

**METHODOLOGY FOR
MITIGATION OF SEISMIC HAZARDS
IN EXISTING UNREINFORCED
MASONRY BUILDINGS:
WALL TESTING, OUT-OF-PLANE**

ABK A Joint Venture
250 North Nash Street
El Segundo, California 90245

**Topical Report 04
December 1981**

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This report describes an experimental program conducted on unreinforced masonry (URM) walls subjected to dynamic, out-of-plane motions. The experimental program is one of several tasks in an overall research program, sponsored by the National Science Foundation, whose objective is to develop a methodology for mitigation of seismic hazards in existing unreinforced masonry buildings.

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FOREWORD

This topical report is one of several reports prepared by ABK, A Joint Venture, for the National Science Foundation under Contract No. NSF-C-PFR-78-19200. The overall objective of the contract is to derive a methodology for the mitigation of seismic hazards in existing unreinforced masonry buildings. This research supports the objective of the Disaster and Natural Hazard Research being conducted under the Applied Science and Research Applications program of the National Science Foundation.

The Joint Venture ABK consists of three firms, Agbabian Associates (AA), S.B. Barnes & Associates (SBB&A), and Kariotis & Associates (K&A), all in the Los Angeles area. The principal investigators for the three firms are R.D. Ewing for AA, A.W. Johnson for SBB&A, and J.C. Kariotis for K&A. The editor for the reports is J. Athey of AA.

This report presents a description of the experimental program conducted on unreinforced masonry walls subjected to dynamic, out-of-plane motions. It includes the basic data obtained from the tests. The interpretation of the test results is reported in a separate volume (ABK, 1981d). Principal contributors to this report are R.D. Ewing from AA and J.C. Kariotis from K&A.

Dr. J.B. Scalzi served as Technical Director of this project for the National Science Foundation and maintained scientific and technical liaison with the joint venture throughout all phases of the research program. His contributions and support are greatly appreciated.

CONTENTS

<u>Section</u>		<u>Page</u>
	Executive Summary	S-1
1	INTRODUCTION	1-1
2	MASONRY WALL TEST DESCRIPTION	2-1
	2.1 Rationale of the Tests	2-1
	2.2 Brief Description of Specimens	2-9
	2.3 Test Set-up and Instrumentation	2-9
	2.4 Test Modes and Sequences	2-14
	2.5 Displacement Controlled Hydraulic Actuation System	2-36
	2.6 Test Data Collection and Format	2-38
3	WALL SPECIMEN DESCRIPTION	3-1
	3.1 Introduction	3-1
	3.2 Construction Contracts	3-1
	3.3 Construction Procedures	3-3
	3.4 Materials Sampling Procedures	3-8
	3.5 Specimen Handling Procedures	3-11
	3.6 Specimen Description	3-11
4	MATERIALS PROPERTIES	4-1
	4.1 Introduction	4-1
	4.2 Summary of Common Properties	4-1
	4.3 Materials Properties	4-4
5	TEST RESULTS	5-1
	5.1 Wall 1	5-2
	5.2 Wall 2	5-5
	5.3 Wall 3	5-25
	5.4 Wall 4	5-34
	5.5 Wall 5	5-34
	5.6 Wall 6	5-35
	5.7 Wall 7	5-35
	5.8 Wall 8	5-42

CONTENTS (continued)

<u>Section</u>		<u>Page</u>
5.9	Wall 9	5-42
5.10	Wall 10	5-49
5.11	Wall 11	5-49
5.12	Wall 12	5-49
5.13	Wall 13	5-54
5.14	Wall 14	5-54
5.15	Wall 15	5-55
5.16	Wall 16	5-55
5.17	Wall 17	5-56
5.18	Wall 18	5-56
5.19	Wall 19	5-57
5.20	Wall 20	5-57
5.21	Wall 21	5-60
5.22	Wall 22	5-60
6	CONCLUSIONS OF TEST PROGRAM	6-1
6.1	Performance of Test Equipment	6-1
6.2	Range of Test Parameters	6-2
6.3	Achievement of Test Objectives	6-4
6.4	General Application	6-4
6.5	Research Recommendations	6-5
7	REFERENCES	7-1
 <u>Appendix</u>		
A	SPECIFICATIONS - MASONRY WALL TEST SPECIMENS	A-1
B	LABORATORY TEST RESULTS	B-1
C	WALL TEST - MAXIMUM AND MINIMUM DATA	C-1

ILLUSTRATIONS

<u>Figure</u>		<u>Page</u>
2-1	Walls, Out-of-Plane, Single-Story Building	2-3
2-2	Typical Cyclic Load Deflection Diagram for Plywood Diaphragms	2-5
2-3	Load Deflection Model for Wood Diaphragms	2-5
2-4	Lumped Parameter Model (8 Segments - Half Model)	2-7
2-5	Walls, Out-of-Plane, Multistory Building	2-8
2-6	Schematic Test Setup for Dynamic Testing of Walls	2-11
2-7	Wall Instrumentation	2-13
2-8	Kinematic Motions, MS1	2-18
2-9	Kinematic Motions, MS2	2-19
2-10	Kinematic Motions, MS3	2-20
2-11	Kinematic Motions, MS4	2-21
2-12	Kinematic Motions, MS5	2-22
2-13	Kinematic Motions, MS6	2-23
2-14	Kinematic Motions, MS7	2-24
2-15	Kinematic Motions, MS8	2-25
2-16	Kinematic Motions, MS9	2-26
2-17	Kinematic Motions, MS10	2-27
2-18	Relative Deformation of Motion Sets	2-28
2-18	Continued	2-29
2-18	Continued	2-30
2-18	Continued	2-31
2-18	Continued	2-32
2-18	Continued	2-33
2-18	Continued	2-34
2-18	Concluded	2-35
2-19	Schematic of the Displacement-Controlled Hydraulic Actuation System	2-37
3-1	Construction Details of Wall Test Specimens	3-2
3-2	Test Fixture for Loading Top of Wall	3-4
3-3	Test Fixture for Base of Wall	3-4

ILLUSTRATIONS (continued)

<u>Figure</u>		<u>Page</u>
3-4	Three-Wythe Masonry Constructed on Base Fixture	3-5
3-5	View of Wall Test Specimens in Construction Area . . .	3-5
3-6	Placement of Interior Wythe in Three-Wythe Masonry . .	3-6
3-7	Placement of Through-Wall Units on Mortar at Face Shell	3-6
3-8	Placement of Through-Wall Units. Clay Block Materials	3-7
3-9	Through-Wall Units Filled with Mortar to Increase Wall Mass	3-7
3-10	Wire Reinforcement Applied on Face of URM Wall	3-9
3-11	Plaster Coat Application to Embed Wire Reinforcement . .	3-9
3-12	Application of Second Coat of Plaster to Reinforce Wall Specimen	3-10
3-13	Preparation of Mortar Test Specimens by Standard Procedures	3-10
3-14	Transporter for Movement of Specimen to Test Apparatus	3-12
3-15	Traditional Methods of Constructing Multiwythe Masonry	3-14
3-16	Traditional Method of Filling Collar Joints Between Wythes	3-14
5-1	Reference Lines of Test Specimens	5-3
5-2	Test Wall Against Barrier	5-4
5-3	Deterioration at Base of Wall	5-4
5-4	Wall 1, MS10, Displacement Gage WD1	5-6
5-5	Wall 1, MS10, Displacement Gage WD2	5-7
5-6	Wall 1, MS10, Displacement Gage WD3	5-8
5-7	Wall 1, MS10, Displacement Gage WD4	5-9
5-8	Wall 1, MS10, Displacement Gage WD5	5-10
5-9	Wall 1, MS10, Displacement Gage WD6	5-11
5-10	Wall 1, MS10, Displacement Gage WD7	5-12
5-11	Wall 1, MS10, Displacement Gage WD1	5-13
5-12	Wall 1, MS10, Displacement Gage WD4	5-14
5-13	Wall 1, MS10, Displacement Gage WD7	5-15

ILLUSTRATIONS (continued)

<u>Figure</u>		<u>Page</u>
5-14	Wall 1, MS10, Accelerometer WAl	5-16
5-15	Wall 1, MS10, Accelerometer WA4	5-17
5-16	Wall 1, MS10, Accelerometer WAV1	5-18
5-17	Wall 1, MS102, Displacement Gage WD1	5-19
5-18	Wall 1, MS102, Displacement Gage WD3	5-20
5-19	Wall 1, MS102, Displacement Gage WD7	5-21
5-20	Wall 1, MS102, Accelerometer WAl	5-22
5-21	Wall 1, MS102, Accelerometer WA4	5-23
5-22	Wall 1, MS102, Accelerometer WAV1	5-24
5-23	Wall 2, MS10H, Displacement Gage WD1	5-26
5-24	Wall 2, MS10H, Displacement Gage WD4	5-27
5-25	Wall 2, MS5, Displacement Gage WD1	5-28
5-26	Wall 2, MS5, Displacement Gage WD4	5-29
5-27	Wall 2, MS5, Accelerometer WAl	5-30
5-28	Wall 2, MS5, Accelerometer WA4	5-31
5-29	Wall 2, MS7, Displacement Gage WD1	5-32
5-30	Wall 2, MS7, Displacement Gage WD4	5-33
5-31	Wall 6, MS3, Displacement Gage WD1	5-36
5-32	Wall 6, MS3, Displacement Gage WD3	5-37
5-33	Wall 6, MS3, Displacement Gage WD7	5-38
5-34	Wall 6, MS3, Accelerometer WAl	5-39
5-35	Wall 6, MS3, Accelerometer WA4	5-40
5-36	Wall 6, MS3, Accelerometer WAV1	5-41
5-37	Wall 8, MS6, Displacement Gage WD1	5-43
5-38	Wall 8, MS6, Displacement Gage WD4	5-44
5-39	Wall 8, MS6, Displacement Gage WD7	5-45
5-40	Wall 8, MS6, Accelerometer WAl	5-46
5-41	Wall 8, MS6, Accelerometer WA4	5-47
5-42	Wall 8, MS6, Accelerometer WAV1	5-48
5-43	Wall 10, MS10H, Displacement Gage WD1	5-50
5-44	Wall 10, MS10H, Displacement Gage WD3	5-51

ILLUSTRATIONS (continued)

<u>Figure</u>		<u>Page</u>
5-45	Wall 10, MS10H, Accelerometer WA1	5-52
5-46	Wall 10, MS10H, Accelerometer WA4	5-53
5-47	Wall 19, MS5, Displacement Gage WD1	5-58
5-48	Wall 19, MS5, Displacement Gage WD4	5-59
5-49	Wall 20, MS7, Displacement Gage WD1	5-61
5-50	Wall 20, MS7, Displacement Gage WD4	5-62

TABLES

<u>Table</u>		
2-1	Wall Specimen Description	2-10
2-2	Wall Test Sequence	2-15
2-3	Wall Input Motions	2-16
2-4	Wall Instrumentation Data	2-39

EXECUTIVE SUMMARY

This report describes an experimental program conducted on unreinforced masonry (URM) walls subjected to dynamic, out-of-plane motions. The experimental program is one of several tasks in an overall research program, sponsored by the National Science Foundation, whose objective is to develop a methodology for mitigation of seismic hazards in existing unreinforced masonry buildings.

The objectives of the experimental program are to establish bounds on the resistance of URM walls to collapse (dynamic stability), to provide data for the development of guidelines and criteria for determining the resistance of this type of wall to collapse, to evaluate the effectiveness of retrofit procedures to increase their collapse resistance, and to verify and calibrate mathematical models for the analysis of typical URM walls.

Full-scale component tests on URM walls subjected to dynamic, out-of-plane motions were designed and conducted on 20 wall specimens subjected to 194 dynamic test sequences covering the full range of seismicity in the United States from an Effective Peak Acceleration of 0.1 g to 0.4 g (ABK, 1981b).

The component tests were designed to account, as closely as possible, for the nonlinear, dynamic interaction between the walls and components of typical URM buildings. This interaction was included in the component tests by defining the kinematic environment at the top and base of the walls from nonlinear, dynamic analyses using analytical models of typical URM buildings that included the nonlinear, hysteretic characteristics of the diaphragms and the diaphragm/wall mass system. A companion component test program for typical diaphragms (ABK, 1981c) was used to validate this nonlinear, hysteretic diaphragm model. The kinematic

environments were obtained for buildings with both stiff and soft diaphragms, for single-story buildings, and for walls at various levels in multistory buildings. The situation for multistory buildings is depicted in Figure 1. The kinematic input motions for a ground level wall element consist of a ground motion at the base of the wall and a compatible floor diaphragm response (a compatible roof diaphragm response for a one-story building) at the top of the wall. As used here, compatible responses are diaphragm motions that result from the same earthquake ground motion. The kinematic input for an intermediate level wall element is compatible floor diaphragm responses at the base and top; while a roof level wall element has a floor diaphragm response at its base and a compatible roof diaphragm response at its top. In addition the walls were tested with various levels of overburden mass attached to the top of the wall to simulate additional wall or parapet mass above the wall section being tested.

A study of existing URM buildings in the United States (ABK, 1981a) was conducted to identify and categorize the current inventory of this class of buildings and to identify their materials and methods of construction. The specimens tested were as representative as possible of typical URM wall elements found in this study. The wall specimens tested included 3 wythe common brick, grouted clay block, and concrete block both grouted and ungrouted. In addition, the test program included one form of retrofit that consisted of applying a wire mesh and a plaster covering to both sides of the wall specimens. The URM wall specimens were 6 ft (1.8 m) wide and 10 to 16 ft (3.0 to 4.9 m) high, and had height-to-thickness ratios that ranged from 14 to 25. Table 1 gives a brief summary description of the wall specimens tested.

A schematic of the test setup is shown in Figure 2. The URM wall specimens were installed in a test fixture that allowed the base and top of the wall to be moved independently in the out-of-plane direction by servocontrolled hydraulic actuators. The wall rested on a low friction, roller supported base and the overburden mass was applied through a mechanical header that was attached to the top of the wall. The wall specimens were instrumented with load cells, accelerometers, and displacement

sensors; and the data from each instrument were recorded on magnetic tape in digital form. Additional data were recorded in the form of still photographs, motion pictures, and observer notes or test logs. Most of these data are reported herein; however, all of the data have been archived for future use in data interpretation and presentation.

The tests produced valuable data for establishing bounds on the resistance of URM walls to collapse when subjected to dynamic, out-of-plane motions. The tests showed that the resistance of the walls to collapse was more dependent on the peak velocities input at the base and top of the walls than on the peak relative deformations induced between the top and bottom of the walls. The tests also demonstrated that the retrofit procedure substantially enhanced the resistance of the walls to collapse, and provided some insight for the design of other retrofit methods. The interpretation of the results of the wall tests is reported in a separate volume (ABK, 1982b).

TABLE 1. WALL SPECIMEN DESCRIPTION

Wall Number	1	2	3	5	6	7	8	9	10	11	13	14	15	16	17	18	19	20	21	22
Overburden (tons) [†]	1	2	4	4	1	1	2	4	1	2	1	4#	2	1	4#	2	1	1	1	1
Wall Weight (tons)	7.34		1.67		3.40		1.97		1.23		0.93		4.42		2.98					
Height (H) (ft)	16.0		10.0		16.0		16.0		10.0		10.0		16.0		16.0					
Thickness (T) (in.)	13.75		5.63		7.63		7.63		7.63		5.63		9.75		9.50					
H/T Ratio	14.0		21.3		25.2		25.2		15.7		21.3		19.7		20.2					
Material	3 Wythe Brick		Conc. Block		Clay Block		Concrete Block						Clay [‡] Block		Concrete [‡] Block					
	Grouted Solid						No Grout						Grouted Solid		No Grout					

Notes:

Applied overburden of 4 tons reduced to 1 ton after wall survived all wall input motions. Wall failed under a 1-ton overburden.

‡ Nominal 8" x 8" x 16" clay block: grouted solid: 1" plaster each side with 2" x 2" x 14 ga reinforcing--Wall 19; double 2" x 2" x 14 ga reinforcing--Wall 20.

+ Nominal 8" x 8" x 16" concrete block: no grout: 1" plaster each side with 2" x 2" x 14 ga reinforcing--Wall 21; double 2" x 2" x 14 ga reinforcing--Wall 22.

† Overburden weights shown are nominal, actual weights are: 0.92, 2.30 and 4.72 tons.

1 in. = 25.4 mm

1 ft = 305 mm

1 ton = 907 kg

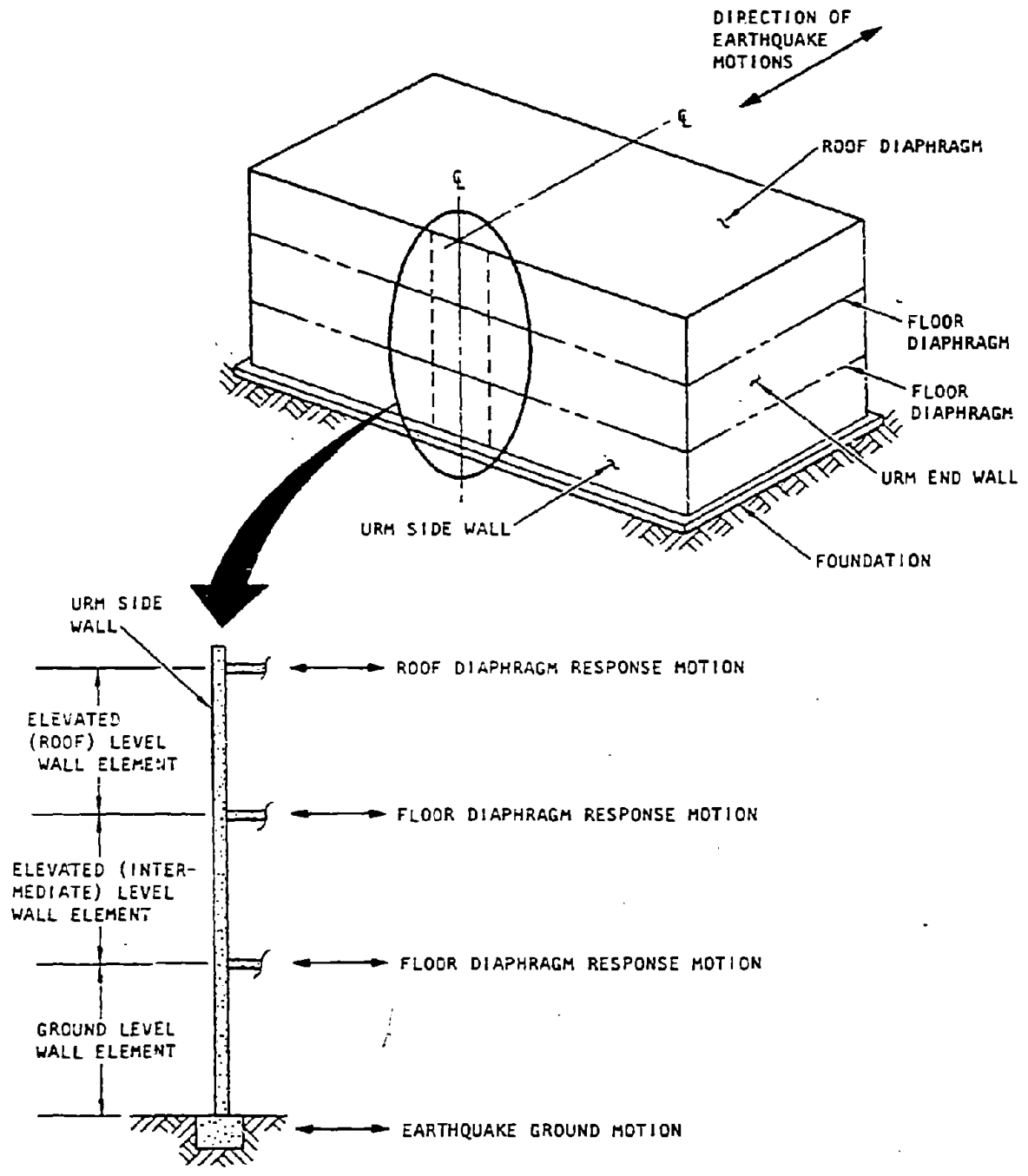


FIGURE 1. WALLS, OUT-OF-PLANE, MULTI-STORY BUILDING

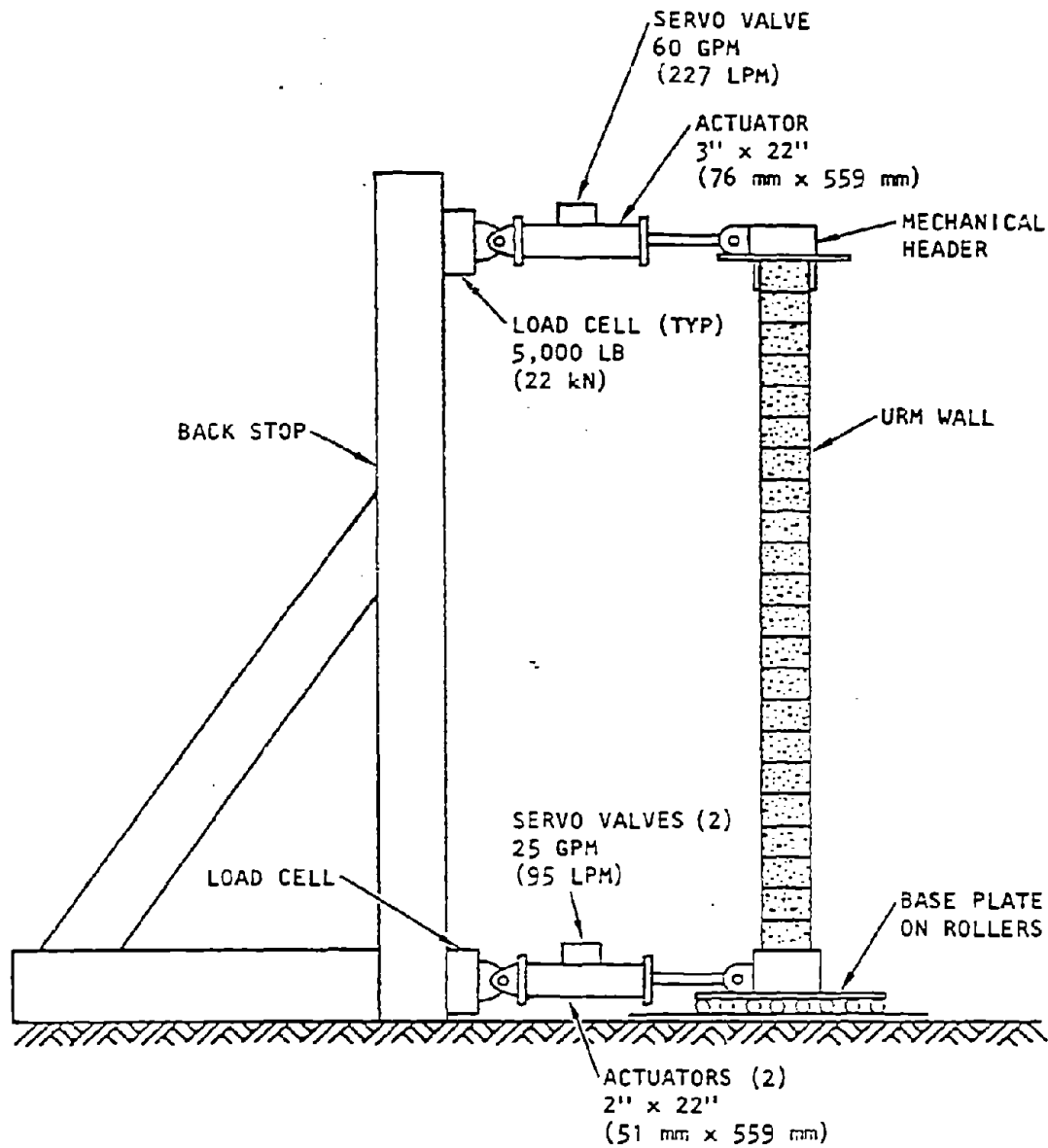


FIGURE 2. SCHEMATIC TEST SETUP FOR DYNAMIC TESTING OF WALLS

SECTION 1

INTRODUCTION

Building construction using unreinforced masonry (URM) predates the development of seismic criteria that guide the design and construction of present-day buildings. A substantial number of these URM buildings are still being used in areas considered seismically active, even though investigations of earthquake damage have confirmed that this type of building has been a major contributor to personal injury or loss of life during relatively high intensity earthquakes. Yet the cost of rehabilitating existing URM buildings to new construction standards is usually unacceptable.

Public agencies and the private sector are becoming more concerned about the potential for personal injury or death resulting from failure of these buildings. However, political jurisdictions struggling with limited budgets can rarely afford the extensive research programs required to develop rehabilitation standards. It is apparent that a system of analysis methods and procedures (a methodology) is needed for determining realistic hazard-mitigation requirements and cost-effective methods of retrofit to fill such requirements. Research that can provide usable tools to meet these goals will have a major impact on cities squeezed between the threat to life safety and economic constraints. The developed methodology and standards could reduce the enormous investment now required to make existing buildings conform to standards for new construction, or eliminate the economic loss that will result from demolition of these buildings.

In 1977, the National Science Foundation (NSF) initiated a multiphased program for the mitigation of seismic hazards, which resulted in a study to develop a methodology for the mitigation of seismic hazards in existing URM buildings. A program plan for this study was formulated that was based on existing research, observed damage in past earthquakes,

and an assessment of the response of typical URM buildings. A review of existing research work on masonry, available at that time, showed that most of the effort had been directed toward determining the response of reinforced masonry components to in-plane forces; and little or no effort had been devoted to typical URM building response. Reports of observed damage in past earthquakes indicated degrees of damage that varied from minor cracking of URM walls to separation of the walls from the diaphragm and, in some instances, the subsequent collapse of the URM walls. A key observation taken from these damage reports is that some structures sustained more damage than others, and the researchers were led to the assumption that the interaction among the building components was a vital issue in explaining and predicting URM building damage. Accordingly, a study of typical URM building response was conducted and three related component responses and their interactions were identified for further study; namely,

- o Horizontal diaphragms
- o URM walls subjected to out-of-plane motions
- o Anchorage between the URM walls and the diaphragm

Moreover, a review of the existing research work showed that the first two items, the response of diaphragms to in-plane motions and the response of URM walls subjected to out-of-plane motions, have received little or no attention. As part of the overall study to develop the methodology, analytical and experimental investigations were conducted on these two items. The experimental investigation of the response of URM walls subjected to out-of-plane motions is the subject of this report. The experimental work on diaphragms is reported separately (ABK, 1981c).

The objectives of the tests on the response of URM walls to out-of-plane motions are to establish bounds on the resistance of URM walls to collapse (dynamic stability), to provide data for the development of guidelines and criteria for determining the resistance of this type of wall to collapse, to evaluate the effectiveness of retrofit procedures to increase their collapse resistance, and to verify and calibrate mathematical models for the analysis of typical URM walls.

SECTION 2

MASONRY WALL TEST DESCRIPTION

2.1 RATIONALE OF THE TESTS

There are several structural response considerations that must be addressed in the development of a methodology for the mitigation of seismic hazards in existing URM buildings. The actual response of these structures is nonlinear and involves interaction among many of the structural elements; such as the end walls, diaphragm, side walls, and wall/diaphragm anchorage. The most ideal method of hazard assessment would combine nonlinear dynamic analyses of complete structures and the dynamic, full-scale testing of the same structures, where the testing would be used to verify and/or calibrate the analyses. However, facilities do not currently exist in the United States for the testing of complete structures at full scale. Moreover, if such facilities did exist they would be very expensive when parametric variations are required, and would only be used in final validation tests.

The experimental philosophy used in this study is based on the development of full-scale component tests and analyses that account for the interaction among the structural elements. Of course, the accountability cannot be perfect, but acceptable levels can be obtained. The main interactions in typical URM buildings that must be given careful attention in the development of component tests are:

- a. The interaction between the end wall and the supporting soil, with all of the natural nonlinearities of both
- b. The interaction between the horizontal diaphragm and the side wall, including the anchorage between them and their nonlinearities

The coupling or interaction between Items a and b is not as significant as the interaction in each of the separate items. However, the response

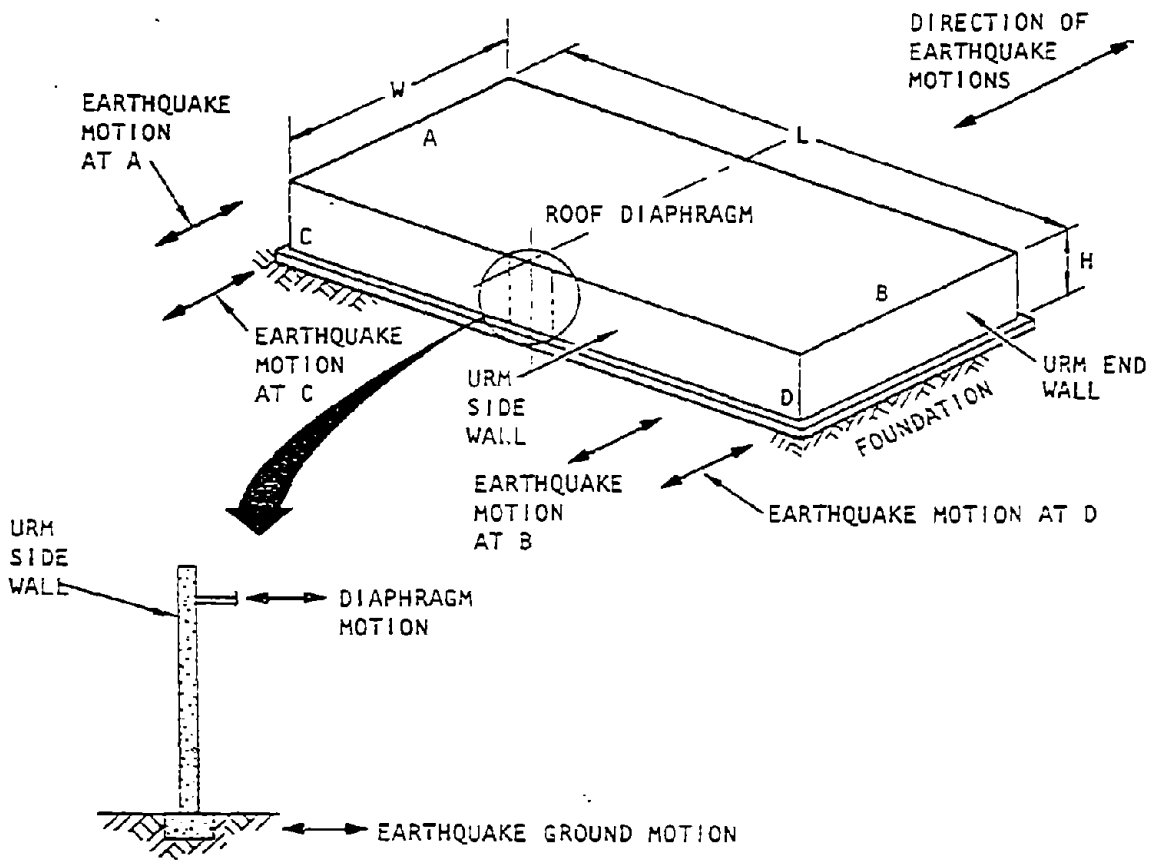
of the end wall has a direct effect on the input to the horizontal diaphragm, as the end wall drives the diaphragm.

The component testing of the URM side walls subjected to out-of-plane motions is the subject of the work reported herein, and the interaction of the URM side walls with the diaphragm and anchors must be given consideration in the development of the test program. A typical one-story URM building is shown in Figure 2-1a. The building consists of a wood roof diaphragm supported on four edges by URM walls. The most critical orientation of the earthquake motions with respect to the building for the URM side wall/diaphragm interaction is normal to the side wall.

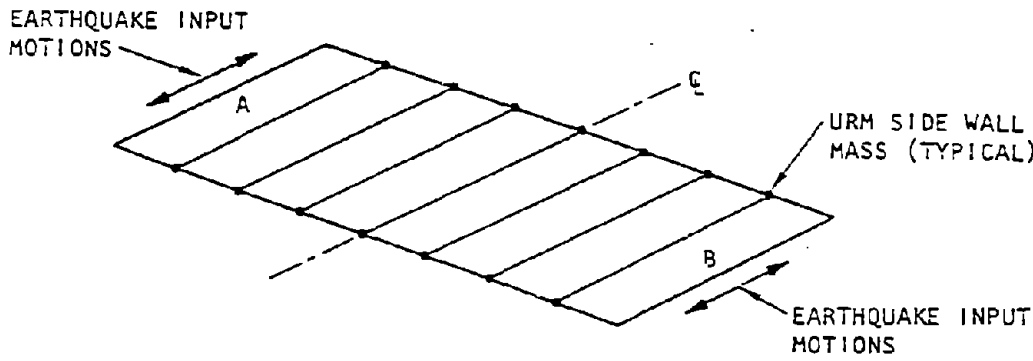
An analysis/testing model can be formulated that includes several important effects, namely:

- o Foundation stiffness and nonlinearities
- o URM end walls with perforations
- o End wall aspect ratio (i.e., height-to-width ratio)
- o URM side wall stiffness and mass
- o Diaphragm stiffness with nonlinearities and damping
- o Anchorage of URM walls to the diaphragm

A preliminary study of rigid in-plane end wall overturning due to seismic loading has been performed for a reasonable range of foundation stiffnesses and wall aspect ratios (Adham & Ewing, 1978). This study indicates that the end walls transmit the earthquake ground motion from the foundation level (C and D in Fig. 2-1a) to the roof level (A and B) with little modification. Engineering judgement clearly indicates that perforations and nonlinearities in the URM end walls will not amplify the ground motion delivered to the ends of the diaphragm by the end walls. Accordingly, the effects of foundation stiffness, end wall aspect ratio, and in-plane deformations of the URM end walls can conservatively be neglected, and the earthquake ground motions can be assumed to be transmitted to the ends of the roof diaphragm with little modification. The URM side walls



(a) Interaction between the diaphragm and side wall



(b) Diaphragm/wall model

FIGURE 2-1. WALLS, OUT-OF-PLANE, SINGLE-STORY BUILDING

are expected to crack and rock about the cracks when subjected to the out-of-plane excitations delivered by the diaphragm. Since the cracked side wall/foundation system has little lateral stiffness, the stiffness interaction between the side walls and the roof diaphragm can be neglected. However, the mass of the cracked side walls will affect the response of the diaphragm/wall system, and was included in the interaction model as shown in Figure 2-1b. Although yielding anchors could be included, rigid attachment of the side walls to the diaphragm was assumed and all of the test results reported herein are based on this assumption.

In order for the component tests of URM side walls subjected to out-of-plane motion to be a reasonable simulation of the in-situ condition, the interaction between the side wall and diaphragm must be included. This interaction is accounted for in the wall component tests by using the kinematic environment at the base and top of the wall that is obtained from an analytical model that includes this interaction (Fig. 2-1b). A lumped parameter model was formulated to include the wall mass and the nonlinear, hysteretic behavior of wood diaphragms typified by the cyclic test results shown in Figure 2-2. An analytic model for this type of diaphragm is shown in Figure 2-3, where Figure 2-3a shows the overall force-deflection envelope and Figure 2-3b shows a typical cyclic load path. A companion component test program for typical diaphragms (ABK, 1981c) was used to validate this nonlinear, hysteretic model. Properties for the diaphragm model of Figure 2-3 were obtained from available test data and were refined and correlated with the companion diaphragm test program. The test data indicates that the force-deflection envelope can be adequately represented by a second-order curve of the form

$$F(e) = \frac{F_u e}{\frac{F_u}{K_i} + e} \quad \text{for } e > 0 \text{ (compression)}$$

and

$$F(e) = \frac{F_u e}{\frac{F_u}{K_i} - e} \quad \text{for } e < 0 \text{ (tension)}$$

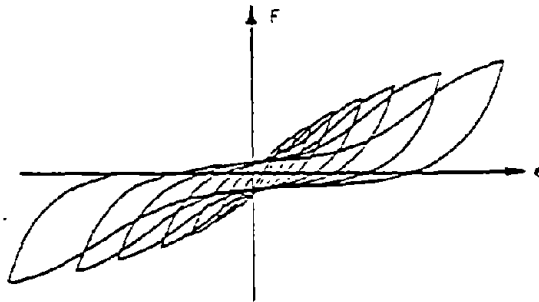
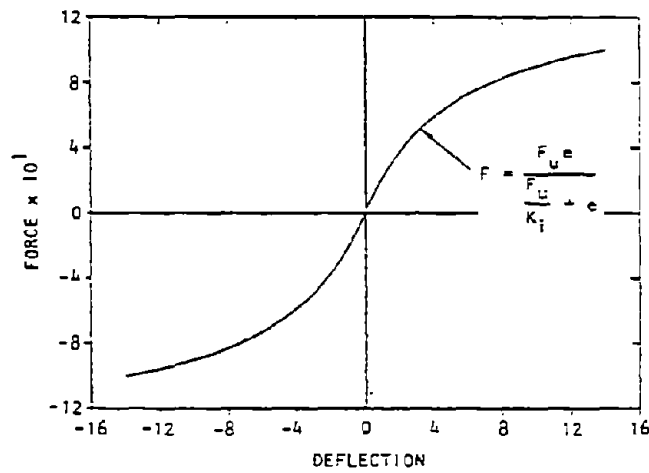
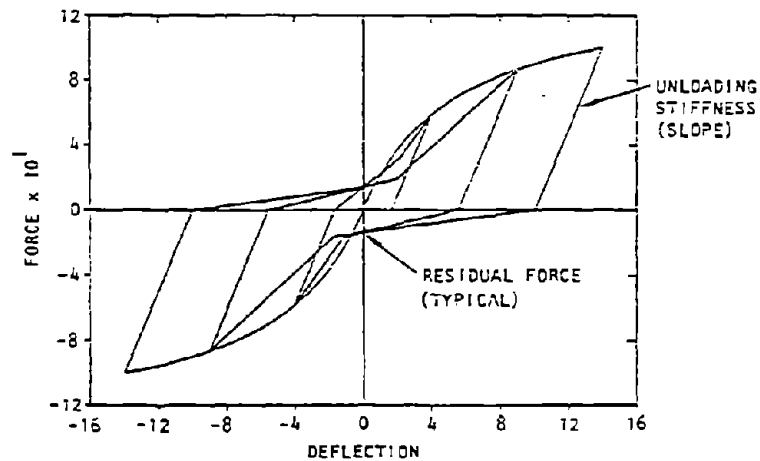


FIGURE 2-2. TYPICAL CYCLIC LOAD DEFLECTION DIAGRAM FOR PLYWOOD DIAPHRAGMS



(a) Force-deflection envelope of model



(b) Typical cyclic load-deflection diagram for model

FIGURE 2-3. LOAD DEFLECTION MODEL FOR WOOD DIAPHRAGMS

where

- $F(e)$ = Spring force
 e = Spring deformation
 F_u = Ultimate capacity of spring at large values of e
 K_i = Initial spring stiffness

In the analytical model the diaphragm was idealized as a deep shear beam and was divided into several segments with a mass at each segment interface (node). Each nodal mass represented the tributary mass of the appropriate diaphragm segment as well as the tributary mass of the side walls. The earthquake motions at each end were assumed to be identical, so due to symmetry only a half model was analyzed. The resulting lumped parameter model is shown in Figure 2-4.

Internal springs 1 through 4 of Figure 2-4 represent the nonlinear, hysteretic shear characteristics of the diaphragm and internal dampers 5 through 8 represent viscous damping in the diaphragm. The earthquake input motion at the end walls is described by degree of freedom (DOF) X_1 , and the independent DOF's of the diaphragm/wall system are described by DOF's X_2 through X_5 . The displacement gages 9 through 12 shown connecting DOF's X_2 through X_5 with DOF X_1 (the ground) are used to monitor the relative out-of-plane motions induced between the base and top of the side wall. The analyses were performed using the STARS/III computer program (AA, 1981).

For the component tests the input to the base and top of the wall was taken from a series of analyses using the model described. For a typical ground level element of a one-story building (see inset in Fig. 2-1e), the kinematic input to the wall component test was a ground motion at the base and a compatible roof diaphragm motion from the analyses at the top, where variations in the diaphragm stiffness characteristics were included. For multistory buildings the input to the base and top of the walls was selected from the analyses, depending on the location of the wall in the building as shown in Figure 2-5. The input for an intermediate level wall element is a floor diaphragm response at the

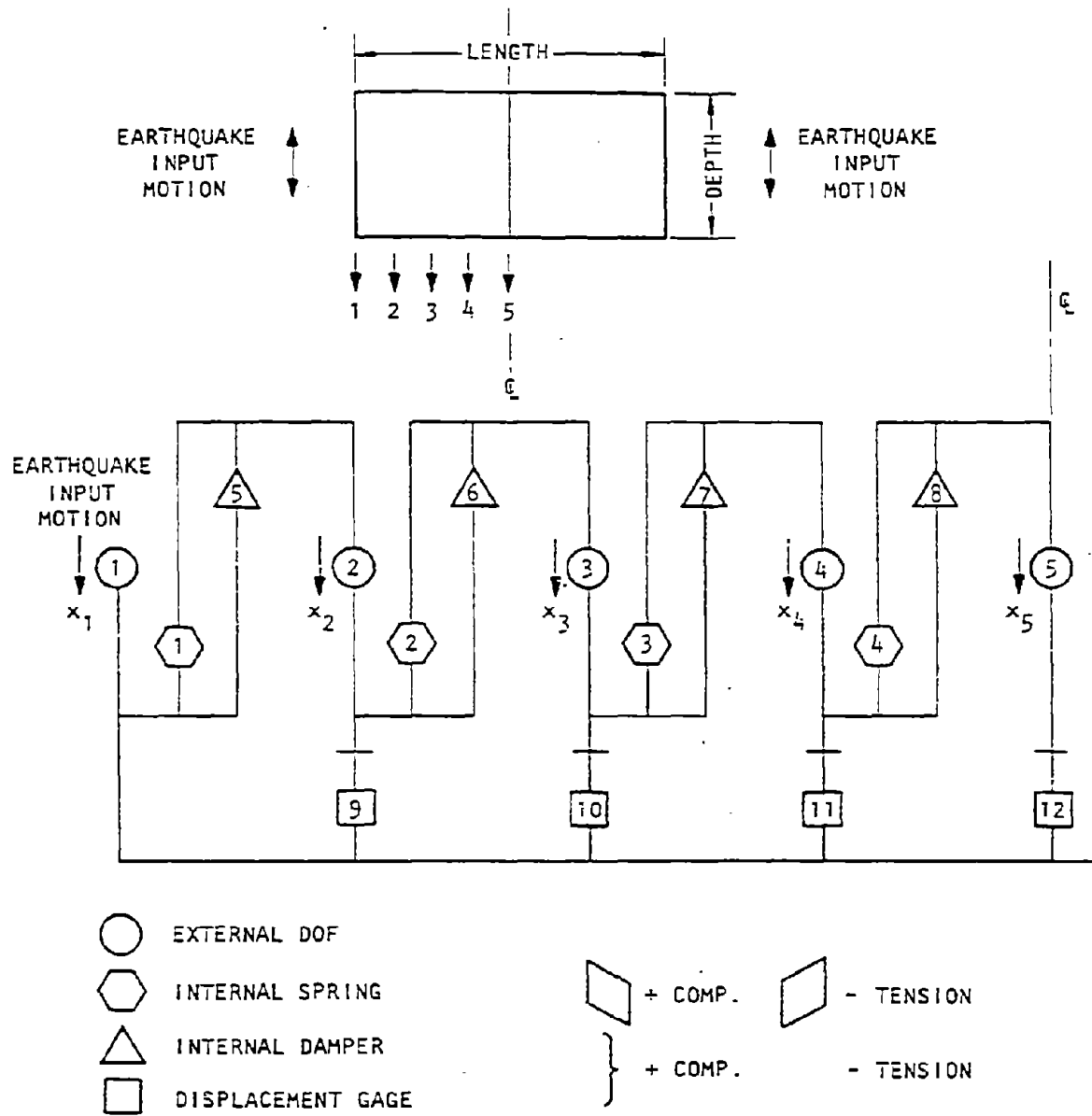


FIGURE 2-4. LUMPED PARAMETER MODEL (8 SEGMENTS — HALF MODEL)

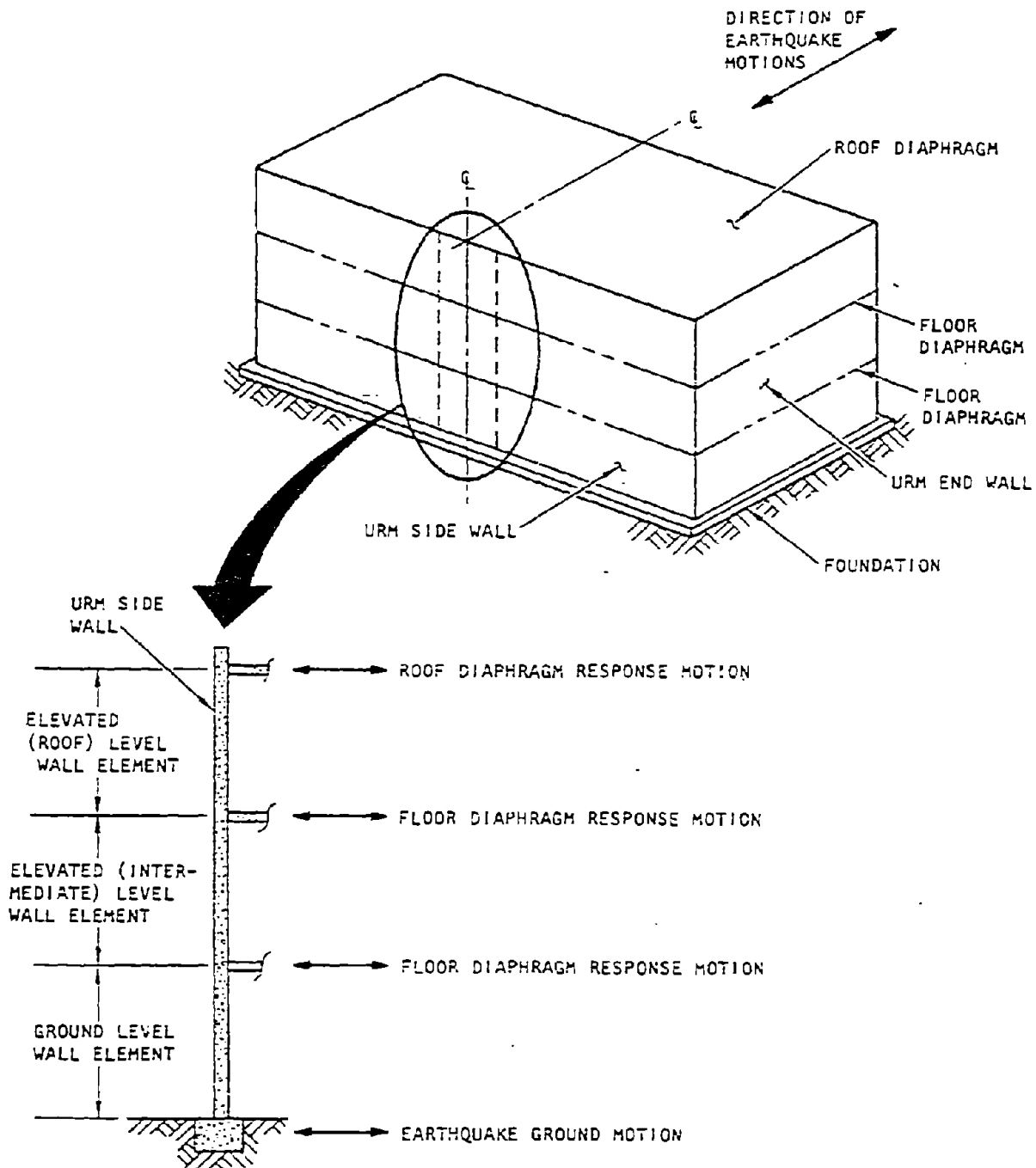


FIGURE 2-5. WALLS, OUT-OF-PLANE, MULTI-STORY BUILDING

base and top, while a roof level wall element has a floor diaphragm response at its base and a roof diaphragm response at its top. The specific kinematic motions used in the wall test program are described in Section 2.4.

2.2 BRIEF DESCRIPTION OF SPECIMENS

A study of existing URM buildings in the United States (ABK, 1981a) was conducted to identify and categorize the current inventory of this class of buildings and to identify their materials and methods of construction. The specimens tested were as representative, as possible, of typical URM wall elements found in the study.

The URM wall specimens were 6 ft (1.8 m) wide and 10 to 16 ft (3.0 to 4.9 m) high, and were fabricated using several materials, with variations in their construction methods. The materials included 3 wythe common brick, grouted clay block, and concrete block both grouted and ungrouted. The height-to-thickness ratios (H/T) of the walls ranged from 14 to 25. In addition, four specimens included one form of retrofit that consisted of a 1 in. (25 mm) plaster surface covering and a wire mesh applied to both sides of the wall. The mesh was a 2 in. (51 mm) square array of 14 gage wire. The retrofit was applied to virgin (undamaged) walls fabricated with grouted clay block and ungrouted concrete block, and each material was tested with single and double wire meshes. Three levels of overburden mass were used to simulate additional wall or parapet mass above the wall section being tested.

Table 2-1 gives a brief summary description of the wall specimens. A more detailed description of the construction of the wall specimens is given in Section 3.

2.3 TEST SET-UP AND INSTRUMENTATION

The URM wall specimens were installed in a test fixture that allowed the base and top of the wall to be moved independently in the out-of-plane direction by servocontrolled hydraulic actuators as shown

TABLE 2-1. WALL SPECIMEN DESCRIPTION

Wall Number	1	2	3	5	6	7	8	9	10	11	13	14	15	16	17	18	19	20	21	22	
Overburden (tons) ¹	1	2	4	4	1	1	2	4	1	2	1	4#	2	1	4#	2	1	1	1	1	
Wall Weight (tons)	7.34			1.67		3.40			1.97		1.23			0.93			4.42		2.98		
Height (H) (ft)	16.0			10.0		16.0			16.0		10.0			10.0			16.0		16.0		
Thickness (T) (In.)	13.75			5.63		7.63			7.63		7.63			5.63			9.75		9.50		
H/T Ratio	14.0			21.3		25.2			25.2		15.7			21.3			19.7		20.2		
Material	3 Wythe Brick			Conc. Block		Clay Block			Concrete Block									Clay Block ^A		Concrete Block ¹	
	Grouted Solid						No Grout									Grouted Solid		No Grout			

Notes:

Applied overburden of 4 tons reduced to 1 ton after wall survived all wall input motions. Wall failed under a 1-ton overburden.

A Nominal 8" x 8" x 16" clay block: grouted solid: 1" plaster each side with 2" x 2" x 14 ga reinforcing--Wall 19; double 2" x 2" x 14 ga reinforcing--Wall 20.

1 Nominal 8" x 8" x 16" concrete block: no grout: 1" plaster each side with 2" x 2" x 14 ga reinforcing--Wall 21; double 2" x 2" x 14 ga reinforcing--Wall 22,

1 Overburden weights shown are nominal, actual weights are: 0.92, 2.30 and 4.72 tons.

1 In. = 25.4 mm

1 ft = 305 mm

1 ton = 907 kg

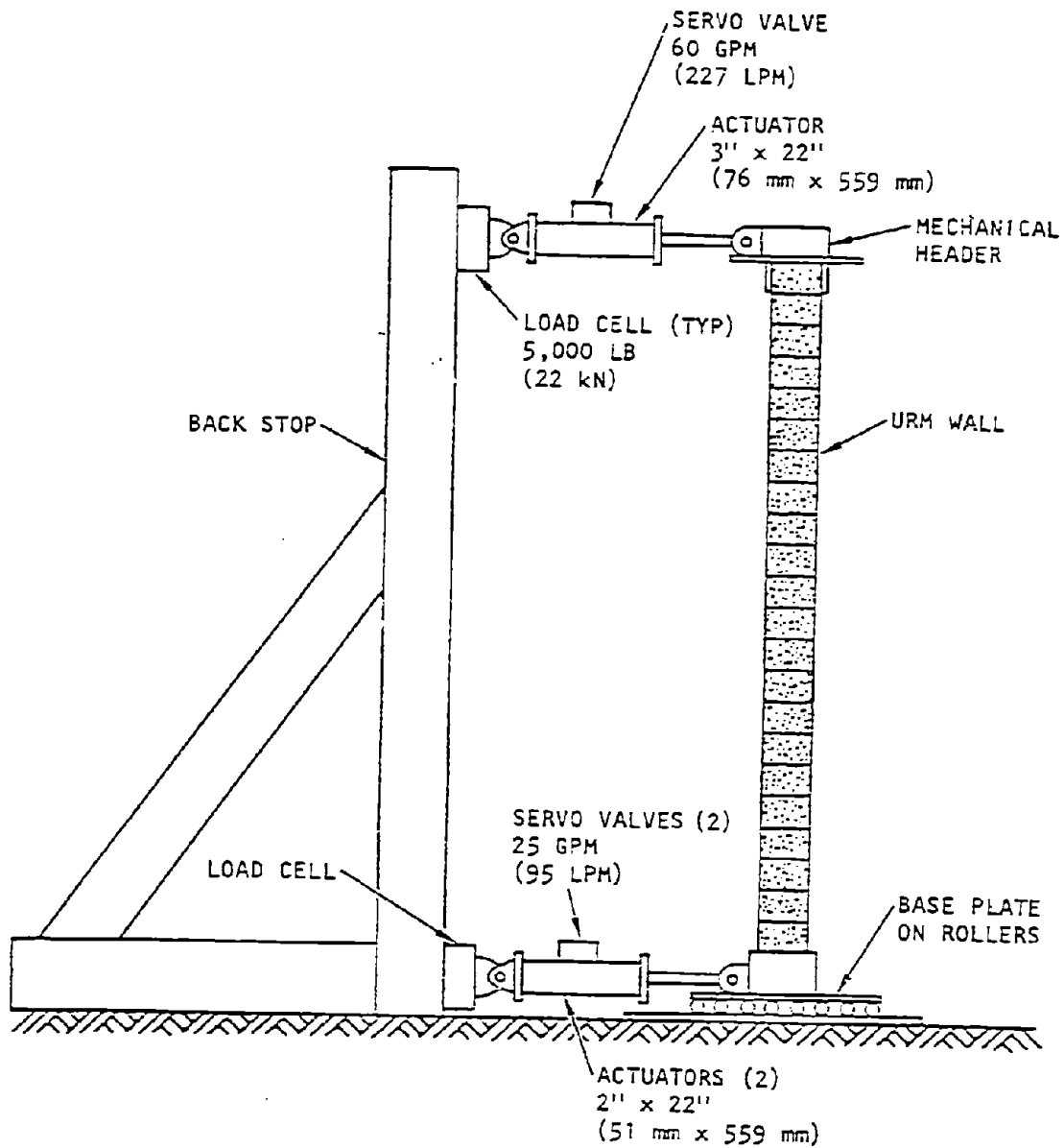


FIGURE 2-6. SCHEMATIC TEST SETUP FOR DYNAMIC TESTING OF WALLS

in Figure 2-6. The walls were fabricated on a concrete filled, metal base with two attachment lugs for the hydraulic actuators. When the wall was installed in the test fixture the base rested on a low-friction, roller supported base plate that allowed the base of the wall to be displaced without rotation by the two hydraulic servoactuators. A mechanical header with one attachment lug was installed on the top of the wall that allowed the top of the wall to be displaced by one hydraulic servoactuator; however, the top of the wall was free to rotate. The mechanical header was guided by a pantograph linkage system (not shown in Fig. 2-6) that allowed the top of the wall to move in the vertical direction without restraint. In addition, the mechanical header was fitted with two vertical rods (not shown in Fig. 2-6) that supported overburden mass to simulate additional wall or parapet mass above the wall section being tested. The overburden mass was suspended from the header a few inches above the laboratory floor so that its fall at the time of wall collapse would be controlled.

The basic instrumentation for the measurement of the dynamic responses and forcing functions consisted of load cells, accelerometers, and displacement sensors as shown in Figure 2-7. Except for the accelerometer on top of the header (WAV1), all instruments measured out-of-plane responses and forcing functions. The out-of-plane response of the wall induced vertical in-plane motions that were measured by the accelerometer WAV1. The displacements were measured using string potentiometers. The displacement sensors, including feedback deflection sensors, were mounted to a stable reference frame that was independent of the frame for the forcing system. This type of instrument mounting was used to eliminate the need to account for the flexibility of the actuator reaction stand. All of the instrumentation shown in Figure 2-7 was used in all of the wall test sequences, except for accelerometers WA3, WA5, and WA7, which were used only in the test sequences for Wall 13.

The data from each instrument was recorded on magnetic tape in digital form. In the data recording each instrument was sampled and

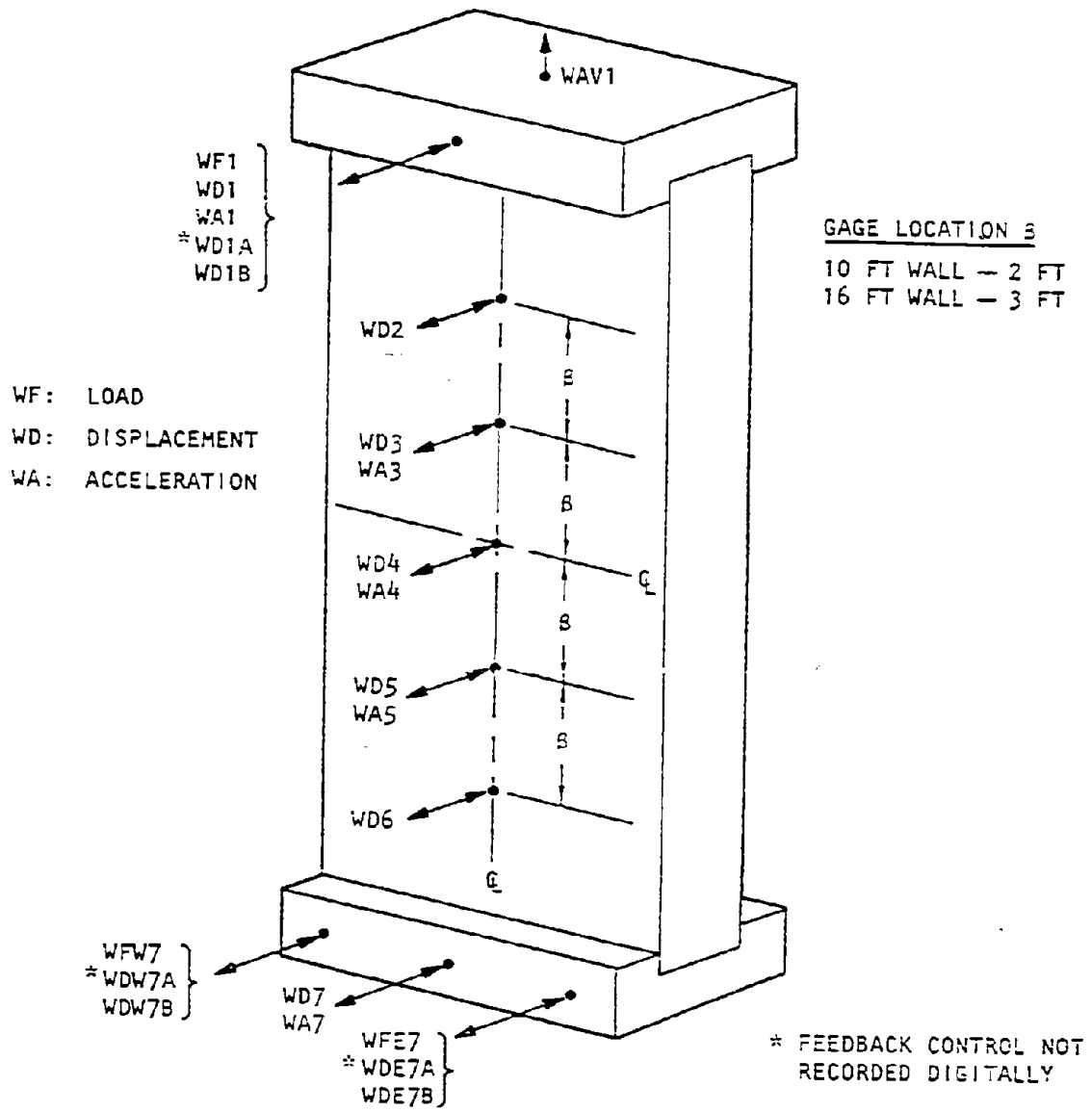


FIGURE 2-7. WALL INSTRUMENTATION

recorded with a common time base. The raw source data tapes were interpreted and written on new tapes, using a standard format with some data compression, for use in data presentation and interpretation. More detailed information on the data tapes is given in Section 2.6.

Additional data recording was taken in the form of still and motion pictures as well as observer notes or test logs. The photographic coverage and observer notes are given in Sections 3 and 5.

2.4 TEST MODES AND SEQUENCES

The sequence of the complete wall test program is shown in Table 2-2. The wall specimens were tested in order given in the table, where the 10 ft (3.0 m) high walls were tested before the 16 ft (4.9 m) high walls as an apparatus change was required to accommodate a change in specimen height. Each wall with its prescribed overburden mass (Table 2-1) was subjected to a sequence of dynamic input motion pairs or motion sets (MS), that consisted of a compatible pair of kinematic motions, one for the base and one for the top of the wall. The motion sets used in the wall test program are defined in Table 2-3.

The kinematic motions used in the test program are based on actual earthquake ground motion records that correspond to seven major geographical regions of the United States (ABK, 1981b). The ground motion records were scaled so as to cover the full range of seismicity from an Effective Peak Acceleration (EPA) of 0.1 g to 0.4 g. These ground motions were input to the nonlinear, dynamic analysis model of a typical URM building described earlier to obtain diaphragm/wall response motions, where the model accounted for the nonlinear response of the diaphragm, including both stiff and flexible diaphragms, and the dynamic inertial effect of the URM walls. The motion sets given in Table 2-3 were assembled in pairs from these dynamic motions to simulate the kinematic environment at the base and top of the URM walls for both ground level wall elements and elevated level wall elements. The input for ground level wall elements consists of a ground motion at the base and a compatible roof or floor diaphragm motion at the top. For elevated

TABLE 2-2. WALL TEST SEQUENCE

Wall No.	10-ft Walls								16-ft Walls											
	13	16	5	14	17	6	15	18	1	7	10	2	3	8	11	9	19	20	21	22
Test Sequence, Motion Set Numbers (Motion Set Numbers defined in Table 2-3.)	1	1	1	1	3	1	3	3	3-1	1	1	1	3	1	1	3	1	1	1	1
	2	2	2	2	4	2	4	4	1	2	2	2	4	2	2	4	2	2	2	2
	3	3	3	3	5	3	5	5	2	3	3	3	10/2	3	3	10/2	3	3	3	3
	4	4	4	4	6	4	6	6	3-2	4	4	4	6	4	4	6	4	4	4	4
	5	5	5	5	9	5	9	9	4	5	10/2	10/2	5	10/2	10/2	5	10/2	10/2	10/2	10/2
	6-1	6	6	6	8		8	8	5 ¹		6	6	9	6	6	9	6	6	6	6
	6-2	7	7	7	9		7	7	6			5	8	5	5	8	5	5	5	5
	7		8	8	10		10	10	9 ¹			9	7			7	9	9	9	9
			9	7	9-N		10.2	10.2	8			8	10						8	8
			7.1	9.1	8-N		7.2	7.2	7			7	10.2						7	7-1 ¹
				8.1	7-N				10											7-2
				7.1					10.2											10
				9.2																10.2
				8A																10.2
				8B																7.2
				8C																7.3-1
				7.3																7.3-2
				8D																7.3-3
				9-N																
				8-N																
			7-N																	

2-15

Notes: ⁰ 4-ton overburden reduced to 1 ton.

¹ Brick wall hit test apparatus barrier but rebounded to stable position; considered to be collapsed.

¹ Data lost.

