

University of Alberta  
Department of Civil Engineering



Structural Engineering Report No. 85

**Test of a  
Prestressed Concrete  
Secondary Containment  
Structure**

by  
J.G. MacGregor  
S.H. Simmonds  
and  
S.H. Rizkalla

April, 1980

University of Alberta  
Department of Civil Engineering

TEST OF A PRESTRESSED  
CONCRETE SECONDARY CONTAINMENT  
STRUCTURE

by

J.G. MacGregor  
S.H. Simmonds  
S.H. Rizkalla

A Technical Report to the  
Atomic Energy Control Board  
Nuclear Plant Licensing Directorate  
P.O. Box 1046  
Ottawa, Canada K1P 5S9

March, 1980

## DISCLAIMER

The interpretation of the technical data and any opinions or conclusions arising in this report are those of the authors only and do not necessarily reflect those of the cooperating agencies.

## ABSTRACT

The construction and testing to failure by internal over-pressure of a 1:14 scale prestressed concrete secondary containment structure is described. The test structure consisted of a rigid base, cylindrical wall with buttresses, ring beam and dome. The overall height of the test structure above the base was 12 ft.-6 in. to outside of the wall. Internal pressure was applied using water and leakage was prevented by using a flexible plastic liner.

Measurements made during the test include internal pressure, deflections using LVDT's, steel and concrete strains using electrical resistance gages, concrete strains using manual gages, concrete crack widths and spacing and curvatures at the base of the cylindrical wall.

The test structure began to exhibit cracking at an internal pressure of 30 psi and yielding of the reinforcement at approximately 110 psi. The structure displayed considerable ductility before failing at an internal pressure of 159.5 psi by rupture of one horizontal tendon and one vertical tendon at midheight of the wall. Prior to failure considerable distress occurred at the anchorages of the horizontal tendons in the wall.

The BOSOR5 analysis developed in other parts of this project gave a very good prediction of strains and deflections.

## TABLE OF CONTENTS

	Page
Title Page . . . . .	i
Disclaimer . . . . .	ii
Abstract . . . . .	iii
Table of Contents . . . . .	iv
List of Tables . . . . .	viii
List of Figures . . . . .	ix
Notation, Terminology and Definitions . . . . .	vi
1. INTRODUCTION . . . . .	1
1.1 Overview of Containment Study . . . . .	1
1.2 Object and Scope of the Test Structure . . . . .	2
1.3 Acknowledgements . . . . .	4
2. TEST STRUCTURE . . . . .	7
2.1 Design Criteria and Design Process . . . . .	7
2.1.1 Selection of Dimensions . . . . .	9
2.1.2 Selection of Reinforcement and Prestressing Details . . . . .	12
2.1.3 Design of Base and Access Hatch . . . . .	15
2.1.4 Design of Base-Wall Hinge . . . . .	16
2.2 Details of As-Built Structure . . . . .	17
2.2.1 Overall Geometry . . . . .	17
2.2.2 Base . . . . .	18
2.2.3 Base-Wall Hinge . . . . .	18
2.2.4 Wall . . . . .	22
2.2.5 Buttresses . . . . .	27
2.2.6 Dome . . . . .	30
2.2.7 Ring Beam . . . . .	34
2.3 Construction of Test Structure . . . . .	34
2.3.1 Base Slab . . . . .	34
2.3.2 Vertical Cylindrical Wall . . . . .	36

	Page
2.3.3 Dome . . . . .	41
2.3.4 Prestressing Sequence . . . . .	41
2.3.5 Grouting . . . . .	44
3. MATERIALS AND MATERIAL PROPERTIES . . . . .	45
3.1 Concrete and Gunite . . . . .	45
3.1.1 Mechanical Properties of Concrete and Gunite . . . . .	45
3.2 Reinforcement . . . . .	47
3.3 Prestressing Steel . . . . .	50
3.4 Grout for Prestressing Tendons . . . . .	52
3.5 Prestressing Forces . . . . .	54
4. INSTRUMENTATION . . . . .	57
4.1 Overview . . . . .	57
4.2 Data Acquisition System . . . . .	59
4.3 Internal Pressure . . . . .	60
4.4 Deflections . . . . .	62
4.5 Average Surface Strains (Demec Strains) . . . . .	62
4.6 Electrical Resistance Gages on Reinforcement . . . . .	67
4.7 Detection of Cracking . . . . .	72
4.8 Measurement of Crack Widths . . . . .	74
4.9 Curvature Meters . . . . .	75
5. TESTING . . . . .	81
5.1 Introduction . . . . .	81
5.2 Hydraulic Loading System . . . . .	82
5.3 Liner . . . . .	82
5.4 Load Sequence . . . . .	85

	Page
6. STRUCTURAL ANALYSIS OF TEST STRUCTURE . . . . .	93
6.1 Introduction . . . . .	93
6.2 Analytical Model of Test Structure . . . . .	95
6.3 Summary . . . . .	98
7. BEHAVIOR OF TEST STRUCTURE DURING TESTS . . . . .	99
7.1 Presentation of Results . . . . .	99
7.2 Overview of Response . . . . .	99
7.2.1 Load Sequences A through F . . . . .	99
7.2.2 Load Sequence F . . . . .	101
7.2.3 Load Sequence G . . . . .	104
8. DISCUSSION OF TEST RESULTS . . . . .	119
8.1 Deflections . . . . .	119
8.1.1 Measured Deflections . . . . .	119
8.1.2 Computed Deflections . . . . .	123
8.2 Cracking . . . . .	126
8.2.1 Observed Cracking . . . . .	126
8.2.2 BOSOR5 Prediction of Cracking Loads . . . . .	138
8.2.3 Calculated Crack Widths . . . . .	145
8.2.4 Cracking of Buttresses . . . . .	146
8.3 Meridional Strains . . . . .	151
8.3.1 Measured Strains . . . . .	151
8.3.2 Computed Strains . . . . .	156
8.4 Circumferential Strains . . . . .	
8.4.1 Measured Strains . . . . .	
8.4.2 Computed Strains . . . . .	
8.5 Strains in Prestressing Tendons . . . . .	
8.6 Forces in Hinge Region . . . . .	
9. CONCLUSIONS . . . . .	

	Page
REFERENCES . . . . .	
APPENDIX A - Loads, Strains and Deflections Recorded in Tests F and G . . . . .	
APPENDIX B - Miscellaneous Plots of Data . . . . .	

## LIST OF TABLES

Table Number	Title	Page
3.1	Properties of Concrete and Gunite	46
3.2	Properties of Reinforcing Bars	49
3.3	Prestressing Forces	55
5.1	Loading Sequence	88
A.1	Identification of Instrumentation Channels	A2
A.2	Testing Schedule - Test F	A3
A.3	Electronically Recorded Data - Test F	A4
A.4	Demec Strain Gage Data - Test F	A32
A.5	Testing Schedule - Test G	A35
A.6	Electronically Recorded Data - Test G	A36
A.7	Demec Strain Gage Data - Test G	A64
B.1	Designation of Symbols for Figs. B.8 B.9 and B.18-21	B1
B.2	Designation of Symbols for Figs. B.7 and B.17	B1

## LIST OF FIGURES

Figure Number	Title	Page
1.1	Cut-Away Drawing of Gentilly-2 Containment Vessel	2
2.1	Photograph of Containment Structure After Test	10
2.2	Vertical Section Through Test Structure	11
2.3	Plan View of Base	19
2.4	Elevation and Section Through Base	20
2.5	Reinforcing Details in Base	21
2.6	Base Reinforcement Prior to Placing Top Layer and Hinge Reinforcement	23
2.7	Base Reinforcement Immediately before Placing Concrete	23
2.8	Detail of Hinge and Reinforcement at Base of Wall	24
2.9	Hinge Reinforcement Prior to Concreting	25
2.10	Photograph of Saw Cut through Hinge During Demolition.	25
2.11	Reinforcing Details in Wall, Ring Beam and Dome	26
2.12	Height of Concrete in Walls	28
2.13	Reinforcing Details in Buttresses	29
2.14	Reinforcing Details in Dome	31
2.15	Dome Reinforcement Prior to Placing Concrete	32
2.16	Anchorage of Dome and Ring Beam Tendons	33
2.17	Installation of Inside Wall Form on Base	37
2.18	Tying Outside Layer of Wall Reinforcement	37
2.19	Dome Form under Construction	42
2.20	Forms and Tendons for Dome and Ring Beam	42

Figure Number	Title	Page
3.1	Stress-Strain Curves for Deformed Bar Reinforcement	48
3.2	Stress-Strain Curves for Prestressing Tendons	51
3.3	Grouting Port in Position on Tendon in Ring Beam Buttress Region	53
4.1	Plan of Test Structure Showing Location of Measuring Lines and Location of LVDT's along Line 4.	58
4.2	Location of LVDT's along Line 1.	61
4.3	Location of Demec Gages along Line 2	63
4.4	Location of Demec Gages on Dome along Line 2	64
4.5	Location of Demec Gages along Lines 5 and 6	66
4.6	Location of Electrical Resistance Strain Gages on Wall Reinforcement	68
4.7	Location of Electrical Resistance Strain Gages on Dome Reinforcement	69
4.8	Location of Electrical Resistance Strain Gages on Horizontal Lines	70
4.9	Location of Electrical Resistance Strain Gages on Hinge Reinforcement	71
4.10	Location of 4 in. Gage Length Electrical Resistance Strain Gages on Surface of Concrete	73
4.11	Location of Curvature Meter Rods	76
4.12	Location of Dial Gages on Curvature Meters and Calculation of Vertical Deflections and Angle Changes from Curvature Meter Readings	77
5.1	Details of First Liner	84
5.2	Test Structure during a Test	87

Figure Number	Title	Page
5.3	West Quadrant of Containment at 80 psi.	90
5.4	Failure of the Containment at 159.9 psi	90
5.5	Model Cut into Pieces for Removal from Laboratory	92
5.6	Loading Half of Base onto Truck for Removal from Laboratory	92
6.1	Analytical Model of Test Structure	94
6.2	Analytical Model of Ring Beam Region	97
7.1	Pressure vs Horizontal Deflection, Line 1, 71.25 in. above Base.	100
7.2	Pressure vs Vertical Deflection at Crown of Dome	102
7.3	Cracking in West Wall at End of Loading F (80 psi)	103
7.4	Cracking in East Quadrant of Dome at End of Loading F (80 psi)	105
7.5	Pressure vs Deflection, Loading G.	106
7.6	Cracking in West Wall at 130 psi	107
7.7	Cracking in East Quadrant of Dome at 130 psi	109
7.8	Deflections along Line 1	110
7.9	Deflections along Line 4	111
7.10	Outward Bulging of North West Buttress at 135 psi	112
7.11	Cracking at Tendon Anchorages in South West Buttress at 135 psi.	113
7.12	Stress Measured in the Fifth Circumferential Tendon from the bottom of the South Wall	115
7.13	South Wall and South East Buttress after Failure	117
8.1	Horizontal Deflections of Base of Wall from Curvature Meters	120

Figure Number	Title	Page
8.2	Slope of Wall at 5 in. above Base of Wall from Curvature Meters	121
8.3	Vertical Deflection of Midplane of Wall from Curvature Meters.	122
8.4	Measured and Computed Deflections, Line 1 120 psi	124
8.5	Measured and Computed Deflections for Wall and Dome, Line 1	125
8.6	Developed View of West Wall showing Cracks at End of Test F, 80 psi.	127
8.7	Developed View of North West Buttress showing Cracks at End of Test F, 80 psi	128
8.8	Cracks in East Quadrant of Dome at End of Test F, 80 psi.	129
8.9	Developed View of West Wall Showing Cracks at 130 psi Pressure	131
8.10	Developed View of North West Buttress showing Cracks at 130 psi Pressure	132
8.11	Cracks in East Quadrant of Dome at 130 psi Pressure	133
8.12	Inclined Cracks in Wall Adjacent to North West Buttress at End of Test G.	135
8.13	Failure Region Seen from Inside of Model	135
8.14	Cracks on Inside of Model at Intersection of North East Buttress and Ring Beam	136
8.15	Cracks on Inside of Model at Intersection of North West Buttress and Ring Beam	136
8.16	Cracks on Inside of Model at Intersection of South West Buttress and Ring Beam	137
8.17	Failure Region Seen from Outside of Model	137
8.18	Cracks Observed in Vertical Sections Cut through Wall after Test	139
8.19	Failure of Prestressing Anchorage in South West Buttress	140

Figure Number	Title	Page
8.20	BOSOR5 Prediction of Development of Circumferential Cracking	141
8.21	Extent of Cracking at 60 psi from BOSOR5 Analysis	142
8.22	Extent of Cracking at 80 psi from BOSOR5 Analysis	143
8.23	Extent of Cracking at 130 psi from BOSOR5 Analysis	144
8.24	Measured and Computed Crack Strain, Vertical Cracks in Walls	147
8.25	Measured and Computed Crack Strain, Circumferential Cracks in Walls	148
8.26	Measured and Computed Crack Strain, Meridional Cracks Crossing a Line Located 32 in. from Crown of Dome	149
8.27	Measured and Computed Crack Strain, Meridional Cracks Crossing a Line Located 21 in. from Crown of Dome	150
8.28	Meridional Demec Strains on Outside Surface, Line 2	152
8.29	Meridional Steel Strains in Inside Layer of Reinforcement, Line 2	154
8.30	Meridional Steel Strains in Outside Layer of Reinforcement, Line 2	155
8.31	Measured and Computed Meridional Strains at Surface, Line 2, 120 psi.	
8.32	Measured and Computed Meridional Strains at Outside Surface of Wall, Line 2	
8.33	Circumferential Demec Strains on Outside Surface, Line 2	

Figure Number	Title	Page
8.34	Circumferential Demec Strains on Outside Surface of Wall, Line 5	
8.35	Measured and Computed Circumferential Strains at Surface, Line 2	
8.36	Measured and Computed Circumferential Strains at Surface of Wall, Line 2	
8.37	Measured and Computed Circumferential Strains at Surface at 1.17 ft. from Crown of Dome	
8.38	Measured Strains in Prestressing Tendons in Dome	
8.39	Computed Stresses in Meridional Tendons	
8.40	Strains Measured in Inclined Bars across Hinge, Lines 1 and 2	
8.41	Strains Measured in Inclined Bars across Hinge, Lines 1 and 2	
8.42	Strains Measured in Inclined Bar across Hinge, Line 3	
8.43	Strains Measured in Vertical Bars across Hinge, Lines 1 and 3	
8.44	Strains Measured in Stirrups near Hinge, Line 1	
B.1	Individual Load-Deflection Plots, Line 1	B2
B.2	Individual Load Deflection Plots, Line 4, 2.25 ft. above Base	B3
B.3	Individual Load-Deflection Plots, Line 1, Ring Beam	B4
B.4	Individual Load-Deflection Plots, Line 1, Dome	B5
B.5	Developed View of West Wall showing Cracks at 110 psi Pressure	B6
B.6	Developed View of North West Buttress showing Cracks at 110 psi Pressure	B7

Figure Number	Title	Page
B.7	Meridional Demec Strains along Line 4	B8
B.8	Meridional Steel Strains, Inside Layer, Line 1	B9
B.9	Meridional Steel Strains, Outside Layer, Line 1	B10
B.10	Meridional Steel Strains, Inside and Outside Layers, Line 1	B11
B.11	Meridional Steel Strains, Inside and Outside Layers, Line 1	B13
B.12	Meridional Steel Strains, Inside and Outside Layers, Line 1	B15
B.13	Meridional Steel Strains, Inside and Outside Layers, Line 1	B17
B.14	Meridional Steel Strains, Inside and Outside Layers, Line 1	B19
B.15	Meridional Steel Strains, Inside and Outside Layers, Line 1	B21
B.16	Meridional Steel Strain, Inside and Outside Layers, Line 2	B23
B.17	Circumferential Demec Strains Along Line 5	B24
B.18	Circumferential Steel Strains, Inside Layer, Line 1	B25
B.19	Circumferential Steel Strains, Outside Layer, Line 1	B26
B.20	Circumferential Steel Strains, Inside Layer, Line 2	B27
B.21	Circumferential Steel Strains, Outside Layer, Line 2	B28
B.22	Circumferential Steel Strains, Inside and Outside Layers, Line 1	B29
B.23	Circumferential Steel Strains, Inside and Outside Layers, Line 1	B31

Figure Number	Title	Page
B.24	Circumferential Steel Strains, Inside and Outside Layers, Line 1	B33
B.25	Circumferential Steel Strains, Inside and Outside Layers, Line 1	B35
B.26	Circumferential Steel Strains, Inside and Outside Layers, Line 1	B37
B.27	Circumferential Steel Strains, Inside and Outside Layers, Line 1	B39
B.28	Circumferential Steel Strains, Inside and Outside Layers, Line 2	B41

## NOTATION, TERMINOLOGY AND DEFINITIONS

### Notation in Section 4.9 and Fig. 4.12

- B reading of dial gage nearest to wall
- F reading of dial gage farthest from wall
- $\ell_r$  change in elevation of curvature measuring rod at a point 15 in. from the center of the wall
- $\Delta_n$  vertical deflection
- $\Delta_x$  difference in elevation of two points on curvature measuring rod
- $\theta$  slope of curvature measuring rod and slope of wall at point where rod meets wall

### Notation in Section 8.2.3

- L length of line crossed by cracks
- $N_c$  number of cracks at a given load
- $N_{fc}$  final number of cracks
- $\epsilon_m$  average surface strain
- $\Sigma w/L$  average crack strain

### Terminology and Definitions

**Demec Strains** - strain measurements made on the surface of the concrete using a mechanical strain gage having a gage length of 5 or 10 in.

**Pressure** - the internal pressure was defined in terms of the pressure at the crown of the dome. When the test structure was full of water with the air release valve at the crown open to the air, the pressure was taken as 0 psi. Due to the height of the structure, the pressure at the base was 5 psi higher than that at the crown.

**Zero Readings** - in all cases the reported zero strains and deflections at the beginning of each test refer to the state of strain and deflection at that point in time.

## 1. INTRODUCTION

### 1.1 Overview of Containment Study

The nuclear reactors in Canadian nuclear power plants of the Gentilly-2 type are housed in circular prestressed concrete containment structures as shown in Fig. 1.1. In the event of certain malfunctions in which pressurized gases or steam may be discharged, the secondary containment structure acts to prevent such gases from escaping into the atmosphere.

The largest pressures that will occur are due to a complete rupture of the secondary steam line. Under normal conditions this release of steam and the increasing pressure would activate a water dousing system which would act to condense the steam and result in a maximum internal pressure of 18.5 psi (design basis accident). One of the design criteria for a secondary containment of this type is that there be no tensile stress in the inner surface of the concrete under a pressure of 1.15 times this design basis accident.

In the extremely unlikely event that a secondary steam line ruptures completely and at the same time the dousing system also fails to operate, the internal pressure may reach several times the design pressure. This would result in the walls and dome of the containment being loaded in biaxial tension to stresses well above the cracking load. The response of the containment structure to such overpressures is the subject of a comprehensive study sponsored by the Atomic Energy Control Board of Canada and undertaken at The University of Alberta.

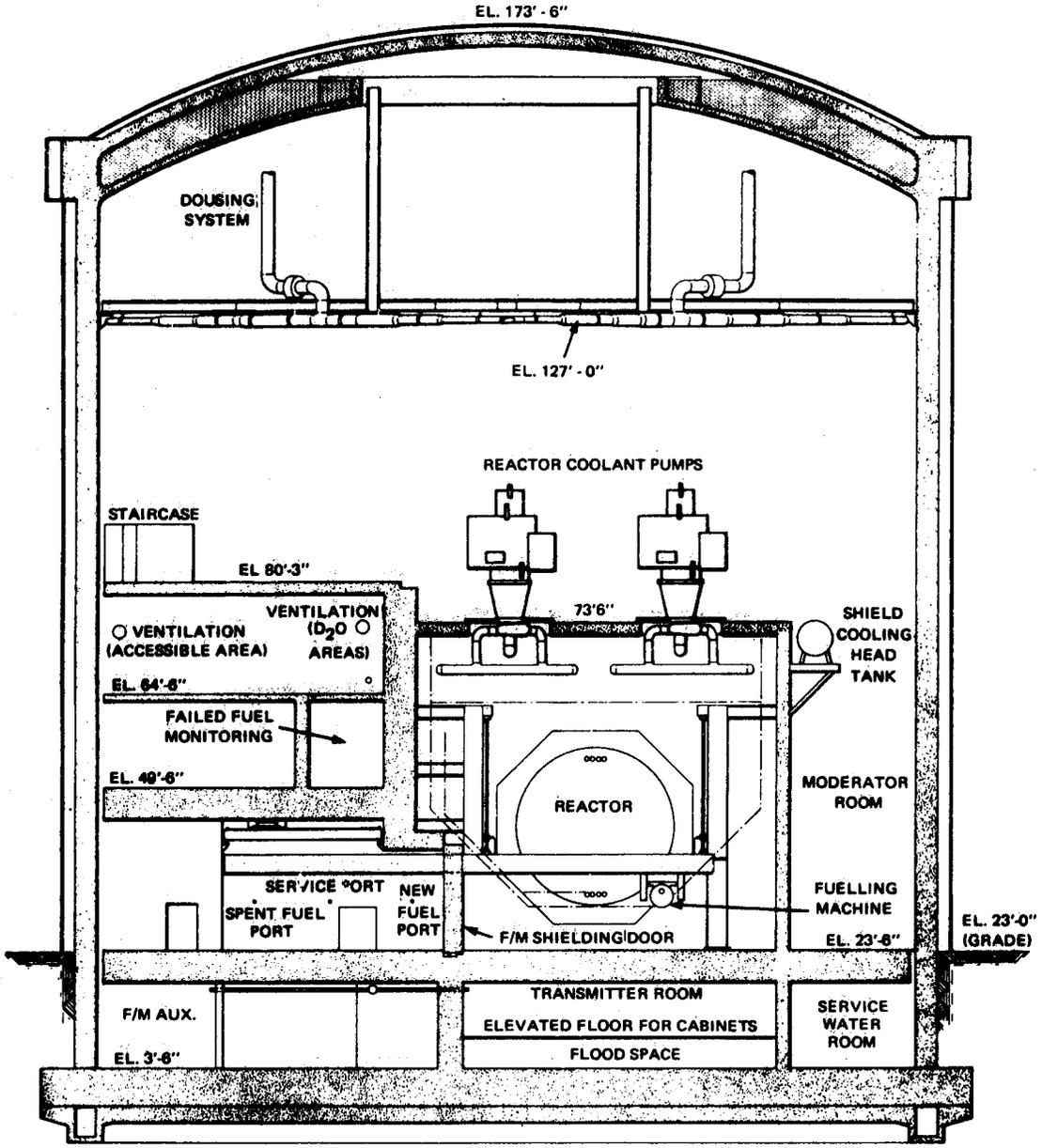


Fig. 1.1 Cut-Away Drawing of Gentilly-2 Containment Building

As the internal pressure in a prestressed concrete containment structure increases it is possible to postulate a series of design conditions or limit states that may occur. These include such states as first surface cracking, first through-the-wall cracking, initial yielding of reinforcement, first yielding of prestressing tendons and fracture of reinforcement and/or tendons. The value of the internal pressure and the location in the containment at which these limit states occur is of primary interest.

To enable prediction of these limit states a series of analytical and experimental studies were undertaken. In order to obtain reliable data on the response of the containment structure under biaxial tension loading a series of 14 wall segments representing different construction details were tested (1)(2)(3). From the results of these tests, constitution relationships for the concrete and steel were developed (4). which would be included in an analytical procedure developed for predicting the response of such structures to overpressure conditions (5).

A major part of this study was the test to failure of a prestressed concrete vessel designed to behave similarly to the containment structure. A description of the design, construction, testing and behavior of this test structure is the basis of this report.

## 1.2 Object and Scope of the Test Structure

The purpose of building and testing a prestressed concrete containment structure to failure is to verify the reliability of the

analytical procedures developed for predicting the various limit states for such structures under increasing internal pressure.

The structure tested was patterned after the prototype containment and was designed to behave and fail in a manner similar to the prototype. However, practical considerations in the construction and testing of the model meant that the same scale could not be used for all structural elements. Thus, while overall behavior will be similar, there will not be a one to one correspondence of pressure at each limit state between the structure tested and the prototype containment. For this reason the test structure should be viewed as a structure in its own right rather than as a model of a particular existing containment structure.

Chapter 2 of this report contains a discussion of the design of the test structure and the properties of the construction materials. The construction sequence is described in Chapter 3. Chapter 4 contains a description of the instrumentation and data recording systems used. The test procedure and sequence of tests is presented in Chapter 5. The BOSOR5 analysis used to predict the response is summarized in Chapter 6. A discussion of the overall behavior of the structure due to pressures up to failure and a comparison of the measured and predicted values is given in Chapter 7. Chapter 8 contains a summary of the primary conclusions.

### 1.3 Acknowledgements

The research project "Study of Concrete Containment Structures under Overpressure Conditions" was sponsored at the University of

Alberta by the Atomic Energy Control Board of Canada and was under the general supervision of Dr. W.D. Smythe and Dr. F. Campbell of AECB. Principal investigators at the University of Alberta, Department of Civil Engineering, were Drs. J.G. MacGregor, D.W. Murray and S.H. Simmonds. Initially, Mr. Declan Whelan served as technical liaison between AECB and the project directors, however, since the summer of 1977, Dr. G.J.K. Asmis has served in this capacity.

The progress of the project has been reviewed from time to time by an Advisory Committee with representatives from the Atomic Energy Control Board, Atomic Energy of Canada Limited, Canatom Limited, Hydro Quebec and Ontario Hydro. The project directors wish to thank the members of this committee for the help and guidance received during this work.

Testing was carried out at the I.F. Morrison Structural Engineering Laboratory at the University of Alberta, Edmonton, Canada. Dr. S.H. Rizkalla was in charge of laboratory work. Mr. Alistair Dunbar was in charge of the Data Acquisition System and Mr. Roy Gitzel designed many of the circuits. Much of the data was reduced by Dr. L. Chitnuyanondh, Mr. C. Wong and Dr. M. El Zanaty.

The carpentry work was carried out by Mr. Henry Feldman of the University of Alberta Physical Plant Department. Without his craftsmanship (see for example Fig. 2.19 and 2.20) this project could not have been carried out.

The prestressing was carried out by Con-Force Products Ltd. at no cost to the project. The authors sincerely appreciate the

interest, guidance and help given by Con-Force at various stages of the project.

## 2. TEST STRUCTURE

### 2.1 Design Criteria and Design Process

The general dimensions and construction details were patterned after the Gentilly-type secondary containment and the test structure was proportioned to have the same sequence of cracking under increasing internal pressure loading that elastic analysis (6) had predicted for that containment.

Since the purpose of the test structure was to compare observed to predicted behavior under overpressure conditions, only those elements which resist this type of loading were included, namely the base slab, cylindrical wall, ring beam and spherical dome. The inner dome of the Gentilly-2 containment was not included in the model. In addition, although the overall geometry of the test structure was scaled from the prototype containment, the same scale could not be used for all construction details and maintain realistic material properties. Therefore, the test structure, while designed to parallel the behavior of the prototype containment, should be considered as an independent prestressed concrete containment used to evaluating the reliability of the procedure developed to predict the behavior of such structures rather than as a model of a particular type of existing containment structure. Due to the drastic change in scale, however, it was not feasible to model the cracking pattern accurately, although the development of cracking in the test followed that predicted by the BOSOR5 analyses.

The above reasoning is also the justification for not modelling penetrations in the wall of the cylinder or dome since these items were not modelled in the analytical response for such structures.

Stresses due to differential thermal effects were ignored in the design since these stresses are self-equilibrating and tend to disappear when internal loading is sufficient to cause cracking.

Overpressure in secondary containment structures is caused by the release of high pressure steam, a loading medium deemed not suitable for use in laboratory testing. Consideration was given to the use of air as the pressurizing medium. This was discarded because of anticipated difficulties in controlling strain rates at higher load levels and the possibility of an explosive type failure due to the energy release at the time of failure (7). For these reasons, water was used as the pressurizing medium.

To obtain limit states corresponding to internal pressures greater than that required to produce through the wall cracking and to maintain these pressures at a constant level while readings of strains and crack widths were being taken it was necessary to provide a suitable water tight liner. To enable examination of the inner surface of the test structure for cracks and other behavior a flexible liner was chosen so that it could be removed following certain specified load increments. This necessitated providing a means of access to the inside of the structure for inspection personnel. To maintain the general axi-symmetry of the test structure and prevent introduction of stress concentrations in the cylinder and dome which might have influenced crack formation and propagation, this access hatch was located in the middle of the rigid base slab. This opening was also used for removing the inside forms for the dome and ring beam during construction.

### 2.1.1 Selection of Dimensions

The dimensions of the test structure must be sufficiently large to permit use of construction materials and details whose structural response under load will be representative of that in actual containment structures. On the other hand, financial constraints and laboratory facilities place an upper limit on size so that the test structure should be as small as possible without scale significantly influencing the results.

After several trial designs an overall scale of 1:14 was selected for the test structure compared to the prototype Gentilly-2 containment. This resulted in a structure having a height above the base of 12'-6" and an outer wall diameter of 10'-6". A photograph of the completed test structure is shown in Fig. 2.1 and a vertical section through the structure is given in Fig. 2.2.

The thickness of the base slab was selected as 3'-6" to provide room for a 24 in. high tunnel located along a diameter which provided passage to the access hatch while providing an essentially rigid base to the structure.

Using the same scaling ratio for member thickness as was used for the overall dimensions would have resulted in thicknesses, of 1.71 in. and 3.0 in. for the dome and wall, respectively. These thicknesses were deemed too thin to permit realistic modelling of the construction details.

The minimum thickness required to accommodate two nominal 1.0 inch ducts for post-tensioning in orthogonal directions, two layers of

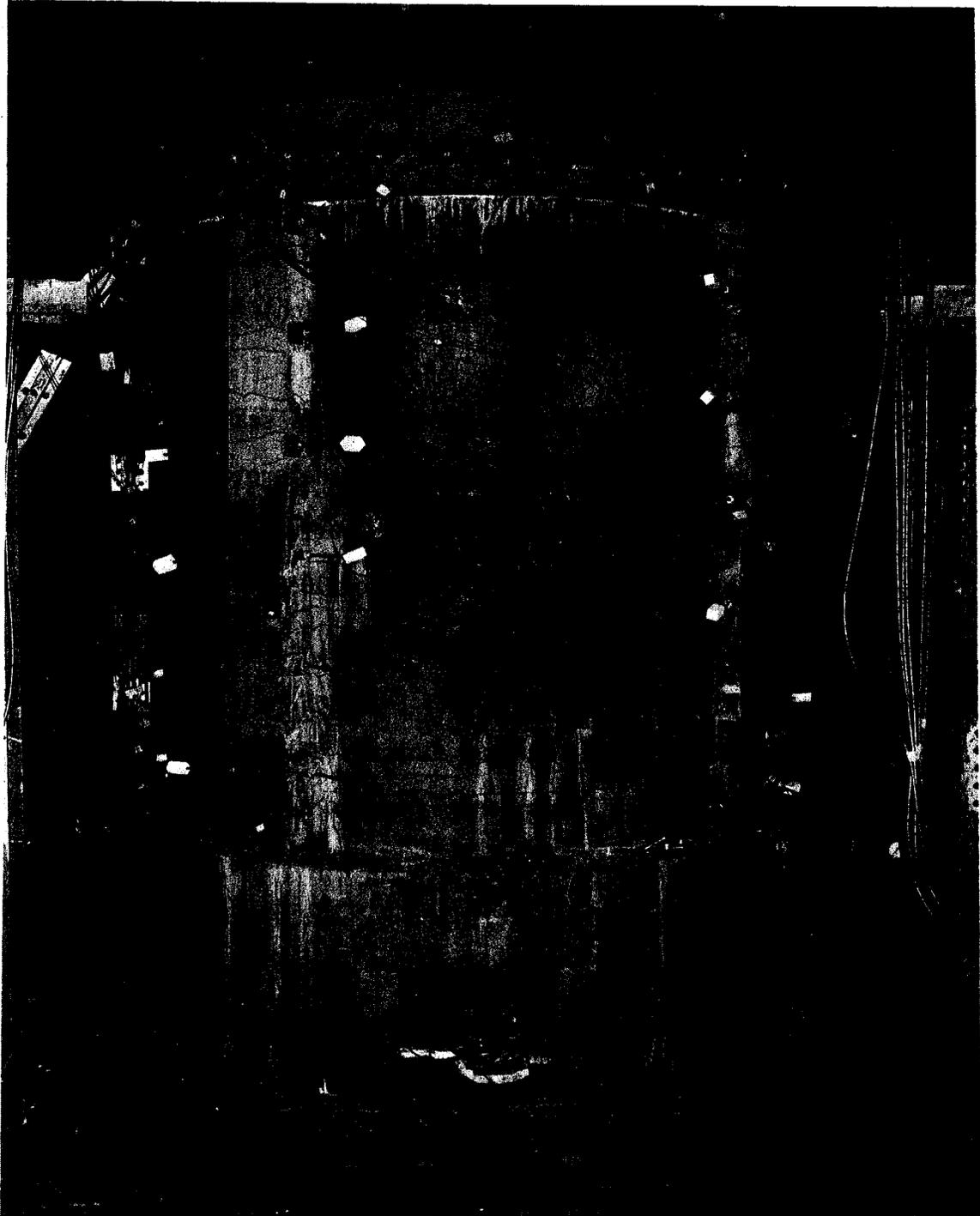


Fig. 2.1 Photograph of Containment Structure After Test

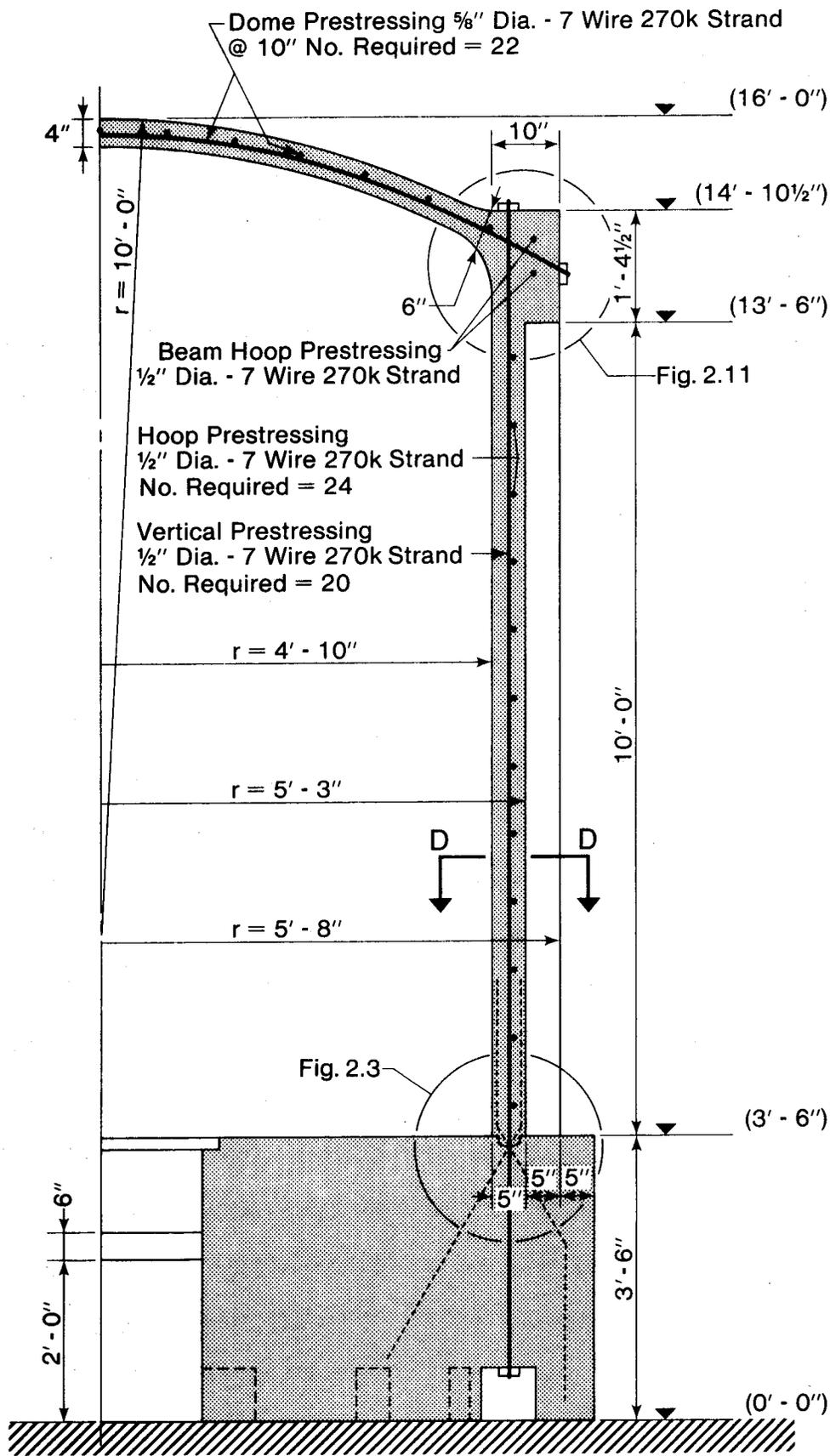


Fig. 2.2 Vertical Section Through Test Structure - (Section BB - Fig. 2.3)

reinforcement in each face and provide 1/2 in. concrete cover was considered to be 4 in. This thickness was used in the dome. Using the same ratio of wall to dome thickness in the test structure as in the prototype would suggest a wall thickness of 7 in. Preliminary calculations using this wall thickness and the same levels of prestress in the concrete as exist in the prototype showed that the internal pressure that would be required to initiate cracking in the wall of the test structure was approximately four times the pressure required to initiate cracking in the dome and the sequence of cracking would be different from that predicted for the prototype.

To obtain the desired sequence of cracking when using a 4 in. thick dome it was necessary to reduce the thickness of the wall to 5 in. and adjust the levels of prestress in both the dome and wall. The means of performing this adjustment is described in section 2.1.2.

The thickness of the ring beam was taken to be twice the thickness of the wall or 10 inches. This corresponds to the ratio of beam to wall thickness in the prototype.

#### 2.1.2 Selection of Reinforcement and Prestressing Details

Steel reinforcement was selected to reflect the percentage of reinforcement used in the prototype. In addition, to ensure ductile behavior when testing in the post cracking region, sufficient reinforcement was placed at each section that the ultimate strength of the section was not less than the cracking strength of the concrete at that section. Thus the minimum reinforcement at a section was to provide a force equal to the total tensile force at the section minus the force in

the prestressing tendons after cracking which was taken as the initial effective prestressing force.

The selection of reinforcement in this manner had only a small effect on the internal pressure at which cracking was initiated at a section and did not alter the cracking sequence.

In actual containment structures the spacing of the reinforcement in both directions is generally between 1/4 and 1/2 of the wall thickness. A nominal spacing of 3 in. was selected which was 60 percent of the wall thickness chosen for the test structure.

Originally it was planned to use welded wire mesh with appropriate wire size in each direction. In order to obtain a well defined yield point for the material, a roll of mesh was heated in an annealing oven to 1000°F and allowed to cool slowly. Subsequent testing indicated that there was considerable variation in the yield strength (30-60 ksi) at different locations in the roll and so this roll was discarded. Tests were then made on a different roll as received from the mill but the material in this roll was found to have elongations at failure of from between 3/4 and 3%. Since this ductility is less than that of the prestressing tendons, there would be a possibility of a brittle failure of the test structure. Further consideration to the use of welded wire mesh as reinforcement was abandoned.

Attention was then given to use of hot rolled reinforcement. The hoop steel in the wall could be provided by using readily available #3 bars spaced at 3 in. centres. After some searching, a nominal 6 mm bar produced in Sweden conforming to Swedish specifications, was located.

This steel, although having a larger yield point, was quite satisfactory and was used for the vertical wall reinforcement and the dome reinforcement. Details of the reinforcement will be discussed more fully later in this chapter.

The levels of prestress in both the dome and wall were selected to obtain the desired sequence of cracking in a structure having the dimensions shown in Fig. 2.2. This selection was made on the following basis. From an elastic analysis (6) for a unit value of internal pressure, the membrane and bending stress resultants were obtained at eight sections along the meridian. At each section the maximum tensile fibre stress was calculated. Analyses were then made for unit values of prestress applied separately in the dome, ring beam, horizontal wall direction and vertical wall direction and the fibre stresses were computed for the same sections considered in the internal pressure analyses.

The cracking strength of concrete under biaxial tension was assumed to be  $6 \sqrt{1.2 f'_c}$  where the value of concrete strength was arbitrarily increased by 20 percent to allow for possible overstrength concrete. The values of prestress from the above analyses were then scaled in various ratios until the desired sequence of cracking was achieved. This resulted in selecting values of prestress which correspond approximately to 80% of the prototype prestress intensity in the dome and 60% and 40% in the horizontal and vertical directions in the wall, respectively. It should be noted that the tendon spacing in the

model is roughly twice the wall thickness in one direction and four times the thickness in the other which is considerably larger than in the prototype. This was done as part of the attempt to balance the prestress intensity at cracking.

### 2.1.3 Design of Base and Access Hatch

In general, due to internal pressure, the base acts as a uniformly loaded circular slab with the uplift from the vertical wall reinforcing acting as the reaction. The deformation of the slab to this loading is not of interest in this study and with the thickness of concrete selected, namely 3'-6", even a nominal amount of reinforcement will resist the resulting stresses and permit considering the base as rigid. The only design complication was due to the presence of the tunnel which extends along a diameter to provide access through the base to the interior of the structure.

The dimensions of the tunnel were chosen arbitrarily but are close to the minimum to permit personnel to crawl to the access hatch. The critical dimension is the 1'-6" of slab above the roof of the tunnel. This portion was designed as a one way slab to resist internal pressures. To ensure rigidity of the base the portion of this tunnel roof slab directly under the walls, where the upward forces from the tendons and vertical reinforcement must be resisted was designed as a beam and extra reinforcement complete with stirrups was placed in this region.

To attach the seal between liner and water hose nipple and to ensure that the liner was properly located on the inside of the test

structure it was considered necessary that access also be provided to the inside of the structure when the liner was in place. This necessitated the design of a hatch that would also provide a seal between the liner and hatch and base.

The hatch consisted of an aluminum plate 30 inch square, stiffened with aluminum sections. Aluminum was chosen so that the weight of the hatch cover was such that it could be handled manually. A seat of 3 x 4 x 1/4 in. steel angles cast in the base was located so that bearing between the bottom of the cover plate and surface of base was in contact at the same time the bottom of the stiffening section's were in contact with the seat angles. This provided two surfaces in bearing through which the liner could be placed. Sealing was accomplished by providing 1/2 inch thick neoprene gaskets.

#### 2.1.4 Design of Base-Wall Hinge

The connection between the base and wall was designed to act primarily as a hinge, the same general detail as used in the prototype containment structure. However, as the purpose of the test was to verify predicted behavior in the post-cracking region and to examine modes of failure, the hinge was designed so to preclude failure of the hinge prior to general failure of the remainder of the structure as response of the hinge was not of major interest.

The shear key of one-half of the width of the wall was formed in the base using prebent steel angles which were left in place when the concrete was cast. The vertical wall tendons pass through the middle of this shear key. Vertical and diagonal steel was provided at the hinge to

resist all lateral force due to an internal pressure corresponding to 120 psi and still be stressed below the yield point. In addition vertical dowels were provided so that the total vertical force components in the reinforcement and tendons across the joint was more than enough to resist the total vertical force corresponding to this pressure. The purpose of these dowels was to prevent separation of wall and base prior to general yielding of the separation of wall and base prior to general yielding of the tendons. To distribute the forces from the diagonal dowels into the base, additional radial reinforcement was placed in the top of the base.

Stirrups extending radially through the wall were provided in the bottom 2 ft. of the wall. These were designed assuming the bottom part of the wall acted as a cantilever beam subjected to the meridional moments at an internal pressure of 120 psi and the radial shears calculated from these moments.

The depth of the shear key was chosen arbitrarily but was checked for the shears resulting from an internal pressure of 120 psi.

## 2.2 Details of As-Build Structure

### 2.2.1 Overall Geometry

The radius of the dome and the inside radius were selected to be approximately 1/14th those in the prototype. The wall and dome thicknesses were thicker than 1/14th scale would suggest however. The overall dimensions are shown in Fig. 2.2.

At the dome to ring-beam junction the top of the shell was trowelled to form a smooth transition with a radius of about 60 inches.

The inside surface was also formed to a smooth transition curve with minimum radius of 8.5 in.

### 2.2.2 Base

The base of the test structure was a circular block of reinforced concrete 12 ft-2 in. in diameter and 3 ft.-6 in. high as shown in Figures 2.3 to 2.5. Around the periphery of the bottom edge of the base, twenty openings were left to provide access to the lower end of the vertical prestressing tendons in the walls. These are shown in Figures 2.3 to 2.5.

The majority of the base has three layers of deformed welded wire fabric mesh as shown in the drawings. Extra reinforcement is placed in a "beam" provided in the regions over the tunnel and directly under the walls. This steel is shown in Figure 2.6. Figure 2.7 shows the base reinforcement in place ready for concreting.

### 2.2.3 Base-Wall Hinge

The joint between the base and the wall in the prototype was intended to act as a hinge. This detail was copied as closely as possible in the test specimen. Figure 2.8 shows the base to wall joint.

Two  $3/4 \times 3/4 \times 1/8$  in. angles bent in circles and held together by 8 radial spacers welded between the angles were used to form the sides of the trough for the shear key. These angles were anchored in place to form a permanent part of the base. The reinforcement crossing the hinge area included vertical and inclined reinforcing bars and  $1/2$  in. seven wire prestressing strands as shown in Fig. 2.8 and 2.9.

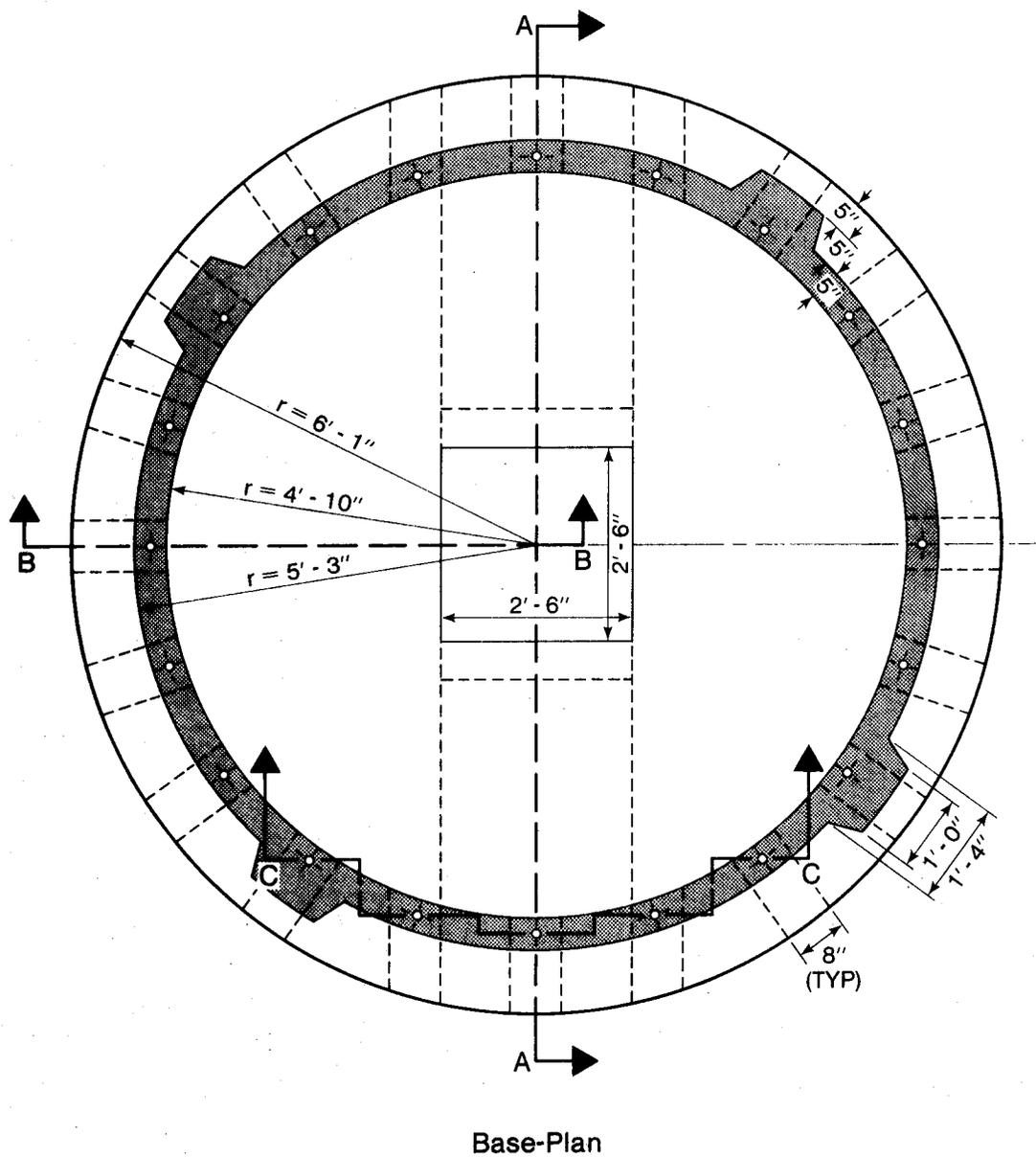
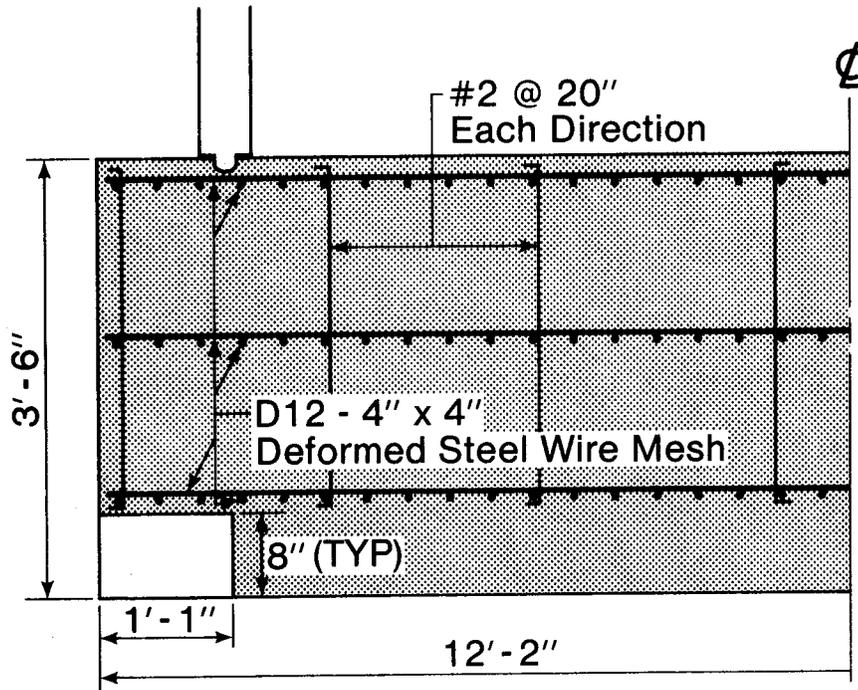
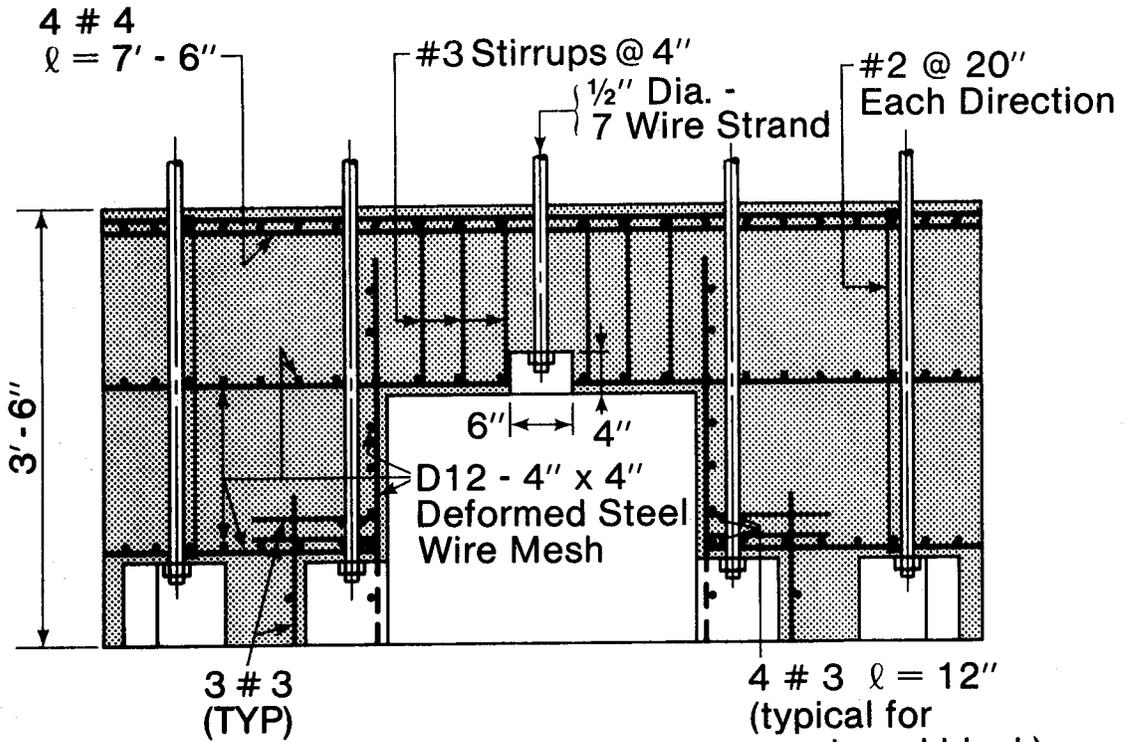


Fig. 2.3 Plan View of Base





Section B - B (Fig. 2.3)



Section C - C  
(Fig. 2.3)

Base Reinforcement Detail

Fig. 2.5 Reinforcing Details in Base

The surface of the shear key between the two angles was rounded using a small hand trowel. After form removal, mortar was used to correct the shape and elevation of the bottom of the shear key. The surface of the key was then waxed to reduce bond between the wall and the base. Figure 2.10 is a photograph of a section cut through the hinge after the wall had been demolished following the test. The steel angles and mortar are clearly visible.

A 0.04 in. thick layer of gasket rubber was placed on the surface of the base on each side of the hinges to allow the base of the wall to rotate relative to the base. This formed the gap shown in Fig. 2.8. At the buttresses this rubber layer extended under the buttresses. The rubber was not removed before the test.

#### 2.2.4 Wall

The walls of the model containment vessel were 5 inches thick with vertical prestressing tendons at mid-thickness, horizontal tendons outside of the vertical tendons, 6 mm Swedish Deformed bars vertically and No. 3 (3/8 in. diam.) bars in the horizontal direction. A typical section through the wall is shown in Fig. 2.11. The vertical wall reinforcement was lap spliced with the reinforcement extending from the hinge area as shown in Fig. 2.8. It should be noted that the inside layer of No. 3 circumferential bars was located inside the vertical bars. Each of the circumferential bars was bent in a single hoop spliced at a buttress by lapping and fillet welding. The bars were lapped 18 inches, 9 inches each way from the center of the buttress. The center 5 inches of this lap was fillet welded. The inside layer of

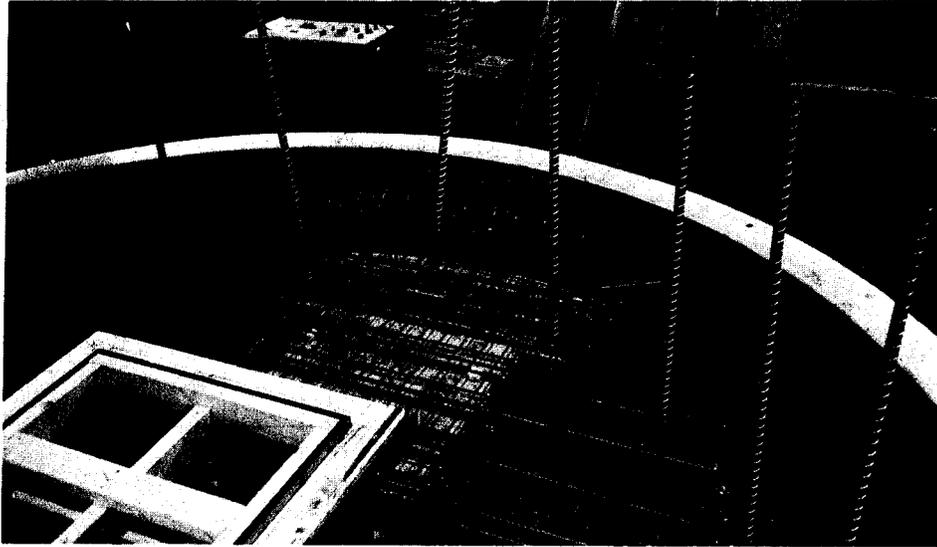


Fig. 2.6 Base Reinforcement Prior to Placing Top Layer and Hinge Reinforcement

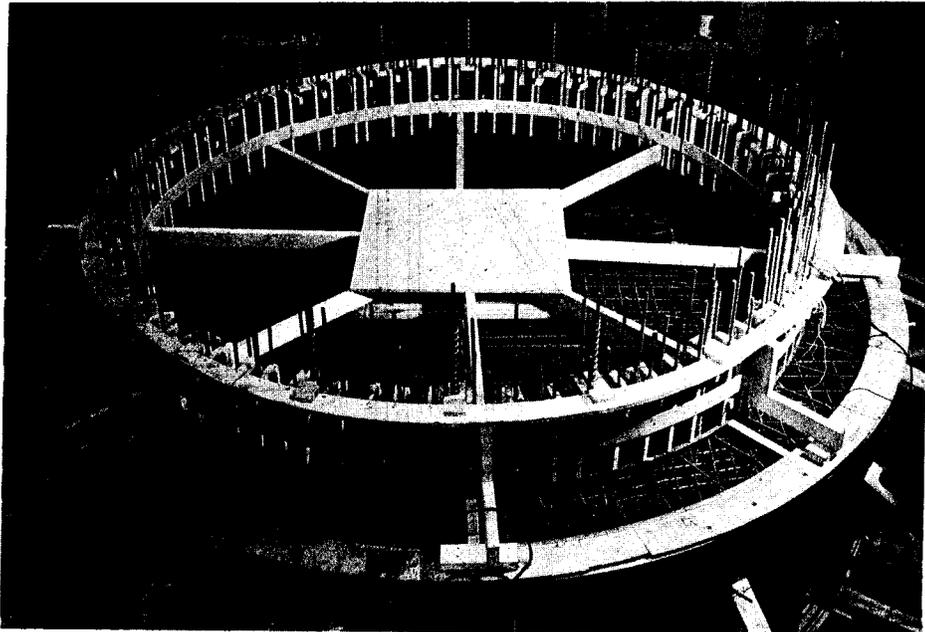
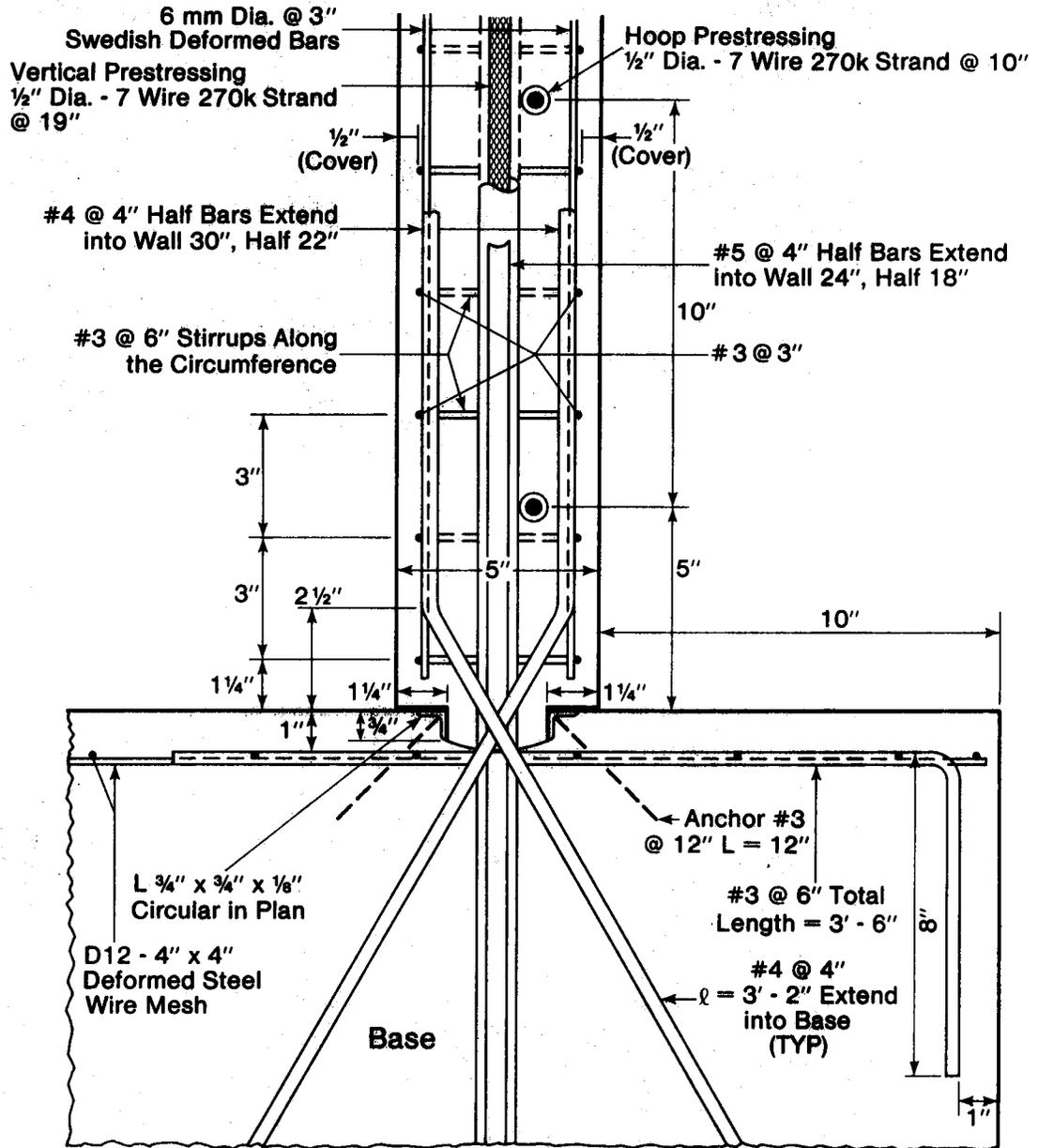


Fig. 2.7 Base Reinforcement Immediately before Placing Concrete



Detail A

Fig. 2.8 Detail of Hinge and Reinforcement at Base of Wall



Fig. 2.10 Photograph of Saw Cut Through Hinge During Demolition

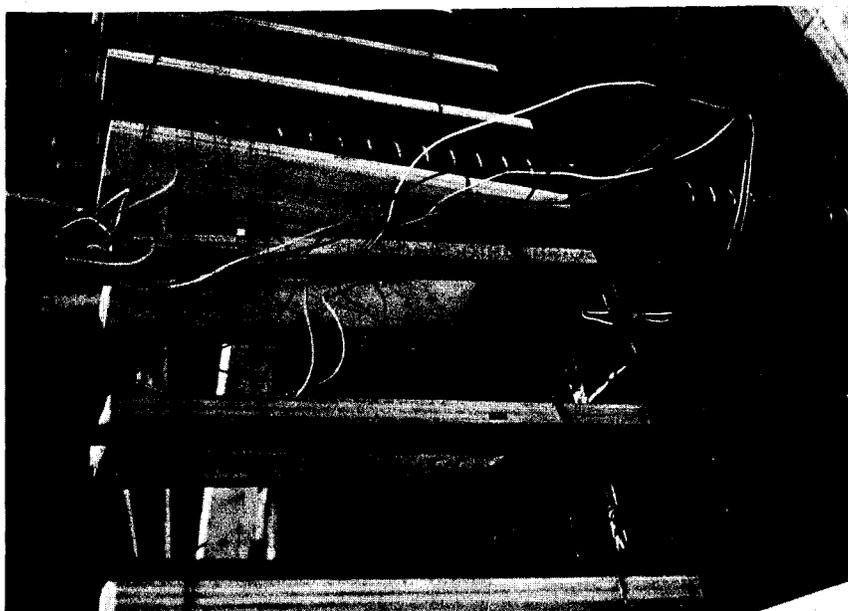


Fig. 2.9 Hinge Reinforcement Prior to Concreting

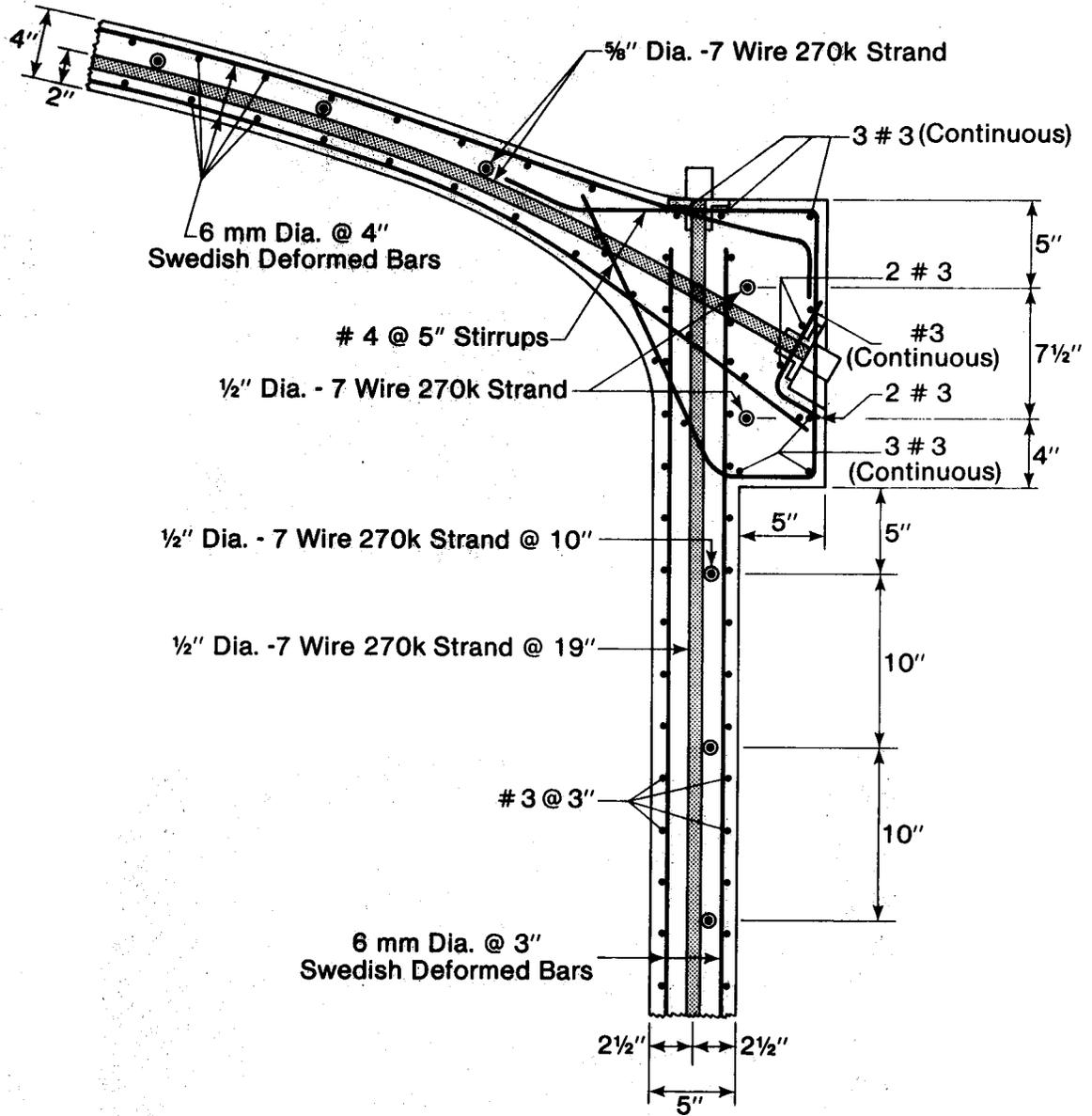


Fig. 2.11 Reinforcing Details in Wall, Ring Beam and Dome

bars were spliced at the north-west buttress, the outside layer at the north-east buttress.

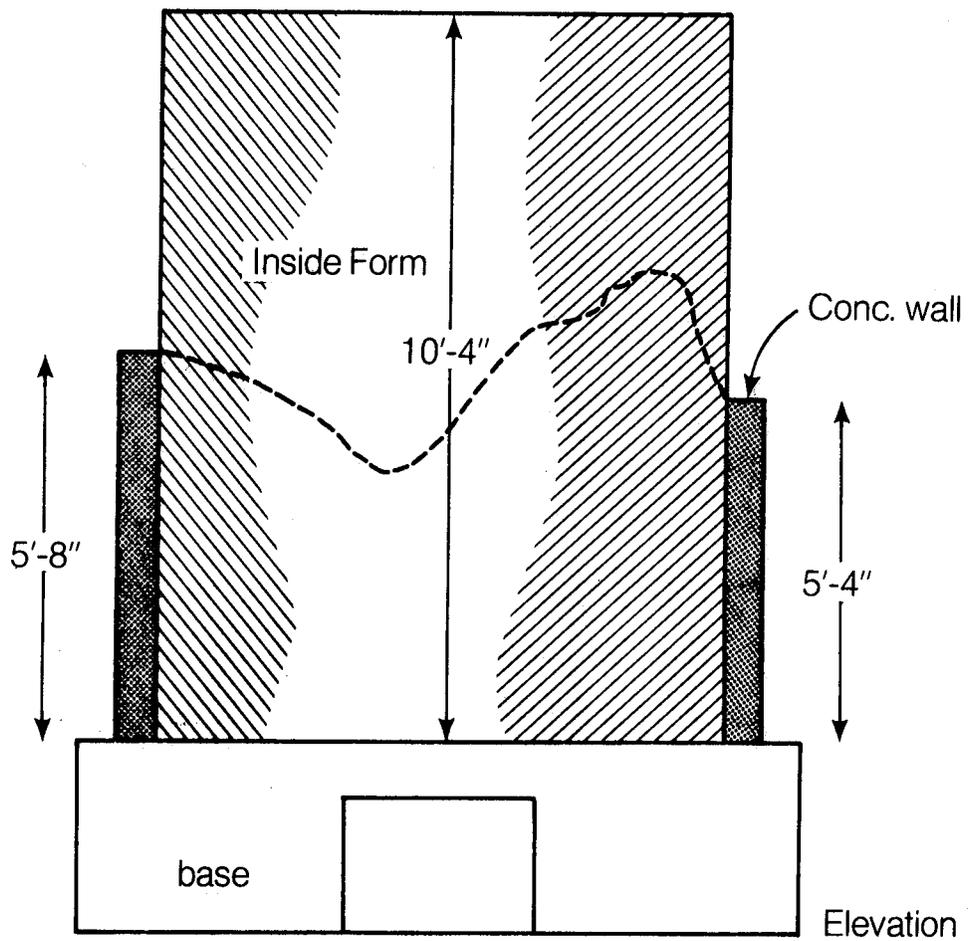
In the bottom two feet of the wall, U-shaped bars (stirrups) were placed perpendicular to the wall at 6 inch centers circumferentially. The vertical spacing of these bars was 6 in. in each line, alternate lines starting  $1\frac{1}{4}$  or  $4\frac{1}{4}$  in. above the base as shown in Fig. 2.8. These were placed to resist radial shear and also served to hold the two layers of steel the correct distance apart. Similar U-bars were used in the remainder of the wall, but at 24 in. spacing each way. Plastic bar supports were used to maintain  $1/2$  inch cover to the bars.

Difficulties were encountered in concreting the wall and as a result, the bottom half of the wall contains concrete from two batches of nominally 5000 psi concrete while the top half of the wall is made of gunite. The joint between the two concretes was irregular in height as shown in Fig. 2.12.

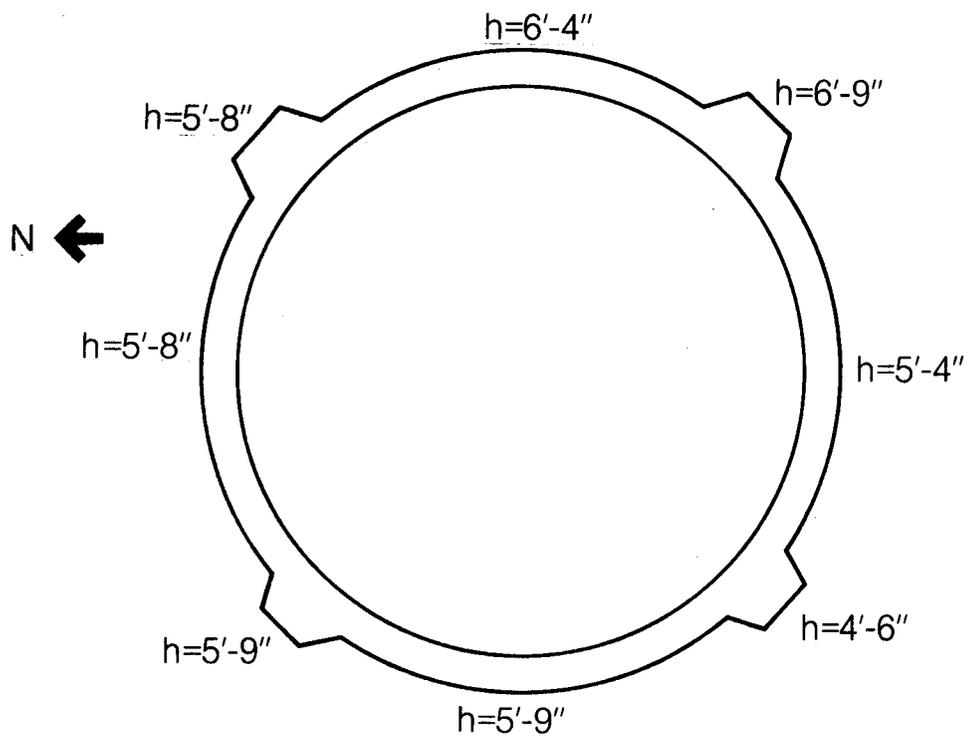
#### 2.2.5 Buttresses

The circumferential prestressing tendons in the walls were anchored in four vertical buttresses located at 90 degrees apart around the vessel. At each level there were two tendons each of which extended 180 degrees around the model to completely surround it. If the tendons at one elevation were anchored at the north-west and south-east buttresses, the anchorages of the next higher set of tendons were anchored at the north-east and south-west buttresses and so on.

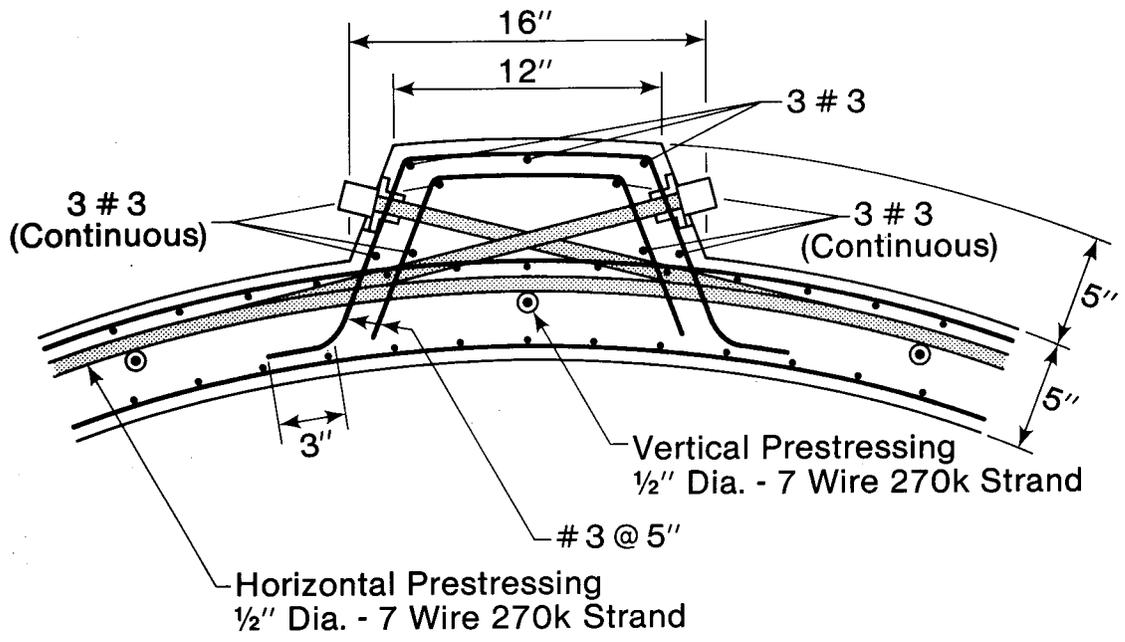
Figure 2.13(a) shows a horizontal section through the abutment. The oblique view of this region before placing the concrete in Fig. 2.13(b)



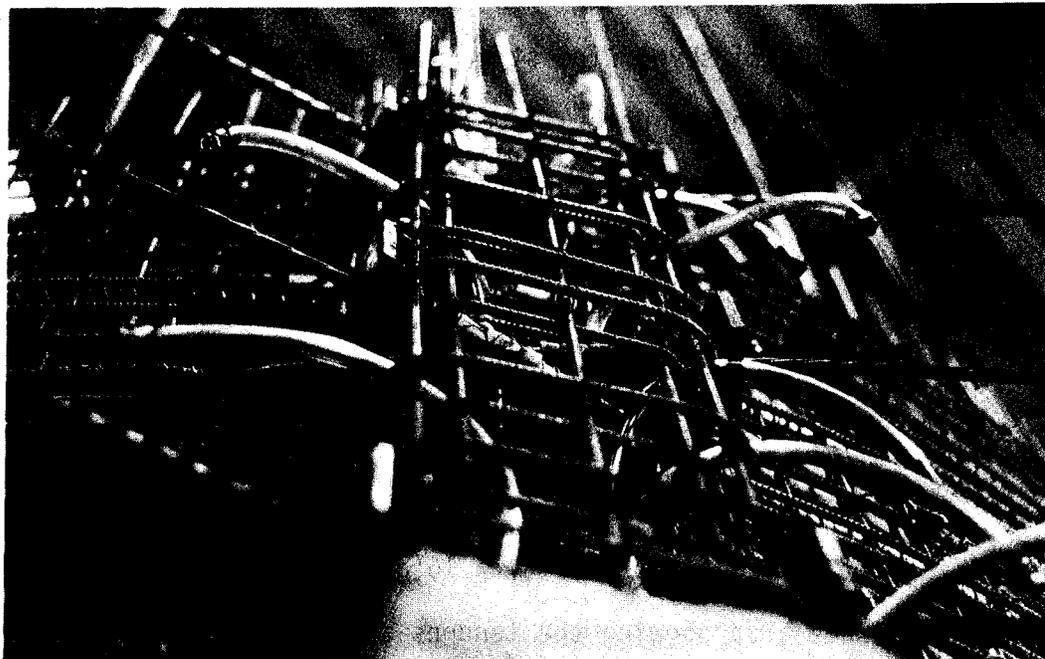
(a) Elevation



(b) Plan



(a) Section D - D (see Fig. 2.2)



(b) Photograph of Buttress Reinforcement

Fig. 2.13 Reinforcing Details in Buttresses

shows the congestion of this region. It was particularly congested where two tendons anchored in the abutment crossed.

Eight inches above the base of each buttress there was a  $1\frac{1}{2}$  in. inside diameter hole used for locating the plastic liner in the finished structure. Similar holes were also provided through the buttresses at mid-height of the ring beam.

#### 2.2.6 Dome

The dome was a spherical dome 4 inches thick except near the ring-beam where the thickness increased as shown in Fig. 2.2 and 2.11. As shown in Fig. 2.11, 2.14 and 2.15 the dome reinforcement consisted of two mats of 6 mm Swedish deformed bars enclosing two layers of prestressing tendons.

Each layer of prestressing tendons consisted of  $11\text{-}5/8$  in. diameter 270 ksi seven wire strands. These were placed along arcs of great circles in the dome. The tendons in each direction were spaced 10 inches apart along the perpendicular meridian as shown in Fig. 2.14. The spaces between the tendons were essentially squares along the perpendicular meridians, changing to diamonds along 45 degree meridians. The effects of this on the distribution of prestress in the dome are discussed in Ref. 5.

The arrangement of the dome tendon anchorages in the vicinity of a buttress is shown in Fig. 2.16(a). Figure 2.15(b) is a photograph of the same area showing the tendons and anchorage plates. The anchorage zone reinforcement is shown in Fig. 2.11.

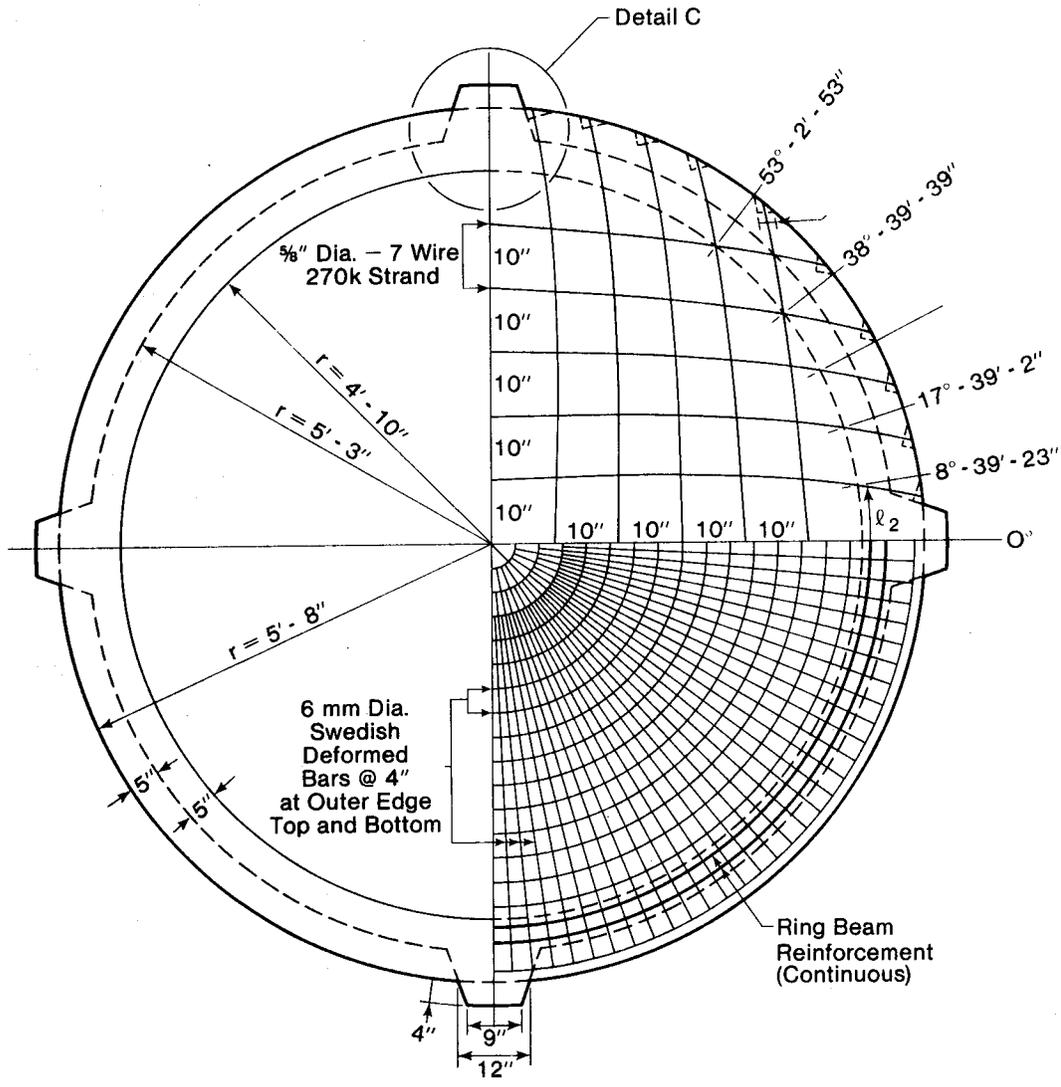


Fig. 2.14 Reinforcing Details in Dome

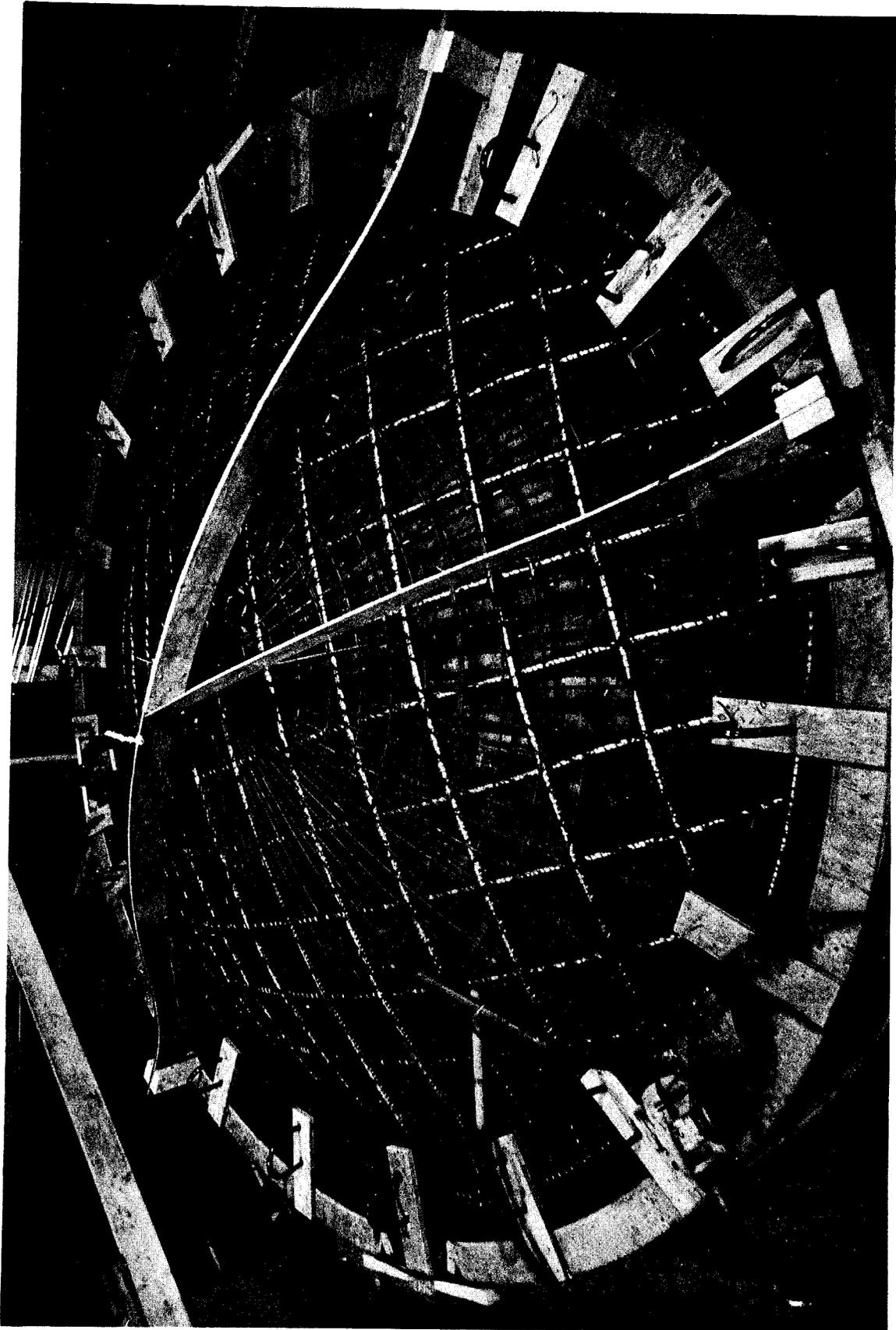
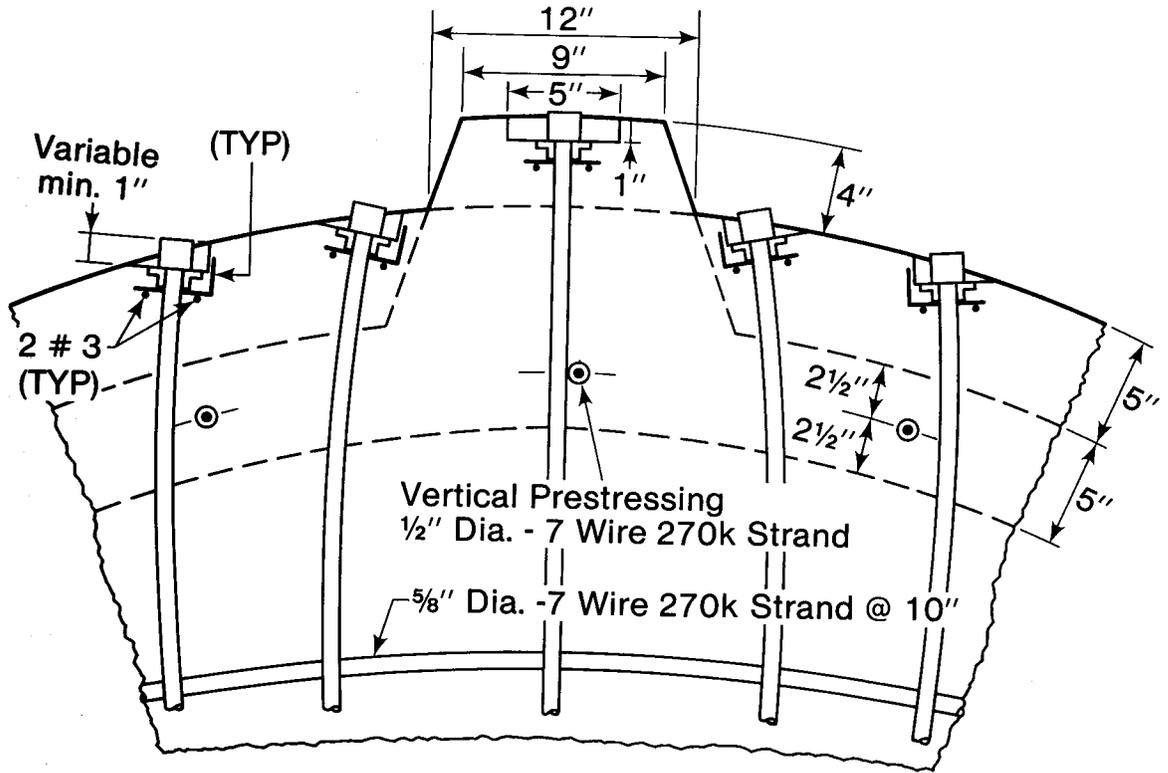
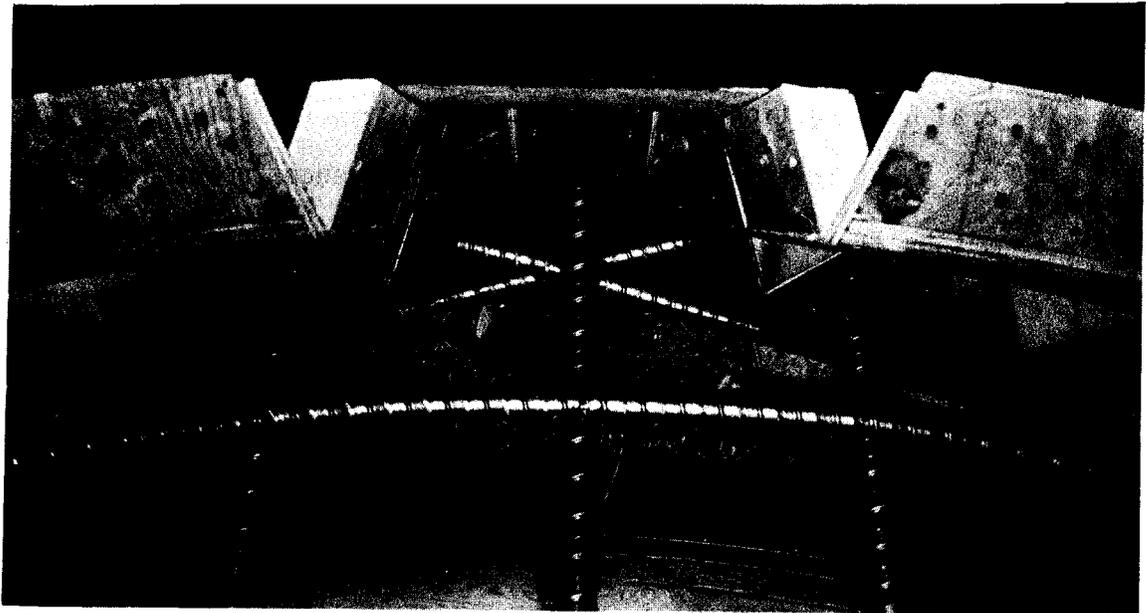


Fig. 2.15 Dome Reinforcement Prior to Placing Concrete



(a) Detail C (Fig. 2.14)



(b) Photograph of Tendons

Fig. 2.16 Anchorage of Dome and Ring Beam Tendons

The circumferential mild steel was lap spliced 10 inches with the lap splices staggered. Only 4 meridional bars crossed the top of the dome. These were continuous without any splice at this point.

A 1½ in. inside diameter pipe extended through the top of the dome approximately 3 in. from the crown. A pipe attached to the top of the plastic liner passed through this hole and allowed air in the liner to escape as the liner was filled with water for testing.

#### 2.2.7 Ring Beam

The ring beam at the top of the wall had circumferential prestressing tendons at two layers and the reinforcement shown on Fig. 2.11. In a given layer there were two tendons, each extending 180 deg. around the ring beam and anchored at opposite buttresses. The tendons in the second layer were anchored at buttresses 90 deg. away from those for the first layer. This can be seen in Fig. 2.16(b).

### 2.3 Construction of Test Structure

This section indicates the sequence in which the test structure was built, describes some of the problems encountered and how they were overcome, and provides details of fabrication at certain sections which are required to interpret the results fully.

#### 2.3.1 Base Slab

The test structure was built on the floor in the I.F. Morrison Structural Laboratory at The University of Alberta. To prevent bonding of the base slab to the laboratory floor, two layers of 3/8 in. plywood sheeting were placed over the region of the test structure. The curved outer form for the base was achieved using three layers of 5/16 in.

plywood sheet with staggered joints. This form was rigidly supported along the upper and lower outer edges by bracing attached to the laboratory floor. The formwork for the access tunnel and hatch was then positioned. The completed form is shown in Fig. 2.7.

Around the periphery and at the bottom of the base twenty block-outs were located symmetrically to provide access to the lower end of the vertical wall tendons during the stressing sequence. These are shown in Fig. 2.3 to 2.5.

The anchorage plates for the vertical tendons were then positioned. Vertical lengths of prestressing tendon ducts were attached to these plates. These ducts, which were five feet long, protruded above the base and were later extended to accommodate the vertical wall tendons. Additional steel reinforcement was placed around each vertical duct in the anchorage zone.

There are three mats of wire mesh reinforcement in the base as shown in Fig. 2.5. Following placing of the second mat, an L-shaped  $1\frac{1}{4}$  in. pipe used to fill the water with water was placed and secured in position. The embedded beam reinforcement crossing the tunnel to resist the vertical tendon reactions in this region was then placed followed by the top mat of reinforcement. (See Fig. 2.5 and 2.6).

The steel angle framing around the hatch and the two circular steel angles used to form the shear key were then positioned. The dowels through the hinge were then placed between the two shear key angles as shown in Fig. 2.9. The tops of these dowels were staggered to reduce the effects of bar cut-off. Each bar, and vertical tendon duct was placed individually to its proper location, and was tied securely to

the temporary wooden supports shown in Fig. 2.9. Finally the radial top steel in the base was inserted between dowels but under the shear key and all reinforcement securely tied together. The base is shown in Fig. 2.7 immediately prior to placing the concrete.

Concrete for the base was poured using two batches of transit mix concrete. Each mix was placed using concrete bucket in approximately one hour and thoroughly compacted using internal vibrators. The base slab surface was hand trowelled and the surface between the two angles of the shear key was rounded using a small hand trowel. A picture of the base after pouring is given in Fig. 2.17. The tunnel, prestressing pockets and grout tubes can be seen. The door for the hatch in the base can also be seen, leaning against the concrete base.

The angles forming the seat for the access door were leveled using plaster of paris so that the door rested evenly on the angles.

### 2.3.2 Vertical Cylindrical Wall

The cylindrical inside form for the wall was fabricated using two layers of 5/16 in. plywood and one layer of 5/16 in. masonite to give a smooth concrete surface. The various sheets were nailed together with staggered joints in both directions. This form contained no openings and was self supporting. Built on the laboratory floor, it was lifted on top of the base inside the protruding dowels, levelled using wooden wedges and secured to the base. Figure 2.17 shows the final stages of lowering this form into place.

Eight vertical strips of wood having a thickness of  $\frac{1}{2}$  in., corresponding to the desired concrete cover, were attached symmetrically around the circumference of the inside form. Finishing nails were



Fig. 2.18 Tying Outside Layer of Wall Reinforcement



Fig. 2.17 Installation of Inside Wall Form on Base

placed at a 3 in. spacing along each strip to act as temporary supports for the inner layer of circumferential reinforcement. These bars had been prebent to the proper radius to form a single large hoop. The only splice had a lap length of 18 in. and after being placed in position the middle 5 in. of each lapped splice was welded. The location of these splices is discussed in Section 2.2.4.

The inside vertical reinforcement layer was then tied securely to the circumferential reinforcement and the nails were pulled and the vertical wood strips removed, leaving the inner layer of reinforcing as a self-supporting mesh. The concrete cover of 1/2 inch was maintained using plastic spacers between the inner form and bars where required.

The 1 in. diameter ducts for the vertical prestressing tendons were then extended from those cast in the base. Steel rods were inserted in the ducts to stiffen them and keep them in position at the midsurface of the wall until all of the steel was placed and tied. These were supported at the top by temporary wooden scaffolding. Plastic spacers were also used to maintain duct alignment.

Circumferential prestressing ducts of the same size as the vertical ducts were positioned and tied securely to the vertical ducts. Due to the presence of the hinge reinforcement at the bottom of the wall; the two bottom circumferential ducts had to be flattened slightly to fit.

The vertical bars of the outer reinforcement layers were then positioned, followed by the horizontal bars. These layers were securely tied to the circumferential ducts so that the mesh of ducts and outer reinforcement formed a rigid cage. This operation is shown in Fig. 2.18. The U-bar stirrups were then positioned.

All electric resistance strain gages for the reinforcement bars were mounted on the bars prior to placing the bars in position. Weldable strain gages used on the prestressing strands were attached after these tendons had been placed in the ducts. This was accomplished by making a 3 in. long slot in the duct through which the gage was attached. The connecting wires were brought out of the slot and a cover placed over the slot. This cover was then sealed with epoxy.

The outer wall form was fabricated in four separate pieces corresponding to the quadrants between buttresses. One quadrant can be seen in Fig. 2.18. The vertical edges of these forms were framed with lumber to form the edges for the buttresses. Thus when these forms were in place the outer face of each buttress was left open. This permitted the attachment of the bearing plates for the tendon anchorages to the buttress side form. The faces of the buttresses were then formed leaving holes for concreting and steel strapping was around the outer form to hold it in place during the concreting operation.

The initial plan was to place ready-mix concrete by pumping. To improve workability a liquid super-plasticizer (Melment L10) was added to the mix in the laboratory as 2% of the cement by weight. After adding the plasticizer a slump of 9 in. was measured before pumping began. It was noted, however, that the concrete coming out of the pumping hose had a slump of only 4 in. This drop in slump was attributed to the pumping. After approximately 1/2 hour, when the bottom 18 in. of the wall had been cast the concrete was too stiff to pump and compact and the placing was stopped.

Using a new batch of concrete but with the same plastisizer, pouring was resumed using a bucket and chutes. However, problems were again encountered in trying to compact the concrete using internal vibrators and the pouring was again stopped.

The outer forms were removed on the next day and extensive honeycombing was observed above the bottom 18 in. This upper concrete was removed immediately using a small electric jack hammer. The elevation of the top of the concrete after this operation is shown in Fig. 2.12. The reinforcement was cleaned thoroughly and all electric resistance strain gages on the reinforcement checked. Where necessary the gages on the reinforcing bars were replaced, but five of the gages on the prestressing tendons in the walls were lost and could not be replaced.

After final cleaning and checking alignment of the reinforcement, the upper portion of the wall was placed using shotcrete blown against the inner form. The outer surface including the four buttresses were finished using steel screeds. The structure was draped with burlap which was kept moist to cure the gunite. After 7 days the inner form was removed. The inner surface was then cleaned of all soft pockets and using the same mix was shotcreted a second time to finish the inside to a smooth surface.

The shotcrete was designed to have the same compressive strength as the original concrete and although the physical properties as obtained from tests did differ somewhat from the concrete, it was concluded that the effects of the shotcrete could be evaluated when processing readings and that the effect on the overall test would not be significant. This was borne out in the analysis of the data.

### 2.3.3 Dome

The form for the dome was fabricated on the floor of the laboratory by bending narrow strips of wood over plywood ribs (see Fig. 2.19). Final surface was obtained by sizing and sanding. While still on the laboratory floor the side forms for the ring beam were positioned and all reinforcement, tendon ducts, and anchorages were precut and fitted as shown in Fig. 2.20. These units were then taken apart, and lifted into place on top of the completed walls. The reinforcement and prestressing units were then refitted and the ring beam reinforcement added. Tendons were inserted into the ducts before concreting. The reinforcement is shown ready for concrete in Fig. 2.14. Prior to installing the dome form, the access door was placed inside the vessel.

Concrete was placed using a bucket and mechanical internal vibrators. No problems were encountered in placing the concrete in the ring beam and dome. The concrete for the ring beam and dome was placed on one pour. The dome form had to be completely dismantled to remove it from the finished structure through the access hatch and tunnel.

### 2.3.4 Prestressing Sequence

The vertical tendons in the wall were stressed first. Since these tendons were straight they were pulled from the top only. Each tendon was provided with a load cell at the bottom anchorage which was monitored during the stressing of that and adjacent tendons. These load cells were not recovered and were grouted into the structure during the grouting operation.

Four prestressing jacks were used and four vertical tendons located at 90 deg. intervals around the perimeter were pulled

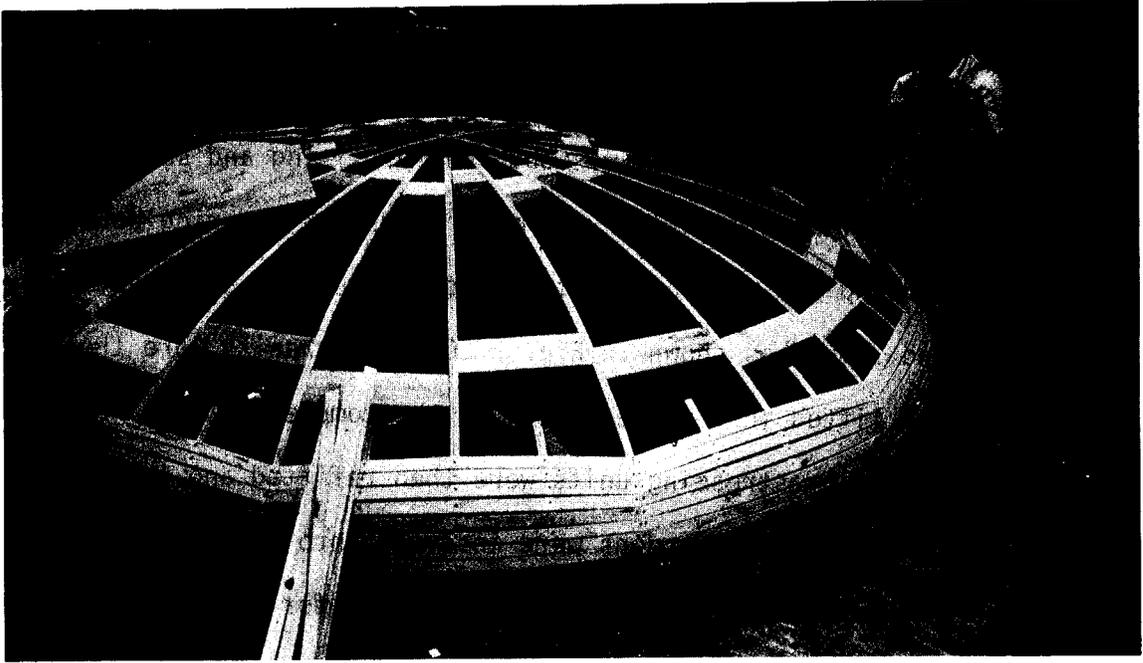


Fig. 2.19 Dome Form Under Construction

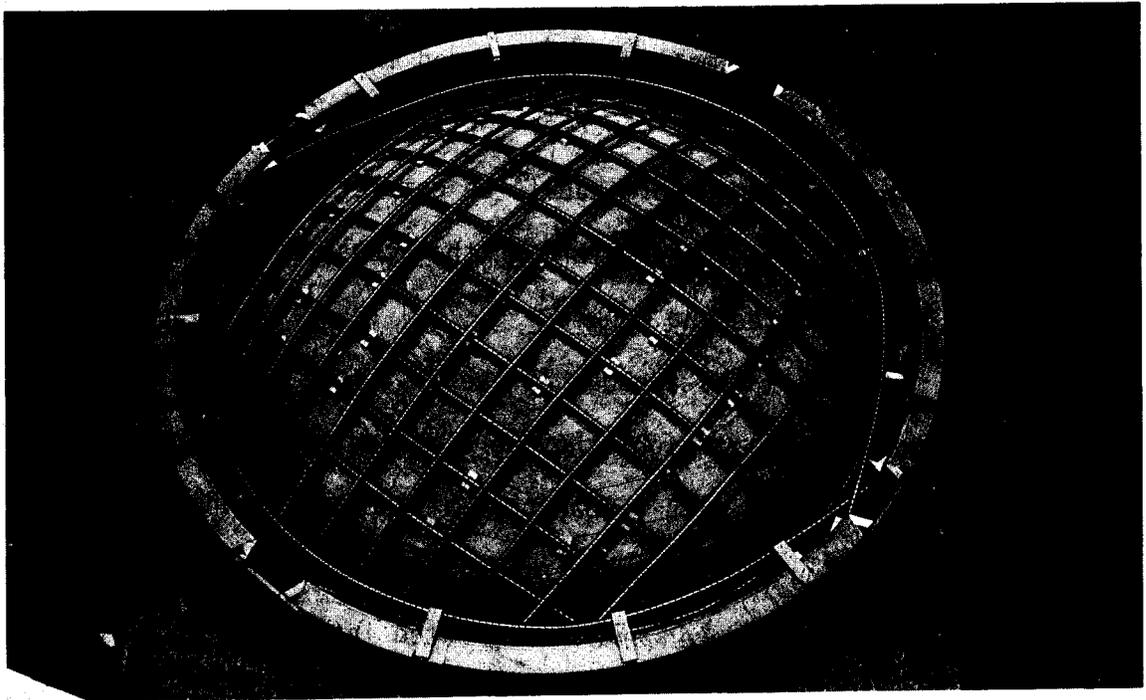


Fig. 2.20 Forms and Tendons for Dome and Ring Beam

simultaneously to full tension of 14.7 kips. The tendons in the abutments were tensioned first, followed by the four tendons at the middle of the walls. Little relaxation of adjacent tendons was observed and no tendons were repulled. These tendons were stressed on September 21, 1978. At this time the wall concrete and gunite were 106 and 92 days old, respectively, while the dome and ring beam concrete were 20 days old.

To minimize friction effects each horizontal wall tendon extended only over half the circumference and splices in adjacent layers of tendons were staggered by 90 degrees. The ends of the tendons can be seen in Fig. 2.1. Four jacks were used, one at each end of the two halves making up one layer but only one load cell was used per tendon half. Each layer was stressed initially to half of the design force in a sequence selected to maintain as uniform a stress as possible. This was done on September 22, 1978. Three days later the tendons were stressed to their full design values starting at the base of one buttress and proceeding sequentially to the top before moving to the other set of buttresses. It was found that some tendons had to be retensioned to adjust final tensioning to within acceptable tolerances.

The ring beam tendons were stressed in pairs to their full stress on September 25, 1978.

Dome tendons were also tensioned using a jack at each end but with a load cell at one end only. The two tendons crossing the dome crown were pulled first to half design force. Using four jacks two parallel tendons located symmetrically to one diameter were pulled sequentially to half design force. In the same manner the orthogonal

set were then stressed but to the full design force. The initial set was then stressed to full load. Some tendons had to be retensioned to achieve final values within acceptable tolerance.

The stressing was carried out by Con-Force Products Ltd. at no cost to the project. The authors sincerely appreciate the interest, guidance and help given by Con-Force at various stages of the project.

#### 2.3.5 Grouting

Epoxy resin was used to seal the gripping system of the tendons and the load cells. Grout under pressure was inserted at one end of the tendon until it flowed freely from the grout nozzle at the other end. This nozzle was then tied and the pressure increased to between 40 and 50 psi to ensure full grouting. All grouting was completed in the day following the completing of the prestressing.

Examination after testing indicated that full tendon bond had been achieved using this procedure.

### 3. MATERIALS AND MATERIAL PROPERTIES

#### 3.1 Concrete and Guniting

The concrete in the base was ready-mix concrete with a nominal strength of 4000 psi. It was made with normal density 1/2 in. maximum size coarse aggregate and Type I cement. Two batches, each 6 cubic yards were used. The concrete in the bottom five and a half feet of the wall was also ready-mix concrete. It was 5000 psi concrete with 3/8 in. maximum size, coarse aggregate and Type 1 cement and a nominal water to cement ratio of 0.42. Prior to placing, a super-plasticizer (Melment 10) was added to increase its slump. The dome concrete was 5000 psi ready-mix concrete with 3/8 in. normal density maximum size coarse aggregate.

The top half of the wall and buttresses was constructed of guniting. This was mixed on-site from sand passing a No. 4 screen, cement and water. The resulting concrete had a much higher percentage of fines than normal concrete. The intended water cement ratio was 0.35. The guniting process took two and a half days.

##### 3.1.1 Mechanical Properties of Concrete and Guniting

The compressive and tensile strengths of concrete were obtained using 6 x 12 in. moulded cylinders tested according to CSA Standard A23.2 "Methods of Test for Concrete". The measured strengths are listed in Table 3.1. The average splitting tensile strength of the concrete was  $5.93 \sqrt{f'_c}$  (psi).

The modulus of elasticity, E, was measured using a deformer with an 8 in. gage length. The value of E was taken as the secant modulus through a stress of 0.4 times the crushing strength. The average modulus of elasticity was  $42960 \sqrt{f'_c}$  (psi).

Table 3.1  
Properties of Concrete and Gunite

Location in Structure	Date of Placement	Compressive Strengths and Modulus			Splitting Tensile Strength		
		Date of Test	Compressive Strength, psi	$E_c$ psi $\times 10^6$ psi	$E_c/\sqrt{f'_c}$	Tensile Strength psi	$f_{sp}/\sqrt{f'_c}$
Base-Concrete	Nov. 10, 1977	Sept. 29, 1978	5606	3.75	50080	-	-
		Dec. 5, 1978	5659	-	-	-	-
Wall-Concrete	June 7, 1978	Sept. 29, 1978	5305	3.00	41190	-	-
		Oct. 20, 1978	5480 (552*)	3.11 (0.115)	42010	522	7.05
		Dec. 5, 1978	6360 (660)	3.30 (0.302)	41380	433 (38)	5.43
Wall-Gunite	June 19-21, 1978	Oct. 20, 1978 (cyl.)	3590 (426)	1.62	-	-	-
Dome	Sept. 1, 1978	Nov. 23, 1978	5337 (584)	-	-	-	-
		Dec. 5, 1978 (cyl.)	4963	-	-	-	-
		Dec. 5, 1978 (core)	3568** (670)	1.69 (0.221)	-	606** (64)	10.15
Dome	Sept. 1, 1978	Sept. 29, 1978	4960	2.90	-	-	-
		Oct. 20, 1978	4934	2.95	-	-	-
		Dec. 5, 1978	4642	2.66	-	388	5.69

\* Values in parentheses are standard deviations which are given for all groups involving three or more tests.

\*\* Multiplied by 0.671 to correct  $2\frac{1}{4}$  x  $4\frac{1}{2}$  core to equivalent cylinder.

\*\*\* Multiplied by 0.75 to correct  $2\frac{1}{4}$  x  $4\frac{1}{2}$  split core to equivalent split cylinder.

The compressive and tensile strengths of the gunite were tested using  $2\frac{1}{4} \times 4\frac{1}{2}$  in. cores drilled from a test piece made at the same time as the wall and 6 x 12 in. cylinders made by shooting gunite into 6 x 12 cylinder molds made of mason's cloth (wire mesh). The compressive strength and modulus of elasticity were comparable to those of the concrete and the splitting tensile strength was higher. The reported core strengths have been corrected for size and coring effect using data given by Malhotra (8). In the BOSOR5 analyses the compressive strength, tensile strength and modulus of elasticity of 6 x 12 in. cylinders were taken as 5600 psi, 445 psi and  $3.10 \times 10^6$  psi, respectively, for cast-in-place concrete and 3570 psi, 430 psi and  $1.8 \times 10^6$  psi for the gunite.

### 3.2 Reinforcement

The reinforcement used in the walls and dome consisted of hot-rolled deformed bars in sizes No. 3 (3/8 in. diameter), No. 4 (1/2 in. diameter), No. 5 (5/8 in. diameter) and 6 mm diameter. The No. 3, 4 and 5 bars conformed to CSA G30.12-72. The 6 mm bars were produced in Sweden. All the bars of one size were from the same heat.

Three specimens of each size were tested in tension in a 200,000 lb. Baldwin universal testing machine. Strains were obtained using a 2 in. electric extensometer. The strain and load readings were plotted directly on an x-y plotter until strain hardening occurred, at which time the extensometer was removed. The yield strengths were obtained from the machine dial and the plots. The modulus of elasticity was computed from the plots.

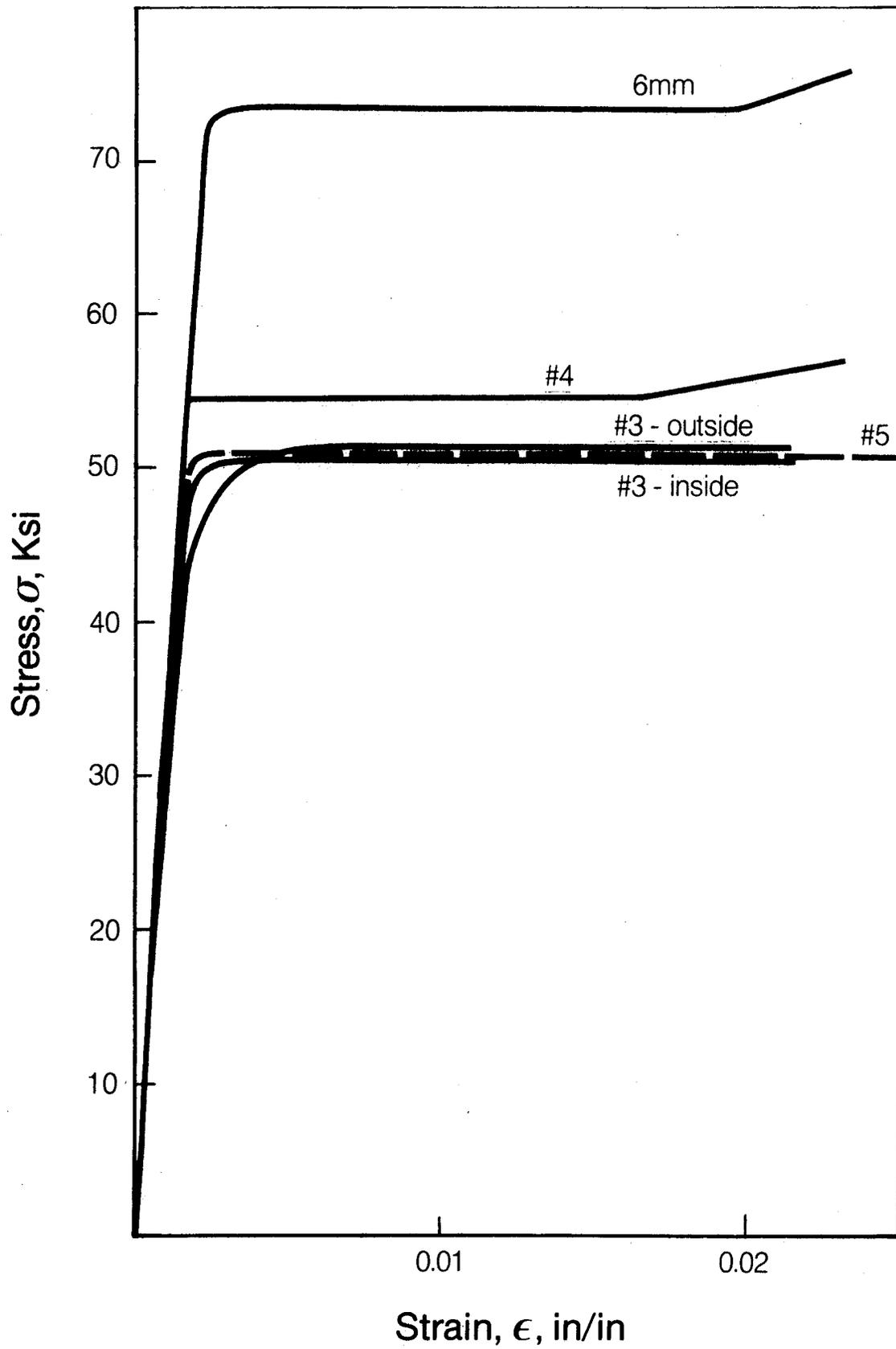


Fig. 3.1 Stress-Strain Curves for Deformed Bar Reinforcement

Table 3.2  
Properties of Reinforcing Bars\*

Size	Yield Strength ksi		Ultimate Tensile Strength, ksi		Modulus of Elasticity, $10^3$ ksi	
	Tests	Average	Tests	Average	Tests	Average
6 mm	73.53		98.43		29.5	
	69.61		97.06		29.0	
	73.53	72.22	98.04	97.84	29.7	29.4
No. 3 - Outside	51.35		77.30		29.0	
	51.35		76.22		28.0	
	52.70	51.80	77.48	77.0	29.0	28.7
No. 3 - Inside	50.18		72.88		28.0	
	50.27		73.43		29.0	
	50.18	50.21	73.51	73.27	29.0	28.7
No. 4	54.5		81.25		29.7	
	52.5	53.5	80.25	80.75	29.7	29.7
No. 5	50.8		77.95		28.4	
	51.7		77.95		28.8	
	56.25	52.92	85.68	80.53	28.3	28.5

\* In all cases the strengths are based on the nominal bar area.

All deformed bar specimens displayed typical ductile behavior having a well defined yield plateau, (Fig. 3.1) a strain hardening range and a cup-cone failure. The No. 3 bars were shop bent to the correct radius before delivery and the test specimens were straightened prior to testing. The resulting residual stresses probably account for the curved stress-strain curves for the No. 3 bars (Fig. 3.1). The properties of the reinforcing bars are summarized in Table 3.2.

The majority of the reinforcement in the base was deformed welded wire mesh. Because no measurements were made on the base and no cracking was observed in it, the properties of this steel will not be reported except to say that it was very brittle. Specimens broke at strains of 0.75 to 3% elongation.

### 3.3 Prestressing Steel

The prestressing tendons consisted of 1/2 in. and 5/8 in. diameter, 270 ksi, seven wire strands manufactured by the Steel Co. of Canada in conformance with CSA G 279-75. . Three specimens of each size were tested in tension giving the stress-strain curves plotted in Fig. 3.2. The strains were measured using electric strain gages mounted on a wire in the seven wire strand. The 1/2 in. strand had a nominal area of 0.152 in<sup>2</sup>, a 0.1% offset yield strength of 247 ksi, an ultimate tensile strength of 284 ksi and an average modulus of elasticity of 30,000 ksi. The corresponding values for the 5/8 in. strand were 0.232 in<sup>2</sup>, 222 ksi, 260 ksi and 30,000 ksi, respectively.

The tendons were enclosed in light gage, flexible, corrugated metal ducts which were 1 in. inside diameter and 1 3/16 in. outside

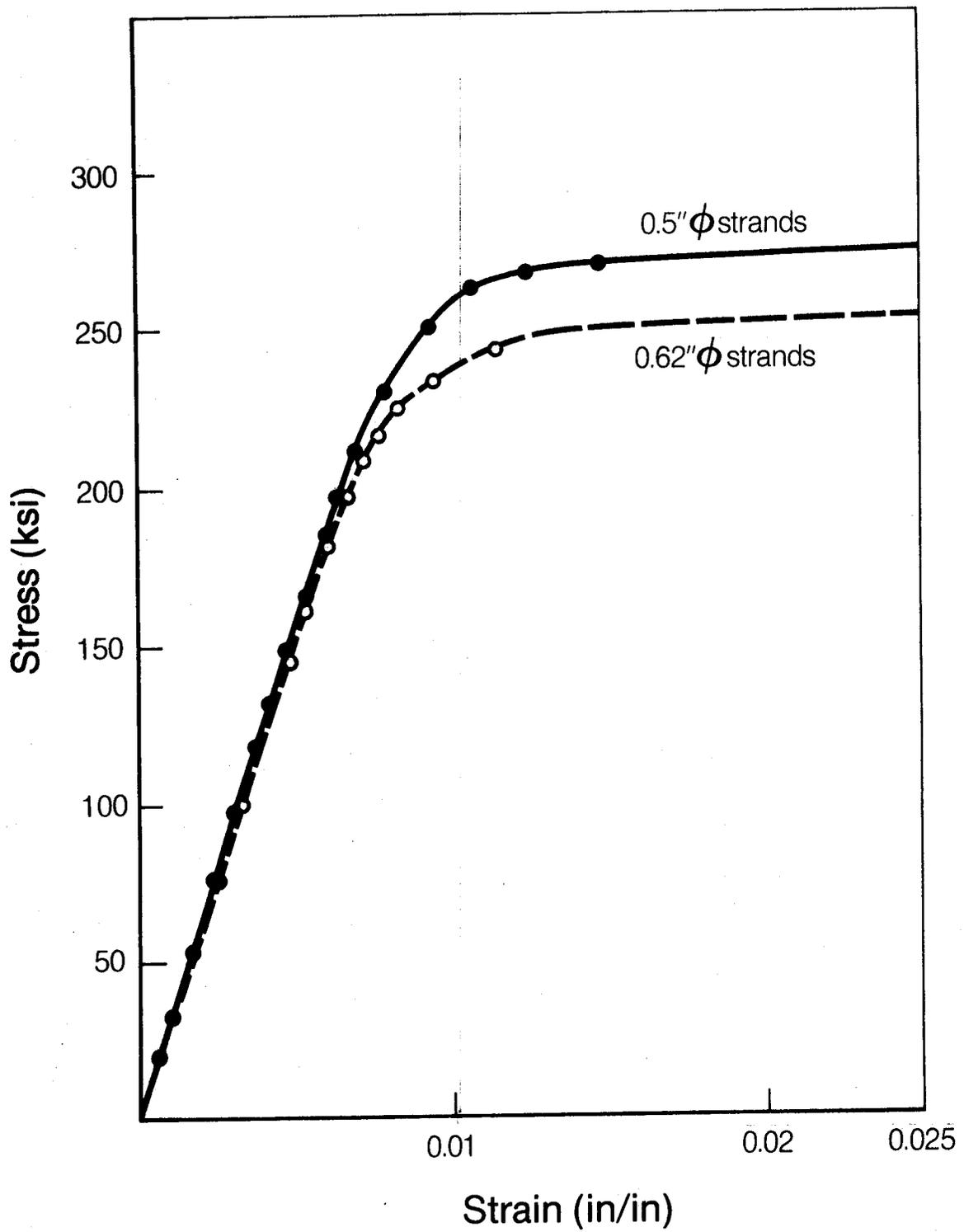


Fig. 3.2 Stress-Strain Curves for Prestressing Tendons

diameter. These ducts were made specifically as prestressed tendon ducts and were impervious to grout.

Each tendon anchorage plate consisted of a 4 x 4 x 1/2 in. steel plate with a central hole large enough to accommodate the tendon. A 1 1/2 inch length of 1 3/8 in. inside diameter pipe was welded to the plate. This unit was screwed to the formwork in the correct position. The tendon duct was then fitted inside the pipe and sealed with a silicon caulking to prevent entry of mortar into the duct during concrete placement. A series of five anchor plates and tendon ducts are shown in position in the ring-beam buttress form in Fig. 2.15(b). Grout entry ports were formed by drilling a 1/2 in. hole through the tendon duct about three inches from the anchorage (such a hole can be seen in the center duct in Fig. 2.15(b)). A flexible plastic fitting with a perpendicular 5/8 in. inside diameter hole was wrapped around the duct and wired in place over the hole in the tendon. A length of 5/8 in. outside diameter plastic garden hose extended through the form to serve as a grouting port. A plastic fitting and grout hose are shown in place in the ring-beam buttress area in Fig. 3.3. Similar grout ports were placed at the mid-point of the horizontal wall tendons to ensure complete grouting occurred.

After stressing the tendon forces were anchored by CONA wedge grip anchors of the correct diameter. These anchors remained in place throughout the test.

