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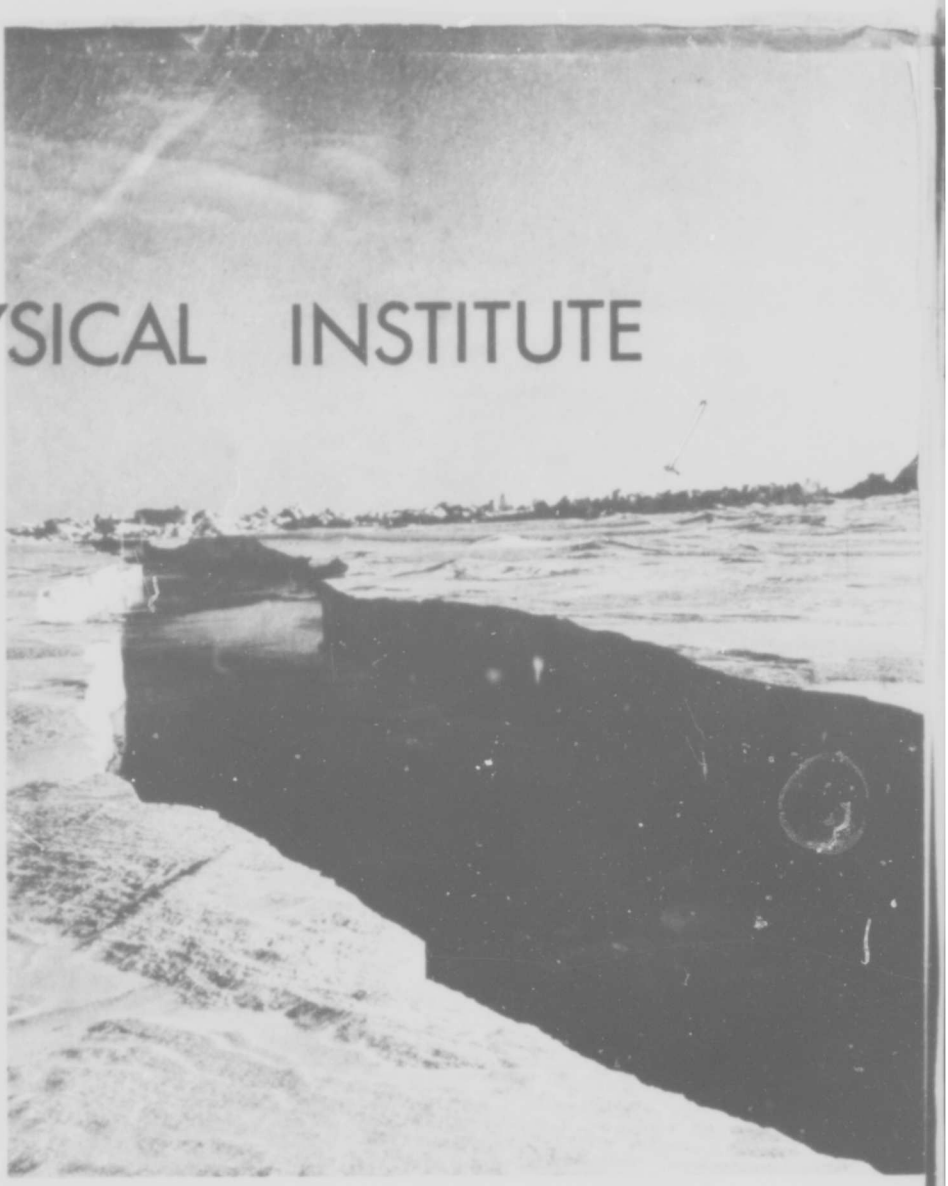

SEA ICE STRENGTH

by

H. R. PEYTON

December 1966

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JUN 27 1967

FINAL REPORT

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University of Alaska

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Final Report

Prepared for

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Office of Naval Research

under

Contract Nonr-2601(01)

December 1966

Principal Investigator:

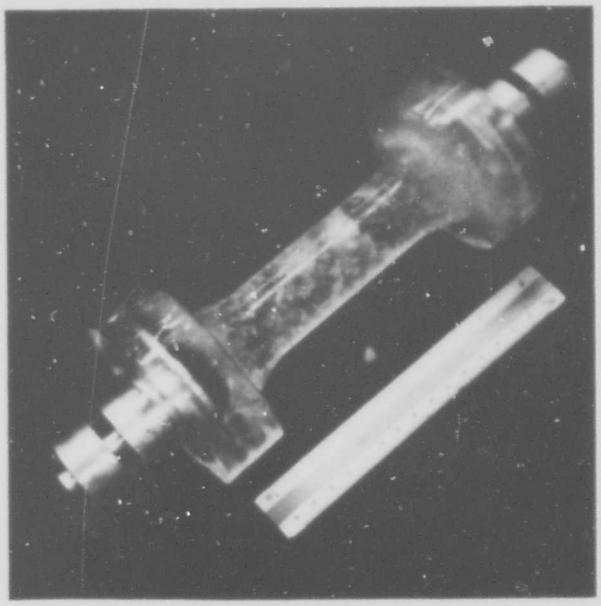
H. R. Peyton

Approved by:

K. B. Mather

K. B. Mather
Director

SEA ICE STRENGTH



This tension test specimen is one of the types used in this research for the determination of the mechanical properties of sea ice.

Application of research findings was made in the design of this offshore oil drilling platform in Cook Inlet, Alaska. It has provisions for 32 wells with 8 through each 14.5 foot diameter leg. Eleven such platforms are in various stages of completion.

Abstract

This report contains the results from a study of the mechanical and structural properties of sea ice; the study commenced in 1958 and was completed in late 1965. Most of the experimental work is based upon stress-strain tests in both direct compression and direct tension. Approximately 3800 of these tests were made.

Those parameters anticipated to have significant effect upon strength were measured: temperature, salinity, rate of loading, crystal size, crystallographic orientation, history of the ice and depth in the ice sheet. All of these are found to be signifificant except that the history factor itself tended to be determined by the other parameters.

The analysis was accomplished primarily by the testing of models by linear multiple regression. The models selected yield good results with multiple correlation coefficients between 0.70 and 0.98 over a range of petrofabric types.

Sea ice is shown to be complex and its description requires five classifications of petrofabric types, each of which exhibit somewhat different characteristics. The load rate proved to be a highly significant parameter in both strength and stiffness in most cases. Ice failing in tension is somewhat less sensitive to load rate than is ice in compression.

The interrelated effects of salinity and temperature were studied using the brine volume concept. This study yielded positive confirmation of the brine volume concept, evidence of solid salt reinforcement, and evidence of failure plane selectivity to bypass strongly reinforced planes. These aspects pertain to both tension and compression failure modes.

Depth in the ice sheet is shown to be a strength factor when related to each of three parameters; rate of loading, brine volume and solid salt reinforcement.

Additional work accomplished in conjunction with construction of large offshore oil drilling platforms had provided significant information concerning oscillatory failure of sea ice in compression and strength reduction at very high load rates. The ice failure force oscillation is an ice property and is not primarily a function of the response of the structure. The amplitude of oscillation is large and at a frequency in the range of most space frame structures. The failing ice may cause forced resonant vibration in structures, and the forces are large enough to resonantly vibrate structure weighing several thousand tons.

Preface

The work accomplished under the Office of Naval Research Arctic Project is covered in Chapters 1-9. Chapter 10 is included as additional work which grew directly from that supported by ONR. This additional work is a practical application of sea ice mechanics to the design and construction of offshore drilling platforms in Cook Inlet, Alaska. At the present time there are eleven such platforms in various stages of design, construction, or operation. A representative structure costs 10 million dollars exclusive of well drilling expenses, contains 2500 tons of steel, and provides conduits for drilling 32 wells.

Acknowledgements

Several individuals have been of considerable assistance in the execution of the work. Mr. Stephen Nathanson spent four year at Barrow, Alaska during the field portion of the work, and his work was instrumental in the development of test procedures and their execution. Mr. Chia Yao Yuan performed many exacting tests at Barrow, and his meticulous attention to detail, even in difficult situations, is reflected in the high quality data acquired. Mr. Philip Johnson was active on the analysis of data and presentation of results during that portion of the project. His diligence, study and ideas are greatly appreciated. Mr. Frank Komin accomplished much of the detailed work in Cook Inlet. The quality and detail of this portion is in great part due to his efforts. Support and encouragement by the U.S. Army Cold Region Research and Engineering Laboratory and the help of Dr. Andrew Assur is greatly appreciated as is that of the Navy Civil Engineering Laboratory and Mr. Earl Moser.

The work was supported by the Geography Branch of the Office of Naval Research and was further supported by the Office of Naval Research through the Arctic Research Laboratory. The support of Dr. Max Brewer, Director, Arctic Research Laboratory is greatfully acknowledged. Partial support was furnished by the State of Alaska. That portion of the work accomplished in Cook Inlet was supported by Shell Oil Company as operator for itself, Standard Oil Company of California and Atlantic-Richfield Oil Company. The support of these companies and the subsequent release of a portion of the results is greatly appreciated.

Without the active support and participation of my wife, Patrica, and children, Linda and Paul, the work would not have been possible. Particular gratitude is expressed for those years in which they lived and worked at Barrow.

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ERRATA

Page	Paragraph	Line	Change	To
19	1.1.1	32	allure	failure
20		9	anistropic	anisotropic
23		6	anistrotropic	anisotropic
23	1.4.3	5	particuularly	particularly
27	2.3.1	7	analysis	analysis;
28	2.5.1	7	prove	provide
35	3.2.2	1	cause	caused
39	6	3	prbability	probability
43	4.2	9	reasonabl	reasonable
43	Eq. 4.4		in	in σ
45		14	perecent	percent
45	4.4	2	independ	independent
62	last	3	varability	variability
67		3	adequte	adequate
77	4	2	deom	with
83	6.2.7	4	s	σ_s
129	Figure 9.7		Tension	Compression
129	Figure 9.7		Compression	Tension
142	3	1	structuria	structural
146	1	3	varying	varying temperature
146	2	10	through	though
146	2	15	a	of a
several locations			crystaline	crystalline
			crystalographic	crystallographic
			colinear	collinear

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Chapter I

INTRODUCTION

1.1 GENERAL PROPERTIES, A REVIEW

1.1.1 Basic Properities of Ice. Pure ice is a crystaline material, and its properties can be rather well described by the parameters which have been used in the description of most other crystaline materials. The general topic of this research is that of ice strength and a description of strength based on physical properties.

The most important physical property of pure ice in the context of this investigation is that of ice crystal type which occurs at pressures and temperatures within range found in nature on the earth's surface. This type is a simple hexagonal crystal and is one in which the atomic spacing and bond strength vary greatly within the crystal (1).

A useful analog model of the ice crystal is that of a stack of plastic plates between which are sandwiched layers of stiff grease. The hexagonal pattern is in the plane of the plastic sheets and represents the plane of greatest atomic bond strength. The crystal axis perpendicular to the plates is the optic or C-axis.

The stacked plate analogy is particularly useful in visualizing the effects of temperature, rate of load application and direction of load application on deformation and strength.

The temperature effect can be envisioned with the model observed at temperatures of -100°C and +100°C. At the colder temperature, the plastic plates are brittle and exhibit elastic properties. The grease layers also act elastically with little evidence of viscous behavior. At the warmer temperatures, both layers exhibit strong viscous behavior with the grease layers being nearly liquid.

It is seen that temperature influences the amount and rate of deformation due to loading. The rate of load application is also seen to have a strong influence on the amount of deformation that would occur prior to fracture of the crystal. The sensitivity to rate of load application is particularly evident when the load is applied in a manner such that shear stresses force the plastic plates to slide over each other. Very slow rates of loading result in large deformations prior to failure and afford the opportunity for fracture at small total loads. On the other hand, extremely rapid loading rates result in small deformations, by the time the total stress has reached a large value, and fracture occurs. Generally, the slow loading rates result in relatively viscous deformation and low failure strengths. Rapid loading rates result in relatively elastic deformation and high failures strengths.

The model clearly indicates the strong influence of the direction of load application on deformation and failure strength. The greatest deformation and least strength obviously occurs if the plates slide

over each other; deformation along the basal plane of the crystal. Greater strength and less deformation occurs if the force is applied perpendicular to the basal plane or parallel to the basal plane.

The characteristics of single ice crystals as described here in analog form have been studied in some detail by Nakaya (2) and others (3,4). The viscous and elastic properties associated with temperature, load rate, and direction of loading have been partially evaluated by these investigators, and single ice crystals have been shown to be quite anistropic with respect to strength and deformation. Additional work is required, however, for a clear understanding of basic mechanisms.

Polycrystaline ice can be formed to provide a homogeneous mass consisting of a great number of small crystals which are randomly oriented with respect to their c-axes. Such ice behaves isotropically but nevertheless exhibits strong sensitivity to temperature with respect to the relative importance of both viscous and elastic deformation. The most interesting work accomplished in this area has been performed by Jellenick and Brill (5). Their results indicate a great increase in viscous behavior with warm temperatures and a large increase in rate of deformation and total deformation with both increasing temperature and applied load. The values they obtained are not of particular importance here, but it is important to note that they found polycrystaline, pure ice to simultaneously deform viscously and elastically at those temperatures which can reasonably be expected in nature. Such a result is expected for a material near the melting point, and all naturally occuring ice is relatively near the melting point when compared with most other crystaline materials. Considerable research is now being directed toward the understanding of properties of materials at high temperatures, but most of this work tends to be of little value in the study of sea ice.

1.1.2 Physical Properties of Sea Ice. In sea ice, discrete volumes of entrapped brine are found within a matrix of pure ice. The brine is entrapped during the growth process because the growth rate of pure ice exceeds the downward convection rate of enriched brines at the growth face. Numerous investigators have studied this entrapment process and it is very well established that the brines are truly entrapped rather than being incorporated within ice crystals (6). It can be seen that the amount of entrapped brine is a function of the growth velocity. Some details of this process are described in Chapter 6.

The entrapped brines have a profound influence on the physical make-up of sea ice. The most important characteristic is the presence of liquid brine within the sea ice matrix at all temperatures and times. The ice crystal analog model can be expanded to include sea ice by incorporating large bubbles of antifreeze, or brine, in some of the grease layers. It is possible to freeze all of the brine, but with very few exceptions this does not occur in nature. The quantity of liquid brine, the chemical composition of the brine, the chemical composition of sea ice solids, and the internal geometry of sea ice crystals, each exhibit considerable variation with temperature. A complete description of these complex relationships with temperatures and salinity is given in Chapter 6.

The entrapped brines drain out of the pure ice matrix at warm temperatures. This knowledge is ancient as evidenced by the fact that Eskimos have used old sea ice to provide a supply of potable water. The amount of entrapped liquid brine is then also a function of age as well as growth velocity and temperature.

1.1.3 Mechanical Properties of Sea Ice. The addition of antifreeze along some basal planes of the ice crystal analog completes the mechanical property analog for sea ice. The strength and resistance to deformation is substantially reduced along basal planes due to the lack of strength and the low viscosity of the antifreeze.

Several investigators have studied sea ice strength by numerous experimental methods including direct compression, bending, and ring tensile tests. A great many tests have well established the effect of liquid brine on ice strength. The best single work is that of Assur and his development of a brine volume concept based upon results of ring tensile tests. Assur's work is reviewed in detail in Chapter 6.

The ring tensile test has been most extensively used, and these tests have provided the data upon which most detailed analytical work has been based (7). The test consists of machining a right circular cylinder of ice which is then loaded on its sides with the specimen splitting from end to end. The test is quite similar to tension tests performed on portland cement concrete cylinders. It will be noted that deformation measurements of such load tests would be very difficult to achieve, and no provision can be made for careful measurement of direction of load application with respect to crystal orientation. The latter provision is not necessary if the material is found to be homogeneous, but it will be shown in Chapter 3 that sea ice is not homogeneous. For this type of specimen and loading, the rate of load application is not a discrete value throughout the test specimen because the stresses vary both radially and rotationally about the cylinder axis.

The bending tests also measure tensile strength, but they do not yield good results for detailed evaluation of rate of loading, direction of local application and deformation.

Very little detailed work has been accomplished in evaluating compressive strength characteristics (8).

Deformation measurements of sea ice are very limited. Elastic deformation properties, however, have been studied by means of seismic methods which should correspond to extremely high rates of load application (9).

1.2 RESEARCH OBJECTIVES

1.2.1 The Need to Identify Mechanical Properties. The structural analyses of sea ice structures, for example floating ice sheets, require knowledge of two mechanical properties. The first is the deformation characteristics; viscosity and elastic modulus. If the ice is cold and the load rate is large, the structure can be analyzed by assuming ice

to behave elastically. If the ice is warm and the rate of loading is slow or the load is constant, the ice can be assumed to behave viscously. Intermediate cases of load rates and temperatures require visco-elastic solutions. In all cases, the stress-deformation-time relationship must be known.

The second required property is the strength. After the structural analysis is accomplished, it is possible to determine how much force can be applied to the structure provided the ice strength is known and predictable. It is noted that the force required to fail the structure is of interest from two aspects. The first is concerned with the load which can be supported by an ice structure. The second is concerned with the load an ice structure may impart to an obstacle in its path.

1.2.2 Parameters which Apparently Govern Mechanical Properties. The more obvious parameters which would be expected to govern the mechanical properties of sea ice include temperature, salinity and rate of load application. The direction of load application relative to that of crystal orientation is also important if the sea ice is not homogeneous, thus the crystallographic characteristics of the ice should be significant. The possibility should be considered that certain factors associated with the chemical composition of sea ice with partially frozen brine.

1.3 EXPERIMENTS

1.3.1 Experimental Design. Measurements of crystal size, shape, and degree of randomness in orientation are required. These measurements are quite effectively made by standard thin section techniques using a universal stage (10). Salinity determination is a well-standardized process.

The mechanical properties are best determined by stress-strain tests in direct compression or direct tension over selected ranges of load rate and temperature. The load rate must be over a large range from zero upward. The zero load rate actually prescribes a creep test at constant load. The temperature range of importance is from the melting temperature to at least -20°C and preferably to -30°C.

Stress-strain tests are desired for representative types of sea ice and for numerous directions of loading if the ice is inhomogeneous or anisotropic.

1.3.2 Expected Experimental Results. Physical property measurements coupled with the stress-strain test measurements should provide data to described deformation and strength in terms of physical properties, rate of loading, and direction of loading. It is anticipated that these descriptions would be complex. Previous work by other investigators has shown the description of strength to be quite complicated even with fewer parameters than are considered here.

1.3.3 Experiments Accomplished. Stress-strain and creep tests in both direct tension and direct compression are developed. The details of

experiments are described in Chapter 2. Also described in that chapter are the series of experiments and measurements required to described the physical properties of sea ice.

The experiments were all performed as outlined in the section on experimental design, however, sea ice was found to possess a broad spectrum of crystallographic types and to exhibit more anistotropic benavior than had been anticipated. As the experimental program progressed, the range of experiments accomplished had to be reduced and did not include all of the combinations desired by the experimental design. Additionally, it was found that the mechanical properties varied in some subtle fashion with depth in the ice sheet, and depth then became another parameter of the study. Equipment limitations restricted the desired ranges of loading rate and temperature.

1.4 PREVIEW OF RESULTS

1.4.1 Early Results. The amount of data collected was quiet large, and detailed analysis has not been completed on all of it. Chapter 3 is a report of many results which could be determined without recourse to detailed analysis. These early results are, in large part, plots of raw data which show the very strong dependence of the more important parameters. In that chapter is shown the extremely anisotropic behavior of the deformation and strength of sea ice. Five sea ice classifications were found to be required in order to described the great variability of sea ice types. The ranges of strength and deformation are shown to be enormous even within the somewhat restricted experimental limits which were used.

Later chapters indicate the complexity encountered in developing descriptions of strength and deformation, and this paper does not incorporate an analysis of all the data which were collected, but rather covers a detailed analysis of certain portions of the experimental results.

1.4.2 Load Rate Effect. The parameters of ice type, direction of loading, temperature, and salinity are all shown in Chapter 3 to be significant. Each of these parameters, however, were prescribed to be measured at nearly descrete values by the manner in which the experiments were accomplished. The data could then be sorted on the basis of these parameters. The remaining parameter of most importance, based on evaluation of raw data, is rate of load application. Load rates were not determined at discrete values, but varied over a continous spectrum. This parameter was then the first to be considered in the detailed analysis. Chapter 5 contains the detailed analysis of rate of loading with respect to the other variables, and the results of Chapter 5 show widely varying significance of load rate on strength.

1.4.3 Effect of Brine Volume. The next parameter selected for study was the one interrelated with temperature and salinity which describes the amount of liquid brine, or brine volume, in the system.

Very early, analysis of the brine volume effect proved to be complex, and for this reason, a small portion of the data of particuularly good quality was selected for first analysis. The first analysis is

reported in Chapter 6 and is concerned with the compressive strength of one ice type at a single depth in the ice sheet. The analysis is then expanded in Chapter 7 to cover this particular ice type for compressive strengths over the entire depth within which this ice type was found to occur.

The brine volume-strength analysis for both tensile and compresive strengths as well as some analysis of deformation characteristics is further extended in Chapter 8 to cover a second ice type.

1.4.4 Solid Salt Effect. As the brine in sea ice becomes colder, a continual precipitation of solid salts occurs. Analysis of the data indicates the possibility that these deposited solid salts reinforce sea ice in certain directions of compression loading. Such reinforcement was not found in the analysis of tension tests. The analysis of the effects due to solid salts is described in conjuction with the descriptions of brine volume effects because the two effects are intimately interrelated. The first description of solid salt reinforcement is in Chapter 6 and continues through Chapter 9.

1.4.5 Failure Mechanisms. The data revealed the possibility of solid salt reinforcement only in some of the ice types and loading directions. The reason for this apparent inconsistency is pursued in Chapter 9 in which the possibility is considered of a shift in failure plane from a reinforced to a non-reinforced one. The failure plane shift concept is shown to have some merit, but not all questions are satisfactorily resolved.

1.4.6 Additional Considerations. The investigator was afforded the opportunity to do further experimental work beyond that previously described here. Some of the results of this additional work are described in Chapter 10. It is of particular significance that the range in the rate of load application used in Chapters 2 - 9, and which was afforded by the stress-strain apparatus, does not allow accurate evaluation of the load rate effect at very high load rates. Also of significance is a preliminary evaluation of a pulsating ice failure which is found to occur when an ice sheet fails in edge loaded compression.

1.5 CLOSURE

The large amount of experimental data acquired under this project has been only partially analyzed. Those complete portions of the analysis constitute a description of the strength of some types of sea ice in terms of physical properties, rate and direction of loading, and depth within the ice sheet.

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Chapter 2

EXPERIMENTS

2.1 LOCATION

All experimental work by the University of Alaska , supported by the Office of Naval Research Geography Branch, was accomplished at the Arctic Research Laboratory at Barrow, Alaska. Two eight by twelve foot portable food storage refrigeration units were enclosed in an insulated structure and modified for temperature-controlled laboratories. Within these laboratories were installed all ice testing equipment including a three-cell triaxial shear machine which provided adequate loading capabilities within budgetary limitations.

2.2 PETROFABRICS; CRYSTAL SIZE, SHAPE AND ORIENTATION

All measurements of petrofabrics were made by use of polarized light and a large universal stage patterned after the smaller Rigsby Stage (1). Thin sections were prepared from each sample to provide petrofabric profiles which correlated with strength specimens. Additionally, petrofabric profiles were obtained from several locations in the Arctic Ocean and others in the vicinity of Barrow, Alaska.

2.3 MEASUREMENTS OF PARAMETERS

2.3.1 Temperature. Temperature measurements were made with calibrated thermistors located at various locations including several in temperature controlled laboratories with one thermistor at each test cell location and within a few inches of the test specimen.

With all other parameters held constant, the test temperature was varied through the range to be expected in Nature. Distinct temperature points were used to allow easier analysis those most frequently used were -2°, -5°, -10°, and -21°C. Two effects on mechanical properties are expected to result from temperature differences. The first and probably most significant for sea ice is the brine volume or volume of liquid phase contained interstitially in the ice matrix. The second is the effect on the crystalline ice material.

2.3.2 Rate of Loading. The rate at which load is applied to ice affects the maximum strength and the apparent stiffness or apparent modulus of elasticity. With all other parameters held constant, the ice was tested in a series of discrete load rates. These rates varied from 20 psi/min to several thousand psi/min.

2.3.3 Salinity. Chlorinity was determined for each test specimen for most of the testing program. During the first tests a titration technique was used and later a conductivity apparatus was calibrated and used. The conductivity method proved to be accurate and much more rapid than the titration method. Salinity is calculated from chlorinity values, and brine volume is calculated from temperature and salinity values.

2.3.4 Ice Type Classification. The ice type classifications are described in the next chapter. Usually classification of samples was not a difficult problem because the ice proved sufficiently uniform in large enough volumes to obtain several test specimens with very similar petrofabrics.

2.3.5 Crystal Orientation. Where applicable, crystal orientation was prescribed for each test specimen. An example is one ice type with colinear preferred c-axis orientation and foliation perpendicular to the c-axis. The test specimen could then be cut from a sample in any crystalographic orientation. Four orientations were generally used:

a. the specimen oriented vertically in the ice sheet and perpendicular to the c-axis,
b. the specimen oriented horizontally in the ice sheet and at 0° to the c-axis,
c. horizontal and 45° to the c-axis, and
d. horizontal and 90° to the c-axis.

2.3.6 Age and History Factors. When possible, a given type of ice was sampled several times between its formation and summer thaw. One sample of very old polar pack ice which was obtained in the summer of 1962 had a very similar petrofabric to one found in newly formed ice and thus allowed a good examination of long term age effects.

2.4 SAMPLING

It was determined early in the testing program that small core samples had many disadvantages, therefore, most sampling consisted of sawing out large samples of approximately two cubic feet. The ice varies considerably in many properties with depth; therefore, consistently similar specimens could be obtained only from the same depth. Sampling was performed to allow the preparation of many specimens from the same depth, thus providing minimum petrofabric and salinity differences between individual specimens.

2.5 MECHANICAL PROPERTIES

Four general types of tests were run; compressive stress-strain, tensile stress-strain, compressive creep and tensile creep. These test types were selected because of the large amount of useful information which can be extracted and because of the ease with which such results can be mathematically incorporated into structural analysis calculation procedures. There were 3762 sea ice tests and 305 single crystal tests.

2.5.1 Compression Stress-Strain Tests. The field sample was slabbed to provide sizes which could be handled with a band saw. Specimen blanks approximately 2" x 2" x 3" were prepared. These blanks were turned to cylindrical shape 1.4" in diameter on a metal working lathe and trimmed to 2.6" long. The ends were then trued to parallel smooth surfaces perpendicular to the cylinder axis.

A loading apparatus was devised and constructed to prove axial loading. The specimen was placed in the apparatus, and two dial indicators were set to measure deformation while loading proceeded. The load was measured

with a proving ring and time was recorded to allow calculation of load rate. The data indicated on the moving dials were all simultaneously recorded photographically and were later transcribed from film onto computation sheets. Figure 2.1 shows the plotted stress-strain curve for a representative test.

From the stress-strain curve many mechanical properties can be determined:

a. Modulus of elasticity or stiffness (apparent)
b. The maximum stress attained or "maximum strength".
c. The stress at time of rupture or "ultimate strength".
d. The energy required for failure.

In addition to the plotting of the curve, the rate of loading and modulus of elasticity were calculated in a rather crude fashion to allow modest interpretation and analysis in the field. Continual checks were made to insure measurement accuracy of all parameters. During the time of field data acquisition, the interrelationships were plotted and followed to ascertain, in a rough fashion, the effects of the various parameters.

2.5.2 Tension Stress-Strain Tests. The problems encountered in the development of a satisfactory direct tension test for ice were formidable and required extensive work. Suitable equipment and procedures were not productively used until January 1962. Some 900 tension tests were run subsequent to that date and constituted the major effort of the final field season.

Several systems of direct tension equipment and procedure were tried, and each in turn proved to be inadequate but pointed the way to improvement. Following is a brief description of the final design. Many aspects of this design were dictated by local Barrow problems; availability of material, skilled shop personnel and tools for investigator use. Therefore, certain promising avenues could not be pursued and the final product is a compromise.

The device is essentially a pair of aluminum end fixtures between which a test section of sea ice is welded and then pulled in tension to failure. Problems encountered in welding the sea ice to aluminum with distilled water dictated an intermediate thickness of distilled water ice.

The problems of preventing bending and torsional stresses from occurring in the test section demanded three degrees of articulation of the end fixture. This in itself is not difficult to provide when precise deformation measurements are not required, but the combination of end articulation and deformation measurement provided a multitude of difficulties. Figure 2.2 shows a test specimen prior to placement in the testing machine.

The aluminum end fixture is shown in Figure 2.3. The upper view is an exploded view showing the component parts and the lower view shows the assembled fixture.

The complete test set up is shown in Figure 2.4. The test specimen as shown in Figure 2.2 is set on knife edges in the loading frame and

subsequently an extensometer with dial indicators was placed in position to measure deformation.

The deformation measurements were made from the ends of brass capped pins which can be seen in Figure 2.3. These pins were carefully greased for their entire length except for the notched end which was incorporated in the weld. Thus the pin was fixed only at the end of the sea ice specimen and transferred sea ice deformation through the test heads to a point where the deformation could be measured.

Several types of deformation measuring devices were evaluated, but the only type which produced acceptable results was the dial indicator. Reasonably precise stress-strain data required deformation measurements of 0.00001 inch. Dial indicators of 0.0001 inch were available and were sufficiently sensitive to allow interpretation of 0.00001 inch movements if extreme care was exercised. This art was developed to a high degree using photographic collimation techniques. Figure 2.5 shows a representative stress-strain curve from tension test #1943. Data acquisition and reduction was quite similar to that for compression tests.

The preparation of tension specimens proved to be difficult and time consuming initially. Considerable improvements were made in procedures such that preparation time was cut from 5 hours to 20 minutes per successful specimen.

2.5.3 Compression and Tension Creep. After the development of reliable stress-strain apparatus, additional equipment was constructed to determine creep behavior in both tension and compression. These tests did not require a testing machine because only constant load was applied to the specimen, thus two tension creep cells and five compression creep cells were operated continuously after their fabrication was completed. The time durations of many of the creep tests were several days; therefore, the number of creep tests is quite small. Figures 2.6 and 2.7 show representative creep curves for compressive and tensile creep, respectively.

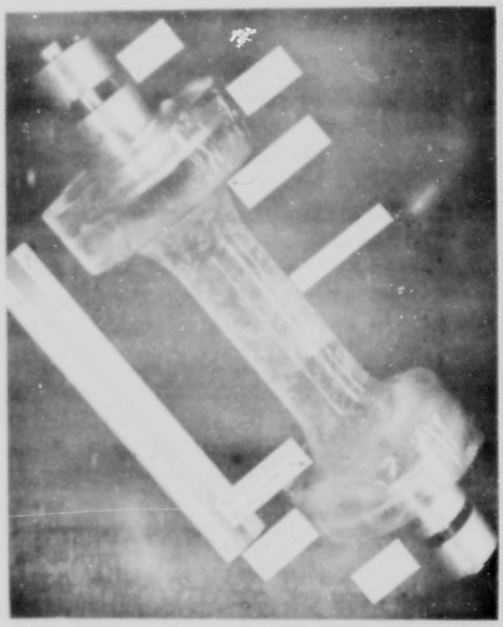
2.6 DATA REDUCTION

2.6.1 Field Calculations. All data acquired were reduced in the field such that stress-strain or creep curves could be plotted. Late in the project, April 1962, the University of Alaska IBM 1620 computer was used to assist in field calculations.

The field calculations were carried to a point of assuring reliable results. This required considerable summarization of data to enable observation of general relationships and patterns of behavior of the numerous parameters.

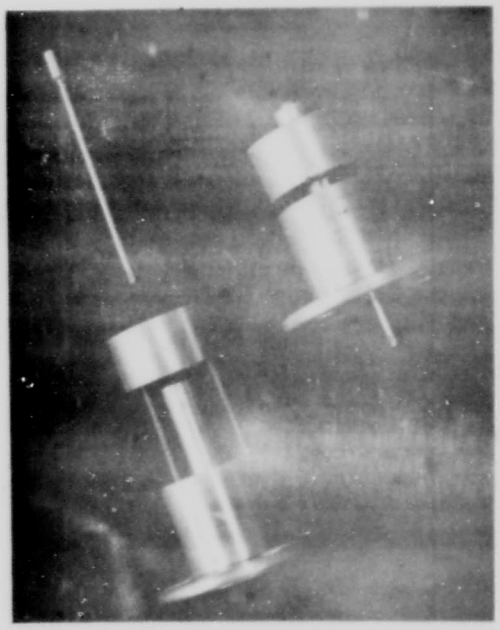
2.6.2 Refined Data Reductions. It was determined during the winter of 1962-1963, after leaving Barrow, that the field data were more sensitive to the rate of loading than had been determined by field calculations. It was further determined that the rate of loading and modulus of elasticity values could then be considerably refined by using a more complex and exacting calculation procedure than would have been reasonable in the field.

Figure 2.1



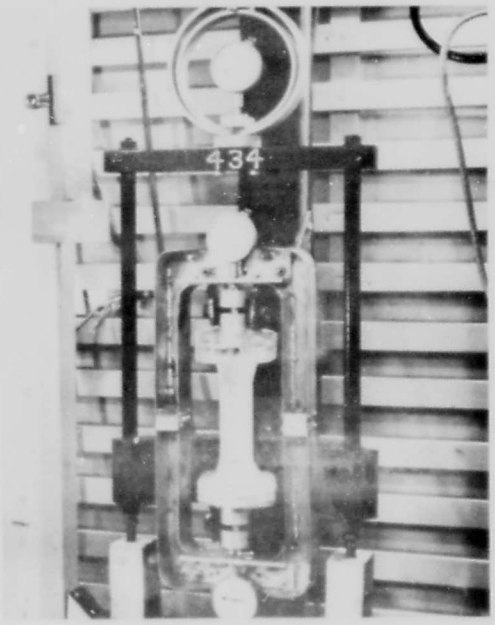
Tension Test Specimen with Loading Heads Attached.

Figure 2.2



Tension Test Loading Heads.

Figure 2.3



Complete Tension Test Set Up.

Figure 2.4

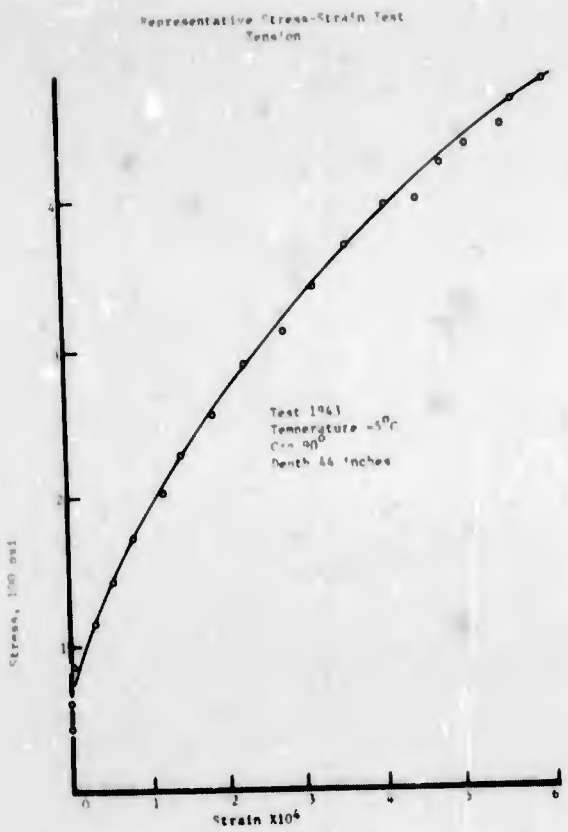


Figure 2.5

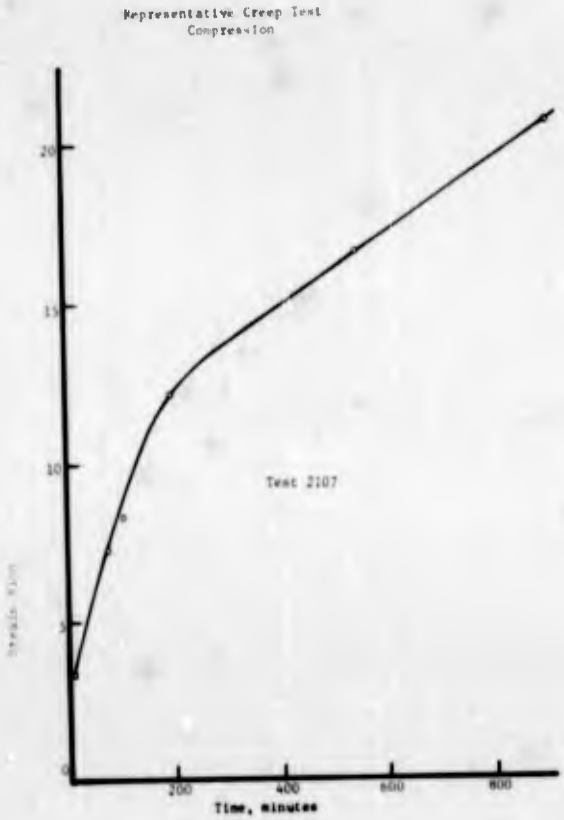


Figure 2.6

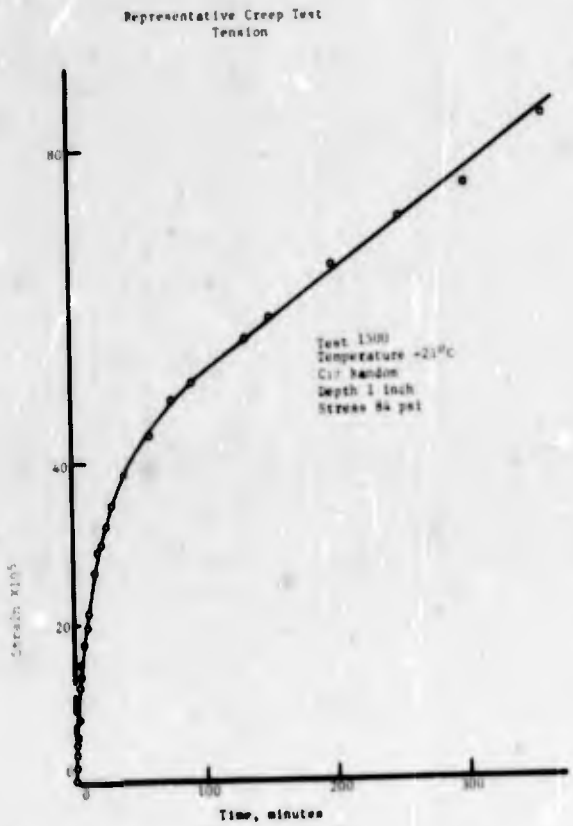


Figure 2.7

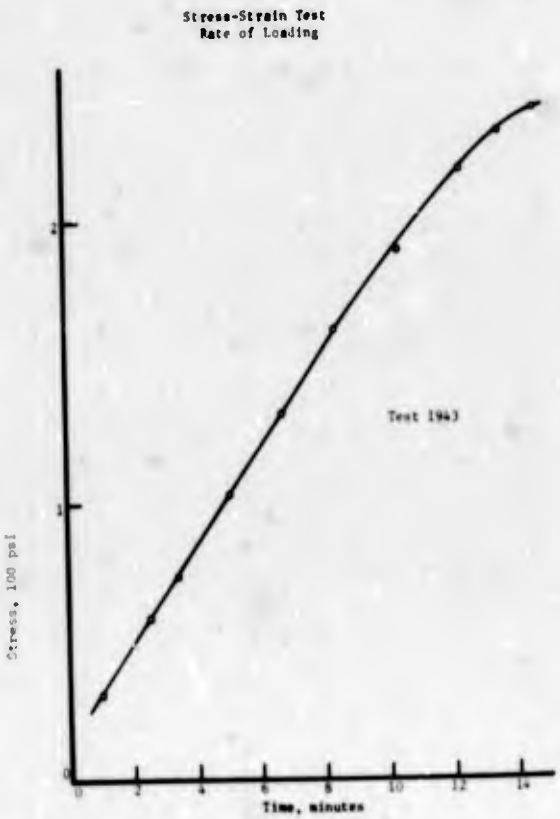


Figure 2.8

The rate of loading calculation necessitated the plotting of stress vs. time for all stress-strain tests and the fitting of a linear curve through the data. The results were much more consistent than those of the crude field calculations. An example is shown in Figure 2.8.

The modulus of elasticity or Young's modulus of ice is actually a misnomer but is used for lack of a better term. Ice is a viscoelastic material, therefore, the slope of the stress-strain curve is time dependent. Nevertheless the apparent stiffness modulus of the material at varying load rates is a most important material property and must be known for structural analysis of ice structures by elastic methods.

For field calculations an arbitrary definition of stiffness was established which allowed adequate monitoring of data as they were acquired. When detailed analysis was initiated, inconsistencies indicated that a more reliable definition of stiffness was needed. This new definition was established and new stiffness calculations were accomplished for all stress-strain tests. The first segment of all stress-strain curves were plotted to large scale as shown in Figure 2.9. The resulting value of modulus of elasticity shows substantial improvement over the field calculations with the new stiffness definition based on a secant modulus from the origin to one third the average ultimate strength of the replicate tests. The number of identical tests was usually five for compression and three for tension.

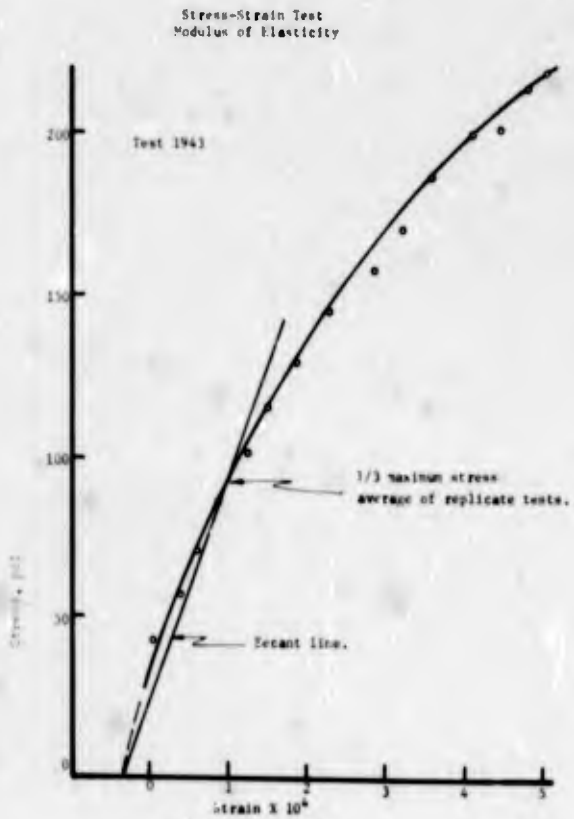


Figure 2.9

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Chapter 3

EARLY RESULTS

3.1 GENERAL

This chapter contains an outline of gross observations and general trends which are presented prior to discussion of the detailed findings.

3.2 ICE FORMS

Several structures of ice have been found, and each has been tested through portions of the spectra of other parameters.

Most of the ice tested was near-shore, first-year sea ice, obtained a few hundred yards offshore at Barrow, Alaska. One sample of summer polar ice was obtained about 200 miles north of Barrow.

The ice forms are here classified primarily on the basis of crystal structure in terms of size, shape, and orientation, and on the basis of chlorinity.

3.2.1 Classifications.

Fine-grained. This crystal type exhibits random orientation in all directions with a grain size of about 1 mm. The chlorinity tends to be the highest of the ice types with a value around 5 1/2°/oo (parts per thousand). This ice type was found extensively more than 10 inches below the surface only during one of three years' sampling and is generally found near the surface of the ice sheet. During one season it was found in an area that had been exposed to rather heavy winds during the initial formation of ice crystals on the water surface. This fine-grained slush ice had a chlorinity of 6.7 to 7.3°/oo.

Medium-grained. This type has a vertical c-axis with a grain size of about 1 mm by 2 mm by 4 mm long. The medium grain has been found in the top 10 inches of the ice sheet. The chlorinity tends to be around 5°/oo.

Center ice. This type is characterized by a horizontal c-axis having random orientation in the horizontal plane. It is generally found from the surface to a 40-inch depth. The grain size is in the order of 6 mm by 12 mm by 24 mm with the platelets stacked 6 mm thick. The chlorinity tends to be around 3°/oo.

Bottom ice. This structure has been found 20 inches or more below the ice surface and is characterized by a horizontal c-axis and a strongly preferred c-axis in the horizontal plane. The grains are similar in shape to the center ice but increase in size with depth to about 20 mm by 40 mm by 80 mm at a 72-inch depth. The chlorinity varies from about 2°/oo to 0.1°/oo as found with old polar ice from the central Arctic Ocean.

Both fine grained and center ice have been described previously (1, 2). Profiles of ice studied are shown in Figure 3.1.

3.2.2 Bottom Ice. Considerable interest is cause by the mere presence of bottom ice, its extent and mechanism of formation. The initial discovery of the petrofabric was made in seasonally grown ice in the

immediate Barrow vicinity and was sampled by a SIPRE corer. The crystal size was too large to prove colinear, horizontal orientation, so the sampling procedure was changed to large block sampling cut with a chain saw.

The first indication of the extent of bottom ice formation was shown by a 10 foot square sample taken in March of 1962 from the 5 foot thick seasonal ice at Barrow. It was found that the very strongly azimuth preferentiation was uniform and colinear over the entire section. This indicated that the extent of bottom ice was large with respect to ice sheet thickness. If bottom ice is indeed a general feature of Arctic Ocean sea ice, problems can be expected to be encountered due to the anisotropic behavior of the ice sheet since orientation affects strength.

No detailed petrofabric data were taken of this sample, but the colinear orientation was so dramatic that specimens could be cut at any angle to the c-axis by direct visual measurement of angle based on platelet orientation seen in reflected light without magnification. Many of the tests with special load-c-axis orientations for bottom ice were on specimens from this large sample. Results shown in later chapters clearly show the anisotropic behavior due to colinear orientation.

The presence of extensive bottom ice in seasonal ice was determined during a two week field trip in April, 1963. Seven large samples of seasonal ice were obtained from broadly spaced locations in the Beaufort and Chuckchi Seas. These sample locations were between 148°W 74° 0'N and 176°W 72° 30'N. All ice at depths below 36 inches was found to be "bottom ice". Four of approximately 250 thin sections are shown in Figure 3.2, showing the general "bottom ice" petrofabric. These four thin sections are parallel to the plane of the ice sheet and are from two corners of a one foot square sample section from depths of 48 and 59 inches of the same sample, #2. Virtually all crystals in these two sections have their c-axes horizontal ± 2°, i.e. in the plane of the photograph. The arrows indicate the envelope of azimuth directions of the c-axis for all crystals in the section. It can be seen in this case that all crystals are lined up within 40° over a much larger area than that of one thin section. Many individual thin sections have an envelope of azimuth orientation of less than the 25° shown. Figure 3.3 shows histograms of four samples from the following locations:

Sample No.	Location
2	Elson Lagoon, Barrow
5	176°W 72°30'N
7	148°W 74°0'N
8	148°W 74°0'N

Sample 8 was from the middle of a refrozen lead several hundred feet wide and shows the colinear orientation preferentation at the surface.

These data were acquired by removing a single ice block of the full thickness of the floe by use of a long chain saw. The cross sectional shape of the sample was approximately one foot square, and one inch thick horizontal cross sectional slabs were taken at each foot of thickness from the top plus one at two inches below the surface and one at two inches from the bottom. Additionally, a full length vertical profile sample

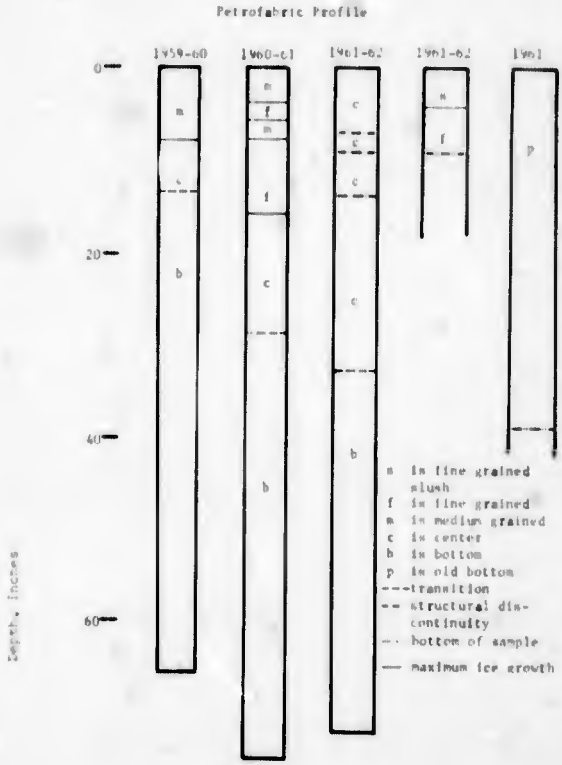
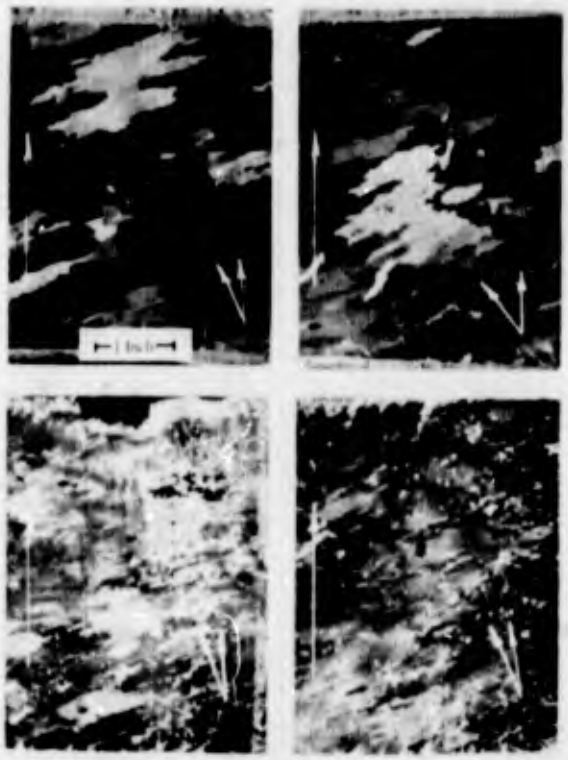


Figure 3.1



Bottom Ice Thin Sections. Upper and Lower Pictures from 48 and 59 Inch Depths Respectively.

Figure 3.2

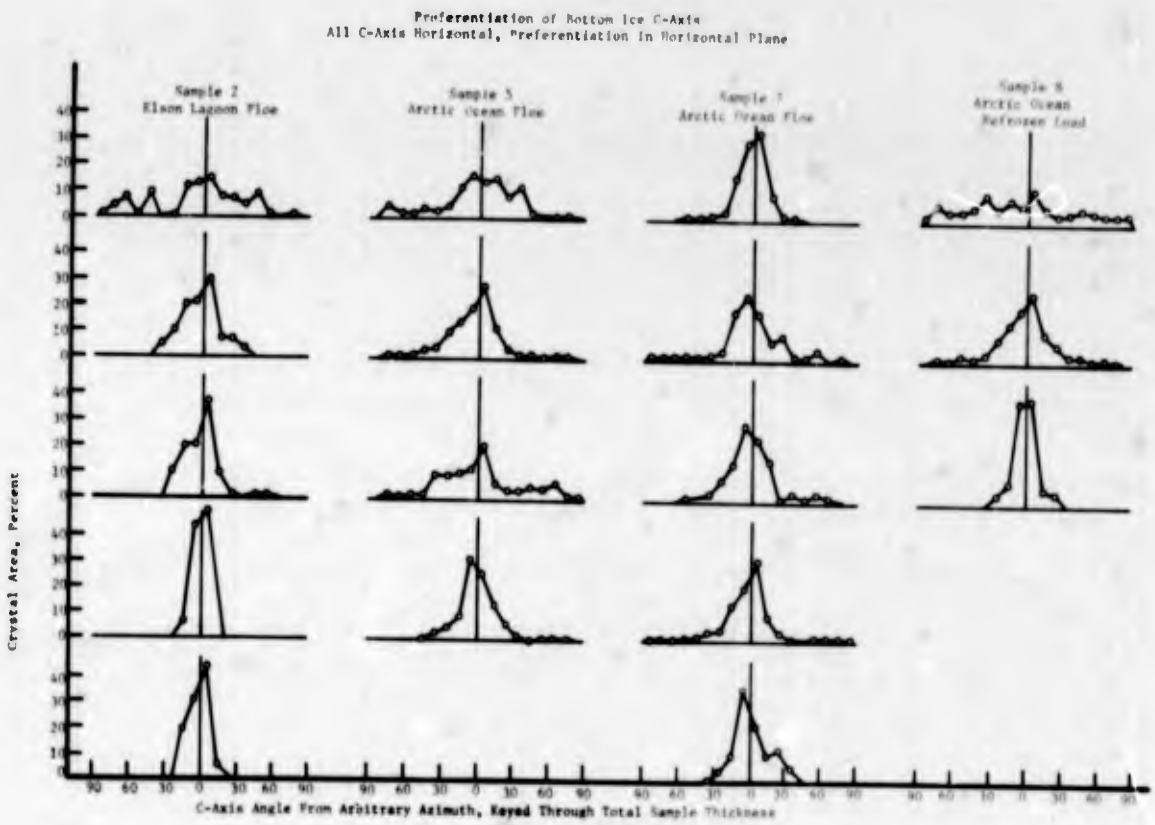


Figure 3.3

slab one inch thick was removed. The slabs were keyed for relative position from the block, covered with polyethylene, packed in insulated boxes and returned to the Barrow laboratory within a few hours.

Four thin sections each four inches square, were prepared from each horizontal slab. One thin section was cut from each corner and was keyed for position relative to the original ice block. The histograms shown in Figure 3.3 results from the four thin sections, and therefore are representative of the complete foot square sample.

Table 3.1 includes the statistical information from the four representative locations. The other samples showed similar results, but the photographic negatives were accidently destroyed before prints could be made.

Table 3.1

Sea Ice Crystal Orientation

Sample	Depth, inches	Mean angle from arbitrary datum	Maximum spread in orientation angle;	Standard deviation of orientation angle;
2	12	+2.38°	170°	37.0°
	24	-2.18	80	16.4
	36	-1.60	90	14.1
	48	-0.70	30	6.2
	56	-1.37	40	8.6
3	12	-1.39	180	32.2
	24	-3.13	180	23.3
	36	+4.58	180	37.3
	45	+1.69	130	16.2
7	12	-2.69°	80	17.3
	24	-0.17	180	26.6
	36	-0.66	130	19.1
	48	-1.31	180	25.4
	56	+3.01	80	15.2
8	2	-4.44	180	42.7
	12	-0.92	180	23.0
	22	0.00	120	9.9

On the basis of these samples, it appears that bottom ice is indeed a general Arctic feature and anisotropic behavior of the gross ice sheet can be expected. This may shed some light on the extreme variability of the ring tensile test and various loading tests in which the petrofabric and crystal orientation are not considered to be parameters.

The "azimuth" of the colinear orientation does not change significantly with depth in the floe; therefore, the mechanism of its formation can not be dependent on a driving force which has geodetically oriented flux lines such as a magnetic field or an ocean current. The floes in the ocean are constantly in rotational motion, but the colinear orientation remains fixed relative to the ice floe, not to the earth.

One hypothesis which agrees with the evidence obtained thus far is based upon the existence of strain fields associated with polygonal cracking of the ice sheet due to thermal shrinkage. Two observations point in this direction. The first is the lack of bottom ice in upper portions of the ice sheet which grew before thermal cracking occurred. The thermally induced strain field is undefined vectorially before cracking occurs. Bottom ice is a general petrofabric feature in those portions of the ice sheet which were formed after thermal cracking and thus after the thermally induced strain field became vectorially defined.

The second observation is the large horizontal extent of the colinearity relative to the transition thickness through which the ice type changes from center ice to bottom ice, i.e. horizontal and random in that plane to horizontal and colinear in that plane. This evidence precludes simple crystal growth selectivity through such thin transition layers.

Other hypotheses include the effect of lateral heat flow due to cracks, but the large volumes and consistent occurrence of bottom ice makes this somewhat suspect. The ice is formed well below the bottom of any crack and also occurs in crack free areas.

Also to be considered is the crystal form in liquids near their freezing points. This is virtually impossible to measure at this time in the field.

Following the first hypothesis, a series of cracks was exposed in Elson Lagoon near Barrow, and samples containing a crack were removed. The median of the azimuths was then determined relative to the crack azimuth by visual inspection of the thin section on the universal stage. This is a crude technique and is subject to fairly high error, but the alternative of determining orientations of individual crystals could not be accomplished in the time available.

The results are shown in Figure 3.4. There the colinear c-axis azimuths can be seen to follow the crack azimuth very well except in areas where many cracks intersect. The statistical results show very high prbability of parallel azimuths of crack and c-axis.

These data do not prove any of the hypotheses, but tend to disprove the lateral heat flow concept because 1) the thermal cracks contained split crystals, thus had been formed after the crystal and 2) the lateral heat flow to an open crack should be very nearly normal to the crack and the confusion in orientation near intersecting cracks should not be as severe as the data show.

3.3 STRENGTH

The strength to be discussed is the maximum strength achieved in unconfined compression and tension.

3.3.1 Rate of Loading. Rate of stress application has been increased from constant load. The actual rates achieved depend on the forms of ice and equipment limitations. The upper limit of loading rates tended to be 3000 pounds per square inch per minute for compression and 100

psi per minute for tension. The constant load tests involved loading by three methods. The first is by direct load of hanging weights, the second by a load amplifying knife edge lever system and the third, by maintaining a constant load by a screw jack through a proving ring. The rates of loading were obtained by the use of a motor driven variable speed transmission which in turn drove a screw jack. The load was measured by proving rings.

3.3.2 Temperature. The temperature effect has been followed through the various ice structures at temperatures which could be expected in the ice. Additional temperature ranges have been studied in some cases, but the generally used temperatures were -2°, -5°, -10° and -20°C. This provided two temperatures above and below that at which sodium sulfate begins to precipitate.

3.3.3 Crystal Orientation. The notation for direction of loading and crystal orientation for all of the data is as follows. σ is the notation for the applied stress vector, Z is the vertical direction and C is the c-axis direction. The notation σ: Z, σ : C gives rather complete information with σ : Z = 90° being a specimen orientated horizontally and σ: Z = 0° being a vertical specimen. σ : C = 0° indicates the load applied parallel to the c-axis and σ : C = 90° is perpendicular to the c-axis. The details of notation are shown in Figure 3.5 for the specific case of bottom ice where C : Z = 90°.

3.4 GENERAL RESULTS

The results shown here are indicative of the general trends which will be discussed in detail in following chapters. Only a small part of the data were used for these preliminary studies but are representative of the total data in a general way.

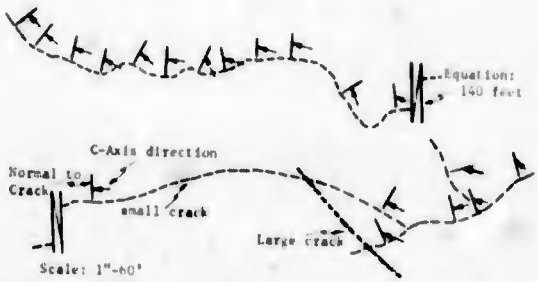
Compressive strengths are shown in Figure 3.6 for four orientations. Both the grain size and chlorinity change with depth in the ice sheets, and the depth of this particular group of data is noted. The chlorinity at this depth was 2.1°/oo. The strength is significantly higher for σ : Z = 0°, σ : C = 90° than for σ : Z = 90°, σ : C = 90°.

This relationship has been observed for all bottom ice tested. A composite picture of compressive strength relationships between ice structures is shown in Figure 3.7. These curves represent the closest representations σ: C angle possible (σ : Z = 90°, σ : C = 90° or random) for the various ice types and within similar orientations. There is shown a strong chlorinity-strength relationship with the exception of the medium grain and center ice. The curve of pure ice single-crystal strength is the upper limit of the envelope of the single crystal data.

Tension results for summer pack ice are shown in Figure 3.8. As expected, the scatter is proportionally greater than for the compression tests. The effect of variable brine volume has not yet been determined.

The creep rate shown in Figure 3.9 is the minimum slope of a strain-time curve. In general, for creep rates of less than 1 in./in./min X 10^{-5},

Crack Effect on C-Axis Orientation
Sea Ice, Elson Lagoon



Sample Number	Crack Azimuth[1], Degrees	C-axis Azimuth[1], Degrees	Difference, (n) Degrees
1	75	69	+6
2	62	62	0
3	39	42	-3
4	39	52	-13
5	54	62	-8
6	26	30	-4
7	49	88	-39*
8	15	37	-22
9	26	38	-12
10	31	41	-10
11	76	88	-12
12	17	46	-29
13	25	26	-1
14	50	53	-3
15	0	55	-55
16	94	34	+60
17	11	24	-13
18	1	34	-33
19	7	61	-54
		Ave n	Std Dev
All Tests		12.9	24.1
All Tests except #7		11.5	22.0
All Tests except #7 & 14-19		10.8	9.4

[1] Arbitrary Base

* Poor thin Section

Figure 3.4

Specimen Orientation Nomenclature

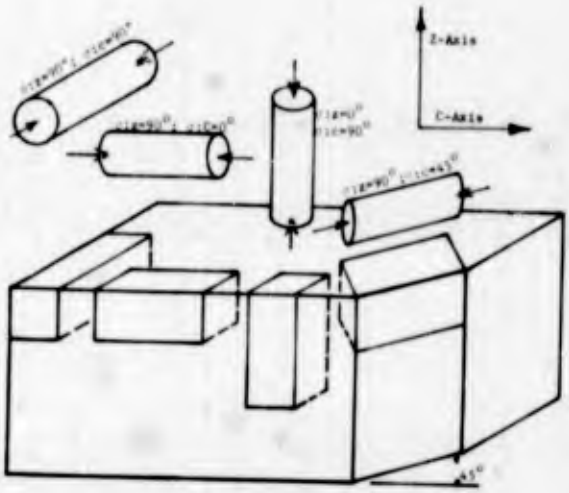


Figure 3.5

Rate of Loading Effect on Strength
New Sea Ice, Compression, 50"-60" Depth

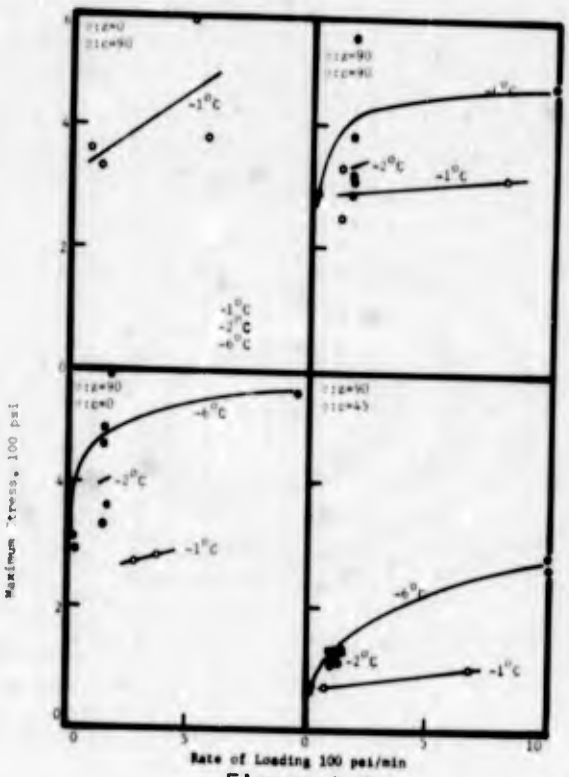


Figure 3.6

Comparative Strength and Load Rate Effects
Compression

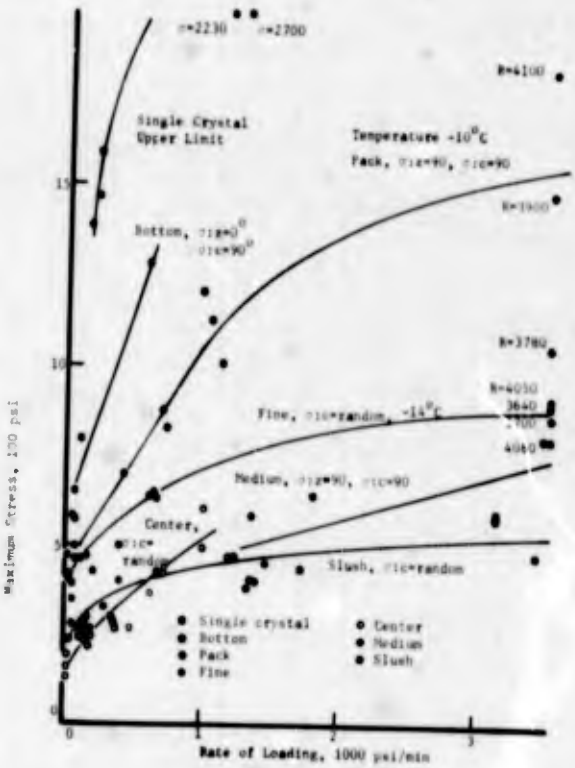


Figure 3.7

the rates do not become greater than this minimum with increasing time. For greater creep rates than 1 in./in./min X 10^{-5}, the creep rates reach a minimum and then becomes increasingly greater with increasing time, ending with a disruptive failure. These particular curves are for bottom ice undergoing slow thawing and also at -6°C.

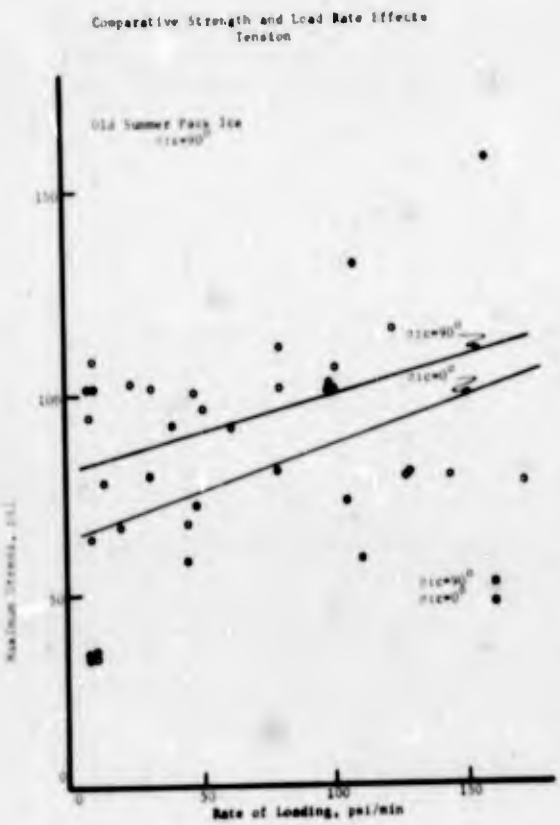


Figure 3.8

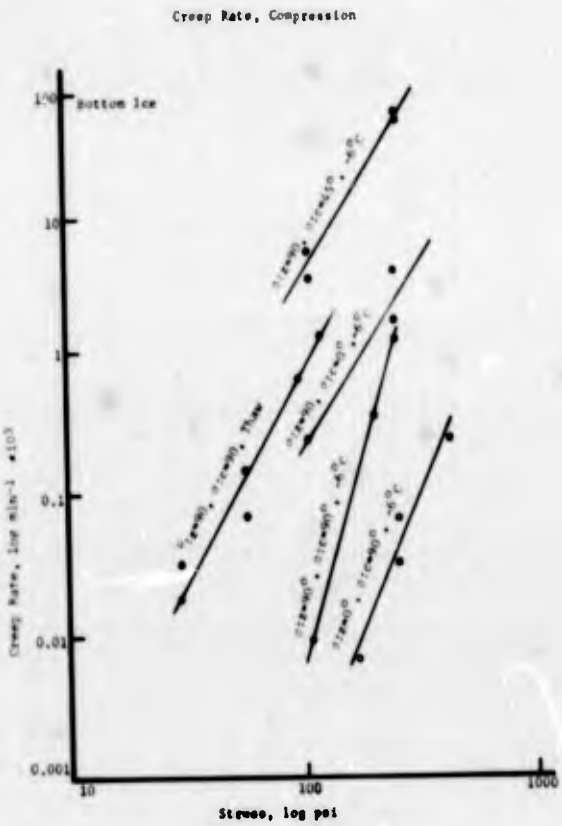


Figure 3.9

Chapter 4

DATA ANALYSIS

4.1 INTRODUCTION

The general form of the equation for the strength of sea ice was assumed to be

$$\sigma = [a][f(x_1)][f(x_2)].....[f(x_n)] \qquad 4.1$$

where any $f(x_i)$ could be established depending upon the physical or chemical mechanism being considered. The specific independent variable x_i was assumed to affect strength according to some reasonable physical law, and a function was selected to describe the mechanism. The function was then statistically tested to check validity.

4.2 EXAMPLE OF BASIC TECHNIQUE

The compression strength depends very critically upon the rate of loading and so this was selected as the first parameter to study. Certain other variables were important, but the data could be sorted to provide groups for which those specific parameters were constant within the group: petrofabric type, crystal orientation, age of ice, and degree of spring time disintegration. Other variables were not sortable in a systematic way because of inter-relationships among them which were probably complex in nature: temperature, salinity, brine volume, and depth in the ice sheet.

A reasonabl -fitting function was selected for load-rate (R), temperature (T), salinity (S), brine volume (V) and depth (D) which yielded the set of equations for n groups of data,

$$\sigma_1 = [a_1][f_1(R)][f_1(T)][f_1(S)][f_1(V)][f_1(D)]$$

$$\sigma_2 = [a_2][f_2(R)][f_2(T)][f_2(S)][f_2(V)][f_2(D)] \qquad 4.2$$

$$\sigma_n = [a_n][f_n(R)][f_n(T)][f_n(S)][f_n(V)][f_n(D)]$$

It was reasoned that variability due to all independent parameters except load rate (R) can be reasonably well extracted by linear multiple regression techniques on equations of the form,

$$\ln \sigma = \ln a + \ln [f(R)]^r + \ln [f(T)]^t ... \qquad 4.3$$

yielding a, r, t ... and whereupon the values of the load rate function can be evaluated by

$$\ln [f(R)]^r = \ln \quad - \ln a - \ln [f(T)]^t ... \qquad 4.4$$

The load-rate function then can be studied in detail. When one is satisfied with its evaluation, the variability of strength due to load-rate can be extracted from strength values by

$$\sigma_a = \frac{\sigma}{f(R)} = [a][f(T)][f(S)][f(V)][f(D)] \qquad 4.5$$

where σ_a is now defined Strate.

Each succeeding parameter or group of inter-related parameters then can be studied in turn, and each individual parametric function can be statistically evaluated in relation to the entire equation.

4.3 DISPERSION MEASURED IN NATURAL LOGARITHMS

Many of the calculations are in units of natural logs so the log values are often more readily available than antilogs. Because of the excessive computer cost of conversion from logs to antilogs, it is desireable to have a measure of the relative variation of the actual numbers when performing a statistical analysis of the natural logs. With caution, the standard deviation of the natural logs can be used. The mathematical relationship is as follows:

$\bar{x}$ = average of data

s = standard deviation of data

cv = coefficient of variation of data

$\overline{\ln x}$ = average of logrithms of data

S = standard deviation of logrithms of data

1. Assuming

$$(\bar{x}+s) - (\bar{x}-s) \approx e^{\overline{\ln x}+S} - e^{\overline{\ln x}-S} \qquad 4.6$$

$$2s \approx e^{\overline{\ln x}} e^{S} - \frac{e^{\overline{\ln x}}}{e^{S}} \qquad 4.7$$

by definition, $s = (cv)(\bar{x})$

$$(2)(cv)(\bar{x}) \approx e^{\overline{\ln x}} (e^{S} - \frac{1}{e^{S}} \qquad 4.8$$

2. If the data have reasonable dispersion,

$$\bar{x} \approx e^{\overline{\ln x}}$$

$$2\,cv \approx e^{S} - \frac{1}{e^{S}} \qquad 4.9$$

3. Where S is less than 0.20

$$e^{S} \approx 1 + S \quad \text{and} \quad \frac{1}{e^{S}} \approx 1 - S$$

$$2\,cv \approx (1 + S) - (1 - S) \qquad 4.10$$

$$cv \approx S \qquad 4.11$$

A later data review indicates that this relation is very good for values of S up to 0.17. Apparently assumptions 1 and 2 cause scatter and assumption 3 causes a systematic error at S values higher than .17. The standard deviation of the log values becomes larger than the coefficient of variation of the actual numbers; however, the standard deviation of the log values can be used as a guide to perhaps 0.30 or more. It is possible to calculate and remove the systematic error.

$$e^x = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \frac{x^4}{4!} \cdots \frac{x^n}{n!} \qquad 4.12$$

$$e^x - e^{-x} = 2x + \frac{2x^3}{3!} + \frac{2x^5}{5!} \cdots \qquad 4.13$$

If x is small, the first two terms are adequate. Equation 4.12 becomes

$$cv \approx S + \frac{S^3}{6} \qquad 4.14$$

and the systematic error is $S^3/6$. The relative errors is $\frac{S^3/6}{S}$ or $S^2/6$. When $S = 0.40$, the relative error is only about three perecent.

4.4 SIMPLE INTERRELATIONSHIPS

Early analysis demonstrated that interrelations exist between rate of loading and other independ variables, particularly temperature. The multiple regressions for determining broad functional relationships was

$$\text{Strength} = A(\text{Depth})^d\ (\text{Salinity})^s\ (\text{Temp})^t\ (\text{Rate} + 50)^r \ldots.$$

This equation will handle most simple interrelationships on the basis of the following:

$$\text{Strength} = A(\text{Depth})^d\ (\text{Temp})^t\ (\text{Rate})^r\ (\text{Temp} \times \text{Rate})^m$$
$$\text{Strength} = A(\text{Depth})^d\ (\text{Temp})^t\ (\text{Rate})^r\ (\text{Temp})^m\ (\text{Rate})^m$$
$$\text{Strength} = A(\text{Depth})^d\ (\text{Temp})^{t+m}\ (\text{Rate})^{r+m}$$

The regression, in solving for A, d,t+m, etc., automatically sorts out the simple interrelationships and assigns variation in the dependent variable in the most simple manner.

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Chapter 5

LOAD RATE EFFECTS

5.1 INTRODUCTION

The data were grouped according to tension, compression, petrofabric, crystal orientation, degree of spring-time disintegration and experimental precision. These groups were then analyzed as outlined in Chapter 4 with respect to rate of loading.

5.2 RATE OF LOADING EFFECT, COMPRESSION

5.2.1 Initial Analysis. The best fitting rate function was determined to be of the form (Rate + Constant)^r, and the constant was found to vary between 25 and 100 psi/min by solving the regression equation

$$\text{Strength}=A(\text{Depth})^d\ (\text{Salinity})^s\ (\text{Temp})^t\ (\text{Rate}+\text{Const})^r \qquad 5.1$$

The rate exponents, r, generally ranged from .15 to .50 and tended to group for ice of the same type and orientation. The fit using this equation tended to be satisfactory for most of the data with multiple regression coefficients up to and beyond .90.

It was then found that the rate constant, Const, and rate exponent, r, were related within petrofabrics and orientation families, but were otherwise variable. See Exhibit 5.1.

Exhibit 5.1 of this report shows, in addition to the r-Const curves, the curves of the multiple regression coeffient, R, versus Const. The rate exponent curves show a fine family relationship but the curves for the multiple regression coefficient fail to show a definite pattern. The best-fitting Const was studied thoroughly, and were found to vary from less than -20 to greater than 100 in a generally random way with an average value being perhaps 10 or 20.

Because Const is rather random, and because the average Const is relatively small, a Const of zero will be used for the time being. Any further study of it is deferred until creep information is considered.

5.2.2 Factors Controlling the Rate Exponent. The combination of ice type-crystal orientation define both the ice used and how it is loaded in strength testing. Basic sorting of the data is, first by crystal type, and secondly, by orientation with each group consisting of a single type and orientation. Since there are frequent references in the balance of this paper to ice of a single type and orientation, this will be abbreviated to singto. Analysis demonstrated that different singto not only had different strengths but they had different rate functions. Study of the center ice demonstrated that rate exponent, r, varied with depth and temperature.

5.2.3 Rate Exponent for a Single Type-Orientation Group(Singto). Once it had been determined that temperature and depth controls r, the ice in each compression singto was sorted into groups with essentially single depths

and temperatures. The effect of ice age was ignored but pack ice was kept separate from other ice. The total number of groups, total number of samples represented, the groups used, and samples used for each singto are shown as follows:

Table 5.1

Compression Data Groups

	ICE	TOTAL GROUPS	TOTAL SAMPLES	GROUPS USED	SAMPLES USED
Horizontal					
	Fine	4	68	4	68
	Med 90-90	6	196	5	174
	Center	18	611	14	566
	Bot 90-00	9	274	8	265
	Bot 90-45	8	234	7	221
	Bot 90-90	7	232	7	232
	Total Horizontal	53	1615	45	1526
Vertical					
	Med 00-90	2	32	2	32
	Bot 00-90	10	274	8	242
	Total Vertical	12	306	10	274

About 93% of the data were used.

Exhibit 5.2 is a listing of the data developed. It shows the identification of each singto, number of samples,average ln(depth), average ln(temp), average ln(salinity), and the fitted rate exponent, r, from a regression of the data. Ignore for the moment the column ln(rotvar x e). The starred data were eliminated because of an atypical rate exponent. Comments on Exhibit 5.2 show the apparent reasons for this atypical behavior. Exhibit 5.3 shows a center ice rate exponent plotted against ln(depth) and ln (temperature).

5.2.4 Developing General Rate Functions. The average rate exponent for the different singto were approximately as shown in Table 5.2.

Table 5.2

Average Rate Exp., Compression

	ICE	AVERAGE RATE EXPONENT
	Fine	.14
	Med 90-90	.20
	Center	.22
Horizontal	Bot 90-00	.20
	Bot 90-45	.40
	Bot 90-90	.25
	Med 00-00	.20
Vertical	Bot 00-90	.17

The fine, medium, and center ice all falls within the same general depth range and the bottom ice is also within a general depth range. It is obvious that the rate exponent is a function

of type and orientation as well as depth and temperature. A new variable, Rotvar, for Rate Orientation and Type Variable, was introduced and a rate exponent equation was assumed.

$$r=A(\text{Depth})^{m}\ (\text{Temp})^{n}\ (\text{Rotvar}) \qquad 5.2$$

The center ice was selected as the primary ice from which to work and it was assigned a Rotvar value of 1.00. Each other horizontal singto was compared to the center ice by fitting values of Rotvar. The values are shown in Table 5.3

Table 5.3

Values of Type and Orientation Variable, Compression

ICE	ROTVAR
Fine	.55
Med 90-90	.79
Center	1.00
Bot 90-00	.60
Bot 90-45	1.26
Bot 90-90	.79

When the horizontal data groups were analysed by weighted regression, 45 data groups and 1526 samples yielded the following equation:

$$r_h = .166(\text{Depth})^{.138}\ (\text{Temp})^{.09}\ (\text{Rotvar}) \qquad 5.3$$

where the subscript h represents horizontal specimens, depth is in inches and temperature in °C, r being used in the equation,

$$\text{Strength} = A(\text{Depth})^{d}\ (\text{Salinity})^{s}\ (\text{Temp})^{t}\ (\text{Rate})^{r}$$

This completes the development for the general rate function for horizontal ice which has the statistical description given in Table 5.4.

Table 5.4
Rate Function Statistics, Horizontal Loading, Compression
(Performed on Logarithms of Variables)

Constant Term	-2.79503
R Squared	.84123
R (Multiple correlation coefficient)	.91719
Standard Error	.121

Ind Var	Regr Coef	Std Error	Part Cor Coef	t
Depth	.13766	.00239	.62202	57.584
Temp	.09016	.00361	.26480	24.947
Rotvar	.97850	.01240	.82352	78.869

The same procedure was used with the vertical ice. However, there were only two singto, one of which was a very weak group. It was found that the Rotvar function was not important for the data available and the general rate function for 10 data groups and 274 samples is

$$r_v = .316(\text{Depth})^{-.123}\ (\text{Temp})^{-.096} \qquad 5.4$$

where v indicates vertical specimens, depth is in inches and temperature in °C.

The statistical information is given in Table 5.5

Table 5.5

Rate Function Statistics, Vertical Loading, Compression
(Performed on Logarithsm of Variables)

Constant Term	-1.15012
R Squared	.40271
R	.63459
Standard Error	.108

Ind Var	Regr Coef	Std Error	Part Cor Coef	t
Depth	-.12281	.01085	-.56286	-11.316
Temp	-.09640	.00899	-.53301	-10.716

5.2.5 Testing the General Rate Functions. The general rate functions for compressive strength were tested by the method outlined below to determine how well they fit the data.

1. Dividing the strength by the rate function removes the variation due to rate and only the variation due to other factors remains.
2. STRATE ONE is defined as the strength divided by the best-fitting rate function from equation 5.1.
3. STRATE TWO is defined as the strength divided by the general rate function.
4. The general rate function fit can be determined by comparing the dispersion of STRATE ONE to that of STRATE TWO for each data group. The coefficient of variation was used as the measure of dispersion.
5. If the coefficient of variation for STRATE TWO is not greatly different from that for STRATE ONE for the individual data groups, it can be concluded that the derived general rate function has survived a rather rigorous test.

Exhibit 5.4 lists for each data group the number of observations, the mean, standard deviation, and coefficients of variation for each STRATE ONE and STRATE TWO. The tests for the general rate functions are that (1) the average value of STRATE TWO should be very close to that of STRATE ONE, and that (2) the coefficient of variation of STRATE TWO should also be very close to that of STRATE ONE. All data, including the groups eliminated earlier, were processed.

In examining Exhibit 5.4, which represents horizontal ice, it is seen that 36 of the 53 groups have coefficients of variation for STRATE

TWO smaller than for STRATE ONE. These particularly good fits are in the fine ice, center ice, and bottom 90-90 ice. In the medium 90-90, bottom 90-00 and 90-45 ice, the coefficients of variations for STRATE TWO are usually larger than those for STRATE ONE.

Since coefficient of variation is affected by differences in size of either the standard deviation or the average value, it is considered that a difference in coefficient of variation of about 0.0050 is smallest for which it can be said that the differences should be examined. Using this criterion, the coefficients of variation of STRATE TWO are found to be too large for the following ice groups.

ICE	NUMBER
Fine	0 of 4
Med 90-90	2 of 6
Center	0 of 19
Bot 90-00	2 of 9
Bot 90-45	2 of 8
Bot 90-90	0 of 7

It would seem that the horizontal general rate function fits the fine, center and bottom 90-90 ice very well but there is some question about the other three singto.

The medium 90-90 ice indicates that the rate exponent decreases with increasing depth which is contrary to the general rate function being used for horizontal ice. However, three data groups are of early ice and the fourth is at the melting temperature so the data are not generally good.

The bottom 90-00 groups that do not fit well are small and one is at the melting temperature. The remaining data groups fit quite well for the bottom 90-00 ice. The two bottom 90-90 groups are also small. One is warm and has a very low range of rate. It seems reasonable to conclude that the general rate function for horizontal ice fits the data adequately well.

5.2.6 The Orientation and Type Function of Rate Exp. Rotvar is the orientation and type function of the rate exponent, r, and it is a simple multiplying variable that ranges from .55 to 1.26 in the equations.

$$r = A(\text{Depth})^{d}\ (\text{Temp})^{t}\ (\text{Rotvar})$$

Exhibit 5.5 is a plot of Rotvar versus average STRATE TWO for the different horizontal singto. This plot indicates a good curvilinear relationship between the two groups. A least squares parabolic fit yields the equation

$$\text{Rotvar} = .709 + .443\ (\text{Strate Two}) - .088\ (\text{Strate Two})^{2} \qquad 5.5$$

with a standard deviation of .036. When this equation is differentiated and the derivitive set equal to zero, it yields a maximum Rotvar of 1.27 at a STRATE TWO value of 2.5. These values are very close to those values for 90-45 ice and possibly indicates that 90-45 ice represents a limiting

case of the general load rate functions. The physical significance of this point should be pursued. Each STRATE TWO mean contains some error due to experimental variability and additional variability due to undefined functions of temperature, brine volume, depth and perhaps other variables. The different singto, however, have been tested at temperatures and brine volume of roughly the same average values and ranges, so this relationship should not be completely discounted.

Table 5.6 shows the values of Rotvar and STRATE TWO for horizontal singto and indicates an inverse relationship between Rotvar and STRATE TWO. This relationship is probably the result of the number of crystal boundaries and inter-platelet brine planes which are oriented in the plane of maximum principal shear. The greater the number of boundaries and brine planes, the more viscous the bulk properties might be expected to be. One reason for this is the lesser ice area and the higher local shear stress in ice which bridges the brine plane and possibly the crystal boundaries. A second reason is the probable orientation of the bridging ice basal plane, being parallel to the brine plane.

Table 5.6

Values of Strate, Compression

ORIENTATION	ROTVAR	STRATE TWO AVERAGE
Bot 90-45	1.26	2.87
Center	1.00	4.28
Med 90-90	.79	4.95
Bot 90-90	.79	4.90
Bot 90-90	.60	5.47
Fine	.55	5.34

5.2.7 Characteristics of Strate. Strate should have less variation than does strength because the variability due to rate has been removed. Some problems exist in measuring the change in variation.

The calculations were made in logarithms and it is more convenient to use the log values that are available.

If $\ln(\text{strength}) = i \pm j$

$$\text{Strength} = e^{i \pm j} = e^{i} e^{\pm j}$$

where i is the average and j is the standard deviation of ln(strength). The value of e^{j} seems to be the most useful measure of variability of strength.

Table 5.7

Average Rate Function, Compression

ICE	j STRENGTH	j STRATE	CHANGE j	PERCENT CHANGE	AVERAGE F(RATE)
Fine	1.99	1.35	.64	65	1.97
Med 90-90	1.66	1.56	.10	15	3.50
Center	2.03	1.66	.37	36	4.31
Bot 90-00	1.73	1.42	.31	43	3.48
Bot 90-45	2.17	1.39	.78	66	11.9
Bot 90-90	1.84	1.38	.46	55	4.46
Med 00-90	1.53	1.53	.00	00	3.26
Bot 00-90	1.91	1.69	.22	24	2.79
All Comp	2.28	2.68	-.40	-31	4.25

In examining the data contained in Table 5.7 it is seen that all ice except the suspect medium 90-90 ice shows substantially higher values of j for strength than for strate. The bottom 00-90 ice, which is the strongest and least rate sensitive, had the least variation removed. The bottom 90-45 ice, which is the most rate sensitive, had the greatest variation removed.

Since Strate = Strength/(f(Rate))

f(Rate) = Strength/Strate

and a useful comparison may be made by setting

Average f(Rate) = Average Strength/Average Strate.

Table 5.7 lists the average f(Rate) for the different singto. The variation within each singto is reduced, but at the same time, the spread between the different singto is increased as compared to the value for strength. Exhibit 5.6 shows average strength and average strate versus orientation for the bottom ice.

5.3 RATE OF LOADING EFFECT, TENSION

5.3.1 Initial Analysis. For the tensile strength testing, a series of direct tension testing apparatus was developed. An improved model was adopted with test 880 and the final model was adopted with test 1446.2. The data have been classified according to the apparatus used. Data prior to test 880 are classified as "very early" and are not used, data from 880 to 1446.2 are classified as "early" and are used but considered questionable. Data continuing from 1446.2 on are classified as "late" data and are considered to be generally good. The early and late data were kept separated in this analysis.

The tension data fall into four failure types; good test, weld failure, head failure, and no failure. Obviously, in the analysis of maximum

strength, only the good tests can be used. For some tests, no rate information is availble and these data cannot be used in an analysis of the effect of rate on strength.

A total of 1054 tests were available and those which were eliminated are shown in Table 5.8.

Table 5.8

Tension Data Eliminated

Type Tests Removed	No. Removed
Very early tests	139
Weld Failure	54
Head Failure	38
No Failure	11
No Rate Information	35

The 777 tests remaining were sorted by ice type, orientation, and early or late. Table 5.9 shows the inventory of tests.

Table 5.9

Inventory of Useable Tests

Ice Type	Ice Orientation	Early	Late	Total
Major Groups				
Fine	90-11(Random)	26	--	26
Medium	90-90	9	12	21
Center	90-11(Random)	32	155	187
Bottom	00-90	--	100	100
Bottom	90-00	23	144	137
Bottom	90-45	11	92	103
Bottom	90-90	26	124	150
Minor Groups				
Bottom	22-90	--	6	6
Bottom	67-90	--	6	6
Bottom	90-22	1	6	7
Bottom	90-67	--	6	5
Bottom	45-90	--	29	29
Total		128	649	777
Total, Major Groups		127	597	724

The minor groups shown are essentially based on strength information at a single depth, temperature, and rate of loading. They cannot be used in determining the rate function. The data remaining for analysis are the 724 tests of the seven major type and orientation groups. In compressive strength, the factors that controlled the rate function had proved to be ice type, ice orientation, depth, and temperature.

The 724 remaining tension tests, which were already sorted by type and orientation were further sorted into groups with limited temperature and ice depth ranges and also with the early data kept separate from the late data. Table 5.10 shows the number of data groups for each single ice type and orientation (singto).

Table 5.10

Tension Data Groups

Singto	Early Groups	Early Data	Late Groups	Late Data	Total Groups	Total Data
Fine	2	26	0	0	2	26
Medium	1	9	1	12	2	21
Center 90-11	2	32	11	155	13	187
Bottom 00-90	0	0	7	100	7	100
Bottom 90-00	1	23	7	114	8	137
Bottom 90-45	1	11	7	92	8	103
Bottom 90-90	1	26	7	124	8	150
Total	8	127	40	597	48	724

The average size of the individual data group is 15 tests. The largest number of tests and largest number of groups are from the center ice.

5.3.2 Factors that Control Rate Exponent. The analysis for the general rate function for tensile strength is quite similar to that used for compressive strength. Some difference arises due to the nature of the tension test and to improved analytical procedure.

Three factors affected the results as compared to those for compression results.

1. Tensile strength proved to be less dependent upon the rate of loading than did compressive strength.
2. Tensile strength data have much more scatter than compressive strength data.
3. The number of tests per group (average of 15) was relatively small.

As a result, the pattern of rate effect on tensile strength was much less clear than the pattern observed in the compressive study.

A few tests with low strength, particularly at high loading rates, were found, and because tension tests are particularly sensitive to flaws, it is possible that these involved flawed specimens. It was decided to eliminate the obviously weak specimens, and 26 tests were eliminated as shown in Table 5.11. Later testing under a different study, as reported in Chapter 10, has shown a strength reduction at very high load rates, much higher than those reported here.

Table 5.11

Weak Data Eliminated

Singto	Initial Data	Eliminated Data
Fine 90-11	26	0
Medium 90-90	21	0
Center 90-11	187	10
Bottom 00-90	100	9
Bottom 90-00	137	2
Bottom 90-45	103	0
Bottom 90-90	150	5
Total	724	26

In no case were more than three tests removed from a group.

Exhibit 5.8 lists the information developed showing identification of the individual groups, the number of tests per group, the averages of the natural logs of strength, depth, temperature and rate, the standard deviation of the natural log of rate, the rate exponent and the Student's t for the rate exponent value.

5.3.3 Rate Exponent for a Single Type and Orientation Group. When the rate exponent values, r, had been obtained for the individual groups, it was necessary to combine them to see if they would fit an equation of the form

$$r = A(\text{Depth})^m\ (\text{Temperature})^n \qquad 5.6$$

Two problems developed; the first was scatter in rate exponent within the singto due to the small number of tests per group and the scatter inherent in the tension data; the second was the need for weighting the data groups.

No means was found for handling negative values of exponents in a regression analysis and it was necessary to partly ignore the data groups with a negative rate exponent. Forty six groups now remained, three with negative rate exp. values and 672 remaining useable tests.

Weighting of the data was required because:

1. Each data group represented different numbers of observations,
2. The range of rate for the different groups varied greatly, and
3. The significance of the rate exponent value for the different groups, as measured by t-test, varied.

An arbitrary weighting formula was adopted:

$$\text{Weight for the group} = (\text{No. of obs})\ (\text{range})\ (t^{1/2}) \qquad 5.7$$

Obviously, the number of observations is a direct component of a weighting formula. The range is because the data group with the greater range of load rate should give a better indication of the rate function. The range was defined as ln(Rate) plus the standard deviation of ln(Rate). It had been observed that the relationship between the square root of Student's t and significance defined in percentile values is approximately linear in the normal range of t. This is the basis for using $t^{1/2}$ in the weighting formula.

A weighted multiple regression was used to fit a data group with the equation:

$$r = A(\text{Depth})^{a} \ (\text{Temperature})^{b} \ (\text{Rotvar}) \qquad 5.8$$

where Rotvar is a constant for each singto which allows all singto to be grouped as in the analysis of compression data. Table 5.12 shows the results obtained for each singto and the multiple corelation coefficient.

Table 5.12

Rate Exp. for Tension Singto

Singto	Groups	Av r	A	a	b	R
Center	13	.053	.054	-.142	.065	.387
Bottom 00-90	6	.036	.012	.319	-.078	.380
Bottom 90-00	6	.040	large	-1.919	-.448	.886
Bottom 90-45	8	.109	.613	-.382	-.165	.660
Bottom 90-90	8	.048	.554	-.628	-.050	.268

The analysis is continued similar to that for compression.

5.3.4 Developing General Rate Functions. Rotvar (Rate Orientation and Type Variable) again is a multiplying function in the rate exponent. It is designed to be a constant for each singto. Center ice, which has the most data, the largest number of data groups, and the greatest range in depth, was assigned a Rotvar value of 1.00 in the same manner as with the analysis of compression data. All other singto must then have Rotvar fitted so they may be grouped with center ice.

The final fit for the horizontal rate function is

$$r_h = .082(\text{Depth})^{.295} \ (\text{Temperature})^{.064} \ (\text{Rotvar}) \qquad 5.9$$

with the Rotvar values shown in Table 5.13. R, the multiple correlation coefficient, is 0.74.

Table 5.13

Fitting Tension Rotvar

Singto	Rotvar
Medium	4.48
Center	1.00
Bottom 90-00	1.82
Bottom 90-45	4.48
Bottom 90-90	2.12

For the vertical (bottom 00-90) ice, the rate exponent is

$$r_v = .012(\text{Depth})^{.319}\ (\text{Temperature})^{-.078} \qquad 5.10$$

5.3.5 Testing the General Rate Function. Strate, the strength function with the rate effect removed, is obtained by dividing strength by the rate function. The compression rate analysis had shown that weaker ice had a larger rate function; and therefore, strate for the weaker ice was proportionately smaller than for the stronger ice. As a result, the relative variation for strate was greater than that for strength when all of the data were grouped, even though the rate function had been responsible for much of the variation in the data. It was expected that tension data might show the same phenomena, and statistical analyses were made on the small data groups for a true indication of the result of removing the rate effect.

Exhibit 5.9 shows the sums, raw cross products, averages, standard deviations and coefficients of variation for the individual data groups for both strength and strate. Exhibit 5.10 shows the same information for combinations of data, by singto and larger groupings. Table 5.14 summarizes the information in the Exhibits by showing selected information regarding the coefficients of variation of the groups. The basic test is whether the coefficient of variation for strate is less than that for strength; if so, part of the variation in the strength data is accounted for by the rate function.

Table 5.14

Study of Coefficient of Variation for Strength and Strate

Singto	All Groups	Late Groups	Ratio of Coefficients of Variation Strate/Strength	
	Improved/total	Improved/total	All	Late
Medium	2/2	1/1	1.516	.886*
Center	12/13	11/11	.878	.848
Bottom 90-00	7/8	6/7	1.00	1.01
Bottom 90-45	8/8	7/7	.844	.862
Bottom 90-90	6/8	5/7	.972	.955
All Horiz	35/39	30/33	1.092	1.103
Bottom 00-90	4/7	4/7	1.036	1.036
All Tension	39/46	34/40	1.133	

*one group only

The coefficient of variation for strate is decreased for 35 of the 39 data groups and 30 of the 33 groups of late data. This decrease indicates that the extraction of the rate function dependence has indeed been successful in removing some of the variation in the data.

The ratio of the coefficients of variation of strate to that of strength for a singto and also for a larger group indicates an improvement in the variation in the entire group if the ratio is less than one. The center and bottom 90-45 ice show a relatively large improvement indicating that rate does account for a substantial portion of the variation of these data. The bottom 90-90 shows a smaller improvement and the bottom 90-00 is not affected. The horizontal data, when grouped show that the relative variation is greater in strate than in strength. This result is identical to that discovered in analysis of the compression data. The vertical data also shows an increase in relative variation.

5.4 RATE OF LOADING EFFECT: TENSION AND COMPRESSION COMPARISIONS

It is desireable to examine the average values of strength and strate for the different singto for both tension and compression. The study of the medium ice is limited by the small number of tests, particularly in tension, but the other data should provide good comparative values. Table 5.15 shows the average strength and strate values in compression and tension as well as some comparative results.

Table 5.15

Strength and Strate Values

Singto	Compression			Tension			Comp/Tension	
	Strength	Strate	Ratio	Strength	Strate	Ratio	Strength	Strate
Med 90-90	493	140	3.50	94.4	35.0	2.70	5.22	4.00
Center	313	72	4.31	96.3	74.5	1.29	3.25	0.97
Bot 90-00	822	237	3.48	114.2	92.3	1.24	7.20	2.57
Bot 90-45	210	17	11.9	100.2	56.2	1.78	2.10	0.30
Bot 90-90	600	134	4.46	156.8	120.6	1.30	3.19	1.11
All Horiz	405	90	4.52	116.3	85.7	1.36	3.48	1.05
Bot 00-90	985	354	2.79	261.7	216.8	1.21	3.76	1.63
All Data	465	109	4.25	129.6	98.7	1.31	3.59	1.10

The ratio of strength/strate is also the average function of rate for the singto. It is apparent that the rate function is extremely important in compressive strength with an average value for all horizontal data of about 4.52. In tension, the equivalent value is only 1.36 showing that rate is much less important in tensile strength.

All compressive strengths are much greater than tensile strengths for the same singto. The compressive and tensile strate values, however, are roughly equivalent with a compressive-strate/tensile-strate ratio for all horizontal data of 1.05. The individual singto behave differently however. The weaker, more rate-sensitive, singto (bottom 90-45 and center) is weaker in compressive strate than in tensile strate; the stronger, less rate sensitive singto remain stronger in compressive strate than in tensile strate.

Table 5.16 is a listing in ascending order of compressive rate functions for the various singto, their compressive and tensile average rate functions, and the ratio of compressive to tensile average rate functions.

Table 5.16

Average Rate Functions

Singto	Average f(rate) Comp.	Tension	Ratio Comp/Tens
Bot 00-90	2.79	1.21	1.30
Bot 90-00	3.48	1.24	2.81
Center	4.31	1.29	3.34
Bot 90-90	4.46	1.30	3.43
Bot 90-45	11.9	1.78	6.69
All Horiz	4.52	1.36	3.32

The singto ranking for average tensile rate functions is the same as for compressive rate function, but the compressive rate functions increase more rapidly than do those for tension.

5.5 SUMMARY

5.5.1 Conclusions

1. The strength of sea ice increases as the rate of loading increases, within the load rate range of these experiments.
2. The data studied indicate that general rate functions can be written for both horizontal and vertical strength.
3. The variables that affect the rate function are depth, temperature, orientation and ice types.
4. The rate function included in the equation

   $$\text{Strength}=(\text{Rate}+\text{Constant})^{r} - - - \text{(All other effects)}$$

   has been adopted; however, the constant seems rather random. An average value of 10 or 20 psi/minute was found but with wide scatter and no defineable pattern. This constant is important only at low load rates where the effect of creep may enter. Since creep is not being studied at this time, a rate constant of zero is used.
5. The general rate functions are of the form $(\text{Rate})^{r}$, and following are the empirical expressions for r.

Compression

Horizontal

$$r_{ch} = 0.166(\text{Depth})^{0.138}(\text{Temp})^{0.09}(\text{Rotvar})$$

Ice		Rotvar
Fine	90-11(Random)	0.55
Medium	90-90	0.79
Center	90-11(Random)	1.00
Bottom	90-00	0.60
Bottom	90-45	1.26
Bottom	90-90	0.79

Vertical (Bottom 00-90)

$$r_{cv} = 0.316(\text{Depth})^{-.123}(\text{Temp})^{-0.096}$$

Tension

Horizontal

$$r_{th}=0.082(\text{Depth})^{-0.295}(\text{Temp})^{-0.064}(\text{Rotvar})$$

Ice		Rotvar
Medium	90-90	4.48
Center	90-11(Random)	1.00
Bottom	90-00	1.82
Bottom	90-45	4.48
Bottom	90-90	2.12

Vertical(Bottom 00-90)

$$r_{tv}=0.012(\text{Depth})^{0.319}(\text{Temp})^{-0.078}$$

Depth is in inches, temperatures in °C and rate in psi/minute.

7. It is not known why depth and temperature affect the rate function. It is interesting that sign reversal between horizontal and vertical rate functions are opposite for tension and compression.
8. A. For almost all of the small groups of data, the relative variation of strate is less than that for strength.
   B. When all data of a single type and orientation of ice are grouped, the relative variation of strate is less than that for strength only if the ice is fairly rate-sensitive. For ice not rate sensitive, the relative variation of strate is greater than that for strength.
   C. When all data are grouped, the relative variation of strate is greater than that for strength.
9. While the average rate function in compression has a value of about 4.52, the average rate function in tension is approximately 1.35. Compressive strength is several times as sensitive to rate as is tensile strength.
10. The average compressive strength (horizontal only) is about 3.5 times as great as the average compressive strate. However, the average compressive strate is only about 1.05 times as great as the tensile strate. The conclusion is that the gross difference

in compressive and tensile strength is due to the large effect of rate in compression.

II. In examining the individual ice type and orientation groups, it is found that some of the weaker types and orientations are weaker in compressive strate than in tensile strate. The stronger types and orientations maintain a stronger compressive than tensile strate. The effect of ice type and orientation is extremely important in strate.

Later it may be possible to refine the results obtained in this analysis and express them in a less empirical manner. The achievement thus far is the development of general rate functions. The general rate functions for horizontal forces appear to fit the data well with the exception of medium 90-90 ice. Enough sample types, orientations and depths were available to yield results in which confidence can be accepted. The vertically oriented ice data were sharply limited in number of samples, types, and orientations; the results are then much more tentative than for the horizontally oriented ice.

The measurement of variation of strength and strate is not entirely satisfactory. A better measure could be obtained by a statistical analysis of the antilog values. The value of eJ does provide a measure of varability, but this type of measure is questionable as to the precision which it can provide.

Chapter 6

BRINE AND SOLID SALT EFFECTS - CENTER ICE - ONE INCH DEPTH

6.1 INTRODUCTION

6.1.1 Sea Ice Formation. The freezing of sea water is rather complex because the sea water is a dilute solution of several salts. The salts depress the freezing point below the freezing temperature of fresh water, and when freezing begins, pure water ice is formed and the excluded salts become segregated in the liquid brine. Part of the enriched brine drains away from the growth boundary of the ice, but part is trapped in the ice structure and gives sea ice a net salinity. The ice and its entrapped brine cool as the ice sheet thickens. With the lowering of the temperature, the salt in the brine begins to precipitate and is incorporated into the solid ice structure. Sea ice thus has three major phases:

1. Pure water ice.
2. Liquid brine of varying concentration.
3. Solid salts of several types.

Ringer (1) investigated the freezing of sea water and established the order and temperature at which salts precipitate. Nelson and Thompson (4) confirmed Ringer's conclusions. Assur (7) developed a complete phase table at intervals of two degrees over the range 0°C to -54°C for standard sea ice (sea ice with a salinity of 34.325 per mil) showing:

1. Ions in solution
2. Water
3. Solid salt
4. Ice

Assur's table was used for the phase studies in this report.

Table 6.1 gives information concerning precipitated salts from Assur's phase table at the three points of -22°, -36° and -54°C. The table shows the individual salts which precipitate in sea ice, the temperatures at which they begin to precipitate, the quantity (in gm/kg of sea water) which has precipitated at the three temperatures and the ratio of individual salts to the total precipitated salts expressed in per cent.

Table 6.1

Quantities of Precipitated Solid Salts at Various Temperatures.

Salt	Precip. Temp. °C	-22°C gm/kg	-22°C %	-36°C gm/kg	-36°C %	-54°C gm/kg	-54°C %
$CaCO_3 \cdot 6H_2O$	-2.2	0.243	2.8	0.314	0.6	0.319	0.5
$Na_2SO_4 \cdot 10H_2O$	-8.2	8.171	94.5	8.883	18.8	8.883	14.0
$MgCl_2 \cdot 8H_2O$	-18.0	0.235	2.7	1.579	3.3	2.284	3.6
$NaCl \cdot 2H_2O$	-22.9	0.000	0.0	36.492	77.2	38.034	59.8
KCl	-36.8	0.000	0.0	0.000	0.0	0.725	1.1
$MgCl_2 \cdot 12H_2O$	-43.2	0.000	0.0	0.000	0.0	13.275	20.9
Unk. Salts		0.000	0.0	0.046	0.1	0.061	0.1
Total		8.649		47.314		63.576	

Of the 34.325 grams of ions in one liter of standard sea water at 0°C, 1.040 grams remain in solution at -54°C. The 33.285 grams not remaining in solution are in the 63.576 grams of solid salts shown in Table 1, mostly as hydrates.

The lower surface of sea ice remains at the freezing point of the sea water (-1.8°C) while the upper surface temperature is controlled by the air temperature, wind, and snow cover. Temperatures in the Arctic do not get extremely low and the sea ice normally has a cover of snow; therefore, extremely low sea ice temperatures do not normally occur. Only sodium sulfate and sodium chloride salts seem important in sea ice because the calcium carbonate is present only in trace quantities and $MgCl_2 \cdot 8H_2O$, which begins to precipitate at -18°C, has deposited only small quantities at -22.9°C where large quantities of sodium chloride begin to precipitate. The other salts, such as potassium chloride, may never precipitate in Nature except in isolated instances.

6.1.2 Current Knowledge of General Physical Properties. Weeks (8) describes ice formed, while there was still wave motion, in the top sheet as small crystals with vertical crystallographic axes except that the crystals have been disarranged and tilted by the wave action. The amount of wave action governs the degree of disarrangement. Below the initial ice sheet, the crystals grow downward and change orientation to a horizontal c-axis. The crystals are composed of small platelets normal to the c-axis and the brine and air trapped in the ice is distributed in the individual ice crystals between the platelets of pure ice. During the freezing process, the platelets are first completely separated by layers of brine and form a skeletal layer of 1-2 cm thickness. As the freezing continues, ice bridges begin to connect the platelets and the ice begins to have some strength.

Anderson and Weeks (5) have shown that the cylinders of brine between the ice platelets are either circular or elliptical in horizontal section and often extend vertically entirely through the ice sheet. When sea ice fails in tension or flexure, it breaks primarily along the brine cells parallel to the small platelets because the liquid brine reduces the effective cross-sectional area of the ice and because the brine cell geometry produces stress concentrations. Two geometric models were developed by Weeks and Anderson, one with round brine channels and one with brine channels of constant width. The reduced cross-section and stress concentration were incorporated in equations for strength with the effective cross section reduction expressed in terms of brine volume, the ratio of liquid brine volume to total volume.

Anderson and Weeks also reported that solid salts would exist at temperatures below the eutectic points of the various constituents, but they believed that the solid salts would affect strength only after sodium chloride began to precipitate. They limited their analysis to warm ice but concluded that solid salts would act as binders rather than stress concentrators in very cold sea ice because others reported that the very cold sea ice could have strengths higher than lake ice.

Assur (7) discussed and further developed a description of the properties of sea ice. He developed the geometric model with brine channels with elliptical cross sections. This model is the most useful that has been developed. Figure 6.1 is a block diagram of it showing the vertical brine channels, ice platelets, and bridging ice. The three axes are the crystal axis, brine axis and zenith axis. (Assur used a growth axis pointed down rather than the zenith axis up.)

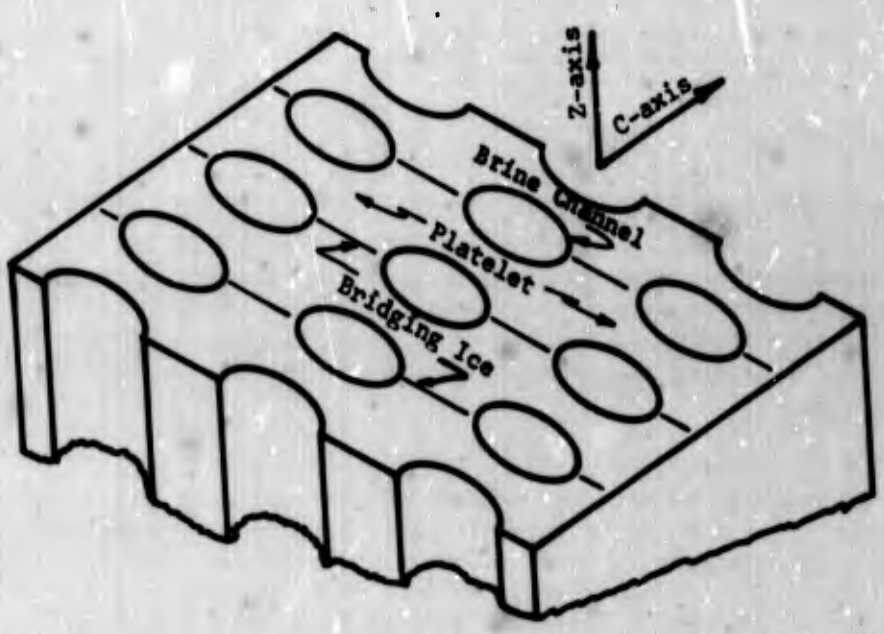

Figure 6.1 Block diagram of Assur's elliptical model.

Figure 6.2 Plan view of elliptical model.

Figure 6.2 is a plan view of Assur's elliptical model.

The geometry of the elliptical model is easily developed. The ratio of the major to minor axis is,

$$\varepsilon = r_b/r_a, \qquad 6.1$$

The cross-sectional area of an ellipse is,

$$F = \pi r_a r_b = \pi r_b^2/\varepsilon \qquad 6.2$$

The relative brine volume in a unit thickness is

$$v = \pi r_b^2/\varepsilon a_o b_o \qquad 6.3$$

The relative brine area in the brine plane (Z-B plane) is

$$F_g = \frac{2r_b}{b_o} = \sqrt{\frac{4a_o b_o \varepsilon v}{\pi b_o^2}} = \sqrt{\frac{4a_o \varepsilon v}{\pi b_o}} \qquad 6.4$$

The strength in the brine plane is

$$\sigma = \sigma_o(1-F_g) = \sigma_o\left(1-\sqrt{\frac{4a_o \varepsilon v}{\pi b_o}}\right) \qquad 6.5$$

where σ is the ice strength of the specimen and σ_o is the basic strength of the bridging ice, including stress concentration effects. Equation 6.5 is equivalent to Assur's Equation 22 except that physical values are used instead of dimensionless relationships and that the brine channels are uninterrupted and extend through the model. This strength relationship is intended to be representative for strength in the brine plane in tension, shear, and compression.

Assur studied the ring tensile strength of 327 specimens and found he could show a linear relationship between the average strength of data groups and $v^{1/2}$ for those data without precipitated salts (v = brine volume expressed as a ratio of brine volume to total volume). However, he found the specimens with solid salts were stronger and concluded that the solid salts reinforced the ice. Precipitation of solid sodium sulfate decahydrate caused an abrupt increase in strength of one-third and precipitation of sodium chloride dihydrate caused a rapid, but smooth, increase in strength. Assur

hypothesized that when failure occured in the plane of the brine channels, the brine channels acted as stress concentrators but that a relatively thin layer of solid salts was adequte reinforcement to reduce stresses in the pure ice. When strength increased rapidly with precipitation of sodium chloride, the failure in the brine plane probably occured first in the bridging ice rather than in the reinforced brine channels. The strength of cold ice with large quantities of sodium chloride dihydrate was found to be more than twice or perhaps even three times the strength of natural fresh water ice. Assur also commented that it is possible to assume that salt inclusions increase strength by reducing crack propogation.

Weeks (9) studied salt ice (NaCl ice) as simplified ice suitable for laboratory studies. His laboratory-grown ice at the 30.5" depth (13, Fig. 1) appears to have had crystals with the c-axis horizontal but randomly oriented. He found the ring tensile strength of solid salt-free ice between -5° and -21.2°C to be a linear function of $v^{1/2}$ and not affected by the temperature of the pure ice platelets. For ice containing solid sodium chloride (below -21.2°C) the ring tensile strength was independent of both the temperature of the sample and the volume of solid salt present in the ice. Weeks reasoned that if the brine pockets were filled with salt with strength equal to or greater than the ice matrix, the failure would occur in the matrix and the strength measured would be that of the ice in the matrix.

Weeks also found the ratio of stress concentration in salt ice to that in fresh water ice to be about 1.20, implying that roughly the same stress concentration exists in fresh water ice as in salt ice. The salt ice that Weeks produced was fundamentally different from sea ice because it had a single eutectic point of -21.2°C. At that temperature, all of the brine crystallizes and the system goes directly from a brine-ice system to a solid salt-ice system. On the basis of his studies of salt ice, Weeks reexamined Assur's data and hypotheses and suggested that:

1. The strength of very cold sea ice may approach but will not exceed the strength of fresh water ice.
2. The sodium sulfate decahydrate either does not reinforce the sea ice or makes it about 20 per cent stronger. The correct alternative cannot be decided from the data.
3. The crystallization of $NaCl \cdot 2H_2O$ and possibly $Na_2SO_4 \cdot 10H_2O$ might reinforce the brine pockets and create one or two discontinities in sea ice strength at unique temperatures at which critical amounts of reinforcing salt have been deposited.

Brown (10) experimented with in-place cantilever tests of sea ice strength at Wales, Alaska, in 1958 and 1959 and at Thule in 1961. He concluded that his data did not indicate any sudden increase in flexural strength caused by precipitation of sodium sulfate decahydrate. He reasoned that any increase in flexural strength due to the precipitation of salts should be gradual since the salts are coming out of solution gradually as temperature decreases.

Graystone and Langleben (11) experimented with ring tensile tests on sea ice during the winter of 1960. They found from their data from specimens not having solid salts, when adjusted for temperature and sorted into groups with small ranges of $v^{1/2}$, that ring tensile strength was linear with

$v^{1/2}$. They found that their data of specimens with solid sodium sulfate fits this same linear expression and suggests that the solid salts do not have a reinforcing effect, perhaps remaining in suspension rather than being incorporated into the solid structure.

The sea ice described in this report has been classified as in Chapter 4:

1. Fine-grained, at or near the surface, with the crystals having a random orientation in all directions, Chlorinity is high.
2. Medium-grained, at or near the surface, with a vertical c-axis and with larger grains.
3. Center ice, found from at or near the surface to a depth which is usually less than two feet. The c-axis is horizontal but is random in that plane.
4. Bottom ice, found from the lower boundary of the center ice to the bottom of the ice sheet. This type has a horizontal c-axis with the direction preferred.

Pack ice more than one year old has been found to be essentially of the bottom ice type but with greatly reduced salinity.

6.2 BRINE SOLIDIFICATION

6.2.1 Examination of the Strate of Center Ice. Most investigators, using ring tensile tests, have found sea ice strength to be a linear function of $v^{1/2}$ and, except for Assur, have not reported solid salt effects. The analysis herein has shown that temperature has a limited effect on the rate function. Except to account for this dependence, the analysis will proceed on the basis used by others with the primary effects of temperature and salinity controlling brine volume and any secondary effects being identified after the brine volume function has been defined.

The largest single grouping of data of this study consists of compression tests made on center ice in early winter 1961-1962 after the testing equipment and techniques had been perfected but before the ice sheet had frozen deep enough to supply bottom ice. These center ice data proved extremely useful in finding the rate function, so it was also investigated to see the effects of brine volume on Strate, the definition of Strate being strength divided by the load rate function.

Figure 6.3 contains a plot of strate versus $(1-v^{1/2})$ for 148 center ice specimens at a depth, of one inch; 82 of the specimens were ice without solid salts and 66 contained solid sodium sulfate. The specimens were 2.5 inches long, 1.4 inches in diameter, and were tested in direct compression. This plate shows:

1. The center ice exhibits a uniform behavior making it possible to use it for further analysis.
2. The Strate for center ice without solid salts is linear with $(1-v^{1/2})$.
3. Ice with solid salts is much stronger than the Strate-brine volume relationship can explain, so the excess strength must be due to salt reinforcement.

Assur (7) suspected that sodium sulfate reinforced ring tensile specimens. Figure 6.3 shows that sodium sulfate strongly reinforces center ice in compression

The ice crystals of the center ice are small (on the order of one-fourth inch in horizontal dimensions) so that a test specimen with a diameter of 1.4 inches contains a substantial number of crystals in each cross section. If the orientation of the crystals is random enough, the center ice can be a relatively homogenous material at the macro scale. Apparently this is the explanation for the uniform behavior of this ice.

Equations 6.1 to 6.5 were developed for the study of failure in the brine plane. Center ice failure must be mainly in the brine planes of the crystals but with some platelets edge-loaded or loaded from the flat side. It appears that the center ice failure system cannot be identified but perhaps can be considered analogous to failure in the brine plane.

The least squares line on Figure 6.3 is for the ice without solid salts. Its equation is

$$\sigma_a = -34.44 + 191.12\ (1-v^{1/2}) \qquad 6.8$$

where σ_a is Strate. It can be put in the form of equation 6.5 in the following manner:

$$\sigma_a = A + B(1-v^{1/2})$$

$$\sigma_a = A + B - Bv^{1/2}$$

$$\sigma_a = (A + B)\ (1 - \frac{B}{A+B}\ v^{1/2})$$

The basic strength of the "bridging" ice is:

$$\sigma_o = A + B = 156.68 \qquad 6.9$$

A geometric constant for center ice without solid salts is

$$C_c = \frac{B}{A+B} = 1.22 \qquad 6.10$$

The equation for the least squares line rewritten is

$$\sigma_a = 156.68\ (1-1.22v^{1/2}) \qquad 6.11$$

with a standard deviation of 17.94 and correlation coefficient, R, of 0.78.

Exhibit 6.1 is a listing of the data used in this analysis and plotted on Figure 6.3. Exhibit 6.2 explains the code used in Exhibit 6.1.

The reinforcement effect of the solid sodium sulfate makes it necessary to examine these salt deposits geometrically, quantitatively and qualitatively.

Indication of Solid Salt Reinforcement

Center Ice, One Inch Depth

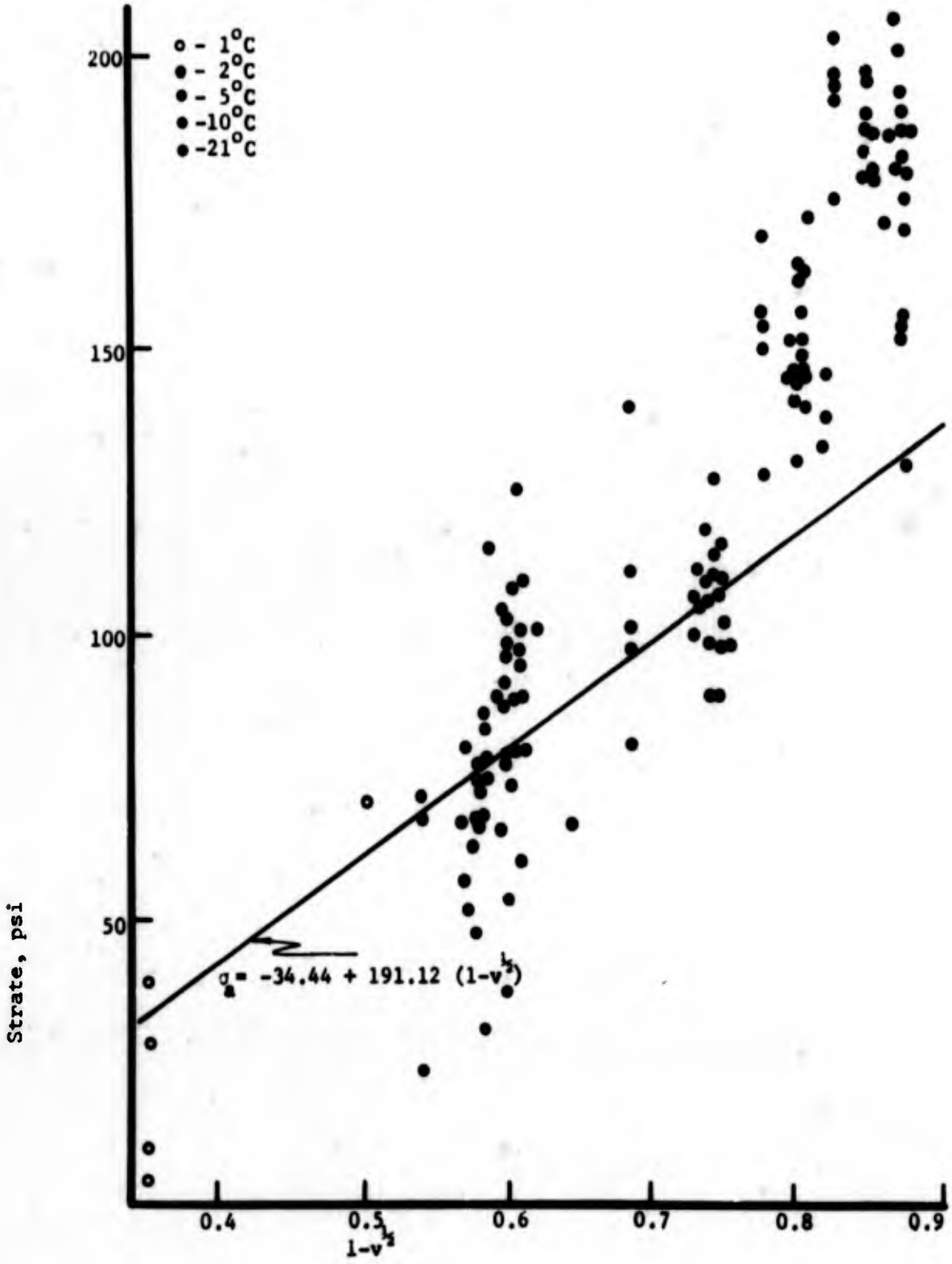

Figure 6.3

Terms and Symbols:

In general, the terms and symbols used in this report are those used by Assur (7) with the necessary additional terms and symbols.

Alce - Ice deposited in association with solid salts.
Sall - Salty ice - the combination of solid salts and alce.
Strate - Ice strength with the rate function removed. psi.

B-axis - Brine axis.
C-axis - crystal axis.
G-axis - Assur's growth axis.
Z-axis - Zenith axis.

F - Average cross sectional area of a brine channel.
F_a - Effective ice area in the brine plane. Relative.
F_c - Salty ice (sall) area in brine plane. Relative.
F_d - Cross sectional area of brine and sall. Relative.
F_e - Sall and brine area in the brine plane. Relative.
F_g - Brine area in the brine plane. Relative.
G - Geometric constant for failure in brine plane.
G_a - Geometric constant for failure in the C-Z plane.
G_c - Geometric constant for failure in the center ice.
S - Relative solid salt volume.
Q - Quality of sall. Ratio of solid salt volume/sall volume.
T - Temperature, °C. Always measured from 0°C down regardless of sign.

a_o - Platelet spacing.
b_o - Brine channel spacing in the brine plane.
d - Delta or incremental value.
r_a - Minor radius of the brine channel.
r_b - Major radius of the brine channel.
r_c - Minor radius of the sall deposit.
r_d - Major radius of the sall deposit.
v - Relative brine volume.
v_a - Relative brine and sall volume.
v_b - Relative sall volume.
v_o - Brine volume at zero strength.
v_s - Relative volume of solid salts.

ε - Ratio of brine pocket radii.
ε_1 - Ratio of sall pocket radii.
σ - Measured or raw strength. psi.
σ_a - Strate. psi.
σ_c - Calculated strength. psi.
σ_o - Basic strate of bridging ice. psi.
σ_r - Strate reinforcement of sall. psi.
σ_s - Salt reinforcement of strate in sall. psi.
σ_t - Basic strate of ice in the C-Z plane. psi.

6.2.2 Geometric Model for Ice-Salty Ice-Brine System. The geometric models developed in the past (5,7) have been for ice-brine systems. Salt reinforcement makes it necessary to develop a more complete model that includes the solid salts. Assur's phase information, to be developed in more detail in the following sections, indicates that ice is forming at the same time the solid salts are precipitating. The ice that forms in association with solid salts has been called alce (associated ice). The combination of alce and solid salts has been called sali (salty ice).

The brine channel size, at the time the solid sodium sulfate begins to precipitate, is quite small: in the order of 0.03 mm in diameter. The ice obviously forms on the sides of the brine channel walls and the apparent salt reinforcement indicates that the solid salts must also be deposited there. The exact structure and composition of sali is unknown.

The elliptical model shown in Figures 6.1 and 6.2 serves as the basis for further model development. Figure 6.4 shows a plan view of the model with sali deposited on the inner walls of the brine channels.

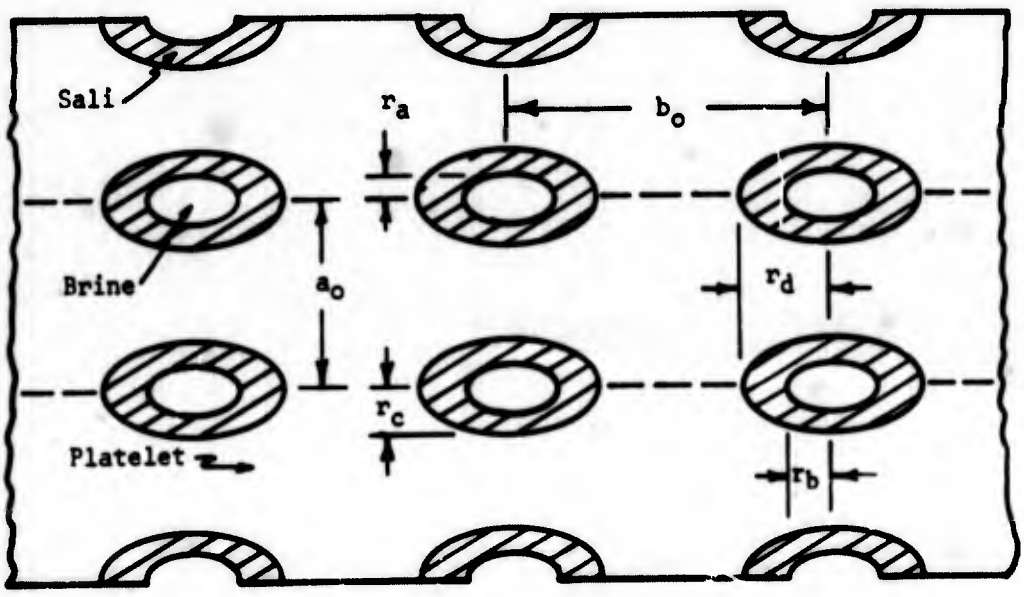

Figure 6.4. Plan view of sea ice model with deposited solid salts.

The radii of the brine channels are still r_a and r_b. Two new radii, r_c and r_d are defined as the outer limits of the sali and correspond to the boundaries of the brine channels at -8.2°C, when sali begins to precipitate.

Defining

$$\epsilon_1 = \frac{r_d}{r_c} \qquad 6.12$$

The cross-sectional area of sall and brine in one brine channel,

$$F_d = \pi r_c r_d = \frac{\pi r_d^2}{\varepsilon_1}; \qquad 6.13$$

The relative volume of sall and brine,

$$v_a = \frac{\pi r_d^2}{\varepsilon_1 a_o b_o}; \qquad 6.14$$

In the brine plane the total area of brine and sall is

$$F_e = \frac{2r_d}{b_o} = \sqrt{\frac{4\varepsilon_1 a_o}{\pi b_o}} \sqrt{v_a}; \qquad 6.15$$

Thus the area of sall in the brine plane is

$$F_c = F_e - F_g = \sqrt{\frac{4a_o}{\pi b_o}} \left[\sqrt{\varepsilon_1 v_a} - \sqrt{\varepsilon v_o} \right] \qquad 6.16$$

If $\varepsilon_1 = \varepsilon$, eq. 6.16 becomes

$$F_c = \sqrt{\frac{4a_o \varepsilon}{\pi b_o}} \left[\sqrt{v_a} - \sqrt{v_o} \right] \qquad 6.17$$

The sall is considered to have two strength functions. The first is the strength of the ice and is defined by equation 6.5. The second strength function to be superimposed on the first is due to salt reinforcement.

$$\sigma_r = \sigma_s \sqrt{\frac{4a_o}{\pi b_o}} \left[\sqrt{\varepsilon_1 v_a} - \sqrt{\varepsilon v} \right] \qquad 6.18$$

where σ_r is the salt reinforcement for the specimen and σ_s is the reinforcement strength of the sall. This is a strate function describing sea ice composed of brine, sall and pure water ice.

$$\sigma_a = \sigma_o \left[1 - \sqrt{\frac{4a_o \varepsilon}{\pi b_o}} \sqrt{v} \right] + \sigma_s \left[\sqrt{\frac{4a_o}{\pi b_o}} \left(\sqrt{\varepsilon_1 v_a} - \sqrt{v} \right) \right] \qquad 6.19$$

If the brine channel shape remains constant, σ_a becomes

$$\sigma_a = \sigma_o \left[1 - \sqrt{\frac{4a_o \varepsilon}{\pi b_o}} \sqrt{v} \right] + \sigma_s \left[\sqrt{\frac{4a_o \varepsilon}{\pi b_o}} \left(\sqrt{v_a} - \sqrt{v_o} \right) \right] \qquad 6.20$$

Figure 6.5 shows the strength relationship as compared to brine volume. The strength of the ice increases with the brine volume function to a temperature of 8.2°C. At that temperature the solid salts begin to precipitate and reinforce the ice; then the strength follows the steeper curved line which is the sum of ice strength and salt reinforcement.

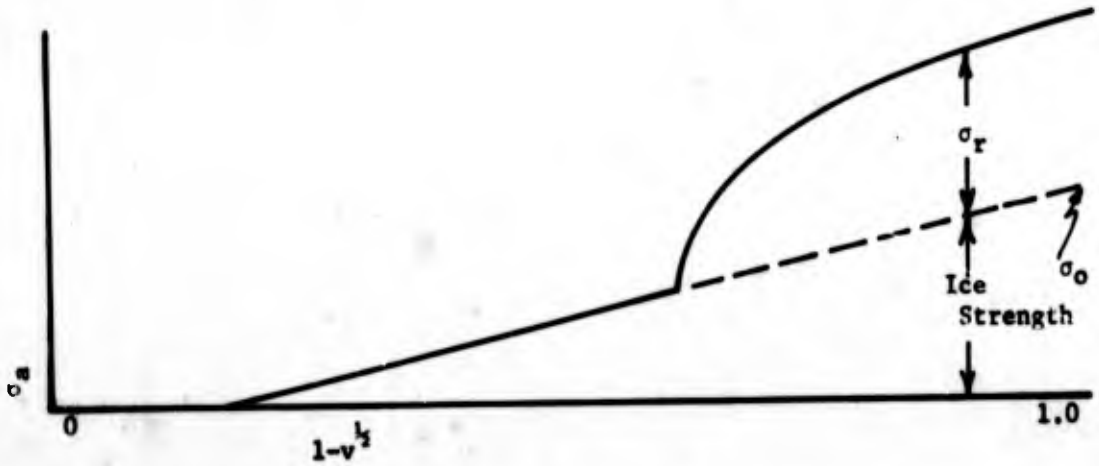

Figure 6.5. Diagram of ice strength and superimposed salt reinforcement.

Defining a geometric factor for ellipses

$$G = \sqrt{\frac{4a_o\varepsilon}{\pi b_o}} \qquad 6.21$$

and a salt area function

$$S = \sqrt{v_a} - \sqrt{v} \qquad 6.22$$

equation 20 becomes

$$\sigma_a = \sigma_o \left[1 - G\sqrt{v}\right] + \sigma_s GS \qquad 6.23$$

If there is no solid salt, S is zero and equation 6.23 becomes equation 6.5. G, the geometric factor, contains three variables, a_o, b_o and ε. If any of these change, G changes and the strength should change. Differentiating equation 6.23,

$$\frac{d\sigma_a}{dG} = -\sigma_o\sqrt{v} + S\,\sigma_s \qquad 6.24$$

It has been reported (13,14) that an increase in platelet thickness reduces the strength of the ice. Equation 6.24 shows that this would be true for an ice-brine system but if salt is present an additional effect occurs which is opposite in sign. The net result depends on several factors.

The strength functions that have been derived are based on the concept of failure in the brine plane. Sea ice may also fail in other planes. Figure 6.6 shows orientation of forces on a block of ice.

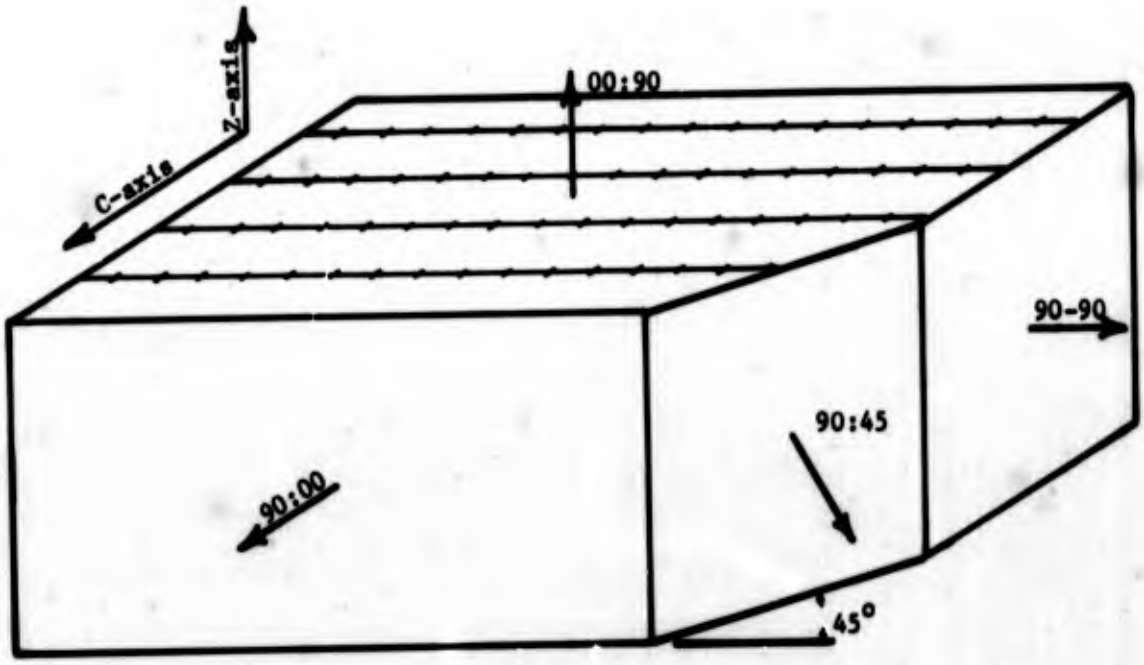

Figure 6.6. Orientation of compressive forces on sea ice.

Tensile forces are shown but compressive forces could be easily shown by reversing the directions of the force vectors. In general, the ice fails across the platelets by crushing, shear, or tension. Ice with 90-45 orientation fails in shear along the brine plane and 90-00 ice in tension tends to fail by tensile separation of the bridging ice in the brine plane. The c-z plane is geometrically representative of cross-platelet failure planes.

The equations for strength in the c-z plane can be developed in a manner similar to that used for brine plane failure. For a brine-ice system

$$\sigma_a = \sigma_t \left[1 - \sqrt{\frac{4b_o}{\pi a_o}} \sqrt{v} \right] \qquad 6.25$$

where σ_t is the transverse strength of the actual ice in the plane of failure. For a brine-salt-ice system

$$\sigma_a = \sigma_t \left[1 - \sqrt{\frac{4b_o}{\pi a_o \varepsilon}} \sqrt{v} \right] + \sigma_s \left[\sqrt{\frac{4b_o}{\pi a_o}} \left(\sqrt{\frac{v_a}{\varepsilon_1}} - \sqrt{\frac{v}{\varepsilon}} \right) \right] \qquad 6.26$$

If ε_1 equals ε this becomes

$$\sigma_a = \sigma_t \left[1 - \sqrt{\frac{4b_o}{\pi a_o \varepsilon}} \sqrt{v} \right] + \sigma_s \left[\sqrt{\frac{4b_o}{\pi a_o \varepsilon}} \left(\sqrt{v_a} - \sqrt{v} \right) \right] \qquad 6.27$$

If a new geometric factor is defined for failure in the c-z plane

$$G_a = \sqrt{\frac{4b_o}{\pi a_o \varepsilon}} \qquad 6.28$$

Equation 6.27 becomes

$$\sigma_a = \sigma_t (1 - G_a \sqrt{v}) + \sigma_s G_a S \qquad 6.29$$

If equation 6.29 is differentiated with respect to G_a

$$\frac{d\sigma_a}{dG_a} = - \sigma_t \sqrt{v} + S\sigma_s \qquad 6.30$$

This differential is similar in form to equation 6.24. However, if G and G_a are examined, it is seen that

$$G = \frac{4}{\pi} \frac{1}{G_a} ,$$

so that changing one of the parameters, such as the platelet thickness, a_o, increases one geometric factor while reducing the other and increases one strength while reducing the other.

Equations 6.25 - 6.30 for cross-platelet failure may be valid in tension and shear. They can not be used universally in compression because the ice platelet when loaded on their edges, exhibit column failure of the platelets at high brine volume values as was seen in failed specimens.

The equations developed for the strength of salt-reinforced ice strength could be extended to include a second form of salt (such as sodium cloride salt) by adding another element similar to the one for sodium sulfate salt.

6.2.3 Sea Ice Phases and Strate of Center Ice. A study of the various aspects of sea ice phases was made using Assur's phase and brine volume results (7) as source information while at the same time an effort was made to relate the phase information to the center ice strength. The study was intended to be as complete as possible, and the final values

desired were the relative volumes of the various components of sea ice and the relationships between these components. Calculations were made for two degree temperature increments from zero to -54°C.

Assur's phase information was considered accurate to the second phase and the third phase was carried as a computational convenience. Three significant numbers were used for brine volume calculations. The values generated in this study are estimated to have accuracy of two phases for standard sea ice and three or four for sea ice of 1 o/oo salinity. An average sea ice density of 0.926 gm/cc was used although density varies somewhat with temperature and salinity (3). Molecular weights and most specific gravities were obtained from the Handbook of Chemistry and Physics, 40th Edition, but the effect of temperature on the specific gravities of the various salts is unknown and was not considered.

Assur, in constructing his table, calculated brine volume for sea ice with a salinity of 1 o/oo so that the brine volume for ice of any salinity could be obtained by multiplying the table value by the salinity. This procedure was followed for the various relative volumes.

After the phase information was developed, curves were fitted to the various important relationships deom an expression of the form:

$$Y = A + B\,(X)^N \qquad 6.31$$

by solving first for the best-fitting N and then solving by least squares for A and B.

6.2.4 Quantitative Aspects of Salt Deposits. While values have been generated in the phase studies to -54°C, the data ranges from -1° to -21°C and this study is primarily concerned with that temperature range. All temperatures used are positive in sign while measuring temperatures below 0°C. Table 6.2 shows the important quantitative information obtained from the source data and developed in the phase studies for ice of 1 o/oo salinity to a temperature of -22°C.

Table 6.2

Quantitative Data for 1 o/oo Salinity Sea Ice.

Temp °C	Ions gm/l	v cc/l	v_s cc/l	Δv_s cc/l	Aice cc/l	ΔAice cc/l	Sali cc/l	Δ Sali cc/l	S Rel.
0	.000	1000.00	.000	.000	0.000	0.000	0.000	0.000	.0000
-2	.001	24.00	.000	.000	0.000	0.000	0.000	0.000	.0000
-4	.001	12.40	.000	.000	0.000	0.000	0.000	0.000	.0000
-6	.002	8.60	.001	.000	0.000	0.000	0.000	0.000	.0000
-8	.002	6.67	.001	.000	0.000	0.000	0.000	0.000	.0000
-10	.050	5.35	.075	.074	1.037	1.037	1.113	1.111	.0071
-12	.073	4.82	.112	.036	1.773	.735	1.885	.771	.0124
-14	.083	4.33	.127	.015	2.290	.517	2.418	.532	.0163
-16	.090	3.95	.137	.010	2.687	.396	2.825	.406	.0194
-18	.095	3.65	.145	.007	3.018	.331	3.163	.338	.0221
-20	.099	3.38	.151	.006	3.312	.294	3.464	.300	.0245
-22	.102	3.14	.158	.006	3.566	.254	3.724	.260	.0268

The curves that have been fitted to the cumulative values in Table 6.2 and their standard errors are:

Curve	S. E.	
Salt used = 0.926 - salt shown = $0.109 - 17.98/T^{2.48}$	.001	6.32
$v = 1.03 + 45.80/T$	.07	6.33
$v_s = 0.168 - 26.53/T^{2.46}$	.002	6.34
$Aice = 6.55 - 32.28/T^{.767}$	.017	6.35
$Sali = 6.60 - 35.26/T^{.808}$	.009	6.36
$S = 0.082 - 0.180/T^{.381}$	.0001	6.37

The units in the equations are identical with those in Table 6.2. The brine volume data used for curve fitting ranged from -2° to -22°C. All other curves are for the range from -10° to -22°C and can probably be extrapolated to -8.2° and -22.9°. Ions used, v, v_s, aice, and sali for any salinity can be calculated by multiplying by the salinity in o/oo. Values for S for any salinity can be calculated by multiplying the table value by the square root of the salinity in o/oo.

Figures 6.7 through 6.12 show curves of the different quantitative functions versus temperature with both cumulative and incremental values plotted on the same graph. All cumulative curves, except brine volume, show that the incremental rate decreases with the lower temperatures. The incremental values have a minor abreation at -12° because the incremental value used for -10° is for the range from -8.2° to -10° rather than -2.0°C.

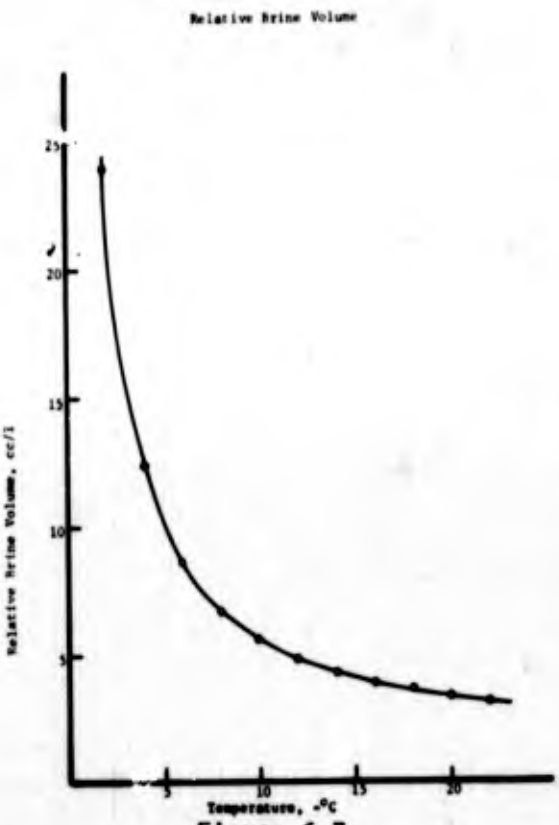

Figure 6.7

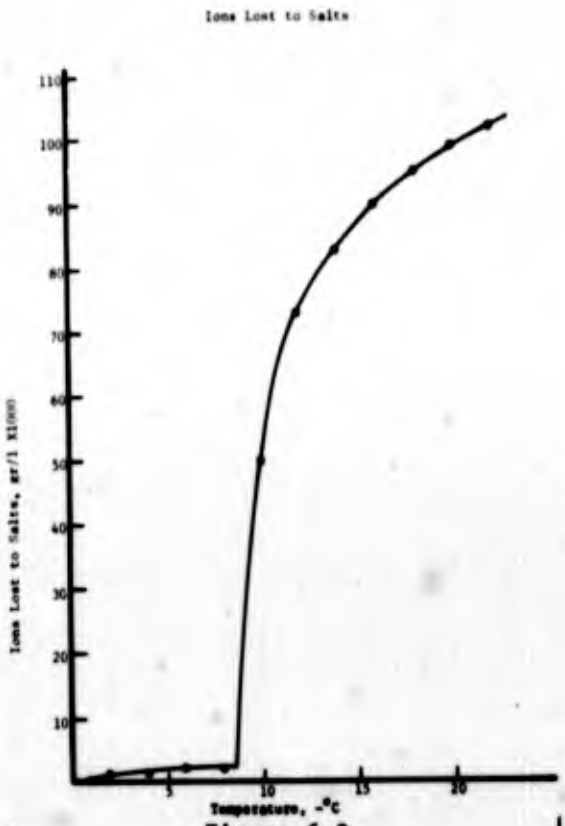

Figure 6.8

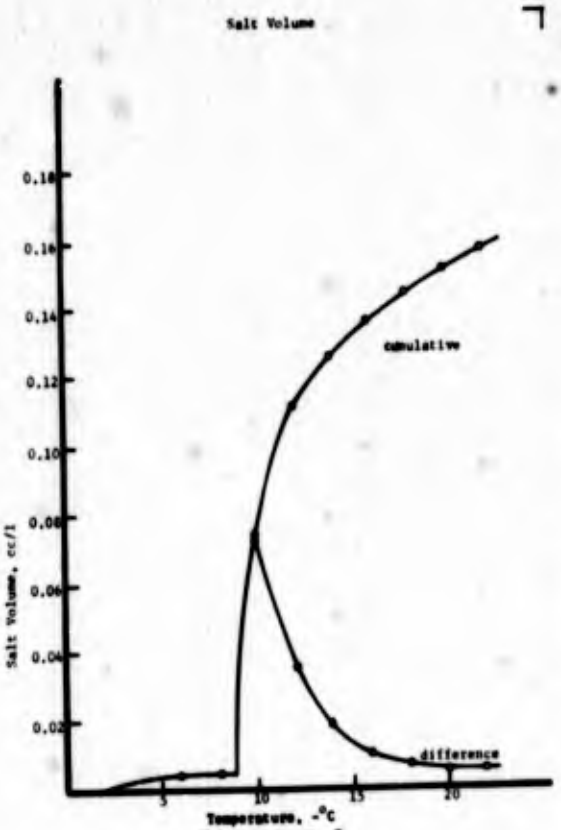

Figure 6.9

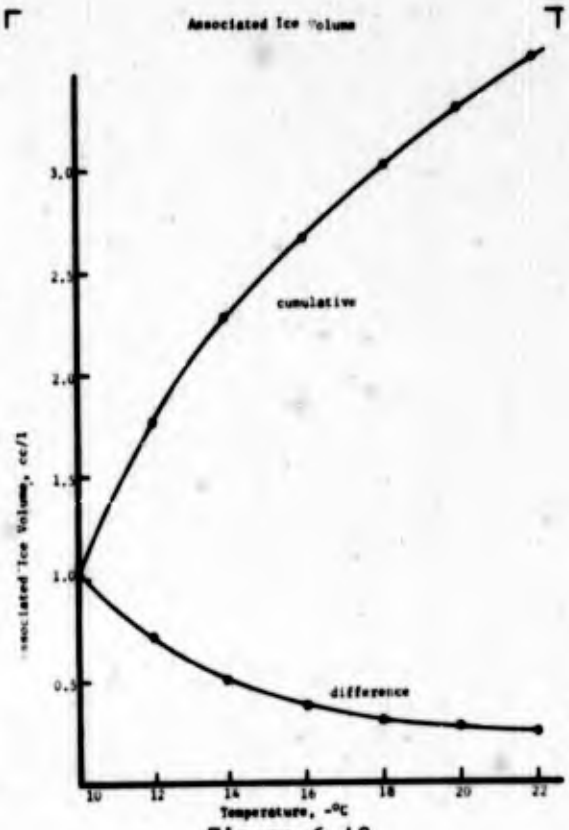

Figure 6.10

Sall area function of sice center ice, σ_r, the salt reinforcement for the center ice being examined, can be determined by using the following relationship derived from equation 6.23:

$$\sigma_r = \sigma_a - \sigma_o (1-G \sqrt{v}) \qquad 6.38$$

σ_r was calculated for each specimen with solid salts and was then plotted against S, the sall area function in the brine plane, in Figure 6.13. This figure shows:

1. σ_r increases with increasing S, and
2. This reinforcement, which must pass through the origin, is not linear with S.

Figure 6.13 shows the Strate of the center ice to be linear with $(1-v^{1/2})$ if no solid salts are present. S is a similar area function, and the salt reinforcement should logically be linear with it. The lack of linearity indicates that there must be one or more additional sall functions affecting salt reinforcement. The factors which may be involved are:

1. Change in shape of the brine channels.
2. Change in the proportion of salts in the sall (quality changes).
3. Change in failure mode or location.

6.2.5 Effect of Brine Channel Shape on Salt Reinforcement. It has been reported (5) that as the brine channels become colder and smaller they tend to become rounder. If the brine channel shape changes, the true equation for σ_r is

$$\sigma_r = \sigma_o G_d \left[\sqrt{v_a \varepsilon_1} - \sqrt{v \varepsilon}\right] \qquad 6.40$$

where G_d is the geometric factor, G, but excluding the shape factor, ε.

Figure 6.13 shows that the change in shape between -1° and -5°C cannot be extreme or the linearity between strate and $(1-v^{1/2})$ would be affected. Some change in shape can be accepted as negligible because changes in the square root of ε are small; thus Strate would not be significantly sensitive to changes in shape.

If the brine channels do change from ellipses to circles, the change would probably be fairly uniform with decreasing brine volume. Table 6.3 shows the relative brine volume of 8 o/oo ice at various temperatures.

Table 6.3

Relative Brine Volume of 8 o/oo Ice at Various Temperatures.

Temperature, °C	v
-1.	.402
-2.	.192
-5.	.082
-8.2	.052
-10.	.044
-15.	.033
-21.	.026

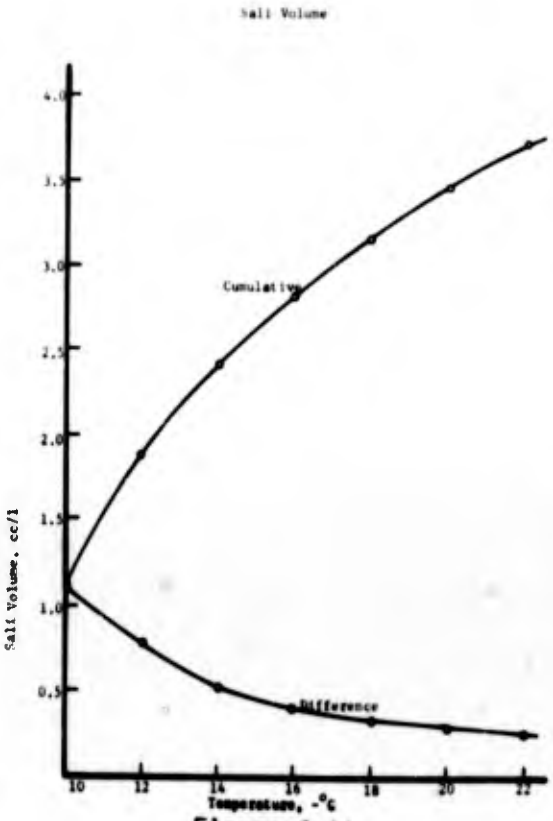

Figure 6.11

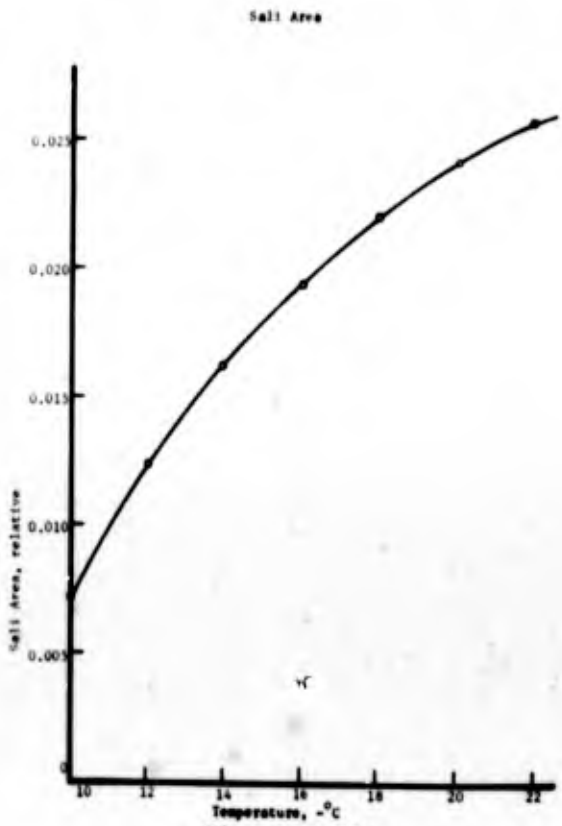

Figure 6.12

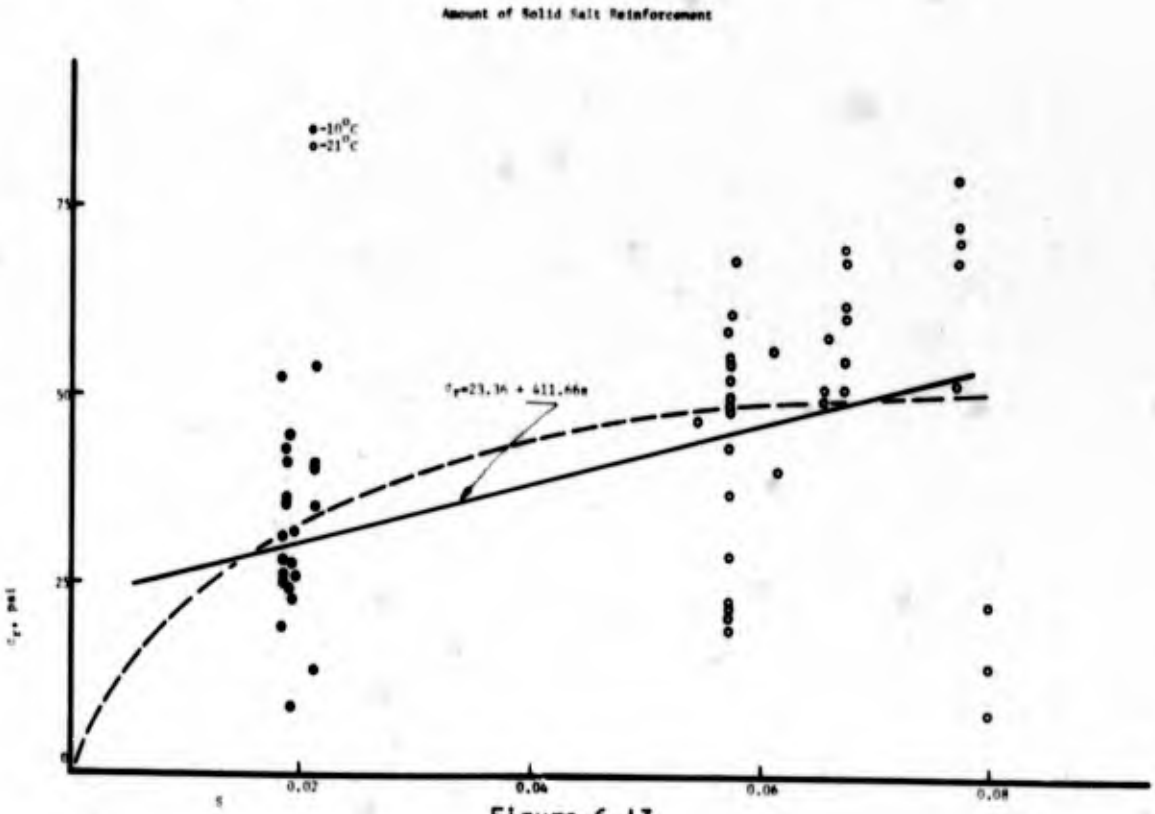

Figure 6.13

Most of the brine volume change occurs at warm temperatures, and the change between -10° and -21° is so small that any gross change in brine channel shape between the two temperatures is highly improbable. The brine channels probably do change shape as the brine volume becomes small but this alone cannot explain the curvilinear relationship between σ_r and S.

6.2.6 Qualitative Aspects of Sali. The two qualitative aspects of sali are:

1. The salt or salts contained in the sali, and
2. The quality or relative amounts of salt at any radius within an annular ring of sali.

The salts precipitated in sea ice were identified by the freezing of sea water in a closed system with subsequent examination the salts which precipitated in the bottom of the container (4). It has not been conclusively decided that the same salts precipitate inside the brine channels nor that they are incorporated in the sali.

The quality or amount of salts in the sali can be measured in several ways:

1. Weight of salts/weight of sali.
2. Volume of salts/volume of sali.
3. Moles of ions lost from the brine/moles of water lost from the brine.

The volume ratio appears best because the model employs volumes, and salt reinforcement is apparently a physical phenomenon which depends on volumes. This approach allows analysis of effective strengths over effective cross sectional areas of the failure plane. Specific weights for the salts have been used in these phase studies with the assumptions that any thermal volume changes are small and that any error in specific weight is constant.

Table 6.4 shows some of the qualitative aspects of sodium sulfate sali. Q, the quality function, is the ratio of salt volume to sali volume.

Table 6.4

Qualitative Aspects of Sodium Sulfate Deposits.

Temp	Cum. Q	ΔQ	ΔSalts/H_2O (moles)	Sali/Brine (volumes)
-8°	.000	.000	.0000	0.000
-10	.068	.066	.0053	0.201
-12	.059	.046	.0042	0.391
-14	.052	.029	.0027	0.558
-16	.048	.025	.0022	0.715
-18	.045	.021	.0019	0.866
-20	.043	.021	.0021	1.024
-22	.042	.024	.0024	1.186

Curve	S. E.	
$Q = 0.034 + 2.707/T^{1.90}$	.00043	6.40
$Q = 0.145 - 0.237\ S^{.229}$	.00075	6.41
Δ moles Salts/H_2O = $0.00176 + 30.60/T^{3.86}$	.00032	6.42
Sal/Brine = $-0.892 + 0.174\ T^{.80}$	.0074	6.43

Table 6.6 shows the ratio of moles of salts to H_2O to be very small; in the order of 0.2 to 0.5 per cent. Q, the ratio, salt volume/sal volume, is in the order of five per cent. Furthermore, Q begins at 0.084 (extrapolating equation 6.41 to a temperature of -8.2°C) when sodium sulfate precipitation begins and then continuously decrease with lowering temperature. The incremental values of Q show a minimum around -19° and a moderate increase at lower temperatures due to the precipitation of a small quantity of $MgCl_2.8H_2O$.

Equation 6.42, the relationship between Q and S, shows that quality drops continuously with increasing S for constant salinity. This is important to consider in evaluating the sketched, non-linear curve in Figure 6.13.

Figure 6.14 indicates Q as a function of temperature, Figure 6.15 indicates the relationship between Q and S for 1 o/oo sea ice, and Figure 6.16 indicates the molecular ratio of salts to water. Table 6.4 and Figure 6.17 indicate the ratio of sal volume to brine volume.

The sal quality factor meets the requirement of a parameter necessary to explain the curvilinear relationship between σ_r and S in Figure 6.13. If the solid salt reinforces the sal, it is reasonable to expect some direct relationship between the amount of salt and the amount of reinforcement. The sal quality for sodium sulfate sal begins at 0.084 and drops fairly rapidly to a value of about 0.021. This loss in quality may explain the declining incremental salt reinforcement with decreasing temperature.

6.2.7 A Combined Sal Function. If sal reinforcement depends on both S (the sal geometric function) and Q (the sal quality function) a combined sal function must be used. The simplest form is found by expressing $_s$ in terms of Q.

$$\sigma_s = KQ^e \qquad 6.44$$

K is a constant, e is a fitting exponent, and Q is the cumulative quality function. The equation for salt reinforcement is

$$\sigma_r = GS\sigma_s = GSKQ^e. \qquad 6.45$$

Since σ_r is determined from experimental data and G and S are either known

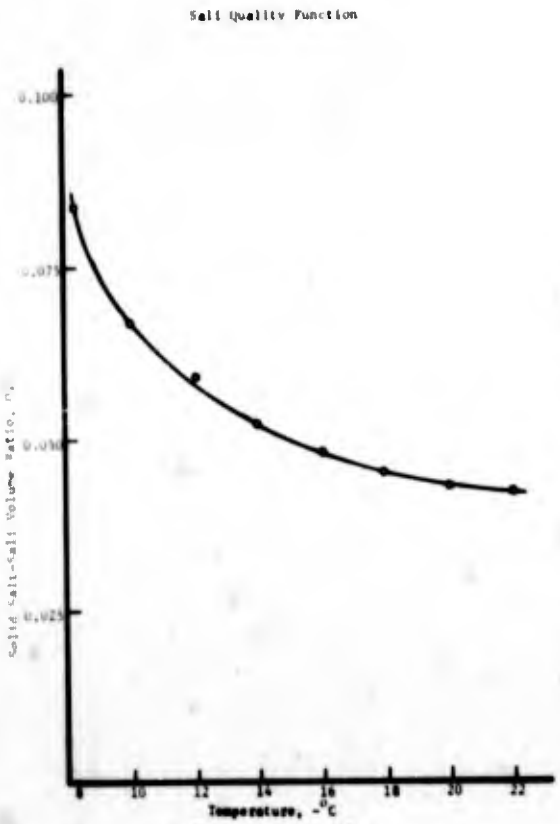

Figure 6.14

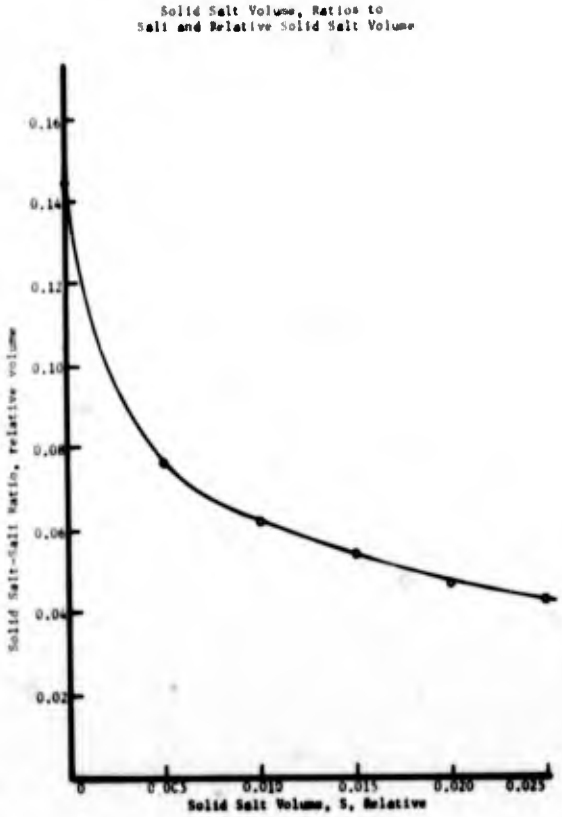

Figure 6.15

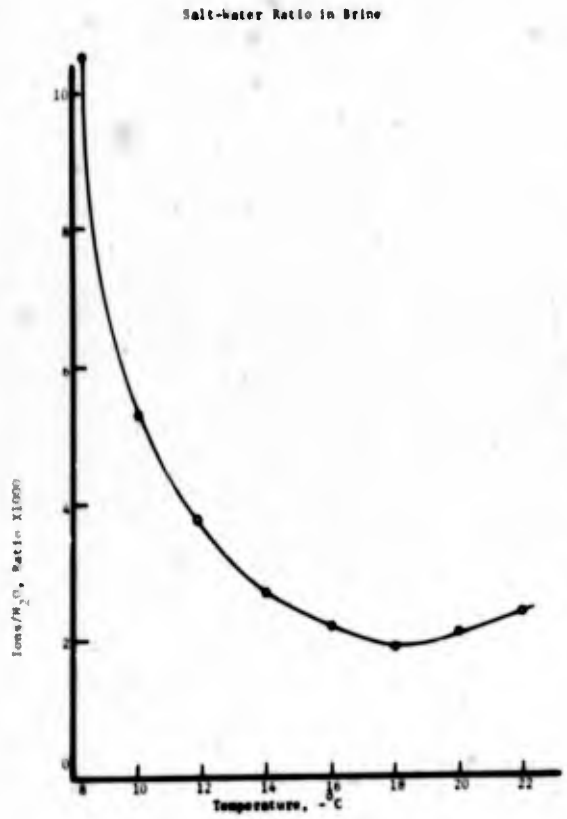

Figure 6.16

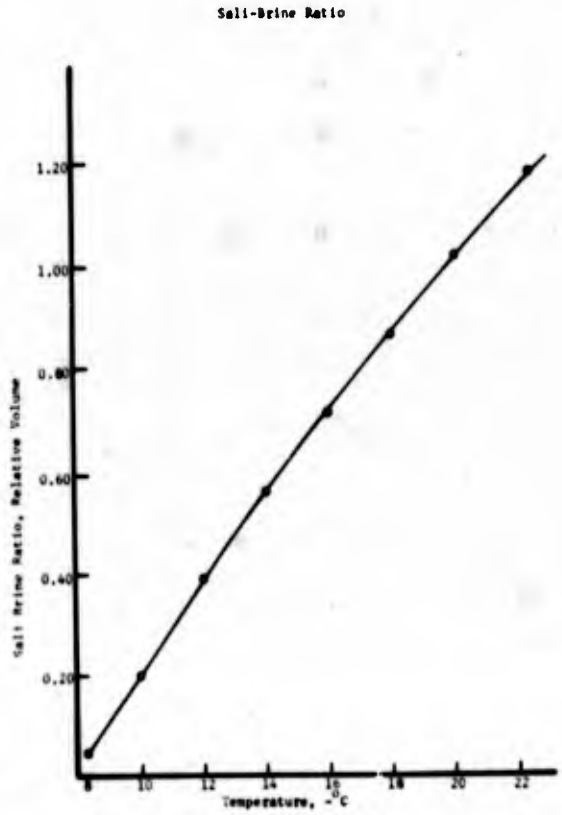

Figure 6.17

or can be calculated, the equation can be altered to

$$\frac{\sigma r}{GS} = KQ^{e} \qquad 6.46$$

For the data under study, Q and $\sigma r/GS$ were calculated for each experimental test. The mean values obtained for -10° and -21° were

Temp	Q	$\sigma r/GS$
-	0.0	0.0
-10.	0.0680	1200.
-21.	0.0423	650

The equation fitted to these points is

$$\sigma_s = 39{,}400\ Q^{1.3}. \qquad 6.47$$

The salt reinforcement function then becomes

$$\sigma_r = 39{,}400\ GSQ^{1.3}, \qquad 6.48$$

and the overall fitting equation for the data being examined is

$$\sigma = Rate^{r}[156.68(1-1.22v^{1/2}) + 39{,}400\ (1.22)\ S\ Q^{1.3}] \qquad 6.49$$

Figure 6.18 shows calculated strength versus measured strength using equation 6.49. The least squares line has the equation

$$\sigma_c = 22.69 + .98\ \sigma$$

with a standard deviation of 73.18 and correlation coefficient of 0.973. This fit is highly satisfactory although it might be possible to rework the constants and find a slightly better fit. Further refinement is not justified because the overall function is as precise as the data.

Equation 6.23 using the combined salt function for salt reinforcement is

$$\sigma = Rate^{r}\ [\sigma_o(1-Gv^{1/2}) + KGSQ^{1.3}] \qquad 6.50$$

The variables such as v, S and Q in this equation are combinations of the original independent variables measured for each test specimen. Assuming,

1. a_o is a function of depth in a generalized growth rate expression.
2. b_o is a constant controlled by ice formation parameters.
3. ϵ is controlled by temperature,

the independent variables and their importances can be evaluated. Table 6.5 shows the independent variables and the elements in equation 6.51 to which they contribute. If the element appears twice in the equation, a double score is shown. An indication of the range of the variable is also given.

Plot of Calculated Strength versus Measured Strength

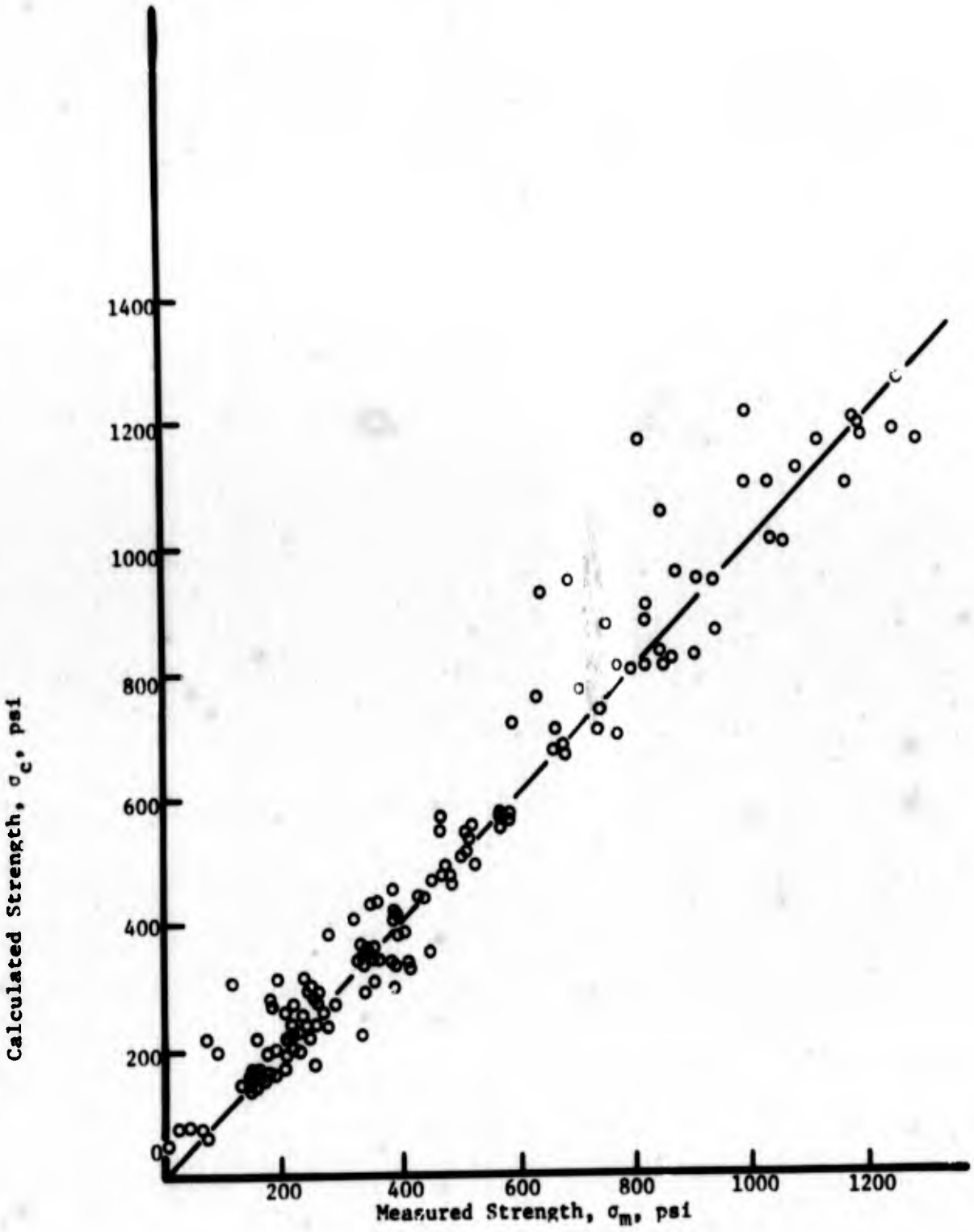

Figure 6.18

Table 6.5

Variables Used in the General Strength Equation.

	Rate	G	v	S	Q	Total	Range
Rate	x					1	Great
Depth	x	xx				3	Great
Temperature	x	xx	x	x	x	6	Medium
Salinity			x	x		2	Small

Temperature is seen to be involved in all elements in equation 6.51, depth in three, salinity in two and rate in one. The range in rate is the greatest and that of salinity the smallest. In order of descending importance, these variables rank in the order:

Rate
Temperature
Depth
Salinity

Some concept of the value for σ_s, the salt reinforcement effect for sodium sulfate, can be obtained from equation 6.48. Table 6.6 shows values of σ_s and the ratio σ_s/σ_o for the ice under study. σ_s represents the bulk salt strength at the unique temperatures shown.

Table 6.6

Representative Values for
Sodium Sulfate Reinforcement

Temp °C	Q	σ_s (psi)	σ_s/σ_o
-8.2	0.084 (max)	1575	10.
-12.0	0.059	980	6.2
-22.0	0.042(min)	640	4.1

The salt reinforcement in the center ice is extremely important as shown in Table 6.6 and Figure 6.3.

The combined function for salt reinforcement developed in this section is plausible and convenient. It was developed as one possible explanation of the data and is based entirely on parameters which have been developed by the application of phase information to the center ice under study. However, Figure 6.13 defines the curve of salt reinforcement only by data at two points other than the origin. The continuous curve which has been assumed has not been proved, and the combined function for salt reinforcement presented here is only a suggested function which fits the data very well and which is based upon a reasonable physical model.

6.3 FAILURE TYPES

The failure type was recorded during testing as a piece of available information which may later be of value. Exhibit 6.1 lists the failure type for each test and Exhibit 6.2 explains their coding. Some simplifications were made in the classifications for this analysis:

1. "Bulge" failure was considered to be plastic failure, and
2. "Tensile" and "shear" failures were lumped together because those failures initially classified as "tensile" failure were later found to actually be shear failures.

Figure 6.19 indicates that failure type is apparently controlled by loading rate and temperature with a change in pattern when solid salt begins to deposit. The solid salts have two effects:

1. The plastic failure type ceases, and
2. The upper limit of the failures without visible deformation abruptly jumps to a higher load rate.

Loading rate, temperature, and solid salts seem to govern the failure pattern. These parameters also govern strength.

6.4 REEVALUATION OF PUBLISHED DATA

6.4.1 Assur's Ring Tensile Data. Assur (7) used 327 ring tensile tests from various sources in an effort to define the tensile strength of sea ice. The tests are grouped into narrow ranges of salinity and further subdivided into narrow ranges of brine volume. Strength values were adjusted to a common temperature of -10°C to remove any temperature effect. Group averages with about nine tests per group were used for strength and brine volume data points. He found that strength at constant temperature was linear with the square root of salinity and therefore with the square root of brine volume. Precipitation of solid salts at low temperatures affected tensile strength and Assur interpreted the data as indicating a relatively thin layer of sodium sulfate which abruptly increased strength by one-third with no further reinforcement effect. Solid sodium chloride also produced a rapid increase in strength.

Assur's work is extremely important because he was the first to report the influence of solid salts on the strength of ice. His work has been the basis for further study of solid salts and their effects.

Weeks (9) studied salt ice (NaCl ice) and found that tensile strength was linear with $v^{1/2}$ and continuous. He re-evaluated Assur's data and, considering only the ice without solid sodium chloride, showed the plot of strength is linear with $v^{1/2}$. He fitted two lines to the data, one to the data without solid salts and the other to that data plus that with solid sodium sulfate. He was unable to determine the correct curve but concluded

that sodium sulfate probably did not reinforce the ice.

Assur's results have been reworked in this study because it is the only large group of sea ice tension data available with enough information to be treated in the same manner as the compression center ice data of the study. The information available for the individual groups is:

1. Number of tests in the group.
2. Average temperature.
3. Average salinity.
4. Average square root of brine volume.
5. Average strength.

Type, orientation, rate of loading and depth are not published.

The relationship between strength and $(1-v^{1/2})$ for the without solid salts data is:

$$\text{Strength} = 19.73(1-2.37v^{1/2})\ \text{kg/cm}^2. \qquad 6.51$$

σ_o from equation 6.51 is 280.6 psi. Three groups with solid sodium sulfate fall below the least squares line for salt-free ice and were discarded. They were also discarded by Weeks. The brine volume effect was removed using equation 6.39 and the salt reinforcement was found for all ice with solid salts as shown in Figure 20. Figure 6.21 shows the relationship between σ_r and S, the salt area function, for the remaining sodium sulfate ice. The equation for the least squares fit is

$$\sigma_v = 0.31 + 35.97\ S\ \ \text{kg/cm}^2. \qquad 6.52$$

The sodium sulfate reinforcement is less than that found for the center ice in compression, but it is still almost twice the basic ice strength. Figure 6.22 shows the effect of both the retained sodium sulfate ice and the sodium chloride ice, and the sodium chloride reinforcement is obviously large.

This analysis of Assur's data shows that the functions developed for analysis of compression data for center ice can be used to demonstrate both sodium sulfate and sodium chloride reinforcement in the tensile strength of sea ice. Assur's data do not contradict the findings of analysis herein of compression data, but rather they show an excellent and only available, picture of possible sodium chloride reinforcement.

6.4.2 Graystone and Langleben. Graystone and Langleben (11) also report ring tensile data which appear to show sodium sulfate reinforcement. The information published is not adequate to be reworked in the manner that Assur's results were reworked, but the inference of salt reinforcement exists.

6.5 CONCLUSIONS

The main conclusions reached in this study of salt deposits are the following:

1. Center ice behaves in a consistent manner making it suitable for analysis.
2. The strength of the center ice in compression is linear with $(1-v^{1/2})$ but the slope of the curve changes abruptly with the initial precipitation of sodium sulfate.
3. Precipitation of solid sodium sulfate may result in strong reinforcement.
4. Sodium sulfate is precipitated in association with the formation of a large amount of new ice. This combination of solid salt and associated ice (called sali) is four to ten times as strong as salt-free ice. The reinforcement can be tentatively explained in terms of the area of sali in the failure plane and the relative volume of solid salts in the sali.
5. The mechanism by which solid salts may reinforce ice is not known. Two possibilities are that the salt crystals destroy the alignment of planes of weakness or that they inhibit crack propogation.
6. Little is known about solid salts in sea ice. This subject requires more study.
7. The primary parameters affecting the strength of sea ice in compression are:
   A. Ice type and orientation
   B. Rate of loading
   C. Brine volume
   D. Sali volume and quality
   E. Plate thickness
   F. Brine channel shape.

   Some of these parameters can be expressed in simpler variables such as temperature and salinity.
8. The strength function of sea ice is probably continuous. Discontinuities are not evident in the data.
9. An examination of the published data of others suggests sodium sulfate reinforcement and sodium chloride reinforcement is also apparent in Assur's results.

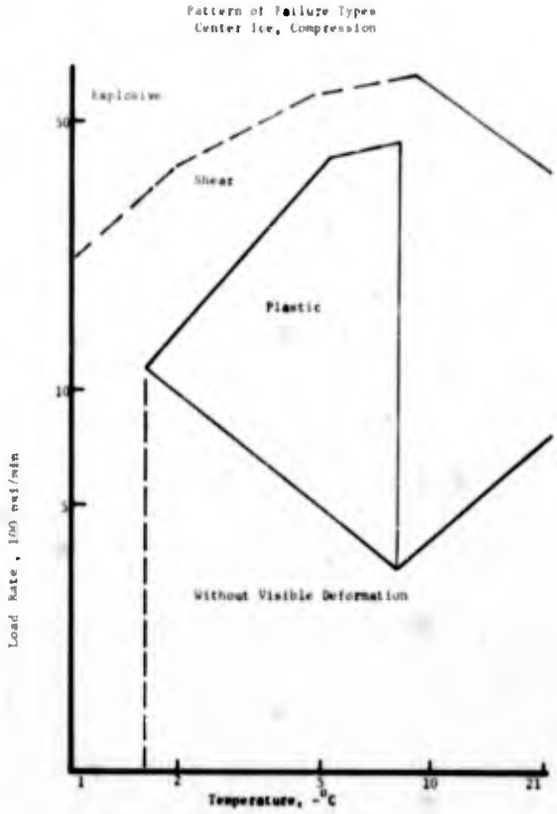

Figure 6.19

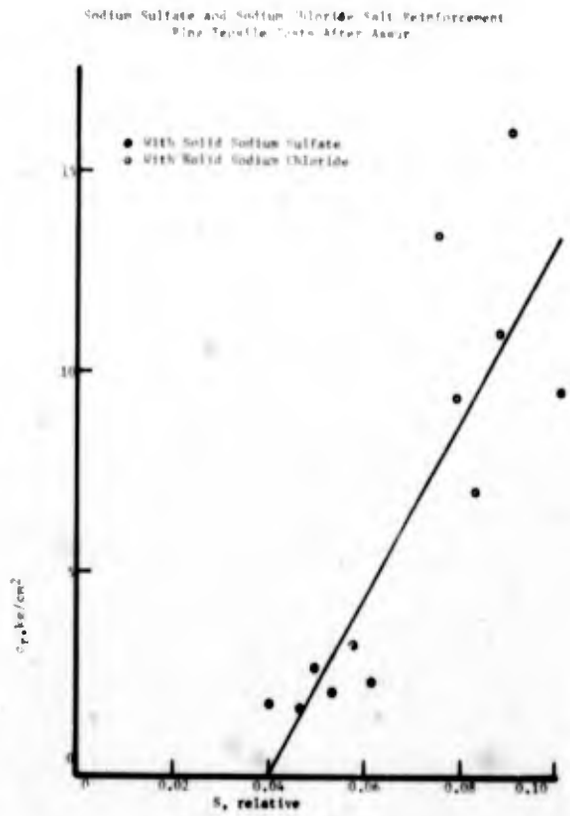

Figure 6.20

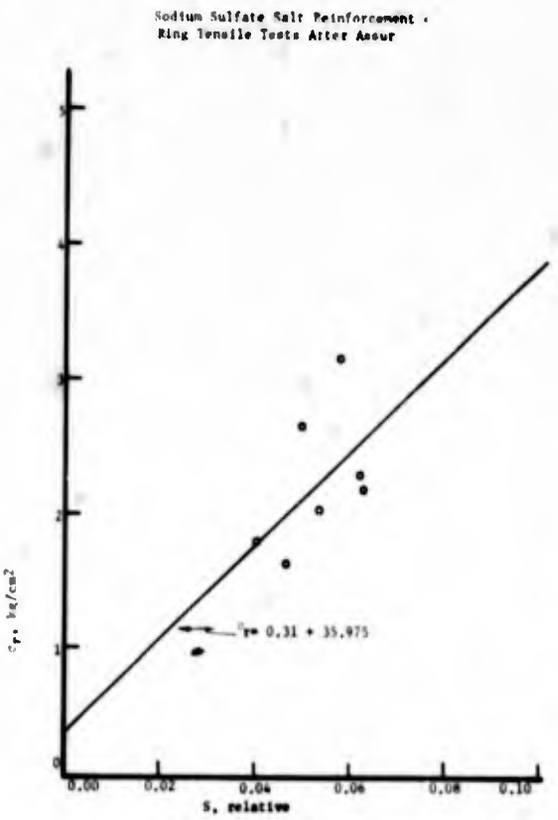

Figure 6.21

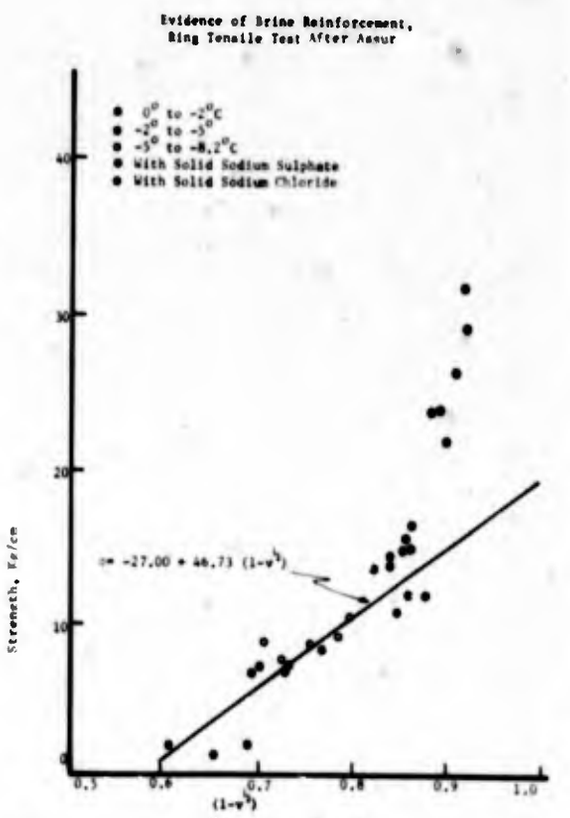

Figure 6.22

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Chapter 7

GENERAL FUNCTION FOR COMPRESSIVE STRENGTH OF CENTER ICE AT ALL DEPTHS

7.1 INTRODUCTION

A general function for the compressive strength of center ice of varying depth is of the form

Strength = f(rate) [f(brine volume + salt reinforcement)]

and fits the data available with a correlation coefficient greater than 0.93. The strength of this ice of a single type and orientation can be expressed in terms of four primary variables; rate, temperature, depth and salinity.

The rate function was obtained in Chapter 5, and its value increases with rate, depth, and negative temperature.

The brine volume-strength function is controlled by depth, geometry of the brine channels, and brine volume. If the ice is very warm, strength is controlled by brine volume. When the ice is colder, strength is controlled by both brine volume and depth. The equations which have been developed do not explain the effect of depth on the brine volume function. Several questions have been raised which cannot be answered by the center ice data because of the limited range of depth within which the center ice petrofabric was found to occur.

Center ice shows salt reinforcement from solid sodium sulfate decahydrate at all depths, and the salt reinforcement is proportional to the amount of salty ice in the failure plane and the quality of the salty ice. For some unknown reason, the salt reinforcement decreases with depth, but the reinforcement is a significant portion of the strength of colder ice. The strength of the salty ice fraction is several times the strength of ice without salt.

It is possible to use the functions developed in this chapter to integrate the compressive strength of sheets of center ice if the ice is warmer than -22.9°C, the mode of failure is the same as for the test specimens, and the thickness, rate of loading, salinity and thermal regime are known. The strength of a 40-inch thick sheet varies from 6.2 to 37.9 kips per horizontal inch of sheet depending on loading rate and thermal regime. The average horizontal compression strength through the 40-inch thickness is 155 to 950 psi.

7.2 CENTER ICE DATA, COMPRESSION

The center ice compression data is the largest single group which was obtained. This ice has proved to be the best group of data for initial analysis because of the high quality of data, quite uniform ice behavior, and because the bottom ice can be considered a special case of center ice with the crystal axes aligned. Results of analysis on center ice have been shown to be good

in Chapter 6, in which the strength of center ice at a depth of 1" was described.

Table 7.1 is an inventory of the numbers of tests by depth and temperature of all center ice tests. There were 598 tests remaining after 13 tests at 4 inches and -10°C were discarded because they were abnormally weak.

Table 7.1

Inventory of Center Compression Tests

	DEPTH, INCHES								
Temp,-°C	1	4	7	11	17	18-21	25-29	32-36	Total
1	6	10	7	4				7	34
2	50	73	4		24			6	157
5	25	16	4	14	22				81
6								5	5
10	32	48	34	17	27	11	11		180
14,14.3						18	6		24
20,21	42	62	3	—	23	—	—	—	130
Total	155	209	52	35	96	29	17	18	611

7.3 A GENERAL STRENGTH FUNCTION FOR 1 INCH CENTER ICE

An overall equation for compressive strength was developed for one inch center ice as follows:

$$\text{Strength} = f(\text{rate})[f(\text{brine volume} + \text{salt reinforcement})] \quad 7.1$$

$$\text{Strate} = \frac{\text{Strength}}{f(\text{rate})} = f(\text{brine volume} + \text{salt reinforcement}) \quad 7.2$$

where,

$$f(\text{rate})_{\text{cent. ice}} = \text{Rate}^{(.166\ \text{Depth}^{.138}\ \text{Temp}^{.09})} \quad 7.3$$

$$f(\text{brine volume}) = \sigma_o(1 - G\ v^{1/2}) \quad 7.4$$

$$\text{Salt reinforcement} = G\ S\ K\ Q^e \quad 7.5$$

where

σ_o = the basic strength of the ice
G = a geometric factor
v = relative brine volume
S = relative area of salty ice in the brine plane
K = a fitting constant
Q = quality of salty ice = ratio of solid salts/salty ice
σ = strength

σ_a = strate
σ_r = salt reinforcement
σ_s = reinforcement value of the salty ice (unit reinforcement)
σ_m = measured strength
σ_c = calculated strength
Fra = function of rate
Fbv = function of brine volume
e = a fitting exponent

The general equation of interest in this analysis is

$$\text{Strate} = \sigma_o (1 - G v^{1/2}) + G S K Q^e$$

Q, S and v have been calculated directly from Assur's phase information. In the study of 1" ice, values were obtained for σ_o and G while studying the brine volume function, and values were obtained for K and e while studying salt reinforcement. The objective of this chapter, assuming this general equation to be suitable, is to find more general values of σ_o, G, K and e as functions of depth.

7.4 THE BRINE FUNCTION, LIQUID AND SOLID

7.4.1 General. In Chapter 6, a linear relationship was observed between the strate of center ice and $(1-v^{1/2})$ in the warmer ice before solid salt precipitation. All 1", 4" and 7" depth specimens have tests at -1, -2, and -5°C, and these three temperatures are adequate to show linearity. The deeper depth test groups do not have three temperatures in the non-solid salt temperature range, and linearity cannot be proved for theso depths but is assumed to be true because of the behavior of tests from 1", 4" and 7" depths.

Average values of strate and $(1-v^{1/2})$ were calculated for each single-temperature, single-depth group of tests. Table 7.2 is a listing of these values and Figure 7.1 shows the values with only the main depths and temperatures being considered.

Table 7.2

Average Strate and $(1-v^{1/2})$
$(1-v^{1/2})$/Strate

Temp	Depth 1"	4"	7"	11"	17"
-1°	.3792/28.4	.4167/32.1	.4338/40.4	.5049/39.8	
-2°	.5933/79.2	.6363/58.7	.5436/43.5		.6664/49.4
-5°	.7321/106.0	.7527/72.5	.7843/49.8	.7772/39.2	.7848/48.9
-10°	.7962/150.2	.8203/85.7	.8347/86.6	.8081/90.9	.8481/52.2
-21°	.8580/178.9	.8713/110.3	.8791/85.7		.8778/74.0

These test groups retain all variability not explained by the general rate function and include any errors; sampling, experimental or analytical. With this in mind, the broad picture outlined in Figure 6.1 exhibits the following qualities in a general sense.

1. For constant depth, the slope of the line decreases as the depth increases.
2. The constant depth curves all appear to originate in the same general region where strate is between 30 and 40 and $(1-v^{1/2})$ is between .35 and .50
3. Salt reinforcement is apparent for all depths.
4. The function, $(1-v^{1/2})$, increases with increasing depth for the same temperature, thus salinity decreases with depth.
5. There is no indication that the relationship between strate and $(1-v^{1/2})$ is not linear in the temperature range without solid salts.
6. The slope of the lines of constant temperature vary. The line for -1° ice is positive and shows strate increasing with increasing depth and increasing $(1-v^{1/2})$. At colder temperatures, the slopes become strongly negative, thus suggesting that brine volume controls strate in warm ice but that depth controls at colder temperatures.

Figure 7.2 shows strate versus depth for the -2°, -5°, -10° and -21° ice. The -2° and -5° lines show a curvilinear relationship between strate and depth with the 17 inch ice apparently being abnormally strong. The -10° line shows a strate-depth relationship apparently to exist but it is not simple and smooth, and the 17 inch ice appears to be abnormally weak and does not show salt reinforcement at -10° as it does at other depths. The -21° line is smooth with the 17" ice again showing less brine reinforcement than might be expected.

A set of fitting functions can be determined for the non-solid salt (salt free) ice temperature range. Some idealization will be required because of anomalous data, but the final results will show this to be reasonable.

<u>Anchor points; brine volume versus depth, -1°C</u>: Figure 7.3 shows average strate versus average $(1-v^{1/2})$ for the ice without salt reinforcement. These values indicate that it is possible to describe the family of lines by first defining an anchor point at a temperature of -1° in terms of brine volume and strate at -1° and then describing the slope of the line in terms of depth.

The first need is to determine a salinity function in terms of depth. Table 7.3 shows the average salinities for the data at each depth for the center ice.