1 ft = 305 mm

1 ton = 907 kg

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TABLE 2-3. WALL INPUT MOTIONS

Motion Sec No.	Base	D, in.	V, in./s	A, g	Top	D, in.	V, in./s	A, g
1	Taft x 1.6 (+) Ground Motion	1.87	3.73	0.10	Taft x 1.6 Stiff Diaph.	1.89	7.87	0.36
		-0.25	-2.34	-0.10		-0.30	-6.45	-0.35
2	Taft x 1.6 Ground Motion	1.87	3.73	0.10	Taft x 1.6 Soft Diaph.	2.18	5.90	0.22
		-0.22	-2.32	-0.10		-0.49	-7.89	-0.20
3	Castaic x 1.0 (-) Ground Motion	4.05	5.96	0.21	Castaic x 1.0 Stiff Diaph.	4.13	10.1	0.62
		-1.96	-11.0	-0.36		-2.34	-17.0	-0.62
4	Olympia x 1.1 (f) Ground Motion	2.85	9.29	0.18	Olympia x 1.1 Soft Diaph.	3.99	19.4	0.31
		-4.46	-6.45	-0.16		-5.26	-15.4	-0.32
5	Castaic x 1.8 Ground Motion	7.25	10.7	0.37	Castaic x 1.8 Stiff Diaph.	7.46	14.8	0.98
		-3.54	-19.7	-0.66		-4.08	-30.6	-1.09
6	Castaic x 1.8 Ground Motion	7.28	10.7	0.37	Castaic x 1.8 Soft Diaph.	8.84	14.8	0.41
		-3.54	-19.7	-0.66		-3.67	-26.9	-0.36
7	Castaic x 1.8 Stiff Diaph.	7.46	14.8	0.98	Castaic x 1.8 Stiff Diaph.	7.46	14.8	0.98
		-4.08	-30.6	-1.09		-4.08	-30.6	-1.09
7.1	110% of 7	8.21	16.3	1.08	110% of 7	8.21	16.3	1.08
		-4.49	-33.7	-1.20		-4.49	-33.7	-1.20
7.2	120% of 7	8.95	17.8	1.18	120% of 7	8.95	17.8	1.18
		-4.90	-36.7	-1.31		-4.90	-36.7	-1.31
7.3	130% of 7	9.70	19.2	1.27	130% of 7	9.70	19.2	1.27
		-5.30	-39.8	-1.42		-5.30	-39.8	-1.42
8	Castaic x 1.8 Stiff Diaph.	7.46	14.8	0.98	Castaic x 1.8 Soft Diaph.	8.84	14.8	0.41
		-4.08	-30.6	-1.09		-3.67	-26.9	-0.36
8.1	110% of 8	8.21	16.3	1.08	110% of 8	8.21	16.3	0.45
		-4.49	-33.7	-1.20		-4.04	-29.6	-0.40
8A	100% of 8	7.46	14.8	0.98	110% of 8	8.21	16.3	0.45
		-4.08	-30.6	-1.09		-4.04	-29.6	-0.40
8B	80% of 8	5.97	11.8	0.78	110% of 8	8.21	16.3	0.45
		-3.25	-24.5	-0.67		-4.04	-29.6	-0.40
8C	60% of 8	4.48	8.68	0.58	110% of 8	8.21	16.3	0.45
		-2.45	-18.4	-0.65		-4.04	-29.6	-0.40
8D	0% of 8	0.00	0.00	0.00	110% of 8	8.21	16.3	0.45
		0.00	0.00	0.00		-4.04	-29.6	-0.40
9	El Centro x 1.25 Stiff Diaph. (i)	6.33	27.6	0.85	El Centro x 1.25 Soft Diaph.	6.97	23.2	0.41
		-4.72	-18.8	-0.50		-5.82	-24.2	-0.40
9.1	110% of 9	6.56	30.4	0.94	110% of 9	7.67	25.5	0.45
		-5.19	-20.7	-1.00		-6.40	-26.6	-0.44
9.2	120% of 9	7.50	33.1	1.02	120% of 9	8.16	27.8	0.46
		-5.66	-22.6	-1.08		-6.98	-25.0	-0.48
10	El Centro x 1.25 Stiff Diaph.	6.33	27.6	0.85	El Centro x 1.25 Stiff Diaph.	6.33	27.6	0.85
		-4.72	-18.8	-0.50		-4.72	-18.8	-0.50
10/2	50% of 10	3.17	13.8	0.43	50% of 10	3.17	13.8	0.43
		-2.36	-9.4	-0.45		-2.36	-9.4	-0.45
10.2	120% of 10	7.60	33.1	1.02	120% of 10	7.60	33.1	1.02
		-5.66	-22.6	-1.08		-5.66	-22.6	-1.08

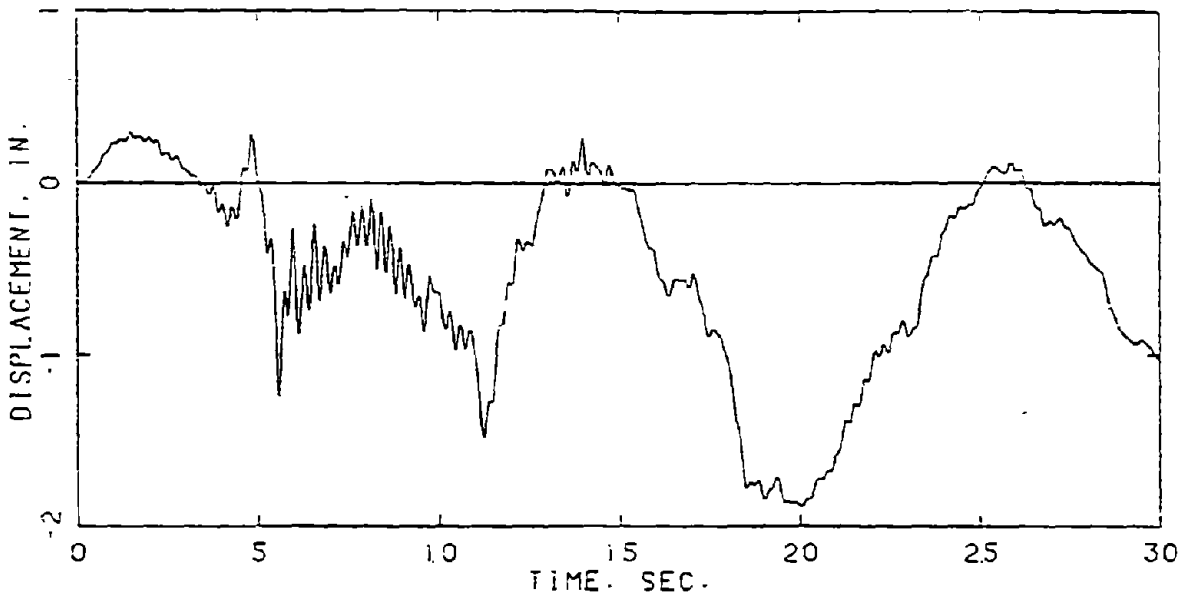
Notes:

- (+) Taft 1954 NZ1E
 - (-) Castaic 1971 N69E
 - (f) Olympia 1949 S04E
 - (i) El Centro 1940 S00E
- 1 in. = 25.4 mm

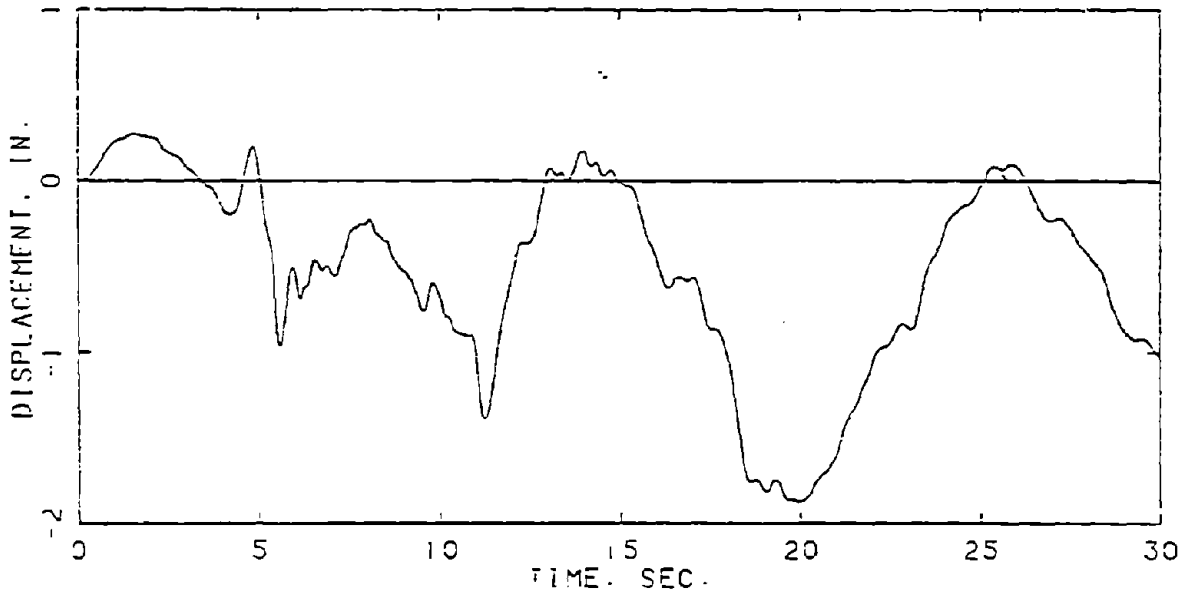
wall elements the input consists of a floor diaphragm motion at the base and a compatible roof or floor diaphragm motion at the top. As used here, compatible motions are motions that result from the same earthquake ground motion. In addition, all of the kinematic motions used in the test program assume non-yielding anchorages between the URM wall and the diaphragm.

A typical example of the motion sets used to simulate the kinematic environment of ground and elevated level wall elements for an EPA of 0.4 g can be obtained from Table 2-3. MS's 5 and 6 simulate the kinematic environment of a ground level wall element (i.e., a ground motion at the base and a diaphragm motion at the top). MS 5 has a stiff diaphragm motion at the top and could simulate the ground level element of a multistory structure or the ground level element of a single-story structure with a very stiff roof. MS 6 has a flexible diaphragm motion at the top and simulates the ground level element of a single-story structure with a typical flexible roof diaphragm. MS's 7 and 8 simulate the kinematic environment of an elevated level wall element (i.e., a diaphragm motion at the base and top). MS 7 simulates an intermediate level of a multistory structure, since it has a floor (stiff) diaphragm motion at the base and top; while MS 8 simulates the top level of a multistory structure, since it has a floor diaphragm motion at the base and a roof diaphragm motion at the top.

Displacement time-history plots for MS's 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 are given in Figures 2-8 through 2-17, respectively, for the first 30 sec of the motion; however, 60-sec records were used in the test program. Time-history plots of the relative deformation between the base and top motions for MS's 1, 2, 3, 4, 5, 6, 8, 8.1, 8A, 8B, 8C, 8D, 9, 9.1, and 9.2 are given in Figures 2-18a through 2-18o, respectively, for the first 30 sec of motion. It can be seen that the MS's involving soft diaphragms have considerable relative deformations between the base and top motions.



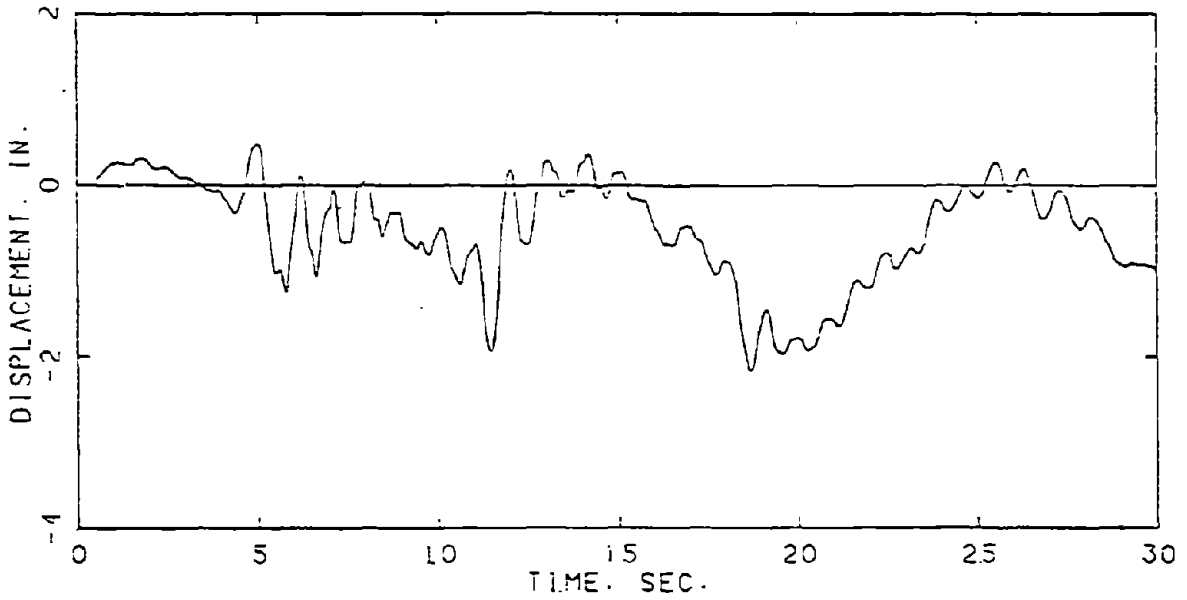
(a) Top motion, Taft x 1.6 - stiff diaphragm



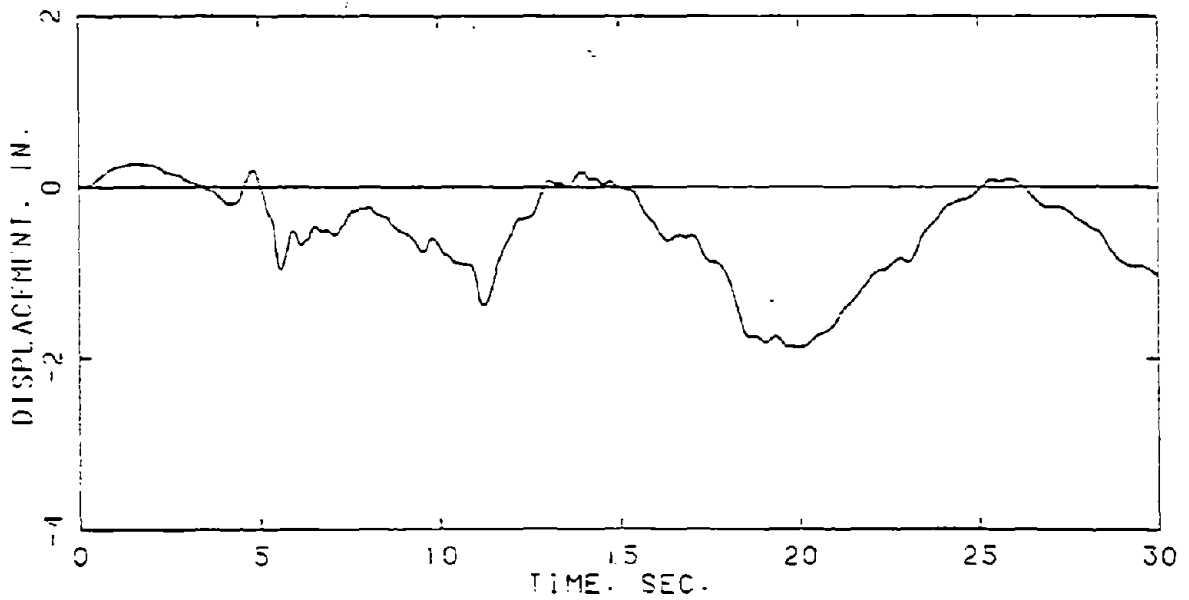
(b) Base motion, Taft x 1.6 - ground motion

NOTE: 1 in. = 25.4 mm

FIGURE 2-8. KINEMATIC MOTIONS, MS 1



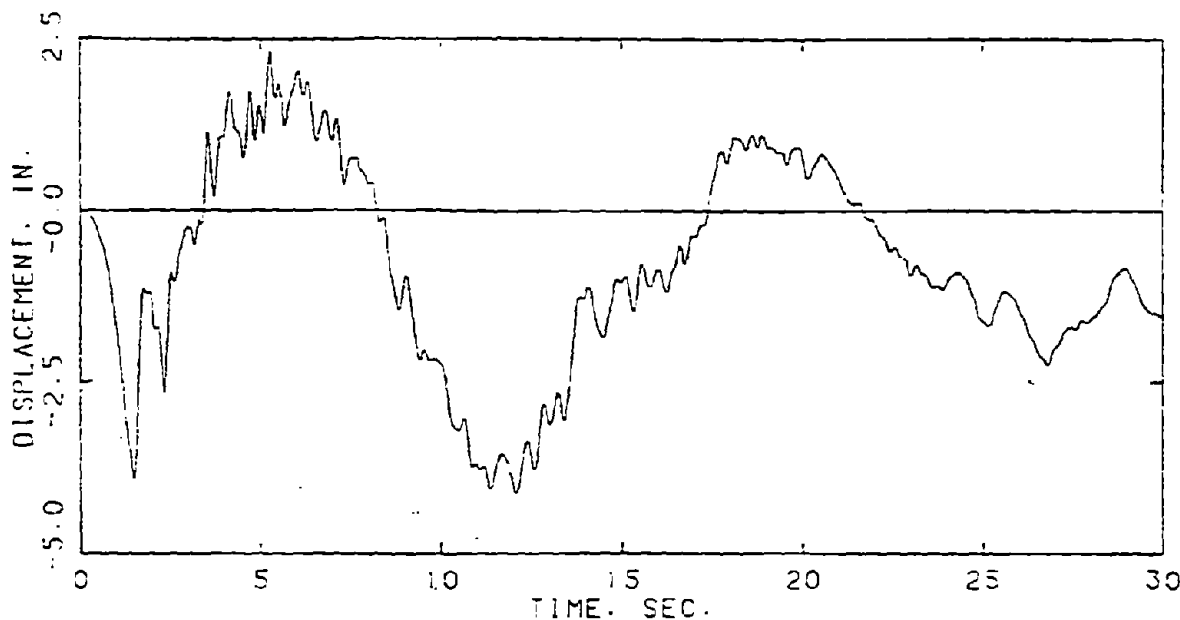
(a) Top motion, Taft x 1.6 - soft diaphragm



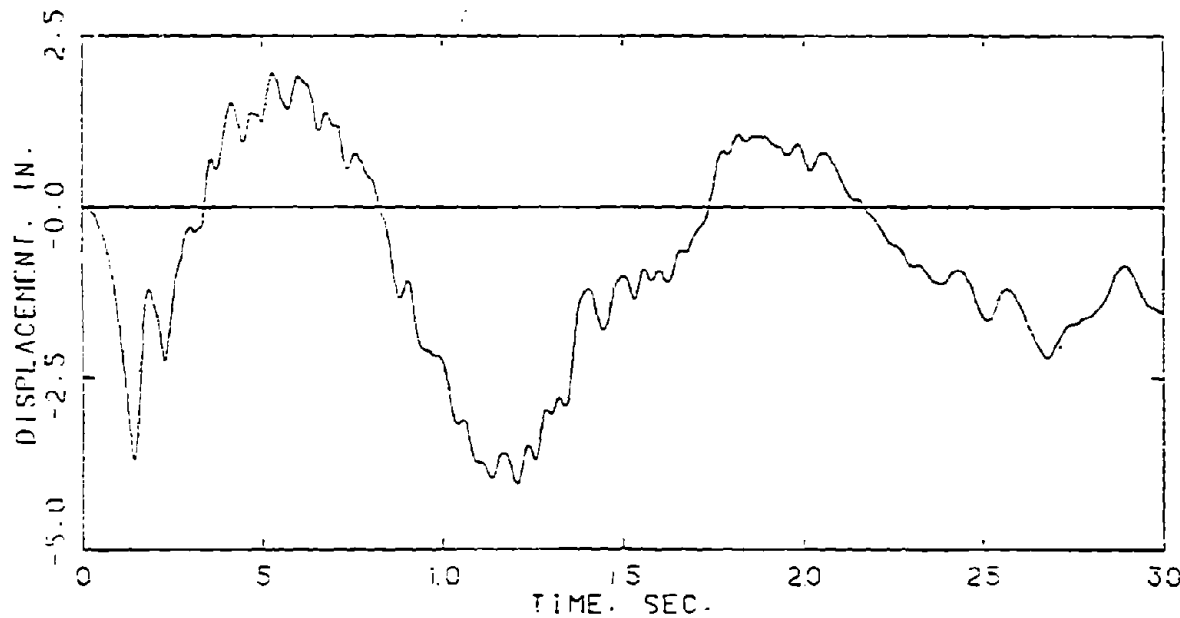
(b) Base motion, Taft x 1.6 - ground motion

NOTE: 1 in. = 25.4 mm

FIGURE 2-9. KINEMATIC MOTIONS, MS 2



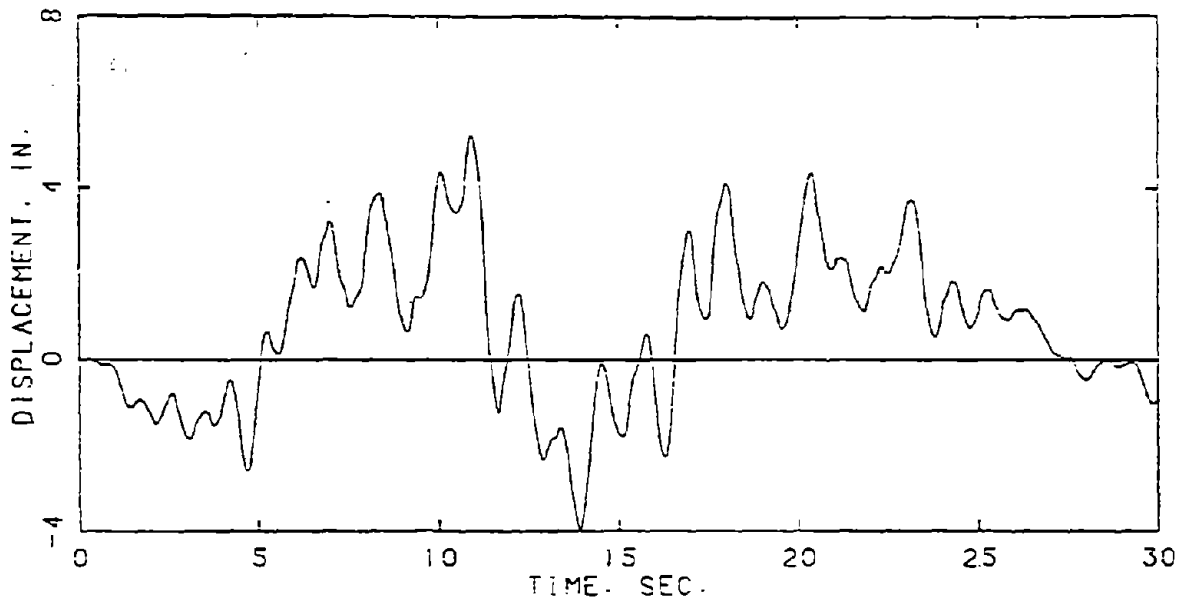
(a) Top motion, Castaic x 1.0 - stiff diaphragm



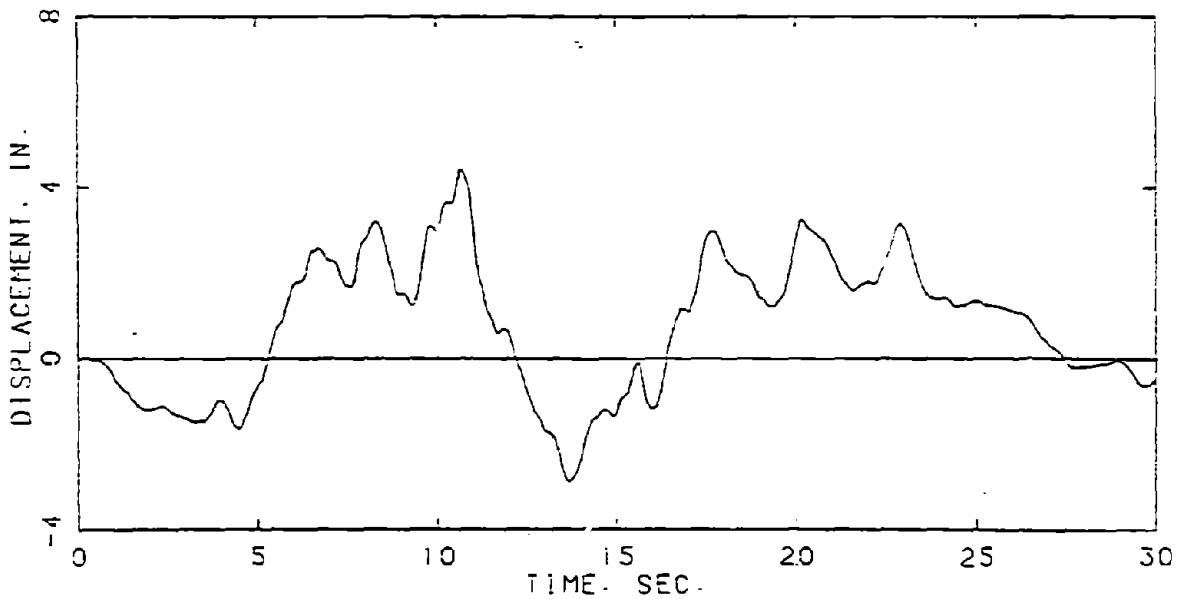
(b) Base motion, Castaic x 1.0 - ground motion

NOTE: 1 in. = 25.4 mm

FIGURE 2-10. KINEMATIC MOTIONS, MS 3



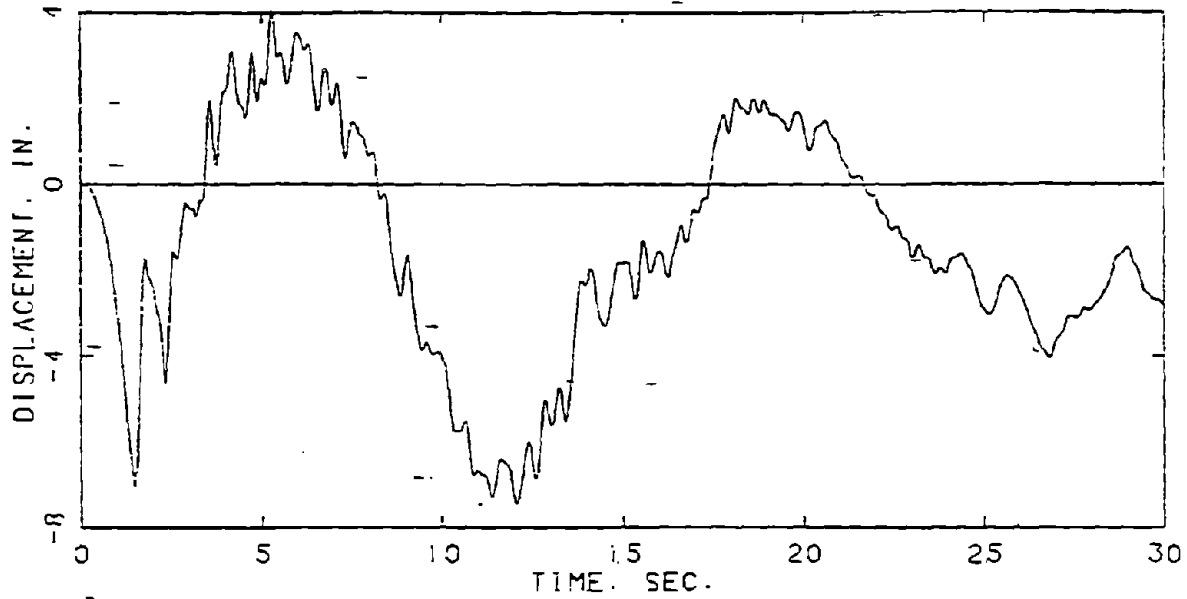
(a) Top motion, Olympia x 1.1 - soft diaphragm



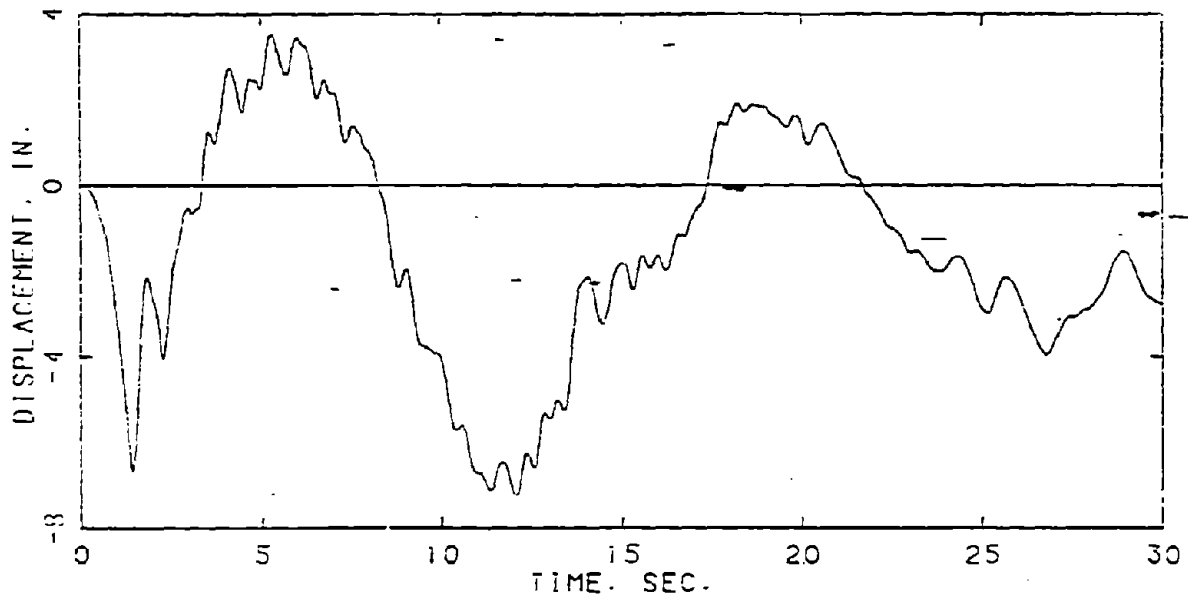
(b) Base motion, Olympia x 1.1 - ground motion

NOTE: 1 in. = 25.4 mm

FIGURE 2-11. KINEMATIC MOTIONS, MS 4



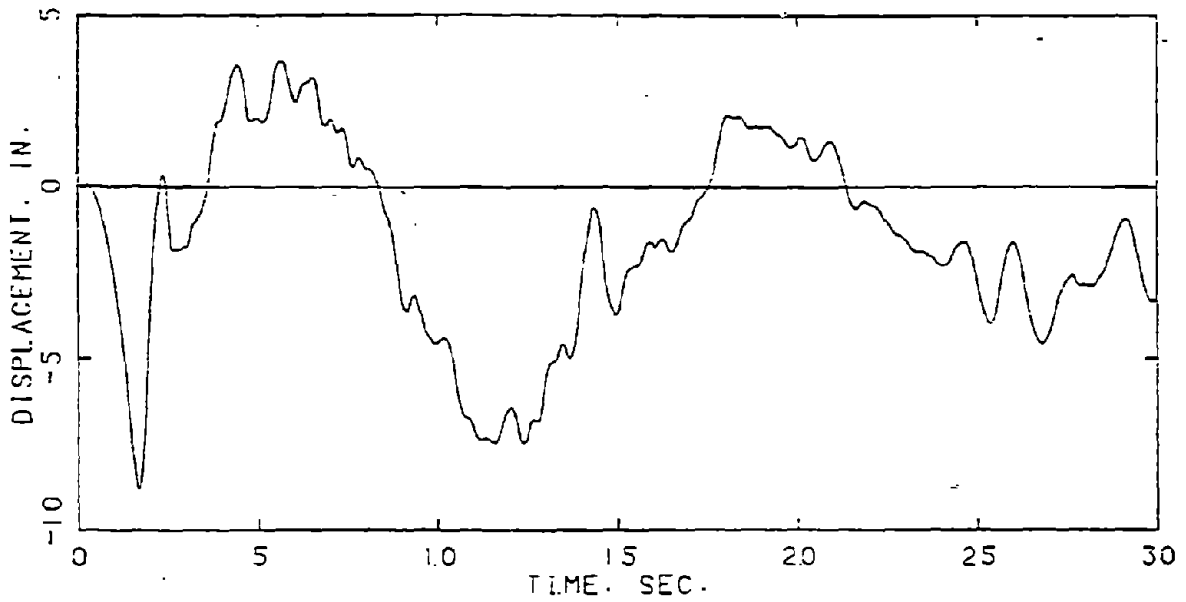
(a) Top motion, Castaic x 1.8 - stiff diaphragm



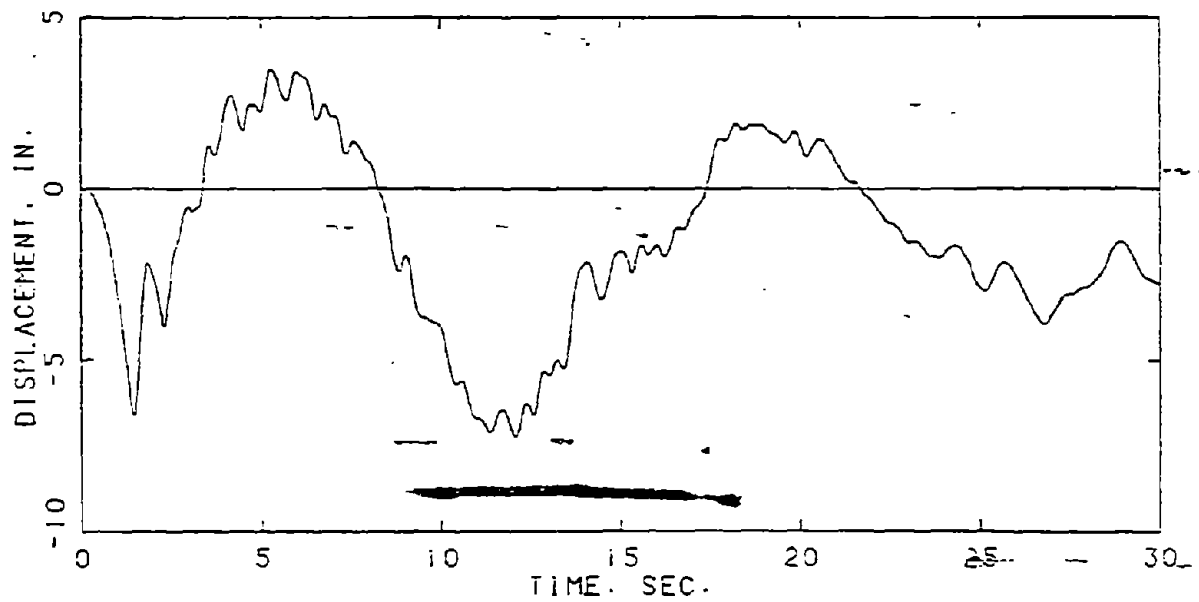
(b) Base motion, Castaic x 1.8 - ground motion

NOTE: 1 in. = 25.4 mm

FIGURE 2-12. KINEMATIC MOTIONS, MS 5



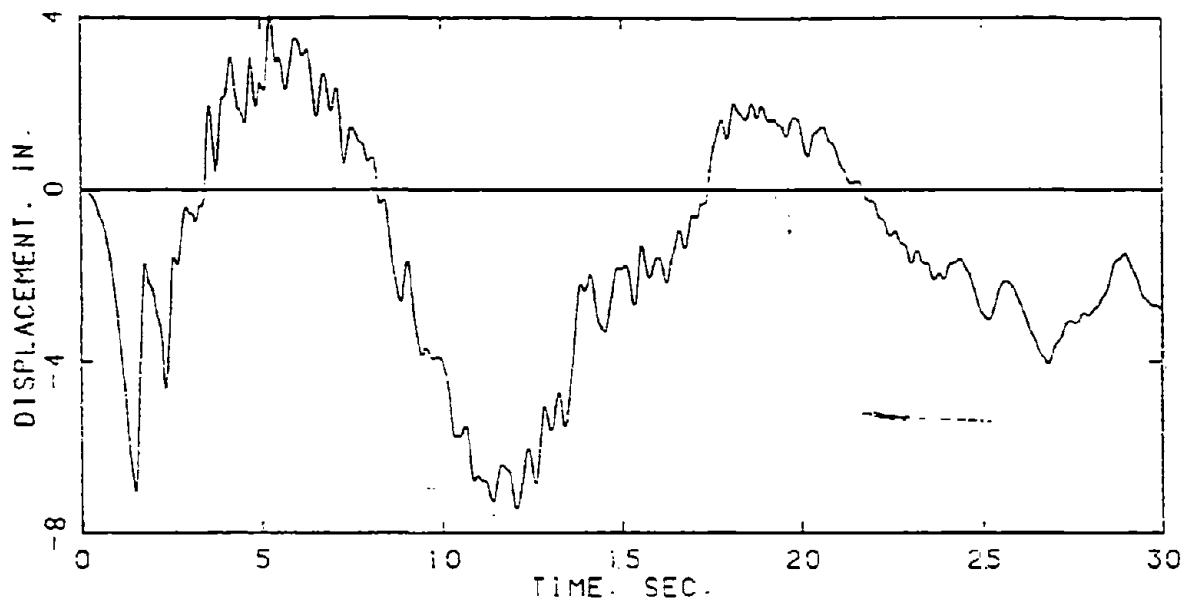
(a) Top motion, Castaic x 1.8 - soft diaphragm



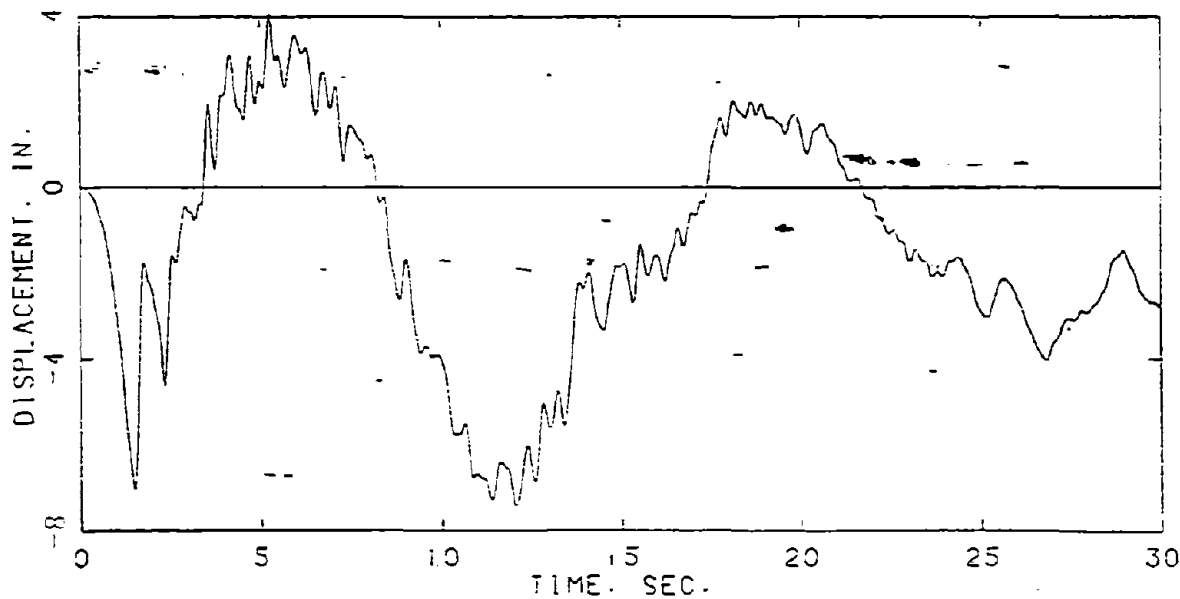
(b) Base motion, Castaic x 1.8 - ground motion

NOTE: 1 in. = 25.4 mm

FIGURE 2-13. KINEMATIC MOTIONS, MS 6



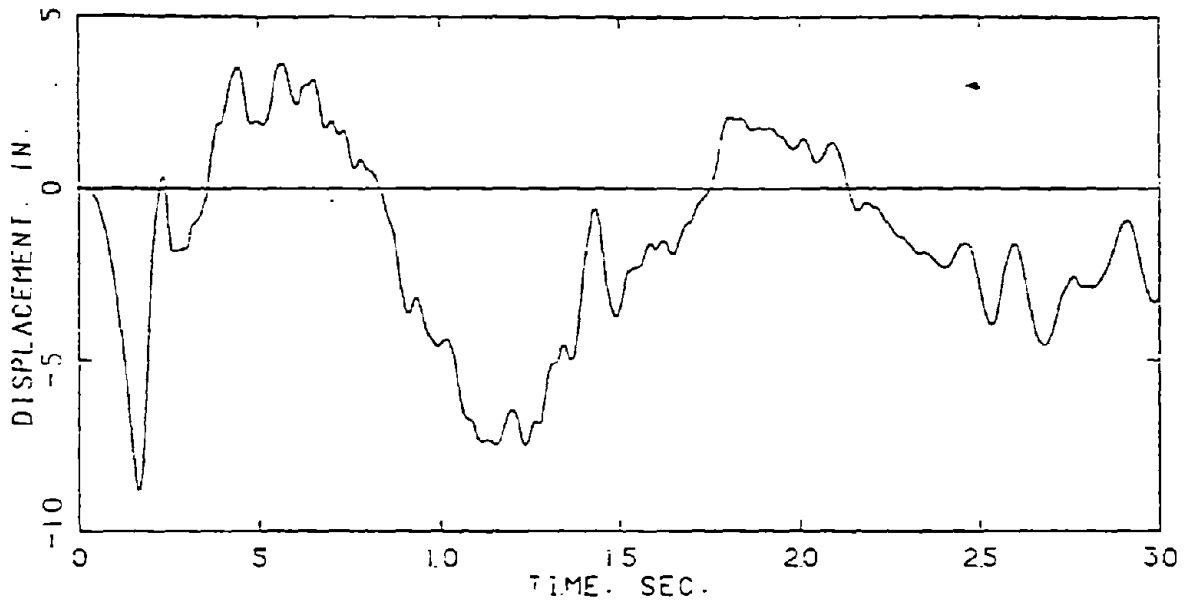
(a) Top motion, Castaic x 1.8 - stiff diaphragm



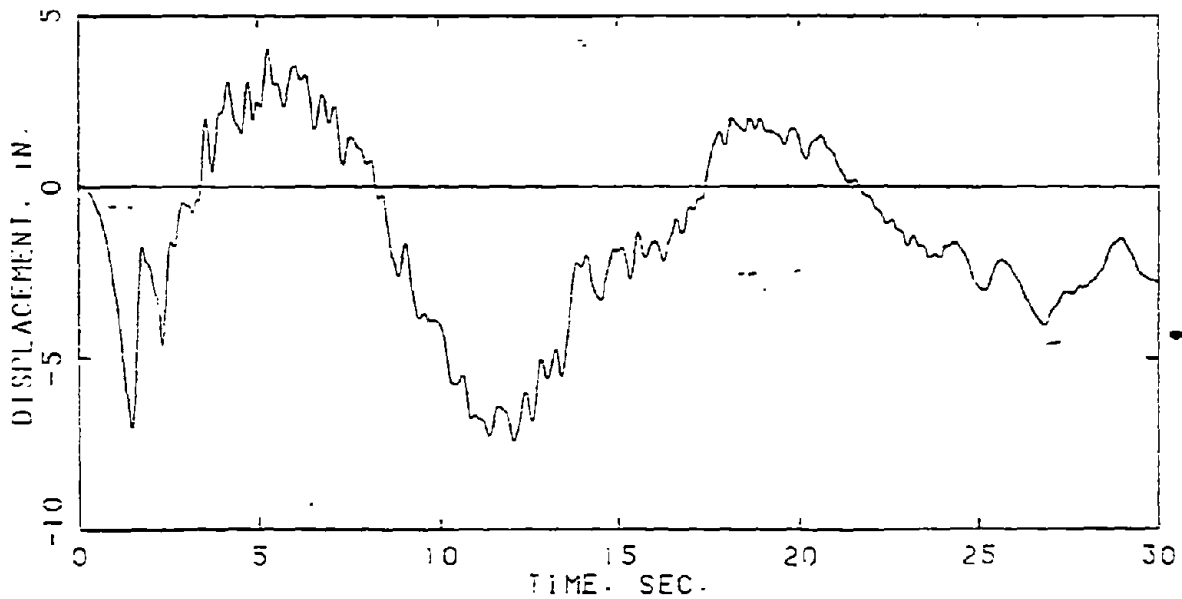
(b) Base motion, Castaic x 1.8 - stiff diaphragm

NOTE: 1 in. = 25.4 mm

FIGURE 2-14. KINEMATIC MOTIONS, MS 7



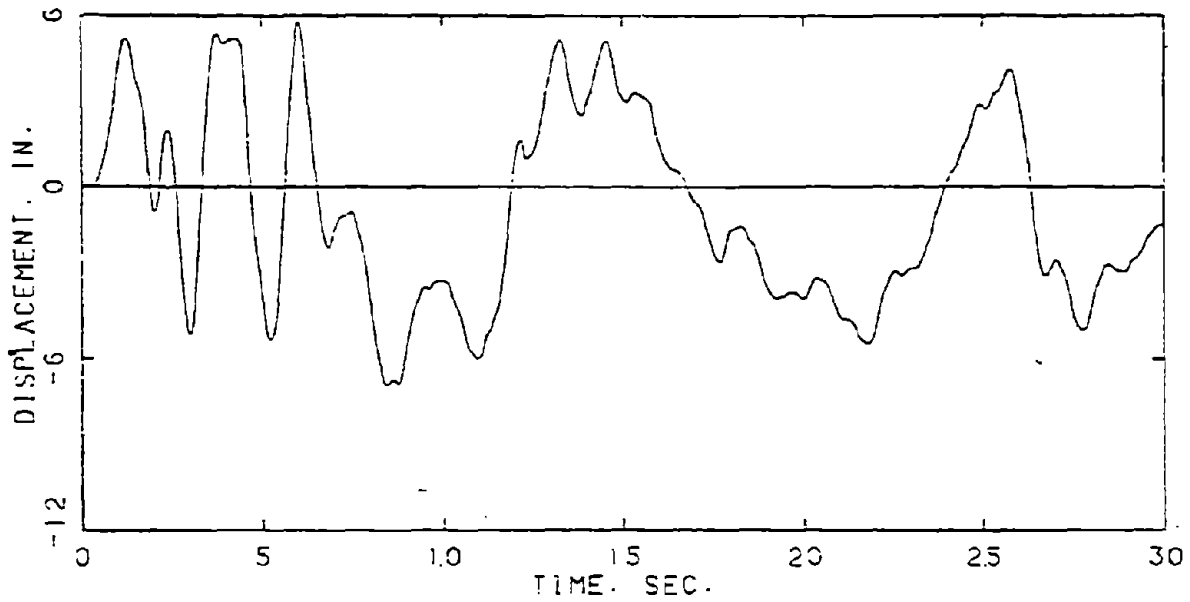
(a) Top motion, Castaic x 1.8 - soft diaphragm



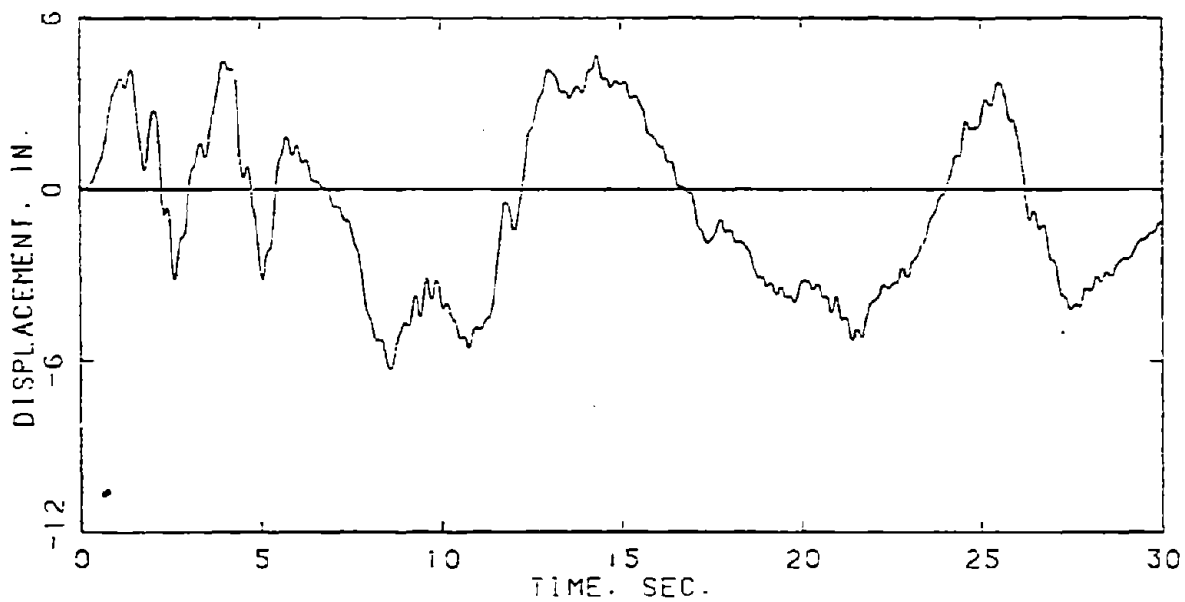
(b) Base motion, Castaic x 1.8 - stiff diaphragm

NOTE: 1 in. = 25.4 mm

FIGURE 2-15. KINEMATIC MOTIONS, MS 8



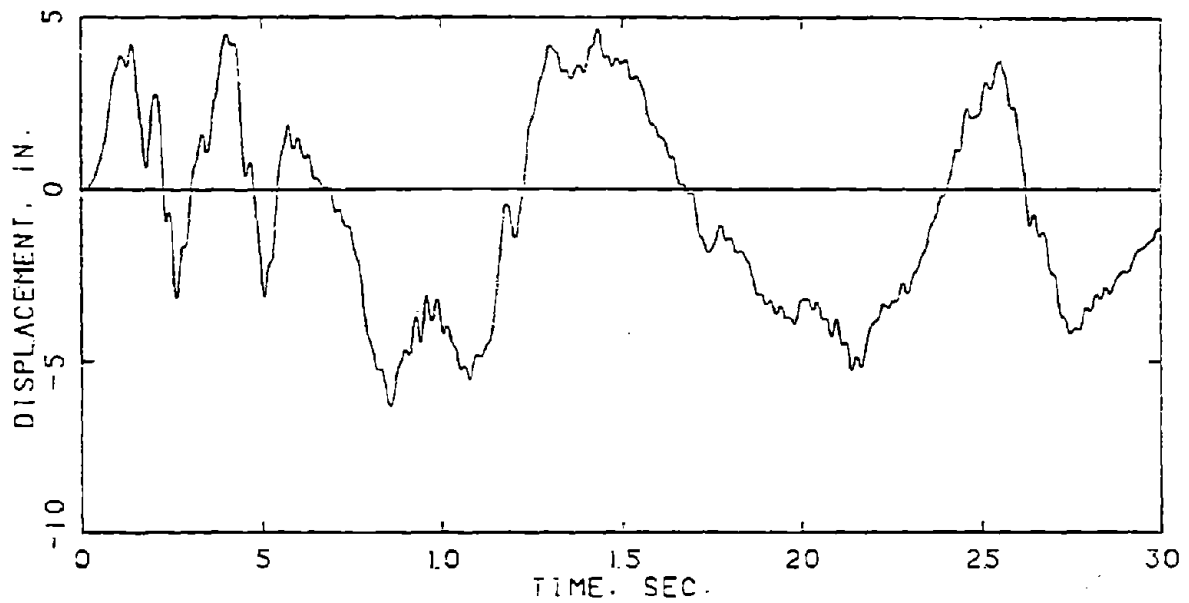
(a) Top motion, El Centro x 1.25 - soft diaphragm



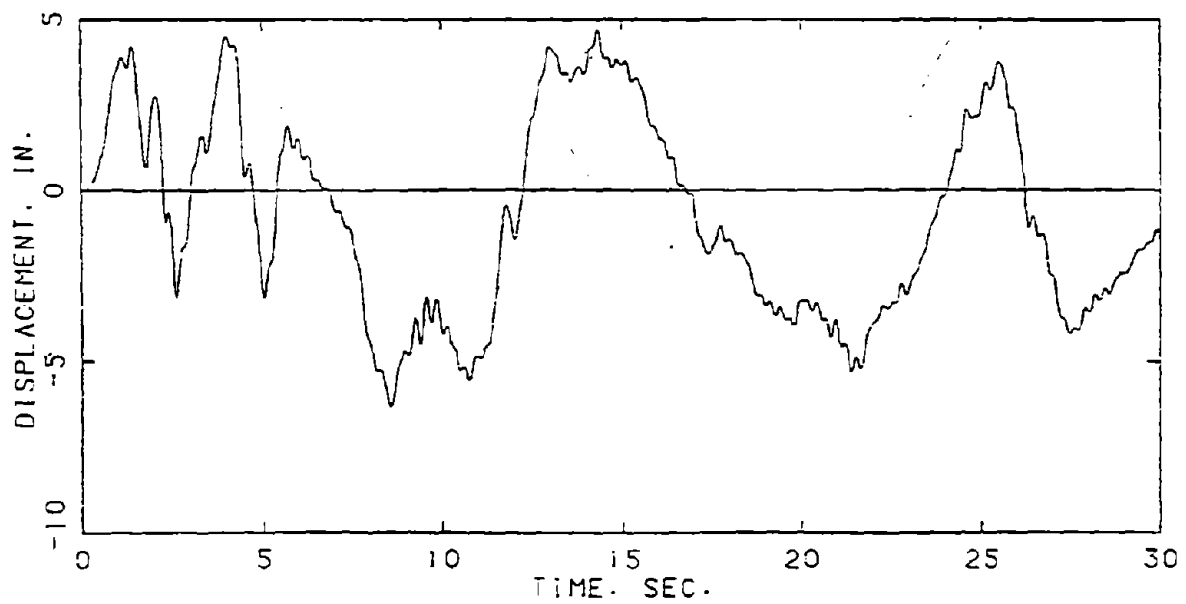
(b) Base motion, El Centro x 1.24 - stiff diaphragm

NOTE: 1 in. = 25.4 mm

FIGURE 2-16. KINEMATIC MOTIONS, MS 9



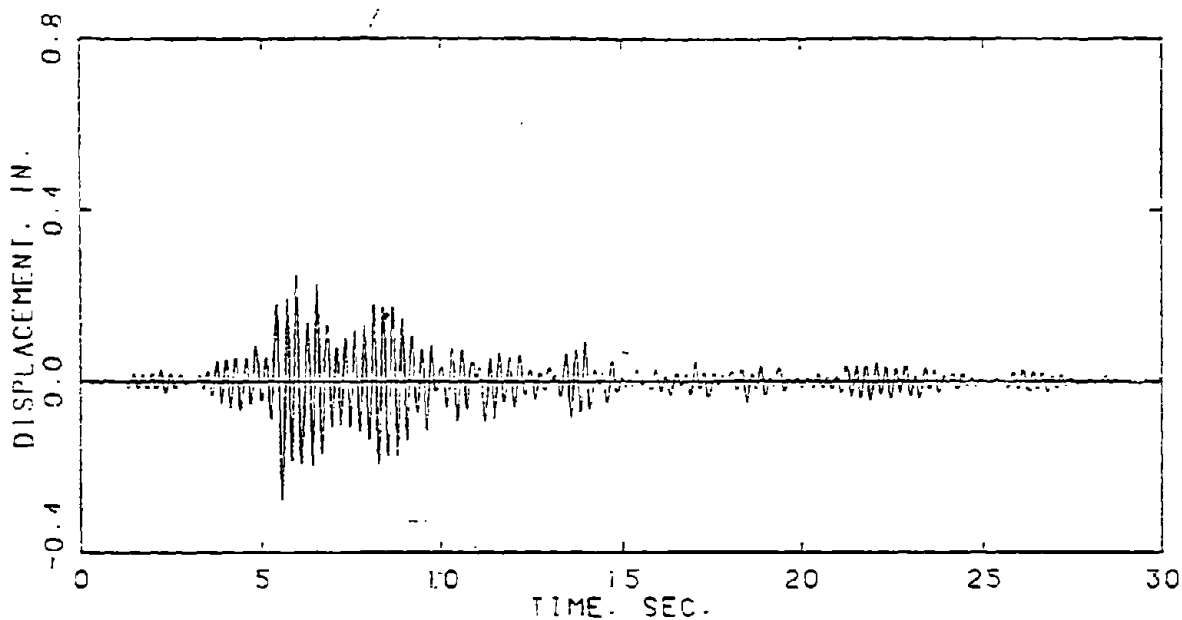
(a) Top motion, El Centro x 1.25 - stiff diaphragm



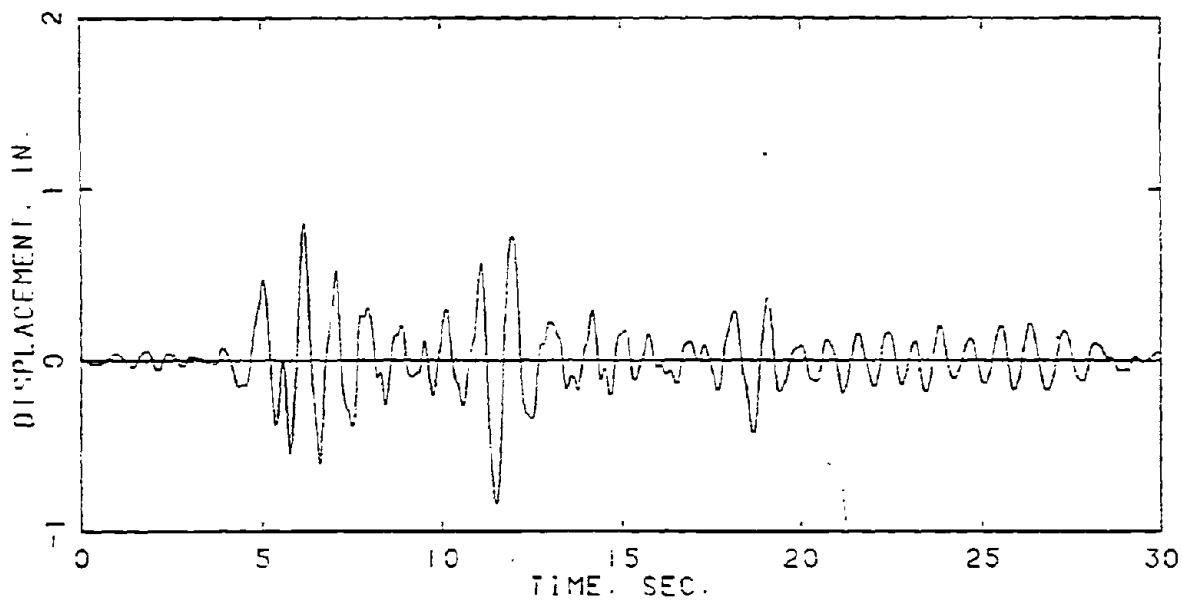
(b) Base motion, El Centro x 1.25 - stiff diaphragm