### 3.4 Grout for Prestressing Tendons

The tendon ducts were grouted using Masterflow 814 Cable Grout. The standard mix consisted of 55 lbs of grout material and

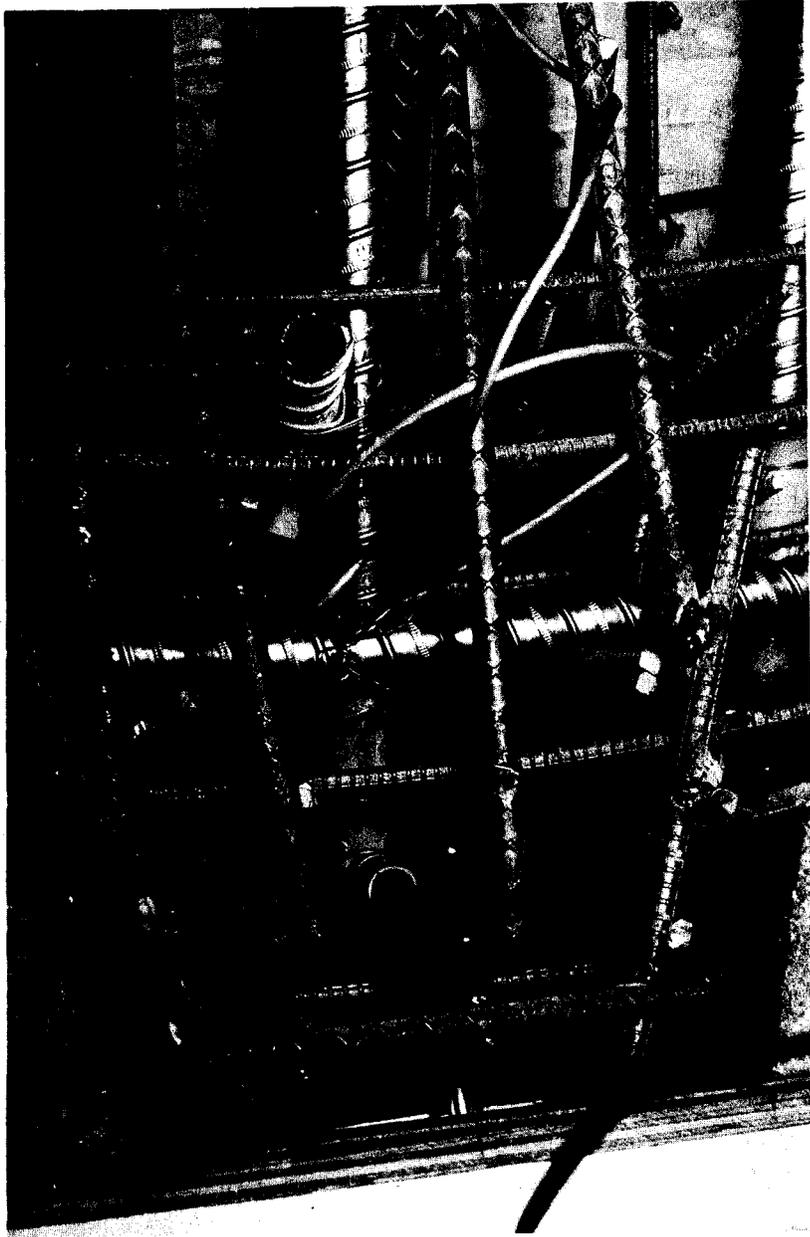


Fig. 3.3 Grouting Part in Position on Tendon in Ring Beam Buttress Region

20 lbs of water. This grout, manufactured by Master Builders Ltd., is specially made for grouting prestressing tendons and is slightly expansive.

A standard 6 x 12 in. cylinder was made by pouring grout into a standard mould. This cylinder had a 28 day compressive strength of 4320 psi. It is possible that the strength of the grout injected into the tendon under a pressure of 30 to 40 psi may be greater than that of the test cylinder.

### 3.5 Prestressing Forces

The prestressing forces after anchorage and before grouting were determined by load cells at the ends of each tendon. The averages and standard deviations of these forces are given in Table 3.3. The tendons were tensioned on September 21 to 26, 1978, and the first major load test occurred on November 20, 1978, 55 days later. The losses in this period were calculated taking into account creep of the concrete and relaxation of the steel. The final values are given in Table 3.3.

Table 3.3  
Prestressing Forces

	After Anchorage, kips		After Losses, kips
	Mean	Standard Deviation	Mean
Vertical Wall Tendons	14.69	0.774	14.60
Horizontal Wall Tendons	21.51	1.060	20.77
Ring Beam Tendons	22.33	1.570	20.95
Dome Tendons	31.18	1.835	29.34



## 4. INSTRUMENTATION

### 4.1 Overview

Extensive measurements were made during the various tests of the containment structure. Measured quantities included internal pressure, deflections, steel and concrete strains, all read electronically and concrete surface strains, crack widths and meridional rotations, all read manually. In general, readings were taken electronically at 5 psi intervals and manual readings at 10 psi intervals although these intervals were reduced in the late stages of the test.

Seven separate tests (A to G) were conducted. The first five, all to relatively low pressures, were carried out to check the instrumentation and test procedure. As a result of these tests a number of gages were rewired, new supports were built for the deflection gages and new targets used for the Demec gages. The last two tests, F which continued to 80 psi internal pressure, and G, the test to failure, are reported in this document.

To permit manual gage readings to be taken at the same time as cracks were being marked and measured, all manually read strain gages (Demec gages) were mounted on the north quadrant of the test specimen and all crack marking and measurement was done on the west quadrant as shown in Fig. 4.1. Electrical resistance and mechanical strain gages were used to read the strains along the 6 lines identified in Fig. 4.1. Line 1 extended from the base to the crown at the middle of the south quadrant. Line 2 was the extension of Line 1 down the north quadrant. Line 3 extended from the base to the crown along the south-west buttress. Line 4 was a horizontal line across the south quadrant 2 ft. - 3 3/4 in.

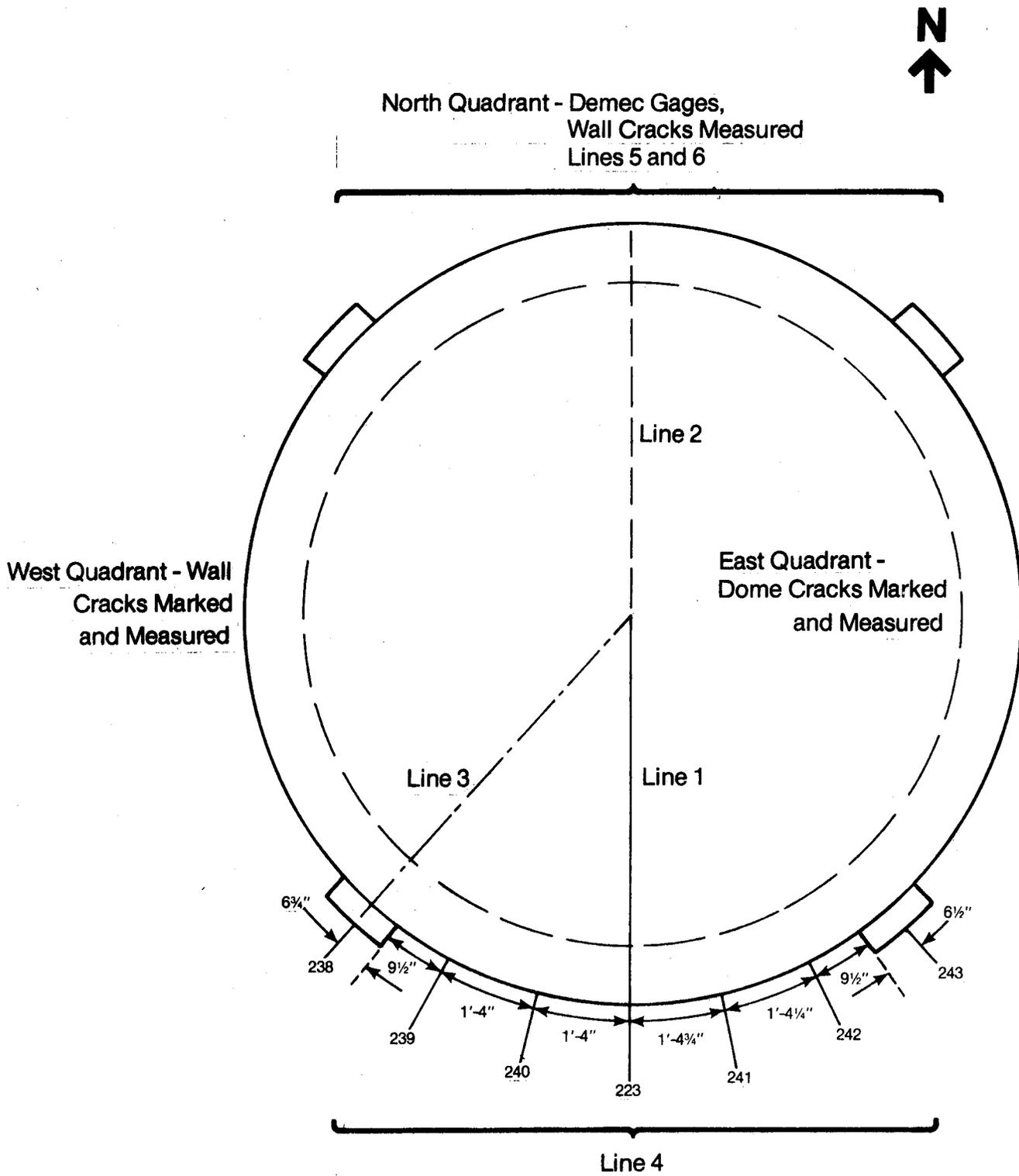


Fig. 4.1 Plan of Test Structure Showing Location of Measuring Lines and Location of LVDT's along Line 4

above the base. The elevation of this line was chosen from computer analyses which suggested that the wall deflections approached the maximum in this region. Line 5 was a horizontal line across the north quadrant, at 2 ft. 4 in. above the base and Line 6 was a horizontal line on the same fact at 5 ft. 5 in. above the base.

#### 4.2 Data Acquisition System

The various pieces of data logging equipment in the laboratory provide excitation to the electric resistance strain gages and LVDT's (Linear Variable Differential Transformers), and convert the outputs to voltage readings in digital format. These data logging devices were monitored by two separate systems. The majority of the channels, 244 of 293, were monitored and the voltage readings recorded using a NOVA 210/E digital computer. The voltages were sampled and converted to digital form by a Computer Products Inc. Model RTP 7480/30 Converter with 256 channels and a theoretical sensitivity of about 0.6 micro-volts compared to a maximum full scale reading of 10.25 volts.

The NOVA computer has a central processor core size of 32K words and a dual disk drive system with each disk having a capacity of 1.2 million words and can receive and process input from up to 254 channels at one time. In general, upon command, the system will take and average three readings of voltage during a period of 0.025 seconds for each channel, convert this to a digital signal and record the results. The signal is also processed by having initial zero readings subtracted and the result multiplied by appropriate gage factors, stiffness and material properties to convert the signal to engineering

quantities such as force, strain, etc. These quantities are also stored for future use. During the course of the test up to 12 selected channels of processed data could be displayed on a video screen to permit monitoring the progress of the test.

The remaining 29 data channels were excited and read by a Fluke Model 2240B Datalogger which had a capacity of twelve channels. This piece of equipment also took several voltage readings and averaged them, outputting the results in digital form. The accuracy was similar to that of the Computer Products converter. Data from the Fluke Datalogger was output on paper tape and also on a cassette using a Techtran Model 8410 Digital Cassette Recorder.

Following a test, the data files from the Fluke apparatus were read into the University computer (an Amdahl 470/V6) which recorded the raw data in a file and created a second file of this information in engineering units. The data files from the NOVA were also transferred to data files in the University computer for final data reduction and plotting.

#### 4.3 Internal Pressure

Internal pressure was measured using a Validyne DP15TL multi-range pressure transducer with a range of 0 to 250 psig and an accuracy of  $\pm 0.5$  psi. This device was mounted in the water filler line just outside the base and besides being read by the computer it was hooked up to a CD12 transducer indicator for visual reading. A normal pressure gage was mounted in the same location as a check on the electronic measurements.

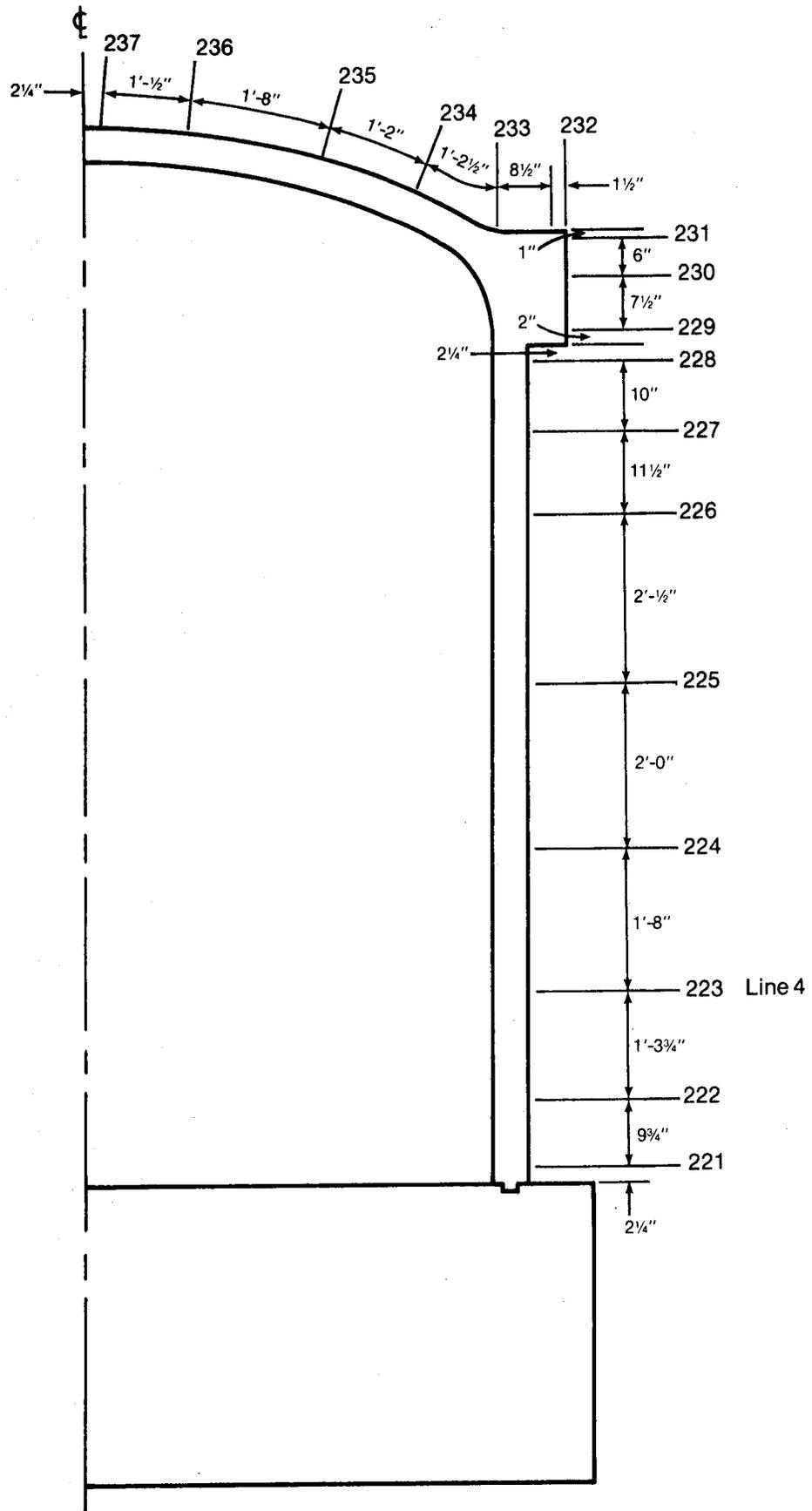


Fig. 4.2 Location of LVDT's along Line 1

The internal pressure was defined in terms of the pressure at the crown of the dome. When the test structure was full of water with the air release valve at the crown open to the air, the pressure was taken as 0 psi. Due to the height of the structure, the pressure at the base was 5 psi higher than that at the crown.

#### 4.4 Deflections

Deflection measurements were made at a total of 23 locations using HP Displacement Transducers (linear variable differential transformers LVDT's) with a full scale range of  $\pm 1$  in. or  $\pm 3$  in. depending on the location. These had an accuracy of 0.005 times the total stroke range (0.01 in. or 0.03 in.) The LVDT supports were completely independent of scaffolding and platforms supporting people during the test. In all cases the LVDT's were placed normal to the surface at the point where the measurements were taken. A 1 x 1 x 1/8 in. aluminum target was glued to the surface at each gage to provide a uniform surface to bear on.

Seventeen LVDT's were located along Line 1 (see Fig. 4.1). The location and direction of these gages is shown in Fig. 4.2. An additional six LVDT's were located along Line 4 as shown in Fig. 4.1. Gage 223 was in both lines. All LVDT's were read directly by the Nova Computer System.

#### 4.5 Average Surface Strains (Demec Strains)

The average strains on the surface of the test structure were measured at 74 locations along line 2 (Fig. 4.3 and 4.4) and lines 4 and

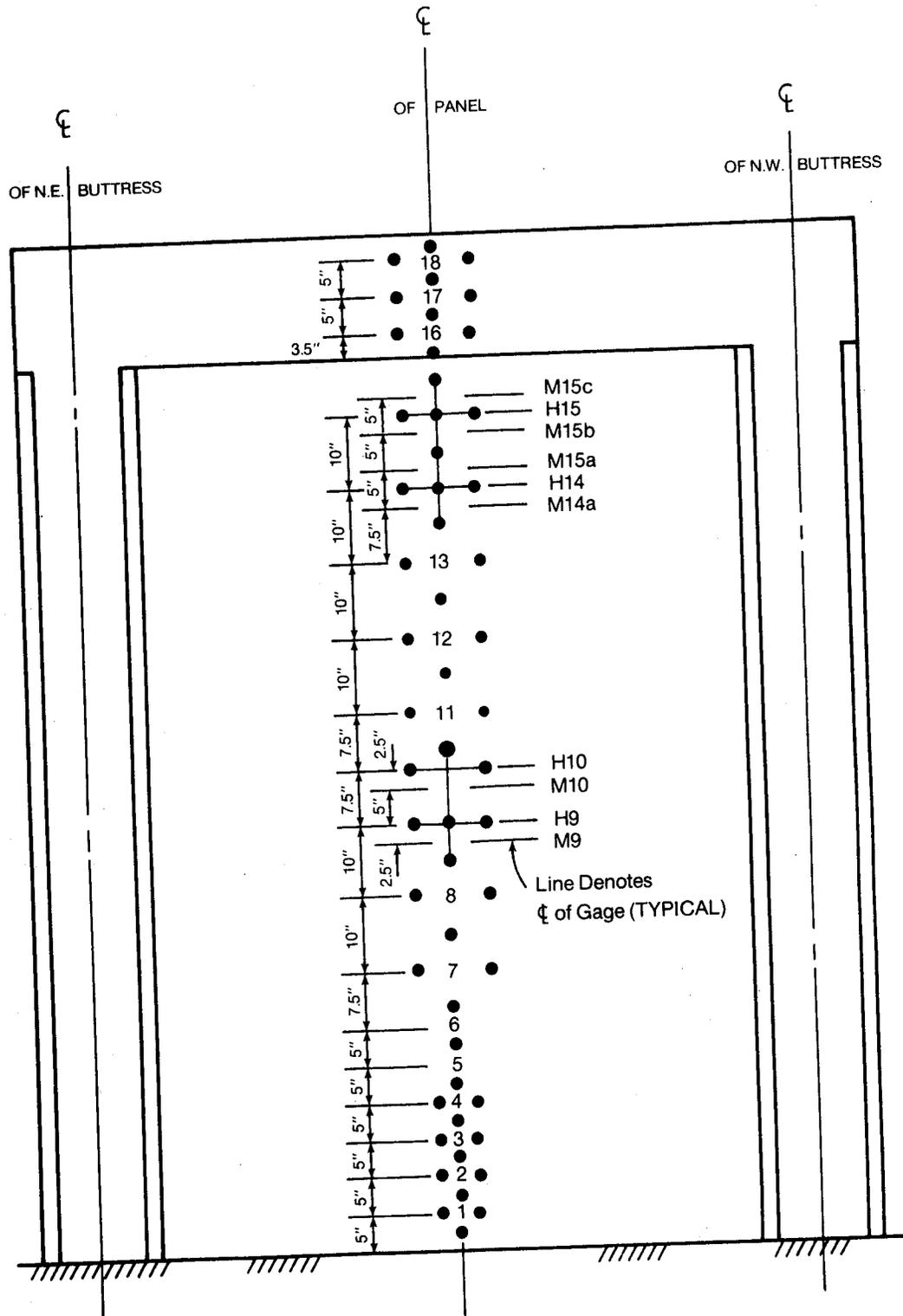


Fig. 4.3 Location of Demec Gages along Line 2

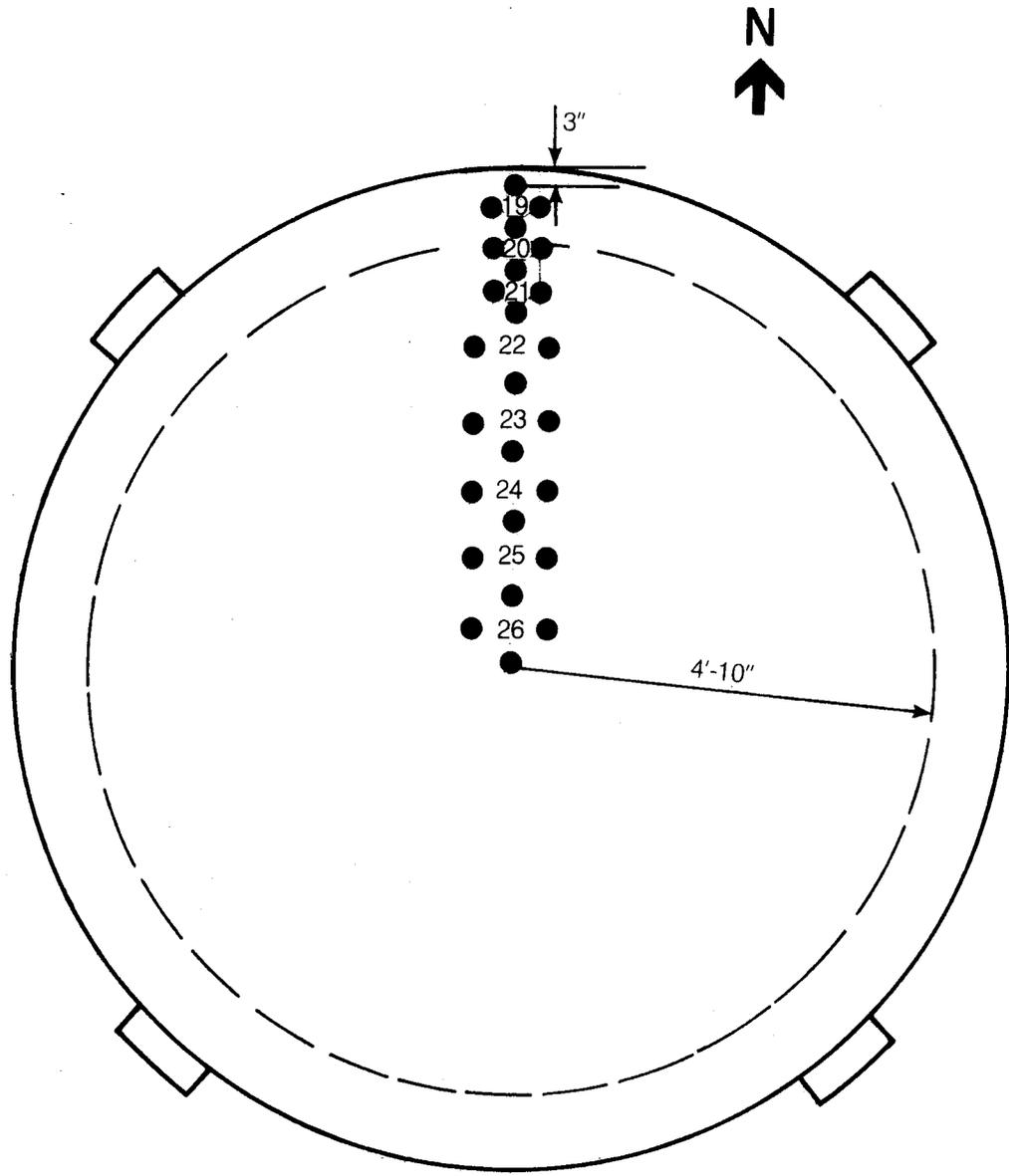


Fig. 4.4 Location of Demec Gages on Dome along Line 2

5 (Fig. 4.5) using mechanical gages which measured the change in length between targets glued to the surface of the concrete. A typical set of readings, such as gage 1 in Fig. 4.3 consisted of a vertical measurement M1 and measurement H1. These gages are referred to as "Demec gages" in this report and previous reports on this project.

A 5 in. gage length and a 10 in. gage length extensometer were used, the 5 in. gage being used in regions of high strain gradients. The 5 in. gage length instrument was a Whittemore Gage Model SN1435 with a dial graduated to 0.0001 in. The smallest dial division corresponded to a strain of 0.00002. Readings were reproducible to  $\pm 5$  dial divisions or a strain of  $\pm 0.0001$  (100  $\mu$  in./in. strain). The 10 in. gage length instrument was a Whittemore Gage also with a dial graduated to 0.00001 in. In this case the smallest dial division corresponded to a strain of 0.00001 and the readings were reproducible to a strain of  $\pm 0.00005$ . The readings were taken by two technicians, and recorded by two others. In every case, the same technician read the same gages to reduce operator error.

The Demec gage readings were manually recorded and were typed into computer files following each test so that computer data reduction and plotting could be carried out.

The initial data from the Demec gages was erratic. This was caused by poor measuring points. Following Test E, all the Demec points were replaced with newly machined points resulting in much better reliability and reproducibility. As a result, the Demec strain data for tests A to E can only be considered to give gross trends. On the other hand, the Demec data for tests F and G is excellent.

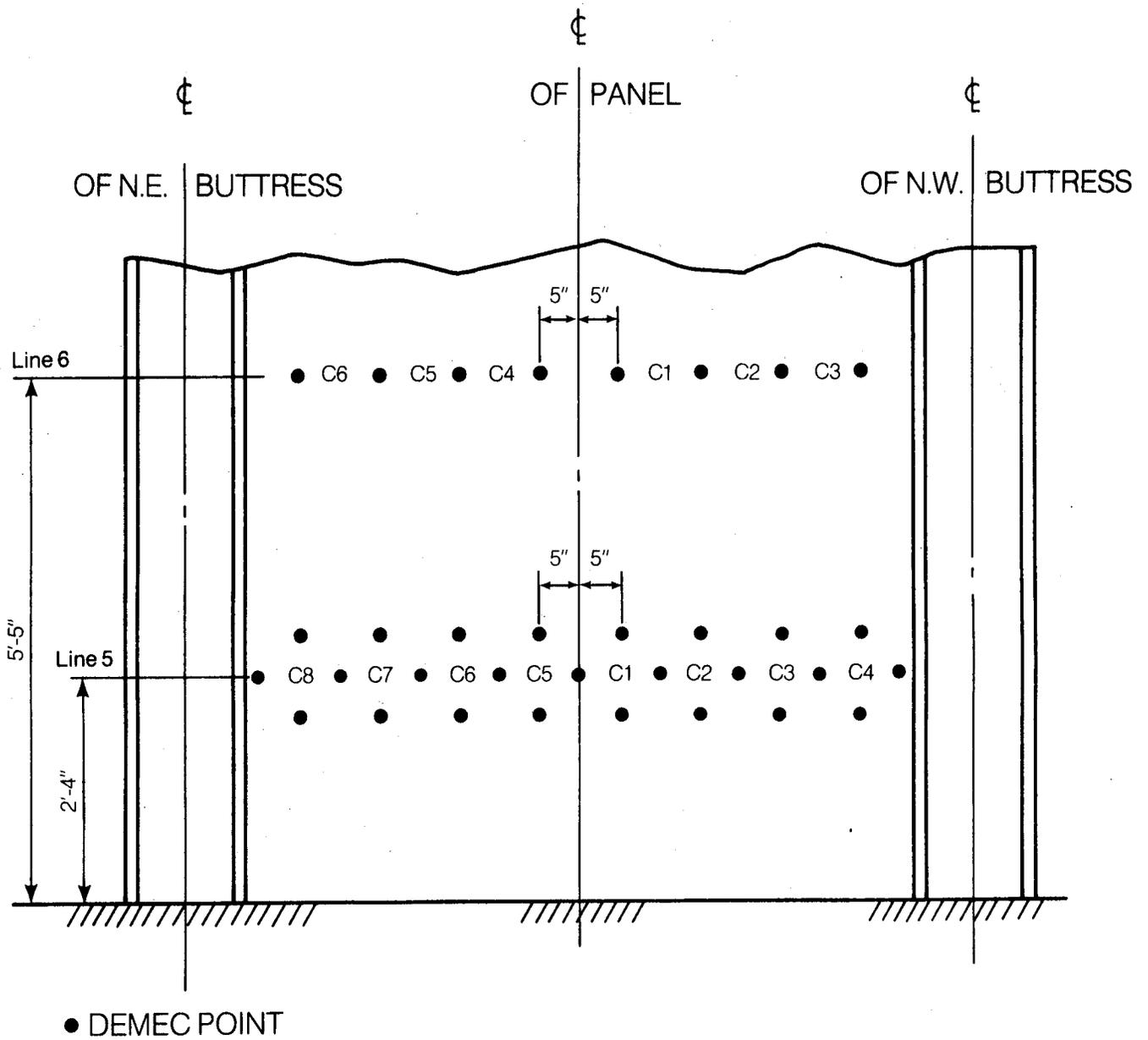


Fig. 4.5 Location of Demec Gages along Lines 5 and 6

#### 4.6 Electrical Resistance Gages on Reinforcement

Groups of four 1/4 in. gage length Micromasurements Type EA-06-250BG-120 electrical resistance strain gages were mounted on reinforcing bars at 17 stations along Line 1, 12 stations along Line 2 and 10 stations along Line 3 (Fig. 4.6 to 4.9) Readings of electrical resistance gages could be reproduced to the nearest  $10\mu$  in/in. In each case, a group of four gages consisted of gages (in the wall) on the top surfaces of the inside and outside horizontal bars and gages (at 0.69 in. from the inside and outside faces) on one side of each of the vertical bars (at 1.00 in. from the inside and outside faces).

In addition, the same type of gages were mounted on 12 reinforcing bars passing through the hinge and stirrups. The locations are shown in Fig. 4.9. On line 1 there were also two, three inch long, 1/4 in. diameter undeformed bars with 1/4 in. diameter by 1 in. long bars forming a cross at each end embedded across the hinge. These also were instrumented with a 1/4 in. strain gage and were intended to give an estimate of the concrete compressive strains across the hinge. The waterproofing of these bars effectively unbonded them over the full three inch length. These were centered at 0.875 in. each way from the center of the hinge.

In all cases, the strain gages on the reinforcement were mounted and waterproofed prior to placing the reinforcement in the structure. During casting the leads extended out through holes in the outside form for the wall and extended up through the top of the dome to a special bridge provided to support them. This bridge is shown in Fig. 2.14. All but 9 of the 215 strain gages on the bars survived the casting, removal of honeycombed concrete and shotcreting operations.

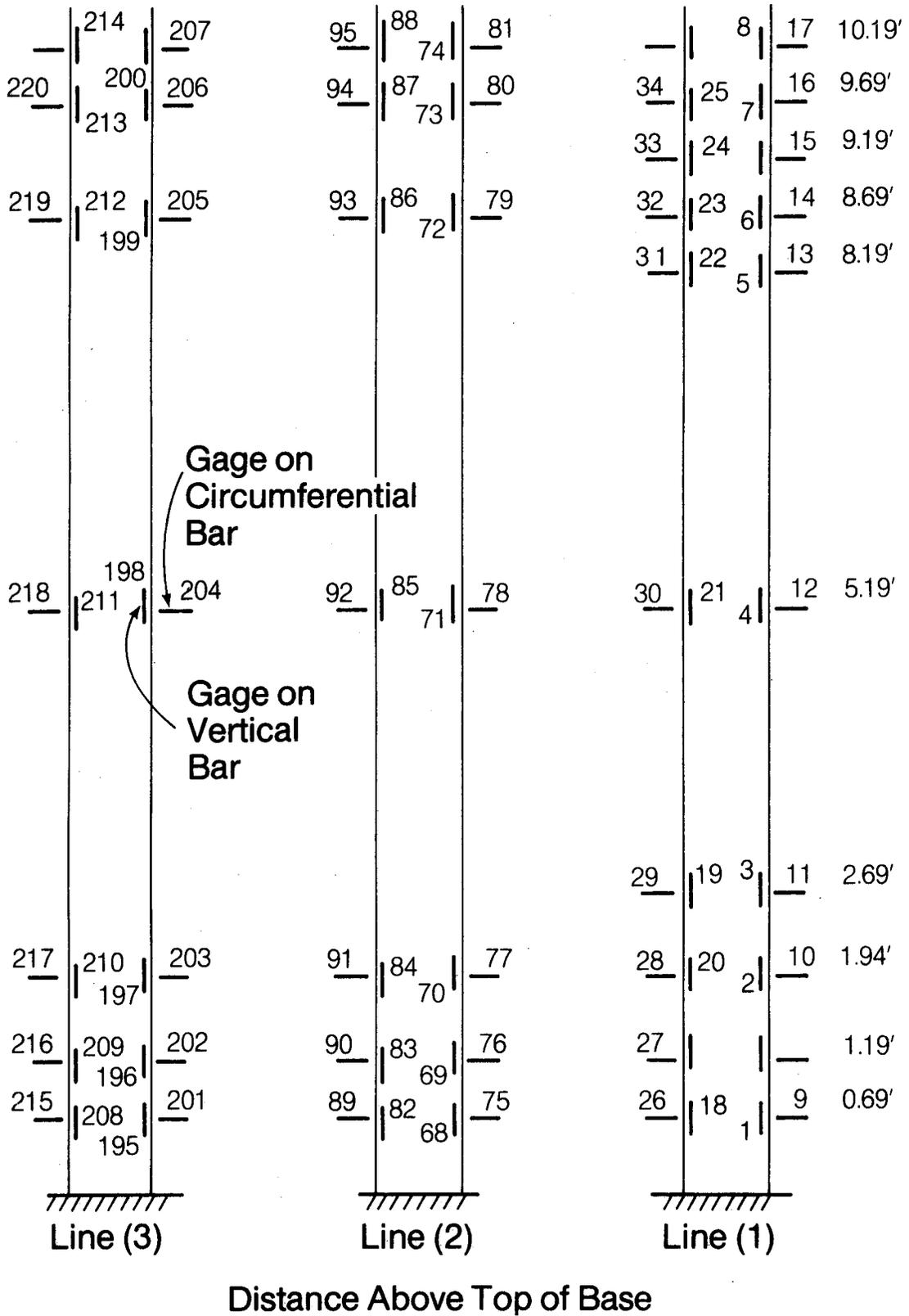
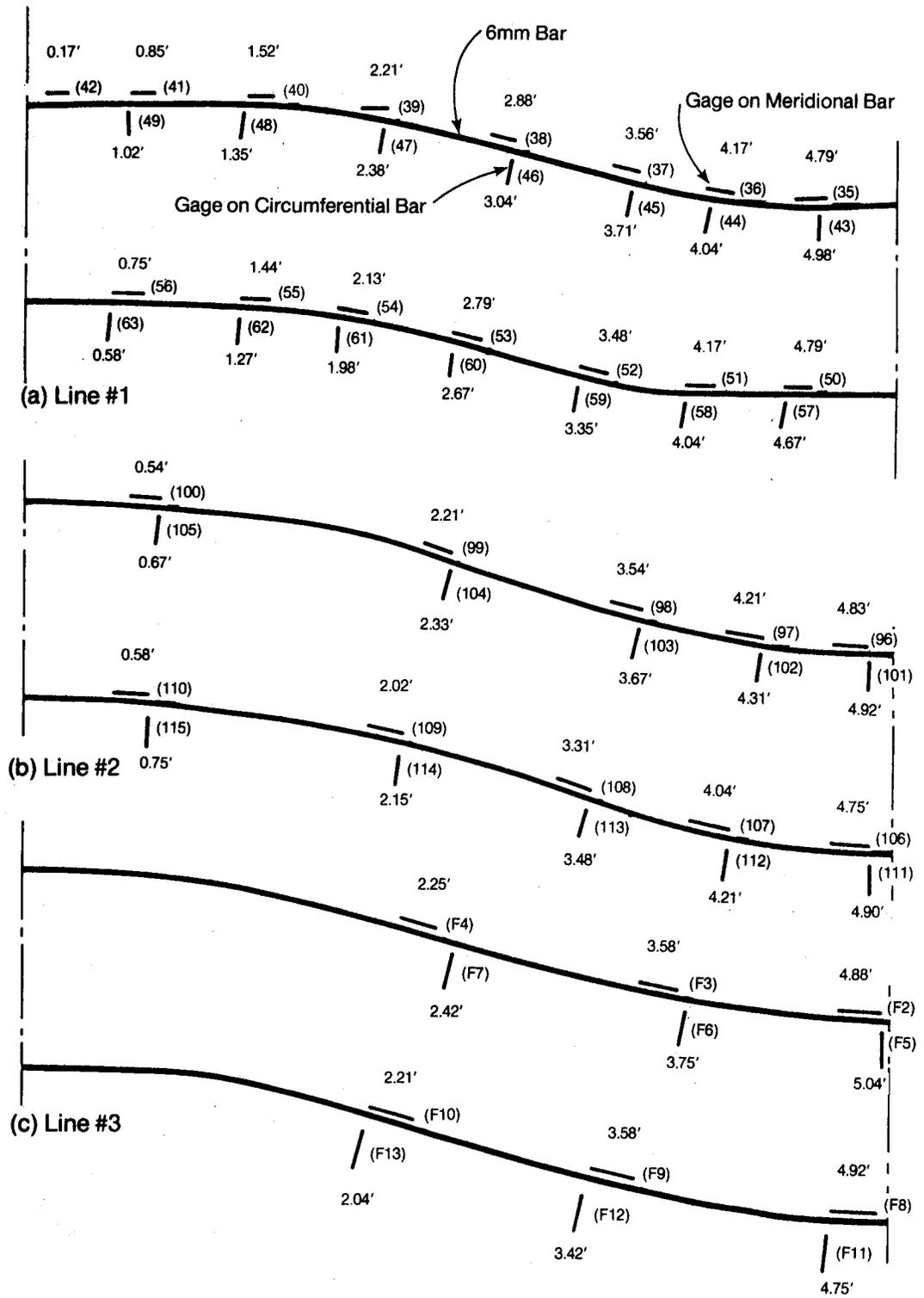


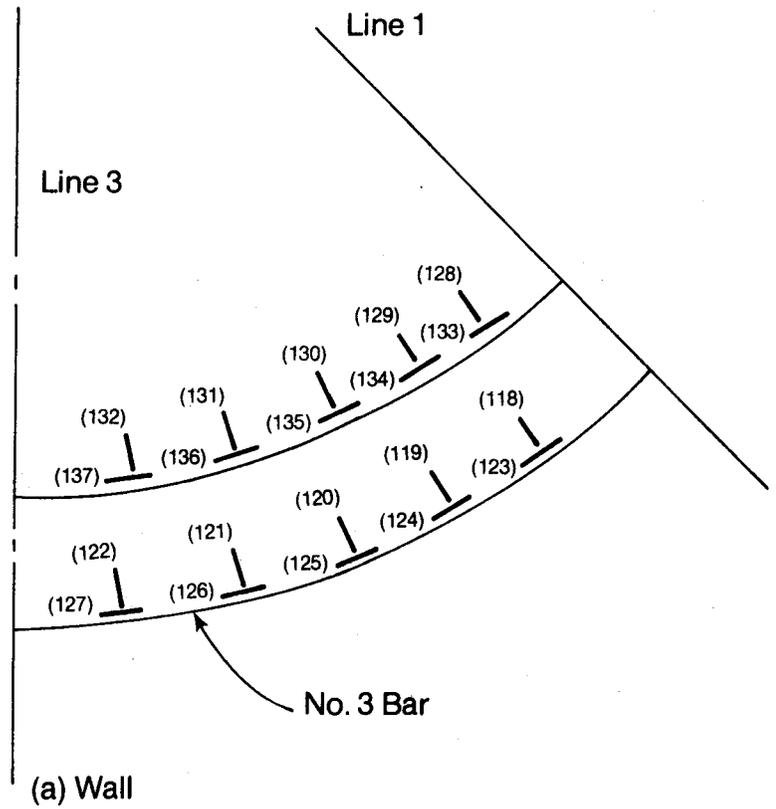
Fig. 4.6 Location of Electrical Resistance Strain Gages on Wall Reinforcement



- All dimensions are in feet, measured from centroid of dome to centre of gage.  
 - Numbers in brackets refer to gage numbers

Fig. 4.7 Location of Electrical Resistance Strain Gages on Dome Reinforcement

Gages were located 22" from the base. The centre of the first gage was 6" from line 3 and they are 6" apart.



Gages were located on the outside surface of the dome on line  $H_1$  which was 61" from the centre of the dome measured along the curved surface.

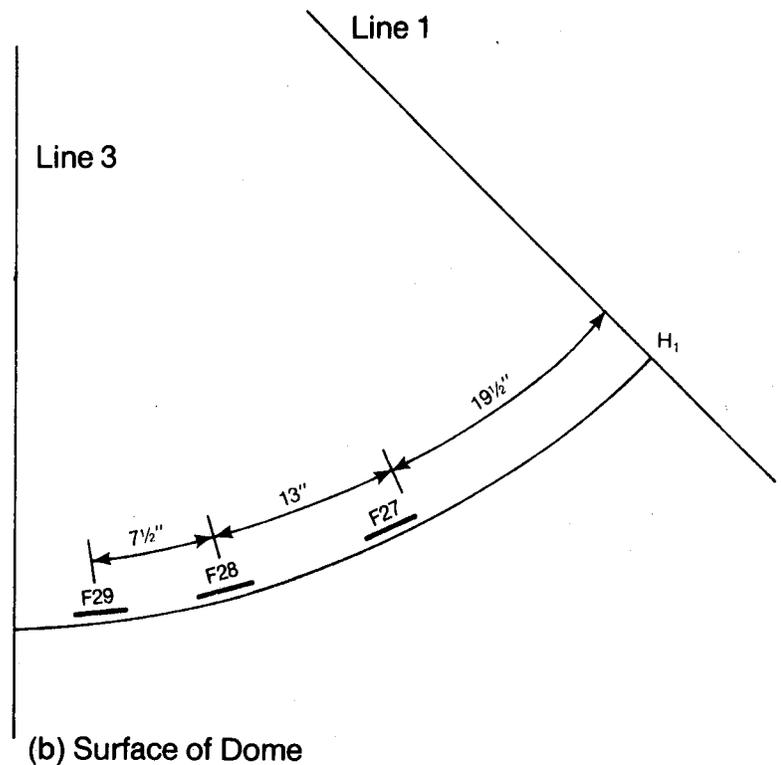
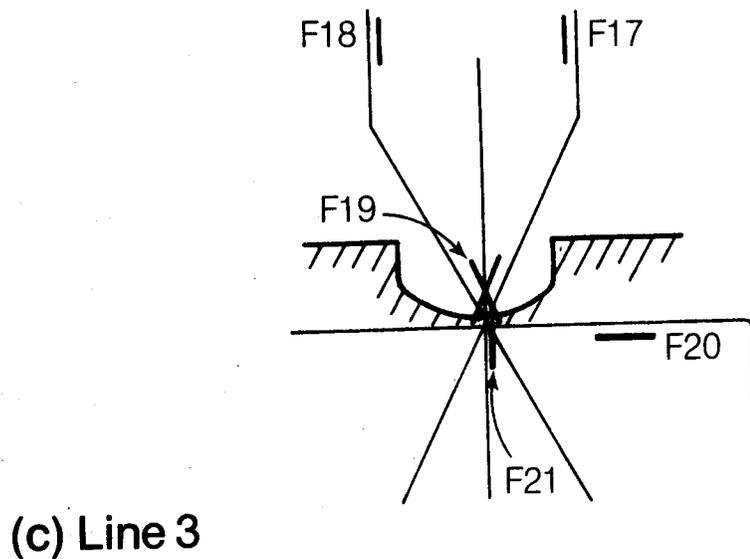
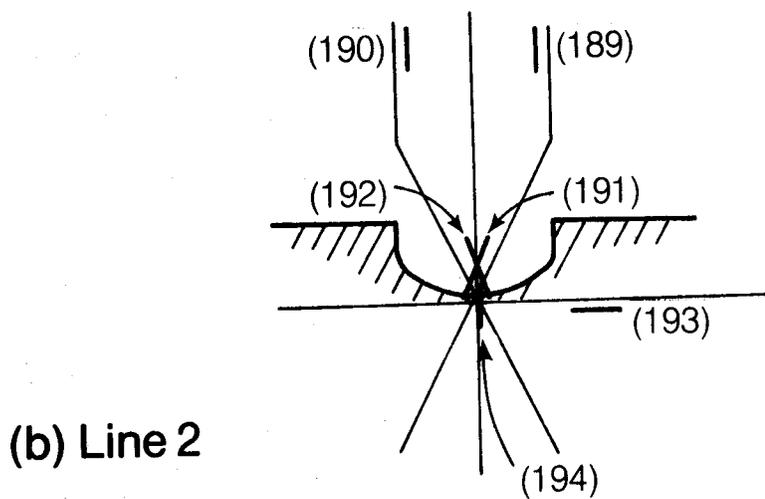
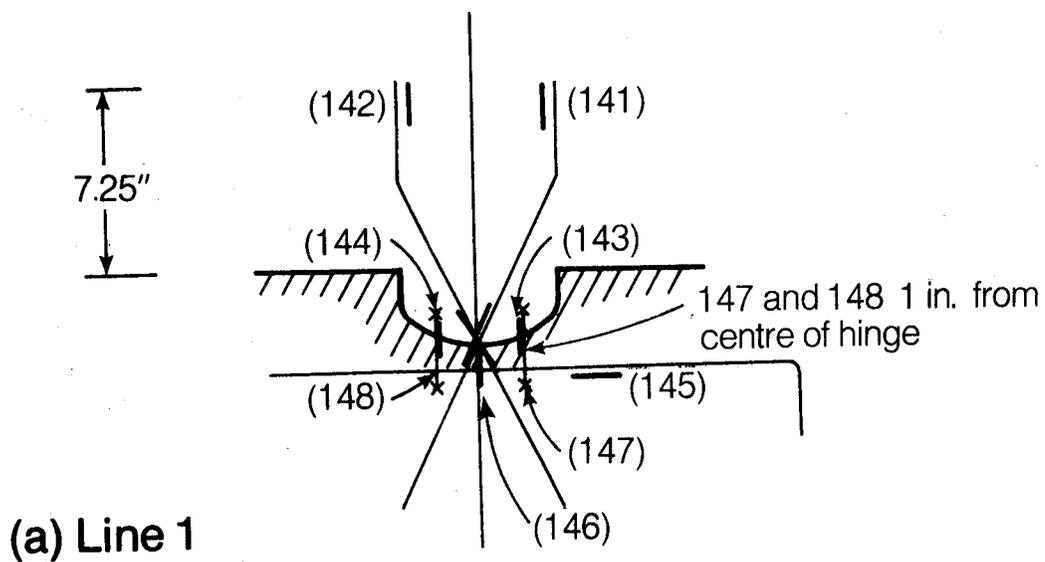


Fig. 4.8 Location of Electrical Resistance Strain Gages on Horizontal Lines



Outside Face of Wall

Fig. 4.9 Location of Electrical Resistance Strain Gages on Hinge Reinforcement

Ailtech SG129-6S weldable strain gages were spot welded to one vertical prestressing tendons, 3 horizontal wall tendons and 2 dome tendons. After the tendon sheaths and tendons were in place a 3 in. by 3/4 in. hole was cut in the tendon sheath and the gages were mounted on the tendons and the leads brought out through the hole leaving about 4 inches slack inside the sheath. The hole was then covered with a segment of tendon sheath and sealed with epoxy. Five of these gages were damaged before the wall was prestressed and another five were damaged during the prestressing and grouting operations leaving three gages functional during the test. Two of these were located on a dome tendon, one at mid-length, the other 5 ft. from the center, near one end. The third was located on the mid-height tendon very near the final failure.

Although electric resistance gages are easy to read, the output is difficult to interpret because the readings are affected not only by the applied load but also by the distance from the gage to the nearest crack. A correlation between electrically measured strains and Demec strains is presented in Ref. 1 based on the wall segment tests.

#### 4.7 Detection of Cracking

Cracks on the outside surface were visually detected using 4 power illuminated magnifying work lamp and were marked in various colors to denote the load at which they were observed.

Baldwin FAE-400N-12-50L 4 Inch gage length SR-4 electrical resistance strain gages were mounted on the surface of the concrete along Line 1 as shown in Fig. 4.10. Eighteen of these were on the

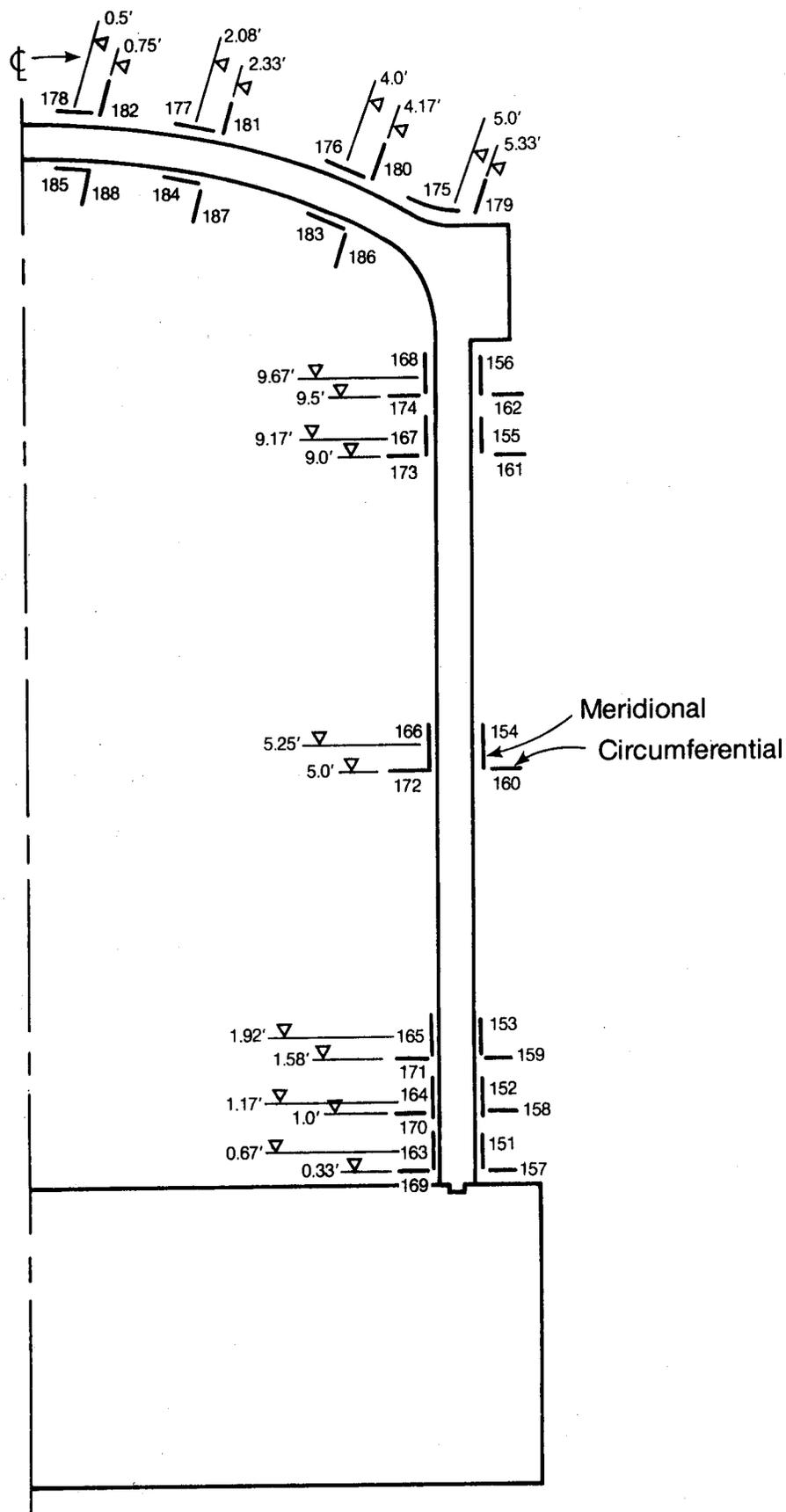


Fig. 4.10 Location of 4 in Gage Length Electrical Resistance Strain Gages on Surface of Concrete

inside surface and 20 were on the outside. The major reason for these gages was to detect the onset of cracking particularly on the inside face which could not be observed during the test. The type of gage chosen ceases to operate if the concrete it is mounted on cracks. Four of the gages on the inside face were damaged by water that leaked out of the liner during early tests.

Strips of brittle electrical conducting paint were also placed on the inside surface of the test structure to detect cracking. The leakage through the liner rendered these inoperable.

#### 4.8 Measurement of Crack Widths

All the cracks observed on the west quadrant were marked with felt pens. The widths of all cracks crossing two vertical lines and two horizontal lines on the north and west faces of the wall were measured using a 40 power hand-held Bauch microscope with an optical scale graduated in 0.001 in. divisions. It was possible to estimate crack widths to about 0.0005 in.

The vertical lines along which cracks were measured were located at 6 in. each way from the centers of the west and north quadrants. The horizontal lines were 36 in. and 60 in. above the base in the west and north quadrants. In addition, crack widths were measured in the dome along two meridional lines which intersected the wall at 6 in each way from the center of the east quadrant, and along two circumferential lines located 21 in. and 32 in. from the crown of the dome, again in the east quadrant.

#### 4.9 Curvature Meters

A series of five 1/2 in. diameter rods were embedded in the wall just above the base, 6 inches east of Line 1 as shown in Fig. 4.11. Dial gages graduated in .0001 in. divisions were mounted on these rods as shown in Fig. 4.12. From the readings it was possible to compute the angle changes at each of the rods and the elongation of the midplane of the wall. From the angle changes the average curvatures and horizontal deflection of the wall could be calculated.

The calculation of angle changes assumed that sections through the wall that were planar before loading remained planar after loading and assumed that the rods were an extension of the plane in which they were placed. The following relationships were required to compute angle changes and deflections from these gages. Because the gages were mounted, differently in Line 1 than subsequent lines, the equations used to compute  $\Delta_{n1}$ ,  $\Delta_{r1}$  and  $\theta_1$  differed from those in subsequent ranges. The notation used is defined in part in Fig. 4.12. The symbols B and F refer to the readings from the dials located nearest to the wall and farthest from the wall in each line. These were recorded in 0.0001 in. units, hence the factor in Eq. 4.1, etc. The subscripts L and 0 refer to loaded and unloaded states while subscripts 1, 2, n, etc. refer to lines 1, 2 and n.

For Line 1:

$$\Delta_{x1} = [(F_L - F_0)_1 - (B_L - B_0)_1]/10,000 \quad (4.1)$$

$$\theta_1 = \tan^{-1} (\Delta_{x1}/5.00) \quad (4.2)$$

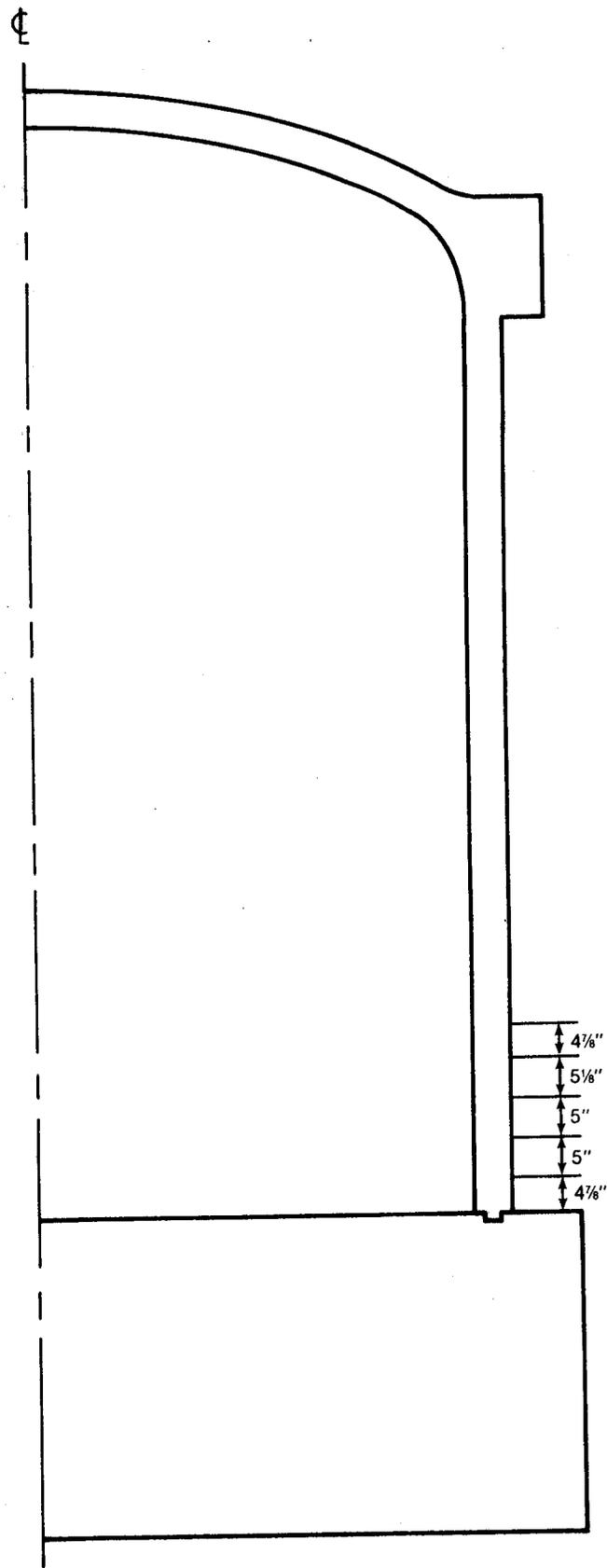


Fig. 4.11 Location of Curvature Meter Rods

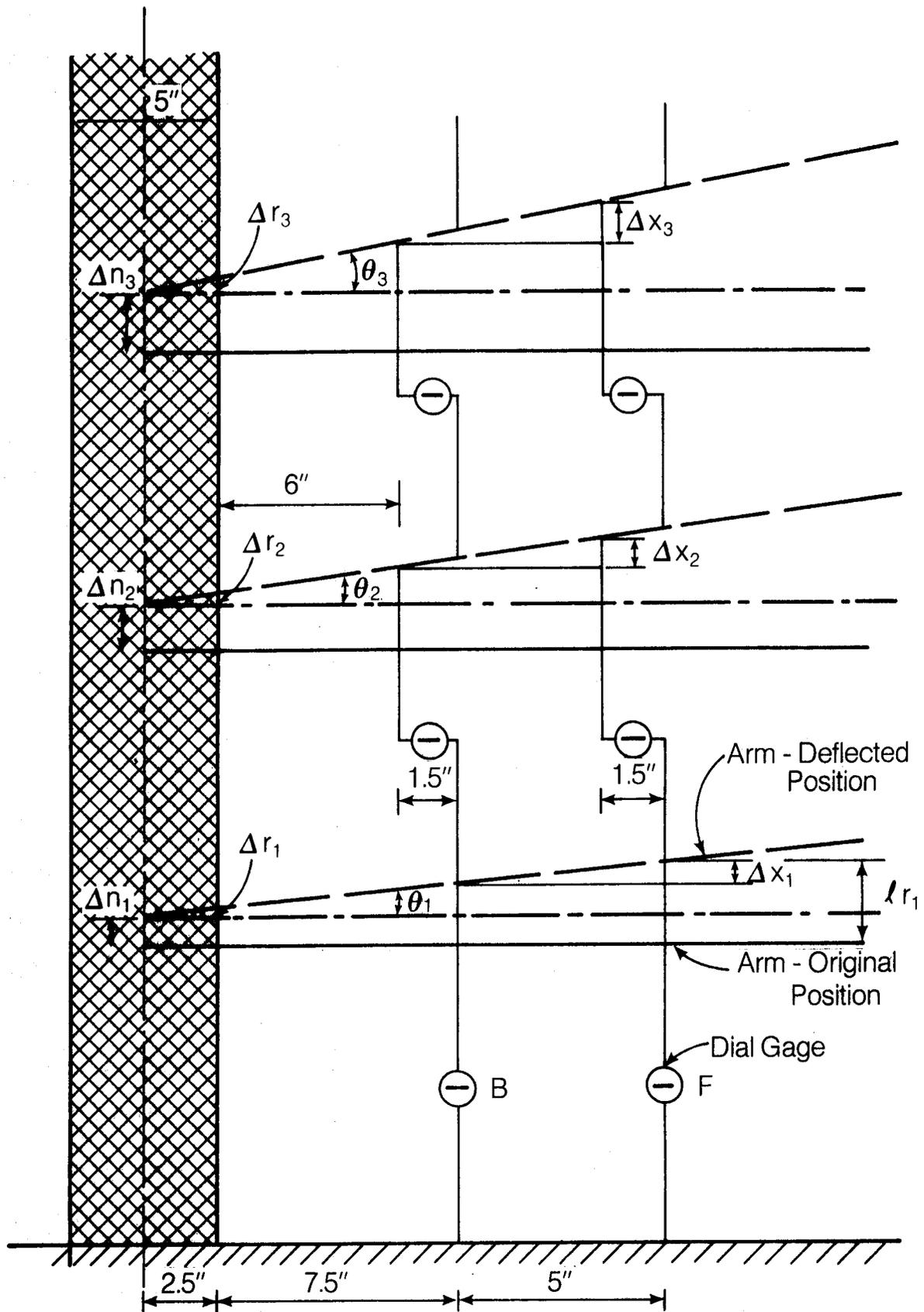


Fig. 4.12 Location of Dial Gages on Curvature Meters and Calculation of Deflections and Angle Changes from Curvature Meter Readings

$$\ell_{r1} = (F_L - F_0)_1 / 10,000 \quad (4.3)$$

$$\Delta_{n1} = \ell_{r1} - 3\Delta_{x1} \quad (4.4)$$

For Line 2:

$$\Delta_{x2} = \Delta_{x1} + \frac{[(F_L - F_0)_2 - (B_L - B_0)_2]}{10,000} \quad (4.5)$$

$$\theta_2 = \tan^{-1} (\Delta_{x2}/5.00) \quad (4.6)$$

$$\ell_{r2} = \left[ \frac{(F_L - F_0)_2}{10,000} + \frac{1.5}{5} \Delta_{x2} \right] + \ell_{r1} \quad (4.7)$$

$$\Delta_{n2} = \left[ \frac{(F_L - F_0)_2}{10,000} + \frac{1.5}{5} \Delta_{x2} - 3\Delta_{x2} \right] + \ell_{r1} \quad (4.8)$$

In General (Lines 2-5)

$$\theta_n = \tan^{-1} (\Delta_{xn}/5.00) \quad (4.8)$$

$$\Delta_{nn} = \left[ \frac{(F_L - F_0)_n}{10,000} - \frac{13.5}{5} \Delta_{xn} \right] + \ell_{rn-1} \quad (4.9)$$

Vertical deflections were computed directly from Eq. 4.4, 4.7, etc. Horizontal deflections were computed assuming the chord from halfway between two lines to halfway between the next two lines had a slope equal to the slope of the rod included in this space and multiplying

the sine of the slope by the distance between the rods. For the bottom section the slope was considered equal to that of the bottom rod from the hinge up to halfway between the first two rods.

If an error of +1 division were made in reading gage  $F_1$  and an error of -1 division in gage  $B_1$ , the error in  $\theta_1$  would be 0.13 degrees, leading to a possible error of 0.01 in. in the horizontal displacement at line 1.



## 5. TESTING

### 5.1 Introduction

Water was the agent used to develop the internal pressure in the test structure. The pressure was obtained using a hand operated pump to pressures of 140 psi above which a truck-mounted, high capacity, high pressure pump was used. To prevent the water from leaking through the containment wall after cracking and still provide the opportunity to view the inside face of the test structure after loading sequences, a removable plastic liner was fitted to the inside surface. A series of five test runs to below the initial cracking pressure were made to test the sealing of the liner at the hatch and to evaluate the response of the instrumentation and data reduction routines. As a result of these runs the seal around the hatch was replaced and certain gages were replaced or rewired.

The first major loading sequence, referred to as Test F, was terminated at an internal pressure of 80 psi due to difficulty in maintaining pressure and extensive leaking through cracks in the walls. After draining the tank and removing the liner it was found that several seams in the liner had failed. A new liner was fabricated that incorporated several modifications learned from experiences with the first liner. Using this liner the final load test, referred to as Test G, was carried out until the test structure ruptured at a pressure of 159 psi. No leakage was observed through the second liner until the test structure failed.

The test structure held approximately 5,000 gallons of water at the beginning of the test. The volume of the structure increased by

about 20 percent to over 6000 gallons by the time failure occurred. The majority of this increase in volume occurred after 140 psi internal pressure.

Details of the hydraulic system and the liner are given in Sections 5.2 and 5.3. The various tests, A to G, are listed in Section 5.4 and Table 5.1.

### 5.2 Hydraulic Loading System

The hydraulic loading system and drainage system consisted of a direct line from the water main to the test structure for filling the structure. Water entered the structure through a 1 1/4 inch diameter galvanized pipe that extended 8 inches above the base. The liner was fastened to this with hose clamps. When the liner was full the direct line was closed and pressure was applied using a hand-operated pump. Finally, a pipe was provided from the tank to the drain to facilitate emptying the vessel.

The hand operated system proved adequate until the pressure reached 140 psi after which time a truck mounted pump was used to raise the pressure to the 159 psi required to cause the final failure.

### 5.3 Liner

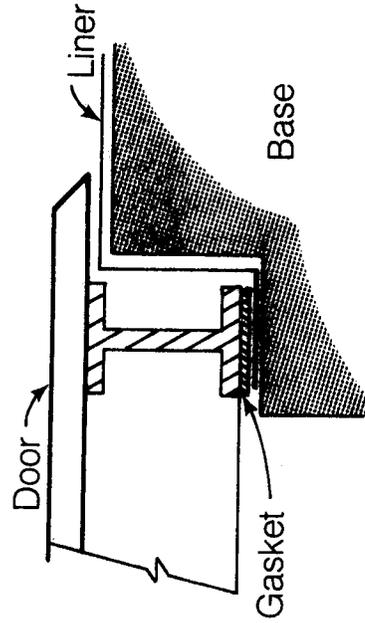
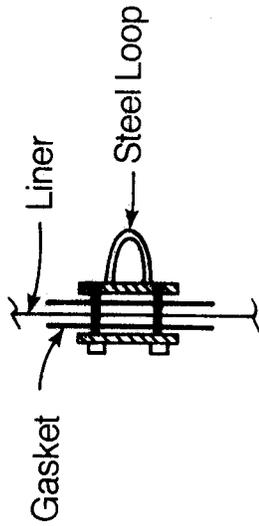
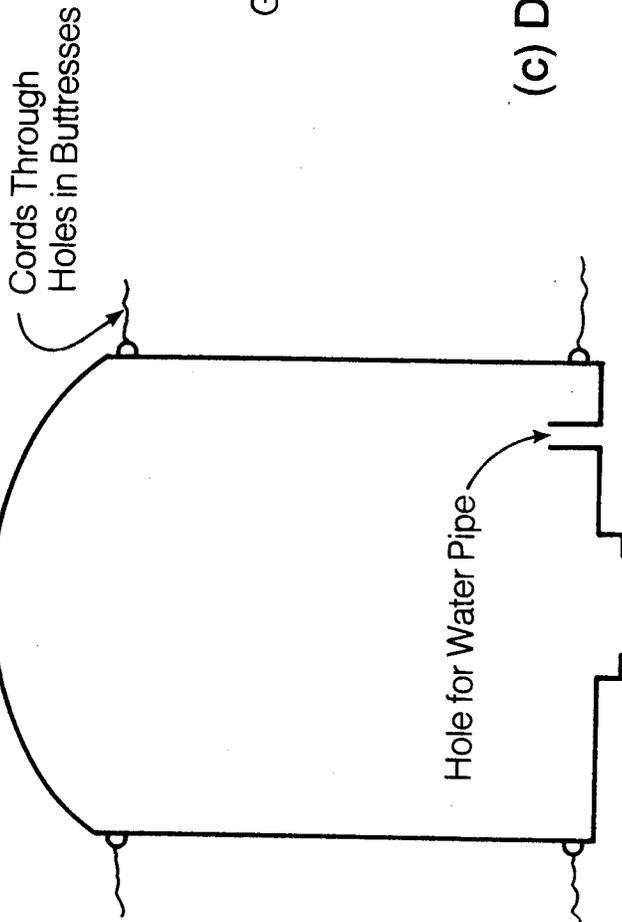
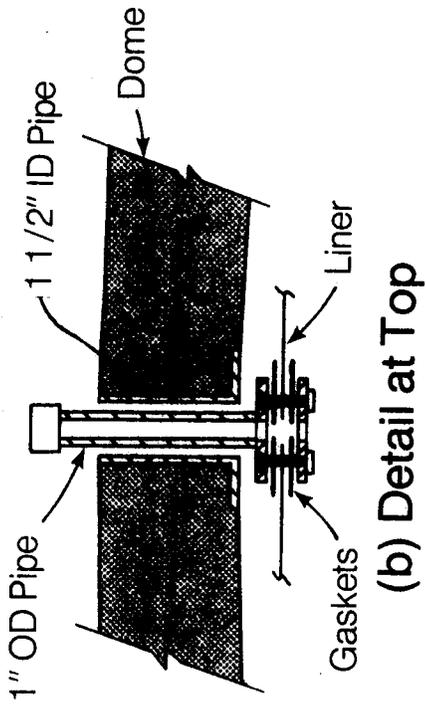
As stated earlier, a removable plastic liner was used to prevent leakage of water out of the containment during the tests. Considerable difficulty was experienced in getting a liner that was sufficiently durable to withstand the handling and the elongations

experienced during the test. This was largely due to a reduction in thickness, strength and ductility where the plastic sheets were jointed by vulcanizing.

In tests A through F a single liner was used. This liner was made of 0.020 in. thick PVC sheeting. The top of the liner was constructed on the form for the dome so as to fit the dome. This top portion was then dielectrically sealed (heat sealed) to a cylindrical portion and that in turn to a flat section for the base. The dome cylinder and base were made oversize to allow for expansion to the test structure under pressure. The base of the liner had a hole with a lip to fit the hatch in the base. A schematic drawing of the first liner is shown in Fig. 5.1(a).

A 1 in. outside diameter pipe was fastened to the top of the liner as shown in Fig. 5.1(b). This allowed air to escape from the liner as it was filled with water. During tests a cap was screwed onto the end of this pipe. To aid in positioning the liner correctly, eight cords were attached to loops fastened to the liner as shown in Fig. 5.1(c). These cords passed through holes provided through the buttresses. As the liner was filled with water the air between the liner and the concrete escaped through these holes and through the space between the two pipes at the top. Finally, the liner fitted over the steel water inlet pipe and was held in place by hose clamps.

When the pressure reached 80 psi in Test F this liner tore gradually along several seams and ended that test. Test G was carried out using the first liner, which had been repaired, and a second liner inside the first. The second liner was considerably oversized and was



(d) Detail of Hatch and Door

Fig. 5.1 Details of First Liner

of cylindrical shape with a flat top and bottom. This liner was made of the same material as the first. It had only three openings, one for the water inlet at the bottom, the second for the air outlet pipe at the top and the third for the door at the bottom.

Before Test G, the first liner was installed in the normal way. The second liner was then put in position inside the first with the air outlet pipe in place, the water inlet pipe clamped to the liner and the door sealed, and inflated with air. The maximum pressure used was 2 psi, enough to expand the liner to fit the inside of the test structure. Water was then introduced into the structure and air bled off, always maintaining a pressure of about 2 psi to hold the liner in position. This second liner did not leak in any way until after the wall of the test structure ruptured.

#### 5.4 Load Sequence

The test was carried out in seven stages, referred to as Tests A through G. Of these only F and G are true load tests, the remaining tests being carried out to check instrumentation, etc. The data from Tests F and G are reported in the balance of this report.

In a typical test the liner was put in place and door sealed and a set of initial readings taken. The vessel was then filled with water with the top pipe open to allow air to escape. This required roughly 5000 gallons of water. The test structure was then left full of water for 20 hrs. to two days to allow the water to approach room temperature and to allow entrapped air to escape. Following this, the top pipe was capped and pressurization carried out.

Pressures were defined in terms of the pressure at the top of the dome. Thus, zero pressure occurred with the test structure full of water with the bleeder pipe at the top open to the air. Due to the hydrostatic head, this corresponded to a pressure of 5 psi at the base of the wall.

Loading was carried out in increments of 5 psi up to 120 psi. Above 120 psi, increments were controlled in terms of the deflection at mid-height of the wall. Electronic readings were taken every 5 psi and manual readings every 10 psi except in the first part of Test G.

The various loading sequences are summarized in Table 5.1 and described in the following paragraphs. Figure 5.2 shows the test structure during a test.

Test A - This test was carried out to check the gages, the hydraulic loading system and the data reduction routines. The maximum pressure was 15 psi. During this test the liner leaked a little and was repaired following the test. When people were on it, the scaffolding around the dome (Fig. 5.2) deflected onto the supports for the deflection LVDT's. The supports for the LVDT's were modified after the test. Loose connections in one panel of dummy gages resulted in erratic readings. This was also corrected.

Test B - Test B refers to data taken before and after filling the vessel with water and again the next day. This data was reduced and on the basis of the data reduction and lack of leakage it was decided to continue the next day to load the structure to failure. The test structure was not drained after this test.



Fig. 5.2 Test Structure During a Test

Table 5.1

## Loading Sequence

Test Name	Date	Load Increments, psi	Remarks
A	Nov. 1, 1978	Empty, 0, 5, 10, 15	To check liner and gages. Liner leaked.
B	Nov. 6 and 7, 1978	Empty, 0	To check whether liner leaked and other corrections adequate.
C	Nov. 8, 1978	0, 5, 10, 15, 20, 25, 30	Stopped because of leakage.
D	Nov. 13 and 14, 1978	Empty, 0	Filling tank to check leakage.
E	Nov. 15, 1978	0, 5, 10, 15, 20, 25, 30, 35, 40	Stopped when door gasket failed. Liner leaked.
F	Nov. 19, 1978	Empty, 0	
	Nov. 20, 1978	0, 5, 10, 15, 20, 25, 30, 35, 40, 45, 50, 55, 60, 65, 70, 75, 80	Stopped because rate of leakage equalled rate of pumping
G	Dec. 10, 1978	Empty, 0	
	Dec. 11, 1978	0, 10, 20, 30, 40, 50, 60, 70, 80, 85, 90, 95, 100, 102.5, 105, 107.5, 110, 112.5, 115, 117.5, 120, 122.5, 125.2, 127.7, 130, 132.7, 135, 137.7, 140, 142.5, 145.7, 147, 148.5, 149.5	
	Dec. 12, 1978	135.4, 149.2, 153.5, 154.3, 156.4, 157.4, 159.9, 149.6, 143	Specimen sat over night at 138 psi. Pressure dropped to 135.4 psi in 12 hours. Failure occurred at 159.9 psi.

Test C - Test C was to have been a test to failure. Unfortunately the test had to be terminated at a pressure of 30 psi due to excessive leakage. The liner was again patched after this test.

Test D - Test D consisted of readings taken before and after filling the tank. The water was left in the test structure in preparation for Test E.

Test E - Again, Test E was to have been a test to failure. This test was terminated at 40 psi when the gasket in the access hatch blew out dumping some of the water onto the floor. The liner was leaking extensively at this stage. Following this test the door gasket was redesigned and the liner was extensively patched and reinforced in all the areas where leakage had occurred and all similar locations. On the basis of the data reduction from this test all the targets for the Demec gages (80 in all) were removed and replaced with new ones machined specially for the purpose. The new targets greatly improved the accuracy of the Demec readings.

The first visible meridional and circumferential cracking developed at 40 psi and cracking was detected on the inside surface of the dome at 30 psi during Test E.

Test F - This was the first major loading cycle. Although intended to be a test to failure, the test was stopped at 80 psi because the rate of leakage equalled the rate of pumping. Substantial cracking occurred and was marked. Following this test the liner was removed and patched and the second liner was conceived and built. Figure 5.3 shows the west quadrant of the structure at the end of Test F.

Test G - Test G was the final test to failure. The vessel was filled and allowed to stand overnight before testing. The actual test

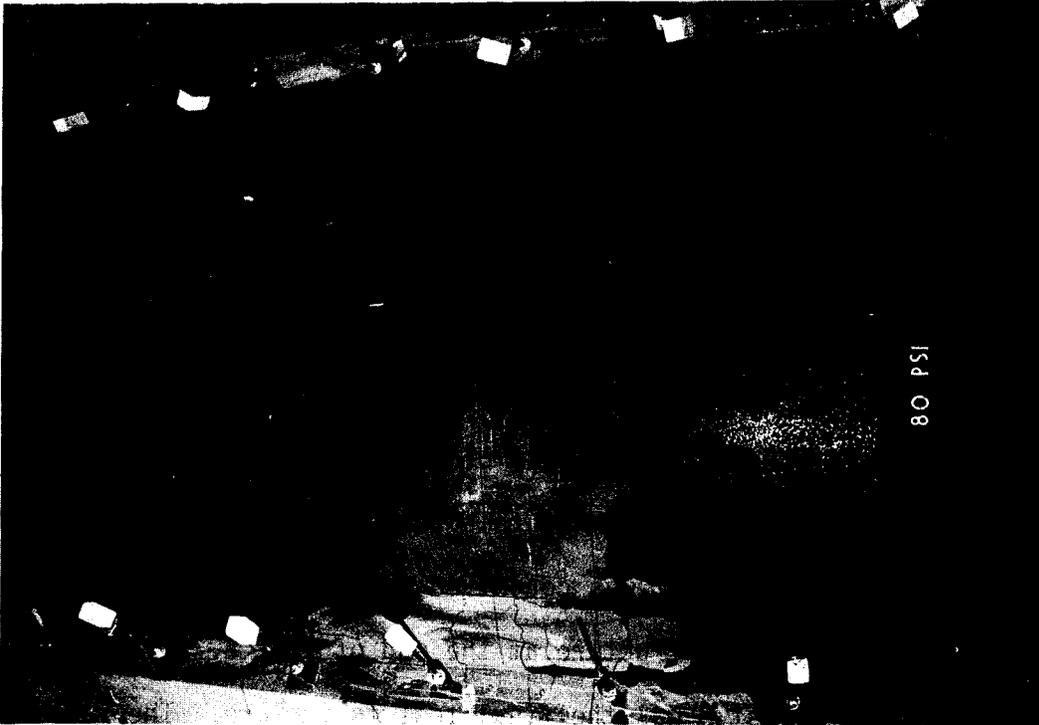


Fig. 5.3 West Quadrant of Containment at 80 psi

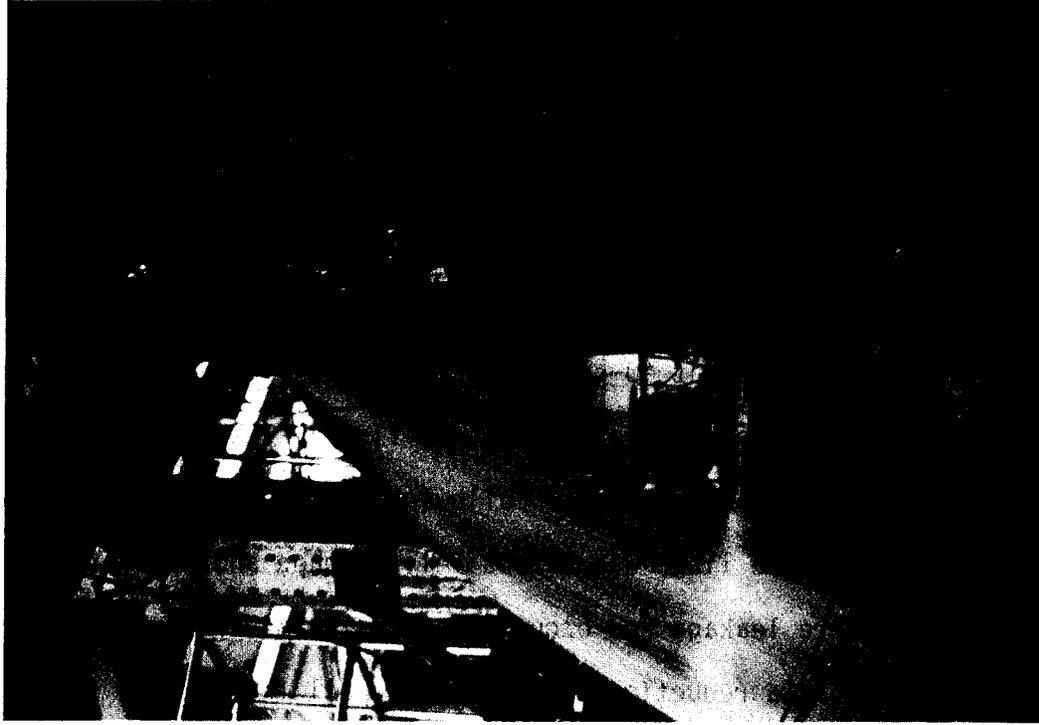


Fig. 5.4 Failure of Containment at 159.9 psi

took two days. The first day the pressure was taken from 0. to 149.5 psi using the hand pump. This took 16 hours. Up to 80 psi (the pressure reached in Test F) readings were taken electronically every 10 psi and manually every 20 psi. Above 80 psi readings were taken electronically every 5 psi and manually every 10 psi. Testing stopped after midnight at 149.5 psi and the pressure was reduced to about 138 psi for overnight. After 12 hours it had dropped to 135.4 psi. Testing resumed after noon on the second day using a high pressure, high volume truck mounted water pump. Loading continued until the vessel failed at 159.9 psi. In this stage load increments were controlled by deformation rather than even increments of pressure. Electrical readings were taken at each load increment for 244 of the 273 electrical gages. No mechanical readings were made. The liner ruptured as a result of the rupture of the wall, spilling about 2000 gallons of water onto the laboratory floor as shown in Fig. 5.4. A portion of this was trapped inside walls built around the model to prevent flooding the laboratory when the model ruptured. Unfortunately, due to space restrictions in the laboratory, the walls were very close to the model on the side where failure occurred and much of the water fell outside the catchment pool.

Figures 5.5 and 5.6 show the walls and dome cut into pieces for removal from the laboratory. It was necessary to saw the base in half to lift it with the 10 ton crane in the laboratory.

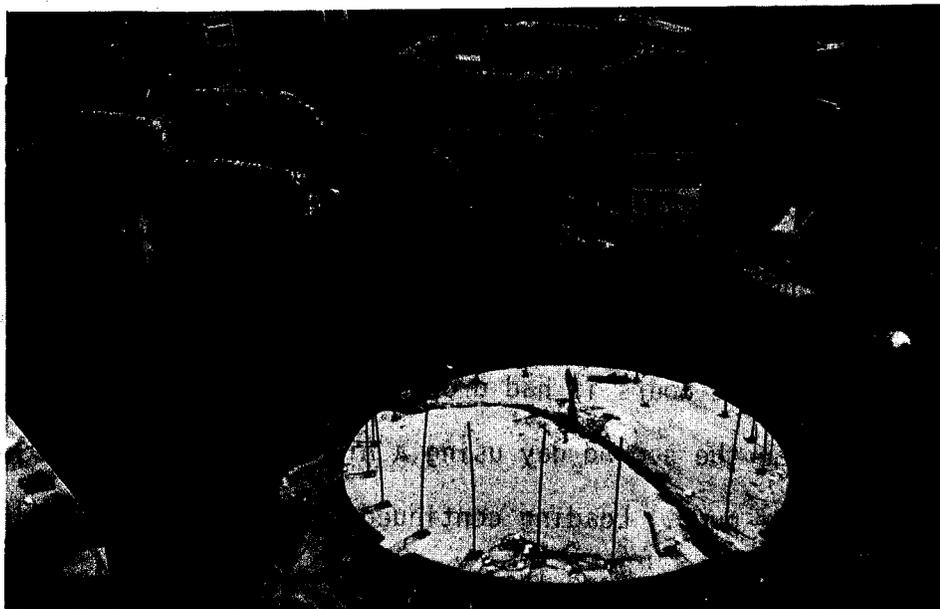


Fig. 5.5 Model Cut into Pieces for Removal from Laboratory



Fig. 5.6 Loading Half of Base onto Truck for Removal from Laboratory

## 6. STRUCTURAL ANALYSIS OF TEST STRUCTURE

### 6.1 Introduction

Primary containment structures of prestressed concrete are generally thick-walled structures. Three dimensional finite elements are often employed for their analysis. On the other hand, prestressed concrete secondary containment structures generally have dimensions which allow them to be classified as thin shells. For such structures the classical Love-Kirchoff assumptions and thin shell theory are adequate for analysis with a consequent reduction in the number of degrees of freedom of the system.

The analysis was carried out with the BOSOR5 program (9,10) developed for the inelastic analysis of axisymmetric shells subjected to axisymmetric loading. In this program the shell wall may be composed of layers of different materials. The structure may be modelled as a series of shell segments with or without eccentric links between them. The thicknesses of a shell segment and its component layers may be varied along the meridian but the number of layers in each segment must remain constant. The properties of the material in each layer are specified by a piecewise linear uniaxial stress-strain curve.

The basic BOSOR5 program was modified as part of this research program to incorporate an elastic-plastic constitutive model to simulate the response of cracked concrete (4,5). This constitutive model attributes a stiffness to the concrete after crack initiation so that average strains produced by a biaxial state of tensile stress can be properly simulated.

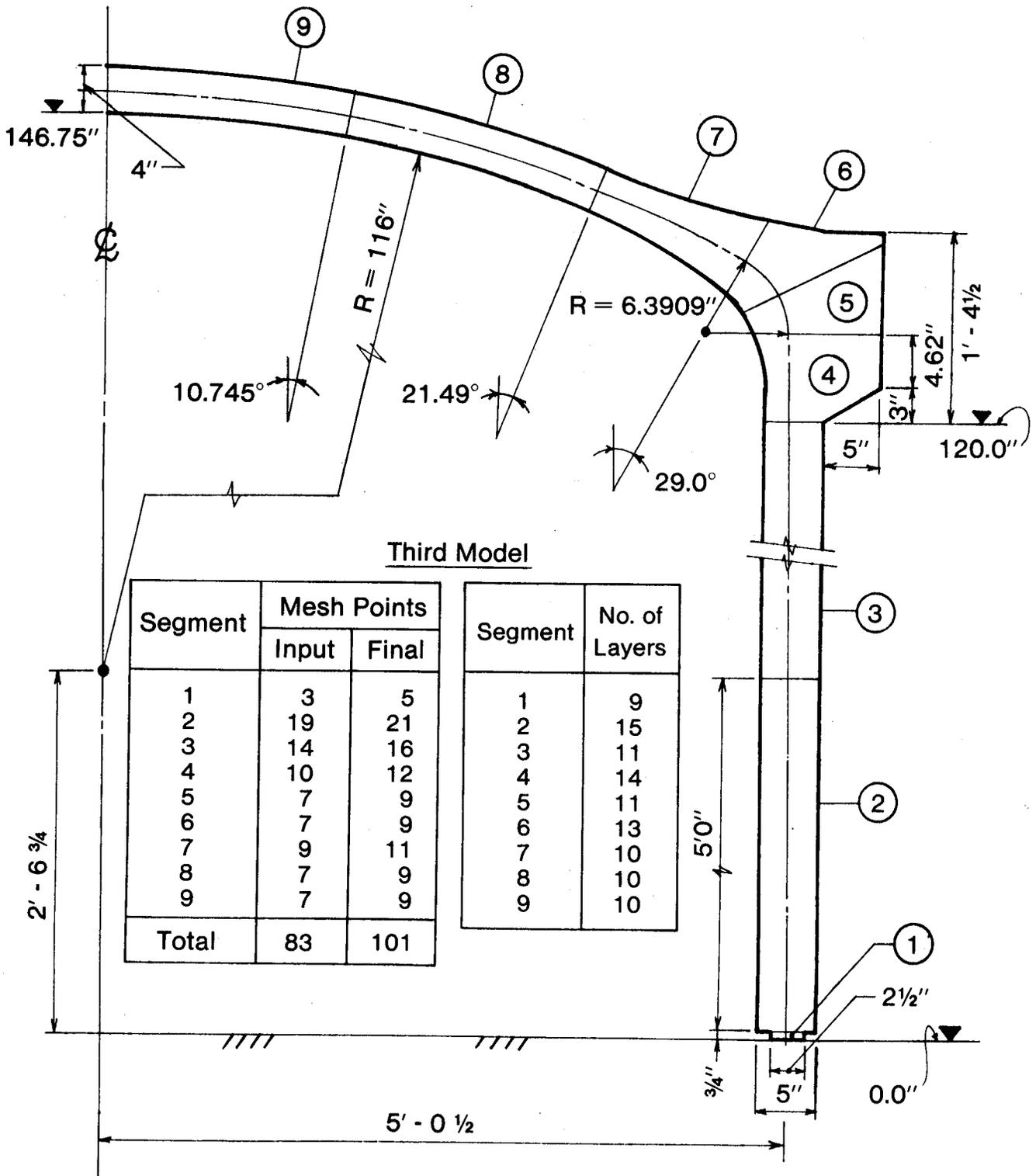


Fig. 6.1 Analytical Model of Test Structure

The analysis of the test structure is described in considerable detail in Ref. 5. Three analytical models were used. The deficiencies in the first led to the second model and eventually to the third. Only the second analytical model is described here.

## 6.2 Analytical Model of Test Structure

The third model of the test structure is shown in Fig. 6.1. The structure was divided into 9 segments as shown. The number of nodes and layers in each segment is also given. The segments were linked by the continuous reference surface shown by the broken line in Fig. 6.1.

Segment 1 represented the "Freyssinet hinge" at the base of the structure. Segment 2 was required because of the extension of the dowels from the base into the wall. Hence the number of layers in Segment 2 was greater than that in the normal cylinder wall, represented by Segment 3. Over the bond development length of the dowels and wall reinforcement, the corresponding layers were tapered to simulate the effectiveness of each bar layer at a given section. This was necessary since very large and unrealistic stress concentrations occurred at the bar cut offs in the first model which did not have tapered bars. The joint between segments 2 and 3 also coincided with the joint between the concrete and the gunite.

In the test structure, the bottom of the ring beam was horizontal. Since the BOSOR5 analysis assumes plane sections, this resulted in stresses acting on the bottom surface of this beam in regions outside the wall. Accordingly the bottom of the ring beam was bevelled in Segment 4 as shown in Fig. 6.1. The ring beam was divided

into three segments to accommodate the changes in layers due to the introduction of the dome prestressing tendons, ring beam tendons and wall tendons. A detail of this region is shown in Fig. 6.2. The initial prestressing forces were assumed to be anchored by bund stresses acting along a short length of tendon rather than by a concentrated anchorage.

In the analytical model the mild steel was assumed elastic-perfectly plastic while the stress-strain curve of the prestressing tendons was described by a piecewise linear approximation to the measured curve. The prestressing effects were simulated as equivalent external loadings and as a result, an artificial origin was introduced in the prestressing steel stress-strain curve so that only the portion above the initial stress level could be developed under applied loads. The inward pressure due to the prestress in the dome varied over the height of the dome to account for the different spacing of the tendons at various points between the crown and the ring beam.

The tensile strength of the concrete was taken as one-half that measured in split tensile tests on 6 in. cylinders. The factor of one-half was reached from a consideration of the relative volumes of a split cylinder test specimen and the critical parts of the test vessel. The concrete in the hinge area was assumed to have an initial curved branch in compression followed by a perfectly plastic region. The concrete in all other parts of the vessel was modelled using stress-strain curves with declining branches in compression and tension as described in Ref. 5.

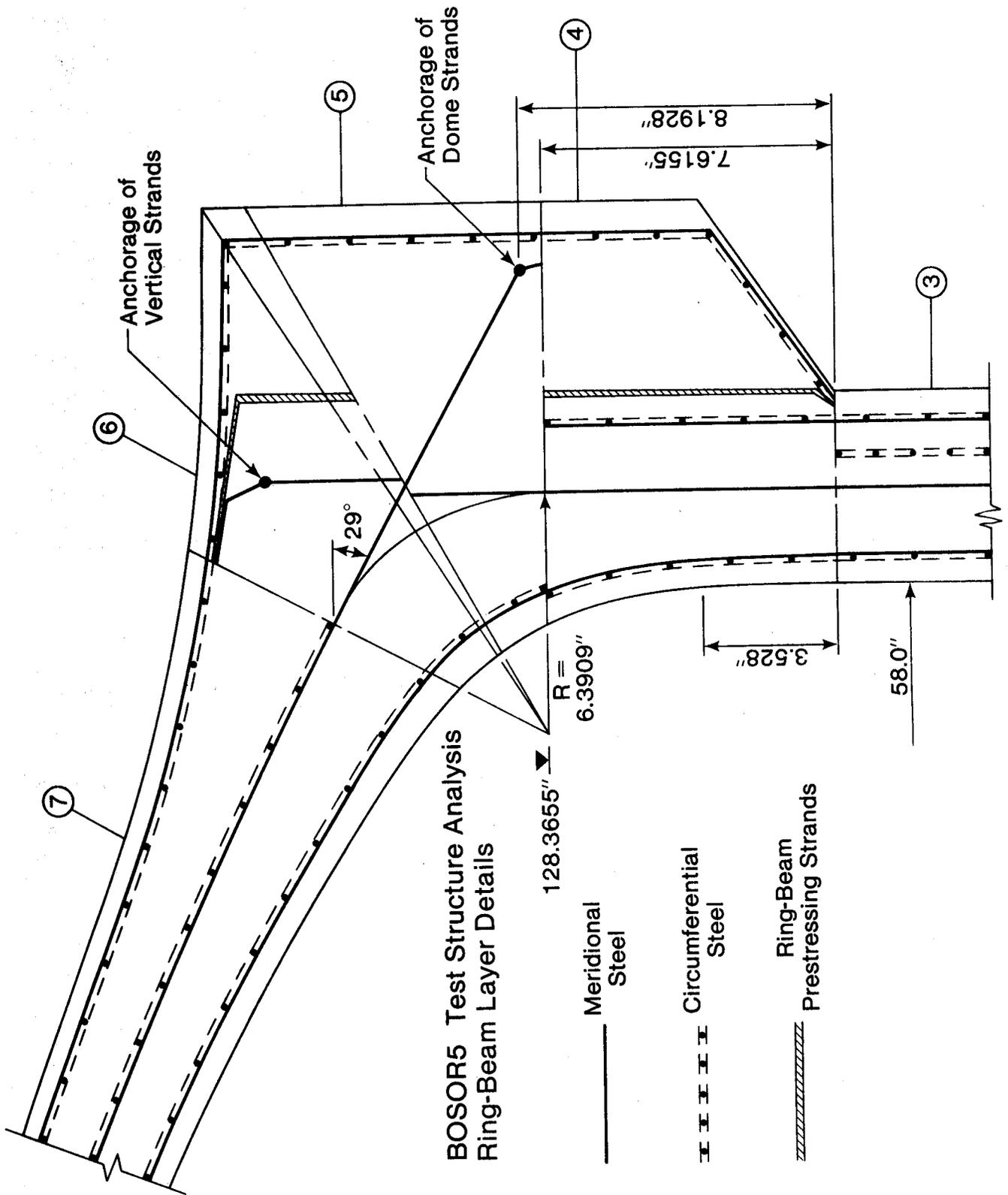


Fig. 6.2 Analytical Model of Ring Beam Region

### 6.3 Summary of Results

The analytical model predicted cracking on the inside surface of the ring beam at an internal pressure of 30 psi and cracking on the exterior surface at 50 psi. Cracking was detected on the inside surface just above the ring beam at 30 psi and isolated cracks on the exterior surface were noted at 40 psi. The analysis indicated yielding of the meridional reinforcing bars at the junction of the dome and ring beam at 95 psi and yielding of the circumferential and meridional bars at the crown of the dome at 109 psi. Yielding of prestressing strands at the ring beam to dome junction and the crown of the dome was predicted at 106 and 110 psi. The analysis became unstable at an internal pressure of 133.75 psi. At this stage strains in the concrete exceeded 0.02 at a number of locations in the structure and the stresses in the tendons were as high as 95 percent of ultimate.

An extrapolation of the analysis suggests first failure of tendons at 138 psi. In the test individual tendon anchorages began to slip at 142 psi causing a significant redistribution of load. The final failure occurred at 1.16 times the projected failure load. The various predictions will be compared to test data in the remainder of this report.

## 7. BEHAVIOR OF TEST STRUCTURE DURING TESTS

### 7.1 Presentation of Results

This chapter will review the response of the test structure as it was loaded to failure. Roughly a dozen graphs and photographs are presented to illustrate these observations. The measured data will be discussed more fully and compared to the analyses in Chapter 8.

As explained in Section 5.4, the entire loading history consisted of seven filling and/or loading sequences. The pressures attained in each of these sequences are listed in Table 5.1. Load sequences A through E were essentially preliminary tests and the results from these tests will not be reported in any detail. The strain and displacement data from tests F and G are given in Appendix A in digital form. Plots of some of this data are given in Appendix B.

It is important to note that in each Test, the zero reading for the electrical gages and Demec gages was taken as the value at the start of that Test with the model full of water with the top vent open to the atmosphere.

### 7.2 Overview of Response

This section will review the behavior of the containment model during the testing program in considerable detail as an introduction to comparisons of measured and computed quantities.

#### 7.2.1 Tests A through E

The first visible signs of cracking in the wall occurred at 40 psi in Test E. In the west wall, horizontal cracks were observed at 25 and 66 in. above the base.

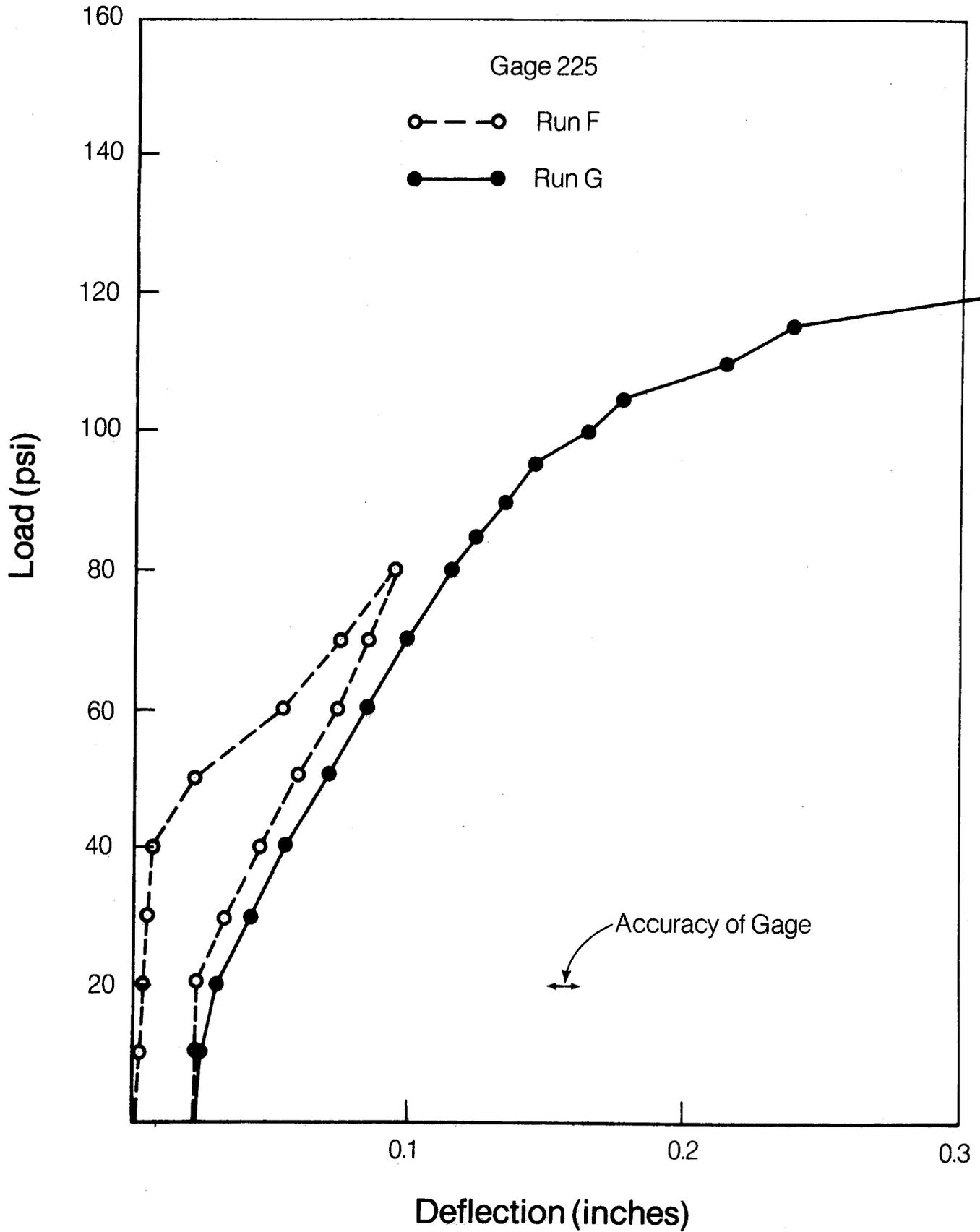


Fig. 7.1 Pressure vs Horizontal Deflection, Line 1, 71.25 in. above Base

A meridional strain gage mounted on the inside surface of the concrete of the dome at 4 ft. radially from the crown of the dome (Gage 183) ceased to operate at an internal pressure of 30 psi suggesting that it had been crossed by a circumferential crack on the inside of the dome. A similar gage located circumferentially at 5 ft. above the base on the inside face of the wall ceased to operate at 40 psi suggesting vertical cracking in this vicinity at this load.

The total residual deflections at midheight of the wall and the crown of the dome were 0.004 in. inward and 0.11 in. upward, respectively, after Tests A through E. Since the specified accuracy of the LVDT's was 0.015 in. it can be assumed that the residual wall deflection was negligible.

#### 7.2.2 Test F

The test structure was loaded to 80 psi pressure in Test F and then unloaded. Load deflection diagrams for Test F and the initial portion of Test G are given in Fig. 7.1 and Fig. 7.2 for points on the wall and dome. In each case the structure was very stiff until the onset of cracking at an internal pressure of 40-50 psi. After unloading there was a residual outward deflection at both points.

Figure 7.3 shows the extent of cracking on the west wall and adjacent buttresses at the end of Test F (80 psi). The crack pattern tends to follow the tendons and reinforcement. In the buttresses cracks occurred on each side of many of the tendons and tendon anchorages. Figure 7.4 shows the cracking in the east quadrant of the dome at the end of Test F. Again there is a strong relationship between the crack pattern and the tendon pattern. Both meridional and circumferential

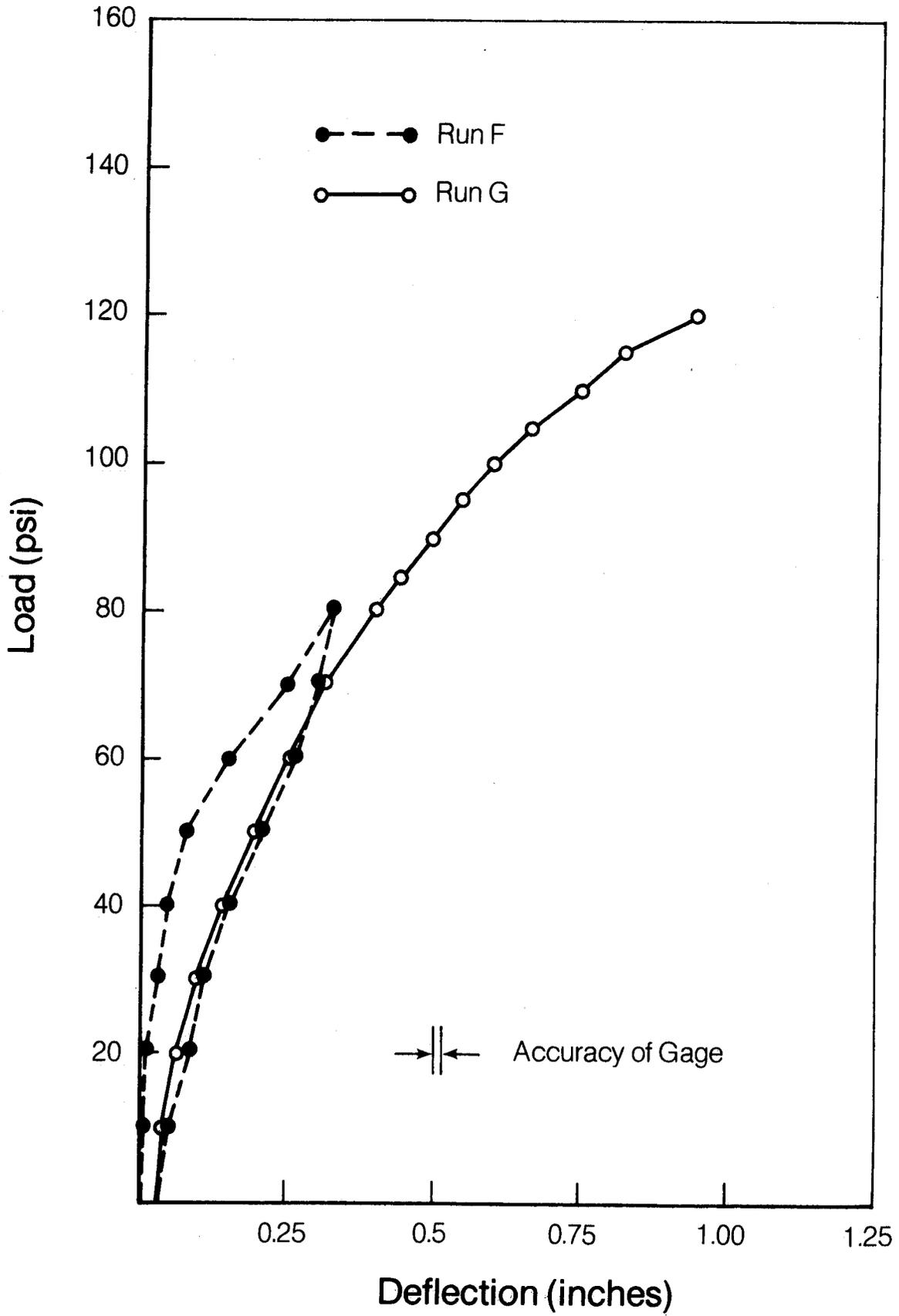


Fig. 7.2 Pressure vs Vertical Deflection at Crown of Dome, Gage 237

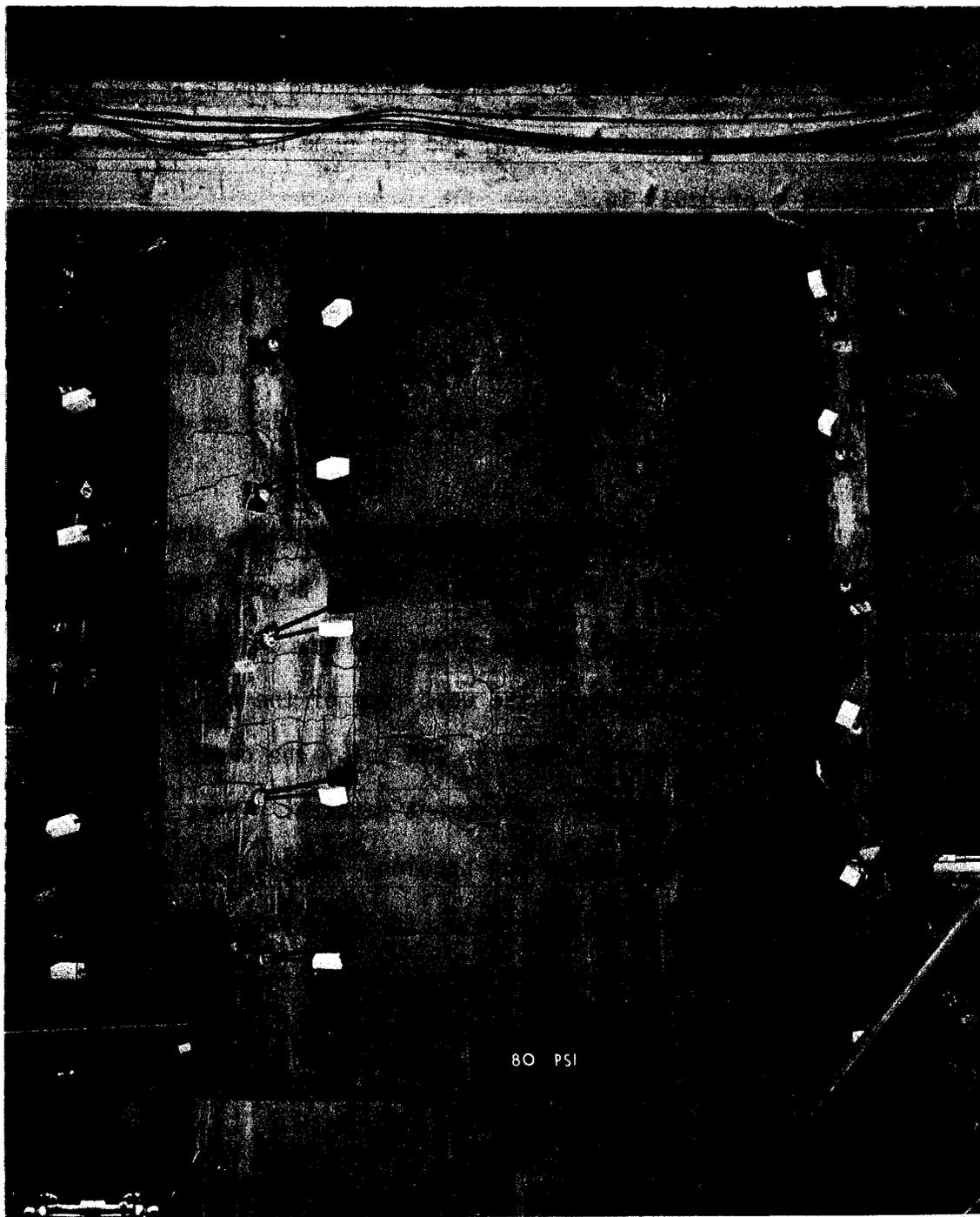


Fig. 7.3 Cracking in West Wall at End of Loading F, 80 psi

cracks were first observed in the dome at 50 psi pressure.

Test F was terminated at 80 psi pressure because the leakage became excessive (Fig. 5.4). After unloading the wall had a residual outward deflection of 0.022 in. and the dome had a residual upward deflection of 0.035 in.

### 7.2.3 Test G

The final test to failure was Test G which took two days to complete. Figure 7.5 shows the complete load deflection response for LVDT 225 near midheight of the wall and LVDT 237 at the crown of the dome.

The cracks formed in Test F reopened as the internal pressures increased. With further loading beyond the 80 psi reached in Test F, these cracks became wider and new cracks developed. Figure 7.6 shows the crack pattern in the west face of the wall and the north-west buttress at a pressure just over 130 psi. The cracks in the wall reflect the tendon and reinforcement pattern. Those in the buttress are strongly related to the tendon spacing. Cracks also continued to develop in the dome approximately parallel to the prestressing tendons except in the outer part of the dome where there were no visible cracks. The crack pattern in the east quadrant of the dome at 130 psi is shown in Fig. 7.7. A meridional crack at the crown of the dome was 1/10 in. wide at this pressure.

Figure 7.8 shows the deflections measured along Line 1 by the LVDT's shown in Fig. 4.2. In each case the LVDT's were mounted perpendicular to the undeformed surface of the structure. Gages 225 and 237 plotted in Fig. 7.1, 7.2 and 7.5 are labelled to show the

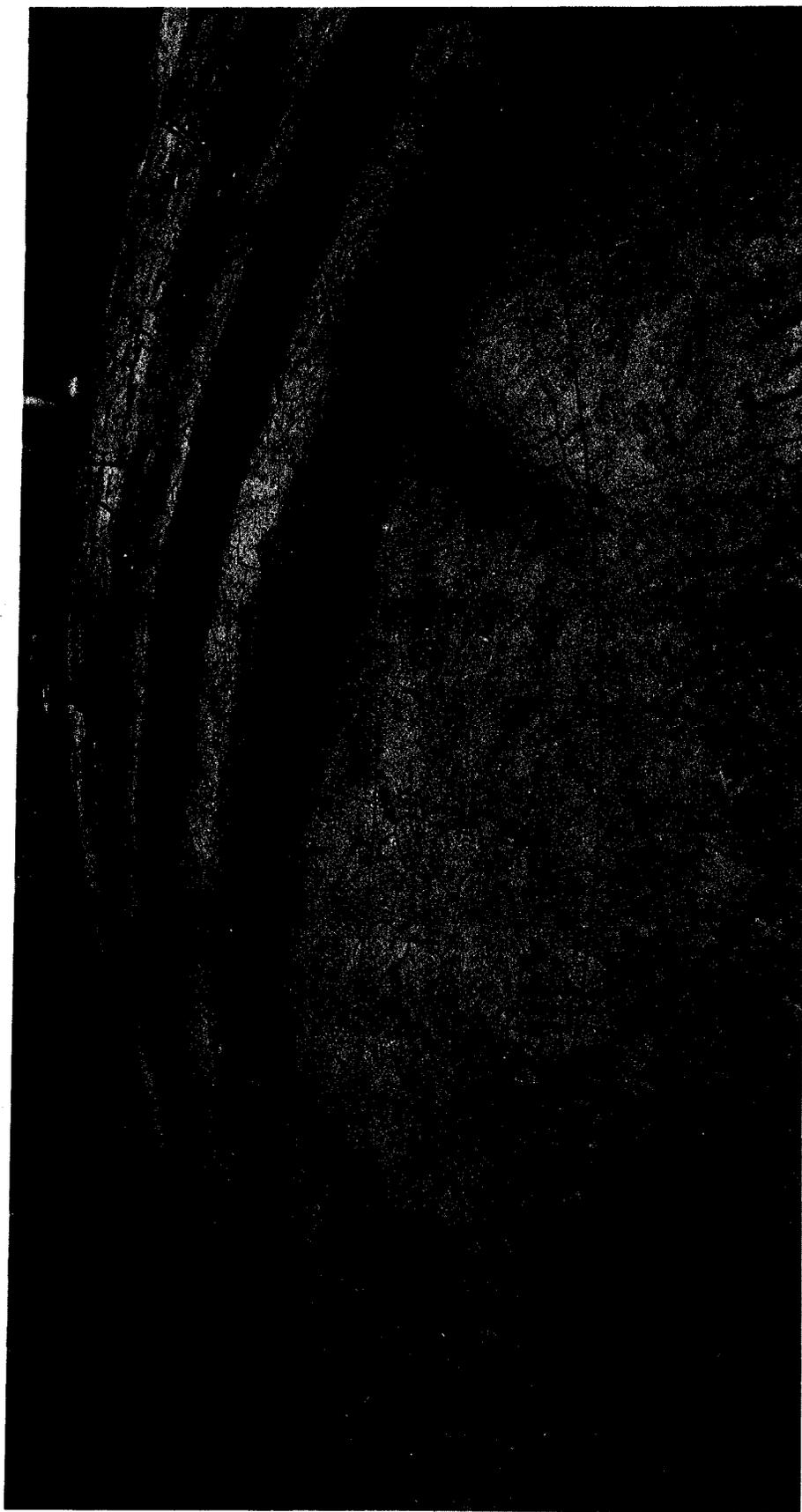


Fig. 7.4 Cracking in East Quadrant of Dome at  
End of Loading F, 80 psi

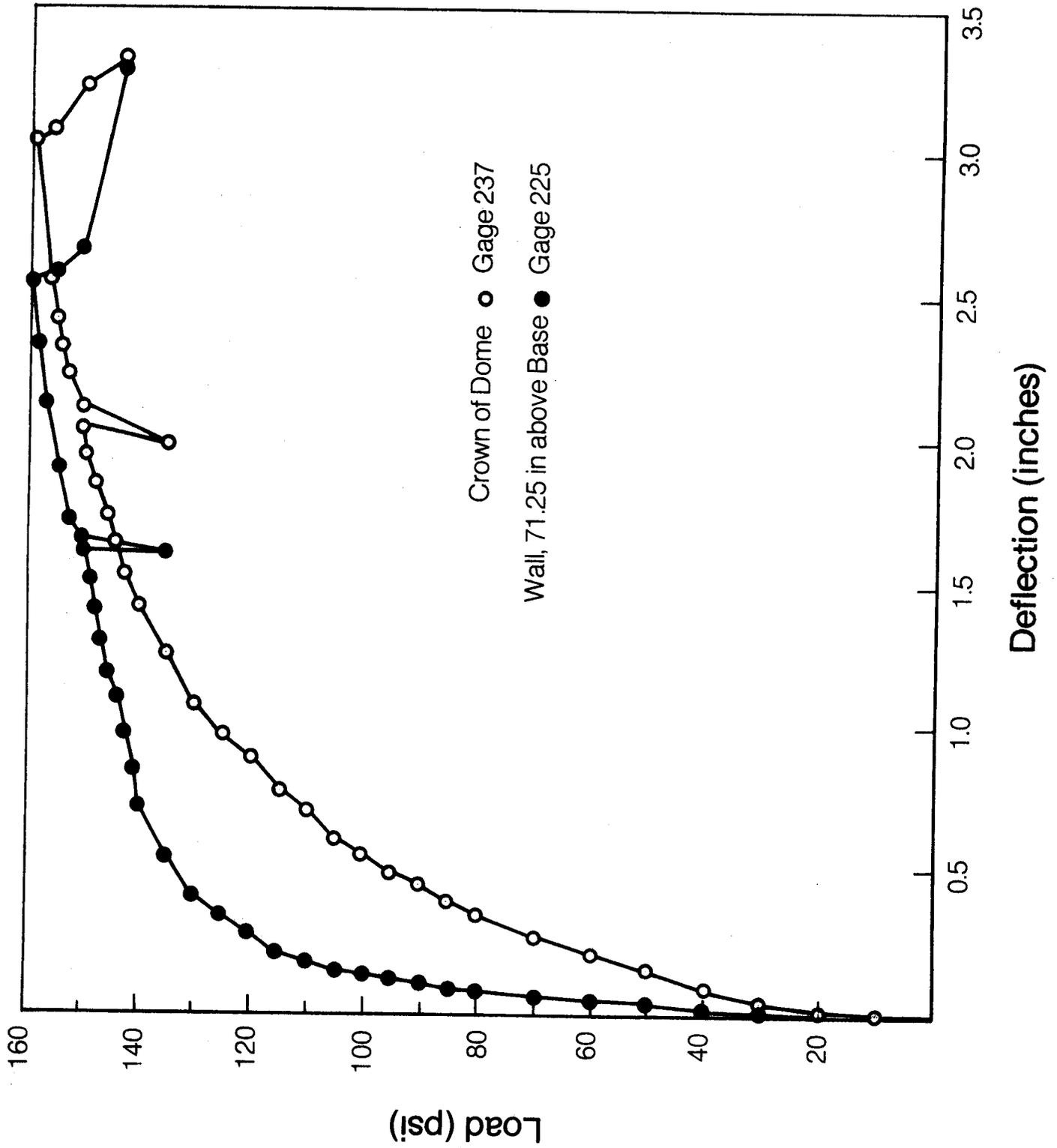


Fig. 7.5 Pressure vs Deflection Loading, G

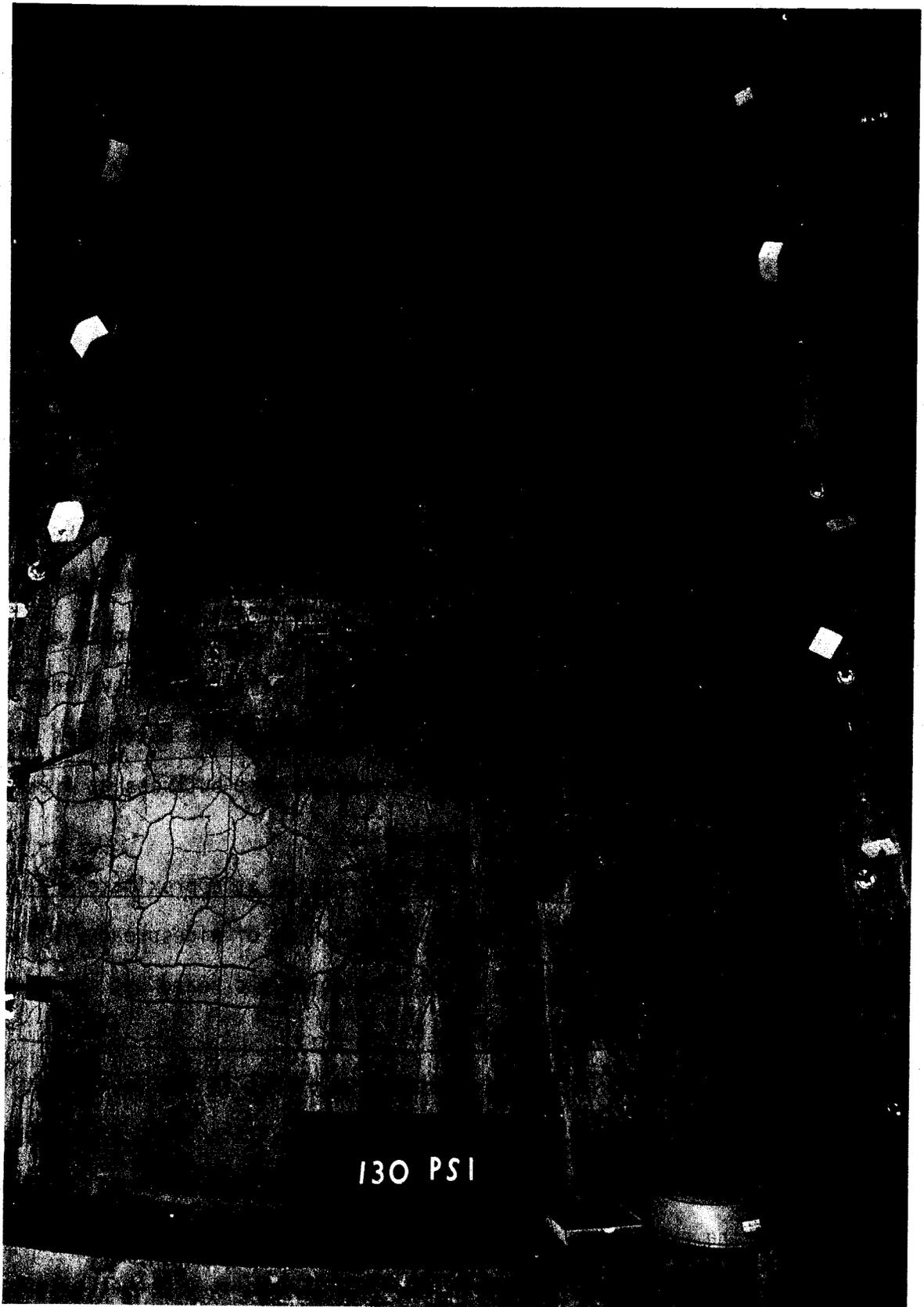


Fig. 7.6 Cracking in West Wall at 130 psi

relationships between the various plots. Gage 225 was the closest deflection gage to the point where failure finally occurred.

At pressures greater than 100 psi a reverse curvature developed at the base of the wall suggesting that the hinge was resisting moments. A similar but less pronounced curvature can be seen at the top of the wall and near the springline of the dome.

Outward bulging of the cylinder walls was noticeable at pressures above 80 psi and increased markedly at approximately 110 psi. Deflections measured on Line 4 (Fig. 4.1) are plotted in Fig. 7.9. Gage 223 is labelled in Figs. 7.10 and 7.11 to help orient these two and the locations of the buttresses are shown. Again the deflections were measured radially. It can be seen that the buttresses appeared to bulge from 40 to 79 percent as much as the other parts of the cylinder implying that the effects of the flexural stiffnesses of the buttresses were small. The degree of bulging of the north-west buttress at a pressure of 135 psi can be seen in Fig. 7.10.

The marked increase in deformation at approximately 110 psi (Fig. 7.5) was associated with the beginning of widespread yielding of the reinforcement. At 115 psi a loud noise was heard but there was no visible evidence of what caused it.