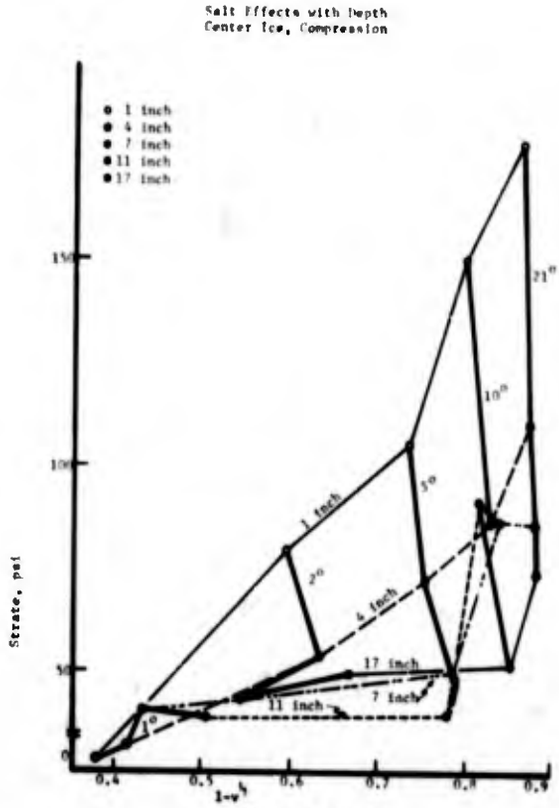

Figure 7.1

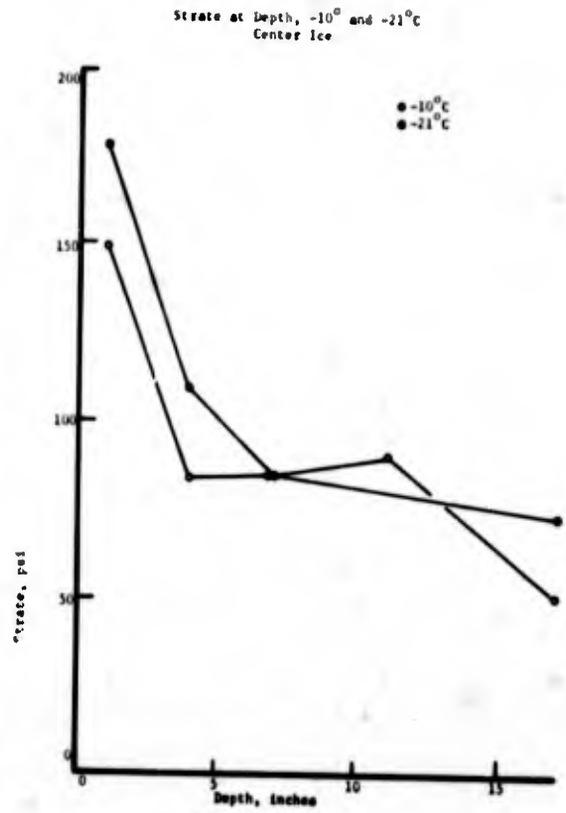

Figure 7.2A

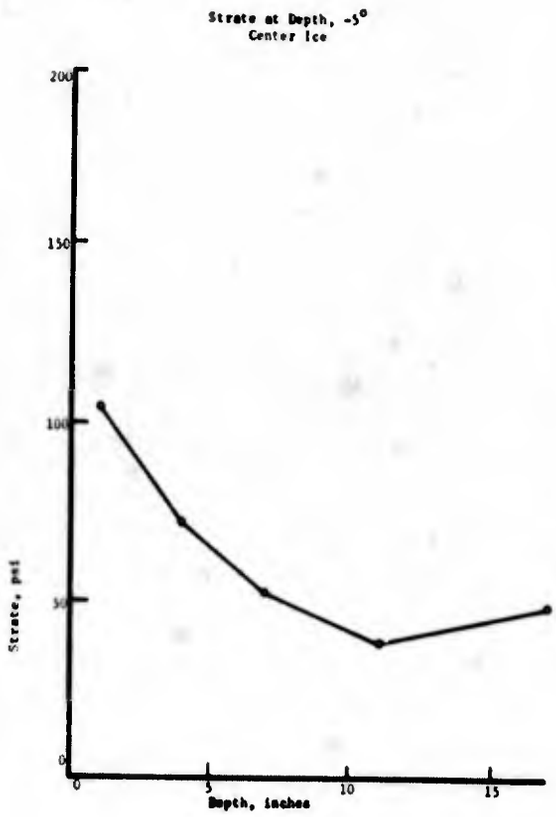

Figure 7.2B

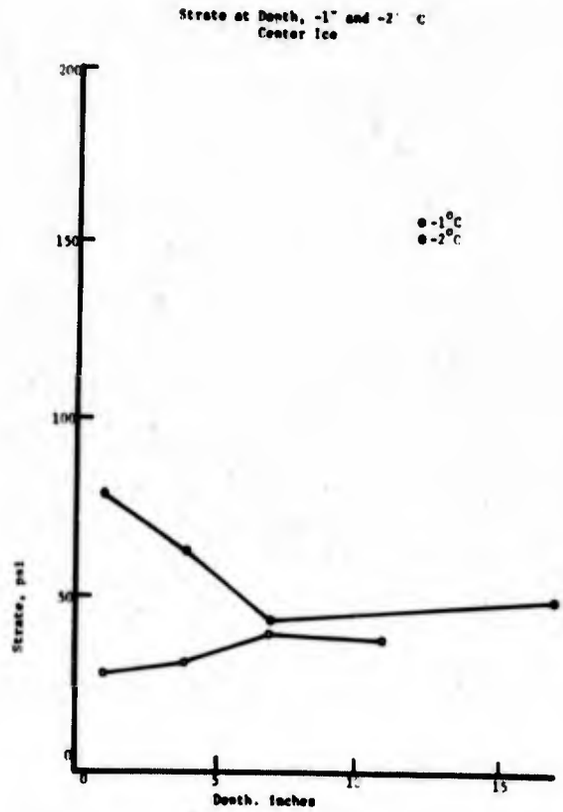

Figure 7.2C

Table 7.3

Average Salinity at Different Depths

Depth	Average Salinity o/oo
1"	7.25
4"	5.80
7"	5.40
11"	5.94
17"	4.59

The salinity, except for the 11" depth, fits a line:

$$\text{Salinity} = 7.25 - 0.95 \ln(\text{Depth}) \qquad 7.6$$

Analysis in Chapter 6 indicated a brine-volume function for sea ice with a salinity of 1 o/oo.

$$\text{Brine Volume} = 1.03 + 45.80/T \qquad 7.7$$

Brine volume can be found for any salinity by multiplying the results of equation 7.7 by the salinity in o/oo. Table 7.4 shows the values of brine volume and $(1-v^{1/2})$ for various depths based on salinity from equation 7.6 for -1°C.

Table 7.4

Idealized Brine Volume and $(1-v^{1/2})$, -1°C.

Depth	Brine Volume, v	$1-v^{1/2}$
1"	.339	.4173
2	.308	.4444
3	.290	.4608
4	.278	.4728
6	.260	.4902
9	.241	.5083
13	.226	.5252
19	.209	.5433
28	.191	.5626
42	.173	.5827

This depth - $(1-v^{1/2})$ relationship can be fitted to the following equation:

$$(1-v^{1/2})_{-1°} = .177 + .243\ \text{Depth}^{.138} \qquad 7.8$$

The equation of the least squares line for strate is

$$\text{strate}_{-1°} = -1.75 + 84.9\ (1-v^{1/2}). \qquad 7.9$$

Salt Effects With Depth,
Center Ice With Solid Salt

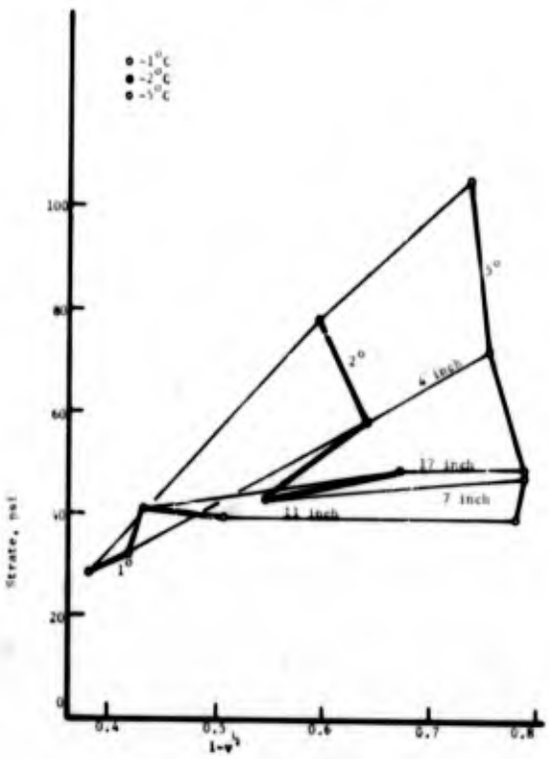

Figure 7.3

Values of Coefficient K at Various Depths

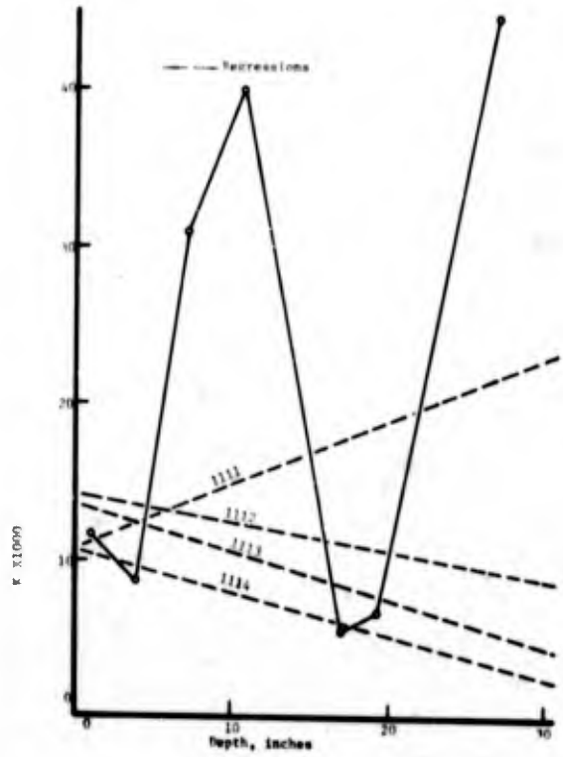

Figure 7.4

Salty Ice Quality at Various Depths

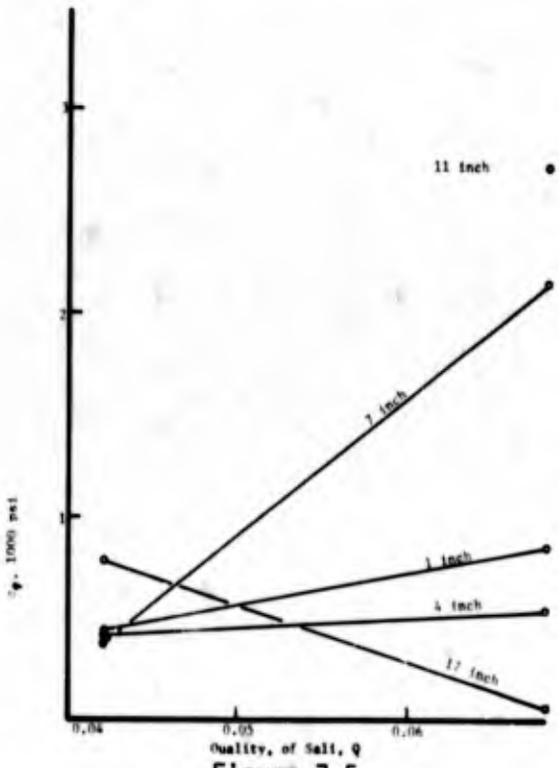

Figure 7.5

Slope of Brine Volume
Function Versus Depth

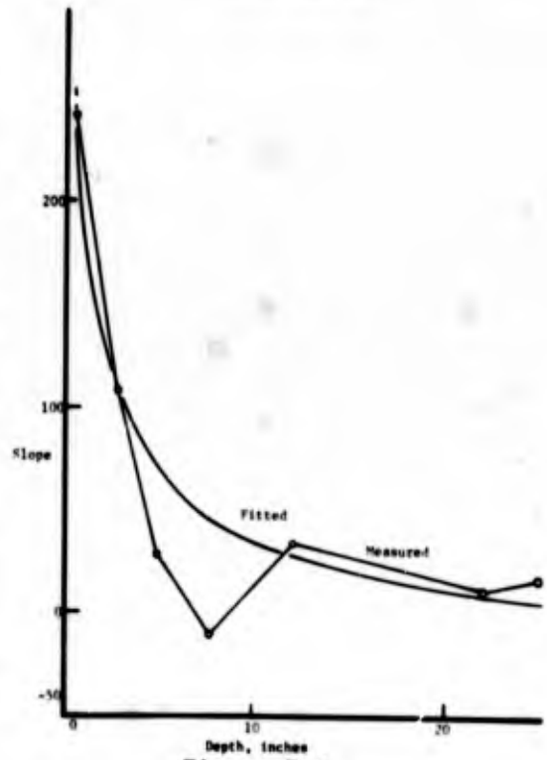

Figure 7.6

With a least squares line forced through the origin, the equation becomes

$$\text{Strate}_{-1^\circ} = 81\ (1-v^{1/2}) \qquad 7.10$$

Using equation 7.10, an anchor point for each constant temperature curve can be based on the -1° curve and defined in terms of depth.

$$X_o = 0.177 + 0.243\ \text{Depth}^{0.138} \qquad 7.11$$

$$Y_o = 81\ X_o \qquad 7.12$$

7.4.2 Slope of Brine Volume Function. A least squares line was fitted between the anchor point for a particular depth and the -2° and -5° data for that depth. The slope of this least squares line represents the brine volume function for that depth based on the anchor point. Table 7.5 shows the various depths, number of observations, anchor points, and slope of the least squares line through the anchor points.

Table 7.5

Anchor Points and Least Squares Slopes

Depth	Obs	X_o	Y_o	Slope
1"	81	.42	34.0	242.7
4	99	.47	38.0	124.3
7	15	.50	40.5	27.9
11	18	.52	42.1	-11.0
17	46	.54	43.7	27.5
32	8	.59	47.8	9.9
36	10	.60	48.6	14.9

Figure 7.6 shows slope versus depth. A regression, analysis weighted by number of observations, between slope and depth yielded equation 7.13.

$$\text{Slope} = -61. + 309.4/\text{Depth}^{.443} \qquad 7.13$$

Table 7.6 shows the measured slopes, the calculated slopes, and the differences.

Table 7.6

Slope of Brine Volume Functions (units = 1/inch)

Depth	Measured Slope	Fitted Slope	Difference
1"	242.7	248.3	-7.6
4	124.3	106.6	17.7
7	27.9	70.1	-42.2
11	-11.0	45.7	-56.7
17	27.5	27.4	.1
32	9.9	4.5	4.4
36	14.9	2.1	12.8

The 7 and 11 inch data have the poorest fit but both are for small numbers of data, the general fit seems good.

For any calculated strength, an equation can be written as follows:

$$Y - Y_o = M (X - X_o), \qquad 7.14$$

where M is the slope of the line and (X_o, Y_o) is the anchor point. This equation can also be written in the form:

$$Y = Y_o - M X_o + M X \qquad 7.15$$

which is of the form:

$$Y = A + BX$$

where X is $(1-v^{1/2})$

$A = Y_o - MX_o$

It was shown in Chapter 6 that

$$\sigma_a = \sigma_o (1-Gv^{1/2})$$

where $\sigma_o = A + B$

$G = B/(A+B)$

In the existing situation

$$\sigma_o = A + M = Y_o - MX_o + M \qquad 7.16$$

$$G = M/\sigma_o \qquad 7.17$$

$$\text{Brine volume function} = \sigma_o(1-Gv^{1/2}) \qquad 7.18$$

where $X_o = 0.177 + 0.243\ \text{Depth}^{0.138}$

$Y_o = 81\ X_o$

$M = -61 + 309.4/\text{Depth}^{0.443}$

7.4.3 Salt Reinforcement. Chapter 5 showed the effect of salt reinforcement on 1" center ice and the reinforcement is described by equation 7.19.

$$\upsilon_r = G\ S\ K\ Q^e, \qquad 7.19$$

where

G is the geometric factor determined in the brine function study.
S is the salty ice (sall) area in the brine plane.
K is a fitting coefficient.
Q is the quality of salty ice (sall).
e is a fitting exponent.

Figure 7.1 shows solid salt reinforcement to be found in all center ice studies; therefore a general approach may be followed.

$$\sigma_r = \sigma_a - (\text{liquid brine volume function}) \qquad 7.20$$

σ_r was calculated for each test with solid salts and average values of σ_r for each depth and temperature are shown in Table 7.7. S, the sall area function, is also shown in the table.

Table 7.7

Average Values of Salt Reinforcement and S: σ_r/S

Temp °C	Depth 1	4	7	11	17
-10	9.23/.0205	10.3/.0172	23.0/.0157	35.7/.0184	0.25/.0145
-21	36.1/.0638	27.8/.0578	18.8/.0543		21.3/.0548

Of the elements in equation 7.19, σ_r, G, S, and Q are either measured or defined models. The unknowns are K and e. A new strength function is defined and used to describe additional geometric and phase information.

$$\sigma_q = \frac{\sigma_r}{GS} = K\,Q^e \qquad 7.21$$

The value of σ_q for each test was calculated, and the average values with the standard deviation for each depth and temperature are shown in Table 7.8 accompanied by the value of Q for that temperature.

Table 7.8

Average Values of σ_q and Standard Deviation; σ_q/S.D.

Temp °C	Depth 1"	4"	7"	11"	17"	Q
-10	848/410	524/583	2145/1842	2700/881	64/2382	.0680
-21	431/203	424/218	374/311		793/752	.0423

Figure 7.5 shows σ_q versus Q for the various depths. It is obvious that no precise salt reinforcement function is possible. The scatter inherent in the rate and brine volume functions have been carried into the salt reinforcement function. In the analysis of the center 1" ice, it was found that e, the exponent of Q, was about 1.3 for the best fit. In this analysis it appears that a value of e of 1.0 will be satisfactory. The remaining unknown is K, with equation 7.21 becoming

$$\sigma_q = K\,Q \qquad 7.22$$

The best fitting value of K for each depth was determined by

$$K = \frac{\Sigma Q\,\sigma_q}{\Sigma Q^2}$$

Table 7.9

Values of K for Each Depth

Depth	Number of Observations	K	Standard Deviation
1"	63	11,595	302
4"	97	8,547	390
7"	32	30,675	1777
11"	17	39,712	881
17"	50	5,352	1862
18-21"	29	6,475	682
25-29"	17	44,400	2345

Figure 7.4 shows K as a depth function with the number of observations for each depth shown. K exhibits great variation; however, the high values are all for small groups of observations and the larger groups tend to show a pattern. A series of weighted, linear regressions were made of the Depth-K values with the weighting factor being the number of observations.

Table 7.10

Relationships of K and Depth

Regression No	Data used	Number of Observations	$\bar{Y}$	A	B	R
1111	All	305	14,513	10,926	401	.258
1112	Less 25-29	288	12,748	14,265	-193	-.128
1113	Less 25-29, 11	271	11,057	13,518	-321	-.288
1114	Less 25-29,11,7	239	8,430	10,624	-283	-.896

The only significant relationship between K and depth is found in Regression 1114 with a correlation coefficient of 0.9 for the equation

$$K = 10624 - 283(\text{Depth}) \qquad 7.24$$

If the depth function in K proves to not be significant, an alternate would be to use a constant value of about 10,000. This completes the definition of equation 7.1 and the general strength function for center ice is now ready for testing and evaluation.

7.5 TESTING, ADJUSTING, AND EVALUATING THE COMPLETE STRENGTH FUNCTION

The general expression for the compressive strength of center ice is

$$\text{Strength} = \text{Rate}^{r}\,[\sigma_o(1-G\,v^{1/2}) + G\,S\,K\,Q] \qquad 7.25$$

with the following values for the individual components of equation 7.25.

$$r = 0.166\ \text{Depth}^{0.138}\ \text{Temp}^{0.09}$$

$$\sigma_o = Y_o - M X_o + M$$

$$Y_o = 81 X_o$$

$$X_o = 0.177 + 0.243 \text{ Depth}^{0.138}$$

$$M = -61 + 309.4/\text{Depth}^{.443}$$

$$G = m/\sigma_o$$

$$S = (SV+BV)^{1/2} - (BV)^{1/2} = Sal^{1/2}(.082 - .180/T^{.381})$$

$$v = Sal(1.03 + 45.8/T)$$

$$Sal = 7.25 - .95 \ln(\text{Depth})$$

$$K = 10600 - 280 \text{ Depth}$$

$$Q = .034 + 2.707/T^{1.90}$$

Strength was calculated for each individual test using equation 7.25. These values were compared with the measured value and two regressions were made, each on the calculated strength in terms of the measured strength. The first by a general least squares fit and the second with a least squares fit forced through the origin. These results are shown in Exhibit 7.1 and in Table 7.11.

Table 7.11

Comparative Statistical Information, K = f(Depth)

	- Least Squares Line - - -				Line Through Origin		
Depth	Number of Observations	A	B	Stand. Dev.	R	Slope	Stand. Dev.
1"	155	35	.98	91.7	.958	1.041	93.8
4	196	10	1.00	69.1	.965	1.023	96.3
7	52	75	.72	94.4	.861	.872	102.1
11	35	142	.52	91.6	.822	.787	120.7
17	96	84	.74	92.4	.892	.908	103.3
18-21	29	67	.79	58.8	.888	.952	63.8
25-29	17	51	.67	42.1	.910	.813	46.4
32-36	18	74	.61	22.5	.865	.976	33.3
All	598	33	.92	92.4	.934	.984	94.2

The information shown in Table 7.11 indicates the general expression fits well. The equation was adjusted by changing K to a constant value of 10,000 and ignoring the depth effect.

Table 7.12

Plotback Statistical Information, K = 10,000

Depth	Number of Observations	- Least Squares Line - - - A	B	Stand. Dev.	Line Through Origin R	Slope	Stand. Dev.
1"	155	36	.98	91.0	.958	1.035	93.2
4"	196	7	1.02	70.1	.965	1.034	70.2
7"	52	73	.74	97.2	.861	.889	104.3
11"	35	137	.55	89.7	.841	.809	117.8
17"	96	76	.80	96.9	.897	.951	105.4
18-21"	29	65	.86	58.4	.905	1.022	63.1
25-29"	17	54	.70	40.9	.919	.842	45.8
32-36"	18	74	.61	22.5	.865	.976	33.3
All	598	33	.93	90.9	.937	.997	92.7

The slope of the single curve from the origin through all of the data is very close to 1.00. The correlation coefficient for this line is .934 which is satisfactory.

Exhibit 7.2 shows the value of the brine volume-strength function in tabular form for each degree from -1°C to -22°C, and for 7 depths. Exhibit 7.3 shows the value of $(1-v^{1/2})$ for the same temperatures and depth. Figure 7.7 shows the brine volume-strength function versus $(1-v^{1/2})$ for the different depths and is the model derived from the data shown in Figures 7.1 and 7.3.

The salt reinforcement for constant temperatures and depth groups is shown in Exhibit 7.4, and Figure 7.8 shows salt reinforcement as a function of depth for three temperatures and Figure 7.9 shows salt reinforcement versus temperature.

Strate, the sum of the brine volume strength function and the salt reinforcement, is shown for the same depths and temperatures in Exhibit 7.5, and Figure 7.10 shows strate versus temperature for constant depths. The brine volume strength function and the salt reinforcement are apparent in this figure, and the reduction of both components with increasing depth is also apparent.

7.6 INTEGRATED COMPRESSIVE STRENGTH OF AN ICE SHEET, CENTER ICE, HORIZONTAL LOADING.

The practical problem of a moving ice sheet impinging on an obstacle such as a piling is one of timely concern. It is known that the mode of failure in such a circumstance can be direct compression; therefore, the net strength through the sheet thickness can be integrated from the information developed for center ice. A natural ice sheet normally exists with a roughly linear temperature gradient; about -2°C throughout during summer melt and with upper surface temperature about -20°C during cold winter periods.

All the parameters of strength thus far studied, load rate, salinity, brine volume and brine reinforcement, vary both with temperature and depth. The limitations of integrating the sheet strength with the information thus far developed are as follows.

1. The entire sheet need be composed of center ice,
2. The ice may not be colder than -22.9°C which is the initial precipitation temperature of sodium chloride dihydrate, and has not been studied,
3. The mode of failure must be the same as for the specimens tested, and
4. The accuracy of the model.

With these limitations in mind, three example integrations are performed for an ice sheet 40 inches thick as follows:

1. The temperature is held constant at -2°C thus reflecting a summer condition. (Warm regime)
2. A linear temperature gradient is established with -22°C at the upper surface and -2°C at the lower surface thus reflecting a cold period. (Medium regime)
3. A linear temperature gradient is established with -22°C at the upper surface and -12°C at the lower surface simulating the center ice upper layer of an 80 inch thick ice sheet during a cold winter period. (Cold regime)
4. Load rates of 100, 300, 1000, and 5000 psi/min are used with each temperature profile yielding 12 integrations.
5. The integration is performed by finite summation of one inch increments.

Exhibit 7.6 shows the temperatures for the three thermal regimes at the top of each increment, Exhibit 7.7 shows the values of rate exponent for each inch for each thermal regime, Exhibits 7.8, 7.9 and 7.10 show the rate functions, (Rate) ^{r} , for the warm, medium, and cold thermal regimes at the four different loading rates. The rate function increases with increasing temperature, increasing depth, and increasing rate, and it ranges in value from about 2 to about 19. This is a multiplying function and shows the rate function to be highly important.

Exhibit 7.11 indicates the general brine volume functions, X_o, Y_o, B(or M), σ_o, G, and salinity at various depths, and Exhibit 7.12 shows the brine volume-strength functions (in psi) for the three thermal regimes at each inch of depth. The latter is sensitive to both depth and temperature near the surface but approaches a constant value which is independent of depth or temperature at deeper depths.

The salt reinforcement values are shown in Exhibit 7.13 for the three thermal regimes. The difference in reinforcement between the medium and cold ice is small, thus indicating the results of the solid salt quality function.

Exhibit 7.14 shows strate, the brine volume strength function, and the salt reinforcement values. Strate decreases rapidly with depth in the upper levels because both the brine volume strength function and the salt reinforcement exhibit this characteristic. For the ice under study, strate varies from about 45 to 240 depending on depth and temperature. In Exhibits

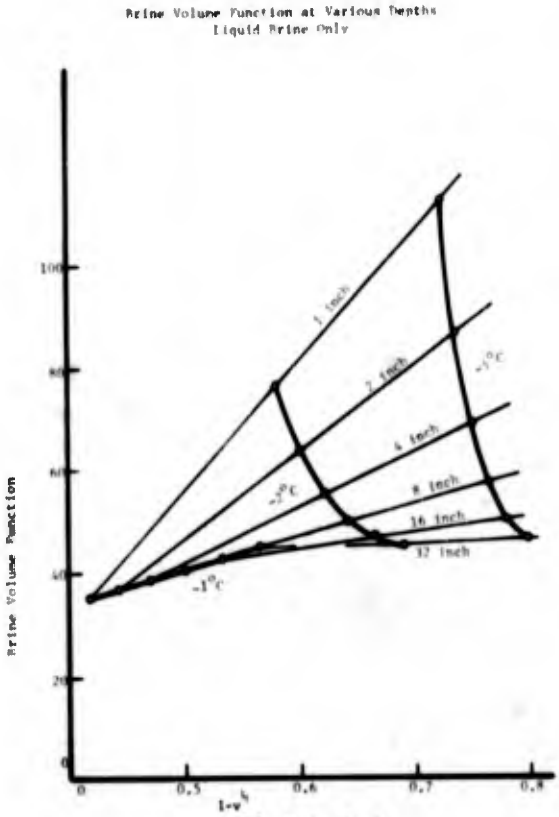

Figure 7.7

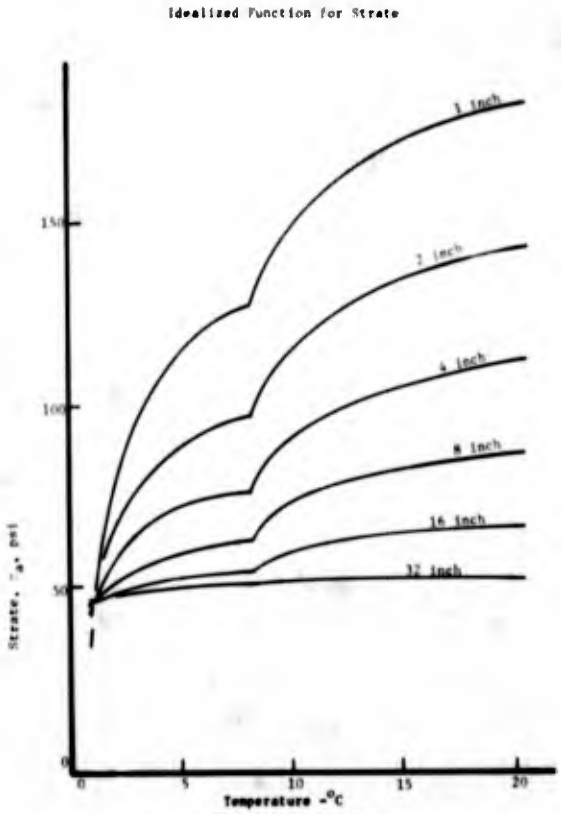

Figure 7.8

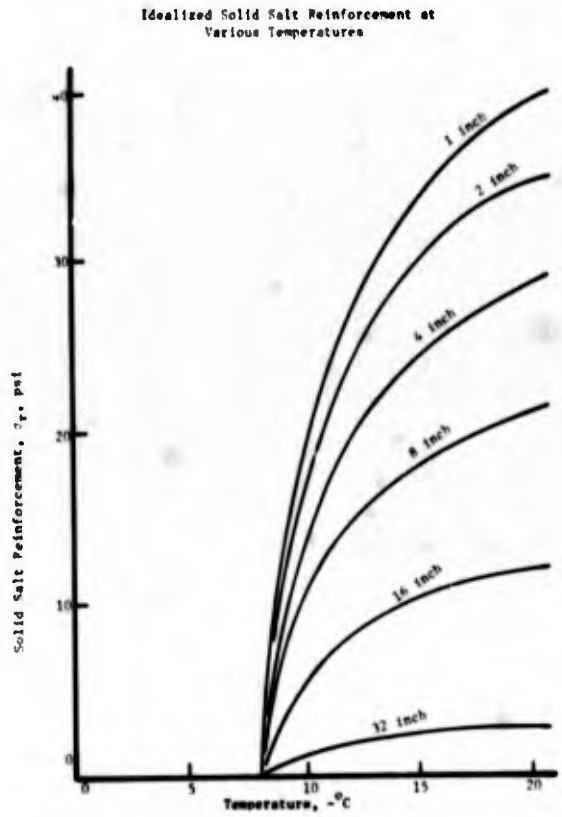

Figure 7.9

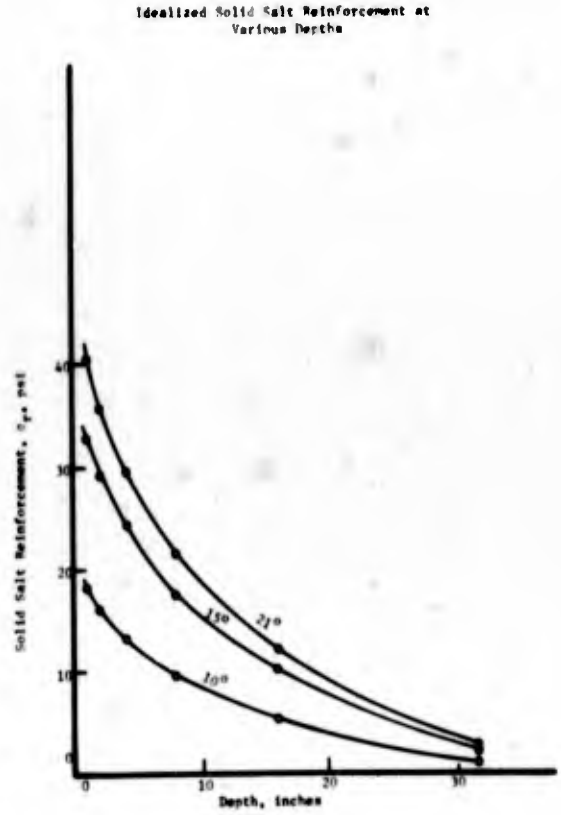

Figure 7.10

7.15, 7.16 and 7.17 are shown the strengths (strate times the rate function) of warm, medium, and cold ice respectively at the four different loading rates. Also shown are the totals or integrated strengths and the average strengths. The integrated strengths for the different rate-thermal regime combinations are shown in Table 7.13. Strength varies from about 145 to 1300 psi.

Table 7.13

Integrated Center Ice Sheet Strengths, lbs/inch of width
Thickness of 40"

Rate, psi/min	Warm	Medium	Cold
100	6,400	10,500	11,400
300	8,500	14,500	15,900
1,000	11,700	20,600	23,000
5,000	17,800	33,100	37,900

The medium and cold ice sheets are substantially stronger than the warm ice sheets, and the cold ice is somewhat stronger than the medium ice. Increasing rate from 100 to 5,000 psi/minute increases the strength by three times.

Figure 7.11 indicates the strength-depth relationship for a rate of 1,000 psi/minute for the three thermal regimes. In general, the warm ice strength is almost constant with depth because the brine volume-strength function decreases with depth but the rate function increases. The medium and cold ice have appreciable strength gradients with depth due to overriding effects of brine volume and solid salt reinforcement.

7.7 CONCLUSIONS

1. The general compressive strength function has been developed for all horizontally loaded center ice which inherently has horizontal crystal orientation but random orientation in the horizontal plane. The geometric variables used were based on bottom ice which is similar to center ice but has colinearly oriented crsytals in the horizontal plane. Center ice can then be expected to behave somewhat as bottom ice if bottom ice properties were integrated in orientation about the horizontal plane. These geometric variables have shown to fit the data very well, but further refinements must await detailed analysis of bottom ice.
2. Center ice from varying depths in the ice sheet has a systematic pattern, thus making it possible to develop a general strength function with a correlation coefficient of 0.93 for 598 specimens with variation of temperature from -1° to -21°C and depths from 1 to 36 inches.
3. The general strength function is

$$\text{Strength} = f(\text{Load Rate})[f(\text{brine volume} + \text{solid salt reinforcement})]$$

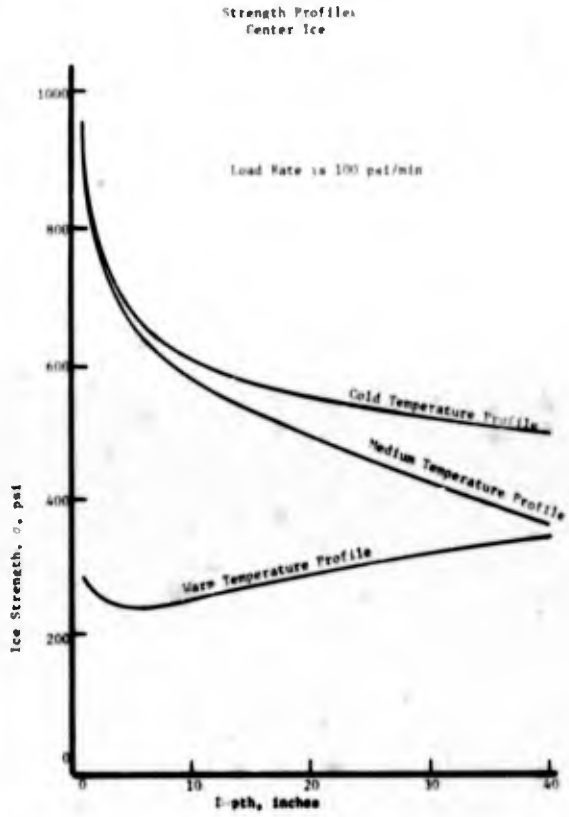
Strength Profile:
Center Ice
Load Rate is 100 psi/min
Cold Temperature Profile
Medium Temperature Profile
Warm Temperature Profile
Ice Strength, σ, psi
1000
800
600
400
200
0
0
10
20
30
40
Depth, inches

Figure 7.11

4. The function of load rate is

$$(\text{Load Rate})^{0.166}\ \text{Depth}^{0.136}\ \text{Temp}^{0.09} = f(\text{Rate})$$

5. The brine volume function is complicated. The greatest strength attenuation is due to liquid brine occuring with warm temperature near the ice sheet surface. The value of the function becomes much less with depth for all temperatures although it remains linear with strate for a particular depth. The details are expressed in equation 7.18. The reason for the attenuation of the brine volume effect with depth is not yet clear. The most intriguing speculation concerns platelet widths increasing with depth and the possibility of a shift in brine plane failures through the bridging ice to interior platelet ice. The failure plane shift is tentatively considered in Chapter 9. It is interesting to note here that such a shift does not negate the solid salt reinforcement concept, but rather enhances it for two reasons: 1) the solid salt reinforced ice is most probably stronger than interior platelet ice and 2) the reinforced brine channels may well inhibit crack propogation and increase the platelet ice's net rupture strength. Thus, the strength in the brine plane may exceed the strength in the platelet plane, and further, the strength in the platelet plane may be enhanced because of inhibition of crack propagation from platelet to platelet. Certain other speculations can be made about variability of brine channel shape, brine plane contaminates between channels, stress concentration, crystal lattice dislocations, and surface energy, but no clear evidence can be discerned.
6. All center ice indicates strong reinforcement due to precipitated sodium sulfate decahydrate. The reinforcement for a single depth is proportional to the salty quantity but the effect decreases with depth. This reinforcement is a significant factor in the strength of colder ice thus implying that salty ice is several times stronger than salt-free ice. Although intriguing, no definitive data are yet availalbe for describing the mechanism of reinforcement.
7. The six primary variables which govern strength are ice type, orientation, load rate, temperature, depth and salinity.
8. The strength functions developed in this chapter are limited to ice warmer than -22.9°C and having direct compression failure.
9. The equations for center ice strength allow integration through a thickness up to 40 inches. Reasonable average strengths range between 155 to 955 pounds per square inch for reasonable field conditions and for failure modes in direct compression.

Chapter 8

STRENGTH FUNCTIONS, BOTTOM ICE

8.1 INTRODUCTION

General load rate functions were developed in Chapter 5 for each ice petrofabric type and orientation. The development of this chapter is the determination of functions for brine volume and solid salt reinforcement for bottom ice by methods described in Chapters 6 and 7. The amount of data collected was very large; therefore, the orientation effect was closely studied with the data selected from a single depth and load rate.

8.2 AVERAGE STRENGTH

Tensile and compressive strengths are affected by the rate of loading, thus standard rates of loading were established and a calculation was made to determine the most probable strength at that rate for each orientation. The standard rates which were selected are 200 psi/min for tension and 460 psi/min for compression. The most probable strength values for each orientation were then obtained as follows:

1. For the main orientations (00-90, 90-00, 90-45 and 90-90), for which rate functions have been established, a group of 6 to 12 tests was selected with rates near the standard. Strate for the group was averaged and the appropriate rate function was applied to find the most probable strength.
2. For other orientations (22 1/2-90, 45-90, 67 1/2-90, 90-22 1/2, and 90-67 1/2) the tests were generally grouped near the standard rates. A linear regression of strength versus rate was calculated, and the strength was adjusted to reflect its value at the standard rate by use of the regression equation. This value was examined to ensure that it was typical. Sparsity of data in these orientations precluded development of a general rate function of high confidence.

Without a suitable general rate function, value of strate could not be determined with a high level of statistical significance. It is for this reason that the analysis in this chapter is made in terms of strength at the fixed value of load rate. Table 8.1 shows, for each orientation, the number of tests, strength at the standard rate, and standard deviation of the strength for both tension and compression. Figure 8.1 shows strength versus orientation in one configuration and Figure 8.2 indicates the same information in another configuration.

Table 8.1

Tensile and Compressive Strength at Standard Conditions for Different Orientations.

Orientation	Tension Number of Observations	Tension Strength (Rate=200)	Tension Stdev.	Compression Number of Observations	Compression Strength (Rate=460)	Compression Stdev.
00-90	9	284	68	12	1260	175
22 1/2-90	6	169	19	9	638	150
45-90	4	192	15	12	790	250
67 1/2-90	6	132	22	7	348	40
90-90	8	153	25	8	612	115
90-67 1/2	5	151	25	8	329	82
90-45	8	110	27	6	259	145
90-22 1/2	6	109	8	8	356	70
90-00	9	132	13	8	1020	210

It is interesting and important to note that Figures 8.1 and 8.2 indicate the same pattern of strength versus orientation in compression as in tension. The fact that tension and compression strength patterns are similar reinforces the probability that each is roughly correct.

The quadrant from the b-axis to the c-axis is the zone containing the brine-basal failure plane and it will be studied in the greatest detail. The character of the strength-orientation function, the extreme variation in strength, and the known structure of the ice in this quadrant suggest that the strength and other mechanical properties of the brine-basal plane can be defined and is worthy of tentative analysis.

8.3 ELASTICITY

8.3.1 General. E, the modulus of elasticity, or Young's modulus, is defined by the slope of the stress-strain curve. In determining E for individual data, a stress-strain plot was made and the average strength for a group of similar data was determined if the plot showed substantial curvature. A secant slope was then obtained between a point of zero stress and a point equal to 1/3 the average maximum failure stress of repeated tests.

Tests were sorted by type, orientation and sampling date, and it was observed that E was strongly dependent on rate of loading. Table 8.2 indicates the E dependence of the various parameters including the best-fitting rate exponent, Exp, in the equation as determined by regression,

$$E = \text{Rate}^{\text{Exp}}(\text{All other functions}).$$

Table 8.2

Orient	Tension or Compression	No. of data	Rate Exp.	t-test	Correlation Coefficient Multiple	With Strength	With Rate
00-90	T	65	.02	0.9	.39	.21	.13
90-00	T	53	.13	2.9	.56	.34	.38
90-45	T	58	.40	9.6	.84	.72	.71
90-90	T	67	.09	2.6	.44	.03	.30
00-90	C	113	.20	8.8	.74	.74	.58
90-00	C	105	.27	7.6	.71	.64	.56
90-45	C	95	.46	14.5	.84	.71	.79
90-90	C	114	.32	8.8	.72	.76	.62

The information presented in Table 8.2 is not intended to be definitive. It is presented to indicate some of the characteristics of E, shown by the tests, but without detailed analysis. This information shows generally:

1. The pattern of E versus rate is very similar to that for strength.
   A. The E-rate relationship is curvilinear.
   B. The exponent in compression is larger than the exponent in tension.
   C. The pattern of exponents versus orientation is similar to that for strength.
2. The multiple correlation coefficients are all significant and are highly significant in most cases.
3. Partial correlation coefficients between E and strength and between E and rate are found to be significant in most cases.

It is important to remember that this is average information, and the modulus of elasticity has not been studied in detail.

8.3.2 Elasticity at Various Orientations. The data which have been studied for strength for different orientations were also subjected to a cursory examination of modulus of elasticity. For the different groups of tests, E has been determined by fitting a least squares line for E versus rate and then finding E for the standard rates of 200 and 460 psi/min for tension and compression respectively. Table 8.3 shows these values of E for the different orientations, and Figure 8.3 shows E versus orientation.

Table 8.3

Values of E at different orientations.

Orientation	E in compression Rate = 460 psi/min	E in tension Rate = 200 psi/min
00-90	2.47×10^5	10.23×10^5
22 1/2-90	.72 "	8.54 "
45-90	1.54 "	8.73 "
67 1/2-90	.56 "	6.22 "
90-90	1.75 "	7.90 "
90-67 1/2	1.13 "	4.76 "
90-45	.93 "	4.19 "
90-22 1/2	.58 "	4.27 "
90-00	1.30 "	8.11 "

Two points are important:

1. The modulus of elasticity for tension is approximately 5 times greater than that for compression.
2. The modulus of elasticity-orientation plot shows the same shape as that for strength-orientation.

The E orientation pattern in the brine-basal plane shows the same deep, broad valley as the strength -orientation. This reinforces further the confidence in the general strength-orientation pattern in the brine-basal plane shown by the data under study. It also suggests that the same sort of orientation relationship can be used to define the value of E in the brine-basal plane.

8.4 TENSILE STRATE FUNCTIONS OF 90-00, 90-45 AND 90-90 ORIENTATIONS

Strate has been defined as the strength with the rate function removed and Table 8.4 shows the average tensile strate and $(1-v^{1/2})$ for 44 inch depth ice for the three orientations, 90-00, 90-45 and 90-90 for temperatures of -2, -5, -10, and -21°C.

Table 8.4

Average Tensile Strate

Temp	Number of 90-00 Obs.	Strate	$1-v^{1/2}$	Number 90-45 Obs.	Strate	$1-v^{1/2}$	Number 90-90 Obs.	Strate	$1-v^{1/2}$
-2°	20	78.4	.6512	15	53.3	.6568	16	108.2	.6703
-5	22	104.1	.7696	12	61.8	.7720	23	125.6	.7820
-10	8	112.8	.8355	11	72.4	.8421	20	150.0	.8328
-21	12	121.2	.8726	14	70.7	.8781	14	145.2	.8790

It is immediately obvious that no salt reinforcement is shown by the data. Furthermore, while the data appear approximately linear with $(1-v^{1/2})$, it is not sufficiently sensitive to changes in $(1-v^{1/2})$ to allow fitting of the general model.

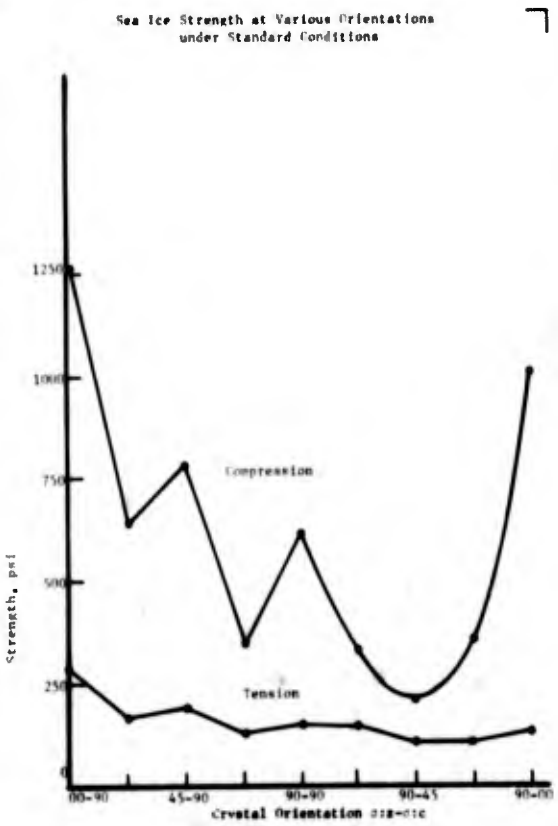

Figure 8.1

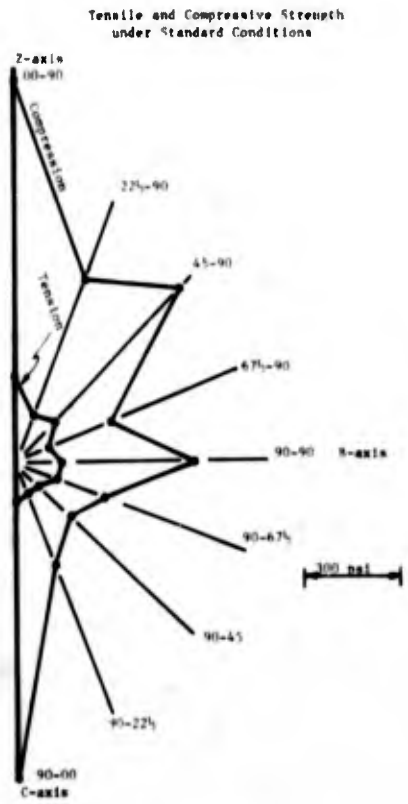

Figure 8.2

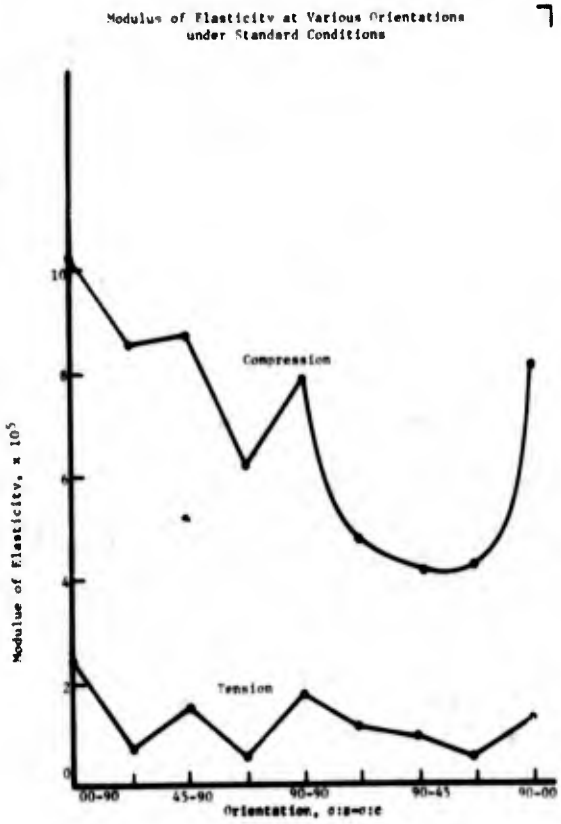

Figure 8.3

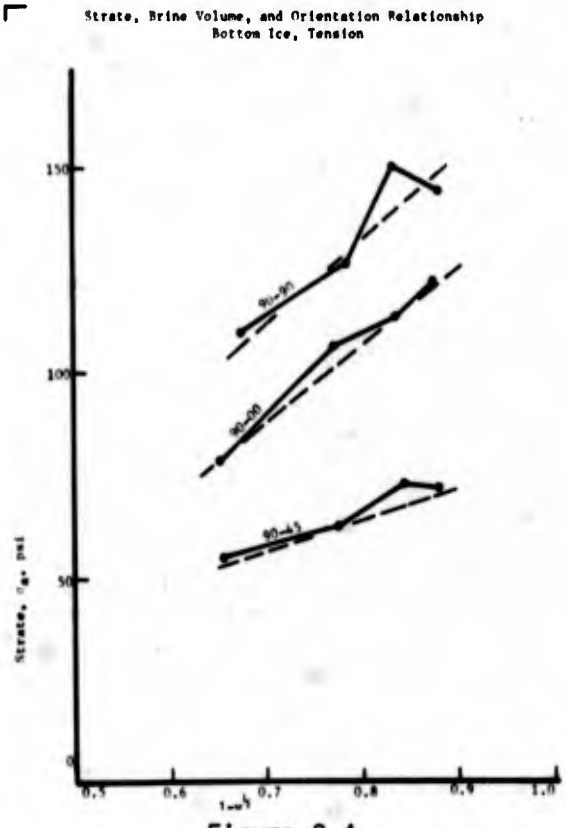

Figure 8.4

linear equations using the average values and weighted for number of observations are:

Orient	Equation	$(1-v^{1/2})$ intercept	
90-00	$\sigma_a = -46.4 + 193.0\ (1-v^{1/2})$	.240	8.1
90-45	$\sigma_a = -3.4 + 86.2\ (1-v^{1/2})$	.040	8.2
90-90	$\sigma_a = -31.9 + 207.8\ (1-v^{1/2})$	.154	8.3

and in standard form,

Orient	Equation	
90-00	$\sigma_a = 146.6\ (1-1.32v^{1/2})$	8.6
90-45	$\sigma_a = 82.8\ (1-1.04v^{1/2})$	8.5
90-90	$\sigma_a = 175.8\ (1-1.18v^{1/2})$	8.6

These provide the strate functions needed to describe the tensile strength of sea ice at 44 inches of depth.

8.5 COMPRESSIVE STRENGTH FUNCTIONS OF 90-00, 90-45 AND 90-90 ORIENTATIONS.

8.5.1 Strate Functions. Table 8.5 and Figure 8.5 show the average compressive strate and $(1-v^{1/2})$ for 44 inch ice for the three orientations, 90-00, 90-45 and 90-90 for temperatures of -2, -5, -10, and -21°C.

Table 8.5

Average Compressive Strate

Temp °C	Number of Obs.	90-00 Strate	$1-v^{1/2}$	Number of Obs.	90-45 Strate	$1-v^{1/2}$	90-90 Obs.	Strate	$1-v^{1/2}$
-2	59	212.2	.682	45	14.09	.682	66	91.65	.700
-5	65	245.7	.800	47	17.22	.790	82	110.4	.802
-10	36	341.0	.832	34	17.07	.836	37	148.3	.839
-21	28	351.1	.881	24	22.33	.877	29	198.1	.881

Figure 8.5 demonstrates that the strength of 90-45 ice in compression, as in tension, shows no salt reinforcement and is relatively insensitive to changes in brine volume. On the other hand, the strength of 90-00 and 90-90 orientations in compression show a greater sensitivity to changes in brine volume function and also show strong salt reinforcement. The shape of the brine volume function for the 90-00 and 90-90 orientations can not be determined because only two temperature, -2° and -5°, are available, in the non-solid salt temperature range. The brine volume function is assumed to be linear.

Linear equations fitting the above data and weighted for the number of observations are shown on the following page.

Orient	Temps	Equation	$(1-v^{1/2})$ intercept	
90-00	All	$\sigma_a = -256.0 + 671.2\ (1-v^{1/2})$	.381	8.7
90-00	2,5	$\sigma_a = 18.58 + 283.9\ (1-v^{1/2})$	-.065	8.8
90-45	All	$\sigma_a = -8.62 + 32.82\ (1-v^{1/2})$	.263	8.9
90-90	All	$\sigma_a = -253.5 + 478.0\ (1-v^{1/2})$	.530	8.10
90-90	2,5	$\sigma_a = -37.0 + 183.8\ (1-v^{1/2})$	.201	8.11

Also shown are the linear brine volume equations in standard form.

Orient	Temps	Equation	
90-00	2,5	$\sigma_a = 302.5\ (1-.938v^{1/2})$	8.12
90-45	All	$\sigma_a = 24.2\ (1-1.36v^{1/2})$	8.13
90-90	2,5	$\sigma_a = 146.8\ (1-1.25v^{1/2})$	8.14

The 90-45 ice shows no salt reinforcement and equation 8.13 completes the description of the strength of 90-45 compression ice at 44". A salt reinforcement term is required for the other two orientations.

8.5.2 Solid Salt Reinforcement Functions. Solid salt reinforcement is described as in Chapter 6.

$$\sigma_r = \sigma_a - \sigma_o(1-Gv^{1/2}) \qquad 8.15$$

σ_r is salt reinforcement, and σ_o and G are the constants in equations 8.12 and 8.14. Table 8.6 shows the calculation of σ_r for the 90-00 and 90-90 ice at -10 and -21°C.

Table 8.6

Calculation of Salt Reinforcement.

Orient	Temp °C	Number of Observations	$1-v^{1/2}$	meas	calc	$\sigma_r = \sigma_m - \sigma_c$
90-00	-10	36	.832	341.0	254.8	86.2
90-00	-21	28	.881	351.1	268.7	82.4
90-90	-10	37	.839	148.3	117.2	31.1
90-90	-21	29	.881	198.1	124.9	73.2

As for center ice,

$$S = (Sall + v)^{1/2} - v^{1/2} \qquad 8.16$$

where Sall is the relative quantity of solid salts and associated ice (salty ice). An equation has been developed for S for the temperature range, -8.2° to -22.9°C.

$$S = (\text{Salinity})^{1/2}\ (.082 - .180/\text{Temp}^{.381}) \qquad 8.17$$

For the data under consideration, average S is 0.0154 at -10°C and 0.055 at -21°C, the details of which are shown in Figure 8.6.

In the study of salt reinforcement of center ice, the general function developed for salt reinforcement was

$$\sigma_r = G\ S\ K\ Q^e \qquad 8.18$$

where G is the geometric constant found in determining the brine volume function, S has been defined, Q is a quality function for salty ice, e is the fitting exponent for Q, and K is a fitting constant. σ_r is calculated from equation 8.15, S is calculated from equation 8.17, and Q can be calculated from

$$Q = .034 + 2.707/T^{1.90} \qquad 8.19$$

and from equation 8.18

$$\frac{\sigma_r}{GS} = K\ Q^e. \qquad 8.20$$

Table 8.7 shows the different values involved in equation 8.20 for the 90-00 and 90-90 compressive data.

Table 8.7

Salt Reinforcement Data

Orient	Number of Observations	Temp	σ_r	G	S	σ_r/GS	Q
90-00	36	-10°	86.2	.938	.015	6.20	.068
90-00	28	-21	82.4	.938	.055	1600	.052
90-90	37	-10	3.1.	1.25	.015	1600	.068
90-90	29	-21	73.2	1.25	.055	1060	.042

Figure 8.7 gives the salt reinforcement data of Table 8.7 with a third point at the origin for each oriention. The relationship is linear for the 90-90 data, and e can be taken as 1. Using a weighted least squares line through the origin, K is approximately 250,000, but it was later necessary to adjust this to 30,000 when the functions were tested. The salt reinforcement for 90-90 compression is

$$\sigma_{r_{90\text{-}90\ c}} = 30{,}000\ G\ S\ Q \qquad 8.21$$

For the 90-00 salt reinforcement, an equation can be fitted using a value of e of 2.5, but this increases the value of K by several times. Another approach is suggested by Figure 8.8 which shows the salt reinforcement to be constant at approximately 85 psi, and this approach will be used because of its simplicity.

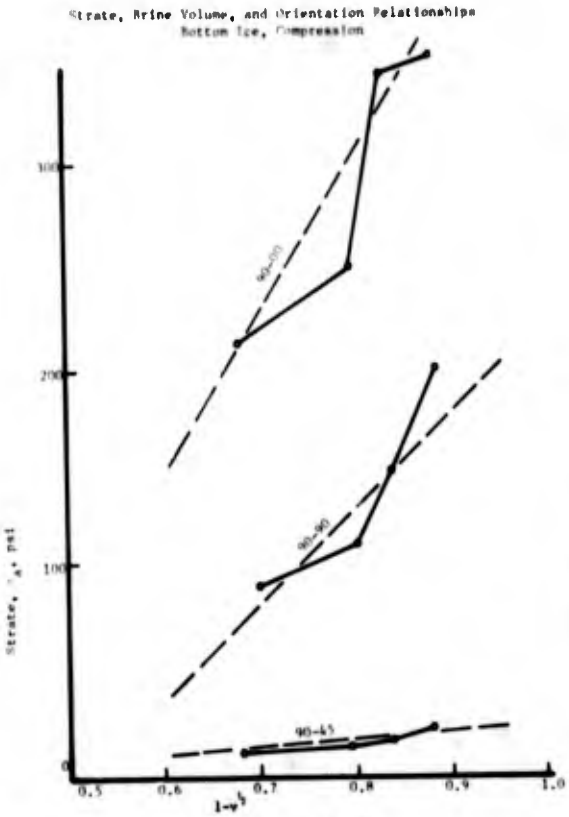

Figure 8.5

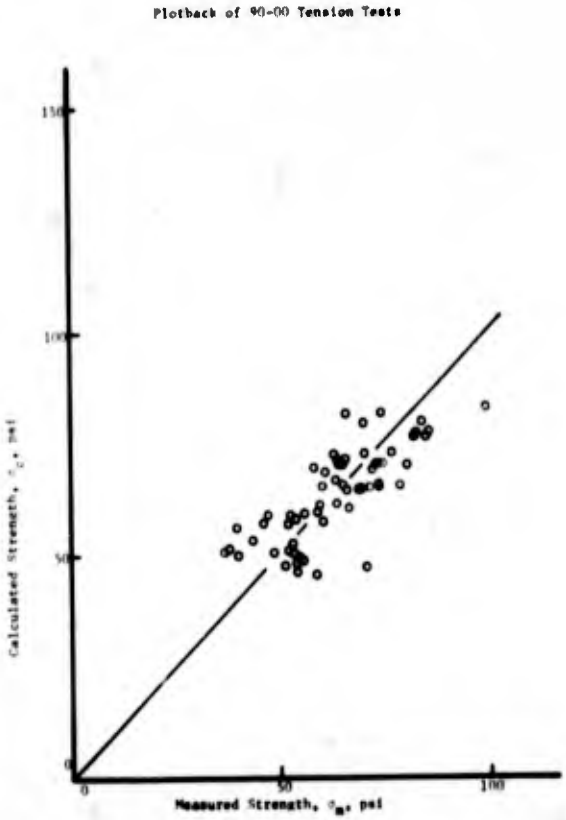

Figure 8.6

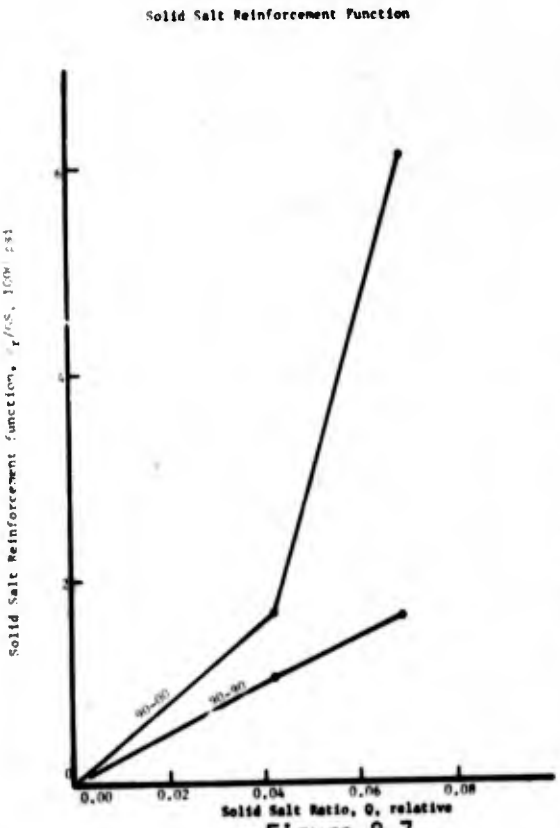

Figure 8.7

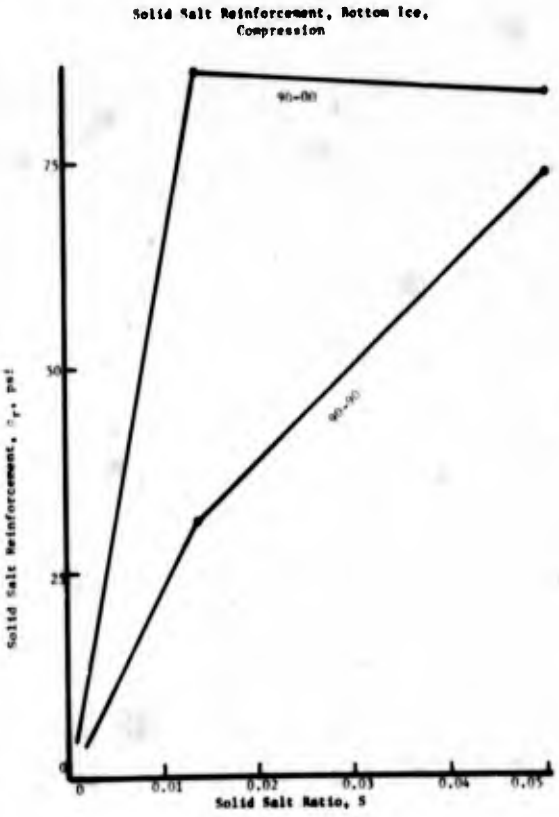

Figure 8.8

8.6 TESTING THE STRENGTH FUNCTIONS

8.6.1 Plotback Check. Plotback of the calculated value versus the measured value was used for the strength functions that were developed in the preceding two sections for strength at 90-00, 90-45 and 90-90 orientations in both tension and compression. Figures 8.8 to 8.13 show the calculated strength-measured strength using the following equations:

Fig.	Orient	Tension or Compression	Equation	
8	90-00	T	$= f(\text{rate})\ (146.6(1-1.32v^{1/2}))$	8.22
9	90-45	T	$= f(\text{rate})\ (82.8(1-1.04v^{1/2}))$	8.23
10	90-90	T	$= f(\text{rate})\ (175.8(1-1.18v^{1/2}))$	8.24
11	90-00	C	$= f(\text{rate})(302.5(1-.938v^{1/2})+85.)$*	8.25
12	90-45	C	$= f(\text{rate})\ (24.2(1-1.36v^{1/2}))$	8.26
13	90-90	C	$= f(\text{rate})(146.8(1-1.25v^{1/2})+ 30{,}000\ G\ S\ Q)$*	8.27

*Salt reinforcement only below -8.2°C.

Five statistical tests are used to determine the fit of the plotback and thus the fit of the equations, the results of which are shown in Table 8.8

1. The average residual.
2. The least squares slope from the origin through the data.
3. The standard deviation of the residuals.
4. The correlation coefficient.
5. The coefficient of variation.

Table 8.8

Statistical Tests of Strength Functions.

Data	Number of Observations	Average σ_m	Slope	R	Residuals, psi Avg.	Stdev	Coeff. of Variation
90-00 T	62	124.7	.985	.73	- .13	17.8	.143
90-45 T	52	115.0	.978	.77	.10	17.2	.150
90-90 T	73	172.9	.961	.53	.01	35.7	.206
All Tens	187	140.8	.971	.62	- .01	26.0	.185
90-00 C	188	1039.	.968	.86	- 11.	273.	.263
90-45 C	150	323.	.980	.95	- 2.9	85.4	.264
90-90 C	214	771.	.963	.93	4.0	185.	.240
All Comp	552	740.	.967	.90	- 2.8	201.	.272
All Data	739	589.	.967	.90	- 2.1	174.	.296

The average residuals are negligible indicating that the average calculated strength is close to the average measured strength. The slope,

Plotback of 90-45 Tension Tests

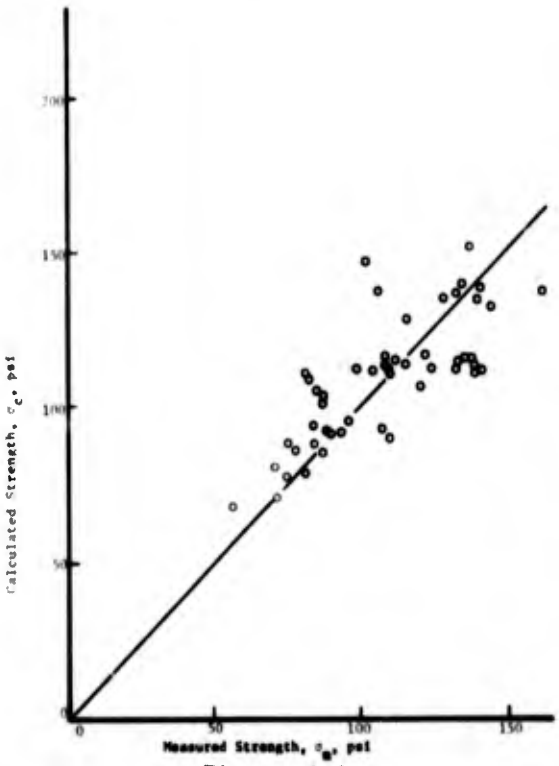

Figure 8.9

Plotback, 90-90 Tension Tests

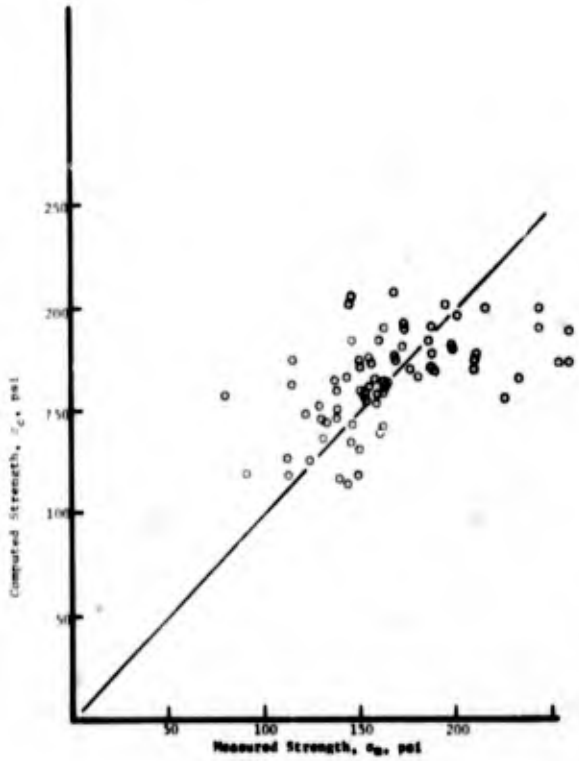

Figure 8.10

Plotback of 90-00 Compression Tests

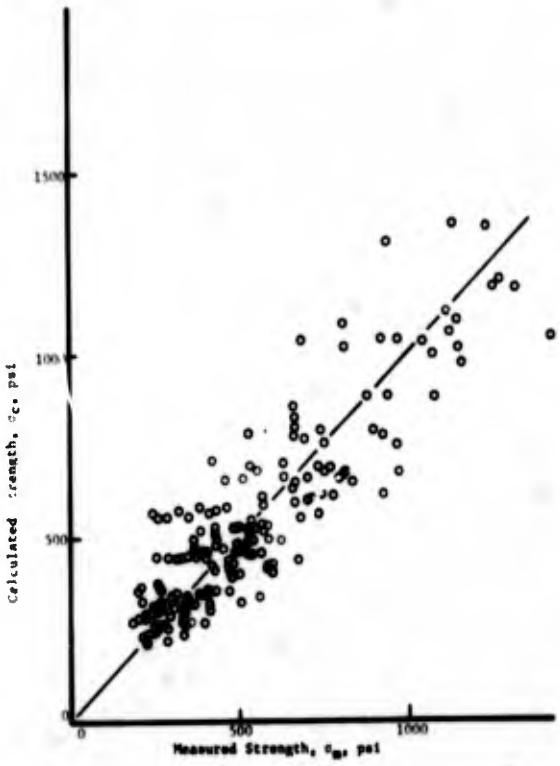

Figure 8.11

Plotback of 90-45 Compression Tests

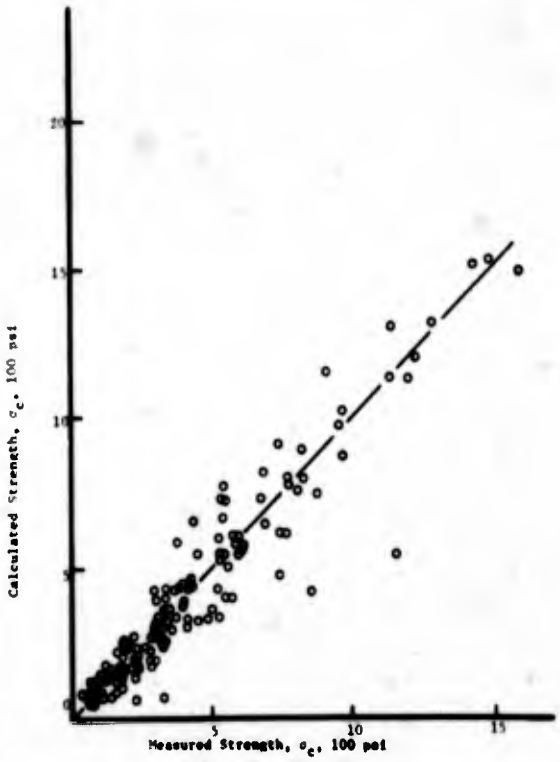

Figure 8.12

which is calculated by least squares shows an average value of approximately .97 with a systematic grouping of all data about that value. This indicates that all calculated values should be increased by approximately 3 percent to yield the best least squares fit; however, this small systematic error is ignored because the functions are probably as accurate as the data.

The correlation coefficients vary between 0.53 and 0.77 for tension and between 0.86 and 0.95 for compression. This is highly satisfactory. The coefficients of variation show a standard deviation in tension of 15 to 20 percent of the average value of measured strength. The compression data show the standard deviation of the residuals is approximately 25 percent of the average value of measured strength; however, while the compression data show a higher coefficient of variation, it also shows a higher correlation coefficient, and this apparent anomaly results from the different distributions and ranges of the data. The tension data are relatively insensitive to rate, and the range of rate was smaller than for compression. On the other hand, the compressive strength is much more sensitive to load rate and the range of the load rate is much greater. Consequently, the range of the compression data is much greater than the tension data. The tension data occur in a group removed from the origin by a discrete amount and have a fairly uniform density over a limited range. The result of this distribution gives relatively high average values which in turn yields a low coefficient of variation. The compression data, however, extends from near the origin for a relatively great range with high density near the origin, and decreases in density at the higher strengths. This gives average values that are relatively low and a correspondingly high coefficient of variation. The great range makes possible a high correlation coefficient.

The plotback plot and statistical analysis generate the following comments:

90-00 Tension. Figure 8.6
The data appear to be well centered on the line of perfect agreement. Because of the weak rate function, the data for the different temperatures are grouped separately, and the range for an individual temperature is small. This explains both the correlation coefficient (.73) and the coefficient of variation (.143). The fitting function is satisfactory.

90-45 Tension. Figure 8.9
These data also appear to be well centered on the line of perfect agreement. Because of the stronger rate effect, the data for the different temperatures overlap, and those for a single temperature have considerably more range than for 90-00 tension. The correlation coefficient is relatively large (.77) because of the increased data ranges.

90-90 Tension. Figure 8.10
This group of tests has the smallest correlation coefficient (.53) and the largest coefficient of variation (.206) of any tension group. It is relatively insensitive to load-rate, with the data grouped by temperature; however, the plot shows a general curve for the data as a whole. The reason for this is two-fold:

1. The data for each temperature tend to show a substantial scatter, and

2. The function used is a compromise because the -10° data show a substantial strength increase over that expected from the strate-$(1-v^{1/2})$ relation for -2° and -5°. This suggests solid salt reinforcement. The strength for -21°, however, drops to an approximately linear relationship with the -2° and -5° data, thus making the solid salt reinforcement concept questionable.

The -2° data falls on the line of perfect agreement. The -5° data falls somewhat above it. The -10° data falls below it and the -21° data falls above it. The correlation coefficient is sufficiently large to show a moderate correlation.

90-00 Compression. Figure 8.11
This pattern is fairly typical of the compression data groups. Because of rate sensitivity and range, the data for different temperatures overlap extensively, and for each temperature there is enough range in strength values to demonstrate a linear pattern. The correlation coefficient (.86) is quite good, but the standard deviation of the residuals (273.) and the coefficient of variation (.263) are both high. The function includes a constant salt reinforcement value, and it is obvious that salt reinforcement must be considered for this orientation. If the density of the data were more uniform, the coefficient of variation would be somewhat smaller.

90-45 Compression. Figure 8.12
Most of the comments regarding the 90-00 compression apply here, but the correlation coefficient is higher (.95), the differential density is more marked, and the overlap of the data for different temperatures is greater. The coefficient of variation (.264) is the same as for the 90-00 data and the fit for each temperature seems adequately centered and linear. Since no salt reinforcement is involved in the calculated strength, it appears certain that this orientation has insignificant salt reinforcement. These data and those for 90-45 tension show that the 90-45 ice is more consistant in performance than all other orientations studied.

90-90 Compression. Figure 8.13
The comments regarding the 90-00 and 90-45 compression data generally apply to this ice. The correlation (.93) is almost as good as the 90-45 data but the coefficient of variation (.272) is the greatest of any data group studied. Differential data density is seen to be much of the reason. The different temperatures overlap at the lower strengths; however, this function contains a salt reinforcement element which drives the -10° and -21° data into somewhat exclusive zones. Both the -10° and -21° data seem satisfactorily linear and these data, like the 90-00, appear to define a linear envelope indicating either random scatter or a second order effect not yet identified.

All Tension.
Statistical information has been calculated for groups of all tension, all compression, and all tests. In general, the All Tension grouping shows values that are approximately average for the three groups. The

All Compression.
This grouping shows an overall correlation coefficient of .90 but a relativelly high coefficient of variation (.272) due to differential data density. The average residual is essentially zero and the least squares slope through the origin is .97. The poorest results were obtained from the 90-00 data.

All Data.
Because the compression data is approximately 3 times as numerous as the tension data, this shows primarily the results of the compression analysis. The data show a correlation coefficient of .90, a high coefficient of variation (.290), an essentially zero average residual, and a slope by least squares through the origin of about .97. Since tension strength is much weaker than compression, the effect of differential density noted in the compression data is intensified in this grouping of all 739 data.

It is concluded that the strength models and the functions derived therefrom express the behavior quite well and are considered adequate for the further analysis in Chapter 9.

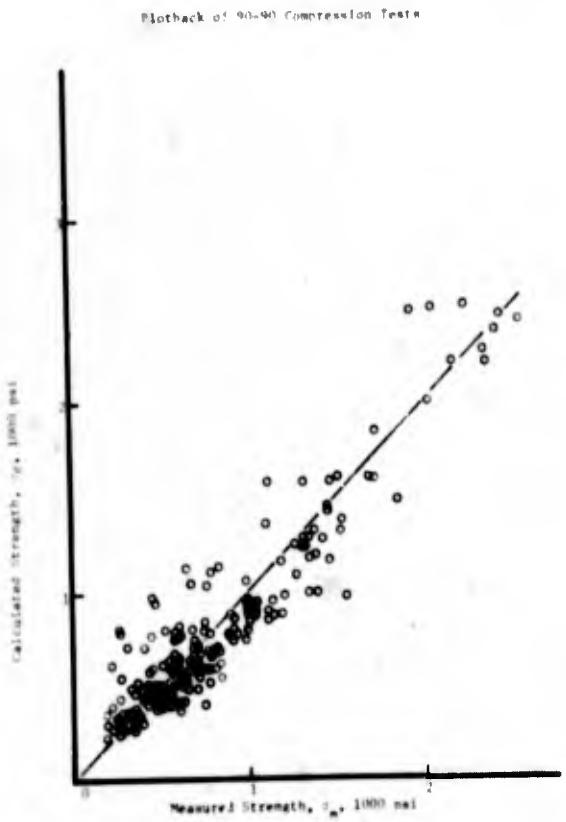

Figure 8.13

Chapter 9

BRINE PLANE - BASAL PLANE FAILURE

9.1 INTRODUCTION

The extremely low strength and stiffness of ice subjected to basal plane shear stress is well known and has been intensively investigated in fresh ice, single and polycrystalline. Substantial evidence has been found in this study for proposing that sea ice properties are sometimes dictated by basal plane characteristics of ice within platelets rather than by the parallel brine plane with its liquid brine and solid salts. These effects were not discernable in center ice, but became quite clear in observations of certain bottom ice properties.

Should basal plane failure be significant, several properties should be apparent, but before proceeding to such a list, the following considerations are put forth.

A shift from brine plane failure to basal plane failure could occur at warmer temperatures and would be difficult to ascertain without data over many small increments of temperature. Such data do not exist, but this type of shift is quite unlikely because of very low areas of bridging ice in the brine plane near the melting point. Ice specimen failures under these conditions in the laboratory have resulted in considerable delamination of crystals. This was not generally found in specimens with high shear stresses in the brine-basal plane, but was found with edge loading of the platelets.

Nothing is known about the crystal orientation of the bridging ice; at least sufficient detail is not available to allow a definitive strength analysis. It is conceivable that bridging ice is not a continuation of platelet ice, but the presentation which follows will consider only the continuation concept.

9.2 BRINE - BASAL PLANE CHARACTERISTICS

9.2.1 Necessary Conditions. Two parallel planes will be considered. The first is the brine plane including the total interplatelet brine at -1.8°C, the solids that form from this liquid, and the ice bridging from platelet to platelet at -1.8°C. The second is the basal plane within the fresh ice platelet.

Brine-plane failure requires several elements:

1. A linear relation between strate and $(1-v^{1/2})$ with strate sensitive to v.
2. A reasonable value of v_o, perhaps in the order of .5 to .65.
3. Salt reinforcement. All solid salts are deposited in the brine plane, therefore, salt reinforcement indicates that failure occurs either in the brine plane or in a failure plane cutting the brine plane.

Basal plane failure characteristics to be expected would include:

1. A rather limited relationship between strength and brine volume. Brine volume would probably be of some effect until enough ice had formed to provide a continuous platelet structure through the specimen. Beyond that point, the strength should remain approximately constant except for the direct temperature effect on the platelet structure strength.
2. Relatively high creep rates at cold temperatures.
3. No salt reinforcement.

9.2.2 Mechanical Properties in the Brine-Basal Plane. The behavior of the 90-45 ice in both tension and compression suggests a basal plane failure in the ice platelets between brine planes. This question is left open for the present and a general function for either the brine or basal plane or both can be developed without definitely identifying the specific plane involved.

Figure 9.1 shows a specimen with unit cross-sectional area loaded with an axial force σ.AB and a crystal axis at an angle θ with σ. The brine-basal plane of weakness cuts the specimen at EF perpendicular to the c-axis. Figure 9.2 shows a force diagram of the upper part of the specimen with the internal forces σ_n.EF, and σ_s·EF.

$$\sigma_n \cdot EF = \sigma . AB \cdot \cos\theta \qquad 9.1$$

$$\sigma_s \cdot EF = \sigma \cdot AB \cdot \sin\theta \qquad 9.2$$

However, AB/EF = cos θ, and equations 9.1 and 9.2 can be written

$$\sigma_n = \sigma\cos^2\theta \qquad 9.3$$

$$\sigma_s = \sigma\sin\theta\cos\theta \qquad 9.4$$

or

$$\sigma = \sigma_n/\cos^2\theta \qquad 9.5$$

$$\sigma = \sigma_s/\sin\theta\cos\theta \qquad 9.6$$

Figures 9.3 and 9.4 show the situation when θ approaches 90° and it can be shown,

$$\sigma_e CD = \sigma AB \sin\theta \qquad 9.7$$

$$\sigma_e = \sigma\sin^2\sigma\theta \qquad 9.8$$

$$\sigma = \sigma_e/\sin^2\theta \qquad 9.9$$

Equations 9.5, 9.6 and 9.9 yield ultimate strength values based on three modes of failure in the b-c-axis plane. The most important strength function here is that for shear in the brine-basal plane. Equation 9.4, where σ_s is the shear strength in the brine-basal plane, can be solved for σ_s for the 90-45 data. Since sin θ cos θ is 0.5 for θ=45°,

$$\sigma_s = 0.5\ \sigma_{90-45} \qquad 9.10$$

Force On a Specimen
Small θ

Figure 9.1

Force Diagram
Small θ

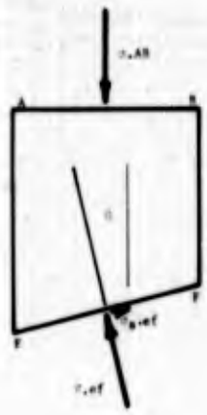

Figure 9.2

Force On a Specimen
Large θ

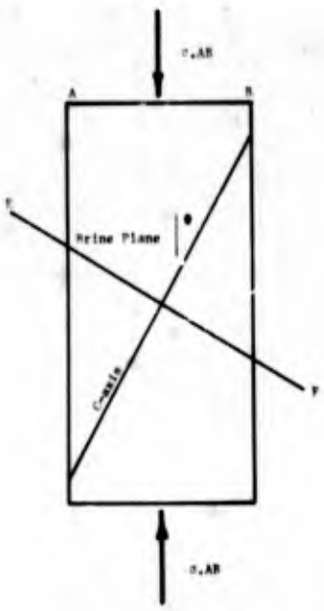

Figure 9.3

Force Diagram
Large θ

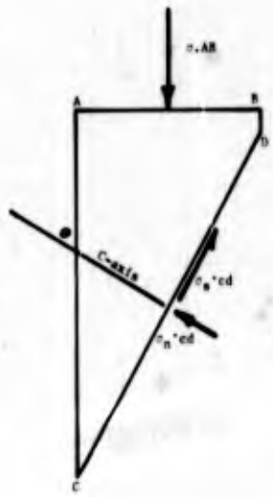

Figure 9.4

Figure 9.5 shows the function $\frac{1}{\sin\theta\cos\theta}$ which becomes infinite if θ is 0° or 90° and attain a value of 2.0 for θ = 45°. This function forms a broad, deep valley similar to the apparent shape of the strength function.

The function is valid at angles greater than 0° & less than 90°. Near 0° and 90° the lack of information prevents definition of the shape of the curve from data. Two possibilities present themselves:

1. If 90-00 and 90-90 orientations have unique modes of failure based on the frontal and edge loading of the platelet structure, equations 9.5 and 9.9 would begin to govern as the angle between load and the c-axis departed from 0° and 90°.
2. If sea ice acts as a granular or amorphous material when loaded on these two axes, the strength should remain approximately constant until another mode of failure controls strength.

Figure 8.6 shows strength versus orientation with both options 1 and 2 under the standard conditions outlined in Chapter 8. The scale factor used for the central part of the function is obtained using equation 9.10 which yields 129.5 psi in compression and 55 psi in tension. At both ends of the curve, strength is

$$\sigma_n = \text{90-00 strength} \qquad 9.11$$

$$\sigma_e = \text{90-90 strength} \qquad 9.12$$

By definition, the 90-00, 90-45 and 90-90 strength values are on the curve. The 90-22 1/2 and 90-67 1/2 values are the only ones available for testing the curves and these strengths are shown in Table 9.1 and Figure 9.6. Three values fit rather nicely but the 90-22 1/2 strength in tension is lower than it should be. The fit is sufficiently satisfactory to indicate that the strength-orientation relation is a good first approximation for the data available.

Table 9.1

Estimated-Measured Strength Values for Odd Orientations

Orientation	Tensile Strength		Compressive Strength	
	Estimated	Measured	Estimated	Measured
90-67 1/2	151	156	329	366
90-22 1/2	109	156	356	366

The shape of the curve is undefined between 0° - 22 1/2° and 67 1/2° -90°. Evidence from tests of laboratory grown single, fresh, ice crystals indicates the strength to be very sensitive to θ near 0° and 90°. The sea ice tests did not show such high sensitivity, but the expected true shape of the curves are shown dotted. Certain additional effects would be expected from experimental error due to lateral restraints at specimen ends and end interference with brine plane and platelet continuity.

Brine-Basal Plane Function

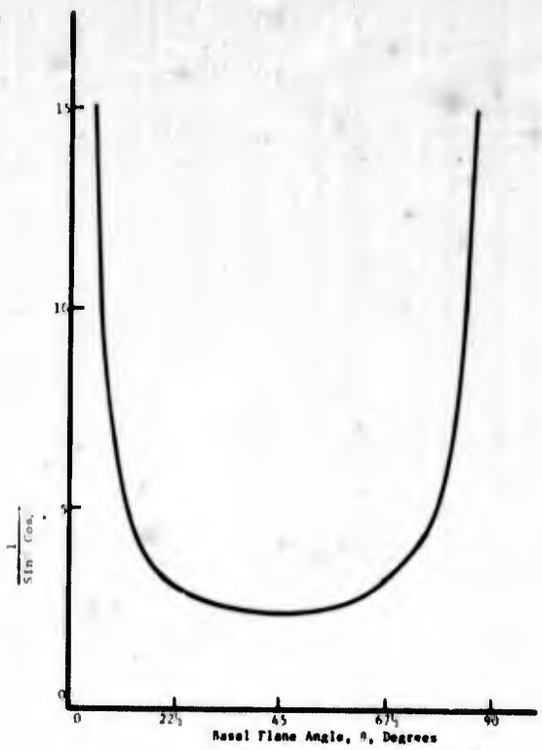

Figure 9.5

Strength Orientation Relationship

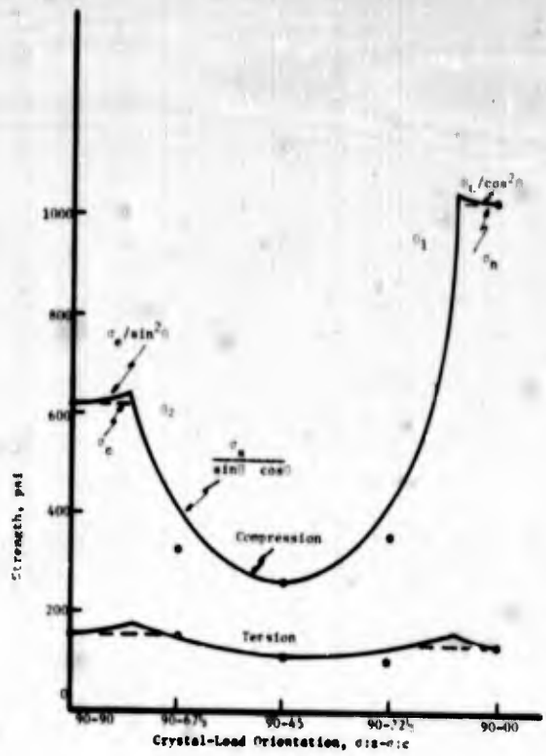

Figure 9.6

Rate Function-Orientation Relationship

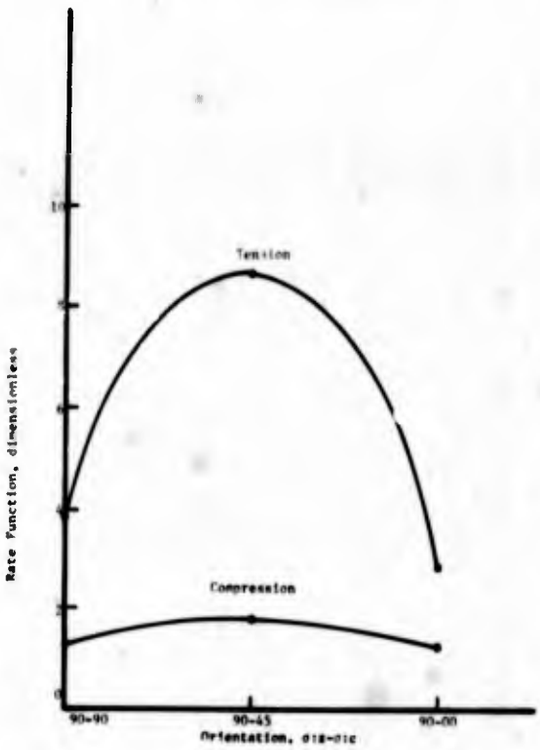

Figure 9.7

Strate Values for Bottom Ice Loaded on the Brine-Basal Plane

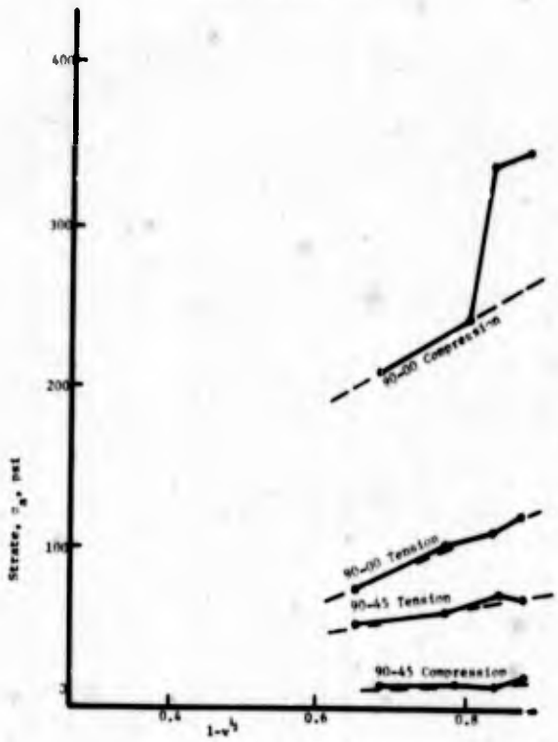

Figure 9.8

9.2.3 Rate Functions in the Brine-Basal Plane. The rate functions for tensile and compressive strength were developed in Chapter 4 with the general approach

$$\text{Strength} = f(\text{rate}) \times (\text{All other functions})$$

where

$$f(\text{rate}) = \text{Rate}^{r}$$

The exponent, r, is empirically fitted to the compression strength data in the horizontal plane:

$$r_{comp_h} = 0.166\ \text{Depth}^{.138}\ \text{Temperature}^{.09}\ \text{Rotvar}_c \qquad 9.12$$

and, for tensile strength

$$r = .082\ \text{Depth}^{-.195}\ \text{Temperature}^{-.064}\ \text{Rotvar}_t \qquad 9.13$$

Rotvar is the Rate Orientation and Type Variable empirically fitted for the different orientations and types. Table 9.2 shows the values of Rotvar for bottom ice.

Table 9.2

Values of Type and Orientation Variable for Several Orientations

Orientation	$\text{Rotvar}_{comp.}$	$\text{Rotvar}_{tens.}$
90-00	.60	1.82
90-45	1.26	4.48
90-90	.79	2.12

The f(rate) is shown in Table 9.3 and Figure 9.7 for tension and compression for 44 inch ice at -5° at rates of 200 psi/min for tension and 460 psi/min for compression.

Table 9.3

Rate Functions for Standard Conditions.

Orientation	Compression		Tension	
	r	f(rate)	r	f(rate)
90-00	.194	2.79	.0445	1.266
90-45	.407	8.60	.109	1.78
90-90	.255	3.86	.052	1.32

Comparison of Figure 9.7 with Figures 8.1 and 8.3 indicates that, in the basal plane, an inverse relation exists between the rate function and both strength and modulus of elasticity.

9.2.4 Brine Volume and Salt Reinforcement in the Brine-Basal Plane. Four data groups represent direct loads on the brine-basal plane. The 90-00 data is loaded directly on the basal plane in either tension or compression. The 90-45 data is loaded at 45° to the brine-basal plane

and exerts the maximum shear force combined with either a tensile or compressive force. Tables 8.4 and 8.5 show the values of strate and $(1-v^{1/2})$ for this data at the temperatures available. Equations for the brine volume functions have been developed in the form

$$\sigma_a = \sigma_o(1-Gv^{1/2}).$$

Table 9.4 shows the values of σ_o, G, and v_o for the four groups, and Figure 9.8 shows strate versus $(1-v^{1/2})$.

Table 9.4

Equation Data for Groups Loaded on the Brine Plane

Orient	σ_o	G	v_o
90-00	146.6	1.32	.634
90-45	82.8	1.04	.040
90-00	302.5	.938	1.134
90-45	24.2	1.36	.543

9.3 SUMMARY AND CONCLUSIONS

Analysis of all details which have been outlined has not been accomplished and some gaps occur in Table 9.5 which summarizes details of the mechanical properties of bottom ice of various load orientations.

Table 9.5

Orientation vs Mechanical Properties

	Compression				
	90-00	90-22 1/2	90-45	90-67 1/2	90-90
$\bar{\sigma}$, psi	1020	356	259	329	612
$E \times 10^{-5}$, psi	1.30	0.58	0.93	1.13	1.75
Strate, psi	246		17		110
Rotvar	0.60		1.26		0.75
Rate Exponent	0.19		0.14		0.26
f(rate)	2.8		8.6		3.9
σ_o, psi	303		24		147
G	0.94		1.3		1.4
v_o	1.1		0.54		0.62
Salt Reinforcement	yes		no		yes

Orientation vs Mechanical Properties

Tension

$\bar{\sigma}$,psi	132	109	110	141	143
$E \times 10^{-5}$,psi	8.11	4.27	4.10	4.76	7.90
Strate, psi	104		62		126
Rotvar	1.82		4.48		2.12
Rate Exponent	0.04		0.11		0.05
f(rate)	1.3		1.8		1.3
σ_o ,psi	147		83		176
G	1.3		1.0		1.2
v_o	0.58		0.90		0.71
Salt Reinforcement	no		no		no

The evidence clearly indicates that compression at 90-45 and tension at 90-45 and 90-00 exhibit characteristics of failure outside the brine plane, at least for temperature colder than -10°C. Behavior at warmer temperatures is quite different from that for 90-90 orientation, but the differences could be equally ascribed to brine plane failure or as basal plane failure.

The 90-22 1/2 orientation seems adequate to force basal plane failure, but information is inadequate to make further analysis at this time. The 90-67 1/2 orientation is strongly affected by mechanical and geometrical constraints on the ends of specimens; therefore, these data would yield erroneous results.

The 90-00 compression curve shows obvious solid salt reinforcement and that failure must be influenced by the brine plane. The three groups remaining for examination are the 90-00 tension data and the 90-45 data in both compression and tension. The 90-00 tension data show:

1. There is no apparent salt reinforcement.
2. For the four different temperatures, strate is apparently fairly linear with $(1-v^{1/2})$.
3. v_o = .63 is reasonable.

Table 8.3 and Figure 8.3 show the 90-00 tension ice to be relatively stiff and the stress-strain curves for the individual data show an almost linear relationship curve from the origin to the point of failure with only small load rates and warm ice showing significant curvature. The tensile strength of 90-00 ice is only 20% stronger than that of 90-45 ice. This has been shown in Figure 8.1. The rate function compared with that for 90-45 tension ice is small with tension Rotvar values respectively of 1.82 and 4.48.

Inspection of the 90-00 tension data indicates no salt reinforcement. In addition, the four data points are quite linear with $(1-v^{1/2})$, thus reinforcing the validity of this function. Finally a v_o of .63 is a reasonable value . It seems; therefore, that all criteria for brine plane failure are met with the possible exception of salt reinforcement.

The 90-45 tension data indicates some similarities to the 90-00 tension data. There is no salt reinforcement and there is apparently a linear relationship with $(1-v^{1/2})$. σ_o is about 83 psi compared with 147 for the 90-00 ice. The slope is relatively flat with a G value of 1.04 and an $(1-v^{1/2})$ intercept of .04. In this case, the requirement for a reasonable v_o value is not met.

The 90-45 compression data shows no salt reinforcement, it is fairly linear with $(1-v^{1/2})$, and it has a reasonable value for v_o. However, this ice is very weak with a σ_o of .3 that for 90-45 tension. Since σ_o is in terms of strate, it is necessary to calculate a rate function to compare strengths. Using a rate of 500 psi/min, a depth of 44 inches and a temperature of -5°, the rate functions for tension and compression are 2.68 and 12.4 respectively. In this representative case, the ratio of compression to tension rate functions is 4.64, thus the compressive strength for this ice is greater than for tension.

The evidence is not entirely satisfactory to explain the occurrence of solid salt reinforcement in some orientations but not in others. There is, however, enough evidence to demonstrate the possibility of failure plane shift from the brine plane to the basal plane within platelets at cold temperatures when the brine plane strength may be strongly reinforced with solid salts.

It should be noted that no solid salt reinforcement has been indicated by tension tests on bottom ice. The question of possible solid salt reinforcement as reported by Assur has not been verified by the direct tension tests of bottom ice used in this study.

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Chapter 10

APPLICATION

10.1 INTRODUCTION

Direct application of the work shown in the preceding chapters was made on a specific project from 1963 through 1965; determination of ice loads, design, fabrication, erection and performance testing of a large offshore oil drilling platform in Cook Inlet, Alaska. The analysis in Chapters 4 through 9 were not completed, and parts had not yet been initiated. Early analysis had given considerable insight to the engineering properties of sea ice, and intuitive reasoning could be used with discretion It should be noted here that the time requirement for establishing the design conditions in a new environment was very short. For example, specially manufactured steel for the future structure was ordered less than six months after the project was conceived and three months after the author began work on the design conditions. The tone of this chapter, therefore, is quite different from that of preceding chapters which were in a research instead of design atmosphere.

The actual study was accomplished in a different manner than outlined here. Actually, the work resulted in a set of four reports, each a substantial refinement of the other. This chapter will contain only those portions which show the end product and the method of achieving it. Work which was exploratory and was later refined will be deleted in the interest of clarity and brevity. Further, much of the detailed work has yet to be released from proprietory status.

10.1.1 The Problem. The problem is rather simple to state: "What will be the forces imposed by ice on an offshore oil drilling platform in Cook Inlet, Alaska?" There is some experience concerning lateral loads on piling or structures by ice in rivers and in some other situations. The extrapolation of this experience to the Cook Inlet is, however, not practical because of the different parametric factors that are known to occur in Cook Inlet. These include high tides, large tidal velocities, high mineral content in the form of soil particles in the water, and considerable mixing of fresh river water with sea water. No previous work has been done in attempting to describe the ice conditions in Cook Inlet.

10.1.2 Status of Knowledge. The description of lateral loads on structures due to ice is an empirical relationship, and the literature contains certain empirical expressions describing these lateral forces on such structures as bridge piers located in rivers. Mechanical properties of ice are highly variable thus leading to different failure modes and great differences in strength. Extensive differences in heat transfer result in large differences in ice growth rates, even in locations with similar ambient weather conditions. Therefore, it is impossible to closely predict lateral loads on a specific structure in a specific location without first determining for the specific ice the expected thickness, the strength of that ice, and the failure mode exhibited when such ice impinges upon a structure. Of necessity, then, an empirical ad hoc experimental approach must be followed if answers are to be found in reasonable time.

10.2 INITIAL OBSERVATIONS

Cook Inlet. Cook Inlet, Alaska, assumed considerable engineering importance after the discovery of offshore oil in the summer of 1962. The inlet is one of the most difficult in the world in which to work because of 35 foot tides and six knot tidal velocities. The high latitude of 62° results in strong coriolis forces, so this coupled with the inlet geometry causes considerable cross currents at both ebb and flood tides. The water is quite turbulent through its entire depth and has a high silt suspension content which makes it virtually opaque. The water depths are variable from 135 feet to -35 feet, based on mean low tide, resulting in frequent choppy wave action, extensive mud flats and three to four foot tidal bores. The general distribution of atmospheric air pressures coupled with the geometry of surrounding mountains and valleys allows full gales to frequently occur and the attendent water waves have heights of about 30 feet. Katabatic winds are very strong in the Turnagain and Knik Arm vicinities. The influx of fresh water from numerous rivers is highly variable from summer to winter resulting in an attendant variability in salinity in the inlet.

These factors alone make Cook Inlet a difficult place in which to work, but the climate is sufficiently cold in the winter to also create a sea ice cover of up to 3.5 feet. This ice forms in floes of up to two miles in diameter which move up and down the inlet with the six knot tide and travel distances in the order of 25 miles per tide.

The study of this ice is the topic of this chapter. The general characteristics of the inlet are shown in Figures 10.1 through 10.4.

10.3 ICE THICKNESS PREDICTIONS

The thickness of the sea ice in Cook Inlet is derived from two mechanisms. The first is the growth thickness and the second is the mechanical stacking or rafting. The analysis of growth of sea ice in Cook Inlet has proved to be an interesting problem. Many factors are contributing to the growth and decay of the ice sheet, and fundamental information of the oceanographic and weather parameters of the inlet area are too meager to allow competent analysis from first principles at the present time. Therefore, the analysis prior to construction of the first offshore drilling platform was subject to wide limits of confidence.

10.4 RAFTING

At the time of maximum ice growth in the inlet and at the time of sampling for strength measurements, thickness determinations were made of several floes during 1963-64. They were quite uniform in thickness of about twelve inches. At this time, general observations were made concerning the occurrence of rafting, and it was determined, and is shown in Figure 10.5, that the majority of the rafting occurs when the ice is quite thin and generally does not appreciably affect ice thickness. However, it will be noted that some small areas of rafting do indeed occur which can double the thickness of the ice sheet. Several locations were observed in which the one foot thick ice sheet had rafted with its full thickness, thereby resulting in a two foot thick ice sheet. It will be noted, however, that not only

Figure 10.1

Wind at Middleground Shoal Platform A.

Figure 10.2

Wind and Waves which Commonly Occur in the Summer in Cook Inlet.

Figure 10.3

Common Winter Ice Cover in Cook Inlet.

Figure 10.4

the fact that the ice sheet doubles in thickness is important, but also of significance, is the horizontal extent of such thickening. The field determination of rafting effects is complex because a search must be conducted for the maximum rafting effects. This is a population sampling program which requires a large number of observations.

10.5 ICE STRENGTH

10.5.1 Mode of Failure. The most important observation made during the first winter of the study was the mode of failure of the ice when impinging upon a temporary exploratory drilling platform. Figures 10.6, 7 and 8 show the general features of the failure type. At the time these pictures were taken, the tidal movement was into the inlet, or a flood tide. The "A" arrows in all figures indicate the platform orientation with the "A" arrow indicating "up inlet" toward Anchorage.

It can be observed that the failure mode of the ice is direct compression. No significant tension cracking of the ice floes occurred, and the total volume of ice impinging upon a single platform piling is crushed into very small pieces. Figures 10.9, 10 and 11 show this failure in detail. Figure 10 shows in particular the ice being reduced to small particle size.

Figures 10.6, 7, and 8 show that orientation of the platform relative to the direction of general ice movement is of little significance in reducing ice forces on the platform due to forces imposed by floes, be they rafted or not. This can be observed particularly in Figure 10.7 in which the "trailing" piling might have been expected to receive substantial force reduction. Piling No. 3 in Figure 10.7 can be observed to be offset about one piling diameter and is apparently receiving negligible force reduction due to the path cut by piling No. 1. This compression failure mode makes the utilization of ice cutters of questionable value.

Also to be observed from Figures 10.6, 7 and 8, is the type of path cut through the floes. The platform is obviously a restriction to the movement of individual floes. The configuration and point of contact of upstream floes with the particular floe which is being extruded past the platform results in differing path shapes. In Figure 10.6 it can be seen that a curvilinear path is being generated, probably dictated by the floe immediately upstream from the one being cut. Figure 10.7 shows a large floe moving past the platform in which no major floes are obvious upstream and the path generated is straight. Figure 10.8 again shows a curvilinear path. The upstream conditions at the time of the photograph are unknown.

10.5.2 Ice Strength Testing, 1962-63. Mid-inlet ice was sampled at Middleground Shoals immediately after the maximum ice growth conditions occurred during the winter of 1962-63. The only major ice-growing weather occurred during the first week of February and sampling was done on 7 February when the ice was thickest. Five samples were collected and salinity profiles were determined for each sample. Eighty-two compression and tension tests were made from the ice collected.

Rafting of Thin Ice Floes, F Indicates Rafted Section.

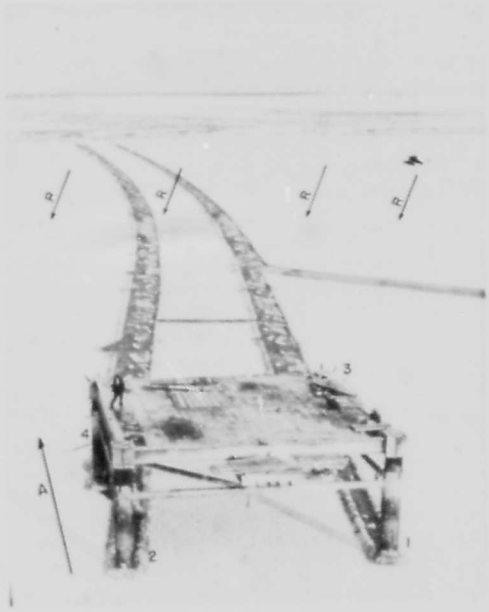
Figure 10.5

Ice Failure Against Platform, I, Note the Double Thick Rafted Section and the Small Floe Size.

Figure 10.6

Ice Failure Against Platform II, Note the Double Thick Rafted Section and the Compression Failure on all Four Legs.

Figure 10.7



Ice Failure Against Platform,III, Note the Curvalinear Path and Nature of Floe Splitting which does not Reduce Platform Loads.

Figure 10.8

10.5.3 Ice Strength Testing, 1963-64. Two favorable ice growing periods occurred during the winter, mid-January and mid-February. The January period provided the best ice and five samples were studied in detail. One sample, number 6, was collected during March for detailed study. All samples were collected to correlate with unique test pile (see 10.6) data. The first day of test pile data collection produced the most important bit of record for the season. On this day, 22 January, ice was sampled, numbers 4 and 5, which appeared to best match this record.

The samples were collected, flown directly to Anchorage by helicopter and stored in a deepfreeze until tested. Compression tests, salinity tests and crystalographic thin sections were run on each of the six samples.

10.5.4 Ice Strength Testing, 1964-65. Six large field samples were collected, and direct compression strengths were determined over a range of load rates and temperatures. Five samples (1-5) were collected in conjunction with force measurements on MGS-A, the completed structure. Previous test pile results indicated loads or forces at high load rates to be about one-half of those at low load rates. The results of the load rate -strength data show this clearly in Figure 10.12. The dotted line denotes Arctic sea ice properties as determined from slower load rates. It should be noted that the actual strength of this particular ice is much lower than average for Cook Inlet ice and the temperature effect is very slight, due to the low salinities (less than 2 parts per thousand). There were three ice growth periods during the winter, and these samples were taken on 16 and 20 February, during the third growth period. Onsite observations and impressions indicated the highest ice strengths during the first period, with the second and third periods producing increasingly weaker ice.

10.6 LATERAL ICE FORCES ON PILING

10.6.1 Field Measurements. A test pile was erected on the temporary drilling platform previously shown. Figure 10.13 shows the test pile for this project at the right side of the figure. It was a 36 inch diameter, 20 foot long cylinder supported as a simple beam. The lower hinge was a piece of 3/4 inch plate which also served to support the pile vertically. The upper end was unsupported either vertically or horizontally except by a 300,000 pound load cell and adequate rigging to prevents its being pushed over.

The second test pile shown in Figure 10.13, erected by others, is of cantilever design. It was totally collapsed by ice forces before useful data could be acquired from it. The simple beam test pile facility was destroyed when the entire platform failed and disappeared in December 1964.

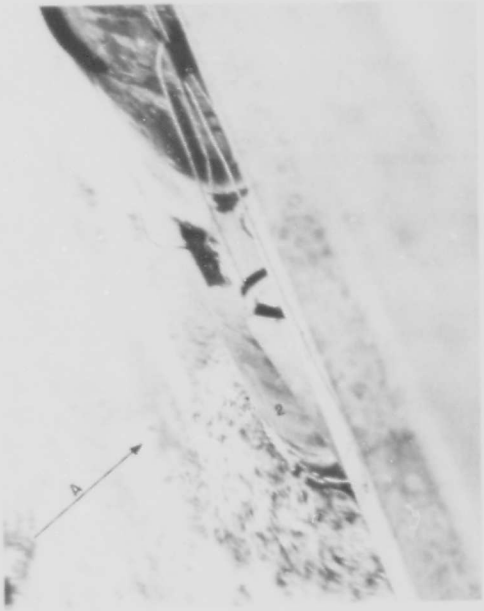
Several interesting factors were observed. First, and most important, is that the largest ice forces occurred when the ice velocity was very slow or zero. The action seen in Figure 10.14, Case J, occurred with a change in velocity of from 3 or 4 miles per hour to zero. In Figure 10.14, the trace runs from left to right and from top to bottom. Starting with the upper left corner (Point C), the ice velocity is high but slowing-down by point D. This slowing resulted from the breaking away of a large chunk of the ice floe which had already passed the platform and thus ceased pulling the floe past the platform. From point E to F on the

Detailed Ice Failure I, Note the Berm of Broken Ice on Each Side of Paths.

Figure 10.9

Detailed Ice Failure II, Note the Small Size of Crushed Ice.

Figure 10.10



Detailed Ice Failure III, Note the Rolling Berm of Broken Ice.

Figure 10.11

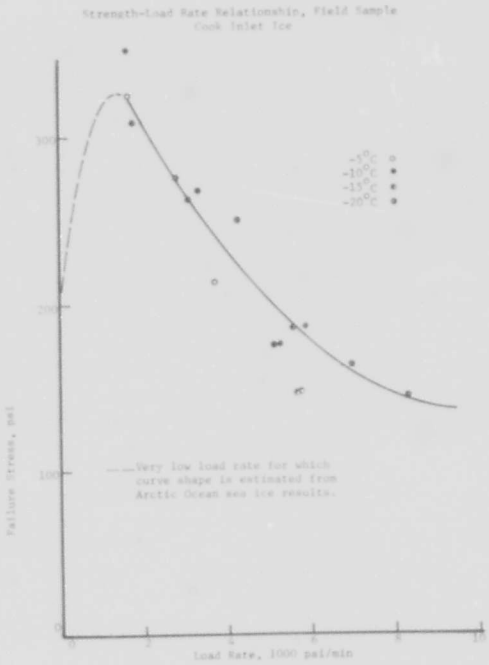


Figure 10.12

record is the slowing of the floe to a complete stop at about point F. Very little motion or ice breakage occurred between points B-A and F. This slow ratcheting failure is characteristic of all the low velocity failure experienced during the winter. This floe seemed to be uniform in thickness over its entire area.

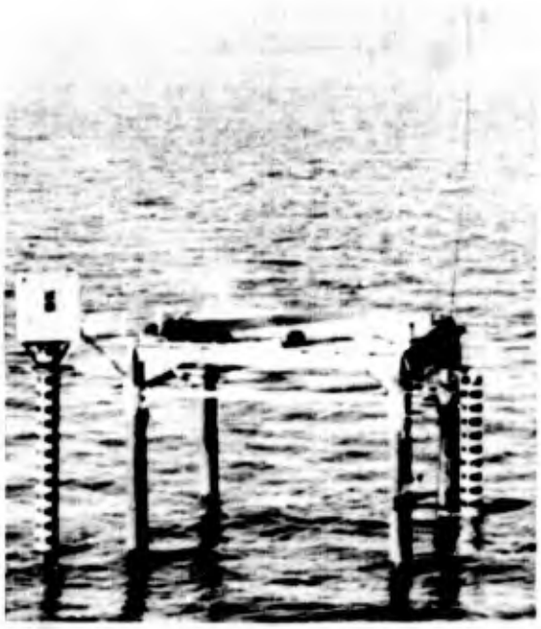
Slow, ratcheting failure was also experienced by small floes which were held against the test pile by currents which were insufficient to fail the ice. If this floe were struck by another, a substantial amount of ratcheting failure occurred until eventually, enough ice was backed upstream to provide adequate force to increase the velocity. Then the forces were reduced.

This mode of ice failure produces severest structurla loading and occurs with very small rates of loading. The actual rate of loading for this type of failure has not been measured, but it is believed that the failure occurs at velocities between virutally zero and 50 feet per minute. Normal high velocity failures may be as high as 600 feet per minute. The ratcheting failure appears to occur only at low ice temperatures and has been recorded only twice, once in early 1964 on the test pile at MGST I and once in late 1964 on MGS-A. The replotted MGS-A record is shown in Figure 10.15. Reasonably accurate values for resonant structural frequency were available for MGS-A, but not for MGST-I. The MGS-A ratcheting ice failure frequency and the resonant structural frequency are nearly identical at 1.2 cycles per second. This is very important if the mechanism is forced, poorly damped, reasonant vibration caused by an osciallatory failure of the ice which happens to occur at the same frequency as the resonant structural frequency. Laboratory studies, reported below, indicate the vibrations to be forced, but that damping is too great to allow signifiicant amplification.

A 2:1 ratio of ratcheting induced forces to high velocity induced forces is a consistant value found in results of direct compression tests, test pile data, MGS-A data and laboratory pile loading data. The ratio is thus found both in static and dynamic situations and clearly shows this to be a load rate effect of the ice rather than resonant amplification of structural stresses.

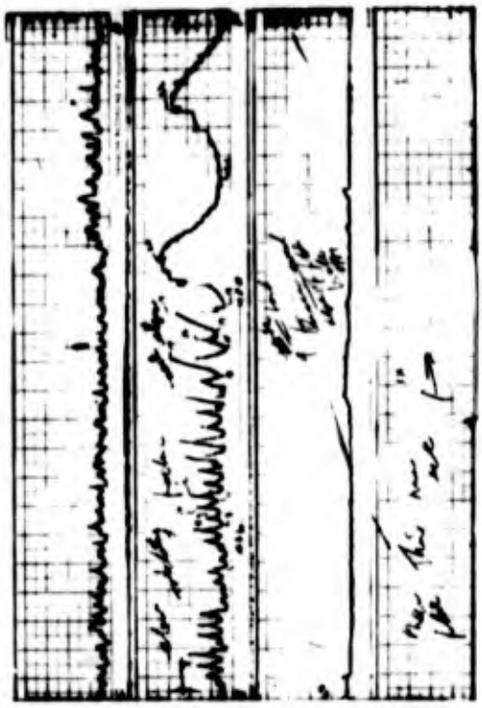
10.6.2 Oscillatory Forces.

1. Laboratory Measurements. The experimental set up is shown in Figure 10.16. The ice was frozen in place with the tank and associated equipment in a cold lab. The full ice sheet was cut into four smaller pieces which could be forced past the pile by the variable speed drive equipment. Each small "floe" was failed at a very slow velocity for half its length and then at the highest velocity which the equipment was capable of producing for the second half. The forces were determined by SR-4 strain gage measurements of the cantilevered, fixed end, one inch diameter pile. Various test sections were mounted at the top of the pile; single piles of 1/4, 1/2, 1 and 2 inch diameters and double piles of the identical diameters and variable spacing.
2. Data Evaluation. Precision measurement of the ice thickness was impractical; therefore, all forces are related to those of a one inch diameter pile at high velocity failure. This base run was



Test Pile Installation. The Test Pile used is on the Right and is a Simple Beam

Figure 10.13



Test Pile Force Records, Oscillating Force Gage J.

Figure 10.14

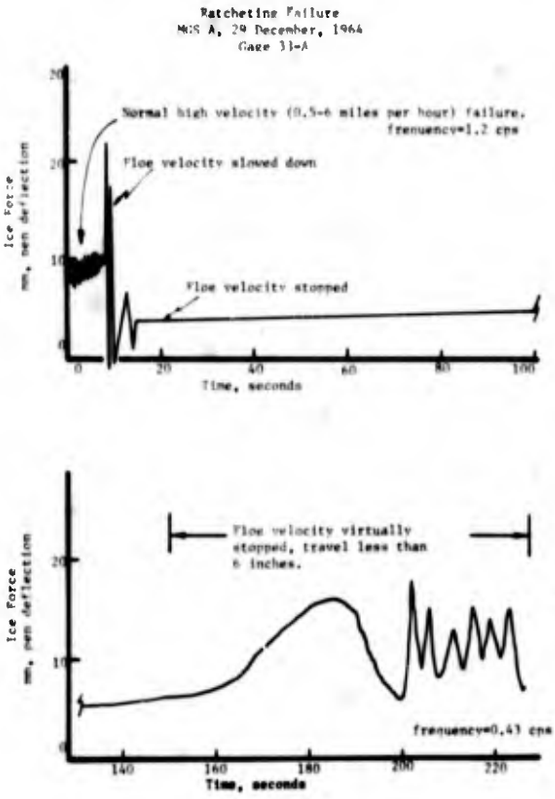


Figure 10.15

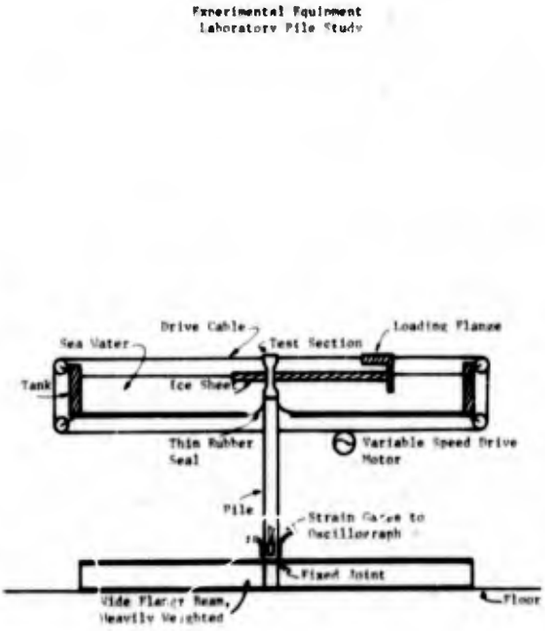


Figure 10.16

made on each new tank of ice and provided adequate references for force and stress values.

The ice was not identical from day to day; therefore, the ratio of the failure stress at high velocity to that at low velocity is more meaningful than either of the absolute values.

3. Loading Rate. The loading rate effect was clearly shown by experiments and was very similar to the effects observed on the platforms and to those of the direct compression tests in the laboratory. This feature is shown in Figure 10.17 by the decreasing ratio of the ice failure stress for high load rate (σ_f) to the failure stress for low load rate (σ_s). The 2:1 ratio of low velocity to high velocity failure was reproduced and substantiated similar results by other methods of measurement.

4. Superstructure Mass Effect. This parameter was studied by adding weights to the top of the pile test section. The results are shown in Figure 10.18. These tests were run only on the one inch diameter section only and are shown for the slow velocity failure as a failure stress ratio using the unweighted one inch test section (σ_s) as 100%. There is no appreciable effect within the range of the experiments.

   There is a slight reduction in failure stress with increased superstructure weight, but the effect is very small. The range of superstructure masses used would be equivalent to the deck weights of MGS-A which range from zero to approximately 5000 tons. Therefore, the deckmass parameter has a negligible effect on ice failure stress at the slow velocities within the scope of these tests. This result should be studied further with particular emphasis on low ice temperatures (σ_s) where ratcheting failure has been observed in the field.

5. Vibration. The results concerning oscillating ice forces and structural vibration are shown in Figure 10.19. The most severe restraint of the present design criteria is that of ratcheting ice failure which occurs frequently at very low ice velocitites. The slow speed experimental tests duplicated the ratcheting failure for all pile sizes and spacings and were easily induced. All of the data in Figure 10.19 are of the ratcheting type and it is easily seen that the frequency of this type failure is not matched to the resonant frequency of the structure but rather is a characteristic of the ice. It will be further noted that the frequency associated with the laboratory grown ice is approximately 5 cycles per second with the spread in data decreasing with increased "deck mass". It is doubtful that the decrease in data spread is due to decreasing resonant frequency per se, but rather is apparently dependent on the structural mass, structural time response, and ice failure force relationships. The difference between the experimental value of approximately 5 cps as compared with approximately 1 cps for the prototypes is most probably due to the differences in the ice. It was not possible to

Load Rate Effect Laboratory Experiments
Single 1" Diameter Leg

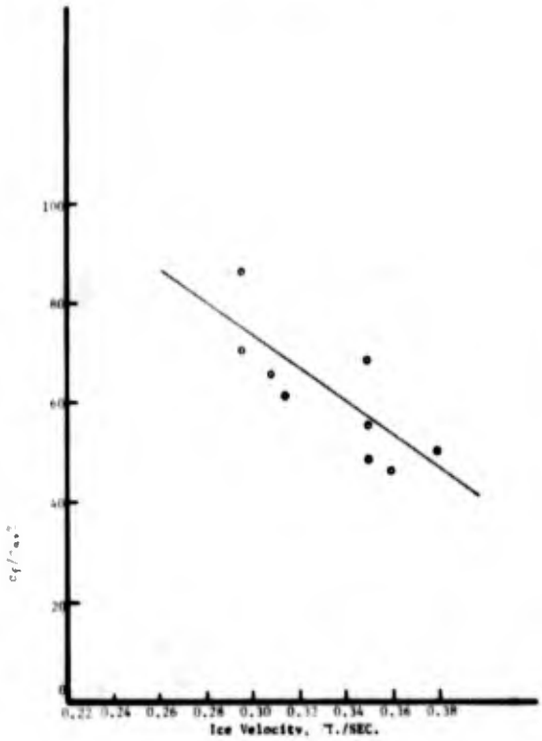


Figure 10.17

Resonant Frequency of Structure and Oscillating Ice Force Frequency
Slow Velocity, Ratcheting Type Failure

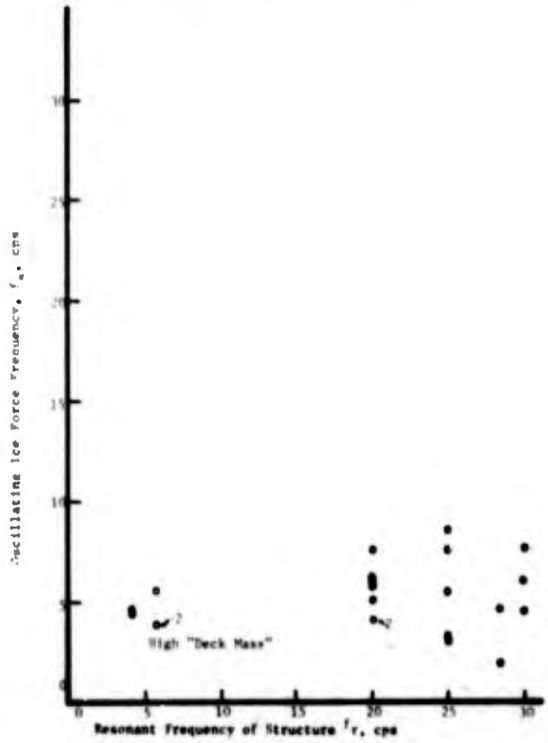


Figure 10.18

Structural Mass Effect, 1" Diameter Leg,
Ice Force Factor

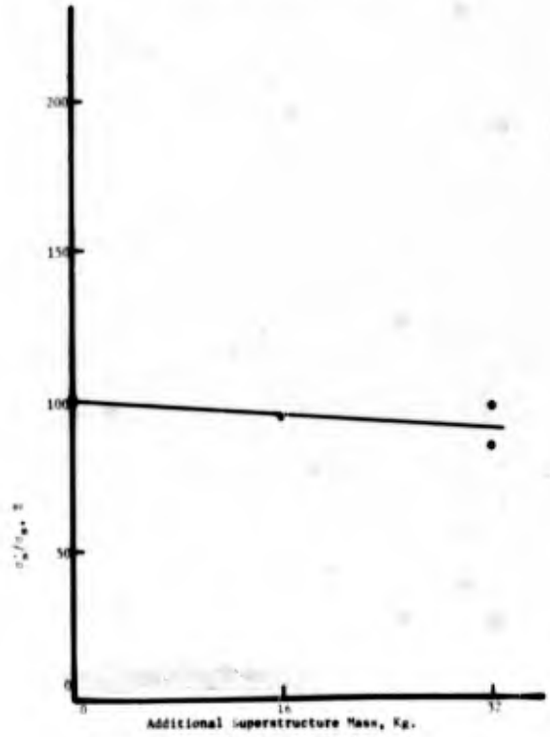


Figure 10.19

experiment with lower ice temperatures, but it should be expected that there is a frequency-temperature relationship due to the large changes in ice properties with varying It should be noted that earlier the ratcheting frequency was speculated to be generated by the resonant frequency of the structure; this must now be seriously questioned. The two data records from prototypes showing ratcheting failure frequencies which were nearly equal to the structural resonant frequencies could now be considered coincidence. It is of considerable importance, however, to be aware of the high probability of the ratcheting failure's matching the structural resonant frequency.

There does exist a possibility for forced, damped, resonant vibration of platforms at a time of very large ice forces. This, of course, is not a trivial matter. The degree of damping to be expected is variable between structures and is probably most dependent upon structural deflection in the water and water displacement per cycle. The extent to which damping is accurately included in the two prototype records is not known. None of the experimental data show the characteristic forced resonant vibration amplification, through the experimental device had far less damping than the prototypes. All evidence, thus far indicates the damping to be great, and the amplification due to forced vibration is insignificant. The 2:1 ratio of low to high speed failure stresses is further substantion of the validity a load rate function concept as seen in Figure 10.12.

EXHIBITS

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EXHIBIT 1.2

DATA CODE

The data shown in Exhibit 1.2.1 is a summary of values calculated from the experimental data shown in Exhibit A. This summary includes the mechanical properties of failure strength and stiffness, the test parameters of temperature and load rate, and many physical properties of the ice.

A specimen of the data is shown below. The decimal is ommitted in the data and immediately below each "word" in the specimen below is the word number.

12250	2639011	808011	531	210	10000	8230	5400	Word
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	Word Number
1	0	0	2	1	4	1	0	Decimal place

Word Meaning

1 Identification number.
2 bcdeeff

b = date of collection

2 1 Nov-31 Dec
3 1 Jan-31 Apr
4 1 May-15 May
5 16 May-31 May
6 1 June-15 June
7 16 June-1 Aug
8 1 Aug-31 Oct

c = location of collection

1 100 yards of theater
2 1 mile off ACS
3 100 miles north of Barrow
4 200 miles north of Barrow
5 100-150 yards north of theater, 1961
6 300 yards north of theather

d = crystal type code

1 fine
2 medium
3 center
4 bottom
5 pack

ee - angle between sigma and zenith, 0° to 90°
ff - angle between sigam and c-axis, 0° to 90°
"11" indicates randomness

Word Meaning

3 ghhiij

g = failure type

Code	Tension meaning	Compression meaning
1	good test	no visible deformation
2	weld failure	tensile failure

3	head failure	head failure
4	no failure	plastic failure
5	not used	no information
6	"	bad test
7	"	bulge failure
8	"	explosive failure
9	"	ring around specimen

hh - age of sample at time of test, days.
TT - depth from top of ice to center of specimen, inches.
T - type of test, "1" is compression, "2" is tension

4 Chlorinity o/oo
5 Temperature -°C.
6 Modulus of Elasticity, psi x 10^5.
7 Failure Strength, psi.
8 Rate of Loading, psi/min.

EXHIBIT 1.1 COMPRESSION DATA. REDUCED

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0009.0	.2120000	.500081	4.54	18.9	30.00		405.00
0010.0	.2120090	.500081	5.39	16.8	35.00		413.00
0011.0	.2120000	.500081	4.18	14.3	89.00		410.00
0012.0	.2120000	.500081	5.11	16.8	88.00		509.00
0014.0	.3120000	.502081	4.44	18.9	79.00		540.00
0015.0	.3120000	.502081	4.71	18.9	560.0		785.00
0017.0	.3120000	.500081	5.09	21.0	82.00		461.00
0019.0	.3120090	.500081	5.22	21.0	590.0		889.00
0020.0	.3120000	.500081	4.07	21.0	30.00		436.00
0021.0	.3120000	.500081	4.72	21.0	700.0		886.00
0027.0	.3120090	.501031	4.49	21.0	260.0		692.00
0027.0	.3120000	.501081	6.70	21.0	1230.		894.00
0030.0	.3120000	.501081	4.57	14.0	2200.		742.00
0041.0	.3120090	.500081	4.00	10.0	80.00		347.00
0042.0	.3120090	.500081	4.85	10.0	510.0		628.00
0045.0	.3120090	.500081	4.21	10.0	1320.		831.00
0046.0	.3130090	.500081	3.60	10.0	250.0		445.00
0047.0	.3130000	.500081	4.77	10.0	30.00		457.00
0050.0	.3130000	.500081	3.46	18.9	2200.		872.00
0051.0	.3130090	.500081	3.76	18.9	470.0		582.00
0057.0	.3130090	.501081	3.39	21.0	510.0		920.00
0058.0	.3150000	.501081	5.32	21.0	85.00		551.00
0059.0	.3130090	.501081	4.04	21.0	34.00		553.00
0060.0	.3140090	.500481	2.23	14.3	71.00		929.00
0061.0	.3140090	.500481	2.27	14.3	660.0		1270.0
0062.0	.3140090	.500481	2.46	14.3	93.00		1040.0
0063.0	.3140090	.500481	2.52	14.3	560.0		544.00
0064.0	.3140090	.500481	2.33	14.3	990.0		1003.0
0065.0	.3140090	.500481	2.63	14.3	91.00		1007.0
0066.0	.3140090	.500481	2.30	14.3	55.00		806.00
0071.0	.3140090	.500481	2.41	10.0	87.00		800.00
0072.0	.3140090	.500481	2.19	10.0	610.0	0	1330.0
0073.0	.3140090	.500481	1.92	10.0	48.00		578.00
0077.0	.3140090	.500601	2.72	6.00	94.00		738.00
0078.0	.3140090	.500601	2.96	6.00	600.0	0	1143.0
0079.0	.3140090	.501601	1.94	6.00			795.00
0083.0	.3149090	.500601	1.86	6.00	120.0	01.1000	329.00
0084.0	.3149000	.500601	1.86	6.00	130.0	.860000	475.00
0085.0	.3149045	.500601	1.86	6.00	82.00	.500000	105.00
0086.0	.3149090	.500601	1.99	6.00	970.0	8.60000	733.00
0087.0	.3149000	.500601	1.99	6.00	920.0	6.20000	958.00
0088.0	.3149045	.500601	1.99	6.00	660.0	1.40000	240.00
0089.0	.3140090	.500601	1.99	6.00	1000.		917.00
0097.0	.3130090	.500081	4.06	14.3	93.00		455.00
0098.0	.3130000	.500281	4.36	14.3	540.0		741.00
0099.0	.3130090	.500081	3.87	14.3	93.00		476.00
0103.0	.3130000	.501081	3.97	14.3	157.0		622.00
0104.0	.3139000	.501081		14.3	150.0	6.20000	477.00
0105.0	.3139090	.501081	4.80	14.3	134.0	1.00000	338.00
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0119.0	.3229011	.500081	.100	14.3	520.0	1.90000	376.00
0110.0	.3129090	.500081	5.28	14.3	1000.		667.00
0120.0	.3229000	.500081	.070	14.3	88.00		494.00
0121.0	.3229090	.500081	.070	14.3	89.00	1.10000	416.00
0122.0	.3220000	.500081	.070	14.3	480.0		262.00
0125.0	.3249090	.501601	1.15	14.3	740.0		403.00
0126.0	.3249000	.501601	1.15	14.0	125.0		227.00
0128.0	.4120000	.500081	5.13	14.3	245.0		587.00
0131.0	.4120000	.501081	6.56	14.3	580.0		680.00
0132.0	.4129090	.501081	6.56	14.3	1030.	1.50000	756.00
0134.0	.4130000	.501081	4.89	14.3	930.0	1.80000	676.00
0136.0	.4139090	.500081	4.43	14.3	143.0	.710000	388.00
0139.0	.4130011	.502081	3.29	14.3	45.00		470.00
0149.0	.4139090	.500081	4.54	6.00	680.0		429.00
0151.0	.4139090	.500081	5.30	6.00	825.0	1.20000	375.00
0157.0	.5149090	.500601	2.49	6.00	840.0	1.00000	608.00
0159.0	.5149000	.500601	2.49	6.00	910.0	1.40000	599.00
0161.0	.5149045	.500601	2.49	6.00	870.0	2.10000	272.00
0166.0	.5140090	.500601	2.93	6.00	1060.	7.30000	1349.0
0196.0	.5120000	.500081	3.98	2.00	470.0		303.00
0197.0	.5120000	.500081	3.98	2.00	940.0	9.20000	741.00
0198.0	.5120000	.500081	3.98	2.00	880.0	1.00000	598.00
0199.0	.5120000	.500081	2.36	2.00	440.0	.230000	147.00
0200.0	.5120000	.500081	2.36	2.00	735.0	1.90000	410.00
0201.0	.5129090	.500081	2.36	2.00	295.0	.150000	116.00
3202.0	.5129090	.500081	2.36	2.00	765.0	2.00000	225.00
0203.0	.5120000	.500081	2.36	2.00	880.0	1.50000	866.00
0204.0	.5129090	.500081	2.36	2.00	550.0	.190000	168.00
0207.0	.5140090	.500601	2.90	2.00	530.0		743.00
0208.0	.5140090	.500601	2.90	2.00	980.0	1.40000	1013.0
0209.0	.5140090	.500601	2.90	2.00	520.0		738.00
0210.0	.5140090	.500601	2.90	2.00	960.0	2.60000	901.00
0211.0	.6149090	.501601	2.13	2.00	600.0		231.00
0212.0	.6149000	.501601	2.13	2.00	740.0	1.90000	469.00
0213.0	.6149045	.501601	2.13	2.00	740.0	1.90000	163.00
0214.0	.6149090	.500601	2.19	2.00	175.0	1.40000	146.00
0215.0	.6149000	.501601	2.19	2.00	120.0	.340000	118.00
0216.0	.6140045	.501601	2.19	2.00	160.0	.600000	109.00
0217.0	.6140090	.501601	1.68	2.00	184.0	4.40000	765.00
0219.0	.6149090	.501601	2.50	2.00	680.0	.650000	650.00
7220.0	.6149000	.502601	2.50	2.00	600.0	.340000	499.00
0221.0	.6149045	.502601	2.50	2.00	460.0	.190000	153.00
0222.0	.6140090	.501141	1.21	1.00	530.0		477.00
0223.0	.6140090	.501141	1.21	1.00	510.0		413.00
0224.0	.6140090	.501101	1.21	1.00	740.0	1.60000	411.00
0225.0	.6140090	.501141	1.21	1.00	1060.	.760000	492.00
0226.0	.6140090	.502141	1.21	1.00	184.0	1.20000	245.00
0228.0	.6149000	.501121	2.64	1.00	580.0	.690000	204.00
0229.0	.6149045	.501121	2.64	1.00	580.0	.160000	143.00
0230.0	.6149090	.502121	2.64	1.00	140.0	.450000	79.000
0231.0	.6149000	.502121	2.64	1.00	120.0	.220000	92.000
0232.0	.6149045	.502121	2.64	1.00	33.00	.120000	47.000
0233.0	.6140090	.501601	2.58	1.00	560.0		587.00
0234.0	.6140090	.501601	2.58	1.00	870.0	1.00000	385.00
0235.0	.6149090	.501601	2.58	1.00	960.0	1.20000	429.00
0236.0	.6149000	.501601	2.58	1.00	680.0	.710000	293.00
0237.0	.6149045	.502601	2.58	1.00	675.0	.280000	103.00
0238.0	.7149090	.501501	.740	1.00	132.0	.460000	256.00
0239.0	.7149000	.501501	.740	1.00	140.0	.380000	269.00
0240.0	.7149045	.501501	.740	1.00	130.0	.160000	71.000
0244.0	.7149090	.503121	.250	1.00	480.0	.340000	160.00
0242.0	.7140090	.501501	.870	1.00	95.00		370.00
0241.0	.7140090	.501501	.870	1.00	110.0	.340000	333.00
0245.0	.7149000	.503121	.250	1.00	660.	2.00000	198.00
0246.0	.7149045	.503121	.250	1.00	940.0	.930000	158.00
0247.0	.7149090	.504121	.250	1.00	111.0	.340000	285.00
0248.0	.7149000	.504121	.250	1.00	140.	.390000	315.00
0249.0	.7149045	.504121	.250	1.00	180.0	1.00000	111.00
0250.0	.7140090	.501081	.050	2.00	520.0		577.00
0251.0	.7140090	.502081	.050	2.00	1040.		680.00
0252.0	.7140090	.501081	.050	2.00	83.00		288.00
0253.0	.7140090	.501081	.050	2.00	560.0		499.00
0254.0	.7140090	.502081	.050	2.00	920.0		312.00
0255.0	.7140090	.501081	.050	2.00	42.00		225.00
0256.0	.7140090	.501081	.050	2.00	540.0		532.00
0257.0	.7140090	.501081	.050	2.00	1120.		600.00
0258.0	.7140090	.500081	.050	2.00	41.00		341.00
0259.0	.7140090	.502181	.050	2.00	53.00		295.00
0260.0	.7140090	.502181	.050	2.00	590.0		702.00
0261.0	.7140090	.502181	.050	2.00	1080.		620.00
0262.0	.7140090	.503181	.050	2.00	62.00		441.00
0263.0	.7140090	.503181	.050	2.00	480.0		379.00
0264.0	.7140090	.503181	.050	2.00	1020.		530.00
0265.0	.7140090	.503181	.050	2.00	48.00		371.00
0266.0	.7140090	.502181	.050	2.00	540.0		488.00
0267.0	.7140090	.502181	.050	2.00	950.0		400.00
0268.0	.7140090	.505081	.400	10.0	40.00		322.00
0269.0	.7140090	.504081	.400	10.0	330.0		453.00
0270.0	.7140090	.505081	.400	10.0	1040.		754.00
0271.0	.7140090	.505081	.400	10.0	46.00		229.00
0272.0	.7140090	.505081	.400	10.0	445.0		229.00
0273.0	.7140090	.505081	.400	10.0	1240.		698.00
0274.0	.7140090	.506081	.400	10.0	43.00		449.00
0275.0	.7140090	.505081	.400	10.0	500.0		786.00
0276.0	.7140090	.506081	.400	10.0	1200.		189.00
0277.0	.7140090	.506181	.400	10.0	35.00		496.00
0278.0	.7140090	.506181	.400	10.0	480.0		1333.0
0279.0	.7140090	.506181	.400	10.0	1060.		872.00
0280.0	.7140090	.506181	.400	10.0	51.00		496.00
0281.0	.7140090	.507181	.400	10.0	600.0		790.00
0282.0	.7140090	.507181	.400	10.0	1200.		803.00
0283.0	.7140090	.507181	.400	10.0	47.00		395.00
Y284.0	.7140090	.507181	.400	10.0	565.0		824.00
0285.0	.7140090	.507181	.400	10.0	840.0		447.00
0286.0	.7140090	.502181	.090	1.00	480.0		277.00
Y287.0	.7140090	.502181	.090	1.00	430.0		410.00
0288.0	.7140090	.503181	.090	1.00	560.0		729.00
0289.0	.7140090	.503181	.090	1.00	810.0	1.40000	587.00
0290.0	.7144590	.503181	.090	1.00	760.0	1.10000	402.00
0002.0	.2120000	.500081	3.51	12.0	250.0		377.00
0003.0	.2120000	.500081	4.74	8.00	300.0		280.00
0004.0	.2120000	.500081	5.53	10.0	270.0		270.00
0005.0	.2120000	.500081	6.47	14.0	300.0		379.00
0006.0	.2120000	.500081	5.74	14.3	85.00		428.00
0007.0	.2120000	.500081	5.49	14.0	270.0		575.00
0291.0	.7149090	.503181	.090	1.00	530.0	.430000	282.00
0292.0	.7144545	.503181	.090	1.00	650.0	.860000	290.00
0293.0	.7149000	.503181	.090	1.00	875.0	1.10000	583.00
0294.0	.7149045	.503181	.090	1.00	750.0	3.90000	206.00
0295.0	.7140090	.503181	.090	1.00	990.0	3.70000	387.00
0296.0	.7144590	.503181	.090	1.00	900.0	1.55000	545.00
0297.0	.7149090	.504181	.090	1.00	873.0	1.90000	595.00
0298.0	.7144545	.504181	.090	1.00	740.0	.780000	219.00
0299.0	.7149000	.504181	.090	1.00	740.0	2.40000	371.00
0300.0	.7149045	.505181	.090	1.00	560.0	.780000	165.00
0301.0	.7140090	.504181	.090	1.00	800.0	2.10000	974.00
0302.0	.7144590	.504181	.090	1.00	845.0	1.70000	582.00
0303.0	.7149090	.504181	.090	1.00	750.0	.800000	427.00
0304.0	.7144545	.504181	.090	1.00	520.0	.620000	177.00
0305.0	.7149000	.504181	.090	1.00	660.0	.720000	400.00
0306.0	.7149045	.504181	.130	1.00	530.0	.220000	182.00
0307.0	.7140090	.504181	.130	1.00	1930.	.110000	1131.0
0308.0	.7144590	.505181	.130	1.00	1590.	1.30000	503.00
0309.0	.7149090	.505181	.130	1.00	1700.	1.20000	430.00
0310.0	.7149045	.505181	.130	1.00	1150.	3.60000	239.00
0311.0	.7140090	.505181	.130	1.00	1400.	.800000	445.00
0312.0	.7149090	.505181	.130	1.00	1550.	1.30000	396.00
0313.0	.7149045	.505181	.130	1.00	1560.	3.40000	241.00
0314.0	.7140090	.505181	.130	1.00	1735.	1.50000	466.00
0315.0	.7149090	.505181	.130	1.00	1460.	.860000	603.00
0316.0	.7149045	.505181	.130	1.00	930.0	.480000	178.00
0317.0	.7140090	.505181	.130	1.00	180.0	1.30000	468.00
7318.0	.7149090	.505181	.130	1.00	130.0	.450000	245.00
0319.0	.7149045	.505181	.130	1.00	103.0	.620000	91.000
0320.0	.7140090	.505181	.130	1.00	153.0	1.00000	516.00
0321.0	.7149090	.506181	.130	1.00	130.0	.580000	237.00

EXHIBIT 1.1 COMPRESSION DATA, REDUCED

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0009.0	.2120000	.500081	4.54	18.9	30.00		405.00
0010.0	.2120090	.500081	5.39	16.8	35.00		413.00
0011.0	.2120000	.500081	4.18	14.3	89.00		410.00
0012.0	.2120000	.500081	5.11	16.8	88.00		509.00
0014.0	.3120000	.502081	4.44	18.0	79.00		540.00
0015.0	.3120000	.502081	4.71	18.9	580.0		785.00
0017.0	.3120000	.500081	5.09	21.0	82.00		461.00
0018.0	.3120090	.500081	5.22	21.0	590.0		889.00
0020.0	.3120000	.500081	4.07	21.0	30.00		436.00
0021.0	.3120000	.500081	4.72	21.0	700.0		886.00
0023.0	.3120090	.501031	4.49	21.0	260.0		692.00
0027.0	.3120000	.501081	6.70	21.0	1230.		894.00
0030.0	.3120000	.501081	4.57	14.0	2200.		742.00
0041.0	.3120090	.500081	4.00	10.0	80.00		347.00
0042.0	.3120090	.500081	4.05	10.0	510.0		628.00
0045.0	.3120090	.500081	4.21	10.0	1320.		831.00
0046.0	.3130090	.500081	3.60	10.0	250.0		445.00
0047.0	.3130000	.500081	4.77	10.0	360.0		457.00
0050.0	.3130000	.500081	3.46	18.9	2200.		872.00
0051.0	.3130090	.500081	3.76	18.9	470.0		582.00
0057.0	.3130090	.501081	3.39	21.0	510.0		920.00
0058.0	.3[illegible]0000	.501081	5.32	21.0	85.00		551.00
0059.0	.3130090	.501081	4.04	21.0	34.00		553.00
0060.0	.3140090	.500481	2.23	14.3	71.00		929.00
0061.0	.3140090	.500481	2.27	14.3	660.0		1270.0
0062.0	.3140090	.500481	2.46	14.3	930.0		1040.0
0063.0	.3140090	.500481	2.52	14.3	560.0		544.00
0064.0	.3140090	.500481	2.33	14.3	990.0		1003.0
0065.0	.3140090	.500481	2.63	14.3	910.0		1007.0
0066.0	.3140090	.500481	2.30	14.3	550.0		806.00
0071.0	.3140090	.500481	2.41	10.0	870.0		800.00
0072.0	.3140090	.500481	2.19	10.0	610.0	0	1330.0
0073.0	.3140090	.500481	1.92	10.0	480.0		578.00
0077.0	.3140090	.500601	2.72	6.00	940.0		738.00
0078.0	.3140090	.500601	2.96	6.00	600.0	0	1143.0
0079.0	.3140090	.501601	1.94	6.00			795.00
0083.0	.3149090	.500601	1.86	6.00	120.0	0 1.1000	329.00
0084.0	.3149000	.500601	1.86	6.00	130.0	.860000	475.00
0085.0	.3149045	.500601	1.86	6.00	820.0	.500000	105.00
0086.0	.3149090	.500601	1.99	6.00	970.0	8.60000	733.00
0087.0	.3149000	.500601	1.99	6.00	920.0	6.20000	958.00
0088.0	.3149045	.500601	1.99	6.00	660.0	1.40000	240.00
0089.0	.3140090	.500601	1.99	6.00	1000.		917.00
0097.0	.3130090	.500081	4.06	14.3	930.0		455.00
0098.0	.3130000	.500081	4.36	14.3	540.0		741.00
0099.0	.3130090	.500081	3.87	14.3	930.0		476.00
0103.0	.3130000	.501081	3.97	14.3	157.0		622.00
0104.0	.3139000	.501081		14.3	150.0	6.20000	477.00
0105.0	.3139090	.501081	4.80	14.3	134.0	1.00000	338.00
0107.0	.3139090	.501081		14.3	165.0	1.30000	514.00
0108.0	.3139000	.500081	5.28	14.3	1060.		917.00
0109.0	.3134545	.500081	5.28	14.3	800.0	1.40000	530.00
0119.0	.3229011	.500081	.100	14.3	520.0	1.90000	376.00
0110.0	.3129090	.500081	5.28	14.3	1000.		667.00
0120.0	.3220000	.500081	.070	14.3	88.00		494.00
0121.0	.3229090	.500081	.070	14.3	89.00	1.10000	416.00
0122.0	.3220000	.500081	.070	14.3	480.0		262.00
0125.0	.3249090	.501601	1.15	14.3	740.0		403.00
0126.0	.3249000	.501601	1.15	14.0	125.0		227.00
0128.0	.4120000	.500081	5.13	14.3	245.0		587.00
0131.0	.4120000	.501081	6.56	14.3	580.0		680.00
0132.0	.4129090	.501081	6.56	14.3	1030.	1.50000	756.00
0134.0	.4130000	.501081	4.89	14.3	930.0	1.80000	676.00
0136.0	.4139090	.500081	4.43	14.3	143.0	.710000	388.00
0139.0	.4130011	.502081	1.29	14.3	45.00		470.00
0149.0	.4139090	.500081	4.54	6.00	480.0		429.00
0151.0	.4139090	.500081	5.30	6.00	825.0	1.20000	375.00
0157.0	.5149090	.500601	2.49	6.00	840.0	1.00000	608.00
0159.0	.5149000	.500601	2.49	6.00	910.0	1.40000	599.00
0161.0	.5149045	.500601	2.49	6.00	870.0	2.10000	278.00
0166.0	.5140090	.500601	2.93	6.00	1060.	7.30000	1345.0
0196.0	.5120000	.500081	3.98	2.00	470.0		303.00
0197.0	.5120000	.500081	3.98	2.00	540.0	9.20000	741.00
0198.0	.5120000	.500081	3.98	2.00	880.0	1.00000	598.00
0199.0	.5120000	.500081	2.36	2.00	440.0	.230000	147.00
0200.0	.5120000	.500081	2.36	2.00	735.0	1.90000	410.00
0201.0	.5129090	.500081	2.36	2.00	295.0	.150000	116.00
0202.0	.5129090	.500081	2.36	2.00	765.0	2.00000	225.00
0203.0	.5120000	.500081	2.36	2.00	880.0	1.50000	866.00
0204.0	.5129090	.500081	2.36	2.00	550.0	.190000	168.00
0207.0	.5140090	.500601	2.90	2.00	530.0		743.00
0208.0	.5140000	.500601	2.90	2.00	980.0	1.40000	1013.0
0209.0	.5140090	.500601	2.90	2.00	520.0		738.00
0210.0	.5140090	.500601	2.90	2.00	960.0	2.60000	901.00
0211.0	.6149090	.501601	2.13	2.00	600.0		231.00
0212.0	.6149000	.501601	2.13	2.00	740.0	1.90000	469.00
0213.0	.6149045	.501601	2.13	2.00	740.0	1.90000	163.00
0214.0	.6149090	.500601	2.19	2.00	175.0	1.40000	146.00
0215.0	.6149000	.501601	2.19	2.00	120.0	.340000	118.00
0216.0	.6140045	.501601	2.19	2.00	160.0	.600000	109.00
0217.0	.6140090	.501601	1.68	2.00	184.0	4.40000	765.00
0219.0	.6149090	.501601	2.50	2.00	680.0	.650000	650.00
0220.0	.6149000	.502601	2.50	2.00	600.0	.340000	499.00
0221.0	.6149045	.502601	2.50	2.00	460.0	.190000	153.00
0222.0	.6140090	.501141	1.21	1.00	530.0		477.00
0223.0	.6140090	.501141	1.21	1.00	510.0		413.00
0224.0	.6140090	.501101	1.21	1.00	740.0	1.60000	411.00
0225.0	.6140090	.501141	1.21	1.00	1060.	.760000	492.00
0226.0	.6140090	.502141	1.21	1.00	184.0	1.20000	245.00
0228.0	.6149000	.501121	2.64	1.00	580.0	.690000	204.00
0229.0	.6149045	.501121	2.64	1.00	580.0	.160000	143.00
0230.0	.6149090	.502121	2.64	1.00	140.0	.450000	79.000
0231.0	.6149000	.502121	2.64	1.00	120.0	.220000	92.000
0232.0	.6149045	.502121	2.64	1.00	33.00	.120000	47.000
0233.0	.6140090	.501601	2.58	1.00	560.0		587.00
0234.0	.6140090	.501601	2.58	1.00	870.0	1.00000	385.00
0235.0	.6149090	.501601	2.58	1.00	960.0	1.20000	429.00
0236.0	.6149000	.501601	2.58	1.00	680.0	.710000	293.00
0237.0	.6149045	.502601	2.58	1.00	675.0	.280000	103.00
0238.0	.7149090	.501501	.740	1.00	132.0	.460000	256.00
0239.0	.7149000	.501501	.740	1.00	140.0	.380000	267.00
0240.0	.7149045	.501501	.740	1.00	130.0	.160000	71.000
0244.0	.7149090	.503121	.250	1.00	480.0	.340000	166.00
0242.0	.7140090	.501501	.870	1.00	95.00		370.00
0241.0	.7140090	.501501	.870	1.00	110.0	.340000	333.00
0245.0	.7149000	.503121	.250	1.00	660.0	2.00000	198.00
0246.0	.7149045	.503121	.250	1.00	940.0	.930000	158.00
0247.0	.7149090	.504121	.250	1.00	111.0	.340000	285.00
0248.0	.7149000	.504121	.250	1.00	[illegible]	.390000	315.00
0249.0	.7149045	.504121	.250	1.00	[illegible]	1.00000	111.00
0250.0	.7140090	.501081	.050	2.00	[illegible]		577.00
0251.0	.7140090	.502081	.050	2.00	1040.		680.00
0252.0	.7140090	.501081	.050	2.00	83.00		288.00
0253.0	.7140090	.501081	.050	2.00	560.0		499.00
0254.0	.7140090	.502081	.050	2.00	920.0		312.00
0255.0	.7140090	.501081	.050	2.00	52.00		225.00
0256.0	.7140090	.501081	.050	2.00	540.0		532.00
0257.0	.7140090	.501081	.050	2.00	1120.		600.00
0258.0	.7140090	.500081	.050	2.00	41.00		341.00
0259.0	.7140090	.502181	.050	2.00	53.00		295.00
0260.0	.7140090	.502181	.050	2.00	550.0		702.00
0261.0	.7140090	.502181	.050	2.00	1080.		620.00
0262.0	.7140090	.503181	.050	2.00	62.00		441.00
0263.0	.7140090	.503181	.050	2.00	480.0		379.00
0264.0	.7140090	.503181	.050	2.00	1020.		530.00
0265.0	.7140090	.503181	.050	2.00	48.00		371.00
0266.0	.7140090	.502181	.050	2.00	540.0		408.00
0267.0	.7140090	.502181	.050	2.00	950.0		400.00
0268.0	.7140090	.505081	.400	10.0	40.00		322.00
0269.0	.7140090	.504081	.400	10.0	330.0		453.00
0270.0	.7140090	.505081	.400	10.0	1040.		754.00
0271.0	.7140090	.505081	.400	10.0	46.00		229.00
0272.0	.7140090	.505081	.400	10.0	445.0		229.00
0273.0	.7140090	.505081	.400	10.0	1240.		698.00
0274.0	.7140090	.506081	.400	10.0	43.00		449.00
0275.0	.7140090	.505081	.400	10.0	500.0		786.00
0276.0	.7140090	.506081	.400	10.0	1200.		189.00
0277.0	.7140090	.506181	.400	10.0	35.00		496.00
0278.0	.7140090	.506181	.400	10.0	480.0		1333.0
0279.0	.7140090	.506181	.400	10.0	1060.		872.00
0280.0	.7140090	.506181	.400	10.0	51.00		496.00
0281.0	.7140090	.507181	.400	10.0	600.0		790.00
0282.0	.7140090	.507181	.400	10.0	1200.		803.00
0283.0	.7140090	.507181	.400	10.0	47.00		395.00
0284.0	.7140090	.507181	.400	10.0	565.0		824.00
0285.0	.7140090	.507181	.400	10.0	840.0		447.00
0286.0	.7140090	.502181	.090	1.00	480.0		277.00
0287.0	.7140090	.502181	.090	1.00	430.0		410.00
0288.0	.7140090	.503181	.090	1.00	560.0		729.00
0289.0	.7140090	.503181	.090	1.00	810.0	1.40000	587.00
0290.0	.7144590	.503181	.090	1.00	760.0	1.10000	402.00
0002.0	.2120000	.500081	3.51	12.0	250.0		377.00
0003.0	.2120000	.500081	4.74	8.00	300.0		280.00
0004.0	.2120000	.500081	5.53	10.0	270.0		270.00
0005.0	.2120000	.500081	6.47	14.0	300.0		379.00
0006.0	.2120000	.500081	5.74	14.3	85.00		428.00
0007.0	.2120000	.500081	5.49	14.0	270.0		575.00
0291.0	.7149090	.503181	.090	1.00	530.0	.430000	282.00
0292.0	.7144545	.503181	.090	1.00	650.0	.860000	290.00
0293.0	.7149000	.503181	.090	1.00	875.0	1.10000	583.00
0294.0	.7149045	.503181	.090	1.00	750.0	3.90000	206.00
0295.0	.7140090	.503181	.090	1.00	990.0	3.70000	387.00
0296.0	.7144590	.503181	.090	1.00	900.0	1.55000	545.00
0297.0	.7149090	.504181	.090	1.00	873.0	1.90000	595.00
0298.0	.7144545	.504181	.090	1.00	740.0	.780000	219.00
0299.0	.7149000	.504181	.090	1.00	740.0	2.40000	371.00
0300.0	.7149045	.505181	.090	1.00	560.0	.[illegible]0000	165.00
0301.0	.7140090	.504181	.090	1.00	800.0	3.10000	874.00
0302.0	.7144590	.504181	.090	1.00	845.0	1.70000	582.00
0303.0	.7149090	.504181	.090	1.00	750.0	.800000	427.00
0304.0	.7144545	.504181	.090	1.00	520.0	.620000	177.00
0305.0	.7149000	.504181	.090	1.00	660.0	.720000	400.00
0306.0	.7149045	.504181	.130	1.00	530.0	.220000	182.00
0307.0	.7140090	.504181	.130	1.00	1930.	.110000	1131.0
0308.0	.7144590	.505181	.130	1.00	1590.	1.30000	803.00
0309.0	.7149090	.505181	.130	1.00	1700.	1.20000	432.00
0310.0	.7149045	.505181	.130	1.00	1150.	3.60000	239.00
0311.0	.7140090	.505181	.130	1.00	1400.	.800000	445.00
0312.0	.7149090	.505181	.130	1.00	1550.	1.30000	396.00
0313.0	.7149045	.505181	.130	1.00	1560.	3.40000	241.00
0314.0	.7140090	.505181	.130	1.00	1735.	1.50000	466.00
0315.0	.7149090	.505181	.130	1.00	1460.	.860000	603.00
0316.0	.7149045	.505181	.130	1.00	930.0	.480000	178.00
Y317.0	.7140090	.505181	.130	1.00	180.0	1.30000	468.00
0318.0	.7149090	.505181	.130	1.00	130.0	.450000	245.00
Y319.0	.7149045	.505181	.130	1.00	103.0	.620000	91.000
0320.0	.7140090	.505181	.130	1.00	151.0	1.00000	516.00
0321.0	.7149090	.506181	.130	1.00	130.0	.580000	237.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0322.0	.7149045	.506181	.130	1.00	170.0	.230000	153.00
0323.0	.7140090	.506181	.130	1.00	99.00	.320000	260.00
0324.0	.7149090	.506181	.130	1.00	78.00	.360000	321.00
0325.0	.7149045	.506181	.130	1.00	38.00	.450000	89.000
0326.0	.7140090	.508181	.110	2.00	300.0	1.00000	437.00
0327.0	.7149090	.508181	.110	2.00	196.	4.10000	610.00
0328.0	.7149045	.508181	.110	2.00	710.0	.900000	103.00
0329.0	.7140090	.508181	.110	2.00	190.0	1.00000	570.00
0330.0	.7149090	.508181	.110	2.00	330.0	2.40000	575.00
0331.0	.7149045	.509181	.110	2.00	139.0	1.00000	242.00
0332.0	.7140090	.509181	.110	2.00	210.0	2.50000	770.00
0333.0	.7149090	.509181	.110	2.00	150.0	1.30000	345.00
0335.0	.7140090	.509181	.110	2.00	1790.	0.98000	687.00
0336.0	.7149090	.509181	.110	2.00	1670.	1.30000	535.00
0337.0	.7149045	.509181	.110	2.00	1150.	.870000	220.00
0338.0	.7140090	.509181	.110	2.00	3000.	2.00000	1030.0
0339.0	.7149090	.509181	.110	2.00	2900.	.670000	611.00
0340.0	.7149045	.509181	.110	2.00	1140.	1.70000	250.00
0341.0	.7140090	.509181	.110	2.00			214.00
0342.0	.7149045	.509181	.110	2.00	1050.	1.20000	353.00
0343.0	.7149090	.510181	.110	2.00	3200.	2.30000	636.00
0344.0	.7149011	.510081	.040	2.00		.800000	142.00
0345.0	.7149011	.510081	.040	2.00		.450000	150.00
0346.0	.7149011	.510081	.040	2.00	870.0	.830000	181.00
0347.0	.7140090	.510081	.040	2.00	1400.	.900000	611.00
0348.0	.7140090	.510081	.040	2.00	1100.	.490000	360.00
0350.0	.7149011	.510081	.040	2.00	883.0	.840000	124.00
0351.0	.7149011	.510081	.040	2.00	685.0	.950000	86.000
0352.0	.7140090	.510081	.040	2.00	1450.	1.70000	486.00
0353.0	.7149011	.511081	.040	2.00	100.0	.290000	63.000
0354.0	.7149011	.511081	.040	2.00	89.00	.570000	57.000
0355.0	.7149011	.511081	.040	2.00	163.0	.620000	135.00
0356.0	.7140090	.511081	.040	2.00	160.0	.560000	192.00
0357.0	.7140090	.511081	.040	2.00	140.0	1.10000	255.00
0358.0	.7140090	.511081	.040	2.00	130.0	.530000	364.00
0359.0	.7149011	.511081	.030	1.00	49.00	.500000	90.000
0360.0	.7149011	.511081	.030	1.00	62.00	.500000	59.000
0361.0	.7149011	.511081	.030	1.00	118.0	.290000	55.000
0362.0	.7140090	.511081	.030	1.00	101.0	.480000	210.00
0363.0	.7140090	.511081	.030	1.00	138.0	.510000	302.00
0364.0	.7140090	.511081	.030	1.00	93.00	.270000	243.00
0365.0	.7149011	.511081	.030	1.00	1320.		177.00
0366.0	.7149011	.510081	.030	1.00	1000.	1.20000	139.00
0367.0	.7149011	.512081	.030	1.00	1070.	.620000	67.000
0368.0	.7140090	.512081	.030	1.00			468.00
0369.0	.7140090	.512081	.030	1.00	982.0	.390000	362.00
0370.0	.7140090	.512081	.030	1.00	1370.	.600000	500.00
0371.0	.7149011	.513081	.030	1.00	780.0	.270000	177.00
0372.0	.7149011	.512081	.030	1.00	970.0	.420000	158.00
0373.0	.7149011	.512081	.030	1.00	1060.	.360000	223.00
0374.0	.7140090	.512081	.030	1.00	1100.	.640000	349.00
0375.0	.7140090	.513081	.040	1.00	1450.	.220000	551.00
0376.0	.7140090	.513081	.040	1.00	1400.	.600000	395.00
0377.0	.7140090	.513081	.030	1.00	1500.	.720000	543.00
0378.0	.7140090	.513081	.030	1.00	1100.	.370000	408.00
0379.0	.7140090	.513081	.030	1.00	910.0	.300000	197.00
0380.0	.7140090	.513081	.030	1.00	1170.	.410000	431.00
0381.0	.7140090	.513081	.030	1.00	1450.	.720000	373.00
0382.0	.7140090	.514081	.030	1.00	104.0	.580000	293.00
0383.0	.7140090	.514081	.030	1.00	1520.	.720000	529.00
0384.0	.2329090	.500041	4.30	6.00	920.0	2.00000	668.00
0385.0	.2329090	.501041	3.98	6.00	1340.	1.10000	212.00
0386.0	.2329090	.501041	3.98	6.00	2000.	3.40000	275.00
0387.0	.2329090	.500041	3.98	6.00	1760.		316.00
0388.0	.2329090	.500041	4.27	6.00	1530.	2.30000	322.00
0389.0	.2329090	.500041	4.27	6.00	1055.	.810000	292.00
0390.0	.2329090	.500041	4.27	10.0	1375.	.580000	387.00
0391.0	.2329090	.500041	4.00	9.00	1470.	.970000	582.00
0392.0	.2329090	.500041	4.00	9.00	1500.	.710000	408.00
0393.0	.2329090	.500041	4.00	9.00	3900.	9.30000	947.00
0394.0	.2329090	.500041	4.00	9.00	6500.		1018.0
0395.0	.2329090	.500041	4.00	9.00	6200.		1105.0
0396.0	.2329090	.500041	4.00	9.00	5600.	3.10000	1033.0
0397.0	.2329090	.500041	4.00	9.00	3000.	4.60000	603.00
0398.0	.2329090	.500041	4.00	9.00	3850.	5.50000	820.00
0399.0	.2329090	.500041	4.00	9.00	6500.	5.50000	1033.0
0400.0	.2329090	.500041	3.45	9.00	1570.	3.40000	460.00
0401.0	.2329090	.500041	3.45	9.00	4150.	9.30000	932.00
0402.0	.2329090	.500041	4.07	9.00	7400.	3.20000	818.00
0403.0	.2329090	.500041	4.07	9.00	1900.	2.00000	665.00
0404.0	.2329090	.500041	4.09	9.00	4000.		603.00
0405.0	.2329090	.500041	4.09	9.00	5300.	4.20000	694.00
0406.0	.2324545	.500061	4.38	9.00	1700.	3.10000	420.00
0407.0	.2324545	.500061	4.38	9.00	1800.	6.70000	549.00
0408.0	.2324545	.500061	4.39	9.00	1620.	6.30000	468.00
0409.0	.2324545	.500061	4.39	9.00	1630.	3.10000	545.00
0410.0	.2324545	.500061	4.01	9.00	1000.		499.00
0411.0	.2324545	.500061	4.01	9.00	1000.		504.00
0412.0	.2324545	.500061	3.80	9.00	1000.		516.00
0413.0	.2324545	.500061	4.01	9.00	970.0		513.00
0414.0	.2320000	.500061	3.25	9.00	1000.		611.00
0415.0	.2320000	.500061	3.25	9.00	1130.		740.00
0416.0	.2320000	.500061	3.25	9.00	1200.		736.00
0417.0	.2320000	.500061	3.25	9.00	1100.		643.00
0420.0	.2329090	.500041	5.60	14.3	1700.	2.00000	370.00
0421.0	.2329090	.500041	5.60	14.3	1600.	1.40000	513.00
0422.0	.2329090	.500041	5.60	14.3	1500.	1.60000	559.00
0424.0	.2329090	.500041	5.25	14.3	1600.	1.10000	269.00
0425.0	.2329090	.500041	5.25	14.3	1400.	1.10000	412.00
0426.0	.2329090	.500041	5.25	14.3	1310.	1.30000	455.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0428.0	.2329090	.500041	6.58	14.3	153.0	.970000	273.00
0429.0	.2329090	.500041	6.58	14.3	264.0	.400000	236.00
0430.0	.2329090	.500041	6.58	14.3	153.0	.710000	193.00
0431.0	.2329090	.500041	6.58	14.3	134.0	.590000	226.00
0432.0	.2329090	.500041	6.06	14.3	337.0	1.80000	380.00
0433.0	.2329090	.500041	6.06	14.3	345.0	1.80000	350.00
0434.0	.2329090	.500041	6.06	14.3	320.0	1.30000	197.00
0436.0	.2329090	.500041	6.06	14.3	410.0	4.20000	461.00
0437.0	.2329090	.500041	6.06	14.3	280.0	.630000	249.00
0439.0	.2329090	.500041	6.00	14.3	1400.	1.00000	367.00
0440.0	.2329090	.500041	6.00	14.3	840.0	2.20000	380.00
0441.0	.2329090	.500041	6.00	14.3	810.0	4.20000	360.00
0443.0	.2329090	.500041	6.00	14.3	980.0		370.00
0444.0	.2329090	.500041	6.00	14.3	840.0	2.20000	347.00
0445.0	.2329090	.500041	5.17	14.3	5000.		625.00
0446.0	.2329090	.500041	5.17	14.3	5100.		537.00
0447.0	.2329090	.500041	5.17	14.3	4800.	7.70000	534.00
0448.0	.2329090	.500041	5.17	14.3	6100.	9.30000	630.00
0452.0	.2324545	.500041	5.87	14.3	120.0	.220000	111.00
0453.0	.2324545	.500041	5.87	14.3	225.0	.360000	126.00
0454.0	.2324545	.500041	5.87	14.3	410.0	.180000	270.00
0457.0	.2324545	.500041	5.87	14.3	750.0	2.80000	237.00
0458.0	.2324545	.500041	5.87	14.3	5600.	3.60000	928.00
0459.0	.2324545	.500041	5.87	14.3	1540.	2.10000	323.00
0461.0	.2329090	.500061	5.77	14.3	166.0	1.80000	245.00
0462.0	.2329090	.500061	5.77	14.3	210.0	1.70000	462.00
0463.0	.2329090	.500061	5.77	14.3	[illegible]	1.70000	365.00
0465.0	.2329090	.500061	5.77	14.3	195.0	3.70000	476.00
0466.0	.2329090	.500081	5.77	14.3	360.0	1.70000	640.00
0467.0	.2329090	.500081	5.77	14.3	530.0	1.20000	525.00
0468.0	.2329090	.500081	4.17	14.3	360.0	3.40000	670.00
0469.0	.2329090	.500081	4.17	14.3	950.0	3.40000	555.00
0472.0	.2329090	.500081	4.17	14.3	960.0	3.40000	683.00
0476.0	.2329090	.500081	4.92	14.3	6440.		1219.0
0477.0	.2329090	.500081	4.92	14.3	6400.		1132.0
0478.0	.2324545	.500081	4.92	14.3	161.0	1.30000	325.00
0481.0	.2324545	.500081	4.92	14.3	160.0	1.20000	491.00
0483.0	.2324545	.500081	4.92	14.3	171.0	1.23000	377.00
0001.0	.2120000	.500081	5.08	12.0	270.0		351.00
0484.0	.2324545	.500081	4.84	14.3	324.0	1.20000	420.00
0485.0	.2324545	.500081	4.84	14.3	360.0	2.20000	529.00
0487.0	.2324545	.500081	4.84	14.3	5900.	4.20000	1133.0
0488.0	.2324545	.500081	4.84	14.3	6300.	1.10000	1076.0
0490.0	.2324545	.500081	4.84	14.3	6500.	4.30000	902.00
0495.0	.2339011	.500181	2.98	10.0	174.0	2.20000	252.00
0496.0	.2339011	.500181	2.98	10.0	210.0	2.80000	260.00
0497.0	.2339011	.500181	2.98	10.0	164.0	1.50000	213.00
0498.0	.2339011	.500181	2.98	10.0	170.0	1.00000	235.00
0499.0	.2339011	.500181	2.98	10.0	330.0	1.60000	289.00
0504.0	.2339011	.500181	2.70	10.0	330.0		268.00
0505.0	.2339011	.500181	2.70	10.0	490.0	9.30000	270.00
0506.0	.2339011	.500181	2.70	10.0	870.0	1.90000	375.00
0508.0	.2339011	.500181	2.70	10.0	970.0	2.50000	435.00
0509.0	.2339011	.500181	2.70	10.0	875.0	2.50000	430.00
0510.0	.2339011	.500181	2.70	10.0	3350.	1.35000	489.00
0570.0	.3349090	.500421	2.57	4.00	320.0	4.10000	589.00
0571.0	.3349090	.500421	2.57	4.00	247.0	2.20000	431.00
0572.0	.3349090	.500421	2.57	4.00	190.0	1.46000	390.00
0573.0	.3349090	.500421	2.57	4.00	230.0	1.31000	395.00
0574.0	.3349090	.500421	2.57	4.00	260.0	4.00000	351.00
0575.0	.3349090	.500421	2.57	4.00	200.0	1.50000	387.00
0576.0	.3349090	.500421	3.05	4.00	2850.	4.20000	560.00
0577.0	.3349090	.500421	3.05	4.00	2250.	2.40000	317.00
0578.0	.3349090	.500421	3.05	4.00	3050.	6.40000	700.00
0579.0	.3349090	.500421	3.05	4.00	2150.	1.10000	536.00
0580.0	.3349090	.500421	3.05	4.00	2300.	4.10000	465.00
0581.0	.3349090	.500421	3.05	4.00	2100.	2.50000	547.00
0582.0	.3349090	.500421	2.76	4.00	222.0	2.60000	380.00
0583.0	.3349090	.500421	2.76	4.00	226.0	1.10000	220.00
0584.0	.3349000	.500421	2.76	4.00	135.0	.300000	458.00
0585.0	.3349000	.500421	2.76	4.00	200.0	1.20000	450.00
0586.0	.3349000	.500421	2.76	4.00	195.0	1.00000	276.00
0587.0	.3349000	.500421	2.76	4.00	136.0	.450000	322.00
0588.0	.3349000	.500421	2.55	4.00	173.0	.700000	469.00
0589.0	.3349000	.500421	2.55	4.00	2000.	1.60000	478.00
0590.0	.3349000	.500421	2.55	4.00	1800.	1.70000	366.00
0591.0	.3349000	.500421	2.55	4.00	1600.	.620000	638.00
0592.0	.3349000	.500421	2.55	4.00	1450.	.600000	761.00
0593.0	.3349000	.500421	2.55	4.00	1510.	1.10000	756.00
0594.0	.3349045	.500421	2.24	4.00	1300.	1.00000	132.00
0595.0	.3349045	.500421	2.24	4.00	1600.	1.60000	228.00
0596.0	.3349045	.500421	2.24	4.00	1450.	1.50000	180.00
0597.0	.3349045	.500421	2.24	4.00	1200.	1.20000	133.00
0598.0	.3349045	.500421	2.24	4.00	1600.	1.50000	171.00
0599.0	.3349045	.500421	2.24	4.00	1630.	1.30000	91.000
0600.0	.3349045	.500421	2.03	4.00	2100.	2.10000	93.000
0601.0	.3349045	.500421	2.03	4.00	1960.	.880000	78.000
0602.0	.3349045	.500421	2.03	4.00	1900.	.920000	85.000
0603.0	.3349045	.500421	2.03	4.00	1800.	.800000	78.000
0604.0	.3349045	.500421	2.03	4.00	4930.	1.80000	135.00
0605.0	.3349045	.500421	2.03	4.00	5500.	1.00000	107.00
0606.0	.3349090	.800421	2.31	4.00	2100.	3.20000	630.00
0607.0	.3349090	.500421	2.31	4.00	1950.	2.20000	395.00
0608.0	.3349090	.800421	2.31	4.00	2250.	3.80000	747.00
0609.0	.3349090	.800421	2.31	4.00	2050.	2.10000	532.00
0610.0	.3349045	.500421	2.31	4.00	520.0	1.80000	146.00
0611.0	.3349045	.500421	2.31	4.00	510.0	1.30000	108.00
0612.0	.3339090	.500041	4.21	21.0	2030.	5.30000	1169.0
0613.0	.3339090	.500041	4.21	21.0	2100.	3.60000	968.00
0614.0	.3339090	.500041	4.21	21.0	2100.		1026.0