NOTE: 1 in. = 25.4 mm

FIGURE 2-17. KINEMATIC MOTIONS, MS 10



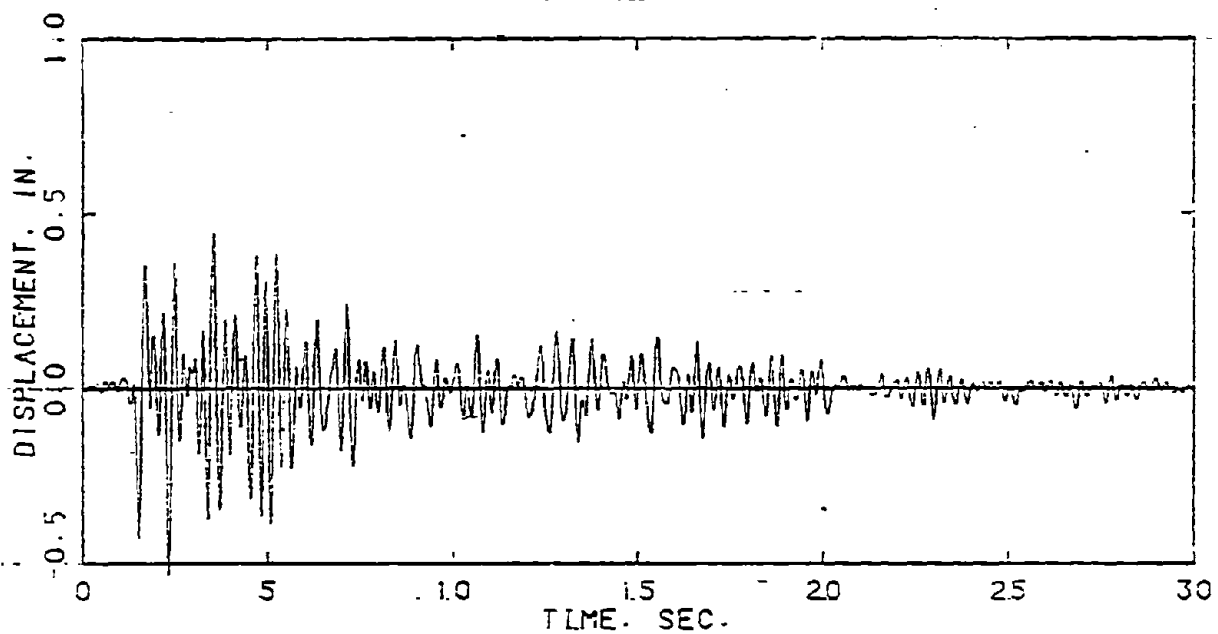
(a) Motion Set 1



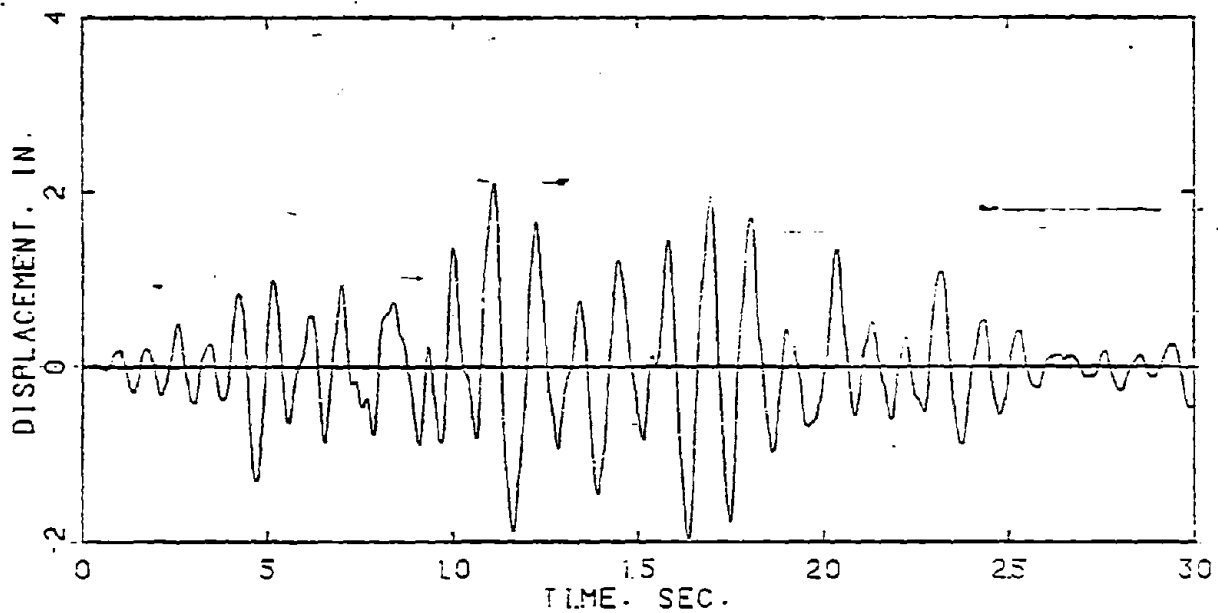
(b) Motion Set 2

NOTE: 1 in. = 25.4 mm

FIGURE 2-18. RELATIVE DEFORMATION OF MOTION SETS



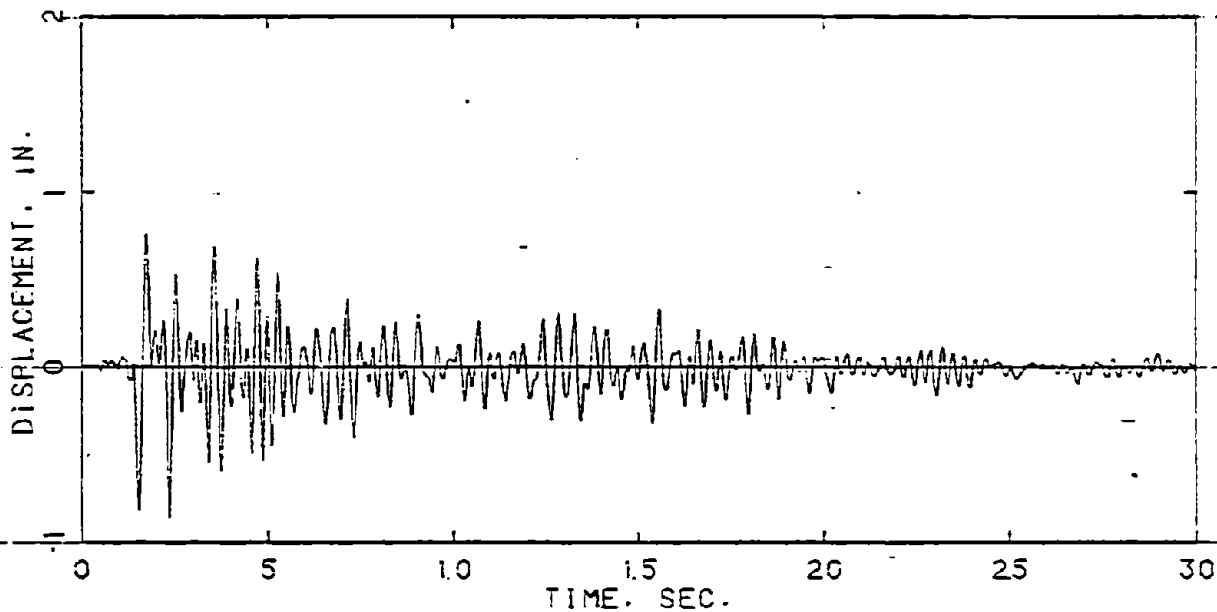
(c) Motion Set 3



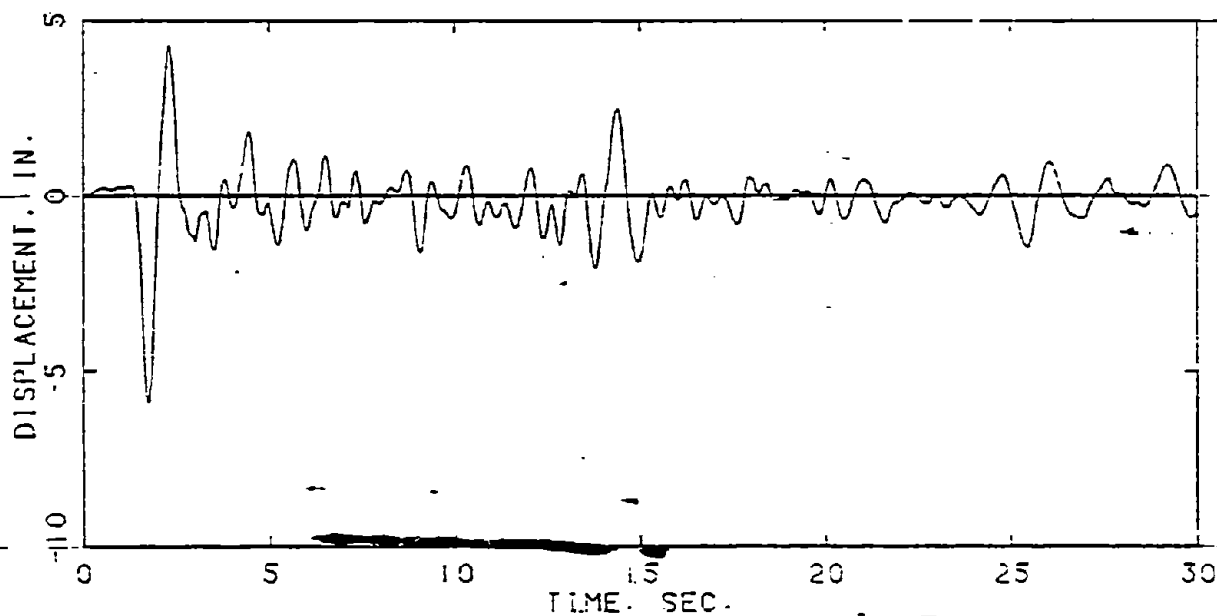
(d) Motion Set 4

NOTE: 1 in. = 25.4 mm

FIGURE 2-18. (CONTINUED)



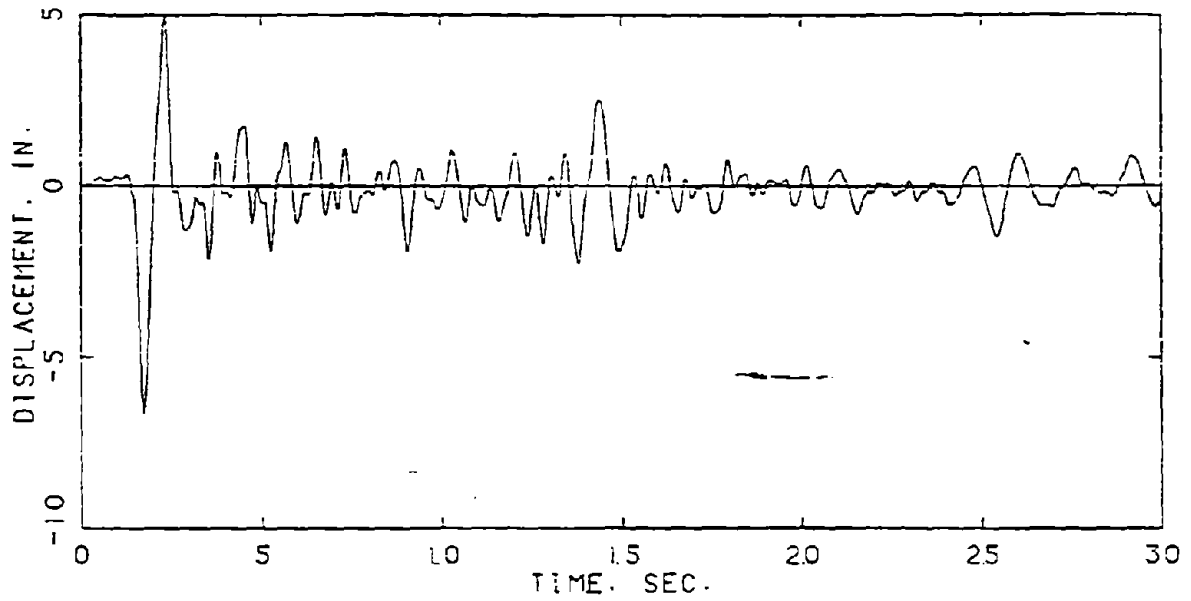
(e) Motion Set 5



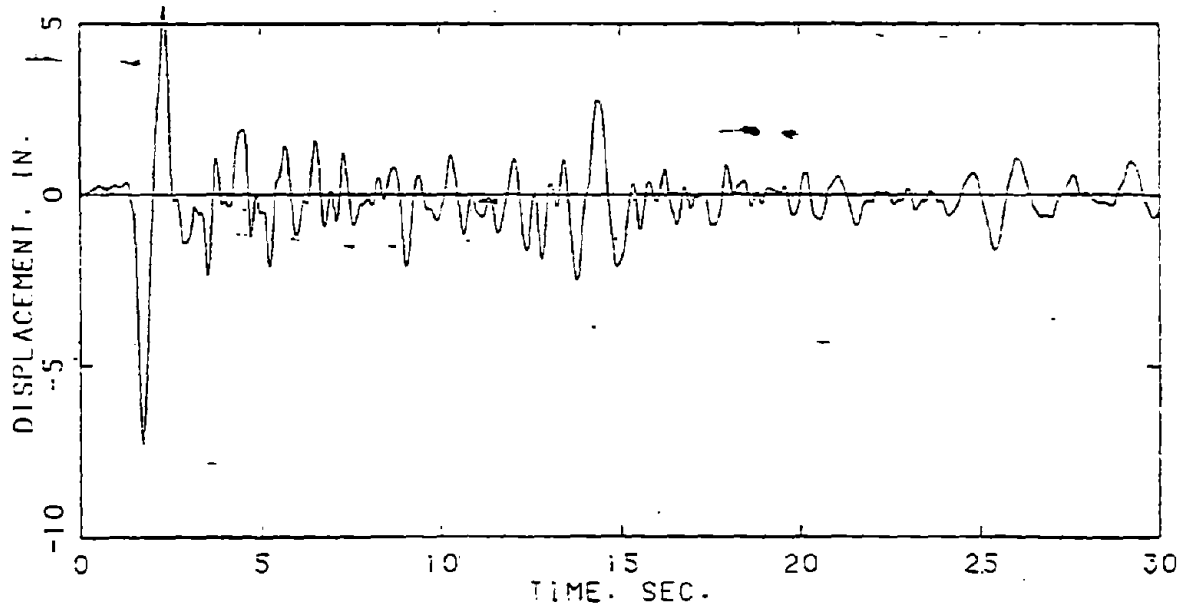
(f) Motion Set 6

NOTE: 1 in. = 25.4 mm

FIGURE 2-18. (CONTINUED)



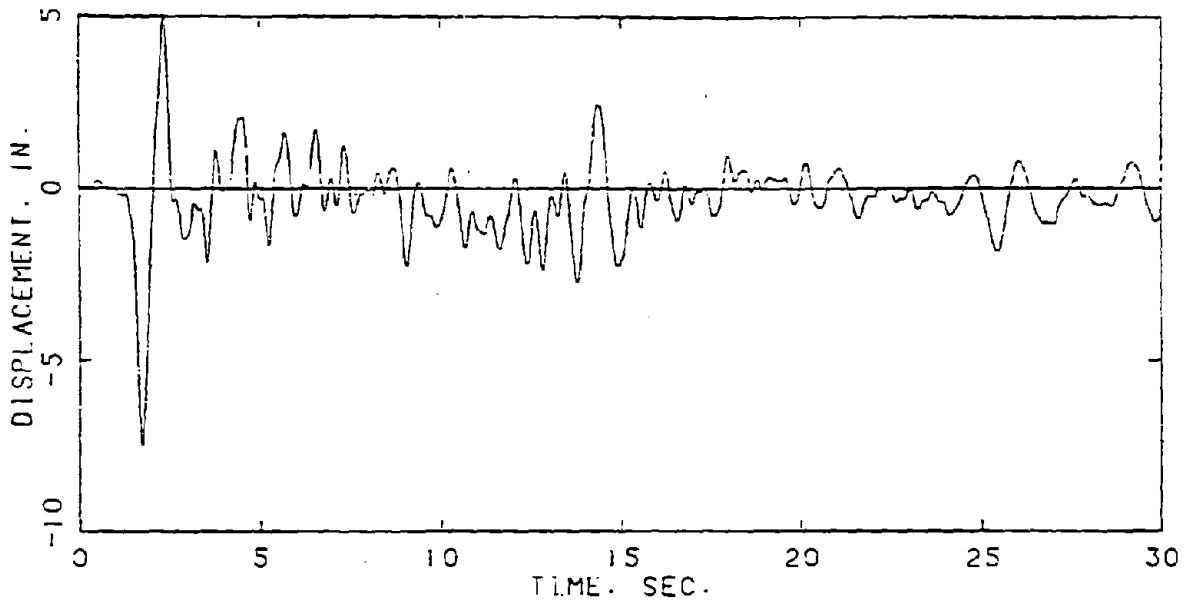
(g) Motion Set 8



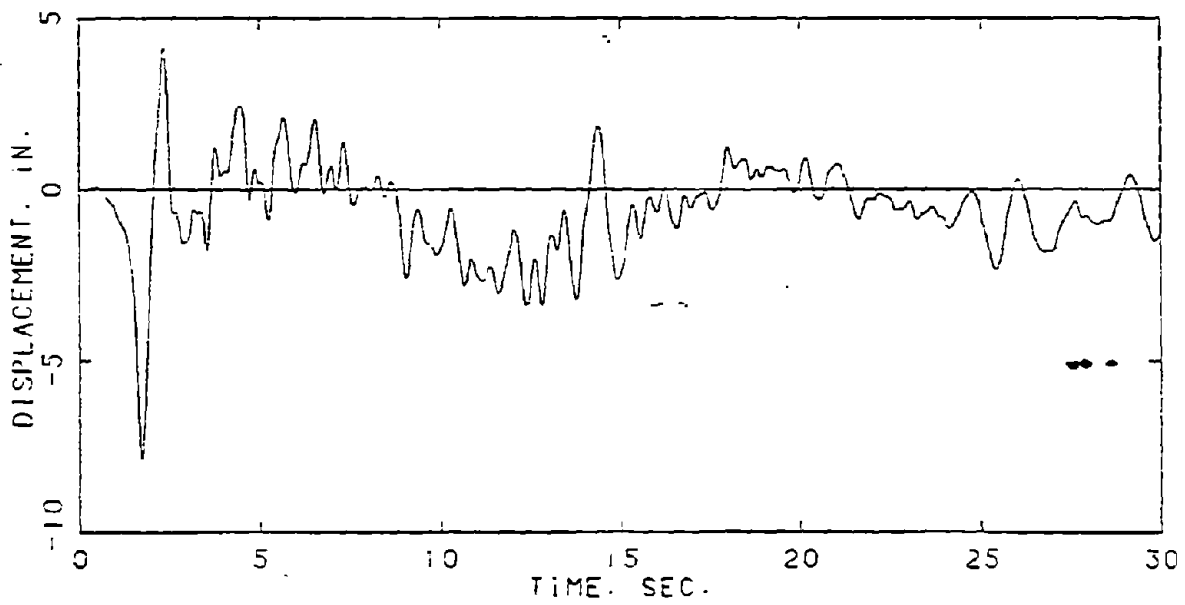
(h) Motion Set 8.1

NOTE: 1 in. = 25.4 mm

FIGURE 2-18. (CONTINUED)



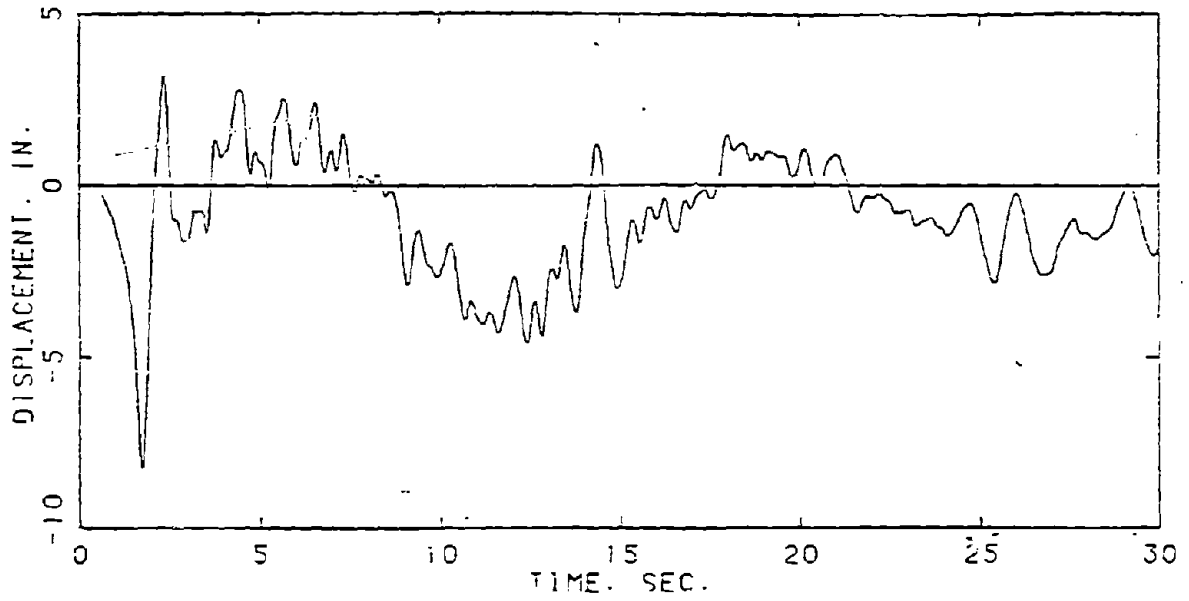
(i) Motion Set 8A



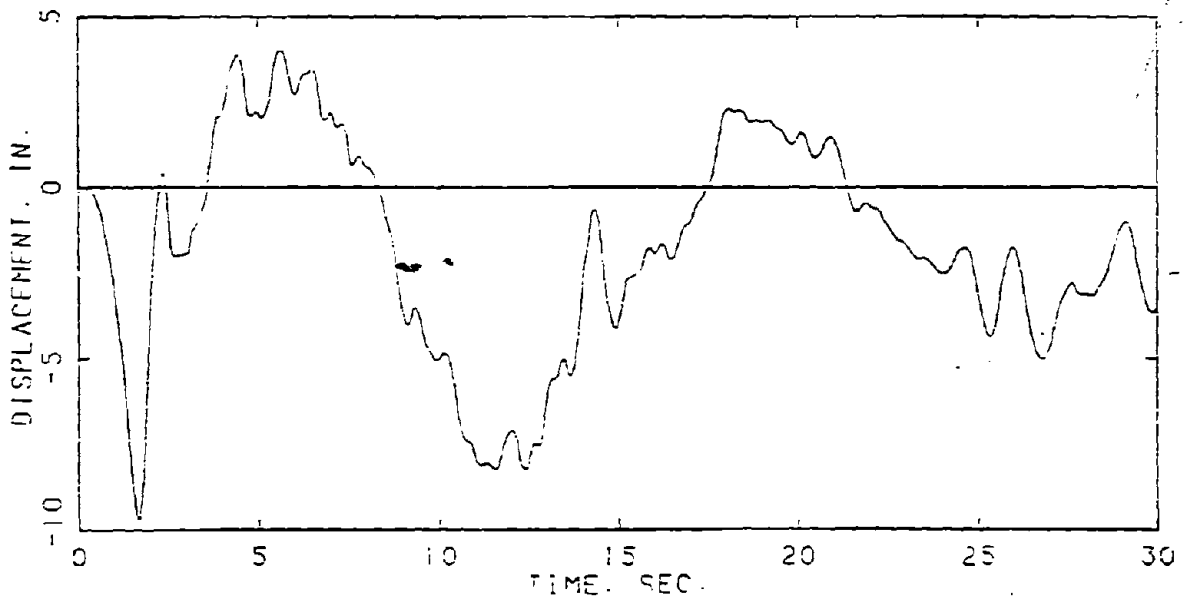
(j) Motion Set 8E

NOTE: 1 in. = 25.4 mm

FIGURE 2-18. (CONTINUED)



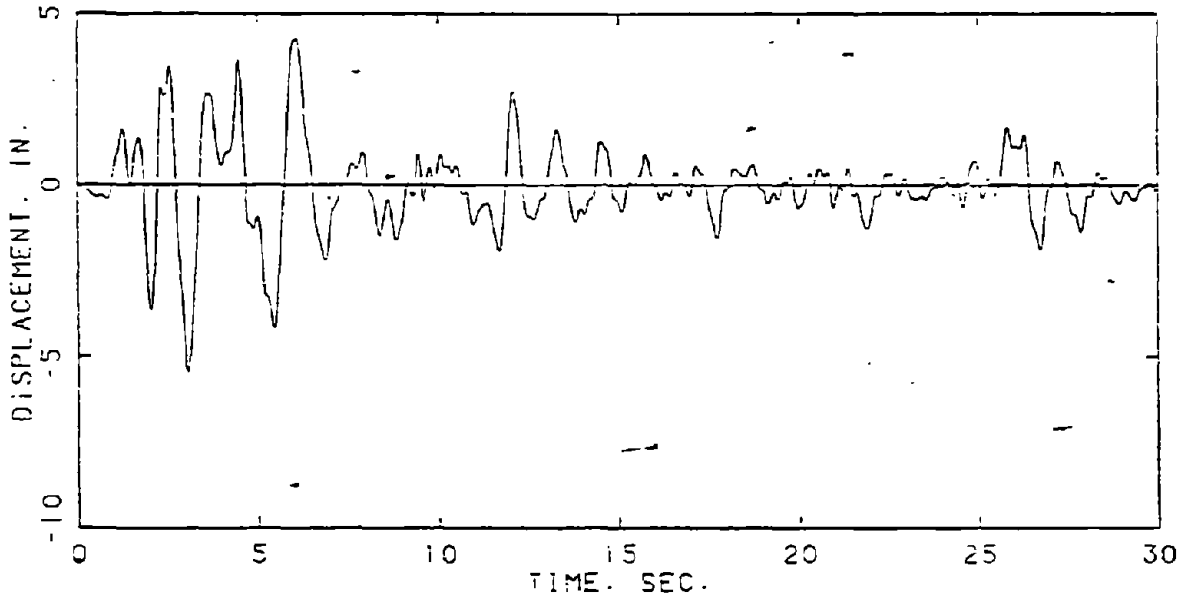
(k) Motion Set 8C



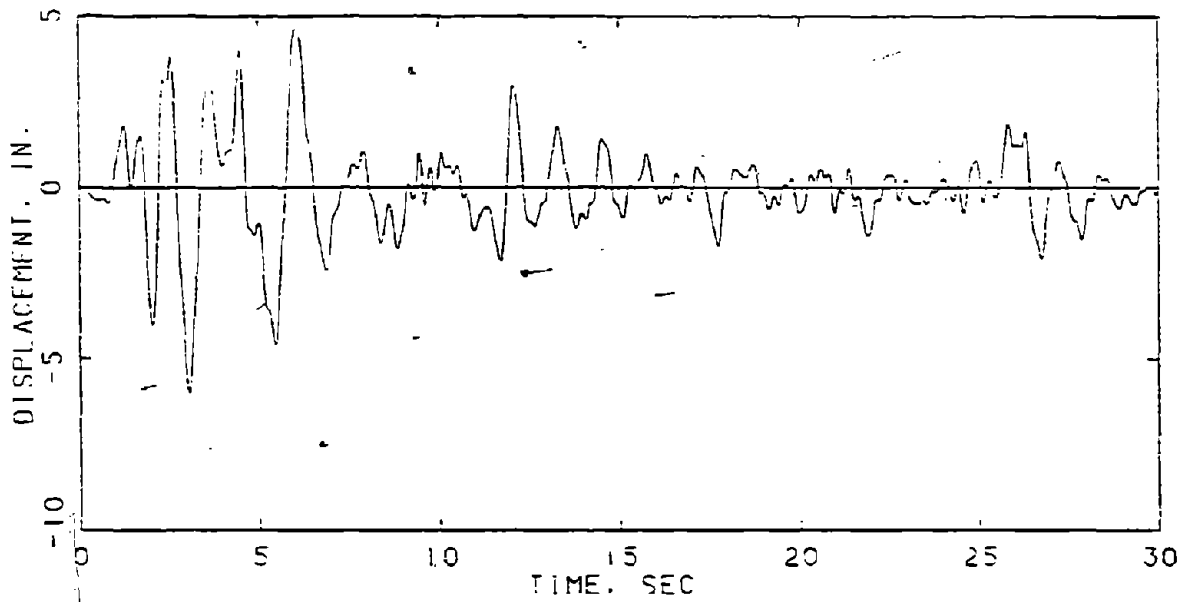
(l) Motion Set 8D

NOTE: 1 in. = 25.4 mm

FIGURE 2-18. (CONTINUED)



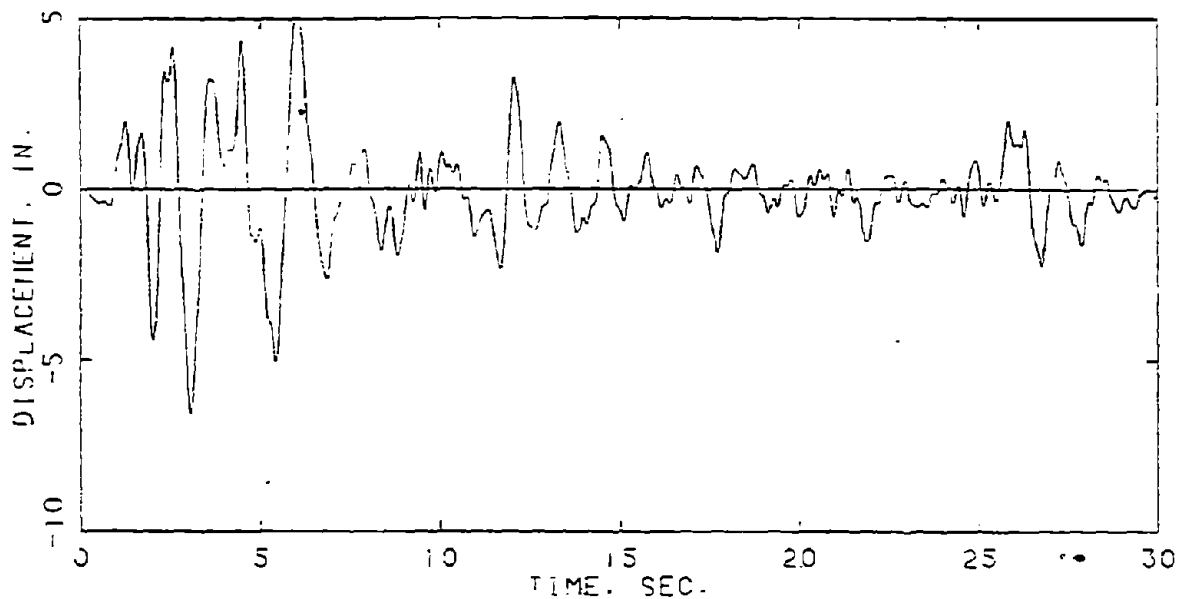
(m) Motion Set 9



(n) Motion Set 9.1

NOTE: 1 in. = 25.4 mm

FIGURE 2-18. (CONTINUED)



(o) Motion Set 9.2

NOTE: 1 in. = 25.4 mm

FIGURE 2-18. (CONCLUDED)

The testing sequence for each wall is shown in Table 2-2. For a given wall the dynamic testing starts with motion sets of low intensity and proceed to higher intensity levels of motion until the wall collapses. The last entry in the motion set sequence for each wall is the motion set that caused collapse. For example, Wall 13 with a nominal 1 ton overburden mass was subjected to MS's 1, 2, 3, 4, 5, 6-1, 6-2 (a repeat of MS 6), and 7 with a collapse failure occurring on MS 7.

The complete wall test program involved 20 wall specimens and 194 dynamic test sequences in addition to a checkout wall specimen (Wall 4) which is not reported. The testing was conducted at the El Segundo Structures Laboratory of the North American Aircraft Division of Rockwell International Corporation.

2.5 DISPLACEMENT CONTROLLED HYDRAULIC ACTUATION SYSTEM

The kinematic input to the base and top of the wall specimens was delivered by a hydraulic actuation system that was controlled by displacement. This method of control provides the most reliable system for command and measurement. A schematic of the displacement controlled hydraulic actuation system is shown in Figure 2-19. The earthquake ground motion and diaphragm/URM wall system response records were obtained in digitized form and written on tape. This tape was introduced into a command and control computer, which was programmed to selectively convert the digital input data into analog form. Analog position commands were transmitted to a multichannel, servocontrol amplifier system that sent control signals to the servohydraulic valves mounted on the hydraulic actuation cylinders. Hydraulic pressure was then delivered to the actuators which drove the base and top of the test specimen. String potentiometer position sensors monitored the attained displacements, which were returned to the servocontrol amplifier system and compared with the command displacement. Differences between the feedback and command signals were monitored and corrections in the command signals, if required, were made to maintain a maximum permissible error of $\pm 10\%$. Hard copy records of the error signals were monitored by the command and control computer operator, so that the quality of each test could be

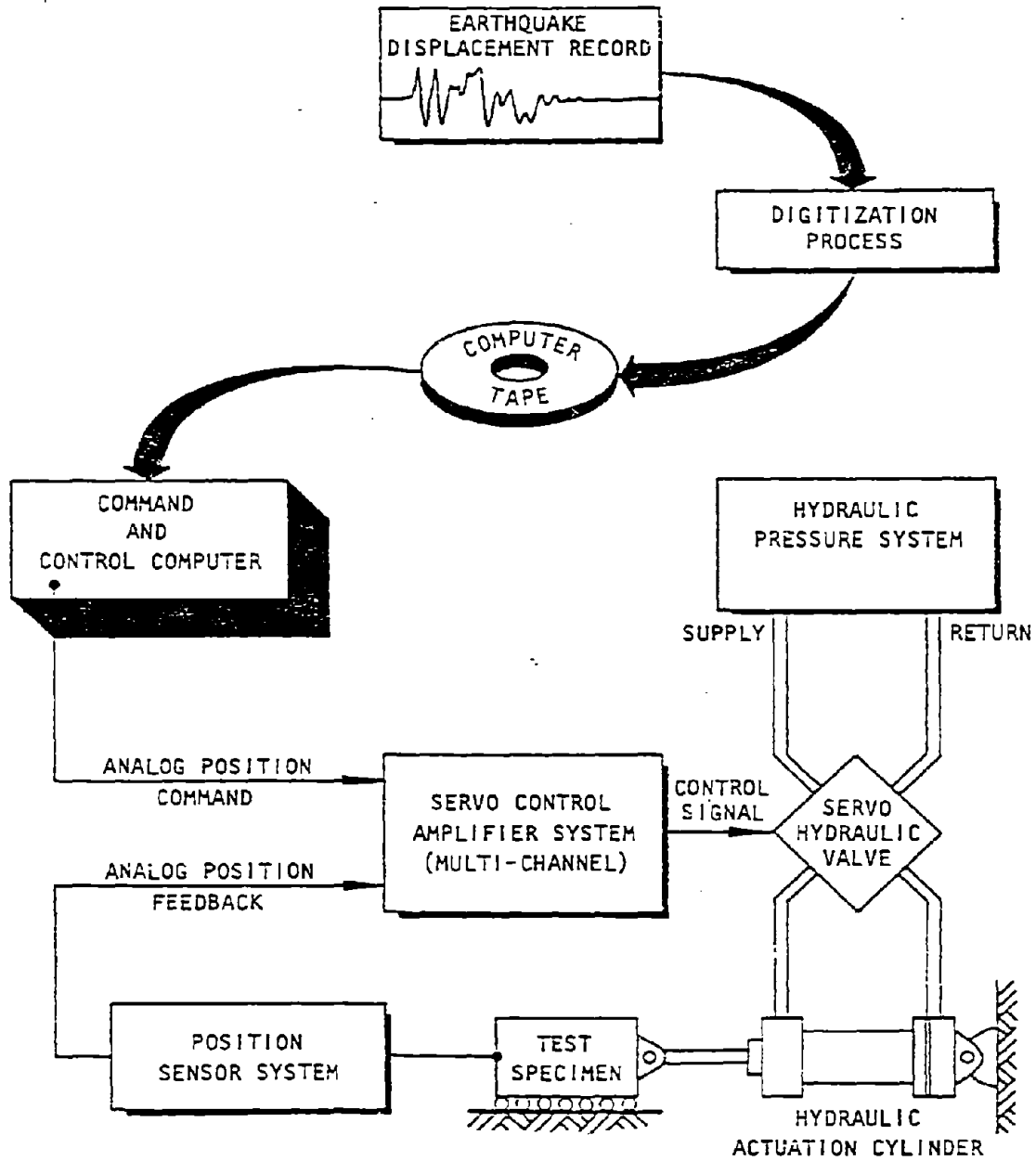


FIGURE 2-19. SCHEMATIC OF THE DISPLACEMENT-CONTROLLED HYDRAULIC ACTUATION SYSTEM

evaluated at the time of the test. In this way corrective measures and rerun decisions could be made by the test monitors.

2.6 TEST DATA COLLECTION AND FORMAT

As noted in Section 2.3, the test data from each instrument were recorded on magnetic tape in digital form. The tapes (source tapes) were written in 9 track, 800 bits per inch, odd parity, NRZI (nonreturn to zero for ones) format and are nonlabeled. Each test sequence was written on the tape using a series of fixed length data records terminated by an end-of-file (EOF) and all records are 1894, 16 bit words in length. The first record for each test sequence is a header record and the remaining records are raw data records.

The header record contains general information including the number of data channels or slots (a total of 40 slots, 19 of which are used for the wall test program) and instrument identification. The data records contain the date and time and the raw test data. In the data recording each instrument or channel was sampled and recorded with a common time base; however, simultaneous sample and hold circuitry was not employed. A constant sampling rate of 0.0026406 sec was used. The first data value in each raw data record is stored in word 17. For each sampled time the data for all 40 channels are consecutively recorded in the data record and the channel data for sequentially sampled times are concatenated in the data record. Accordingly, each raw data record contains 46 time samples for the 40 channels. Each data value (one 16 bit word) is in the form of analog to digital counts and gain using two's complement arithmetic, where bit 0 is the sign, bits 1 through 11 are the magnitude, and bits 12 through 15 are the gain. The data are converted to millivolts (MV) as given below

$$MV = (\text{sign}) \text{ Magnitude} \cdot 10.24/2^{\text{Gain}}$$

The calibration factors, along with other instrument data, to convert from millivolts to engineering units is given in Table 2-4 for each instrument. Engineering units were obtained from the raw data using a

TABLE 2-4. WALL INSTRUMENTATION DATA

Source Tape Instrument Title	Instrument Title	Instrument Range	Calibration Factor Engineering Units	Filter Cutoff, Hz	Source Tape Slot No.	Multiplexer Channel No.	Display Slot	Gage Serial No.
D 9	WD1	±15 in.	10.205 in.	--	0	16	840	174
D 10	WD2	±15 in.	10.200 in.	--	1	17	841	176
D 11	WD3	±20 in.	16.940 in.	--	2	18	842	827
D 12	WD4	±20 in.	16.980 in.	--	3	19	843	963
D 13	WD5	±15 in.	10.144 in.	--	4	20	844	178
D 14	WD6	±10 in.	6.727 in.	--	5	21	845	182
D 15	WD7	±10 in.	6.704 in.	--	6	22	846	184
Acc 1	WA1	±25 g	2.179 g	30	7	32	847	AA70
Acc 2	WA4	±25 g	2.027 g	30	8	33	848	AA36
Acc 10	WA1	±25 g	2.036 g	30	9	34	849	AA09
Acc 11	WA3	±25 g	2.222 g	30	10	35	850	AA35
Acc 12	WA5	±25 g	2.024 g	30	11	36	851	AA06
Acc 13	WA7	±25 g	2.217 g	30	12	37	852	AA39
W 1B	WDE7B	±10 in.	6.826 in.	--	13	24	853	961
W 2B	WDW7B	±10 in.	6.902 in.	--	14	25	854	960
W 3B	WD1B	±10 in.	10.115 in.	--	15	26	855	179
F 1	WFE7	±5 kip	4.985 kip	--	16	28	856	--
F 2	WFW7	±5 kip	5.010 kip	--	17	29	857	--
F 3	WFI	±10 kip	9.971 kip	--	18	27	858	--

Note: 1 in. = 25.4 mm

1 kip = 4.5 kN

calibration file, one for each wall, and the calibration factors. The source data tapes for the complete test series have been archived for future reference and use by the research team.

As an aid in data presentation and data interpretation, the raw source data tapes were converted to engineering units and stored with some data compression on an additional set of tapes (engineering units tapes) using a standardized format. This new format contains identification information, basic statistical information, and the converted data including the addition of a time channel. Other than conversion to engineering units and data compression (decimation by a factor of 8), the data on these new tapes was not altered. The new tapes were also written in 9 track, 800 bits per inch, odd parity, NRZI format and are nonlabeled. Again, the new data tapes for the complete test series have been archived for future reference and use by the research team.

SECTION 3 WALL SPECIMEN DESCRIPTION

3.1 INTRODUCTION

Unreinforced masonry (URM) wall specimens were fabricated by journeymen bricklayers using controlled techniques to duplicate the character of common URM found in existing buildings. The specimens were not intended to duplicate the wide variation of masonry materials used in existing URM or the extreme variation in material strengths that have been noted in surveys of URM buildings throughout the continental United States. As stated in Section 1, the test purpose is to establish bounds of dynamic stability. Strength properties of the specimens as constructed have a significant variation. This strength variation was intended to furnish data for determining the influence of this parameter.

The URM walls included typical multi-wythe common brick, hollow through-wall units of concrete block, and a nonrepresentative, filled cell, concrete block and clay block. This last material was used in each height series to obtain data on the influence of modifying the response mass (weight per unit surface area) of the specimens.

The materials incorporated in the specimen construction were sampled on delivery to the construction site for tests of their physical properties. Mortar and similar on-site produced materials were sampled on each work day.

3.2 CONSTRUCTION CONTRACTS

Construction drawings (Fig. 3-1) and construction specifications (Appendix A) were prepared and issued for competitive bids to masonry specialty contractors. The time of bidding coincided with a period of high activity in construction and, as a result, all bids received exceeded cost estimates. A program of reduction of specimens to the minimum number needed to give definitive data was completed and

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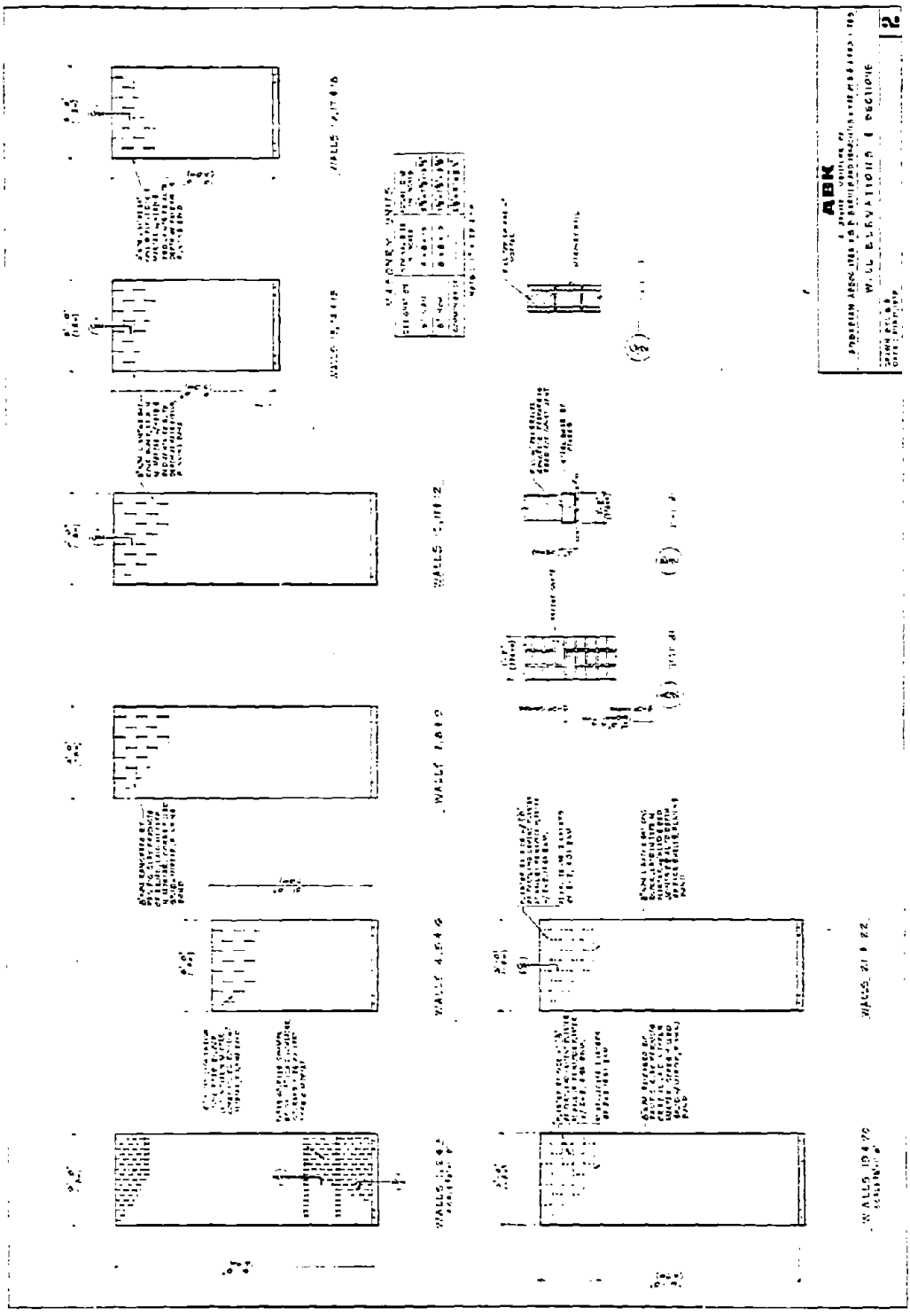


FIGURE 3-1 CONSTRUCTION DETAILS OF WALL TEST SPECIMENS

ABK undertook construction coordination services. These services included materials purchasing, contracting for journeyman masons, and all other coordination efforts. This procedure was cost effective, reducing costs by more than one-half.

Fabrication of fixtures for loading the top of the wall specimens (Fig. 3-2) and base plates (Fig. 3-3) for loading the bottom of the wall was contracted to steel fabricators. The base plate, in addition to providing a construction surface similar to a foundation wall for constructing the URM, was the attachment for lifting the wall for transport.

The journeymen masons, employed under a labor contract, were instructed as to the intent of the specifications, the coordination required with other subcontractors, and the preparation of test specimens of mortar and wall prisms. Special construction quality control was not required as the wall specimens were to represent average construction. Construction observation, typical of engineered California projects, was maintained during the entire construction period. The work progressed without interruption or unanticipated incidents.

3.3 CONSTRUCTION PROCEDURES

The URM wall specimens were constructed on a concrete fill placed in the base fixture (Fig. 3-1 and Fig. 3-4). Mortar was job mixed using sacked portland cement, sacked lime, and washed sand purchased from local sources (Fig. 3-5). Three-wythe masonry units, walls 1 through 3, were solid with the interior wythe floated in place (Fig. 3-6). Collar joints of three-wythe work were slushed with mortar. Through-wall units such as hollow concrete block and clay units were laid with mortar joints on the exterior shell (Fig. 3-7 and Fig. 3-8). Cells of clay block units and one-half of the 6 in. nominal concrete block units were filled solid with mortar to increase the response mass (Fig. 3-9).

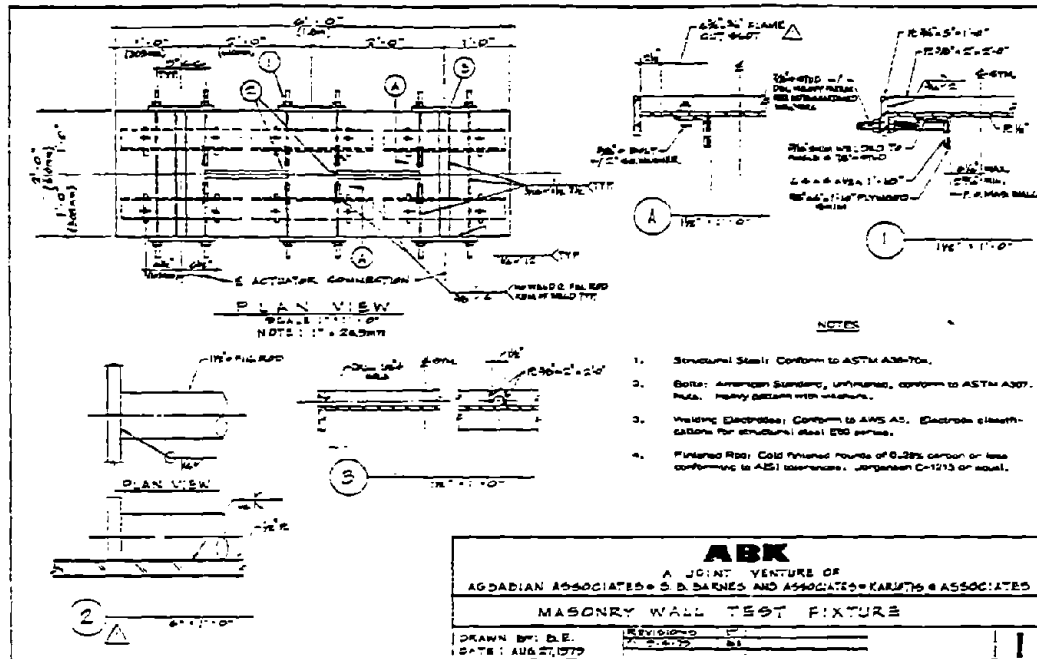


FIGURE 3-2. TEST FIXTURE FOR LOADING TOP OF WALL

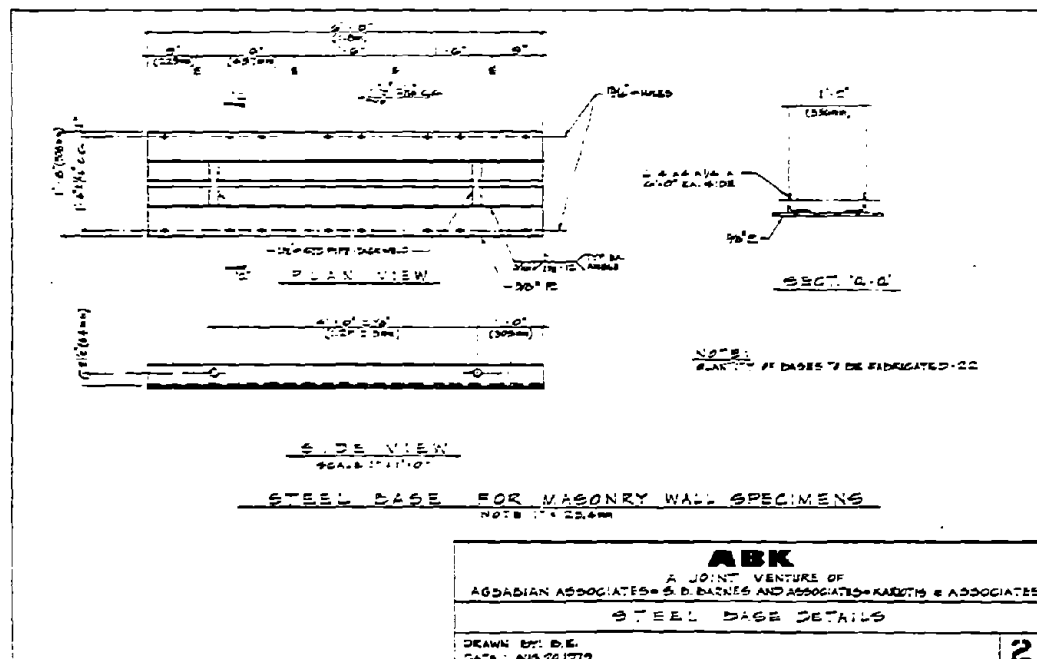


FIGURE 3-3. TEST FIXTURE FOR BASE OF WALL



FIGURE 3-4. THREE-WYTHE MASONRY ON BASE FIXTURE

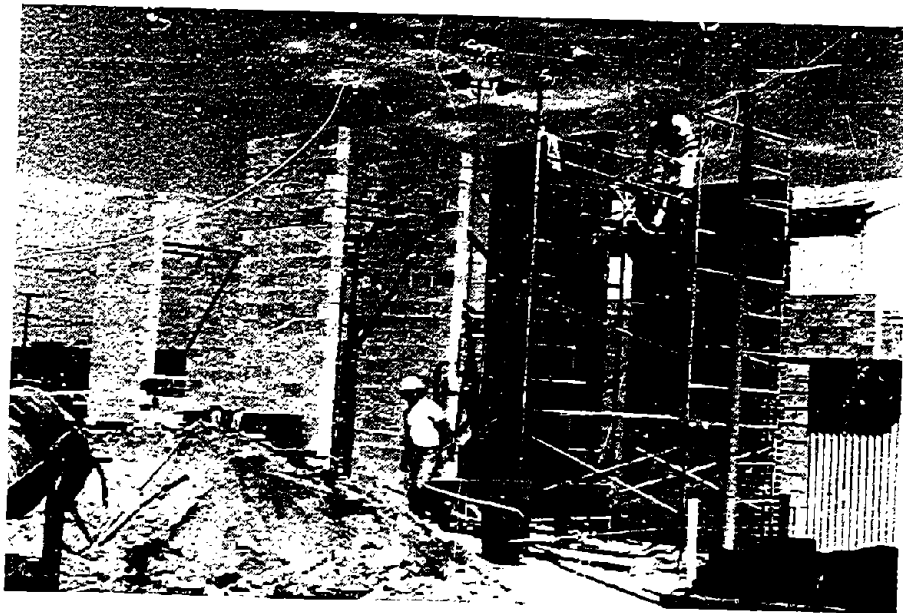


FIGURE 3-5. VIEW OF WALL TEST SPECIMENS IN CONSTRUCTION AREA



FIGURE 3-6. PLACEMENT OF INTERIOR WYTHE IN THREE-WYTHE MASONRY



FIGURE 3-7. PLACEMENT OF THROUGH-WALL UNITS ON MORTAR AT FACE SHELL



FIGURE 3-8. PLACEMENT OF THROUGH-WALL UNITS.
CLAY BLOCK MATERIALS

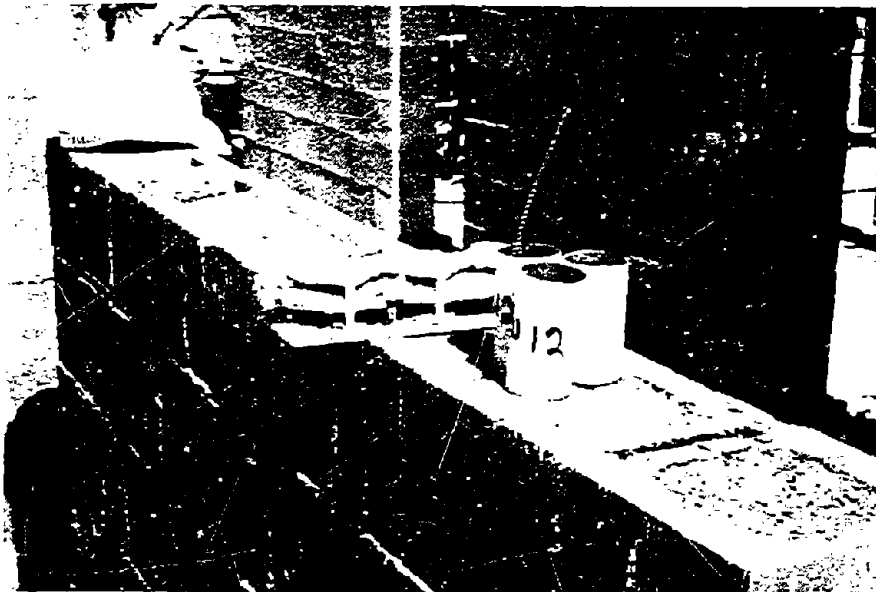


FIGURE 3-9. THROUGH-WALL UNITS FILLED WITH
MORTAR TO INCREASE WALL MASS

Three wall specimens of each material, height and weight were constructed (Fig. 3-1). The parameter varied in the dynamic testing was the applied axial load or overburden mass. Two wall specimens identical to walls 7, 8 and 9 and two walls identical to walls 10, 11 and 12 were constructed for application of retrofit methods. The retrofit method tested is within the capabilities of construction journeymen and does not require special instruction or techniques. Reinforcement of a single or double layer of fabricated wire mesh 2 x 2, 14 ga (50 mm spacing x 2 mm dia) was applied to each face and furred with spacers from the face of the masonry (Fig. 3-10). Portland cement plaster was applied over the mesh to embed the reinforcement in the first plaster coat (Fig. 3-11). The additional coat to furnish the specified thickness was applied after the first coat had acquired adequate stiffness (Fig. 3-12).

Portland cement plaster was specified to meet the requirements of the Uniform Building Code except lime was restricted to one-half of that specified in the UBC. This restriction of lime was used to correspond to tentative regulations of the California State Architect for use of a similar retrofit technique. Compression test samples were obtained for the plaster using the standard techniques for determining compressive strength of mortar.

3.4 MATERIALS SAMPLING PROCEDURES

The materials-testing subcontractor sampled materials delivered to the job site. The labor subcontractor prepared daily mortar specimens in both 2 in. (50 mm) sq cubes and 2 in. dia x 4 in. high (50 mm X 100 mm) cylinders. Mortar specimens were prepared in conformance with Uniform Building Code Standard No. 24.22, as ASTM Standards do not include a field test for mortar. The mortar samples were spread on a masonry unit 1/2 in. (13 mm) thick and allowed to stand one minute. The mortar was then removed and placed in the cube or cylinder form (Fig. 3-13). The test standard required use of the cylinder. Two in. (50 mm) cubes were also made to correlate with laboratory procedures ASTM C161-44T and ASTM C270-59T. Published research work on masonry mortar has used

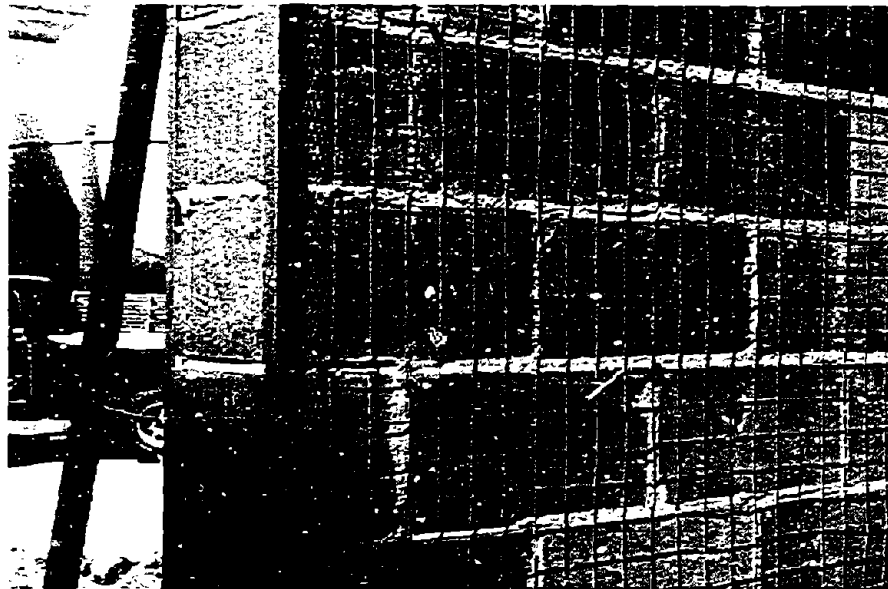


FIGURE 3-10. WIRE REINFORCEMENT APPLIED ON FACE OF JRM WALL

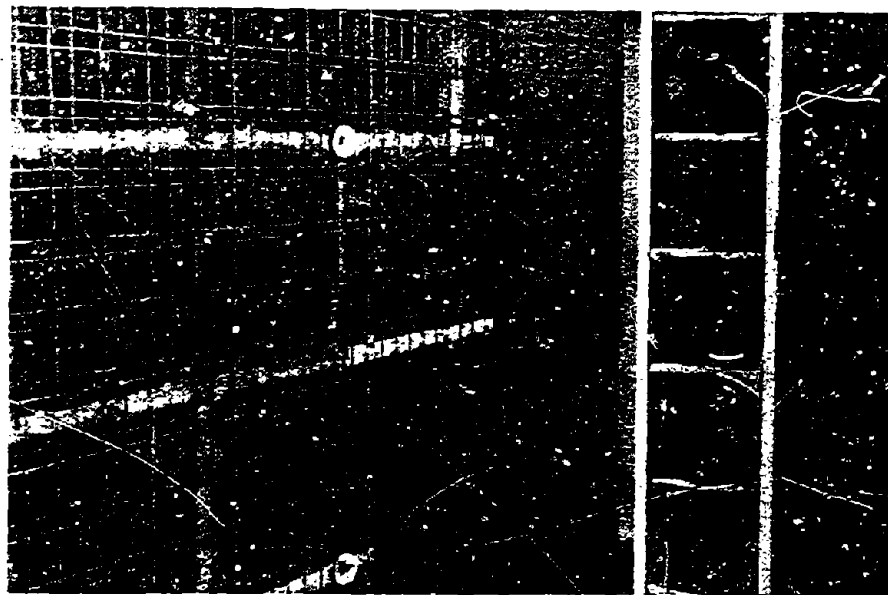


FIGURE 3-11. PLASTER COAT APPLICATION TO EMBED WIRE REINFORCEMENT



FIGURE 3-12. APPLICATION OF SECOND COAT OF PLASTER TO REINFORCE WALL SPECIMEN



FIGURE 3-13. PREPERATION OF MORTAR TEST SPECIMENS BY STANDARD PROCEDURES

these laboratory procedures. This opportunity for correlation was requested by the Review Panel prior to completing the Test Program.

In addition to component testing, 32 in. (810 mm) to 36 in. (910 mm) square prisms were constructed for diagonal compression testing, and the results of these tests are given in Section 4.

3.5 SPECIMEN HANDLING PROCEDURES

The wall specimens as constructed on the steel base plate were braced by ties and typical tilt-up bracing during construction and curing periods. A transporter was designed by the dynamic testing subcontractor (Fig. 3-14) to lift the wall vertically and transport it into the test apparatus. The transporter had hydraulic jacks at the upper ends of rod hangers which were attached to the base plate by a through bolt. These jacks lifted the specimen from the construction area and compressed the specimen between the base plate and a fixed beam at the top. Pressure gages indicated the desired compression load. Movable clamps gave lateral restraint to the wall specimen during movement.

3.6 SPECIMEN DESCRIPTION

Walls 1 through 3 were 6 ft wide x 16 ft high x 14 in. thick (1.8 m x 4.9 m x 360 mm), constructed of clay brick units of the size termed common brick. These walls were constructed in three-wythe brick work with "0" type mortar. "0" mortar is 1 part portland cement, 2 parts lime, and 9 parts sand mixed on the job site to a workable mortar. Workability is a judgement made by the mason. Variability of compressive strength of mortar produced by these judgements is shown in Section 4.

Wythes are bonded with continuous header courses at 24 in. (610 mm). Header courses were lapped in the center wythe to complete a tie through the wall. This practice is consistent with existing URM. These walls were planned to be 12-1/2 in. (320 mm) thick in the test program, but because the delivered brick was consistently oversize, the

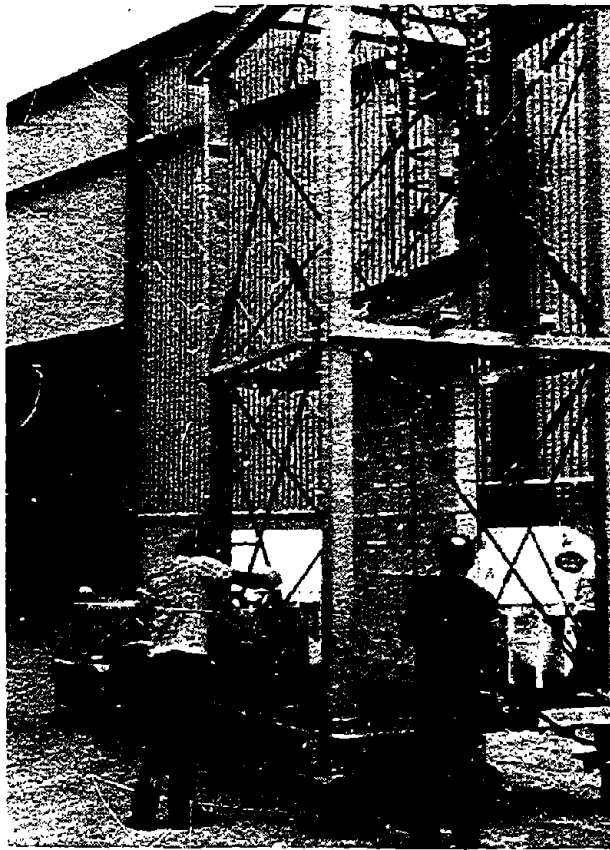


FIGURE 3-14. TRANSPORTER FOR MOVEMENT OF SPECIMEN TO TEST APPARATUS

wall dimensions were increased accordingly. Unit weight of the wall as constructed was 153 lbs per sq ft (746 Kg/m^2).

The wall was constructed in the traditional manner of laying the two exterior wythes with full bed and partial head joints (Fig. 3-15). The interior wythe is placed in mortar thrown in the center (Fig. 3-6). Mortar is then thrown by trowel into the collar joint (Fig. 3-16). This technique does not produce a solid wall. Examination of fractured specimens indicated the voids of the specimens are equivalent to the least voids observed in URM throughout the United States.

Walls 4 through 6 were 6 ft wide x 10 ft high (1.8 m x 3 m) x 6 in. nominal hollow concrete block units laid with head and bed mortar joints equal to face shell thickness. All cells of the units are filled with mortar. Actual size of the units was 5-5/8 in. x 7-5/8 in. x 15-5/8 in. (140 mm x 195 mm x 400 mm). Mortar used in wall construction was "N" type. "N" mortar is 1 part portland cement, 1 part lime, and 6 parts sand mixed on the job site to a workable mortar. Compressive strength of mortar used is shown in Section 4. Unit weight of the wall was 56 lbs per sq ft (273 Kg/m^2).

Walls 7 through 9 are 6 ft wide x 16 ft high (1.8 m x 4.9 m) x 8 in. nominal hollow clay units laid with head and bed mortar joints equal to face shell thickness. Actual size of units was 7-7/8 in. x 7-1/2 in. x 15-1/2 in. (200 mm x 190 mm x 390 mm). Internal cells of the hollow units are filled with mortar (Fig. 3-9). Mortar was type "N". Unit weight of the wall was 70.9 lbs per sq ft (346 Kg/m^2).

Walls 10 through 12 were 6 ft wide x 16 ft high (1.8 m x 4.9 m) x 8 in. nominal hollow concrete block units. Units were laid with type "N" mortar. Head and bed joints were equal to the thickness of face shells. Actual size of units was 7-5/8 in. x 7-5/8 in. x 15-5/8 in. (195 mm x 195 mm x 400 mm). Unit weight of the wall was 41 lbs per sq ft (200 Kg/m^2).