Between 140 and 142.5 psi the cracks in the south-west buttress adjacent to the anchorages for the 7th and 9th circumferential tendons from the bottom of the vessel became more prominent. Figure 7.11 shows the extent of this cracking. The anchorages of the 5th, 7th, 9th and 11th tendons can be seen. At the 7th, and to a lesser extent, the 5th anchorages, the anchor plates were pulled into the face of the



Fig. 7.7 Cracking in East Quadrant of Dome at 130 psi

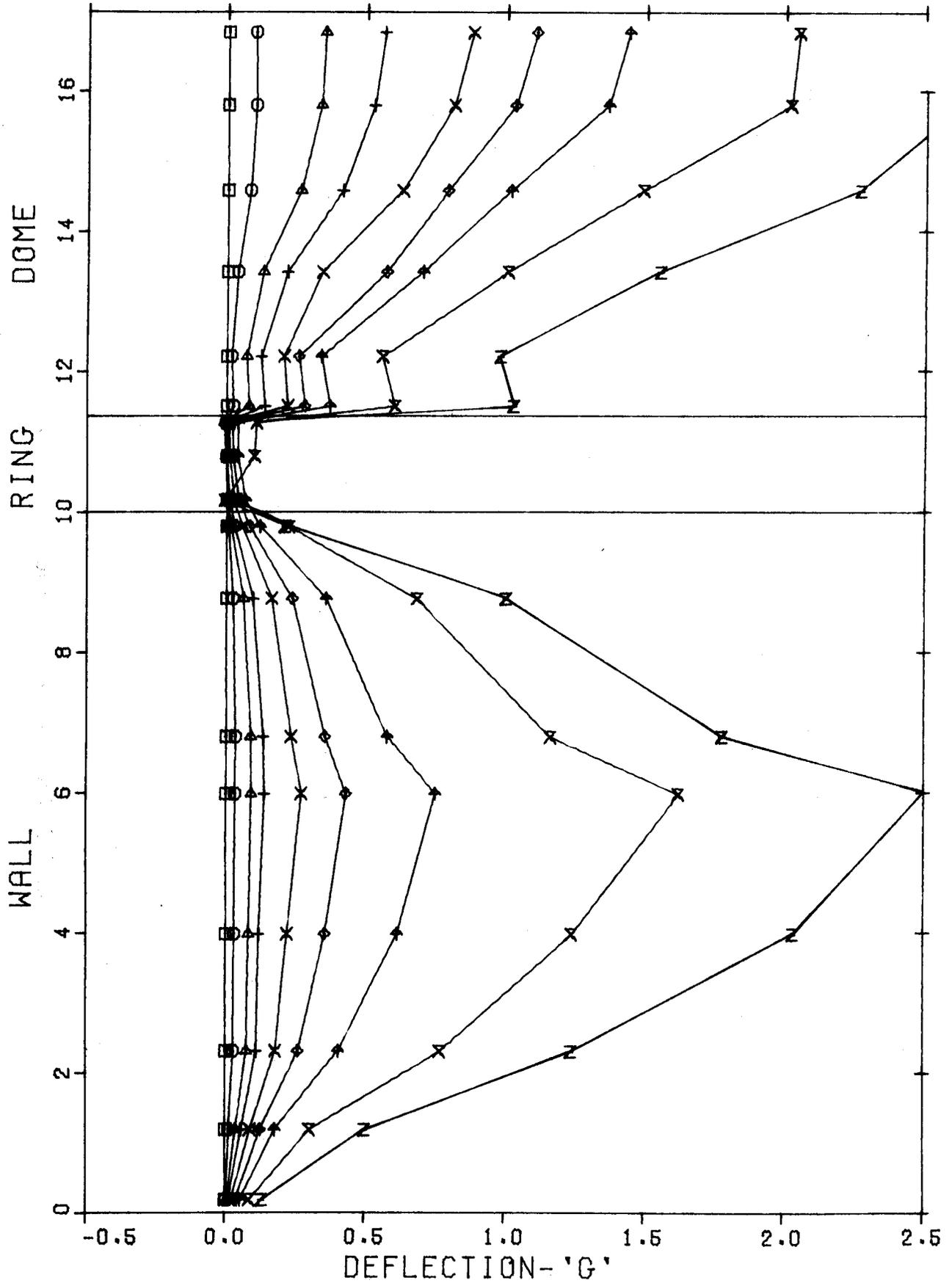


Fig. 7.8 Deflections along Line 1

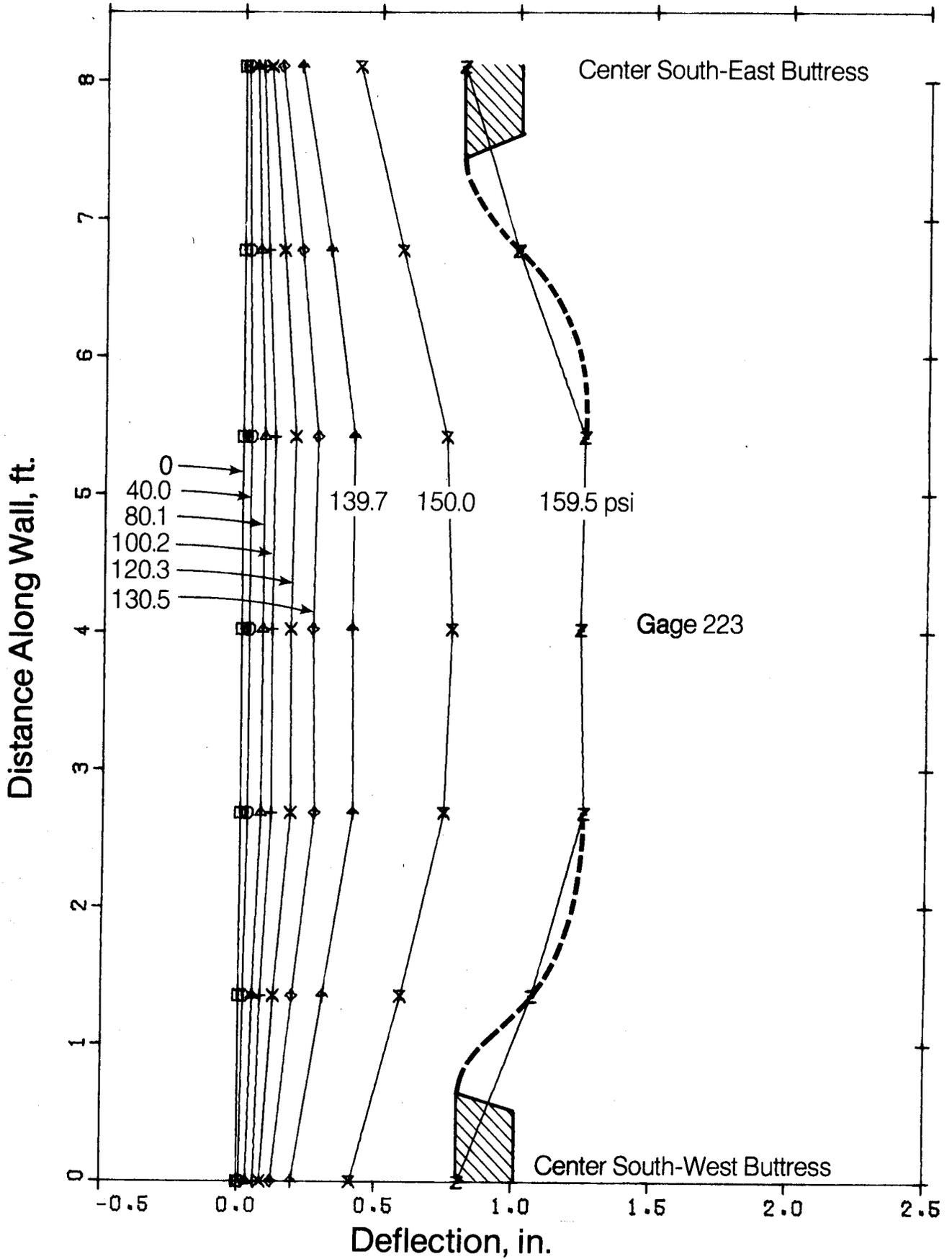


Fig. 7.9 Deflections along Line 4

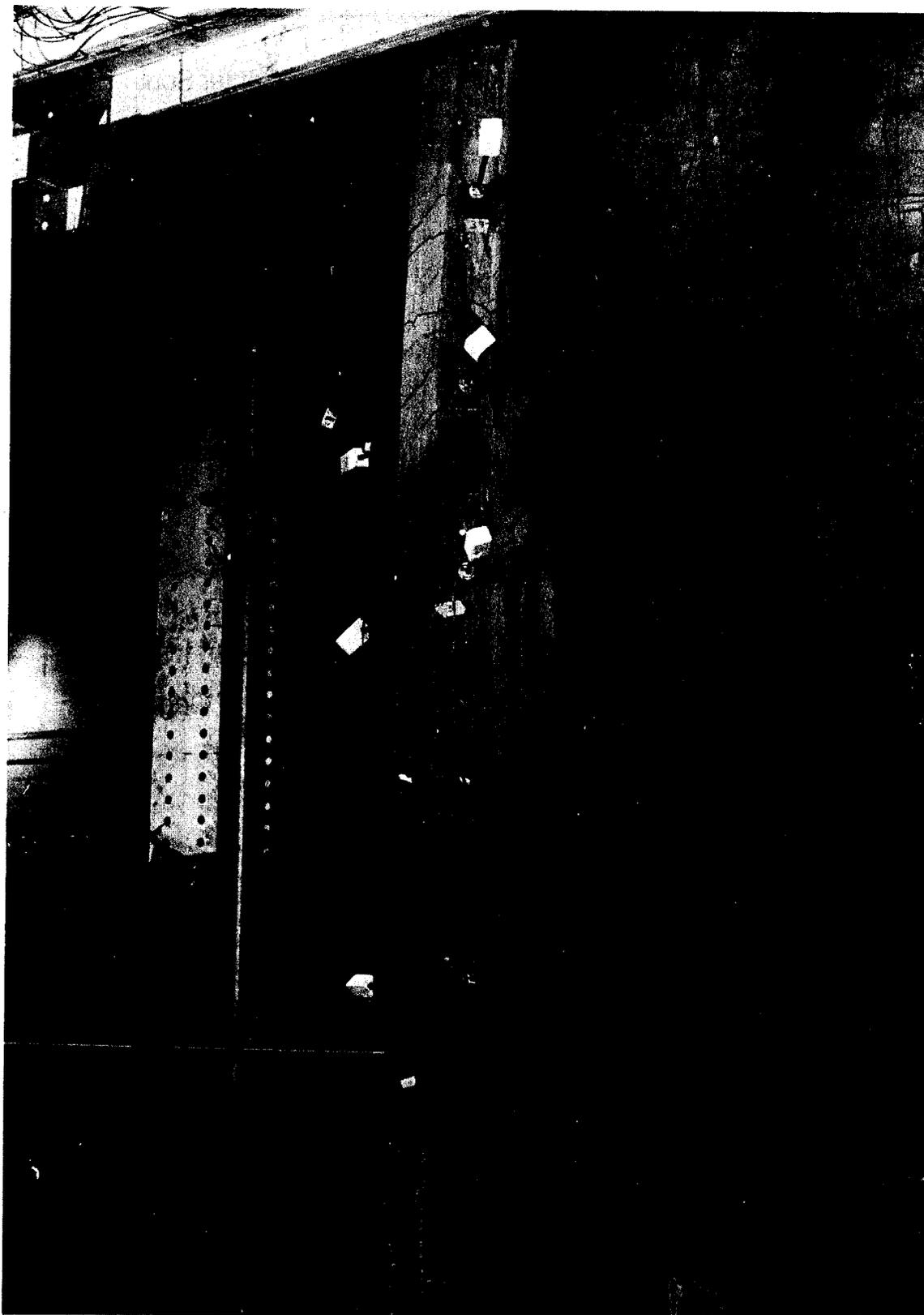


Fig. 7.10 Outward Bulging of Northwest Buttress at 135 psi

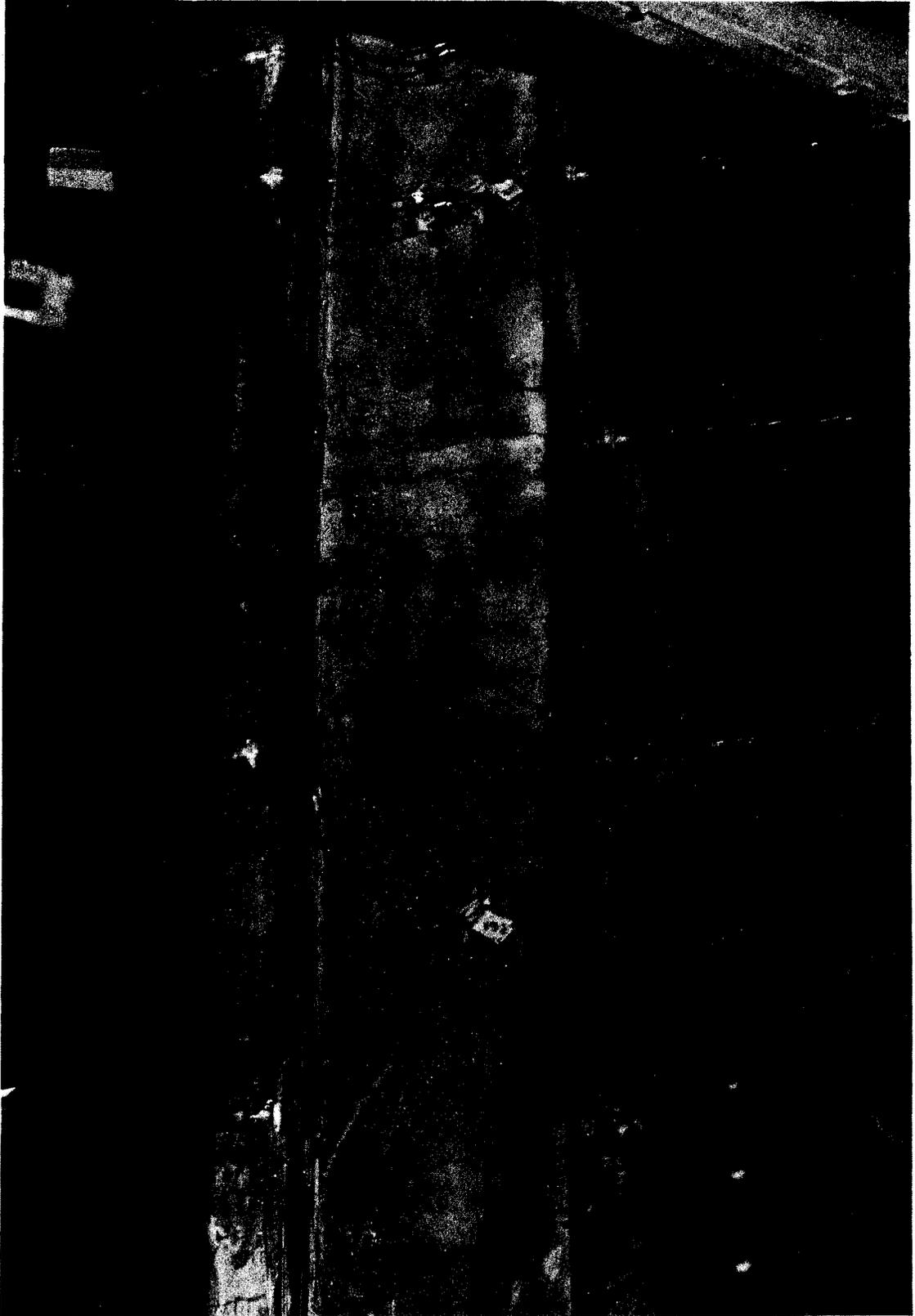


Fig. 7.11 Cracking at Tendon Anchorages in Southwest Buttress at 135 psi

buttresses. The effect of this on the stress in the 5th tendon from the bottom in the south wall can be seen from the plot of internal pressure vs stress in this tendon given in Fig. 7.12. The loss of stress in this tendon overloaded the adjacent tendons and the vertical tendons. The south quadrant appeared to bulge more than the other faces at this stage.

At pressures of 142 psi and 144 psi the top anchorages slipped on the first tendons clockwise from the south-west and north-east buttresses, respectively. At 145 psi the anchorage of a ring beam tendon slipped at the north-east buttress. The tendon in question was the top tendon in the ring beam on the east and south sides. In each instance a small drop in pressure was observed momentarily in the electronic pressure transducer but the load appeared to redistribute quickly and the slip of these anchorages did not appear to influence behavior. It was noted that none of the anchorage slips occurred in the vicinity of final failure. After unloading, gaps of 0.1 to 0.25 in. were observed between the anchor chucks and the anchor plates.

Between 140 and 150 psi the volume of the structure increased so rapidly that hand pumping was difficult. Accordingly, the test was stopped at 150 psi at 12:30 A.M. and continued the next day using a mechanical pump.

The break in the load-deflection curves in Fig. 7.5 corresponding to a drop in load from 144.5 psi to 135 psi and subsequent reloading indicates the amount of deflection occurring after the first day of load test G. The pressure was intentionally reduced to 137 psi when

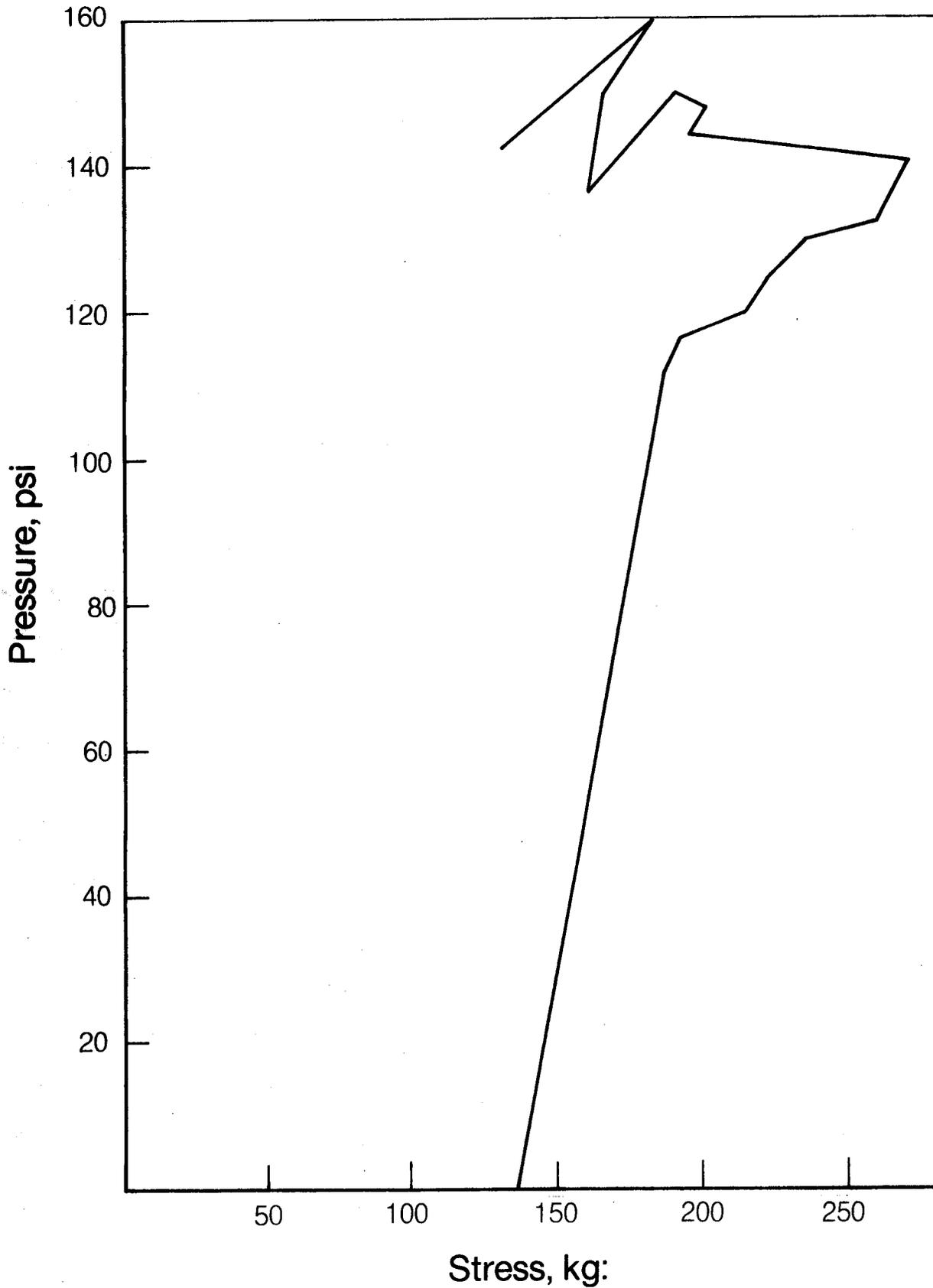


Fig. 7.12 Stress Measured in the Fifth Circumferential Tendon from the Bottom of the South Wall

the structure overnight. When loading was resumed after an interval of 14 hours, the pressure had dropped only 2 psi. The gap between the two points after reloading to the previous pressure is an indication of the creep that occurred during that period under a pressure of approximately 135 psi. Thus it can be seen that although the test structure was cracked extensively and the internal pressure was over 85% of failure pressure, it was still able to maintain this pressure over a significant time period with very little additional deformation. This was not altogether unexpected as the structure was essentially being held together by the prestressing tendons.

When the load reached 153.3 psi the anchorages slipped on three more vertical strands. One of these was in the south-east buttress. The south side continued to bulge more than the other sides and small pieces of concrete began to fall out of the cylinder wall. The cracking in the buttresses became more pronounced, particularly in the south-west buttress.

Failure of the test structure occurred when the 7th horizontal tendon from the base of the wall and one vertical tendon fractured at midheight near the south-east buttress permitting the liner to rupture. Immediately prior to failure the concrete cover over one of the horizontal tendon anchorages at this buttress was observed to pop outwards followed by rapid opening of the cracks in the immediate vicinity and spalling of the concrete. The failure region showing this spalling and the ruptured horizontal tendon is shown in Fig. 7.13.

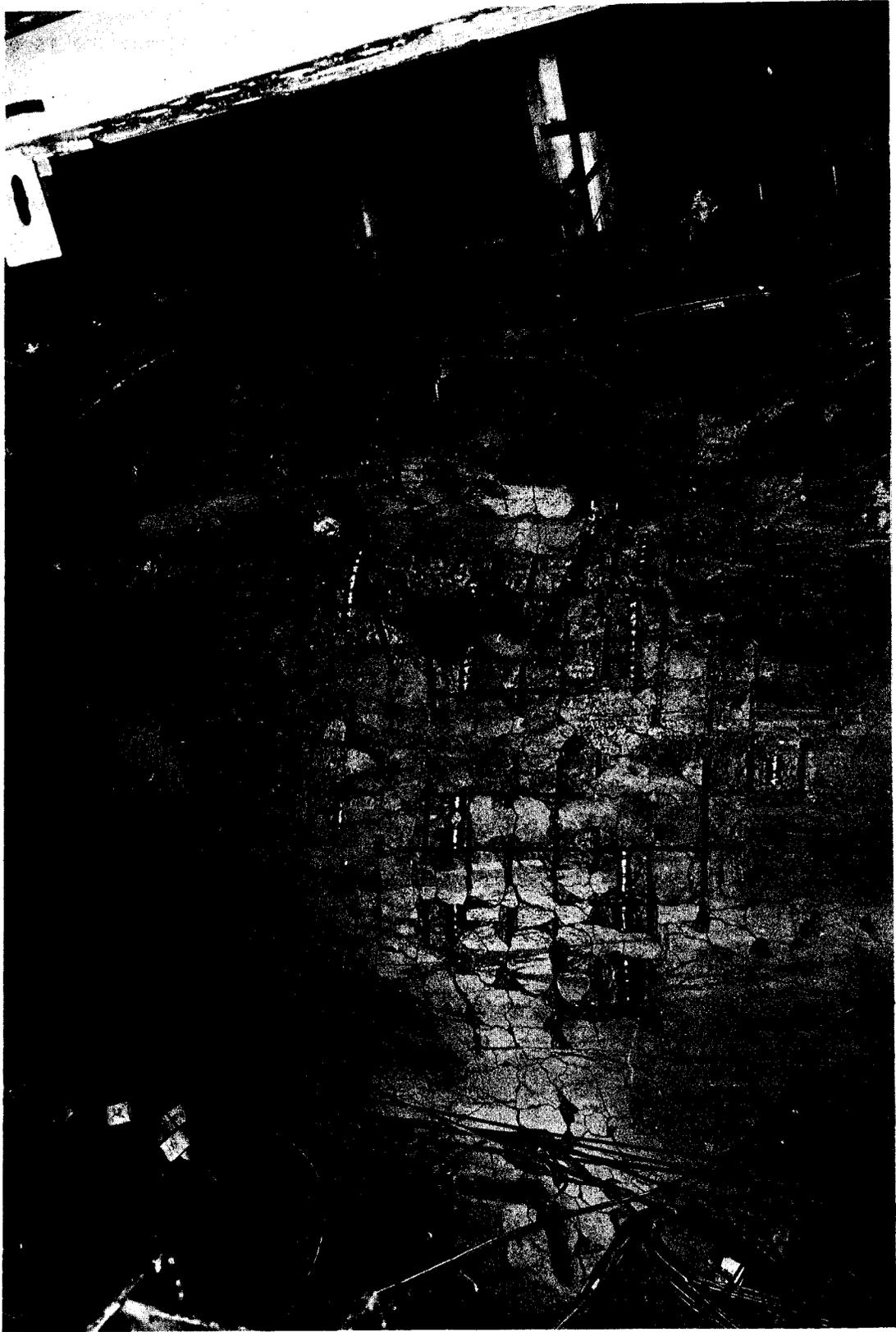


Fig. 7.13 South Wall and South East Buttress after Failure

The degree of ductility inherent in the structure is evident from Fig. 7.5 in which the outward deflection of the wall at midheight (channel 225) and the upward deflection near the crown of the dome (channel 237) are shown. The measured deflections at these points immediately prior to the apparent drop in load associated with failure are 2.5 in. and 3.0 in. respectively.

## 8. DISCUSSION OF TEST RESULTS

### 8.1 Deflections

#### 8.1.1 Measured Deflections

Pressure-deflection curves were given in Fig. 7.1, 7.2 and 7.5 based on LVDT's mounted 5.94 ft. above the base on line 1 (Gage 225) and at the crown of the dome (Gage 237). In plotting Fig. 7.1 and 7.2 it was assumed that all of the residual deformation existing at the end of Test F (0.022 and 0.035 in., respectively) was present at the state of Test G. It is likely that some of this was recovered due to creep under the prestress during the 20 day period between the two loading cycles. Fig. 7.5 to 7.12 and all future figures in this report consider only the deformations, etc. from Test G.

Figures 7.8 and 7.9 show the deflections measured along a meridian (Line 1) and a circumferential line (Line 4). These graphs were discussed in section 7.2.3.

Figure 8.1 shows the horizontal deflections computed from the curvature meter readings at the bottom of the wall adjacent to Line 1 (Fig. 4.11 and 4.12). These horizontal deflections compare well with those measured with the LVDT gages except that the LVDT's suggest that the base may have moved outwards. The hinge region is discussed in Section 8.6. A shift of this sort could not be detected by the curvature meters.

The slope of the wall at the first curvature meter rod (5 in. above the base) is plotted against pressure in Fig. 8.2. This slope results from curvature in the wall itself plus rotation of the hinge, the latter being predominant. The slope of the wall started to increase

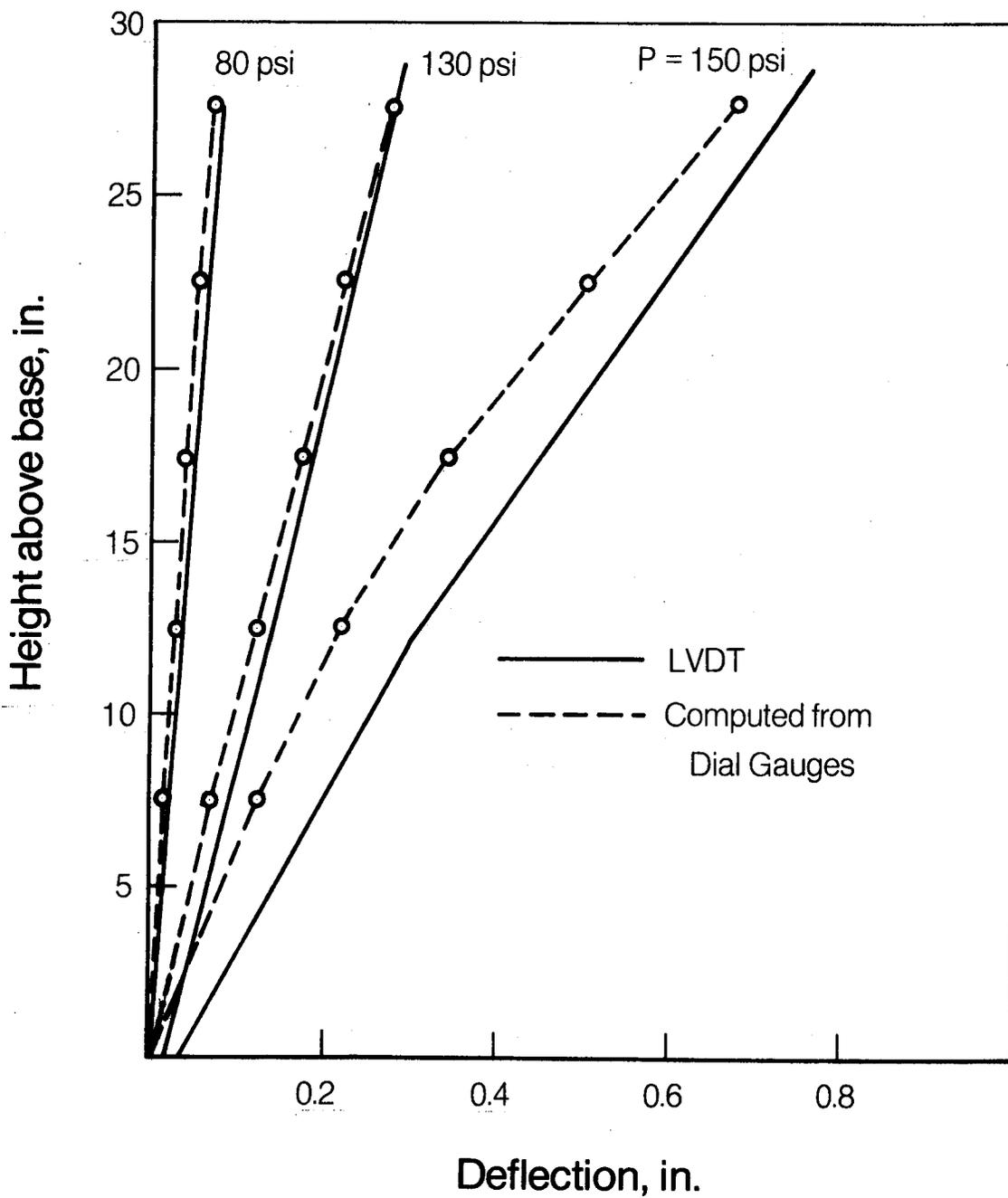


Fig. 8.1 Horizontal Deflections of Base of Wall from Curvature Meters

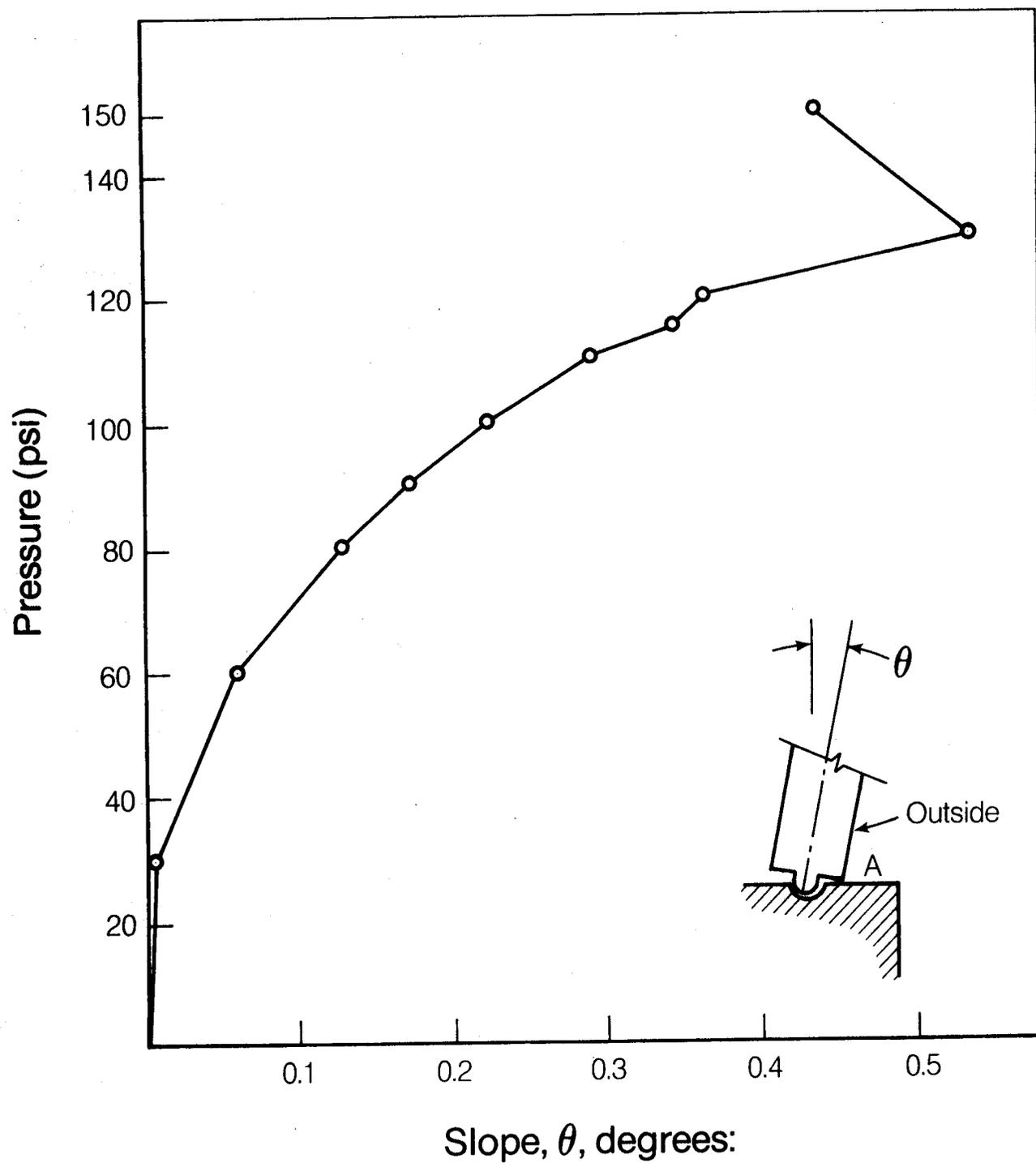


Fig. 8.2 Slope of Wall at 5 in. above Base of Wall from Curvature Meters

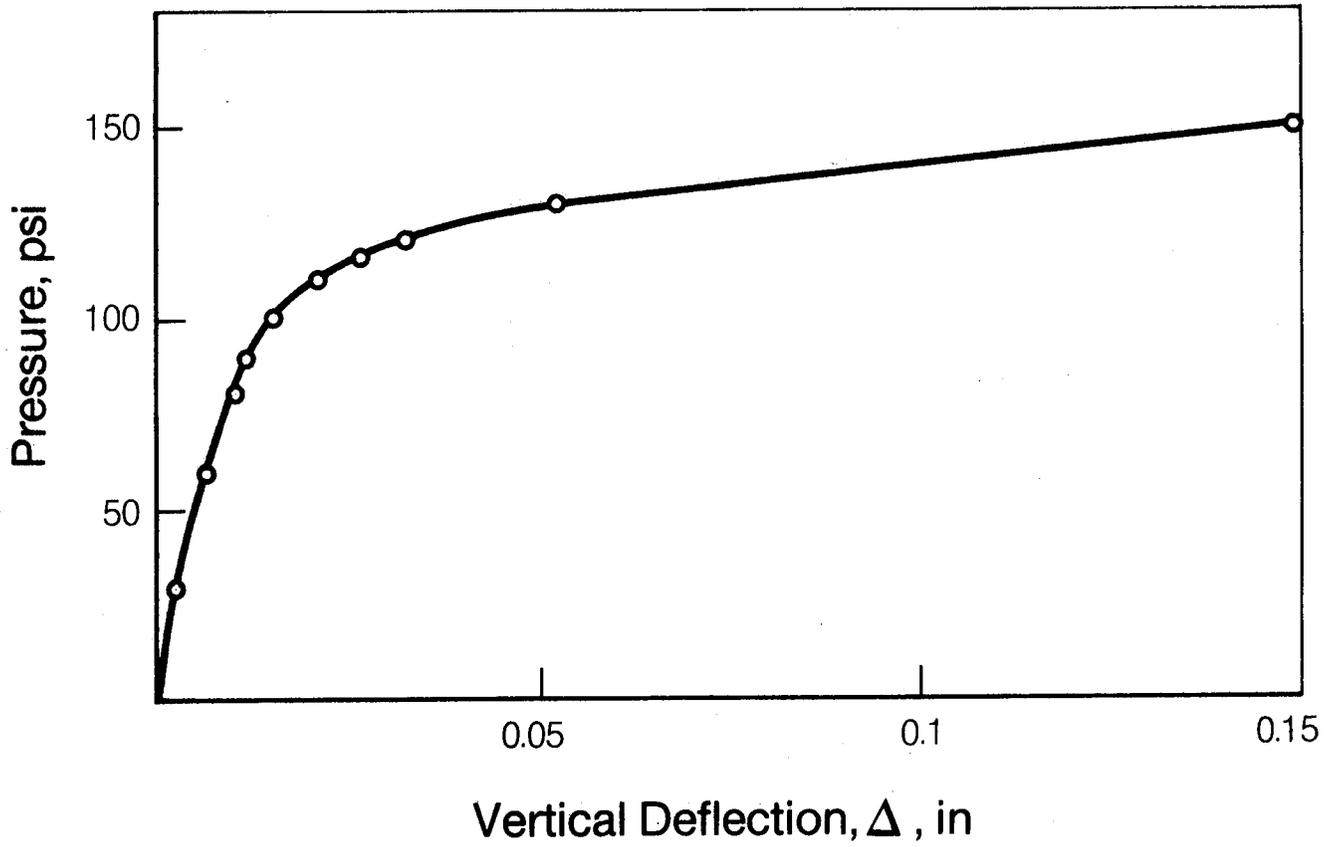


Fig. 8.3 Vertical Deflection of Midplane of Wall  
from Curvature Meters

above 30 psi indicating that the internal pressure had offset the prestress at the hinge allowing the hinge to rotate. At pressures greater than 130 psi the slope began to decrease indicating that the corner of the wall at A was jamming, creating a negative moment on the base of the wall.

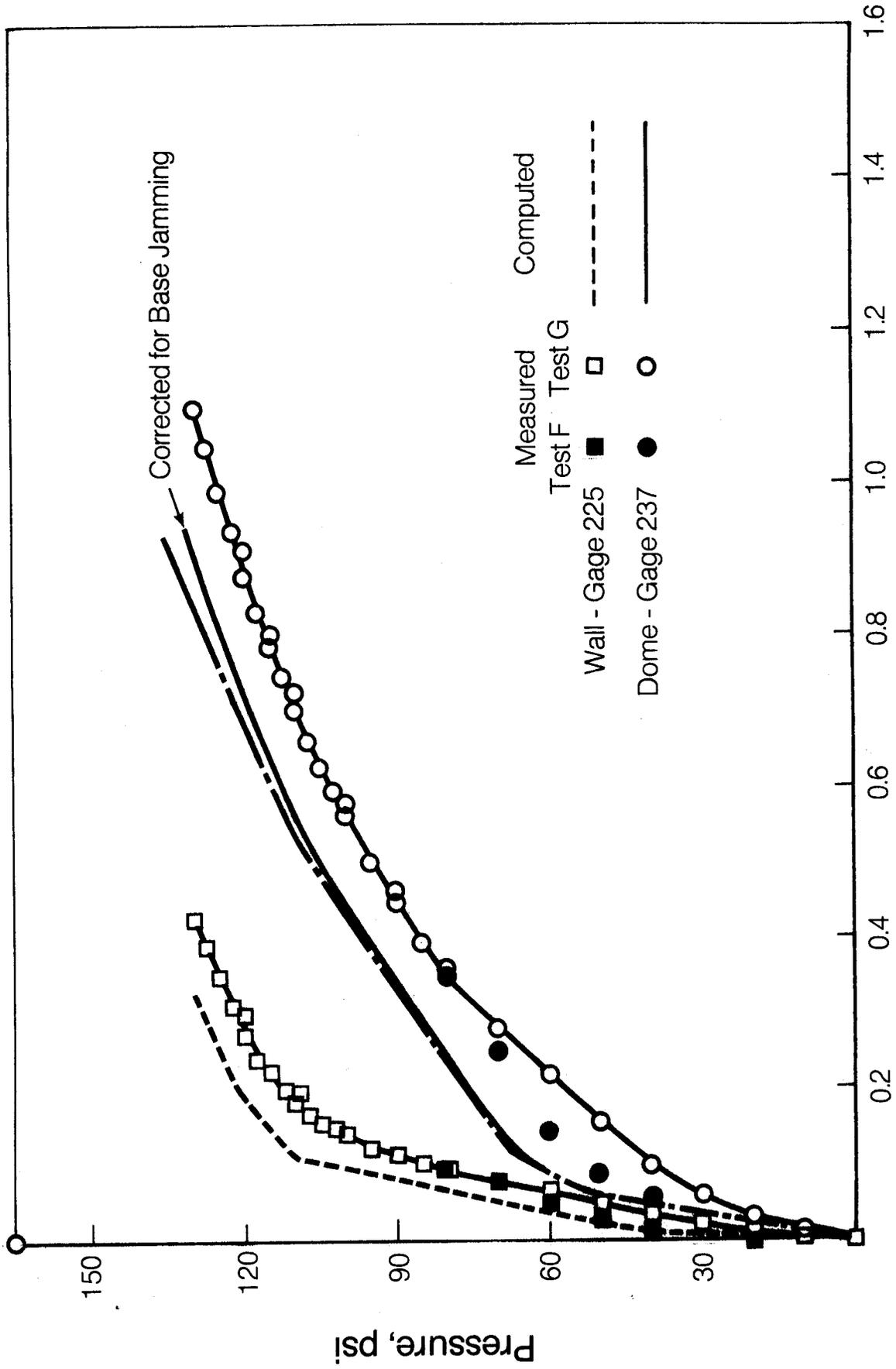
The curvature meters also indicated an upward deflection of the center of the wall as shown in Fig. 8.3 for a point 25 in. above the base on Line 1. The start of significant upward movement coincides with the onset of inelastic action in the wall. The upward movement resulted from elongation of the reinforcement crossing the hinge and a shift of the center of rotation from the center of the hinge to the outer edge of the wall or buttress when these edges jammed against the base. Two thirds of the upward movement occurred after this jamming occurred (as indicated by the onset of negative curvature at the base of the wall).

The vertical deflection measured by Gage 232 (Fig. 7.8) includes components due to lengthening of the wall, a slight rotation of the ring beam and the upward movement of the center of the wall shown in Fig. 8.3. These vertical deflections caused an upward movement of the entire dome which is part of the measured deflections in Gages 232 to 237.

#### 8.1.2 Computed Deflections

The measured and computed deflections along Line 1 are compared in Fig. 8.4 for a pressure of 120 psi. The analysis appears to underestimate the radial deflection of the cylinder and the vertical deflections near the crown. A part of the error in the dome results from the effect plotted in Fig. 8.3 as shown by the dashed line in Fig. 8.4.





Deflection, in.

Fig. 8.5 Measured and Computed Deflections for Wall and Dome, Line 1

Two other reasons can be cited for the errors. Gage 225 was mounted very close to the section that eventually failed. As shown in Fig. 8.4 and more emphatically in Fig. 7.8 the deflection at this point was larger than at other points in the wall and continued to grow more rapidly than at other points. The hole and resulting slight decrease in continuity at the top of the dome may have accounted for a small part of the error at the crown.

## 8.2 Cracking

### 8.2.1 Observed Cracking

The first crack developed in Test E at a pressure of 30 psi. This was a circumferential crack on the inside face of the dome at 4 ft. from the center of the dome. This crack was detected by the failure of a 4 in. gage length electrical resistance strain gage mounted meridionally along line 1 on the inside face of the dome. The location of this crack coincided with the termination of the No. 4 ring beam "stirrups" (Fig. 2.11). At this location the inside of the dome was in tension and the outside in compression.

At 40 psi pressure in Test E, vertical cracking was detected on the inside of the wall at 4 ft. above the base again by the failure of a gage on the surface of the concrete. The first visible signs of cracking occurred in the wall at 40 psi in Test E. In the west wall, horizontal cracks were observed at 66 in. above the base corresponding approximately to the joint between the gunite and the concrete (Fig. 2.12) and at 25 in. above the base in the region where dowels were being cut off (Fig. 2.8). Two cracks were observed on the north side at the same pressure (40 psi). These closed on unloading and did not reopen.

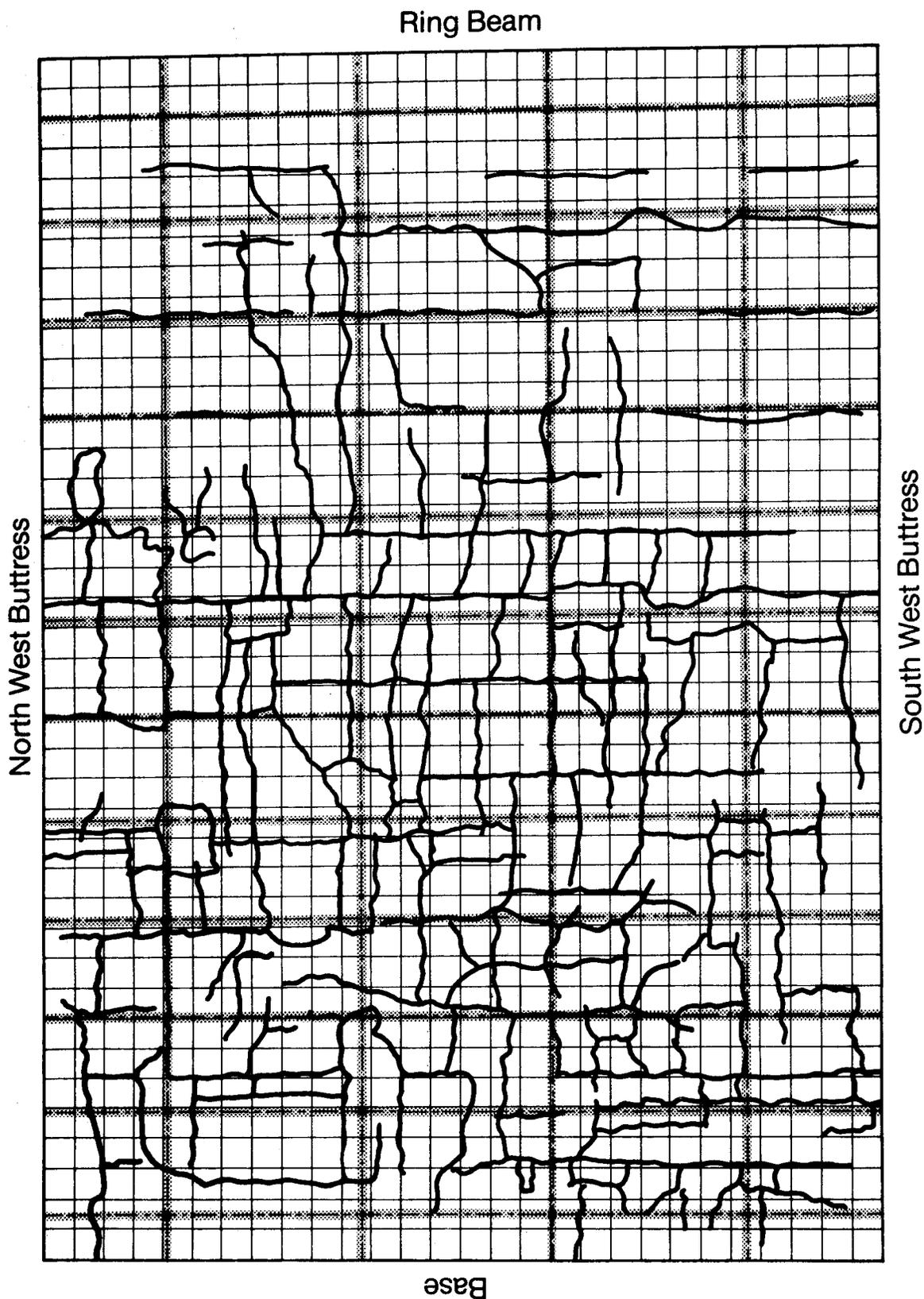


Fig. 8.6 Developed View of West Wall showing Cracks at end of Test F, 80 psi

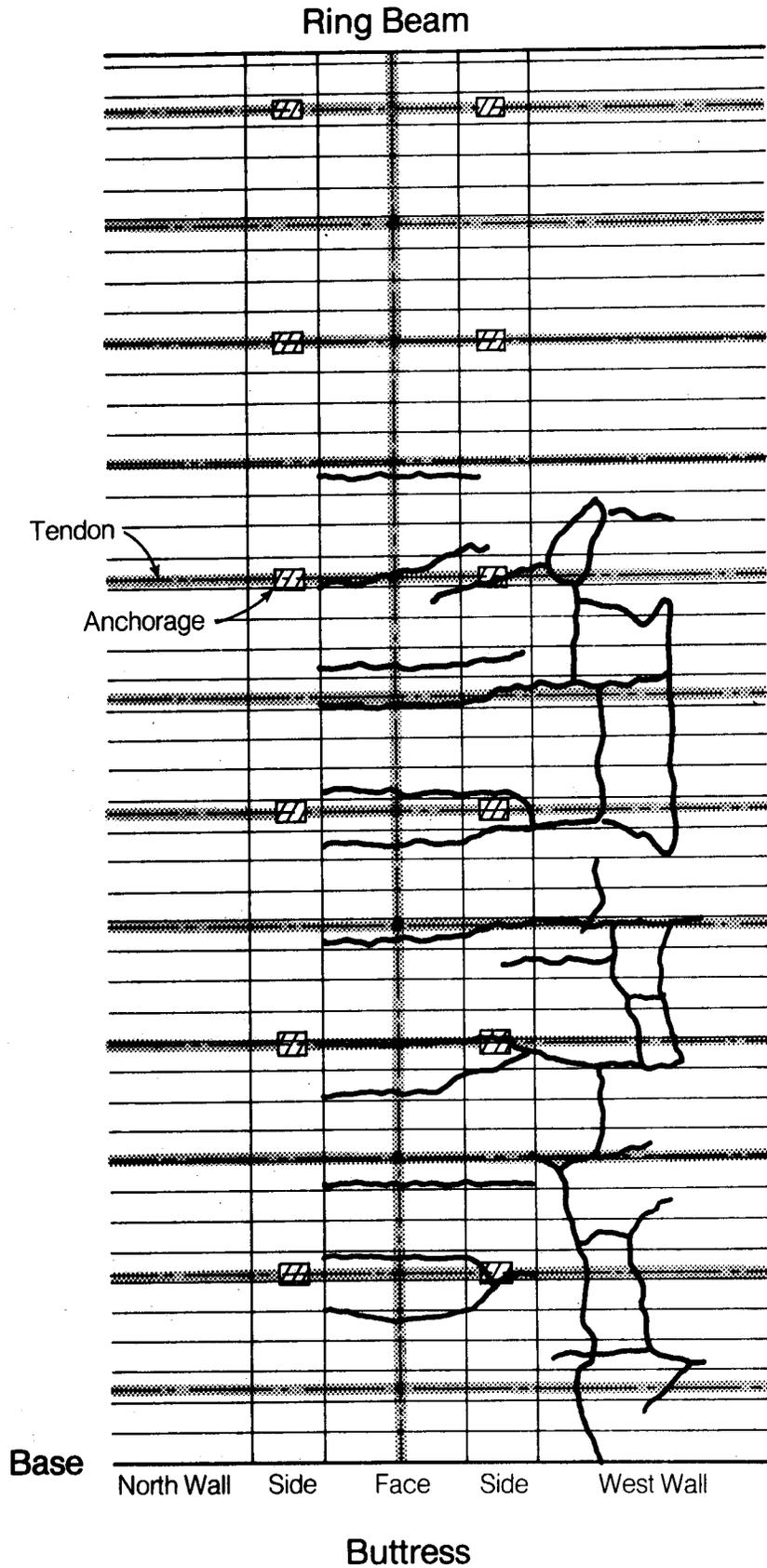


Fig. 8.7 Developed View of North West Buttruss showing Cracks at End of Test F, 80 psi

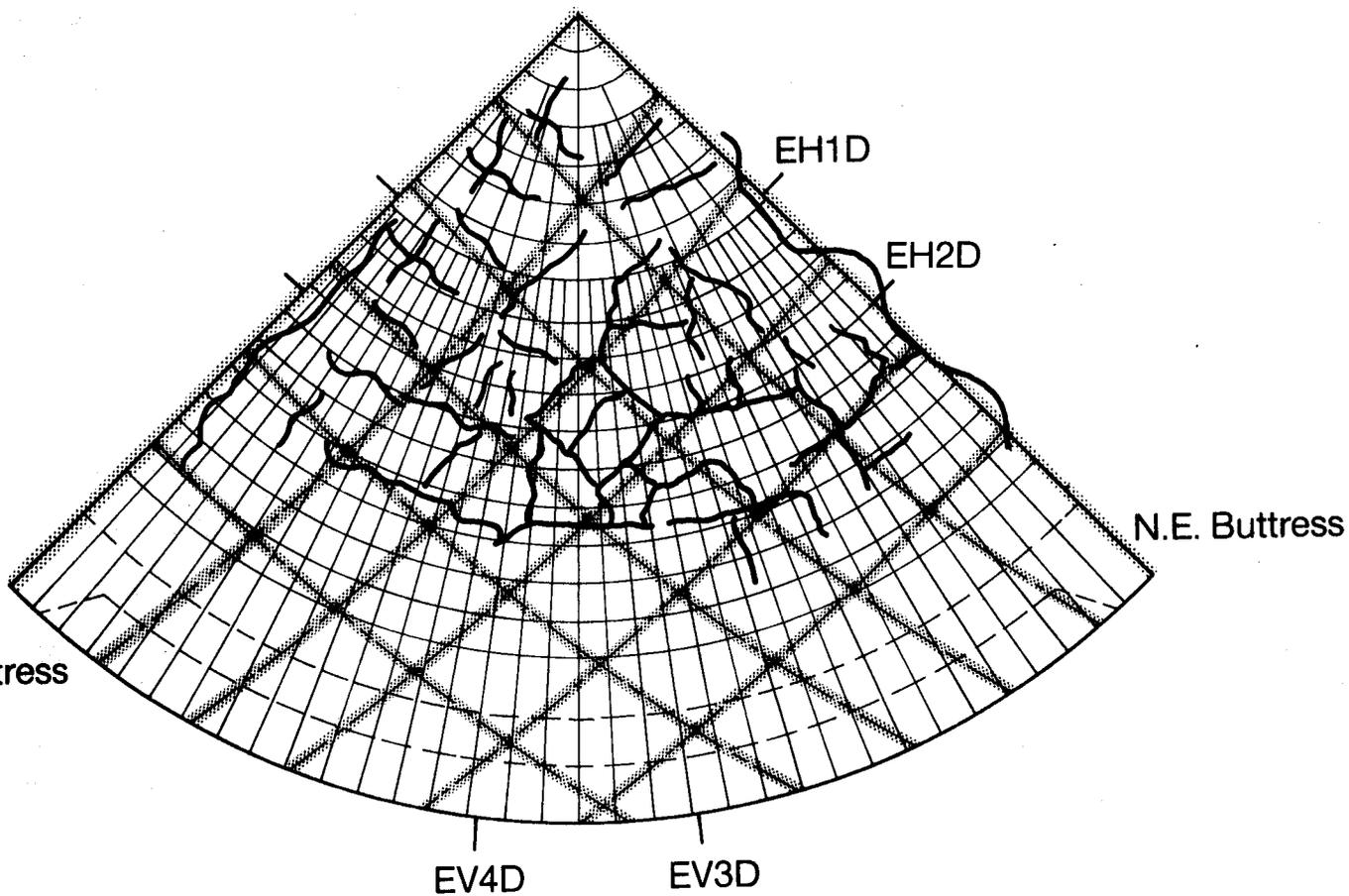


Fig. 8.8 Cracks in East Quadrant of Dome at end of Test F, 80 psi

Wall cracking extended at 50 psi and the first cracking in the dome was observed at this pressure. A strain gage on the inside surface detected circumferential cracking at 50 psi.

Figure 8.6 shows the extent of cracking in the west wall at the end of Test F (80 psi). The fine straight lines represent reinforcing bars while the shaded lines represent tendons. The close relationship between the tendon and reinforcement locations and the crack pattern can be seen clearly. Figure 8.7 shows the extent of cracking in the north-west buttress at the end of Test F. Cracks occurred on each side of many of the tendons and tendon anchorages. The cracks in the west wall and north-west buttress of this stage can be seen in the photograph in Fig. 7.3.

The cracking in the east quadrant of the dome at the end of Test F is shown in Figs. 7.4 and 8.8. The latter figure shows the strong relationship between the crack pattern and the tendon pattern.

The state of cracking in the wall buttress and dome at 120 psi is shown in Fig. 8.9, 8.10 and 8.11. Similar figures for 110 psi are given in Appendix A. Photographs of the crack patterns at 130 psi are given in Fig. 7.6 and 7.7.

At loads over 130 psi inclined cracks occurred in the wall adjacent to the buttresses as shown in Fig. 8.12. These cracks and similar inclined cracks on the inside face in the wall adjacent to the joint between the ring beam and buttresses (Fig. 8.14 to 8.16) suggest that the upward movement of the wall illustrated in Fig. 8.3 was smaller than the upward movement of the buttresses and ring beam. This was because the base of the buttresses rotated about the outside edges of

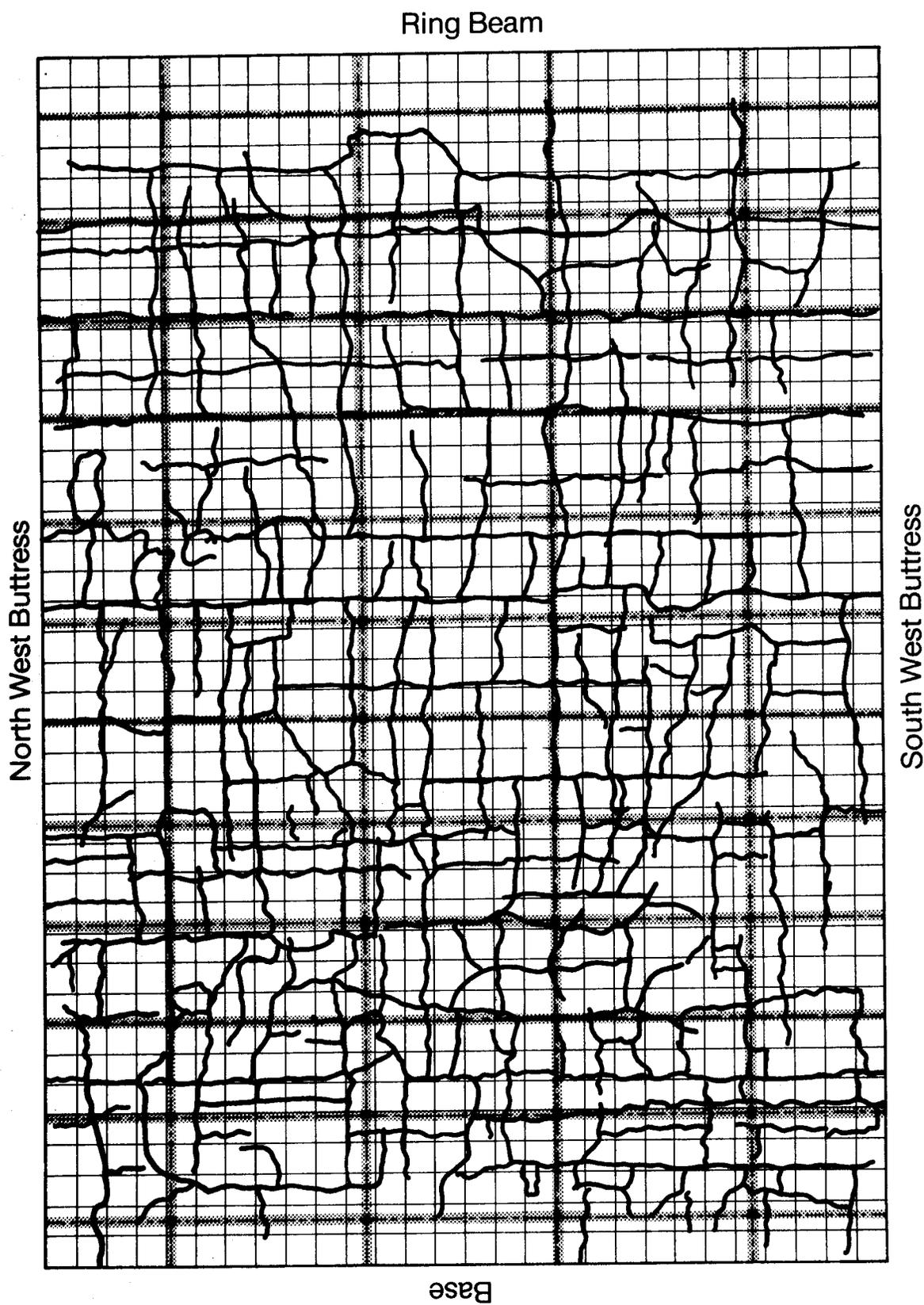


Fig. 8.9 Developed View of West Wall showing Cracks at 130 psi Pressure

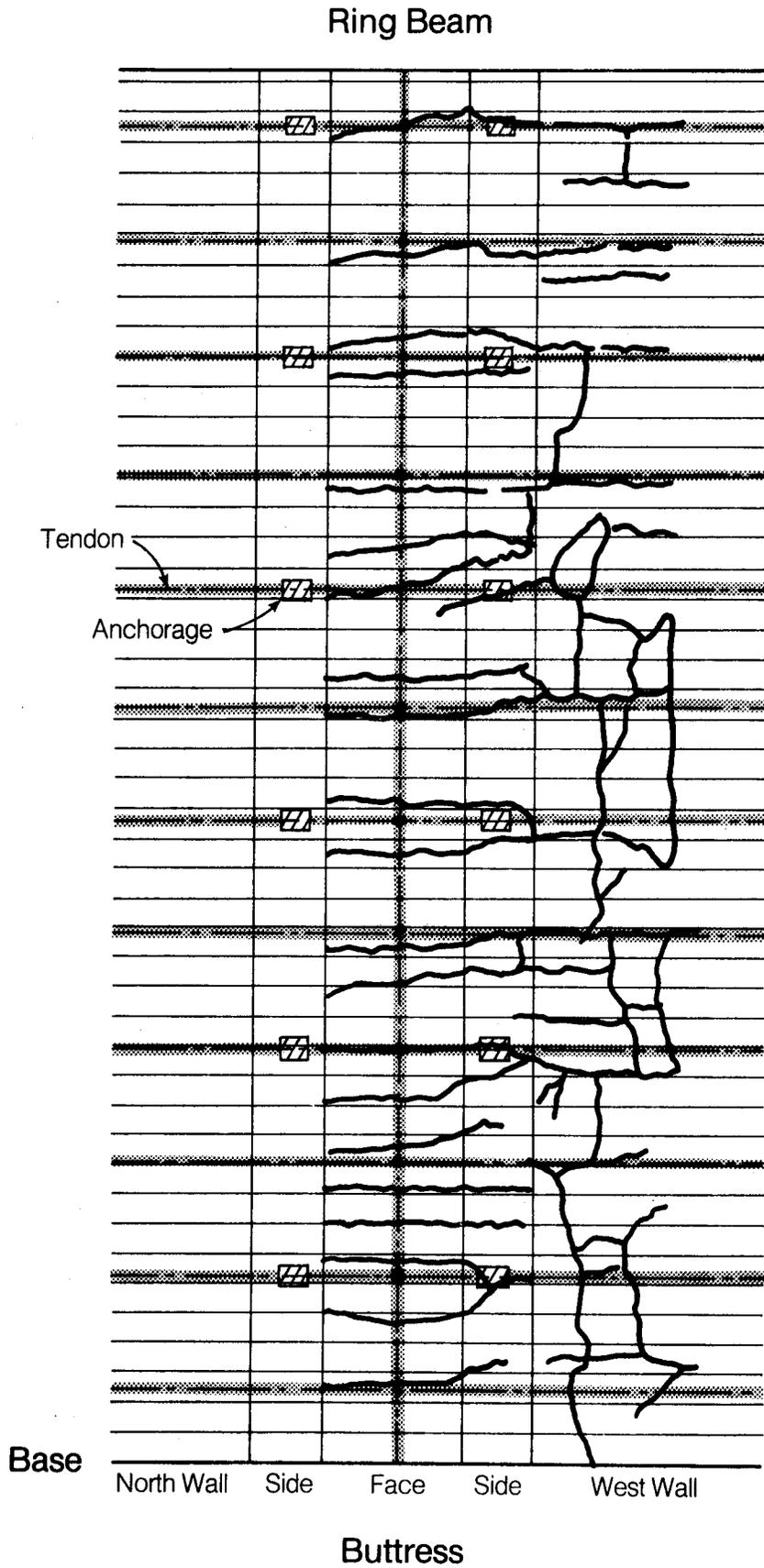


Fig. 8.10 Developed View of North West Buttruss showing Cracks at 130 psi pressure

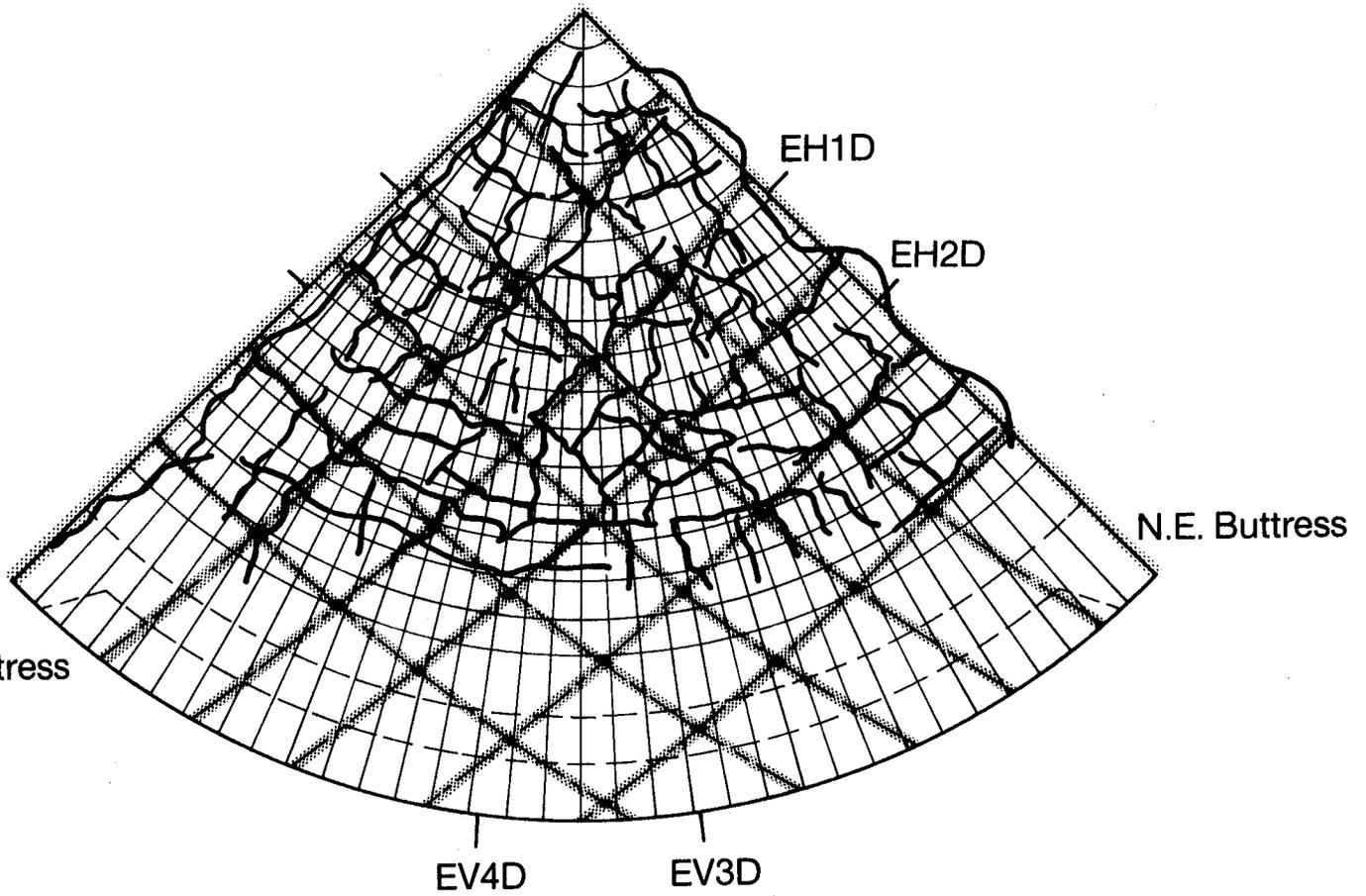


Fig. 8.11 Cracks in East Quadrant of Dome at 130 psi Pressure

the buttresses at loads over 130 psi while the base of the walls rotated about the outside edge of the wall at points between the buttresses and hence moved up less. In some cases diagonal cracks were observed in the lower ends of the buttress as extensions of the diagonal cracks in the walls. In other cases these cracks appeared to extend downwards along the wall to buttress joints as shown in Fig. 8.12.

The cracking pattern on the inside after failure is shown in Fig. 8.13 to 8.16. Figure 8.13 shows the failure region. Figures 8.14 to 8.16 show the base of the dome and the top 20 to 40 inches of the dome (the major horizontal cracks are at the tendons which are spaced at 10 in on centers). The circular spot near the center of the top of each photo is a hole through the ring beam used to position the liner. These holes typically were near the middle of the buttress and 4 inches above the bottom of the ring beam. Figures 8.14, 8.15 and 8.16 show the north-east, north-west and southwest buttresses respectively. The south-east buttress runs up the left side of Fig. 8.13.

Three major circumferential cracks extended around the entire vessel in a zone extending 4 in. above and below the dome to ring beam joint. Major vertical cracking was observed on the inside faces of the buttresses indicating very high horizontal tensile strains across the inside face of the buttresses. These cracks were absent at the north-west buttress as shown in Fig. 8.15 because the inside layer of horizontal wall steel was spliced with a weld at the center of this buttress. The ends of the spliced bars overlapped for the entire width of this buttress.



Fig. 8.12 Inclined Cracks in Wall  
Adjacent to North West  
Abutment at End of Test G

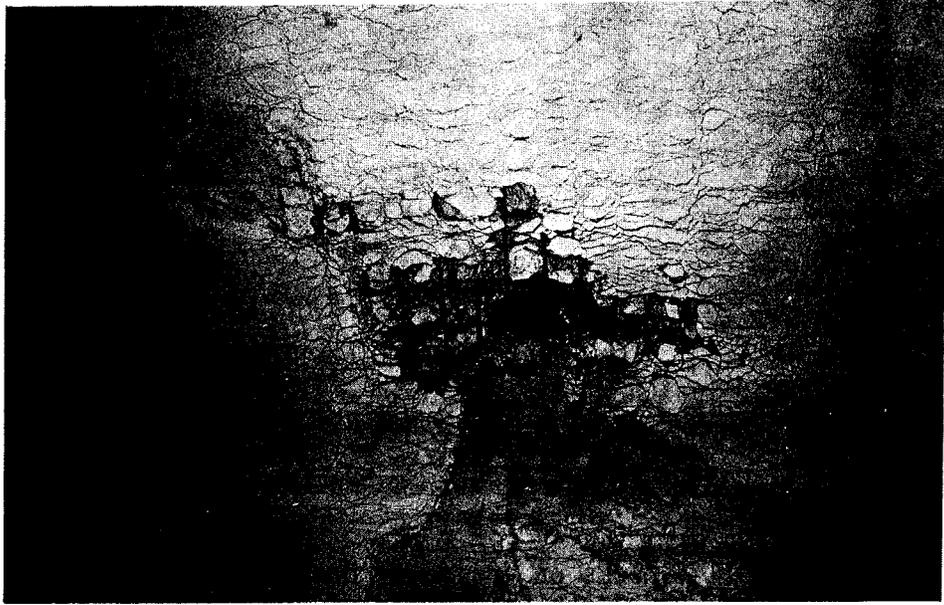


Fig. 8.13 Failure Region Seen from  
Inside of Model

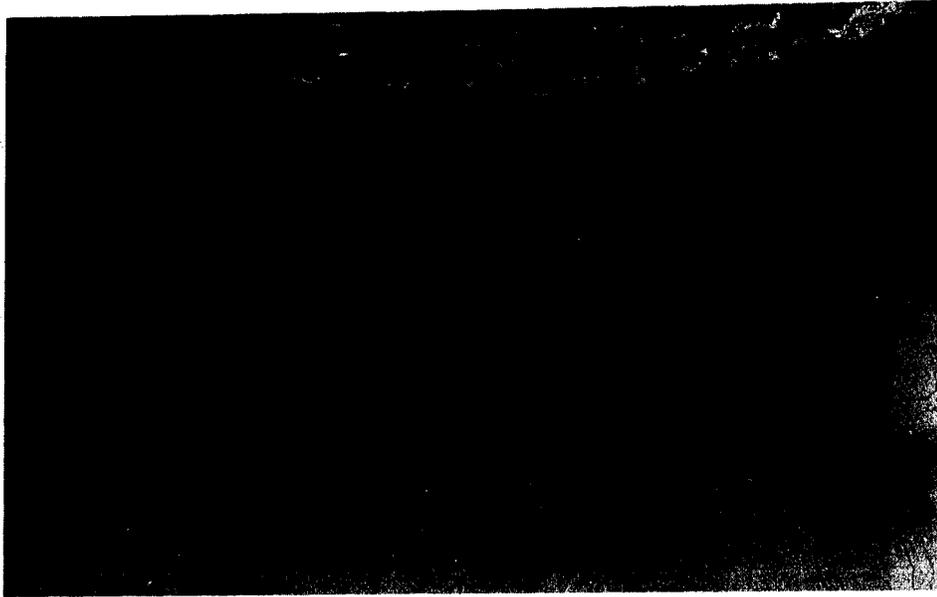


Fig. 8.14 Cracks on Inside of Model at Intersection of North East Buttress and Ring Beam

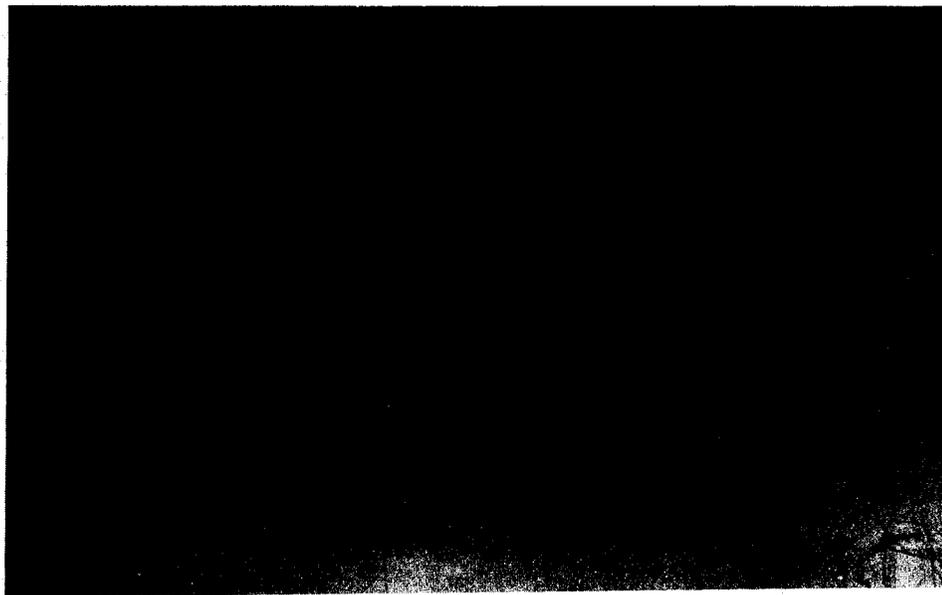


Fig. 8.15 Cracks on Inside of Model at Intersection of North West Buttress and Ring Beam

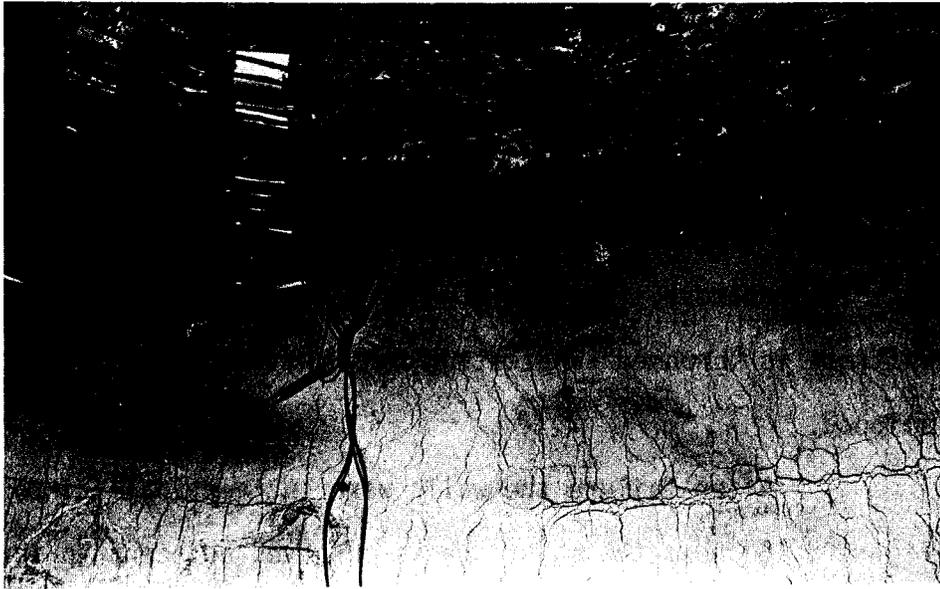


Fig. 8.16 Cracks on Inside of Model at Intersection of South West Buttrass and Ring Beam



Fig. 8.17 Failure Region Seen from Outside of Model

Another group of significant circumferential cracks were located on the inside of the dome near where the ring beam stirrups were cut-off about 4 ft. from the center of the dome.

Figure 8.17 shows the failure region from the outside. Broken reinforcing bars can be seen. The broken tendon is the 7th from the base. The prestressing anchor plate for the 8th tendon has sunk 1/8 in. into the buttress. The end of the tendon on the other side of the buttress is "broomed" indicating that the anchorage on this tendon has slipped.

After failure the walls were cut vertically into segments. Figure 8.18 shows the major cracks observed adjacent to three horizontal tendons when this was done. These cracks are very similar to those observed in the segment tests (2). Due to the roughness of the broken surface small cracks may have been missed.

The destruction of an anchorage zone is shown clearly in Fig. 8.19. This is the 7th tendon from the base counting all tendons or the 4th from the base counting those anchored in the southwest buttress. The 7th tendon fractured at the failure location which was about 5 ft. to the right of this photograph.

#### 8.2.2 BOSOR5 Prediction of Cracking Loads

Figure 8.20 shows the initiation of circumferential cracking as predicted by the BOSOR5 analysis. This analysis predicted first cracking just before 40 psi in two areas - at the mid-height of the ring beam and at the dome to ring beam joint. Cracking was detected at the latter location at 30 psi. It should be noted that the ring beam "stirrups" were not included explicitly in the BOSOR5 model and it is

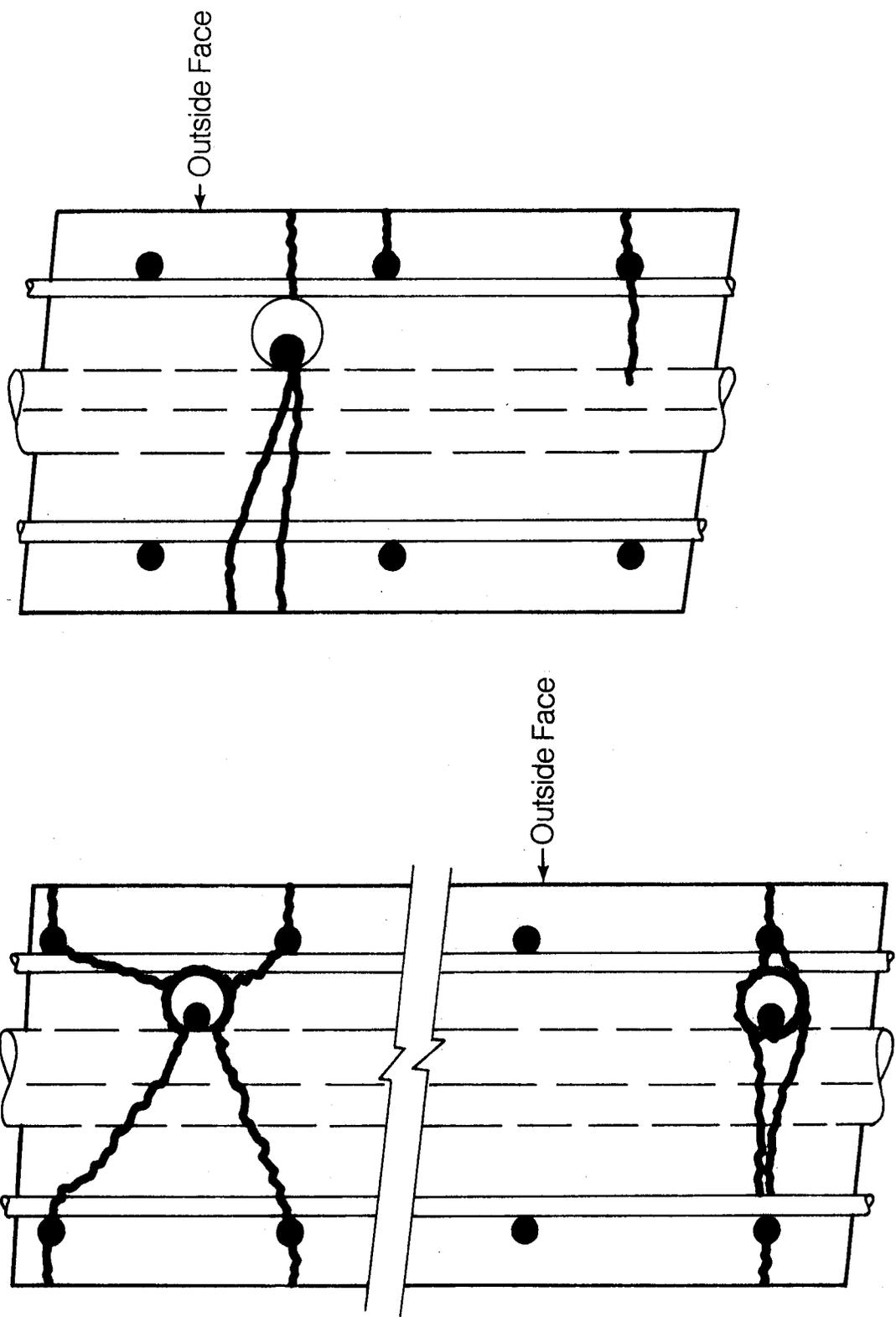


Fig. 8.18 Cracks Observed in Vertical Sections Cut Through Wall After Test

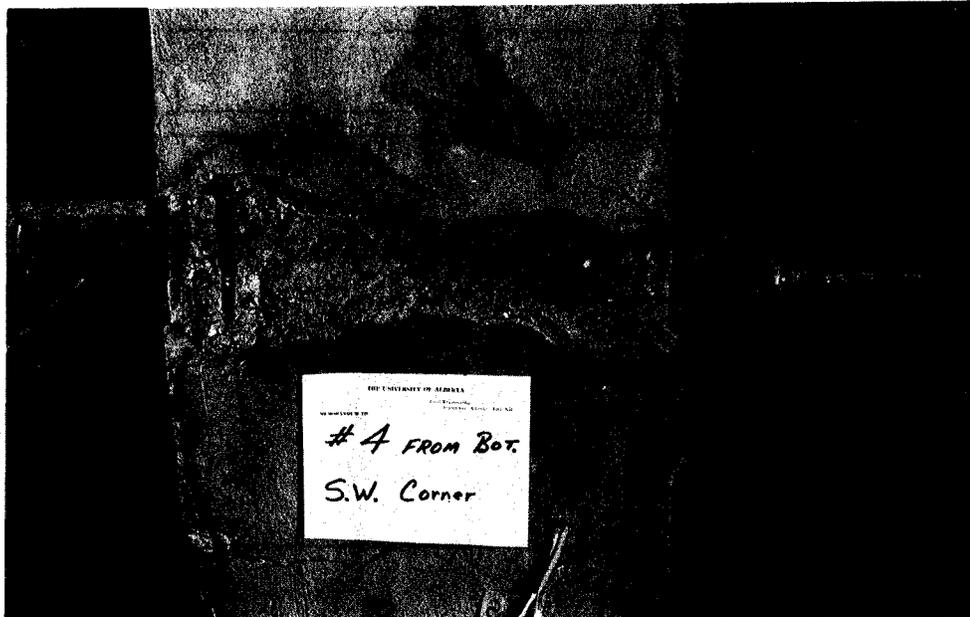


Fig. 8.19 Failure of Prestressing Anchorage in South West Buttress

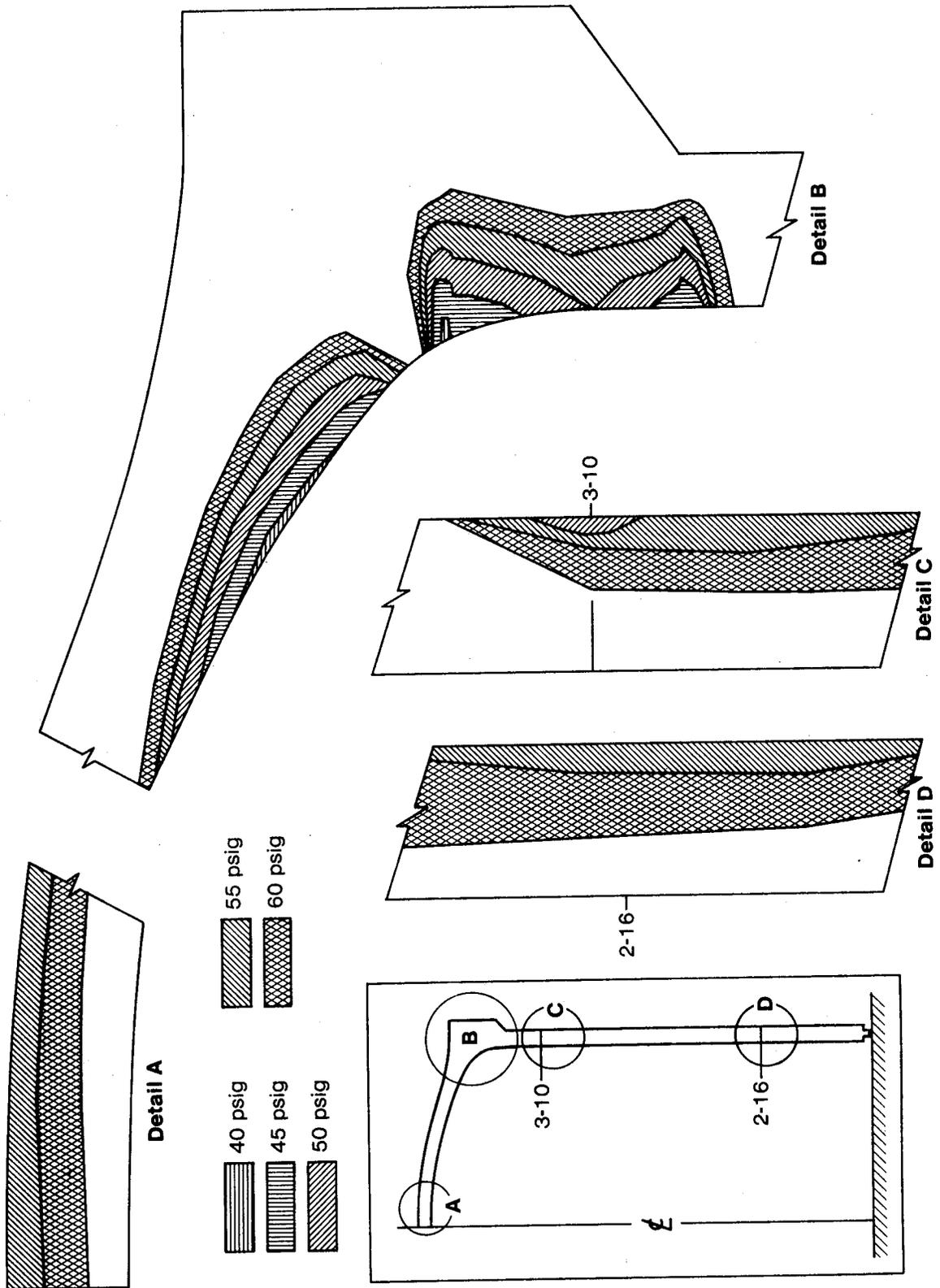
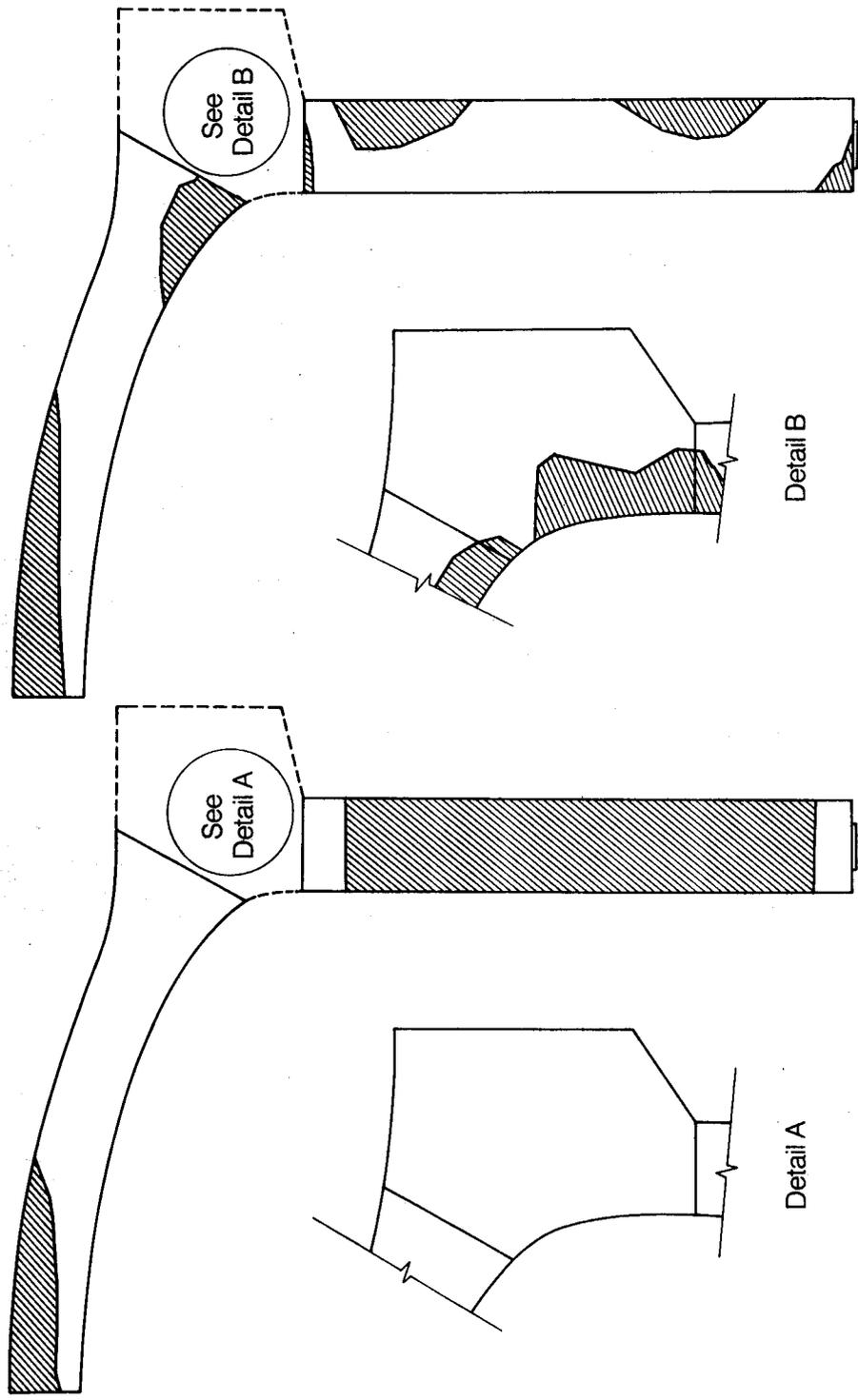


Fig. 8.20 BOSOR5 Prediction of Development of Circumferential Cracking

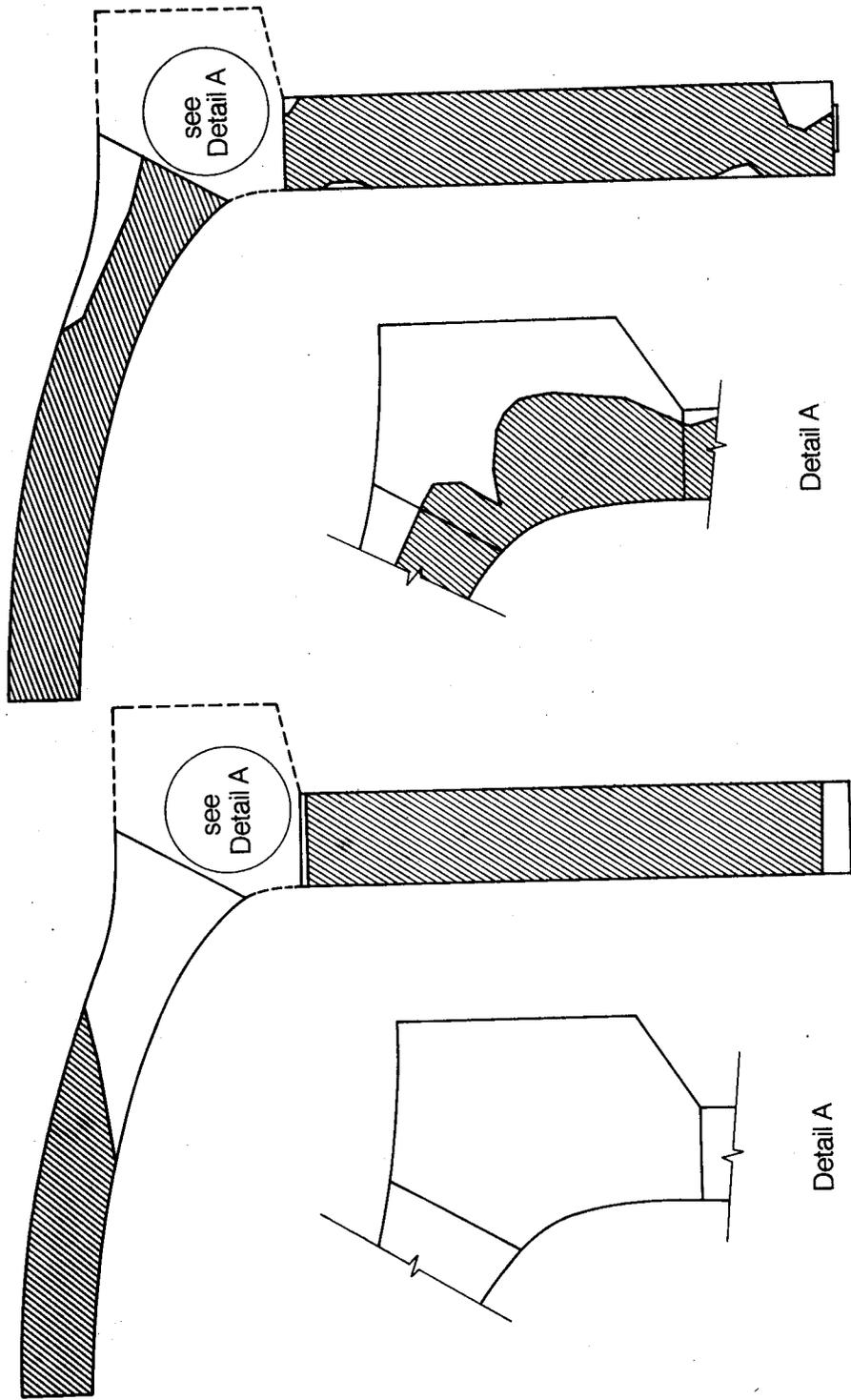


Distortion Ratio  
Thickness : Length  
Wall 4 : 1  
Dome 2 : 1  
Ring - Beam 1 : 1

**(a) Vertical Cracks**

**(b) Horizontal Cracks**

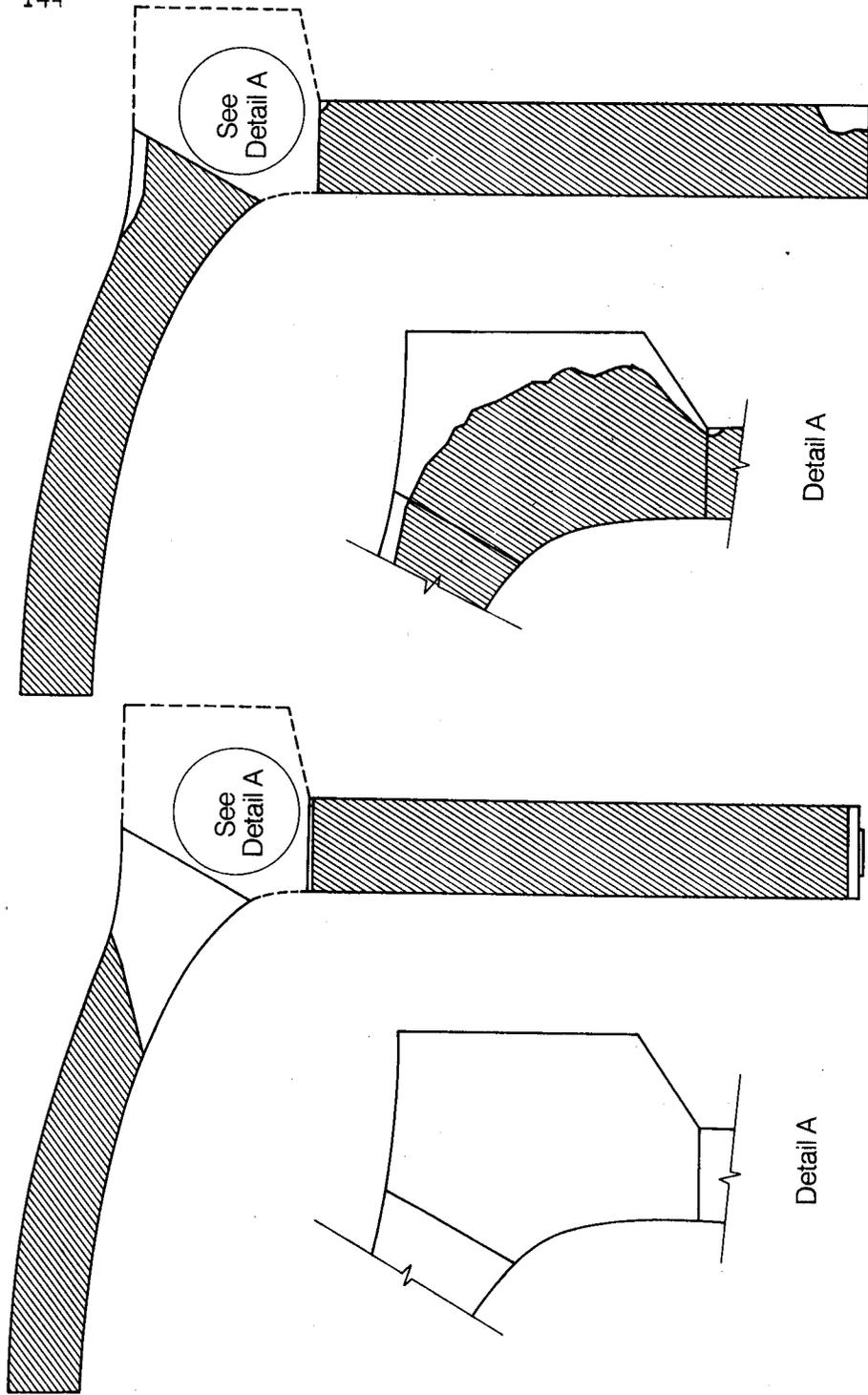
Fig. 8.21 Extent of Cracking at 60 psi from BOSOR5 Analysis



Distortion Ratio  
Thickness : Length  
Wall 4 : 1  
Dome 2 : 1  
Ring-Beam 1 : 1

(a) Vertical Cracks (b) Horizontal Cracks

Fig. 8.22 Extent of Cracking at 80 psi from BOSOR5 Analysis



Distortion Ratio  
Thickness : Length  
Wall 4 : 1  
Dome 2 : 1  
Ring - Beam 1 : 1

**(a) Vertical Cracks**

**(b) Horizontal Cracks**

Fig. 8.23 Extent of Cracking at 130 psi from BOSOR5 Analysis

believed that the abrupt termination of these bars reduced the cracking load near the cut-off point. The first significant horizontal wall and dome cracking was observed at 50 psi, compared to the predicted 55 psi.

Figures 8.21 to 8.23 show the predicted extent of cracking at pressures of 60, 80 and 130 psi. The measured cracks at 80 and 130 psi are shown in Fig. 7.3 to 7.7 and 8.6 to 8.11.

### 8.2.3 Calculated Crack Widths

Crack widths were calculated for cracks in the middle portions of the west and north walls using the procedure presented in Chapter 6 of Ref. 2. This procedure has been used to estimate potential crack widths in G2 in Ref. 11. In this procedure it is necessary to estimate the total number and spacing of cracks and the surface strain at points where the crack widths are being computed. The following assumptions were made:

1. The number of cracks at a given load level,  $N_c$ , is:

$$N_c = N_{fc} \cdot \epsilon_m / 0.002 \quad (8.1)$$

but not more than  $N_{fc}$ .

Where  $N_{fc}$  is the final number of cracks, assumed to be reached when the average surface strain,  $\epsilon_m$ , reaches 0.002.

2. The crack width was calculated as:

$$w = \epsilon_m L / N_{fc} \quad (8.2)$$

where  $L$  is the length over which the crack pattern is being observed and  $L/N_{fc}$  is the final crack spacing.

3. The measured results and calculated results are presented in Fig. 8.24 to 8.27 terms of  $\Sigma w/L$ . The measured value was computed from the crack measurements. The computed value is equal to  $wN_c/L$ .

4. The final number of vertical cracks in the walls was estimated assuming a crack at each vertical tendon and every second vertical reinforcing bar.
5. The final number of horizontal cracks in the walls was estimated assuming a crack at each horizontal tendon plus one other between each pair of tendons.
6. The final numbers of meridional and circumferential cracks in the dome were estimated assuming that a crack occurred at every second reinforcing bar crossing the measuring lines.

Comparisons of measured and computed crack widths are presented in Fig. 8.24 to 8.27. Only those vertical wall cracks falling in the center 3 ft. of each side were considered since the deflection (Fig. 7.9) and circumferential strain (Fig. 8.35) were constant in this region. Similarly, only those horizontal wall cracks in the zone from 3 ft. to 8 ft. from the base of the wall were considered. This again was a region of roughly constant meridional strain (Fig. 8.28). In the dome the meridional cracks crossing two 90 deg. arcs located 21 and 32 in. from the crown are considered separately in Fig. 8.26 and 8.27.

The crack width estimates in Fig. 8.24 to 8.27 are reasonable when it is considered that the structure was built to model overall structural response rather than cracking response.

#### 8.2.4 Cracking of Buttresses

As the buttresses bulged out they were stressed in tension and flexure and cracked as shown in Fig. 7.3, 7.10, 7.11, and 8.8. In general these cracks isolated small prisms containing the tendon anchorages. This was a very congested region as can be seen from Fig. 2.13.

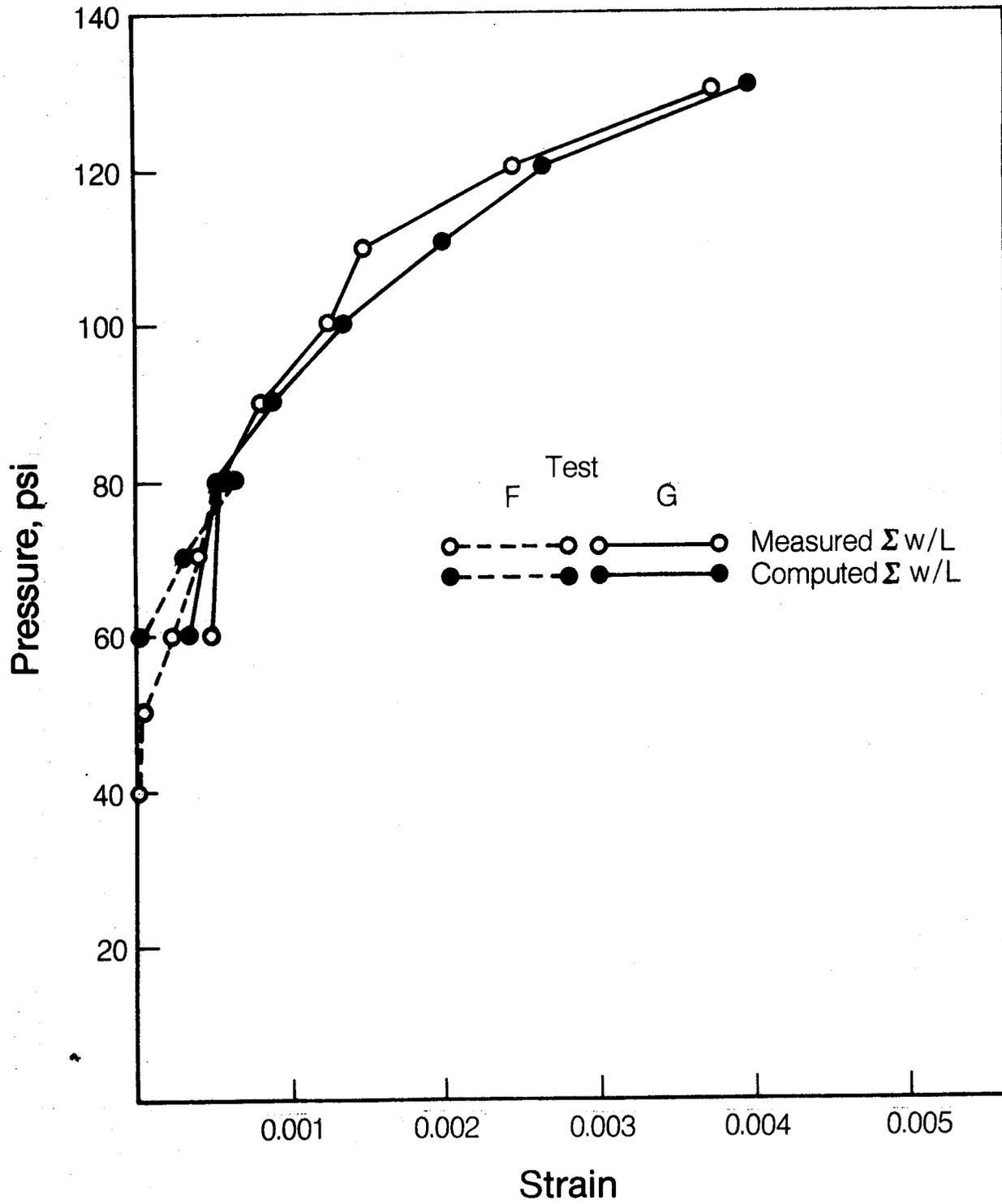


Fig. 8.24 Measured and Computed Crack Strain, Vertical Cracks in Walls

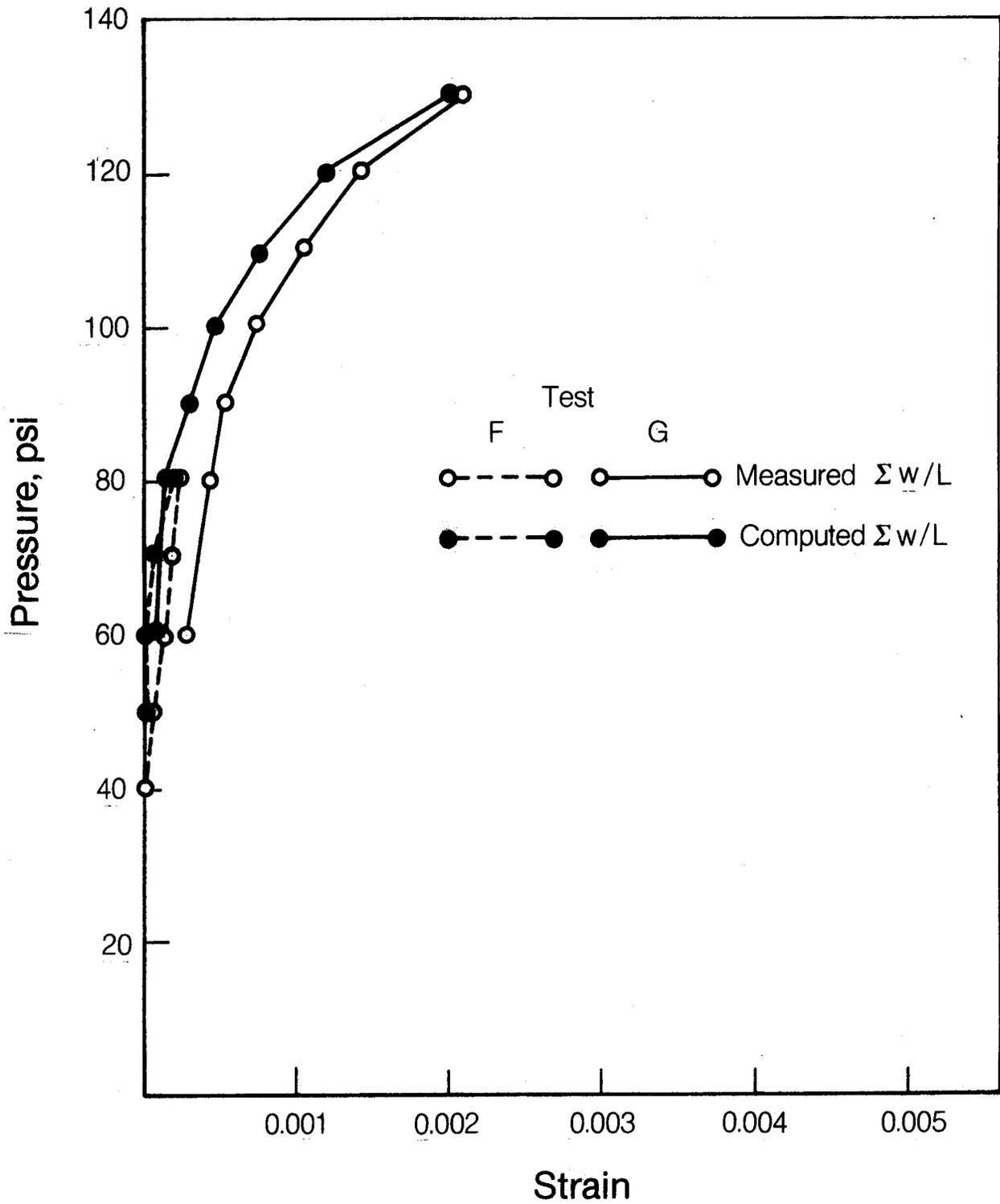


Fig. 8.25 Measured and Computed Crack Strain Circumferential Cracks in Walls

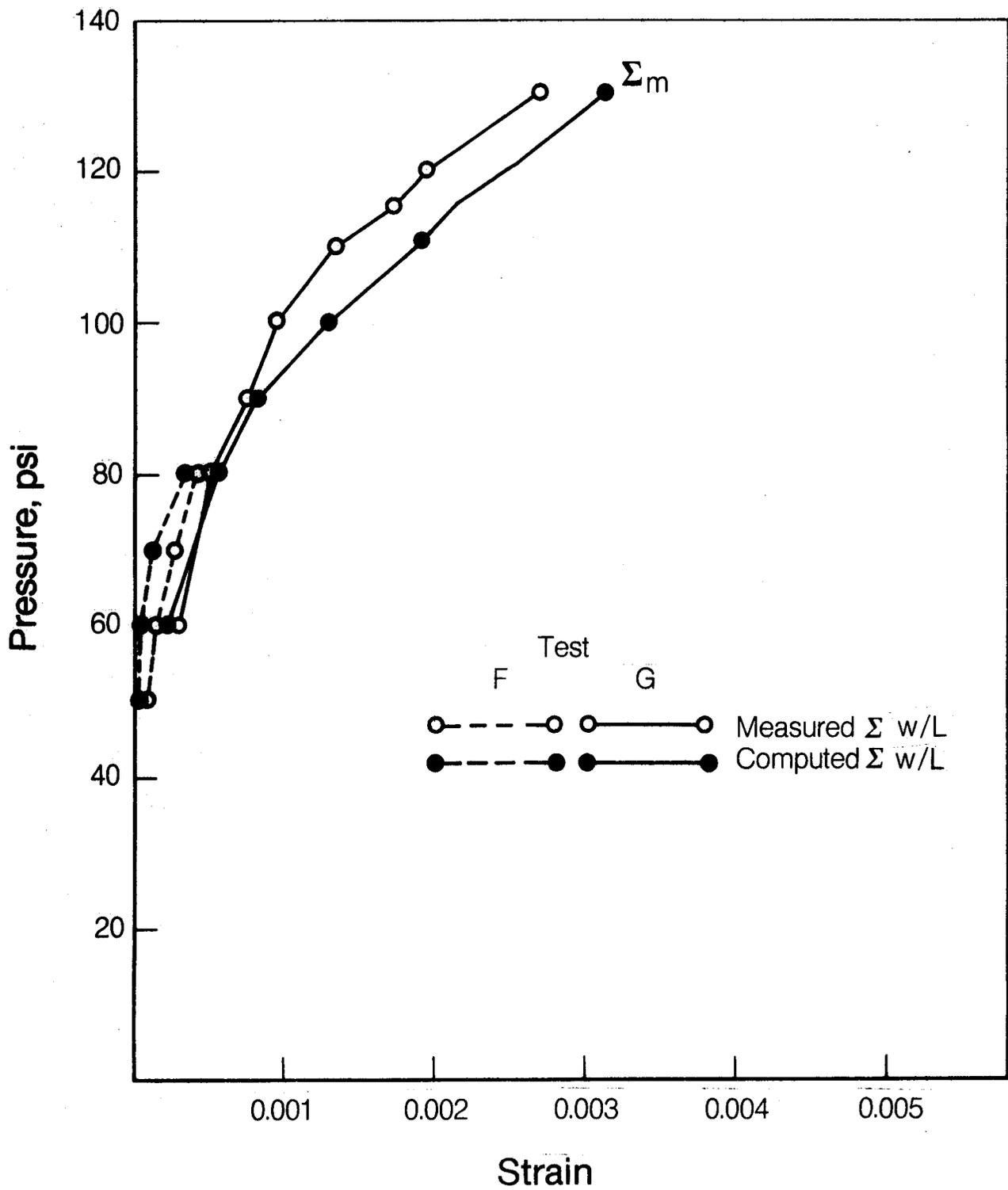


Fig. 8.26 Measured and Computed Crack Strain, Meridional Cracks Crossing a Line Located 32 in. from Crown of Dome

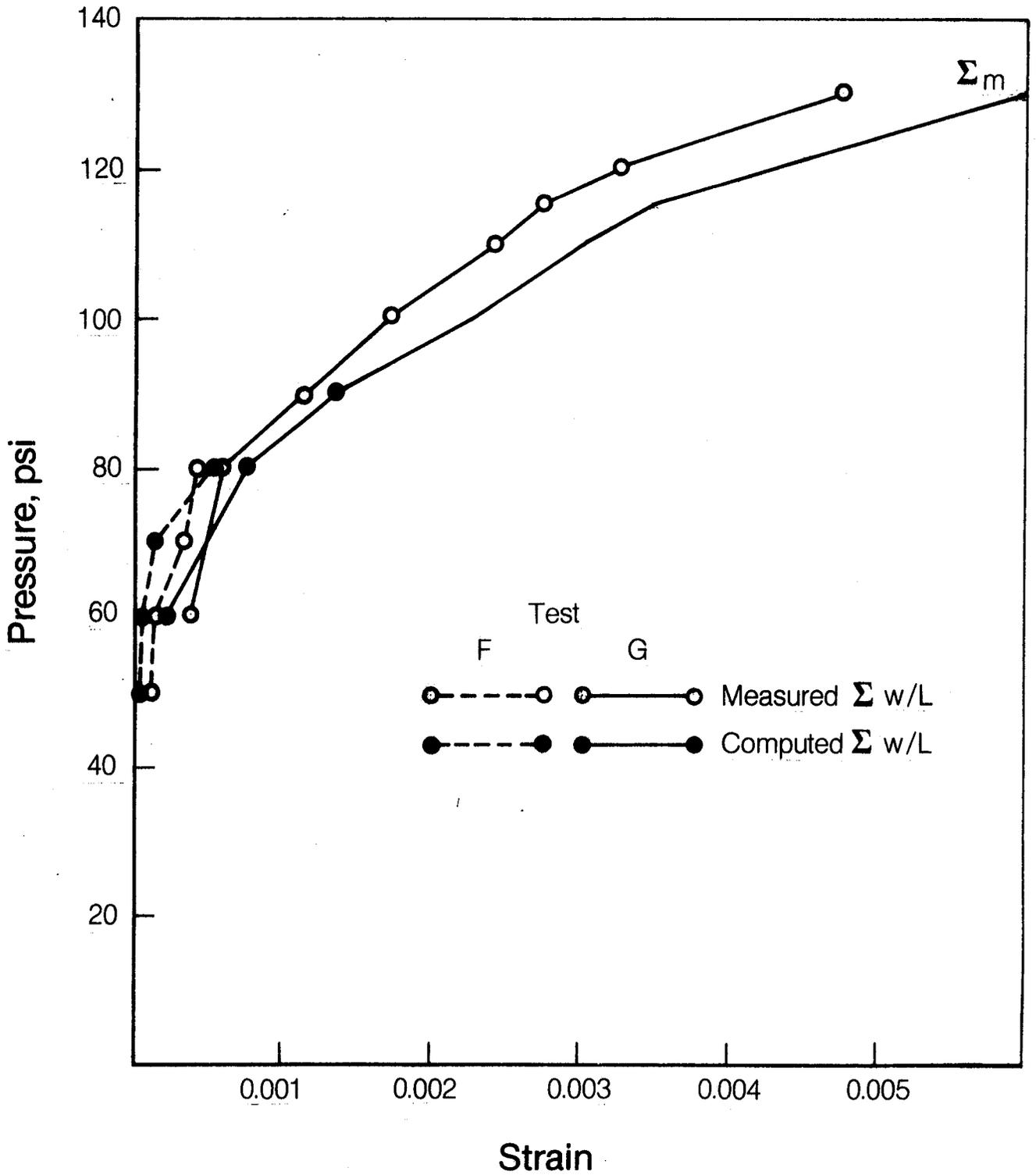


Fig. 8.27 Measured and Computed Crack Strain, Meridional Cracks Crossing a Line Located 21 in. from Crown of Dome

More study of the strength of such a region is required to simulate the effect of the transverse tension forces.

The existence of these transverse tensions was recognized in the design of the containment model and the relative amount of vertical reinforcement in the buttresses of the model was selected to be roughly twice that in the prototype. Thus, the ratio of the total area of reinforcing bars and tendons to the area of concrete in the buttresses was 0.0045 in the prototype and 0.0117 in the model. The cracked section moment of inertia of the buttress ignoring axial forces due to prestress and the internal pressure was 4.1 times that of section of wall of the same width in the prototype and 9 times in the model. This suggests that a prototype structure would show even smaller effects of buttress stiffness with the result that buttress cracking and deflections should be more serious in the prototype than in the model.

### 8.3 Meridional Strains

#### 8.3.1 Measured Strains

Strains were measured along three meridians (Lines 1, 2 and 3) using electrical resistance strain gages mounted on the vertical reinforcement in the two faces of the wall and also one meridian (Line 2) using a mechanical strain gage which will be referred to as a Demec Gage. In the wall and the dome the gages on the reinforcement were located at 1 in. from the inside and outside faces. The Demec gage readings were made on the outside surface of the wall ring beam and dome.

Figure 8.28 shows the meridional strains measured on the outside surface along line 2. The erratic nature of these readings

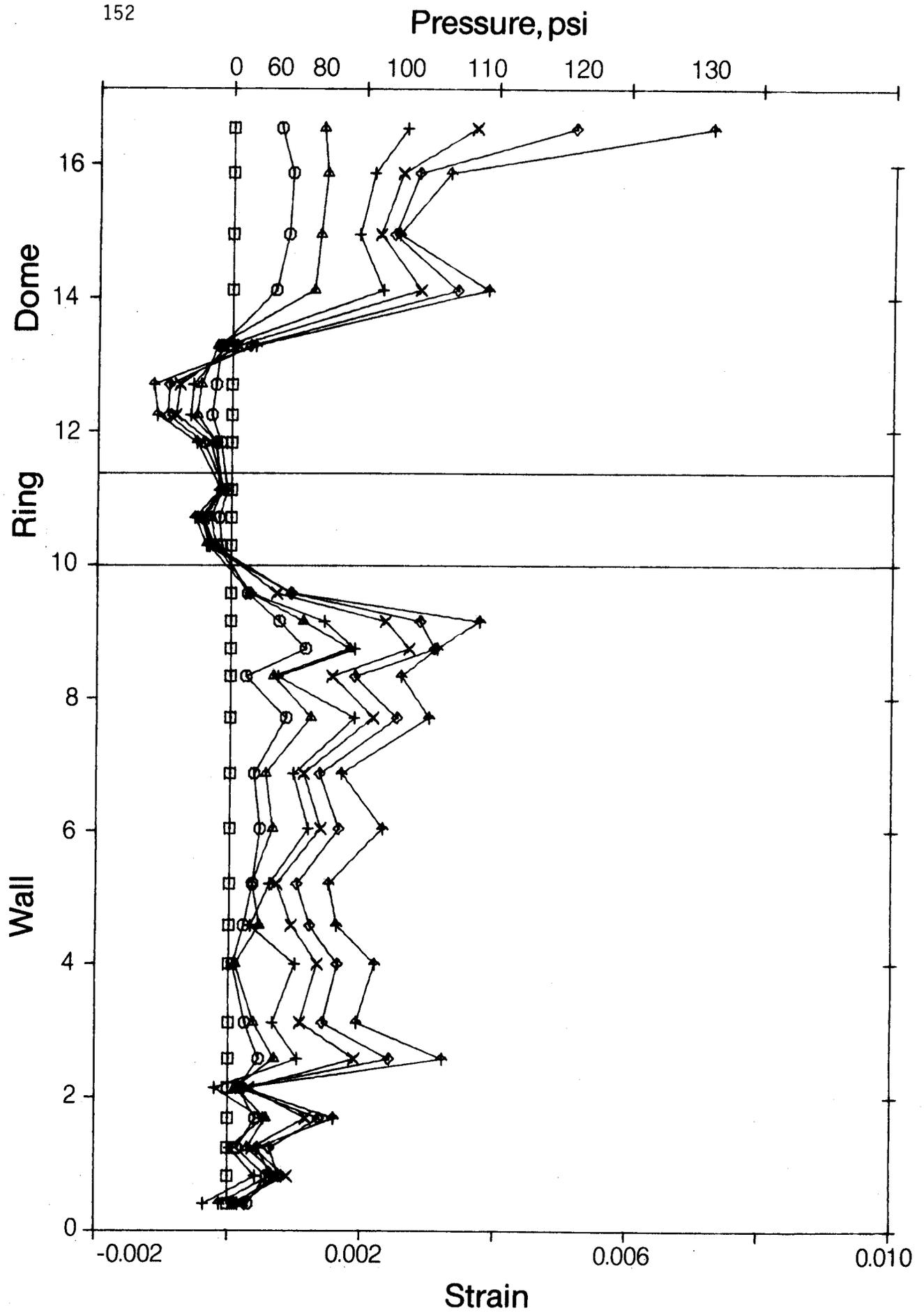


Fig. 8.28 Meridional Demec Strains on Outside Surface, Line 2

results in part from gage lengths being 5 or 10 inches while the crack spacings were more random, approaching 3 inches. As a result, a given gage length may have had zero to three cracks in it. Since the Demec strain includes the change in length due to the width of the crack, it is affected by the actual crack locations relative to the gage lengths. In addition, the strains were affected by the location of bar cut-offs, particularly in the dome and in the region from 18 in. to 30 in. above the base.

Meridional steel strains measured along line 2 are plotted in Fig. 8.29 and 8.30 for the inside and outside layers of steel respectively. These are roughly equal in the region from 4 to 8 ft. above the base and are approximately equal to the surface strain measured by the Demec gages. The yield strain of the meridional reinforcement was 0.00246.

At the bottom of the wall the strains in the reinforcement in the two faces are roughly equal up to an internal pressure of 120 psi after which time the outside strains decrease while the inside strains remain roughly constant. This indicates the hinge began to develop moments at pressures greater than 120 psi and confirms the observations made in Fig. 7.8, 8.1 and 8.2.