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0616.0	.3329090	.500041	4.21	21.0	2180.	3.60000	1119.0
0620.0	.3329090	.500041	5.23	21.0	1950.	3.00000	965.00
0622.0	.3329090	.500041	5.23	21.0	2250.	4.20000	1213.0
0624.0	.3329090	.500041	5.23	21.0	2000.	2.70000	947.00
0626.0	.3329090	.500041	3.62	21.0	640.0	2.30000	810.00
0628.0	.3329090	.500041	3.62	21.0	630.0	2.70000	773.00
0629.0	.3329090	.500041	3.62	21.0	780.0	2.30000	940.00
0630.0	.3329090	.500041	3.62	21.0	700.0	2.10000	740.00
0631.0	.3329090	.500041	5.51	21.0	693.0	3.00000	910.00
0632.0	.3329090	.500041	5.51	21.0	770.0	4.00000	750.00
0633.0	.3329090	.500041	5.51	21.0	695.0	2.90000	846.00
0634.0	.3329090	.500041	5.51	21.0	590.0	2.40000	832.00
0636.0	.3329090	.500041	4.91	21.0	264.0	2.60000	683.00
0637.0	.3329090	.500041	4.91	21.0	249.0	2.70000	618.00
0639.0	.3329090	.500041	4.91	21.0	260.0	3.40000	601.00
0640.0	.3329090	.501041	4.91	21.0	260.0	2.40000	582.00
0642.0	.3329090	.500041	3.33	21.0	260.0	2.40000	874.00
0643.0	.3329090	.500041	3.33	21.0	260.0	2.00000	633.00
0645.0	.3329090	.500041	3.33	21.0	260.0	1.90000	611.00
0647.0	.3329090	.500041	3.33	21.0	255.0	3.10000	561.00
0650.0	.3329090	.501041	3.33	21.0	235.0	1.40000	687.00
0651.0	.3329090	.500041	3.60	21.0	650.0	2.70000	663.00
0652.0	.3329090	.500041	3.60	21.0	750.0	4.70000	964.00
0653.0	.3329090	.500041	3.60	21.0	730.0	4.60000	672.00
0654.0	.3329090	.500041	3.60	21.0	730.0	3.80000	695.00
0655.0	.3329090	.500041	3.60	21.0	640.0	2.10000	503.00
0656.0	.3329090	.500041	2.51	21.0	200.0	2.60000	487.00
0657.0	.3329090	.500041	2.51	21.0	220.0	3.40000	663.00
0658.0	.3329090	.500041	2.90	21.0	230.0	3.40000	751.00
0659.0	.3319011	.500041	5.80	20.0	225.0	2.70000	529.00
0660.0	.3329090	.500021	2.90	20.0	250.0	3.10000	720.00
0661.0	.3319011	.500041	5.80	20.0	230.0	2.60000	546.00
0662.0	.3329090	.500021	3.39	21.0	235.0	2.40000	543.00
0663.0	.3319011	.500041	4.96	20.0	215.0	2.60000	550.00
0664.0	.3329090	.500021	3.39	21.0	140.0	2.90000	694.00
0665.0	.3319011	.500041	4.96	21.0	120.0	1.40000	533.00
0666.0	.3329090	.500021	2.93	21.0	130.0	4.00000	761.00
0667.0	.3319011	.500041	5.25	21.0	110.0	1.80000	529.00
0668.0	.3329090	.500021	2.93	21.0	26.00	.700000	268.00
0669.0	.3319011	.500041	5.25	20.0	15.00	1.40000	412.00
0670.0	.3329090	.501021	2.93	21.0	16.00	1.40000	0328.0
0671.0	.3319011	.501041	5.25	21.0	14.00	1.40000	412.00
0672.0	.3329090	.500021	2.53	21.0	27.00	1.20000	424.00
0673.0	.3319011	.500041	4.95	21.0	28.00	1.30000	477.00
0674.0	.3329090	.501021	2.53	21.0	29.00	2.70000	618.00
0675.0	.3329090	.500021	2.53	21.0	2100.	3.30000	1195.0
0676.0	.3319011	.500041	5.10	21.0	1900.	3.20000	910.00
0677.0	.3329090	.500021	2.53	21.0	2200.	4.20000	1220.0
0678.0	.3319011	.500041	5.10	21.0	1900.	3.30000	895.00
0679.0	.3329090	.500021	2.53	21.0	2050.	4.00000	1463.0
0681.0	.3324545	.500031	3.82	21.0	29.00	1.00000	295.00
0682.0	.3324545	.500031	3.82	20.0	158.0	1.20000	453.00
0683.0	.3324545	.500031	3.82	20.0	1800.	3.60000	824.00
0684.0	.3324545	.501031	3.82	20.0	1900.	3.70000	800.00
0685.0	.3324545	.501031	3.82	14.3	1500.	2.80000	671.00
0686.0	.3320000	.500031	3.82	14.3	1900.	2.90000	835.00
0687.0	.3320000	.500031	3.82	14.3	29.00	1.50000	383.00
0688.0	.3320000	.501031	3.82	14.3	1900.	3.30000	816.00
0680.0	.3319090	.500041	5.10	21.0	1000.	3.20000	740.00
0690.0	.3329090	.500021	2.53	14.3	162.0	2.50000	581.00
0691.0	.3329090	.500021	2.53	14.3	150.0	1.00000	468.00
0693.0	.3329090	.500021	2.53	14.3	165.0	1.90000	723.00
0695.0	.3319011	.500041	5.10	14.3	160.0	1.00000	462.00
0696.0	.3329090	.500021	2.53	14.3	300.0	2.00000	450.00
0697.0	.3329090	.500021	2.53	14.3	160.0	2.00000	634.00
0698.0	.3329090	.500021	2.53	14.3	156.0	1.30000	395.00
0700.0	.3319011	.500041	5.10	14.3	150.0	1.56000	476.00
0701.0	.3319011	.500041	5.10	14.3	150.0	1.30000	460.00
0702.0	.3329090	.500021	2.53	14.3	150.0	2.00000	542.00
0703.0	.3329090	.500021	2.53	14.3	160.0	1.56000	504.00
0704.0	.3329090	.500021	2.53	14.3	125.0	2.70000	408.00
0705.0	.3329090	.500021	2.53	14.3	160.0	1.90000	480.00
0710.0	.3329090	.500021	2.53	14.3	980.0	2.40000	821.00
0711.0	.3329090	.500021	2.53	14.3	900.0	2.40000	732.00
0712.0	.3329090	.500021	2.53	14.3	980.0	2.70000	800.00
0713.0	.3329090	.500021	2.53	14.3	920.0	2.50000	645.00
0715.0	.3329090	.500021	2.53	14.3	950.0	1.80000	690.00
0716.0	.3319011	.500041	4.33	14.3	900.0	2.34000	634.00
0717.0	.3319011	.500041	4.33	14.3	970.0	3.50000	648.00
0718.0	.3319011	.500041	4.33	14.3	900.0	1.80000	641.00
0719.0	.3329090	.500021	2.64	14.3	31.00	1.80000	544.00
0721.0	.3329090	.500021	2.64	14.3	22.00	.900000	362.00
0722.0	.3329090	.500021	2.64	14.3	36.00	1.10000	305.00
0724.0	.3329090	.500021	2.64	14.3	30.00	1.00000	323.00
0726.0	.3329090	.501021	2.64	14.3	22.00	1.50000	401.00
0728.0	.3319011	.500041	3.88	14.3	24.00	1.30000	408.00
0730.0	.3319011	.500041	3.88	14.3	22.00	1.10000	405.00
0731.0	.3319011	.500041	3.88	14.3	3700.	3.00000	885.00
0732.0	.3319011	.500041	3.88	14.3	3650.	2.50000	874.00
0741.0	.3319011	.501091	4.78	14.3	210.0	2.00000	533.00
0742.0	.3319011	.501091	4.78	14.3	210.0	1.30000	540.00
0743.0	.3319011	.501151	4.78	14.3	215.0	2.15000	570.00
0744.0	.3319011	.501121	4.78	14.3	215.0	1.68000	573.00
0745.0	.3319011	.501121	4.78	14.3	23.00	1.10000	416.00
0746.0	.3319011	.501121	4.78	14.3	1000.	3.00000	691.00
0747.0	.3319011	.501121	4.78	14.3	190.0	2.40000	474.00
0748.0	.3319011	.501121	4.78	14.3	170.0	1.40000	405.00
0749.0	.3339011	.500171	4.68	14.3	930.0	2.50000	532.00
0750.0	.3339011	.500211	4.49	14.3	1000.	2.65000	662.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0751.0	.3339011	.500171	4.68	14.3	1000.	3.10000	538.00
0752.0	.3339011	.500211	4.49	14.3	1000.	2.65000	685.00
0753.0	.3339011	.500171	4.68	14.3	1100.	2.10000	482.00
0754.0	.3339011	.500211	4.49	14.3	880.0	2.30000	450.00
0755.0	.3339011	.500181	4.68	14.3	980.0	1.90000	428.00
0756.0	.3339011	.500211	4.49	14.3	990.0	2.30000	516.00
0757.0	.3339011	.500171	4.68	14.3	1000.	2.60000	499.00
0762.0	.4329090	.501021	2.53	14.3	170.0	3.20000	688.00
0763.0	.4329090	.501021	2.53	14.3	170.0	1.60000	665.00
0764.0	.4329090	.501021	2.53	14.3	155.0	1.50000	465.00
0765.0	.4329090	.501021	2.53	14.3	137.0	1.42000	472.00
0766.0	.4329090	.501021	2.53	14.3	143.0	1.45000	414.00
0767.0	.4329090	.501021	2.53	14.3	161.0	2.50000	455.00
0768.0	.4329090	.501021	2.53	14.3	160.0	1.50000	432.00
0769.0	.4329090	.502021	2.53	14.3	161.0	1.65000	450.00
0770.0	.4329090	.502021	2.53	14.3	157.0	1.90000	432.00
0771.0	.4319011	.501101	5.25	14.3	159.0	2.40000	502.00
0772.0	.4319011	.502101	5.25	14.3	160.0	2.20000	550.00
0773.0	.4319011	.502101	5.25	14.3	160.0	2.40000	482.00
0774.0	.4319011	.502101	5.25	14.3	153.0	1.60000	470.00
0775.0	.4319011	.502141	5.25	14.3	162.0	2.15000	433.00
0776.0	.4319011	.502141	5.25	14.3	158.0	2.30000	478.00
0777.0	.4319011	.502141	5.25	14.3	160.0	2.40000	511.00
0778.0	.4319011	.502141	5.25	14.3	157.0	2.30000	471.00
0779.0	.4319011	.503141	5.25	14.3	155.0	1.80000	479.00
0780.0	.4319011	.503101	5.25	14.3	157.0	1.40000	509.00
0781.0	.4339011	.503201	4.45	14.3	152.0	1.45000	275.00
0782.0	.4339011	.503201	4.45	14.3	160.0	1.30000	317.00
0783.0	.4339011	.503201	4.45	14.3	156.0	1.40000	288.00
0784.0	.4339011	.503181	4.68	14.3	158.0	1.10000	273.00
0785.0	.4339011	.503181	4.68	14.3	158.0	1.60000	270.00
0786.0	.4339011	.503181	4.68	14.3	146.0	.740000	314.00
0787.0	.4339011	.506251	2.24	14.3	150.0	1.80000	344.00
0788.0	.4339011	.506251	2.24	14.3	146.0	2.35000	386.00
0789.0	.4339011	.506271	2.24	14.3	163.0	2.50000	408.00
0790.0	.4339011	.507271	2.24	14.3	158.0	3.80000	340.00
0791.0	.4339011	.507271	2.24	14.3	154.0	2.60000	432.00
0792.0	.4339011	.507271	2.24	14.3	153.0	1.70000	292.00
0793.0	.4329090	.507021	2.64	14.3	32.00	1.40000	330.00
0794.0	.4329090	.507021	2.64	14.3	34.00	1.60000	350.00
0795.0	.4329090	.507021	2.64	14.3	55.00	1.20000	349.00
0796.0	.4329090	.507021	2.64	14.3	66.00	1.80000	418.00
0797.0	.4329090	.507021	2.64	14.3	1200.	3.80000	821.00
0798.0	.4329090	.507021	2.64	14.3	1200.	4.40000	830.00
0799.0	.4329090	.508021	2.64	14.3	52.00	1.90000	368.00
0800.0	.4319011	.508121	5.24	14.3	37.00	2.50000	413.00
0801.0	.4319011	.508121	5.24	14.3	1200.		818.00
0802.0	.4319011	.508121	5.24	14.3	47.00	3.30000	538.00
0803.0	.4319011	.508121	5.24	14.3	34.00	2.25000	434.00
0804.0	.4319011	.508121	5.24	14.3	56.00	1.70000	491.00
0805.0	.4319011	.508121	5.24	14.3	31.00	1.40000	387.00
0806.0	.4319011	.509121	5.24	14.3	1100.	4.20000	672.00
0808.0	.4339011	.509191	4.49	14.3	1060.	3.20000	583.00
0809.0	.4339011	.509191	4.49	14.3	25.00	.420000	185.00
0810.0	.4339011	.509191	4.49	14.3	1070.	1.20000	545.00
0811.0	.4339011	.509191	4.49	14.0	27.00	.770000	190.00
0812.0	.4339011	.509191	4.49	14.0	52.00	.840000	238.00
0813.0	.4339011	.510191	4.49	14.3	54.00	.720000	227.00
0814.0	.4339011	.510191	4.49	14.0	1020.	2.20000	531.00
0815.0	.5339011	.501291	2.24	10.0	160.0	1.30000	238.00
0816.0	.5339011	.501291	2.24	10.0	165.0	1.20000	247.00
0817.0	.5339011	.501291	2.24	10.0	167.0	1.10000	263.00
0818.0	.5339011	.501291	2.24	10.0	169.0	1.10000	282.00
0819.0	.5339011	.501291	2.24	10.0	170.0	1.70000	273.00
0820.0	.5339011	.501291	2.24	10.0	1100.	2.10000	485.00
0821.0	.5339011	.501291	2.24	10.0	28.00	.670000	158.00
0822.0	.5339011	.502291	2.24	10.0	1020.	2.30000	550.00
0823.0	.5339011	.502291	2.24	10.0	1040.	2.30000	622.00
0824.0	.5339011	.502291	2.24	10.0	25.00	.520000	129.00
0825.0	.5339011	.502291	2.24	10.0	29.00	.670000	183.00
0829.0	.5339011	.504321	2.25	6.00	158.0	1.00000	251.00
0830.0	.5339011	.504321	2.25	6.00	156.0	.930000	211.00
0831.0	.5339011	.504321	2.25	6.00	160.0	1.10000	268.00
0832.0	.5339011	.504321	2.25	6.00	165.0	1.00000	212.00
0833.0	.5339011	.504321	2.25	6.00	168.0	1.40000	280.00
0834.0	.5339011	.505321	2.25	2.00	139.0	.600000	164.00
0835.0	.5339011	.505321	2.25	2.00	145.0	.540000	171.00
0836.0	.5339011	.505321	2.25	2.00	142.0	.730000	184.00
0837.0	.5339011	.505361	2.25	2.00	147.0	.900000	169.00
0838.0	.5339011	.505361	2.25	2.00	157.0	1.00000	207.00
0839.0	.5339011	.506361	2.25	2.00	150.0	1.00000	201.00
0840.0	.5339011	.506361	2.25	1.00	66.00	.120000	112.00
0841.0	.5339011	.506361	2.25	1.00	77.00	.160000	99.000
0842.0	.5339011	.506361	2.25	1.00	115.0	.270000	195.00
0843.0	.5339011	.507361	2.25	1.00	137.0	.450000	256.00
0844.0	.5339011	.507361	2.25	1.00	93.00	.160000	162.00
0845.0	.5339011	.507361	2.25	1.00	10.00	.080000	87.000
0846.0	.5339011	.507361	2.25	1.00	15.00	.180000	52.000
0847.0	.5349045	.514721	2.25	1.00	96.00	.280000	75.000
0848.0	.5349045	.514721	2.25	1.00	9.300	.150000	35.000
0849.0	.5349045	.514721	2.25	1.00	710.0	.380000	145.00
0852.0	.5349000	.515721	2.25	1.00	125.0	.400000	195.00
0853.0	.5349000	.515721	2.25	1.00	970.0	.930000	271.00
0854.0	.5349000	.515721	2.25	1.00	22.00	.270000	116.00
0855.0	.5349090	.516721	2.25	1.00	105.0	.320000	207.00
0856.0	.5349090	.516721	2.25	1.00	24.00	.200000	117.00
0857.0	.5349090	.516681	2.25	1.00	380.0	.830000	411.00
0858.0	.5349090	.516681	2.25	1.00	180.0	1.00000	371.00
0859.0	.5349090	.516681	2.25	1.00	23.00	.310000	160.00
0860.0	.5349090	.516681	2.25	1.00	980.0	1.40000	479.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0861.0	.5349090	.518681	2.25	1.00	150.0	.600000	319.00
0862.0	.5349090	.518681	2.25	1.00	25.00	.440000	185.00
0863.0	.5349090	.518681	2.25	1.00	770.0	.900000	414.00
0864.0	.5349000	.518681	2.25	1.00	152.0	.740000	421.00
0865.0	.5349000	.518681	2.25	1.00	24.00	.440000	254.00
0866.0	.5349000	.518681	2.25	1.00	970.0	1.25000	488.00
0867.0	.5349000	.518631	2.25	1.00	153.0	.700000	327.00
0868.0	.5349000	.518631	2.25	1.00	21.00	.270000	196.00
0869.0	.5349000	.519631	2.25	1.00	800.0	.610000	445.00
0878.0	.5349000	.522581	2.25	2.00	168.0	1.28000	583.00
0879.0	.5349000	.522581	2.25	2.00	165.0	.950000	364.00
0881.0	.5349090	.522581	2.25	2.00	164.0	1.03000	384.00
0882.0	.5349090	.522581	2.25	2.00	163.0	.930000	297.00
0883.0	.5349045	.522581	2.25	2.00	113.0	.330000	102.00
0884.0	.5349045	.522581	2.25	2.00	120.0	.450000	113.00
0885.0	.5349000	.523531	2.25	2.00	155.0	.690000	330.00
0886.0	.5349090	.523531	2.25	2.00	165.0	1.00000	321.00
0887.0	.5349045	.525581	2.25	6.00	117.0	.350000	136.00
0888.0	.5349090	.525531	2.25	6.00	170.0	.930000	314.00
0889.0	.5349090	.525531	2.25	6.00	29.00	1.10000	299.00
0890.0	.5349090	.525531	2.25	6.00	1.90	1.60000	479.00
0891.0	.5349090	.525531	2.25	6.00	170.0	1.09000	559.00
0892.0	.5349000	.525531	2.25	6.00	152.0	.680000	466.00
0893.0	.5349000	.525531	2.25	6.00	22.00	.340000	313.00
0894.0	.5349000	.525531	2.25	6.00	980.0	1.65000	560.00
0895.0	.5349000	.525531	2.25	6.00	151.0	.830000	500.00
0896.0	.5349000	.526531	2.25	6.00	26.00	.940000	285.00
0897.0	.5349000	.526481	2.25	6.00	1000.0	1.60000	601.00
0898.0	.5349000	.526481	2.25	6.00	151.0	.980000	400.00
0899.0	.5349090	.526481	2.25	6.00	154.0	.990000	344.00
0900.0	.5349090	.526481	2.25	6.00	29.00	.680000	231.00
0901.0	.5349000	.526481	2.25	6.00	980.0	1.30000	541.00
0903.0	.5349045	.527431	2.25	6.00	120.0	.500000	131.00
0904.0	.5349045	.527431	2.25	6.00	20.00	.400000	76.000
0905.0	.5349045	.527431	2.25	6.00	920.0	1.10000	291.00
0906.0	.5349045	.527431	2.25	6.00	15.00	.300000	62.000
0907.0	.5349045	.527431	2.25	6.00	990.0	.600000	271.00
0960.0	.8449000	.544141	.230	10.0	170.0	.940000	205.00
0962.0	.8449000	.547121	.230	10.0	38.00	.400000	279.40
0968.0	.8449000	.551121	.230	10.0	51.00	.520000	366.20
0969.0	.8449090	.554121	.230	10.0	51.00	1.35000	349.70
0971.0	.8449090	.554121	.230	10.0	61.00	3.90000	349.70
0974.0	.8449000	.558091	.230	10.0	95.00	.580000	386.00
0976.0	.8449000	.560291	.230	10.0	240.0	.480000	380.00
0978.0	.8449000	.560091	.230	10.0	630.0	.950000	446.00
0981.0	.8449090	.560091	.230	10.0	350.0	1.09000	402.00
0982.0	.8449090	.561091	.230	10.0	380.0	1.21000	523.00
0983.0	.8449090	.561091	.230	10.0	770.0	1.40000	833.00
0991.0	.8449090	.562061	.230	10.0	52.00	.725000	277.00
0993.0	.8449090	.562061	.230	10.0	61.00	1.40000	388.00
0995.0	.8449000	.564061	.230	10.0	770.0	1.10000	596.00
0997.0	.8449000	.564061	.230	10.0	39.00	.100000	451.00
1000.0	.8449000	.564061	.230	10.0	13.00	.030000	217.00
1003.0	.8449000	.564201	.210	10.0	50.00	.460000	401.00
1004.0	.8449000	.565201	.210	10.0	34.00	.440000	285.00
1005.0	.8449000	.565201	.210	10.0	880.0	1.18000	781.00
1006.0	.8449000	.565201	.210	10.0	1000.	2.35000	1189.0
1008.0	.8449090	.565201	.210	10.0	1100.	3.70000	1218.0
1011.0	.8449090	.565201	.210	10.0	110.0	6.20000	1130.0
1012.0	.8449090	.565201	.210	10.0	59.00	6.60000	652.00
1014.0	.8449090	.565201	.210	10.0	71.00	3.50000	495.00
1016.0	.8449045	.566201	.210	10.0	44.00	.480000	88.000
1018.0	.8449045	.566201	.210	10.0	130.0	.800000	157.00
1020.0	.8449045	.566201	.210	10.0	280.0	1.13000	207.00
1022.0	.8449045	.566201	.230	10.0	700.0	.610000	223.00
1027.0	.8449000	.567251	.270	10.0	11.00	.300000	372.00
1028.0	.8449000	.567251	.270	10.0	180.0	1.60000	427.00
1029.1	.8449090	.867251	.270	10.0	3950.	4.00000	990.00
1030.0	.8449090	.568251	.270	10.0	12.00		475.00
1031.0	.8449090	.569251	.270	10.0	4600.	4.00000	1490.0
1032.0	.8449045	.569251	.270	10.0	13.00	.300000	63.000
1033.0	.8449045	.569251	.270	10.0	3200.	1.95000	533.00
1034.0	.8449090	.569251	.270	10.0	419.0	2.75000	707.00
1037.0	.8449090	.571251	.270	1.00	27.00	2.60000	247.00
1038.0	.8449090	.571251	.270	1.00	575.0	2.40000	605.00
1039.0	.8449090	.572251	.270	1.00	3800.	4.80000	989.00
1041.0	.8449090	.572251	.270	1.00	64.00	3.00000	343.00
1043.0	.8449000	.572281	.190	1.00	41.00	1.90000	321.00
1044.0	.8449000	.572281	.190	1.00	620.0	2.00000	592.00
1045.0	.8449000	.873281	.190	1.00	3000.	.390000	896.00
1046.0	.8449000	.573281	.190	1.00	41.00	2.20000	317.00
1047.0	.8449045	.573281	.190	1.00	35.00	.560000	85.000
1048.0	.8449045	.573281	.190	1.00	13.00	.110000	73.000
1049.0	.8449045	.574281	.190	1.00	2100.	.500000	308.00
1050.0	.8449045	.574281	.190	1.00	35.00	1.00000	148.00
1051.0	.8449090	.574281	.190	1.00	760.0	3.20000	767.00
1052.0	.8449090	.574281	.190	1.00	3100.	1.60000	740.00
1053.0	.8449000	.574281	.190	1.00	510.0	.470000	618.00
1054.0	.8449000	.574281	.190	1.00	3800.	1.40000	896.00
1065.0	.8449045	.578301	.140	1.00	650.0	.610000	221.00
1066.0	.8449045	.578301	.140	1.00	1800.	1.40000	337.00
1067.0	.8449000	.578301	.140	1.00	2000.	.860000	691.00
1068.0	.8449000	.578301	.140	1.00	900.0	.610000	672.00
1069.0	.8449090	.578321	.140	1.00	900.0	.600000	626.00
1070.0	.8449090	.578321	.140	1.00	3000.	.880000	679.00
1073.0	.8449045	.579321	.140	1.00	42.00	.350000	92.000
1074.0	.8449045	.579321	.140	1.00	450.0	.370000	233.00
1076.0	.8449045	.579321	.140	1.00	1550.	1.05000	363.00
1077.0	.8449045	.579321	.140	1.00	3000.	2.00000	450.00
1079.0	.8449045	.580321	.140	3.00	46.00	.900000	112.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
1080.0	.8449045	.580321	.140	3.00	530.0	1.40000	264.00
1081.0	.8449045	.580321	.140	3.00	1700.	1.40000	432.00
1083.0	.8449045	.580321	.140	3.00	3450.	1.70000	489.00
1085.0	.8449045	.580281	.190	6.00	40.00	.550000	111.00
1086.0	.8449045	.580281	.190	6.00	470.0	1.30000	250.00
1087.0	.8449045	.580281	.190	6.00	1600.	1.85000	424.00
1088.0	.8449045	.580281	.190	6.00	3100.	1.50000	694.00
1090.0	.8449045	.581281	.190	10.0	48.00	1.10000	122.00
1091.0	.8449045	.581281	.190	10.0	500.0	1.00000	311.00
1092.0	.8449045	.581281	.190	10.0	780.0	.630000	353.00
1093.0	.8449045	.581281	.190	10.0	2500.	2.00000	529.00
1094.0	.8449045	.581281	.190	10.0			618.00
1094.1	.8449045	.581281	.190	10.0	3400.	3.70000	626.00
1095.0	.8449090	.581321	.140	10.0	1112.	2.90000	1008.0
1096.0	.8449090	.581321	.140	10.0	1200.	3.70000	880.00
1097.0	.8449090	.581321	.140	10.0	2500.	4.10000	1075.0
1098.0	.8449090	.581321	.140	10.0	2400.	4.20000	1139.0
1099.0	.8449090	.581321	.140	10.0	4250.	5.40000	1812.0
1100.0	.8449000	.581321	.140	10.0	1300.	4.40000	926.00
1101.0	.8449000	.581321	.140	10.0	1100.	2.40000	1044.0
1102.0	.8449000	.581321	.140	10.0	2300.	2.80000	918.00
1103.0	.8449000	.581321	.140	10.0	2400.	5.00000	854.00
1104.0	.8449000	.581321	.140	10.0	5250.	3.30000	1210.0
1106.0	.8449000	.582321	.140	10.0	1200.	2.30000	1089.0
1108.0	.8449045	.593281	.190	1.00	730.0	.370000	222.00
1109.0	.8449045	.594281	.190	1.00	2000.	.450000	382.00
1110.0	.8449045	.594341	.140	1.00	4500.	1.40000	512.00
1111.0	.8449045	.594341	.140	1.00	2460.	.900000	411.00
1112.0	.8449045	.594341	.140	1.00	4500.	1.00000	461.00
1113.0	.8449045	.594341	.140	1.00	960.0	.570000	291.00
1114.0	.8449045	.594341	.140	1.00	2450.	1.10000	408.00
1115.0	.8449045	.594341	.140	1.00	3350.	.640000	483.00
1117.0	.2519011	.501011	7.00	1.00	170.0	.180000	54.000
1118.0	.2519011	.503011	7.00	10.0	790.0	.910000	428.00
1119.0	.2519011	.503011	7.00	10.0	140.0	.480000	309.00
1120.0	.2519011	.503011	7.00	10.0	1800.	1.85000	442.00
1121.0	.2519011	.503011	7.00	10.0	2800.	.900000	432.00
1122.0	.2519011	.503031	7.00	10.0	1550.	2.20000	475.00
1123.0	.2519011	.500061	6.67	10.0	1500.	1.20000	408.00
1124.0	.2519011	.500071	6.67	10.0	1150.	1.50000	378.00
1125.0	.2519011	.503011	6.67	10.0	320.0	1.20000	334.00
1126.0	.2519011	.503011	6.67	10.0	40.00	.430000	229.00
1127.0	.2639011	.501011	5.80	10.0	118.0	.290000	212.00
1128.0	.2639011	.501011	5.80	10.0	650.0	.605000	273.00
1129.0	.2639011	.501011	5.80	10.0	3150.	.975000	393.00
1130.0	.2639011	.501011	5.80	10.0	470.0	.380000	393.00
1131.0	.2639011	.501011	5.80	10.0	890.0	.325000	328.00
1132.0	.2639011	.501041	5.80	10.0	35.00	.340000	136.00
1133.0	.2639011	.501041	5.80	10.0	582.0	.550000	236.00
1134.0	.2639011	.501041	5.80	10.0	2600.	.990000	361.00
1135.0	.2639011	.501071	4.85	10.0	35.00	.170000	147.00
1136.0	.2639011	.501071	4.85	10.0	473.0	.370000	257.00
1137.0	.2639011	.501071	4.85	10.0	1900.	.580000	454.00
1138.0	.2639011	.501011	6.70	10.0	47.00	.595000	214.00
1139.0	.2639011	.501011	6.70	10.0	2000.	.350000	295.00
1140.0	.2639011	.501011	6.70	10.0	5600.	.820000	432.00
1141.0	.2639011	.501041	5.80	10.0	120.0	.550000	149.00
1142.0	.2639011	.501041	5.80	10.0	1050.	.630000	283.00
1143.0	.2639011	.501041	5.80	10.0	170.0	.520000	158.00
1144.0	.2639011	.501071	4.85	10.0	110.0	.480000	127.00
1145.0	.2639011	.501071	4.85	10.0	140.0	1.00000	272.00
1146.0	.2639011	.501071	4.85	10.0	280.0	1.05000	206.00
1167.0	.2639011	.503041	5.30	2.00	300.0	.190000	144.00
1170.0	.2639011	.303071	4.80	2.00	555.0	.810000	168.00
1171.0	.2639011	.303071	4.80	2.00	100.0	.640000	149.00
1172.0	.2639011	.303071	4.80	2.00	3200.	.910000	296.00
1173.0	.2639011	.303071	4.80	2.00	989.0	.570000	157.00
1174.0	.2639011	.303041	5.30	2.00	105.0	.370000	151.00
1176.0	.2639011	.503041	5.30	2.00	1200.	.670000	193.00
1177.0	.2639011	.503041	5.30	2.00	2370.	.840000	254.00
1179.0	.2639011	.504041	5.30	2.00	36.00	1.70000	99.000
1181.0	.2639011	.504041	5.30	2.00	23.00	.180000	70.000
1184.0	.2639011	.304041	5.30	2.00	1600.	.760000	258.00
1185.0	.2639011	.304041	5.30	2.00	4070.	1.00000	243.00
1187.0	.2519011	.313041	5.80	2.00			6.0000
1189.0	.2519011	.513041	5.80	2.00	10.00	.004000	6.0000
1190.0	.2519011	.513041	5.80	2.00	3200.	5.33000	225.00
1191.0	.2639011	.505041	5.30	2.00	330.0	.170000	157.00
1193.0	.2639011	.305041	5.30	2.00	87.00	.036000	70.000
1196.0	.2639011	.505011	4.85	2.00	630.0	.710000	217.00
1197.0	.2639011	.506011	4.85	2.00	680.0	1.50000	207.00
1198.0	.2639011	.506011	4.85	1.00	9.000	.008000	6.0000
1200.0	.2639011	.306041	4.85	1.00	.3100	.002000	16.000
1201.0	.2639011	.306041	4.85	1.00	1.200	.002400	7.0000
1202.0	.2639011	.506041	4.85	1.00	130.0	.040000	112.00
1203.0	.2639011	.507041	4.85	1.00	150.0	.032000	80.000
1204.0	.2639011	.507041	4.85	1.00	870.0	.053000	80.000
1207.0	.2639011	.507071	4.85	1.00	37.00	.056000	74.000
1208.0	.2639011	.507071	4.85	1.00	290.0	.087000	124.00
1209.0	.2639011	.307071	4.85	1.00	490.0	.470000	200.00
1210.0	.2639011	.307071	4.85	1.00	1700.	.350000	157.00
1213.0	.2639011	.307011	4.85	1.00	40.00	.670000	70.000
1214.0	.2639011	.307011	4.85	1.00	125.0	.040000	67.000
1215.0	.2639011	.307011	4.85	1.00	150.0	.062000	42.000
1216.0	.2639011	.507011	4.85	1.00	230.0	.060000	23.000
1218.0	.2639011	.504041	3.40	20.0	820.0	1.30000	530.00
1219.0	.2639011	.804041	3.40	20.0	5300.	3.20000	905.00
1220.0	.2639011	.504041	3.40	20.0	160.0	1.30000	361.00
1222.0	.2639011	.504041	3.40	20.0	48.00	1.00000	263.00
1223.0	.2639011	.304041	3.41	21.0	290.0	1.35000	471.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
1224.0	.2639011	.304041	3.41	21.0	3300.	2.10000	862.00
1225.0	.2639011	.808011	5.31	21.0	5400.	1.00000	823.00
1226.0	.2639011	.309011	5.31	21.0	2050.	1.80000	700.00
1227.0	.2639011	.509011	5.31	21.0	4400.	.450000	327.00
1229.0	.2639011	.325071	2.46	21.0	5100.	1.10000	207.00
1230.0	.2639011	.3[illegible]071	2.46	21.0	2050.	2.40000	730.00
31.0	.2639011	.8[illegible]071	2.46	21.0	5400.	1.60000	1100.0
1[illegible]3.0	.8449045	.399151	.210	21.0	5460.	2.70000	812.00
1234.0	.8449045	.299151	.210	21.0	2940.	2.80000	762.00
1235.0	.8449045	.599151	.210	21.0	9300.	1.80000	875.00
1236.0	.8449045	.595151	.210	21.0	3200.	.320000	260.00
1239.0	.2519011	.518041	6.66	21.0	6400.		384.00
1240.0	.2519011	.418041	6.66	20.0	1500.	.900000	680.00
1241.0	.2519011	.418041	6.66	20.0	9200.	1.70000	650.00
1242.0	.2519011	.818041	6.66	20.0	5800.	2.40000	910.00
1244.0	.2639011	.536041	3.41	1.00	2.100	.002000	40.000
1245.0	.2639011	.426041	3.41	1.00	41.00	1.20000	80.000
1246.0	.2639011	.426041	3.41	1.00	100.0	.160000	84.000
1247.0	.2639011	.307041	3.41	1.00	2400.	.093000	106.00
1248.0	.2639011	.307041	3.41	1.00	930.0	.190000	99.000
1249.0	.2639011	.307041	3.41	1.00	940.0	.100000	90.000
1250.0	.2639011	.307071	2.46	1.00	1600.	.075000	84.000
1251.0	.2639011	.307071	2.46	1.00	1300.	.290000	245.00
1252.0	.2639011	.307071	2.46	1.00	1700.	.120000	116.00
1254.0	.2639011	.308111	2.85	1.00	11.00	.330000	52.000
1255.0	.2639011	.308111	2.85	1.00	71.00	.692000	124.00
1256.0	.2639011	.308111	2.85	1.00	620.0	.500000	237.00
1257.0	.2639011	.308111	2.85	1.00	613.0	.130000	140.00
1261.0	.2639011	.329011	2.85	1.00	2100.	.930000	245.00
1266.0	.2519011	.324041	6.66	5.00	52.00	.800000	161.00
1267.0	.2519011	.324041	6.66	5.00	115.0	.380000	188.00
1268.0	.2519011	.324041	6.66	5.00	560.0	.200000	204.00
1270.0	.2519011	.124071	6.66	5.00	39.00	.200000	220.00
1271.0	.2519011	.324071	6.66	5.00	540.0	.450000	304.00
1272.0	.2519011	.324071	5.26	5.00	3400.	.250000	291.00
1273.0	.2519011	.124011	6.66	5.00	440.0	.500000	168.00
1274.0	.2519011	.524011	6.66	5.00	787.0	1.10000	270.00
1275.0	.2519011	.824011	6.66	5.00	3510.	1.20000	236.00
1276.0	.2639011	.102011	5.26	5.00	480.0	.550000	230.00
1277.0	.2639011	.102011	5.26	5.00	120.0	.570000	238.00
1278.0	.2639011	.442011	5.26	5.00	660.0	.080000	341.00
1279.0	.2639011	.422011	5.26	5.00	2500.	1.10000	351.00
1280.0	.2639011	.302011	5.26	5.00	5600.	1.90000	706.00
1283.0	.2639011	.133041	3.59	5.00	490.0	.600000	160.00
1284.0	.2639011	.133041	3.59	5.00	1400.	.630000	202.00
1285.0	.2639011	.133041	3.59	5.00	720.0	.900000	278.00
1286.0	.2639011	.833041	3.59	5.00	5000.	1.30000	348.00
1289.0	.2639011	.103071	2.50	5.00	2400.	.170000	100.00
1290.0	.2639011	.103071	2.50	5.00	170.0	1.10000	183.00
1291.0	.2639011	.103071	2.50	5.00	830.0	1.30000	289.00
1292.0	.2639011	.803071	2.50	5.00	4300.	2.50000	351.00
1294.0	.2639011	.133041	3.59	5.00	620.0	.900000	162.00
1295.0	.2639011	.133041	3.59	5.00	1850.	1.40000	255.00
1296.0	.2639011	.133041	3.59	5.00	3000.	1.50000	255.00
1297.0	.2639011	.133041	3.59	5.00	2640.	1.80000	445.00
1299.0	.2639011	.104171	2.90	5.00	140.0	.120000	79.000
1300.0	.2639011	.304171	2.90	5.00	800.0	.330000	98.000
1301.0	.2639011	.404171	2.90	5.00	920.0	.550000	140.00
1302.0	.2639011	.804171	2.90	5.00	600.0	.024000	243.00
1304.0	.2639011	.104111	2.67	5.00	460.0	.130000	79.000
1305.0	.2639011	.124111	2.67	5.00	1600.	1.00000	150.00
1306.0	.2639011	.124111	2.67	5.00	240.0	.710000	210.00
1307.0	.2639011	.104111	2.67	5.00	640.0	1.90000	320.00
1308.0	.2639011	.404111	2.67	5.00	1700.	.550000	205.00
1309.0	.2639011	.804111	2.67	5.00	4750.	.850000	260.00
1311.0	.2639011	.124111	2.67	5.00	68.00	.800000	79.000
1312.0	.2639011	.124111	2.67	5.00	900.0	1.40000	183.00
1313.0	.2639011	.124111	2.67	5.00	2620.	2.30000	445.00
1314.0	.2639011	.804111	2.67	5.00	4000.	.280000	447.00
1316.0	.2639011	.104111	2.67	5.00	180.0	.200000	149.00
1317.0	.2639011	.304111	2.67	5.00	700.0	.720000	235.00
1318.0	.2639011	.334111	2.67	5.00	2250.	1.30000	244.00
1319.0	.2639011	.824111	2.67	5.00	6100.	1.73000	350.00
1325.0	.2636011	.101011	4.94	10.0	66.00	1.10000	346.00
1326.0	.2629011	.101011	4.94	10.0	110.0	.250000	396.00
1327.0	.2639011	.101011	4.94	10.0	275.0	.200000	392.00
1328.0	.2639011	.501011	4.94	10.0	1800.	1.10000	670.00
1329.0	.2639011	.531011	4.94	10.0	2150.	1.45000	780.00
1330.0	.2639011	.501011	4.94	10.0	5100.	1.60000	854.00
1331.0	.2639011	.501041	3.42	10.0	67.00	.840000	256.00
1332.0	.2639011	.101041	3.42	10.0	157.0	.460000	316.00
1333.0	.2639011	.101041	3.42	10.0	373.0	1.00000	335.00
1334.0	.2639011	.141041	3.42	10.0	300.0	.310000	450.00
1335.0	.2639011	.141041	3.42	10.0	1400.	.800000	564.00
1336.0	.2639011	.501041	3.42	10.0	3000.	.840000	679.00
1337.0	.2639011	.801041	3.42	10.0	5230.	1.30000	781.00
1338.0	.2639011	.501041	3.42	10.0	880.0	1.20000	479.00
1339.0	.2639011	.101071	2.37	10.0	74.00	.950000	220.00
1340.0	.2639011	.101071	2.37	10.0	185.0	1.20000	359.00
1341.0	.2639011	.101071	2.37	10.0	420.0	3.30000	299.00
1342.0	.2639011	.501071	2.37	10.0	790.0	.770000	618.00
1343.0	.2639011	.505071	2.37	10.0	1950.	.600000	496.00
1344.0	.2639011	.505071	2.37	10.0	2700.	.500000	387.00
1345.0	.2639011	.105111	3.70	10.0	53.00	.570000	261.00
1346.0	.2639011	.105111	3.70	10.0	170.0	.820000	338.00
1347.0	.2638011	.105111	3.70	10.0	290.0	.470000	394.00
1348.0	.2639011	.505111	3.70	10.0	980.0	1.10000	734.00
1349.0	.2639011	.505111	3.70	10.0	2700.	2.05000	831.00
1350.0	.2639011	.805111	3.70	10.0	5400.	1.50000	912.00
1351.0	.2639011	.106111	3.70	10.0	66.00	.830000	236.00
1352.0	.2639011	.506111	3.70	10.0	170.0	1.00000	451.00
1353.0	.2639011	.106111	3.70	10.0	420.0	1.40000	459.00
1354.0	.2639011	.506111	3.70	10.0	1100.	2.70000	825.00
1355.0	.2639011	.906111	3.70	10.0	2500.	.850000	810.00
1356.0	.2639011	.806111	3.70	10.0	5150.	1.75000	952.00
1357.0	.2639011	.906111	3.70	10.0	75.00	.680000	289.00
1358.0	.2639011	.106111	3.70	10.0	120.0	.600000	320.00
1359.0	.2639011	.106111	3.70	10.0	321.0	.950000	394.00
1360.0	.2639011	.506111	3.70	10.0	540.0	.460000	559.00
1361.0	.2639011	.806111	3.70	10.0	1700.	1.90000	711.00
1362.0	.2639011	.806111	3.70	10.0	3600.	2.00000	870.00
1363.0	.2629090	.106171	3.64	10.0	76.00	.480000	336.00
1364.0	.2629090	.106171	3.64	10.0	100.0	.610000	358.00
1365.0	.2629090	.106171	3.84	10.0	170.0	1.00000	360.00
1366.0	.2629090	.106171	3.84	10.0	330.0	.700000	425.00
1367.0	.2629090	.106171	3.84	10.0	760.0	.420000	610.00
1368.0	.2629090	.806171	3.84	10.0	1400.	1.40000	663.00
1369.0	.2629090	.806171	3.84	10.0	2500.	.350000	732.00
1370.0	.2629090	.806171	3.84	10.0	4300.	.480000	837.00
1371.0	.2629090	.107171	3.84	10.0	75.00	.700000	388.00
1372.0	.2629090	.107171	3.84	10.0	124.0	.750000	423.00
1373.0	.2629090	.107171	3.84	10.0	700.0	1.60000	500.00
1374.0	.2629090	.147171	3.64	10.0	950.0	.920000	570.00
1375.0	.2629090	.507171	3.84	10.0	2500.	1.00000	700.00
1376.0	.2629090	.107171	3.84	10.0	5000.	1.70000	650.00
1377.0	.2629090	.107171	3.64	10.0	12.00	.100000	261.00
1378.0	.2629090	.107171	3.84	10.0	62.00	.250000	410.00
1379.0	.2629090	.107171	3.84	10.0	700.0	1.00000	500.00
1380.0	.2629090	.107171	3.84	10.0			640.00
1381.0	.2629090	.507171	3.84	10.0	3900.	3.30000	737.00
1382.0	.2629090	.507171	3.84	10.0	5400.	2.30000	918.00
1383.0	.2629090	.507261	2.32	10.0	80.00	.680000	340.00
1384.0	.2629090	.107261	2.32	10.0	110.0	.900000	269.00
1385.0	.2629090	.107261	2.32	10.0	190.0	.700000	359.00
1386.0	.2629090	.107261	2.32	10.0	320.0	1.30000	345.00
1387.0	.2629090	.147261	2.32	10.0	835.0	1.30000	278.00
1388.0	.2629090	.147261	2.84	10.0	1600.	7.60000	635.00
1389.0	.2629090	.507261	2.84	10.0	3400.	1.80000	635.00
1390.0	.2629090	.807261	2.34	10.0	3950.	1.60000	560.00
1391.0	.2629090	.108261	2.84	10.0	73.00	.540000	263.00
1392.0	.2629090	.108261	2.84	10.0	160.0	.600000	335.00
1393.0	.2629090	.108261	2.84	10.0	850.0	1.00000	523.00
1394.0	.2629090	.808261	2.84	10.0	5700.	1.21000	490.00
1395.0	.2629090	.108261	2.84	10.0	69.00	.580000	300.00
1396.0	.2629090	.108261	2.84	10.0	284.0	.700000	315.00
1397.0	.2629090	.108261	2.84	10.0	870.0	1.10000	540.00
1398.0	.2629090	.808261	2.64	10.0	5900.	2.80000	617.00
1422.0	.2639011	.122071	2.37	10.0	76.00	.830000	255.00
1423.0	.2639011	.522071	2.37	10.0	67.00	.440000	206.00
1424.0	.2639011	.122071	2.37	10.0	120.0	.240000	255.00
1425.0	.2639011	.122071	2.37	10.0	248.0	.600000	299.00
1426.0	.2639011	.325071	2.37	10.0	890.0	1.20000	453.00
1427.0	.2639011	.822071	2.37	10.0	1700.	1.60000	717.00
1428.0	.2639011	.522071	2.37	10.0			657.00
1429.0	.2639011	.522071	2.37	10.0			640.00
1430.0	.2639011	.526071	2.37	10.0	79.00	.920000	478.00
1431.0	.2639011	.126071	2.37	10.0	55.00	.180000	378.00
1432.0	.2639011	.525071	2.37	10.0	135.0	.580000	282.00
1433.0	.2639011	.125071	2.37	10.0	357.0	2.80000	368.00
1434.0	.2639011	.425071	2.37	10.0	990.0	1.50000	579.00
1435.0	.2639011	.425071	2.37	10.0	1700.	1.50000	651.00
1436.0	.2639011	.825071	2.37	10.0	3100.	1.30000	637.00
1437.0	.2639011	.826071	2.37	10.0	5100.	.980000	843.00
1438.0	.2639011	.125071	2.37	10.0	63.00	.680000	357.00
1439.0	.2639011	.426071	2.37	10.0	380.0	1.00000	525.00
1440.0	.2639011	.526071	2.37	10.0	860.0	.820000	710.00
1441.0	.2639011	.126071	2.37	10.0	72.00	.860000	347.00
1442.0	.2639011	.526071	2.37	10.0	286.0	.540000	450.00
1443.0	.2639011	.326071	2.37	10.0	900.0	.880000	560.00
1444.0	.2639011	.127071	2.37	10.0	84.00	.500000	400.00
1445.0	.2639011	.327071	2.37	10.0	720.0	.640000	688.00
1460.0	.2639011	.536011	4.94	21.0	83.00	1.40000	454.00
1461.0	.2639011	.536011	4.94	21.0	1100.	1.80000	911.00
1462.0	.2639011	.136011	4.94	21.0	1150.	2.20000	874.00
1463.0	.2639011	.836011	4.94	21.0	5800.	2.70000	1257.0
1466.0	.2639011	.336011	4.94	21.0	2800.	2.20000	1050.0
1471.0	.3639011	.304011	3.80	21.0	1000.	1.00000	829.00
1472.0	.3639011	.304011	3.80	21.0	1000.	2.10000	861.00
1473.0	.3639011	.104011	3.80	21.0	85.00	1.70000	490.00
1474.0	.3639011	.604011	3.80	21.0	2700.	1.90000	1071.0
1475.0	.3639011	.804011	3.80	21.0	5500.	2.60000	1130.0
1476.0	.3639011	.105011	3.80	21.0	128.0	2.20000	518.00
1477.0	.3639011	.105011	3.80	21.0	200.0	1.60000	591.00
1478.0	.3639011	.105011	3.80	21.0	410.0	1.36000	690.00
1479.0	.2639011	.140041	2.96	21.0	83.00	1.41000	320.00
1480.0	.2639011	.140041	2.96	21.0	18.00	.750000	488.00
1481.0	.2639011	.340041	2.96	21.0	990.0	1.26000	737.00
1482.0	.2639011	.340041	2.96	21.0	970.0	1.70000	696.00
1483.0	.2639011	.840041	2.96	21.0	5700.	1.80000	1070.0
1484.0	.2639011	.540041	2.96	21.0	340.0	.770000	513.00
1485.0	.2639011	.340041	3.20	21.0	2800.	1.99000	1008.0
1488.0	.3639011	.106041	3.20	21.0	68.00	.450000	328.00
1489.0	.3639011	.146041	3.20	21.0	110.0	.670000	325.00
1490.0	.3639011	.106041	3.20	21.0	180.0	1.40000	439.00
1491.0	.3639011	.106041	3.20	21.0	360.0	1.30000	530.00
1492.0	.3639011	.406041	3.20	21.0	1000.	1.25000	764.00
1493.0	.3639011	.406041	3.20	21.0	990.0	.820000	685.00
1494.0	.3639011	.506041	3.20	21.0	1900.	1.90000	810.00
1495.0	.3639011	.106041	3.20	21.0	5800.	1.90000	1062.0
1503.0	.2629090	.147171	2.68	21.0	76.00	1.20000	504.00

ID	CODE 1	CODE 2	CML	TEMP	RATE	MODULUS	STRENG
1504.0	.2629090	.147171	2.68	21.0	235.0	1.70000	667.00
1505.0	.2629090	.547171	2.68	21.0	1100.	2.10000	949.00
1506.0	.2629090	.847171	2.68	21.0	2300.	2.20000	1028.0
1507.0	.2629090	.847171	2.68	21.0	5800.	1.80000	1163.0
1508.0	.2629090	.147171	2.68	21.0	400.0	1.70000	798.00
1514.0	.2629090	.553261	1.95	21.0	94.00	.250000	378.00
1515.0	.2629090	.553261	1.95	21.0	190.0	.920000	497.00
1516.0	.2629090	.453261	1.95	21.0	670.0	1.87000	656.00
1517.0	.2629090	.553261	1.95	21.0	2000.	1.00000	860.00
1518.0	.2629090	.553261	1.95	21.0	5800.	1.03000	1054.0
1519.0	.3639011	.118171	2.64	21.0	68.00	.780000	396.00
1520.0	.3639011	.118171	2.64	21.0	200.0	.900000	489.00
1521.0	.3639011	.118171	2.64	21.0	540.0	.590000	723.00
1522.0	.3639011	.418171	2.64	21.0	1800.	.780000	910.00
1523.0	.3639011	.518171	2.64	21.0	6300.	1.19000	1132.0
1530.0	.2629090	.163171	2.68	1.00	48.00	.280000	188.00
1531.0	.2629090	.563171	2.68	1.00	24.00	.080000	127.00
1532.0	.2629090	.463171	2.68	1.00	510.0	1.28000	240.00
1533.0	.2629090	.463171	2.68	1.00	1600.	.440000	350.00
1534.0	.2629090	.863171	2.68	1.00	2900.	.320000	424.00
1535.0	.2629090	.363171	2.68	1.00	47.00	.270000	331.00
1536.0	.2629090	.563171	2.68	1.00	49.00	.090000	112.00
1537.0	.2629090	.563171	2.68	1.00	1400.	.019000	175.00
1538.0	.2629090	.464171	2.67	1.00			98.000
1539.0	.2629090	.565261	1.95	1.00	38.00	.038000	160.00
1540.0	.2629090	.565261	1.95	1.00	72.50	.200000	120.00
1541.0	.2629090	.565261	1.95	1.00			97.000
1542.0	.2629090	.167171	2.68	1.00	120.0	.600000	295.00
1543.0	.2629090	.467171	2.68	1.00	880.0	.540000	460.00
1544.0	.2629090	.567171	2.68	1.00	3800.	.600000	440.00
1545.0	.2629090	.567261	1.95	1.00	91.00	.150000	151.00
1546.0	.2629090	.567261	1.95	1.00	341.0	.120000	132.00
1547.0	.2629090	.868261	1.95	1.00	4400.	1.44000	465.00
1548.0	.2629090	.168261	1.95	1.00	742.0	1.60000	308.00
1549.0	.3639011	.134171	2.55	2.00	145.0	.480000	205.00
1550.0	.3639011	.134171	2.60	2.00	261.0	.250000	207.00
1551.0	.3639011	.334171	2.76	2.00	1320.	.600000	163.00
1552.0	.3639011	.334171	2.50	2.00	4450.	2.40000	409.00
1553.0	.3639011	.134171	2.52	2.00	176.0	1.20000	241.00
1555.0	.3639011	.134171	2.48	2.00	300.0	.270000	228.00
1556.0	.3639011	.334171	2.48	2.00	850.0	.720000	243.00
1557.0	.3639011	.334171	2.78	2.00	2600.	.440000	316.00
1558.0	.3639011	.134171	2.69	2.00	25.00	.078000	139.00
1559.0	.3639011	.134171	2.70	2.00	61.00	.530000	183.00
1560.0	.3639011	.135041	2.65	2.00	44.00	.190000	121.00
1561.0	.3639011	.135041	2.78	2.00	24.00	.240000	125.00
1562.0	.3639011	.135041	2.95	2.00	157.0	2.00000	169.00
1563.0	.3639011	.335041	2.58	2.00	34.00	.080000	141.00
1564.0	.3639011	.135041	2.60	2.00	400.0	1.10000	184.00
1565.0	.3639011	.135041	2.80	2.00	290.0	.540000	150.00
1566.0	.3639011	.135041	2.88	2.00	1250.	1.06000	199.00
1567.0	.3639011	.335041	3.08	2.00	700.0	.450000	171.00
1568.0	.3639011	.335041	3.33	2.00	3650.	.230000	171.00
1569.0	.3639011	.335041	3.10	2.00	3700.	.900000	220.00
1573.0	.3539011	.135011	3.60	2.00	47.00	.250000	141.00
1574.0	.3639011	.136011	3.65	2.00	176.0	.140000	90.000
1575.0	.3639011	.336011	2.85	2.00	3700.	.610000	276.00
1578.0	.3639011	.101011	3.67	2.00	35.00	.290000	169.00
1579.0	.3639011	.101011	3.45	2.00	33.00	.270000	152.00
1580.0	.3639011	.101011	4.00	2.00	32.00	.210000	142.00
1581.0	.3639011	.101011	4.05	2.00	68.00	.650000	161.00
1582.0	.3639011	.101011	4.00	2.00	85.00	.820000	142.00
1583.0	.3639011	.101011	3.98	2.00	90.00	.620000	161.00
1584.0	.3639011	.101011	4.12	2.00	220.0	.140000	172.00
1585.0	.3639011	.101011	3.66	2.00	3140.	.380000	214.00
1586.0	.3639011	.101011	3.63	2.00	940.0	.590000	216.00
1587.0	.3639011	.401011	4.20	2.00	1100.	.330000	268.00
1588.0	.3639011	.401011	3.95	2.00	1400.	.860000	260.00
1589.0	.3639011	.401011	3.95	2.00	1200.	.380000	291.00
1590.0	.3639011	.301011	4.30	2.00	2100.	.240000	252.00
1591.0	.3639011	.301011	4.07	2.00	3000.	.860000	190.00
1592.0	.3639011	.301011	4.26	2.00	3800.	1.20000	237.00
1594.0	.3639011	.102011	3.70	2.00	36.00	.210000	142.00
1595.0	.3639011	.102011	4.05	2.00	45.00	.640000	131.00
1596.0	.3639011	.102011	4.00	2.00	74.00	.180000	152.00
1597.0	.3639011	.503011	3.40	2.00	280.0	.340000	159.00
1598.0	.3639011	.103011	3.76	2.00	840.0	.470000	206.00
1599.0	.3639011	.303011	4.79	2.00	700.0	.040000	71.000
1600.0	.3639011	.304011	4.00	2.00	2600.	.590000	117.00
1601.0	.3639011	.303011	3.65	2.00	1200.	.180000	180.00
1602.0	.3639011	.303011	4.13	2.00	1400.	.190000	217.00
1603.0	.3639011	.303011	4.20	2.00	1500.	.590000	180.00
1604.0	.3639011	.102041	2.73	2.00	4300.	.027000	113.00
1605.0	.3639011	.102041	2.55	2.00	42.00	.260000	161.00
1606.0	.3639011	.103041	2.50	2.00	124.0	.550000	131.00
1607.0	.3339011	.103041	2.59	2.00	118.0	.940000	152.00
1608.0	.3639011	.103041	2.63	2.00	330.0	.440000	204.00
1609.0	.3639011	.403041	2.57	2.00	320.0	.900000	220.00
1610.0	.3639011	.403041	2.75	2.00	900.0	.940000	240.00
1611.0	.3639011	.403041	2.50	2.00	980.0	.920000	296.00
1612.0	.3639011	.403041	2.70	2.00	2900.	.630000	331.00
1613.0	.3639011	.303041	2.70	2.00	3200.	.760000	349.00
1614.0	.3639011	.104041	2.49	2.00	32.00	.390000	110.00
1615.0	.3639011	.104041	2.90	2.00	28.00	.140000	190.00
1616.0	.3639011	.104041	2.78	2.00	91.00	.100000	190.00
1617.0	.3639011	.104041	2.57	2.00	190.0	.470000	189.00
1618.0	.3639011	.104041	2.61	2.00	390.0	.330000	259.00
1619.0	.3639011	.104041	2.73	2.00	290.0	.140000	192.00
1620.0	.3639011	.404041	2.50	2.00	970.0	.570000	299.00
1621.0	.3639011	.204041	2.75	2.00	720.0	.610000	280.00
1622.0	.3639011	.204041	2.55	2.00	3950.	.530000	424.00
1623.0	.3639011	.304041	2.56	2.00	3900.	.600000	272.00
1631.0	.3639011	.105041	2.75	2.00	37.00	.140000	157.00
1632.0	.3639011	.105041	2.63	2.00	150.0	1.10000	209.00
1633.0	.3639011	.405041	2.61	2.00	540.0	.910000	285.00
1634.0	.3639011	.305041	2.70	2.00	1350.	.870000	385.00
1635.0	.3639011	.405041	3.03	2.00	2400.	.600000	343.00
1636.0	.3639011	.405041	2.60	2.00	2900.	.750000	380.00
1637.0	.3639011	.305041	2.05	2.00	2400.	.410000	417.00
1638.0	.3639011	.305041	2.86	2.00	2660.	1.69000	381.00
1639.0	.3639011	.305041	2.55	2.00	2400.	.750000	430.00
1640.0	.3639011	.305041	2.23	2.00	5400.	1.07000	470.00
1641.0	.3639011	.305041	2.77	2.00	3050.	1.60000	383.00
1643.0	.3639011	.105041	2.12	2.00	520.0	.740000	262.00
1644.0	.3639011	.305041	2.50	2.00	3100.	.350000	340.00
1649.0	.3640090	.107441	2.78	2.00	68.00	.420000	537.00
1650.0	.3640090	.107441	2.47	2.00	61.00	.630000	790.00
1651.0	.3640090	.107441	2.55	2.00	110.0	1.80000	756.00
1652.0	.3640090	.107441	2.40	2.00	170.0	1.30000	882.00
1653.0	.3640090	.107441	2.50	2.00	217.0	1.72000	951.00
1654.0	.3640090	.107441	2.50	2.00	220.0	1.00000	890.00
1655.0	.3640090	.308441	2.55	2.00	590.0	1.37000	1433.0
1656.0	.3640090	.108441	2.66	2.00	730.0	2.50000	1170.0
1657.0	.3640090	.108441	2.63	2.00	675.0	3.00000	1102.0
1658.0	.3640090	.808441	2.55	2.00	1900.	2.20000	1458.0
1659.0	.3640090	.808441	2.53	2.00	240.	2.80000	1457.0
1660.0	.3640090	.808441	2.55	2.00	2400.	2.90000	1550.0
1661.0	.3640090	.808441	2.60	2.00	5900.	3.50000	1775.0
1662.0	.3640090	.808441	2.53	2.00	5800.	3.03000	1565.0
1663.0	.3640090	.808441	2.68	2.00	5600.	1.60000	989.00
1664.0	.3640090	.808441	2.48	2.00	5900.	3.80000	1797.0
1665.0	.3640090	.808441	2.60	2.00	3800.	1.54000	974.00
1666.0	.3640090	.808441	2.55	2.00	4700.		1615.0
1667.0	.3640090	.908441	2.70	2.00	2300.	2.60000	1330.0
1668.0	.3640090	.108441	2.75	2.00	280.0	2.20000	843.00
1669.0	.3640090	.108441	2.55	2.00	165.0	1.20000	761.00
1675.0	.3640090	.109441	2.75	2.00	90.00	1.20000	602.00
1677.0	.3640090	.109441	2.91	2.00	630.0	1.10000	1046.0
1678.0	.3640090	.809441	2.55	2.00	2200.	1.80000	1279.0
1685.0	.3649090	.111441	2.53	2.00			337.00
1686.0	.3649090	.111441	2.44	2.00	197.0	3.80000	455.00
1690.0	.3649090	.311441	2.44	2.00	1600.	1.37000	505.00
1691.0	.3649090	.311441	2.32	2.00	1750.	1.90000	628.00
1692.0	.3649090	.311441	2.56	2.00	2000.	1.84000	615.00
1693.0	.3649090	.311441	2.56	2.00	1550.	1.30000	951
1706.0	.3640090	.113441	2.85	2.00	62.00	.270000	413.
1707.0	.3640090	.113441	2.37	2.00	230.0	1.32000	782.0
1708.0	.3640090	.113441	2.70	2.00	4300.	1.71000	1060.
1709.0	.3640090	.813441	2.40	2.00	7000.	2.15000	649.00
1713.0	.3640090	.813441	2.55	2.00	6500.	2.50000	1456.0
1726.0	.3639011	.102041	2.07	10.0	54.00	.330000	210.00
1728.0	.3639011	.302041	2.75	10.0			508.00
1729.0	.3639011	.302041	2.55	10.0	5500.	1.13000	653.00
1730.0	.3639011	.302041	3.90	10.0	710.0	.830000	469.00
1731.0	.3639011	.302041	4.10	10.0	660.0	.800000	383.00
1732.0	.3639011	.302041	3.70	10.0	1600.	1.56000	565.00
1733.0	.3639011	.302041	4.30	10.0	1500.	.880000	432.00
1734.0	.3639011	.302041	3.15	10.0	1500.	1.20000	438.00
1735.0	.3639011	.302041	3.10	10.0	5600.	4.60000	737.00
1738.0	.3639011	.302041	4.30	10.0	810.0	.960000	362.00
1742.0	.3649090	.800441	2.80	10.0	6400.	2.10000	1700.0
1743.0	.3649090	.300441	2.70	10.0	1800.	4.70000	825.00
1744.0	.3649090	.300441	2.55	10.0	1005.	1.51000	987.00
1749.0	.3649090	.800441	2.55	10.0	6400.	2.00000	1893.0
1750.0	.3649090	.800441	1.90	10.0			2169.0
1751.0	.3649090	.800441	1.65	10.0	9700.	1.60000	1930.0
1752.0	.3649090	.300441	2.75	10.0	680.0	2.03000	1033.0
1753.0	.3649090	.301441	3.05	10.0	100.0	1.10000	475.00
1754.0	.3649090	.301441	2.47	10.0		.220000	453.00
1755.0	.3649090	.301441	2.78	10.0	71.00	.770000	383.00
1756.0	.3649090	.101441	2.30	10.0	175.0	.610000	675.00
1757.0	.3649090	.401441	2.97	10.0	180.0	.600000	560.00
1758.0	.3649090	.301441	3.26	10.0	160.0	.440000	617.00
1759.0	.3649090	.301441	2.60	10.0	1950.	2.30000	1175.0
1760.0	.3649090	.201441	2.74	10.0	2000.	1.76000	1463.0
1761.0	.3649090	.401441	2.57	10.0	2050.	1.60000	1350.0
1767.0	.3649000	.301441	2.90	10.0	90.00	.820000	720.00
1768.0	.3649000	.301441	3.42	10.0	55.00	.240000	1910.0
1769.0	.3649000	.501441	2.50	10.0	4600.		1969.0
1770.0	.3649000	.901441	2.80	10.0	190.0	1.30000	1069.0
1771.0	.3649000	.301441	2.82	10.0	180.0	.770000	1027.0
1772.0	.3649000	.301441	3.05	10.0	180.0	1.00000	816.00
1773.0	.3649000	.301441	2.65	10.0	540.0	.830000	890.00
1776.0	.3649000	.301441	3.12	10.0	610.0		1363.0
1779.0	.3649000	.201441	2.67	10.0	610.0	2.10000	895.00
1776.0	.3649000	.301441	2.92	10.0	1700.	1.79000	1284.0
1777.0	.3649000	.301441	3.30	10.0	1600.	.680000	1289.0
1778.0	.3649000	.301441	2.89	10.0	1350.	.780000	1029.0
8779.0	.3649000	.801441	2.80	10.0	9400.	1.72000	1334.0
1780.0	.3649000	.801441	2.81	10.0	6000.	2.69000	2177.0
1781.0	.3649000	.801441	2.80	10.0	6500.	1.54000	1972.0
1786.0	.3649000	.300441	3.78	10.0	65.00	1.80000	1118.0
1788.0	.3649045	.301441	4.80	10.0	21.00	.050000	109.00
8789.0	.3649045	.101441	3.80	10.0	63.00	.370000	97.000
1790.0	.3649045	.101441	3.04	10.0	100.0	.900000	110.00
1791.0	.3649045	.101441	1.96	10.0	90.00	.170000	133.00
1792.0	.3649045	.101441	2.22	10.0	140.0	1.13000	139.00
1793.0	.3649045	.101441	2.80	10.0	400.0	.910000	230.00
1794.0	.3649045	.301441	2.72	10.0	300.0	.800000	228.00
1795.0	.3649045	.101441	3.52	10.0	380.0	1.40000	292.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
1796.0	.3649045	.201441	2.73	10.0	1400.	1.42000	350.00
1797.0	.3649045	.201441	2.86	10.0	1120.	.750000	340.00
1798.0	.3649045	.301441	3.02	10.0	1300.	.600000	417.00
1799.0	.3649045	.201441	2.40	10.0	4400.	1.82000	588.00
1800.0	.3649045	.501441	4.56	10.0	4200.	1.60000	614.00
1801.0	.3649045	.201441	3.55	10.0	4000.	1.20000	543.00
1803.0	.3640090	.102441	2.64	10.0	110.0	1.56000	1098.0
1804.0	.3640090	.302441	3.44	10.0	108.0	1.37000	915.00
1805.0	.3640090	.302441	3.04	10.0	98.00	.840000	1191.0
1806.0	.3640090	.302441	2.15	10.0	240.0	.950000	1221.0
1807.0	.3640090	.302441	3.14	10.0	240.0	.900000	920.00
1809.0	.3640090	.102441	3.66	10.0	630.0	1.40000	1604.0
1810.0	.3640090	.302441	3.21	10.0	666.0	1.24000	1627.0
1811.0	.3640090	.302441	3.61	10.0	650.0	1.20000	1355.0
1812.0	.3640090	.802441	3.50	10.0	2700.	2.10000	2008.0
1813.0	.3640090	.202441	2.35	10.0	2500.	2.04000	1999.0
1814.0	.3640090	.802441		10.0	2300.	1.23000	1635.0
1815.0	.3640090	.802441	3.25	10.0			1855.0
1816.0	.3640090	.802441	3.25	10.0	7000.	1.81000	2235.0
1817.0	.3640090	.802441	3.25	10.0	6900.	4.80000	2610.0
1823.1	.3649045	.102441	3.25	5.00	30.00	.140000	46.000
1828.0	.3649045	.102441	3.63	5.00	36.00	.180000	79.000
1829.0	.3649045	.102441	3.65	5.00	73.00	.600000	82.000
1830.0	.3649045	.102441	4.19	5.00	280.0	.610000	164.00
1831.0	.3649045	.302441	4.27	5.00	300.0	.580000	180.00
1833.0	.3649045	.202441	2.95	5.00	2600.	.820000	440.00
1835.0	.3649045	.102441	3.02	5.00	4400.	1.10000	609.00
1841.0	.3649090	.402441	3.30	5.00	97.00	.890000	432.00
1842.0	.3649090	.102441	2.86	5.00	65.00	1.00000	329.00
1843.0	.3649090	.202441	2.29	5.00	480.0	1.08000	564.00
1844.0	.3649090	.302441	2.45	5.00	680.0	2.70000	700.00
1845.0	.3649090	.302441	2.80	5.00	460.0	.450000	565.00
1846.0	.3649090	.302441	3.10	5.00	76.00	.500000	356.00
1847.0	.3649090	.202441	2.35	5.00	1800.	1.40000	900.00
1848.0	.3649090	.202441	2.46	5.00	1650.	1.50000	802.00
1849.0	.3649090	.302441	2.58	5.00			816.00
1851.0	.3649090	.202441	2.83	5.00	5400.	1.20000	460.00
1852.0	.3649090	.202441	2.97	5.00	4800.	1.58000	1027.0
1855.0	.3649000	.102441	2.28	5.00	95.00	.480000	576.00
1856.0	.3649000	.302441	2.66	5.00	95.00	1.00000	657.00
1857.0	.3649000	.302441	2.35	5.00	100.0	1.20000	642.00
1858.0	.3649000	.302441	2.65	5.00	670.0	1.60000	900.00
1859.0	.3649000	.302441	1.88	5.00	570.0	1.40000	782.00
1860.0	.3649000	.302441	3.41	5.00	700.0	2.30000	1144.0
1861.0	.3640090	.802441	3.25	5.00	6500.	3.30000	1790.0
1862.0	.3640090	.802441	3.25	5.00	6500.	3.00000	1989.0
1863.0	.3640090	.802441	3.25	5.00	7300.	2.60000	2042.0
1867.0	.3640090	.302441	3.20	5.00	660.0	1.68000	1363.0
1868.0	.3640090	.302441	2.75	5.00	100.0	2.20000	1400.0
1869.0	.3640090	.302441	3.17	5.00	680.0	1.76000	1222.0
1877.0	.3649045	.107441	2.90	5.00	56.00	.170000	78.000
1879.0	.3649045	.507441	3.48	5.00	110.0	.260000	119.00
1880.0	.3649045	.107441	3.00	5.00	114.0	.500000	120.00
1881.0	.3649045	.107441	2.83	5.00	27.00	.800000	168.00
1882.0	.3649045	.307441	2.90	5.00	1000.	1.11000	331.00
1883.0	.3649045	.307441	2.68	5.00	975.0	1.20000	290.00
1884.0	.3649045	.308441	2.60	5.00	750.0	1.30000	323.00
1885.0	.3649045	.308441	2.60	5.00	3000.	1.19000	431.00
1886.0	.3649045	.308441	3.00	5.00	3300.	2.27000	413.00
1887.0	.3649045	.308441	2.60	5.00	2800.	.710000	421.00
1888.0	.3649045	.308441	2.85	5.00	3660.	1.40000	460.00
1894.0	.3649000	.308441	2.60	5.00	130.0	.350000	793.00
1895.0	.3649000	.308441	2.98	5.00	245.0	.960000	939.00
1896.0	.3649000	.308441	2.80	5.00	220.0	1.30000	900.00
1897.0	.3649000	.308441	3.25	5.00	1800.	1.23000	1014.0
1898.0	.3649000	.308441	3.24	5.00	2000.	2.64000	961.00
1899.0	.3649000	.308441	3.03	5.00	1400.	.136000	702.00
1900.0	.3649000	.808441	3.31	5.00	3700.	1.70000	1100.0
1901.0	.3649000	.808441	3.00	5.00	3900.	1.32000	1383.0
1902.0	.3649000	.808441	3.00	5.00	3800.	2.66000	1363.0
1903.0	.3649000	.308441	2.80	5.00	3100.	3.50000	735.00
1904.0	.3649000	.308441	2.75	5.00	5400.	2.50000	1283.0
1905.0	.3649090	.808441	3.00	5.00	.0000	6.40000	1403.0
1908.0	.3649090	.109441	2.90	5.00	200.0	1.10000	360.00
1909.0	.3649090	.109441	3.03	5.00	180.0	.990000	425.00
1910.0	.3649090	.109441	3.05	5.00	170.0	.880000	351.00
1911.0	.3649090	.309441	3.00	5.00	1500.	1.50000	715.00
1912.0	.3649090	.309441	3.15	5.00	3250.	1.39000	900.00
1913.0	.3649090	.309441	3.13	5.00	3800.	1.86000	738.00
1914.0	.3649090	.309441	2.88	5.00	4100.	1.85000	1132.0
1915.0	.3649090	.209441	3.10	5.00	5100.	1.27000	1050.0
1924.0	.3640090	.311441	2.48	5.00	265.0	4.90000	1309.0
1925.0	.3640090	.311441	2.55	5.00	110.0	.860000	1181.0
1926.0	.3640090	.111441	2.80	5.00	235.0	2.04000	860.00
1927.0	.3640090	.311441	3.14	5.00	280.0	.140000	932.00
1928.0	.3640090	.311441	3.13	5.00	750.0	2.60000	1463.0
1929.0	.3640090	.311441	3.00	5.00	720.0	1.47000	1225.0
1930.0	.3640090	.311441	3.00	5.00	1277.	.879000	1260.0
1931.0	.3640090	.211441	2.85	5.00	1800.	2.52000	1579.0
1932.0	.3640090	.311441	2.85	5.00	1950.	2.33000	1490.0
1933.0	.3640090	.811441	3.00	5.00	4450.	4.42000	1461.0
1934.0	.3640090	.811441	3.00	5.00	4400.	4.34000	1988.0
1961.0	.3649000	.118441	2.42	2.00	120.0	.970000	481.00
1962.0	.3649000	.318441	2.80	2.00	85.00	.350000	432.00
1963.0	.3649000	.318441	3.30	2.00	120.0	1.13000	475.00
1964.0	.3649000	.318441	2.85	2.00	160.0	.910000	494.00
1965.0	.3649000	.318441	2.70	2.00	170.0	1.10000	630.00
1967.0	.3649000	.519441	2.63	2.00	1500.	1.62000	975.00
1968.0	.3649000	.319441	2.58	2.00	410.0	.360000	677.00
1969.0	.3649000	.519441	2.90	2.00	540.0	.490000	981.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
1970.0	.3649000	.319441	2.50	2.00	1900.	2.99000	808.00
1971.0	.3649000	.319441	2.26	2.00	1900.	2.16000	922.00
1972.0	.3649000	.319441	2.90	2.00	1800.	2.30000	1163.0
1973.0	.3649000	.819441	2.80	2.00	3850.	2.23000	989.00
1974.0	.3649000	.319441	2.95	2.00	3700.	1.93000	1011.0
1975.0	.3649000	.819441	2.60	2.00	3600.	3.00000	976.00
1976.0	.3649000	.219441	3.03	2.00	5300.	1.97000	953.00
1977.0	.3649000	.219441	3.20	2.00	5000.	1.53000	769.00
1978.0	.3649000	.819441	2.93	2.00	5600.	2.20000	1200.0
1990.0	.3649000	.220441	3.00	2.00	86.00	1.60000	413.00
1991.0	.3649000	.520441	2.65	2.00	103.0	.320000	550.00
1992.0	.3649000	.120441	3.00	2.00	110.0	1.22000	474.00
1993.0	.3649000	.220441	2.84	2.00	430.0	.570000	467.00
1994.0	.3649000	.220441	3.00	2.00	620.0	2.30000	673.00
1995.0	.3649090	.120441	2.32	2.00	78.00	1.10000	256.00
1996.0	.3649090	.120441	2.98	2.00	49.00	.140000	207.00
1997.0	.3649090	.120441	2.61	2.00	76.00	.400000	253.00
1998.0	.3649090	.120441	2.50	2.00	135.0	.720000	293.00
1999.0	.3649090	.120441	2.65	2.00	122.0	.530000	251.00
2000.0	.3649090	.120441	2.86	2.00	150.0	.920000	295.00
2014.0	.3649090	.121441	3.48	2.00	570.0	1.77000	522.00
2015.0	.3649090	.121441	2.31	2.00	560.0	1.26000	470.00
2016.0	.3649090	.121441	2.78	2.00	580.0	2.10000	472.00
2017.0	.3649090	.121441	2.50	2.00	1400.	.470000	693.00
2018.0	.3649090	.121441	2.05	2.00	1400.	1.10000	412.00
2019.0	.3649090	.321441	2.80	2.00	1600.	.740000	637.00
2020.0	.3649090	.221441	3.15	2.00	5000.	1.42000	762.00
2021.0	.3649090	.721441	3.25	2.00	5100.	2.48000	754.00
2022.0	.3649090	.721441	2.53	2.00	5700.	2.34000	564.00
2025.0	.3649045	.121441	2.15	2.00	19.00	.050000	53.000
2026.0	.3649045	.121441	2.98	2.00	35.00	.200000	43.000
2027.0	.3649045	.121441	2.93	2.00	71.00	.210000	57.000
2028.0	.3649045	.121441	2.18	2.00	83.00	.380000	77.000
2029.0	.3649045	.121441	2.70	2.00	280.0	.910000	133.00
2030.0	.3649045	.121441	2.38	2.00	270.0	.270000	136.00
2031.0	.3649045	.121441	2.61	2.00	845.0	2.62000	213.00
2032.0	.3649045	.121441	2.16	2.00	1100.	1.38000	203.00
2033.0	.3649045	.121441	2.31	2.00	4200.	1.87000	323.00
2034.0	.3649045	.121441	2.43	2.00	4100.	1.00000	314.00
2036.0	.3649045	.121441	2.78	2.00	2650.	.850000	248.00
2037.0	.3649045	.121441	2.80	2.00	2500.	1.08000	277.00
2045.0	.3649090	.322441	2.65	21.0	89.00	.980000	828.00
2046.0	.3649090	.322441	2.63	21.0	98.00	1.57000	675.00
2047.0	.3649090	.322441	3.22	21.0	99.00	1.60000	980.00
2048.0	.3649090	.222441	2.80	21.0	783.0	4.00000	1530.0
2049.0	.3649090	.722441	2.80	21.0	700.0	.770000	1341.0
2050.0	.3649090	.322441	2.80	21.0	780.0	2.95000	1372.0
2051.0	.3649090	.822441	2.80	21.0	6500.	3.44000	1943.0
2052.0	.3649090	.822441	2.90	21.0	6300.	4.98000	2562.0
2053.0	.3649090	.822441	2.80	21.0	7100.	3.33000	2253.0
2060.0	.3649000	.122441	2.70	21.0	94.00	1.19000	832.00
2061.0	.3649000	.722441	2.80	21.0	113.0	2.55000	832.00
2062.0	.3649000	.122441	2.36	21.0	110.0	2.20000	746.00
2063.0	.3649000	.522441	2.70	21.0	710.0	2.18000	1281.0
2064.0	.3649000	.822441	2.70	21.0	640.0	1.75000	1457.0
2065.0	.3649000	.822441	2.70	21.0	760.0	3.34000	1735.0
2066.0	.3649000	.822441	2.70	21.0	8900.	3.25000	2200.0
2067.0	.3649000	.822441	2.70	21.0	8700.	1.57000	2398.0
2068.0	.3649000	.822441	2.70	21.0			2365.0
2075.0	.3649045	.124441	2.60	21.0	74.00	.580000	110.00
2076.0	.3649045	.124441	2.75	21.0	74.00	.850000	130.00
2077.0	.3649045	.124441	2.65	21.0	490.0	1.31000	343.00
2078.0	.3649045	.124441	2.87	21.0	570.0	3.30000	335.00
2079.0	.3649045	.124441	2.63	21.0	4200.	1.68000	983.00
2080.0	.3649045	.124441	2.40	21.0	5000.	1.30000	1030.0
2090.0	.3639011	.101011	3.86	10.0	76.00	.370000	359.00
2091.0	.3639011	.101011	3.75	10.0	80.00	4.30000	334.00
2092.0	.3639011	.101011	4.19	10.0	78.00	.320000	343.00
2093.0	.3639011	.101011	3.86	10.0	100.0	.210000	409.00
2094.0	.3639011	.101011	4.04	10.0	200.0	.780000	367.00
2095.0	.3639011	.101011	4.07	10.0	160.0	.870000	289.00
2096.0	.3639011	.201011	3.85	10.0	550.0	1.32000	513.00
2097.0	.3639011	.201011	4.06	10.0	640.0	1.02000	531.00
2098.0	.3639011	.201011	3.88	10.0	580.0	1.10000	574.00
2099.0	.3639011	.201011	3.93	10.0	1950.	1.69000	743.00
2100.0	.3639011	.201011	3.63	10.0	1700.	1.25000	687.00
2101.0	.3639011	.201011	3.84	10.0	2000.	2.48000	672.00
2102.0	.3639011	.201011	4.13	10.0	3900.	1.85000	781.00
2116.0	.3639011	.501011	3.85	10.0	5800.	3.16000	830.00
2117.0	.3639011	.201011	4.00	10.0	6800.	2.35000	832.00
2118.0	.3639011	.201011	3.76	10.0		1.87000	811.00
2119.0	.3639011	.201011	3.90	10.0	3700.	1.70000	802.00
2120.0	.3639011	.201011	3.85	10.0	3050.	1.21000	715.00
2121.0	.3639011	.102041	3.90	10.0	61.00	1.33000	228.00
2122.0	.3639011	.102041	3.11	10.0	68.00	.580000	253.00
2123.0	.3639011	.102041	3.11	10.0	47.00	.310000	212.00
2124.0	.3639011	.102041	2.94	10.0	170.0	2.13000	265.00
2125.0	.3639011	.102041	3.00	10.0	145.0	.640000	252.00
2126.0	.3639011	.102041	2.90	10.0	166.0	1.30000	172.00
2127.0	.3639011	.102041	3.00	10.0	520.0	1.00000	370.00
2128.0	.3639011	.102041	3.20	10.0	400.0	1.71000	403.00
2129.0	.3639011	.102041	3.92	10.0	360.0	.280000	363.00
2130.0	.3639011	.202041	2.87	10.0	1400.	1.20000	572.00
2131.0	.3639011	.202041	2.91	10.0	1600.	1.18000	577.00
2132.0	.3639011	.202041	2.82	10.0	2000.	2.74000	500.00
2133.0	.3639011	.702041	3.24	10.0		1.35000	765.00
2134.0	.3639011	.702041	2.91	10.0	6000.	2.10000	649.00
2135.0	.3639011	.702041	3.00	10.0	6100.	2.68000	522.00
2136.0	.3639011	.702041	3.00	10.0	3800.	2.14000	610.00
9137.0	.3639011	.802041	3.00	10.0	3200.	2.80000	617.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
2138.0	.3639011	.702041	2.97	10.0		1.60000	707.00
2147.0	.3639011	.103041	2.51	10.0	126.0	1.80000	187.00
2148.0	.3639011	.103041	2.66	10.0	58.00	.200000	137.00
2149.0	.3639011	.103041	3.00	10.0	74.00	.510000	171.00
2150.0	.3639011	.103041	3.00	10.0	150.0	.670000	177.00
2151.0	.3639011	.103041	3.00	10.0	140.0	.530000	242.00
2152.0	.3639011	.103041	3.00	10.0	160.0	.750000	185.00
2153.0	.3639011	.103041	3.00	10.0	490.0	1.28000	261.00
9154.0	.3639011	.103041	3.00	10.0	340.0	.490000	262.00
2155.0	.3639011	.103041	3.00	10.0	520.0	1.34000	330.00
2156.0	.3639011	.103041	3.00	10.0		1.58000	426.00
2157.0	.3639011	.103041	3.00	5.00	1000.	.490000	336.00
2158.0	.3639011	.103041	3.00	5.00	1900.	2.57000	398.00
2159.0	.2639011	.703041	3.00	5.00	4400.	2.77000	540.00
2160.0	.2639011	.703041	3.00	5.00	5000.	1.66000	519.00
2161.0	.3639011	.703041	3.00	5.00	5250.	3.07000	527.00
2162.0	.3639011	.703041	3.00	5.00	2900.	.710000	496.00
2163.0	.3639011	.703041	3.00	5.00	3200.	1.10000	456.00
2164.0	.3639011	.703041	3.00	5.00	2100.	.590000	402.00
2176.0	.3639011	.104011	3.91	5.00	96.00	.510000	234.00
2177.0	.3639011	.104011	3.45	5.00	39.00	.140000	210.00
2178.0	.3639011	.104011	3.29	5.00	64.00	.350000	212.00
2179.0	.3639011	.104011	3.50	5.00	48.00	.240000	221.00
2180.0	.3639011	.104011	3.60	5.00	220.0	.390000	244.00
2181.0	.3639011	.104011	3.61	5.00	182.0	.720000	260.00
2182.0	.3639011	.104011	3.30	5.00	140.0	.470000	256.00
2183.0	.3639011	.104011	3.41	5.00	190.0	1.00000	241.00
2184.0	.3639011	.104011	3.48	5.00	390.0	.580000	387.00
2185.0	.3639011	.104011	3.65	5.00	490.0	.800000	347.00
2186.0	.3639011	.704011	3.45	5.00	1100.	1.00000	389.00
2187.0	.3639011	.704011	3.65	5.00	1140.	2.00000	394.00
2188.0	.3639011	.704011	3.46	5.00	1500.	.860000	433.00
2189.0	.3639011	.204011	3.38	5.00	5900.	2.00000	590.00
2190.0	.3639011	.204011	3.50	5.00	5600.	3.60000	573.00
2191.0	.3639011	.204011	3.40	5.00	4600.	.350000	470.00
2192.0	.3639011	.504011	3.43	5.00	4150.	1.80000	520.00
2193.0	.3639011	.704011	3.78	5.00	3400.	1.30000	506.00
2194.0	.3639011	.104011	3.81	5.00	450.0	.860000	335.00
2195.0	.3639011	.704011	3.65	5.00	3000.	1.20000	533.00
2209.0	.3639011	.105041	3.10	2.00	51.00	.270000	119.00
2210.0	.3639011	.105041	3.11	2.00	65.00	.580000	129.00
2211.0	.3639011	.105041	2.84	2.00	41.00	.270000	135.00
2212.0	.3639011	.105041	2.80	2.00	85.00	.245000	175.00
2213.0	.3639011	.105041	2.50	2.00	84.00	.190000	137.00
2214.0	.3639011	.105041	2.82	2.00	100.0	.260000	157.00
2215.0	.3639011	.105041	2.90	2.00	66.00	.290000	133.00
2216.0	.3639011	.105041	2.90	2.00	360.0	.290000	225.00
2217.0	.3639011	.105041	2.88	2.00	375.0	.580000	210.00
2218.0	.3639011	.105041	2.92	2.00	310.0	.245000	203.00
2219.0	.3639011	.705041	2.70	2.00	870.0	.350000	285.00
2220.0	.3639011	.505041	3.10	2.00	1400.	1.30000	217.00
2221.0	.3639011	.705041	2.92	2.00	1800.	.570000	313.00
2222.0	.3639011	.705041	2.78	2.00	3300.	.700000	268.00
2223.0	.3639011	.705041	3.32	2.00	4900.	2.10000	284.00
2224.0	.3639011	.705041	2.94	2.00	3300.	.650000	253.00
2225.0	.3639011	.705041	2.79	2.00	3150.	1.50000	214.00
2226.0	.3639011	.705041	3.20	2.00	2700.	.900000	305.00
2227.0	.3639011	.705041	3.19	2.00	1750.	.730000	191.00
2228.0	.3639011	.505041	2.97	2.00	400.0	.800000	256.00
2231.0	.3649000	.129441	2.70	2.00	640.0	1.30000	669.00
2232.0	.3649000	.729441	2.79	2.00	590.0	1.10000	653.00
2244.0	.3639011	.107011	3.52	2.00	68.00	1.50000	203.00
2245.0	.3639011	.107011	3.58	2.00	52.00	.620000	174.00
2246.0	.3639011	.107011	3.58	2.00	47.00	.330000	190.00
2247.0	.3639011	.107011	3.51	2.00	36.00	.220000	177.00
2248.0	.3639011	.107011	3.88	2.00	97.00	.460000	254.00
2249.0	.3639011	.107011	3.79	2.00	150.0	.600000	207.00
2250.0	.3639011	.107011	3.52	2.00	180.0	.620000	217.00
2251.0	.3639011	.107011	3.48	2.00	150.0	.710000	189.00
2252.0	.3639011	.107011	3.52	2.00	320.0	.320000	338.00
2253.0	.3639011	.107011	3.67	2.00	460.0	.880000	277.00
2254.0	.3639011	.107011	3.60	2.00	470.0	.800000	257.00
2255.0	.3639011	.107011	3.64	2.00	1400.	1.10000	341.00
2256.0	.3639011	.707011	3.50	2.00	1600.	1.60000	390.00
2257.0	.3639011	.707011	3.30	2.00	1500.	.780000	356.00
2258.0	.3639011	.807011	3.58	2.00	4200.	1.30000	454.00
2259.0	.3639011	.607011	3.76	2.00	4100.	1.50000	369.00
2260.0	.3639011	.207011	3.76	2.00	3200.	1.30000	417.00
2261.0	.3639011	.207011	3.65	2.00	3600.	1.50000	417.00
2262.0	.3639011	.207011	3.49	2.00	2900.	.800000	394.00
2263.0	.3639011	.207011	3.50	2.00	2900.	1.50000	392.00
2278.0	.3639011	.109011	3.56	21.0	100.0	2.00000	480.00
2279.0	.3639011	.109011	3.56	21.0	91.00	1.00000	474.00
2280.0	.3639011	.109011	2.72	21.0	78.00	1.60000	493.00
2281.0	.3639011	.109011	2.72	21.0	63.00	.460000	441.00
2282.0	.3639011	.109011	2.72	21.0	210.0	1.40000	573.00
2283.0	.3639011	.109011	2.72	21.0	200.0	1.00000	474.00
2284.0	.3639011	.109011	2.72	21.0	190.0	.107000	575.00
2286.0	.3639011	.109011	2.72	21.0	650.0	2.60000	750.00
2287.0	.3639011	.109011	2.72	21.0	580.0	2.24000	599.00
2288.0	.3639011	.109011	2.72	21.0	740.0	1.45000	636.00
2289.0	.3639011	.209011	2.72	21.0	2000.	2.20000	950.00
2290.0	.3639011	.209011	2.72	21.0	1410.	.600000	759.00
2291.0	.3639011	.209011	2.72	21.0	2060.	1.10000	923.00
2292.0	.3639011	.809011	2.72	21.0		3.00000	1183.0
2293.0	.3639011	.809011	2.72	21.0	6100.	2.08000	1192.0
2294.0	.3639011	.809011	2.72	21.0	6400.	2.00000	1003.0
2295.0	.3639011	.209011	2.72	21.0	3400.	3.80000	860.00
2296.0	.3639011	.209011	2.72	21.0	4100.	1.60000	1040.0
2297.0	.3639011	.209011	2.72	21.0	4100.	.600000	1003.0

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
2310.0	.3639011	.510041	2.58	21.0	51.00	.290000	314.00
2311.0	.3639011	.510041	2.30	21.0	76.00	.620000	301.00
2312.0	.3639011	.510041	2.40	21.0	55.00	.265000	380.00
2313.0	.3639011	.510041	2.58	21.0	68.00	.560000	302.00
2314.0	.3639011	.510041	2.58	21.0	190.0	1.60000	313.00
2315.0	.3639011	.510041	2.58	21.0	130.0	.280000	332.00
2316.0	.3639011	.510041	2.58	21.0	180.0	.900000	323.00
2317.0	.3639011	.510041	2.58	21.0	182.0	1.30000	320.00
2318.0	.3639011	.510041	2.58	21.0	700.0	1.80000	478.00
2319.0	.3639011	.510041	2.58	21.0	560.0	.700000	484.00
2320.0	.3639011	.510041	2.58	21.0	700.0	1.30000	516.00
2321.0	.3639011	.210041	2.58	21.0	1850.	1.50000	533.00
2322.0	.3639011	.210041	2.58	21.0	1600.	1.10000	719.00
2323.0	.3639011	.510041	2.58	21.0	1900.	1.40000	643.00
2324.0	.3639011	.810041	2.58	21.0	5700.	2.60000	907.00
2325.0	.3639011	.810041	2.58	21.0	5900.	1.95000	913.00
2326.0	.3639011	.210041	2.58	21.0	5800.	2.10000	1026.0
2327.0	.3639011	.810041	2.58	21.0	3700.	1.42000	883.00
2328.0	.3639011	.810041	2.58	21.0	3650.	1.30000	828.00
2329.0	.3639011	.510041	2.58	21.0	3850.	1.30000	749.00
2342.0	.3639011	.103171	2.74	21.0	83.00	1.00000	197.00
2343.0	.3639011	.103171	2.24	21.0	97.00	1.30000	258.00
2344.0	.3639011	.103171	2.41	21.0	64.00	.800000	187.00
2345.0	.3639011	.103171	2.30	21.0	97.00	1.03000	242.00
2346.0	.3639011	.303171	2.38	21.0	175.0	1.60000	530.00
2347.0	.3639011	.303171	2.58	21.0	170.0	1.00000	456.00
2348.0	.3639011	.303171	2.47	21.0	174.0	.830000	372.00
2349.0	.3639011	.403171	2.50	21.0	180.0	1.18000	447.00
2350.0	.3639011	.303171	2.57	21.0	630.0	1.40000	529.00
2351.0	.3639011	.103171	2.32	21.0	510.0	.630000	353.00
2352.0	.3639011	.103171	2.65	21.0	530.0	1.10000	378.00
2353.0	.3639011	.303171	2.62	21.0	180.0	1.10000	544.00
2354.0	.3639011	.303171	2.59	21.0	650.	1.10000	712.00
2355.0	.3639011	.703171	2.64	21.0	2100.	2.70000	713.00
2356.0	.3639011	.803171	2.30	21.0	5200.	.870000	823.00
2357.0	.3639011	.803171	2.74	21.0		2.20000	874.00
2358.0	.3639011	.203171	2.49	21.0	4750.	1.60000	652.00
2359.0	.3639011	.203171	2.25	21.0	3800.	2.80000	873.00
2360.0	.3639011	.803171	2.61	21.0	3250.	1.10000	1226.0
2374.0	.3639011	.104171	2.43	5.00	70.00	.455000	111.00
2375.0	.3639011	.104171	2.52	5.00	54.00	.420000	91.000
2376.0	.3639011	.104171	2.31	5.00	49.00	.400000	165.00
2377.0	.3639011	.104171	2.25	5.00	58.00	.420000	112.00
2378.0	.3639011	.104171	2.30	5.00	119.0	.700000	186.00
2379.0	.3639011	.304171	2.40	5.00	135.0	.700000	238.00
2380.0	.3639011	.104171	2.40	5.00	118.0	.630000	147.00
2381.0	.3639011	.304171	2.39	5.00	102.0	.680000	222.00
2382.0	.3639011	.304171	2.60	5.00	450.0	.680000	562.00
2383.0	.3639011	.304171	2.25	5.00	420.0	.720000	367.00
2384.0	.3639011	.304171	2.30	5.00	450.0	.720000	285.00
2385.0	.3639011	.104171	2.61	5.00	1500.	1.90000	334.00
2386.0	.3639011	.904171	2.46	5.00	1600.	1.90000	393.00
2387.0	.3639011	.904171	2.76	5.00	1550.	1.10000	305.00
2388.0	.3639011	.904171	2.40	5.00	5500.	2.00000	652.00
2389.0	.3639011	.904171	2.42	5.00			500.00
2390.0	.3639011	.304171	2.32	5.00			500.00
2391.0	.3639011	.904171	2.29	5.00	2200.	1.70000	469.00
2392.0	.3639011	.204171	2.42	5.00	2650.	1.20000	431.00
2393.0	.3639011	.304171	2.28	5.00			431.00
2394.0	.3639011	.204171	2.25	5.00	4100.	1.45000	514.00
2407.0	.3639011	.214011	3.30	21.0			919.00
2408.0	.3639011	.214011	2.56	21.0	1900.	.910000	649.00
2409.0	.3639011	.214011	2.76	21.0			997.00
2410.0	.3639011	.214011	3.15	21.0	7200.	2.63000	886.00
2411.0	.3639011	.814011	2.90	21.0	5500.	3.47000	1300.0
2412.0	.3639011	.814011	3.10	21.0	6000.	2.70000	1200.0
2413.0	.3639011	.814011	2.68	21.0			1169.0
2414.0	.3639011	.814011	3.62	21.0	7800.	1.78000	1269.0
2415.0	.3639011	.814011	2.68	21.0			1183.0
2416.0	.3639011	.814011	2.71	21.0	5500.	3.64000	1205.0
2417.0	.3639011	.814011	2.48	21.0	4500.		1090.0
2418.0	.3639011	.814011	2.77	21.0	4000.	1.25000	1181.0
2419.0	.3639011	.115041	2.74	21.0	92.00	1.25000	417.00
2420.0	.3639011	.115041	2.81	21.0	89.00	1.20000	418.00
2421.0	.3639011	.115041	2.51	21.0	98.00	1.51000	340.00
2422.0	.3639011	.115041	2.50	21.0	58.00	.340000	341.00
2423.0	.3639011	.115041	2.40	21.0	190.0	1.47000	379.00
2424.0	.3639011	.115041	3.03	21.0	180.0	1.22000	462.00
2425.0	.3639011	.115041	2.51	21.0	160.0	.690000	417.00
2426.0	.3639011	.115041	2.67	21.0	200.0	1.53000	457.00
2427.0	.3639011	.115041	3.15	21.0	630.0	2.63000	576.00
2428.0	.3639011	.415041	3.16	21.0	637.0	2.13000	580.00
2429.0	.3639011	.115041	2.85	21.0	560.0	2.60000	567.00
2430.0	.3639011	.215041	2.65	21.0	2200.	3.20000	880.00
2431.0	.3639011	.315041	2.65	21.0	2200.	2.17000	988.00
2432.0	.3639011	.915041	3.05	21.0	2300.	3.55000	800.00
2433.0	.3639011	.815041	2.40	21.0	6400.	3.59000	1184.0
2434.0	.3639011	.815041	2.60	21.0	6100.	2.69000	798.00
2435.0	.3639011	.815041	2.85	21.0	6100.	2.06000	1019.0
2436.0	.3639011	.415041	2.72	21.0	4000.	2.40000	953.00
2437.0	.3639011	.415041	2.75	21.0	4100.	2.31000	915.00
2438.0	.3639011	.815041	2.72	21.0	4700.	2.61000	1019.0
2439.0	.3639011	.815041	2.96	21.0	8100.	3.39000	1075.0
2452.0	.3639011	.110171	2.41	10.0	86.00	.950000	153.00
2453.0	.3639011	.110171	2.38	10.0	95.00	.770000	158.00
2454.0	.3639011	.110171	2.30	10.0	110.0	1.25000	173.00
2455.0	.3639011	.110171	2.40	10.0	85.00	.690000	158.00
2456.0	.3639011	.110171	2.23	10.0	120.0	.610000	319.00
2457.0	.3639011	.410171	2.58	10.0	129.0	.450000	183.00
2458.0	.3639011	.410171	2.38	10.0	170.0	1.13000	308.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
2459.0	.3639011	.110171	2.39	10.0	165.0	2.08000	229.00
2460.0	.3639011	.110171	1.94	10.0	700.0	1.70000	379.00
2461.0	.3639011	.110171	1.99	10.0	660.0	1.49000	350.00
2462.0	.3639011	.410171	2.00	10.0	650.0	.600000	604.00
2463.0	.3639011	.110171	2.76	10.0	590.0	1.30000	348.00
2464.0	.3639011	.410171	2.31	10.0	2000.	1.80000	652.00
2465.0	.3639011	.410171	2.32	10.0	1800.	1.36000	594.00
2466.0	.3639011	.410171	2.35	10.0	2000.	1.64000	470.00
2467.0	.3639011	.410171	2.00	10.0	4900.	2.56000	727.00
2468.0	.3639011	.410171	2.45	10.0	5800.	2.10000	635.00
2469.0	.3639011	.410171	2.26	10.0	6600.	5.00000	988.00
2470.0	.3639011	.110171	2.58	10.0	4200.	1.56000	529.00
2471.0	.3639011	.410171	1.88	10.0	3500.	1.30000	864.00
2472.0	.3639011	.110171	1.89	10.0	4100.	2.65000	539.00
2473.0	.3639011	.110171	2.76	10.0	130.0	.610000	253.00
2485.0	.3639011	.111171	2.49	10.0	41.00	.170000	55.000
2486.0	.3639011	.111171	2.48	10.0	73.00	.480000	104.00
2487.0	.3639011	.111171	2.42	10.0	50.00	.270000	94.000
2488.0	.3639011	.411171	2.25	10.0	74.00	.600000	163.00
2489.0	.3639011	.111171	2.40	10.0	144.0	.940000	118.00
2490.0	.3639011	.111171	2.59	2.00	81.00	.240000	137.00
2491.0	.3639011	.111171	2.60	2.00	66.00		130.00
2492.0	.3639011	.411171	2.46	2.00	93.00	.230000	222.00
2493.0	.3639011	.411171	2.47	2.00	410.0	.550000	166.00
2494.0	.3639011	.111171	2.68	2.00	290.0	.290000	173.00
2495.0	.3639011	.411171	2.79	2.00	353.0	.370000	222.00
2496.0	.3639011	.411171	2.65	2.00	1800.	1.31000	293.00
2497.0	.3639011	.411171	2.48	2.00	1400.	.790000	446.00
2498.0	.3639011	.411171	2.49	2.00	2000.	1.30000	364.00
2499.0	.3639011	.311171	2.77	2.00	6900.	.800000	390.00
9500.0	.3639011	.311171	2.48	2.00	5650.	1.05000	333.00
2501.0	.3639011	.411171	2.33	2.00	6050.	2.50000	317.00
2502.0	.3639011	.411171	2.43	2.00	2650.	.700000	475.00
2503.0	.3639011	.411171	2.31	2.00	4300.	2.14000	385.00
2519.0	.4649000	.205441	2.24	21.0	110.0	2.04000	1024.0
2520.0	.4649000	.205441	2.10	21.0	59.00	1.04000	1043.0
2521.0	.4649000	.205441	2.54	21.0	110.0	2.00000	1103.0
2522.0	.4649000	.205441	2.47	21.0	110.0	2.00000	1017.0
2523.0	.4649000	.305441	2.41	21.0	270.0	3.54000	1277.0
2524.0	.4649000	.305441	2.41	21.0	215.0	1.29000	1284.0
2525.0	.4649000	.405441	2.81	21.0	87.00		1054.0
2526.0	.4649000	.205441	2.48	21.0	235.0	2.19000	1112.0
2527.0	.4649000	.405441	2.49	21.0	680.0	1.10000	1343.0
2528.0	.4649000	.805441	2.49	21.0	620.0	1.09000	1873.0
2529.0	.4649000	.805441	2.49	21.0	730.0	1.43000	1776.0
2530.0	.4649000	.805441	2.49	21.0	770.0	3.62000	1437.0
2531.0	.4649000	.805441	2.58	21.0	7500.	2.86000	1530.0
2532.0	.4649000	.805441	2.63	21.0	2800.	3.21000	2980.0
2533.0	.4649000	.805441	2.59	21.0	7500.	2.46000	1833.0
2534.0	.4649000	.805441	2.27	21.0	2600.	2.88000	1776.0
2535.0	.4649000	.805441	2.38	21.0	2500.	2.90000	2025.0
2536.0	.4649000	.805441	2.06	21.0	2500.	2.94000	1876.0
2537.0	.4649000	.805441	2.56	21.0	4700.	2.06000	2570.0
2538.0	.4649000	.805441	2.77	21.0	5300.	.353000	2470.0
2551.0	.4649045	.106441	2.50	21.0	67.00	.850000	183.00
2552.0	.4649045	.106441	2.27	21.0	73.00	.750000	184.00
2553.0	.4649045	.106441	2.60	21.0	47.00	.560000	174.00
2554.0	.4649045	.106441	2.58	21.0	150.0	.810000	260.00
2555.0	.4649045	.106441	2.58	21.0	170.0	1.00000	245.00
2556.0	.4649045	.106441	2.38	21.0	127.0	.550000	220.00
2557.0	.4649045	.406441	2.56	21.0	510.0	.600000	583.00
2558.0	.4649045	.106441	2.40	21.0	470.0	.780000	413.00
2559.0	.4649045	.106441	2.75	21.0	.6300	1.70000	412.00
2560.0	.4649045	.306441	2.68	21.0	6800.	2.80000	1148.0
2561.0	.4649045	.206441	2.28	21.0	6800.	3.00000	1197.0
2562.0	.4649045	.406441	2.78	21.0	6700.	2.80000	1278.0
2563.0	.4649045	.306441	2.49	21.0	2100.	3.10000	772.00
2564.0	.4649045	.306441	2.49	21.0	1500.	1.50000	647.00
2565.0	.4649045	.306441	2.34	21.0	1500.	1.00000	697.00
2566.0	.4649045	.406441	2.58	21.0	5000.	4.10000	912.00
2567.0	.4649045	.806441	2.49	21.0	3700.	2.50000	917.00
2568.0	.4649045	.806441	2.68	21.0	3700.	2.10000	968.00
2569.0	.4649045	.806441	2.55	21.0	74.00	.880000	226.00
2582.0	.4649090	.207441	2.57	21.0	80.00	3.00000	793.00
2583.0	.4649090	.207441	2.58	21.0	91.00	2.70000	702.00
2584.0	.4649090	.207441	2.57	21.0	90.00	1.40000	764.00
2585.0	.4649090	.207441	2.20	21.0	70.00	1.80000	663.00
2586.0	.4649090	.207441	2.29	21.0	250.0	2.90000	1040.0
2587.0	.4649090	.207441	2.82	21.0	240.0	2.70000	997.00
2588.0	.4649090	.207441	2.30	21.0	240.0	3.00000	1004.0
2589.0	.4649090	.207441	2.67	21.0	210.0	.940000	1047.0
2590.0	.4649090	.207441	2.38	21.0	760.0	2.80000	1423.0
2591.0	.4649090	.207441	2.10	21.0	720.0	2.40000	1266.0
2592.0	.4649090	.807441	2.04	21.0	780.0	3.20000	1315.0
2593.0	.4649090	.207441	2.15	21.0	3600.	3.19000	2030.0
2594.0	.4649090	.807441	2.72	21.0	2600.	3.10000	2438.0
2595.0	.4649090	.807441	2.58	21.0	2500.	2.90000	1735.0
2596.0	.4649090	.807441	2.12	21.0	6500.	4.30000	2412.0
2597.0	.4649090	.807441	2.15	21.0	7200.	4.00000	2451.0
2598.0	.4649090	.807441	2.42	21.0	7250.	5.00000	2058.0
2599.0	.4649090	.807441	2.42	21.0	5350.	4.60000	2353.0
2600.0	.4649090	.807441	2.15	21.0	5100.	4.09000	2178.0
2601.0	.4649090	.807441	2.55	21.0	4800.	4.10000	2366.0
2628.0	.4649000	.309441	2.51	10.0	110.0	2.34000	704.00
2629.0	.4649000	.309441	2.71	10.0	102.0	2.36000	953.00
2630.0	.4649000	.209441	3.10	10.0	87.00	2.20000	629.00
2632.0	.4649000	.209441	2.60	10.0	190.0	1.56000	939.00
2633.0	.4649000	.309441	2.70	10.0	190.0	2.05000	832.00
2634.0	.4649000	.509441	3.20	10.0	203.0	1.00000	953.00
2635.0	.4649000	.209441	2.81	10.0	212.0	2.13000	1097.0
2636.0	.4649000	.309441	2.90	10.0	680.0	4.31000	1570.0
2637.0	.4649000	.309441	2.84	10.0	740.0	4.16000	1427.0
2638.0	.4649000	.309441	2.90	10.0	2500.	5.12000	1827.0
2639.0	.4649000	.809441	2.76	10.0	670.0	2.80000	1457.0
2640.0	.4649000	.809441	2.69	10.0	2400.	4.07000	1693.0
2641.0	.4649000	.809441	2.81	10.0	2400.	2.92000	2084.0
2642.0	.4649000	.809441	2.73	10.0	7400.	7.30000	2153.0
2643.0	.4649000	.809441	2.90	10.0	6900.	4.27000	2216.0
2644.0	.4649000	.809441	2.01	10.0	7200.	8.30000	2530.0
2645.0	.4649000	.809441	2.84	10.0	4500.	4.42000	2072.0
2646.0	.4649000	.809441	2.80	10.0	3900.	4.99000	2241.0
2647.0	.4649000	.809441	2.80	10.0	4750.	4.81000	2227.0
2650.0	.4649000	.509441	2.47	10.0	2800.	1.10000	1283.0
2651.0	.4649090	.312441	2.80	10.0	93.00	1.59000	475.00
2652.0	.4649090	.312441	2.69	10.0	61.00	.560000	349.00
2653.0	.4649090	.312441	2.51	10.0	81.00	.750000	462.00
2654.0	.4649090	.312441	2.70	10.0	86.00	2.20000	398.00
2655.0	.4649090	.312441	2.31	10.0	210.0	1.10000	585.00
2656.0	.4649090	.212441	2.70	10.0	185.0	1.10000	598.00
2657.0	.4649090	.912441	2.61	10.0	170.0	.880000	682.00
2658.0	.4649090	.512441	2.40	10.0	154.0	.620000	689.00
2659.0	.4649090	.312441	2.41	10.0	730.0	3.09000	1004.0
2660.0	.4649090	.312441	2.70	10.0	720.0	3.02000	890.00
2661.0	.4649090	.312441	2.69	10.0	680.0	1.81000	1018.0
2662.0	.4649090	.312441	2.76	10.0	690.0	3.00000	911.00
2663.0	.4649090	.312441	2.10	10.0	3500.	5.00000	1305.0
2664.0	.4649090	.312441	2.61	10.0	2400.	4.83000	1307.0
2665.0	.4649090	.212441	2.58	10.0	2150.	4.50000	1383.0
7666.0	.4649090	.312441	2.71	10.0	6500.	4.22000	1517.0
2667.0	.4649090	.312441	2.63	10.0	6100.	3.89000	1471.0
2668.0	.4649090	.312441	2.76	10.0	6100.	3.06000	1305.0
2669.0	.4649090	.312441	2.43	10.0	6100.	4.67000	1104.0
2670.0	.4649090	.812441	2.63	10.0	4900.	3.33000	1847.0
2671.0	.4649090	.312441	2.48	10.0	3600.	.970000	1097.0
2672.0	.4649090	.312441	2.90	10.0	4400.	2.57000	1443.0
2673.0	.4649090	.312441	2.60	10.0	4300.	3.34000	1457.0
2688.0	.4649045	.113441	2.57	10.0	70.00	.500000	83.000
2689.0	.4649045	.113441	2.15	10.0	41.00	.350000	75.000
2690.0	.4649045	.113441	2.38	10.0	60.00	.880000	89.000
2691.0	.4649045	.113441	2.15	10.0	47.00	.200000	83.000
2692.0	.4649045	.113441	2.10	10.0	172.0	.510000	123.00
2693.0	.4649045	.113441	2.64	10.0	160.0	.740000	174.00
2694.0	.4649045	.113441	2.15	10.0	170.0	1.12000	186.00
2695.0	.4649045	.113441	2.58	10.0	207.0	1.50000	150.00
2696.0	.4649045	.113441	2.58	10.0	410.0	.520000	262.00
2697.0	.4649045	.113441	2.67	10.0	530.0	1.50000	240.00
2698.0	.4649045	.113441	2.51	10.0	560.0	2.35000	273.00
2699.0	.4649045	.113441	2.58	10.0	1800.	2.11000	469.00
2700.0	.4649045	.113441	2.60	10.0	3100.	3.00000	435.00
2701.0	.4649045	.113441	2.40	10.0	1700.	1.87000	447.00
2702.0	.4649045	.213441	2.28	10.0	7500.	3.60000	725.00
2703.0	.4649045	.313441	2.47	10.0	5800.	4.40000	772.00
2704.0	.4649045	.313441	2.60	10.0	5300.	2.16000	762.00
2705.0	.4649045	.113441	2.60	10.0	3200.	.880000	617.00
2706.0	.4649045	.113441	2.59	10.0	4350.	1.45000	651.00
2707.0	.4649045	.113441	2.58	10.0	3300.	2.60000	659.00
2722.0	.4649000	.314441	2.61	5.00	92.00	1.13000	795.00
2723.0	.4649000	.314441	2.97	5.00	81.00	.870000	643.00
2724.0	.4649000	.314441	2.58	5.00	85.00	1.10000	492.00
2725.0	.4649000	.314441	2.51	5.00	69.00	.640000	567.00
2743.0	.4649000	.314441	2.51	5.00	215.0	2.34000	783.00
2744.0	.4649000	.314441	2.77	5.00	200.0	1.30000	787.00
2745.0	.4649000	.214441	2.62	5.00	200.0	1.10000	727.00
2746.0	.4649000	.914441	2.78	5.00	185.0	1.00000	1080.0
2747.0	.4649000	.514441	3.24	5.00	540.0	1.23000	825.00
2748.0	.4649000	.514441	2.74	5.00	580.0	.750000	1120.0
2749.0	.4649000	.514441	2.86	5.00	700.0	1.63000	1302.0
2750.0	.4649000	.314441	2.61	5.00	2300.	1.75000	1326.0
2751.0	.4649000	.314441	2.47	5.00	2400.	1.36000	1425.0
2752.0	.4649000	.214441	2.81	5.00	1850.	1.20000	1123.0
2753.0	.4649000	.214441	2.73	5.00	6200.	3.03000	1554.0
2754.0	.4649000	.214441	2.62	5.00	6300.	1.96000	1883.0
2755.0	.4649000	.214441	2.78	5.00	5300.	3.08000	1613.0
2756.0	.4649000	.214441	2.81	5.00	4000.	2.50000	1494.0
2757.0	.4649000	.814441	2.75	5.00	4200.	3.86000	1442.0
2758.0	.4649000	.814441	2.86	5.00	4100.	2.59000	1797.0
2772.0	.4649045	.415441	2.93	5.00	29.00	.120000	253.00
2773.0	.4649045	.115451	2.61	5.00			39.000
2774.0	.4649045	.115451	2.70	5.00			55.000
2775.0	.4649045	.415451	3.05	5.00	29.00	.220000	93.000
2776.0	.4649045	.115451	2.47	5.00	64.00	.240000	102.00
2777.0	.4649045	.115451	2.70	5.00	61.00	.170000	469.00
2778.0	.4649045	.315451	2.59	5.00	165.0	.830000	151.00
2779.0	.4649045	.115451	2.65	5.00	105.0	.350000	106.00
2780.0	.4649045	.315451	2.59	5.00	380.0	.760000	222.00
2781.0	.4649045	.315451	2.72	5.00	290.0	.430000	222.00
2782.0	.4649045	.515451	2.78	5.00	490.0	2.00000	208.00
2783.0	.4649045	.215451	2.44	5.00	1000.	.440000	340.00
2784.0	.4649045	.115451	2.47	5.00	1400.	1.76000	345.00
2785.0	.4649045	.315451	2.70	5.00	1300.	.530000	584.00
2786.0	.4649045	.315441	2.70	5.00	4100.	1.70000	590.00
2787.0	.4649045	.315441	2.89	5.00	6400.	2.00000	534.00
2788.0	.4649045	.315441	2.69	5.00	4550.	1.00000	550.00
2789.0	.4649045	.115441	2.65	5.00	3450.	1.76000	480.00
2790.0	.4649045	.315441	2.78	5.00	2600.	.680000	939.00
2791.0	.4649045	.315441	2.80	5.00	3200.	2.00000	472.00
2792.0	.4649045	.315441	2.52	5.00	3150.	2.20000	481.00
2809.0	.4649090	.116441	2.20	5.00	85.00	1.30000	326.00
2810.0	.4649090	.416441	2.68	5.00	73.00	.860000	408.00
9811.0	.4649090	.116441	2.22	5.00	66.00	.605000	388.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
2812.0	.4649090	.116441	2.71	5.00	63.00	.640000	348.00
2813.0	.4649090	.316441	2.58	5.00	195.0	1.13000	622.00
2814.0	.4649090	.316441	2.21	5.00	190.0	1.80000	568.00
2815.0	.4649090	.316441	2.78	5.00	190.0	2.10000	469.00
2816.0	.4649090	.316441	2.09	5.00	162.0	.570000	411.00
2817.0	.4649090	.316441	2.30	5.00	750.0	2.94000	792.00
2818.0	.4649090	.316441	2.06	5.00	700.0	.800000	547.00
2819.0	.4649090	.316441	2.64	5.00	750.0	2.35000	647.00
2820.0	.4649090	.316441	2.20	5.00	730.0	2.30000	590.00
2821.0	.4649090	.316441	2.13	5.00	2000.	3.13000	885.00
2822.0	.4649090	.316441	2.06	5.00	2300.	2.10000	903.00
2823.0	.4649090	.316441	2.20	5.00	1750.	2.40000	674.00
2824.0	.4649090	.316441	2.30	5.00	2100.	1.67000	882.00
2825.0	.4649090	.316441	2.71	5.00	5500.	2.49000	979.00
2826.0	.4649090	.216441	2.88	5.00	6150.	3.35000	1564.0
2827.0	.4649090	.216441	2.37	5.00	2540.	.650000	983.00
2828.0	.4649090	.216441	2.80	5.00	3800.	2.08000	1110.0
2829.0	.4649090	.216441	2.81	5.00	4100.	3.40000	1179.0
2830.0	.4649090	.216441	2.50	5.00	4000.	1.61000	1104.0
2831.0	.4649090	.216441	2.72	5.00	5500.	1.96000	1126.0
2832.0	.4649090	.216441	2.47	5.00	5900.	3.40000	1386.0
2839.0	.4649000	.317441	2.23	2.00	59.00	.350000	643.00
2840.0	.4649000	.317441	2.49	2.00	45.00	.170000	439.00
2841.0	.4649000	.317441	2.40	2.00	48.00	2.20000	436.00
2842.0	.4649000	.317441	2.39	2.00	43.00	.305000	538.00
2854.0	.4649000	.317441	2.58	2.00	150.0	.570000	530.00
2855.0	.4649000	.917441	2.40	2.00	140.0	.620000	682.00
2856.0	.4649000	.917441	2.36	2.00	148.0	.730000	759.00
2857.0	.4649000	.917441	2.80	2.00	140.0	.710000	658.00
2858.0	.4649000	.317441	2.70	2.00	650.0	1.36000	757.00
2859.0	.4649000	.317441	2.61	2.00	540.0	1.52000	625.00
2860.0	.4649000	.917441	2.67	2.00	640.0	1.26000	750.00
2861.0	.4649000	.317441	2.60	2.00	2300.	1.96000	927.00
2862.0	.4649000	.317441	2.69	2.00	1900.	2.29000	896.00
2863.0	.4649000	.317441	2.78	2.00	1900.	1.77000	911.00
2864.0	.4649000	.317441	2.75	2.00	4000.	1.58000	975.00
2865.0	.4649000	.317441	2.59	2.00	3700.	1.65000	875.00
2866.0	.4649000	.917441	2.49	2.00	3000.	1.15000	1090.0
2867.0	.4649000	.917441	2.63	2.00	4900.	2.09000	1018.0
2870.0	.4649000	.317441	2.90	2.00	5800.	1.72000	1124.0
2885.0	.4649045	.319441	2.78	2.00	34.00	.190000	
2886.0	.4649045	.319441	2.61	2.00	20.00	.061000	
2887.0	.4649045	.319441	2.59	2.00	6.000	.053000	
2888.0	.4649045	.319441	2.59	2.00	42.00	.038000	
2889.0	.4649045	.319441	2.46	2.00	37.00	.057000	
2890.0	.4649045	.419441	2.85	2.00	130.0	.076000	
2891.0	.4649045	.319441	2.67	2.00		.098000	
2892.0	.4649045	.319441	2.50	2.00	45.00	.042000	
2893.0	.4649045	.319441	2.67	2.00	200.0	.051000	
2894.0	.4649045	.119441	2.35	2.00	400.0	.070000	
2895.0	.4649045	.119441	2.66	2.00	390.0	.15000	
2896.0	.4649045	.119441	2.75	2.00	780.0	.520000	226.00
2897.0	.4649045	.119441	2.60	2.00	1200.	.920000	258.00
2898.0	.4649045	.119441	2.53	2.00	1500.	1.30000	250.00
2899.0	.4649045	.119441	2.67	2.00	2900.	1.00000	352.00
2900.0	.4649045	.119441	2.49	2.00	3000.	1.00000	387.00
2901.0	.4649045	.119441	2.70	2.00	3250.	1.30000	419.00
2902.0	.4649045	.219441	2.80	2.00	5600.	3.20000	447.00
2903.0	.4649045	.419441	2.67	2.00	5400.	1.80000	431.00
2904.0	.4649045	.119441	2.78	2.00	4200.	2.00000	394.00
2905.0	.4649045	.319441	2.75	2.00	4900.	1.30000	676.00
2920.0	.4649090	.120441	2.53	2.00	58.00	.095000	185.00
2921.0	.4649090	.120441	2.74	2.00	76.00	.340000	279.00
2922.0	.4649090	.120441	2.28	2.00	91.00	.570000	341.00
2923.0	.4649090	.120441	2.00	2.00	61.00	.80000	411.00
2924.0	.4649090	.321441	2.50	2.00	145.0	.110000	210.00
2925.0	.4649090	.221441	2.61	2.00	200.0	3.10000	387.00
2926.0	.4649090	.221441	2.70	2.00	135.0	.500000	395.00
2927.0	.4649090	.221441	2.70	2.00	125.0	.820000	198.00
2928.0	.4649090	.321441	2.33	2.00	420.0	.560000	432.00
2929.0	.4649090	.321441	2.73	2.00	460.0	1.30000	410.00
2930.0	.4649090	.221441	2.74	2.00	470.0	.520000	265.00
2931.0	.4649090	.321441	2.67	2.00	2000.	3.40000	761.00
2932.0	.4649090	.321441	2.79	2.00	1600.	1.20000	317.00
2933.0	.4649090	.321441	2.17	2.00	1800.	3.70000	617.00
2934.0	.4649090	.321441	2.52	2.00	3900.	.960000	505.00
2935.0	.4649090	.421441	2.44	2.00	4000.	5.00000	817.00
2936.0	.4649090	.421441	2.97	2.00	3100.	1.10000	839.00
2937.0	.4649090	.321441	2.48	2.00	5250.	1.86000	772.00
2938.0	.4649090	.321441	2.29	2.00	4700.	1.30000	673.00
2939.0	.4649090	.321441	2.10	2.00	5250.	3.50000	788.00
2940.0	.4649000	.321441	2.09	2.00	5200.	2.50000	544.00
2955.0	.4640090	.322441	2.20	2.00	130.0	2.08000	868.00
2956.0	.4640090	.322441	2.68	2.00	125.0	1.60000	840.00
2957.0	.4640090	.122441	2.73	2.00	88.00	.820000	447.00
2958.0	.4640090	.122441	2.69	2.00	109.0	1.60000	673.00
2959.0	.4640090	.422441	2.76	2.00	120.0	.490000	765.00
2960.0	.4640090	.122441	2.40	2.00	180.0	1.1000	765.00
2961.0	.4640090	.322441	2.76	2.00	190.0	1.6000	932.00
2962.0	.4640090	.122441	2.50	2.00	175.0	.880000	796.00
2963.0	.4640090	.322441	2.63	2.00	850.0	3.59000	1133.0
2964.0	.4640090	.322441	2.69	2.00	750.0	2.70000	1248.0
2965.0	.4640090	.322441	2.72	2.00	820.0	3.2000	961.00
2966.0	.4640090	.222441	2.86	2.00	2100.	2.14000	910.00
2967.0	.4640090	.822441	2.63	2.00	2300.	3.29000	1383.0
2968.0	.4640090	.222441	2.68	2.00	2060.	1.92000	1306.0
2969.0	.4640090	.822441	2.95	2.00	4950.	3.80000	1622.0
2970.0	.4640090	.822441	2.65	2.00	4750.	3.82000	1587.0
2971.0	.4640090	.822441	2.71	2.00	6000.	2.60000	1639.0
2972.0	.4640090	.422441	2.80	2.00	5650.	3.22000	1600.0
2973.0	.4640090	.822441	2.40	2.00	6150.	3.15000	1600.0
2974.0	.4640090	.822441	2.15	2.00	5600.	2.60000	1611.0
2975.0	.4640090	.822441	2.45	2.00	6400.	6.00000	1600.0
2976.0	.4640090	.323441	2.68	10.0	115.0	2.91000	1306.0
2977.0	.4640090	.323441	3.08	10.0	130.0	1.91000	1283.0
2978.0	.4640090	.223441	3.10	10.0	66.00	1.36000	1363.0
2979.0	.4640090	.323441	2.97	10.0	159.0	3.60000	1227.0
2980.0	.4640090	.323441	2.49	10.0	240.0	2.18000	1630.0
2981.0	.4640090	.323441	2.61	10.0	220.0	2.80000	1420.0
2982.0	.4640090	.323441	3.10	10.0	220.0	5.20000	1348.0
2983.0	.4640090	.223441	2.71	10.0	210.0	1.34000	1112.0
2984.0	.4640090	.823441	2.69	10.0	810.0	4.16000	2090.0
2985.0	.4640090	.823441	2.48	10.0	720.0	2.31000	1727.0
2986.0	.4640090	.823441	2.68	10.0	800.0	4.71000	2079.0
2987.0	.4640090	.823441	2.60	10.0	2700.	3.40000	2157.0
2988.0	.4640090	.823441	2.41	10.0	2500.	3.60000	2597.0
2989.0	.4640090	.823441	2.68	10.0	2630.	3.79000	2583.0
2990.0	.4640090	.823441	2.71	10.0	4600.	7.00000	2333.0
2991.0	.4640090	.823441	2.40	10.0	4800.	4.39000	3054.0
2992.0	.4640090	.823441	2.55	10.0	4900.	3.85000	2729.0
2993.0	.4640090	.823441	2.60	10.0	5500.	4.07000	2990.0
2994.0	.4640090	.123441	2.68	10.0	6150.	3.95000	2670.0
2995.0	.4640090	.823441	2.50	10.0	6700.	3.62000	2623.0
3022.0	.4640090	.124441	2.42	5.00	150.0	3.83000	1113.0
3023.0	.4640090	.124441	2.49	5.00	110.0	1.67000	983.00
3024.0	.4640090	.124441	2.30	5.00	140.0		903.00
3025.0	.4640090	.124441	2.40	5.00	128.0	1.62000	1054.0
3026.0	.4640090	.124441	2.40	5.00	240.0	4.0000	1111.0
3027.0	.4640090	.124441	2.50	5.00	120.0		1163.0
3028.0	.4640090	.124441	2.38	5.00	210.0	2.19000	1088.0
3029.0	.4640090	.124441	2.18	5.00	224.0	2.44000	1005.0
3030.0	.4640090	.124441	2.49	5.00	785.0	2.66000	1442.0
3031.0	.4640090	.124441	2.33	5.00	750.0	2.66000	1393.0
3032.0	.4640090	.124441	2.33	5.00	870.0	2.30000	1307.0
3033.0	.4640090	.324441	2.28	5.00	710.0	4.30000	1364.0
3034.0	.4640090	.224441	2.47	5.00	2500.	2.90000	1603.0
3035.0	.4640090	.824441	2.80	5.00	2600.	5.20000	2400.0
3036.0	.4640090	.824441	2.32	5.00	2200.	2.41000	1713.0
3037.0	.4640090	.824441	2.57	5.00	5350.	2.26000	989.00
3038.0	.4640090	.824441	2.80	5.00	4550.	3.32000	2253.0
3039.0	.4640090	.824441	2.27	5.00	4200.	2.07000	1775.0
3040.0	.4640090	.824441	2.10	5.00	7200.	3.77000	2093.0
3041.0	.4640090	.824441	2.19	5.00	6400.	3.50000	2016.0
3042.0	.4640090	.824441	2.76	5.00	7200.	4.68000	2392.0
3043.0	.4640090	.824441	2.29	5.00	4100.	4.83000	1734.0
3044.0	.4640090	.826441	2.68	21.0	120.0	1.90000	1484.0
3045.0	.4640090	.826441	2.76	21.0	110.0	1.90000	1320.0
3046.0	.4640090	.226441	2.75	21.0	110.0	4.33000	1997.0
3047.0	.4640090	.426441	2.78	21.0	104.0	3.00000	1373.0
3048.0	.4640090	.426441	2.58	21.0	230.0	5.50000	1957.0
3049.0	.4640090	.126441	2.81	21.0	230.0	3.40000	1731.0
3050.0	.4640090	.326441	2.70	21.0	190.0	2.30000	1663.0
3052.0	.4640090	.826441	2.75	21.0	850.0	5.40000	2745.0
3053.0	.4640090	.826441	2.72	21.0	750.0	4.35000	2534.0
3054.0	.4640090	.826441	2.73	21.0	800.0	4.03000	2246.0
3055.0	.4640090	.826441	2.40	21.0	710.0	3.62000	2252.0
3056.0	.4640090	.826441	2.69	21.0	27.00	4.11000	3119.0
3057.0	.4640090	.826441	2.62	21.0	2650.	3.23000	3119.0
3058.0	.4640090	.826441	2.35	21.0	2700.	6.30000	3119.0
3059.0	.4640090	.826441	2.57	21.0	5400.	5.40000	3125.0
3060.0	.4640090	.826441	2.10	21.0	5400.	4.60000	3317.0
3061.0	.4640090	.826441	2.70	21.0	5400.	5.04000	3527.0
3062.0	.4640090	.826441	2.39	21.0	7100.	4.00000	3068.0
3063.0	.4640090	.826441	2.60	21.0	7300.	6.70000	3073.0
3064.0	.4640090	.826441	2.55	21.0	6750.	4.87000	3643.0
3064.1	.4640090	.826441	2.60	21.0	7300.	4.53000	2220.0
3065.0	.4640090	.826441	2.70	21.0	7500.	6.08000	3900.0
3087.0	.4649090	.129531	3.10	5.00	96.00	1.80000	530.00
3088.0	.4649090	.129531	2.80	5.00	79.00	.520000	575.00
3089.0	.4649090	.129531	3.08	5.00	70.00	.680000	410.00
3090.0	.4649090	.129531	2.40	5.00	180.0	1.05000	556.00
3091.0	.4649090	.129531	2.63	5.00	200.0	2.00000	613.00
3092.0	.4649090	.129531	3.10	5.00	195.0	2.00000	574.00
3093.0	.4649090	.129531	2.90	5.00	630.0	2.53000	823.00
3094.0	.4649090	.129531	3.06	5.00	682.0	2.10000	917.00
3095.0	.4649090	.129531	2.96	5.00	700.0	1.66000	689.00
3096.0	.4649090	.329531	3.02	5.00	2300.	3.48000	1092.0
3097.0	.4649090	.329531	2.31	5.00	2000.	1.44000	853.00
3098.0	.4649090	.529531	2.88	5.00	2100.	3.80000	1090.0
3099.0	.4649090	.229531	2.83	5.00	4000.	4.0000	961.00
3100.0	.4649090	.229531	3.08	5.00	3900.	2.90000	1298.0
3101.0	.4649090	.529531	2.40	5.00	3900.	4.00000	1006.0
3102.0	.4649090	.229531	2.88	5.00	6300.	4.55000	1294.0
3103.0	.4649090	.229531	2.82	5.00	630.0	3.06000	1234.0
3104.0	.4649090	.229531	2.80	5.00	6400.	4.30000	1730.0
3105.0	.4649090	.329531	2.27	5.00	6700.	2.85000	1170.0
3120.0	.4649000	.530531	2.97	5.00	76.00	.380000	456.00
3121.0	.4649000	.330531	2.34	5.00	89.00	2.30000	754.00
3122.0	.4649000	.330531	1.90	5.00	76.00	.780000	453.00
3123.0	.4649000	.330531	2.88	5.00	166.0	1.29000	707.00
3124.0	.4649000	.330531	2.93	5.00	160.0	1.44000	757.00
3125.0	.4649000	.330531	2.97	5.00	140.0	1.52000	764.00
3126.0	.4649000	.330531	2.39	5.00	670.0	2.15000	772.00
3127.0	.4649000	.330531	2.93	5.00	710.0	1.85000	864.00
3128.0	.4649000	.230531	2.97	5.00	720.0	1.90000	1122.0
3129.0	.4649000	.230531	2.97	5.00	1900.	2.47000	1144.0
3130.0	.4649000	.330531	3.13	5.00	1900.	1.63000	1113.0
3131.0	.4649000	.230531	2.38	5.00	2300.	3.80000	1438.0
3132.0	.4649000	.830531	2.80	5.00	5700.	2.40000	1572.0
3133.0	.4649000	.830531	2.97	5.00	5800.	2.83000	1783.0

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
3134.0	.4649000	.830531	2.98	5.00	5700.	2.99000	1444.0
3135.0	.4649000	.830531	2.10	5.00	4000.	1.94000	932.00
3136.0	.4649000	.230531	2.87	5.00	4300.	2.11000	1370.0
3137.0	.4649000	.230531	2.33	5.00	3300.	4.20000	845.00
3152.0	.4649045	.131531	2.80	5.00	4.000		36.000
3153.0	.4649045	.131531	2.80	5.00	56.00	.410000	69.000
3154.0	.4649045	.131531	2.80	5.00	36.00	.110000	30.000
3155.0	.4649045	.131531	2.86	5.00	86.00	.590000	77.000
3156.0	.4649045	.131531	2.40	5.00	79.00		50.000
3157.0	.4649045	.131531	2.01	5.00	130.0	.800000	105.00
3158.0	.4649045	.131531	2.80	5.00	127.0	.650000	74.000
3159.0	.4649045	.131531	2.01	5.00	440.0	1.06000	162.00
3160.0	.4649045	.131531	2.90	5.00	437.0	.970000	157.00
3161.0	.4649045	.131531	2.01	5.00	440.0	1.34000	169.00
3162.0	.4649045	.131531	2.80	5.00	445.0	.630000	173.00
3163.0	.4649045	.131531	2.95	5.00	1300.	1.30000	272.00
3164.0	.4649045	.131531	2.92	5.00	1700.	1.66000	297.00
3165.0	.4649045	.131531	2.80	5.00	1300.	.590000	293.00
3166.0	.4649045	.131531	2.80	5.00	4150.	2.30000	345.00
3167.0	.4649045	.131531	2.80	5.00	3900.	2.91000	373.00
3168.0	.4649045	.131531	2.80	5.00	4000.	1.70000	354.00
3169.0	.4649045	.131531	2.07	5.00	5100.	2.90000	469.00
3170.0	.4649045	.131531	2.00	5.00	5100.	2.10000	432.00
3171.0	.4649045	.131531	2.88	5.00	4200.	1.90000	387.00
3172.0	.4649045	.131531	3.06	5.00	4600.	3.50000	500.00
3186.0	.4640090	.133531	2.99	5.00	104.0	2.60000	630.00
3187.0	.4640090	.133531	2.90	5.00	92.00	1.90000	465.00
3188.0	.4640090	.133531	2.91	5.00	71.00	.590000	364.00
3189.0	.4640090	.133531	2.39	5.00	188.0	2.40000	594.00
3190.0	.4640090	.133531	2.59	5.00	92.00	1.56000	564.00
3191.0	.4640090	.133531	2.79	5.00	250.0	2.43000	664.00
3192.0	.4640090	.333531	2.60	5.00	740.0	2.56000	856.00
3193.0	.4640090	.133531	2.88	5.00	190.0	1.72000	629.00
3194.0	.4640090	.333531	2.79	5.00	660.0	2.47000	704.00
3195.0	.4640090	.133531	2.79	5.00	600.0	2.71000	778.00
3196.0	.4640090	.333531	2.58	5.00	720.0	3.04000	994.00
3197.0	.4640090	.833531	2.83	5.00	2400.	2.72000	1255.0
3198.0	.4640090	.833531	2.68	5.00	2300.	4.40000	1263.0
3199.0	.4640090	.833531	2.51	5.00	2200.	3.50000	1233.0
3200.0	.4640090	.833531	2.80	5.00	4500.	5.80000	1348.0
3201.0	.4640090	.833531	2.68	5.00	4550.	3.00000	1427.0
3202.0	.4640090	.833531	2.68	5.00	4400.	3.85000	1374.0
3203.0	.4640090	.833531	2.80	5.00	6100.	3.18000	1593.0
3204.0	.4640090	.833531	2.90	5.00	6400.	4.20000	2095.0
3205.0	.4640090	.833531	2.50	5.00	6300.	2.88000	1384.0
3206.0	.4640090	.833531	2.98	5.00	6300.	4.00000	1586.0
3207.0	.4640090	.833531	2.58	5.00	4150.	3.50000	1356.0
3234.0	.4640090	.434531	2.90	2.00	680.0	2.90000	642.00
3235.0	.4640090	.134531	2.65	2.00	690.0	2.4800	520.00
3236.0	.4640090	.434531	3.20	2.00	680.0	2.1000	545.00
3237.0	.4640090	.134531	3.10	2.00	667.0	1.70000	532.00
3238.0	.4640090	.134531	2.80	2.00	660.0	1.62000	557.00
3239.0	.4640090	.134531	2.69	2.00	640.0	1.30000	643.00
3240.0	.4640090	.134531	3.19	2.00	615.0	1.50000	544.00
3241.0	.4640090	.134531	3.08	2.00	645.0	1.60000	585.00
3242.0	.4649045	.134531	2.80	2.00	370.0	.284000	94.000
3243.0	.4649045	.134531	2.70	2.00	310.0	.63000	99.000
3244.0	.4649045	.134531	2.66	2.00	360.0	.372000	101.00
3245.0	.4649045	.134531	2.61	2.00	400.0	.750000	132.00
3246.0	.4649045	.134531	2.70	2.00	280.0	.360000	93.000
3247.0	.4649045	.134531	2.50	2.00	372.0	.570000	125.00
3248.0	.4649045	.134531	2.15	2.00	312.0	.250000	89.000
3249.0	.4649045	.134531	2.05	2.00	328.0	.600000	133.00
3262.0	.4649090	.135531	2.63	2.00	550.0	1.40000	493.00
3263.0	.4649090	.135531	2.20	2.00	530.0	1.90000	512.00
3264.0	.4649090	.135531	2.30	2.00	670.0	3.40000	577.00
3265.0	.4649090	.135531	2.68	2.00	610.0	1.00000	484.00
3266.0	.4649090	.135531	3.05	2.00	620.0	2.58000	540.00
3267.0	.4649090	.135531	2.89	2.00	490.0	.750000	374.00
3268.0	.4649090	.135531	2.78	2.00	570.0	1.00000	458.00
3269.0	.4649090	.135531	2.92	2.00	510.0	.840000	444.00
3270.0	.4649090	.135531	2.89	2.00	455.0		498.00
3271.0	.4649000	.135531	2.59	2.00	540.0	1.0000	621.00
3272.0	.4649000	.335531	2.42	2.00	550.0	.750000	762.00
3273.0	.4649000	.335531	2.63	2.00	510.0	.640000	672.00
3274.0	.4649000	.335531	2.71	2.00	570.0	1.3000	659.00
3275.0	.4649000	.335531	2.78	2.00	500.0	.600000	620.00
3276.0	.4649000	.335531	2.50	2.00	500.0	.960000	584.00
3277.0	.4649000	.335531	2.68	2.00	460.0	.660000	582.00
3278.0	.4649000	.335531	2.50	2.00	510.0	.610000	610.00
3291.0	.4644590	.136441	2.49	5.00	98.00	.171000	582.00
3292.0	.4644590	.136441	2.56	5.00	84.00	.870000	587.00
3293.0	.4644590	.136441	2.91	5.00	75.00	.590000	477.00
3294.0	.4644590	.136441	2.69	5.00	150.0	.850000	469.00
3295.0	.4644590	.136441	2.83	5.00	140.0	.770000	315.00
3296.0	.4644590	.136441	3.18	5.00	160.0	1.40000	605.00
3297.0	.4644590	.136441	2.78	5.00	630.0	1.80000	1003.0
3298.0	.4644590	.136441	2.80	5.00	460.0	.370000	926.00
3299.0	.4644590	.136441	2.41	5.00	680.0	1.90000	899.00
3300.0	.4644590	.236441	2.50	5.00	2200.	2.70000	1186.0
3301.0	.4644590	.336441	2.81	5.00	2200.	2.50000	1335.0
3302.0	.4644590	.236441	2.39	5.00	2300.	2.55000	1191.0
3303.0	.4644590	.336441	2.64	5.00	4100.	1.88000	1297.0
3304.0	.4644590	.336441	2.88	5.00	4400.	2.64000	1572.0
3305.0	.4644590	.836441	2.77	5.00	4100.	2.22000	1396.0
3306.0	.4644590	.836441	2.88	5.00	5800.	1.35000	1636.0
3307.0	.4644590	.836441	2.59	5.00	6100.	2.22000	1551.0
3308.0	.4644590	.836441	2.68	5.00	5900.	3.93000	1282.0
3317.0	.4644590	.137441	2.78	5.00	65.00	.850000	419.00
3318.0	.4644590	.137441	2.67	5.00	74.00	1.72000	508.00
3319.0	.4644590	.137441	2.59	5.00	49.00	.350000	426.00
3320.0	.4644590	.137441	2.89	5.00	170.0	.810000	543.00
3321.0	.4644590	.137441	2.51	5.00	150.0	.950000	522.00
3322.0	.4644590	.137441	2.51	5.00	160.0	1.39000	494.00
3323.0	.4644590	.137441	2.72	5.00	640.0	1.98000	710.00
3324.0	.4644590	.337441	2.59	5.00	730.0	3.20000	1202.0
3325.0	.4644590	.137441	2.75	5.00	590.0	1.25000	746.00
3326.0	.4644590	.337441	2.60	5.00	1650.	1.54000	926.00
3327.0	.4644590	.237441	2.80	5.00	1900.	.780000	1153.0
3328.0	.4644590	.337441	2.50	5.00	2100.	2.30000	1124.0
3329.0	.4644590	.237441	2.61	5.00	4590.	2.73000	1376.0
3330.0	.4644590	.337441	2.78	5.00			1420.0
3331.0	.4644590	.837441	2.57	5.00	4490.	2.66000	1318.0
3332.0	.4644590	.837441	2.75	5.00	5600.	2.26000	1410.0
3333.0	.4644590	.837441	2.72	5.00	5100.	1.60000	1410.0
3334.0	.4644590	.837441	2.72	5.00	5600.	2.76000	1406.0
3356.0	.4642290	.338441	2.59	5.00	680.0	2.14000	768.00
3357.0	.4642290	.138441	2.50	5.00	530.0	.860000	486.00
3358.0	.4642290	.338441	2.60	5.00	470.0	.600000	907.00
3359.0	.4642290	.138441	2.50	5.00	640.0	1.80000	795.00
3360.0	.4642290	.138441	2.50	5.00	370.0	.370000	536.00
3361.0	.4642290	.138441	2.61	5.00	520.0	.590000	499.00
3362.0	.4642290	.138441	2.68	5.00	540.0	1.84000	793.00
3363.0	.4642290	.138441	2.90	5.00	620.0	2.00000	761.00
3364.0	.4642290	.138441	2.61	5.00	620.0	1.60000	696.00
3365.0	.4646790	.138441	2.89	5.00	480.0	.990000	392.00
3366.0	.4646790	.138441	2.79	5.00	610.0	.250000	342.00
3367.0	.4646790	.138441	2.99	5.00	480.0	.430000	273.00
3368.0	.4646790	.138441	2.89	5.00	360.0	.280000	336.00
3369.0	.4646790	.138441	2.75	5.00	29.00	.150000	362.00
3370.0	.4646790	.138441	2.58	5.00	440.0	.850000	351.00
3371.0	.4646790	.138441	2.78	5.00	440.0	.510000	390.00
3372.0	.4646790	.138441	2.86	5.00	530.0	.560000	349.00
3385.0	.4649067	.140441	2.60	5.00	470.0	1.30000	386.00
3386.0	.4649067	.140441	2.61	5.00	350.0	.260000	389.00
3387.0	.4649067	.140441	2.60	5.00	253.0	.250000	250.00
3388.0	.4649067	.140441	2.70	5.00	380.0	1.40000	245.00
3389.0	.4649067	.140441	2.52	5.00	430.0	.830000	406.00
3390.0	.4649067	.140441	2.52	5.00	420.0	.750000	229.00
3391.0	.4649067	.140441	2.44	5.00	500.0	1.30000	337.00
3392.0	.4649067	.140441	2.58	5.00	394.0	.800000	203.00
3393.0	.4649022	.140441	2.60	5.00	450.0	.510000	356.00
3394.0	.4649022	.340441	2.61	5.00	490.0	.740000	317.00
3395.0	.4649022	.340441	2.73	5.00	440.0	.700000	280.00
3396.0	.4649022	.140441	2.62	5.00	460.0	1.10000	309.00
3397.0	.4649022	.140441	2.58	5.00	520.0	.250000	308.00
3398.0	.4649022	.140441	2.68	5.00	430.0	.350000	455.00
3399.0	.4649022	.140441	2.70	5.00	470.0	.670000	341.00
3400.0	.4649022	.940441	2.70	5.00	430.0	.330000	469.00
3401.0	.6649090	.102441	1.68	5.00	94.00	1.40000	305.10
3402.0	.6649090	.102441	1.85	5.00	80.00	.710000	278.90
3403.0	.6649090	.102441	1.66	5.00	54.00	.260000	249.60
3404.0	.6649090	.102441	1.67	5.00	95.00	.830000	190.20
3405.0	.6649090	.102441	1.54	5.00	176.0	1.70000	501.00
3406.0	.6649090	.102441	1.25	5.00	180.0	1.09000	348.70
3407.0	.6649090	.102441	1.47	5.00	192.0	1.69000	473.10
3408.0	.6649090	.102441	1.63	5.00	170.0	1.50000	471.60
3409.0	.6649090	.102441	1.44	5.00	760.0	2.70000	611.00
3410.0	.6649090	.302441	1.85	5.00	580.0	.880000	428.60
3411.0	.6649090	.102441	1.90	5.00	700.0	2.70000	580.80
3412.0	.6649090	.102441	1.51	5.00	690.0	1.90000	647.10
3413.0	.6649090	.402441	1.29	5.00	1500.	1.10000	583.60
3414.0	.6649090	.502441	1.24	5.00	1630.	1.05000	573.30
3415.0	.6649090	.402441	1.48	5.00	1400.	1.56000	969.20
3416.0	.6649090	.802441	1.43	5.00	5000.	2.70000	750.40
3417.0	.6649090	.802441	1.64	5.00	4950.	2.50000	1347.0
3418.0	.6649090	.802441	1.76	5.00	4500.	2.85000	1194.2
3419.0	.6649090	.802441	1.71	5.00	6950.	6.00000	1290.2
3420.0	.6649090	.802441	1.71	5.00	7700.	2.60000	637.40
3421.0	.6649090	.802441	1.23	5.00	6100.	3.50000	765.50
3422.0	.6649090	.802441	1.89	5.00	4700.	2.50000	439.90
3430.0	.6649090	.502441	1.67	5.00	570.0	.870000	558.20
3431.0	.6649090	.102441	1.65	5.00	2000.	2.90000	660.00
3440.0	.6649000	.104441	1.41	5.00	105.0	1.90000	510.00
3441.0	.6649000	.104441	1.45	5.00	100.0	1.02000	715.70
3442.0	.6649000	.104441	1.54	5.00	100.0	.820000	545.40
3443.0	.6649000	.104441	1.41	5.00	100.0	.940000	402.20
3444.0	.6649000	.304441	1.50	5.00	160.0	1.19000	595.90
3445.0	.6649000	.304441	1.27	5.00	150.0	1.10000	381.90
3446.0	.6649000	.404441	1.50	5.00	140.0	.510000	577.10
3447.0	.6649000	.104441	1.27	5.00	170.0	1.06000	509.20
3448.0	.6649000	.304441	1.26	5.00	610.0	2.10000	702.20
3449.0	.6649000	.404441	1.75	5.00	610.0	2.10000	487.40
3450.0	.6649000	.304441	1.30	5.00	700.0	2.10000	828.50
3451.0	.6649000	.304441	1.50	5.00	650.0	1.59000	786.30
3452.0	.6649000	.304441	1.43	5.00	610.0	1.90000	716.50
3453.0	.6649000	.304441	1.44	5.00	1900.	2.90000	835.90
3454.0	.6649000	.304441	1.38	5.00	1900.	2.60000	614.70
3455.0	.6649000	.304441	1.41	5.00	1800.	1.10000	787.10
3456.0	.6649000	.304441	1.41	5.00	2100.	3.10000	884.10
3457.0	.6649000	.804441	1.28	5.00	5500.	2.78000	802.60
3458.0	.6649000	.804441	1.53	5.00	5100.	1.64000	1069.2
3459.0	.6649000	.104441	1.47	5.00	5600.	3.30000	1209.5
3460.0	.6649000	.104441	1.49	5.00	5300.	5.00000	1024.8
3461.0	.6649000	.804441	1.41	5.00	4750.	4.80000	1471.4
3462.0	.6649000	.804441	1.52	5.00	4000.	1.80000	987.80
3463.0	.6649000	.804441	1.44	5.00	4150.	4.30000	1223.8
3464.0	.6649000	.304441	1.50	5.00	4100.	3.00000	1542.1
3471.0	.6649045	.105441	1.49	5.00	58.00	.270000	53.000
3472.0	.6649045	.105441	1.87	5.00	40.00	.190000	37.200

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
3473.0	.6649045	.105441	1.78	5.00	84.00	.700000	64.100
3474.0	.6649045	.105441	1.69	5.00	44.00	.330000	75.200
3479.0	.6649045	.105441	1.55	5.00	170.0	.550000	89.500
3480.0	.6649045	.105441	2.10	5.00		.200000	51.500
3481.0	.6649045	.105441	1.50	5.00	85.00	.350000	91.100
3482.0	.6649045	.105441	1.73	5.00	87.00	.220000	46.700
3483.0	.6649045	.105441	1.39	5.00	450.0	1.14000	168.00
3484.0	.6649045	.105441	1.48	5.00	360.0	.660000	137.80
3485.0	.6649045	.105441	1.54	5.00	420.0	1.20000	138.60
3486.0	.6649045	.105441	1.55	5.00	350.0	.410000	153.70
3487.0	.6649045	.105441	1.47	5.00	1500.	1.90000	310.60
3488.0	.6649045	.105441	1.80	5.00	1200.	.880000	259.10
3489.0	.6649045	.105441	1.52	5.00	1400.	1.10000	299.50
3490.0	.6649045	.105441	1.39	5.00	1300.	.890000	225.80
3491.0	.6649045	.105441	1.68	5.00	3100.	1.53000	418.80
3492.0	.6649045	.105441	1.52	5.00	2850.	.820000	294.80
3493.0	.6649045	.105441	1.79	5.00	4000.	1.50000	340.70
3494.0	.6649045	.105441	1.77	5.00	5100.	1.40000	422.60
3495.0	.6649045	.105441	1.84	5.00	4100.	2.05000	427.90
3496.0	.6649045	.105441	2.04	5.00	5300.	2.40000	433.90
3525.0	.6649090	.306441	1.57	5.00	128.0	1.68000	742.80
3526.0	.6649090	.306441	1.54	5.00	96.00	1.20000	599.70
3527.0	.6649090	.306441	1.47	5.00	130.0	2.40000	780.40
3528.0	.6649090	.306441	1.61	5.00	105.0	1.53000	750.40
3529.0	.6649090	.306441	1.75	5.00	700.0	3.25000	1192.0
3530.0	.6649090	.806441	1.46	5.00	600.0	2.00000	939.60
3532.0	.6649090	.806441	2.04	5.00	700.0	3.00000	969.20
3533.0	.6649090	.806441	1.64	5.00	685.0	2.03000	975.90
3534.0	.6649090	.806441	1.35	5.00	6000.	3.74000	1157.8
3535.0	.6649090	.806441	1.37	5.00	7000.	3.52000	832.20
3536.0	.6649090	.806441	1.36	5.00	5200.	2.86000	584.60
3537.0	.6649090	.806441	1.34	5.00	5500.	4.26000	1647.4
3538.0	.6649090	.806441	1.41	5.00	5400.	3.50000	1857.8
3539.0	.6649090	.106401	1.70	5.00	110.0	2.58000	1489.6
3540.0	.6649090	.106401	1.72	5.00	95.00	1.84000	876.70
3541.0	.6649090	.106401	1.70	5.00	66.00	.410000	806.30
3542.0	.6649090	.106401	1.68	5.00	120.0	3.00000	930.00
3543.0	.6649090	.806401	1.70	5.00	740.0	2.08000	1456.1
3544.0	.6649090	.806401	1.70	5.00	740.0	3.24000	1615.8
3545.0	.6649090	.806401	1.70	5.00	740.0	2.50000	1281.5
3546.0	.6649090	.806401	1.70	5.00	750.0	3.70000	1531.6
3547.0	.6649090	.806401	1.70	5.00	700.0	3.10000	1246.6
3548.0	.6649090	.806401	1.64	5.00	730.0	4.30000	1857.8
3549.0	.6649090	.806401	1.77	5.00	7200.	4.40000	1993.0
3550.0	.6649090	.806401	1.70	5.00	7900.	5.53000	2398.3
3551.0	.6649090	.806401	1.74	5.00	6100.	1.70000	1032.2
3552.0	.6649090	.107441	1.56	5.00	189.0	1.70000	831.50
3553.0	.6649090	.107441	1.53	5.00	170.0	.900000	565.80
3554.0	.6649090	.107441	1.52	5.00	130.0	.920000	747.40
3555.0	.6649090	.107441	1.62	5.00	195.0	1.20000	515.30
3556.0	.6649090	.807441	1.49	5.00	200.0	4.80000	1376.1
3557.0	.6649090	.807441	1.48	5.00	2700.	11.0000	1829.3
3558.0	.6649090	.807441	1.84	5.00	2500.	2.28000	1128.5
3559.0	.6649090	.807441	1.50	5.00	2200.	3.70000	1268.4
3560.0	.6649090	.807441	1.49	5.00	5700.	3.70000	1448.8
3561.0	.6649090	.807441	1.30	5.00	4300.	3.03000	1477.9
3562.0	.6649090	.807441	1.74	5.00	4400.	7.70000	1871.4
3563.0	.6649090	.807441	1.52	5.00	4100.	3.98000	1724.5
3565.0	.6649090	.407401	1.74	5.00	186.0	1.80000	1076.6
3566.0	.6649090	.307401	1.89	5.00	200.0	2.50000	1011.4
3567.0	.6649090	.307401	1.99	5.00	190.0	1.90000	984.00
3568.0	.6649090	.807401	1.51	5.00	2500.	3.20000	1898.4
3569.0	.6649090	.807401	1.92	5.00	2500.	3.40000	1682.4
3570.0	.6649090	.807401	1.50	5.00	2400.	5.70000	1633.3
3571.0	.6649090	.807401	1.70	5.00	2300.	3.16000	1703.5
3572.0	.6649090	.807401	1.92	5.00	3700.	1.90000	2020.0
3573.0	.6649090	.807401	1.69	5.00	4000.	4.42000	2202.4
3574.0	.6649090	.807401	2.19	5.00	5000.	3.79000	1993.0
3575.0	.6649090	.807401	1.71	5.00	4800.	4.30000	2026.7
3602.0	.6644590	.308441	1.41	5.00	570.0	1.82000	546.90
3603.0	.6644590	.308441	1.36	5.00	440.0	1.04000	339.20
3604.0	.6644590	.308441	1.34	5.00	590.0	1.24000	621.50
3605.0	.6644590	.408441	1.35	5.00	640.0	3.20000	546.90
3606.0	.6644590	.108441	1.67	5.00	600.0	1.35000	601.90
3607.0	.6644590	.108441	1.71	5.00	570.0	2.00000	685.60
3608.0	.6644590	.108441	1.63	5.00	560.0	1.60000	697.60
3609.0	.6644590	.108401	1.83	5.00	640.0	2.20000	681.10
3610.0	.6644590	.108401	1.70	5.00	670.0	1.91000	781.90
3611.0	.6644590	.108401	1.79	5.00	690.0	3.20000	745.90
3612.0	.6644590	.108401	1.86	5.00	520.0	1.35000	562.70
3613.0	.6444590	.108401	1.61	5.00	720.0	2.16000	885.60
3614.0	.6644590	.108401	1.62	5.00	490.0	2.20000	910.00
3615.0	.6644590	.108401	1.70	5.00	660.0	2.30000	743.60
3616.0	.6644590	.108401	1.74	5.00	712.0	3.00000	989.20
3629.0	.6649000	.109441	1.34	5.00	520.0	1.19000	561.20
3630.0	.6649000	.109441	1.38	5.00	480.0	.810000	592.90
3631.0	.6649000	.309441	1.34	5.00	546.0	1.80000	664.50
3632.0	.6649090	.109441	2.02	5.00	180.0	1.30000	213.90
3633.0	.6649090	.109441	1.56	5.00	190.0	1.19000	249.60
3634.0	.6649090	.109441	1.40	5.00	140.0	.650000	216.30
3635.0	.6649090	.109441	1.44	5.00	174.0	1.40000	403.70
3636.0	.6649090	.309441	1.63	5.00	380.0	.720000	364.50
3637.0	.6649090	.309441	1.98	5.00	630.0	.500000	560.50
3638.0	.6649090	.309441	1.67	5.00	480.0	1.00000	261.50
3639.0	.6649090	.309441	1.80	5.00	570.0	2.30000	415.10
3640.0	.6649090	.109441	1.46	5.00	1700.	1.26000	432.40
3641.0	.6649090	.109441	1.45	5.00	1650.	1.70000	607.20
3642.0	.6649090	.809441	1.59	5.00	1700.	1.83000	433.90
3643.0	.6649090	.309441	1.42	5.00	1700.		261.50
3644.0	.6649090	.309441	1.71	5.00	6000.	3.40000	880.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
3645.0	.6649090	.309441	1.61	5.00	5400.	3.97000	971.50
3646.0	.6649090	.309441	1.60	5.00			277.30
3647.0	.6649090	.809441	1.49	5.00			277.30
3664.0	.6649045	.111441	1.61	2.00	94.00	.670000	64.900
3665.0	.6649045	.111441	2.29	2.00	86.00	.380000	54.600
3668.0	.6649045	.111441	1.93	2.00	113.0	.390000	57.000
3669.0	.6649045	.111441	1.90	2.00	97.00	.280000	49.900
3670.0	.6649045	.111441	2.27	2.00	100.0	.350000	61.800
3671.0	.6649045	.111441	1.98	2.00	63.00	.130000	41.200
3672.0	.6649045	.111441	2.22	2.00	390.0	1.40000	103.00
3673.0	.6649045	.111441	2.60	2.00	360.0	.790000	71.300
3674.0	.6649045	.111441	1.70	2.00	365.0	.700000	103.00
3675.0	.6649045	.111441	1.67	2.00	334.0	.650000	138.60
3676.0	.6649045	.111441	2.04	2.00	300.0	.500000	95.100
3677.0	.6649045	.111441	2.70	2.00	1500.	.760000	220.30
3678.0	.6649045	.111441	1.86	2.00	1350.	1.03000	230.60
3679.0	.6649045	.111441	1.80	2.00	1300.	.900000	174.30
3680.0	.6649045	.111441	2.08	2.00	1000.	.590000	151.30
3681.0	.6649045	.111441	2.10	2.00	2350.	.740000	265.40
3682.0	.6649045	.111441	2.08	2.00	2600.	1.40000	237.70
3683.0	.6649045	.111441	2.70	2.00	1900.	.630000	225.00
3684.0	.6649045	.111441	2.19	2.00	3200.	.620000	252.80
3685.0	.6649045	.111441	2.68	2.00	3800.	1.30000	255.10
3686.0	.6649045	.111441	2.01	2.00	5100.	1.29000	332.80
3687.0	.6649045	.111441	1.60	2.00	4000.	1.20000	263.10
3688.0	.6649045	.111441	1.88	2.00	3600.	1.03000	233.70
3706.0	.6649090	.112441	1.52	2.00	97.00	.880000	178.30
3707.0	.6649090	.112441	1.80	2.00	90.00	.460000	233.70
3708.0	.6649090	.112441	1.43	2.00	118.0	1.30000	235.30
3709.0	.6649090	.112441	1.80	2.00	79.00	.380000	221.90
3710.0	.6649090	.112441	1.37	2.00	140.0	.700000	217.90
3711.0	.6649090	.112441	1.32	2.00	130.0	.320000	306.70
3712.0	.6649090	.312441	1.34	2.00	190.0	1.50000	309.00
3713.0	.6649090	.312441	1.50	2.00	141.0	.800000	229.80
3714.0	.6649090	.112441	1.27	2.00	560.0	1.50000	375.60
3715.0	.6649090	.112441	1.64	2.00	540.0	1.60000	397.70
3716.0	.6649090	.112441	1.33	2.00	425.0	.450000	396.20
3717.0	.6649090	.112441	1.43	2.00	560.0	1.05000	427.10
3718.0	.6649090	.112441	1.16	2.00	540.0	1.40000	380.40
3719.0	.6649090	.312441	1.24	2.00	1700.	1.32000	591.40
3720.0	.6649090	.312441	1.15	2.00	1700.	1.80000	214.70
3721.0	.6649090	.312441	1.24	2.00	1800.	1.85000	606.50
3722.0	.6649090	.112441	1.08	2.00	1700.	2.30000	540.90
3723.0	.6649090	.312441	1.16	2.00	3100.	1.60000	305.90
3724.0	.6649090	.312441	1.08	2.00	3400.	2.00000	558.20
3725.0	.6649090	.312441	1.10	2.00	2900.	1.12000	403.70
3726.0	.6649090	.312441	1.18	2.00	5100.	3.50000	509.20
3727.0	.6649090	.312441	1.15	2.00	5100.	1.23000	253.60
3728.0	.6649090	.812441	1.09	2.00	5600.	2.58000	595.20
3729.0	.6649090	.812441	1.08	2.00	4700.	1.30000	735.30
3730.0	.6649090	.112441	1.10	2.00	1850.	1.35000	660.70
3731.0	.6649090	.312441	1.13	2.00	3150.	1.03000	712.70
3732.0	.6649000	.313441	1.19	2.00	110.0	.860000	427.10
3733.0	.6649000	.913441	1.17	2.00	78.00	.910000	359.80
3734.0	.6649000	.313441	1.18	2.00	93.00	.540000	418.80
3735.0	.6649000	.313441	1.16	2.00	77.00	.500000	359.00
3736.0	.6649000	.313441	1.24	2.00	90.00	.270000	388.30
3737.0	.6649000	.313441	1.20	2.00	130.0	.420000	485.90
3738.0	.6649000	.313441	1.24	2.00	130.0	.440000	471.60
3739.0	.6649000	.313441	1.17	2.00	180.0	.860000	494.20
3740.0	.6649000	.313441	1.20	2.00	4500.	1.40000	501.70
3741.0	.6649000	.313441	1.30	2.00	5300.	1.61000	464.80
3742.0	.6649000	.813441	1.08	2.00	3950.	2.00000	562.00
3743.0	.6649000	.313441	1.16	2.00	4600.	1.46000	676.50
3760.0	.6649000	.313441	1.23	2.00	420.0	6.55000	396.20
3761.0	.6649000	.313441	1.16	2.00	485.0	1.30000	482.90
3762.0	.6649000	.313441	1.18	2.00	460.0	.770000	492.70

EXHIBIT 1.2 TENSION DATA, REDUCED

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0141.0	.4119090	.1[illegible]082	4.41	14.3	86.00		138.00
0143.0	.4129090	.3[illegible]082	3.82	14.3	180.0		105.00
0144.0	.4129090	.1[illegible]082	3.82	14.3	90.00		74.000
0145.0	.4129090	.3[illegible]082	3.82	14.3	140.0		93.000
0146.0	.4129090	.1[illegible]082	3.82	14.3	160.0		97.000
0147.0	.4129090	.1[illegible]082	3.82	14.3	130.0		76.000
0154.0	.5149090	.3[illegible]602	2.69	6.00	170.0		87.500
0155.0	.5149000	.1[illegible]602	2.20	6.00	190.0		81.000
0156.0	.5149045	.1[illegible]602	2.20	6.00	170.0		106.000
0163.0	.5149090	.3[illegible]602	2.37	6.00	130.0		87.000
0164.0	.5149000	.1[illegible]602	2.37	6.00	140.0		53.500
0165.0	.5149045	.1[illegible]602	2.37	6.00	190.0		104.000
0176.0	.5149090	.1[illegible]602	2.53	6.00	270.0		33.500
0177.0	.5149045	.1[illegible]602	2.53	6.00	160.0		50.000
0178.0	.5149090	.1[illegible]602	2.53	6.20	280.0		92.000
0179.0	.5149000	.1[illegible]602	1.86	6.00	250.0		75.000
0180.0	.5149045	.1[illegible]602	1.86	6.00	230.0		97.000
0181.0	.5149090	.3[illegible]602	1.86	6.00	260.0		116.00
0185.0	.5149090	.1[illegible]602	2.3[illegible]	6.00	140.0		92.000
0186.0	.5149090	.1[illegible]602	2.3[illegible]	6.00	160.0		147.00
0195.0	.5139090	.1[illegible]082	2.86	2.00	520.0		308.00
0418.0	.2329090	.1[illegible]062	3.85	4.00	420.0	2.15000	72.100
0419.0	.2329090	.1[illegible]042	5.66	14.3	330.0	2.50000	95.300
0435.0	.2329090	.1[illegible]042	6.06	14.3	290.0	2.10000	51.000
0438.0	.2329090	.2[illegible]042	6.06	14.3	400.0	2.10000	30.800
0442.0	.2329090	.1[illegible]042	6.00	14.3	320.0		44.000
0449.0	.2329090	.1[illegible]042	5.17	14.3	1400.	1.80000	41.900
0450.0	.2329090	.1[illegible]042	5.17	14.3	1600.	3.30000	44.200
0451.0	.2329090	.1[illegible]042	5.17	14.3	1200.	2.00000	45.900
0455.0	.2329090	.1[illegible]042	5.87	14.3	45.00	1.90000	47.800
0456.0	.2329090	.1[illegible]042	5.87	14.3	49.00	3.80000	64.900
0464.0	.2329090	.1[illegible]082	5.77	14.3	47.30	2.40000	98.900
0471.0	.2329090	.1[illegible]082	4.17	14.3	49.00	3.50000	111.30
0474.0	.2329090	.1[illegible]082	4.17	14.3	1300.	2.70000	100.50
0479.0	.2329090	.1[illegible]082	4.92	14.3	48.00	3.20000	120.60
0480.0	.2329090	.1[illegible]082	4.92	14.3	46.00	1.80000	60.300
0482.0	.2329090	.1[illegible]072	4.92	14.3	46.00	1.90000	45.500
0486.0	.2329090	.1[illegible]072	4.84	14.3	1100.	3.10000	77.600
0489.0	.2329090	.2[illegible]072	4.84	14.3	1100.	3.80000	110.00
0491.0	.2329090	.2[illegible]072	4.84	14.3	1100.		46.900
0494.0	.2339011	.1[illegible]182	2.98	10.0	47.00	1.70000	48.900
0500.0	.2339011	.2[illegible]182	2.98	10.0	44.00	2.10000	76.700
0501.0	.2339011	.1[illegible]182	2.98	10.0	51.00	3.20000	63.000
0502.0	.2339011	.1[illegible]182	2.98	10.0	750.0	3.10000	59.000
0503.0	.2339011	.1[illegible]182	2.76	10.0	890.0		83.800
0507.0	.2339011	.1[illegible]182	2.76	10.0	43.00	1.30000	51.900
0511.0	.2339011	.1[illegible]182	2.76	10.0	48.00	1.10000	77.100
0515.0	.3349000	.1[illegible]282	2.44	6.00	45.00		73.000
0516.0	.3349000	.1[illegible]282	2.44	6.00	47.00		92.000
0517.0	.3349090	.1[illegible]282	2.44	6.00	45.00		106.00
0518.0	.3349000	.1[illegible]282	2.44	6.00	45.00		55.000
0519.0	.3349090	.1[illegible]282	2.44	6.00	44.00		71.000
0520.0	.3349045	.1[illegible]282	2.44	6.00	45.00		77.000
0521.0	.3349045	.1[illegible]282	2.44	6.00	44.00		71.000
0522.0	.3349090	.2[illegible]282	2.44	6.00	47.00		78.000
0523.0	.3349045	.2[illegible]282	2.44	6.00	46.00		70.000
0524.0	.3349000	.1[illegible]282	2.44	6.00	390.0		80.000
0525.0	.3349090	.2[illegible]282	2.41	6.00	380.0		74.000
0525.1	.3349090	.1[illegible]282	2.41	6.00	400.0		78.000
0526.0	.3349045	.1[illegible]282	2.41	6.00	370.0		59.000
0527.0	.3349000	.1[illegible]282	2.41	6.00	360.0	2.40000	74.000
0528.0	.3349090	.1[illegible]282	2.41	6.00	400.0	2.30000	97.400
0529.0	.3349045	.2[illegible]282	2.41	6.00	390.0	2.50000	72.000
0530.0	.3349000	.1[illegible]282	2.56	14.3	47.00	3.20000	66.000
0531.0	.3349090	.1[illegible]282	2.56	14.3	47.00	2.90000	69.000
0532.0	.3349045	.1[illegible]282	2.56	14.3	48.00	1.70000	66.000
0533.0	.3349000	.1[illegible]282	2.56	14.3	46.00	1.50000	55.000
0534.0	.3349090	.1[illegible]282	2.84	14.3	46.00	3.20000	81.000
0535.0	.3349045	.1[illegible]282	2.84	14.3	47.00	1.20000	83.000
0536.0	.3349000	.1[illegible]282	2.84	14.3	44.00	1.50000	70.000
0537.0	.3349090	.1[illegible]282	2.84	14.3	44.00	1.90000	89.300
0538.0	.3349045	.1[illegible]282	2.84	14.3	44.00	1.80000	57.000
0539.0	.3349000	.1[illegible]282	2.85	14.3	44.00	1.50000	29.000
0540.0	.3349090	.1[illegible]282	2.85	14.3	46.00	1.70000	107.70
0541.0	.3349045	.1[illegible]282	2.85	14.3	42.00	1.30000	64.000
0542.0	.3349000	.1[illegible]282	3.16	14.3	380.0	1.90000	75.000
0543.0	.3349090	.1[illegible]282	3.16	14.3	400.0	1.70000	84.000
0544.0	.3349045	.1[illegible]282	3.16	14.3	370.0	1.60000	59.000
0545.0	.3349000	.1[illegible]282	3.16	14.3	400.0	1.70000	78.000
0546.0	.3349090	.1[illegible]282	2.39	14.3	440.0	1.90000	79.000
0547.0	.3349045	.1[illegible]282	2.39	14.3	380.0	1.80000	73.000
0548.0	.3349090	.1[illegible]282	2.39	14.3	360.0	1.90000	64.000
0549.0	.3349090	.1[illegible]422	2.90	4.00	460.0	1.90000	83.000
0550.0	.3349090	.1[illegible]422	2.90	4.00	51.00	1.60000	81.000
0551.0	.3349090	.2[illegible]422	2.62	4.00	48.00	1.80000	50.000
0552.0	.3349090	.1[illegible]422	2.62	4.00	48.00	2.20000	113.00
0553.0	.3349000	.1[illegible]422	2.62	4.00	46.00	1.20000	38.000
0554.0	.3349000	.1[illegible]422	2.62	4.00	33.00	1.10000	32.000
0555.0	.3349000	.1[illegible]422	2.90	4.00	46.00	1.20000	36.000
0556.0	.3349000	.1[illegible]422	2.90	4.00	44.00	1.20000	38.000
0557.0	.3349045	.2[illegible]422	2.90	4.00	44.00	1.30000	69.200
0558.0	.3349045	.1[illegible]422	2.91	4.00	43.00	.980000	39.000
0559.0	.3349045	.1[illegible]422	2.91	4.00	44.00	1.20000	44.000
0560.0	.3349045	.1[illegible]422	2.91	4.00	49.00	1.30000	69.000
0561.0	.3349090	.1[illegible]422	2.93	4.00	410.0	2.50000	80.000
0562.0	.3349090	.1[illegible]422	2.93	4.00	390.0	1.80000	73.000
0563.0	.3349090	.1[illegible]422	2.93	4.00	520.0	2.00000	95.000
0564.0	.3349000	.1[illegible]422	3.30	4.00	330.0	1.30000	49.000

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0565.0	.3349000	.1[illegible]422	3.30	4.00	530.0	2.00000	42.000
0566.0	.3349000	.1[illegible]422	3.30	4.00	320.0	1.70000	87.000
0567.0	.3349045	.1[illegible]422	2.57	4.00	320.0	1.20000	33.500
0568.0	.3349045	.1[illegible]422	2.57	4.00	310.0	1.50000	45.000
0569.0	.3349045	.1[illegible]422	2.57	4.00	310.0	1.40000	62.000
0617.0	.3329090	.1[illegible]042	4.21	21.0	430.0	5.70000	117.40
0618.0	.3329090	.1[illegible]042	5.23	21.0	390.0	7.50000	146.00
0619.0	.3329090	.1[illegible]042	5.23	21.0	400.0	3.80000	99.400
0621.0	.3329090	.1[illegible]042	5.23	21.0	410.0	3.50000	115.00
0623.0	.3329090	.1[illegible]042	5.23	21.0	440.0	4.70000	134.00
0625.0	.3329090	.1[illegible]042	3.62	21.0	150.0	6.70000	138.00
0627.0	.3329090	.1[illegible]042	3.62	21.0	140.0	6.80000	127.00
0635.0	.3329090	.1[illegible]042	4.91	21.0	130.0	4.10000	132.00
0638.0	.3329090	.2[illegible]042	4.91	21.0	140.0	5.10000	50.000
0641.0	.3329090	.1[illegible]042	3.33	21.0	55.00	6.60000	149.00
0644.0	.3329090	.1[illegible]042	3.33	21.0	57.00	2.80000	125.00
0646.0	.3329090	.2[illegible]042	3.33	21.0	56.00	5.40000	80.000
0648.0	.3329090	.1[illegible]042	3.33	21.0	57.00	4.00000	134.00
0649.0	.3329090	.1[illegible]042	3.33	21.0	56.00	4.30000	113.00
0689.0	.3319011	.3[illegible]042	5.10	14.3	26.00		78.000
0692.0	.3319011	.1[illegible]042	5.10	14.3	40.00		93.800
0694.0	.3319011	.1[illegible]042	5.10	14.3	40.00	.300000	93.800
0699.0	.3319011	.3[illegible]042	5.10	14.3	43.00		83.800
0706.0	.3319011	.1[illegible]042	4.33	14.3	41.00		99.000
0707.0	.3319011	.1[illegible]042	4.33	14.3	44.00		93.800
0708.0	.3319011	.1[illegible]042	4.33	14.3	210.0		125.80
0709.0	.3319011	.3[illegible]042	4.33	14.3	180.0		110.50
0714.0	.3319011	.3[illegible]042	4.33	14.3	230.0		127.30
0720.0	.3319011	.1[illegible]042	4.33	14.3	7.600		124.20
0723.0	.3319011	.1[illegible]042	4.33	14.3	12.00		181.50
0725.0	.3319011	.1[illegible]042	4.33	14.3	10.00		144.50
0727.0	.3319011	.1[illegible]042	3.88	14.3	14.00		97.000
0727.1	.3319011	.1[illegible]042	4.33	14.3	270.0		130.50
0729.0	.3319011	.1[illegible]042	3.88	14.3	280.0		126.80
0733.0	.3329090	.1[illegible]022	2.64	14.3	330.0		131.20
0734.0	.3329090	.1[illegible]022	2.64	14.3	310.0		159.40
0735.0	.3329090	.1[illegible]022	2.64	14.3	280.0	0	105.00
0736.0	.3329090	.1[illegible]022	2.64	14.3	310.0		101.50
0758.0	.3319011	.1[illegible]042	5.25	14.3	77.00		127.00
0759.0	.4319011	.1[illegible]042	5.25	14.3	69.00		68.000
0761.0	.4319011	.1[illegible]042	5.25	14.3	57.00		97.000
0880.0	.5349000	.1[illegible]582	.700	2.00	38.00	3.50000	50.600
0914.0	.5349090	.2[illegible]632	.700	6.00	42.00	6.90000	61.000
0914.1	.5349090	.1[illegible]632	.700	6.00	35.00	5.80000	82.000
0915.0	.5349000	.1[illegible]632	.700	6.00	42.00	5.60000	75.000
0916.0	.5349000	.1[illegible]632	.700	6.00	80.00	5.80000	84.000
0917.0	.5349000	.1[illegible]632	.700	6.00	42.00	4.70000	54.000
0918.0	.5349090	.1[illegible]632	.700	6.00	50.00		92.300
0919.0	.5349045	.2[illegible]532	.700	6.00	42.00	2.20000	60.000
0919.1	.5349045	.2[illegible]532	.700	6.00	43.00	2.20000	60.000
0919.2	.5349045	.2[illegible]532	.700	6.00	180.0	5.70000	77.400
0919.3	.5349045	.1[illegible]532	.700	6.00	200.0	6.00000	69.000
0920.0	.5349000	.2[illegible]632	.700	6.00	42.00		57.000
0920.1	.5349000	.1[illegible]632	.700	6.00	43.00		63.000
0921.0	.5349000	.1[illegible]632	.700	6.00	50.00		109.00
0922.0	.5349045	.2[illegible]532	.700	6.00	40.00	2.10000	51.000
0922.1	.5349045	.2[illegible]532	.700	6.00	28.00	.750000	50.000
0922.2	.5349045	.1[illegible]532	.700	1.00	31.00	.750000	42.000
0923.0	.5349045	.2[illegible]532	.700	1.00	34.00	1.80000	35.000
0923.1	.5349045	.2[illegible]632	.700	1.00	190.0	2.20000	43.000
0923.2	.5349045	.2[illegible]732	.700	1.00	200.0	2.50000	55.000
0923.3	.5349045	.2[illegible]732	.700	2.00	220.0	1.90000	68.000
0923.4	.5349045	.2[illegible]732	.700	2.00	200.0	4.00000	64.000
0924.0	.5319011	.3[illegible]082	.300	2.00	56.00	3.40000	114.00
0924.1	.5319011	.2[illegible]082	.300	2.00	58.00	4.00000	127.00
0925.0	.5319011	.1[illegible]082	.300	2.00	98.00		236.00
0926.0	.5319011	.3[illegible]082	.300	2.00	48.00	3.90000	120.00
0927.0	.5319011	.1[illegible]082	.300	2.00	120.0		151.00
0928.0	.5319011	.1[illegible]082	.300	2.00	120.0		107.00
0929.0	.5319011	.1[illegible]082	.300	2.00	45.00	2.50000	93.000
0930.0	.5319011	.1[illegible]082	.300	2.00	220.0	4.60000	77.000
0931.0	.5319011	.1[illegible]082	.300	2.00	200.0	4.20000	117.00
0932.0	.5319011	.1[illegible]082	.300	6.00	370.0		157.00
0933.0	.5319011	.1[illegible]082	.300	6.00	210.0	5.70000	70.000
0934.0	.5319011	.1[illegible]082	.300	6.00	490.0		62.300
0935.0	.5319011	.1[illegible]082	.300	6.00	360.0		102.00
0936.0	.5319011	.1[illegible]082	.300	6.00	390.0		79.000
0937.0	.5319011	.1[illegible]082	.300	6.00	380.0	3.70000	79.000
0938.0	.5319011	.1[illegible]082	.300	6.00	390.0		101.00
0939.0	.5319011	.1[illegible]082	.300	6.00	290.0	3.60000	64.000
0940.0	.5319011	.1[illegible]082	.300	6.00	420.0	3.90000	86.000
0941.0	.5329090	.1[illegible]022	.300	6.00	48.00	1.60000	79.000
0942.0	.5329090	.1[illegible]022	.300	6.00	52.00	3.20000	74.000
0943.0	.5329090	.1[illegible]022	.300	6.00	50.00	3.10000	60.000
0944.0	.5329090	.1[illegible]022	.300	6.00	130.0		33.500
0945.0	.5329090	.1[illegible]022	.300	6.00	230.0	4.00000	101.00
0946.0	.5329090	.1[illegible]022	.300	6.00	230.0	3.90000	107.00
0947.0	.5329090	.1[illegible]022	.300	6.00	530.0	3.30000	104.00
0948.0	.5329090	.1[illegible]022	.300	6.00	600.0	3.80000	94.000
0949.0	.5329090	.1[illegible]022	.300	6.00	460.0	4.30000	87.000
0950.0	.5329090	.1[illegible]022	.300	6.00	240.0	3.60000	94.000
0951.0	.8449090	.1[illegible]162	.200	10.0	270.0		163.00
0952.0	.8449090	.1[illegible]162	.200	10.0	160.0		130.50
0953.0	.8449090	.1[illegible]162	.200	10.0	210.0		103.20
0954.0	.8449090	.1[illegible]162	.200	10.0	50.00		103.20
0955.0	.8449090	.1[illegible]142	.230	10.0	30.00	4.40000	97.800
0956.0	.8449090	.1[illegible]142	.230	10.0	27.00	11.0000	110.00
0957.0	.8449090	.1[illegible]142	.230	10.0	36.00	12.0000	101.20
0958.0	.8449000	.1[illegible]142	.230	10.0	34.00	5.30000	81.300
0959.0	.8449000	.1[illegible]142	.230	10.0	30.00	2.70000	100.60

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
0961.0	.8449000	.145122	.230	10.0	33.00	2.90000	91.300
0963.0	.8449000	.147122	.230	10.0	32.00		80.300
0964.0	.8449000	.147122	.230	10.0	64.00		92.000
0965.0	.8449000	.147122	.230	10.0	66.00		106.10
0966.0	.8449090	.248122	.230	10.0	28.00	3.30000	68.300
0967.0	.8449090	.151122	.230	10.0	33.00	3.50000	101.00
0970.0	.8449090	.154122	.230	10.0	29.00	2.80000	67.500
0972.0	.8449090	.155122	.230	10.0	53.00	7.30000	100.20
0973.0	.8449022	.157092	.230	10.0	50.00	2.10000	73.200
0975.0	.8449000	.158092	.230	10.0	48.00	1.40000	59.300
0977.0	.8449000	.160092	.230	10.0			64.300
0979.0	.8449000	.160092	.230	10.0	130.0	4.30000	73.600
0980.0	.8449000	.160092	.230	10.0	130.0	3.70000	65.300
0984.0	.8449090	.161092	.230	10.0	140.0	4.80000	80.000
0986.0	.8449090	.161062	.230	10.0	150.0		77.000
0987.0	.8449090	.161062	.230	10.0	150.0	4.30000	82.000
0990.0	.8449090	.162062	.230	10.0	9.500	2.00000	79.100
0992.0	.8449090	.162062	.230	10.0	10.00	1.60000	37.600
0994.0	.8449090	.162062	.230	10.0	9.200	2.80000	65.300
0996.0	.8449090	.164062	.230	10.0	50.00	11.0000	92.500
0998.0	.8449000	.164062	.230	10.0	9.300	1.80000	36.200
1001.0	.8449000	.164062	.230	10.0	9.300	4.40000	34.600
1002.0	.8449000	.164062	.230	10.0	9.000	1.00000	35.800
1007.0	.8449000	.165202	.210	10.0			92.700
1009.0	.8449090	.165202	.210	10.0	150.0	7.80000	115.60
1010.0	.8449090	.165202	.210	10.0	130.0	10.0000	78.400
1011.0	.8449090	.166202	.210	10.0	10.00	5.40000	95.500
1015.0	.8449090	.366202	.210	10.0	9.500	8.00000	107.90
1015.1	.8449090	.266202	.210	10.0	9.900	8.60000	119.00
1015.2	.8449090	.167202	.210	10.0	10.00	8.60000	109.00
1017.0	.8449000	.166202	.210	10.0	10.00	2.80000	102.80
1019.0	.8449000	.166202	.210	10.0	140.0	4.80000	130.70
1021.0	.8449000	.267252	.270	10.0	8.600	4.20000	62.600
1021.1	.8449000	.167252	.270	10.0	9.000		102.20
1023.0	.8449045	.267252	.270	10.0	7.200	6.70000	64.000
1023.1	.8449045	.168252	.270	10.0	7.400	.870000	59.900
1024.0	.8449045	.268252	.270	10.0	31.00	3.00000	74.100
1024.1	.8449040	.268252	.270	10.0	28.00	2.80000	48.600
1024.2	.8449045	.169252	.270	10.0	27.00	2.30000	79.800
1025.0	.8449045	.268252	.270	10.0	56.00	3.00000	71.000
1025.1	.8449045	.268252	.270	10.0	56.00	3.30000	61.400
1025.2	.8449045	.169252	.270	10.0	61.00	4.50000	92.800
1026.0	.8449045	.369252	.270	10.0	130.0	5.10000	78.700
1026.1	.8449045	.271252	.270	10.0	130.0	4.00000	51.500
1035.0	.8449000	.369252	.270	10.0	140.0	7.40000	133.00
1035.1	.8449090	.170252	.270	10.0	170.0	9.60000	158.00
1036.0	.8449090	.271252	.270	1.00	5.000	11.0000	158.00
1036.1	.8449090	.172252	.270	1.00	11.00	9.30000	119.00
1040.0	.8449090	.272252	.270	1.00	68.00	8.70000	85.300
1040.1	.8449090	.372252	.270	1.00	58.00	4.60000	79.100
1040.2	.8449090	.274252	.270	1.00	31.00	8.00000	111.00
1040.3	.8449090	.174252	.270	1.00			139.00
1042.0	.8449090	.273282	.190	1.00	150.0	5.80000	128.00
1042.1	.8449090	.273282	.190	1.00	130.0	6.50000	95.700
1042.2	.8449090	.374282	.190	1.00	150.0	9.10000	104.00
1042.3	.8449090	.175282	.190	1.00			139.00
1057.0	.8449000	.175282	.190	1.00	6.600	1.60000	78.700
1058.0	.8449000	.176282	.190	1.00	57.00	5.00000	106.00
1059.0	.8449000	.176282	.190	1.00	120.0	4.60000	102.00
1061.0	.8449045	.276282	.190	1.00	7.000	.890000	58.600
1061.1	.8449045	.178282	.190	1.00			68.000
1062.0	.8449045	.278282	.190	1.00	50.00	1.10000	68.700
1062.1	.8449045	.178282	.190	1.00			95.000
1063.0	.8449045	.178282	.190	1.00	110.0	2.70000	80.600
1071.0	.8449045	.179322	.140	1.00	6.500	.870000	52.600
1075.0	.8449045	.179322	.140	1.00	120.0	6.70000	84.200
1078.0	.8449045	.180282	.190	3.00	8.500	1.50000	57.200
1082.0	.8449045	.180282	.190	3.00	130.0	5.10000	74.000
1149.0	.2639011	.102012	6.70	10.0	3.700	2.50000	43.000
1150.0	.2639011	.103042	5.80	10.0	3.900	1.30000	34.000
1152.0	.2639011	.103012	6.70	10.0	51.00	2.80000	15.700
1154.0	.2639011	.103042	5.80	10.0	130.0	7.90000	74.100
1155.0	.2639011	.107072	4.85	10.0	100.0	3.90000	51.600
1156.0	.2639011	.107012	6.83	10.0	130.0	2.50000	59.000
1159.0	.2519011	.109042	6.60	10.0	9.000	2.40000	71.200
1162.0	.2639011	.107042	5.30	10.0	57.00	2.30000	40.000
1163.0	.2639011	.109072	4.80	10.0	81.00	2.50000	43.200
1164.0	.2639011	.102042	5.30	10.0	14.00	1.40000	27.000
1165.0	.2639011	.102042	5.30	10.0	150.0	1.40000	22.900
1166.0	.2639011	.102072	4.80	10.0	75.00	3.40000	57.000
1167.0	.2639011	.103072	4.80	2.00	68.00	2.70000	40.800
1175.0	.2639011	.103072	4.80	2.00	12.00	1.30000	28.900
1178.0	.2639011	.103042	5.30	2.00	72.00	1.80000	49.000
1180.0	.2639011	.104042	5.30	2.00	13.00	1.60000	19.000
1182.0	.2639011	.104072	4.80	2.00	4.600	1.40000	41.900
1183.0	.2639011	.104042	5.30	2.00	5.000	.820000	31.300
1188.0	.2519011	.113042	5.80	2.00	100.0	3.50000	52.900
1192.0	.2519011	.113042	5.80	2.00	27.00	1.40000	55.600
1194.0	.2519011	.113072	5.80	2.00	15.00	1.50000	97.000
1195.0	.2519011	.113012	5.80	2.00	23.00	1.80000	69.000
1199.0	.2519011	.114072	6.66	1.00	25.00	3.30000	45.800
1205.0	.2519011	.114012	6.66	1.00			7.0000
1206.0	.2519011	.114012	6.66	1.00	79.00	.830000	30.000
1211.0	.2519011	.115072	5.80	1.00	20.00	.940000	16.100
1212.0	.2639011	.107012	4.85	1.00	12.00		21.600
1217.0	.2639011	.109042	4.85	20.0	16.00	3.00000	80.000
1221.0	.2639011	.104012	5.31	20.0			80.800
1228.0	.2639011	.104072	2.46	20.0	75.00	4.50000	76.000
1232.0	.2639011	.105042	3.41	21.0	15.00	5.40000	58.200
1237.0	.8449045	.299152	.210	21.0	130.0		87.000

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
1237.1	.8449045	.199152	.210	20.0	120.0	2.00000	97.300
1238.0	.8449045	.299152	.210	21.0	6.500	2.00000	67.100
1238.1	.8449045	.209152	.210	1.00	4.000	1.60000	27.000
1253.0	.2639011	.108042	3.41	1.00	8.500	1.90000	27.400
1259.0	.2639011	.108072	2.46	1.00			27.400
1260.0	.2639011	.108072	2.46	1.00	68.00	2.20000	38.400
1262.0	.2639011	.109042	3.41	1.00	69.00	2.10000	32.200
1263.0	.2639011	.109112	2.85	1.00	9.300	3.00000	20.500
1264.0	.2639011	.109112	2.85	1.00			42.300
1282.0	.2639011	.103012	5.26	5.00	56.00	1.80000	39.600
1287.0	.2639011	.103042	3.59	5.00	5.800	2.60000	54.700
1288.0	.2639011	.103042	3.59	5.00	69.00	2.40000	50.500
1293.0	.2639011	.103012	5.26	5.00	5.000	1.40000	44.700
1298.0	.2639011	.104072	2.50	5.00	5.000	1.50000	64.400
1303.0	.2639011	.204072	2.50	5.00	85.00	4.50000	66.600
1303.1	.2639011	.204072	2.50	5.00	68.00	4.80000	59.900
1303.2	.2639011	.105072	2.50	5.00	72.00	3.00000	65.200
1310.0	.2639011	.104042	3.59	5.00	18.00	2.40000	67.300
1315.0	.2639011	.104042	2.59	5.00	87.00	2.40000	52.200
1322.0	.2639011	.105112	2.67	5.00	5.000	1.00000	53.100
1323.0	.2639011	.105112	2.67	5.00	62.00		50.200
1446.0	.2629090	.127172	3.85	10.0	21.00	5.70000	65.000
1447.0	.2629090	.128172	3.85	10.0	140.0	5.70000	67.000
1448.0	.2629090	.128172	3.85	10.0	190.0	8.40000	106.00
1449.0	.2629090	.128172	3.85	10.0	390.0	7.60000	126.60
1450.0	.2629090	.129172	3.85	10.0	930.0	8.70000	134.00
1454.0	.2639011	.130012	4.94	20.0	590.0	7.10000	122.00
1455.0	.2639011	.130012	4.94	21.0	022.0	4.80000	103.00
1456.0	.2639011	.132012	4.94	21.0	270.0	6.00000	127.00
1457.0	.2639011	.132012	4.94	21.0	650.0	8.20000	105.00
1458.0	.2639011	.136012	4.94	21.0	110.0	7.10000	117.00
1465.0	.2639011	.136012	4.94	21.0	120.0	07.2000	101.00
1470.0	.2639011	.339012	4.94	21.0	420.0	8.20000	117.00
1486.0	.3639011	.105012	3.80	21.0	26.00	6.90000	96.000
1487.0	.3639011	.106012	3.80	21.0	700.0	3.70000	111.00
1487.1	.3639011	.106012	3.80	21.0	560.0	4.60000	117.00
1496.0	.3639011	.107012	3.80	21.0	1100.	7.80000	117.00
1496.1	.3639011	.307012	3.80	21.0	880.0	7.30000	141.00
1496.2	.3639011	.108012	3.80	21.0	680.0	6.30000	137.00
1496.6	.3639011	.318012	3.80	21.0	800.0	8.50000	115.00
1500.0	.3639011	.107012	3.80	21.0	720.0	5.4000	110.00
1500.1	.3639011	.108012	3.80	21.0	690.0	5.40000	117.00
1500.2	.3639011	.308012	3.80	21.0	730.0	7.70000	137.00
1500.6	.3639011	.119012	3.80	21.0	780.0	7.10000	153.00
1527.0	.3639011	.120172	2.63	21.0	610.0	5.50000	104.00
1527.1	.3639011	.120172	2.63	21.0	590.0	5.90000	129.60
1528.0	.2629090	.155172	2.68	21.0	670.0	7.00000	127.00
1528.1	.2629090	.156172	2.68	21.0	700.0	9.50000	133.00
1528.3	.2629090	.158172	2.68	21.0	910.0	9.90000	135.80
1529.0	.2629090	.160262	1.95	21.0	730.0	7.30000	72.500
1529.1	.2629090	.160262	1.95	21.0	700.0	4.20000	124.10
1529.3	.2629090	.362262	1.95	21.0	800.0	7.30000	115.00
1554.0	.3639011	.134172	2.48	2.00	220.0		63.600
1554.1	.3639011	.134172	2.48	2.00	640.0	6.60000	80.000
1554.4	.3639011	.137172	2.48	2.00	980.0	7.70000	77.800
1572.0	.3639011	.135042	3.10	2.00	680.0	6.40000	98.300
1572.1	.3639011	.235042	3.10	2.00	550.0	7.10000	57.900
1572.4	.3639011	.138042	3.10	2.00	1300.	5.60000	92.100
1593.0	.3639011	.137012	2.99	2.00	620.0	4.30000	95.000
1593.1	.3639011	.138012	2.99	2.00	1300.	6.90000	149.00
1593.3	.3639011	.140012	2.99	2.00	760.0	4.70000	61.000
1624.0	.3639011	.140012	3.73	2.00	200.0	3.10000	65.000
1625.0	.3639011	.140012	4.36	2.00	600.0	4.50000	94.000
1626.0	.2629090	.172172	2.60	2.00	690.0	3.30000	84.000
1627.1	.2629090	.173172	2.23	2.00	740.0	5.80000	80.000
1684.0	.3640090	.109442	2.48	2.00			237.00
1698.0	.3640090	.111442	2.85	2.00	970.0	9.10000	272.30
1700.0	.3640090	.312442	2.65	2.00	19.00	2.10000	250.00
1701.0	.3640090	.112442	2.65	2.00	21.00	4.90000	254.30
1702.0	.3640090	.112442	3.10	2.00	1900.	10.0000	252.00
1703.0	.3640090	.312442	2.72	2.00	2200.	7.50000	255.00
1704.0	.3640090	.112442	2.50	2.00	2300.	11.0000	303.00
1705.0	.3640090	.112442	2.40	2.00	160.0	4.20000	202.00
1714.0	.3639011	.101042	3.30	2.00	11.00	4.40000	84.000
1715.0	.3639011	.101042	2.15	2.00	10.00	1.40000	76.000
1716.0	.3639011	.101042	3.27	2.00	11.20	2.10000	81.000
1717.0	.3639011	.101042	4.73	2.00	660.0	3.30000	75.500
1719.0	.3639011	.101042	1.70	2.00	1300.	6.90000	87.000
1720.0	.3639011	.101042	2.60	2.00	690.0	4.20000	75.000
1721.0	.3639011	.102042	2.90	2.00	610.0	5.80000	107.00
1722.0	.3639011	.102042	2.25	2.00	11.00	1.50000	84.000
1723.0	.3639011	.102042	2.70	2.00	10.00	1.80000	84.400
1724.0	.3639011	.302042	1.45	10.0	1000.	5.30000	93.000
1725.0	.3639011	.202042	1.10	10.0	670.0	6.40000	92.300
1727.0	.3639011	.102042	2.45	10.0	130.0	3.60000	120.00
1762.0	.3649090	.101442	2.90	10.0	2300.	10.0000	211.00
1763.0	.3649090	.101442	3.47	10.0	1600.	11.0000	332.00
1782.0	.3649090	.100442	2.90	10.0	130.0	8.70000	256.00
1783.0	.3649090	.100442	2.78	10.0	22.00	7.20000	83.500
1785.0	.3649090	.100442	3.15	10.0	27.00	8.30000	237.10
1787.0	.3649090	.100442	2.62	10.0	310.0	8.60000	196.00
1802.0	.3649090	.101442	3.00	10.0	290.0	6.40000	296.00
1818.0	.3640090	.102442	2.66	10.0	21.00	8.50000	193.50
1820.0	.3649090	.102442	2.89	5.00	210.0	6.70000	157.00
1836.0	.3649090	.102442	2.46	5.00	180.0	5.50000	143.00
1837.0	.3649090	.102442	3.15	5.00	230.0	6.40000	169.00
1838.0	.3649090	.302442	3.25	5.00	240.0	6.60000	84.600
1839.0	.3649090	.102442	3.13	5.00			230.00
1840.0	.3649090	.102442	3.25	5.00	1600.	7.20000	164.00
1916.0	.3649090	.109442	2.45	5.00	[illegible]	5.80000	144.00

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
1918.0	.3649090	.109442	3.15	5.00	24.00	8.90000	169.30
1919.0	.3649090	.109442	2.35	5.00	1300.	9.30000	207.50
1920.0	.3649090	.109442	3.10	5.00	980.0	10.0000	219.50
1921.0	.3649090	.309442	2.35	5.00	1300.	7.20000	213.50
1940.0	.3640090	.312442	2.80	5.00	19.00	5.10000	189.70
1940.1	.3640090	.112442	2.90	5.00			235.00
1941.0	.3640090	.212442	2.80	5.00			208.50
1941.1	.3640090	.113442	2.80	5.00	41.00	20.0000	250.90
1942.0	.3640090	.213442	2.91	5.00			118.70
1942.1	.3640090	.313442	2.91	5.00	30.00	14.0000	214.00
1942.2	.3640090	.114442	2.91	5.00			202.90
1943.0	.3640090	.112442	2.92	5.00	18.00	5.00000	245.50
1943.1	.3640090	.213442	2.92	5.00	35.00	4.30000	260.00
1944.0	.3640090	.313442	2.92	5.00	1700.	8.30000	255.50
1945.0	.3640090	.113442	2.95	5.00	1300.	18.0000	252.80
1946.0	.3640090	.213442	2.95	5.00			228.20
1946.1	.3640090	.114442	2.95	5.00	1200.	17.0000	296.60
1947.0	.3640090	.313442	2.95	5.00	1800.	9.50000	239.00
1947.1	.3640090	.314442	2.95	5.00	1700.	9.30000	254.00
1948.0	.3649000	.114442	2.95	5.00	26.00	6.80000	131.30
1949.0	.3649000	.115442	3.15	5.00	23.00	6.50000	109.00
1950.0	.3649000	.115442	2.55	5.00	21.00	6.80000	117.30
1951.0	.3649000	.116442	3.20	5.00	1000.	9.30000	141.40
1952.0	.3649000	.116442	3.03	5.00	1300.	9.40000	159.30
1953.0	.3649000	.116442	2.63	5.00	1500.	13.0000	123.50
1954.0	.3649000	.116442	3.00	5.00	190.0	10.0000	141.70
1955.0	.3649000	.116442	3.16	5.00	190.0	10.0000	129.20
1956.0	.3649000	.116442	2.55	5.00	170.0	9.10000	124.30
1979.0	.3649000	.118442	2.55	2.00	35.00	6.30000	78.900
1980.0	.3649000	.118442	2.20	2.00	42.00	6.70000	85.500
1981.0	.3649000	.118442	2.95	2.00	28.00	6.00000	106.30
1982.0	.3649000	.119442	3.25	2.00	890.0	19.0000	104.80
1983.0	.3649000	.119442	3.24	2.00	640.0	2.40000	96.400
1984.0	.3649000	.119442	3.45	2.00	820.0	8.70000	104.60
1985.0	.3649000	.119442	3.16	2.00	150.0	11.0000	109.30
1986.0	.3649000	.119442	3.35	2.00	140.0	12.0000	100.60
1987.0	.3649000	.119442	3.45	2.00	160.0	6.90000	139.00
2001.0	.3649090	.119442	2.60	2.00	330.0	4.10000	53.300
2002.0	.3649090	.119442	2.80	2.00	1200.	8.00000	138.50
2003.0	.3649090	.119442	2.80	2.00	1200.	11.0000	135.50
2004.0	.3649090	.119442	2.80	2.00	33.00		180.50
2005.0	.3649090	.119442	2.80	2.00	29.00	5.60000	95.000
2006.0	.3649090	.120442	2.80	2.00	20.00	4.50000	145.00
2007.0	.3649090	.120442	2.65	2.00	17.00	3.60000	117.50
2008.0	.3649090	.120442	2.90	2.00	940.0		113.10
2009.0	.3649090	.220442	2.50	2.00	1100.	5.70000	89.000
2010.0	.3649045	.320442	2.80	2.00	960.0	4.10000	127.50
2012.0	.3649045	.320442	2.70	2.00	1100.	5.10000	144.00
2013.0	.3649045	.120442	3.18	2.00	1100.	5.40000	85.500
2038.0	.3649045	.121442	2.60	2.00	15.00	1.90000	74.800
2039.0	.3649045	.421442	2.35	2.00	15.00	2.30000	74.600
2040.0	.3649045	.421442	2.80	2.00	15.00	.950000	71.000
2041.0	.3649045	.321442	3.11	2.00	950.0	5.20000	127.00
2042.0	.3649045	.121442	2.80	2.00	1100.	4.30000	120.00
2043.0	.3649045	.121442	2.90	2.00	1200.	5.10000	145.00
2044.0	.3649045	.121442	3.10	2.00	1200.	4.40000	145.20
2054.0	.3649090	.122442	2.80	21.0	47.00	7.50000	185.30
2055.0	.3649090	.122442	2.83	21.0	41.00	8.50000	198.30
2056.0	.3649090	.122442	2.15	21.0	51.00	9.10000	157.30
2057.0	.3649090	.122442	2.80	21.0	2000.	17.0000	151.60
2058.0	.3649090	.122442	2.70	21.0	2600.	17.0000	152.80
2059.0	.3649090	.122442	2.70	21.0	3400.	10.0000	175.00
2069.0	.3649000	.122442	2.80	21.0	22.00	8.50000	148.00
2070.0	.3649000	.122442	2.80	21.0	22.00	2.80000	144.60
2071.0	.3649000	.122442	2.60	21.0	23.00	6.80000	126.30
2072.0	.3649000	.122442	2.80	21.0	1300.	15.0000	197.00
2073.0	.3649000	.122442	3.35	21.0	1500.	9.10000	130.30
2074.0	.3649000	.122442	2.80	21.0	1200.	9.30000	147.00
2081.0	.3649045	.322442	2.32	21.0	17.00	3.20000	102.70
2082.0	.3649045	.122442	2.70	21.0	26.00	3.70000	100.00
2084.0	.3649045	.122442	2.70	21.0	2000.	7.00000	106.00
2085.0	.3649045	.122442	2.70	21.0	2800.	9.40000	144.00
2109.0	.3639011	.101012	4.15	10.0	14.00	5.10000	110.30
2110.0	.3639011	.101012	4.26	10.0	18.00	4.20000	98.500
2111.0	.3639011	.101012	3.85	10.0	17.00	3.70000	97.200
2112.0	.3639011	.101012	3.98	10.0	940.0	4.80000	123.60
2113.0	.3639011	.101012	3.79	10.0	870.0	7.70000	138.80
2114.0	.3639011	.101012	3.76	10.0	790.0	6.00000	119.20
2115.0	.3639011	.101012	3.80	10.0	140.0	5.50000	117.80
2139.0	.3639011	.102042	3.30	10.0	15.00	1.80000	91.300
2140.0	.3639011	.102042	3.20	10.0	15.00	2.60000	104.70
2141.0	.3639011	.102042	2.90	10.0	13.00	2.20000	90.000
2142.0	.3639011	.102042	2.80	10.0	950.0	6.80000	138.00
2143.0	.3639011	.102042	2.87	10.0	810.0	6.10000	121.50
2144.0	.3639011	.102042	3.20	10.0	800.0	8.30000	128.00
2145.0	.3639011	.102042	3.00	10.0	150.0	4.80000	108.30
2146.0	.3639011	.102042	3.00	10.0	150.0	5.60000	124.80
2167.0	.3639011	.103042	3.00	5.00	13.00		93.500
2168.0	.3639011	.103042	3.00	5.00	14.00		94.300
2169.0	.3639011	.103042	3.00	5.00	13.00	6.40000	92.000
2170.0	.3639011	.103042	3.00	5.00	800.0		95.000
2171.0	.3639011	.103042	3.00	5.00	810.0	8.00000	148.70
2172.0	.3639011	.103042	3.00	5.00	760.0	5.90000	120.30
2173.0	.3639011	.103042	3.00	5.00	130.0	6.30000	91.200
2174.0	.3639011	.103042	3.00	5.00	910.0	4.80000	77.600
2175.0	.3639011	.103042	3.00	5.00	630.0	5.10000	104.80
2196.0	.3639011	.104012	3.35	5.00	13.00	2.00000	91.200
2197.0	.3639011	.104012	3.88	5.00	14.00	2.90000	79.500
2198.0	.3639011	.104012	3.71	5.00	15.00	1.90000	76.800
2199.0	.3639011	.104012	3.55	5.00	760.0	6.30000	104.80
2200.0	.3639011	.104012	3.55	5.00			109.00
2201.0	.3639011	.104012	3.55	5.00	1000.		97.000
2202.0	.3639011	.104012	3.47	5.00			104.80
2203.0	.3639011	.104012	3.85	5.00			93.100
2204.0	.3639011	.104012	3.60	5.00	120.0	1.70000	97.000
2205.0	.3649045	.328442	2.69	5.00	16.00	4.10000	73.200
2205.1	.3649045	.428442	2.69	2.00	14.00	3.20000	68.500
2206.0	.3649045	.128442	3.51	5.00	1200.	8.80000	143.60
2233.0	.3639011	.105042	3.19	2.00	15.00		65.000
2234.0	.3639011	.105042	3.41	2.00	16.00	1.40000	64.100
2235.0	.3639011	.105042	2.90	2.00	13.00	2.40000	86.400
2236.0	.3639011	.105042	3.19	2.00	700.0	10.0000	79.200
2237.0	.3639011	.105042	3.09	2.00			86.400
2238.0	.3639011	.105042	3.10	2.00	720.0	9.80000	59.800
2238.1	.3639011	.107062	3.10	2.00	700.0	12.0000	86.300
2239.0	.3639011	.105042	2.92	2.00	110.0	5.90000	77.400
2240.0	.3639011	.105042	2.98	2.00	130.0		86.400
2241.0	.3639011	.105042	2.90	2.00	120.0	7.30000	91.800
2242.0	.3639011	.105042	2.92	2.00	10.00		77.400
2243.0	.3639011	.105042	2.47	2.00	11.00	3.60000	81.000
2264.0	.3639011	.107012	3.65	2.00	11.00	2.10000	78.500
2265.0	.3639011	.107012	3.40	2.00	13.00	1.50000	58.700
2266.0	.3639011	.107012	3.66	2.00	12.00		51.500
2267.0	.3639011	.107012	3.73	2.00	13.00	2.50000	77.400
2268.0	.3639011	.107012	3.70	2.00	410.0	7.70000	97.900
2269.0	.3639011	.107012	3.31	2.00	430.0		92.700
2270.0	.3639011	.107012	3.31	2.00	470.0	5.50000	105.10
2271.0	.3639011	.107012	3.70	2.00	430.0	7.00000	98.700
2272.0	.3639011	.107012	3.49	2.00			97.900
2273.0	.3639011	.107012	3.56	2.00	110.0	2.30000	83.600
2274.0	.3639011	.107012	3.36	2.00	110.0	2.80000	87.500
2275.0	.3639011	.107012	3.43	2.00			67.500
2298.0	.3639011	.109012	2.98	21.0	18.00	6.40000	97.000
2299.0	.3639011	.109012	3.19	21.0	19.00	5.30000	94.300
2300.0	.3639011	.109012	2.80	21.0	19.00	4.80000	98.700
2301.0	.3639011	.109012	2.72	21.0	17.00	4.30000	129.90
2302.0	.3639011	.109012	2.30	21.0	980.0		133.40
2303.0	.3639011	.109012	2.39	21.0	1100.	7.80000	110.20
2304.0	.3639011	.109012	2.21	21.0			112.90
2305.0	.3639011	.109012	2.85	21.0			123.90
2306.0	.3639011	.109012	2.20	21.0			180.50
2307.0	.3639011	.109012	2.72	21.0	160.0	6.70000	102.50
2308.0	.3639011	.109012	3.17	21.0	160.0	10.0000	111.50
2309.0	.3639011	.109012	3.10	21.0	120.0	5.50000	91.700
2330.0	.3639011	.110042	2.36	18.9	17.00	1.40000	98.800
2331.0	.3639011	.110042	2.70	18.9			105.20
2332.0	.3639011	.110042	2.58	18.9			93.800
2333.0	.3639011	.110042	2.40	18.9	15.00	3.40000	102.50
2334.0	.3639011	.110042	3.30	18.9	880.0	8.30000	115.70
2335.0	.3639011	.110042	2.69	18.9			123.90
2336.0	.3639011	.110042	2.65	18.9			130.50
2337.0	.3639011	.110042	2.59	18.9	880.0	6.70000	145.80
2338.0	.3639011	.110042	2.30	18.9	160.0	6.70000	119.00
2339.0	.3639011	.110042	2.65	18.9	120.0	3.20000	94.000
2340.0	.3639011	.110042	2.56	18.9	150.0	5.30000	129.10
2362.0	.3639011	.103172	2.39	21.0	14.00	2.30000	90.300
2363.0	.3639011	.303172	2.32	21.0	12.00	2.00000	109.20
2364.0	.3639011	.103172	2.39	21.0	12.00	3.20000	90.400
2365.0	.3639011	.103172	2.68	21.0	13.00	1.80000	98.200
2366.0	.3639011	.103172	2.69	21.0	830.0	5.40000	84.500
2367.0	.3639011	.103172	2.40	21.0	970.0		84.000
2368.0	.3639011	.103172	2.25	21.0	1000.	7.50000	96.500
2369.0	.3639011	.103172	2.40	21.0	830.0	6.50000	77.700
2370.0	.3639011	.103172	2.12	21.0	130.0	5.70000	71.400
2371.0	.3639011	.103172	2.60	21.0			92.300
2372.0	.3639011	.103172	2.48	21.0	150.0	6.30000	94.400
2373.0	.3639011	.103172	2.47	21.0	140.0	4.60000	100.50
2395.0	.3639011	.104172	2.21	5.00	11.00	1.20000	66.200
2396.0	.3639011	.104172	2.64	5.00	9.000	1.40000	75.000
2397.0	.3639011	.104172	2.40	5.00	9.500	1.30000	78.600
2398.0	.3639011	.104172	2.18	5.00	10.00	1.70000	66.900
2399.0	.3639011	.104172	2.52	5.00			89.700
2400.0	.3639011	.104172	2.31	5.00	690.0	4.90000	68.000
2401.0	.3639011	.104172	2.58	5.00	690.0	7.30000	81.000
2402.0	.3639011	.104172	2.79	5.00	740.0	2.70000	93.000
2403.0	.3639011	.104172	2.42	5.00	110.0	2.60000	75.300
2404.0	.3639011	.104172	2.42	5.00	110.0	2.50000	75.300
2405.0	.3639011	.204172	2.42	5.00	110.0	4.60000	84.300
2406.0	.3639011	.204172	2.42	5.00	100.0	5.20000	90.500
2440.0	.3639011	.115042	2.77	21.0	16.00	3.20000	92.000
2441.0	.3639011	.115042	2.63	21.0	19.00	3.30000	90.000
2442.0	.3639011	.115042	3.08	21.0	20.00	4.00000	93.300
2443.0	.3639011	.115042	2.46	21.0	15.00	3.70000	107.00
2444.0	.3639011	.115042	2.76	21.0	870.0	8.20000	115.00
2445.0	.3639011	.115042	2.60	21.0	760.0	8.00000	124.00
2446.0	.3639011	.115042	2.39	21.0	960.0	8.90000	124.00
2447.0	.3639011	.115042	2.72	21.0	870.0	7.20000	133.00
2448.0	.3639011	.115042	2.50	21.0	160.0	6.00000	104.00
2449.0	.3639011	.115042	2.86	21.0	150.0	6.00000	113.00
2450.0	.3639011	.115042	2.65	21.0	130.0	4.60000	90.000
2451.0	.3639011	.115042	2.60	21.0	150.0	6.10000	102.50
2474.0	.3639011	.110172	2.01	10.0	9.500	1.30000	82.000
2475.0	.3639011	.110172	2.76	10.0	10.00	1.20000	78.300
9476.0	.3639011	.110172	2.11	10.0	10.00	2.00000	69.700
2477.0	.3639011	.110172	2.50	10.0	8.500	2.70000	87.500
2478.0	.3639011	.110172	2.30	10.0	740.0	5.30000	136.00
2479.0	.3639011	.110172	2.30	10.0	790.0	6.10000	81.700
2480.0	.3639011	.110172	2.49	10.0	810.0	6.20000	109.00
2481.0	.3639011	.110172	3.17	10.0	810.0	5.70000	97.300
2482.0	.3639011	.110172	2.99	10.0	140.0	9.20000	75.500