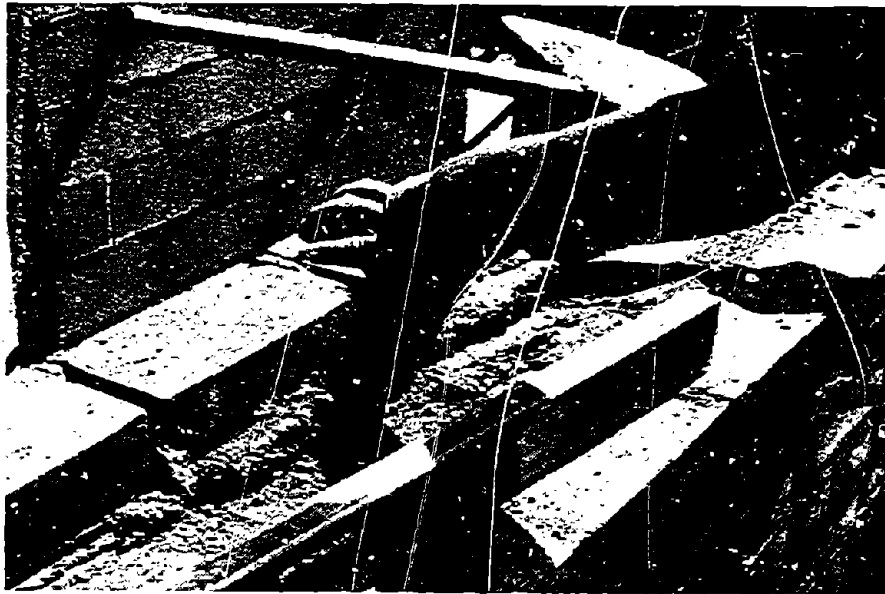


FIGURE 3-15. TRADITIONAL METHODS OF CONSTRUCTING MULTI-WYTHE MASONRY

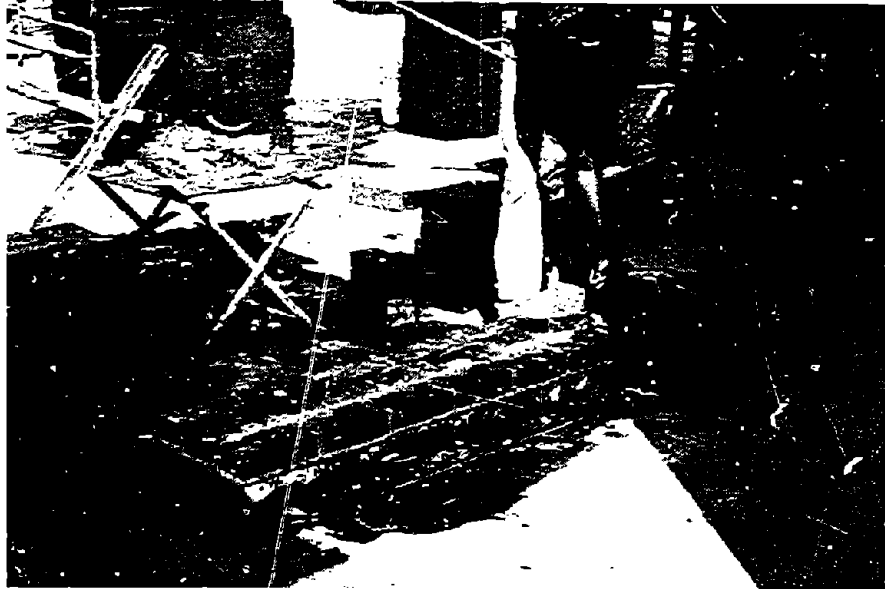


FIGURE 3-16. TRADITIONAL METHOD OF FILLING COLLAR JOINTS BETWEEN WYTHES

Walls 13 through 15 were 6 ft wide x 10 ft high (1.8 m x 3.0 m) x 8 in. nominal hollow concrete units. Construction and units were identical to walls 10 through 12.

Walls 16 through 18 were 6 ft wide x 10 ft high (1.8 m x 3.0 m) x 6 in. nominal hollow concrete block units. Actual size of units is 5-5/8 in. x 7-5/8 in. x 15-5/8 in. (140 mm x 195 mm x 400 mm). Mortar was type "N". Head and bed joints were equal to face shell thickness. Unit weight was 30.9 lbs per sq ft (151 Kg/m²).

Walls 19 and 20 were 6 ft wide x 16 ft high (1.8 m x 4.9 m) x 8 in. nominal hollow clay units. Units were laid with head and bed joints equal to face shell thickness. Cells of units were filled solid with mortar. Mortar was type "N". Construction of the URM wall was identical to walls 7, 8 and 9. Walls were reinforced with wire mesh embedded in 7/8 in. (22 mm) portland cement plaster placed on each wall surface by usual hand application techniques. Reinforcement of wall 19 was a single layer of fabricated mesh 2 x 2, 14 ga (50 mm spacing x 2 mm dia). Attachment of the mesh to the wall was only for temporary support during application of the plaster. The mesh was purchased in 100 ft (30 m) rolls equal to the width of the walls. For all single layer reinforced walls the mesh was continuous from top to bottom of the wall. Reinforcement of wall 20 was two layers of the same fabricated mesh (2 x 2, 14 ga). One side of the wall had the second layer of mesh spliced at midheight. The splice of the mesh was 6 in. (150 mm).

The portland cement plaster proportions were 1 volume cement to 4 parts sand maximum. Lime was added to plaster depending on the ratio of portland cement and sand. For a ratio of 1 part cement to 2 parts sand, 5 lbs (2.3 Kg) of lime may be added, for a 1:4 ratio, 10 lbs (4.5 Kg) of lime may be added. Compressive strength of 2 in. dia x 4 in. high (50 mm x 100 mm) cylinders is given in Section 4.

The portland cement plaster was applied to the wall cleaned of dust but without any other surface preparation. The plaster was applied

in two coats. The first coat fully covered the reinforcement. The second coat was applied when the first coat had acquired adequate stiffness.

Walls 21 and 22 were 6 ft wide x 16 ft high (1.8 m x 4.9 m) x 8 in. nominal hollow concrete block units. Construction of the wall specimen was identical to walls 10, 11 and 12. Walls were reinforced identically to walls 19 and 20 respectively, except all mesh reinforcement was continuous top to bottom of the wall. Details of plastering were identical to walls 19 and 20.

SECTION 4

MATERIALS PROPERTIES

4.1 INTRODUCTION

Masonry materials utilized in the construction of the wall specimens were tested by applicable ASTM procedures and the test results are given in Appendix B. ASTM tests are intended to be materials tests, they do not test an assemblage of masonry materials, and therefore their purpose is not to determine strength properties of the constructed specimens. The design profession is accustomed to relating estimated strengths of current and past URM to these materials tests, and with this reported data can classify the test specimens within the wide range of URM constructed within the United States.

The tests typically provide compressive strength values. The prism tests (6HA & B, 6SA & B, 8HA & B, 8CA & B, and 14A & B) use a diagonal compression test to subject the center of the prism to a biaxial state of stress with a principal tensile stress normal to the axis tested, if an isotropic material. If the failure surface is principally joint oriented, classic biaxial stress relationships are not applicable. An important purpose of this test is to make a judgmental decision to classify the masonry assemblage as isotropic or anisotropic.

Brittle cracking of the masonry specimens subjected to realistic dynamic displacements of their ends did not precipitate collapse of the wall specimens. Collapse of the wall as supported in the test apparatus requires the wall cross section be cracked at or near the base and near midheight. These crack systems always formed at a test input motion prior to the input motion that caused displacements of the magnitude to cause collapse.

4.2 SUMMARY OF COMMON PROPERTIES

Properties of masonry units determined by measuring and testing are unit size, unit weight, initial rate of absorption for clay masonry units, and compressive strength. Properties of job manufactured materials such as mortar specimens, plaster specimens, and prisms were determined by weighting, measuring, and compression testing. Mortar test specimens were made in 2 in. (50 mm) cubes and 2 in. dia x 4 in. (50 mm x 100 mm) cylinders. The Uniform Building Code specifies field-prepared mortar cylinders as a strength verification. Mortar cubes are a laboratory procedure for standardization of mortar mixes and verification of cement quality. A large body of data on mortar exists using each specimen size. The duplicate testing was not intended to be a guide for cross comparison but to allow direct comparison with either procedure.

Common brick used in the three-wythe URM specimens, Nos. 1 through 3, was tested in flatwise compression. The average ultimate compressive strength was 7,032 psi (48,450 kPa), and the initial rate of absorption was 34.6 grams/minute/30 sq in. Compressive strength of hollow clay block was 3,113 psi (21,450 kPa), and its initial rate of absorption was 33.8 grams/minute/30 sq in. Hollow concrete block was tested for compressive strength and its dry weight was determined. Six in. nominal and 8 in. nominal block have 2432 psi (16,760 kPa) and 2493 psi (17,180 kPa) ultimate compressive strength respectively. Weight of the wall specimen was determined from the weight of wall prisms.

Mortar specimens were sampled on each working day that the type of mortar was used. Sampling of type "N" mortar consists of 42 cylinders and 42 cubes. Each set of three represents the mortar used on the day noted in Appendix B. The mortar specimens were field cured under the same conditions as the wall specimens, transported to the laboratory and tested on nearly the same day as the wall specimen was tested. The average compressive strength of type "N" mortar cylinders was 1835 psi (12,640 kPa), with a standard deviation of 439 psi (3025 kPa). Maximum ultimate compressive strength was 2,611 psi (17,990 kPa), and the minimum strength reported was 923 psi (6360 kPa). Compressive strength

of mortar cubes was 1328 psi (9150 kPa), with a standard deviation of 389 psi (2,680 kPa). Maximum compressive strength was 2375 psi (16,360 kPa), and the minimum strength was 570 psi (3930 kPa).

Sampling of type "0" mortar consists of 42 cylinders and 33 cubes. Nine cylinders were made using the same procedure as the field cured specimens but were transported to the laboratory in accordance with UBC Standard No. 2422 and cured in a fog room. Testing of these samples was at 35 to 38 days age.

The average ultimate compressive strength of 33 field cured cylinders of type "0" mortar was 597 psi (4110 kPa), with a standard deviation of 184 psi (1270 kPa). Maximum strength reported was 1044 psi (7190 kPa), and the minimum was 350 psi (2410 kPa). Average ultimate compressive strengths of wet-cured cylinders sampled on three working days were 469 psi (3230 kPa), 917 psi (6320 kPa) and 594 psi (4090 kPa). Field cured cylinders made the same day had 407 psi (2800 kPa), 968 psi (6670 kPa) and 551 psi (3800 kPa) average compressive strengths, respective to the wet-cured cylinders. Compressive strength of 33 mortar cubes of type "0" mortar was 413 psi (2850 kPa) average with a standard deviation of 184 psi (1270 kPa). Maximum strength reported was 662 psi (4560 kPa), and the minimum was 182 psi (1250 kPa).

Portland cement plaster was sampled in 2 inch x 4 in. (50mm x 100 mm) cylinders made in the same manner as mortar specimens. The average ultimate compressive strength of twelve cylinders was 3,544 psi (24,420 kPa), with a standard deviation of 437 psi (3010 kPa). Maximum reported strength was 4,369 psi (30,100 kPa), and the minimum reported was 2,745 psi (18,910 kPa).

Twelve square prisms were manufactured of materials identical to the wall specimens. These prisms were weighed and measured to determine unit weight. The prisms were loaded by compression on a diagonal, through special bearing surfaces. Photographs of the loading devices and failure surfaces are reported in Appendix B. Unit weights of the

URM walls varied from 153 lbs per sq ft (746 Kg/m^2) for three wythe brickwork to 31 lbs per sq ft (151 Kg/m^2) for 6 in. nominal hollow concrete block masonry. Unit weights of each set of specimens was reported in Section 3.6. Observed failure of hollow units, Specimens 6HA & B and 8HA & B, indicate failure patterns are joint oriented. Calculation of the state of stress in these specimens by classic formula for brittle materials is not applicable. The shear stress reported in Appendix B was calculated by dividing the maximum load by the area computed on the diagonal length, and is not representative of a state of stress.

The observed failure of the mortar filled specimens was not conclusive that failure is in an isotropic medium. If isotropic behavior is assumed the principal tensile stress can be calculated as $0.519 P/bl$. P is applied load, b and l are panel thickness and edge dimension respectively.

Calculated principal tensile stresses and shear stresses for the mortar filled specimens were

<u>MATERIAL TYPE</u>	<u>PRINCIPAL TENSILE STRESS</u>	<u>SHEAR STRESS</u>
6-in. nominal Concrete Block	97.6 psi (672 kPa)	207 psi (1430 kPa)
8-in. nominal Concrete Block	61.3 psi (422 kPa)	130.1 psi (896 kPa)
8-in. nominal Clay Block	60.5 psi (417 kPa)	128.4 psi (885 kPa)
14-in. Three- Wythe Brick	94.4 psi (650 kPa)	200.2 psi (1380 kPa)

4.3 MATERIALS PROPERTIES

A testing laboratory was employed to make physical tests of materials, and Appendix B includes that report.

After receipt and review of the report, an apparent mechanical equipment error was discovered on Page 20 of the included report. The reported weights of the prisms exceed expected density of brickwork. Individual bricks were weighed by the laboratory and by the brick supplier. From this unit weight, number of bricks used in each prism, unit weight of mortar and dimensions of unit, the unit weight of the wall specimen was calculated. This is reported in Section 3.6, for walls 1 through 3, as 153 lbs per sq ft (746 Kg/m^2).

The shear stress reported in the prism compression test, pages B-15 through B-22, is not representative of the biaxial state of stress. Calculated stresses assuming an isotropic material are reported in Section 4.2.

SECTION 5

TEST RESULTS

The test results from the experimental program conducted on URM walls includes measured data from the instrumentation, still photographs, motion pictures, and visual observations.

The instrumentation measurements provide quantitative data on displacements, accelerations, and forces, and in addition provide a data base for the generation of other forms of data, such as relative deformation in the walls. As noted in Section 2, the amount of data collected was considerable, and the plotting of every data channel is too bulky for inclusion in this report. Accordingly, the maximum and minimum values of each instrument for each wall test sequence are given in Appendix C, and selected response time-history plots are given in this section.

The still photographs and motion pictures provide a permanent visual record of the tests and specimens. The still photographs and motion pictures have been archived and are available for viewing. Selected still photographs are included in this section to clarify important features of the test results.

The visual observations are important in that they provide data on the wall responses that were not directly measurable by the instrumentation, such as the location of cracks and the deterioration of the walls. Accordingly, this section will report the observations made by the research personnel during the testing of each wall. Due to the rapid motions involved, comments on wall response are somewhat instinctive and are made to provide relative comparisons where it is considered important. Upwards of four observers recorded the responses, and no substantial differences were noted by the various observers. However,

each observer did not necessarily report all test conditions but reported what he considered important based on what he saw in the short period of time during the test.

The visual observations made by the research personnel during the testing of each wall, complemented where appropriate by selected still photographs, response time-history plots, and references to the maximum and minimum (max-min) data, are given in the following subsections. A separate subsection is given for each wall, and the test results for each wall are presented in the test sequence order defined in Table 2-2 and uses the identification for the programmed input motions defined in Table 2-3. To provide reference locations for the observations, the wall specimens were marked with lines on the mortar joints and numbered; and these reference lines are shown in Figure 5-1 for the three different marking schemes used in the test program. North as described in the observational notes is the same as positive displacement in the max-min data and the plotted displacements.

5.1 WALL 1

- MS 3-1 Crack formed one and one-half bricks above 5-4, halfway between 7-6 and 6-5, and one course above base. Top jacks appeared to oscillate during tests.
- MS 1 Cycled on crack between 7-6 and 6-5.
- MS 2 Minor cycles on same crack.
- MS 3-2 About 4 to 5 cycles on crack between 7-6 and 6-5. Top jacks appeared unstable. Max-min data (Appendix C) indicates cracked excursions.
- MS 4 Cycled on cracks between 7-6 and 6-5 and above 5-4. On one excursion crack opened on opposite face.
- MS 5 Very large excursions on crack between 7-6 and 6-5. Possibly touched barrier on north (Fig. 5-2). Max-min data indicate large cracked excursion in one direction only. Mortar in south face eroded equal to depth of joint.
- MS 6 Cycled on crack between 7-6 and 6-5. Very slow motion

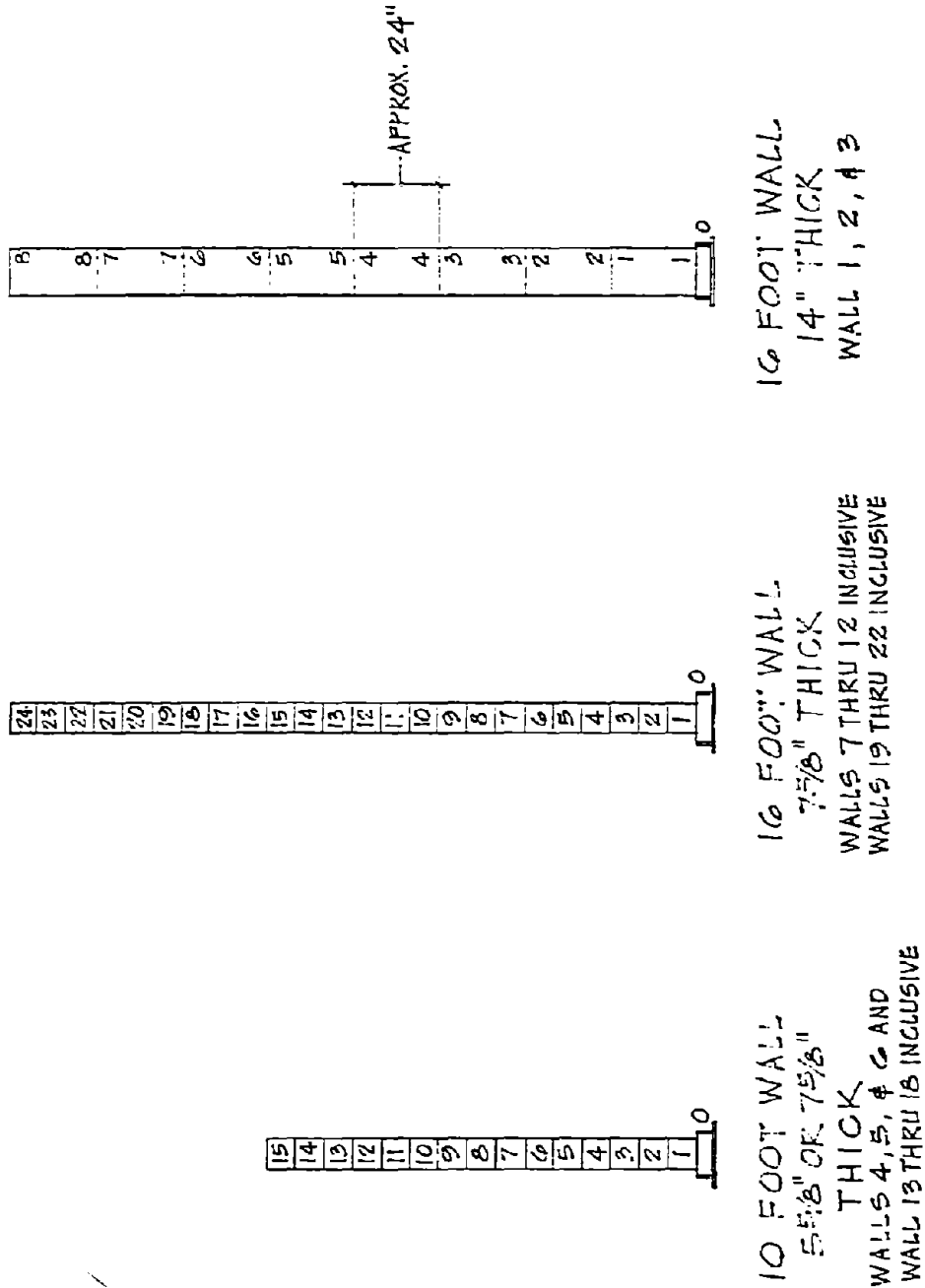


FIGURE 5-1. REFERENCE LINES ON TEST SPECIMENS

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FIGURE 5-2. TEST WALL AGAINST BARRIER

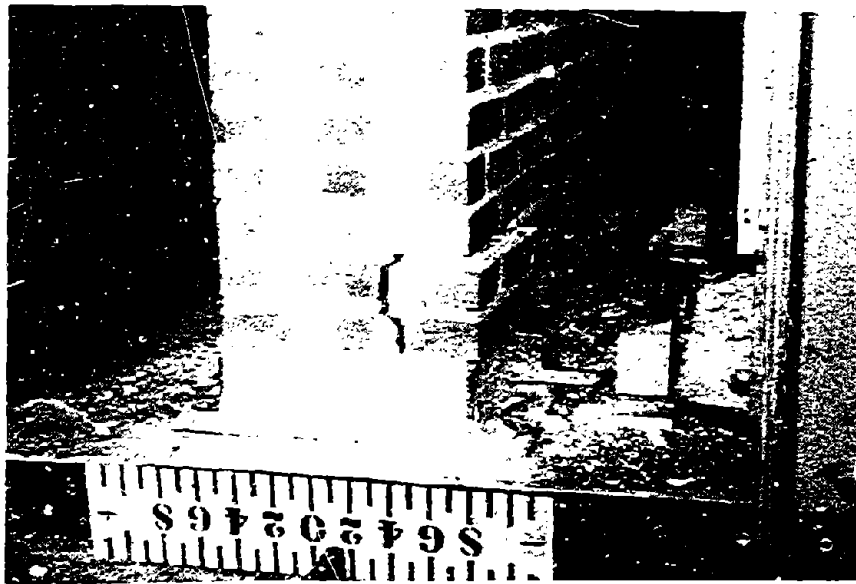


FIGURE 5-3. DETERIORATION AT BASE OF WALL

- at center of wall. Small excursions.
- MS 9 Contact with barrier at north during test. Wall rebounded to stability position. Max-min data indicates large excursions each direction.
- MS 8 Wall cycled with gentle motion at center of wall. Two bricks in exterior wythe above crack at base separated from wall (Fig. 5-3).
- MS 7 Wall cycled with gentle excursions at center of wall. Max-min data indicate large differential excursions at center of wall.
- MS 10 Cycled on same cracks. Base deteriorated further. Max-min data indicates large excursion 30 sec after beginning.

Plots of input displacements WD1 (Fig. 5-4) and WD7, (Fig. 5-10) for time of 2 to 10 sec and simultaneous displacement of gages WD2 through WD6 are presented in Figures 5-5 through 5-9. Max-min data in the appendix does not occur in this plotted time span. The plots of WD1, WD4 and WD7, (Figs. 5-11 through 5-13) for the period of 0 to 40 sec include these maximums. Maximum and minimum data for displacements are absolute values and do not necessarily occur at maximum cracked excursions. Accelerometer data for input WA1, (Fig. 5-14) and response WA4, (Fig. 5-15) are presented for the 2 to 10 sec period corresponding to plots for all displacement gages. Vertical acceleration of the superimposed load, WAV1, is presented in Figure 5-16.

- MS 10.2 Wall displaced to south against barrier after second reversal of input motion. Displacements including failure of the specimen are plotted in Figures 5-17 through 5-19. Accelerations for the same time period are plotted in Figures 5-20 through 5-22.

5.2 WALL 2

- MS 1 Elastic behavior. Elastic displacement visible at

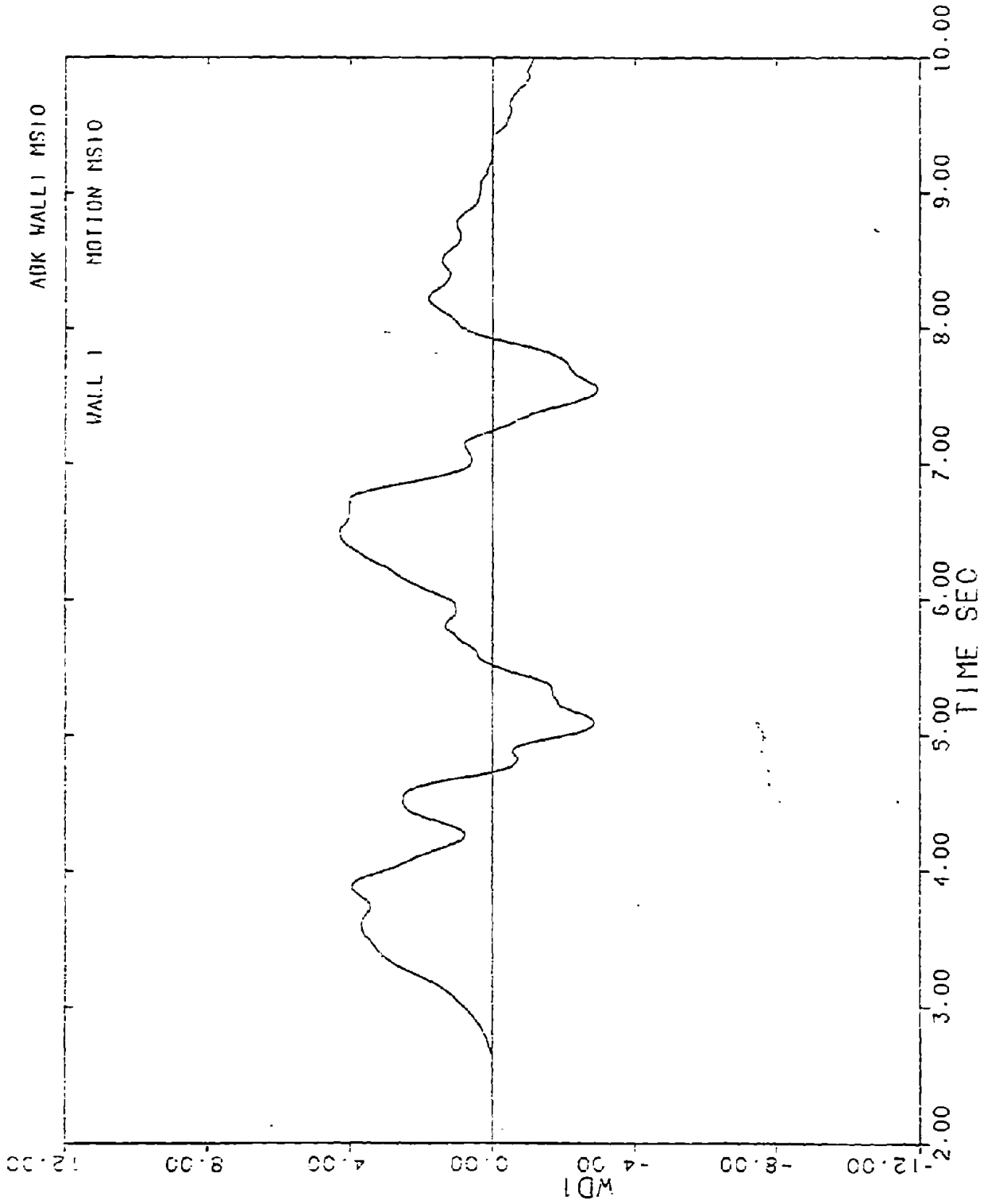


FIGURE 5-4.

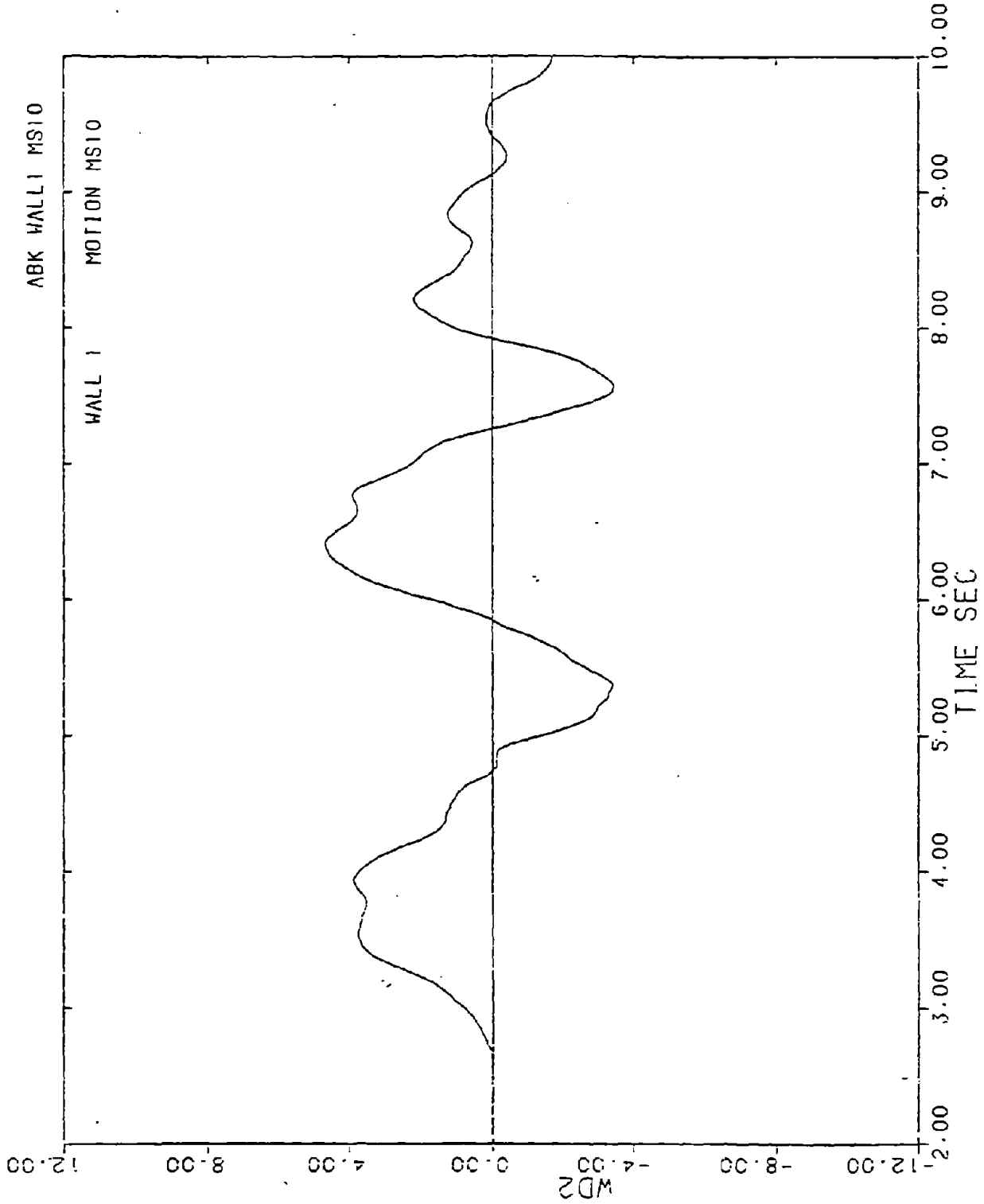


FIGURE 5-5.

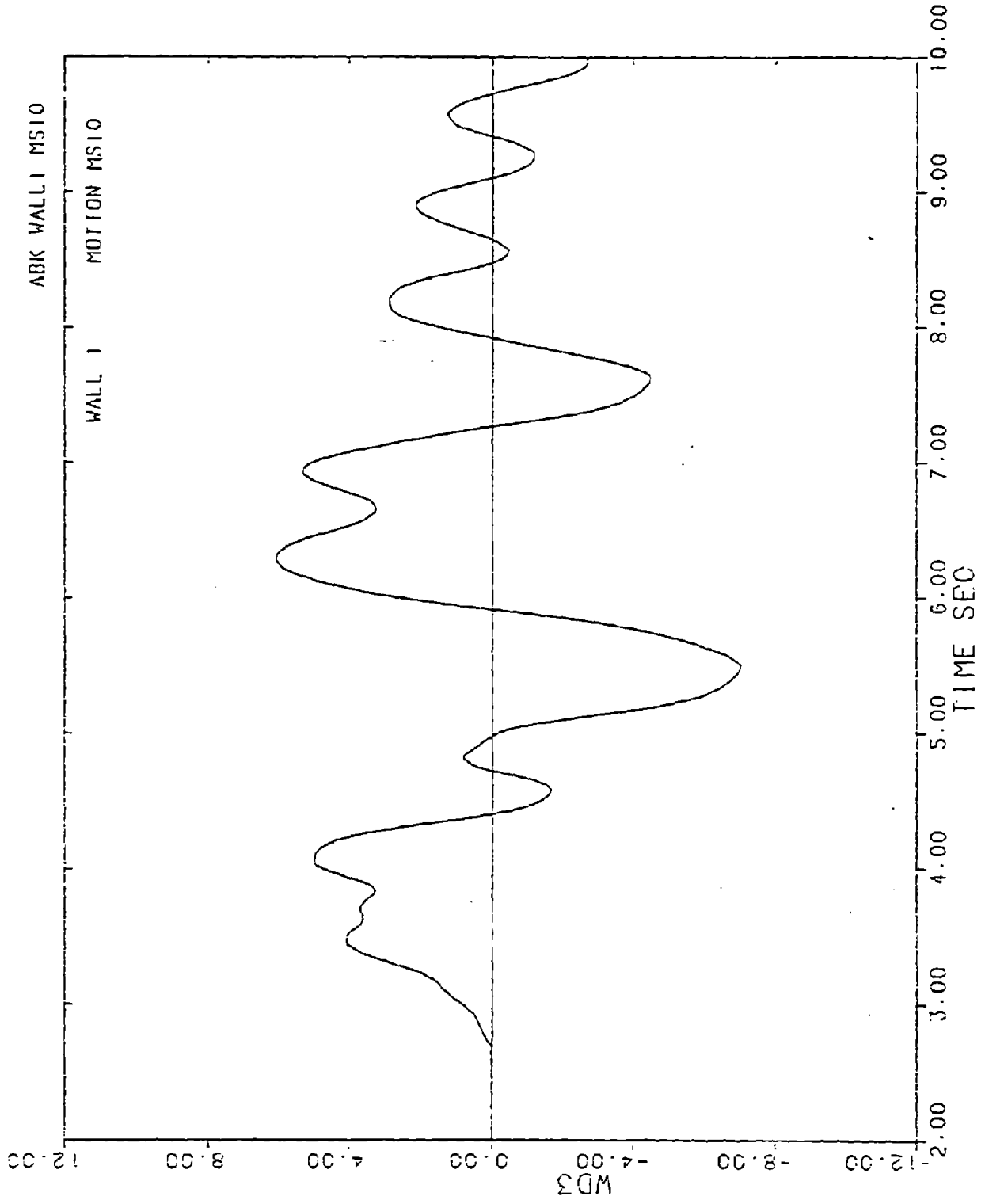


FIGURE 5-6.

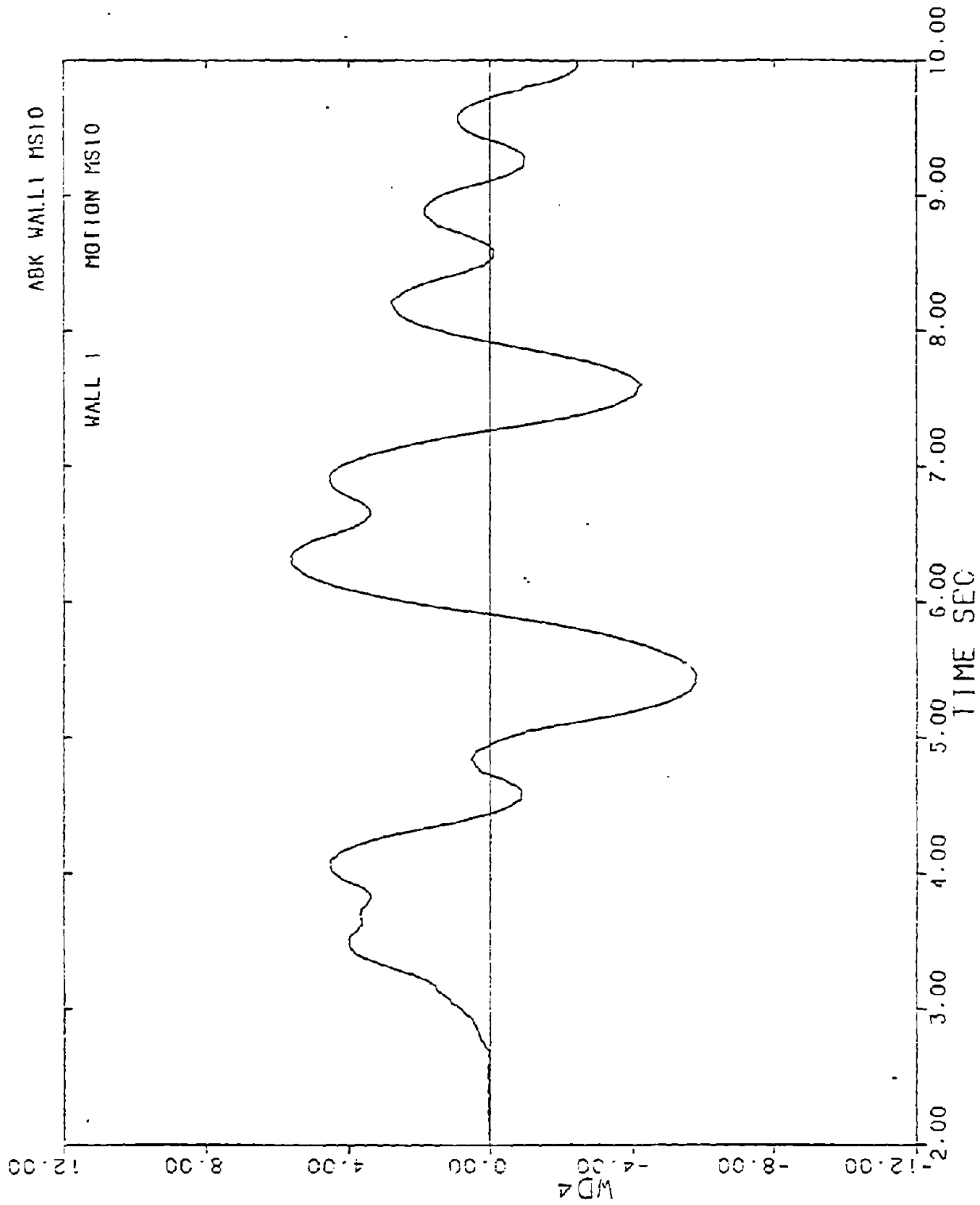


FIGURE 5-7.

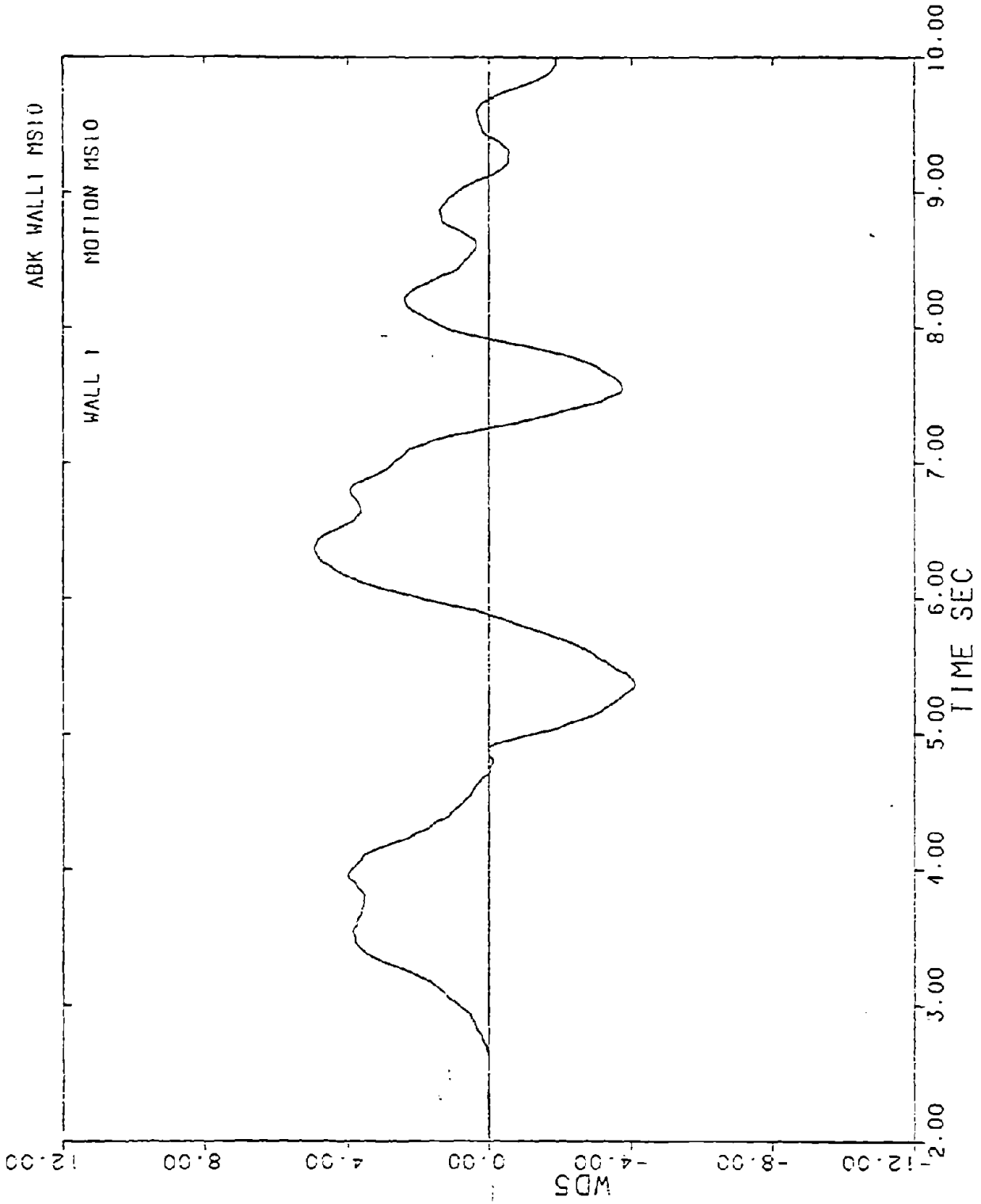


FIGURE 5-8.

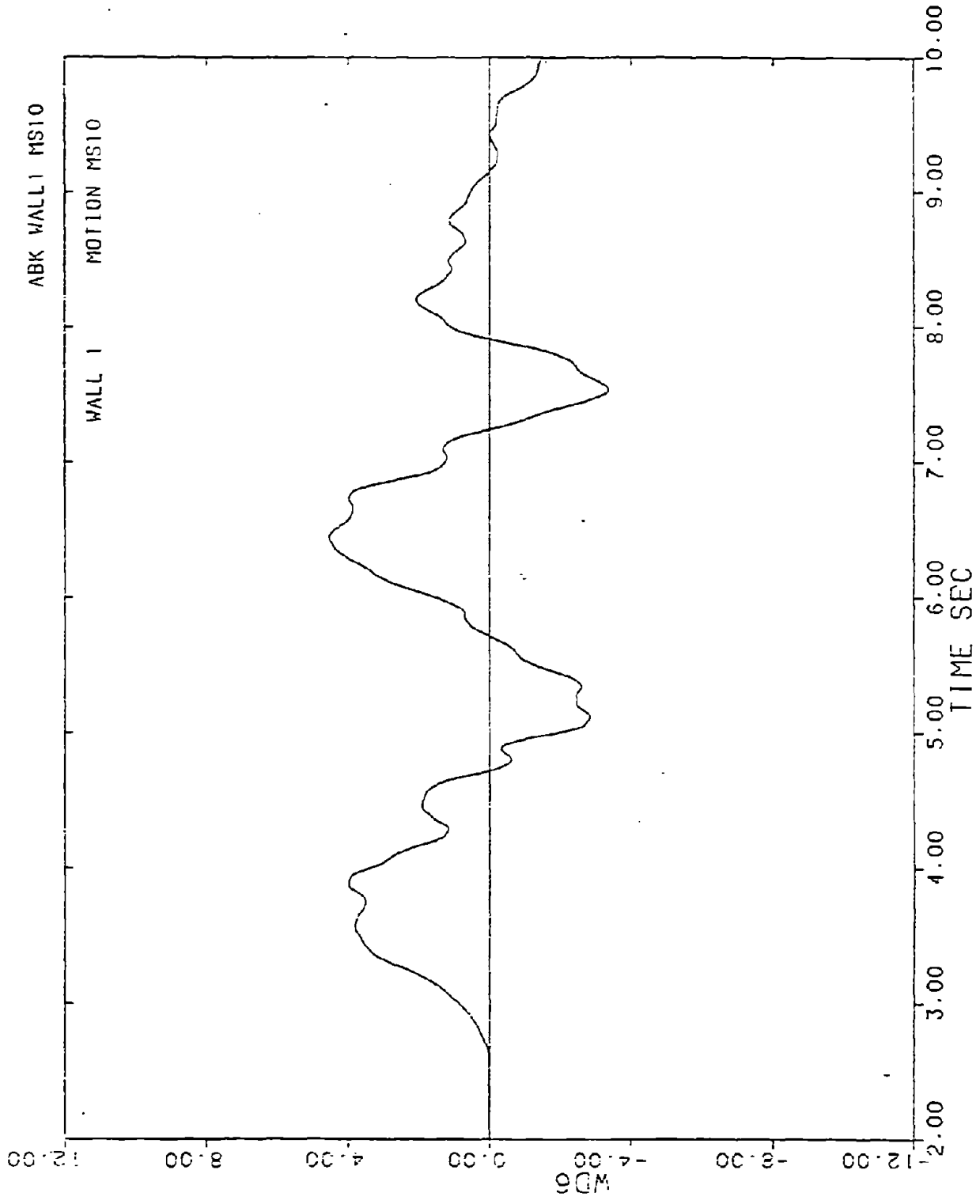


FIGURE 5-9.

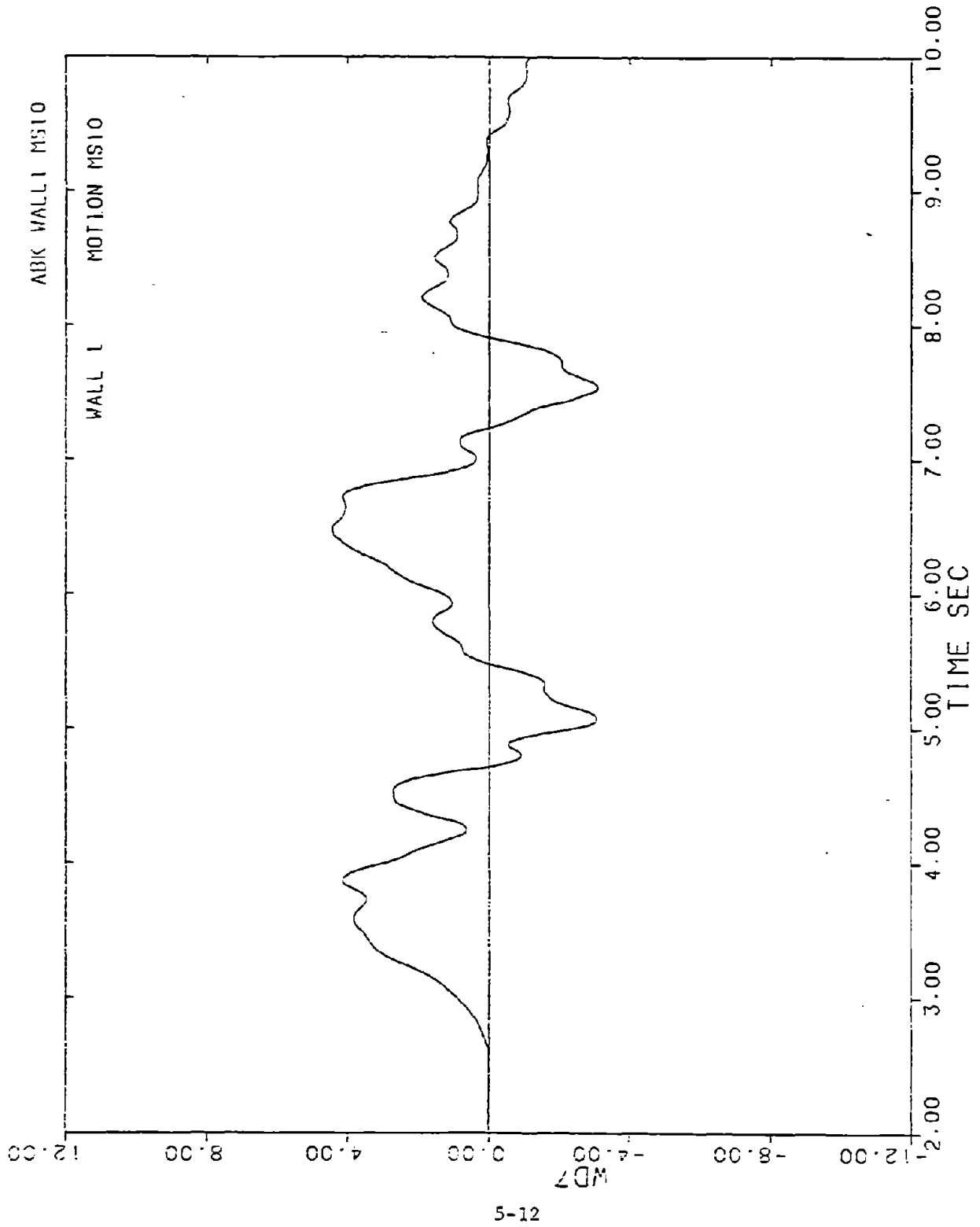


FIGURE 5-10.

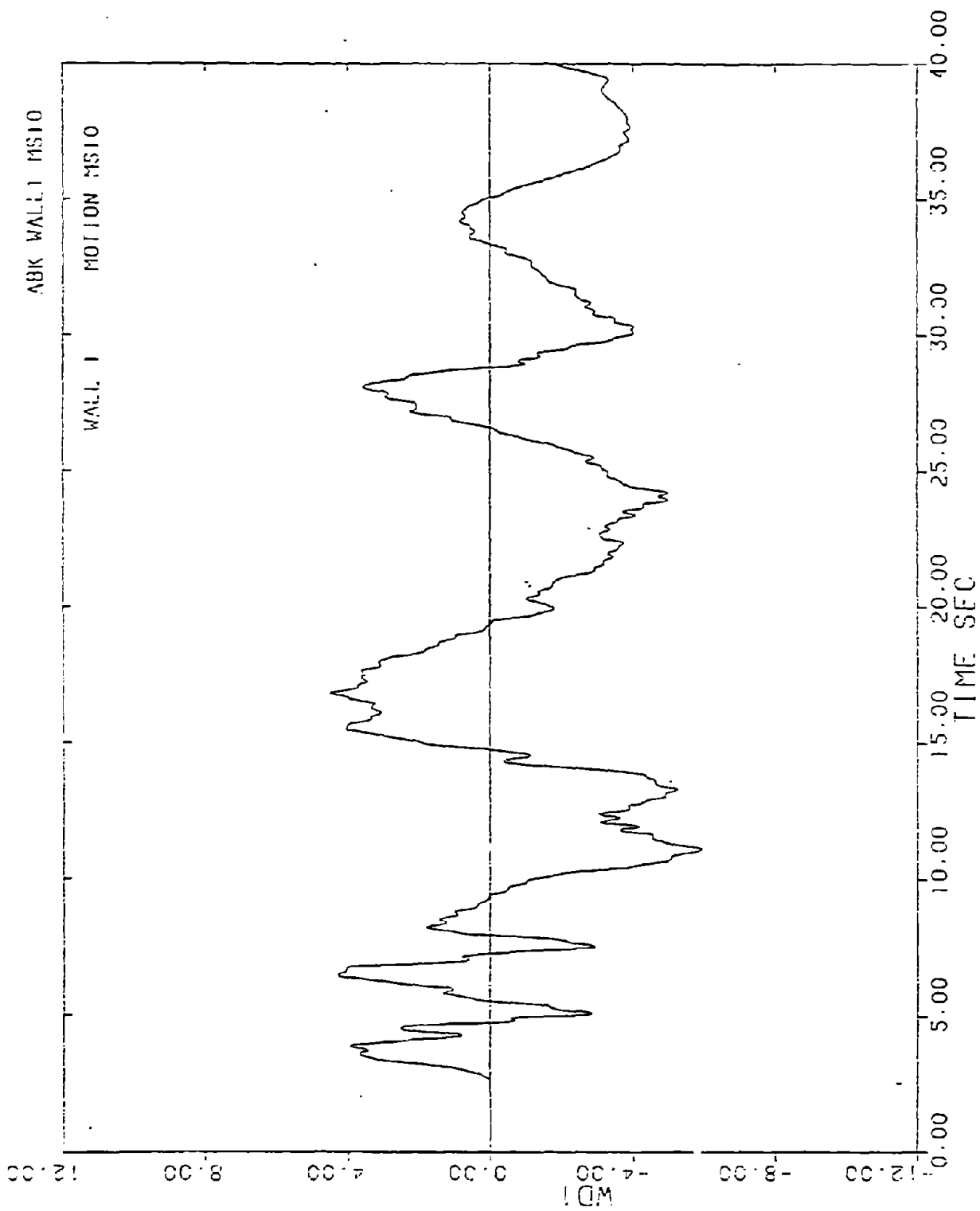


FIGURE 5-11.

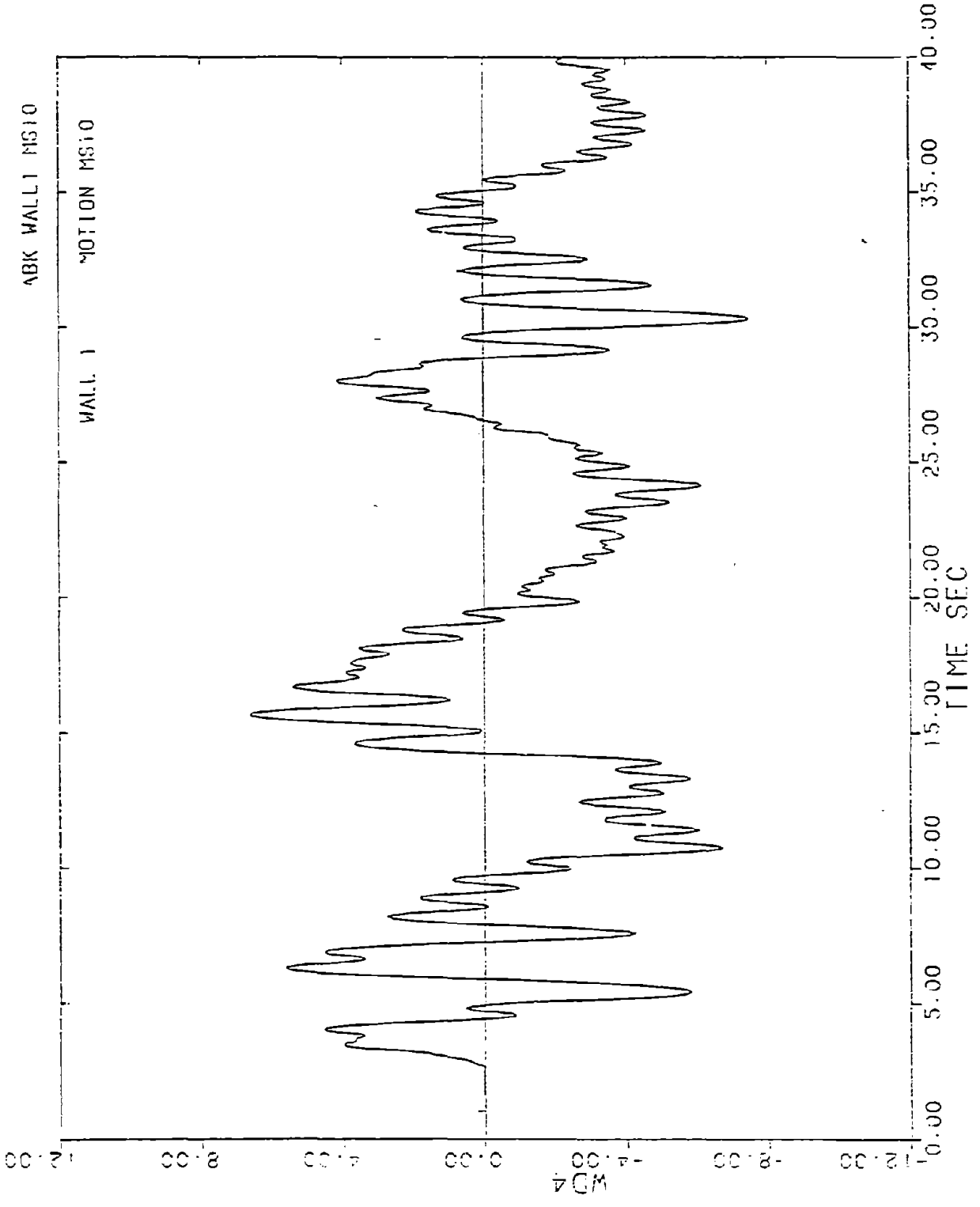


FIGURE 5-12.

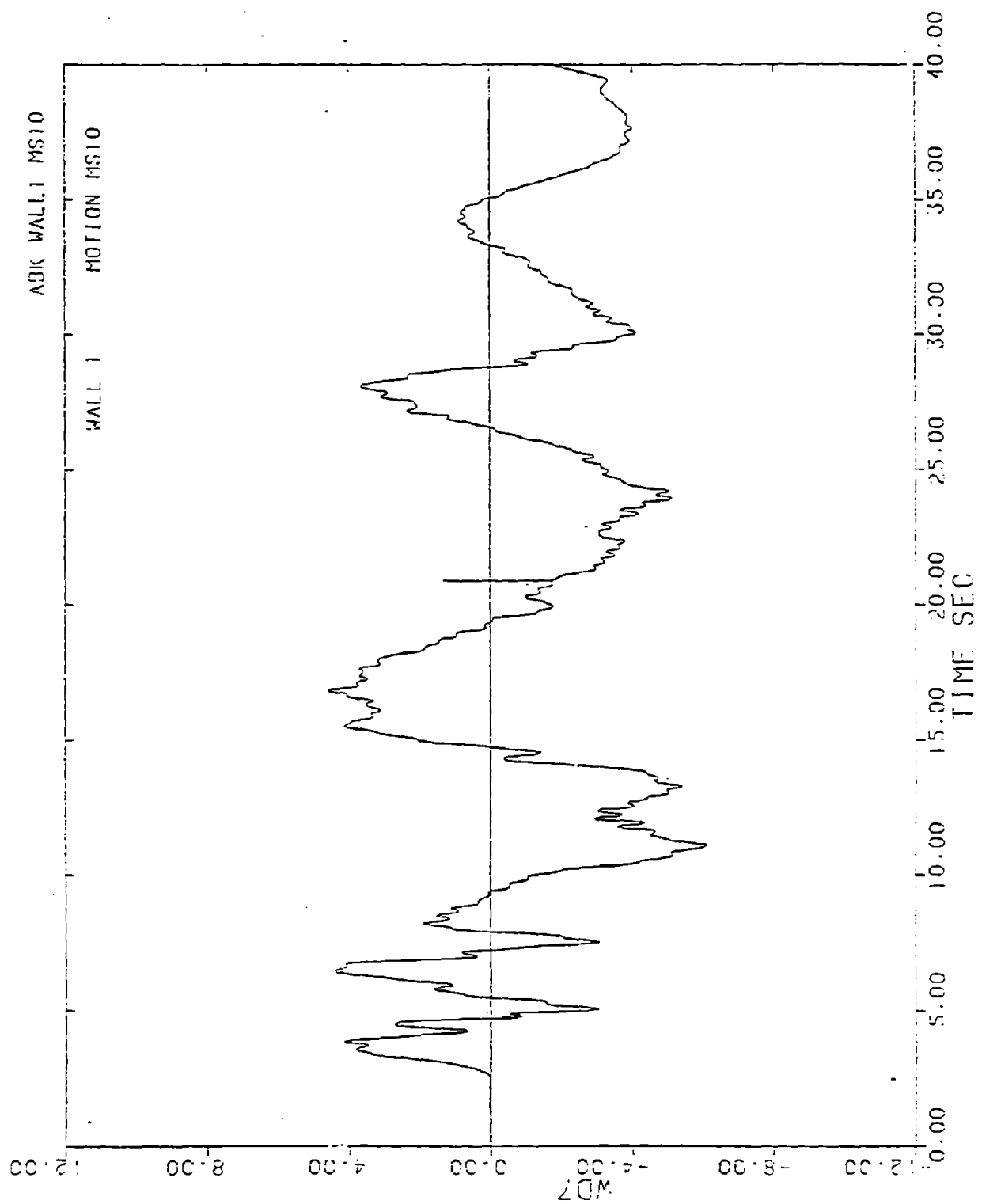


FIGURE 5-13.

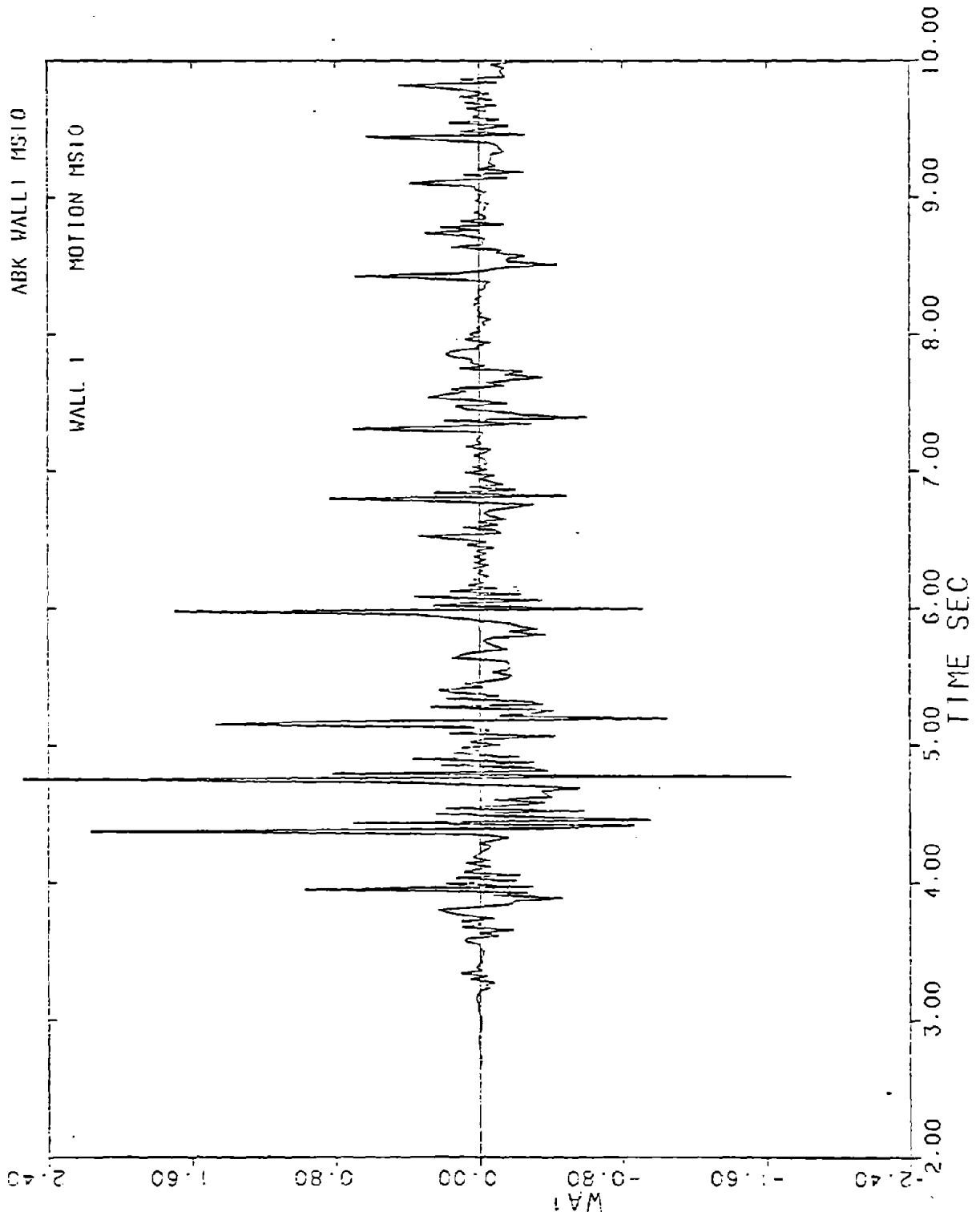


FIGURE 5-14.