The meridional strains in the ring beam region indicate large tensile strains in the reinforcement located 1 in. from the inside face of the ring beam. At a pressure of 130 psi these were 0.0024 tension increasing to greater than 1 percent at the failure load. At 4 in. from the inside face of the ring beam the corresponding steel strains were 0.0016 tension at 130 psi and 0.005 tension at 159.5 psi. The surface

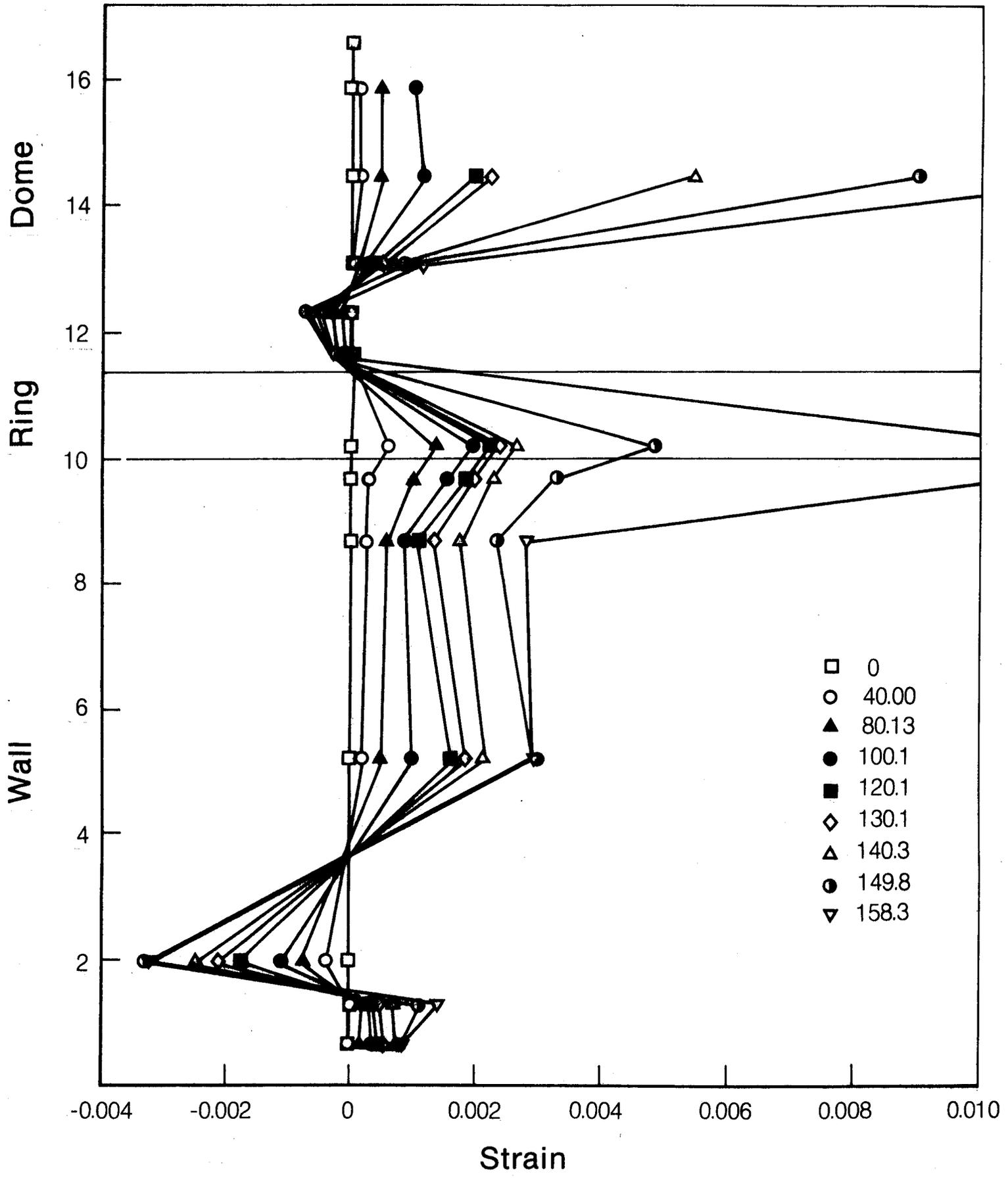


Fig. 8.29 Meridional Steel Strains in Inside Layer of Reinforcement, Line 2

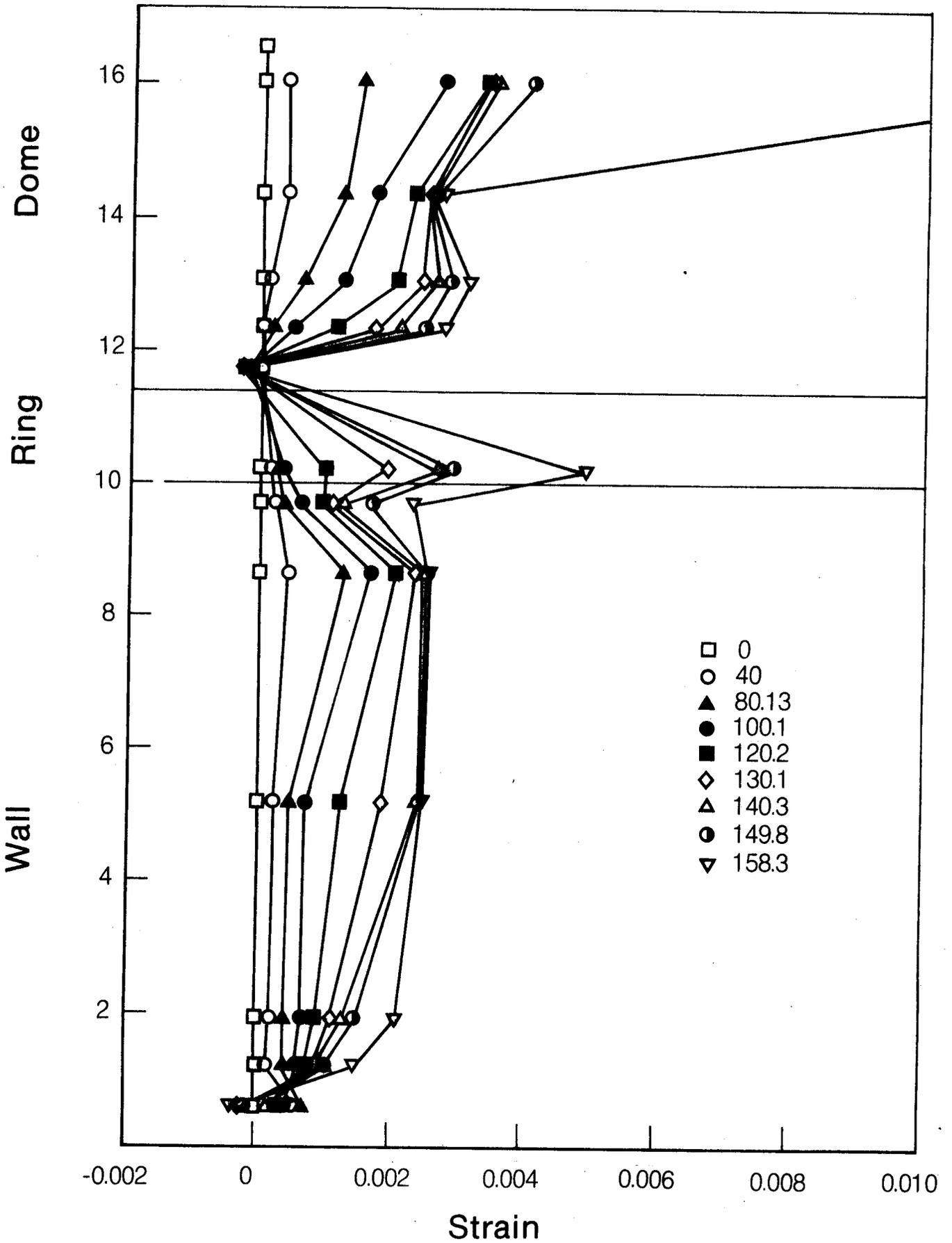


Fig. 8.30 Meridional Steel Strains in Outside Layer of Reinforcement, Line 2

strains on the outside of the ring beam (at 10 in from the inside face) were compressive in the order of 0.0005. This suggests that in spite of the discontinuities in this region, the meridional strains were surprisingly close to being linearly distributed.

The strains on the upper surface of the dome are compressive near the springline due to reverse curvatures in this region resulting from the tendency of both the dome and walls to balloon outwards while the ring beam deflected very little. The very low steel strains in the same region reflect the effects of the extension of ring beam reinforcement into the bottom of the dome. The meridional ring beam reinforcement or stirrups had a cross-sectional area of  $0.47 \text{ in}^2/\text{ft}$  around the circumference of the dome at the springline compared to the meridional dome reinforcement which had an area of  $0.13 \text{ in}^2/\text{ft}$  in each layer.

After failure crushing was noted on the upper surface of the dome near the springline and on the outside surface of the wall where it met the ring beam.

### 8.3.2 Computed Strains

The measured and computed meridional strains on the outside surface along Line 2 are shown in Fig. 8.31 for an internal pressure of 120 psi. Figure 8.32 compares the measured and computed meridional strains. Since the measured strains are given relative to the deflected shape after prestressing and losses, the computed strains have been adjusted by assuming zero strain corresponds to the state after prestressing. The computed load deflection curve agrees quite well with Test F up to 80 psi and Test G after that load. This is because the analysis assumed an uncracked structure.

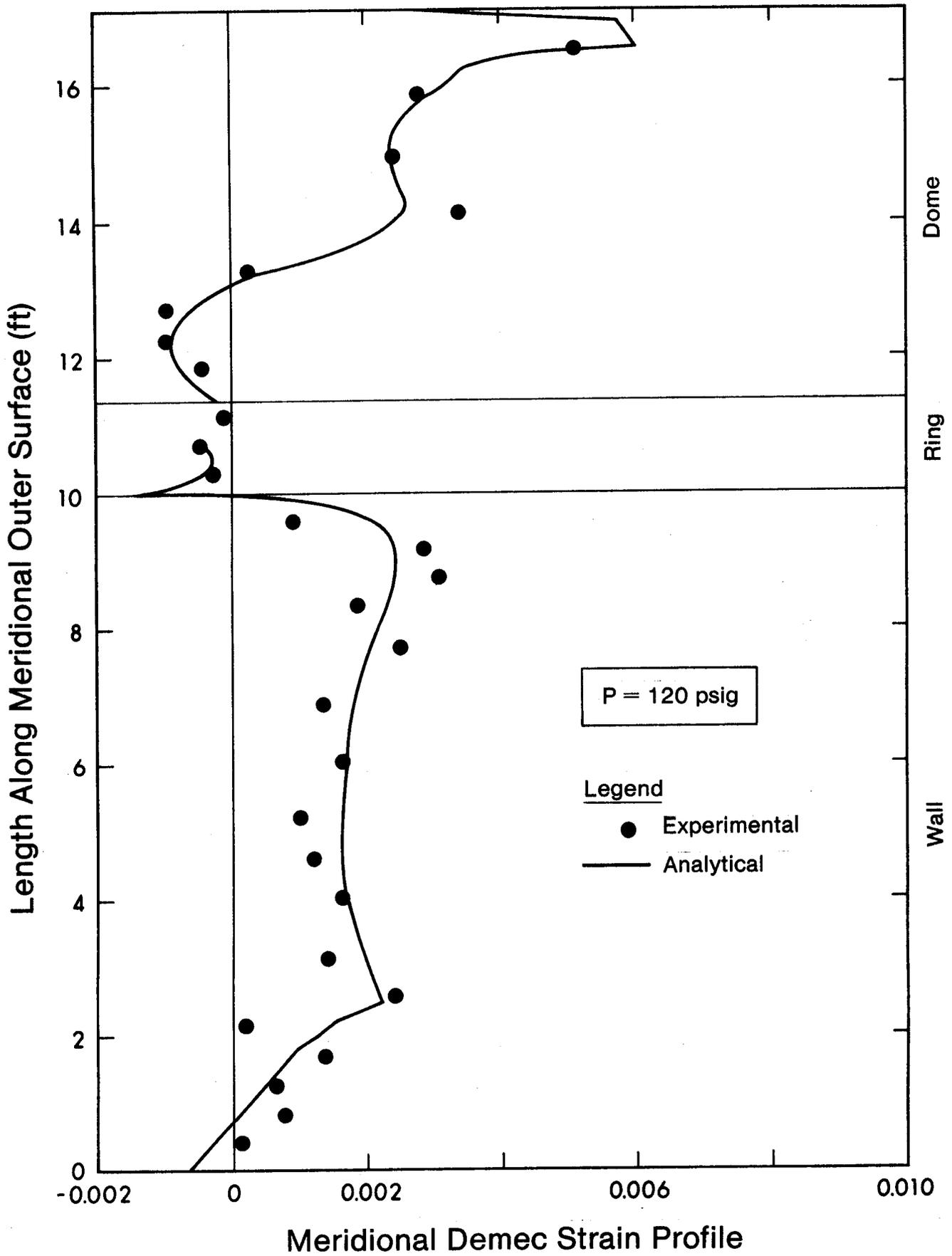


Fig. 8.31 Measured and Computed Meridional Strains, Line 2, 120 psi

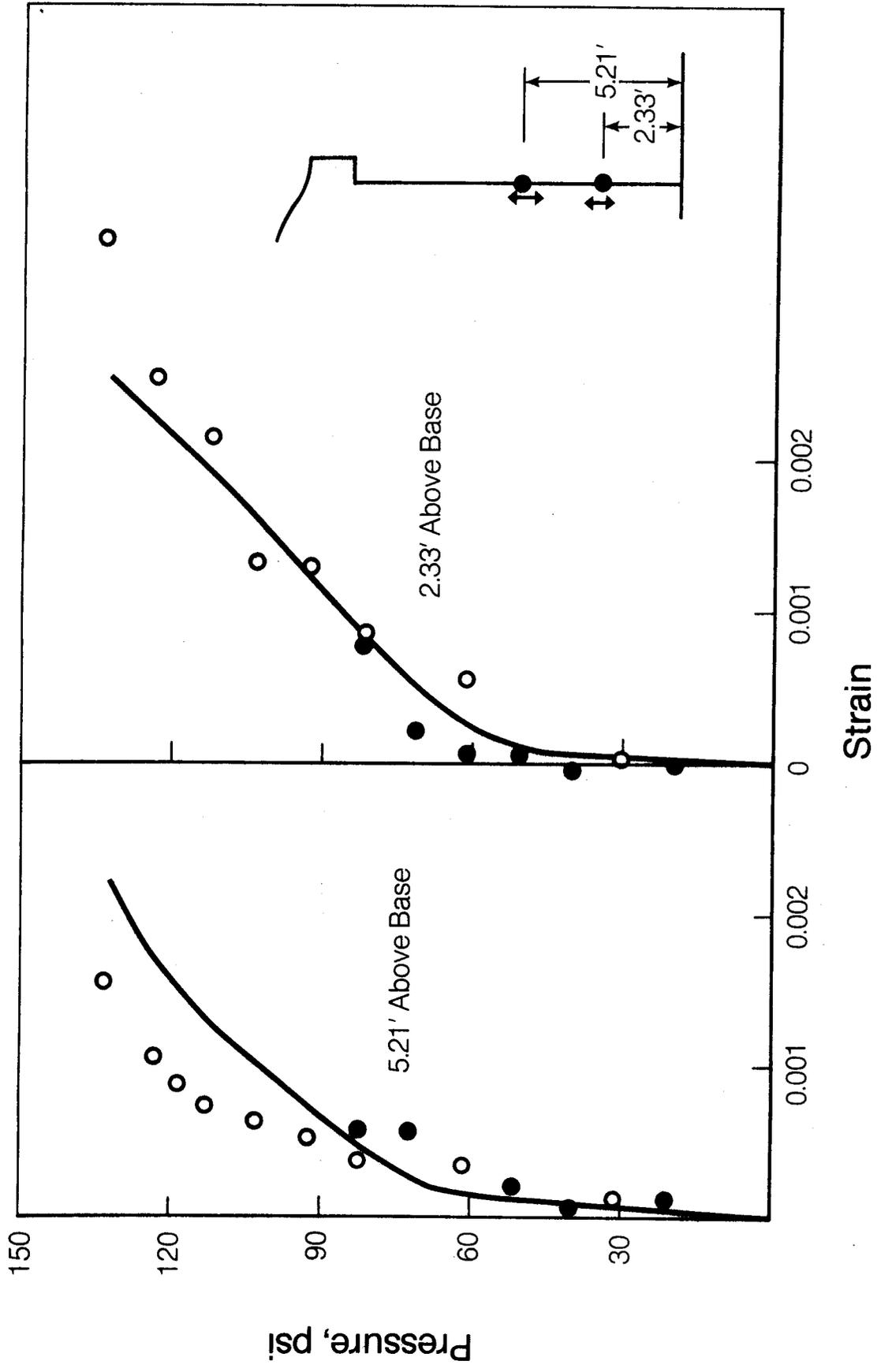


Fig. 8.32 Measured and Computed Meridional Strains at Surface of Wall, Line 2

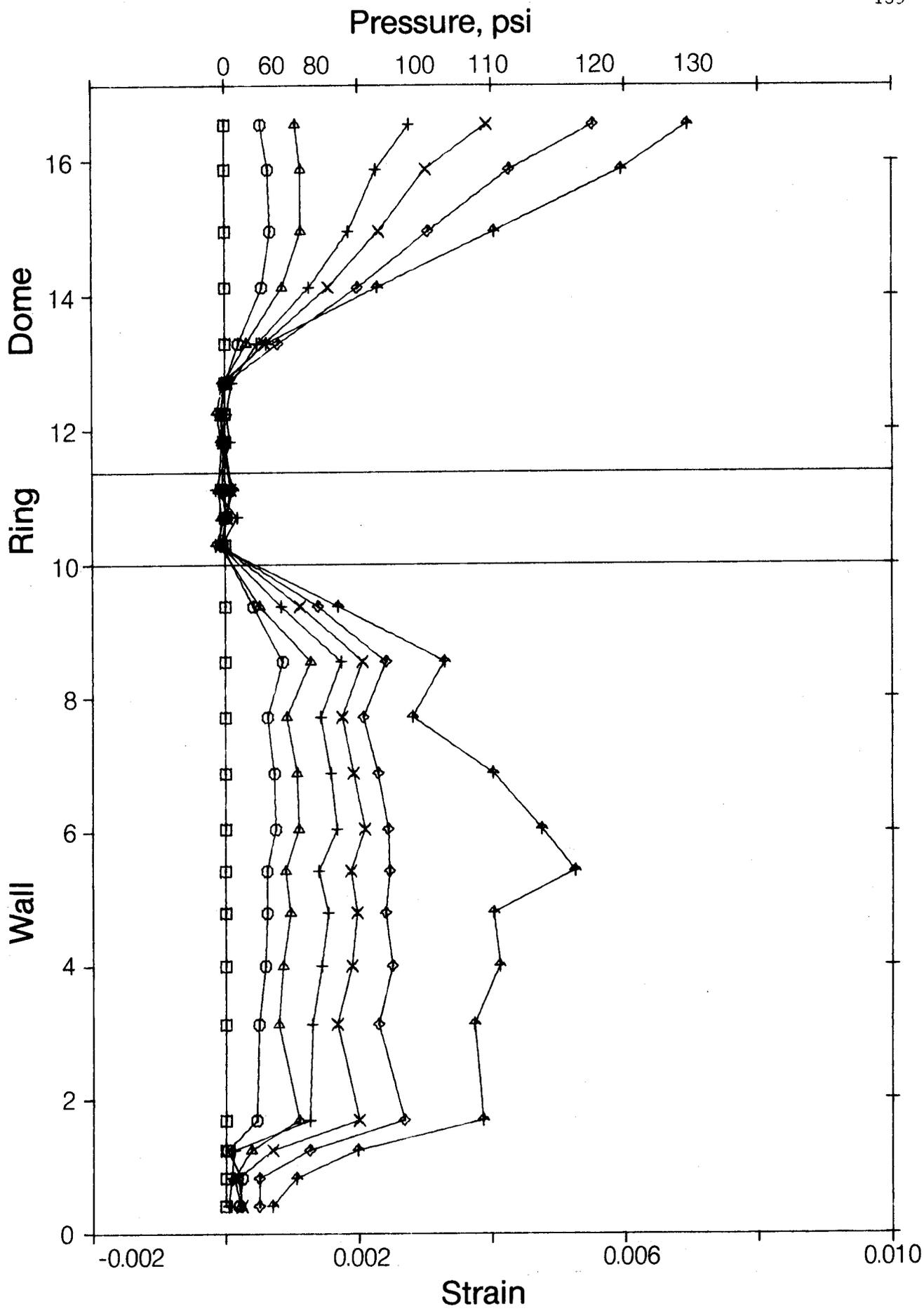


Fig. 8.33 Circumferential Demec Strains on Outside Surface, Line 2

Considering the erratic nature of strains measured over long gage lengths in cracked concrete, the agreement is excellent. In particular the analytical results closely reflect the strain concentrations where bars were cut off at 2 ft above the base and three feet from the crown. This confirms the validity of the representation of bar cut offs using tapered bars.

#### 8.4 Circumferential Strains

##### 8.4.1 Measured Strains

Circumferential strains measured on the outside surface of the concrete on gage lengths crossing line 2 are plotted in Fig. 8.33. These, as expected, show very small circumferential deformations near the base and ring beam and large strains in the mid-portion of the wall and the crown of the dome.

More interesting are circumferential strains measured on the outside surface along a horizontal line at 28 inches above the top of the base (Line 5, Fig. 4.5), Fig. 8.34. A comparison of these with the deflections at the same height (Fig. 7.9) indicates essentially constant strains in the middle portion where the deflections were roughly constant and peaks in the outside strains near the ends of the region where the walls were bending outward the most.

##### 8.4.2 Computed Strains

Figure 8.35 compares the measured and circumferential strains across line 2 at 120 psi pressure. The agreement appears to be excellent near the hinge, near the ring beam and in the dome and poorer in the wall. The strains in two of the gages shown in Fig. 8.35 are replotted

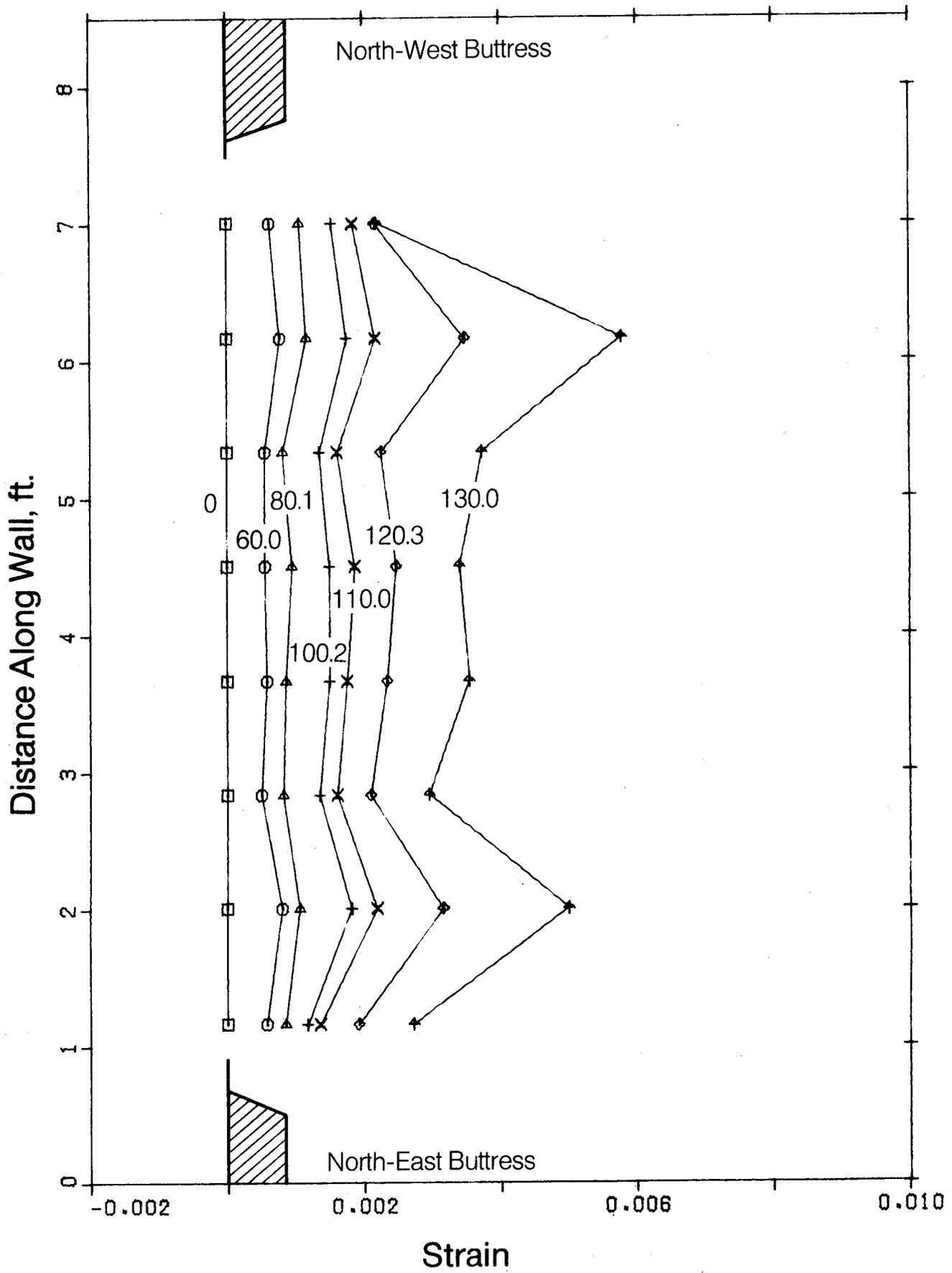


Fig. 8.34 Circumferential Demec Strains on Outside Surface, Line 5

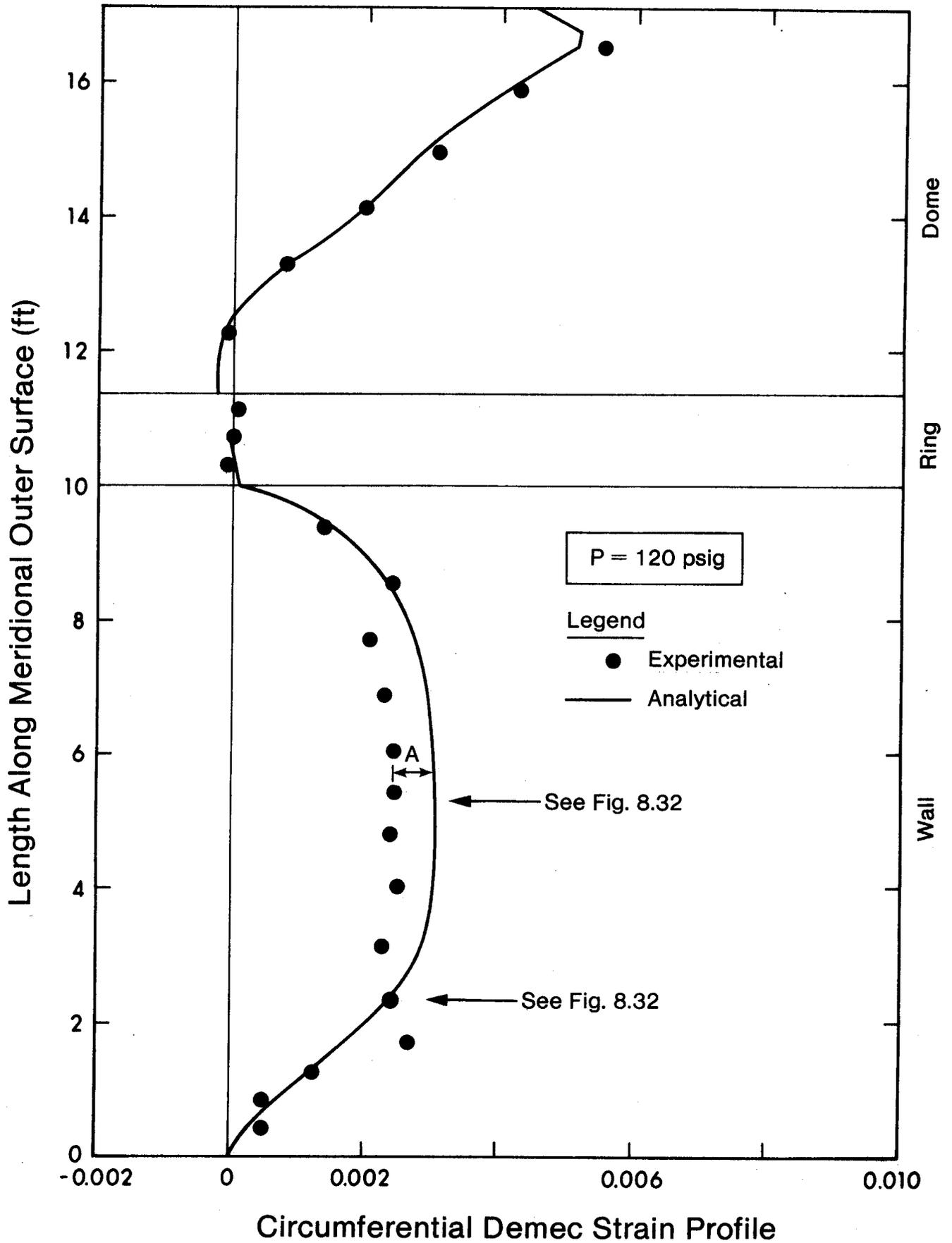


Fig. 8.35 Measured and Computed Circumferential Strains at Surface, Line 2 120 psi

against pressure in Fig. 8.36. The difference in strain labelled A in Fig. 8.35 is shown in Fig. 8.36. The apparently significant error in this strain in Fig. 8.35 is seen to be much less serious in Fig. 8.36.

Fig. 8.37 compares the measured and computed circumferential strains in the dome. In Fig. 8.36 and 8.37 the analysis agrees with Test F up to 80 psi and Test G after that time. It may be said therefore that the analysis gives excellent agreement with the measured strains on the virgin loading curve.

#### 8.5 Strains in Prestressing Tendons

Gages 139 and 140, plotted in Fig. 8.38 were mounted on the center prestressing tendon in the upper layer of dome tendons. Gage 140 was at the crown, gage 139 was 5 ft. from the crown. The strains plotted in Fig. 8.38 are the increases in strain from the start of the test at which time there was a prestrain of 0.0042 in this tendon. Gage 140 underwent a total strain of 0.0115 which exceeded the yield strain of the strand. At gage 139 the strand was stressed just over the proportional limit. The total force in the tendon at gage 140 at failure was 140 ksi compared to 218 ksi at gage 139, 5 ft. away. This indicates this tendon was still bonded at the end of the test.

Gage 138, mounted on a horizontal prestressing tendon in the wall 55 in. above the base and 2 ft. from the center of the south wall, indicated the variation in stress shown in Fig. 7.12. The drop in stress resulted from movement of the tendon anchorages.

The calculated stresses in the prestressing tendons are plotted in Fig. 8.39. Yield is predicted near the crown of the dome

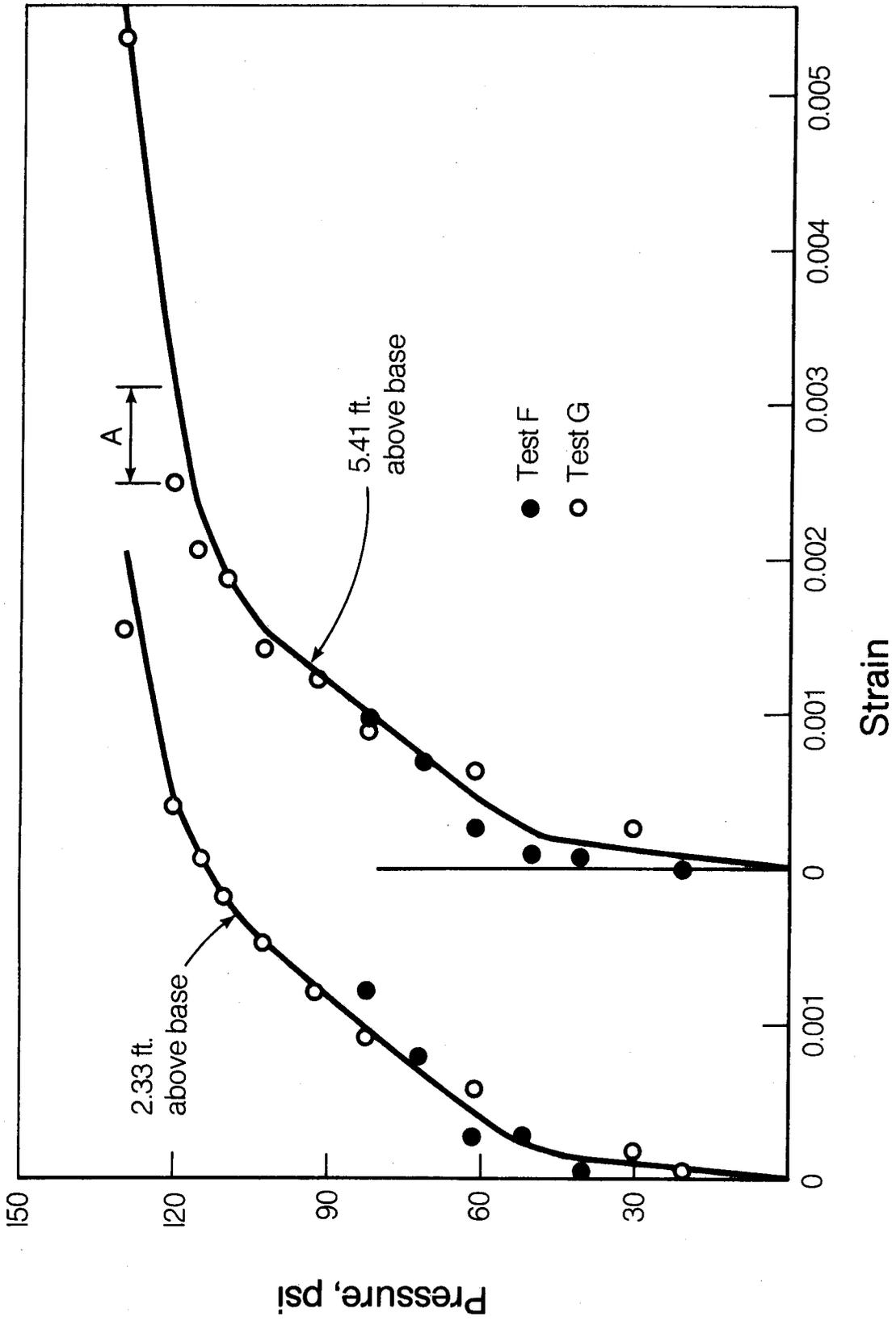


Fig. 8.36 Measured and Computed Circumferential Strains at Surface of Wall, Line 2

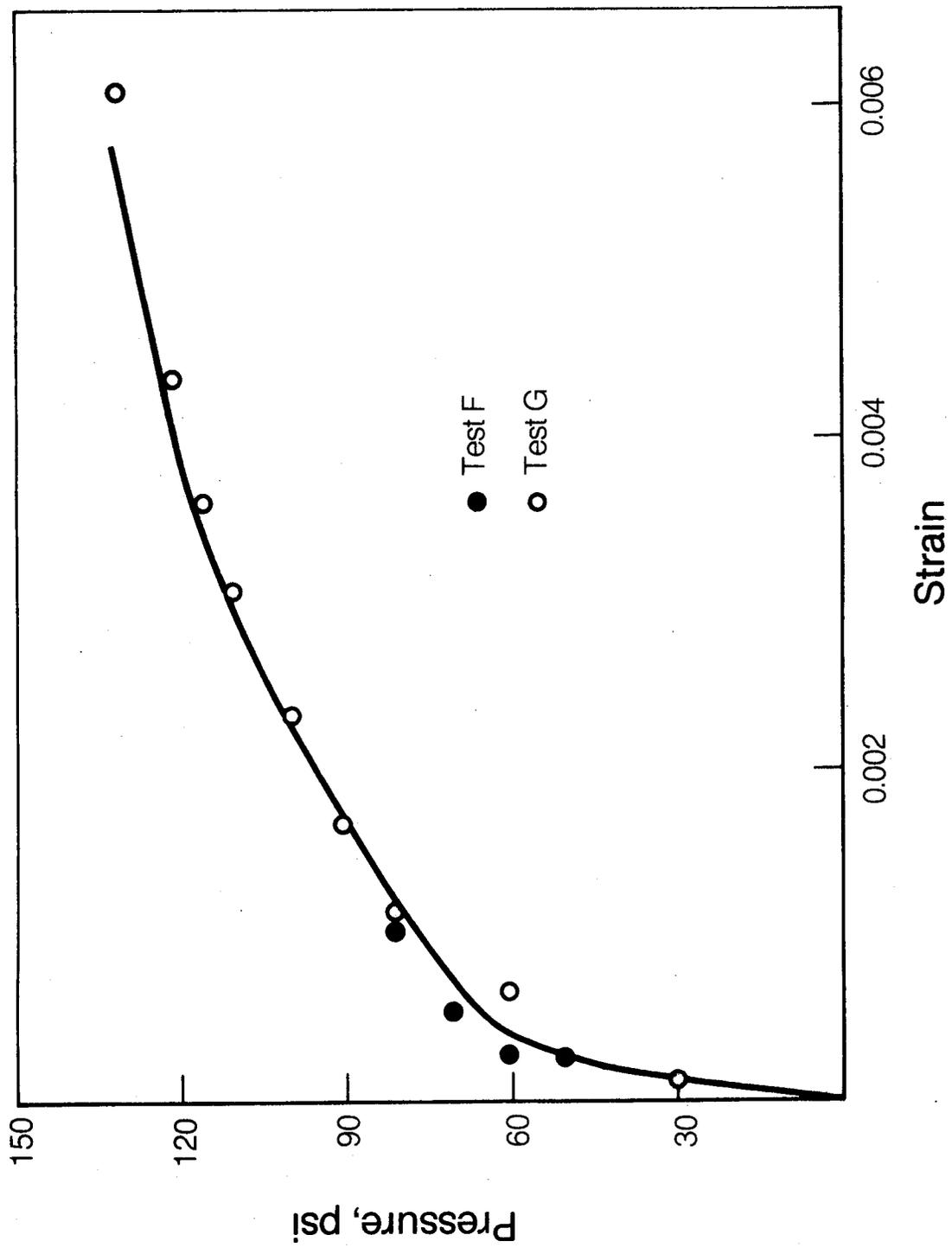


Fig. 8.37 Measured and Computed Circumferential Strains at Surface at 1.17 ft. from Crown of Dome

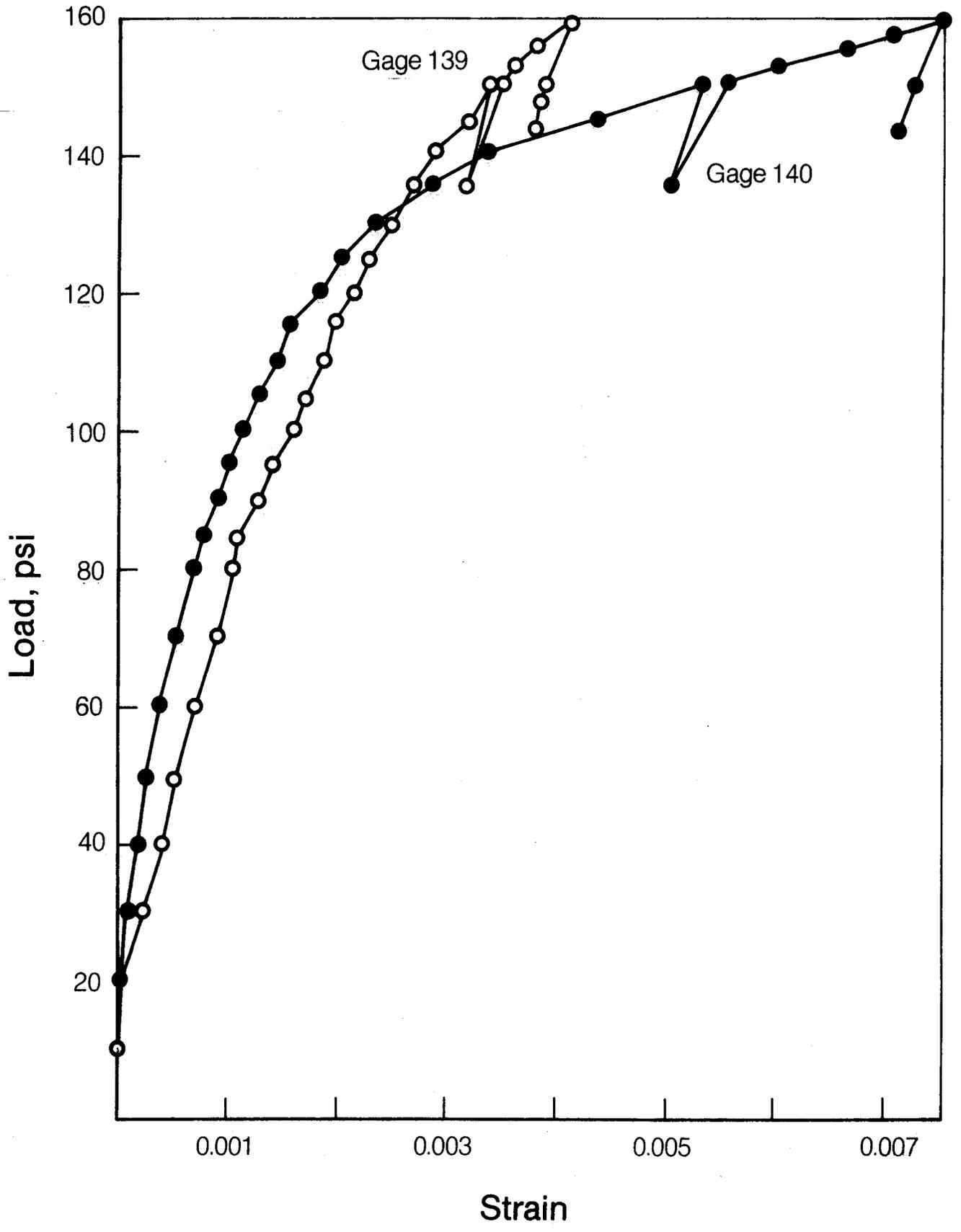


Fig. 8.38 Measured Strains in Prestressing Tendon in Dome

and near the springline of the dome. The measured strains plotted in Fig. 8.38 bear this out. The analysis predicted a very high strain and stresses in the vertical wall tendons at the base of the ring beam. Strains were not measured here, but the existence of such a stress peak is suggested by the wide cracks shown in Fig. 8.14 to 8.16 and the fact that several of the tendon anchorages located 16 in. above this section slipped at high loads. The drastic change in tendon stress predicted in the analysis would cause very high bond stresses which would lead to slip of the tendons in this vicinity.

#### 8.6 Forces in Hinge Region

The joint between the wall and the base was designed as a hinge with reinforcement as shown in Fig. 2.8 and 2.9. Electrical resistance strain gages were mounted on this reinforcement at the locations shown in Fig. 4.9. Unfortunately the vertical gage on Line 2 (Gage 194 in Fig. 4.9), the gages on vertical tendons and a gage on one inclined bar at Line 3 malfunctioned, leaving an incomplete set of data. The strains from the various gages are plotted in Fig. 8.40 to 8.44.

The behavior differed at all three lines although Lines 1 and 2 were diametrically opposite and would normally be expected to display similar behavior. Internal pressure tended to move the wall outward relative to the base. The outward movement of the wall was restrained by bearing between the key projecting downward from the wall and the steel angles cast into the base, by tensile forces in the inclined bars oriented as shown in Fig. 8.40 and by compressive forces in the inclined

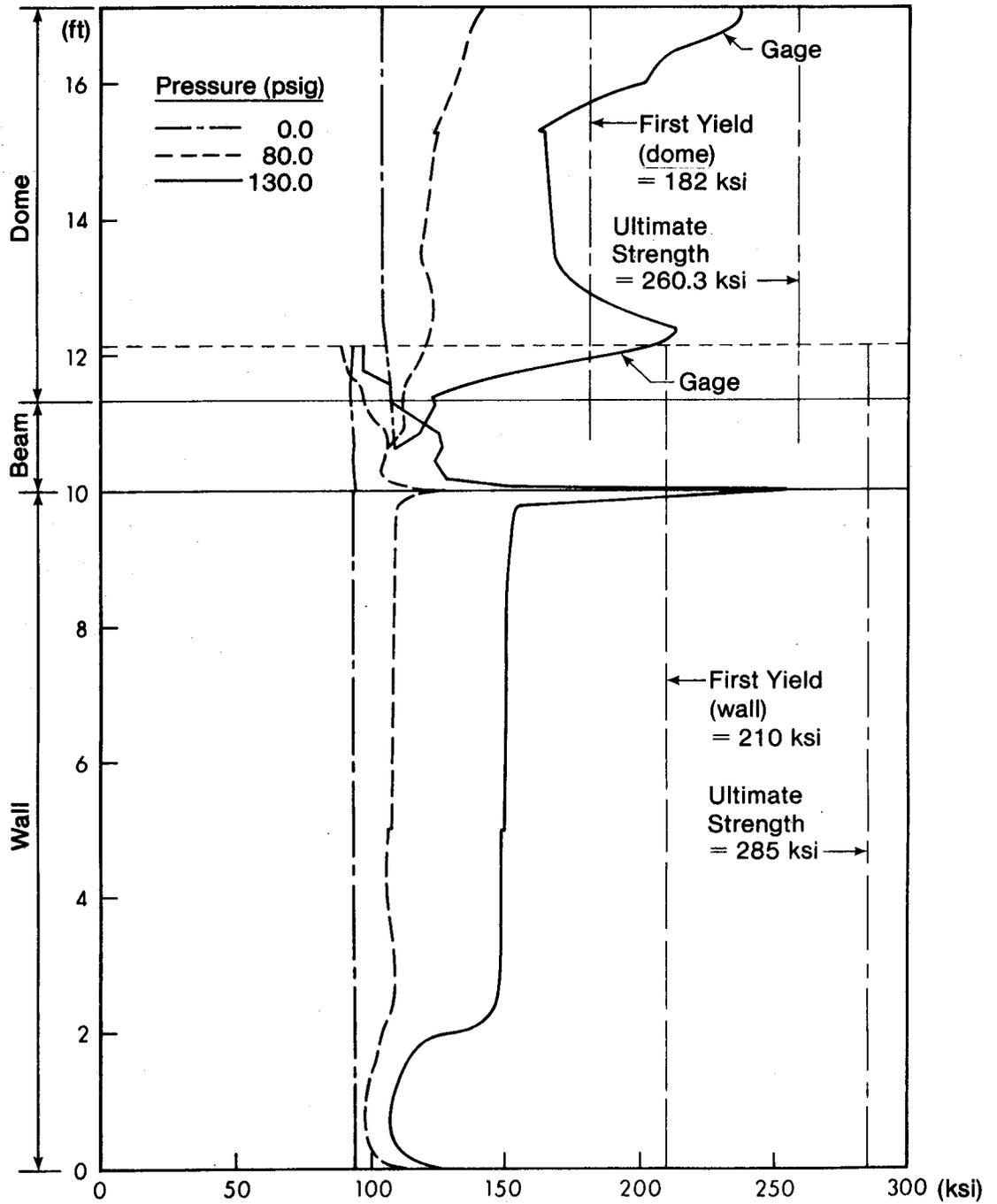


Fig. 8.39 Computed Stresses in Meridional Tendons

bars oriented as shown in Fig. 8.41 and 8.42. However, such stresses could only occur if the key were able to move outwards relative to the base.

The prestress in the tendons was sufficient to maintain a compression force across the joint until the internal pressure reached 28 psi. At higher pressures the walls tended to lift off the base. The upward motion of the wall relative to the base was resisted by tensions in the vertical and inclined bars and tendons crossing the joint. In the bars shown in Fig. 8.41 the tensions due to upward movement of the wall would tend to cancel the stresses due to radial movement while in the bars shown in Fig. 8.40 they would add to them.

The data from Line 1 suggests that the bearing between the hinge key and the groove was not perfect, allowing the outward movement necessary to develop compressive and tensile forces in the inclined bars to occur. Thus, gage 143 (Fig. 8.40) was stressed in tension while gage 144 (Fig. 8.41) was initially stressed in compression. The tensions resulting from the uplift forces increase those in gage 143 and reduce the compressions in gage 144. If it is assumed that the opening of the joint involves strains extending over a 2 in. length of the inclined bars crossing the joint, the calculated horizontal deflection required to develop the strains shown in Fig. 8.40 and 8.41 at a pressure of 120 psi is 0.0036 in. The measured horizontal deflection at Gage 221 located 2.25 in. above the base was 0.0034 in. at the same pressure. The vertical bar on which Gage 146 (Fig. 8.42) was mounted was inadvertently placed in such a manner that any bending of the bar due to horizontal slipping at the hinge would tend to cause strains in

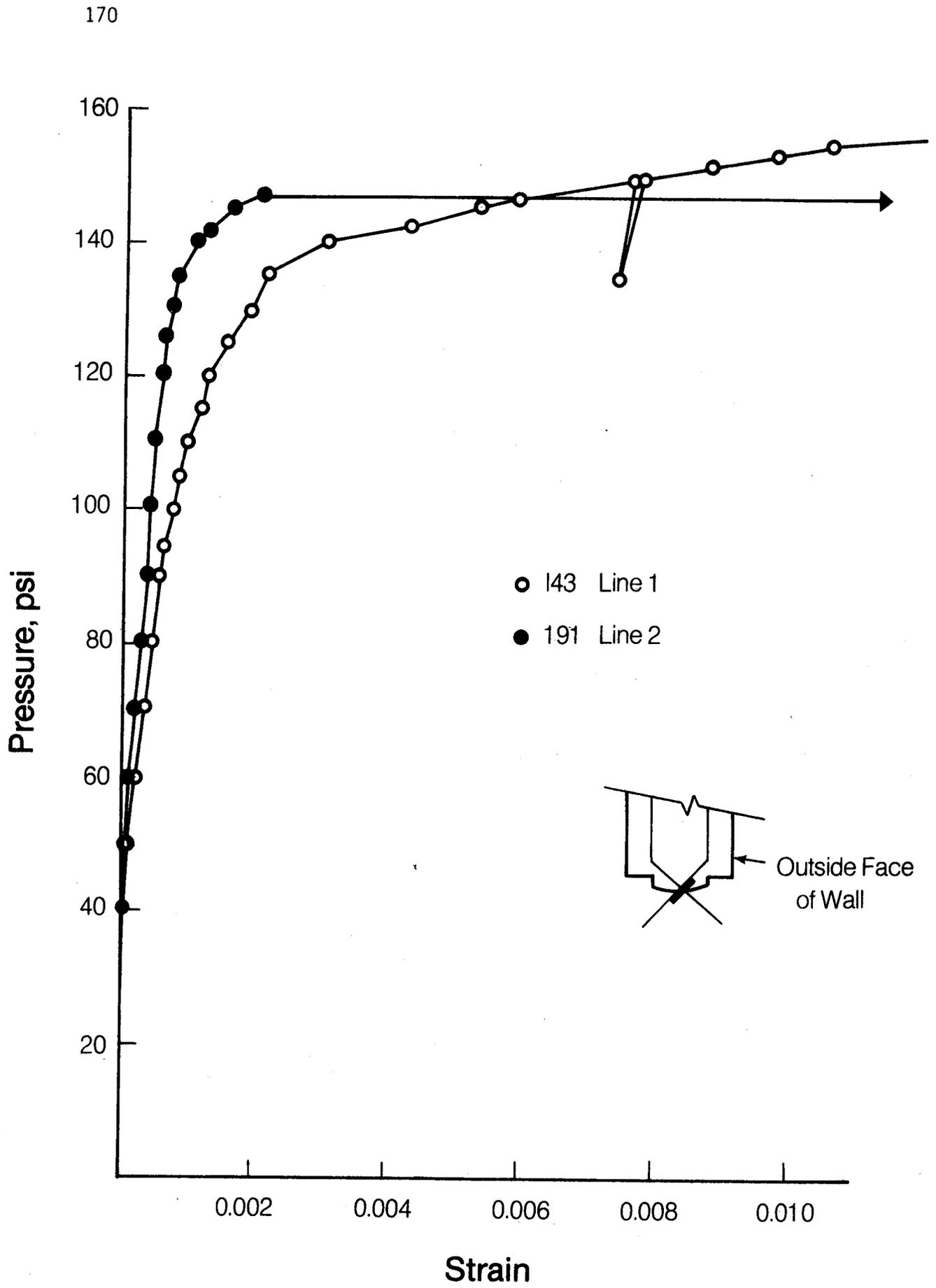


Fig. 8.40 Strains Measured in Inclined Bars across Hinge, Lines 1 and 2

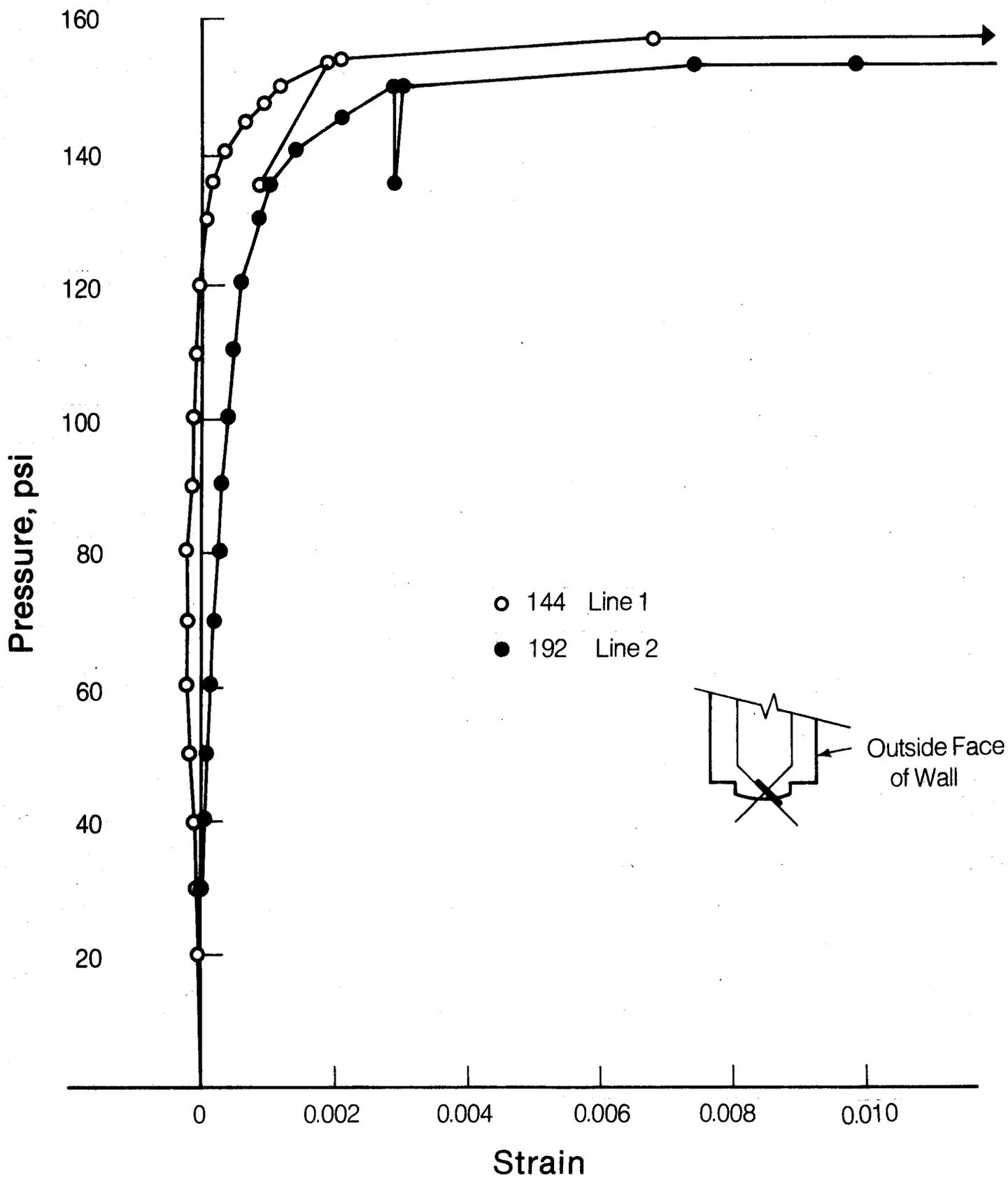


Fig. 8.41 Strains measured in Inclined Bars across Hinge, Lines 1 and 2

this gage. As a result, no conclusions can be drawn from the readings of this gage.

Gages 191 and 192 at Line 2 (Figs. 8.40 and 8.41) indicate very similar strains in both inclined bars at that line. This indicates that outward movement of wall was prevented by bearing between the hinge key and the groove in the base and as a result, only vertical movement occurred. It is interesting to note that the total vertical component of force in the inclined bars was similar at Lines 1 and 2 in spite of the different behaviour at these two locations.

The strains in Gage F19 on Line 3 (Fig. 8.42) indicate that a larger horizontal slip occurred at the buttress than at Line 1. This may reflect poorer compaction of the concrete in the key in this region or it may be due in part to the potentially larger outward forces at this location due to the non-axisymmetric action of the buttress. Gage F19 initially yielded in compression about 60 psi pressure began to unload about 70 psi, reaching zero stress at 122 psi and yielding in tension at 141 psi. The vertical bar at Line 3 yielded in tension at 130 psi pressure (Fig. 8.43). Here, superimposed on the outward sliding and upward movements, was a rotation of the buttress about a point near the outside edge of the buttress. The yielding of this steel coincided with the start of increased vertical movement of the mid-plane of the wall as noted in Fig. 8.3.

Strain gages F24 to F26 were mounted on the bottom three stirrups in the wall on Line 1. Fig. 8.44 indicates that these underwent very little strain prior to a pressure of 120 psi, following which time the top stirrup appears to have been intersected by a crack.

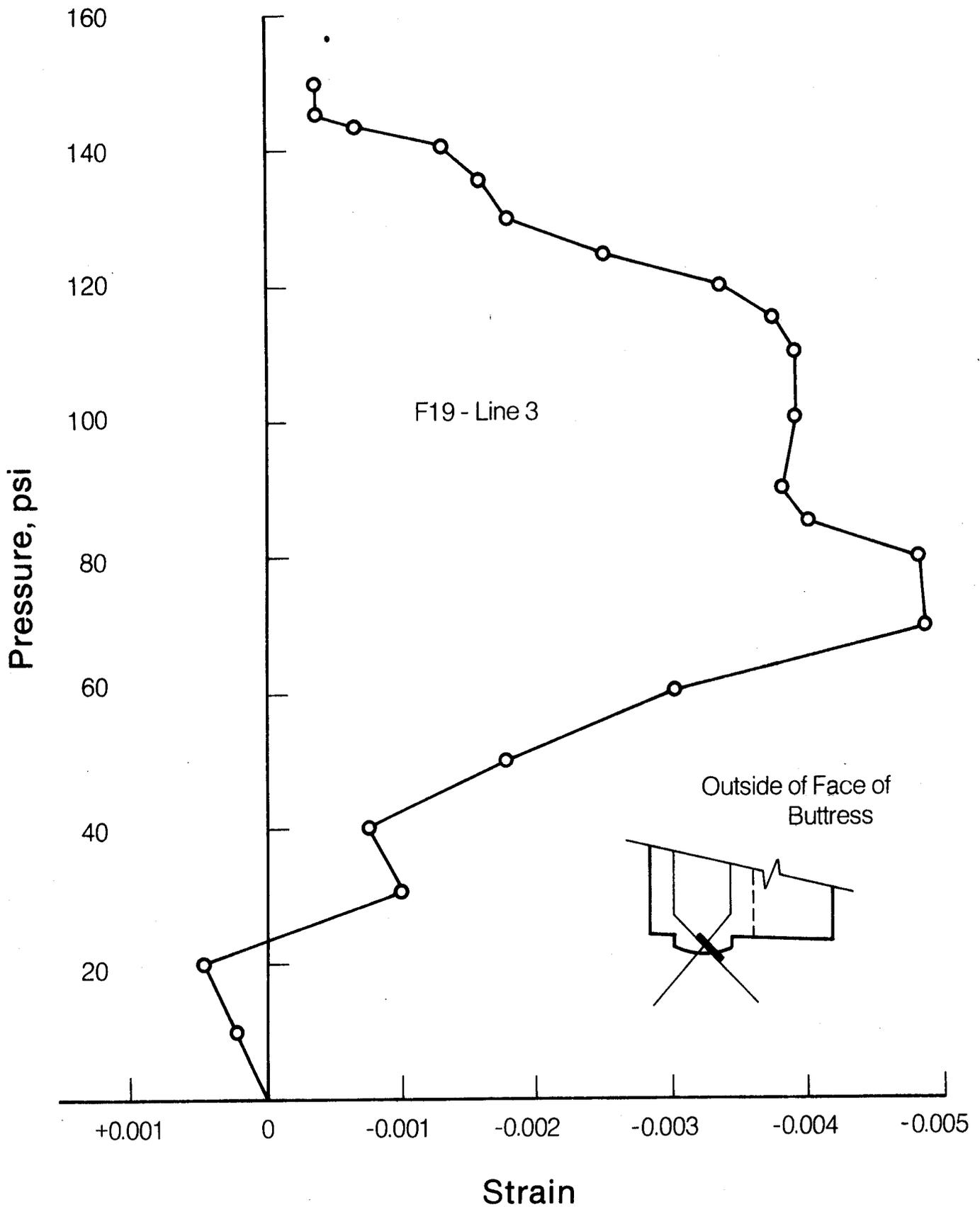


Fig. 8.42 Strains measured in Inclined Bar across Hinge, Line 3

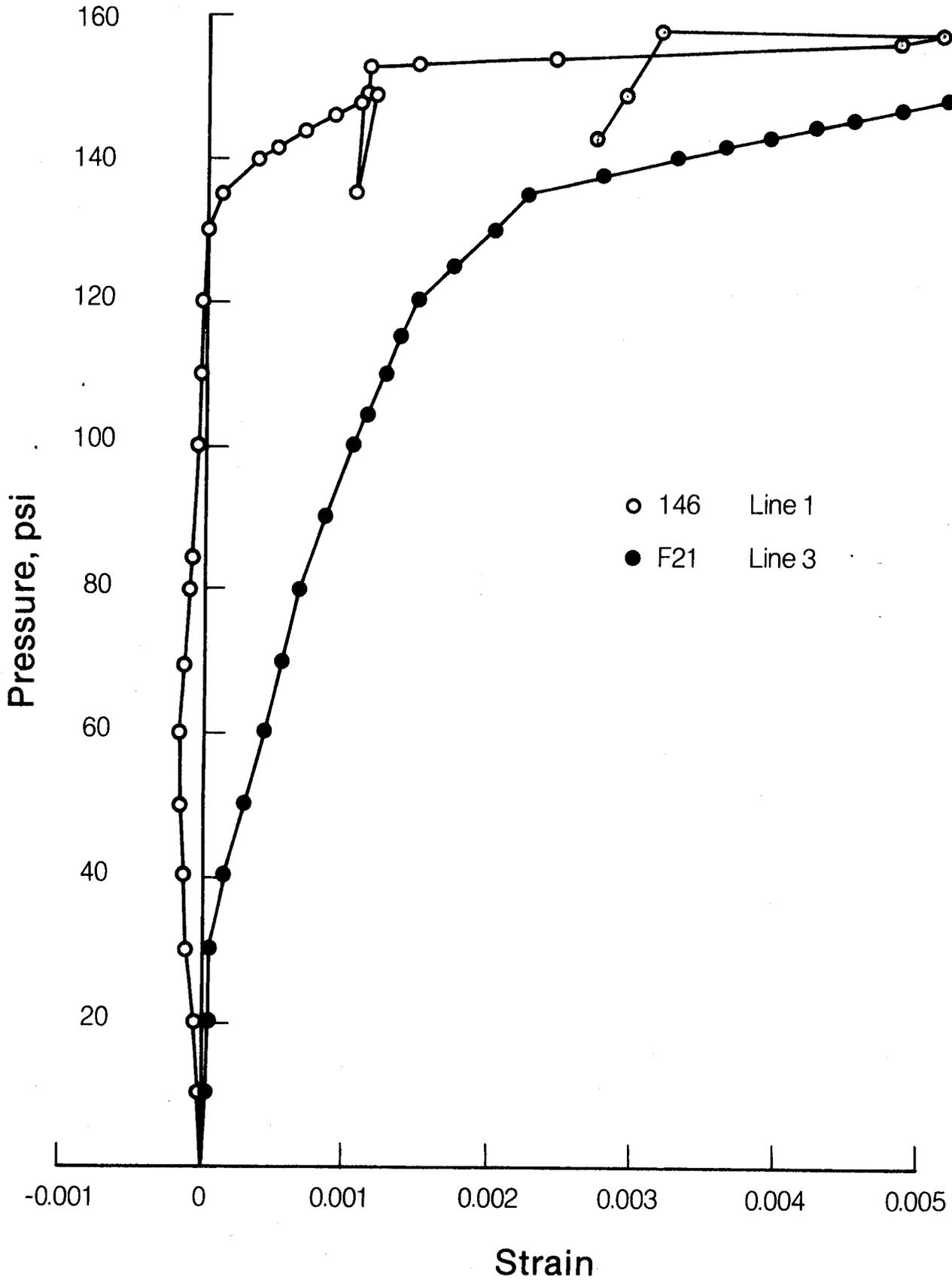


Fig. 8.43 Strains measured in Vertical Bars across Hinge. Lines 1 and 2

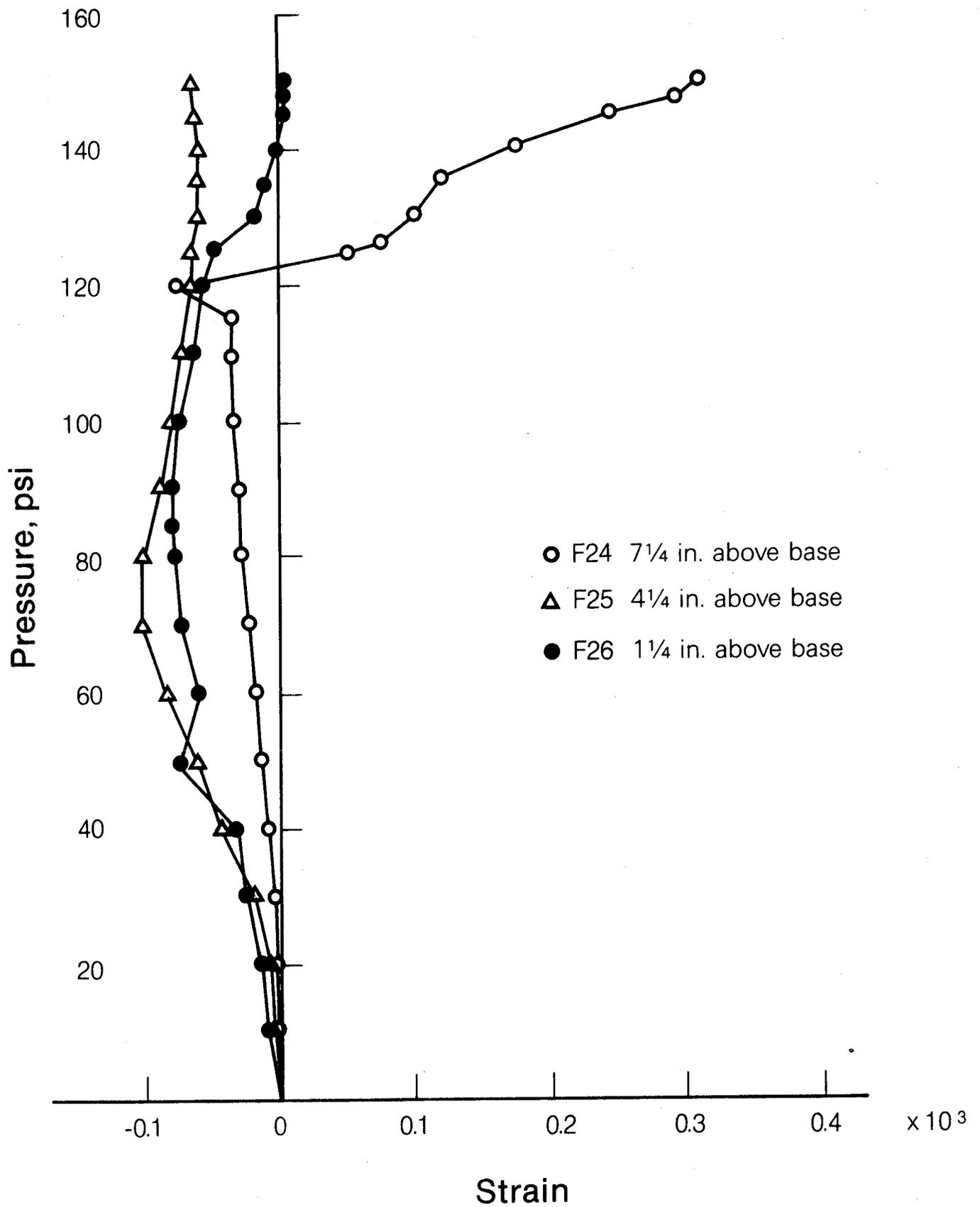


Fig. 8.44 Strains measured in Stirrups near Hinge, Line 1



## 9. CONCLUSIONS

This report describes a test of a prestressed concrete structure designed to behave in a manner similar to a containment building for a nuclear power plant. The model had an overall height of 16 ft and a diameter of 11 ft 4 in. When loaded to failure with water pressure it cracked extensively and deformed in a ductile manner before failing at 159.9 psi internal pressure. The following conclusions can be drawn from this test:

### Behavior of Test Structure

1. The test structure behaved in a highly ductile manner. The corresponding prototype structure could be expected to do so also.
2. The ring beam, dome and center half of each wall had strains and deflections corresponding to axi-symmetric behavior. In the region extending roughly 20-25 degrees each way from the center of each buttress the behavior was affected by the flexural stiffness of the buttresses.
3. Crack patterns were strongly affected by tendon locations with major cracks in the walls and dome following the tendons. Cracks formed between the tendons at roughly every second reinforcing bar. This is the same pattern of cracking observed in the wall segment tests.
4. The outward bending of the buttresses resulted in cracks adjacent to most of the anchorages for the horizontal wall tendons. Final failure appeared to have been initiated by distress at several of these anchorage zones. Additional study is required of the strength and stiffness needed in the buttresses to prevent anchorage zone distress.

5. In a number of regions the cracking loads and deformations were affected by discontinuities in the reinforcement pattern.
6. Although data from gages in the hinge region did not allow a complete assessment of the force transfer mechanism in this region, the horizontal force transfer involved bearing on the hinge key and if slip could occur, horizontal force components in the inclined bars. More study of this problem would be desirable. Future work should utilize statically determinate specimens if possible.

#### Analyses

7. The BOSOR5 calculations closely modelled the behavior of the test structure on its virgin loading curve in regions where the results approached axisymmetric conditions. The biggest errors were in deflection predictions, especially at points where errors would cumulate, such as the vertical deflection at the top of the ring beam or top of the wall.
8. The techniques of modelling bar cutoffs and splices using tapered bars, and modelling of prestressing anchor zones using bond forces along the sides of a tendon near its ends both appeared to be satisfactory.
9. The crack width calculations gave adequate estimates of crack widths especially at loads prior to yielding of the reinforcing bars.

REFERENCES

1. Simmonds, S.H.; Rizkalla, S.H. and MacGregor, J.G.; "Tests of Wall Segments from Reactor Containments," Structural Engineering Report No. 81, Department of Civil Engineering, University of Alberta, Edmonton, Canada, November 1979.
2. MacGregor, J.G.; Rizkalla, S.H.; and Simmonds, S.H.; "Cracking of Reinforced and Prestressed Concrete Wall Segments," Structural Engineering Report No. 82, Department of Civil Engineering, University of Alberta, Edmonton, Canada, March 1980.
3. Rizkalla, S.H.; Simmonds, S.H. and MacGregor, J.G.; "Leakage Tests of Wall Segments of Reactor Containments", Structural Engineering Report No. 80, Department of Civil Engineering, University of Alberta, Edmonton, Canada, October 1979.
4. Chitnuyanondh, L.; Rizkalla, S.; Murray, D.W. and MacGregor, J.G.; "An Effective Uniaxial Tensile Stress-Strain Relationship for Prestressed Concrete", Structural Engineering Report No. 74, Department of Civil Engineering, University of Alberta, Edmonton, Canada, February 1979.
5. Murray, D.W., Chitnuyanondh, L., Wong, C. and Rijub-Agha, K.Y. Inelastic Analysis of Prestressed Concrete Secondary Containments. Structural Engineering Report No. 67, Department of Civil Engineering, University of Alberta, Edmonton, Canada, July 1798.
6. Epstein, M. and Murray, D.W., "An Elastic Stress Analysis of a Gentilly Type Containment Structure: Volume 1", Structural Engineering Report No. 55, "Volume 2 (Appendices B to F)", Structural Engineering Report No. 56, Department of Civil Engineering, University of Alberta, Edmonton, Canada, April 1976.
7. Murray, D.W. A Review of Explosive Characteristics of Secondary Containments Near Ultimate Load. Nuclear Engineering and Design Vol. 52, 1979.
8. Malhotra, V.M., "Contract Strength Requirements - Cores versus in-situ Evaluation," Journal of American Concrete Institute, Proc. Vol. 74, April 1977, p. 163172.
9. Bushnell, D., "Stress, Stability and Vibration of Complex Branched Shells of Revolution: User's Manual for BOSOR4", Lockheed Missile and Space Company, Inc., Sunnyvale, California.

10. Bushnell, D., "BOSOR5 - A Computer Program for Buckling of Elastic-Plastic Complex Shells of Revolution Including Large Deflections and Creep; Vol. 1: User's Manual, Input Data", Lockheed Missils and Space Company, Inc., Sunnyvale, California, December 1974.
11. Murray, D.W., Wong, C., Simmonds, S.H., MacGregor, J.G., "An Inelastic Analysis of the Gentilly-2 Secondary Containment Structure", Structural Engineering Report No. 86, Department of Civil Engineering, University of Alberta, Edmonton, Canada, April 1980.

**APPENDIX A**

**Loads, Strains and Deflections**

**Recorded in Tests F and G**

### Introduction

The loads, strains and deflections recorded in Tests F and G are listed in the following tables. The tables have been abbreviated from the original data in the following ways:

1. Three readings of each electronic measurement were made at each load. The average of these values is reported.
2. Where several sets of readings were made at a given load interval, only the first is reported.

In both Tests F and G the strains and deflections are reported assuming the value at the beginning of that test was the zero value.

Table A.1  
Identification of Instrumentation Channels

Channel No.	Quantity Measured	Units	Location
1 - 34	Strain	-	Wall (Line 1) - Fig. 4.6
35 - 63	Strain	-	Dome (Line 1) - Fig. 4.7
64 - 67	Strain	-	Ring Beam Stirrup (Line 1)
68 - 95	Strain	-	Wall (Line 2) - Fig. 4.6
96 - 115	Strain	-	Dome (Line 2) - Fig. 4.7
116 - 117	Strain	-	Ring Beam Stirrup (Line 2)
118 - 137	Strain	-	Wall - Fig. 4.8
138	Strain	-	Wall, Horizontal tendon
139, 140	Strain	-	Dome, tendon
141 - 148	Strain	-	Hinge (Line 1) - Fig. 4.9
149, 150	Broken gages	-	
151 - 174	Strain	-	Wall - Fig. 4.10
175 - 188	Strain	-	Dome - Fig. 4.10
189 - 194	Strain	-	Hinge (Line 2) - Fig. 4.9
195 - 220	Strain	-	Wall (Line 3) - Fig. 4.6
221 - 228	Deflection	inches	Wall (Line 1) - Fig. 4.2
229 - 232	Deflection	inches	Ring Beam (Line 1)
233 - 237	Deflection	inches	Dome (Line 1) - Fig. 4.2
238	Deflection	inches	Buttress (Line 4) - Fig. 4.1
239 - 242	Deflection	inches	Wall (Line 4) - Fig. 4.1
243	Deflection	inches	Buttress (Line 4) - Fig. 4.1
244	Pressure	psi	--
F1	Strain	-	Wall (Line 3) - Fig. 4.6
F2 - F13	Strain	-	Dome (Line 3) - Fig. 4.7
F14 - F16	Strain	-	Ring Beam Stirrup (Line 3)
F17 - F23	Strain	-	Hinge (Line 3) - Fig. 4.9
F24 - F26	Strain	-	Stirrups (Line 1)
F27 - F29	Strain	-	Dome - Fig. 4.8

TESTING SCHEDULE	- TEST F			YEAR	HOUR	MINUTE	SECOND
LOAD(PST)	MONTH	DAY	YEAR	HOUR	MINUTE	SECOND	
0.0	11	20	78	10	46	41	
5.088	11	20	78	10	51	21	
9.943	11	20	78	10	55	22	
14.95	11	20	78	10	39	21	
19.89	11	20	78	11	2	32	
19.98	11	20	78	11	46	37	
24.90	11	20	78	11	49	35	
29.93	11	20	78	11	53	32	
35.03	11	20	78	11	19	37	
40.22	11	20	78	12	4	32	
40.12	11	20	78	13	12	23	
45.18	11	20	78	13	15	27	
49.80	11	20	78	13	22	31	
50.68	11	20	78	14	58	19	
54.52	11	20	78	15	1	42	
60.25	11	20	78	15	5	44	
60.17	11	20	78	16	27	35	
65.69	11	20	78	16	30	28	
71.24	11	20	78	16	33	14	
70.09	11	20	78	17	25	33	
75.34	11	20	78	17	28	35	
80.38	11	20	78	17	32	22	
80.13	11	20	78	18	23	29	
69.51	11	20	78	18	26	53	
59.81	11	20	78	18	27	50	
49.54	11	20	78	18	28	41	
40.08	11	20	78	18	29	31	
29.41	11	20	78	18	30	18	
19.41	11	20	78	18	30	58	
9.680	11	20	78	18	31	47	
1.070	11	20	78	18	33	1	

Table A2

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	1	2	3	4	5	6	7	8	9	10
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.8258E-05	0.1332E-04	0.1726E-04	-0.2500E-05	0.1138E-04	0.4106E-04	0.1273E-04	0.2879E-05	0.1076E-04	0.1846E-04
9.943	0.1188E-04	0.2497E-04	0.3024E-04	0.6203E-05	0.2180E-04	0.8990E-04	0.2218E-04	0.5593E-06	0.1517E-04	0.3497E-04
14.95	0.1527E-04	0.3713E-04	0.4412E-04	0.3619E-05	0.3272E-04	0.1434E-03	0.3264E-04	-0.1546E-05	0.2752E-04	0.5485E-04
19.89	0.1958E-04	0.5087E-04	0.5843E-04	0.1354E-04	0.4409E-04	0.1954E-03	0.4394E-04	-0.4935E-05	0.2769E-04	0.7498E-04
19.98	0.3075E-04	0.5391E-04	0.6707E-04	0.2116E-04	0.5249E-04	0.2062E-03	0.5244E-04	0.1250E-05	0.3856E-04	0.8852E-04
24.90	0.3626E-04	0.7847E-04	0.8383E-04	0.2890E-04	0.6455E-04	0.2565E-03	0.6493E-04	-0.5922E-06	0.4480E-04	0.1087E-03
29.93	0.4108E-04	0.8793E-04	0.1015E-03	0.3486E-04	0.7717E-04	0.3092E-03	0.7834E-04	-0.3866E-05	0.5218E-04	0.1325E-03
35.03	0.4718E-04	0.1033E-03	0.1237E-03	0.4338E-04	0.9262E-04	0.3666E-03	0.9359E-04	-0.6975E-05	0.5981E-04	0.1576E-03
40.22	0.5429E-04	0.1273E-03	0.1525E-03	0.5203E-04	0.1202E-03	0.4444E-03	0.1029E-03	-0.1227E-04	0.7011E-04	0.1902E-03
40.12	0.6011E-04	0.1352E-03	0.1560E-03	0.5297E-04	0.1294E-03	0.4585E-03	0.1042E-03	-0.1425E-04	0.7740E-04	0.2035E-03
45.18	0.6287E-04	0.1604E-03	0.1896E-03	0.7166E-04	0.1587E-03	0.5206E-03	0.1025E-03	-0.2050E-04	0.8778E-04	0.2634E-03
49.80	0.6936E-04	0.1869E-03	0.2345E-03	0.8816E-04	0.3139E-03	0.6118E-03	0.8337E-04	-0.1847E-04	0.1115E-03	0.3552E-03
50.68	0.9499E-04	0.2127E-03	0.2653E-03	0.8257E-04	0.4007E-03	0.6354E-03	0.8581E-04	0.1002E-04	0.1467E-03	0.4205E-03
54.52	0.1014E-03	0.2327E-03	0.2904E-03	0.1720E-03	0.4663E-03	0.7162E-03	0.5893E-04	0.1693E-04	0.1561E-03	0.4746E-03
60.25	0.1157E-03	0.2563E-03	0.4168E-03	0.2508E-03	0.7221E-03	0.8055E-03	0.2918E-04	0.5271E-04	0.2074E-03	0.6446E-03
60.17	0.1575E-03	0.2770E-03	0.4882E-03	0.3103E-03	0.8380E-03	0.8292E-03	0.2344E-04	0.7057E-04	0.2379E-03	0.7184E-03
65.69	0.1804E-03	0.3038E-03	0.5880E-03	0.3463E-03	0.9515E-03	0.9259E-03	0.3318E-04	0.8928E-04	0.2691E-03	0.8173E-03
71.24	0.2386E-03	0.3418E-03	0.7550E-03	0.4885E-03	0.1161E-02	0.1095E-02	0.6037E-04	0.1212E-03	0.3326E-03	0.9964E-03
75.34	0.3270E-03	0.4388E-03	0.8018E-03	0.5674E-03	0.1213E-02	0.1121E-02	0.7196E-04	0.1414E-03	0.3756E-03	0.1058E-02
80.38	0.4034E-03	0.4391E-03	0.1095E-02	0.7616E-03	0.1451E-02	0.1388E-02	0.1712E-03	0.2004E-03	0.6381E-03	0.1307E-02
80.13	0.4695E-03	0.4506E-03	0.1155E-02	0.8119E-03	0.1494E-02	0.1425E-02	0.1946E-03	0.2214E-03	0.6672E-03	0.1361E-02
69.51	0.4483E-03	0.3970E-03	0.1046E-02	0.7627E-03	0.1376E-02	0.1279E-02	0.1790E-03	0.1995E-03	0.6276E-03	0.1244E-02
59.81	0.4188E-03	0.3530E-03	0.9140E-03	0.6932E-03	0.1225E-02	0.1100E-02	0.1642E-03	0.1720E-03	0.5792E-03	0.1090E-02
49.54	0.3847E-03	0.2936E-03	0.7649E-03	0.6157E-03	0.1050E-02	0.8951E-03	0.1322E-03	0.1430E-03	0.5220E-03	0.9125E-03
40.08	0.3521E-03	0.2488E-03	0.6282E-03	0.5420E-03	0.8804E-03	0.7058E-03	0.1050E-03	0.1195E-03	0.4656E-03	0.7446E-03
29.41	0.3193E-03	0.1881E-03	0.4835E-03	0.4618E-03	0.6973E-03	0.4984E-03	0.7161E-04	0.9994E-04	0.4066E-03	0.5664E-03
19.41	0.2933E-03	0.1541E-03	0.3641E-03	0.3921E-03	0.5396E-03	0.3190E-03	0.4086E-04	0.8785E-04	0.3595E-03	0.4187E-03
9.680	0.2737E-03	0.1018E-03	0.2708E-03	0.3370E-03	0.4099E-03	0.1692E-03	0.1387E-04	0.8168E-04	0.3230E-03	0.2998E-03
1.070	0.2576E-03	0.5942E-04	0.2027E-03	0.2934E-03	0.3156E-03	0.5725E-04	-0.9130E-05	0.8010E-04	0.2948E-03	0.2126E-03

Table A3

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	11	12	13	14	15	16	17	18	19	20
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.2672E-04	0.2017E-04	0.1842E-04	0.2102E-04	0.1742E-04	0.8225E-05	0.1941E-05	0.8011E-05	0.6761E-05	0.5922E-05
9.943	0.5541E-04	0.3966E-04	0.2731E-04	0.4262E-04	0.3441E-04	0.1306E-04	0.1036E-05	0.1165E-04	0.9081E-05	0.8028E-05
14.95	0.8855E-04	0.6083E-04	0.3968E-04	0.6656E-04	0.5283E-04	0.1823E-04	0.4935E-07	0.1485E-04	0.1124E-04	0.9624E-05
19.89	0.1234E-03	0.8324E-04	0.6242E-04	0.9074E-04	0.7146E-04	0.2415E-04	0.6416E-06	0.1851E-04	0.1347E-04	0.1145E-04
19.98	0.1359E-03	0.9295E-04	0.5419E-04	0.1018E-03	0.8095E-04	0.3254E-04	0.6416E-06	0.2820E-04	0.2213E-04	0.1949E-04
24.90	0.1703E-03	0.1164E-03	0.7837E-04	0.1261E-03	0.1003E-03	0.3993E-04	0.6514E-05	0.3262E-04	0.2576E-04	0.2246E-04
29.93	0.2075E-03	0.1413E-03	0.9349E-04	0.1534E-03	0.1206E-03	0.4623E-04	0.6087E-05	0.3632E-04	0.2798E-04	0.2448E-04
35.03	0.2485E-03	0.1687E-03	0.1107E-03	0.1853E-03	0.1444E-03	0.5508E-04	0.6138E-05	0.4007E-04	0.3116E-04	0.2708E-04
40.22	0.3000E-03	0.2022E-03	0.1249E-03	0.2222E-03	0.1791E-03	0.6893E-04	0.7321E-05	0.4387E-04	0.3474E-04	0.2964E-04
45.18	0.3128E-03	0.2090E-03	0.1385E-03	0.2370E-03	0.1928E-03	0.7399E-04	0.8752E-05	0.4358E-04	0.3440E-04	0.2973E-04
49.80	0.3820E-03	0.3159E-03	0.1911E-03	0.3085E-03	0.2449E-03	0.8822E-04	0.9212E-05	0.4800E-04	0.3830E-04	0.3721E-04
49.80	0.5262E-03	0.4521E-03	0.4265E-03	0.4529E-03	0.3296E-03	0.1190E-03	0.1194E-04	0.5202E-04	0.4142E-04	0.5812E-04
54.52	0.5837E-03	0.7359E-03	0.6323E-03	0.6078E-03	0.4190E-03	0.1872E-03	0.3244E-04	0.7232E-04	0.6123E-04	0.8742E-04
60.25	0.6591E-03	0.5351E-03	0.5600E-03	0.5310E-03	0.3977E-03	0.1579E-03	0.2728E-04	0.7112E-04	0.5924E-04	0.9984E-04
60.17	0.8152E-03	0.9661E-03	0.8392E-03	0.7548E-03	0.5291E-03	0.2303E-03	0.3390E-04	0.7531E-04	0.6123E-04	0.1440E-03
65.69	0.8627E-03	0.1004E-02	0.9057E-03	0.8115E-03	0.5597E-03	0.2454E-03	0.2931E-04	0.2670E-04	0.7694E-04	0.1730E-03
71.24	0.9764E-03	0.1139E-02	0.9980E-03	0.9106E-03	0.6234E-03	0.2672E-03	0.2874E-04	0.2772E-04	0.8141E-04	0.2125E-03
71.24	0.1104E-02	0.1285E-02	0.1187E-02	0.1083E-02	0.6962E-03	0.2869E-03	0.3349E-04	0.5355E-04	0.1002E-03	0.2642E-03
70.09	0.1121E-02	0.1289E-02	0.1221E-02	0.1113E-02	0.7222E-03	0.2874E-03	0.3430E-04	0.8102E-04	0.1126E-03	0.2744E-03
75.34	0.1217E-02	0.1406E-02	0.1321E-02	0.1202E-02	0.7842E-03	0.3044E-03	0.3440E-04	0.8832E-04	0.1181E-03	0.3025E-03
80.38	0.1325E-02	0.1538E-02	0.1505E-02	0.1394E-02	0.8975E-03	0.3417E-03	0.3330E-04	0.1097E-03	0.1278E-03	0.3471E-03
80.13	0.1349E-02	0.1562E-02	0.1560E-02	0.1392E-02	0.9392E-03	0.3583E-03	0.3859E-04	0.1149E-03	0.1346E-03	0.3566E-03
69.51	0.1210E-02	0.1372E-02	0.1424E-02	0.1260E-02	0.8553E-03	0.3299E-03	0.3840E-04	0.1103E-03	0.1282E-03	0.3204E-03
59.81	0.1046E-02	0.1159E-02	0.1247E-02	0.1099E-02	0.7529E-03	0.2956E-03	0.3701E-04	0.8493E-04	0.1191E-03	0.2750E-03
49.54	0.8649E-03	0.9367E-03	0.1061E-02	0.9219E-03	0.6366E-03	0.2578E-03	0.3706E-04	0.8281E-04	0.1103E-03	0.2250E-03
40.08	0.6963E-03	0.7385E-03	0.8927E-03	0.7554E-03	0.5247E-03	0.2221E-03	0.3810E-04	0.9273E-04	0.1025E-03	0.1824E-03
29.41	0.5158E-03	0.5315E-03	0.7034E-03	0.5703E-03	0.3981E-03	0.1803E-03	0.4037E-04	0.9017E-04	0.9308E-04	0.1423E-03
19.41	0.3652E-03	0.3708E-03	0.5438E-03	0.4088E-03	0.2867E-03	0.1421E-03	0.4244E-04	0.8321E-04	0.8360E-04	0.1124E-03
9.680	0.2433E-03	0.2509E-03	0.4157E-03	0.2744E-03	0.1946E-03	0.1108E-03	0.4471E-04	0.7472E-04	0.7590E-04	0.9076E-04
1.070	0.1522E-03	0.1664E-03	0.3240E-03	0.1756E-03	0.1260E-03	0.8681E-04	0.4600E-04	0.6643E-04	0.6993E-04	0.7753E-04

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	21	22	23	24	25	26	27	28	29	30
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.8752E-04	0.6087E-05	0.1365E-04	0.7534E-05	0.1130E-04	0.8818E-05	0.1258E-04	0.1736E-04	0.1857E-04	0.1629E-04
9.943	0.1382E-04	0.8571E-05	0.2857E-04	0.1133E-04	0.1956E-04	0.1400E-04	0.2236E-04	0.3315E-04	0.3601E-04	0.3068E-04
14.95	0.1810E-04	0.1069E-04	0.4489E-04	0.1463E-04	0.2813E-04	0.2162E-04	0.3267E-04	0.5090E-04	0.5542E-04	0.4603E-04
19.89	0.2379E-04	0.1347E-04	0.6126E-04	0.1823E-04	0.3698E-04	0.2555E-04	0.4389E-04	0.6987E-04	0.7610E-04	0.6271E-04
19.98	0.3162E-04	0.2450E-04	0.6926E-04	0.2632E-04	0.4540E-04	0.3562E-04	0.5401E-04	0.8163E-04	0.8719E-04	0.7199E-04
24.90	0.4386E-04	0.2519E-04	0.8564E-04	0.3093E-04	0.5516E-04	0.4248E-04	0.6559E-04	0.1013E-03	0.1075E-03	0.8913E-04
29.93	0.4550E-04	0.2861E-04	0.1033E-03	0.3706E-04	0.6486E-04	0.4933E-04	0.7850E-04	0.1244E-03	0.1308E-03	0.1080E-03
35.03	0.5060E-04	0.3241E-04	0.1234E-03	0.3999E-04	0.7610E-04	0.5871E-04	0.9290E-04	0.1514E-03	0.1558E-03	0.1282E-03
40.22	0.5593E-04	0.3789E-04	0.1518E-03	0.4539E-04	0.9026E-04	0.6941E-04	0.1101E-03	0.1858E-03	0.1861E-03	0.1540E-03
40.12	0.5815E-04	0.3706E-04	0.1589E-03	0.4651E-04	0.9354E-04	0.7258E-04	0.1150E-03	0.1967E-03	0.1938E-03	0.1608E-03
45.18	0.5990E-04	0.3614E-04	0.1889E-03	0.5397E-04	0.1077E-03	0.8446E-04	0.1334E-03	0.2552E-03	0.2319E-03	0.2169E-03
49.80	0.7171E-04	0.4651E-04	0.2643E-03	0.7011E-04	0.1266E-03	0.1080E-03	0.1643E-03	0.3340E-03	0.2789E-03	0.2741E-03
50.68	0.1027E-03	0.6903E-04	0.2998E-03	0.9214E-04	0.1464E-03	0.1391E-03	0.1959E-03	0.3855E-03	0.3167E-03	0.3088E-03
54.52	0.1073E-03	0.7974E-04	0.3303E-03	0.1049E-03	0.1611E-03	0.1547E-03	0.2137E-03	0.4280E-03	0.3501E-03	0.3909E-03
60.25	0.1304E-03	0.1250E-03	0.3923E-03	0.1258E-03	0.1904E-03	0.2072E-03	0.2643E-03	0.5859E-03	0.4612E-03	0.6340E-03
60.17	0.1485E-03	0.1547E-03	0.4125E-03	0.1391E-03	0.2017E-03	0.2420E-03	0.3009E-03	0.6652E-03	0.5282E-03	0.6930E-03
65.69	0.1634E-03	0.1807E-03	0.4574E-03	0.1564E-03	0.2226E-03	0.2840E-03	0.3374E-03	0.7745E-03	0.6319E-03	0.7940E-03
71.24	0.2195E-03	0.2305E-03	0.5303E-03	0.2048E-03	0.3110E-03	0.3641E-03	0.4015E-03	0.9338E-03	0.7739E-03	0.9503E-03
75.34	0.2622E-03	0.2509E-03	0.5412E-03	0.2283E-03	0.3492E-03	0.3957E-03	0.4317E-03	0.9811E-03	0.8345E-03	0.9719E-03
80.38	0.2909E-03	0.2718E-03	0.5823E-03	0.2482E-03	0.3952E-03	0.4378E-03	0.4613E-03	0.1074E-02	0.9164E-03	0.1065E-02
89.51	0.3700E-03	0.3162E-03	0.6451E-03	0.2903E-03	0.6641E-03	0.4978E-03	0.5042E-03	0.1211E-02	0.1047E-02	0.1174E-02
99.51	0.4208E-03	0.3404E-03	0.6560E-03	0.3208E-03	0.7356E-03	0.5277E-03	0.5410E-03	0.1254E-02	0.1108E-02	0.1198E-02
49.54	0.3987E-03	0.3184E-03	0.5974E-03	0.2986E-03	0.6771E-03	0.4855E-03	0.5047E-03	0.1130E-02	0.1019E-02	0.1050E-02
40.08	0.3716E-03	0.2860E-03	0.5232E-03	0.2710E-03	0.5987E-03	0.4315E-03	0.4608E-03	0.9784E-03	0.9026E-03	0.8887E-03
29.41	0.3338E-03	0.2537E-03	0.4392E-03	0.2399E-03	0.5084E-03	0.3701E-03	0.4093E-03	0.8036E-03	0.7622E-03	0.7203E-03
19.41	0.3021E-03	0.2219E-03	0.3616E-03	0.2112E-03	0.4252E-03	0.3141E-03	0.3587E-03	0.6389E-03	0.6244E-03	0.5739E-03
9.680	0.2639E-03	0.1888E-03	0.2771E-03	0.1793E-03	0.3393E-03	0.2559E-03	0.2993E-03	0.4698E-03	0.4724E-03	0.4261E-03
1.070	0.2281E-03	0.1600E-03	0.2043E-03	0.1505E-03	0.2727E-03	0.2112E-03	0.2465E-03	0.3424E-03	0.3495E-03	0.3116E-03
	0.1959E-03	0.1367E-03	0.1443E-03	0.1260E-03	0.2212E-03	0.1772E-03	0.2020E-03	0.2484E-03	0.2534E-03	0.2228E-03
	0.1703E-03	0.1187E-03	0.9959E-04	0.1066E-03	0.1845E-03	0.1521E-03	0.1668E-03	0.1815E-03	0.1839E-03	0.1589E-03

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PST)	CHANNEL NUMBER									
	31	32	33	34	35	36	37	38	39	40
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.1662E-04	0.1609E-04	0.1212E-04	0.7074E-05	-0.5643E-05	0.5379E-05	0.1944E-04	0.0	0.3326E-04	0.3261E-04
9.943	0.3096E-04	0.3014E-04	0.2277E-04	0.1161E-04	-0.1663E-04	0.4047E-05	0.3356E-04	0.0	0.6949E-04	0.6523E-04
14.95	0.4516E-04	0.4433E-04	0.3394E-04	0.1617E-04	-0.2871E-04	0.1662E-05	0.4810E-04	0.0	0.1142E-03	0.1016E-03
19.89	0.5957E-04	0.5896E-04	0.4535E-04	0.2107E-04	-0.4014E-04	-0.9870E-07	0.6391E-04	0.0	0.1634E-03	0.1419E-03
19.98	0.6876E-04	0.6959E-04	0.5368E-04	0.3010E-04	-0.3242E-04	0.7337E-05	0.7161E-04	0.0	0.1764E-03	0.1571E-03
24.90	0.8311E-04	0.8433E-04	0.6554E-04	0.3601E-04	-0.4299E-04	0.6021E-05	0.8765E-04	0.0	0.2239E-03	0.1976E-03
29.93	0.9856E-04	0.1005E-03	0.7811E-04	0.4223E-04	-0.5583E-04	0.3553E-05	0.1037E-03	0.0	0.2736E-03	0.2432E-03
35.03	0.1158E-03	0.1189E-03	0.9249E-04	0.4986E-04	-0.6843E-04	0.1431E-05	0.1207E-03	0.0	0.3247E-03	0.2908E-03
40.22	0.1411E-03	0.1454E-03	0.1148E-03	0.6004E-04	-0.8337E-04	-0.3010E-05	0.1365E-03	0.0	0.3845E-03	0.3502E-03
45.18	0.174E-03	0.1533E-03	0.1205E-03	0.6291E-04	-0.8554E-04	-0.4557E-05	0.1619E-03	0.0	0.3975E-03	0.3637E-03
49.80	0.2499E-03	0.1848E-03	0.1468E-03	0.7288E-04	-0.1036E-03	-0.1589E-04	0.1619E-03	0.0	0.4628E-03	0.4391E-03
50.68	0.3010E-03	0.2334E-03	0.2009E-03	0.9816E-04	-0.1231E-03	-0.2430E-04	0.2291E-03	0.0	0.5506E-03	0.5515E-03
54.52	0.3343E-03	0.2801E-03	0.2519E-03	0.1266E-03	-0.1106E-03	-0.6317E-05	0.2797E-03	0.0	0.6028E-03	0.6020E-03
60.25	0.4941E-03	0.3016E-03	0.2716E-03	0.1557E-03	-0.1282E-03	-0.1535E-04	0.3259E-03	0.0	0.6641E-03	0.6905E-03
60.17	0.5507E-03	0.4078E-03	0.3547E-03	0.1929E-03	-0.1525E-03	-0.1757E-04	0.4219E-03	0.0	0.8053E-03	0.8709E-03
65.69	0.6182E-03	0.4553E-03	0.3886E-03	0.2120E-03	-0.1601E-03	-0.5215E-05	0.4657E-03	0.0	0.8548E-03	0.8973E-03
71.24	0.7827E-03	0.5172E-03	0.4369E-03	0.2343E-03	-0.1877E-03	0.5878E-04	0.5809E-03	0.0	0.9706E-03	0.1033E-02
75.34	0.8389E-03	0.7313E-03	0.5347E-03	0.2718E-03	-0.2442E-03	0.8304E-04	0.7208E-03	0.0	0.1140E-02	0.1185E-02
80.38	0.1094E-02	0.7904E-03	0.5755E-03	0.2903E-03	-0.2709E-03	0.1039E-03	0.7609E-03	0.0	0.1172E-02	0.1190E-02
80.13	0.1150E-02	0.9102E-03	0.6623E-03	0.3160E-03	-0.3023E-03	0.2169E-03	0.8523E-03	0.0	0.1272E-02	0.1305E-02
69.51	0.1057E-02	0.8996E-03	0.6489E-03	0.3292E-03	-0.3116E-03	0.1357E-03	0.1004E-02	0.0	0.1398E-02	0.1456E-02
59.81	0.9377E-03	0.8111E-03	0.5836E-03	0.3069E-03	-0.2758E-03	0.2273E-03	0.1050E-02	0.0	0.1438E-02	0.1488E-02
49.54	0.8011E-03	0.7083E-03	0.5059E-03	0.2794E-03	-0.2365E-03	0.1931E-03	0.9599E-03	0.0	0.1302E-02	0.1313E-02
40.08	0.6714E-03	0.6085E-03	0.4300E-03	0.2492E-03	-0.1899E-03	0.1539E-03	0.8477E-03	0.0	0.1135E-02	0.1105E-02
29.41	0.5307E-03	0.4959E-03	0.3427E-03	0.1861E-03	-0.9836E-04	0.1204E-03	0.7113E-03	0.0	0.9455E-03	0.8604E-03
19.41	0.4114E-03	0.3950E-03	0.2639E-03	0.1661E-03	-0.6115E-04	0.9332E-04	0.4387E-03	0.0	0.7637E-03	0.6442E-03
9.680	0.3127E-03	0.3069E-03	0.1975E-03	0.1251E-03	-0.2823E-04	0.7965E-04	0.3312E-03	0.0	0.4019E-03	0.3028E-03
1.070	0.2405E-03	0.2392E-03	0.1480E-03	0.1025E-03	-0.6909E-06	0.6727E-04	0.2499E-03	0.0	0.2754E-03	0.1890E-03
							0.1909E-03	0.0	0.1837E-03	0.1020E-03

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	41	42	43	44	45	46	47	48	49	50
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.2644E-04	0.0	0.7238E-06	0.5149E-05	0.7781E-05	0.0	0.2308E-04	0.0	0.2321E-04	0.2576E-04
9.943	0.4881E-04	0.0	0.3208E-05	0.6432E-05	0.1221E-04	0.0	0.4555E-04	0.0	0.4447E-04	0.4739E-04
14.95	0.7198E-04	0.0	-0.7534E-05	0.7501E-05	0.1619E-04	0.0	0.7233E-04	0.0	0.6649E-04	0.6934E-04
19.89	0.1003E-03	0.0	-0.1053E-04	0.1030E-04	0.2160E-04	0.0	0.1012E-03	0.0	0.9276E-04	0.9403E-04
19.98	0.1156E-03	0.0	-0.2830E-05	0.2339E-04	0.3379E-04	0.0	0.1128E-03	0.0	0.1063E-03	0.1054E-03
24.90	0.1437E-03	0.0	-0.4738E-05	0.2512E-04	0.3937E-04	0.0	0.1416E-03	0.0	0.1342E-03	0.1293E-03
29.93	0.1745E-03	0.0	-0.8785E-05	0.2941E-04	0.4432E-04	0.0	0.1712E-03	0.0	0.1657E-03	0.1538E-03
35.03	0.2052E-03	0.0	-0.1160E-04	0.3057E-04	0.5024E-04	0.0	0.2025E-03	0.0	0.1985E-03	0.1797E-03
40.22	0.2378E-03	0.0	-0.1550E-04	0.4006E-04	0.5610E-04	0.0	0.2389E-03	0.0	0.2323E-03	0.2079E-03
40.12	0.2463E-03	0.0	-0.1614E-04	0.3511E-04	0.5927E-04	0.0	0.2457E-03	0.0	0.2402E-03	0.2119E-03
45.18	0.2823E-03	0.0	-0.1861E-04	0.3912E-04	0.6371E-04	0.0	0.3056E-03	0.0	0.2811E-03	0.2406E-03
49.80	0.3423E-03	0.0	-0.1890E-04	0.4231E-04	0.6641E-04	0.0	0.3672E-03	0.0	0.3335E-03	0.2671E-03
50.68	0.3902E-03	0.0	-0.2797E-05	0.5919E-04	0.7987E-04	0.0	0.4003E-03	0.0	0.3714E-03	0.2889E-03
54.52	0.4570E-03	0.0	-0.5922E-06	0.6797E-04	0.8684E-04	0.0	0.4541E-03	0.0	0.4365E-03	0.3152E-03
60.25	0.6641E-03	0.0	-0.7798E-05	0.7862E-04	0.9809E-04	0.0	0.5846E-03	0.0	0.6727E-03	0.3688E-03
60.17	0.7348E-03	0.0	-0.8900E-05	0.8158E-04	0.1079E-03	0.0	0.6274E-03	0.0	0.8619E-03	0.4352E-03
65.69	0.9287E-03	0.0	-0.1731E-04	0.8901E-04	0.1357E-03	0.0	0.7759E-03	0.0	0.1202E-02	0.6283E-03
71.24	0.1244E-02	0.0	-0.2323E-04	0.1063E-03	0.1745E-03	0.0	0.9855E-03	0.0	0.1273E-02	0.6711E-03
70.09	0.1301E-02	0.0	-0.1861E-04	0.1082E-03	0.1831E-03	0.0	0.1015E-02	0.0	0.1470E-02	0.7697E-03
75.34	0.1506E-02	0.0	-0.2093E-04	0.1170E-03	0.2062E-03	0.0	0.1149E-02	0.0	0.1766E-02	0.9607E-03
80.38	0.1855E-02	0.0	-0.2063E-04	0.1332E-03	0.2450E-03	0.0	0.1325E-02	0.0	0.1844E-02	0.9931E-03
69.51	0.1946E-02	0.0	-0.2504E-04	0.1398E-03	0.2604E-03	0.0	0.1370E-02	0.0	0.1645E-02	0.8879E-03
49.54	0.1735E-02	0.0	-0.1940E-04	0.1327E-03	0.2353E-03	0.0	0.1203E-02	0.0	0.1645E-02	0.8879E-03
59.81	0.1445E-02	0.0	-0.1515E-04	0.1208E-03	0.2034E-03	0.0	0.1001E-02	0.0	0.1361E-02	0.7624E-03
49.08	0.1084E-02	0.0	-0.8538E-05	0.1066E-03	0.1666E-03	0.0	0.7754E-03	0.0	0.1013E-02	0.6204E-03
40.08	0.8162E-03	0.0	-0.1234E-05	0.9461E-04	0.1334E-03	0.0	0.5869E-03	0.0	0.7399E-03	0.4932E-03
29.41	0.6040E-03	0.0	0.7057E-05	0.8183E-04	0.1027E-03	0.0	0.4120E-03	0.0	0.5216E-03	0.3702E-03
19.41	0.4623E-03	0.0	0.1457E-04	0.7131E-04	0.8168E-04	0.0	0.2941E-03	0.0	0.3796E-03	0.2802E-03
9.680	0.3550E-03	0.0	0.2191E-04	0.6357E-04	0.6761E-04	0.0	0.1951E-03	0.0	0.2745E-03	0.2080E-03
1.070	0.2779E-03	0.0	0.2927E-04	0.5754E-04	0.5740E-04	0.0	0.1264E-03	0.0	0.1971E-03	0.1498E-03

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	51	52	53	54	55	56	57	58	59	60
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.2739E-04	0.2889E-04	0.1925E-04	0.2012E-04	0.1933E-04	0.1842E-04	-0.1053E-05	0.1316E-06	0.4590E-05	0.6580E-05
9.943	0.5045E-04	0.5542E-04	0.3721E-04	0.3979E-04	0.3590E-04	0.3412E-04	-0.7321E-05	-0.4359E-05	0.6975E-05	0.1158E-04
14.95	0.7472E-04	0.8586E-04	0.5690E-04	0.6384E-04	0.5606E-04	0.5281E-04	-0.1420E-04	-0.8949E-05	0.1280E-04	0.1627E-04
19.89	0.1007E-03	0.1197E-03	0.7775E-04	0.9056E-04	0.7905E-04	0.7205E-04	-0.1989E-04	-0.1286E-04	0.2491E-04	0.2140E-04
19.89	0.1098E-03	0.1301E-03	0.8778E-04	0.1019E-03	0.8979E-04	0.8327E-04	-0.9295E-05	-0.2862E-05	0.3642E-04	0.2951E-04
24.90	0.1358E-03	0.1649E-03	0.1076E-03	0.1273E-03	0.1128E-03	0.1021E-03	-0.1375E-04	-0.7255E-05	0.5080E-04	0.3534E-04
29.93	0.1623E-03	0.2032E-03	0.1281E-03	0.1558E-03	0.1376E-03	0.1222E-03	-0.2032E-04	-0.1319E-04	0.7038E-04	0.4170E-04
35.03	0.1906E-03	0.2445E-03	0.1506E-03	0.1856E-03	0.1638E-03	0.1431E-03	-0.2584E-04	-0.1793E-04	0.9099E-04	0.4957E-04
40.22	0.2228E-03	0.2927E-03	0.1799E-03	0.2240E-03	0.1924E-03	0.1654E-03	-0.3348E-04	-0.2456E-04	0.1079E-03	0.5506E-04
40.12	0.2259E-03	0.3049E-03	0.1867E-03	0.2346E-03	0.1988E-03	0.1708E-03	-0.3649E-04	-0.2668E-04	0.1209E-03	0.6000E-04
45.18	0.2259E-03	0.3049E-03	0.1867E-03	0.2346E-03	0.1988E-03	0.1708E-03	-0.3649E-04	-0.2668E-04	0.1209E-03	0.6000E-04
49.80	0.2591E-03	0.3410E-03	0.2814E-03	0.2880E-03	0.2873E-03	0.2176E-03	-0.4401E-04	-0.3685E-04	0.1230E-03	0.8410E-04
50.68	0.3096E-03	0.6574E-03	0.4021E-03	0.3780E-03	0.3342E-03	0.2459E-03	-0.3869E-04	-0.4292E-04	0.1094E-03	0.1178E-03
54.52	0.3321E-03	0.8058E-03	0.4410E-03	0.4185E-03	0.3982E-03	0.2628E-03	-0.4421E-04	-0.5621E-04	0.1195E-03	0.1500E-03
60.25	0.4578E-03	0.9936E-03	0.5353E-03	0.5077E-03	0.5821E-03	0.3562E-03	-0.4417E-04	-0.4687E-04	0.1384E-03	0.2573E-03
60.17	0.5263E-03	0.1041E-02	0.5686E-03	0.5421E-03	0.6252E-03	0.3924E-03	-0.4211E-04	-0.3879E-04	0.1377E-03	0.2868E-03
65.69	0.7840E-03	0.1172E-02	0.6267E-03	0.6360E-03	0.7447E-03	0.4770E-03	-0.4753E-04	-0.2573E-04	0.1611E-03	0.3561E-03
71.24	0.9618E-03	0.1348E-02	0.7376E-03	0.8001E-03	0.9237E-03	0.6294E-03	-0.8380E-04	-0.2183E-04	0.1879E-03	0.4559E-03
70.09	0.1037E-02	0.1393E-02	0.7746E-03	0.8249E-03	0.9656E-03	0.6783E-03	-0.9550E-04	-0.1464E-05	0.177E-03	0.4804E-03
75.34	0.1219E-02	0.1517E-02	0.8436E-03	0.9353E-03	0.1099E-02	0.7750E-03	-0.1180E-03	0.7156E-05	0.2144E-03	0.5425E-03
80.38	0.1506E-02	0.1688E-02	0.9545E-03	0.1088E-02	0.1310E-02	0.9487E-03	-0.1526E-03	0.2724E-04	0.2581E-03	0.6294E-03
80.13	0.1596E-02	0.1742E-02	0.9995E-03	0.1121E-02	0.1358E-02	0.1024E-02	-0.1645E-03	0.3856E-04	0.2625E-03	0.6514E-03
69.51	0.1425E-02	0.1605E-02	0.9179E-03	0.1010E-02	0.1198E-02	0.9483E-03	-0.1390E-03	0.3583E-04	0.2275E-03	0.5802E-03
49.54	0.9744E-03	0.1170E-02	0.8180E-03	0.8674E-03	0.9907E-03	0.8378E-03	-0.1110E-03	0.2176E-04	0.1862E-03	0.4911E-03
40.08	0.7612E-03	0.9219E-03	0.5875E-03	0.5681E-03	0.5559E-03	0.5443E-03	-0.4772E-04	-0.1461E-04	0.1416E-03	0.3901E-03
29.41	0.5600E-03	0.6665E-03	0.4602E-03	0.4327E-03	0.3810E-03	0.4183E-03	-0.1895E-04	-0.2586E-04	0.1026E-03	0.3041E-03
29.41	0.4182E-03	0.4747E-03	0.3490E-03	0.3254E-03	0.2672E-03	0.3303E-03	-0.3701E-05	-0.2068E-04	0.3845E-04	0.1717E-03
9.680	0.3133E-03	0.3296E-03	0.2575E-03	0.2383E-03	0.1865E-03	0.2635E-03	0.1989E-04	-0.7008E-05	0.1925E-04	0.1330E-03
1.070	0.2366E-03	0.2258E-03	0.1921E-03	0.1734E-03	0.1274E-03	0.2126E-03	0.3519E-04	0.6465E-05	0.6613E-05	0.1061E-03

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	61	62	63	64	65	66	67	68	69	70
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.1750E-04	0.1836E-04	0.1237E-04	0.1579E-05	0.1959E-04	0.2254E-05	0.1908E-05	0.1732E-04	0.1434E-04	0.1087E-04
9.943	0.3111E-04	0.3464E-04	0.2135E-04	0.4113E-05	0.3641E-04	0.1102E-05	-0.4113E-06	0.2946E-04	0.2170E-04	0.1620E-04
14.95	0.4539E-04	0.5310E-04	0.3149E-04	-0.3652E-05	0.5309E-04	0.1645E-06	-0.2517E-05	0.4527E-04	0.3043E-04	0.2203E-04
19.89	0.6116E-04	0.7510E-04	0.4256E-04	-0.5445E-05	0.7297E-04	-0.3784E-06	-0.4557E-05	0.6375E-04	0.4200E-04	0.2969E-04
19.98	0.7054E-04	0.8531E-04	0.5253E-04	0.2665E-05	0.8811E-04	0.7353E-05	0.1991E-05	0.7957E-04	0.5569E-04	0.4175E-04
24.90	0.8704E-04	0.1084E-03	0.6324E-04	0.9624E-05	0.1051E-03	0.7288E-05	0.1119E-05	0.9752E-04	0.6587E-04	0.4912E-04
29.93	0.1029E-03	0.1343E-03	0.7436E-04	-0.3372E-05	0.1232E-03	0.6843E-05	-0.7238E-06	0.1195E-03	0.7979E-04	0.5822E-04
35.03	0.1212E-03	0.1620E-03	0.8656E-04	-0.5017E-05	0.1417E-03	0.6432E-05	-0.2056E-05	0.1427E-03	0.9645E-04	0.6760E-04
40.22	0.1401E-03	0.1912E-03	0.9872E-04	-0.7172E-05	0.1621E-03	0.5495E-05	-0.4047E-05	0.1659E-03	0.1216E-03	0.7577E-04
40.12	0.1433E-03	0.1963E-03	0.1010E-03	0.6992E-05	0.1832E-03	0.6350E-05	-0.3257E-05	0.1727E-03	0.1356E-03	0.7977E-04
45.18	0.1634E-03	0.2340E-03	0.1146E-03	-0.6942E-05	0.2028E-03	0.5626E-05	-0.5610E-05	0.1920E-03	0.1545E-03	0.8717E-04
49.80	0.1764E-03	0.2972E-03	0.1328E-03	0.4836E-05	0.2191E-03	0.5626E-05	-0.1214E-04	0.2185E-03	0.1955E-03	0.9701E-04
50.68	0.2027E-03	0.3571E-03	0.1552E-03	0.1097E-04	0.2607E-03	0.2055E-04	-0.2451E-05	0.2502E-03	0.2755E-03	0.1268E-03
54.52	0.2257E-03	0.4709E-03	0.1709E-03	0.1250E-04	0.2782E-03	0.2152E-04	-0.1018E-04	0.2637E-03	0.2929E-03	0.1285E-03
60.25	0.2841E-03	0.726E-03	0.1826E-03	0.1500E-04	0.3125E-03	0.1834E-04	-0.1713E-04	0.2984E-03	0.3709E-03	0.1444E-03
60.17	0.3116E-03	0.7768E-03	0.1919E-03	0.1877E-04	0.2996E-03	0.2218E-04	-0.1295E-04	0.3432E-03	0.4841E-03	0.2036E-03
65.69	0.3704E-03	0.9511E-03	0.2233E-03	0.1898E-04	0.3471E-03	0.2056E-04	-0.1880E-04	0.3694E-03	0.5184E-03	0.2629E-03
71.24	0.5639E-03	0.1169E-02	0.3522E-03	0.2446E-04	0.3885E-03	0.1943E-04	-0.2451E-04	0.4267E-03	0.6228E-03	0.3730E-03
70.09	0.6180E-03	0.1185E-02	0.3944E-03	0.2568E-04	0.4006E-03	0.1953E-04	-0.2130E-04	0.4308E-03	0.6492E-03	0.5060E-03
75.34	0.7572E-03	0.1350E-02	0.5066E-03	0.2452E-04	0.4413E-03	0.1772E-04	-0.2690E-04	0.4661E-03	0.6795E-03	0.5628E-03
80.38	0.9483E-03	0.1554E-02	0.6348E-03	0.2806E-04	0.5031E-03	0.1584E-04	-0.3501E-04	0.5033E-03	0.7345E-03	0.6546E-03
80.13	0.9946E-03	0.1578E-02	0.6399E-03	0.3048E-04	0.6057E-03	0.1675E-04	-0.3114E-04	0.4985E-03	0.7407E-03	0.7308E-03
59.51	0.8669E-03	0.1342E-02	0.5154E-03	0.3183E-04	0.5431E-03	0.2004E-04	-0.2236E-04	0.4481E-03	0.6932E-03	0.6936E-03
59.81	0.7114E-03	0.1053E-02	0.4085E-03	0.3173E-04	0.4710E-03	0.2226E-04	-0.1357E-04	0.3838E-03	0.6335E-03	0.6461E-03
49.54	0.5440E-03	0.7422E-03	0.3164E-03	0.3188E-04	0.3921E-03	0.3154E-04	-0.3701E-05	0.3108E-03	0.5662E-03	0.5924E-03
40.08	0.4187E-03	0.4928E-03	0.2413E-03	0.3237E-04	0.3228E-03	0.2734E-04	0.6712E-05	0.2442E-03	0.5035E-03	0.5400E-03
29.41	0.3090E-03	0.2804E-03	0.1709E-03	0.3297E-04	0.2528E-03	0.2951E-04	0.1732E-04	0.1763E-03	0.4393E-03	0.4833E-03
19.41	0.2288E-03	0.1558E-03	0.1206E-03	0.3455E-04	0.1947E-03	0.2223E-04	0.2616E-04	0.1250E-03	0.3878E-03	0.4349E-03
9.680	0.1683E-03	0.7803E-04	0.8380E-04	0.3662E-04	0.1446E-03	0.3400E-04	0.3435E-04	0.8385E-04	0.3442E-03	0.3911E-03
1.070	0.1221E-03	0.2813E-04	0.5804E-04	0.3988E-04	0.1047E-03	0.3608E-04	0.4081E-04	0.5157E-04	0.3085E-03	0.3550E-03

## ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	71	72	73	74	75	76	77	78	79	80
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.8702E-05	0.3137E-04	0.2749E-04	0.3224E-05	0.8752E-05	0.1227E-04	0.1550E-04	0.1528E-04	0.1383E-04	0.2303E-05
9.943	0.1104E-04	0.6672E-04	0.5200E-04	0.2303E-06	0.9229E-05	0.1701E-04	0.2221E-04	0.2426E-04	0.2257E-04	0.8226E-07
14.95	0.1410E-04	0.1067E-03	0.7972E-04	-0.2484E-05	0.1132E-04	0.2292E-04	0.3129E-04	0.3461E-04	0.3203E-04	-0.3537E-05
19.89	0.1872E-04	0.1486E-03	0.1100E-03	-0.4623E-05	0.1528E-04	0.3103E-04	0.4096E-04	0.4652E-04	0.4325E-04	-0.5746E-05
19.98	0.2861E-04	0.1617E-03	0.1187E-03	0.3471E-05	0.2695E-04	0.4368E-04	0.5383E-04	0.5845E-04	0.5434E-04	0.4471E-05
24.90	0.3356E-04	0.2003E-03	0.1477E-03	0.1053E-05	0.3076E-04	0.5105E-04	0.6365E-04	0.6985E-04	0.6426E-04	0.2435E-05
29.93	0.3831E-04	0.2452E-03	0.1796E-03	-0.1382E-05	0.3545E-04	0.5996E-04	0.7597E-04	0.8336E-04	0.7646E-04	0.2797E-06
35.03	0.4354E-04	0.2988E-03	0.2121E-03	-0.4442E-05	0.4132E-04	0.6973E-04	0.8742E-04	0.9602E-04	0.8905E-04	-0.2402E-05
40.22	0.4934E-04	0.3690E-03	0.2439E-03	-0.8637E-05	0.4660E-04	0.8151E-04	0.9624E-04	0.1075E-03	0.1037E-03	-0.5906E-05
40.12	0.5430E-04	0.3854E-03	0.2449E-03	-0.1003E-04	0.5065E-04	0.8610E-04	0.1013E-03	0.1093E-03	0.1081E-03	-0.6054E-05
45.18	0.6162E-04	0.4867E-03	0.2639E-03	-0.1535E-04	0.5508E-04	0.9476E-04	0.1108E-03	0.1187E-03	0.1219E-03	-0.5649E-05
49.80	0.7995E-04	0.5953E-03	0.2302E-03	-0.3066E-04	0.6139E-04	0.9944E-04	0.1188E-03	0.1311E-03	0.1352E-03	0.8192E-05
50.68	0.1186E-03	0.6762E-03	0.2383E-03	-0.1673E-04	0.1069E-03	0.1308E-03	0.1475E-03	0.1596E-03	0.1696E-03	0.3660E-04
54.52	0.1398E-03	0.7454E-03	0.2567E-03	0.2701E-04	0.1122E-03	0.1383E-03	0.1558E-03	0.1787E-03	0.2197E-03	0.5161E-04
60.25	0.2554E-03	0.8502E-03	0.2401E-03	0.3626E-04	0.1267E-03	0.1539E-03	0.1699E-03	0.2495E-03	0.2979E-03	0.7501E-04
60.17	0.3081E-03	0.8981E-03	0.2404E-03	0.4613E-04	0.1838E-03	0.1847E-03	0.3242E-03	0.3109E-03	0.3373E-03	0.8196E-04
65.69	0.3474E-03	0.9766E-03	0.2735E-03	0.5272E-04	0.2061E-03	0.2383E-03	0.3424E-03	0.4351E-03	0.6008E-03	0.9125E-04
71.24	0.4469E-03	0.1086E-02	0.2840E-03	0.1182E-03	0.2325E-03	0.2927E-03	0.9019E-03	0.6352E-03	0.7962E-03	0.1428E-03
70.09	0.4848E-03	0.1099E-02	0.2866E-03	0.1492E-03	0.2777E-03	0.3354E-03	0.9865E-03	0.6840E-03	0.8389E-03	0.1572E-03
75.34	0.5179E-03	0.1233E-02	0.3075E-03	0.1710E-03	0.2971E-03	0.3697E-03	0.1113E-02	0.7472E-03	0.9175E-03	0.1731E-03
80.38	0.5796E-03	0.1335E-02	0.3419E-03	0.2227E-03	0.3297E-03	0.4343E-03	0.1264E-02	0.8608E-03	0.1040E-02	0.2039E-03
80.13	0.6149E-03	0.1357E-02	0.3512E-03	0.2546E-03	0.3772E-03	0.5160E-03	0.1338E-02	0.9228E-03	0.1087E-02	0.2294E-03
69.51	0.5848E-03	0.1210E-02	0.3137E-03	0.2318E-03	0.3618E-03	0.4863E-03	0.1211E-02	0.8568E-03	0.9951E-03	0.2170E-03
59.81	0.5416E-03	0.1039E-02	0.2712E-03	0.2030E-03	0.3400E-03	0.4480E-03	0.1061E-02	0.7697E-03	0.8821E-03	0.2001E-03
49.54	0.4893E-03	0.8549E-03	0.2220E-03	0.1722E-03	0.3134E-03	0.4033E-03	0.8944E-03	0.6626E-03	0.7510E-03	0.1805E-03
40.08	0.4361E-03	0.6848E-03	0.1709E-03	0.1465E-03	0.2875E-03	0.3595E-03	0.7476E-03	0.5561E-03	0.6257E-03	0.1623E-03
29.41	0.3744E-03	0.4996E-03	0.1096E-03	0.1268E-03	0.2596E-03	0.3115E-03	0.6056E-03	0.4387E-03	0.4895E-03	0.1441E-03
19.41	0.3182E-03	0.3415E-03	0.5054E-04	0.1172E-03	0.2377E-03	0.2710E-03	0.5020E-03	0.3423E-03	0.3802E-03	0.1315E-03
9.680	0.2691E-03	0.2127E-03	-0.4985E-05	0.1120E-03	0.2191E-03	0.2372E-03	0.4230E-03	0.2658E-03	0.2959E-03	0.1228E-03
1.070	0.2307E-03	0.1187E-03	-0.5374E-04	0.1094E-03	0.2052E-03	0.2101E-03	0.3631E-03	0.2096E-03	0.2369E-03	0.1180E-03

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	81	82	83	84	85	86	87	88	89	90
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.8077E-05	0.1053E-04	0.7929E-05	-0.1558E-03	0.1018E-04	0.1061E-04	0.1623E-04	0.1764E-04	0.1023E-04	0.2476E-03
9.943	0.8011E-05	0.1231E-04	0.8291E-05	-0.2463E-03	0.1917E-04	0.1917E-04	0.2839E-04	0.3128E-04	0.1286E-04	0.3867E-03
14.95	0.1186E-04	0.1489E-04	0.9558E-05	-0.3400E-03	0.1426E-04	0.3038E-04	0.4142E-04	0.4505E-04	0.1698E-04	0.5169E-03
19.89	0.6251E-05	0.1954E-04	0.1260E-04	-0.4295E-03	0.2621E-04	0.4378E-04	0.5652E-04	0.6026E-04	0.2298E-04	0.6532E-03
19.98	0.2173E-04	0.3257E-04	0.2604E-04	-0.4927E-03	0.3736E-04	0.5687E-04	0.6868E-04	0.7189E-04	0.3802E-04	0.7332E-03
24.90	0.2081E-04	0.3710E-04	0.2853E-04	-0.5863E-03	0.4294E-04	0.6829E-04	0.8257E-04	0.8595E-04	0.4302E-04	0.8698E-03
29.93	0.2190E-04	0.4215E-04	0.3205E-04	-0.6800E-03	0.4887E-04	0.8291E-04	0.9902E-04	0.1020E-03	0.5040E-04	0.9935E-03
35.03	0.2190E-04	0.4731E-04	0.3484E-04	-0.7695E-03	0.5606E-04	0.9826E-04	0.1163E-03	0.1174E-03	0.5774E-04	0.1112E-02
40.22	0.2242E-04	0.5353E-04	0.3874E-04	-0.8590E-03	0.6361E-04	0.1190E-03	0.1371E-03	0.1346E-03	0.6511E-04	0.1231E-02
45.18	0.2545E-04	0.5519E-04	0.4229E-04	-0.8895E-03	0.6853E-04	0.1272E-03	0.1425E-03	0.1378E-03	0.7248E-04	0.1259E-02
49.80	0.2545E-04	0.6051E-04	0.4621E-04	-0.9853E-03	0.7898E-04	0.1602E-03	0.1689E-03	0.1565E-03	0.7867E-04	0.1392E-02
50.68	0.2826E-04	0.6811E-04	0.5707E-04	-0.1076E-02	0.1003E-03	0.2250E-03	0.2455E-03	0.2592E-03	0.9163E-04	0.1528E-02
54.52	0.4611E-04	0.1028E-03	0.1037E-03	-0.1177E-02	0.1378E-03	0.3300E-03	0.2533E-03	0.6642E-03	0.1244E-03	0.1687E-02
60.25	0.4815E-04	0.1173E-03	0.1320E-03	-0.1274E-02	0.1808E-03	0.4204E-03	0.3744E-03	0.8803E-03	0.1436E-03	0.1833E-02
60.17	0.4924E-04	0.1312E-03	0.1592E-03	-0.1295E-02	0.2059E-03	0.4465E-03	0.4636E-03	0.9444E-03	0.1029E-03	0.1880E-02
65.69	0.5119E-04	0.1536E-03	0.1776E-03	-0.1417E-02	0.2334E-03	0.4516E-03	0.6274E-03	0.1079E-02	0.1206E-03	0.2060E-02
71.24	0.4853E-04	0.1996E-03	0.2311E-03	-0.1543E-02	0.3277E-03	0.5440E-03	0.8759E-03	0.1273E-02	0.1626E-03	0.2238E-02
70.09	0.5164E-04	0.2088E-03	0.2522E-03	-0.1603E-02	0.3899E-03	0.5682E-03	0.9425E-03	0.1340E-02	0.2143E-03	0.2301E-02
75.34	0.5197E-04	0.2285E-03	0.2766E-03	-0.1726E-02	0.4487E-03	0.6291E-03	0.1052E-02	0.1441E-02	0.2388E-03	0.2463E-02
80.38	0.5427E-04	0.2700E-03	0.3339E-03	-0.1846E-02	0.5916E-03	0.7003E-03	0.1174E-02	0.1510E-02	0.2866E-03	0.2621E-02
80.13	0.5891E-04	0.2782E-03	0.3402E-03	-0.1893E-02	0.6627E-03	0.7238E-03	0.1192E-02	0.1549E-02	0.3319E-03	0.2677E-02
69.51	0.5947E-04	0.2580E-03	0.3202E-03	-0.1974E-02	0.6275E-03	0.6697E-03	0.1084E-02	0.1427E-02	0.3064E-03	0.2782E-02
59.81	0.5957E-04	0.2322E-03	0.2932E-03	-0.2015E-02	0.5835E-03	0.6022E-03	0.9421E-03	0.1282E-02	0.2795E-03	0.2829E-02
49.54	0.5981E-04	0.2053E-03	0.2643E-03	-0.2053E-02	0.5228E-03	0.5258E-03	0.7745E-03	0.1113E-02	0.2475E-03	0.2879E-02
40.08	0.6021E-04	0.1819E-03	0.2302E-03	-0.2091E-02	0.4633E-03	0.4548E-03	0.6171E-03	0.9478E-03	0.2156E-03	0.2934E-02
29.41	0.6184E-04	0.1600E-03	0.2024E-03	-0.2132E-02	0.3934E-03	0.3752E-03	0.4561E-03	0.7543E-03	0.1808E-03	0.2987E-02
19.41	0.6579E-04	0.1418E-03	0.1825E-03	-0.2170E-02	0.3351E-03	0.3067E-03	0.3343E-03	0.5733E-03	0.1531E-03	0.3041E-02
9.680	0.6954E-04	0.1232E-03	0.1658E-03	-0.2214E-02	0.2877E-03	0.2474E-03	0.2452E-03	0.4139E-03	0.1153E-03	0.3094E-02
1.070	0.7215E-04	0.1077E-03	0.1562E-03	-0.2252E-02	0.2521E-03	0.2016E-03	0.1831E-03	0.3014E-03	0.9727E-04	0.3145E-02