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
2483.0	.3639011	.111172	2.71	10.0	140.0	5.00000	91.000
2484.0	.3639011	.111172	2.74	10.0	120.0	4.60000	66.200
2506.0	.3639011	.111172	2.54	2.00	9.00	2.00000	72.700
2507.0	.3639011	.111172	2.51	2.00	10.00	.980000	57.000
2508.0	.3639011	.111172	2.65	2.00	9.00	.870000	44.000
2509.0	.3639011	.111172	2.31	2.00	9.00	1.10000	65.000
2510.0	.3639011	.111172	2.77	2.00	710.0	4.30000	57.000
2511.0	.3639011	.111172	2.59	2.00	710.0	5.90000	47.000
2512.0	.3639011	.111172	2.59	2.00	830.0	6.20000	63.000
2513.0	.3639011	.111172	2.50	2.00	560.0	4.70000	62.000
2514.0	.3639011	.111172	2.47	2.00	100.0	4.10000	60.000
2515.0	.3639011	.111172	2.69	2.00	100.0	3.30000	67.200
2516.0	.3639011	.111172	2.02	2.00	100.0	4.00000	98.000
2517.0	.3639011	.111172	2.75	2.00	140.0	3.50000	40.400
2518.0	.3639011	.111172	2.12	2.00	630.0	4.60000	77.600
2540.0	.4649000	.105442	2.68	21.0	21.00	8.00000	146.00
2541.0	.4649000	.105442	2.10	21.0			95.000
2542.0	.4649000	.105442	2.38	21.0	19.00		124.93
2543.0	.4649000	.105442	2.27	21.0			129.00
2544.0	.4649000	.105442	2.16	21.0			114.50
2545.0	.4649000	.105442	2.56	21.0	1200.	12.000	118.50
2546.0	.4649000	.105442	2.50	21.0	180.0	8.20000	142.[illegible]
2547.0	.4649000	.105442	2.68	21.0	170.0	7.90000	167.50
2548.0	.4649000	.105442	2.68	21.0	170.0	10.0000	162.30
2550.0	.4649000	.105442	2.50	21.0	21.00	8.80000	126.50
2570.0	.4649045	.107442	2.67	21.0	12.00	2.30000	85.000
2571.0	.4649045	.107442	2.41	21.0	11.00	2.40000	88.000
2572.0	.4649045	.107442	2.4[illegible]	21.0	17.00	2.40000	92.600
2573.0	.4649045	.107442	2.68	21.0	18.00	3.70000	94.100
2574.0	.4649045	.107442	2.45	21.0	1100.	4.70000	141.40
2575.0	.4649045	.107442	2.55	21.0	1000.	6.80000	169.70
2576.0	.4649045	.107442	2.67	21.0	1000.	8.50000	138.90
2577.0	.4649045	.107442	2.51	21.0	1000.	8.00000	110.80
2578.0	.4649045	.107442	2.42	21.0	150.0	5.20000	113.20
2579.0	.4649045	.107442	2.55	21.0	160.0	4.50000	144.10
2580.0	.4649045	.107442	2.12	21.0	160.0	6.10000	113.50
2581.0	.4649045	.107442	2.28	21.0	160.0	5.30000	141.40
2602.0	.4649090	.108442	2.65	21.0	15.00		105.50
2603.0	.4649090	.108442	2.38	21.0	19.00	2.50000	244.60
2604.0	.4649090	.108442	2.45	21.0	22.00	2.40000	149.80
2605.0	.4649090	.108442	2.15	21.0	15.00	5.80000	165.20
2606.0	.4649090	.108442	2.49	21.0	1300.	10.0000	226.00
2607.0	.4649090	.108442	2.38	21.0	1300.	11.0000	204.30
2608.0	.4649090	.108442	2.33	21.0	1200.		188.80
2609.0	.4649090	.108442	2.50	21.0	1200.	12.0000	255.70
2610.0	.4649090	.108442	2.18	21.0	180.0		77.400
2611.0	.4649090	.108442	2.01	21.0	180.0	9.00000	151.70
2612.0	.4649090	.108442	2.34	21.0	200.0	1.40000	195.00
2613.0	.4649090	.108442	2.49	21.0	180.0	8.40000	213.60
2614.0	.4649000	.109442	2.73	10.0	12.00	12.0000	119.50
2615.0	.4649000	.109442	2.81	10.0	12.00		147.30
2616.0	.4649000	.109442	2.50	10.0	12.00	6.40000	82.500
2617.0	.4649000	.109442	2.71	10.0	12.00	11.0000	128.20
2618.0	.4649000	.109442	2.69	10.0	1100.	12.0000	139.10
2619.0	.4649000	.109442	2.50	10.0	1100.	9.60000	166.50
2620.0	.4649000	.109442	2.93	10.0	830.0	10.0000	168.80
2621.0	.4649000	.109442	2.71	10.0	830.0	13.0000	118.50
2622.0	.4649000	.109442	2.80	10.0	146.0	9.00000	151.50
2623.0	.4649000	.109442	2.72	10.0	150.0	14.0000	139.60
2624.0	.4649000	.109442	2.88	10.0	150.0		116.30
2625.0	.4649000	.109442	2.98	10.0	140.0		178.80
2626.0	.4649090	.112442	2.66	10.0	20.00	8.30000	166.90
2675.0	.4649090	.112442	2.90	10.0	20.00	9.20000	169.80
2676.0	.4649090	.112442	2.77	10.0	20.00	7.70000	160.80
2677.0	.4649090	.112442	2.70	10.0	20.00		148.90
2678.0	.4649090	.112442	2.83	10.0	650.0	10.0000	168.00
2679.0	.4649090	.112442	2.86	10.0	1100.	9.20000	196.60
2680.0	.4649090	.112442	2.50	10.0	1100.	10.0000	181.70
2681.0	.4649090	.112442	2.77	10.0	1100.	11.0000	170.40
2682.0	.4649090	.112442	2.77	10.0	210.0	6.30000	162.00
2683.0	.4649090	.112442	2.61	10.0	1100.	9.40000	181.70
2684.0	.4649090	.112442	2.91	10.0	200.0	9.00000	266.00
2685.0	.4649090	.112442	2.87	10.0	210.0	12.0000	177.50
2686.0	.4649090	.112442	2.78	10.0	200.0	6.50000	177.30
2687.0	.4649090	.112442	2.67	10.0	190.0	9.00000	220.40
2709.0	.4649045	.113442	2.56	10.0	1200.	6.90000	147.10
2710.0	.4649045	.113442	2.40	10.0	850.0	5.80000	146.10
2711.0	.4649045	.113442	2.45	10.0	910.0	8.30000	135.10
2712.0	.4649045	.113442	2.80	10.0	850.0	8.60000	151.50
2713.0	.4649045	.113442	2.29	10.0	170.0	5.30000	139.20
2714.0	.4649045	.113442	2.50	10.0	150.0	4.90000	148.00
2715.0	.4649045	.113442	2.58	10.0	160.0	3.70000	115.00
2716.0	.4649045	.113442	2.54	10.0	150.0	5.50000	109.20
2717.0	.4649045	.113442	2.38	10.0	120.0	1.40000	80.900
2718.0	.4649045	.113442	2.51	10.0	120.0	1.60000	90.900
2719.0	.4649045	.113442	2.64	10.0	130.0	.890000	87.900
2721.0	.4649045	.113442	2.58	10.0	160.0	5.80000	129.10
2728.0	.4649000	.114442	2.99	5.00	11.00	6.30000	118.80
2729.0	.4649000	.114442	2.59	5.00	13.00	8.00000	116.30
2730.0	.4649000	.114442	2.30	5.00	13.00	6.80000	125.40
2731.0	.4649000	.114442	2.86	5.00	15.00	4.50000	102.60
2734.0	.4649000	.114442	3.20	5.00	880.0	7.80000	120.40
2735.0	.4649000	.114442	2.80	5.00	750.0	10.0000	128.60
2736.0	.4649000	.114442	2.73	5.00	990.0	13.0000	128.60
2737.0	.4649000	.114442	3.00	5.00	890.0	6.40000	114.30
2738.0	.4649000	.114442	2.74	5.00	150.0	9.80000	155.30
2739.0	.4649000	.114442	2.94	5.00	150.0	6.10000	135.90
2740.0	.4649000	.114442	2.78	5.00	150.0	7.40000	145.50
2741.0	.4649000	.114442	2.85	5.00	150.0	7.10000	136.80
2742.0	.4649000	.114442	2.68	5.00	150.0	10.0000	145.50

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
2759.0	.4649045	.115442	2.67	5.00	750.0	6.20000	164.20
2760.0	.4649045	.115442	2.70	5.00			77.500
2761.0	.4649045	.115442	2.75	5.00	1000.	6.80000	120.90
2762.0	.4649045	.115442	2.50	5.00	870.0	5.70000	136.80
2763.0	.4649045	.115442	2.47	5.00	150.0	4.80000	124.00
2764.0	.4649045	.115442	3.10	5.00	140.0	4.70000	91.200
2765.0	.4649045	.115442	2.61	5.00	150.0	3.90000	88.900
2766.0	.4649045	.115442	2.65	5.00	140.0	5.70000	91.200
2767.0	.4649045	.115442	2.72	5.00	140.0	2.10000	72.900
2769.0	.4649045	.115442	2.7[illegible]	5.00	11[illegible]	2.20000	77.500
2770.0	.4649045	.115442	2.54	5.00	13.00	1.80000	64.400
2771.0	.4649045	.115442	2.73	5.00	610.0	6.10000	132.30
2793.0	.4649090	.116442	2.74	5.00	1200.	9.30000	196.60
2794.0	.4649090	.116442	2.23	5.00	1100.	10.0000	181.70
2795.0	.4649090	.116442	2.59	5.00	1100.	8.00000	220.40
2796.0	.4649090	.116442	2.33	5.00	1100.	7.70000	208.50
2797.0	.4649090	.116442	2.09	5.00	400.0	9.00000	119.10
2798.0	.4649090	.116442	2.70	5.00	410.0	9.80000	189.40
2799.0	.4649090	.116442	3.08	5.00	330.0	9.70000	169.80
2800.0	.4649090	.116442	2.23	5.00	370.0	7.50000	157.40
2801.0	.4649090	.116442	2.23	5.00	120.0	7.30000	119.10
2802.0	.4649090	.116442	2.33	5.00	120.0	8.50000	160.80
2803.0	.4649090	.116442	2.18	5.00	120.0	10.0000	169.80
2804.0	.4649090	.116442	2.19	5.00	120.0	4.20000	143.10
2805.0	.4649090	.116442	2.87	5.00	[illegible]	8.70000	169.80
2806.0	.4649090	.116442	2.40	5.00	27.00	7.70000	144.20
2807.0	.4649090	.116442	2.38	5.00	[illegible]	5.40000	126.90
2808.0	.4649090	.116442	2.06	5.00	[illegible]	6.70000	134.00
2833.0	.4649000	.117442	2.70	2.00	[illegible]		91.600
2834.0	.4649000	.117442	2.60	2.00	[illegible]	4.10000	105.90
2835.0	.4649000	.117442	2.40	2.00	16.20	2.70000	107.20
2836.0	.4649000	.117442	2.54	2.00	[illegible]	4.20000	115.60
2845.0	.4649000	.117442	2.57	2.00	[illegible]	9.30000	105.10
2846.0	.4649000	.117442	2.72	2.00	10.0	9.90000	101.70
2847.0	.4649000	.217442	2.65	2.00			25.100
2848.0	.4649000	.117442	2.68	2.00	120.0	9.30000	90.400
2849.0	.4649000	.117442	2.78	2.00	120.0	9.50000	101.70
2850.0	.4649000	.117442	2.90	2.00	140.0	7.40000	71.400
2851.0	.4649000	.117442	2.84	2.00	140.0	7.90000	75.600
2852.0	.4649000	.117442	2.21	2.00	150.0	9.80000	77.700
2853.0	.4649000	.117442	2.48	2.00	530.0	8.30000	92.500
2871.0	.4649045	.119442	2.78	2.00	780.0	5.00000	84.400
2872.0	.4649045	.119442	2.49	2.00	430.0	5.40000	116.30
2873.0	.4649045	.119442	2.59	2.00	830.0	05.2000	138.40
2874.0	.4649045	.119442	2.75	2.00	930.0	3.70000	102.60
2875.0	.4649045	.119442	2.45	2.00	140.0	2.20000	111.70
2876.0	.4649045	.119442	2.64	2.00	130.0	2.70000	114.90
2877.0	.4649045	.119442	2.49	2.00	150.0	2.80000	67.500
2878.0	.4649045	.119442	2.67	2.00	150.0	3.20000	98.000
2879.0	.4649045	.419442	2.45	2.00	10.00	1.30000	77.300
2880.0	.4649045	.419442	2.41	2.00	10.00		73.700
2881.0	.4649045	.119442	2.50	2.00	10.00	1.30000	58.600
2882.0	.4649045	.419442	2.45	2.00	21.00	1.10000	70.900
2883.0	.4649045	.119442	2.01	2.00	140.0	1.20000	77.500
2906.0	.4649090	.120442	2.60	2.00	1300.	8.70000	165.60
2907.0	.4649090	.120442	2.08	2.00	1200.	6.80000	143.80
2908.0	.4649090	.120442	2.08	2.00	1200.	7.60000	160.10
2909.0	.4649090	.120442	2.21	2.00	1200.	11.0000	105.80
2910.0	.4649090	.120442	2.41	2.00	150.0	6.60000	136.80
2911.0	.4649090	.120442	2.64	2.00	180.0	6.40001	153.10
2912.0	.4649090	.120442	2.19	2.00	180.0	04.8000	153.10
2913.0	.4649090	.120442	2.87	2.00	180.0	4.60000	156.30
2914.0	.4649090	.120442	2.60	2.00	17.00	5.10000	154.70
2915.0	.4649090	.120442	2.15	2.00	19.00	8.00000	116.70
2916.0	.4649090	.120442	2.8	2.00	17.00	7.80000	129.20
2917.0	.4649090	.120442	2.87	2.00	16.00	8.60000	149.30
2918.0	.4649090	.120442	2.75	2.00	970.0	7.50000	122.10
2941.0	.4640090	.121442	3.20	2.00	24.00	12.0000	162.00
2942.0	.4640090	.121442	2.80	2.00	18.00	10.0000	187.70
2943.0	.4640090	.121442	2.70	2.00	18.00		231.80
2944.0	.4640090	.121442	2.61	2.00	29.00	8.10000	229.30
2945.0	.4640090	.121442	3.12	2.00	240.0	9.50000	218.00
2946.0	.4640090	.121442	2.86	2.00	250.0	9.50000	248.90
2947.0	.4640090	.121442	2.81	2.00	23.0	6.30000	207.40
2948.0	.4640090	.121442	2.91	2.00	250.0	10.0000	275.10
2949.0	.4640090	.121442	3.10	2.00	31.00	6.40000	207.40
2950.0	.4640090	.122442	2.66	2.00	1500.	9.80000	255.40
2951.0	.4640090	.122442	2.41	2.00	2000.	8.70000	186.50
2952.0	.4640090	.122442	2.69	2.00	1800.	8.90000	275.70
2953.0	.4640090	.122442	2.70	2.00	1700.	10.0000	224.00
2954.0	.4640090	.122442	2.59	2.00	1600.	12.0000	170.30
2997.0	.4640090	.123442	2.39	10.0	230.0	9.80000	205.10
2998.0	.4640090	.123442	3.10	10.0	350.0	11.0000	356.30
2999.0	.4640090	.123442	2.79	10.0	350.0	9.40000	345.50
3000.0	.4640090	.123442	2.08	10.0	350.0	6.50000	296.90
3001.0	.4640090	.223442	2.91	10.0	250.0	12.0000	237.50
3002.0	.4640090	.123442	2.92	10.0	2200.	12.0000	299.10
3003.0	.4640090	.123442	3.10	10.0	2000.	11.0000	275.30
3004.0	.4640090	.123442	2.81	10.0	230.0	11.0000	280.70
3005.0	.4640090	.123442	2.58	10.0	45.00	13.0000	367.10
3006.0	.4640090	.123442	2.89	10.0	35.00	11.0000	376.40
3007.0	.4640090	.123442	2.70	10.0	38.00	11.0000	356.20
3008.0	.4640090	.123442	2.86	10.0	40.00	12.0000	350.90
3009.0	.4640090	.124442	2.40	5.00	1100.	11.0000	277.10
3010.0	.4640090	.124442	2.19	5.00	2200.	11.0000	287.40
3011.0	.4640090	.124442	2.54	5.00	1300.	07.5000	241.40
3012.0	.4640090	.124442	2.58	5.00	200[illegible].	8.50000	273.10
3013.0	.4640090	.124442	2.50	5.00	29[illegible].	9.30000	384.70
3014.0	.4640090	.124442	2.24	5.00	280.0	6.50000	287.40
3015.0	.4640090	.124442	2.29	5.00	290.0	14.0000	296.60

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
3016.0	.4640090	.124442	2.50	5.00	290.0	9.10000	379.80
3017.0	.4640090	.124442	2.74	5.00	36.00	12.0000	297.50
3018.0	.4640090	.124442	2.26	5.00	40.00	13.0000	240.00
3019.0	.4640090	.124442	2.60	5.00	32.00	9.50000	244.30
3020.0	.4640090	.124442	2.29	5.00	36.00	11.0000	203.20
3021.0	.4640090	.124442	2.33	5.00	320.0	08.9000	195.00
3066.0	.4640090	.126442	2.79	21.0	42.00	9.70000	409.30
3067.0	.4640090	.226442	2.61	21.0	38.00		203.40
3068.0	.4640090	.126442	2.40	21.0	40.00	6.20000	326.50
3069.0	.4640090	.126442	2.61	21.0	42.00	7.90000	326.70
3070.0	.4640090	.126442	2.60	21.0	380.0	13.0000	379.70
3071.0	.4640090	.126442	2.76	21.0	390.0	9.10000	321.00
3072.0	.4640090	.126442	2.76	21.0	410.0	6.60000	345.20
3073.0	.4640090	.126442	2.81	21.0	400.0	9.30000	382.10
3074.0	.4640090	.126442	2.32	21.0	1300.	11.0000	249.00
3075.0	.4640090	.126442	2.81	21.0	2200.	14.0000	463.90
3076.0	.4640090	.126442	2.50	21.0	2500.	12.0000	249.00
3077.0	.4640090	.126442	2.62	21.0	2500.	11.0000	271.20
3078.0	.4640090	.126442	2.55	21.0	44.00		283.50
3079.0	.4640090	.126442	2.76	21.0	170.0	11.0000	357.50
3080.0	.4640090	.126442	2.20	21.0	2700.	11.0000	351.30
3081.0	.4640090	.126442	2.55	21.0	42.00		351.00
3106.0	.4649090	.129532	2.49	5.00	24.00	7.60000	119.10
3107.0	.4649090	.129532	2.69	5.00	24.00	15.0000	150.10
3108.0	.4649090	.129532	2.94	5.00	21.00	11.0000	134.00
3109.0	.4649090	.129532	3.10	5.00	23.00	12.0000	150.70
3110.0	.4649090	.129532	3.20	5.00	200.0	11.0000	113.20
3111.0	.4649090	.129532	2.49	5.00	200.0	9.00000	134.00
3112.0	.4649090	.129532	3.05	5.00	180.0	9.30000	129.90
3113.0	.4649090	.129532	2.79	5.00	180.0	9.50000	187.70
3114.0	.4649090	.129532	3.15	5.00	1100.	10.0000	160.80
3115.0	.4649090	.129532	2.85	5.00	700.0	8.20000	140.00
3116.0	.4649090	.129532	2.86	5.00	1100.	7.40000	178.70
3117.0	.4649090	.129532	2.57	5.00	1100.	7.40000	190.60
3118.0	.4649090	.129532	2.49	5.00	1100.	7.80000	148.90
3140.0	.4649000	.130532	3.13	5.00	800.0		84.500
3141.0	.4649000	.130532	3.19	5.00	800.0	7.10000	127.70
3142.0	.4649000	.130532	2.70	5.00	900.0	6.30000	77.500
3143.0	.4649000	.130532	3.00	5.00	600.0	5.30000	51.600
3144.0	.4649000	.130532	2.73	5.00	140.0	5.80000	79.800
3145.0	.4649000	.130532	2.32	5.00	140.0	5.80000	104.10
3146.0	.4649000	.130532	3.19	5.00	140.0	6.40000	129.10
3147.0	.4649000	.130532	2.40	5.00	140.0	6.40000	68.400
3148.0	.4649000	.130532	2.73	5.00	120.0	5.50000	130.00
3149.0	.4649000	.130532	2.46	5.00	9.000	11.0000	108.90
3150.0	.4649000	.130532	2.86	5.00	13.00		119.90
3151.0	.4649000	.130532	3.10	5.00	13.00	6.60000	107.20
3173.0	.4649045	.131532	2.80	5.00	1100.	05.5000	114.70
3174.0	.4649045	.131532	2.80	5.00	1100.	6.00000	102.60
3175.0	.4649045	.131532	2.98	5.00	930.0	5.90000	91.200
3176.0	.4649045	.131532	2.87	5.00	980.0	6.20000	132.30
3177.0	.4649045	.131532	2.87	5.00	130.0	2.60000	96.700
3178.0	.4649045	.131532	2.80	5.00	130.0	2.40000	87.100
3179.0	.4649045	.131532	2.51	5.00	140.0	3.40000	102.60
3180.0	.4649045	.131532	2.83	5.00	140.0	3.60000	84.400
3181.0	.4649045	.131532	2.40	5.00	14.00	2.50000	72.000
3182.0	.4649045	.131532	2.67	5.00	17.00	1.40000	70.700
3183.0	.4649045	.131532	2.87	5.00	14.00	.830000	70.700
3184.0	.4649045	.131532	3.10	5.00	11.00	1.40000	63.800
3185.0	.4649045	.131532	2.85	5.00	1100.	1.30000	119.50
3208.0	.4640090	.133532	2.62	5.00	18.00	14.0000	204.50
3209.0	.4640090	.133532	2.79	5.00	35.00	6.70000	190.90
3210.0	.4640090	.133532	2.50	5.00	36.00	11.0000	190.90
3211.0	.4640090	.133532	2.97	5.00	31.00		150.00
3212.0	.4640090	.133532	2.50	5.00	270.0	12.0000	190.90
3213.0	.4640090	.133532	2.58	5.00	260.0	7.50000	249.10
3214.0	.4640090	.133532	3.02	5.00	270.0	14.0000	159.10
3215.0	.4640090	.133532	2.63	5.00	280.0	9.10000	195.50
3216.0	.4640090	.133532	2.78	5.00			159.00
3217.0	.4640090	.133532	2.88	5.00	180.0	12.0000	140.90
3218.0	.4640090	.133532	2.66	5.00	180.0	11.0000	177.30
3219.0	.4640090	.133532	2.80	5.00	180.0	9.80000	127.30
3221.0	.4640090	.134532	2.78	2.00	190.0	11.0000	174.10
3222.0	.4640090	.134532	2.80	2.00	200.0	6.00000	216.80
3223.0	.4640090	.134532	2.98	2.00	200.0	10.0000	206.90
3225.0	.4640090	.134532	3.10	2.00	210.0	8.50000	187.20
3226.0	.4640090	.134532	2.82	2.00	130.0	3.90000	99.800
3227.0	.4649045	.134532	2.30	2.00	160.0	2.70000	60.800
3228.0	.4649045	.134532	2.51	2.00	160.0	1.80000	34.200
3231.0	.4649045	.134532	2.66	2.00	160.0	2.10000	45.000
3233.0	.4649045	.134532	2.80	2.00	83.00	1.50000	34.500
3250.0	.4649090	.235532	3.10	2.00	170.0	11.0000	65.100
3251.0	.4649000	.235532	2.89	2.00	150.0	6.80000	103.10
3252.0	.4649090	.135532	2.50	2.00	160.0	8.10000	143.80
3253.0	.4649090	.135532	2.50	2.00	170.0	8.10000	129.20
3254.0	.4649090	.135532	2.59	2.00	170.0	8.30000	141.10
3255.0	.4649090	.135532	2.97	2.00	180.0	8.90000	139.00
3256.0	.4649000	.135532	3.20	2.00	150.0	8.50000	75.600
3257.0	.4649000	.135532	2.63	2.00	140.0	5.60000	87.800
3258.0	.4649000	.135532	2.79	2.00	150.0	3.40000	45.400
3259.0	.4649000	.135532	2.99	2.00	110.0	5.10000	85.300
3260.0	.4649000	.135532	3.18	2.00	120.0	9.60000	71.400
3261.0	.4649090	.135532	2.20	2.00	140.0	9.80000	110.50
3279.0	.4644590	.136442	3.05	5.00	21.00	3.20000	165.50
3280.0	.4644590	.136442	2.88	5.00	21.00		137.90
3281.0	.4644590	.136442	2.95	5.00	25.00	4.30000	147.80
3282.0	.4644590	.136442	2.90	5.00	23.00		166.20
3283.0	.4644590	.136442	2.82	5.00	190.0	8.20000	180.00
3284.0	.4644590	.136442	2.98	5.00	190.0	8.00000	202.30
3285.0	.4644590	.136442	3.16	5.00	210.0	8.40000	183.90
3286.0	.4644590	.136442	2.88	5.00	200.0	10.0000	202.90
3288.0	.4644590	.136442	2.79	5.00	1500.	13.0000	197.00
3289.0	.4644590	.136442	2.90	5.00	1500.	11.0000	266.00
3290.0	.4644590	.136442	3.10	5.00	1300.	9.80000	233.80
3335.0	.4644590	.137442	2.60	5.00	1300.	9.50000	180.60
3336.0	.4644590	.137442	2.79	5.00	1300.	9.60000	226.50
3337.0	.4644590	.137442	2.65	5.00	470.0	15.0000	170.80
3338.0	.4644590	.137442	2.69	5.00	400.0	10.0000	226.60
3339.0	.4644590	.137442	2.79	5.00	420.0	11.0000	187.80
3340.0	.4644590	.137442	2.95	5.00	61.00	9.00000	157.00
3341.0	.4644590	.137442	2.79	5.00	77.00	8.70000	178.70
3342.0	.4644590	.137442	2.79	5.00	72.00	7.30000	193.80
3343.0	.4644590	.237442	2.69	5.00			65.200
3344.0	.4642290	.137442	2.79	5.00	210.0	5.20000	177.30
3345.0	.4642290	.138442	2.88	5.00	220.0	6.50000	223.30
3346.0	.4642290	.138442	2.72	5.00	200.0	14.0000	164.20
3347.0	.4642290	.138442	2.61	5.00	210.0	7.80000	197.70
3348.0	.4642290	.138442	2.65	5.00	200.0	6.50000	197.00
3349.0	.4642290	.138442	2.60	5.00	200.0	5.80000	152.40
3350.0	.4646790	.138442	2.78	5.00	220.0	5.60000	141.20
3351.0	.4646790	.138442	2.90	5.00	220.0	4.70000	154.30
3352.0	.4646790	.138442	2.90	5.00	200.0	5.10000	130.00
3353.0	.4646790	.138442	2.81	5.00	200.0	7.20000	163.50
3354.0	.4646790	.138442	2.96	5.00	200.0	5.80000	105.10
3355.0	.4646790	.138442	2.70	5.00	210.0	6.90000	130.70
3373.0	.4649067	.140442	2.37	5.00	200.0	6.70000	162.90
3374.0	.4649067	.140442	2.46	5.00	210.0	5.40000	161.60
3375.0	.4649067	.140442	2.80	5.00	210.0	3.10000	130.00
3376.0	.4649067	.140442	2.39	5.00	210.0	3.00000	104.50
3377.0	.4649067	.140442	2.60	5.00	180.0	5.10000	179.00
3379.0	.4649022	.140442	2.46	5.00	180.0	3.80000	112.30
3380.0	.4649022	.140442	2.76	5.00	180.0	4.70000	111.60
3381.0	.4649022	.140442	3.00	5.00	180.0	4.10000	95.900
3382.0	.4649022	.140442	2.90	5.00	180.0	4.90000	115.60
3363.0	.4649022	.140442	2.40	5.00	200.0	4.00000	107.70
3384.0	.4649022	.140442	2.90	5.00	190.0	4.90000	112.30
3423.0	.6649090	.102442	1.59	5.00	120.0	11.0000	139.60
3424.0	.6649090	.102442	1.90	5.00	120.0	4.20000	90.400
3425.0	.6649090	.102442	1.54	5.00	140.0	8.90000	132.40
3426.0	.6649090	.102442	1.75	5.00	140.0	7.30000	126.10
3427.0	.6649090	.102442	1.85	5.00	15.00		111.40
3428.0	.6649090	.102442	1.66	5.00	14.00	9.10000	94.600
3429.0	.6649090	.102442	1.69	5.00	16.00	9.40000	133.70
3432.0	.6649090	.102442	2.08	5.00			111.40
3433.0	.6649090	.104442	1.70	5.00	880.0	10.0000	101.90
3434.0	.6649090	.104442	1.47	5.00	940.0	13.0000	74.800
3435.0	.6649090	.104442	1.44	5.00	900.0	6.70000	45.600
3436.0	.6649090	.104442	1.87	5.00	870.0	8.80000	159.60
3437.0	.6649090	.104442	1.63	5.00	990.0	11.0000	143.70
3438.0	.6649090	.104442	1.48	5.00	120.0	6.70000	148.20
3639.0	.6649090	.104442	1.70	5.00	15.00	4.20000	134.50
3465.0	.6649000	.104442	1.46	5.00	120.0	6.20000	99.100
3466.0	.6649000	.104442	1.68	5.00	120.0	14.0000	120.50
3467.0	.6649000	.104442	1.60	5.00	120.0	9.60000	127.50
3468.0	.6649000	.104442	1.48	5.00	140.0	13.0000	85.500
3469.0	.6649000	.104442	1.59	5.00	93.00	10.0000	100.20
3470.0	.6649000	.104442	1.87	5.00	18.00	4.80000	75.800
3498.0	.6649000	.105442	1.23	5.00	20.00	7.70000	94.000
3499.0	.6649000	.105442	1.50	5.00	20.00		42.700
3500.0	.6649000	.105442	1.45	5.00	14.00	11.0000	100.60
3501.0	.6649000	.105442	1.63	5.00	14.00	8.50000	85.100
3502.0	.6649000	.105442	1.63	5.00	14.00	4.00000	74.200
3503.0	.6649000	.105442	1.58	5.00	140.0	12.0000	78.500
3504.0	.6649000	.105442	1.80	5.00	820.0	7.70000	111.90
3505.0	.6649000	.105442	1.80	5.00	760.0	8.60000	104.90
3506.0	.6649000	.105442	1.75	5.00	820.0	7.60000	93.300
3507.0	.6649000	.105442	1.70	5.00	740.0	12.0000	113.50
3508.0	.6649000	.105442	1.47	5.00	720.0	23.0000	98.300
3509.0	.6649000	.105442	1.50	5.00	570.0		73.800
3510.0	.6649045	.106442	1.63	5.00	17.00	.620000	66.900
3512.0	.6649045	.106442	1.92	5.00	16.00	1.50000	59.200
3513.0	.6649045	.106442	1.92	5.00	16.00	1.20000	74.000
3516.0	.6649045	.106442	1.61	5.00	130.0	4.50000	91.600
3517.0	.6649045	.106442	2.02	5.00	120.0	2.30000	97.100
3518.0	.6649045	.106442	1.46	5.00	130.0	1.90000	94.600
3519.0	.6649045	.106442	1.67	5.00	124.0	3.50000	100.90
3520.0	.6549045	.106442	2.45	5.00	130.0	3.60000	92.500
3521.0	.6649045	.106442	1.25	5.00	780.0	7.40000	107.60
3522.0	.6649045	.106442	1.37	5.00	770.0	7.00000	88.200
3523.0	.6649045	.106442	1.79	5.00	820.0	4.70000	83.200
3524.0	.6649045	.106442	2.10	5.00	790.0	5.10000	104.20
3576.0	.6640090	.107442	1.42	5.00	100.0	4.00000	202.30
3577.0	.6640090	.107442	1.39	5.00	180.0	6.20000	231.90
3578.0	.6640090	.107442	1.47	5.00	200.0	9.80000	208.90
3579.0	.6640090	.107442	1.45	5.00	200.0	11.0000	269.30
3580.0	.6640090	.207442	1.46	5.00	200.0	9.70000	170.80
3581.0	.6640090	.107442	1.49	5.00	26.00		200.30
3582.0	.6640090	.107442	1.40	5.00	25.00	13.0000	175.40
3583.0	.6640090	.307402	2.60	5.00	180.0	11.0000	275.90
3584.0	.6640090	.107402	1.92	5.00	220.0	12.0000	218.10
3585.0	.6640090	.107402	1.42	5.00	220.0	15.0000	220.00
3586.0	.6640090	.107402	1.88	5.00	220.0	15.0000	258.00
3587.0	.6640090	.107402	2.06	5.00	22.00	8.50000	227.30
3588.0	.6640090	.107402	2.14	5.00	23.00	26.0000	244.40
3589.0	.6640090	.207402	1.79	5.00	27.00	9.50000	167.50
3590.0	.6640090	.108442	1.61	5.00	36.00	15.0000	284.20
3592.0	.6640090	.108442	1.67	5.00	1600.	14.0000	255.30
3593.0	.6640090	.108442	1.34	5.00	1700.	10.0000	243.40
3594.0	.6640090	.108442	1.38	5.00	1700.	13.0000	222.20
3595.0	.6640090	.108442	1.42	5.00	1800.	13.0000	178.10

ID	CODE 1	CODE 2	CHL	TEMP	RATE	MODULUS	STRENG
3596.0	.6649090	.108442	1.81	5.00	41.00	11.0000	167.40
3598.0	.6649090	.108442	1.86	5.00	170.0	16.0000	234.40
3599.0	.6649090	.108442	1.92	5.00	180.0	16.0000	252.80
3600.0	.6649090	.108442	1.91	5.00	150.0	16.0000	255.40
3601.0	.6649090	.108442	1.78	5.00	160.0	14.0000	237.50
3617.0	.6649090	.109442	1.41	5.00	210.0	14.0000	149.70
3618.0	.6649090	.109442	1.36	5.00	220.0	8.20000	111.60
3619.0	.6649090	.109442	1.38	5.00	140.0	11.0000	123.00
3620.0	.6649090	.109442	1.71	5.00	200.0	10.0000	164.20
3621.0	.6649090	.109442	1.50	5.00	220.0	10.0000	68.900
3622.0	.6649090	.109442	1.70	5.00	210.0	9.50000	147.10
3623.0	.6649090	.109442	2.17	5.00	220.0	5.30000	75.500
3624.0	.6649090	.109442	1.99	5.00	210.0	7.30000	216.90
3625.0	.6649090	.109442	1.83	5.00	200.0	8.20000	167.20
3626.0	.6649090	.109442	1.84	5.00	200.0	8.20000	121.50
3628.0	.6649090	.109442	2.28	5.00	220.0	11.0000	75.500
3648.0	.6649045	.111442	2.10	2.00	190.0	1.40000	63.000
3649.0	.6649045	.111442	2.36	2.00	170.0	1.60000	66.900
3650.0	.6649045	.111442	2.36	2.00	150.0	.960000	58.800
3651.0	.6649045	.111442	1.98	2.00	180.0	1.10000	55.400
3652.0	.6649045	.111442	2.60	2.00	170.0	1.20000	52.600
3653.0	.6649045	.111442	1.93	2.00	120.0	1.40000	71.000
3654.0	.6649045	.111442	2.11	2.00	130.0	2.50000	80.300
3655.0	.6649045	.111442	2.32	2.00	120.0	2.80000	55.900
3656.0	.6649045	.111442	2.08	2.00	140.0	2.70000	90.800
3657.0	.6649045	.211442	1.49	2.00	110.0	4.10000	74.800
3658.0	.6649045	.111442	1.80	2.00	840.0	4.20000	74.800
3659.0	.6649045	.111442	2.01	2.00	910.0	5.20000	91.600
3660.0	.6649045	.111442	3.35	2.00	740.0	6.10000	86.100
3661.0	.6649045	.111442	2.30	2.00	800.0	4.70000	84.000
3662.0	.6649045	.111442	1.85	2.00	1100.	4.10000	77.700
3664.0	.6649045	.112442	2.44	2.00	120.0	3.10000	42.800
3685.0	.6649090	.112442	1.30	2.00	270.0	2.40000	98.500
3690.0	.6649090	.112442	1.36	2.00	280.0	5.30000	79.400
3691.0	.6649090	.112442	1.80	2.00	30.00		118.20
3694.0	.6649090	.112442	1.43	2.00	190.0	7.70000	78.800
3695.0	.6649090	.112442	1.39	2.00	200.0	6.50000	130.00
3696.0	.6649090	.112442	1.50	2.00	190.0	8.40000	82.100
3698.0	.6649090	.112442	1.80	2.00	210.0	7.60000	99.200
3700.0	.6649090	.112442	1.70	2.00	1100.	6.80000	131.30
3701.0	.6649090	.112442	1.36	2.00	1200.	5.50000	78.800
3702.0	.6649090	.112442	1.34	2.00	1100.	8.50000	134.60
3744.0	.6649000	.113442	1.17	2.00	31.00	1.70000	97.200
3745.0	.6649000	.113442	1.14	2.00	30.00	4.80000	104.90
3746.0	.6649000	.113442	1.14	2.00	34.00	8.80000	95.900
3747.0	.6649000	.113442	1.25	2.00	27.00	8.30000	97.800
3749.0	.6649000	.112442	1.18	2.00	200.0	8.80000	116.90
3750.0	.6649000	.113442	1.14	2.00	190.0	5.90000	78.100
3751.0	.6649000	.213442	1.23	2.00	200.0	6.60000	78.800
3752.0	.6649000	.113442	1.16	2.00	190.0	6.20000	105.10
3753.0	.6649000	.113442	1.24	2.00	210.0	7.10000	79.400
3754.0	.6649000	.113442	1.16	2.00	820.0	12.0000	111.60
3755.0	.6649000	.113442	1.13	2.00	1000.	22.0000	90.600
3756.0	.6649000	.113442	1.04	2.00	1200.	12.0000	130.00
3758.0	.6649000	.113442	1.24	2.00	1200.	23.0000	158.30

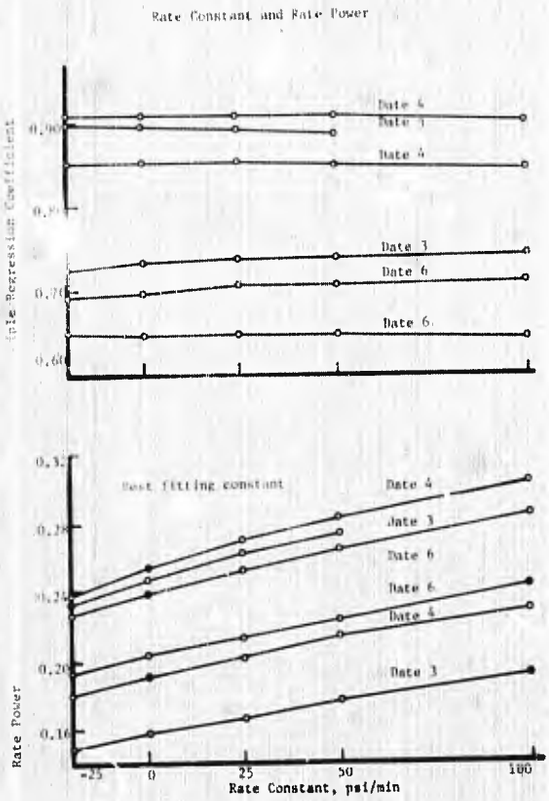

Exhibit 5.1

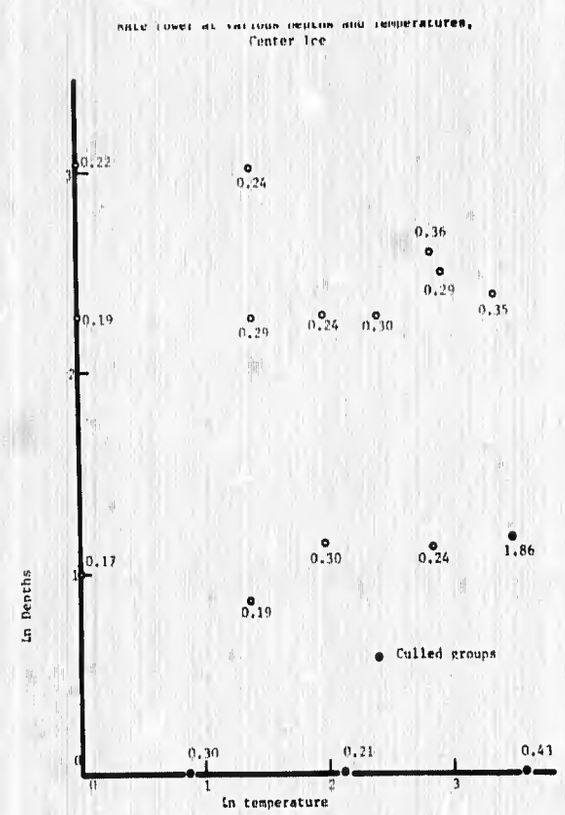

Exhibit 5.3

EXHIBIT 5.2

DATA GROUPS, COMPRESSION, ALL VALUES IN HUNDREDTHS

ID	NOBS	RPOW	LN DEP	LN TEM	LN SAL	LN ROTVAR	X E
HORIZONTAL SPECIMENS							
CFAREV	9	10	111	161	249	40	
CFB	19	15	97	249	228	40	
CFC	15	16	139	302	231	40	
CFD	25	14	247	266	222	40	
CM99A	22	42	139	209	198		• EARLY DATE
CM99B	71	20	113	266	192	76	
CM99C	40	25	120	304	187	76	
CM99D	17	20	298		147	76	
CM99E	35	17	303	230	177	76	
CM99F	11	21	303	304	143	76	
CRP A	16	30	87		201	100	• -1 C
CRP B	75	17		100	193	100	
CRP C1	32	19		230	211	100	
CRP C2	42	22		304	180	100	
CRP D	89	19	138	86	171	100	
CRP E1	48	29	139	230	182	100	
CRP E2	62	24	139	304	163	100	
CRP F	11	21	211		179	100	• - 1 C
CRP G	8	23	195	115	184	100	
CRP H	37	24	195	236	158	100	
CRP I	14	30	240	161	158	100	
CRP J	17	30	240	230	190	100	
CRP K	46	34	283	113	152	100	
CRP L RV	50	36	283	264	147	100	
CRP M	29	29	294	252	192	100	
CRP N	7	43	358		140	100	• SMALL GROUP
CRP O	11	86	350	119	140	100	• - 1 C
CRP P	17	35	333	242	140	100	
CB90AREV	8	22	334		114	48	
CB90B	9	15	218	230	-88		•
CB90C	12	24	327	230	113	48	
CB90DREV	44	16	378	69	159	48	
CB90E	102	19	379	184	143	48	
CB90F	27	19	378	304	151	48	
CB90GREV	28	22	414	27	72	48	
CB90HREV	23	20	397	165	154	48	
CB90I	21	20	428	230	102	48	
CB94AREV	45	44	378	69	143	123	
CB94BREV	59	39	379	161	144	123	
CB94C	34	42	378	230	158	123	
CB94D	24	43	378	304	153	123	
CB94E	13	20	401	64	148		• - 1.2 C
CB94FREV	19	44	397	161	155	123	
CB94GREV	25	33	428	18	-97	123	
CB94H	15	39	428	216	-99	123	
CB99AREV	52	25	378	69	141	73	
CB99BREV	42	25	378	161	155	73	
CB99C	37	28	378	230	155	73	
CB99D	29	26	378	304	151	73	
CB99EREV	27	22	397	134	161	73	
CB99F	26	22	428	16	126	73	
CB99G	19	28	428	230	100	73	
VERTICAL ICE							
CM00A	16	21	208	275	218	2	
CM00B	16	19	188	181	136	2	
CB09A	49	18	378	69	155	1	
CB09B1	24	17	369	161	115	1	
CB09B2	60	17	378	161	136	1	
CB09C	32	20	378	230	164	1	
CB09D	22	12	378	304	155	1	
CB09E1	8	18	397	69	167	1	
CB09E2	22	28	397	161	160	1	• VERY EARLY
CB09F	10	9	387	255	143	1	•
CB09GREV	29	18	428	69	-131	1	
CB09H	18	14	428	230	- 32	1	

• CULLED DATA GROUPS

EXHIBIT 5.4

EVALUATION OF STRATE TWO, COMPRESSION

ID	NOB	RPOW ×100	AV ×100	SD ×10E4	CV ×10E4	AV ×100	SD ×10E4	CV ×10E4	
			••••STRATE 2••			----STRATE 1--			
HORIZONTAL SPECIMENS									
•••FINE ICE•••									
CFAREV	9	10	470	1504	319	483	1593	330	
CFB	19	15	535	2252	421	522	2720	520	
CFC	15	16	558	2014	161	549	1034	188	
CFD	25	14	542	1058	195	553	1008	182	
•••MEDIUM ICE•••									
CM99A	22	42	488	3948	808	364	3324	1092	1
CM99B	71	20	501	3876	773	497	3592	723	2
CM99C	40	25	540	2088	386	510	1887	369	
CM99D	17	20	435	3686	846	432	3582	830	3
CM99E	35	17	463	2437	526	507	1905	375	
CM99F	11	21	494	1766	357	524	1144	218	
•••CENTER ICE•••									
CRP A	16	30	421	7570	2354	270	7189	2666	4
CRP B	75	17	444	3141	708	448	3399	758	5
CRP C1	32	19	487	2727	560	493	2731	554	
CRP C2	42	22	518	1185	228	513	1192	232	
CRP D	89	19	408	2671	654	422	2878	682	
CRP E1	48	29	432	2412	559	401	2290	570	
CRP E2	62	24	468	1621	346	480	1596	332	
CRP F	11	21	366	2652	724	370	2706	732	6
CRP G	8	23	383	1674	437	386	2064	535	
CRP H	37	24	441	3348	763	454	3409	750	
CRP I	14	30	364	2649	728	336	2583	765	7
CRP J	17	30	450	1225	272	436	1161	266	
CRP K	46	24	386	2852	726	401	2917	727	8
CRPL1	27	40	390	3571	916	329	3004	921	9
CRPL2	23	29	427	2773	649	442	2740	619	
CRP M	29	29	407	1567	385	415	1848	445	
CRP N	7	43	375	3466	923	316	2998	966	10
CRP O	11	86	386	1193	308				11
CRP P	17	35	410	1824	445	394	1914	486	
•••BOTTOM ICE•••									
CB90AREV	8	22	539	1348	250	497	613	123	
CB90B	9	15	510	3104	608	516	2863	555	
CB90C	12	24	540	2283	422	509	2073	407	
CB90DREV	44	16	545	1812	332	554	1796	324	
CB90E	102	19	560	3077	549	562	3279	582	
CB90F	27	19	567	1851	315	604	1832	303	
CB90GREV	28	22	510	3266	640	485	3083	635	
CB90HREV	23	20	544	2600	477	541	2517	465	
CB90I	21	20	507	3147	620	516	3236	627	
CB94AREV	45	44	269	2594	964	218	2270	1041	12
CB94BREV	59	39	291	4089	1405	294	4093	1391	13
CB94C	34	42	291	1515	520	291	1515	520	
CB94D	24	43	318	1772	557	331	1726	521	
CB94E	13	20	256	1984	773	357	1838	514	14
CB94FREV	19	46	258	1866	723	222	1651	745	
CB94GREV	25	33	309	2218	718	335	2385	711	15
CB94H	15	39	286	1754	613	319	1366	429	
CB99AREV	52	25	461	2255	489	444	2175	490	
CB99BREV	42	25	488	1941	398	482	1935	401	
CB99C	37	28	509	1540	302	494	1486	301	
CB99D	29	26	539	1071	198	549	1022	186	
CB99EREV	27	22	496	2221	447	512	2683	524	
CB99F	26	22	466	3213	687	471	3249	690	
CB99G	19	28	487	2421	496	485	2411	497	
VERTICAL SPECIMENS									
•••MEDIUM ICE•••									
CM00A	16	21	539	3385	628	508	3233	636	
CM00B	16	19	519	4848	934	505	4442	879	
•••BOTTOM ICE•••									
CB09A	49	18	570	2184	383	574	2183	380	
CB09B1	24	17	610	1845	302	610	1845	302	
CB09B2	60	17	596	2685	450	596	2685	450	
CB09C	32	20	640	1649	257	612	1444	235	
CB09D	22	12	679	2288	336	698	2283	327	
CB09E1	8	18	513	836	162	518	835	161	
CB09E2	22	28	569	2111	371	493	1170	237	
CB09F	10	9	600	2872	479	633	2772	437	
CB09GREV	29	18	501	3096	617	505	3102	614	
CB09H	18	14	535	4942	923	546	4939	904	

1 EARLY 384-405
2 466-479
3 TEMP = -1
4 TEMP = -1
5 TEMP = -2.5
6 ONLY 11. TEMP = -1
7 ONLY 14
8 TEMP = -2.5
9 POOR RESULTS
10 TEMP = -1
11 REGRESSION BLEW UP
12 TEMP = -2
13 TEMP = -2
14 TEMP = -1.2
15 PACK ICE. TEMP = -1

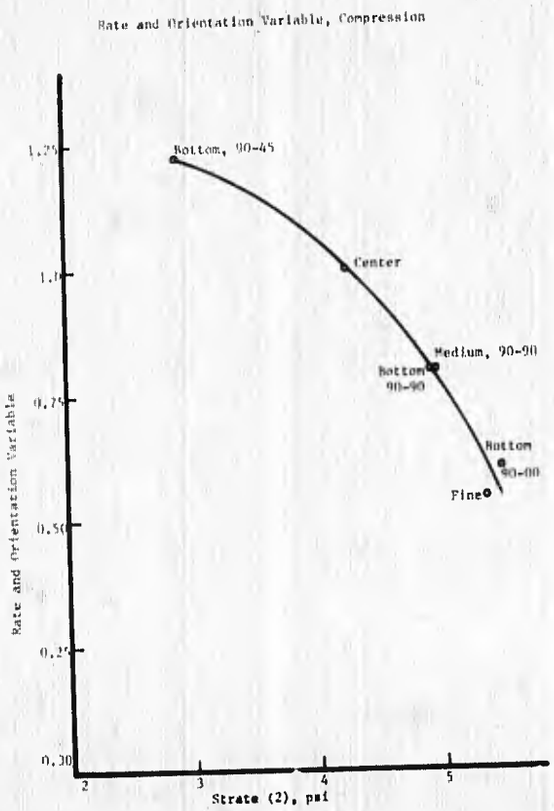

Exhibit 5.5

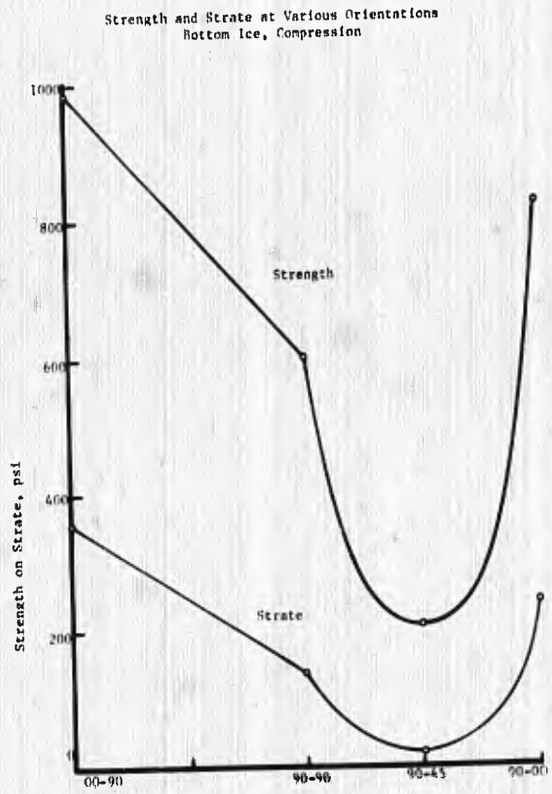

Exhibit 5.6

EXHIBIT 5.7

STATISTICAL ANALYSIS OF LN(STRENGTH) AND STRATE

ID	NOBS	AV LN	AV	STDEV	ESTDEV	COFVAR
HORIZONTAL ICE						
FINE 90-11 ICE						
STRENGTH	71	6.0199	411	.6882	1.99	.1143
STRATE	68	5.3409	209	.3042	1.35	.0569
DIFF		.6790	1.97	.3840	1.47	
MEDIUM 90-90 ICE						
STRENGTH	203	6.2036	493	.5089	1.66	.0820
STRATE	196	4.9489	141	.4424	1.56	.0893
DIFF		1.2547	3.50	.0665	1.07	
CENTER 90-11 ICE						
STRENGTH	606	5.7464	313	.7085	2.03	.1232
STRATE	611	4.2828	72	.5053	1.66	.1179
DIFF		1.4636	4.31	.2032	1.22	
BOTTOM 90-00 ICE						
STRENGTH	246	6.7134	822	.5535	1.73	.0820
STRATE	274	5.4666	237	.3547	1.42	.0648
DIFF		1.2468	3.48	.1958	1.21	
BOTTOM 90-45 ICE						
STRENGTH	269	5.3421	210	.7776	2.17	.1445
STRATE	234	2.8658	17	.3260	1.39	.1137
DIFF		2.4763	11.9	.4516	1.57	
BOTTOM 90-90 ICE						
STRENGTH	308	6.3947	600	.6085	1.84	.0951
STRATE	232	4.8984	134	.3255	1.38	.0664
DIFF		1.4963	4.46	.2830	1.32	
ALL HORIZONTAL ICE						
STRENGTH	1703	6.0054	405	.7949	2.21	.1325
STRATE	1615	4.4992	90	.8857	2.42	.1969
DIFF		1.5062	4.52	-.0908	.91	
VERTICAL ICE						
MEDIUM 00-00 ICE						
STRENGTH	33	6.2349	510	.4271	1.53	.0685
STRATE	32	5.0518	156	.4365	1.54	.0864
DIFF		1.1831	3.26	-.0094	.99	
BOTTOM 00-90 ICE						
STRENGTH	306	6.8956	985	.6483	1.91	.0940
STRATE	274	5.8688	354	.5234	1.69	.0891
DIFF		1.0268	2.79	.1249	1.13	
ALL VERTICAL ICE						
STRENGTH	339	6.8313	927	.6601	1.93	.0966
STRATE	307	5.7646	117	.6586	1.93	.1142
DIFF		1.0667	2.90	.0015	1.00	
ALL ICE						
STRENGTH	2042	6.1425	465	.8274	2.28	.1347
STRATE	1922	4.6954	109	.9861	2.68	.2100
DIFF		1.4471	4.25	-.1587	.85	

EXHIBIT 5.8

TENSION RATE POWER

ID	NOBS	STR	DEP	T	RATE	STDEVR	RPOW	T
RNTF1	11	3.945	1.212	1.089	3.715	.962	-.117	.70
RNTF2	15	4.588	2.079	1.352	5.439	.681	-.035	.15
RNTM1	9	4.343	.693	1.792	5.147	1.040	.162	1.43
RNTM2	12	4.612	2.904	2.343	6.016	1.114	.178	3.35
RNTC1	21	3.686	1.493	.964	2.763	1.188	.042	.95
RNTC2A	9	3.873	1.419	2.539	3.043	1.322	.124	1.44
RNTC3A	13	4.434	0.000	.693	4.916	1.803	.107	2.85
RNTC4	22	4.414	1.405	.693	4.493	2.011	.026	2.24
RNTC5A	12	4.198	2.833	.693	4.272	1.946	.033	1.53
RNTC6A	14	4.582	.792	1.609	4.667	1.951	.050	3.04
RNTC7	9	4.347	2.833	1.609	4.242	2.002	.033	2.64
RNTC8	16	4.732	.780	2.303	4.938	1.903	.069	6.39
RNTC9	10	4.469	2.833	2.303	4.603	1.940	.066	1.92
RNTC10	7	4.734	1.386	2.939	4.653	1.642	.102	2.76
RNTC11	23	4.720	.000	3.042	5.268	1.564	.045	2.89
RNTC12	12	4.667	1.386	3.045	4.869	1.670	.063	3.88
NTC13A	9	4.567	2.833	3.045	4.690	1.751	.036	2.12
RNT091A	16	5.476	3.784	.693	5.442	1.839	.043	2.75
RNT092	17	5.596	3.784	1.609	5.494	1.691	.028	1.05
RNT093A	13	5.272	3.956	1.327	4.965	1.258	.034	1.24
RNT094	10	5.453	3.689	1.609	5.568	1.792	.032	1.80
RNT095	11	5.403	3.784	1.609	5.473	1.729	.038	1.20
RNT096	12	5.711	3.784	2.303	5.315	1.749	-.023	.59
RNT097A	12	5.873	3.784	3.045	5.278	1.555	.038	1.83
RNT901	23	4.304	2.986	1.821	3.543	.968	.166	3.43
RNT902	21	4.575	3.784	.693	4.844	1.677	-.021	1.03
RNT903	12	4.640	3.784	.693	5.210	1.512	.057	1.40
RNT904	22	4.858	3.784	1.609	4.947	1.699	.032	2.22
RNT905A	15	4.552	3.970	1.365	4.613	1.532	-.064	1.92
RNT906	18	4.509	3.784	1.609	4.731	1.603	.063	1.66
RNT907	11	4.953	3.784	2.303	4.986	1.815	.029	1.07
RNT908	13	4.975	3.784	3.045	4.802	1.853	.020	.79
RNT941	11	4.244	3.366	1.263	3.736	1.304	.136	5.80
RNT942	15	4.613	3.784	.693	5.668	1.583	.138	3.70
RNT943	13	4.250	3.784	.693	5.107	1.591	.090	2.11
RNT944	12	4.673	3.784	1.609	5.132	1.776	.134	5.72
RNT945	15	4.344	3.970	1.365	5.291	1.414	.107	3.94
RNT946	12	4.466	3.784	1.609	4.940	1.536	.090	3.29
RNT947	11	4.822	3.784	2.303	5.243	1.606	.118	5.20
RNT948	14	4.778	3.784	3.045	5.349	1.913	.079	3.42
RNT991	26	4.547	2.639	2.175	3.872	1.102	.096	2.31
RNT992A	18	4.940	3.784	.693	4.836	1.838	.017	.84
RNT993A	9	4.640	3.784	.693	5.019	1.440	.075	1.47
RNT994	23	5.092	3.784	1.609	5.234	1.500	.064	3.23
RNT995	18	4.962	3.970	1.355	5.198	1.373	.044	1.77
RNT996A	12	4.824	3.784	1.609	4.622	1.628	.037	1.15
RNT997	21	5.240	3.784	2.303	5.387	1.691	.071	2.47
RNT998	18	5.145	3.784	3.045	5.330	1.935	.019	.50

EXHIBIT 5.9

STRATE AND STRENGTH INDIVIDUAL DATA GROUPINGS

STRATE	STRENGTH	
RNTM1	009	
181.88	726.50	SUM
3925.99	62697.25	CROSS PRODUCT
20.2989	80.7222	AVERAGE
5.5943	22.5070	STANDARD DEVIATION
.2768	.2788	COEFF OF VARIATION

RNT2	012	RNTC10	007	RNT907	011	RNT991	026	RNT093A	013
552.78	1255.30	643.54	804.90	1274.77	1574.30	1941.74	2547.00	2060.91	2493.20
26862.22	140306.26	59866.20	94575.63	150516.56	230009.09	154956.45	267283.88	332317.88	485832.34
46.0654	104.5833	91.9353	114.9857	115.8883	143.1181	74.6845	97.9615	158.5318	191.7846
11.1922	28.6898	10.8124	18.3649	16.6895	21.6751	19.9340	26.6652	21.5972	25.2899
.2429	.2743	.1176	.1597	.1440	.1514	.2669	.2722	.1362	.1318
RNTC1	021	RNTC11	023	RNT908	013	RNT992A	018	RNT094	010
770.76	892.90	1819.95	2602.20	1566.23	1901.10	1958.71	2943.80	1935.59	2344.80
31742.60	42246.89	146026.78	299623.18	192048.56	283827.83	218741.54	367061.68	377605.29	554547.20
36.7332	42.5190	79.1286	113.1391	120.4793	146.2384	108.8173	141.3222	193.5590	234.4800
13.1394	14.6315	9.5724	15.3926	16.7086	22.0111	18.1489	21.0967	18.1171	22.9455
.3579	.3441	.1209	.1360	.1386	.1545	.1667	.1492	.0936	.0978
RNTC2A	009	RNTC12	012	RNT941	011	RNT993A	009	RNT095	011
399.67	458.40	1030.12	1287.60	486.98	789.20	720.80	952.10	2037.66	2471.30
19705.60	26012.48	89043.97	140575.14	22151.60	59628.58	59596.03	105025.19	387106.82	568033.59
44.4306	50.9333	85.8436	107.3166	44.2709	71.7454	80.0893	105.7888	185.2419	224.6636
15.5679	18.2904	7.4738	14.6868	7.6977	17.3408	15.2775	23.1937	31.0590	35.8083
.3503	.3583	.0870	.1368	.1738	.2417	.1907	.2192	.1676	.1593
RNTC3A	013	RNTC13A	009	RNT942	015	RNT994	023	RNT096	012
760.00	1135.60	761.75	875.30	799.58	1560.40	2890.20	3802.70	2911.63	3705.10
46121.74	106619.56	65609.22	87003.47	43871.20	172123.26	3702F3.75	648747.97	844174.33	.11860507E 07
58.4616	87.3538	84.6395	97.2455	53.3055	104.0266	125.6612	165.3347	259.3025	306.7583
11.8701	24.8671	11.9083	15.3120	9.4455	26.4573	17.9599	30.1732	58.2477	61.8430
.2030	.2846	.1406	.1574	.1771	.2543	.1429	.1824	.2246	.2002
RNTC4	022	RNT901	023	RNT943	013	RNT995	018	RNT097A	012
1450.19	1829.60	1483.70	1808.10	514.56	933.30	2008.44	2601.30	3630.88	4297.90
96797.12	154141.22	105623.20	156880.63	20971.23	69882.29	228568.57	384958.29	1111875.6	1563363.2
65.9178	83.1636	64.5089	78.6130	39.5815	71.7923	111.5805	144.5166	302.5739	358.1583
7.5705	9.7224	21.2248	25.8847	7.0953	15.4879	16.2058	23.0435	34.7243	46.7434
.1148	.1169	.3290	.3292	.1792	.2157	.1452	.1594	.1147	.1305
RNTC5A	012	RNT902	021	RNT944	012	RNT996A	012	RNT091A	016
688.33	809.30	1650.39	2061.80	741.94	1327.90	1194.70	1516.10	21.1713	32.3632
40215.76	55850.93	133933.58	207211.54	46679.13	156775.05	121964.87	196885.05	.1084	.1343
57.3613	67.4416	78.5900	98.1809	61.8288	110.6583	99.5588	126.3416		
8.1567	10.7466	14.5420	15.4629	8.5570	29.8965	16.5729	22.0298	RNT092	017
.1421	.1593	.1850	.1574	.1383	.2701	.1664	.1743	40.7390	50.8492
								.1811	.1859
RNTC6A	014	RNT903	012	RNT945	015	RNT997	021	RNT093A	013
1050.84	1386.10	987.95	1265.80	707.62	1247.00	3130.60	4104.60	21.5972	25.2899
80938.32	141344.97	83724.43	138950.90	36419.24	116449.76	493561.74	856664.96	.1362	.1318
75.0605	99.0071	82.3238	105.4833	47.1749	83.1333	149.0766	195.4571		
12.5915	17.7832	14.7277	22.2161	14.7288	30.2164	36.6478	52.1495	RNT094	010
.1677	.1796	.1788	.2106	.3122	.3634	.2458	.2668	18.1171	22.9455
								.0936	.0978
RNTC7	009	RNT904	022	RNT946	012	RNT998	017		
608.39	699.30	2290.13	2850.70	615.44	1060.00	2323.79	2985.30	RNT095	011
41325.88	54955.19	240811.14	373825.47	31985.20	96098.32	338111.21	557131.23	31.0590	35.8083
67.5991	77.7000	104.0968	129.5772	51.2872	88.3333	136.6940	175.6058	.1676	.1593
4.9881	8.8064	10.7255	14.5398	6.1837	14.9696	35.7612	45.3424		
.0737	.1132	.1030	.1122	.1205	.1694	.2616	.2582	RNT096	012
								58.2477	61.8430
RNTC8	016	RNT905A	015	RNT947	011	RNT091A	016	.2246	.2002
1375.15	1832.00	1207.96	1457.20	796.20	1392.10	3124.24	3853.70		
119063.00	213236.02	103616.48	148429.32	58199.11	182092.59	616778.40	943898.41	RNT097A	012
85.9469	114.5000	80.5312	97.1466	72.3826	126.5545	195.2650	240.8562	34.7243	46.7434
7.6281	15.2140	21.2759	22.1475	7.5329	24.3228	21.1713	32.3632	.1147	.1305
.0887	.1328	.2641	.2279	.1040	.1921	.1084	.1343		
RNTC9	010	RNT906	018	RNT948	014	RNT092	017		
765.84	892.20	1357.96	1679.40	990.71	1697.70	3823.61	4648.50		
60790.55	83528.10	106414.26	163604.88	71511.13	213962.73	886558.75	.13124616		
76.5842	89.2200	75.4426	93.3000	70.7650	121.2642	224.9188	273.4411		
15.4165	20.8859	15.2729	20.1711	10.3901	24.9497	40.7390	50.8492		
.2013	.2340	.2024	.2161	.1468	.2057	.1811	.1859		

EXHIBIT 5.1

STRATE AND STRENGTH, SINGTO AND LARGER GROUPINGS

	STRENGTH	STRATE	STRENGTH/STRATE	
LL TENSION				
671				NO. OF DATA
	86960.50	66225.06	1.31	SUMS
	14470417.00	8918692.30	1.62	CROSS PRODUCTS
	129.598	98.696	1.313	AVERAGES
	69.1146	59.6324	1.1590	STD. DEVIATION
	.5332	.6042	.8826	COEFF. OF VARIATION
ALL HORIZONTAL TENSION				
580				
	63146.00	46500.54	1.35	
	7856226.80	4362275.20	1.80	
	108.872	80.173	1.357	
	41.1696	33.0051	1.2439	
	.3781	.4127	.9160	
ALL LATE HORIZONTAL				
481				
	55923.90	41235.56	1.35	
	7241477.10	4024169.60	1.79	
	116.265	85.728	1.356	
	39.2490	31.9209	1.2295	
	.3375	.3723	.9066	
MEDIUM				
21				
	1981.50	734.66	2.69	
	203003.51	30768.21	6.59	
	94.357	34.983	2.697	
	28.3150	15.9169	1.7789	
	.3000	.4549	.6595	
ALL CENTER				
177				
	15305.60	12124.73	1.27	
	1499712.80	897246.74	1.67	
	87.602	68.501	1.278	
	28.3431	19.4654	1.4560	
	.3235	.2841	1.1385	
ALL LATE CENTER				
147				
	14154.30	10954.10	1.29	
	1431453.40	845798.54	1.69	
	96.287	74.517	1.292	
	21.6712	14.2204	1.5239	
	.2250	.1908	1.1793	
BOTTOM 00-90				
91				
	23814.50	19724.52	1.20	
	6614190.00	4556417.10	1.45	
	261.697	216.752	1.207	
	65.1483	55.8836	1.1657	
	.2489	.2578	.9655	

	STRENGTH	STRATE	STRENGTH/STRATE
ALL BOTTOM 90-00			
135			
	14598.40	11819.09	1.23
	1702739.70	1116688.20	1.52
	108.136	87.548	1.235
	30.4350	24.7285	1.2307
	.2814	.2824	.9964
LATE BOTTOM 90-00			
112			
	12790.30	10335.39	1.23
	1545859.00	1011065.00	1.52
	114.199	92.280	1.237
	27.7079	22.7228	1.2193
	.2426	.2462	.9853
ALL BOTTOM 90-45			
103			
	10007.60	5653.03	1.77
	1067012.40	331787.84	3.21
	97.161	54.883	1.770
	30.4641	14.5279	2.0969
	.3135	.2647	1.1845
LATE BOTTOM 90-45			
92			
	9210.40	5166.05	1.78
	1007383.80	309636.24	3.25
	100.200	56.152	1.784
	30.3278	14.6566	2.0692
	.3026	.2610	1.1596
ALL BOTTOM 90-90			
144			
	21052.90	16169.03	1.30
	3383758.30	1985784.10	1.70
	146.200	112.284	1.302
	46.2442	34.5040	1.3402
	.3163	.3072	1.0293
LATE BOTTOM 90-90			
118			
	18505.90	14227.24	1.30
	3116474.40	1830827.70	1.70
	156.829	120.569	1.300
	42.7875	31.4128	1.3621
	.2728	.2605	1.0471

EXHIBIT 6.1

COMPRESSION DATA WITH SALT PROPERTIES, CENTER ICE

ID	A	B	CHL	T	STRATE	BV	SV	IV	E	STR	RATE	ES
11980	2639011	506011	485	10	343610	4171	0	5829	80	60	9	4
12130	2639011	507011	485	10	365139	4171	0	5829	700	700	40	38
12140	2639011	367011	485	10	334560	4171	0	5829	400	620	125	28
12150	2639011	367011	485	10	232662	4171	0	5829	620	420	150	18
12160	2639011	507011	485	10	225526	4171	0	5829	600	230	230	9
12610	2639011	309011	285	10	426304	2451	0	7549	9300	2450	2100	71
11960	2639011	505011	485	20	426940	2104	0	7896	7100	2170	630	71
11970	2639011	506011	485	20	420987	2104	0	7896	15000	2370	680	67
15730	3639011	135011	360	20	428544	1562	0	8438	2500	1410	47	72
15740	3639011	136011	365	20	361099	1584	0	8416	1400	900	174	47
15750	3639011	436011	285	20	420490	1236	0	8764	6100	2760	3700	67
15780	3639011	101011	367	20	451737	1592	0	8408	2900	1690	35	91
15790	3639011	101011	395	20	442149	1714	0	8286	2700	1520	33	83
15800	3639011	101011	400	20	435873	1736	0	8264	2100	1420	32	78
15810	3639011	101011	405	20	435445	1757	0	8243	6500	1610	68	77
15820	3639011	101011	400	20	419043	1736	0	8264	8200	1420	85	66
15830	3639011	101011	398	20	430616	1727	0	8273	4200	1610	90	74
15840	3639011	101011	412	20	421826	1788	0	8212	1400	1720	220	67
15850	3639011	101011	366	20	437545	1588	0	8412	3800	2140	314	79
15860	3639011	101011	363	20	437105	1575	0	8425	5500	2160	340	79
15870	3639011	401011	420	20	438447	1822	0	8178	3300	2680	1100	80
15880	3639011	401011	395	20	431262	1714	0	8286	8600	2600	1400	74
15890	3639011	401011	395	20	445102	1714	0	8286	3800	2910	1200	85
15900	3639011	301011	460	20	421151	1866	0	8134	2400	2520	2100	67
15910	3639011	301011	487	20	386766	1766	0	8234	8600	1900	3000	47
15920	3639011	301011	428	20	404797	1848	0	8152	12000	2370	3800	57
15940	3639011	103011	370	20	433844	1605	0	8395	2100	1420	36	76
15950	3639011	102011	485	20	421937	1757	0	8243	6400	1310	45	67
15960	3639011	102011	400	20	428236	1736	0	8264	1800	1520	74	72
15970	3639011	503011	440	20	409812	1475	0	8525	3400	1590	280	60
15980	3639011	103011	376	20	416782	1631	0	8369	4700	2060	840	64
15990	3639011	303011	479	20	313404	2078	0	7922	400	710	700	22
16000	3639011	304011	400	20	346746	1736	0	8264	5500	1170	2600	30
16010	3639011	307011	365	20	397145	1584	0	8416	1800	1800	1200	53
16020	3639011	303011	413	20	413184	1792	0	8208	1500	2170	1400	62
16030	3639011	303011	420	20	393301	1822	0	8178	5900	1800	1500	51
22440	3639011	107011	352	20	458625	1527	0	8473	15000	2030	68	98
22450	3639011	107011	358	20	447832	1553	0	8447	6200	1740	52	88
22460	3639011	107011	358	20	458370	1553	0	8447	3300	1900	47	97
22470	3639011	107011	351	20	455877	1523	0	8477	2200	1770	36	95
22480	3639011	107011	388	20	434918	1683	0	8317	4600	2540	97	115
22490	3639011	107011	370	20	446947	1605	0	8395	6000	2070	150	87
22500	3639011	107011	352	20	448523	1527	0	8473	6200	2170	180	88
22510	3639011	107011	348	20	437849	1510	0	8490	7100	1890	150	79
22520	3639011	107011	352	20	482926	1527	0	8473	3200	3380	320	125
22530	3639011	107011	367	20	456771	1592	0	8408	8800	2770	460	96
22540	3639011	107011	360	20	448906	1562	0	8438	8000	2570	470	89
22550	3639011	107011	364	20	458382	1579	0	8421	11000	3410	1400	97
22560	3639011	707011	350	20	469508	1519	0	8481	16000	3900	1600	109
22570	3639011	707011	330	20	461498	1432	0	8568	7800	3560	1500	100
22580	3639011	807011	358	20	468076	1553	0	8447	13000	4540	4200	107
22590	3639011	807011	376	20	447761	1631	0	8369	15000	3690	4100	88
22600	3639011	207011	376	20	464260	1631	0	8369	13000	4170	3200	103
22610	3639011	207011	365	20	462231	1584	0	8416	15000	4170	3600	101
22620	3639011	207011	349	20	460289	1514	0	8486	8000	3940	2900	99
22630	3639011	207011	350	20	460378	1519	0	8481	15000	3920	2800	99
12760	2639011	102011	526	50	471380	976	0	9022	5500	2300	48	111
12770	2639011	102011	526	50	457656	976	0	9022	5700	2380	120	97
12780	2639011	402011	526	50	461723	976	0	9022	800	3410	660	101
12790	2639011	402011	526	50	439696	978	0	9022	11000	3510	2500	81
12800	2639011	302011	526	50	494490	978	0	9022	19000	7060	5600	140
21760	3639011	104011	391	50	460136	727	0	9273	5100	2340	96	99
21770	3639011	104011	345	50	466654	641	0	9359	1400	2100	38	106
21780	3639011	104011	329	50	457848	611	0	9389	3500	2120	64	97
21790	3639011	104011	350	50	467388	651	0	9349	2400	2210	48	107
21800	3639011	104011	360	50	448805	669	0	9331	3900	2440	220	88
21810	3639011	104011	361	50	458704	671	0	9329	7200	2600	182	98
21820	3639011	104011	330	50	462063	613	0	9387	4700	2560	140	101
21830	3639011	104011	341	50	450311	634	0	9366	10000	2410	190	90
21840	3639011	104011	348	50	484220	647	0	9353	5800	3870	390	126
21850	3639011	104011	365	50	469039	678	0	9322	8000	3470	490	108
21860	3639011	704011	365	50	465235	678	0	9322	10000	3890	1100	104
21870	3639011	704011	365	50	465944	678	0	9322	20000	3940	1140	105
21880	3639011	704011	346	50	470248	643	0	9357	8600	4330	1500	110
21890	3639011	204011	338	50	475565	626	0	9372	20000	5900	5900	116
21900	3639011	204011	350	50	473617	651	0	9349	36000	5730	5600	113
21910	3639011	204011	340	50	457482	632	0	9368	3500	4700	4600	97
21920	3639011	504011	343	50	469518	637	0	9363	18000	5200	4150	109
21930	3639011	704011	378	50	470518	703	0	9297	13000	5060	3400	110
21940	3639011	104011	381	50	467113	708	0	9292	8600	3350	450	106
21950	3639011	704011	365	50	478058	678	0	9322	12000	5330	3000	119
13250	2639011	101011	494	100	501212	492	99	9408	11000	3460	66	150
13260	2639011	101011	494	100	504537	492	99	9408	2500	3960	110	155
13270	2639011	101011	494	100	485276	492	99	9408	2000	3920	275	128
13280	2639011	501011	494	100	501464	492	99	9408	11000	6700	1800	150
13290	2639011	501011	494	100	513127	492	99	9408	14500	7800	2150	159
13300	2639011	501011	494	100	504990	492	99	9408	16000	8540	5100	156
13560	2639011	806011	370	100	515659	368	74	9557	17500	9520	5150	171
20900	3639011	101011	386	100	502091	384	77	9538	3700	3590	76	151
20910	3639011	101011	375	100	493852	373	75	9551	43000	3340	80	139
20920	3639011	101011	419	100	497015	417	84	9498	3200	3430	78	144

20930	3639011	101011	386	100	509666	384	77	9538	2100	4090	100	163
20940	3639011	101011	404	100	485027	402	81	9516	7800	3670	200	127
20950	3639011	101011	407	100	495292	405	81	9513	8700	3850	160	141
20960	3639011	201011	385	100	498374	383	77	9539	13200	5130	550	146
20970	3639011	201011	406	100	498805	404	61	9514	10200	5310	640	146
20980	3639011	201011	386	100	508552	386	76	9535	11000	5740	580	161
20990	3639011	201011	393	100	510212	391	79	9529	16900	7430	1050	164
21000	3639011	201011	383	100	505108	381	77	9541	17500	6870	1700	156
21010	3639011	201011	384	100	499664	382	77	9540	24800	6720	2000	147
21020	3639011	201011	413	100	501397	411	83	9505	18500	7810	3900	150
21160	3639011	501011	385	100	499579	383	77	9539	31400	8300	5800	147
21170	3639011	201011	400	100	496659	398	80	9521	23500	8320	6800	143
21190	3639011	201011	390	100	505059	388	78	9533	17000	8020	3700	156
21200	3639011	201011	385	100	497463	383	77	9539	12100	7150	3050	144
12250	2639011	808011	531	210	488337	315	347	9537	10000	8230	5400	132
12260	2639011	309011	531	210	492766	315	347	9537	16000	7000	2050	138
12270	2639011	509011	531	210	498435	315	347	9337	4500	3270	44	146
14600	2639011	336011	494	210	517730	293	323	9383	14000	4540	83	177
14610	2639011	336011	494	210	532908	293	323	9383	18000	9110	1100	205
14620	2639011	136011	494	210	528221	293	323	9383	22000	8740	1100	196
14630	2639011	836011	494	210	529168	293	323	9383	27000	12570	5800	198
14660	2639011	336011	494	210	526678	293	323	9383	22900	10500	2800	193
14710	3639011	304011	380	210	524904	226	248	9525	10000	8290	1000	190
14720	3639011	304011	380	210	528752	226	248	9525	21000	8610	1000	197
14730	3639011	104011	380	210	524862	226	248	9525	17000	4900	85	190
14740	3639011	804011	380	210	529432	226	248	9525	14000	10710	2700	199
14750	3639011	804011	380	210	519645	226	248	9525	24000	11300	5500	180
14760	3639011	104011	380	210	521704	226	248	9525	22000	5180	128	184
14770	3639011	104011	380	210	525347	226	248	9525	14000	5910	200	191
14780	3639011	104011	380	210	525592	226	248	9525	13800	6900	410	191
22780	3639011	109011	356	210	519340	211	233	9555	20000	4800	100	180
22790	3639011	109011	356	210	520096	211	233	9555	10000	4740	91	181
22800	3639011	109011	272	210	527702	161	178	9660	16000	4930	78	195
22810	3639011	109011	272	210	520702	161	178	9660	4600	4410	63	182
22820	3639011	109011	272	210	521255	161	178	9660	14000	5730	210	183
22830	3639011	109011	272	210	503326	161	178	9660	10000	4740	200	153
22840	3639011	109011	272	210	523734	161	178	9660	1070	5750	190	188
22860	3639011	109011	272	210	524120	161	178	9660	26000	7500	650	188
22870	3639011	109011	272	210	504266	161	178	9660	22400	5990	580	154
22880	3639011	109011	272	210	504872	161	178	9660	14500	6360	740	155
22890	3639011	209011	272	210	523832	161	178	9660	22000	9500	2000	188
22900	3639011	209011	272	210	508828	161	178	9660	6000	7590	1410	162
22910	3639011	209011	272	210	520320	161	178	9660	11000	9230	2060	181
22930	3639011	809011	272	210	522785	161	178	9660	20800	11920	6100	186
22940	3639011	809011	272	210	504499	161	178	9660	20000	10030	6400	155
22950	3639011	209011	272	210	502583	161	178	9660	38000	8600	3400	152
22960	3639011	209011	272	210	517602	161	178	9660	16000	10400	4100	176
22970	3639011	209011	272	210	513979	161	178	9660	6000	10030	4100	170
23120	3639011	814011	310	210	523806	184	203	9612	27000	12000	6000	188
24080	3639011	214011	256	210	486821	152	167	9680	9100	6490	1900	130
24100	3639011	214011	315	210	514829	187	206	9606	26300	8860	2200	172
24110	3639011	814011	290	210	533662	172	190	9637	34700	13000	5500	207
24140	3639011	814011	362	210	523811	215	237	9547	17800	12690	7800	188
24160	3639011	814011	271	210	526074	161	177	9661	36400	12050	5500	192
24170	3639011	814011	248	210	520316	147	162	9690	0	10900	4500	181
24180	3639011	814011	277	210	530842	164	181	9654	12500	11810	4000	202

EXHIBIT 6.2

CODE FOR DATA

The data shown in Exhibit 6.1 is the data at a relatively advanced stage of analysis. Besides the original data, rate of loading, and modulus of elasticity, it contains brine volume, solid salt volume, ice volume, strate, and the natural log of strate.

A specimen of the data is shown below. The decimal is ommitted in the data and immediately below each "word" in the specimen below is the word number.

```
12250 2639011 808011 531 210 488337 315 347 9337 10000 8230 5400 132
 (1)    (2)    (3)   (4) (5)  (6)   (7)(8)  (9)  (10)   (11)(12) (13)
  1      0      0     2   1    5     4  4    4    4      1   0    0
```

Word Number

Decimal Place

Word Meaning

1 Identification number.
2 bcdeeff

b = date of collection

2 1 Nov-31 Dec
3 1 Jan-31 Apr
4 1 May-15 May
5 16 May-31 May
6 1 June-15 June
7 16 June-1 Aug
8 1 Aug-31 Oct

c = location of collection

1 100 yards of theater
2 1 mile off ACS
3 100 miles north of Barrow
4 200 miles north of Barrow
5 100-150 yards north of theater, 1961
6 300 yards north of theather

d = crystal type code

1 fine
2 medium
3 center
4 bottom
5 pack

ee - angle between sigma and zenith, 0° to 90°
ff - angle between sigam and c-axis, 0° to 90°
"11" indicates randomness

Word Meaning

3 ghhiij

g = failure type

Code	Tension meaning	Compression meaning
1	good test	no visible deformati
2	weld failure	tensile failure

3	head failure	head failure
4	no failure	plastic failure
5	not used	no information
6	"	bad test
7	"	bulge failure
8	"	explosive failure
9	"	ring around specimen

hh - age of sample at time of test, days.
ii - depth from top of ice to center of specimen, inches.
j - type of test, "1" is compression, "2" is tension

4 Chlorinity, o/oo
5 Temperature, -°C.
6 Natural log of Strate
7 Brine volume, relative
8 Solid salt volume, relative
9 Ice volume, relative
10 Modulus of Elasticity, psi x 10^5.
11 Strength, psi.
12 Rate of loading, psi/min.
13 Strate.

Plotback
1 Inch Center Ice, Compression

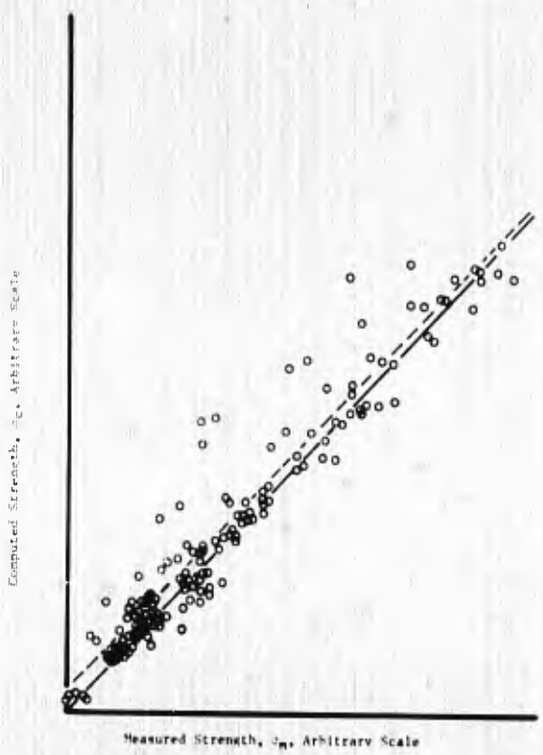

Exhibit 7.1A

Plotback,
4 Inch Center Ice, Compression

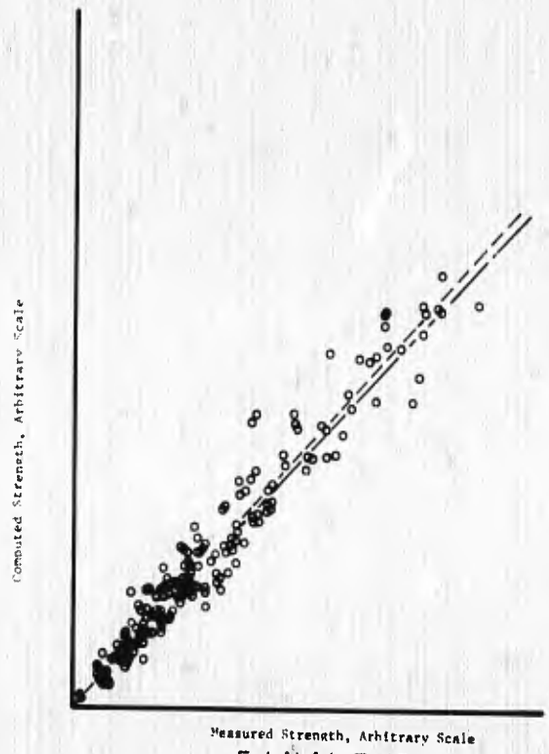

Exhibit 7.1B

Plotback, 7 Inch Center Ice
Compression

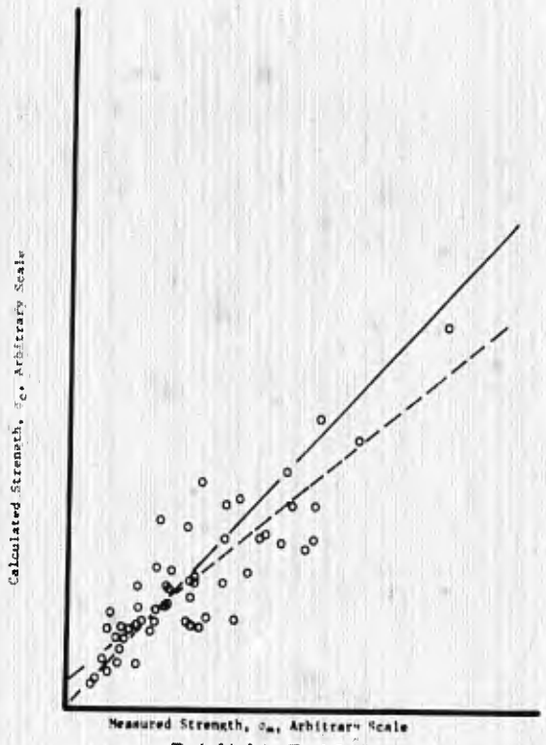

Exhibit 7.1C

Plotback, 11 Inch Center Ice,
Compression

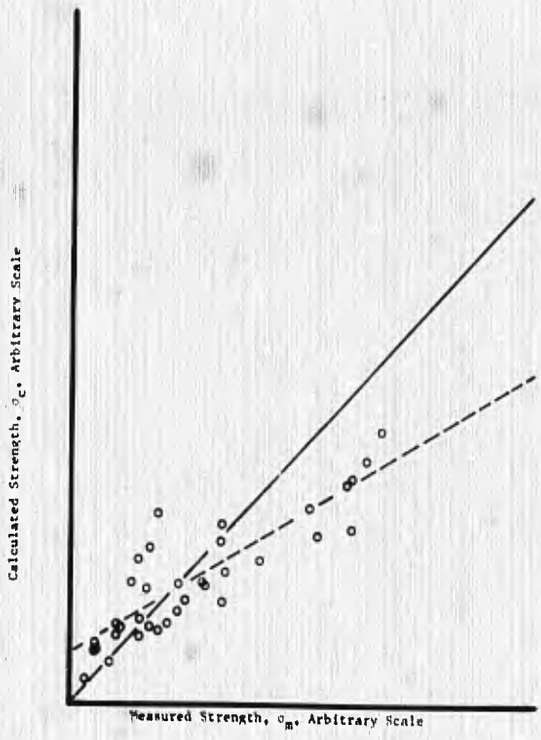

Exhibit 7.1D

Plotback, 17 Inch Center Ice
Compression

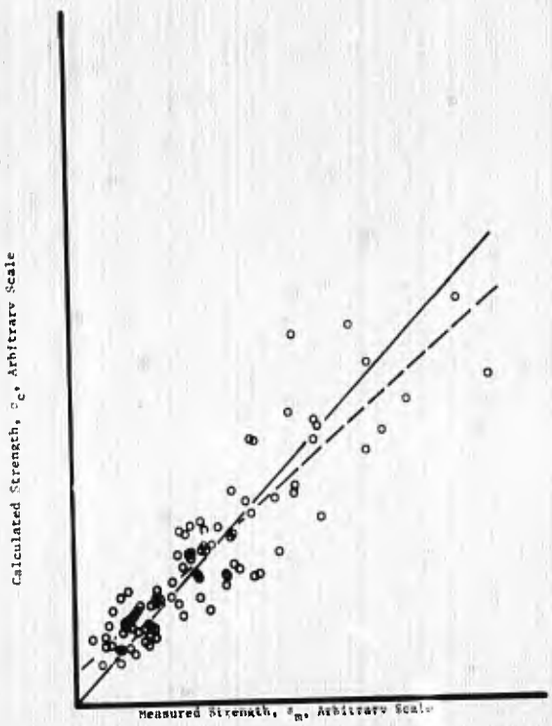

Exhibit 7.1F

Plotback, 32-36 Inch Center Ice,
Compression

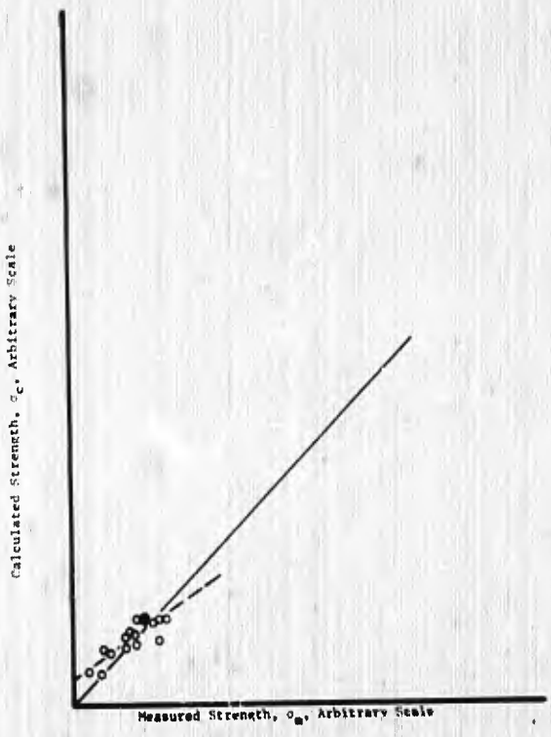

Exhibit 7.1E

Plotback, 25-29 Inch Center Ice
Compression

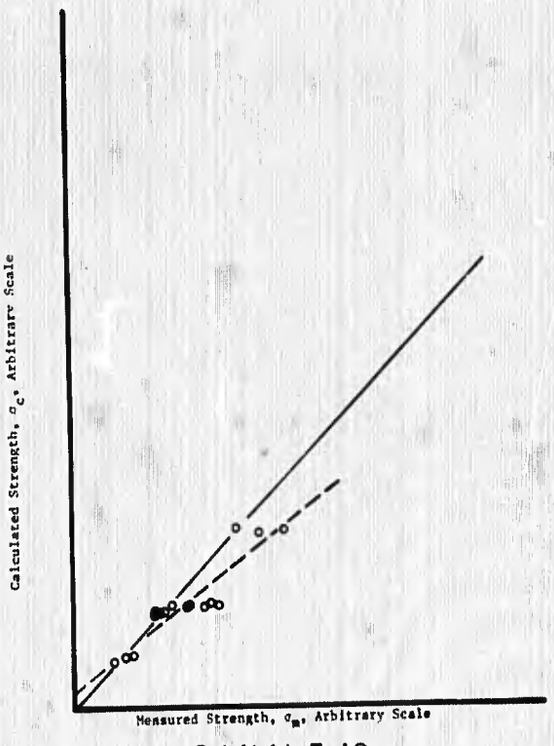

Exhibit 7.1G

Plotback, 18-21 Inch Center Ice,
Compression

Exhibit 7.1H

EXHIBIT 7.2 BRINE VOLUME STRENGTH FUNCTION

TEMP	1.	2.	4. DEPTH 8.	16.	32.	40.
1	34.8	36.8	38.6	40.4	42.5	44.9	45.8
2	76.1	63.2	54.6	49.2	46.4	45.6	45.7
3	94.2	74.8	61.6	53.1	48.2	45.9	45.7
4	104.8	81.6	65.7	55.4	49.2	46.1	45.7
5	112.0	86.2	68.5	56.9	49.9	46.2	45.7
6	117.3	89.5	70.5	58.0	50.4	46.3	45.7
7	121.3	92.1	72.1	58.9	50.7	46.4	45.7
8	124.6	94.2	73.4	59.6	51.1	46.5	45.6
9	127.2	95.9	74.4	60.1	51.3	46.5	45.6
10	129.5	97.3	75.3	60.6	51.5	46.5	45.6
11	131.3	98.5	76.0	61.0	51.7	46.6	45.6
12	133.0	99.6	76.6	61.4	51.9	46.6	45.6
13	134.4	100.5	77.2	61.7	52.0	46.6	45.6
14	135.7	101.3	77.7	62.0	52.1	46.6	45.6
15	136.5	102.0	78.1	62.2	52.2	46.7	45.6
16	137.8	102.7	78.5	62.4	52.3	46.7	45.6
17	138.7	103.3	78.6	62.6	52.4	46.7	45.6
18	139.6	103.8	79.2	62.8	52.5	46.7	45.6
19	140.3	104.3	79.5	62.9	52.5	46.7	45.6
20	141.0	104.7	79.7	63.1	52.6	46.7	45.6
21	141.6	105.1	80.0	63.2	52.7	46.7	45.6
22	142.2	105.5	80.2	63.4	52.7	46.8	45.6

EXHIBIT 7.3 11-ROOT BRINE VOLUME* MATRIX

TEMP	1.	2.	4. DEPTH 8.	16.	32.	40.
1	.4173	.4444	.4728	.5030	.5350	.5694	.5811
2	.5834	.6028	.6232	.6447	.6676	.6922	.7006
3	.6562	.6722	.6890	.7068	.7257	.7460	.7529
4	.6992	.7131	.7278	.7434	.7599	.7777	.7837
5	.7281	.7408	.7541	.7681	.7831	.7991	.8046
6	.7493	.7610	.7732	.7862	.8000	.8148	.8198
7	.7656	.7765	.7880	.8001	.8130	.8268	.8315
8	.7786	.7889	.7998	.8112	.8234	.8364	.8409
9	.7893	.7991	.8094	.8203	.8319	.8443	.8486
10	.7983	.8077	.8175	.8279	.8390	.8509	.8550
11	.8059	.8149	.8244	.8344	.8451	.8566	.8605
12	.8125	.8212	.8304	.8401	.8504	.8615	.8652
13	.8183	.8267	.8356	.8450	.8550	.8657	.8694
14	.8234	.8316	.8402	.8493	.8590	.8695	.8730
15	.8279	.8359	.8443	.8532	.8627	.8728	.8763
16	.8320	.8398	.8480	.8567	.8659	.8758	.8792
17	.8356	.8433	.8513	.8598	.8688	.8785	.8818
18	.8390	.8465	.8543	.8626	.8715	.8810	.8842
19	.8420	.8494	.8571	.8652	.8739	.8833	.8864
20	.8448	.8520	.8596	.8676	.8762	.8853	.8884
21	.8474	.8545	.8619	.8698	.8782	.8872	.8903
22	.8497	.8567	.8641	.8718	.8801	.8890	.8920

EXHIBIT 7.4 SALT REINFORCEMENT FUNCTION

TEMP	1.	2.	4. DEPTH 8.	16.	32.	40.
1	.0	.0	.0	.0	.0	.0	.0
2	.0	.0	.0	.0	.0	.0	.0
3	.0	.0	.0	.0	.0	.0	.0
4	.0	.0	.0	.0	.0	.0	.0
5	.0	.0	.0	.0	.0	.0	.0
6	.0	.0	.0	.0	.0	.0	.0
7	.0	.0	.0	.0	.0	.0	.0
8	.0	.0	.0	.0	.0	.0	.0
9	11.4	10.1	8.4	6.1	3.4	.7	-.0
10	18.0	16.0	13.2	9.7	5.4	1.1	-.1
11	22.7	20.2	16.7	12.2	6.9	1.4	-.1
12	26.3	23.3	19.3	14.1	7.9	1.6	-.1
13	29.0	25.7	21.3	15.5	8.8	1.8	-.2
14	31.2	27.7	22.9	16.7	9.4	1.9	-.2
15	33.0	29.3	24.3	17.7	10.0	2.1	-.2
16	34.6	30.7	25.4	18.6	10.5	2.2	-.2
17	36.0	31.9	26.4	19.3	10.9	2.2	-.2
18	37.2	33.0	27.3	20.0	11.2	2.3	-.2
19	38.3	34.0	28.1	20.6	11.6	2.4	-.2
20	39.3	34.9	28.9	21.1	11.9	2.5	-.2
21	40.3	35.7	29.6	21.6	12.2	2.5	-.2
22	41.1	36.5	30.2	22.1	12.4	2.6	-.2

EXHIBIT 7.5 STRATE OF ICE SHEET

TEMP	1.	2.	4. DEPTH 8.	16.	32.	40.
1	34.8	36.8	38.6	40.4	42.5	44.9	45.8
2	76.1	63.2	54.6	49.2	46.4	45.6	45.7
3	94.2	74.8	61.6	53.1	48.2	45.9	45.7
4	104.8	81.6	65.7	55.4	49.2	46.1	45.7
5	112.0	86.2	68.5	56.9	49.9	46.2	45.7
6	117.3	89.5	70.5	58.0	50.4	46.3	45.7
7	121.3	92.1	72.1	58.9	50.7	46.4	45.7
8	124.6	94.2	73.4	59.6	51.1	46.5	45.6
9	138.7	106.1	82.8	66.3	54.8	47.2	45.6
10	147.5	113.4	88.5	70.3	57.0	47.7	45.5
11	154.1	118.8	92.7	73.3	58.6	48.0	45.5
12	159.3	122.9	96.0	75.5	59.8	48.3	45.4
13	163.5	126.3	98.5	77.3	60.8	48.5	45.4
14	166.9	129.0	100.6	78.7	61.6	48.6	45.4
15	169.9	131.4	102.4	80.0	62.2	48.8	45.4
16	172.5	133.4	104.0	81.0	62.8	48.9	45.4
17	174.8	135.2	105.3	82.0	63.3	49.0	45.4
18	176.8	136.9	106.6	82.8	63.8	49.1	45.4
19	178.7	138.3	107.7	83.5	64.2	49.2	45.3
20	180.4	139.7	108.7	84.2	64.5	49.2	45.3
21	182.0	140.9	109.6	84.9	64.9	49.3	45.3
22	183.4	142.0	110.5	85.5	65.2	49.4	45.3

EXHIBIT 7.6

TEMPERATURE MATRIX

DEPTH	WARM	MEDIUM	COLD
1	2.00	22.00	22.00
2	2.00	21.50	21.75
3	2.00	21.00	21.50
4	2.00	20.50	21.25
5	2.00	20.00	21.00
6	2.00	19.50	20.75
7	2.00	19.00	20.50
8	2.00	18.50	20.25
9	2.00	18.00	20.00
10	2.00	17.50	19.75
11	2.00	17.00	19.50
12	2.00	16.50	19.25
13	2.00	16.00	19.00
14	2.00	15.50	18.75
15	2.00	15.00	18.50
16	2.00	14.50	18.25
17	2.00	14.00	18.00
18	2.00	13.50	17.75
19	2.00	13.00	17.50
20	2.00	12.50	17.25
21	2.00	12.00	17.00
22	2.00	11.50	16.75
23	2.00	11.00	16.50
24	2.00	10.50	16.25
25	2.00	10.00	16.00
26	2.00	9.50	15.75
27	2.00	9.00	15.50
28	2.00	8.50	15.25
29	2.00	8.00	15.00
30	2.00	7.50	14.75
31	2.00	7.00	14.50
32	2.00	6.50	14.25
33	2.00	6.00	14.00
34	2.00	5.50	13.75
35	2.00	5.00	13.50
36	2.00	4.50	13.25
37	2.00	4.00	13.00
38	2.00	3.50	12.75
39	2.00	3.00	12.50
40	2.00	2.50	12.25

EXHIBIT 7.7

RATE POWER MATRIX

DEPTH	WARM	MEDIUM	COLD
1	.160	.199	.199
2	.186	.231	.231
3	.200	.247	.248
4	.210	.258	.259
5	.217	.267	.268
6	.223	.274	.275
7	.228	.280	.282
8	.233	.285	.287
9	.237	.289	.292
10	.241	.293	.296
11	.244	.296	.300
12	.247	.299	.303
13	.250	.301	.306
14	.253	.304	.309
15	.255	.306	.312
16	.257	.308	.314
17	.260	.309	.317
18	.262	.311	.319
19	.264	.312	.321
20	.266	.313	.323
21	.268	.314	.324
22	.269	.315	.326
23	.271	.316	.328
24	.273	.317	.329
25	.274	.317	.331
26	.276	.317	.332
27	.277	.317	.333
28	.279	.317	.335
29	.280	.317	.336
30	.281	.317	.337
31	.283	.316	.338
32	.284	.316	.339
33	.285	.315	.340
34	.286	.314	.341
35	.288	.312	.342
36	.289	.311	.342
37	.290	.308	.343
38	.291	.306	.344
39	.292	.303	.344
40	.293	.299	.345

EXHIBIT 7.8

RATE FUNCTION FOR WARM ICE

DEPTH	100	300	1000	5000
1	2.094	2.498	3.031	3.925
2	2.364	2.903	3.635	4.910
3	2.517	3.138	3.994	5.516
4	2.630	3.313	4.266	5.982
5	2.721	3.456	4.490	6.372
6	2.799	3.578	4.684	6.712
7	2.867	3.686	4.856	7.017
8	2.928	3.784	5.011	7.295
9	2.983	3.872	5.154	7.552
10	3.034	3.954	5.286	7.792
11	3.081	4.031	5.410	8.018
12	3.126	4.102	5.527	8.231
13	3.167	4.170	5.637	8.435
14	3.206	4.234	5.742	8.629
15	3.244	4.295	5.843	8.815
16	3.279	4.353	5.939	8.994
17	3.313	4.409	6.031	9.167
18	3.346	4.463	6.120	9.334
19	3.377	4.515	6.206	9.496
20	3.407	4.564	6.289	9.653
21	3.436	4.613	6.370	9.806
22	3.464	4.659	6.448	9.955
23	3.491	4.705	6.524	10.100
24	3.518	4.749	6.598	10.242
25	3.543	4.792	6.670	10.380
26	3.568	4.833	6.741	10.515
27	3.592	4.874	6.810	10.648
28	3.616	4.914	6.877	10.778
29	3.639	4.953	6.943	10.905
30	3.662	4.991	7.007	11.030
31	3.684	5.028	7.071	11.153
32	3.705	5.064	7.133	11.274
33	3.726	5.100	7.193	11.392
34	3.747	5.135	7.253	11.509
35	3.767	5.169	7.312	11.624
36	3.787	5.203	7.370	11.737
37	3.806	5.236	7.426	11.849
38	3.825	5.268	7.482	11.959
39	3.844	5.300	7.537	12.067
40	3.862	5.332	7.591	12.174

EXHIBIT 7.9

RATE FUNCTION FOR MEDIUM ICE

DEPTH	100	300	1000	5000
1	2.503	3.115	3.960	5.457
2	2.902	3.742	4.944	7.175
3	3.129	4.108	5.536	8.249
4	3.295	4.380	5.982	9.076
5	3.427	4.598	6.346	9.761
6	3.538	4.783	6.655	10.351
7	3.633	4.942	6.925	10.870
8	3.716	5.082	7.163	11.333
9	3.789	5.207	7.377	11.751
10	3.855	5.319	7.569	12.131
11	3.914	5.420	7.744	12.476
12	3.967	5.512	7.903	12.793
13	4.015	5.595	8.047	13.082
14	4.059	5.670	8.179	13.347
15	4.099	5.739	8.299	13.589
16	4.135	5.801	8.408	13.809
17	4.167	5.858	8.507	14.010
18	4.196	5.908	8.596	14.191
19	4.222	5.953	8.676	14.353
20	4.245	5.993	8.746	14.496
21	4.265	6.028	8.808	14.622
22	4.282	6.058	8.860	14.730
23	4.296	6.083	8.904	14.821
24	4.307	6.102	8.940	14.894
25	4.316	6.118	8.967	14.948
26	4.321	6.128	8.984	14.985
27	4.324	6.132	8.993	15.003
28	4.324	6.132	8.993	15.002
29	4.321	6.126	8.982	14.980
30	4.314	6.115	8.961	14.938
31	4.304	6.097	8.930	14.873
32	4.290	6.072	8.887	14.784
33	4.272	6.041	8.831	14.670
34	4.249	6.001	8.761	14.527
35	4.222	5.953	8.676	14.353
36	4.188	5.895	8.573	14.143
37	4.148	5.825	8.449	13.893
38	4.100	5.741	8.302	13.594
39	4.041	5.639	8.125	13.237
40	3.970	5.516	7.910	12.807

EXHIBIT 7.10

RATE FUNCTIOON FOR COLD ICE

DEPTH	100	300	1000	5000
1	2.503	3.115	3.960	5.457
2	2.905	3.747	4.952	7.190
3	3.137	4.121	5.557	8.286
4	3.308	4.401	6.017	9.141
5	3.446	4.629	6.398	9.859
6	3.563	4.825	6.726	10.487
7	3.665	4.996	7.017	11.049
8	3.756	5.150	7.275	11.560
9	3.837	5.289	7.518	12.030
10	3.912	5.417	7.739	12.466
11	3.981	5.535	7.943	12.874
12	4.044	5.645	8.134	13.256
13	4.103	5.747	8.313	13.617
14	4.159	5.843	8.482	13.958
15	4.210	5.933	8.641	14.282
16	4.259	6.019	8.791	14.589
17	4.305	6.099	8.934	14.882
18	4.349	6.176	9.070	15.161
19	4.390	6.248	9.199	15.428
20	4.429	6.317	9.322	15.683
21	4.466	6.383	9.439	15.926
22	4.501	6.445	9.551	16.160
23	4.535	6.505	9.658	16.383
24	4.567	6.561	9.761	16.597
25	4.597	6.616	9.858	16.802
26	4.626	6.667	9.951	16.998
27	4.654	6.716	10.040	17.185
28	4.680	6.763	10.125	17.365
29	4.705	6.808	10.206	17.537
30	4.729	6.851	10.284	17.701
31	4.751	6.891	10.358	17.857
32	4.773	6.930	10.428	18.007
33	4.793	6.966	10.495	18.149
34	4.812	7.001	10.558	18.285
35	4.831	7.034	10.618	18.413
36	4.848	7.065	10.675	18.535
37	4.864	7.095	10.729	18.650
38	4.879	7.123	10.780	18.759
39	4.894	7.148	10.827	18.861
40	4.907	7.172	10.872	18.956

EXHIBIT 7.11

GENERAL BRINE VOLUME FUNCTIONS

DEPTH	XO	YO	B	SIGO	G	SAL
.5	.389	31.56	359.60	251.04	1.432	7.908
1.5	.424	34.38	197.53	148.06	1.334	6.864
2.5	.442	35.84	145.17	116.77	1.243	6.379
3.5	.455	36.86	116.62	100.40	1.161	6.059
4.5	.464	37.66	97.90	90.04	1.087	5.821
5.5	.473	38.31	84.39	82.78	1.019	5.630
6.5	.479	38.87	74.02	77.37	.956	5.471
7.5	.486	39.36	65.72	73.14	.898	5.335
8.5	.491	39.80	58.89	69.75	.844	5.216
9.5	.496	40.19	53.12	66.95	.793	5.111
10.5	.500	40.55	48.17	64.61	.745	5.016
11.5	.504	40.88	43.86	62.61	.700	4.929
12.5	.508	41.19	40.06	60.88	.658	4.850
13.5	.512	41.48	36.67	59.37	.617	4.777
14.5	.515	41.75	33.63	58.04	.579	4.709
15.5	.518	42.00	30.87	56.86	.542	4.646
16.5	.521	42.24	28.36	55.81	.508	4.586
17.5	.524	42.47	26.06	54.87	.475	4.530
18.5	.527	42.68	23.94	54.01	.443	4.478
19.5	.529	42.89	21.99	53.24	.413	4.428
20.5	.532	43.09	20.17	52.53	.384	4.380
21.5	.534	43.28	18.47	51.88	.356	4.335
22.5	.536	43.46	16.89	51.29	.329	4.292
23.5	.538	43.63	15.40	50.74	.303	4.250
24.5	.540	43.80	14.01	50.24	.278	4.211
25.5	.542	43.97	12.69	49.77	.255	4.173
26.5	.544	44.12	11.44	49.34	.232	4.136
27.5	.546	44.28	10.26	49.93	.209	4.101
28.5	.548	44.43	9.14	48.56	.188	4.067
29.5	.550	44.57	8.08	48.21	.167	4.034
30.5	.552	44.71	7.07	47.88	.147	4.003
31.5	.553	44.84	6.10	47.57	.128	3.972
32.5	.555	44.98	5.18	47.28	.109	3.942
33.5	.556	45.10	4.30	47.01	.091	3.914
34.5	.558	45.23	3.45	46.76	.073	3.886
35.5	.559	45.35	2.64	46.52	.056	3.858
36.5	.561	45.47	1.86	46.29	.040	3.832
37.5	.562	45.59	1.11	46.08	.024	3.806
38.5	.564	45.70	.39	45.87	.008	3.781
39.5	.565	45.81	-.29	45.68	-.006	3.757

EXHIBIT 7.12

CAINE VOLUME STRENGTH FUNCTIONS

DEPTH	WARM	MEDIUM	COLD
1	94.607	194.633	194.633
2	68.006	118.972	119.085
3	60.051	95.996	96.161
4	55.998	84.006	84.205
5	53.504	76.435	76.660
6	51.809	71.147	71.393
7	50.585	67.214	67.478
8	49.663	64.160	64.438
9	48.947	61.713	62.004
10	48.378	59.705	60.008
11	47.919	58.026	58.339
12	47.544	56.602	56.923
13	47.233	55.377	55.707
14	46.974	54.314	54.650
15	46.756	53.383	53.725
16	46.573	52.561	52.909
17	46.418	51.832	52.184
18	46.287	51.180	51.536
19	46.175	50.596	50.955
20	46.081	50.069	50.431
21	46.002	49.594	49.956
22	45.934	49.162	49.526
23	45.878	48.770	49.133
24	45.832	48.413	48.775
25	45.793	48.088	48.447
26	45.763	47.790	48.146
27	45.738	47.519	47.870
28	45.720	47.270	47.616
29	45.706	47.044	47.381
30	45.697	46.837	47.165
31	45.692	46.650	46.965
32	45.691	46.480	46.781
33	45.693	46.327	46.610
34	45.698	46.191	46.453
35	45.706	46.072	46.307
36	45.716	45.970	46.172
37	45.728	45.886	46.047
38	45.743	45.821	45.932
39	45.759	45.780	45.826
40	45.777	45.768	45.728

EXHIBIT 7.13

SALT REINFORCEMENT

DEPTH	WARM	MEDIUM	COLD
1	.000	44.531	44.531
2	.000	38.240	39.441
3	.000	33.981	34.353
4	.000	30.592	31.113
5	.000	27.734	28.390
6	.000	25.251	26.030
7	.000	23.053	23.944
8	.000	21.080	22.076
9	.000	19.292	20.386
10	.000	17.660	18.846
11	.000	16.160	17.434
12	.000	14.774	16.133
13	.000	13.489	14.929
14	.000	12.291	13.811
15	.000	11.172	12.770
16	.000	10.122	11.798
17	.000	9.133	10.889
18	.000	8.201	10.037
19	.000	7.317	9.237
20	.000	6.478	8.485
21	.000	5.678	7.777
22	.000	4.912	7.110
23	.000	4.177	6.481
24	.000	3.467	5.887
25	.000	2.780	5.326
26	.000	2.109	4.796
27	.000	1.452	4.296
28	.000	.804	3.823
29	.000	.000	3.376
30	.000	.000	2.954
31	.000	.000	2.556
32	.000	.000	2.180
33	.000	.000	1.826
34	.000	.000	1.494
35	.000	.000	1.181
36	.000	.000	.889
37	.000	.000	.615
38	.000	.000	.361
39	.000	.000	.126
40	.000	.000	-.090

EXHIBIT 7.14

STRATE VALUES

DEPTH	WARM	MEDIUM	COLD
1	94.607	239.164	239.164
2	68.006	157.213	157.527
3	60.051	129.978	130.514
4	55.998	114.598	115.210
5	53.504	104.169	105.051
6	51.809	96.399	97.423
7	50.585	90.267	91.422
8	49.663	85.240	86.515
9	48.947	81.006	82.391
10	48.378	77.365	78.854
11	47.919	74.187	75.774
12	47.544	71.376	73.056
13	47.233	68.866	70.636
14	46.974	66.606	68.462
15	46.756	64.555	66.496
16	46.573	62.683	64.708
17	46.418	60.965	63.074
18	46.287	59.381	61.574
19	46.175	57.914	60.192
20	46.081	56.548	58.916
21	46.002	55.272	57.734
22	45.934	54.073	56.636
23	45.878	52.948	55.614
24	45.832	51.881	54.662
25	45.793	50.868	53.774
26	45.763	49.900	52.943
27	45.738	48.971	52.166
28	45.720	48.075	51.439
29	45.706	47.044	50.758
30	45.697	46.837	50.120
31	45.692	46.650	49.522
32	45.691	46.480	48.962
33	45.693	46.327	48.437
34	45.698	46.191	47.947
35	45.706	46.072	47.489
36	45.716	45.970	47.061
37	45.728	45.886	46.663
38	45.743	45.821	45.294
39	45.759	45.780	45.952
40	45.777	45.768	45.637

EXHIBIT 7.15

WARM ICE STRENGTH

DEPTH	100	300	1000	5000
1	198.180	236.412	286.832	371.415
2	160.789	197.428	247.235	333.976
3	151.192	188.448	239.899	331.263
4	147.310	185.542	238.926	335.018
5	145.637	184.934	240.278	340.957
6	145.046	185.424	242.692	347.784
7	145.060	186.507	245.647	354.984
8	145.440	187.935	248.890	362.321
9	146.052	189.570	252.288	369.678
10	146.817	191.334	255.763	376.993
11	147.687	193.177	259.272	384.231
12	148.627	195.068	262.784	391.377
13	149.616	196.985	266.284	398.421
14	150.638	198.919	269.758	405.361
15	151.683	200.846	273.201	412.195
16	152.741	202.773	276.609	418.925
17	153.808	204.691	279.977	425.555
18	154.878	206.596	283.306	432.087
19	155.949	208.487	286.594	438.524
20	157.018	210.360	289.841	444.871
21	158.083	212.217	293.048	451.130
22	159.142	214.054	296.216	457.305
23	160.196	215.874	299.345	463.401
24	161.242	217.674	302.436	469.419
25	162.281	219.455	305.490	475.363
26	163.311	221.218	308.508	481.236
27	164.333	222.962	311.491	487.040
28	165.346	224.688	314.441	492.779
29	166.350	226.396	317.357	498.455
30	167.346	228.086	320.242	504.070
31	168.333	229.758	323.095	509.627
32	169.311	231.414	325.919	515.127
33	170.280	233.053	328.714	520.573
34	171.240	234.676	331.480	525.966
35	172.192	236.283	334.219	531.309
36	173.135	237.874	336.931	536.603
37	174.070	239.451	339.618	541.849
38	174.996	241.012	342.279	547.050
39	175.915	242.559	344.916	552.206
40	176.825	244.092	347.530	557.319
SUMS	6408.111	8524.248	11669.371	17793.785
AVERAGE	160.202	213.106	291.734	444.844

EXHIBIT 7.17

OLD ICE STRENGTH

DEPTH	100	300	1000	5000
1	598.665	745.156	947.169	1305.246
2	457.721	592.354	780.230	1132.713
3	409.466	547.874	725.272	1081.538
4	381.518	507.545	693.941	1054.194
5	362.059	486.381	672.155	1035.799
6	347.167	470.104	655.354	1021.757
7	335.105	456.836	641.572	1010.183
8	324.965	445.603	629.810	1000.171
9	316.218	435.844	619.497	991.232
10	308.529	427.205	610.282	983.081
11	301.675	419.450	601.935	975.545
12	295.498	412.416	594.294	968.506
13	289.883	405.982	587.267	961.887
14	284.744	400.060	580.706	955.632
15	280.014	394.579	574.610	949.700
16	275.642	389.486	568.903	944.061
17	271.583	384.736	563.546	938.689
18	267.804	380.293	558.504	933.564
19	264.276	376.128	553.749	928.671
20	260.974	372.214	549.259	923.995
21	257.878	368.531	545.011	919.526
22	254.971	365.061	540.989	915.251
23	252.237	361.786	537.178	911.163
24	249.663	358.694	533.564	907.254
25	247.238	355.773	530.135	903.516
26	244.951	353.009	526.882	899.942
27	242.794	350.397	523.795	896.527
28	240.759	347.925	520.865	893.266
29	238.838	345.588	518.087	890.154
30	237.026	343.378	515.452	887.187
31	235.317	341.290	512.956	884.363
32	233.706	339.319	510.594	881.678
33	232.190	337.460	508.362	879.131
34	230.764	335.709	506.256	876.720
35	229.426	334.064	504.274	874.444
36	228.172	332.521	502.414	872.304
37	227.002	331.080	500.674	870.301
38	225.912	329.738	499.054	868.438
39	224.903	328.495	497.555	866.717
40	223.974	327.351	496.177	865.143
S	11391.247	15925.436	23636.334	37659.202
RAGE	284.781	398.135	575.958	946.480

EXHIBIT 7.16

MEDIUM ICE STRENGTH

DEPTH	100	300	1000	5000
1	598.665	745.156	947.169	1305.246
2	456.301	588.367	777.379	1128.136
3	406.800	534.161	719.676	1072.287
4	377.673	501.967	685.622	1040.150
5	357.081	479.074	661.119	1016.864
6	341.090	461.095	641.605	997.648
7	327.956	446.146	625.112	981.224
8	316.764	433.248	610.633	966.090
9	306.980	421.832	597.594	951.954
10	298.265	411.540	585.634	938.528
11	290.392	402.132	574.530	925.629
12	283.197	393.437	564.099	913.133
13	276.563	385.331	554.226	900.951
14	270.398	377.717	544.816	889.014
15	264.632	370.519	535.754	877.265
16	259.206	363.677	527.058	865.658
17	254.073	357.138	518.676	854.146
18	249.193	350.859	510.480	842.690
19	244.531	344.799	502.469	831.248
20	240.055	338.924	494.604	819.778
21	235.738	333.200	486.846	808.239
22	231.554	327.597	479.158	796.584
23	227.478	322.085	471.503	784.765
24	223.487	316.633	463.843	772.731
25	219.557	311.212	456.139	760.425
26	215.665	305.792	448.350	747.785
27	211.787	300.341	440.432	734.745
28	207.901	294.827	432.341	721.234
29	203.986	288.229	422.581	704.763
30	202.084	286.419	419.753	699.681
31	200.802	284.443	416.606	693.856
32	199.425	282.275	413.081	687.208
33	197.936	279.887	409.136	679.546
34	196.314	277.243	404.712	671.054
35	194.534	274.302	399.736	661.294
36	192.564	271.008	394.116	650.187
37	190.363	267.294	387.734	637.502
38	187.876	263.065	380.429	622.929
39	185.028	258.189	371.977	606.037
40	181.704	252.473	362.046	586.190
SUMS	10524.920	14503.553	20638.887	33144.709
AVERAGE	263.123	362.588	515.972	828.617

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EXHIBIT A

TIME-STRAIN-STRESS DATA

Tensile stress-strain test

Tensile creep tests

Compressive stress-strain test

Compressive creep tests

TIME-STRAIN-STRESS DATA

This exhibit contains the detailed data from stress-strain and creep tests. The column headings have the following meaning:

Time

This is the clock time which was photographically recorded simultaneously with measurements of load and deformation. Time is generally expressed in the data a hours, minutes, and hundredths of minutes. The format of the six digit number (123456) is hours in digits 1 and 2, minutes in digits 3 and 4, and hundredths of minutes in digits 5 and 6. In some cases, digits 5 and 6 represent seconds, and these cases are noted. Some creep tests have time durations greater than 99 hours. In these cases the leading 100's of hours digit has been ignored.

Strain

Strain is calculated from the raw deformation measurements and is expressed as a dimensionless number. The number is listed as strain x 10^5. Exceptions to the exponent 5 are noted.

Stress

Compression: Stress is calculated from the raw data load measurements and is expressed in pounds per square inch. The number listed is stress x 10^0. Exceptions to the exponent o are noted.

Tension: Stress is expressed in pounds per square inch and the number listed is stress x 10^1. Exceptions to the exponent 1 are noted.

Test number

A test identification number preceeds the set of time-strain-stress data for each test

The tension test are the first test listed and start on page A 4. These are then followed by the compression test which begin with test 1 and continue through the remainder of Exhibit A.

Some tension tests were re-run because of weld or head failures. Data for the original run and each re-run are listed.

Explanatory Notes.

1. Strain data expressed as strain x 10^5.
2. Strain data expressed as strain x 10^4.
3. Strain data expressed as strain x 10^6.
4. Stress data expressed as stress x 10^0.
5. Stress data expressed as stress x 10^1.
6. Not used.
7. The last two time digits represent seconds.

TIME	STRAIN	STRS
0141		
SEE NOTES 2,4,7		
101903	0	0
101910	13	8
101919	49	13
101926	74	19
101928	102	28
101940	140	36
101947	167	45
101952	188	53
101957	204	62
102001	218	71
102006	233	82
102012	250	94
102016	265	105
102021	310	109
102027	322	110
102032	392	86
102040	404	112
102044	420	138
0142		
SEE NOTES 2,4,7		
135220	0	0
135315	70	34
135332	150	53
135340	181	68
135600	185	67
140803	188	67
150800	195	67
155115	196	68
170000	200	68
180800	203	68
190000	204	69
201500	207	68
210000	208	67
222200	209	67
244000	213	68
080700	225	68
081013	357	
0143		
SEE NOTES 2,4,7		
100502	27	0
100700	28	0
100717	0	20
100732	70	36
100738	89	51
100742	100	63
100746	109	77
100750	131	81
100754	139	94
100758	147	105
0144		
SEE NOTES 2,4,7		
214502	0	0
214519	27	18
214529	69	34
214542	135	51
214548	160	62
214554	190	70
214556		74
0145		
SEE NOTES 2,4,7		
213730	0	0
213736	13	17
213740	27	26
213746	57	35
213750	71	45
213754	84	56
213757	97	66
213800	108	76
213804	117	85
213807	126	93
0145B		
SEE NOTES 2,4,7		
192108	0	0
192113	11	9
192116	22	20
192119	33	29
192123	50	41
192128	65	55
192132	78	66
192135	97	75
192139	128	84
192143	702	
192352	728	
192404	728	
0146		
SEE NOTES 2,4,7		
214030	0	0
215036	8	2
215041	14	10
215046	38	19
215050	53	24
215054	73	34
215100	96	49
215603	109	57
215606	120	66
215610	132	78
215613	140	88
215616		97
0147		

TIME	STRAIN	STRS
SEE NOTES 2,4,7		
093033	0	0
093040	0	3
093044	13	11
093047	24	20
093050	40	26
093054	53	33
093057	64	39
093100	77	47
093103	88	57
093106	100	67
093107		76
0148		
SEE NOTES 2,4,7		
100921	0	0
100929	20	56
100935	36	36
100940	50	56
100946	64	76
		78
0154		
SEE NOTES 2,4,7		
213035	0	0
213039	10	11
213042	20	19
213045	27	27
213047	33	36
213050	39	43
213053	46	51
213056	54	59
213059	62	67
213102	70	76
213105	78	84
		88
0154		
SEE NOTES 2,4,7		
201508	0	0
201516	0	0
201545	1	1
201548	3	4
201552	13	11
201554	21	19
201557	33	27
201600	38	34
201604	40	44
201607	50	54
201610	67	65
201614	78	70
		74
0155		
SEE NOTES 2,4,7		
213305	0	0
213308	9	8
213311	16	17
213314	25	27
213317	30	37
213320	37	47
213323	44	57
213326	45	66
213329	58	75
213332		81
0156		
SEE NOTES 2,4,7		
235045	0	0
235103	0	0
235106	17	7
235110	29	17
235113	33	27
235116	35	34
235120	42	44
235123	54	51
235125	58	59
235128	63	67
235131	79	75
235134	83	84
235137	92	92
235140	100	100
		107
0163		
SEE NOTES 2,4,7		
211659	0	0
211707	3	3
211712	13	10
211716	28	21
211720	46	31
211726	75	40
211730	89	49
211736	112	61
211739	122	69
211742	135	77
211746	149	87
0164		
SEE NOTES 2,4,7		
225104	0	0
225109	0	1
225113	7	8
225116	18	12
225120	32	18
225124	46	26
225127	53	33
225130	57	38

TIME	STRAIN	STRS
		41
0165		
SEE NOTES 2,4,7		
091751	0	0
091801	0	0
091808	3	2
091811	8	8
091814	13	17
091817	20	26
091820	27	35
091823	33	44
091825	37	52
091828	42	61
091831	42	71
091834	46	81
091837	53	91
091840	59	101
		104
0176		
SEE NOTES 2,4,7		
204633	0	0
204702	1	0
204710	1	2
204713	8	8
204716	16	17
204719	23	20
204723		33
0177		
SEE NOTES 2,4,7		
214846	0	0
214859	0	0
214904	0	1
214910	2	2
214914	9	8
214917	17	12
214922	42	18
214928	71	25
214931	83	29
214934	96	33
214937	109	37
		50
0178		
SEE NOTES 2,4,7		
094218	0	0
094232	0	1
094240	0	2
094242	10	8
094246	20	17
094249	29	25
094252	35	32
094255	43	42
094258	50	51
094301	57	60
094304	65	69
094307	72	77
094310	78	85
094313		92
0179		
SEE NOTES 2,4,7		
092147	0	0
092203	0	
092211	3	3
092214	8	10
092217	16	18
092220	25	27
092224	33	35
092226	38	44
092229	45	54
092232	52	62
092234	57	70
092237		75
0180		
SEE NOTES 2,4,7		
101420		
101430	0	0
101434	3	2
101439	3	3
101443	10	11
101446	17	21
101449	25	30
101452	30	41
101455	38	50
101458	38	60
101501	38	70
101504	38	78
101507	38	87
101510		97
0181		
SEE NOTES 2,4,7		
205823		
205830	0	0
205839	3	3
205842	9	6
205846	22	16
205850	32	26
205853	43	34
205855	49	42
205859	57	50
205902	66	58
205905	75	66
205908	84	101

TIME	STRAI	TRS
205911	94	83
205914	104	92
205918	117	100
205920	131	104
205925	167	103
205929	193	105
205932	226	97
205936	238	108
205939		116
0185		
SEE NOTES 2,4,7		
090539	0	0
090600		0
090609		
090617	1	3
090621	10	11
090625	25	19
090628	36	26
090631	46	34
090634	55	43
090637	63	51
090640	74	58
090644	84	65
090647	97	71
090649	109	77
090653	123	84
090655		92
0186		
SEE NOTES 2,4,7		
195252		
195304	0	0
195308		1
195312	8	7
195315	17	16
195318	25	24
195321	35	32
195324	38	41
195327	46	50
195330	51	58
195333	59	68
195336	67	77
195338	72	86
195341	79	94
195345	88	105
195348	96	115
195351	103	123
195355	113	140
195358	121	156
195402		147
0190		
SEE NOTES 2,4,7		
140110	0	0
140129	5	9
140133	7	37
140139	16	84
140142	24	105
140149	34	176
140154	43	221
140200	54	268
140207	70	302
140211	87	308
140214	118	279
140217	260	240
0418		
SEE NOTE 7		
155825	0	0
155829	33	30
155832	37	37
155835	63	111
155836	67	144
155837	67	188
155838	83	250
155839	104	302
155840	108	340
155842	142	397
155843	171	443
155844	204	510
155846	238	598
155848	271	675
155849		721
0419		
SEE NOTE 7		
167501	0	0
167504	0	11
167506	0	16
167512	29	37
167515	25	60
167517	29	88
167519	41	107
167521	58	128
167522	58	135
167523	58	136
167525	58	155
167526	62	210
167527	83	249
167529	116	296
167531	137	347
167533	137	402
167534	166	447
167535	166	515
167537	195	587

TIME	STRAIN	STRS
167538	237	652
167539	279	726
167542	320	807
167543	350	875
167545	366	953
0435		
SEE NOTE 7		
150400	0	0
150403	0	6
150405	0	22
150410	0	23
150415	24	60
150417	32	108
150419	84	134
150421	93	208
150422	100	212
150426	100	212
150428	100	212
150432	128	296
150433	144	338
150434	180	382
150436	236	445
150437	236	510
0438		
165250	0	0
165256	0	0
165260	0	33
165261	36	77
165262	48	114
165263	76	156
165264	96	201
165265	168	250
165266	172	299
165267	208	339
165268		
0442		
162725	0	0
162729	0	18
162731	0	55
162732	0	97
162734	0	147
162735	8	184
162736	16	233
162737	40	271
162738	44	303
162739	56	337
162740	60	369
162741	60	409
162742	52	449
162743	48	484
0449		
150002	0	0
150005	0	28
150006	29	104
150006	42	171
150007	129	245
150007	167	325
150008	213	402
0450		
162077	0	0
162080	4	47
162080	33	144
162081	62	225
162081	100	309
162082	158	394
0451		
175200	0	0
175202	8	11
175203	8	44
175203	37	123
175204	70	174
175204	100	226
175205	133	281
175205	166	333
175206	195	403
175206	220	459
0455		
152050	0	0
152133	4	9
152145	4	46
152157	12	76
152164	36	107
152173	64	143
152180	92	177
152187	104	211
152195	120	244
152203	128	277
152210	144	311
152217	160	344
152226	196	378
152235	212	445
152241	240	478
0456		
173353	0	0
173380	0	2
173435	0	30
173449	0	67
173456	4	97
173463	8	134
173471	17	167
173478	29	201

TIME	STRAIN	STRS
173485	38	234
173491	50	269
173498	54	301
173505	75	335
173511	91	368
173517	108	402
173521	116	418
173524	120	435
173527	125	452
173530	133	469
173536	145	502
173543	158	536
173546	166	552
173549	170	571
173555	187	604
173561	200	638
173567	250	670
173586	279	767
173595	312	807
173603	354	849
0460		
093000		0
093037		3
093047		33
093055		67
093062		100
093070		137
093077		167
0464		
142700	0	0
142707	0	5
142769	0	34
142777	4	67
142785	8	101
142793	12	134
142800	24	168
142808	44	203
142813	52	235
142822	52	271
142829	84	302
142835	108	335
142843	120	369
142849	136	402
142856	148	436
142863	168	469
142870	188	506
142877	212	538
142885	236	570
142891	272	605
142898	300	637
142905	328	670
142912	352	704
142919	372	737
142926	408	771
142940	472	838
142948	512	875
142958	584	925
142969	672	973
0471		
131205	0	0
131380	0	34
131395	8	101
131403	16	134
131410	36	172
131417	48	203
131424	56	235
131430	64	268
131438	72	302
131445	84	335
131451	92	369
131458	112	402
131464	124	436
131471	144	469
131478	156	503
131484	180	540
131497	216	603
131504	232	637
131511	248	670
131516	268	704
131524	288	737
131538	356	804
131545	384	838
131551	448	875
131557	472	908
131563	500	942
131572	544	972
131577	576	1005
131583	608	1039
131590	640	1074
131597	676	1106
	684	1113
0474		
170450	0	0
170451	8	50
170452	64	160
170453	120	235
170454	156	315
170455	212	416
170455	276	519
170456	336	607
170456	380	714

TIME	STRAIN	STRS
170457	432	821
170458	[illegible]	918
170459	508	1005
	532	1003
0479		
015560	0	0
015640	0	30
015660	12	98
015676	32	167
015691	56	236
015705	76	302
015720		368
015727		398
015735	120	445
015746	128	502
015760	152	566
015767	160	571
015774	184	639
015781	200	671
015793	216	735
015809	272	804
015825	312	872
015840	344	938
015847	360	971
015862	384	1042
015877	56	1104
015885	472	1141
015900	540	1206
0480		
154540	0	0
154555	16	33
154572	60	100
154588	120	167
154602	184	234
154617	232	301
154632	280	368
154653	308	469
154668	320	536
154682	396	603
0482		
173725	0	0
173746	36	45
173764	72	113
173780	108	187
173795	132	247
173810	172	314
173825	212	392
173840	248	455
0486		
132477	0	0
132481	44	170
132482	64	234
132482	92	316
132483	112	375
132483	136	455
132484	176	519
132484	196	586
132485	248	656
132485	280	732
0489		
151800	0	0
151802	8	56
151803	16	125
151804	36	202
151805	64	261
151805	88	328
151806	112	392
151806	140	462
151807	172	526
151807	232	599
151808	300	695
151808	332	764
151809	412	831
151809	448	898
151810	496	983
151810	552	1047
151811		
0491		
165550	0	0
165551	0	37
165552	4	97
165553	12	186
165553	32	251
165554	40	312
165554	60	375
165555		
0494		
131150	0	0
131230	8	44
131245	40	107
131260	80	178
131275	120	245
131290	160	312
131303	196	379
131310	216	409
131316	260	442
131324	296	476
131328		
0500		
143150	0	0
143172	12	33

TIME	STRAIN	STRS
143188	24	100
143205	20	167
143220	96	234
143235	128	301
143243	140	335
143250	160	368
143258	172	402
143265	196	435
143273	212	469
143277	216	489
143280	224	506
143288	244	539
143295	252	573
143303	264	604
143311	284	637
143317	300	670
143325	320	703
143333	352	737
	408	767
0501		
160350	0	0
160375	4	34
160390	24	101
160405	44	171
160420	64	238
160440	104	335
160446	128	369
160453	144	402
160465	180	469
160478	216	536
160485	232	570
160490	260	603
	264	630
0502		
172825	0	0
172829	28	67
172830	32	97
172830	36	121
172830	52	151
172831	56	174
172831	72	208
172831	72	191
172832	92	278
172833	104	315
172833	116	345
172834	132	379
172834	144	409
172835	160	452
172835	180	486
172835	192	519
172836	204	553
172836	224	590
172836		588
0503		
112752	0	0
112753	0	20
112754	4	117
112755	8	161
112755	20	223
112756	24	302
112757	32	362
112758	40	429
112758	40	499
112759	48	556
112760	56	610
112760	80	684
112761	84	762
112762	104	824
	112	838
0507		
134375	0	0
134410	12	39
134432	52	134
134448	76	201
134462	124	268
134478	172	335
134493	240	402
134500	264	436
134510	288	469
134517	312	503
	352	519
0511		
151000	0	0
151030	4	34
151047	20	99
151062	60	168
151077	124	238
151090	184	302
151105	256	369
151120	328	436
151125	364	469
151132	396	503
151140	432	536
151153	492	603
151160	524	640
151168	556	670
151175	548	704
151190	540	771
0515		
153411	0	0
153452		170

TIME	STRAIN	STRS
153525		500
153563		726
153569		726
153576		726
0516		
000045	0	0
000076		170
000147		500
000237		920
0518		
140073	0	0
140115		170
140188		500
0517		
113158	0	0
113201		170
113274		500
113392		1060
0519		
153850	0	0
153888		170
153964		500
154092		709
0520		
172164	0	0
172202		170
172275		500
172345		770
0521		
114815	0	0
114857		170
114933		500
114978		713
0522		
000030	0	0
000069		170
000140		500
000194		780
0525		
131132	0	0
131136		190
131149		680
131150		740
0525		
152177	0	0
152181		170
152194		690
152196		780
0523		
164615	0	0
164694		170
164726		500
164770		703
0524		
180900	0	0
180910		180
180918		510
180923		680
180926		803
0526		
171805	0	0
171810		190
171819		500
171822		590
171823		590
0527		
190803	0	0
190805	12	40
190807	30	107
190809	63	170
190811	96	243
190813	133	301
190814	171	371
190815	200	441
190817	234	513
190818	258	540
190819	271	575
190820	300	610
190821	317	640
190822	342	675
190823	367	707
190824	396	742
0528		
204651		
204653	4	33
204654	12	77
204656	54	174
204658	88	240
204660	125	307
204661	158	368
204663	204	438
204664	242	502
204665	271	552
204667	292	592
204668	321	630
204669	354	665
204670	392	
204671	421	
204672	450	
204673	475	
204674	526	

TIME	STRAIN	STRS
204675	580	
204677		
0529		
095652		
095653		33
095655	29	104
095656	46	174
095658	83	240
095660	121	308
095661	163	370
095663	204	435
095665	246	505
095666	275	544
095666	300	592
095667	325	
095668	379	680
095670	420	
0530		
131477		
131485	21	33
131502	29	100
131519	63	170
131534	83	234
131548	104	300
131562	113	368
131577	146	435
131591	167	500
131605	187	565
131621	229	636
0531		
140691		
140700	8	33
140715	21	100
140731	25	167
140746	63	234
140760	63	300
140773	104	370
140787	104	410
140800	129	500
140813	146	570
140820	146	600
140828	154	636
140836	179	670
140842		
0532		
160186		0
160196	13	32
160205	29	65
160213	50	99
160221	67	132
160229	92	166
160236	108	199
160244	130	233
160250	150	266
160257	171	301
160263	196	335
160270	221	368
160277	246	402
160284	275	436
160290	304	469
160297	338	502
160304	371	536
160310	400	570
160318	434	603
160325	467	636
0533		
171190	0	
171205	12	34
171221	54	100
171237	96	167
171251	150	234
171265	192	301
171280	238	369
171285	250	392
171294	280	439
171300	296	469
171307	321	502
171313	342	536
0534		
141915		
141923	4	33
141938	21	100
141954	42	170
141967	63	237
141981	83	304
141995	104	365
142010	125	435
142023	146	505
142030	158	540
142037	175	570
142044	188	606
142050	200	636
0535		
151740		
151750	8	33
151763	42	84
151775	83	134
151786	125	184
151797	171	234
151808	213	290
151818	254	335

TIME	STRAIN	STRS
151826	292	370
151837	354	420
151847	413	470
151857	471	520
0536		
181142		
181159	17	33
181171	46	84
181193	83	134
181195	121	184
181205	158	240
181216	192	290
181227	225	335
181235	254	370
181242	283	400
181249	312	435
181255	338	470
0537		
170220		
170233	13	33
170250	42	100
170266	79	170
170280	116	234
170294	158	300
170310	200	370
170320	229	415
170332	263	470
170345	292	520
170355	325	570
170365	342	608
		890
0538		
091424		
091433	17	33
091446	46	84
091458	83	134
091465	104	167
091473	125	204
091480	142	234
091487	163	270
091494	188	304
091500	208	335
091507	225	370
0539		
114927		
114940	21	33
114952	50	84
114963	83	134
114975	121	190
114985	154	240
114995	188	290
115005		
0540		
132186		
132204	21	33
132220	63	100
132236	96	170
132246	146	220
132256	150	270
132267	188	320
132276	213	365
132288	242	420
132299	275	470
132306	288	505
132314	317	540
0541		
142111		
142144		33
142160	79	100
142176	125	170
142187	167	217
142199	208	268
142210	292	320
142222	371	374
142228	375	400
142237	446	440
142244	500	470
0542		
131630		
131631	0	33
131633	17	106
131635	75	167
131636	96	240
131639	146	316
131640	180	378
131641	217	427
131643	250	470
131644	270	530
131645	296	570
131646	333	620
131647	366	650
131648	375	694
131649	413	740
0543		
151806		
151807	12	2
151809	42	70
151810	54	117
151811	92	170
151812	138	234
151815	191	304

TIME	STRAIN	STRS
151816	250	350
151817	254	410
151819	296	470
151820	317	500
151821	358	540
151822	375	570
151823	388	606
151824	429	640
151825	463	686
151826	463	720
151827	483	776
151828	546	840
0544		
170604		
170605		42
170606		105
170607		167
170610		220
170611		258
170612		318
170613		351
170615		404
170616		455
170617		502
170618		545
170619		590
0545		
201282		
201283		49
201285		114
201286		170
201287		234
201290		300
201291		368
201303		780
0546		
114977		
114980		40
114981		104
114983		176
114984		234
114986		306
114987		368
114990		438
0547		
133179		
133196	452	733
0548		
152122		
152139	326	642
0549		
152667	539	830
0550		
172904		
173069	554	810
0551		
133735		
133852	302	501
0552		
145740		
145997	766	1128
0553		
160540		
160615	265	380
0554		
185342		0
185350		30
185360		60
185370		90
185380		130
185390		160
185397		190
185405		230
185413		270
185420	249	300
0555		
154585		
154663	286	360
0556		
171690		
171776	352	380
0557		
183608		0
183625		60
183634		90
183640		120
183648		160
183655		190
183661		230
183667		260
183673		290
183680		320
183685		360
183691		390
183698		430
183705		460
183711		490
183718		530
183726		560
183733		600
183740		630

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TIME	STRAIN	STRS
183747		660
183753	931	700
		700
0558		
141692		
141788	484	388
0559		
154056		
154171	451	438
0560		
170037		
170180	912	689
0561		
143808		
143829	304	796
0562		
155450		
155471	426	729
0563		
170405		
170409		40
170410	45	107
170415	116	358
170429	385	950
0564		
131229		
131235	116	485
0565		
143280		
143291	282	422
0566		
163026		
163050	466	870
0567		
132229		
132239	290	335
0568		
142529		
142540	253	448
0569		
152779		
152795	406	622
0617		
182518	0	0
182525	4	40
182526	20	90
182533	60	320
182570	60	330
182575	80	400
182576	80	460
182577	100	500
182578	100	550
182579	100	590
182580	110	630
182581	120	670
182583	120	720
182584	130	770
182585	130	810
182587	140	860
182588	170	940
182590	190	1010
182593	210	1080
182595	240	1140
182597	250	1160
182600		1180
0618		
140630	0	0
140634	0	70
140636	4	120
140637	12	180
140638	16	240
140640	20	300
140641	30	350
140643	30	400
140644	40	470
140646	40	550
140647	50	610
140649	60	680
140650	70	750
140652	80	820
140654	80	890
140656	90	950
140658	110	1020
140660	140	1070
140661	160	1120
140662	170	1150
140663	190	1150
140666	190	1150
140672	200	1150
140689	260	1210
140735	320	1330
140738	340	1420
140743		1460
0619		
153690	0	20
153695	0	70
153696	10	140
153698	30	210
153700	40	280
153701	70	350
153703	90	410

TIME	STRAIN	STRS
153705	100	480
153706	120	540
153708	140	610
153710	150	680
153711	160	750
153714	190	840
153716	210	930
153718		
0621		
170013	0	0
170015	0	70
170016	30	120
170017	60	170
170018	60	230
170020	90	290
170021	100	340
170024	110	420
170025	140	490
170027	160	560
170028	180	610
170030	190	690
170031	200	750
170034	220	820
170035	260	890
170037	290	950
170038	280	1020
170040	310	1090
170041		1150
0623		
181053	0	0
181055	0	60
181056	0	110
181058	10	160
181059	30	210
181061	30	270
181062	60	340
181064	70	400
181065	80	480
181067	90	550
181068	100	610
181070	120	670
181072	140	740
181074	160	810
181075	180	880
181076	210	940
181077	210	1010
181080	230	1070
181081	250	1130
181083	280	1210
181084	300	1270
181086		1340
0625		
133728	0	0
133740	10	80
133746	10	150
133751	20	220
133755	30	280
133760	50	350
133765	50	410
133770	60	480
133774	70	560
133778	80	620
133783	90	680
133787	100	750
133792	120	820
133796	130	890
133800	150	930
133802	150	960
133805	160	1040
133810	170	1080
133815	190	1150
133820	210	1220
133825	230	1290
133830	250	1350
133832		1380
0627		
144827	10	0
144835	0	60
144840	10	140
144845	30	210
144850	40	270
144855	50	340
144860	60	400
144864	70	470
144869	80	540
144874	90	610
144878	100	680
144883	110	740
144887	120	800
144892	130	870
144897	160	940
144903	170	1010
144908	190	1070
144913	200	1140
144918	220	1220
144923		1270
0629		
131811	0	0
131818	24	70
131824	15	140
131830	36	210

TIME	STRAIN	STRS
131834	56	280
131839	82	350
131844	92	400
131849	105	480
131854	122	540
131859	144	610
131864	163	680
131869	172	740
131875	184	820
131880	207	880
131885	215	950
131890	222	1010
131897	234	1080
131903	238	1120
131912	268	1150
132001		1190
132038	310	1250
132044	314	1320
0638		
163634	0	0
163645	20	70
163650	50	140
163655	60	200
163660	70	270
163665	80	340
163670	100	400
163674	110	470
163678		500
0641		
130560	0	0
130595	0	70
130607	10	130
130620	10	200
130634	20	270
130645	30	340
130656	40	400
130670	50	460
130682	50	540
130693	60	600
130706	70	670
130718	80	740
130731	100	800
130743	100	870
130750	110	910
130755	110	940
130768	130	1010
130780	140	1070
130792	160	1140
130805	170	1210
130818	180	1270
130830	210	1340
130842	230	1410
130854	250	1470
130857		1490
0644		
151954	0	0
151965	40	50
151979	68	120
151990	92	190
152003	120	260
152015	138	320
152029	160	400
152044	192	490
152058	204	580
152074	256	660
152085	276	720
152097	288	790
152110	320	860
152122	336	930
152134	368	990
152145	400	1060
152158	420	1130
152171	448	1200
152181		1250
0646		
165179	0	0
165221	20	70
165235	40	130
165247	40	200
165259	60	270
165270	70	340
165282	80	400
165295	100	470
165306	120	540
165319	120	600
165331	130	670
165343	140	740
165355	160	800
0648		
215680	0	10
215706	20	70
215717	20	130
215731	30	200
215742	50	270
215754	60	340
215765	80	400
215777	100	470
215787	120	540
215800	140	610
215811	160	670
215823	190	740

TIME	STRAIN	STRS
215836	210	800
215848	240	870
215860	260	940
215873	280	1000
215884	300	1070
215896	330	1140
215908	360	1210
215921	390	1280
215935		1340
215936		1340
0649		
083510	0	0
083603	0	30
083611	0	70
083624	10	130
083637	30	200
083650	40	270
083661	50	340
083674	70	400
083685	90	470
083696	110	540
083707	140	610
063720	170	670
083732	200	743
083744	210	800
083756	240	870
083769	270	940
083781	320	1010
083793	350	1070
083804		1130
0689		
153777	0	3
153789	0	50
153805	20	121
153823	100	204
153847	240	271
153892	248	355
153925	256	422
153963	268	492
153990	692	564
154007	784	640
154025	928	693
154048	1148	781
154060		
0692		
222485	48	0
222526	0	34
222540	20	97
222550	32	134
222564	44	198
222581	44	268
222596	44	331
222614	44	402
222630	184	469
222644	244	526
222657	272	570
222668	312	610
222682	412	663
222691	456	698
222709	692	767
222725	992	836
222741	1072	901
222751	1140	938
0694		
090700	0	0
090743	2	14
090758	32	77
090776	112	151
090788	196	201
090804	320	288
090820	512	335
090838	712	402
090848	912	442
090855	972	469
090871	1212	536
090888	1432	603
090904	1660	637
090920	1712	737
090938	1784	804
090954	1964	871
090962	2084	905
0699		
183407		0
183471		168
183595		708
0706		
000000		0
000078		134
000248		835
000280		971
0707		
000000		
000065		144
000216		805
0708		
000000		0
000030		97
000071		1005
000081		1258
000083		1234
0709		

TIME	STRAIN	STRS
000000		
000044		87
000083		804
0714		
000000		
000042		84
000078		915
0720		
000000		
000381		134
001061		670
001821		1242
0723		
000000		
000533		684
000900		1140
001495		1815
0725		
000000		
000250		21
001302		1259
0727		
000000		0
000285		228
000782		912
000830		972
000046		21
000077		1045
000086		1305
0729		
000000		
000042		232
000073		1093
0733		
000000		
000102		232
000121		1005
0734		
000000		
000032		228
000069		1368
0735		
000000		
000042		205
000068		942
000073		1050
0736		
000000		
000074		228
000094		902
0758		
SEE NOTES 1,4		
143383	0	0
143395	6	11
143405	5	18
143416	12	27
143428	13	36
143440	8	46
143452	17	55
143464	25	64
143475	24	73
143487	23	82
143498	21	91
143510	37	100
143525	45	109
143540	48	119
143551		127
0759		
SEE NOTES 1,4		
190000	0	0
190062	17	2
190072	15	9
190084	32	18
190097	39	28
190109	36	37
190122	29	46
190135	21	55
190149	63	64
190157		68
0761		
110905	0	0
110926	0	2
110936	0	8
110947	0	13
110960	8	20
110969	4	26
110980	8	33
110990	6	39
111000	9	44
111013	12	51
111024	19	56
111033	28	61
111045	40	67
111057	50	74
111070	77	80
111084	99	87
111093	119	92
111103	128	97
0880		
153945		
154315	0	0

TIME	STRAIN	STRS
154357	22	33
154375	48	100
154390	66	167
154410	84	234
154427	106	301
154445	136	368
154474	158	435
154480	188	504
0914		
171254	0	0
171315	104	70
171332	96	130
171347	92	200
171362	116	270
171376	112	340
171391	140	400
171411	160	470
171426	178	540
171441	182	600
201407		0
201502	174	70
201521	186	130
201540	202	200
201560	206	270
201580	220	340
201598	232	400
201615	244	470
201634	274	540
201652	288	600
201663		670
0915		
084583	0	0
084601	26	30
084610	32	70
084620	40	100
084630	46	130
084637	52	170
084645	60	200
084653	62	230
084661	72	270
084667	76	300
084676	82	340
084682	88	370
084688	100	400
084696	104	430
084705	124	470
084711	120	500
084718	128	540
084726	138	570
084735	162	600
084743	162	630
084750	168	670
084757	192	700
084765	196	740
0916		
134621		0
134639	2	30
134648	0	70
134657	6	100
134667	6	130
134674	16	170
134681	26	200
134689	30	230
134696	28	270
134705	28	300
134711	24	340
134719	36	400
134727	42	470
134736	52	540
134744	56	600
134751	66	670
134765	88	740
134780	94	800
0917		
171247	0	0
171262	38	30
171275	50	70
171284	56	100
171291	66	130
171299	58	170
171307	56	200
171315	64	230
171322	68	270
171330	72	300
171337	84	340
171353	98	400
171370	126	470
171385	144	540
0918		
000000		0
000022		70
000040		150
000056		240
000074		320
000088		390
000102		450
000116		520
000128		590
000142		660
000155		720
000171		790

TIME	STRAIN	STRS
000185		860
000196		
0919		
210723	0	0
210735	26	30
210744	54	70
210751	58	100
210758	52	130
210765	82	170
210773	96	200
210780	130	230
210788	158	270
210795	190	300
210804	236	340
210821	326	400
210840	448	470
210858	624	540
210876		
114410	0	0
114430	56	40
114440	76	70
114447	98	110
114455	118	140
114463	136	180
114471	154	220
114480	172	250
114488	204	290
114495	238	320
114505	280	360
114523	376	430
114540	494	510
114558	632	580
154136	0	0
154150	20	90
154154	40	180
154158	48	270
154162	80	360
154166	112	450
154170	148	540
154175	208	630
154178	266	720
192228	0	0
192250	92	100
192255	112	200
192260	134	300
192264	162	390
192269	222	490
192273	266	590
192277	330	690
0920		
000000		0
000016		20
000038		100
000064		200
000086		300
000110		400
000132		500
000149		
000000		0
000035		80
000056		170
000076		250
000094		330
000108		400
000121		470
000135		530
000151		600
000157		
0921		
000000		0
000022		70
000038		160
000055		250
000073		330
000091		410
000108		500
000124		580
000140		660
000158		750
000174		830
000193		920
000210		1000
000227		1080
0922		
202200	0	0
202230	58	70
202246	84	130
202261	122	200
202277	170	270
202293	222	340
202310	294	400
202330	396	470
202342		
111775	0	0
111809	268	70
111830	350	130
111850	446	200
111874	694	270
111897	792	340
111923	1040	400
111948	1380	470

TIME	STRAIN	STRS
165523	0	0
165551	96	40
165565	134	70
165572	170	100
165583	246	140
165590	266	170
165601	336	200
165613	434	240
165624	560	270
165636	718	300
165647	864	340
165660	1120	370
165673	1360	400
0923		
081730	0	0
081761	12	33
081770	30	67
081780	46	100
081790	70	130
081800	100	170
081810	138	200
081820	188	230
081830	228	270
081840	282	300
	320	340
194347	0	0
194351	8	20
194352	14	40
194353	26	60
194354	30	80
194356	34	100
194357	48	120
194358	56	140
194359	64	160
194360	70	180
194361	84	200
194362	106	210
194363	122	230
194364	140	250
194365	152	270
194366	162	290
194367	174	310
194368	190	330
194369	196	350
194370	214	370
194370	230	390
194371		430
101179	0	0
101180	44	20
101181	50	40
101183	58	60
101185	62	80
101186	64	100
101187	76	130
101189	86	150
101190	106	170
101191	124	190
101192	128	210
101194	154	250
101196	180	290
101198	214	340
101200	228	380
101202	284	420
101205	314	460
101206	346	500
101209	408	540
133721	0	0
133759	94	20
133760	96	40
133761	100	60
133762	100	80
133763	104	100
133764	114	130
133765	118	150
133766	132	170
133767	132	190
133768	144	210
133769	146	250
133770	174	290
133771	194	340
133773	216	380
133775	222	420
133776	230	460
133778	256	500
133780	292	540
133782	332	590
133783	358	630
133785	402	670
195186	0	0
195190	44	21
195191	50	42
195191	58	63
195192	62	84
195193	70	105
195194	74	136
195195	78	150
195196	82	170
195197	88	190
195198	94	210
195199	100	230
195200	122	250

TIME	STRAIN	STRS
195202	140	290
195204	158	340
195205	176	380
195207	214	420
195209	238	460
195210	262	500
195212	292	540
195214	326	590
195215	360	630
0924		
101300	0	0
101352	20	70
101366	20	130
101378	40	200
101389	60	270
101400	80	340
101413	60	400
101426	80	470
101440	100	540
101452	120	600
101464	140	670
101476	180	740
101486	190	800
101500	220	870
101511	240	940
101525	240	1010
101536	280	1070
104373	0	0
104400	0	70
104452	0	130
104464	0	200
104475	20	270
104490	34	340
104500	36	400
104512	60	470
104524	80	540
104537	100	600
104550	120	670
104563	140	770
104580	140	870
104597	180	970
104616	230	1040
104635	260	1140
104654	320	1240
0925		
080259		0
080277		120
080291		250
080307		390
080320		520
080334		650
080348		780
080360		910
080374		1040
		2360
0926		
103403	0	0
103418	20	30
103437	30	100
103453	56	160
103466	74	220
103478	80	280
103490	90	340
103503	110	390
103515	126	450
103528	136	510
103541	160	570
103553	180	630
103567	200	700
103582	230	770
103596	260	850
103611	290	920
103627	310	990
103643	348	1070
103659	360	1140
0927		
134200		0
134405		120
134421		250
134434		460
134447		520
134458		660
134470		780
134482		920
134493		1040
134507		1180
134513		1250
134519		1310
134526		1380
134532		1440
134538		1510
0928		
080950		0
080974		100
080986		230
080998		370
081010		500
081022		630
081034		760
081046		890
081058		1020

TIME	STRAIN	STRS
		1070
0929		
103098	0	0
103326	10	60
103379	60	120
103394	90	180
103408	120	230
103421	130	290
103434	150	350
103447	170	410
103458	190	470
103471	220	530
103483	240	580
103497	262	660
103513	320	730
103530	350	800
103544	420	880
		930
0930		
152219	0	0
152258	34	40
152263	40	100
152268	50	160
152271	66	220
152274	86	280
152276	96	340
152278	106	390
152282	122	450
152284	146	510
152287	176	570
152291	190	630
		770
0931		
191699	0	0
191708	70	40
191710	86	100
191714	100	160
191717	110	220
191722	130	280
191724	140	340
191726	150	400
191731	170	450
191734	210	510
191738	224	570
191740	246	640
191743	284	720
191747	304	790
191751	326	860
191754	364	930
191758	420	1010
191762	450	1080
191765		1150
0932		
113200		0
113229		100
113231		210
113235		320
113239		430
113241		540
113244		640
113247		750
113250		860
113253		970
113256		1080
113258		1190
113261		1300
113263		1410
113266		1510
0933		
143551	0	
143565	14	40
143568	24	100
143571	40	160
143574	44	220
143577	60	270
143580	70	360
143582	76	390
143585	106	450
143587	120	510
143590	156	570
143593	170	630
143597	206	700
0934		
162396		0
162399		78
162402		78
162406		267
162408		333
162411		508
162414		614
0935		
091700	0	0
091718	0	60
091720	0	120
091724	0	180
091725	0	230
091727	0	300
091729	0	350
091730	0	410
091732	1	470
091734	14	530

TIME	STRAIN	STRS
091735	22	580
091737	34	660
091739	44	730
091741	50	800
091742	70	880
091745	114	950
091747	150	1010
0936		
114474		0
114542		60
114549		120
114550		180
114552		230
114554		290
114555		350
114556		410
114558		470
114560		530
114561		580
114562		660
114564		720
114566		770
0937		
152300	0	0
152320	2	60
152321	2	120
152323	26	180
152325	42	230
152327	64	290
152328	82	350
152330	98	410
152331	108	470
152333	128	530
152335	144	590
152336	160	660
152339	178	720
152340		770
0938		
114899		0
114927		60
114929		120
114931		190
114933		240
114935		290
114937		350
114938		430
114940		500
114942		580
114943		640
114946		720
114948		800
114950		870
114952		940
114954		1010
0939		
091299	0	0
091315	0	60
091317	0	120
091320	18	180
091321	38	230
091323	58	290
091326	58	350
091327	68	410
091329	78	470
091330	88	530
091331	128	580
091332	158	640
0940		
135499	0	0
135518	0	60
135521	0	120
135523	20	180
135525	30	230
135526	30	290
135527	40	350
135529	50	410
135530	70	470
135532	90	530
135534	100	580
135535	120	660
135537	140	730
135540	160	800
	190	860
0941		
163445	0	0
163506	0	60
163520	30	120
163534	60	180
163568	90	230
163563	100	290
163576	170	350
163590	200	410
163604	240	470
163619	290	530
163633	330	580
163648	360	640
163662	430	700
163678	500	760
0942		
113300	00	0
113318	20	70

TIME	STRAIN	STRS
113339	40	130
113352	60	200
113365	80	270
113378	100	340
113390	130	400
113403	160	470
113416	200	540
113430	220	600
113442	240	670
113456	270	736
0943		
154985	00	0
155000	20	70
155014	20	130
155027	30	200
155041	50	270
155054	90	340
155068	140	400
155092	140	470
155093		540
0944		
103351		0
104220		70
104230		130
104235		200
104240		270
104246		336
0945		
140802	00	0
140833	00	70
140836	00	130
140840	20	200
140842	36	270
140845	42	340
140848	58	400
140851	80	470
140854	96	540
140856	118	600
140860	140	670
140862	160	740
140865	182	800
140868	200	870
140871	218	940
140873	234	1003
0946		
163300	00	0
163330	2	70
163334	10	130
163337	26	200
163340	42	270
163343	60	340
163345	82	400
163348	102	470
163351	124	540
163354	138	600
163357	160	670
163360	168	740
163363	184	800
163365	202	870
163368	226	940
163371	244	1010
163374	264	1070
0947		
201200	00	0
201210	10	70
201211	10	130
201212	32	200
201213	52	270
201215	74	340
201216	100	400
201218	128	470
201219	152	540
201220	178	600
201222	210	670
201224	238	740
201226	258	800
201228	244	870
201229	274	940
201230		1003
0948		
140867	00	0
140879	00	70
140880	10	130
140882	36	200
140884	40	270
140885	60	340
140886	80	400
140888	94	470
140889	120	540
140890	130	500
140892	144	670
140894	164	740
140896	180	800
140897	190	870
140899	200	936
0949		
162555	0	0
162580	34	70
162582	100	130
162583	96	200
162585	100	270

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TIME	STRAIN	STRS
162586	110	340
162588	116	400
162589	130	470
162591	150	540
162592	164	600
162594	190	670
162596	196	740
162597	210	800
162599	224	869
0950		
092530	00	0
092580	30	70
092584	10	130
092586	00	200
092589	20	270
092592	40	340
092595	54	400
092598	90	470
092601	94	540
092603	120	600
092607	130	670
092609	150	740
092611	170	800
092614	190	870
0951		
132607		0
132630		130
132637		360
132645		570
132660		1000
132676		1430
0952		
195912		410
195921		580
195932		740
195942		910
195952		1080
195963		1240
200018		4
0953		
161000		0
161019		8
161040		52
161046		176
161056		382
161069		634
161076		772
161081		897
161086		1026
161090		0
0954		
171716	0	0
171775	2	24
171895	21	114
171921	78	268
171940	97	367
171963	97	496
171991	99	625
172019	120	754
172045	136	883
172070	157	1012
0955		
084020	0	0
084050	101	26
084060	101	59
084071	117	89
084082	113	123
084092	115	157
084902	119	190
084913	132	224
084925	126	257
084935	122	291
084946	124	324
084969	144	391
084990	167	458
085011	176	525
085033	207	594
085051	234	659
085072	303	723
085100	326	810
085131	359	891
0956		
162026	0	0
162053	9	16
162066		67
162078	21	117
162090	96	168
162106	21	235
162129	20	303
162143	12	370
162163	15	439
162181	24	505
162198	33	572
162217	30	640
162235	40	705
162253	46	775
162271	57	842
162290	62	913
162311	66	990
162326	72	1044
162345	65	1112

TIME	STRAIN	STRS
0957		
114700	0	0
114720	58	13
114730	59	36
114745	58	66
114752	54	104
114763	49	155
114776	47	212
114793	44	285
114812	48	357
114835	55	429
114855	68	501
114876	76	573
114893	70	646
114911	69	718
114931	98	790
114949	98	862
114967	135	942
0958		
090330	0	0
090365	50	10
090385	50	43
090398	52	77
090418	70	144
090437	77	212
090455	88	283
090473	112	347
090494	119	414
090515	152	481
090536	203	549
090556	243	616
090575	291	684
090594	357	751
090616	400	812
0959		
193513	0	0
193541	28	10
193558	28	41
193574	36	84
193582	38	119
193592	56	159
193610	90	228
193634	118	301
193658	178	380
193684	272	459
193707	330	535
193729	458	606
193751	536	682
193774	682	757
193796	854	837
193817	1052	912
193840	1248	983
193851		938
0961		
185100	0	0
185134	0	37
185150	4	74
185163	2	117
185181	32	180
185192	28	217
185203	26	254
185212	28	284
185227	40	336
185237	52	371
185255	114	421
185265	124	455
185283	142	510
185292	158	538
185307	178	588
185322	228	637
185333	268	672
185342	298	705
185353	346	744
185362	374	773
185373	424	806
185383	458	839
185393	538	872
185405	590	906
0963		
083965	0	0
083978	0	8
083990	2	33
084003	2	70
084012	8	104
084024	2	138
084034	2	170
084045	4	202
084065	6	269
084078	22	311
084092	170	353
084110	206	404
084135	266	475
084157	358	539
084179	428	606
084200	538	674
084216	646	724
084233	782	775
084265		744
084254		744
0964		
132680	0	0

TIME	STRAIN	STRS
132700	20	24
132710	18	66
132727	22	137
132735	40	161
132748	68	208
132759	74	258
132769	72	307
132779	76	359
132788	80	410
132799	88	477
132809	92	545
132820	120	612
132830	142	680
132840	240	749
132851	340	824
132860	402	882
0965		
080817	0	0
080832	20	33
080843	0	70
080862	2	121
080876	6	171
080890	10	239
080901	14	306
080912	18	370
080923	20	441
080935	20	512
080945	24	576
080955	26	643
080964	28	711
080974	36	778
080983	72	845
080992	96	909
081001	112	973
081007	340	1014
081012	362	1048
081016		987
0966		
160860	0	0
160870	2	11
160885	2	33
160901	2	36
160918	46	109
160937	56	154
160967	124	227
160993	128	291
161009	128	304
161034	140	409
161073	166	512
161082	192	539
161103	240	606
161122	308	670
161128		629
0967		
175273		0
175291	4	39
175303	6	78
175316	12	118
175326	22	157
175351	48	231
175376	74	315
175387	88	354
175398	102	392
175421	126	474
175445	166	551
175466	192	627
175487	228	709
175507	262	786
175517	296	827
175528	310	866
175538	336	909
175549	344	945
175558	372	985
175568	390	1024
175575		951
0970		
042911	0	0
042930	4	9
042943	6	35
042976	16	11
043005	22	41
043012	32	73
043032	42	112
043043	50	139
043055	56	170
043068	58	203
043079	84	234
043092	110	274
043118	142	337
043144	180	409
043170	228	510
043190	230	536
043212	276	603
043235	326	671
0972		
050037	0	0
050094	4	2
050104	4	27
050113	14	43
050119	18	98
050122	16	132

TIME	STRAIN	STRS
050133	10	164
050139	24	199
050146	28	231
050152	28	263
050159	28	300
050165	28	331
050178	38	397
050191	72	464
050202	82	532
050214	112	602
050225	118	667
050236	132	735
050247	148	801
050257	178	867
050270	200	934
050281		1000
0973		
083661	0	0
083672	4	32
083680	18	63
083687	24	100
083694	44	135
083702	68	169
083707	82	199
083713	88	233
083720	110	266
083727	152	302
083733	168	335
083743	206	386
083753	266	436
083763	322	483
083773	364	538
083781	390	585
083790	456	633
083798	528	686
0975		
172816	0	0
172830	0	11
172836	0	29
172845	2	56
172853	10	90
172861	18	123
172869	80	157
172876	100	191
172882	134	224
172890	156	256
172896	196	291
172903	218	325
172909	272	355
172919	314	408
172930	344	459
172940	398	509
172950	458	559
172958		668
173046	14320	
0977		
132622		
0979		
045600	0	0
045700	2	0
045707	0	26
045714	0	5
045715	0	36
045730	2	99
045734	4	152
045739	6	209
045742	4	256
045746	8	271
045750	20	312
045753	32	389
045756	46	432
045760	60	480
045763	66	527
045767	78	580
045772	96	647
045776	112	712
045781		736
0980		
052680	0	0
052696	0	22
052703	0	98
052707	2	133
052711	10	180
052716	18	234
052719	38	276
052722	64	319
052726	86	352
052729	108	397
052732	114	439
052736	192	480
052739	212	523
052742	248	563
052745	286	580
0984		
133080	0	0
133105	10	0
133108	6	16
133111	10	45
133115	10	87
133118	10	123
133123	10	187

TIME	STRAIN	STRS
133126	10	247
133130	10	294
133134	6	343
133137	30	403
133142	30	460
133145	66	505
133149	64	551
133151	74	595
133155	84	643
133158	84	672
133161	100	749
133164	100	800
133397		799
0986		
152989	0	0
153001	0	2
153007	7	28
153011	7	91
153015	23	164
153019	25	218
153023	30	306
153026	37	324
153032	44	421
153036	46	475
153040	48	534
153043	48	588
153048	51	639
153051	76	692
153055	99	749
153209		770
0987		
163076	0	0
163101	0	7
163105	0	2
163114	0	19
163118	0	49
163123	0	113
163127	0	170
163130	0	255
163133	16	272
163137	16	348
163140	46	397
163143	50	418
163146	70	482
163153	90	545
163155	94	595
163159	140	651
163161	160	696
163165	180	751
163168	196	782
163280		
0990		
012798	0	0
012963	12	15
012988	16	33
013013	22	49
013031	32	68
013064	44	100
013078	56	135
013137	70	170
013171	86	200
013107	100	233
013145	124	264
013183	156	302
013222	182	335
013260	210	366
013277	230	373
013294	244	402
013313	250	419
013333	260	433
013370	310	468
013509	342	500
013547	390	534
013582	430	565
013613	474	600
013650	528	634
013685	584	670
013712	632	702
013734	662	720
013751	688	737
013770	726	753
0992		
042000	0	0
042074	0	23
042091	12	46
042117	24	77
042147	42	111
042180	68	144
042216	90	179
042250	124	209
042284	158	243
042321	196	273
042363	250	300
042398	272	338
042438	338	355
042472		
0994		
052651	0	0
052857	4	15
052885	2	37
052904	8	51

TIME	STRAIN	STRS
052931	16	84
052986	24	136
053011	34	166
053041	46	188
053074	60	220
053107	80	253
053144	104	284
053172	127	313
053218	156	348
053257	184	385
053290	220	418
053329	256	454
053367	298	487
053402	332	519
053438	376	553
053473	420	587
053503	458	621
0996		
114951	0	0
114969	0	11
114976	0	46
114983	4	82
114988	2	125
114992	0	151
114996	4	184
115000	8	211
115005	8	243
115010	14	278
115016	16	310
115023	22	351
115028	26	382
115034	34	416
115040	38	447
115045	46	482
115050	50	514
115056	56	553
115061	66	583
115066	74	616
115070	78	651
115075	82	682
115080	88	718
115085	94	755
115089	110	78[illegible]
115093	116	818
115097	130	858
115003		
0998		
161600	40	0
161798	40	29
161821	40	47
161866	6	81
161891	10	115
161920	8	149
161957	28	181
161992	54	213
162030	62	246
162069	96	277
162105	130	311
162150	168	347
1001		
161700		0
161798	6	27
161821	4	46
161865	8	80
161892	14	114
161926	30	146
161956	38	179
161992	52	212
162031	64	245
162068	102	276
162106	154	310
162130	178	346
1002		
173400	0	0
173495	0	27
173518	10	41
173565	38	81
173591	88	112
173629	108	141
173669	160	177
173702	208	208
173743	278	241
173780	356	272
173816	444	305
173864	552	342
173880		
1009		
042761	0	0
042778	6	5
042782	14	37
042785	18	82
042790	30	140
042793	28	177
042796	40	211
042799	48	248
042802	54	288
042805	62	327
042810	58	390
042813	70	438
042817	72	520
042820	78	559

TIME	STRAIN	STRS
042823	92	599
042826	94	616
042830	100	666
042833	104	713
042836	112	752
042839	116	808
042843	114	863
042846	110	910
042850	126	964
042853	136	1007
042857	142	1060
042862	150	1132
1010		
051750	0	0
051825	4	1
051831	2	31
051836	10	78
051850	20	242
051853	26	281
051856	28	322
051861	32	382
051865	38	440
051869	48	485
051872	50	529
051876	52	580
051881	64	657
051885	68	721
051888	70	771
1013		
093981	0	0
093994	6	1
094048	16	20
094085	34	48
094119	42	100
094148	54	117
094185	50	150
094225	58	183
094260	68	216
094292	68	249
094323	74	280
094358	82	314
094394	92	348
094439	100	383
094461	112	417
094513	122	470
094562	142	517
094610	154	567
094653	162	616
094696	180	665
094745	196	718
094799	204	770
094833	218	822
094874	238	869
094919	252	919
1015		
011750	0	0
011842	0	6
011885	0	42
011912	0	91
011943	0	112
011968	2	142
011992	0	176
012011	4	208
012057	0	238
012091	8	272
012128	20	308
012169	14	342
012205	20	377
012238	16	410
012275	32	446
012310	34	476
012343	48	510
012378	52	543
012412	64	577
012443	62	576
012473	68	606
012505	66	640
012552	74	728
012598	96	781
012642	112	829
012685	114	878
012715	114	912
012747	126	942
012778	122	975
012810	122	1001
012844	132	1046
012876	142	1079
160951	100	0
161030	16	44
161062	22	77
161096	26	120
161130	32	156
161187	42	207
161247	46	259
161308	52	311
161371	54	363
161432	62	418
161497	64	478
161560		539
161618		585
161678		656

TIME	STRAIN	STRS
161732		689
161787		740
161840		798
161897		855
161950		908
162002		962
162055		1013
162115		1068
162169		1123
162206		1176
162241		1188
085099	0	0
085145	16	18
085198	20	52
085231	22	94
085264	30	131
085295	34	169
085352	38	225
085412	64	281
085446	72	334
085521	78	391
085589	86	450
085634	102	512
085687	122	584
085740	132	621
085792	140	677
085835	162	730
085888	184	790
085937	204	847
085985	220	907
090028	238	962
090086	266	1017
090125	306	1067
1017		
024800	0	0
024828	2	17
024865	6	51
024887	18	85
024915	24	118
024945	42	153
024978	56	185
025012	66	217
025049	124	249
025064	122	282
025121	150	317
025159	174	353
025195	144	386
025235	164	426
025268	186	458
025300	212	490
025336	240	524
025368	264	554
025397	288	584
025429	330	617
025464	362	654
025514	420	705
025567	468	757
025611	532	807
025662	610	855
025713	680	905
025765	784	955
025804	864	988
1019		
132901	0	0
132906	12	59
132909	14	110
132913	16	135
132918	22	190
132923	32	241
132927	50	286
132932	58	336
132937	78	389
132941	84	443
132944	88	480
132948	102	532
132952	118	586
132955	132	639
132959	144	688
132962	158	741
132965	168	792
132969	182	841
132972	200	892
132975	208	937
132979	228	992
132982	242	1046
132985	264	1091
132989	276	1146
132992	296	1187
132996	320	1239
133000	342	1272
133004	370	1301
1021		
144145	00	0
144205	6	39
144234	4	71
144265	4	103
144303	10	139
144348	26	171
144386	30	203
144425	36	237
144462	52	268

TIME	STRAIN	STRS
144499	56	300
144541	64	333
144583	80	370
144639	96	422
144697	110	473
144752	144	521
144806	172	571
144858	190	618
144911	192	671
144964	152	723
145013	172	773
145065	228	826
051879	0	0
051905	24	13
052173	24	51
052102	20	83
052131	12	117
052163	28	151
052215	30	198
052274	30	247
052328	44	295
052388	42	348
052450	50	402
052506	62	452
052562	86	503
052618	104	518
052672	144	599
052722	160	648
052793	194	716
052843	242	769
052894	296	821
052945	340	869
053000	392	919
053054	466	966
1023		
041016	4	0
041200	0	10
041261	10	47
041292	34	83
041332	74	115
041400	150	167
041461	246	214
041521	368	264
041584	432	310
041656	630	364
041724	850	415
041803	1090	467
041878	1436	515
041943	1808	569
042013	2194	583
042085	2728	613
042170	3528	640
101058	0	0
101102	36	36
101140	76	75
101178	108	108
101226	144	145
101264	174	181
101310	212	216
101362	288	252
101408	360	285
101464	512	324
101521	608	361
101581	814	398
101666	1180	449
101770	1760	504
101850	2280	542
101936	3880	596
102075	4360	597
102097	4630	598
102125	4970	596
102151	5300	595
102185	5800	594
102205	6170	592
102260	6940	580
102312	7720	566
102364	8550	548
1024		
112433	0	0
112451	0	34
112460	18	69
112470	4	104
112481	8	136
112491	24	168
112502	28	201
112513	40	235
112525	60	265
112537	82	302
112550	106	337
112561	136	372
112571	166	404
112583	208	438
112594	244	470
112604	334	503
112615	420	537
112627	484	570
112638	504	602
112650	534	637
112662	626	673
112673	698	705
112684	798	741

TIME	STRAIN	STRS
035898	0	0
035951	0	13
035965	2	52
035975	10	87
035984	18	120
035995	24	160
040007	44	194
040020	62	228
040033	88	262
040057	150	298
040062	201	335
040076	326	372
040090	388	410
040102	436	443
091009	0	0
091046	0	15
091077	10	55
091089	28	96
091099	42	128
091108	56	163
091130	78	203
091145	86	242
091156	98	274
091169	116	312
091182	148	348
091195	178	386
091209	212	425
091223	238	464
091235	302	497
091250	362	537
091263	428	572
091276	558	608
091290	628	645
091304	734	683
091318	846	718
091333	966	757
1025		
012153	0	0
012158	16	11
012167	24	47
012174	28	83
012179	28	112
012184	36	149
012190	46	183
012195	64	212
012200	74	244
012207	96	279
012214	106	312
012220	126	347
012228	148	383
012233	152	416
012240	188	448
012247	206	481
012253	238	516
012260	274	551
012265	304	582
012271	338	617
012280	406	664
172163	0	0
172171	4	39
172178	11	75
172184	15	109
172190	30	145
172196	38	181
172202	47	217
172208	60	253
172215	64	289
172222	75	325
172229	113	361
172236	138	400
172242	166	435
172248	200	470
172255	232	506
172261	268	542
172268	315	581
172274	351	614
1025		
134300	0	0
134316	0	39
134322	6	73
134327	21	111
134333	32	148
134339	40	186
134346	51	223
134352	60	259
134360	89	311
134367	117	352
134376	130	388
134380	153	429
134385	168	464
134390	209	501
134396	232	538
134401	256	574
134407	288	614
134413	315	648
134419	349	686
134425	386	725
134430	424	759
134436	469	800
134442	524	835
134448	571	871

TIME	STRAIN	STRS
134453	652	909
1026		
152193	0	0
152203	2	0
152222	8	75
152226	14	122
152230	22	157
152234	30	205
152238	42	250
152241	46	290
152246	64	337
152250	92	392
152253	114	437
152257	142	482
152261	174	532
152264	222	580
152268	264	637
152271	304	680
152274	362	731
152278	432	787
112551	0	0
112601	14	7
112615	16	24
112621	38	86
112626	42	151
112632	50	215
112637	78	279
112640	102	324
112644	120	370
112650	180	440
112655	246	515
1035		
051537		
051551	0	0
051557	10	14
051561	2	53
051565	4	101
051569	10	152
051573	22	215
051576	28	262
051579	34	299
051582	42	345
051586	54	400
051590	62	450
051594	66	488
051598	74	562
051601	78	606
051604	82	651
051607	90	700
051610	96	751
051614	110	803
051617	124	863
051621	136	915
051625	144	1000
051628	152	1016
051631	164	1067
051635	176	1117
051638	188	1167
051641	200	1210
051644	216	1260
051647	226	1300
051650	244	1330
012250	0	0
012256	2	22
012260	4	74
012264	6	138
012268	18	202
012270	26	257
012274	26	307
012278	34	376
012281	40	426
012285	50	487
012288	56	535
012291	64	591
012294	76	639
012297	84	692
012300	88	748
012306	107	848
012309	118	911
012312	130	971
012315	146	1034
012319	162	1095
012322	178	1156
012325	182	1219
012329	208	1277
012332	226	1340
012336	244	1407
1036		
040600	0	0
040738	14	25
040877	8	57
040907	12	97
040962	20	131
041015	18	165
041075	22	196
041145	26	230
041208	24	261
041272	20	293
041340	30	328
041413	36	362
041480	44	396

TIME	STRAIN	STRS
041543	44	431
041608	54	465
041674	56	498
041743	64	530
041815	66	565
041894	72	596
041945	90	628
042007	94	660
042085	102	695
042187	102	748
042251	106	782
042342	128	834
040229		0
040243		0
040310	0	11
040365	2	50
040391	4	89
040418	6	128
040449	14	165
040478	20	203
040506	26	239
040527	30	276
040566	34	311
040595	40	347
040633	46	386
040672	48	427
040706	50	466
040741	54	504
040779	56	544
040812	60	581
040849	62	615
040885	66	653
040935	70	708
040987	76	763
041035	78	822
041077	82	882
041128	86	934
041173	88	959
041220	92	1048
041267	96	1101
041326	98	1161
1040		
113942	0	0
113950	6	1
113969	10	26
113978	24	65
113985	28	124
113992	36	177
113998	40	217
114005	54	262
114014	52	377
114023	58	381
114029	64	420
092482	0	0
092493	0	0
092529	0	20
092538	6	56
092544	12	98
092552	20	147
092559	26	185
092565	34	224
092572	40	262
092582	56	318
092592	74	377
092602	92	436
092612	104	496
092622	114	552
092628	122	592
092633	138	644
092648	156	699
092657	178	756
101000	0	0
101013	7	44
101027	0	118
101030	7	274
101042	15	343
101055	21	392
101069	27	443
101081	33	532
1042		
111951	0	0
111965	10	2
111970	12	33
111973	19	67
111977	23	123
111981	31	173
111984	35	217
111988	37	265
111993	56	318
111997	60	379
112001	72	432
112005	84	449
112009	87	543
112012	95	598
112016	99	651
112020	111	706
112024	119	762
112029	140	852
112032	155	918
112037	150	993
112042	173	1062

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TIME	STRAIN	STRS
112947	183	1137
112951	202	1214
112955	210	1280
051587		
051575	0	0
051580	0	49
051586	8	109
051592	10	158
051600	21	210
051607	31	264
051612	43	311
051618	45	372
051622	56	429
051627	72	480
051633	76	556
051638	91	627
051643	89	682
051646	91	734
051650	95	790
051653	105	846
051657	111	902
051660	126	954
150256	0	0
150263	2	7
150268	6	75
150272	6	141
150275	6	186
150279	8	258
150283	21	317
150288	16	375
150292	23	433
150296	27	490
150300	29	530
150303	43	602
150307	49	659
150311	54	714
150315	66	791
	70	864
	78	943
	93	1013
1057		
051750	0	0
051848	14	8
051897	20	43
051929	28	75
052002	48	109
052081	64	143
052154	86	176
052221	106	209
052270	122	243
052335	162	291
052405	210	343
052474	250	394
052545	320	446
052610	398	496
052680	494	544
052751	608	594
052619	750	642
052870	942	694
052965	1158	745
053018	1370	782
1058		
012671	0	0
012692	12	9
012705	14	48
012713	20	99
012720	30	139
012726	42	176
012733	48	211
012742	54	261
012753	70	315
012765	140	369
012776	126	426
012786	120	481
012796	136	537
012805	156	590
012815	196	640
012825	200	700
012835	286	751
012845	298	806
012854	354	843
012865	450	931
012875	548	984
012885	624	1026
1059		
051351	0	0
051368	2	11
051372	4	51
051376	20	111
051382	36	174
051387	44	227
051391	58	278
051395	70	332
051399	76	379
051404	96	446
051410	106	516
051416	120	599
051420	126	650
051424	138	702
051428	158	768
051433	192	852

TIME	STRAIN	STRS
051437	224	889
051440	258	948
051444	296	1001
1061		
090911	0	0
091261	0	2
091435	6	39
091508	58	106
091568	126	157
091632	214	206
091679	298	240
091725	424	271
091770	538	303
091825	674	339
091871	856	373
091931	1038	407
091989	1268	441
092051	1980	474
092119	2168	511
092193	2894	540
092252	3344	559
092295	3738	571
092336	4146	581
1062		
031700	0	0
031712	2	22
031721	26	76
031727	52	124
031740	92	175
031750	148	225
031760	204	272
031766	258	308
031774	320	345
031783	420	392
031794	528	433
031802	624	478
031809	710	511
031816	816	543
031824	926	576
031836	1146	626
031850	1408	677
1063		
052263	0	0
052290	18	14
052302	28	43
052306	34	81
052310	42	111
052313	50	144
052317	64	181
052321	86	227
052326	124	278
052331	144	328
052335	176	381
052340	216	432
052343	262	478
052348	346	532
052352	428	580
052356	522	629
052361	596	682
052365	690	736
052369	760	784
1071		
113604	0	9
113657	20	32
113699	40	71
113737	72	104
113804	126	137
113873	216	172
113925	280	205
113985	426	255
114038	532	288
114090	684	322
114170	992	372
114244	1410	423
114319	1800	459
114482	3170	515
114515	3530	522
114557	4030	526
114628	5010	525
1075		
143110	0	0
143115	0	16
143120	4	72
143125	6	136
143129	16	183
143133	22	231
143138	30	284
143142	42	325
143145	50	361
143148	76	406
143152	94	454
143156	120	504
143161	142	563
143165	170	615
143168	224	664
143172	230	712
143175	256	759
143178	300	842
1078		
101777	2	0
101817	0	7

TIME	STRAIN	STRS
101863	2	41
101895	6	77
101972	22	109
101957	60	142
101981	68	174
102046	126	228
102098	208	273
102139	284	310
102181	382	343
102237	528	394
102300	732	444
102364	1004	493
102438	1386	544
102488	1732	572
1082		
013398	0	0
013407	0	10
013412	36	61
013417	58	130
013421	60	188
013427	74	249
013430	82	286
013433	96	319
013436	108	356
013439	118	395
013441	136	440
013445	156	478
013448	190	526
013452	222	578
013456	250	628
013460	282	677
013463		729
1149		
112950	0	0
112996	0	6
113023	10	23
113036	12	37
113065	20	59
113084	28	76
113103	44	93
113123	36	112
113148	14	127
113205	46	162
113261	64	195
113304	72	228
113346	104	260
113394	128	296
113428	142	326
113480	176	362
113509	208	396
113545	230	432
1150		
111151	0	0
111300	24	10
111515	18	22
111550	18	40
111575	24	57
111597	30	70
111624	34	90
111646	42	111
111670	52	124
111692	70	141
111735	90	174
111780	118	208
111821	156	241
111866	188	276
111907	220	309
111952	288	340
1152		
153975	0	0
153990	2	4
154005	8	10
154012	18	37
154018	34	71
154022	56	95
1154		
091599	0	0
091613	6	6
091617	10	22
091616	20	71
091630	26	120
091634	30	167
091639	42	232
091643	52	272
091646	80	320
091650	64	361
091653	78	407
091658	96	504
091662	102	524
091666	98	573
091670	132	637
091674	144	681
091678	164	741
1155		
131200	0	0
131205	2	8
131220	8	20
131224	8	42
131227	36	73
131230	44	110
131234	56	143

TIME	STRAIN	STRS
131238	60	174
131242	70	213
131245	76	250
131249	90	288
131252	110	321
131255	112	356
131258	120	396
131261	138	433
131264	134	478
1156		
152870	0	0
152884	10	7
152888	6	14
152905	4	37
152914	28	70
152918	48	142
152922	74	171
152926	76	217
152931	114	271
152935	126	326
152939	146	370
152944	162	420
152947	190	477
152952	222	538
152956	266	590
1159		
172479	0	0
172516	6	5
172556	20	22
172605	28	53
172629	44	76
172648	48	91
172668	48	107
172689	54	123
172710	60	140
172736	78	160
172779	84	195
172812	108	225
172852	120	259
172888	136	290
172926	138	319
172965	170	359
173004	194	395
173040	210	430
173075	244	461
173130	306	514
173181	332	591
173239	374	610
173291	450	662
1162		
162775	0	
162788	8	5
162794	18	23
162799	32	53
162804	34	79
162810	48	106
162814	60	133
162819	74	162
162822	82	189
162827	102	218
162831	120	248
162836	136	279
162840	148	307
162844	154	336
162847	168	364
162851	194	393
1163		
113500	0	0
113510	8	7
113515	12	25
113519	26	53
113524	50	80
113529	60	111
113533	62	133
113536	70	162
113541	74	192
113545	70	213
113548	96	235
113552	106	264
113555	122	290
113559	134	318
113563	138	346
113566	140	374
113570	174	404
113573	190	432
1164		
132500	0	0
132522	2	4
132538	6	14
132546	8	23
132555	8	36
132562	10	43
132568	16	51
132590	30	68
132596	46	87
132610	60	107
132622	78	124
132634	84	141
132648	112	160
132659	132	177
132672	146	196

TIME	STRAIN	STRS
132684	166	215
132694	176	234
132705	184	252
132715	222	270
1165		
160170	0	0
160181	0	2
160185	6	36
160188	42	75
160190	46	110
160193	76	146
160195	112	180
160198	136	218
1166		
171538	20	14
171543	18	45
171546	24	69
171551	28	98
171555	42	127
171560	46	159
171565	60	189
171569	66	216
171573	80	232
171576	82	288
171580	98	309
171585	120	344
171590	132	380
171593	148	409
171598	168	449
171602	176	486
171608	206	531
171613	222	571
1169		
102363	0	0
102372	6	15
102376	18	45
102381	26	69
102388	36	97
102392	46	123
102396	58	149
102400	72	176
102405	88	206
102409	96	233
102414	124	268
102418	156	298
102423	170	326
102426	208	351
102430	226	377
102434	264	407
1175		
151635	0	0
151651	6	2
151659	10	10
151669	18	20
151676	28	29
151689	32	38
151699	36	47
151713	50	65
151729	68	83
151747	76	102
151761	94	120
151775	110	138
151788	126	156
151802	142	174
151815	154	193
151829	176	211
151842	192	232
151860	224	257
151880	270	
1178		
164150	0	0
164157	14	4
164162	18	20
164165	18	35
164169	18	59
164172	38	76
164177	58	103
164180	64	129
164185	64	155
164190	74	185
164192	94	206
164196	114	233
164200	130	258
164203	134	286
164207	148	313
164211	174	341
164215	194	368
164218	210	398
164223	224	432
164226	234	462
1180		
134527	2	12
134541	16	31
134560	2	59
134584	30	85
134602	40	103
134615	52	122
134628	64	140
134642	82	157
134657	106	177
1182		

TIME	STRAIN	STRS
152987		0
155290	4	7
155320	10	16
155349	22	27
155370	24	36
155386	26	46
155422	40	62
155464	56	80
155506	80	100
155540	89	117
155579	102	135
155618	124	153
155659	166	170
155700	192	189
155742	206	210
155778	228	228
155818	278	246
155860	308	259
155897	350	282
155937	404	300
155978	482	318
160019	540	336
160063	626	355
160102	698	374
160140	588	393
1183		
171155	2	3
171225	32	10
171245	38	19
171275	60	28
171307	116	47
171336	130	65
171424	132	101
171450	148	119
171489	190	131
171549	244	165
171590	306	182
171650	312	211
171705	376	240
171745	430	258
171784	504	276
171843	634	304
1188		
110795	0	0
110805	14	6
110811	20	37
110816	44	104
110821	46	138
110825	62	174
110830	92	223
110834	120	269
110838	144	323
110843	176	377
110847	202	427
110851	218	476
110856	266	529
1192		
132227	0	0
132262	6	21
132278	38	55
132285	48	73
132294	66	88
132300	78	108
132306	84	122
132319	86	159
132332	128	190
132345	168	226
132357	170	257
132376	230	304
132389	258	341
132407	306	391
132419	334	426
132432	372	462
132444	402	495
132455	432	527
132468	494	563
1194		
150946	0	0
150990	4	20
151001	12	37
151027	50	91
151050	90	141
151067	96	175
151092	152	238
151107	186	274
151126	218	320
151140	236	357
151159	274	409
151177	308	459
151180	336	496
151201	360	529
151212	386	561
151225	422	594
151243	458	643
151255	492	677
151272	456	728
151285	584	764
151295	628	797
151307	668	836
151317	712	867
151329	748	899