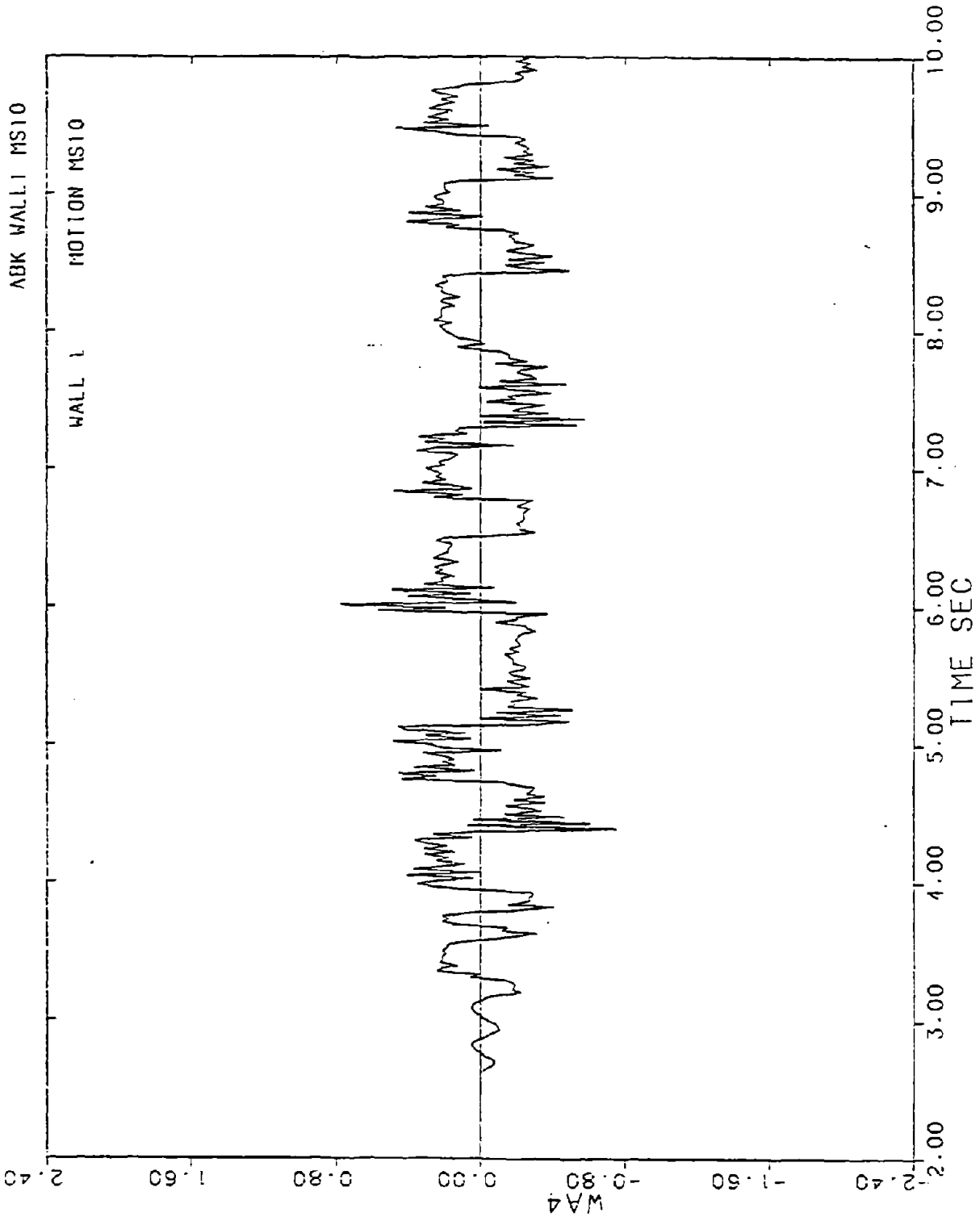


FIGURE 5-15.

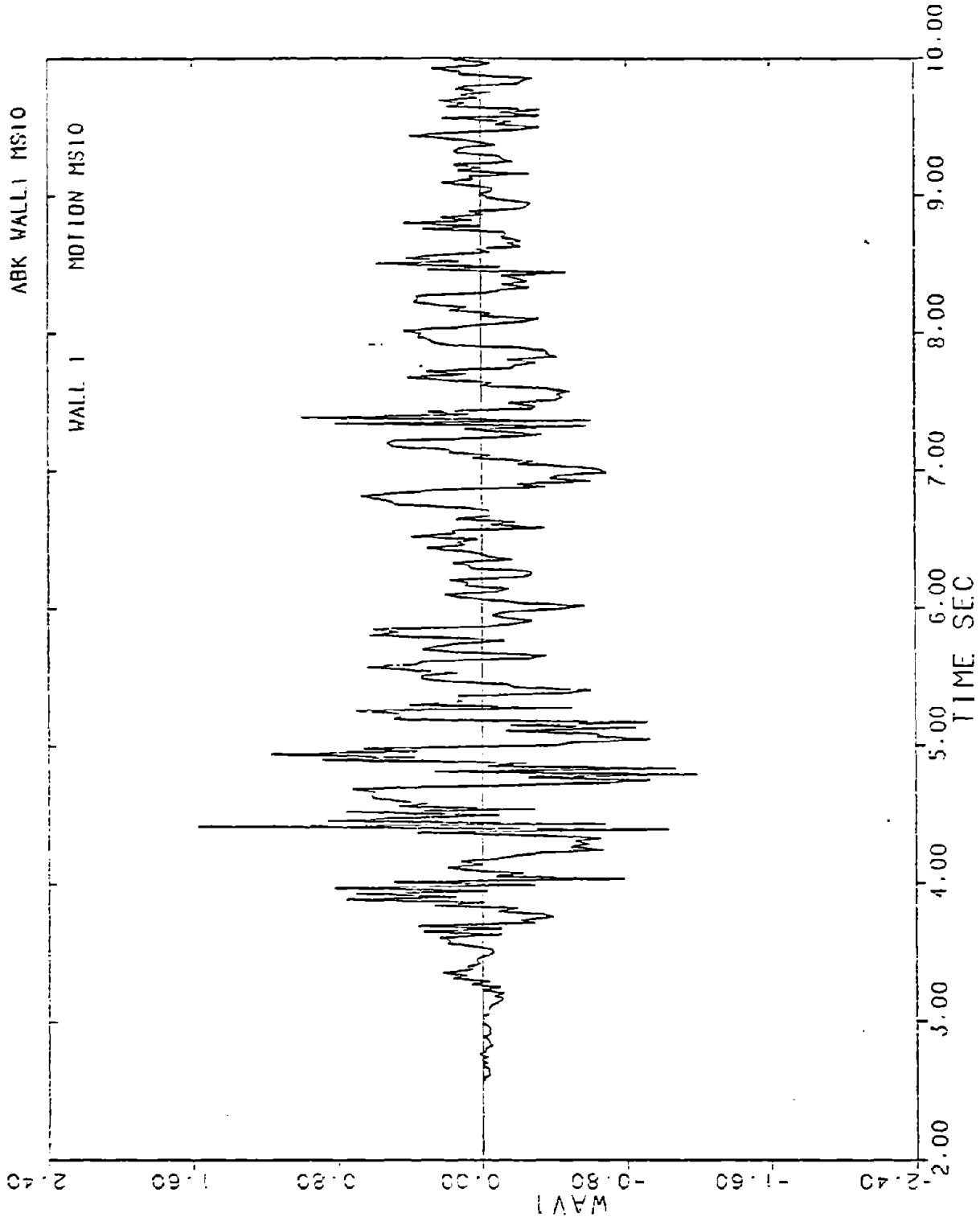


FIGURE 5-16.

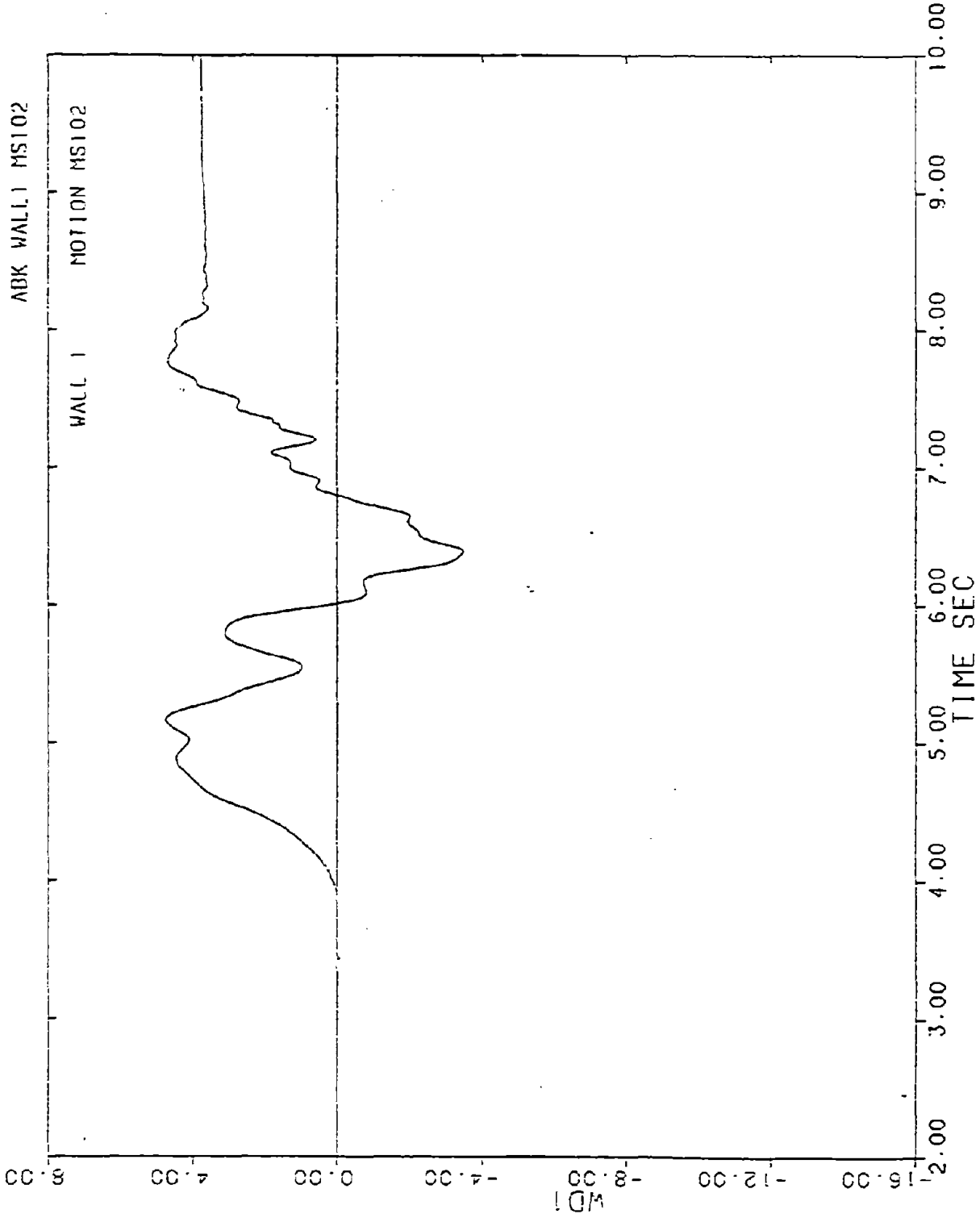


FIGURE 5-17.

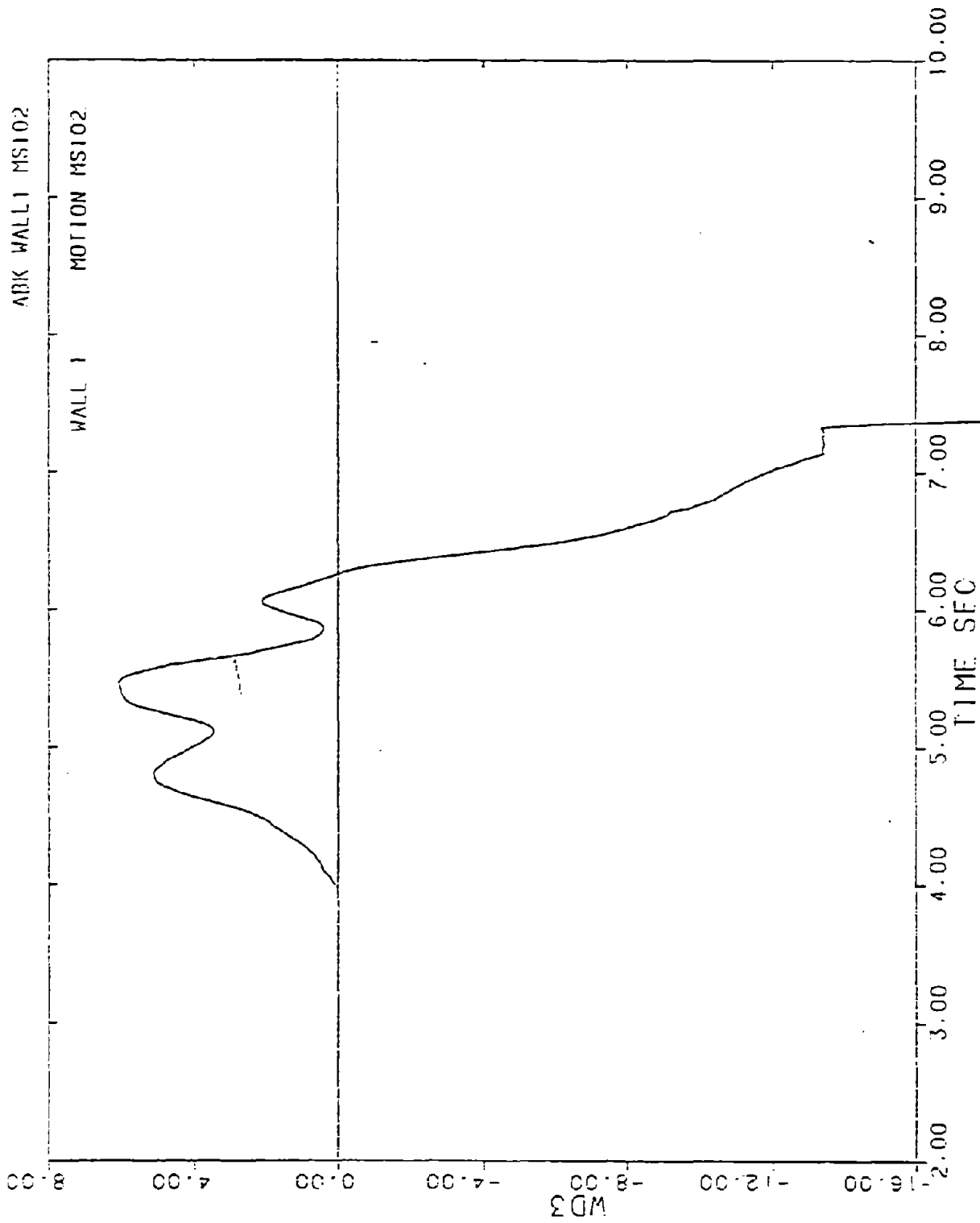


FIGURE 5-18.

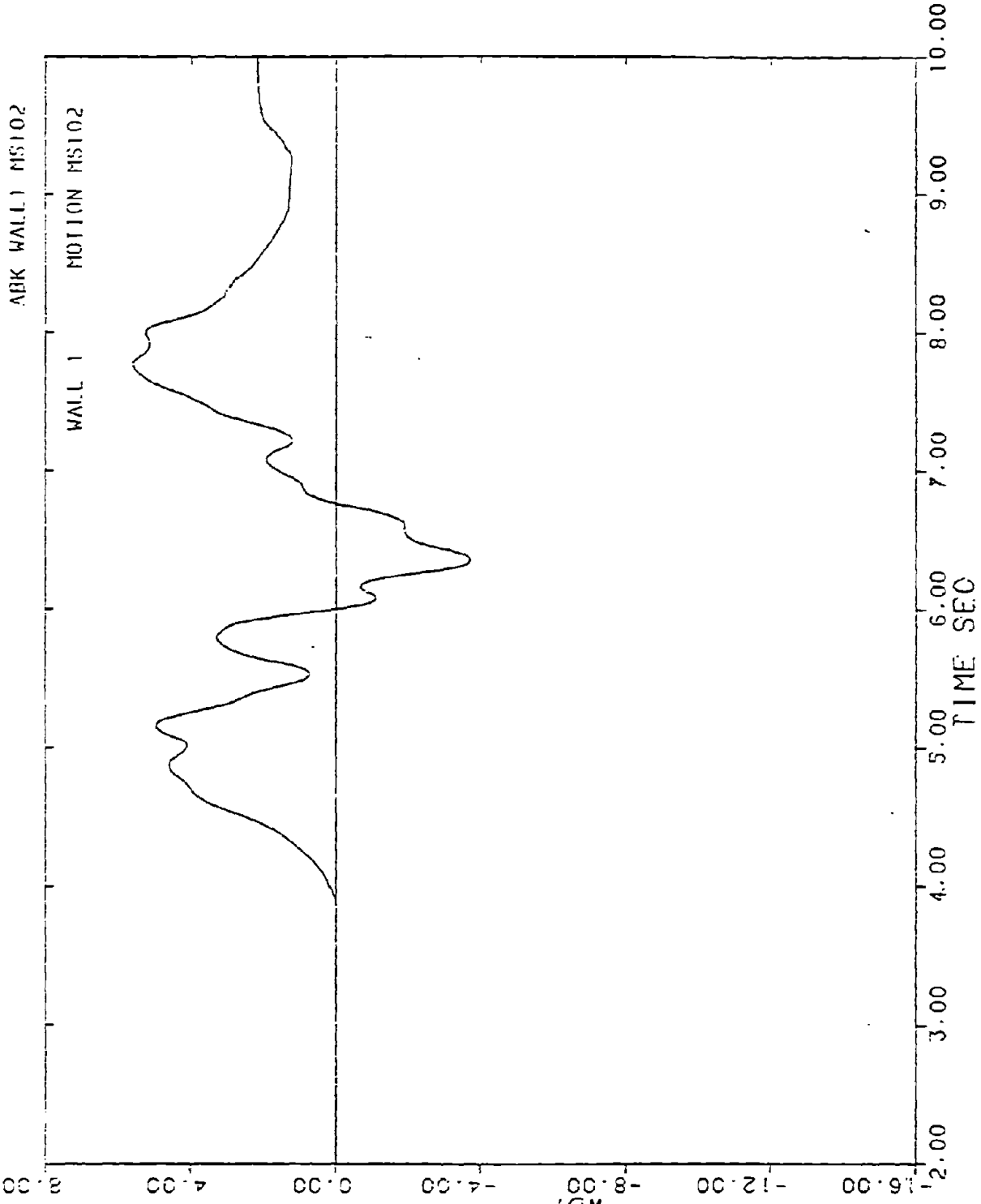


FIGURE 5-19.

12-5
WD7

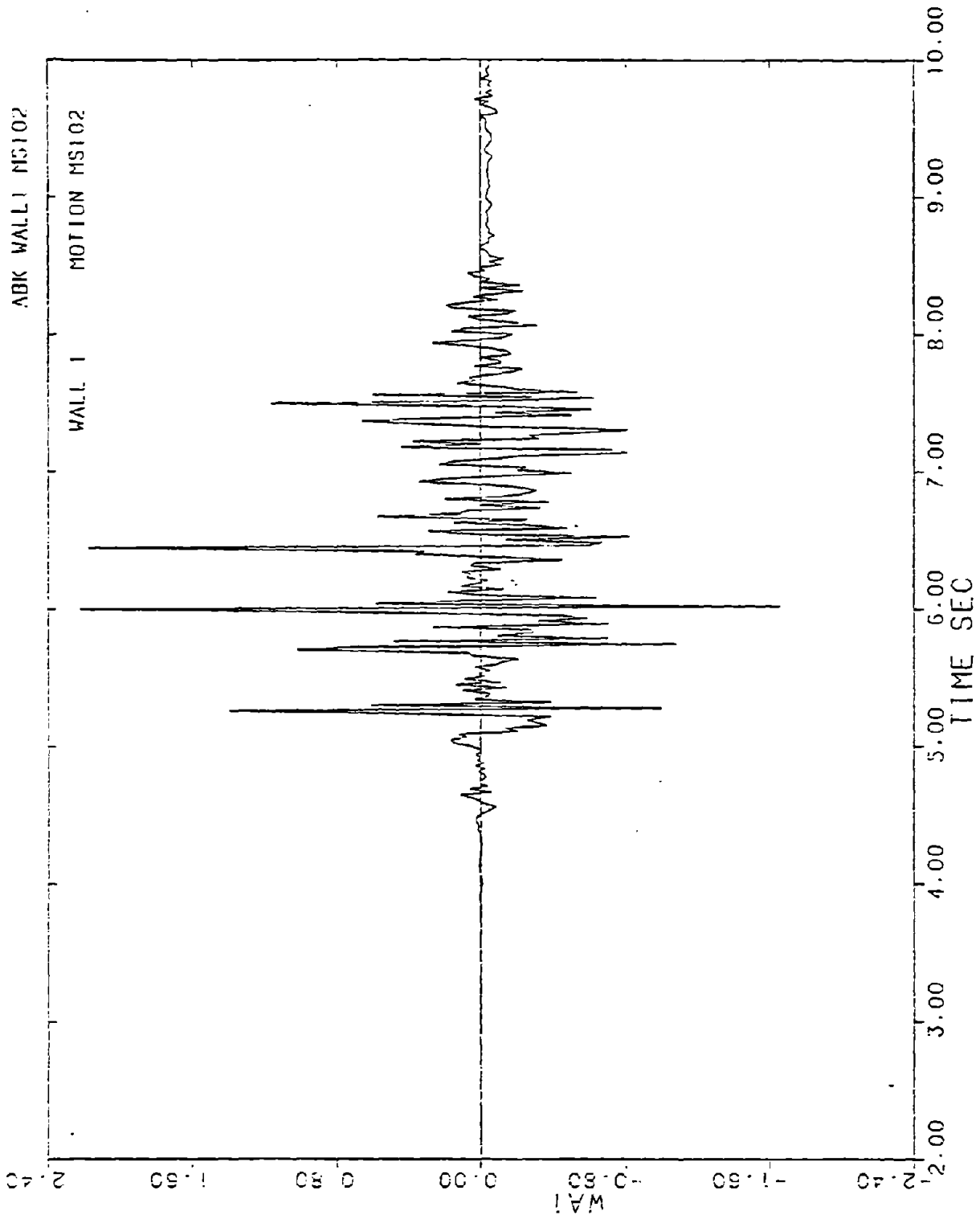


FIGURE 5-20.

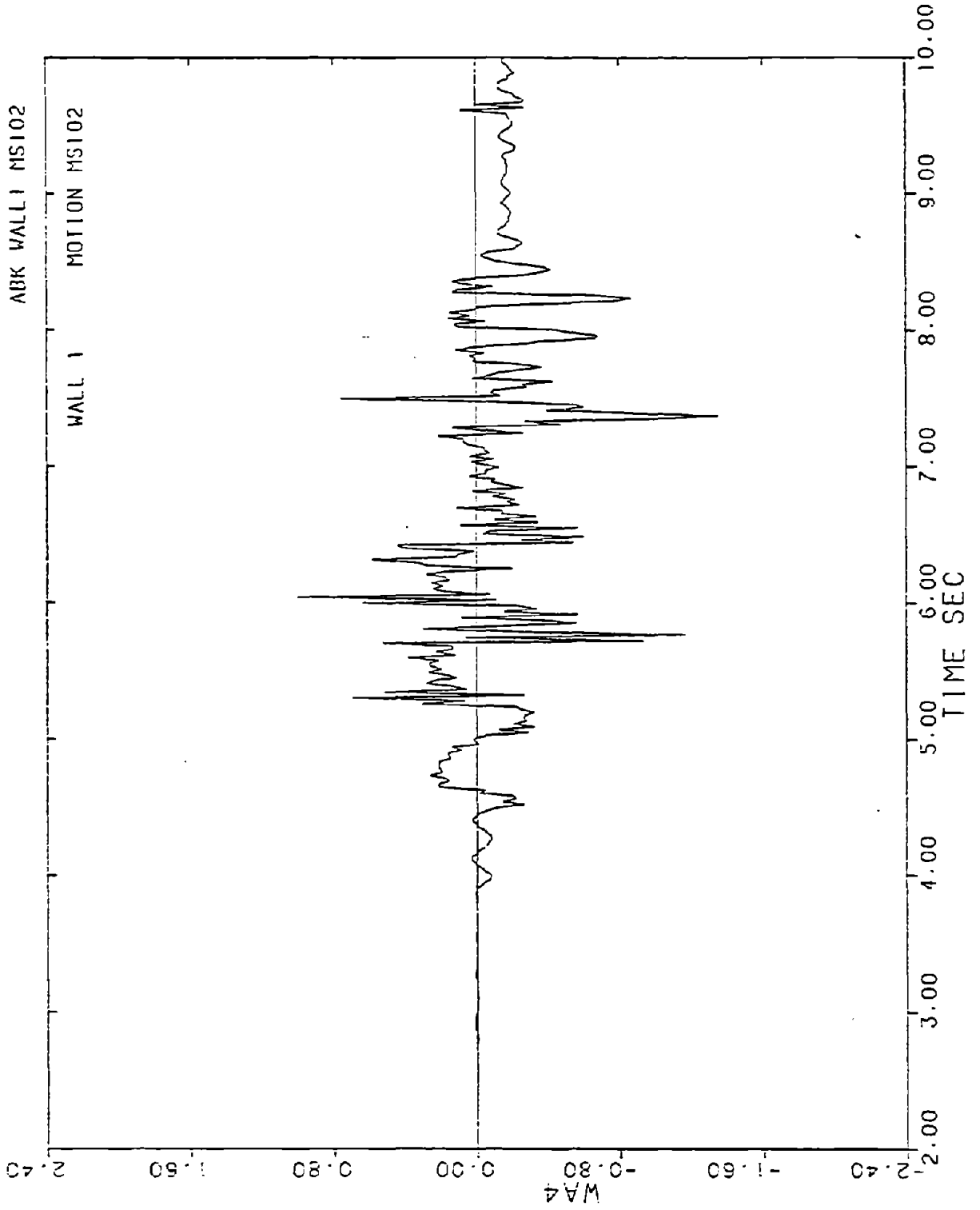


FIGURE 5-21.

5-24

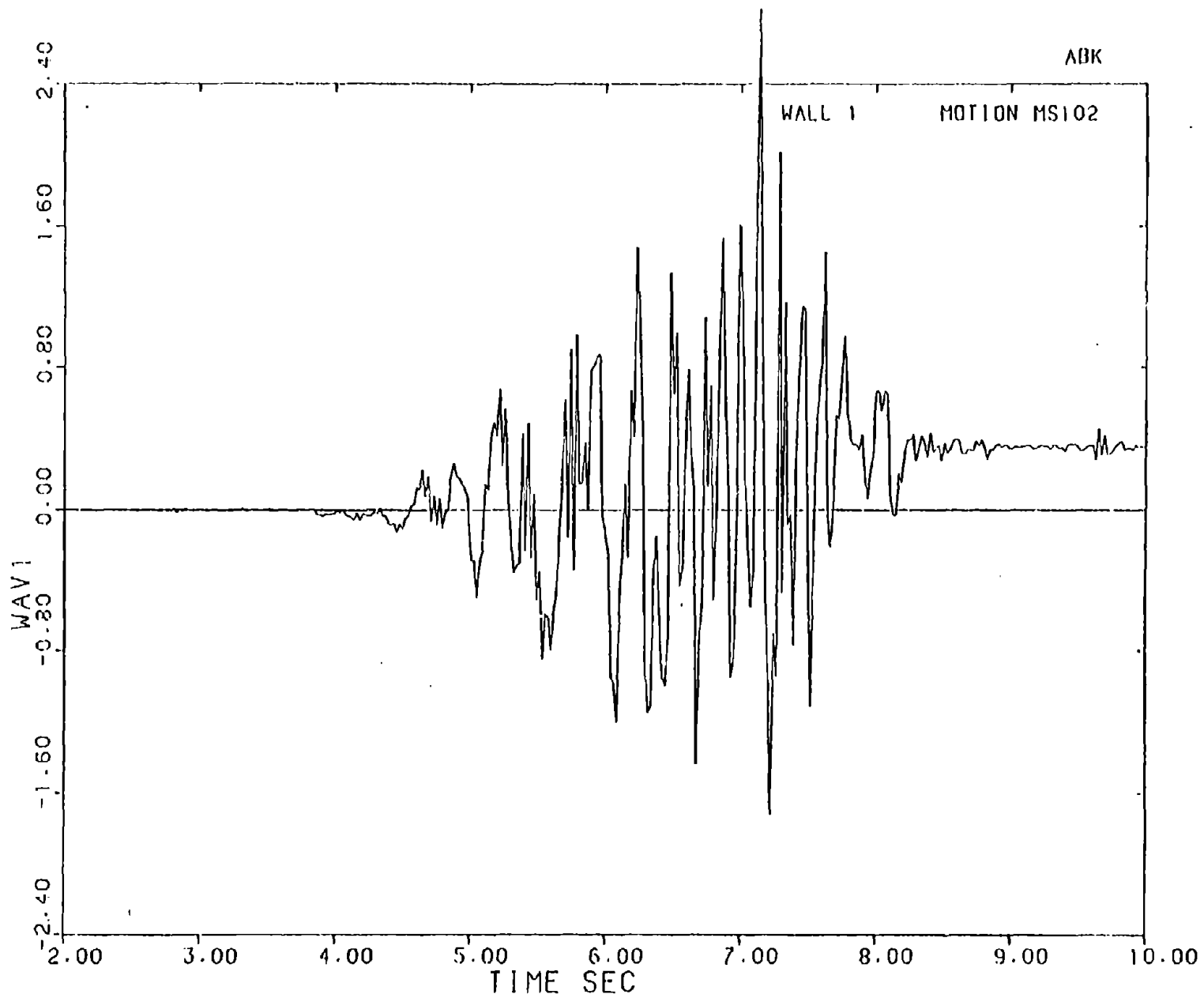


FIGURE 5-22.

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- center of wall. Max-min data indicates elastic displacement very small.
- MS 2 Elastic behavior. Test fixture base acting as fixed base. Uplift at edge of base plate.
- MS 3 Cracked 1 course above 5-6 at header course. Crack 2 courses above base plate. Max-min data indicates cracked excursion in positive direction.
- MS 4 Cycled on same cracks. Few visible excursions.
- MS 10/2 Cycled on same cracks. Period of oscillations very noticeable. Plot of input to each end is shown on Figure 5-23. Response of center of wall is shown on Figure 5-24.
- MS 6 Small excursions on same cracks.
- MS 5 Many excursions, approached instability. Lost mortar in cracked joint on south side. Offset of 1/8 in. (3 mm) to north at crack 2 courses above base plate. Plot of input displacement at end and response displacement at center of the wall is shown by Figures 5-25 and 5-26 respectively. Recorded input acceleration and response acceleration of the center of the wall for the same time period is shown in Figures 5-27 and 5-28.
- MS 9 Displaced at base, 1-1/2 in. (40 mm) west end, 1/2 in. (13 mm) east end. Wythes of brick separating in the 2 courses above base plate.
- MS 8 Excursions less than MS 9.
- MS 7 Wall collapsed to north late in time. Input displacement and excursions at center of wall are shown in Figures 5-29 and 5-30 respectively. Collapse followed deterioration of exterior wythe of brick at base.

5.3 WALL 3

- MS 3 Elastic behavior observed.
- MS 4 Elastic behavior. Crack at base.
- MS 10/2 Crack at first course above 2-3, 47 in. (1.2 m) above base. Crack at mid point of 5-5, 103 in. (2.6 m) above base.

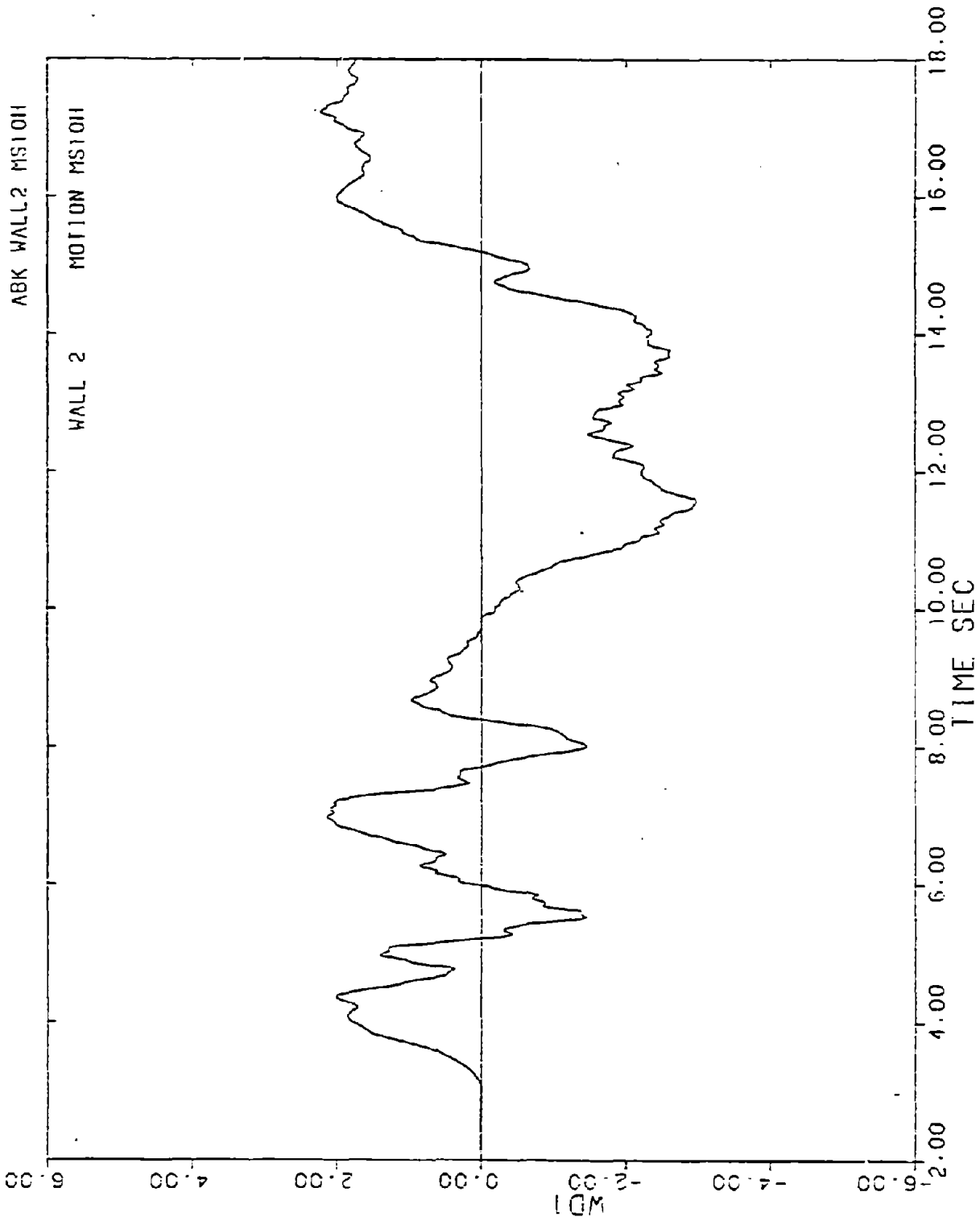


FIGURE 5-23.

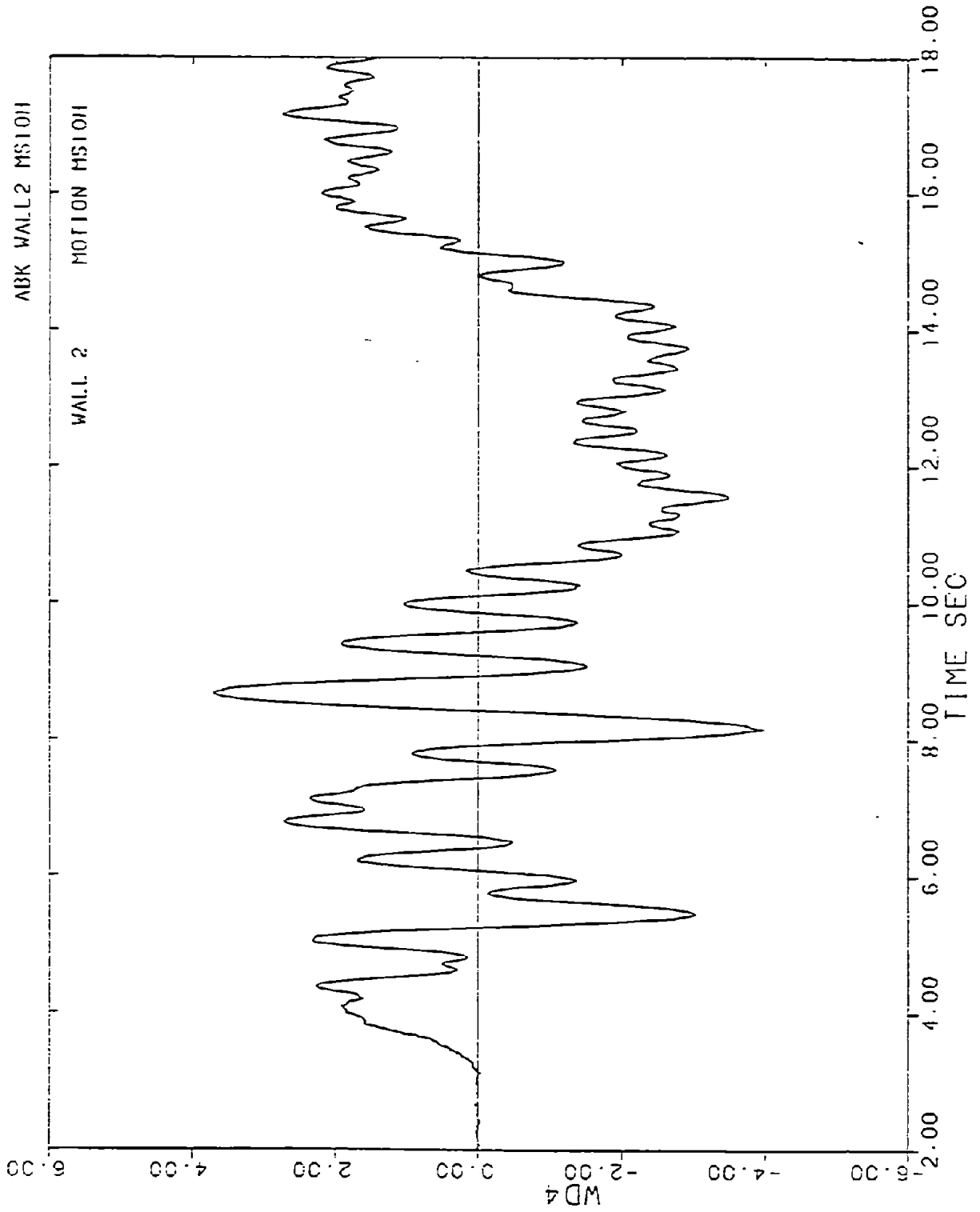


FIGURE 5-24.

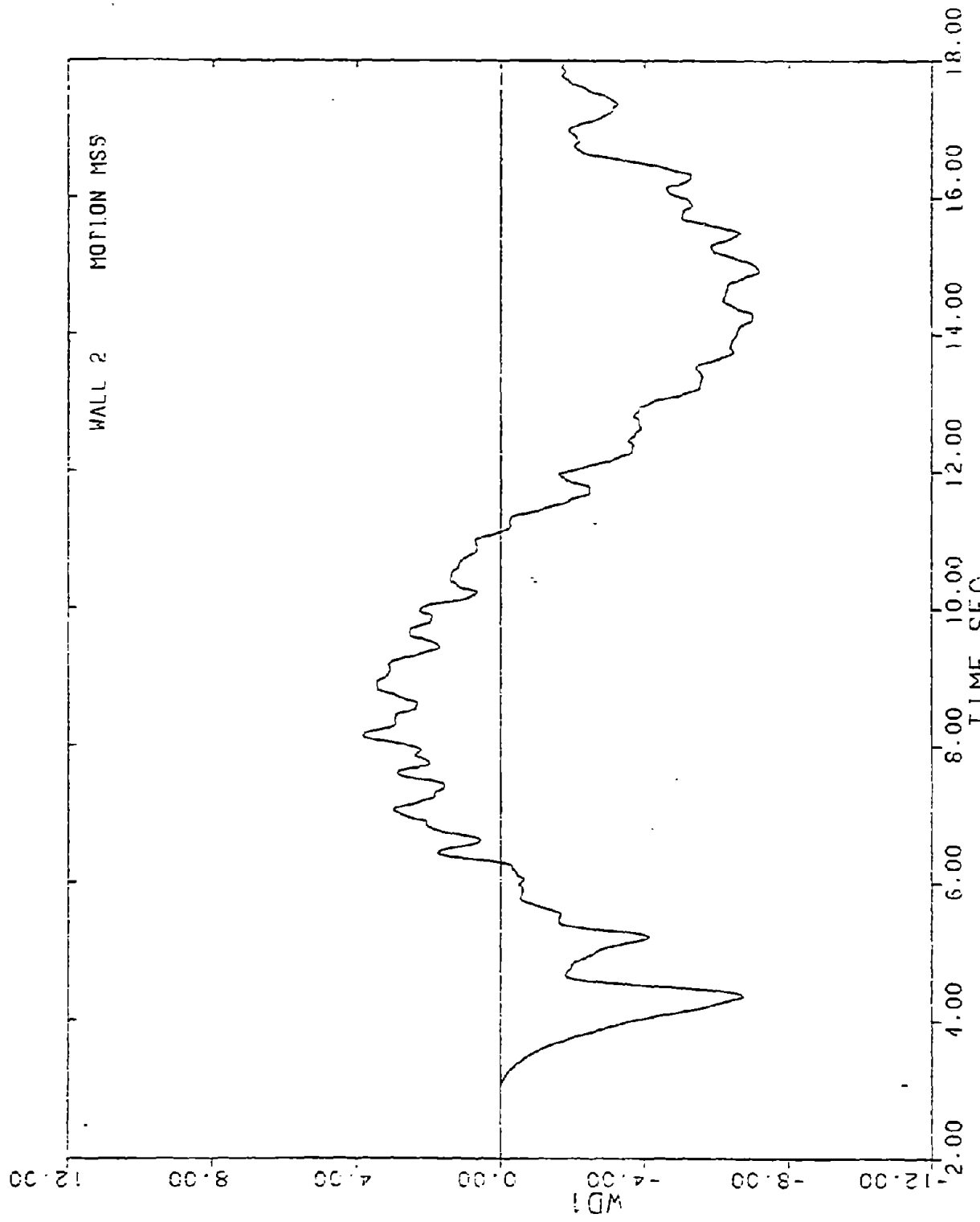


FIGURE 5-25.

62-5

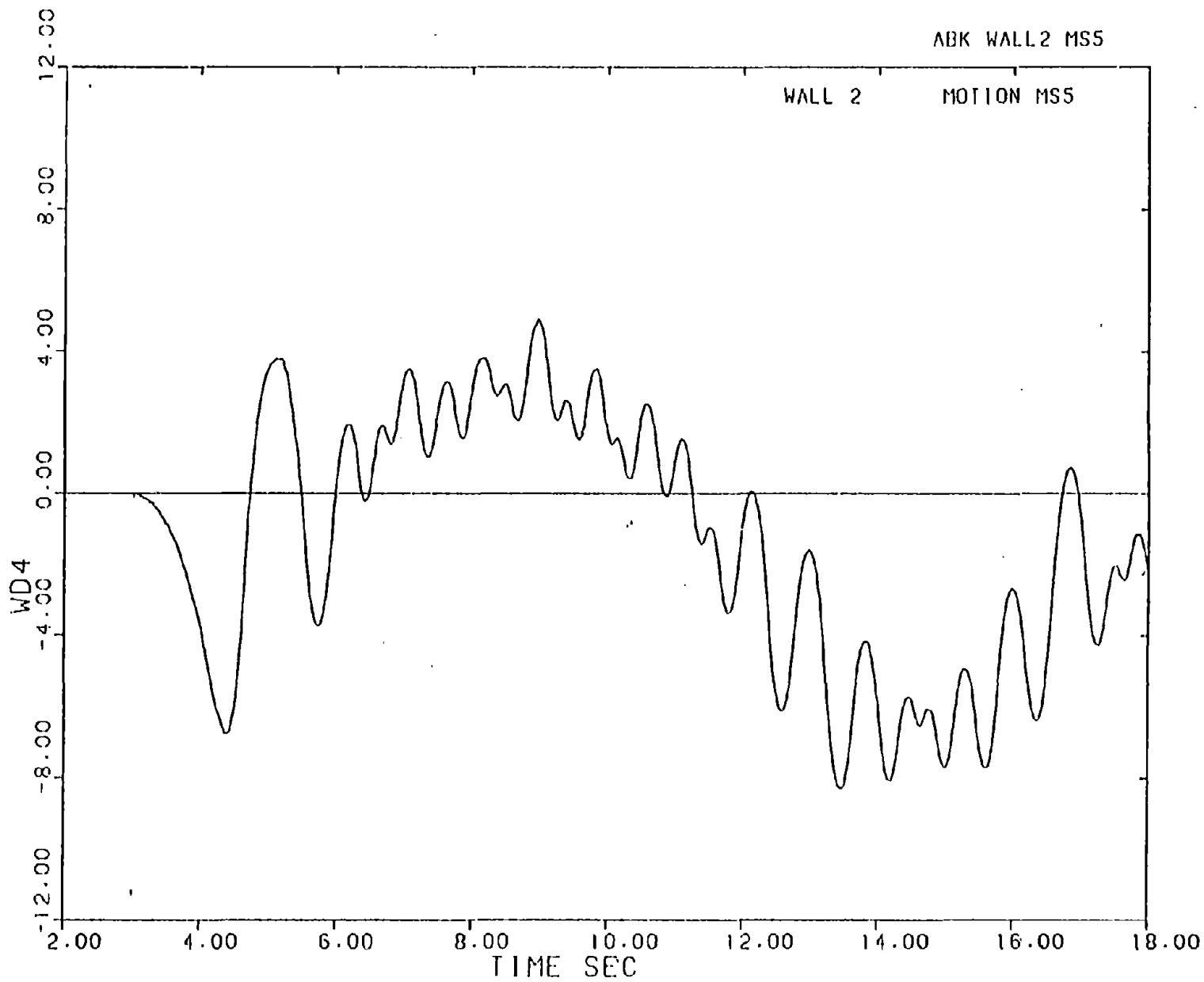
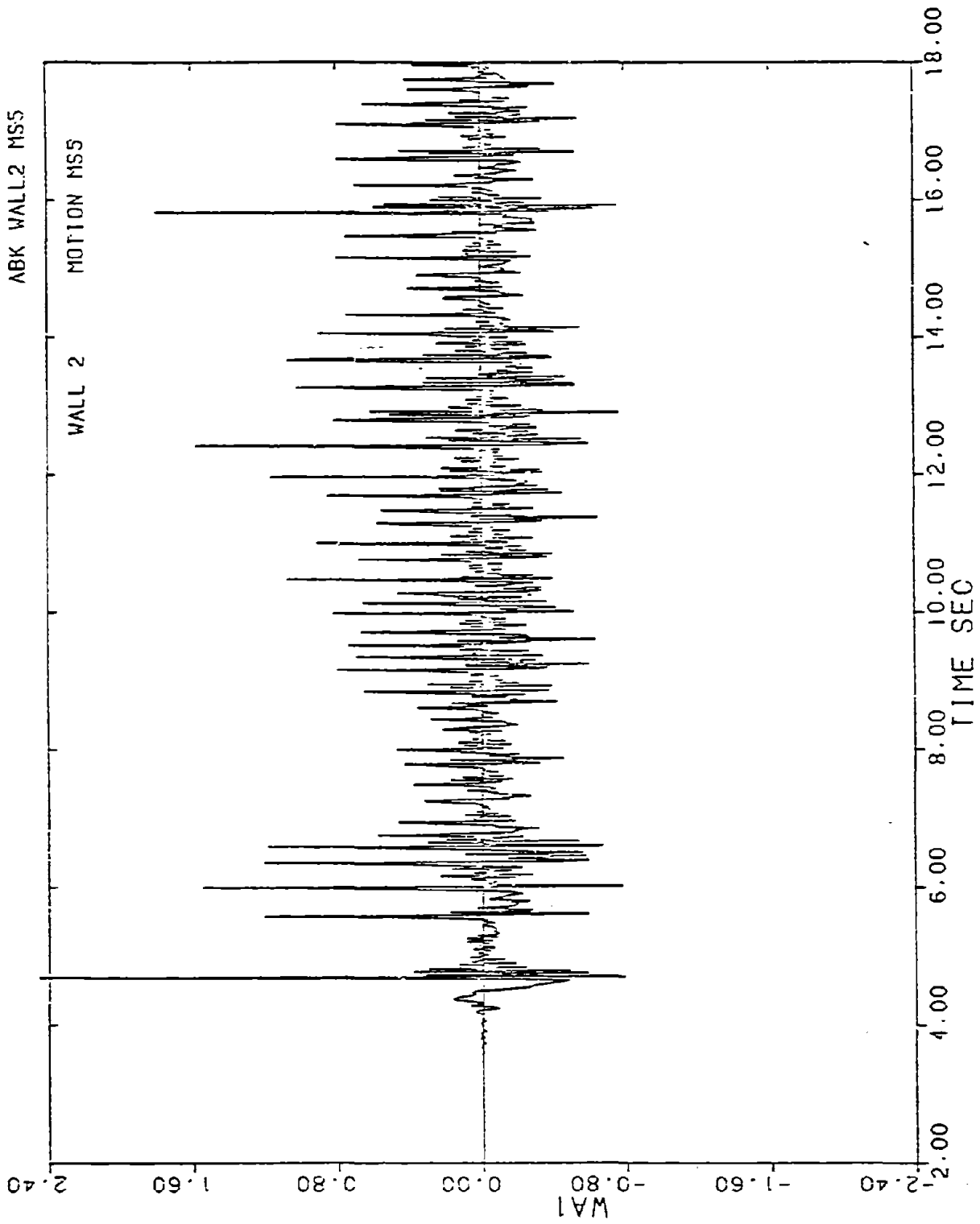


FIGURE 5-26.

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5-30

FIGURE 5-27.

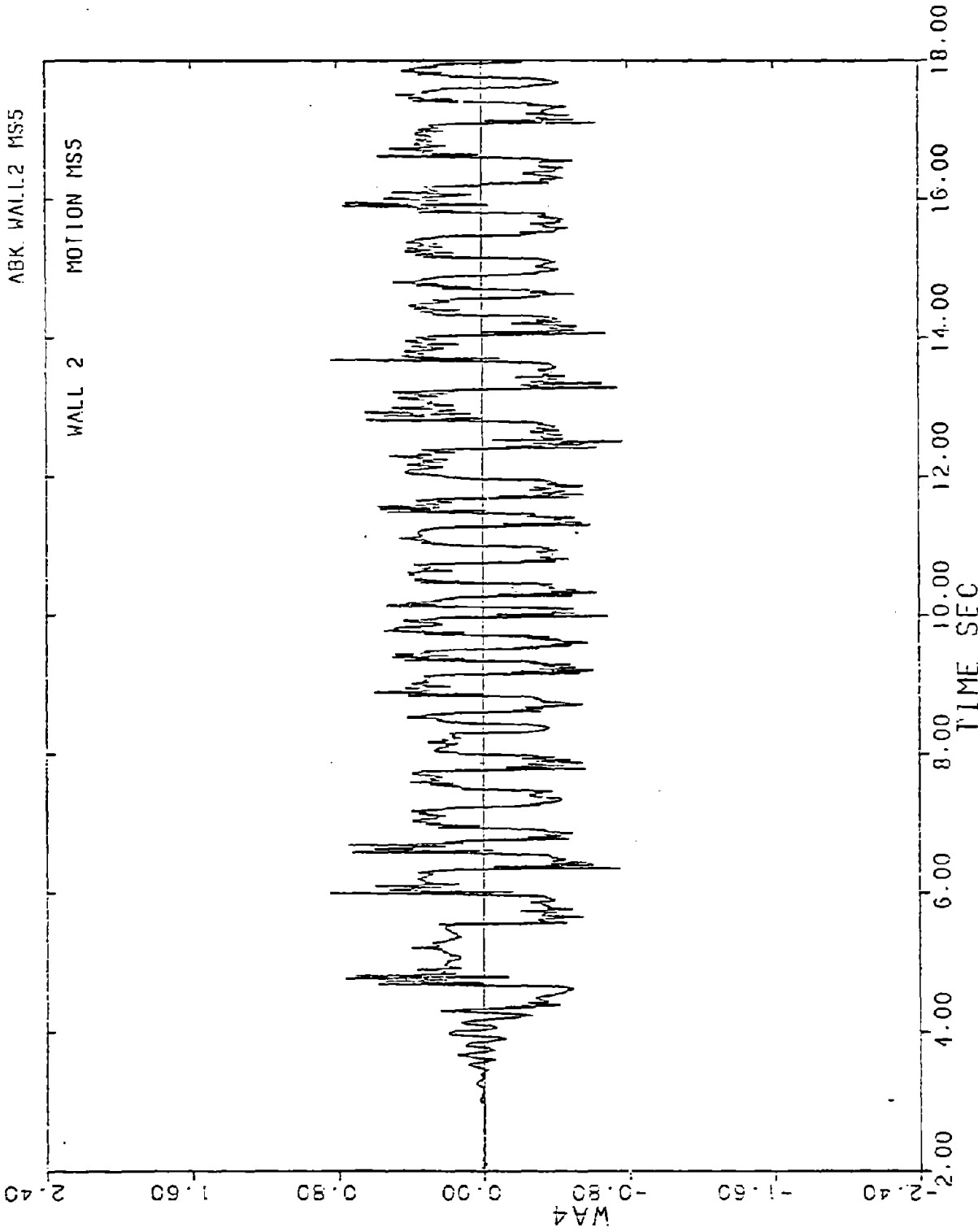
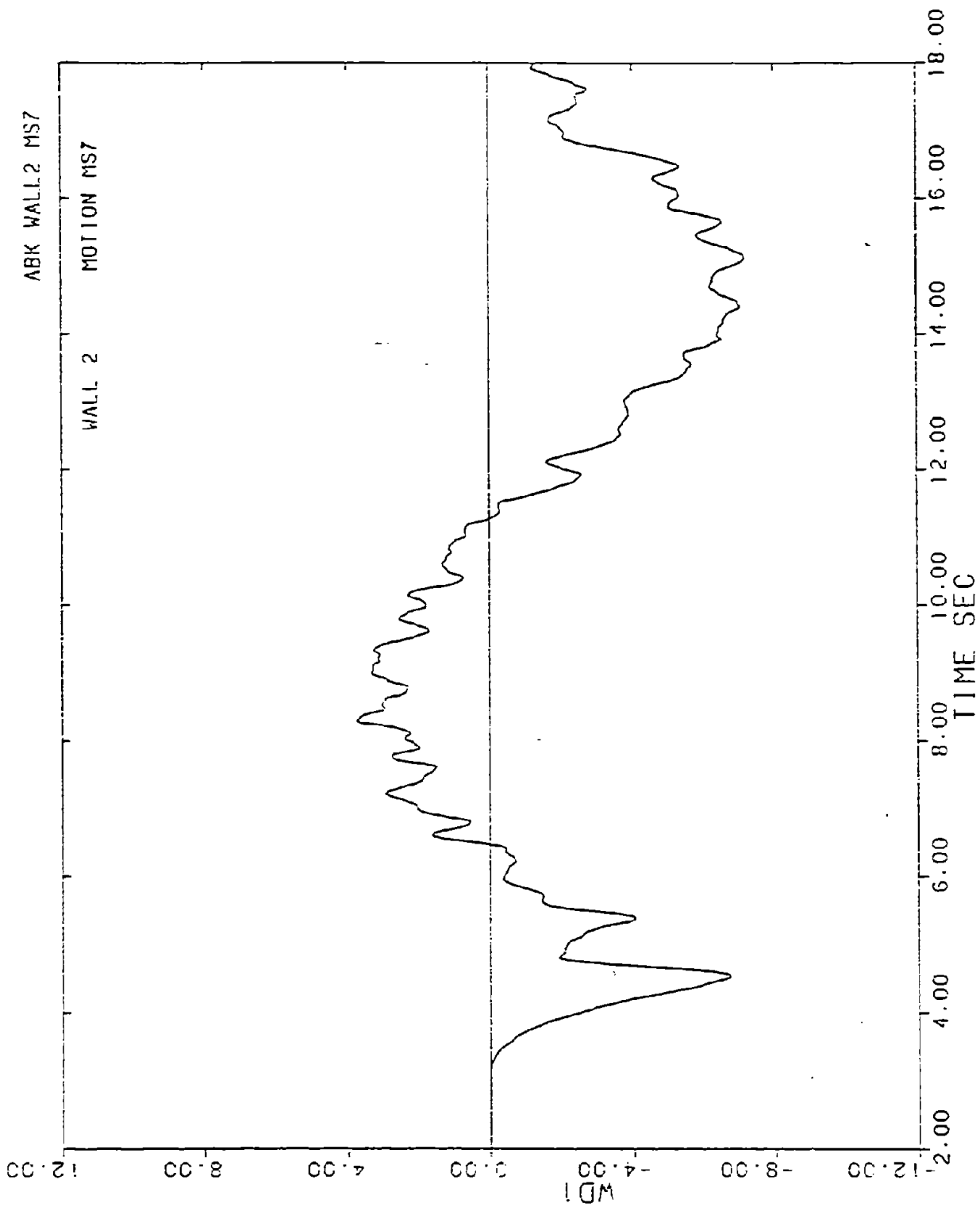


FIGURE 5-28.

13-5



5-32

FIGURE 5-29.

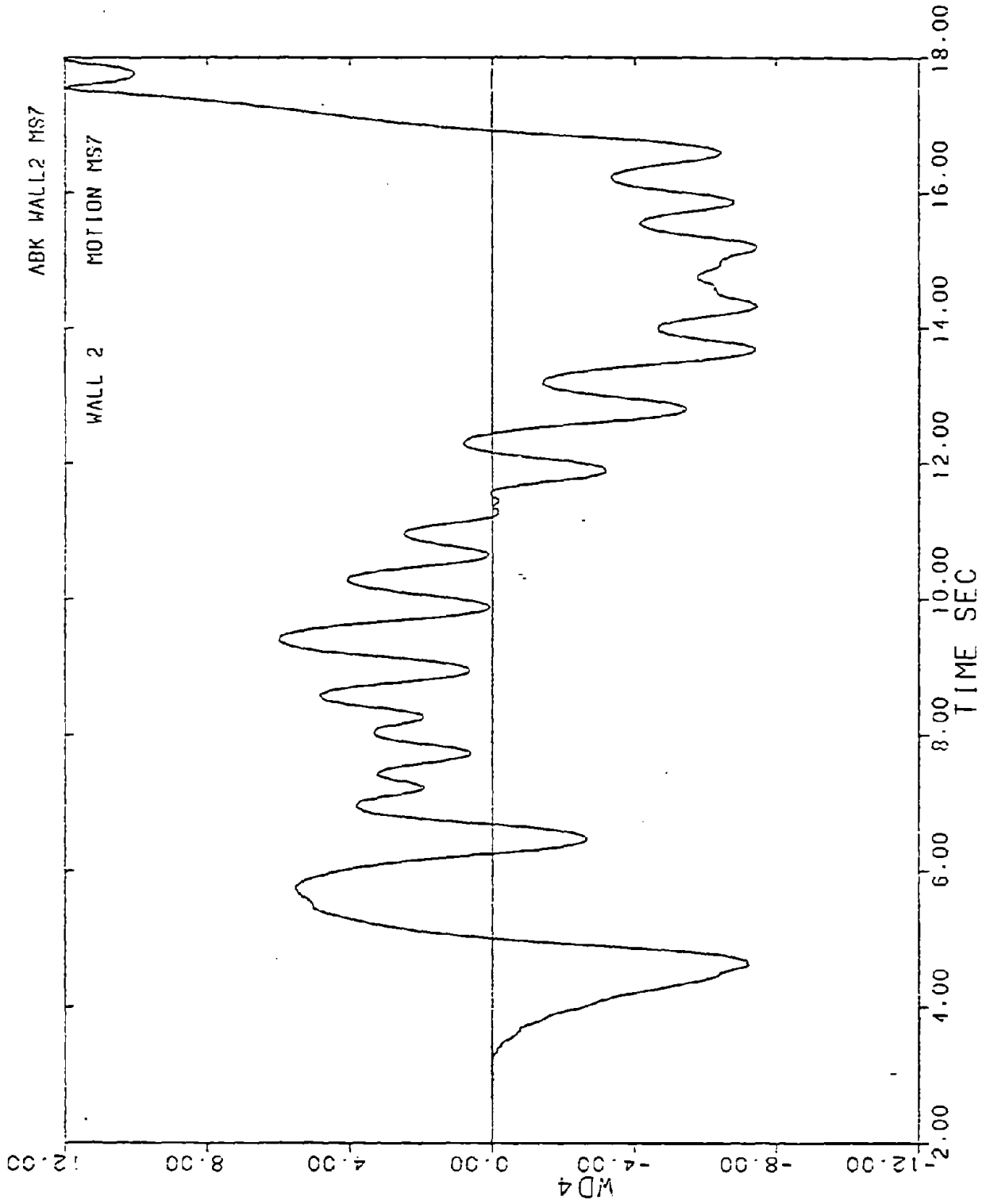


FIGURE 5-30.

- MS 6 Crack at 3rd course above 5-4; 3rd course above 7-6.
- MS 5 Spalling of brick surface at crack above 7-6. Wall cycled on crack above 5-4. Offset to north on crack at middle of 7-7. Max-min data indicates minimal excursions in negative direction. Large excursion at WD5 in positive direction.
- MS 9 Cycled on crack at base and above 7-6. Brick face spalled above 7-6. During test 3 different cracks opened. Max-min data does not indicate large excursions.
- MS 8 Cycled on many cracks at wall base, 3-2, above 5-4, above 7-6. Max-min data does not indicate large excursions. Acceleration data at mid-height, WA4, indicates acceleration is in excess of 2 g.
- MS 7 Cycled on cracks three courses below 7-6, 3 courses above 7-6, 1/2 in. offset at this crack, much spalling of brick face this crack. Max-min data indicates significant cracked excursion in middle of wall, WD2, WD3, WD4. Acceleration data at mid-height of wall indicate response of under 2 g.
- MS 10 Cycled on cracks as noted previously. Max-min data does not indicate significant excursions. Max-min acceleration data at center of wall less than two previous tests.
- MS 10.2 Wall collapsed on early input displacements.

5.4 WALL 4

Wall 4 was tested with MS 1 through 5 prior to an equipment malfunction that damaged the wall extensively. Max-min data indicated that the data acquisition was erratic and not of significant value.

5.5 WALL 5

- MS 1 through MS 7. Elastic behavior. Max-min data for MS 5 and 7 indicates response acceleration at center of wall 1.3 to 1.5 g.
- MS 8 Crack at 8-9. Crack at base not noted. Max-min data

indicates small excursions. Very high response acceleration at WA4.

- MS 9 Large excursions on 8-9. Mortar spalled on both sides of wall on excursions.
- MS 7.1 Wall collapsed on displacement at crack 8-9. Wall collapsed on first reversal of large displacement input.