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	91	92	93	94	95	96	97	98	99	100
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.1579E-04	0.1872E-04	0.1533E-04	0.9739E-05	0.3208E-05	-0.5182E-05	0.2731E-05	0.1349E-04	0.2293E-04	0.2208E-04
9.943	0.2527E-04	0.3228E-04	0.2658E-04	0.1433E-04	0.2451E-05	-0.1390E-04	0.2780E-05	0.2392E-04	0.4558E-04	0.4124E-04
14.95	0.3662E-04	0.4697E-04	0.3841E-04	0.1915E-04	0.8225E-06	-0.2301E-04	0.2895E-05	0.3545E-04	0.6908E-04	0.6042E-04
19.89	0.4894E-04	0.6380E-04	0.5197E-04	0.2588E-04	0.2108E-05	-0.3098E-04	0.9981E-05	0.4807E-04	0.9341E-04	0.8090E-04
19.98	0.6462E-04	0.7771E-04	0.6473E-04	0.3749E-04	0.4014E-05	-0.2754E-04	0.4804E-05	0.5318E-04	0.1010E-03	0.9594E-04
24.90	0.7390E-04	0.9267E-04	0.7633E-04	0.4290E-04	0.4030E-05	-0.3598E-04	0.5593E-05	0.6475E-04	0.1242E-03	0.1153E-03
29.93	0.8655E-04	0.1109E-03	0.9102E-04	0.5026E-04	0.5363E-05	-0.4435E-04	0.6992E-05	0.7791E-04	0.1502E-03	0.1369E-03
35.03	0.1029E-03	0.1291E-03	0.1049E-03	0.5748E-04	0.5396E-05	-0.5388E-04	0.7419E-05	0.8998E-04	0.1765E-03	0.1594E-03
40.22	0.1191E-03	0.1503E-03	0.1221E-03	0.6626E-04	0.6317E-05	-0.6363E-04	0.7534E-05	0.1023E-03	0.2056E-03	0.1817E-03
40.12	0.1270E-03	0.1567E-03	0.1270E-03	0.6922E-04	-0.7403E-06	-0.6620E-04	0.4146E-05	0.9948E-04	0.2120E-03	0.1920E-03
45.18	0.1432E-03	0.1791E-03	0.1492E-03	0.7982E-04	0.4771E-06	-0.7636E-04	0.3668E-05	0.1096E-03	0.2414E-03	0.2097E-03
49.80	0.1650E-03	0.1997E-03	0.1845E-03	0.9882E-04	0.1579E-05	-0.8844E-04	0.6251E-06	0.1154E-03	0.2753E-03	0.2294E-03
50.68	0.2039E-03	0.2316E-03	0.2173E-03	0.1295E-03	0.1207E-04	-0.8192E-04	0.8373E-05	0.1237E-03	0.3005E-03	0.2598E-03
54.52	0.2039E-03	0.2422E-03	0.2424E-03	0.1425E-03	0.6235E-05	-0.8538E-04	0.8785E-05	0.1294E-03	0.3274E-03	0.2783E-03
60.25	0.2481E-03	0.2909E-03	0.2727E-03	0.1521E-03	0.1754E-04	-0.1013E-03	-0.3405E-05	0.1297E-03	0.4045E-03	0.3806E-03
60.17	0.2711E-03	0.3229E-03	0.2976E-03	0.1499E-03	0.3570E-05	-0.1067E-03	-0.3027E-05	0.1297E-03	0.4504E-03	0.4287E-03
65.69	0.3109E-03	0.4096E-03	0.6289E-03	0.1707E-03	0.2336E-05	-0.1266E-03	0.1810E-06	0.1845E-03	0.5966E-03	0.6142E-03
71.24	0.4244E-03	0.6295E-03	0.8190E-03	0.2033E-03	0.2525E-04	-0.1640E-03	0.2310E-04	0.2858E-03	0.8424E-03	0.8906E-03
70.09	0.4874E-03	0.6903E-03	0.8402E-03	0.2183E-03	0.1101E-04	-0.1696E-03	0.2923E-04	0.3200E-03	0.8424E-03	0.9645E-03
75.34	0.5516E-03	0.8019E-03	0.9167E-03	0.2444E-03	0.6284E-05	-0.1861E-03	0.6950E-04	0.3800E-03	0.8878E-03	0.1117E-02
80.38	0.8248E-03	0.9986E-03	0.1035E-02	0.2972E-03	0.1546E-05	-0.2059E-03	0.9647E-04	0.5139E-03	0.9963E-03	0.1367E-02
80.13	0.9043E-03	0.1079E-02	0.1073E-02	0.3249E-03	-0.1283E-04	-0.2122E-03	0.1144E-03	0.5577E-03	0.1177E-02	0.1420E-02
69.51	0.8348E-03	0.9843E-03	0.9520E-03	0.3018E-03	0.1451E-04	-0.1898E-03	0.9806E-04	0.5026E-03	0.1046E-02	0.1280E-02
59.81	0.7523E-03	0.8679E-03	0.8141E-03	0.2736E-03	-0.1584E-04	-0.1648E-03	0.7803E-04	0.4338E-03	0.8911E-03	0.1085E-02
49.54	0.6561E-03	0.7340E-03	0.6650E-03	0.2410E-03	-0.1782E-04	-0.1347E-03	0.5646E-04	0.3517E-03	0.7197E-03	0.8458E-03
40.08	0.5664E-03	0.6075E-03	0.5341E-03	0.2129E-03	-0.1762E-04	-0.1067E-03	0.3830E-04	0.2773E-03	0.5674E-03	0.6284E-03
29.41	0.4741E-03	0.4716E-03	0.4053E-03	0.1841E-03	-0.1698E-04	-0.7704E-04	0.2443E-04	0.2063E-03	0.4199E-03	0.4493E-03
19.41	0.4010E-03	0.3608E-03	0.3094E-03	0.1604E-03	-0.1328E-04	-0.5256E-04	0.1693E-04	0.1532E-03	0.3082E-03	0.3402E-03
9.680	0.3404E-03	0.2729E-03	0.2352E-03	0.1384E-03	-0.1091E-04	-0.3099E-04	0.1140E-04	0.1101E-03	0.2174E-03	0.2600E-03
1.070	0.2952E-03	0.2079E-03	0.1810E-03	0.1204E-03	-0.7452E-05	-0.1283E-04	0.7995E-05	0.7600E-04	0.1471E-03	0.1997E-03

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	101	102	103	104	105	106	107	108	109	110
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	-0.1842E-05	0.6580E-07	0.4244E-05	0.1589E-04	0.2394E-04	0.0	0.0	0.0	0.8785E-05	0.1028E-04
9.943	-0.5100E-05	-0.1464E-05	0.7913E-05	0.3437E-04	0.4802E-04	-0.3767E-05	-0.7732E-05	-0.4458E-05	0.1731E-04	0.1923E-04
14.95	-0.7304E-05	-0.3520E-05	0.1147E-04	0.4572E-04	0.7227E-04	0.7238E-05	-0.1291E-04	-0.7962E-05	0.2640E-04	0.2938E-04
19.89	-0.1247E-04	-0.5001E-05	0.1527E-04	0.6067E-04	0.9744E-04	-0.1798E-04	-0.1798E-04	-0.1087E-04	0.3603E-04	0.4007E-04
19.98	-0.9689E-05	0.1316E-05	0.2272E-04	0.6560E-04	0.1057E-03	0.5083E-05	-0.1130E-04	-0.7650E-05	0.4083E-04	0.4568E-04
24.90	-0.1393E-04	-0.2945E-05	0.2665E-04	0.8023E-04	0.1323E-03	-0.8850E-05	-0.1713E-04	-0.1109E-04	0.5001E-04	0.5662E-04
29.93	-0.9508E-05	0.4080E-05	0.3127E-04	0.9696E-04	0.1611E-03	0.1227E-04	-0.2237E-04	-0.1298E-04	0.6052E-04	0.6725E-04
35.03	-0.2083E-04	0.6284E-05	0.3570E-04	0.1140E-03	0.1906E-03	0.1678E-04	-0.2856E-04	-0.1602E-04	0.7110E-04	0.7753E-04
40.22	-0.2503E-04	-0.8390E-05	0.4035E-04	0.1266E-03	0.2255E-03	-0.4345E-04	-0.3557E-04	-0.1898E-04	0.8260E-04	0.8788E-04
40.12	-0.2583E-04	0.7781E-05	0.3946E-04	0.1358E-03	0.2255E-03	-0.4345E-04	-0.3557E-04	-0.1652E-04	0.8535E-04	0.8880E-04
45.18	-0.3078E-04	-0.1076E-04	0.4323E-04	0.1488E-03	0.2534E-03	-0.4855E-04	-0.4427E-04	-0.2153E-04	0.9783E-04	0.1025E-03
49.80	-0.3583E-04	0.1513E-04	0.4526E-04	0.1714E-03	0.2787E-03	-0.5384E-04	-0.5360E-04	-0.2426E-04	0.1157E-03	0.1186E-03
50.68	-0.3264E-04	-0.1038E-04	0.5021E-04	0.1910E-03	0.2975E-03	-0.4978E-04	-0.5276E-04	-0.2267E-04	0.1334E-03	0.1291E-03
54.52	-0.2905E-04	0.7024E-05	0.6105E-04	0.2093E-03	0.3117E-03	-0.5847E-04	-0.6008E-04	-0.2550E-04	0.1507E-03	0.1449E-03
60.25	-0.3471E-04	-0.1374E-04	0.7618E-04	0.2506E-03	0.3282E-03	-0.5305E-04	-0.6034E-04	-0.3741E-04	0.1935E-03	0.1733E-03
65.69	-0.4123E-04	-0.1675E-04	0.9045E-04	0.2705E-03	0.3531E-03	-0.6278E-04	-0.6896E-04	-0.3994E-04	0.2053E-03	0.1859E-03
71.24	-0.4458E-04	0.2022E-04	0.9826E-04	0.3163E-03	0.4926E-03	-0.6157E-04	-0.9364E-04	-0.2132E-04	0.2556E-03	0.1689E-03
75.34	-0.4738E-04	-0.1917E-04	0.1498E-03	0.4370E-03	0.8020E-03	-0.8357E-04	-0.1093E-03	0.2017E-04	0.3389E-03	0.2206E-03
80.38	-0.5082E-04	-0.1811E-04	0.1604E-03	0.4811E-03	0.9059E-03	-0.8230E-04	-0.1061E-03	0.2517E-04	0.3581E-03	0.2249E-03
80.13	-0.4812E-04	-0.1193E-04	0.2443E-03	0.9127E-03	0.1194E-02	-0.1004E-03	-0.1168E-03	0.4442E-04	0.3991E-03	0.2634E-03
89.51	-0.4751E-04	-0.9986E-05	0.2542E-03	0.9769E-03	0.1790E-02	-0.1337E-03	-0.1408E-03	0.1523E-03	0.4673E-03	0.3430E-03
99.81	-0.4062E-04	-0.7107E-05	0.2232E-03	0.8581E-03	0.1941E-02	-0.1372E-03	-0.1602E-03	0.1505E-03	0.4992E-03	0.3509E-03
49.54	-0.2882E-04	-0.4392E-05	0.1342E-03	0.5300E-03	0.1721E-02	-0.1119E-03	-0.1378E-03	0.1206E-03	0.4486E-03	0.3058E-03
40.08	-0.2280E-04	-0.2221E-05	0.9609E-04	0.3987E-03	0.1419E-02	-0.8434E-04	-0.1142E-03	0.8661E-04	0.3157E-03	0.2562E-03
29.41	-0.3356E-05	0.1086E-05	0.6593E-04	0.2928E-03	0.8102E-03	-0.3395E-04	-0.6381E-04	0.1964E-04	0.2490E-03	0.1617E-03
19.41	-0.8291E-05	0.4343E-05	0.4466E-04	0.2203E-03	0.6086E-03	-0.2023E-04	-0.3899E-04	0.3998E-05	0.1834E-03	0.1195E-03
9.680	-0.2517E-05	0.6860E-05	0.2956E-04	0.1622E-03	0.4743E-03	-0.1036E-04	-0.2162E-04	-0.2764E-05	0.1359E-03	0.8750E-04
1.070	0.2270E-05	0.9673E-05	0.1851E-04	0.1155E-03	0.2911E-03	0.3899E-05	0.3257E-05	-0.7403E-06	0.9851E-04	0.5972E-04
									0.7013E-04	0.3948E-04

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	111	112	113	114	115	116	117	118	119	120
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.2104E-04	0.2122E-04	0.1367E-04	0.1270E-04	0.2102E-04	-0.1892E-05	0.2040E-05	0.1135E-04	0.1050E-04	0.1015E-04
9.943	0.3968E-04	0.4192E-04	0.3335E-04	0.2474E-04	0.4231E-04	-0.5100E-05	-0.4935E-05	0.2140E-04	0.1972E-04	0.1658E-04
14.95	0.5950E-04	0.6332E-04	0.5458E-04	0.3784E-04	0.6245E-04	-0.8949E-05	-0.8390E-05	0.3195E-04	0.2997E-04	0.2320E-04
19.89	0.8072E-04	0.8567E-04	0.7613E-04	0.5203E-04	0.8375E-04	-0.1214E-04	-0.1188E-04	0.4271E-04	0.4034E-04	0.3129E-04
19.98	0.8441E-04	0.8944E-04	0.8281E-04	0.5639E-04	0.9525E-04	-0.1115E-04	-0.1191E-04	0.4981E-04	0.4927E-04	0.3478E-04
24.90	0.1050E-03	0.1114E-03	0.1035E-03	0.6973E-04	0.1143E-03	-0.1438E-04	-0.1504E-04	0.6044E-04	0.5950E-04	0.4345E-04
29.93	0.1273E-03	0.1355E-03	0.1267E-03	0.8498E-04	0.1367E-03	-0.1688E-04	-0.1798E-04	0.7268E-04	0.7279E-04	0.5190E-04
35.03	0.1498E-03	0.1598E-03	0.1500E-03	0.1006E-03	0.1583E-03	-0.2022E-04	-0.2142E-04	0.8615E-04	0.8962E-04	0.6123E-04
40.22	0.1744E-03	0.183E-03	0.1754E-03	0.1180E-03	0.1802E-03	-0.2382E-04	-0.2509E-04	0.1007E-03	0.1143E-03	0.7126E-04
45.18	0.1799E-03	0.1921E-03	0.1811E-03	0.1226E-03	0.1826E-03	-0.2397E-04	-0.2616E-04	0.1073E-03	0.1294E-03	0.7737E-04
49.80	0.2045E-03	0.2193E-03	0.2107E-03	0.1427E-03	0.8326E-04	-0.2397E-04	-0.2616E-04	0.1184E-03	0.1628E-03	0.8707E-04
50.68	0.2447E-03	0.2506E-03	0.2413E-03	0.1716E-03	0.1200E-03	-0.3287E-04	-0.3160E-04	0.1344E-03	0.2165E-03	0.1002E-03
54.52	0.2582E-03	0.2901E-03	0.2635E-03	0.1960E-03	0.8201E-04	-0.3162E-04	-0.3094E-04	0.1585E-03	0.2468E-03	0.1241E-03
60.25	0.3113E-03	0.3480E-03	0.3893E-03	0.2246E-03	0.9890E-04	-0.4164E-04	-0.3178E-04	0.1692E-03	0.2665E-03	0.1350E-03
65.69	0.3454E-03	0.4240E-03	0.4598E-03	0.3269E-03	0.2270E-03	-0.4947E-04	-0.3506E-04	0.2043E-03	0.4982E-03	0.1858E-03
71.24	0.4153E-03	0.7166E-03	0.1144E-02	0.5137E-03	0.1505E-04	-0.6569E-04	-0.3098E-04	0.2750E-03	0.6554E-03	0.4156E-03
70.09	0.4399E-03	0.8463E-03	0.1191E-02	0.4050E-03	0.1463E-03	-0.5536E-04	-0.3568E-04	0.3709E-03	0.6955E-03	0.4831E-03
75.34	0.4867E-03	0.1512E-02	0.1326E-02	0.5948E-03	0.2562E-03	-0.7719E-04	-0.2872E-04	0.4107E-03	0.7749E-03	0.5532E-03
80.38	0.5929E-03	0.1838E-02	0.1462E-02	0.6667E-03	0.4115E-03	-0.9681E-04	-0.2806E-04	0.5624E-03	0.8764E-03	0.6172E-03
80.13	0.6403E-03	0.1920E-02	0.1484E-02	0.6897E-03	0.3971E-03	-0.9959E-04	-0.2622E-04	0.6261E-03	0.9170E-03	0.6703E-03
69.51	0.5799E-03	0.1636E-02	0.1291E-02	0.6228E-03	0.2640E-03	-0.8622E-04	-0.2241E-04	0.5818E-03	0.8411E-03	0.6235E-03
49.54	0.5098E-03	0.1304E-02	0.1057E-02	0.5381E-03	0.9214E-04	-0.7309E-04	-0.1944E-04	0.5274E-03	0.7487E-03	0.5623E-03
40.08	0.4286E-03	0.9461E-03	0.8043E-03	0.4376E-03	-0.9638E-04	-0.5932E-04	-0.1678E-04	0.4646E-03	0.6434E-03	0.4901E-03
29.41	0.3520E-03	0.6660E-03	0.5966E-03	0.3440E-03	-0.2508E-03	-0.4669E-04	-0.1387E-04	0.4052E-03	0.5453E-03	0.4201E-03
19.41	0.2716E-03	0.4445E-03	0.4073E-03	0.2477E-03	0.3735E-03	-0.3307E-04	-0.9920E-05	0.3413E-03	0.4429E-03	0.3460E-03
9.680	0.2039E-03	0.3076E-03	0.2726E-03	0.1755E-03	-0.4484E-03	-0.2152E-04	-0.5034E-05	0.2868E-03	0.3585E-03	0.2842E-03
1.070	0.1448E-03	0.2094E-03	0.1704E-03	0.1197E-03	-0.5072E-03	-0.1125E-04	0.2961E-06	0.2378E-03	0.2885E-03	0.2349E-03
	0.9633E-04	0.1371E-03	0.1009E-03	0.7812E-04	-0.5339E-03	-0.2221E-05	0.4985E-05	0.1971E-03	0.2342E-03	0.1984E-03

## ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	121	122	123	124	125	126	127	128	129	130
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.9081E-05	0.6679E-05	0.1933E-04	0.1627E-04	0.1477E-04	0.1096E-04	0.8127E-05	0.4705E-05	0.5972E-05	0.5774E-05
9.943	0.1717E-04	0.1148E-04	0.3984E-04	0.3047E-04	0.2721E-04	0.1920E-04	0.1291E-04	0.6975E-05	0.9640E-05	0.9706E-05
14.95	0.2640E-04	0.1589E-04	0.6296E-04	0.4558E-04	0.4175E-04	0.2834E-04	0.1810E-04	0.9196E-05	0.1339E-04	0.1303E-04
19.89	0.3649E-04	0.2127E-04	0.8780E-04	0.6230E-04	0.5703E-04	0.3841E-04	0.2308E-04	0.1201E-04	0.1726E-04	0.1657E-04
19.98	0.4539E-04	0.2908E-04	0.9969E-04	0.7284E-04	0.6748E-04	0.5032E-04	0.3027E-04	0.1862E-04	0.2461E-04	0.2690E-04
24.90	0.5498E-04	0.3478E-04	0.1232E-03	0.8892E-04	0.8197E-04	0.5773E-04	0.3621E-04	0.2124E-04	0.2882E-04	0.3094E-04
29.93	0.6705E-04	0.4048E-04	0.1514E-03	0.1081E-03	0.1002E-03	0.6911E-04	0.4213E-04	0.2417E-04	0.3394E-04	0.3522E-04
35.03	0.8087E-04	0.4698E-04	0.1797E-03	0.1280E-03	0.1216E-03	0.8049E-04	0.4728E-04	0.2714E-04	0.3881E-04	0.3872E-04
40.22	0.9828E-04	0.5351E-04	0.2146E-03	0.1560E-03	0.1482E-03	0.9155E-04	0.5057E-04	0.3121E-04	0.4458E-04	0.4325E-04
40.12	0.1074E-03	0.5710E-04	0.2270E-03	0.1737E-03	0.1611E-03	0.9709E-04	0.5114E-04	0.3381E-04	0.4789E-04	0.4723E-04
45.18	0.1222E-03	0.6495E-04	0.2651E-03	0.2694E-03	0.1859E-03	0.1042E-03	0.5230E-04	0.3756E-04	0.5682E-04	0.5169E-04
49.80	0.1419E-03	0.7521E-04	0.3208E-03	0.5004E-03	0.2234E-03	0.1182E-03	0.4998E-04	0.4354E-04	0.6447E-04	0.5993E-04
50.68	0.1784E-03	0.9217E-04	0.3692E-03	0.5743E-03	0.2661E-03	0.1497E-03	0.5975E-04	0.6123E-04	0.8156E-04	0.7889E-04
54.52	0.1920E-03	0.9760E-04	0.4073E-03	0.6496E-03	0.2892E-03	0.1686E-03	0.6044E-04	0.6549E-04	0.8804E-04	0.8349E-04
60.25	0.2662E-03	0.1117E-03	0.5171E-03	0.8267E-03	0.3990E-03	0.3251E-03	0.4728E-04	0.9809E-04	0.1371E-03	0.1220E-03
60.17	0.3181E-03	0.1225E-03	0.5660E-03	0.8636E-03	0.5088E-03	0.6113E-03	0.6557E-04	0.9809E-04	0.1371E-03	0.1220E-03
55.69	0.3974E-03	0.1271E-03	0.6442E-03	0.9732E-03	0.5972E-03	0.7761E-03	0.3329E-03	0.1093E-03	0.1654E-03	0.1597E-03
71.24	0.4969E-03	0.1049E-03	0.7916E-03	0.1131E-02	0.7466E-03	0.9350E-03	0.4984E-03	0.1332E-03	0.2463E-03	0.2471E-03
70.09	0.5365E-03	0.1826E-03	0.8428E-03	0.1147E-02	0.8303E-03	0.1006E-02	0.5789E-03	0.1446E-03	0.2804E-03	0.2903E-03
75.34	0.6036E-03	0.2381E-03	0.9243E-03	0.1244E-02	0.9564E-03	0.1098E-02	0.6619E-03	0.1508E-03	0.3074E-03	0.2997E-03
80.38	0.6890E-03	0.3255E-03	0.1069E-02	0.1379E-02	0.1117E-02	0.1250E-02	0.7872E-03	0.1843E-03	0.3553E-03	0.3338E-03
80.13	0.7262E-03	0.3624E-03	0.1135E-02	0.1397E-02	0.1198E-02	0.1316E-02	0.8858E-03	0.2121E-03	0.3844E-03	0.3777E-03
59.51	0.6567E-03	0.3429E-03	0.1034E-02	0.1250E-02	0.1111E-02	0.1187E-02	0.8076E-03	0.2029E-03	0.3608E-03	0.3597E-03
59.81	0.5765E-03	0.3337E-03	0.9138E-03	0.1083E-03	0.9979E-03	0.1037E-02	0.7007E-03	0.1904E-03	0.3281E-03	0.3342E-03
49.54	0.4889E-03	0.2934E-03	0.7720E-03	0.8974E-03	0.8606E-03	0.8700E-03	0.5907E-03	0.1763E-03	0.2899E-03	0.3042E-03
40.08	0.4113E-03	0.2573E-03	0.6261E-03	0.7222E-03	0.7265E-03	0.7199E-03	0.4971E-03	0.1605E-03	0.2550E-03	0.2746E-03
29.41	0.3301E-03	0.2154E-03	0.4645E-03	0.5355E-03	0.5813E-03	0.5734E-03	0.4056E-03	0.1435E-03	0.2188E-03	0.2428E-03
19.41	0.2637E-03	0.1952E-03	0.3362E-03	0.3875E-03	0.4685E-03	0.4665E-03	0.3400E-03	0.1278E-03	0.1872E-03	0.2143E-03
9.680	0.2085E-03	0.1742E-03	0.2355E-03	0.2709E-03	0.3772E-03	0.3836E-03	0.3009E-03	0.1146E-03	0.1593E-03	0.1874E-03
1.070	0.1673E-03	0.1439E-03	0.1613E-03	0.1874E-03	0.3077E-03	0.3233E-03	0.2695E-03	0.1035E-03	0.1377E-03	0.1649E-03

## ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	131	132	133	134	135	136	137	138	139	140
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.4688E-05	0.4787E-05	0.1620E-04	0.0	0.1490E-04	0.1634E-04	0.1663E-04	0.1624E-04	0.2017E-04	0.1773E-04
9.943	0.8094E-05	0.7419E-05	0.3269E-04	0.0	0.2910E-04	0.3270E-04	0.3422E-04	0.3376E-04	0.4345E-04	0.3432E-04
14.95	0.1160E-04	0.1025E-04	0.5072E-04	0.0	0.4473E-04	0.5032E-04	0.4917E-04	0.5134E-04	0.6722E-04	0.5108E-04
19.89	0.1520E-04	0.1337E-04	0.6962E-04	0.0	0.6097E-04	0.6822E-04	0.6834E-04	0.6886E-04	0.9013E-04	0.6909E-04
19.98	0.2622E-04	0.2204E-04	0.8125E-04	0.0	0.7195E-04	0.8107E-04	0.7932E-04	0.7571E-04	0.9573E-04	0.7421E-04
24.90	0.2958E-04	0.2476E-04	0.9935E-04	0.0	0.8784E-04	0.9823E-04	0.9867E-04	0.9380E-04	0.1218E-03	0.9214E-04
29.93	0.3394E-04	0.2830E-04	0.1211E-03	0.0	0.1064E-03	0.1189E-03	0.1169E-03	0.1145E-03	0.1537E-03	0.1147E-03
35.03	0.3798E-04	0.3177E-04	0.1443E-03	0.0	0.1267E-03	0.1415E-03	0.1397E-03	0.1365E-03	0.1878E-03	0.1333E-03
40.22	0.4366E-04	0.3634E-04	0.1709E-03	0.0	0.1509E-03	0.1676E-03	0.1649E-03	0.1617E-03	0.2054E-03	0.1556E-03
40.12	0.5003E-04	0.3854E-04	0.1814E-03	0.0	0.1602E-03	0.1767E-03	0.1536E-03	0.1676E-03	0.2093E-03	0.1579E-03
45.18	0.5799E-04	0.4251E-04	0.2132E-03	0.0	0.1893E-03	0.2049E-03	0.1796E-03	0.2058E-03	0.2503E-03	0.2007E-03
49.80	0.7605E-04	0.5057E-04	0.2659E-03	0.0	0.2305E-03	0.2431E-03	0.2158E-03	0.2731E-03	0.3201E-03	0.2244E-03
50.68	-0.8301E-04	0.6435E-04	0.3173E-03	0.0	0.2581E-03	0.2733E-03	0.2380E-03	0.3157E-03	0.3541E-03	0.2339E-03
54.52	-0.6521E-04	0.6788E-04	0.3651E-03	0.0	0.2841E-03	0.3028E-03	0.2604E-03	0.3820E-03	0.4302E-03	0.2582E-03
60.17	-0.1744E-05	0.7875E-04	0.4734E-03	0.0	0.3543E-03	0.4286E-03	0.3195E-03	0.5738E-03	0.5735E-03	0.3014E-03
60.17	-0.2177E-03	0.9344E-05	0.5368E-03	0.0	0.3903E-03	0.6981E-03	0.3026E-03	0.6139E-03	0.6085E-03	0.3058E-03
65.69	-0.1932E-03	0.4228E-05	0.6127E-03	0.0	0.4899E-03	0.9067E-03	0.8288E-03	0.7050E-03	0.7158E-03	0.3487E-03
71.24	-0.1149E-03	0.1003E-05	0.7485E-03	0.0	0.4113E-03	0.7861E-03	0.8288E-03	0.7050E-03	0.8549E-03	0.4010E-03
70.09	0.3552E-04	0.1833E-04	0.8013E-03	0.0	0.5445E-03	0.9828E-03	0.1099E-02	0.8624E-03	0.8610E-03	0.3687E-03
75.34	0.6863E-04	0.3437E-04	0.8672E-03	0.0	0.7455E-03	0.1075E-02	0.1221E-02	0.9422E-03	0.9491E-03	0.3906E-03
80.38	0.1036E-03	0.4656E-04	0.9939E-03	0.0	0.9178E-03	0.1208E-02	0.1360E-02	0.1042E-02	0.1057E-02	0.4201E-03
80.13	0.2515E-03	0.1109E-03	0.1057E-02	0.0	0.9733E-03	0.1277E-02	0.1426E-02	0.1063E-02	0.1069E-02	0.4057E-03
69.51	0.2181E-03	0.1077E-03	0.9791E-03	0.0	0.8898E-03	0.1145E-02	0.1254E-02	0.9528E-03	0.9348E-03	0.3160E-03
59.81	0.1767E-03	0.9801E-04	0.8817E-03	0.0	0.7848E-03	0.9879E-03	0.1058E-02	0.8251E-03	0.7897E-03	0.2152E-03
49.54	0.1013E-03	0.9870E-04	0.7613E-03	0.0	0.6611E-03	0.8073E-03	0.8309E-03	0.6829E-03	0.6296E-03	0.1186E-03
40.08	0.2537E-04	0.9500E-04	0.6383E-03	0.0	0.5431E-03	0.6503E-03	0.6230E-03	0.5485E-03	0.4900E-03	0.5675E-04
29.41	-0.5414E-04	0.7970E-04	0.4905E-03	0.0	0.4220E-03	0.4981E-03	0.4146E-03	0.4046E-03	0.3403E-03	0.8883E-06
19.41	-0.7107E-04	0.6213E-04	0.3639E-03	0.0	0.3286E-03	0.3887E-03	0.2700E-03	0.2868E-03	0.2225E-03	0.4970E-04
9.680	-0.6855E-04	0.6327E-04	0.2675E-03	0.0	0.2581E-03	0.3024E-03	0.1588E-03	0.1950E-03	0.1363E-03	0.9614E-04
1.070	-0.7699E-04	0.6840E-04	0.1996E-03	0.0	0.2042E-03	0.2386E-03	0.5675E-04	0.1300E-03	0.7200E-04	0.1418E-03

## ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	141	142	143	144	145	146	147	148	149	150
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.5182E-05	0.8373E-05	0.1431E-05	-0.1332E-05	0.2504E-05	0.3553E-05	0.1991E-05	0.1316E-04	0.0	0.0
9.943	0.9426E-05	0.1342E-04	0.5593E-06	-0.4573E-05	0.3427E-05	-0.1244E-04	0.1727E-05	0.2369E-04	0.0	0.0
14.95	0.1099E-04	0.1708E-04	-0.3339E-05	-0.1165E-04	0.3559E-05	-0.2392E-04	0.1497E-05	0.3264E-04	0.0	0.0
19.89	0.1423E-04	0.2129E-04	-0.5955E-05	-0.1619E-04	0.4745E-05	-0.3439E-04	0.1958E-05	0.4265E-04	0.0	0.0
19.98	0.2209E-04	0.2586E-04	0.9095E-12	-0.1369E-04	0.1371E-04	-0.3389E-04	0.6860E-05	0.6739E-04	0.0	0.0
24.90	0.2568E-04	0.2999E-04	-0.1168E-05	-0.1620E-04	0.1516E-04	-0.4254E-04	0.7008E-05	0.7476E-04	0.0	0.0
29.93	0.3152E-04	0.3458E-04	-0.3290E-07	-0.2420E-04	0.1674E-04	-0.5396E-04	0.7715E-05	0.8424E-04	0.0	0.0
35.03	0.3718E-04	0.3902E-04	0.3948E-06	-0.3247E-04	0.1845E-04	-0.6672E-04	0.7551E-05	0.9266E-04	0.0	0.0
40.22	0.4195E-04	0.4280E-04	0.4935E-07	-0.4039E-04	0.2096E-04	-0.8253E-04	0.7896E-05	0.9951E-04	0.0	0.0
40.12	0.4328E-04	0.4103E-04	-0.3938E-03	-0.4934E-04	0.2452E-04	-0.9039E-04	0.7172E-05	0.4791E-04	0.0	0.0
45.18	0.4662E-04	0.4560E-04	-0.3923E-03	-0.5967E-04	0.2623E-04	-0.1089E-03	0.6498E-05	0.5792E-04	0.0	0.0
49.80	0.4929E-04	0.4766E-04	-0.3233E-03	-0.1603E-03	0.2966E-04	-0.1380E-03	0.7863E-05	0.6255E-04	0.0	0.0
50.68	0.6394E-04	0.5620E-04	-0.1590E-03	-0.1785E-03	0.4191E-04	-0.1486E-03	0.1520E-04	0.1385E-03	0.0	0.0
54.52	0.6605E-04	0.5694E-04	-0.1261E-03	-0.1970E-03	0.4389E-04	-0.1624E-03	0.1543E-04	0.1348E-03	0.0	0.0
60.25	0.7309E-04	0.6082E-04	-0.2247E-04	-0.1368E-02	0.4666E-04	-0.2058E-03	0.1584E-04	0.1485E-03	0.0	0.0
65.69	0.8974E-04	0.6212E-04	-0.1066E-04	-0.7643E-03	0.5061E-04	-0.2183E-03	0.1525E-04	0.7740E-04	0.0	0.0
71.24	0.1010E-03	0.6490E-04	0.6212E-04	-0.7383E-03	0.5378E-04	-0.2181E-03	0.1408E-04	0.4791E-04	0.0	0.0
70.09	0.1354E-03	0.7085E-04	0.1802E-03	-0.6849E-03	0.5733E-04	-0.2169E-03	0.1153E-04	0.5370E-04	0.0	0.0
75.34	0.2298E-03	0.7752E-04	0.2365E-03	-0.5680E-03	0.5958E-04	-0.2219E-03	0.1092E-04	0.1127E-03	0.0	0.0
80.38	0.2946E-03	0.8250E-04	0.3252E-03	-0.5756E-03	0.6274E-04	-0.2136E-03	0.1051E-04	0.1153E-03	0.0	0.0
80.13	0.3544E-03	0.9525E-04	0.4433E-03	-0.5616E-03	0.6682E-04	-0.2055E-03	0.8604E-05	0.1079E-03	0.0	0.0
69.51	0.3414E-03	0.1004E-03	0.4923E-03	-0.6283E-03	0.7223E-04	-0.2107E-03	0.8242E-05	0.1322E-03	0.0	0.0
59.81	0.3196E-03	0.9515E-04	0.3730E-03	-0.6669E-03	0.6643E-04	-0.2464E-03	0.8735E-05	0.1137E-03	0.0	0.0
49.54	0.2975E-03	0.8271E-04	0.1269E-03	-0.7062E-03	0.6129E-04	-0.2744E-03	0.9624E-05	0.7266E-04	0.0	0.0
40.08	0.2741E-03	0.7980E-04	-0.7452E-05	-0.7202E-03	0.5615E-04	-0.2916E-03	0.1061E-04	0.9793E-04	0.0	0.0
29.41	0.2473E-03	0.7309E-04	-0.1181E-03	-0.7023E-03	0.5180E-04	-0.2945E-03	0.1180E-04	0.9477E-04	0.0	0.0
19.41	0.2272E-03	0.6455E-04	-0.1702E-03	-0.6692E-03	0.4587E-04	-0.2714E-03	0.1332E-04	0.9319E-04	0.0	0.0
9.680	0.2113E-03	0.5621E-04	-0.1875E-03	-0.6579E-03	0.4231E-04	-0.2319E-03	0.1407E-04	0.8845E-04	0.0	0.0
1.070	0.1968E-03	0.4629E-04	-0.2009E-03	-0.6564E-03	0.3915E-04	-0.1874E-03	0.1377E-04	0.8687E-04	0.0	0.0
					0.3717E-04	-0.1491E-03	0.1431E-04	0.7108E-04	0.0	0.0

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	151	152	153	154	155	156	157	158	159	160
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.1492E-04	0.9108E-03	0.3029E-02	0.9558E-05	0.8044E-05	0.3405E-05	0.4392E-05	0.6458E-05	0.1545E-04	0.2586E-04
9.943	0.1762E-04	0.4324E-02	0.1514E-01	0.1235E-04	0.1359E-04	0.8340E-05	0.5034E-05	0.1120E-04	0.2288E-04	0.2953E-04
14.95	0.2440E-04	0.6598E-02	0.9127	0.1727E-04	0.1813E-04	0.9854E-05	0.9393E-05	0.1740E-04	0.3437E-04	0.4364E-04
19.89	0.2961E-04	0.4930E-01	0.9132	0.2065E-04	0.2499E-04	0.1494E-04	0.1030E-04	0.2452E-04	0.4494E-04	0.5401E-04
19.98	0.4639E-04	0.1748	0.9143	0.3160E-04	0.3280E-04	0.2278E-04	0.1992E-04	0.3770E-04	0.6131E-04	0.7066E-04
24.90	0.5624E-04	0.9270	0.9147	0.3881E-04	0.3984E-04	0.2816E-04	0.2384E-04	0.4719E-04	0.7357E-04	0.8602E-04
29.93	0.5679E-04	0.9271	0.9139	0.4313E-04	0.4359E-04	0.3190E-04	0.2607E-04	0.5193E-04	0.8446E-04	0.9652E-04
35.03	0.6707E-04	0.9271	0.9120	0.5174E-04	0.4688E-04	0.3542E-04	0.2953E-04	0.5602E-04	0.9738E-04	0.1119E-03
40.22	0.7732E-04	0.9271	0.9111	0.6218E-04	0.5203E-04	0.2941E-04	0.3180E-04	0.5615E-04	0.1114E-03	0.1283E-03
40.12	0.8834E-04	0.9275	0.9119	0.7117E-04	0.5508E-04	0.2964E-04	0.2535E-04	0.6248E-04	0.1155E-03	0.1322E-03
45.18	0.8857E-04	0.9275	0.9119	0.1180E-03	0.5516E-04	0.1810E-04	0.3353E-04	0.6472E-04	0.1255E-03	0.1277E-03
49.80	0.9281E-04	0.9275	0.9119	0.1545E-03	0.4864E-04	0.1221E-04	0.4384E-04	0.6234E-04	0.1362E-03	0.1259E-03
50.68	0.1201E-03	0.9279	0.9127	0.1811E-03	0.6363E-04	0.3849E-05	0.5986E-04	0.7908E-04	0.1653E-03	0.1669E-03
54.52	0.1253E-03	0.9279	0.9127	0.1664E-03	0.7985E-04	0.2647E-04	0.6278E-04	0.8370E-04	0.1815E-03	0.2153E-03
60.25	0.1429E-03	0.9291	0.9139	0.1839E-03	0.8615E-04	0.6618E-04	0.6901E-04	0.9569E-04	0.2083E-03	0.9341
60.17	0.1692E-03	0.9295	0.9143	0.2254E-03	0.1026E-03	0.7062E-04	0.6231E-04	0.9648E-04	0.2118E-03	0.9341
65.69	0.1923E-03	0.9299	0.9147	0.2621E-03	0.1015E-03	0.7102E-04	0.6676E-04	0.1021E-03	0.2312E-03	0.9345
71.24	0.2420E-03	0.9307	0.9155	0.9045E-03	0.4457E-03	0.1070E-03	0.6837E-04	0.1103E-03	0.2478E-03	0.9353
70.09	0.3228E-03	0.9303	0.9155	0.1271E-02	0.7450E-03	0.1061E-03	0.5050E-04	0.9688E-04	0.2448E-03	0.9349
75.34	0.3610E-03	0.9313	0.9165	0.1386E-02	0.6248	0.1213E-03	0.5588E-04	0.1095E-03	0.2650E-03	0.9359
80.38	0.4359E-03	0.9331	0.9183	0.9315	0.9373	0.4266E-04	0.5723E-04	0.1243E-03	0.2824E-03	0.9377
80.13	0.4824E-03	0.9327	0.9179	0.9312	0.9372	0.1680E-04	0.5087E-04	0.1115E-03	0.2777E-03	0.9375
69.51	0.4549E-03	0.9327	0.9179	0.9312	0.9373	0.1135E-05	0.4299E-04	0.1008E-03	0.2449E-03	0.9376
59.81	0.4274E-03	0.9327	0.9179	0.9312	0.9371	0.1875E-04	0.3637E-04	0.8818E-04	0.2108E-03	0.9374
49.54	0.3989E-03	0.9327	0.9179	0.9312	0.9372	0.3050E-04	0.3010E-04	0.7552E-04	0.1741E-03	0.9374
40.08	0.3664E-03	0.9327	0.9179	0.9312	0.9371	0.3963E-04	0.2195E-04	0.6604E-04	0.1448E-03	0.9375
29.41	0.3282E-03	0.9320	0.9171	0.9304	0.9365	0.4323E-04	0.1717E-04	0.5061E-04	0.1150E-03	0.9368
19.41	0.3012E-03	0.9315	0.9164	0.9296	0.9357	0.4042E-04	0.1209E-04	0.3796E-04	0.9044E-04	0.9361
9.680	0.2814E-03	0.9315	0.9164	0.9296	0.9357	0.3963E-04	0.7896E-05	0.3005E-04	0.7190E-04	0.9361
1.070	0.2660E-03	0.9314	0.9163	0.9296	0.9357	0.3563E-04	0.5429E-05	0.2175E-04	0.5379E-04	0.9361

## ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	161	162	163	164	165	166	167	168	169	170
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.5001E-05	0.4442E-05	0.1292E-04	-0.3822E-05	-0.3187E-04	0.6918E-05	0.4195E-05	0.9739E-05	0.1041E-04	0.1054E-05
9.943	0.1383E-04	0.1277E-04	-0.3177E-04	-0.9226E-05	-0.5841E-04	0.1186E-04	0.8176E-05	0.4236E-04	-0.1582E-04	-0.3690E-05
14.95	0.2002E-04	0.1762E-04	-0.4824E-04	-0.9753E-05	-0.7528E-04	0.1752E-04	0.1156E-04	0.6485E-04	-0.9226E-05	-0.9226E-06
19.89	0.3057E-04	0.2502E-04	-0.6419E-04	-0.9226E-05	-0.8458E-04	0.2359E-04	0.1532E-04	0.8893E-04	0.1186E-05	0.3031E-05
19.98	0.3326E-04	0.3292E-04	-0.6551E-04	0.6458E-05	-0.7903E-04	0.3564E-04	0.2199E-04	0.1073E-03	0.2583E-04	0.2372E-04
24.90	0.4132E-04	0.4001E-04	-0.6907E-04	0.8831E-05	-0.8129E-04	0.4124E-04	0.2588E-04	0.1345E-03	0.3756E-04	0.3242E-04
29.93	0.5022E-04	0.4753E-04	-0.7645E-04	0.6458E-05	-0.8975E-04	0.4750E-04	0.2912E-04	0.1515E-03	0.4653E-04	0.3888E-04
35.03	0.5713E-04	0.5611E-04	-0.8555E-04	0.4745E-05	-0.9264E-04	0.5383E-04	0.3234E-04	0.1658E-03	0.5839E-04	0.4995E-04
40.22	0.6057E-04	0.6962E-04	-0.9135E-04	0.4349E-05	-0.9669E-04	0.6186E-04	0.3795E-04	0.2217E-03	0.7170E-04	0.6788E-04
40.12	0.6304E-04	0.7600E-04	-0.9596E-04	0.6063E-05	-0.8544E-04	0.6812E-04	0.4159E-04	0.2427E-03	0.8726E-04	0.9530E-04
45.18	0.6899E-04	0.8548E-04	-0.1000E-03	0.5008E-05	-0.9083E-04	0.6924E-04	0.5202E-04	0.2705E-03	0.9365E-04	0.1085E-03
49.80	0.7084E-04	0.9171E-04	-0.1002E-03	0.3163E-05	-0.8735E-04	0.8229E-04	0.7102E-04	0.3893E-03	0.1111E-03	0.1302E-03
50.68	0.8095E-04	0.1088E-03	-0.8931E-04	0.1529E-04	-0.4834E-04	0.1138E-03	0.8951E-04	0.4083E-03	0.1504E-03	0.1897E-03
54.52	0.4410E-03	0.2260E-03	-0.9043E-04	0.1516E-04	-0.4805E-04	0.1249E-03	0.1039E-03	0.4152E-03	0.1630E-03	0.2090E-03
60.25	0.1191E-02	0.2781E-03	-0.8522E-04	0.1977E-04	-0.6054E-04	0.1449E-03	0.1384E-03	0.8888E-03	0.2141E-03	0.2662E-03
60.17	0.9220	0.3317E-03	-0.2744E-03	-0.1019E-03	-0.3259E-04	0.1604E-03	0.1492E-03	0.2375E-02	0.2504E-03	0.4700E-03
65.69	0.9232	0.3710E-03	-0.2754E-03	-0.3901E-04	-0.3486E-04	0.1716E-03	0.1597E-03	0.9237	0.3104E-03	0.5172E-03
71.24	0.9238	0.5167E-03	-0.2899E-03	-0.2952E-04	-0.1944E-04	0.1619E-03	0.1394E-03	0.9235	0.4260E-03	0.5661E-03
70.09	0.9238	0.5484E-03	-0.2380E-03	-0.1302E-03	0.3683E-04	0.1579E-03	0.1325E-03	0.9232	0.4607E-03	0.6954E-03
75.34	0.9245	0.5974E-03	-0.2496E-03	-0.1166E-03	0.4177E-04	0.1619E-03	0.1317E-03	0.9239	0.5063E-03	0.7339E-03
80.38	0.9263	0.9294	-0.2487E-03	-0.1102E-03	0.5153E-04	0.1738E-03	0.9107E-04	0.9260	0.5671E-03	0.7704E-03
80.13	0.9262	0.9292	-0.2557E-03	-0.5444E-04	0.9836E-04	0.1822E-03	0.8673E-04	0.9257	0.5995E-03	0.8728E-03
69.51	0.9262	0.9292	-0.2542E-03	-0.4112E-04	0.9915E-04	0.1712E-03	0.7704E-04	0.9257	0.5473E-03	0.8244E-03
49.81	0.9261	0.9291	-0.2479E-03	-0.3163E-04	0.1035E-03	0.1597E-03	0.7191E-04	0.9257	0.4873E-03	0.7798E-03
49.54	0.9261	0.9292	-0.2700E-03	-0.4745E-04	0.1128E-03	0.1476E-03	0.6806E-04	0.9256	0.4178E-03	0.7418E-03
40.08	0.9262	0.9292	-0.2661E-03	-0.5813E-04	0.1250E-03	0.1382E-03	0.6662E-04	0.9257	0.3610E-03	0.7102E-03
29.41	0.9254	0.9284	-0.2212E-03	-0.5536E-04	0.1380E-03	0.1277E-03	0.6440E-04	0.9249	0.2946E-03	0.6797E-03
19.41	0.9238	0.4120E-02	-0.2194E-03	-0.6169E-04	0.1430E-03	0.1129E-03	0.6110E-04	0.9232	0.2393E-03	0.6501E-03
9.680	0.9238	0.8975E-02	-0.3352E-03	-0.4587E-04	0.1401E-03	0.1000E-03	0.5710E-04	0.9232	0.2054E-03	0.5931E-03
1.070	0.9238	0.1357E-01	-0.2684E-03	0.5101E-04	0.1260E-03	0.8835E-04	0.5138E-04	0.9232	0.1998E-03	0.5726E-03

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	171	172	173	174	175	176	177	178	179	180
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	-0.2947E-04	0.9213E-05	-0.2171E-05	0.8044E-05	0.0527E-06	-0.7732E-06	0.3875E-04	0.1744E-04	0.1974E-06	-0.4244E-05
9.943	-0.5052E-04	0.2343E-04	-0.6580E-07	0.7419E-05	-0.1714E-04	-0.6827E-05	0.7525E-02	0.4343E-04	0.9870E-07	0.1201E-05
14.95	-0.5894E-04	0.4212E-04	-0.2040E-05	0.8044E-05	-0.3084E-04	-0.1479E-04	0.6483E-01	0.6873E-04	0.6580E-07	0.1102E-05
19.89	-0.5262E-04	0.5976E-04	-0.1152E-06	0.9393E-05	-0.4785E-04	-0.2288E-04	0.9261	0.9747E-04	0.9870E-07	0.6613E-05
19.98	-0.3979E-03	0.7345E-04	-0.4935E-07	0.1987E-04	-0.3664E-04	-0.1561E-04	0.9270	0.1064E-03	0.1316E-06	0.5001E-05
24.90	-0.3874E-03	0.8924E-04	-0.2155E-05	0.2199E-04	-0.4989E-04	-0.2301E-04	0.9274	0.1366E-03	0.8225E-07	0.9541E-05
29.93	-0.3916E-03	0.1064E-03	-0.2237E-05	0.2171E-04	-0.6617E-04	-0.3224E-04	0.9274	0.1692E-03	0.6580E-07	0.1171E-04
35.03	-0.6516E-03	0.1216E-03	0.6581E-07	0.2800E-04	-0.7922E-04	-0.4042E-04	0.9274	0.2008E-03	0.2303E-06	0.1252E-04
40.22	-0.1010E-02	0.1432E-03	0.1974E-06	0.3387E-04	-0.9081E-04	-0.5340E-04	0.9274	0.2318E-03	0.1316E-06	0.1308E-04
40.12	-0.1511E-02	0.1514E-03	-0.2139E-05	0.4073E-04	-0.9306E-04	-0.5123E-04	0.9278	0.2426E-03	0.2139E-06	0.1635E-04
45.18	-0.1488E-02	0.1898E-03	-0.4442E-05	0.4289E-04	-0.1110E-03	-0.7164E-04	0.9278	0.2781E-03	0.1649E-06	0.2010E-04
49.80	-0.1485E-02	0.2148E-03	-0.2221E-05	0.5064E-04	-0.1298E-03	-0.9342E-04	0.9278	0.3352E-03	0.3290E-07	0.2473E-04
50.68	-0.2001E-02	0.2382E-03	0.2221E-05	0.6843E-04	-0.1127E-03	-0.7567E-04	0.9282	0.3727E-03	0.2632E-06	0.3596E-04
54.52	-0.1976E-02	0.2888E-03	-0.2352E-05	0.7898E-04	-0.1252E-03	-0.9415E-04	0.9282	0.4331E-03	0.1810E-06	0.3978E-04
60.25	-0.2026E-02	0.6587E-03	-0.1974E-06	0.8433E-04	-0.1479E-03	-0.1544E-03	0.9294	0.8721E-03	0.1645E-07	0.5424E-04
60.17	-0.3215E-02	0.7700E-03	-0.2237E-05	0.9726E-04	-0.1596E-03	-0.1637E-03	0.9294	0.9404E-03	0.1316E-06	0.6263E-04
65.69	-0.3136E-02	0.2802E-02	-0.2632E-06	0.1125E-03	-0.1877E-03	-0.2083E-03	0.9298	0.1232E-02	0.8225E-07	0.7024E-04
71.24	-0.2916E-02	0.9245	-0.2352E-05	0.1185E-03	-0.2345E-03	-0.2589E-03	0.9308	0.1798E-02	0.9870E-07	0.7682E-04
70.09	-0.3343E-02	0.9241	-0.2352E-05	0.1305E-03	-0.2429E-03	-0.2518E-03	0.9306	0.1937E-02	0.1645E-07	0.7717E-04
75.34	-0.3305E-02	0.9252	-0.2369E-05	0.1350E-03	-0.2736E-03	-0.2854E-03	0.9317	0.9368	0.8225E-07	0.8947E-04
80.38	-0.3323E-02	0.9265	-0.6827E-05	0.1330E-03	-0.3204E-03	-0.3108E-03	0.9328	0.9382	0.9870E-07	0.1077E-03
80.13	-0.5901E-02	0.9262	-0.4623E-05	0.1473E-03	-0.3419E-03	-0.3014E-03	0.9326	0.9377	0.2797E-06	0.1132E-03
69.51	-0.6025E-02	0.9262	-0.6662E-05	0.1415E-03	-0.3061E-03	-0.2504E-03	0.9326	0.9377	0.3455E-06	0.1050E-03
59.81	-0.6134E-02	0.9262	-0.5429E-06	0.1388E-03	-0.2641E-03	-0.1939E-03	0.9326	0.9377	0.2468E-06	0.9150E-04
49.54	-0.6254E-02	0.9262	-0.4935E-07	0.1349E-03	-0.2191E-03	-0.1327E-03	0.9326	0.9377	0.2468E-06	0.6909E-04
40.08	-0.6348E-02	0.9262	-0.1303E-04	0.1285E-03	-0.1783E-03	-0.8296E-04	0.9326	0.9377	0.1974E-06	0.5029E-04
29.41	-0.6464E-02	0.1427E-01	-0.3455E-06	0.1200E-03	-0.1269E-03	-0.3474E-04	0.9314	0.9368	0.1481E-06	0.3519E-04
19.41	-0.6538E-02	0.3991E-01	-0.6712E-05	0.1120E-03	-0.8343E-04	-0.5429E-06	0.9306	0.9361	0.0	0.2201E-04
9.680	-0.6551E-02	0.2726E-01	-0.6712E-05	0.1016E-03	-0.4429E-04	-0.2507E-04	0.9306	0.9361	0.4935E-07	0.1081E-04
1.070	-0.6508E-02	0.4203E-01	-0.1974E-06	0.9629E-04	-0.1107E-04	0.4294E-04	0.9306	0.9361	0.4935E-07	0.2912E-05

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	181	182	183	184	185	186	187	188	189	190
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.2468E-06	0.2061E-04	0.3910E-04	0.1397E-04	0.1240E-04	-0.9044E-05	0.3552E-05	0.1689E-04	0.1356E-04	0.8719E-05
9.943	0.1481E-06	0.3830E-04	0.6098E-04	0.2563E-04	0.2576E-04	-0.1414E-04	0.8583E-05	0.3168E-04	0.2195E-04	0.1260E-04
14.95	0.2139E-06	0.6014E-04	0.9403E-04	0.4355E-04	0.4047E-04	-0.2480E-04	0.1361E-04	0.4761E-04	0.3453E-04	0.1806E-04
19.89	0.4935E-06	0.8719E-04	0.1260E-03	0.6344E-04	0.5657E-04	-0.3167E-04	0.1786E-04	0.6357E-04	0.4832E-04	0.2443E-04
19.98	0.2139E-06	0.1016E-03	0.1391E-03	0.8143E-04	0.6195E-04	-0.3664E-04	0.2575E-04	0.7223E-04	0.5496E-04	0.2839E-04
24.90	0.9870E-07	0.1314E-03	0.1714E-03	0.1055E-03	0.7969E-04	-0.4334E-04	0.3104E-04	0.8859E-04	0.6746E-04	0.3422E-04
29.93	0.1645E-06	0.1665E-03	0.2044E-03	0.1328E-03	0.9977E-04	-0.4907E-04	0.3677E-04	0.1063E-03	0.8303E-04	0.4076E-04
35.03	0.7074E-06	0.2045E-03	0.2436E-03	0.1658E-03	0.1174E-03	-0.5814E-04	0.4098E-04	0.1275E-03	0.9895E-04	0.4749E-04
40.22	0.7567E-06	0.2439E-03	0.2888E-03	0.2021E-03	0.1416E-03	-0.6844E-04	0.5038E-04	0.1494E-03	0.1140E-03	0.5432E-04
40.12	0.4935E-07	0.2564E-03	0.2989E-03	0.2293E-03	0.1440E-03	-0.7245E-04	0.4706E-04	0.1573E-03	0.1188E-03	0.5628E-04
45.18	0.0	0.2999E-03	0.3486E-03	0.2813E-03	0.1669E-03	-0.8412E-04	0.4275E-04	0.1840E-03	0.1311E-03	0.6347E-04
49.80	0.5264E-06	0.3452E-03	0.4048E-03	0.4093E-03	0.1881E-03	-0.9882E-04	0.4357E-04	0.2359E-03	0.1465E-03	0.7141E-04
50.68	0.5922E-06	0.3818E-03	0.4256E-03	0.1017E-02	0.2050E-03	-0.1047E-03	0.5186E-04	0.2897E-03	0.1628E-03	0.8480E-04
54.52	0.5758E-06	0.4364E-03	0.4577E-03	0.1076E-02	0.2114E-03	-0.1112E-03	0.6239E-04	0.4402E-03	0.1722E-03	0.8911E-04
60.25	-0.7732E-06	0.5749E-03	0.7103E-03	0.1257E-02	0.2090E-03	-0.1767E-03	0.1024E-03	0.9279	0.1881E-03	0.9793E-04
65.69	-0.9870E-06	0.6112E-03	0.7984E-03	0.1641E-02	0.2155E-03	-0.1905E-03	0.1255E-03	0.9284	0.2093E-03	0.1060E-03
71.24	-0.1086E-05	0.7134E-03	0.8207E-03	0.1847E-02	0.2158E-03	-0.2245E-03	0.2138E-03	0.9285	0.2246E-03	0.1209E-03
70.09	-0.6087E-06	0.8207E-03	0.9208	0.2244E-02	0.2026E-03	-0.2355E-03	0.3567E-03	0.9296	0.2612E-03	0.1479E-03
75.34	-0.6745E-06	0.8357E-03	0.9211	0.3348E-02	0.1961E-03	-0.2227E-03	0.3937E-03	0.9295	0.2657E-03	0.1538E-03
80.38	-0.8225E-06	0.1117E-02	0.9229	0.4335E-02	0.1943E-03	-0.2410E-03	0.5001E-03	0.9299	0.2844E-03	0.1647E-03
80.13	-0.1053E-05	0.1581E-02	0.9225	0.9171	0.1837E-03	-0.2589E-03	0.6921E-03	0.9316	0.2941E-03	0.1858E-03
69.51	-0.1036E-05	0.1421E-02	0.9225	0.9171	0.1805E-03	-0.2559E-03	0.7605E-03	0.9312	-0.5291E-03	0.1903E-03
59.81	-0.1086E-05	0.1160E-02	0.9225	0.9170	0.1714E-03	-0.2318E-03	0.6664E-03	0.9312	-0.7490E-03	0.1762E-03
49.54	-0.9870E-06	0.7999E-03	0.9225	0.9170	0.1635E-03	-0.2046E-03	0.5372E-03	0.9312	-0.7490E-03	0.1612E-03
40.08	-0.1086E-05	0.5889E-03	0.9225	0.9171	0.1541E-03	-0.1715E-03	0.3866E-03	0.9312	-0.6333E-03	0.1452E-03
29.41	-0.1086E-05	0.4764E-03	0.6834E-02	0.9159	0.1424E-03	-0.1349E-03	0.2677E-03	0.9312	-0.6160E-03	0.1320E-03
19.41	-0.7896E-06	0.4029E-03	0.5710E-02	0.1355E-01	0.1199E-03	-0.9698E-04	0.1725E-03	0.9303	-0.8555E-03	0.1171E-03
9.680	-0.6909E-06	0.3492E-03	0.5990E-02	0.1032E-01	0.9150E-04	-0.6768E-04	0.1269E-03	0.9292	-0.7800E-03	0.1026E-03
1.070	-0.1974E-06	0.3016E-03	0.5985E-02	0.9961E-02	0.6134E-04	-0.4479E-04	0.9895E-04	0.9292	-0.7785E-03	0.8617E-04
					0.3494E-04	-0.2772E-04	0.7843E-04	0.9292	-0.9521E-03	0.7136E-04

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	191	192	193	194	195	196	197	198	199	200
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	-0.8094E-05	0.4952E-05	0.3492E-05	0.0	0.8209E-05	0.7831E-05	0.6449E-05	0.5840E-05	0.1423E-04	0.8242E-05
9.943	-0.1212E-04	0.4425E-05	0.3821E-05	0.0	0.1161E-04	0.1275E-04	0.1084E-04	0.8011E-05	0.2841E-04	0.1454E-04
14.95	-0.1484E-04	0.5017E-05	0.5798E-05	0.0	0.1750E-04	0.1976E-04	0.1614E-04	0.1188E-04	0.4560E-04	0.2190E-04
19.89	-0.1731E-04	0.6136E-05	0.7840E-05	0.0	0.2288E-04	0.2617E-04	0.2144E-04	0.1622E-04	0.6338E-04	0.2925E-04
19.98	-0.2107E-04	0.9476E-05	0.1370E-04	0.0	0.2996E-04	0.3251E-04	0.2629E-04	0.2007E-04	0.7090E-04	0.3497E-04
24.90	-0.2048E-04	0.1133E-04	0.1581E-04	0.0	0.3535E-04	0.3851E-04	0.3154E-04	0.2359E-04	0.8888E-04	0.4238E-04
29.93	-0.2255E-04	0.1311E-04	0.1792E-04	0.0	0.4262E-04	0.4595E-04	0.3764E-04	0.2867E-04	0.1101E-03	0.5013E-04
35.03	-0.2680E-04	0.1385E-04	0.1891E-04	0.0	0.4938E-04	0.5360E-04	0.4414E-04	0.3305E-04	0.1348E-03	0.5914E-04
40.22	-0.3282E-04	0.1423E-04	0.1983E-04	0.0	0.5677E-04	0.6172E-04	0.5156E-04	0.3835E-04	0.1650E-03	0.6840E-04
40.12	-0.3249E-04	0.1601E-04	0.2326E-04	0.0	0.6118E-04	0.6635E-04	0.5478E-04	0.4177E-04	0.1781E-03	0.7220E-04
45.18	-0.3642E-04	0.1716E-04	0.2306E-04	0.0	0.6769E-04	0.7434E-04	0.6215E-04	0.4606E-04	0.2125E-03	0.7873E-04
49.80	-0.3956E-04	0.2206E-04	0.2392E-04	0.0	0.8039E-04	0.8669E-04	0.7357E-04	0.5570E-04	0.2791E-03	0.8831E-04
50.68	-0.1389E-01	-0.1387E-03	0.3307E-04	0.0	0.9522E-04	0.1006E-03	0.8908E-04	0.6819E-04	0.3201E-03	0.1101E-03
54.52	-0.1253E-01	-0.1131E-03	0.3360E-04	0.0	0.1019E-03	0.1080E-03	0.9604E-04	0.7449E-04	0.3569E-03	0.1295E-03
60.25	-0.1216E-01	-0.1887E-03	0.3927E-04	0.0	0.1248E-03	0.1341E-03	0.1531E-03	0.1144E-03	0.5621E-03	0.1139E-03
60.17	-0.8608E-02	-0.7710E-03	0.4355E-04	0.0	0.1740E-03	0.1704E-03	0.1706E-03	0.144E-03	0.6268E-03	0.1232E-03
65.69	-0.8672E-02	-0.7884E-03	0.4790E-04	0.0	0.1515E-03	0.2740E-03	0.1706E-03	0.1380E-03	0.7197E-03	0.1427E-03
71.24	-0.8465E-02	-0.8178E-03	0.5330E-04	0.0	0.2205E-03	0.5725E-03	0.2121E-03	0.1865E-03	0.8751E-03	0.1965E-03
70.09	-0.2525E-01	-0.1425E-02	0.5449E-04	0.0	0.2594E-03	0.6481E-03	0.3102E-03	0.2173E-03	0.8966E-03	0.2052E-03
75.34	-0.2120E-01	-0.2293E-02	0.5936E-04	0.0	0.2775E-03	0.7061E-03	0.4071E-03	0.2478E-03	0.9817E-03	0.2224E-03
80.38	-0.2016E-01	-0.2459E-02	0.6661E-04	0.0	0.3224E-03	0.7774E-03	0.5215E-03	0.3184E-03	0.1112E-02	0.2636E-03
80.13	-0.2894E-01	-0.1884E-02	0.7122E-04	0.0	0.3511E-03	0.1494E-03	0.5358E-03	0.3683E-03	0.1147E-02	0.2936E-03
69.51	-0.2941E-01	-0.2322E-02	0.6601E-04	0.0	0.3308E-03	0.1215E-03	0.4964E-03	0.3427E-03	0.1038E-02	0.2673E-03
59.81	-0.2876E-01	-0.2392E-02	0.6009E-04	0.0	0.3053E-03	0.5838E-04	0.4514E-03	0.3085E-03	0.9127E-03	0.2371E-03
49.54	-0.2696E-01	-0.2489E-02	0.5396E-04	0.0	0.2767E-03	-0.1579E-04	0.4070E-03	0.2681E-03	0.7705E-03	0.2019E-03
40.08	-0.1672E-01	-0.2569E-02	0.4862E-04	0.0	0.2496E-03	-0.9826E-04	0.3645E-03	0.2320E-03	0.6381E-03	0.1695E-03
29.41	-0.1689E-01	-0.2662E-02	0.4170E-04	0.0	0.2176E-03	-0.1736E-03	0.3118E-03	0.1944E-03	0.4958E-03	0.1349E-03
19.41	-0.1789E-01	-0.2572E-02	0.3558E-04	0.0	0.1892E-03	-0.2342E-03	0.2674E-03	0.1640E-03	0.3792E-03	0.1053E-03
9.680	-0.1689E-01	-0.2447E-02	0.3321E-04	0.0	0.1648E-03	-0.2840E-03	0.2304E-03	0.1392E-03	0.2841E-03	0.7921E-04
1.070	-0.2409E-01	-0.2297E-02	0.3202E-04	0.0	0.1452E-03	-0.2732E-03	0.2020E-03	0.1201E-03	0.2144E-03	0.5853E-04

## ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	201	202	203	204	205	206	207	208	209	210
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.4557E-05	0.4639E-05	0.8373E-05	0.1027E-04	0.8011E-05	0.3817E-05	0.1727E-05	-0.1810E-06	0.5527E-05	0.4820E-05
9.943	0.5198E-05	0.7304E-05	0.1331E-04	0.1762E-04	0.1370E-04	0.1267E-05	-0.7239E-06	-0.8884E-06	0.7140E-05	0.5988E-05
14.95	0.7682E-05	0.1101E-04	0.1989E-04	0.2640E-04	0.2015E-04	-0.4935E-07	-0.1842E-05	0.2139E-06	0.1030E-04	0.8423E-05
19.89	0.1020E-04	0.1449E-04	0.2677E-04	0.3594E-04	0.2700E-04	0.5593E-06	-0.2533E-05	0.2895E-05	0.1365E-04	0.1112E-04
19.98	0.1492E-04	0.1749E-04	0.3269E-04	0.4299E-04	0.3303E-04	0.1625E-04	0.5758E-04	-0.6580E-06	0.1875E-04	0.1662E-04
24.90	0.1694E-04	0.2073E-04	0.3935E-04	0.5218E-04	0.4016E-04	0.2571E-04	0.8291E-05	-0.2632E-06	0.2199E-04	0.1921E-04
29.93	0.1976E-04	0.2504E-04	0.4710E-04	0.6297E-04	0.4767E-04	0.4157E-04	0.1249E-04	0.1069E-05	0.2598E-04	0.2282E-04
35.03	0.2306E-04	0.2963E-04	0.5498E-04	0.7365E-04	0.5592E-04	0.4409E-04	0.1252E-04	0.4491E-05	0.3002E-04	0.2622E-04
40.22	0.2514E-04	0.3333E-04	0.6312E-04	0.8479E-04	0.6380E-04	0.3527E-04	0.8637E-05	0.4129E-05	0.3374E-04	0.3032E-04
40.12	0.2685E-04	0.3473E-04	0.6582E-04	0.8938E-04	0.6546E-04	0.5573E-04	0.1708E-04	0.4606E-06	0.3668E-04	0.3404E-04
45.18	0.2821E-04	0.3736E-04	0.7271E-04	0.1006E-03	0.7204E-04	0.5350E-04	0.1509E-04	0.9377E-06	0.4022E-04	0.3752E-04
49.80	0.3116E-04	0.4116E-04	0.8079E-04	0.1156E-03	0.7733E-04	0.6253E-04	0.1708E-04	0.4836E-05	0.4886E-04	0.4718E-04
50.68	0.3836E-04	0.4539E-04	0.9316E-04	0.1354E-03	0.9142E-04	0.9094E-04	0.3150E-04	0.1217E-05	0.5731E-04	0.6136E-04
54.52	0.4001E-04	0.4753E-04	0.9875E-04	0.1515E-03	0.1017E-03	0.8034E-04	0.2675E-04	-0.5593E-06	0.5952E-04	0.6534E-04
60.25	0.4302E-04	0.5396E-04	0.1074E-03	0.2133E-03	0.1060E-03	0.1045E-03	0.3010E-04	-0.3307E-05	0.6723E-04	0.8489E-04
60.17	0.4766E-04	0.5933E-04	0.1132E-03	0.2344E-03	0.1105E-03	0.1242E-03	0.3282E-04	-0.3438E-05	0.2969E-04	0.1067E-03
65.69	0.5988E-04	0.7291E-04	0.1303E-03	0.2621E-03	0.1318E-03	0.1488E-03	0.4302E-04	-0.2978E-05	0.5105E-04	0.8201E-04
71.24	0.7107E-04	0.1114E-03	0.1909E-03	0.3295E-03	0.1725E-03	0.1808E-03	0.5580E-04	-0.6087E-06	0.6074E-04	0.6954E-04
70.09	0.8168E-04	0.1446E-03	-0.2470E-03	0.3535E-03	0.1863E-03	0.1998E-03	0.6001E-04	-0.2632E-06	-0.9990E-04	0.1386E-03
75.34	0.9296E-04	0.1675E-03	-0.2130E-03	0.3952E-03	0.2162E-03	0.2142E-03	0.5013E-04	0.4935E-06	-0.1051E-03	0.1565E-03
80.38	0.1107E-03	0.2093E-03	-0.7650E-03	0.5096E-03	0.2759E-03	0.2463E-03	0.5213E-04	-0.4442E-06	-0.6942E-04	0.1798E-03
80.13	0.1297E-03	0.2493E-03	0.2138E-03	0.5646E-03	0.3182E-03	0.2629E-03	0.6761E-04	-0.4869E-05	0.4095E-04	0.1850E-03
69.51	0.1175E-03	0.2284E-03	0.1875E-03	0.5136E-03	0.2816E-03	0.2438E-03	0.6623E-04	-0.4343E-05	0.3356E-04	0.1264E-03
59.81	0.1035E-03	0.2029E-03	0.1675E-03	0.4512E-03	0.2398E-03	0.2233E-03	0.6485E-04	-0.3109E-05	0.8439E-05	0.1253E-03
49.54	0.8765E-04	0.1735E-03	0.1308E-03	0.3795E-03	0.1928E-03	0.1887E-03	0.6006E-04	-0.2961E-05	0.2275E-04	0.1494E-03
40.08	0.7437E-04	0.1474E-03	0.6860E-04	0.3145E-03	0.1513E-03	0.1677E-03	0.5986E-04	-0.2813E-05	-0.2655E-04	0.1000E-03
29.41	0.6055E-04	0.1209E-03	0.7304E-05	0.2526E-03	0.1125E-03	0.1367E-03	0.5680E-04	-0.4096E-05	-0.5216E-04	0.6416E-04
19.41	0.4985E-04	0.1003E-03	-0.5310E-04	0.2058E-03	0.8489E-04	0.1126E-03	0.5429E-04	-0.4047E-05	-0.7709E-04	0.5157E-04
9.680	0.4244E-04	0.8370E-04	-0.3316E-04	0.1688E-03	0.6292E-04	0.1012E-03	0.5394E-04	-0.2418E-05	-0.9436E-04	0.4254E-04
1.070	0.3622E-04	0.7181E-04	-0.5493E-04	0.1401E-03	0.4605E-04	0.9772E-04	0.5542E-04	0.2171E-05	-0.1068E-03	0.4654E-04

ELECTRONICALLY RECORDED DATA - TEST F

LOAD	CHANNEL NUMBER									
	211	212	213	214	215	216	217	218	219	220
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.7205E-05	0.4425E-05	0.7518E-05	0.1280E-04	0.8982E-05	0.1066E-04	0.1770E-04	0.2020E-04	0.1015E-04	0.2035E-04
9.943	0.1239E-04	0.8225E-05	0.1561E-04	0.2426E-04	0.1497E-04	0.2264E-04	0.3466E-04	0.3882E-04	0.1818E-04	0.4058E-04
14.95	0.1847E-04	0.1296E-04	0.2339E-04	0.3683E-04	0.2232E-04	0.2857E-04	0.5358E-04	0.5927E-04	0.2826E-04	0.6366E-04
19.89	0.2507E-04	0.1775E-04	0.3236E-04	0.5003E-04	0.3037E-04	0.4562E-04	0.7312E-04	0.8135E-04	0.3828E-04	0.8831E-04
19.98	0.3242E-04	0.2362E-04	0.3601E-04	0.5478E-04	0.3721E-04	0.5127E-03	0.8112E-04	0.8908E-04	0.5053E-04	0.9428E-04
24.90	0.3859E-04	0.2834E-04	0.4422E-04	0.6768E-04	0.4463E-04	0.9716E-04	0.9884E-04	0.1104E-03	0.6015E-04	0.1189E-03
29.93	0.4567E-04	0.3400E-04	0.5318E-04	0.8173E-04	0.5388E-04	0.6093E-04	0.1220E-03	0.1349E-03	0.7201E-03	0.1472E-03
35.03	0.5383E-04	0.4154E-04	0.6404E-04	0.9712E-04	0.6396E-04	0.3593E-04	0.1457E-03	0.1610E-03	0.8459E-04	0.1778E-03
40.22	0.6250E-04	0.491E-04	0.7546E-04	0.1131E-03	0.7450E-04	0.2399E-04	0.1713E-03	0.1889E-03	0.9817E-04	0.2116E-03
40.12	0.6913E-04	0.4873E-04	0.7983E-04	0.1169E-03	0.7881E-04	0.8727E-04	0.1787E-03	0.1958E-03	0.1111E-03	0.2091E-03
45.18	0.7819E-04	0.5417E-04	0.9183E-04	0.1325E-03	0.8836E-04	0.4284E-04	0.2039E-03	0.2265E-03	0.1249E-03	0.2424E-03
49.80	0.9555E-04	0.7529E-04	0.1113E-03	0.1570E-03	0.1041E-03	0.7732E-05	0.2358E-03	0.2780E-03	0.1493E-03	0.3004E-03
50.68	0.1155E-03	0.7924E-04	0.1309E-03	0.1782E-03	0.1231E-03	0.4310E-04	0.2627E-03	0.3130E-03	0.1834E-03	0.3877E-04
54.52	0.1293E-03	0.1073E-03	0.1466E-03	0.1997E-03	0.1318E-03	0.1767E-04	0.2828E-03	0.3842E-03	0.2057E-03	0.1908E-03
60.17	0.1778E-03	0.1712E-03	0.1852E-03	0.2581E-03	0.1581E-03	0.2793E-04	0.3392E-03	0.6689E-03	0.2780E-03	0.3783E-03
65.69	0.2256E-03	0.4513E-03	0.2024E-03	0.3045E-03	0.1709E-03	0.1598E-03	0.3116E-03	0.7184E-03	0.3127E-03	0.6010E-03
71.24	0.2643E-03	0.3884E-03	0.2165E-03	0.4897E-03	0.1919E-03	0.1990E-03	0.3819E-03	0.8214E-03	0.3659E-03	0.7319E-03
70.09	0.3547E-03	0.4093E-03	0.2910E-03	0.7307E-03	0.2084E-03	0.3017E-03	0.5814E-03	0.9986E-03	0.4245E-03	0.9060E-03
75.34	0.3984E-03	0.1943E-03	0.3237E-03	0.7933E-03	0.2287E-03	0.3285E-03	0.6605E-03	0.1020E-02	0.4420E-03	0.9495E-03
80.38	0.4453E-03	0.2188E-03	0.3701E-03	0.9271E-03	0.2586E-03	0.4573E-03	0.7617E-03	0.1141E-02	0.4907E-03	0.1068E-02
80.13	0.5331E-03	0.2544E-03	0.4797E-03	0.1154E-02	0.3024E-03	0.6133E-03	0.9414E-03	0.1351E-02	0.5454E-03	0.1257E-02
69.51	0.5672E-03	0.3238E-03	0.5211E-03	0.1233E-02	0.3321E-03	0.6723E-03	0.1092E-02	0.1215E-02	0.5746E-03	0.1330E-02
49.54	0.5275E-03	0.2995E-03	0.4077E-03	0.9862E-03	0.3064E-03	0.5881E-03	0.9616E-03	0.1008E-02	0.5257E-03	0.1168E-02
59.81	0.4770E-03	0.2691E-03	0.3371E-03	0.8287E-03	0.2713E-03	0.4859E-03	0.8083E-03	0.4704E-03	0.4048E-03	0.8027E-03
40.08	0.4166E-03	0.2396E-03	0.2754E-03	0.6775E-03	0.2289E-03	0.4113E-03	0.6330E-03	0.7932E-03	0.4048E-03	0.8027E-03
29.41	0.3583E-03	0.2086E-03	0.2146E-03	0.5213E-03	0.1447E-03	0.3425E-03	0.4928E-03	0.6166E-03	0.3419E-03	0.6347E-03
19.41	0.2962E-03	0.1671E-03	0.2146E-03	0.4029E-03	0.1447E-03	0.2391E-03	0.3486E-03	0.4554E-03	0.2739E-03	0.4622E-03
9.680	0.2463E-03	0.1147E-03	0.1687E-03	0.4029E-03	0.1093E-03	0.1574E-03	0.2383E-03	0.3379E-03	0.2194E-03	0.3342E-03
1.070	0.2072E-03	0.6189E-04	0.1312E-03	0.3147E-03	0.7975E-04	0.1006E-03	0.1595E-03	0.2458E-03	0.1747E-03	0.2343E-03
	0.1786E-03	0.3766E-04	0.1029E-03	0.2540E-03	0.5799E-04	0.5962E-04	0.1046E-03	0.1756E-03	0.1423E-03	0.1598E-03

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	221	222	223	224	225	226	227	228	229	230
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.4498E-04	0.6686E-03	0.8603E-03	0.6522E-03	0.8721E-03	0.7846E-03	0.2937E-03	0.4501E-04	0.3808E-03	0.3082E-03
9.943	0.1632E-03	0.1414E-02	0.2117E-02	0.1855E-02	0.1927E-02	0.1800E-02	0.1115E-02	0.2525E-03	0.4184E-03	0.5331E-03
14.95	0.2848E-03	0.2259E-02	0.3557E-02	0.3214E-02	0.3034E-02	0.2885E-02	0.2066E-02	0.4649E-03	0.3993E-03	0.7592E-03
19.89	0.4243E-03	0.3120E-02	0.5032E-02	0.4621E-02	0.4095E-02	0.3969E-02	0.3006E-02	0.6630E-03	0.5930E-03	0.1002E-02
19.98	0.5405E-03	0.3374E-02	0.5410E-02	0.5003E-02	0.3374E-02	0.3678E-02	0.3310E-02	0.2914E-03	0.1432E-02	0.1349E-02
24.90	0.6377E-03	0.4189E-02	0.6836E-02	0.6119E-02	0.4370E-02	0.4688E-02	0.3932E-02	0.4093E-03	0.1598E-02	0.1639E-02
29.93	0.7832E-03	0.5155E-02	0.8478E-02	0.7663E-02	0.5574E-02	0.5779E-02	0.4916E-02	0.6188E-03	0.1731E-02	0.1897E-02
35.03	0.9282E-03	0.6198E-02	0.1023E-01	0.9321E-02	0.6693E-02	0.6938E-02	0.5932E-02	0.7734E-03	0.1889E-02	0.2188E-02
40.22	0.1095E-02	0.7449E-02	0.1236E-01	0.1133E-01	0.8277E-02	0.9305E-02	0.7723E-02	0.1170E-02	0.2030E-02	0.2534E-02
40.12	0.1251E-02	0.7895E-02	0.1309E-01	0.1221E-01	0.8255E-02	0.1015E-01	0.9274E-02	0.1409E-02	0.1850E-02	0.2573E-02
45.18	0.1470E-02	0.9436E-02	0.1636E-01	0.1609E-01	0.1268E-01	0.1311E-01	0.1098E-01	0.1689E-02	0.2106E-02	0.3032E-02
49.80	0.1903E-02	0.1192E-01	0.2163E-01	0.2299E-01	0.2007E-01	0.2024E-01	0.1532E-01	0.2789E-02	0.1900E-02	0.3247E-02
50.68	0.2266E-02	0.1342E-01	0.2435E-01	0.2590E-01	0.2315E-01	0.2327E-01	0.1643E-01	0.3254E-02	0.1965E-02	0.3201E-02
54.52	0.2577E-02	0.1509E-01	0.2815E-01	0.3035E-01	0.2969E-01	0.2951E-01	0.2027E-01	0.4329E-02	0.1847E-02	0.3495E-02
60.25	0.3568E-02	0.2006E-01	0.3944E-01	0.4433E-01	0.4860E-01	0.4522E-01	0.2960E-01	0.6987E-02	0.1043E-02	0.3442E-02
60.17	0.4070E-02	0.2262E-01	0.4410E-01	0.4987E-01	0.5325E-01	0.4980E-01	0.3249E-01	0.7393E-02	0.1425E-02	0.4037E-02
65.69	0.4932E-02	0.2681E-01	0.5158E-01	0.5833E-01	0.6162E-01	0.5704E-01	0.3684E-01	0.8262E-02	0.1741E-02	0.4299E-02
71.24	0.6213E-02	0.3292E-01	0.6237E-01	0.6959E-01	0.7515E-01	0.7057E-01	0.4637E-01	0.1054E-01	0.1372E-02	0.4288E-02
70.09	0.6500E-02	0.3453E-01	0.6416E-01	0.7078E-01	0.7550E-01	0.7263E-01	0.4590E-01	0.1071E-01	0.1587E-02	0.4473E-02
75.34	0.7001E-02	0.3820E-01	0.7070E-01	0.7739E-01	0.8440E-01	0.7923E-01	0.5167E-01	0.1174E-01	0.1584E-02	0.4938E-02
80.38	0.8010E-02	0.4341E-01	0.8016E-01	0.8616E-01	0.9525E-01	0.9010E-01	0.6168E-01	0.1370E-01	0.1625E-02	0.5351E-02
80.13	0.9090E-02	0.4572E-01	0.8286E-01	0.8819E-01	0.9768E-01	0.9467E-01	0.6765E-01	0.1616E-01	0.5372E-03	0.3227E-02
69.51	0.8278E-02	0.4132E-01	0.7927E-01	0.7887E-01	0.8556E-01	0.8508E-01	0.6765E-01	0.1499E-01	0.2246E-03	0.2461E-02
49.54	0.7192E-02	0.3617E-01	0.7609E-01	0.6812E-01	0.7425E-01	0.7429E-01	0.6765E-01	0.1344E-01	0.3277E-03	0.1721E-02
40.08	0.5809E-02	0.3012E-01	0.6323E-01	0.5601E-01	0.6045E-01	0.6176E-01	0.6765E-01	0.1145E-01	0.5220E-03	0.9677E-03
29.41	0.4401E-02	0.2426E-01	0.5257E-01	0.4469E-01	0.4773E-01	0.4982E-01	0.6767E-01	0.9354E-02	0.7259E-04	0.6172E-03
29.41	0.2989E-02	0.1813E-01	0.3258E-01	0.3291E-01	0.3447E-01	0.3708E-01	0.6765E-01	0.6920E-02	0.6240E-04	0.4311E-03
19.41	0.2028E-02	0.1336E-01	0.2416E-01	0.2365E-01	0.2426E-01	0.2678E-01	0.6768E-01	0.4878E-02	0.4495E-03	0.2675E-03
9.680	0.1467E-02	0.9760E-02	0.1677E-01	0.1668E-01	0.2419E-01	0.1882E-01	0.6768E-01	0.3280E-02	0.1609E-03	0.6029E-04
1.070	0.1199E-02	0.7180E-02	0.1284E-01	0.1166E-01	0.2422E-01	0.1340E-01	0.6767E-01	0.2200E-02	0.1914E-03	0.4469E-03

## ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	231	232	233	234	235	236	237	238	239	240
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	-0.4023E-03	-0.1920E-04	-0.6814E-04	0.8269E-03	0.3270E-02	0.3227E-02	0.4577E-02	0.3409E-03	0.6652E-03	0.8518E-03
9.943	-0.7020E-03	0.8435E-03	0.6452E-03	0.2925E-02	0.6720E-02	0.9018E-02	0.1039E-01	0.9758E-03	0.1547E-02	0.2060E-02
14.95	-0.1015E-02	0.1826E-02	0.1701E-02	0.5176E-02	0.1171E-01	0.1542E-01	0.1677E-01	0.1526E-02	0.2398E-02	0.3401E-02
19.89	-0.1332E-02	0.2747E-02	0.2500E-02	0.7341E-02	0.1663E-01	0.2184E-01	0.2315E-01	0.2037E-02	0.3404E-02	0.4805E-02
19.98	-0.1669E-02	0.2765E-02	0.2260E-02	0.6136E-02	0.1634E-01	0.2179E-01	0.2233E-01	0.1679E-02	0.3238E-02	0.4775E-02
24.90	-0.2041E-02	0.3271E-02	0.2680E-02	0.7851E-02	0.2060E-01	0.2743E-01	0.2872E-01	0.2212E-02	0.4164E-02	0.6137E-02
29.93	-0.2397E-02	0.4410E-02	0.3450E-02	0.1062E-01	0.3510E-01	0.4253E-01	0.3622E-01	0.2831E-02	0.5174E-02	0.7681E-02
35.03	-0.2779E-02	0.5742E-02	0.4533E-02	0.1300E-01	0.3214E-01	0.4253E-01	0.4358E-01	0.3413E-02	0.6281E-02	0.9300E-02
40.22	-0.3243E-02	0.7463E-02	0.5928E-02	0.1595E-01	0.3890E-01	0.5116E-01	0.5318E-01	0.4189E-02	0.7297E-02	0.1123E-01
40.12	-0.3290E-02	0.8436E-02	0.7171E-02	0.1632E-01	0.4023E-01	0.5315E-01	0.5313E-01	0.4670E-02	0.7919E-02	0.1211E-01
45.18	-0.3876E-02	0.9863E-02	0.8457E-02	0.1995E-01	0.4950E-01	0.6427E-01	0.6436E-01	0.5995E-02	0.1018E-01	0.1560E-01
49.80	-0.4251E-02	0.1390E-01	0.857E-02	0.1995E-01	0.4950E-01	0.6427E-01	0.6436E-01	0.8464E-02	0.1252E-01	0.2115E-01
50.68	-0.4072E-02	-0.4982	0.1201E-01	0.2544E-01	0.6274E-01	0.8094E-01	0.8030E-01	0.1224E-01	0.1365E-01	0.2243E-01
54.52	-0.4363E-02	-0.4955	0.1348E-01	0.2620E-01	0.6715E-01	0.8618E-01	0.8709E-01	0.1345E-01	0.1501E-01	0.2517E-01
60.25	-0.4714E-02	-0.4866	0.1613E-01	0.3078E-01	0.7928E-01	0.1005	0.1013	0.1718E-01	0.1920E-01	0.3365E-01
60.17	-0.5449E-02	-0.4808	0.2447E-01	0.4429E-01	0.1088	0.1365	0.1388	0.2069E-01	0.2545E-01	0.3977E-01
65.69	-0.6609E-02	-0.4746	0.2924E-01	0.5203E-01	0.1196	0.1493	0.1517	0.2468E-01	0.3172E-01	0.4856E-01
71.24	-0.7453E-02	-0.4608	0.3449E-01	0.6370E-01	0.1456	0.1821	0.1862	0.3024E-01	0.3969E-01	0.6017E-01
70.09	-0.8146E-02	-0.4551	0.4807E-01	0.8504E-01	0.1861	0.2352	0.2435	0.3204E-01	0.4193E-01	0.6280E-01
75.34	-0.8941E-02	-0.4479	0.5480E-01	0.9139E-01	0.1952	0.2458	0.2546	0.3541E-01	0.4660E-01	0.6937E-01
80.38	-0.9732E-02	-0.4325	0.6077E-01	0.1023	0.2185	0.2765	0.2877	0.3541E-01	0.4660E-01	0.7947E-01
80.13	-0.8364E-02	-0.4256	0.7630E-01	0.1279	0.2564	0.3246	0.3405	0.4036E-01	0.5388E-01	0.8251E-01
69.51	-0.7205E-02	-0.4332	0.8425E-01	0.1377	0.2704	0.3404	0.3559	0.4206E-01	0.5663E-01	0.7418E-01
59.81	-0.6099E-02	-0.4425	0.7772E-01	0.1243	0.2425	0.3040	0.3161	0.3752E-01	0.5061E-01	0.6460E-01
49.54	-0.5035E-02	-0.4425	0.6892E-01	0.1082	0.2089	0.2598	0.2686	0.3245E-01	0.4371E-01	0.5324E-01
40.08	-0.4238E-02	-0.4635	0.5803E-01	0.8765E-01	0.1699	0.2089	0.2142	0.2705E-01	0.3603E-01	0.4285E-01
29.41	-0.3424E-02	-0.4744	0.4810E-01	0.7096E-01	0.1340	0.1636	0.1674	0.2241E-01	0.2900E-01	0.3194E-01
19.41	-0.2720E-02	-0.4831	0.3751E-01	0.5315E-01	0.9827E-01	0.1201	0.1228	0.1785E-01	0.2202E-01	0.2339E-01
9.680	-0.2023E-02	-0.4903	0.2887E-01	0.3911E-01	0.7086E-01	0.8705E-01	0.8929E-01	0.1478E-01	0.1676E-01	0.1666E-01
1.070	-0.1143E-02	-0.4955	0.2206E-01	0.2789E-01	0.4957E-01	0.6079E-01	0.6289E-01	0.1253E-01	0.1269E-01	0.1192E-01
	-0.1143E-02	-0.4955	0.1705E-01	0.1983E-01	0.3397E-01	0.4145E-01	0.4315E-01	0.1107E-01	0.9889E-02	

## ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER			
	241	242	243	244
0.000	0.0	0.0	0.0	0.0
5.088	0.1093E-02	0.6742E-03	0.1741E-03	5.088
9.943	0.2342E-02	0.1455E-02	0.6443E-03	9.943
14.95	0.3695E-02	0.2338E-02	0.1210E-02	14.95
19.89	0.5082E-02	0.3221E-02	0.1752E-02	19.89
19.98	0.5391E-02	0.3257E-02	0.2046E-02	19.98
24.90	0.6712E-02	0.4075E-02	0.2428E-02	24.90
29.93	0.8228E-02	0.5078E-02	0.3079E-02	29.93
35.03	0.9841E-02	0.6141E-02	0.3800E-02	35.03
40.22	0.1185E-01	0.7388E-02	0.4601E-02	40.22
40.12	0.1249E-01	0.7948E-02	0.5184E-02	40.12
45.18	0.1511E-01	0.9310E-02	0.6075E-02	45.18
49.80	0.1962E-01	0.1183E-01	0.7881E-02	49.80
50.68	0.2229E-01	0.1318E-01	0.9172E-02	50.68
54.52	0.2611E-01	0.1522E-01	0.1102E-01	54.52
60.25	0.4049E-01	0.2616E-01	0.1796E-01	60.25
60.17	0.4527E-01	0.3033E-01	0.2090E-01	60.17
65.69	0.5373E-01	0.3653E-01	0.2523E-01	65.69
71.24	0.6581E-01	0.4682E-01	0.3430E-01	71.24
70.09	0.6748E-01	0.4893E-01	0.3628E-01	70.09
75.34	0.7419E-01	0.5402E-01	0.3994E-01	75.34
80.38	0.8418E-01	0.6266E-01	0.4686E-01	80.38
80.13	0.8681E-01	0.6551E-01	0.4940E-01	80.13
69.51	0.7809E-01	0.5904E-01	0.4475E-01	69.51
49.54	0.5669E-01	0.4318E-01	0.3294E-01	49.54
40.08	0.4578E-01	0.3517E-01	0.2695E-01	40.08
29.41	0.3411E-01	0.2654E-01	0.2068E-01	29.41
19.41	0.2492E-01	0.1968E-01	0.1577E-01	19.41
9.680	0.1779E-01	0.1443E-01	0.1205E-01	9.680
1.070	0.1273E-01	0.1072E-01	0.9441E-02	1.070

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.1079E-05	-0.6472E-04	0.9708E-05	0.2265E-04	-0.3236E-05	0.3236E-05	0.1305E-03	0.2157E-04	0.2373E-04	0.1510E-04
9.943	0.1079E-05	-0.1402E-04	0.1618E-04	0.4530E-04	-0.9708E-05	0.6472E-05	0.2039E-03	0.4315E-04	0.4854E-04	0.2912E-04
14.95	0.3236E-05	-0.2265E-04	0.2481E-04	0.7119E-04	-0.1618E-04	0.9708E-05	0.1845E-03	0.6472E-04	0.7659E-04	0.4746E-04
19.89	0.1079E-05	-0.3236E-04	0.3020E-04	0.9924E-04	-0.1942E-04	0.1294E-04	-0.3614E-03	0.8953E-04	0.1036E-03	0.6472E-04
19.98	0.6472E-05	-0.3020E-04	0.3236E-04	0.1089E-03	-0.1618E-04	0.1942E-04	0.1165E-03	0.9384E-04	0.1100E-03	0.7227E-04
24.90	0.6472E-05	-0.3883E-04	0.3560E-04	0.1359E-03	-0.2049E-04	0.2373E-04	0.6903E-04	0.1176E-03	0.1370E-03	0.9169E-04
29.93	0.5393E-05	-0.4854E-04	0.4207E-04	0.1650E-03	-0.2373E-04	0.2805E-04	-0.1176E-03	0.1424E-03	0.1672E-03	0.1133E-03
35.03	0.8629E-05	-0.5933E-04	0.4854E-04	0.1952E-03	-0.3128E-04	0.3236E-04	-0.6612E-03	0.1650E-03	0.1974E-03	0.1359E-03
40.22	0.8629E-05	-0.7119E-04	0.5501E-04	0.2351E-03	-0.4099E-04	0.3560E-04	-0.6720E-03	0.1942E-03	0.2298E-03	0.1575E-03
40.12	0.1187E-04	-0.7119E-04	0.5501E-04	0.2481E-03	-0.3560E-04	0.3883E-04	0.1025E-03	0.1974E-03	0.2373E-03	0.1650E-03
45.18	0.1294E-04	-0.8198E-04	0.5717E-04	0.3160E-03	-0.4530E-04	0.4530E-04	0.4854E-04	0.2265E-03	0.2794E-03	0.2028E-03
49.80	0.1618E-04	-0.9708E-04	0.5501E-04	0.4487E-03	-0.5501E-04	0.5178E-04	-0.3797E-03	0.2578E-03	0.3322E-03	0.2740E-03
50.68	0.2265E-04	-0.9708E-04	0.6256E-04	0.5178E-03	-0.5825E-04	0.6472E-04	0.7227E-04	0.2740E-03	0.3570E-03	0.3107E-03
54.52	0.2805E-04	-0.1079E-03	0.7659E-04	0.6504E-03	-0.7119E-04	0.7227E-04	0.4962E-03	0.3031E-03	0.3916E-03	0.3678E-03
60.17	0.3236E-04	-0.1230E-03	0.1532E-03	0.8608E-03	-0.8521E-04	0.1068E-03	0.1313E-02	0.3247E-03	0.4735E-03	0.4962E-03
65.69	0.2912E-04	-0.1294E-03	0.1812E-03	0.9298E-03	-0.9384E-04	0.1262E-03	0.0	0.3430E-03	0.4930E-03	0.4862E-03
71.24	0.8629E-04	-0.1855E-03	0.4099E-03	0.1370E-02	-0.1089E-03	0.2265E-03	0.0	0.6073E-03	0.5555E-03	0.5868E-03
70.09	0.1036E-03	-0.1888E-03	0.4563E-03	0.1425E-02	-0.1240E-03	0.2945E-03	0.0	0.8683E-03	0.6461E-03	0.7583E-03
75.34	0.1262E-03	-0.2071E-03	0.5480E-03	0.1569E-02	-0.1391E-03	0.3268E-03	0.4275	0.9417E-03	0.6666E-03	0.7853E-03
80.38	0.1974E-03	-0.2206E-03	0.6957E-03	0.1777E-02	-0.1424E-03	0.3969E-03	0.4165	0.1018E-02	0.7335E-03	0.8640E-03
80.13	0.2276E-03	-0.2244E-03	0.7648E-03	0.1842E-02	-0.1424E-03	0.4455E-03	0.4209	0.1191E-02	0.8273E-03	0.9535E-03
69.51	0.2006E-03	-0.2006E-03	0.6019E-03	0.1657E-02	-0.1262E-03	0.4045E-03	0.2814E-02	0.1265E-02	0.8662E-03	0.9740E-03
59.81	0.1715E-03	-0.1812E-03	0.4822E-03	0.1427E-02	-0.1133E-03	0.3527E-03	0.1919E-02	0.1129E-02	0.7766E-03	0.7313E-03
49.54	0.1359E-03	-0.1553E-03	0.6822E-03	0.1155E-02	-0.1003E-03	0.2880E-03	0.1595E-02	0.9611E-02	0.6893E-03	0.5792E-03
40.08	0.1100E-03	-0.1262E-03	0.3624E-03	0.9061E-03	-0.8090E-04	0.2330E-03	0.1498E-02	0.7605E-03	0.5760E-03	0.4466E-03
29.41	0.8414E-04	-0.9384E-04	0.2492E-03	0.6537E-03	-0.6472E-04	0.1780E-03	0.1336E-02	0.5663E-03	0.4725E-03	0.3171E-03
19.41	0.7119E-04	-0.6796E-04	0.1747E-03	0.4725E-03	-0.4530E-04	0.1424E-03	0.1175E-02	0.3883E-03	0.3657E-03	0.2233E-03
9.680	0.6148E-04	-0.4207E-04	0.1230E-03	0.3333E-03	-0.2589E-04	0.1165E-03	0.6569E-03	0.2751E-03	0.2783E-03	0.1521E-03
1.070	0.5501E-04	-0.2265E-04	0.8090E-04	0.2330E-03	-0.1618E-04	0.9708E-04	-0.2265E-04	0.1909E-03	0.2006E-03	0.9708E-04

ELECTRONICALLY RECORDED DATA - TEST F

LOAD	(PSI)	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20
		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088		-0.4315E-05	0.2157E-05	0.1079E-04	0.3236E-05	0.6472E-05	-0.1079E-05	0.6472E-05	0.9708E-05	0.3236E-05	0.0
9.943		-0.9708E-05	0.0	0.2265E-04	0.0	0.1294E-04	-0.1510E-04	0.1294E-04	0.1294E-04	0.6472E-05	0.0
14.95		-0.1618E-04	0.0	0.3883E-04	-0.2157E-05	0.2265E-04	-0.2912E-04	0.1942E-04	0.1834E-04	0.6472E-05	0.0
19.89		-0.1942E-04	0.0	0.5501E-04	-0.3236E-05	0.3236E-04	-0.3667E-04	0.2265E-04	0.1834E-04	0.9708E-05	0.0
19.98		-0.1618E-04	0.9708E-05	0.6148E-04	0.0	0.3883E-04	0.6472E-05	0.2805E-04	0.2912E-04	0.1618E-04	0.6472E-05
24.90		-0.2265E-04	0.9708E-05	0.7766E-04	0.0	0.4746E-04	0.2481E-04	0.3452E-04	0.3236E-04	0.2265E-04	0.5393E-05
29.93		-0.2912E-04	0.9708E-05	0.9708E-04	-0.3236E-05	0.5717E-04	0.6364E-04	0.4207E-04	0.3560E-04	0.2912E-04	0.6472E-05
35.03		-0.3452E-04	0.1079E-04	0.1165E-03	-0.5393E-05	0.6796E-04	0.5825E-04	0.4854E-04	0.3560E-04	0.3560E-04	0.6472E-05
40.22		-0.4207E-04	0.1294E-04	0.1391E-03	-0.6472E-05	0.7766E-04	0.2265E-04	0.5501E-04	0.4207E-04	0.4207E-04	0.6472E-05
40.12		-0.3991E-04	0.1618E-04	0.1424E-03	-0.5393E-05	0.8090E-04	0.8953E-04	0.5825E-04	0.5178E-04	0.5178E-04	0.1294E-04
45.18		-0.4530E-04	0.1942E-04	0.1715E-03	-0.6472E-05	0.9169E-04	0.7443E-04	0.6689E-04	0.5717E-04	0.5825E-04	0.1294E-04
49.80		-0.5178E-04	0.3128E-04	0.1963E-03	-0.9708E-05	0.1035E-03	0.7443E-04	0.8090E-04	0.6256E-04	0.5933E-04	0.1510E-04
50.68		-0.4638E-04	0.4530E-04	0.2200E-03	-0.4315E-05	0.1165E-03	0.1510E-03	0.9384E-04	0.7874E-04	-0.2265E-03	0.2265E-04
54.52		-0.5178E-04	0.1338E-03	0.2470E-03	-0.6472E-05	0.1294E-03	0.9816E-04	0.1014E-03	0.8737E-04	-0.2200E-03	0.2373E-04
60.25		-0.5393E-04	0.2556E-03	0.2988E-03	-0.1618E-04	0.1661E-03	0.7766E-04	0.1262E-03	0.1068E-03	-0.2621E-03	0.2912E-04
60.17		-0.4854E-04	0.2643E-03	0.3139E-03	-0.1726E-04	0.1769E-03	0.1165E-03	0.1489E-03	0.1834E-03	-0.9277E-04	0.3236E-04
65.69		-0.1251E-03	0.3312E-03	0.3657E-03	-0.2157E-04	0.1888E-03	0.1284E-03	0.1853E-03	0.1467E-03	-0.1176E-03	0.3560E-04
71.24		-0.1877E-03	0.3290E-03	0.4552E-03	-0.2589E-04	0.2136E-03	0.8737E-04	0.2416E-03	0.1715E-03	-0.1208E-03	0.4099E-04
70.09		-0.2039E-03	0.3258E-03	0.4822E-03	-0.2373E-04	0.2254E-03	0.9708E-04	0.2783E-03	0.1931E-03	-0.1294E-04	0.4530E-04
75.34		-0.2351E-03	0.3624E-03	0.5954E-03	-0.2697E-04	0.3225E-03	0.7551E-04	0.3020E-03	0.2082E-03	0.2157E-05	0.5178E-04
80.38		-0.2794E-03	0.3797E-03	0.7141E-03	-0.2912E-04	0.4067E-03	0.7551E-04	0.3441E-03	0.2405E-03	0.1079E-04	0.5825E-04
80.13		-0.2945E-03	0.3657E-03	0.7389E-03	-0.2589E-04	0.4433E-03	0.8845E-04	0.3818E-03	0.2869E-03	0.2049E-04	0.5933E-04
69.51		-0.2556E-03	0.3139E-03	0.6440E-03	-0.1942E-04	0.3948E-03	0.1068E-03	0.3560E-03	0.2718E-03	-0.6472E-05	0.5178E-04
59.81		-0.2103E-03	0.2556E-03	0.5339E-03	-0.1294E-04	0.3365E-03	0.1359E-03	0.3268E-03	0.2492E-03	-0.3236E-04	0.4530E-04
49.54		-0.1618E-03	0.1845E-03	0.4207E-03	-0.9708E-05	0.2751E-03	0.1391E-03	0.2912E-03	0.2265E-03	-0.4207E-04	0.3560E-04
40.08		-0.1165E-03	0.1197E-03	0.3236E-03	-0.3236E-05	0.2200E-03	0.1650E-03	0.2556E-03	0.2071E-03	-0.7443E-04	0.2912E-04
29.41		-0.7119E-04	0.6148E-04	0.2330E-03	0.3236E-05	0.1650E-03	0.1747E-03	0.2168E-03	0.1845E-03	-0.9061E-04	0.1942E-04
19.41		-0.4207E-04	0.3560E-04	0.1650E-03	0.9708E-05	0.1197E-03	0.1586E-03	0.1845E-03	0.1586E-03	-0.1262E-03	0.1618E-04
9.680		-0.2265E-04	0.1618E-04	0.1100E-03	0.1294E-04	0.8414E-04	0.2039E-03	0.1521E-03	0.1294E-03	-0.1424E-03	0.1294E-04
1.070		-0.6472E-05	0.9708E-05	0.6796E-04	0.1618E-04	0.5825E-04	0.2330E-03	0.1262E-03	0.9708E-04	-0.1521E-03	0.1294E-04

ELECTRONICALLY RECORDED DATA - TEST F

LOAD (PSI)	CHANNEL NUMBER									
	F21	F22	F23	F24	F25	F26	F27	F28	F29	
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5.088	0.9708E-05	0.0	-0.8629E-04	0.3236E-05	0.0	-0.3236E-05	-0.3236E-05	0.0	0.0	0.0
9.943	0.1942E-04	0.0	0.9061E-04	0.3236E-05	0.0	-0.6472E-05	-0.6472E-05	-0.4315E-05	-0.3236E-05	0.0
14.95	0.2912E-04	0.0	0.9708E-05	0.1079E-05	-0.3236E-05	-0.9708E-05	-0.9708E-05	-0.9708E-05	-0.6472E-05	0.0
19.89	0.3883E-04	0.0	-0.2319E-03	0.0	-0.5393E-05	-0.9708E-05	-0.1294E-04	-0.1402E-04	-0.9708E-05	0.0
19.98	0.4530E-04	0.0	0.1122E-03	0.3236E-05	0.0	-0.9708E-05	-0.1079E-04	0.6472E-05	-0.6472E-05	0.0
24.90	0.5501E-04	0.0	-0.7659E-04	0.3236E-05	-0.3236E-05	-0.9708E-05	-0.1402E-04	0.9708E-05	-0.9708E-05	0.0
29.93	0.6796E-04	0.0	-0.4433E-03	0.3236E-05	-0.3236E-05	-0.1079E-04	0.1942E-04	0.1618E-04	-0.1294E-04	0.0
35.03	0.8090E-04	0.0	-0.7410E-03	0.0	-0.3236E-05	-0.1618E-04	-0.2265E-04	0.1187E-04	-0.1618E-04	0.0
40.22	0.1003E-03	0.0	-0.7216E-03	0.0	-0.5393E-05	-0.1942E-04	-0.2697E-04	0.0	-0.1942E-04	0.0
40.12	0.1057E-03	0.0	-0.1726E-03	0.2157E-05	0.0	-0.1618E-04	-0.2589E-04	0.1834E-04	-0.1834E-04	0.0
45.18	0.1230E-03	0.0	-0.2298E-03	0.0	-0.3236E-05	-0.1618E-04	-0.3128E-04	0.9708E-05	-0.1942E-04	0.0
49.80	0.1542E-03	0.0	-0.6202E-03	-0.1079E-05	-0.1079E-05	-0.9708E-05	-0.3128E-04	0.4315E-05	-0.2589E-04	0.0
50.68	0.1791E-03	0.0	-0.5933E-03	0.6472E-05	0.1294E-04	-0.3236E-05	-0.3128E-04	0.2589E-04	-0.2157E-04	0.0
54.52	0.2082E-03	0.0	-0.1435E-03	0.6472E-05	0.1294E-04	-0.2157E-05	-0.3667E-04	0.9708E-05	-0.1942E-04	0.0
60.25	0.2858E-03	0.0	0.2373E-03	0.3236E-05	0.1834E-04	-0.6472E-05	-0.4638E-04	0.1079E-05	-0.2589E-04	0.0
60.17	-0.7443E-04	0.0	0.2922E-02	0.9708E-05	0.2697E-04	-0.5393E-05	-0.4207E-04	0.1079E-04	-0.3236E-04	0.0
65.69	-0.6472E-05	0.0	0.2745E-02	0.7551E-05	0.1618E-04	-0.9708E-05	-0.5285E-04	0.1187E-04	-0.3452E-04	0.0
71.24	-0.1187E-04	0.0	0.2671E-02	0.5393E-05	0.1402E-04	-0.1618E-04	-0.5825E-04	0.4315E-05	-0.3560E-04	0.0
70.09	0.1025E-03	0.0	0.2495E-02	0.1294E-04	-0.2265E-04	-0.1187E-04	-0.5393E-04	0.1402E-04	-0.3560E-04	0.0
75.34	0.1801E-03	0.0	0.2499E-02	0.1294E-04	-0.3236E-04	-0.1510E-04	-0.5825E-04	0.1187E-04	-0.3667E-04	0.0
80.38	0.3020E-03	0.0	0.2610E-02	0.9708E-05	-0.4423E-04	-0.1079E-04	-0.5825E-04	0.2157E-04	-0.3236E-04	0.0
80.13	0.4088E-03	0.0	0.1274E-02	0.1618E-04	-0.6472E-05	-0.9708E-05	-0.5501E-04	0.3236E-04	-0.2805E-04	0.0
69.51	0.3009E-03	0.0	0.1026E-02	0.2655E-04	0.1294E-04	0.0	-0.4530E-04	0.4207E-04	-0.2265E-04	0.0
59.81	0.1747E-03	0.0	0.6699E-03	0.2912E-04	0.3236E-04	0.9708E-05	-0.3560E-04	0.4530E-04	-0.1618E-04	0.0
49.54	0.9708E-05	0.0	0.4627E-03	0.3236E-04	0.5501E-04	0.2589E-04	-0.2589E-04	0.4530E-04	-0.1618E-04	0.0
40.08	-0.9061E-04	0.0	0.2718E-03	0.3560E-04	0.7443E-04	0.3560E-04	-0.1618E-04	0.5178E-04	-0.1294E-04	0.0
29.41	-0.2200E-03	0.0	0.2071E-03	0.3883E-04	0.9061E-04	0.4854E-04	-0.6472E-05	0.5501E-04	-0.6472E-05	0.0
19.41	-0.2556E-03	0.0	0.3301E-03	0.4207E-04	0.1003E-03	0.5825E-04	0.6472E-05	0.5825E-04	-0.3236E-05	0.0
9.680	-0.2686E-03	0.0	-0.3171E-03	0.4530E-04	0.1133E-03	0.6472E-04	0.1618E-04	0.7119E-04	0.0	0.0
1.070	-0.2427E-03	0.0	-0.5372E-03	0.4530E-04	0.1165E-03	0.6796E-04	0.1618E-04	0.8414E-04	0.6472E-05	0.0

DEMEC STRAIN GAGE DATA - TEST F

LOAD (PSI)	GAGE NUMBER									
	M1	M2	M3	M4	M5	M6	M7	M8	M9	M10
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.98	0.200E-03	0.200E-03	-0.200E-03	0.600E-04	-0.400E-04	-0.200E-04	0.500E-04	0.600E-04	0.600E-04	0.1200E-03
40.22	0.340E-03	0.480E-03	-0.400E-04	0.160E-03	0.400E-04	0.400E-04	0.200E-04	0.100E-04	0.800E-04	0.1000E-03
50.68	0.280E-03	0.180E-03	0.200E-04	0.180E-03	0.200E-04	0.800E-04	0.300E-04	0.100E-04	0.400E-04	0.2000E-03
60.25	0.180E-03	0.260E-03	0.220E-03	0.480E-03	0.320E-03	0.100E-03	-0.100E-04	0.0	0.600E-04	0.3700E-03
70.09	0.140E-03	0.660E-03	0.440E-03	0.780E-03	0.420E-03	0.260E-03	0.220E-03	0.600E-04	0.400E-04	0.5600E-03
80.38	0.440E-03	0.860E-03	0.420E-03	0.120E-02	0.620E-03	0.100E-02	0.480E-03	0.100E-03	0.440E-03	0.5700E-03
1.070	0.340E-03	0.240E-03	0.120E-03	0.460E-03	0.380E-03	0.520E-03	0.150E-03	0.0	0.100E-03	0.1100E-03

LOAD (PSI)	GAGE NUMBER									
	M11	M12	M13	M14	M15A	M15B	M15C	M16	M17	M18
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.98	0.110E-03	0.130E-03	0.900E-04	0.800E-04	0.600E-04	-0.600E-04	0.800E-04	-0.200E-04	0.400E-04	0.200E-04
40.22	0.700E-04	0.120E-03	0.500E-04	0.140E-03	0.220E-03	-0.120E-03	0.160E-03	-0.400E-04	-0.100E-03	0.600E-04
50.68	0.120E-03	0.220E-03	0.110E-03	0.180E-03	0.700E-03	-0.400E-04	0.160E-03	-0.600E-04	-0.140E-03	-0.400E-04
60.25	0.340E-03	0.360E-03	0.670E-03	0.100E-03	0.108E-02	-0.600E-04	-0.400E-04	-0.120E-03	-0.200E-03	-0.400E-04
70.09	0.690E-03	0.590E-03	0.1210E-02	0.140E-03	0.176E-02	0.840E-03	0.140E-03	-0.140E-03	0.260E-03	-0.600E-04
80.38	0.760E-03	0.670E-03	0.156E-02	0.560E-03	0.202E-02	0.128E-02	0.600E-04	-0.180E-03	-0.300E-03	-0.600E-04
1.070	0.500E-04	-0.100E-04	0.350E-03	0.200E-03	0.320E-03	0.140E-03	-0.320E-03	-0.100E-03	-0.600E-04	0.0

LOAD (PSI)	GAGE NUMBER									
	M19	M20	M21	M22	M23	M24	M25	M26	H1	H2
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.98	0.400E-04	0.400E-04	0.400E-04	0.0	0.300E-04	0.130E-03	0.120E-03	0.110E-03	0.0	0.400E-04
40.22	0.600E-04	-0.800E-04	-0.200E-04	0.700E-04	0.190E-03	0.270E-03	0.300E-03	0.240E-03	0.0	0.200E-03
50.68	0.600E-04	-0.100E-03	-0.800E-04	-0.200E-04	0.190E-03	0.370E-03	0.380E-03	0.290E-03	0.120E-03	0.120E-03
60.25	0.0	-0.160E-03	-0.140E-03	-0.100E-03	0.800E-04	0.570E-03	0.520E-03	0.410E-03	0.100E-03	0.140E-03
70.09	0.200E-04	-0.240E-03	-0.180E-03	-0.170E-03	0.330E-03	0.100E-02	0.930E-03	0.830E-03	0.140E-03	0.200E-03
80.38	-0.120E-03	-0.420E-03	-0.360E-03	-0.140E-03	0.1130E-02	0.139E-02	0.142E-02	0.1410E-02	0.180E-03	0.280E-03
1.070	0.0	-0.400E-04	-0.800E-04	-0.100E-04	0.170E-03	0.150E-03	0.210E-03	0.170E-03	-0.400E-04	0.200E-03

Table A4

DEMEC STRAIN GAGE DATA - TEST F

LOAD (PSI)	GAGE NUMBER																			
	H3	H4	H7	H8	H9	H10	H11	H12	H13	H14	H3	H4	H7	H8	H9	H10	H11	H12	H13	H14
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.98	0.400E-04	-0.200E-04	0.400E-04	0.100E-03	0.700E-04	-0.800E-04	0.150E-03	0.800E-04	0.200E-04	0.600E-04	0.150E-03	0.800E-04	0.150E-03	0.800E-04	0.200E-04	0.600E-04	0.150E-03	0.800E-04	0.200E-04	0.600E-04
40.22	0.160E-03	0.160E-03	0.200E-04	0.100E-04	0.200E-04	0.100E-04	0.180E-03	0.180E-03	0.180E-03	0.150E-03	0.180E-03	0.180E-03	0.180E-03	0.180E-03	0.180E-03	0.150E-03	0.180E-03	0.180E-03	0.180E-03	0.150E-03
50.68	0.600E-04	0.180E-04	0.400E-04	0.130E-04	0.700E-04	0.800E-04	0.190E-03	0.290E-03	0.290E-03	0.600E-04	0.190E-03	0.290E-03	0.190E-03	0.290E-03	0.600E-04	0.190E-03	0.290E-03	0.290E-03	0.600E-04	0.350E-03
60.25	0.600E-04	0.260E-03	0.170E-03	-0.300E-04	0.100E-03	0.260E-03	0.460E-03	0.510E-03	0.510E-03	0.130E-03	0.460E-03	0.510E-03	0.460E-03	0.510E-03	0.130E-03	0.460E-03	0.510E-03	0.510E-03	0.130E-03	0.640E-03
70.09	0.160E-03	0.800E-03	0.460E-03	0.450E-03	0.560E-03	0.670E-03	0.950E-03	0.960E-02	0.960E-02	0.570E-02	0.950E-03	0.960E-02	0.950E-03	0.960E-02	0.570E-02	0.950E-03	0.960E-02	0.960E-02	0.570E-02	0.107E-02
80.38	0.360E-03	0.144E-02	0.100E-02	0.115E-02	0.100E-02	0.960E-03	0.115E-02	0.123E-02	0.123E-02	0.960E-03	0.115E-02	0.123E-02	0.115E-02	0.123E-02	0.960E-03	0.115E-02	0.123E-02	0.123E-02	0.960E-03	0.144E-02
1.070	0.600E-04	0.460E-03	0.190E-03	0.170E-03	0.130E-03	0.500E-04	0.100E-04	0.150E-03	0.150E-03	0.0	0.100E-04	0.150E-03	0.100E-04	0.150E-03	0.0	0.100E-04	0.150E-03	0.150E-03	0.0	0.210E-03

LOAD (PSI)	GAGE NUMBER																			
	H15	H16	H17	H18	H19	H20	H21	H22	H23	H24	H15	H16	H17	H18	H19	H20	H21	H22	H23	H24
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.98	-0.110E-03	0.0	0.0	0.0	0.200E-04	0.800E-04	0.400E-04	0.400E-04	0.600E-04	0.800E-04	0.400E-04	0.800E-04	0.400E-04	0.400E-04	0.600E-04	0.800E-04	0.400E-04	0.400E-04	0.600E-04	0.800E-04
40.22	-0.200E-04	-0.200E-04	0.0	0.0	0.200E-04	0.600E-04	0.400E-04	0.110E-03	0.180E-03	0.180E-03	0.400E-04	0.600E-04	0.400E-04	0.400E-04	0.600E-03	0.180E-03	0.400E-03	0.110E-03	0.180E-03	0.210E-03
50.68	0.100E-04	0.0	0.0	0.0	0.200E-04	0.800E-04	0.400E-04	0.110E-03	0.200E-03	0.280E-03	0.400E-04	0.800E-04	0.400E-04	0.400E-04	0.200E-03	0.280E-03	0.400E-03	0.110E-03	0.200E-03	0.280E-03
60.25	0.140E-03	0.0	0.200E-04	-0.400E-04	0.400E-04	0.600E-04	0.200E-04	0.700E-04	0.230E-03	0.360E-03	0.400E-04	0.600E-04	0.400E-04	0.400E-04	0.200E-03	0.360E-03	0.400E-03	0.700E-04	0.230E-03	0.360E-03
70.09	0.230E-03	-0.400E-04	0.0	0.200E-04	-0.400E-04	0.600E-04	0.200E-04	0.800E-04	0.440E-03	0.520E-03	0.400E-04	0.600E-04	0.400E-04	0.400E-04	0.200E-03	0.520E-03	0.400E-03	0.800E-04	0.440E-03	0.520E-03
80.38	0.450E-03	-0.400E-04	0.400E-04	0.0	0.400E-04	0.400E-04	0.400E-04	0.230E-03	0.670E-03	0.930E-03	0.400E-04	0.400E-04	0.400E-04	0.400E-04	0.230E-03	0.670E-03	0.400E-03	0.230E-03	0.670E-03	0.930E-03
1.070	0.200E-04	0.0	0.400E-04	0.0	-0.200E-04	0.100E-03	0.0	0.0	0.400E-04	0.120E-03	-0.200E-04	0.100E-03	0.0	0.0	-0.200E-04	0.100E-03	0.0	0.400E-04	0.120E-03	0.120E-03

LOAD (PSI)	GAGE NUMBER																			
	H25	H26	MC1	MC2	MC3	MC4	MC5	MC6	MC7	MC8	H25	H26	MC1	MC2	MC3	MC4	MC5	MC6	MC7	MC8
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.98	0.900E-04	0.100E-03	-0.200E-03	-0.200E-04	0.260E-03	0.160E-03	-0.400E-04	0.400E-04	0.200E-04	0.400E-04	-0.400E-04	0.160E-03	-0.400E-04	0.200E-04	0.260E-03	0.160E-03	-0.400E-04	0.400E-04	0.200E-04	0.400E-04
40.22	0.240E-03	0.240E-03	-0.200E-04	-0.600E-04	0.120E-03	0.220E-03	-0.800E-04	-0.200E-04	-0.600E-04	-0.200E-04	-0.800E-04	0.220E-03	-0.800E-04	-0.200E-04	-0.600E-04	0.220E-03	-0.800E-04	-0.200E-04	-0.600E-04	-0.200E-04
50.68	0.270E-03	0.290E-03	0.600E-04	0.0	0.160E-03	0.120E-03	0.200E-03	0.200E-04	0.200E-04	0.200E-04	0.200E-03	0.120E-03	0.200E-03	0.200E-04	0.160E-03	0.120E-03	0.200E-03	0.200E-04	0.200E-04	0.200E-04
60.25	0.270E-03	0.210E-03	-0.120E-03	-0.600E-04	0.140E-03	0.180E-03	0.200E-04	-0.800E-04	0.600E-04	0.600E-04	0.200E-03	0.180E-03	0.200E-04	-0.800E-04	0.140E-03	0.180E-03	0.200E-04	0.600E-04	0.600E-04	0.600E-04
70.09	0.560E-03	0.360E-03	0.320E-03	0.400E-04	0.460E-03	0.560E-03	0.200E-03	0.600E-04	0.600E-04	0.560E-03	0.460E-03	0.560E-03	0.200E-03	0.600E-04	0.460E-03	0.560E-03	0.200E-03	0.600E-04	0.600E-04	0.560E-03
80.38	0.1020E-02	0.840E-03	0.840E-03	0.400E-03	0.920E-03	0.900E-03	0.740E-03	0.140E-03	0.300E-03	0.200E-03	0.840E-03	0.900E-03	0.840E-03	0.400E-03	0.920E-03	0.900E-03	0.740E-03	0.140E-03	0.300E-03	0.200E-03
1.070	0.120E-03	0.1110E-02	0.120E-03	0.160E-03	0.420E-03	0.520E-03	0.220E-03	0.0	0.160E-03	0.0	0.120E-03	0.1110E-02	0.120E-03	0.160E-03	0.420E-03	0.520E-03	0.220E-03	0.0	0.160E-03	0.0

DEMEC STRAIN GAGE DATA - TEST F

LOAD (PSI)	GAGE NUMBER									
	HC1	HC2	HC3	HC4	HC5	HC6	HC7	HC8	C1	C2
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.98	-0.600E-04	-0.700E-04	-0.800E-04	0.500E-04	0.900E-04	0.900E-04	0.700E-04	0.800E-04	-0.600E-04	-0.400E-04
40.22	-0.500E-04	-0.100E-04	0.800E-04	0.300E-04	0.600E-04	0.400E-04	0.500E-04	0.900E-04	0.140E-03	-0.200E-04
50.68	0.400E-04	0.700E-04	0.320E-03	0.180E-03	0.290E-03	0.170E-03	0.170E-03	0.220E-03	0.270E-03	0.250E-03
60.25	0.600E-04	0.500E-04	0.470E-03	0.130E-03	0.240E-03	0.140E-03	0.520E-03	0.380E-03	0.590E-03	0.560E-03
70.09	0.610E-03	0.390E-03	0.820E-03	0.480E-03	0.790E-03	0.470E-03	0.950E-03	0.710E-03	0.127E-02	0.910E-03
80.38	0.1140E-02	0.900E-03	0.1110E-02	0.750E-03	0.1210E-02	0.870E-03	0.130E-02	0.1070E-02	0.1520E-02	0.950E-03
1.070	0.290E-03	0.300E-04	0.110E-03	-0.300E-04	0.190E-03	0.800E-04	0.180E-03	0.250E-03	0.200E-03	-0.200E-04

LOAD (PSI)	GAGE NUMBER		
	C3	C4	C6
0.000	0.0	0.0	0.0
19.98	0.900E-04	0.160E-03	0.180E-03
40.22	0.310E-03	0.110E-03	0.100E-03
50.68	0.420E-03	0.230E-03	0.200E-03
60.25	0.680E-03	0.500E-03	0.570E-03
70.09	0.190E-02	0.1010E-02	0.630E-03
80.38	0.1090E-02	0.1260E-02	0.780E-03
1.070	0.0	0.1100E-03	0.200E-04

TESTING SCHEDULE - TEST G

LOAD(P.SI)	MONTH	DAY	YEAR	HOUR	MINUTE	SECOND
0.000	12	11	78	10	28	39
0.004	12	11	78	10	29	36
9.937	12	11	78	10	38	19
19.92	12	11	78	10	42	22
30.01	12	11	78	11	8	32
40.00	12	11	78	11	12	34
50.03	12	11	78	11	20	29
60.04	12	11	78	11	24	24
70.14	12	11	78	12	30	32
80.13	12	11	78	12	35	33
85.05	12	11	78	13	49	37
89.99	12	11	78	13	55	39
95.10	12	11	78	15	22	33
100.1	12	11	78	15	27	32
102.5	12	11	78	16	33	30
105.0	12	11	78	16	41	25
107.5	12	11	78	16	47	43
110.1	12	11	78	16	54	29
112.5	12	11	78	18	11	12
115.1	12	11	78	18	18	34
117.5	12	11	78	18	44	27
120.2	12	11	78	18	57	33
122.5	12	11	78	20	23	36
125.2	12	11	78	20	30	29
127.7	12	11	78	20	37	37
130.1	12	11	78	22	6	22
132.6	12	11	78	22	20	36
135.2	12	11	78	22	27	30
137.7	12	11	78	22	37	32
139.8	12	11	78	22	45	17
140.3	12	11	78	22	53	27
141.8	12	11	78	23	2	27
142.6	12	11	78	23	8	23
143.4	12	11	78	23	17	20
145.3	12	11	78	23	24	42
147.1	12	11	78	23	35	20
147.8	12	11	78	23	42	37
148.4	12	12	78	0	1	37
149.8	12	12	78	0	12	25
155.4	12	12	78	13	50	35
149.2	12	12	78	14	1	22
153.3	12	12	78	14	12	24
153.5	12	12	78	14	15	32
154.4	12	12	78	14	19	36
156.3	12	12	78	14	24	39
157.4	12	12	78	14	26	23
158.3	12	12	78	14	32	38
149.6	12	12	78	14	38	28
143.1	12	12	78	14	43	20