TIME	STRAIN	STRS
151347	848	948
1195		
170898		
170926	36	21
170933	20	40
170940	24	59
170945	42	73
170954	46	92
170972	62	122
170992	88	158
171012	106	195
171031	118	222
171044	144	258
171057	164	289
171077	194	343
171095	224	392
171112	292	446
171132	328	495
171151	390	545
171169	436	595
171187	476	644
171205	558	694
1199		
110300	0	0
110382	0	34
110412	0	105
110426	6	142
110453	8	190
110471	22	236
110492	44	286
110510	54	334
110531	86	391
110545	94	441
110558	106	458
1206		
184897	0	0
184923	30	1
184927	6	28
184931	98	58
184937	88	74
184960	96	91
184965	96	106
184973	104	124
184978	150	201
184981	276	262
1211		
153298	0	0
153348	68	66
153356	106	94
153372	114	104
153378	146	138
1212		
074200	0	0
074240	8	5
074267	24	15
074303	20	26
074327	10	31
074370	42	42
074388	50	43
074631	46	44
074510	58	47
074519	78	50
074580	62	59
074597	76	79
074611	86	98
074626	88	118
074646	106	144
074665	128	171
074695	154	198
1217		
102559	0	0
102560	14	16
102601	4	44
102621	6	79
102638	26	106
102635	36	133
102679	50	168
102691	44	188
102710	80	217
102727	74	224
102748	142	271
102765	136	298
102783	130	324
102805	130	362
102828	110	401
102850	118	436
102870	136	472
102900	160	528
102929	156	574
102956	224	619
102977	260	655
103096	256	701
103032	248	737
103072	260	783
1221		
132783	54	
132815	52	
132820	62	
132824	60	
132830	44	
132837	206	

TIME	STRAIN	STRS
132845	226	
132851	244	
132856	256	
132861	270	
132866	210	
132870	270	
132877	266	
132886	236	
132892	244	
132897	232	
132903	228	
132909	202	
1228		
171805		0
171824	10	15
171828	8	34
171832	14	53
171835	16	72
171839	20	87
[illegible]	24	100
[illegible]	28	127
[illegible]	32	146
[illegible]	36	165
[illegible]	42	189
[illegible]	54	211
[illegible]	58	237
[illegible]	58	261
[illegible]	66	289
171875	78	316
171879	82	344
171882	90	372
171886	100	403
171890	116	437
171894	120	475
171898	130	508
171904	136	553
171910	128	619
171914	172	640
171918	184	675
171925	214	729
171930	224	765
1232		
085562	0	
085692	8	
085710	8	
085737	6	
085814	0	0
085832	4	4
085852	2	34
085866	2	52
085913	6	80
085942	4	97
085992	20	127
090025	8	151
090039		170
090062	30	198
090088	22	235
090113	52	271
090141	86	308
090165	54	329
090191		381
090213	78	437
090235	116	456
090262		501
090278	142	527
090307	128	574
1237		
132211		
132257	32	15
132265	32	88
132273	30	190
132279	68	261
132283	108	311
132303	198	554
132310	264	644
132315	348	714
132320	368	791
132325	442	857
170676	0	
170683	14	25
170686	18	61
170691	34	102
170700	56	151
170706	74	185
170712	108	236
170716	126	286
170720	138	337
170725	210	390
170731	244	456
170736	300	524
170741	322	590
170747	366	655
170752	418	727
170756	468	789
170761	526	856
170765	596	930
1238		
095859	0	
095923	6	19
095946	14	43
095965	26	57

TIME	STRAIN	STRS
095997	44	73
100036	46	126
100110	54	124
100179	96	156
100255	128	187
100326	174	222
100396	212	253
100429	230	290
100472	290	326
100516	314	361
100571	374	410
100628	424	463
100686	596	514
100742	626	563
100801	748	612
100858	736	661
1238		
110075		0
110180	2	6
110220	12	16
110241	10	26
110270	12	37
110290	18	44
110315	10	53
110334	20	63
110377	42	81
110426	94	99
110498	154	117
110553	288	135
110611	330	145
110629	368	139
110639	380	129
110650	408	29
110700	0	53
110741	12	71
110766	12	81
110807	36	100
110845	84	117
110893	120	136
110970	268	172
111055	490	199
111139	836	227
111255	1560	254
111356	2538	269
111573	3220	270
1253		
113804	2	4
113812	2	11
113523	2	20
113835	2	40
113851	10	65
113862	10	85
113873	24	101
113888	34	120
113900	64	139
114000	120	193
114058	122	222
114077	170	250
114094	176	276
1259		
160250	0	0
160351	50	
160396	104	
160426	114	
160452	112	
160470	112	
160487	94	
160506	72	
1260		
082606	0	0
082630	102	56
082638	118	93
082642	32	129
082647	140	150
082650	146	180
082654	160	207
082658	188	236
082662	206	262
082665	236	289
082670	230	317
082673	258	346
082677		
1262		
114550	0	0
114563	22	42
114570	56	63
114575	70	103
114580	74	126
114584	84	159
114590	104	196
114596	134	251
114602	138	286
114606	164	322
1263		
135800	0	0
135858	2	13
135891	34	22
135923	40	59
135979	96	115
140010	392	132
140042	348	169

TIME	STRAIN	STRS
1264		
164800	0	
164810	4	
164816	6	
164822	4	
164830	6	
164842	4	
164858	268	
164866	266	
164870	278	
1281		
081402		
081511	12	
081529	50	
081561	52	
081580	42	
1282		
000012	16	32
000014	18	48
000018	30	69
000022	42	89
000026	44	102
000030	50	123
000033	52	141
000036	76	157
000039	90	174
000042	106	193
000045	140	212
000048	142	231
000051	154	251
000054	174	272
000057	166	288
000060	156	307
000065	154	340
000069	146	366
000074	146	396
000077		394
1287		
132602	0	0
132709	2	28
132866	2	85
132965	8	131
132973	8	144
133041	16	186
133075	36	204
133090	30	211
133120	42	230
133137	56	268
133163	60	250
133169	66	258
133185	68	268
133215	88	284
133249	96	302
133280	126	320
133293	128	330
133321	134	336
133338	142	356
133355	158	365
133371	162	368
133415	194	404
133446	230	423
133475	248	440
133502	278	458
133532	306	476
133563	362	495
133594	380	514
1288		
150000	0	
150055	4	7
150058	8	27
150063	16	49
150066	10	62
150070	10	77
150078	34	93
150083	26	122
150088	40	152
150092	4[illegible]	181
150096	60	210
150102	64	240
150107	96	277
150113	108	322
150116	112	349
150119	124	365
150123	136	396
150125	156	432
150131	168	470
150137	186	505
1293		
165382	18	31
165410	30	48
165471	60	84
165531	74	114
165607	62	155
165648	74	173
165720	110	210
165800	152	265
165871	186	284
165944	206	319
170017	254	356
170088	310	392
170170	336	419

TIME	STRAIN	STRS
1298		
080951	0	0
081043	4	17
081102	24	48
081183	40	83
081283	60	119
081367	94	159
081530	124	189
081605	124	228
081680	192	265
081765	248	303
081871	308	337
081891	380	372
081928	428	392
081964	470	411
081997	492	430
082040	538	448
082063	580	466
082096	650	484
082133	708	502
082169	782	520
082205	860	
082241	976	556
082282	1058	575
082322	1180	593
082368	1320	613
082407	1448	631
1303		
105401	0	0
105406	6	17
105411	12	14
105416	18	108
105420	24	117
105424	28	163
105428	32	177
105431	40	184
105435	58	244
105438	74	272
105441	90	297
105445	70	328
105448	118	354
105451	120	381
105456	134	408
105457	150	433
105462	180	474
105465	200	520
105468	216	528
150900		
150910	0	29
150915	36	28
150918	46	46
150921	56	56
150925	58	65
150928	62	76
150952	82	145
150955	80	164
150957	70	182
150960	86	199
150962	90	217
150965	86	238
150970	96	269
150976	102	293
150977	116	313
150980	126	338
150985	126	344
150988	156	374
150992	156	422
150995	146	450
150998	182	475
151002	186	503
151011	246	572
100200		
100278	52	14
100400	12[illegible]	9
100415	154	73
100418	158	95
100421	178	122
100426	174	14[illegible]
100430	184	175
100435	196	200
100438	218	227
100443		262
100448	242	295
100452	244	324
100456	264	360
100461	284	398
100464	306	423
100468	310	452
100471	330	480
100475	344	505
100478	386	532
100481	396	557
100486	428	598
100489	448	626
100492	464	646
1310		
131000		0
131051	4	0
131113	2	45
131143	4	65
131200	28	105

TIME	STRAIN	STRS
131241	38	136
131267	66	171
131293	82	212
131316	107	242
131345	158	290
131363	154	319
131386	178	364
131406	220	392
131426	238	430
131445	266	466
131467	364	500
131486	422	560
131507	488	575
131528	558	613
131538	588	640
131548	640	650
131559	676	668
1315		
163000	0	
163016	0	9
163020	12	28
163023	28	54
163027	34	69
163031	46	99
163039	66	144
163045	114	210
163049	110	255
163055	162	324
163059	208	370
163061	242	423
163064	292	466
1322		
131953	0	0
132205	42	27
132272	98	59
132392	80	101
132472	100	119
132572	128	146
132643	154	184
132715	192	220
132822	286	275
132921	342	328
133027	428	380
133115	568	440
133176	674	476
1323		
154002	0	0
154076	26	10
154094	24	20
154099	20	48
154105	18	73
154110	18	91
154126	32	165
154135	22	200
154140	46	237
154147	72	272
154152	60	310
154158	60	346
154163	86	394
154169	100	433
154174	120	474
1446		
030000	3	67
030100	0	90
030182	10	107
030216	28	134
030268	54	308
030313	88	399
030370	132	503
030420	188	604
1447		
012950	10	67
013000	6	67
013025	24	134
013032	34	201
013038	50	269
013044	60	332
013050	66	399
013058	76	469
013064	88	536
013071	102	603
013077	122	667
1448		
030000	0	99
030012	4	124
030015	12	184
030018	16	229
030020	22	280
030023	30	322
030025	36	359
030026	42	395
030029	48	433
030041	88	680
030044	98	728
030046	108	768
030048	114	798
030050	126	846
030052	138	892
030055	146	934
030059	160	1022
030061	176	1053

TIME	STRAIN	STRS
1449		
043000	0	77
043008	8	128
043010	22	229
043012	30	308
043014	40	375
043016	48	440
043018	60	512
043020	68	631
043024	98	772
043026	112	864
043028	126	935
043030	132	996
043032	144	1056
043034	158	1115
043036	164	1173
043038	176	1223
043040	180	1256
1450		
100000	0	73
100008	36	304
100010	56	454
100012	92	686
100014	116	852
100016	148	1032
1454		
042900	0	59
042919	22	146
042922	38	266
042925	56	382
042928	70	479
042930	82	570
042932	92	651
042935	112	787
042938	120	839
042940	138	934
042941	150	1003
042943	168	1069
042948	188	1140
1455		
071550	0	80
071566	20	139
071593	30	202
071620	48	271
071650	60	335
071682	78	401
071716	96	470
071746	116	538
071780	130	606
071811	162	671
071841	178	736
071875	204	804
071907	226	873
071938	252	939
071972	278	1005
1456		
010300	0	38
010374	6	142
010326	20	188
010329	28	242
010331	36	297
010334	46	366
010337	58	401
010339	66	453
010341	72	508
010345	88	556
010350	112	674
010351	156	
010364	174	962
010366	186	1018
010370	204	1075
010371	206	1111
1457		
034650	0	
034663	16	169
034665	36	308
034668	54	466
034670	76	610
034672	98	757
034675	120	879
034676	144	988
1458		
090000		4
090029	108	67
090100	120	67
090266	160	67
090275	202	67
091599	222	67
092200	236	67
093000	254	67
094500	260	67
100051	270	67
101500	284	67
103000	292	67
104507	292	67
110200	300	67
113100	300	67
121551	312	67
124700	330	67
133100	342	67
140700	342	67

TIME	STRAIN	STRS
150000	354	67
155000	364	67
164200	378	67
172500	398	67
202100	416	67
212500	442	67
225500	464	67
230068	466	67
123100	462	67
154800		67
112751	0	104
112776	14	184
112783	24	262
112791	42	361
112796	54	428
112803	60	504
112809	72	576
112815	84	654
112820	100	720
112826	112	789
112834	128	862
112840	146	937
112846	162	1012
112853	180	1080
112860	192	1149
1465		
012900	16	89
012933	46	217
012939	52	286
012945	52	348
012953	56	431
012959	76	500
012966	90	587
012972	96	648
012977	112	719
012984	120	786
012990	144	861
012997	156	937
1467		
000000	0	73
000016	8	171
000022	24	332
000026	66	499
000030	90	660
000035	122	834
000039	134	999
000041	142	1010
000044	146	1010
000046	154	1010
000049	158	1010
000054	160	1010
000057	164	1010
000060	164	1010
000062	168	1010
000065	168	1010
000070	176	1010
000089	178	1010
000109	180	1010
000200	230	1010
000300	264	1010
000350	272	1010
000400	292	1010
000450	312	1010
000500	336	1010
000600	364	1010
000700	354	1010
000800	358	1010
000900	370	1010
001000	378	1010
001100	384	1010
001200	388	1010
001400	420	1010
001500	428	1010
001898	444	1010
001900	448	1010
002100	462	1010
002300	474	1010
002500	492	1010
003000	508	1010
003500	514	1010
004000	518	1010
004500	522	1010
005000	538	1010
005600	548	1010
010200	564	1010
010800	588	1010
011700	604	1010
012500	612	1010
013500	618	1010
014500	622	1010
015500	644	1010
020600	660	1010
022059	668	1010
023950	680	1010
024000	680	1010
024408	690	1010
032315	716	1010
043948	784	1010
050000	824	1010
061510	838	1010
1470		

TIME	STRAIN	STRS
012200	4	76
012211	10	218
012215	30	350
012219	52	494
012222	70	636
012227	96	834
012232	122	1004
1486		
040000		105
040087	4	136
040103	8	168
040118	12	203
040155	36	276
040189	42	336
040224	54	403
040263	80	473
040297	98	543
040332	114	610
040366	140	675
040398	162	740
040433	182	810
040468	212	874
040500	230	949
1487		
	0	101
012150	0	100
012155	0	179
012159	52	374
012162	102	603
012165	176	840
012167	204	956
012169	266	106
1487		
042950		95
042960	18	182
042963	24	335
042965	42	450
042967	90	582
042970	120	769
042973	146	892
042975	158	1010
1496		
110423	0	20
110500	4	50
110510	30	250
110513	76	600
110515	116	840
110518	144	1080
045000	16	60
045050	20	90
045063	58	370
045065	84	540
045068	108	800
045070	132	900
045073	192	1240
020400	16	90
020413	36	220
020415	68	460
020417	104	630
020420	130	800
020422	158	1000
020424	196	1140
020425	212	1280
113000	0	90
113005	0	141
113008	0	256
113010	6	419
113015	36	813
113017	76	953
113018	86	1096
1500		
021050	0	20
021100	0	20
021112	6	110
021115	20	190
021117	52	380
021120	88	560
021122	110	770
021125	164	970
114150	6	70
114162	24	200
114165		
	120	
	164	920
114171		1170
114173		
044950	4	70
044959	14	190
044961	58	480
044964	84	690
044966	116	950
044969	136	1120
044971		
113000	10	122
113005	10	148
113008	14	237
113010	46	451
113012	68	613
113013	88	759
113015	110	892
113017	132	1031
113019	158	1219

TIME	STRAIN	STRS
113021	182	1345
113023	208	1500
1527		
013000	0	133
013007	2	148
013009	22	302
013011	56	432
013013	84	563
013015	124	742
013018	162	870
013020	194	990
013022		
075300	0	117
075310	2	152
075312	20	270
075314	40	391
075315	62	495
075317	82	598
075320	118	746
075321	150	853
075323	184	963
075325	204	1061
075326	240	1113
075335		
1528		
033200	0	83
033210	4	148
033212	20	276
033214	28	379
033215	48	480
033216	66	581
033218	82	728
033220	98	826
033222	110	917
033225	146	1155
033228	162	1270
033229		
100000	0	97
100010	8	151
100012	20	238
100013	20	341
100014	46	444
100015	54	558
100017	66	662
100018	76	752
100023	128	1053
100024	150	1140
100025	164	1243
110000	0	136
110009	34	387
110011	52	569
110013	72	752
110015	112	941
1529		
111900	0	97
111909	8	153
111910	30	250
111912	44	359
111914	62	473
111915	76	585
111916	106	678
014800	0	100
014807	2	138
014809	12	247
014810	20	357
014812	56	455
014814	86	570
014815	86	662
014817	148	806
014819	182	903
014820	214	1010
014822	250	1120
014825	316	1220
035300		64
035500	0	94
035508	10	136
035510	20	235
035511	28	332
035513	42	476
035514	68	590
035515	86	681
035516	96	769
035518	106	868
035520	122	970
1554		
130000	618	57
130007	616	121
130010	622	144
130012	626	232
060000	0	72
060007	4	134
060010	40	362
060011	56	483
060013	80	608
060015	98	699
060017	118	800
060019		
080000		88
080008	14	189
080010	28	356

TIME	STRAIN	STRS
080011	54	479
080013	68	623
1572		
110000	0	111
110005	880	146
110007	884	277
110009	908	403
110012	980	649
110013	918	700
110016	1064	890
050000	0	98
050005	8	129
050006	24	228
050009	50	379
050010	82	497
050000		82
050007		140
050009	4	269
050012	28	432
050013	56	558
050015	102	681
050016	172	789
050018	176	893
090000	0	120
090010	14	195
090011	46	355
090013	94	545
090015	144	720
090017	196	864
1593		
030000	44	52
030005	54	104
030010	52	148
030011	76	249
030013	98	350
030017	150	576
030019	174	681
030020	204	780
030021	226	873
090000	6	160
090009	22	292
090010	42	501
090012	68	602
09 013	94	713
090015	118	1140
090017	150	1320
091500	0	127
091510	0	194
091511	14	332
091513	44	458
091515	90	609
1624		
090000		112
090008	18	154
090010	56	285
090011	112	403
090013	168	523
090015	228	629
1625		
040000	0	89
040009	8	150
040010	4	298
040012	54	413
040014	66	537
040016	116	655
040018	148	762
1626		
050000	0	102
050007	22	131
050010	24	151
050013	10	308
050014	40	412
050016	78	544
050018	120	675
050020	156	783
1627		
150000		127
150007	8	151
150009	2	276
150010	40	397
150012	76	517
150015	120	757
150017		
080000	0	124
080002	0	127
080004	2	128
080006	2	138
080007	0	210
080011	96	532
080013	174	675
080014	276	797
080016	348	915
080019		
1698		
100000	0	0
100006	11	65
100009	55	111
100011	55	394
100013	100	676
100015	144	952
100017	167	1070

TIME	STRAIN	STRS
100020	167	1300
100022	189	1484
100025	211	1833
100027	256	2023
100030	211	2306
1700		
0000	129	274
0001	160	364
0200	289	602
0300	365	786
0400	467	986
0500	578	1180
0600	666	1365
0700	780	1540
0800	975	1780
0900	1065	1985
0982	1150	2046
0924	1275	2110
1069	1380	2180
1113	1490	2260
1158	1583	2324
1200	1630	2400
1247	1796	2462
1701		
050000	0	0
050100	11	201
050173	35	360
050233	53	487
050300	82	630
050370	115	756
050424	153	890
050490	182	1017
050557	213	1147
050634	260	1287
050711	317	1424
050779	348	1547
050857	400	1674
050935	460	1796
051022	535	1938
051062	584	2005
051103	635	2070
051127	649	2104
051149	685	2142
051190	739	2202
1702		
050000		250
050010	0	391
050012	40	708
050014	53	993
050016	104	1347
050018	120	1608
050021	124	1937
050024	178	1200
050025	200	1491
1703		
050200	0	224
050210	11	309
050212	58	660
050213	109	985
050214	140	1280
050216	216	1525
050218	318	
050220	418	
050221		
1704		
120000	0	209
120003	7	298
120004	18	600
120006	35	882
120007	82	1185
120008	105	1472
120010	127	1765
120011	158	2005
120013	169	2360
120014	178	2600
120016	218	2800
120017	258	2940
1705		
060000	0	0
060028	52	152
060035	50	267
060042	51	380
060049	87	494
060056	120	614
060063	155	733
060072	190	851
060079	226	968
060086	245	1078
060094	265	1202
060102	281	1320
060108	293	1438
060116	440	1558
060125	430	1669
060133	467	1790
060141	478	1907
060150	487	2025
1714		
0000	00	107
0065	00	178
0112	2	238
0141	10	270

TIME	STRAIN	STRS
0200	36	338
0257	84	401
0317	142	472
0438	300	603
0508	404	670
0583	584	735
0700	1006	831
1715		
0000	0	111
0052	8	154
0099	32	201
0173	108	269
0239	196	335
0303	283	402
0400	468	523
0494	700	603
0634	1182	737
1716		
0000	0	171
0052	1	161
0115	44	246
0229	144	378
0334	194	503
0623	404	603
0687	555	670
0551	726	735
0587	4	771
0606	880	787
0625	954	803
1717		
0000	64	113
0005	80	160
0008	120	332
0009	166	465
0011	208	582
0013	276	694
1718		
0000		
0017		67
1719		
010000	0	109
010006	8	158
010007	28	291
010008	66	414
010009	106	547
010010	164	665
010011	220	781
010012		
1720		
120000	0	82
120019	12	124
120021	22	175
120024	52	325
120025	88	445
120027	112	571
120029	142	684
1721		
120000		152
120008	10	173
120010	28	338
120011	86	476
120013	142	597
120015	200	704
120016	284	801
120018	336	908
120020	432	1005
1722		
120000	0	148
120012	16	172
120024	40	198
120047	76	248
120100	96	281
120107	198	430
120130	244	476
120200	312	541
120232	380	606
120310	488	677
120324	520	700
120342	578	736
120402	650	770
120426	732	807
120443		
1723		
120000	0	80
120108	24	133
120285	44	193
120360	96	259
120428	144	321
120494	214	385
120561	284	453
120625	372	516
120690	468	581
121256	594	642
121289	664	675
121324	744	705
121362	854	736
121400	954	771
121438	1064	805
121478	1208	838
1724		
090000	0	101

TIME	STRAIN	STRS
090030	10	144
090033	36	276
090036	66	420
090037	86	561
090039	108	670
090040	132	780
090041	148	916
1725		
070000	0	100
070027	20	149
070029	40	288
070031	70	414
070034	120	543
070035	160	660
070037	200	770
070039	360	915
1727		
000000	0	121
000005	28	220
000006	64	343
000007	102	477
000008	134	607
000009	170	726
000010		858
000011	228	
000012	258	1080
000013	286	1190
1762		
000000		174
0017	49	382
0018	95	761
0019	120	1090
0021	162	1400
0022	207	1660
0023	272	1960
0024		1640
1763		
120000	0	309
120005	11	464
120007	44	828
120009	88	1165
120011	110	1485
120013	145	1765
120014	178	2050
120015	222	2320
120018	244	2610
120019	272	2850
120021		
1782		
0000	20	161
0027	43	296
0030	67	515
0032	89	697
0034	100	888
0035	113	1060
0036	151	1310
0037	178	1525
0039	204	1665
0041	240	1940
0043	267	2200
0045	291	2460
1783		
0000	00	194
0121	00	239
0172	33	361
0245	44	519
0282	78	597
0337	89	715
0394	178	835
1785		
0000	46	115
0002	78	470
0200	86	620
0284	104	848
0345	160	1001
0415	156	1190
0477	160	1355
0547	196	1533
0615	220	1694
0687	244	1863
0764	278	2034
0843	320	2201
0924	360	2380
1787		
120000	174	216
120090	200	484
120093	222	664
120102	238	810
120110	262	1080
120118	292	1286
120124	318	1500
120131	349	1730
1802		
060000		0
060000	20	99
060075	8	412
060078	12	658
060090	14	805
060095	163	966
060107	208	1300
060112	230	1465

TIME	STRAIN	STRS
060117	250	1580
060128	288	1855
060130	295	1910
060128	310	1975
060136	321	2055
060138	338	2140
060142	348	2188
060144	368	2260
060152	418	2430
060157	438	2510
060160	455	2590
060164	473	2680
060163	500	2760
060172	518	2845
060176	540	2935
1818		
0000	0	342
0048	0	436
0090	11	547
0146	36	697
0200	55	840
0220	55	896
0247	55	974
0272	73	975
0345	89	1233
0400	111	1370
0457	118	1508
0519	142	1642
0585	156	1784
0643	169	1918
1820		
0000	197	196
0000	95	183
0018	109	277
0025	122	416
0036	156	625
0042	187	757
0048	198	884
0053	245	1010
0060	272	1138
0067	304	1264
0073	331	1377
0081	370	1518
1836		
040000	46	195
040020	93	466
040023	108	546
040027	117	615
040032	133	685
040039	157	821
040048	191	962
040054	222	1095
040062	255	1235
040071	302	1390
1837		
040000	0	283
040011	31	485
040017	51	631
040022	73	767
040028	95	920
040030	125	1078
040042	146	1238
040050	182	1397
040057	215	1547
1838		
040000	0	235
040010	333	382
040015	845	739
1840		
160000		233
160003	3	582
160005	7	855
160007	11	1088
160008	15	1359
160010	20	1583
1916		
110000	0	180
110058	8	261
110107	8	376
110268	4	500
110434	26	623
110498	48	747
110565	104	874
110630	110	1003
110693	136	1124
110760	184	1252
110823	192	1368
1917		
110000	0	0
110000	6	185
110083	47	282
110122	66	381
110174	92	504
110225	117	619
110278	149	742
110432	194	870
110483	243	993
110539	287	1126
110592	556	1241
1918		
110000	0	0

TIME	STRAIN	STRS
110000	0	261
110015	0	305
110080	213	474
110130	246	593
110183	262	713
110233	283	836
110280	312	955
110342	347	1071
110400	411	1186
110457		1307
110480		1366
110520		1427
110554		1486
110588		1550
110751		1668
1919		
110000	0	0
110000	13	186
110008	22	315
110010	36	570
110012	72	774
110014	96	980
110015	153	1178
110017	185	1347
110018	221	1541
110022	372	1869
110023	406	2008
1920		
	0	0
110000	0	175
110010	0	178
110012	0	344
110014	32	507
110015	43	666
110017	43	827
110018	53	987
110020	64	1083
110022	96	1338
110024	107	1497
110026	149	1662
110028	149	1790
110029	139	1937
110031	160	2100
1921		
110000	0	0
110000	9	181
110005	21	272
110008	60	523
110010	77	683
110012	104	858
110014	160	1063
110016	179	1232
110017	211	1395
110019	272	1550
110020	312	1740
110023	347	1962
1940		
120110	0	0
120110	0	219
120153	11	292
120193	23	353
120279	36	468
120370	87	584
120459	108	702
120552	115	818
120640	121	930
120735	174	1055
120826	193	1167
120917	206	1280
121020	228	1403
121121	230	1523
121171	262	1580
121218	268	1637
121270	276	1692
121323	276	1752
121423	304	1863
121533	330	1983
1941		
090000	29	380
090062	0	655
090102	13	828
090253	36	1488
090370	73	1942
090475	113	2310
090525	200	2450
1942		
	0	0
100000	20	222
100080	27	414
100210	65	821
100288	69	1075
100373	82	1340
100465	127	1598
100567	131	1883
100619	138	2012
100670		2137
1943		
010000	0	0
010000	0	228
010103	0	296
010177	2	430

TIME	STRAIN	STRS
010263	33	572
010347	56	712
010435	82	865
010507	120	1000
010582	143	1142
010665	183	1284
010762	225	1447
010836	278	1561
010929	312	1712
011025	356	1854
011119	407	1998
011171	446	2007
011226	476	2140
011279	507	2205
011335	552	2270
011391	568	2345
011450	605	2420
	0	0
120000	18	238
120120	73	546
120267	207	1042
120354	307	1350
120439	398	1631
120480	452	1793
120536	499	1937
120581	552	2083
120633	641	2232
120711	710	2450
1944		
		0
100000	16	213
100002	22	268
100004	27	344
100006	38	428
100008	42	683
100010	85	974
100011	118	1267
100013	176	1504
100015	244	1780
100017	273	2080
100019	311	2240
100020	344	2444
1945		
	0	0
100500	9	255
100507	9	465
100510	16	742
100511	36	946
100512	60	1158
100514	73	1369
100516	85	1587
100519	87	1820
100520		2035
100521	100	2215
100524	114	2445
1946		
020000	0	0
020000	18	239
020018	20	264
020070	31	438
020022	64	717
020024	73	973
020025	100	1215
020028	100	1468
020030	140	1697
020033	185	2190
020035	203	2450
020037	203	2665
020039	231	2920
1947		
120000	0	0
120000	18	231
120006	24	426
120007	53	744
120009	91	1043
120010	125	1354
120012	169	1707
120014	197	1913
120017	267	2293
020000	0	0
020000	20	290
020017	24	544
020020	60	684
020021	111	1048
020023	136	1395
020025	214	1767
020026	298	2020
020028	369	2295
1948		
120000	0	0
120000	16	216
120183	47	564
120235	76	688
120322	116	920
120402	172	1128
120480	264	1311
1949		
120190	0	0
120190	9	598
120245	32	721
120300	49	845

TIME	STRAIN	STRS
120355	66	963
120412	66	1080
1950		
120000	0	0
120000	6	205
120075	4	254
120143	15	406
120206	30	537
120259	32	636
120321	55	692
120386	83	888
120447	104	1018
120509	153	1150
1951		
110000	0	0
110000	7	211
110039	11	360
110040	31	489
110043	67	735
110045	91	1027
110047	100	1237
110048	123	1414
1952		
110000	0	0
110000	16	191
110019	29	297
110021	71	593
110023	96	864
110025	116	1113
110027	154	1357
1953		
120000	0	0
120000	2	418
120019	22	658
120020		872
120022	58	1122
1954		
020000	0	0
020000	16	164
020027	60	213
020038	73	370
020041	82	428
020054	96	643
020058	107	724
020069	123	918
020076	134	1057
020080	145	1125
020085	156	1200
020090	189	1336
1955		
110000	0	0
110000	13	163
110017	20	296
110030	44	547
110035	51	624
110042	67	772
110046	71	942
110050	78	907
110053	87	976
110056	93	1027
110059	96	1080
110063	102	1152
110067	102	1213
110071	114	1287
1956		
110000	0	0
110000	9	164
110051	24	306
110056	35	380
110060	40	456
110068	60	582
110073	69	667
110078	76	770
110084	93	876
110090	93	972
110097	138	1082
110103	151	1175
1979		
110000	0	0
110000	0	204
110096	0	398
110140	36	541
110176	54	657
1980		
110000	0	0
110000	4	225
110079	36	407
110109	60	525
110141	96	654
110175	132	793
1981		
120000	0	0
120000	0	216
120059	40	403
120100	76	525
120158	15[illegible]	657
120181	15[illegible]	720
120210	180	789
120238	212	852
120265	242	922
120291	276	1059

TIME	STRAIN	STRS
1982		
072400	0	0
072400	0	148
072437	4	189
072439	13	387
072441	28	561
072443	36	738
072445	40	878
072447	53	992
1983		
073000	0	0
073000	0	119
073019	8	193
073020	20	213
073024	54	394
073025	124	517
073028	258	657
073030	320	817
1984		
083800		0
083800		132
083816	0	212
083818	12	360
083820	33	505
083821	50	657
083824	73	843
083826	81	1017
1985		
010000	0	143
010025	30	182
010028	32	221
010037	44	356
010040	52	427
010047	60	497
010060	78	716
010067	80	821
010073	94	709
010075	100	
010079		
010081	116	1087
1986		
010000		0
010000		134
010025	0	272
010043	12	522
010060	48	765
010066	75	865
010070	90	915
010074	96	952
010077	104	1006
1987		
010000	0	0
010000	0	134
010026	0	266
010041	6	484
010051	28	672
010055	46	692
010063	76	807
010076	130	947
2001		
070000	0	0
070000	0	55
070004	1	96
070006	44	155
070008	50	232
070010	74	276
070011	88	336
070013	106	396
070015	126	452
070017		507
2002		
030000	0	
030000	0	169
030007	20	267
030009	44	484
030011	90	796
030014	130	1070
030015	164	1290
2003		
040000	0	
040000	0	164
040006	8	223
040008	16	418
040010	38	495
040011	60	807
040013	80	1020
040015	96	1200
2004		
040000		0
040000		206
040055		328
040100		543
040133		657
040166		762
040197		872
040230		980
040265		1089
040300		1192
040339		1253
040360		1363
040378		1412

TIME	STRAIN	STRS
040419		1527
040464		1630
040507		1735
2005		
040000		183
040048	16	312
040097	38	461
040115	56	514
040150	74	610
040185	96	719
040220	108	835
2006		
010000		
010061		
010000		
010000		170
010064		262
010140	6	413
010191	24	515
010246	54	619
010328	106	776
010411	178	930
010472	230	1030
010535	292	1160
010572	328	1181
010611	374	1240
010645	418	1280
010683	468	1336
010754	528	1440
2007		
030000		
030000		
030000		227
030047	20	312
030081	38	420
030160	78	560
030243	126	712
030401	232	975
030463	280	1069
030510	342	1135
2008		
010000		
010000		141
010011		206
010013		376
010015		540
010016		707
010018		885
010020		1055
2009		
033000		
033000		166
033008	4	231
033010	50	446
033012	92	696
033014	136	891
2010		
010000		
010000		201
010001	33	270
010003	75	425
010005	127	589
010007	229	805
010009	334	996
010010	475	1180
2012		
120000	0	0
120000	0	210
120028	19	325
120030	83	569
120031	137	775
120034	243	980
120036	376	1230
2013		
120000	0	0
120000	0	95
120030	4	296
120032	53	563
120035	132	815
2038		
120000	0	
120000	0	175
120110	111	304
120157	183	374
120177	236	406
120198	300	439
120235	416	499
120274	596	555
120316	864	616
120370	1325	670
120388	1640	691
120452	2330	734
120488	2900	744
120520	3520	742
120563	4410	770
120595	5170	731
120614	5640	725
120643	6330	710
120676	7100	692
120706	7820	685
120741	8650	670

TIME	STRAIN	STRS
120782	9460	653
120810	10100	645
2039		
120000	0	
120000	2	208
120027	34	246
120127	386	622
120180	702	503
120275	1622	615
120355	2810	623
120398	3650	740
120441	4490	746
120540	4580	673
120583	5680	657
120630	6920	635
120700		617
2040		
010000	0	
010000	15	199
010093	92	254
010163	258	377
010209	438	449
010278	628	543
010357	1505	626
010419	2280	673
010470	3115	765
010519	4220	870
010571	5120	883
010625	6360	796
010684	7540	635
010707	8360	666
2041		
012300		
012300		368
012325	62	648
012328	143	945
012330	260	1190
2042		
010000		
010000		199
010018	59	391
010020	134	726
010023	219	957
010025	326	1170
2043		
010000	0	
010000	15	174
010007		218
010010	60	339
010012	115	635
010015	213	925
010017	338	1200
2044		
100000	0	
100000	11	195
100012	34	396
100018	245	1020
100020	368	1259
2054		
090000	0	0
090003	3	361
090052	33	598
090079	49	724
090125	85	947
090175	127	1165
090227	185	1278
090278	231	1643
2055		
090000	0	0
090000	7	449
090064	36	700
090119	67	932
090200	124	1254
090238	154	1392
090295	178	1570
090298	187	1640
090327	209	1757
090358	236	1873
2056		
090000	0	0
090000	20	325
090062	40	462
090121	76	770
090158	100	943
090206	140	1071
2057		
090000	0	0
090000	18	329
090007	16	347
090009	40	675
090011	82	1094
090012	120	1462
2058		
090000	0	0
090000	18	325
090024	91	352
090026	125	873
090028	160	1318
2059		
095953	0	0
095953	18	329

TIME	STRAIN	STRS
095958	24	376
095960	67	625
095961	103	1049
095962	147	1423
2069		
080000	14	226
080053	22	331
080142	50	532
080197	70	657
080258	92	784
080321	120	924
080383	146	1055
080444	178	1187
080475	194	1250
080506	212	1314
080537	232	1381
080569	250	1437
2070		
080005	14	282
080040	58	354
080056	76	400
080108	114	525
080169	170	662
080242	220	813
080291	256	925
080353	288	1056
080440	342	1238
080480	360	1318
2071		
080000	0	0
080000	6	185
080065	20	331
080091	36	398
080149	50	534
080206	74	662
080264	92	720
080386	130	1056
080450	150	1187
2072		
090400	0	0
090400	12	197
090422	6	444
090425	30	916
090427	60	1082
090431	104	1622
090434	130	1866
2073		
090000	0	0
090000	4	184
090007	12	254
090009	30	461
090010	62	670
090011	80	891
090013	100	1125
2074		
100050	0	0
100050	8	185
100056	6	186
100058	20	332
100060	34	413
100061	52	582
100062	74	773
100064	102	980
100066	114	1185
100067	128	1380
2081		
093000	0	0
093000	20	218
093120	120	425
093255	189	512
093302	394	603
093400	816	778
093443	1070	869
093501	1510	935
093572	2085	1020
2082		
094500	0	0
094500	2	272
094532	29	339
094565	62	442
094623	129	597
094654	209	683
094685	231	764
094718	384	845
094758	515	927
2084		
090500	0	0
090500	7	244
090513	30	314
090515	67	619
090516	128	904
2085		
094400	0	0
094400	11	74
094406	31	356
094408	67	653
094409	120	927
094410	176	1205
2109		
030000	0	0
030000	2	126

TIME	STRAIN	STRS
030031	4	174
030055	14	214
030112	36	322
030165	54	402
030232	88	503
030370	150	676
030437	198	758
030505	234	867
030568	276	922
030638	306	1007
030707	350	1096
2110		
030000	0	0
030000	18	135
030045	38	214
030066	52	259
030107	68	341
030191	112	502
030241	140	597
030284	150	677
030330	184	753
030381	218	838
030440	266	920
2111		
030000	0	0
030000	12	202
030046	42	280
030081	58	342
030125	70	417
030298	158	716
030378	208	838
030431	244	919
2112		
030050	0	0
030050	18	72
030066	42	183
030068	76	341
030070	100	508
030072	150	715
030074	180	912
030077	226	1100
2113		
030000	0	0
030000	6	127
030008	16	166
030010	44	376
030011	70	572
030014	104	765
030017	130	947
030019	166	1137
030021	196	1277
2114		
030000	0	0
030000	10	119
030025	0	143
030027	18	284
030029	54	440
030031	86	632
030033	174	756
030035	196	915
030037	184	1052
2115		
030000	0	0
030000	0	145
030009	2	182
030012	8	230
030016	20	292
030024	26	413
030028	58	463
030031	66	517
030043	104	682
030051	178	794
030054	142	837
030057	146	876
030060	162	920
030063	176	960
030067	186	1003
030071	204	1053
030074	218	1100
030077	232	1132
030081	256	1178
2139		
120000	0	0
120000	0	129
120250	8	479
120300	46	541
120356	86	627
120411	124	713
120469	182	793
120527	240	875
2140		
120000	0	0
120000	10	143
120087	44	246
120162	92	381
120229	118	439
120293	184	509
120354	238	671
120426	306	774
120472	358	836
120534	430	917

TIME	STRAIN	STRS
120604	524	1006
2141		
120000	0	0
120000	14	129
120276	92	313
120367	142	414
120472	226	550
120531	278	672
120633	384	767
120698	460	837
2142		
120000	0	0
120000	10	126
120007	20	225
120009	54	337
120010	90	593
120013	114	772
120015	128	926
120017	152	1180
120020	178	1256
2143		
120000	0	0
120000	2	129
120008	10	188
120010	48	416
120012	62	587
120015	124	802
120018	172	1017
120020	202	1152
2144		
120050		0
120050	4	107
120057	6	
120060	12	208
120062	30	366
120063	56	501
120065	78	650
120067	96	790
120069	120	933
120071	150	1072
120072	168	1188
2145		
120000	0	0
120000	16	135
120006	24	162
120011	36	250
120017	58	337
120023	70	428
120028	92	495
120035	108	585
120040	140	670
120047	164	757
120051	192	834
120058	222	918
120064	276	1000
2146		
120051	0	0
120051	14	129
120073	52	217
120078	58	300
120083	70	376
120088	86	441
120092	100	503
120097	110	583
120103	132	670
120110	150	753
120115	168	834
120121	202	917
120129	234	1000
120133	256	1050
120137	264	1093
120140	278	1134
120145	304	1177
2167		
120000	0	0
120000	0	120
120150	0	196
120237	4	314
120290	86	387
120480	100	633
120530	138	702
120591	256	775
120657	420	853
120732	684	932
2168		
120000	0	0
120000	0	123
120300	246	157
120353	306	625
120406	420	700
120468	540	777
120530	684	853
120602	902	933
2169		
120000	0	0
120000	8	116
120061	14	155
120247	104	379
120316	150	467
120465	276	654
120500	312	702

TIME	STRAIN	STRS
120568	384	777
120637	448	853
120678	542	893
2170		
120000	0	0
120000	18	119
120005	16	156
120008	36	273
120009	44	
		950
2171		
120000	0	0
120000	0	108
120019	16	120
120021	26	184
120023	44	335
120026	72	545
120028	98	759
120030	122	911
120034	160	1108
120035	198	1280
120037	222	1485
2172		
120000	0	0
120000	14	117
120008	28	192
120010	54	356
120011	82	518
120017	178	944
120020	216	1095
2173		
120000	0	0
120000	12	120
120020	54	240
120035	98	462
120050	122	634
120061	182	790
120064	200	828
120067	230	872
120071	300	912
2174		
120000	0	0
120000	16	120
120006	28	168
120007	60	314
120009	94	462
120011	130	617
120012	166	758
2175		
120000	0	0
120000	12	12
120004	40	184
120006	60	304
120008	90	430
120010	110	560
120014	184	913
2196		
120000	0	0
120000	8	120
120067	0	155
120094	12	193
120132	42	244
120184	10	313
120238	12	387
120303	142	473
120365	132	558
120472	268	702
120534	364	780
120595	448	853
2197		
120000	0	0
120000	14	141
120091	36	202
120077	0	235
120133	46	310
120190	66	387
120247	118	466
120304	174	547
120418	316	700
2198		
120000	0	
120000	2	108
120011	76	224
120151	102	281
120334	248	543
120389	296	627
120443	348	702
2199		
120000	0	0
120000	8	113
120017	6	155
120018	6	298
120020	6	449
120022	38	612
120025	86	762
120027	132	913
120028		1048
2201		
120000	0	0
120000	0	117
120006	14	184

TIME	STRAIN	STRS
120008	20	304
120010	26	536
120012	44	702
120014	52	894
2204		
120000	0	0
120000	0	123
120010	18	155
120019	82	271
120027	152	368
120031	180	422
120036	200	464
120041	236	539
120049	256	622
120055	272	695
120061	290	773
120068	312	848
120071	316	886
120075	330	927
120079	356	970
2205		
120000	0	0
120000	4	205
120061	27	310
120261	340	615
120292	663	653
120000	0	0
120000	0	201
120035	129	312
120072	207	374
120259	1262	623
120373	3125	682
120432	4560	678
120500	6040	662
2206		
120000	0	0
120000	11	176
120017	13	370
120019	13	594
120020	71	820
120023	156	1080
120025	273	1283
2233		
120000	0	0
120000	16	126
120144	0	252
120220	40	366
120262	102	430
120310	344	500
120396	542	632
2234		
120000	0	0
120010	12	115
120115	24	206
120190	120	292
120250	182	361
120310	264	432
120376	334	507
120440	572	578
2235		
120000		
120003		
120003		
120000	0	0
120000	44	137
120084	76	245
120149	132	331
120190	166	367
120267	266	476
120320	374	563
120361	468	587
120419	600	652
120463	721	687
120491	816	724
120555	1162	776
2236		
010000	0	0
010000	0	108
010010	6	163
010012	22	308
010014	44	443
010016	76	572
010018	86	708
2238		
120000	0	0
120000	4	112
120006	22	173
120009	36	311
120010	52	452
120011	64	584
030000	0	0
030000	4	133
030005	8	195
030007	20	291
030009	36	393
030010	56	490
030011	78	591
030013	114	698
030016	176	803
2239		
120000	0	0

TIME	STRAIN	STRS
120000	16	108
120021	22	153
120031	36	220
120043	82	399
120057	150	519
120064	208	616
120073	292	721
2240		
120000		
120014		
120000		0
120000		109
120031		177
120047		368
120057		505
120067		642
120073		719
120076		755
120079		790
120081		827
2241		
120051	0	0
120051	0	114
120065	0	151
120077	21	264
120083	38	359
120090	42	438
120094	54	498
120103	76	617
120112	90	720
120119	110	794
120123	130	828
120126	156	867
2242		
120000	0	0
120000	6	121
120068	58	189
120200	190	337
120285	278	425
120357	310	537
120435	420	580
120477	420	625
120557	420	683
120590	484	723
2243		
120000		
120000		115
120121	18	180
120203	36	278
120270	84	360
120335	124	437
120441	256	568
120500	368	633
120555	450	687
120667	482	726
2264		
030000		
030000		113
030050	14	147
030077	28	181
030131	58	245
030170	80	288
030207	116	443
030384	282	540
030476	318	645
030550	338	723
2265		
030000		112
030119	54	206
030241	202	372
030313	306	467
030375	228	547
2266		
030000		91
030116		210
030200		306
030358		497
030372		509
2267		
030000		102
030197	18	210
030248	114	364
030376	262	537
030396	306	563
030420	334	595
030451	396	632
030476	444	660
030530	548	722
2268		
030051		112
030059	8	181
030061	24	265
030063	38	346
030065	50	420
030067	52	498
030068	50	577
030070	116	667
030072	144	732
030075	188	833
030077	224	899
030078	248	963

TIME	STRAIN	STRS
2269		
030000		0
030000		108
030021		192
030024		296
030026		388
030028		483
030030		578
030031		668
030034		719
030036		823
030038		890
2270		
030052	0	0
030052	0	119
030059	2	144
030061	20	234
030063	36	306
030064	54	379
030067	70	485
030068	90	566
030070	112	648
030072	134	732
030074	160	828
030076	178	897
030078	186	992
2271		
030000		96
030015	20	147
030017	26	287
030019	28	320
030020	62	389
030022	80	470
030024	104	557
030027	102	669
030028	158	745
030031	170	830
030033	184	897
2273		
030000	0	0
030000	2	95
030050	72	203
030055	106	268
030066	162	396
030077	212	523
030086	294	623
030092	348	680
2274		
030000		97
030015	8	130
030020	12	180
030031	48	306
030036	62	360
030044	94	447
030049	112	505
030054	140	575
030060	174	646
030066	214	715
030073	250	786
030076	270	826
030080	302	867
2298		
120000	0	150
120076	16	278
120158	40	396
120200	54	478
120328	78	732
120379	108	830
120443	138	940
2299		
120000		
120062		
120160		
120000	8	0
120000	8	164
120107	28	235
120223	76	463
120272	94	549
120323	114	643
120423	162	823
120977	206	913
2300		
120000	0	0
120000	4	128
120179	68	341
120245	98	462
120290	120	548
120339	148	642
120385	178	732
120435	210	822
120486	258	912
120513	270	956
2301		
120000		
120000		134
120114		232
120152	14	282
120203	38	368
120257	62	455
120308	92	565
120362	124	640

TIME	STRAIN	STRS
120410	148	730
120461	186	823
120513	244	910
120540	262	955
120569	280	1000
120598	304	1050
120628	324	1095
120659	342	1140
120690	366	1185
120751	422	1279
2302		
120011	0	0
120011	10	214
120013	14	402
120015	24	607
120017	36	772
120018	48	917
120020	56	1071
120021	66	1210
2303		
120000	8	129
120007	22	219
120009	40	388
120011	66	547
120012	96	715
120014	118	871
120015	154	1010
2304		
120000		
120000	0	
120006	4	
120008	12	
120010	16	
120012	22	
120014	28	
120016	50	1129
2307		
120000		
120017		
120033		
120000	0	0
120000	18	131
120021	24	160
120025	34	204
120028	40	268
120034	52	346
120039	60	423
120043	74	493
120047	82	558
120052	100	640
120057	120	822
120062	138	866
120068	164	892
2308		
120000	0	0
120000	0	132
120016	16	165
120022	22	249
120029	34	364
120035	52	453
120040	46	568
120046	66	647
120051	94	737
120056	116	825
120061	140	913
120064		957
		1100
2309		
120000		102
120018	2	139
120021	10	176
120026	16	222
120030	26	270
120037	34	338
120042	50	400
120053	68	539
120058	88	604
120063	106	670
120067	114	707
120070	122	738
120073	120	773
120077	136	822
120080	146	859
120893	156	890
2330		
120000	0	0
120000	0	139
120117	134	273
120184	224	385
120240	294	475
120286	338	551
120440	400	643
120488	468	730
120545	516	823
120604	560	912
120636	586	960
2331		
120000		
120000	0	
120078	46	
120128	76	

TIME	STRAIN	STRS
120181	134	
120234	188	
2333		
120000	0	0
120000	14	141
120100	40	235
120133	44	277
120197	78	364
120270	142	468
120327	198	554
120384	252	645
120436	310	730
120495	382	822
120561	480	916
120590	532	960
120621	602	1003
2334		
120000	0	0
120000	10	84
120007	16	162
120010	22	224
120011	44	371
120012	72	533
120015	98	710
120017	128	866
120018	152	1006
120020	188	1146
2337		
120000	0	0
120007	12	145
120009	20	264
120011	76	464
120013	80	658
120015	112	843
120017	138	997
120018	166	1043
120020	182	1217
120021	206	1376
120023		1458
2338		
	0	0
120000	0	109
120019	14	277
120024	26	287
120035	64	451
120038		497
120050	137	693
120053	446	736
120058		810
120064	756	907
120068	156	967
120071	476	1018
120077	204	1022
120083	246	1095
2339		
120000	0	0
120000	6	110
120012	20	135
120023	34	199
120029	56	268
120036	76	343
120040	96	400
120047	116	476
120052	144	542
120060	172	632
120063	192	672
120069	208	738
120075	224	811
120081	280	876
120085	276	913
120088	284	947
2340		
120000	0	0
120000	0	146
120010	4	183
120022	26	334
120026	42	385
120031	54	455
120039	74	567
120043	92	637
120049	110	732
120065	128	827
120060	148	907
120067	180	998
120073	206	1089
120080	240	1140
120083	264	1232
120082	280	1282
2362		
120000	0	0
120000	34	176
120083	48	188
120167	100	285
120212	136	346
120280	196	430
120404	368	593
120480	460	693
120533	554	757
120586	684	821
120605	728	841
2363		

TIME	STRAIN	STRS
120000	0	0
120000	0	127
120008	6	192
120042	42	264
120129	90	336
120195	186	431
120359	218	512
120320	394	597
120377	530	671
120567	782	777
120625	986	840
120677	1220	913
120708	1376	925
120760	1640	968
120808	1922	1008
120867	2284	1053
2364		
120000	0	0
120000	8	142
120088	26	219
120148	58	292
120260	144	432
120317	202	504
120453	396	675
120528	528	761
120605	650	847
120647	778	893
2365		
120000	0	0
120000	10	150
120044	24	188
120107	110	269
120195	186	390
120227	242	434
120310	368	545
120410	568	672
120503	842	772
120557	1020	840
120625	1294	905
2366		
120000	0	0
120051	2	106
120069	2	142
120071	2	189
120074	26	360
120076	68	532
120078	98	695
120080	114	845
2367		
120000	0	0
120000	2	126
120007	16	210
120008	42	396
120010	50	573
120012		618
2368		
120000	0	0
120000	0	126
120011	0	197
120013	20	352
120015	44	517
120017	72	787
120018	96	831
2369		
120000	0	0
120000	8	123
120010	18	172
120011	70	330
120013	70	487
120016	100	665
2370		
120000	0	0
120000	2	131
120019		163
120031	40	314
120036	54	382
120060	66	438
120065	84	492
120050	106	590
120057	138	672
2372		
120000	0	0
120000	10	148
120007	14	189
120015		302
120023	72	418
120029	98	502
120034	124	588
120040	160	670
120047	204	757
120052	244	840
120055	266	877
120058	300	919
2373		
	0	0
120000	12	138
120014	40	272
120018	54	320
120024	74	414
120030	96	504
120036	114	588

TIME	STRAIN	STRS
120041	140	672
120048	170	757
120054	206	840
120060	240	925
120063	250	963
120067	360	1005
2395		
120000	0	0
120000	16	133
120109	78	202
120180	162	273
120250	270	341
120319	420	407
120380	700	510
120462	1032	541
120546	1480	612
2396		
120096	0	0
120096	0	171
120163	56	232
120280	176	337
120366	310	413
120431	440	477
120502	612	541
120584	858	607
120673	1232	674
120720	1478	708
120780	1840	745
2397		
120000	0	0
120000	18	111
120143	80	208
120201	106	229
120240	144	270
120303	234	337
120371	378	408
120423	500	469
120505	732	541
120600	1118	622
120684	1576	685
120715	1792	707
120775	2234	742
120866	3050	787
2398		
120000	0	0
120000	0	104
120054	0	135
120085	0	169
120143	16	231
120193	20	286
120268	128	358
120336	142	438
120435	328	540
120520	572	613
120600	934	672
2399		
	0	0
120000	18	111
120017	28	132
2400		
120000	0	0
120000	8	101
120015	6	130
120017	18	220
120019	42	342
120020	72	467
120022	100	597
120025	154	780
120027	186	887
2401		
120018	0	0
120018	4	152
120020	32	264
120027	144	316
120028	168	417
120030	196	508
120031	232	590
2402		
	0	0
120000	18	112
120007	20	157
120014	230	672
2403		
050000	0	0
050000	10	68
050057	22	152
050077	170	542
050073	198	610
050098	662	673
050105	1324	740
2404		
120000	0	0
120000	14	113
120020	20	189
120029	54	273
120035	80	330
120040	112	406
120047	166	473
120051	206	539
120058	258	607
120063	312	672

TIME	STRAIN	STRS
120070	378	738
2405		
120000	0	0
120000	12	113
120017	38	168
120030	82	310
120031		323
120050	206	545
120057	260	612
120062	316	676
120068	396	738
120072	446	777
2406		
120008	0	0
120008	24	150
120015	40	223
120020	56	268
120027	70	337
120033	108	401
120040	138	472
120046	176	538
120052	224	607
120059	278	675
120065	348	743
120069	376	768
120072	424	812
120076	470	845
2440		
120000	0	0
120000	14	133
120097	28	219
129171	62	332
120235	100	435
120292	132	525
120352	168	624
120457	240	784
120514	282	866
2441		
120000	0	0
120000	4	148
120128	42	296
120177	88	386
120234	110	493
120285	166	587
120335	184	680
120445	310	872
2442		
120000	0	0
120000	4	144
120090	20	255
120100	32	277
120162	72	396
120193	88	457
120242	124	547
120288	164	642
120341	206	740
120447	316	915
2443		
	0	0
120000	14	130
120089	30	181
120181	60	282
120248	84	370
120310	120	462
120430	194	649
120489	236	745
120565	310	857
120611	348	924
120669	428	1000
2444		
120000	0	0
120000	4	137
120013	8	223
120016	44	463
120019	86	740
120021	116	916
120023	140	1070
2445		
120000	0	0
120000	6	140
120008	18	216
120011	46	409
120013	78	594
120016	112	782
120018	160	943
2446		
120000	0	0
120000	8	138
120011	14	219
120015	44	439
120017	72	636
120019	102	816
120020	124	976
120023	190	1118
2447		
120000	0	0
120000	4	146
120007	32	228
120009	58	419
120010	80	573
120012	104	745

TIME	STRAIN	STRS
120016	126	912
120016	152	1050
120018	154	1180
2448		
120000	0	0
120000	16	142
120017	30	232
120020	38	286
120031	70	458
120037	84	547
120043	104	638
120049	122	731
120055	142	829
120060	162	912
120066	184	992
2449		
120000	0	0
120000	0	126
120052	24	244
120063	58	385
120068	66	458
120075	74	564
120080	96	639
120086	124	729
120092	152	822
120098	168	912
120104	194	1002
120108	206	1052
120112	230	1096
2450		
	0	0
120000	10	105
120012	14	130
120018	22	166
120025	40	239
120032	60	312
120038	72	401
120048	96	472
120053	116	541
120059	140	606
120065	160	672
120071	180	740
120076	200	794
120081	220	843
120088	246	912
2451		
	0	0
120000	6	146
120012	18	312
120019	34	318
120025	52	412
120028	62	458
120036	76	542
120043	106	683
120047	116	729
120053	130	821
120058	152	912
120064	178	1002
2474		
	0	0
120000	4	150
120086	18	216
120155	96	276
120238	152	353
120274	186	384
120357	278	415
120517	534	623
120606	760	702
120698	1020	777
2475		
120000	0	0
120000	6	128
120096	44	165
120189	72	242
120391	236	392
120498	350	[illegible]
120578	468	623
120671	658	712
120752	892	780
2476		
	0	0
120000	4	135
120095	52	201
120119	140	326
120187	206	393
120360	318	467
120476	530	583
2477		
120000	0	0
120000	8	148
120080	44	194
120126	64	236
120300	182	452
120360	252	477
120361	436	583
120544	640	662
120637	940	743
120736	1378	820
120793	1678	856
		875
	0	0

TIME	STRAIN	STRS
120000	2	129
120041	18	202
120043	48	341
120045	68	489
120047	90	633
120049	112	777
120050	138	907
120052	168	1030
120053	196	1153
120055	210	1271
2479		
120000	0	0
120000	6	116
120012	20	194
120015	46	342
120017	60	495
120019	116	662
120020	154	798
2480		
120000	0	
120000	8	129
120015	22	190
120017	44	334
120019	78	473
120020	108	657
120023	156	805
120025	198	952
2481		
120000	0	0
120000	16	0
120012	30	176
120014	56	324
120017	84	472
120018	108	634
120020	130	797
120022	158	930
2482		
120000	0	0
120000	0	148
120010	6	198
120015	18	271
120018	22	307
120021	30	351
120024	36	388
120029	56	464
120035	70	543
120040	94	622
120046	110	677
2483		
120000	0	0
120000	18	129
120010	22	157
120017	38	232
120023	60	311
120029	72	391
120035	92	465
120040	112	544
120046	134	625
120051	164	701
120057	184	776
120063	222	853
2484		
120000	0	0
120000	0	145
120011	24	195
120017	40	260
120021	52	314
120028	70	388
120035	88	465
120041	108	545
120047	130	623
2506		
120050	0	0
120000	10	129
120077	36	169
120147	88	238
120210	144	304
120280	250	377
120353	410	442
120425	628	509
120525	970	575
120618	1410	646
120674	1750	678
2507		
120000		
00	8	114
94	56	168
0191	182	274
0255	300	337
0367	618	441
0461	914	507
0526	1328	569
2508		
120000	0	0
00	12	121
95	98	169
0138	140	207
0201	262	270
71	428	337
0343	660	369
2509		

TIME	STRAIN	STRS
120000	0	0
00	28	133
79	78	169
0123	114	204
0208	188	276
95	264	352
0360	326	407
96	376	442
0448	446	491
0506	544	543
0628	802	643
2510		
120000	0	0
00	18	114
05	36	151
07	74	300
09	114	437
11	176	575
2511		
120000	0	0
00	10	115
05	22	165
07	46	309
2512		
120000	0	0
00	0	105
18	18	151
20	30	256
22	60	369
24	96	503
26	162	632
2513		
120000	0	0
00	18	117
06	38	174
07	72	230
09	100	389
11	138	487
2514		
120000	0	0
00	8	96
39	26	202
35	36	246
40	64	303
43	76	337
0150	112	403
57	160	473
63	202	541
68	254	607
75	314	572
81	386	740
88	470	812
2515		
120000	0	0
00	18	96
24	44	180
29	64	234
36	76	304
46	164	363
52	198	436
60	272	541
67	332	607
73	396	672
2516		
120000	12	112
11	28	135
19	52	205
26	72	268
33	104	337
40	140	372
47	190	473
53	244	542
60	308	609
67	376	676
73	466	740
80	570	808
86	630	847
88	694	860
95	852	946
2517		
120000	0	0
00	12	120
09	30	169
15	52	235
19	90	270
25	230	337
32	328	404
2518		
120000	0	0
00	36	116
08	52	167
10	82	300
12	114	437
2540		
120000	0	139
0108	6	309
58	20	412
0207	32	517
59	44	623
0331	64	778
0406	76	932

TIME	STRAIN	STRS
65	88	1033
0519	102	1133
78	120	1242
0636	126	1342
0698	146	1448
2541		
120000		0
00		162
0104		324
0270		631
0340		782
2542		
120000	0	0
00	52	139
0149	130	428
0223	168	527
0305	212	752
95	310	932
0465	382	1040
0513	452	1145
70	550	1242
2543		
010000		
010000		
18		
20		
22		
25		
27		1290
2544		
010000		
010000		
13		
15		
17		
20		1148
2545		
010000	12	161
07	34	206
08	56	464
11	60	602
12	92	889
14	116	1072
2546		
120000	0	0
120000	2	145
30	6	208
37	16	314
43	28	410
47	42	513
55	50	617
61	60	723
67	78	827
72	98	929
78	106	1022
83	124	1130
90	134	1239
96	134	1343
0102	152	1447
09	158	1544
2547		
120000	0	0
120000	18	172
18	20	261
27	40	418
31	52	515
43	66	724
52	102	879
61	108	1035
70	126	1187
76	136	1292
85	160	1447
92	172	1548
98	190	1646
2548		
120000	0	0
120000	0	160
20	18	207
27	26	304
33	36	412
39	5[illegible]	510
45	58	612
50	70	720
62	94	933
68		1027
80	126	1238
92	140	1447
99	170	1543
0102	172	1595
2550		
120000	0	0
120000	0	169
06	6	268
41	18	364
0168	24	413
0224	54	515
78	50	617
0332	62	727
84	78	830
0430	94	929
93	108	1032

TIME	STRAIN	STRS
0548	122	1132
0610	144	1240
2570		
120000	0	0
120000	14	159
89	66	263
0135	94	317
0220	176	418
98	264	518
0382	390	625
0464	550	728
0560	788	835
2571		
120000	0	0
120000	38	155
0139	104	300
0242	174	413
0466	514	687
0591	866	827
2572		
00	0	137
38	48	214
0105	95	314
0247	268	550
0471	686	852
2573		
00	0	153
85	11	216
0140	44	313
0191	91	412
0251	195	520
0300	300	612
0362	404	721
0427	586	833
0474	706	877
0491	777	929
2574		
00	0	132
11	20	159
14	22	293
17	71	517
18	113	720
20	160	927
21	200	1100
23	251	1271
2575		
00	0	133
28	11	210
31	28	545
34	57	802
37	68	1110
39	93	1313
41	146	1513
2576		
00	0	137
13	15	241
16	53	469
18	84	662
20	122	886
22	160	1074
2577		
00	0	134
10	15	251
12	42	463
13	68	666
15	95	879
18	131	1065
2578		
00	0	154
15	8	205
22	13	308
30	42	414
37	66	514
44	95	613
51	137	720
57	177	823
63	220	924
67	2[illegible]	978
71	264	1027
75	295	1075
78	326	1126
2579		
00	0	159
19	11	208
27	40	308
34	64	417
40	97	513
47	146	614
53	195	719
59	235	823
66	291	928
72	346	1023
79	397	1126
87	480	1233
93	560	1337
0102	644	1440
2580		
120000	0	0
120000	14	161
12	34	309
19	56	413

TIME	STRAIN	STRS
25	80	512
32	112	614
38	150	723
44	188	825
57	284	1032
63	340	1123
2581		
00	0	137
49	11	206
57	31	309
64	60	417
71	82	514
77	113	613
84	148	720
89	173	823
95	211	926
0102	253	1028
0108	293	1125
0115	351	1233
0122	404	1336
2602		
00	0	211
97	2	310
0171	6	437
0205	6	502
0283	13	614
0382	28	743
0482	45	869
0578	62	994
2603		
00	0	168
0101	312	360
0236	485	619
0297	553	740
0366	600	873
0431	640	997
0507	700	1116
0591	755	1238
0707	823	1407
0760	857	1486
0841	893	1613
0921	929	1738
1000	965	1857
1079	1010	1977
1163	1051	2108
1247	1100	2230
1337	1155	2354
2604		
00	0	201
85	157	372
0183	287	495
0300	402	866
0412	544	1091
0605	541	1249
0668	619	1359
0748	657	1490
2605		
00	0	185
0273	89	490
0357	108	61[illegible]
0398	123	679
0530	148	901
0718	210	1211
0808	238	1362
0891	263	1496
0993	295	1652
2606		
00	0	174
24	4	244
26	27	466
28	63	725
30	82	998
32	97	1250
35	127	1530
37	148	1750
39	172	2040
2607		
00	0	174
18	23	335
21	51	581
23	85	829
25	110	1090
27	129	1332
30	142	1560
32	170	1832
2608		
00	0	193
12	6	432
15	27	654
17	63	874
19	36	1109
21	142	1332
23	221	1560
25	219	1750
2609		
00	0	178
13	0	255
16	21	483
22	78	1223
24	95	1430
26	112	1640

TIME	STRAIN	STRS
28	131	1840
29	148	2036
33	176	2431
2610		
00	0	174
28	17	242
41	31	483
55	54	740
2611		
00	0	149
19	21	315
30	38	501
37	57	619
47	78	798
53	89	922
63	112	1120
70	125	1238
79	146	1420
2612		
00	0	185
13	4	253
19	14	362
30	27	570
37	40	733
44	53	866
55	76	1120
61	93	1232
67	106	1356
73	121	1486
80	134	1611
87	144	1739
93	163	1857
2613		
00	0	199
10	2	247
27	30	495
18	15	371
33	43	614
48	81	866
60	113	1118
72	140	1359
83	159	1611
90	182	1732
0103	204	1974
0110	223	2106
2614		
00	0	139
60	8	189
93	16	228
0138	18	277
0212	22	370
0292	24	470
0351	32	546
0420	32	642
0485	54	731
0559	58	826
0628	68	912
0702	72	1000
0783	82	1095
0873	94	1180
2615		
00	0	139
0194	4	232
0329	20	373
0468	18	562
0639	8	775
0673	14	821
0745	26	911
0816	46	1001
0897	66	1097
0988	96	1193
1067	84	1280
1159	122	1366
1253	134	1456
2616		
00	0	151
0163		233
0198		274
0620	50	547
0696	62	657
0620	74	821
2617		
00	0	140
0100	2	311
0142	0	366
0300	16	589
0413	30	753
0538	52	917
0693	68	1105
0806	88	1234
0851	104	1279
2618		
00	0	151
07	10	273
10	36	551
11	48	749
13	64	919
15	82	1026
17	98	1282
2619		
00	0	152

TIME	STRAIN	STRS
06	12	269
08	36	477
10	56	661
12	76	886
14	94	1065
17	108	1198
18	122	1342
2620		
00	0	128
20	20	237
22	38	419
25	54	602
27	68	791
29	92	959
30	106	1141
33	112	1302
35	118	1465
37	128	1634
2621		
00	0	129
13	2	154
17	6	232
20	38	501
23	70	751
26	128	972
28	166	1171
2622		
00	0	156
11	22	241
18	48	324
26	60	436
33	84	560
39	108	636
51	128	818
57	154	906
63	162	993
70	178	1088
77	204	1183
82	216	1276
89	233	1361
2623		
00	0	153
14	- 26	178
23	- 22	272
37	- 10	456
44	- 4	542
50	6	643
61	26	823
67	36	912
72	44	999
85	56	1188
98	80	1366
2624		
00	0	151
08	0	200
13	2	268
30	2	510
47	24	762
59	50	937
64	60	1000
70	64	1094
2625		
00		155
12		230
45		577
70		916
79		1043
86		1139
93		1231
0105		1368
0113		1456
0125		1556
0133		1688
2674		
00	0	199
0217	90	624
0287	108	774
0386	122	987
0428	148	1072
0488	180	1187
0550	220	1304
0617	280	1431
0688	328	1552
0762	392	1669
2675		
00	0	191
0172	36	411
0330	62	716
0359	80	773
0493	126	1051
0567	170	1191
0697	294	1439
0773	362	1556
2676		
00	0	196
95	52	476
0347	80	701
0438	116	986
0512	150	1132
0567	158	1191
0408	174	1312

TIME	STRAIN	STRS
0712	226	1496
2677		
000000		190
000053		238
000253		595
000381		867
000475		1044
000680		1430
2678		
000000	0	166
000021	22	405
000023	36	536
000025	48	658
000027	62	789
000029	78	932
000031	94	1076
000033	110	1220
000035	126	1400
000037	154	1566
2679		
000000	0	196
000005	30	387
000007	62	692
000016	88	904
000018	104	1035
000020	124	1220
000021	138	1427
000023	160	1627
000025	180	1787
000028	190	1968
2680		
000000	0	169
000011	12	257
000014	36	448
000016	56	657
000018	74	836
000020	94	1039
000021	104	1202
000023	124	1412
000026	142	1604
2681		
000000	0	157
000007	12	293
000008	32	495
000010	60	708
000012	80	970
000014	94	1185
000016	108	1376
000018	118	1549
000019	136	1704
2682		
000000	0	191
000029	38	248
000033	50	323
000044	78	536
000050	96	655
000058	136	835
000063	152	954
000069	168	1074
000076	194	1191
000080	202	1306
000087	226	1435
000096	250	1606
2683		
000000	0	197
000006	24	219
000008	48	457
000011	78	771
000012	104	901
000014	132	1081
000015	156	1235
000017	180	1400
000019	204	1558
2684		
000000	0	206
000008	6	241
000013	30	357
000019	46	479
000025	62	595
000030	70	708
000036	86	839
000048	106	1075
000053	122	1190
000062	150	1366
000069	156	1491
000075	172	1606
000080	186	1696
000084	196	1780
000091	210	1899
000097	234	2022
000108	214	2202
2685		
000000	0	189
000015	6	241
000022	18	357
000028	26	476
000034	34	591
000041	48	722
000050	62	901
000058	74	1073
000064	80	1191

TIME	STRAIN	STRS
000070	96	1305
000077	106	1430
000082	120	1549
000089	142	1668
2686		
000011	0	249
000017	14	363
000023	30	477
000028	46	590
000035	92	709
000041	86	834
000053	106	1072
000058	94	1190
000077	246	1550
000084	158	1670
2687		
000000	0	197
000012	18	301
000021	38	479
000028	56	595
000034	66	715
000040	76	834
000059	108	1191
000068	142	1368
000078	156	1549
000085	158	1679
000092	168	1787
000099	176	1902
000106	200	2024
000118	232	2204
2709		
000000	0	160
000007	10	221
000010	59	554
000011	97	761
000013	140	980
000015	189	1185
000017	236	1380
2710		
000000	0	158
000008	23	268
000010	57	459
000011	102	660
000013	244	860
000018	257	1322
000020	308	1461
2711		
000000	0	163
000011	6	318
000013	31	517
000015	61	702
000018	91	898
000019	125	1058
000021	176	1241
2712		
000000	0	153
000008	21	218
000010	38	377
000011	59	539
000012	87	716
000016	108	896
000018	134	1058
000018	165	1218
000020	202	1382
2713		
000033	0	211
000038	19	298
[illegible]	[illegible]	397
[illegible]	55	499
000056	81	591
000063	125	742
000073	198	923
000078	224	991
000083	294	1088
000090	366	1192
000096	446	1293
000104	575	1392
2714		
000000	0	161
000018	19	201
000026	38	298
000033	61	397
000040	85	496
000053	140	695
000065	229	897
000072	287	989
000078	361	1092
000088	564	1241
2715		
000000	0	163
000021	4	199
000028	10	299
000035	34	400
000041	63	496
000048	87	592
000053	121	696
000062	157	842
000071	202	993
2716		
000000	0	173
000012	21	252

TIME	STRAIN	STRS
000019	36	348
000031	21	512
000040	61	648
000049	112	799
000056	131	896
000063	214	991
000068	282	1089
2717		
000000	0	172
000176	125	360
000350	559	571
000412	872	642
000470	1262	695
2718		
000000	0	163
000081	6	199
000112	23	249
000230	4	397
000310	110	496
000459	480	666
000535	821	766
000725	2425	875
2719		
000000	0	167
000166	293	372
000372	846	652
000408	1014	694
000563	2285	824
000610	2865	848
000751	2757	879
000812	3846	879
000835	4219	876
2721		
000000	0	103
000020	4	205
000028	21	301
000036	36	398
000042	63	500
000049	93	595
000053	119	695
000061	165	794
000071	291	992
000078	376	1088
000085	491	1192
2728		
000000	0	156
000150	22	296
000283	50	469
000305	56	457
000465	18	734
000481	34	824
000554	72	917
000629	92	1001
000695	138	1066
000837	232	1096
000918	310	1.48
2729		
000000		148
000077		182
000272		385
000329		456
000399		543
000541		730
000615		821
000690		912
000800		1068
2730		
000000	0	164
000038	6	182
000107	28	281
000169	44	370
000230	54	458
000370	88	662
000493	140	830
000557	160	912
000627	186	1002
000707	228	1096
000788	294	1186
2731		
000000	0	151
000074	18	182
000173	40	319
000207	48	372
000265	60	456
000327	90	549
000388	86	645
000513	126	828
000578	142	912
000648	154	1003
2734		
000000	0	150
000012	14	212
000014	38	384
000016	58	553
000018	82	731
000020	106	908
000022	128	1068
2735		
000000	0	91
000010	2	168
000011	4	161

TIME	STRAIN	STRS
000013	14	287
000015	34	437
000017	46	579
000019	62	752
000021	80	948
000023	74	1110
000026	104	1260
2736		
000000	0	156
000005	14	288
000007	24	451
000008	44	625
000010	50	797
000012	64	952
000013	74	1105
000015	88	1252
2737		
000000	0	137
000023	14	235
000025	32	364
000026	52	497
000028	70	639
000030	110	794
000031	136	935
000033	170	1071
2738		
000000	0	126
000029		229
000039		364
000045		453
000053	16	593
000062	28	729
000073	42	910
000079	54	1000
000086	70	1100
000092	82	1187
000098	94	1277
000107	106	1369
000113	124	1456
000120	138	1553
2739		
000000	0	168
000020	42	230
000030	64	365
000037	84	456
000042	94	546
000049	116	638
000056	132	729
000060	148	822
000066	166	912
000075	198	1045
000081	210	1141
000087	224	1234
000094	242	1323
2740		
000000	0	151
000009	16	182
000020	28	325
000031	56	496
000041	74	638
000050	92	775
000059	108	909
000068	134	1042
000078	162	1186
000088	194	1324
000095	222	1409
2741		
000000	0	137
000025	14	278
000031	24	317
000040	38	457
000049	58	592
000058	88	733
000063	100	820
000072	120	952
000081	154	1094
000091	188	1240
2742		
000000	0	149
000007	0	181
000011	0	232
000020	22	367
000028	36	498
000037	46	639
000046	64	775
000054	76	912
000064	90	1045
000073	112	1140
000080	124	1282
000087	136	1368
000094	152	1455
2759		
000000	0	147
000005	21	243
000007	44	411
000011	136	935
000013	176	1088
000016	234	1308
000018	285	1446
000020	363	1610
2760		

TIME	STRAIN	STRS
000000	2593	149
2761		
000000	0	153
000005	23	250
000007	55	417
000008	68	614
000010	91	803
000012	42	965
000013	65	1133
2762		
000000	0	143
000004	14	230
000006	40	382
000007	68	528
000010	117	783
000012	168	1012
000014	208	1163
000016	259	1300
2763		
000000	0	149
000010	8	187
000015	23	273
000027	72	456
000036	123	589
000047	219	775
000057	304	912
000072	576	114
000079	748	1232
2764		
000000	0	150
000011	4	183
000018	25	272
000026	46	364
000032	65	451
000039	80	548
000048	151	733
000057	246	823
000063	329	912
2765		
000000	0	151
000010	36	181
000017	72	275
000022	112	361
000029	155	456
000035	225	5.2
000043	351	667
000049	431	775
2766		
000000	0	151
000017	34	182
000025	51	273
000032	80	364
000039	112	456
000049	192	597
000057	261	729
000067	374	865
2767		
000000	0	160
000063	34	228
000097	63	276
000163	155	372
000222	287	456
000293	531	552
000377	980	693
2769		
000000	0	152
000006	63	227
000278	197	416
000380	461	543
000552	1244	709
000657	2212	774
2770		
000000	0	149
000170	36	364
000263	217	497
000341	493	600
000407	859	684
000513	1714	775
000593	2806	821
2771		
000000	0	151
000006	4	213
000007	31	387
000009	68	577
000011	100	761
000012	134	895
000014	180	1039
000016	221	1181
000018	280	1308
2793		
000000	0	135
000003	12	327
000007	68	776
000008	100	1026
000010	138	1248
2794		
000000	0	202
000008	24	491
000009	40	647
000011	66	853
000012	80	1057

TIME	STRAIN	STRS
000014	100	1255
000028	136	1664
2795		
000000	0	200
000006	16	309
000007	36	476
000010	82	738
000012	102	983
000015	130	1234
000017	174	1510
000019	218	1715
000021	228	1894
000023	242	2115
2796		
000000	0	178
000016	4	207
000019	20	311
000021	44	514
000023	66	721
000025	86	954
000027	114	1203
000029	144	1414
000030	166	1607
000033	200	1787
000035	212	1973
2797		
000000	0	200
000006	4	234
000010	8	357
000013	28	476
000019	62	710
000022	76	842
000025	100	957
000032	140	1191
2798		
000000	0	200
000006	2	235
000010	8	359
000013	22	483
000016	26	597
000018	38	707
000021	52	834
000026	50	1006
000030	102	1187
000033	106	1306
000038	130	1489
000043	138	1610
000047	152	1728
000049	164	1792
2799		
000000	0	202
000008	10	298
000011	28	483
000015	40	600
000021	64	774
000027	88	1008
000033	106	1187
000036	132	1369
000043	152	1542
2800		
000000	0	204
000006	20	300
000011	38	482
000015	84	653
000020	85	834
000025	114	1008
000030	138	1191
000035	166	1364
000040	194	1544
2801		
000000	0	192
000009	6	239
000020	20	358
000030	42	480
000040	60	595
2802		
000000	0	195
000027	40	238
000039	54	358
000050	72	485
000059	88	595
000077	120	839
000090	154	1014
000106	186	1191
000116	214	1306
000128	254	1430
000140	294	1550
2803		
000000	0	197
000015	8	238
000027	2	359
000038	14	476
000048	26	589
000059	44	715
000069	64	834
000079	80	956
000089	132	1078
000100	150	1188
000111	156	1307
000122	186	1430
000135	236	1550

TIME	STRAIN	STRS
2804		
000000	0	208
000013	36	298
000030	76	476
000040	108	595
000050	142	714
000060	166	834
000068	206	951
000078	234	1075
000088	266	1191
000097	306	1303
000109	354	1431
2805		
000000	0	199
000159	22	370
000229	42	568
000300	60	721
000387	134	953
000487	144	1191
000597	242	1431
000714	384	1668
2806		
000000	0	199
000135	28	416
000289	76	827
000384	124	1079
000513	172	1382
2807		
000000	0	193
000110	22	369
000296	132	816
000400	212	1073
000482	322	1253
2808		
000000	0	199
000141	44	384
000217	72	610
000336	58	898
000368	184	973
000440	282	1132
000469	330	1190
000525	438	1306
2833		
000000		134
000175		444
000316		665
000424		798
000497		890
2834		
000000	0	152
000016	38	282
000259	96	486
000300	162	703
000300	162	703
000391	214	831
000397	214	840
000459	256	919
000667	352	1051
2835		
000100	0	168
000134	170	325
000290	310	568
000469	438	849
000531	492	938
000613	544	1052
2836		
000000	0	134
000158	46	307
000326	116	555
000447	144	738
000520	170	941
000650	230	1011
000757	302	1139
2865		
000000	0	131
000008	2	182
000010	18	348
000011	38	519
000013	62	693
000017	86	900
2866		
000000	0	137
000005	2	185
000006	22	341
000008	46	493
000010	56	660
000011	76	815
000013	96	954
2867		
000000	0	0
000003	4	73
2868		
000000	0	130
000006	2	195
000008	22	374
000010	42	525
000012	62	700
000014	76	850
2869		
000000	0	95
000013	22	168

TIME	STRAIN	STRS
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000029	[illegible]	335
000037	1[illegible]	420
000047	40	546
000057	78	675
000062	94	758
000069	112	840
00076	142	919
.0082	178	1009
2850		
000000	0	154
000011	10	211
000029	30	341
000035	40	420
000041	56	504
000050	88	634
2851		
000000	0	143
000004	2	167
000011	4	252
000017	24	340
000022	30	420
000031	58	543
000040	84	672
2852		
000000	0	142
000010	- 36	210
000019	- 56	297
000028	- 34	424
000033	- 16	502
000038	4	589
000044	24	672
000050	42	759
2853		
000000	0	142
000005	8	190
000006	26	306
000008	50	482
000010	74	658
000012	106	815
2871		
000000	0	150
000010	15	340
000012	48	429
000013	71	563
000015	120	699
000017	157	785
2872		
000000	0	151
000008	26	291
000010	135	562
000012	146	740
000014	208	912
000016	282	1070
2873		
000000	0	151
000020	8	246
000021	33	367
000023	62	502
000025	106	661
000027	148	813
000028	197	960
000030	260	1101
2874		
000000	0	160
000005	28	249
000007	77	437
000008	128	622
000010	184	820
000012	260	1005
2875		
000000	0	159
000008	33	229
000015	77	320
000022	133	413
000028	306	501
000035	293	591
000042	366	685
000048	486	777
000055	635	866
000061	817	953
000070	1093	1049
2876		
000000	0	148
000011	4	182
000018	35	271
000027	73	364
000034	131	456
000041	206	543
000048	286	638
000058	433	775
000066	562	867
000073	742	956
000081	982	1044
000089	1295	1142
2877		
000000	0	174
000011	15	273
000021	60	370
000027	100	459
000041	173	688

TIME	STRAIN	STRS
000051	373	820
2878		
000000	0	168
000007	22	233
000015	69	364
000021	111	450
000030	197	588
000039	317	729
000052	560	912
2879		
000000	0	0
000000	0	181
000060	40	228
000077	222	367
000246	426	453
000397	1071	601
000537	2362	729
000626	3735	763
000785	4691	763
2880		
000000	0	160
000230	355	260
000133	1015	575
000551	1235	737
000646	3208	732
000655	3408	730
2881		
000000	0	165
000281	226	464
000308	357	496
000400	995	586
2882		
000000	0	177
000107	146	314
000257	628	498
000352	1213	602
000465	2357	684
000674	3393	709
000760	4937	692
2883		
000000	0	183
000000	44	273
000008	145	364
000014	233	456
000021	322	542
000027	426	637
000037	631	774
2906		
000000	0	179
000007	12	279
000009	34	483
000010	50	677
000012	62	882
000013	100	1081
000015	116	1186
000018	140	1389
000019	166	1574
2907		
000000	0	183
000006	18	294
000007	48	488
000010	76	684
000011	112	913
000014	152	1177
000016	172	1373
2908		
000000	0	174
000004	12	266
000006	42	471
000007	68	680
000010	102	945
000012	134	1185
000014	176	1390
000017	212	1583
2909		
000000	0	184
000009	12	298
000011	34	526
000013	74	750
000015	120	1014
2910		
000000	0	222
000006	6	271
000011	22	378
000020	46	535
000043	96	810
000052	126	982
000058	150	1081
000066	202	1248
2911		
000000	0	205
000005	4	219
000010	16	325
000020	46	491
000026	62	597
000032	82	704
000041	118	868
000054	166	1088
000063	216	1241
000070	256	1357
000077	292	1466

TIME	STRAIN	STRS
2912		
000000	0	179
000009	20	224
000014	46	327
000020	68	443
000026	86	538
000035	116	700
000047	182	926
000055	238	1080
000064	306	1247
000071	352	1358
000078	406	1467
2913		
000000	0	178
000008	16	216
000014	28	325
000021	48	439
000027	76	540
000036	110	701
000047	164	924
000055	190	1085
000064	234	1243
000071	274	1358
000073	320	1464
2914		
000000	0	193
000060	6	329
000228	18	526
000325	66	683
000424	78	863
000591	168	1139
000708	208	1313
000828	328	1493
2915		
000000	0	180
000132	36	325
000277	68	602
000392	152	831
000472	248	977
2916		
000000	0	196
000125	10	387
000280	62	659
000370	94	830
000451	144	977
000518	188	1088
000617	208	1247
2917		
000000		222
000041		271
000073		326
000233		570
000447		921
000553		1084
000619		1190
000696		1306
001318		1473
2918		
000000	0	211
000012	12	232
000014	52	510
000016	84	634
000019	140	885
000021	206	1113
2941		
000000	0	244
000123	18	398
000168	26	476
000339	52	817
000532	76	1200
000602	92	1320
000709	120	1480
2942		
000000	0	251
000066	12	349
000187	36	553
000329	56	811
000400	58	954
000613	150	1316
000751	292	1526
000853	388	1670
000949	501	1787
2943		
000000	310	0
000000	310	210
000237	280	573
000348	278	782
000607	212	1253
000750	262	1495
000874	242	1688
000949	242	1792
001026	234	1906
001107	232	2029
001211	228	2183
001293	226	2294
2944		
000000	0	278
000075	20	460
000191	73	793
000333	131	1246
000427	177	1521

TIME	STRAIN	STRS
000535	244	1822
000630	324	2052
000707	393	2218
2945		
000000	0	259
000012	11	362
000020	28	510
000035	51	722
000044	71	940
000053	97	1170
000065	126	1450
000075	151	1670
000084	162	1890
000091	182	2040
000098	204	2170
2946		
000000	0	244
000009	6	292
000016	13	436
000021	33	582
000029	42	722
000037	66	946
000048	100	1244
000057	120	1454
000065	131	1668
000075	155	1892
000081	168	2038
000088	184	2183
000094	200	2323
000101	20[illegible]	2475
2947		
000000	0	249
000008	2	293
000015	4	436
000022	28	582
000029	55	727
000039	108	940
000052	191	1241
000060	280	1455
000070	373	1674
000080	466	1892
000087	533	2049
2948		
000000	0	247
000014	24	438
000020	31	583
000027	55	724
000035	77	946
000047	100	1238
000055	120	1455
000064	144	1672
000073	148	1892
000080	160	2041
000087	142	2178
000092	157	2324
000100	173	2473
000107	193	2625
2949		
000000	0	309
000073	18	511
000159	51	740
000256	90	1099
000324	145	1316
000449	191	1669
2950		
000000	0	233
000027	11	425
000029	44	648
000031	71	931
000033	104	1306
000036	131	152[illegible]
000037	160	2198
000039	202	2072
000042	226	2421
2951		
000000	0	270
000007	15	366
000008	42	648
000010	77	92[illegible]
000011	115	1240
000013	142	1538
000016	180	1816
2952		
000000	0	298
000005	28	510
000007	57	804
000010	104	1272
000011	151	1650
000014	193	1962
000016	220	2258
000018	280	2536
2953		
000000	0	27[illegible]
000004	6	401
000007	40	736
000008	71	1022
000010	102	1313
000011	122	1607
000013	153	1875
000016	193	2240
2954		

TIME	STRAIN	STRS
000000	0	255
000008	2	372
000010	26	656
000012	53	974
000014	88	1300
000016	326	1630
2997		
000000	0	345
000012	7	431
000020	28	651
000028	49	859
000035	74	1071
000043	98	1182
000063	130	1671
000066	172	2051
2998		
000000	0	337
000011	21	431
000028	93	1087
000038	128	1397
000047	156	1741
000059	188	2154
000078	216	2481
000083	262	2913
2999		
00	0	347
10	2	426
17	20	656
29	74	1077
41	113	1511
53	162	1943
59	135	2159
68	227	2583
78	293	2807
88	346	3140
95	395	3338
3000		
00	0	347
10	39	430
16	72	649
28	144	1077
35	165	1287
44	209	1619
55	255	2051
64	293	2363
74	339	2692
3001		
00	0	337
06	9	437
07	46	871
10	113	1535
12	155	2036
3002		
00	0	356
05	0	483
07	39	865
08	69	1226
11	111	1733
15	183	2653
3003		
00	0	396
05	39	742
07	88	1233
10	141	1727
12	183	2168
3004		
00	0	347
04	23	517
07	69	1064
08	113	1428
11	155	2036
12	190	2322
14	227	2755
3005		
00	0	357
0224	100	1241
0325	139	1735
0418	183	2159
0521	232	2599
0602	232	2921
0685	325	3239
0764	358	3533
3006		
00	0	387
48	18	552
0150	62	913
0302	109	2049
0480	197	2205
0557	225	2485
0692	269	2835
0842	353	3322
0970	444	3784
3007		
00	0	356
0214	90	1032
0352	151	1604
0469	200	2063
0650	260	2745
0746	309	3083
0871	362	3512
3008		

TIME	STRAIN	STRS
00	0	349
0207	162	1114
0256	116	1296
0434	183	2159
0557	320	2658
0627	411	2919
0721	581	3200
3009		
00	0	334
07	30	628
08	48	821
10	69	1026
12	88	1215
14	106	1448
17	141	1736
19	165	2106
21	195	2488
3010		
00	0	320
05	18	511
07	53	972
09	100	1413
11	132	1833
13	165	2218
15	202	2577
3011		
00	0	340
03	4	497
06	72	1001
07	109	1334
10	172	1723
11	213	2066
3012		
00	0	330
04	30	530
06	67	9413
08	109	1313
10	165	1733
12	206	2083
13	241	2412
16	279	2731
3013		
00	0	330
06	16	409
18	13	726
28	41	1021
35	69	1223
46	132	1539
51	144	1765
58	162	1950
64	186	2145
71	211	2355
83	248	2669
91	262	2976
0100	286	3172
0101		3490
3014		
00	0	292
13	46	405
23	109	721
34	155	1023
46	202	1326
57	255	1642
67	306	1950
78	293	2250
94	348	2672
3015		
00	0	3377
10	25	410
18	46	615
25	60	829
31	62	1018
42	60	1332
51	88	1642
60	113	1941
70	123	2248
81	165	2566
91	204	2874
3016		
00	0	351
07	13	418
15	32	630
22	58	827
29	81	1018
40	111	1334
50	137	1645
60	165	2042
70	195	2250
81	230	2571
89	290	2771
96	325	2976
0100	337	3081
0108	376	3276
0120	432	3600
3017		
00	0	348
06	9	489
0151	23	659
0404	104	1591
0475	123	1860
0549		2103

TIME	STRAIN	STRS
0588		2248
0740		2749
0787		2887
3018		
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0116	37	6996
0208	70	1062
0260	93	1267
0410	133	1879
0553		2391
3019		
00	0	338
0145	34	767
0237	69	959
0316	153	1566
0567	206	2044
3020		
00	0	348
0148	51	700
0234	86	988
0414	111	1641
3021		
00	0	381
10	279	615
20	535	921
30	930	1220
39	123	1539
49	156	1642
3066		
00	0	363
53	27	499
0132	48	863
0257	102	1356
0362	153	1978
0455	190	2235
0578	239	2720
0685	279	3100
0780	313	3465
0857	330	3709
0923	358	3947
3067		
00	0	335
0160	46	891
0512	179	1175
0615	218	1596
0725	232	1983
3068		
00	0	388
0211	90	1118
0388	183	1869
0611	295	2735
0710	346	3094
3069		
00	0	525
0195	106	1290
0338	200	2040
0470	311	2444
0571	325	2860
3070		
00	0	321
16	25	499
26	55	872
36	86	1232
47	104	1600
55	139	1972
68	174	2465
78	186	2833
89	230	3211
99	267	3577
3071		
00	0	458
10	34	752
18	76	1112
36	120	1467
50	190	2095
59	223	2434
72	276	2961
3072		
00	0	372
16	123	749
26	197	1113
35	251	1467
44	311	1849
53	362	2216
60	400	2465
70	467	2833
81	530	3207
3073		
00	0	315
20	55	752
25	79	986
31	102	1232
41	139	1602
50	179	1972
57	202	2221
63	232	2465
72	276	2826
83	311	3210
90	344	3455
97	365	3698
3074		

TIME	STRAIN	STRS
00	0	357
08	13	554
10	44	824
13	81	1224
16	104	1652
19	144	1975
22	190	2475
3075		
00	0	359
08	9	544
11	58	1088
12	100	1580
14	139	2082
17	181	2507
19	216	2891
20	251	3327
23	283	3757
25	323	4204
27	346	4639
3076		
00	0	338
10	18	542
12	55	1020
13	113	1550
16	167	2040
18	216	2460
3077		
00	0	369
10	6	637
12	51	1149
14	97	1633
16	141	2159
19	186	2576
3078		
00	0	367
98	46	742
0295	67	1637
0372	102	1979
0491	158	2465
3079		
00	0	345
09	13	496
21	37	739
37	60	993
52	83	1229
68	104	1528
82	120	1978
0103	160	2463
0115	188	2829
0128	218	3207
0140	260	3575
3080		
00	0	372
05	6	490
07	48	938
08	93	1380
10	130	1843
12	162	2284
13	202	2649
15	230	3045
17	262	3402
3081		
00		345
0159		828
0300		1401
0404		1849
0500		2225
0657		2828
0771		3216
0840		3460
3106		
00	0	163
0102	4	283
0246	62	620
0350	106	873
0384	120	953
0438	140	1076
3107		
00	0	185
0140	46	458
0314	86	881
0373	128	1014
0418	162	1112
0482	218	1244
0548	294	1371
0618	392	1491
3108		
00	0	185
06	4	361
07	12	362
0204	34	613
0292	54	813
0359	104	958
0442	154	1133
0531	196	1313
3109		
00	0	178
25	22	409
0223	40	619
0298	38	787
0370	70	953

TIME	STRAIN	STRS
0481	114	1187
0549	134	1323
0612	150	1436
3110		
00	0	171
13	12	303
19	22	424
28	46	603
39	80	834
48	98	1011
3111		
00	0	215
07	16	302
16	34	479
22	44	597
31	68	769
40	94	953
49	144	1132
58	198	1305
3112		
00	0	160
11	4	238
21	24	418
31	42	595
38	58	709
47	84	893
54	104	1014
64	134	1191
3113		
00	0	160
08	4	238
15	12	362
22	36	482
29	44	595
38	62	775
47	80	952
57	96	1137
62	110	1248
69	124	1369
77	138	1491
87	160	1669
93	172	1787
3114		
00	0	162
03	6	233
05	22	420
07	44	609
08	62	813
10	82	1036
12	102	1224
14	126	1422
16	144	1603
3115		
00	0	158
09	36	266
11	58	442
12	70	554
14	86	662
17	102	805
19	128	998
21	156	1191
24	186	1400
3116		
00	0	169
12	24	291
14	58	555
17	92	783
18	116	1027
20	148	1233
22	176	1429
24	204	1608
3117		
00	0	169
04	12	287
06	40	502
08	66	719
09	102	942
11	132	1190
13	170	1368
15	186	1554
17	218	1765
3118		
00	0	165
05	22	250
07	52	464
08	80	667
10	100	893
12	128	1109
14	144	1311
16	170	1489
3140		
00	0	128
04	16	245
06	38	845
3141		
00	0	125
05	14	200
07	34	362
09	52	526
11	54	718
12	68	853

TIME	STRAIN	STRS
14	90	1012
16	112	1156
3142		
00	0	135
07	2	218
12	32	393
14	62	566
16	100	742
3143		
00	0	92
04	4	122
07	38	288
08	60	405
3144		
00	0	127
20	26	240
29	42	369
35	58	456
46	88	615
56	122	729
3145		
00	0	128
10	8	182
16	22	273
23	44	369
29	54	456
36	70	542
42	90	638
48	108	729
54	130	822
61	152	912
3146		
00	0	155
16	12	228
27	40	365
34	50	456
44	70	593
54	86	733
67	118	908
77	142	1045
90	166	1187
3147		
00	0	132
12	2	192
22	18	320
32	40	454
41	74	593
3148		
00	0	173
48	10	232
0223	46	455
0361	80	625
0458	104	749
0516	112	822
0631	152	953
0759	194	1094
0860	242	1191
3149		
000000	0	109
000080	8	169
000196	32	397
000352	58	433
000477	86	572
000511	90	603
000600	72	670
000673	80	735
000761	104	804
000853	132	874
000946	162	941
001036	208	1007
001126	260	1072
3150		
000000	0	127
000167	16	276
000300	60	442
000377	86	543
000470	80	668
000573	82	802
000700	76	954
000839	34	1115
3151		
000000	0	132
000145	26	270
000245	42	411
000341	84	544
000413	105	643
000515	148	776
000590	200	870
3173		
000000	0	127
000004	13	203
000006	37	364
000008	97	565
000010	153	729
000011	213	881
000013	311	1025
000014	397	1147
3174		
000000	0	149
000014	44	277
000017	84	416

TIME	STRAIN	STRS
000018	113	543
000019	177	650
000021	257	858
000022	328	982
3175		
000000	0	129
000005	24	215
000007	57	364
000009	104	585
000011	168	754
000013	231	906
3176		
000000	0	125
000003	13	193
000005	37	350
000007	82	492
000008	124	638
000009	173	783
000011	222	913
000012	291	1022
000013	368	1144
000016	473	1268
3177		
000000	0	130
000007	17	183
000013	44	271
000021	88	370
000028	146	459
000038	248	592
000048	388	729
000058	615	729
3178		
000000	0	148
000004	28	183
000010	53	273
000017	102	364
000024	168	456
000036	297	592
000047	491	729
000059	791	866
3179		
000000	0	130
000007	4	183
000013	38	273
000020	64	367
000027	104	469
000033	182	562
000040	268	638
000047	371	729
000057	520	821
000066	724	912
000075	988	998
3180		
000000	0	156
000007	22	182
000012	46	273
000019	80	369
000026	128	456
000032	195	542
000042	328	683
000054	548	825
3181		
000000	0	136
000123	131	338
000215	426	527
000304	984	594
000403	2364	688
000492	4095	720
000602	6851	714
3182		
000000	0	125
000058	37	232
000131	171	372
000224	500	524
000325	1624	647
3183		
000000	0	124
000116	126	219
000262	493	419
000358	951	547
000445	1862	652
3184		
000000	0	133
000160	217	334
000329	964	540
000414	1822	611
000668	6042	623
000828	7531	597
3185		
000000	0	136
000006	8	245
000007	46	415
000009	86	565
000011	148	783
000013	217	962
000014	295	1105
3208		
000000	0	225
000128	15	480
000284	46	782
000422	71	1036

TIME	STRAIN	STRS
000607	97	1446
000791	175	1818
3209		
000000	0	278
000104	51	620
000249	153	1145
000305	186	1363
000383	275	1636
000437	348	1818
3210		
000000	0	325
000134	46	586
000253	84	999
000356	120	1385
000390	137	1501
000428	151	1636
000481	157	1793
3211		
000000	0	231
000098	6	459
000247	13	892
000313	40	1112
000402	182	1409
3212		
000000	00	220
000012	13	390
000019	22	574
000025	35	729
000031	51	902
000038	66	1083
000048	93	1363
000058	124	1641
000064	148	1815
3213		
000000	0	235
000011	20	363
000022	53	636
000032	97	902
000039	115	1074
000050	153	1366
000060	191	1635
000067	206	1816
000074	233	1999
000082	266	2182
3214		
000000	0	209
000007	22	272
000017	22	545
000030	66	909
000037	88	1091
000043	88	1273
000050	111	1454
3215		
000009	0	272
000016	15	459
000026	48	726
000032	66	902
000042	104	1180
000051	133	1454
000058	155	1635
000064	184	1809
3216		
000000	0	0
3217		
000000	0	237
000003	220	290
000006	184	729
000007	155	1054
3218		
000000	0	220
000004	11	345
000006	37	631
000007	64	921
000009	93	1184
000011	113	1464
000012	135	1729
3219		
000000	0	257
000006	24	518
000008	88	208
3221		
000000	0	165
000008	8	257
000015	19	400
000022	36	530
000029	42	656
000036	65	785
000042	70	921
000052	93	1118
000061	119	1311
000069	125	1434
000077	170	1576
0084	185	1708
3222		
000000	0	163
000018	27	270
000027	57	461
000037	89	653
000048	121	854
000058	157	1054
000067	197	1248

TIME	STRAIN	STRS
000077	234	1439
000086	293	1576
000097	314	1777
000108	361	1970
3223		
000000	0	197
000007	6	229
000014	23	394
0028	51	653
000037	65	848
000047	93	1047
000057	108	1248
000066	136	1438
000077	161	1642
000087	182	1841
000098	208	2031
3225		
000000	0	158
000011	2	268
000032	40	601
000036	57	783
000045	80	988
000051	100	1116
000061	127	1312
000071	148	1509
000081	161	1713
3226		
000000	0	87
000010	19	133
000017	31	203
000023	44	268
000029	59	331
000038	91	433
000048	114	537
000058	140	639
000067	168	733
000078	202	840
000088	234	938
3227		
000000	0	131
000011	35	216
000018	86	326
000025	162	437
000031	262	533
3228		
000000	0	135
000008	51	218
000015	135	332
3231		
000000	0	141
000008	17	161
000015	77	271
000021	160	381
3233		
000000	0	84
000012	8	96
000017	40	135
000024	86	201
000029	120	234
000033	168	269
000037	202	305
3250		
000000	0	136
000005	- 12	163
000011	4	272
000021	16	440
000027	24	539
3251		
000000	0	141
000008	4	217
000019	30	382
000027	48	497
000038	70	651
000048	96	814
000058	124	978
3252		
000000	0	152
000005	4	215
000012	6	325
000020	20	435
000027	38	542
000034	58	647
000044	80	814
000054	106	978
000064	136	1132
000071	162	1244
000084	210	1413
3253		
000000	0	158
000009	14	272
000018	38	4452
000023	52	540
000033	70	709
000041	102	871
000054	140	1084
000064	184	1244
3254		
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000013	2	2[illegible]
000019	12	326
000026	24	437

TIME	STRAIN	STRS
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000041	66	703
000050	82	868
000060	98	1035
000069	134	1190
000077	164	1303
3255		
000000	0	141
000008	6	218
000017	22	380
000026	42	542
000035	60	651
000044	78	871
000057	112	1084
000062	128	1190
000069	146	1297
3256		
000000	0	110
000011	12	214
000019	26	339
000025	38	420
000034	56	546
000042	76	676
3257		
000000	0	84
000018	12	171
000028	28	253
000035	46	338
000041	62	419
000050	86	544
000059	112	674
000065	130	757
000072	160	840
3258		
000000	0	150
000017	26	210
000014	42	311
000021	80	420
3259		
000000	0	101
000012	2	126
000019	16	254
000026	32	295
000037	52	418
000044	66	500
000052	84	588
000060	98	676
000067	112	756
000074	132	840
3260		
000000	0	104
000005	4	126
000012	16	211
000021	22	296
000031	34	420
000041	42	546
000052	60	677
3261		
000000	0	128
000008	2	169
000019	14	298
000027	38	417
000036	66	545
000044	94	672
000057	132	840
000067	178	967
000079	228	1097
3279		
000000	0	158
000066	35	229
000112	64	331
000245	142	612
000295	160	718
000413	242	953
000484	275	989
000551	311	1114
000647	366	1321
000702	422	1439
000776	500	1576
3280		
000000		170
000041		195
000102		323
000118		354
000231		572
000373		871
000410		1168
000668		1307
3281		
000000	0	191
000106	48	394
000213	104	638
000321	175	900
000420	260	1149
000496	340	1319
3282		
000000	0	187
000109	13	342
000196	55	498
000260	66	653
000400	42	974

TIME	STRAIN	STRS
000526	15	1254
000626	31	1452
000730	108	1643
3283		
000000	0	197
000007	2	264
000014	15	396
000021	33	528
000028	46	656
000038	68	855
000052	91	1053
000066	128	1312
000076	151	1511
000088	188	1715
3284		
000060	0	1254
000070	24	1442
000077	40	1576
000084	62	1708
000091	84	1840
000098	108	1970
3285		
000000	0	167
000009	15	266
000015	37	394
000021	44	525
000027	57	656
000036	84	854
000045	108	1055
000054	135	1248
000064	151	1446
000073	184	1642
3286		
000000	0	158
000012	13	195
000021	33	333
000029	44	459
000036	57	591
000046	84	787
000056	95	991
000064	64	1184
000071	66	1313
000081	104	1511
000087	122	1643
000095	137	1776
000102	173	1908
000109	191	2029
3288		
000000	0	167
000004	2	278
000007	27	586
000009	69	873
000011	102	1166
000012	140	1402
000014	182	1636
000016	202	1839
3289		
000000	0	183
000003	11	356
000005	24	903
000006	53	709
000008	73	939
000009	95	1165
000011	122	1371
000012	146	1570
000014	175	1758
000018	211	2184
000019	233	2392
000021	257	2583
3290		
000000	0	191
000004	17	355
000006	42	570
000008	60	809
000010	84	1082
000012	113	1321
000014	140	1568
000016	166	1781
000019	186	2068
000021	208	2332
3335		
00	0	166
03	0	229
05	20	461
07	53	687
08	82	921
10	111	1164
12	135	1341
14	377	1635
3336		
00	0	155
04	6	216
06	31	440
08	53	664
10	77	909
11	106	1153
13	131	1382
15	177	1624
17	177	1808
18	206	2016
20	233	2225

TIME	STRAIN	STRS
3337		
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05	2	262
08	8	407
11	22	526
13	35	662
18	62	852
22	84	1053
27	115	1248
31	142	1440
37	162	1646
3338		
00	0	145
06	4	204
08	28	332
13	51	525
18	73	722
23	106	927
34	160	1372
38	177	1511
42	193	1645
46	217	1775
52	244	1970
56	266	2102
3339		
00	0	191
06	4	270
09	17	400
14	55	595
18	71	787
23	86	993
28	106	1185
32	128	1374
38	142	1576
43	166	1773
3340		
00	0	160
73	11	262
0105	26	465
0124	44	591
0155	53	716
0185	95	923
0212	104	1116
0243	144	1313
0277	180	1511
3341		
00	0	200
27	24	328
53	48	394
70	71	656
86	91	787
0110	122	988
0127	155	1120
0153	222	1309
0172	266	1443
0192	326	1578
0214	393	1711
3342		
00	0	157
20	8	197
38	15	400
63	42	525
79	64	656
0104	106	858
0153	195	1248
0179	255	1438
0200	297	1578
0221	351	1709
0242	411	1839
3343		
03	0	290
05	917	652
3344		
00	0	200
06	6	266
15	44	459
24	88	660
34	144	854
43	208	1052
53	282	1254
60	337	1374
67	400	1506
80	560	1711
3345		
00	0	243
07	24	328
13	91	457
22	68	658
31	108	854
40	142	1051
49	177	1246
58	215	1440
69	273	1642
77	311	1775
88	857	1970
95	417	2097
3346		
00	0	197
08	4	262
18	8	459
28	22	654

TIME	STRAIN	STRS
38	35	852
51	84	1118
61	126	1313
68	162	1439
75	195	1576
3347		
00	0	168
06	13	203
13	28	332
23	57	532
29	71	656
38	102	861
47	135	1051
56	177	1251
65	226	1445
76	291	1648
87	368	1840
94	431	1970
3348		
00	0	158
09	20	192
17	26	329
25	51	470
32	64	591
42	93	781
52	131	991
70	191	1372
77	222	1509
87	275	1708
99	355	1905
3349		
00	0	181
13	17	333
23	48	526
30	84	656
40	115	854
49	157	1051
63	224	1310
72	291	1511
3350		
00	0	162
11	28	266
20	68	474
28	102	656
38	157	854
47	217	1051
57	313	1256
3351		
00	0	264
07	33	394
13	57	525
19	95	656
25	133	783
31	177	925
40	253	1120
47	320	1116
53	395	1373
61	497	1509
3352		
00	0	148
06	8	191
13	37	395
24	80	525
30	111	653
40	157	852
46	215	985
62	271	1118
3353		
00	0	170
11	17	262
21	42	461
28	51	592
34	86	717
40	131	854
50	217	1055
57	291	1186
64	375	1313
71	486	1438
78	651	1576
3354		
00	0	158
11	2	199
18	26	398
25	51	461
35	95	656
42	160	783
48	180	919
3355		
00	0	158
07	13	197
13	33	331
20	62	463
27	75	592
32	108	722
39	164	856
44	177	991
54	266	1183
3373		
00	0	147
10	20	193
24	62	467

TIME	STRAIN	STRS
34	104	655
44	153	854
54	202	1052
63	311	1250
74	428	1440
3374		
00	0	154
09	8	198
19	46	400
28	86	593
37	140	792
46	226	990
56	315	1186
63	402	1312
69	515	1440
77	677	1583
3375		
00	0	159
10	37	263
16	75	395
22	120	527
28	171	658
38	302	855
47	455	1051
56	691	1248
3376		
08	11	73
15	33	204
20	86	340
27	128	469
37	211	666
46	320	861
3377		
00	0	157
09	8	302
15	37	396
24	77	530
31	122	724
42	193	851
52	286	1049
63	417	1298
69	537	1373
76	704	1509
85	924	1710
94	1228	1770
3379		
00	0	158
09	24	262
16	38	396
24	107	527
31	160	656
41	275	854
52	455	1057
3380		
00	0	157
08	0	198
14	26	331
24	77	525
30	126	656
39	211	852
49	362	1051
3381		
00	0	157
08	22	195
16	48	335
24	95	463
33	188	656
40	260	787
3382		
00	0	149
07	20	197
14	48	329
22	80	459
30	133	597
41	237	783
49	328	919
56	457	1051
3383		
00	0	188
80	34	332
0170	88	526
0230	132	657
0300	190	781
0360	268	920
3384		
00	0	158
06	11	193
15	46	331
22	75	459
29	111	591
36	175	716
43	237	852
53	373	1051
3423		
00	0	118
07	8	168
13	0	256
19	6	338
26	14	420
32	24	501
42	42	630

TIME	STRAIN	STRS
52	60	756
59	68	840
65	78	920
73	90	1009
81	108	1092
89	120	1179
96	138	1259
0103	154	13446
3424		
00	0	128
06	20	213
13	38	299
23	72	418
33	104	546
43	130	673
53	164	7997
3425		
00	0	113
09	22	168
15	24	252
21	32	336
27	34	421
37	48	567
45	76	674
54	86	798
60	90	878
67	104	965
74	116	1051
82	130	1136
92	144	1258
3426		
00	0	128
08	4	211
14	23	303
22	43	420
31	52	547
39	70	631
48	90	798
58	108	925
68	136	1052
75	150	1137
86	170	1262
3427		
00	0	112
46	2	168
0102	4	252
0190	0	378
0290	6	528
0387	16	682
0510	50	861
0607	76	972
0692	96	1095
3428		
00	0	107
40	26	147
0161	36	302
0300	12	491
0443	30	687
0495	50	760
0604	112	899
3429		
00	0	126
95	10	250
0240	20	491
0346	42	672
0480	80	879
0640	132	1095
0713	158	1179
0787	296	1259
3432		
00	0	102
0124	20	203
3433		
00	0	113
03	12	151
05	32	299
07	48	459
09	74	689
11	94	848
13	108	994
3434		
00	0	114
03	10	205
05	22	378
07	44	578
3435		
00	0	111
03	16	139
05	36	264
06	58	416
3436		
00	0	105
04	6	176
06	24	333
07	40	462
09	56	599
11	78	779
13	94	909
16	116	1103
18	136	1284
20	160	1412

TIME	STRAIN	STRS
22	164	1553
3437		
00	0	113
05	10	229
07	10	391
08	28	556
10	38	716
12	60	886
13	68	1027
17	100	1327
3438		
00	0	103
31	12	228
37	26	319
44	32	409
56	68	500
62	74	592
72	90	731
82	108	867
88	114	953
99	118	1095
0108	134	1186
0116	154	1277
0123	160	1367
0131	166	1459
3439		
00	0	105
69	8	191
0108	32	255
0161	42	328
0217	68	410
0249	86	494
0356	132	593
0437	176	731
0513	220	843
0566	244	913
0631	254	1004
0704	274	1099
0782	372	1187
0857	394	1277
3465		
00	0	95
11	92	152
19	110	233
27	118	311
33	132	388
43	154	505
53	170	622
58	188	698
65	206	775
71	226	852
78	248	932
3466		
00	0	97
07	- 18	154
13	- 18	235
19	- 12	311
25	2	385
34	4	505
42	20	622
52	34	739
62	46	850
72	62	974
80	68	1050
87	84	1127
3467		
00	0	118
08	18	236
18	28	312
23	38	388
22	46	506
41	62	622
50	82	738
60	92	852
70	116	974
81	130	1089
88	142	1165
94	150	1241
3468		
00	0	171
07	8	247
11	2	311
17	2	387
22	4	462
31	16	624
37	26	660
46	44	774
3469		
00	0	99
08	0	155
17	4	234
25	8	311
34	22	387
47	38	462
57	50	546
67	64	661
78	84	776
89	110	893
3470		
00	0	105
14	16	226

TIME	STRAIN	STRS
0256	64	415
0289	80	464
0390	142	611
0426	178	661
3502		
00	0	94
0106	20	175
0211	58	314
0347	140	511
0392	172	582
0475	260	699
3501		
00	0	104
0109	22	239
0181	16	334
0248	16	423
0362	54	583
0445	110	699
0502	158	774
3500		
00	0	95
43	4	115
78	12	155
0112	24	195
0205	24	311
0281	36	412
0374	66	545
0486	106	709
0562	128	815
0652	162	936
3499		
00	0	129
0136	114	324
3498		
00	0	103
83	50	200
0130	38	274
0232	66	432
0375	98	669
0418	108	738
0472	122	816
0528	148	893
3503		
00	0	94
08	18	116
15	4	195
21	6	274
29	12	388
35	24	465
44	42	625
52	58	699
58	72	777
3504		
00	0	96
09	16	120
11	24	234
12	42	362
14	56	485
16	76	620
17	88	739
19	102	859
21	132	974
22	152	1080
3505		
000000	0	95
000003	14	161
000004	28	283
000007	42	415
000008	58	548
000010	70	732
000012	84	873
000014	104	1017
3506		
000000	0	91
000002	14	92
000004	10	162
000006	20	286
000007	40	431
000010	62	597
000011	80	742
000013	110	886
3507		
000000	0	123
000005	6	202
000006	22	369
000009	46	601
000012	60	792
000013	84	937
000015	92	1024
3508		
000000	0	94
000003	8	168
000005	2	291
000006	0	412
000008	18	555
000010	30	703
000011	48	821
000013	54	983
3509		
000000	0	91
000002	4	128

TIME	STRAIN	STRS
000004	16	252
000006	10	370
000007	14	490
000008	40	620
3510		
000000	0	103
000059	151	174
000105	287	258
000214	740	440
000257	1021	502
000343	1876	601
000454	1427	669
3512		
000000	0	97
000062	23	126
000088	42	169
000112	72	210
000164	159	296
000191	212	338
000245	365	420
000302	614	500
000371	1076	592
3513		
000000	0	121
000032	38	169
000057	70	213
000166	323	391
000246	702	515
000314	1212	610
000426	2627	715
000529	2672	742
3516		
000000	0	96
000009	8	170
000015	29	255
000021	57	337
000028	85	421
000037	153	547
000044	212	634
000050	270	719
000060	389	840
3517		
000000	0	101
000010	36	169
000021	93	297
000031	168	421
000041	282	546
000051	408	676
000062	585	798
000068	746	879
000077	970	966
3518		
000000	0	105
000007	4	171
000016	80	295
000021	151	379
000027	223	459
000033	308	546
000042	472	674
000052	678	800
000059	872	879
3519		
000000	0	97
000011	27	169
000022	65	298
000028	102	378
000035	144	457
000046	242	592
000055	363	718
000065	544	840
000073	708	922
3520		
000000	0	96
000009	14	169
000018	63	296
000027	131	421
000033	172	501
000042	276	631
000049	391	718
000059	551	840
3521		
000000	0	100
000005	0	206
000007	38	372
000009	61	512
000011	104	678
000012	159	836
000015	225	982
3522		
000000	0	108
000003	4	174
000005	29	301
000007	53	428
000008	97	588
000010	142	732
000012	193	857
3523		
000014	0	30
000016	36	210
000018	72	356
3524		

TIME	STRAIN	STRS
000000	0	105
000003	14	151
000005	42	286
000006	74	436
000008	102	593
000010	136	753
000012	185	896
000013	244	1030
3576		
000000	0	133
000046	51	270
000057	78	393
000071	114	526
000084	148	649
000101	185	848
000116	210	1051
000140	260	1249
000148	261	1379
000151	302	1578
000167	327	1843
3577		
000000	0	157
000009	23	264
000019	53	459
000029	80	656
000039	106	853
000049	123	1052
000059	138	1247
000067	159	1371
000079	174	1576
000091	202	1775
000098	206	1909
000105	227	2031
000113	263	2168
000121		2300
3578		
000000	0	197
000016	2	264
000022	10	295
000029	25	526
000035	40	655
000080		1506
000092	189	1709
000102	227	1905
3579		
000000	0	158
000006	14	197
000011	19	328
000020	38	525
000026	55	655
000034	65	852
000046	85	1124
000055	106	1312
000065	131	1507
000077	148	1708
000087	159	1910
000093	163	2031
000097	168	2098
000103	180	2235
000110	180	2366
000118	187	2498
000126	202	2628
3580		
000000	0	179
000006	0	262
000013	14	396
000019	21	526
000026	29	656
000036	51	852
000045	70	1051
000056	87	1255
000065	108	1440
000077	129	1710
3581		
000000	0	191
000038	2	259
000088	0	328
000139	0	525
000186	6	652
000288	6	942
000381	4	1208
000473	6	1313
000547	29	1597
000674	38	1867
000721	44	1968
3582		
000000	0	162
000174	17	503
000269	40	733
000395	85	1068
000492	97	1308
000548	112	1440
000643	146	1646
3583		
000000	0	162
000011	10	282
000018	31	397
000026	40	525
000033	53	656
000044	61	854
000057	89	1118

TIME	STRAIN	STRS
000067	95	1315
000078	100	1509
000096	106	1777
000107	108	1970
000114	114	2097
000121	112	2235
000133	125	2432
000144	127	2624
000152	134	2756
3584		
000012	0	266
000018	17	395
000025	27	525
000031	40	655
000040	68	854
000049	68	1051
000058	80	1248
000067	95	1439
000077	106	1648
000088	121	1843
000098	136	2030
3585		
000000	0	187
000005	6	262
000011	12	396
000018	23	526
000024	29	656
000033	48	854
000042	63	1054
000053	78	1249
000063	97	1440
000073	114	1643
000086	127	1841
000101	148	2099
3586		
000000	0	170
000007	4	262
000013	10	400
000019	19	526
000025	34	656
000034	51	855
000042	61	1049
000051	78	1252
000061	93	1440
000071	106	1712
000081	117	1838
000092	136	2029
000102	153	2235
000112	168	2434
000123	176	2627
3587		
000000	0	171
000027	4	197
000084	25	328
000136	42	459
000230	74	715
000237	119	1130
000495	148	1674
000561	159	1843
000688	182	1936
000762	191	2099
000833	172	2266
3588		
000000	0	178
000118	8	388
000206	42	931
000392	46	1185
000437	55	1307
000490	65	1446
000631	100	1775
000719	119	1967
000780	134	2102
000839	148	2239
000933	168	2440
3589		
000000	0	158
000074	21	279
000160	53	498
000288	95	853
000380	119	1117
000453	134	1312
000528	151	1504
3590		
000000	0	262
000034		344
000078		512
000124		692
000191		929
000259		1191
000347		1527
000396	0	1696
000447	12	1874
000497	21	2044
000553	34	2207
000612	38	2377
000668	61	2624
000723	91	2708
3592		
000000	0	191
000004	2	274
000006	6	437

TIME	STRAIN	STRS
000009	21	675
000011	31	853
000015	57	1155
000017	74	1457
000019	100	1791
000022	129	2059
000024	148	2380
3593		
000000	0	325
000003	0	445
000006	14	767
000007	46	1060
000010	87	1444
000012	114	1766
000014	151	2108
000016	178	2406
3594		
000000	0	195
000004	4	332
000006	8	575
000009	36	855
000013	65	1212
000011	80	1511
000013	108	1826
000016	138	2128
3595		
000000	0	223
000004	0	395
000006	19	665
000008	55	1029
000010	85	1377
000011	114	1703
3596		
000000	0	235
000031	10	349
000072	27	515
000111	42	679
000171	61	923
000241	87	1231
000314	112	1540
000388	140	1824
3598		
000000	0	205
000003	4	302
000005	21	592
000008	63	1166
000010	87	1488
000012	102	1752
000014	134	2044
000016	161	2344
3599		
000000	0	229
000006	6	410
000007	16	705
000009	29	958
000011	53	1340
000013	63	1687
000015	102	2019
000017	131	2310
3600		
000000	0	212
000004	2	366
000006	19	604
000007	40	854
000009	70	1195
000011	104	1529
000014	131	1847
000015	161	2082
000017	191	2366
3601		
000000	0	241
000003	10	359
000005	34	680
000007	70	953
000009	93	1242
000011	127	1561
000012	148	1857
000015	191	2285
3617		
000000	0	168
000012	6	269
000021	17	463
000031	37	651
000040	57	854
000046	64	989
000055	84	1186
000061	111	1311
3618		
000000	0	197
000006	26	264
000015	53	480
000020	71	592
000029	104	787
000038	137	987
3619		
000000	0	156
000009	13	197
000016	20	328
000024	33	461
000031	46	591
000038	64	716

TIME	STRAIN	STRS
000045	100	854
000051	113	984
000057	135	114
3620		
000000	0	159
000014	15	266
000021	31	395
000029	42	532
000035	55	656
000042	66	785
000051	77	986
000058	97	1116
000064	104	1247
000071	111	1374
000077	120	1507
000084	142	1644
3621		
000000	0	170
000010	- 17	262
000016	- 13	400
000022	2	534
000028	20	653
3622		
000000	0	164
000007	2	191
000014	13	334
000021	26	461
000030	55	660
000036	68	782
000041	97	919
000048	113	1053
000054	133	1182
000060	160	1310
000067	191	1440
3623		
000000	0	154
000008	15	197
000014	40	329
000023	80	524
000029	115	658
3624		
000000	0	220
000004	15	268
000010	31	398
000017	42	526
000024	71	653
000031	80	787
000037	97	926
000043	113	1052
000052	146	1249
000059	160	1376
000066	182	1511
000073	195	1642
000081	224	1775
000091	260	1972
000098	288	2031
3625		
000000	0	158
000011	13	195
000018	28	333
000025	48	459
000032	60	591
000038	75	716
000045	86	856
000054	113	1053
000060	133	1051
000067	146	1307
000077	193	1511
000087	237	1711
000094	264	1840
3626		
000000	0	163
000006	33	195
000012	28	332
000020	51	466
000026	60	595
000032	71	717
000042	104	925
000051	117	1124
3628		
000000	0	192
000006	22	262
000012	35	398
000018	51	526
000024	69	652
3648		
000000	0	118
000032	40	168
000053	87	212
000075	140	255
000097	221	299
000118	304	336
000164	591	418
000218	1093	502
000296	2236	588
000391	2189	630
000443	3612	627
3649		
000000	0	107
000018	17	126
000041	40	168

TIME	STRAIN	STRS
000064	68	212
000087	112	254
000108	187	295
000131	261	336
000180	497	420
000231	910	501
000296	1727	589
000441	2855	666
000472	3921	666
3650		
000000	0	102
000047	23	125
000076	68	172
000159	329	316
000196	548	380
000221	731	419
000292	1497	515
000409	1844	586
3651		
000000	0	138
000039	40	168
000060	68	212
000081	117	253
000105	180	296
000128	285	337
000180	623	420
000243	1251	501
000300	2146	545
000362	3040	551
000362	3634	547
3652		
000000	0	105
000024	12	125
000048	44	168
000072	110	212
000094	193	254
000117	300	295
000142	440	336
000216	1100	438
000273	1912	501
000314	2793	523
000331	3263	523
3653		
000000	0	100
000010	0	126
000014	0	168
000022	6	254
000030	65	336
000037	140	418
000043	253	502
000051	397	589
000058	570	672
3654		
000000	0	112
000004	12	122
000009	27	168
000015	53	254
000028	153	421
000034	236	504
000041	353	593
000047	468	673
000053	631	756
3655		
000000	0	104
000010	34	121
000017	68	211
000025	110	296
000035	212	419
000042	327	502
3656		
000000	0	126
000008	14	168
000013	51	254
000019	95	337
000025	144	418
000031	208	502
000038	304	588
000044	412	676
000051	582	756
000058	787	838
3657		
000000	0	105
000007	14	169
000015	42	251
000022	78	340
000030	138	420
000037	208	502
000044	300	589
000051	406	673
3658		
000000	0	118
000004	19	188
000006	53	322
000007	89	454
000009	155	610
3659		
000000	0	105
000004	6	173
000006	34	296
000007	63	421
000009	112	576

TIME	STRAIN	STRS
000011	151	731
000012	204	854
3660		
000000	0	121
000003	14	217
000006	48	363
000007	97	511
000009	144	660
000011	200	801
000012	644	839
3661		
000000	0	161
000003	29	210
000005	61	354
000007	102	483
000008	155	623
000010	223	762
3662		
000000	0	103
000007	65	265
000009	117	473
000011	157	644
3663		
000000	0	100
000007	10	126
000011	27	168
000018	70	253
000025	146	337
000031	234	419
3689		
000000	0	185
000040	2	264
000065	6	334
000090	2	394
000140	8	526
000188	29	656
000236	61	789
000285	104	932
3690		
000000	0	159
000042	2	198
000119	25	328
000144	48	394
000191	112	532
000240	197	653
000291	323	789
3691		
000000	0	213
000032	27	262
000051	210	328
000100	246	476
000137	240	591
000181	246	722
000226	225	856
000267	182	988
000335	187	1182
3694		
000000	0	165
000006	2	197
000009	17	266
000017	31	398
000023	55	528
000030	87	656
000037	114	788
3695		
000000	0	171
000005	8	198
000009	14	269
000016	38	397
000022	59	525
000028	80	656
000034	106	788
000040	140	923
000048	182	1120
000055	219	1249
3696		
000000	0	167
000009	12	191
000013	21	266
000019	36	389
000030	59	593
000037	93	716
3698		
000000	0	226
000008	14	331
000011	14	395
000017	40	528
000023	65	658
000026	82	722
000032	114	855
000038	148	986
3700		
000000	0	158
000004	12	223
000006	42	408
000011	121	964
000012	155	1203
3701		
000000	0	158
000005	10	203
000007	53	428

TIME	STRAIN	STRS
000009	93	672
3702		
000000	0	167
000004	6	291
000006	29	453
000008	63	655
000009	106	871
000011	159	1131
000013	185	1330
3703		
000000	0	203
000004	17	310
3744		
000000	0	159
000025	40	195
000060	80	294
000092	140	395
000135	219	534
000172	280	656
000291	421	920
3745		
000000		0
000000	0	194
000028	16	263
000053	26	340
000071	38	395
000091	60	460
000112	70	526
000158	100	668
000192	148	788
000232	176	921
3746		
000000	0	191
000034	11	275
000051	19	335
000088	45	463
000106	57	527
000124	78	592
000142	95	652
000182	126	791
000220	183	927
3747		
000000	0	164
000076	- 33	233
000088	- 35	264
000115	- 28	329
000142	- 19	396
000167	- 9	461
000190	- 2	525
000236	14	655
000280	61	789
000302	92	856
000324	114	925
3749		
000000	0	166
000008	0	197
000013	0	262
000020	2	394
000027	28	526
000033	35	656
000039	66	783
000046	85	920
000052	121	1056
3750		
000000	0	171
000007	2	203
000010	19	264
000013	26	333
000018	38	398
000024	57	525
000028	69	592
000031	85	655
3751		
000000	0	180
000008	14	262
000015	26	394
000021	57	525
000027	73	653
000033	100	783
3752		
000000	0	177
000004	4	197
000008	16	262
000011	26	331
000015	30	396
000022	64	528
000029	85	653
000036	109	788
000042	133	919
000046	154	994
3753		
000000	0	191
00005	11	257
000011	30	394
000017	47	525
000023	71	653
000027	85	717
000030	104	782
3754		
000000	0	164
000004	4	191

TIME	STRAIN	STRS
000007	35	443
000009	40	605
000010	65	777
3755		
000000	0	246
000008	2	243
000010	11	448
000012	23	656
000013	57	868
3756		
000000	0	158
000003	7	185
000005	26	408
000007	52	673
000009	92	946
000011	121	1184
3758		
000000	0	164
000003	4	181
000005	16	360
000007	35	596
000008	52	778
000010	66	965
000011	95	1302
000013	121	1415
000014	135	1583
0001		
SEE NOTES 2,7		
100900		
1000	42	271
1100	141	351
1117	175	335
1130	204	327
1200	268	303
1230	330	288
1300	394	271
1330	457	256
1400	521	234
1430	584	217
1500	646	201
1530	708	189
1545	736	168
0002		
SEE NOTES 2,7		
100907	0	
0936	8	55
1004	24	168
1030	46	280
1100	85	357
1130	140	377
1200	198	372
1230	260	369
1300	322	360
1404	453	333
1500	571	309
1600	697	274
1700	825	239
0003		
SEE NOTES 2,7		
151600		
1615	7	73
1630	17	151
1700	48	245
1730	98	278
1800	159	280
1830	219	269
1900	284	258
1930	345	249
2000	402	235
2100	530	215
2300	780	169
2400	909	145
0004		
SEE NOTES 2,7		
102000		0
2015	5	30
2020	11	90
2040	20	147
2050	30	195
2100	43	236
2115	58	264
2122	89	270
2145	122	268
2200	148	268
2215	177	270
2230	210	270
2245	242	264
2300	273	260
2330	335	250
2400	394	237
2500	514	228
2600	632	220
2800	875	195
0005		
SEE NOTES 2,7		
151400		
1415	1	15
1425	7	64
1435	12	104
1445	21	164
1455	28	217

TIME	STRAIN	STRS
1505	35	261
1515	44	303
1525	53	339
1540	80	368
1600	115	379
1615	146	375
1630	179	371
1700	236	358
1730	293	356
1800	354	351
1900	471	353
2000	596	363
2100	716	307
2200	846	257
0006		
SEE NOTES 2,7		
104600		
4500	2	18
4515	9	40
4530	14	61
4600	23	105
4630	32	148
4700	41	190
4730	50	230
4800	61	280
4900	82	338
5000	113	405
5100	158	427
5200	217	428
5300	250	417
5400	348	376
5600	478	336
5800	605	285
0007		
SEE NOTES 2,7		
103400		
3430	7	37
3445	15	90
3500	28	152
3515	37	211
3530	50	282
3545	60	346
3600	75	410
3615	87	463
3630	105	510
3645	130	551
3700	159	571
3715	196	575
3730	246	554
3745	305	516
3800	357	483
3830	470	404
3850	561	348
0008		
SEE NOTES 2,7		
103500		0
3511	4	78
3520	14	159
3530	24	252
3541	35	366
3550	46	457
3600	58	541
3612	78	631
3623	120	699
3633	211	704
0009		
SEE NOTES 2,7		
110500		
0600	7	24
0700	13	54
0800	20	84
0900	26	114
1000	32	143
1100	46	201
1300	63	254
1500	81	303
1700	102	343
1900	126	376
2100	156	397
2300	191	405
2500	233	405
2700	254	401
2900	296	388
3100	339	377
3505	426	360
3900	513	340
4300	602	319
4700	697	288
5000	797	254
0010		
SEE NOTES 2,7		
163905		
4000	8	12
4200	26	68
4400	40	139
4600	53	207
4800	68	273
5000	85	332
5200	10	377
5400	135	409
5600	172	413

TIME	STRAIN	STRS
5700	196	411
5800	220	400
5900	271	371
170100	319	350
0300	366	338
0500	408	333
0700	451	326
0900	494	322
1100	535	318
1400	578	314
0011		
SEE NOTES 2,7		
120203		
0300	14	67
0400	29	155
0500	47	235
0600	68	316
0700	96	374
0800	130	410
0900	182	408
1000	241	386
1100	304	359
1200	366	337
1300	423	317
1400	481	304
1500	538	293
1600	594	284
1700	651	272
1800	708	258
0012		
SEE NOTES 2,7		
141700		
1730	4	6
1800	15	36
1900	38	116
2000	52	204
2100	70	293
2200	99	375
2300	113	447
2400	146	496
2500	195	509
2600	262	474
2700	334	429
2800	408	387
2900	474	356
3000	538	338
3100	602	314
3200	666	293
0013		
SEE NOTES 2,7		
151330		
151552	33	81
1600	39	81
4303	40	81
170019	42	81
5645	42	81
185535	43	81
201325	44	81
211658	45	81
222608	46	81
230105	46	81
241334	48	81
045245	48	81
121736	50	81
185562	50	81
090742	51	81
090842	52	81
091022	41	
0014		
SEE NOTES 2,7		
102903		
103000	18	92
3100	36	131
3200	53	207
3300	70	287
3400	88	363
3500	109	435
3600	133	496
3700	165	530
3800	213	540
3900	277	505
4000	348	496
4100	414	418
4200	478	388
4300	540	364
0015		
SEE NOTES 2,7		
160014		
1409	4	81
1419	18	163
1427	26	237
1435	27	319
1443	41	394
1451	45	463
1458	59	528
1504	71	590
1515	86	652
1527	116	729
1545	171	785
1555	241	783
1606	286	745

TIME	STRAIN	STRS
1615	399	629
1630	527	518
1645	670	324
1700	794	296
1735	877	222
1802	906	204
0016		
SEE NOTES 2,7		
101506		0
1835	40	117
4020	48	117
110557	51	117
120010	56	117
133010	57	117
143000	59	117
145500	60	117
165553	62	117
191735	63	117
205905	65	117
211023	69	117
215025	70	117
235730	72	117
070037	79	117
074745	79	117
102053	81	117
111805	82	117
112235	63	0
113055	60	0
115910	58	0
133022	57	0
0017		
SEE NOTES 2,7		
183700		
3800	9	70
3900	26	155
4000	43	236
4100	60	317
4200	81	385
4300	105	433
4400	134	460
4500	168	461
4600	205	444
4700	241	420
4800	272	398
4900	314	390
5100	412	381
5300	488	356
5600	567	343
5700	662	321
0018		
SEE NOTES 2,7		
163300		
3314	2	37
3324	24	106
3332	36	181
3343	43	263
3355	54	412
3405	61	511
3414	61	597
3427	80	724
3445	115	867
3450	150	885
3502	187	889
3510	239	858
3517	329	751
3526	669	98
3540	720	140
3555	804	145
0019		
SEE NOTES 2,7		
154115		0
092024		0
2313	41	235
2600	42	235
3000	51	235
4500	58	235
102100	70	235
4830	76	235
111845	83	235
5000	91	235
131900	107	235
141700	116	235
154800	130	235
165000	137	235
190500	155	235
210905	175	235
222000	182	235
241000	195	235
070900	245	235
132000	278	235
132226	259	0
140000	256	0
145500	255	0
0020		
SEE NOTES 2,7		
161900		
2100	19	56
2300	35	116
2500	51	175
2700	66	231
2900	81	292

TIME	STRAIN	STRS
3000	89	317
3200	107	368
3400	126	410
3600	149	431
3800	178	436
3920	202	429
4000	212	404
4200	235	368
4330	246	321
4600	260	290
4700	267	280
4900	275	266
5100	283	252
5800	295	222
170207	300	208
1100	308	191
0021		
SEE NOTES 2,7		
151502		
1614	13	117
1620	20	185
1625	25	243
1633	29	268
1757	40	295
1820	44	337
1915	57	390
2112	73	560
2212	104	5[illegible]
2302	143	741
2450	251	886
2437	359	845
2508	772	353
2518	872	203
0022		
SEE NOTES 2,7		
111200		0
1630	55	235
1700	58	235
1800	60	235
2000	64	235
2500	69	235
3500	77	235
5000	85	235
121500	94	235
4600	102	235
131400	107	235
141000	119	235
153200	141	235
165700	158	235
183300	173	235
205300	190	235
240600	209	235
024500	229	235
131000	278	235
1025	260	0
2500	257	0
150600	255	0
163100	255	0
0023		
SEE NOTES 2,7		
162000		0
2015	8	44
2030	21	102
2045	32	160
2100	42	222
2130	61	350
2200	81	480
2230	105	585
2300	136	657
2322	169	689
2345	221	692
2400	261	662
2430	368	583
2500	515	400
2527	672	207
2547	733	174
0024		
SEE NOTES 2,7		
131355		351
131417	0	498
1432	17	498
1451	26	512
1515	43	509
1543	73	501
1652	162	512
1718	210	506
1850	615	431
1900	768	285
0025		
SEE NOTES 2,7		
134800		0
5000	39	174
5100	43	174
5200	46	174
5600	53	174
140500	60	174
2600	68	174
5800	77	174
160500	88	174
4700	92	174
185900	105	174

TIME	STRAIN	STRS
211700	114	174
240200	123	174
310800	135	174
311000	144	174
331600	150	174
331700	150	174
353900	155	174
354000	135	0
360500	134	0
361700	133	0
0026		
SEE NOTES 2,7		
112506	0	
2515	8	61
2535	37	249
112620	68	313
2635	76	324
2653	86	332
112740	110	335
2850	146	336
2930	168	336
3025	201	337
3120		
3200	290	335
3255	373	337
3315	425	335
3350	557	293
3405	704	224
0027		
SEE NOTES 2,7		
103057		
3104	10	122
3111	20	218
3115	21	308
3120	44	411
3125	41	497
3128	52	570
3133	63	652
3137	75	723
3142	99	810
3147	112	855
3151	150	888
3155	186	894
3159	239	893
3203	314	820
3207	708	758
0028		
SEE NOTES 2,7		
160500		0
0650	112	174
0735	118	174
1000	126	174
2000	136	174
5600	151	174
180600	166	174
200700	183	174
215700	204	174
240300	215	174
265100	228	174
265700	251	174
385200	285	174
391000	288	174
391219	238	0
394600	235	0
430800	233	0
0029		
SEE NOTES 2,7		
131156		
1205	14	73
1213	28	140
1220	41	202
1227	51	254
1245	73	295
1255	80	296
1328	96	296
1419	114	295
1524	132	295
1621	146	295
1803	166	296
2001	187	296
2154	207	295
2400	228	296
2800	265	295
3100	292	296
3700	344	296
4700	429	296
5500	515	296
140300	605	296
1000	710	297
1400	805	298
1800	950	294
0030		
SEE NOTES 2,7		
120158		
0205	13	121
0212	23	242
0217	32	356
0223	45	487
0230	63	602
0236	86	685
0243	123	741

TIME	STRAIN	STRS
0248	193	742
0255	308	618
120301	460	455
0314	696	205
0329	896	133
0359	1063	113
0031		
SEE NOTES 2,7		
113852	51	200
4100	57	200
4500	66	200
120000	76	200
3500	89	200
131800	101	200
141700	114	200
152200	130	200
165600	148	200
190000	166	200
205700	176	200
233900	197	200
064500	246	200
092200	260	200
105800	273	200
110000	253	0
114900	251	0
135500	251	0
0032		
SEE NOTES 2,7		
200357	0	0
200423	22	72
0437	33	133
0453	45	199
0518	50	199
0652	56	199
1200	65	199
2500	75	200
211000	94	201
220400	110	199
2813	115	199
232533	129	201
0033		
SEE NOTES 2,7		
143603		0
3620	10	85
3630	19	168
3636	26	236
3655	37	303
3728	44	301
3800	52	301
3842	58	303
3950	66	300
4422	83	302
4800	98	304
150412	136	302
2300	171	302
5236	219	302
162546	265	303
170418	327	302
2005	350	302
2100	325	6
0034		
SEE NOTES 2,7		
153800		0
4200	41	160
4600	46	160
160600	58	150
4000	66	160
180900	80	160
200300	93	160
223700	107	160
233300	151	160
054100	179	160
090500	192	160
133100	250	160
133300	240	0
135200	240	0
165100	239	0
0035		
SEE NOTES 2,7		
183102		0
183116	21	103
3121	27	151
3131	41	238
3217	50	239
3424	59	239
3800	67	241
5300	83	240
192000	103	239
5500	121	242
205100	145	239
213300	163	239
225400	191	234
240700	215	235
0838	186	0
2800	183	0
4100	181	0
0036		
SEE NOTES 2,7		
140700		0
0715	19	117
0725	31	215

TIME	STRAIN	STRS
0739	44	342
140822	71	405
0844	80	409
140907	91	413
141000	111	407
1050	129	407
1210	163	405
1330	201	405
1430	234	406
1520	270	407
1620	314	403
1709	359	405
1753	405	403
1828	448	407
1925	538	404
2009	634	403
2031	718	402
2045	795	372
2105	920	291
0037		
SEE NOTES 2,7		
105835	0	0
110525	72	240
0801	76	240
1000	79	240
1700	86	240
1800	88	240
4100	104	240
5600	110	240
130300	131	240
141000	147	240
154406	163	240
193200	197	240
221800	213	240
2100	227	240
240300	242	240
0510	201	0
380300	194	0
0038		
SEE NOTES 2,7		
101152		0
1210	11	68
1220	14	151
1230	36	247
1253	39	249
101500	48	247
1900	54	247
2900	63	251
112100	82	251
122700	96	245
133400	107	249
153200	125	251
200600	161	249
243900	186	251
244100	161	0
011500	158	0
082400	157	0
0039		
SEE NOTES 2,7		
101400		0
1417	17	69
1433	33	290
1443	43	393
1455	50	403
101553	68	403
1720	83	401
2100	104	401
2700	126	401
3700	152	401
5600	190	403
112800	236	401
5600	276	401
122400	315	399
133100	398	403
140400	438	403
145200	492	403
151800	522	401
155900	572	399
165800	636	401
174900	700	401
175300	678	0
334000	675	0
0040		
SEE NOTES 2,7		
130600		0
0614	10	46
0623	26	129
0635	44	240
0655	54	238
0800	69	238
0850	75	240
1200	91	240
2400	121	240
3900	145	240
5400	180	238
141200	218	240
3900	264	240
150104	309	238
2100	349	238
4300	395	241
161600	464	240

TIME	STRAIN	STRS
1700	434	2
2600	430	2
5400	429	2
0041		
SEE NOTES 2,7		
203700	0	0
3732	12	35
3830	33	118
3902	45	164
4000	67	239
4032	80	276
4101	96	304
4200	134	345
4253	179	347
4330	233	314
4400	271	289
4500	343	254
4600	409	234
4700	470	224
4800	538	217
0042		
SEE NOTES 2,7		
185456		0
5506	17	78
5516	35	153
5525	49	228
5534	60	302
5542	74	385
5554	99	480
5601	106	541
5608	121	584
5615	146	617
5619	167	628
5625	203	624
5632	280	569
5642	352	480
5709	559	318
5732	685	263
5804	917	175
5834	1019	120
5900	1050	98
0043		
SEE NOTES 2,7		
182200		0
2210	22	137
2217	36	227
2224	57	320
2248	65	320
2400	84	320
2600	104	322
2900	128	320
3200	150	320
3700	182	320
4100	209	320
4709	252	320
4800	257	320
5200	286	320
5800	330	318
190400	380	318
0800	418	320
1400	483	320
1500	449	0
192408	462	0
210620	439	0
0044		
SEE NOTES 2,7		
133600		0
3611	21	108
3618	37	209
3624	50	296
3630	66	400
3642	82	400
3706	104	400
3722	118	400
3753	146	400
3847	214	399
3914	268	396
3936	322	398
3950	375	399
4012	472	398
4020	523	397
4037	675	364
4140	751	4
134500	745	4
0045		
SEE NOTES 2,7		
151904		0
1915	15	108
1919	26	209
1924	38	306
1929	49	418
1933	59	513
1938	72	590
1943	87	650
1948	110	737
1953	138	803
1957	166	831
2002	212	810
2008	288	749
2014	397	616
2019	540	404

TIME	STRAIN	STRS
2023	703	110
2029	789	91
0046		
SEE NOTES 2,7		
172800		0
2815	12	37
2827	22	85
2841	36	150
2850	45	188
2900	53	231
2910	63	271
2921	74	317
2933	88	360
2947	106	406
3004	134	438
3016	160	445
3025	186	429
3037	230	414
3047	272	378
3058	316	341
3113	368	306
3131	430	273
3149	486	254
3204	529	241
0047		
SEE NOTES 2,7		
200300		0
201000	1	
1100	10	28
1200	17	61
1400	34	136
1500	42	172
1530	46	190
1600	50	205
1700	58	243
1730	62	261
1800	62	275
1830	71	292
1900	75	304
2000	84	333
2100	94	358
2200	103	381
2300	115	403
2400	126	421
2500	139	432
2600	153	444
2700	169	453
2800	186	457
3030	235	457
3515	342	417
4100	475	362
5009	690	280
0048		
SEE NOTES 2,7		
110159		0
0122	9	44
0130	16	80
0136	21	107
0147	29	159
0233	37	159
0500	45	159
1000	54	159
3310	70	159
124800	95	159
141900	118	159
160019	139	159
182800	166	159
194411	180	159
213830	198	159
220955	205	161
221053	186	2
324024	180	2
0049		
SEE NOTES 2,7		
184755	0	0
4812	11	66
4825	31	200
4840	51	345
4853	70	479
4902	78	478
4917	88	479
5015	125	481
5031	138	480
5112	173	480
5140	213	482
5212	272	481
5225	304	483
5231	323	479
5305	473	475
5317	573	455
0050		
SEE NOTES 2,7		
161530	0	0
1607	5	51
1612	17	149
1617	28	270
1622	36	376
1627	48	462
1631	58	565
1636	71	635
1640	83	699

TIME	STRAIN	STRS
1645	99	770
1650	125	840
1655	166	872
1700	227	852
0051		
SEE NOTES 2,7		
092202	0	0
2350	2	3
2406	20	48
2422	34	117
2432	45	167
2452	59	257
2511	75	342
2534	95	432
2600	125	521
2620	148	566
2630	164	580
2647	199	582
2703	243	562
2720	293	489
2747	388	434
2808	464	379
2842	583	306
2908	661	276
0052		
SEE NOTES 2,7		
141000	0	0
1017	5	16
1038	29	84
1055	45	163
1153	53	161
1333	59	162
2742	74	161
150027	86	161
165420	105	161
202558	126	161
220047	134	161
011208	146	161
1300	126	2
3043	123	2
3600	121	2
0053		
SEE NOTES 2,7		
150500	0	0
0518	12	8
0532	27	107
0567	42	259
150609	62	464
0633	77	463
0719	91	463
0813	106	464
0909	121	463
1105	146	465
1400	194	461
1620	253	463
1711	285	463
1813	335	463
1900	383	464
1948	448	464
2110	640	463
2134	749	460
2150	867	428
0054		
SEE NOTES 2,7		
110800		0
0900	2	7
0915	29	164
0925	45	260
0940	61	401
1000	69	399
1025	76	401
1139	90	401
1317	103	401
1900	136	399
2500	175	398
3139	224	401
3430	273	400
3600	311	402
3800	383	399
3935	492	400
4000	551	399
4025	655	399
4033	709	316
0055		
SEE NOTES 2,7		
160600		0
0617	2	11
0633	21	110
0642	31	170
0653	42	240
0726	47	240
0810	52	246
1000	61	246
2615	77	241
4127	83	240
172600	97	239
181405	108	240
191907	119	240
201446	128	240
212518	138	240
222200	145	239

TIME	STRAIN	STRS
233430	152	240
243300	159	240
013748	166	240
023700	172	240
024318	143	0
025404	140	0
033400	138	0
104400	136	0
0056		
SEE NOTES 2,7		
143206		0
3307	3	84
3325	31	149
3343	58	320
3430	72	322
3518	79	321
3713	93	320
4030	108	320
4434	123	320
4916	137	320
5925	147	319
151230	196	319
2455	233	321
3646	287	320
5227	365	320
160616	445	320
1915	535	320
2800	622	322
3600	729	324
4200	852	323
4455	950	323
4625	927	0
5600	927	0
182000	927	0
0057		
SEE NOTES 2,7		
134400	0	0
4410	11	84
4420	24	193
4434	37	313
4455	61	491
4500	65	507
5123	89	639
5132	98	562
5143	107	665
5151	116	743
5200	130	825
5212	144	877
5222	162	920
5227	172	911
5240	187	873
5253	217	808
5310	267	695
5328	361	494
5400	265	313
0058		
SEE NOTES 2,7		
151100	0	0
1200	15	63
1300	34	150
1400	52	232
1500	70	309
1600	88	378
1700	109	440
1800	132	497
1900	155	533
2000	179	551
2055	183	544
2100	216	544
2200	259	538
2300	313	497
2400	374	439
2500	445	383
2600	522	330
2700	587	295
2800	648	269
0059		
SEE NOTES 2,7		
163820	0	0
4000	12	42
4200	25	110
4400	37	177
4700	55	261
4900	65	302
5100	73	330
5200	75	326
5400	78	326
5500	81	323
5900	89	368
170000	93	396
0100	97	425
0200	104	445
0400	113	484
0600	126	514
1000	162	553
1300	213	539
1500	260	502
1800	340	428
2400	491	337
3700	608	247
0060		

TIME	STRAIN	STRS
SEE NOTES 2,7		
192100		
2116	3	5
2200	12	60
2317	28	151
2523	42	240
2558	46	277
2656	53	350
2755	63	431
2800	69	489
2857	74	526
3353	81	557
3430	87	609
3500	90	653
3600	99	740
3652	108	816
3700	120	882
3900	138	924
3952	173	929
4030	262	821
	672	2
0061		
SEE NOTES 2,7		
134100	0	0
4623	12	10
4653	22	106
4709	32	271
4725	40	448
4741	46	626
4756	51	782
4812	60	1088
4828	67	1217
4847	74	1217
4853	74	1218
4920	81	1204
5145	575	323
5205	644	333
5222	698	283
5245	726	230
0062		
SEE NOTES 2,7		
154700	0	0
4800	15	94
4900	29	188
5000	40	279
5100	48	374
5200	58	470
5300	65	575
5400	74	661
5500	82	744
5600	91	817
5700	108	881
5745	130	891
5806	146	1040
5831	184	996
5855	260	714
5910	349	539
5935	494	272
0063		
SEE NOTES 2,7		
165453	0	0
5510	18	105
5520	29	192
5530	43	295
5544	54	421
5555	62	531
5857	88	544
0064		
SEE NOTES 2,7		
092603	0	0
2641	18	390
2649	30	528
2707	36	659
2718	43	772
2726	49	845
2735	61	931
2748	96	1013
2752	178	984
0065		
SEE NOTES 2,7		
193000	0	0
3145	11	72
3245	30	162
3346	44	261
3441	56	347
3533	61	437
3623	68	532
3708	73	611
3804	80	705
3849	87	772
3945	98	859
4145	133	1007
4205	153	1006
4219	189	952
4226	236	844
4233	316	669
4239	484	338
4245	591	142
4310	640	98
4339	671	92
4351	684	84

TIME	STRAIN	STRS
0066		
SEE NOTES 2,7		
214900	0	0
5100	15	82
5300	33	178
5500	47	271
5700	56	373
5900	65	480
220000	69	535
0200	79	638
0300	83	683
0500	96	764
0600	106	789
0700	124	806
0828	139	805
0900	169	786
0928	255	612
0949	340	442
1032	452	268
1100	532	201
1300	599	189
0067		
SEE NOTES 2,7		
093810	0	0
3824	23	173
3840	40	264
3850	48	355
3907	61	528
3917	69	637
3927	77	723
3934	83	785
3942	90	856
3950	101	937
4000	121	1000
4007	152	1014
0068		
SEE NOTES 2,7		
151600	0	0
1625	52	186
1648	86	390
1717	93	392
1828	98	392
2613	110	392
3841	121	392
5115	143	392
162009	321	392
2308	528	390
2328	572	390
2347	622	394
2410	691	381
0069		
SEE NOTES 2,7		
191600	0	0
1624	29	117
1637	54	240
1708	59	241
2000	64	240
5806	78	241
214850	94	284
231500	98	239
014500	108	240
051608	118	240
101545	145	241
5045	150	241
114822	161	241
131231	196	240
3352	213	241
140255	246	241
2217	296	241
5045	395	241
150543	455	241
3040	554	241
5046	632	242
162030	763	241
2500	794	241
0070		
SEE NOTES 2,7		
204745		0
4812	18	71
4835	70	258
4853	90	400
4909	104	400
5057	113	398
5400	139	400
5600	163	400
5700	180	398
5830	229	400
5915	272	400
5945	325	400
210012	405	398
0026	539	394
0071		
SEE NOTES 2,7		
134200	0	0
4300	21	72
4400	43	157
4430	53	202
4500	62	244
4530	68	289
4600	77	335
4700	91	425
4800	109	515
4900	121	607
4930	127	646
5000	135	680
5100	149	750
5200	174	799
5230	201	800
5300	282	677
5320	448	355
5345	552	195
5400	343	157
0072		
SEE NOTES 2,7		
152400	0	0
2407	12	71
2418	28	168
2427	37	260
2437	43	346
2446	51	435
2455	58	524
2503	64	608
2511	70	692
2520	75	774
2527	82	851
2534	85	930
2542	91	1007
2550	96	1070
2600	105	1144
2609	116	1216
2618	132	1265
2623	166	1279
2628	595	
0073		
SEE NOTES 2,7		
165700	0	0
5900	26	68
170000	49	165
0300	69	263
0500	88	357
0700	111	447
0900	138	529
1000	153	562
1130	171	578
1138	190	574
1200	205	558
1300	255	484
1400	324	398
1500	390	337
1700	489	268
1900	571	234
2500	792	201
0074		
SEE NOTES 2,7		
132200	0	0
2210	23	61
2221	46	138
2233	67	235
2335	78	237
2633	86	237
3900	102	239
5200	110	237
140600	121	239
3000	155	237
3830	179	237
4500	215	237
5035	278	237
5300	333	237
5500	396	240
5700	481	237
5900	601	238
0075		
SEE NOTES 2,7		
162200	0	0
2222	39	122
2248	82	167
2250	90	403
2335	102	402
2500	113	402
2700	126	404
3000	145	401
3135	218	405
3530	267	400
3604	311	401
3630	359	402
3700	437	403
3726	557	396
3740	676	383
0076		
SEE NOTES 2,7		
083900	0	0
3915	18	95
3940	43	241
4000	50	240
4700	55	241
091100	62	241
4517	68	241
123700	80	241
131200	84	240
143500	87	239
161500	91	240
184300	98	238
204000	107	239
214300	111	239
233802	118	239
014107	128	240
025907	138	241
030145	118	
031800	117	
080700	117	
0077		
SEE NOTES 2,7		
190705	0	0
0802	15	46
0900	41	135
1000	61	239
1100	75	326
1200	92	420
1300	106	520
1400	122	619
1500	141	704
1548	170	738
1602	190	729
1620	237	670
1634	284	588
1648	368	436
1723	494	255
1800	561	203
0078		
SEE NOTES 2,7		
204000		0
204025	40	167
204046	62	345
204105	76	525
204121	89	694
204138	102	849
204154	115	850
204212	133	1007
204228	166	1123
204235		
204307		
0079		
SEE NOTES 2,7		
213100	0	0
213300	21	84
213404	31	319
213500	46	411
213800	61	503
214003	74	587
214200	88	677
214501	109	784
214705	138	795
214800	274	585
214900	391	255
215011	428	234
0080		
SEE NOTES 2,7		
152500	0	0
152515	17	59
152527	37	162
152536	48	236
152700	55	237
153105	61	238
155000	73	239
162745	92	238
164145	108	240
165200	135	237
165723	154	238
170407	192	239
161400	287	239
171830	370	238
172200	454	238
172500	536	2[illegible]
172800	63[illegible]	242
173011	720	238
0081		
SEE NOTES 2,7		
182903	0	0
182935	22	161
182951	36	307
183001	43	401
183045	50	401
183217	57	400
183755	66	401
184300	79	401
184705	93	400
184955	114	401
185200	147	401
185310	189	403
185342	224	401
185430	298	403
185517	405	401
185600	559	402
185622	675	400
0082		
SEE NOTES 2,7		
192500	0	0
192520	37	63
192535	72	163
192835	88	163
194200	101	166
204523	115	166
235715	128	163
010812	133	166
011500	113	3
073627	112	3
073847	131	164
104248	143	163
142505	156	163
154347	162	166
154843	140	0
0083		
SEE NOTES 2,7		
185700	0	0
185900	0	2
190100	4	36
190200	20	107
190230	33	162
190300	51	232
190330	70	289
190400	96	321
190430	132	329
190454	169	312
190530	232	251
190600	278	216
190630	321	192
190700	361	188
190730	400	177
190800	439	172
190830	480	171
190900	514	171
0084		
SEE NOTES 2,7		
194000	0	0
194200	26	111
194330	40	195
194407	64	275
194618	68	299
194500	101	382
194530	128	429
194600	158	450
194630	191	472
194700	232	475
194730	268	454
194817	335	422
194900	396	403
195000	479	388
195330	748	316
0085		
SEE NOTES 2,7		
205200	0	0
205300	14	56
205330	38	97
205400	70	105
205430	114	105
205500	156	105
205530	194	101
205600	232	95
205630	273	89
205700	311	86
205730	348	82
205800	388	81
205830	426	80
205900	468	77
205930	502	75
210000	540	73
210033	582	73
210100	618	73
210130	654	71
210150	677	71
0086		
SEE NOTES 2,7		
214400	0	0
214406	11	65
214410	19	143
214415	28	221
214420	36	303
214425	48	386
214430	63	477
214435	69	552
214439	79	613
214443	96	692
214450	123	733
214454	165	721
[illegible]4500	258	523
214505	339	344
214514	411	263
214527	511	225
0087		
SEE NOTES 2,7		
220800	0	0
220807	1	15
220813	11	57
220820	25	151
220826	36	234
2[illegible]31	47	317
220[illegible]6	56	393
220840	65	468
220847	79	566
220852	90	637
220856	97	700
220901	109	756
220905	120	812
220912	139	880
220917	157	920
220926	190	958
220931	238	958
220937	312	858
220942	709	409
220955	732	487
0088		
SEE NOTES 2,7		
223900	0	0
223916	6	25
223921	16	100
223926	30	152
223930	46	200
223935	69	232
223939	96	235
223945	140	240
223951	178	208
224000	242	175
224008	293	159
224020	376	143
224035	477	134
224049	567	127
224115	746	120
224147	938	112
224218	1130	110
224248	1326	104
224301	1381	103
224314	1485	100
0089		
SEE NOTES 2,7		
241300	0	0
241328	1	8
241333	14	55
241340	29	125
241346	42	212
241352	53	295
241357	63	375
241402	71	451
241407	77	531
241411	86	613
241415	92	684
241420	101	756
241425	110	818
241430	127	891
241434	144	925
241437	144	889
241442	262	614
241445	306	531
241515	520	361
0090		
SEE NOTES 2,7		
161220	0	0
161308	0	1
161316	3	18
161321	7	35
161340	20	104
161405	37	249
161600	53	250
161619	64	249
162520	90	249
162902	107	249
163158	127	247
163358	147	249
163649	187	249
163834	229	250
163953	267	249
164042	307	249
164125	347	247
164155	388	249
164220	431	249
164236	467	249
0091		
SEE NOTES 2,7		
201600	0	0
201611	8	2
201630	18	169
201652	35	247
201737	52	247
201845	72	247
201926	80	247
202045	98	247
202215	120	247
202330	138	247
202539	161	247
202616	192	247
202802	236	247
203045	280	247
203115	324	249
203230	363	249
203345	408	248
203415	476	249
0092		
SEE NOTES 2,7		
211444	0	0
211538	0	1
211549	13	50
211611	37	117
211649	169	242
211703	258	238
211711	328	247
211719	417	244
211727	521	244
211734	621	244
211740	724	246
211752	937	244
211759	1078	244
211807	1261	244
0093		
SEE NOTES 2,7		
214046	0	0
214100	0	0
214117	8	17
214130	14	101
214152	28	246
214405	35	246
215027	47	246
220433	54	247
222100	71	246
223925	88	246
224850	96	246
231006	120	246
232348	143	246
233445	170	246
234600	215	246
235400	268	247
235900	310	246
240406	363	246
240945	429	246
0094		
SEE NOTES 2,7		
093230	0	0
093330	14	103
094500	16	103
110800	25	103
130430	36	103
150300	55	103
171400	99	103
174300	123	103
180000	144	103
182100	184	103
183900	233	103
185400	261	103
190600	296	103
191800	329	103
193100	370	103
0095		
SEE NOTES 2,7		
220830	0	0
220945	45	103
221000	60	103
221019	68	103
221034	81	103
221100	101	103
221115	117	103
221200	163	103
221230	199	103
221300	241	103
221330	287	103
221400	337	103
221430	392	103
221500	452	103
221530	519	103
221600	586	103
221630	666	103
221700	734	103
221730	807	103
221800	880	103
0096		
SEE NOTES 2,7		
094515	0	0
094645	27	103
095000	39	103
095800	58	103
101045	89	103
102400	127	103
103745	169	103
105445	216	103
110645	253	103
111545	280	103
113850	360	103
114700	378	103
115445	403	103
115700	[illegible]87	0
115000	[illegible]	0
0097		
SEE NOTES 2,7		
193755	0	0
193807	2	6
193900	22	90
194000	44	182
194100	70	262
194200	95	336
194300	123	411
194337	145	442
194416	177	455
194500	239	476
194600	339	352
194700	430	304
194830	547	266
194918	610	250
0098		
SEE NOTES 2,7		

TIME	STRAIN	STRS
220153	0	0
220159	[illegible]	14
220208	18	74
220220	37	173
220230	54	264
220241	69	349
220251	80	423
220300	89	528
220310	102	613
220322	123	698
220326	134	720
220332	160	741
220337	191	741
220343	240	718
220350	314	614
220356	384	528
220412	516	351
220428	552	268
220455	575	191
0099		
SEE NOTES 2,7		
222855	0	0
222913	6	5
223014	42	76
223116	67	174
223215	88	265
223316	[illegible]	351
223425	142	441
223516	180	476
223529	196	474
223600	251	426
223635	325	351
223700	372	312
223730	417	280
223800	461	257
223835	510	239
223907	551	232
223945	596	222
0100		
SEE NOTES 2,7		
135247	0	0
5310	4	20
5322	22	128
5334	40	238
5415	48	238
5545	57	239
140300	73	240
2240	93	240
5023	114	239
151828	131	240
4622	151	239
165352	198	238
181704	248	239
191211	305	240
5044	329	240
205133	376	239
215045	420	238
222122	439	238
0101		
SEE NOTES 2,7		
091718	0	0
1727	5	19
1802	61	310
1844	95	398
1916	118	398
1930	127	399
1951	145	398
2017	164	396
2035	181	396
2050	198	398
2121	243	395
2143	288	395
2200	332	397
2211	377	401
2223	434	387
2231	502	370
2235	561	313
0102		
SEE NOTES 2,7		
103206	0	0
3222	19	240
3500	75	240
4100	91	241
4700	105	240
5902	118	239
112400	144	239
5808	172	239
125315	218	239
134600	261	239
143600	305	238
152300	350	239
160530	395	239
4003	439	240
170800	475	238
1603	451	
180200	448	
203000	447	
0103		
SEE NOTES 2,7		
105148	0	0
5200	0	0
5230	3	10
5310	12	59
5332	20	116
5400	32	186
5430	44	266
5500	58	346
5530	71	426
5630	100	576
5600	185	509
5700	125	615
5720	145	631
5735	167	624
5800	207	560
5830	264	461
5900	314	394
110000	398	322
0010	407	314
0104		
SEE NOTES 2,7		
122903	0	0
2943	13	53
3015	22	137
3100	40	252
3130	57	320
3200	77	383
3230	99	428
3250	117	460
3301	125	470
3400	197	477
3430	240	453
3500	280	428
3600	363	396
3635	409	383
3700	440	371
3730	480	365
3800	517	357
0105		
SEE NOTES 2,7		
142745	0	0
2800	0	0
2820	5	32
2900	26	137
2932	45	209
3000	68	270
3030	95	316
3100	128	334
3130	171	338
3203	220	327
3218	241	309
3230	261	303
3300	273	283
3330	274	268
3401	274	258
3500	470	243
3532	530	237
3600	542	234
3615	589	229
3700	644	218
3713	666	218
0107		
SEE NOTES 2,7		
155046	0	0
5100	0	0
5118	2	23
5200	18	120
5230	31	199
5300	45	285
5400	77	428
5430	99	487
5518	152	514
5534	173	514
5600	213	464
5700	304	375
5731	348	348
5801	385	334
5830	422	327
5900	458	319
0108		
SEE NOTES 2,7		
165548	0	0
5600	0	0
5612	18	158
5624	37	372
5629	47	456
5635	57	549
5639	66	626
5647	85	761
5653	100	824
5700	121	894
5706	156	917
5711	189	886
5715	229	780
5719	299	618
5723	354	481
5728	400	390
5736	447	333
5738	490	292
5747	548	260
0109		
SEE NOTES 2,7		
182703	0	0
2720	19	16
2727	30	83
2732	41	153
2737	52	225
2743	64	310
2750	82	392
2756	101	468
2805	134	531
2810	161	539
2815	186	531
2821	219	468
2830	304	393
2838	371	354
2848	439	321
2900	510	298
2909	564	283
0110		
SEE NOTES 2,7		
193245	0	0
3303	2	9
3310	14	114
3315	23	201
3320	36	288
3325	46	368
3330	61	444
3336	78	522
3341	97	589
3350	133	663
3358	176	677
3403	213	664
3409	261	590
3416	331	484
3421	373	443
3426	409	409
3434	469	371
3441	515	348
0111		
SEE NOTES 2,7		
200645	0	0
0700	0	0
0707	10	38
0713	20	103
0718	30	181
0723	42	266
0729	60	348
0735	72	424
0741	96	503
0746	115	535
0755	180	539
0800	224	481
0805	272	424
0810	313	385
0818	372	308
0112		
SEE NOTES 2,7		
205357	0	0
5402	0	0
5410	6	51
5417	17	109
5423	29	246
5451	44	247
5535	57	247
5634	67	247
210046	87	247
0415	108	247
0945	128	246
1530	146	247
2030	165	247
3200	202	247
4616	238	247
5900	280	247
220800	313	247
1700	350	247
2750	394	247
3545	425	246
0113		
SEE NOTES 2,7		
233443	0	0
3500	0	3
3513	11	82
3528	31	245
3628	46	245
3815	57	245
4531	78	244
240300	101	247
2653	120	245
011645	167	245
021230	196	244
031535	236	245
042633	284	245
5437	313	245
061257	370	245
070711	418	245
0114		
SEE NOTES 2,7		
073734	0	0
3800	3	
3815	17	84
3820	22	120
3830	36	246
3913	51	244
3933	57	246
3935	68	246
4315	88	246
4715	109	246
5813	150	246
080808	181	246
2029	222	246
3047	268	246
4116	314	246
5319	380	246
090855	464	246
0115		
SEE NOTES 2,7		
092400	0	
2430	10	102
2700	14	102
100900	32	102
122700	50	102
133200	68	102
230000	78	102
114200	104	102
144600	108	102
171100	113	102
1232	95	100
3000	93	100
230300	92	100
080350	92	100
0116		
SEE NOTES 2,7		
103200	0	
3300	16	102
111600	36	102
132900	54	102
162700	73	102
191500	83	102
234030	104	102
081043	139	102
1230	126	0
5300	123	100
0117		
SEE NOTES 2,7		
101855	0	0
1918	12	102
2530	31	102
3400	38	102
120500	57	102
161900	76	102
220600	90	102
082400	112	102
2515	102	0
2600	87	0
112200	83	0
0118		
SEE NOTES 2,7		
151400	0	0
1458	0	0
1505	7	42
1519	169	15
0119		
SEE NOTES 2,7		
162952	0	
2958	0	0
3004	6	14
3008	11	28
3013	18	42
3017	22	57
3020	26	70
3025	28	84
3028	31	98
3031	33	112
3037	38	142
3042	42	186
3050	48	249
3055	54	279
3103	63	322
3113	81	376
0120		
SEE NOTES 2,7		
192148	0	0
2200	0	0
2209	1	2
2214	1	5
2218	2	8
2228	4	15
2232	5	18
2243	7	25
2300	10	36
2315	13	47
2331	17	58
2365	18	69
2358	22	80
2422	25	95
2444	29	112
2497	31	121
2530	35	166
2552	40	199
2615	43	235
2710	55	302
2807	70	370
2910	90	438
3022	135	494
3035	154	491
3055	193	472
3116	255	424
0121		
SEE NOTES 2,7		
205945	0	1
210004	0	0
0017	1	6
0032	4	18
0044	5	26
0056	7	35
0105	9	41
0120	12	51
0132	15	60
0155	21	77
0220	29	93
0243	31	110
0307	36	128
0330	40	162
0353	45	196
0417	49	231
0445	56	265
0515	64	299
0547	76	333
0624	91	367
0709	119	400
0753	157	
0818	193	414
0915	292	381
1114	508	294
0122		
SEE NOTES 2,7		
214547		0
4610		13
4616		19
4621		37
4627		62
4635		92
4640		110
4644		134
4652		206
4700		262
4705	47	
0123		
SEE NOTES 2,7		
121147	0	0
1218	1	2
1345	16	101
1520	37	244
1630	53	244
1740	70	244
1900	95	244
2025	127	244
2320	208	244
2525	286	244
2650	356	244
2733	396	244
2803	425	244
2940	540	244
3035	608	245
3100	644	245
3150	712	244
3240	782	245
3340	874	244
3445	973	244
3600	1085	244
3730	1166	125
4605	1228	0
0124		
SEE NOTES 2,7		
141900	0	0
2100	56	68
2205	73	144
2300	83	245
3300	95	245
163600	120	245
220915	152	245
083740	198	245
101800	207	245
140200	227	245
204800	268	246
4830	255	0
211000	252	0
230000	251	0
080900	251	0
0125		
SEE NOTES 2,7		
132646	0	0
2700	0	0
2740	7	51
2745	19	137
2750	29	201
2755	40	265
2800	59	319
2805	78	442
2811	106	393
2818	150	403
2825	192	400
2828	219	383
2833	253	364
2839	293	343
2844	332	322
2853	377	305
2902	430	291
2910	489	281
2922	562	271
2945	705	258
3004	819	250
3016	893	246
0126		
SEE NOTES 2,7		
153000	0	0
3106	4	3
3253	10	62
3650	31	124
3716	49	180
3735	65	204
3756	88	223
3814	107	227
3833	133	226
3842	146	225
3854	165	220
3920	203	212
3947	242	205
4016	279	194
4047	320	187
4115	357	181
4144	396	175
4242	472	167
4341	549	164
4511	654	162
4640	780	162
4810	895	162
0127		
SEE NOTES 2,7		
132450	0	0
2502	0	3
2520	9	85
2545	23	248
2607	35	248
2821	50	248
3057	69	248
3330	86	249
3922	124	247
4308	164	247
4517	203	248
4630	239	247
4736	280	247
4811	309	249
4853	350	247
4923	383	249
4951	420	248
5019	458	248
5106	533	249
5250	609	249
0128		
SEE NOTES 2,7		
181600	0	0
1616	1	8
1640	31	82
1705	58	177
1732	86	285
1750	100	358
1812	121	447
1835	165	535
1900	188	587
1909	219	587
1915	245	574
1925	286	533
1935	358	446
1947	431	357
2000	508	266
2015	598	177
2035	681	137
2052	736	121
0129		
SEE NOTES 2,7		
184200	0	0
4212	11	0
4307	4	0
4315	41	16
4335	114	323
4345	148	460
4405	204	709
4415	261	717
4420	307	668
4427	363	598
4436	426	515
4447	507	468
4458	582	428
4515	693	372
4530	807	303
4600	989	225
4622	1137	169
0130		
SEE NOTES 2,7		
104630		
5130	0	0
5147	16	
5200	45	136
5208	62	265
5214	74	351

TIME	STRAIN	STRS
5220	85	427
5225	100	513
5230	120	574
5240	163	620
5245	193	618
5251	243	568
5300	313	49[illegible]
5310	385	427
5321	468	392
5340	586	397
5352	660	397
5406	737	396
0131		
SEE NOTES 2,7		
100530	0	0
0603	0	4
0615	23	86
0626	39	183
0635	51	273
0645	64	365
0655	78	452
0705	92	539
0715	114	626
0730	168	680
0734	195	676
0740	238	653
0743	278	606
0747	327	535
0751	407	398
0755	516	214
0802	592	127
0806	628	100
0814	683	92
0132		
SEE NOTES 2,7		
120539	0	0
0608	0	15
0615	12	96
0621	27	185
0627	40	265
0631	52	346
0636	64	427
0641	79	510
0646	88	574
0651	105	653
0658	131	725
0705	161	756
0709	189	755
0713	229	702
0720	304	570
0725	372	460
0735	464	364
0746	545	320
0802	657	288
0133		
SEE NOTES 2,7		
135413		0
140020	0	6
44	38	16
47	43	62
52	51	134
56	58	207
0100	65	270
0106	78	365
0111	87	442
0116	100	523
0120	112	595
0126	128	675
0132	143	748
0139	166	818
0147	196	880
0153	227	896
0157	261	884
0203	319	803
0211	415	618
0226	585	366
0238	680	299
0252	766	281
0134		
SEE NOTES 2,7		
151748	0	0
1800	0	16
1807	7	91
1823	43	336
1851	132	676
1857	171	669
1902	210	636
1911	282	520
1925	382	424
1936	460	377
1946	532	334
1959	650	288
2013	704	249
0135		
SEE NOTES 2,7		
192655	0	0
3057	3	5
3118	19	5
3138	33	13
3200	41	81
3209	44	107

TIME	STRAIN	STRS
3209	53	160
3238	58	189
3255	69	232
3315	81	271
3330	92	298
3420	141	348
3550	183	364
3545	254	291
3625	310	261
3652	350	249
3735	408	233
3810	446	231
3850	504	226
0136		
SEE NOTES 2,7		
185452	0	0
5503	0	7
5642	17	75
5719	36	160
5765	51	230
5817	71	301
5900	103	374
5918	120	388
190000	180	374
10	195	361
50	263	305
0118	303	277
0215	383	243
0315	463	238
0419	543	230
0453	588	229
0535	643	222
0137		
SEE NOTES 2,7		
125123	0	0
5200	3	2
5213	22	102
5221	30	166
5229	35	251
5249	62	244
5350	54	247
5603	73	242
5750	88	246
5930	108	246
130100	143	243
0600	183	243
0930	223	245
1300	291	243
1530	361	244
1700	431	249
1900	527	244
2100	652	245
2135	635	
0138		
SEE NOTES 2,7		
092445	0	0
2500	0	16
2510	7	67
2518	14	134
2525	18	245
2848	30	244
3050	33	243
105200	57	246
162900	97	241
205859	122	243
235800	134	242
074034	170	243
102800	187	244
3030	173	
4100	173	
113500	172	
0139		
SEE NOTES 2,7		
183965	0	
4003	0	1
4022	2	11
4040	7	23
4055	11	33
4124	19	52
4150	23	71
4220	30	94
4245	34	112
4312	39	133
4400	48	170
4448	57	205
4538	66	243
4627	75	279
4745	88	333
4847	99	375
5030	121	439
5230	168	470
5245	176	466
5300	186	457
5420	266	366
5545	354	280
5653	408	236
0140		
SEE NOTES 2,7		
104240	0	
4325		102
4350	238	102

TIME	STRAIN	STRS
4504	260	102
4555	276	102
110700	288	102
5630	313	102
130000	320	102
140700	327	102
150800	338	102
171900	346	102
185000	356	102
200700	365	102
211100	370	102
2734	347	0
3000	332	0
4000	330	0
075700	323	0
083600	322	0
0149		
SEE NOTES 2,7		
190850	0	0
0900	0	0
0905	6	25
0910	16	58
0915	25	97
0925	41	176
0929	48	210
0933	57	247
0938	68	283
0943	79	319
0948	93	350
0954	110	387
1007	159	429
1013	189	429
1017	218	418
1022	264	372
1031	358	283
1034	431	229
0150		
SEE NOTES 2,7		
194751	0	0
4800	0	1
4815	31	93
4823	44	158
4834	66	241
4904	87	241
4940	106	243
5020	124	243
5058	143	243
5136	160	241
5214	178	238
5256	215	237
5312	249	243
5352	296	224
5510	362	243
5642	420	243
5715	482	243
5733	552	240
5755	613	239
0151		
SEE NOTES 2,7		
210249	0	0
0300	1	13
0307	15	91
0313	35	194
0319	57	270
0328	94	350
0333	117	368
0338	150	375
0344	191	372
0355	280	311
0411	388	270
0425	484	249
0442	594	240
0500	711	231
0518	824	223
0540	977	216
0152		
SEE NOTES 2,7		
231232	0	0
1241	9	66
1251	23	155
1305	28	155
1400	37	155
1800	51	153
3700	77	155
5200	92	156
242100	115	155
5500	140	155
013800	173	155
020300	192	155
4100	220	155
030300	238	155
042200	298	155
2307	290	
0153		
SEE NOTES 2,7		
091500	0	0
1562	21	102
3800	48	102
103500	68	102
114900	89	102
135100	122	102

TIME	STRAIN	STRS
151600	140	102
165100	159	102
180037	176	102
205400	214	102
220000	228	102
241557	258	102
081600	380	102
3500	386	102
3832	380	
4900	380	
092200	380	
2342	380	
0157		
SEE NOTES 2,7		
144350	0	0
4402	1	0
4406	10	55
4410	23	122
4415	33	171
4420	44	242
4425	58	319
4429	72	392
4432	78	434
4435	87	485
4439	100	539
4443	110	589
4446	130	608
4449	160	589
4453	208	479
4456	264	359
4500	305	300
4507	367	188
4514	424	138
0158		
SEE NOTES 2,7		
160348	0	0
0401	0	0
0406	10	42
0410	15	100
0414	23	166
0418	32	240
0421	35	284
0425	47	361
0429	57	393
0432	67	439
0435	77	481
0440	85	535
0446	107	587
0450	126	612
0454	151	612
0457	183	573
0503	265	439
0512	340	316
0520	419	250
0526	462	231
0159		
SEE NOTES 2,7		
131945	0	0
2000	0	0
2005	9	48
2009	18	105
2014	30	177
2018	40	227
2022	49	278
2025	58	330
2029	68	383
2032	79	429
2037	96	483
2042	114	525
2047	138	561
2051	166	599
2100	219	566
2106	285	483
2115	377	352
2125	467	292
2146	620	178
0160		
SEE NOTES 2,7		
133620	0	0
3633	15	0
3639	49	3
3643	57	61
3647	66	114
3654	83	211
3659	98	270
3703	115	305
3711	147	357
3717	174	403
3723	202	428
3733	262	448
3741	307	448
3757	415	446
3819	560	414
3845	752	357
3905	877	308
3919	972	296
3934	1071	270
3947	1161	252
0161		
SEE NOTES 2,7		
185152	0	0

TIME	STRAIN	STRS
5200	3	25
5205	13	92
5208	20	138
5212	30	193
5215	43	235
5219	58	262
5222	79	276
5227	108	278
5232	147	272
5238	194	249
5249	267	225
5301	342	209
5312	412	200
5325	498	189
5337	575	188
5356	691	177
5408	765	178
5421	846	172
5438	959	169
5504	1114	166
0162		
SEE NOTES 2,7		
194950	0	0
5202	10	8
5208	33	25
5212	40	73
5215	44	121
5219	56	185
5223	70	229
5229	93	266
5232	156	266
5242	183	262
5251	243	229
5302	310	207
5319	407	192
5333	500	185
5347	590	175
5402	681	164
0166		
SEE NOTES 2,7		
140145	0	0
0203	0	2
0207	5	59
0215	18	177
0222	33	297
0230	47	456
0240	63	647
0248	77	795
0257	92	939
0309	110	1155
0167		
SEE NOTES 2,7		
150518		
0530	0	0
0534	7	44
0542	24	156
0548	37	245
0558	56	398
0607	75	550
0615	88	663
0621	100	778
0632	120	923
0642	144	1067
0654	193	1163
0658	222	1136
0700	286	926
0168		
SEE NOTES 2,7		
162545	0	0
2600	0	0
2639	21	111
2705	43	256
175200	81	242
182800	92	242
184100	97	236
200200	140	249
204500	184	249
205900	214	242
211300	250	266
212400	292	249
212408	293	249
213000	329	249
213020	308	
214000	301	
223800	301	
0169		
SEE NOTES 2,7		
104304		
4345		
4432	0	0
4445	24	246
4900	46	246
5900	63	246
110800	86	246
1900	107	246
113000	154	246
3700	175	246
4100	2[illegible]7	246
4300	[illegible]7	246
4600	315	253
5100	376	246

TIME	STRAIN	STRS
5137	356	
0170		
SEE NOTES 2,7		
132000	0	0
2030	47	248
2500	83	248
2800	107	242
3115	153	248
3300	203	249
3400	260	248
3452	341	248
3509	379	241
3532	446	248
3552	515	249
3604	572	233
3615	670	242
3633	710	251
3648	813	246
3702	918	240
3714	1021	238
3730	1154	243
3746	1304	244
3800	1436	242
3811	1504	249
3822	1584	242
3848	1691	242
0171		
SEE NOTES 2,7		
145745	0	0
5759	35	242
5815	46	241
5837	62	242
5925	84	250
150005	119	248
0152	142	242
0203	181	246
0243	223	241
0313	258	232
0335	301	244
0403	377	249
0421	453	244
0172		
SEE NOTES 2,7		
155845	0	0
5905	46	240
5931	71	240
5953	88	240
160015	102	240
0040	116	240
0125	139	240
0224	172	240
0330	209	243
0459	253	243
0600	297	250
0645	330	244
0747	380	245
0831	415	239
0905	450	242
0920	430	0
0173		
SEE NOTES 2,7		
163451	0	0
3502	41	241
3521	57	248
3616	76	248
3715	94	242
3827	114	261
3923	133	251
4059	171	252
4217	218	244
4306	249	258
4355	291	249
4436	330	249
4458	364	241
4527	406	241
4549	446	248
4557	421	
0174		
SEE NOTES 2,7		
175600	0	0
5708	58	232
5714	92	251
5719	127	255
5724	162	251
5729	208	242
5733	250	235
5737	291	251
5741	340	242
5743	386	259
5747	447	259
5751	523	251
5755	617	259
5800	751	251
5806	732	
0175		
SEE NOTES 2,7		
190300	0	0
0340	0	0
0404	41	246
0409	57	248
0415	77	252

TIME	STRAIN	STRS
0420	98	252
0423	115	252
0427	137	248
0432	173	252
0437	213	256
0441	249	256
0445	287	256
0451	341	232
0457	403	248
0500	445	264
0504	490	281
0508	538	252
0512	482	
0182		
SEE NOTES 2,7		
133340	0	0
3400	20	102
3442	47	102
3506	66	102
3525	85	102
3545	108	102
3600	124	102
3618	143	102
3645	181	102
3708	219	102
3735	62	102
3755	297	102
3815	335	102
3837	378	102
3853	412	102
3910	450	102
3950	543	102
4030	637	102
4105	739	102
4135	835	102
4235	1031	102
4315	1075	102
0183		
SEE NOTES 2,7		
150745	0	0
0805	32	102
0840	68	102
0930	86	102
1030	111	102
1145	141	102
1235	160	102
1342	183	102
1515	220	102
1635	260	102
1915	350	102
2130	430	102
2247	487	102
2430	567	102
2535	626	102
2554	477	
2633	550	
0184		
SEE NOTES 2,7		
163602	0	0
3904	51	102
4235	63	102
5125	96	102
171800	121	102
3500	123	102
5200	145	102
184505	180	102
200400	225	102
221600	295	102
2200	294	0
3045	272	
3300	261	
0187		
SEE NOTES 2,7		
135604		
5725		
5746	0	102
5820	8	102
140100	25	102
142700	44	102
143500	65	102
150700	96	102
3400	128	102
5200	151	102
160700	182	102
2200	223	102
3700	296	102
4330	341	102
4800	380	102
5200	419	102
5430	465	102
5730	496	102
170000	535	102
0300	588	102
0610	640	102
0188		
SEE NOTES 2,7		
094300	0	0
4328	66	0
4409	50	102
5015	73	102
100200	108	102

TIME	STRAIN	STRS
0700	131	102
1000	150	102
1300	169	102
1530	189	102
1710	208	102
2030	247	102
2300	288	102
2515	323	102
2730	363	102
2930	401	102
3131	438	102
3330	478	102
3500	518	102
3730	594	102
3930	669	102
3950	492	
4710	627	
0189		
SEE NOTES 2,7		
212800	0	0
2805	13	16
2809	29	36
2814	44	58
2818	51	67
2930	51	68
4000	55	68
0190		
SEE NOTES 2,7		
021700	0	0
1715	15	20
1732	32	40
2000	32	40
2500	35	40
3000	36	40
4100	37	40
0191		
SEE NOTES 2,7		
034830	0	0
4843	20	20
0192		
SEE NOTES 2,7		
113233	0	0
3300	27	29
3500	30	29
4400	33	29
120300	35	29
2300	36	29
4500	37	29
131500	38	29
141200	39	29
150000	40	29
155600	42	29
165400	43	29
190600	47	29
220900	51	30
020000	56	29
060300	60	29
110000	72	29
170800	86	29
220000	106	29
000600	114	29
073800	135	29
084500	151	29
090000	155	29
091500	163	29
093500	175	29
0193		
SEE NOTES 2,7		
100310	0	0
0333	26	33
0413	31	33
0194		
SEE NOTES 2,7		
102140	0	0
2150	23	23
2200	37	46
2600	41	46
4000	44	46
5900	47	46
112700	50	46
5600	53	46
123500	57	46
130500	60	46
132500	64	46
140700	70	46
3800	78	46
150200	97	46
151100	117	46
0196		
SEE NOTES 2,7		
182900	0	0
2905	10	26
2909	19	53
2913	27	85
2917	34	115
2921	40	144
2924	46	166
2928	52	199
2931	58	228
2935	66	254
2938	75	280

TIME	STRAIN	STRS
2945	99	303
2948	124	290
2953	185	228
3004	274	155
3040	498	90
0197		
SEE NOTES 2,7		
203939	0	0
3954	20	153
3959	27	211
4002	31	249
4006	36	296
4010	40	355
4013	45	409
4016	47	448
4020	53	515
4023	57	571
4026	60	605
4030	66	656
4037	579	741
0198		
SEE NOTES 2,7		
225045	0	0
5052	11	41
5057	26	90
5104	49	169
5111	67	250
5117	82	329
5121	94	395
5125	104	451
5130	121	457
5135	141	566
5140	167	598
5143	193	566
5146	230	491
5157	319	386
0199		
SEE NOTES 2,7		
224700		
4705	0	0
4710	16	41
4716	39	81
4723	70	137
4728	100	146
4733	140	147
4742	201	132
4752	264	171
4800	316	112
4812	396	103
4825	482	94
4836	558	86
4394	674	78
0200		
SEE NOTES 2,7		
132200	0	0
132204	4	47
132207	11	96
132211	19	138
132214	29	188
132218	37	232
132223	53	292
132228	71	350
132233	92	390
132239	124	410
132245	165	406
132250	211	350
132259	289	260
132312	380	202
132329	491	168
132345	600	145
0201		
SEE NOTES 2,7		
115100		
115107	0	0
115112	24	31
115117	51	58
115123	80	88
115127	106	104
115131	125	112
115136	148	116
115140	188	114
115147	236	114
115157	304	111
115215	424	98
115230	528	96
115245	626	96
115315	828	90
115330	922	88
0202		
SEE NOTES 2,7		
154832	0	0
154836	8	38
154840	15	90
154844	31	137
154847	39	169
154853	73	207
154856	93	218
154902	127	225
154912	195	219
154921	255	200
154929	319	182

TIME	STRAIN	STRS
154940	395	160
154957	519	140
0203		
SEE NOTES 2,7		
170916	0	0
170920	7	39
170925	20	80
170928	31	121
170932	41	164
170935	47	204
170940	59	252
170944	70	324
170949	86	416
170956	96	485
171000	107	599
171004	118	637
171012	135	741
171020	164	869
171024	180	866
171028	218	818
171032	557	0
0204		
SEE NOTES 2,7		
184132	0	0
184137	12	44
184142	30	90
184148	64	127
184158	80	160
184209	188	168
184228	320	155
184243	424	147
184257	520	138
184313	620	132
184317	648	131
184327	720	130
184343	824	124
184358	920	122
0205		
SEE NOTES 2,7		
213830	0	0
213901	23	102
214008	37	102
214400	50	102
214500	54	102
215102	49	102
220000	87	102
221102	104	102
222100	118	102
224203	142	102
232400	187	102
235303	214	102
244800	269	102
251752	302	102
260553	356	102
264653	404	102
275145	488	102
275900	492	102
280000	473	102
0206		
SEE NOTES 2,7		
092100	0	0
092245	156	102
092330	174	102
092400	204	102
092416	219	102
092432	238	102
092500	273	102
092534	320	102
092545	335	102
092600	358	102
092630	408	102
092700	461	102
092730	523	102
092834	623	102
092915	719	102
093054	815	102
093302	915	102
093345	1006	102
093429	1106	102
093507	1198	102
093550	1296	102
0207		
SEE NOTES 2,7		
122930		
123001	0	0
123005	13	21
123009	22	40
123012	29	56
123015	36	87
123018	41	111
123021	48	137
123024	52	152
123027	59	172
123030	63	214
123034	68	247
123038	73	282
123042	80	319
123047	88	353
123051	91	393
123057	99	450
123102	102	498

TIME	STRAIN	STRS
123110	116	571
123122	135	671
123132	185	743
0208		
SEE NOTES 2,7		
013701	0	0
013705	0	60
013711	11	127
013718	29	206
013721	38	253
013726	48	330
013730	57	400
013735	68	466
013740	80	562
013748	91	633
013751	107	746
013756	120	819
013802	134	887
013810	161	964
013818	198	1013
013822	225	1000
0209		
SEE NOTES 2,7		
101145	0	0
101202	0	0
101207	9	20
101212	20	57
101224	38	154
101233	52	245
101244	68	334
101254	81	423
101303	94	512
101313	109	598
101324	126	683
101331	144	729
101344	158	738
101337	180	723
0210		
SEE NOTES 2,7		
120200	0	0
120210	9	60
120217	29	142
120223	45	215
120227	56	266
120232	67	330
120237	77	417
120242	85	500
120246	96	567
120251	103	639
120255	113	717
120301	126	788
120307	144	860
120314	170	901
120317	193	896
120322	247	866
120326	309	818
120340	495	275
0211		
SEE NOTES 2,7		
041003	0	0
041008	0	61
041012	0	103
041017	4	152
041022	43	198
041028	57	228
041031	78	231
041035	125	228
041040	164	228
041045	190	216
041050	211	200
041056	257	177
041107	346	129
041118	427	101
0212		
SEE NOTES 2,7		
071540	0	0
071601	0	0
071605		32
071609	4	82
071613	33	135
071618	33	198
071623	40	257
071627	68	325
071632	79	395
071637	106	395
071643	146	432
071653	176	465
071657	220	469
071703	257	462
071710	295	432
071714	331	406
071719	369	377
071724	407	364
071729	444	294
0213		
SEE NOTES 2,7		
094640	0	0
094702	1	6
094706	9	59
094711	24	119
094715	40	152

TIME	STRAIN	STRS
094719	62	163
094723	72	163
094727	121	152
094740	208	143
094753	285	136
094803	359	127
094816	440	119
094827	517	111
094838	593	107
094851	673	103
094857	719	101
094909	785	98
094920	851	95
094926	900	95
094938	938	95
094951	1053	93
095006	1093	93
095009	1170	91
0214		
SEE NOTES 2,7		
102248	0	0
102300	0	0
102340	0	0
102345	2	11
102400	9	54
102417	18	95
102439	38	131
102506	107	146
102545	130	144
102624	188	127
102702	204	115
102756	283	103
102851	342	90
102945	437	85
103100	502	78
103207	673	78
103315	768	73
103423	861	72
0215		
SEE NOTES 2,7		
105638	8	0
105704	24	61
105734	53	97
105806	95	114
105812	103	118
105850	154	118
105855	180	118
105938	224	111
110000	300	97
110030	372	
110304	520	73
110400	597	70
110444	654	63
0216		
SEE NOTES 2,7		
035145	0	0
035201	0	0
035215	37	26
035239	50	65
035304	75	103
035337	120	109
035405	157	101
035437	195	90
035542	271	85
035613	310	85
035715	389	82
035812	467	78
035914	593	77
040020	670	77
040125	701	77
040227	772	77
040330	840	77
0217		
SEE NOTES 2,7		
070945	0	0
071000	1	9
071009	7	24
071016	9	53
071029	15	97
071055	29	98
071120	39	256
071163	48	332
071205	57	412
071228	65	489
071249	73	562
071312	83	637
071337	95	714
071413	121	765
071428	153	761
071445	202	637
071510	277	464
071553	369	379
0218		
SEE NOTES 2,7		
101121	0	28
101245	0	
101305	8	
101800	14	
103906	26	
125656	52	
160413	77	