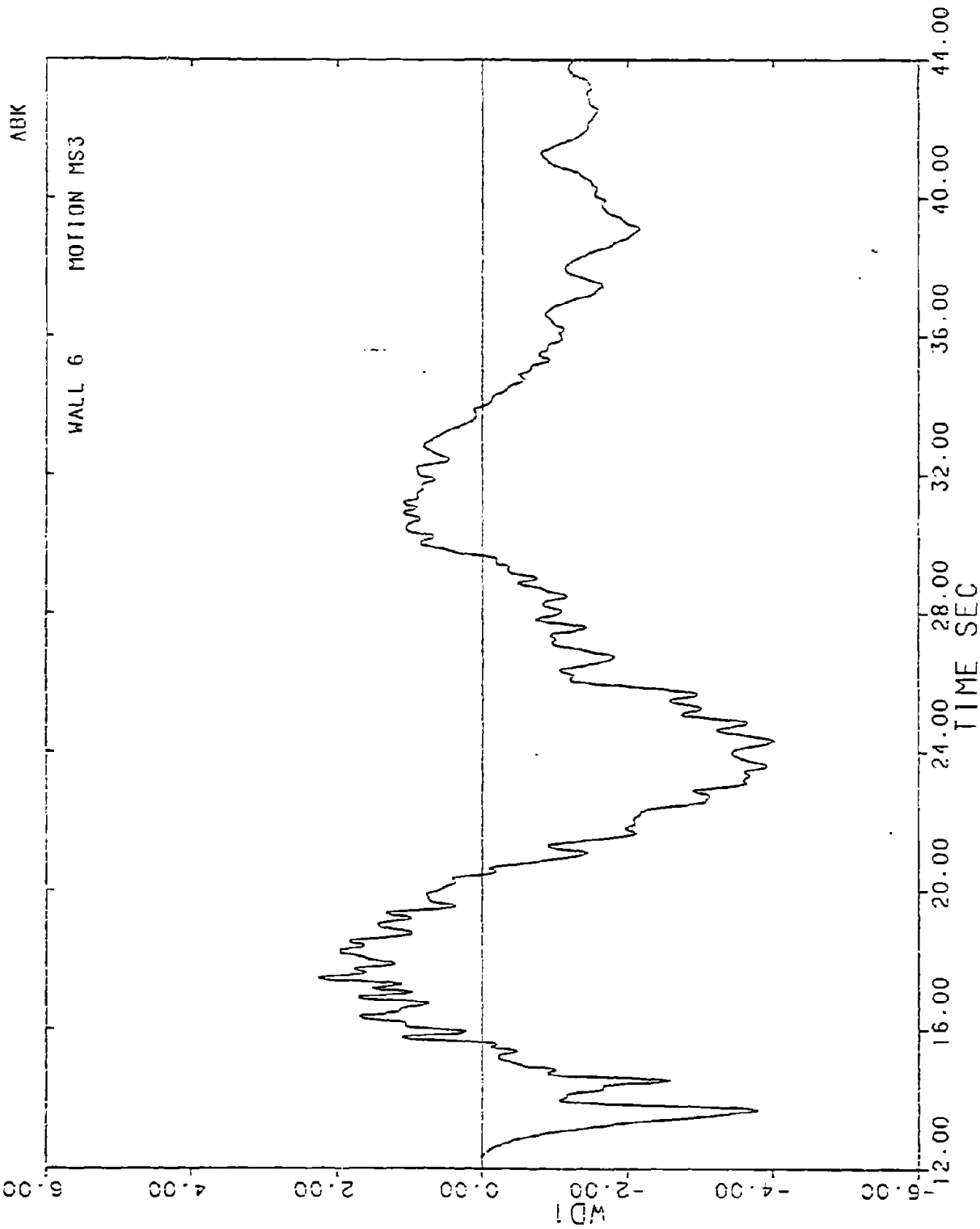
5.6 WALL 6

Points describing cracks in the wall are joints between concrete block units numbered above the base. The first block above the base is 1, the top block is block 15. Height of courses is 8 in. (200 mm).

- MS 1 Response of wall elastic.
- MS 2 Elastic response.
- MS 3 Cracked at 0-1, 10-11, cycled 3 to 4 times in each direction. Plots of input displacement WD1 on Fig. 5-31, WD7, Fig. 5-33, and displacement of the wall adjacent to the observed crack WD3, Fig. 5-32, are shown for the time interval containing max-min displacements. Input acceleration at the top of the wall WA1, response acceleration at the center of the wall, WA4, and vertical acceleration of the superimposed load, WAV1, are shown on Figures 5-34 through 5-36 for the same time period.
- MS 4 Several cycles on same cracks as MS 3. Max-min data indicates smaller excursions.
- MS 5 Wall collapsed on 2nd cycle of input displacement.

5.7 WALL 7

- MS 1 Crack at 12-13. No crack visible at base.
- MS 2 No visible hinging at base. Very minimal excursions at crack 12-13.
- MS 3 Cycled visibly 10 to 15 times on crack at 0-1 and 12-13. Very minor spalls on south face.
- MS 4 Smaller, fewer excursions than MS 3.



5-36

FIGURE 5-31.

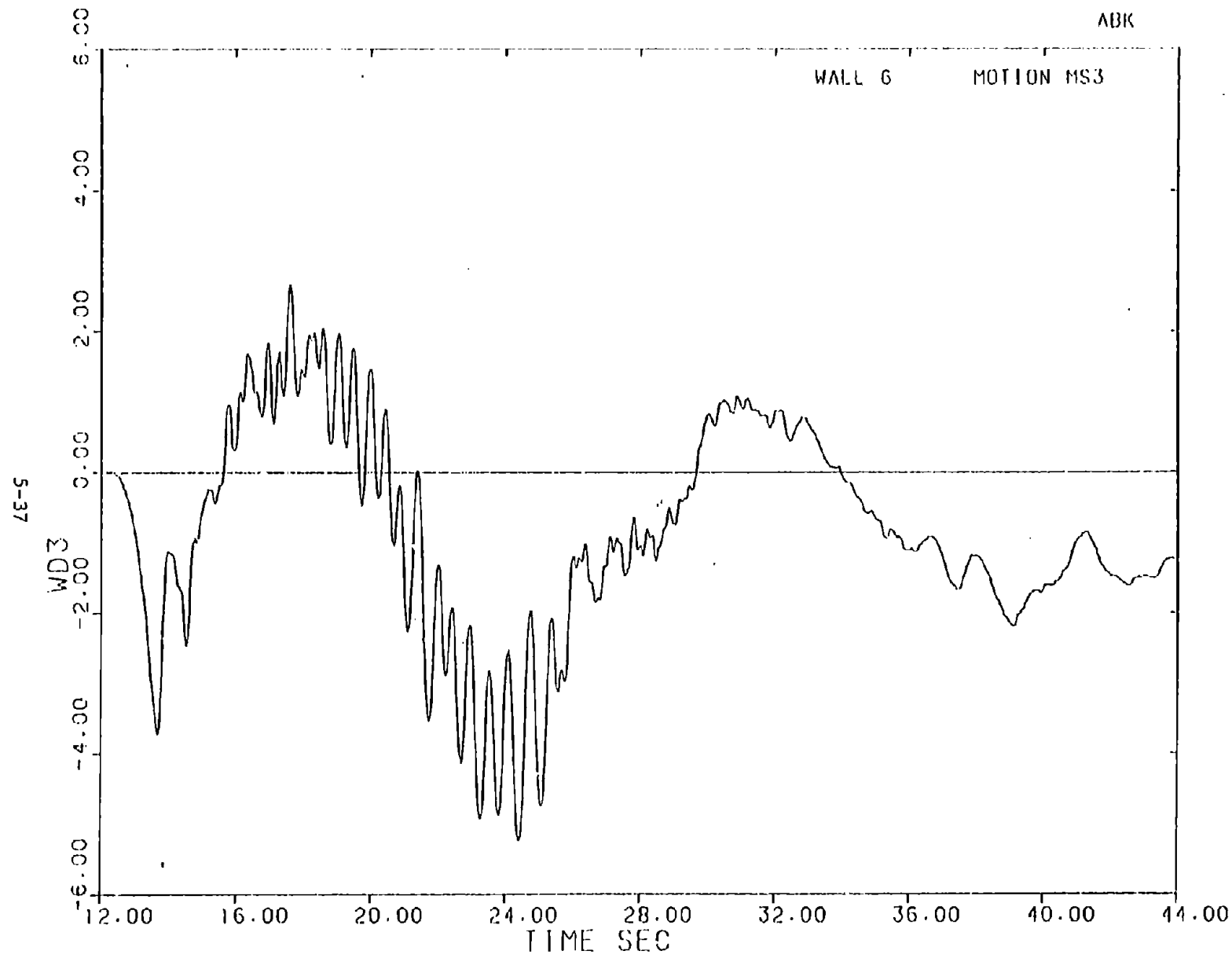


FIGURE 5-32.

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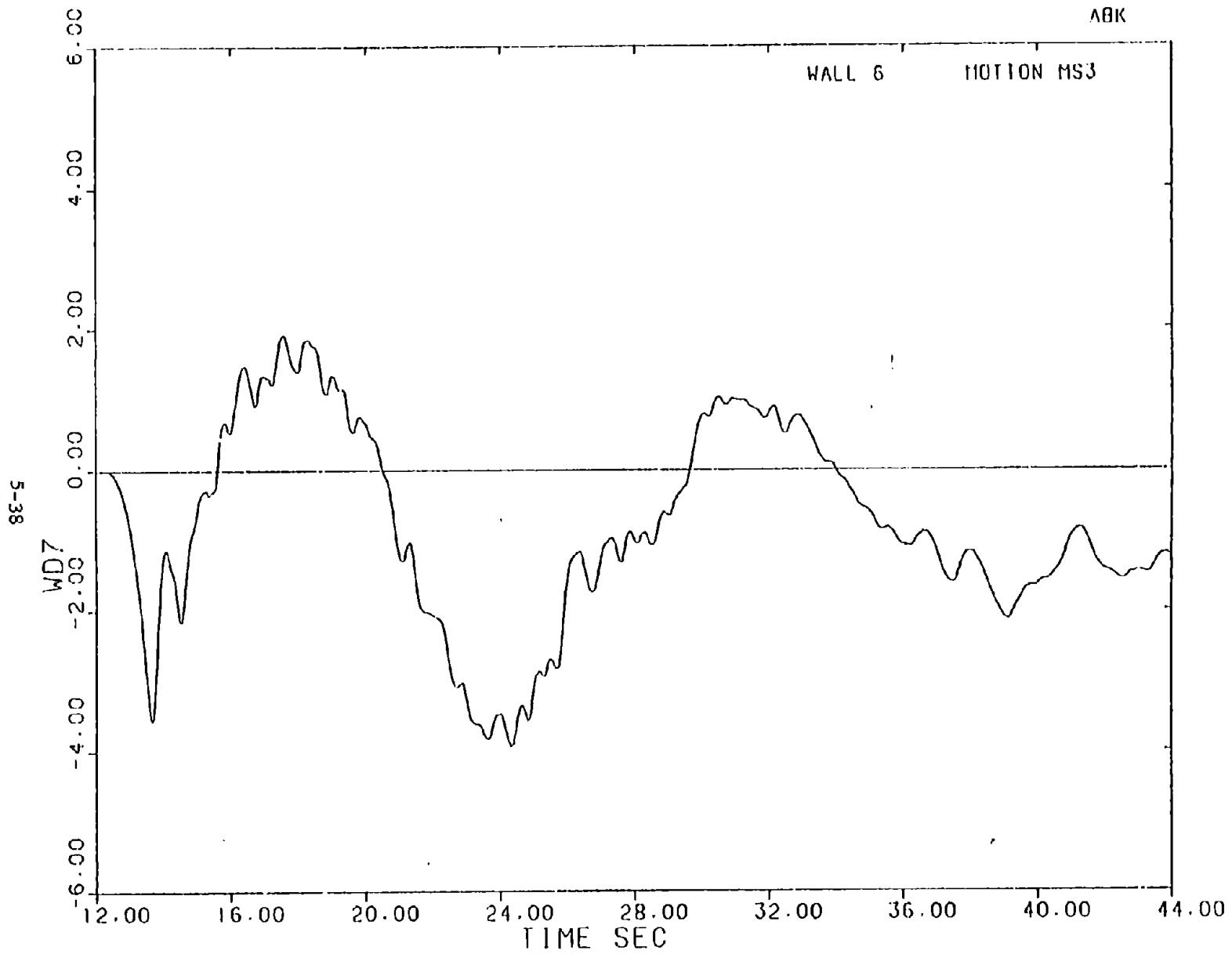


FIGURE 5-33.

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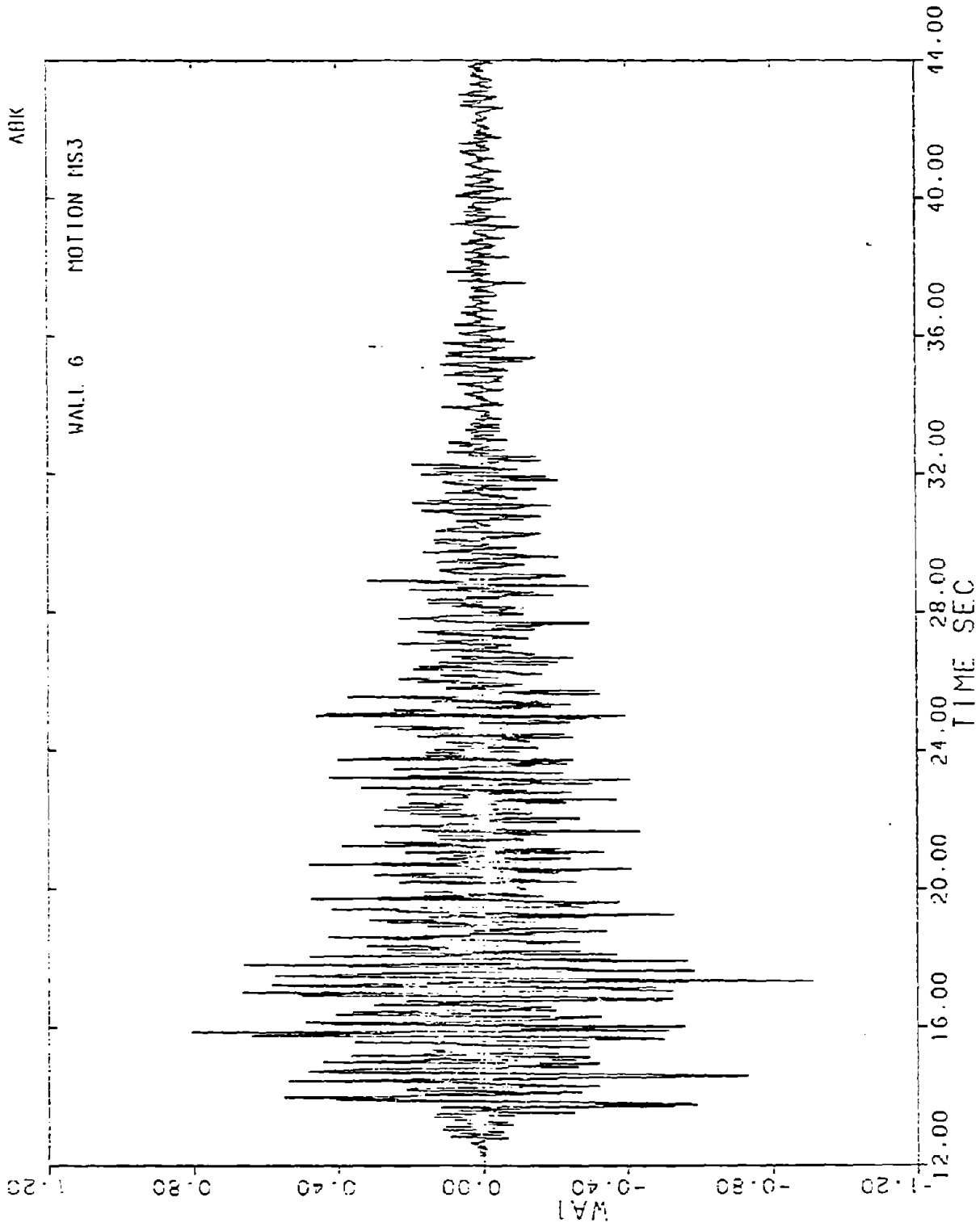


FIGURE 5-34.

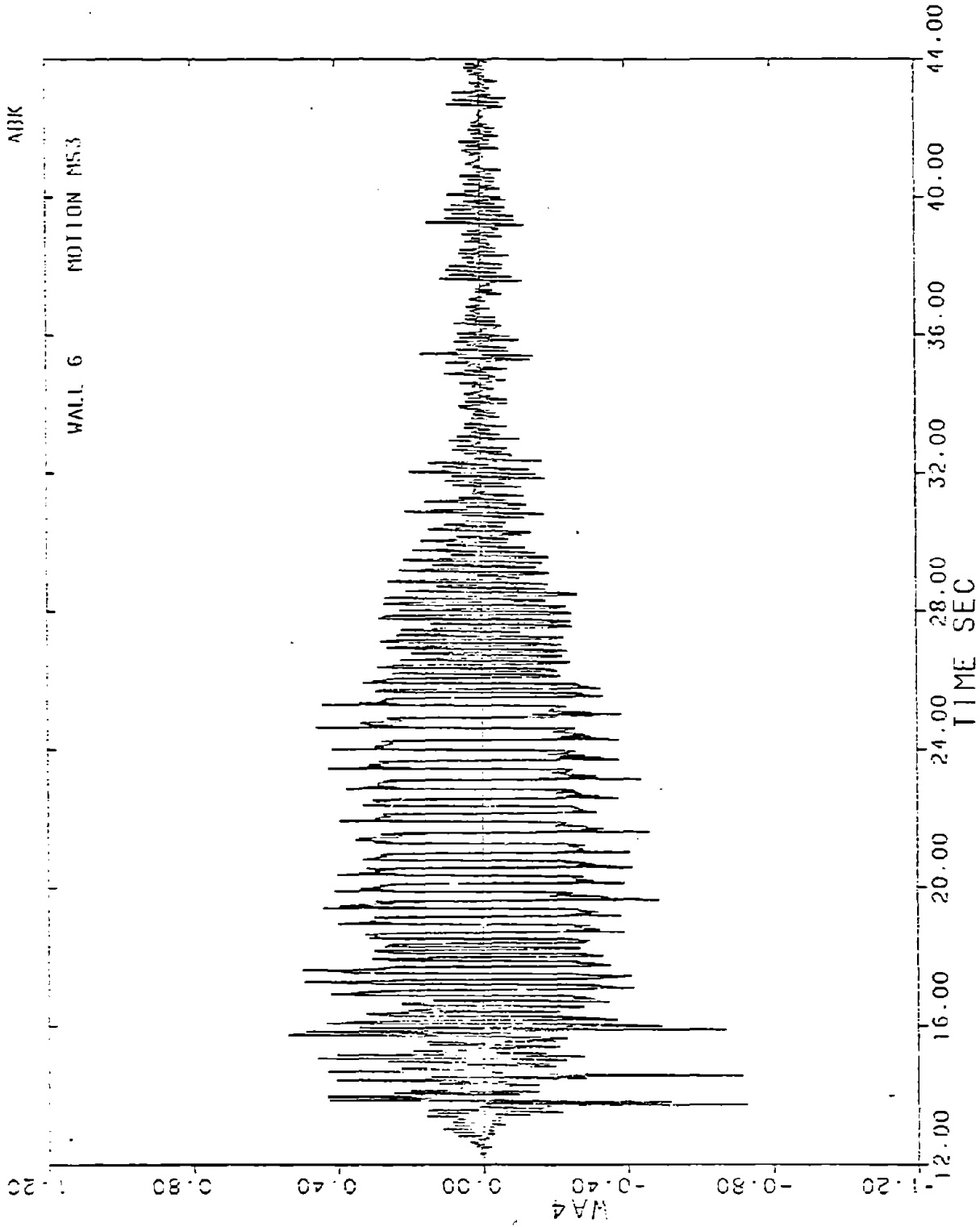


FIGURE 5-35.

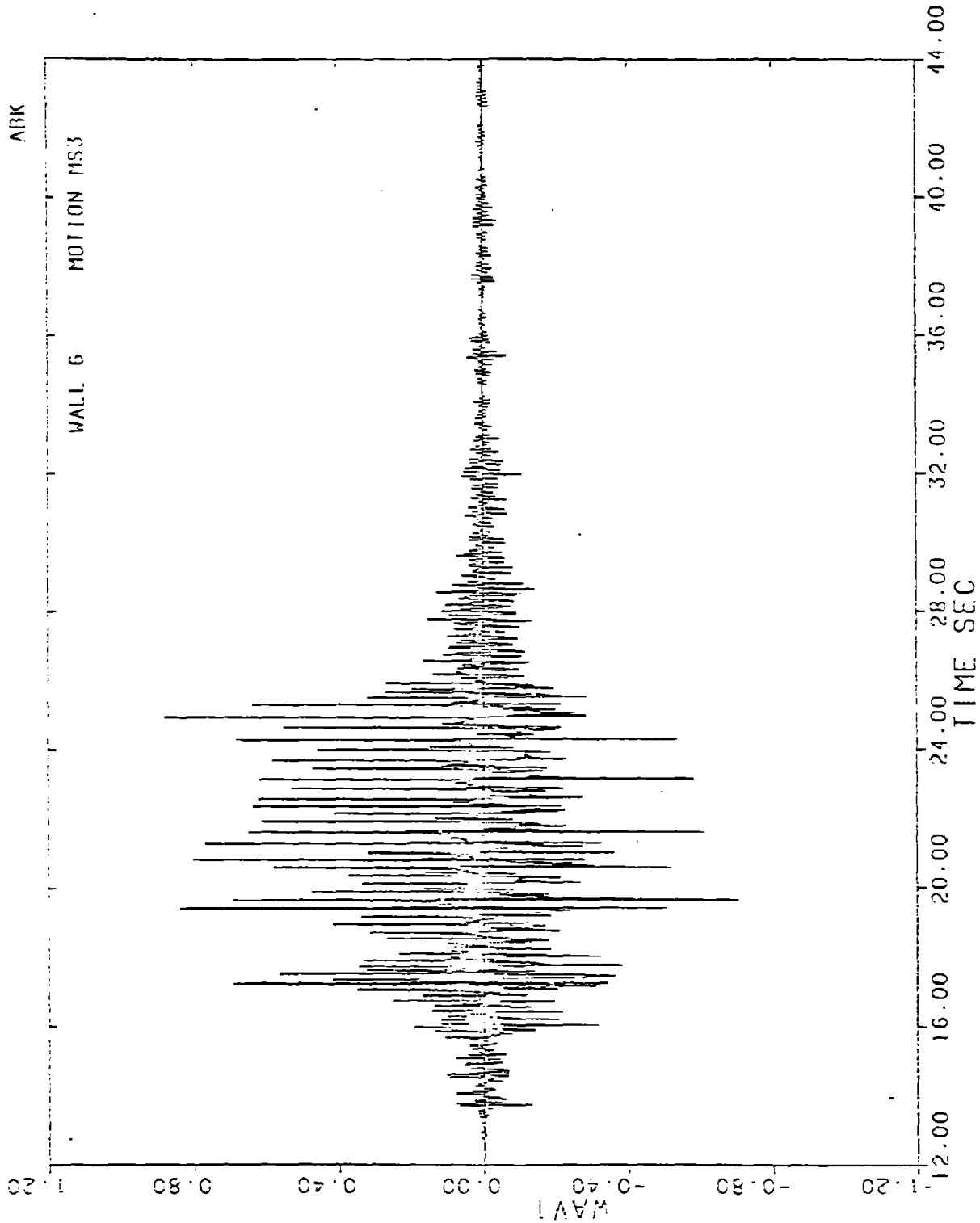


FIGURE 5-36.

MS 5 Failed on 3rd pulse, not typical 2nd pulse of Castaic input. Max-min data of input motion indicates negative displacements are 8 to 12 percent low. Positive displacements exceed programmed displacement.

5.8 WALL 8

MS 1 Elastic behavior.
MS 2 Elastic behavior
MS 3 Elastic behavior.
MS 4 Crack at 0-1. Wall appears to have elastic behavior.
MS 10/2 Crack at 11-14. Cycled on this and crack at base. Block spalled on south face.
MS 6 Cycled on cracks at 13-14 and 0-1. Additional spalling at south face. Displacement from top to bottom of wall WD1, WD4 and WD7 are plotted in Figures 5-37 through 5-39 for the period 2 to 18 sec. Acceleration at top of wall, mid-height and at superimposed load are plotted in Figures 5-40 through 5-42 respectively.
MS 5 Collapsed early in test. Max-min data indicates wall failed on reversal of 1st cycle of Castaic ground motion.

5.9 WALL 9

MS 3 Elastic behavior.
MS 4 Elastic behavior.
MS 10/2 Crack at 11-12, rocking on this crack. No visible crack at bottom.
MS 6 Rocked on cracks at 11-12. Crack at base 0-1. Max-min data for WD3 indicates error in reported displacement for this and previous tests.
MS 5 Large rocking movements on crack at 11-12 and 0-1. Spalling of face of block above and below 11-12. Most spalling at corners of specimen.
MS 9 Same as MS 5. More spalling.
MS 8 Much more spalling of block on east end. Entire north

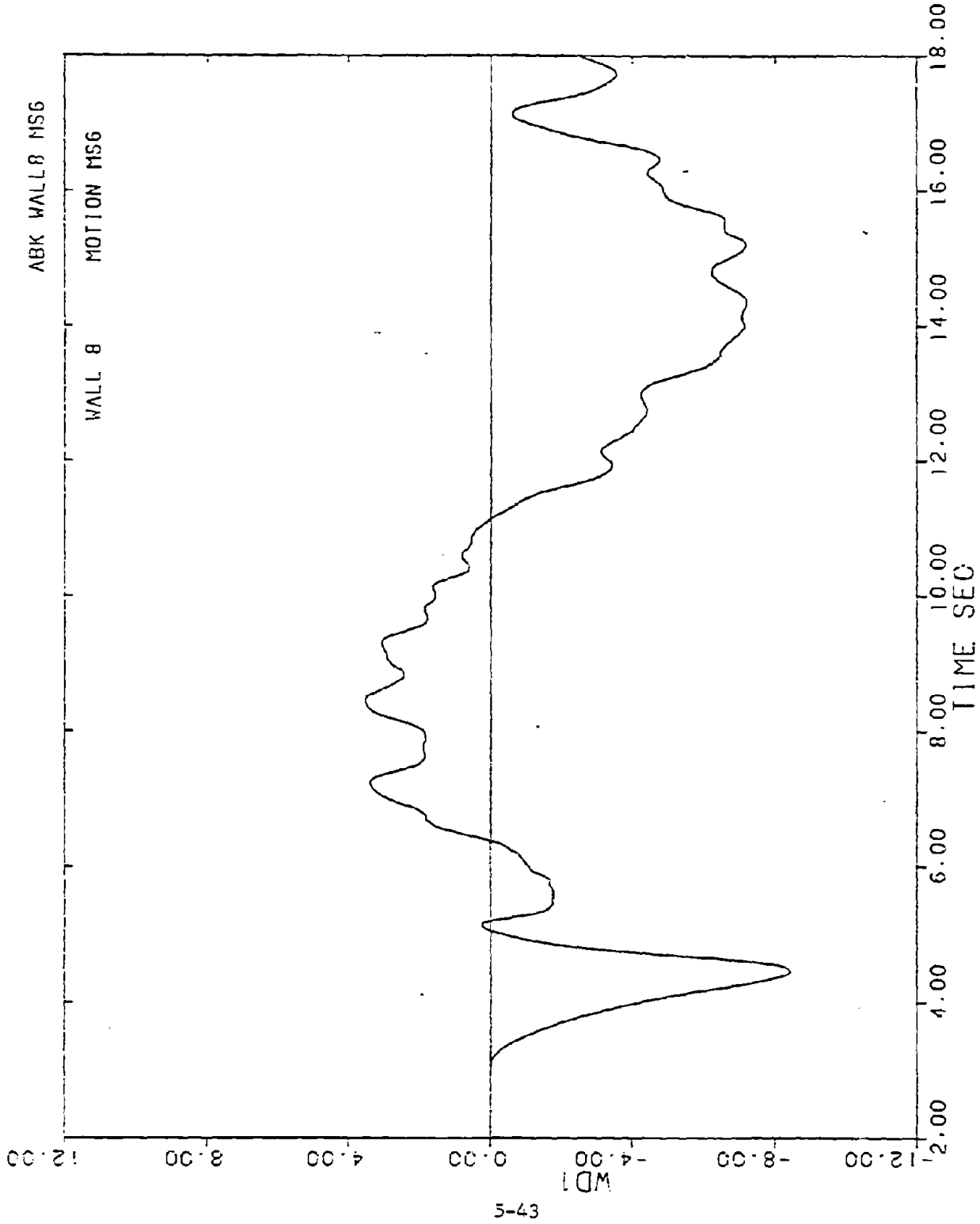


FIGURE 5-37.

5-43

WD1

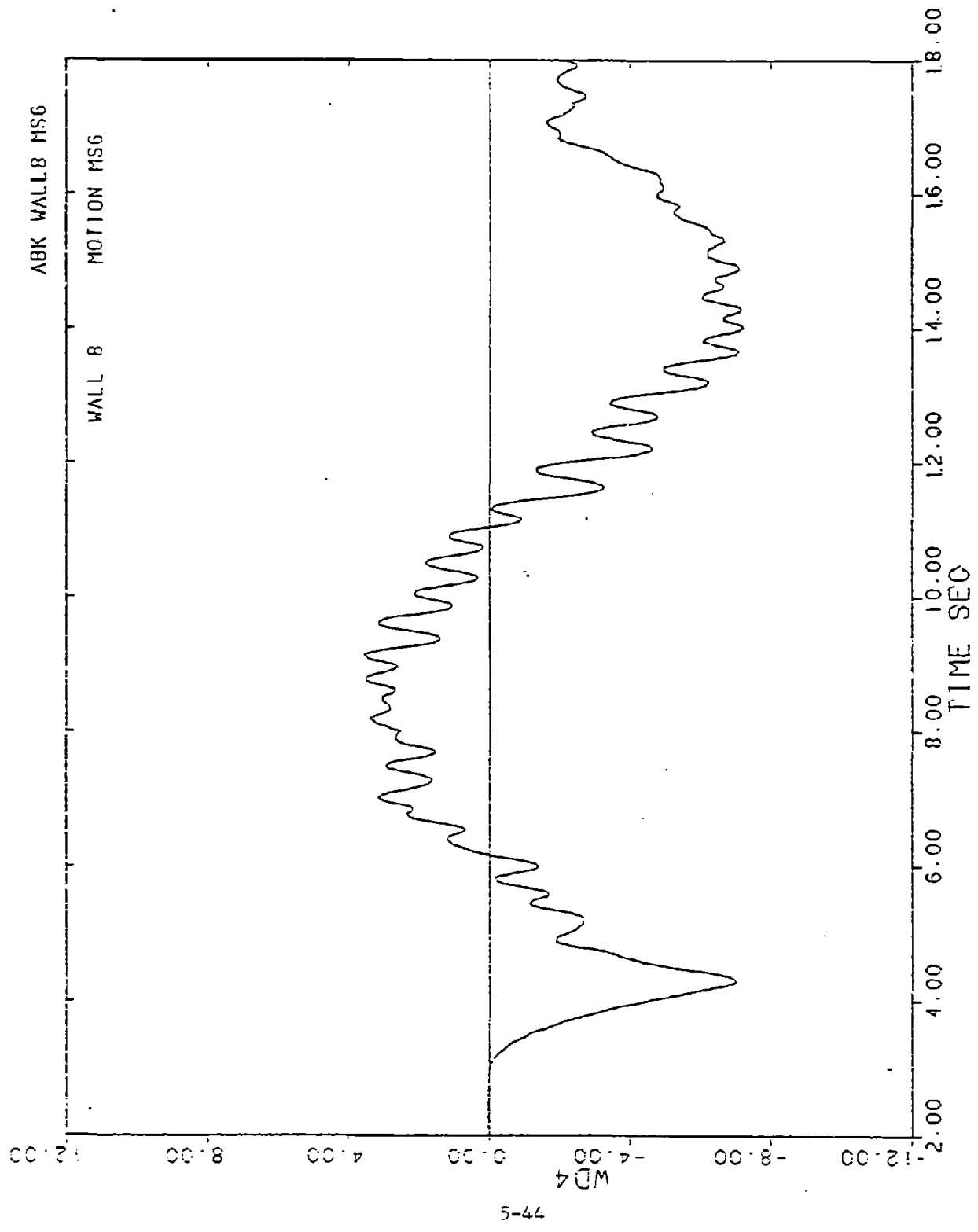


FIGURE 5-38.

74-5

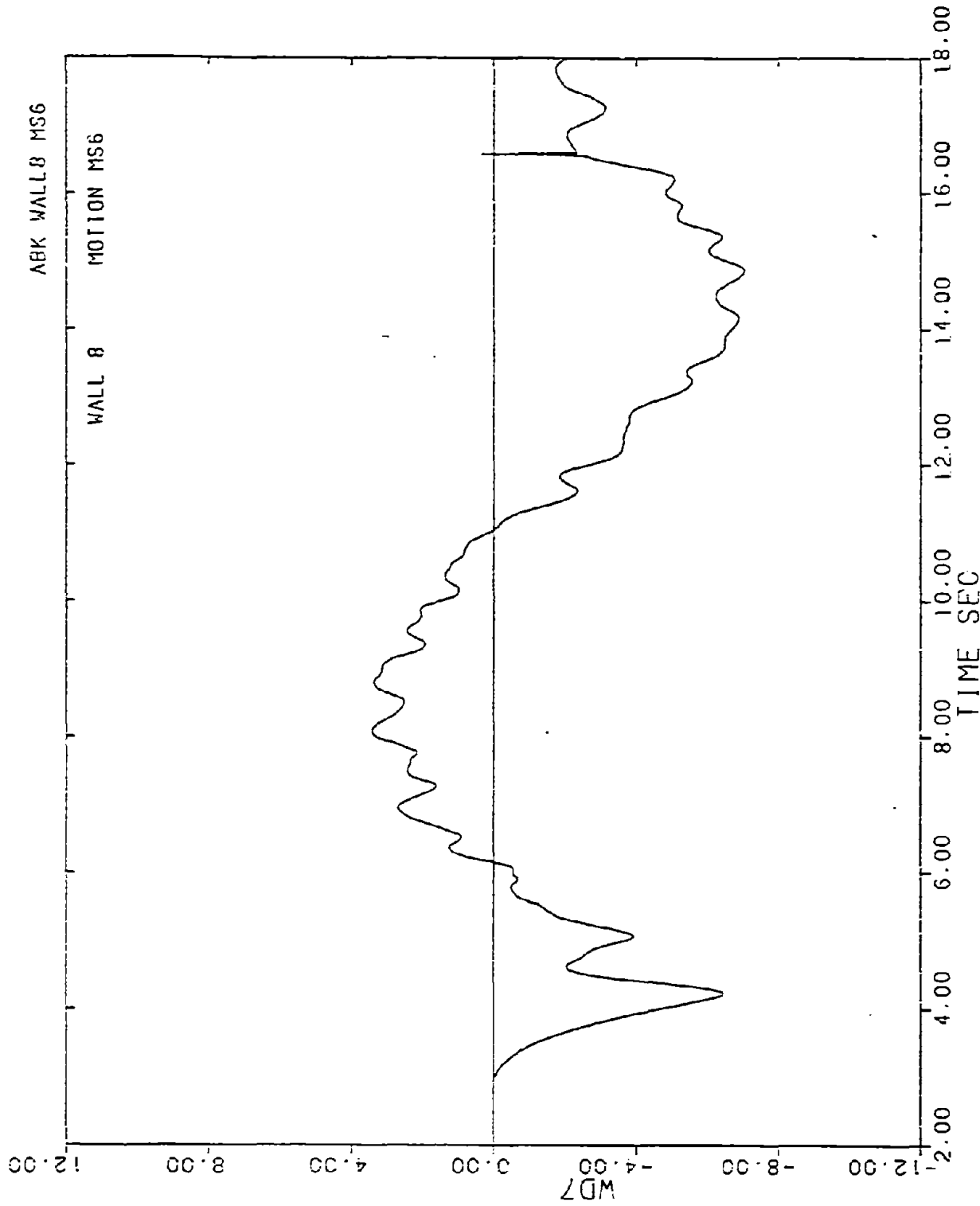


FIGURE 5-39.

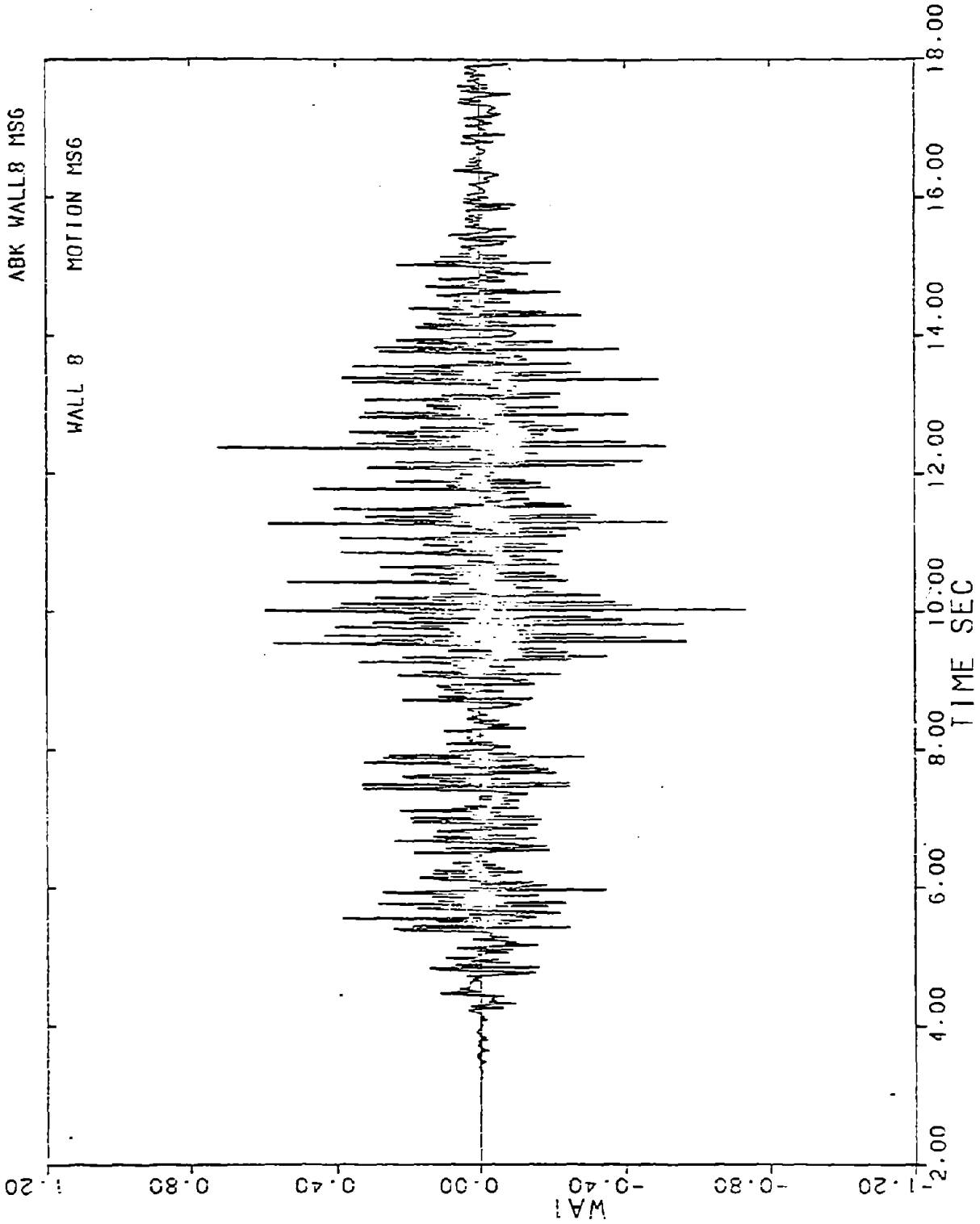


FIGURE 5-40.

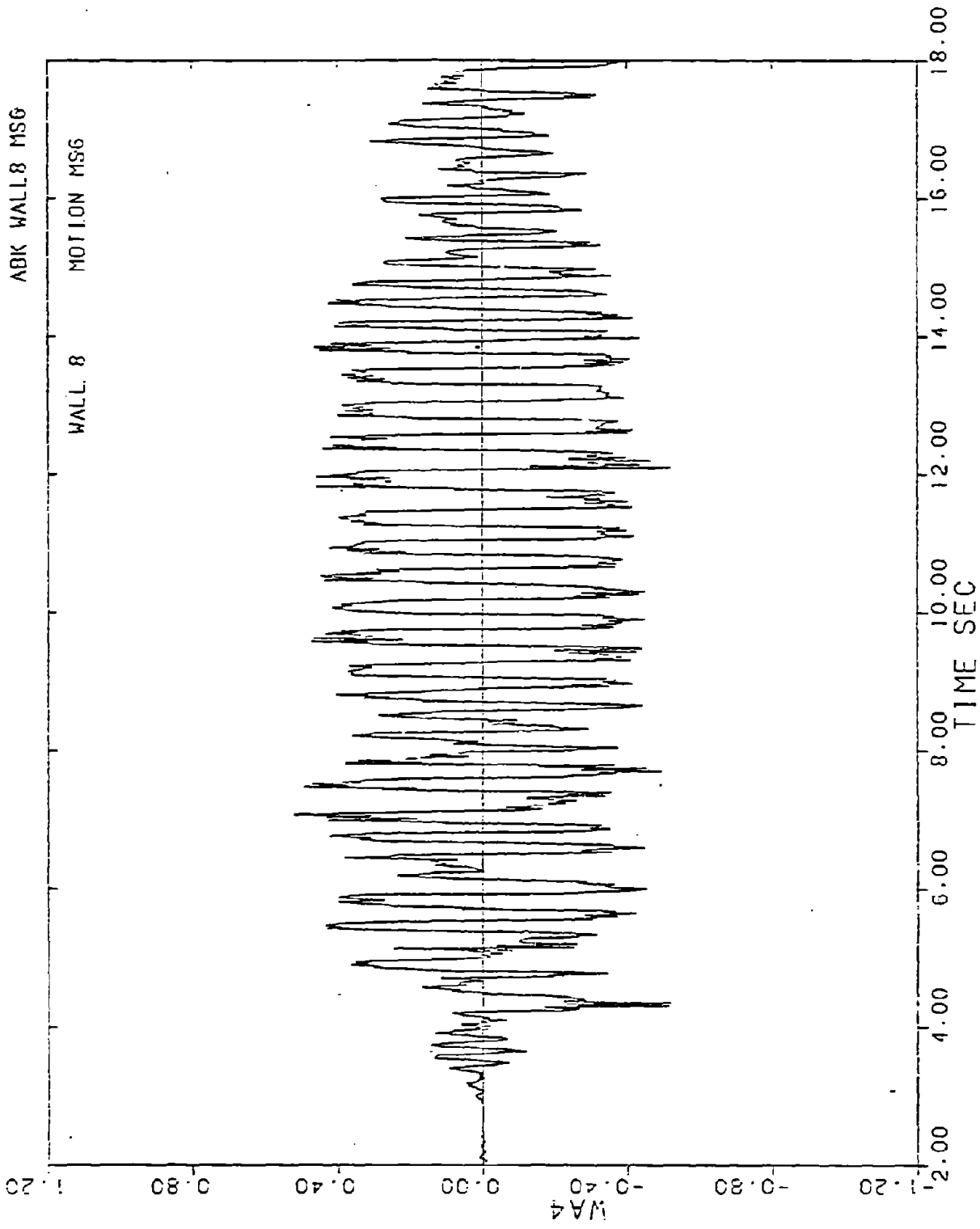


FIGURE 5-41.

5-7

WA 4

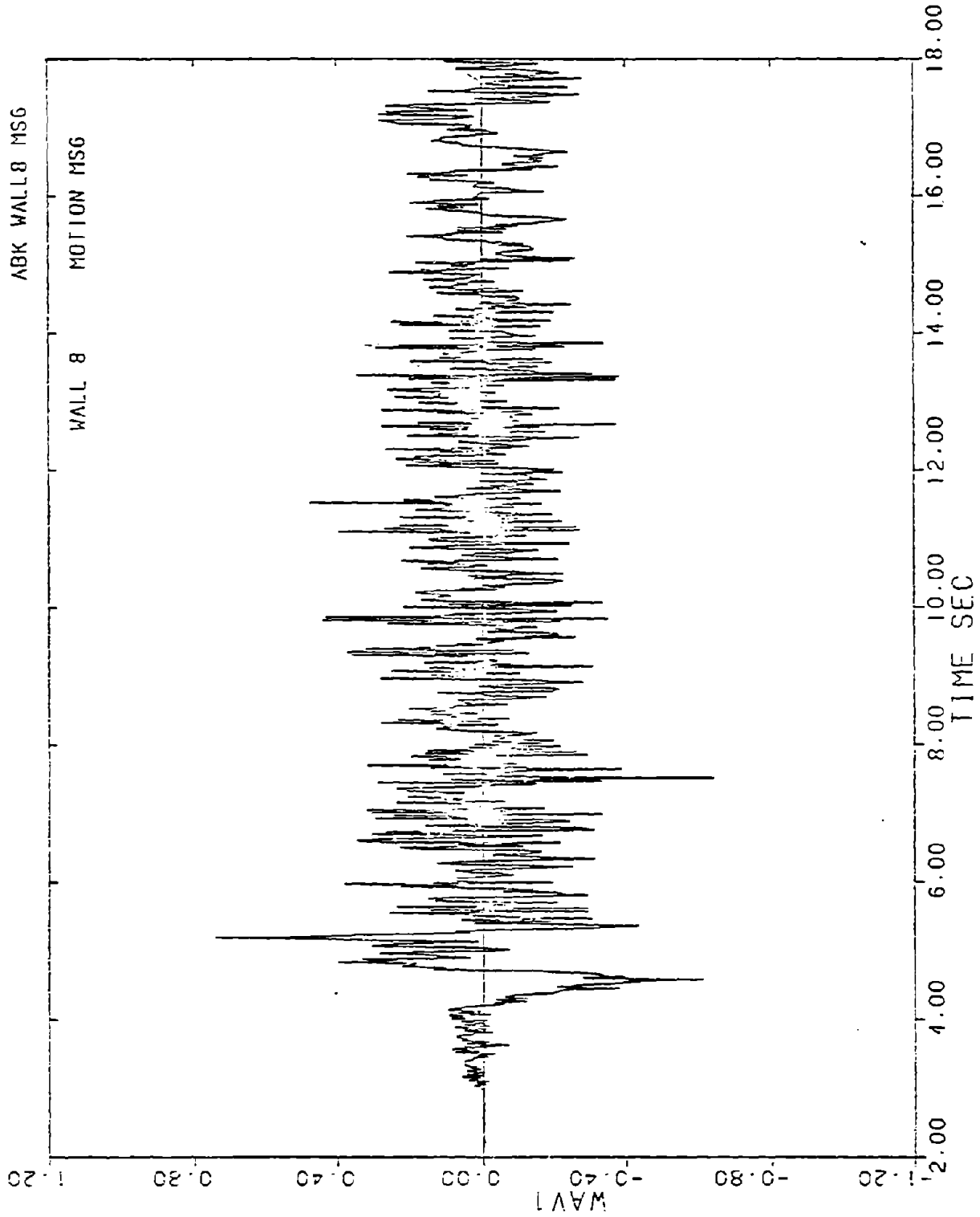


FIGURE 5-42.

face of block on west end spalled off. Much rocking on 11-12 and 0-1.

MS 7 Collapsed against south wall. Max-min data indicates collapse on 1st reversal of Castaic motion.

5.10 WALL 10

MS 1 Elastic behavior.

MS 2 Elastic behavior.

MS 3 Crack at 18-19. Crack at base not noted.

MS 4 Crack at 18-19 and 13-14. Max-min data indicates small excursion on cracks.

MS 10/2 Crack at 18-19 and 1-2. Wall almost collapsed. Plots of input displacement at each end of wall specimen, WD1, and response displacement adjacent to crack, WD3, are presented in Figures 5-43 and 5-44. Input acceleration, WA1, and response acceleration at center of wall, WA4, are presented in Figures 5-45 and 5-46.

MS 6 Cycled on cracks at 18-19 and 1-2 to collapse.

5.11 WALL 11

MS 1 Elastic behavior.

MS 2 Elastic behavior.

MS 3 Elastic behavior.

MS 4 Elastic behavior, elastic displacement observed at center of wall.

MS 10/2 Crack at 16-17 and 0-1. Cycled on cracks 5 to 8 times.

MS 6 Crack at 3-4 probable, 8-9 probable, 11-12 probable, 16-17 closed during motion set.

MS 5 Failed on 16-17 to north. Collapse early in motion set. Max-min data indicates collapse on 1st reversal of Castaic motion.

5.12 WALL 12

Wall 12 was damaged in handling and discarded.

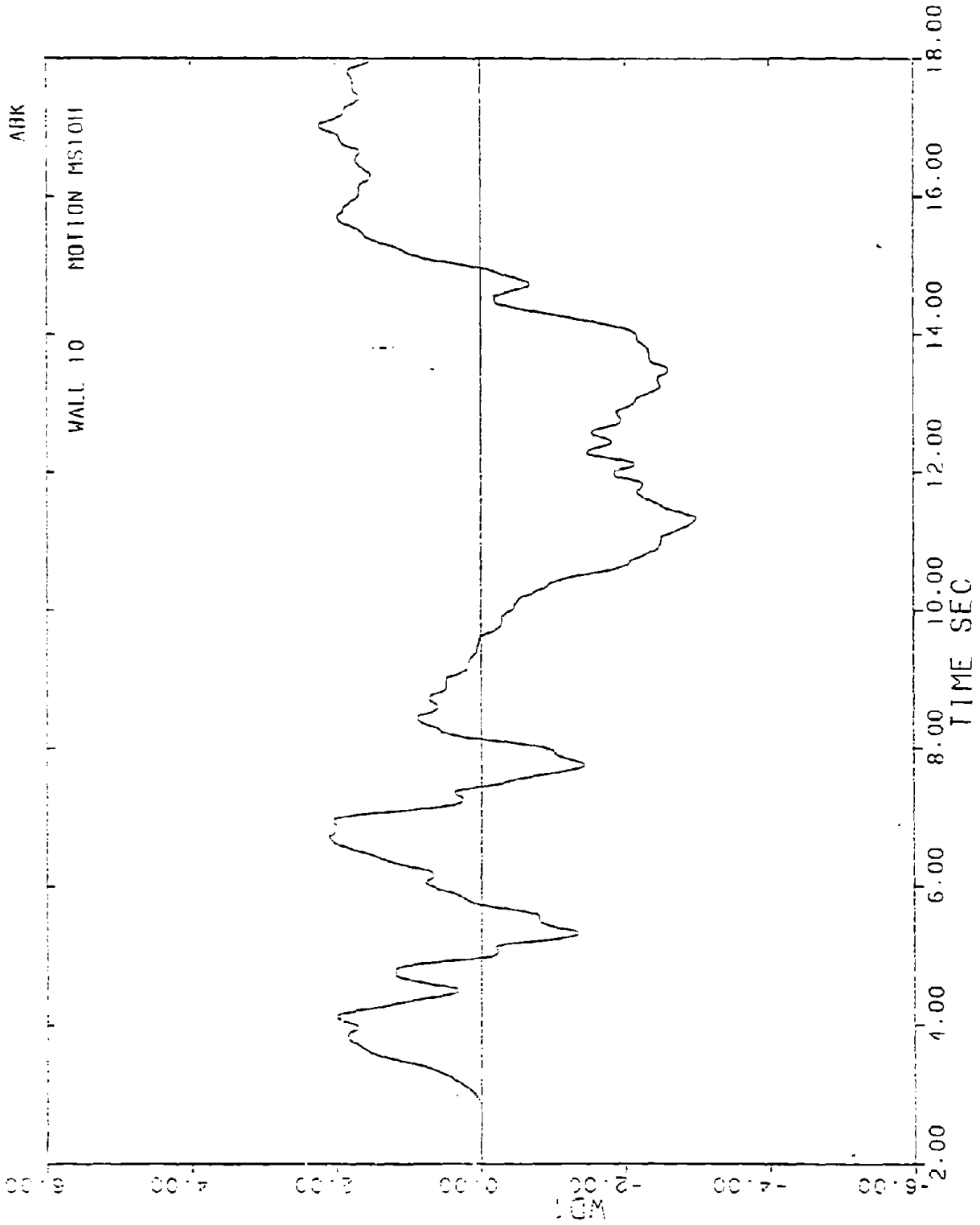


FIGURE 5-43.

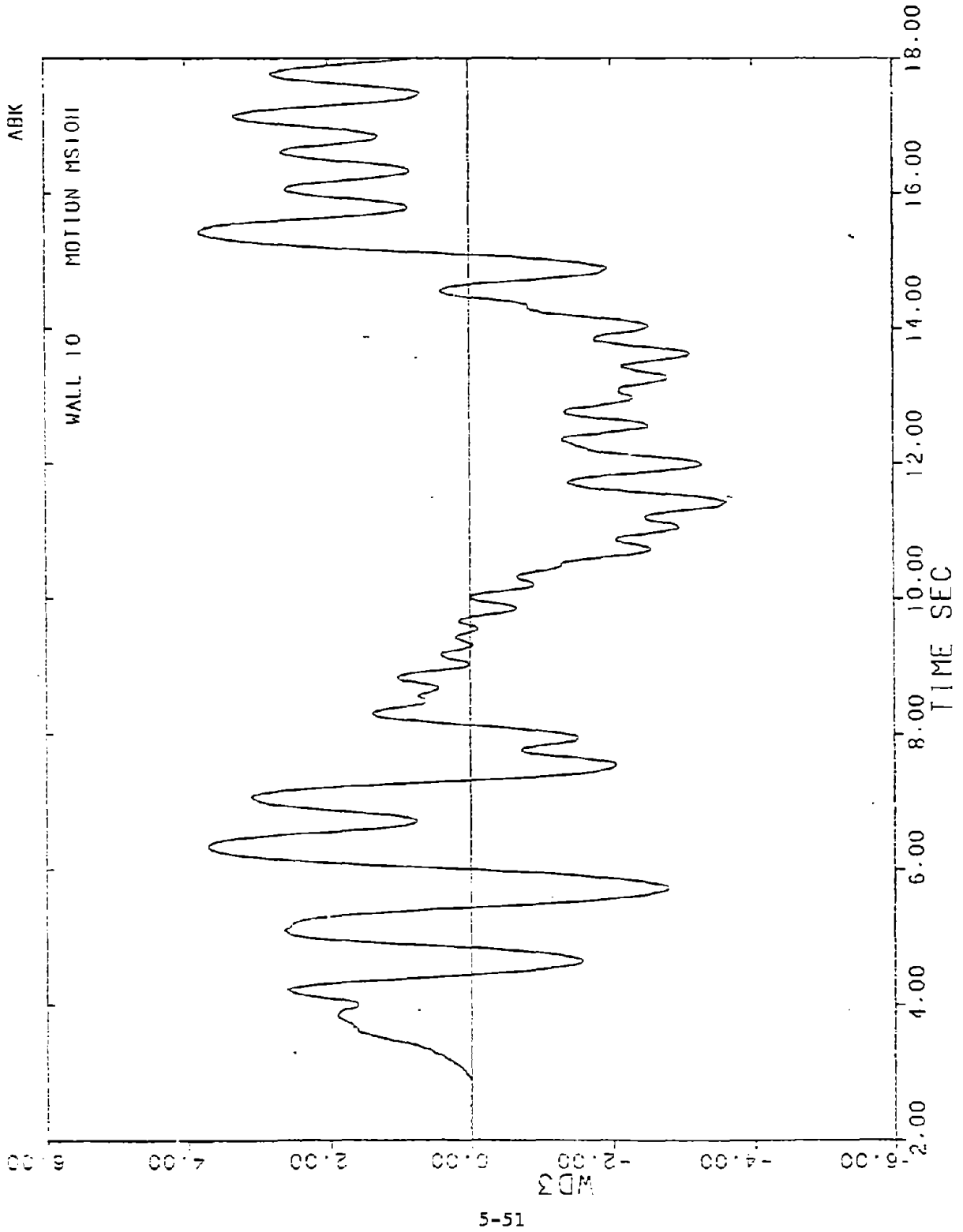
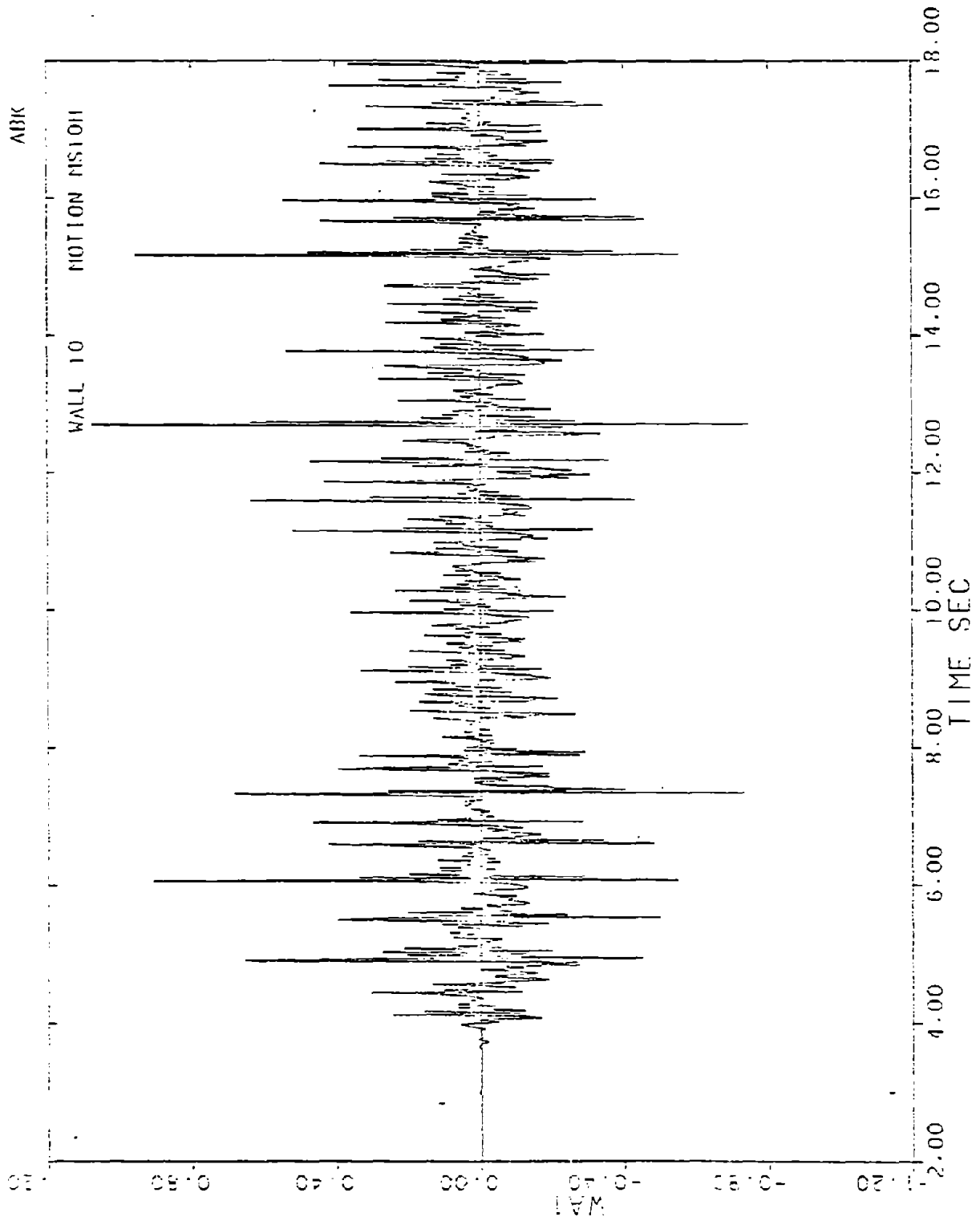


FIGURE 5-44.



5-52

FIGURE 5-45.

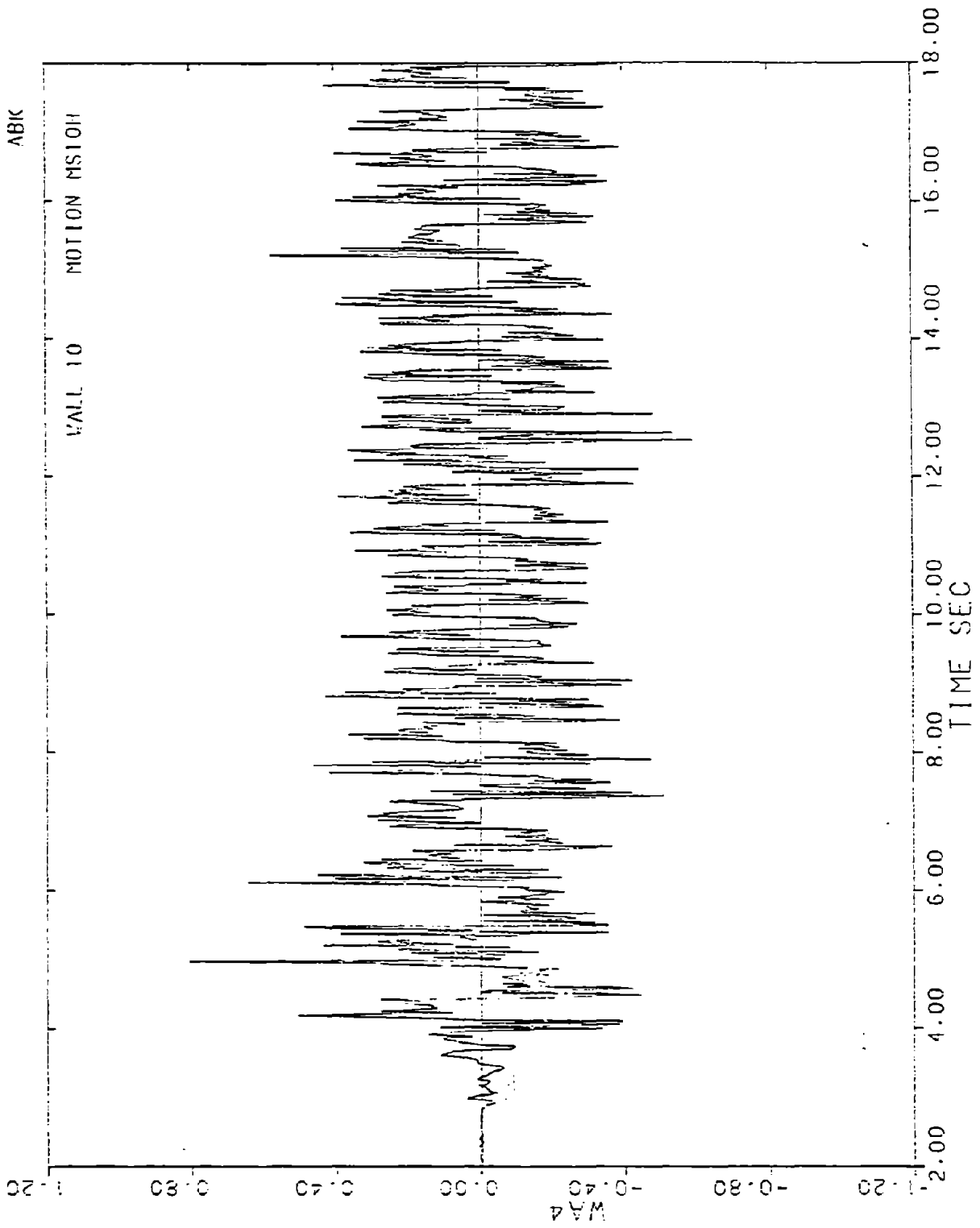


FIGURE 5-46.

5.13 WALL 13

- MS 1 Elastic behavior.
- MS 2 Elastic behavior.
- MS 3 Elastic behavior.
- MS 4 Crack at 1-2 above base, elastic behavior of remainder of wall. Max-min data for WD3 inconsistent with other displacement gages.
- MS 5 No new cracks. Acceleration gages in center of wall indicate peak response in excess of 0.9 g.
- MS 6-1 Crack at 1-2, 2-3, and 8-9. Test was repeated due to suspect recording of sensor.
- MS 6-2 Cycled on same cracks. Displacement max-min data indicates repetition of cracked performance. Gage WAV1 indicates variance with prior test. Acceleration gages indicate close fit with prior test.
- MS 7 Cycled on crack at 8-9 and 1-2. Collapsed to north. Max-min data indicates collapse on first reversal of input displacement.

5.14 WALL 14

- MS 1 through MS 6. Elastic behavior.
- MS 9 Elastic behavior. Elastic deflection estimated at 3/8 in. (10 mm).
- MS 8 Cracked at joints 1-2 and 7-8. Max-min data indicates error in input motions.
- MS 7 No additional cracks. Visually did not cycle on cracks formed earlier.
- MS 9.1 Formed cracks at 2-3 and 6-7. Cracked excursions small.
- MS 8.1 Cycled on cracks 1-2, 3-4, 6-7, 7-8, and 8-9.
- MS 7.1 No new cracks.
- MS 9.2 Spalled mortar at corner, joint 7-8. Crack at 9-10. Hydraulic problems.
- MS 8A Rocked on crack at 1-2. Other cracks mainly closed.
- MS 8B Rotation on 1.2. No significant opening on other cracks.
- MS 8C Same as 8B.