Table A5

Table A6 ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	1	2	3	4	5	6	7	8	9	10
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.2138E-06	0.3651E-05	0.1809E-06	-0.1974E-06	0.4935E-07	0.1973E-06	0.1316E-06	0.5592E-06	0.4441E-06	0.2138E-06
9.937	0.7072E-04	0.2201E-04	0.3057E-04	0.3487E-05	0.5465E-04	0.8901E-04	0.1015E-04	-0.6480E-05	0.1419E-04	0.4475E-04
19.92	0.1974E-04	0.5304E-04	0.9896E-04	0.3676E-04	0.1788E-03	0.2314E-03	0.1189E-04	-0.8750E-05	0.3584E-04	0.1311E-03
30.01	0.3742E-04	0.9347E-04	0.2235E-04	0.9445E-04	0.3642E-03	0.4141E-03	0.2942E-04	0.6365E-05	0.7552E-04	0.2912E-03
40.00	0.7029E-04	0.1454E-03	0.3670E-03	0.1776E-03	0.5422E-03	0.6089E-04	0.6200E-04	0.3018E-04	0.1279E-03	0.4656E-03
50.03	0.1080E-03	0.1987E-03	0.5285E-03	0.2741E-03	0.7348E-03	0.8250E-03	0.6200E-04	0.5602E-04	0.1909E-03	0.6594E-03
60.04	0.1473E-03	0.2569E-03	0.6946E-03	0.3589E-03	0.9241E-03	0.1038E-02	0.1393E-03	0.9079E-04	0.2694E-03	0.8510E-03
70.14	0.1828E-03	0.3250E-03	0.8687E-03	0.4685E-03	0.1128E-02	0.1260E-02	0.1742E-03	0.1242E-03	0.3257E-03	0.1054E-02
80.13	0.2250E-03	0.3936E-03	0.1085E-02	0.6037E-03	0.1346E-02	0.1500E-02	0.2331E-03	0.1770E-03	0.4067E-03	0.1268E-02
85.05	0.2593E-03	0.4449E-03	0.1191E-02	0.6856E-03	0.1462E-02	0.1621E-02	0.2930E-03	0.2253E-03	0.4813E-03	0.1382E-02
89.99	0.2779E-03	0.4934E-03	0.1337E-02	0.7584E-03	0.1592E-02	0.1762E-02	0.3463E-03	0.2582E-03	0.5203E-03	0.1506E-02
95.10	0.2941E-03	0.5407E-03	0.1456E-02	0.8735E-03	0.1722E-02	0.1879E-02	0.3956E-03	0.2965E-03	0.5463E-03	0.1628E-02
100.1	0.3197E-03	0.6105E-03	0.1623E-02	0.9919E-03	0.1873E-02	0.2016E-02	0.4585E-03	0.3449E-03	0.5945E-03	0.1772E-02
102.5	0.3290E-03	0.6483E-03	0.1696E-02	0.1061E-02	0.1969E-02	0.2102E-02	0.5076E-03	0.3892E-03	0.6252E-03	0.1862E-02
105.0	0.3391E-03	0.6603E-03	0.1755E-02	0.1106E-02	0.2039E-02	0.2169E-02	0.5335E-03	0.4140E-03	0.6409E-03	0.1926E-02
107.6	0.3429E-03	0.6970E-03	0.1835E-02	0.1187E-02	0.2128E-02	0.2251E-02	0.5805E-03	0.4519E-03	0.6663E-03	0.2010E-02
110.1	0.3429E-03	0.7397E-03	0.1900E-02	0.1267E-02	0.2201E-02	0.2312E-02	0.6306E-03	0.4886E-03	0.6867E-03	0.2083E-02
112.5	0.3480E-03	0.7739E-03	0.1954E-02	0.1347E-02	0.2293E-02	0.2388E-02	0.6991E-03	0.5484E-03	0.7205E-03	0.2190E-02
115.1	0.3424E-03	0.7939E-03	0.2013E-02	0.1418E-02	0.2380E-02	0.2452E-02	0.7339E-03	0.5831E-03	0.7431E-03	0.2243E-02
117.5	0.3395E-03	0.8181E-03	0.2059E-02	0.1498E-02	0.2458E-02	0.2510E-02	0.7701E-03	0.6357E-03	0.7686E-03	0.2283E-02
120.2	0.3356E-03	0.8494E-03	0.2096E-02	0.1598E-02	0.2545E-02	0.2569E-02	0.7954E-03	0.7027E-03	0.8070E-03	0.2586E-02
122.5	0.3175E-03	0.8986E-03	0.2112E-02	0.1697E-02	0.2568E-02	0.2587E-02	0.8187E-03	0.7817E-03	0.8624E-03	0.2830E-02
125.2	0.2998E-03	0.9452E-03	0.2168E-02	0.1788E-02	0.2578E-02	0.2596E-02	0.8232E-03	0.8413E-03	0.8241E-03	0.3027E-02
127.7	0.2889E-03	0.9902E-03	0.2249E-02	0.1902E-02	0.2580E-02	0.2609E-02	0.8542E-03	0.9292E-03	0.9201E-03	0.3178E-02
130.1	0.2544E-03	0.1115E-02	0.2384E-02	0.2168E-02	0.2587E-02	0.2632E-02	0.9630E-03	0.1113E-02	0.9505E-03	0.3568E-02
132.6	0.2482E-03	0.1189E-02	0.2415E-02	0.2168E-02	0.2612E-02	0.2652E-02	0.9706E-03	0.1130E-02	0.9455E-03	0.3834E-02
135.2	0.2292E-03	0.1279E-02	0.2468E-02	0.2452E-02	0.2633E-02	0.2701E-02	0.1037E-02	0.1187E-02	0.1006E-02	0.3979E-02
137.7	0.2008E-03	0.1237E-02	0.2513E-02	0.2660E-02	0.2653E-02	0.2746E-02	0.1126E-02	0.1259E-02	0.1178E-02	0.4078E-02
139.8	0.1528E-03	0.1279E-02	0.2560E-02	0.2689E-02	0.2696E-02	0.2789E-02	0.1203E-02	0.1323E-02	0.1619E-02	0.4195E-02
140.3	0.1193E-03	0.1301E-02	0.2577E-02	0.2715E-02	0.2730E-02	0.2786E-02	0.1225E-02	0.1372E-02	0.1711E-02	0.4284E-02
141.8	0.9664E-04	0.1320E-02	0.2669E-02	0.2693E-02	0.2781E-02	0.2811E-02	0.1273E-02	0.1422E-02	0.2010E-02	0.4351E-02
142.6	0.7983E-04	0.1318E-02	0.2689E-02	0.3224E-02	0.2832E-02	0.2824E-02	0.1308E-02	0.1478E-02	0.2202E-02	0.4399E-02
143.4	0.3745E-04	0.1340E-02	0.2718E-02	0.6723E-02	0.2853E-02	0.2832E-02	0.1345E-02	0.1554E-02	0.2476E-02	0.4515E-02
145.7	-0.5691E-05	0.1376E-02	0.2747E-02	0.1095E-01	0.2852E-02	0.2813E-02	0.1385E-02	0.1612E-02	0.4944E-02	0.4616E-02
147.1	-0.7100E-04	0.1365E-02	0.2723E-02	0.1348E-01	0.2795E-02	0.2870E-02	0.1442E-02	0.1804E-02	0.1414E-01	0.4774E-02
147.8	-0.1112E-03	0.1355E-02	0.2706E-02	0.1442E-01	0.2774E-02	0.2887E-02	0.1485E-02	0.1866E-02	0.4190E-01	0.4874E-02
148.4	-0.1607E-03	0.1308E-02	0.2652E-02	0.1461E-01	0.3462E-02	0.2911E-02	0.1497E-02	0.1945E-02	0.2223E-01	0.5012E-02
148.8	-0.1976E-03	0.1227E-02	0.2372E-02	0.1481E-01	0.5351E-02	0.2945E-02	0.1528E-02	0.2264E-02	0.6180E-01	0.5119E-02
135.4	-0.2650E-03	0.1308E-02	0.2372E-02	0.1481E-01	0.5487E-02	0.2779E-02	0.1460E-02	0.2357E-02	0.1043E-01	0.5136E-02
149.2	-0.2551E-03	0.1306E-02	0.2554E-02	0.1465E-01	0.7237E-02	0.3002E-02	0.1522E-02	0.2490E-02	0.1041E-01	0.5296E-02
153.3	-0.2963E-03	0.1343E-02	0.2619E-02	0.1509E-01	0.8950E-02	0.3069E-02	0.1593E-02	0.2814E-02	0.1378E-01	0.8956E-02
154.4	-0.3370E-03	0.1343E-02	0.2619E-02	0.1509E-01	0.1155E-02	0.3099E-02	0.1669E-02	0.3457E-02	0.1435E-01	0.9354E-02
156.3	-0.3791E-03	0.1343E-02	0.2700E-02	0.1457E-01	0.1041E-01	0.3121E-02	0.1852E-02	0.4003E-02	0.1500E-01	0.9834E-02
157.4	-0.3824E-03	0.1382E-02	0.2817E-02	0.1377E-01	0.1033E-01	0.3062E-02	0.2130E-02	0.4244E-02	0.1594E-01	0.1035E-01
158.3	-0.2523E-03	0.1448E-02	0.2940E-02	0.1348E-01	0.1038E-01	0.3083E-02	0.2297E-02	0.4300E-02	0.1670E-01	0.1087E-01
158.4	-0.2532E-03	0.1448E-02	0.2997E-02	0.1331E-01	0.1056E-01	0.1151E-01	0.2490E-02	0.770E-02	0.1831E-01	0.1216E-01
149.1	-0.1953E-03	0.1345E-02	0.2539E-02	0.1312E-01	0.1030E-01	0.1338E-01	0.2370E-02	0.1716E-01	0.1844E-01	0.1220E-01
143.1	-0.1746E-03	0.1131E-02	0.2010E-02	0.1344E-01	0.9586E-02	0.1350E-01	0.2321E-02	0.1226E-01	0.1927E-01	0.1265E-01

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER																			
	11	12	13	14	15	16	17	18	19	20										
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.4605E-06	0.1810E-06	0.4934E-06	0.3454E-06	0.6580E-07	-0.1809E-06	0.7072E-06	0.7401E-06	0.5427E-06	0.4934E-06	0.7401E-06	0.7072E-06	0.5427E-06	0.4934E-06	0.7401E-06	0.7072E-06	0.5427E-06	0.4934E-06	0.7401E-06	0.7072E-06
9.937	0.6115E-04	0.3824E-04	0.4386E-04	0.7089E-04	0.4490E-04	0.1526E-04	-0.9046E-06	0.8996E-05	0.2928E-05	0.4039E-05	0.8996E-05									
19.92	0.1753E-03	0.1351E-03	0.1596E-03	0.2044E-03	0.1320E-03	0.5105E-04	0.1316E-05	0.2112E-04	0.1271E-04	0.1503E-04	0.2112E-04									
30.01	0.3524E-03	0.3506E-03	0.3506E-03	0.3918E-03	0.2630E-03	0.1009E-04	0.9144E-05	0.3378E-04	0.2840E-04	0.5686E-04	0.3378E-04									
40.00	0.5394E-03	0.5765E-03	0.5514E-03	0.5761E-03	0.3920E-03	0.1517E-03	0.9013E-05	0.4084E-04	0.4368E-04	0.1013E-03	0.4084E-04									
50.03	0.7294E-03	0.8109E-03	0.7568E-03	0.7658E-03	0.5220E-03	0.1929E-03	0.6957E-05	0.4500E-04	0.5286E-04	0.1504E-03	0.4500E-04									
60.04	0.9149E-03	0.1042E-02	0.9589E-03	0.9515E-03	0.6492E-03	0.2357E-03	0.9440E-05	0.5432E-04	0.6692E-04	0.2022E-03	0.5432E-04									
70.14	0.1111E-02	0.1288E-02	0.1183E-02	0.1146E-02	0.7859E-03	0.2749E-04	0.5181E-05	0.5850E-04	0.6860E-04	0.2464E-03	0.5850E-04									
80.13	0.1313E-02	0.1544E-02	0.1436E-02	0.1348E-02	0.9358E-03	0.3348E-03	0.1076E-04	0.7465E-04	0.8717E-04	0.3051E-03	0.7465E-04									
89.05	0.1412E-02	0.1673E-02	0.1566E-02	0.1452E-02	0.1032E-02	0.3799E-03	0.2581E-04	0.9144E-04	0.1099E-03	0.3404E-03	0.9144E-04									
89.99	0.1531E-02	0.1846E-02	0.1725E-02	0.1559E-02	0.1128E-02	0.4245E-03	0.2931E-04	0.1012E-03	0.1190E-03	0.3698E-03	0.1012E-03									
95.10	0.1653E-02	0.2049E-02	0.1889E-02	0.1668E-02	0.1233E-02	0.4574E-03	0.3505E-04	0.1273E-03	0.1384E-03	0.3867E-03	0.1273E-03									
100.1	0.1808E-02	0.2282E-02	0.2121E-02	0.1826E-02	0.1343E-02	0.5046E-03	0.5046E-03	0.1361E-03	0.1389E-03	0.4386E-03	0.1361E-03									
102.5	0.1915E-02	0.2410E-02	0.2275E-02	0.1928E-02	0.1429E-02	0.5477E-03	0.5477E-03	0.1418E-03	0.1418E-03	0.4553E-03	0.1418E-03									
105.0	0.2020E-02	0.2549E-02	0.2356E-02	0.1996E-02	0.1484E-02	0.5770E-03	0.5770E-03	0.1562E-03	0.1562E-03	0.4775E-03	0.1562E-03									
107.6	0.2131E-02	0.2812E-02	0.2471E-02	0.2102E-02	0.1572E-02	0.6111E-03	0.6111E-03	0.1681E-03	0.1681E-03	0.4961E-03	0.1681E-03									
110.1	0.2270E-02	0.3151E-02	0.2562E-02	0.2220E-02	0.1665E-02	0.6577E-03	0.6577E-03	0.1839E-03	0.1839E-03	0.5135E-03	0.1839E-03									
112.5	0.2402E-02	0.3397E-02	0.2680E-02	0.2362E-02	0.1789E-02	0.6860E-03	0.6860E-03	0.1988E-03	0.1988E-03	0.5405E-03	0.1988E-03									
115.1	0.2531E-02	0.4603E-02	0.2780E-02	0.2538E-02	0.1903E-02	0.7254E-03	0.7254E-03	0.2138E-03	0.2138E-03	0.5654E-03	0.2138E-03									
117.5	0.2695E-02	0.8099E-02	0.2883E-02	0.2685E-02	0.2031E-02	0.7782E-03	0.7782E-03	0.2395E-03	0.2395E-03	0.6003E-03	0.2395E-03									
120.2	0.2898E-02	0.1318E-01	0.3002E-02	0.2921E-02	0.2225E-02	0.782E-03	0.782E-03	0.2613E-03	0.2613E-03	0.6190E-03	0.2613E-03									
122.5	0.3145E-02	0.1612E-01	0.3067E-02	0.3026E-02	0.2405E-02	0.8283E-03	0.8283E-03	0.3031E-03	0.3031E-03	0.6526E-03	0.3031E-03									
125.2	0.3424E-02	0.1785E-01	0.3050E-02	0.3002E-02	0.2694E-02	0.8890E-03	0.8890E-03	0.3591E-03	0.3591E-03	0.6737E-03	0.3591E-03									
127.7	0.3671E-02	0.1930E-01	0.3067E-02	0.3008E-02	0.3008E-02	0.9714E-03	0.9714E-03	0.3931E-03	0.3931E-03	0.7057E-03	0.3931E-03									
130.1	0.5110E-02	0.1902E-01	0.3163E-02	0.3002E-02	0.1156E-01	0.1156E-01	0.4720E-05	0.4743E-03	0.4743E-03	0.7251E-03	0.4743E-03									
132.6	0.5285E-02	0.1891E-01	0.3189E-02	0.3015E-02	0.1174E-01	0.1174E-01	0.8651E-05	0.8651E-05	0.8651E-05	0.7510E-03	0.8651E-05									
135.2	0.6555E-02	0.1870E-01	0.3275E-02	0.2985E-02	0.1436E-01	0.1436E-01	0.8519E-05	0.8519E-05	0.8519E-05	0.7804E-03	0.8519E-05									
137.7	0.9779E-02	0.1862E-01	0.3399E-02	0.3005E-02	0.1501E-01	0.1501E-01	0.1127E-04	0.1127E-04	0.1127E-04	0.8292E-03	0.1127E-04									
139.8	0.1210E-01	0.1472E-01	0.3562E-02	0.3078E-02	0.1493E-01	0.1493E-01	0.1666E-02	0.1666E-02	0.1666E-02	0.8568E-03	0.1666E-02									
140.3	0.1329E-01	0.1316E-01	0.3654E-02	0.3125E-02	0.1495E-01	0.1495E-01	0.1846E-02	0.1846E-02	0.1846E-02	0.8988E-03	0.1846E-02									
141.8	0.1438E-01	0.1245E-01	0.3795E-02	0.3160E-02	0.1518E-01	0.1518E-01	0.1967E-02	0.1967E-02	0.1967E-02	0.9282E-03	0.1967E-02									
142.6	0.1552E-01	0.1231E-01	0.3951E-02	0.3174E-02	0.1540E-01	0.1540E-01	0.2109E-02	0.2109E-02	0.2109E-02	0.9420E-03	0.2109E-02									
143.4	0.1781E-01	0.1196E-01	0.4132E-02	0.3223E-02	0.1669E-01	0.1669E-01	0.2257E-02	0.2257E-02	0.2257E-02	0.9672E-03	0.2257E-02									
145.7	0.1901E-01	0.1195E-01	0.4413E-02	0.3316E-02	0.1655E-01	0.1655E-01	0.2477E-02	0.2477E-02	0.2477E-02	0.9845E-03	0.2477E-02									
147.1	0.1959E-01	0.1160E-01	0.4576E-02	0.4294E-02	0.1580E-01	0.1580E-01	0.2585E-02	0.2585E-02	0.2585E-02	0.9972E-03	0.2585E-02									
147.8	0.1978E-01	0.1164E-01	0.8077E-02	0.4576E-02	0.1569E-01	0.1569E-01	0.2802E-02	0.2802E-02	0.2802E-02	0.9642E-03	0.2802E-02									
148.4	0.2009E-01	0.1155E-01	0.1171E-01	0.6232E-02	0.1560E-01	0.1560E-01	0.2921E-02	0.2921E-02	0.2921E-02	0.9648E-03	0.2921E-02									
149.8	0.2016E-01	0.1147E-01	0.1547E-01	0.6681E-02	0.1554E-01	0.1554E-01	0.2984E-02	0.2984E-02	0.2984E-02	0.9676E-03	0.2984E-									

ELECTRONICALLY RECORDED DATA - TEST G

LOAD

CHANNEL NUMBER

	21	22	23	24	25	26	27	28	29	30
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.3174E-05	-0.1151E-06	0.4276E-06	0.2961E-06	0.2796E-06	0.2632E-06	0.3947E-06	0.2960E-06	0.6579E-06	0.8059E-06
9.937	0.7483E-05	0.6595E-05	0.3143E-04	0.1039E-04	0.1773E-04	0.1071E-04	0.2071E-04	0.3365E-04	0.4033E-04	0.3671E-04
19.92	0.2729E-04	0.2735E-04	0.9049E-04	0.3375E-04	0.4459E-04	0.3018E-04	0.5411E-04	0.1028E-03	0.1047E-03	0.1075E-03
30.01	0.6316E-04	0.6797E-04	0.1745E-03	0.7432E-04	0.9294E-04	0.7559E-04	0.1177E-03	0.2444E-03	0.2335E-03	0.2576E-03
40.00	0.1103E-03	0.1057E-03	0.2557E-03	0.1100E-03	0.1665E-03	0.1261E-03	0.1657E-03	0.4056E-03	0.3761E-03	0.4133E-03
50.03	0.1519E-03	0.1423E-03	0.3410E-03	0.1426E-03	0.2695E-03	0.1903E-03	0.2217E-03	0.5863E-03	0.5348E-03	0.5863E-03
60.04	0.2070E-03	0.1854E-03	0.4296E-03	0.1806E-03	0.3816E-03	0.2634E-03	0.2848E-03	0.7692E-03	0.6930E-03	0.7666E-03
70.14	0.2527E-03	0.2244E-03	0.5164E-03	0.2148E-03	0.4984E-03	0.3308E-03	0.3458E-03	0.9603E-03	0.8597E-03	0.9609E-03
80.13	0.3359E-03	0.2851E-03	0.6138E-03	0.2736E-03	0.6502E-03	0.4095E-03	0.4166E-03	0.1163E-02	0.1042E-02	0.1169E-02
85.05	0.4039E-03	0.3363E-03	0.6691E-03	0.3278E-03	0.7779E-03	0.4572E-03	0.4737E-03	0.1275E-02	0.1158E-02	0.1273E-02
89.99	0.4737E-03	0.3815E-03	0.7275E-03	0.4275E-03	0.9224E-03	0.4993E-03	0.5155E-03	0.1389E-02	0.1286E-02	0.1390E-02
95.10	0.5503E-03	0.4202E-03	0.7699E-03	0.5321E-03	0.1057E-02	0.5360E-03	0.5642E-03	0.1494E-02	0.1413E-02	0.1506E-02
100.1	0.6718E-03	0.4814E-03	0.8343E-03	0.6749E-03	0.1223E-02	0.5820E-03	0.6606E-03	0.1605E-02	0.1563E-02	0.1646E-02
102.5	0.7342E-03	0.5177E-03	0.8640E-03	0.7447E-03	0.1328E-02	0.6044E-03	0.7270E-03	0.1680E-02	0.1659E-02	0.1721E-02
105.0	0.7652E-03	0.5349E-03	0.8924E-03	0.7727E-03	0.1384E-02	0.6230E-03	0.7592E-03	0.1734E-02	0.1706E-02	0.1796E-02
107.6	0.8239E-03	0.5659E-03	0.9274E-03	0.8191E-03	0.1461E-02	0.6495E-03	0.8116E-03	0.1804E-02	0.1788E-02	0.1891E-02
112.5	0.9364E-03	0.6329E-03	0.9799E-03	0.9235E-03	0.1559E-02	0.7006E-03	0.1019E-02	0.1876E-02	0.1859E-02	0.2018E-02
115.1	0.9606E-03	0.6555E-03	0.1013E-02	0.9532E-03	0.1568E-02	0.7266E-03	0.1081E-02	0.1984E-02	0.1952E-02	0.2193E-02
117.5	0.1003E-02	0.6869E-03	0.1047E-02	0.1009E-02	0.1598E-02	0.7530E-03	0.1149E-02	0.2100E-02	0.1952E-02	0.2441E-02
120.2	0.1051E-02	0.7302E-03	0.1101E-02	0.1073E-02	0.1644E-02	0.7876E-03	0.1222E-02	0.2457E-02	0.2113E-02	0.2646E-02
122.5	0.1103E-02	0.7838E-03	0.1140E-02	0.1130E-02	0.1695E-02	0.8267E-03	0.1313E-02	0.2658E-02	0.2304E-02	0.2922E-02
125.2	0.1208E-02	0.8417E-03	0.1187E-02	0.1191E-02	0.1744E-02	0.8623E-03	0.1393E-02	0.2833E-02	0.2352E-02	0.3694E-02
127.7	0.1448E-02	0.9294E-03	0.1244E-02	0.1266E-02	0.1808E-02	0.9161E-03	0.1500E-02	0.3018E-02	0.2418E-02	0.3919E-02
130.1	0.1324E-02	0.1098E-02	0.1352E-02	0.1434E-02	0.1948E-02	0.1033E-02	0.1720E-02	0.3231E-02	0.2696E-02	0.4233E-02
132.6	0.1337E-02	0.1112E-02	0.1376E-02	0.1457E-02	0.2052E-02	0.1053E-02	0.1748E-02	0.3251E-02	0.2717E-02	0.4113E-02
135.2	0.1494E-02	0.1183E-02	0.1443E-02	0.1513E-02	0.2152E-02	0.1113E-02	0.1846E-02	0.3251E-02	0.2773E-02	0.4181E-02
137.7	0.1494E-02	0.1283E-02	0.1540E-02	0.1688E-02	0.2202E-02	0.1194E-02	0.1958E-02	0.3256E-02	0.2987E-02	0.4181E-02
139.8	0.1661E-02	0.1415E-02	0.1654E-02	0.1757E-02	0.2250E-02	0.1395E-02	0.2197E-02	0.3335E-02	0.3450E-02	0.4191E-02
140.3	0.1802E-02	0.1505E-02	0.1732E-02	0.1874E-02	0.2283E-02	0.1518E-02	0.2408E-02	0.3402E-02	0.3705E-02	0.4191E-02
142.6	0.2142E-02	0.1678E-02	0.1941E-02	0.1870E-02	0.2290E-02	0.1597E-02	0.2538E-02	0.3459E-02	0.3814E-02	0.4203E-02
143.4	0.2258E-02	0.1760E-02	0.1997E-02	0.1997E-02	0.2307E-02	0.1744E-02	0.2709E-02	0.3536E-02	0.4012E-02	0.4203E-02
145.7	0.2367E-02	0.1847E-02	0.2052E-02	0.1929E-02	0.2332E-02	0.1875E-02	0.2879E-02	0.3638E-02	0.4196E-02	0.4203E-02
147.1	0.2419E-02	0.1980E-02	0.2119E-02	0.1933E-02	0.2364E-02	0.2007E-02	0.3102E-02	0.3777E-02	0.4859E-02	0.4203E-02
147.8	0.2479E-02	0.2064E-02	0.2162E-02	0.1941E-02	0.2375E-02	0.2118E-02	0.3268E-02	0.3840E-02	0.5774E-02	0.2042E-01
148.4	0.2527E-02	0.2134E-02	0.2203E-02	0.1967E-02	0.2408E-02	0.2224E-02	0.3400E-02	0.3961E-02	0.5774E-02	0.2042E-01
149.8	0.2572E-02	0.2183E-02	0.2237E-02	0.1983E-02	0.2401E-02	0.2306E-02	0.3487E-02	0.4162E-02	0.8654E-02	0.2029E-01
135.4	0.2459E-02	0.2157E-02	0.2123E-02	0.1917E-02	0.2282E-02	0.2245E-02	0.3387E-02	0.4162E-02	0.1447E-01	0.2039E-01
149.2	0.2571E-02	0.2235E-02	0.2234E-02	0.1989E-02	0.2416E-02	0.2306E-02	0.3552E-02	0.4140E-02	0.1560E-01	0.2020E-01
153.3	0.2627E-02	0.2349E-02	0.2334E-02	0.2058E-02	0.2470E-02	0.2316E-02	0.5472E-02	0.4265E-02	0.1588E-01	0.1993E-01
153.5	0.2676E-02	0.2360E-02	0.2325E-02	0.2121E-02	0.2484E-02	0.2312E-02	0.6646E-02	0.4265E-02	0.1641E-01	0.1993E-01
154.4	0.2628E-02	0.2402E-02	0.2586E-02	0.2225E-02	0.2501E-02	0.2374E-02	0.8352E-02	0.4265E-02	0.1651E-01	0.1983E-01
156.3	0.2691E-02	0.2430E-02	0.2567E-02	0.2329E-02	0.3493E-02	0.2448E-02	0.9388E-02	0.7686E-02	0.1770E-01	0.2002E-01
157.4	0.2704E-02	0.2464E-02	0.2683E-02	0.2414E-02	0.8572E-02	0.2545E-02	0.1039E-01	0.7214E-02	0.1928E-01	0.1566E-01
158.3	0.2764E-02	0.2567E-02	0.1111E-01	0.2783E-02	0.8501E-02	0.4662E-02	0.9816E-02	0.5708E-02	0.2197E-01	0.1490E-01
149.6	0.2653E-02	0.2612E-02	0.8131E-02	0.3013E-02	0.8009E-02	0.4737E-02	0.9492E-02	0.5349E-02	0.1621E-01	0.1448E-01
143.1	0.8866E-02	0.2597E-02	0.7864E-02	0.3404E-02	0.8136E-02	0.5059E-02	0.9354E-02	0.5288E-02	0.1480E-01	0.1426E-01

ELECTRONICALLY RECORDED DATA - TEST G

CHANNEL NUMBER

LOAD (PSI) 31 32 33 34 35 36 37 38 39 40

Table with 10 columns (LOAD, 31-40) and 100 rows of data. Each cell contains a numerical value with a sign and a unit code (e.g., 0.00, 0.1480E-07, 0.1640E-06, etc.).

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	41	42	43	44	45	46	47	48	49	50
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.9539E-06	0.0	-0.1645E-06	0.0	0.0	0.0	-0.4930E-07	0.0	0.0	0.0
9.937	0.3939E-04	0.0	-0.1127E-04	-0.8223E-06	0.0	0.0	-0.4025E-04	0.0	-0.6580E-07	0.3454E-06
19.92	0.1034E-03	0.0	-0.1507E-04	0.7598E-05	0.0	0.0	0.1163E-03	0.0	0.4011E-04	0.4429E-04
30.01	0.2280E-03	0.0	-0.1368E-04	0.2378E-04	0.0	0.0	0.2394E-03	0.0	0.9760E-04	0.9977E-04
40.00	0.4399E-03	0.0	-0.1577E-04	0.4039E-04	0.0	0.0	0.2394E-03	0.0	0.2190E-03	0.1703E-03
50.03	0.7729E-03	0.0	-0.2344E-04	0.5643E-04	0.0	0.0	0.4112E-03	0.0	0.4337E-03	0.2730E-03
60.04	0.1169E-02	0.0	-0.2893E-04	0.7492E-04	0.0	0.0	0.6409E-03	0.0	0.7797E-03	0.4306E-03
70.14	0.1559E-02	0.0	-0.4219E-04	0.8806E-04	0.0	0.0	0.8893E-03	0.0	0.1161E-02	0.5941E-03
80.13	0.2021E-02	0.0	-0.4344E-04	0.1102E-03	0.0	0.0	0.1151E-02	0.0	0.1538E-02	0.7710E-03
85.05	0.2302E-02	0.0	-0.3266E-04	0.1341E-03	0.0	0.0	0.1437E-02	0.0	0.1948E-02	0.9686E-03
89.99	0.2640E-02	0.0	-0.3429E-04	0.1455E-03	0.0	0.0	0.1599E-02	0.0	0.2162E-02	0.1095E-02
95.10	0.3058E-02	0.0	-0.4826E-04	0.1577E-03	0.0	0.0	0.1795E-02	0.0	0.2409E-02	0.1229E-02
100.1	0.3438E-02	0.0	-0.4372E-04	0.1848E-03	0.0	0.0	0.2017E-02	0.0	0.2710E-02	0.1386E-02
102.5	0.3596E-02	0.0	-0.5613E-04	0.1970E-03	0.0	0.0	0.2291E-02	0.0	0.3053E-02	0.1583E-02
105.0	0.3680E-02	0.0	-0.5592E-04	0.2023E-03	0.0	0.0	0.2458E-02	0.0	0.3276E-02	0.1696E-02
107.6	0.3748E-02	0.0	-0.5066E-04	0.2168E-03	0.0	0.0	0.2586E-02	0.0	0.3439E-02	0.1751E-02
110.1	0.3772E-02	0.0	-0.4503E-04	0.2381E-03	0.0	0.0	0.2749E-02	0.0	0.3666E-02	0.1834E-02
112.5	0.3813E-02	0.0	-0.4526E-04	0.2893E-03	0.0	0.0	0.2920E-02	0.0	0.3892E-02	0.1853E-02
115.1	0.3811E-02	0.0	-0.4449E-04	0.3114E-03	0.0	0.0	0.3144E-02	0.0	0.4185E-02	0.1946E-02
117.5	0.3825E-02	0.0	-0.4189E-04	0.3343E-03	0.0	0.0	0.3229E-02	0.0	0.4410E-02	0.1996E-02
120.2	0.3802E-02	0.0	-0.3511E-04	0.3572E-03	0.0	0.0	0.3525E-02	0.0	0.4693E-02	0.2052E-02
122.5	0.3781E-02	0.0	-0.4005E-04	0.3758E-03	0.0	0.0	0.3743E-02	0.0	0.5049E-02	0.2118E-02
125.2	0.3781E-02	0.0	-0.3635E-04	0.3929E-03	0.0	0.0	0.4019E-02	0.0	0.5541E-02	0.2198E-02
127.7	0.3781E-02	0.0	-0.3168E-04	0.4257E-03	0.0	0.0	0.4350E-02	0.0	0.6073E-02	0.2238E-02
130.1	0.1770E-01	0.0	-0.4444E-04	0.4948E-03	0.0	0.0	0.4733E-02	0.0	0.6959E-02	0.2350E-02
132.6	0.1794E-01	0.0	-0.4357E-04	0.5072E-03	0.0	0.0	0.5499E-02	0.0	0.9350E-02	0.2369E-02
135.2	0.1832E-01	0.0	-0.4020E-04	0.5319E-03	0.0	0.0	0.5620E-02	0.0	0.9729E-02	0.2392E-02
137.7	0.1801E-01	0.0	-0.4521E-04	0.5568E-03	0.0	0.0	0.5955E-02	0.0	0.1130E-01	0.2382E-02
139.8	0.1814E-01	0.0	-0.4969E-04	0.5974E-03	0.0	0.0	0.6375E-02	0.0	0.1450E-01	0.2399E-02
140.3	0.1799E-01	0.0	-0.5761E-04	0.5974E-03	0.0	0.0	0.6805E-02	0.0	0.1664E-01	0.2425E-02
141.8	0.1831E-01	0.0	-0.8816E-04	0.6250E-03	0.0	0.0	0.7018E-02	0.0	0.1764E-01	0.2442E-02
142.6	0.1846E-01	0.0	-0.9750E-04	0.6361E-03	0.0	0.0	0.7302E-02	0.0	0.1866E-01	0.2453E-02
143.4	0.1877E-01	0.0	-0.1182E-03	0.6491E-03	0.0	0.0	0.7428E-02	0.0	0.1895E-01	0.2468E-02
145.7	0.1966E-01	0.0	-0.1325E-03	0.6689E-03	0.0	0.0	0.7592E-02	0.0	0.1931E-01	0.2481E-02
147.1	0.1862E-01	0.0	-0.1488E-03	0.6923E-03	0.0	0.0	0.8405E-02	0.0	0.2018E-01	0.2498E-02
147.8	0.1848E-01	0.0	-0.1561E-03	0.7059E-03	0.0	0.0	0.8637E-02	0.0	0.2005E-01	0.2509E-02
148.4	0.1842E-01	0.0	-0.2117E-03	0.7178E-03	0.0	0.0	0.8899E-02	0.0	0.1971E-01	0.2515E-02
149.8	0.1865E-01	0.0	-0.2205E-03	0.7333E-03	0.0	0.0	0.9931E-02	0.0	0.1889E-01	0.2518E-02
135.4	0.1858E-01	0.0	-0.3166E-03	0.6927E-03	0.0	0.0	0.1093E-01	0.0	0.1878E-01	0.2360E-02
149.2	0.1858E-01	0.0	-0.2976E-03	0.7500E-03	0.0	0.0	0.1145E-01	0.0	0.1884E-01	0.2547E-02
153.3	0.1857E-01	0.0	-0.2951E-03	0.8261E-03	0.0	0.0	0.1246E-01	0.0	0.1868E-01	0.2585E-02
153.5	0.1880E-01	0.0	-0.3267E-03	0.8358E-03	0.0	0.0	0.1262E-01	0.0	0.1861E-01	0.2574E-02
154.4	0.1880E-01	0.0	-0.3249E-03	0.8500E-03	0.0	0.0	0.1299E-01	0.0	0.1876E-01	0.2616E-02
156.3	0.1900E-01	0.0	-0.3231E-03	0.9075E-03	0.0	0.0	0.1355E-01	0.0	0.1845E-01	0.2643E-02
157.4	0.1941E-01	0.0	-0.3309E-03	0.9344E-03	0.0	0.0	0.1417E-01	0.0	0.1822E-01	0.2647E-02
158.3	0.2025E-01	0.0	-0.3576E-03	0.1032E-02	0.0	0.0	0.1553E-01	0.0	0.1815E-01	0.2662E-02
149.6	0.1993E-01	0.0	-0.4901E-03	0.9342E-03	0.0	0.0	0.1531E-01	0.0	0.1763E-01	0.2487E-02
143.1	0.1965E-01	0.0	-0.5049E-03	0.9754E-03	0.0	0.0	0.1515E-01	0.0	0.1712E-01	0.2310E-02

ELECTRONICALLY RECORDED DATA - TEST G

CHANNEL NUMBER

LOAD (PSI)	51	52	53	54	55	56	57	58	59	60
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.1151E-06	-0.4441E-06	-0.3293E-07	0.2960E-06	0.6579E-06	-0.4933E-07	0.5757E-06	-0.4605E-06	0.3619E-06	0.1151E-06
9.937	0.5193E-04	0.5839E-04	0.3827E-04	0.4202E-04	0.3327E-04	0.3041E-04	0.1569E-04	-0.1396E-04	0.9523E-05	0.7533E-05
19.92	0.1169E-03	0.1584E-03	0.1132E-03	0.1184E-03	0.8837E-04	0.7385E-04	0.2868E-04	-0.2776E-04	0.2919E-04	0.2952E-04
30.01	0.2244E-03	0.3857E-03	0.2424E-03	0.2567E-03	0.2064E-03	0.1521E-03	0.3615E-04	-0.5260E-04	0.5723E-04	0.1037E-03
40.00	0.4083E-03	0.6456E-03	0.3667E-03	0.3927E-03	0.2737E-03	0.2737E-03	0.5051E-04	-0.5186E-04	0.9602E-04	0.1951E-03
50.03	0.6711E-03	0.9417E-03	0.5066E-03	0.5612E-03	0.6035E-03	0.4452E-03	0.8404E-04	-0.3025E-04	0.1465E-03	0.3104E-03
60.04	0.9513E-03	0.1214E-03	0.6518E-03	0.7446E-03	0.8606E-03	0.6182E-03	0.1168E-03	-0.4243E-05	0.1966E-03	0.4286E-03
70.14	0.1256E-02	0.1467E-02	0.8055E-03	0.9299E-03	0.1142E-02	0.7987E-03	0.1588E-03	0.2023E-04	0.247E-03	0.5420E-03
80.13	0.1635E-02	0.1750E-02	0.9828E-03	0.1148E-02	0.1449E-02	0.1007E-02	0.1979E-03	0.5228E-04	0.3018E-03	0.6658E-03
85.05	0.1885E-02	0.1950E-02	0.1106E-02	0.1267E-02	0.1652E-02	0.1172E-02	0.2243E-03	0.7123E-04	0.3447E-03	0.7487E-03
89.99	0.2152E-02	0.2170E-02	0.1217E-02	0.1400E-02	0.1862E-02	0.1344E-02	0.2662E-03	0.9140E-04	0.3975E-03	0.8317E-03
95.10	0.2418E-02	0.2366E-02	0.1343E-02	0.1527E-02	0.2079E-02	0.1549E-02	0.2996E-03	0.1058E-03	0.4405E-03	0.9167E-03
100.1	0.2681E-02	0.2582E-02	0.1477E-02	0.1657E-02	0.2335E-02	0.1760E-02	0.3304E-03	0.8549E-04	0.5065E-03	0.1021E-02
102.5	0.2806E-02	0.2683E-02	0.1547E-02	0.1716E-02	0.2446E-02	0.1875E-02	0.3501E-03	0.8625E-04	0.5289E-03	0.1055E-02
105.0	0.2823E-02	0.2769E-02	0.1601E-02	0.1781E-02	0.2568E-02	0.1978E-02	0.3633E-03	0.1158E-03	0.5567E-03	0.1109E-02
107.6	0.2827E-02	0.2860E-02	0.1659E-02	0.1850E-02	0.2718E-02	0.2155E-02	0.3722E-03	0.1683E-03	0.5907E-03	0.1167E-02
110.1	0.2902E-02	0.2949E-02	0.1722E-02	0.1921E-02	0.2896E-02	0.2155E-02	0.3925E-03	0.1781E-03	0.6243E-03	0.1229E-02
112.5	0.3186E-02	0.3130E-02	0.1863E-02	0.2062E-02	0.3078E-02	0.2421E-02	0.4076E-03	0.1563E-03	0.6689E-03	0.1298E-02
115.1	0.3222E-02	0.3220E-02	0.1928E-02	0.2119E-02	0.3240E-02	0.2534E-02	0.4237E-03	0.1423E-03	0.7070E-03	0.1361E-02
117.5	0.3295E-02	0.3220E-02	0.1991E-02	0.2159E-02	0.3414E-02	0.2655E-02	0.4425E-03	0.1639E-03	0.7482E-03	0.1435E-02
120.2	0.3368E-02	0.3419E-02	0.2069E-02	0.2158E-02	0.3614E-02	0.2785E-02	0.4596E-03	0.1733E-03	0.7907E-03	0.1512E-02
122.5	0.3524E-02	0.3531E-02	0.2134E-02	0.2217E-02	0.3808E-02	0.2959E-02	0.4949E-03	0.1718E-03	0.8352E-03	0.1592E-02
125.2	0.3751E-02	0.3662E-02	0.2208E-02	0.2257E-02	0.3973E-02	0.3062E-02	0.5155E-03	0.1636E-03	0.8752E-03	0.1665E-02
127.7	0.3987E-02	0.3913E-02	0.2336E-02	0.2327E-02	0.4288E-02	0.3278E-02	0.5404E-03	0.1480E-03	0.9247E-03	0.1747E-02
130.1	0.4059E-02	0.4136E-02	0.2377E-02	0.2355E-02	0.4411E-02	0.3438E-02	0.6038E-03	0.9880E-04	0.9959E-03	0.1907E-02
132.6	0.4158E-02	0.4338E-02	0.2436E-02	0.2370E-02	0.4385E-02	0.3590E-02	0.6176E-03	0.9141E-04	0.1026E-02	0.1957E-02
135.2	0.4950E-02	0.4338E-02	0.2513E-02	0.2420E-02	0.4395E-02	0.3627E-02	0.6408E-03	0.8432E-04	0.1072E-02	0.2044E-02
137.7	0.1360E-01	0.4542E-02	0.2626E-02	0.2510E-02	0.4401E-02	0.3770E-02	0.6693E-03	0.6018E-03	0.1122E-02	0.2131E-02
139.8	0.1578E-01	0.4600E-02	0.2661E-02	0.2548E-02	0.4411E-02	0.3855E-02	0.6939E-03	0.2770E-04	0.1182E-02	0.2245E-02
140.3	0.1609E-01	0.4665E-02	0.2661E-02	0.2548E-02	0.4415E-02	0.3959E-02	0.7148E-03	0.6973E-05	0.1229E-02	0.2303E-02
141.8	0.1679E-01	0.4703E-02	0.2708E-02	0.2599E-02	0.4430E-02	0.4015E-02	0.7525E-03	0.5871E-05	0.1308E-02	0.2364E-02
142.6	0.1642E-01	0.4728E-02	0.2732E-02	0.2627E-02	0.4430E-02	0.4015E-02	0.7693E-03	0.1074E-04	0.1340E-02	0.2392E-02
143.4	0.1679E-01	0.4759E-02	0.2758E-02	0.2664E-02	0.4440E-02	0.4015E-02	0.7919E-03	0.2773E-04	0.1381E-02	0.2431E-02
145.7	0.1741E-01	0.4759E-02	0.2789E-02	0.2688E-02	0.4455E-02	0.4015E-02	0.8109E-03	0.4202E-04	0.1423E-02	0.2472E-02
147.1	0.1800E-01	0.5084E-02	0.2846E-02	0.2746E-02	0.4480E-02	0.4015E-02	0.8362E-03	0.5863E-04	0.1464E-02	0.2508E-02
147.8	0.1851E-01	0.5586E-02	0.2846E-02	0.2792E-02	0.4487E-02	0.4015E-02	0.8507E-03	0.6723E-04	0.1500E-02	0.2528E-02
148.4	0.1904E-01	0.6293E-02	0.2899E-02	0.2901E-02	0.4542E-02	0.4015E-02	0.8731E-03	0.8294E-04	0.1523E-02	0.2542E-02
149.8	0.1858E-01	0.7104E-02	0.2899E-02	0.2918E-02	0.4542E-02	0.4015E-02	0.8924E-03	0.9261E-04	0.1566E-02	0.2562E-02
135.4	0.1989E-01	0.6978E-02	0.2918E-02	0.2936E-02	0.4314E-02	0.4015E-02	0.8982E-03	0.1390E-03	0.1418E-02	0.2406E-02
149.2	0.1889E-01	0.8723E-02	0.2936E-02	0.2936E-02	0.4314E-02	0.4015E-02	0.9536E-03	0.1508E-03	0.1606E-02	0.2568E-02
153.3	0.2155E-01	0.1216E-01	0.2995E-02	0.3071E-02	0.1273E-01	0.1929E-01	0.9862E-03	0.1733E-03	0.1770E-02	0.2552E-02
153.5	0.2199E-01	0.1277E-01	0.3004E-02	0.3113E-02	0.1443E-01	0.1969E-01	0.9878E-03	0.1747E-03	0.1770E-02	0.2539E-02
154.4	0.2251E-01	0.1348E-01	0.3025E-02	0.3133E-02	0.1571E-01	0.1969E-01	0.9936E-03	0.1700E-03	0.1817E-02	0.2536E-02
156.3	0.2364E-01	0.1438E-01	0.3084E-02	0.3266E-02	0.1680E-01	0.2097E-01	0.1017E-02	0.1537E-03	0.1923E-02	0.2527E-02
157.4	0.2482E-01	0.1473E-01	0.3146E-02	0.3438E-02	0.1827E-01	0.2202E-01	0.1045E-02	0.1540E-03	0.2001E-02	0.2506E-02
158.3	0.2691E-01	0.1506E-01	0.3257E-02	0.3611E-02	0.2131E-01	0.2410E-01	0.1083E-02	0.1373E-03	0.2128E-02	0.2418E-02
149.6	0.2659E-01	0.1487E-01	0.3148E-02	0.3467E-02	0.2144E-01	0.2413E-01	0.1030E-02	0.3293E-03	0.2047E-02	0.2275E-02
143.1	0.2629E-01	0.1467E-01	0.3010E-02	0.3301E-02	0.2161E-01	0.2411E-01	0.9982E-03	0.3441E-03	0.1969E-02	0.2151E-02

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	61	62	63	64	65	66	67	68	69	70
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.1481E-06	0.8223E-07	0.2467E-06	0.8220E-07	0.1250E-05	0.1645E-06	0.9868E-07	0.8223E-07	0.4934E-06	0.2960E-06
9.937	0.2618E-04	0.320E-04	0.1941E-04	0.5888E-05	0.3271E-04	-0.3191E-05	-0.6414E-05	0.1567E-04	0.1720E-04	0.1712E-04
19.92	0.6832E-04	0.8047E-04	0.4673E-04	-0.5131E-05	0.6936E-04	-0.2796E-05	-0.1079E-04	0.4094E-04	0.4275E-04	0.3837E-04
30.01	0.1645E-03	0.1933E-03	0.9518E-04	0.1858E-05	0.1236E-03	0.9868E-06	-0.1636E-04	0.8192E-04	0.8283E-04	0.7256E-04
40.00	0.3016E-03	0.4444E-03	0.1635E-03	0.5575E-05	0.1891E-03	0.1447E-05	-0.2120E-04	0.1382E-03	0.1331E-03	0.1184E-03
50.03	0.4720E-03	0.7642E-03	0.3020E-03	0.6398E-05	0.2751E-03	-0.2303E-06	-0.3018E-04	0.2212E-03	0.2109E-03	0.1859E-03
60.04	0.6596E-03	0.1077E-02	0.4230E-03	0.8487E-05	0.3660E-03	-0.2138E-06	-0.3740E-04	0.2985E-03	0.2873E-03	0.2565E-03
70.14	0.8566E-03	0.1413E-02	0.5202E-03	0.6612E-05	0.4620E-03	-0.4046E-05	-0.4881E-04	0.3801E-03	0.3669E-03	0.3375E-03
80.13	0.1083E-02	0.1756E-02	0.6626E-03	0.1229E-04	0.5905E-03	-0.3289E-05	-0.5436E-04	0.4520E-03	0.4379E-03	0.4224E-03
85.05	0.1226E-02	0.1944E-02	0.7446E-03	0.2480E-04	0.6991E-03	-0.5954E-05	-0.4791E-04	0.4940E-03	0.4792E-03	0.4823E-03
89.99	0.1376E-02	0.2143E-02	0.7870E-03	0.2931E-04	0.8100E-03	0.5197E-05	-0.5143E-04	0.5224E-03	0.5123E-03	0.5402E-03
95.10	0.1522E-02	0.2343E-02	0.7767E-03	0.3275E-04	0.9251E-03	0.4885E-05	-0.5603E-04	0.5486E-03	0.5444E-03	0.5994E-03
100.1	0.1694E-02	0.2588E-02	0.6942E-03	0.4349E-04	0.1052E-04	0.8437E-05	-0.5636E-04	0.5783E-03	0.5882E-03	0.6834E-03
102.5	0.1776E-02	0.2711E-02	0.6204E-03	0.4615E-04	0.1113E-02	0.9704E-05	-0.5612E-04	0.5856E-03	0.6055E-03	0.7228E-03
105.0	0.1866E-02	0.2837E-02	0.5833E-03	0.4995E-04	0.1140E-02	0.9720E-05	-0.6064E-04	0.5958E-03	0.6224E-03	0.7499E-03
107.6	0.1985E-02	0.2984E-02	0.5221E-03	0.5880E-04	0.1196E-02	0.1319E-04	-0.5903E-04	0.6063E-03	0.6431E-03	0.7875E-03
110.1	0.2132E-02	0.3126E-02	0.4704E-03	0.6817E-04	0.1247E-02	0.1521E-04	-0.6005E-04	0.6041E-03	0.6559E-03	0.8138E-03
112.5	0.2298E-02	0.3279E-02	0.4113E-03	0.8049E-04	0.1296E-02	0.1712E-04	-0.5682E-04	0.5999E-03	0.6732E-03	0.8570E-03
115.1	0.2422E-02	0.3384E-02	0.5212E-03	0.8958E-04	0.1342E-02	0.2766E-04	-0.6067E-04	0.5902E-03	0.6835E-03	0.8780E-03
117.5	0.2570E-02	0.3554E-02	0.1617E-03	0.9676E-04	0.1396E-02	0.3021E-04	-0.6100E-04	0.5729E-03	0.6933E-03	0.9093E-03
120.2	0.2720E-02	0.3824E-02	0.1018E-02	0.1037E-03	0.1437E-02	0.3168E-04	-0.6003E-04	0.5489E-03	0.7043E-03	0.9473E-03
122.5	0.2893E-02	0.4554E-02	0.1293E-02	0.1107E-03	0.1497E-02	0.3493E-04	-0.6339E-04	0.5145E-03	0.7069E-03	0.9623E-03
125.2	0.3018E-02	0.5524E-02	0.1719E-02	0.1191E-03	0.1540E-02	0.3548E-04	-0.6579E-04	0.4804E-03	0.7103E-03	0.1035E-02
127.1	0.3147E-02	0.6482E-02	0.1896E-02	0.1294E-03	0.1583E-02	0.3936E-04	-0.6345E-04	0.4394E-03	0.7203E-03	0.1062E-02
130.7	0.3375E-02	0.7749E-02	0.1885E-02	0.1404E-03	0.1654E-02	0.4707E-04	-0.6347E-04	0.3451E-03	0.7265E-03	0.1130E-02
132.6	0.3457E-02	0.8039E-02	0.1943E-02	0.1433E-03	0.1685E-02	0.4773E-04	-0.6408E-04	0.3359E-03	0.7343E-03	0.1144E-02
135.2	0.3496E-02	0.8653E-02	0.2099E-02	0.1482E-03	0.1713E-02	0.5464E-04	-0.6261E-04	0.2967E-03	0.7423E-03	0.1180E-02
137.8	0.3504E-02	0.9377E-02	0.2322E-02	0.1502E-03	0.1745E-02	0.5228E-04	-0.6526E-04	0.2517E-03	0.7394E-03	0.1225E-02
140.3	0.4707E-02	0.1062E-01	0.2785E-02	0.1478E-03	0.1791E-02	0.5136E-04	-0.6422E-04	0.1921E-03	0.7434E-03	0.1273E-02
141.8	0.6865E-02	0.1118E-01	0.2991E-02	0.1267E-03	0.1822E-02	0.4906E-04	-0.6483E-04	0.1662E-03	0.7595E-03	0.1361E-02
142.6	0.7928E-02	0.1147E-01	0.3056E-02	0.1323E-03	0.1837E-02	0.5337E-04	-0.6274E-04	0.1536E-03	0.7556E-03	0.1381E-02
143.4	0.8875E-02	0.1189E-01	0.3118E-02	0.1210E-03	0.1852E-02	0.5457E-04	-0.6187E-04	0.1354E-03	0.7517E-03	0.1415E-02
145.7	0.9491E-02	0.1225E-01	0.3169E-02	0.1199E-03	0.1876E-02	0.5733E-04	-0.6161E-04	0.1195E-03	0.7691E-03	0.1463E-02
147.1	0.1011E-01	0.1278E-01	0.3288E-02	0.1168E-03	0.1902E-02	0.4806E-04	-0.6228E-04	0.8932E-04	0.8454E-03	0.1522E-02
147.8	0.1013E-01	0.1316E-01	0.3421E-02	0.1158E-03	0.1920E-02	0.4844E-04	-0.6036E-04	0.6205E-04	0.9118E-03	0.1567E-02
148.4	0.1022E-01	0.1357E-01	0.3526E-02	0.1060E-03	0.1942E-02	0.4377E-04	-0.6024E-04	0.3640E-04	0.9740E-03	0.1568E-02
149.8	0.1055E-01	0.1411E-01	0.3690E-02	0.1067E-03	0.1959E-02	0.4299E-04	-0.6051E-04	0.1428E-04	0.1031E-02	0.1562E-02
135.4	0.1018E-01	0.1379E-01	0.3547E-02	0.7956E-04	0.1788E-02	0.3496E-04	-0.5677E-04	0.4387E-04	0.9533E-03	0.1398E-02
149.2	0.3176	0.1471E-01	0.3945E-02	0.9156E-04	0.1969E-02	0.3618E-04	-0.5848E-04	0.2554E-04	0.1059E-02	0.1531E-02
153.3	0.2961	0.1573E-01	0.4281E-02	0.1003E-03	0.2032E-02	0.4048E-04	-0.5654E-04	0.4380E-04	0.1186E-02	0.1591E-02
153.5	0.2960	0.1602E-01	0.4403E-02	0.6909E-04	0.2030E-02	0.3728E-04	-0.5166E-04	0.5381E-04	0.1214E-02	0.1617E-02
154.4	0.3027	0.1637E-01	0.4525E-02	0.7857E-04	0.2053E-02	0.3360E-04	-0.4723E-04	0.7968E-04	0.1245E-02	0.1644E-02
156.3	0.3294	0.1731E-01	0.4724E-02	0.9049E-04	0.2098E-02	0.4132E-04	-0.4361E-04	0.9544E-04	0.1301E-02	0.1766E-02
157.4	0.3912	0.1763E-01	0.4952E-02	0.8219E-04	0.2125E-02	0.4025E-04	-0.4070E-04	0.1384E-02	0.1384E-02	0.1924E-02
158.3	0.9095	0.1834E-01	0.5634E-02	0.7320E-04	0.2147E-02	0.3881E-04	-0.7160E-04	0.1251E-03	0.1490E-02	0.2119E-02
149.6	0.9098	0.1804E-01	0.5366E-02	0.1577E-06	0.2024E-02	0.3861E-04	-0.2889E-04	0.1382E-03	0.1462E-02	0.2061E-02
143.1	0.9098	0.1791E-01	0.5009E-02	-0.7370E-05	0.1922E-02	0.3971E-04	-0.3035E-04	-0.1563E-03	0.1412E-02	0.1951E-02



ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	81	82	83	84	85	86	87	88	89	90
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.4770E-06	0.1875E-05	0.3783E-06	0.5369E-04	0.2549E-05	0.1809E-06	0.1645E-07	0.3618E-06	0.4770E-06	0.8533E-04
9.937	-0.1661E-05	0.8322E-05	0.3701E-05	-0.1295E-03	0.1309E-04	0.1949E-04	0.2502E-04	0.5153E-04	0.7598E-05	0.2023E-03
19.92	-0.4243E-05	0.2015E-04	0.1212E-04	-0.2032E-03	0.3678E-04	0.6498E-04	0.6296E-04	0.2113E-03	0.2011E-04	0.3221E-03
30.01	-0.1089E-04	0.3964E-04	0.3155E-04	-0.3400E-03	0.1016E-03	0.1532E-03	0.1455E-03	0.4230E-03	0.4465E-04	0.5420E-03
40.00	-0.1242E-04	0.6256E-04	0.5182E-04	-0.4137E-03	0.1718E-03	0.2381E-03	0.2725E-03	0.6032E-03	0.6922E-04	0.6570E-03
50.03	-0.1235E-04	0.9360E-04	0.8538E-04	-0.5558E-03	0.2544E-03	0.3286E-03	0.4632E-03	0.7943E-03	0.1018E-03	0.8861E-03
60.04	-0.1250E-04	0.1259E-03	0.1147E-03	-0.6253E-03	0.3307E-03	0.4128E-03	0.6513E-03	0.9800E-03	0.1390E-03	0.9859E-03
70.14	-0.1038E-04	0.1600E-03	0.1471E-03	-0.7295E-03	0.4234E-03	0.5044E-03	0.8485E-03	0.1182E-02	0.1769E-03	0.1131E-02
80.13	-0.6891E-05	0.1985E-03	0.1839E-03	-0.8000E-03	0.5515E-03	0.5936E-03	0.1066E-02	0.1404E-02	0.2217E-03	0.1233E-02
85.05	0.4506E-05	0.2305E-03	0.2107E-03	-0.8937E-03	0.6528E-03	0.6461E-03	0.1200E-02	0.1525E-02	0.2618E-03	0.1373E-02
89.99	0.6891E-05	0.2544E-03	0.2273E-03	-0.9622E-03	0.7517E-03	0.6946E-03	0.1337E-02	0.1644E-02	0.3018E-03	0.1473E-02
95.10	0.5559E-05	0.2724E-03	0.2415E-03	-0.1071E-02	0.8657E-03	0.7518E-03	0.1447E-02	0.1798E-02	0.3450E-03	0.1639E-02
100.1	0.6085E-05	0.3006E-03	0.2631E-03	-0.1148E-02	0.9962E-03	0.8148E-03	0.1570E-02	0.1955E-02	0.4006E-03	0.1739E-02
102.5	0.9704E-05	0.3058E-03	0.2666E-03	-0.1254E-02	0.1066E-02	0.8441E-03	0.1622E-02	0.2043E-02	0.4261E-03	0.1871E-02
105.0	0.2796E-05	0.3164E-03	0.2744E-03	-0.1328E-02	0.1109E-02	0.8694E-03	0.1654E-02	0.2074E-02	0.4458E-03	0.1973E-02
107.6	-0.1858E-05	0.3326E-03	0.2852E-03	-0.1405E-02	0.8992E-03	0.8992E-03	0.1673E-02	0.2092E-02	0.4814E-03	0.2181E-02
110.1	-0.1053E-04	0.3439E-03	0.2910E-03	-0.1478E-02	0.1265E-02	0.9289E-03	0.1689E-02	0.2117E-02	0.5229E-03	0.2073E-02
112.5	-0.1266E-04	0.3544E-03	0.2982E-03	-0.1560E-02	0.1375E-02	0.9728E-03	0.1717E-02	0.2166E-02	0.5692E-03	0.2306E-02
115.1	-0.2085E-04	0.3675E-03	0.3062E-03	-0.1626E-02	0.1451E-02	0.1007E-02	0.1744E-02	0.2163E-02	0.5969E-03	0.2411E-02
117.5	-0.2640E-04	0.3817E-03	0.3123E-03	-0.1756E-02	0.1530E-02	0.1042E-02	0.1779E-02	0.2190E-02	0.6307E-03	0.2599E-02
120.2	-0.3100E-04	0.4039E-03	0.3220E-03	-0.1816E-02	0.1599E-02	0.1084E-02	0.1824E-02	0.2211E-02	0.6371E-03	0.2689E-02
122.5	-0.3853E-04	0.4144E-03	0.3240E-03	-0.1885E-02	0.1657E-02	0.1124E-02	0.1836E-02	0.2241E-02	0.6371E-03	0.2689E-02
125.2	-0.4395E-04	0.4434E-03	0.3483E-03	-0.1966E-02	0.1701E-02	0.1180E-02	0.1875E-02	0.2266E-02	0.7149E-03	0.2812E-02
127.7	-0.4437E-04	0.4739E-03	0.3771E-03	-0.2052E-02	0.1771E-02	0.1241E-02	0.1857E-02	0.2297E-02	0.7720E-03	0.2921E-02
130.1	-0.4571E-04	0.5178E-03	0.4302E-03	-0.2122E-02	0.1858E-02	0.1340E-02	0.1955E-02	0.2373E-02	0.8329E-03	0.3027E-02
132.6	-0.4589E-04	0.5340E-03	0.4460E-03	-0.2196E-02	0.1885E-02	0.1374E-02	0.1996E-02	0.2407E-02	0.9570E-03	0.3113E-02
135.2	-0.4498E-04	0.5810E-03	0.4903E-03	-0.2283E-02	0.1924E-02	0.1450E-02	0.2068E-02	0.2487E-02	0.9804E-03	0.3206E-02
137.7	-0.4705E-04	0.6222E-03	0.5321E-03	-0.2372E-02	0.1974E-02	0.1544E-02	0.2133E-02	0.2567E-02	0.1083E-02	0.3324E-02
139.8	-0.4951E-04	0.6720E-03	0.5903E-03	-0.2464E-02	0.2078E-02	0.1653E-02	0.2206E-02	0.2602E-02	0.1258E-02	0.3437E-02
140.3	-0.5021E-04	0.7009E-03	0.6368E-03	-0.2556E-02	0.2135E-02	0.1724E-02	0.2258E-02	0.2619E-02	0.1315E-02	0.3555E-02
141.8	-0.5141E-04	0.7411E-03	0.7018E-03	-0.2646E-02	0.2246E-02	0.1817E-02	0.2342E-02	0.2649E-02	0.1421E-02	0.3783E-02
142.6	-0.4432E-04	0.7616E-03	0.7382E-03	-0.2741E-02	0.2328E-02	0.1884E-02	0.2430E-02	0.2685E-02	0.1468E-02	0.3904E-02
143.4	-0.3554E-04	0.7860E-03	0.7964E-03	-0.2827E-02	0.2409E-02	0.1981E-02	0.2527E-02	0.2725E-02	0.1539E-02	0.4014E-02
145.7	-0.2970E-04	0.8119E-03	0.8631E-03	-0.2921E-02	0.2489E-02	0.2058E-02	0.2540E-02	0.2750E-02	0.1602E-02	0.4130E-02
147.1	-0.2143E-04	0.8304E-03	0.9682E-03	-0.3006E-02	0.2653E-02	0.2138E-02	0.2583E-02	0.2743E-02	0.1676E-02	0.4236E-02
147.8	-0.1179E-04	0.8293E-03	0.1038E-02	-0.3095E-02	0.2729E-02	0.2138E-02	0.2576E-02	0.2741E-02	0.1747E-02	0.4349E-02
148.4	0.3215E-04	0.8261E-03	0.1094E-02	-0.3161E-02	0.2800E-02	0.2252E-02	0.2610E-02	0.2813E-02	0.1855E-02	0.4430E-02
148.8	0.3951E-04	0.8189E-03	0.1147E-02	-0.3242E-02	0.2812E-02	0.2318E-02	0.3307E-02	0.4895E-02	0.1942E-02	0.4529E-02
135.4	0.3227E-04	0.7080E-03	0.1068E-02	-0.2473E-02	0.2570E-02	0.2180E-02	0.3073E-02	0.6619E-02	0.1866E-02	0.3612E-02
149.2	0.4115E-04	0.7752E-03	0.1143E-02	-0.2563E-02	0.2804E-02	0.2292E-02	0.4969E-02	0.8744E-02	0.1990E-02	0.3728E-02
153.3	0.6015E-04	0.7844E-03	0.1225E-02	-0.2745E-02	0.2406E-02	0.2433E-02	0.7740E-02	0.1005E-01	0.2080E-02	0.3963E-02
153.5	0.7507E-04	0.7742E-03	0.1245E-02	-0.2842E-02	0.2851E-02	0.2433E-02	0.8642E-02	0.1024E-01	0.2108E-02	0.4089E-02
154.4	0.8663E-04	0.7697E-03	0.1279E-02	-0.2941E-02	0.2488E-02	0.2488E-02	0.9457E-02	0.1075E-01	0.2122E-02	0.4216E-02
156.3	0.8419E-04	0.7821E-03	0.1314E-02	-0.3033E-02	0.2851E-02	0.2756E-02	0.1063E-01	0.1110E-01	0.2184E-02	0.4320E-02
157.4	0.1048E-03	0.7824E-03	0.1371E-02	-0.3116E-02	0.8923	0.2772E-02	0.1183E-01	0.1135E-01	0.2201E-02	0.4423E-02
158.3	0.1520E-03	0.7834E-03	0.1408E-02	-0.3186E-02	0.8924	0.2814E-02	0.1082E-01	0.1165E-01	0.2341E-02	0.4517E-02
149.6	0.2320E-03	0.7617E-03	0.1395E-02	-0.3265E-02	0.8924	0.2766E-02	0.1047E-01	0.1056E-01	0.2327E-02	0.4620E-02
143.1	0.2575E-03	0.7558E-03	0.1384E-02	-0.3348E-02	0.8924	0.2694E-02	0.1028E-01	0.1010E-01	0.2311E-02	0.4725E-02

## ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	91	92	93	94	95	96	97	98	99	100
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.1810E-06	0.4770E-06	0.6579E-07	0.3618E-06	0.3947E-06	0.5592E-06	0.6580E-07	0.4934E-07	0.6579E-07	0.1480E-06
9.937	0.2584E-04	0.3451E-04	0.2868E-04	0.1238E-04	0.1727E-05	0.1617E-04	0.2220E-05	0.2507E-04	0.4898E-04	0.3627E-04
19.92	0.5914E-04	0.9164E-04	0.7187E-04	0.3107E-04	0.4457E-05	0.3447E-04	0.3355E-05	0.5082E-04	0.1156E-03	0.7595E-04
30.01	0.1070E-03	0.2069E-03	0.1705E-03	0.6383E-04	0.8470E-05	0.5541E-04	0.6957E-05	0.8926E-04	0.2309E-03	0.1558E-03
40.00	0.1724E-03	0.3409E-03	0.2998E-03	0.8659E-04	0.9835E-05	0.8464E-04	0.1844E-04	0.1512E-03	0.3667E-03	0.3155E-03
50.03	0.2811E-03	0.4980E-03	0.4585E-03	0.1433E-03	0.8141E-05	0.1163E-03	0.4508E-04	0.2493E-03	0.5573E-03	0.5959E-03
60.04	0.3986E-03	0.6521E-03	0.6183E-03	0.1493E-03	0.4983E-05	0.1487E-03	0.7123E-04	0.3483E-03	0.7507E-03	0.8510E-03
70.14	0.5292E-03	0.8242E-03	0.7929E-03	0.1971E-03	0.1480E-06	0.1817E-03	0.1032E-03	0.4558E-03	0.9539E-03	0.1133E-02
80.13	0.6748E-03	0.1024E-02	0.9768E-03	0.2427E-03	0.3355E-05	0.2115E-03	0.1554E-03	0.6049E-03	0.1183E-02	0.1473E-02
85.05	0.7633E-03	0.1160E-02	0.1088E-02	0.2816E-03	0.1396E-04	0.2228E-03	0.2067E-03	0.7243E-03	0.1325E-02	0.1743E-02
89.99	0.8487E-03	0.1315E-02	0.1180E-02	0.3120E-03	0.2166E-04	0.2309E-03	0.2812E-03	0.9184E-03	0.1475E-02	0.2047E-02
95.10	0.9480E-03	0.1477E-02	0.1290E-02	0.3490E-03	0.2868E-04	0.2436E-03	0.3422E-03	0.1087E-02	0.1622E-02	0.2362E-02
100.1	0.1065E-02	0.1661E-02	0.1407E-02	0.3808E-03	0.3401E-04	0.2547E-03	0.4302E-03	0.1252E-02	0.1774E-02	0.2739E-02
102.5	0.1123E-02	0.1763E-02	0.1458E-02	0.4048E-03	0.4048E-04	0.2624E-03	0.4792E-03	0.1335E-02	0.1843E-02	0.2874E-02
105.0	0.1161E-02	0.1828E-02	0.1527E-02	0.4224E-03	0.3659E-04	0.2655E-03	0.5198E-03	0.1406E-02	0.1906E-02	0.3022E-02
107.6	0.1218E-02	0.1912E-02	0.1594E-02	0.4474E-03	0.1645E-04	0.2806E-03	0.5776E-03	0.1498E-02	0.1973E-02	0.3122E-02
110.1	0.1277E-02	0.2019E-02	0.1659E-02	0.4739E-03	0.6872E-04	0.2745E-03	0.6689E-03	0.1610E-02	0.2044E-02	0.3254E-02
112.5	0.1348E-02	0.2160E-02	0.1761E-02	0.5102E-03	0.1025E-03	0.2857E-03	0.7709E-03	0.1723E-02	0.2117E-02	0.3363E-02
115.1	0.1387E-02	0.2257E-02	0.1844E-02	0.5351E-03	0.1196E-03	0.2905E-03	0.8707E-03	0.1818E-02	0.2173E-02	0.3405E-02
117.5	0.1436E-02	0.2381E-02	0.1949E-02	0.5706E-03	0.1322E-03	0.2984E-03	0.9757E-03	0.1934E-02	0.2227E-02	0.3398E-02
120.2	0.1483E-02	0.2495E-02	0.2109E-02	0.6674E-03	0.1483E-04	0.3022E-03	0.1232E-02	0.2035E-02	0.2284E-02	0.3406E-02
122.5	0.1523E-02	0.2586E-02	0.2325E-02	0.7350E-03	0.6353E-04	0.3080E-03	0.1395E-02	0.2140E-02	0.2341E-02	0.3389E-02
125.2	0.1525E-02	0.2642E-02	0.2477E-02	0.8030E-03	0.1599E-04	0.3117E-03	0.1439E-02	0.2299E-02	0.2434E-02	0.3425E-02
127.7	0.1543E-02	0.2743E-02	0.2520E-02	0.9603E-03	0.2682E-04	0.3134E-03	0.1650E-02	0.2437E-02	0.2482E-02	0.3399E-02
130.1	0.1595E-02	0.2847E-02	0.2597E-02	0.9603E-03	0.4118E-04	0.3175E-03	0.1701E-02	0.2494E-02	0.2523E-02	0.3405E-02
132.6	0.1623E-02	0.2881E-02	0.2759E-02	0.9913E-03	0.4118E-04	0.3175E-03	0.1816E-02	0.2553E-02	0.2527E-02	0.3465E-02
135.2	0.1632E-02	0.2907E-02	0.2732E-02	0.1102E-02	0.6156E-04	0.3196E-03	0.1939E-02	0.2612E-02	0.2577E-02	0.3438E-02
137.7	0.1640E-02	0.2963E-02	0.2741E-02	0.1228E-02	0.7738E-04	0.3229E-03	0.1939E-02	0.2643E-02	0.2548E-02	0.3424E-02
139.8	0.1643E-02	0.2958E-02	0.1065E-01	0.1379E-02	0.5238E-04	0.3255E-03	0.2051E-02	0.2657E-02	0.2548E-02	0.3480E-02
140.3	0.1639E-02	0.2992E-02	0.1028E-01	0.1489E-02	0.1118E-04	0.3288E-03	0.2103E-02	0.2702E-02	0.2547E-02	0.3531E-02
141.8	0.1642E-02	0.4398E-02	0.9586E-02	0.1655E-02	0.2132E-04	0.3265E-03	0.2181E-02	0.2725E-02	0.2551E-02	0.3556E-02
142.6	0.1655E-02	0.6838E-02	0.9523E-02	0.1767E-02	0.3850E-04	0.3316E-03	0.2219E-02	0.2759E-02	0.2548E-02	0.3583E-02
143.4	0.1692E-02	0.1314E-01	0.9550E-02	0.1936E-02	0.6238E-04	0.3324E-03	0.2270E-02	0.2796E-02	0.2555E-02	0.3613E-02
145.7	0.1710E-02	0.1932E-01	0.9561E-02	0.2071E-02	0.7797E-04	0.3354E-03	0.2318E-02	0.2859E-02	0.2555E-02	0.3735E-02
147.1	0.1719E-02	0.2196E-01	0.9541E-02	0.2263E-02	0.8117E-04	0.3372E-03	0.2366E-02	0.2859E-02	0.2556E-02	0.3841E-02
147.8	0.1741E-02	0.2356E-01	0.9620E-02	0.2434E-02	0.1020E-03	0.3380E-03	0.2410E-02	0.2896E-02	0.2555E-02	0.3963E-02
148.4	0.1754E-02	0.2274E-01	0.9220E-02	0.2839E-02	0.1968E-03	0.3336E-03	0.2435E-02	0.2913E-02	0.2555E-02	0.4064E-02
149.8	0.1751E-02	0.2268E-01	0.9142E-02	0.2990E-02	0.2114E-03	0.3353E-03	0.2473E-02	0.2944E-02	0.2558E-02	0.4064E-02
135.4	0.1619E-02	0.2166E-01	0.8057E-02	0.3001E-02	0.2049E-03	0.3162E-03	0.2317E-02	0.2907E-02	0.2520E-02	0.3699E-02
149.2	0.1772E-02	0.2128E-01	0.8192E-02	0.3118E-02	0.1967E-03	0.3358E-03	0.2498E-02	0.2907E-02	0.2520E-02	0.4246E-02
153.3	0.1795E-02	0.2061E-01	0.8174E-02	0.3599E-02	0.2352E-03	0.3220E-03	0.2510E-02	0.2981E-02	0.2549E-02	0.4658E-02
153.5	0.1799E-02	0.2035E-01	0.8136E-02	0.3722E-02	0.2782E-03	0.3156E-03	0.2510E-02	0.2991E-02	0.2554E-02	0.4698E-02
154.4	0.1814E-02	0.2014E-01	0.8142E-02	0.3830E-02	0.3142E-03	0.3114E-03	0.2524E-02	0.3004E-02	0.2553E-02	0.4815E-02
156.3	0.1837E-02	0.2018E-01	0.8078E-02	0.4132E-02	0.4528E-03	0.2952E-03	0.2577E-02	0.3022E-02	0.2549E-02	0.5716E-02
157.4	0.1857E-02	0.1908E-01	0.8119E-02	0.4404E-02	0.5693E-03	0.2806E-03	0.2602E-02	0.3032E-02	0.2542E-02	0.8470E-02
158.3	0.1942E-02	0.1839E-01	0.8510E-02	0.7417E-02	0.7922E-03	0.2178E-03	0.2703E-02	0.3093E-02	0.2502E-02	0.1747E-01
149.6	0.1867E-02	0.1779E-01	0.8594E-02	0.8813E-02	0.9308E-03	0.1806E-03	0.2628E-02	0.2941E-02	0.2350E-02	0.1743E-01
143.1	0.1794E-02	0.1765E-01	0.8451E-02	0.8472E-02	0.9640E-03	0.1621E-03	0.2559E-02	0.2773E-02	0.2194E-02	0.1722E-01

ELECTRONICALLY RECORDED DATA - TEST G

CHANNEL NUMBER

LOAD

(PSI)	101	102	103	104	105	106	107	108	109	110
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.3125E-06	-0.7401E-06	0.2961E-06	-0.1809E-06	-0.4930E-07	0.8223E-07	0.6085E-06	0.6579E-07	0.1151E-06	-0.1809E-06
9.937	-0.4687E-05	-0.3487E-05	0.7285E-05	0.3036E-04	0.5345E-04	-0.8125E-05	-0.1038E-04	-0.5049E-05	0.1686E-04	0.1983E-04
19.92	-0.1110E-04	-0.7220E-05	0.1446E-04	0.6391E-04	0.1123E-03	-0.1821E-04	-0.2337E-04	-0.9950E-05	0.4156E-04	0.4615E-04
30.01	-0.1444E-04	-0.8355E-05	0.3077E-04	0.1189E-04	0.2039E-03	-0.2110E-04	-0.3646E-04	-0.1097E-04	0.8760E-04	0.8385E-04
40.00	-0.2378E-04	-0.1352E-04	0.5168E-04	0.2030E-03	0.3548E-03	-0.2567E-04	-0.5720E-04	0.4950E-05	0.1510E-03	0.1247E-03
50.03	-0.2975E-04	-0.1551E-04	0.9682E-04	0.3624E-03	0.6568E-03	-0.4363E-04	-0.8623E-04	0.4862E-04	0.2296E-03	0.1747E-03
60.04	-0.3631E-04	-0.1599E-04	0.1497E-03	0.5523E-03	0.1066E-02	-0.7197E-04	-0.1131E-03	0.8936E-04	0.3073E-03	0.2376E-03
70.14	-0.4159E-04	-0.1523E-04	0.1973E-03	0.7657E-03	0.1517E-02	-0.1002E-03	-0.1425E-03	0.3943E-03	0.5264E-03	0.3046E-03
80.13	-0.4572E-04	-0.9523E-05	0.2753E-03	0.1052E-02	0.2101E-02	-0.1371E-03	-0.1843E-03	0.1667E-03	0.2644E-03	0.4985E-03
85.05	-0.4576E-04	0.2944E-05	0.3324E-03	0.1283E-02	0.2427E-02	-0.1615E-03	-0.2012E-03	0.1858E-03	0.6343E-03	0.7179E-03
89.99	-0.4783E-04	0.2459E-04	0.3965E-03	0.1554E-02	0.3097E-02	-0.1932E-03	-0.2510E-03	0.2039E-03	0.8371E-03	0.8930E-03
95.10	-0.4829E-04	0.2987E-04	0.4233E-03	0.1800E-02	0.3738E-02	-0.2088E-03	-0.2861E-03	0.2217E-03	0.9798E-03	0.9735E-03
100.1	-0.5248E-04	0.2743E-04	0.4796E-03	0.2082E-02	0.4645E-02	-0.1880E-03	-0.3244E-03	0.2482E-03	0.1156E-02	0.1059E-02
102.5	-0.5544E-04	0.2182E-04	0.5054E-03	0.2214E-02	0.5053E-02	-0.1810E-03	-0.3394E-03	0.2604E-03	0.1235E-02	0.1062E-02
105.0	-0.5255E-04	0.7894E-05	0.5408E-03	0.2534E-02	0.5527E-02	-0.2037E-03	-0.3484E-03	0.2739E-03	0.1308E-02	0.1128E-02
107.6	-0.5006E-04	-0.1268E-04	0.5781E-03	0.2743E-02	0.6676E-02	-0.2132E-03	-0.3591E-03	0.2987E-03	0.1402E-02	0.9180
110.1	-0.4995E-04	-0.2222E-04	0.6058E-03	0.2743E-02	0.6746E-02	-0.2259E-03	-0.3591E-03	0.2987E-03	0.1506E-02	0.9183
112.5	-0.4954E-04	-0.3209E-04	0.6258E-03	0.2975E-02	0.7343E-02	-0.2182E-03	-0.3666E-03	0.3211E-03	0.1629E-02	0.9183
115.1	-0.4686E-04	-0.4155E-04	0.6557E-03	0.3221E-02	0.8127E-02	-0.2259E-03	-0.3841E-03	0.3382E-03	0.1732E-02	0.9183
117.5	-0.4704E-04	-0.5653E-04	0.6886E-03	0.3475E-02	0.9027E-02	-0.2334E-03	-0.4117E-03	0.3592E-03	0.1856E-02	0.9183
120.2	-0.4696E-04	-0.6816E-04	0.7170E-03	0.3753E-02	0.9990E-02	-0.2415E-03	-0.4342E-03	0.3802E-03	0.1960E-02	0.9183
122.5	-0.4681E-04	-0.8245E-04	0.7412E-03	0.4092E-02	0.1135E-01	-0.2496E-03	-0.4622E-03	0.4062E-03	0.2075E-02	0.9184
125.2	-0.4659E-04	-0.9126E-04	0.7749E-03	0.4387E-02	0.1259E-01	-0.2592E-03	-0.4900E-03	0.4246E-03	0.2121E-02	0.9184
127.7	-0.4733E-04	-0.1051E-03	0.8118E-03	0.4712E-02	0.1379E-01	-0.2675E-03	-0.5401E-03	0.4439E-03	0.2159E-02	0.9184
130.1	-0.5207E-04	-0.1527E-03	0.8637E-03	0.5429E-02	0.1637E-01	-0.2805E-03	-0.6751E-03	0.4864E-03	0.2183E-02	0.9184
132.6	-0.5824E-04	-0.1591E-03	0.9395E-03	0.5601E-02	0.1701E-01	-0.2862E-03	-0.7131E-03	0.5017E-03	0.2217E-02	0.9184
135.2	-0.5824E-04	-0.1753E-03	0.9306E-03	0.5933E-02	0.1835E-01	-0.2933E-03	-0.7624E-03	0.5295E-03	0.2165E-02	0.9183
137.7	-0.6199E-04	-0.1927E-03	0.9664E-03	0.6379E-02	0.1961E-01	-0.3031E-03	-0.8071E-03	0.5600E-03	0.2138E-02	0.9183
139.8	-0.6421E-04	-0.2066E-03	0.1016E-02	0.7271E-02	0.1989E-01	-0.3105E-03	-0.6917E-03	0.5942E-03	0.2232E-02	0.9183
140.3	-0.6679E-04	-0.2196E-03	0.1033E-02	0.7764E-02	0.1989E-01	-0.3176E-03	-0.6869E-03	0.6121E-03	0.2710E-02	0.9183
141.8	-0.7021E-04	-0.2336E-03	0.1057E-02	0.8320E-02	0.1999E-01	-0.3176E-03	-0.6925E-03	0.6459E-03	0.5470E-02	0.9183
142.6	-0.7704E-04	-0.2454E-03	0.1066E-02	0.8602E-02	0.2007E-01	-0.3211E-03	-0.6954E-03	0.6659E-03	0.6439E-02	0.9183
143.4	-0.8237E-04	-0.2596E-03	0.1081E-02	0.9018E-02	0.2013E-01	-0.3237E-03	-0.6871E-03	0.6890E-03	0.7218E-02	0.9183
145.7	-0.8786E-04	-0.2710E-03	0.1103E-02	0.9504E-02	0.2020E-01	-0.3293E-03	-0.6915E-03	0.7163E-03	0.8413E-02	0.9183
147.1	-0.9468E-04	-0.2911E-03	0.1127E-02	0.1018E-02	0.2038E-01	-0.3357E-03	-0.7605E-03	0.7511E-03	0.8713E-02	0.9183
147.8	-0.1001E-03	-0.2989E-03	0.1143E-02	0.1064E-01	0.2061E-01	-0.3345E-03	-0.7547E-03	0.7796E-03	0.8413E-02	0.9183
148.4	-0.1294E-03	-0.3148E-03	0.1176E-02	0.1107E-01	0.2090E-01	-0.3286E-03	-0.7445E-03	0.8007E-03	0.9141E-02	0.9180
149.8	-0.1534E-03	-0.3082E-03	0.1176E-02	0.1150E-01	0.2084E-01	-0.3308E-03	-0.7502E-03	0.8212E-03	0.8871E-02	0.9180
149.2	-0.1533E-03	-0.3425E-03	0.1217E-02	0.1236E-01	0.2160E-01	-0.3459E-03	-0.7427E-03	0.8332E-03	0.9407E-02	0.9180
153.3	-0.1611E-03	-0.3093E-03	0.1344E-02	0.1342E-01	0.2274E-01	-0.3542E-03	-0.7287E-03	0.8933E-03	0.1006E-01	0.9177
153.5	-0.1758E-03	-0.2944E-03	0.1362E-02	0.1349E-01	0.2315E-01	-0.3525E-03	-0.7104E-03	0.9130E-03	0.1026E-01	0.9177
154.4	-0.1802E-03	-0.2824E-03	0.1365E-02	0.1365E-01	0.2361E-01	-0.3556E-03	-0.7049E-03	0.9282E-03	0.1049E-01	0.9177
156.3	-0.1638E-03	-0.2426E-03	0.1502E-02	0.1415E-01	0.2430E-01	-0.3605E-03	-0.6939E-03	0.9828E-03	0.1107E-01	0.9177
157.4	-0.1721E-03	-0.2430E-03	0.1564E-02	0.1463E-01	0.2468E-01	-0.3657E-03	-0.6786E-03	0.1021E-02	0.1147E-01	0.9177
158.3	-0.2131E-03	-0.2254E-03	0.1746E-02	0.1619E-01	0.2516E-01	-0.3908E-03	-0.5368E-03	0.1170E-02	0.1227E-01	0.9179
149.1	-0.2390E-03	-0.2280E-03	0.1705E-02	0.1607E-01	0.2459E-01	-0.3754E-03	-0.5164E-03	0.1127E-02	0.1211E-01	0.9180
143.1	-0.2485E-03	-0.2308E-03	0.1672E-02	0.1606E-01	0.2420E-01	-0.3645E-03	-0.5063E-03	0.1089E-02	0.1197E-01	0.9178

## ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	111	112	113	114	115	116	117	118	119	120
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.3454E-06	-0.3290E-07	-0.2303E-06	-0.6414E-06	-0.1974E-06	-0.6250E-06	-0.6579E-06	-0.4934E-06	-0.2960E-06	-0.2631E-06
9.937	0.4062E-04	0.4451E-04	0.4225E-04	0.2673E-04	0.3599E-04	-0.7253E-05	-0.6200E-05	0.2229E-04	0.3240E-04	0.1574E-04
19.92	0.8569E-04	0.9728E-04	0.1027E-03	0.6802E-04	0.8115E-04	-0.1668E-04	-0.1197E-04	0.5363E-04	0.7949E-04	0.4426E-04
30.01	0.1448E-03	0.1864E-03	0.2374E-03	0.1539E-03	0.1511E-03	-0.2816E-04	-0.1518E-04	0.1056E-03	0.1563E-03	0.9940E-04
40.00	0.2135E-03	0.3832E-03	0.4558E-03	0.2525E-03	0.2525E-03	-0.4095E-04	-0.1918E-04	0.1632E-03	0.2053E-03	0.1605E-04
50.03	0.3008E-03	0.7695E-03	0.7283E-03	0.3686E-03	0.4159E-03	-0.5380E-04	-0.2108E-04	0.2338E-03	0.3648E-03	0.2374E-03
60.04	0.3929E-03	0.1157E-02	0.9827E-03	0.4693E-03	0.6072E-03	-0.6906E-04	-0.2446E-04	0.3055E-03	0.4774E-03	0.3200E-03
70.14	0.4960E-03	0.1563E-02	0.1256E-02	0.5793E-03	0.8037E-03	-0.8330E-04	-0.2640E-04	0.3922E-03	0.5959E-03	0.4089E-03
80.13	0.6254E-03	0.2039E-02	0.1539E-02	0.7124E-03	0.1040E-02	-0.9911E-04	-0.2626E-04	0.5029E-03	0.7286E-03	0.5145E-03
85.05	0.7415E-03	0.2305E-02	0.1700E-02	0.8072E-03	0.1164E-02	-0.1052E-03	-0.2280E-04	0.5881E-03	0.8103E-03	0.5849E-03
89.99	0.8983E-03	0.2608E-02	0.1864E-02	0.8660E-03	0.1367E-02	-0.1113E-03	-0.1979E-04	0.6842E-03	0.8819E-03	0.6550E-03
95.10	0.1068E-02	0.2869E-02	0.2010E-02	0.9524E-03	0.1585E-02	-0.1182E-03	-0.1789E-04	0.7735E-03	0.9563E-03	0.7313E-03
100.1	0.1543E-02	0.3193E-02	0.2183E-02	0.1089E-02	0.1843E-02	-0.1265E-03	-0.1388E-03	0.8643E-03	0.1047E-02	0.8491E-03
102.5	0.1673E-02	0.332E-02	0.2259E-02	0.1159E-02	0.1948E-02	-0.1289E-03	-0.1201E-04	0.9015E-03	0.1087E-02	0.8997E-03
105.0	0.1715E-02	0.3383E-02	0.2338E-02	0.1207E-02	0.2062E-02	-0.1319E-03	-0.5888E-05	0.9294E-03	0.1208E-02	0.1000E-02
107.6	0.1865E-02	0.3484E-02	0.2419E-02	0.1347E-02	0.2188E-02	-0.1345E-03	-0.2401E-05	0.9808E-03	0.1280E-02	0.1076E-02
110.1	0.1951E-02	0.3506E-02	0.2497E-02	0.1434E-02	0.2316E-02	-0.1382E-03	-0.2007E-05	0.1013E-02	0.1347E-02	0.1145E-02
112.5	0.2062E-02	0.3591E-02	0.2574E-02	0.1494E-02	0.2461E-02	-0.1426E-03	-0.6283E-05	0.1028E-02	0.1396E-02	0.1199E-02
115.1	0.2127E-02	0.3576E-02	0.2649E-02	0.1512E-02	0.2481E-02	-0.1446E-03	-0.1015E-04	0.1048E-02	0.1445E-02	0.1261E-02
117.5	0.2199E-02	0.3662E-02	0.2726E-02	0.1568E-02	0.2539E-02	-0.1492E-03	-0.1169E-04	0.1059E-02	0.1495E-02	0.1328E-02
120.2	0.2269E-02	0.4580E-02	0.2803E-02	0.1696E-02	0.2539E-02	-0.1506E-03	-0.1525E-04	0.1069E-02	0.1546E-02	0.1384E-02
122.5	0.2366E-02	0.6278E-02	0.2879E-02	0.1792E-02	0.2510E-02	-0.1506E-03	-0.1895E-04	0.1078E-02	0.1595E-02	0.1439E-02
125.2	0.2428E-02	0.8874E-02	0.2954E-02	0.1862E-02	0.2117E-02	-0.1542E-03	-0.2309E-04	0.1104E-02	0.1659E-02	0.1486E-02
127.7	0.2492E-02	0.1071E-01	0.3021E-02	0.1944E-02	0.2089E-02	-0.1563E-03	-0.2951E-04	0.1144E-02	0.1725E-02	0.1563E-02
130.1	0.2600E-02	0.1329E-01	0.3134E-02	0.2120E-02	0.2135E-02	-0.1580E-03	-0.3018E-04	0.1160E-02	0.1753E-02	0.1592E-02
132.6	0.2642E-02	0.1406E-01	0.3201E-02	0.2173E-02	0.2150E-02	-0.1601E-03	-0.3069E-04	0.1198E-02	0.1799E-02	0.1657E-02
135.2	0.2697E-02	0.1483E-01	0.3295E-02	0.2283E-02	0.2170E-02	-0.1615E-03	-0.3174E-04	0.1227E-02	0.1839E-02	0.1722E-02
137.7	0.2757E-02	0.1543E-01	0.3394E-02	0.2415E-02	0.2206E-02	-0.1620E-03	-0.3261E-04	0.1251E-02	0.1866E-02	0.1786E-02
140.3	0.2876E-02	0.1577E-01	0.3671E-02	0.2866E-02	0.2200E-02	-0.1615E-03	-0.3237E-04	0.1293E-02	0.1870E-02	0.1864E-02
141.8	0.2970E-02	0.1586E-01	0.3814E-02	0.3005E-02	0.2194E-02	-0.1616E-03	-0.3237E-04	0.1293E-02	0.1951E-02	0.1896E-02
142.6	0.2938E-02	0.1582E-01	0.3814E-02	0.3005E-02	0.2207E-02	-0.1628E-03	-0.2834E-04	0.1295E-02	0.1951E-02	0.1896E-02
143.4	0.3006E-02	0.1590E-01	0.3971E-02	0.3137E-02	0.2200E-02	-0.1624E-03	-0.2834E-04	0.1293E-02	0.1994E-02	0.1910E-02
145.7	0.3039E-02	0.1595E-01	0.4193E-02	0.3219E-02	0.2214E-02	-0.1638E-03	-0.2428E-04	0.1308E-02	0.2034E-02	0.1918E-02
147.1	0.3080E-02	0.1600E-01	0.4510E-02	0.3315E-02	0.2149E-02	-0.1659E-03	-0.2284E-04	0.1342E-02	0.2102E-02	0.1925E-02
147.8	0.3105E-02	0.1603E-01	0.4843E-02	0.3372E-02	0.2124E-02	-0.1628E-03	-0.8421E-05	0.1408E-02	0.2205E-02	0.1883E-02
148.4	0.3112E-02	0.1605E-01	0.5278E-02	0.3416E-02	0.2127E-02	-0.1647E-03	-0.8092E-05	0.1472E-02	0.2259E-02	0.1900E-02
149.8	0.3140E-02	0.1608E-01	0.5930E-02	0.3475E-02	0.1888E-02	-0.1507E-03	-0.2470E-04	0.1345E-02	0.2100E-02	0.1704E-02
135.4	0.2876E-02	0.1561E-01	0.5804E-02	0.3265E-02	0.2092E-02	-0.1676E-03	-0.1762E-04	0.1497E-02	0.2271E-02	0.1892E-02
149.2	0.3156E-02	0.1618E-01	0.6841E-02	0.3520E-02	0.2119E-02	-0.1719E-03	-0.1457E-04	0.1637E-02	0.2365E-02	0.1983E-02
153.3	0.3221E-02	0.1629E-01	0.9391E-02	0.3683E-02	0.2119E-02	-0.1719E-03	-0.2915E-04	0.1743E-02	0.2411E-02	0.2023E-02
153.5	0.3219E-02	0.1633E-01	0.1047E-01	0.3756E-02	0.2124E-02	-0.1721E-03	-0.2774E-04	0.1761E-02	0.2441E-02	0.2024E-02
154.4	0.3247E-02	0.1641E-01	0.1147E-01	0.3822E-02	0.2149E-02	-0.1640E-03	-0.1484E-04	0.1836E-02	0.2544E-02	0.2075E-02
156.3	0.3324E-02	0.1676E-01	0.1360E-01	0.3874E-02	0.2156E-02	-0.1638E-03	-0.1628E-04	0.1920E-02	0.2626E-02	0.2168E-02
157.4	0.3384E-02	0.1721E-01	0.1459E-01	0.3874E-02	0.2156E-02	-0.1638E-03	-0.1628E-04	0.2346E-02	0.2748E-02	0.2422E-02
158.3	0.3480E-02	0.1975E-01	0.1535E-01	0.4107E-02	0.2181E-02	-0.1545E-03	-0.1729E-04	0.2504E-02	0.2517E-02	0.2321E-02
149.6	0.3295E-02	0.1953E-01	0.1517E-01	0.4002E-02	0.1985E-02	-0.1225E-03	-0.3619E-04	0.2504E-02	0.2517E-02	0.2321E-02
143.1	0.3102E-02	0.1940E-01	0.1499E-01	0.3874E-02	0.1808E-02	-0.1086E-03	-0.4169E-04	0.2291E-02	0.2124E-02	0.2048E-02

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	121	122	123	124	125	126	127	128	129	130
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.3947E-06	0.1316E-06	0.3618E-06	0.2795E-06	0.1973E-06	0.1325E-06	0.2139E-06	0.1316E-06	0.9474E-13	0.0
9.937	0.1600E-04	0.1041E-04	0.3803E-04	0.4957E-04	0.3587E-04	0.2056E-04	0.1280E-04	0.7335E-05	0.7960E-05	0.4712E-06
19.92	0.4067E-04	0.2378E-04	0.1020E-03	0.1324E-03	0.8390E-04	0.4503E-04	0.2337E-04	0.1684E-04	0.1868E-04	0.2163E-04
30.01	0.9325E-04	0.4536E-04	0.2392E-03	0.2953E-03	0.1896E-03	0.1219E-03	0.4490E-04	0.3275E-04	0.4138E-04	0.4766E-04
40.00	0.1581E-03	0.6666E-04	0.3917E-03	0.4764E-03	0.3255E-03	0.2675E-03	0.117E-03	0.5123E-04	0.7534E-04	0.7279E-04
50.03	0.2535E-03	0.9875E-04	0.5565E-03	0.6787E-03	0.4833E-03	0.4491E-03	0.2305E-03	0.6699E-04	0.1190E-03	0.1053E-03
60.04	0.3565E-03	0.1423E-03	0.7114E-03	0.8771E-03	0.6390E-03	0.6360E-03	0.3607E-03	0.8679E-04	0.1661E-03	0.1461E-03
70.14	0.4675E-03	0.1947E-03	0.8720E-03	0.1075E-02	0.8028E-03	0.8280E-03	0.4966E-03	0.8679E-04	0.2162E-03	0.1904E-03
80.13	0.5922E-03	0.2549E-03	0.1047E-02	0.1266E-02	0.9843E-03	0.1040E-02	0.6424E-03	0.1763E-03	0.2815E-03	0.2586E-03
85.05	0.6712E-03	0.2941E-03	0.1159E-02	0.1377E-02	0.1097E-02	0.1176E-02	0.7375E-03	0.2163E-03	0.3323E-03	0.3015E-03
89.99	0.7431E-03	0.3334E-03	0.1276E-02	0.1483E-02	0.1211E-02	0.1319E-02	0.8296E-03	0.2557E-03	0.4068E-03	0.3544E-03
95.10	0.8122E-03	0.3903E-03	0.1416E-02	0.1586E-02	0.1325E-02	0.1456E-02	0.9345E-03	0.2936E-03	0.4869E-03	0.4036E-03
100.1	0.9109E-03	0.4703E-03	0.1582E-02	0.1696E-02	0.1460E-02	0.1624E-02	0.1091E-02	0.3661E-03	0.6126E-03	0.5019E-03
102.5	0.9491E-03	0.5244E-03	0.1662E-02	0.1750E-02	0.1522E-02	0.1700E-02	0.1164E-02	0.4013E-03	0.6704E-03	0.5408E-03
105.0	0.9901E-03	0.5522E-03	0.1721E-02	0.1791E-02	0.1572E-02	0.1776E-02	0.1223E-02	0.4218E-03	0.7233E-03	0.5754E-03
107.6	0.1042E-02	0.5958E-03	0.1797E-02	0.1851E-02	0.1648E-02	0.1922E-02	0.1304E-02	0.4838E-03	0.8506E-03	0.6274E-03
110.1	0.1102E-02	0.6410E-03	0.1885E-02	0.1948E-02	0.1729E-02	0.2132E-02	0.1392E-02	0.4838E-03	0.8506E-03	0.6886E-03
112.5	0.1159E-02	0.7036E-03	0.1987E-02	0.2046E-02	0.1828E-02	0.2301E-02	0.1497E-02	0.5200E-03	0.9048E-03	0.7439E-03
115.1	0.1208E-02	0.7444E-03	0.2065E-02	0.2137E-02	0.1912E-02	0.2449E-02	0.1622E-02	0.5534E-03	0.9048E-03	0.7939E-03
117.5	0.1259E-02	0.7961E-03	0.2208E-02	0.2289E-02	0.1988E-02	0.2641E-02	0.1768E-02	0.5950E-03	0.1014E-02	0.8470E-03
120.2	0.1308E-02	0.8579E-03	0.2360E-02	0.2575E-02	0.2067E-02	0.2970E-02	0.1947E-02	0.6505E-03	0.1084E-02	0.9106E-03
122.5	0.1354E-02	0.9338E-03	0.2550E-02	0.3000E-02	0.2179E-02	0.3404E-02	0.2116E-02	0.7045E-03	0.1150E-02	0.9645E-03
125.2	0.1405E-02	0.9917E-03	0.2752E-02	0.3684E-02	0.2254E-02	0.3958E-02	0.2254E-02	0.7692E-03	0.1231E-02	0.1031E-02
127.7	0.1469E-02	0.1068E-02	0.2952E-02	0.4282E-02	0.254E-02	0.5116E-02	0.2452E-02	0.8453E-03	0.1293E-02	0.1048E-02
130.1	0.1571E-02	0.1204E-02	0.3412E-02	0.4898E-02	0.2310E-02	0.1361E-01	0.3169E-02	0.9905E-03	0.1369E-02	0.1120E-02
132.6	0.1607E-02	0.1228E-02	0.3500E-02	0.5793E-02	0.2342E-02	0.1430E-01	0.3251E-02	0.1020E-02	0.1400E-02	0.1154E-02
135.2	0.1670E-02	0.1287E-02	0.3718E-02	0.6269E-02	0.2360E-02	0.1614E-01	0.3578E-02	0.1106E-02	0.1467E-02	0.1241E-02
137.7	0.1714E-02	0.1362E-02	0.3870E-02	0.6788E-02	0.2391E-02	0.1798E-01	0.4084E-02	0.1216E-02	0.1560E-02	0.1374E-02
139.8	0.1742E-02	0.1439E-02	0.3987E-02	0.7187E-02	0.2442E-02	0.2171E-01	0.4866E-02	0.1356E-02	0.1665E-02	0.1499E-02
140.3	0.1752E-02	0.1487E-02	0.4121E-02	0.7534E-02	0.2481E-02	0.2399E-01	0.5505E-02	0.1475E-02	0.1730E-02	0.1577E-02
141.8	0.1799E-02	0.1571E-02	0.4417E-02	0.7843E-02	0.2539E-02	0.2508E-01	0.6642E-02	0.1694E-02	0.1823E-02	0.1721E-02
142.6	0.1835E-02	0.1655E-02	0.4901E-02	0.8283E-02	0.2573E-02	0.2536E-01	0.7605E-02	0.1856E-02	0.1909E-02	0.1833E-02
143.4	0.1883E-02	0.1748E-02	0.6169E-02	0.9144E-02	0.2620E-02	0.2595E-01	0.9288E-02	0.2014E-02	0.1994E-02	0.1916E-02
145.7	0.1964E-02	0.1837E-02	0.7644E-02	0.1032E-01	0.2674E-02	0.2627E-01	0.1268E-01	0.2165E-02	0.2091E-02	0.1970E-02
147.1	0.2110E-02	0.1962E-02	0.9945E-02	0.1324E-01	0.2752E-02	0.2634E-01	0.1599E-01	0.2348E-02	0.2387E-02	0.2018E-02
147.8	0.2194E-02	0.2066E-02	0.1141E-01	0.1466E-01	0.2797E-02	0.2638E-01	0.1854E-01	0.2469E-02	0.2347E-02	0.2028E-02
148.4	0.2193E-02	0.2130E-02	0.1277E-01	0.1633E-01	0.2833E-02	0.2308E-01	0.1433E-01	0.2512E-02	0.2415E-02	0.2024E-02
149.8	0.2243E-02	0.2216E-02	0.1466E-01	0.1836E-01	0.2911E-02	0.2263E-01	0.1342E-01	0.2540E-02	0.2514E-02	0.2046E-02
135.4	0.2034E-02	0.2099E-02	0.1038E-01	0.1230E-01	0.2789E-02	0.2124E-01	0.1289E-01	0.2366E-02	0.2357E-02	0.1920E-02
149.2	0.2220E-02	0.2203E-02	0.1015E-01	0.1323E-01	0.2998E-02	0.2136E-01	0.1286E-01	0.2473E-02	0.2454E-02	0.2000E-02
153.3	0.2364E-02	0.2347E-02	0.1013E-01	0.1314E-01	0.4073E-02	0.2132E-01	0.1313E-01	0.2538E-02	0.2642E-02	0.2056E-02
153.5	0.2375E-02	0.2415E-02	0.9588E-02	0.2313E-01	0.4923E-02	0.2126E-01	0.1322E-01	0.2568E-02	0.2694E-02	0.2089E-02
154.4	0.2355E-02	0.2464E-02	0.9275E-02	0.2313E-01	0.6139E-01	0.2122E-01	0.1329E-01	0.2568E-02	0.2694E-02	0.2091E-02
156.3	0.2374E-02	0.2528E-02	0.9309E-02	0.2318E-01	0.8137E-02	0.2122E-01	0.1347E-01	0.2603E-02	0.2828E-02	0.2105E-02
157.4	0.2305E-02	0.2528E-02	0.9309E-02	0.2318E-01	0.9709E-02	0.2118E-01	0.1338E-01	0.2578E-02	0.2772E-02	0.2094E-02
158.3	0.2318E-02	0.2497E-02	0.9107E-02	0.2319E-01	0.1337E-01	0.2054E-01	0.1324E-01	0.2568E-02	0.2703E-02	0.2099E-02
149.6	0.2233E-02	0.2420E-02	0.8851E-02	0.2308E-01	0.1329E-01	0.2031E-01	0.1312E-01	0.2521E-02	0.2662E-02	0.2063E-02
143.1	0.2236E-02	0.2378E-02	0.8666E-02	0.2312E-01	0.1301E-01	0.1987E-01	0.1322E-01	0.2518E-02	0.3035E-02	0.2058E-02

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	131	132	133	134	135	136	137	138	139	140
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.1974E-06	0.5099E-06	0.9868E-07	0.0	0.1809E-06	0.3619E-06	0.4770E-06	0.7894E-06	0.1645E-05	0.8881E-06
9.937	0.7071E-05	0.6151E-05	0.3298E-04	0.0	0.2878E-04	0.3189E-04	0.3291E-04	0.3796E-04	0.3921E-04	0.3316E-04
19.92	0.1799E-04	0.1349E-04	0.8133E-04	0.0	0.6705E-04	0.7373E-04	0.9026E-04	0.1061E-03	0.9965E-04	0.7079E-04
30.01	0.4236E-04	0.1919E-04	0.2108E-03	0.0	0.1310E-03	0.1513E-03	0.2409E-03	0.2390E-03	0.2340E-03	0.1204E-03
40.00	0.6531E-04	0.1479E-04	0.3413E-03	0.0	0.2355E-03	0.3048E-03	0.4646E-03	0.3818E-03	0.3907E-03	0.1911E-03
50.03	0.1005E-03	0.9704E-05	0.4836E-03	0.0	0.3721E-03	0.4964E-03	0.6789E-03	0.5344E-03	0.5633E-03	0.2778E-03
60.04	0.1400E-03	0.1335E-04	0.6234E-03	0.0	0.5125E-03	0.6864E-03	0.9127E-03	0.7336E-03	0.9067E-03	0.3936E-03
70.14	0.1864E-03	0.2220E-04	0.7660E-03	0.0	0.6603E-03	0.8845E-03	0.1157E-02	0.8394E-03	0.9067E-03	0.5391E-03
80.13	0.2546E-03	0.3947E-04	0.9349E-03	0.0	0.8255E-03	0.1092E-02	0.1402E-02	0.1011E-02	0.1091E-02	0.6998E-03
85.05	0.3079E-03	0.6625E-04	0.1045E-02	0.0	0.9324E-03	0.1209E-02	0.1524E-02	0.1098E-02	0.1189E-02	0.7996E-03
89.99	0.3609E-03	0.9108E-04	0.1155E-02	0.0	0.1035E-02	0.1320E-02	0.1679E-02	0.1197E-02	0.1313E-02	0.9157E-03
95.10	0.4168E-03	0.1283E-03	0.1273E-02	0.0	0.1141E-02	0.1439E-02	0.1856E-02	0.1299E-02	0.1437E-02	0.1037E-02
100.1	0.4908E-03	0.2022E-03	0.1405E-02	0.0	0.1261E-02	0.1580E-02	0.2138E-02	0.1420E-02	0.1571E-02	0.1160E-02
102.5	0.5216E-03	0.2359E-03	0.1464E-02	0.0	0.1316E-02	0.1636E-02	0.2258E-02	0.1476E-02	0.1629E-02	0.1200E-02
105.0	0.5584E-03	0.2566E-03	0.1510E-02	0.0	0.1359E-02	0.1680E-02	0.2369E-02	0.1536E-02	0.1692E-02	0.1278E-02
107.6	0.6075E-03	0.2896E-03	0.1580E-02	0.0	0.1415E-02	0.1733E-02	0.2419E-02	0.1620E-02	0.1766E-02	0.1351E-02
110.1	0.6824E-03	0.3275E-03	0.1664E-02	0.0	0.1477E-02	0.1761E-02	0.2396E-02	0.1722E-02	0.1840E-02	0.1443E-02
112.5	0.7432E-03	0.3674E-03	0.1759E-02	0.0	0.1552E-02	0.1823E-02	0.2404E-02	0.1827E-02	0.1919E-02	0.1520E-02
115.1	0.8102E-03	0.3971E-03	0.1844E-02	0.0	0.1599E-02	0.1846E-02	0.2391E-02	0.1966E-02	0.1993E-02	0.1640E-02
117.5	0.8749E-03	0.4326E-03	0.1937E-02	0.0	0.1662E-02	0.1898E-02	0.2351E-02	0.2140E-02	0.2067E-02	0.1742E-02
120.2	0.9524E-03	0.4726E-03	0.2059E-02	0.0	0.1737E-02	0.1945E-02	0.2345E-02	0.2383E-02	0.2145E-02	0.1839E-02
122.5	0.1029E-02	0.5121E-03	0.2204E-02	0.0	0.1824E-02	0.2012E-02	0.2421E-02	0.2623E-02	0.2224E-02	0.1947E-02
125.2	0.1109E-02	0.5647E-03	0.2327E-02	0.0	0.1898E-02	0.2078E-02	0.2616E-02	0.2974E-02	0.2304E-02	0.2086E-02
127.7	0.1179E-02	0.6205E-03	0.2482E-02	0.0	0.1944E-02	0.2160E-02	0.3282E-02	0.3349E-02	0.2395E-02	0.2222E-02
130.1	0.1314E-02	0.7242E-03	0.2714E-02	0.0	0.1992E-02	0.2318E-02	0.7723E-02	0.4161E-02	0.2527E-02	0.2513E-02
132.6	0.1353E-02	0.7465E-03	0.2753E-02	0.0	0.2027E-02	0.2350E-02	0.7735E-02	0.4329E-02	0.2585E-02	0.2629E-02
135.2	0.1461E-02	0.8135E-03	0.2836E-02	0.0	0.2053E-02	0.2343E-02	0.6021E-02	0.4847E-02	0.2684E-02	0.2852E-02
137.7	0.1578E-02	0.9038E-03	0.3052E-02	0.0	0.2105E-02	0.2319E-02	0.5766E-02	0.5514E-02	0.2684E-02	0.2852E-02
139.8	0.1753E-02	0.1039E-02	0.3945E-02	0.0	0.2212E-02	0.2299E-02	0.5856E-02	0.5835E-02	0.2790E-02	0.3103E-02
140.3	0.1849E-02	0.1156E-02	0.5942E-02	0.0	0.2339E-02	0.2304E-02	0.5856E-02	0.5835E-02	0.2897E-02	0.3385E-02
142.6	0.2031E-02	0.1379E-02	0.9317E-02	0.0	0.2501E-02	0.2319E-02	0.5776E-02	0.4967E-02	0.3029E-02	0.3570E-02
144.4	0.2237E-02	0.1736E-02	0.1168E-01	0.0	0.2601E-02	0.2344E-02	0.5821E-02	0.5111E-02	0.3070E-02	0.3809E-02
145.7	0.2431E-02	0.1901E-02	0.1425E-01	0.0	0.2740E-02	0.2385E-02	0.5785E-02	0.4057E-02	0.3120E-02	0.4148E-02
147.1	0.2611E-02	0.2025E-02	0.1464E-01	0.0	0.2834E-02	0.2425E-02	0.5677E-02	0.3988E-02	0.3184E-02	0.4377E-02
148.4	0.2704E-02	0.2050E-02	0.1470E-01	0.0	0.2890E-02	0.2482E-02	0.5764E-02	0.4087E-02	0.3245E-02	0.4677E-02
149.8	0.2764E-02	0.2086E-02	0.1185E-01	0.0	0.3021E-02	0.2599E-02	0.5829E-02	0.4119E-02	0.3285E-02	0.4873E-02
135.4	0.2596E-02	0.1963E-02	0.8869E-02	0.0	0.3485E-02	0.2759E-02	0.5832E-02	0.3876E-02	0.3320E-02	0.5112E-02
149.2	0.2749E-02	0.2082E-02	0.8797E-02	0.0	0.3378E-02	0.3483E-02	0.5807E-02	0.3885E-02	0.3373E-02	0.5321E-02
153.3	0.2831E-02	0.2105E-02	0.8660E-02	0.0	0.3051E-02	0.3263E-02	0.5462E-02	0.2778E-02	0.3159E-02	0.5012E-02
153.5	0.2845E-02	0.2100E-02	0.8594E-02	0.0	0.3432E-02	0.5489E-02	0.5474E-02	0.3163E-02	0.3597E-02	0.5560E-02
154.4	0.2844E-02	0.2121E-02	0.8567E-02	0.0	0.3286E-02	0.5079E-02	0.5296E-02	0.3219E-02	0.3626E-02	0.6133E-02
156.3	0.2880E-02	0.2104E-02	0.8562E-02	0.0	0.3172E-02	0.4926E-02	0.5226E-02	0.3248E-02	0.3667E-02	0.6268E-02
157.4	0.2946E-02	0.2104E-02	0.8551E-02	0.0	0.3324E-02	0.4801E-02	0.5196E-02	0.3336E-02	0.3764E-02	0.6647E-02
158.3	0.5559E-02	0.6053	0.8511E-02	0.0	0.3591E-02	0.4650E-02	0.5179E-02	0.3461E-02	0.3838E-02	0.6908E-02
149.6	0.7184E-02	0.9068	0.8610E-02	0.0	0.3366E-02	0.4956E-02	0.5276E-02	0.3455E-02	0.4060E-02	0.7518E-02
143.1	0.1151E-01	0.9072	0.8515E-02	0.0	0.3179E-02	0.4788E-02	0.5118E-02	0.2638E-02	0.3918E-02	0.7266E-02
					0.2977E-02	0.4717E-02	0.4784E-02	0.1974E-02	0.3822E-02	0.7136E-02

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER														
	141	142	143	144	145	146	147	148	149	150					
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.3618E-06	0.9704E-06	0.6414E-06	0.1036E-05	0.9226E-06	0.1217E-05	0.1480E-06	0.1054E-05	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9.937	0.7023E-05	0.8289E-05	0.5016E-05	0.1010E-04	0.5273E-06	0.1633E-04	0.1809E-06	0.1422E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
19.92	0.1395E-04	0.1717E-04	0.9144E-05	0.2485E-04	0.2109E-05	0.4513E-04	0.4441E-06	0.3264E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.01	0.2456E-04	0.2620E-04	0.9950E-05	0.5822E-04	0.7909E-05	0.9929E-04	0.7089E-05	0.4633E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40.00	0.3585E-04	0.3207E-04	0.3988E-04	0.9758E-04	0.1173E-04	0.1412E-03	0.3849E-05	0.5265E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50.03	0.6473E-04	0.3702E-04	0.1481E-03	0.1440E-03	0.1806E-04	0.1583E-03	0.7566E-06	0.5792E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60.04	0.9253E-04	0.4342E-04	0.2657E-03	0.1734E-03	0.2215E-04	0.1541E-03	0.8223E-07	0.5844E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70.14	0.1230E-03	0.5284E-04	0.3529E-03	0.1840E-03	0.3414E-04	0.1390E-03	0.1118E-05	0.7318E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80.13	0.1547E-03	0.6286E-04	0.4841E-03	0.1809E-03	0.3994E-04	0.1176E-03	0.3059E-05	0.7529E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85.05	0.1769E-03	0.7371E-04	0.5113E-03	0.1766E-03	0.5036E-04	0.1050E-03	0.7121E-05	0.8582E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
89.99	0.1908E-03	0.8102E-04	0.5878E-03	0.1664E-03	0.5431E-04	0.8880E-04	0.3783E-06	0.9003E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0
95.10	0.2100E-03	0.9029E-04	0.7043E-03	0.1553E-03	0.6512E-04	0.7835E-04	0.2204E-05	0.1011E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
100.1	0.2274E-03	0.1036E-03	0.8065E-03	0.1324E-03	0.6960E-04	0.5273E-04	0.4539E-05	0.1016E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
102.5	0.2355E-03	0.1063E-03	0.8613E-03	0.1305E-03	0.7620E-04	0.5673E-04	0.6875E-05	0.1106E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
105.0	0.2443E-03	0.1145E-03	0.9042E-03	0.1172E-03	0.8002E-04	0.4671E-04	0.8519E-05	0.1121E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
107.6	0.2476E-03	0.1229E-03	0.9865E-03	0.1019E-03	0.8450E-04	0.4051E-04	0.9210E-05	0.1185E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
110.1	0.2501E-03	0.1350E-03	0.1044E-03	0.9084E-04	0.8740E-04	0.3847E-04	0.1214E-04	0.1195E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
112.5	0.2617E-03	0.1484E-03	0.1137E-02	0.8745E-04	0.9571E-04	0.4470E-04	0.1526E-04	0.1221E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115.1	0.2646E-03	0.1634E-03	0.1213E-02	0.7011E-04	0.9979E-04	0.3500E-04	0.1783E-04	0.1258E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
117.5	0.2656E-03	0.1809E-03	0.1293E-02	0.5814E-04	0.1045E-03	0.3220E-04	0.2232E-04	0.1327E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
120.2	0.2645E-03	0.2040E-03	0.1371E-02	0.4201E-04	0.1082E-03	0.2985E-04	0.2581E-04	0.1279E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
122.5	0.2606E-03	0.2300E-03	0.1495E-02	0.4067E-04	0.1190E-03	0.4506E-04	0.3286E-04	0.1406E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
125.2	0.2550E-03	0.2698E-03	0.1592E-02	0.8766E-05	0.1243E-03	0.2673E-04	0.3850E-04	0.1453E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
127.7	0.2513E-03	0.3187E-03	0.1715E-02	0.1952E-04	0.1352E-03	0.1286E-04	0.4332E-04	0.1511E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
130.1	0.2539E-03	0.4104E-03	0.1950E-02	0.3796E-04	0.1703E-03	0.2929E-05	0.5909E-04	0.1706E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
132.6	0.2535E-03	0.4286E-03	0.2017E-02	0.5697E-04	0.1763E-03	0.3235E-04	0.6118E-04	0.1737E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.2	0.2577E-03	0.4848E-03	0.2141E-02	0.1040E-03	0.2018E-03	0.1097E-03	0.6592E-04	0.1837E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
137.7	0.2700E-03	0.5457E-03	0.2274E-02	0.1496E-03	0.2442E-03	0.1774E-03	0.7677E-04	0.1911E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
139.8	0.2886E-03	0.6047E-03	0.2659E-02	0.2066E-03	0.2763E-03	0.2820E-03	0.8214E-04	0.2022E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
140.3	0.3116E-03	0.6477E-03	0.3034E-02	0.2450E-03	0.2969E-03	0.3595E-03	0.8806E-04	0.2095E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
141.8	0.3538E-03	0.7112E-03	0.3750E-02	0.3286E-03	0.3169E-03	0.4962E-03	0.9329E-04	0.2201E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
142.6	0.3843E-03	0.7456E-03	0.4170E-02	0.3853E-03	0.3274E-03	0.5842E-03	0.9766E-04	0.2269E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143.4	0.4242E-03	0.7835E-03	0.4742E-02	0.4985E-03	0.3366E-03	0.7102E-03	0.1037E-03	0.2353E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
145.7	0.4683E-03	0.8186E-03	0.5365E-02	0.6647E-03	0.3461E-03	0.8639E-03	0.1091E-03	0.2422E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.1	0.5317E-03	0.8663E-03	0.5960E-02	0.8886E-03	0.3590E-03	0.1043E-02	0.1174E-03	0.2532E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
147.8	0.5803E-03	0.8996E-03	0.6544E-02	0.1012E-02	0.3640E-03	0.118E-02	0.1215E-03	0.2596E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
148.4	0.6300E-03	0.9235E-03	0.7074E-02	0.1102E-02	0.3743E-03	0.1130E-02	0.1309E-03	0.2669E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149.8	0.6772E-03	0.9513E-03	0.7793E-02	0.1179E-02	0.3816E-03	0.1181E-02	0.1362E-03	0.2717E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
135.4	0.6675E-03	0.8890E-03	0.7441E-02	0.1022E-02	0.4009E-03	0.1039E-02	0.1427E-03	0.3475E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149.2	0.6997E-03	0.9525E-03	0.8271E-02	0.1131E-02	0.4272E-03	0.1134E-02	0.1450E-03	0.3643E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153.3	0.7831E-03	0.1020E-02	0.8783E-02	0.1725E-02	0.4475E-03	0.1130E-02	0.1462E-03	0.3738E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
153.5	0.8142E-03	0.1048E-02	0.9461E-02	0.1865E-02	0.4480E-03	0.1485E-02	0.1485E-03	0.3728E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
154.4	0.8482E-03	0.1085E-02	0.1060E-01	0.2087E-02	0.4506E-03	0.2408E-02	0.1517E-03	0.3733E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
156.3	0.9239E-03	0.1147E-02	0.1270E-01	0.3375E-02	0.4593E-03	0.4800E-02	0.1457E-03	0.3791E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
157.4	0.9726E-03	0.1194E-02	0.1425E-01	0.6709E-02	0.4672E-03	0.5139E-02	0.1410E-03	0.3822E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
158.3	0.1124E-02	0.1280E-02	0.2347E-01	0.1331E-01	0.4875E-03	0.3189E-02	0.1368E-03	0.3922E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
149.6	0.1098E-02	0.1282E-02	0.6560E-01	0.1348E-01	0.4825E-03	0.2892E-02	0.1353E-03	0.3891E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0
143.1	0.1041E-02	0.1308E-02	0.5273E-01	0.1352E-01	0.4767E-03	0.2724E-02	0.1343E-03	0.3812E-03	0.0	0.0	0.0	0.0	0.0	0.0	0.0

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	151	152	153	154	155	156	157	158	159	160
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.3954E-06	0.0	0.0	0.0	0.0	-0.5921E-06	0.4112E-06	-0.2636E-06	0.9210E-06	0.0
9.937	0.1199E-04	0.0	0.0	0.0	0.0	-0.2467E-05	0.3553E-05	0.4219E-05	0.1679E-04	0.0
19.92	0.1483E-04	0.0	0.0	0.0	0.0	-0.1653E-04	0.8665E-05	0.1397E-04	0.3166E-04	0.0
30.01	0.1746E-04	0.0	0.0	0.0	0.0	-0.2192E-04	0.2288E-04	0.3282E-04	0.5687E-04	0.0
40.00	0.6635E-04	0.0	0.0	0.0	0.0	-0.2924E-04	0.3580E-04	0.4350E-04	0.8121E-04	0.0
50.03	0.9831E-04	0.0	0.0	0.0	0.0	-0.3418E-04	0.4505E-04	0.5734E-04	0.1122E-03	0.0
60.04	0.1372E-03	0.0	0.0	0.0	0.0	-0.3510E-04	0.5567E-04	0.7013E-04	0.1485E-03	0.0
70.14	0.1759E-03	0.0	0.0	0.0	0.0	-0.3161E-04	0.6686E-04	0.9281E-04	0.1907E-03	0.0
80.13	0.2101E-03	0.0	0.0	0.0	0.0	-0.1622E-04	0.7790E-04	0.1080E-03	0.4369E-03	0.0
85.05	0.2453E-03	0.0	0.0	0.0	0.0	0.1585E-04	0.9197E-04	0.1252E-03	0.8086E-03	0.0
89.99	0.2721E-03	0.0	0.0	0.0	0.0	0.1831E-04	0.9896E-04	0.1308E-03	0.9680E-03	0.0
95.10	0.2755E-03	0.0	0.0	0.0	0.0	0.2824E-04	0.1073E-03	0.1438E-03	0.1777E-02	0.0
100.1	0.3049E-03	0.0	0.0	0.0	0.0	0.2077E-04	0.1148E-03	0.1504E-03	0.1306E-02	0.0
102.5	0.3049E-03	0.0	0.0	0.0	0.0	0.3480E-04	0.1188E-03	0.1544E-03	0.1413E-02	0.0
105.0	0.2842E-03	0.0	0.0	0.0	0.0	0.4377E-04	0.1191E-03	0.1599E-03	0.1453E-02	0.0
107.6	0.2936E-03	0.0	0.0	0.0	0.0	0.6661E-04	0.1250E-03	0.1674E-03	0.1635E-02	0.0
110.1	0.3111E-03	0.0	0.0	0.0	0.0	0.9748E-04	0.1364E-03	0.1707E-03	0.1541E-02	0.0
112.5	0.3060E-03	0.0	0.0	0.0	0.0	0.1531E-03	0.1491E-03	0.1865E-03	0.1795E-02	0.0
115.1	0.2806E-03	0.0	0.0	0.0	0.0	0.1711E-03	0.1563E-03	0.1996E-03	0.1876E-02	0.0
117.5	0.2737E-03	0.0	0.0	0.0	0.0	0.1872E-03	0.1682E-03	0.2144E-03	0.1984E-02	0.0
120.2	0.2669E-03	0.0	0.0	0.0	0.0	0.1746E-03	0.1844E-03	0.2393E-03	0.2380E-02	0.0
122.5	0.2237E-03	0.0	0.0	0.0	0.0	0.1572E-03	0.2059E-03	0.2843E-03	0.9284	0.0
125.2	0.1795E-03	0.0	0.0	0.0	0.0	0.1184E-03	0.2292E-03	0.3189E-03	0.9284	0.0
127.7	0.1361E-03	0.0	0.0	0.0	0.0	0.9036E-04	0.2805E-03	0.3880E-03	0.9284	0.0
130.1	0.2333E-04	0.0	0.0	0.0	0.0	0.1038E-04	0.3792E-03	0.5601E-03	0.9285	0.0
132.6	0.1911E-05	0.0	0.0	0.0	0.0	-0.2960E-05	0.3900E-03	0.5832E-03	0.9284	0.0
135.2	0.4751E-04	0.0	0.0	0.0	0.0	-0.4722E-04	0.4361E-03	0.6636E-03	0.9284	0.0
137.7	-0.1420E-03	0.0	0.0	0.0	0.0	-0.9788E-04	0.5100E-03	0.7663E-03	0.9284	0.0
139.8	-0.2304E-03	0.0	0.0	0.0	0.0	-0.1615E-03	0.6072E-03	0.9233	0.9292	0.0
140.3	-0.2984E-03	0.0	0.0	0.0	0.0	-0.2526E-03	0.6745E-03	0.9237	0.9296	0.0
141.8	-0.3719E-03	0.0	0.0	0.0	0.0	-0.3344E-03	0.7551E-03	0.9241	0.9299	0.0
142.6	-0.4023E-03	0.0	0.0	0.0	0.0	-0.4105E-03	0.8080E-03	0.9245	0.9305	0.0
143.4	-0.4602E-03	0.0	0.0	0.0	0.0	-0.5006E-03	0.8869E-03	0.9249	0.9305	0.0
143.7	-0.4987E-03	0.0	0.0	0.0	0.0	-0.5684E-03	0.9467E-03	0.9246	0.9305	0.0
145.7	-0.5357E-03	0.0	0.0	0.0	0.0	-0.5771E-03	0.1048E-02	0.9245	0.9305	0.0
147.1	-0.5768E-03	0.0	0.0	0.0	0.0	-0.6128E-03	0.1136E-02	0.9245	0.9305	0.0
147.8	-0.6121E-03	0.0	0.0	0.0	0.0	-0.6612E-03	0.1224E-02	0.9245	0.9305	0.0
148.4	-0.6357E-03	0.0	0.0	0.0	0.0	-0.6741E-03	0.1301E-02	0.9249	0.9308	0.0
149.8	-0.6605E-03	0.0	0.0	0.0	0.0	-0.7037E-03	0.1286E-02	0.9243	0.9298	0.0
135.4	-0.6975E-03	0.0	0.0	0.0	0.0	-0.7009E-03	0.1369E-02	0.9243	0.9299	0.0
149.2	-0.7180E-03	0.0	0.0	0.0	0.0	-0.7314E-03	0.1497E-02	0.9243	0.9302	0.0
153.3	-0.7542E-03	0.0	0.0	0.0	0.0	-0.7569E-03	0.1542E-02	0.9243	0.9302	0.0
153.5	-0.7461E-03	0.0	0.0	0.0	0.0	-0.7827E-03	0.1597E-02	0.9243	0.9302	0.0
154.4	-0.7631E-03	0.0	0.0	0.0	0.0	-0.9067E-03	0.1740E-02	0.9243	0.9302	0.0
156.3	-0.8038E-03	0.0	0.0	0.0	0.0	-0.9762E-03	0.1885E-02	0.9243	0.9302	0.0
157.4	-0.8318E-03	0.0	0.0	0.0	0.0	-0.9660E-03	0.3738E-02	0.9246	0.9302	0.0
158.3	-0.9588E-03	0.0	0.0	0.0	0.0	-0.9660E-03	0.4254E-02	0.9246	0.9302	0.0
149.1	-0.9904E-03	0.0	0.0	0.0	0.0	-0.7599E-03	0.6441E-02	0.9245	0.9302	0.0
143.1	-0.1030E-02	0.0	0.0	0.0	0.0	-0.7746E-03				0.0