TIME	STRAIN	STRS
180657	83	
200804	833	
210906	96	
260236	115	
341030	134	
440804	152	
481213	160	
530557	169	
560622	172	
560846	172	
0218		
SEE NOTES 2,7		
001000	0	28
160410	77	
200805	92	
210900	95	
221035	102	
231108	103	
241205	107	
251316	110	
251365	111	
261436		
281610	119	
281645	120	
301810	123	
311906	125	
322041	130	
342230	134	
352330	136	
440804	154	
450935	158	
471110	160	
481214	161	
501412	165	
511512	432	
521657	168	
541815	170	
562046	173	
572115	173	
0219		
SEE NOTES 2,7		
100245	0	0
100304	0	8
100308	8	55
100313	19	103
100317	30	159
100324	53	237
100331	76	315
100337	95	395
100343	110	479
100348	130	552
100356	160	620
100401	188	650
100405	218	641
100409	263	544
100414	345	355
100420	453	198
0220		
SEE NOTES 2,7		
091750	0	0
091802	1	0
091810	17	35
091815	37	78
091819	50	118
091825	68	165
091831	93	239
091839	102	320
091847	160	397
091901	225	473
091908	259	494
091913	286	499
091938	394	489
091925	446	427
091944	537	402
0221		
SEE NOTES 2,7		
111349	0	0
111404	2	11
111409	18	56
111414	49	89
111421	77	132
111427	109	149
111438	191	153
111449	272	143
111501	352	133
111519	469	126
111527	592	121
111546	653	118
111555	716	111
0222		
SEE NOTES 2,7		
092845	0	0
092902	1	3
092907	8	29
092911	18	41
092916	23	101
092920	31	141
092925	36	160
092932	47	238
092938	53	296
092945	64	357

TIME	STRAIN	STRS
092957	83	446
093003	103	477
0223		
SEE NOTES 2,7		
115745	0	0
115802	0	0
115805	4	8
115809	11	32
115814	17	64
115818	28	94
115823	35	154
115827	42	172
115832	51	217
115839	64	261
115844	75	306
115850	88	350
115858	108	395
115902	126	425
115905	147	397
0224		
SEE NOTES 2,7		
115101	0	0
115105	9	32
115110	17	89
115114	23	148
115119	39	203
115123	48	260
115127	59	305
115130	70	351
115136	92	400
115139	114	409
115147	170	411
115150	210	365
115157	278	284
0225		
SEE NOTES 2,7		
014840	0	0
014901	0	0
014908	4	8
014913	14	55
014917	22	103
014920	33	151
014925	48	206
014929	59	261
014933	70	316
014937	84	381
014941	96	432
014949	132	492
014954	166	492
014957	207	418
015001	259	293
0226		
SEE NOTES 2,7		
112045	0	0
112103	0	0
112111	4	15
112116	8	30
112132	16	79
112148	22	119
112204	30	158
112223	41	198
112237	52	213
112318	95	245
112323	103	238
112350	152	158
112427	200	119
112457	249	103
112547	307	87
112636	364	87
112705	408	84
0228		
SEE NOTES 2,7		
025341	0	0
025401	0	0
025434	3	6
025438	13	47
025442	29	86
025446	41	134
025451	60	165
025458	95	197
025506	101	204
025511	186	192
025524	278	169
025540	397	148
025553	478	140
025605	558	134
0229		
SEE NOTES 2,7		
045001	0	0
045006	6	17
045011	11	66
045015	40	104
045020	61	130
045027	116	143
045038	195	108
045048	275	93
045100	355	83
045113	475	73
045125	565	66
0230		
SEE NOTES 2,7		

TIME	STRAIN	STRS
105945	0	0
105006	0	0
105020	4	23
105117	42	71
105146	79	79
105210	110	79
105257	171	71
105326	211	71
105408	268	63
105453	232	63
105536	391	55
105619	452	55
105706	472	55
105806	592	55
105938	712	55
0231		
SEE NOTES 2,7		
030140	0	0
030201	1	1
030210	2	7
030238	30	41
030332	95	70
030408	142	73
030451	201	76
030551	283	77
030700	370	78
030800	456	80
030900	539	77
031000	627	77
031100	691	83
031210	803	82
031310	882	85
031410	963	87
031509	1042	88
031611	1121	89
031710	1199	92
0232		
SEE NOTES 2,7		
043301	0	0
043352	23	23
043441	79	39
043528	143	47
043551	183	47
043643	243	47
043744	323	39
043847	403	39
044017	483	39
044111	605	39
044211	684	39
044313	764	39
044412	840	39
0233		
SEE NOTES 2,7		
095240	0	0
095302	1	3
095306	8	34
095312	16	74
095317	23	114
095321	29	153
095325	33	192
095331	39	244
095336	47	294
095340	48	293
095419	50	285
095620	59	279
095638	67	351
095639	71	422
095646	81	509
095652	90	547
095700	112	587
095703	173	551
0234		
SEE NOTES 2,7		
110543	0	0
110602	0	0
110613	4	20
110618	16	78
110623	28	139
110627	38	193
110630	45	238
110634	57	290
110641	72	376
110644	95	385
0235		
SEE NOTES 2,7		
013338	0	0
013402	0	0
013406	6	41
013410	13	84
013414	23	147
013419	35	210
013423	46	273
013428	58	335
013433	78	395
013438	90	429
013441	110	427
013445	195	400
013453	230	313
013459	278	265
013506	328	225
013514	390	126

TIME	STRAIN	STRS
0236		
SEE NOTES 2,7		
031440	0	0
031501	0	0
031509	0	8
031513	11	55
031518	22	103
031521	38	143
031527	52	182
031534	95	203
031540	130	238
031548	176	245
031613	333	285
031630	443	293
031656	548	285
031715	709	262
031721	780	253
0237		
SEE NOTES 2,7		
030949	00	0
031002	00	8
031006	11	47
031009	19	87
031014	45	103
031017	80	55
031021	119	15
031026	152	8
031033	213	0
031045	291	
031057	369	
031111	437	
031122	567	
0238		
SEE NOTES 2,7		
102749	0	0
102800	2	0
102824	4	8
102841	9	48
102857	20	82
102916	31	124
102934	45	163
102956	61	205
103021	84	240
103038	104	255
103107	140	256
103138	181	231
103212	240	191
103251	301	158
103351	381	154
103505	482	146
103600	554	145
0239		
SEE NOTES 2,7		
113347	0	0
113400	7	0
113424	15	40
113434	30	71
113454	42	111
113515	59	158
113534	73	198
113558	94	237
113635	135	269
113710	183	261
113752	247	237
113720	283	229
113705	364	213
114003	429	198
114031	460	198
114102	504	190
114132	544	183
114203	535	174
114221	604	174
0240		
SEE NOTES 2,7		
021247	0	0
021300	0	0
021331	4	8
021355	34	40
021449	87	71
021536	149	71
021618	210	63
021702	273	55
021747	336	47
021817	378	47
021900	441	47
022948	504	47
022038	566	47
022105	608	47
022149	670	47
022239	732	47
022340	815	43
022500	925	39
0241		
SEE NOTES 2,7		
035648	0	0
035700	0	0
035722	4	8
035742	16	47
035803	35	87
035843	67	166
035920	102	245

TIME	STRAIN	STRS
040012	147	325
040043	191	333
040056	215	325
040131	280	245
040157	323	221
040300	419	198
040400	504	162
040430	548	178
040530	624	175
040630	704	166
040659	768	159
0242		
SEE NOTES 2,7		
061045	0	0
061059	2	3
061120	11	30
061152	23	80
061215	32	117
061235	39	150
061252	45	177
061315	52	212
061338	61	247
061404	71	285
061444	89	337
061520	113	370
061537	129	368
061548	149	352
061559	180	320
061619	229	261
061644	283	212
061714	331	186
061749	377	171
061826	421	164
0243		
SEE NOTES 2,7		
035901	0	28
035903	1	
041500	1	
050235	8	
070200	11	
090200	16	
090200	16	
120200	19	
020214	20	
080020	23	
120324	28	
040328	29	
071031	30	
102934	31	
122936	31	
081544	37	
020450	40	
080056	41	
103558	41	
081268	42	
120472	42	
045076	43	
103282	49	
035887	49	
101294	51	
0244		
SEE NOTES 2,7		
033641	0	0
033701	4	0
033705	8	48
033709	22	79
033714	41	119
033718	62	151
033724	95	166
033730	171	166
033735	183	143
033740	219	135
033749	263	127
033750	340	127
033804	384	119
033810	473	119
033816	486	119
033822	500	111
033831	560	111
033839	620	103
033849	683	103
033903	780	95
0245		
SEE NOTES 2,7		
051146	0	0
051203	0	0
051213	8	48
051217	19	88
051221	27	135
051225	41	166
051233	50	191
051238	123	198
051250	203	198
051258	263	198
051308	323	198
051313	383	198
051327	443	198
051338	523	191
051348	600	183
0246		
SEE NOTES 2,7		

TIME	STRAIN	STRS
101240	0	0
101304	0	0
101311	11	47
101314	22	95
101318	34	135
101323	59	158
101332	119	158
101340	179	151
101348	239	135
101357	300	127
101406	360	119
101412	400	119
101421	456	111
101430	520	111
101440	527	106
101447	641	102
101458	721	102
0247		
SEE NOTES 2,7		
113440	0	0
113500	0	0
113517	4	8
113537	11	39
113542	19	55
113610	42	103
113617	50	127
113643	67	154
113653	74	198
113733	110	261
113802	143	285
113827	179	285
113909	240	269
113937	280	253
114005	320	245
114049	380	238
114149	460	229
0248		
SEE NOTES 2,7		
031640	0	0
031701	0	0
031713	0	0
031804	8	39
031821	11	79
031838	30	118
031858	48	158
031915	59	198
031934	74	238
031957	95	277
032017	111	301
032048	151	315
032118	192	309
032158	291	292
032227	592	285
0249		
SEE NOTES 2,7		
105141	0	0
105205	0	0
105226	4	8
105243	11	39
105312	41	79
105413	115	111
105449	171	111
105529	231	111
105613	291	103
105655	352	103
105738	411	95
105829	480	95
105920	552	95
110003	612	87
110047	672	87
110134	730	87
110216	798	87
0250		
SEE NOTES 2,7		
095501	0	0
095505	3	9
095516	27	78
095521	36	117
095527	48	176
095532	56	209
095538	62	266
095549	69	354
095554	82	397
095559	93	441
095604	102	508
095612	117	553
095616	130	577
095620	227	
0251		
SEE NOTES 2,7		
034159	0	0
034203	13	60
034206	21	109
034210	28	193
034214	38	250
034217	46	308
034220	52	363
034224	59	423
034227	64	433
034230	70	542
034233	82	596

TIME	STRAIN	STRS
034237	102	654
0252		
SEE NOTES 2,7		
015223	0	0
015239	7	9
015321	16	39
015345	21	59
015423	27	88
015512	39	126
015603	49	165
015654	61	202
015748	73	237
015852	89	273
015945	101	288
020010	133	283
020033	153	273
020050	168	264
020107	183	253
020143	213	235
020222	241	220
020322	272	201
020440	341	183
020604	393	167
020728	348	157
0253		
SEE NOTE 2,7		
071200	0	0
071205	5	19
071210	7	37
071218	21	119
071219	28	177
071229	36	229
071234	40	263
071240	49	319
071243	53	351
071246	59	377
071250	64	407
071255	73	443
071302	91	490
071305	105	499
071309	130	493
0254		
SEE NOTES 2,7		
180003	0	0
180007	16	63
180010	28	121
180014	37	178
180017	47	232
180021	55	294
180025		312
0255		
SEE NOTES 2,7		
092355	0	0
092532	4	10
092600	14	34
092631	18	58
092700	21	82
092800	37	126
092900	55	189
093000	70	209
093100	90	225
093130	108	225
093200	125	222
093300	163	215
093430	231	185
093530	281	163
093800	382	145
094100		148
0256		
SEE NOTES 2,7		
112000	0	0
112005	7	19
112011	19	59
112016	28	99
112022	39	138
112027	48	195
112032	54	236
112038	61	283
112043	69	330
112047	72	358
112050	78	390
112053	83	419
112058	91	460
112102	99	495
112107	109	532
112110		522
0257		
SEE NOTES 2,7		
103800	0	0
103805	13	56
103808	21	103
103812	29	182
103814	39	233
103818	48	296
103822	55	363
103825	62	415
103828	70	475
103831	78	541
103834	85	597
0258		
SEE NOTES 2,7		

TIME	STRAIN	STRS
102800	0	0
102820	4	17
102915	14	53
103015	31	95
103130	36	147
103255	79	208
103408	91	251
103518	110	316
103637	137	341
103652	148	333
103728	177	307
103810	213	278
103320	271	243
104020	311	225
104130	358	211
104245	405	208
104400	452	200
104520	502	198
104625	538	196
0259		
SEE NOTES 2,7		
111359	0	0
111500	8	56
111600	15	103
111700	23	167
111800	32	208
111900	43	266
112000	62	295
112014	73	293
112030	96	253
112053	193	109
112115	234	36
112200	277	10
112390	338	2
0260		
SEE NOTES 2,7		
103506	0	0
103513	13	20
103519	24	86
103525	33	137
103528	39	179
103532	42	215
103536	48	250
103540	51	286
103544	55	322
103548	58	357
103553	62	400
103557	57	441
103602	72	492
103607	75	536
103611	79	570
103614	82	602
103618	89	637
103622	92	671
103626	98	702
0261		
SEE NOTES 2,7		
025758	0	0
025802	14	46
025806	27	100
025809	36	156
025812	45	208
025815	48	256
025818	59	307
025821	66	366
025824	73	418
025827	81	476
025830	90	532
025833	99	578
025836	111	614
025839	126	159
0262		
SEE NOTES 2,7		
014651	0	0
014659	9	21
014800	23	69
014900	38	108
015000	51	170
015100	61	223
015200	70	278
015303	80	299
015400	90	378
015500	106	422
015600	132	441
015615	157	437
015645	173	411
015731	237	333
015845	314	263
020000	372	239
020200	451	225
0263		
SEE NOTES 2,7		
124204	0	0
124212	15	13
124217	31	69
124224	47	126
124230	61	163
124237	77	210
124244	92	254
124251	113	299
124302	152	343

TIME	STRAIN	STRS
124306	255	379
0264		
SEE NOTES 2,7		
032959	0	0
033003	16	50
033007	29	100
033010	41	156
033014	52	212
033017	61	265
033020	70	319
033024	80	393
033027	87	454
033030	100	495
033032		
033118		
0265		
SEE NOTES 2,7		
010804	0	0
010846	8	26
010940	20	69
011030	29	111
011100	34	135
011200	45	189
011300	57	234
011400	69	280
011430	74	299
011530	89	338
011645	115	369
011710	127	371
011730	140	367
011820	169	323
011916	247	242
012011	303	217
012112	349	196
012300	381	177
012500	391	174
0266		
SEE NOTES 2,7		
105145	0	0
105200	1	1
105205	11	33
105211	21	74
105218	32	135
105225	42	193
105230	50	242
105236	57	297
105240	63	339
105245	71	379
105249	75	387
105253	80	422
105256	86	468
0267		
SEE NOTES 2,7		
092840	0	0
092900	0	0
092905	7	47
092909	20	115
092913	39	193
092918	42	280
092921	65	303
092927	83	400
0268		
SEE NOTES 2,7		
091302	0	0
091400	7	7
091514	30	43
091640	50	107
091727	60	132
091840	78	195
091945	95	236
092100	117	276
092318	171	322
092347	189	319
092410	206	311
092443	232	290
092515	260	267
092545	289	248
092642	333	225
092750	363	211
092830	367	206
092940	371	200
093130	381	199
093345	393	198
0269		
SEE NOTES 2,7		
102205	0	0
102210	10	31
102217	25	79
102224	40	129
102230	56	156
102240	84	221
102250	116	268
102257	135	313
102304	157	353
102314	185	396
102320	207	429
102323	223	453
0270		
SEE NOTES 2,7		
112141	0	0
112200	0	0

TIME	STRAIN	STRS
112205	13	45
112209	27	93
112212	38	145
112215	48	194
112220	59	278
112225	71	368
112230	83	459
112235	95	567
112239	106	632
112242	116	683
112245	128	722
0271		
SEE NOTES 2,7		
200550	0	0
200615	4	19
200641	9	38
200730	18	77
200835	31	146
200922	40	173
201000	48	203
201048	63	229
201110	79	228
201130	95	215
201230	103	200
201400	205	165
201700	310	151
202000	410	151
0272		
SEE NOTES 2,7		
022744	0	0
022800	0	0
022810	18	43
022818	37	102
022826	52	157
022832	61	207
022842	169	116
022850	187	195
022900	217	223
022903	367	193
0273		
SEE NOTES 2,7		
213955	0	0
214000	12	53
214003	20	113
214006	25	173
214009	30	227
214012	35	280
214016	40	354
214019	46	421
214022	49	485
214025	53	548
214028	57	603
214031	61	658
0274		
SEE NOTES 2,7		
141202	0	0
141230	1	5
141242	17	43
141400	31	96
141510	41	149
141600	51	188
141704	62	235
141800	71	274
141913	82	323
142022	94	368
142234	108	413
142347	155	449
142428	188	407
142510	238	329
142630	310	265
142722	364	249
142800	373	242
0275		
SEE NOTES 2,7		
191040	0	0
191100	0	0
191111	21	11
191118	39	48
191121	53	89
191130	63	145
191135	72	195
191145	81	273
191150	90	318
191155	95	369
191200	101	405
191203	105	434
191209	113	495
191215	121	550
191223	132	624
191227	138	657
191240	155	771
191248		786
0276		
SEE NOTES 2,7		
100440	0	0
100520	226	3
100527	258	69
100533	302	127
100537	337	149
100562	441	51
100600	535	134

TIME	STRAIN	STRS
100608	665	175
100618		172
100622		166
100633		167
0277		
SEE NOTES 2,7		
193100	0	0
193200	1	1
193240	11	28
193345	29	65
193436	41	100
193533	52	144
193609	60	175
193700	69	217
193734	74	248
193817	80	282
193900	89	318
193943	92	353
194025	103	389
194112	112	425
194201	125	461
194318	150	496
194355	173	496
194407	179	488
194451	240	479
194605	351	264
194900	492	205
0278		
SEE NOTES 2,7		
212132	0	0
212138	12	38
212144	23	87
212148	32	116
212155	46	180
212200	51	208
212203	56	232
212207	61	264
212210	66	298
212215	70	336
212218	74	371
212224	78	429
212227	82	468
212230	85	502
212235	90	549
212240	95	600
212244	97	633
212250	104	690
212253	108	715
212300	113	780
212310	123	875
212318	135	956
212329	153	1039
212340	170	1120
212350	180	1200
212407		1333
0279		
SEE NOTES 2,7		
233406	0	0
233410	9	59
233415	17	139
233418	25	200
233421	31	259
233425	37	313
233428	44	365
233431	49	416
233434	53	467
233437	62	530
233440	67	593
233444	75	658
233447	81	712
233451	89	766
233454	98	820
233457	106	872
0280		
SEE NOTES 2,7		
215400	0	0
215508	18	38
215558	33	77
215746	49	116
215831	57	155
215937	71	212
220043	82	264
220124	91	300
220206	101	336
220248	109	371
220333	119	407
220420	128	443
220513	139	479
220608	161	496
220632	176	496
220703	199	479
220712	240	443
221005	375	389
221548	549	336
0281		
SEE NOTES 2,7		
073100	0	0
073108	11	41
073115	22	92
073120	30	139
073125	37	190

TIME	STRAIN	STRS
073129	42	233
073134	49	278
073139	52	311
073143	58	368
073148	63	412
073153	68	458
073158	72	502
073203	77	545
073207	81	586
073212	85	628
073217	91	670
073222	97	712
073226	103	750
073230	107	790
0282		
SEE NOTES 2,7		
043751	0	0
043801	1	0
043806	13	56
043810	26	144
043815	39	230
043820	49	319
043825	57	408
043829	66	497
043833	73	583
043800	79	649
043840	86	715
043844	92	774
0283		
SEE NOTES 2,7		
141005	0	0
141031	5	17
141105	12	45
141250	31	119
141300	46	139
141500	52	228
141600	63	271
141700	72	314
141710	87	358
141844	120	395
141910	136	393
141950	182	289
142016	212	279
142147	250	237
142243	301	216
142320	318	206
142420	336	199
142700	351	193
0284		
SEE NOTES 2,7		
075357	0	0
075402	9	31
075410	23	83
075416	35	132
075422	42	182
075426	50	226
075431	53	280
075436	60	315
075441	64	361
075445	69	402
075450	74	451
075456	79	493
075459	83	537
075503	87	581
075509	91	623
075513	97	666
075517	101	705
075521	105	743
075525	110	783
075530	114	824
075534	120	705
0285		
SEE NOTES 2,7		
091900	0	0
091904	10	53
091907	17	111
091911	30	171
091915	37	223
091918	41	271
091922	49	332
091925	71	394
091928	77	447
0286		
SEE NOTES 2,7		
030401	0	0
030411	7	39
030420	13	75
030428	23	118
030436	30	157
030443	39	192
030448	43	213
030454	52	239
030460	61	264
030465	73	277
0287		
SEE NOTE 2		
111001	0	0
111010	8	26
111016	16	53
111024	25	82
111030	33	112

TIME	STRAIN	STRS
111030	47	143
111045	51	172
111050	58	200
111057	67	227
111063	75	252
111070	82	278
111076	90	307
111083	98	335
111090	108	361
111098	120	396
111105	136	410
0288		
SEE NOTE 2		
045475	5	0
045502	0	0
045510	4	18
045525	16	76
045537	26	136
045547	35	193
045556	42	244
045563	48	281
045572	54	328
045580	56	369
045586	62	406
045593	67	442
045603	73	497
045612	82	548
045623	89	600
045630	94	634
045640	107	685
045652	122	721
045657	138	729
0289		
SEE NOTE 2		
113767	0	0
113799	1	22
113815	21	151
113821	27	197
113830	40	270
113844	60	396
113863	74	468
113865	96	546
113874	120	582
113880	162	587
113885	170	517
113893	228	468
113900	294	416
113907	366	237
0290		
SEE NOTE 2		
022867	0	0
022901	0	5
022913	15	73
022925	31	159
022935	44	239
022944	60	315
022955	84	389
022963	113	402
022970	151	363
022977	191	315
022993	276	237
023008	367	199
023017	374	186
0291		
SEE NOTE 2		
073901	0	0
073909	10	37
073916	15	74
073922	35	109
073930	51	149
073937	65	185
073945	86	228
073956	120	267
073968	160	282
073973	184	279
073990	265	223
074007	343	169
074016	378	155
074026	422	149
074045	500	128
0292		
SEE NOTE 2		
043770	0	0
043800	0	0
043820	9	20
043828	21	77
043837	35	154
043843	46	196
043855	75	275
043860	88	285
043866	110	290
043875	144	284
043885	203	251
043902	279	211
043920	360	187
043930	402	178
043949	479	164
0293		
SEE NOTE 2		
065570	0	0
065601	0	0
065606	2	10
065610	15	73
065626	22	119
065632	31	166
065640	42	239
065645	51	279
065650	59	323
065654	66	357
065662	77	433
065673	97	509
065687	133	574
065695	160	583
065704	191	582
065720	265	507
065740	381	356
065755	463	293
0294		
SEE NOTE 2		
101400	0	0
101408	7	58
101415	16	113
101421	26	152
101427	38	181
101432	56	200
101438	76	206
101445	103	206
101452	132	204
101458	157	196
101475	231	175
101524	423	149
101574	617	133
101625	807	125
101675	1000	117
101726	1192	109
0295		
SEE NOTE 2		
110313	0	0
110321	3	33
110327	11	78
110334	16	125
110340	21	166
110341	24	210
110346	31	262
110351	38	309
110357	48	364
110363	66	387
110369	135	134
0296		
SEE NOTE 2		
010309	0	0
010313	0	0
010322	11	57
010328	17	111
010334	26	158
010339	33	205
010345	40	247
010350	48	297
010354	56	343
010359	63	387
010364	71	429
010370	83	468
010377	96	510
010385	120	543
010392	144	545
010399	175	533
010413	252	432
010430	349	316
010455	461	251
010480	544	219
0297		
SEE NOTE 2		
015800	0	0
015808	7	60
015814	13	117
015820	17	159
015824	23	204
015829	33	243
015833	35	284
015838	42	328
015844	48	380
015849	58	424
015853	64	467
015860	77	514
015865	91	551
015871	102	582
015877	115	595
015883	151	589
015896	218	502
015914	313	386
015920	347	363
015956	510	264
015983	624	233
0298		
SEE NOTE 2		
035302	0	0
035311	7	31
035317	17	77
035322	25	115
035328	32	148
035335	50	191
035343	71	215
035348	102	219
035357	131	214
035361	232	187
035431	424	181
035480	618	140
035531	809	131
035580	1001	125
0299		
SEE NOTE 2		
034598	0	0
034607	1	6
034613	8	44
034618	13	86
034624	20	131
034630	27	173
034635	31	220
034640	46	263
034646	57	377
034651	71	323
034658	92	349
034665	115	356
034672	139	371
034688	201	371
034710	289	335
034734	386	303
034780	579	256
034829	772	189
0300		
SEE NOTE 2		
052698	0	0
2710	1	7
2716	7	38
2721	21	73
2729	29	109
2735	48	143
2740	63	157
2746	84	165
2752	105	165
2768	171	163
2783	234	156
2808	317	148
2835	411	142
2884	597	137
2936	810	135
2986	1002	135
0301		
SEE NOTE 2		
062798	0	0
2806	3	27
2813	14	82
2818	21	126
2823	29	161
2828	37	202
2835	43	272
2843	51	346
2848	59	403
2855	68	469
2862	75	540
2870	85	616
2877	95	669
2883	105	728
2888	110	776
2895	124	822
2904	149	860
2911	168	874
2917	188	870
2928	256	770
2943	372	540
2982	587	312
0302		
SEE NOTE 2		
083868	0	0
3901	0	6
3910	10	81
3920	21	164
3925	29	210
3931	34	259
3938	44	323
3946	57	401
3951	69	458
3961	84	513
3965	111	570
3978	134	582
3984	158	581
3992	198	550
4003	255	477
4011	307	401
4017	347	361
4027	384	322
4045	447	284
0303		
SEE NOTE 2		
094870	0	0
4902	1	1
4919	1	5
4933	25	77
4939	35	125
4948	48	187
4955	53	257
4962	71	315
4969	84	363
4977	99	408
4984	118	427
4990	168	337
4996	257	103
0304		
SEE NOTE 2		
111470	0	0
1502	0	1
1510	10	37
1516	21	76
1525	35	115
1532	58	153
1541	86	173
1547	107	177
1561	165	177
1574	217	170
1581	252	166
1596	308	156
1607	350	
1622	408	147
1633	445	147
0305		
SEE NOTE 2		
013370	0	0
3401	0	0
3410	10	37
3427	23	77
3438	42	149
3448	58	236
3455	70	276
3462	84	317
3480	133	374
3490	162	389
3500	203	397
3516	265	400
3537	349	383
3550	410	365
3565	448	347
0306		
SEE NOTE 2		
042270		
2300	0	0
2314	1	6
2320	16	35
2332	41	75
2338	60	107
2347	87	153
2357	120	180
2373	187	182
2380	213	180
2396	281	174
2415	361	169
2430	424	166
2445	480	163
2455	522	162
0307		
SEE NOTE 2		
113898	0	0
3906	7	35
3912	20	130
3918	32	227
3925	43	352
3930	55	467
3935	62	556
3940	72	647
3945	80	741
3949	89	831
3953	99	914
3958	113	995
3962	125	1061
3968	149	1125
3974	189	1131
3979	302	872
3987	447	549
4022	689	429
0308		
SEE NOTE 2		
115995	0	0
120004	76	63
0011	27	157
0017	48	242
0021	60	315
0027	75	411
0032	291	483
0037	102	563
0042	115	643
0048	139	728
0054	182	795
0058	213	803
0065	250	694
0083	557	280
0073	407	461
2215	557	280
0114	802	143
0309		
SEE NOTE 2		
011298	0	0
1305	18	91
1310	34	175
1315	62	260
1320	63	333
1326	86	403
1331	118	432
1336	158	427
1340	214	347
1348	284	290
1360	390	229
1370	471	209
1395	649	181
1412	870	172
0310		
SEE NOTE 2		
023301	0	0
3309	13	84
3314	30	153
3321	65	221
3326	98	235
3332	149	239
3338	192	216
3348	277	203
3375	477	188
2400	653	185
2428	877	181
2454	1074	179
0311		
SEE NOTE 2		
032209	0	0
2221	55	176
2231	91	307
2237	113	371
2243	147	438
2250	200	445
2255	215	380
2265	371	227
2278	471	222
2300	624	260
2331	804	283
2367	1047	284
2383	1243	268
2409	1452	243
0312		
SEE NOTE 2		
014295	0	0
042196	79	
2206	84	41
2211	95	117
2216	110	197
2221	84	275
2226	143	340
2230	168	377
2235	197	396
2239	236	390
2245	303	327
2268	431	249
2275	559	216
042302	760	185
0313		
SEE NOTE 2		
043697	0	0
3704	13	89
3709	31	167
3715	57	215
3720	87	240
3725	120	241
3729	158	229
3734	207	209
3746	318	177
3775	517	157
3799	695	150
3826	917	149
0314		
SEE NOTE 2		
110171	0	0
0200	0	0
0208	14	110
0215	35	226
0222	53	353
0230	80	466
0315		
SEE NOTE 2		
062810	0	0
2817	10	53
2826	38	188
2833	53	281
2838	76	371
2843	92	443
2848	109	507
2853	135	575
2858	167	603
2864	230	535
0316		
SEE NOTE 2		
114771	0	0
4800	0	0
4808	13	69
4815	40	134
4821	77	178
4828	130	164
4833	183	124
0317		
SEE NOTE 2		
020501	0	0
0600	8	13
0650	20	85
0690	33	155
0720	40	209
0760	55	282
0800	64	356
0830	79	402
0892	110	468
0930	143	455
0952	171	426
1005	332	353
0318		
SEE NOTE 2		
042270	0	0
2300	0	6
2400	3	9
2420	9	30
2458	15	70
2475	19	104
2512	43	142
2560	68	211
2625	108	222
2740	190	245
2819	251	245
2886	308	238
2939	349	230
3030	423	211
3122	501	198
3215	575	186
3271	617	180
3300	643	177
0319		
SEE NOTE 2		
071300	0	0
1401	0	0
1500	10	37
1544	31	77
1600	71	91
1700	154	91
1800	230	87
1900	318	86
2000	404	79
2100	482	77
2200	563	77
2300	645	70
2400	724	69
2500	803	70
2600	881	69
2700	964	68
0320		
SEE NOTE 2		
091800	0	0
1900	8	26
1950	23	86
1970	31	115
1998	40	156
2026	47	199
2070	62	268
2110	75	331
2161	89	416
2237	119	506
2307	167	516
2410	251	482
2471	307	442
2550	375	396
2630	444	355
2700	503	336
0321		
SEE NOTE 2		
083301	0	0
3369	8	39
3390	16	63
3428	28	116
3461	39	158
3498	53	197
3550	83	236
3600	120	237
3650	163	220
3700	171	197
3800	292	163
3900	379	143
4020	463	135
4100	527	134
4200	602	127
0322		
SEE NOTE 2		
115730	0	0
5800	8	21
5818	21	45
5833	33	73
5900	58	102
5931	94	153
120017	153	153
0100	209	153
0200	283	153
0300	360	149
0350	423	149
0450	500	147
0553	557	147
0700	684	147
0758	732	147

TIME	STRAIN	STRS
0827	770	147
0323		
SEE NOTE 2		
142100	0	0
2151	17	78
2220	28	155
2252	48	237
2329	85	260
2415	157	240
2440	170	228
2444	208	212
2512	250	181
2535	281	162
2539	366	149
2722	423	146
2824	443	145
2836	500	145
2934	512	145
0324		
SEE NOTE 2		
110800	0	0
0814	2	20
0900	17	43
0928	29	63
0942	37	77
0958	46	90
0915	52	110
0990	59	126
1001	63	137
1062	90	207
1106	106	257
1123	115	275
1165	139	308
1200	159	321
1253	192	316
1300	238	288
1372	307	256
1467	383	235
1567	462	219
1663	537	210
1765	613	205
1825	658	204
0325		
SEE NOTE 2		
155635	0	0
5830	3	0
5849	12	37
5918	36	70
160000	83	89
0100	151	85
0200	237	84
0300	300	80
0412	406	78
0500	462	78
0326		
SEE NOTE 2		
131800	0	0
1830	3	0
1900	8	60
1918	18	111
1930	25	149
1945	33	197
1956	35	228
2020	51	294
2035	59	333
2058	76	387
2138	113	437
2145	129	429
2157	168	327
2208	207	229
2218	233	189
2248	282	149
0327		
SEE NOTE 2		
023850	0	0
3930	3	5
3958	8	35
3990	15	87
4010	18	124
4030	19	157
4050	27	201
4087	36	274
4113	41	317
4141	50	369
4177	58	429
4214	75	495
4254	85	543
4286	101	585
4326	121	610
4355	150	600
4386	198	503
4406	232	427
4436	272	363
4510	349	292
0328		
SEE NOTE 2		
042000	0	0
2030	1	11
2068	7	35
2104	21	69
2158	46	95
2191	79	103
2241	117	103
2335	190	101
2386	233	100
2479	298	98
2585	389	93
2685	467	90
2782	541	90
2885	622	89
2982	694	89
3085	771	89
3185	847	89
0329		
SEE NOTE 2		
091900	0	0
1974	44	38
2005	60	75
2030	67	115
2053	74	156
2090	89	235
2132	102	315
2171	113	393
2212	127	468
2254	143	543
2312	185	570
2326	197	541
2356	234	467
2362	274	393
2381	310	313
2446	385	241
2538	447	234
2650	549	234
0330		
SEE NOTE 2		
230003	0	0
0025	3	37
0037	8	79
0051	14	117
0105	20	156
0119	27	198
0130	33	236
0143	38	275
0155	45	315
0209	56	355
0223	63	395
0235	69	432
0248	77	468
0320	102	544
0348	132	575
0357	145	569
0410	180	505
0425	230	395
0456	308	275
0656	481	352
0331		
SEE NOTE 2		
122999	0	0
3035	9	36
3060	17	77
3086	27	115
3115	40	147
3139	51	177
3160	67	210
3190	85	226
3238	122	242
3300	217	239
3353	229	227
3416	239	196
3466	426	171
3489	619	148
0332		
SEE NOTE 2		
011404	0	0
1427	6	43
1449	12	83
1491	22	157
1532	35	242
1571	45	321
1608	55	400
1644	67	475
1661	70	510
1670	75	551
1700	83	583
1715	90	627
1740	94	663
1758	102	700
1811	127	770
1822	143	767
1832	180	623
1845	254	400
1883	321	271
1987	422	235
0333		
SEE NOTE 2		
014102	0	0
4125	6	29
4147	11	69
4179	25	145
4235	43	222
4290	69	309
4355	76	345
4378	98	343
4431	161	266
4565	345	159
0334		
SEE NOTE 2		
024884		96
4899		106
4925		
4950		
4976		
5000		
5050		
5100		
5200		
5300		
5400		
5600		
0335		
SEE NOTE 2		
101773	0	0
1800	1	7
1807	18	111
1813	35	193
1820	53	278
1825	70	361
1831	90	478
1838	107	591
1843	121	776
1850	140	807
0336		
SEE NOTE 2		
113673	0	0
3704	0	0
3712	14	75
3718	29	156
3725	52	253
3730	70	333
3735	95	413
3740	119	469
3752	182	535
3757	228	535
3763	284	503
0337		
SEE NOTE 2		
115776	0	0
5870	2	7
5900	2	7
5910	7	35
5915	21	92
5920	64	149
5926	75	189
5931	103	220
5937	153	220
5948	238	219
5957	309	208
5970	416	206
5977	466	194
5983	543	192
5998	620	189
120010	697	187
0338		
SEE NOTE 2		
134045	0	0
4102	0	7
4105	12	72
4110	25	164
4114	39	276
4121	70	495
4129	102	722
4134	132	881
4139	155	979
4142	190	1030
4146	347	988
0339		
SEE NOTE 2		
142651	0	0*
2704	0	0
2707	3	30
2712	32	112
2716	56	207
2720	80	292
2724	98	399
2727	119	494
2731	141	571
2735	180	611
2740	257	525
2743	373	288
0340		
SEE NOTE 2		
033940	0	0
3969	0	0
4010	8	51
4022	41	196
4030	83	250
4037	137	250
4045	202	223
4054	282	197
4071	418	168
0341		
SEE NOTE 2		
042380	0	0
2400	1	0
2409	20	96
2416	43	214
2423	177	90
0342		
SEE NOTE 2		
073761	0	0
3800	1	1
3810	22	120
3816	39	221
3824	59	315
3830	255	98
0343		
SEE NOTE 2		
092099	0	0
2121	11	50
2130	28	176
2138	53	342
2145	72	455
2153	98	565
2160	133	636
2167	211	540
2173	314	385
2180	384	243
2198	532	210
2228	706	210
2250	909	197
0344		
SEE NOTE 2		
095071		0
5101	0	0
5109	19	77
5116	95	77
5125	143	113
5132	201	115
5150	314	133
5165	447	133
5174	526	131
5190	640	130
0345		
SEE NOTE 2		
112750	0	0
2804	2	2
2810	13	41
2816	38	115
2822	196	78
2830	213	78
0346		
SEE NOTE 2		
100171	0	0
0200	0	1
0209	15	71
0216	45	168
0230	275	125
0271	435	153
0292	582	175
0311	720	171
0347		
SEE NOTE 2		
020770	0	0
0801	2	3
0809	18	108
0813	47	231
0824	72	330
0830	90	408
0836	113	481
0843	144	550
0848	170	556
0348		
SEE NOTE 2		
035071	0	0
5103	0	0
5109	0	72
5116	29	142
5124	61	231
5130	94	293
5137	129	326
0350		
SEE NOTE 2		
194160	0	0
4202	0	1
4210	8	42
4214	28	107
4222	113	78
0351		
SEE NOTE 2		
082076	0	0
2100	0	2
2107	15	50
2115	69	73
2125	113	81
2131	187	76
2142	222	84
0352		
SEE NOTE 2		
114299	0	0
4315	2	9
4322	18	89
4328	31	167
4334	51	264
4340	71	343
4345	90	415
4350	116	453
4355	153	486
4361	533	120
0353		
SEE NOTE 2		
121605	0	0
1625	40	13
1647	51	36
1678	65	52
1710	93	60
1750	126	60
1800	172	62
1850	209	63
1900	249	60
2015	322	60
2132	440	60
2253	536	60
2373	633	58
2495	729	58
2618	823	59
2739	920	59
2858	1011	59
2983	1112	59
3106	1208	59
3252	1243	35
3326	1305	22
0354		
SEE NOTE 2		
005900	0	0
5934	3	5
5950	9	21
5960	13	34
5976	20	44
010000	39	52
0020	56	57
0100	120	57
0190	200	57
0262	257	52
0311	302	51
0431	400	41
0547	449	37
0670	600	35
0794	701	35
0912	800	30
0355		
SEE NOTE 2		
015398	0	0
5419	3	14
5428	8	30
5435	9	42
5442	12	51
5451	15	60
5460	18	72
5474	25	89
5487	33	101
5503	41	113
5530	58	130
5569	89	135
5600	114	133
5629	139	130
5753	250	100
5870	346	90
5991	446	83
6008	539	76
6350	732	76
6591	922	76
0356		
SEE NOTE 2		
031892	0	0
1910	0	0
1922	1	19
1932	3	36
1948	15	59
1960	18	78
1981	31	92
2008	43	110
2039	52	132
2074	85	158
2123	121	180
2162	153	192
2192	179	192
2261	240	191
2353	320	172
2475	422	168
2593	500	168
2839	720	158
3202	1021	158
0357		
SEE NOTE 2		
040800	0	0
0822	3	13
0836	7	42
0848	9	55
0861	13	75
0874	22	98
0899	30	126
0928	45	160
0947	57	177
0978	74	203
1022	103	227
1075	139	250
1131	181	255
1161	211	247
1215	263	203
1276	323	160
1346	381	145
1465	462	135
1579	575	126
1824	843	125
0358		
SEE NOTE 2		
043800	0	
3822	3	12
3837	8	28
3857	15	51
3881	23	86
3908	33	118
3924	40	140
3936	43	153
3958	53	189
3983	63	225
4010	74	263
4027	83	287
4053	95	318
4099	102	357
4145	152	366
4187	189	357
4213	218	246
4292	302	246
4493	481	175
4853	770	157
0359		
SEE NOTE 2		
021151	0	0
1203	0	1
1250	2	10
1274	11	34
1324	38	60
1353	59	75
1407	101	90
1440	119	90
1500	141	90
1600	230	90
1700	354	75
1759	402	76
1829	458	69
1900	518	66
0360		
SEE NOTE 2		
033960	0	0
4003	0	0
4054	3	16
4073	11	41
4114	48	53
4212	119	59
4260	163	58
4332	219	52
4407	281	51
4498	360	47
4575	420	48
4700	525	50
4797	600	47
4895	680	47
4995	760	46
5100	847	46
5200	888	46
0361		
SEE NOTE 2		
203100	0	0
3150	3	8
3161	8	21
3170	13	32
3187	21	46
3200	28	51
3225	51	55
3250	72	55
3300	113	55
3400	200	52
3500	283	49
3600	365	55
3750	488	55
3900	611	55
4050	732	55
4100	853	55
4300	1015	55
5700	1360	55
0362		
SEE NOTE 2		
043970	0	0
4003	0	0
4020	3	13
4031	8	35
4054	15	57
4068	21	72
4078	31	91
4107	43	111
4131	54	137
4191	90	190
4230	135	210
4270	163	203
4339	220	165

TIME	STRAIN	STRS
4440	320	115
4530	400	97
4615	440	85
4725	580	82
0363		
SEE NOTE 2		
063551	0	0
1600	1	0
1615	5	22
1633	9	40
1662	22	80
1691	34	119
1717	44	159
1750	60	198
1780	73	236
1820	95	273
1870	126	300
1900	150	302
1943	189	293
1993	204	262
4055	305	220
4148	381	195
4240	460	182
4332	557	174
4424	612	167
0364		
SEE NOTE 2		
071450	0	0
1502	0	0
1558	2	10
1569	7	27
1586	14	35
1630	33	74
1670	52	114
1700	67	158
1740	83	205
1790	113	228
1871	167	243
1946	229	226
2015	245	203
2088	306	187
2193	423	182
2300	468	164
2393	577	157
2492	650	155
2532	798	153
0365		
SEE NOTE 2		
114991	0	0
5005	1	1
5017	78	160
0366		
125089	0	0
5100	0	0
5108	17	79
5114	42	139
5120	83	138
5126	131	130
5132	185	98
5138	241	79
5153	322	64
5180	562	67
5208	763	92
5235	960	107
5262	1161	120
0367		
SEE NOTE 2		
011998	0	0
2008	1	0
2015	18	75
2020	52	87
2025	95	81
2042	211	78
2055	310	70
2080	500	70
2107	697	70
2134	884	68
2160	1073	68
2185	1269	68
0369		
SEE NOTE 2		
021300	0	0
1310	0	1
1314	1	20
1323	28	100
1331	52	165
1338	76	248
1342	103	315
1349	131	357
0370		
SEE NOTE 2		
024094	0	0
4107	0	0
4114	23	86
4120	42	165
4125	53	245
4131	83	320
4136	103	39[illegible]
4141	125	45[illegible]
4147	151	490
4152	192	473

TIME	STRAIN	STRS
0371		
SEE NOTE 2		
031470		
1500	0	0
1508	13	35
1515	43	90
1521	75	161
1526	110	177
1533	157	177
1539	213	154
1549	298	138
1558	377	130
1569	460	125
1578	435	121
1586	605	121
1594	668	121
0372		
SEE NOTE 2		
095698	0	0
5711	1	7
5719	26	85
5725	49	141
5731	80	203
5737	115	244
5742	153	245
5748	208	215
5755	270	157
5765	358	158
5791	580	142
5819	760	141
5845	958	140
5870	1158	140
0373		
SEE NOTE 2		
102199	0	0
2219	1	9
2221	27	78
2229	56	149
2235	90	220
2241	113	223
2248	170	182
2253	239	157
2270	370	119
2295	563	101
2312	758	93
2369	950	85
2375	1140	74
0374		
SEE NOTE 2		
110998	0	0
1010	5	24
1017	30	120
1025	62	201
1031	95	263
1039	133	319
1045	173	349
1050	219	349
1055	270	302
1065	368	202
1072	434	157
1091	564	121
1102	685	140
1129	882	63
1154	1082	48
1180	1283	48
0375		
SEE NOTE 2		
120659	0	0
0713	8	10
0720	18	103
0725	33	189
0731	52	272
0736	68	349
0741	86	422
0746	103	483
0751	133	536
0758	183	551
0763	245	478
0769	307	373
0775	373	308
0795	539	229
0822	752	197
0837	925	173
0874	1114	173
0900	1310	166
0376		
SEE NOTE 2		
123500	0	0
3512	3	8
3525	25	73
3530	44	160
3536	65	241
3541	85	321
3548	109	386
3683		395
0377		
SEE NOTE 2		
102000	0	0
2050	0	0
2057	26	68
2065	48	164

TIME	STRAIN	STRS
2071	68	253
2077	89	350
2082	107	420
2089	137	487
2094	168	543
2105	242	541
2111	302	518
2118	367	406
2126	447	325
2134	630	283
0378		
SEE NOTE 2		
103850	0	0
3900	0	0
3906	22	48
3913	50	121
3920	76	197
3925	102	261
3932	122	331
3939	151	387
3945	201	408
3952	253	400
3959	326	347
3969	416	280
3979	501	237
0379		
SEE NOTE 2		
021351	0	0
1400	0	0
1409	26	39
1416	57	100
1426	100	197
1433	153	195
1439	219	120
0380		
SEE NOTE 2		
044470	0	0
4500	0	0
4507	25	37
4515	58	93
4521	88	163
4528	115	241
4535	142	323
4541	173	396
4548	203	431
4555	260	431
4560	313	389
4572	416	293
4580	501	240
4586	552	213
0381		
SEE NOTE 2		
113943	0	0
3958	3	9
3963	22	90
3969	37	169
3974	58	249
3980	80	332
3985	107	373
3990	147	372
3995	195	325
4002	262	272
4007	308	247
4024	423	222
4051	623	214
4075	814	214
4102	1006	204
4129	1200	191
0382		
SEE NOTE 2		
031460		0
1480	0	0
1505	102	14
1512	127	92
1520	155	173
1527	185	243
1534	224	285
1541	270	293
1548	339	258
1555	401	228
1578	537	182
1604	780	165
1631	971	157
0383		
SEE NOTE 2		
033279	0	
3300	0	0
3306	17	63
3313	37	156
3320	61	237
3325	82	323
3331	104	397
3337	129	468
3343	162	514
3348	195	529
3353	236	522
3359	288	492
3369	370	444
3393	567	398
3420	756	371
3445	910	338

TIME	STRAIN	STRS
3457	1146	291
3504	1417	223
0384		
SEE NOTE 2		
204075	0	0
4101	0	0
4114	6	47
4122	12	81
4130	15	114
4136	19	166
4142	25	225
4150	31	292
4158	38	334
4164	50	386
4168	62	442
4178	77	533
4188	100	563
4196	138	668
0385		
SEE NOTE 2		
155370	0	0
5408	15	23
5418	38	157
5430	115	212
5437	181	157
5455	327	78
5464	404	52
0386		
SEE NOTE 2		
095172	0	0
5210	15	0
5219	46	180
5228	100	275
5236	154	275
5245	230	237
5254	296	198
5268	423	158
5293	615	102
5308	731	78
0387		
SEE NOTE 2		
131870	0	0
1905	12	8
1913	29	149
1920	54	237
1932	115	316
1938	169	308
1963	375	198
1992	615	125
2008	731	105
2030	845	92
0388		
SEE NOTE 2		
160070	0	0
0105	8	38
0112	23	141
0118	42	237
0128	88	316
0134	125	322
0141	192	308
0148	244	276
0163	385	237
0188	577	180
0216	769	158
0240	962	149
0389		
SEE NOTE 2		
090290	0	0
0300	0	0
0303	15	77
0311	35	140
0320	69	235
0325	96	276
0330	135	292
0338	192	276
0357	346	212
0380	538	173
0408	731	157
0434	923	140
0390		
SEE NOTE 2		
150680	0	0
0702	0	0
0712	23	117
0718	42	205
0726	69	316
0734	111	371
0738	154	387
0745	181	383
0766	387	280
0775	461	252
0800	654	190
0826	850	140
0391		
SEE NOTE 2		
165870	0	0
5903	10	13
5911	29	118
5917	42	205
5924	77	315
5930	96	395

TIME	STRAIN	STRS
5936	119	460
5941	146	513
5948	188	582
5958	281	476
5968	375	395
5986	535	340
170012	731	316
0039	923	292
0392		
SEE NOTE 2		
184870	0	0
4903	4	0
4912	24	94
4921	68	229
4930	120	198
4938	182	157
4950	268	237
4958	304	355
4965	356	408
4971	408	387
4984	520	284
5002	680	213
5019	800	189
5041	1000	157
5067	1200	140
0393		
SEE NOTE 2		
153800	0	0
3803	15	109
3810	35	308
3815	58	514
3819	85	706
3824	110	860
3830	167	947
3834	300	657
3840	479	300
3846	577	197
3850	658	157
3855	750	137
0394		
SEE NOTE 2		
164404	0	0
4406	11	78
4408	21	180
4409	31	285
4410	38	387
4412	54	484
4414	69	627
4416	77	700
4418	92	810
4419	108	896
4420	131	970
4421	163	976
4423	227	874
4425	330	634
4427	423	453
4431	538	331
4434	613	276
0395		
SEE NOTE 2		
205202	0	0
5207	35	220
5208	46	308
5210	65	446
5212	77	551
5214	88	672
5215	96	750
5216	100	817
5218	111	896
5219	123	968
5220	135	1040
5222	158	1105
0396		
SEE NOTE 2		
152800	0	0
2802	8	53
2803	17	140
2805	31	230
2807	37	300
2808	50	380
2810	62	470
2812	69	575
2813	77	640
2814	88	730
2815	102	810
2817	108	820
2818	131	990
2820	152	1033
2822	194	1025
0397		
SEE NOTE 2		
160500	0	0
0501	8	14
0502	16	62
0505	19	133
0507	27	157
0508	33	216
0510	38	275
0511	46	315
0513	58	395
0515	65	435

TIME	STRAIN	STRS
0517	77	498
0518	90	535
0520	104	577
0522	129	600
0524	146	603
0525	167	593
0527	206	550
0529	250	468
0398		
SEE NOTE 2		
164800	0	0
4802	4	33
4804	12	100
4806	15	157
4808	25	237
4810	33	315
4812	38	395
4814	50	468
4816	58	540
4818	67	612
4820	77	700
4822	102	773
4825	119	803
4826	131	820
4828	165	810
4829	185	800
0399		
SEE NOTE 2		
190201	0	0
0203	8	77
0206	19	180
0207	31	245
0208	38	303
0209	46	395
0210	54	468
0212	62	544
0213	65	612
0214	73	695
0215	81	773
0216	87	832
0217	96	900
0218	108	953
0220	127	1020
0221	167	1033
0222	192	990
0400		
SEE NOTE 2		
113400	0	0
113401	2	30
113406	96	80
113411	21	157
113416	33	245
113421	48	315
113425	63	353
113428	71	395
113433	110	454
113437	127	460
113441	163	454
113443	183	438
113450	233	395
113456	310	315
113465	387	275
113475	467	237
113500	674	173
0401		
SEE NOTE 2		
130306	0	0
130308	11	53
130310	23	134
130312	31	213
130315	37	308
130317	46	395
130319	54	445
130320	58	515
130321	65	596
130323	73	673
130325	79	743
130327	90	810
130330	106	870
130333	142	932
130335	173	905
130337	213	840
130338	265	729
130340	342	582
130344	411	475
130350	527	370
130356	611	331
0402		
SEE NOTE 2		
141200	0	0
141202	4	70
141204	13	150
141206	27	237
141208	31	300
141210	42	387
141211	52	460
141212	62	550
141213	73	612
141215	85	680
141217	100	760
141218	140	818

TIME	STRAIN	STRS
141220	[illegible]	790
141221	[illegible]	730
141222	273	585
141224	346	430
0403		
SEE NOTE 2		
150401	0	0
0403	4	22
150409	11	77
150413	23	157
150415	27	180
150418	35	237
150421	44	315
150425	54	395
150430	65	468
150433	77	543
150439	96	618
150443	117	665
150445	131	665
150449	154	656
150450	165	640
150453	223	543
150463	338	395
150476	454	315
0404		
SEE NOTE		
161200	0	0
161202	0	62
161206	13	150
161208	19	198
161210	27	276
161212	38	355
161214	50	430
161216	69	505
161219	88	573
161221	108	603
161223	142	600
161225	173	562
161227	231	426
161235	369	331
161242	500	252
161253	679	190
0405		
SEE NOTE 2		
170901	0	0
170902	11	62
170904	19	133
170906	27	220
170908	38	300
170909	50	398
170910	58	453
170912	69	540
170913	81	595
170915	100	670
170916	137	694
170917	160	675
170918	200	593
0406		
SEE NOTE 2		
133502	0	0
		30
133507	8	77
133509	15	121
133512	19	156
133516	31	236
133518	35	272
133521	50	315
133527	75	391
133531	90	420
133534	111	420
133537	138	419
133541	173	391
133548	237	315
133563	377	236
133578	503	215
133592	612	177
0407		
SEE NOTE 2		
141301	0	0
141305	2	30
141307	6	70
141311	15	150
141313	21	189
141315	24	228
141320	35	308
141324	44	387
141329	58	460
141335	85	528
141337	100	543
141340	123	549
141345	162	536
141349	198	480
141355	265	410
141361	322	371
141373	423	318
141392	579	284
0408		
SEE NOTE 2		
153000	0	0
153004	6	22
153006	8	77

TIME	STRAIN	STRS
153010	19	125
153012	23	156
153016	31	236
153020	44	315
153024	55	355
153027	65	394
153032	90	454
153038	140	468
153040	154	457
153042	179	427
153046	210	393
153055	308	317
153065	385	276
153079	500	258
153087	556	245
0409		
SEE NOTE 2		
164400	0	0
164408	6	13
164411	15	77
164415	19	125
164417	25	156
164421	35	236
164424	42	276
164426	48	315
164431	63	394
164436	85	468
164440	98	505
164445	129	535
164447	154	545
164451	181	528
164453	200	505
164459	274	427
164470	385	333
164495	581	276
0410		
SEE NOTE 2		
132300	0	0
132307	12	50
132311	20	99
132316	28	146
132321	36	193
132325	42	234
132330	48	283
132334	56	328
132338	65	373
132342	75	409
132347	85	444
132351	107	480
132355	123	493
132357	132	496
132359	146	499
132362	164	498
132364	187	493
132366	219	470
132370	247	444
132380	353	373
132391	448	325
132400	509	305
0411		
SEE NOTE 2		
140800	0	0
140808	13	59
140816	27	131
140822	38	199
140828	46	258
140834	57	1319
140840	70	375
140843	79	406
140848	89	443
140853	109	478
140857	130	497
140860	150	504
140863	171	504
140867	208	486
140870	245	460
140878	344	370
140887	440	285
140906	595	219
0412		
SEE NOTE 2		
151700	0	0
151706	9	19
151712	21	79
151718	30	138
151724	39	193
151730	49	257
151736	58	318
151741	70	373
151745	78	408
151751	96	462
151756	116	497
151760	134	512
151763	154	516
151768	195	510
151772	226	483
151776	281	444
151784	361	386
151793	448	335
151805	714	304
0413		

TIME	STRAIN	STRS
SEE NOTE 2		
181600	0	0
181610	20	59
181617	36	135
181622	44	193
181629	54	256
181635	65	317
181640	78	372
181646	91	404
181652	107	461
181656	125	490
181658	134	499
181662	163	513
181666	188	513
181670	215	503
181674	259	478
181684	359	413
181695	447	366
181708	539	339
181719	625	325
0414		
SEE NOTE 2		
132100		
132900	0	0
132908	16	70
132915	25	85
132920	32	195
132926	40	255
132932	48	315
132937	55	370
132943	66	437
132948	77	497
132955	91	550
132965	130	607
132968	151	611
132975	202	609
132981	271	552
132990	369	457
132996	455	377
133001	507	335
0415		
SEE NOTE 2		
140600		
140610	0	0
140617	22	135
140622	27	187
140628	134	257
140633	240	318
140638	46	371
140645	54	446
140649	59	497
140653	67	550
140658	77	599
140662	86	633
140672	114	715
140676	130	730
140680	150	740
140687	214	726
140691	270	665
140698	381	517
140705	459	427
140712	539	359
0416		
SEE NOTE 2		
151900		0
151908	11	57
151916	23	85
151922	30	195
151928	36	255
151933	43	318
151938	50	373
151944	55	435
151949	63	495
151954	71	550
151957	77	585
151960	84	617
151965	96	668
151970	110	700
151972	118	716
151977	140	734
151980	164	736
151984	196	723
151988	247	690
151992	314	540
151996	371	497
152000	432	424
0417		
SEE NOTE 2		
163700	0	0
163710	18	57
163718	29	135
163722	36	193
163728	42	249
163734	51	318
163739	59	371
163745	67	428
163750	80	496
163757	96	550
163760	104	583
163765	123	617
163769	141	633

TIME	STRAIN	STRS
163772	156	640
163775	179	643
163778	213	633
163782	253	598
163787	304	550
163792	379	474
163800	464	398
163810	557	335
0420		
SEE NOTE 2		
192475	0	0
192500	0	0
192512	17	114
192519	38	235
192525	58	315
192533	106	370
192539	154	358
192545	215	300
192556	308	235
192574	462	163
192594	602	100
0421		
SEE NOTE 2		
143300	0	0
143303	0	0
143308	12	37
143311	18	77
143316	33	156
143321	46	235
143326	60	315
143331	79	395
143337	102	467
143345	142	513
143348	173	513
143351	200	485
143355	246	435
143360	290	395
143380	479	275
143410	692	212
143435	885	173
0422		
SEE NOTE 2		
090081	0	0
090102	0	0
090112	20	93
090120	40	205
090126	54	309
090133	76	405
090139	100	495
090145	133	550
090157	184	545
090159	260	467
090170	376	370
090178	456	315
090200	640	260
0424		
SEE NOTE 2		
164400	0	0
164407	11	78
164412	28	158
164421	61	237
164424	80	253
164427	101	268
164432	136	269
164444	232	237
164458	346	190
164481	535	142
0425		
SEE NOTE 2		
171513	0	27
171523	31	185
171526	40	237
171530	52	284
171532	65	315
171537	88	340
171541	106	400
171545	133	412
171551	190	410
171557	245	363
171565	320	315
171583	490	252
0426		
SEE NOTE 2		
195300		0
195305	8	46
195308	13	78
195313	27	165
195318	46	276
195324	62	316
195326	73	355
195331	90	394
195335	111	425
195339	140	450
195343	162	455
195347	195	449
195354	270	395
195363	350	343
195385	538	273
0427		
SEE NOTE 2		
142600	0	0

TIME	STRAIN	STRS
142685	12	23
142722	22	78
142750	32	120
142770	40	153
142839	72	237
142897	110	270
142960	160	273
143001	200	246
143092	280	206
143229	400	173
143371	520	157
143525	640	149
143719	800	143
0429		
SEE NOTE 2		
154200	0	0
154272	19	78
154298	28	114
154312	88	222
154432	102	236
154547	197	228
154639	280	197
154760	385	168
154890	489	148
155069	640	137
155385	895	125
0430		
SEE NOTE 2		
181491	0	0
181503	0	0
181540	4	13
181600	18	79
181635	32	134
181665	49	158
181712	80	189
181797	232	193
181937	280	141
182075	399	110
182222	520	102
182414	680	86
0431		
SEE NOTE 2		
190700	0	0
190742	17	33
190774	30	78
190803	41	115
190835	57	157
190876	81	197
190973	149	226
191021	189	220
191120	377	188
191255	397	157
191450	536	137
191575	657	130
191749	797	125
0432		
SEE NOTE 2		
141100	0	0
141119	8	37
141142	20	116
141155	28	159
141165	36	198
141188	55	275
141226	91	355
141254	127	380
141291	196	361
141320	246	308
141358	316	254
141451	476	214
141581	680	195
141703	876	181
0433		
SEE NOTE 2		
153400	0	0
153434	8	10
153452	19	79
153463	24	117
153475	32	158
153486	40	199
153501	50	237
153516	60	275
153533	115	316
153559	120	350
153615	208	365
153624	400	215
153644	600	180
0434		
SEE NOTE 2		
162200	0	0
162229	12	12
162248	24	78
162277	48	150
162307	81	190
162341	137	197
162396	239	117
162445	317	80
162540	477	48
162622	597	35
0436		
SEE NOTE 2		
171900	0	0

TIME	STRAIN	STRS
171922	8	30
171943	18	118
171962	30	198
171972	36	238
171982	43	278
171991	49	316
172005	60	358
172018	70	395
172045	100	468
172060	120	461
172082	164	445
172105	212	393
172155	324	275
172169	524	198
172186	724	161
0437		
SEE NOTE 2		
201000	0	0
201025	22	78
201058	34	110
201073	44	157
201090	58	198
201113	84	237
201138	116	249
201173	176	236
201209	236	193
201281	356	141
201358	476	116
201439	596	105
0439		
SEE NOTE 2		
144600	0	0
144614	11	32
144623	25	117
144635	42	287
144646	63	316
144661	112	367
144675	179	327
144[illegible]	243	296
144711	359	155
144731	443	119
144773	623	86
144816	799	69
0440		
SEE NOTE 2		
151200	0	0
151216	14	36
151225	24	117
151230	32	157
151235	40	198
151240	47	240
151245	56	284
151250	63	316
151257	88	355
151264	112	340
151274	164	375
151287	240	266
151301	306	198
151332	521	120
151365	583	84
151408	760	62
151440	920	43
0441		
SEE NOTE 2		
154800	0	0
154814	12	36
154822	22	117
154832	36	198
154837	44	237
154843	58	276
154850	76	316
154859	108	340
154878	204	340
154895	288	198
154931	440	117
154969	600	85
155021	789	66
0443		
SEE NOTE 2		
184000	0	0
184010	8	36
184014	15	77
184023	25	157
184028	33	197
184032	40	237
184038	51	277
184043	65	315
184050	85	353
184058	113	370
184064	145	368
184073	190	315
184077	220	284
184089	280	213
184107	370	148
184119	420	125
184145	537	102
184192	745	78
0444		
SEE NOTE 2		
190500	0	0
190516	16	5

TIME	STRAIN	STRS
190525	26	78
190529	32	117
190534	40	157
190539	48	196
190544	58	238
190549	70	276
190556	88	316
190567	128	339
190570	140	339
190579	168	334
190585	220	276
190604	311	198
190623	496	142
190652	520	102
190699	720	76
0445		
SEE NOTE 2		
130282	0	0
130285	15	81
130286	29	205
130288	42	318
130290	51	395
130291	65	472
130292	78	545
130294	102	612
130295	131	625
130298	162	566
130300	250	491
130300	296	415
130303	388	310
130307	473	243
130310	554	205
0446		
SEE NOTE 2		
163900	0	0
163901	8	18
163903	15	101
163905	24	158
163906	33	237
163907	43	311
163909	56	395
163910	73	469
163912	91	517
163913	115	537
163914	152	515
0447		
SEE NOTE 2		
140800	0	0
140803	10	34
140805	23	157
140807	36	252
140808	46	329
140810	58	397
140811	77	
140813	100	529
		534
140815	171	474
140817	221	386
140818	281	273
140820	338	169
140821	379	130
0448		
SEE NOTE 2		
152300		
152303	7	26
152304	16	92
152305	22	157
152306	30	238
152308	37	316
152309	45	400
152310	55	469
152312	64	540
152313	89	614
152315	114	630
152316	145	625
152317	191	520
152318	245	422
152320	314	316
152322	387	230
0452		
SEE NOTE 2		
134100	0	0
134167	18	0
134218	40	77
134273	80	108
134327	123	108
134438	220	84
134560	316	73
134756	404	72
134905	520	20
135133	688	14
0453		
SEE NOTE 2		
143300	0	0
143345	12	0
143362	20	33
143382	30	78
143425	55	114
143463	87	128
143495	120	128
143577	280	81

TIME	STRAIN	STRS
143604	320	45
143615	419	33
143629	520	28
0454		
SEE NOTE 2		
153900	0	0
153930	13	33
153940	17	78
153951	21	117
153970	29	158
153980	38	198
153990	53	237
154014	75	268
154035	110	270
154064	171	198
154120	291	119
154135	458	99
154217	1000	96
0457		
SEE NOTE 2		
162800	0	0
162814	11	0
162822	20	70
162825	25	93
162831	32	137
162840	50	198
162846	68	229
162852	88	237
162860	127	237
162871	184	180
162890	276	117
162923	400	80
162970	600	52
0458		
SEE NOTE 2		
090600	0	0
090602	7	70
090605	22	225
090605	32	277
090606	38	337
090609	55	476
090610	67	552
090612	74	622
090613	83	695
090614	96	776
090615	110	867
090617	133	905
090618	158	928
090620	208	925
090622	292	925
090624	392	566
090626	488	420
090629	575	335
0459		
SEE NOTE 2		
083900	0	0
083908	17	77
083913	29	157
083918	46	236
083921	58	276
083925	79	316
083927	100	323
083932	146	323
083935	173	269
083939	225	204
083944	271	157
083947	304	133
083951	342	110
083972	538	53
0461		
SEE NOTE 2		
135500	0	0
135520	0	0
135565	11	77
135588	19	113
135612	26	158
135644	40	197
	66	236
135735	100	245
135780	142	240
135892	240	229
136057	380	212
136080	400	212
136262	544	204
136422	680	201
0462		
SEE NOTE 2		
144500	0	0
144550	12	77
144569	19	114
144588	25	157
144608	33	198
144628	38	237
144643	45	261
144670	54	318
144696	66	358
144760	97	432
144813	135	462
144865	177	451
144909	231	404
145069	385	317

TIME	STRAIN	STRS
145339	615	287
0463		
SEE NOTE 2		
161500	0	0
161522	4	7
161561	15	77
161602	27	156
161622	35	198
161645	42	235
161665	53	276
161695	66	315
161740	95	357
161770	119	365
161835	174	355
161975	308	287
162190	500	251
0465		
SEE NOTE 2		
053000	0	0
053056	5	35
053102	15	115
053166	27	198
053167	33	240
053187	38	280
053213	47	320
053239	55	355
053264	65	395
053295	79	431
053329	100	468
053369	119	476
053415	160	475
053454	198	431
053538	269	375
053650	365	339
053696	481	324
053870	615	320
0466		
SEE NOTE 2		
071600	0	0
071633	4	37
071657	15	117
071677	29	198
071689	35	240
071700	38	280
071713	46	320
071726	53	358
071737	62	398
071752	74	435
071770	92	468
071799	127	640
071826	170	468
071861	303	395
071927	362	331
072003	460	303
072110	612	288
072191	727	282
072300	881	276
0467		
SEE NOTE 2		
165900	0	0
165976	6	13
170005	27	77
170027	39	156
170040	47	198
170050	54	237
170060	61	275
170072	68	316
170085	77	360
170097	88	395
170112	97	435
170129	111	467
170150	134	506
170173	165	525
170193	202	521
170230	272	446
170266	346	395
170336	462	340
170466	665	316
170592	846	313
0468		
SEE NOTE 2		
020600	0	0
020623	11	33
020650	22	117
020670	31	205
020682	38	237
020692	42	280
020703	46	320
020715	50	359
020727	58	395
020738	67	435
020749	73	469
020770	85	543
020783	92	585
020798	104	629
020832	139	670
020865	206	604
020887	269	491
020918	336	400
020980	423	348
021125	654	340

TIME	STRAIN	STRS
0469		
SEE NOTE 2		
014500	0	0
014520	15	77
014530	29	157
014539	38	237
014547	48	317
014556	65	398
014567	88	469
014572	131	544
014599	199	555
014615	269	507
014633	350	431
014658	461	367
014686	577	330
014726	731	311
014767	888	300
0472		
SEE NOTE 2		
042500	0	0
042511	19	77
042521	27	157
042530	38	240
042538	48	316
042547	60	399
042555	75	472
042563	87	545
042576	106	617
042588	145	683
042599	186	683
042611	242	618
042621	300	543
042659	481	400
042691	615	380
0476		
SEE NOTE 2		
143950	0	0
144000	0	0
144007	38	221
144013	71	545
144018	107	929
144025	169	1219
0477		
SEE NOTE 2		
021700	0	0
021708	53	610
021718	127	1051
021742	493	883
021769	687	713
0478		
SEE NOTE 2		
061825	0	0
061937	12	37
061976	28	117
062035	42	195
062086	65	276
062135	108	316
062168	115	325
062237	174	316
062287	221	278
062438	346	237
062637	500	233
062982	769	231
0481		
SEE NOTE 2		
050300	0	0
050364	8	35
050404	20	101
050435	30	153
050467	38	198
050479	43	237
050507	52	285
050527	58	316
050555	70	355
050628	106	432
050812	231	491
050896	308	439
051131	500	379
051390	692	360
0483		
SEE NOTE 2		
175700	0	0
175750	9	37
175797	23	110
175865	38	198
175890	54	277
175962	77	356
176014	127	377
176086	191	365
176222	308	277
176455	500	229
176697	692	207
0484		
SEE NOTE 2		
135075	0	0
135097	5	8
135109	12	33
135137	26	117
135160	40	198
135184	57	276
135214	78	359

TIME	STRAIN	STRS
135232	92	395
135250	115	416
135272	151	420
135347	290	320
135404	385	284
135530	577	237
135650	769	217
0485		
SEE NOTE 2		
141733	0	0
142050	8	37
142072	20	113
142094	33	198
142116	45	277
142128	53	319
142140	59	355
142163	77	431
142195	107	506
142217	134	527
142242	173	529
142282	251	455
142336	366	387
142455	538	340
142583	731	325
0487		
SEE NOTE 2		
160000	0	0
160001	6	21
160003	16	85
160005	27	198
160007	39	316
160008	46	395
160010	58	477
160011	68	567
160012	76	638
160013	85	702
160014	92	771
160015	100	853
160017	111	930
160018	120	989
160019	134	1051
160020	148	1109
160022	168	1133
160023	208	1133
160026	385	1105
160030	572	934
160036	683	669
0488		
SEE NOTE 2		
164000	0	0
164003	10	78
164005	19	155
164006	27	244
164007	33	324
164008	38	409
164010	45	485
164011	52	567
164012	58	639
164013	65	711
164014	71	771
164015	81	845
164016	88	910
164017	100	992
164019	122	1054
164021	156	1076
164030	523	1027
164042	831	772
0490		
SEE NOTE 2		
051800	0	0
051804	29	157
051805	38	250
051806	45	322
051807	55	401
051809	65	475
051810	71	543
051811	78	622
051813	90	697
051814	98	771
051815	111	873
051817	133	902
051819	190	902
0492		
SEE NOTE 2		
152000		0
152025	0	7
152028	0	15
152031	1	21
152034	2	27
152037	4	34
0493		
SEE NOTE 2		
161633	0	0
161665	35	104
172700	53	104
211600	63	104
231700	66	104
080015	82	104
112400	88	104
170300	100	104
202100	104	104

TIME	STRAIN	STRS
230430	108	104
0495		
SEE NOTE 2		
140500	0	0
140618	10	30
140662	23	115
140715	43	198
140755	65	239
140808	105	252
140860	154	229
140900	193	198
140984	273	157
141272	473	133
0496		
SEE NOTE 2		
133700	0	0
133750	9	37
133808	31	157
133875	58	235
133920	85	260
133993	154	237
134072	231	198
134109	346	162
134253	462	155
134462	654	150
0497		
SEE NOTE 2		
153000	0	0
153052	8	37
153075	15	77
153098	25	113
153125	34	157
153157	50	193
153185	69	207
153241	115	213
153290	160	198
153369	231	166
153505	346	141
153693	500	125
153887	654	124
153987	735	124
0498		
SEE NOTE 2		
161900	0	0
161945	12	35
161969	22	77
161991	31	116
162017	42	157
162050	61	198
162140	92	235
162230	212	229
162330	308	209
162498	462	190
162758	692	175
0499		
SEE NOTE 2		
170300	0	0
170317	8	37
170363	21	117
170353	27	157
170364	33	198
170377	42	236
170395	62	276
170433	115	289
170473	188	236
170523	269	198
170608	404	157
170695	538	135
170827	731	119
0504		
124000	0	0
124137	12	41
124160	26	120
124181	36	197
124198	49	236
124224	77	267
124245	110	268
124277	165	245
124333	253	189
124418	388	157
0505		
120200	0	0
120235	8	37
120260	23	167
120271	29	207
120285	38	198
120300	52	236
120340	99	270
120385	179	245
120445	265	198
120583	481	157
0506		
140200	0	0
140207	7	30
140218	18	116
140226	30	198
140235	43	276
140250	77	355
140255	98	372
140269	154	375
140283	219	316

TIME	STRAIN	STRS
140303	300	270
140330	400	237
140363	538	213
0508		
154300	0	0
154312	15	77
154316	20	117
154320	25	156
154325	29	198
154329	34	236
154323	38	275
154337	46	316
154342	54	355
154348	68	395
154357	94	631
154361	108	635
154369	147	430
154377	181	395
154396	273	320
154425	385	275
154473	577	240
154525	769	216
0509		
162400	0	0
162408	13	35
162414	17	77
162418	23	110
162424	29	156
162428	34	198
162432	40	237
162436	47	275
162440	52	315
162447	65	355
162452	78	395
162463	115	430
162480	190	395
162499	275	315
162536	426	240
162573	577	210
162615	731	198
162655	885	180
0510		
165000	0	0
165002	8	40
165005	21	158
165007	28	200
165008	32	237
165009	38	281
165010	44	317
165011	51	359
165012	59	395
165014	69	431
165015	85	470
165017	100	489
165020	141	483
165021	180	440
165023	213	397
165025	246	362
165034	409	236
0512		
172025	0	0
172751	0	3
172766	3	10
172782	4	16
172792	6	21
172304	10	27
172311	12	30
172317	14	33
172517	24	33
172600	31	33
173000	32	33
173700	39	32
174725	45	32
175550	48	32
181200	54	31
183225	56	31
190207	67	31
193250	69	30
201000	75	30
203536	72	30
211400	83	30
211691	74	13
0570		
140040	0	0
140077	12	78
140106	31	157
140133	50	237
140160	92	316
140193	158	395
140225	249	469
140264	393	543
140302	626	586
140315	746	589
140334	1040	543
140350	1389	469
140365	1726	400
140390	2184	317
140453	3010	237
140466	3184	233
0571		
145473	0	0

TIME	STRAIN	STRS
145510	32	73
145543	70	157
145573	123	236
145607	213	315
145635	411	395
145695	672	431
145720	898	427
145768	1257	431
145796	1910	321
145851	2666	236
145867	2904	220
0572		
155275	0	0
155283	22	30
155309	52	78
155333	79	117
155351	107	157
155367	136	198
155385	178	237
155402	223	276
155422	286	317
155448	390	355
155477	562	390
155510	892	379
155525	1078	357
155550	1478	280
155592	2036	197
155610	2387	157
155637	2690	133
0573		
165946	0	0
165976	48	37
165995	82	78
166013	111	117
166030	143	157
166046	174	198
166062	218	237
166080	267	277
166100	338	316
166131	466	355
166171	708	395
166205	1012	395
166232	1346	355
166251	1616	316
166270	1910	277
166320	2156	198
166370	2903	157
0574		
190313	0	0
190330	7	33
190347	19	73
190363	29	118
190378	45	157
190392	66	198
190410	100	237
190425	141	277
190447	226	316
190480	411	351
190508	686	348
190523	898	316
190540	1157	276
190575	1694	198
190615	2165	157
190651	2524	150
0575		
200910	0	0
200992	34	37
201015	96	78
201037	141	117
201054	167	157
201068	188	198
201024	222	238
201100	263	276
201120	324	316
201146	434	355
201173	596	382
201191	758	387
201210	940	380
201225	1138	355
201245	1412	316
201265	1707	276
201291	2058	237
201325	2456	198
201398	3223	157
0576		
115981	2	0
115982	5	10
115983	11	25
115984	15	48
115985	21	63
115986	25	82
115987	35	105
115988	36	128
115989	39	148
115990	45	167
115990	50	191
115991	54	208
115992	61	226
115993	69	253
115994	79	280
115995	95	311

TIME	STRAIN	STRS
115997	117	358
115998	135	382
116000	170	424
116002	209	462
116004	265	500
116006	372	539
116009	525	558
116012	737	560
0577		
133330		
133332		
133513	0	0
133528	24	38
133530	40	78
133531	50	102
133532	58	121
133533	69	158
133535	82	190
133536	96	212
133537	110	237
133539	127	268
133540	136	284
133541	156	317
0578		
142304	0	0
142305	6	20
142306	12	36
142307	20	61
142309	24	90
142310	29	112
142311	34	130
142312	37	150
142313	41	180
142314	45	203
142315	49	223
142316	57	252
142317	62	281
142318	69	311
142319	80	348
142320	94	380
142321	112	420
142323	130	462
142325	152	495
142327	182	538
142329	214	570
142331	247	603
142333	309	641
142336	430	687
142339	522	700
142343	644	661
142348	1563	446
142349	2450	308
142351	2997	244
0579		
152354	0	0
152355	29	21
152357	66	43
152360	84	78
152361	69	97
152362	136	124
152363	167	158
152365	196	184
152366	232	212
152367	258	238
152369	291	277
152371	324	317
152373	364	356
152375	415	400
152377	458	436
152380	520	472
152382	625	512
152385	835	536
152388	1016	532
152390	1359	476
152392	1782	370
152394	2292	229
152395	2585	165
0580		
160476	0	0
160481	15	14
160483	26	52
160484	36	78
160485	44	101
160487	50	133
160488	59	158
160489	63	185
160490	72	212
160491	82	237
160492	93	268
160494	116	316
160496	154	356
160498	192	394
160500	227	431
160504	418	465
160507	773	422
160508	1056	362
160511	1590	238
160513	1960	165
160515	2222	150
0581		
164403	0	0

TIME	STRAIN	STRS
164405	3	14
164407	16	37
164408	33	59
164409	44	78
164410	58	107
164412	70	133
164413	79	159
164414	89	181
164415	96	212
164416	110	237
164418	124	272
164420	144	317
164422	169	358
164424	192	394
164426	231	438
164428	281	483
164431	389	528
164434	532	547
164436	699	538
0582		
131525	0	0
131540	10	18
131549	14	37
131558	24	57
131565	36	78
131576	42	96
131584	47	117
131593	59	136
131600	67	157
131611	79	180
131617	92	198
131628	110	220
131636	120	237
131655	175	276
131677	238	317
131699	318	347
131712	399	375
131739	584	380
131760	770	370
131769	870	356
131781	1072	316
131809	1640	220
131863	2120	180
0583		
141787	0	0
141816	21	14
141830	50	38
141853	88	51
141862	100	79
141874	123	92
141882	135	117
141889	160	140
141900	187	157
141916	285	180
141930	306	198
141952	435	215
141978	634	220
142006	910	220
142034	1138	198
142062	1482	176
142088	1767	157
0584		
163574	0	0
163595	41	22
163609	78	45
163614	125	65
163638	181	85
163660	290	114
163678	397	125
163703	542	141
163716	669	165
163729	803	180
163775	966	205
163815	964	244
163855	998	284
163897	1626	323
163941	1856	362
163987	2126	401
164052	2542	438
164102	2912	458
164144	3236	458
164185	3594	450
160000	3878	406
164360	5402	323
0585		
153611	0	0
153621	9	14
153630	16	37
153640	31	52
153652	50	78
153663	69	97
153670	87	116
153681	121	137
153690	155	157
153707	226	176
153721	296	198
153742	415	216
153760	514	236
153807	787	276
153851	1038	317
153893	1284	355

TIME	STRAIN	STRS
153932	1520	379
154016	2043	431
154084	2134	450
154147	3067	446
154186	3474	420
154252	4212	347
154373	5032	268
0586		
163107	0	0
163114	2	19
163124	16	37
163134	36	57
163142	56	78
163154	77	97
163162	104	113
163175	141	137
163183	169	157
163200	232	181
163210	284	198
163235	434	220
163264	658	238
163468	2283	276
163562	3087	276
163626	3643	276
163725	4084	268
163860	5730	249
0587		
172884	0	0
172902	25	22
172912	46	47
172925	79	66
172937	117	84
172954	197	106
172969	274	124
173006	506	150
173035	724	165
173072	984	184
173107	1220	212
173155	1528	243
173192	1784	277
173249	2152	300
173300	2572	322
173380	2848	322
173425	3648	316
173513	4500	283
173640	5668	243
0588		
135361	0	0
135426	17	13
135436	26	33
135448	47	51
135457	65	77
135471	103	91
135485	151	114
135502	223	132
135521	308	153
135550	463	176
135570	584	197
135595	721	212
135613	811	237
135638	933	258
135655	1024	277
135686	1170	314
135730	1378	360
135774	1602	381
135858	1880	395
135895	2060	436
135951	2390	469
135993	2640	421
140078	3144	455
140146	3675	455
140181	3918	393
140189	3978	387
0589		
150379	0	0
150383	19	12
150385	33	30
150386	48	54
150387	65	78
150388	77	101
150390	88	118
150391	97	136
150392	107	150
150393	121	182
150394	126	196
150396	148	236
150398	181	283
150400	212	317
150402	246	362
150406	288	401
150408	343	437
150410	399	478
150413	250	557
0590		
154737	2	8
154738	5	25
154739	17	50
154741	27	74
154743	39	93
154744	62	112
154745	73	140

TIME	STRAIN	STRS
154746	92	171
154748	117	198
154749	146	220
154750	174	250
154752	233	276
154755	310	317
154759	536	351
154765	917	355
154770	1351	366
154777	1813	363
154790	2828	352
154805	4013	316
154821	5214	295
154841	5548	317
0591		
162978	2	7
162980	23	26
162981	42	49
162983	67	79
162984	90	98
162985	123	121
162987	177	145
162989	247	180
162991	329	205
162994	421	237
162998	593	277
163004	792	316
163008	997	360
163013	1241	394
163023	1720	468
163034	2304	546
163041	2688	582
163050	3329	618
163057	3777	634
163064	4228	638
163069	4740	618
163076	5368	544
163090	5406	394
0592		
170828	0	0
170830	25	20
170831	45	37
170832	67	54
170834	96	78
170835	128	100
170837	179	130
170839	230	156
170841	281	180
170843	351	209
170846	467	251
170850	604	292
170855	837	356
170862	1118	431
170869	1390	506
170876	1660	582
170884	1980	661
170891	2330	724
170897	2640	756
170900	2880	761
170903	3270	710
0593		
173904	2	7
173905	17	30
173907	34	52
173909	50	78
173910	77	100
173912	102	132
173914	122	157
173915	143	181
173917	172	209
173919	202	237
173921	263	281
173924	327	316
173927	433	355
173930	570	395
173937	858	445
173941	1100	487
173948	1416	543
173957	1885	618
173965	2368	694
173973	2730	731
173979	3120	756
173986	3714	747
0594		
131852	0	0
131853	15	18
131854	29	38
131855	50	50
131857	76	69
131858	117	88
131860	190	110
131863	379	130
131866	601	132
131871	1047	125
131878	1615	117
131883	2095	116
131890	2677	115
132907	3930	112
132923	5160	109
0595		
141827	0	0

TIME	STRAIN	STRS
141836	13	10
141845	26	30
141847	40	47
141848	52	69
141849	65	88
141850	87	108
141851	105	121
141852	130	141
141854	165	161
141855	217	185
141858	320	211
141850	447	223
141852	604	228
141855	845	225
141857	1100	206
141862	1508	181
141867	1941	165
141875	2487	148
141885	3473	133
141898	4242	129
0596		
150264	0	0
150265	13	14
150266	22	29
150267	38	50
150268	51	77
150270	78	93
150271	104	113
150274	137	132
150275	195	152
150276	265	171
150279	447	180
150282	668	180
150284	943	165
150290	1047	141
150295	1833	119
150304	2601	91
150313	3365	72
0597		
155001	0	0
155006	20	10
155007	37	35
155009	53	51
155010	82	73
155011	112	90
155014	183	110
155015	240	121
155017	360	131
155020	570	133
155024	876	130
155030	1288	118
155038	1949	145
155048	2807	78
155053	3216	59
0598		
163327	0	0
163339	16	22
163340	25	37
163341	48	56
163342	61	78
163343	77	90
163345	120	111
163346	164	131
163348	227	148
163350	351	166
163352	497	171
163356	862	166
163362	1290	156
163371	2660	140
163387	3240	131
163403	4380	125
163430	6307	116
0599		
172281	0	0
172287	1	17
172297	12	36
172310	43	54
172320	71	71
172328	110	81
172350	273	91
172367	468	91
172390	703	90
172432	1119	78
172473	1538	71
172516	1957	63
172559	2376	62
172601	2790	60
0600		
132630	2	7
132636	4	10
132640	10	16
132646	16	35
132651	30	42
132657	40	56
132663	60	68
132669	84	78
132680	143	85
132698	268	92
132713	395	93
132803	1069	78
132895	2032	72

TIME	STRAIN	STRS
132936	2414	68
133002	3047	60
0601		
140410	0	0
140413	1	9
140419	10	20
140425	25	32
140431	45	40
140440	83	57
140448	130	68
140456	197	71
140476	377	76
140514	761	78
140551	1152	69
140589	1518	63
140630	1923	62
140667	2308	60
0602		
145490	2	7
145496	2	9
145502	17	20
145508	28	31
145515	48	44
145522	77	52
145528	102	69
145536	142	76
145544	236	85
145558	432	85
145580	551	85
145632	1090	82
145668	1477	76
145706	1862	73
145748	2221	61
0603		
155263	0	0
155268	4	11
155255	28	21
155260	38	36
155268	71	44
155277	112	62
155283	153	66
155290	206	70
155310	358	77
155326	511	78
155365	896	78
155404	1281	77
155468	1513	69
155508	2283	69
155530	2479	69
155565	2825	69
0604		
163003	0	0
163005	5	9
163008	15	26
163013	32	49
163017	48	69
163021	83	92
163026	129	110
163033	209	123
163041	321	135
163050	636	135
163064	1017	122
163086	1968	108
163100	2331	100
163126	2990	91
163161	3490	85
163210	4644	80
0605		
171352	2	7
171356	5	10
171357	23	29
171360	50	43
171363	69	60
171366	108	76
171376	196	92
171378	293	99
171385	442	107
171401	858	107
171425	1457	97
171455	2260	91
171485	3060	88
171535	4260	85
0606		
134652	0	0
134654	11	37
134656	22	78
134658	34	116
134660	50	157
134662	62	198
134664	71	237
134666	83	276
134668	96	316
134670	123	365
134671	135	395
134675	182	468
134677	251	544
134684	419	618
134688	661	630
0607		
142553	0	0
142557	11	37

TIME	STRAIN	STRS
142559	23	78
142561	42	116
142564	60	157
142565	81	198
142567	105	237
142570	133	276
142572	173	316
142577	331	395
0608		
150503	0	0
150505	2	30
150508	16	78
150510	28	113
150513	35	157
150515	48	198
150517	54	237
150519	70	280
150520	78	323
150522	91	360
150524	107	398
150528	137	468
150531	176	568
150535	233	622
150539	323	699
150543	499	747
0609		
154967	0	0
154970	19	37
154972	36	78
154975	57	116
154977	75	158
154979	92	198
154982	113	239
154983	129	278
154985	154	316
154987	182	360
154989	204	396
154993	282	468
0610		
164135	0	0
164146	8	11
164150	13	31
164154	36	67
164156	62	66
164158	50	77
164161	73	91
164165	113	109
164169	207	131
164179	318	142
164188	544	146
164198	815	140
164211	1130	127
164216	1522	117
164254	2252	107
164284	3030	100
0611		
172063	0	0
172074	7	16
172078	23	37
172081	46	52
172085	71	69
172086	88	78
172091	141	90
172097	235	99
172110	525	108
172121	794	108
172142	1310	96
172171	2072	92
172203	2843	85
172226	3386	83
172257	4158	77
0612		
151995	0	2
152010	5	77
152014	17	157
152018	33	236
152022	48	315
152025	63	395
152029	74	464
152033	92	544
152036	109	625
152040	137	702
152043	161	773
152048	207	882
152053	304	989
152060	444	1097
152065	636	1163
152067	769	1169
152069	841	1142
152076	1041	695
0613		
160930	0	0
160962	19	77
160966	52	157
160950	73	236
160954	94	315
160957	113	395
160960	139	468
160964	162	544
160968	201	625
160971	245	695

TIME	STRAIN	STRS
160975	304	780
160979	390	845
160984	535	912
160987	687	950
160991	902	968
160996	1275	953
161000	1827	881
161010	3041	695
161020	4102	566
0614		
165372	0	4
165379		77
165383		157
165387		236
165390		315
165395		416
165398	69	475
165401	127	544
165405	161	623
165409	192	695
165413	240	773
165416	285	846
165421	383	918
165426	547	990
165431	769	1026
165435	1074	1020
165439	1277	961
165444	1336	853
165450	1414	680
165459	1692	544
0615		
172807	3	8
172818	25	77
172822	29	157
172826	79	236
172830	98	315
172836	114	402
172837	126	475
172840	144	551
172844	163	625
172847	177	702
172850	198	773
172853	223	845
172856	253	918
172860	274	989
172863	311	1061
172867	342	1140
172870	377	1205
172875	463	1313
172880	565	1377
172888	870	1485
172890	1079	1478
172893	1563	1377
172896	2348	1162
0616		
141039	0	0
141046	65	77
141050	113	157
141056	154	275
141061	186	395
141066	217	505
141072	261	618
141075	287	702
141078	321	773
141081	365	846
141085	426	918
141090	501	990
141095	638	1062
141099	804	1107
141102	1012	1119
141105	1279	1097
141108	1748	1018
141112	2436	875
141118	3490	606
141125	4463	505
0620		
153987	0	0
153995	58	77
153999	92	157
154003	121	236
154007	150	315
154012	174	395
154015	201	468
154019	228	551
154023	265	621
154027	310	698
154031	375	773
154037	506	875
154043	719	943
154048	1126	965
154051	1385	962
154058	2100	846
154065	3065	695
154072	3985	582
0622		
170442	0	0
170446	56	74
170451	107	154
170455	136	235
170458	165	315
170462	183	402

TIME	STRAIN	STRS
170465	198	478
170467	214	551
170472	236	632
170475	254	695
170478	282	773
170482	309	846
170485	340	910
170490	393	990
170492	451	1061
170496	563	1040
170501	721	1197
170505	923	1213
170508	1321	1155
170511	2018	1061
170515	3053	712
170518	4232	395
0624		
181417	0	0
181422	56	77
181427	100	157
181431	133	236
181436	162	315
181439	190	395
181443	221	468
181447	258	544
181450	303	618
181454	363	695
181457	425	773
181462	526	846
181465	622	882
181470	875	940
181474	1069	947
181478	1458	932
181483	2064	853
181490	3341	695
181498	4003	589
0626		
134645	0	0
134657	38	77
134670	79	157
134682	110	236
134694	144	315
134705	174	395
134716	212	468
134728	262	544
134740	323	625
134752	411	695
134765	556	773
134775	695	803
134783	878	810
134790	1109	803
134799	1435	760
134810	1964	664
134825	2635	558
134847	3925	446
0628		
145381	0	0
145401	38	77
145415	75	157
145427	102	236
145439	128	315
145450	163	395
145460	197	468
145470	238	544
145482	311	618
145496	438	695
145513	655	759
145527	948	773
145538	1273	763
145550	1755	695
145563	2301	625
145583	3095	570
145608	3877	468
0629		
161592	0	0
161619	77	77
161632	125	157
161645	160	236
161655	198	315
161666	232	395
161676	266	468
161687	300	544
161698	362	618
161710	396	695
161720	452	773
161733	539	867
161749	711	919
161758	884	940
161766	1126	932
161775	1505	875
161783	2028	773
161790	2535	656
161805	2515	530
0630		
165950	6	14
165960	12	77
165972	44	157
165982	63	
165991	90	215
170004	120	395
170016	159	468

TIME	STRAIN	STRS
170028	208	544
170041	304	618
170056	465	695
170067	654	725
170075	819	740
170087	1182	732
170102	1679	672
170120	2370	590
170138	3001	521
170162	3785	468
0631		
131722	0	15
131736	110	77
131749	133	157
131760	167	236
131770	209	315
131782	244	395
131793	285	468
131805	331	544
131816	384	618
131829	457	695
131840	533	773
131856	662	847
131866	829	890
131875	924	910
131883	1217	903
131891	1631	847
131906	2275	717
131918	3057	567
131932	3665	490
131944	4019	453
0632		
155123	0	0
155137	19	77
155148	40	157
155159	60	236
155170	86	315
155180	117	395
155197	179	505
155217	286	618
155242	598	735
155256	891	750
155264	1148	743
155277	1600	687
155295	2386	583
155331	3589	468
0633		
165318	0	0
165336	35	77
165349	71	157
165360	94	236
165370	121	315
165380	143	395
165391	171	465
165402	200	544
165420	274	655
165438	405	773
165456	675	839
165465	904	846
165478	1379	788
165491	2076	767
165510	2827	559
165536	3738	468
0634		
180092	3	0
180113	37	77
180126	76	154
180139	109	236
180150	140	315
180160	167	395
180170	197	468
180180	233	547
180192	307	618
180204	361	695
180218	498	773
180235	767	825
180244	950	832
180250	1104	832
180260	1479	807
180282	2302	695
180311	3339	581
180355	4686	505
0636		
145082	0	0
145125	66	75
145160	116	157
145190	146	236
145220	178	316
145250	211	395
145281	265	468
145314	324	543
145353	436	617
145382	575	664
145421	878	683
145433	1017	672
145453	1376	618
145577	1844	543
145600	2297	468
145641	2911	395
0637		
162686		0

TIME	STRAIN	STRS
162728	23	77
162760	52	157
162792	87	236
162825	125	315
162857	178	395
162893	262	468
162937	412	544
162994	745	567
163036	1053	618
163072	1392	618
163115	1870	582
163161	2404	544
163232	3156	505
163250	4320	468
0639		
172964	3	7
172987	3	35
173005	19	73
173036	40	157
173064	67	236
173097	90	315
173129	159	395
173160	239	468
173195	240	539
173242	268	590
173274	17	601
173294	1111	601
173320	1432	582
0640		
123150	0	7
123192	12	35
123210	38	77
123245	85	155
123275	119	236
123306	155	315
123337	209	395
123355	249	432
123371	299	468
123393	377	515
123417	494	544
123465	832	582
123513	1295	573
123546	1688	544
123585	2083	502
123642	2863	462
123714	3663	423
0642		
131212	0	0
131250	38	77
131282	67	157
131313	104	236
131343	140	315
131371	180	395
131400	220	468
131430	231	544
131458	319	618
131489	384	695
131520	459	773
131558	577	846
131602	1007	874
131613	1025	867
131640	1598	773
131657	2062	657
131672	2592	544
131727	3636	395
0643		
152628	0	0
152655	29	78
152685	56	157
152715	83	238
152747	119	316
152773	155	395
152805	212	468
152840	300	543
152880	484	618
152912	720	693
152926	883	626
152948	1216	582
152973	1694	505
153038	2587	416
153103	3709	395
0645		
165604	0	0
165644	46	77
165678	98	157
165708	137	236
165739	182	315
165770	207	395
165801	326	468
165841	469	544
165922	1024	611
165943	1233	607
165973	1609	582
166033	2356	505
166137	3614	431
166155	3805	423
0647		
183818		0
183841	18	38
183857	31	78
183873	40	116

TIME	STRAIN	STRS
183888	56	157
183904	71	198
183918	81	237
183948	115	317
183976	162	395
184009	235	468
184049	385	543
184085	628	581
184110	915	573
184138	1272	532
184173	1825	461
184234	2613	395
0650		
083993	0	0
084030	42	35
084047	73	78
084054	104	113
084068	133	157
084115	190	237
084147	248	317
084170	309	395
084212	370	468
084245	462	542
084262	520	581
084272	596	618
084306	707	656
084357	1108	687
084377	1353	663
084399	1691	618
084431	2219	543
084467	2724	468
084557	3882	393
0651		
131561	0	0
131587		78
131595		115
131602		156
131608		198
131614		237
131626		315
131637		394
131649		468
131660		547
131675		622
131690		663
131698		661
131706		633
131716		570
131736		460
131752		412
131778		370
0652		
142124	0	11
142139	25	97
142147	40	158
142158	56	237
142168	71	315
142178	90	395
142190	112	468
142201	138	544
142213	171	618
142224	209	694
142235	263	771
142247	338	847
142261	464	918
142279	762	964
142287	975	953
142296	1394	881
142303	1882	771
142313	2573	611
142323	3254	468
0653		
152670	0	0
152699	14	38
152707	31	78
152713	38	117
152719	48	158
152730	67	237
152740	94	315
152752	128	395
152763	168	468
152775	233	548
152790	357	618
152812	709	672
152820	931	664
152831	1348	618
152847	2033	521
152863	2665	439
152880	3228	395
0654		
162088	0	0
162098	13	36
162105	27	77
162112	37	116
162118	48	157
162124	58	198
162130	65	237
162141	90	315
162151	113	395
162162	142	472
162173	176	546

TIME	STRAIN	STRS
162184	219	618
162196	276	693
162210	357	773
162224	488	846
162237	663	889
162245	833	895
162255	1117	889
162263	1450	846
162278	2072	740
162296	2882	618
162318	3608	543
162356	4740	480
0655		
170078	6	15
170083	10	37
170091	37	77
170099	60	117
170105	75	157
170114	97	205
170118	115	239
170130	159	315
170142	228	395
170157	378	468
170173	645	503
170183	822	497
170193	1255	468
170215	1981	402
170242	2732	347
170286	3932	315
0656		
155891	0	0
155921	0	0
155944	10	35
155966	24	76
155988	38	117
156008	56	157
156027	75	193
156045	97	237
156063	123	276
156080	156	315
156120	259	394
156144	348	432
156171	502	467
156206	792	487
156233	1092	483
156245	1248	480
156265	1550	453
0657		
192844	0	0
192860	6	16
192877	16	44
192898	37	90
192920	40	130
192937	52	169
192954	63	207
192970	75	249
192986	86	288
193002	96	326
193018	109	365
193024	122	405
193030	136	440
193064	148	480
193093	181	557
193123	221	630
193157	279	705
193190	356	785
193232	509	856
193245	587	863
193270	819	863
193285	1125	821
193296	1450	745
193309	1923	630
193329	2373	480
193360	3077	399
0658		
150305	0	0
150320	3	2
150340	10	36
150361	21	78
150381	33	116
150400	44	158
150419	58	200
150426	71	237
150462	84	276
150468	100	316
150500	133	395
150533	175	469
150564	230	544
150598	306	619
150646	685	694
150672	887	701
150688	1106	694
150703	1175	654
150720	1567	580
150747	2144	468
150779	2706	394
0659		
165946	0	0
165956	1	2
165975	12	33
165997	24	78

TIME	STRAIN	STRS
170020	39	117
170039	57	157
170058	76	198
170074	93	237
170090	97	276
170110	147	317
170150	239	394
170195	422	469
170227	597	505
170291	1137	529
170317	1401	529
170352	1826	491
170405	2484	439
170475	3284	394
170512	3670	386
0660		
190800	0	0
190816	0	0
190836	15	33
190858	28	78
190879	41	117
190896	55	157
190916	66	198
190933	79	237
190949	91	276
190964	105	317
190996	138	394
191029	176	469
191059	223	543
191090	290	618
191133	424	693
191159	568	720
191180	789	720
191190	953	699
191210	1376	619
191228	1764	543
191265	2420	431
191295	2595	394
0661		
212905	0	0
212925	10	34
212947	27	78
212967	40	117
212985	57	157
213005	74	198
213021	93	237
213039	115	277
213056	144	318
213093	229	394
213136	377	469
213163	508	505
213212	844	543
213230	998	566
213272	1448	561
213309	1890	513
213354	2429	469
213428	3252	423
213510	4119	394
0662		
133616	0	0
133629	2	3
133648	12	34
133669	27	78
133690	45	117
133710	63	157
133728	83	198
133746	104	237
133761	125	277
133780	150	318
133814	212	394
133854	317	469
133908	589	541
133937	867	543
133948	1010	537
133972	1377	483
134014	2083	394
134080	2942	318
0663		
151602	0	0
151608	2	5
151630	12	38
151655	27	78
151675	43	117
151694	60	157
151715	79	198
151730	94	237
151750	117	277
151766	146	318
151802	217	394
151845	348	469
151870	467	505
151917	767	543
151947	1017	550
151978	1350	542
152015	1800	510
152078	2550	645
152175	3642	394
0664		
175923	0	0
175943	3	1
175977	13	36

TIME	STRAIN	STRS
180017	27	78
180051	41	117
180081	56	157
180117	69	198
180148	83	237
180175	95	276
180204	112	317
180263	152	394
180324	202	469
180381	268	543
180446	362	619
180555	652	694
180590	849	694
180610	1011	680
180645	1396	619
180670	1766	544
180720	2361	431
180742	2565	401
0665		
091330	0	0
091391	18	35
091435	47	74
091477	75	113
091514	103	158
091549	133	200
091578	160	237
091611	193	276
091647	231	316
091724	348	395
091767	465	431
091820	588	469
091988	817	512
092062	1111	528
092097	1289	533
092168	1677	525
092217	1952	513
092345	2765	461
092435	3259	438
0666		
130919	0	0
130930	0	0
130963	8	36
131005	19	78
131040	27	116
131073	39	158
131098	49	200
131127	59	237
131165	76	283
131215	100	356
131249	115	399
131301	152	469
131358	195	544
131417	256	619
131450	290	657
131485	362	696
131525	417	732
131576	581	761
131616	829	757
131642	1131	694
131674	1650	580
131708	2186	468
0667		
145812	0	0
145830	2	3
145865	16	36
145903	36	78
145940	59	116
145975	82	158
146012	109	200
146046	142	237
146074	162	276
146126	236	331
146149	274	356
146187	345	395
146233	447	431
146290	607	469
146362	855	507
146439	1172	529
146477	1362	529
146496	1468	529
146549	1757	521
146600	2070	506
146702	2699	468
146870	3670	435
0668		
162140	0	0
162280	0	0
162555	48	38
162710	96	78
162955	154	101
163290		133
0669		
204787	0	0
204890	3	3
205172	30	53
205430	58	78
205632	86	117
205880	123	157
210040	156	181
210198	193	205
210415	254	229

TIME	STRAIN	STRS
210613	312	253
210707	345	269
211075	485	293
211254	575	324
211490	687	367
211647	769	411
211917	913	387
212255	1115	395
212970	1556	409
213505	2046	412
214270	2717	401
0670		
090284	0	0
090410	0	0
090560	13	22
090714	27	38
090980	49	78
091154	62	98
091417	90	133
091558	110	157
091767	133	190
091947	150	220
092100	177	237
092500	226	276
092861	343	316
093380	588	428
093645	758	424
094250	988	300
094450	1286	276
0671		
130532	0	0
130587	2	3
130810	12	36
131087	38	78
131365	77	117
131643	126	157
132003	196	198
132488	285	236
133170	458	276
133307	545	317
133617	669	355
134035	965	395
134795	1361	408
135258	1652	412
135785	1994	401
140737	2704	412
142132	3665	420
143022	3990	453
0672		
181150	0	0
181185	2	3
181472	38	78
181620	69	117
181763	104	157
181915	144	198
182078	188	236
182220	245	276
182360	288	315
182504	355	355
182654	442	395
182903	519	424
182979	646	423
183072	840	409
183222	1408	355
183417	1846	315
183660	2283	292
0673		
205001	0	0
205023	0	3
205127	15	36
205279	46	78
205425	77	116
205583	112	157
205697	152	198
205845	202	236
210028	277	276
210206	364	316
210485	463	355
210685	796	401
210850	1010	431
211264	1431	468
211532	1779	475
211673	1988	477
211790	2363	468
212371	2904	453
213183	3760	415
0674		
100263	0	0
100310	1	3
100450	14	36
100587	27	78
100708	35	117
100870	56	157
100920	71	198
101035	90	236
101148	112	276
101280	133	315
101367	160	355
101472	183	395
101610	217	442
101795	260	468

TIME	STRAIN	STRS
101810	275	513
101940	317	544
102069	369	585
102260	479	618
102345	573	618
102450	777	601
102770	2066	555
102915	2969	515
103160	3815	500
0675		
095315	0	0
095316	10	31
095319	25	71
095324	56	158
095329	84	237
095333	110	316
095337	131	394
095341	155	473
095345	177	549
095348	200	618
095352	229	700
095355	262	771
095358	296	846
095362	338	910
095366	400	990
095371	496	1061
095375	619	1132
095379	781	1184
095381	879	1190
095384	1178	1195
095387	1421	1170
095389	1725	1104
095391	2186	1010
095393	2758	903
095397	3606	771
0676		
131672	0	0
131677	23	70
131681	50	149
131685	73	228
131690	98	308
131693	121	390
131697	150	460
131701	179	537
131705	217	612
131709	270	688
131714	344	766
131718	458	840
131722	590	873
131726	780	907
131729	979	910
131733	1317	895
131737	1733	852
131741	2346	766
131745	2896	688
131752	3760	588
131755	3963	566
0677		
143363	0	0
143368	19	78
143373	42	158
143377	60	237
143380	81	316
143384	96	395
143388	112	476
143391	126	551
143394	148	618
143398	169	696
143401	190	772
143405	220	845
143409	254	918
143413	298	989
143417	363	1061
143422	465	1132
143427	660	1209
143430	827	1220
143433	1048	1212
143435	1256	1149
143438	1690	1011
143440	2383	853
143444	3594	597
0678		
161003	0	0
161015	24	70
161019	48	149
161023	73	228
161028	96	308
161032	121	386
161036	150	458
161040	179	536
161043	219	612
161047	277	687
161051	354	765
161056	492	838
161060	625	874
161063	792	893
161066	1030	895
161070	1373	881
161073	1836	824
161077	2302	765
161082	2975	664

TIME	STRAIN	STRS
161087	3300	581
161092	4144	536
0679		
172484	0	0
172489	25	78
172493	48	158
172498	73	237
172502	94	316
172507	113	394
172510	131	468
172514	150	551
172517	170	618
172521	190	702
172525	213	771
172528	235	846
172532	262	918
172535	290	990
172539	327	1061
172543	367	1132
172545	408	1205
172549	457	1283
172552	531	1349
172557	673	1427
172562	942	1463
172565	1311	1441
172568	1823	1298
172569	2229	1162
0679		
172484	0	0
172490	26	78
172493	50	158
172498	74	237
172503	98	316
172507	117	401
172510	136	475
172514	156	550
172517	174	627
172521	198	701
172525	218	771
172528	244	847
172532	272	918
172535	302	990
172539	340	1062
172542	362	1132
172545	424	1205
172550	486	1283
172553	556	1355
172557	700	1427
172562	980	1462
172565	1364	1441
172567	1896	1299
172569	2318	1162
0680		
193290	0	0
193293	8	36
193298	23	78
193307	46	157
193315	69	236
193323	96	315
193331	125	395
193338	162	468
193346	217	551
193354	300	618
193365	485	695
193375	737	732
193380	935	760
193385	1198	732
193390	1494	710
193400	2031	650
193418	3027	545
193428	3461	512
193290	0	0
193293	8	38
193298	24	78
193307	50	158
193315	72	244
193323	100	316
193330	130	395
193338	170	468
193347	226	550
193354	312	618
193365	506	694
193375	766	732
193380	974	739
193385	1258	732
193390	1554	710
193400	2114	649
193418	3150	544
193428	3602	512
0681		
111975	0	0
112000	2	7
112112	24	30
112190	42	52
112272	64	78
112353	86	92
112440	114	124
112518	144	146
112602	176	165
112707	225	192
112809	280	220

TIME	STRAIN	STRS
112943	366	252
113145	562	283
113369	810	292
113560	1096	295
113761	1440	280
113907	1682	276
114135	2046	256
114935	3206	251
115585	4126	251
0682		
140730	0	0
140828	33	42
140853	57	85
140878	93	117
140904	137	165
140931	193	205
140957	249	245
140980	310	283
141004	379	323
141035	477	362
141066	607	401
141110	829	438
141155	1109	453
141220	1235	445
141258	1475	431
0683		
171615	0	0
171620	24	78
171625	46	158
171630	70	237
171635	96	316
171638	126	401
171642	156	476
171646	196	544
171650	248	618
171655	340	701
171659	504	771
171662	626	806
171665	790	824
171669	1096	824
171672	1372	802
171675	1884	723
171680	2648	611
171690	2826	506
0684		
101332	0	0
101336	16	78
101360	38	158
101365	70	237
101369	84	316
101374	118	400
101377	150	475
101380	182	544
101385	254	618
101390	360	694
101395	548	771
101398	710	796
101402	956	800
101405	1220	789
101409	1730	710
101413	2314	618
101418	2642	537
0685		
142887	0	0
142892	32	78
142897	62	158
142901	92	237
142906	130	316
142910	172	402
142915	226	468
142920	312	550
142925	450	618
142932	804	671
142937	1262	656
142941	1690	603
142946		520
142953	2756	468
0686		
160218	0	0
160238	28	70
160243	62	158
160247	88	237
160251	104	316
160255	140	400
160259	172	476
160263	208	551
160267	260	618
160271	344	700
160275	468	771
160280	712	824
160283	882	835
160287	1186	828
160290	1680	771
160295	2432	658
160300	3126	558
160303	3498	505
0687		
170813	0	0
170864	6	7
170950	17	30
171032	31	52

TIME	STRAIN	STRS
171111	48	78
171189	69	101
171293	96	
172665	826	356
172870	1100	380
172962	1214	383
173188	1476	383
0688		
092047	0	0
092052	34	78
092056	60	158
092060	84	237
092065	108	316
092069	136	401
092073	168	470
092077	210	552
092080	256	618
092085	322	694
092093	452	771
0690		
163100	0	0
163131	0	0
163158	23	30
163187	58	78
163215	56	116
163237	72	158
163285	108	237
163330	148	316
163380	200	395
163424	268	468
163480	392	544
163540	664	581
163580	836	574
163580	1082	544
163600	1458	468
163630	1872	395
0691		
171489	0	0
171508	2	0
171532	24	10
171557	67	35
171594	134	78
171623	180	112
171654	230	158
171706	310	237
171760	392	316
171817	502	395
171926	769	468
171945	914	468
171965	1107	449
172017	1773	395
172078	2108	376
172100	2180	376
0693		
112794	0	0
112823	4	0
112850	32	34
112877	56	70
112907	81	116
112931	101	150
112976	140	230
113021	178	308
113069	222	395
113114	264	468
113161	320	544
113184	350	581
113208	386	618
113232	428	656
113262	506	694
113306	700	723
113322	829	715
113336	943	694
113356	1251	618
0695		
235300	0	0
235340	4	
235370	38	38
235405	86	78
235436	126	116
235461	160	158
235512	236	237
235563	334	309
235603	444	355
235642	602	395
235696	826	430
235807	1444	460
235862	1678	462
0696		
142150	0	0
142760	11	10
142777	19	35
142804	37	78
142832	60	116
142855	82	150
142904	142	237
142957	231	316
143017	306	395
143100	804	450
143122	990	438
143155	1300	416
143207	1678	355

TIME	STRAIN	STRS
143295	2726	292
0697		
153754	0	0
153777	7	1
153805	30	35
153835	55	78
153860	80	116
153885	102	158
153935	162	237
153980	182	316
154028	230	395
154075	291	468
154126	381	544
154190	574	618
154222	756	634
154238	858	626
154255	1122	596
154280	1592	506
154328	2422	355
154347	2650	323
0698		
170283	0	0
170295	5	3
170325	32	38
170357	66	78
170383	94	116
170409	128	158
170460	202	237
170515	310	316
170603	466	395
170678	1196	383
170711	1528	355
170820	2498	275
0700		
203000	0	0
3029	10	6
3049	24	38
3077	48	78
3102	72	116
3129	100	158
3179	172	237
3236	284	316
3306	492	395
3360	702	430
3435	1090	468
3488	1444	476
3560	1966	468
3680	2944	430
3815	3982	402
0701		
224030	0	0
4035	2	0
4087	34	38
4115	60	78
4143	90	116
4170	122	158
4220	200	237
4272	312	308
4330	558	395
4505	1392	460
4570	1890	453
4630	2378	430
4835	3884	395
4959	4572	400
0702		
130540	0	0
0572	12	6
0595	28	38
0621	48	78
0649	68	116
0672	92	158
0717	132	237
0765	184	316
0815	256	395
0865	354	468
0967	790	542
0983	932	540
1010	1238	506
1047	1760	415
1100	2428	340
0703		
135755	0	0
5799	6	3
5827	32	38
5855	58	78
5880	84	116
5918	122	178
5953	160	237
140002	190	316
0055	326	395
0112	482	468
0185	676	504
0205	1064	498
0230	1346	468
0269	1854	395
0337	2968	332
0704		
152527	0	0
2566	8	38
2600	12	78
2635	26	116

TIME	STRAIN	STRS
2664	48	158
2725	128	237
2787	234	316
2875	466	395
2935	738	408
2985	1122	405
3006	1354	395
3045	1820	355
3199	2320	316
3284	3102	292
0705		
163065	0	0
3094	8	10
3118	24	38
3142	44	78
3168	60	116
3200	90	158
3240	128	237
3264	148	275
3287	176	316
3316	218	355
3342	264	395
3373	340	430
3410	470	468
3433	588	480
3454	718	480
3487	990	468
3515	1328	430
3555	1696	395
3637	2410	316
0710		
133200	0	0
3266	8	18
3274	34	78
3283	68	150
3290	98	229
3300	134	316
3308	166	395
3315	200	468
3323	242	546
3332	300	618
3340	374	694
3350	498	771
3362	782	821
3365	934	821
3372	1338	771
3378	1768	654
3385	2302	581
3392	2616	506
0711		
142121	0	0
2159	30	38
2163	52	78
2172	94	158
2180	128	237
2189	162	316
2197	216	395
2205	262	468
2212	288	546
2221	358	618
2231	486	694
2238	769	732
2246	912	728
2257	1218	694
2267	1682	618
2261	2070	559
2269	2586	475
0712		
151808	0	0
1837	16	21
1843	38	69
1852	76	150
1860	106	237
1868	136	316
1876	164	395
1884	198	468
1891	236	544
1899	286	618
1908	366	695
1918	506	771
1928	776	800
1931	942	795
1935	1130	771
1940	1592	694
1947	2198	589
1952	2664	506
0713		
162086	0	0
2140	2	0
2150	40	78
2159	72	158
2167	106	237
2175	140	316
2184	182	395
2172	230	460
2200	314	546
2212	504	618
2222	796	665
2227	964	660
2233	1218	618
2240	1632	566

TIME	STRAIN	STRS
2251	2360	468
0715		
171304	0	0
1418	6	10
1428	28	78
1438	92	158
1446	134	237
1455	176	316
1465	232	395
1473	284	468
0716		
183104	0	0
3214	22	13
3223	50	78
3228	66	116
3232	82	158
3237	96	194
3240	112	230
3245	134	275
3250	156	316
3258	208	395
3267	282	468
3277	406	540
3292	726	618
3302	1034	634
3313	1[illegible]6	626
3324	2052	581
3332	2462	544
3352	3268	458
0717		
204190	0	0
4215	22	42
4220	34	78
4230	64	150
4234	78	198
4237	88	229
4243	100	275
4247	110	316
4255	136	395
4263	170	468
4272	262	544
4278	364	581
4285	526	618
4294	794	641
4297	840	648
4302	974	648
4315	1440	634
4330	2140	589
4350	3170	512
4368	3846	491
0718		
214313	0	0
4330	0	0
4370	4	3
4380	56	78
4389	92	158
4397	134	237
4406	180	316
4415	238	395
4425	308	468
4435	418	544
4443	530	581
4451	724	618
4460	1014	641
4469	1336	633
4475	1684	611
4487	2222	566
4505	3120	498
0719		
133560	0	0
3724	10	18
3815	22	42
3948	44	85
4090	68	125
4200	88	165
4348	114	205
4462	140	243
4605	172	283
4739	204	323
4872	244	362
5005	282	401
5145	332	438
5270	378	475
5435	460	512
5677	704	544
5725	814	537
5792	1022	500
5870	1344	438
6025	1876	362
0721		
155580	0	0
5598	12	7
5715	37	38
5862	78	78
5920	96	78
160030	132	116
0178	184	149
0355	254	190
0498	316	229
0695	408	275
0865	494	316

TIME	STRAIN	STRS
1200	796	355
1362	1018	362
1510	1288	355
1710	1702	331
0722		
165530	0	0
5550	16	21
5600	31	38
5695	62	78
5802	100	110
5918	150	158
170047	214	198
0157	286	229
0358	452	275
0768	994	305
0865	1176	300
1000	1442	283
1198	1816	269
0724		
185943	0	0
190047	14	7
0150	38	38
0248	72	78
0373	112	116
0484	178	150
0630	228	193
0765	304	229
0960	430	275
1228	664	316
1375	846	323
1672	1326	316
1930	1796	292
2595	3510	275
0726		
112232	0	0
2382	4	6
2515	26	46
2889	60	105
2989	78	132
3144	107	165
3336	147	205
3513	204	244
3675	261	283
3841	335	322
4037	441	362
4396	717	401
4579	721	401
4770	1193	387
4944	1457	362
5063	1639	340
0728		
134325	0	0
4450	0	10
4565	16	38
4803	55	90
4910	80	121
5032	115	158
5250	186	194
5430	258	224
5733	420	275
5855	514	316
140067	713	350
0120	866	370
0398	1138	380
0786	1424	395
0994	1744	400
1585	2304	408
2534	3595	404
3000		401
0730		
140428	0	0
0497	1	0
0752	25	38
0796	56	78
0938	88	112
1195	135	158
1342	196	198
1487	277	237
1669	399	275
1919	599	316
2203	870	351
2725	1283	385
3120	2079	405
3233	2273	401
3415	2585	388
3912	3069	375
0731		
151317	0	0
1357	1	6
1361	50	121
1364	96	245
1366	127	362
1370	165	468
1373	217	590
1376	300	700
1379	465	810
1382	709	870
1385	1038	885
1388	1531	855
1392	2226	771
1396	3070	662

TIME	STRAIN	STRS
1400	3690	567
0732		
171830	0	0
1875	6	9
1877	54	78
1880	107	175
1881	131	232
1883	162	316
1885	184	395
1887	224	468
1889	265	544
1892	313	623
1894	377	694
1896	478	771
1898	648	860
1903	1084	874
1906	1634	834
1910	2493	723
1914	3147	626
0737		
143006	0	0
3060	1	65
3107	15	65
3399	22	65
3659	31	65
4143	38	65
5699	50	65
151800	66	65
4851	81	65
161900	91	65
5230	102	65
173546	116	65
200034	146	65
220410	165	65
073830	260	65
091054	270	65
132715	311	65
151017	328	65
171589	348	65
194443	369	65
220000	392	65
080000	484	65
120500	532	65
153000	565	65
181400	596	65
203300	617	65
222900	638	65
075600	746	65
115100	792	65
132808	808	65
2812	808	65
0738		
144800	0	0
4816	102	237
4870	164	237
4974	258	237
5055	316	237
5190	384	237
5320	432	237
5477	488	237
5670	546	237
150055	656	237
0300	710	237
0780	798	237
1175	880	237
1660	970	237
2035	1030	237
2500	1118	237
2850	1176	237
4200	1344	237
5100	1488	237
160750	1702	237
0739		
163500	0	0
3524	146	316
3562	264	316
3600	362	316
3675	512	316
3780	652	316
3925	766	316
4117	964	316
4290	1088	316
4510	1246	316
4705	1372	316
4908	1506	316
5390	1808	316
6022	2192	316
6710	2562	316
7040	2758	316
7423	2990	316
7580	3094	316
0740		
183300	0	0
3317	94	153
3500	216	153
3850	296	153
190100	480	153
2600	618	153
200700	778	153
3700	908	153
5700	1004	153

TIME	STRAIN	STRS
215600	1223	153
224607	1409	153
234100	1580	153
245900	1775	153
5942	1851	316
010090	2000	316
0300	2141	316
0600	2319	316
0900	2482	316
1200	2645	316
1500	2805	316
1515	2755	153
2900	2828	153
4605	2899	153
022700	3079	153
0741		
140000	0	0
0053	10	33
0063	16	45
0085	33	85
0104	52	120
0123	70	165
0145	95	205
0164	117	245
0181	141	285
0200	169	323
0225	217	363
0250	278	401
0277	377	439
0316	575	476
0371	900	517
0426	1296	533
0460	1585	533
0511	2061	521
0584	2788	484
0742		
144744	0	0
4760	10	18
4782	31	52
4840	62	92
4862	87	132
4882	112	180
4964	170	203
5021	195	192
163836	0	0
3874	6	0
3922	85	65
3940	112	92
3959	138	132
3982	170	185
4016	222	268
4035	249	292
4054	286	331
4076	342	378
4100	417	416
4132	530	450
4165	678	486
4211	940	533
4260	1306	540
4291	1619	532
4320	1928	516
4408	3102	444
0743		
154900	0	0
4945	4	0
4983	34	52
4996	46	92
5017	63	126
5036	81	172
5057	100	209
5076	119	251
5093	139	291
5120	170	330
5142	203	370
5164	248	408
5190	321	446
5221	432	482
5263	605	520
5309	874	558
5352	1170	578
5388	1514	566
5448	2140	520
5491	2510	490
0744		
172800	0	0
2830	10	13
2853	34	53
2870	54	96
2888	78	133
2903	98	165
2925	126	212
2945	150	252
2963	176	292
2984	220	331
3007	268	371
3032	324	409
3060	406	447
3087	504	484
3120	640	520
3173	900	560
3215	1174	573

TIME	STRAIN	STRS
3290	1766	570
3357	2408	537
3437	3282	483
0745		
182900	0	0
3025	6	12
3112	26	38
3260	62	77
3487	110	117
3614	150	157
3770	204	198
3987	290	237
4170	410	276
4335	526	292
4850	706	276
4930	748	300
4990	788	317
5172	950	355
5522	1342	395
6100	2128	416
6665	2978	416
0746		
090413		
0434	0	0
0522	20	34
0526	34	78
0534	66	150
0542	95	237
0550	124	316
0555	156	395
0566	196	468
0674	254	544
0584	390	618
0605	770	688
0615	1046	691
0621	1276	688
0631	1744	660
0652	2808	592
0681	4352	487
0747		
093380	0	0
3437	0	0
3458	12	36
3483	36	78
3504	49	116
3523	64	158
3546	85	192
3565	106	237
3586	128	272
3609	162	316
3636	214	355
3669	304	395
3715	502	428
3724	972	468
3776	1573	474
3806	1834	472
3883	2530	446
0748		
100855	0	0
0913	6	3
0935	31	35
0952	52	78
0975	83	112
0997	119	157
1020	158	192
1044	204	232
1072	280	277
1102	377	316
1144	544	355
1215	736	394
1276	1350	405
1346	1916	399
1415	2510	375
0749		
130700	0	0
0708	31	78
0716	68	158
0725	104	232
0733	152	317
0742	228	394
0752	344	469
0767	712	528
0775	999	532
0781	1411	490
0795	2270	395
0750		
134946	0	0
4973	0	0
4988	42	91
4996	76	169
5004	106	255
5011	142	339
5020	174	416
5028	218	496
5036	272	572
5045	350	646
5049	397	662
5054	458	660
5067	665	572
5076	826	516
0751		

TIME	STRAIN	STRS
145292	0	0
5300	7	18
5309	30	84
5316	54	151
5325	88	243
5333	134	324
5342	205	408
5352	336	482
5367	738	538
5374	826	538
5376	1372	525
5382	1748	488
5388	1982	435
0752		
154900	0	0
4910	6	7
4920	62	92
4928	100	165
4937	133	252
4946	168	330
4953	209	408
4961	264	482
4970	345	570
4979	473	632
4987	646	670
4992	794	685
4997	999	680
5005	1292	656
5017	1802	595
5027	2250	558
0753		
162000	0	0
2014	4	7
2026	50	92
2035	90	172
2042	131	252
2050	196	330
2060	308	408
2076	690	482
2081	712	482
2086	1180	468
2092	1569	430
2101	2104	292
0754		
172300	0	0
2311	2	0
2324	44	92
2332	82	172
2340	124	243
2350	197	330
2362	362	408
2374	640	450
2378	818	446
2384	1086	430
2392	1521	396
2400	1968	355
0755		
183729	0	0
3737	20	38
3742	50	85
3746	72	122
3750	98	163
3754	120	198
3758	154	242
3762	191	280
3767	242	322
3773	326	362
3780	474	401
3790	776	428
3800	1198	425
3805	1484	408
3815	1966	362
3837	3040	300
0756		
191618	0	0
1626	20	40
1631	41	85
1635	57	125
1640	76	165
1643	96	205
1647	116	245
1651	142	283
1655	166	322
1659	205	362
1664	256	400
1669	314	435
1675	430	475
1686	762	516
1692	1021	512
1698	1340	482
1706	1744	438
1712	2122	408
1719	2198	370
0757		
200600	0	0
0608	18	44
0612	34	85
0616	52	124
0620	68	165
0625	84	203
0629	107	244

TIME	STRAIN	STRS
0633	130	283
0636	158	322
0640	197	362
0646	259	400
0651	342	438
0658	482	477
0665	708	499
0675	1093	495
0680	1308	482
0687	1727	438
0695	2152	400
1205	2654	363
0762		
0966	0	0
0991	3	4
1029	14	50
1061	38	101
1086	49	150
1124	61	196
1152	75	240
1184	94	293
1205	109	332
1227	122	373
1254	145	419
1280	171	462
1308	202	508
1340	241	552
1351	255	563
1380	295	596
1418	367	635
1471	511	677
1490	605	686
1505	710	688
1513	803	678
1525	958	657
1533	1079	636
0763		
153054	0	0
3095	46	48
3126	78	97
3156	106	148
3185	126	194
3213	155	238
3243	182	282
3267	207	330
3290	231	372
3320	270	425
3353	316	480
3387	373	532
3425	453	582
3474	593	633
3517	851	655
3535	1029	641
3547	1206	618
3554	1331	600
0764		
163160	0	0
3184	2	2
3225	52	50
3258	89	100
3286	120	150
3331	156	196
3362	193	240
3395	237	283
3420	281	329
3448	337	374
3482	422	418
3534	642	462
3550	752	465
3566	878	462
3587	1080	445
3606	1268	409
3616	1362	395
0765		
171888	0	0
1906	1	2
1952	70	53
1982	102	98
2030	138	150
2060	166	195
2090	203	242
2121	245	286
2147	288	330
2175	347	373
2208	447	419
2255	659	462
2285	873	472
2305	1078	470
2320	1244	458
2337	1480	436
0766		
182980	0	0
2997	3	2
3040	78	50
3073	127	98
3103	163	147
3143	205	195
3173	243	240
3205	299	284
3235	364	330
3270	468	374

TIME	STRAIN	STRS
3325	753	412
3343	851	414
3388	1086	410
3405	1195	400
0767		
193552	0	0
3597	3	2
3647	50	61
3670	69	98
3700	96	147
3729	125	195
3758	158	240
3790	204	283
3815	254	330
3842	316	373
3878	431	418
3923	686	453
3941	835	455
3955	980	435
4080	1238	416
0768		
085977	0	0
090032	2	2
0085	71	70
0105	90	98
0132	121	147
0163	154	195
0192	196	240
0225	247	283
0252	300	330
0283	380	373
0324	534	418
0360	748	433
0382	913	432
0400	1072	417
0410	1163	407
0417	1231	391
0769		
091278	0	0
1290	2	2
1325	42	43
1357	81	91
1387	117	143
1416	153	190
1447	199	232
1480	258	279
1507	324	325
1537	410	368
1575	547	412
1608	735	440
1640	890	450
1664	1216	445
1678	1415	430
1691	1622	409
0770		
100727	0	0
0740	4	2
0782	54	50
0812	88	97
0840	119	145
0871	152	195
0900	189	238
0932	240	282
0959	301	329
0989	388	372
1030	565	416
1059	750	432
1071	851	432
1086	995	432
1102	1173	416
1120		390
0771		
111797	0	0
1842	0	0
1938	4	2
1976	67	39
2001	102	80
2025	123	118
2049	144	158
2072	163	196
2100	189	240
2132	229	287
2157	268	330
2185	326	373
2219	415	420
2258	545	462
2306	770	499
2319	841	500
2337	953	502
2364	1121	499
2400	1354	483
0772		
132765	0	0
2795	0	2
2840	43	50
2870	68	100
2898	95	150
2933	120	204
2956	139	240
2986	170	284
3010	202	330

TIME	STRAIN	STRS
3016	246	373
3065	310	419
3097	399	462
3118	467	490
3145	565	516
3182	733	562
3208	882	550
3227	1017	550
3252	1195	534
3277	1391	516
0773		
150255	0	0
0285	2	2
0332	49	51
0363	81	98
0391	106	148
0420	131	196
0450	162	240
0482	205	284
0510	255	330
0539	324	374
0575	430	418
0618	611	462
0656	814	480
0678	960	482
0692	1068	479
0714	1200	462
0737	1509	452
0774		
160650	0	0
0695	4	2
0740	52	50
0772	88	98
0800	118	148
0830	148	196
0866	191	243
0895	240	284
0924	298	330
0955	375	373
0995	499	418
1060	776	462
1080	936	470
1115	1273	462
1132	1400	459
0775		
170883	0	0
0900	0	2
0940	41	50
0973	74	98
1000	103	147
1030	135	196
1060	177	240
1094	236	284
1120	294	329
1155	379	373
1198	544	417
1220	650	430
1242	790	433
1270	972	432
1290	1114	428
0776		
184585	0	0
4593	5	3
4636	62	55
4665	92	98
4694	115	147
4720	138	196
4750	162	240
4780	192	283
4805	221	329
4832	266	373
4863	338	418
4900	467	462
4915	526	470
4940	627	478
4952	672	464
4977	748	443
5003	814	428
0777		
200007	0	0
0014	3	2
0056	62	50
0090	105	98
0117	133	148
0146	156	195
0175	180	240
0205	212	284
0230	243	329
0256	288	373
0286	362	418
0325	485	462
0365	675	500
0390	814	510
0410	955	511
0435	1130	510
0470	1383	493
0505	1633	487
0778		
085912	0	0
5925	1	2
5967	56	50

TIME	STRAIN	STRS
090002	91	101
0030	113	150
0057	136	195
0088	163	241
0115	194	283
0142	229	328
0170	285	373
0206	390	420
0262	543	462
0285	760	470
0302	876	471
0330	1070	468
0352	1222	452
0362	1255	450
0779		
080765	0	0
0800	1	2
0843	31	50
0876	62	99
0905	99	150
0935	126	195
0965	159	240
0995	200	283
1020	241	330
1050	305	373
1085	406	419
1110	506	444
1137	622	462
1157	719	471
1187	887	479
1202	999	477
1252	1280	466
1270	1377	466
0780		
091530	0	0
1568	0	0
1628	81	62
1650	110	96
1680	142	145
1710	174	194
1740	211	238
1772	258	282
1797	306	327
1825	372	372
1857	463	416
1895	608	460
1925	753	488
1952	888	500
1965	978	502
1982	1092	503
2000	1246	500
2038	1540	482
2070	1784	470
0781		
114262	0	0
4300	2	3
4342	52	50
4376	79	99
4405	137	147
4438	182	196
4476	265	240
4560	728	275
4583	939	266
4610	1089	256
4655	1417	252
0782		
134947	0	0
4976	4	2
5007	63	40
5033	95	78
5057	129	118
5080	157	157
5105	191	196
5131	246	231
5160	318	266
5200	488	304
5220	618	313
5236	755	317
5266	850	312
5264	1031	302
5281	1231	282
5300	1440	266
0783		
151220	0	0
1238	4	6
1270	37	40
1295	70	78
1318	101	118
1343	134	157
1370	183	196
1397	255	231
1435	488	266
1462	635	282
1480	849	287
1495	962	288
1505	1046	284
1535	1233	264
1585	1578	249
0784		
161288	0	0
1312	5	3

TIME	STRAIN	STRS
1345	41	40
1371	72	78
1395	106	118
1419	147	157
1445	210	196
1477	308	231
1510	451	258
1550	724	273
1567	850	273
1576	933	272
1614	1282	255
1642	1532	249
0785		
170677	0	0
0697	2	2
0732	43	40
0756	78	78
0780	106	118
0805	143	157
0831	194	196
0862	275	231
0895	409	258
0925	586	270
0940	711	270
0950	776	270
0977	1014	258
1030	1449	242
0786		
183910	0	0
3910	1	0
3923	2	2
3956	69	40
3986	149	78
4013	209	118
4040	269	157
4067	338	196
4097	429	231
4123	474	258
4145	522	275
4165	626	294
4190	768	307
4202	862	312
4215	972	314
4237	1148	312
4258	1347	304
4297	1690	283
0787		
162837	0	0
2876	27	20
2905	76	57
2930	108	97
2955	135	135
2978	168	175
3006	212	215
3037	273	255
3060	328	282
3082	396	310
3106	500	332
3127	598	343
3146	657	344
3160	789	341
3180	997	319
3212	1394	291
0788		
183210	0	0
3223	9	0
3257	32	49
3281	59	77
3305	82	116
3326	104	155
3350	131	194
3375	159	230
3391	186	253
3411	224	282
3428	264	310
3447	315	336
3470		362
3482		372
3510		386
3530		380
3552		354
3575		332
0789		
091900	0	0
1960	4	0
1980	7	1
2010	44	39
2035	79	77
2058	102	116
2081	125	156
2103	147	195
2126	173	228
2154	210	264
2177	252	283
2198	304	336
2225	381	371
2269	587	408
2275	722	408
2295	870	403
2318	1036	370
0790		

TIME	STRAIN	STRS
075895	0	0
5915	30	20
5955	98	57
5980	144	97
080003	163	135
0036	190	185
0050	206	210
0076	244	247
0106	305	282
0127	370	310
0150	458	328
0173	577	340
0186	663	339
0205	781	338
0235	1096	328
0306	1606	312
0360	1940	310
0791		
091026	0	0
1080	38	20
1108	62	57
1132	88	97
1155	108	135
1177	126	175
1200	147	210
1224	171	247
1249	201	282
1270	230	310
1290	269	353
1315	327	390
1330	374	407
1350	471	425
1372	515	432
1384	617	431
1399	771	414
0792		
101725	0	0
1776	2	2
1792	15	20
1826	51	67
1860	[illegible]	120
1880	[illegible]	55
1905	16	35
1940	25	[illegible]
1995	40	[illegible]
2020	580	292
2045	796	291
2054	864	290
2080	1099	273
0793		
132921	0	0
4646	2	2
3510	14	20
3653	45	60
3744	66	86
3845	102	120
3953	129	154
4031	160	180
4115	139	200
4235	263	230
4370	349	257
4455	410	273
4587	535	300
4722	698	318
4830	869	327
4914	1041	330
4990	1237	316
5085	1600	276
5223	1934	263
5440		239
5578		230
0794		
151405	0	0
1647	20	20
1777	21	55
1899	86	97
2014	114	135
2100	138	165
2193	165	194
2290	202	220
2413	236	250
2551	252	282
2615	301	300
2700	380	318
2800	497	336
2900	647	345
2988	901	350
3047	1033	350
3111	1103	340
3224	1332	318
0795		
171098	0	0
1145	3	2
1195	38	20
1267	106	57
1343	167	97
1412	188	138
1480	230	175
1550	280	212
1628	348	247
1715	449	282

TIME	STRAIN	STRS
1800	[illegible]	318
1856	[illegible]	336
1950	949	349
2000	1156	346
2064	1468	325
2123	1824	295
0796		
2821	0	0
2916	45	20
2994	113	57
3057	150	96
3116	181	135
3175	207	175
3233	235	212
3295	267	247
3364	311	282
3417	353	318
3498	456	362
3553	516	390
3650	727	416
3693	866	418
3730	1020	416
3760	1181	406
3820	1562	372
0797		
085870	0	0
5915	3	2
5920	40	48
5925	63	97
5930	76	145
5934	91	195
5937	103	238
5942	120	292
5945	133	330
5949	146	372
5952	161	417
5956	178	463
5960	198	508
5963	220	550
5967	249	595
5972	283	632
5975	328	680
5980	378	720
5984	445	754
5988	524	782
5990	584	796
5994	771	815
5998	967	820
6003	1302	821
6007	1553	815
0798		
082652	0	0
2660	35	58
2666	59	120
2672	76	174
2677	93	230
2682	108	283
2686	121	338
2690	136	390
2694	155	442
2699	179	500
2703	204	552
2707	238	600
2712	283	650
2718	347	705
2722	421	745
2729	563	796
2733	722	820
2736	865	830
2740	1108	830
2744	1504	810
0799		
212152	0	0
2240	5	20
2312	38	57
2385	45	96
2497	95	145
2577	125	195
2650	163	230
2718	213	264
2797	292	300
2878	406	336
2970	598	362
3060	880	368
3085	989	367
3133	1220	354
3213	1666	318
0800		
102685	0	0
102846	22	19
103030	72	57
103138	94	96
103250	115	137
103350	145	175
103462	163	211
103588	204	247
103732	279	282
103840	361	307
104002	537	341
104189	787	364
104422		390

TIME	STRAIN	STRS
104753	1630	413
105040	1715	318
105108	1933	323
105165	1976	336
105355		365
0801		
130928	0	0
130950	9	19
130956	57	77
130965	107	141
130970	129	195
130975	145	247
130980	162	313
130985	178	370
130989	193	430
130994	211	490
130998	236	550
131004	275	609
131010	337	669
131015	406	715
131018	488	751
131023	622	767
131026	749	807
131030	934	817
131033	1118	818
131035	1350	810
131040	1673	770
0802		
140397	0	0
140468	25	19
140542	65	57
141010	92	96
141176	115	135
141242	139	175
141310	168	211
141388	214	247
141470	278	282
141540	341	318
141615	416	353
141660	463	370
141700	510	390
141770	605	416
141846	723	443
141937	876	471
141998	986	488
142108	1205	515
142205	1338	527
142275	1606	535
142340	1790	538
142500	2304	538
142560	2511	533
142633	2776	523
0803		
154830	0	0
154921	12	19
155053	36	57
155168	58	96
155283	80	135
155400	103	175
155574	132	211
155660	265	247
155813	362	282
155988	472	320
160420	883	390
160797	1322	425
161167	1849	434
161575	2514	434
161882		420
0804		
182137	0	0
182365	38	19
182490	101	57
182560	131	96
182630	162	135
182694	169	175
182780	231	220
182870	289	264
182967	375	310
183063	491	353
183160	645	390
183273	839	425
183397	1085	460
183651	1763	491
183738	2069	489
183815	2384	479
183923	2783	459
0805		
091681	0	0
092494	49	30
092717	94	77
092840	125	116
092958	159	155
093092	197	195
093237	257	230
093415	355	264
093600	490	300
093814	691	336
094142	1064	371
094517	1590	386
094746	1951	387
095061	2470	384

TIME	STRAIN	STRS
095235	2780	383
0806		
081384	0	0
081400	5	4
081408	29	60
081414	76	120
081419	111	175
081425	133	230
081430	154	282
081435	174	338
081438	192	390
081443	215	450
081447	242	500
081452	277	550
081458	347	613
081464	442	670
081467	482	672
081474	541	647
081478	672	630
0807		
090888	0	0
090898	12	19
090905	76	77
090910	115	135
090916	154	195
091239	110	0
091380	154	73
091385	183	151
091390	198	195
091395	214	245
0808		
101480	0	0
101493	8	19
101499	38	77
101505	65	135
101510	98	195
101515	120	255
101520	157	323
101527	195	380
101532	251	433
101538	345	499
101545	505	550
101550	712	575
101553	886	583
101557	1113	583
101560	1358	575
0809		
110854	0	0
110987	29	19
111140	88	57
111290	154	96
111455	253	135
111673	449	175
112094	1191	185
112220	1486	175
112405	1921	160
112590	2341	150
112835	2888	116
0810		
144860	0	0
144865	13	19
144872	68	77
144877	114	138
144882	152	195
144889	204	255
144895	267	321
144900	328	376
144905	411	425
144911	567	485
144918	692	525
144922	978	542
144927	1231	545
144930	1487	543
144934	1807	528
0811		
161245	0	0
161348	26	19
161462	68	48
161567	110	77
161678	159	106
161885	288	155
162050	448	180
162266	775	190
162390	1013	188
162500	1237	183
162653	1548	177
162826	1915	167
162912	2087	165
0812		
195693	0	0
195798	20	19
195865	56	48
195920	83	77
195978	117	106
200034	150	136
200096	211	165
200165	288	195
200267	430	220
200357	578	238
200394	780	238
200440	950	236

TIME	STRAIN	STRS
200538	1371	220
200621	1847	203
0813		
081545	0	0
081610	33	19
081674	78	48
081723	114	77
081785	152	104
081863	214	145
081930	285	175
082003	396	201
082091	565	220
082173	736	226
082212	967	227
082252	1117	224
082398	1723	211
082595	2537	195
082754	3048	187
0814		
141385	0	0
141391	14	19
141396	53	77
141404	86	145
141408	113	195
141413	150	252
141420	202	317
141425	263	374
141431	351	430
141438	525	491
141445	806	525
141449	998	531
141452	1168	529
141455	1440	514
141458	1689	496
0815		
140000	0	0
140024	1	1
140053	30	58
140076	63	77
140098	96	116
140122	150	155
140150	233	195
140176	339	220
140211	751	238
140249		235
0816		
144902	0	0
144979	0	3
144997	14	26
145015	41	58
145035	68	87
145052	96	116
145069	134	145
145088	182	175
145108	346	201
145126	434	220
145136	586	229
145150	683	238
145172	787	247
145186	957	247
145206	1206	245
145234	1572	236
145283	2297	220
0817		
154300	0	0
154315	0	0
154332	8	9
154347	34	28
154365	64	58
154383	90	87
154399	109	116
154417	143	145
154436	180	175
154466	233	203
154480	422	227
154502	559	247
154562	1021	263
154598	1553	261
154632	2065	206
154672	2373	247
0818		
162007	0	0
162025	0	3
162042	33	26
162061	61	58
162080	88	87
162095	111	116
162112	137	145
162130	171	175
162148	216	201
162168	285	226
162186	366	247
162208	500	265
162225	715	273
162255	1622	282
162285	1255	282
162325	1793	270
162352	2056	263
0819		
165800	0	0
165815	1	2

TIME	STRAIN	STRS
165837	49	28
165855	81	58
165873	101	87
165889	121	116
165906	147	145
165923	178	175
165942	225	201
165964	296	230
165993	354	256
170008	463	265
170022	585	271
170046	926	273
170072	1132	271
170108	1673	265
170132	1873	263
0820		
185864	0	0
185899	0	2
185905	40	48
185909	71	96
185914	94	145
185917	116	195
185922	145	238
185926	182	282
185930	222	327
185935	279	371
185940	381	416
185945	555	455
185950	871	480
185954	1035	485
185957	1190	485
185960	1380	480
185964	1708	465
185975	2386	317
0821		
201900	0	0
201930	0	5
201980	14	19
202043	44	38
202113	82	58
202188	131	77
202278	206	96
202380	309	116
202512	559	135
202742	934	155
202921	1296	157
203008	1483	158
203200	1917	153
0822		
204172	0	0
204222	20	19
204226	32	58
204232	55	116
204237	83	175
204240	100	211
204245	120	247
204248	152	282
204252	186	327
204256	235	371
204260	281	407
204263	356	443
204267	445	478
204272	570	510
204276	870	536
204283	1236	550
204287	1469	549
204291	1782	540
204296	2345	514
204300	2564	491
0823		
213996	0	0
214013	19	19
214018	53	67
214024	79	126
214030	101	189
214034	129	230
214039	166	275
214042	199	321
214047	238	363
214049	269	392
214052	312	427
214055	369	460
214060	437	499
214064	535	534
214067	645	560
214073	746	587
214080	949	609
214085	1460	617
214090	1787	622
214097	2127	620
214102	2607	609
214112	3105	550
0824		
103992	0	0
104133	9	9
104218	47	28
104333	112	58
104465	213	85
104666	534	116
104859	767	125
105074	1110	129

TIME	STRAIN	STRS
105380	1841	127
105567	2230	125
0825		
113905	0	0
113963	2	2
114030	16	19
114084	44	28
114135	63	42
114182	82	58
114247	109	77
114311	137	96
114390	179	116
114470	229	137
114563	309	157
114677	442	175
114882	786	185
115053	935	185
115140	1139	175
115267	1418	155
115432	2029	144
0826		
145900	0	0
145907	4	3
145917	45	58
145928	84	116
150002	171	119
150200	270	119
150300	358	119
150400	438	116
150500	604	116
150600	764	116
150900	884	116
151100	1110	116
151300	1241	116
151500	1375	116
151700	1507	116
151900	1636	116
152100	1759	119
152300	1879	116
152500	2007	118
152700	2122	116
152713	2106	2
152725	2073	2
152780	2037	2
153001	1988	0
154600	1932	0
161059	1919	0
0827		
191500	0	0
191506	6	32
191511	17	48
191514	25	58
191517	32	75
191600	102	77
191700	194	75
191900	332	77
192200	630	77
192600	980	77
193000	1138	77
193500	1588	77
194002	1882	77
194020	1865	0
194100	1799	0
194200	1775	0
194412	1757	0
194700	1756	0
0828		
211500	0	0
211536	14	28
211699	29	28
213400	88	28
223200	153	28
225700	172	28
233400	199	28
242800	232	28
100869	562	28
135800	616	28
135806	622	0
140000	617	0
141100	606	0
145700	600	0
0829		
132810	0	0
132828	19	18
132846	50	47
132865	78	75
132883	113	104
132900	160	132
132923	230	162
132949	346	192
132985	603	219
133030	1040	228
133050	1354	228
133086	1725	228
133195	2680	243
133225	3065	249
133270	3237	251
0830		
144200	0	0
144243	30	19
144263	66	49

TIME	STRAIN	STRS
144281	95	77
144300	132	108
144319	186	135
144341	267	165
144371	427	195
144403	683	208
144432	996	211
144460	1414	206
144525	2156	202
144553	2365	202
0831		
162117	0	0
162147	18	19
162179	66	67
162197	96	97
162215	129	128
162234	175	155
162261	265	195
162276	330	211
162293	503	230
162315	631	248
162350	791	264
162374	1032	268
162388	1206	268
162423	1862	252
162450	2095	231
162473	2502	217
0832		
171617	0	0
171680	4	1
171706	29	19
171725	66	49
171742	92	77
171760	121	108
171780	158	135
171800	206	165
171825	316	195
171852	417	211
171890	886	212
171917	1320	210
171945	1592	201
171967	1880	192
0833		
185665	0	0
185690	116	19
185710	151	46
185728	180	77
185740	197	97
185751	213	116
185764	231	135
185775	255	155
185787	280	175
185799	311	195
185811	345	211
185826	397	230
185846	474	248
185868	616	264
185906	968	280
185919	1217	279
185945	1582	264
185972	1859	242
0834		
081888	0	0
081957	34	19
081973	72	38
081985	104	58
081998	141	77
082013	187	97
082033	270	125
082052	378	142
082081	612	160
082111	929	164
082130	1140	160
082169	1549	149
082191	2038	139
082236	2506	126
0835		
092200	0	
092230	52	19
092246	110	38
092260	241	58
092275	280	77
092287	323	97
092300	380	116
092319	452	135
092340	582	155
092379	932	171
092396	1143	169
092432	1600	157
092484	2366	135
0836		
101639	0	0
101663	30	19
101693	96	58
101706	124	77
101718	145	97
101733	194	118
101746	239	135
101763	318	155
101788	485	175
101806	648	182

TIME	STRAIN	STRS
101825	846	184
101841	1149	182
101868	1410	172
101906	1964	152
101962	2411	141
0837		
131340	0	0
131360	12	19
131368	24	30
131374	29	38
131381	40	49
131387	53	60
131396	67	75
131405	85	87
131419	123	106
131439	201	131
131454	281	148
131471	316	158
131485	444	162
131502	619	168
131518	796	169
131566	1210	168
131602	1917	152
131613	2005	150
0838		
144726	0	0
144747	19	19
144755	29	29
144775	59	60
144785	76	77
144797	97	97
144810	127	118
144824	163	139
144834	195	155
144854	286	175
144878	455	195
144895	611	202
144917	736	207
144937	1055	207
144960	1346	201
145003	1854	195
0839		
081489	0	0
081522	25	19
081537	46	40
081549	64	61
081561	84	77
081574	110	97
081586	144	116
081600	189	135
081616	255	155
081636	364	175
081653	482	188
081665	580	195
081689	986	200
081721	1253	201
081755	1551	198
081796	2049	195
0840		
155684	0	0
155711	63	4
155732	162	19
155745	243	26
155760	338	38
155778	488	48
155806	700	58
155825	721	67
155843	771	78
155879	861	97
155907	966	106
155955	1208	112
0841		
184660	0	0
184710	48	8
184723	117	19
184735	186	28
184746	239	38
184757	298	48
184768	360	58
184780	436	67
184795	540	77
184819	732	86
184847	1008	91
184880	1351	93
184910	1688	95
184948	2093	99
184981	2469	99
0842		
202099	0	0
202135	133	20
202144	171	27
202153	212	38
202167	270	53
202177	315	66
202186	357	77
202195	406	85
202203	455	97
202216	521	105
202227	597	116
202241	695	128
202261	773	135

TIME	STRAIN	STRS
202283	975	142
202297	1214	145
202326	1520	150
202399	2145	165
202450	2680	172
202471	1976	173
202513		195
0843		
101765	0	0
101776	44	10
101786	80	19
101802	164	38
101810	187	48
101816	207	57
101827	240	72
101838	273	86
101850	314	103
101861	363	116
101875	434	131
101891	539	145
101913	712	160
101965	1214	175
102000	1554	180
102031	1876	184
102065	2236	184
102113	2776	186
102140	3068	190
102242		210
102300		226
102450		256
0844		
134145	0	0
134187	14	20
134207	25	36
134219	31	48
134227	35	57
134240	43	67
134253	51	77
134267	62	87
134288	80	96
134329	122	102
134400	200	103
134484	296	105
134577	395	120
134685	510	131
134822	657	146
134982	831	162
0845		
154006	0	0
154102	11	5
154158	18	10
154211	25	17
154269	34	21
154331	44	29
154399	53	34
154460	63	38
154531	74	46
154633	92	50
154829	129	56
155077	179	57
155275	218	62
155714	304	68
155915	343	70
160703	408	80
161187	593	82
161590	679	82
162048	766	86
162240	803	87
0845A		
154000	0	0
1540	116	6
1540	179	11
1542	259	17
1542	344	23
1542	438	28
1544	540	34
1544	630	40
1544	741	46
154630	923	51
154830	1305	57
155030	1804	57
1553	2179	63
1557	3050	69
1559	3532	72
0846		
205646	0	0
205712	3	6
205745	6	10
205785	11	19
205817	13	20
205851	17	23
205896	22	33
205930	28	38
205985	36	46
210367	49	51
210302	106	52
210717	186	52
210827	212	51
211020	256	50
211346	323	48
211762	406	48

TIME	STRAIN	STRS
212176	502	46
213008	671	50
0847		
142262	0	0
142270	30	8
142280	73	18
142291	124	29
142298	143	37
142308	179	46
142319	241	56
142333	327	65
142355	514	75
142409	1140	75
142443	1561	71
142491	2127	65
142600	3407	59
142759	5210	56
142864	6331	55
0848		
165913	0	0
170044	170	9
170081	196	12
170116	245	19
170181	323	27
170249	438	31
170346	627	35
170505	990	34
170575	1144	34
170790	1628	31
171183	3393	30
171836	4804	29
172169	5523	29
0849		
190332	0	0
190350	43	
190352	79	19
190353	107	30
190355	131	40
190356	156	50
190358	171	59
190359	201	69
190360	222	79
190362	259	89
190363	281	99
190365	334	112
190367	438	128
190372	627	140
190375	869	143
190379	1081	145
190384	1473	139
190391	2011	129
190403	2840	120
190415	3715	115
190434	5052	110
0850		
100000	0	0
100018	74	20
100110	138	20
100500	279	20
101000	460	20
101500	688	20
102000	1049	20
103000	1853	20
103500	2291	20
104700	3407	20
105500	4246	20
110500	5362	20
111500	6372	20
112500	7273	20
113500	7934	20
113600	7925	0
114100	7900	0
115000	7899	0
120000	7897	0
131000	7988	
0851		
133500	0	0
133531	54	12
133600	103	12
134100	429	12
134500	719	12
135000	1143	12
140000	2009	12
141000	3099	12
142000	4041	12
143000	4876	12
145002	6430	12
152100	8207	12
152400	8296	0
152447	8296	0
152600	8296	0
153502	8296	0
154500	8345	0
160000	8408	0
0852		
165088	0	0
165115	107	
165129	170	19
165137	205	27
165142	214	31
165147	237	38

TIME	STRAIN	STRS
165152	250	43
165160	268	51
165165	281	57
165170	299	66
165176	326	71
165180	339	77
165186	357	84
165195	388	96
165204	411	108
165211	438	116
165220	482	125
165229	527	132
165240	580	148
165252	665	155
165264	737	165
165279	850	175
165301	1040	185
165327	1273	195
165370	1768	193
165452	2733	188
165520	3568	175
0853		
094245	0	0
094276	91	10
094278	115	19
094280	145	38
094283	169	57
094285	189	77
094287	213	96
094289	232	116
094292	255	140
094293	277	158
094295	305	175
094297	342	195
094300	386	211
094302	433	229
094305	505	248
094309	677	264
094311	795	271
0854		
194571	0	0
194693	73	10
194742	117	19
194785	154	29
194829	188	38
194875	225	49
194922	272	57
194977	331	68
195048	430	77
195200	701	87
195325	953	91
195477	1270	94
195576	1475	96
195840	2011	105
196117	2587	110
196410	3199	116
196630	3681	116
197170	4860	114
197680	5931	116
0855		
135360	0	0
135370	27	10
135381	63	19
135390	89	29
135399	107	38
135413	170	52
135426	210	69
135444	281	87
135464	411	106
135489	482	126
135526	875	145
135563	1116	155
135583	1402	165
135645	2036	179
135710	2706	186
135764	3313	187
135819	3902	195
135887	4617	201
135954	5331	207
0856		
145155	0	0
145214	36	10
145268	89	19
145319	134	29
145368	179	38
145421	232	49
145480	304	57
145546	384	66
145640	536	77
145805	839	87
145997	1402	96
150270	1759	100
150440	2304	106
150725	2683	111
151041	3335	115
151243	3760	117
0857		
160683	0	0
160692	27	10
160695	63	19
160700	89	38

TIME	STRAIN	STRS
160705	107	57
160710	134	77
160714	156	96
160717	156	116
160721	179	135
160725	192	155
160729	205	175
160734	232	198
160736	255	211
160740	265	229
160745	281	248
160748	312	264
160753	335	283
160757	362	302
160763	415	336
160768	473	357
160774	542	381
160780	652	399
160787	832	409
160792	987	411
160797	1210	403
160806	1630	375
160810	1822	351
0858		
170277	0	0
170288	18	10
170296	45	19
170312	98	38
170325	136	57
170328	143	77
170350	158	96
170362	183	119
170375	195	138
170385	217	155
170396	235	175
170408	256	195
170420	280	211
170432	311	229
170445	333	248
170460	368	264
170474	411	281
170485	447	300
170504	527	328
0859		
092037	0	0
092128	54	10
092175	98	19
092222	134	29
092258	156	38
092300	188	49
092340	219	57
092385	246	68
092427	272	77
092591	366	102
092625	439	116
092710	535	131
092830	661	145
092963	857	155
093170	1241	157
093333	1518	160
0860		
094790	0	0
094823	28	19
094826	69	38
094829	98	57
094831	121	79
094833	139	99
094836	159	125
094839	170	155
094841	189	185
094845	212	211
094847	236	238
094850	259	262
094853	292	290
094855	317	320
094858	352	344
094860	393	371
094862	431	390
094865	494	414
094868	576	436
094870	652	451
094872	737	466
094876	906	479
094879	1161	477
094881	1429	452
094885	1759	422
0861		
112757	0	0
112773	53	10
112783	104	19
112800	161	39
112813	198	58
112828	235	77
112840	263	97
112855	295	118
112866	328	139
112879	361	155
112891	393	176
112905	429	195
112925	496	220
112950	589	249

TIME	STRAIN	STRS
112976	701	272
113004	827	300
113042	1198	319
113140	1348	319
113182	1895	317
113213	3234	297
113260	3648	272
0872		
132058	0	0
132113	36	8
132159	79	19
132202	110	29
132245	138	39
132319	185	58
132392	233	77
132463	259	97
132538	304	116
132612	356	135
132712	448	155
132865	613	174
133030	920	185
133137	1160	185
133252	1415	181
133352	1574	174
133688	1991	165
0863		
141725	0	0
141731	40	8
141754	86	19
141757	172	49
141761	213	77
141765	257	116
141770	296	161
141774	341	198
141777	380	229
141781	446	264
141785	519	300
141790	650	336
141794	775	371
141798	924	399
141802	1108	409
141805	1323	408
141808	1704	367
0864		
152406	0	0
152426	108	10
152435	137	19
152443	161	27
152450	182	39
152465	222	60
152478	248	77
152490	275	97
152503	297	116
152522	337	145
152528	353	155
152541	375	174
152554	405	195
152565	431	211
152585	484	238
152606	549	264
152625	617	291
152646	697	319
152667	790	344
152692	924	371
152713	1064	390
152743	1295	408
152778	1607	419
152832	2195	421
152847	2375	417
152863	2661	408
0865		
165965	0	0
170172	63	9
170225	116	19
170294	160	33
170335	180	46
170390	211	58
170461	246	77
170538	286	94
170615	317	117
170693	374	136
170778	429	156
170830	476	168
170911	562	180
171036	705	195
171257	1013	211
171387	1201	220
171566	1466	229
171765	1771	238
172069	2252	247
172717	3325	252
173114	3978	253
173341	4450	252
0866		
203796	0	0
203839	16	9
203840	49	19
203842	68	31
203844	84	48
203846	111	62
203848	117	78

TIME	STRAIN	STRS
203850	127	97
203853	145	126
203855	175	152
203857	188	175
203859	204	196
203862	221	221
203864	254	247
203868	281	272
203870	313	302
203874	369	338
203876	418	371
203880	508	408
203885	639	442
203891	897	479
203895	1104	487
203898	1317	488
203901	1576	482
203906	1875	471
0867		
093854	0	0
093880	37	7
093889	56	19
093896	74	29
093905	92	39
093919	122	58
093932	145	77
093945	165	97
093957	196	116
093971	226	135
093983	261	158
093995	301	176
094010	350	195
094023	404	211
094040	466	229
094058	572	247
094104	876	281
094170	1422	319
094218	1928	327
094258	2399	321
094285	2761	312
094305	3050	297
0868		
102855	0	0
102908	21	1
102952	54	9
103005	128	19
103065	181	29
103101	209	39
103141	236	48
103179	257	58
103271	335	77
103363	412	97
103460	491	116
103574	607	135
103753	872	155
103984	1248	168
104255	1741	174
104542	2268	178
104896	2942	179
105250	3615	183
105613	4250	195
105715	4427	196
0869		
112924	0	0
112991	55	12
112992	79	21
112995	127	39
112997	161	58
113001	215	97
113006	277	138
113011	355	178
113016	496	211
113021	608	247
113027	769	286
113031	915	319
113038	1133	353
113043	1373	381
113048	1598	399
113052	1779	408
113058	2082	420
113066	2580	433
113074	3044	441
113079	3411	444
113087	4000	443
113091	4345	431
113095	4661	418
0870		
133000	0	0
133022	152	49
133052	246	97
133300	515	97
133710	846	97
134007	1123	97
134375	1480	97
134757	1868	97
135190	2346	97
135550	2737	97
135915	3114	97
140295	3511	97
140670	3891	97
141135	4361	97

TIME	STRAIN	STRS
141500	4757	97
141900	5159	97
142385	5617	97
142675	5900	97
143050	6270	97
143074	6208	0
143600	6146	0
150545	6163	0
0871		
154500	0	0
154516	126	49
154540	199	97
154640	592	97
155635	965	97
160090	1378	97
160570	1952	116
160910	2412	116
161578	3140	97
161835	3426	97
162375	4006	97
162815	4488	97
163270	4979	97
163287	4959	0
163600	4895	0
164600	4912	0
165800	4939	0
0872		
185970	0	0
190010	113	28
190199	176	28
190499	278	28
192700	860	28
194702	1156	28
201000	1439	28
203045	1611	28
204720	1733	28
221317	2219	28
233700	2615	28
241398	2739	28
014603	3054	28
084353	3875	28
090600	3914	28
090750	3910	0
091400	3898	0
094361	3889	0
102700	3882	0
0873		
110000	0	0
110020	177	57
110535	363	58
114504	803	58
120345	1106	58
122900	1498	58
125900	2050	58
131500	2362	58
133100	2777	58
134400	3076	58
140400	3630	58
141500	3935	56
141540	3877	0
141800	3860	0
142900	3835	0
151179	3833	0
0874		
160000	0	0
160050	71	20
160400	104	20
161900	299	20
164700	689	20
170200	856	20
172200	1110	20
173795	1348	20
180500	1774	20
183000	2145	20
185500	2577	20
191700	2920	20
194500	3310	20
200000	3570	20
200100	3552	0
200400	3533	0
201400	3521	0
202900	3532	0
0875		
210000	0	0
210015	36	13
210100	63	13
210600	98	13
212000	165	13
215500	232	13
222500	467	13
230800	721	13
240000	1031	13
081100	3952	13
085000	4215	13
093000	4499	13
093100	4488	0
093500	4450	
094700	4445	
101400	4508	
0876		
103000	0	0

TIME	STRAIN	STRS
103023	185	58
103600	203	58
103655	634	58
111600	879	58
114000	1127	58
120000	1368	58
120700	1453	58
123000	1698	58
130000	2002	58
133000	2404	58
140000	2788	58
140020	2757	0
140700	2724	0
141500	2717	0
143200	2719	0
150000	2759	0
0877		
160000	0	0
160050	80	28
160500	179	28
161000	225	28
162000	296	28
166600	421	28
172000	580	28
174900	705	28
181700	840	28
190500	1056	28
213500	1707	28
240000	2328	28
083500	4054	28
090500	4139	28
093000	4233	28
093119	4187	0
093500	4170	0
095500	4165	0
103000	4160	0
0878		
143450	0	0
143477	40	9
143485	64	18
143493	80	29
143500	94	38
143507	112	48
143513	120	58
143519	129	67
143525	141	78
143536	156	97
143548	170	117
143560	178	136
143571	191	156
143582	201	175
143596	228	200
143603	244	211
143619	262	236
143625	271	257
143637	284	264
143654	308	292
143668	324	319
143686	356	353
143707	396	392
143725	426	425
143747	500	460
143774	584	497
143801	705	532
143822	839	550
143860	1116	567
143879	1171	571
143929	1677	580
0879		
161856	0	0
161900	27	9
161907	52	19
161920	80	38
161933	119	58
161947	132	78
161960	150	97
161976	177	126
161992	210	156
162015	251	195
162040	306	229
162067	386	264
162095	509	304
162122	661	336
162160	956	362
162195	1375	362
162210	1509	353
162235	2000	328
0881		
180000	0	0
183620	36	8
183631	68	19
183646	113	38
183660	149	58
183674	163	78
183685	178	97
183696	199	109
183712	222	145
183730	250	175
183748	288	202
183765	319	229
183790	385	264

TIME	STRAIN	STRS
183816	490	300
183847	663	336
183878	872	362
183902	1082	373
183955	1623	382
183990	2024	382
184035	2513	383
184090	3230	381
184136	3793	376
184153	4011	371
0882		
101560	0	0
101593	17	9
101602	40	19
101610	61	29
101615	73	37
101622	88	48
101639	98	58
101642	121	78
101653	140	97
101665	159	117
101675	180	136
101688	201	156
101700	232	175
101713	263	195
101725	302	211
101740	348	229
101755	411	247
101772	491	264
101793	630	281
101825	947	296
101860	1314	297
101876	1523	291
101919	2081	272
0883		
131263	0	0
131283	13	3
131292	40	15
131296	52	19
131305	80	28
131313	110	38
131321	140	48
131330	172	58
131350	264	78
131380	308	97
131407	766	102
131444	1201	102
131471	1540	97
131483	1978	87
0884		
142011	0	0
142041	7	7
142049	16	13
142054	36	19
142063	54	29
142070	83	38
142078	104	48
142086	136	58
142095	167	68
142104	211	78
142114	260	87
142126	334	97
142145	491	108
142175	794	113
142201	1105	112
142240	1566	108
142281	2017	107
0885		
190550	0	0
190574	19	9
190582	42	19
190597	87	38
190611	126	58
190625	154	78
190639	178	97
190652	206	117
190663	231	136
190675	255	157
190687	291	175
190700	313	195
190719	371	220
190741	446	247
190765	558	273
190788	681	300
190826	956	328
190840	1095	330
190862	1357	329
190874	1519	321
190885	1711	311
0886		
093900	0	0
093927	26	8
093936	56	19
093945	76	29
093952	96	38
093966	128	58
093979	154	78
093990	171	97
094002	185	117
094013	208	136
094040	225	164

TIME	STRAIN	STRS
094067	255	195
094084	289	220
094082	336	247
094096	371	264
094117	466	291
094139	636	309
094181	1035	321
094195	1215	320
094211	1473	307
094223	1665	291
0887		
091193	0	0
091213	18	9
091221	57	19
091231	90	29
091238	121	38
091246	156	48
091255	179	58
091263	216	67
0888		
101797	0	0
101836	51	9
101852	125	19
101866	184	29
101877	230	38
101885	255	48
101893	290	58
101910	342	86
101920	364	97
101933	393	117
101945	418	136
101952	429	150
101968	455	175
101979	477	195
101995	509	221
102015	567	247
102038	628	272
102060	725	302
102085	932	316
102100	1131	310
102118	1390	300
0889		
104900	0	0
105020	29	9
105060	47	19
105100	65	29
105135	79	38
105170	91	48
105228	116	68
105260	127	78
105296	136	
105326	144	97
105388	165	117
105450	186	136
105514	208	156
105578	238	175
105650	266	195
105720	301	211
105795	339	229
105873	393	247
105974	460	264
106088	569	281
106202	697	297
106284	840	299
106347	969	297
106380	1049	291
106445	1246	272
106510	1478	256
0890		
120010	0	0
120058	17	9
120061	50	29
120064	79	59
120066	97	86
120070	122	119
120073	138	146
120075	155	175
120077	171	202
120080	186	229
120083	200	256
120085	220	283
120087	235	312
120090	256	340
120092	271	361
120094	319	390
120098	399	425
120103	516	462
120106	688	477
120109	827	479
120111	1056	461
0891		
132450	0	0
132468	29	19
132476	50	29
132486	79	38
132493	97	48
132500	106	58
132506	120	67
132513	136	76
132525	152	97
132536	170	115

TIME	STRAIN	STRS
132547	188	135
132569	211	165
132581	235	195
132596	259	221
132614	283	248
132631	313	276
132645	332	302
132658	362	328
132672	388	352
132690	422	390
132705	462	416
132721	506	441
132742	573	479
132768	666	514
132793	814	541
132811	974	552
132830	1164	559
132861	1509	558
132870	1619	551
0892		
150000	0	0
150045	20	9
150054	39	19
150061	61	28
150068	75	38
150081	108	58
150095	132	76
150106	164	97
150119	186	118
150131	206	135
150144	226	155
150156	262	175
150169	288	195
150180	321	211
150202	374	241
150219	432	264
150238	480	291
150255	542	318
150288	627	352
150302	730	390
150329	864	418
150359	1062	442
150406	1478	463
150435	1810	462
150453	2093	441
150464	2287	425
0893		
162750	0	0
162883	32	9
162923	64	19
162971	89	28
163013	116	38
163060	150	49
163105	185	58
163186	245	77
163270	298	97
163355	355	117
163430	408	135
163501	456	155
163580	511	175
163698	598	202
163820	670	229
163910	742	248
164067	884	272
164235	1068	300
164387	1297	311
164506	1518	313
164676	1845	311
164796	2111	310
0894		
190777	0	0
190814	29	9
190818	56	39
190822	90	76
190826	110	118
190830	136	157
190835	155	195
190838	172	231
190842	201	266
190845	218	303
190848	249	339
190851	280	371
190855	321	407
190857	380	442
190862	459	480
190865	531	501
190870	722	529
190876	1083	550
190880	1268	552
190884	1515	556
190887	1725	554
0895		
092240	0	0
092249	20	9
092257	54	19
092271	86	38
092286	123	58
092290	148	76
092311	165	96
092323	185	116
092335	198	135

TIME	STRAIN	STRS
092353	225	165
092371	261	195
092393	297	229
092419	349	264
092460	392	301
092460	443	336
092481	494	371
092502	572	407
092531	687	442
092565	867	480
092595	1103	497
092608	1320	500
092647	1666	497
092663	1873	488
092679	2128	470
0896		
085362	0	0
085411	26	9
085457	51	19
085497	83	29
085534	93	36
085605	123	58
085679	160	76
085749	181	96
085820	201	116
085887	227	136
085953	244	155
090029	280	175
090104	320	195
090225	367	224
090366	441	247
090486	538	264
090653	832	281
090770	995	285
090864	1116	284
090898	1233	279
090990	1465	264
0897		
102956	0	0
103052	24	9
103055	62	38
103057	87	58
103062	113	96
103065	127	139
103069	156	175
103072	183	211
103076	201	251
103080	228	284
103082	242	320
103085	296	352
103089	340	398
103091	376	427
103095	434	460
103099	497	499
103102	579	532
103107	713	567
103111	880	590
103115	1024	598
103118	1203	600
103121	1400	599
103123	1570	590
0898		
113153	0	0
113170	28	19
113180	49	30
113185	58	38
113198	78	58
113218	110	87
113237	137	115
113254	168	145
113273	208	175
113298	263	211
113325	319	248
113356	447	285
113380	555	318
113410	739	353
113470	1219	390
113525	1722	399
113560	2116	398
113570	2262	390
113585	2515	371
0899		
132247	0	0
132266	37	19
132274	61	29
132281	88	39
132295	106	57
132308	135	76
132321	159	97
132335	183	118
132346	199	135
132364	231	165
132382	263	195
132400	303	221
132421	360	248
132445	449	271
132469	577	303
132494	735	327
132535	1077	344
132996	1329	342
132972	1530	336

TIME	STRAIN	STRS
132604	1884	319
0900		
145580	0	0
145615	17	9
145650	33	19
145683	51	28
145720	79	38
145754	91	48
145782	99	58
145846	126	76
145915	157	96
145981	190	118
150046	220	135
150116	259	155
150190	299	175
150276	352	195
150374	447	211
150425	635	229
150511	635	231
150600	1028	230
150745	1586	221
151069	1931	211
0901		
161462	0	0
161519	29	9
161521	62	29
161525	93	58
161528	124	88
161531	151	118
161534	177	148
161537	200	177
161540	223	211
161545	251	247
161549	290	284
161552	325	316
161555	371	355
161558	417	390
161562	465	427
161565	526	464
161569	600	499
161575	770	532
161578	936	541
161582	1187	541
0902		
183000	0	0
183018	65	48
183040	106	97
183500	246	97
184500	384	97
191500	710	97
194500	899	97
201500	1011	97
204500	1092	97
211500	1180	97
214600	1247	97
223000	1317	97
232700	1396	97
242700	1472	97
023400	1588	97
045300	1706	97
073600	1822	97
075000	1837	97
075013	1820	0
075100	1810	0
080000	1801	0
082500	1792	0
091500	1782	0
0903		
110119	0	0
110130	25	9
110137	38	19
110145	63	29
110152	89	38
110160	110	48
110168	142	58
110176	171	67
110184	206	76
110193	257	86
110202	313	97
110215	411	106
110230	514	115
110258	740	125
110294	1128	131
110342	1662	131
110368	1971	130
110498	2364	125
110547	3286	107
0904		
130600	0	0
130705	30	8
130752	60	19
130782	82	23
130807	101	30
130842	131	38
130875	153	42
130905	182	50
130957	244	58
131005	305	62
131180	421	67
131207	658	76
131362	979	76

TIME	STRAIN	STRS
131542	1381	76
131665	1658	73
131963	2337	72
0905		
142400	0	0
142407	27	9
142410	49	28
142412	76	48
142415	101	77
142417	119	97
142419	137	118
142421	161	135
142425	210	164
142428	263	195
142430	296	211
142434	370	229
142436	465	248
142440	603	264
142445	760	280
142450	1020	289
142453	1251	291
142456	1447	291
142460	1700	288
142465	2076	282
0906		
151500	0	0
151577	38	9
151600	55	14
151643	89	22
151680	129	31
151715	165	37
151765	219	43
151834	321	51
151900	429	57
152026	654	61
152210	1040	62
152360	1440	62
152504	1696	61
152595	1884	61
152900	2567	59
0907		
163720	0	0
163776	18	9
163779	54	29
163781	91	50
163784	125	67
163785	165	89
163788	199	109
163790	259	137
163795	325	165
163797	402	184
163800	438	195
163807	518	211
163805	634	229
163810	857	248
163815	1081	257
163819	1304	264
163825	1666	270
163831	2063	271
163840	2576	270
163849	3182	268
163863	3572	248
0908		
082900		0
082927		95
083000	0	0
083026	109	95
083182	151	95
085001	398	95
092103	783	95
094200	1080	95
101600	1450	95
104500	1803	95
112100	2178	95
115805	2506	95
132500	2883	95
150000	3146	95
165700	3288	95
200000	3626	95
200071	3575	0
200500	3555	0
201000	3550	0
203000	3534	0
210000	3529	0
0909		
105900	0	0
110000	237	164
110400	339	164
112002	496	164
120300	764	164
123100	887	164
130000	982	164
140000	1148	164
150000	1291	164
160200	1396	164
170000	1496	164
181000	1606	164
191000	1693	162
210700	1861	164
210713	1861	164
243706	1988	164

TIME	STRAIN	STRS
021300	2123	164
053200	2306	164
081000	2463	164
081031	2438	0
081200	2424	0
082500	2412	0
090000	2403	0
0910		
103000	0	0
103039	113	22
103200	244	22
103500	387	22
104000	619	22
105010	1104	22
110000	1565	23
110900	1977	22
112000	2451	22
113000	2816	22
114000	3247	22
115000	3635	22
120000	4009	22
120030	3960	0
120200	3892	0
120500	3847	0
123700	3785	0
130500	3773	0
0911		
140000	0	0
140042	23	20
140300	93	20
141000	137	20
142500	219	20
144700	314	20
154500	518	20
164500	710	20
174700	898	20
185000	1050	20
211300	1355	20
224600	1525	20
245200	1743	20
030200	2024	20
074500	2317	20
074800	2290	0
075500	2251	0
082000	2228	0
084600	2228	0
0912		
110000	0	0
110079	124	95
110500	366	95
112600	768	95
114500	1127	95
120000	1362	95
123500	1752	95
130000	1921	95
133203	2119	95
140000	2244	95
143000	2359	95
150500	2481	95
154018	2572	95
154047	2567	0
154500	2457	0
160634	2480	0
0913		
163000	0	0
163060	220	95
163200	354	95
163500	484	95
164000	610	95
170000	903	95
173300	1218	95
180505	1575	95
184500	2021	95
194700	2592	95
202800	2965	95
210520	3254	95
210573	3360	95
214400	3566	96
222900	3808	95
234600	4160	95
012000	4547	95
012019	4513	0
013700	4422	0
015300	4394	0
060000	4313	0
0923		
165690	2	0
165745	0	2
165772	2	10
165806	4	10
165833	12	25
165852	20	25
165882	27	25
165917	37	25
165949	45	25
165981	51	25
170007	56	25
170022	61	25
170047	66	25
170076	72	25
170098	76	25

TIME	STRAIN	STRS
170125	80	25
170155	87	25
170183	90	25
170235	100	25
170299	109	25
170352	120	25
170433	127	25
170452	149	25
170495	217	25
170920	220	25
170985	227	15
171006	277	15
171099	227	15
171665	257	15
172262	285	15
172807	310	15
173430	335	15
174274	376	15
174886	402	15
175500	431	15
180167	462	15
180235	469	15
180274	475	0
180316	475	0
181072	476	0
184995	482	0
185498	502	0
185538	502	0
185560	514	15
230698	582	15
231320	616	15
232152	637	15
232779	651	15
232815	655	15
232837	661	26
232875	674	26
232920	682	26
232980	696	26
233037	711	26
233318	757	26
233385	777	26
233461	793	26
233537	805	26
233610	823	26
233690	841	26
233765	861	26
233800	869	26
233872	875	0
233903	875	0
143127	935	0
193733	935	0
0960		
163200	0	0
163270	20	36
163295	65	78
163321	136	117
163362	333	163
163387	507	183
163430	808	203
163474	1027	205
163509	1380	198
163565	2107	182
163606	2476	180
163666	3355	174
0962		
083786	0	0
083805	3	7
083822	7	13
083847	14	22
083862	21	28
083874	24	33
083894	33	42
083914	42	50
083940	57	60
083958	68	67
084005	98	84
084049	132	100
084088	163	117
084130	241	134
084183	316	151
084227	439	167
084262	536	176
084295	652	214
084410	1288	250
084512	2147	255
084610	2628	256
084690		261
084802		279
0968		
171820	0	0
171885	2	4
171901	7	10
171918	14	17
171927	22	25
171953	30	34
171969	40	42
171985	51	50
172001	66	59
172017	80	67
172035	83	76
172052	113	84

TIME	STRAIN	STRS
172068	136	92
172085	160	101
172122	222	117
172163	308	134
172204	423	151
172261	624	182
172300	805	200
172346	1030	215
172460	1853	236
172495	2161	237
172637	3189	250
172700	3855	268
172754	4140	281
173105	4940	366
0969		
103515	0	0
103575	12	18
103628	20	27
103645	25	34
103664	30	45
103683	39	54
103703	47	64
103723	56	71
103743	68	85
103763	80	95
103781	93	105
103807	111	119
103861	137	134
103874	163	148
103911	201	176
103956	252	197
104009	337	211
104048	419	265
104108	543	299
104172	737	334
104242	1100	350
104268	1290	349
104353	2186	349
104396	2712	343
0971		
165900	0	0
165967	2	2
165993	17	13
170012	33	21
170030	49	29
170048	68	38
170062	78	44
170081	88	54
170096	92	62
170112	96	71
170137	102	85
170166	111	101
170200	121	119
170226	126	135
170256	134	152
170287	144	183
170324	160	218
170360	177	252
170395	197	286
170431	219	319
170469	248	354
170506	282	388
170547	326	422
170587	382	456
170619	455	490
170676	559	524
170728	710	558
170786	1024	576
170796	1115	575
170816	1368	565
170902	3270	394
0974		
091574		0
091585	10	8
091594	18	16
091603	28	25
091612	38	33
091630	57	50
091649	80	67
091665	105	83
091683	136	100
091700	176	117
091719	255	134
091740	287	150
091762	377	181
091790	541	216
091825	568	250
091862	684	284
091900	1428	318
091946	1706	352
092001	2554	386
092022	2761	
092128	2843	
092227		
0976		
111700	0	0
111788	119	65
111797	153	108
111813	242	149
111831	360	187
111863	515	228

TIME	STRAIN	STRS
111951	2055	241
112021	3105	251
112137	4720	272
112178	5120	307
112235	5680	347
112353	7320	380
112442	8800	346
112490	9630	311
0978		
031900	0	0
031910	22	55
031916	60	88
031928	148	165
031942	370	253
031968	1188	315
032005	2482	365
032035	3606	404
032067	4862	442
032078	5442	425
032099	6268	411
032113	6874	413
0981		
163950	0	0
163970	0	33
163981	47	66
163992	66	117
164004	127	156
164016	161	204
164030	236	240
164045	372	280
164063	503	320
164086	813	355
164103	1060	378
164149	1762	400
164183	2305	402
164203	2708	386
164220	3075	338
164225	3383	313
0982		
113799	0	0
113827	20	41
113842	57	91
113853	102	137
113863	134	169
113870	149	203
113881	240	247
113892	270	282
113906	368	321
113917	476	360
113934	572	397
113953	835	434
113986	1323	470
114021	1835	510
114066	2563	523
114077	2790	516
114112	3470	472
114125	3880	434
114147	4370	398
0983		
022300	0	0
022310	28	35
022319	92	81
022326	105	135
022334	188	197
022340	217	245
022345	257	286
022353	330	357
022361	411	430
022368	504	485
022375	630	543
022386	882	618
022396	1090	657
022410	1609	724
022432	2295	805
022447	2940	833
022453	3295	830
022460	3717	806
022467	4190	767
0985		
035500	0	0
035518	71	227
035532	102	227
035580	173	227
035605	208	227
035637	250	227
035700	286	227
035800	434	227
035902	691	227
040085	834	227
040135	945	227
040223	1152	227
040230	1216	227
040289	1269	227
040325	1298	227
040378	1348	227
040415	1655	227
040446	1739	227
040494	1902	227
040536	2050	227
040557	2128	227
040597	2285	227

TIME	STRAIN	STRS
040622	2382	227
040652	2504	227
040700	2477	0
040900	2461	0
042351	2408	0
044729	2393	0
0991		
044200		0
044311	24	25
044362	61	51
044427	102	85
044477	145	109
044525	171	131
044600	290	168
044669	394	192
044757	541	213
044895	840	237
045003	1081	253
045193	1557	277
045270	1779	277
045328	1950	275
045460	2354	261
045610	2836	245
0993		
065200	0	0
065396	31	22
065438	51	43
065490	73	77
065536	78	102
065576	120	125
065626	140	158
065664	167	182
065706	192	208
065764	251	239
065812	270	261
065873	360	284
065968	497	307
070038	615	325
070138	775	349
070213	918	374
070338	1172	388
070378	1265	385
070467	1580	365
070561	1880	343
070738	2430	319
071052	3387	276
0995		
110900	0	0
110915	32	30
110926	80	89
110934	124	148
110940	189	197
110945	232	235
110951	334	276
110960	482	315
110969	561	348
110979	1142	366
113994	1028	388
111014	2305	426
111029	3069	465
111042	3560	480
111059	4130	538
111100	6060	596
111111	6580	589
111140	7660	589
111160	8830	591
0997		
155700	0	0
155843	6	24
155911	136	51
155997	244	83
160086		107
160266	846	119
160625	1722	153
160792	2158	179
160895	2680	211
161115	2962	221
161179	3100	231
161254	3276	243
161418	3634	
161575		298
161685	4066	323
161770	4248	337
161957	4576	402
162129	4956	451
0999		
153500	0	0
153515	94	227
153531	219	227
153540	318	227
153548	410	227
153555	521	227
153566	683	227
153576	850	227
153584	880	227
153591	1138	227
153600	1271	227
153610	1449	227
153622	1735	227
153630	1816	227
153639	1992	227

TIME	STRAIN	STRS
153645	2104	227
153652	2255	227
153659	2357	227
153665	2501	227
153682	2414	0
153725	2358	0
153810	2312	0
154200	2278	0
154500	2272	0
155000	2263	0
1000		
163801	0	0
0060	0	6
4025	34	7
4049	74	24
4122	162	65
4565	1336	87
4792	1994	94
4949	2392	108
5093	2746	124
5230	3066	141
5346	3370	157
5545	3926	150
5645	4178	167
5797	4598	190
5890	4866	169
170047	5302	198
0154	5596	206
1003		
075700	0	0
5770	6	18
5812	30	44
5870	90	78
5923	140	101
5972	190	125
080050	280	157
0113	380	182
0184	510	206
0298	700	237
0486	880	251
0590	1260	300
0689	1480	316
0802	1710	335
0911	1960	355
0959	2040	363
1057	2280	375
1174	2504	389
1280	2780	396
1500	3280	401
1622	3570	398
1004		
101399	0	0
1451	0	0
1610	34	19
80	80	44
1759	158	78
1834	232	101
83	328	109
2018	536	156
2210	990	175
2428	1592	180
2619	2116	187
2782	2518	205
2920	2834	223
3076	3188	238
3253	3610	261
3407	3996	285
1005		
113200	0	0
16	52	67
27	126	136
33	192	197
40	228	254
50	314	341
58	428	402
68	576	479
74	694	515
81	852	552
91	1156	590
2302	1532	621
12	2032	660
34	2622	697
50	3186	720
70	3956	765
84	4536	781
99	5150	781
3411	5704	761
1006		
131951	0	0
1961	32	33
1968	66	77
1976	120	175
1985	156	267
93	210	357
2002	256	443
2012	366	517
2020	470	594
2030	636	670
2038	796	707
2046	1026	743
2057	1340	797

TIME	STRAIN	STRS
2066	1598	843
2079	1940	913
92	2252	988
2103	2524	1055
2117	2882	1130
2134	3400	1188
2145	3816	1189
2155	4376	1135
1008		
034151	0	0
58	8	7
64	20	53
77	100	163
85	136	237
91	162	322
99	190	401
3506	201	466
12	230	543
19	266	620
26	274	694
33	306	788
40	330	869
48	382	956
53	428	1020
59	462	1072
64	536	1127
75	734	1200
81	896	1218
85	1110	1205
90	1446	1151
1011		
165099	0	0
5126	2	0
63	14	41
53	26	133
60	76	207
68	106	294
78	128	400
85	146	475
91	166	551
99	196	650
5210	250	776
20	308	881
30	392	991
38	488	1068
48	708	1133
54	970	1120
61	1652	982
1012		
084600	0	0
5012	16	1
83	36	31
5126	58	54
55	78	69
92	88	91
5228	96	113
60	120	136
5304	130	167
40	138	182
98	152	232
5452	166	271
5505	184	309
63	194	349
5613	208	387
86	228	433
5730	248	460
91	280	498
5872	298	546
0966	346	597
090068	424	649
0150	584	652
63	626	648
90	746	626
0227	786	569
1013		
102324	0	0
12	16	24
2609	66	75
70	110	114
2724	118	155
85	132	197
2845	140	239
97	172	275
2964	204	312
3015	228	353
75	256	391
3152	322	430
3216	364	463
65	384	480
3328	562	495
62	672	490
3430	924	453
59	1118	425
3517	1510	352
1014		
101825	0	0
2017	16	21
2110	40	73
70	88	111
2224	118	152
85	130	192

TIME	STRAIN	STRS
2365	152	235
97	172	270
2455	190	310
2515	226	350
75	256	390
2652	320	428
2716	374	463
55	428	478
2828	556	493
62	668	487
2930	946	450
59	1114	421
3017	1512	342
1016		
111950	0	0
2667	226	7
2737	284	38
2812	392	67
2904	596	88
3198	1464	87
3448	2202	86
3601	2448	94
3874	3178	81
4036	3964	87
4203	4406	92
4318	4724	96
4426	5002	104
4583	5434	113
4725	5802	120
1018		
135600	0	0
53	0	0
5750	2	0
5811	12	8
32	52	34
47	90	63
60	136	83
75	190	103
88	260	121
5912	418	144
49	760	157
78	1068	153
6030	1604	146
6117	2536	136
6215	3556	128
6330	4786	129
93	5416	137
6467	5928	150
6521	6610	170
6583	7190	193
6653	7634	217
6765	8860	265
6842	9632	302
1020		
032200	0	0
16	16	18
25	40	44
32	64	72
49	114	111
63	184	150
83	358	190
99	566	204
2312	746	207
32	1046	204
50	1360	201
72	1792	193
2426	2636	182
2507	3960	178
65	4864	189
95	5304	200
2648	6064	222
82	6576	239
2752	7666	269
1022		
045200	0	0
38	10	1
47	60	56
55	144	117
60	238	157
67	570	188
75	616	215
83	944	223
90	1220	217
98	1600	207
5311	2152	196
25	2670	187
35	3120	189
48	3738	190
72	4640	185
95	5188	182
1027		
095000	0	0
100013	16	23
0152	36	39
0428	112	68
0782	196	93
1096	308	117
1338	394	136
1575	490	150
2006	650	158
2379	736	167

TIME	STRAIN	STRS
3021	960	178
3188	1192	217
3277	1306	238
3666	1598	253
3818	1850	274
4063	1946	289
4203	2110	301
4463	2338	318
4662	2530	331
4976	2870	369
5457	3284	364
5795	3572	370
110135	1980	372
0500	4176	370
1028		
020100	0	0
18	4	13
41	20	43
59	44	76
78	66	101
94	88	140
0212	118	173
23	136	195
38	164	220
53	200	245
56	224	271
82	276	300
0300	324	322
12	384	346
38	486	370
68	638	391
0412	966	410
72	1424	415
0537	1952	420
0620	2854	427
82	3178	421
0776	3988	406
0812		395
1029		
153852	0	0
56	30	27
58	70	90
60	106	153
62	126	212
63	140	264
64	150	312
65	160	352
66	170	395
67	180	427
68	190	472
69	200	495
70	210	547
82	350	628
84	380	612
1030		
141200	0	0
1811	12	12
2000	32	44
2189	38	59
2776	48	63
3014	50	60
3981	40	13
5142	216	328
5352	268	367
5536	332	399
5790	440	433
150176	690	472
0320	872	475
0397	988	663
0495	1230	625
0572	1454	390
0668	1726	343
0800	2020	317
1031		
155851	0	0
55	20	86
58	40	165
60	60	244
62	80	322
64	100	401
65	120	476
67	150	551
69	170	627
70	190	701
72	210	781
74	230	852
75	240	925
77	260	996
78	280	1069
87	580	1428
90	670	1469
1032		
110951	0	0
1021	20	8
1140	60	24
1498	252	45
2123	806	58
2318	984	55
2529	1176	58
	1344	54
2745	1404	63

TIME	STRAIN	STRS
2910	1568	61
3186	1788	63
3657	1842	60
4700	2252	60
4100	2598	55
5151	3508	56
5400	3714	55
1033		
022051	0	0
56	14	20
58	20	61
59	46	106
61	72	170
62	98	203
63	122	250
65	164	299
66	204	338
67	264	388
69	366	425
70	440	457
71	554	485
73	696	501
75	886	518
76	1090	528
78	1452	533
79	1668	528
82	2028	518
85	2576	504
88	2954	497
90	3308	487
93	3684	475
1034		
092000	0	0
88	12	8
2102	40	71
12	56	110
22	71	150
32	83	190
41	104	230
50	123	268
60	141	307
69	164	347
81	193	401
95	227	418
2205	248	493
16	314	535
27	358	572
38	404	612
50	458	651
70	647	700
80	785	707
90	936	699
2302	1248	663
12	1600	610
1037		
022100	0	0
2275	4	2
2350	20	16
2422	38	32
2503	60	55
92	80	83
2682	96	103
2760	118	129
2848	146	152
3066	192	176
86	256	199
3226	362	213
92	426	216
3402	532	220
3498	618	224
3587	702	229
3800	936	233
4000	1118	240
91	1212	247
4267	1404	246
4434	1590	242
4500	1658	244
1038		
170277	0	0
84	4	33
95	20	79
1501	46	127
08	76	171
18	102	231
26	136	281
37	170	349
50	226	425
62	294	500
77	434	575
88	628	605
93	810	599
1900	1044	574
07	1330	536
15	1704	485
1039		
120000	0	0
25	20	0
30	40	37
31	80	77
32	120	110
35	160	190

TIME	STRAIN	STRS
36	220	253
38	240	340
40	260	387
41	280	453
43	300	514
44	340	574
45	380	634
48	420	717
50	460	796
51	500	846
53	600	910
55	720	968
57	880	989
58	1120	976
1041		
142800	0	0
2865	8	16
2892	44	42
2934	56	66
2993	68	100
3021	8	122
3058	36	149
3104	108	177
3142	128	202
3195	160	232
3237	178	257
3284	212	283
3327	246	302
3390	316	325
2451	404	342
3498	520	343
3563	714	327
3633	906	320
3693	1062	321
3780	1250	323
1043		
095508	0	0
5694	22	13
5734	64	30
5806	128	60
47	176	75
98	244	100
5950	314	115
100017	420	137
0113	634	156
0215	852	174
0336	1106	195
0426	1298	213
0523	1506	228
0652	1782	252
0803	2126	274
0962	2450	298
1045	2694	304
1261	2961	313
1350	3156	321
1405	3276	314
1508	3452	314
1044		
064583	0	0
4600	8	1
20	24	9
31	30	52
45	70	129
55	112	195
73	198	307
82	258	365
94	324	432
4705	458	478
12	540	509
20	664	530
28	880	541
38	1066	541
55	1441	553
72	1874	580
93	2410	591
4810	2850	592
20	3418	581
38	3658	565
1045		
104653	0	0
55	0	0
98	10	0
4702	40	37
03	60	93
05	110	157
06	160	198
08	290	229
10	460	268
12	540	308
13	640	347
15	740	423
18	840	483
20	980	567
23	1100	650
35	2040	750
	2900	860
1046		
095600	0	0
5763	18	5
5803	48	28
43	80	44