MS 7.3 Rocked on joint 1-2. Crack 7-8 appeared to open.
MS 8D Rocked on joint 1-2. Wall appeared elastic above base crack. No deterioration on crack at base. 3 tons (2720 kg) of superimposed load removed from wall specimen.
MS 9-N Spalling at joint 9-10. All cracked joints have some excursions.
MS 8-N Spalling and rocking on joints 7-8, 8-9 and 9-10.
MS 7-N On large initial displacement, wall collapsed on crack at joint 9-10 and 10-11.

5.15 WALL 15

MS 3 Elastic behavior. Max-min data indicates recorded data error on positive displacements.
MS 4 Elastic behavior.
MS 5 Elastic behavior.
MS 6 Cracked at joint 1-2. Elastic above crack.
MS 9 Rotated on 0-1 and 1-2. Crack observed at 8-9 and 9-10. Small excursions.
MS 8 Rotated on 0-1 and 1-2. Cycled on 6-7, 7-8, 8-9 and 9-10.
MS 7 Principal excursions on 9-10.
MS 10 Several excursions on joints 9-10 and 10-11. No deterioration visible.
MS 10.2 Same as MS 10, except more excursions.
MS 7.2 Collapsed to north barrier on joint 9-10.

5.16 WALL 16

MS 1 Elastic behavior.
MS 2 Elastic behavior above crack at 1-2.
MS 3 Same as MS 2.
MS 4 Crack at 2-3. Elastic behavior above crack.
MS 5 Cycled on 2-3 and 10-11. Four cycles observed.
MS 6 Rotated on 2-3. No cracks opened above.
MS 7 Displaced on 2-3 and 10-11 to collapse.

5.17 WALL 17

Wall cracked on joint 13-14 in transportation to test apparatus; however, this crack did not open or cause failure in any of the tests conducted on this wall.

- MS 3 Crack observed at joint 7-8.
- MS 4 Rotated on crack at 1-2 at base. No cracking in remainder of wall.
- MS 5 No significant cycling on cracks.
- MS 6 Cycled on crack at 7-8.
- MS 9 Cycled on 6-7, 7-8 and 2-3.
- MS 8 Cycled on 6-7, 7-8 and 2-2.
- MS 7 Did not have visible crack opening on large pulse of this motion set. Max-min data indicates input motions were achieved within acceptable range.
- MS 10 Appeared elastic in performance. Removed 3 t (2720 Kg) of superimposed load on wall specimen.
- MS 9-N Cracks opened on 2-3, 6-7, 7-8, 9-10 and 10-11.
- MS 8-N Cracks opened on 7-8, 8-9, 9-10 and 10-11. Rocking late in motion set on 9-10. Max-min data indicates small cracked excursions.
- MS 7-N Displaced on 9-10 to collapse.

5.18 WALL 18

- MS 3 Elastic behavior.
- MS 4 Crack at 1-2. Remainder of wall elastic behavior.
- MS 5 Crack at 1-2 and 5-6.
- MS 6 Cycled on crack at 1-2. Remainder of wall elastic.
- MS 9 Cycled on cracks at 1-2, 2-3, 5-6 and 8-9.
- MS 8 Cycled on cracks at 1-2, 5-6, 6-7, 8-9 and 9-10. Many cycles on crack at 8-9.
- MS 7 Cycled on cracks at 9-10 and 4-5. 1/16 in. (2 mm) displacement on 9-10. Spalled mortar at 4-5.
- MS 10 Cycled on joint 9-10. Max-min data indicates small excursions.
- MS 10.2 Cycled on crack at 1-2 and 9-10. Mortar lost from joints

3-4, 4-5 and 9-10.

MS 7.2 Failed against north barrier on reversal of first displacement. Hinged on joints 1-2 and 9-10.

5.19 WALL 19

MS 1 through MS 3. Elastic behavior. Max-min data has suspect displacements late in the test run.

MS 4 Crack at 0-1.

MS 10/2 Movement in plaster screed at 15-16. Crack in plaster propagated 6 to 8 in. (150-200 mm) into plaster. Suspect reading for displacement gage WD3.

MS 6 Observed crack centered on block 14. Visible one cycle only. WD3 max-min data suspect.

MS 5 Opened large crack on 14-15. Spalled some plaster on tension side. Very slight spalls on compression side. Figures 5-47 and 5-48 show input displacement WD1 and displacement gage WD4 respectively for the time of cracked behavior.

MS 9 Failed to south barrier on early cycle. Cracks at 14-15 and 0-1. Wire mesh fractured on both faces. Plaster adhered to both faces.

5.20 WALL 20

MS 1 Elastic behavior.

MS 2 Elastic behavior.

MS 3 Crack at 0-1 and 14-15. Max-min data for displacement gages WD3 and WD4 suspect. Acceleration WA1 low. Response of WA4 in expected range.

MS 4 Crack at 0-1 and 14-15. Displacement gage WD3 suspect. Other gages indicate near elastic displacements. Acceleration input and response at center of wall in expected range.

MS 10/2 Crack at 0-1. Max-min data WD3 and WD4 suspect. Acceleration gage WA1 for input low. Response at center of wall in expected range, 1.3 g.

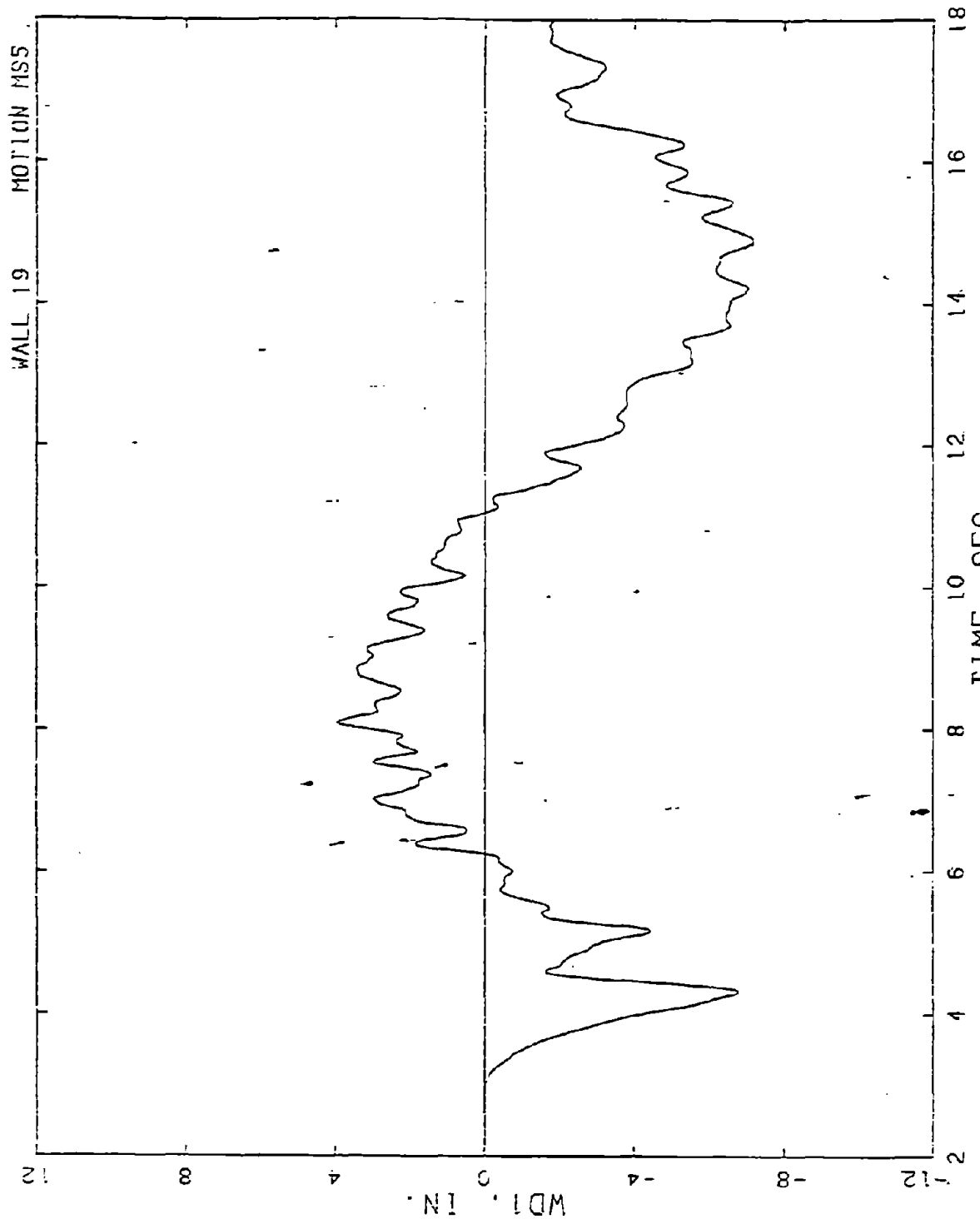


FIGURE 5-47.

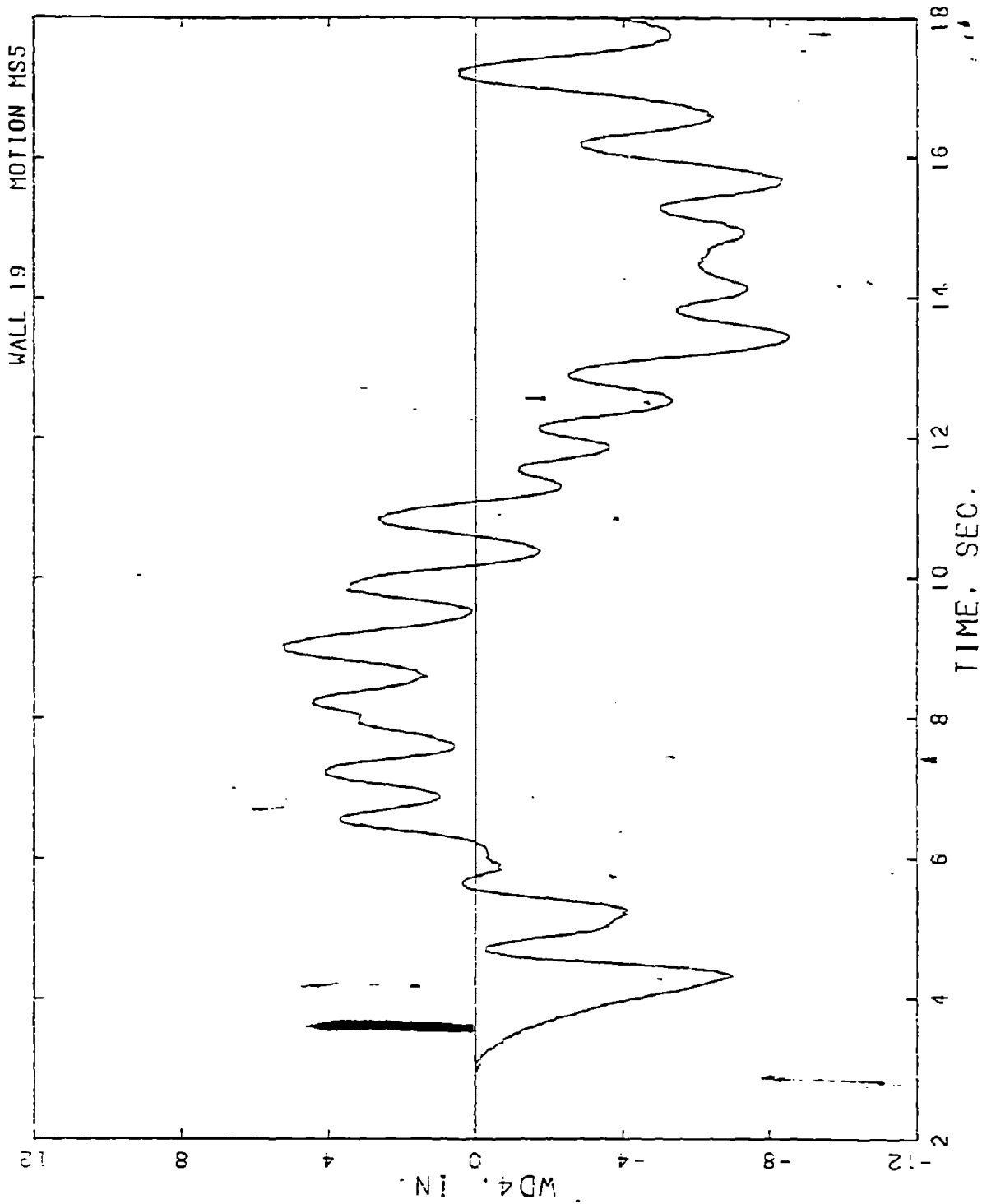


FIGURE 5-48.

- MS 6 Crack at 0-1 and 14-15. Suspect gages similar to MS 10/2.
- MS 5 Elastic above base. Acceleration at center of wall 1.4 to 1.6 g.
- MS 9 Crack at 0-1 and 14-15. Acceleration at center of wall 1.8 to 1.5 g from max-min data.
- MS 8 Crack at 0-1 and 14-15. Acceleration at center of wall 1.5 to 1.6 g.
- MS 7 Crack at 0-1 and 14-15. Collapse late in motion sequence. Max-min data indicates collapse 3 sec after maximum excursion of input displacement. Mesh broken on both faces. Displacement plots of input and center of wall are shown on Figures 5-49 and 5-50 respectively.

5.21 WALL 21

- MS 1 through MS 3. Elastic behavior.
- MS 4, 10/2, 6, 5, 9 and 8. Crack at 0-1. Elastic behavior above crack.
- MS 7.1 Data lost.
- MS 7-2 Crack in plaster at 16-17 and 11-12.
- MS 10 Crack at 0-1, 15-16 north face, and 16-17 south face.
- MS 10.2 Collapse to south with mesh broken on both faces at 16-12.

5.22 WALL 22

- MS 1 through 3. Elastic. No crack at base.
- MS 4 Crack at 0-1. Remainder of wall elastic. Very small flexural deformations in body of wall.
- MS 10/2 Same as MS 4.
- MS 6 Large excursions on crack at 0-1. 1/4 in. (6 mm) open. Small flexural deformations in body of wall.
- MS 5 Elastic deflections above crack at base.
- MS 9 Same as MS 5.
- MS 8 Same as MS 5. 3/8 in. (10 mm) flexural deformations estimated.
- MS 7 Elastic deflections above crack at base.

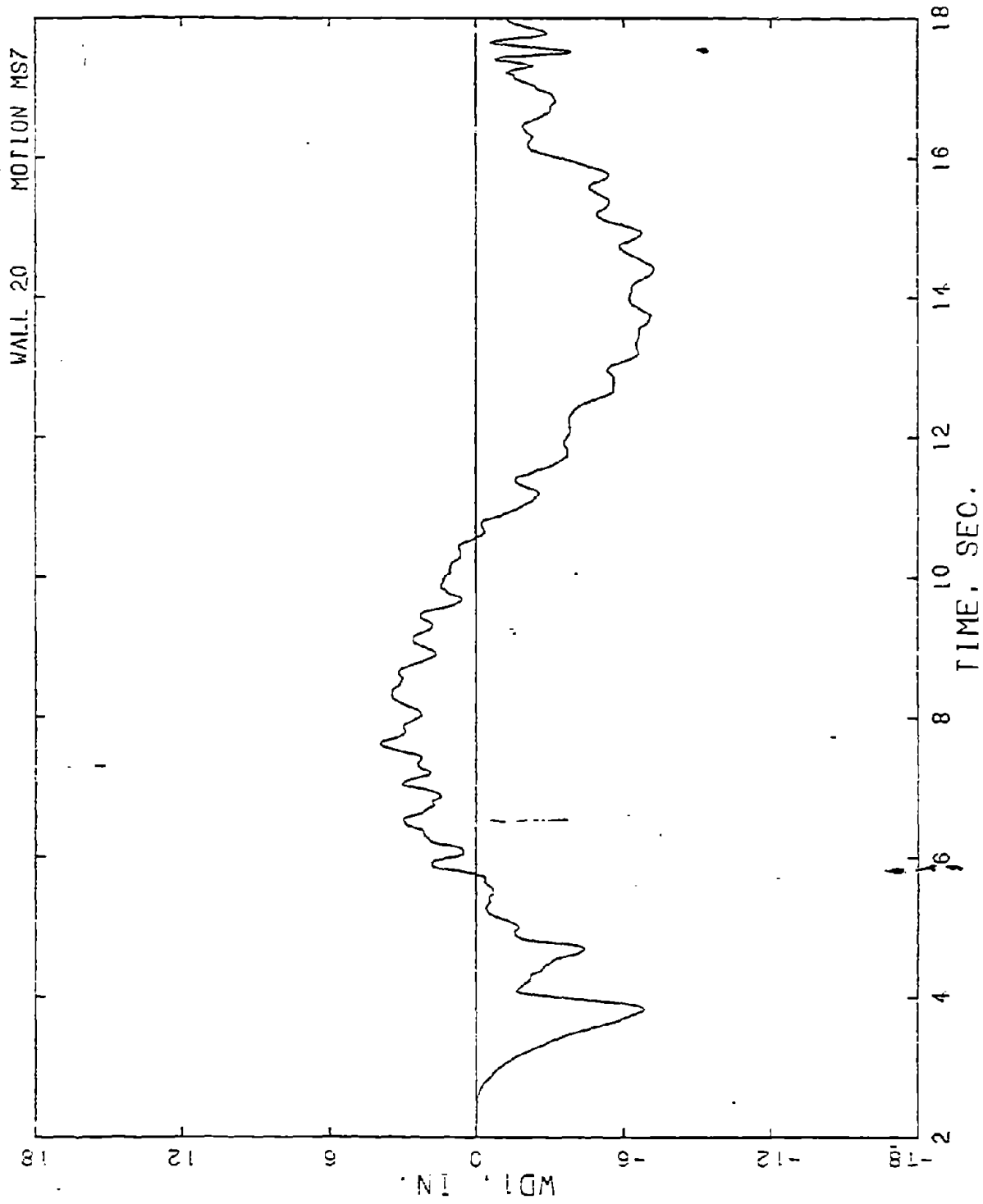


FIGURE 5-49.

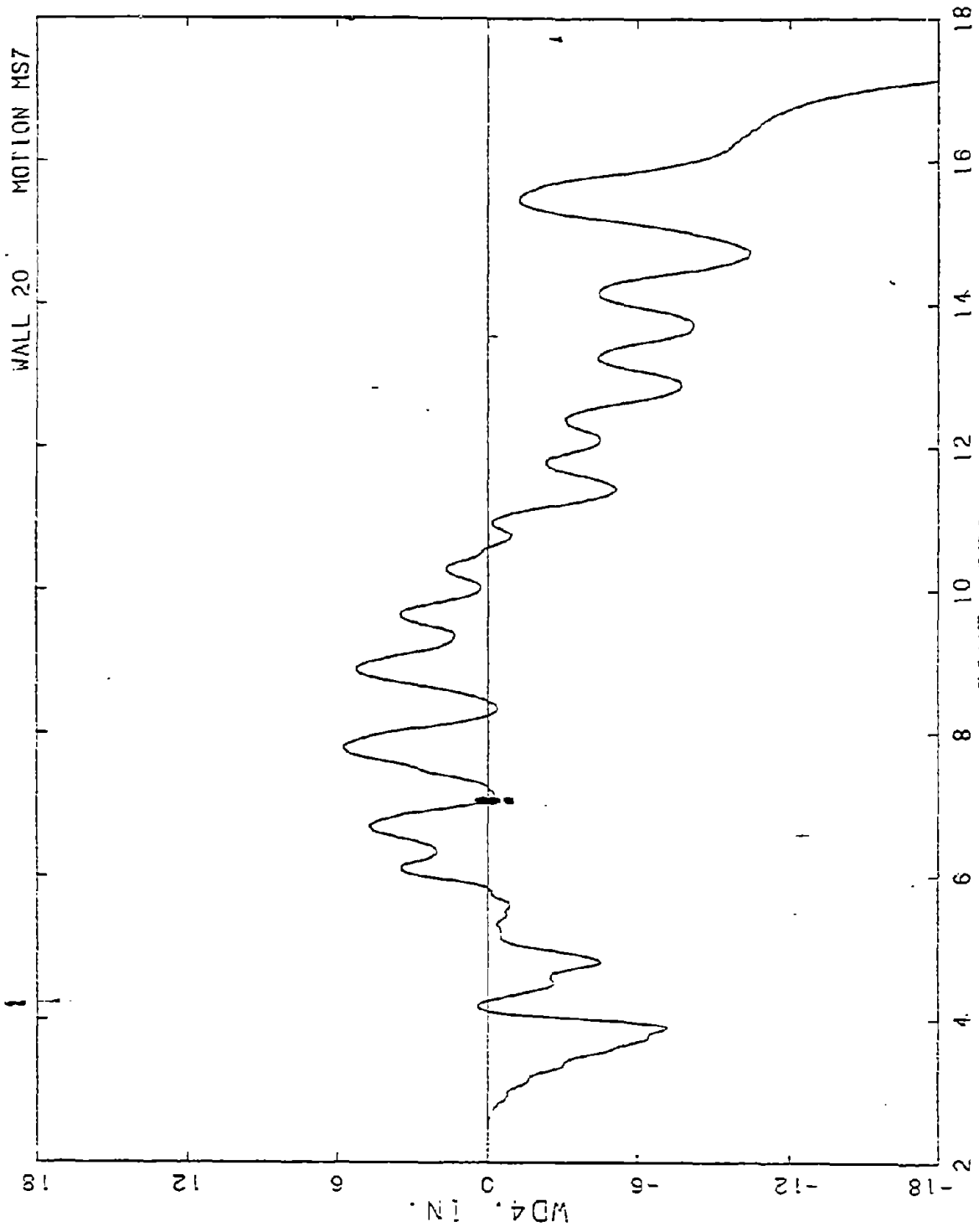


FIGURE 5-50.

- MS 10 Same as MS 7.
- MS 10.2 Crack at 0-1 and 15-16. Very small at 15-16. Audible crack.
- MS 7.2 Crack at 0-1 and 15-16.
- MS 7.3-1 Same as MS 7.2.
- MS 7.3-2 Same as MS 7.3-1. Visible crack on north face at 15-16.
- MS 7.3-3 Failed to north on crack at 15-16. Wire broken on both faces.

SECTION 6

CONCLUSIONS OF TEST PROGRAM

6.1 PERFORMANCE OF TEST EQUIPMENT

Performance of the test equipment was primarily dependent on control of the hydraulic actuators duplicating programmed dynamic inputs. Development of a reliable test apparatus delayed the beginning of testing. The first test specimen was damaged by loss of control to the extent that the specimen was discarded without further testing. After system alteration, the test program was successfully completed.

The test apparatus typically underachieved displacement by less than 5%. Acceleration gages monitoring input indicated programmed peaks were exceeded. Capacity of the test apparatus actuators for load and stroke was adequate to collapse wall specimens with overburden masses of 1 and 2 tons (907 and 1,814 Kg). The available space between the protective barriers and the load capacity of the actuators limited the input motion to the seismic intensity of MS 7.3, Section 2, Table 2-3. This motion did not collapse 10 ft (3 m) high specimens of minimum unit weight with 4 ton (3,630 Kg) overburden. A specimen of greater unit weight and 4 ton (3,630 Kg) overburden was driven to collapse by input motions less than maximum equipment capacity. The 14 in. (360 mm) specimen had limited clearance between the barriers and in two cases, Wall 1, MS 5 and 9, momentarily prevented the displacement of the center of the wall that would have caused collapse (Fig. 5-2). The continuing programmed input motions at the head and base moved the ends of the wall to a differential displacement that restored stability to the specimen. Prevention of collapse in these instances gave an opportunity to continue testing with additional input motions.

Retrofit specimen, Wall 22, did not fail during the first run of maximum input intensity. The maximum motion was rerun, failure

occured on the third motion sequence of maximum intensity. These reruns provide data of equal value as that acquired by increasing intensity of motions.

Data acquisition was at times interrupted during a test requiring the test to be rerun. In one case, Wall 13, MS 6, loss of data was suspected and the test was rerun. The equipment reran the test and data was recovered from the identical tests, giving an opportunity to examine reproducibility of the experiment.

6.2 RANGE OF TEST PARAMETERS

The parameters varied in the test specimens were specimen thickness, height, unit weight, overburden weight and input motions. Materials of construction varied from solid clay brick units, hollow clay units filled with mortar, hollow concrete blocks filled with mortar, and hollow concrete block units. Detailed descriptions of specimens and materials are in Section 3. Tested strength of materials is reported in Section 4. Variation in construction materials was selected to match existing construction, and give variation in unit weight, and variation in specimen thickness. This variation also gave an opportunity to observe differences in specimen deterioration. The only observed difference in masonry deterioration during testing was in three-wythe brickwork vs. through-wall units.

The range of specimen thickness included through-wall units and thicknesses of multiwythe brickwork in common usage. The through-wall units of six and eight in. nominal thickness were constructed in heights of 10 and 16 ft. The three-wythe brick walls were 16 ft high. Design practice utilizes a parameter of h/t to select walls for buildings. The h is the height of the wall between supporting elements, t is the thickness of the wall. The ratio of h/t for the test specimens varied from 14 for the three-wythe, 16 ft high walls, 15.75 for 8 in. nominal, 10 ft high walls, 21.4 for 6 in. nominal, 10 ft high walls, to 25.2 for 8 in. nominal, 16 ft high walls. This range covers the typical range of URM walls used for bearing and exterior walls.

The unit weight of the specimens generally corresponded to existing construction. The exception was the walls grouted to give variation in unit weight only. Grouted unit weight approximates the combined weight of structural wall faced with a veneer unit.

Overburden weight was varied in a doubling ratio. For the three-wythe work the overburden weight varied from that equal to a minimum parapet to less than a story height of similar masonry above. For 6 and 8 in. nominal walls the overburden varied from that equivalent to a parapet and minimal roof framing to three stories of equivalent wall above. The overburden was applied at the center of the wall. In existing construction the wall above would be undergoing similar excursions and would have a high probability of bearing on the edge of the wall below rather than the center. However, if the end walls of the building have not failed and the horizontal elements are adequate to control displacement as determined by the methodology, this applied moment from weight of the wall above has a high probability of increasing wall stability.

Input motions encompassed the response of a one story building wall in the three EPA zones considered (EPA = 0.1, 0.2 and 0.4 g). Additional inputs used the time history responses of diaphragms shaken by ground motion selected as representative of EPA equal to 0.2 and 0.4 g. Combinations of soft (flexible) and stiff diaphragm responses were selected to give maximum differential displacements between the top and bottom of the wall specimen. Combinations of stiff diaphragms displacing the top and bottom of the wall were selected to give maximum response to the wall specimens. The sequence of input motions was originally selected anticipating that relative displacement of the top and bottom of the wall, out of phase motions, would be significant. After a few specimen tests it was recognized that input velocity was a more probable scaling factor for input motions. The sequence of input motions used motion sets representative of single story buildings succeeded by motion sets generally ordered in increasing average top and bottom input velocities. After the test apparatus was revised to test 16 ft (4.9 m) high specimens

the sequence was again revised to an order of increasing root mean square of the top and bottom input velocities.

This order of test motions corresponds to the three EPA zones considered (EPA equal to 0.1, 0.2 and 0.4 g) beginning with the motions expected in a single story structure and progressing to a higher intensity seismic zone or a wall above the first floor in a multistory building.

6.3 ACHIEVEMENT OF TEST OBJECTIVES

The dynamic testing of the unreinforced wall specimens provides data to determine probability of survival of URM walls when support conditions at the ends of walls, the intensity of design ground motions and response of building elements are defined. The tests indicate test input must be a time history of seismic motion. This necessity of dynamic testing was postulated in the objectives and has been confirmed.

The selection of the range of variable parameters for test specimens appears adequate to define the performance of the wall specimens. The number of specimens were a minimum for the determination of the influence of the test parameters. The retrofit specimens utilized a single straightforward method of modifying URM walls. The retrofit tests indicated the response levels of elastic walls to the input motions that are applicable to similar retrofit systems that have brittle failure mechanisms. The retrofit system did not exhibit extended inelastic response due to the unexpected strength of the bonding portland cement plaster. However, observations of the dynamic performance of URM specimens give insight into other simple retrofit methods that modify one or more of the test parameters used.

6.4 GENERAL APPLICATION

The information obtained in these dynamic tests is believed to be applicable in all seismic zones within the United States. Since the geographic United States spans the total range of seismic intensity the information gained can be utilized outside its boundaries. Section 6.5 will discuss suggested additional research to refine predictions of

dynamic stability. However, these dynamic tests can provide the basis for analysis procedures incorporating the concept of probability of dynamic stability for URM walls in a seismic environment.

6.5 RESEARCH RECOMMENDATIONS

These dynamic tests of URM wall specimens were a single task of development of a methodology to mitigate seismic hazards in URM buildings. The objective of the test was to define the performance of an element in the URM buildings and the test was simplified from the complex response of a building wall to the three dimensional motions of an earthquake.

Additional research should be considered to define the significance of combination of vertical forces in the URM wall. These vertical forces can be induced by inertial forces due to vertical earthquake motions or by response of the wall to horizontal motion in the wall plane. This research will enable the analysis of URM buildings to more closely approximate the bounds of physical behavior in design earthquakes. As the analysis is refined, conservatism in recommendations for procedures of defining hazards and hazard mitigation can be reduced. Refinement of analysis procedures is believed to be cost effective. Determination of minimal risk can suggest a do-nothing recommendation for an existing URM building in lieu of a required retrofit.

Additional research to determine retrofit methods that have good inelastic behavior should be pursued. Retrofit methods such as tested provide very substantial strength increases to extend elastic performance. Systems using simple construction procedures that have desirable inelastic behavior can be postulated from these dynamic tests. Systems that can provide stabilizing forces to supplement the restoring gravity moments in the wall are another retrofit system. The stiffness and strength of these systems need to be developed and coordinated with the dynamic model of the wall specimen.

SECTION 7

REFERENCES

- ABK, A Joint Venture (ABK). (1981a) Methodology for Mitigation of Seismic Hazards in Existing Unreinforced Masonry Buildings: Categorization of Buildings, ABKTR01. El Segundo, CA: Agbabian Assoc., Dec.
- . (1981b) Methodology for Mitigation of Seismic Hazards in Existing Unreinforced Masonry Buildings: Seismic Input, ABK-TR-02. El Segundo, CA: Agbabian Assoc., Dec.
- . (1981c) Methodology for Mitigation of Seismic Hazards in Existing Unreinforced Masonry Buildings: Diaphragm Testing, ABK-TR-03. El Segundo, CA: Agbabian Assoc., Dec.
- . (1982b) Methodology for Mitigation of Seismic Hazards in Existing Unreinforced Masonry Buildings: Interpretation of Wall Tests, Out-of-Plane, ABK-TR-06. El Segundo, CA: Agbabian Assoc., Mar.
- Adham, S.A. and Ewing, R.D. (1978) Methodology for Mitigation of Seismic Hazards in Existing Unreinforced Masonry Buildings, Phase I, R-7815-4610. El Segundo, CA: Agbabian Assoc., Mar.
- Agbabian Assoc. (AA). (1981) A User's Guide for STARS/III: A Computer Program for the Nonlinear, Dynamic Analysis of Lumped Parameter Systems, U-4700-5261. El Segundo, CA: AA, Oct.

APPENDIX A
SPECIFICATIONS - MASONRY WALL TEST SPECIMENS

This appendix presents the construction specifications for the contractor building the test specimens. These specifications describe in detail the materials and the sequences and methods of construction. These specifications in conjunction with the construction drawings, Figure 3-1, were the legal documents describing the contractor's obligations. The testing described in these specifications was performed by an independent testing laboratory and is reported in Appendix B.

SPECIFICATIONS

MASONRY WALL TEST SPECIMENS

Rockwell International Test Facility
El Segundo, California

Table of Contents

<u>Section</u>	<u>Title</u>	<u>Page</u>
1B	Tests and Inspections .	3
4A	Unit Masonry	3
9A	Reinforced Portland Cement Plaster	2

SECTION 1B - TESTS AND INSPECTIONS

PART 1: GENERAL1.1 PRINCIPAL ITEMS OF WORK INCLUDE:

- a. All materials, labor and technical facilities required to execute the testing work as indicated on the Drawings, as specified and as necessary to complete the Contract.

1.2 COOPERATION:

- a. Contractor shall give timely notice and cooperate with and provide assistance to testing laboratory and Engineer is taking samples, making field tests and field inspections.

1.3 TESTING LABORATORY AND ENGINEER: In addition to the requirements of the General Conditions and Article 11.2 Tests and Inspections, the following shall apply:

- a. The Engineer shall designate all independent testing laboratories to conduct tests required.

1.4 TEST REPORTS

- a. Forward three copies of all test reports performed by testing engineers or laboratories to the Engineer. The reports shall include all tests made. Report on samples taken but not tested, and records of any special sampling operations that were required. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of these specifications.
- b. Furnish a report if work on the project is suspended, and at the completion of the project, a record covering all tests performed.

1.5 PAYMENT

- a. Costs of all testing and procedures specified herein or required shall be paid for by the Engineer. Costs of the following tests and procedures shall be born by the Contractor or deducted from the contract sum in form of change order.
 1. The cost of any test, retest or check test which fails to meet specifications.

- b. The Engineer reserves the right to require tests, or special examinations of any material, item or workmanship or part thereof to assure compliance with Specifications and may reject any material, work, or part judged defective or nonconforming as a result thereof. If such tests or examinations indicate the work paid by the Engineer.

PART 2: PROCEDURES:

2.1 MASONRY UNITS:

- a. Brick: Sample ten units for compressive strength and initial rate of absorption tests made in conformance with ASTM C-62-75a.
- b. Hollow brick: Sample five units of each size for compressive strength and initial rate of absorption tests made in conformance with ASTM C-62-75a.
- c. Concrete masonry units: Sample six units of each size for compressive strength testing, measurement of dimensions and weight determination.

2.2 MORTAR TESTS:

- a. Pick up and test mortar specimens prepared by the Contractor. Three two inch cubes and three 2" x 4" cylinders shall be prepared for each class of mortar used in a days work. Specimens shall be prepared in accord with UBC Standard 24-22.
- b. Testing of mortar specimens shall be reasonably coordinated with testing of full size wall specimens so as to represent the strength at time of full size testing by testing subcontractors.

2.3 MASONRY PRISMS:

- a. Pick up and test 32 inch square masonry prisms constructed for each class of masonry materials utilized for construction of test specimens. The Contractor shall construct ten prisms, two each of each type concrete block or brick. Construct prisms identical to specified work for test specimens.
- b. Test masonry prisms to failure by loading the prism on a diagonal through a six inch face loading shoe.
- c. Weigh and determine dimensions of each prism.

- c. Testing of prisms shall be reasonably coordinated with testing of full size wall specimens so as to represent the strength at time of full size testing by testing subcontractor.
- d. Retain failed specimens for inspection by Engineer. The Engineer may reclaim the remainder of the prisms for further testing.

END OF SECTION

PART 1: GENERAL:1.1 PRINCIPAL ITEMS OF WORK INCLUDED:

- a. Solid and hollow unit brick masonry.
- b. Concrete block unit masonry.
- c. Setting of anchors and miscellaneous inserts in masonry.
- d. Preparing mortar specimens and masonry prisms.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- a. Masonry wall base fixtures: By others.
- b. Testing of Mortar and prisms: Section: Testing and Inspection.

1.3 REQUIREMENTS:

- a. Prepare six mortar specimens for each class of mortar for each days work.
- b. Test prisms: Prepare ten masonry test prisms at time of construction of identical wall test specimens.

PART 2: PRODUCTS:2.1 MATERIALS:

- a. Concrete block unit masonry: Type 1, Grade N. light weight, concrete block, conforming to ASTM G-90. Sizes: 8" wide x 16" long and 6" wide x 8" high x 16" long units. Both ends closed.
- b. Brick: Grade MW, conforming to ASTM C-62. Size: 2 1/2" high x 3 7/8" wide x 8 1/4" long.
- c. Hollow brick: Grade MW, conforming to ASTM C-652. Size: 3 5/8" or 7 5/8" high x 3 5/8" and 7 5/8" wide x 15 5/8" long.

2.2 MIXES:

- a. Mortar:
 1. Type N: One part portland cement: One part hydrated lime: two and one quarter to three times the sum of portland cement and lime of sand.
 2. Type O: One part portland cement: 2 parts hydrated lime: two and one quarter to three times the sum of portland cement and lime of sand.
 3. Pea Gravel Concrete: Equal to coarse grout, UBC Section 2403 (s)

Unit Masonry 4A-1

PART 3: EXECUTION3.1 PREPARATION

- a. Base fixture for masonry wall: Set fixture on plywood shims or strips to level top of fixture to a tolerance of 1/4 inch in ten feet. Use 2" continuous strip at edge of plate or two shims under wall of 10" x 24" minimum size.
- b. Concrete base: Place pea gravel concrete flush with top of angles. After initial set of the concrete clean upper surface with hose stream and brushing to expose aggregate. Concrete may be job or transit mixed.
- c. Inserts and anchors: Set all anchors and inserts plumb and level or as specifically detailed otherwise.

3.2 INSTALLATION:

- a. Brick masonry: Construct brick masonry with full head and bed joints in running bond. Bond wythes with continuous header courses at 24" vertical. Lap headers from exterior wythes 4". Mortar type for brick masonry shall be Type O.
- b. Hollow brick masonry: Construct hollow brick masonry with head and bed joints equal to face shell thickness in running bond. Fill all cells with mortar. Mortar type for hollow brick masonry shall be Type N.
- c. Concrete block unit masonry: Construct unit masonry with head and bed joints equal to face shell thickness in running bond. Mortar type for concrete block unit masonry shall be Type N. Fill top course with mortar for bond beam.
- d. Units shall be set plumb and true within the following tolerances:
Variation from plumb in 10 feet 1/4"
Variation from level in 10 feet 1/4"
- e. Finishes:
 1. Joints:
 - A. Joints shall be of a uniform thickness not greater than 1/2" and not less than 3/8".
 - B. Joints struck flush unless indicated otherwise.
 2. Bond: Running bond unless otherwise indicated.

3.3 TEST PRISMS:

- a. Construct two 32" square prisms of each unreinforced unit masonry material used, total of ten prisms. Materials, thickness and methods shall be identical to full size walls.

Unit Masonry 4A-2

- b. Construct test prisms on 3/8" plywood over wood members spaced to permit lifting the prisms for transportation to the laboratory.
- c. Construct prism on same day as construction of identical material wall. Mark prism with wall number.

3.4 TEMPORARY WALL BRACING:

- a. Provide tilt-up braces, two per wall section, as shown on the drawings. Braces shall be to the existing slab or to a braced wall previously constructed.
- b. Install bracing on each working day to walls completed or constructed above the point of attachment.

END OF SECTION

5A STRUCTURAL STEEL

1. GENERAL The General Conditions and the applicable portions of the Special Conditions are part of this Section.
2. SCOPE Provide structural steel work as indicated and specified, complete.
3. WORK INCLUDED Principal items of work include:
 - A. All plates, shapes, rods, bars, straps and connection therefor.
 - B. All bolts, nuts and washers.
 - C. Field and shop welding.
4. MATERIALS
 - A. Structural Steel: Conform to ASTM A36-70a.
 - B. Bolts: American Standard, unfinished, conform to ASTM A307. Nuts: Heavy pattern with washers.
 - C. Welding Electrodes: Conform to AWS A5. Electrode classifications for structural steel E60 series.
 - D. Finished Rod: Cold finished rounds of 0.28% carbon or less conforming to AISI tolerances. Jorgensen C-1213 or equal.
5. WORKMANSHIP Conform to AISC Standard Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings. Fabricate and assemble work of this section with skilled workmen, using exact sizes and weights shown, accurately and neatly executed.
 - A. Holes: As detailed and required to connect this work. Burned holes are not allowed.
 - B. Welding: Use shielded electric arc process per AWS Standard Code. Minimum size of structural welds, 3/16" by 1 1/2", excepting resistance seam welds. Field welds to be chipped, slagged and wire brushed clean for inspection.

- C. Handling, Transport and Storage: In a manner so as not to overstress, kink or otherwise injure any member, or permit rusting.

6. PAINING AND PROTECTIVE COATINGS

- A. Shop Painting: Exposed surfaces to be free of rust and mill scale, and cleaned with mineral spirits before painting. Paint all parts and surfaces of all members other than finish rod, bolts and studs with two (2) coats of metal primer.

7. APPLICABLE STANDARDS

AMERICAN INSTITUTE OF STEEL CONSTRUCTION

Specifications for the Design, Fabrication and Erection of Structural Steel for Buildings

AMERICAN WELDING SOCIETY

Welding in Building Construction

AMERICAN SOCIETY OF TESTING AND MATERIALS

ASTM A36 - Material Specifications for Structural Steel

SECTION 9A - REINFORCED PORTLAND CEMENT PLASTER

PART 1: GENERAL1.1 PRINCIPAL ITEMS OF WORK INCLUDED:

- a. Reinforcement for portland cement plaster.
- b. Lathing for application of plaster.
- c. Portland cement plaster.

1.2 RELATED WORK SPECIFIED ELSEWHERE:

- a. Unit Masonry, Section 4A

PART 2: PRODUCTS2.1 MATERIALS:

- a. Portland Cement: ASTM C-150, Type I or II.
- b. Aggregate sand: ASTM C-33 washed natural sand.
- c. Welded wire fabric: Electrically welded wire fabric of cold-drawn wire per ASTM A-185.

2.2 MIXES:

- a. Portland cement plaster shall be one part portland cement to four parts sand maximum. Dry hydrated lime may be added as a plasticizing agent to each sack of portland cement in the following proportions:

<u>Sand (volume)</u>	<u>Lime (pounds)</u>
2 parts	5
3 parts	7 1/2
4 parts	10

PART 3: EXECUTION

- 3.1 CONDITION OF SURFACES: Existing unit masonry surfaces to receive reinforced portland cement plaster shall be washed to remove dust.

3.2 PREPARATION:

- a. Electrically welded mesh: Apply with splices between adjacent sheets vertically. Attach to existing masonry surface with concrete nail and furring washer.

Reinforced Portland Cement Plaster 9A-1

3.3 INSTALLATION: First coat of portland cement plaster shall embed all reinforcement. Additional coats of portland cement plaster shall total the full thickness noted on the drawings. Placing and curing of all plaster material per UBC Table 47-F except that finish coat shall be omitted.

END OF SECTION

APPENDIX B
LABORATORY TEST RESULTS

This appendix presents the results of a materials test program conducted by an independent testing laboratory. The number of tests, the methods of testing and the age of testing of the masonry specimens were specified by ABK. These test results will provide a yardstick for the design profession to judge the masonry quality and relate the specimen quality to masonry in current or past use in their geographic zone.

In addition to the independent laboratory report, pages B-24 and B-25 provide a key to correlate the mortar and other tested material with the dynamic wall test specimens.

RICHMOND PMII

FORM 714 THE LC

SMITH-EMERY COMPANY

CHEMISTS - TESTING - INSPECTION - ENGINEERS

781 EAST WASHINGTON BOULEVARD • LOS ANGELES, CALIFORNIA 90021 • (213) 749-3411
3148-G LA PALMA AVENUE • ANAHEIM, CALIFORNIA 92806 • (714) 630-4910

ALL REPORTS ARE SUBMITTED AS THE CONFIDENTIAL PROPERTY OF CLIENTS. AUTHORIZATION FOR PUBLICATION OF OUR REPORTS, CONCLUSIONS, OR EXTRACTS FROM OR REPRODUCING THEM IS RESERVED PENDING OUR WRITTEN APPROVAL AS A MUTUAL PROTECTION TO CLIENTS, THE PUBLIC AND OURSELVES.

File No.: AI58940
LABORATORY No.: L-79-1740

DATE: June 10, 1980

ABK (A Joint Venture)
c/o John Kariotis
Kariotis, Kesler & Allys
1414 Fair Oaks Avenue
South Pasadena, California 91030

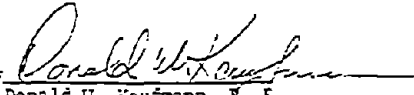
Re: National Science Foundation Contract #NSF - C-PFR 78-19200.
Out of Plane Dynamic Wall Test.

SOURCE: Materials submitted to Laboratory.

REPORT OF TESTS

See attached Pages 1 through 21 for test data
of cylinders, cubes, and materials.

Respectfully submitted,
SMITH-EMERY COMPANY

by 
Donald W. Kaufmann, P. E.
Quality Engineer

DKK/wh
2-addressee

File No.: AI58940
 Lab No: L-79-1740

FORM 714 2-12-60

SMITH-EMERY COMPANY

PLANE WALL TEST

Mortar Specimens

Compression Tests (Type "N" Mortar)

Cylinders - 2" x 4"
 Cubes - 2" x 2" x 2"

<u>Identification</u>	<u>Date Made</u>	<u>Date Tested</u>	<u>Age Days</u>	<u>Area Sq. In.</u>	<u>Load, Pounds</u>	<u>P. S. I.</u>
1N (Cylinders)	9-17-79	2-14-80	150	3.14	7,940	2,528
				3.14	8,160	2,598
				3.14	8,200	<u>2,511</u>
						2,579
1N (Cubes)	9-17-79	2-14-80	150	4.0	7,700	1,925
				4.0	8,000	2,000
				4.0	8,500	<u>2,375</u>
						2,100
2N (Cylinders)	9-18-79	2-19-80	154	3.14	4,800	1,528
				3.14	5,700	1,815
				3.14	5,500	<u>1,751</u>
						1,698
2N (Cubes)	9-18-79	2-19-80	154	4.0	4,400	1,100
				4.0	5,100	1,275
				4.0	5,900	<u>1,475</u>
						1,283
3N (Cylinders)	9-19-79	2-20-80	154	3.14	6,000	1,910
				3.14	6,360	2,025
				3.14	5,920	<u>1,885</u>
						1,940
3N (Cubes)	9-19-79	2-20-80	154	4.0	7,180	1,795
				4.0	6,400	1,600
				4.0	6,720	<u>1,680</u>
						1,692
4N (Cylinders)	9-20-79	2-20-80	153	3.14	3,200	1,019
				3.14	2,900	923
				3.14	3,400	<u>1,082</u>
						1,008
4N (Cubes)	9-20-79	2-20-89	153	4.0	2,560	665
				4.0	2,460	615
				4.0	2,280	<u>570</u>
						617

File No.: AI58940
 Lab No: L-79-1740

FORM 7-74 7-74 LC

SMITH-EMERY COMPANY

Compression Tests (Type "N" Mortar)-Con't

<u>Identification</u>	<u>Date Made</u>	<u>Tested</u>	<u>Days</u>	<u>Sq. In.</u>	<u>Pounds</u>	<u>P. S. I.</u>
5N (Cylinders)	9-21-79	3-17-80	178	3.14	7,200	2,292
				3.14	7,000	2,229
				3.14	6,940	2,221
						2,247
5N (Cubes)	9-21-79	3-17-80	178	4.0	4,860	1,215
				4.0	6,180	1,545
				4.0	6,180	1,545
						1,435
5N (Cylinders)	9-24-79	3-3-80	161	3.14	5,760	1,834
				3.14	5,480	1,745
				3.14	5,360	1,707
						1,762
6N (Cubes)	9-24-79	3-3-80	161	4.0	3,100	775
				4.0	3,950	990
				4.0	5,140	1,285
						1,017
7N (Cylinders)	9-25-79	3-17-80	174	3.14	4,700	1,495
				3.14	5,500	1,751
				3.14	5,460	1,738
						1,662
7N (Cubes)	9-25-79	3-17-80	174	4.0	3,760	940
				4.0	3,580	920
				4.0	3,580	895
						918
8N (Cylinders)	9-26-79	3-3-80	159	3.14	7,160	2,280
				3.14	6,740	2,146
				3.14	6,520	2,076
						2,167
8N (Cubes)	9-26-79	3-3-80	159	4.0	5,080	1,270
				4.0	5,260	1,315
				4.0	5,480	1,370
						1,318

File No.: AT58940
 Lab No: L-79-1740

FORM P-1A (REV. 6-6)

SMITH-EMERY COMPANY

Compression Tests (Type "N" Mortar)-Cont'd

<u>Identification</u>	<u>Date Made</u>	<u>Date Tested</u>	<u>Age Days</u>	<u>Area Sq. In.</u>	<u>Load Pounds</u>	<u>P. S. I.</u>
9N (Cylinders)	9-27-79	3-17-80	172	3.14	6,900	2,197
				3.14	7,080	2,254
				3.14	5,420	1,726
						<u>2,059</u>
9N (Cubes)	9-27-79	3-17-80	172	4.0	7,240	1,819
				4.0	6,940	1,735
				4.0	6,400	1,600
						<u>1,715</u>
10N (Cylinders)	10-10-79	3-17-80	159	3.14	6,000	1,910
				3.14	7,380	2,350
				3.14	7,260	2,312
						<u>2,191</u>
10N (Cubes)	10-10-79	3-17-80	159	4.0	5,880	1,470
				4.0	6,060	1,515
				4.0	5,420	1,355
						<u>1,447</u>
11N (Cylinders)	10-11-79	3-17-80	158	3.14	6,120	1,949
				3.14	5,720	1,821
				3.14	7,100	2,261
						<u>2,010</u>
11N (Cubes)	10-11-79	3-17-80	158	4.0	4,680	1,170
				4.0	5,100	1,275
				4.0	5,680	1,420
						<u>1,288</u>
12N (Cylinders)	10-13-79	3-17-80	156	3.14	3,720	1,184
				3.14	3,480	1,108
				3.14	3,980	1,257
						<u>1,186</u>
12N (Cubes)	10-13-79	3-17-80	156	4.0	3,760	940
				4.0	3,680	920
				4.0	4,040	1,010
						<u>957</u>

File No.: AI58940
 Lab No: L-79-1740

FORM NO. 101 LC

SMITH-EMERY COMPANY

Compression Tests (Type "N" Mortar)-Con't

<u>Identification</u>	<u>Date Made</u>	<u>Date Tested</u>	<u>Age Days</u>	<u>Area Sq. In.</u>	<u>Load Pounds</u>	<u>P. S. I.</u>
13N (Cylinders)	10-17-79	3-17-80	152	3.14	4,660	1,434
				3.14	3,800	1,210
				3.14	3,900	<u>1,242</u>
						1,295
13N (Cubes)	10-17-79	3-17-80	152	4.0	5,080	1,270
				4.0	4,880	1,220
				4.0	4,560	<u>1,140</u>
						1,210
14N (Cylinders)	10-19-79	3-17-80	150	3.14	5,380	1,713
				3.14	5,480	1,745
				3.14	6,940	<u>2,210</u>
						1,389
14N (Cubes)	10-19-79	3-17-80	150	4.0	6,200	1,550
				4.0	6,740	1,685
				4.0	6,100	<u>1,525</u>
						1,587

File No.: AI58940
 Lab No.: L-79-1740

FORM T-21 (11-66)

SMITH-EMERY COMPANY

PLANE WALL TESTMortar SpecimensCompression Tests (Type "O" Mortar)

Cylinders - 2" x 4"
 Cubes - 2" x 2" x 2"

<u>Identification</u>	<u>Date Made</u>	<u>Date Tested</u>	<u>Age Days</u>	<u>Area Sq. In.</u>	<u>Load, Pounds</u>	<u>P. S. I.</u>
10 (Cylinders)	10-1-79	2-20-80	142	3.14	2,120	675
				3.14	2,540	808
				3.14	2,620	<u>834</u>
						772
10 (Cubes)	10-1-79	2-20-80	142	4.0	2,700	675
				4.0	2,900	725
				4.0	2,340	<u>585</u>
						662
20 (Cylinders)	10-2-79	2-20-80	141	3.14	1,900	605
				3.14	2,000	636
				3.14	2,220	<u>707</u>
						649
20 (Cubes)	10-2-79	2-20-80	141	4.0	1,600	400
				4.0	1,180	295
				4.0	1,660	<u>415</u>
						370
30 (Cylinders)	10-3-79	2-20-80	140	3.14	1,480	471
				3.14	1,460	464
				3.14	1,520	<u>484</u>
						473
30 (Cubes)	10-3-79	2-20-80	140	4.0	820	205
				4.0	1,020	255
				4.0	880	<u>220</u>
						227
40 (Cylinders)	10-4-79	2-20-80	139	3.14	2,500	796
				3.14	2,160	687
				3.14	2,200	<u>700</u>
						728
40 (Cubes)	10-4-79	2-20-80	139	4.0	2,520	630
				4.0	2,360	595
				4.0	1,800	<u>450</u>
						558

ABK-TR-04

File No.: AIS8940
 Lab No: L-79-1740

FORM P-2A MILC

SMITH-EMERY COMPANY

Compression Tests (Type "O" Mortar)-Con't.

<u>Identification</u>	<u>Date Made</u>	<u>Tested</u>	<u>Days</u>	<u>Sq. In.</u>	<u>Pounds</u>	<u>P. S. I.</u>
50 (Cylinders)	10-9-79	3-3-80	147	3.14	1,940	617
				3.14	2,320	738
				3.14	2,220	707
						<u>687</u>
50 (Cubes)	10-9-79	3-3-80	146	4.0	2,420	605
				4.0	2,680	670
				4.0	2,360	590
						<u>622</u>
60 (Cylinders)	10-22-79	2-20-80	121	3.14	1,880	598
				3.14	1,680	535
				3.14	1,640	522
						<u>552</u>
60 (Cubes)	10-22-79	2-20-80	121	4.0	1,680	420
				4.0	1,500	375
				4.0	1,580	395
						<u>397</u>
70 (Cylinders)	10-23-79	2-20-80	120	3.14	1,100	350
				3.14	1,100	350
				3.14	1,120	356
						<u>352</u>
70 (Cubes)	10-23-79	2-20-80	120	4.0	560	140
				4.0	780	195
				4.0	1,120	280
						<u>205</u>
80 (Cylinders)	10-24-79	2-20-80	119	3.14	1,400	445
				3.14	1,300	414
				3.14	1,420	452
						<u>437</u>
80 (Cubes)	10-24-79	2-20-80	119	4.0	1,000	265
				4.0	1,080	270
				4.0	900	225
						<u>253</u>

File No.: AI58940
 Lab No: L089-1740

FORM PMA 241 LC

SMITH-EMERY COMPANY

Compression Tests (Type "O" Mortar)-Con't

<u>Identification</u>	<u>Date Made</u>	<u>Date Tested</u>	<u>Age Days</u>	<u>Area Sq. In.</u>	<u>Load, Pounds</u>	<u>P. S. I.</u>
90A* (Cylinders)	10-26-79	12-3-79	38	3.14	1,400	446
				3.14	1,440	459
				3.14	1,580	<u>503</u>
						469
90B (Cylinders)	10-26-79	3-17-80	143	3.14	1,280	407
				3.14	1,140	363
				3.14	1,420	<u>452</u>
						407
90 (cubes)	10-26-79	3-17-80	143	4.0	800	200
				4.0	740	185
				4.0	640	<u>160</u>
						182
100A* (Cylinders)	10-27-79	12-3-79	37	3.14	2,860	911
				3.14	2,620	834
				3.14	3,160	<u>1,006</u>
						917
100B (Cylinders)	10-27-79	3-17-80	142	3.14	3,040	968
				3.14	2,800	891
				3.14	3,280	<u>1,044</u>
						968
100 (Cubes)	10-27-79	3-17-80	142	4.0	2,760	690
				4.0	2,400	600
				4.0	2,600	<u>650</u>
						647
110A* (Cylinders)	10-29-79	12-3-79	35	3.14	2,080	662
				3.14	1,640	522
				3.14	1,880	<u>599</u>
						594
110B (Cylinders)	10-29-79	3-17-80	140	3.14	1,460	464
				3.14	1,920	611
				3.14	1,820	<u>579</u>
						551
110 (Cubes)	10-29-79	3-17-80	140	4.0	1,700	425
				4.0	1,720	430
				4.0	1,640	<u>410</u>
						422

* Wet Cure

ABK-TR-04

File No.: AI58940
Lab No: L-79-1740

FORM PMA 241 LC

SMITH-EMERY COMPANY

PLANE WALL TEST

Portland Cement Plaster Specimens

Compression Tests

<u>Identification</u>	<u>Date Made</u>	<u>Date Tested</u>	<u>Age Days</u>	<u>Area Sq. In.</u>	<u>Load, Pounds</u>	<u>P. S. I.</u>
1C	10-30-79	2-14-80	107	3.14	11,100	3,535
2C	10-30-79	2-14-80	107	3.14	10,520	3,350
3C	10-30-79	2-14-80	107	3.14	11,960	3808
4B	10-30-79	2-14-80	107	3.14	11,260	3,585
5B	10-30-79	2-14-80	107	3.14	12,950	4,135
6B	10-30-79	2-14-80	107	3.14	13,720	4,369
7C	11-2-79	2-14-80	104	3.14	11,460	3,649
8C	11-2-79	2-14-80	104	3.14	11,520	3,668
9C	11-2-79	2-14-80	104	3.14	8,620	2,745
10B	11-2-79	2-14-80	104	3.14	10,220	3,254
11B	11-2-79	2-14-80	104	3.14	9,760	3,120
12B	11-2-79	2-14-80	104	3.14	11,760	3,254

File No.: A158940
 Lab No: I-79-1740

FORM PMA 201-10

SMITH-EMERY COMPANY

Red Clay Tile 8" x 8" x 16"

Compression Test

	<u>Actual Size</u> <u>Inches</u>	<u>Gross Area</u> <u>Sq. In.</u>	<u>Net Area</u> <u>Sq. In.</u>	<u>Total Load</u> <u>Pounds</u>	<u>Gross Area</u> <u>PSI</u>	<u>Net Area</u> <u>PSI</u>
1.	7.90 x 7.50 x 15.40	121.66	69.76	216,000	1,775	3,096
2.	7.85 x 7.50 x 15.45	121.28	69.38	215,000	1,773	3,099
3.	7.85 x 7.50 x 15.35	120.50	68.60	232,000	1,925	3,382
4.	7.90 x 7.65 x 15.45	122.06	70.16	232,000	1,901	3,307
5.	7.85 x 7.60 x 15.50	121.68	69.78	187,000	1,537	2,680
			Average		1,782	3,113

INITIAL RATE OF ABSORPTION

<u>Sample</u> <u>Number</u>	<u>Actual Dimension</u>		<u>Area</u> <u>Sq. In.</u>	<u>Actual Weight Gain</u> <u>Grams</u>	<u>Corrected Weight Gain</u> <u>Grams</u>
	<u>L</u>	<u>H</u>			
1	15.40	7.50	115.50	125.0	32.46
2	15.45	7.50	115.87	142.0	36.76
3	15.35	7.50	115.12	124.0	32.31
4	15.45	7.65	118.19	131.0	33.25
5	15.50	7.60	117.80	135.0	34.38
			Average	131.4	33.83

File No.: AT58940
 Lab No: L-79-1740

FORM PMA 111 LC

SMITH-EMERY COMPANY

Common Red Clay Brick - 4" x 2" x 8"

Compression Strength Tests (Tested Flatwise)

A.S.T.M. C62

<u>Sample Number</u>	<u>Dimensions Inches</u>	<u>Area Sq. In.</u>	<u>Load Pounds</u>	<u>Compression Strength PSI</u>
1	4.10 x 4.30	17.63	132,00	7,487
2	4.10 x 4.00	16.40	114,500	6,982
3	4.10 x 4.10	16.81	119,000	7,079
4	3.95 x 4.15	16.39	125,500	7,627
5	4.15 x 4.50	18.68	137,500	7,334
Average.				7,032

INITIAL RATE OF ABSORPTION

<u>Sample Number</u>	<u>Actual Dimension</u>		<u>Area Sq. In.</u>	<u>Actual Weight Gain Grams</u>	<u>Corrected Weight Gain Grams</u>
	<u>L</u>	<u>W</u>			
1	8.55	4.20	35.91	41.0	34.25
2	8.55	4.15	35.48	42.0	35.51
3	8.55	4.00	34.20	36.0	31.57
4	8.60	4.15	35.69	43.0	36.14
5	8.55	4.15	35.48	42.0	35.51
Average.				40.8	34.60

File No.: AT58940
 Lab No: 1-79-1740

FORM PMA 1016 C

SMITH-EMERY COMPANY

Concrete Block - 6" x 8" x 16" - Medium Weight.