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	161	162	163	164	165	166	167	168	169	170
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.0	-0.2532E-05	0.1054E-05	0.0	0.2636E-06	0.0	0.0	0.0	0.0	0.0
9.937	0.0	0.2850E-03	-0.2782E-04	0.0	0.1109E-03	0.1166E-04	-0.1480E-06	0.0	0.0	0.0
19.92	0.0	0.1348E-01	-0.2913E-04	-0.3159E-04	-0.1535E-03	0.2860E-04	0.6118E-05	0.0	-0.1579E-05	0.0
30.01	0.0	0.1381E-01	-0.1081E-04	-0.2632E-04	-0.1925E-03	0.4692E-04	0.1722E-04	0.0	0.2711E-04	0.0
40.00	0.0	0.9128	-0.1055E-05	-0.1843E-04	-0.2105E-03	0.5509E-04	0.3021E-04	0.0	0.9161E-04	0.0
50.03	0.0	0.9133	-0.9097E-05	-0.2106E-04	-0.2333E-03	0.6431E-04	0.2811E-04	0.0	0.1664E-03	0.0
60.04	0.0	0.9137	-0.1266E-04	-0.2211E-04	-0.2386E-03	0.7729E-04	0.2286E-04	0.0	0.2496E-03	0.0
70.14	0.0	0.9149	-0.7514E-05	-0.6318E-05	-0.2146E-03	0.9732E-04	0.2525E-04	0.0	0.3335E-03	0.0
80.13	0.0	0.9153	-0.6460E-05	-0.6318E-05	-0.1993E-03	0.1205E-03	0.2980E-04	0.0	0.4402E-03	0.0
85.05	0.0	0.9160	0.1173E-04	0.1580E-04	-0.1379E-03	0.1481E-03	0.3615E-04	0.0	0.5299E-03	0.0
89.99	0.0	0.9162	0.2228E-04	0.1685E-04	-0.1184E-03	0.1750E-03	0.4151E-04	0.0	0.6065E-03	0.0
95.10	0.0	0.9165	0.3137E-04	0.2527E-04	-0.6891E-04	0.2089E-03	0.4521E-04	0.0	0.7155E-03	0.0
100.1	0.0	0.9165	0.5299E-04	0.3580E-04	-0.3967E-04	0.2796E-03	0.9467E-04	0.0	0.7637E-03	0.0
102.5	0.0	0.9165	0.6038E-04	0.4238E-04	-0.1450E-05	0.3065E-03	0.1008E-03	0.0	0.7969E-03	0.0
105.0	0.0	0.9165	0.6512E-04	0.4528E-04	-0.3756E-05	0.3264E-03	0.1060E-03	0.0	0.8190E-03	0.0
107.6	0.0	0.9165	0.7514E-04	0.5370E-04	0.2043E-04	0.3587E-03	0.1087E-03	0.0	0.8485E-03	0.0
110.1	0.0	0.9165	0.9926E-04	0.6265E-04	0.5087E-04	0.5441E-03	0.1089E-03	0.0	0.8766E-03	0.0
112.5	0.0	0.9165	0.1167E-03	0.8108E-04	0.1038E-03	0.9076E-03	0.1225E-03	0.0	0.9306E-03	0.0
115.1	0.0	0.9165	0.1349E-03	0.9161E-04	0.1176E-03	0.1037E-02	0.1355E-03	0.0	0.9627E-03	0.0
117.5	0.0	0.9165	0.1562E-03	0.1074E-03	0.1556E-03	0.1147E-02	0.1603E-03	0.0	0.1006E-02	0.0
120.2	0.0	0.9165	0.1904E-03	0.1303E-03	0.2056E-03	0.1207E-02	0.2150E-03	0.0	0.1052E-02	0.0
122.5	0.0	0.9169	0.2278E-03	0.1582E-03	0.2623E-03	0.1386E-02	0.2946E-03	0.0	0.1114E-02	0.0
125.2	0.0	0.9169	0.2966E-03	0.1909E-03	0.3065E-03	0.1423E-02	0.3901E-03	0.0	0.1163E-02	0.0
127.7	0.0	0.9169	0.3779E-03	0.2243E-03	0.3600E-03	0.1430E-02	0.4945E-03	0.0	0.1239E-02	0.0
130.1	0.0	0.9173	0.5716E-03	0.2925E-03	0.5081E-03	0.1459E-02	0.7503E-03	0.0	0.1366E-02	0.0
132.6	0.0	0.9173	0.6073E-03	0.3072E-03	0.5351E-03	0.1454E-02	0.7941E-03	0.0	0.1363E-02	0.0
135.2	0.0	0.9171	0.7434E-03	0.3538E-03	0.5934E-03	0.1408E-02	0.9026E-03	0.0	0.1428E-02	0.0
137.7	0.0	0.9172	0.9012E-03	0.4122E-03	0.6531E-03	0.1328E-02	0.1534E-02	0.0	0.1510E-02	0.0
139.8	0.0	0.9173	0.1072E-02	0.5075E-03	0.7638E-03	0.1213E-02	0.3347E-02	0.0	0.1623E-02	0.0
140.3	0.0	0.9185	0.9119	0.6665E-03	0.8439E-03	0.1102E-02	0.1235E-01	0.0	0.2302E-02	0.0
141.8	0.0	0.9197	0.9131	0.8750E-03	0.9881E-03	0.1289E-02	0.9205	0.0	0.2935E-02	0.0
142.6	0.0	0.9222	0.9156	0.9925E-03	0.9191	0.9179	0.9229	0.0	0.1453	0.0
143.4	0.0	0.9231	0.9164	0.1111E-02	0.9201	0.9188	0.9240	0.0	0.9164	0.0
145.7	0.0	0.9230	0.9164	0.1209E-02	0.9199	0.9187	0.9238	0.0	0.9164	0.0
147.1	0.0	0.9230	0.9163	0.1349E-02	0.9199	0.9187	0.9238	0.0	0.9164	0.0
147.8	0.0	0.9230	0.9164	0.1485E-02	0.9199	0.9187	0.9238	0.0	0.9164	0.0
148.4	0.0	0.9239	0.9172	0.9211	0.9210	0.9196	0.9248	0.0	0.9172	0.0
149.8	0.0	0.9234	0.9174	0.9212	0.9211	0.9199	0.9250	0.0	0.9175	0.0
135.4	0.0	0.9234	0.9165	0.9204	0.9203	0.9191	0.9242	0.0	0.9165	0.0
149.2	0.0	0.9235	0.9165	0.9205	0.9204	0.9192	0.9243	0.0	0.9165	0.0
153.3	0.0	0.9235	0.9169	0.9205	0.9204	0.9193	0.9243	0.0	0.9169	0.0
153.5	0.0	0.9235	0.9169	0.9205	0.9204	0.9193	0.9243	0.0	0.9169	0.0
154.4	0.0	0.9235	0.9168	0.9205	0.9204	0.9193	0.9243	0.0	0.9169	0.0
156.3	0.0	0.9235	0.9168	0.9205	0.9204	0.9193	0.9243	0.0	0.9168	0.0
157.4	0.0	0.9235	0.9167	0.9205	0.9204	0.9193	0.9243	0.0	0.9168	0.0
158.3	0.0	0.9236	0.9169	0.9208	0.9205	0.9193	0.9243	0.0	0.9169	0.0
149.6	0.0	0.9235	0.9169	0.9205	0.9204	0.9193	0.9243	0.0	0.9169	0.0
143.1	0.0	0.9235	0.9169	0.9207	0.9206	0.9193	0.9243	0.0	0.9169	0.0

## ELECTRONICALLY RECORDED DATA - TSET G

LOAD (PSI)	CHANNEL NUMBER									
	171	172	173	174	175	176	177	178	179	180
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.0	0.3475E-03	-0.6579E-07	-0.1809E-06	-0.1201E-05	-0.2303E-06	0.0	0.0	0.3125E-06	0.3618E-06
9.937	0.0	0.1026E-02	-0.3618E-06	-0.3668E-05	-0.3271E-04	-0.1178E-04	0.0	0.0	-0.1858E-05	0.1069E-05
19.92	0.0	0.4968E-02	-0.4112E-06	0.3273E-05	-0.6630E-04	-0.3205E-04	0.0	0.0	-0.8651E-05	0.8651E-05
30.01	0.0	0.4899E-01	-0.4770E-06	0.1464E-05	-0.1102E-03	-0.6335E-04	0.0	0.0	0.4622E-05	0.2480E-04
40.00	0.0	0.8636	-0.3125E-06	0.1559E-04	-0.1489E-03	-0.1060E-03	0.0	0.0	0.6069E-05	0.3238E-04
50.03	0.0	0.8641	-0.4112E-06	0.1567E-04	-0.1982E-03	-0.1639E-03	0.0	0.0	0.7549E-05	0.5538E-04
60.04	0.0	0.8645	-0.4687E-05	0.2227E-04	-0.2481E-03	-0.2219E-03	0.0	0.0	0.9177E-05	0.7296E-04
70.14	0.0	0.8661	-0.2451E-05	0.2696E-04	-0.3064E-03	-0.2721E-03	0.0	0.0	0.1643E-04	0.9944E-04
80.13	0.0	0.8665	-0.8898E-05	0.3289E-04	-0.3674E-03	-0.3256E-03	0.0	0.0	0.2331E-04	0.1260E-03
85.05	0.0	0.8670	-0.2549E-05	0.4426E-04	-0.4070E-03	-0.3376E-03	0.0	0.0	0.3335E-04	0.1388E-03
89.99	0.0	0.8671	-0.2451E-05	0.5113E-04	-0.4515E-03	-0.3609E-03	0.0	0.0	0.3643E-04	0.1496E-03
95.10	0.0	0.8678	-0.3454E-06	0.5482E-04	-0.5065E-03	-0.3702E-03	0.0	0.0	0.4436E-04	0.1688E-03
100.1	0.0	0.8677	-0.2483E-05	0.6317E-04	-0.5504E-03	-0.3796E-03	0.0	0.0	0.4977E-04	0.1807E-03
102.5	0.0	0.8678	-0.4523E-05	0.6773E-04	-0.5793E-03	-0.3788E-03	0.0	0.0	0.5224E-04	0.1893E-03
105.0	0.0	0.8678	-0.6957E-05	0.5834E-04	-0.5974E-03	-0.4001E-03	0.0	0.0	0.5850E-04	0.2082E-03
107.6	0.0	0.8678	-0.5427E-06	0.6036E-04	-0.6053E-03	-0.4105E-03	0.0	0.0	0.6620E-04	0.2147E-03
110.1	0.0	0.8678	-0.6727E-05	0.6353E-04	-0.6210E-03	-0.4080E-03	0.0	0.0	0.7187E-04	0.2156E-03
115.1	0.0	0.8678	-0.6095E-05	0.6191E-04	-0.6616E-03	-0.3797E-03	0.0	0.0	0.8163E-04	0.2215E-03
117.5	0.0	0.8678	-0.6020E-05	0.7013E-04	-0.6434E-03	-0.3772E-03	0.0	0.0	0.8834E-04	0.2440E-03
120.2	0.0	0.8678	-0.5921E-05	0.1029E-03	-0.6865E-03	-0.3775E-03	0.0	0.0	0.9473E-04	0.2544E-03
122.5	0.0	0.8685	-0.5921E-05	0.1293E-03	-0.7825E-03	-0.3791E-03	0.0	0.0	0.1014E-03	0.2639E-03
125.2	0.0	0.8684	-0.6168E-05	0.4257E-03	-0.1094E-02	-0.3959E-03	0.0	0.0	0.1079E-03	0.3017E-03
127.7	0.0	0.8685	-0.5904E-05	0.9621E-03	-0.1631E-02	-0.3960E-03	0.0	0.0	0.1142E-03	0.3214E-03
130.1	0.0	0.8686	-0.4901E-05	0.3208	-0.3167	-0.3924E-03	0.0	0.0	0.1261E-03	0.3519E-03
132.6	0.0	0.8686	-0.4358E-05	0.3208	-0.3167	-0.4037E-03	0.0	0.0	0.1287E-03	0.4305E-03
135.2	0.0	0.8686	-0.4358E-05	0.3208	-0.3167	-0.4201E-03	0.0	0.0	0.1294E-03	0.4405E-03
137.7	0.0	0.8686	-0.4737E-05	0.3208	-0.3167	-0.4403E-03	0.0	0.0	0.1309E-03	0.4762E-03
139.8	0.0	0.8690	-0.3964E-05	0.3209	-0.3168	-0.4505E-03	0.0	0.0	0.1306E-03	0.5021E-03
140.3	0.0	0.8694	-0.4079E-05	0.3210	-0.3170	-0.4562E-03	0.0	0.0	0.1268E-03	0.5078E-03
141.8	0.0	0.8694	-0.4029E-05	0.3211	-0.3170	-0.4511E-03	0.0	0.0	0.1032E-03	0.5104E-03
142.6	0.0	0.8702	-0.3651E-05	0.3213	-0.3172	-0.4551E-03	0.0	0.0	0.9950E-04	0.5035E-03
143.4	0.0	0.8702	-0.3914E-05	0.3213	-0.3172	-0.4425E-03	0.0	0.0	0.9633E-04	0.5166E-03
145.7	0.0	0.8702	-0.3454E-05	0.3213	-0.3172	-0.4515E-03	0.0	0.0	0.9135E-04	0.5256E-03
147.1	0.0	0.8702	-0.3914E-05	0.3213	-0.3172	-0.4717E-03	0.0	0.0	0.8704E-04	0.5587E-03
147.8	0.0	0.8702	-0.4227E-05	0.3213	-0.3172	-0.4891E-03	0.0	0.0	0.8508E-04	0.5725E-03
148.4	0.0	0.8702	-0.4079E-05	0.3213	-0.3172	-0.5146E-03	0.0	0.0	0.8273E-04	0.5724E-03
149.8	0.0	0.8702	-0.4227E-05	0.3214	-0.3173	-0.5358E-03	0.0	0.0	0.8291E-04	0.5829E-03
135.4	0.0	0.8695	-0.3955E-05	0.3212	-0.3171	-0.5503E-03	0.0	0.0	0.5921E-04	0.5420E-03
149.2	0.0	0.8699	-0.2772E-05	0.3212	-0.3171	-0.5623E-03	0.0	0.0	0.7208E-04	0.6153E-03
153.3	0.0	0.8699	-0.3101E-05	0.3213	-0.3172	-0.6000E-03	0.0	0.0	0.7783E-04	0.7505E-03
153.5	0.0	0.8699	-0.3133E-05	0.3213	-0.3172	-0.5967E-03	0.0	0.0	0.4090E-04	0.7401E-03
154.4	0.0	0.8697	-0.2575E-05	0.3213	-0.3172	-0.6123E-03	0.0	0.0	0.4401E-04	0.7683E-03
156.3	0.0	0.8696	-0.2821E-05	0.3213	-0.3172	-0.6531E-03	0.0	0.0	0.5173E-04	0.8729E-03
157.4	0.0	0.8695	-0.3051E-05	0.3213	-0.3172	-0.6755E-03	0.0	0.0	0.4785E-04	0.9663E-03
158.3	0.0	0.8703	-0.3035E-05	0.3215	-0.3174	-0.6925E-03	0.0	0.0	0.9626E-04	0.9329
149.6	0.0	0.8703	-0.3018E-05	0.3214	-0.3174	-0.6572E-03	0.0	0.0	-0.8414E-04	0.9329
143.1	0.0	0.8703	-0.3183E-05	0.3215	-0.3173	-0.6597E-03	0.0	0.0	-0.9666E-04	0.9329

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	181	182	183	184	185	186	187	188	189	190
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.9868E-07	0.2632E-06	-0.3474E-04	0.2632E-06	-0.2961E-06	-0.6743E-06	-0.1727E-05	0.0	0.1316E-06	0.4770E-06
9.937	-0.3289E-07	0.3630E-04	-0.1824E-02	0.1219E-03	0.2456E-04	-0.1480E-04	0.5444E-05	0.0	0.1099E-04	0.1194E-04
19.92	0.1316E-06	0.8038E-04	-0.1309E-02	0.1160E-02	0.5534E-04	-0.3638E-04	0.7072E-05	0.0	0.2822E-04	0.2582E-04
30.01	-0.5756E-06	0.1574E-03	0.2864	0.5133E-02	0.1095E-03	-0.5983E-04	0.4775E-04	0.0	0.5066E-04	0.4613E-04
40.00	-0.3289E-06	0.2902E-03	0.8732	0.1075E-01	0.1213E-03	-0.1246E-03	0.1148E-03	0.0	0.8192E-04	0.6518E-04
50.03	0.4934E-07	0.6485E-03	0.8741	0.9043	0.1226E-03	-0.1684E-03	0.2574E-03	0.0	0.1251E-03	0.8248E-04
60.04	-0.2303E-06	0.1214E-02	0.8743	0.9045	0.1170E-03	-0.2086E-03	0.4223E-03	0.0	0.1644E-03	0.9809E-04
70.14	0.9868E-06	0.1586E-02	0.8757	0.9060	0.1285E-03	-0.2256E-03	0.5997E-03	0.0	0.2029E-03	0.1184E-03
80.13	-0.1480E-06	0.9218	0.8765	0.9069	0.1214E-03	-0.2501E-03	0.8288E-03	0.0	0.2308E-03	0.1361E-03
85.05	0.4934E-07	0.9222	0.8769	0.9073	0.1301E-03	-0.2498E-03	0.1012E-02	0.0	0.2486E-03	0.1516E-03
89.99	0.5592E-06	0.9226	0.8773	0.9076	0.1128E-03	-0.2647E-03	0.3117	0.0	0.2573E-03	0.1636E-03
95.10	0.2138E-06	0.9234	0.8781	0.9081	0.1363E-03	-0.2606E-03	0.9265	0.0	0.2632E-03	0.1744E-03
100.1	-0.1974E-06	0.9234	0.8781	0.9081	0.1542E-03	-0.2881E-03	0.9265	0.0	0.2711E-03	0.1878E-03
102.5	0.5099E-06	0.9234	0.8781	0.9081	0.1661E-03	-0.2809E-03	0.9265	0.0	0.2718E-03	0.1939E-03
105.0	0.6579E-07	0.9233	0.8781	0.9081	0.1709E-03	-0.2751E-03	0.9265	0.0	0.2725E-03	0.2002E-03
107.6	-0.1645E-06	0.9234	0.8781	0.9081	0.1591E-03	-0.2820E-03	0.9265	0.0	0.2748E-03	0.2098E-03
110.1	-0.1645E-07	0.9234	0.8781	0.9081	0.1444E-03	-0.2756E-03	0.9265	0.0	0.2711E-03	0.2193E-03
112.5	0.4112E-06	0.9234	0.8780	0.9081	0.1504E-03	-0.2595E-03	0.9265	0.0	0.2684E-03	0.2334E-03
115.1	0.6579E-07	0.9234	0.8780	0.9081	0.1578E-03	-0.2609E-03	0.9265	0.0	0.2623E-03	0.2476E-03
117.5	0.1592E-11	0.9234	0.8781	0.9083	0.1717E-03	-0.2698E-03	0.9268	0.0	0.2562E-03	0.2659E-03
120.2	-0.5115E-05	0.9234	0.8781	0.9084	0.2885E-03	-0.2888E-03	0.9268	0.0	0.2516E-03	0.2901E-03
122.5	-0.3701E-05	0.9238	0.8785	0.9085	0.5399E-03	-0.2905E-03	0.9269	0.0	0.2418E-03	0.3181E-03
125.2	-0.3651E-05	0.9237	0.8784	0.9085	0.5961E-03	-0.2949E-03	0.9269	0.0	0.2341E-03	0.3550E-03
127.7	-0.3470E-05	0.9238	0.8784	0.9085	0.6341E-03	-0.2994E-03	0.9269	0.0	0.2237E-03	0.3998E-03
130.1	-0.5674E-05	0.9245	0.8791	0.9093	0.9227	-0.2993E-03	0.9277	0.0	0.1923E-03	0.4948E-03
132.6	-0.5082E-05	0.9242	0.8789	0.9093	0.9226	-0.2999E-03	0.9277	0.0	0.1902E-03	0.5125E-03
135.2	-0.4671E-05	0.9242	0.8789	0.9093	0.9226	-0.3231E-03	0.9277	0.0	0.1793E-03	0.5847E-03
137.7	-0.4210E-05	0.9242	0.8789	0.9093	0.9226	-0.3199E-03	0.9277	0.0	0.1646E-03	0.6628E-03
139.8	-0.3881E-05	0.9246	0.8793	0.9093	0.9229	-0.3206E-03	0.9277	0.0	0.1549E-03	0.7461E-03
140.3	-0.3750E-05	0.9247	0.8793	0.9098	0.9230	-0.3164E-03	0.9281	0.0	0.1507E-03	0.8017E-03
141.8	-0.4243E-05	0.9250	0.8798	0.9101	0.9234	-0.3052E-03	0.9285	0.0	0.1504E-03	0.8761E-03
142.6	-0.3668E-05	0.9256	0.8802	0.9106	0.9238	-0.3119E-03	0.9289	0.0	0.1589E-03	0.9193E-03
143.4	-0.4342E-05	0.9258	0.8806	0.9106	0.9243	-0.3140E-03	0.9292	0.0	0.1721E-03	0.9745E-03
145.7	-0.4802E-05	0.9258	0.8806	0.9106	0.9243	-0.3187E-03	0.9290	0.0	0.1843E-03	0.1024E-02
147.1	-0.4293E-05	0.9255	0.8802	0.9106	0.9238	-0.3113E-03	0.9289	0.0	0.1976E-03	0.1078E-02
147.8	-0.5345E-05	0.9258	0.8804	0.9106	0.9242	-0.3116E-03	0.9289	0.0	0.2127E-03	0.1109E-02
148.4	-0.4605E-05	0.9258	0.8806	0.9106	0.9242	-0.2785E-03	0.9289	0.0	0.2389E-03	0.1144E-02
149.8	-0.4819E-05	0.9258	0.8806	0.9110	0.9243	-0.2512E-03	0.9286	0.0	0.2638E-03	0.1165E-02
135.4	-0.4282E-05	0.9251	0.8799	0.9102	0.9236	-0.1757E-03	0.9286	0.0	0.2534E-03	0.1094E-02
149.2	-0.4413E-05	0.9251	0.8799	0.9103	0.9236	-0.1714E-03	0.9286	0.0	0.2656E-03	0.1172E-02
153.3	-0.4462E-05	0.9257	0.8803	0.9107	0.9240	0.9303	0.9290	0.0	0.3381E-03	0.1218E-02
153.5	-0.4347E-05	0.9255	0.8803	0.9107	0.9240	0.9303	0.9290	0.0	0.3714E-03	0.1225E-02
154.4	-0.4199E-05	0.9255	0.8803	0.9107	0.9240	0.9303	0.9290	0.0	0.4061E-03	0.1238E-02
156.3	-0.4265E-05	0.9255	0.8803	0.9107	0.9240	0.9303	0.9290	0.0	0.4606E-03	0.1262E-02
157.4	-0.4380E-05	0.9255	0.8803	0.9107	0.9240	0.9303	0.9290	0.0	0.5105E-03	0.1281E-02
158.3	-0.4462E-05	0.9260	0.8807	0.9107	0.9244	0.9305	0.9292	0.0	0.5983E-03	0.1329E-02
149.1	-0.4577E-05	0.9259	0.8806	0.9107	0.9243	0.9303	0.9290	0.0	0.5985E-03	0.1306E-02
143.1	-0.4380E-05	0.9260	0.8807	0.9107	0.9243	0.9303	0.9291	0.0	0.5926E-03	0.1289E-02

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	191	192	193	194	195	196	197	198	199	200
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.1186E-05	0.3618E-06	0.3954E-06	0.0	0.3454E-06	-0.3411E-12	0.4613E-06	0.3618E-06	0.5427E-06	0.1941E-05
9.937	0.1582E-05	0.6710E-05	0.1977E-05	0.0	0.1076E-04	0.1324E-04	0.1153E-04	0.5937E-05	0.3469E-04	0.3533E-04
19.92	0.3559E-05	0.1309E-04	0.5535E-05	0.0	0.2625E-04	0.3130E-04	0.2741E-04	0.1477E-04	0.9439E-04	0.5906E-04
30.01	0.1055E-04	0.2857E-04	0.1166E-04	0.0	0.5128E-04	0.6787E-04	0.5924E-04	0.3082E-04	0.2179E-03	0.1089E-03
40.00	0.3678E-04	0.4857E-04	0.1852E-04	0.0	0.7801E-04	0.1247E-03	0.1051E-03	0.5306E-04	0.3631E-03	0.1404E-03
50.03	0.9083E-04	0.8380E-04	0.2636E-04	0.0	0.1083E-03	0.2319E-03	0.1764E-03	0.9370E-04	0.5154E-03	0.1793E-03
60.04	0.1465E-04	0.1243E-03	0.3314E-04	0.0	0.1428E-03	0.3429E-03	0.2541E-03	0.1488E-03	0.6611E-03	0.2200E-03
70.14	0.2369E-03	0.1799E-03	0.4711E-04	0.0	0.1811E-03	0.4595E-03	0.3442E-03	0.2156E-03	0.8142E-03	0.2805E-03
80.13	0.3095E-03	0.2341E-03	0.5621E-04	0.0	0.2249E-03	0.5785E-03	0.4353E-03	0.2988E-03	0.9806E-03	0.3355E-03
85.05	0.4092E-03	0.2740E-03	0.6958E-04	0.0	0.2539E-03	0.6407E-03	0.4956E-03	0.3614E-03	0.1073E-02	0.3852E-03
89.99	0.4365E-03	0.3132E-03	0.7650E-04	0.0	0.2852E-03	0.7012E-03	0.5533E-03	0.4356E-03	0.1181E-02	0.4564E-03
95.10	0.4649E-03	0.3499E-03	0.8685E-04	0.0	0.3264E-03	0.7750E-03	0.6379E-03	0.5512E-03	0.1271E-02	0.5316E-03
100.1	0.4937E-03	0.3936E-03	0.9541E-04	0.0	0.3755E-03	0.8454E-03	0.7163E-03	0.7280E-03	0.1382E-02	0.6345E-03
105.0	0.5037E-03	0.4068E-03	0.1033E-03	0.0	0.4087E-03	0.8661E-03	0.7499E-03	0.8000E-03	0.1423E-02	0.7097E-03
107.6	0.5150E-03	0.4276E-03	0.1062E-03	0.0	0.4301E-03	0.8940E-03	0.7792E-03	0.8437E-03	0.1466E-02	0.7444E-03
110.1	0.5302E-03	0.4530E-03	0.1123E-03	0.0	0.4794E-03	0.9211E-03	0.8167E-03	0.9107E-03	0.1510E-02	0.8017E-03
112.5	0.5452E-03	0.4771E-03	0.1184E-03	0.0	0.552E-03	0.9397E-03	0.8480E-03	0.9810E-03	0.1553E-02	0.8808E-03
115.1	0.5670E-03	0.5254E-03	0.1353E-03	0.0	0.5890E-03	0.9580E-03	0.8981E-03	0.1054E-02	0.1594E-02	0.9803E-03
117.5	0.5762E-03	0.5548E-03	0.1437E-03	0.0	0.6166E-03	0.9853E-03	0.9436E-03	0.1109E-02	0.1652E-02	0.1039E-02
120.2	0.5908E-03	0.5940E-03	0.1539E-03	0.0	0.6453E-03	0.1003E-02	0.9899E-03	0.1168E-02	0.1703E-02	0.1134E-02
122.5	0.5952E-03	0.6252E-03	0.1715E-03	0.0	0.6807E-03	0.1053E-02	0.1087E-02	0.1227E-02	0.1760E-02	0.1228E-02
125.2	0.6230E-03	0.6796E-03	0.1823E-03	0.0	0.7605E-03	0.1076E-02	0.1128E-02	0.1385E-02	0.1816E-02	0.1343E-02
127.7	0.6691E-03	0.7386E-03	0.2000E-03	0.0	0.8085E-03	0.1096E-02	0.1167E-02	0.1479E-02	0.1892E-02	0.1426E-02
130.1	0.7617E-03	0.8322E-03	0.2455E-03	0.0	0.8942E-03	0.1130E-02	0.1239E-02	0.1656E-02	0.2028E-02	0.1698E-02
132.6	0.7825E-03	0.8754E-03	0.2521E-03	0.0	0.9127E-03	0.1145E-02	0.1264E-02	0.1702E-02	0.2060E-02	0.1740E-02
135.2	0.8501E-03	0.1005E-02	0.2708E-03	0.0	0.9585E-03	0.1165E-02	0.1310E-02	0.1867E-02	0.2095E-02	0.1827E-02
137.7	0.9361E-03	0.1119E-02	0.2954E-03	0.0	0.1004E-02	0.1198E-02	0.1381E-02	0.2007E-02	0.2138E-02	0.1906E-02
139.8	0.1094E-02	0.1284E-02	0.3218E-03	0.0	0.1083E-02	0.1204E-02	0.1345E-02	0.2085E-02	0.2214E-02	0.2016E-02
140.3	0.1258E-02	0.1429E-02	0.3381E-03	0.0	0.1127E-02	0.1204E-02	0.1406E-02	0.2126E-02	0.2271E-02	0.2126E-02
141.8	0.1387E-02	0.1693E-02	0.3551E-03	0.0	0.1165E-02	0.1223E-02	0.1442E-02	0.2227E-02	0.2484E-02	0.2248E-02
142.6	0.1446E-02	0.1837E-02	0.3676E-03	0.0	0.1165E-02	0.1256E-02	0.1538E-02	0.2277E-02	0.2549E-02	0.2319E-02
143.4	0.1544E-02	0.2005E-02	0.3836E-03	0.0	0.1284E-02	0.1299E-02	0.1596E-02	0.2333E-02	0.2555E-02	0.2380E-02
145.7	0.1677E-02	0.2117E-02	0.3976E-03	0.0	0.1384E-02	0.1362E-02	0.1693E-02	0.2438E-02	0.2555E-02	0.2418E-02
147.1	0.2064E-02	0.2195E-02	0.4175E-03	0.0	0.1469E-02	0.1418E-02	0.1693E-02	0.2458E-02	0.2550E-02	0.2596E-02
147.8	0.5031E-01	0.2239E-02	0.4337E-03	0.0	0.1469E-02	0.1461E-02	0.1798E-02	0.2447E-02	0.2526E-02	0.2667E-02
148.4	0.4930E-01	0.2394E-02	0.4548E-03	0.0	0.1653E-02	0.1526E-02	0.1815E-02	0.2474E-02	0.2529E-02	0.2777E-02
149.8	0.9145	0.2911E-02	0.4726E-03	0.0	0.1591E-02	0.1467E-02	0.1792E-02	0.2264E-02	0.2316E-02	0.2728E-02
135.4	0.9157	0.2882E-02	0.4622E-03	0.0	0.1695E-02	0.1594E-02	0.1885E-02	0.2458E-02	0.2501E-02	0.2878E-02
149.2	0.9322	0.3041E-02	0.5060E-03	0.0	0.1848E-02	0.1755E-02	0.1960E-02	0.2472E-02	0.2524E-02	0.3222E-02
153.3	0.9325	0.7414E-02	0.5355E-03	0.0	0.1922E-02	0.1881E-02	0.2011E-02	0.2448E-02	0.2597E-02	0.4133E-02
153.5	0.9325	0.9787E-02	0.5405E-03	0.0	0.2012E-02	0.2038E-02	0.2044E-02	0.2377E-02	0.2356E-02	0.4779E-02
154.4	0.9325	0.1182E-01	0.5509E-03	0.0	0.2186E-02	0.2349E-02	0.2140E-02	0.2377E-02	0.3934E-02	0.5938E-02
156.3	0.9325	0.1479E-01	0.5711E-03	0.0	0.2344E-02	0.2705E-02	0.2193E-02	0.2361E-02	0.3896E-02	0.7138E-02
157.4	0.9325	0.1633E-01	0.5865E-03	0.0	0.2663E-02	0.4143E-02	0.2338E-02	0.1790E-02	0.3272E-02	0.1336E-01
158.3	0.9327	0.1670E-01	0.6203E-03	0.0	0.2623E-02	0.3974E-02	0.2355E-02	0.1775E-02	0.2944E-02	0.1303E-01
149.6	0.9325	0.1668E-01	0.6097E-03	0.0	0.2623E-02	0.3974E-02	0.2355E-02	0.1775E-02	0.2944E-02	0.1303E-01
143.1	0.9325	0.1664E-01	0.6000E-03	0.0	0.2652E-02	0.3551E-02	0.2285E-02	0.2500E-02	0.3000E-02	0.1328E-01

ELECTRONICALLY RECORDED DATA - TEST G

LOAD

CHANNEL NUMBER

	201	202	203	204	205	206	207	208	209	210
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.1316E-06	0.4112E-06	-0.2512E-10	0.9868E-07	0.3289E-06	0.1152E-06	-0.9870E-07	0.7402E-06	-0.6579E-07	-0.3288E-07
9.937	0.3487E-05	0.6677E-05	0.1181E-04	0.1492E-04	0.9901E-05	0.3191E-05	-0.1349E-05	0.4309E-05	0.5691E-05	0.5229E-05
19.92	0.9260E-05	0.1534E-04	0.2700E-04	0.3211E-04	0.1992E-04	0.9621E-05	-0.8388E-06	0.5543E-05	0.1355E-04	0.1319E-04
30.01	0.1812E-04	0.2855E-04	0.5321E-04	0.6342E-04	0.3801E-04	0.2510E-04	0.3289E-05	0.9375E-05	0.2456E-04	0.3154E-04
40.00	0.2896E-04	0.4735E-04	0.8570E-04	0.1080E-03	0.6701E-04	0.4793E-04	0.8289E-05	0.1016E-04	0.3658E-04	0.5012E-04
50.03	0.4439E-04	0.7607E-04	0.1392E-03	0.1799E-03	0.1135E-03	0.7266E-04	0.5707E-05	0.1189E-04	0.4993E-04	0.6656E-04
60.04	0.6273E-04	0.1110E-03	0.2038E-03	0.2674E-03	0.1682E-03	0.1050E-03	0.8223E-05	0.1143E-04	0.6515E-04	0.8129E-04
70.14	0.8449E-04	0.1517E-03	0.2809E-03	0.3660E-03	0.2326E-03	0.1371E-03	0.2043E-04	0.2562E-04	0.8217E-04	0.1042E-03
80.13	0.1072E-03	0.1969E-03	0.3684E-03	0.4761E-03	0.3075E-03	0.1708E-03	0.2755E-04	0.1623E-04	0.1007E-03	0.1277E-03
85.05	0.1262E-03	0.2317E-03	0.4336E-03	0.5578E-03	0.3673E-03	0.2092E-03	0.4520E-04	0.1949E-04	0.1230E-03	0.1608E-03
89.99	0.1428E-03	0.2732E-03	0.5233E-03	0.6593E-03	0.4408E-03	0.2358E-03	0.5594E-04	0.2400E-04	0.1455E-03	0.1794E-03
95.10	0.1610E-03	0.3229E-03	0.6361E-03	0.7780E-03	0.5344E-03	0.2694E-03	0.6893E-04	0.2390E-04	0.1666E-03	0.2115E-03
100.1	0.1939E-03	0.4086E-03	0.7774E-03	0.9171E-03	0.6459E-03	0.2930E-03	0.7783E-04	0.1905E-04	0.2034E-03	0.2465E-03
102.5	0.2266E-03	0.4715E-03	0.8520E-03	0.9964E-03	0.7165E-03	0.3067E-03	0.8709E-04	0.2487E-04	0.2200E-03	0.2763E-03
105.0	0.2412E-03	0.5049E-03	0.8987E-03	0.1061E-02	0.7624E-03	0.3205E-03	0.9317E-04	0.2331E-04	0.2329E-03	0.2913E-03
107.6	0.2712E-03	0.5631E-03	0.9589E-03	0.1150E-02	0.8309E-03	0.3376E-03	0.9952E-04	0.2097E-04	0.2575E-03	0.3139E-03
110.1	0.3008E-03	0.6560E-03	0.1034E-02	0.1252E-02	0.9163E-03	0.3554E-03	0.1069E-03	0.2138E-04	0.2758E-03	0.3368E-03
115.1	0.3326E-03	0.7325E-03	0.1131E-02	0.1375E-02	0.1017E-02	0.3703E-03	0.1214E-03	0.2482E-04	0.3006E-03	0.3830E-03
117.5	0.3485E-03	0.7862E-03	0.1205E-02	0.1501E-02	0.1093E-02	0.3855E-03	0.1299E-03	0.2526E-04	0.3333E-03	0.4124E-03
120.2	0.4063E-03	0.9540E-03	0.1403E-02	0.1773E-02	0.1299E-02	0.4061E-03	0.1468E-03	0.2294E-04	0.4167E-03	0.4877E-03
122.5	0.4592E-03	0.1169E-02	0.1525E-02	0.1967E-02	0.1428E-02	0.4215E-03	0.1471E-03	0.3510E-04	0.4609E-03	0.5410E-03
125.2	0.4877E-03	0.1169E-02	0.1644E-02	0.2039E-02	0.1561E-02	0.4505E-03	0.1386E-03	0.3674E-04	0.5192E-03	0.5867E-03
127.7	0.5310E-03	0.1290E-02	0.1826E-02	0.2043E-02	0.1756E-02	0.4921E-03	0.1235E-03	0.3650E-04	0.5825E-03	0.6532E-03
130.1	0.6391E-03	0.1515E-02	0.2258E-02	0.2096E-02	0.2217E-02	0.6070E-03	0.4567E-04	0.2123E-04	0.6939E-03	0.7880E-03
132.6	0.6543E-03	0.1556E-02	0.2326E-02	0.2127E-02	0.2275E-02	0.6246E-03	0.3786E-04	0.2574E-04	0.7220E-03	0.8118E-03
135.2	0.6941E-03	0.1683E-02	0.2537E-02	0.2195E-02	0.2379E-02	0.6789E-03	0.9342E-05	0.2572E-04	0.8026E-03	0.8838E-03
137.7	0.7436E-03	0.1826E-02	0.2732E-02	0.2179E-02	0.2484E-02	0.7398E-03	0.5010E-04	0.3140E-04	0.8972E-03	0.9656E-03
139.8	0.7999E-03	0.1983E-02	0.2980E-02	0.2263E-02	0.2565E-02	0.8176E-03	0.8631E-04	0.3219E-04	0.1005E-02	0.9188E-03
140.3	0.8383E-03	0.2150E-02	0.3150E-02	0.2365E-02	0.2594E-02	0.9011E-03	0.9103E-04	0.3464E-04	0.1079E-02	0.1007E-02
141.8	0.8819E-03	0.2360E-02	0.3355E-02	0.2619E-02	0.2638E-02	0.1025E-02	0.9832E-04	0.3464E-04	0.1194E-02	0.1159E-02
142.6	0.9131E-03	0.2523E-02	0.3490E-02	0.2900E-02	0.2652E-02	0.1141E-02	0.9098E-04	0.3278E-04	0.1286E-02	0.1273E-02
143.4	0.9661E-03	0.2843E-02	0.3744E-02	0.3281E-02	0.2662E-02	0.1255E-02	0.9164E-04	0.3215E-04	0.1378E-02	0.1329E-02
145.7	0.1015E-02	0.3300E-02	0.4138E-02	0.3831E-02	0.2675E-02	0.1373E-02	0.7988E-04	0.3189E-04	0.1467E-02	0.1399E-02
147.1	0.1104E-02	0.3900E-02	0.5235E-02	0.6794E-02	0.2695E-02	0.1518E-02	0.1054E-03	0.3755E-04	0.1573E-02	0.1413E-02
147.8	0.1176E-02	0.4488E-02	0.7626E-02	0.6805E-02	0.2717E-02	0.1710E-02	0.1348E-03	0.4411E-04	0.1651E-02	0.1426E-02
148.4	0.1246E-02	0.5099E-02	0.6219E-01	0.5123E-02	0.2733E-02	0.1772E-02	0.1823E-03	0.4196E-04	0.1707E-02	0.1433E-02
149.8	0.1316E-02	0.6262E-02	0.9401	0.4912E-02	0.2750E-02	0.1869E-02	0.2021E-03	0.4408E-04	0.1764E-02	0.1459E-02
135.4	0.1310E-02	0.6710E-02	0.9387	0.4407E-02	0.2571E-02	0.1859E-02	0.2277E-03	0.4700E-04	0.1644E-02	0.1618E-02
149.2	0.1386E-02	0.6883E-02	0.9388	0.4495E-02	0.2782E-02	0.1949E-02	0.2074E-03	0.4643E-04	0.1759E-02	0.1718E-02
153.3	0.1519E-02	0.1129E-01	0.9401	0.4716E-02	0.2764E-02	0.2089E-02	0.2449E-03	0.4643E-04	0.1899E-02	0.1746E-02
153.5	0.1577E-02	0.1237E-01	0.9400	0.4655E-02	0.2789E-02	0.2213E-02	0.2510E-03	0.4610E-04	0.1987E-02	0.1727E-02
154.4	0.1643E-02	0.1332E-01	0.9400	0.4761E-02	0.1202E-01	0.2260E-02	0.2412E-03	0.4569E-04	0.2108E-02	0.1727E-02
156.3	0.1769E-02	0.1421E-01	0.9400	0.4294E-02	0.1493E-01	0.2340E-02	0.2458E-03	0.3672E-04	0.2400E-02	0.1734E-02
157.4	0.1878E-02	0.1479E-01	0.9404	0.4836E-02	0.1608E-01	0.2362E-02	0.2299E-03	0.2432E-04	0.2663E-02	0.1751E-02
158.3	0.2101E-02	0.1559E-01	0.9404	0.5949E-02	0.1812E-01	0.2728E-02	0.1472E-03	0.2577E-04	0.6671E-02	0.1748E-02
149.6	0.2092E-02	0.1556E-01	0.9404	0.5575E-02	0.1838E-01	0.2922E-02	0.2950E-04	0.2593E-04	0.7074E-02	0.1743E-02
143.1	0.2142E-02	0.1515E-01	0.9408	0.4065E-02	0.1875E-01	0.3437E-02	0.6317E-04	0.3072E-04	0.7536E-02	0.1789E-02

## ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	211	212	213	214	215	216	217	218	219	220
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.2303E-06	0.1318E-06	0.3163E-05	0.3954E-06	0.1977E-06	0.1053E-05	0.0	0.2961E-06	0.1318E-06	0.1151E-06
9.937	0.1069E-04	0.2613E-04	0.2685E-04	0.2663E-04	0.1245E-04	0.2896E-04	0.3607E-04	0.3613E-04	0.1997E-04	0.3998E-04
19.92	0.2617E-04	0.4298E-04	0.5792E-04	0.6552E-04	0.2919E-04	0.6845E-04	0.8661E-04	0.8312E-04	0.4995E-04	0.1022E-03
30.01	0.5235E-04	0.8720E-04	0.1295E-03	0.1507E-03	0.5680E-04	0.1632E-03	0.2001E-03	0.1921E-03	0.1168E-03	0.2340E-03
40.00	0.9880E-04	0.1246E-03	0.1737E-03	0.2977E-03	0.9113E-04	0.2643E-03	0.3175E-03	0.3553E-03	0.1889E-03	0.4045E-03
50.03	0.1710E-03	0.1662E-03	0.2469E-03	0.4796E-03	0.1377E-03	0.3938E-03	0.4744E-03	0.5710E-03	0.2596E-03	0.6039E-03
60.04	0.2471E-03	0.2067E-03	0.3380E-03	0.6618E-03	0.1898E-03	0.5244E-03	0.6476E-03	0.8030E-03	0.3318E-03	0.8058E-03
70.14	0.3295E-03	0.2544E-03	0.4586E-03	0.8629E-03	0.2487E-03	0.6792E-03	0.8427E-03	0.1059E-02	0.4149E-03	0.1018E-02
80.15	0.4229E-03	0.3104E-03	0.5707E-03	0.1097E-02	0.3173E-03	0.8329E-03	0.1058E-02	0.1323E-02	0.5000E-03	0.1242E-02
85.05	0.4891E-03	0.3565E-03	0.6813E-03	0.1382E-02	0.4172E-03	0.9398E-03	0.1189E-02	0.1486E-02	0.5645E-03	0.1387E-02
89.99	0.5500E-03	0.3942E-03	0.9240E-03	0.1382E-02	0.4172E-03	0.1018E-02	0.1322E-02	0.1680E-02	0.6362E-03	0.1624E-02
95.10	0.6312E-03	0.4494E-03	0.1086E-02	0.1528E-02	0.4718E-03	0.1131E-02	0.1482E-02	0.1942E-02	0.7006E-03	0.1868E-02
100.1	0.7495E-03	0.5179E-03	0.1271E-02	0.1670E-02	0.5361E-03	0.1262E-02	0.1705E-02	0.2313E-02	0.7621E-03	0.2170E-02
102.5	0.8103E-03	0.5579E-03	0.1355E-02	0.1743E-02	0.5748E-03	0.1324E-02	0.1885E-02	0.2529E-02	0.8067E-03	0.2322E-02
105.0	0.8510E-03	0.5832E-03	0.1428E-02	0.1803E-02	0.6009E-03	0.1382E-02	0.2036E-02	0.2790E-02	0.8390E-03	0.2519E-02
107.6	0.9041E-03	0.6219E-03	0.1521E-02	0.1873E-02	0.6374E-03	0.1462E-02	0.2184E-02	0.3094E-02	0.8668E-03	0.2750E-02
110.1	0.9593E-03	0.6621E-03	0.1603E-02	0.1957E-02	0.6927E-03	0.1604E-02	0.2474E-02	0.3492E-02	0.9425E-03	0.3005E-02
112.5	0.1016E-02	0.7222E-03	0.1693E-02	0.2048E-02	0.7529E-02	0.1753E-02	0.2808E-02	0.3837E-02	0.1010E-02	0.3135E-02
115.1	0.1050E-02	0.7569E-03	0.1784E-02	0.2122E-02	0.7984E-03	0.1822E-02	0.3104E-02	0.4589E-02	0.1067E-02	0.3232E-02
117.5	0.1084E-02	0.8111E-03	0.1882E-02	0.2178E-02	0.8504E-03	0.1989E-02	0.3420E-02	0.5913E-02	0.1133E-02	0.3452E-02
120.2	0.119E-02	0.8770E-03	0.1993E-02	0.2238E-02	0.9114E-03	0.2168E-02	0.3926E-02	0.7779E-02	0.1209E-02	0.3453E-02
122.5	0.1166E-02	0.9604E-03	0.2091E-02	0.2278E-02	0.9886E-03	0.2399E-02	0.4305E-02	0.1105E-01	0.1312E-02	0.3489E-02
125.2	0.1197E-02	0.1052E-02	0.2220E-02	0.2332E-02	0.1061E-02	0.2791E-02	0.4912E-02	0.1469E-01	0.1404E-02	0.3558E-02
127.7	0.1224E-02	0.1182E-02	0.2371E-02	0.2417E-02	0.1150E-02	0.3615E-02	0.4973E-02	0.1730E-01	0.1528E-02	0.3874E-02
130.1	0.1239E-02	0.1465E-02	0.2687E-02	0.3780E-02	0.1290E-02	0.3897E-02	0.6400E-02	0.9409E-02	0.1866E-02	0.3196E-02
132.6	0.1253E-02	0.1504E-02	0.2775E-02	0.3780E-02	0.1313E-02	0.3973E-02	0.7026E-02	0.9456E-02	0.1922E-02	0.2879E-02
135.2	0.1250E-02	0.1634E-02	0.2789E-02	0.4555E-02	0.1378E-02	0.4117E-02	0.7990E-02	0.9639E-02	0.2178E-02	0.1594E-02
137.7	0.1266E-02	0.1815E-02	0.2784E-02	0.1008E-01	0.1443E-02	0.4202E-02	0.7160E-02	0.9739E-02	0.2437E-02	0.1845E-02
139.8	0.1286E-02	0.1992E-02	0.2724E-02	0.1008E-01	0.1512E-02	0.4375E-02	0.7405E-02	0.9830E-02	0.2729E-02	0.1691E-02
140.3	0.1297E-02	0.2090E-02	0.4528E-02	0.1024E-01	0.1610E-02	0.4533E-02	0.7555E-02	0.9821E-02	0.3125E-02	0.1831E-02
141.8	0.1461E-02	0.2261E-02	0.1075E-01	0.1024E-01	0.1646E-02	0.4633E-02	0.7783E-02	0.9736E-02	0.4127E-02	0.2014E-02
142.6	0.1549E-02	0.2324E-02	0.1120E-01	0.8819E-02	0.1689E-02	0.4624E-02	0.7990E-02	0.9749E-02	0.3916E-02	0.2114E-02
143.4	0.1599E-02	0.2389E-02	0.1137E-01	0.8583E-02	0.1689E-02	0.4624E-02	0.8192E-02	0.9732E-02	0.3732E-02	0.2178E-02
145.7	0.1656E-02	0.2450E-02	0.1163E-01	0.8684E-02	0.1735E-02	0.4579E-02	0.8192E-02	0.9775E-02	0.3732E-02	0.2178E-02
147.1	0.1731E-02	0.2494E-02	0.1192E-01	0.8684E-02	0.1784E-02	0.4436E-02	0.8538E-02	0.9826E-02	0.3791E-02	0.2276E-02
147.8	0.1793E-02	0.2501E-02	0.1233E-01	0.8760E-02	0.1867E-02	0.4422E-02	0.8382E-02	0.1000E-01	0.3840E-02	0.2307E-02
148.4	0.1797E-02	0.2487E-02	0.1231E-01	0.8296E-02	0.1990E-02	0.4512E-02	0.9338	0.1002E-01	0.4032E-02	0.2299E-02
149.8	0.1823E-02	0.2488E-02	0.1266E-01	0.8349E-02	0.1990E-02	0.4555E-02	0.9338	0.9982E-02	0.3840E-02	0.2499E-02
135.4	0.1724E-02	0.2340E-02	0.1266E-01	0.8349E-02	0.2038E-02	0.4430E-02	0.9338	0.1008E-01	0.3743E-02	0.2640E-02
149.2	0.1798E-02	0.2480E-02	0.8752E-02	0.7701E-02	0.2086E-02	0.4010E-02	0.9331	0.9763E-02	0.3240E-02	0.2676E-02
153.3	0.1898E-02	0.2510E-02	0.8717E-02	0.8253E-02	0.2115E-02	0.4301E-02	0.9331	0.9928E-02	0.3240E-02	0.2763E-02
154.4	0.2004E-02	0.2562E-02	0.8316E-02	0.8790E-02	0.2106E-02	0.4131E-02	0.9319	0.9698E-02	0.2836E-02	0.2126E-02
155.5	0.2010E-02	0.2580E-02	0.7967E-02	0.8867E-02	0.2102E-02	0.4165E-02	0.9331	0.9659E-02	0.2922E-02	0.1436E-02
156.3	0.2050E-02	0.5687E-02	0.7679E-02	0.9146E-02	0.2132E-02	0.4282E-02	0.9331	0.9826E-02	0.2603E-02	0.1168E-02
157.4	0.2054E-02	0.8840E-02	0.7500E-02	0.9354E-02	0.2167E-02	0.4668E-02	0.9339	0.9566E-02	0.2419E-02	0.1048E-02
158.3	0.2144E-02	0.1029E-01	0.6990E-02	0.9766E-02	0.2308E-02	0.5169E-02	0.9339	0.9842E-02	0.2274E-02	0.1051E-02
149.6	0.2151E-02	0.1169E-01	0.6637E-02	0.9558E-02	0.2279E-02	0.4811E-02	0.9339	0.1006E-01	0.2188E-02	0.1040E-02
143.1	0.1925E-02	0.1228E-01	0.6346E-02	0.9594E-02	0.2280E-02	0.4844E-02	0.9347	0.1083E-01	0.2123E-02	0.9294

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	221	222	223	224	225	226	227	228	229	230
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.7566E-06	0.8543E-06	0.5646E-05	0.3381E-05	-0.1960E-04	0.6805E-05	-0.1976E-04	-0.9740E-05	0.1446E-03	-0.4182E-05
9.937	0.1791E-03	0.1486E-02	0.2883E-02	0.2822E-02	0.2539E-02	0.3192E-02	0.2557E-02	0.8030E-03	0.3013E-03	-0.3876E-03
19.92	0.5208E-03	0.3762E-02	0.7799E-02	0.7875E-02	0.7723E-02	0.9582E-02	0.7457E-02	0.2413E-02	0.6967E-02	-0.6389E-03
30.01	0.1258E-02	0.8021E-02	0.1710E-01	0.1805E-01	0.1974E-01	0.2168E-01	0.1563E-01	0.5082E-02	0.1612E-02	-0.9469E-03
40.00	0.2183E-02	0.1338E-01	0.2786E-01	0.2990E-01	0.3307E-01	0.3428E-01	0.2417E-01	0.7515E-02	0.1883E-02	-0.1443E-02
50.03	0.3170E-02	0.1945E-01	0.3951E-01	0.4260E-01	0.4718E-01	0.4739E-01	0.3290E-01	0.9543E-02	0.1624E-02	-0.2224E-02
60.04	0.4070E-02	0.2541E-01	0.5070E-01	0.5464E-01	0.6085E-01	0.6004E-01	0.4132E-01	0.1145E-01	0.1444E-02	-0.3248E-02
70.14	0.5123E-02	0.3174E-01	0.6255E-01	0.6759E-01	0.7513E-01	0.7344E-01	0.5074E-01	0.1383E-01	0.1618E-02	-0.3381E-02
80.13	0.6197E-02	0.3841E-01	0.7515E-01	0.8088E-01	0.9044E-01	0.8798E-01	0.6101E-01	0.1664E-01	0.2048E-02	-0.3805E-02
85.05	0.7071E-02	0.4207E-01	0.8177E-01	0.8088E-01	0.9044E-01	0.8798E-01	0.6101E-01	0.1664E-01	0.2048E-02	-0.3805E-02
89.99	0.7802E-02	0.4609E-01	0.8971E-01	0.8750E-01	0.9867E-01	0.9621E-01	0.7497E-01	0.2095E-01	0.2569E-02	-0.4031E-02
95.10	0.9085E-02	0.5092E-01	0.9835E-01	0.9566E-01	0.1088	0.1060	0.7497E-01	0.2467E-01	0.3419E-02	-0.3848E-02
100.1	0.1068E-01	0.5672E-01	0.1094	0.1046	0.1202	0.1174	0.8397E-01	0.2941E-01	0.5610E-02	-0.2776E-02
102.5	0.1181E-01	0.5997E-01	0.1151	0.1168	0.1366	0.1316	0.9475E-01	0.3227E-01	0.8844E-02	-0.9963E-03
105.0	0.1237E-01	0.6233E-01	0.1201	0.1233	0.1443	0.1392	0.1009	0.3387E-01	0.1135E-01	0.9095E-03
107.6	0.1321E-01	0.6542E-01	0.1271	0.1385	0.1523	0.1460	0.1057	0.3628E-01	0.1205E-01	0.1041E-02
110.1	0.1436E-01	0.6934E-01	0.1354	0.1498	0.1788	0.1668	0.1119	0.3920E-01	0.1362E-01	0.2087E-02
112.5	0.1612E-01	0.7412E-01	0.1448	0.1624	0.1955	0.1800	0.1197	0.3920E-01	0.1500E-01	0.2778E-02
115.1	0.1729E-01	0.7782E-01	0.1537	0.1765	0.2145	0.1929	0.1294	0.4613E-01	0.1794E-01	0.4706E-02
117.5	0.1950E-01	0.8318E-01	0.1649	0.1945	0.2381	0.2095	0.1480	0.5057E-01	0.1914E-01	0.5291E-02
120.2	0.2191E-01	0.8923E-01	0.1783	0.2178	0.2690	0.2313	0.1615	0.5528E-01	0.2221E-01	0.7436E-02
122.5	0.2655E-01	0.9836E-01	0.1965	0.2473	0.3058	0.2592	0.1795	0.6373E-01	0.2491E-01	0.8866E-02
125.2	0.2877E-01	0.1055	0.2146	0.2789	0.3440	0.2880	0.1964	0.6889E-01	0.3184E-01	0.1465E-01
127.7	0.3196E-01	0.1147	0.2369	0.3161	0.3858	0.3215	0.2167	0.7531E-01	0.3860E-01	0.1866E-01
130.1	0.4013E-01	0.1358	0.2869	0.4007	0.4813	0.3929	0.2594	0.9040E-01	0.4924E-01	0.2803E-01
132.6	0.4099E-01	0.1394	0.2963	0.4166	0.5002	0.4062	0.2672	0.9274E-01	0.5071E-01	0.2871E-01
135.2	0.4403E-01	0.1498	0.3243	0.4668	0.5591	0.4500	0.2916	0.9975E-01	0.5457E-01	0.3108E-01
137.7	0.4781E-01	0.1622	0.3584	0.5295	0.6371	0.5045	0.3205	0.1080	0.5918E-01	0.3388E-01
139.8	0.5221E-01	0.1769	0.4015	0.6076	0.7401	0.5713	0.3546	0.1178	0.6450E-01	0.3794E-01
141.8	0.5957E-01	0.2026	0.4778	0.7543	0.8242	0.6220	0.3800	0.1252	0.6874E-01	0.4109E-01
142.6	0.6223E-01	0.2118	0.5058	0.8124	0.9337	0.6923	0.4121	0.1343	0.6874E-01	0.4109E-01
143.4	0.6549E-01	0.2245	0.5454	0.8854	1.015	0.7426	0.4360	0.1369	-0.4736E-01	0.4127E-01
145.7	0.6855E-01	0.2371	0.5835	0.9567	1.107	0.8005	0.4661	0.1438	-0.4332E-01	0.4310E-01
147.1	0.7305E-01	0.2560	0.6402	1.062	1.333	0.8565	0.4981	0.1515	-0.3826E-01	0.4762E-01
147.8	0.7662E-01	0.2710	0.6836	1.138	1.437	1.011	0.5474	0.1634	-0.3193E-01	0.5279E-01
148.4	0.8063E-01	0.2863	0.7255	1.195	1.537	1.097	0.5827	0.1715	-0.4993E-01	0.5638E-01
149.2	0.8342E-01	0.2990	0.7644	1.243	1.618	1.157	0.6424	0.2076	-0.2029E-01	0.8820E-01
149.2	0.8620E-01	0.3115	0.7968	1.259	1.626	1.155	0.6825	0.2233	-0.9579E-02	0.9734E-01
153.3	0.9217E-01	0.3381	0.8694	1.347	1.660	1.202	0.7084	0.2317	-0.3419E-02	0.1036
153.5	0.9317E-01	0.3464	0.8933	1.386	1.775	1.309	0.7720	0.2523	-0.6507E-02	0.1109
154.4	0.9641E-01	0.3617	0.9361	1.455	1.815	1.200	0.8336	0.2439	-0.1296E-01	0.7847E-02
156.3	0.1033	0.3928	1.020	1.599	1.907	1.283	0.6828	0.1189	-0.1391E-01	-0.3998E-02
157.4	0.1102	0.4225	1.097	1.730	2.082	1.419	0.7662	0.1434	0.4807E-03	-0.1351E-01
158.3	0.1295	0.4999	1.241	1.790	2.219	1.518	0.8267	0.1593	0.7869E-02	-0.8050E-02
149.6	0.1296	0.5024	1.247	2.064	2.543	1.778	1.003	0.2013	0.2148E-02	-0.1464E-02
143.1	0.1279	0.5146	1.268	2.279	2.668	1.868	1.065	0.1707	-0.5953E-01	-0.7447E-01
					3.290	2.036	1.158	0.1634	-0.1140	-0.1375

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	231	232	233	234	235	236	237	238	239	240
0.00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.5840E-05	-0.9182E-06	-0.9756E-05	0.5618E-04	0.1908E-04	0.5266E-05	-0.2455E-04	0.1051E-03	0.1105E-03	-0.3174E-04
9.937	0.137E-03	0.1998E-02	0.1485E-02	0.3417E-02	0.7251E-02	0.1144E-01	0.1140E-01	0.9031E-03	0.1538E-02	0.2538E-02
19.92	-0.1074E-02	0.6198E-02	0.5094E-02	0.9890E-02	0.2120E-01	0.2909E-01	0.2838E-01	0.1556E-02	0.3812E-02	0.6743E-02
30.01	-0.1456E-02	0.1300E-01	0.8019E-02	0.2119E-01	0.4697E-01	0.5832E-01	0.5675E-01	0.3967E-02	0.9782E-02	0.1568E-01
40.00	-0.2340E-02	0.2334E-01	0.1765E-01	0.3795E-01	0.8110E-01	0.1004	0.9855E-01	0.7230E-02	0.1575E-01	0.2574E-01
50.03	-0.4020E-02	0.3546E-01	0.2879E-01	0.5756E-01	0.1229	0.1549	0.1546	0.1254E-01	0.2311E-01	0.3750E-01
60.04	-0.5749E-02	0.4825E-01	0.4104E-01	0.7913E-01	0.1664	0.2113	0.2142	0.1857E-01	0.3166E-01	0.4897E-01
70.14	-0.7059E-02	0.6256E-01	0.5456E-01	0.1022	0.2119	0.2699	0.2769	0.2453E-01	0.3889E-01	0.6099E-01
80.13	-0.8482E-02	0.7948E-01	0.7063E-01	0.1290	0.2625	0.3345	0.3474	0.3128E-01	0.4891E-01	0.7386E-01
85.05	-0.9367E-02	0.9083E-01	0.8101E-01	0.1459	0.2930	0.3734	0.3910	0.4261E-01	0.5348E-01	0.8141E-01
89.99	-0.1001E-01	0.1043	0.9360E-01	0.1670	0.3294	0.4196	0.4434	0.4703E-01	0.5959E-01	0.8967E-01
95.10	-0.7232E-02	0.1180	0.1063	0.1886	0.3676	0.4680	0.4978	0.5195E-01	0.6648E-01	0.9873E-01
100.1	-0.6038E-02	0.1347	0.1215	0.2146	0.4114	0.5239	0.5603	0.5846E-01	0.7681E-01	0.1107
102.5	-0.2242E-02	0.1441	0.1299	0.2284	0.4336	0.5523	0.5913	0.6059E-01	0.7907E-01	0.1161
105.0	-0.2118E-02	0.1505	0.1359	0.2385	0.4526	0.5780	0.6213	0.6237E-01	0.8254E-01	0.1211
107.6	-0.1192E-02	0.1600	0.1529	0.2514	0.4771	0.6154	0.6576	0.6456E-01	0.8702E-01	0.1280
110.1	-0.9605E-03	0.1704	0.1624	0.2671	0.5043	0.6511	0.6985	0.6631E-01	0.9256E-01	0.1367
112.5	0.2070E-02	0.1827	0.1734	0.2862	0.5360	0.6923	0.7422	0.6901E-01	0.9466E-01	0.1458
115.1	0.2934E-02	0.1923	0.1822	0.3018	0.5631	0.7273	0.7832	0.7151E-01	0.1047	0.1669
117.5	0.4957E-02	0.2036	0.1920	0.3223	0.5930	0.7661	0.8274	0.7576E-01	0.1133	0.1549
120.2	0.6138E-02	0.2168	0.2037	0.3410	0.6259	0.8089	0.8750	0.8127E-01	0.1245	0.1814
122.5	0.1258E-01	0.2332	0.2177	0.5041	0.6673	0.8621	0.9324	0.8991E-01	0.1399	0.2005
125.2	0.1373E-01	0.2464	0.2294	0.5231	0.7036	0.9109	0.9845	0.9834E-01	0.1550	0.2198
127.7	0.1604E-01	0.2622	0.2434	0.5468	0.7456	0.9678	1.044	0.1092	0.1734	0.2437
130.1	0.2674E-01	0.2943	0.2724	0.5969	0.8310	1.088	1.164	0.1343	0.2143	0.2967
132.6	0.2727E-01	0.3007	0.2772	0.6055	0.8504	1.116	1.195	0.1394	0.2221	0.3063
135.2	0.2945E-01	0.3184	0.2934	0.6313	0.8948	1.181	1.261	0.1546	0.2448	0.3352
137.7	0.3402E-01	0.3407	0.3132	0.6621	0.9480	1.262	1.337	0.1728	0.2730	0.3685
139.8	0.3866E-01	0.3668	0.3366	0.6978	1.012	1.358	1.431	0.1947	0.3032	0.4079
140.3	0.4196E-01	0.3860	0.3535	0.7224	1.052	1.415	1.484	0.2122	0.3267	0.4373
141.8	0.4303E-01	0.4211	0.3902	0.7673	1.120	1.505	1.610	0.2383	0.3605	0.4766
142.6	0.4080E-01	0.4449	0.4128	0.7946	1.158	1.553	1.669	0.2548	0.3824	0.5021
143.4	0.4369E-01	0.4680	0.4339	0.8243	1.204	1.612	1.669	0.2761	0.4116	0.5370
145.7	0.4909E-01	0.4910	0.4549	0.8557	1.254	1.678	1.734	0.2980	0.4406	0.5712
147.1	0.5470E-01	0.5257	0.4862	0.8997	1.321	1.769	1.822	0.3311	0.4851	0.6233
147.8	0.5938E-01	0.5519	0.5097	0.9313	1.370	1.836	1.886	0.3581	0.5197	0.6641
148.4	0.9309E-01	0.5763	0.5358	0.9732	1.438	1.941	1.976	0.3868	0.5555	0.7031
149.8	0.1038	0.5996	0.5557	1.003	1.488	2.013	2.043	0.4098	0.5875	0.7391
135.4	0.1082	0.5876	0.5598	0.9927	1.459	1.981	1.995	0.4103	0.5875	0.7391
149.2	0.1110	0.6138	0.5827	1.035	1.456	2.111	2.115	0.4289	0.6132	0.7673
153.3	0.1200	0.6638	0.6292	1.107	1.666	2.281	2.269	0.4734	0.6711	0.8363
153.5	0.1053	0.7112	0.6805	1.162	1.737	2.365	2.341	0.4928	0.6943	0.8609
154.4	0.9960E-01	0.7539	0.7206	1.207	1.797	2.440	2.413	0.5229	0.7325	0.9017
156.3	-0.5771E-02	0.8190	0.7835	1.297	1.926	2.601	2.575	0.5859	0.8102	0.9834
157.4	-0.1221E-02	0.8725	0.8333	1.369	2.029	2.732	2.702	0.6504	0.8861	1.061
158.3	-0.4142E-02	1.047	1.001	1.569	2.285	3.065	3.039	0.8073	1.072	1.258
149.1	-0.8972E-01	1.301	1.259	1.758	2.481	3.260	3.224	0.8111	1.079	1.264
143.1	-0.1619	1.481	0.8603	1.718	2.450	3.182	3.327	0.8660	1.136	1.315

## ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER			
	241	242	243	244
0.000	0.0	0.0	0.0	0.000
0.004	0.1405E-04	0.0	0.2938E-04	0.004
9.937	0.3012E-02	0.2079E-02	0.1185E-02	9.937
19.92	0.7924E-02	0.5393E-02	0.3355E-02	19.92
30.01	0.1796E-01	0.1246E-01	0.8209E-02	30.01
40.00	0.2939E-01	0.2081E-01	0.1403E-01	40.00
50.03	0.4155E-01	0.2981E-01	0.2074E-01	50.03
60.04	0.5318E-01	0.3857E-01	0.2751E-01	60.04
70.14	0.6541E-01	0.4801E-01	0.3495E-01	70.14
80.13	0.7877E-01	0.5849E-01	0.4320E-01	80.13
85.05	0.8607E-01	0.6456E-01	0.4856E-01	85.05
89.99	0.9459E-01	0.7078E-01	0.5364E-01	89.99
95.10	0.1039	0.7803E-01	0.5937E-01	95.10
100.1	0.1156	0.8694E-01	0.6568E-01	100.1
102.5	0.1217	0.9199E-01	0.6929E-01	102.5
105.0	0.1270	0.9590E-01	0.7143E-01	105.0
107.6	0.1342	0.1011	0.7383E-01	107.6
110.1	0.1434	0.1078	0.7666E-01	110.1
112.5	0.1536	0.1158	0.8062E-01	112.5
115.1	0.1633	0.1231	0.8373E-01	115.1
117.5	0.1755	0.1327	0.8844E-01	117.5
120.2	0.1897	0.1441	0.9470E-01	120.2
122.5	0.2084	0.1591	0.1038	122.5
125.2	0.2268	0.1739	0.1126	125.2
127.7	0.2493	0.1921	0.1234	127.7
130.1	0.2990	0.2312	0.1481	130.1
132.6	0.3080	0.2381	0.1528	132.6
135.2	0.3352	0.2596	0.1669	135.2
137.7	0.3672	0.2843	0.1840	137.7
139.8	0.4046	0.3141	0.2053	139.8
140.3	0.4327	0.3362	0.2214	140.3
141.8	0.4709	0.3645	0.2425	141.8
142.6	0.4957	0.3830	0.2563	142.6
143.4	0.5303	0.4099	0.2775	143.4
145.7	0.5651	0.4367	0.2997	145.7
147.1	0.6164	0.4772	0.3343	147.1
147.8	0.6586	0.5103	0.3604	147.8
148.4	0.7004	0.5445	0.3905	148.4
149.8	0.7408	0.5775	0.4189	149.8
135.4	0.7372	0.5758	0.4188	135.4
149.2	0.7696	0.6027	0.4393	149.2
153.3	0.8377	0.6590	0.4854	153.3
153.5	0.8602	0.6783	0.5032	153.5
154.4	0.8987	0.7103	0.5302	154.4
156.3	0.9776	0.7771	0.5926	156.3
157.4	1.053	0.8425	0.6529	157.4
158.3	1.255	1.005	0.8069	158.3
149.6	1.274	1.034	0.8467	149.6
143.1	1.329	1.082	0.9021	143.1

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	0.0	0.0	0.1079E-05	0.2157E-05	0.0	0.0	-0.5393E-05	-0.1079E-05	0.0	0.0
9.937	0.3236E-05	-0.1834E-04	0.2265E-04	0.5393E-04	-0.9708E-05	0.6472E-05	0.4854E-04	0.4423E-04	0.5178E-04	0.3560E-04
19.92	0.1187E-04	-0.3883E-04	0.4423E-04	0.1575E-03	-0.2697E-04	0.1942E-04	0.1176E-03	0.9600E-04	0.1154E-03	0.8521E-04
30.01	0.2589E-04	-0.6580E-04	0.9384E-04	0.3560E-03	-0.4207E-04	0.5178E-04	0.2880E-03	0.1715E-03	0.2071E-03	0.1942E-03
40.00	0.4638E-04	-0.9708E-04	0.2006E-03	0.5987E-03	-0.5825E-04	0.1025E-03	0.4412E-03	0.2988E-03	0.3042E-03	0.3236E-03
50.03	0.7766E-04	-0.1327E-03	0.3538E-03	0.8953E-03	-0.7766E-04	0.1726E-03	0.7195E-03	0.5307E-03	0.4218E-03	0.4789E-03
60.04	0.1176E-03	-0.1607E-03	0.4919E-03	0.1182E-02	-0.9277E-04	0.2459E-03	0.1010E-02	0.7583E-03	0.5415E-03	0.6353E-03
70.14	0.1618E-03	-0.1942E-03	0.6256E-03	0.1478E-02	-0.1046E-03	0.3204E-03	0.1232E-02	0.1003E-02	0.6742E-03	0.8058E-03
80.13	0.2190E-03	-0.2136E-03	0.8155E-03	0.1813E-02	-0.1165E-03	0.4067E-03	0.1575E-02	0.8273E-03	0.8273E-03	0.9589E-03
85.05	0.2600E-03	-0.2233E-03	0.9158E-03	0.2006E-02	-0.1165E-03	0.4681E-03	0.1780E-02	0.1492E-02	0.9255E-03	0.1052E-02
89.99	0.2912E-03	-0.2298E-03	0.1058E-02	0.2229E-02	-0.1176E-03	0.5178E-03	0.1997E-02	0.1729E-02	0.1027E-02	0.1143E-02
95.10	0.3312E-03	-0.2395E-03	0.1182E-02	0.2440E-02	-0.1197E-03	0.5685E-03	0.2287E-02	0.1962E-02	0.1174E-02	0.1240E-02
100.1	0.3743E-03	-0.2254E-03	0.1331E-02	0.2669E-02	-0.1176E-03	0.6343E-03	0.2682E-02	0.2188E-02	0.1512E-02	0.1334E-02
102.5	0.3894E-03	-0.2265E-03	0.1398E-02	0.2761E-02	-0.1219E-03	0.6623E-03	0.2766E-02	0.2307E-02	0.1679E-02	0.1382E-02
105.0	0.4088E-03	-0.2265E-03	0.1458E-02	0.2857E-02	-0.1316E-03	0.6914E-03	0.2935E-02	0.2392E-02	0.1945E-02	0.1431E-02
107.6	0.4325E-03	-0.2190E-03	0.1533E-02	0.2960E-02	-0.1240E-03	0.7324E-03	0.3176E-02	0.2482E-02	0.1945E-02	0.1486E-02
110.1	0.4617E-03	-0.2103E-03	0.1612E-02	0.3070E-02	-0.1282E-03	0.7777E-03	0.3413E-02	0.2566E-02	0.2072E-02	0.1549E-02
112.5	0.4991E-03	-0.2004E-03	0.1690E-02	0.3171E-02	-0.1282E-03	0.8234E-03	0.3662E-02	0.2691E-02	0.2186E-02	0.1610E-02
115.1	0.5210E-03	-0.1909E-03	0.1769E-02	0.3289E-02	-0.1316E-03	0.8737E-03	0.3960E-02	0.2719E-02	0.2321E-02	0.1682E-02
117.5	0.5458E-03	-0.1747E-03	0.1841E-02	0.3390E-02	-0.1327E-03	0.9287E-03	0.4216E-02	0.2727E-02	0.2442E-02	0.1755E-02
120.2	0.5803E-03	-0.1467E-03	0.1919E-02	0.3494E-02	-0.1327E-03	0.9999E-03	0.4506E-02	0.2738E-02	0.2560E-02	0.1823E-02
122.5	0.6030E-03	-0.1230E-03	0.1997E-02	0.3592E-02	-0.1402E-03	0.1075E-02	0.4740E-02	0.2692E-02	0.2692E-02	0.1903E-02
125.2	0.6472E-03	-0.1057E-03	0.2066E-02	0.3690E-02	-0.1456E-03	0.1139E-02	0.4992E-02	0.2751E-02	0.2814E-02	0.1970E-02
127.7	0.6957E-03	-0.7659E-04	0.2138E-02	0.3783E-02	-0.1456E-03	0.1221E-02	0.5235E-02	0.2757E-02	0.2951E-02	0.2045E-02
130.1	0.5987E-03	0.1079E-05	0.2246E-02	0.3982E-02	-0.1327E-03	0.1414E-02	0.5866E-02	0.2783E-02	0.3249E-02	0.2340E-02
132.6	0.5922E-03	0.6472E-05	0.2288E-02	0.4047E-02	-0.1359E-03	0.1457E-02	0.5941E-02	0.2805E-02	0.3319E-02	0.2398E-02
135.2	0.5577E-03	0.3128E-04	0.2348E-02	0.4128E-02	-0.1338E-03	0.1663E-02	0.6173E-02	0.2822E-02	0.3455E-02	0.2508E-02
137.7	0.5285E-03	0.6148E-04	0.2403E-02	0.4201E-02	-0.1251E-03	0.1663E-02	0.6466E-02	0.2848E-02	0.3603E-02	0.2663E-02
139.8	0.5037E-03	0.1122E-03	0.2445E-02	0.4289E-02	-0.1154E-03	0.1816E-02	0.6871E-02	0.2888E-02	0.3760E-02	0.2807E-02
140.3	0.4757E-03	0.1316E-03	0.2459E-02	0.4339E-02	-0.1036E-03	0.1909E-02	0.7056E-02	0.2926E-02	0.3999E-02	0.2888E-02
141.8	0.4174E-03	0.1650E-03	0.2515E-02	0.4373E-02	-0.6903E-04	0.2094E-02	0.7356E-02	0.2950E-02	0.3999E-02	0.2987E-02
142.6	0.3657E-03	0.1801E-03	0.2537E-02	0.4392E-02	-0.5501E-04	0.2181E-02	0.7563E-02	0.2994E-02	0.4083E-02	0.3036E-02
143.4	0.3301E-03	0.2093E-03	0.2558E-02	0.4404E-02	-0.4099E-04	0.2277E-02	0.7972E-02	0.2991E-02	0.4171E-02	0.3101E-02
145.7	0.3107E-03	0.2265E-03	0.2591E-02	0.4435E-02	-0.2617E-04	0.2371E-02	0.1002E-01	0.2971E-02	0.4229E-02	0.3177E-02
147.1	0.2718E-03	0.2600E-03	0.2638E-02	0.4456E-02	-0.1618E-04	0.2521E-02	0.1165E-01	0.2934E-02	0.4303E-02	0.3247E-02
147.8	0.2556E-03	0.2654E-03	0.2671E-02	0.4541E-02	0.0	0.2644E-02	0.1283E-01	0.2925E-02	0.4347E-02	0.3322E-02
148.4	0.1909E-03	0.2697E-03	0.2686E-02	0.4569E-02	0.1942E-04	0.2800E-02	0.1326E-01	0.2931E-02	0.4409E-02	0.3363E-02
149.8	0.1758E-03	0.2794E-03	0.2720E-02	0.4591E-02	0.2589E-04	0.2932E-02	0.1360E-01	0.2933E-02	0.4457E-02	0.3410E-02

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER									
	F11	F12	F13	F14	F15	F16	F17	F18	F19	F20
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.1079E-05	0.0	0.0	-0.2805E-04	0.0	0.2157E-05	0.0	0.0	0.3236E-05	0.1079E-05
9.937	-0.1187E-04	0.0	0.0	-0.5393E-05	0.0	0.7551E-05	0.0	0.0	0.2589E-04	0.3236E-05
19.92	-0.2265E-04	0.6472E-05	0.2589E-04	-0.8629E-05	0.1618E-04	0.1079E-04	0.1294E-04	0.9708E-05	0.2589E-04	0.3236E-05
30.01	-0.3560E-04	0.3236E-04	0.6472E-04	-0.1294E-04	0.7066E-04	0.3344E-04	0.2912E-04	0.2589E-04	0.4854E-04	0.1294E-04
40.00	-0.7227E-04	0.9708E-04	0.2200E-03	-0.1942E-04	0.1327E-03	0.2589E-04	0.8737E-04	0.7443E-04	-0.9913E-03	0.1942E-04
50.03	-0.1327E-03	0.1855E-03	0.3365E-03	-0.2373E-04	0.1963E-03	0.6472E-05	0.1262E-03	0.1003E-03	-0.7303E-03	0.1942E-04
60.04	-0.1888E-03	0.2459E-03	0.4627E-03	-0.2912E-04	0.2654E-03	0.4315E-05	0.1694E-03	0.1510E-03	-0.1783E-02	0.2481E-04
70.14	-0.2503E-03	0.3009E-03	0.5987E-03	-0.3560E-04	0.3387E-03	0.7874E-04	0.2136E-03	0.1510E-03	-0.3072E-02	0.4854E-04
80.13	-0.3193E-03	0.3063E-03	0.7540E-03	-0.3883E-04	0.4347E-03	0.3344E-04	0.2697E-03	0.1845E-03	-0.4822E-02	0.5825E-04
85.05	-0.3657E-03	0.3107E-03	0.8414E-03	-0.3560E-04	0.5199E-03	0.5178E-04	0.3020E-03	0.1780E-03	-0.4071E-02	0.7659E-04
89.99	-0.4228E-03	0.3160E-03	0.9449E-03	-0.3560E-04	0.6224E-03	0.4423E-04	0.3344E-03	0.1985E-03	-0.3827E-02	0.8414E-04
95.10	-0.4800E-03	0.3204E-03	0.1038E-02	-0.3452E-04	0.7249E-03	0.8198E-04	0.3732E-03	0.2190E-03	-0.3739E-02	0.1003E-03
100.1	-0.4822E-03	0.3268E-03	0.1142E-02	-0.2912E-04	-0.3330E+50	0.7335E-04	0.4207E-03	0.2513E-03	-0.3894E-02	0.1154E-03
102.5	-0.4886E-03	0.3301E-03	0.1184E-02	-0.2589E-04	0.8953E-02	0.8845E-04	0.4541E-03	0.2632E-03	-0.4090E-02	0.1294E-03
105.0	-0.5048E-03	0.3344E-03	0.1234E-02	-0.2697E-04	0.9320E-03	0.8414E-04	0.4768E-03	0.2772E-03	-0.4049E-02	0.1435E-03
107.6	-0.5232E-03	0.3430E-03	0.1292E-02	-0.2481E-04	0.9859E-03	0.8414E-04	0.5188E-03	0.2956E-03	-0.4002E-02	0.1650E-03
110.1	-0.5447E-03	0.3495E-03	0.1357E-02	-0.2157E-04	0.1058E-02	0.8198E-04	0.5792E-03	0.3139E-03	-0.3904E-02	0.1888E-03
112.5	-0.5712E-03	0.3567E-03	0.1412E-02	-0.1731E-04	0.1190E-02	0.8990E-04	0.6191E-03	0.3310E-03	-0.3890E-02	0.2032E-03
115.1	-0.5954E-03	0.3678E-03	0.1492E-02	-0.1294E-04	0.1218E-02	0.9169E-04	0.6537E-03	0.3463E-03	-0.3561E-02	0.2341E-03
117.5	-0.6235E-03	0.3754E-03	0.1565E-02	-0.5993E-05	0.1314E-02	0.9277E-04	0.6947E-03	0.3624E-03	-0.3561E-02	0.2548E-03
120.2	-0.6526E-03	0.3851E-03	0.1642E-02	0.0	0.1411E-02	0.9384E-04	0.7432E-03	0.3852E-03	-0.3381E-02	0.2761E-03
122.5	-0.7022E-03	0.3883E-03	0.1723E-02	0.6472E-05	0.1481E-02	0.8737E-04	0.7939E-03	0.4142E-03	-0.2677E-02	0.3074E-03
125.2	-0.7238E-03	0.3916E-03	0.1796E-02	0.9708E-05	0.1526E-02	0.9169E-04	0.8511E-03	0.4487E-03	-0.2511E-02	0.3290E-03
127.7	-0.7594E-03	0.3980E-03	0.1874E-02	0.1294E-04	0.1578E-02	0.9600E-04	0.9190E-03	0.4886E-03	-0.2385E-02	0.3581E-03
130.1	-0.8338E-03	0.4185E-03	0.1984E-02	0.1942E-04	0.1647E-02	0.1413E-03	0.1058E-02	0.5663E-03	-0.1800E-02	0.4153E-03
132.6	-0.8500E-03	0.4261E-03	0.2026E-02	0.1942E-04	0.1676E-02	0.1348E-03	0.1084E-02	0.5825E-03	-0.1695E-02	0.4272E-03
135.2	-0.8845E-03	0.4433E-03	0.2067E-02	0.1726E-04	0.1709E-02	0.1143E-03	0.1163E-02	0.6321E-03	-0.1583E-02	0.4584E-03
137.7	-0.9212E-03	0.4563E-03	0.2114E-02	0.1294E-04	0.1738E-02	0.1014E-03	0.1247E-02	0.6871E-03	-0.1523E-02	0.4908E-03
139.8	-0.9460E-03	0.4778E-03	0.2184E-02	0.7551E-05	0.1778E-02	0.1284E-03	0.1345E-02	0.7486E-03	-0.1438E-02	0.5318E-03
140.3	-0.9632E-03	0.4919E-03	0.2240E-02	0.9708E-05	0.1778E-02	0.1370E-03	0.1417E-02	0.7971E-03	-0.1284E-02	0.5620E-03
141.8	-0.9686E-03	0.5156E-03	0.2346E-02	0.6472E-05	0.1823E-02	0.9708E-04	0.1519E-02	0.8694E-03	-0.1059E-02	0.6030E-03
142.6	-0.9837E-03	0.5296E-03	0.2411E-02	0.3236E-05	0.1840E-02	0.9384E-04	0.1589E-02	0.9223E-03	-0.9352E-03	0.6256E-03
143.4	-0.9988E-03	0.5415E-03	0.2513E-02	0.7551E-05	0.1855E-02	0.1801E-03	0.1678E-02	0.9870E-03	-0.6688E-03	0.6601E-03
145.7	-0.1012E-02	0.5544E-03	0.2702E-02	0.1079E-04	0.1876E-02	0.1760E-03	0.1760E-02	0.1056E-02	-0.3883E-03	0.6903E-03
147.1	-0.1056E-02	0.5846E-03	0.2294E-02	0.1294E-04	0.1893E-02	0.2783E-03	0.1850E-02	0.1146E-02	-0.1489E-03	0.7313E-03
147.8	-0.1074E-02	0.6084E-03	0.2869E-02	0.1618E-04	0.1901E-02	0.2578E-03	0.1905E-02	0.1211E-02	-0.1726E-03	0.7594E-03
148.4	-0.1103E-02	0.6353E-03	0.5389E-02	0.2157E-04	0.1910E-02	0.5404E-03	0.1938E-02	0.1281E-02	-0.1081E-02	0.7842E-03
149.8	-0.1124E-02	0.6591E-03	0.6262E-02	0.2697E-04	0.1921E-02	0.6353E-03	0.1942E-02	0.1353E-02	-0.3506E-03	0.8079E-03

ELECTRONICALLY RECORDED DATA - TEST G

LOAD (PSI)	CHANNEL NUMBER										
	F21	F22	F23	F24	F25	F26	F27	F28	F29		
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
0.004	-0.2157E-05	0.0	0.8414E-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1079E-05
9.937	0.1618E-04	0.0	-0.2718E-03	-0.3236E-05	-0.6472E-05						
19.92	0.3883E-04	0.0	-0.1057E-03	-0.3236E-05	-0.8629E-05	-0.1618E-04	-0.1618E-04	-0.1618E-04	-0.1618E-04	-0.1618E-04	-0.1079E-04
30.01	0.8414E-04	0.0	-0.4919E-03	-0.6472E-05	-0.1942E-04	-0.2589E-04	-0.2589E-04	-0.2589E-04	-0.2589E-04	-0.2589E-04	-0.1402E-04
40.00	0.1586E-03	0.0	-0.5652E-03	-0.9708E-05	-0.4530E-04	-0.3775E-04	-0.4099E-04	-0.3775E-04	-0.3775E-04	-0.3775E-04	-0.1726E-04
50.03	0.2826E-03	0.0	-0.3570E-03	-0.1618E-04	-0.6796E-04	-0.7659E-04	-0.4854E-04	-0.4207E-04	-0.4207E-04	-0.4207E-04	-0.2049E-04
60.04	0.4218E-03	0.0	-0.3452E-04	-0.1942E-04	-0.8737E-04	-0.6148E-04	-0.5717E-04	-0.4530E-04	-0.4530E-04	-0.4530E-04	-0.2265E-04
70.14	0.5663E-03	0.0	-0.7896E-03	-0.2589E-04	-0.1068E-03	-0.7443E-04	-0.6472E-04	-0.4315E-04	-0.4315E-04	-0.4315E-04	-0.2697E-04
80.13	0.6750E-02	0.0	-0.1109E-02	-0.2912E-04	-0.1079E-03	-0.8090E-04	-0.6796E-04	-0.4530E-04	-0.4530E-04	-0.4530E-04	-0.2265E-04
85.05	0.7863E-03	0.0	-0.7087E-03	-0.2912E-04	-0.9600E-04	-0.8090E-04	-0.6580E-04	-0.3883E-04	-0.3883E-04	-0.3883E-04	-0.1618E-04
89.99	0.8640E-03	0.0	-0.9147E-03	-0.3236E-04	-0.9169E-04	-0.8090E-04	-0.6580E-04	-0.3236E-04	-0.3236E-04	-0.3236E-04	-0.1294E-04
95.10	0.9471E-03	0.0	-0.9449E-03	-0.3560E-04	-0.8090E-04	-0.7443E-04	-0.6256E-04	-0.2265E-04	-0.2265E-04	-0.2265E-04	-0.1402E-04
100.1	0.1037E-02	0.0	-0.8327E-03	-0.3560E-04	-0.8090E-04	-0.7443E-04	-0.6256E-04	-0.1942E-04	-0.1942E-04	-0.1942E-04	-0.1618E-04
102.5	0.1079E-02	0.0	-0.1072E-02	-0.3775E-04	-0.7551E-04	-0.7227E-04	-0.6472E-04	-0.1294E-04	-0.1294E-04	-0.1294E-04	-0.1726E-04
105.0	0.1125E-02	0.0	-0.1010E-02	-0.3883E-04	-0.7443E-04	-0.7011E-04	-0.6472E-04	-0.1294E-04	-0.1294E-04	-0.1294E-04	-0.1618E-04
107.6	0.1178E-02	0.0	-0.1089E-02	-0.3883E-04	-0.7551E-04	-0.6796E-04	-0.6256E-04	-0.1294E-04	-0.1294E-04	-0.1294E-04	-0.1294E-04
110.1	0.1244E-02	0.0	-0.1089E-02	-0.3883E-04	-0.7551E-04	-0.6796E-04	-0.6256E-04	-0.1294E-04	-0.1294E-04	-0.1294E-04	-0.1294E-04
112.5	0.1291E-02	0.0	-0.1101E-02	-0.3531E-04	-0.6991E-04	-0.6592E-04	-0.6191E-04	0.0	0.0	0.0	-0.6453E-05
115.1	0.1353E-02	0.0	-0.1141E-02	-0.3236E-04	-0.6796E-04	-0.6472E-04	-0.6148E-04	0.0	0.0	0.0	-0.4315E-05
117.5	0.1410E-02	0.0	-0.1187E-03	-0.2589E-04	-0.6796E-04	-0.6148E-04	-0.6148E-04	0.3236E-05	0.3236E-05	0.3236E-05	-0.1079E-05
120.2	0.1477E-02	0.0	-0.1320E-02	-0.7766E-04	-0.5580E-04	-0.5825E-04	-0.6148E-04	0.4315E-05	0.4315E-05	0.4315E-05	0.3236E-05
122.5	0.1559E-02	0.0	-0.1435E-03	-0.3236E-04	-0.6580E-04	-0.5825E-04	-0.6903E-04	0.8629E-05	0.8629E-05	0.8629E-05	0.4315E-05
125.2	0.1651E-02	0.0	-0.4552E-03	0.5285E-04	-0.6580E-04	-0.5178E-04	-0.7443E-04	0.1294E-04	0.1294E-04	0.1294E-04	0.7551E-05
127.7	0.1757E-02	0.0	-0.1345E-02	0.7335E-04	-0.6796E-04	-0.4207E-04	-0.7874E-04	0.1834E-04	0.1834E-04	0.1834E-04	0.1294E-04
130.1	0.2000E-02	0.0	-0.4377E-02	0.1003E-03	-0.6148E-04	-0.1834E-04	-0.8737E-04	0.4099E-04	0.4099E-04	0.4099E-04	0.1726E-04
132.6	0.2063E-02	0.0	-0.4667E-02	0.1046E-03	-0.6472E-04	-0.1834E-04	-0.9061E-04	0.4207E-04	0.4207E-04	0.4207E-04	0.1726E-04
135.2	0.2237E-02	0.0	-0.2061E-02	0.1208E-03	-0.6148E-04	-0.1187E-04	-0.9061E-04	0.3883E-04	0.3883E-04	0.3883E-04	0.2049E-04
137.7	0.2504E-02	0.0	-0.1216E-02	0.1338E-03	-0.5933E-04	-0.1079E-04	-0.9277E-04	0.6472E-04	0.6472E-04	0.6472E-04	0.1942E-04
139.8	0.2899E-02	0.0	-0.1524E-02	0.1596E-03	-0.5717E-04	-0.1079E-05	-0.8953E-04	0.6364E-04	0.6364E-04	0.6364E-04	0.2049E-04
140.3	0.3250E-02	0.0	-0.2712E-02	0.1769E-03	-0.6041E-04	-0.3236E-05	-0.8953E-04	0.7119E-04	0.7119E-04	0.7119E-04	0.2265E-05
141.8	0.3824E-02	0.0	0.9122	0.1996E-03	-0.6472E-04	-0.4315E-05	-0.8737E-04	0.1011E-04	0.1011E-04	0.1011E-04	0.3236E-05
142.6	0.4143E-02	0.0	0.9122	0.2125E-03	-0.6256E-04	-0.3236E-05	-0.8414E-04	0.7011E-04	0.7011E-04	0.7011E-04	0.3236E-05
143.4	0.4361E-02	0.0	0.9122	0.2287E-03	-0.5933E-04	0.3236E-05	-0.8737E-04	0.8521E-04	0.8521E-04	0.8521E-04	0.0
145.7	0.4511E-02	0.0	0.9122	0.2449E-03	-0.6364E-04	0.5393E-05	-0.8953E-04	0.9492E-04	0.9492E-04	0.9492E-04	0.1079E-05
147.1	0.4807E-02	0.0	0.9132	0.2664E-03	-0.6256E-04	0.6472E-05	-0.9061E-04	0.1036E-03	0.1036E-03	0.1036E-03	-0.8629E-05
147.8	0.5035E-02	0.0	0.9149	0.2848E-03	-0.6472E-04	0.6472E-05	-0.9384E-04	0.1629E-03	0.1629E-03	0.1629E-03	-0.1079E-04
148.4	0.5266E-02	0.0	0.9145	0.2956E-03	-0.6472E-04	0.7551E-05	-0.8521E-04	0.1661E-03	0.1661E-03	0.1661E-03	-0.8629E-05
149.8	0.5473E-02	0.0	0.9150	0.3117E-03	-0.6580E-04	0.6472E-05	-0.8737E-04	0.1812E-03	0.1812E-03	0.1812E-03	-0.9708E-05





DEMEC STRAIN GAGE DATA - TEST G

LOAD (PSI)	GAGE NUMBER									
	HC1	HC2	HC3	HC4	HC5	HC6	HC7	HC8	C1	C2
0.000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30.01	0.1700E-03	0.1000E-03	0.2300E-03	0.1500E-03	0.1300E-03	0.1600E-03	0.2700E-03	0.2300E-03	0.3300E-03	0.2500E-03
60.04	0.5800E-03	0.5000E-03	0.8000E-03	0.5700E-03	0.5500E-03	0.5500E-03	0.7800E-03	0.6300E-03	0.1070E-02	0.7300E-03
80.13	0.8600E-03	0.8200E-03	0.1060E-02	0.8500E-03	0.9500E-03	0.8200E-03	0.1170E-02	0.1070E-02	0.1530E-02	0.9100E-03
89.99	0.1130E-02	0.1020E-02	0.1320E-02	0.8700E-03	0.1200E-02	0.1060E-02	0.1410E-02	0.1220E-02	0.1890E-02	0.1170E-02
100.1	0.1500E-02	0.1350E-02	0.1820E-02	0.1170E-02	0.1500E-02	0.1350E-02	0.1760E-02	0.1540E-02	0.2240E-02	0.1360E-02
110.1	0.1760E-02	0.1610E-02	0.2190E-02	0.1360E-02	0.1870E-02	0.1620E-02	0.2180E-02	0.1850E-02	0.2860E-02	0.1890E-02
115.1	0.2000E-02	0.1800E-02	0.2560E-02	0.1700E-02	0.2130E-02	0.1900E-02	0.2640E-02	0.2030E-02	0.3240E-02	0.2060E-02
120.2	0.2340E-02	0.2100E-02	0.3150E-02	0.1920E-02	0.2470E-02	0.2250E-02	0.3480E-02	0.2170E-02	0.3710E-02	0.2670E-02
130.1	0.3540E-02	0.2950E-02	0.4990E-02	0.2730E-02	0.3400E-02	0.3730E-02	0.5780E-02	0.2200E-02	0.5370E-02	0.5120E-02

LOAD (PSI)	GAGE NUMBER					
	C3	C4	C5	C6		
0.000	0.0	0.0	0.0	0.0		
30.01	0.2500E-03	0.4400E-03	0.3200E-03	0.4800E-03		
60.04	0.7500E-03	0.9500E-03	0.5000E-03	0.1130E-02		
80.13	0.1020E-02	0.1260E-02	0.7400E-03	0.1580E-02		
89.99	0.1230E-02	0.1600E-02	0.9100E-03	0.1960E-02		
100.1	0.1470E-02	0.1920E-02	0.1140E-02	0.2450E-02		
110.1	0.1870E-02	0.2340E-02	0.1310E-02	0.3150E-02		
115.1	0.2270E-02	0.2680E-02	0.1470E-02	0.4260E-02		
120.2	0.2970E-02	0.3190E-02	0.1700E-02	0.5760E-02		
130.1	0.5020E-02	0.4940E-02	0.2580E-02	-0.3920E-02		

APPENDIX B

Miscellaneous Plots of Data

Table B.1

Designation of Symbols for Figs. B8, B9  
and B18-21

Symbol	Load (psig)
□	0
○	40.0
△	80.1
+	100.2
×	120.3
◇	130.5
△	139.7
⋈	150.0
≧	159.5

Table B.2

Designation of Symbols for Figs. B7 and B17

Symbol	Load (psig)
□	10.0
○	60.0
△	80.0
+	100.0
×	110.0
◇	120.0
↑	130.0

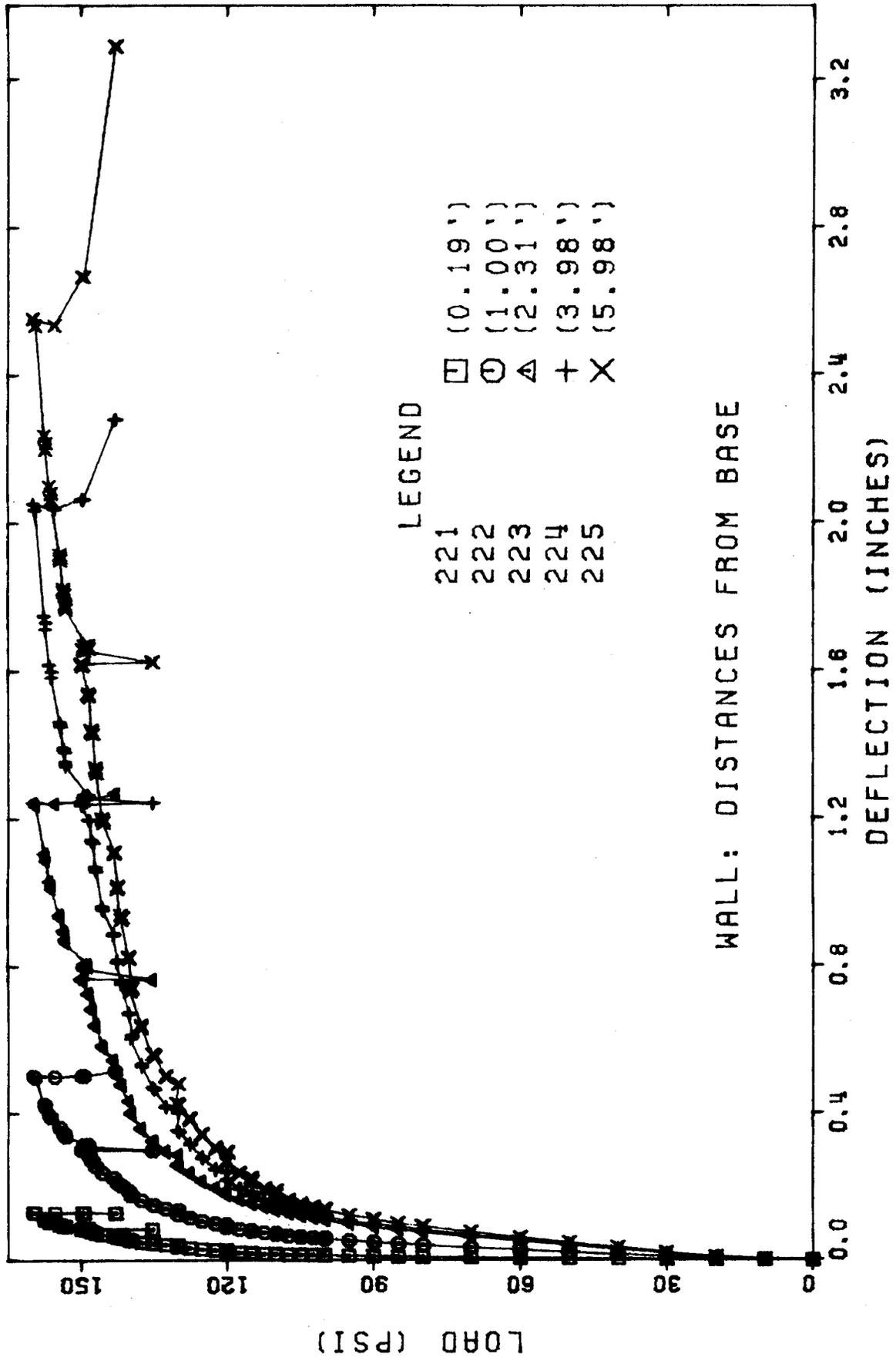


Fig. B.1 Individual Load-Deflection Plots, Line 1

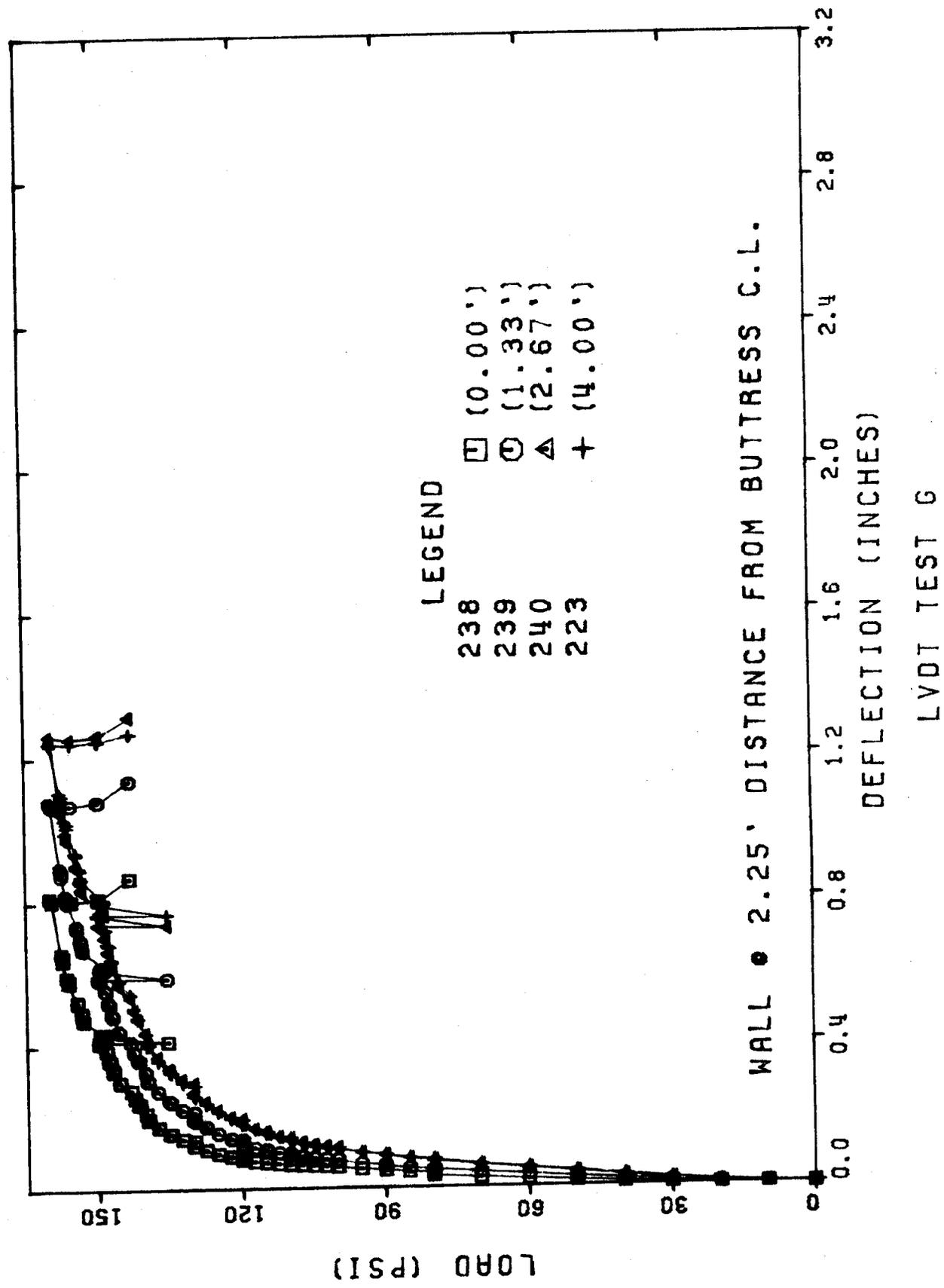
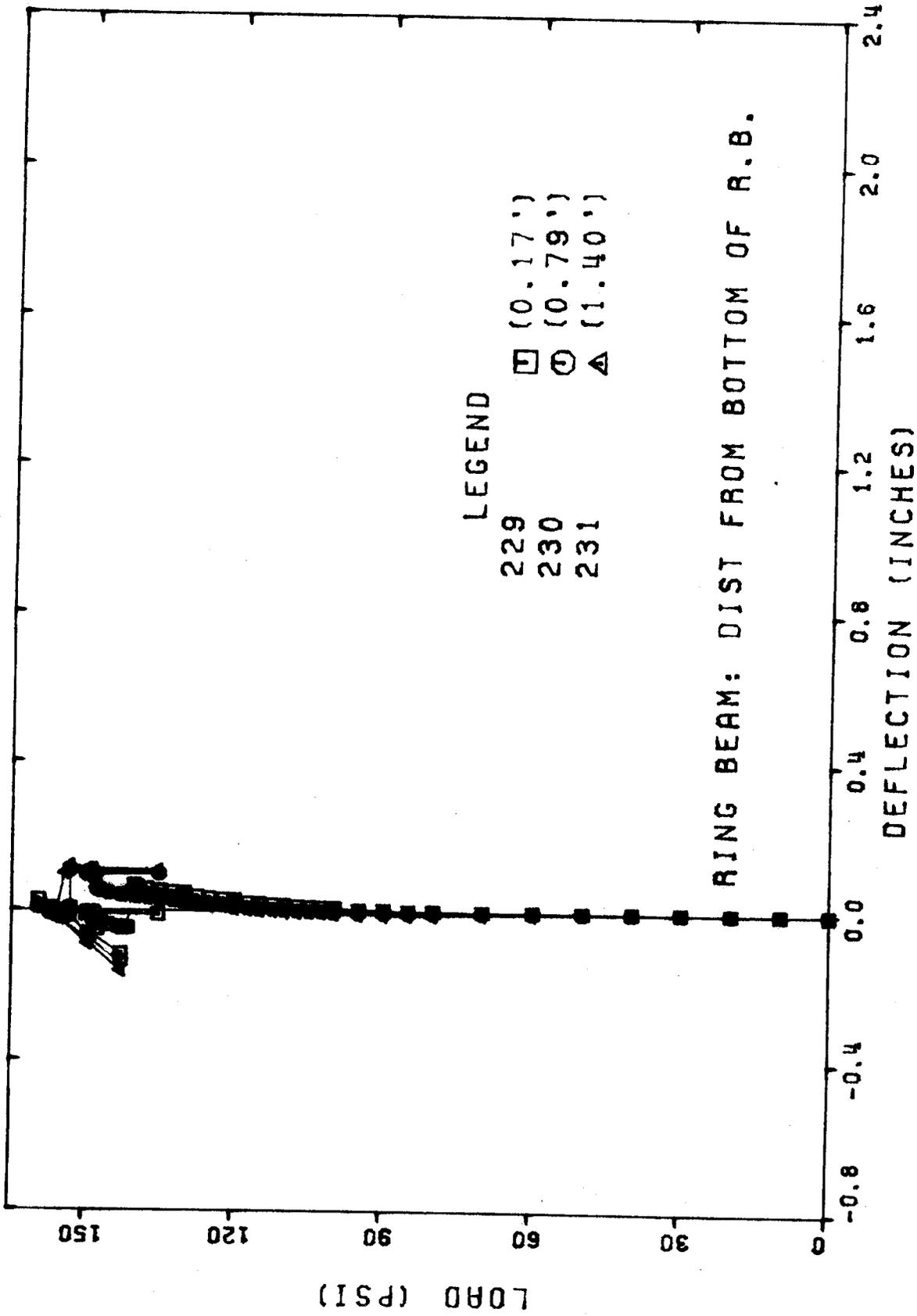
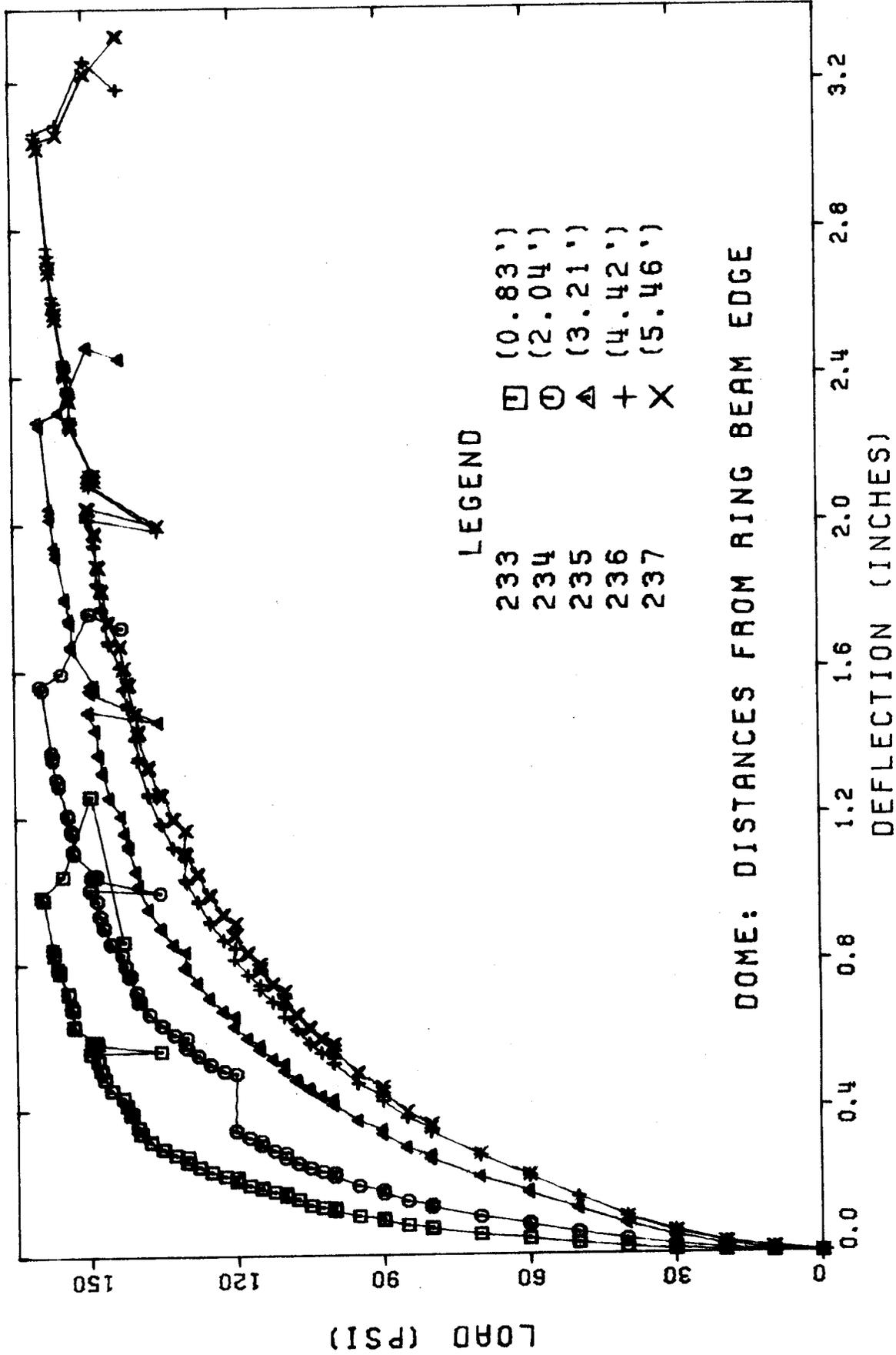


Fig. B.2 Individual Load Deflection Plots, Line 4, 2.25 ft. above Base



LVDT TEST G

Fig. B.3 Individual Load-Deflection Plots, Line 1, Ring Beam



LVDT TEST G

Fig. B.4 Individual Load-Deflection Plots, Line 1, Dome

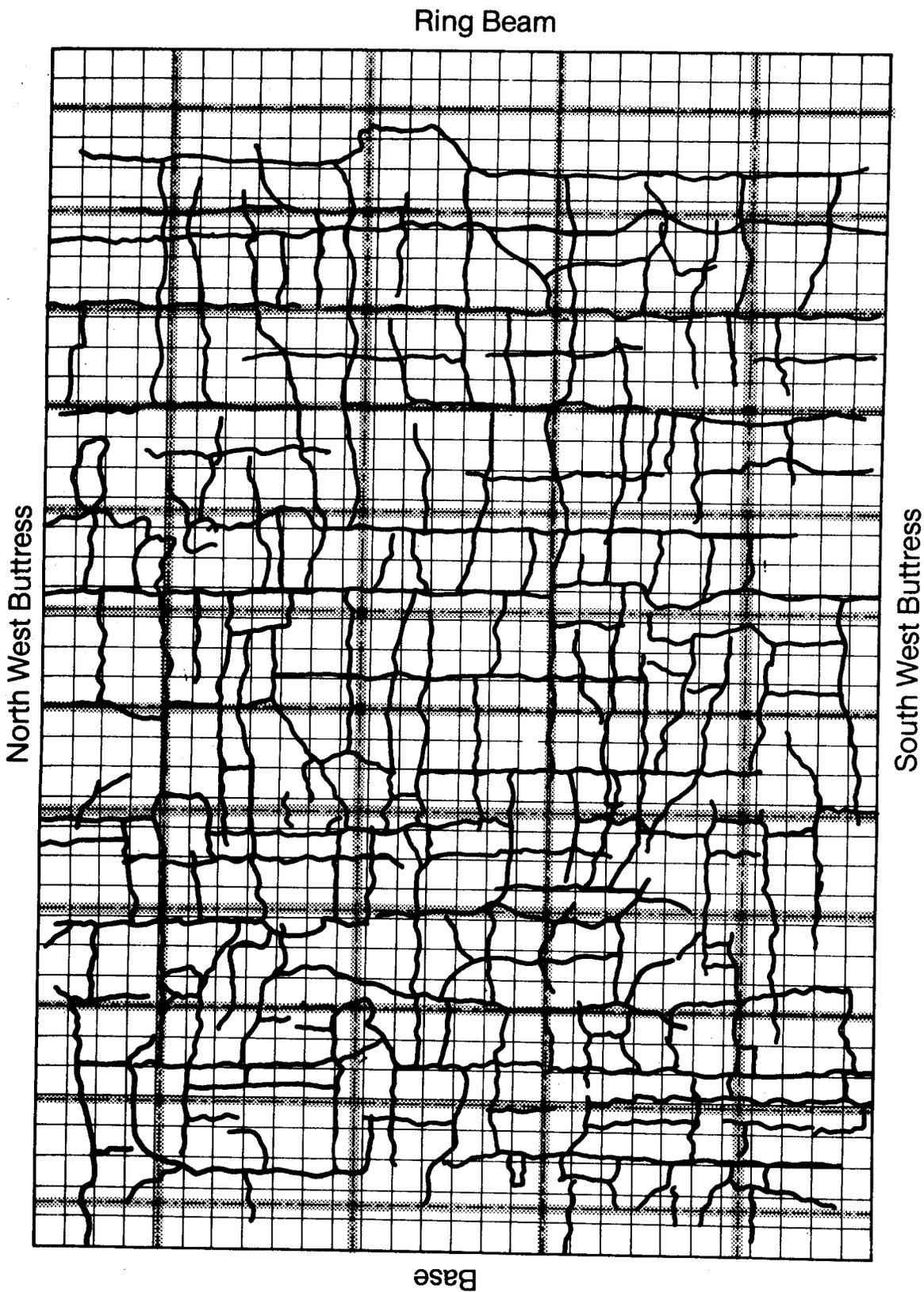


Fig. B.5 Developed View of West Wall showing Cracks at 110 psi Pressure

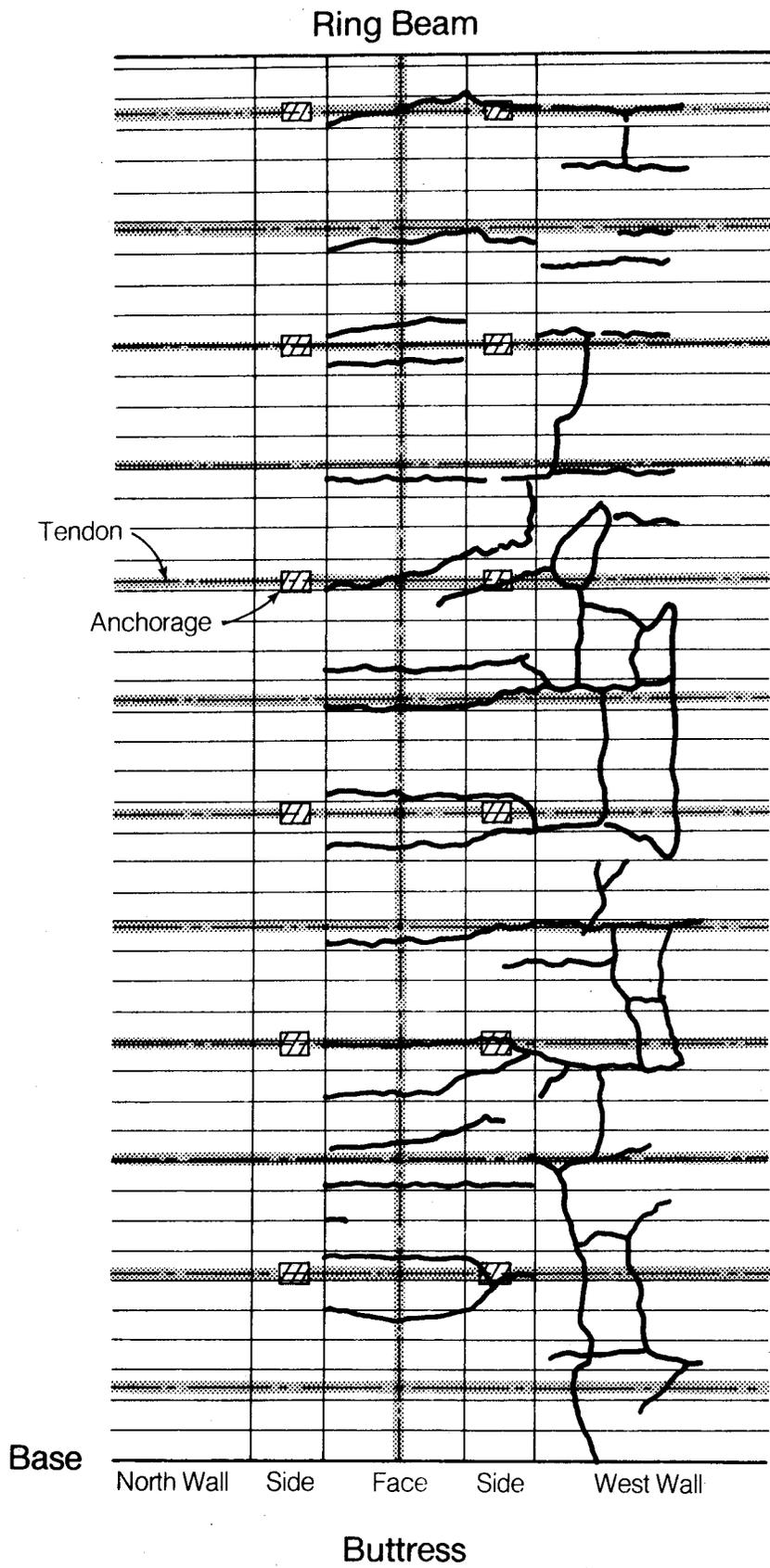


Fig. B.6 Developed View of North West Buttruss showing Cracks at 110 psi Pressure