TIME	STRAIN	STRS
81	124	60
5960	220	92
100007	288	110
49	342	124
0102	436	140
0201	632	156
83	794	171
0380	994	188
0462	1158	203
0553	1344	219
0631	1502	233
0730	1706	249
0818	1904	263
0900	2084	273
91	2306	282
1126	2566	304
1202	2768	308
70	2874	315
75	2906	317
86	2922	314
1313	2958	306
40	2990	296
1047		
063452	0	0
1855	14	16
90	34	27
1935	74	42
80	116	59
4039	202	75
4137	412	85
4259	730	82
4451	1236	81
4589	1806	78
4752	2082	74
1048		
071200	0	0
1657	36	4
1813	164	12
1984	226	20
2046	302	26
2115	416	35
66	492	43
2225	582	51
94	694	59
2369	810	67
2552	1244	73
2700	1622	72
6833	1970	70
49	2228	69
3100	2642	67
3300	3150	67
3400	3392	73
1049		
111615	0	0
22	560	53
25	660	102
26	760	133
28	880	189
30	980	220
33	1300	293
35	1600	308
38	1880	308
40	2200	300
42	2590	292
45	3100	284
50	3720	276
1050		
103000	0	0
3473	10	7
3505	24	22
3569	54	37
3609	76	54
3655	84	72
3692	116	83
3708	142	93
94	252	120
3849	328	130
80	410	139
3988	654	146
4000	944	148
99	1200	145
4199	1490	140
1051		
031953	0	0
031963	32	40
031970	54	83
031976	60	123
031981	74	160
031986	86	198
031991	98	240
031996	114	275
032002	124	318
032013	154	393
032014	192	465
032030	248	540
032048	340	616
032061	542	670
032071	754	693
032083	1180	760
032101	1396	765
032111	1652	767

TIME	STRAIN	STRS
032119	1880	755
032127	2190	740
1052		
040903	0	0
08		12
13	8	137
18	110	196
20	204	400
24	314	505
28	456	619
31	702	679
36	1022	712
37	1416	700
39	1932	657
1053		
073559	0	0
68	52	33
76	106	78
81	158	101
86	194	127
95	268	170
3604	398	202
15	566	250
26	736	288
37	892	323
50	1126	365
66	1458	401
84	1850	432
92	2042	452
3727	2840	503
62	3638	555
91	4234	582
3806	4736	588
13	4984	570
1054		
070898	0	0
3903	12	91
07	50	228
09	74	324
11	94	420
14	178	520
16	252	603
19	384	678
21	568	740
24	790	780
26	1064	807
30	1408	830
32	1768	851
35	1984	856
38	2592	848
40	3036	837
43	3512	835
54	5372	834
1055		
134000	0	0
14	0	0
23	30	34
51	66	34
4159	128	34
4419	208	34
4600	248	34
5000	316	34
5300	362	34
5700	412	34
140200	476	34
0899	560	34
1799	662	34
2599	732	34
3599	824	34
4699	930	34
150000	1022	34
1200	1106	34
2999	1208	34
4599	1292	34
160000	1350	34
1499	1412	34
2600	1456	34
3600	1504	34
5000	1546	34
170500	1610	34
1500	1626	34
3500	1704	34
5999	1788	34
181100	1892	34
190500	1998	34
0660	1978	0
0850	1940	0
1000	1930	0
1500	1918	0
2000	1914	0
4500	1902	0
200000	1904	0
3000	1902	0
1056		
101200	0	0
1216	270	49
30	360	49
66	574	49
88	682	49
1316	806	49
40	890	49

TIME	STRAIN	STRS
65	988	49
1406	1134	49
29	1220	49
55	1318	49
86	1418	49
1531	1616	49
79	1798	49
[illegible]	1946	49
1705	2314	49
1805	2710	49
93	2996	49
1957	3228	49
2036	3564	49
2116	3912	49
2200	4294	49
81	4620	49
2405	5066	49
90	5326	49
2629	5660	49
102795	5996	49
3027	6374	49
3300	6680	49
3500	6880	49
3800	7180	49
59	6984	0
4000	6910	0
104499	6892	0
4800	6876	0
5000	6870	0
111000	6868	0
3000	6870	0
1060		
020500	0	0
30	22	23
0600	48	23
0900	100	23
1500	150	23
2510	190	23
4000	246	23
5500	292	23
031500	346	23
4500	410	23
041500	504	23
4500	568	23
051000	630	23
060000	736	23
070000	856	23
080000	960	23
090000	1056	23
100300	1162	23
133000	1494	23
200000	2230	23
210130	2270	23
230000	2420	23
250800	2596	23
254000	2976	23
254221	2972	0
4352	2976	0
255000	2974	0
260500	2974	0
4300	2976	0
270000	2972	0
1064		
020921	0	0
29	550	71
65	798	71
76	986	71
84	1106	71
90	1206	71
98	1324	71
1611	1466	71
1023	1582	71
40	1722	71
53	1856	71
65	1984	71
84	2170	71
1106	2362	71
32	2576	71
67	2882	71
1212	3254	71
43	3496	71
98	3910	71
1326	4204	71
75	4504	71
1433	4680	0
76	4682	0
1652	4816	0
1065		
143452	0	0
3504	220	9
16	364	83
23	456	133
30	642	176
38	886	211
47	1258	221
61	1568	219
70	2400	216
81	2936	211
1066		
160399	0	0
0418	96	10

TIME	STRAIN	STRS
22	128	57
25	200	114
30	334	202
34	464	258
37	630	293
42	758	334
46	1312	337
49	1878	324
52	2046	306
57	2502	290
61	2868	281
1067		
042902	0	0
27	136	36
32	250	61
36	372	177
39	472	236
42	584	282
46	748	329
49	938	364
53	1212	399
57	1512	421
61	1804	436
65	2164	448
70	2508	458
75	[illegible]68	463
80	3534	466
90	4420	500
98	5036	543
3005	5130	570
14	6252	632
20	6590	659
30	7508	691
38	8046	688
41	8474	666
1068		
065420	0	0
50	40	1
75	124	32
80	200	72
85	266	110
89	338	152
94	398	193
98	468	231
5502	540	272
07	626	312
11	690	348
19	878	406
28	1074	459
38	1346	515
50	1748	570
60	2096	610
72	2594	643
82	2994	662
88	3302	672
96	3658	672
5602	4030	666
11	4474	571
1069		
191534	0	0
51	106	0
92	416	43
97	470	97
1602	528	124
06	596	162
11	682	208
20	862	289
28	980	361
38	1146	433
43	1264	472
48	1392	510
54	1552	547
61	1774	586
66	1964	605
75	2308	624
82	2638	626
86	2844	622
95	3298	616
1704	3780	593
14	4264	588
1070		
085399	0	0
5900	2	78
05	112	115
09	250	244
12	398	332
15	472	410
17	620	481
20	608	541
24	1100	605
27	1406	653
30	1784	679
33	2260	679
36	2706	660
39	3180	630
41	3820	601
1072		
115720	0	0
34	42	11
42	64	71
50	94	71

TIME	STRAIN	STRS
5816	290	71
5919	480	71
90	602	71
120090	754	71
0175	880	71
0220	946	71
67	996	71
0374	1146	71
0458	1246	71
0525	1378	71
0624	1460	71
0708	1576	71
85	1680	71
0965	1868	71
1100	2058	71
25	1988	0
75	1944	0
1300	1924	0
1073		
092800	0	0
93	58	23
2944	92	37
[illegible]04	176	62
3111	364	71
98	600	81
3235	770	82
3493	1384	90
3689	1886	91
3800	2208	91
3953	2618	91
4100	3008	92
4212	3284	90
1074		
140705	0	0
22	56	38
40	6	118
50	310	158
62	488	200
76	788	220
83	998	222
95	1242	223
0812	1678	224
35	2260	228
61	2912	233
92	3744	232
0903	4066	228
19	4500	217
31	4810	219
1076		
030100	0	0
05	18	36
07	64	84
10	104	124
13	162	176
16	220	220
19	276	255
21	380	292
24	498	322
27	648	342
30	846	356
32	1030	351
35	1226	354
37	1422	350
40	1646	342
44	1954	342
47	2210	342
1077		
169000	0	0
04	26	60
07	82	180
12	190	322
16	528	438
20	1040	441
24	1620	427
27	2094	413
31	2680	402
1079		
084500	0	0
68	10	12
4607	30	30
72	66	60
4728	150	82
98	292	101
4848	404	112
4918	586	104
74	768	101
5058	986	100
5148	1232	99
5204	1532	99
5352	1764	100
1080		
091800	0	0
10	14	15
15	36	42
19	54	61
22	72	80
27	90	101
30	106	122
34	146	183
37	146	161
41	164	178

TIME	STRAIN	STRS
45	196	197
49	238	219
54	292	237
58	356	250
62	428	256
69	554	264
75	700	262
78	812	259
82	914	252
88	1066	243
92	1186	236
1081		
105680	0	0
5700	6	12
03	58	65
06	112	108
08	154	156
11	194	205
14	238	252
17	294	302
20	368	356
25	514	400
29	738	428
32	944	425
36	1268	415
39	1538	400
43	1992	385
46	2184	368
1083		
114205	0	0
07	98	44
08	160	91
10	240	120
11	230	170
12	258	211
13	286	250
14	304	292
15	340	331
17	404	395
20	566	458
21	764	489
24	1024	489
25	1256	476
27	1684	436
28	1948	416
30	2260	390
32	2746	356
1084		
020000	0	0
15	79	71
26	127	71
40	180	71
53	231	71
72	304	71
97	394	71
0139	532	71
87	706	71
0236	878	71
0300	1125	71
51	1320	71
0450	1624	71
0500	1908	71
50	2114	71
0600	2320	71
50	2538	71
88	2736	71
0725	2966	71
69	3196	71
0851	3635	71
0935	4122	71
1023	4558	71
78	4870	71
1109	5040	71
48	5172	71
1206	5144	0
1300	5142	0
1500	5140	0
1942	5130	0
2700	5120	0
1085		
051650	0	0
93	16	12
1728	56	30
65	104	45
1828	194	70
69	260	86
1938	412	102
2014	604	111
83	812	110
2145	984	108
98	1182	107
1086		
041700	0	0
10	0	18
15	22	38
20	34	61
23	48	81
30	76	104
35	108	137
39	142	157
45	202	181

TIME	STRAIN	STRS
49	264	198
56	354	220
63	486	237
70	664	246
80	888	250
85	1040	249
94	1300	244
1816	1928	230
32	2358	221
65	2998	212
1087		
043800	0	0
04	26	45
07	66	91
10	106	157
13	150	213
17	208	272
20	282	319
22	358	356
25	468	393
29	646	417
32	848	424
35	1054	420
38	1354	403
41	1714	382
45	2078	359
1088		
045431	0	0
50	10	4
56	156	35
58	188	84
60	212	126
61	236	170
62	268	213
64	300	260
66	354	335
68	406	400
69	458	450
72	578	536
74	696	587
	924	629
1089		
173600	0	0
17	384	71
32	464	71
46	518	71
62	584	71
80	656	71
3702	730	71
31	810	71
77	922	71
3830	1030	71
92	1178	71
3990	1272	71
4092	1400	71
4195	1544	71
4292	1680	71
4391	1822	71
4497	1976	71
4592	2100	71
4692	2236	71
4790	2326	71
5091	2556	71
5593	2818	71
180491	3174	71
1510	3390	71
3000	3628	71
5100	3894	71
192200	4174	71
5000	4376	71
202000	4558	71
5000	4704	71
212000	4830	71
215000	4956	71
222200	5072	71
240000	5410	71
010000	5560	71
073800	6406	71
3952	6346	0
080518	6356	0
081000	6304	0
1090		
102420	0	0
65	14	11
99	26	24
2530	44	41
57	68	53
86	100	65
2625	144	81
65	210	97
2708	282	109
81	450	119
2840	592	122
2912	774	122
3009	1024	120
1091		
102080	0	0
87	10	8
92	22	29
97	56	44
2105	96	84

TIME	STRAIN	STRS
13	142	122
17	178	148
22	214	170
29	272	203
36	356	230
42	428	259
48	510	280
57	680	296
64	854	308
77	1146	302
93	1600	294
2214	2164	287
1092		
115700	0	0
5707	8	13
11	64	31
17	140	79
21	196	110
25	248	137
30	306	170
32	350	195
37	438	236
41	526	272
48	648	304
55	898	342
60	1098	352
65	1376	353
72	1696	347
81	2150	331
90	2614	319
5801	3178	307
1093		
111230	0	0
36	12	40
39	44	88
42	74	142
47	138	242
50	218	313
52	252	366
56	440	421
59	600	472
63	812	504
67	1160	519
72	1556	525
76	1930	528
80	2280	520
87	3010	503
96	3960	474
1222	4552	459
1094		
062593	0	0
2600	2	1
05	20	28
07	50	109
10	78	203
12	116	240
14	166	362
16	250	442
20	372	516
21	538	577
25	816	616
27	1184	623
30	1616	572
32	2224	561
35	2686	526
1095		
115800	0	0
08	14	32
13	50	82
17	60	122
20	74	163
24	88	200
28	104	241
31	116	282
34	136	321
37	146	359
40	160	399
44	178	447
47	198	484
52	234	540
55	258	587
60	298	624
67	348	736
76	474	848
90	728	963
5902	1138	1008
06	1362	1005
12	1698	981
16	1966	950
1096		
010900	0	0
09	20	27
13	52	69
17	74	110
20	92	152
26	110	211
30	134	262
36	150	343
40	164	384
45	194	442
49	210	496

TIME	STRAIN	STRS
52	226	550
57	252	604
62	300	691
68	352	762
75	452	839
81	632	872
85	782	880
89	944	874
92	1134	860
95	1378	830
1097		
014380	0	0
99	0	0
4404	10	48
07	38	122
11	64	230
15	90	313
18	102	378
20	126	451
24	148	539
27	166	612
30	190	692
33	228	779
36	272	849
39	324	920
43	436	989
47	592	1038
50	758	1062
52	988	1068
56	1534	1008
1098		
020300	0	0
07	20	48
11	66	119
15	92	196
19	114	283
21	134	361
25	158	432
28	172	508
31	198	590
34	222	673
37	250	755
40	282	828
42	324	894
45	370	960
48	432	1028
51	550	1095
55	736	1134
58	808	1139
61	1118	1118
63	1728	1070
1099		
022821	0	0
51	0	1
57	12	37
59	48	115
62	80	202
63	106	296
66	126	391
68	144	482
70	162	576
73	196	688
75	212	812
78	238	912
80	266	960
82	298	1103
84	312	1196
86	344	1290
88	380	1393
91	418	1600
94	490	1652
97	630	1776
1100		
030300	0	0
030320	8	27
030324	28	117
030321	48	200
030337	74	278
030342	94	370
030348	114	438
030355	154	518
030360	184	582
030365	238	647
030372	318	716
030391	794	868
030400	1136	894
030410	1600	911
030421	2104	924
030430	2526	926
030438	2914	922
030441	3132	916
030446	3408	897
1101		
040300	0	0
040307		46
040312	2	91
040316	12	100
040322	44	203
040328	72	265
040333	114	322
040340	158	400

TIME	STRAIN	STRS
040347	216	473
040353	272	548
040359	342	632
040365	404	707
040370	480	784
040377	580	854
040383	716	924
040392	950	996
040600	1258	1037
040606	1474	1042
040610	1678	1044
040615	1928	1036
040620	2158	1022
040625	2472	995
1102		
042950	0	0
042956	20	37
042958	48	91
042961	78	147
042963	96	205
042966	116	270
042969	132	323
042971	166	392
042975	208	453
042978	248	552
042981	306	635
042984	366	704
042987	462	773
042991	652	840
042995	890	876
042998	1160	889
043002	1502	890
043006	1900	891
043019	2970	907
043027	3740	918
043033	4300	913
043039	4840	897
043043	5328	871
043047	5708	775
1103		
045699	0	0
045704	8	43
045707	22	102
045710	42	165
045712	52	23[illegible]
045715	72	296
045719	102	394
045722	126	470
045726	168	560
045728	214	630
045731	268	696
045735	376	776
045738	556	826
045741	792	849
045745	1082	856
045748	1450	842
045752	1792	826
045755	2112	808
045758	2652	792
1104		
051925	0	0
051950	8	16
051953	44	112
051957	98	270
051960	120	366
051962	158	447
051965	202	550
051968	264	702
051970	320	818
051972	394	915
051975	492	1009
051977	626	1077
051980	806	1149
051982	1080	1188
051985	1436	1199
051987	1816	1203
051990	2196	1205
051994	2900	1210
051998	3672	1203
1105		
100004	0	0
100027	44	71
100044	72	71
100062	100	71
100104	166	71
100179	276	71
100225	342	71
100300	442	71
100404	572	71
100503	696	71
100600	822	71
100700	964	71
100800	1118	71
100900	1278	71
101000	1442	71
101120	1646	71
101500	2212	71
102000	2844	71
103074	3986	71
105055	4998	71
111900	5354	71

TIME	STRAIN	STRS
134040	6794	71
141500	7068	71
145000	7096	71
155600	7596	71
162500	7902	71
173000	7956	71
193000	8298	71
220000	8696	71
240400	8916	71
240481	8930	71
075609	9570	71
102600	9738	71
121000	9818	71
143000	9912	71
163000	9984	71
176500	10036	71
220000	10210	71
0[illegible]000	10716	71
[illegible]1000	10726	71
081200	10730	71
081280	10636	0
081375	10612	0
081600	10580	0
092200	10534	0
110300	10521	0
1106		
094901	0	0
094912	18	37
094918	44	97
094923	88	158
094928	118	219
094933	140	278
094940	192	358
094947	246	431
094953	314	563
094958	380	579
094966	508	662
094975	756	734
094982	978	773
094990	1288	810
094999	1582	848
095008	1918	883
095018	2290	924
095026	2572	957
095037	2952	1004
095050	3460	1060
095060	3918	1086
095066	4208	1089
095074	4642	1079
095078	4946	1046
095083	5660	955
095086	12214	813
1107		
150900	0	0
150917	246	71
150927	872	71
150937	1816	71
150952	4926	71
150963	5226	71
150977	5444	71
151000	5696	71
151082	6420	71
151142	6880	71
151183	7250	71
151320	8322	71
151417	9146	71
151549	10182	71
151767	10768	71
151909	11456	71
152200	12532	71
152500	13312	71
153000	13928	71
153706	14608	71
160105	15346	71
162000	16066	71
164200	16364	71
173203	16806	71
183000	17002	71
200000	17266	71
215000	17432	71
081800	19396	71
1108		
132500	0	0
132505	10	6
132508	126	21
132512	220	51
132516	286	73
132519	382	101
132523	458	132
132528	640	166
132531	760	185
132535	940	207
132540	1200	219
132545	1460	222
132549	1716	221
132554	2048	221
132559	2400	213
132563	2708	209
132570	3140	206
132578	3676	146
132583	4030	140

TIME	STRAIN	STRS
		221
1109		
113700	0	0
113705	36	13
113708	142	45
113710	214	77
113713	302	112
113715	398	152
113717	504	208
113720	686	252
113723	856	295
113725	1092	322
113728	1352	340
113731	1670	356
113735	2120	368
113739	2554	378
113742	3018	380
113747	3576	378
113751	4098	368
113754	4488	357
113760	5214	341
113766	6072	322
		382
1110		
120076	0	0
120100	28	3
120105	58	38
120107	158	94
120109	264	236
120111	354	322
120113	566	392
120115	714	439
120117	1372	438
120120	1970	415
120123	2792	406
120126	3372	402
		512
1111		
140900	0	0
140905	20	24
140908	72	82
140910	154	147
140912	204	192
140915	286	243
140918	446	318
140920	606	355
140923	808	387
140926	1066	404
140929	1366	408
140933	1762	395
140937	2506	379
140941	3016	362
		411
1112		
144075	0	0
144098	62	0
144104	76	24
144107	156	139
144111		341
144114	746	407
144116	1144	438
144119	1718	431
144122	2444	410
144125	3154	402
		461
1113		
164800	0	0
164816	12	4
164819	46	26
164821	100	50
164825	162	81
164828	230	116
164831	290	145
164833	350	165
164836	406	201
164839	472	220
164842	552	242
164845	690	266
164850	712	281
164853	1120	288
164857	1370	289
164864	1804	289
164874	2472	276
164887	3390	252
		291
1114		
172675	0	0
172700	28	1
172710	60	29
172714	316	61
172716	402	113
172719	462	168
172720	528	215
172723	600	266
172725	690	311
172727	810	356
172730	1018	397
172733	1264	408
172735	1660	408
172738	2094	392
172743	2714	370

TIME	STRAIN	STRS
172745	3022	369
1115		
193275	0	0
193299	64	9
193303	320	40
193305	652	77
193308	944	150
193310	1140	211
193313	1358	310
193315	1592	389
193318	1906	460
193320	2352	483
193324	3180	476
193327	3900	445
1116		
103000	0	0
103025	124	71
103034	150	71
103052	206	71
103076	298	71
103200	516	71
103500	932	71
104000	2242	71
104131	2668	71
104300	3212	71
104500	3822	71
105000	5050	71
110000	6784	71
112000	8296	71
120700	8764	71
130400	8930	71
140700	9492	71
150000	9868	71
170200	10578	71
190000	11256	71
241200	12326	71
080000	13584	71
091500	13786	71
115500	14196	71
141000	14498	71
141044	14500	0
141100	14474	0
141500	14448	0
141537	14442	0
150300	14442	0
1117		
190700	0	0
190754	2	1
190801	122	10
190809	332	28
190820	668	46
190832	1064	53
190842	1468	54
190859	2140	54
190893	3584	54
190921	4708	49
190945	5648	46
190975	6900	41
101212	8486	46
1118		
111200	0	0
111217	24	20
111221	88	42
111225	110	62
111230	154	97
111234	186	133
111238	240	170
111244	296	205
111249	366	259
111255	472	299
111260	582	334
111267	754	373
111276	1016	410
111282	1242	426
111288	1490	428
111294	1760	426
111302	2130	412
111308	2442	400
111322	3270	373
1119		
115600	0	0
115643	26	9
115662	76	36
115677	130	55
115695	196	82
115715	248	110
115734	308	132
115753	376	163
115770	450	200
115784	504	219
115804	606	241
115830	740	262
115855	912	283
115891	1166	304
115939	1564	309
115982	1978	303
120000	2504	284
120119	3302	271
120190	3984	248
1120		
134800	0	0

TIME	STRAIN	STRS
134805	16	53
134808	68	109
134812	98	173
134815	154	235
134820	216	296
134823	296	338
134827	416	376
134830	554	410
134835	870	439
134839	1174	442
134843	1498	433
134846	1854	410
134851	2340	380
1121		
142480	0	0
142499	0	6
142504	8	10
142506	76	67
142609	192	109
142611	264	219
142614	398	300
142617	618	380
142620	946	423
142624	1356	432
142627	1868	420
142630	2552	386
142642	3360	355
1122		
150900	0	0
150910	38	9
150913	118	43
150917	160	86
150920	198	130
150923	224	170
150925	250	214
150928	290	258
150932	392	319
150935	502	367
150939	658	402
150943	886	432
150947	1132	438
150951	1574	430
150956	2054	401
150962	2712	393
		475
1123		
152600	0	0
152615	20	33
152618	52	81
152622	86	130
152624	126	168
152627	184	211
152630	224	255
152635	308	320
152638	434	357
152642	830	393
152649	1230	404
152652	1544	397
152656	1976	373
152660	2316	360
152668	3098	322
		408
1124		
154300	0	0
154317	22	12
154322	52	68
154325	86	112
154328	126	173
154331	172	218
154336	236	255
154337	328	290
154340	458	330
154346	778	370
154351	1076	378
154355	1440	377
154361	1990	350
154366	2478	326
154379	3670	290
1125		
162000	0	0
162045	62	19
162058	100	51
162065	116	74
162073	144	100
162082	172	128
162089	204	152
162098	270	177
162107	292	201
162118	364	230
162129	440	252
162140	532	279
162158	698	309
162176	918	324
162202	1304	334
162225	1702	326
162245	2042	311
162275	2616	286
162310	3270	262
1126		
164700	0	0
164824	18	2

TIME	STRAIN	STRS
164871	76	16
164910	92	33
164960	150	53
165011	218	72
165071	286	102
165134	376	112
165194	476	141
165265	560	146
165332	708	169
165437	896	196
165533	1094	209
165662	1398	222
165838	1818	229
170063	2408	223
170250	2924	219
170500	3588	210
1127		
083400	0	0
083452	52	21
083469	124	45
083484	190	61
083501	274	79
083517	362	100
083534	426	117
083550	504	138
083570	626	157
083597	780	180
083667	1316	204
083748	1980	212
083840	2820	209
083930	3642	198
084033	4598	188
1128		
085900	0	0
085909	30	20
085915	92	56
085919	132	82
085925	198	118
085931	294	155
085938	468	195
085947	680	233
085954	900	251
085961	1164	264
085968	1428	272
085974	1864	273
085999	2708	262
090020	3624	250
090044	4640	237
1129		
092500	0	0
092504	40	50
092506	116	118
092509	220	198
092511	344	268
092515	600	340
092517	930	379
092521	1396	388
092525	1996	388
092530	2900	372
092535	3620	361
		393
1130		
101000	0	0
101004	74	37
101006	322	170
101009	504	263
101011	744	371
101014	1094	375
101017	2010	378
101020	2766	355
101023	3238	323
		393
1131		
103800	0	0
103814	58	36
103820	162	70
103825	294	109
103830	450	149
103835	642	200
103838	806	228
103843	1060	268
103851	1546	306
103856	1862	316
103861	2322	316
103868	2798	309
103875	3378	298
103888	4544	276
103898	5408	263
		328
1132		
110700	0	0
110827	20	8
110871	64	25
110942	148	49
111012	248	73
111065	364	88
111157	504	104
111235	664	123
111342	970	131
111466	1226	136
111692	1856	130

TIME	STRAIN	STRS
111847	2317	126
111972	[illegible]	121
112102	3060	113
1133		
112100	0	0
112115	32	21
112118	76	40
2122	140	61
112126	160	85
112131	238	119
112136	300	148
112141	408	172
112147	520	196
112152	690	212
112160	918	228
112166	1160	236
112175	1536	236
112187	2018	236
112207	2794	228
112225	3524	220
112256	4820	205
		236
1136		
131000	0	0
131004	26	28
131007	4	95
131010	218	186
131012	386	250
131015	606	306
131019	980	335
131022	1432	347
131026	1962	359
131030	2624	361
131035	3398	339
131039	4100	315
1135		
132851	0	0
132985	8	10
133036	86	23
133101	190	40
133185	366	61
133276	530	71
133377	746	89
133479	958	104
133601	1226	120
133701	1438	139
133843	1744	143
133976	2114	147
134210	2698	147
134412	3256	141
134517	3530	138
1136		
140050	0	0
140065	50	30
140071	102	52
140076	202	82
140082	330	117
140086	436	129
140091	552	149
140100	780	179
140108	1026	211
140119	1354	229
140125	1554	236
140138	1980	250
140150	2410	255
140165	3036	257
140187	3930	252
140212	4924	246
140239	5990	236
1137		
142000	0	0
142007	106	45
142011	224	104
142014	350	162
142016	546	236
142019	790	283
142022	1144	331
142026	1654	355
142031	2184	391
142037	2856	422
142041	3434	440
142046	4140	452
142052	5174	454
142057	5992	440
142061	6600	422
1138		
151751	0	0
151851	16	9
151920	50	36
151946	82	49
151982	116	67
152014	146	83
152065	200	104
152107	252	123
152151	314	138
152198	394	151
152267	518	168
152343	658	183
152438	854	200
152527	1072	208
152624	1294	214

TIME	STRAIN	STRS
152787	1720	211
152928	2108	207
153100	2548	202
1139		
154650	0	0
154694	12	10
154726	128	38
154742	196	60
154761	286	91
154774	356	115
154792	474	153
154804	552	173
154821	670	210
154836	776	234
154850	914	255
154877	1230	286
154882	1396	295
154928	1980	287
154941	2200	277
1140		
[illegible]		0
[illegible]	44	80
[illegible]	274	245
160810	546	357
160813	1002	427
160816	1702	422
160819	2718	357
160822	3524	310
		432
1141		
162100	0	0
162126	18	13
162141	60	31
162161	100	55
162176	148	73
162206	286	92
162231	448	112
162278	780	131
162329	1168	142
162443	2104	149
162539	2920	149
162621	3592	141
162698	4216	138
1142		
164000	0	0
164009	16	21
164013	62	53
164018	158	112
164021	274	144
164027	472	200
164034	830	240
164039	1186	260
164044	1522	268
164053	2204	282
164061	2858	283
164069	3680	279
164082	4528	268
164092	5346	261
1143		
172550		0
172574	18	0
172580	54	0
172586	68	15
172593	102	38
172600	154	50
172612	240	51
172624	356	90
172640	544	111
172660	808	130
172709	1502	150
172767	2394	150
172786	2738	148
172822	3302	142
172855	3832	138
1144		
165551	0	0
165603	12	7
165615	32	17
165631	66	34
165646		50
165657	142	66
165669	184	82
165684	154	106
165712	438	114
165796	1158	127
165874	1818	117
165945	2444	116
170056	3446	110
1145		
171350	0	0
171359	54	23
171363	82	69
171366	140	108
171370	228	154
171374	336	190
171378	568	233
171384	894	262
171389	1274	268
171393	1636	262
171398	2050	247
171404	2640	215

TIME	STRAIN	STRS
1146		
173800	0	0
173841	20	16
173851	22	37
173858	62	60
173865	82	78
173871	106	93
173878	128	110
173886	166	136
173894	226	152
173904	304	172
173916	426	188
173935	656	206
173946	822	206
173957	990	204
173994	1602	192
1147		
085500	0	0
085521	58	71
085534	76	71
085548	94	71
085700	200	71
090000	294	71
090508	384	71
091019	456	71
091500	512	71
092010	570	71
093100	662	71
094200	770	71
100001	874	71
101720	956	71
103200	1026	71
105000	1102	71
111500	1198	71
114500	1314	71
121000	1410	71
130200	1576	71
141800	1768	71
150700	1882	71
160500	2014	71
173000	2198	71
190200	2606	71
220000	2754	71
080000	3650	71
085600	3982	71
085657	3962	0
085500	3930	0
090000	3916	0
1148		
102500		0
102620	486	
102700	708	
103000	708	71
103500	194	71
104121	606	71
104500	862	71
105000	1201	71
105800	1706	71
110505	2110	71
112300	3090	71
114600	4084	71
120000	6586	71
121000	6878	71
121900	7184	71
125500	8300	71
131300	8702	71
132200	8972	71
135100	9402	71
140600	9642	71
141900	9842	71
153078	10620	71
153160	10608	0
153200	10586	0
154500	10560	0
160000	10558	0
1151		
114000	0	0
114030	132	72
114045	228	72
114068	320	72
114100	434	72
114158	718	72
114400	1102	72
114900	1670	72
115300	1908	72
115600	2096	72
120101	2334	72
120600	2328	72
121200	2778	72
121500	2882	72
122100	3072	72
125200	3876	72
131100	4244	72
133000	4568	72
136900	4810	72
140300	5024	72
141800	5140	72
153400	5838	72
161300	6164	72
163700	6376	72
173000	6764	72

TIME	STRAIN	STRS
190100	7268	72
201300	7542	72
232556	8014	72
075600	8922	72
090000	9072	72
100000	9114	72
101104	9126	72
101175	9100	0
101199	9092	0
101400	9072	0
102100	9064	0
103500	9054	0
110204	9040	0
111600	9038	0
1153		
163100	0	0
163113	50	71
163135	50	71
163200	56	71
163500	70	71
1640	98	71
1655	236	71
1725	314	71
1810	406	71
1900	474	71
2024	556	71
2326	716	71
0755	1030	71
0904	1080	71
1058	1114	71
1105	1168	71
110606	1136	0
110707	1126	0
111010	1122	0
111418	1120	0
132323	1114	0
1157		
134500	0	0
134529	140	101
134536	192	101
134600	358	101
134700	556	101
134800	704	101
135000	1034	101
135200	1340	101
135600	1862	101
135800	2466	101
140100	3132	101
140500	3618	101
141200	4078	101
141600	4958	101
141900	5524	101
142300	6256	101
142700	7284	101
143300	8472	101
143900	9650	101
144500	10726	101
145100	11704	101
145700	12558	101
145800	12540	0
145900	12512	0
150100	12482	0
150800	12456	0
153700	12434	0
1158		
162000	0	0
162021	36	100
162040	124	
162100	206	
162300	328	
162600	486	
162800	554	
163000	616	
163400	722	
163900	828	
164500	940	
165600	1122	
171000	1312	
172000	1428	
173550	1606	
180400	1960	
183200	2216	
195500	2908	
235500	6656	
075800	7506	
083000	7676	
090100	7830	
103300	8302	
120500	8838	
144800	9314	
163500	10056	
173200	10296	
190000	10668	
211500	11240	
104100	13970	
120700	14238	
161800	14974	
172700	15382	
221300	16008	
080700	17586	
080800	17552	0

TIME	STRAIN	STRS
081100	17516	0
081600	17530	0
083000	17520	0
085700	17520	0
091500	17518	0
095700	17516	0
1160		
101000	0	0
101063	76	101
101076	134	101
101230	366	101
101500	736	101
101800	[illegible]	101
102100	1212	101
102800	1798	101
104000	2564	101
105500	3562	101
111000	4122	101
113300	4846	101
114800	5272	101
120300	5642	101
124800	6550	101
131800	7028	101
136600	7388	101
143000	7880	101
152500	8202	101
164000	8984	101
173000	9310	101
190300	9850	101
190500	9856	101
211000	10464	101
241400	11162	101
104000	12736	101
121000	12948	101
161500	13406	101
1161		
134000		138
134018	72	138
134024	88	138
134072	126	138
134200	216	138
134300	268	138
134600	392	138
135100	534	138
135500	636	138
140500	842	138
141700	1052	138
142800	1198	138
144300	1466	138
151500	1820	138
160000	2468	138
163600	2816	138
172000	2026	138
172100	1956	138
172200	1940	138
172600	1922	138
173300	1908	138
183000	1900	138
1167		
093000	0	0
093009	30	29
093022	22	68
093035	534	106
093056	1204	135
093066	1606	141
093080	2118	144
093093	2642	144
093114	3516	144
093136	4292	140
093162	5434	136
093183	6050	129
1168		
105000	0	0
105033		71
1170		
111300		0
111313	8	18
111318	46	68
111324	94	79
111328	162	105
111333	246	130
111337	338	145
111342	476	157
111347	644	165
111352	838	168
111360	1166	166
111369	1510	160
111381	2040	159
111397	2686	159
111416	3260	160
		168
1171		
115000	0	0
115100	58	16
115115	54	30
115130	78	46
115146	130	65
115162	182	81
115181	292	98
115206	452	110
115221	540	115

TIME	STRAIN	STRS
115259	668	123
6222	1368	132
115419	2146	140
115529	2666	148
115626	3866	148
115708	4606	145
115786	5318	138
		149
1172		
131251	0	0
131256	12	10
131260	32	130
131261	192	202
131265	364	266
131268	512	296
131271	1194	281
131275	1752	271
131279	2416	271
131282	2940	266
1173		
141300	0	0
141306	12	2
141315	236	91
141318	406	110
141322	678	121
141327	1006	126
141332	1358	130
141337	1804	130
141344	2304	130
141365	3844	144
141386	5372	151
141406	7058	153
		157
1174		
153400	0	0
153459	6	7
153470	28	15
153478	54	30
153498	126	48
153513	198	63
153536	326	78
153566	548	88
153583	666	93
153632	1058	102
153709	1648	105
153771	2166	106
153856	2850	121
153970	3828	127
154160	5118	141
154331	6668	151
154670	7824	151
154951	8278	151
1176		
162150	0	0
162157	10	4
162160	56	63
162162	120	73
162165	240	94
162168	396	118
162171	584	125
162175	858	131
162180	1228	143
162186	1750	142
162192	2194	145
162204	3090	148
162218	4280	150
162237	5886	147
162270	8220	143
1177		
165600	0	0
165604	62	61
165608	268	153
165610	470	204
165613	776	236
165617	1240	259
165620	1730	252
165625	2490	253
165632	3500	250
165636	4140	244
165641	4886	236
165648	5970	228
165653	6560	228
1179		
140651	0	0
140763	8	19
140803	20	35
140853	54	
140909	94	68
141038	296	76
141115	688	85
141265	1080	92
141470	2024	93
141685	2196	96
142023	3106	97
142336		98
143570	6510	99
1181		
151700	0	0
151827	46	12
151900	176	29
151913	418	41

TIME	STRAIN	STRS
152130	704	50
152282	1096	55
152414	1458	59
152675	2146	66
152860	2628	67
153220	3596	68
153536	4430	68
		70
1194		
162450	0	0
162669	190	110
162672	276	161
162675	454	205
162677	704	238
162680	990	251
162684	1386	255
162687	1742	258
162696	2814	260
162702	3508	254
1185		
164750	0	0
164756	62	61
164759	210	193
164761	528	238
164766	1040	236
164768	1684	202
164770	2756	127
118571	3392	155
164771	3392	155
		243
1186		
085500		49
085535	274	49
085565	636	49
085590	972	49
085659	1576	49
085760	2174	49
085840	2552	49
085998	3170	49
090125	3592	49
090400	4574	49
090655	5122	49
090900	5632	49
091209	6176	49
091500	6612	49
091800	7032	49
092100	7386	49
093006	8790	49
095600	10048	49
100451	10608	49
115900	11566	49
135900	12820	49
143600	13036	49
155000	13652	49
173300	13966	49
191800	14626	49
221800	15110	49
080000	17118	49
080231	16998	49
080271	16992	49
080300	16978	49
081622	16972	49
084100	16960	49
085600	16962	49
1187		
113990	0	0
114000	2	1
114004	246	6
114007	868	5
114010	3036	2
1189		
120890	0	0
120903	6	1
120921	60	2
120962	508	5
120953	960	5
120967	1494	6
120980	2050	5
121002	2940	5
121023	3762	5
121058	5152	6
121086	6356	5
121107	9078	1
1190		
134550	0	0
134557	2	22
134560	20	118
134563	54	225
1191		
160050	0	0
160066	20	4
160072	102	28
160080	296	50
160084	456	59
160090	690	69
160095	856	77
160107	1246	83
160117	1630	98
160133	2166	106
160148	2718	117
160167	3436	130

TIME	STRAIN	STRS
160186	4182	138
160211	5160	140
160235	6046	147
160278	7732	149
160315	9220	151
160365	11120	156
		157
1193		
162309	0	0
162316	96	10
162331	428	21
162340	1072	33
162352	1926	42
162359	2632	46
162366	2990	48
162378	3878	54
162390	4768	57
162403	5782	63
162416	6814	66
162430	7880	65
162445	9000	66
162461	10276	66
162482	11832	70
1196		
165150	0	0
165164	14	12
165169	34	41
165172	82	64
165176	134	86
165180	214	114
165185	296	137
165188	392	157
165194	524	179
165198	642	198
165205	844	209
165211	1074	217
165217	1326	217
165226	1668	214
165235	2036	209
165245	2476	203
165288	2994	196
1197		
172400	0	0
172496	28	5
172500	114	27
172505	122	51
172509	166	81
172513	210	111
172517	274	141
172520	346	159
172525	440	181
172530	606	198
172536	818	201
172544	1110	207
172554	1488	205
172567	2010	199
172578	2464	198
172604	3534	191
1198		
101800	0	0
101813	62	
101829	220	1
101852	458	4
101877	690	4
101906	1676	5
101923	2304	5
101957	3600	6
101982	4616	6
102011	5746	6
		6
1200		
155600	0	0
5800	106	1
160451	1166	3
0652	1476	3
1000	1992	5
1087	2174	5
1300	2546	5
72	2610	5
1493	2730	5
1700	2962	4
1943	3296	6
2130	3722	10
2353	4236	13
2600	4798	16
1201		
165051	0	0
5114	227	3
77	644	4
5236	880	3
5343	1738	6
5550	2677	7
5606	4016	5
5760	5192	5
5861	6696	5
95	7216	5
5926	7494	3
1202		
092398	0	0
2625	36	4
31	142	12

TIME	STRAIN	STRS
42	446	26
51	778	36
65	1298	50
78	1728	71
93	2174	95
2508	2726	108
19	3156	112
41	3980	111
52	4408	111
88	5868	109
2611	6764	107
23	7242	106
1203		
091550	0	0
1590	-18	
1610	224	12
1615	512	20
1620	838	28
1626	1266	36
1628	1858	45
1642	2490	53
1653	3302	59
1670	4588	62
1680	5618	63
1698	6890	66
1723	8664	80
1204		
093900	0	0
04	226	14
08	876	47
11	1472	74
15	2282	81
19	3360	71
22	3876	58
1207		
130726	0	0
0825	96	3
47	214	11
75	392	20
0902	572	32
29	758	41
1003	1332	60
18	1968	67
1140	2472	70
1266	3492	72
1338	4182	74
1208		
141852	0	0
3937	370	0
56	468	3
97	818	23
4303	966	34
10	1174	50
16	1340	67
25	1618	83
37	1988	98
48	2428	106
61	2966	110
78	3588	114
93	4222	116
4119	5202	124
1209		
170300	0	0
32	40	8
35	118	28
39	190	52
42	264	100
65	356	138
50	518	173
53	738	200
56	1052	174
60	1432	159
1210		
162200	0	0
08	20	5
13	66	14
15	246	29
19	1172	143
26	2496	106
1213		
171200	0	0
74	-20	4
1307	0	4
50	22	4
1420	52	4
1527	214	17
72	496	33
1600	688	45
1758	1156	57
1837	1816	63
67	2282	66
80	3060	67
1980	3886	68
2075	4728	70
2317	5960	70
1214		
081225	0	0
50	98	8
55	444	15
67	626	30
77	990	37

TIME	STRAIN	STRS
96	1668	47
1312	2352	50
22	3076	55
58	4088	58
73	4674	60
1402	5818	62
38	7268	61
61	8170	57
1215		
085700	0	0
35	90	12
37	304	28
42	668	31
49	1146	36
56	1714	38
68	2674	39
75	3016	42
86	3722	42
96	4786	39
5808	5888	38
17	6452	36
1216		
091510	0	0
15	110	4
24	216	12
27	950	19
32	2140	23
37	3192	21
43	4430	22
47	5162	20
53	6516	17
57	7514	10
1218		
090900	0	0
06	10	13
19	36	36
14	79	67
19	106	106
23	128	141
32	206	218
39	252	290
49	350	372
59	510	451
65	630	488
73	852	520
78	1020	530
83	1246	529
88	1428	522
92	1616	507
98	1970	484
1219		
114080	0	0
99	0	0
4104	12	20
06	50	42
08	98	263
11	148	371
13	210	507
16	288	622
18	434	816
21	692	905
23	1294	825
1220		
105519	0	0
72	14	8
93	96	22
5625	106	51
52	146	91
75	190	129
5702	234	169
25	286	209
50	374	247
80	652	290
5816	604	328
67	916	361
5915	1298	360
29	1626	352
73	1866	319
110041	2306	297
1222		
140400	0	0
0593	8	8
0641	24	29
0690	54	51
0739	64	76
83	98	98
0833	150	122
83	186	147
0940	238	180
91	300	196
1054	442	203
1115	472	235
96	600	252
121260	734	259
1320	860	263
1402	1038	261
80	1060	259
1620	1654	242
1719	1946	220
1223		
150127	0	0

TIME	STRAIN	STRS
0155	18	9
0178	94	[illegible]
0193	130	61
0204	156	80
0219	192	116
0229	210	139
0244	246	180
0258	280	219
0276	322	261
0287	368	299
0300	428	[illegible]
0309	498	178
0332	612	417
0350	780	452
0381	1194	471
0391	1376	460
0408	1664	439
0419	1904	411
1224		
153089	0	0
3100	2	1
06	20	20
10	36	84
12	98	173
16	136	268
18	194	353
21	242	460
25	264	56
28	358	66
31	458	73
35	580	808
38	800	858
41	1116	862
43	1552	820
1225		
155690	0	
5700	-12	
03	40	5
06	178	16
09	292	27
11	402	37
13	516	524
1226		
162180	0	0
2200	0	0
27	24	5
49	60	28
53	148	89
59	232	192
64	294	256
68	346	378
73	412	469
77	482	539
81	564	602
86	720	669
90	948	700
93	1204	696
96	1512	665
98	1846	611
1227		
165099		
5152	8	
5460	22	10
5509	52	38
59	102	50
5625	176	85
78	234	105
5725	290	130
66	324	145
5807	366	162
49	414	190
87	486	217
5935	520	231
83	602	248
170044	656	280
91	766	285
0190	956	310
0323	1036	327
0451	1592	326
0501	1712	319
03	1976	310
1229		
092200	0	0
2394	10	5
2430	32	16
2521	96	59
68	128	81
2609	152	106
2760	198	140
2818	262	155
2881	338	172
2996	434	193
3073	724	202
3152	924	202
3218	1110	200
3362	1458	185
1230		
103098	0	0
3115	46	50
20	96	121
24	140	205

TIME	STRAIN	STRS
28	174	238
32	208	368
36	250	453
40	294	518
44	368	595
47	498	673
53	686	722
57	988	730
60	1288	700
63	1610	660
1		
100698	0	0
5503	10	2
06	62	104
08	166	159
10	232	365
12	290	399
15	366	531
17	466	691
20	586	807
24	818	1004
28	1108	1130
1233		
112431	0	0
51	2	0
55	0	0
59	10	5
63	38	30
71	120	118
74	172	247
76	230	394
78	316	522
81	440	[illegible]
83	628	752
86	1006	812
88	1548	792
1234		
114883	0	0
99	2	0
6933	128	18
3	298	87
40	366	160
43	378	242
46	414	330
49	464	420
52	532	514
55	634	600
58	778	675
62	1088	728
65	1404	756
68	1674	752
72	2056	735
1235		
135100	0	0
26	12	22
33	56	[illegible]
39	84	145
45	122	201
54	186	288
62	260	360
71	390	436
82	654	648
88	862	510
95	1114	510
5200	1328	502
06	1618	490
12	1960	471
1236		
142700	0	0
2937	18	6
3000	70	22
55	138	40
3132	224	64
3213	314	93
86	414	120
3373	552	143
3460	708	160
3507	812	164
95	1014	173
3696	1252	176
3812	1552	260
78	1734	184
3944	1906	171
4051	2202	168
1239		
152851		0
3281	2	3
3673	8	11
3788	25	36
3893	33	68
4019	50	122
60	53	147
4115	57	177
58	60	200
4211	65	228
78	70	255
4333	78	290
4400	86	301
73	93	326
4595	113	360
4663	126	370

TIME	STRAIN	STRS
4823	158	382
80	[illegible]	380
4983	199	368
5060	220	360
1240		
162951	0	0
3281	24	8
3321	190	39
58	320	80
86	420	109
3411	470	160
36	544	192
57	598	233
85	674	280
3507	816	319
33	858	355
93	1044	435
3640	1294	470
72	1530	478
95	1742	472
3717	1972	452
42	2234	439
73	2562	390
1241		
092450	0	0
77	16	38
82	40	83
88	82	140
94	112	198
99	138	240
2503	166	288
08	182	338
15	252	402
20	308	456
27	382	508
33	486	561
40	660	615
49	864	640
53	1036	650
58	1222	641
62	1476	619
1242		
094451	0	0
65	52	18
68	170	108
70	236	253
73	298	397
75	370	538
78	448	668
80	564	796
82	752	891
1244		
142200	0	0
2320	212	5
2839	870	6
3530	1486	5
3910	2096	7
4230	3036	11
4438	3614	19
4665	4192	23
4958	5098	31
5330	6136	37
5530	6756	37
5800	7542	39
150023	8204	39
0300	9032	40
1245		
161000	0	0
57	276	18
88	380	30
1121	580	45
1211	1106	70
90	2006	75
1370	2712	78
1421	3164	78
65	3556	79
1531	4126	76
66	4356	78
1660	5072	78
1827	6808	78
1991	8252	80
2075	8998	80
1246		
164800	0	0
37	64	14
48	166	29
72	432	51
4903	830	70
41	1358	77
5014	2466	84
70	3320	82
5100	3780	82
47	4476	82
85	5034	81
5287	6574	82
5312	6966	84
1247		
093995	0	0
4002	4	0
20	206	11
4126	284	20

TIME	STRAIN	STRS
38	606	39
60	1472	51
4206	3292	70
35	4400	80
49	5740	86
4309	7292	91
50	8922	96
4411	1424	101
59	3321	106
4513	5472	105
1248		
091702	0	0
41	150	2
50	324	35
54	536	50
63	1234	67
80	2488	78
1805	4144	81
23	5798	80
57	8462	85
96	672	90
1911	2592	91
37	4556	94
64	6858	99
1249		
103501	0	0
20	332	8
25	954	55
28	1608	78
32	2360	90
35	3062	73
1250		
143600	0	0
41	58	5
3703	198	12
27	256	19
4674	2298	78
5131	4190	80
5302	4440	72
5538	5334	71
150680	6374	84
1251		
134803	0	0
30	62	36
36	376	110
41	718	181
46	1160	221
52	1832	230
57	2468	245
63	3204	230
68	3972	174
1252		
140451	0	0
58	108	47
62	690	116
65	1636	78
70	2896	101
77	4500	30
1254		
132000	0	0
34	24	10
2178	86	22
2218	162	31
2311	276	40
2480	582	45
2503	914	48
2643	1302	50
2780	1686	50
2918	2066	52
3010	2492	51
3219	2908	50
3327	3256	50
2503	3688	50
1255		
105951	0	0
0000	24	0
0156	192	6
0475	276	11
0574	402	15
97	544	40
0625	752	51
60	952	75
93	1104	90
0732	1450	115
72	1776	124
0834	2018	123
92	2816	120
0936	3298	110
1020	4050	110
1256		
102000	0	0
07	54	39
13	134	72
17	216	105
25	340	151
33	618	186
39	718	202
50	1148	207
54	1306	200
62	1730	186
74	2258	176

TIME	STRAIN	STRS
96	3222	167
2122	4284	150
1257		
103900	0	0
05	4	0
53	36	0
58	238	30
62	444	50
68	2078	82
73	3016	122
82	5084	140
86	5848	118
89	6688	99
92	7368	89
96	8190	80
1258		
142000	0	34
21	454	34
29	552	34
50	686	34
76	812	34
2100	876	34
2200	1228	34
2300	1540	34
2400	1824	34
2550	2230	34
2886	3092	34
3186	3840	34
3700	5166	34
4056	6150	34
4498	7044	34
4935	8280	34
5400	9648	34
5700	10346	34
150000	11062	34
0174	11492	34
92	11466	34
0212	11460	34
1000	11868	34
3200	14528	34
4836	16008	34
1261		
105451	0	0
54	24	9
57	96	78
60	190	137
63	374	198
67	590	234
70	864	245
72	1174	241
75	1640	224
78	2002	221
82	2492	213
1266		
101651	0	0
91	20	6
1721	40	32
39	52	41
73	94	58
1819	156	79
1903	268	103
75	410	120
2142	794	142
2335	1292	151
2496	1694	156
2620	2042	156
2990	3060	161
3186	3666	160
3433	4444	157
3630	5068	157
3677	5224	156
1267		
105351	0	0
5402		31
27	104	71
60	244	112
98	450	150
5551	830	180
82	1094	184
5622	1468	182
63	1850	175
82	2036	173
1268		
111000	0	0
22	92	83
33	308	85
39	536	122
47	618	161
64	1196	201
71	1512	193
80	1954	182
1270		
141103	0	0
1907	20	10
51	36	25
2003	56	40
67	82	67
2202	152	120
2251	226	137
2324	330	159
76	622	173

TIME	STRAIN	STRS
2514	708	200
2707	1196	212
74	1610	210
2903	1806	206
1271		
132950	0	0
90	0	4
92	20	16
95	40	34
99	98	57
3003	154	80
12	308	120
20	460	159
25	546	200
32	652	238
40	772	278
48	1062	304
56	1346	296
60	1600	291
65	1836	289
1272		
125551	0	0
72	166	103
76	584	192
78	864	260
1273		
135766	0	0
5800	32	15
42	72	34
75	86	50
5910	126	66
45	176	83
140055	346	130
0151	586	150
0305	1032	165
0564	1842	166
0765	2456	162
0880	2860	160
1274		
134300	0	0
25	30	42
30	72	81
35	120	120
40	182	160
46	296	200
52	440	239
61	716	270
70	1104	264
73	1308	258
78	1530	241
1275		
131251	0	0
1254	16	28
1257	104	133
1276		
145500	0	0
5694	24	8
5743	92	22
5796	200	40
5862	322	56
5944	488	83
150025	576	120
57	616	138
0104	688	160
45	752	171
0218	906	200
0302	1092	210
0464	1514	229
0601	1934	230
0970	2782	221
1277		
152000	0	0
67	36	36
77	80	50
2106	176	77
26	216	99
46	260	126
67	294	138
75	372	161
88	418	179
2214	564	205
2247	770	220
2293	1128	235
2340	1508	238
2433	2346	229
1278		
153300	0	0
3342	50	19
3348	220	41
3358	510	62
3365	764	81
3373	1066	97
3383	1408	122
3392	1660	145
3396	1810	160
3402	1934	181
3404	1988	200
3408	2054	220
3411	2114	240
14	2158	259
17	2214	280

TIME	STRAIN	STRS
23	2340	303
27	2478	320
34	2620	339
43	2948	341
60	3734	311
63	3892	307
67	4086	295
1279		
154350	0	0
4356	32	0
4359	108	0
4361	158	2
4363	194	51
4366	254	122
4368	322	190
4372	462	279
4374	586	320
4378	840	350
4380	1186	351
4382	1480	333
4385	1918	300
4389	2678	257
1280		
145298	0	0
5307	8	26
09	0	120
11	126	252
14	56	357
16	510	426
18	1018	706
1283		
090150	0	0
0362	108	35
87	140	49
0423	162	60
84	240	89
0554	376	109
0638	540	127
83	652	131
0808	992	139
1040	1644	145
1326	2372	150
1621	2862	160
2060	4076	156
2100	4208	154
1284		
095100	0	0
5154	20	20
67	46	40
80	86	60
91	120	79
5204	172	97
18	230	112
52	408	155
70	526	169
5308	814	191
58	1252	202
5408	1758	196
25	1880	191
1285		
101650	0	0
69	18	14
72	44	42
78	90	81
83	152	120
87	222	150
93	360	192
1700	462	230
11	796	270
15	916	277
20	1110	278
29	1240	276
34	1482	276
43	2082	263
1286		
111950	0	0
55	14	19
57	96	120
59	208	249
61	404	329
1289		
084500	0	0
4656	26	10
4772	190	38
4828	280	50
4933	472	78
5005	642	90
5224		100
5339	1552	97
91	1726	93
5409	1778	92
28	1830	92
1290		
100151	0	0
0204	18	35
16	40	59
39	80	80
39	114	95
53	164	117
68	240	136
83	326	153

TIME	STRAIN	STRS
0307	490	170
50	864	[illegible]
87	1246	177
98	1570	171
1291		
102850	0	0
71	6	9
76	26	31
77	42	59
83	90	111
86	120	138
90	184	167
92	204	190
96	262	212
98	316	230
2902	380	230
09	590	271
14	770	280
19	936	280
27	1248	279
31	1406	278
37	1660	272
42	1694	266
45	2022	262
50	2262	257
1292		
112800	0	0
09	6	10
11	46	96
13	90	182
14	150	270
16	242	351
18	1558	77
1294		
125535	0	0
67	6	11
5600	40	40
38	64	61
90	146	91
5721	166	110
98	294	138
5850	404	156
5925	634	162
130168	1356	160
97	1456	157
1295		
134600	0	0
22	8	33
32	22	50
42	36	70
52	58	90
64	86	110
588	176	150
4726	354	189
69	678	205
82	1254	200
4849	1478	196
1296		
135900	0	0
23	6	23
32	26	44
41	44	75
53	80	116
60	104	138
66	124	151
78	198	191
97	348	230
6033	834	212
51	1122	242
64	1342	236
1297		
141650	0	0
1699	20	30
1702	62	111
05	104	171
06	140	221
08		270
10		320
12		360
13		397
16	580	420
18		438
23	908	445
22	1132	441
25	1464	431
26	1710	426
28	1982	421
1299		
090150	0	0
0202	132	10
0320	342	36
0449	720	50
1129	2860	76
1488	4002	78
1612	4400	79
1300		
095150	0	0
095186	32	19
095206	102	38
095225	198	51
095285	790	78

TIME	STRAIN	STRS
095330	1258	83
095381	1552	89
095436	2008	94
095506	2478	96
095611	3606	97
095703	4374	98
095751	4836	98
095803	5292	96
095858	5760	95
095917	6264	95
095976	6790	95
1301		
101699	0	0
101709	14	10
101714	54	39
101718	122	61
101721	178	80
101725	262	95
101733	508	118
101741	836	128
101753	1138	131
101770	2014	132
101779	2416	132
101785	2644	132
101793	3018	131
101800	3302	131
101811	3700	132
101830	4478	135
101840	4876	137
101851	5098	138
101870	6122	137
101881	6546	137
101902	7362	140
1302		
112669	0	0
112665	422	218
112667	918	230
112669	1436	211
112671	1870	229
112674	2410	243
112679	3578	211
112680	4564	0
1304		
084200	0	0
084223	18	17
084273	0	40
084636	684	72
084758	1414	78
084858	1756	77
085137	2352	78
085156	2622	77
085241	3024	79
1305		
094200	0	0
094239	20	20
094261	60	60
094271	98	80
094295	122	97
094298	172	118
094370	294	138
094362	620	150
094402	984	145
094427	1204	141
1306		
100750	0	0
100763	78	28
100772	68	51
100780	112	70
100787	144	86
100800	216	110
100811	284	126
100821	364	146
100832	450	160
100857	698	186
100882	1122	200
100909	1360	195
100928	1622	186
1307		
103700	0	0
103709	8	17
103716	40	51
103720	84	115
103726	122	156
103731	170	196
103736	242	234
103742	374	274
103749	550	296
103752	658	305
103757	868	312
103766	1232	307
103772	1516	295
103778	1776	289
1308		
103899	0	0
103903	44	28
103906	126	60
103908	270	114
103910	334	146
103916	788	195
103920	1276	204
103923	1584	205

TIME	STRAIN	STRS
103927	2024	205
103930	2342	205
103934	2834	204
103940	3584	200
103945	4104	197
103952	5056	196
1309		
132200	0	0
132208	18	35
132210	60	130
132212	182	168
1311		
140657	0	0
140702	8	12
140738	44	34
140767	112	49
140836	284	71
140996	862	68
141083	1266	64
141158	1534	61
141358	2248	59
1312		
135350	0	0
135363	20	12
135366	38	39
135370	72	74
135376	140	112
135383	278	148
135388	464	176
135393	620	183
266696	750	183
135409	1270	183
135423	1658	176
135429	2110	176
135445	2738	177
135454	3160	179
1313		
134000	0	0
134008	22	15
134011	72	75
134013	110	146
134016	144	219
134019	208	295
134021	310	370
134026	648	422
134029	896	412
134031	1444	362
1314		
132950	0	0
132970	214	20
133012	318	35
133015	956	60
133019	1468	82
133024	2542	120
133028	3246	160
133033	3834	235
133035	4110	310
133037	4410	396
133039	4738	432
133041	5180	429
133044	5746	369
1316		
153200	0	0
153235	64	20
153248	164	40
153270	354	79
153290	520	115
153304	670	137
153332	1054	149
153364	1582	
153394	2082	132
153405	2232	130
153436	2732	126
1317		
152200	0	0
152253	36	35
152258	86	71
152264	186	115
152270	286	155
152277	468	196
152282	644	218
152287	812	220
152293	1106	222
152293	1106	222
152311	1784	229
152325	2366	235
152344	2602	235
152356	3672	229
152367	4164	223
152373	5232	219
1318		
155450	0	0
155458	90	135
155460	142	180
155462	220	219
155464	378	244
155466	592	244
155468	1220	150
1319		
160450	0	0
160455	18	25

TIME	STRAIN	STRS
160457	66	108
160458	120	280
160460	278	350
160462	384	300
160463	1038	267
1320		
111512	0	93
111541	76	93
222900	468	93
111828	480	93
113146	1484	93
3322		93
120115	3322	93
130500	3426	93
140260	3450	93
152330	3470	93
153759	3500	93
153777	3530	93
153789	3546	93
154372	3976	93
170166	5698	93
180990	6066	93
202600	6916	93
224900	7324	93
235200	10740	93
131600	11834	93
140607	11522	93
160000	13540	93
164500	14536	93
164536	14504	93
164600	14484	93
164700	14484	0
192168	14224	0
1321		
102498	0	0
102512	56	64
102521	66	64
102550	100	64
102600	142	64
102700	248	64
103000	382	64
103800	466	64
104400	548	64
105200	634	64
110017	906	64
113271	1082	64
120000	1384	64
130500	1640	64
140300	1880	64
152621	2036	64
181037	2202	64
201807	2238	64
225000	2320	64
230907	2344	64
235300	2344	64
082200	2726	64
150050	3136	64
192230	3658	64
075800	5124	64
091919	5520	64
091996	5504	0
204700	5480	0
1325		
101500	0	0
101600	0	58
101638	66	83
101650	72	93
101662	82	100
101700	122	126
101750	180	159
101800	214	190
101850	294	219
101900	320	249
101950	398	274
102000	480	296
102050	566	314
102100	654	329
102200	900	346
102300	1210	337
102400	1584	313
1326		
103002	0	0
103200	326	36
103250	654	60
103300	1024	90
103350	1330	130
103400	1630	178
103450	1894	229
103500	2152	293
103550	2324	352
103600	2620	390
103618	2730	395
103638	2934	390
103650	3044	386
103660	2944	380
103700	3614	344
1327		
104500	0	0
104564	108	92
104603	460	60
104650	782	72

TIME	STRAIN	STRS
104675	978	139
104700	1160	181
104725	1392	215
104750	1406	261
104775	1830	310
104810	2058	350
104825	2332	371
104850	2506	392
104875	3156	371
104900	3632	331
1328		
100000	0	0
100025	22	0
100030	2	25
100037	68	142
100042	142	152
100050	236	169
100056	284	223
100061	324	265
100065	362	300
100069	390	340
100073	426	380
100077	476	420
100081	514	452
100086	568	492
100090	630	530
100095	690	565
100100	770	600
100108	920	641
100114	1112	660
100117	1220	670
100120	1362	668
100125	1550	651
1329		
010000	0	0
010010	20	15
010013	114	99
010016	214	160
010020	312	230
010023	378	300
010029	432	396
010029	480	460
010031	550	535
010033	618	609
010037	744	681
010040	948	759
010042	1168	780
010046	1588	761
010049	2190	679
1330		
131500	0	0
131508	48	89
131512	160	270
131515	232	410
131518	326	668
131521	476	749
131525	840	854
131529	1700	790
1331		
153000	0	0
153050	8	10
153100	38	43
153200	142	110
153250	202	144
153300	272	177
153350	366	205
153400	464	226
153500	738	252
153600	1104	246
153625	1204	226
153650	1308	239
1332		
031500	0	0
031525	22	12
031550	88	54
031575	206	90
031600	312	130
031626	410	170
031651	526	210
031674	638	242
031700	792	270
031725	938	290
031751	1142	304
031800	1592	312
031851	2124	300
031900	2672	272
1333		
023000	0	0
023040	84	105
023051	140	146
023063	212	192
023075	294	224
023100	498	282
023125	798	317
023150	1204	319
023175	1716	291
1334		
021600	0	0
021615	42	25
021629	274	68
021650	644	128

TIME	STRAIN	STRS
021658	772	151
021675	1058	213
021691	1324	310
021702	1548	379
021723	2116	446
021728	2292	445
021732	2478	436
021736	2674	422
1335		
140000	0	0
140208	32	5
140212	60	64
140215	114	111
140220	236	185
140226	344	265
140230	424	343
140235	532	413
140240	712	492
140252	1394	564
140255	1628	556
140258	1960	544
140261	2452	525
1336		
014500	0	0
014507	10	19
014510	126	98
014513	260	185
014516	354	262
014518	432	341
014522	570	455
014526	782	568
014530	1154	651
014533	1550	659
014537	2276	607
1337		
133000	0	0
133010	80	135
133012	194	276
133015	280	403
133018	410	537
133020	572	661
133023	874	760
133025	1424	757
133029	2378	609
1338		
041500	0	0
041510	8	28
041515	30	68
041521	76	110
041526	116	151
041533	186	229
041538	230	267
041542	272	305
041546	334	342
041551	422	381
041957	538	419
041566	814	463
041573	1044	479
041580	1284	479
041589	1694	474
041592	2046	469
1339		
034500	0	0
034550	10	15
034600	44	51
034650	98	88
034700	162	121
034750	246	157
034800	338	174
034850	454	196
034900	788	209
035000	924	218
035100	1122	203
1340		
040000	0	0
040050	64	80
040075	102	128
040091	124	161
040108	158	190
040125	204	222
040141	222	250
040160	304	280
040183	414	311
040200	508	326
040225	664	340
040250	864	344
040275	1076	345
040300	1288	349
1341		
080000	0	0
080025	6	12
080050	30	110
080067	74	182
080083	140	245
080100	286	283
080116	334	297
080128	696	296
080150	1172	270
1342		
043000	0	0
043007	14	30

TIME	STRAIN	STRS
043012	106	70
043020	238	109
043025	322	149
043031	392	188
043036	446	229
043040	498	269
043045	554	310
043048	598	345
043052	642	381
043057	698	420
043061	770	456
043066	860	497
043072	978	532
043079	1150	566
043093	1582	608
043100	1812	612
043103	1954	610
043108	2106	607
043113	2338	598
1343		
081500	0	0
081516	10	11
081520	90	81
081523	200	130
081526	320	200
081530	440	268
081533	680	323
081536	880	367
081540	1160	424
081545	1520	459
081549	1930	474
081552	2340	467
081555	2840	459
1344		
083000	0	0
083015	30	12
083018	180	93
083021	414	175
083023	1202	200
083028	1550	283
083031	1930	387
1345		
041500	0	0
041525	18	20
041575	104	46
041600	138	58
041625	174	70
041650	218	84
041700	286	111
041750	354	138
041800	412	165
041900	574	216
042000	810	252
042150	1284	259
042100	1484	250
042200	1114	261
1346		
040000	0	0
040050	16	15
040075	60	59
040100	116	99
040125	182	140
040150	264	181
040166	336	210
040183	404	230
040200	478	252
040211	548	274
040233	636	290
040251	740	307
040268	840	321
040300	1066	331
040316	1224	338
040350	1544	330
040300	2046	317
1347		
034500	0	0
034525	112	10
034541	84	52
034559	194	105
034575	300	150
034591	410	200
034607	526	232
034624	658	270
034642	816	308
034660	984	342
034668	1080	355
034682	1256	376
034700	1468	391
034725	1834	374
034750	2280	384
034776	2758	363
1348		
033000	0	0
033015	0	11
033021	26	56
033031	80	133
033040	154	214
033047	222	291
033055	288	366
033064	400	444
033072	524	518

TIME	STRAIN	STRS
033082	708	593
033095	906	635
033110	1412	726
033115	1572	734
033126	2042	727
033132	2344	710
1349		
031500	0	0
031520	6	15
031523	56	88
031527	122	166
031530	166	246
031532	210	321
031536	268	426
031539	326	510
031541	396	585
031545	486	630
031548	628	738
031552	982	821
031555	1262	831
031557	1646	817
031560	2056	782
031564	2754	708
1350		
150000	0	0
150013	50	41
150015	330	160
150018	370	283
150020	460	409
150022	574	540
150025	680	663
150028	976	789
150030	1130	878
150033	1550	912
150035	2200	873
150037	2910	799
150040	3679	710
1351		
090000	0	0
090050	20	42
090100	62	71
090150	118	103
090200	194	138
090250	278	160
090300	382	182
090400	640	210
090500	942	219
090600	1298	219
090650	1476	215
1352		
103000	0	0
103050	40	50
103067	62	75
103083	90	101
103100	118	127
103116	138	153
103150	210	214
103192	322	290
103215	390	161
103250	516	371
103268	594	391
103283	660	405
103300	792	421
103325	902	434
103350	1100	444
103400	1526	444
103450	1988	432
1353		
104500	0	0
104515	2	5
104541	56	46
104560	110	106
104575	156	169
104591	220	230
104607	288	281
104624	354	331
104641	496	377
104658	668	411
104676	884	433
104695	1094	443
104708	1320	449
104723	1556	449
104750	2002	435
1354		
110000	0	0
110005	12	30
110009	42	62
110013	58	101
110018	94	148
110024	78	213
110031	112	290
110039	162	368
110046	232	443
110055	330	516
110064	486	592
110075	954	678
110094	1270	744
110098	1410	760
110107	1716	851
110117	2026	800
110132	2362	820

TIME	STRAIN	STRS
110140	2890	825
110147	3194	814
110152	3460	810
1355		
010000	0	0
010038	18	100
010041	92	96
010045	198	177
010048	288	252
010050	380	322
010053	484	401
010057	586	479
010061	744	584
010067	1080	742
010070	1332	789
010073	1406	808
010075	1878	810
010079	2412	794
010082	2930	768
1356		
011500	0	0
011507	122	170
011509	204	293
011512	280	441
011515	366	590
011518	484	741
011519	640	858
011522	920	923
011526	1468	948
011528	2222	886
1357		
030000	0	0
030050	34	35
030100	92	77
030150	162	113
030200	254	143
030250	344	184
030300	458	206
030350	536	228
030400	664	258
030450	798	267
030500	938	280
030600	1286	289
030700	1694	283
1358		
023001	0	0
023050	20	54
023100	84	58
023150	252	132
023200	460	197
023250	708	246
023300	986	290
023350	1330	317
023400	1742	320
023450	2204	303
1359		
021500	0	0
021536	10	95
021550	124	140
021575	252	220
021600	516	286
021625	624	336
021650	904	376
021660	1050	376
021700	1700	375
021735	2260	356
1360		
140000	0	0
140020	138	52
140029	248	93
140035	338	132
140047	518	212
140058	662	297
140068	852	369
140080	1072	443
140098	1540	517
140110	1956	539
140116	2148	541
140122	2390	536
1361		
014500	0	0
014504	16	31
014508	60	103
014514	126	209
014518	188	279
014523	264	360
014530	444	476
014536	628	549
014544	1004	631
014550	1378	676
014558	1926	706
014561	2206	711
014570	2938	695
014572	3298	669
1362		
013000	0	0
013007	20	0
013010	54	75
013011	94	152
013015	132	236
013018	188	322

TIME	STRAIN	STRS
013020	238	394
013023	332	501
013026	460	611
013030	660	723
013035	1104	807
013036	1416	840
013040	2054	731
1363		
031500	0	0
031552	38	37
031600	126	75
031650	196	113
031700	300	147
031800	456	218
031900	658	278
032000	712	320
032100	1254	338
032200	1900	321
1364		
153000	0	0
153051	42	20
153111	166	72
153150	238	111
153200	322	166
153250	422	212
153300	526	262
153400	810	332
153510	1306	358
153600	1868	331
1365		
164502	0	0
164532	24	28
164550	50	59
164575	96	105
164600	150	144
164700	514	288
164750	764	360
164800	1114	360
164850	1590	348
1366		
160000	0	0
160027	64	73
160048	162	131
160080	518	239
160098	406	290
160128	582	367
160152	810	410
160165	966	421
160182	1272	425
1367		
160000	0	0
160015	96	56
160025	228	97
160037	406	167
160043	492	211
160055	694	290
160064	828	368
160076	1010	455
160087		538
160099	1478	595
160110	1844	610
160113	2028	605
1368		
161500	0	0
161511	362	81
161519	814	152
161526	1066	233
161537	1230	316
161540	1396	426
161547	1616	539
161557	2056	653
161561	2382	663
161564	2704	638
1369		
163002	0	0
163025	16	16
163028	242	95
163053	648	175
163036	902	251
163041	1254	380
163047	1642	513
163051	1998	638
163058	2752	717
163065	4202	588
1370		
163000	0	0
163005	200	71
163008	504	142
163011	770	224
163014	966	318
163018	1006	474
163020	1360	610
163024	1706	745
163026	1766	835
163028	2398	837
163030	2996	705
1371	0	0
090000	0	0
090051	226	31
090100	272	68
090151	326	109

TIME	STRAIN	STRS
090200	384	147
090300	476	227
090400	618	296
090450	698	323
090500	800	347
090600	1052	380
090652	1210	388
090700	1394	387
1372	0	0
100000	0	0
100100	74	66
100150	152	128
100203	240	163
100251	312	255
100300	408	310
100350	538	359
100400	706	397
100450	922	413
100500	1210	400
1373	0	0
101500	0	0
101525	50	61
101550	110	150
101575	190	248
101600	282	330
101615	370	378
101635	488	425
101650	624	457
101667	818	479
101678	996	482
101700	1284	457
1374	0	0
094500	0	0
094513	314	60
094525	430	138
094552	574	295
094553	690	410
094570	976	520
094578	1200	547
094584	1442	549
094590	1768	530
1375	0	0
111500	0	0
111506	80	34
111513	404	122
111520	760	243
111524	860	342
111530	976	477
111535	1202	617
111541	1698	675
111545	2258	622
1376	0	0
141500	0	0
141505	188	127
141507	266	249
141510	358	365
141511	460	474
141514	608	573
141517	936	650
141520	1528	605
1377	0	0
091462	0	0
091506	44	3
091600	150	12
091700	508	19
091800	856	28
091900	1094	42
092000	1446	55
092100	1726	72
092400	2510	155
092700	3226	261
093000	4336	254
093059	4990	246
1378	0	0
110000	0	0
110025	64	19
100051	170	36
100100	362	62
100151	596	104
100200	842	148
100300	1060	244
100350	1456	298
100400	1698	353
100500	2250	385
1379	0	0
103000	0	0
103017	56	62
103028	160	138
103038	202	220
103055	546	329
103078	1120	445
103095	1674	480
103102	1924	473
103108	2178	468
1381	0	0
113000	0	0
113030	38	48
113033	84	174
113036	122	288
113039	168	397
113041	240	513

TIME	STRAIN	STRS
113045	368	637
113047	520	701
113050	848	737
113053	1740	608
1382	0	0
140000	0	0
140005	240	156
1400	290	
140010	350	450
140012	410	510
140016	430	760
140019	676	842
140021	1140	900
1383	0	0
081500	0	0
081551	26	25
081600	80	61
081650	138	102
081675	170	121
081700	208	143
081750	284	187
081800	366	222
081851	454	257
081899	564	286
081950	698	309
081999	842	326
082051	1024	337
082100	1218	342
082150	1442	337
1384	0	0
080000	0	0
080050	50	50
080075	84	80
080100	122	110
080125	[illegible]	138
080150	220	160
080175	276	188
080200	344	208
080225	416	222
080251	512	240
080275	610	250
080300	708	260
080350	976	269
080400	1268	262
080425	1408	260
1385	0	0
154500	0	0
154550	46	73
154576	140	122
154600	200	171
154625	260	218
154650	344	260
154677	466	299
154700	584	325
154725	718	346
154750	908	355
154776	1138	359
154800	1370	347
1386	0	0
153001	0	0
153025	18	14
153050	84	102
153060	128	138
153075	178	185
153086	230	219
153100	310	260
153113	404	295
153125	[illegible]	319
153135	610	337
153146	738	362
153157	916	365
153172	1210	330
1387	0	0
151500	0	0
151512	62	88
151526	236	205
151546	768	278
151551	950	270
1388	0	0
150000	0	0
150008	12	56
150014	18	131
150019	32	211
150024	84	291
150029	166	370
150036	276	448
150039	560	518
150046	734	596
150051	1106	620
150057	1636	587
1389	0	0
144500	0	0
144505	16	27
144508	60	97
144510	110	171
144512	168	261
144515	234	365
144518	314	441
144520	404	509
144523	596	590
144526	938	620

TIME	STRAIN	STRS
144529	1870	680
1390	0	0
143000	0	0
143006	16	70
143009	72	178
143011	138	240
143012	208	339
143015	296	438
143017	406	508
143019	684	569
143021	1356	348
1391	0	0
082800	0	0
082898	16	10
082950	88	48
083000	162	83
083050	240	120
083100	336	157
083150	462	183
083200	574	209
083300	886	244
083350	1042	255
083400	1244	260
083450	1452	263
083500	1672	257
1392	0	0
100000	0	0
100024	38	38
100050	104	77
100075	186	129
100100	286	168
100125	402	200
100150	526	233
100175	654	265
100200	788	290
100225	962	315
100250	1144	328
100275	1364	336
100300	1604	335
100325	1868	326
1393	0	0
101500	0	0
101505	10	18
101512	14	59
101516	60	96
101520	100	137
101525	122	177
101530	152	219
101536	230	257
101538	224	295
101543	282	335
101547	330	367
101551	396	407
101557	510	448
101574	714	523
101576	1050	523
101580	1172	519
101583	618	485
101583	1366	510
1394	0	0
113000	0	0
113007	46	69
113009	140	183
113011	238	301
113013	364	412
113007	1382	170
1395	0	0
104500	0	0
104550	18	22
104600	74	57
104650	160	91
104700	218	126
104800	402	193
104900	640	246
105000	912	280
105150	1458	294
105200	1718	283
1396	0	0
101500	0	0
101524	44	49
101550	170	123
101567	282	176
101583	414	216
101603	590	257
101638	956	303
101651	1144	315
101668	1422	315
101688	1790	301
1397	0	0
103002	0	0
103009	34	25
103013	62	50
103023	172	135
103031	230	228
103040	272	287
103048	368	360
103056	466	440
103070	762	514
103075	926	525
103080	1136	522
103084	1542	507

TIME	STRAIN	STRS
1396	0	0
120000	0	0
120008	8	29
120011	82	190
120013	156	330
120019	382	526
120021	798	575
1399	0	0
151197	0	0
184500	302	97
222100	492	97
080700	984	97
100000	1074	97
113000	1154	97
113600	1180	97
113639	1144	97
113658	1140	97
114683	11.9	97
125100	11.8	97
1400		
031900		162
031521	96	162
031535	104	162
031543	146	162
031590	450	162
031726	428	162
032320	2270	162
032377	3496	162
032400	3740	162
032473	5476	162
032512	6432	162
032527	7002	162
032551	7522	162
032600	7774	162
032756	7814	162
03	5930	162
1400		
181900		0
181946	264	162
182003	300	162
182300	386	162
183600	500	162
184900	576	162
090600	630	162
110000	1320	162
110508	1936	162
11	1950	162
015600	2178	162
025900	2314	162
030150	2470	162
041500	2670	162
064200	2826	162
064250	3396	0
064300	3386	0
065900	3286	0
091800	3280	0
1401		
095000	0	0
095018	52	138
095034	66	138
095110	108	138
095310	198	138
095900	418	138
100319	580	138
100800	864	138
101703	1532	138
103500	3990	138
105000	6080	138
110035	8148	138
110350	8898	138
110373	8998	0
11	8784	0
110500	8664	0
1401		
084500		0
084585	386	138
084600	430	138
084700	460	138
084800	650	138
085600	1310	138
090800	3030	138
091500	3626	138
091534	3796	138
091600	3772	0
092600	3530	0
105000	3514	0
1402		
022200		0
022218	96	162
022228	156	162
022246	136	162
022276	162	162
022307	190	162
022320	198	162
022370	222	162
022400	242	162
023000	396	162
024050	544	162
032200	1088	162
033400	1170	162
055252	1920	162

TIME	STRAIN	STRS
075651	2682	162
101300	4170	162
112051	5580	162
1403		
020000		0
020016	54	97
020051	84	97
020100	122	97
020260	142	97
020321	156	97
020404	174	97
021297	202	97
021500	232	97
021810	218	97
021828	222	97
024200	308	97
030600	352	97
03	378	97
033550	400	97
055200	582	97
075215	692	97
102050	814	97
114300	882	97
120000	1202	97
054800	1460	97
056500	1466	97
083400	1538	97
083400	1916	97
090000	1948	97
090028	1938	0
090600	1910	0
095400	1894	0
095453	1894	
1404		
132603		
152638	270	183
132652	304	183
132900	556	183
133800	856	183
140000	1206	183
163950	3562	183
203900	4132	183
203924	4164	183
204050	4614	183
204395	6176	183
205000	6152	0
222900	6122	0
090000	6118	0
1405		
104500		0
104523	46	97
104538	66	97
104700	156	97
105030	250	97
110000	424	97
110500	498	97
112100	704	97
114500	1024	97
012200	2150	97
020104	2492	97
043400	3638	97
084185	5282	97
034256	5264	97
084300	5264	97
084362	5248	0
084951	5230	0
102950	5208	0
085953	5196	0
1406		
103500		0
103534	54	80
103550	82	80
103800	196	80
104000	236	80
104550	296	80
110000	376	80
113000	470	80
120000	546	80
125600	636	80
020100	768	80
030810	876	80
040200	944	80
050000	1022	80
045600	1130	80
091900	1236	80
080000	1592	80
120100	1712	80
023000	1806	80
034000	1844	80
034055	1830	80
034062	1826	0
034100	1824	0
034800	1808	0
051150	1796	0
1407		
010000		0
010050	780	206
010100	970	206
010200	1170	206
010500	1494	206
011000	1892	206

TIME	STRAIN	STRS
012000	2706	206
014250	5060	206
014285	5950	206
014300	5932	0
015205	5850	0
030850	5840	0
1408		
033000		117
033030	202	117
033050	234	117
033100	302	117
033300	490	117
033600	800	117
034100	1362	117
034500	1914	117
035550	3502	117
040000	4158	117
040500	4874	117
041800	6782	117
043000	8454	117
044815	10514	117
044850	10446	117
044876	10386	117
045900	10294	117
065700	10268	117
1409		
101500		0
101541	832	162
101605	1056	162
101700	1208	162
101900	1318	162
102515	2518	162
103100	4020	162
103500	5168	162
104000	6594	162
104138	6870	0
104200	6784	0
104507	6702	0
105000	6684	0
1410		
011500		0
011578	570	138
011600	676	138
011700	838	138
012000	1074	138
012600	1256	138
013000	1388	138
013500	1498	138
014502	1476	138
015003	1636	138
022900	2338	138
031800	3048	138
033300	3268	138
050751	4266	138
051000	4700	138
051030	4838	138
051080	4812	0
051100	4602	0
051850	4592	0
1411		
081000		
083037	34	97
083080	232	97
083100	262	97
083200	396	97
083500	614	97
084600	998	97
090300	1354	97
092000	1588	97
095000	1886	97
115100	2640	97
020800	3482	97
030400	3508	97
044505	3884	97
075500	5806	97
035800	6418	0
040625	6400	0
042218	6372	0
060250	6350	0
1412		
084000		
084085	482	162
084100	504	162
084200	596	162
084500	672	162
090400	860	162
091900	950	162
095100	1122	162
102900	1304	162
115005	1686	162
013716	2298	162
020500	2466	162
030007	2824	162
030115	2756	0
030500	2734	0
042160	2702	0
1413		
090000		138
090061	88	138
090100	114	138
102256	1084	138

TIME	STRAIN	STRS
104750	[illegible]	[illegible]
112700	[illegible]	138
155700	[illegible]	138
160859	[illegible]	138
160900	[illegible]	0
042100	4920	0
060200	4910	0
1414		
101500		0
101561	308	97
101585	338	97
101602	336	97
101900	532	97
102700	552	97
10	556	97
104400	610	97
145708	856	97
150400	920	97
164600	998	97
195500	1142	97
233300	1296	97
23	1674	97
101102	1676	97
150200	1864	97
214100	2088	97
075500	2682	97
090400	2722	97
090450	2492	97
090504	2492	0
092000	2484	0
115700	2474	0
1415		
101800		0
102000	272	162
102088	336	162
102100	760	162
102307	1156	162
103300	1382	162
10	1400	162
103300	1538	162
104200	3192	162
113500	5134	162
010300	8180	162
014250	9780	162
014412	9864	162
014450	9774	162
014462	9770	0
014500	9760	0
015700	9712	0
030000	9690	0
1416		
090000		0
090045	814	138
090105	1130	138
090200	1220	138
090600	1260	138
092100	1726	138
100900	2860	138
115600	5650	138
012300	7946	138
033805	11550	138
034400	11690	138
034450	11620	138
034500	11620	0
035000	11560	0
044300	11570	0
1417		
081500	0	0
081580	434	97
081700	500	97
082008	672	97
083500	758	97
091200	896	97
110100	1094	97
030196	1480	97
041650	1578	97
064500	1784	97
091950	1954	97
081145	2720	97
081200	2738	97
011600	2980	97
015000	3202	97
015172	3190	0
015206	3180	0
020200	3150	0
02	3138	0
032200	3136	0
1418		
014500		0
014578	848	138
014600	878	138
014700	974	138
014800	1076	138
015400	1660	138
020150	2492	138
020400	2922	138
021100	3196	138
022000	3528	138
030000	4334	138
042900	5912	138
045400	6306	138

TIME	STRAIN	STRS
064200	7872	138
080100	9068	138
080200	9090	138
080238	9076	0
080300	8994	0
083500	8940	0
08	8938	0
080700	8934	0
1419		
090000		
090035	84	80
090075	106	80
090098	114	80
090200	120	80
090800	400	80
091700	476	80
092100	686	80
100100	764	80
011300	960	80
024400	1108	80
02	2060	80
075800	2140	80
102100	2224	80
112000	2264	80
112207	2264	80
112247	2242	80
112300	2234	0
113800	2214	0
010200	2204	0
1420		
090500	0	0
090546	344	138
090574	378	138
090600	436	138
090700	540	138
091600	1036	138
095400	1834	138
101108	2332	138
101153	2316	138
101300	2278	0
102000	2254	0
103300	2216	0
1421		
011800		0
011882	188	183
011900	240	183
012000	376	183
012100	430	183
012800	700	183
013500	870	183
014700	1200	183
015800	1480	183
021500	1920	183
024300	2670	183
030000	3230	183
031900	3758	183
034000	4380	183
040400	5080	183
042900	5810	183
043600	6040	183
050000	6820	183
055500	8830	183
055524	8790	0
05	8676	0
075000	8678	0
1422		
010000	0	0
010150	40	27
010200	90	63
010250	142	102
010300	188	140
010350	264	171
010400	344	200
010450	448	226
010500	562	243
010550	702	253
010600	880	255
010650	1088	251
010700	1286	246
010800	1686	237
1423		
011500	0	0
011550	80	30
011600	180	69
011650	312	100
011700	462	132
011750	660	150
011800	898	164
011900	1426	171
012000	1980	171
012100	2320	174
012200	2960	
1424		
020000	0	0
020015	444	20
020050	598	60
020075	618	134
020100	968	120
020150	1068	159
020200	1408	186
020250	1754	218

TIME	STRAIN	STRS
020300	2126	236
020350	2570	240
020400	3046	236
020450	3518	229
020500	3986	224
1425		
021500	0	0
021550	62	40
021575	192	102
021600	346	165
021619	432	205
021635	638	232
021650	790	264
021661	906	272
021681	1158	291
021700	1422	299
021719	1712	299
021750	2216	283
021800	3100	260
1426		
110000	0	0
110039	16	28
110050	48	123
110060	202	226
110070	368	302
110080	564	372
110090	832	420
110100	1114	446
110110	1416	453
110120	1794	453
110128	2122	448
11 141	2654	442
110160	3538	423
110170	4002	410
1427		
010000	0	0
010012	34	40
010018	120	121
010022	172	195
010027	228	277
010031	284	352
010036	346	432
010040	444	509
010045	560	580
010048	670	630
010055	998	698
010059	1324	716
010061	1552	717
010062	1896	714
010071	2220	702
010077	2812	695
1430		
010000		0
010100	114	12
010150	258	21
010200	388	32
010300	554	80
010400	658	147
010500	740	230
010600	830	305
010700	936	380
010800	1068	440
010900	1278	478
010950	1452	473
011000	1700	443
1431		
090000		0
090100	32	4
090150	168	37
090200	318	67
090300	648	117
090400	962	171
090500	1278	230
090600	1600	280
090700	1928	325
090800	2326	358
090900	2666	372
091000	3248	378
091050	3522	369
091100	3802	354
1432		
121500		0
121660	132	80
121700	252	139
121750	390	202
121800	542	250
121850	756	278
121900	1160	282
121951	1636	270
122000	1944	250
1433		
120000		0
120053	56	70
120100	192	238
120125	326	307
120150	652	360
120160	724	368
120180	1064	366
120200	1424	350
120250	2368	291
1434		

TIME	STRAIN	STRS
113000		0
113024	52	17
113038	166	118
113051	258	243
113056	320	294
113062	374	355
113066	422	395
8070	484	432
113076	566	467
113081	668	505
113089	848	545
113098	1122	575
113104	1428	575
113111	1622	565
113118	1896	546
1435		
030000		0
030010	16	12
030014	84	71
030019	150	150
030024	212	232
030028	280	317
030033	362	394
030038	472	468
030042	622	548
030048	[illegible]	619
030056	1380	651
030058	1622	649
030062	1902	635
030065	2194	619
030081	3524	544
1436		
090000		0
090010	80	64
090013	148	157
090018	282	313
090023	434	467
090026	684	540
090032	1396	611
090036	1772	626
1437		
110000		0
110011	12	31
110014	174	111
110017	440	213
110020	630	339
110023	768	457
110025	886	580
110028	1022	698
110030	1230	813
110032		843
1438		
021500		0
021600	72	42
021700	208	107
021800	352	167
021900	486	230
022000	628	296
022100	814	347
022282	1072	350
022300	1144	357
022400	1446	300
1439		
093000		0
093060	70	31
093100	208	149
093140	342	294
093150	394	340
093160	472	380
093191	592	481
093210	754	520
093225	986	525
093240	1346	480
093250	1650	433
1440		
023000		0
023034	46	35
023041	146	74
023053	336	155
023065	494	234
023075	640	318
023087	776	420
023091	820	468
023100	916	542
023110	1038	619
023121	1268	691
023130	1518	710
023135	1780	691
023139	2010	663
023142	2240	628
1441		
020000	0	
020052	0	0
020100	36	34
020300	212	181
020400	338	251
020500	496	316
020600	732	347
020650	918	341
020676	1040	330
020700	1192	317

TIME	STRAIN	STRS
1442		
030000	0	0
030050	66	35
030100	464	139
030125	602	211
030140	694	248
030160	820	319
030180	968	378
030200	1144	416
030220	1354	444
030241	1642	450
1443		
024500		0
024532	128	79
024543	280	152
024552	392	231
024561	508	316
024570	642	396
024580	798	468
024595	910	542
024605	1460	560
024616	1922	535
024626	2362	509
024641	3066	467
1444		
100000		0
100100	44	8
100200	276	57
100300	554	110
100400	724	196
100500	892	279
100550	984	318
100600	1102	347
100650	1236	371
100700	1390	392
100750	1560	400
100800	1792	399
100850	2036	385
100900	3120	362
1445		
103000		0
103027	244	76
103037	502	115
103047	738	154
103055	924	195
103061	1072	235
103067	1186	275
103073	1296	317
103079	1384	362
103083	1454	395
103088	1528	432
103093	1598	467
103099	1686	508
103105	1778	543
103110	1876	582
103116	1990	617
103123	2132	657
103137	2550	688
103143	2832	660
103148	3232	619
1452		
090000		0
090081	172	97
090100	172	97
091500	292	97
092600	320	97
093900	352	97
102600	390	97
113600	420	97
145200	460	97
14	656	97
074100	660	97
124800	670	97
163829	710	97
213885	770	97
034905	798	97
075265	816	97
075319	820	97
141525	850	97
195551	916	97
14	942	97
080130	950	97
113600	956	97
145576	1012	97
14	1044	97
080725	1056	97
081926	1056	97
081972	1030	0
082660	1000	0
095071	984	0
1453		
091200		0
091300	160	162
091700	200	162
092500	260	162
094000	304	162
095200	330	162
102500	390	162
110000	436	162
113300	470	162
131300	572	162

TIME	STRAIN	STRS
145300	612	162
164300	740	162
074000	1318	162
125000	1480	162
164100	1600	162
213600	1760	162
035000	1944	162
075200	207[illegible]	162
110200	218[illegible]	162
110300	2130	0
111700	2110	0
121700	2070	0
1459		
144500	262	203
144700	300	203
145500	396	203
151300	492	203
153600	570	203
160900	662	203
164500	752	203
195230	1140	203
081800	2460	203
113700	2872	203
145500	3624	203
150200	3520	203
150230		203
150300	3252	0
150800	3220	0
1460		
134500	0	0
134575	18	12
134600	32	15
134650	62	52
134700	102	80
134750	138	128
134800	174	167
134900	250	247
135000	342	322
135050	388	358
135100	450	391
135150	526	419
135200	614	433
135300	910	454
135334	1006	459
135350	1070	448
135375	1190	440
135400	1296	428
1461		
140608		
140700		1
140713	26	35
140725	116	110
140735	196	192
140743	240	267
140751	284	356
140762	346	467
140769	324	543
140776	428	620
140783	480	691
140790	566	770
140800	674	841
140814	972	910
140817	1138	911
140824	1438	883
140829	1770	847
1462		
	0	0
150440	58	80
150448	100	150
150456	142	234
150464	174	315
150470	210	390
150477	246	465
150485	296	540
	346	615
	416	690
	510	768
150518	678	839
150527	914	874
150530	1036	867
150534	1210	855
150536	1382	838
150539	1564	808
150542	1830	774
1463		
155400	0	0
155411	30	72
155417	90	197
155419	122	293
155421	172	407
155423	228	537
155425	270	644
155427	316	760
155429	340	875
155431	444	975
155433	552	1060
155434	626	1140
155436	790	1225
155438	1100	1257
1464		
104500	0	0

TIME	STRAIN	STRS
104558	800	227
104600	896	227
104700	978	227
104800	1000	227
104900	1032	227
105000	1050	227
110000	1188	227
111200	1260	227
113500	1374	227
130700	1668	227
155700	2160	227
174600	2480	227
210900	3140	227
1466		
151900		
151910	16	72
151916	82	220
151922	156	392
151924	176	457
151926	212	520
151929	246	590
151931	274	676
151934	308	739
151936	362	820
151938	412	880
151941	528	951
151944	608	1009
151946	504	1050
151948	932	319
151950	1024	301
151952	1616	240
151954	2082	157
1468		
135000		0
135023	170	295
135033	198	295
135058	210	295
135100	250	295
135202	312	295
135600	404	295
135500	440	295
140100	638	295
141300	1160	295
142100	2110	295
142200	1860	0
162200	1760	0
1469		
100000		0
100041	100	340
100050	110	340
100076	142	340
100099	166	340
100200	268	340
100300	316	340
100400	374	340
100500	440	340
100800	660	340
100900	752	340
100956	670	0
101000	658	0
103100	596	0
125302	580	0
1471		
030000		0
030022	34	36
030027	86	77
030039	182	150
030047	262	236
030051	298	279
030055	320	311
030059	340	352
030062	366	390
030065	396	430
030070	424	467
030073	456	502
030077	490	550
030084	560	620
030089	604	659
030092	650	690
030096	708	730
030102	792	775
030108	918	810
030119	1214	829
030124	1504	820
030132	1908	772
1472		
031500		0
031[illegible]43	58	70
031[illegible]1	124	156
031559	176	230
031566	220	313
031574	242	390
031577	288	430
031581	316	466
031589	366	544
031596	436	617
031600	460	652
031604	516	690
031608	560	730
031613	638	776
031618	720	808

TIME	STRAIN	STRS
031625	850	841
031628	952	856
031632	1062	861
031639	1376	850
031643	1578	828
031646	1816	800
031649	2024	775
1473		
240000		0
240050	4	06
240100	22	40
240150	44	75
240200	78	111
240250	104	151
240300	120	194
240400	204	277
240450	254	313
240500	292	343
240550	332	388
240600	388	418
240650	456	446
240700	536	467
240800	768	490
240850	926	489
240900	1178	475
240950	1366	457
1474		
041500		0
041511	32	69
041515	80	106
041518	130	230
041521	178	340
041526	242	400
041530	296	573
041534	366	690
041537	448	880
041541	560	911
041544	662	982
041547	878	1055
041550	1098	1071
041553	1594	1031
041556	2218	937
1475		
043000		0
043009	4	40
043012	60	160
043015	136	345
043018	180	467
043021	234	670
043023	296	776
043026	406	975
043029	524	1130
1476		
100000	0	0
100051	4	47
100100	30	110
100150	66	174
100200	104	239
100250	158	300
100300	220	368
100350	292	41[illegible]
100400	380	458
100450	496	493
100500	672	518
100550	934	517
100600	1256	481
1477		
101500	0	0
101525	26	32
101550	50	58
101575	92	102
101600	134	154
101620	164	190
101640	194	228
101660	236	270
101680	276	315
101700	308	355
101730	380	409
101760	450	461
101790	554	513
101800	600	529
101814	680	555
101833	740	568
101850	840	584
101871	1002	591
101900	1304	573
101929	1652	554
1478		
103000	0	0
103025	0	5
103050	78	67
103064	118	113
103075	144	153
103085	174	192
103095	198	233
103105	226	275
103116	258	318
103127	284	356
103138	324	402
103146	354	434
103157	388	466

TIME	STRAIN	STRS
103166	468	510
103176	472	545
103187	560	583
103193	604	619
100216	712	660
100240	1016	690
100249	1172	686
100257	1350	673
100265	1542	650
1479		
010000	0	0
010050	2	15
010100	20	54
010200	90	139
010250	134	177
010300	186	216
010350	258	257
010400	348	277
010450	474	297
010500	582	313
010550	732	418
010600	908	520
010650	1110	517
010700	1308	310
1480		
131500	0	0
131550	6	16
131600	112	91
131650	252	171
131675	320	222
131700	384	270
131725	440	317
131750	512	368
131775	600	409
131800	700	447
131825	830	470
131850	1002	488
131875	1230	488
131892	1310	478
131900	1500	473
1481		
013000	0	0
013030	14	32
013035	42	75
013044	106	150
013048	144	190
013053	186	231
013056	222	267
013060	264	313
013069	336	395
013076	386	466
013085	486	543
013094	586	615
013098	666	655
013105	786	695
013115	1056	733
013120	1214	737
013123	1358	736
013129	1642	717
013134	1866	696
013140	2200	659
1482		
014500	0	0
014513	22	47
014522	64	111
014531	102	187
014539	164	271
014544	196	322
014551	250	395
014559	310	467
014567	406	543
014576	544	615
014594	1028	695
014599	1200	696
014603	1402	694
014608	1574	688
014615	1866	673
014620	2096	657
1483		
140000	0	0
140008	16	32
140010	66	120
140013	118	216
140014	172	318
140017	256	473
140020	348	635
140022	426	760
140025	522	865
140028	786	1012
140030	1184	1069
140033	1786	1031
1484		
040000	0	0
040100	90	15
040142	338	76
040150	390	88
040175	460	144
040200	676	211
040219	766	265
040240	858	332
040260	964	404

TIME	STRAIN	STRS
040280	1104	495
040300	1268	492
040320	1484	510
040331	1636	513
040346	1906	509
040354	2038	490
040361	2180	480
1485		
041500	0	0
041508	38	33
041512	94	149
041515	138	229
041518	178	312
041521	216	397
041526	300	567
041530	342	650
041532	392	725
041536	492	840
041539	592	911
041542	778	980
041546	1082	1008
041548	1378	1000
041550	1694	973
041552	2056	930
1488		
100000	0	0
100100	0	5
100200	56	51
100300	152	115
100400	238	187
100500	306	253
100600	516	305
100700	776	328
100750	966	325
100776	1078	318
100800	1172	309
1489		
020000	0	0
020100	32	35
020150	100	84
020200	180	139
020250	268	192
020300	400	244
020350	540	281
020400	736	308
020450	976	321
020500	1260	325
020550	1550	319
020600	1950	310
1490		
023052		0
023150	14	21
023175	38	65
023199	78	104
023214	110	110
023250	154	200
023275	206	248
023299	262	290
023324	334	329
023351	420	369
023357	522	398
023400	644	417
023424	796	430
023450	1000	439
023475	1240	430
023500	1382	410
1491		
030000	0	0
030077	18	38
030090	50	78
030102	82	110
030113	120	152
030126	162	193
030138	194	234
030160	284	318
030171	340	355
030183	410	395
030198	512	433
030216	668	468
030242	888	508
030263	1210	523
030283	1514	530
030290	1650	529
030298	1752	523
030309	1928	515
1492		
040000	0	0
040029	28	37
040039	102	111
040047	150	187
040051	186	235
040055	212	278
040061	284	355
040068	322	430
040072	354	466
040075	390	503
040079	432	542
040084	486	585
040087	538	617
040091	598	656
040104	854	734

TIME	STRAIN	STRS
040118	1340	764
040122	1510	764
040126	1698	758
040131	1912	751
040136	2118	740
1493		
033000	0	0
033033	26	37
033037	74	73
033042	138	111
033047	194	150
033050	240	187
033057	298	236
033060	328	270
033065	376	316
033068	414	351
033073	462	397
033080	570	467
033089	690	544
033099	874	619
033119	1460	685
033125	1681	681
033132	2032	660
1494		
041500	0	0
041511	36	72
041514	64	127
041516	88	182
041520	112	231
041522	138	283
041525	172	365
041530	212	426
041534	272	500
041536	340	571
041542	438	655
041546	582	730
041555	1042	808
041557	1232	810
041560	1528	797
1495		
043002	0	0
043025	18	25
043028	114	142
043031	226	298
043034	278	451
043037	368	635
043045	876	1003
043047	1496	1062
1497		
101452	0	0
101491	92	97
101500	96	97
101600	122	97
101700	140	97
101800	164	97
102200	190	97
104500	240	97
125700	350	97
152802	440	97
083000	680	97
132300	740	97
153700	770	97
082805	942	97
125550	1014	97
242745	1134	97
105800	1232	97
205564	1340	97
074911	1420	97
103550	1460	97
214500	1568	97
075100	1662	97
075180	1646	0
075200	1642	0
075950	1614	0
1498		
090000		0
090054	298	227
090064	334	227
090078	372	227
090106	424	227
090200	528	227
090300	644	227
090500	830	227
090600	930	227
090700	1078	227
090800	1234	227
090889	1246	0
090900	1238	0
092103	1140	0
100500	1124	0
1499		
103500		0
103534	340	252
103544	386	252
103553	412	252
103567	448	252
103579	478	252
103587	496	252
103700	694	252
103800	834	252
103900	976	252

TIME	STRAIN	STRS
104000	1140	252
104200	1580	252
104300	1864	252
104339	1844	0
105500	1666	0
125600	1446	0
1500		
123000		0
21	1	84
28	2	84
38	2	84
67	3	84
76	4	84
3100	5	84
3200	8	84
3300	12	84
3400	13	84
3500	15	84
3700	17	84
3900	20	84
4113	20	84
4300	26	84
4500	26	84
4800	28	84
5100	30	84
5500	32	84
130000	35	84
1000	39	84
3000	43	84
4711	48	84
47	48	84
140000	50	84
4311	55	84
150000	58	84
4950	65	84
163906	71	84
173100	76	84
183000	84	84
193000	90	84
220900	103	84
0715	134	84
0815	142	84
0935	151	84
1036	155	84
1219	161	84
1400	168	84
1507	173	84
1502		
103000	0	0
33	160	162
44	180	162
60	190	162
3110	254	162
3200	310	162
3300	352	162
4000	554	162
4800	810	162
110500	990	162
1800	1180	162
132100	2360	162
153900	3900	162
161315	4320	162
1569	4260	0
3213	4230	0
173760	4120	0
1503		
131500	0	0
50	14	21
1604	52	43
50	90	80
1700	114	115
50	150	150
1800	174	190
50	198	228
1900	232	267
50	258	302
2000	292	341
50	328	377
2100	376	407
50	422	438
2200	484	459
50	558	480
2300	646	496
50	760	503
2400	890	504
37	1032	493
56	1216	487
1504		
113000	0	0
75	14	5
3100	82	33
50	254	98
3200	382	195
24	444	247
50	476	311
70	502	367
90	540	413
3300	556	437
20	600	477
41	642	528
60	698	568

TIME	STRAIN	STRS
80	770	602
3400	854	633
20	958	656
42	1104	667
59	1270	662
68	1396	653
80	1552	633
86	1692	621
1505		
111500	0	0
35	44	67
40	68	110
45	92	150
52	132	226
60	162	304
66	198	385
73	232	463
80	264	540
86	312	612
93	368	685
1600	428	773
08	516	841
26	944	949
31	1140	940
34	1288	926
39	1594	885
1506		
104500	0	0
15	28	39
58	64	87
60	98	136
63	134	194
66	164	250
68	180	300
70	208	353
72	228	407
75	248	451
76	268	499
80	308	588
83	342	641
85	370	700
88	414	782
91	470	830
93	504	865
96	572	924
99	658	980
4601	760	1005
05	1010	1028
08	1292	1006
1507		
103200	0	0
11	32	27
13	162	97
15	284	180
19	404	331
22	510	514
25	582	637
27	654	789
28	736	861
30	836	973
32	992	1078
35	1224	1155
1508		
030000	0	0
36	26	60
52	60	123
	88	153
	112	194
	136	230
90	160	277
0100	184	315
10	198	357
19	218	395
28	238	431
38	262	468
57	318	543
	350	580
	394	617
	441	655
98	510	695
0215	660	734
34	848	758
38	924	756
46	1064	739
53	1258	719
1509		
100000	0	0
46	90	97
70	96	97
0100	106	97
0200	122	97
0300	126	97
0900	154	97
2400	174	97
5800	200	97
123200	224	97
150506	252	97
160822	262	97
203500	284	97
075700	350	97
152300	390	97

TIME	STRAIN	STRS
072100	438	97
102000	460	97
121800	460	97
221000	484	97
072400	520	97
122000	532	97
140000	536	97
203000	560	97
104000	600	97
104100		0
1510		
103000	0	0
40	964	347
45	992	347
65	1084	347
73	1100	347
78	1112	347
3186	1280	347
3200	1298	347
3300	1416	347
3400	1478	347
3500	1546	347
3800	1750	347
4500	2594	347
4600	2856	347
4650	2734	0
5700	2626	0
123300	2598	0
1511		
125600		0
53	60	227
69	72	227
74	78	227
5700	96	227
5800	126	227
5900	132	227
131500	336	227
150400	446	227
160900	770	227
202400	1162	227
075800	2130	227
101000	2420	227
110629	2518	227
110900	2434	0
111500	2382	0
113343	2314	0
1512		
080000		0
46	204	384
52	226	384
55	232	384
0100	320	384
0200	488	384
0300	624	384
0400	750	384
0500	880	384
0848	1850	384
62	1940	384
73	2002	384
80	2058	384
0962	1976	0
2303	1914	0
092827	1876	0
1513		
101510	0	0
26	262	220
50	332	220
1600	470	220
1700	612	220
1800	662	220
2200	834	220
3100	1022	220
4000	1124	220
4800	1330	220
121600	2020	220
133260	3028	220
141300	3672	220
1514		
041500	0	0
25	16	11
52	38	26
1700	80	53
50	138	87
1800	262	106
50	312	124
1900	426	143
50	498	162
2000	580	180
2100	772	228
2200	950	252
2300	1140	286
30	1402	323
2500	1566	339
2600	1778	361
2700	2026	378
2900	2646	369
50	2796	360
1515		
020000	0	0
50	176	3
0271	18	18

TIME	STRAIN	STRS
76	2	13
81	36	20
86	68	25
92	112	26
0313	264	32
30	350	40
37	388	42
62	532	62
71	574	73
95	658	96
0442	756	146
56	810	188
76	858	225
0500	906	271
20	942	314
61	1044	391
85	1116	430
0612	1222	462
58	1510	491
68	1592	492
79	1718	494
88	1794	479
1516		
013000	0	0
17	14	34
25	40	71
32	58	109
40	80	158
51	120	232
63	160	314
74	210	391
85	268	466
98	354	540
3113	496	614
28	740	655
33	870	655
37	978	646
41	1174	626
1517		
011500	0	0
3.	36	31
37	128	106
42	222	188
50	350	310
54	420	391
58	496	465
62	572	539
65	652	616
69	724	689
7	862	771
79	1136	840
81	1274	844
84	1570	821
86	1998	741
1518		
010000	0	0
21	74	45
24	330	106
26	466	182
30	508	310
33	696	420
35	816	529
37	950	649
39	1064	808
42	1196	930
44	1628	1030
1519		
100000	0	0
50	34	34
0150	124	102
0200	168	138
50	214	172
0300	262	204
50	306	239
0400	358	271
0500	484	323
50	558	350
0600	650	362
50	750	383
0700	866	392
50	1010	394
0800	1176	392
50	1332	389
1520		
103000	0	0
27	14	14
51	56	51
75	100	101
3100	154	138
25	200	182
50	250	231
76	306	279
3200	366	331
24	438	372
50	532	411
75	658	443
3300	812	457
25	992	463
51	1238	456
75	1512	442
1521		

TIME	STRAIN	STRS
040011	0	0
62	100	33
81	354	73
0118	884	156
39	1140	231
55	1286	317
69	1394	400
80	1478	466
93	1580	542
0208	1710	616
27	1942	692
38	2136	714
42	2248	718
50	2500	710
55	2624	702
58	2796	690
1522		
030000	0	0
08	78	72
14	196	149
19	286	222
24	382	310
29	452	390
33	530	466
37	604	551
41	[illegible]	630
45	770	691
49	876	772
53	1042	836
60	1478	905
63	1680	903
65	1866	892
1523		
030019	0	0
49	102	121
51	178	193
53	262	309
55	378	449
57	496	561
59	580	718
60	682	772
62	786	874
64	944	974
65	1108	1058
67	1340	1118
70	1902	1123
72	2646	1020
1524		
130000	0	0
53	78	98
0100	120	98
0200	160	98
0300	172	98
1000	258	98
2700	320	98
145000	430	98
163200	510	98
210015	630	98
080000	830	98
112500	870	98
080400	1100	98
125700	1140	98
215100	1228	98
074300	1304	98
153300	1370	98
091600	1510	98
162600	1558	98
1525		
130500		0
47	914	227
53	966	227
65	1038	227
0600	1180	227
48	1314	227
0700	1408	227
0800	1536	227
0900	1634	227
131803	2022	227
2600	2232	227
4800	2770	227
141200	3478	227
4800	4872	227
4902	4918	227
4937	4820	0
150750	4666	0
163100	4638	0
1526		
100000		0
43	180	296
62	216	296
85	252	296
0100	276	296
74	368	296
98	390	296
0300	496	296
0400	590	296
0600	780	296
0700	876	296
0800	984	296
0900	1102	296
1000	1222	296

TIME	STRAIN	STRS
1100	1356	296
1200	1504	296
1250	1422	0
3124	1258	0
112300	1238	0
1527		
153000	0	0
07	2	97
12	7	97
18	12	97
21	10	97
24	11	97
30	12	97
41	12	97
51	14	97
65	15	97
3100	17	97
3150	19	97
3200	22	97
50	25	97
3300	25	97
3400	30	97
3500	33	97
3700	38	97
4000	44	97
4400	51	97
5000	58	97
160000	70	97
1715	85	97
3615	93	97
170200	105	97
1528		
160000	0	0
16	11	108
19	11	108
20	10	108
23	11	108
26	11	108
30	11	108
37	11	108
51	11	108
77	10	108
0100	11	108
0200	11	108
0300	10	108
0500	13	108
1000	12	108
2000	13	108
4700	16	108
5900	26	108
173200	58	108
182500	64	108
202500	75	108
225000	80	108
074400	94	108
094100	154	108
103400	164	108
124205	183	108
053203	212	108
142555	220	108
85	204	0
2600	202	0
3932	187	0
1529		
100000	0	0
18	8	90
21	8	
26	8	
51	12	
0100	11	
50	12	
0200	13	
0300	16	
0500	18	
1000	22	
1500	25	
2000	27	
3100	32	
4800	10	
112050	14	
4050	15	
124410	20	
141200	26	
151700	30	
161800	34	
211900	49	
080100	80	
110500	89	
110544	88	0
0600	73	0
2300	61	0
130100	51	0
1530		
110000	0	0
30	48	19
0100	128	44
0130	218	69
0200	318	91
30	418	116
0300	532	136
0400	786	170

TIME	STRAIN	STRS
0500	1126	183
30	1322	182
0600	1522	180
30	1736	175
1531		
010005	0	0
30	142	12
0100	502	29
30	864	37
0200	1352	50
30	1624	64
0300	2006	79
30	2358	91
0400	2788	103
50	3112	111
0500	3504	118
30	3906	121
0600	4398	125
30	4702	127
1532		
011502	0	0
16	20	31
28	62	85
42	166	150
52	278	191
70	576	231
78	762	236
83	886	234
92	1160	223
1600	1354	216
1533		
013000	0	0
06	48	41
12	324	75
16	474	110
20	564	150
22	638	186
25	706	229
28	794	267
32	928	312
36	1160	348
39	1500	347
41	1586	329
44	1860	303
1534		
014500	0	0
10	104	26
11	250	72
14	420	126
16	594	183
18	764	242
20	926	272
21	1036	400
23	2546	
1535		
034503	0	0
50	28	8
4650	184	96
4700	280	80
50	376	103
4800	486	130
50	596	151
4900	706	175
50	814	200
5000	926	220
50	1040	241
5100	1164	260
50	1298	278
5200	1440	288
50	1598	297
5300	1754	310
51	1920	317
5400	2090	322
50	2248	326
5500	2428	328
50	2596	331
5600	2774	330
50	2954	331
5700	3124	331
1536		
060000	0	0
0200	254	12
50	572	40
0300	930	60
50	1342	76
0400	1750	83
0500	2608	96
50	3066	100
0600	3514	103
50	3958	104
77	4242	103
1537		
013000	0	0
22	54	38
25	110	63
27	194	92
31	378	123
36	616	136
39	824	145
42	1104	150
47	1422	159

TIME	STRAIN	STRS
57	1798	164
55	2062	169
59	2338	172
63	2742	173
68	3072	173
73	3414	172
78	3888	172
82	4174	172
86	4496	172
92	5032	171
3111	6418	172
20	7062	175
28	7586	167
1538		
103223	0	0
81	1834	90
84	2334	90
86	2812	90
88	3396	91
91	4002	91
94	4634	93
1539		
100000	0	0
51	84	0
0100	196	1
50	290	2
0200	372	2
0300	534	15
40	758	37
50	824	40
0400	1174	60
50	1538	78
0500	1916	90
60	2354	104
1100	2660	120
53	3052	134
1203	3434	146
50	3782	160
1540		
010006	0	0
58	56	
69	122	1
92	234	16
96	366	50
0100	530	75
06	824	106
10	1048	119
15	1420	111
20	2030	105
24	2174	101
29	2560	98
1541		
020000	0	0
05	216	83
07	526	92
10	938	93
11	1368	92
13	2024	90
16	2320	86
18	2848	89
21	3366	74
22	3830	64
1542		
023000	0	0
25	6	6
51	32	25
3100	102	62
19	132	81
40	166	102
75	264	142
3200	336	173
19	402	196
50	530	229
80	666	257
3300	790	275
24	960	287
51	1144	292
68	1264	291
80	1446	289
3400	1626	280
1543		
030000	0	0
18	78	31
25	184	75
31	242	111
36	298	150
40	346	192
45	396	231
50	428	271
54	520	311
59	604	351
64	704	393
70	864	431
82	1220	460
85	1352	460
90	1560	460
93	1740	452
99	1984	441
1544		
033000	0	0
50	38	20

TIME	STRAIN	STRS
52	184	79
53	334	140
55	474	209
59	822	369
61	1032	431
63	1888	313
1545		
040000	0	0
0100	80	14
71	510	79
0200	690	102
24	858	122
50	1076	136
76	1304	145
0300	1534	146
24	1758	148
50	2026	151
76	2276	142
1546		
043208	0	0
34	260	35
46	596	76
59	966	118
65	1172	130
70	1352	131
73	1522	131
78	1730	128
82	1888	121
1547		
090000	0	0
13	24	37
15	76	112
17	130	216
19	188	304
20	266	398
1548		
010000	0	0
24	8	10
27	12	30
32	30	71
38	60	131
43	96	151
48	132	188
52	198	230
58	284	269
69	624	304
72	724	302
75	866	294
77	986	289
1549		
014500	0	0
30	14	15
50	62	45
61	108	60
70	150	73
90	254	93
4600	308	102
20	418	120
40	548	137
75	784	162
4700	962	176
25	1138	194
50	1362	200
75	1612	204
4800	1858	200
24	2098	198
1550		
025400	0	0
11	42	28
24	148	62
31	282	80
39	358	102
50	520	130
61	694	153
75	982	175
90	1332	186
5500	1522	198
15	1876	204
24	2060	206
37	2350	207
60	2950	206
71	3264	201
1551		
030000	0	0
06	20	31
09	24	71
12	112	116
15	196	148
18	350	157
20	538	147
22	730	132
1552		
033000	0	0
06	24	53
08	68	129
09	124	208
11	210	281
12	328	350
14	514	404
17	1254	379
1553		

TIME	STRAIN	STRS
034500	0	0
12	10	10
23	20	29
40	44	59
50	64	77
60	88	92
70	114	109
80	142	126
90	178	140
4600	212	157
20	294	180
31	346	194
41	404	204
50	464	212
70	612	225
90	770	231
4720	1020	235
37	1184	231
50	1322	230
1554		
110000		58
09	4	58
11	8	58
15	9	58
21	10	58
41	12	58
0100	16	58
51	18	58
0200	22	58
0300	26	58
0400	30	58
0500	34	58
0700	38	58
1000	45	58
1200	50	58
1600	59	58
1800	64	58
2000	69	58
2300	76	58
2500	80	58
2700	84	58
2900	90	58
1555		
040000	0	0
19	104	30
35	248	68
50	454	110
60	608	142
70	756	166
90	1106	173
0100	1304	226
19	1774	226
28	2024	218
33	2168	212
1556		
031500	0	0
05	2	19
11	66	70
16	168	111
20	272	149
24	390	176
28	548	204
31	746	220
35	974	214
37	1218	192
1557		
033000	0	0
21	80	40
24	206	96
25	326	150
27	476	201
30	860	277
1558		
041500	0	0
60	42	4
1600	124	11
50	268	22
1700	320	33
50	566	42
1800	712	56
1900	994	80
2000	1272	105
2100	1596	122
2200	1762	132
2300	2350	137
2400	2718	139
2500	3116	138
50	3312	137
2600	3516	136
1559		
043000	0	0
50	12	6
3100	64	35
50	126	67
3200	202	96
50	294	125
3300	410	147
50	542	161
3400	698	172
50	874	178
3500	1060	180

TIME	STRAIN	STRS
50	1258	180
3600	1464	178
15	1358	176
1560		
090000	0	0
50	22	4
75	68	13
0100	116	26
50	234	44
0200	362	61
50	502	75
0300	650	86
0400	956	109
0500	1328	117
0600	1736	120
60	1986	117
0700	2144	117
1561		
091500	0	0
50	10	0
1600	90	17
50	184	41
1700	272	64
50	386	86
1800	518	101
50	682	110
1900	864	112
2000	1276	116
2100	1684	112
2200	2078	115
2300	2470	116
2400	2980	120
2500	3282	121
1562		
010000	0	0
24	8	20
40	20	46
50	30	61
70	72	96
83	126	116
91	160	176
0100	198	134
19	306	149
50	546	163
75	762	163
0200	984	163
24	1200	159
50	1462	153
1563		
011515	0	0
40	92	11
1600	680	41
40	744	56
61	896	66
1700	1190	77
25	1378	81
80	1812	90
1800	1958	92
61	2420	105
1900	2714	114
50	3110	126
2000	3524	131
50	3956	141
2100	4384	134
50	4804	135
2200	5238	137
1564		
020000	0	0
15	22	35
23	52	68
30	88	91
35	134	111
42	218	139
50	326	159
57	468	171
70	768	180
78	952	180
88	1210	180
97	1454	171
1565		
021400	0	0
21	34	16
32	108	56
41	202	79
56	418	121
66	618	137
77	884	141
90	1214	143
1509	1652	144
37	2338	139
50	2668	139
1566		
030000	0	0
08	14	19
10	38	44
12	62	70
15	120	100
17	192	126
20	310	149
24	447	167
27	616	182

TIME	STRAIN	STRS
30	820	190
33	1084	188
37	1342	182
39	1564	176
1567		
031500	0	0
15	40	22
20	118	57
25	238	91
30	382	122
34	562	145
39	864	161
45	1172	162
51	1812	153
55	2088	150
1568		
033000	0	0
05	38	32
07	350	105
10	530	157
11	722	130
1569		
040000	0	0
08	20	22
10	90	89
12	186	159
14	464	217
17	972	190
18	1394	175
1570		
000000	0	0
17	300	32
50	330	32
67	386	32
0100	400	32
0300	460	32
0400	508	32
0500	532	32
0600	544	32
0700	560	32
0800	594	32
0900	594	32
1000	612	32
1100	618	32
1300	650	32
1400	660	32
2400	770	32
3500	896	32
6700	1280	32
013400	1954	32
022500	3160	32
028500	3916	32
031000	4240	32
1571		
080000	0	0
10	320	67
30	420	67
40	500	67
0100	640	67
0115	760	67
0130	850	67
0200	1000	67
30	1200	67
45	1270	67
0330	1660	67
0400	1868	67
0430	1790	67
0530	1640	0
1000	1810	0
091000	1866	0
1572		
020000	0	5
15	14	78
21	19	78
28	23	78
34	28	78
41	32	78
48	35	78
55	41	78
61		0
1573		
040000	0	0
56	20	5
0100	86	24
20	126	32
60	206	50
0200	286	67
50	406	86
0300	532	100
50	676	115
0400	838	125
51	1022	129
0500	1204	131
0700	1958	132
0800	2334	136
1000	3100	137
1100	3468	138
1200	3846	140
1300	4226	139
1500	4988	140
1600	5376	138

TIME	STRAIN	STRS
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
1900	6532	135
2000	6922	134
1574		
100000	0	0
24	64	18
40	258	46
61	472	80
80	1116	88
0100	1606	88
10	1882	88
31	2388	84
66	3238	82
1575		
100000	0	0
11	18	41
12	120	103
14	282	152
16	530	190
19	802	221
20	1174	258
22	1542	271
25	1936	276
27	2468	262
30	3032	254
1576		
000000	0	
50	90	15
75	116	15
0100	122	15
0200	160	15
0400	202	15
0600	212	15
0700	240	15
0900	272	15
3500	526	15
4500	620	15
036000	3820	15
060000	4854	15
014600	7370	15
015050	7490	15
015950	7580	15
017750	7730	15
189000	8936	15
206500	9760	15
226000	0424	15
1577		
000000		0
10	60	15
30	100	15
40	122	15
0100	152	15
0200	182	15
0300	202	15
0400	220	15
0700	262	15
2500	430	15
3000	480	15
3200	480	15
3400	492	15
6000	658	15
7000	728	15
045500	2040	15
075500	2810	15
161500	4626	15
166000	4690	15
179000	4970	15
193000	5508	15
304500	6100	15
322500	6110	15
1578		
130000	0	0
50	30	14
0100	96	35
0200	222	69
0200	388	98
0400	576	120
0500	748	145
0600	1014	151
0700	1272	163
0900	1842	163
1100	2434	162
1200	2702	159
1579		
011500	0	0
75	76	26
1600	116	37
1700	276	68
1800	454	94
1900	622	120
2000	878	133
2100	1140	140
2200	1418	145
2300	1698	145
2600	2576	141
2700	2860	140
1580		
133000	0	0
3100	56	20
50	126	36

TIME	STRAIN	STRS
3200	202	45
50	292	70
3300	400	80
3400	572	107
3500	814	125
50	918	132
3600	1068	132
3700	1322	139
3800	1602	142
3900	1888	140
4300	3030	137
4400	3324	135
1581		
140000	0	0
51	18	12
85	64	41
93	84	50
0120	118	62
40	162	78
76	278	92
0200	382	105
51	640	130
0300	982	148
0400	1778	159
50	2198	155
1582		
020000	0	0
23	6	9
50	30	31
75	62	55
0100	104	74
50	232	101
0200	502	129
50	844	141
0300	1236	142
50	1660	138
0400	2106	133
1583		
021600	0	0
01	40	15
26	104	43
40	152	62
50	192	79
75	310	100
1700	438	123
50	754	151
1800	1150	159
50	1592	155
1900	2224	151
1584		
023000	0	0
19	50	6
33	248	30
51	514	62
66	768	97
78	952	123
92	1208	147
0112	1628	168
25	1900	172
35	2104	170
51	2528	169
1585		
144500	0	0
19	52	30
30	134	68
40	230	95
44	282	110
51	376	129
57	456	139
63	538	167
68	624	181
75	744	200
82	876	206
88	1030	210
4600	1298	208
07	1486	204
16	1718	200
1586		
150000	0	0
08	18	15
15	54	40
24	120	71
35	222	106
42	312	130
53	464	160
60	604	174
74	902	185
85	1188	185
0100	1556	185
1587		
150000	0	0
08	80	31
10	168	59
14	258	90
16	332	120
19	414	150
22	508	178
25	602	204
27	706	228
30	900	251
33	1034	261

TIME	STRAIN	STRS
36	1246	263
39	1454	263
41	1654	255
1588		
150000	0	0
12	52	36
10	88	67
12	118	104
15	202	139
18	262	178
21	352	210
24	484	236
27	642	250
30	842	255
33	1072	250
36	1306	244
1589		
030000	0	0
07	102	43
10	174	72
12	256	102
15	330	137
18	424	174
21	518	207
24	614	238
27	732	265
30	890	283
32	1110	287
35	1324	274
38	1552	256
1590		
030000	0	0
06	40	13
08	256	65
10	574	94
12	852	143
14	1020	209
1591		
030000	0	0
14	52	64
15	126	128
18	286	185
20	694	189
21	1296	118
23	1758	123
1592		
150000	0	0
04	156	19
07	374	48
09	492	124
11	578	170
1594		
090000	0	0
61	46	7
0100	116	24
50	212	43
0200	320	60
50	428	76
0300	538	90
50	670	105
0400	782	118
0500	1086	131
0700	1842	139
0800	2120	140
0900	2484	140
1000	2846	138
1100	3192	130
1400	4268	135
1550	4446	135
1595		
110000	0	0
50	10	7
0109	60	39
50	120	57
0200	202	74
50	312	97
0300	432	103
0400	734	119
0500	1074	126
0600	1430	129
0900	2506	130
24	2596	131
50	2690	131
1596		
121500	0	0
50	14	4
76	74	24
1600	168	41
25	290	59
50	422	73
71	564	87
1700	710	101
41	976	111
80	1282	119
1800	1440	120
50	1838	120
1900	2236	120
50	2618	120
2000	3006	120
50	3402	120
2100		118

TIME	STRAIN	STRS
1597		
031500	0	0
16	68	20
26	150	48
38	288	79
52	510	99
65	736	118
80	1034	141
1600	1438	155
12	1688	155
39	2308	156
60	2792	152
86	3358	151
1598		
033000	0	0
08	48	23
14	124	59
17	244	90
20	258	122
25	480	147
28	628	168
30	790	188
35	1008	199
38	1258	203
41	1494	202
44	1740	200
47	1994	198
1599		
040000	0	0
03	98	49
05	410	63
07	818	63
09	1268	61
11	1770	52
13	2206	45
15	2708	34
19	3414	28
1600		
150000	0	0
150008	28	19
150010	174	71
150011	490	85
150012	612	99
150015	1168	110
150017	1590	112
150020	2058	115
150022	2550	110
150024	3092	81
1601		
040000	0	0
040011	38	8
040013	198	48
040017	446	81
040019	616	108
040021	820	144
040024	1110	166
040026	1450	172
040029	1810	175
040032	2238	176
040034	2600	178
040037	2992	180
040040	3454	177
040043	3870	176
040050	4990	173
040053	5474	168
1602		
160000	0	0
160003	58	16
160006	198	37
160008	380	53
160011	568	72
160013	768	102
160015	956	134
160018	1112	166
160020	1374	201
160022	1686	207
160025	2100	169
1603		
040000	0	0
040011	46	31
040013	126	78
040016	212	120
040018	350	157
040020	566	170
040021	868	169
040024	1154	161
040025	1462	156
1604		
120000	0	0
120025	18	7
120051	58	23
120100	148	42
120150	236	60
120200	290	81
120250	436	97
120300	562	107
120600	1626	107
120650	1824	105
120700	1990	104
1605		
120000	0	0

TIME	STRAIN	STRS
120079	66	32
120100	106	42
120125	146	53
120151	194	64
120200	296	82
120251	422	97
120300	550	110
120351	694	121
120400	842	129
120451	1010	135
120500	1164	139
120600	1502	143
120700	1826	149
120800	2170	151
120900	2526	157
121000	2874	158
121100	3220	160
121480	4568	157
121500	4664	157
1606		
030000	0	0
030034	22	11
030067	76	52
030103	236	86
030125	346	97
030141	56	105
030161	792	111
030201	886	121
030250	1248	127
030300	1650	128
030341	1990	126
030375	2274	126
030400	2478	122
1607		
040200	0	0
040225	10	10
040240	40	27
040285	188	80
040300	248	93
040320	356	112
040350	522	132
040380	744	146
040413	986	148
040460	1380	147
040500	1706	145
1608		
040000	0	0
040011	20	19
040017	62	37
040023	110	59
040035	238	97
040041	330	122
040048	412	140
040054	512	160
040062	652	180
040074	912	200
040081	1084	205
040090	1318	205
040100	1562	204
040108	1766	200
040115	1952	199
1609		
033000	0	0
033025	54	18
033044	148	72
033054	238	103
033063	338	135
033069	412	151
033074	494	168
033080	612	187
033089	772	202
033095	960	210
033112	1278	217
033127	1672	216
033134	1848	205
1610		
040600	0	0
040607	44	19
040611	174	60
040615	296	101
040620	416	140
040625	582	182
040630	848	228
040636	1308	236
040640	1566	230
040642	1800	222
1611		
040000		0
040008	108	48
040012	226	86
040017	418	140
040021	530	178
040024	684	207
040028	842	237
040030	1040	247
040034	1252	253
040038	1530	250
040040	1746	244
1612		
040000	0	0
040017	36	28

TIME	STRAIN	STRS
040019	120	73
040021	196	128
040024	322	202
040025	500	252
040028	756	299
040030	1068	323
040031	1456	318
040033	1916	290
1613		
040000	0	0
040014	44	37
040016	128	101
040018	238	171
040020	360	236
040021	554	287
040023	778	331
040025	1120	349
040027	1596	321
1614		
110000	0	0
110030	8	7
110050	28	12
110076	56	22
110100	76	31
110200	224	63
110250	324	79
110300	458	92
110400	786	106
110500	1162	106
110650	1772	101
110670	1860	96
1615		
111500	0	0
111561	48	5
111600	160	6
111700	460	34
111751	590	46
111800	728	60
111900	880	89
112000	1244	120
112100	1558	141
112200	1926	147
112300	2328	142
112357	2534	141
1616		
130000	0	0
130070	40	13
130100	164	31
130160	470	59
130200	708	77
130241	958	95
130281	1222	111
130300	1366	119
130352	1742	125
130400	2162	127
130430	2422	125
130450	2580	121
1617		
010000	0	0
010021	8	14
010037	48	34
010061	108	61
010080	172	99
010100	240	129
010130	400	160
010150	532	178
010180	758	184
010200	944	185
010230	1202	176
010245	1352	174
1618		
130000	0	0
130018	28	10
130029	128	39
130037	204	69
130049	310	110
130065	442	182
130078	608	230
130093	868	256
130104	1120	253
130115	1386	249
1619		
010000	0	0
010031	190	40
010040	508	60
010061	580	115
010080	716	151
010100	1294	172
010124	1756	184
010153	2450	187
010176	3020	184
010200	3560	180
1620		
020000		0
020010	22	10
020014	92	49
020017	160	90
020020	252	118
020025	354	153
020027	462	181
020030	582	209

TIME	STRAIN	STRS
020034	696	232
020036	836	255
020039	984	275
020042	1160	289
020045	1314	293
020048	1560	295
020050	1780	291
020052	2000	281
1621		
023000	0	0
023009	10	11
023011	30	35
023015	90	71
023019	156	101
023024	278	136
023029	482	172
023034	728	202
023039	958	241
023043	1178	270
023047	1420	278
023050	1638	268
023052	1876	254
1622		
030011	220	304
030013	368	383
030015	650	423
030016	1060	405
030018	1536	351
1623		
150000	0	0
150006	20	39
150008	106	72
150010	222	190
150012	454	239
150014	708	272
150016	1182	268
150018	1700	207
1629		
080015	0	0
080030	0	15
080100	6	15
080130	22	15
080200	24	15
080500	54	15
080800	74	15
083200	140	15
090000	170	15
101000	240	15
105000	262	15
130000	366	15
151000	480	15
080000	966	15
153000	1292	15
080000	622	15
081000	628	0
093000	668	0
1630		
080300	0	
080315	0	0
080330	66	15
080400	80	15
080430	90	15
080500	108	15
080800	134	15
083200	220	15
090000	278	15
101000	394	15
105000	448	15
151000	640	15
080000	790	15
153000	1324	15
080000	3612	15
080000	2930	15
080500	2916	0
081500	2914	0
1631		
100000	0	0
100050	82	13
100200	538	56
100300	652	93
100500	1186	150
100600	1526	151
100618	1614	150
100650	1734	147
1632		
100000	0	0
100030	10	20
100053	40	57
100063	68	74
100074	96	89
100085	138	103
100100	188	126
100125	288	154
100189	620	135
100228	1032	189
100250	1250	178
1633		
100000	0	0
100012	14	20
100021	54	56
100030	110	95

TIME	STRAIN	STRS
100037	166	133
100045	240	164
100050	300	189
100061	460	233
100075	730	277
100089	1062	285
100099	1332	280
100110	1612	277
1634		
100000	0	0
100007	36	18
100011	168	51
100015	300	82
100020	448	123
100022	520	164
100026	590	216
100029	672	260
100031	754	300
100035	892	342
100038	1036	370
100041	1230	383
100044	1424	385
100046	1656	370
100049	1902	354
1635		
100000	0	0
100007	6	10
100010	54	56
100012	162	110
100014	280	161
100016	422	221
100020	600	295
100022	790	331
100025	1166	322
100027	1580	293
1636		
090000	0	0
090005	24	29
090007	92	80
090009	150	139
090011	220	199
090013	280	254
090015	400	308
090016	590	336
090018	908	322
090020	1228	298
1637		
090000	0	0
090009	38	18
090011	132	65
090012	266	112
090015	404	161
090017	568	218
090020	744	270
090022	944	317
090024	1136	354
090026	1346	389
090030	1802	411
090033	2174	389
090034	2564	351
1638		
090000	0	0
090006	14	29
090009	50	108
090011	102	178
090013	160	261
090015	242	327
090017	406	379
090019	710	381
090021	1202	311
1639		
090000	0	0
090007	36	19
090010	150	62
090013	280	107
090015	450	152
090018	538	211
090020	634	280
090023	776	352
090026	1002	411
090028	1256	430
090030	1950	304
1640		
090000	0	0
090010	18	14
090012	92	90
090014	164	171
090015	254	253
090017	376	360
090020	584	441
090022	870	470
090044	1312	448
090125	1796	408
1641		
090000	0	0
090033	20	29
090035	62	79
090037	90	141
090039	134	199
090041	188	264
090043	254	322

TIME	STRAIN	STRS
090045	272	367
090047	204	328
090049	254	360
1643		
010000	0	0
010015	10	21
010025	62	61
010034	106	92
010043	172	141
010050	230	174
010058	314	209
010071	500	251
010083	774	262
010091	1002	254
010099	1252	239
1644		
130000	0	0
130003	114	46
130006	328	121
130008	504	200
130010	668	268
130012	906	321
130014	1228	334
130015	1618	337
130018	2144	289
1645		
000000		0
000030	120	35
000100	168	35
000400	260	35
008000	1160	35
015000	1530	35
030000	1802	35
042000	2262	35
072000	2798	35
147000	3166	35
174000	3522	35
300000	4990	35
318000	5332	35
318005	5300	0
15	5298	0
336000	5340	0
1646		
000030	320	35
000100	380	35
000200	416	35
000500	690	35
008000	1274	35
015000	1632	35
030000	2020	35
042000	2280	35
072000	2920	35
147000	3310	35
174000	3650	35
300000	5390	35
318000	5770	35
3190	5710	0
319015	5720	0
326060	5760	0
1647		
000030	20	17
000100	16	17
000300	22	17
002500	52	17
012000	112	17
042000	168	17
117000	194	17
134000	246	17
160000	392	17
178000	410	17
178005	410	0
178015	412	0
184015	412	0
1648		
000030	10	32
000100		32
002500	28	32
012000	50	32
042000	112	32
117000	140	32
144000	186	32
270000	356	32
288000	384	32
288015	384	0
294015	390	0
1649		
030000	0	
030100	36	22
035050	140	50
030200	222	81
030456	648	270
030600	990	430
030800	1550	510
030943	2032	537
030961	2120	522
030984	2267	515
1650		
030000		0
030100	50	22
030200	616	78
030500	1310	250

TIME	STRAIN	STRS
030700	1710	382
031000	1990	552
031200	2270	730
031300	2480	785
031460	2684	790
031476	2760	788
031499	2886	775
1651		
030000	0	0
030025	26	10
030050	68	29
030075	72	50
030100	90	72
030175	138	142
030200	158	166
030230	176	200
030261	198	230
030300	222	272
030350	250	328
030400	286	385
030500	362	488
030602	450	585
030700	558	669
077777	712	756
079393	1060	750
091010	1136	743
1652		
040030	16	12
040057	22	43
040068	60	75
040090	98	111
040114	136	150
040153	184	232
040190	222	317
040228	276	395
040262	324	467
040296	380	543
040335	450	630
040370	540	692
040411	670	775
040458	836	845
040500	1080	882
040514	1200	875
040522	1300	866
1653		
070000	0	
070035	24	23
070084	110	26
070128	170	186
070160	212	254
070200	276	343
070250	366	450
070300	446	560
070352	560	669
070400	604	774
070450	746	872
070500	958	950
070527	1138	961
070538	1238	951
070543	1318	940
1654		
070042	26	18
070070	118	42
070101	298	74
070199	634	178
070251	770	255
070299	834	352
070351	950	467
070399	1020	560
070499	1238	768
070550	1406	840
070599	1690	883
070636	1936	890
070650	2080	874
1655		
080019	74	40
080040	314	90
080061	510	177
080080	656	271
080100	758	389
080120	834	505
080140	906	642
080161	998	790
080181	1114	926
080200	1250	1032
080220	1422	1139
080241	1664	1261
080260	1940	1352
080280	2300	1412
080302	2780	1433
080315	3146	1421
080322	3406	1395
1656		
090000	0	
090035	16	25
090050	60	107
090070	78	212
090093	120	315
090100	164	400
090120	224	560
090151	344	777

TIME	STRAIN	STRS
090180	506	971
090200	650	1078
090230	1096	1170
090242	1454	1140
090250	1678	1112
1657		
090000	0	
090026	28	35
090042	78	34
090061	130	225
090080	178	355
090100	228	485
090119	298	619
090140	326	758
090161	444	908
090180	484	1010
090200	800	1081
090220	1186	1102
090229	1432	1077
090231	2158	1064
1658		
090000	0	0
090015	30	13
090021	154	130
090025	194	143
090031	246	231
090035	284	313
090040	344	505
090046	374	542
090051	408	636
090056	450	710
090060	500	825
090065	556	982
090070	622	1100
090075	676	1205
090078	740	1308
090085	922	1413
1659		
010000	0	
010007	18	42
010014	66	148
010020	120	268
010028	172	424
010034	208	560
010039	242	652
010043	288	770
010049	334	877
010054	400	1017
010059	458	1130
010063	530	1241
010068	532	1351
1660		
090000	0	
090043	10	17
090050	44	112
090055	82	221
090060	122	366
090068	176	504
090073	220	618
090080	270	775
090086	318	912
090090	356	1020
090095	406	1132
090102	446	1276
090105	514	1360
090109	578	1454
090112	646	1525
1661		
090000	0	
090019	22	41
090020	64	80
090023	96	229
090025	132	347
090027	160	460
090028	196	573
090030	222	693
090031	264	815
090034	298	940
090036	346	1053
090038	388	1228
090040	442	1378
090041	500	1500
090043	582	1593
090045	694	1710
1662		
090000	0	0
090005	2	11
090016	22	55
090018	46	158
090020	280	269
090023	118	410
090028	226	705
090030	282	838
090032	336	965
090034	392	1100
090036	446	1248
090038	536	1392
090040	640	1518
1663		
090000	0	
090006	2	4

TIME	STRAIN	STRS
090011	0	49
090015	0	116
090018	36	239
090020	106	362
090023	190	496
090026	312	687
090029	410	838
090031	514	983
1664		
090000	0	
090012	32	53
090015	90	168
090018	136	347
090021	184	532
090024	230	705
090027	272	871
090029	320	1027
090031	374	1216
090033	426	1395
090036	484	1552
090039	570	1718
1665		
100000	0	
100006	14	13
100020	40	54
100025	102	175
100027	150	258
100029	216	356
100032	292	465
100035	360	582
100038	434	717
100042	574	905
1666		
100000	0	
100009	122	31
100016	192	71
100020	222	163
100022	222	255
100027	220	426
100030	218	575
100033	284	725
100037	338	874
100040	390	1018
100043	474	1198
100046	560	1344
100050	666	1488
100051	800	1594
1667		
100028	44	93
100032	72	173
100036	96	230
100040	132	341
100047	184	456
100051	226	578
100058	286	720
100063	352	870
100070	446	1020
100077	564	1170
100081	706	1273
100088	1124	1307
100095	1586	1330
100108	2656	1329
100111	3004	1258
1668		
110000	0	
110029	16	17
110178	64	70
110225	90	162
110260	106	247
110281	146	303
110320	276	414
110351	368	520
110380	496	622
110400	582	688
110450	938	832
110476	1282	843
110482	1460	828
1669		
110000	0	0
110030	126	13
110072	254	46
110100	344	86
110150	698	297
110300	792	390
110400	988	555
110500	1234	710
110570	1594	761
110583	1720	750
110591	1806	740
1675		
020000	0	0
020061	24	18
020100	58	40
020150	96	71
020200	130	107
020400	240	277
020500	320	363
020700	550	516
020800	690	581
020900	940	602
020966	1100	602

TIME	STRAIN	STRS
021000	1250	599
021018	1310	595
1677		
030000	0	0
030016	36	19
030044	180	126
030063	254	236
030070	290	276
030082	340	355
030089	380	394
030100	420	467
030115	490	542
030127	550	617
030139	610	694
030151	716	771
030164	796	840
030178	928	911
030197	1150	985
030211	1364	1025
030232	1744	1046
030241	1990	1032
030248	2170	1019
1678		
160000	0	0
160009	20	39
160014	90	110
160020	220	190
160025	320	270
160029	380	356
160035	420	467
160038	480	539
160045	540	691
160052	600	840
160055	640	911
160058	680	982
160062	720	1053
160065	800	1134
160068	900	1204
160073	1060	1279
1683		
110000	0	0
110022	200	609
110027	200	609
110048	240	609
110100	260	609
110151	320	609
110200	350	609
110300	380	609
110400	420	609
110500	470	609
110700	500	609
110800	600	609
111100	840	609
111300	980	609
111800	1300	609
112200	3080	609
112235	3340	609
112251	3420	609
112300	3740	609
112350	4040	609
1686		
120000	0	
120024	8	33
120051	20	87
120100	56	184
120140	134	265
120170	200	326
120200	274	381
120250	504	440
120287	796	455
120300	930	441
1690		
120000	0	0
120015	26	30
120020	90	118
120025	150	198
120030	216	277
120035	294	347
120037	352	400
120043	558	467
120050	942	505
120052	1222	485
120055	1540	467
1691		
120000	0	
120010	20	46
120015	44	118
120021	104	240
120025	146	309
120030	208	394
120035	306	469
120039	434	543
120046	738	617
120050	1096	628
120052	1274	606
120054	1542	582
1692		
120000	0	0
120006	8	44
120009	36	90
120013	60	172

TIME	STRAIN	STRS
120016	102	232
120020	208	315
120024	308	395
120025	456	469
120029	644	542
120034	1166	613
120036	1790	608
120037	1886	578
1693		
120000	0	
120009	64	28
120014	182	75
120020	348	158
120026	404	235
120030	484	305
120035	588	392
120040	744	462
120050	1240	533
120053	1598	551
120057	1988	508
1706		
100000	0	
0031	18	27
0142	262	96
0321	838	125
0402	1008	164
0511	1256	230
0601	1438	283
0700	1650	341
0800	1920	387
0900	2252	413
0915	2348	408
0945	2574	407
1000	2704	398
1707		
090000		
18	0	10
50	32	52
0100	100	109
0139	172	238
0172	242	319
0200	258	387
0272	390	546
0306	462	626
0340	554	695
0386	752	775
0415	914	782
0428	1100	775
0435	1200	760
1708		
090000	0	0
08	30	49
10	80	128
12	122	202
15	164	279
18	212	405
20	260	491
22	300	572
25	344	724
26	382	753
28	432	845
30	488	931
33	586	1003
35	796	1050
37	1228	994
1709		
090000	0	0
21	80	36
23	144	141
25	178	247
26	238	365
27		472
31	364	617
1710		
0000	0	
18	118	505
23	132	505
44	206	505
69	272	505
99	340	505
0161	464	505
0200	562	505
0300	776	505
0400	966	505
0502	1134	505
0700	1350	505
0900	1774	505
1000	2448	505
1025	2736	505
1052	3082	505
75	3482	505
1712		
110000	0	
23	186	505
35	250	505
45	298	505
0100	364	505
0135	526	505
0200	728	505
0226	1056	505
0236	1340	505

TIME	STRAIN	STRS
0300	2460	505
0316	3418	505
07	30	37
09	106	108
12	186	201
14	278	308
16	386	432
18	424	558
20	476	685
22	528	827
24	582	953
27	640	1072
28	724	1230
32	836	1373
33	1660	
1726		
030000		
49		20
0200	26	45
0275	150	85
0350	270	125
0397	350	156
0442	436	170
0500	592	231
0600	916	209
0667	1186	190
0705	1354	200
0715	1456	198
1728		
020000		
10	352	356
17	1012	508
20	2325	411
25	3580	315
30	5660	176
1729		
041986		
042000		
050000	254	181
12	460	475
15	758	640
20	1754	632
25	5218	410
29	4658	251
1730		
030007	0	
030000	0	
07	26	40
16	104	110
25	144	172
37	318	260
4[illegible]	482	340
60	642	397
64	828	440
70	1008	459
78	1290	469
1731		
030000	0	
06	4	12
17	80	87
28	220	158
35	296	209
42	384	251
50	522	309
59	724	355
65	902	373
69	1048	381
73	1192	383
78	1404	377
80	1528	370
1732		
020000		
09	20	40
14	62	113
17	76	150
19	116	198
21	132	234
26	200	317
31	280	392
35	408	468
42	692	542
45	892	561
49	1138	565
51	1340	560
53	1578	551
56	1868	531
1733		
020000		
12	30	47
18	166	172
28	360	309
35	654	399
44	1260	432
31	1898	409
37	2422	390
1734		
030000		
12	76	172
19	176	277
25	318	378

TIME	STRAIN	STRS
30	544	435
37	1044	438
43	1680	395
49	2284	308
1735		
070000		
21	20	70
22	20	165
25	50	258
27	90	371
28	170	468
30	280	561
32	400	663
34	420	702
36	680	737
38	1390	702
39	1010	618
1738		
030000		
05		34
18	56	95
25	98	150
30	162	193
35	224	231
40	228	272
46	418	311
52	550	356
57	656	356
60	818	370
64	965	371
68	1120	370
73	1319	361
75	1495	362
82	1726	357
86	1900	355
90	2120	347
95	2300	337
1742		
070000	0	
05	40	100
08	120	200
10	170	309
12	210	428
14	250	542
16	280	672
18	330	805
20	370	932
22	440	1060
24	500	1195
26	600	1328
28	740	1470
31	900	1565
32	924	1650
34	1456	1700
37	1900	1682
38	2680	1565
1743		
070002		
35		79
56	200	158
65	260	317
70	300	395
77	400	468
85	540	543
94	590	618
0102	660	658
0114	860	772
74	1160	811
62	3640	
1744		
070095	0	0
070105	18	12
0120	282	79
0121	342	118
0132	240	200
0145	350	317
0152	382	395
0160	412	468
0166	474	542
0175	550	475
0180	616	695
0187	678	775
0195	770	847
0206	898	915
0217	1204	986
0221	1356	987
0225	1544	972
0228	1846	918
0235	2526	775
0244	3324	630
0256	4518	475
0282	5600	395
1746		
0000	0	0
0050	71	32
0100	94	32
0150	106	32
0200	121	32
0300	138	32
1000	253	32
RESET DIALS		

TIME	STRAIN	STRS
5200	0	32
010000	127	32
013000	639	32
020000	1185	32
022500	1663	32
RESET DIALS		
033500	0	32
040000	467	32
050000	1433	32
060000	2168	32
071000	2445	32
RESET DIALS		
092700	0	32
102300	630	32
113900	838	32
122600	1103	32
131300	1317	32
223100	2346	32
000000	0	32
000050	96	32
000100	128	32
000150	138	32
000200	150	32
001100	189	32
001600	206	32
002600	241	32
003600	384	32
004600	436	32
005600	504	32
012600	613	32
015600	628	32
RESET DIALS		
015900	0	32
022100	402	32
RESET DIALS		
033100	0	32
035600	448	32
045600	1157	32
055600	1613	32
070600	2054	32
092500	2825	32
102500	3108	32
113100	3384	32
121800		32
RESET DIALS		
122000	0	32
131000	169	32
222800	1423	32
224800	1555	32
1747		
0000	00	0
0005	2	15
0100	4	15
0200	4	15
0250	4	15
0300	5	15
0900	11	15
1400	14	15
2400	16	15
3400	22	15
4400	26	15
5400	29	15
012400	38	15
015400	46	15
021900	52	15
022300	68	15
025300	76	15
035300	90	15
055300	103	15
070300	114	15
092300	126	15
102300	136	15
RESET DIALS		
112800	0	15
121500	7	15
130800	20	15
222600	105	15
224700	108	15
224800	107	0
225300	106	0
235400	105	0
1748		
0000	0	0
0050	160	15
0100	234	15
0150	280	15
0200	316	15
0250	352	15
0400	574	15
0900	680	15
1900	948	15
2900	1234	15
3900	1380	15
4900	1552	15
011900	1984	15
014900	2362	15
021400	2658	15
031800	3392	15
034800	3742	15
044800	4508	15
054800	5064	15

TIME	STRAIN	STRS
065800	5726	15
091900	6936	15
102200	7414	15
112400	8086	15
121200	8298	15
130400	8762	15
222100	12284	15
232100	12284	15
236400	12460	15
136500	12404	0
137000	12314	0
143000	12260	0
1749		
0000		
06	264	158
12	520	398
16	698	662
21	820	945
25	982	1277
32	1280	1608
37	2116	1693
1751		
0000	0	
0114	132	720
0122	324	1014
0127	580	1370
1752		
0000		
26	56	78
39	82	159
54	128	237
66	174	317
72	212	395
89	254	468
0100	300	543
0111	350	618
0124	406	645
0135	462	775
0146	520	846
0158	624	918
0173	714	989
0188	1076	1030
0195	1320	1016
0203	1666	960
0208	2000	888
0211	2312	823
0216	2716	732
0220	3082	653
0229	3714	525
0244	4566	395
0275	5680	317
1753		
010000		
75	40	20
0124	60	70
0175	120	118
0223	140	165
0275	200	220
0351	250	290
0399	300	340
0450	390	375
0500	480	413
0551	600	440
0600	740	460
0675	1010	475
0730	1380	460
0800	1720	410
0850	2140	348
1754		
0750	1080	380
0800	1170	395
0850	1640	409
0900	1322	417
0950	1444	453
1000	1630	452
1050	1780	452
1755		
0000		
0200	44	78
0400	200	220
0500	316	262
0600	518	317
0800	1032	383
1000	1556	372
1100	2188	317
1400	3256	280
1756		
1200	0	0
50	60	70
0100	170	140
50	320	220
0200	450	300
50	580	388
0300	720	475
50	870	563
0400	1040	640
51	1370	675
72	1600	655
84	1970	607
1757		
120200	730	150

TIME	STRAIN	STRS
0250	860	220
0300	950	310
50	1138	400
0400	1262	460
50	1590	507
0500	1894	543
0550	2330	560
0573	2516	541
89	2750	515
1758		
0000		
0100	36	10
50	202	52
0200	376	109
50	562	176
0300	684	252
0353	846	330
0400	798	409
50	980	467
0500	1362	543
50	1608	588
0600	1926	617
0640	2340	617
0655	2384	607
1759		
120000	0	0
04	0	16
08	40	70
12	80	145
15	110	200
21	150	310
25	180	390
28	220	460
33	250	550
37	290	645
40	320	718
44	380	828
48	420	900
53	520	995
58	670	1095
63	834	1155
67	1142	1175
72	1720	1096
1760		
0010		
15		
20	40	78
26	120	158
32	180	322
39	200	394
34	254	475
36	270	558
51	340	665
55	344	775
58	440	847
61	500	918
65	540	997
69	600	1076
73	660	1191
76	760	1262
80	800	1350
85	980	1421
88	1110	1450
92	1430	1463
96	1930	1350
0100		
1761		
120000		0
50	100	38
55	160	90
59	180	195
69	260	318
72	324	432
76	400	542
81	510	658
87	560	775
91	610	875
98	740	982
0104	840	1098
0111	1060	1205
0117	1350	1320
1764		
0000		
23	138	328
30	160	328
52	166	328
62	170	328
0500	286	328
54	350	328
1103	498	328
1573	632	328
1635	660	328
2100	890	328
2300	1120	328
2500	1560	328
2653	2258	328
2700	2444	328
2750	2762	328
2808	3220	328
2852	3604	328
2898	4078	328

TIME	STRAIN	STRS
2928	4400	328
2964	4800	328
1765		
010010		
80	404	328
90	424	328
0100	464	328
0110	472	328
0225	584	328
0325	638	328
0425	684	328
0525	726	328
0625	780	328
0825	852	328
1125	1000	328
1225	1160	328
1525	1400	328
1766		
0004	20	324
28	90	324
37	262	324
42	292	324
47	302	324
72	412	324
77	440	324
0150	1225	324
64	1276	324
0200	1312	324
0300	1390	324
0400	1438	324
0509	1486	324
0600	1578	324
0851	1652	324
1000	1798	324
1200	2034	324
1350	2148	324
1375	2220	324
1400	2234	324
1415	2372	324
1767		
020000	0	0
22	0	5
50	40	15
75	60	38
0100	80	60
50	120	100
0200	200	150
0300	280	238
0400	360	324
50	480	380
0500	520	410
50	560	460
70	580	475
0600	620	496
0650	660	535
0700	780	580
0640	840	604
55	880	618
0800	920	650
50	1020	680
0900	1100	700
50	1308	720
1026	1500	720
76	1720	720
1143	2020	700
1768		
120000		
0100	73	30
0200	250	79
0300	250	135
0400	540	170
0500	812	220
0600	1060	245
0700	1500	284
0800	1880	340
0950	2310	388
1075	2750	426
1200	3250	450
1325	3730	475
1375	3880	480
1525	4120	490
75	4230	496
60	4500	565
1600	4540	615
25	4570	655
62	4600	693
78	4605	718
85	4610	738
1718	4610	775
1772	4610	780
1834	4630	920
93	4650	990
1960	4670	1060
2012	4675	1133
2200	4720	1350
2300	4740	1490
00	4820	1810
1769		
020000	0	
20	46	375
25	70	617

TIME	STRAIN	STRS
32	96	880
41	110	1282
48	186	1433
54	246	1558
1770		
030000	0	0
50	0	10
99	52	5
0150	125	159
0198	208	278
0299	371	450
0367	482	572
0324	633	693
66	724	775
0416	864	857
99	1195	970
0587	1460	1050
0640	1695	1065
59	1860	1065
0799	2010	1015
1771		
030000	0	
65	75	20
0150	323	111
0275	348	335
0400	387	576
0500	1056	760
0600	1391	909
0700	1886	1000
0750	2190	1024
89	2490	1027
0805	2640	1023
30	2900	1000
1772		
030000	0	0
50	44	35
99	80	115
0174	244	240
0215	364	318
030300	522	476
0400	762	658
88	1106	775
0563	1402	810
90	1768	816
030601	1870	810
10	2044	800
50	2384	755
1773		
030000	0	0
15	39	20
32	102	103
49	214	196
72	390	318
86	528	395
0101	646	469
0117	790	545
41	1030	658
58	1250	730
0203	1575	808
92	1775	867
0312	2162	880
24	2610	890
38	2803	885
42	2900	874
1774		
030000	0	
33	335	62
75	1000	69
0110	2145	92
50	2815	176
94	3395	324
0230	3755	470
70	4145	694
89	4270	810
0309	4385	912
39	5220	1062
50	4820	1134
78	5130	1276
97	4980	1349
04155	5680	1363
18	5920	1349
22	6020	1330
1775		
030000	0	0
70	52	78
92	177	188
0125	219	433
0159	302	611
0184	522	773
0202	698	845
0216	1032	855
0220	1138	791
1776		
030000	0	0
06	40	70
11	100	159
17	160	318
24	160	363
30	262	467
35	300	572
44	460	720

TIME	STRAIN	STRS
50	580	845
56	800	955
63	1020	1048
70	1280	1133
78	1800	1205
85	2320	1284
1777		
030000	0	0
18	37	70
25	125	102
34	246	197
42	358	300
51	596	467
58	787	575
65	1018	686
70	1180	770
80	1930	788
91	1950	1060
030104	2616	1206
11	3060	1242
16	3400	1239
1778		
030000	0	0
07	0	0
11	102	89
24	365	287
31	544	313
40	738	472
50	966	615
57	1200	765
68	1580	788
85	2416	1058
89	2740	1029
97	3366	1022
0100	3680	1045
1779		
030000	0	
05	11	23
08	52	86
10	73	133
11	125	213
13	157	284
15	198	408
18	292	528
20	416	693
23	511	811
25	646	918
28	771	1017
31	1063	1191
33	1293	1276
35	1700	1331
38	2125	1334
40	2665	1276
1780		
030000		
06	63	154
08	104	273
10	171	392
12	184	505
14	232	617
16	291	743
18	317	867
21	396	1004
23	437	1152
25	494	1276
27	564	1434
29	625	1552
31	721	1686
33	821	1804
35	939	1920
37	1090	2023
39	1310	2116
41	1570	2172
1781		
030000	0	0
05	52	65
34	145	140
36	229	265
38	312	390
40	375	505
43	458	618
46	584	830
48	816	950
50	771	1060
52	896	1205
54	1041	1328
56	1239	1415
59	1510	1520
1786		
060000		
36	4	14
75	50	37
0125	136	88
75	210	102
0225	320	142
0300	480	188
0400	640	261
0500	720	372
0600	780	466
0700	860	582
0800	920	677

TIME	STRAIN	STRS
1000	1243	867
1100	1300	1012
1200	1490	1018
1300	1806	1012
37	1980	1004
59	2060	996
1788		
060000		
50	0	
0175	22	3
0225	88	23
75	194	37
0325	326	44
0400	594	53
0500	964	70
0600	1302	94
0700	1710	108
0743	1896	109
0951	2694	108
1000	3122	103
1789		
070000	0	0
25	20	14
51	60	30
0128	200	78
0200	260	85
0245	660	92
0260	760	85
0271	800	85
1790		
070000	0	0
50	31	27
0100	144	78
30	282	100
68	566	110
0200	833	102
08	946	102
20	1060	102
1791		
070000	0	0
50	38	25
0100	222	70
55	492	102
77	636	111
0200	800	119
50	1192	129
77	1450	127
0392	2500	114
1792		
070000	0	0
50	16	27
85	66	76
0100	106	93
26	192	119
50	460	136
75	506	139
0230	974	132
90	1502	123
1793		
070000		0
21	40	30
35	92	71
44	146	108
56	237	150
66	338	194
88	747	230
99	1005	228
0108	1240	221
1794		
070000		0
14	52	22
29	136	86
42	188	113
53	263	157
68	488	188
91	897	228
0106	1272	221
0113	1473	215
1795		
070000		
14	18	31
35	113	120
45	180	150
55	293	191
75	637	231
95	1157	232
0106	1465	227
1796		
070000		
07	4	22
13	89	120
16	111	157
21	200	237
28	444	317
31	577	321
34	720	347
36	889	350
39	1199	347
41	1378	330
1797		
070000	0	0
07	13	25
12	64	78
18	165	148
25	372	231
30	556	276
36	775	310
41	1265	360
44	1532	338
47	1798	332
1798		
070000		
13	0	18
17	58	76
24	192	147
30	348	238
36	562	314
40	708	359
45	945	396
49	1168	412
53	1543	417
56	1785	417
59	2055	409
1799		
070000		
14	26	50
17	96	171
19	162	270
21	300	351
23	452	430
25	650	491
28	918	552
30	1730	588
31	1634	588
33	2150	560
1800		
070000	0	
070005	18	62
070007	66	144
070009	140	232
070010	224	316
070012	338	395
070014	464	476
070016	628	537
070018	866	582
070020	1198	611
070021	1560	614
070024	1976	587
1801		
070000		
070005	0	62
070007	80	141
070010	190	256
070015	566	459
070019	960	519
070020	1480	543
070024	2270	527
070025	2640	476
1803		
120000	0	0
120050	0	0
120100	56	0
120150	68	0
120200	92	0
120300	400	0
120350	636	0
120400	786	11
120450	934	28
120550	1166	78
120650	1300	150
120750	1400	237
120850	1480	348
120950	1546	460
121000	1576	520
121050	1612	572
121100	1650	633
121150	1686	685
121200	1736	730
121250	1760	788
121300	1822	803
121350	1870	884
121400	1940	925
121450	1994	969
121550	2184	1032
121650	2404	1075
121746	2704	1098
121800	2988	1061
121850	3330	1004
1804		
120000	0	0
120100	8	27
120200	84	119
120300	172	228
120400	258	363
120500	344	450
120700	450	659
120900	814	852
120950	914	887
121050	1020	919
121100	1480	898
121150	1962	875
1805		
0100		
0200	220	71
0397	620	197
0600	920	395
0800	1200	573
1000	1460	788
1100	1580	861
1200	1700	954
1300	1900	1026
1400	2060	1097
1500	2280	1162
1575	2520	1191
1605	2660	1148
1650	3620	
1806		
000000	0	0
000007	0	0
000049	42	36
000084	202	78
000152	298	157
000201	678	240
000256	832	345
000317	1006	464
000384	1182	628
000468	1348	780
000511	1490	850
000578	1662	1067
000656	1990	1212
000664	2036	1221
000676	2200	1220
000686	2270	1207
000691	2342	1192
000696		1171
1807		
000000	0	0
0021	58	18
0048	180	34
0087	354	80
0148	600	160
0251	942	248
0322	1160	402
0382	1312	602
0453	1538	738
0567	2068	845
0608	2430	920
0613	2494	912
0618	2826	903
1809		
0300		
0326	104	92
0353	240	316
0380	390	417
0402	456	559
0422	520	692
0445	608	852
0452	630	914
0493	838	1207
0515	996	1359
0539	1188	1490
0571	1650	1604
0576	1762	1595
0580	1930	1571
1810		
0000	0	0
0048	240	48
0110	920	251
1070	1240	615
0213	1260	910
0248	1580	1136
0276	1760	1355
0300	1960	1510
0332	2440	1604
0337	2560	1604
0370	3300	1627
0375	3410	1580
0377	3480	1600
1811		
120000	0	4
120050	360	152
120089	696	356
120108	826	467
120132	964	617
120177	1190	913
120213	1418	1137
120242	1720	1286
120271	2282	1355
120277	2618	1347
120281	2628	1301
1812		
090000	0	0
090006	52	60
090012	130	150
090020	220	271
090026	270	396
090033	338	562
090037	372	620
090043	424	768
090049	484	911
090055	544	1050
090060	616	1212
090065	672	1347
090071	744	1497
090077	820	1628
090083	920	1772
090090	1086	1918
090095	1256	1989
090098	1464	2008
1813		
120000	0	0
120008	36	79
120015	138	209
120025	268	394
120033	338	543
120040	398	678
120043	470	875
120055	556	1057
120064	656	1280
120072	764	1491
120078	854	1635
120091	1206	1918
120101	1680	1991
120105	1896	1999
120109	2328	1967
1814		
120000	0	0
120027	30	41
120040	188	187
120050	342	395
120061	590	618
120071	754	708
120080	808	1021
120091	1020	1279
120100	1224	1491
1815		
010000	0	0
010006	24	21
010010	422	144
010015	700	347
1816		
010000	0	0
010008	236	69
010011	662	94
010020	1926	227
010025	2484	399
010029	2740	547
010032	2886	693
010035	3012	852
010038	3156	1047
010040	3260	1257
010043	3352	1425
010045	3426	1557
010049	3566	1776
010050	3666	1882
010051	3784	1989
010053	3892	2082
010055	4020	2170
010056	4258	2235
1817		
120000	0	
120006	12	50
120009	58	150
120011	104	282
120014	146	475
120016	180	625
120019	210	780
120021	250	943
120026	326	1276
120029	368	1456
120031	404	1620
120033	448	1745
120035	384	1903
120037	552	2060
120039	618	2192
120040	694	2315
120043	806	2458
120045	962	2550
1821		
080000		1100
080055	464	1100
080060	514	1100
080074	740	1100
080080	860	1100
080095		1100
080100	896	1100
080113	1524	1100
1823		
080000		0
080035	770	974
080038	850	974
080043	890	974
080060	1190	974
080064	1270	974
080068	1360	974
080078	1560	974
080083	1660	974
080098	2490	974
080102	2880	974
080106	3820	974
080110	4100	974
1824		
030000	16	0
030100	122	15
030200	448	45
030252	680	46
030300	912	46
030350	1156	46
030500	1840	30
030600	2300	15
1825		
000000	0	0
000030	140	16
000100	262	16
000150	304	16
000200	342	16
000250	384	16
000300	414	16
000400	494	16
000500	526	16
000600	572	16
000700	620	16
000800	670	16
000900	696	16
001000	740	16
002000	1042	16
003000	1302	16
004000	1520	16
005000	1716	16
006000	1958	16
009000	2590	16
012000	3184	16
015000	3770	16
019000	4450	16
046000	5196	16
104800	5938	16
104900	5924	0
113000	5772	0
1826		
000000	0	
000030	280	1
000100	324	1
000130	368	1
000200	398	1
000230	438	16
000300	458	16
000400	530	16
000500	586	16
000600	620	16
000700	662	16
000800	718	16
000900	758	16
001000	780	16
002000	1054	16
002700	1196	16
003700	1382	16
004700	1550	16
005700	1730	16
008700	2238	16
011700	2662	16
014700	3054	16
018700	3524	16
045700	5086	16
150500	6528	16
150600	6224	0
156600	6300	0
1828		
000000	0	0
000030	100	35
000100	154	35
000130	186	35
000200	220	35
000230	252	35
000300	278	35
000400	322	35
000500	358	35
000600	384	35
000700	414	35
000800	438	35
000900	470	35
001000	696	35
0020	742	35
003000	1000	35
004000	1166	35
005100	1252	35
008100	1568	35
011100		35
1828		
000000	12	
000050	40	10
000100	164	28
000203	510	44
000300	882	75
000400	1314	78
000500	1742	78
000600	2200	79
000700	2660	78
1829		
000000	0	
000038	26	24
000060	56	40
000100	146	62
000150	304	73
000200	504	80
000300	936	81
000404	1426	81
000500	1862	82
000593	2294	73
1830		
000000	0	0
000015	12	15
000025	68	49
000041	198	99
000051	340	122
000077	614	161
000111	1520	164
000123	2046	156
000147	2538	150
1831		
030000	0	0
030009	8	20
030024	74	70
030043	270	123
030050	374	142
030075	878	180
030091	1314	180
030110	1728	172
030132	2032	161
030151	2702	161
1832		
000000		
000010		
000019	40	14
000029	100	43
000041	220	78
000056	440	85
000070	740	109
000092	1130	140
000100	1290	144
000116	1620	158
000133	1980	163
000150	2380	163
000176	3000	172
000200	3590	172
000225	4180	172
000262	5060	180
000297	5900	198
000357	7260	228
000433	9180	268
000462	9880	316
000467	9920	371
000471	0000	395
000475	0020	424
000481	0020	467
000488	0020	520
000496	0040	580
1833		
030000	0	0
030015	0	0
030020	80	140
030024	402	260
030027	820	322
030031	1410	380
030036	2248	432
030039	2970	460
030042	3716	432
030047	4600	408
1834		
030000		
030028	2120	446
030039	3480	396
1835		
030000	0	0
030010	32	52
030012	130	158
030015	242	292
030018	404	417
030020	648	482
030025	1482	505
1841		
070000		0
070150		2
070403	110	104
070500	226	201
070600	382	295
070700	570	380
070800	878	430
070886	1238	432
070898	1312	426
070910	1380	413
070934	1546	401
1842		
070000	0	0
070100	22	23
070172	80	76
070228	102	111
070287	156	152
070400	626	272
070660	1134	316
070833	1930	341
070879	2176	329
1843		
040000	0	0
040052	16	20
040065	74	81
040081	132	152

TIME	STRAIN	STRS
040100	200	236
040130	[illegible]	350
040155	862	467
040170	1146	584
040100	1866	555
040120	2114	562
040135	2752	564
40152	3232	562
040157	3384	560
1844		
040000		
040010	6	14
040021	44	78
040037	96	172
040047	142	243
040063	222	347
040080	286	467
040100	312	572
040106	370	617
040126	854	693
040138	1184	700
040150	1714	640
1845		
040000		
040022	20	
040056	54	79
040077	264	158
040102	466	283
040145	1004	317
040166	1380	443
040182	1756	563
040191	2060	565
040196	2240	558
1846		
070000	0	0
070060	40	36
070102	108	69
070167	232	117
070260	408	193
070308	504	232
070358	598	273
070516	736	315
070508	1232	353
070561	1252	356
070597	1448	348
070630	1618	341
1847		
040000	0	0
040065	64	37
040070	160	112
040075	208	188
040081	320	316
040086	368	401
040092	480	542
040097	560	617
040105	724	775
040110	954	845
040119	1420	882
1848		
040000		
040009	40	32
040014	100	109
040022	164	229
040026	232	316
040031	286	394
040034	316	450
040041	490	580
040049	636	692
040053	1040	758
040059	1040	788
040064	1664	802
040066	1964	774
1851		
040000	0	0
040005	64	72
040007	128	147
040008	190	228
040010	504	317
040011	462	390
040014	770	445
040016	1098	460
040018	1504	451
040020	1940	433
1852		
040000	0	0
040003	56	84
040005	128	177
040007	186	272
040009	254	373
040010	324	473
040012	380	568
040015	540	735
040018	700	854
040020	912	950
040022	1208	1013
040025	1638	1027
040027	2232	979
1855		
070000	0	
070056	26	10
070085	64	33

TIME	STRAIN	STRS
070142	172	74
070200	286	120
070260	398	200
070400	661	317
070500	882	395
070628	1212	469
070800	1712	567
071023	2592	576
071038	2656	574
071051	2732	572
1856		
070000	0	0
070147	62	43
070187	116	80
0.0232	170	115
070268	212	156
070310	258	195
070345	298	232
070383	344	275
070429	412	315
070465	472	356
070510	554	395
070558	646	434
070505	744	467
070563	868	507
070730	1030	543
070800	1226	582
070887	1502	618
070902	1546	625
071105	2306	657
071190	2690	650
071212	2790	642
1857		
070000	0	0
070028	20	14
070047	28	30
070240	198	230
070377	418	355
070438	556	398
070497	606	436
070558	874	466
070700	1262	565
070800	1556	589
070936	2016	625
071080	2584	642
071288	3048	637
1858		
070000	C	0
070020	16	42
070027	30	77
070036	50	120
070042	74	152
070050	98	196
070056	124	232
070062	148	273
070068	180	313
070075	214	355
070081	246	395
070087	282	432
070094	308	470
070100	387	507
070107	400	543
070113	446	581
070120	498	619
070127	546	654
070135	622	693
070143	702	730
070185	1292	831
070210	1840	900
1859		
070000	0	0
070046	88	115
070058	140	183
070068	202	240
070080	236	306
070094	322	464
070108	410	451
070121	512	525
070136	648	595
070147	778	635
070161	922	689
070175	1206	729
070215	2028	782
070226	2314	770
070235	2738	747
1860		
060000	0	0
060019	60	57
060060	476	224
060091	722	405
060120	840	576
060141	946	715
060158	1042	838
060170	1130	918
060183	1244	989
060220	1720	1132
060228	1854	1144
060222	1958	1144
060239	2136	1132
1861		
060000	0	0

TIME	STRAIN	STRS
060009	50	78
060012	120	276
060015	220	457
060020	280	677
060022	370	860
060025	400	1068
060030	490	1327
060033	580	1565
060036	730	1776
1862		
060000	0	0
060007	18	32
060010	44	125
060011	81	252
060014	130	410
060018	210	618
060021	278	812
060024	350	1008
060026	384	1160
060028	462	1300
060031	530	1450
060033	590	1584
060035	732	1730
060037	168	1875
1863		
060000	0	0
060007	196	93
060010	240	212
060012	246	330
060015	280	490
060017	304	466
060019	356	738
060021	414	890
060024	480	1040
060027	566	1220
060029	634	1387
060031	688	1537
060034	756	1691
060036	840	1853
060039	946	2027
1867		
060000	0	0
060013	20	36
060025	244	171
060070	386	328
060192	478	481
060118	574	649
060140	664	808
060160	760	950
060188	926	1133
060212	1148	1280
060233	1408	1354
060240	1572	1363
060250	1884	1339
1868		
060000	0	0
060023	30	60
060040	84	124
060070	162	319
060197	244	510
060125	322	794
060156	428	918
060189	580	1160
060220	810	1356
060235	1042	1400
060241	1250	1385
1869		
070000	0	0
070033	22	23
070058	136	150
070100	308	415
070131	414	620
070153	502	778
070173	608	912
070200	780	1060
070232	1152	1102
070245	1400	1222
070258	1748	1215
070267	2042	1189
1870		
120000	0	0
120100	41	15
120300	57	
120900	93	
121600	124	
123000	160	
134000	310	
135500	343	
140200	356	
141400	385	
142300	405	
142900	417	
153600	613	
160000	691	
160000	690	
162000	670	
171500	671	
1871		
120800	0	0
120900	66	32
121800	288	

TIME	STRAIN	STRS
123000	420	
134000	3778	
135500	4310	
1872		
120500	0	0
120700	156	32
120900	249	
121800	571	
123000	786	
135000	1432	
135500	1672	
140300	1904	
141400	2072	
142100	2080	
123000	2023	
143100	2020	
1873		
100000	0	48
100030	100	
100042	128	
100300	552	
100900	1636	
101300	2780	
101400	3086	
101500	3430	
101600	3780	
101800	4460	
101820	4756	
102200	5982	
102300	6030	
1874		
110000	0	48
110016	60	
110332	524	
110800	1546	
111700	3300	
111900	3882	
112200	4560	
112700	5550	
113052	5940	
113600	6628	
1875		
100000	0	
100028	134	71
100057	276	
100300	1450	
100713	3664	
100900	4654	
101500	7442	
101906	8712	
102200	9354	
1876		
080000	0	
080018	120	71
080026	210	
080052	340	
080070	480	
080083	508	
080116	760	
080162	900	
080200	1120	
080250	1360	
080300	1640	
080620	2880	
080700	3700	
080950	5140	
081150	6800	
081200	7080	
081500	8300	
1877		
120000	0	0
120100	60	17
120150	180	37
120200	780	65
120266	500	70
120300	640	78
120353	890	78
120400	1140	65
1879		
120000		0
120023	24	19
120083	280	85
120100	382	95
120133	614	109
120200	1256	117
120248	1510	117
1880		
120000	0	0
120019	2	11
120040	44	35
120077	174	76
120100	300	95
120140	386	108
120169	880	119
120187	1020	118
120200	1172	116
1881		
010000	0	0
010010	0	7
010020	20	35
010033	70	73

TIME	STRAIN	STRS
010050	238	119
010066	528	157
010082	992	164
010111	1640	157
1882		
120000	0	0
120007	18	10
120011	60	70
120015	114	117
120022	218	191
120030	446	268
120037	768	317
120041	1060	328
120045	1382	331
120050	1704	325
120055	2154	298
1883		
120000	0	0
120010	0	23
120014	0	55
120016	0	77
120019	0	95
120020	20	119
120024	64	141
120025	130	164
120029	226	189
120036	420	230
120041	806	276
120045	970	283
120048	1210	290
120051	1470	284
120065	1700	283
1884		
060000	0	0
060007	10	13
060018	180	157
060027	480	237
060037	980	299
060045	1470	317
060050	1790	317
060054	2150	317
1885		
060000	0	0
060005	18	40
060008	60	56
060010	112	152
060011	166	206
060013	242	267
060015	340	317
060018	466	367
060020	636	409
060022	880	430
060024	1168	431
060026	1494	427
1886		
060000	0	0
060005	20	46
060007	50	114
060010	98	204
060011	160	277
060014	260	340
060016	428	389
060019	782	413
060021	1084	402
060023	1414	388
1887		
060000	0	0
060010	14	20
060011	68	80
060015	164	127
060017	242	180
060019	382	232
060021	524	297
060024	656	347
060026	794	387
060027	984	413
060030	1044	421
060031	1526	416
060033	1860	403
1888		
060000	0	0
060005	8	23
060006	38	83
060008	92	141
060010	190	204
060010	294	258
060012	414	310
060014	572	351
060019	1146	453
060020	1442	460
060021	1764	455
060025	2356	433
1889		
120000	0	
120100	33	9
120200	40	9
121500	56	9
180000	110	9
191000	206	9
243010	274	9
360000	310	9

TIME	STRAIN	STRS
360000	518	9
400000	652	9
430030	750	9
683030	774	9
831230	778	9
860030	852	9
880030	886	9
894530	942	9
912030	976	9
084530	1238	9
153030	1376	9
354530	1712	9
403030	1774	9
560030	1960	9
700030	2080	9
701030	2080	9
710030	2074	9
1890		
120200	0	
120360	28	9
120400	36	9
120500	41	9
124000	104	9
180000	211	9
191000	224	9
243000	286	9
360000	418	9
400000	146	9
403000	622	9
683000	910	9
831200	1136	9
860000	1228	9
880000	1258	9
894500	1284	9
912000	1308	9
964500	1540	9
033000	1662	9
154500	1722	9
163000	1770	9
200000	1910	9
240000	2032	9
241000	2030	9
250000	2026	9
1891		
000000	0	
000100	32	61
003600	158	61
055600	464	61
070600	502	61
122600	660	61
144000	780	61
168000	830	61
188600	882	61
339000	1018	61
432800	1070	61
443600	1126	61
455600	1140	61
466100	1164	61
475600	1194	61
586100	1300	61
1892		
070000	0	502
070025	272	502
070042	456	502
070065	702	502
070100	1148	502
070150	1588	502
070214	2064	502
070250	2308	502
070300	2652	502
070368	3158	502
070400	3626	502
070450	4100	502
070481	4954	502
070492	5744	502
1893		
070000	0	
070031	296	502
070050	462	502
070075	734	502
070100	992	502
070125	1294	502
070150	1632	502
070200	2276	502
070240	2960	502
070269	3656	502
070283	4084	502
1894		
170000	0	0
170027	52	31
170142	610	162
170200	882	237
170260	1160	317
170319	1388	395
170400	1682	588
170488	2026	627
170549	2274	693
170538	2592	772
170700	3050	793
170733	3380	783
1895		

TIME	STRAIN	STRS
120000	0	0
120026	32	32
120057	122	80
120098	240	153
120138	334	233
120171	380	317
120207	450	400
120272	594	446
120308	686	608
120346	820	693
120391	1016	772
120495	1762	838
120510	1912	830
1896		
120000	0	0
120046	16	29
120075	28	80
120113	92	153
120152	162	235
120180	236	316
120227	308	396
120263	398	425
120302	524	558
120337	616	623
120378	776	695
120426	994	773
120487	1334	845
120573	1964	898
120607	2282	887
1897		
120000	0	0
120015	58	69
120022	108	156
120026	162	228
120035	322	393
120040	364	467
120043	446	544
120048	522	619
120055	710	722
120060	918	843
120065	1182	910
120074	1638	985
120081	2188	1012
120085	2474	1004
1898		
120000	0	0
120004	6	37
120009	30	111
120015	72	229
120020	108	306
120024	148	395
120028	192	467
120032	246	547
120035	320	609
120039	394	732
120044	520	778
120050	744	842
120057	1200	910
120064	1690	943
120069	2042	956
120072	2310	957
120077	2716	935
1899		
120000	0	0
120012	48	72
120023	162	227
120035	434	395
120046	816	544
120055	1302	629
120063	1676	664
120075	2676	690
120078	2972	702
120081	3310	672
1900		
120000	0	0
05	0	35
11	172	212
16	266	390
20	396	542
25	538	693
32	980	902
38	1614	1016
49	2970	1100
51	3404	1097
53	4364	980
1901		
120000	0	0
04	28	29
10	148	225
17	336	417
23	472	788
27	602	839
30	742	976
34	898	1128
36	1070	1191
38	1204	1253
42	1614	1345
45	1976	1383
47	2346	1357
1902		
120000	0	0

TIME	STRAIN	STRS
05	6	23
08	30	86
11	82	226
16	146	395
20	200	543
24	284	687
29	450	918
33	586	1054
37	828	1205
43	1448	1348
46	1764	1363
48	2128	1333
1903		
060000	0	0
10	34	41
12	84	78
15	124	157
20	140	308
25	208	459
28	760	735
1904		
120000	0	0
03	26	79
05	38	181
07	80	280
09	118	379
10	162	482
15	270	693
18	410	910
21	588	1083
26	1136	1267
28	1498	1283
30	2032	1225
1905		
120000	0	0
00	4	20
00	16	108
00	32	204
00	50	299
00	86	463
00	112	521
00	144	695
1907		
070000	0	276
34	294	
53	400	
0100	644	
40	880	
75	1098	
0224	1386	
50	1550	
0300	1820	
33	1964	
66	2190	
0400	2580	
52	2754	
0500	3136	
76	3878	
0632	4630	
62	5202	
85	5674	
0700	6012	
1908		
120000		0
25	26	34
50	66	83
0100	196	169
50	402	248
0200	688	311
50	1066	348
0300	1548	356
21	1798	347
1909		
120000	0	0
25	16	35
48	52	75
0100	178	168
50	332	266
0200	428	354
50	780	411
95	1256	419
0305	1374	409
1910		
120000	0	0
33	16	37
53	46	76
0100	152	157
50	330	237
73	440	273
0200	568	293
50	980	335
0312	1532	347
30	1722	343
1911		
120000	0	0
05	14	22
10	66	95
18	152	229
22	210	310
27	280	395
31	350	467

TIME	STRAIN	STRS
35	438	543
40	564	620
49	1050	715
51	1476	517
1912		
120000	0	0
05	32	73
09	80	159
11	114	260
15	232	351
19	350	477
21	482	587
25	660	686
30	952	813
35	1506	895
38	2214	816
1913		
120000	0	0
10	0	0
18	22	71
31	70	183
35	152	313
39	248	471
43	388	617
49	906	734
51	1348	726
1914		
120000	0	0
05	4	13
08	6	70
11	98	86
15	186	287
19	278	421
21	344	523
25	416	613
27	504	734
30	602	840
33	762	1035
36	948	1055
40	1464	1132
43	2156	1043
1915		
120000	0	0
05	72	20
07	150	182
08	242	255
10	352	357
11	446	439
14	510	535
17	542	691
20	776	830
22	996	975
25	1278	1042
26	1624	1033
28	2204	937
1923		
080000	0	1054
41	244	
44	248	
60	314	
76	356	
79	382	
0120	460	
38	494	
55	542	
0204	726	
29	890	
45	1098	
53	1286	
58	1490	
63	1812	
67	2238	
1924		
120000	0	0
50	2	32
95	28	135
0151	64	227
0200	78	405
50	136	540
0300	174	679
50	216	820
0400	266	955
50	322	1093
0500	366	1223
57	450	1307
60	710	1298
65	804	1280
1925		
120000	0	0
50	80	20
0100	284	51
50	520	96
0200	678	147
0300	1202	279
0400	1460	468
0500	1630	683
0600	1874	820
0700	2160	1113
90	2710	1181
0803	2828	1169
11	2920	1167

TIME	STRAIN	STRS
1926		
120000	0	0
50	18	37
0100	64	131
0200	144	363
0300	196	603
0400	582	780
0500	1260	837
10	1414	816
1927		
010000	0	0
27	66	53
51	316	75
82	1060	155
0100	1280	207
43	1956	334
79	2468	423
0211	2842	630
38	3126	722
75	3770	920
79	3926	902
1928		
120000	0	0
20	42	72
37	90	160
50	124	235
61	174	316
82	194	467
92	244	545
0111	289	693
30	344	841
43	364	945
57	430	1050
73	516	1204
83	568	1277
93	638	1353
0211	830	1455
18	968	1463
23	1134	1448
26	1316	1410
1929		
120000	0	0
21	14	33
39	86	118
53	148	190
66	218	276
82	260	395
0102	302	541
33	386	772
51	460	913
70	570	1062
86	716	1171
95	850	1209
0200	924	1223
05	1038	1225
10	1156	1223
29	1682	1200
1930		
120000	0	0
10	44	37
20	244	149
28	360	263
35	484	395
41	602	433
51	780	693
62	1072	908
75	1564	1126
84	2118	1249
90	2552	1260
92	2932	1215
1931		
120000		0
09	10	39
16	82	144
23	136	270
29	182	393
34	226	583
39	260	619
46	318	769
50	368	876
55	410	983
59	480	1086
63	518	1205
68	480	1313
73	518	1495
81	520	1559
85	866	1573
87	1042	1561
90	1300	1523
1932		
120000	0	0
10	26	46
15	70	149
21	116	268
30	168	431
35	198	447
39	232	655
43	268	760
49	318	874
53	366	983
57	436	1092

TIME	STRAIN	STRS
61	534	1205
65	648	1281
72	886	1383
85	1696	1484
88	2098	1487
91	2142	1490
95	2400	1480
0100	2806	1457
1933		
120000	0	0
08	6	50
10	22	123
11	40	202
14	58	293
18	100	465
21	140	622
26	212	905
29	280	975
33	370	1125
36	504	1275
40	768	1414
42	1062	1445
45	1320	1454
46	1662	1461
49	2026	1452
1934		
120000	0	0
13	24	62
15	54	147
19	84	283
24	126	491
27	152	617
30	178	767
33	206	914
39	266	1198
41	304	1348
43	340	1484
47	384	1624
50	424	1775
52	506	1945
1935		
050000	0	0
24	128	318
50	180	
0100	236	
50	288	
0200	336	
50	384	
0300	418	
0500	536	
0600	598	
0800	682	
1000	754	
2000	962	
2600	1146	
3800	1356	
5300	1470	
061700	1894	
091400	3264	
1936		
090000	0	0
36	288	318
61	326	
0100	406	
0200	536	
045050	736	
3700	1754	
125400	3296	
024200	4268	
052290	6776	
1937		
050000	0	0
33	314	182
64	368	
0100	432	
50	474	
0200	510	
0504	624	
053800	2000	
064720	5906	
070485	9500	
070490		
1938		
080000	0	0
30	56	182
50	296	
75	340	
0100	354	
0200	408	
0300	444	
0835	1108	
5315	1480	
100300	2446	
2900	3786	
1957		
140000		0
140100	26	65
140400	38	65
140900	58	65
145500	117	65
162000	177	65

TIME	STRAIN	STRS
080000	546	65
113000	642	65
163000	806	65
081500	1600	65
111500	1704	65
131500	1765	65
160000	1854	65
091500	2277	65
131500	2407	65
151500	2447	65
1958		
140400	0	0
140500	30	65
140900	66	65
145500	162	65
162000	243	65
080000	1079	65
113000	1239	65
163000	1645	65
081500	2762	65
111500	2818	65
131500	3062	65
160000	3217	65
091500	4391	65
131500	5212	65
151500	5814	65
1959		
140600	0	0
140700	3	13
140900	11	13
145500	58	13
162000	84	13
080000	186	13
113000	200	13
163000	226	13
081500	303	13
111500	338	13
131500	350	13
160000	369	13
091500	514	13
131500	566	13
151500	573	13
1960		
140800	0	0
0900	90	13
1100	98	13
5500	152	
162000	170	
080000	274	
113000	288	
163000	312	
081500	410	
111500	450	
131500	460	
160000	488	
091500	702	
131500	762	
151500	798	
153000	796	
1961		
090000	0	0
24	10	13
85	74	73
0140	142	145
83	200	197
0217	254	236
52	324	275
0333	496	360
0415	514	433
70	698	467
0513	1070	463
67	1314	477
0650	1794	473
60	1876	471
1962		
021500	0	0
63	80	13
1600	174	39
40	270	73
97	404	123
1816	706	236
1923	1026	316
2155	2100	395
2240	2554	393
2349	3196	395
73	3350	390
1963		
093000	0	0
25	6	14
74	58	72
3140	130	154
3204	220	233
77	360	316
3367	606	395
3539	1320	467
82	1538	475
3620	1752	475
3659	1970	471
1964		
100000	0	0
50	18	30

TIME	STRAIN	STRS
81	70	79
0107	110	116
33	160	159
83	272	238
0236	486	320
0300	668	402
76	1072	466
0431	1456	493
63	1702	493
77	1820	487
1965		
100000	0	0
61	76	34
83	122	76
0135	230	155
79	262	235
0202	306	275
25	360	317
73	468	398
96	542	435
0321	632	470
48	724	505
82	872	545
0482	1456	620
0525	1782	630
65	2118	621
1967		
080000	0	0
18	34	72
22	64	123
29	126	226
40	228	387
45	278	466
55	420	618
65	624	781
82	1196	913
90	1580	949
95	1932	954
98	2200	939
1968		
080000	0	0
37	28	28
47	94	71
59	206	116
70	328	152
92	606	234
0105	734	280
12	820	317
31	1018	401
47	1220	467
66	1488	543
93	1974	631
0230	2682	676
43	3018	677
51	3214	671
55	3324	663
1969		
080000	0	0
35	62	13
60	300	72
70	390	107
82	484	152
97	576	235
0114	684	320
17	764	397
40	864	470
0235	1294	595
52	1416	697
66	1554	772
84	1752	853
0305	2082	924
41	2826	977
52	3094	973
60	3324	961
1970		
120000	0	0
34	14	27
38	36	103
45	84	236
52	160	384
60	294	545
69	546	703
77	916	772
83	1320	801
86	1532	806
90	1910	799
94	2244	780
1971		
120000	0	0
13	46	70
19	92	148
23	122	229
28	158	312
32	196	392
36	240	467
40	292	545
43	342	616
47	448	739
51	564	766
57	882	840
68	1472	912

TIME	STRAIN	STRS
72	1824	913
75	2122	903
79	2394	888
1972		
120000	0	0
12	8	27
15	26	69
20	58	151
24	94	226
29	130	313
33	166	390
37	204	466
40	252	543
43	304	615
47	372	733
51	472	770
55	622	839
60	808	907
66	1114	983
75	1572	1055
86	2296	1136
96	2966	1163
0100	3244	1162
03	3504	1151
1973		
120000	0	0
07	20	53
10	62	140
11	102	227
14	132	301
16	170	387
18	216	455
20	274	543
25	432	648
27	570	764
30	794	839
34	1086	909
41	2152	968
44	2652	950
1974		
120000	0	0
05	30	53
08	82	154
12	168	320
14	216	384
15	232	437
17	266	491
19	312	551
20	358	603
22	448	649
25	582	770
28	774	838
32	1238	908
37	1884	933
39	2142	947
41	2496	967
45	2964	988
49	3294	1004
51	3916	1007
53	4304	992
1975		
120000	0	0
09	52	70
25	288	327
27	358	467
30	462	591
36	772	768
42	1370	903
49	2222	971
51	2600	961
53	3040	926
1976		
120000	0	0
19	32	73
21	84	175
25	164	333
26	254	445
31	596	708
35	948	817
37	1290	869
40	1778	905
41	2162	923
45	2882	919
48	3512	856
1977		
120000	0	0
08	2	20
10	34	49
12	74	193
15	230	368
18	324	456
20	462	544
25	942	680
27	1318	730
29	1766	763
32	2232	767
34	2780	731
36	4102	449
1978		
120000	0	0
04	16	49

TIME	STRAIN	STRS
06	54	146
08	92	230
10	146	335
11	192	413
12	244	473
15	420	629
17	510	693
19	694	763
21	1208	804
29	2392	902
31	2868	901
33	3372	877
1988		
1988		
120000	0	
22	382	356
38	612	
60	866	
78	1026	
0100	1166	
30	1342	
50	1444	
0200	1662	
50	1836	
0300	1984	
53	2140	
0400	2264	
0500	2494	
0600	2688	
0710	2888	
0800	3014	
0900	3182	
1000	3312	
1500	3902	
1989		
020000	0	
34	642	356
50	866	
75	1128	
0125	1464	
0300	2140	
0500	2676	
0725	3130	
0950	3452	
1015	3534	
1102	3644	
1400	3986	
2200	4792	
3041	5808	
1990		
040000	0	0
50	4	26
0100	22	69
50	38	107
0200	88	137
0250	160	166
0300	240	197
0400	536	285
0500	946	357
0600	1436	397
0700	2000	413
0800	2650	440
1991		
040000	0	0
0100	104	95
0200	414	198
0300	764	287
0400	1314	362
0500	1778	419
0600	2304	451
0700	2880	474
0800	3430	506
0900	4030	531
1000	4652	550
1100	5286	537
1200	5916	533
1992		
120000	0	0
52	8	17
97	40	78
0134	90	117
0230	256	236
0300	366	309
0400	962	393
0500	1442	449
0600	1984	474
34	2400	465
1993		
120000	0	0
78	54	28
0103	218	130
30	496	232
55	904	318
72	1232	360
91	1624	397
0247	2834	457
65	3324	467
81	3742	464
90	4000	460
1994		
120000	0	0

TIME	STRAIN	STRS
12	2	33
20	16	72
33	42	152
46	100	237
60	194	325
73	314	397
90	526	467
0111	826	546
37	1282	620
65	1856	665
80	2276	673
91	2596	661
1995		
120000	0	0
71	12	6
0162	74	77
0264	196	156
0328	308	200
0419	554	240
90	802	255
0571	1176	253
1996		
010000	0	0
0100	70	22
0261	464	79
0405	784	149
0720	1982	204
51	2146	201
1997		
120000	0	0
60	50	35
0120	162	80
0207	260	147
0315	478	215
0405	774	243
50	970	243
0550	1444	233
1998		
120000	0	0
35	42	17
0120	202	132
80	396	210
0211	510	247
46	674	276
89	976	287
0311	1166	283
1999		
120000	0	0
53	48	25
0117	194	103
0200	476	204
76	936	246
0311	1230	242
2000		
120000	0	0
40	36	66
69	84	110
0118	192	185
53	314	240
0216	648	276
55	966	270
2014		
120000	0	0
21	10	19
34	38	75
50	88	157
62	146	231
77	238	308
93	376	397
0111	586	471
33	940	522
40	1154	522
49	1406	506
2015		
120000	0	0
20	22	16
38	76	95
55	158	187
70	262	275
95	318	396
0125	996	469
35	1222	467
39	1340	468
2016		
120000	0	0
33	14	40
38	22	72
51	66	149
60	110	203
66	136	232
73	186	273
81	252	317
98	414	397
0108	722	433
24	796	469
30	948	472
36	1140	459
2017		
120000	0	0
08	20	37
11	72	74

TIME	STRAIN	STRS
15	192	113
18	280	151
25	432	231
30	562	313
35	650	392
39	752	500
44	894	553
49	1044	617
57	1444	693
59	1658	685
61	1882	667
2018		
120002	0	0
09	14	17
14	60	90
18	134	149
24	264	228
30	642	313
38	738	394
45	1436	412
49	1624	393
2019		
120000	0	0
20	50	35
25	124	83
30	216	150
35	312	229
40	400	313
45	486	394
50	586	467
54	730	544
60	984	615
66	1390	637
70	1666	626
72	2006	598
2020		
120050	0	0
56	24	34
58	84	111
60	144	204
61	236	314
64	356	423
65	456	516
68	614	605
70	804	762
71	1082	725
73	1474	725
75	2030	675
2021		
120000	0	0
18	6	44
20	40	141
23	106	292
25	152	382
26	218	469
28	340	563
30	464	654
32	710	724
35	1094	754
36	1506	747
39	2032	714
2022		
120000	0	0
03	26	43
07	76	160
08	112	252
10	164	345
12	246	474
14	344	564
2023		
120000	0	0
31	110	204
47	146	204
0124	244	204
0200	324	204
50	366	204
0302	414	204
50	456	204
0400	492	204
0500	616	204
0600	664	204
1615	828	204
43	1256	204
60	1660	204
2024		
120000	0	0
30	294	204
40	320	204
0155	558	204
0200	630	204
50	668	204
0300	694	204
0600	930	204
0800	1232	204
0900	1604	204
50	2042	204
1000	2616	204
2025		
120000	0	0
23	20	06
0192	682	39

TIME	STRAIN	STRS
0300	1208	36
40	1398	36
2026		
120000	0	0
29	8	6
51	38	12
76	84	19
0120	208	36
75	448	40
0200	572	39
2027		
120000	0	0
39	46	7
60	118	22
80	196	35
0119	390	50
57	658	53
74	796	51
2028		
120000	0	0
37	16	10
60	68	30
78	126	44
0103	224	62
68	666	73
81	760	72
2029		
120000	0	0
07	0	4
10	14	18
12	46	41
28	150	72
35	242	90
45	386	108
61	700	121
70	872	131
83	1226	130
91	1446	126
2030		
120000	0	0
26	22	9
34	82	28
42	184	52
51	270	77
61	382	100
75	618	126
86	866	136
0100	1176	133
15	1548	134
46	2260	130
2031		
120000	0	0
04	4	8
07	0	37
09	12	55
11	20	83
14	74	103
17	132	129
20	220	149
23	266	174
27	556	198
31	802	210
34	1006	210
38	1322	207
40	1504	203
2032		
120000	0	0
05	0	13
07	18	43
10	42	71
12	88	106
15	160	148
18	240	166
21	434	194
24	596	198
26	752	196
39	966	188
2033		
120000	0	0
05	14	40
07	46	100
08	92	173
10	180	243
11	320	293
12	542	320
14	864	322
15	1222	317
18	1774	304
2034		
120000	0	0
05	16	28
07	62	94
08	156	150
15	848	309
16	1238	307
19	1678	293
2035		
000000	0	0
50	200	39
0100	310	39
0200	440	39

TIME	STRAIN	STRS
0300	590	39
0400	704	39
1000	1510	39
1700	2210	39
3000	3500	39
4400	4704	39
6000	6270	39
013000	8340	39
024000	9240	39
2036		
120000	0	0
31	2	1
35	6	12
37	40	44
40	146	123
41	250	164
45	528	224
47	810	243
49	1096	244
0150	1398	237
2037		
120000	0	0
05	20	15
08	30	63
10	110	112
12	228	160
15	416	208
19	718	255
21	835	275
24	1378	276
26	1718	263
2045		
070005	0	0
77	14	13
0114	30	34
0214	112	102
0320	202	203
66	240	235
0411	282	277
54	318	316
0539	358	397
78	420	436
0624	454	469
0708	540	547
0800	624	623
93	722	693
1005	918	770
88	1100	811
1178	1380	825
1200	1442	823
2046		
080000	0	0
46	10	33
0130	56	116
63	74	151
0250	136	231
0341	214	317
0428	298	397
0626	556	545
0761	816	621
0952	1334	671
1018	1564	665
2047		
080000	0	0
0114	58	81
0314	182	280
0510	312	467
0677	448	628
0865	678	778
0965	832	838
1100	1086	925
1228	1366	970
75	1504	980
85	1530	974
2048		
120000	0	0
28	48	37
49	46	153
65	120	275
0102	186	551
37	264	817
68	362	1046
91	468	1224
0221	636	1443
33	754	1503
40	870	1523
45	1014	1516
49	1170	1487
2049		
120000	0	0
19	32	39
29	116	52
49	178	153
70	424	277
86	498	397
0109	584	545
31	680	693
0251	770	841
72	874	986
95	994	1137
0320	1210	1277

TIME	STRAIN	STRS
34	1400	1314
38	1500	1311
43	1696	1283
2050		
120000	0	0
18	14	37
30	36	78
45	74	166
65	126	323
84	162	474
0103	196	619
22	238	772
42	288	927
60	352	1069
80	440	1209
0202	608	1350
11	762	1372
15	862	1363
2051		
100000	0	0
11	24	49
13	72	156
16	118	303
20	180	519
22	218	717
25	270	835
27	320	998
30	380	1230
32	446	1339
35	520	1489
38	666	1683
40	864	1830
42	1154	1906
44	1678	1943
2052		
100000	0	0
09	8	40
12	44	198
15	74	340
18	112	534
21	154	770
24	184	917
25	212	1043
28	240	1196
30	266	1310
31	300	1484
34	338	1622
35	372	1768
38	420	1903
40	470	2063
41	530	2185
44	610	2324
46	758	2393
48	1022	2507
2053		
100000	0	0
11	10	9
18	10	62
20	10	180
23	100	317
26	130	504
30	220	708
35	300	1061
40	404	1426
42	368	1635
46	580	1840
49	710	2030
50	944	2208
55	1700	2216
2060		
080000	0	0
70	30	9
0133	100	32
0353	220	236
0514	276	431
0628	326	539
0769	400	693
0851	470	772
0983	750	823
91	800	817
2061		
080000	0	0
20	4	20
69	24	73
0400	172	449
0723	394	770
0849	680	829
0961	746	823
2062		
080000	0	0
10	20	8
48	32	49
82	50	73
0302	152	317
0439	224	467
0653	424	675
0847	930	744
0861	1006	737
2063		
070000	0	0
88	26	33

TIME	STRAIN	STRS
0106	86	115
44	190	340
74	264	551
0205	368	772
18	466	918
52	594	1054
80	826	1204
0305	1212	1281
12	1418	1269
2064		
070000	0	0
89	38	72
0120	160	238
51	286	506
68	370	543
0202	542	772
26	680	920
51	840	1062
78	1068	1204
0310	1464	1353
30	1792	1397
36	1942	1398
2065		
070000	0	0
12	16	57
26	40	131
42	78	236
53	100	313
77	148	485
95	190	637
0114	232	770
33	290	903
54	370	1061
75	472	1204
95	602	1353
0218	784	1494
45	1080	1637
76	1628	1736
2066		
070000	0	0
11	8	37
14	38	130
37	122	272
39	142	373
43	202	619
45	232	766
48	280	965
50	320	1126
53	372	1411
55	420	1599
59	480	1843
61	590	2048
63	634	2192
2067		
060000	0	0
11	26	29
14	120	136
16	220	265
20	332	420
23	434	616
27	502	777
30	560	980
33	630	1225
36	704	1503
40	760	1722
45	846	2053
47	914	2205
49	1002	2386
2075		
080000	0	0
61	22	32
0115	90	72
0364	1002	108
0410	1220	102
2076		
080000	0	0
15	0	3
40	18	20
74	52	47
0110	98	74
0215	370	126
0308	712	117
2077		
100000	0	0
10	10	25
20	38	69
29	74	109
36	122	145
45	182	190
56	276	243
68	408	289
80	572	323
95	704	343
0107	1360	335
2078		
100000	0	0
32	10	15
42	20	70
50	36	108
57	68	155
72	144	236

TIME	STRAIN	STRS
80	224	275
81	348	317
0100	524	331
08	648	335
19	906	327
2079		
100000	0	0
07	26	43
10	62	125
11	116	226
15	224	375
18	380	525
21	542	703
25	786	829
27	1078	903
30	1468	926
32	2150	886
2080		
100000	0	0
05	6	44
06	8	106
08	50	197
10	9[illegible]	299
12	35[illegible]	473
15	416	509
16	282	611
18	356	704
20	470	808
22	616	890
25	836	954
27	1192	983
2087		
100000	0	0
20	148	227
34	252	227
52	452	227
75	726	227
0100	1058	227
10	1216	227
19	1358	227
40	1704	227
59	1964	227
0200	2652	227
33	3148	227
61	3690	227
0300	4402	227
43	5338	227
0400	5998	227
30	6422	227
69	6934	227
0500	7334	227
30	7960	227
65	8376	227
0600	8774	227
33	9172	227
2088		
100000	0	0
39	100	94
60	144	94
80	180	94
0100	222	94
0458	776	94
1262	2102	94
1778	3570	94
2442	4796	94
3300	5870	94
112824	6956	94
121500	7272	94
2090		
020000	0	0
43	0	13
0102	132	50
0410	746	287
48	830	317
0510	1000	356
67	1194	352
78	1246	359
2091		
020000	0	0
53	56	11
0293	510	204
0422	784	304
81	976	330
0511	1098	334
0619	1126	331
2092		
020000	0	0
50	5	7
0108	146	19
0391	736	239
0570	1246	341
92	1306	341
2093		
020005	0	0
05	0	0
39	50	13
76	250	37
0300	1240	267
50	1450	317
2094		
020000	0	0

TIME	STRAIN	STRS
29	34	22
57	106	78
0185	500	286
0255	830	367
92	1348	356
2095		
020005	0	0
50	60	35
74	104	77
0120	200	157
63	286	213
0221	540	316
0305	1040	387
16	1150	386
2096		
120000	0	0
01	8	31
12	70	113
22	108	163
36	260	233
50	316	319
65	412	399
81	560	470
95	772	509
0102	956	513
09	1136	507
2097		
120000	0	0
15	12	23
30	68	87
44	134	148
57	210	230
71	290	317
83	376	397
98	506	465
0119	818	531
24	940	530
39	1108	514
2098		
120000	0	0
20	16	25
33	50	74
41	90	113
50	138	160
57	170	195
65	222	241
78	290	315
91	380	398
0108	506	477
23	674	546
41	1034	574
58	1266	551
2099		
120000	0	0
06	6	31
14	82	149
18	122	227
22	178	314
26	204	393
30	256	464
34	326	540
38	424	616
43	618	694
48	864	712
51	1214	741
2100		
010000	0	0
03	22	41
07	62	99
12	132	188
15	174	231
20	244	319
24	314	397
28	394	467
33	472	543
38	634	618
46	1076	687
48	1286	677
51	1618	644
2101		
010000	0	0
05	0	47
10	44	146
16	90	270
20	166	353
26	206	467
30	324	549
36	448	623
41	592	665
45	1168	633
2102		
120000	0	0
10	2	[illegible]
11	60	79
15	118	185
19	184	308
23	290	467
27	438	617
33	774	772
35	1084	781
37	1564	719

TIME	STRAIN	STRS
2103		
000000	0	0
0100	2200	32
000200	2420	32
000700	2710	32
000900	2760	32
002500	3050	32
014500	3560	32
094000	3980	[illegible]
200000	4250	32
270000	4680	[illegible]
2104		
000000	0	0
000100	1360	32
000600	1780	32
000800	1830	32
002400	2100	32
014400	2620	32
094000	3080	32
200000	3378	32
270000	3650	32
2105		
000000	0	0
000100	1540	32
000300	1750	32
001900	2292	32
023900	3070	32
093600	3580	32
195400	3906	32
265400	4124	32
2107		
120000	0	
30	132	118
50	148	
01[illegible]	176	
0300	226	
0400	248	
0900	314	
011500	818	
014500	716	
03147	1214	
085825	1696	
071160	2236	
071200	2184	
3300	2148	
2116		
090000	0	0
11	2	72
14	48	190
16	88	344
19	140	473
20	220	622
24	362	761
26	794	830
28	1378	736
30	2442	483
2117		
090050	0	0
60	46	151
61	168	252
63	130	367
65	190	480
66	274	599
68	376	700
70	554	798
72	978	805
74	1986	570
2118		
100000	0	0
00	12	51
00	56	146
00	120	253
00	198	369
00	308	487
00	450	613
00	608	713
00	852	785
00	1208	802
2119		
120000	0	0
07	38	106
11	126	250
15	238	414
19	344	546
22	482	658
27	732	772
30	1088	802
31	1662	722
2120		
120000	0	0
11	46	[illegible]
14	116	176
17	196	[illegible]
20	298	502
29	732	617
33	1120	703
36	1596	693
2121		
120000	0	0
33	0	09
50	0	20

TIME	STRAIN	STRS
0100	10	49
53	42	79
0111	218	157
0400	398	197
0500	670	223
0659	862	226
83	964	223
2122		
120000	0	0
55	32	34
40	128	90
0156	144	101
0234	254	155
0350	478	218
0400	618	235
53	780	240
59	806	239
2123		
120000	0	0
27	16	08
45	36	20
0238	380	120
90	476	149
0340	588	173
0400	746	200
51	906	209
0500	1096	211
10	1134	204
2124		
120000	0	0
17	12	15
27	20	32
0234	704	266
61	928	260
2125		
120000	0	0
10	0	0
38	26	5
84	130	72
0130	262	126
0200	534	195
64	872	230
88	1054	231
94	1100	228
2126		
120000	0	0
14	6	21
50	52	81
0100	182	141
50	440	167
80	680	164
2127		
120000	0	0
10	18	24
20	56	70
29	106	117
45	200	198
53	274	243
68	432	317
80	588	355
92	832	365
96	914	363
2128		
120000	0	0
11	14	21
38	60	109
49	104	152
64	120	211
71	148	241
90	152	316
0102	362	360
18	566	395
27	752	403
32	1086	397
2129		
120000	0	0
40	214	37
65	606	74
69	786	113
83	962	157
0104	1228	231
37	1616	317
52	1946	356
67	2262	363
72	2390	358
2130		
120000	0	0
05	6	19
10		85
17	36	175
24	170	280
30	384	378
38	670	467
47	1142	524
51	1480	514
2131		
120000	0	0
03	4	10
07	36	66
12	110	150
18	212	256

TIME	STRAIN	STRS
21	266	315
27	364	394
33	528	467
40	834	543
50	1478	577
52	1756	563
56	2072	551
2132		
120000	0	0
08	4	35
11	26	103
18	74	227
22	134	317
33	394	667
38	692	500
41	930	495
45	1252	493
2133		
120000	0	0
00	22	39
00	104	140
00	170	229
00	222	334
00	278	441
00	410	596
00	726	750
00	1174	754
00	2006	647
2134		
120000	0	0
07	0	0
08	36	99
10	96	225
12	160	343
15	242	459
17	366	562
19	618	646
21	1062	630
2135		
120000	0	0
03	12	52
06	52	159
08	104	274
10	196	402
13	422	521
15	790	522
17	1256	513
2136		
120000	0	0
06	2	23
08	34	94
10	86	170
12	118	271
15	170	354
18	246	470
20	364	557
23	660	610
2137		
120000	0	0
03	20	37
07	44	148
11	126	314
15	156	432
19	436	540
23	894	611
27	1494	617
2138		
120000	0	0
00	4	20
00	44	93
00	116	185
00	184	283
00	264	383
00	368	493
00	572	616
00	920	689
00	1316	705
00	1878	674
2147		
060000	0	0
24	6	24
62	42	72
0102	86	110
44	158	145
80	238	157
0230	400	193
67	564	180
2148		
120000	0	0
42	30	5
60	62	11
0268	626	125
0304	728	143
58	940	137
72	998	131
2149		
120000	0	0
39	42	14
63	76	30
0110	152	70
47	206	97

TIME	STRAIN	STRS
86	304	127
0240	428	153
0317	738	167
30	800	163
2150		
120000	0	0
18	8	10
47	72	53
61	114	77
90	220	117
0127	394	150
79	740	173
93	860	165
2151		
060000	0	0
28	36	22
54	96	57
92	214	112
0121	296	150
51	398	191
0200	646	236
26	830	238
38	936	236
2152		
060000	0	0
22	0	12
68	96	84
96	200	134
0111	260	150
50	480	176
70	644	176
77	698	173
2153		
060000	0	0
10	12	30
17	48	76
27	104	127
32	144	149
52	382	232
70	746	261
94	1144	251
2154		
060000	0	0
17	60	37
24	86	60
40	220	116
51	306	153
65	458	192
80	664	236
0100	1052	258
07	1236	252
2155		
060000	0	0
08	10	9
17	24	49
30	96	109
39	142	157
53	248	230
60	316	270
75	520	316
80	612	325
91	930	319
2156		
060000	0	0
00	10	13
00	34	79
00	86	133
00	94	165
00	224	227
00	272	274
00	342	317
00	410	353
00	576	397
00	794	423
00	954	426
00	1148	424
00	1404	417
2157		
060000	0	0
07	0	1
10	66	60
20	334	167
27	610	227
38	1062	317
43	1396	334
47	1716	323
2158		
060000	0	0
10	8	12
13	20	80
15	54	130
19	82	194
21	116	228
26	204	308
35	528	395
37	716	397
39	898	389
2159		
080000	0	0
11	4	37
13	34	120

TIME	STRAIN	STRS
15	78	254
18	146	331
20	262	447
21	466	527
23	830	519
2160		
080000	0	0
14	52	102
17	144	255
19	228	353
21	342	436
23	570	516
25	1042	483
2161		
080000	0	0
10	10	53
12	54	188
14	112	296
16	202	400
18	320	476
20	604	524
22	1170	505
2162		
080000	0	0
04	44	37
07	148	126
10	256	187
12	400	264
15	564	353
18	730	433
20	980	489
23	1396	477
2163		
080000	0	0
05	14	36
07	50	93
10	138	172
11	200	228
14	302	319
16	400	390
20	760	456
21	1050	439
2164		
080000	0	0
09	14	51
13	248	200
15	354	269
18	548	310
21	780	370
24	1092	397
25	1364	386
2165		
0000	0	55
01	680	
02	754	
37	1674	
0147	2268	
1262	3930	
1317	4134	
1407	4790	
1737	4878	
1992	5150	
2166		
0000	0	55
01	280	
04	370	
40	572	
0150	590	
1265	950	
1320	976	
1410	1010	
1740	1116	
1995	1170	
2176		
070000	0	0
0250	24	4
0335	130	53
86	204	102
0464	370	157
0534	530	197
0607	760	228
80	1044	228
0760	1418	220
2177		
070000	0	0
33	20	4
68	70	13
0355	902	126
0450	1220	153
0623	1838	193
0742	2292	207
50	2328	204
2178		
070000	0	0
58	42	13
86	86	31
0325	598	177
0433	986	203
81	1276	187
0548	1560	180
2179		

TIME	STRAIN	STRS
120000	0	0
0193	136	77
0260	266	109
0450	796	195
0500	950	207
82	1242	217
97	1312	221
2180		
120000	0	0
30	18	29
45	48	60
58	70	87
70	108	113
92	184	153
0170	276	193
57	498	232
0200	816	239
10	922	236
2181		
120000	0	0
36	62	50
59	120	92
93	240	150
0139	426	213
58	510	233
0200	828	257
25	1018	257
38	1144	253
2182		
120000	0	0
51	58	40
83	142	86
0102	216	126
41	350	164
0231	886	244
92	1390	247
0300	1458	245
2183		
120000	0	0
30	36	41
53	86	87
91	206	151
0122	338	190
70	608	230
0205	886	237
18	994	235
2184		
120000	0	0
10	0	3
30	30	43
39	62	71
50	156	111
59	200	149
68	286	192
77	366	233
96	566	320
0109	726	364
30	1140	386
42	1706	363
2185		
120000	0	0
20	62	87
28	114	126
41	222	185
52	344	241
71	616	317
91	1014	345
96	1142	342
2186		
120000	0	0
05	10	23
10	22	73
16	120	134
21	256	192
34	666	327
40	962	384
44	1222	389
47	1510	374
2187		
120000	0	0
05	6	20
09		93
16	42	148
23	224	230
31	500	313
37	806	370
45	1284	394
59	1642	378
2188		
120000	0	0
09	14	10
13	86	72
20	184	163
23	262	224
29	390	314
35	598	394
41	916	433
46	1462	423
49	1638	393
2189		
120000	0	0

TIME	STRAIN	STRS
05	4	26
07	34	113
08	66	204
10	112	296
11	164	385
12	242	465
14	356	536
15	466	579
17	1050	508
2190		
120000	0	0
06	2	36
08	32	55
10	86	268
11	152	377
15	390	530
17	724	560
19	1308	468
2191		
120000	0	0
04	14	18
07	66	87
08	168	148
10	298	213
11	418	277
12	550	343
14	714	406
17	1027	468
2192		
120002	0	0
11	38	60
13	70	140
15	112	227
17	164	307
20	246	494
23	370	472
25	560	520
27	868	518
29	1308	417
2193		
120000	0	0
05	0	0
08	20	28
10	100	87
12	178	152
14	244	231
17	310	322
19	386	393
21	512	461
24	758	506
27	1104	492
2194		
120000	0	0
07	2	17
11	20	37
18	70	72
37	225	152
41	294	172
48	376	199
57	502	236
69	696	273
85	892	317
0100	1288	333
12	1544	324
2195		
120000	0	0
06	6	7
08	72	73
11	162	149
13	246	232
16	330	314
29	450	491
0125	1046	533
28	1518	494
2209		
120000	0	0
120027	14	7
120064	98	37
120100	170	44
120167	340	72
120213	488	87
120300	820	102
120350	1040	119
120361	1088	103
2210		
120000	0	0
120069	50	44
120104	104	66
120150	208	97
120212	406	116
120297	796	129
120305	824	123
2211		
120000	0	0
120075	122	31
120195	458	78
120270	672	110
120300	780	117
120378	1090	133
120439	1356	126
120448	1404	122

TIME	STRAIN	STRS
2212		
120000	0	0
120036	80	31
120058	166	51
120125	506	113
120140	586	133
120192	916	166
120240	1290	173
120260	1408	164
2213		
120000	0	0
120017	36	10
120124	686	79
120201	1336	135
120265	1706	137
120328	2240	137
120341	2358	135
2214		
120000	0	0
120013	18	4
120061	196	53
120197	1026	157
120241	1430	146
120248	1488	144
2215		
120000	0	0
120075	134	32
120178	268	100
120267	1086	123
120298	1344	117
2216		
120000	0	0
120010	14	17
120018	60	47
120031	182	84
120049	424	149
120062	660	200
120083	1088	216
120089	1242	219
120102	1576	214
2217		
120000	0	0
120022	20	21
120038	118	77
120047	200	115
120059	326	156
120071	520	192
120090	960	206
120096	1152	200
2218		
120000	0	0
120018	102	29
120037	340	80
120050	506	120
120061	680	154
120079	1020	191
120091	1374	196
120097	1460	193
2219		
120000	0	0
120009	14	13
120011	50	32
120016	272	72
120020	446	108
120025	596	151
120029	732	197
120031	842	231
120033	1144	276
120040	1318	284
120042	1504	283
120047	1780	277
2220		
120000	0	0
120033	16	37
120037	92	111
120040	170	152
120043	290	191
120048	594	214
120051	842	211
120054	1106	197
2221		
120000	0	0
120006	24	10
120008	56	36
120011	124	73
120014	198	112
120017	278	147
120021	396	194
120024	492	231
120028	688	277
120032	884	301
120039	1364	310
120042	1600	310
120047	1968	304
2222		
120000	0	0
120005	22	22
120007	72	93
120008	160	160
120010	318	217
120011	570	253
120013	916	259
120015	1418	227
2223		
120000	0	0
120005	24	9
120007	70	109
120009	166	198
120010	298	261
120011	610	277
120014	1052	245
2224		
120000	0	0
120017	36	39
120019	142	103
120021	300	167
120022	510	220
120026	1112	247
120028	1518	214
2225		
120005	0	0
120016	44	39
120018	96	107
120020	164	166
120022	348	205
120024	732	214
2226		
120000	0	0
120007	34	24
120010	94	81
120011	168	152
120014	292	229
120018	610	305
120020	888	347
120023	1466	247
2227		
120000	0	0
120008	18	14
120011	80	70
120016	470	148
120021	1050	184
120024	1518	161
2228		
120000	0	0
120029	14	20
120047	86	73
120050	134	106
120078	282	131
120085	508	232
120088	714	253
120091	960	253
120097	1422	233
2229		
0000	0	55
0100	120	55
0300	180	55
4500	366	55
022000	208	55
095000	1164	55
240000	1293	55
314000	1325	55
450000	1626	55
490500	1761	55
513000	1903	55
573000	2069	55
700000	2226	55
2231		
120000	0	0
120020	10	13
120025	12	36
120033	54	79
120041	86	120
120047	120	157
120052	142	190
120059	196	237
120065	230	275
120070	266	317
120079	338	356
120086	406	395
120094	480	435
120102	594	469
120122	834	545
120146	1258	625
120176	1956	659
120188	2292	648
2232		
120000	0	0
120020	16	20
120040	92	120
120048	134	155
120059	208	236
120072	310	317
120088	462	396
120107	670	469
120132	1056	546
120168	1764	619
120215	2894	653
120237	3436	647
2244		
120000	0	0
120067	24	47
120085	32	60
120139	80	96
120206	170	133
120368	514	191
120405	620	203
120454	762	196
120496	900	191
2245		
120000	0	0
120075	38	37
120215	238	113
224574	344	137
120274	344	137
120337	480	158
120422	710	170
120516	1020	172
120526	1038	167
2246		
120000	0	0
120169	24	83
120241	346	117
120302	468	140
120393	670	167
120490	936	183
120550	1120	186
120570	1186	183
2247		
120000	0	0
120067	46	19
120193	218	61
120261	320	90
120339	446	114
120439	646	150
120503	802	166
120554	932	173
120587	1028	174
120655	1216	171
120668	1244	166
2248		
120000	0	0
120062	70	13
120140	412	49
120202	648	131
120255	876	182
120308	1108	232
120366	1470	254
120397	1732	245
2249		
120000	0	0
120038	60	42
120062	126	77
120150	454	184
120192	732	207
120225	970	206
2250		
120000	0	0
120019	24	17
120078	160	109
120094	214	131
120120	314	160
120172	596	205
120209	864	210
120237	1084	207
2251		
120000	0	0
120040	56	54
120065	126	91
120083	198	111
120150	532	169
120212	1014	173
2252		
120000	0	0
120003	0	23
120013	30	27
120029	186	83
120036	274	106
120051	466	155
120080	602	203
2253		
120000	0	0
120018	16	13
120030	68	70
120061	318	213
120075	516	245
120096	984	269
120006	1244	254
2254		
120000	0	0
120009	0	14
120018	44	56
120030	106	112
120039	192	153
120049	294	191
120060	458	241
120073	700	248
120083	984	245
120088	1110	239
2255		
120000	0	0
120018	36	41
120020	46	70
120023	108	114
120025	148	145
120028	212	190
120031	304	232
120034	382	270
120038	524	314
120041	778	340
120045	978	333
2256		
120000	0	0
120010	6	0
120016	18	26
120020	46	77
120024	100	155
120029	180	236
120033	286	316
120037	472	464
120040	600	493
120043	826	390
120047	1228	358
2257		
120000	0	0
120025	30	22
120028	74	52
120032	158	128
120037	246	186
120039	326	232
120042	406	269
120046	528	315
120052	706	355
120054	1134	345
2258		
120000	0	0
120011	16	23
120013	82	89
120014	142	167
120018	252	329
120019	362	409
2259		
120009	0	0
120021	38	53
120023	120	168
120025	186	250
120027	278	327
120028	482	369
2260		
120000	0	0
120004	54	55
120006	108	123
120008	172	203
120010	274	267
120011	422	339
120013	792	382
120014	810	417
120016	1158	408
2261		
120000	0	0
120005	20	34
120010	120	190
120012	178	258
120013	250	316
120015	330	374
120017	472	412
120019	730	412
120021	1186	348
2262		
120000	0	0
120006	14	6
120010	82	63
120011	156	119
120014	240	187
120016	314	243
120018	470	316
120020	612	374
120023	844	394
120025	1446	389
2263		
120000	0	0
120018	20	13
120020	68	71
120022	96	133
120025	152	199
120027	236	263
120029	338	317
120031	534	370
120033	760	387
120035	1104	365
2276		
120000	0	0
120024	150	72
120048	282	72
120081	530	72
120100	658	72
120134	922	72
120224	1568	72
120251	1782	72
120300	2174	72
120400	2916	72
120550	4034	72
120654	4756	72
120673	4898	72
120700	5098	72
120752	5408	72
121000	6624	72
2277		
120000	0	0
120018	176	72
120025	228	72
120051	402	72
120171	1396	72
120286	2452	72
120431	3868	72
120471	4302	72
120539	4954	72
120575	5268	72
120600	5484	72
2278		
120000	0	0
120012	4	6
120022	8	27
120055	30	60
120072	34	78
120100	50	109
120157	92	164
120200	116	
120300	200	307
120351	242	357
120400	300	399
120600	460	469
120600	790	484
120610	832	479
2279		
120000	0	0
120024	0	07
120052	20	23
120127	84	80
120205	146	150
120416	360	342
120451	384	384
120500	456	417
120600	632	469
120663	894	472
120673	940	469
2280		
120000	0	0
120093	120	52
120132	184	78
120200	280	129
120251	342	169
120300	390	216
120444	524	368
120500	592	393
120600	752	463
120676	950	491
120722	1108	493
120743	1196	487
2281		
120000	0	0
120107	66	33
120156	158	67
120300	258	90
120305	454	157
120400	604	231
120500	754	308
120600	930	383
120800	1508	441
120847	1736	420
120853	1766	414
2282		
120000	0	0
120039	14	13
120070	70	61
120134	178	173
120200	288	314
120242	354	393
120318	558	573
120372	870	568
120385	988	562
2283		
120000	0	0
120041	36	38
120077	102	110
120100	134	153
120186	332	309
120253	534	409
120300	744	457
120350	1100	469
2284		
120000	0	0
120036	22	21
120076	110	79
120170	246	255
120252	368	423
120293	468	495
120330	590	548
120387	988	570
2286		
120000	0	0
120015	10	45
120028	34	120
120050	122	244
120078	150	429
120085	182	473
120097	350	551
120108	424	625
120121	564	703
120141	920	747
120147	1092	731
2287		
120000	0	0
120045	10	35
120105	92	223
120137	170	414
120156	448	510
120186	1006	599
120193	1224	580
2288		
120000	0	0
120020	10	35
120033	42	117
120049	78	235
120072	202	395
120092	324	503
120117	586	625
120126	902	634
120131	944	620
2289		
120000	0	0
120010	10	23
120020	98	236
120025	160	317
120030	216	469
120036	298	531
120041	388	697
120045	478	767
120049	614	846
120056	988	900
120058	1296	877
2290		
120000	0	0
120010	12	34
120016	120	115
120020	204	158
120025	348	237
120030	498	318
120036	640	394
120040	800	469
120047	1018	546
120052	1136	621
120057	1480	697
120067	2098	759
120071	2474	727
2291		
120000	0	0
120008	14	35
120012	38	105
120014	54	160
120018	74	243
120021	100	310
120025	126	393
120028	156	463
120035	228	622
120038	264	688
120041	352	763
120046	424	840
120051	646	915
120054	846	923
120057	1402	884
2292		
120000	0	0
120000	2	29
120000	48	196
120000	86	438
120000	136	536
120000	186	687
120000	248	835
120000	348	979
120000	487	1126
120000	520	1177
2293		
120000	0	0
120008	24	57
120010	76	156
120011	126	257
120015	216	470
120017	282	627
120020	334	766
120022	414	910
120025	534	1053
120028	896	1153
2294		
120000	0	0
120006	8	43
120008	64	174
120010	134	307
120013	212	460
120015	284	617
120018	352	753
120020	506	910
120023	804	995
2295		
120000	0	0
120007	2	38
120010	22	147

TIME	STRAIN	STRS
120015	[illegible]	317
120020	[illegible]	469
120024	[illegible]	619
120029	696	770
120033	1004	841
120036	1330	858
120037	1908	834
[illegible]		
[illegible]000	0	0
120006	16	55
120008	82	150
120011	138	243
120013	212	350
120016	284	459
120020	390	621
120023	496	772
120026	574	851
120028	704	943
120031	892	1013
120034	1196	1040
120036	1552	1008
2297		
120000	0	0
120006	14	33
120008	60	106
120011	[illegible]4	230
2310		
120000	[illegible]	0
08	22	9
0120	230	63
0349	554	183
0460	814	238
0537	1000	275
0693	1504	313
0714	1614	307
2311		
120000	0	0
19	4	7
0233	290	175
57	330	190
0317	454	233
50	528	250
0438	784	288
0500	1008	297
81	1340	300
87	1376	293
2312		
120000	0	0
97	122	23
0100	354	63
0307	562	117
0587	1138	271
0702	1462	336
88	1642	368
0957	2294	378
2313		
120000	0	0
77	66	32
76	160	89
0192	322	168
0401	504	235
0587	1062	286
2314		
120000	0	0
43	26	51
63	50	89
99	120	160
0120	168	197
49	248	240
78	378	276
0249	616	309
74	1034	302
2315		
120000	0	0
45	110	42
0147	582	83
77	706	158
0204	812	194
37	940	233
77	1118	277
0328	1392	317
94	1842	330
0403	1912	327
2316		
120000	0	0
65	78	53
0104	152	118
26	190	156
47	232	193
69	292	240
0200	390	278
38	566	317
73	800	323
0300	1028	320
2317		
120000	0	0
17	4	13
31	20	36
53	52	77
75	82	119
0105	142	173

TIME	STRAIN	STRS
41	240	234
72	350	278
0224	658	315
46	816	317
66	1008	314
2318		
120000	0	0
17	18	33
40	96	173
50	130	234
63	218	321
78	362	394
0100	700	470
06	848	478
13	1010	477
18	1146	477
2319		
120000	0	0
18	46	24
28	120	70
45	204	151
60	320	236
76	432	312
[illegible]	584	393
[illegible]1	922	472
[illegible]	1120	484
[illegible]	1320	484
36	1520	476
2320		
120000	0	0
48	12	21
57	48	71
63	90	119
76	160	205
80	186	237
92	246	316
0105	348	393
23	542	473
37	780	509
54	1170	516
58	1298	511
2321		
120000	0	0
07	4	51
10	42	112
17	138	232
21	222	310
26	354	393
34	644	475
41	1062	510
49	1576	533
52	1876	532
2322		
120000	0	0
08	46	44
12	126	109
15	168	153
20	246	236
25	334	318
28	396	393
33	460	469
37	544	547
41	650	624
46	820	695
51	1180	718
54	1492	697
2323		
120000	0	0
10	8	27
15	40	111
21	120	193
27	250	273
43	610	489
48	1064	558
56	1438	620
60	1768	643
64	2074	640
2324		
120000	0	0
08	74	108
11	140	254
14	202	496
16	292	539
19	390	673
20	490	768
22	618	840
23	808	898
25	1094	907
27	1688	840
2325		
120000	0	0
120013	184	314
120015	228	390
120019	306	546
120022	388	691
120026	504	838
120029	658	938
120031	834	987
120033	1146	983
17	12	27
18	72	126

TIME	STRAIN	STRS
20	140	230
23	192	253
26	288	540
28	362	657
30	450	762
32	688	853
34	884	91[illegible]
2326		
120000	0	[illegible]
09	40	91
10	[illegible]	[illegible]95
13	150	363
15	238	540
19	360	637
21	484	830
23	544	908
25	882	961
27	1186	973
2327		
120000	0	0
17	70	102
20	140	227
24	264	386
29	448	543
33	616	695
36	818	768
38	1052	830
41	1348	852
43	1756	830
2328		
120000	0	0
07	12	43
10	84	136
13	180	183
18	320	423
20	442	543
23	554	623
28	838	749
31	1138	811
33	1458	828
35	1784	819
2329		
010000	0	0
07	30	44
10	66	112
11	124	199
17	272	390
20	432	539
24	582	621
27	798	690
31	1274	747
33	1616	747
36	2310	725
2342		
120000	0	0
78	10	5
0116	44	37
60	104	73
0210	174	118
51	258	150
0300	382	173
0410	810	197
2343		
120000	0	0
54	24	30
82	48	60
0100	66	75
23	90	97
45	108	121
83	170	157
0233	262	198
0300	444	233
78	738	250
0457	1074	256
0500	1264	257
44	1454	258
53	1488	255
2344		
120000	0	0
56	24	33
82	54	53
0100	62	65
51	122	93
91	200	113
0302	282	158
71	468	177
0400	766	183
51	952	187
74	1040	183
2345		
120000	0	0
18	16	23
34	32	40
74	62	79
0102	116	103
0221	348	199
50	434	212
0300	598	228
50	782	235
04	1000	239
13	1094	237

TIME	STRAIN	STRS
2346		
120000	0	0
24	18	23
53	44	77
71	82	118
0103	146	163
35	222	213
52	262	237
82	416	277
0233	694	316
0300	1168	337
0400	1942	350
0500	2704	379
0600	3490	402
0700	4498	425
0800	5086	453
0904	5826	492
1000	6500	517
1100	7268	530
1154	7682	525
2347		
120000	0	0
19	10	17
37	46	52
53	74	79
77	146	117
0100	218	150
10	248	160
42	386	196
0200	738	235
0300	1472	253
0450	2624	273
0643	3944	319
0950	6144	447
1207	8120	456
37	8352	454
2348		
120000	0	0
26	54	39
50	84	[illegible]
74	140	123
96	194	15[illegible]
0121	294	199
51	592	237
0450	2630	269
0500	3010	279
0953	6638	368
1032	7412	367
2349		
120000	0	0
22	14	21
37	22	50
52	34	79
80	94	130
0100	146	157
0400		347
0600		417
0700		420
35		419
2350		
120000	0	0
14	4	26
21	28	76
29	56	118
34	86	157
40	122	195
47	162	235
60	288	316
78	484	395
0116	1198	469
50	2406	484
0200	3170	519
20	3658	519
2351		
120000	0	0
24	52	42
45	226	147
61	392	228
73	566	273
0100	1322	314
15	1686	310
2352		
120000	0	0
39	124	145
49	214	195
57	310	235
78	606	317
94	866	360
0123	1512	378
2353		
120000	0	0
23	26	30
28	88	111
32	160	194
37	226	268
39	276	314
43	390	394
49	576	471
59	1126	544
63	1460	529
2354		

TIME	STRAIN	STRS
120000	0	0
09	14	4
13	134	60
20	332	153
25	404	230
30	490	313
34	586	394
39	682	471
42	760	520
45	860	583
49	972	632
55	1336	697
60	1610	710
64	2018	706
2355		
120000	0	0
15	4	23
18	24	93
22	56	157
26	80	238
30	120	319
33	168	394
37	246	474
41	320	555
46	434	622
52	736	697
57	1104	710
62	1526	704
2356		
120000	0	0
27	126	111
29	276	203
30	386	290
32	478	382
34	588	480
36	722	583
37	826	677
39	962	757
41	1200	812
2357		
120000	0	0
00	10	41
00	48	150
00	104	307
00	162	428
00	244	547
00	342	653
00	480	757
00	1198	871
2358		
120000	0	0
11	34	61
14	110	180
17	200	333
19	316	457
22	496	581
25	826	640
27	1208	607
2359		
120000	0	0
00	10	49
15	46	158
17	76	263
19	106	358
22	176	475
25	240	581
27	304	659
30	460	763
33	532	847
36	1052	870
38	1360	873
41	1854	857
2360		
120000	0	0
10	14	28
13	88	147
19	286	317
23	450	464
28	662	621
33	1014	770
37	1364	847
40	1732	882
43	2244	896
50	3282	938
53	3538	966
57	4094	999
60	2620	1040
65	5232	1100
70	5784	1151
73	6518	1186
78	6918	1204
82	7498	1219
2374		
120000	0	0
0100	36	30
50	110	55
0210	230	93
0300	518	110
0400	888	107
51	1078	104
2375		

TIME	STRAIN	STRS
120000	0	0
65	36	33
0100	90	52
0200	338	87
0300	684	89
0400	1074	89
18	1136	83
2376		
120000	0	0
50	24	13
0200	272	87
50	396	103
0352	726	119
0500	950	123
0550	1458	125
0600	1614	137
0700	1928	148
0800	2282	154
1000	3006	160
63	3246	163
95	3328	158
2377		
120000	0	0
50	26	27
0100	102	56
51	200	79
0200	334	94
0300	854	107
0400	1130	106
0500	1420	103
2378		
120000	0	0
75	34	16
0118	118	67
50	224	100
0200	450	140
0300	1078	182
50	1498	180
2379		
120000	0	0
50	52	54
76	128	89
0100	222	115
62	532	164
0202	800	180
52	1178	188
0355	1960	207
0400	2330	215
0502	3202	223
0700	5286	233
30	5514	229
2380		
120000	0	0
60	84	63
0100	234	110
24	350	133
0208	972	143
50	1298	142
0301	1734	141
2381		
120000	0	0
50	50	38
75	100	63
0100	150	89
52		133
0200	510	169
0300	1128	206
75	1672	222
0600	3616	210
2382		
120000	0	0
19	36	53
31	118	113
42	248	152
57	508	195
82	974	237
0120	1862	253
52	2674	253
0200	3864	286
72	4292	316
87	5630	403
0311	6792	447
0400	8142	505
86	10176	542
2383		
120000	0	0
16	30	49
30	120	113
39	196	153
48	296	193
59	430	235
72	642	277
95	1058	317
0150	2318	350
0202	3504	364
23	4006	362
2384		
120000	0	0
12	16	33
20	54	73
30	106	118

TIME	STRAIN	STRS
16	158	151
45	250	193
57	400	237
79	848	268
0100	1316	277
50	2520	279
61	2778	280
2385		
120000	0	0
06	2	24
10	28	72
12	58	112
14	96	149
17	142	190
20	208	231
22	286	270
27	438	314
33	816	334
36	1070	329
38	1280	318
2386		
120000	0	0
05	8	40
08	42	93
11	98	153
14	168	197
17	196	237
19	268	276
22	358	319
26	524	357
31	644	385
35	1098	385
39	1466	382
43	1720	379
59	3030	390
63	3362	394
70	3912	405
79	4502	420
85	[illegible]	431
94	[illegible]	450
0100	6000	460
06	6408	469
11	6744	479
2387		
120000	0	0
06	28	48
10	88	114
15	192	187
18	306	237
21	474	273
30	928	304
40	1772	305
51	2620	305
66	3806	302
82	5018	311
0100	6230	343
10	6896	347
20	7686	356
36	8640	393
48	9660	423
2388		
120000	0	0
08	2	24
11	90	192
13	164	283
14	228	355
2389		
170000	0	0
17	1630	260
19	2036	328
22	2634	348
25	3280	426
28	3932	372
32	4600	389
35	5220	394
39	5950	421
43	7008	441
45	7526	484
2391		
120000	0	0
07	0	0
10	28	24
14	152	79
17	216	149
20	290	233
25	450	326
28	648	391
34	1274	469
37	1684	469
45	2922	453
58	5104	450
71	7162	443
2392		
120000	0	0
23	0	0
28	52	43
30	112	122
33	184	200
35	252	270
37	330	326
39	480	388

TIME	STRAIN	STRS
40	672	421
42	972	417
45	1372	384
2394		
120000	0	0
09	20	24
10	82	165
12	138	195
13	204	283
15	280	443
17	384	467
19	570	503
20	960	514
23	1374	442
25	1836	462
2408		
120000	0	0
31	16	46
36	88	149
45	328	319
50	494	395
61	946	562
70	1442	625
80	2096	649
94	3260	627
2410		
120000	0	0
18	24	71
22	56	153
26	86	236
33	150	394
40	232	545
43	276	620
50	422	772
60	886	883
63	1224	853
66	1540	822
2411		
120000	0	0
09	18	32
10	240	86
21	440	780
30	1100	1300
2412		
120000	0	0
04	22	137
07	118	235
10	188	394
12	262	536
15	308	703
17	364	836
20	458	984
21	596	1128
25	1030	1245
27	1582	1132
2414		
120000	0	0
05	30	46
09	146	230
11	222	387
13	302	539
17	392	697
19	490	832
22	648	972
23	850	1080
26	1170	1129
2416		
120000	0	0
20	82	157
22	104	250
28	166	463
31	216	617
34	270	768
37	344	904
40	456	1057
46	818	1204
47	1214	1191
0100	1532	1162
2417		
120000	0	0
05	12	67
07	16	120
25	400	962
28	620	1076
34	1192	1049
2418		
120000	0	0
07	46	53
09	132	141
13	258	319
18	372	460
23	564	703
27	690	842
31	876	988
36	1160	1133
39	1592	1181
2419		
120000	0	0
42	10	21
0100	50	74
52	90	121

TIME	STRAIN	STRS
0200	124	166
0300	222	253
0400	362	326
0500	594	365
80	856	355
2420		
120000	0	0
59	18	38
87	40	63
0100	48	78
60	110	133
0210	156	175
0300	258	254
0400	380	327
0500	536	387
0600	790	418
50	956	416
2421		
120000	0	0
34	8	18
0100	42	76
0200	122	165
0300	220	246
0400	380	313
0500	536	339
57	868	328
2422		
120000	0	0
0152	96	39
0250	266	90
0300	346	117
0400	504	182
0500	664	247
0700	1108	341
0759	1322	336
2423		
120000	0	0
32	0	17
50	10	46
0100	86	143
50	212	230
0200	394	300
50	658	344
0300	1050	352
14	1162	337
2424		
120000	0	0
0100	36	36
54	108	124
0234	250	270
0300	434	383
58	674	447
0405	996	462
27	1174	458
2425		
120000	0	0
53	20	10
0100	142	70
50	254	147
0200	374	229
0300	766	357
0400	1362	417
49	1758	407
2426		
120000	0	0
24	0	13
82	74	123
0118	120	197
0150	176	261
0250	270	423
0300	746	456
27	952	455
36	1036	453
2427		
120000	0	0
11	4	33
19	20	79
32	42	164
43	98	237
55	166	316
68	248	397
83	380	468
0103	626	549
23	1094	576
32	1256	569
2428		
120000	0	0
25	64	107
33	88	158
46	156	238
64	268	356
80	396	507
0100	676	509
17	1028	520
25	1268	580
2429		
120000	0	0
12	6	38
27	28	118
34	68	154
47	110	238

TIME	STRAIN	STRS
60	194	321
73	280	398
87	420	473
0108	654	548
27	1040	567
35	1250	562
2430		
120000	0	0
10	0	27
13	28	107
17	46	191
22	94	313
25	126	396
30	174	477
36	278	621
45	554	772
51	914	814
55	1260	826
2431		
120000	0	0
12	36	74
20	112	234
29	188	404
35	252	536
42	348	697
49	492	844
60	594	988
64	1378	966
2432		
120000	0	0
24	2	39
28	22	123
33	58	238
40	110	393
47	200	549
53	360	697
59	588	772
66	952	793
69	1436	749
2433		
120000	0	0
07	6	53
10	50	231
12	100	390
15	150	551
17	206	700
20	276	916
22	388	988
25	564	1124
27	970	1183
2434		
120000	0	0
07	18	45
10	68	194
12	146	389
15	232	564
19	366	772
2435		
120000	0	0
06	34	70
09	118	233
12	196	403
14	292	560
18	446	778
20	602	907
24	1020	1014
2436		
120000	0	0
18	70	236
20	114	331
23	166	438
27	258	620
31	386	765
34	538	859
38	958	924
40	1528	869
2437		
120000	0	0
11	24	56
13	68	153
17	140	324
21	210	476
25	318	628
29	498	772
33	800	870
36	1184	903
39	1718	873
2438		
120000	0	0
12	30	63
15	64	152
18	126	314
22	204	469
25	276	622
29	382	772
32	532	930
35	716	981
37	1058	989
2439		
120000	0	0
07	8	63

TIME	STRAIN	STRS
09	56	244
11	106	395
13	158	549
16	216	705
19	310	869
21	460	1000
2452		
120000	0	0
83	48	71
0118	92	101
52	158	125
0205	292	149
0300	632	153
0450	890	144
2453		
120000	0	0
58	42	27
0100	94	67
0160	198	99
0257	464	125
0300	630	129
0357	862	120
2454		
120000	0	0
26	0	13
61	12	50
91	44	83
0144	114	136
0200	236	159
55	406	172
0300	566	173
50	780	169
2455		
120000	0	0
38	20	21
58	36	38
0100	90	69
53	166	103
0200	266	131
50	394	146
0330	656	157
62	794	153
75	842	150
2456		
120000		0
77	6	13
0100	42	43
65	178	133
0200	300	171
40	462	213
0303	754	270
0400	1362	309
0551	2428	318
0700	3368	319
08	7642	310
2457		
120000	0	0
55	62	55
0103	190	113
50	396	163
0200	500	183
0409	2296	140
2458		
120000	0	0
29	0	13
50	20	53
86	86	114
0157	306	210
0207	528	260
51	774	283
0334	1356	295
73	1652	299
0550	2382	313
64	3056	308
2459		
120000	0	0
0182	38	29
0200	50	56
50	142	138
0300	304	208
50	400	229
73	778	226
2460		
120000	0	0
36	32	49
51	112	153
65	222	240
80	390	319
91	572	361
0116	1134	379
29	1522	363
2461		
120000	0	0
18	8	17
28	44	77
40	101	156
52	192	234
68	398	317
91	898	350
0107	1374	343
2462		

TIME	STRAIN	STRS
120000	0	0
19	126	59
32	248	119
40	302	159
45	348	193
51	402	236
58	452	276
66	528	319
73	620	356
82	760	396
96	1004	432
0131	1806	471
69	2670	547
91	3166	583
0238	4352	600
46	4594	584
2463		
120000	0	0
31	22	20
53	62	77
60	92	116
66	136	155
80	236	235
88	324	277
98	458	319
0122	986	347
29	1186	343
33	1298	337
2464		
120000	0	0
09	32	20
13	74	78
17	146	154
21	210	255
25	268	314
29	344	394
33	424	470
38	540	546
43	740	618
49	1048	648
51	1282	641
54	1542	628
2465		
120000	0	0
09	36	36
13	76	111
18	122	153
20	188	231
24	272	313
28	366	390
33	490	469
39	668	543
45	846	585
51	1090	596
57	1148	587
60	1198	578
2466		
120000	0	0
17	18	32
19	44	76
23	92	153
27	158	237
31	224	316
37	352	400
45	752	469
50	1114	470
54	1532	455
2467		
120000	0	0
26	16	103
29	104	328
32	196	476
35	376	625
37	720	713
39	1246	703
42	1830	676
2468		
120000	0	0
06	22	53
08	72	170
11		341
13	266	448
16	508	573
18	696	627
20	920	635
22	1256	610
25	1850	557
2469		
120000	0	0
09	28	51
11	66	275
13	128	416
15	230	539
18	434	645
20	746	719
23	1072	809
26	1426	888
29	1946	952
32	2516	983
36	3272	982
2470		

TIME	STRAIN	STRS
120000	0	0
06	[illegible]	57
08	102	166
12	250	316
18	574	469
22	806	529
27	1208	523
29	1598	499
2471		
120000	0	0
27	8	17
30	42	70
31	108	150
34	174	233
37	234	315
38	288	403
42	388	545
46	536	697
51	924	842
53	1284	862
56	1770	843
2472		
120000	0	0
06	12	26
10	80	207
15	[illegible]	385
21	[illegible]	535
25	1258	[illegible]
30	2132	507
2473		
120000	0	[illegible]
43	38	37
73	110	77
0105	216	117
46	300	157
0200	436	209
43	572	236
0332	998	250
39	1056	247
2485		
120000	0	0
58	52	13
0132	224	43
0244	584	53
0370	1066	50
2486		
120000	0	0
37	8	25
75	66	53
0100	106	65
0200	364	97
0300	702	101
0450	1228	103
0587	1734	104
0602	1778	102
2487		
120000	0	0
68	56	17
0100	116	33
39	204	47
0200	296	59
0300	452	67
0600	822	78
0700	2858	89
0900	3416	93
67	3606	94
2488		
120000	0	0
50	20	13
0100	82	50
51	168	80
0200	284	102
0300	576	125
0400	892	135
0500	1102	143
0600	1296	148
0700	1462	153
0800	1594	157
1050	1856	160
1100	1962	159
2489		
120000	0	0
23	28	22
57	112	71
0100	344	108
52	562	116
0300	1270	116
52	1730	113
2490		
120000	0	0
41	88	28
73	228	53
0103	340	80
51	576	116
0200	906	135
30	1136	131
2491		
120000	0	0
0114	36	63
0200	668	120
0278	1522	128

TIME	STRAIN	STRS
2492		
120000	0	0
71	170	55
0101	294	84
50	542	128
0200	868	157
0300	1624	186
0451	2652	220
0734	4412	212
2493		
120000	0	0
08	14	20
21	110	73
36	274	121
51	534	153
72	1026	162
87	1608	165
2494		
120000	0	0
10	34	18
30	234	76
44	430	113
[illegible]	752	156
[illegible]	1292	172
01[illegible]	1728	118
15	1928	117
2495		
120000	0	0
15	32	40
28	166	86
51	498	157
68	860	179
84	1238	185
0100	1574	187
60	2980	198
70	3254	193
2496		
120000	0	0
12	22	69
16	80	145
21	204	227
25	342	273
30	718	290
33	910	288
2497		
120000	0	0
14	46	49
17	88	73
20	166	125
22	210	160
25	250	196
28	296	223
30	348	274
33	400	314
37	496	356
41	624	394
49	908	433
57	1328	446
64	1920	443
69	2246	438
2498		
120000	0	0
08	6	33
12	66	111
14	104	152
20	228	239
26	432	316
31	734	355
33	910	360
67	1222	364
41	1500	355
2499		
120000	0	0
07	14	21
08	116	103
10	222	185
12	438	307
15	758	333
17	1356	357
22	2067	387
25	2744	390
29	3535	385
33	4320	382
38	5222	379
42	6028	368
46	7122	357
2500		
120000	0	0
0007	66	69
0009	174	182
0011	404	262
0013	766	287
1515	1256	291
0021	2350	316
0028	3826	327
0032	4434	316
0036	5126	311
0043	6394	323
0049	7868	315
2501		
120000	0	0

TIME	STRAIN	STRS
0007	24	67
0009	116	188
0012	382	263
0014	806	297
0017	1304	310
0019	1622	315
0022	2502	315
0025	3056	293
2502		
120000	0	0
0006	8	25
0009	150	124
0011	246	173
0013	374	237
0016	572	315
1818	752	356
2323	1192	427
3333	2496	475
0034	2816	469
0037	3288	457
2503		
120000	0	0
0017	4	40
0021	54	147
0022	114	226
0024	230	310
0028	618	385
0030	908	376
0032	1218	373
2504		
120000	0	0
0005	78	67
0008	180	151
0011	296	235
0013	444	311
0015	644	363
0019	908	394
0021	1238	417
0023	1546	425
0028	2286	430
0036	3354	454
0038	3674	465
0046	4872	488
0051	5936	492
0055	6608	484
0061	7720	463
2519		
120000	0	0
0024	24	22
0080	48	89
0113	66	126
0253	86	159
0293	102	206
0334	134	250
0360	148	278
9393	168	316
0470	220	402
0506	242	432
0638	346	564
0700	394	628
0812	516	724
0858	568	772
0957	634	846
1139	994	953
1259	1236	988
1390	1570	1012
1484	1900	1004
1493	1914	1004
2520		
120000	0	0
0078	18	18
0165	66	71
0358	124	153
0442	200	236
0700	432	426
0798	542	565
1076	780	704
1080	932	784
1380	1450	960
1538	1800	1022
1750	2378	1039
1767	2640	1036
2521		
120000	0	0
0063	34	38
0103	64	78
0140	94	118
0170	112	153
0482	286	502
0808	500	848
0941	634	950
1200	1056	1091
1419	1720	1097
1440	1790	1087
2522		
120000	0	0
0058	24	36
0094	42	73
0313	164	324
0445	236	469
0695	390	723

TIME	STRAIN	STRS
0918	640	911
1206	1244	1013
1350	1378	1017
2523		
120100	0	0
0140	6	41
5353	18	77
8282	42	160
0256	90	356
0298	128	473
0356	184	625
0411	244	772
0474	344	916
0549	502	1066
0658	920	1228
0765	1494	1277
0790	1800	1263
2524		
120000	0	0
3737	56	40
5858	98	79
0170	284	321
0207	340	406
0370	742	736
0494	1239	923
0591	1578	1064
0700	1954	1205
0803	2376	1284
0854	2704	1266
2525		
120000	0	0
0060	166	40
0098	380	73
0200	868	160
0441	2538	262
0775	3810	753
0906	4274	962
1068	5094	1046
1079	5150	1039
2526		
120000	0	0
0068	60	121
0100	98	197
0182	184	393
0290	390	630
0377	712	772
0591	1582	992
0723	2140	1078
0948	3016	1107
0956	3098	1112
2527		
120000	0	0
0024	34	75
0036	96	158
0060	240	324
0083	398	477
0109	600	766
0135	824	777
0160	1100	918
0192	1510	1062
0234	1836	1210
0295	2582	1339
0300	2714	1333
0305	2818	1323
2528		
120000	0	0
0028	52	72
0041	138	158
0067	342	321
0091	520	475
0114	664	624
0137	794	780
0155	896	917
0175	1028	1066
0195	1126	1212
0118	1254	1372
0230	1374	1444
0261	1590	1635
0294	1992	1777
0328	2636	1873
0335	2822	1799
2529		
120000	0	0
0017	16	38
0106	52	80
0118	110	153
0142	222	318
0163	298	479
0180	346	624
0198	400	772
0220	476	924
0239	556	1066
0258	660	1213
0278	798	1356
0301	990	1494
0331	1292	1635
0370	1920	1776
0382	2220	1769
0387	2394	1747
2530		
120000	0	0

TIME	STRAIN	STRS
0019	16	80
0039	48	235
0050	78	317
0068	124	471
0087	168	620
0107	254	772
0127	338	911
0148	476	1062
0170	656	1205
0197	972	1348
0335	1626	1437
0340	1760	1430
2531		
120000	0	0
0009	14	35
0016	144	375
0019	224	635
0022	280	800
0024	400	978
0028	602	1197
0030	786	1349
0033	1174	1484
0036	1692	1530
0038	2420	1508
2532		
120000	0	0
0028	18	89
0033	52	209
0041	112	396
0050	186	625
0055	224	772
0063	298	989
0072	366	1207
0078	420	1353
0082	480	1487
0089	560	1630
0095	650	1774
0102	762	1918
0108	866	2053
0114	992	2195
0120	1114	2326
0130	1330	2526
0140	1576	2728
0147	1760	2860
0153	1992	2980
2533		
120100	0	0
0005	14	43
0014	66	174
0018	184	469
0021	280	697
0025	384	918
0028	490	1127
0031	636	1337
0033	796	1502
0037	1156	1698
0041	1630	1813
0044	2182	1833
2534		
120000	0	0
0008	6	30
0014	50	42
0020	94	232
0023	118	310
0030	162	472
0036	212	623
0042	250	772
0053	378	1062
0062	520	1270
0072	778	1487
0081	1218	1616
0085	1506	1623
2535		
0000	0	0
0053	8	140
0057	124	236
0060	164	307
0067	232	469
0078	342	770
0084	402	913
0090	460	1062
0097	524	1205
0102	592	1344
0109	680	1498
0113	778	1626
0123	936	1775
0131	1178	1917
0137	1396	1990
0142	1700	2025
2536		
120000	0	0
0010	12	72
0014	42	151
0022	104	315
0035	224	695
0047	358	920
0058	540	1207
0070	854	1490
0078	1126	1629
0083	1344	1705
0089	1608	1773

TIME	STRAIN	STRS
0095	1902	1847
2537		
120000	0	0
0013	0	29
0018	32	92
0021	12	231
0026	204	396
0030	270	537
0035	379	772
0038	452	915
0041	516	1055
0044	612	1269
0047	706	1347
0050	836	1489
0053	1016	1635
0057	1238	1775
0062	1568	1923
0066	1924	2060
0070	2302	2196
0075	2732	2330
0080	3270	2461
0084	3756	2530
0088	4232	2567
2538		
120000	0	0
0024	20	67
0030	68	232
0037	142	543
0041	218	765
0047	268	1053
0052	368	1345
0054	390	1480
0060	482	1776
0065	628	2063
0067	692	2200
0070	794	2330
0073	918	2455
2551		
120000	0	0
0103	82	53
0147	128	78
0190	204	104
0236	288	131
0407	808	178
0457	994	175
2552		
120000	0	0
0078	42	35
0160	154	90
0216	300	120
0398	768	182
0471	1036	184
0478	1078	180
2553		
0000	0	0
0102	98	40
0159	160	67
0310	506	128
0387	762	136
0526	1244	148
0605	1348	157
0938	2416	173
0970	2544	168
2554		
120000	0	0
0035	24	34
0060	76	73
0087	148	114
0118	230	160
0160	334	204
0188	544	235
0250	998	243
0060	1116	240
2555		
120000	0	0
0037	26	38
0067	72	88
0119	206	159
0155	350	200
0209	660	237
0259	1036	243
0302	1380	240
2556		
120000	0	0
0030	38	20
0044	66	38
0093	212	100
0155	468	154
0263	916	220
0368	1956	215
0410	2300	213
2557		
120000	0	0
0019	24	38
0031	78	78
0049	224	154
0064	348	240
0080	518	320
0103	850	394
0151	1897	432
0261	4340	456

TIME	STRAIN	STRS
0301	5158	496
0360	6678	548
2558		
120000	0	0
0037	176	150
0056	364	240
0074	614	319
0106	796	357
0107	1160	396
0122	1496	403
0146	1850	412
0198	1414	412
0227	2066	406
2559		
120000	0	0
0015	16	43
0021	38	72
0035	90	160
0047	160	239
0062	304	319
0086	646	398
0108	1202	412
0117	1414	403
0124	1588	400
2560		
120000	0	0
0012	20	60
0017	114	317
0020	200	553
0023	374	766
0027	550	977
0032	1176	1127
0034	1780	1142
2561		
120000	0	0
0006	56	117
0008	94	140
0011	164	385
0013	242	542
0017	374	755
0019	508	909
0021	750	1053
0023	1052	1127
0027	1474	1156
0028	2028	1133
0030	2630	1080
2562		
120000	0	0
0010	46	105
0012	104	243
0015	162	394
0018	266	630
0020	352	770
0022	488	913
0025	728	1062
0028	1046	1155
0031	1780	1205
0034	2390	1197
2563		
120000	0	0
0021	56	120
0028	100	237
0031	136	319
0039	444	488
0046	418	623
0060	1200	772
0064	1632	772
0068	1962	763
0071	2232	753
2564		
120000	0	0
0010	16	42
0013	30	73
0019	80	158
0029	238	314
0032	504	454
0044	698	544
0051	1054	620
0057	1446	645
0061	2064	647
0066	2330	636
2565		
120000	0	0
0007	10	45
0011	56	118
0015	100	155
0024	292	315
0030	416	394
0034	542	465
0039	714	543
0045	950	621
0057	1956	697
0060	2024	696
0063	2318	688
0067	2824	683
2566		
120000	0	0
0012	286	49
0016	350	315
0027	482	548
0026	612	686

TIME	STRAIN	STRS
0030	886	836
0036	1442	905
0039	2004	890
0042	2628	850
2567		
120000	0	0
0019	16	90
0022	68	227
0026	114	368
0030	220	544
0037	462	768
0043	1096	903
0047	1652	898
2568		
120000	0	0
0012	14	27
0016	100	148
0020	188	315
0025	280	479
0028	366	620
0032	506	767
0037	824	915
0039	1118	957
0042	1488	968
0045	1936	959
0048	2418	937
2569		
120000	0	0
0034	12	18
0057	24	34
0108	70	73
0198	198	140
0305	446	194
0591	1490	222
0818	2292	226
0939	2418	223
2582		
0000	0	0
0120	108	165
0468	226	400
0746	406	647
0904	584	761
0957	672	783
1031	878	793
1042	914	783
2583		
0000	0	0
0148	48	103
0348	120	290
0659	308	569
0861	598	702
0897	724	699
2584		
0000	0	0
0134	34	47
0159	44	73
0371	176	253
0438	232	317
0577	346	451
0812	566	649
1164	1040	763
1173	1078	759
2585		
0000	0	0
0053	2	34
0095	22	79
0465	160	324
0765	468	561
2586		
0000	0	0
0051	10	44
0082	16	78
0114	46	153
0147	68	238
0209	134	396
0270	200	547
0368	372	788
0429	498	917
0528	1018	1026
2587		
0000	0	0
0051	26	84
0080	56	156
0115	84	237
0218	188	486
0271	260	620
0336	380	772
0408	578	915
0474	934	985
0515	1272	990
0522	1344	986
2588		
0000	0	0
0018	4	22
0108	56	204
0153	100	319
0183	130	397
0247	222	548
0307	342	698
0343	428	772
0375	528	846

TIME	STRAIN	STRS
0419	674	917
0470	922	989
0505	1156	1004
0519	1292	996
2589		
0000	0	0
0040	52	91
0071	208	78
0195	546	316
0320	830	583
0405	1028	772
0523	1394	988
0588	1792	1039
0603	1944	1030
2590		
0000	0	0
0018	22	77
0037	50	157
0042	78	235
0067	138	395
0087	198	547
0116	294	772
0136	366	915
0165	446	1062
0172	544	1205
0196	724	1357
0219	1074	1420
0228	1442	1356
2591		
0000	0	0
0029	34	82
0040	62	157
0051	96	236
0072	164	393
0093	206	545
0126	216	772
0167	250	912
0180	382	1133
0197	542	1205
0225	978	1266
0237	1244	1215
2592		
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0012	18	39
0020	28	089
0042	78	239
0052	102	317
0062	128	396
0081	184	567
0100	240	699
0110	276	772
0131	344	918
0259	480	1133
0280	668	1279
0302	1072	1315
0310	1342	1281
2593		
0000	0	0
0012	16	71
0017	48	150
0025	98	317
0035	166	546
0044	234	767
0052	302	916
0057	358	1131
0062	400	1273
0072	500	1492
0077	578	1633
0083	686	1779
0097	1004	1990
0100	1248	2015
0104	1696	1938
2594		
120000	0	0
0008	20	65
0017	74	234
0024	122	393
0030	154	547
0037	216	706
0041	252	837
0048	304	989
0053	370	1137
0062	484	1349
0067	574	1493
0073	712	1627
0083	1154	1747
0090	2030	2180
2595		
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0010	18	69
0014	46	149
0023	90	315
0034	166	546
0043	256	772
0049	332	910
0054	414	1057
0063	506	1279
0071	658	1500
0077	808	1630
0081	970	1706
0087	1270	1735

TIME	STRAIN	STRS
0090	1556	1710
2596		
120000	0	0
0021	62	147
0025	122	394
0029	168	604
0031	216	792
0035	260	983
0037	310	1204
0042	388	1500
0046	460	1768
0050	574	2057
0051	658	2203
0053	754	2333
2597		
120000	0	0
0017	20	88
0019	42	183
0021	70	282
0023	102	410
0026	140	568
0029	180	772
0031	210	917
0034	262	1132
0037	320	1354
0039	362	1503
0043	452	1773
0047	544	1979
0050	686	2200
0053	962	2390
2598		
120000	0	0
0021	4	57
0024	40	230
0027	68	388
0030	116	620
0032	152	772
0036	200	983
0038	244	1133
0040	300	1328
0042	360	1434
0048	570	1862
0051	886	2051
2599		
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0041	48	143
0045	88	306
0049	118	457
0051	136	680
0055	160	764
0060	248	1062
0066	340	1377
0071	416	1629
0077	544	1917
0083	640	2065
0083	764	2200
2600		
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0024	8	53
0031	70	313
0037	150	620
0041	200	838
0046	268	1082
0051	330	1350
0055	400	1561
0059	508	1776
0065	802	2057
0068	1138	2113
2601		
120000	0	0
0025	16	74
0029	54	223
0033	92	391
0037	130	550
0041	178	676
0046	234	982
0049	280	1134
0063	334	1353
0065	406	1486
0068	462	1627
0062	578	1847
0067	728	2063
0070	870	2200
0073	1136	2330
0076	1450	2351
2626		
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0200	1982	508
0500	2020	508
3000	2040	508
013000	2070	508
030000	2310	508
050700	2356	508
080000	2390	508
100000	2420	508
310000		508
510000	3350	508
583000	3680	508
803000	4600	508
860000	5000	508
861000	4940	0

TIME	STRAIN	STRS
2627		
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0400	12	508
2900	40	508
012900	50	508
025900	142	508
045900	130	508
075900	110	508
095900	110	508
305900	206	508
505900	360	508
582900	470	508
802900	1450	508
855900	2080	508
855900	1910	508
860900	1840	0
2628		
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0048	2	35
0079	18	73
0115	36	115
0151	48	154
0228	88	236
0307	124	319
0390	178	396
0543	326	513
0593	388	549
0808	728	655
0949	1078	697
1172	1460	703
1184	1500	702
2629		
0000	0	0
0050	4	19
0065	14	36
0234	80	206
0434	170	410
0690	348	659
0888	560	813
1088	912	909
1360	1314	950
1404	1452	948
1412	1474	946
2630		
0000	0	0
0102	18	4
0278	74	160
0425	204	367
0677	372	469
0888	702	572
1260	1342	619
1278	1430	607
2632		
0000	0	0
0048	10	68
0094	50	87
0174	130	236
0258	232	394
0371	412	620
0465	696	777
0530	922	832
0620	1416	920
0697	1878	936
0712	2000	930
2633		
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0145	4	22
0247	98	215
0355	248	417
0453	520	614
0518	792	797
0622	1320	803
0726	2038	831
0734	2122	830
2634		
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0140	196	132
0273	380	403
0400	776	657
0576	1116	907
0673	1696	950
0685	1946	946
2635		
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0028	8	30
0130	110	247
0336	268	653
0458	308	736
0513	388	852
0547	456	917
0615	658	1030
0693	1108	1095
0713	1238	1095
0720	1298	1089
2636		
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0045	20	86
0069	56	250
0090	88	394
0114	128	551

TIME	STRAIN	STRS
0147	202	740
0162	264	917
0182	338	1063
0205	414	1205
0241	446	1420
0356	614	1436
0375	756	1560
0387	846	1570
0392	920	1559
2637		
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0028	24	78
0049		230
0070	100	394
0102	168	621
0223	222	772
0253	346	900
0202	710	1277
0245	1310	1420
0355	1446	1423
0360	1704	1420
2638		
0000	0	0
0008	2	76
0020	48	315
0030	94	547
0038	140	772
0047	198	988
0057	276	1204
0064	334	1420
0075	610	1632
0086	932	1777
0091	1446	1816
0096	1774	1762
2639		
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0025	8	73
0044	46	173
0078	136	397
0100	194	546
0131	278	772
0150	342	906
0193	544	1204
0219	730	1349
0250	1164	1457
0261	1458	1448
2640		
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0008	26	69
0017	64	238
0023	102	394
0036	162	622
0039	204	772
0053	370	1133
0063	504	1348
0070	678	1500
0078	876	1630
0089	1198	1693
0093	1254	1686
2641		
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0018	24	86
0025	86	230
0033	146	467
0042	208	624
0048	240	772
0057	300	983
0064	376	1204
0073	478	1414
0077	524	1487
0083	622	1586
0090	770	1777
0098	990	1918
0111	1794	2060
0117	1806	2084
2642		
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0008	8	91
0011	42	307
0014	64	514
0017	100	763
0021	148	1050
0026	188	1340
0028	250	1493
0031	378	1768
0037	1426	2153
2643		
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0011	8	72
0013	42	222
0015	70	370
0018	118	548
0021	174	780
0023	210	918
0027	264	1130
0029	336	1343
0032	384	1493
0033	440	1633
0036	404	1767
0040	724	2057
0042	928	2145

TIME	STRAIN	STRS
2644		
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0007	0	83
0041	138	133
0044	160	213
0045	180	1103
0052	304	1649
0053	350	1796
0057	426	1982
0059	538	2200
0062	662	2349
0065	908	2530
2645		
0000	0	0
0010	4	54
0013	26	146
0015	58	250
0018	84	363
0023	134	615
0028	190	845
0035	278	1135
0041	372	1347
0047	560	1633
0055	982	1917
0061	1770	2055
2646		
0000	0	0
0007	16	148
0010	58	315
0016	98	548
0030	168	907
0036	242	1207
0041	328	1500
0047	464	1773
0053	674	2057
0057	888	2194
2647		
0000	0	0
0016	14	72
0021	42	316
0028	124	624
0031	164	793
0037	240	1057
0042	338	1340
0048	512	1634
0053	730	1847
0059	1122	2060
0064	1866	2194
2648		
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0000		442
0100		442
0700		442
3000		442
010000		442
030000		442
050000		442
260000		442
460000		442
533000		442
753000		442
810000		442
810000		0
811000		0
2649		
0000		0
0000		442
0200		442
0500		442
2500		442
55C		442
025500		442
045500		442
255500		442
465500		442
533500		442
702500		442
805500		0
805500		0
2650		
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0114	76	72
0127	384	233
0143	816	486
0157	1076	763
0168	1166	995
0177	1578	1168
0190	2158	1277
0195	2508	1283
2651		
0000	0	0
0085	32	49
0142	54	78
0203	90	141
0260	142	194
0332	202	257
0410	278	327
0450	318	363
0500	396	401
0548	466	433
0620	598	475
0804	1314	455
2652		
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0157	78	72
0313	264	167
0428	460	234
0582	788	317
0719	1222	347
0730	1264	344
2653		
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0145	10	21
0257	132	112
0409	430	317
0482	552	367
0637	656	397
076*	1344	455
0873	1356	453
2654		
0000	0	0
0137	54	97
0322	202	257
0428	344	329
0658	984	394
0770	1368	396
0777	1394	394
2655		
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0027	26	29
0140	60	47
0252	396	139
0319	716	430
0408	984	563
0529	1802	585
0534	1848	582
2656		
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0120	150	103
0251	374	346
0336	574	486
0439	1102	590
0491	1466	589
0497	1514	587
2657		
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0122	6	17
0132	20	33
0154	60	74
0246	252	223
0364	538	423
0467	880	571
0535	1166	645
0629	1784	673
2658		
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0126	296	63
0290	592	229
0402	1524	344
0527	1842	537
0586	2010	647
0628	2212	684
0742	2328	680
2659		
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0018	14	33
0025	28	77
0036	52	157
0047	80	237
0058	106	317
0067	132	394
0090	202	551
0122	336	772
0133	398	866
0146	504	916
0163	740	988
0172	940	999
0180	1166	980
2660		
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0026	18	73
0037	40	153
0059	96	319
0102	262	621
0142	570	848
0158	880	890
0164	1076	873
2661		
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0033	48	103
0052	122	237
0110	322	626
0143	496	843
0157	630	923
0175	882	994
0187	1170	997
2662		
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0014	0	33
0028	8	78
0057	92	319
0080	170	476
0127	416	788
0145	584	881
0160	922	905
0167	1136	887
2663		
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0009	12	76
0016	38	236
0023	70	394
0030	120	549
0036	176	703
0041	232	842
0049	338	989
0055	492	1132
0064	862	1276
0073	1376	1305
0077	1662	1285
2664		
0000	0	0
0011	4	85
0018	36	230
0025	68	394
0035	126	628
0043	210	842
0050	300	938
0060	526	1212
0068	960	1307
0071	1232	1282
2665		
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0010	14	86
0017	28	231
0025	70	394
0035	130	630
0040	172	772
0047	234	912
0052	328	1058
0060	488	1205
0070	902	1350
0077	1390	1383
0082	1846	1375
2666		
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0004	0	48
0008	32	228
0010	74	386
0014	134	613
0016	180	768
0019	226	910
0024	280	1055
0027	410	1264
0030	568	1412
0033	814	1510
0035	1064	1463
2667		
0000	0	0
0012	10	85
0015	46	218
0018	90	396
0022	166	633
0024	216	772
0026	278	913
0030	430	1133
0034	778	1349
0038	1322	1455
0039	1774	1471
0041	2344	1452
2668		
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0020	2	87
0024	76	317
0027	126	467
0029	194	623
0031	258	772
0037	488	1066
0039	694	1200
0041	950	1275
0043	1358	1305
0045	1834	1280
2669		
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0007	16	86
0010	44	229
0013	82	394
0036	374	757
0038	464	909
0040	616	995
0043	988	1102
0046	2104	941
2670		
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0008	24	150
0013	90	400
0017	142	543
0022	196	772
0025	222	910
0028	274	1060
0033	384	1269
0037	548	1496
0041	800	1632
0044	1170	1667
0048	204	1487
2671		
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0008	96	152
0013	344	316
0018	500	467
0021	612	622
0025	744	772
0029	864	912
0033	1128	1055
0037	1582	1094
0040	2958	787
2672		
0000	0	0
0021	72	150
0028	168	393
0032	260	621
0036	304	767
0040	392	984
0045	540	1206
0048	728	1351
0053	1262	1443
0057	2102	1300
2673		
0000	0	0
0008	28	94
0011	60	226
0015	118	395
0021	180	621
0023	228	759
0027	286	917
0031	390	1130
0037	616	1353
0042	1276	1436
0046	1322	1244
2688		
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0047	44	22
0067	72	36
0249	546	80
0300	668	80
0331	832	79
2689		
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0145	274	40
0177	334	53
0200	394	59
0251	546	63
0302	708	70
0358	918	67
0368		66
2690		
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0030	10	12
0051	26	26
0100	78	54
0152	170	77
0200	294	89
0262	508	89
0218	714	86
2691		
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0061	54	32
0080	108	41
0121	196	55
0200	438	63
0300	764	70
0451	930	71
0500	1096	78
0551	1252	80
0569	1304	78
2692		
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0028	40	35
0053	124	78
0071	206	97
0100	368	118
0139	668	120
0150	762	119
2693		
0000	0	0
0030	0	10
0046	16	33
0060	74	60
0078	130	89
0100	222	119
0150	460	157
0200	818	173
0240	1136	170
0248	1206	170
2694		
0000	0	0
0029	14	38
0051	46	74
0074	104	116
0108	218	157
0200	872	186
0212	960	185
0219	1018	183
2695		
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0028	4	13
0041	22	40
0059	52	73
0077	124	115
0100	222	137
0150	576	150
0174	792	143
2696		
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0013	40	18
0030	150	75
0041	240	1[illegible]
0050	320	156
0096	694	238
0100	1162	261
0114	1470	259
2697		
0000	0	0
0021	24	38
0029	48	74
0036	68	114
0044	122	153
0070	476	237
0085	826	234
0090	1132	230
2698		
0000	0	0
0008	10	22
0017	28	77
0024	50	116
0037	80	156
0048	240	238
0067	578	272
0082	1106	266
2699		
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0006	10	41
0010	34	113
0014	82	193
0019	154	274
0025	286	355
0032	528	431
0040	1060	469
0046	1450	463
2700		
0000	0	0
0010	24	53
0012	44	113
0017	80	272
0023	174	317
0029	336	396
0037	576	434
0041	1142	424
2701		
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0007	8	41
0014	68	153
0023	242	318
0029	400	393
0037	788	443
0041	1154	442
0044	1440	440
2702		
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0007	28	103
0008	64	300
0010	118	330
0013	204	462
0015	328	573
0022	1466	695
0024	1930	670
2703		
0000	0	0
0006	24	160
0008	48	277
0011	140	476
0014	270	621
0016	494	717
0019	938	767
0022	1444	763
0024	1990	739
2704		
0000	0	0
0006	28	78
0009	102	238
0012	198	396
0015	310	554
0018	514	689
0021	920	757
0023	1466	750
0026	2108	707
2705		
0000	0	0
0019	86	82
0021	164	146
0024	258	228
0026	290	310
0031	492	469
0037	1098	614
0040	1586	613
0044	2202	612
2706		
0000	0	0
0006	34	64
0008	94	154
0010	162	238
0012	224	316
0015	296	399
0020	516	547
0023	812	627
0034	1394	645
0037	1796	633
2707		
0000	0	0
0004	16	68
0009	88	238
0013	184	398
0018	376	543
0021	616	676
0031	1106	658
0035	1774	640
2722		
0000	0	0
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0085	28	35
0102	38	47
0152	76	89
0202	120	140
0251	180	179
0300	204	231
0400	284	323
0452	326	365
0577	424	460
0700	552	543
0800	698	605
0900	846	658
1000	1016	699
1100	1176	733
1207	1406	768
1300	1620	787
1400	1880	793
1459	2052	793
2723		
0000	0	0
0258	216	139
0321	280	190
0381	352	240
0538	544	355
0812	982	517
1116	1626	624
1451	2676	600
2724		
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0238	186	172
0407	400	315
0678	954	445
0895	1568	485
1019	1968	486
1030	2002	484
2725		
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0175	168	48
0362	364	173
0637	650	363
0958	1224	596
1200	1798	553
1422	2398	545
1708	3240	540
2743		
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0050	14	68
0071	30	120
0100	58	195
0140	104	279
0190	184	398
0267	340	549
0307	456	627
0350	608	699
0410	904	767
0438	1082	780
0458	1248	778
2744		
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0056	28	16
0067	66	38
0129	146	153
0282	512	456
0407	1010	646
0531	1678	754
0617	2292	776
0629	2390	772
2745		
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0041	68	33
0097	144	89
0138	222	158
0175	288	237
0246	432	366
0311	622	471
0413	1020	615
0581	1656	719
0599	2190	640

TIME	STRAIN	STRS
2746		
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0056	40	35
0119	144	152
0179	242	276
0251	522	403
0368	818	587
0555	1690	790
0749	2548	995
0893	3420	1079
0900	3452	1073
2747		
0006	0	0
0016	34	36
0020	72	73
0044	140	157
0068	264	320
0093	424	472
0120	644	621
0155	1092	772
0189	1830	812
0193	1950	802
2748		
0000	0	0
0017	24	38
0034	80	72
0049	180	152
0063	296	237
0077	399	319
0103	570	471
0128	720	623
0151	778	772
0162	986	840
0176	1130	914
0218	1666	1065
0251	2350	1120
0258		1113
2749		
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0016	24	33
0030	60	74
0043	124	154
0067	212	320
0088	292	472
0110	390	623
0133	514	772
0144	590	842
0167	798	988
0181	936	1062
0197	1104	1134
0238	1858	1258
0250	2096	1302
0253	2192	1242
2750		
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0007	30	71
0014	84	150
0023	180	319
0030	258	469
0037	326	620
0043	410	780
0049	506	913
0057	690	1061
0065	1030	1204
0073	1394	1259
0078	1952	1250
2751		
0000	0	0
0009	26	32
0014	64	72
0019	152	157
0028	258	317
0035	320	473
0041	378	621
0047	462	767
0060	720	1057
0068	936	1204
0077	1352	1348
0088	1942	1422
0092	2280	1425
0096	2550	1413
2752		
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0015	90	71
0025	190	230
0035	346	406
0047	798	621
0054	1028	772
0063	1338	913
0074	1752	1059
0084	2288	1122
0088	2650	1107
2753		
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0010	116	390
0013	206	620
0016	280	763
0020	432	984
0023	658	1197
0027	952	1364
0032	1658	1494
0037	2640	1554
0038	3140	1520
2754		
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0007	152	229
0010	236	387
0013	312	543
0017	414	772
0020	506	978
0025	680	1277
0029	918	1507
0031	1118	1620
0037	1756	1778
0038	2148	1883
0040	2540	1803
2755		
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0010	66	244
0014	138	467
0020	238	772
0023	328	984
0026	480	1204
0033	934	1493
0036	1402	1598
0037	1916	1613
2756		
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0006	72	86
0010	190	230
0014	276	396
0020	384	623
0025	574	838
0030	694	1056
0035	842	1275
0039	1098	1384
0047	2158	1494
0081	2754	1467
2757		
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0010	60	315
0016	128	543
0022	230	813
0028	404	1056
0033	656	1276
0040	1234	1420
0044	1836	1433
0047	2368	1390
2758		
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0009	122	317
0015	208	547
0020	288	772
0028	364	987
0029	472	1200
0033	578	1345
0037	740	1494
0041	1062	1630
2772		
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0080	14	1
0124	82	9
0214	150	37
0272	370	53
0365	588	78
0553	1066	122
0700	1566	136
0852	2114	153
1100	3044	188
1300	3874	226
1460	4030	217
2773		
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0438	1102	33
0838	2490	29
0890	2680	29
2774		
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0315	808	54
0350	928	50
2775		
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0077	100	17
0109	164	35
0156	278	47
0220	450	61
0282	622	73
0451	1032	87
0568	1508	92
0588	1578	93
2776		
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0077	24	10
0125	124	34
0188	354	73
0261	730	102
0415	1802	101
0437	2046	97
2777		
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0061	202	47
0085	316	53
0131	428	89
0200	966	115
0305	1634	137
0400	2260	153
0582	3538	199
0671	4116	238
0700	5028	294
0952	3322	372
1088	7066	469
2778		
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0098	84	77
0136	224	119
0183	578	137
0237	816	139
0284	1414	135
2779		
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0059	122	73
0098	344	103
0172	562	103
0191	1130	99
2780		
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0015	24	35
0025	74	73
0035	136	112
0047	248	156
0060	432	194
0084	912	217
0104	1352	216
0110	1488	215
2781		
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0014	64	35
0027	164	72
0041	298	114
0056	484	157
0077	884	194
0130	1948	209
0164	2762	215
0191	3374	217
0233	4280	213
2782		
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0020	26	72
0028	52	113
0037	116	154
0048	198	193
0066	608	208
0070	746	200
0075	860	197
2783		
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0018	38	47
0024	194	113
0028	340	150
0037	654	237
0045	1076	315
0057	1840	335
0062	2364	329
2784		
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0007	10	45
0010	48	112
0019	196	240
0026	428	315
0031	724	340
0036	1068	339
0039	1278	329
2785		
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0007	46	21
0014	132	116
0017	226	154
0021	376	195
0027	608	232
0037	1178	277
0062	3258	303
0087	5104	364
0103	6200	432
0113	6730	472
0127	7603	547
0133	8076	584
2786		
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0003	0	70
0007	8	145
0009	48	230
0011	136	308
0014	302	396
0017	536	466
0020	974	548
0023	1380	580
0026	1782	589
0028	2282	589
0031	2812	590
0034		605
0042		697
0047	4102	765
0049	4496	801
0051	4878	852
0054	5402	903
2787		
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0007	60	77
0009	164	234
0012	368	396
0017	740	507
0019	1196	534
0022	1882	525
0025	2420	524
0027	2938	516
2788		
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0013	114	140
0016	210	236
0019	450	387
0021	632	463
0025	1180	537
0028	1644	550
0030	2136	528
0031	2600	514
2789		
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0026	10	38
0030	86	172
0031	162	250
0034	264	317
0037	508	400
0039	710	432
0042	1118	469
0046	1512	480
0048	1868	480
0051	2466	469
2790		
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0004	32	8
0007	94	74
0011	302	191
0016	534	317
0020	812	395
0025	1220	469
0028	1568	509
0033	2370	543
0038	3310	547
0043	3692	577
0049	4720	624
0057	5586	713
0066	7026	838
0072	8060	914
0078	8938	933
2791		
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0010	54	168
0013	194	309
0016	330	396
0021	648	472
0023	1136	469
0026	1458	461
0028	1900	451
2792		
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0000	0	0
0015	20	27
0019	72	149
0024	200	311
0027	340	396
0031	704	468
0035	1268	475
0038	1758	453
2809		
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0360	248	244
0616	580	326
0652	1120	323
60	1162	321
2810		
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0409	494	206
0843	1042	400
1120	2322	273
2811		
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0177	170	114
0300	332	176
0510	684	261
0752	1134	342
1000	1716	388
44	1856	387
55	1886	386
2812		
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0365	270	197
0646	496	290
0807	804	340
0875	970	348
1002	1334	344
1202	1940	328
2813		
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0118	126	163
0200	340	316
0300	628	488
0445	1398	612
2814		
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58	10	36
0169	152	263
0295	256	487
0393	1064	532
2815		
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85	96	156
0174	302	325
0257	620	432
0300	724	462
29	778	469
50	942	464
2816		
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74	42	55
0207	420	271
0348	1114	403
0400	1462	411
28	1508	409
32	1736	409
2817		
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30	20	77
40	42	156
61	98	319
72	134	396
83	196	469
97	272	546
0122	514	697
50	1062	792
58	1332	774
2818		
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51	82	72
57	118	113
78	334	220
0103	562	353
30	836	469
45	1108	514
68	1644	547
92	2278	543
0302	2530	539
2819		
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47	24	120
52	36	149
57	56	193
88	148	332
0100	240	398
17	430	472
28	598	510
51	1032	577
82	1386	639
0210	2440	642
16	2580	635
2820		
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27	10	76
33	28	119
38	46	156
49	80	237
60	136	316
71	210	396
84	322	469
93	420	509
0106	574	544
0131	964	583
57	1588	590
61	1734	575
2821		
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18	8	62
23	36	153
27	64	237
32	122	356
38	226	471
47	400	621
58	916	767
66	1404	841
73	1920	877
78	2294	882
82	2644	870
2822		
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21	18	50
26	52	111
35	110	243
42	202	397
59	310	542
60	678	772
68	1504	900
71	1836	889
2823		
000000	0	0
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10	30	109
17	94	233
27	212	398
35	432	547
48	1122	672
53	1538	670
2824		
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21	82	152
30	182	327
37	274	470
43	402	622
51	620	667
57	846	843
63	1210	882
67	1528	873
2825		
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17	14	67
20	62	231
23	146	396
26	244	543
30	510	772
34	908	911
38	1606	979
40	1986	978
42	2494	949
2826		
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18	58	238
21	114	396
23	164	546
27	238	768
29	292	914
32	376	1063
34	488	1203
37	700	1352
40	1080	1485
43	1730	1549
46	2400	1496
48	3512	1246
2827		
000000	0	0
13	66	41
19	188	187
24	220	319
31	666	469
36	956	621
46	1790	873
51	2556	950
2828		
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08	22	72
12	100	243
16	178	396
20	272	542
25	418	766
28	568	903
34	864	1062
38	1330	1110
40	1796	1106
43	2236	1083
2829		
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08	14	67
11	62	234
16	118	400
19	150	543
24	278	767
28		907
31	526	1062
37	1056	1179
40	1456	1148
2830		
000000	0	0

TIME	STRAIN	STRS
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19	40	79
23	134	237
27	238	395
32	396	621
37	528	772
40	680	909
46	1118	1050
50	1648	1104
53	2294	1082
2831		
000000	0	0
17	56	103
21	160	312
23	232	467
27	314	610
29	438	772
31	562	907
35	840	1053
38	1280	1125
40	1744	1120
2832		
000000	0	0
12	20	64
13	38	175
18	26	475
21	150	620
23	228	772
25	306	907
28	430	1059
31	574	1204
33	770	1301
35	1086	1366
37	1504	1386
39	1952	1384
41	2628	1293
2839		
000000	0	0
39	22	18
29	138	67
0251	364	147
0400	712	227
0700	1464	370
0853	1864	432
1388	3160	543
1555	4006	578
1800	4478	597
1900	5134	614
2425	6500	643
47	7182	640
2840		
000000	0	0
0139	224	19
0427	922	143
0652	1668	257
0800	1960	314
1158	2758	409
1455	3974	439
2841		
000000	0	0
0252	258	122
0525	824	252
0771	1504	317
1450	3510	416
1650	4136	425
1844	4752	430
1891	4920	429
2842		
000000	0	0
0300	306	107
0600	898	237
0850	1494	348
1200	1920	466
1500	2356	518
1650	2612	535
2000	2658	537
2854		
000000	0	0
55	64	17
67	90	39
0180	442	209
0333	1140	395
0500	2166	497
0773	4400	485
2855		
000000	0	0
0150	232	192
0310	812	423
0400	1268	503
0712	3248	671
0818	3986	682
30	4074	677
2856		
000000	0	0
80	24	82
0307	652	419
52	862	463
0500	1580	598
0705	2634	731
0800	3354	752
33	3574	755

TIME	STRAIN	STRS
2857		
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0157	276	197
0305	1064	322
0517	2368	442
0780	4128	526
2858		
000000	0	0
18	24	63
51	182	277
0110	964	506
0200	2186	660
38	3214	723
87	4470	740
92	4628	737
2859		
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19	36	73
39	102	154
64	222	321
97	486	472
0153	1320	625
2860		
000000	0	0
17	12	28
25	44	73
38	104	153
62	254	317
88	470	472
0120	834	624
77	2024	750
93	2596	738
2861		
000000	0	0
12	30	71
17	70	152
25	156	319
34	360	469
46	860	619
67	2068	772
87	3436	881
0107	4752	923
12	5194	900
2862		
000000	0	0
05	4	33
10	24	81
18	110	232
27	228	400
36	402	547
53	1162	772
70	2234	843
83	3270	877
93	4014	895
0105	4860	873
2863		
000000	0	0
13	16	22
25	112	226
33	228	398
41	416	548
63	1600	772
73	2230	838
94	3744	905
0100	4150	893
05	4468	867
2864		
000000	0	0
06	24	70
10	122	235
14	228	396
18	328	550
24	548	770
29	900	880
34	1438	975
37	2030	927
2865		
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03	4	32
07	52	144
10	152	303
15	268	467
19	454	621
25	920	767
34	1858	840
41	2984	875
50	4368	873
53	4912	834
2866		
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07	44	93
10	158	231
15	318	398
20	512	549
27	1008	767
32	1418	839
37	2130	917
43	2838	983
51	3818	1062

TIME	STRAIN	STRS
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60	5368	1033
2867		
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10	84	237
13	172	397
16	286	547
20	500	762
23	800	906
26	1318	986
30	1856	1006
38	2482	947
2870		
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04	22	78
08	128	319
12	290	540
17	604	767
20	946	840
26	1504	915
30	2062	986
36	2668	1053
42	3336	1123
46	3736	1113
48	4034	1078
2885		
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71	64	23
0133	200	44
0264	540	77
0459	1196	97
1108	3136	135
1411	4572	192
1975	6544	246
2333	7730	322
2886		
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0258	674	84
0810	3198	197
1350	5688	350
1400	5880	365
2887		
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0206	508	100
0497	1850	117
0860	3314	197
0926	3622	212
1457	5744	272
1847	7164	408
2888		
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0139	164	58
0320	910	89
0883	3316	178
1532	8150	363
2889		
000000	0	0
27	28	9
0253	1480	92
1237	8616	540
2890		
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0172	648	87
0292	1532	100
0400	3986	240
0500	4844	261
2891		
000000	0	0
0266	1414	143
0713	5018	332
2892		
000000	0	0
0218	1300	98
0770	5334	252
1113	8050	456
2893		
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11	42	32
32	164	75
84	1200	149
0126	2134	152
0232	4574	240
0284	5830	319
0331	6972	384
0341	7242	395
2894		
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24	52	40
42	242	112
61	626	151
0100	1458	163
57	2666	190
0203	3776	238
36	4452	271
2895		
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15	44	33
26	118	73
47	338	153
0100	1454	224

TIME	STRAIN	STRS
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0200	3610	333
62	4374	417
2896		
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14	120	72
22	360	158
31	864	221
41	1600	216
47	2096	209
2897		
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26	72	71
32	184	154
39	462	230
44	892	253
49	1240	252
54	1700	248
2898		
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07	0	39
12	60	120
20	328	231
27	718	249
31	1116	237
2899		
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05	44	20
08	130	111
11	272	193
15	484	271
18	818	329
21	1280	352
25	1794	350
30	2426	343
2900		
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05	24	58
07	58	111
11	164	231
13	302	315
17	432	379
20	984	387
23	1432	375
2901		
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11	20	20
16	102	119
20	308	238
22	492	315
27	864	396
30	1344	417
34	1820	419
37	2352	413
40	2836	412
2902		
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10	16	20
12	40	111
13	96	206
15	188	301
18	348	379
19	520	426
21	938	447
23	1344	444
25	1760	437
2903		
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05	42	56
07	122	168
09	240	271
11	424	353
14	826	417
17	1298	431
19	1836	430
22	2366	430
2904		
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03	6	18
06	34	90
07	112	192
10	266	316
13	748	394
16	1234	391
17	1718	376
2905		
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05	20	16
07	64	80
09	160	189
12	394	334
16	788	421
18	1228	447
21	1738	453
23	2342	470
29	3190	494
33	4136	509
38	4972	555
41	5814	588

TIME	STRAIN	STRS
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48	7044	676
2920		
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51	0	12
0150	76	69
0300	564	105
0500	1348	119
0700	2132	143
0900	2914	170
1254	4404	182
1300	4610	182
2921		
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87	108	25
0200	168	106
03	430	185
0418	702	248
0600	1336	275
0800	2084	279
0887	2444	270
2922		
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0115	64	57
78	136	128
0200	164	144
0300	402	222
0500	1118	97
0651	1658	330
0752	2078	341
0861	2964	323
2923		
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0131	158	13
0234	248	47
0351	360	124
0666	1002	330
0751	1242	363
0852	1598	402
0973	2104	411
2924		
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31	26	20
50	64	49
71	124	78
0100	226	113
0151	518	144
0200	910	152
0300	1766	163
0400	2438	183
0600	4068	210
0700	5024	200
2925		
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15	4	19
51	28	89
84	62	159
0148	188	279
0251	696	381
0311	1246	356
2926		
0000	0	0
18	6	5
71	112	63
0117	240	127
0155	384	176
0200	550	241
0302	1064	339
0400	1782	355
0477	2660	327
2927		
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39	4	21
0100	144	97
0162	506	125
0250	1186	132
0400	2308	165
0510	3158	183
0605	3956	183
2928		
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11	20	20
24	92	73
34	184	113
43	284	154
63	502	240
87	820	320
0154	2430	377
0200	3226	420
0236	4084	409
2929		
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15	0	20
48	138	170
61	254	238
80	470	317
0115	1016	396
0136	1458	410
75	2480	402
2930		
0000	0	0

TIME	STRAIN	STRS
27	66	62
45	228	147
76	848	198
0100	1414	158
53	2588	248
0200	3472	255
0217	4080	256
2931		
0000	0	0
05	0	33
10	22	112
11	34	159
15	64	237
19	98	319
23	135	396
31	276	550
40	590	697
53	1438	761
60	2152	746
2932		
0000	0	0
10	18	35
15	42	78
25	210	237
38	954	317
44	1456	299
2933		
0000	0	0
05	4	40
12	34	153
20	92	317
29	250	469
39	728	580
49	1438	597
64	2582	613
70	3118	597
2934		
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40	116	81
44	284	237
48	504	390
53	924	476
57	1606	496
62	2202	496
70	3680	505
79	5082	504
85	5758	484
2935		
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06	0	33
08	22	150
12	62	307
16	124	462
20	252	627
24	344	770
29	1086	815
32	1584	808
35	2070	797
2936		
0000	0	0
10	30	61
14	120	157
18	262	317
23	444	469
28	724	619
35	1362	772
41	2194	832
47	3004	830
50	3596	805
2937		
0000	0	0
04	18	65
07	108	232
10	240	396
13	390	543
20	1160	765
22	1608	768
25	2278	733
2938		
0000	0	0
08	46	63
11	198	228
15	370	400
18	644	537
21	1120	593
25	1828	611
28	2456	647
33	3480	667
38	4594	670
43	5596	673
50	7180	652
2939		
0000	0	0
05	10	65
07	60	234
10	124	396
13	230	545
16	420	685
19	842	772
21	1388	785
25	2024	782

TIME	STRAIN	STRS
30	3434	772
2940		
0000	0	0
04	24	79
07	92	237
10	204	396
13	448	543
16	1006	539
18	1714	487
2955		
0000	0	0
45	36	13
0100	52	67
55	82	132
0200	114	188
0300	174	318
0400	254	450
0500	308	577
0603	410	703
0800	796	862
0888	1570	710
2956		
0000	0	0
77	68	29
0151	168	89
0261	350	194
0466	526	450
0663	704	688
0751	810	772
0909	1282	830
0945	1500	807
2957		
0000	0	0
65	56	41
0150	148	77
0200	214	136
0511	854	402
0537	1016	392
2958		
0000	0	0
69	46	52
0165	142	149
0273	220	273
0515	400	532
0621	528	625
0755	940	653
2959		
0000	0	0
0103	150	44
0200	362	140
0450	984	449
0526	1228	548
0700	1916	748
0817	2744	745
2960		
0000	0	0
38	10	33
0100	50	89
0200	218	244
0284	394	396
0467	868	703
0520	1098	747
0564	1402	751
296		
0000	0	0
71	66	39
95	364	239
0237	426	316
0444	714	763
0465	754	807
0545	988	920
0612	1626	899
2962		
0000	0	0
92	16	19
0130	122	132
0269	398	375
0358	636	520
0455	946	670
0549	1368	762
0638	1984	791
0669	2248	783
2963		
0000	0	0
15	10	36
28	14	73
50	54	237
60	82	320
78	136	472
97	202	724
0116	280	770
28	404	917
63	664	1074
86	1042	1132
91	1182	1113
2964		
0000	0	0
21	32	48
28	64	76
39	102	160
61	184	318

TIME	STRAIN	STRS
81	246	473
0160	324	624
20	380	772
38	464	914
58	580	1063
80	812	1209
0207	1248	1248
09	1436	1230
2965		
0000	0	0
20	12	34
25	20	74
36	42	153
55	88	319
72	138	469
92	212	623
0113	322	771
40	592	915
0167	1184	956
75	1434	947
2966		
0000	0	0
10	24	68
14	56	150
22	156	317
33	246	543
41	412	695
47	640	772
53	1024	840
64		897
2967		
0000	0	0
08	0	29
14	34	152
21	84	315
28	136	469
41	212	772
47	260	907
53	310	1061
67	718	1350
2968		
0000	0	0
09	30	73
13	64	151
21	134	317
32	246	547
43	394	772
50	586	914
62	942	1062
70	1540	1132
85	2502	1205
98	3314	1280
0104	3704	1299
2969		
0000	0	0
05	22	67
09	70	225
14	134	463
21	218	780
26	282	1004
30	374	1204
37	582	1487
2970		
0000	0	0
08	6	64
11	20	147
16	64	318
24	154	683
30	218	903
36	352	1217
44	490	1554
47	1044	1573
2971		
0000	0	0
25	18	123
30	96	230
34	154	396
37	210	545
41	290	777
44	328	914
47	394	1059
51	456	1268
57	582	1488
2972		
0000	0	0
05	52	133
07	82	303
11	154	540
15	248	764
20	456	1065
24	704	1270
28	1206	1419
31	1554	1497
34	2022	1573
37	2606	1593
2973		
0000	0	0
04	36	72
08	90	229
12	152	468
16	238	702

TIME	STRAIN	STRS
20	328	990
25	432	1264
28	546	1487
30	1078	1485
2974		
0000	0	0
07	102	61
11	280	263
16	394	547
20	482	770
25	614	1061
30	956	1360
34	1318	1611
2975		
0000	0	0
05	14	89
08	56	306
12	102	525
16	150	772
19	216	984
22	290	1200
27	424	1484
29	526	1623
2976		
0000	0	0
50	64	28
0100	110	46
0300	226	158
0500	306	387
0700	388	610
0900	468	903
1100	556	1118
1500	1006	1305
1517	1064	1301
2977		
0000	0	0
0128	100	39
0300	310	254
0763	556	722
0781	618	1099
0853	1296	1268
2978		
0000	0	0
0192	202	35
0334	326	73
0758	668	354
1348	978	794
1804	1212	1092
68	2874	1317
84	3040	1229
2979		
0000	0	0
0290	148	277
0613	278	791
0933	464	1057
2980		
0000	0	0
0167	234	263
0280	358	519
0495	586	1029
0626	802	1302
0712	1084	1419
0734	1188	1412
2981		
0000	0	0
0157	112	215
0278	196	480
0543	424	1081
0721	766	1407
0759	988	1417
0767	1074	1405
2982		
0000	0	0
0242	142	466
0500	354	1042
0597	488	1225
0717	1016	1339
2983		
0000	0	0
0120	62	150
0363	444	655
0505	764	923
0694	1594	1112
0842	3424	835
2984		
0000	0	0
10	44	34
26	76	78
44	334	330
84	410	468
0121	478	778
0148	530	988
63	570	1133
0208	670	1493
44	804	1778
72	950	1940
97	1236	2092
0300	1420	2053
2985		
0000	0	0
39	104	72

TIME	STRAIN	STRS
52	192	153
76	342	318
0130	530	713
0172	654	1063
0210	786	1348
30	884	1490
67	1196	1707
73	1370	1727
78	1524	1713
2986		
0000	0	0
35	30	216
77	104	547
0132	194	987
0176	318	1365
0211	416	1640
0238	530	1849
0271	830	2057
77	930	2058
80	1058	2046
2987		
0000	0	0
07	14	73
17	56	238
29	112	471
41	216	759
50	320	988
60	502	1279
63	586	1490
68	682	1707
77	798	1912
84	950	2057
2988		
0000	0	0
07	0	17
10	16	77
14	42	151
21	88	316
31	144	548
38	196	766
47	246	989
57	308	1272
65	360	1489
73	412	1703
78	454	1849
84	492	1998
91	550	2198
98	636	2328
0112	988	2595
2989		
0000	0	0
06	18	75
10	48	192
13	76	231
23	142	469
31	194	695
39	246	905
48	298	1133
55	326	1348
65	422	1630
76	504	1918
84	582	2125
97	742	2397
2990		
0000	0	0
05	48	168
10	104	396
13	140	544
18	196	772
23	220	1057
28	270	1271
32	302	1487
37	340	1769
43	380	2053
46	400	2207
2991		
0000	0	0
06	40	160
11	96	403
16	136	630
20	190	854
25	238	1068
29	286	1283
36	348	1640
40	404	1852
47	506	2207
49	554	2347
53	660	2547
58	804	2735
2992		
0000	0	0
14	48	112
19	90	314
26	166	624
33	264	987
39	340	1275
43	392	1490
47	462	1706
52	574	2658
2993		
0000	0	0

TIME	STRAIN	STRS
07	8	56
45	54	176
52	136	532
60	240	917
65	312	1200
73	406	1623
79	486	1924
84	552	2200
88	624	2397
96	770	2720
99	870	2847
2994		
0000	0	0
04	54	56
10	156	450
14	222	694
18	278	907
22	346	1205
30	456	1635
33	522	1912
37	598	2200
41	694	2458
2995		
0000	0	0
06	120	165
12	278	483
19	432	1004
23	486	1291
27	563	1521
32	678	1932
36	836	2207
40	1000	2462
44	1390	2611
3022		
0000	0	0
57	0	5
0129	24	113
98	50	210
0277	84	326
0500	202	648
0756	306	853
0900	624	1104
1043	770	1111
49	804	1110
3023		
0000	0	0
0200	120	125
0500	316	450
0712	456	686
1468	2698	675
3024		
0000	0	0
0511	380	710
0865	1018	902
0900	1360	894
3025		
0000	0	0
0372	196	437
0685	436	837
0771	540	988
0875	822	1050
3026		
0000	0	0
0164	138	245
0300	236	559
90	320	772
0500	494	987
0623	1026	1107
29	1078	1103
3027		
0000	0	0
0118	620	62
0252	1124	169
0586	2516	571
0936	3332	1165
1054	3490	1157
59	3538	1152
3028		
0000	0	0
0120	96	147
0271	224	473
0437	410	823
0600	812	1080
30	1002	1083
38	1066	1079
3029		
0000	0	0
0151	84	240
0321	240	621
0525	652	988
61	864	1003
69	940	997
3030		
0000	0	0
17	16	36
30	38	73
51	104	24[illegible]
71	158	400
0100	238	628
0219	288	772
50	416	988

TIME	STRAIN	STRS
64	512	1097
0312	994	1350
43	1496	1441
50	1690	1437
3031		
0000	0	0
12	16	37
27	66	75
51	116	240
91	216	551
0123	290	789
60	404	1068
0202	678	1353
19	936	1393
22	1056	1380
26	1208	1358
3032		
0000	0	0
16	22	41
38	74	157
85	224	509
0120	338	770
72	602	1097
0213	1130	1279
33	1500	1307
38	1604	1300
43	1854	1273
3033		
0000	0	0
13	22	36
20	50	71
56	148	238
77	190	400
0120	300	700
51	422	918
81	600	1135
0223	952	1354
33	1140	1364
37	1314	1343
3034		
0000	0	0
12	16	45
17	38	73
26	134	236
36	214	469
42	264	626
48	312	772
57	384	983
65	468	1205
70	540	1348
77	630	1490
87	872	1703
93	1054	1775
98	1310	1803
3035		
0000	0	0
12	44	35
22	104	152
30	164	319
40	216	548
49	262	847
57	306	985
65	356	1208
73	410	1422
81	466	1632
87	518	1779
97	618	1987
0107	792	2198
3036		
0000	0	0
09	70	74
13	130	150
22	220	315
33	314	547
42	396	769
51	478	985
64	620	1279
73	676	1499
87	1164	1704
3037		
0000	0	0
06	66	39
11	160	315
18	308	617
24	418	842
3038		
0000	0	0
04	32	72
08	124	231
12	198	391
17	258	620
21	320	840
27	374	1062
32	440	1340
37	526	1564
42	652	1847
50	926	2128
3039		
0000	0	0
06	50	57
13	194	323

TIME	STRAIN	STRS
19	312	545
24	418	772
31	554	1061
37	676	1346
41	766	1561
47	894	1773
3040		
0000	0	0
05	44	190
09	90	392
13	150	621
16	204	840
20	256	1057
24	340	1343
27	408	1564
30	490	1768
35	700	2063
3041		
0000	0	0
05	54	151
09	136	396
12	206	624
17	278	920
21	356	1210
26	466	1486
30	40	1773
33	854	1925
3042		
0000	0	0
04	64	110
07	116	319
12	176	653
16	230	899
20	288	1205
24	346	1490
29	420	1775
31	476	1945
33	542	2133
37	630	2327
3043		
0000	0	0
05	12	72
09	50	231
15	92	475
22	156	768
27	220	989
34	304	1277
38	382	1487
3044		
0000	0	0
59	16	27
0133	68	120
0200	88	200
0477	204	519
0779	332	854
1041	444	1119
1512	1058	1483
3045		
0000		0
00	46	53
0224	146	240
0626	404	699
0889	592	976
1100	790	1179
1267	996	1287
1593	2280	1180
3046		
0000	0	0
0164	46	130
0354	112	339
0494	150	501
1000	250	1074
1255	326	1350
1400	378	1495
1669	456	1651
1800	650	1787
2036	714	1997
2141	852	1960
3047		
0000	0	0
0265	90	159
0382	180	410
0865	318	783
1029	434	936
1264	644	1223
1577	1248	1373
1589	1304	1365
3048		
0000	0	0
30	8	26
0169	114	313
0313	172	642
0500	264	1082
0652	356	1427
0751	440	1632
0925	650	1957
1109	3080	1670
3049		
0000	0	0
0168	150	285
0350	266	703

TIME	STRAIN	STRS
0453	310	920
0555	390	1144
0651	462	1353
0800	630	1637
0894	776	1727
0910	1114	1708
3050		
0000	0	0
0127	270	152
0232	456	350
0448	604	588
0559	724	832
0762	930	1282
3052		
0000	0	0
28	0	107
58	30	337
83	100	544
0111	140	772
0140	164	989
0174	230	1273
0202	264	1495
0233	316	1705
0268	370	1993
0293	414	2200
0335	438	2476
0366	652	2667
0378	948	2744
0383	1162	2723
3053		
0000	0	0
14	12	40
56	100	320
86	156	548
0115	214	772
0145	260	938
0181	322	1278
0210	372	1493
0251	454	1778
0278	520	1990
0305	588	2200
36	696	2398
63	994	2530
69	1044	2530
3054		
0000	0	0
22	22	73
38	56	153
51	64	239
87	144	547
0116	188	772
0164	268	1099
0181	322	1298
0209	374	1493
0240	470	1708
0288	856	2057
0325	942	2246
0350	1014	2246
3055		
0000	0	0
12	24	47
19	38	77
32	58	157
44	84	238
76	146	472
0118	228	772
49	284	988
87	358	1279
0217	416	1495
48	488	1705
78	590	1918
0326	962	2162
30	1038	2163
57	1186	2143
3056		
0060	0	0
17	40	103
24	90	233
31	150	396
38	210	547
47	276	780
57	336	1060
68	396	1348
78	432	1630
90	504	1917
0100	558	2200
12	624	2465
23	712	2725
29	768	2877
40	922	3119
3057		
0000	0	0
12	86	150
15	214	427
38	316	772
50	422	1072
60	498	1349
71	564	1633
87	678	2063
99	766	2343
0110	852	2596

TIME	STRAIN	STRS
21	984	2859
28	1106	2981
37	1188	3103
40	1570	3119
3058		
0000	0	0
07	4	73
14	24	237
24	58	469
36	106	772
44	150	989
52	186	1205
62	236	1495
71	284	1709
78	334	1918
89	404	2196
97	462	2400
0109	564	2664
18	674	2857
24	782	2952
33	1050	3116
3059		
0000	0	0
37	16	35
41	64	240
46	104	471
51	158	767
55	208	990
59	234	1297
64	292	1495
71	358	1847
77	424	2200
83	490	2529
89	572	2860
94	656	3125
3060		
0000	0	0
06	22	158
12	80	403
26	216	1007
31	276	1350
37	326	1634
42	390	1917
48	466	2200
52	502	2400
55	624	2594
60	762	2860
64	886	3056
70	1186	3317
3061		
0000	0	0
07	38	169
14	106	469
21	162	775
27	210	1058
32	256	1349
37	306	1625
44	382	1988
49	450	2238
56	570	2694
61	664	2855
67	814	3188
72	1002	3503
3062		
0000	0	0
08	12	140
26	108	475
33	234	980
38	308	1354
43	392	1703
48	468	2054
52	562	2394
57	662	2761
60	740	2975
3063		
0000	0	0
10	10	161
17	78	640
20	124	905
24	168	1197
28	218	1483
32	260	1776
37	312	2070
39	412	2328
43	492	2598
47	580	2860
59	2708	3073
3064		
0000	0	0
06	74	164
10	158	420
19	288	1062
23	340	1350
28	484	1632
33	452	1996
36	492	2205
39	542	2467
42	598	2725
45	644	2919
48	688	3119
51	762	3378

TIME	STRAIN	STRS
55	856	3643
0000	0	0
13	12	143
16	106	396
21	176	622
25	250	918
31	350	1368
35	416	1629
38	466	1853
43	542	2200
3065		
0000	0	0
31	34	183
35	70	396
38	114	624
41	158	843
45	200	1169
50	258	1500
52	288	1697
55	326	1927
58	368	2214
62	424	2465
66	498	2855
70	568	3113
73	634	3380
75	670	3515
80	828	3842
3087		
0000	0	0
0130	88	110
0277	170	233
0467	364	436
0562	546	509
0616	726	523
0630	788	517
3088		
0000	0	0
34	22	60
0357	436	267
0530	682	415
38	694	421
0718	1058	530
34	1080	537
3089		
0000	0	0
0147	112	79
0285	206	154
0516	498	337
0852	1996	247
3090		
0000	0	0
38	14	37
60	48	76
78	78	110
0137	144	165
0194	236	279
032626	534	509
0397	944	556
0407	1040	548
3091		
0000	0	0
60	74	78
0111	116	177
80	196	317
0227	256	403
0334	520	573
0432	1290	553
3092		
0000	0	0
29	8	34
50	26	74
69	44	112
0311	72	537
49	344	568
0462	444	573
70	496	565
3093		
0000	0	0
31	14	27
38	52	73
50	56	157
61	82	237
80	134	347
0102	192	469
26	304	621
50	488	771
66	80[illegible]	823
73	996	800
3094		
0000	0	0
11	4	33
18	24	72
24	40	114
33	58	173
53	118	319
74	200	471
96	306	621
0120	460	772
34	580	840
58	976	913
64	1192	896

TIME	STRAIN	STRS
3095		
0000	0	0
08	8	33
15	38	75
30	98	158
50	162	237
63	224	417
84	324	471
0114	586	624
39	1006	688
48	1262	678
52	1436	655
3096		
0000	0	0
18	14	68
28	60	236
39	126	469
48	240	696
55	348	840
62	532	988
70	920	1092
73	1238	1068
3097		
0000	0	0
07	60	78
19	194	238
31	326	470
38	438	621
46	634	772
52	900	846
55	1172	847
57	1436	817
3098		
0000	0	0
08	30	73
19	90	232
27	144	469
34	222	621
40	302	768
48	444	917
57	738	1063
61	1006	1090
64	1356	1053
3099		
0000	0	0
04	12	80
09	44	239
15	132	469
21	268	697
24	424	833
31	954	957
33	1600	880
3100		
000000	0	0
06	20	71
12	74	238
17	90	396
22	78	625
27	48	844
31	126	989
37	350	1206
41	782	1295
45	1356	1212
3101		
000000	0	0
08	40	231
11	86	400
17	186	622
21	280	772
25	454	913
31	1010	1006
33	1620	902
3102		
000000	0	0
05	12	93
08	52	313
12	110	540
16	204	772
20	344	984
24	412	1200
28	1148	1294
30	1578	1276
3103		
000000	0	0
06	22	94
09	76	317
13	154	549
17	244	776
21	382	986
26	714	1201
27	1060	1232
29	1620	1162
3104		
000000	0	0
07	10	78
09	30	143
12	56	310
16	120	547
19	192	767
23	290	987
28	520	1276

TIME	STRAIN	STRS
33	696	1493
36	1274	1728
3105		
000000	0	0
05	18	85
08	68	182
14	192	600
17	282	782
21	450	977
26	1000	1153
28	1562	1028
3120		
000000	0	0
0146	116	85
0397	624	275
1027	2890	456
1138	3204	449
3121		
000000	0	0
40	2	13
80	36	113
0310	102	248
0464	192	404
0702	458	603
0808	642	672
1113	1476	754
1134	1562	754
3122		
000000	0	0
0132	100	40
0285	260	163
0450	514	277
0741	1176	403
0910	1680	432
1291	2538	450
1340	2686	449
3123		
000000	0	0
30	20	32
0165	186	236
0274	500	433
0408	1124	569
0560	1952	672
0633	2402	700
0708	2930	707
21	3020	700
3124		
000000	0	0
30	22	35
52	36	73
0158	156	243
0310	414	447
0433	866	721
0577	1576	757
0553	1716	749
3125		
000000	0	0
27	28	38
0163	154	232
0367	364	570
0472	968	686
0635	1834	764
74	2120	763
3126		
000000	0	0
21	14	73
35	34	120
54	78	240
87	194	471
0129	496	697
57	1002	772
62	1178	772
71	1516	759
3127		
000000	0	0
26	44	71
58	150	290
72	218	396
90	348	549
0126	562	699
41	742	769
87	1530	824
0207	1800	849
3128		
000000	0	0
08	22	36
22	52	57
37	82	157
71	220	397
84	340	547
0132	596	772
61	950	914
78	1192	985
0238	2282	1122
50	2600	1110
3129		
000000	0	0
97	110	240
0107	188	469
14	268	630
0122	364	772

TIME	STRAIN	STRS
32	584	949
40	896	1062
52	1648	1144
59	2220	1127
3130		
000000	0	0
17	84	142
22	128	205
32	242	400
43	426	621
51	600	772
58	878	882
71	1536	1025
81	2098	1100
90	2700	1113
96	3208	1093
3131		
000000	0	0
06	22	72
17	70	238
31	142	547
41	244	780
53	420	1067
64	694	1280
76	1274	1420
80	1552	1436
86	2098	1410
3132		
000000	0	0
06	36	107
09	120	316
13	236	547
17	335	775
21	474	1056
27	732	1348
31	1024	1490
33	1518	1560
37	2092	1547
3133		
000000	0	0
07	12	49
10	70	226
14	142	469
18	200	688
21	280	907
25	390	1132
29	564	1348
33	874	1564
37	1294	1702
40	1774	1776
43	2290	1771
3134		
000000	0	0
07	36	114
11	94	319
15	176	447
19	256	772
22	380	986
27	618	1217
31	1092	1387
34	1584	1443
36	2194	1415
3135		
000000	0	0
07	50	78
10	130	227
14	212	397
19	304	551
25	508	772
31	926	911
34	1412	918
3136		
000000	0	0
05	20	93
08	52	232
12	92	390
16	152	560
19	226	696
22	302	839
26	408	983
32	690	1204
36	896	1283
39	1288	1348
41	1672	1370
46	2292	1360
3137		
000000	0	0
08	74	159
17	222	449
22	386	621
27	730	764
31	1110	822
34	1550	838
37	2020	838
42	2920	809
3152		
000000	0	0
0100	146	29
0267	784	36
0367	1214	27
3153		

TIME	STRAIN	STRS
000000	0	0
24	16	13
56	60	31
81	110	46
0151	300	63
0219	576	67
66	786	64
3154		
000000	0	0
38	64	11
71	176	23
0151	470	30
0315	1190	24
3155		
000000	0	0
49	26	22
71	58	41
0100	112	55
0249	276	70
0335	634	71
0430	1076	70
3156		
000000	0	0
53	138	28
67	218	39
0144	792	47
0200	1252	41
3157		
000000	0	0
11	12	13
27	28	33
47	84	51
70	356	89
0127	542	104
0165	826	105
0190	1056	104
3158		
000000	0	0
17	54	19
28	82	33
78	356	71
0100	518	73
37	1010	67
3159		
000000	0	0
09	6	15
16	38	49
27	106	96
47	380	154
58	646	157
65	834	152
3160		
000000	0	0
06	22	20
14	58	55
18	84	73
30	200	114
54	642	157
70	876	143
75	1236	143
3161		
000000	0	0
07	16	22
13	32	54
18	54	73
27	122	114
39	284	153
57	696	162
62	842	160
3162		
000000	0	0
05	22	12
11	46	35
19	120	74
31	226	117
43	410	156
65	834	173
72	1004	169
3163		
000000	0	0
04	24	21
08	70	71
14	248	151
22	302	234
28	796	266
32	1112	266
36	1442	252
3164		
000000	0	0
03	16	21
07	53	80
09	72	114
11	106	153
16	206	232
38	1046	286
40	1250	287
45	1824	279
3165		
000000	0	0
05	30	17
08	104	74

TIME	STRAIN	STRS
11	178	115
14	264	155
21	506	234
27	586	274
32	1104	291
37	1554	287
3166		
000000	0	0
03	16	22
04	44	92
06	84	152
08	154	227
12	390	320
15	684	364
17	998	341
3167		
000000	0	0
05	22	45
07	46	115
09	114	200
12	236	277
16	484	354
19	916	373
21	1286	351
3168		
000000	0	0
04	20	67
08	158	308
12	356	313
15	558	354
18	1198	347
21	1566	331
3169		
000000	0	0
11	12	79
14	84	232
18	276	396
20	600	462
23	1044	467
24	1544	439
3170		
000000	0	0
03	20	60
04	46	150
07	198	303
09	368	382
12	704	431
14	1124	428
3171		
000000	0	0
13	26	22
17	98	150
20	314	312
23	710	381
25	1134	385
27	1674	365
3172		
000000	0	0
03	20	69
05	50	161
07	102	259
10	230	390
11	430	462
14	722	492
16	1094	487
17	1498	469
3186		
000000	0	0
0108	44	48
0288	146	230
0372	189	322
0439	238	396
0515	284	472
0645	404	583
0730	590	630
0747	632	621
3187		
000000	0	0
0156	56	78
0329	144	238
0510	262	399
0627	422	463
0650	520	459
3188		
000000	0	0
0133	82	21
0317	272	152
0485	498	268
0674	518	359
0735	1122	361
48	1174	360
3189		
000000	0	0
0111	178	100
0256	352	372
0384	604	514
0408	758	591
15	810	585
3190		
000000	0	0
0134	40	48

TIME	STRAIN	STRS
0278	120	168
0407	174	287
0479	216	354
0607	312	472
0700	398	548
0754	526	564
0762	594	553
3191		
000000	0	0
0140	114	74
0283	262	432
0400	466	640
50	730	664
58	992	658
3192		
000000	0	0
31	30	79
48	72	194
63	116	317
84	170	471
0106	242	622
28	[illegible]	722
41	[illegible]	843
51	654	854
54	826	833
3193		
000000	0	0
32	8	19
32	78	130
0213	156	287
0327	290	503
0409	498	625
38	678	629
49	774	616
3194		
000000	0	0
12	12	38
35	40	119
42	60	163
53	84	240
76	158	338
0118	342	621
0146	732	704
0159	1160	685
3195		
000000	0	0
21	32	65
44	90	160
70	126	316
94	168	470
0120	238	623
52	386	778
57	494	770
61	668	745
3196		
000000	0	0
15	22	33
32	38	77
46	66	155
68	114	316
89	158	472
0112	218	623
33	298	772
55	418	917
70	570	988
75	702	993
81	908	973
3197		
000000	0	0
09	70	73
14	110	154
27	192	396
38	272	621
47	284	845
53	270	989
59	258	1132
67	212	1253
71	832	1150
3198		
000000	0	0
08	12	78
16	42	231
23	90	398
33	162	621
39	208	772
49	306	983
55	410	1133
3199		
000000	0	0
07	36	74
15	74	237
23	128	398
33	208	625
42	296	843
52	414	1063
59	582	1204
62	724	1231
3200		
000000	0	0
04	4	70
07	22	189

TIME	STRAIN	STRS
10	48	323
15	94	546
23	102	923
28	278	1137
33	424	1348
3201		
000000	0	0
03	16	63
11	100	319
15	182	545
20	260	772
25	356	984
30	510	1205
34	2174	1446
3202		
000000	0	0
05	10	69
09	60	234
14	112	469
20	176	707
24	250	920
31	384	1209
37	1584	1374
3203		
000000	0	0
04	14	78
07	40	229
11	132	469
16	222	767
19	294	983
22	366	1200
26	470	1407
3204		
000000	0	0
07	140	53
09	196	149
13	256	313
18	352	630
21	410	840
26	504	1143
31	672	1494
34	1546	2095
3205		
000000	0	0
04	32	129
07	88	283
14	264	779
18	330	984
23	680	1273
3206		
000000	0	0
04	14	78
07	58	246
11	108	471
17	208	885
20	260	1063
24	360	1349
28	472	1564
3207		
000000	0	0
05	4	75
09	54	239
15	122	470
20	202	710
25	270	912
32	400	1207
36	778	1356
3234		
000000	0	0
08	4	15
19	24	76
27	46	119
32	62	157
44	92	237
57	132	319
67	180	398
77	228	469
0107	490	622
17	692	642
25	952	622
3235		
000000	0	0
11	6	35
15	18	78
38	44	157
60	120	318
83	264	469
0102	500	570
10	716	514
3236		
000000	0	0
18	16	43
23	34	78
37	70	157
49	116	238
71	220	401
89	350	510
0102	552	545
08	760	524
3237		
000000	0	0

TIME	STRAIN	STRS
21	18	35
28	40	77
35	64	113
42	98	156
53	142	237
64	204	316
76	268	402
88	352	469
0106	578	532
10	748	513
3238		
000000	0	0
26	40	36
33	50	74
40	78	114
47	92	157
58	150	238
81	264	398
94	336	469
0112	502	547
21	692	557
28	1104	540
3239		
000000	0	0
18	20	35
34	80	119
53	140	244
75	302	401
93	398	509
0116	618	621
26	790	643
34	1030	633
3240		
000000	0	0
21	38	33
30	60	78
44	128	157
62	224	279
73	272	358
86	372	433
0102	496	509
16	786	544
23	936	526
3241		
000000	0	0
21	20	42
28	46	80
43	108	165
55	146	253
66	196	327
77	246	403
89	330	479
0118	690	580
22	874	560
3242		
000000	0	0
12	60	13
18	126	35
24	194	51
40	346	61
53	590	90
64	866	94
82	1396	87
3243		
000000	0	0
09	14	18
16	22	37
28	166	75
33	250	90
47	538	99
61	924	97
68	1120	94
3244		
000000	0	0
08	30	10
15	84	35
22	144	61
28	210	17
41	474	96
62	1044	87
3245		
000000	0	0
09	24	14
14	58	36
21	110	63
26	158	78
40	348	114
53	638	129
67	1054	128
79	1398	123
3246		
000000	0	0
11	68	15
16	116	35
27	196	61
33	316	79
41	460	90
52	802	93
64	1102	90
74	1380	89
3247		

TIME	STRAIN	STRS
000000	0	0
11	30	25
20	82	57
25	122	77
35	242	107
42	384	117
51	598	122
63	950	120
70	1138	115
3248		
000000	0	0
12	82	14
19	162	36
29	294	67
42	532	87
50	726	89
65	1158	[illegible]
3249		
000000	0	[illegible]
09	[illegible]	[illegible]
14	[illegible]	[illegible]
21	[illegible]	[illegible]
27	[illegible]	[illegible]
42	[illegible]	[illegible]
59	[illegible]	[illegible]
78	[illegible]	[illegible]
3262		
000000	0	0
09	34	35
24	56	112
31	88	158
45	184	236
76	480	398
98	800	469
0119	1260	493
28	1502	488
3263		
000000	0	0
16	2	21
22	10	53
27	20	75
35	44	117
42	90	157
57	174	237
71	306	316
97	584	358
0129	1128	509
40	1402	512
44	1540	505
3264		
000000	0	0
23	0	21
28	10	75
40	30	157
52	74	238
64	110	316
74	176	397
88	272	473
0107	512	568
0131	1050	577
0137	1170	568
3265		
000000	0	0
20	18	49
27	48	78
41	128	157
54	192	238
68	294	319
84	630	396
0106	872	450
32	1500	468
38	1686	484
3266		
000000	0	0
09	2	38
23	18	72
37	48	157
49	92	236
61	162	316
74	248	396
88	418	469
0119	1056	540
37	1144	532
3267		
000000	0	0
12	44	36
29	108	78
45	202	157
59	314	238
77	524	317
0102	958	372
13	1214	372
23	1518	363
3268		
000000	0	0
17	14	37
32	78	76
40	114	114
47	164	158
61	252	238
75	362	317

TIME	STRAIN	STRS
92	536	396
0104	700	433
27	1192	458
32	1326	453
3269		
000000	0	0
23	48	36
31	84	79
46	200	158
61	340	237
77	512	317
97	746	398
0117	1006	433
28	1400	443
35	1592	432
3270		
000000	0	0
19	10	35
0120	1044	493
31	1304	498
45	1666	493
3271		
000000	0	0
18	50	39
24	64	75
39	134	157
52	248	237
69	438	319
92	758	398
0124	1314	471
66	2154	550
0242	3816	621
61	4346	617
3272		
000000	0	0
14	24	49
29	64	78
45	160	157
66	350	279
95	694	398
0135	1358	509
85	2308	625
0226	3132	697
0302	4894	759
40	5828	758
3273		
000000	0	0
32	76	83
57	176	156
62	320	239
94	646	398
0128	952	471
48	1518	547
94	2460	625
0248	3666	671
76	4378	672
97	4922	667
3274		
000000	0	0
18	10	47
23	20	75
38	84	157
51	156	237
80	420	396
0132	1202	547
77	2176	625
0221	3158	655
34	3666	646
3275		
000000	0	0
23	40	33
33	176	74
64	440	232
0102	870	402
50	1716	522
97	2750	583
0256	4114	620
89	4996	613
3276		
000000	0	0
12	20	33
28	48	75
36	76	113
43	124	155
84	568	351
0144	1670	471
98	2804	547
0266	4418	584
87	[illegible]	579
3277		
000000	0	0
24	86	50
30	120	79
47	472	156
0110	1078	411
84	2576	540
0292	5250	567
3278		
000000	0	0
25	82	35
33	146	77

TIME	STRAIN	STRS
68	452	261
0157	1928	512
0208	2844	583
84	4732	610
96	5036	603
3291		
000000	0	0
21	10	18
42	12	36
77	32	72
99	42	93
0151	76	143
99	110	189
0252	168	244
0300	236	291
0400	320	390
0600	596	543
0743	1020	581
0760	2096	579
3292		
000000	0	0
66	26	09
99	60	33
0124	86	53
51	110	76
76	124	97
0200	158	118
0324	190	232
0500	478	403
0600	658	489
0700	770	557
0825	1114	587
0951	1222	583
3293		
000000	0	0
61	48	17
76	62	28
99	90	46
0124	124	63
51	162	84
77	202	100
99	228	117
0325	384	214
0453	546	327
0552	694	400
0792	1380	476
0808	1446	472
3294		
000000	0	0
86	52	28
99	74	49
0124	112	83
51	160	151
76	208	166
99	254	200
0252	286	287
0300	542	356
0400	992	457
0536	1984	463
3295		
000000	0	0
51	32	24
65	58	48
77	74	53
99	118	94
0126	166	129
45	208	159
0251	556	283
0400	1542	313
37	1804	305
3296		
000000	0	0
51	42	24
70	72	54
99	116	100
0131	150	154
0233	292	356
0446	1128	603
59	1260	593
3297		
000000	0	0
16	48	33
31	128	53
37	186	75
47	294	115
56	354	155
76	448	277
93	506	396
0118	598	548
39	690	797
62	828	863
94	1136	987
0205	1364	999
10	1534	979
3298		
000000	0	0
09	22	38
46	298	131
75	670	237
98	964	317
0136	1324	471

TIME	STRAIN	STRS
65	1610	622
0200	2004	772
51	2774	924
65	3158	926
72	3410	879
3299		
000000	0	0
08	40	29
30	162	73
40	274	113
50	364	153
64	422	240
74	478	319
0115	668	560
41	888	702
71	1264	843
99	1748	897
0206	1962	880
3300		
000000	0	0
10	6	38
12	28	86
17	46	156
24	88	319
34	184	545
44	306	772
51	522	913
59	632	1062
68	1092	1186
73	1648	1160
3301		
000000	0	0
07	10	32
10	24	75
14	40	154
22	130	317
30	200	469
36	296	619
42	374	767
49	498	911
61	826	1133
75	1478	1315
80	1824	1335
84	2220	1319
3302		
000000	0	0
07	18	35
12	40	78
17	72	157
21	100	238
28	150	396
36	220	550
44	324	767
51	414	917
58	544	1057
64	758	1169
3303		
000000	0	0
04	6	73
10	86	319
16	202	547
21	378	772
26	592	913
31	1006	1063
37	1574	1205
42	2168	1279
47	2676	1297
49	3264	1267
3304		
000000	0	0
07	30	72
10	72	199
12	116	320
16	166	475
21	234	696
28	332	992
31	452	1137
35	584	1285
41	960	1495
44	1354	1563
47	1742	1564
3305		
000000	0	0
06	28	61
11	108	240
18	244	539
23	380	768
27	486	914
33	750	1137
38	1112	1280
45	1976	1387
49	2478	1393
52	3192	1325
3306		
000000	0	0
02	26	63
07	260	233
11	504	480
15	644	697
19	794	911
22	936	1144

TIME	STRAIN	STRS
27	1150	1410
30	1378	1610
33	1816	1635
3307		
000000	0	0
05	44	143
08	120	319
12	214	550
15	296	774
19	426	995
23	586	1230
27	824	1427
30	1194	1537
3308		
000000	0	0
05	2	60
30	24	243
32	76	420
36	150	642
39	262	846
43	472	1063
48	1014	1264
50	1398	1282
55	2104	1172
3317		
000000	0	0
44	6	13
77	22	35
0108	48	56
37	60	74
62		165
0400	304	269
0540	420	360
0700	1024	417
0954	1360	404
68	1406	403
3318		
000000	0	0
0161	2	78
0271	30	159
0406	112	267
0544	224	377
0637	342	43
0708	446	[illegible]
0824	710	508
77	898	502
3319		
000000	0	0
68	28	7
0106	64	23
0140	124	37
0250	256	93
0408	470	172
0602	764	261
0904	1292	390
20	1298	396
1100	1724	426
35	1828	424
3320		
000000	0	0
42	24	21
49	36	33
72	70	73
98	122	115
0122	172	153
44	218	197
64	260	237
0262	504	409
0406	1208	543
36	1460	540
3321		
000000	0	0
51	34	23
60	48	37
87	88	77
0113	122	114
42	170	163
0234	354	330
0368	848	510
0532	2098	505
37	2158	500
3322		
000000	0	0
40	16	15
53	30	39
69	44	60
80	52	78
0108	96	126
25	120	159
0237	376	355
0382	1122	475
0465	1696	494
0688	1882	493
3323		
000000	0	0
08	0	24
27	20	77
40	56	159
53	108	237
64	170	316
93	366	485

TIME	STRAIN	STRS
0148	1056	699
65	1446	710
74	1700	697
3324		
000000	0	0
17	2	19
23	8	53
35	32	122
40	40	157
51	82	235
62	96	320
84	168	471
0108	276	623
31	426	772
58	652	920
91	984	1099
0220	1378	1207
30	1420	1210
34	1760	1197
3325		
000000	0	0
17	24	33
26	52	74
41	124	155
54	190	236
68	276	317
97	454	471
0126	690	625
57	1162	746
62	1320	746
72	1602	733
3326		
000000	0	0
07	14	33
10	28	78
15	60	150
24	182	315
38	516	546
49	668	696
61	1448	842
72	2144	914
76	2414	917
81	2844	913
3327		
000000	0	0
07	60	33
10	98	76
16	238	151
26	436	316
34	614	469
42	800	625
50	1000	772
58	1242	914
68	1584	1057
75	1920	1132
80	2334	1153
84	2866	1133
3328		
000000	0	0
08	82	19
12	30	85
16	56	157
23	108	316
31	182	475
41	306	695
47	432	840
55	618	985
63	950	1095
68	1334	1124
72	1664	1115
3329		
000000	0	0
04	16	33
07	52	111
10	90	238
13	142	399
18	220	579
23	312	840
28	454	1062
32	600	1205
37	892	1348
40	1254	1376
42	1666	1353
3331		
000000	0	0
05	10	29
09	30	155
12	74	316
18	164	547
23	262	774
29	416	987
34	702	1204
39	1146	1314
41	1536	1318
44	2256	1280
3332		
000000	0	0
08	40	200
11	86	317
13	144	466
17	260	697

TIME	STRAIN	STRS
22	408	982
26	534	1203
28	650	1330
31	624	1396
33	834	1410
35	1192	1390
3333		
000000	0	0
07	72	152
09	178	321
12	266	375
16	388	697
20	550	921
23	758	1139
28	1126	1348
31	1650	1410
3334		
000000	0	0
02	0	41
06	22	160
10	120	396
13	210	619
17	340	772
19	430	913
23	574	1163
26	740	1275
30	1046	1404
31	1308	1390
3356		
000000	0	0
10	0	20
15	4	53
21	22	77
28	40	116
35	80	158
47	100	234
60	156	321
74	256	399
91	424	469
0103	562	515
35	974	622
0183	1814	762
97	2132	768
0207	2370	760
3357		
000000	0	0
26	20	25
36	46	78
51	174	158
77	410	295
0115	882	433
47	1524	483
61	1936	486
72	2184	479
3358		
000000	0	0
16	64	20
32	288	49
45	462	79
70	788	158
0127	1252	425
55	1508	577
95	1798	735
0213	2110	844
46	2666	903
92	2862	897
3359		
000000	0	0
14	50	37
28	130	90
33	170	120
40	198	155
64	320	315
0103	568	520
34	884	664
60	1268	772
77	1604	795
82	1744	787
3360		
000000	0	0
11	42	20
27	152	75
54	454	170
0109	1038	387
52	1680	509
82	2384	535
90	2606	526
3361		
000000	0	0
30	154	119
38	222	153
70	490	317
0106	888	447
43	1650	498
60	2242	493
3362		
000000	0	0
13	6	53
18	14	79
23	50	159
60	196	403

TIME	STRAIN	STRS
0132	852	677
60	1208	772
73	1516	789
83	1776	717
3363		
000000	0	0
16	6	41
22	24	77
37	62	161
54	184	277
80	244	433
34	846	530
0170	1456	761
76	1594	757
3364		
000000	0	0
13	12	36
21	40	75
42	146	191
60	212	325
87	286	475
0142	1110	670
60	1506	694
81	2080	686
3365		
000000	0	0
13	10	40
25	58	86
42	160	168
77	600	317
0103	1030	357
47	2116	392
64	2480	391
70	2636	387
3366		
000000	0	0
15	62	23
38	356	81
56	578	133
87	1036	217
0120	1632	276
52	2290	317
94	3226	342
0214	3694	333
3367		
000000	0	0
28	120	79
39	220	130
64	488	238
88	968	271
0104	1384	267
3368		
000000	0	0
15	70	36
30	216	75
62	572	176
0198	1058	290
0227	1580	330
44	1972	333
3369		
000000	0	0
18	110	32
32	154	53
46	534	78
72	896	139
97	1182	214
0143	1960	297
87	2980	315
0211	3582	316
52	4454	342
0300	5554	360
14	5904	356
3370		
000000	0 0	0
19	58	67
27	96	102
41	204	162
58	376	241
71	542	297
0104	1122	351
35	1956	321
3371		
000000	0	0
17	58	31
30	156	79
49	308	158
66	484	234
91	816	317
0122	1366	369
44	1842	390
57	2126	390
67	2504	383
3372		
000000	0	0
18	34	14
34	170	69
63	380	220
93	764	319
0139	1736	347
93	2122	342
3385		

TIME	STRAIN	STRS
000000	0	0
07	0	14
14	20	41
19	40	75
29	86	119
37	144	160
54	318	237
90	956	316
0117	1456	356
57	2392	386
66	2614	379
3386		
000000	0	0
11	40	36
23	154	78
39	364	118
64	848	163
0108	1606	240
50	2566	279
75	3176	287
94	3214	284
3387		
000000	0	0
17	90	27
41	304	80
69	616	158
0120	1636	192
86	2758	242
0238	3970	236
3388		
000000	0	0
23	78	81
33	144	119
42	224	157
65	570	236
0100	1458	244
59	2944	215
3389		
000000	0	0
13	14	32
24	60	79
46	222	173
62	384	244
81	624	320
0100	864	365
42	1734	406
71	2680	383
3390		
000000	0	0
10	32	43
20	76	74
40	256	157
68	760	219
93	1330	229
0131	2278	209
3391		
000000	0	0
10	12	25
29	56	113
45	182	197
54	274	237
90	902	316
0123	1656	335
53	2436	330
60	2680	324
3392		
000000	0	0
14	48	40
40	256	142
59	564	193
0100	1540	190
18	1986	187
54	2820	202
67	3186	197
3393		
000000	0	0
22	58	83
37	148	153
56	360	236
85	864	302
0100	1140	317
35	1886	356
49	2250	345
3394		
000000	0	0
15	30	40
23	70	78
38	180	153
49	314	195
68	666	234
0141	2054	317
68	2618	358
0200	3276	396
48	4258	478
0335	6016	584
3395		
000000	0	0
15	64	53
20	86	75
38	246	158
78	1020	230

TIME	STRAIN	STRS
0108	1616	251
68	3018	280
0205	3800	319
35	4394	360
85	5494	434
0317	6140	471
78	7510	526
3396		
000000	0	0
17	34	40
24	76	75
44	232	164
66	546	237
92	1056	275
0261	2612	305
0270	2860	301
3397		
000000	0	0
25	252	57
37	478	80
53	770	164
87	1126	242
0155	2520	306
71	2952	302
3398		
000000	0	0
21	198	39
36	316	80
55	500	156
76	686	246
0109	1032	372
38	1496	432
79	2418	455
98	2856	451
3399		
000000	0	0
32	82	42
51	260	118
69	424	204
90	686	276
0133	1574	339
0175	2578	337
0193	2790	334
3400		
000000	0	0
000026	86	78
000045	252	160
000074	766	226
000100	1312	260
000163	2756	277
000220	2960	316
000283	5460	396
000300	5686	419
3401		
SEE NOTES 3,5		
000030	19920	158
000052	20200	380
000088	20360	737
000175	21080	1537
000230	21500	1997
000321	22740	2686
000431	25480	3027
3402		
SEE NOTES 3,5		
000047	340	269
000069	560	459
000114	1040	808
000217	2240	1616
000339	4060	2377
000447	7220	2781
000481	8500	2765
3403		
SEE NOTES 3,5		
000057	640	142
000097	1420	380
000135	2240	570
3404		
SEE NOTES 3,5		
000024	0240	158
000044	0460	356
000071	0760	610
000092	1000	792
000217	3360	1640
000313	6660	1894
000351	8260	1886
000370	9280	1846
3405		
SEE NOTES 3,5		
000026	60	158
000037	140	356
000058	380	768
000082	580	1188
000104	820	1553
000148	1540	2361
000172	2000	2781
000218	2920	3566
000243	3480	4000
000300	5400	4731
000363	8920	5010
000371	9680	4964
3406		

TIME	STRAIN	STRS
SEE NOTES 3,5		
000023	220	237
000043	680	752
000074	1040	1125
000098	1440	1569
000182	3700	2837
000263	8460	3233
000278	9740	3170
3407		
SEE NOTES 3,5		
000023	60	253
000031	80	396
000050	280	776
000074	580	1244
000091	800	1577
000134	1320	2377
000172	2040	3170
000219	3020	3962
000248	3880	4354
000287	5760	4716
000309	7200	4731
000316	7740	4716
3408		
SEE NOTES 3,5		
000023	120	158
000064	460	760
000088	760	1149
000135	1360	1957
000157	1780	2377
000202	2540	3170
000252	3740	3977
000319	6520	4640
000344	8000	4716
000359	9340	4655
3409		
SEE NOTES 3,5		
000009	0	221
000018	140	752
000030	360	1565
000040	600	2337
000051	960	3185
000061	1420	3962
000071	2060	4716
000084	3080	5484
000106	6540	6110
000111	8300	5989
3410		
SEE NOTES 3,5		
000000	2042	0
000005	220	206
000012	820	546
000021	1520	935
000029	2260	1371
000051	4220	2623
000069	6340	3376
000081	8260	3764
000101	12070	4151
000121	16620	4286
000130	19180	4226
3411		
SEE NOTES 3,5		
000012	60	356
000019	260	792
000031	520	1569
000043	880	2377
000054	1380	3185
000065	2040	3962
000084	3608	5092
000111	7820	5793
3412		
SEE NOTES 3,5		
000012	60	356
000019	320	713
000026	580	1117
000022	800	1553
000044	1240	2345
000055	1840	3170
000067	2480	3970
000078	3320	4716
000092	4600	5530
000108	6320	6223
000119	8300	6471
000126	10380	6411
3413		
SEE NOTES 3,5		
000004	0120	317
000008	0440	840
000012	1160	1521
000020	2340	2853
000026	3280	3837
000033	4720	5092
000040	8020	5838
000043	1860	5484
3414		
SEE NOTES 3,5		
000007	340	356
000010	740	760
000016	1700	1585
000026	3100	3185
000029	3760	3962
000039	6620	5462

TIME	STRAIN	STRS
000044	9500	5733
000046	13660	5484
3415		
SEE NOTES 3,5		
000006	520	309
000010	1940	919
000014	3380	1125
000017	4020	1545
000022	4820	2377
000028	5600	3550
000033	6420	4716
000040	7300	6260
000047	8380	7715
000052	9740	8833
000057	11880	9559
000061	14200	9618
000063	17020	9204
3416		
SEE NOTES 3,5		
000006	500	1505
000008	780	2448
000011	1280	4279
000014	2040	4761
000018	3620	6268
000023	7580	7459
3417		
SEE NOTES 3,5		
000010	480	3106
000015	800	4716
000017	1260	6185
000021	1800	7730
000024	2480	9196
000027	328010640	
000031	450012146	
000035	728013455	
000037	984013273	
3418		
SEE NOTES 3,5		
000014	100	491
000018	520	2377
000021	1040	3740
000024	1340	5047
000029	2140	6976
000032	2980	8485
000037	480010692	
000039	600011403	
000041	862011942	
000043	1200011622	
3419		
SEE NOTES 3,5		
000002	0	475
000005	160	1569
000007	460	3138
000011	1120	5552
000014	1880	7692
000017	2480	8946
000018	316010144	
000021	434011513	
000023	598012509	
000025	894012902	
3420		
SEE NOTES 3,5		
000006	140	150
000033	580	1252
000037	1300	3185
000040	2580	5514
3421		
SEE NOTES 3,5		
000003	40	649
000005	300	1632
000007	720	3170
000011	1780	5469
3422		
SEE NOTES 3,5		
000014	0	213
000017	400	1561
000020	1300	3185
000023	3940	4399
3430		
SEE NOTES 3,5		
000009	60	332
000016	300	729
000024	860	1149
000033	1500	1577
000041	2040	1969
000047	2600	2345
000062	3940	3170
000075	5120	3977
000089	6320	4716
000111	9160	5469
000122	11540	5567
000134	15040	5409
3431		
SEE NOTES 3,5		
000006	120	744
000007	200	1101
000010	400	1561
000014	840	2377
000018	1240	3170
000024	2200	4324
000031	3640	5469

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TIME   STRAIN STRS
000037  5500 6223
000041  8200 6569
000044 11160 6464
3440
SEE NOTES 3,5
000021     0  134
000041    20  380
000063   180  618
000078   200  768
000103   340  990
000122   440 1180
000160   760 1569
000202  1120 1989
000241  1560 2377
000282  1960 2773
000328  2420 3170
000433  4040 3962
000604  7720 4851
000821 14880 5100
000951 16180 5085
3441
SEE NOTES 3,5
000042   280  150
000064   480  380
000080   880  776
000152  1280 1180
000200  1760 1672
000350  3280 5217
000467  4780 4339
000560  6700 5115
000664  8200 5891
000794 11320 6607
000892 14140 6976
001030 18880 7157
001061 20060 7127
3442
SEE NOTES 3,5
000020   220  158
000044   500  396
000063   700  610
000082   920  792
000123  1420 1172
000160  1960 1585
000338  5020 3320
000474  9360 4196
000691 16640 5092
000938 26740 5454
3443
SEE NOTES 3,5
000012   160  166
000042   400  380
000065   620  634
000078   800  760
000120  1220 1180
000160  1680 1600
000293  3560 2987
000474  8300 4022
000761 20580 4022
000777 21400 3985
3444
SEE NOTES 3,5
000037   280  301
000052   440  546
000065   600  776
000091   960 1172
000116  1360 1577
000239  3980 3526
000330  2640 4784
000476 13820 5854
000538 17440 5959
000582 20780 5914
3445
SEE NOTES 3,5
000026   100  150
000040   320  372
000066   640  792
000091  1080 1172
000119  1520 1585
000144  2080 1973
000241  5280 3185
000380 13620 3732
000427 16740 3716
3446
SEE NOTES 3,5
000020   400  221
000030   600  380
000047   980  618
000057  1300  760
000087  2080 1180
000117  2940 1585
000168  4540 2377
000286  8920 3899
000377 12880 4829
000467 17760 5507
000566 24320 5771
000597 26680 5741
3447
SEE NOTES 3,5
000022    40  253
000031   300  388
000044   440  610
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TIME   STRAIN STRS
000053   560  752
000077   960 1180
000100  1280 1569
000234  4560 3724
000406 13240 5070
000459 17020 5085
3448
SEE NOTES 3,5
000010   100  332
000018   260  729
000024   420 1109
000031   620 1521
000045  1080 2361
000058  1700 3170
000087  3620 4716
000131  9520 6253
000181 20640 6984
000194 22040 7022
000208 25460 6976
3449
SEE NOTES 3,5
000009   100  364
000016   360  737
000020   500 1212
000028   640 1569
000042  1220 2361
000055  2040 3185
000089  6140 4716
000108 10560 4874
000115 12160 4829
3450
SEE NOTES 3,5
000007    80  158
000011   220  364
000018   420  729
000024   600 1149
000031   780 1569
000042  1160 2377
000054  1560 3170
000076  2620 4723
000100  4480 6223
000137  8820 7730
000152 11560 8100
000171 16140 8271
000179 18600 8952
3451
SEE NOTES 3,5
000008     0   87
000014    80  388
000020   320  729
000028   560 1125
000034   800 1553
000047  1320 2369
000058  1940 3170
000071  2820 3962
000084  3940 4716
000101  5740 5469
000122  8720 6238
000175 18820 7670
000208 26440 7848
000239 27060 7834
3452
SEE NOTES 3,5
000008   160  388
000014   300  721
000021   480 1125
000027   720 1537
000041  1260 2361
000054  2020 3185
000067  3080 3962
000082  4660 4731
000128 12040 6245
000172 21660 7014
000212 31220 7157
3453
SEE NOTES 3,5
000008   160 1069
000011   320 1553
000016   620 2377
000024  1340 3977
000031  2400 5454
000039  4140 6946
000048  7940 8085
000053 12320 8322
000058 15480 8219
3454
SEE NOTES 3,5
000007   360  713
000010   620 1497
000015  1100 2369
000024  2520 4000
000034  5600 5469
000042 10880 6110
000046 13980 6147
000051 18440 6065
3455
SEE NOTES 3,5
000004   200  340
000007   460  713
000010   800 1125
000017  1200 1505
```

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TIME   STRAIN STRS
000016  2180 2361
000023  3160 3257
000027  3880 3977
000036  5640 5469
000044  8140 7006
000052 11880 7730
000058 16260 7848
000061 19360 7789
3456
SEE NOTES 3,5
000007    80  435
000011   360 1172
000014   560 1902
000021   960 3154
000028  1680 4731
000036  2780 6223
000043  4500 7677
000049  6560 8433
000054 10120 8796
000059 13780 8781
000062 16220 8633
3457
SEE NOTES 3,5
000002    60  435
000004   480 1180
000006   960 2314
000009  1340 4000
000013  2800 6200
000017  5060 7670
000019  7300 7745
3458
SEE NOTES 3,5
000006   380  570
000008   940 1585
000011  1600 2781
000013  2260 3985
000016  3360 5492
000019  4560 6976
000020  5640 7804
000023  8140 9344
000028 1320010618
000030 1702010663
3459
SEE NOTES 3,5
000003   180  515
000005   400  626
000008  1000 3185
000011  1580 4768
000013  2140 6155
000016  3020 7730
000019  4080 9137
000021  580010692
000024  840011796
000027 1200012095
000028 1572012037
000030 2052011527
3460
SEE NOTES 3,5
000006   160  554
000007   400 1680
000010   680 3185
000013  1200 4987
000019  2320 7945
000023  4080 9878
000026  546010240
000028 1084010114
000030 16260 9759
3461
SEE NOTES 3,5
000041   200  752
000043   360 1600
000046   600 2686
000048   920 3946
000051  1260 5514
000057  1940 7745
000059  2740 9226
000062  380010707
000066  536012102
000070  832013615
000076 1422014678
000078 1710014714
000079 2056014401
3462
SEE NOTES 3,5
000007   100  372
000009   680 1188
000012  1240 2361
000017  2080 4000
000020  3080 5462
000024  4520 6991
000029  7360 8396
000032  9960 9004
000036 14400 9552
000039 18640 9759
000042 23740 9766
000045 28100 9463
3463
SEE NOTES 3,5
000002    60  673
000005   240  705
000006   360 2298
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TIME   STRAIN STRS
000009   640 3170
000011   880 3962
000014  1300 5454
000018  1880 6976
000022  2800 8463
000025  2140 9937
000030  900011447
000034 1134012160
000036 1432012233
3464
SEE NOTES 3,5
000004   280   79
000007   620 1680
000011  1240 3265
000015  1740 4784
000018  2380 6230
000022  3160 7730
000024  3580 8500
000027  4600 9915
000031  602011513
000035  808012975
000039 1076014328
000045 1644015386
3471
SEE NOTES 3,5
000029   280  213
000045   820  301
000062  1360  404
000082  2080  483
000099  2800  515
000135  4480  530
000177  7140  515
3472
SEE NOTES 3,5
000021   400  158
000041  1040  237
000072  2200  324
000092  3100  340
000140  5420  364
000235 10320  372
3473
SEE NOTES 3,5
000023   100   71
000044   420  245
000059   760  372
000084  1500  530
000131  3380  634
000183  6100  634
000213  7560  618
3474
SEE NOTES 3,5
000018  0320   15
000052  0800  134
000083  1300  301
000146  3240  554
000205  5340  721
000274  8760  729
000304  0240  729
3479
SEE NOTES 3,5
000025    40   63
000042   400  301
000059   720  546
000072  1180  689
000100  2460  855
000123  4700  895
000143  5460  879
3480
SEE NOTES 3,5
000020  0660   10
000046  1660   30
000072  3100   35
000100  4840   50
000154  9200   51
000176 11100   50
3481
SEE NOTES 3,5
000027   220  134
000047   760  324
000067  1520  475
000102  3080  705
000120  4020  792
000182  8360  895
000192  9200  887
3482
SEE NOTES 3,5
000017   700  118
000038  1520  301
000069  3520  451
000109  6460  487
000122  7480  451
3483
SEE NOTES 3,5
000007   100  103
000013   280  380
000021   600  764
000026   860  974
000030  1200 1157
000042  2740 1585
000051  4680 1680
3484
```

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TIME   STRAIN STRS
SEE NOTES 3,5
000012  0340  174
000017  0580  380
000022  0820  594
000027  1220  752
000036  2160 1046
000039  2700 1165
000062  7220 1378
000071  9680 1363
3485
SEE NOTES 3,5
000008  0180  277
000012  0360  459
000018  0660  713
000022  0920  871
000033  2120 1236
000045  4520 1363
000053  6600 1339
3486
SEE NOTES 3,5
000009   320  158
000014   620  364
000020  1080  594
000032  2160  990
000043  3760 1339
000063  7580 1513
000076 10860 1497
3487
SEE NOTES 3,5
000003 20020  118
000006 20200  459
000010 20460 1157
000012 20860 1529
000016 21340 2020
000018 21820 2377
000022 22940 2765
000025 24440 3019
000028 26640 3106
000031 28900 3098
000034 31160 3027
3488
SEE NOTES 3,5
000003   340  142
000007   760  752
000010  1080 1133
000013  1700 1577
000020  4420 2385
000027  8160 2567
000030 10460 2575
000034 14440 2504
3489
SEE NOTES 3,5
000003  0080  253
000006  0500  729
000009  0940 1149
000011  1560 1553
000018  3300 2361
000026  6660 2932
000029  9260 2987
000034 13000 2916
3490
SEE NOTES 3,5
000006   480  265
000008  0840  721
000012  1400 1172
000014  1940 1545
000018  3080 1917
000023  5720 2227
000027  8460 2227
000330 11100 2139
3491
SEE NOTES 3,5
000004     0  134
000006   120  713
000008   600 1513
000010  1160 2298
000130  2200 3170
000017  4320 3938
000019  7120 4188
000021 10400 4173
000023 13860 4037
3492
SEE NOTES 3,5
000010  1980 1561
000013  3900 2377
000018  5000 2908
000020 11380 2948
000022 15800 2908
000024 19280 2813
3493
SEE NOTES 3,5
000009   720 1117
000011  1400 1894
000012  1980 2393
000016  3940 3106
000018  6120 3360
000020  8560 3407
000022 12600 3328
3494
SEE NOTES 3,5
000005  0400  134
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TIME   STRAIN STRS
000007  0820 1101
000009  1480 2108
000011  2460 3019
000012  4080 3716
000015  7360 4196
000017  1460 4226
000018  6700 4022
000021 21740 3843
3495
SEE NOTES 3,5
000003   160  253
000006   500 1125
000007   980 1933
000009  1720 2757
000011  2900 3510
000012  4800 4053
000014  7760 4279
000017 11820 4248
000018 15680 4075
3496
SEE NOTES 3,5
000003  0320  404
000005  0700 1299
000007  1400 2440
000008  2400 3090
000011  4100 3819
000012  6640 4233
000015  8860 4271
000017 17200 4049
3525
SEE NOTES 3,5
    35   220  364
    51   380  562
    64   480  729
    98   840 1149
  0199  1700 2401
  0376  2820 4716
  0543  4500 6592
  0671  7300 7029
  0678  7860 7293
3526
SEE NOTES 3,5
    46   700   79
    77  1300  356
  0247  4060 1997
  0382  5380 3637
  0646 12160 5597
  0652 12970 5138
3527
SEE NOTES 3,5
    34   160  174
    47   200  348
    75   320  713
  0176   920 2076
  0307  1600 2179
  0553  3860 7112
  0620  5040 7730
  0652  6200 7782
  0661 16620 7745
3528
SEE NOTES 3,5
    31   100  142
    53   280  356
    90   580  721
  0228  1480 2171
  0371  2280 3740
  0461  2940 4716
  0578  3840 5854
  0668  4620 6607
  0827  6960 7413
  0832  7160 7346
3529
SEE NOTES 3,5
    21   140  253
    31   300  729
    38   400 1149
    46   480 1553
    57   660 2377
    67   880 3178
    87  1340 4716
  0108  1840 6238
  0128  2440 7730
  0158  3880 9952
  0191  686011796
  0202  884011920
  0213 1438011796
3530
SEE NOTES 3,5
    12   160  150
    16   260  348
    23   400  729
    30   640 1117
    38   840 1521
    52  1240 2369
    64  1520 3170
    99  2620 4723
  0121  3660 6260
  0145  4720 7730
  0169 16960 9159
3532
SEE NOTES 3,5
```

```
TIME   STRAIN STRS
   12    100   324
   19    220   729
   25    340 1109
   32    440 1545
   44    760 2393
   56   1040 3185
   77   1800 4716
 0100   2780 6230
 0125   6060 7730
 0151   6340 9196
 0167   8980 9663
 0172  10360 9670
 0177  11620 9574
3533
SEE NOTES 3,5
   08    240   332
   15    440   729
   22    600 1177
   28    780 1569
   39   1140 2369
   51   1520 3185
   71   3320 4716
   94   3140 6223
 0117   4340 7730
 0143   6360 9196
 0159   7060 9729
 0163  10220 9729
 0167  11420 9611
3534
SEE NOTES 3,5
   16    280   697
   18    620 1973
   22   1260 4053
   25   1840 6268
   29   2480 8485
   32  324010714
3535
SEE NOTES 3,5
   04     40   277
   16    320   562
   18    580 2440
   20    840 3439
   22   1180 4668
   24   1660 6215
   27   2200 7878
3536
SEE NOTES 3,5
   05    180   562
   08    780 2282
   11   3360 2886
   13   4600 4708
   17  17240 5786
3537
SEE NOTES 3,5
   03    100   317
   06    320 1529
   08    700 3233
   12   1160 5522
   16   1660 7730
   18   2060 9159
   20  246010781
   23  306012939
   27  396015127
   29  472016460
3538
SEE NOTES 3,5
   06    220   594
   08    700 1870
   12   1220 3185
   16   1700 4791
   18   2420 7074
   20   2840 8545
   24  350010899
   27  416013157
   31  502015716
   34 1612017968
3539
SEE NOTES 3,5
   41     80   229
   63    180   475
   90    300   792
 0171    640 1585
 0340   1340 3043
 0447   1760 4256
 0656   2140 5565
 0768   3100 8041
 0913   3900 9552
 1115 1596014896
 1127 1846014074
3540
SEE NOTES 3,5
   43    300   213
   62    400   396
 0102    660   792
 0143    740 1125
 0184    960 1565
 0364   1780 3304
 0552   2760 5100
 0729   3840 6713
 0953   6220 8196
 1104   9180 8485
TIME   STRAIN STRS
 1117   9560 8470
3541
SEE NOTES 3,5
   31    520   166
   68   1200   388
 0131   2740   729
 0313   5720 1973
 0477   7260 3479
 0663   8220 5070
 0904  10700 7338
3542
SEE NOTES 3,5
   57      0   142
   77     60   380
 0109    160   744
 0231    620 2219
 0418   1480 4414
 0475   1720 5092
 0677   2900 7542
 0764   3520 8663
 0867   4880 9196
 0907   5900 9278
 0919   6340 9226
3543
SEE NOTES 3,5
   09    180   364
   16    360   729
   22    580 1149
   28    780 1545
   41    296 2361
   52   1580 3170
   74   2260 4731
   94   2920 6238
 0114   3580 7730
 0135   4240 9204
 0153  502010707
 0172  608012160
 0197  800013637
 0223 1188014561
 0229 1352014459
3544
SEE NOTES 3,5
   28     40   420
   34    180   800
   47    540 1577
   59    800 2393
   69   1040 3170
   90   1540 4731
 0111   1920 6223
 0141   2520 8419
 0169  322010707
 0189  374012189
 0208  428013615
 0227  504015071
 0253  766016158
 0257  886016137
3545
SEE NOTES 3,5
   12    240   348
   20    660   752
   28   1120 1149
   36   1600 1545
   50   2220 2377
   62   2580 3185
   82   3240 4716
 0105   3760 6238
 0129   4420 7752
 0158   5560 9952
 0195  752012160
 0213 1024012670
 0219 1148012604
3546
SEE NOTES 3,5
   11     40   356
   18     80   729
   24    160 1165
   30    260 1521
   41    480 2345
   53    760 3178
   72   1180 4738
   92   1640 6238
 0113   2060 7730
 0141   2820 9944
 0161  346011447
 0190  466013615
 0216  658015071
 0226  830015309
 0231  958015225
3547
SEE NOTES 3,5
   14    180   348
   20    360   729
   28    640 1188
   35    820 1521
   49   1140 2393
 0160   1440 3170
 0182   2000 4716
 0103   2500 6238
 0125   3200 7730
 0253   4720 9937
 0277  550011447
TIME   STRAIN STRS
 0300  798012466
 0305  884012466
 0310 1098012357
3548
SEE NOTES 3,5
   04    120   863
   07    480 2425
   10    840 3977
   12   1280 5552
   16   1780 7730
   18   2020 9055
   20  240010860
   23  290012822
   27  348015134
   28  384016607
3549
SEE NOTES 3,5
   05    440   855
   10   1820 3185
   13   2340 5469
   17   2700 6976
   19   3240 9211
   22  372011498
   26  444013659
   28  516015744
   32 1628017901
3550
SEE NOTES 3,5
   05      0   602
   07    140 1442
   10    480 3281
   12    800 5620
   16   1140 6901
   18   1400 8383
   21  1820 10737
   24  222013004
   27  252015041
   30  300017224
   33  340019342
   36  378021348
   38  424023125
3551
SEE NOTES 3,5
   14   1260 1196
   19   3000 3154
   24   4160 6223
   27   4680 8063
3552
SEE NOTES 3,5
   22    300   221
   31    420   372
   55    800   752
   76   1180 1125
 0100   1600 1545
 0213   2840 3685
 0296   3900 5303
 0447   7020 7715
 0518  10260 8285
   52         8233
3553
SEE NOTES 3,5
   44    540   372
   65    900   713
   91   1320 1157
 0115   1760 1545
 0139   2120 1957
 0247   4180 3891
 0390   9800 5635
 0432  12960 5590
3554
SEE NOTES 3,5
   44    860   317
   84   2120   808
 0109   2700 1165
 0136   3300 1545
 0226   4840 2742
 0319   6420 4490
 0432   8700 6479
 0502  11280 7346
 0536  13220 7474
   55         7444
3555
SEE NOTES 3,5
   29    240   443
   43    500   729
 0140   2080 2447
 0230   4240 4354
 0407  16340 5153
 0431  18400 5092
3556
SEE NOTES 3,5
   04      0   317
   06     80   760
   08    180 1149
   10    240 1521
   14    420 2393
   18    600 3170
   26    980 4716
   32   1460 6238
   39   2000 7745
   46   2580 9196
TIME   STRAIN STRS
   55  404011447
   67  736013615
3557
SEE NOTES 3,5
   03    702   467
   06    755 2441
   15   1031 3966
   26   1340 6889
   35   1744 9780
   45  238712437
   51  303114341
   58  405316367
   62  468017079
   67  591418293
   69 1942517025
3558
SEE NOTES 3,5
   03      0   309
   06     80   705
   11    480 1545
   15    740 2314
   19   1120 3170
   27   1860 4723
   33   2560 6215
   39   3240 7730
   46   4040 9226
   53 1556010707
3559
SEE NOTES 3,5
   04    120   324
   07    200   729
   11    440 1553
   16    680 2377
   20    920 3273
   26   1360 4716
   33   1820 6223
   39   2400 7730
   44   3100 9211
   51  418010692
   58  614012160
   63  906012684
   66 1130012604
3560
SEE NOTES 3,5
   02     40   404
   06    320 1497
   10    760 3193
   16   1380 5484
   20   2040 7700
   25  286010633
   30  394012160
   33 1490013615
3561
SEE NOTES 3,5
   02    220   562
   06    480 1521
   09    900 3185
   13   1420 4663
   18   2380 7022
   22   2840 8485
   26  368010722
   31  488012968
3562
SEE NOTES 3,5
   04     20   523
   07    180 1521
   08    260 2314
   11    380 3241
   14    560 4784
   18    900 6313
   20   1160 7670
   23   1400 9130
   26  180010722
   31  240012953
   32  240015071
   38  446016474
   42  594017877
   44  800018687
   46 1544016902
3563
SEE NOTES 3,5
   05     20   467
   07    200 1212
   11    540 2385
   14    940 4030
   18   1360 5499
   23   1880 7760
   28   2400 9944
   32  314012726
   37  400014343
   41 1504016418
3565
SEE NOTES 3,5
   30    340   332
   56    780   760
   81   1160 1157
 0108   1560 1569
 0211   2740 3637
 0292   3700 4957
 0400   3640 7346
 0466   6960 8470
TIME   STRAIN STRS
 0532   8500 9596
 0647 1366010692
3566
SEE NOTES 3,5
   34    260   332
   57    460   752
   78    660 1180
 0108    800 1537
 0202   1640 3665
 0294   2680 5801
 0377   3300 7730
 0445   4280 9211
 0570  690010240
 0538 1042010114
3567
SEE NOTES 3,5
   35    240   356
   54    440   721
   76    660 1125
   98    860 1537
 0120   1080 1949
 0212   2050 3804
 0282   2880 5311
 0369   3940 7037
 0493   6400 9152
 0563   9120 9833
 0581  10540 9774
3568
SEE NOTES 3,5
   04      0   332
   07    100   713
   08    260 1109
   11    280 1505
   16    620 2393
   19    960 3170
   27   1440 4753
   34   1960 6487
   39   2340 7730
   48   2980 9937
   57  370012160
   65  454014343
   74  558016418
   85  770018578
3569
SEE NOTES 3,5
   06    200   317
   08    340   760
   10    400 1157
   13    580 1600
   17    860 2345
   21   1060 3170
   28   1440 4768
   34   1880 6185
   41   2260 7745
   49   2860 9937
   58  368012146
   67  466014321
   77  546015702
3570
SEE NOTES 3,5
   11    160   737
   17    320 1489
   21    560 2330
   25    760 3138
   35   1200 5669
   41   1520 6976
   48   1960 8411
   59  298011433
   68  436013615
   74 1544015036
3571
SEE NOTES 3,5
   05    100   372
   08    340 1054
   11    500 1489
   15    860 2377
   19   1080 3201
   30   1720 5469
   39   2460 7730
   46   2860 9278
   51  316010707
   59  408012910
   68  530015071
   75  676016404
3572
SEE NOTES 3,5
   07    200   768
   09    500 1537
   14   1420 3201
   20   2680 5477
   26   3840 7730
   31   4580 9944
   35  532012189
   39  606014408
   43  672016474
   49 1788019274
3573
SEE NOTES 3,5
   03     60   752
   07    520 2417
   11    880 4015
TIME   STRAIN STRS
   17   1380 6238
   21   1760 8461
   26   2300 9352
   31  280013652
   36  338015786
   39  394017919
   43  470019943
   48  578021916
3574
SEE NOTES 3,5
   05      0   388
   08     80   792
   40    220 1046
   66    720 3154
   49   1120 4716
   53   1660 6976
   58   2280 9152
   61  268010766
   65  346012946
   69  410015071
   73  500017189
   77  594019236
3575
SEE NOTES 3,5
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   12    460 2377
   16    820 3977
   21   1380 6260
   23   1600 7210
   27   2000 9152
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   36  308013637
   40  374015772
   44  456017877
   48 1566019977
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SEE NOTES 3,5
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000031    500   737
000058   1420 2345
000078   2300 3558
000101   3860 4716
000147  17140 5469
000152  13920 5356
3603
SEE NOTES 3,5
000022    560   657
000045   1580 1719
000070   3980 2773
000099   8800 3392
000114  13700 3098
3604
SEE NOTES 3,5
000008    160   142
000014    300   372
000023    640   760
000040   1300 1577
000054   1920 2369
000068   2560 3185
000082   3200 4015
000114   5300 5486
000140   8940 6208
000147  10820 6125
3605
SEE NOTES 3,5
000009     20   380
000024    220 1172
000032    420 1585
000044    840 2369
000057   1300 3178
000069   1980 4000
000083   2960 4716
000110   6460 5484
000118   8580 5462
3606
SEE NOTES 3,5
000010    200   221
000015    300   388
000023    640   784
000032    880 1149
000039   1280 1553
000054   1760 2377
000067   2280 3209
000080   2980 3962
000096   4000 4731
000115   5660 5469
000138   9320 6019
000146  11660 5891
3607
SEE NOTES 3,5
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000018  20120   372
000026  20320   792
000034  20500  1172
000043  20720  1592
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000071  21760  3185
000085  22320  3962
000100  22800  4731
000116  23440  5486
000133  23880  6223
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TIME  STRAIN STRS
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SEE NOTES 3,5
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000072 22520 3582
000095 24080 4716
000124 26740 5854
000139 28180 6245
000165 33380 6976
000176 36380 6916
3609
SEE NOTES 3,5
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000031  700 1545
000039  980 2052
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000069      3962
000081 2820 4716
000095 3800 5469
000111 5260 6223
000133 8700 6811
000143 11380 6765
3610
SEE NOTES 3,5
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000019  380  752
000027  560 1141
000034  780 1585
000047 1120 2377
000058 1520 3185
000069 1940 3977
000081 2480 4723
000094 3180 5484
000108 3980 6223
000122 5100 6976
000141 7400 7730
000149 9340 7804
000155 11000 7730
3611
SEE NOTES 3,5
000036   20  213
000045  160  752
000052  240 1149
000058  320 1569
000064  520 1973
000070  640 2377
000082 1060 3170
000110 2420 4716
000127 3460 5484
000146 6120 6223
000169 10420 6976
000194 15080 7436
000208 18680 7391
3612
SEE NOTES 3,5
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000019  560  752
000028  800 1149
000035 1200 1561
000050 1880 2393
000062 2580 3170
000091 4960 4716
000116 8340 5477
000131 11640 5627
000139 14000 5507
3613
SEE NOTES 3,5
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000022  320  832
000029  460 1228
000036  600 1640
000047  920 2433
000059 1420 3288
000069 1820 4015
000081 2260 4768
000094 2840 5537
000107 3420 6313
000134 5200 7782
000151 7100 8507
000167 10500 8826
000177 13580 8722
3614
SEE NOTES 3,5
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000022  220  776
000030  460 1204
000036  600 1585
000048 1000 2377
000059 1420 3170
000082 2340 4731
000108 3480 6238
000134 4900 7730
000147 6180 8433
000168 9880 9078
TIME  STRAIN STRS
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3615
SEE NOTES 3,5
000014   60  380
000022  200  760
000029  340 1165
000036  480 1585
000041  720 1917
000048  900 2393
000060 1340 3170
000084 2420 4716
000098 3260 5484
000112 4280 6245
000129 6000 6976
000146 9140 7436
000159 12680 7366
3616
SEE NOTES 3,5
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000031  500 1521
000044  860 2393
000054 1180 3170
000076 1940 4716
000100 2740 6238
000126 4080 7730
000150 6320 9196
000172 10160 9885
000279 12600 9729
3629
SEE NOTES 3,5
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000021  440  760
000030  740 1165
000037 1120 1565
000052 1960 2377
000067 2900 3178
000104 7220 4716
000122 9840 5138
000157 17080 5575
000178 21180 5605
000184 23700 5530
3630
SEE NOTES 3,5
000014  380  309
000024  860  760
000034 1320 1172
000042 1780 1585
000050 2360 1973
000059 3000 2425
000072 4020 3185
000089 5340 3962
000107 7260 4716
000136 11220 5484
000176 20020 5929
000189 23240 5869
3631
SEE NOTES 3,5
000013  160  356
000021  320  737
000028  480 1157
000035  740 1553
000050 1440 2377
000063 2440 3185
000080 4100 3962
000107 8160 4716
000147 15960 5469
000210 29040 6253
000264 41340 6645
000277 44540 6577
3632
SEE NOTES 3,5
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000052  240  594
000062  500  776
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000159 12800 1925
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000264 29300 2092
3633
SEE NOTES 3,5
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000223 8260 2433
3634
SEE NOTES 3,5
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000072 1320  744
000102 2260 1157
000137 3540 1569
000242 9940 2139
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SEE NOTES 3,5
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000282 5980 3962
000314 8240 4037
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3636
SEE NOTES 3,5
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000034 1600 1157
000044 2540 1569
000055 3560 1997
000065 4640 2377
000088 8140 3185
000124 14620 3637
000131 16420 3558
3637
SEE NOTES 3,5
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000018  660  729
000026 1800 1157
000033 3300 1569
000040 4980 1973
000047 7720 2377
000059 12100 3170
000072 17640 3962
000091 25200 4716
000126 30600 5492
000147 35740 5605
000158 39140 5484
3638
SEE NOTES 3,5
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000075 7440 2615
000100 13640 2551
3639
SEE NOTES 3,5
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000035  680 1585
000049 1320 2377
000057 1740 2781
000063 2360 3185
000081 4400 3962
000097 7480 4143
000106 9920 4030
3640
SEE NOTES 3,5
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000025 3440 3550
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000036 9200 4326
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3641
SEE NOTES 3,5
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000024 1880 3170
000028 2560 3962
000032 3400 4716
000037 4960 5469
000044 9000 6012
000050 14640 5786
3642
SEE NOTES 3,5
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000009  400  792
000012  580 1196
000016 1040 1965
000023 2060 3170
000028 3380 3962
3643
SEE NOTES 3,5
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000005  100  713
000007  360 1149
000010  400 1521
000015 1360 2377
3644
SEE NOTES 3,5
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000006  720 1941
000008 1440 3090
000010 2640 4120
000012 4200 5062
TIME  STRAIN STRS
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000017  9080 6524
000019 13980 6517
3645
SEE NOTES 3,5
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000006  440 2298
000008  860 3415
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000014 2580 6765
000016 3320 7836
000018 4840 8952
000020 7040 9715
000022 11280 9655
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SEE NOTES 3,5
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000023 36360 1981
000027 46840 2242
000031 51080 2393
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SEE NOTES 3,5
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000007 7960 2314
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SEE NOTES 3,5
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000130 3120  626
000170 5600  654
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3665
SEE NOTES 3,5
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000057  920  380
000092 2400  515
000137 4780
000160 6160  515
3668
SEE NOTES 3,5
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000037  380  237
000049  800  364
000088 3320  554
000131 6520  570
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3669
SEE NOTES 3,5
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SEE NOTES 3,5
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000047 1000  364
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000150 8040  594
000167 9500  570
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SEE NOTES 3,5
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3672
SEE NOTES 3,5
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000023 1260  760
000031 2340  911
000039 4040 1006
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3673
SEE NOTES 3,5
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000027 2180  594
000036 3660  673
000047 6380  689
000058 9620  649
3674
SEE NOTES 3,5
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TIME  STRAIN STRS
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000022 1420  729
000031 2680  911
000040 4560 1014
000056 7640  974
3675
SEE NOTES 3,5
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000027 1400  752
000032 1940  935
000039 2840 1133
000049 4580 1299
000056 6340 1355
3676
SEE NOTES 3,5
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000016  540  356
000023 1060  570
000028 1680  729
000037 3100  887
000048 5400  935
000062 9220  919
000070 11220  903
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SEE NOTES 3,5
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000007  520  467
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000016 2440 1569
000020 4400 1973
000026 8040 2155
000032 12820 2084
000036 16360 1989
3678
SEE NOTES 3,5
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000006  280  356
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000011 1000 1149
000014 1580 1521
000023 6240 2266
000027 7820 2290
000031 11380 2219
3679
SEE NOTES 3,5
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000007  860  776
000011 1900 1188
000016 3960 1529
000021 7220 1624
000026 11220 1585
000031 14860 1521
3680
SEE NOTES 3,5
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000006  840  530
000008 1340  752
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000019 6840 1450
000022 9180 1466
000028 13040 1474
000038 21160 1426
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SEE NOTES 3,5
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000036 3400 2227
000038 5920 2536
000041 10760 2647
000044 15740 2615
000048 20760 2534
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SEE NOTES 3,5
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000014 6020 2330
000016 9240 2345
000019 13540 2314
000022 18260 2266
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SEE NOTES 3,5
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000014 4740 1925
000018 8960 2219
000023 17620 2227
000029 26580 2219
000034 33400 2147
3684
SEE NOTES 3,5
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000016 3720 1640
000018 5840 2290
000021 10400 2504
TIME  STRAIN STRS
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000026 23040 2464
000028 28160 2314
3685
SEE NOTES 3,5
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000011 3500 2290
000014 8120 2528
000017 14480 2544
000021 21020 2504
000023 27260 2393
3686
SEE NOTES 3,5
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000008 1120 1585
000010 2480 2528
000013 5220 3170
000015 9220 3320
000018 15700 3138
3687
SEE NOTES 3,5
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000006  980 1204
000008 2200 1981
000010 4400 2520
000012 8180 2623
000014 13520 2536
000017 17740 2448
3688
SEE NOTES 3,5
000004    0   95
000006  660  776
000008 1360 1204
000011 3000 1909
000016 7260 2314
000018 10740 2211
3706
SEE NOTES 3,5
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  0167 5300 1521
  0260 7820 1751
  0281 9180 1743
3707
SEE NOTES 3,5
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    58  920  388
    80 1340  570
  0100 1680  752
  0142 2440 1149
  0235 4440 1909
  0326 8200 2314
  0344 9240 2282
3708
SEE NOTES 3,5
    26  140  229
    37  240  372
    55  440  602
    68  680  776
  0106 1400 1165
  0131 1920 1466
  0168 2360 1569
  0198 3900 1941
  0281 7400 2282
  0350 11040 2322
  0385 13220 2290
3709
SEE NOTES 3,5
    34  340  136
    58  920  372
    88 1620  610
  0108 2140  760
  0166 3920 1157
  0237 6380 1569
  0343 11220 1941
  0536 21300 2203
  0600 25180 2187
3710
SEE NOTES 3,5
    28  100  118
    53  570  388
    68  900  618
    79 1100  792
  0106 1780 1172
  0134 2780 1569
  0166 4300 1949
  0211 7700 2155
  0249 11460 2100
3711
SEE NOTES 3,5
    26  670  237
    36  980  356
    55 1780  610
    68 2240  792
  0100 3480 1188
  0132 4760 1569
  0167 6120 1949
  0202 8080 2361
  0213 10900 2757
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TIME   STRAIN STRS
 0353 18100 3067
 0385 20780 3051
 0608 22660 3320
3712
SEE NOTES 3,5
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    21   120  364
    34   240  610
    41   360  737
    62   700 1157
    83  1220 1553
  0109   432 1965
  0141  3320 2361
  0189  6240 2773
  0278 12740 2971
  0330 16560 3035
  0384 21120 3075
  0441 25760 3067
  0454 26980 3051
3713
SEE NOTES 3,5
    37   540  253
    44   720  380
    66  1200  776
    91  1960 1188
  0155  2900 1965
  0211  8400 2266
  0256 12920 2227
3714
SEE NOTES 3,5
    08     0  176
    11     0  364
    18   200  744
    26   480 1165
    33   780 1529
    40  1260 1949
    49  2020 2377
    57  2980 2773
    68  4400 3178
    83  7180 3495
  0111 13060 3756
  0118 15060 3685
3715
SEE NOTES 3,5
    08   400  388
    15   640  760
    23   920 1165
    30  1240 1549
    37  1600 1973
    44  2100 2393
    51  2660 2757
    71  4860 3574
    91  8640 3977
  0106 12420 3899
3716
SEE NOTES 3,5
    10   120  142
    17   500  364
    33  1560  784
    42  2460 1172
    51  3320 1569
    60  4380 1989
    70  5640 2377
    81  7160 2773
    93  8660 3185
  0107 10560 3582
  0144 17980 3970
  0154 20800 3883
3717
SEE NOTES 3,5
    09   260  356
    17   640  752
    24   960 1172
    38  1760 1941
    46  2280 2433
    58  3240 3170
    67  4060 3558
    77  5620 3977
    98  9620 4271
  0109 12340 4196
3718
SEE NOTES 3,5
    10   200  364
    18   460  808
    24   800 1149
    32  1320 1521
    40  1980 1949
    50  3120 2369
    62  4680 2781
    74  6940 3185
  0100 11800 3566
  0147 22860 3724
  0153 27000 3693
3719
SEE NOTES 3,5
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    07   540  816
    09   760 1165
    11  1080 1600
    16  1640 2385
    20  2280 2793
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```
TIME   STRAIN STRS
    24  3300 4022
    34  5560 5484
    39  9060 5914
    43 12160 5718
3720
SEE NOTES 3,5
    03    40  269
    06   320  760
    08   660 1149
    11  1060 1565
    17  1280 2139
    19  6580 1814
3721
SEE NOTES 3,5
    06    80  245
    08   300  776
    12   720 1545
    17  1220 2369
    21  1660 3170
    30  3120 4716
    35  4480 5469
    42  8220 6065
    46 12380 5725
3722
SEE NOTES 3,5
    02     0  158
    06   220  737
    11   400 1569
    15   820 2385
    19  1240 3098
    23  1860 3946
    28  2780 4716
    32  3860 5085
    39  7720 5409
    46 14500 5213
3723
SEE NOTES 3,5
    11     0  198
    14   360 1196
    16   760 1624
    18  1580 2322
    21  3800 2995
    25  9080 3051
    28 13620 3051
    32 21040 3059
    36 26880 2971
    38 30380 2892
3724
SEE NOTES 3,5
    05   140  253
    07   580 1125
    11  1240 2361
    16  2420 4015
    20  5140 5462
    23  9120 5582
    26 14380 5077
3725
SEE NOTES 3,5
    02   160  213
    06   940  895
    08  1940 2020
    12  3500 3162
    16  6680 3954
    19 11440 3977
3726
SEE NOTES 3,5
    04    20  388
    07   380 1521
    09   940 2686
    11  1880 3724
    13  3400 4640
    15  6180 5077
3727
SEE NOTES 3,5
    07   400  499
    09  1220 1513
3728
SEE NOTES 3,5
    03     0  261
    05   240 1252
    07   640 2361
    09  1300 3621
    11  2120 4716
    13  3620 5627
    16  5920 5884
    18 11460 5952
3729
SEE NOTES 3,5
    04   100  118
    06  1020  879
    08  1880 1997
    11  2860 3249
    14  4240 4791
    18  6500 6260
    20  8880 7067
3730
SEE NOTES 3,5
    03   500  340
    06  1100  792
    10  1600 1180
    12  1880 1585
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TIME   STRAIN STRS
    17  2420 2440
    21  2820 3185
    29  4000 4716
    36  5390 5424
    41  7400 6273
    48 11760 6607
    53 17540 6411
3731
SEE NOTES 3,5
    03   260  110
    07  1280  729
    11  2640 1909
    14  3500 3170
    19  5180 4746
    23  6720 6268
    27 11200 7006
    30 16120 7120
    36 22460 6750
3732
SEE NOTES 3,5
    31   320  221
    43   440  364
  0112  1380 1365
  0146  1920 1521
  0182  2640 1965
  0267  4660 2757
  0321  6000 3167
  0428  9520 3812
  0600 16680 4271
  0676 20680 4256
3733
SEE NOTES 3,5
    32   340  221
    47   500  388
    81   840  752
  0181  2040 1482
  0278  4060 2345
  0400  7440 3027
  0500 11740 3320
  0600 15880 3502
  0700 20480 3582
  0765 23520 3587
3734
SEE NOTES 3,5
    31   400  221
    47   660  364
    65   960  554
    86  1280  737
  0131  2040 1125
  0174  2880 1545
  0278  5140 2377
  0377  7960 3011
  0525 13060 3574
  0700 20420 3930
  0913 25340 4037
  0900 29120 4068
  0914 29680 4045
3735
SEE NOTES 3,5
    36   320  166
    55   560  356
    94  1100  729
  0141  1820  966
  0168  2280 1157
  0270  4500 2100
  0379  7920 2789
  0471 11420 3170
  0802 26420 3574
  0838 28220 3574
3736
SEE NOTES 3,5
    26   500  142
    45   920  364
    66  1660  610
    80  2100  752
  0136  2840  974
  0149  4080 1149
  0180  5040 1577
  0279  8540 2702
  0383 13760 3415
  0600 28000 3796
  0628 29960 3788
3737
SEE NOTES 3,5
    29   380  213
    41   680  356
    55  1100  554
    69  1500  729
    88  2080  974
  0101  2680 1141
  0133  3600 1593
  0193  5900 2361
  0297 10320 3655
  0392 15360 4188
  0665 26460 4806
  0700 36200 4844
  0872 42260 4784
3738
SEE NOTES 3,5
    41   700    0
    67  1380  364
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TIME   STRAIN STRS
    87  1960  626
    99  2200  776
  0129  3120 1149
  0158  4180 1537
  0277  9540 2726
  0377 15140 3384
  0500 23520 3899
  0700 36000 4505
  0900 50520 4716
3739
SEE NOTES 3,5
    20   180  158
    35   400  388
    46   640  626
    53   800  776
    67  1040  998
    76  1280 1165
    98  1780 1569
  0122  2260 1989
  0165  2900 2393
  0239  6240 3685
  0353 12760 4535
  0488 22400 4912
  0578 29440 4927
3740
SEE NOTES 3,5
    06   100  309
    08   680 1157
    10  1500 2044
    12  2900 3185
    14  4580 3566
    17  7900 3962
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    11  2040 3019
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    41  1120 1537
    49  1880 1957
    58  2940 2377
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  0165 20080 4904
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13. ABSTRACT

This report contains the results from a study of the mechanical and structural properties of sea ice; the study commenced in 1958 and was completed in late 1965. Most of the experimental work is based upon stress-strain tests in both direct compression and direct tension. Approximately 3800 of these tests were made.

Those parameters anticipated to have significant effect upon strength were measured: temperature, salinity, rate of loading, crystal size, crsytallographic orientation, history of the ice and depth in the ice sheet. All of these are found to be significant except that the history factor itself tended to be determined by the other parameters.

The analysis was accomplished primarily by testing models by linear multiple regression. The models selected yield good results with multiple correlation coefficients between 0.70 and 0.98 over a range of petrofabric types.

Additional work accomplished in conjunction with construction of offshore oil drilling platforms had provided significant information concerning oscillatory failure of sea ice in compression and strength reduction at very high load rates. The ice failure force oscillation is an ice property and is not primarily a function of the response of the structure. The magnitude of oscillation is large and at a frequency in the range of most space frame structures. The failing ice may cause forced resonant vibration in structures, and the forces are large enough to resonantly vibrate structure weighing several thousand tons.

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14 KEY WORDS	LINK A ROLE	LINK A WT	LINK B ROLE	LINK B WT	LINK C ROLE	LINK C WT
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Ice						
Sea Ice						
Ice Strength						
Ice Properties						

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