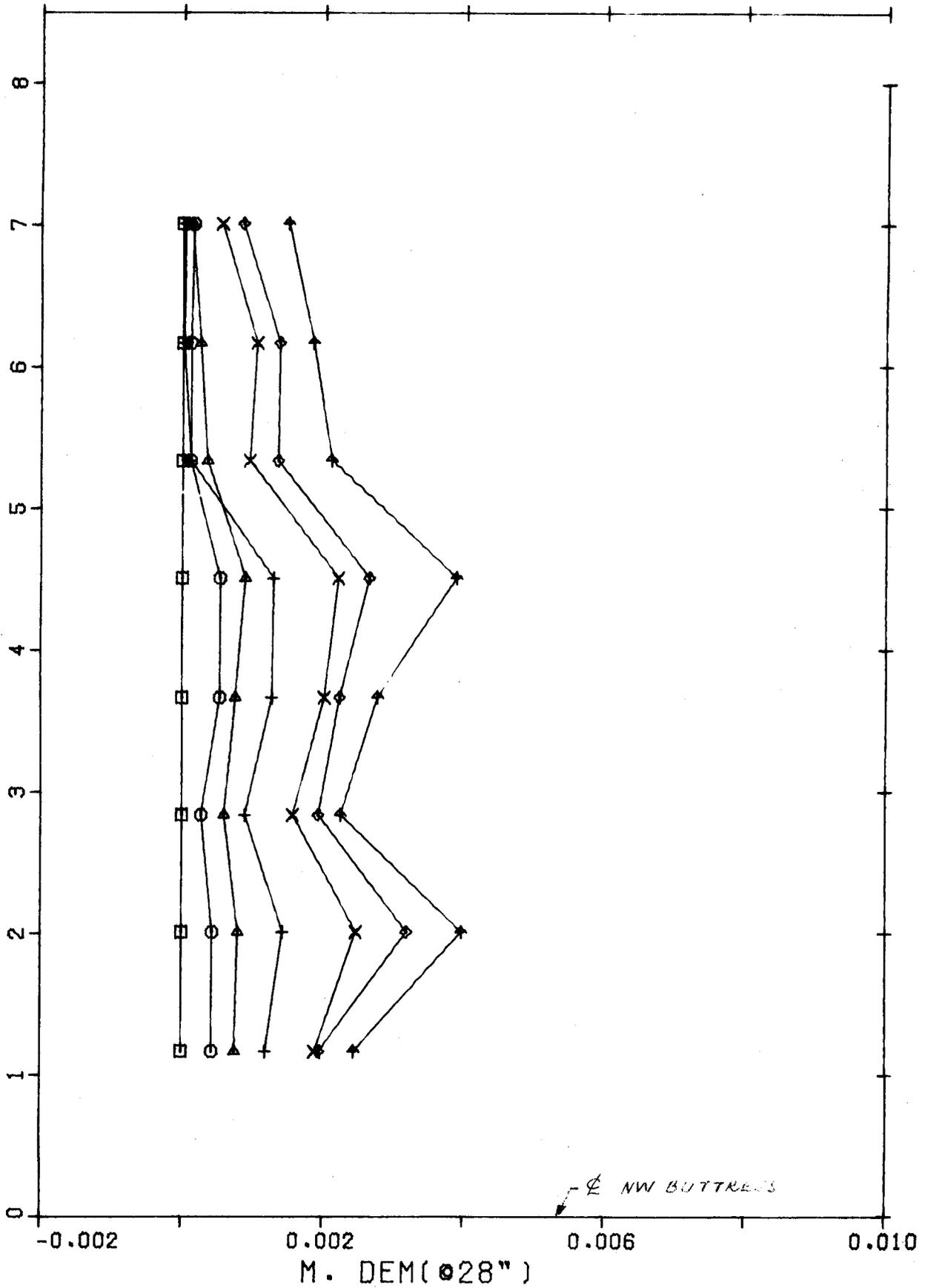
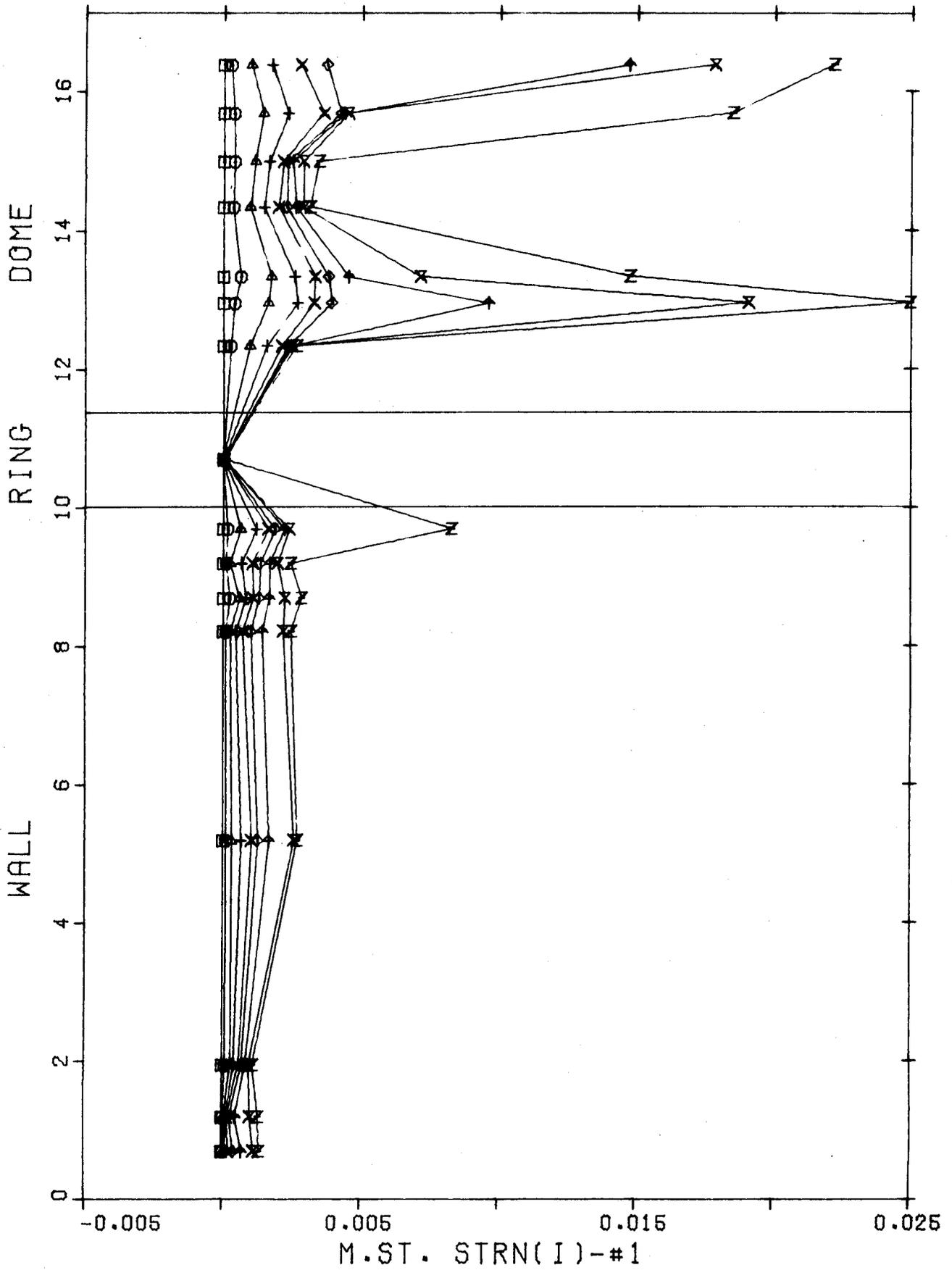


Fig. B.7 Meridional Demec Strains along Line 4



B.8 Meridional Steel Strains, Inside Layer, Line 1

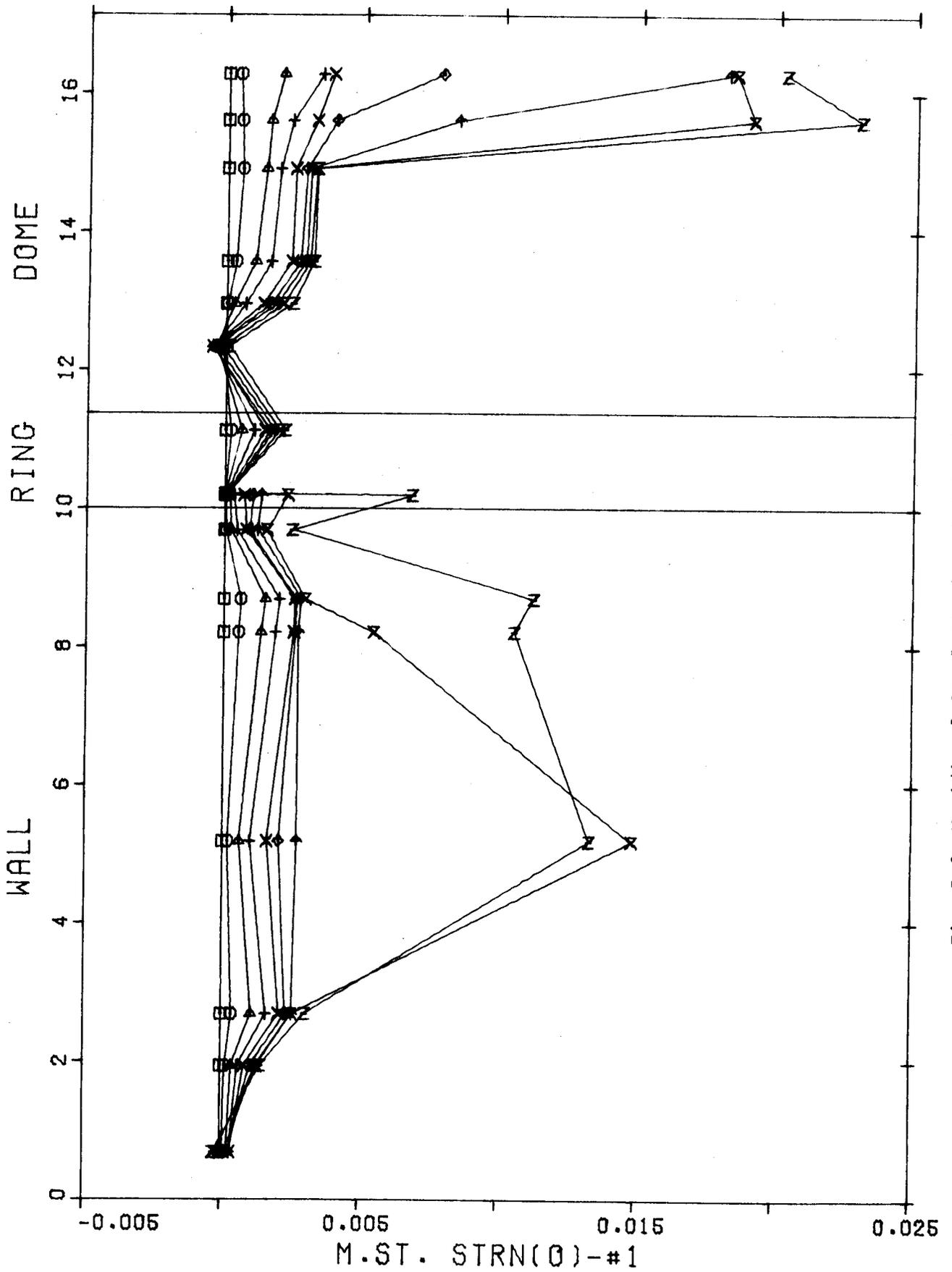


Fig. B.9 Meridional Steel Strains, Outside Layer, Line 1

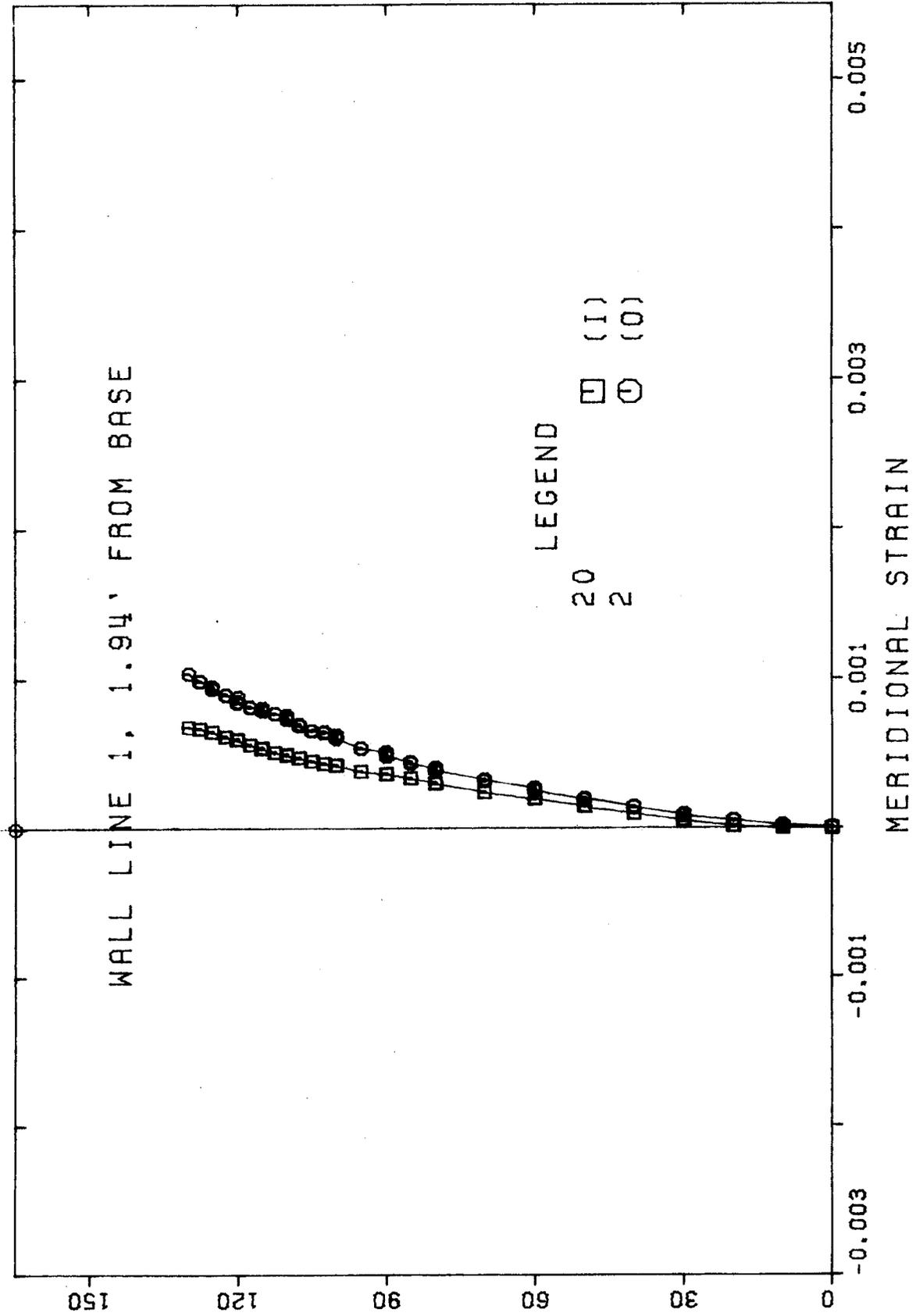


Fig. B.10 Meridional Steel Strains, Inside and Outside Layers, Line 1

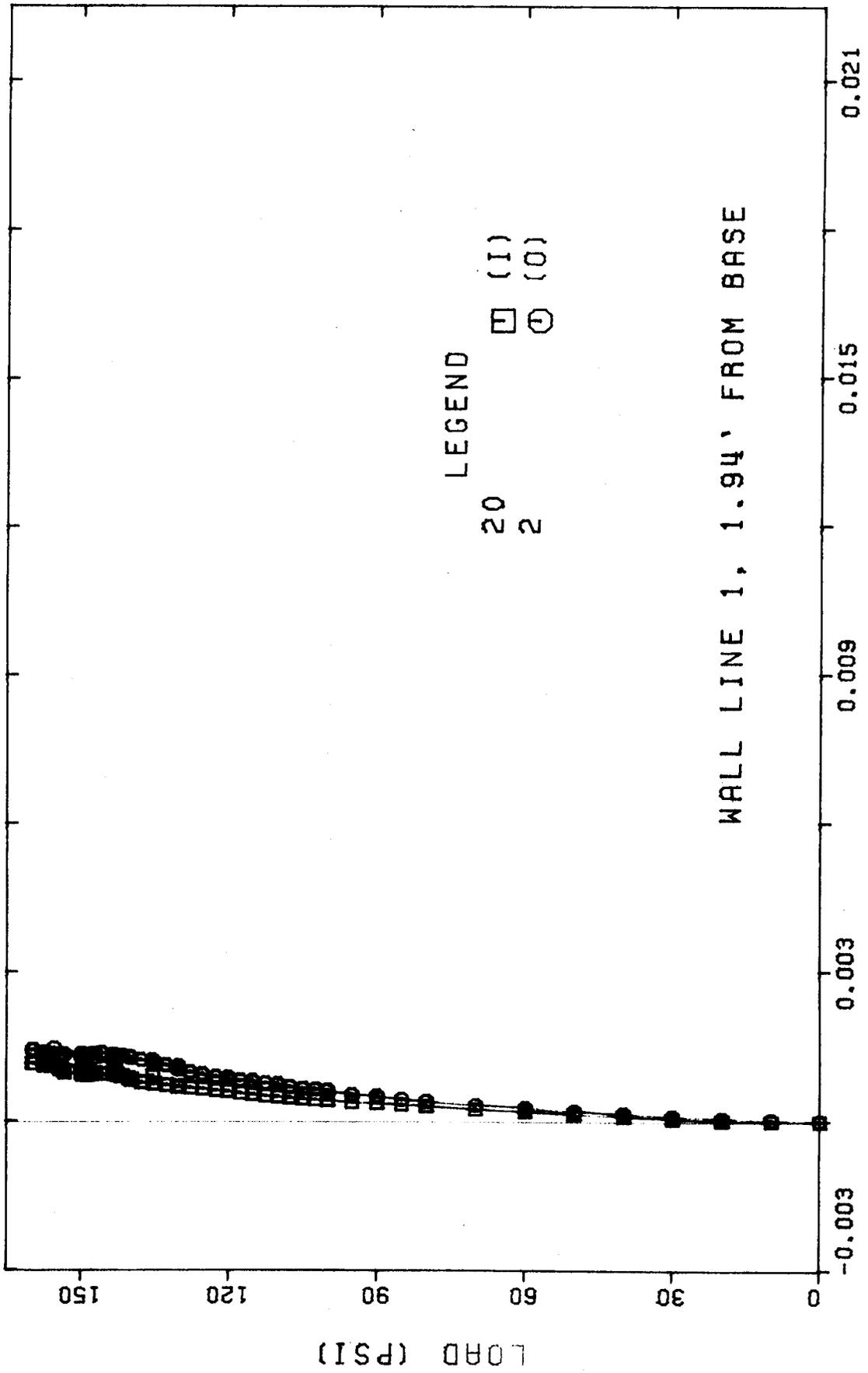
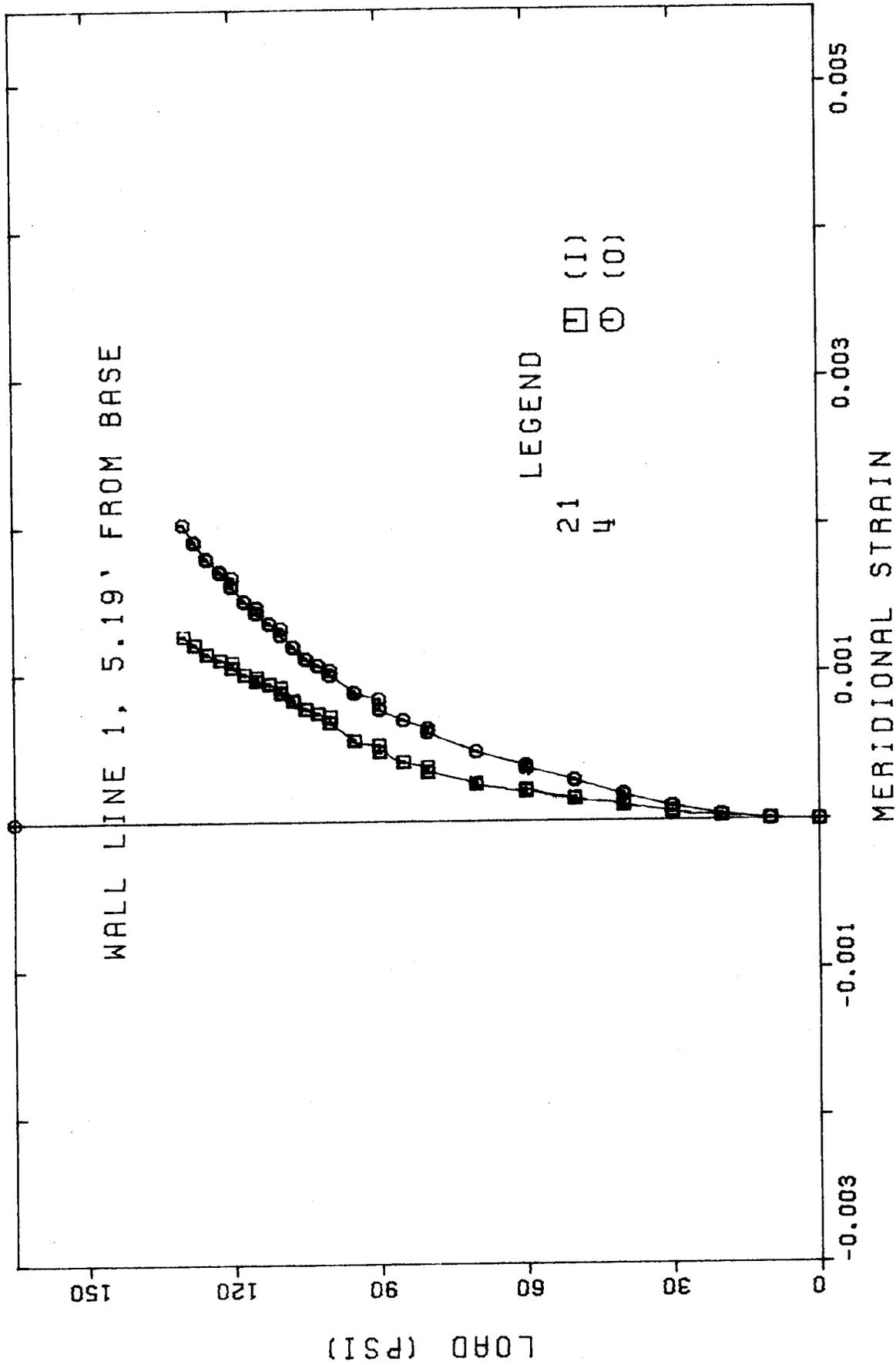


Fig. B.10 - Continued



M. ST. STRN (I/O) TEST G

Fig. B.11 Meridional Steel Strains, Inside and Outside Layers, Line 1

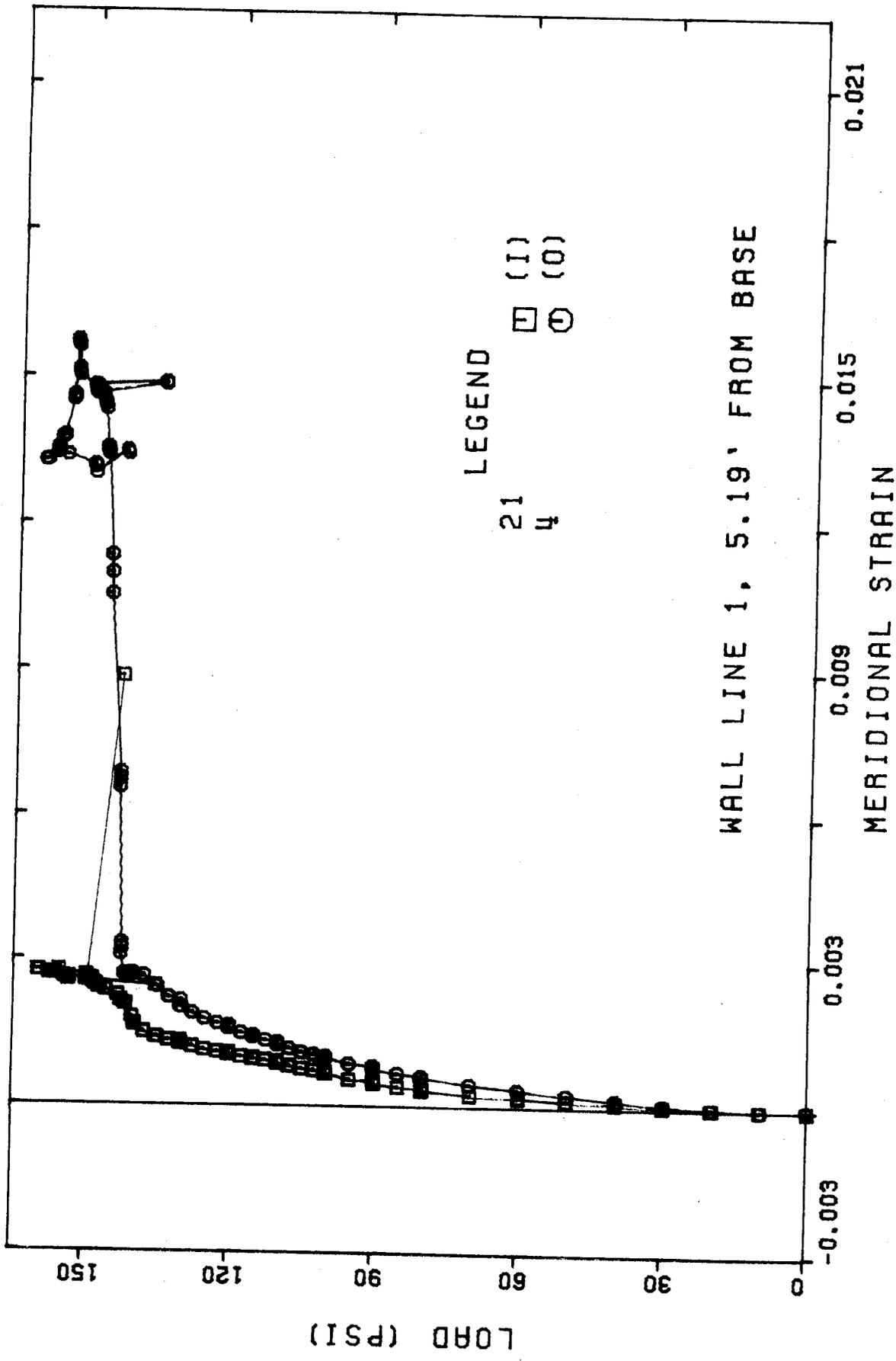


Fig. B.11 (Continued)

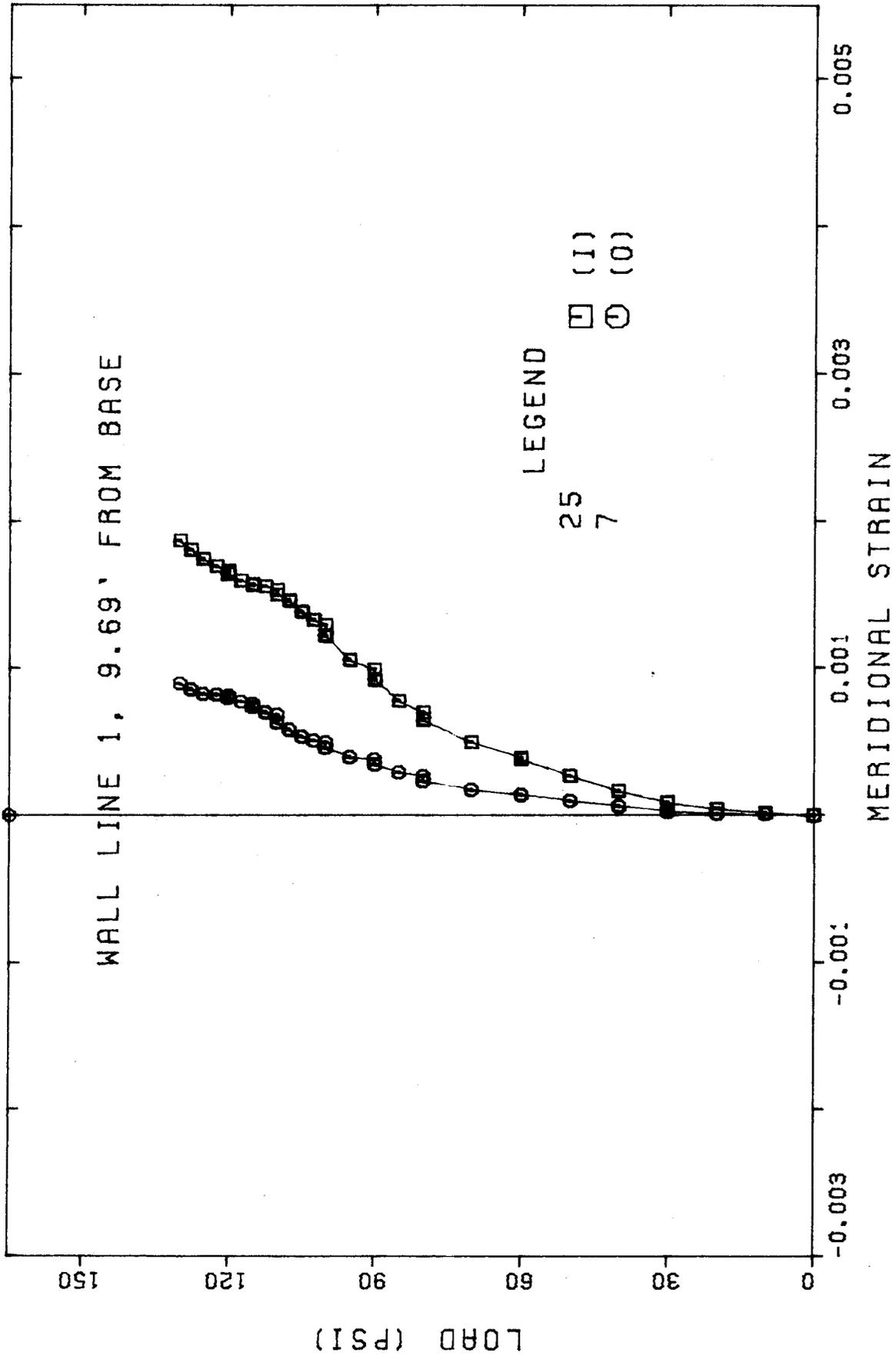


Fig. B.12 Meridional Steel Strains, Inside and Outside Layers, Line 1

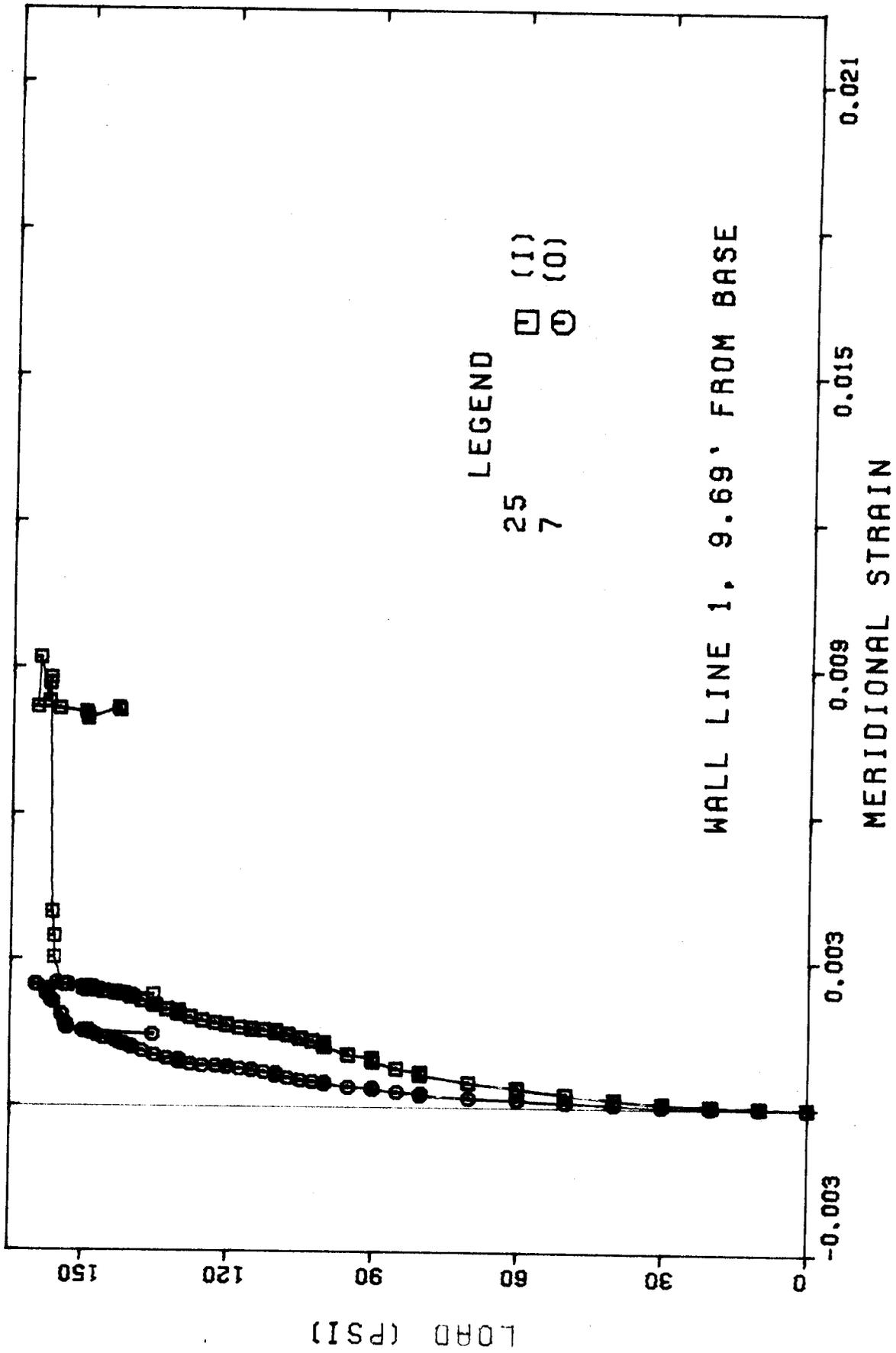
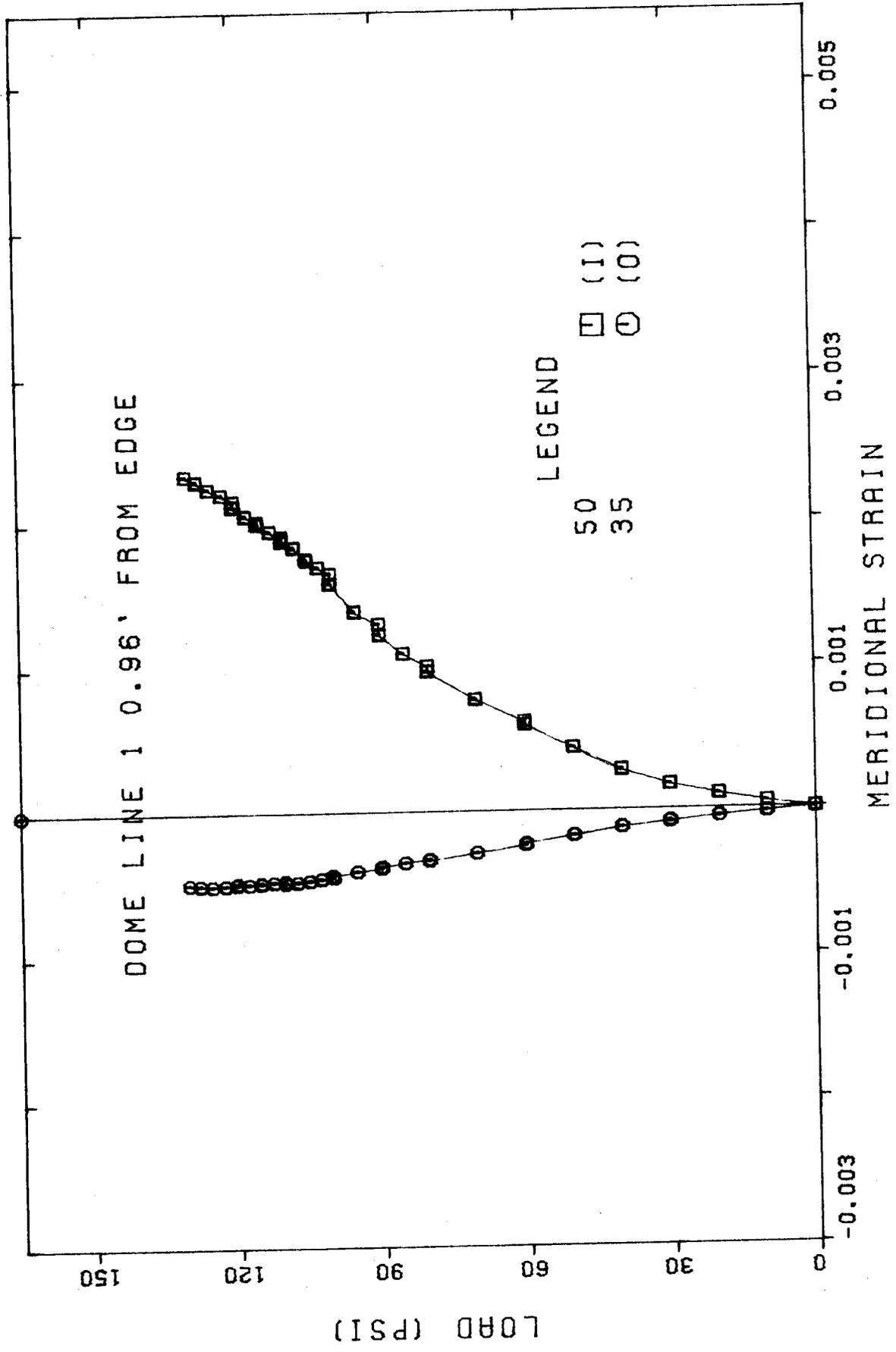
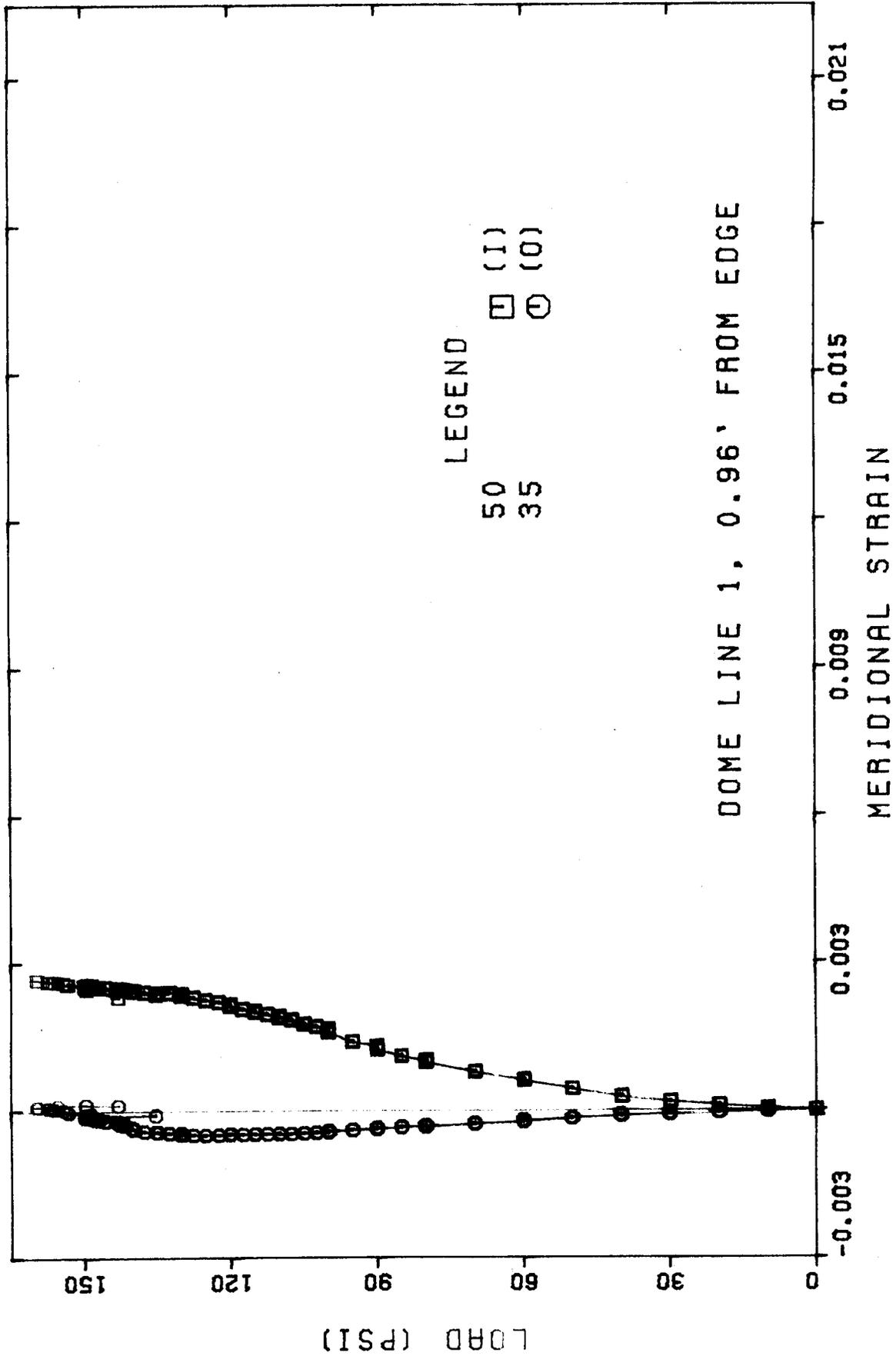


Fig. B.12 (Continued)



M. ST. STARN (I/O) TEST G

Fig. B.13 Meridional Steel Strains, Inside and Outside Layers, Line 1



M. ST. STRN (I/O) TEST G

Fig. B.13 (Continued)

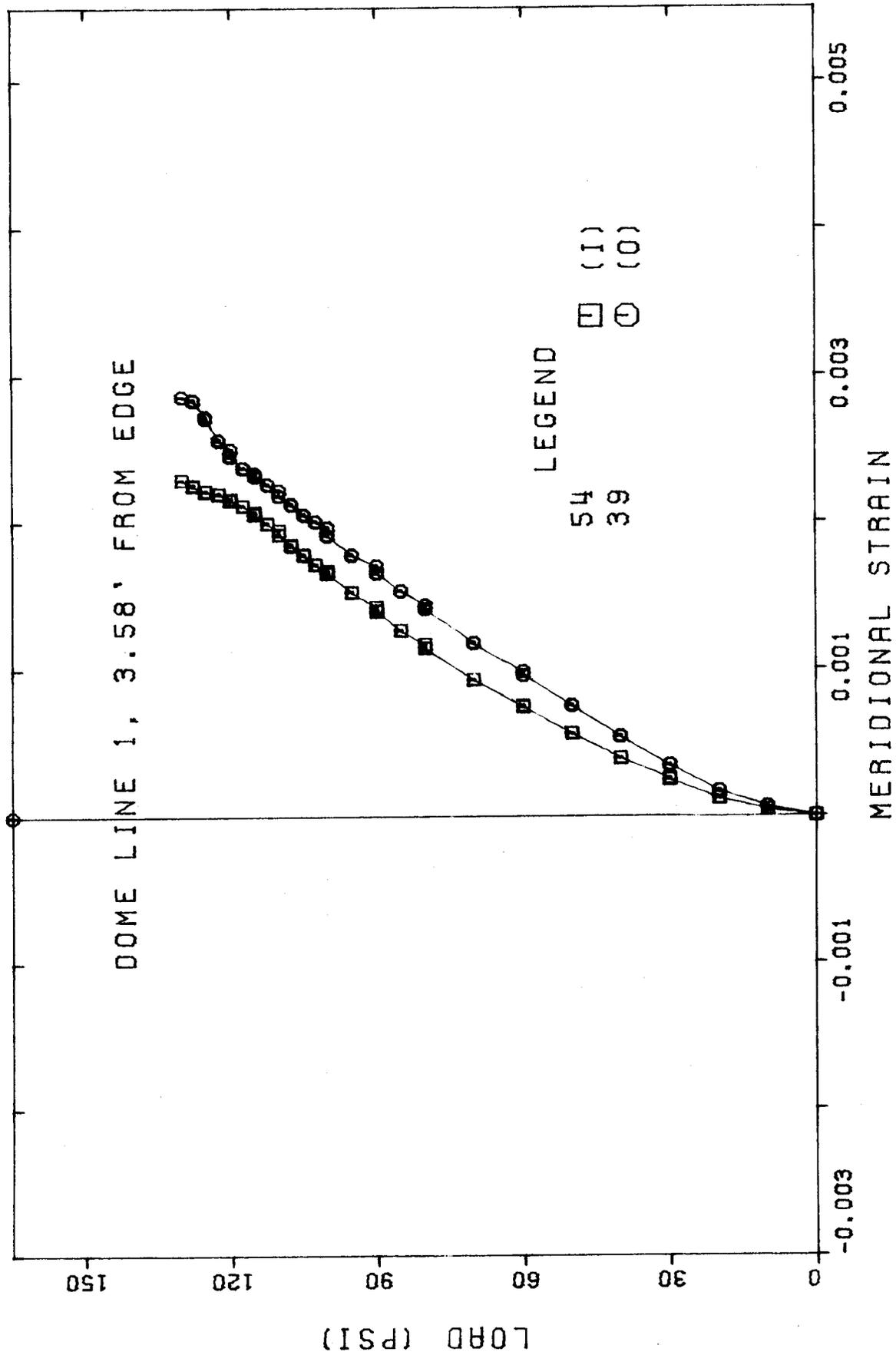


Fig. B.14 Meridional Steel Strains, Inside and Outside Layers, Line 1

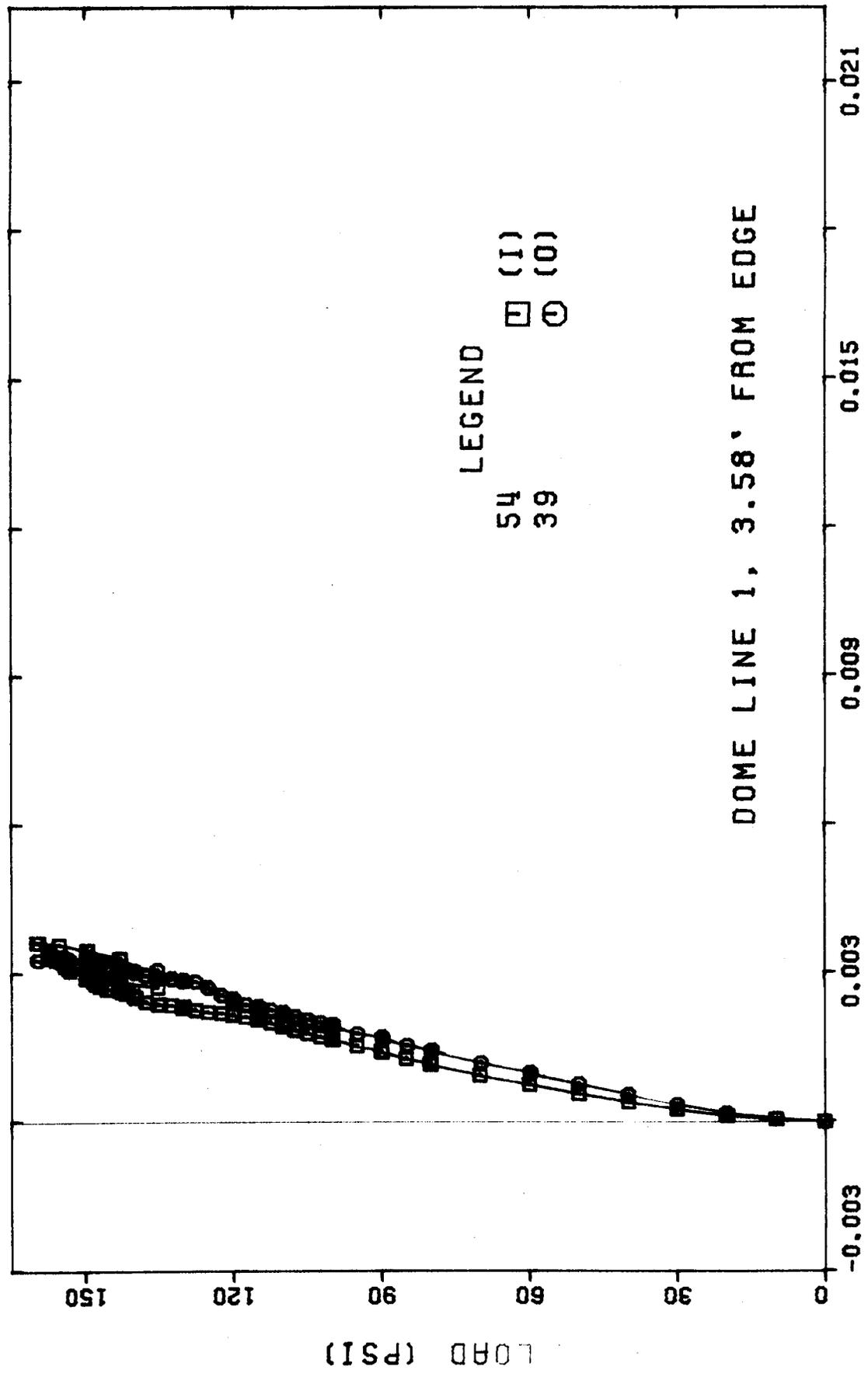
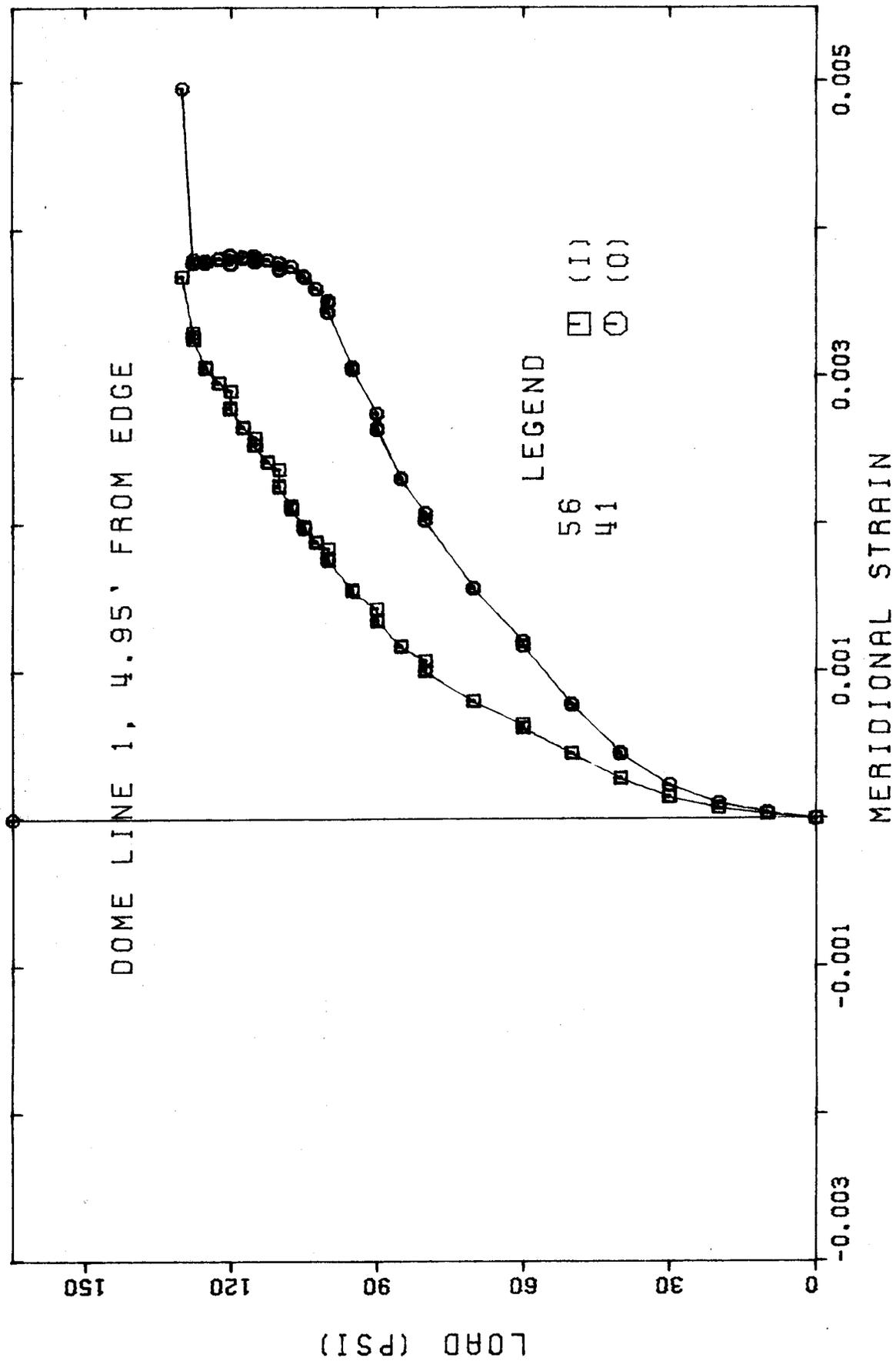
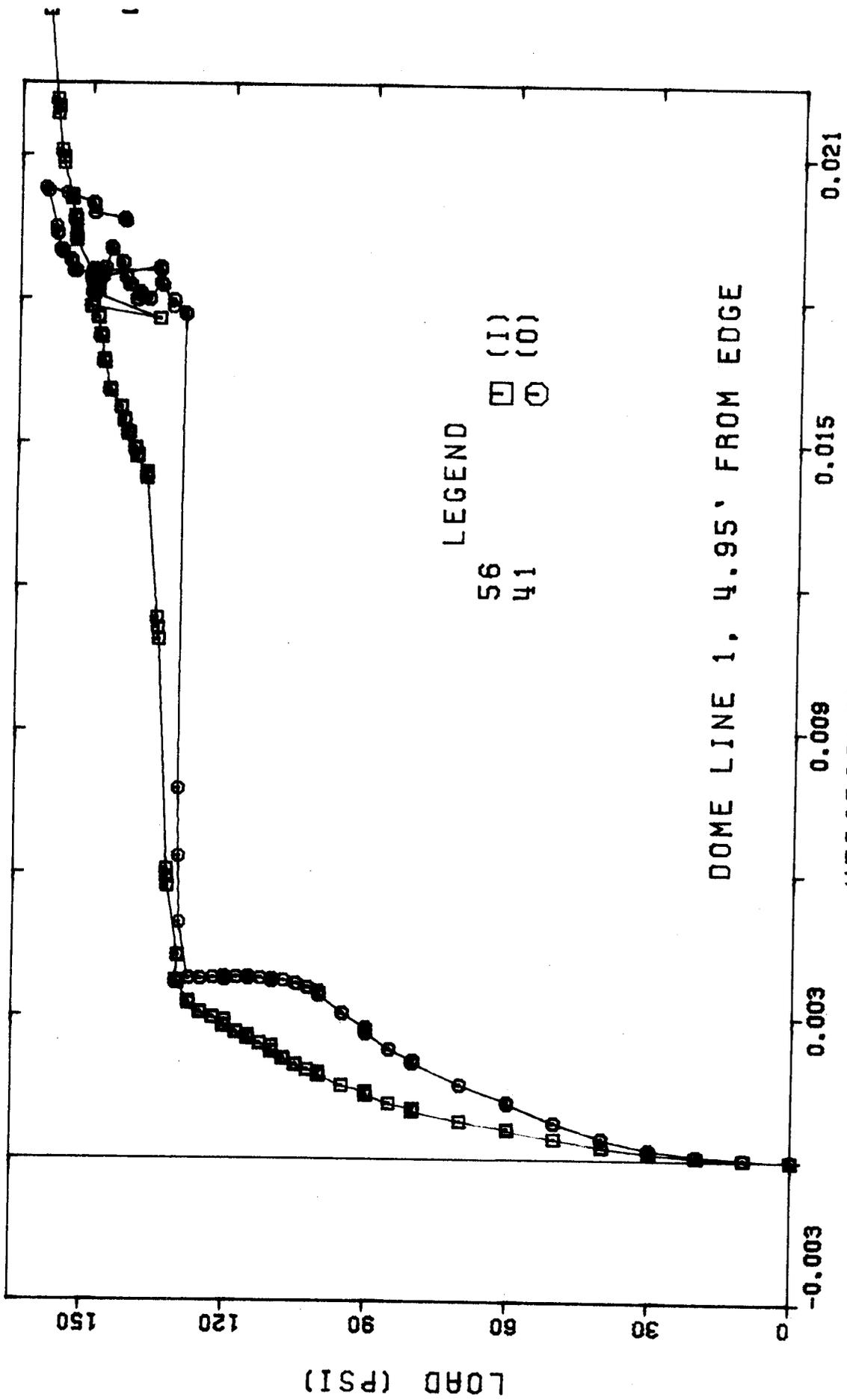


Fig. B.14 (Continued)



M. ST. STRAN(I/O) TEST G

Fig. B.15 Meridional Steel Strains, Inside and Outside Layers, Line 1



M.S.T. STAN (I/O) TEST G

Fig. B.15 (Continued)

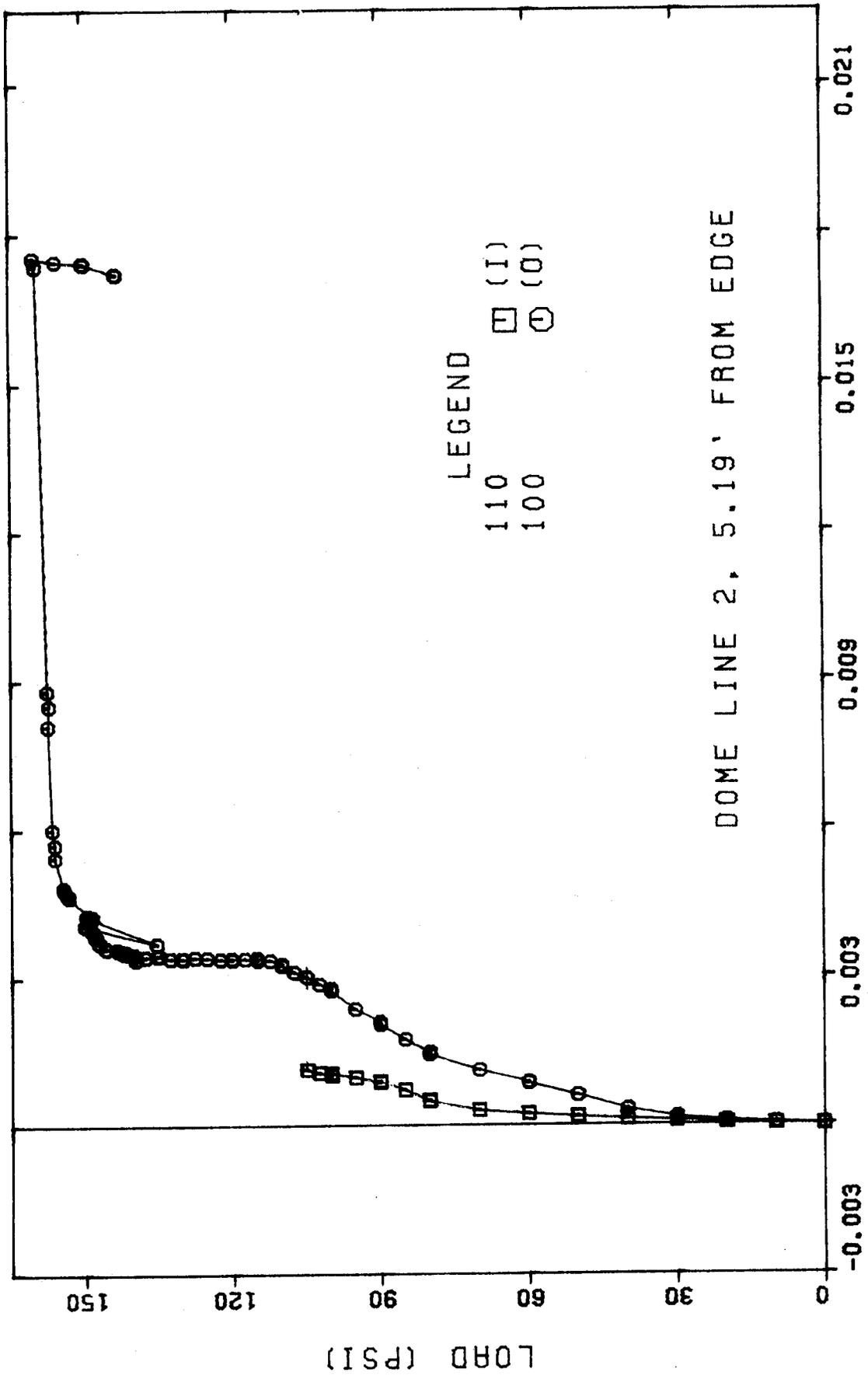


Fig. B.16 Meridional Steel Strain, Inside and Outside Layers, Line 2

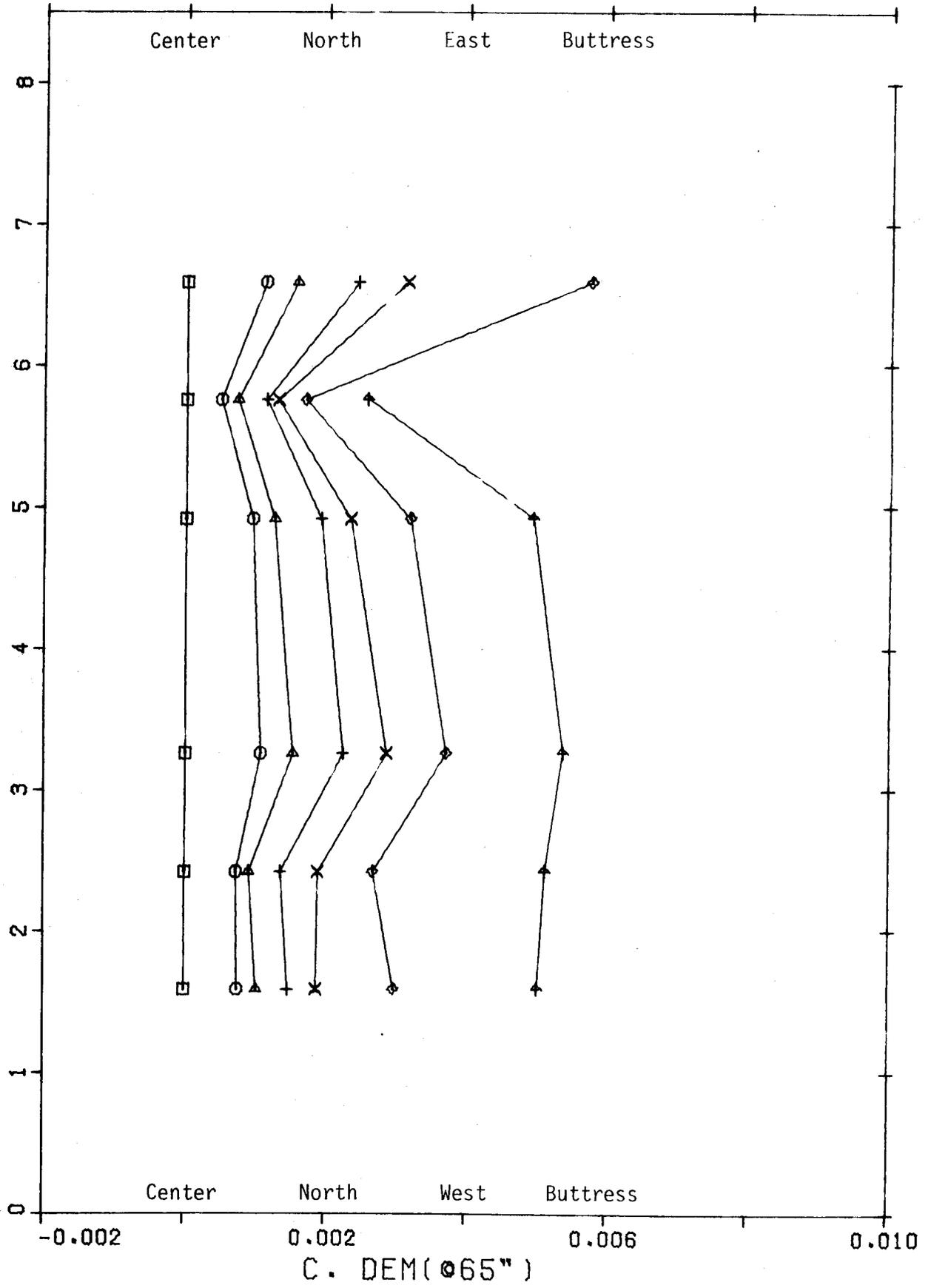


Fig. B.17 Circumferential Demec Strains Along Line 5

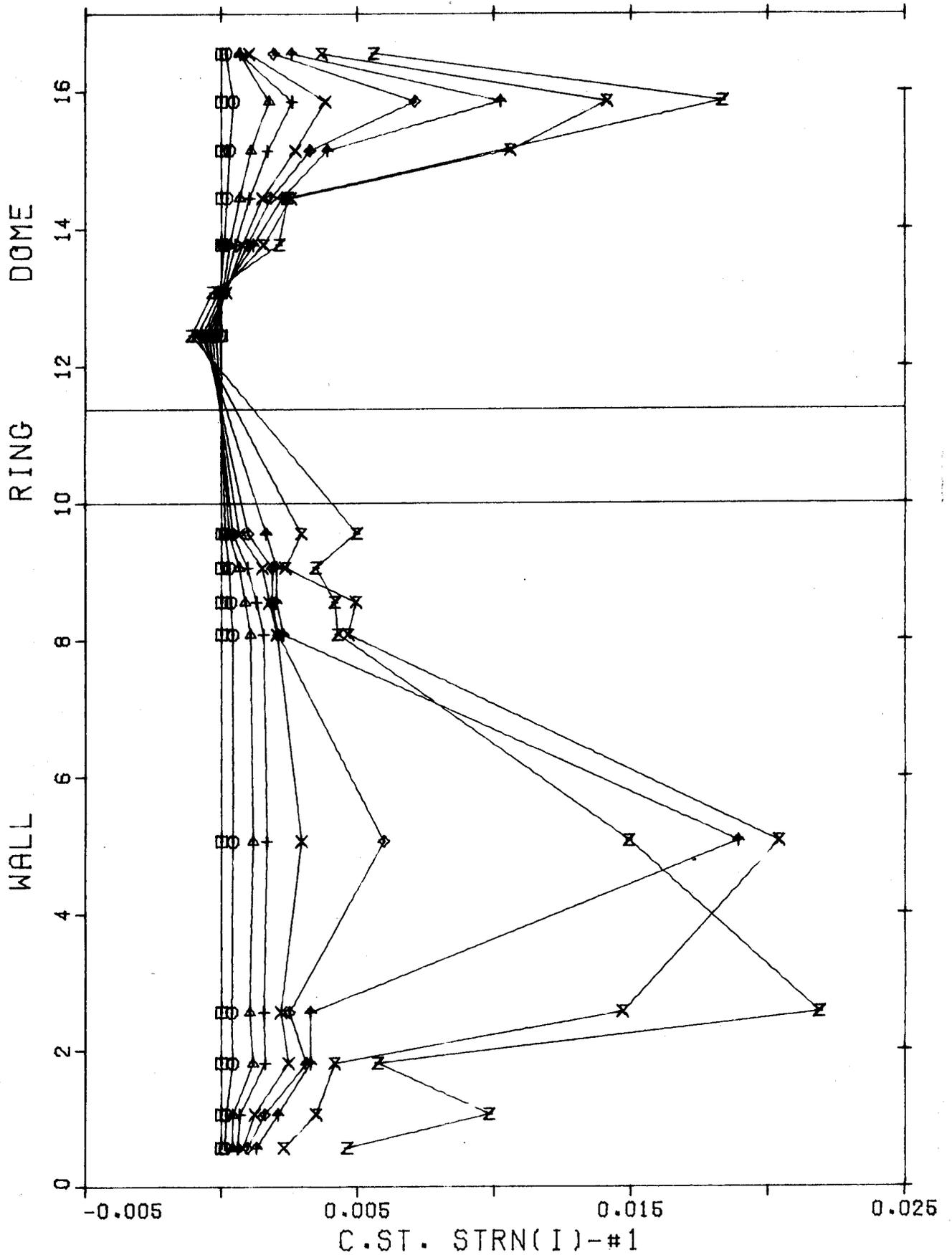


Fig. B.18 Circumferential Steel Strains, Inside Layer, Line 1

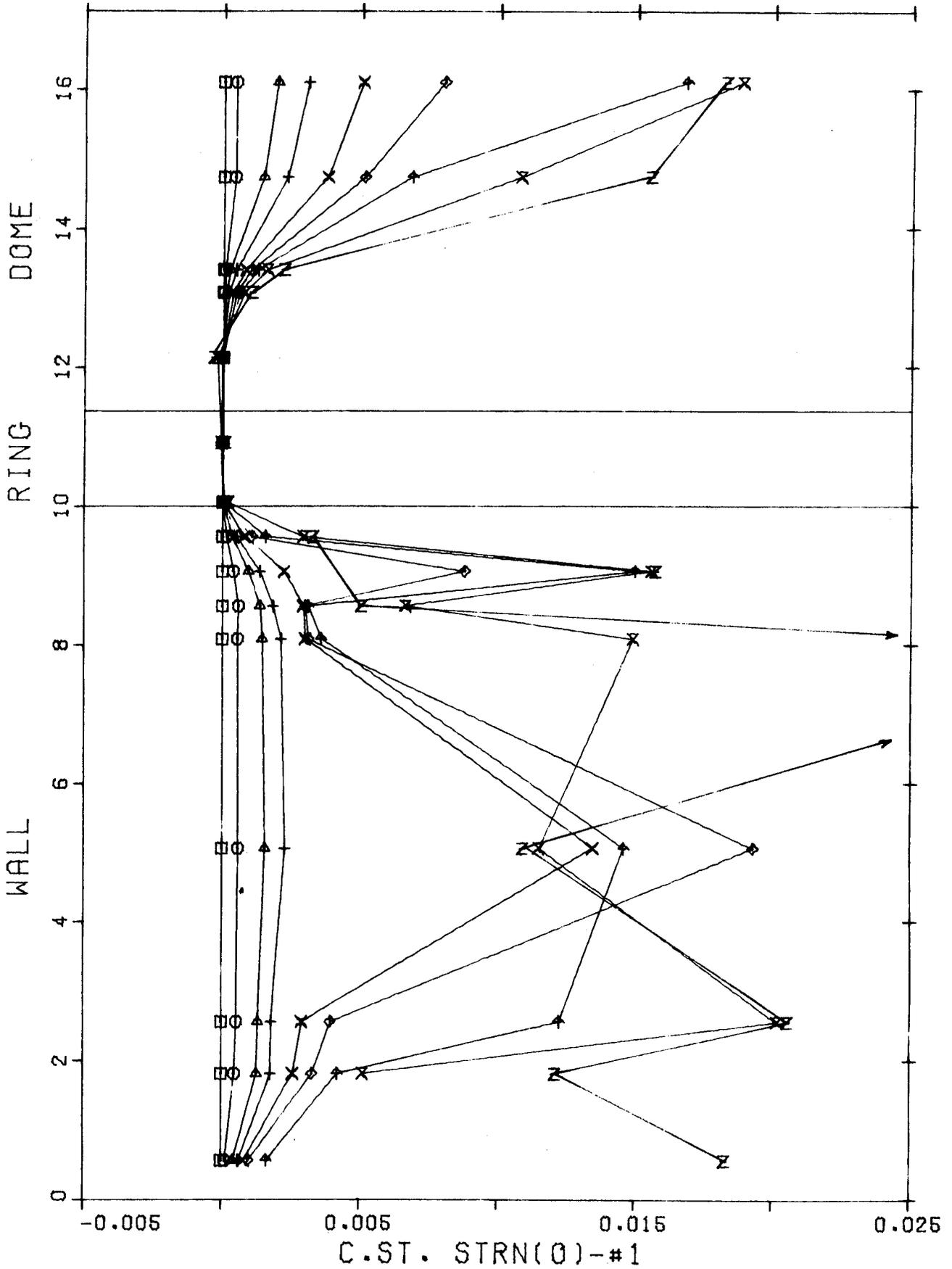


Fig. B19 Circumferential Steel Strains, Outside Layer, Line 1

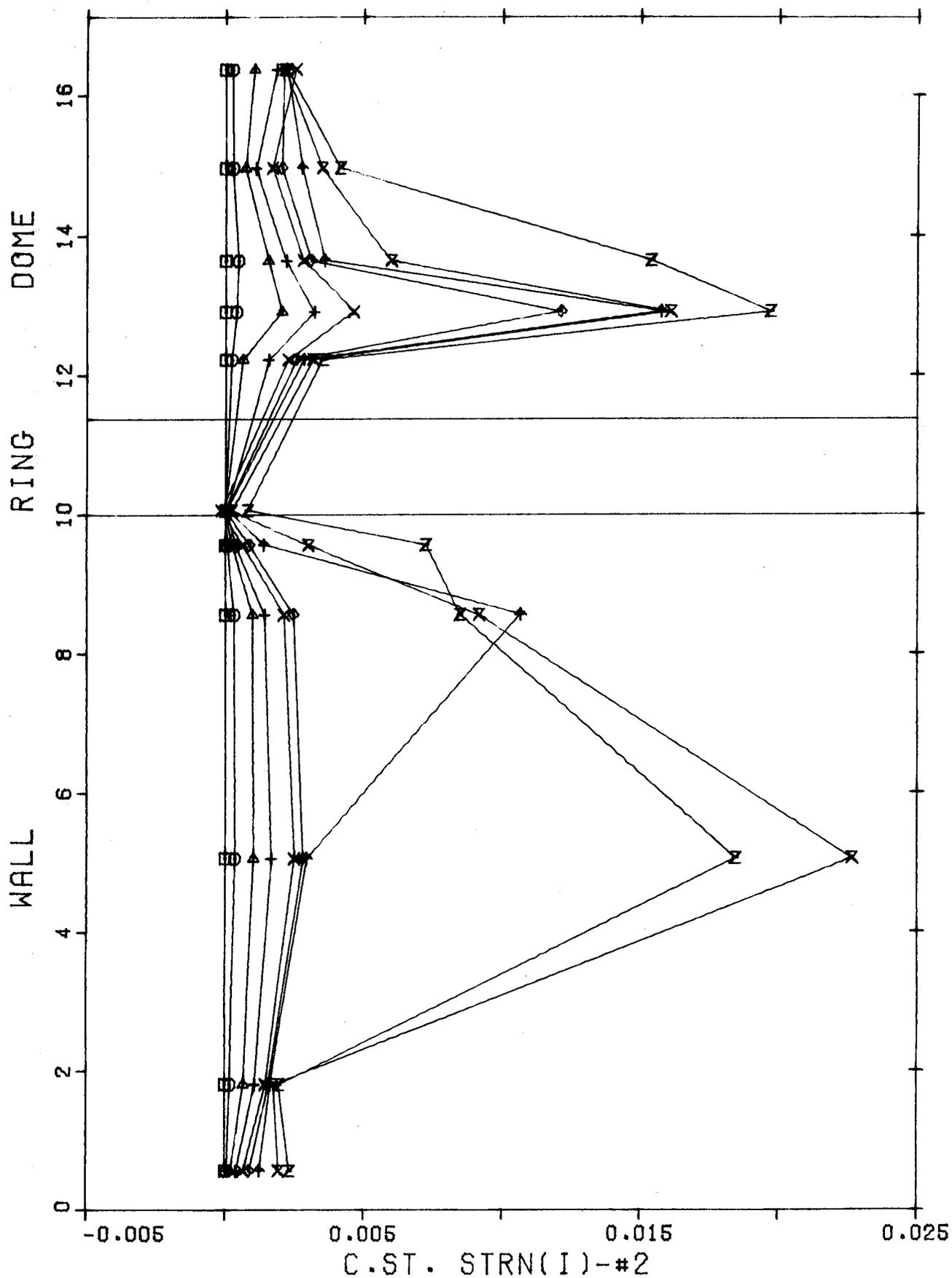


Fig. B.20 Circumferential Steel Strains, Inside Layer, Line 2

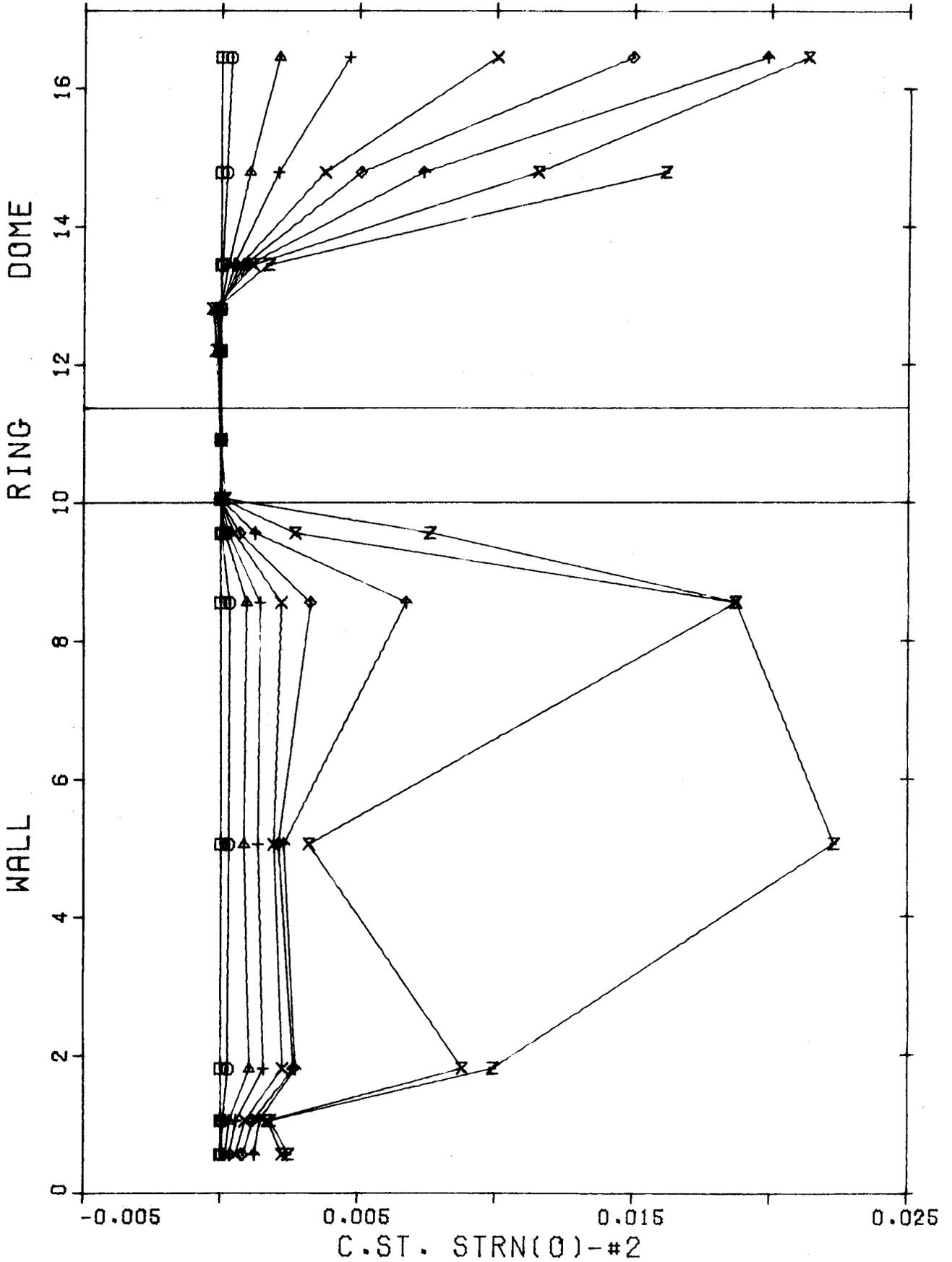


Fig. B.21 Circumferential Steel Strains, Outside Layer, Line 2

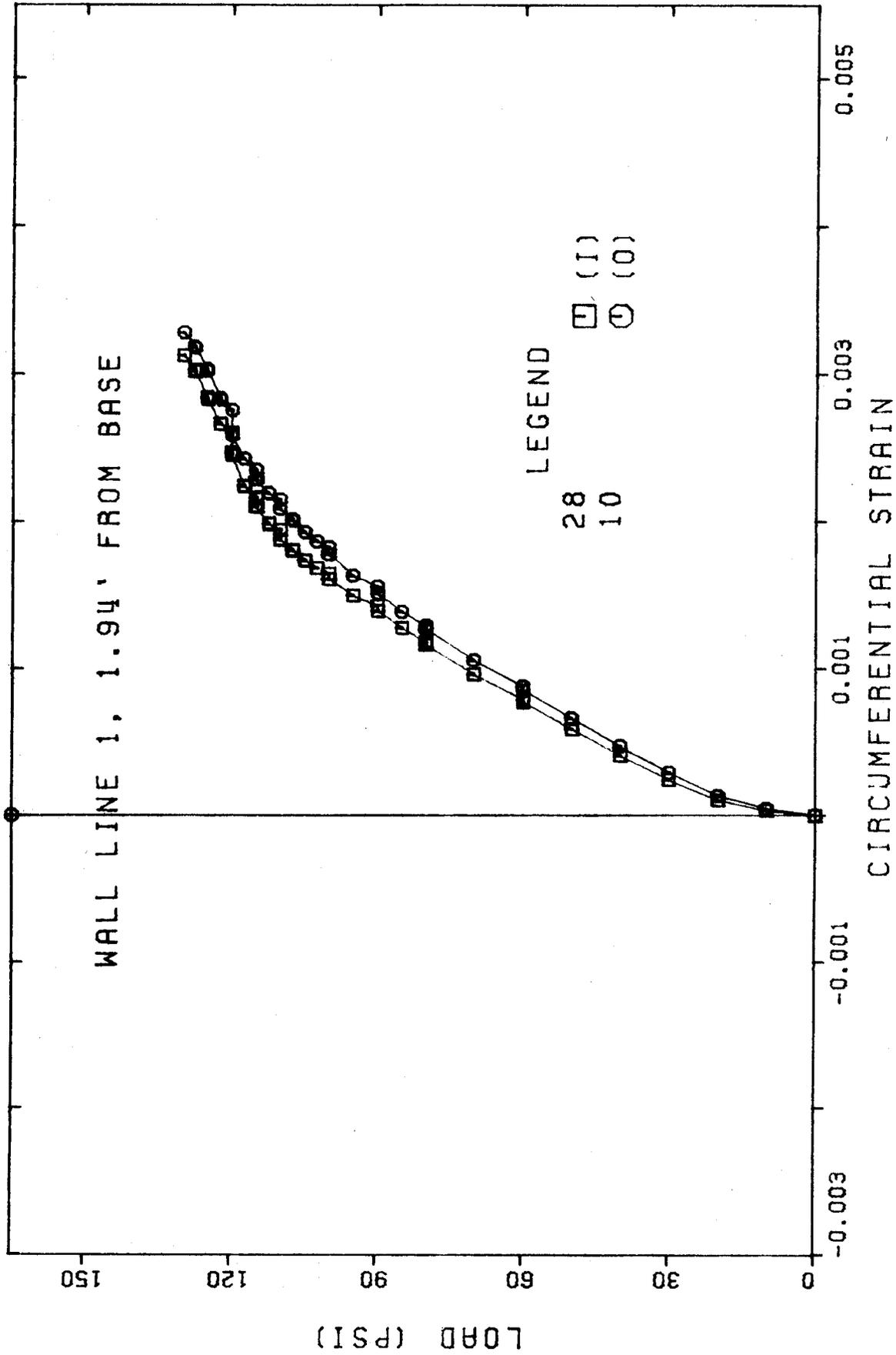
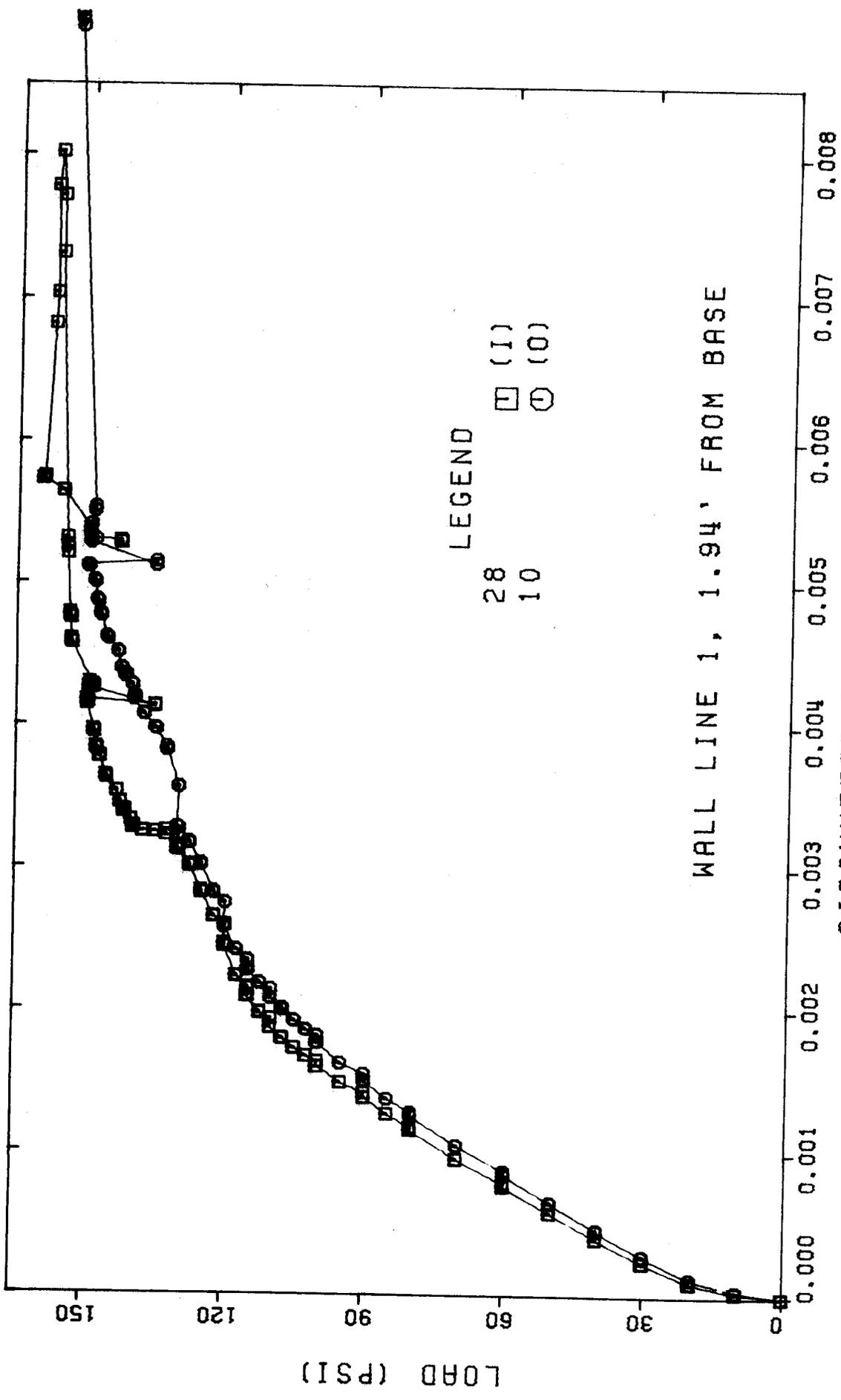


Fig. B.22 Circumferential Steel Strains, Inside and Outside Layers, Line 1



WALL LINE 1, 1.94' FROM BASE  
C.S.T. STRN (I/O) TEST G

Fig. B.22 (Continued)

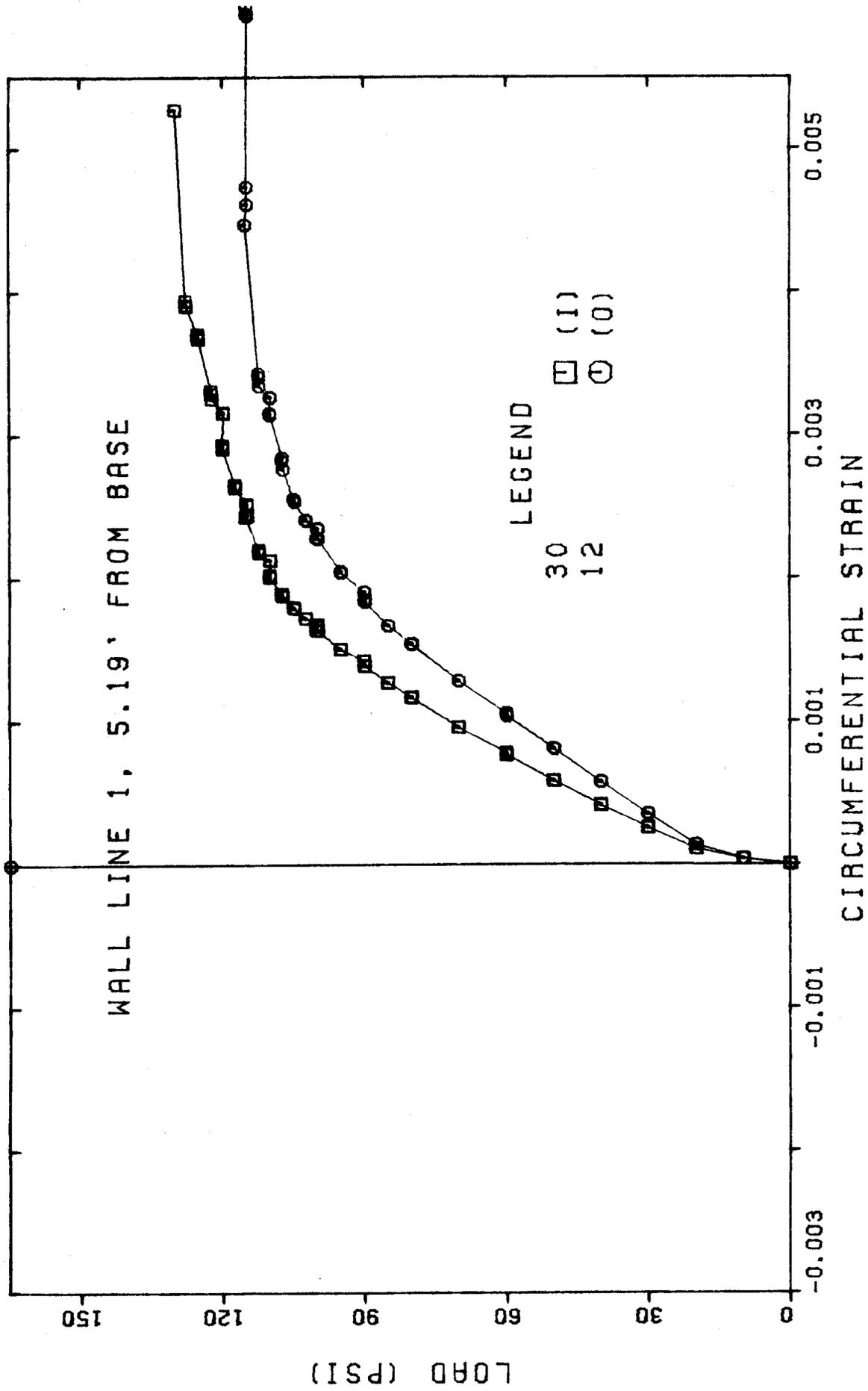


Fig. B23 Circumferential Steel Strains, Inside and Outside Layers, Line 1  
C. ST. STAN (I/O) TEST G

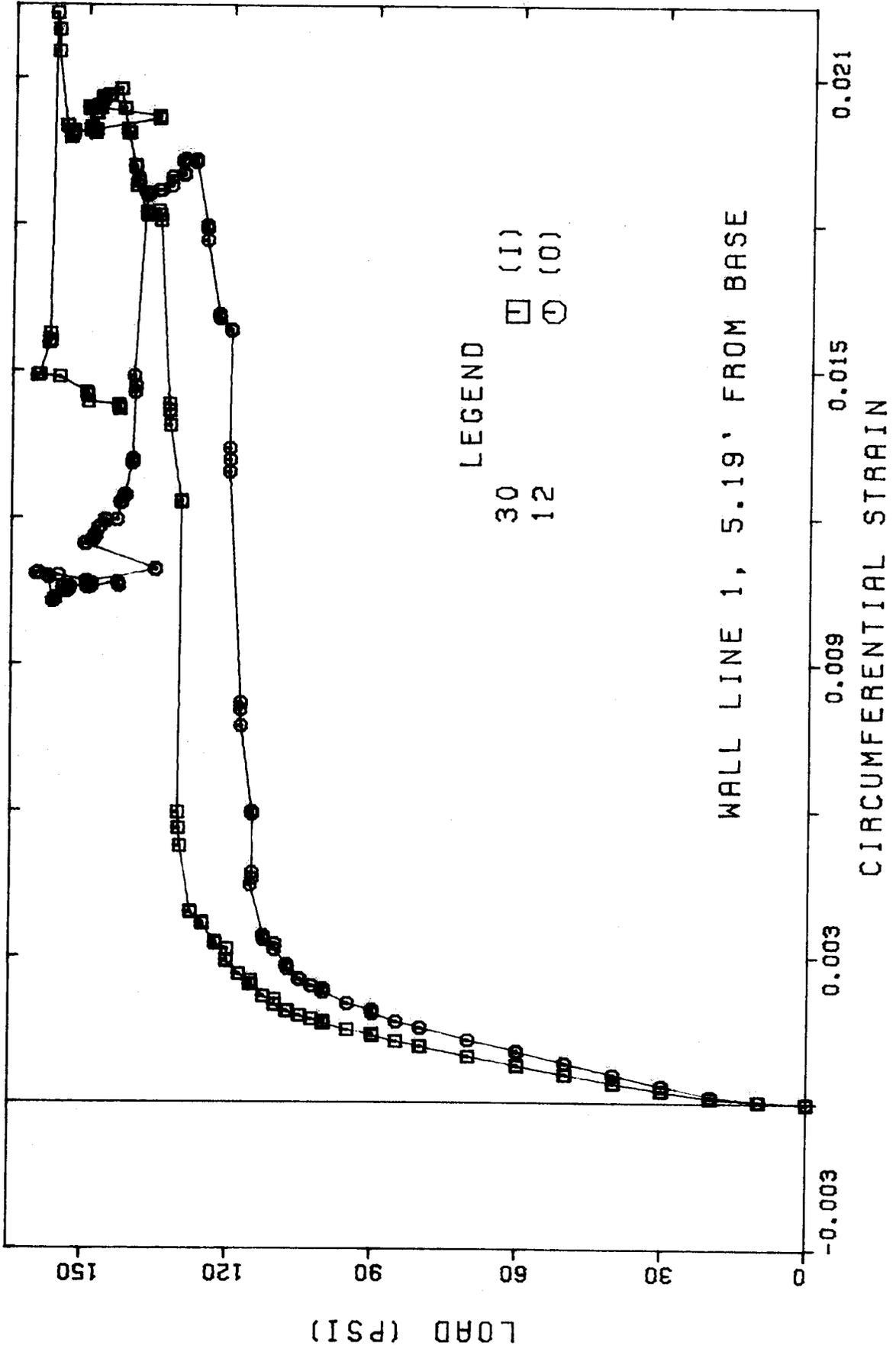


Fig. B.23 (Continued)

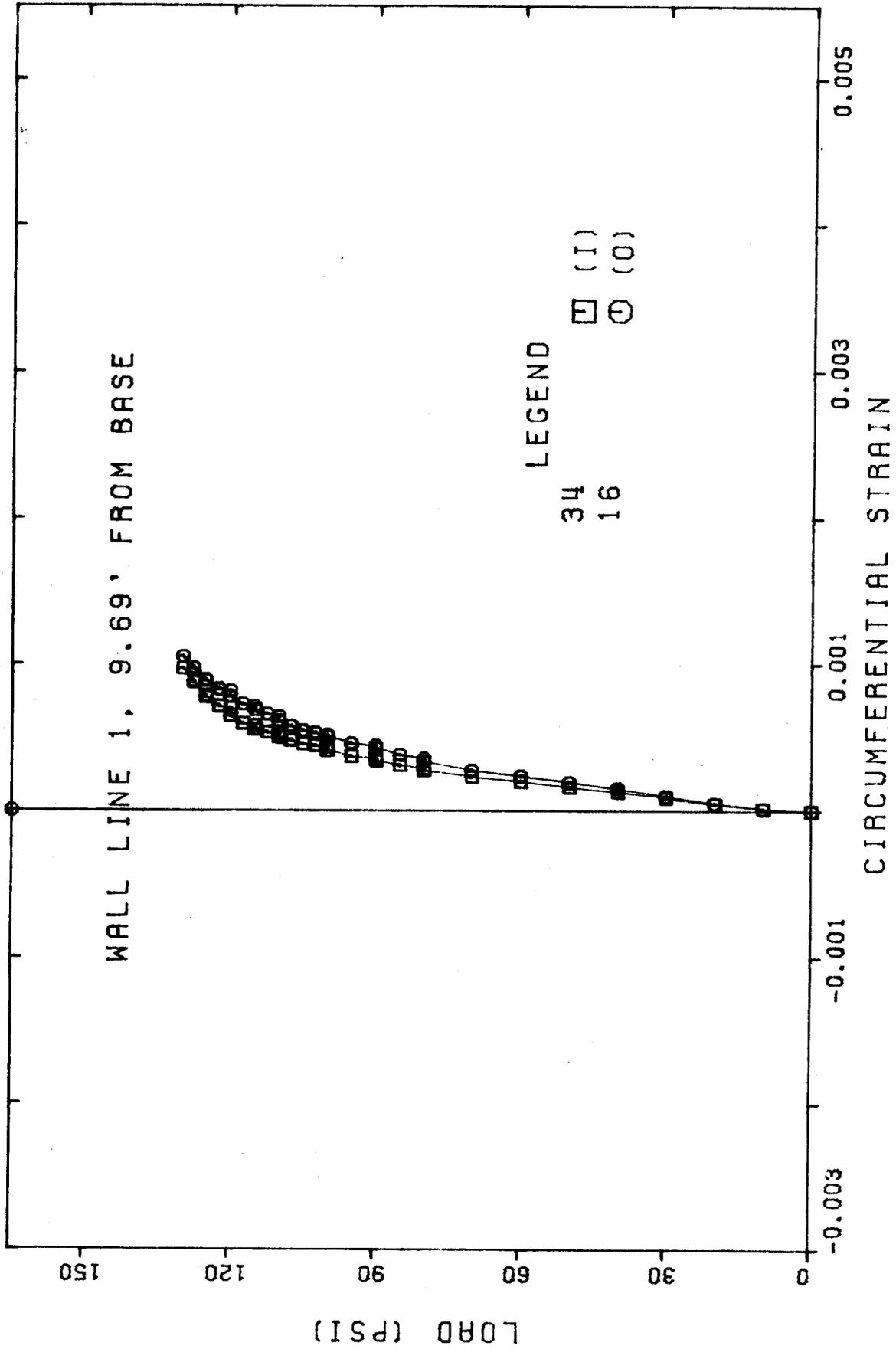


Fig. B.24 Circumferential Steel Strains, Inside and Outside Layers, Line 1

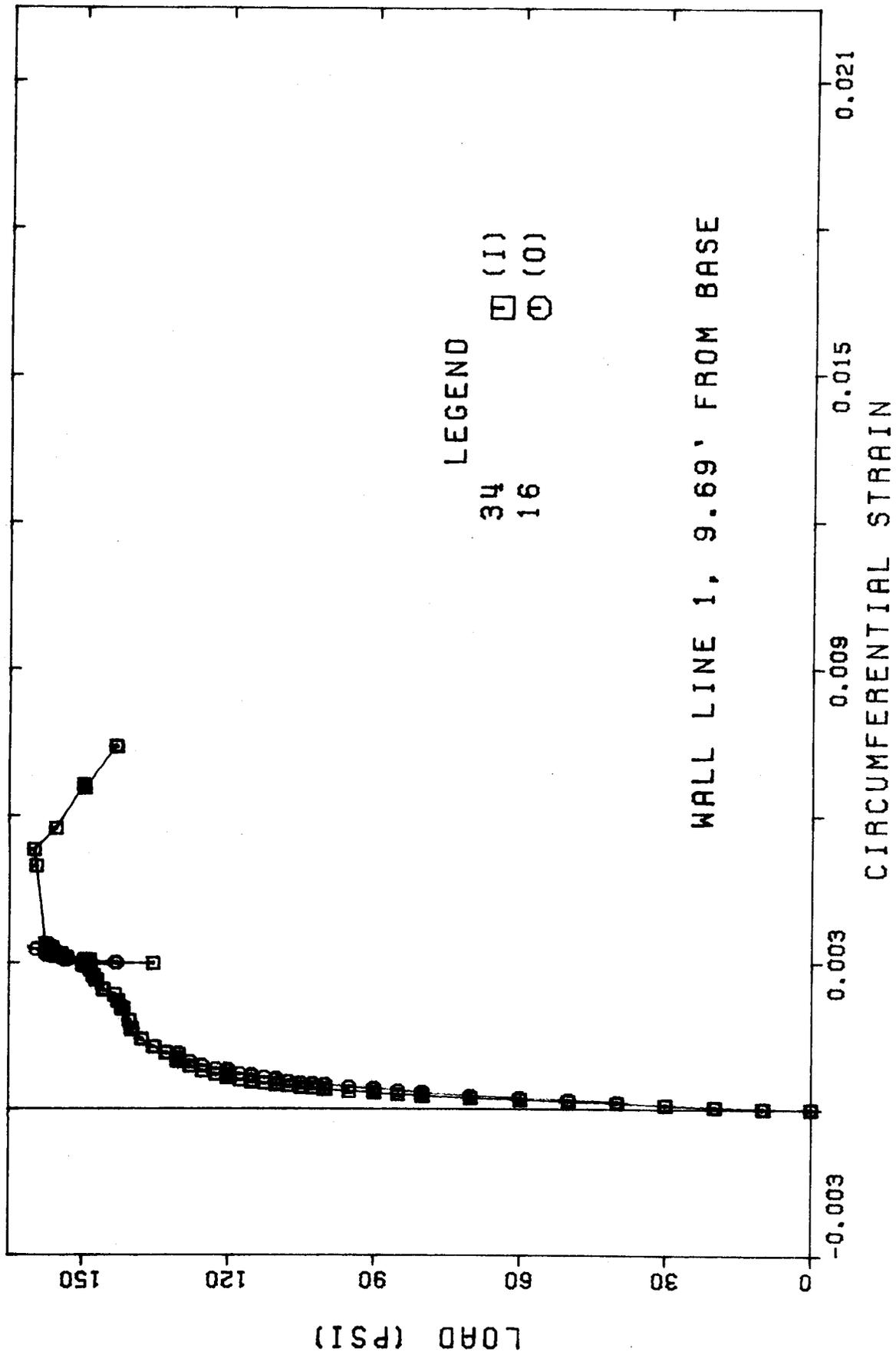


Fig. B.24 (Continued)

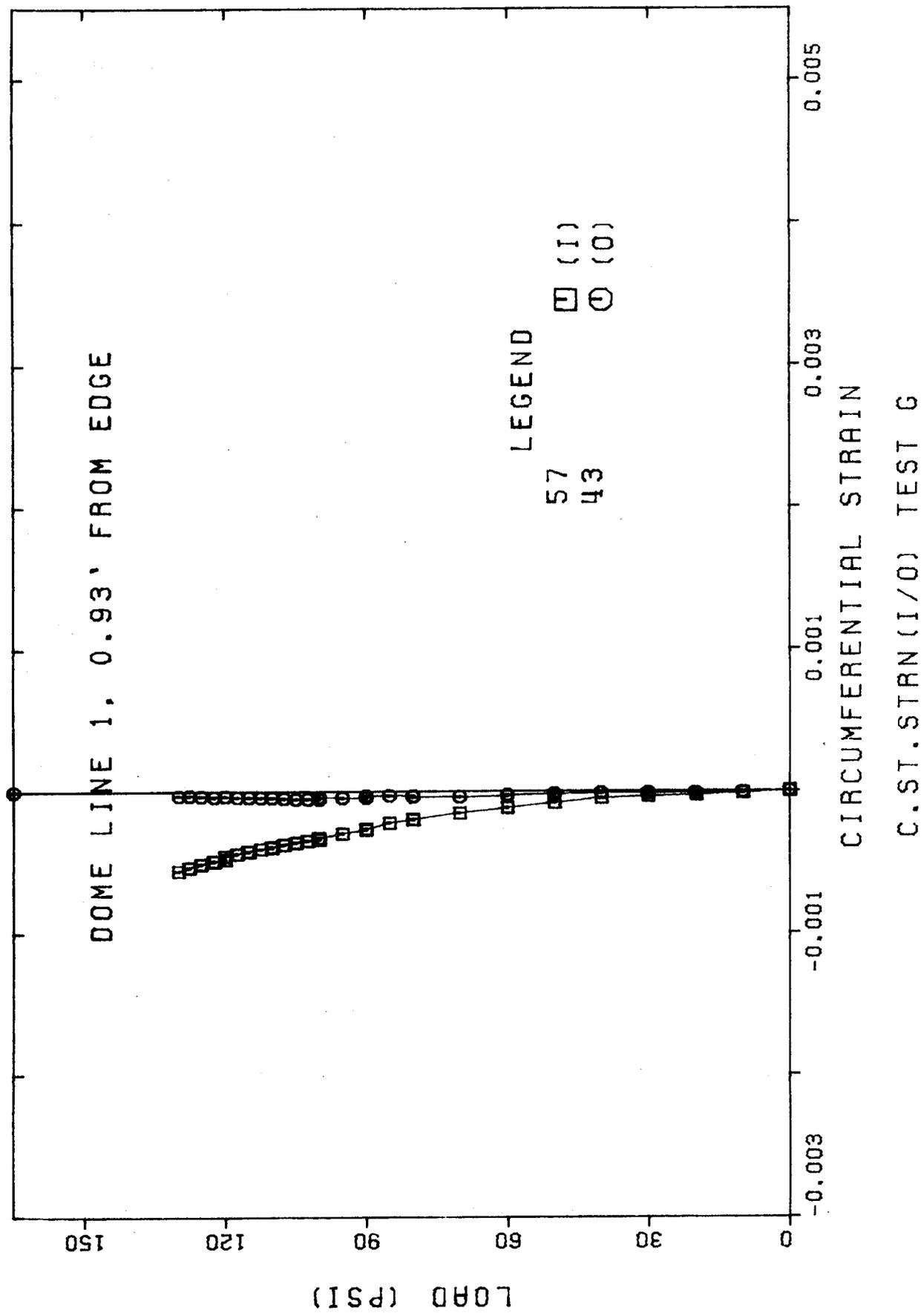
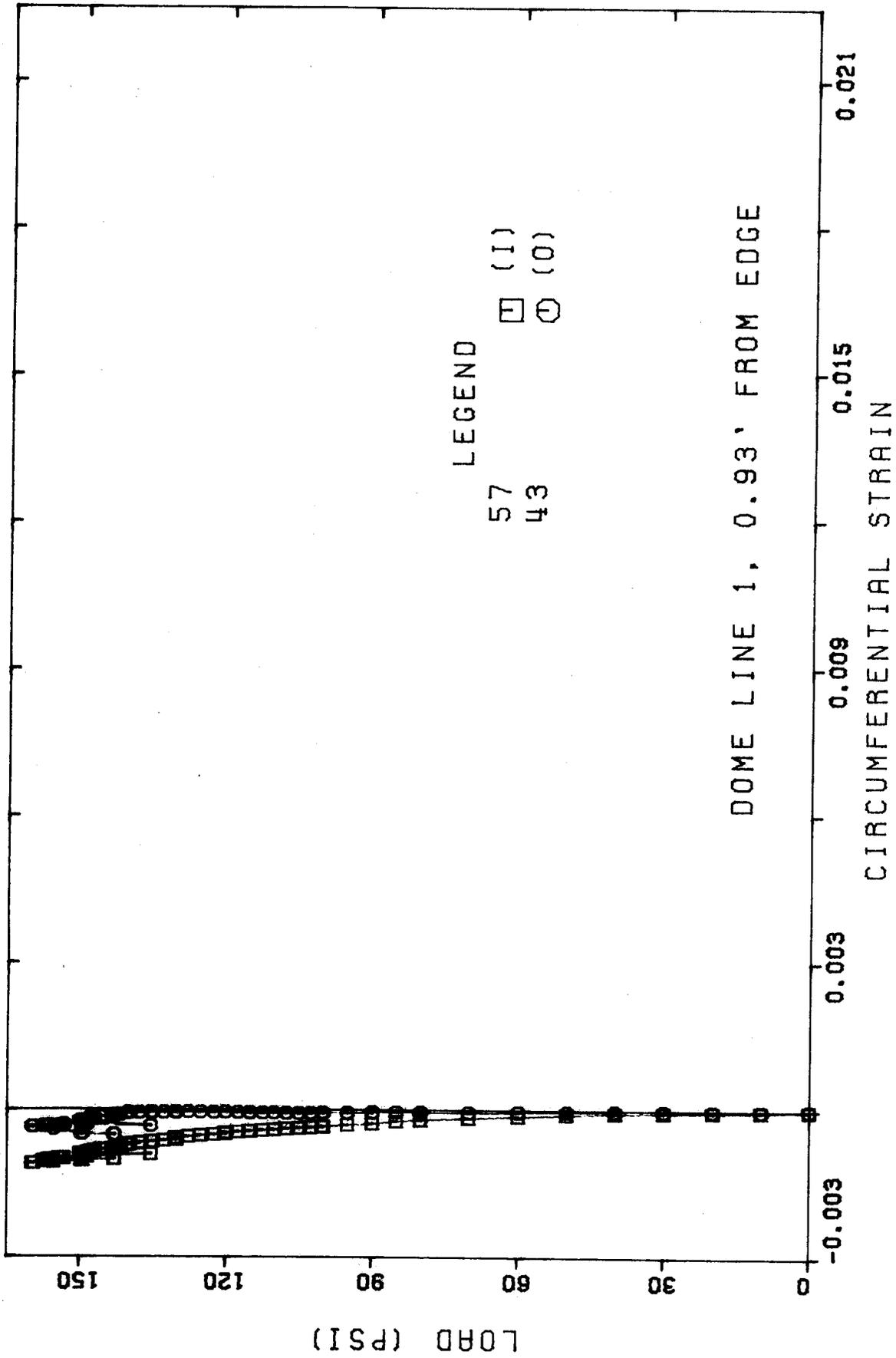


Fig. B.25 Circumferential Steel Strains, Inside and Outside Layers, Line 1



C. ST. STRN (I/O) TEST G

Fig. B.25 (Continued)

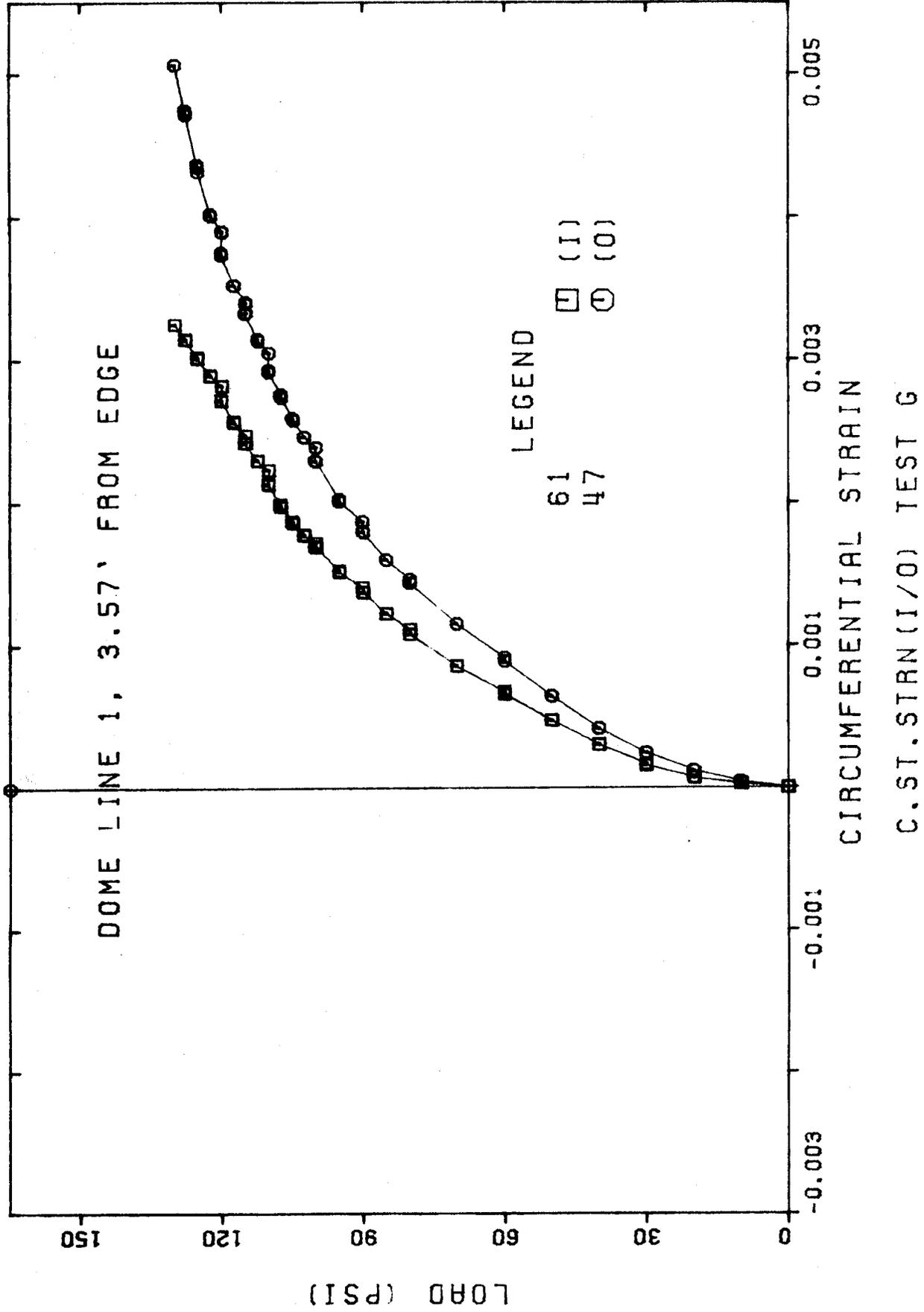


Fig. B.26 Circumferential Steel Strains, Inside and Outside Layers, Line 1

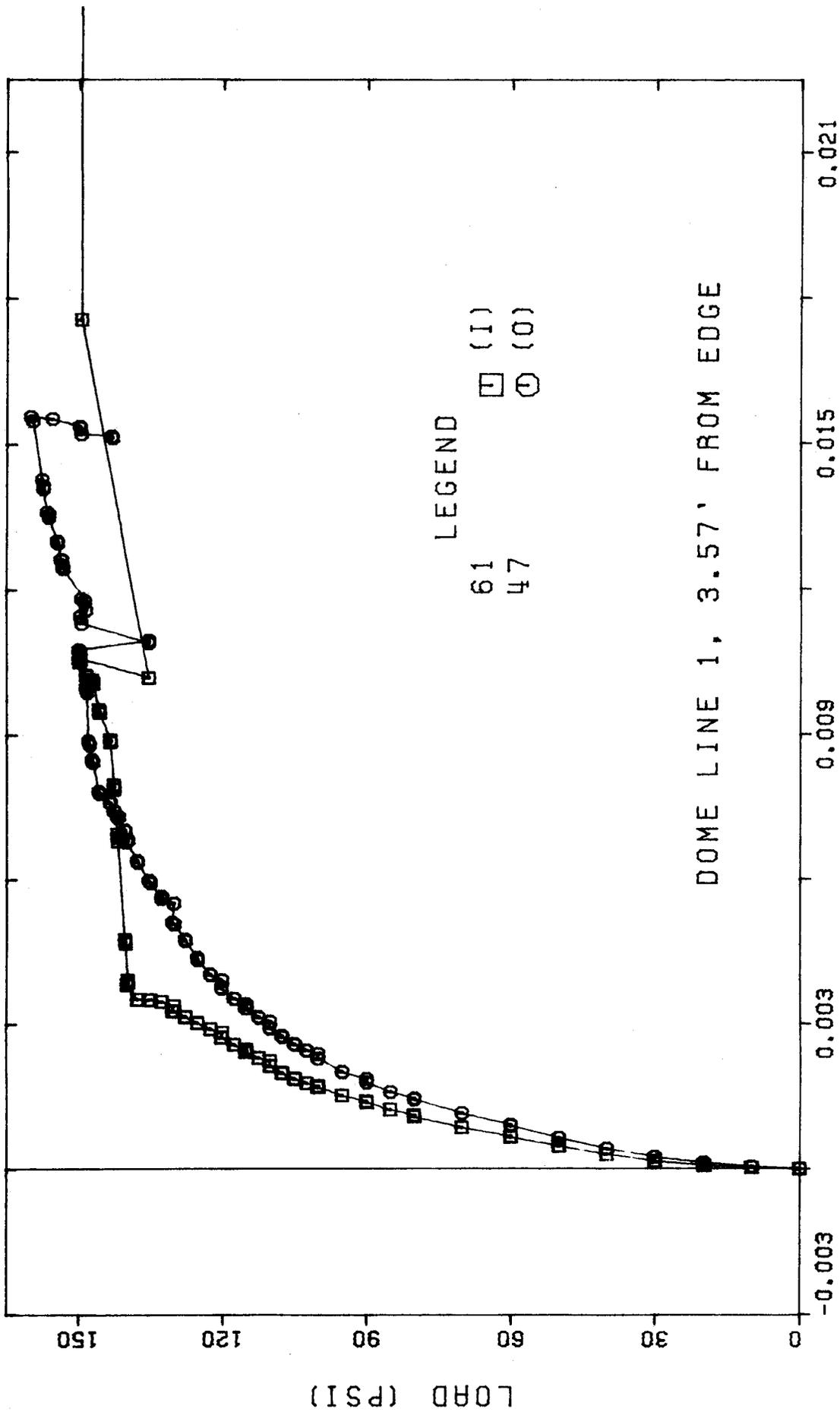


Fig. B.26 (Continued)

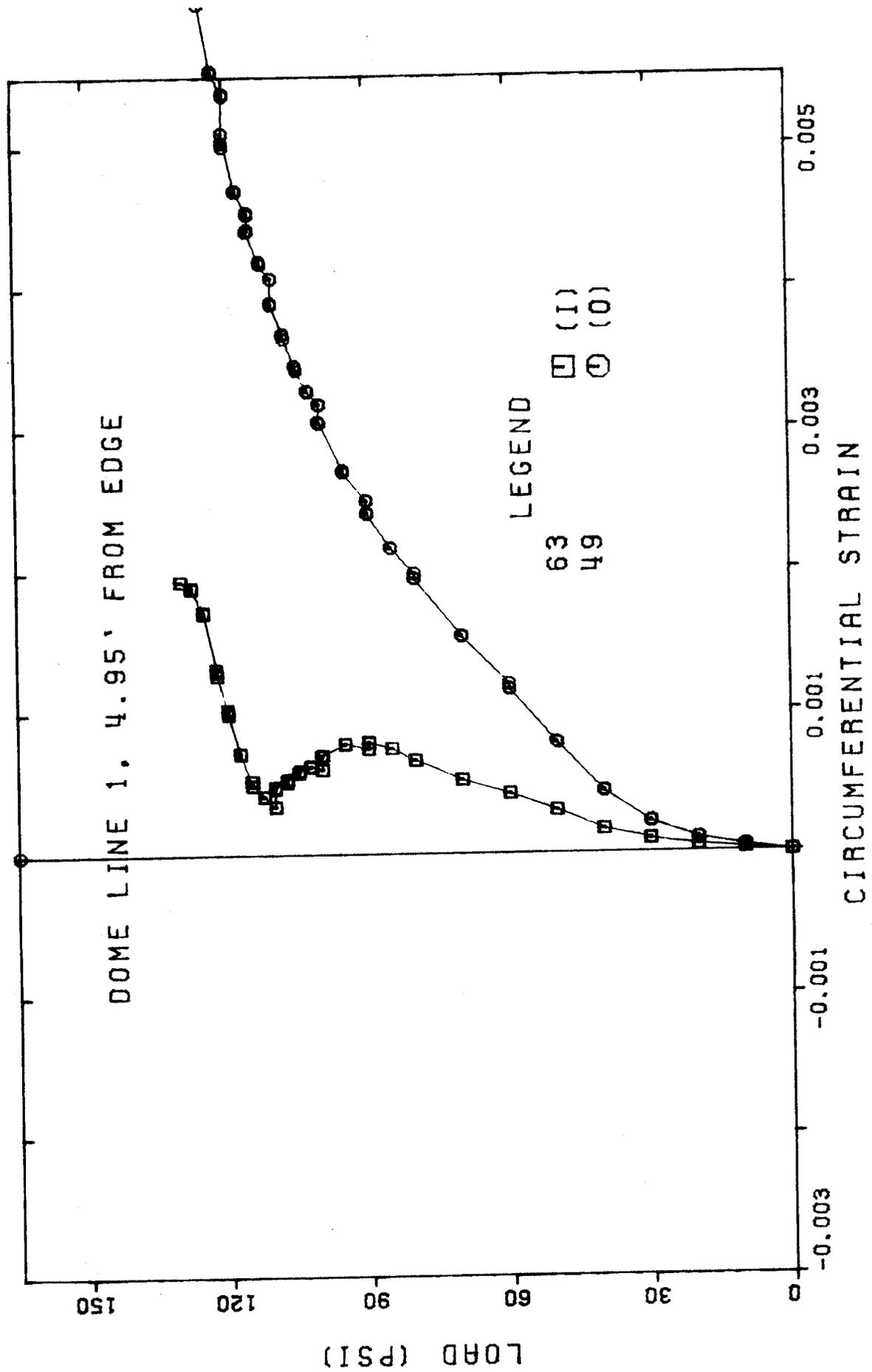
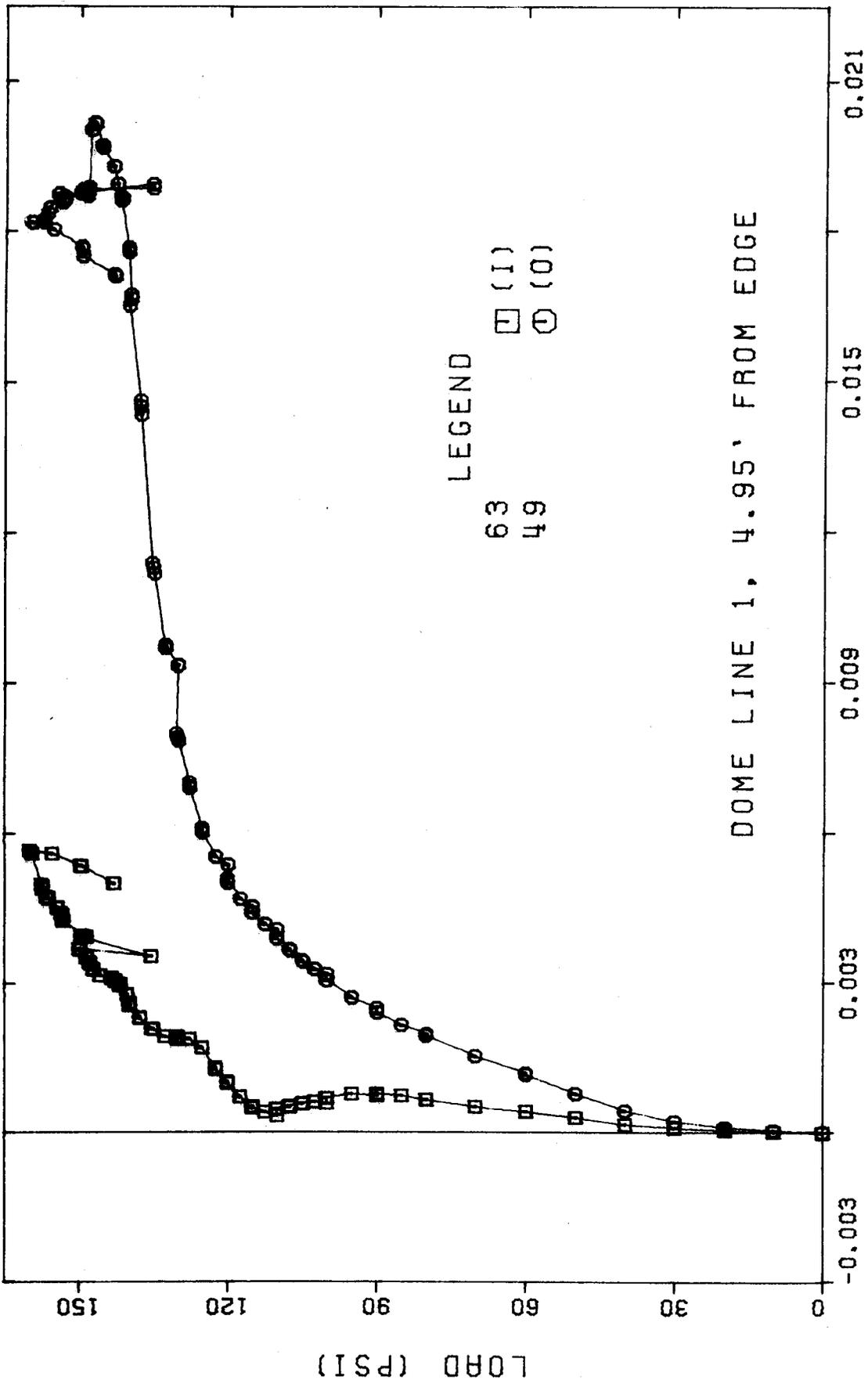


Fig. B.27 Circumferential Steel Strains, Inside and Outside Layers, Line 1



DOME LINE 1, 4.95' FROM EDGE

CIRCUMFERENTIAL STRAIN

C. ST. STARN (I/O) TEST G

Fig. B.27 (Continued)

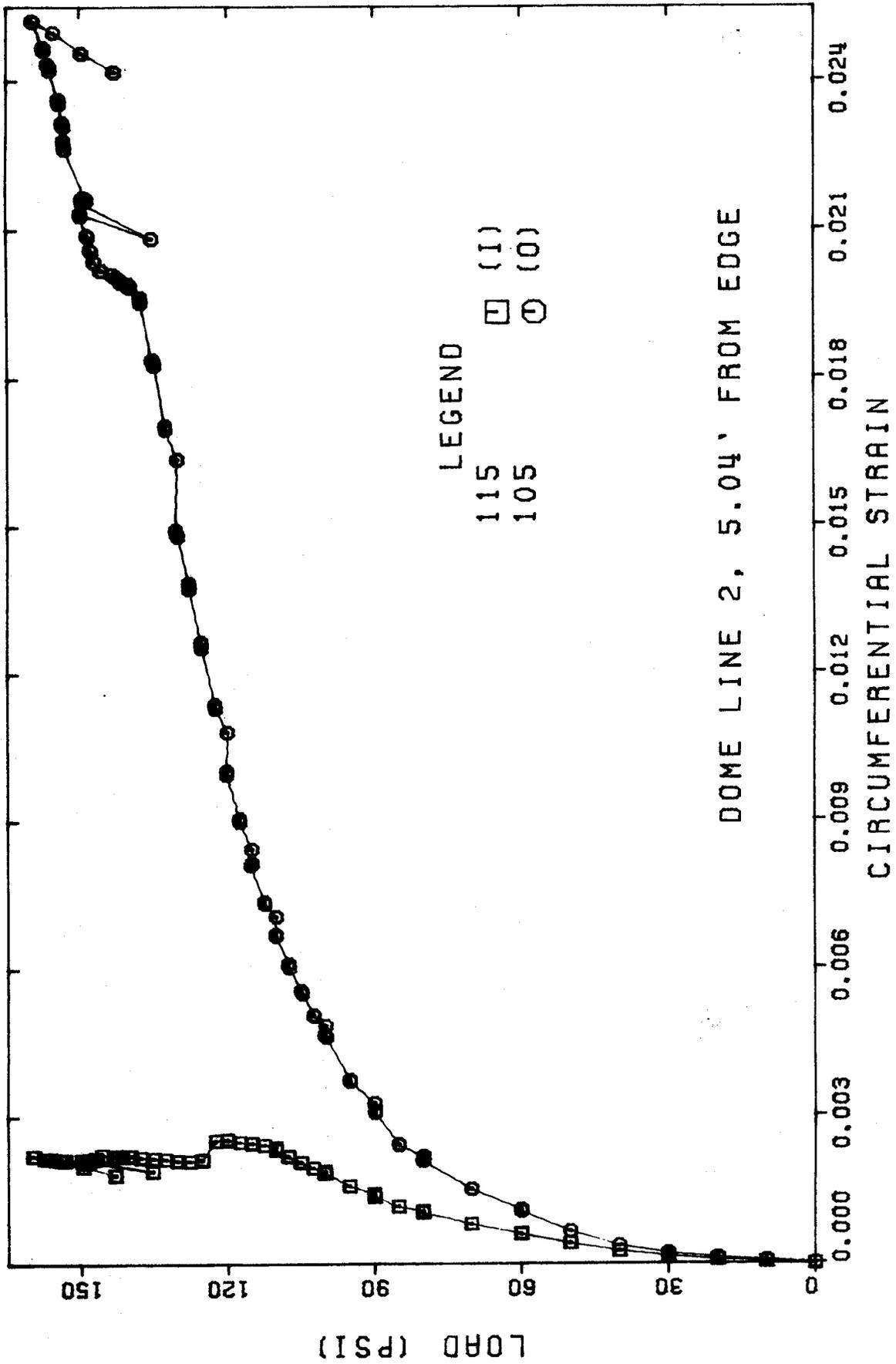


Fig. B.28 Circumferential Steel Strains, Inside and Outside Layers, Line 2