Summary Test Data

Compression Test, Gross Area, PSI	1,252
Compression Test, Net Area, PSI	2,432
Weight As Received, Pounds	25.37
Dry Weight, Pounds Per Cubic Foot	124.9
Dry Weight, Pounds	25.17
Face Shell Thickness, Inches	1.019
Web Thickness, Inches	1.015
Equivalent Web Thickness, Inch/Linear Foot	2.384

Compression Test

	Actual Size Inches	Gross Area Sq. In.	Net Area Sq. In.	Total Load Pounds	Gross Area PSI	Net Area PSI
1.	5.6 x 7.6 x 15.65	87.64	45.16	111,500	1,272	2,469
2.	5.6 x 7.7 x 15.60	87.36	44.99	115,000	1,316	2,556
3.	5.7 x 7.7 x 15.75	89.78	46.24	105,000	1,170	2,271
				Average	1,252	2,432

Sample Number	Weight As Received, Pounds	Dry Weight Pounds Per Cu. Ft.	Dry Weight Pounds
1	25.71	126.0	25.48
2	25.15	123.6	24.94
3	25.26	125.1	25.09
Average	25.37	124.9	25.17

Thickness of Face Shell and Webs

	Face Shell Thickness, Inches		Web Thickness, Inches			Equivalent Web Thickness In./Linear Foot
	1 Side	Opposite Side	End	Center	End	
1.	1.053	1.001	1.036	1.018	1.039	2.372
2.	1.003	1.024	1.064	1.015	1.049	2.406
3.	1.024	1.008	1.063	1.013	1.038	2.373
	1.026	1.011	1.054	1.015	1.042	2.384
Average	1.019					

File No.: A158940
 Lab No: L-79-1740

FORM P-2A P-11 LC

SMITH-EMERY COMPANY

Concrete Block - 8" x 8" x 16" - Medium Weight

Summary Test Data

Compression Test, Gross Area, PSI	1,265
Compression Test, Net Area, PSI	2,493
Weight As Received, Pounds	32.48
Dry Weight, Pounds Per Cubic Foot	119.2
Dry Weight, Pounds	32.23
Face Shell Thickness, Inches	1.274
Web Thickness, Inches	1.023
Equivalent Web Thickness, Inch/Linear Foot	2.749

Compression Test

	<u>Actual Size</u> <u>Inches</u>	<u>Gross Area</u> <u>Sq. In.</u>	<u>Net Area</u> <u>Sq. In.</u>	<u>Total Load</u> <u>Pounds</u>	<u>Gross Area</u> <u>PSI</u>	<u>Net Area</u> <u>PSI</u>
1.	7.65 x 7.65 x 15.60	119.3	60.8	154,500	1,295	2,541
2.	7.60 x 7.75 x 15.60	118.6	60.1	148,500	1,252	2,471
3.	7.70 x 7.75 x 15.60	120.1	60.8	150,000	1,249	2,467
				Average	1,265	2,493

<u>Sample</u> <u>Number</u>	<u>Weight</u> <u>As Received, Pounds</u>	<u>Dry Weight</u> <u>Pounds</u> <u>Per Cu. Ft.</u>	<u>Dry Weight</u> <u>Pounds</u>
1	32.37	119.0	32.13
2	32.54	119.1	32.28
3	32.54	119.4	32.29
Average	32.48	119.2	32.23

Thickness of Face Shell and Webs

	<u>Face Shell Thickness, Inches</u>		<u>Web Thickness, Inches</u>			<u>Equivalent Web Thickness</u>
	<u>1 Side</u>	<u>Opposite Side</u>	<u>End</u>	<u>Center</u>	<u>End</u>	<u>In./Linear Foot</u>
1.	1.285	1.248	1.293	1.029	1.251	2.748
2.	1.288	1.260	1.304	1.023	1.279	2.774
3.	1.307	1.254	1.250	1.016	1.274	2.725
Avg	1.293	1.254	1.282	1.023	1.268	2.749
	1.274					

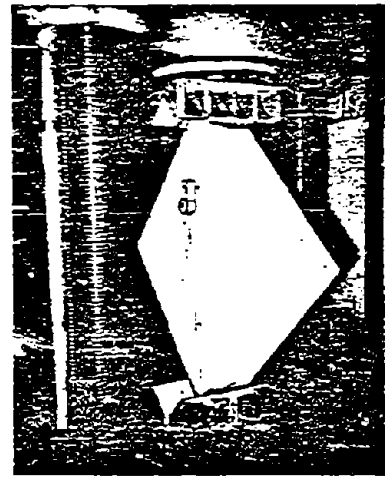
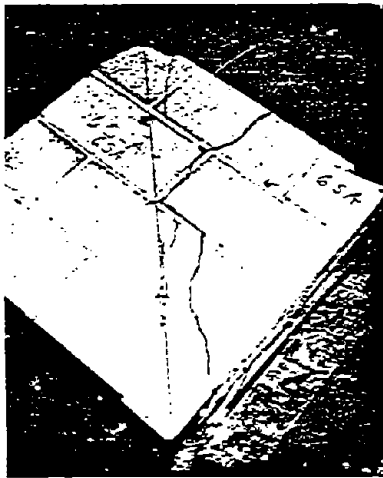
File No.: AI58940
 Lab No: L-79-1740

FORM PMA 241 LC

SMITH-EMERY COMPANY

Diagonal Shear (Solid Filled Concrete Block Units - 6" x 8" x 16")

Identification	6 S A	6 S B
Date of Test	2-19-80	2-19-80
Length, Inches	31.75	31.75
Height, Inches	31.50	31.50
Thickness, Inches	5.65	5.65
Weight of Specimen, Pounds	385.8	387.9
Gross Area, Square Inch	179.39	179.39
Maximum Load, Pounds	33,000	34,200
Shear Stress, P.S.I.	130.1	134.8



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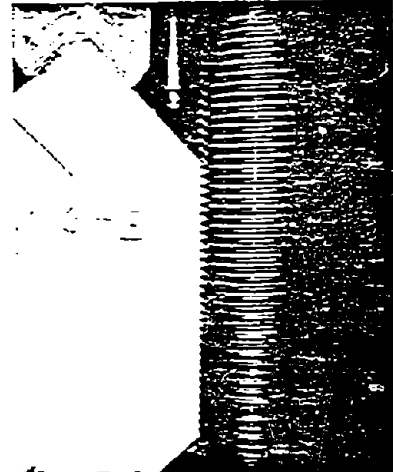
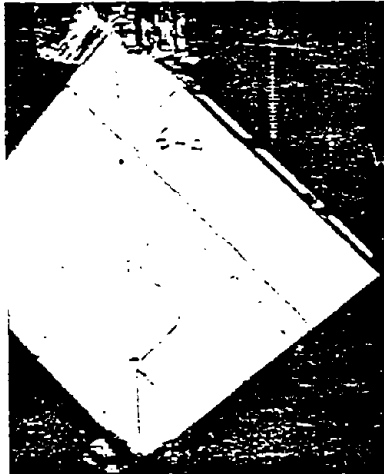
File No.: AIS8940
Lab No: I-79-1740

FORM PMA PMS LC

SMITH-EMERY COMPANY

Diagonal Shear (Hollow Concrete Block Units - 6" x 8" x 16")

Identification	6 H A	6 H B
Date of Test	3-15-80	3-15-80
Length, Inches	32.13	31.75
Height, Inches	32.0	31.25
Thickness, Inches	5.70	5.70
Weight of Specimen, Pounds	219	215
Gross Area, Square Inches	183.14	180.98
Percent, Net Area	51.53	51.53
Net Area, Square Inches	94.37	92.26
Maximum Load, Pounds	4,150	13,150
Shear Stress, P.S.I.	31.1	99.7



ABK-TR-04

File No.: A158940
Lab No: L-79-1740

FORM PMA ONE LC

SMITH-EMERY COMPANY



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File No.: AI58940
 Lab No: L-79-1740

FORM PEA 341 LC

SMITH-EMERY COMPANY

Diagonal Shear (Hollow Concrete Block Units - 8" x 8" x 16")

Identification	8 E A	8 E B
Date of Test	3-8-80	3-8-80
Length, Inches	31.75	31.75
Height, Inches	31.70	31.75
Thickness, Inches	7.63	7.63
Weight of Specimen, Pounds	287	287
Gross Area, Square Inch	242.25	242.25
Percent, Net Area	50.66	50.66
Net Area, Square Inches	122.72	122.72
Maximum Load, Pounds	18,350	*See Note
Shear Stress, P. S. I.	105.7	

NOTE: *While placing in testing machine, specimen fell apart.



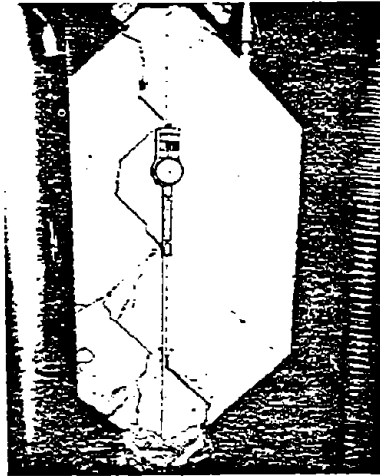
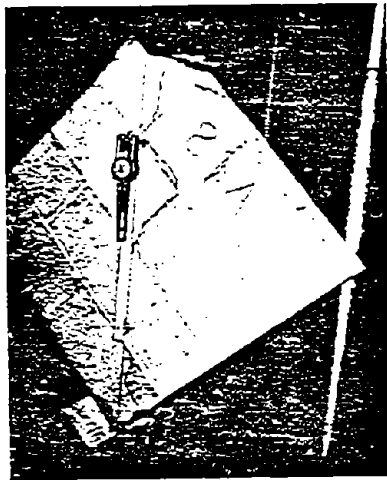
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 Lab No: L-79-1740

FORM PMA 241 LC

SMITH-EMERY COMPANY

Diagonal Shear (Solid Filled Concrete Block - 8" x 8" x 16")

Identification	8 S A	8 S B
Date of Test	2-19-80	3-8-80
Length, Inches	31.75	31.75
Height, Inches	31.50	31.75
Thickness, Inches	7.65	7.63
Weight of Specimen, Pounds	516.5	504
Gross Area, Square Inches	242.89	242.25
Maximum Load, Pounds	28,400	26,800
Shear Stress, P.S.I.	82.7	84.1



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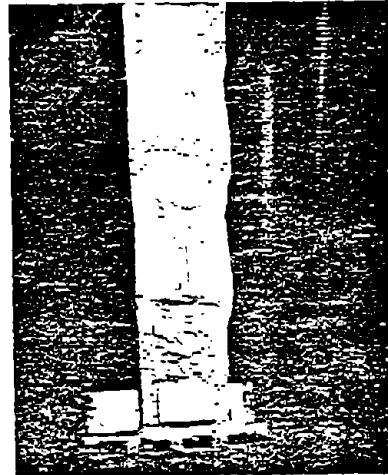


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File No.: AI58940
Lab No.: L-79-1740

FORM PMA PMS LC

SMITH-EMERY COMPANY



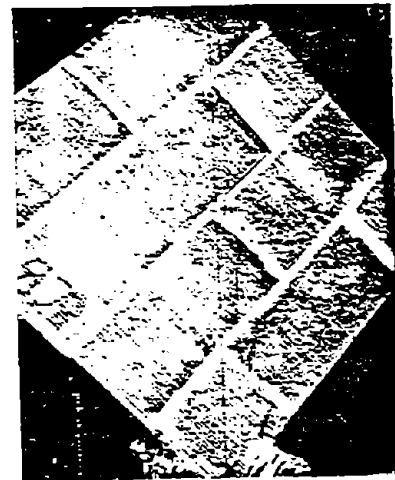
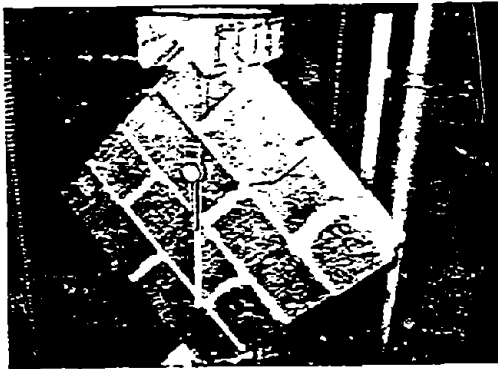
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 Lab No: L-79-1740


FORM PEA 111-15

SMITH-EMERY COMPANY

Diagonal Shear (Solid Filled Clay Block Units - 8" x 8" x 16")

Identification	8 C A	8 C B
Date of Test	3-15-80	3-15-80
Length, Inches	31.75	31.75
Height, Inches	31.88	32.00
Thickness, Inches	7.65	7.65
Weight of Specimen, Pounds	496	503
Gross Area, Square Inches	242.89	242.89
Maximum Load, Pounds	22,200	34,600
Shear Stress, P.S.I.	64.2	100.7



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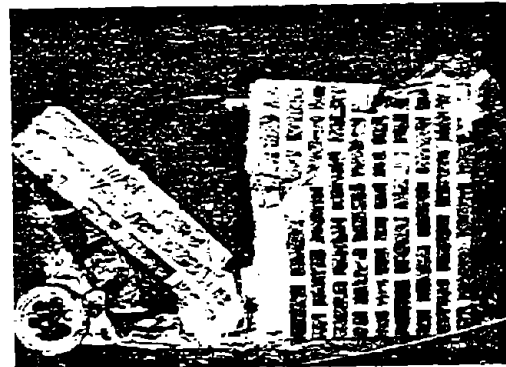
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 Lab No: L-79-1740


FORM P-14 P-11 LC

SMITH-EMERY COMPANY

Diagonal Shear (Common Brick Units)

Identification	14 A	14 B
Date of Test	2-20-80	3-3-80
Length, Inches	36.10	36.50
Height, Inches	36.50	36.75
Thickness, Inches	14.10	14.10
Weight of Specimen, Pounds	1,610	1,850 / 1,650
Gross Area, Square Inches	509.01	514.65
Maximum Load, Pounds	97,600	89,400
Shear Stress, P.S.I.	135.6	122.8

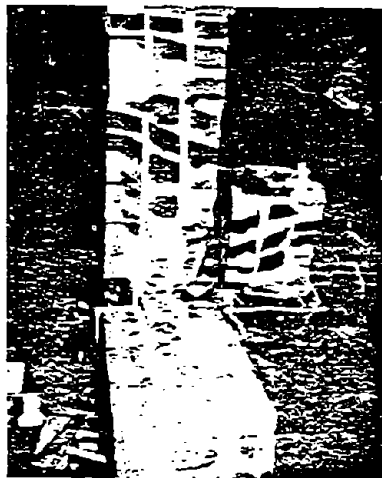


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File No.: A158940
Lab No: L-79-1740

FORM FEA 3-61 LC

SMITH-EMERY COMPANY



14 B

OUT OF PLANE WALL TEST
TEST SPECIMENS

MORTAR SPECIMENS

<u>Specimen</u>	<u>Mortar Type</u>	<u>Related Test Panel</u>	<u>Date Sampled</u>
1N	N	4, 13, 16, 5, 14, 17	9/17/79
2N	N	14, 6	9/18/79
3N	N	6, 15, 18, 10	9/19/79
4N	N	6, 15, 18, 10	9/20/79
5N	N	11, 12	9/21/79
6N	N	11, 12, 7	9/24/79
7N	N	11, 12, 7	9/25/79
8N	N	7, 8, 12, 21	9/26/79
9N	N	8, 21	9/27/79
10N	N	9	10/10/79
11N	N	19, 20	10/11/79
12N	N	19, 20	10/13/79
13N	N	19, 20, 22	10/17/79
14N	N	9	10/19/79
10	O	1, 2	10/1/79
20	O	1, 2	10/2/79
30	O	1, 2	10/3/79
40	O	1, 2	10/4/79
50	O	1, 2	10/9/79
60	O	1	10/22/79
70	O	1	10/23/79
80	O	1	10/24/79
90A*	O	3	10/26/79
90B	O	3	10/26/79
100A*	O	3	10/27/79
100B	O	3	10/27/79
110A*	O	3	10/29/79
110B	O	3	10/29/79

* Wet cure.

Out of Plane Wall Test
Test Specimens (Cont'd)

PRISM SPECIMENS

<u>Specimen</u>	<u>Mortar Type</u>	<u>Material & Wall Thickness</u>	<u>Date Assembled</u>
6SA*	N	6" lt. wt. concrete block	9/18/79
6SB*	N	6" lt. wt. concrete block	9/18/79
8SA*	N	8" lt. wt. concrete block	9/18/79
8SB*	N	8" lt. wt. concrete block	9/21/79
6HA	N	6" lt. wt. concrete block	9/21/79
6HB	N	6" lt. wt. concrete block	10/17/79
8HA	N	8" lt. wt. concrete block	9/27/79
8HB	N	8" lt. wt. concrete block	9/27/79
8CA*	N	8" hollow brick	10/18/79
8CB*	N	8" hollow brick	10/18/79
14A	O	14" solid brick	10/22/79
14B	O	14" solid brick	10/22/79

* Prisms solid grouted.

PORITLAND CEMENT PLASTER SPECIMENS

<u>Specimen</u>	<u>Application</u>	<u>Related Test Panel</u>	<u>Date Sampled</u>
1C	Scratch	21, 22	10/30/79
2C	Scratch	21, 22	10/30/79
3C	Scratch	21, 22	10/30/79
4B	Scratch	19, 20	10/30/79
5B	Scratch	19, 20	10/30/79
6B	Scratch	19, 20	10/30/79
7C	Brown	21, 22	11/2/79
8C	Brown	21, 22	11/2/79
9C	Brown	21, 22	11/2/79
10B	Brown	19, 20	11/2/79
11B	Brown	19, 20	11/2/79
12B	Brown	19, 20	11/2/79

APPENDIX C

MAXIMUM AND MINIMUM DATA FOR URM WALL TESTS

This appendix gives a tabulation of the maximum and minimum values, including their times of occurrence, of the instruments for all 194 wall test sequences conducted in the experimental program (Table 2-2). The wall instrumentation given in Figure 2-7 shows 19 instruments; however, all 19 were only used in the test sequences for Wall 13, and 16 instruments were used in the test sequences for all other wall specimens where instruments WA3, WA5, and WA7 were not installed. A separate tabulation is given for each wall test sequence and contains statistics for 18 channels (21 channels for Wall 13), consisting of the 16 basic instruments (19 for Wall 13) as well as a time channel and one channel of relative displacement (WD1-WD7), which was obtained directly from the basic data by subtraction.

The tabulations for the test sequences for each wall are grouped together in the order that the test sequences were conducted (Table 2-2), and the tabulations for each wall are given in numerical order using the wall identification number. These tabulations were computer generated from the engineering units tape (Sec. 2.6) and the maximum and minimum values obtained by a scan of all values on these tapes. During the processing of the data tapes, occasional spikes or dropouts were noted when the data were plotted. These dropouts were traced to an intermittent malfunction of the multiplexer unit. Attempts were made by the Rockwell International personnel to correct the malfunction in their equipment and some improvement was attained; however, dropouts continued to occur, but on a less frequent basis than before. The task of identifying all dropouts was considered to be monumental, requiring as a minimum the plotting of 3128 of the 3516 data channels. Accordingly, consideration of the possibility of dropouts must be given when using the tabulations.

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WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 1
INPUT MOTION MS 3-1
NO. OF DATA POINTS 1764

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		37.243	
2	WD1	IN	-4.066	14.640	2.366	7.837
3	WD2	IN	-4.470	14.765	2.502	7.658
4	WD3	IN	-5.342	14.809	3.205	7.943
5	WD4	IN	-5.047	14.809	3.072	7.943
6	WD5	IN	-13.289	27.969	2.602	7.922
7	WD6	IN	-4.139	14.745	2.192	7.922
8	WD7	IN	-3.926	14.682	1.936	7.901
9	WAV1	G	-2.346	11.175	2.432	13.161
10	WA4	G	-1.033	14.133	.940	15.654
11	WA1	G	-1.130	19.519	1.388	9.823
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7R	IN	-1.931	7.901	3.932	14.703
16	WDW7B	IN	-1.947	7.901	3.914	14.703
17	WD1B	IN	-4.034	14.640	2.349	7.837
18	WFE7	KIP	-4.182	5.788	4.100	5.725
19	WFA7	KIP	-2.671	4.922	2.539	5.154
20	WF1	KIP	-6.066	11.703	8.307	4.901
21	WD1-WD7	IN	-.553	7.415	.509	6.147

WALL TEST
 MAXIMUM AND MINIMUM DATA

RALL 1
 INPUT MOTION MS 1
 NO. OF DATA POINTS 2746

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.988	
2	WD1	IN	-1.780	23.047	.280	4.436
3	WD2	IN	-1.803	23.026	.336	7.637
4	WD3	IN	-1.825	22.857	.423	7.637
5	WD4	IN	-1.231	38.257	.389	7.658
6	WD5	IN	-1.634	22.878	3.760	13.435
7	WD6	IN	-1.614	22.963	1.315	23.343
8	WD7	IN	-1.610	23.153	1.332	22.160
9	WAV1	G	-.765	9.084	.056	6.936
10	WA4	G	-.497	6.661	.033	9.316
11	WA1	G	-.315	8.640	.589	6.809
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.306	4.521	1.776	23.111
16	WDW7B	IN	-.232	4.669	1.643	23.195
17	WD1B	IN	-1.773	23.132	.282	4.500
18	WFE7	KIP	-1.405	6.915	1.327	9.063
19	WFW7	KIP	-1.729	8.598	1.405	9.337
20	WF1	KIP	-4.207	8.809	3.506	6.577
21	WD1-WD7	IN	-3.035	22.160	.235	6.915

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2830

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		59.762	
2	WD1	IN	-2.046	22.139	.458	8.387
3	WD2	IN	-2.021	22.139	.428	8.523
4	WD3	IN	-1.942	22.139	.371	8.239
5	WD4	IN	-1.139	35.764	.335	8.260
6	WD5	IN	-1.613	23.364	3.779	33.060
7	WD6	IN	-1.604	23.597	.285	5.091
8	WD7	IN	-1.799	23.512	.289	4.922
9	WAV1	G	-.584	10.372	.654	10.668
10	WA4	G	-.332	10.562	.382	11.534
11	WA1	G	-.321	10.161	.317	9.908
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.285	4.922	1.801	23.597
16	WDW7B	IN	-.286	4.922	1.791	23.597
17	WD18	IN	-2.039	22.160	.459	8.387
18	WFE7	KIP	-1.357	10.647	1.109	10.119
19	WFW7	KIP	-1.122	10.119	1.307	10.605
20	WF1	KIP	-1.873	10.584	3.309	9.126
21	WD1-WD7	IN	-.789	14.935	.744	9.591

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 3-2
 NO. OF DATA POINTS 893

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		18.843	
2	WD1	IN	-3.791	14.618	2.244	7.589
3	WD2	IN	-3.825	14.618	2.641	8.661
4	WD3	IN	-4.902	4.880	4.039	8.661
5	WD4	IN	-3.727	14.630	3.575	8.661
6	WD5	IN	-3.841	14.618	3.771	11.598
7	WD6	IN	-3.830	14.618	2.234	8.661
8	WD7	IN	-3.825	14.597	1.912	7.774
9	WAV1	G	-1.727	8.957	1.493	8.556
10	WA4	G	-.829	8.195	.724	5.218
11	WA1	G	-.859	9.379	1.500	6.160
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.901	7.774	3.835	14.618
16	WDW7b	IN	-1.891	7.795	3.802	14.618
17	WD1B	IN	-3.785	14.640	2.276	7.589
18	WFE7	KIP	-2.594	7.943	3.530	8.936
19	WFW7	KIP	-1.676	5.746	2.369	5.197
20	WF1	KIP	-4.470	4.162	7.049	4.753
21	WD1-WD7	IN	-.452	4.774	1.027	11.260

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3019

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		63.755	
2	WD1	IN	-3.745	17.217	5.024	14.238
3	WD2	IN	-3.614	17.217	4.870	14.323
4	WD3	IN	-3.420	17.153	4.660	14.344
5	WD4	IN	-3.234	17.153	4.379	14.048
6	WD5	IN	-3.004	17.153	4.385	14.027
7	WD6	IN	-2.829	17.132	4.350	14.006
8	WD7	IN	-2.785	17.048	4.357	14.006
9	WAV1	G	-.717	14.745	.656	15.632
10	WA4	G	-.575	14.661	.542	21.590
11	WA1	G	-.332	16.013	.515	15.231
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.343	14.006	2.785	17.048
16	WDW7B	IN	-4.332	14.027	2.778	17.048
17	WD1B	IN	-3.750	17.280	5.023	14.238
18	WFE7	KIP	-1.364	14.449	1.610	14.610
19	WFW7	KIP	-1.875	14.682	1.675	21.611
20	WF1	KIP	-4.150	21.125	4.571	15.062
21	WD1-WD7	IN	-1.935	19.731	2.106	14.449

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2589

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.671	
2	WD1	IN	-7.188	14.935	3.850	8.091
3	WD2	IN	-7.412	14.935	4.400	9.126
4	WD3	IN	-7.740	14.935	10.833	5.661
5	WD4	IN	-7.580	14.914	8.812	5.661
6	WD5	IN	-7.404	14.956	5.205	5.663
7	WD6	IN	-7.196	14.956	3.844	9.063
8	WD7	IN	-7.061	14.956	3.468	8.112
9	WAV1	G	-1.763	12.105	1.177	12.083
10	WA4	G	-.668	6.823	.778	10.055
11	WA1	G	-1.101	10.034	2.017	17.534
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.455	8.133	7.041	14.956
16	WDW7B	IN	-3.473	8.133	7.030	14.978
17	WD1B	IN	-7.149	14.935	3.814	8.112
18	WFE7	KIP	-2.385	9.992	1.816	12.675
19	WFW7	KIP	-2.215	10.689	1.663	10.034
20	WF1	KIP	-6.026	4.669	6.578	4.267
21	WD1-WD7	IN	-3.082	52.110	.639	5.028

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2589

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.671	
2	WD1	IN	-8.490	4.669	3.529	8.682
3	WD2	IN	-8.103	4.626	3.461	8.640
4	WD3	IN	-7.625	4.563	3.460	7.204
5	WD4	IN	-7.189	14.365	3.403	8.978
6	WD5	IN	-7.069	14.386	3.755	37.307
7	WD6	IN	-7.004	15.168	3.409	8.323
8	WD7	IN	-7.058	15.168	3.448	8.323
9	WAV1	G	-.748	7.711	.789	5.049
10	WA4	G	-.616	7.922	.762	5.535
11	WA1	G	-.689	5.556	.715	5.577
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.438	8.323	7.037	15.125
16	WDN7B	IN	-3.431	8.323	7.019	15.168
17	WD1B	IN	-8.488	4.690	3.535	8.682
18	WFE7	KIP	-1.360	4.985	2.067	5.514
19	WFW7	KIP	-1.715	5.429	2.101	5.049
20	WF1	KIP	-5.398	5.619	6.928	4.478
21	WD1-WD7	IN	-5.749	4.732	4.111	5.323

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2384

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		50.341	
2	WD1	IN	-6.755	12.992	5.344	10.246
3	WD2	IN	-8.548	13.076	5.107	16.759
4	WD3	IN	-12.601	13.224	11.194	14.534
5	WD4	IN	-11.191	13.245	8.791	16.076
6	WD5	IN	-8.565	13.161	6.139	16.921
7	WD6	IN	-6.631	12.886	4.532	17.196
8	WD7	IN	-6.170	12.844	4.579	18.569
9	WAV1	G	-1.039	14.597	1.126	11.999
10	WA4	G	-.972	12.866	1.254	14.555
11	WA1	G	-1.333	8.957	2.383	8.936
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.577	18.569	6.164	12.844
16	WDW7B	IN	-4.546	18.590	6.150	12.844
17	WD1B	IN	-6.735	12.717	5.480	10.246
18	WFE7	KIP	-2.562	10.351	1.564	14.809
19	WFW7	KIP	-2.692	6.042	2.568	7.013
20	WF1	KIP	-9.034	13.795	9.470	13.626
21	WD1-WD7	IN	-5.414	7.267	3.938	10.330

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 8
 NO. OF DATA POINTS 2678

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		56.551	
2	WD1	IN	-8.551	4.880	3.567	6.872
3	WD2	IN	-8.513	4.880	4.000	8.767
4	WD3	IN	-8.450	4.860	5.028	6.703
5	WD4	IN	-7.865	14.492	4.686	8.703
6	WD5	IN	-7.441	14.555	4.017	9.527
7	WD6	IN	-7.176	15.358	3.903	8.534
8	WD7	IN	-7.215	15.358	3.971	6.513
9	WAV1	G	-1.123	6.295	1.041	10.710
10	WA4	G	-.641	9.950	.696	14.090
11	WA1	G	-.642	14.069	1.256	6.211
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.957	8.513	7.210	15.358
16	WDW7B	IN	-3.972	8.534	7.171	15.358
17	WD1B	IN	-8.497	4.901	3.550	8.915
18	WFE7	KIP	-1.797	7.035	1.405	7.098
19	WFW7	KIP	-1.996	7.415	2.519	8.027
20	WF1	KIP	-6.983	8.196	7.830	4.774
21	WD1-WD7	IN	-6.567	4.943	4.845	5.556

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 7
 NO. OF DATA POINTS 2578

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.439	
2	WD1	IN	-7.168	14.534	3.799	7.732
3	WD2	IN	-7.861	14.703	4.025	8.767
4	WD3	IN	-9.464	14.766	6.428	9.971
5	WD4	IN	-9.296	14.766	5.619	9.971
6	WD5	IN	-8.233	14.793	4.339	8.788
7	WD6	IN	-7.490	14.618	5.678	8.767
8	WD7	IN	-7.279	14.555	3.948	7.732
9	WAV1	G	-1.375	9.717	1.245	17.534
10	WA4	G	-.765	5.577	.788	4.352
11	WA1	G	-1.402	6.147	3.225	6.126
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.952	7.732	7.272	14.555
16	WD47B	IN	-3.900	7.753	7.242	14.555
17	WD16	IN	-7.136	14.555	3.848	7.732
18	WFE7	KIP	-2.209	9.612	1.618	9.084
19	WFW7	KIP	-1.837	11.492	2.762	7.225
20	WF1	KIP	-7.232	7.415	8.940	3.950
21	WD1-WD7	IN	-3.026	34.814	.534	4.795

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 10
 NO. OF DATA POINTS 2337

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.548	
2	WD1	IN	-5.943	11.133	4.486	16.837
3	WD2	IN	-5.789	10.774	5.178	15.632
4	WD3	IN	-8.276	30.335	7.193	15.675
5	WD4	IN	-7.475	30.314	6.645	15.675
6	WD5	IN	-6.116	30.356	5.587	15.654
7	WD6	IN	-5.649	11.112	4.655	16.815
8	WD7	IN	-6.100	11.133	4.614	16.837
9	WAV1	G	-1.189	4.795	1.578	4.415
10	WA4	G	-.751	4.394	.802	29.469
11	WA1	G	-1.735	4.774	2.550	4.753
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.639	16.837	6.058	11.133
16	WDW7B	IN	-4.540	16.837	6.091	11.133
17	WD1B	IN	-5.982	11.133	4.468	16.858
18	WFE7	KIP	-1.912	6.781	2.157	5.154
19	WFW7	KIP	-2.493	7.542	2.575	12.464
20	WF1	KIP	-6.504	4.880	7.882	5.028
21	WD1-WD7	IN	-3.106	43.813	.543	6.929

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 1
 INPUT MOTION MS 10.2
 NO. OF DATA POINTS 709

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		14.956	
2	WD1	IN	-3.473	6.401	4.752	5.154
3	WD2	IN	-5.416	7.351	4.688	4.838
4	WD3	IN	-24.451	7.499	6.123	5.471
5	WD4	IN	-14.688	7.351	5.419	5.367
6	WD5	IN	-8.171	7.330	4.821	4.636
7	WD6	IN	-3.580	6.401	4.696	5.154
8	WD7	IN	-3.714	6.359	5.588	7.774
9	WAV1	G	-1.723	7.225	2.824	7.140
10	WA4	G	-1.355	7.373	.998	6.042
11	WA1	G	-1.662	6.021	2.225	5.999
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.321	7.774	3.701	6.359
16	WDW7B	IN	-5.289	7.795	3.680	6.380
17	WD1B	IN	-3.474	6.401	5.165	7.795
18	WFE7	KIP	-4.785	7.119	4.072	7.658
19	WFW7	KIP	-1.952	6.464	2.077	6.253
20	WF1	KIP	-7.998	6.168	9.255	6.316
21	WD1-WD7	IN	-1.120	7.647	2.507	9.232

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 1
 NO. OF DATA POINTS . . . 2788

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.875	
2	WD1	IN	-1.782	23.132	.280	4.626
3	WD2	IN	-1.824	23.153	.282	4.647
4	WD3	IN	-1.827	23.153	.295	4.711
5	WD4	IN	-1.862	22.836	.310	4.647
6	WD5	IN	-1.836	23.237	.293	4.647
7	WD6	IN	-1.819	23.153	.272	4.711
8	WD7	IN	-1.820	23.153	.274	4.711
9	WAV1	G	-.953	8.746	1.034	8.471
10	WA4	G	-.574	8.408	.466	9.696
11	WA1	G	-.257	8.577	.333	8.619
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.277	4.647	1.819	23.153
16	WDA7B	IN	-.251	4.584	1.827	23.216
17	WD15	IN	-1.791	23.132	.278	4.669
18	WFE7	KIP	-2.510	8.387	2.727	8.450
19	WFW7	KIP	-2.031	9.253	2.025	8.471
20	WF1	KIP	-4.507	8.661	4.374	8.450
21	WD1-WD7	IN	-.231	9.210	.241	8.809

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2741

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.882	
2	WD1	IN	-2.082	21.674	.461	7.880
3	WD2	IN	-2.062	21.674	.436	7.901
4	WD3	IN	-1.985	21.674	.361	7.880
5	WD4	IN	-1.920	21.653	.366	7.837
6	WD5	IN	-1.852	21.674	.291	4.732
7	WD6	IN	-1.803	23.068	.279	4.711
8	WD7	IN	-1.819	23.068	.280	4.711
9	WAV1	G	-.631	9.950	.616	9.675
10	WA4	G	-.424	9.633	.422	9.464
11	WA1	G	-.221	9.802	.205	9.464
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.263	4.711	1.820	23.089
16	WDW7H	IN	-.279	4.626	1.808	23.068
17	WD1B	IN	-2.089	21.674	.469	7.964
18	WFE7	KIP	-1.654	9.337	1.506	9.465
19	WFW7	KIP	-2.028	9.612	1.515	13.900
20	WF1	KIP	-3.060	9.591	4.088	9.041
21	WD1-WD7	IN	-.760	14.534	.784	9.168

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2620

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.526	
2	WD1	IN	-3.960	14.766	2.158	7.922
3	WD2	IN	-3.992	14.787	2.228	7.964
4	WD3	IN	-4.141	14.090	2.745	8.049
5	WD4	IN	-4.140	14.069	2.810	8.027
6	WD5	IN	-4.045	14.809	2.430	8.049
7	WD6	IN	-3.961	14.787	2.093	8.027
8	WD7	IN	-3.917	14.787	1.968	7.964
9	WAV1	G	-1.116	9.696	1.055	12.738
10	WA4	G	-.646	10.098	.709	5.239
11	WA1	G	-.790	10.182	1.095	12.231
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.960	7.964	3.918	14.787
16	WDW7B	IN	-1.941	7.985	3.904	14.787
17	WD1B	IN	-3.971	14.767	2.175	7.922
18	WFE7	KIP	-2.346	11.999	3.063	9.844
19	WFW7	KIP	-2.494	8.218	2.788	12.252
20	WF1	KIP	-7.774	4.985	6.195	9.844
21	WD1-WD7	IN	-.425	5.025	.349	6.211

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3019

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		63.755	
2	WD1	IN	-3.786	17.407	5.088	14.428
3	WD2	IN	-3.654	17.407	5.001	14.428
4	WD3	IN	-3.442	17.428	4.841	14.449
5	WD4	IN	-3.210	17.386	4.570	14.449
6	WD5	IN	-2.948	17.236	4.412	14.196
7	WD6	IN	-2.843	17.217	4.370	14.175
8	WD7	IN	-2.804	17.153	4.348	14.175
9	WAV1	G	-1.590	14.872	1.034	14.682
10	WA4	G	-.556	15.041	.582	14.872
11	WA1	G	-.440	14.682	.919	14.830
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.331	14.175	2.826	17.175
16	WDW7B	IN	-4.322	14.154	2.801	17.196
17	WD1B	IN	-3.621	17.407	5.074	14.428
18	WFE7	KIP	-1.935	22.054	1.952	14.449
19	WFN7	KIP	-1.387	10.182	2.221	21.569
20	WF1	KIP	-6.282	15.252	4.603	14.428
21	WD1-WD7	IN	-1.863	19.857	2.049	14.555

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2363

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.897	
2	WD1	IN	-2.967	11.555	2.230	17.238
3	WD2	IN	-3.174	11.555	2.366	17.196
4	WD3	IN	-3.636	8.175	3.694	8.661
5	WD4	IN	-3.992	8.154	3.708	8.661
6	WD5	IN	-3.314	11.555	2.652	8.661
7	WD6	IN	-3.176	11.555	2.347	17.217
8	WD7	IN	-3.095	11.555	2.307	17.259
9	WAV1	G	-1.523	5.640	1.319	5.704
10	WA4	G	-.958	5.302	.767	6.675
11	WA1	G	-.671	7.732	1.843	7.711
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE76	IN	-2.304	17.259	3.093	11.555
16	WDK78	IN	-2.287	17.259	3.088	11.576
17	WD18	IN	-2.977	11.598	2.207	17.238
18	WFE7	KIP	-2.714	5.281	3.156	8.450
19	WFW7	KIP	-2.682	9.020	2.831	5.661
20	WF1	KIP	-7.706	5.281	7.995	6.450
21	WD1-WD7	IN	-2.693	11.027	.254	5.197

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2562

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.101	
2	WD1	IN	-8.447	4.267	3.573	6.218
3	WD2	IN	-7.769	4.204	3.513	8.218
4	WD3	IN	-7.277	4.119	3.467	6.739
5	WD4	IN	-7.057	14.006	3.640	7.922
6	WD5	IN	-7.035	14.027	3.550	7.901
7	WD6	IN	-6.999	14.618	3.476	7.901
8	WD7	IN	-7.047	14.703	3.464	7.901
9	WAV1	G	-.858	18.611	.976	6.401
10	WA4	G	-.597	6.401	.585	18.970
11	WA1	G	-.754	6.443	.840	6.359
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.436	7.880	7.050	14.703
16	WDW7B	IN	-3.448	7.901	7.017	14.703
17	WD1B	IN	-8.515	4.288	3.567	8.218
18	WFE7	KIP	-1.961	5.978	1.670	6.633
19	WFW7	KIP	-1.945	6.380	2.162	18.991
20	WF1	KIP	-6.865	4.077	5.148	18.527
21	WD1-WD7	IN	-5.752	4.331	4.106	4.901

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2562

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.101	
2	WD1	IN	-7.165	14.914	3.820	8.133
3	WD2	IN	-7.411	14.217	3.977	8.936
4	WD3	IN	-8.268	13.414	4.815	8.976
5	WD4	IN	-8.299	13.457	4.915	8.978
6	WD5	IN	-7.584	14.217	4.264	8.978
7	WD6	IN	-7.148	14.999	3.757	8.915
8	WD7	IN	-7.085	14.935	3.462	8.175
9	WAV1	G	-1.810	19.139	1.591	15.844
10	WA4	G	-.768	12.506	.849	5.999
11	WA1	G	-.839	23.470	2.457	4.690
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.434	8.154	7.062	14.935
16	WDW7B	IN	-3.444	8.175	7.052	14.978
17	WD16	IN	-7.191	14.935	3.806	8.154
18	WFE7	KIP	-2.349	11.788	3.180	11.978
19	WFW7	KIP	-2.759	6.380	3.665	4.711
20	WF1	KIP	-9.464	13.266	10.263	4.690
21	WD1-WD7	IN	-3.086	32.279	.530	6.443

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2279

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		48.123	
2	WD1	IN	-6.661	11.217	5.515	8.788
3	WD2	IN	-6.661	11.471	6.606	6.570
4	WD3	IN	-6.867	11.471	8.823	6.591
5	WD4	IN	-6.558	11.471	8.697	6.653
6	WD5	IN	-6.171	11.407	6.997	6.675
7	WD6	IN	-5.924	11.366	5.522	6.697
8	WD7	IN	-6.121	11.344	4.593	17.048
9	WAV1	G	-1.177	20.787	1.380	6.253
10	WA4	G	-.671	4.584	.738	8.672
11	WA1	G	-.647	12.231	1.602	6.232
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.586	17.048	6.126	11.365
16	WDW7B	IN	-4.556	17.069	6.096	11.365
17	WD1B	IN	-6.709	11.217	5.565	8.788
18	WFE7	KIP	-2.474	5.556	2.320	12.126
19	WFW7	KIP	-2.327	13.013	2.813	12.781
20	WF1	KIP	-8.151	4.478	7.911	5.176
21	WD1-WD7	IN	-5.438	5.809	4.071	8.830

WALL TEST
 MAXIMUM AND MINIMUM DATA

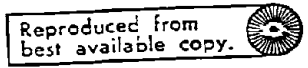
WALL 2
 INPUT MOTION MS 8
 NO. OF DATA POINTS 2505

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.897	
2	WD1	IN	-6.536	4.415	3.536	8.365
3	WD2	IN	-6.405	4.394	4.162	8.281
4	WD3	IN	-6.574	4.373	5.277	8.260
5	WD4	IN	-7.702	14.238	5.252	8.260
6	WD5	IN	-7.369	14.175	4.379	9.063
7	WD6	IN	-7.196	14.787	3.790	8.070
8	WD7	IN	-7.261	14.851	3.964	8.027
9	WAV1	G	-1.060	11.957	.903	11.936
10	WA4	G	-.735	6.924	.745	6.717
11	WA1	G	-.758	5.234	1.284	5.598
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.931	8.027	7.236	14.851
16	WDW7B	IN	-3.921	8.049	7.232	14.851
17	WD1B	IN	-8.530	4.436	3.508	8.429
18	WFE7	KIP	-2.013	11.724	2.012	16.907
19	WFW7	KIP	-2.204	6.528	2.255	7.542
20	WF1	KIP	-8.549	4.286	7.856	7.711
21	WD1-WD7	IN	-6.565	4.500	4.805	5.112

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 2
 INPUT MOTION MS 7
 NO. OF DATA POINTS 1134

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		23.934	
2	WD1	IN	-7.183	15.125	3.750	8.302
3	WD2	IN	-7.271	15.189	4.256	9.358
4	WD3	IN	-7.544	15.189	11.553	17.956
5	WD4	IN	-7.488	14.323	11.976	17.555
6	WD5	IN	-7.224	15.189	5.137	22.118
7	WD6	IN	-6.999	15.147	4.482	22.329
8	WD7	IN	-7.236	15.125	3.979	8.323
9	WAV1	G	-1.591	6.644	1.287	8.302
10	WA4	G	-1.171	17.660	2.180	17.576
11	WA1	G	-1.073	8.513	1.837	4.964
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.968	8.323	7.221	15.125
16	WDN7R	IN	-3.930	8.344	7.196	15.147
17	WD1B	IN	-7.198	15.125	3.819	8.323
18	WFE7	KIP	-2.784	8.809	2.658	4.943
19	WFW7	KIP	-2.302	18.780	2.695	6.781
20	WF1	KIP	-8.625	4.584	7.908	8.006
21	WD1-WD7	IN	-2.977	22.350	.741	17.534



WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2536

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.552	
2	AD1	IN	-3.967	14.999	2.160	6.216
3	AD2	IN	-4.006	14.999	3.180	26.702
4	AD3	IN	-4.006	14.999	2.098	6.239
5	AD4	IN	-4.005	14.999	2.036	6.239
6	AD5	IN	-3.998	14.999	2.001	6.260
7	AD6	IN	-3.948	14.978	1.951	6.239
8	AD7	IN	-3.917	15.041	1.926	6.260
9	AAV1	G	-2.088	5.281	1.194	5.133
10	AA4	G	-.857	5.040	.785	4.711
11	AA1	G	-.599	5.345	.530	5.281
12	AA3	G	--	--	--	--
13	AA5	G	--	--	--	--
14	AA7	G	--	--	--	--
15	AD75	IN	-1.914	8.260	3.924	14.999
16	ADW75	IN	-1.932	8.239	3.873	15.041
17	AD18	IN	-2.111	8.239	3.676	14.999
18	AF7	KIP	-3.667	5.112	4.159	5.026
19	AFW7	KIP	-2.502	5.239	2.781	7.647
20	AF1	KIP	-6.729	4.690	6.451	4.457
21	AD1-AD7	IN	-2.694	16.562	.351	6.306

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 4
 NO. OF DATA POINTS . . . 3045

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		64.504	
2	WD1	IN	-3.809	17.576	5.022	14.534
3	WD2	IN	-3.585	17.576	4.918	14.534
4	WD3	IN	-3.314	17.491	4.713	14.534
5	WD4	IN	-3.157	17.470	4.527	14.534
6	WD5	IN	-2.963	17.470	4.324	14.534
7	WD6	IN	-2.825	17.344	4.271	14.365
8	WD7	IN	-2.805	17.365	4.339	14.344
9	WAV1	G	-1.190	8.429	.965	7.858
10	WA4	G	-.629	16.668	.664	19.688
11	WA1	G	-.420	12.633	.488	9.126
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.318	14.365	2.811	17.365
16	WDN7B	IN	-4.295	14.365	2.796	17.365
17	WD15	IN	-4.910	14.555	3.749	17.597
18	WFE7	KIP	-2.418	9.760	2.069	12.210
19	WFA7	KIP	-2.767	12.907	2.494	19.519
20	WF1	KIP	-7.146	13.773	6.976	27.357
21	WD1-WD7	IN	-1.960	20.026	2.097	14.766

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2431

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		51.333	
2	WD1	IN	-3.024	11.196	2.230	16.942
3	WD2	IN	-3.063	11.217	3.720	21.125
4	WD3	IN	-3.078	11.217	2.301	6.528
5	WD4	IN	-3.111	11.217	2.332	6.506
6	WD5	IN	-3.087	11.217	2.268	6.506
7	WD6	IN	-3.105	11.217	2.284	16.900
8	WD7	IN	-3.071	11.217	2.297	16.900
9	WAV1	G	-1.694	12.654	1.542	5.049
10	WA4	G	-1.196	8.281	1.227	5.830
11	WA1	G	-.973	5.683	1.666	5.429
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.296	16.900	5.051	11.217
16	WDW7B	IN	-2.267	16.900	3.068	11.217
17	WD1B	IN	-2.173	16.942	2.942	11.217
18	WFE7	KIP	-4.245	5.408	3.038	5.577
19	WFW7	KIP	-4.479	5.218	3.698	12.844
20	WF1	KIP	-10.548	5.028	10.467	5.197
21	WD1-WD7	IN	-.226	5.830	.254	5.154

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2562

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.101	
2	WD1	IN	-6.439	4.922	3.546	8.956
3	WD2	IN	-7.797	4.922	3.440	8.936
4	WD3	IN	-7.123	4.774	3.272	8.936
5	WD4	IN	-6.996	14.682	3.220	8.788
6	WD5	IN	-7.004	14.703	3.187	8.640
7	WD6	IN	-6.992	15.358	3.329	8.519
8	WD7	IN	-7.062	15.400	3.441	8.556
9	WAV1	G	-1.040	5.894	.698	11.914
10	WA4	G	-.724	4.753	.596	7.985
11	WA1	G	-.294	5.936	.295	5.788
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.427	8.556	7.026	15.400
16	WDA7B	IN	-3.406	8.598	7.029	15.400
17	WD1B	IN	-3.484	8.957	8.576	4.964
18	WFE7	KIP	-2.159	5.957	2.254	5.873
19	WFW7	KIP	-2.310	9.422	2.364	5.809
20	WF1	KIP	-6.636	5.786	7.671	4.753
21	WD1-WD7	IN	-5.745	5.028	4.132	5.598

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 5
 NU. OF DATA POINTS 2520

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.214	
2	WD1	IN	-7.150	14.597	3.926	7.816
3	WD2	IN	-7.162	14.597	4.931	7.943
4	WD3	IN	-7.134	14.597	5.733	7.943
5	WD4	IN	-7.157	14.597	5.119	7.901
6	WD5	IN	-7.294	14.597	7.762	8.957
7	WD6	IN	-7.144	14.597	3.843	7.901
8	WD7	IN	-7.094	14.597	3.495	7.816
9	WAV1	G	-1.835	7.901	3.231	4.288
10	WA4	G	-1.247	9.612	1.371	4.647
11	WA1	G	-0.834	9.696	1.750	7.816
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE76	IN	-3.455	7.816	7.075	14.618
16	WDW76	IN	-3.447	7.837	7.091	14.618
17	WD10	IN	-3.799	7.816	7.028	14.597
18	WFE7	KIP	-5.204	4.267	3.528	7.647
19	WFW7	KIP	-4.121	6.175	4.401	4.373
20	WF1	KIP	-10.770	4.267	10.236	6.316
21	WD1-WD7	IN	-2.660	16.414	.629	4.267

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 9
 NG. OF DATA POINTS 2326

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.115	
2	WD1	IN	-5.683	11.492	5.481	9.041
3	WD2	IN	-6.692	11.640	5.335	6.844
4	WD3	IN	-5.647	11.640	5.319	6.844
5	WD4	IN	-5.537	11.640	5.148	17.449
6	WD5	IN	-6.583	11.619	4.758	17.407
7	WD6	IN	-6.283	11.640	4.621	17.386
8	WD7	IN	-6.178	11.661	4.598	17.344
9	WAV1	G	-1.761	12.802	2.166	12.865
10	WA4	G	-1.598	5.492	1.488	15.294
11	WA1	G	-1.452	12.950	1.935	12.717
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.350	17.365	6.171	11.640
16	WDW7B	IN	-4.559	17.365	6.145	11.661
17	WD1B	IN	-5.424	9.063	6.617	11.513
18	WFE7	KIP	-4.561	12.717	3.098	4.880
19	WFW7	KIP	-3.494	5.768	3.449	12.759
20	WF1	KIP	-7.334	12.675	11.031	8.006
21	WD1-WD7	IN	-5.238	6.105	4.052	9.126

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 8
 NO. OF DATA POINTS 2515

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.108	
2	WD1	IN	-8.433	4.500	3.611	8.513
3	WD2	IN	-8.045	4.457	3.801	17.132
4	WD3	IN	-7.667	4.436	3.657	8.260
5	WD4	IN	-7.399	4.394	3.948	8.196
6	WD5	IN	-7.227	14.238	3.652	8.175
7	WD6	IN	-7.204	14.893	3.884	8.154
8	WD7	IN	-7.240	14.914	3.950	8.133
9	WAV1	G	-2.242	5.640	1.772	6.718
10	WA4	G	-2.102	6.908	2.248	4.753
11	WA1	G	-1.463	6.823	1.682	11.365
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.951	8.133	7.230	14.914
16	WDW7B	IN	-3.893	8.154	7.225	14.935
17	WD1B	IN	-3.503	8.513	6.325	4.521
18	WF7	KIP	-3.629	5.450	3.656	7.816
19	WF7	KIP	-3.027	7.858	4.439	4.669
20	WF1	KIP	-11.699	4.647	13.623	4.732
21	WD1-WD7	IN	-6.432	4.605	4.823	5.197

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 7
 NO. OF DATA POINTS 2578

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.439	
2	WD1	IN	-7.155	14.471	3.712	7.626
3	WD2	IN	-8.252	14.492	4.412	7.268
4	WD3	IN	-9.280	14.492	5.224	7.246
5	WD4	IN	-8.715	14.492	4.373	7.964
6	WD5	IN	-8.187	14.492	3.891	8.598
7	WD6	IN	-7.635	14.471	3.497	8.661
8	WD7	IN	-7.267	14.449	3.964	7.626
9	WAV1	G	-1.799	15.104	1.985	4.901
10	WA4	G	-1.936	4.162	1.749	4.225
11	WA1	G	-2.677	4.859	2.451	4.204
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE75	IN	-3.975	7.647	7.251	14.449
16	WDW7B	IN	-3.911	7.647	7.235	14.449
17	WD15	IN	-3.618	7.647	6.960	14.407
18	WFE7	KIP	-5.024	4.204	3.797	4.795
19	WFW7	KIP	-4.381	5.028	3.736	7.901
20	WF1	KIP	-9.400	7.351	10.766	5.746
21	WD1-WD7	IN	-2.694	16.372	4.632	4.309

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 10
 NO. OF DATA POINTS 2373

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		50.108	
2	WD1	IN	-6.020	11.661	4.488	17.344
3	WD2	IN	-6.297	11.682	4.916	17.344
4	WD3	IN	-6.886	5.239	5.230	17.344
5	WD4	IN	-6.434	11.703	5.151	17.344
6	WD5	IN	-6.297	11.703	4.958	17.344
7	WD6	IN	-6.200	11.661	4.789	17.344
8	WD7	IN	-6.156	11.661	4.620	17.322
9	WAV1	G	-2.598	5.704	2.130	5.767
10	WA4	G	-1.371	28.941	1.110	8.006
11	WA1	G	-1.587	8.281	2.145	8.619
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.504	17.344	6.149	11.661
16	WDW7B	IN	-4.587	17.344	6.120	11.661
17	WD1B	IN	-4.343	17.344	5.908	11.640
18	WFE7	KIP	-3.587	8.619	3.622	4.838
19	WFW7	KIP	-4.744	7.626	3.104	5.767
20	WF1	KIP	-8.243	5.746	13.055	5.577
21	WD1-WD7	IN	-2.725	21.611	.361	8.851

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 3
 INPUT MOTION MS 10.2
 NO. OF DATA POINTS 578

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		12.189	
2	WD1	IN	-3.977	5.683	4.775	4.267
3	WD2	IN	-11.707	5.661	4.739	4.035
4	WD3	IN	-21.302	5.514	5.496	4.436
5	WD4	IN	-17.467	5.535	4.696	4.415
6	WD5	IN	-12.437	5.514	4.767	4.014
7	WD6	IN	-7.159	5.492	4.679	4.014
8	WD7	IN	-3.804	5.471	6.593	11.978
9	WAV1	G	-4.962	5.957	4.041	5.577
10	WA4	G	-2.068	5.535	1.046	4.394
11	WA1	G	-3.907	5.809	2.301	5.957
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.798	11.745	3.737	5.471
16	WDW7B	IN	-5.644	10.372	3.735	5.471
17	WD1B	IN	-5.155	6.126	3.265	5.663
18	WFE7	KIP	-6.794	5.809	4.675	5.436
19	WFW7	KIP	-3.993	4.711	3.028	5.894
20	WF1	KIP	-8.535	5.302	11.239	5.133
21	WD1-WD7	IN	-3.835	5.936	2.004	6.126

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 5
 INPUT MOTION MS 1
 NO. OF DATA POINTS 3003

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		63.417	
2	WD1	IN	-1.787	23.808	3.377	19.773
3	WD2	IN	-1.793	23.808	.298	5.197
4	WD3	IN	-1.812	23.808	.279	5.197
5	WD4	IN	-1.882	23.787	.317	5.197
6	WD5	IN	-1.851	23.808	.295	5.366
7	WD6	IN	-1.814	23.787	.270	5.429
8	WD7	IN	-1.809	23.871	1.154	49.136
9	WAV1	G	-.043	12.358	.041	12.274
10	WA4	G	-.344	11.957	.329	12.105
11	WA1	G	-.507	12.231	.419	12.083
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.298	5.366	1.790	23.808
16	WDW7B	IN	-.244	5.345	1.820	23.871
17	WD18	IN	-1.778	23.766	.285	5.197
18	WFE7	KIP	-.797	12.210	.633	12.062
19	WFW7	KIP	-.720	9.802	.486	2.091
20	WF1	KIP	-.926	2.049	1.647	9.126
21	WD1-WD7	IN	-2.780	49.136	3.838	56.072

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 5
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2951

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.518	
2	WD1	IN	-2.076	21.695	.472	7.985
3	WD2	IN	-2.034	21.695	.447	7.985
4	WD3	IN	-1.947	21.695	.377	7.985
5	WD4	IN	-1.872	21.695	.388	4.753
6	WD5	IN	-1.827	23.322	.320	4.732
7	WD6	IN	-1.818	23.047	.271	4.626
8	WD7	IN	-1.820	23.047	1.143	48.946
9	WAV1	G	-.029	9.253	.025	57.037
10	WA4	G	-.195	10.224	.192	9.274
11	WA1	G	-.250	9.696	.249	10.119
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.270	4.626	1.825	23.132
16	WDW7B	IN	-.262	4.563	1.803	23.132
17	WD18	IN	-2.062	21.738	.460	8.006
18	WFE7	KIP	-.402	9.675	.335	8.872
19	WFW7	KIP	-.565	8.492	.455	9.295
20	WFI	KIP	-.647	8.725	1.657	8.027
21	WD1-WD7	IN	-2.873	48.946	.763	9.189

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 5
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2725

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.544	
2	WD1	IN	-3.993	15.632	3.863	38.722
3	WD2	IN	-4.006	15.632	2.272	8.788
4	WD3	IN	-3.963	15.632	2.189	8.788
5	WD4	IN	-3.975	15.696	2.122	8.788
6	WD5	IN	-3.943	15.632	2.023	8.609
7	WD6	IN	-3.904	15.611	1.953	8.609
8	WD7	IN	-3.886	15.632	1.917	8.851
9	WAV1	G	-.078	8.788	.093	8.619
10	WA4	G	-.796	5.894	.747	7.161
11	WA1	G	-.773	7.204	.784	7.161
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.935	8.809	3.896	15.632
16	WDW7B	IN	-1.898	8.851	3.850	15.675
17	WD1B	IN	-3.966	15.654	2.252	8.809
18	WFE7	KIP	-1.246	7.182	1.436	7.140
19	WFW7	KIP	-.919	7.204	.981	5.176
20	WF1	KIP	-2.730	5.007	2.131	7.140
21	WD1-WD7	IN	-2.519	30.948	4.324	38.722

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL S
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3019

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		63.755	
2	WD1	IN	-3.829	16.731	5.090	13.731
3	WD2	IN	-3.721	16.731	4.999	13.731
4	WD3	IN	-3.476	16.731	4.719	13.731
5	WD4	IN	-3.193	16.710	4.485	13.731
6	WD5	IN	-2.975	16.668	4.291	13.668
7	WD6	IN	-2.810	16.562	4.271	13.499
8	WD7	IN	-2.783	16.499	4.328	13.499
9	WAV1	G	-1.142	8.260	2.720	8.239
10	WA4	G	-.518	14.217	.388	13.689
11	WA1	G	-.454	21.083	.412	15.125
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.343	13.499	2.793	16.499
16	WDR7B	IN	-4.280	13.499	2.748	16.541
17	WD1B	IN	-3.807	16.752	5.065	13.752
18	WFE7	KIP	-1.028	21.062	.589	15.590
19	WFW7	KIP	-.559	14.217	.610	21.125
20	WF1	KIP	-1.950	7.351	1.631	12.696
21	WD1-WD7	IN	-1.880	19.203	4.597	34.201

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 5
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2730

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.650	
2	WD1	IN	-7.239	15.294	3.938	8.492
3	WD2	IN	-7.261	15.294	3.928	8.492
4	WD3	IN	-7.217	15.294	3.776	8.492
5	WD4	IN	-7.133	15.294	3.671	8.492
6	WD5	IN	-7.113	15.316	3.582	8.492
7	WD6	IN	-7.076	15.294	3.477	8.492
8	WD7	IN	-7.051	15.294	3.426	8.513
9	WAV1	G	-.254	7.225	.197	7.351
10	WA4	G	-1.325	7.225	1.296	7.077
11	WA1	G	-1.204	6.998	1.286	6.844
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7b	IN	-3.445	8.534	7.035	15.316
16	WDN7b	IN	-3.383	8.513	6.985	15.337
17	WD18	IN	-7.179	15.294	3.926	8.492
18	WFE7	KIP	-2.259	6.992	2.240	6.739
19	WFW7	KIP	-.903	6.908	1.607	7.077
20	WF1	KIP	-4.057	4.690	2.979	6.823
21	WD1-WD7	IN	-.824	5.577	3.839	53.676

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 5
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2688

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		56.763	
2	WD1	IN	-8.597	4.901	3.557	8.872
3	WD2	IN	-8.176	4.901	3.485	8.872
4	WD3	IN	-7.332	4.816	3.285	8.872
5	WD4	IN	-7.003	14.576	3.146	8.767
6	WD5	IN	-6.987	14.861	3.131	8.840
7	WD6	IN	-7.010	15.358	3.319	8.556
8	WD7	IN	-7.047	15.358	3.417	8.556
9	WAV1	G	-.123	8.239	.140	5.830
10	WA4	G	-.689	8.239	.505	5.640
11	WA1	G	-.494	5.049	.557	5.661
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.413	8.556	7.055	15.379
16	WDW7B	IN	-3.376	8.556	6.961	15.379
17	WD1B	IN	-6.512	4.922	3.533	8.872
18	WFE7	KIP	-.694	5.767	.859	5.619
19	WFW7	KIP	-.998	6.570	.462	4.901
20	WF1	KIP	-2.279	4.711	2.430	6.844
21	WD1-WD7	IN	-5.818	4.985	4.201	5.556

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 5
 INPUT MOTION MS 7
 NO. OF DATA POINTS 2967

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.656	
2	WD1	IN	-7.219	15.442	3.941	8.598
3	WD2	IN	-7.274	15.442	3.995	8.598
4	WD3	IN	-7.281	15.442	4.036	8.619
5	WD4	IN	-7.247	15.442	4.062	8.619
6	WD5	IN	-7.264	15.379	4.028	8.619
7	WD6	IN	-7.234	15.442	4.009	8.598
8	WD7	IN	-7.223	15.442	3.987	8.598
9	WAV1	G	-.341	7.161	.468	5.809
10	WA4	G	-1.434	7.161	1.312	8.365
11	WA1	G	-1.525	7.098	1.418	6.866
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.013	8.598	7.231	15.442
16	WDA7B	IN	-3.950	8.619	7.121	15.442
17	WD1B	IN	-7.175	15.421	3.910	8.619
18	WFE7	KIP	-2.087	6.992	2.096	6.844
19	WFW7	KIP	-1.552	5.725	2.152	5.630
20	WF1	KIP	-5.581	5.704	5.873	8.281
21	WD1-WD7	IN	-.088	10.541	.106	4.943

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 5
 INPUT MOTION MS 8
 NO. OF DATA POINTS 4652

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		98.252	
2	WD1	IN	-8.567	5.028	3.580	8.978
3	WD2	IN	-6.135	4.964	3.612	8.957
4	WD3	IN	-7.580	4.901	3.846	8.703
5	WD4	IN	-7.229	4.880	4.563	8.882
6	WD5	IN	-7.111	4.838	4.250	8.661
7	WD6	IN	-7.173	15.442	4.047	8.640
8	WD7	IN	-7.224	15.442	3.959	8.619
9	WAV1	G	-.538	8.999	.819	8.957
10	WA4	G	-2.171	8.830	1.928	8.957
11	WA1	G	-.928	8.915	1.091	9.084
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.003	8.640	7.200	15.442
16	WDW7B	IN	-3.929	8.640	7.151	15.463
17	WD1B	IN	-8.501	5.028	3.553	8.978
18	WFE7	KIP	-1.229	7.056	.940	5.577
19	WFW7	KIP	-2.187	6.218	2.153	8.133
20	WF1	KIP	-4.615	8.809	5.460	8.323
21	WD1-WD7	IN	-6.581	5.091	4.860	5.704

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL S
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2400

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		50.679	
2	WD1	IN	-6.764	11.365	5.643	8.915
3	WD2	IN	-6.696	11.365	5.308	8.915
4	WD3	IN	-6.486	11.366	5.000	6.908
5	WD4	IN	-6.367	11.513	5.000	6.908
6	WD5	IN	-6.283	11.513	4.803	6.806
7	WD6	IN	-6.189	11.513	4.579	17.217
8	WD7	IN	-6.139	11.513	4.575	17.217
9	WAV1	G	-.851	12.654	.639	5.408
10	WA4	G	-1.570	12.612	1.834	6.295
11	WA1	G	-.711	5.957	.703	29.976
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.576	17.217	6.140	11.513
16	WDW7B	IN	-4.506	17.238	6.078	11.534
17	WD1B	IN	-6.718	11.386	5.622	8.915
18	WFE7	KIP	-1.399	12.590	1.207	29.955
19	WFW7	KIP	-1.205	4.732	2.602	12.759
20	WF1	KIP	-5.355	5.239	6.155	12.738
21	AD1-WD7	IN	-5.240	5.957	4.457	46.792

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 5
 INPUT MOTION MS 7.1
 NO. OF DATA POINTS 378

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	1	???	.000	.000	7.964	7.964
2	WD1	IN	-7.588	4.225	3.149	6.929
3	WD2	IN	-13.454	5.683	17.685	5.556
4	WD3	IN	-22.854	5.640	27.170	5.471
5	WD4	IN	-23.338	5.852	26.462	5.492
6	WD5	IN	-13.595	5.725	17.095	5.598
7	WD6	IN	-6.903	6.971	8.275	5.725
8	WD7	IN	-7.532	4.225	4.154	7.457
9	WAV1	G	-9.957	4.838	9.350	4.816
10	WA4	G	-25.708	4.795	25.696	5.260
11	WA1	G	-2.303	4.901	1.823	4.478
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.350	6.929	7.527	4.225
16	WDW7B	IN	-3.322	7.478	7.452	4.246
17	WD1B	IN	-7.535	4.225	3.361	6.950
18	WFE7	KIP	-1.455	5.112	2.215	4.457
19	WFW7	KIP	-1.615	5.978	2.788	4.478
20	WF1	KIP	-9.686	5.767	8.570	4.457
21	WD1-WD7	IN	-1.569	7.964	1.137	4.795

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL. 6
 INPUT MOTION MS 1
 NO. OF DATA POINTS 3150

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		66.522	
2	WD1	IN	-1.825	25.624	.283	6.992
3	WD2	IN	-1.839	25.624	.287	6.992
4	WD3	IN	-1.814	25.624	.312	6.992
5	WD4	IN	-1.782	25.646	.366	7.140
6	WD5	IN	-1.795	25.730	.350	7.161
7	WD6	IN	-1.779	25.624	.320	7.161
8	WD7	IN	-1.767	25.624	.326	7.225
9	WAV1	G	-.069	12.105	.068	14.133
10	WA4	G	-.297	11.957	.299	10.943
11	WA1	G	-.491	13.816	.389	12.105
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.403	7.077	1.701	25.709
16	WDW7B	IN	-.255	7.077	1.811	25.709
17	WD18	IN	-1.792	25.646	.277	7.077
18	WFET	KIP	-.749	14.069	.661	13.942
19	WFW7	KIP	-.847	1.965	.517	1.922
20	WF1	KIP	-1.468	1.859	1.313	10.922
21	WD1-WD7	IN	-.314	11.133	.163	11.513

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 6
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2919

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		61.642	
2	WD1	IN	-2.095	21.759	2.986	22.878
3	WD2	IN	-2.061	21.759	.431	8.027
4	WD3	IN	-1.973	21.759	.373	7.964
5	WD4	IN	-1.905	21.759	.328	7.943
6	WD5	IN	-1.836	22.752	.319	4.838
7	WD6	IN	-1.796	23.216	.292	4.732
8	WD7	IN	-1.799	23.047	.292	4.732
9	NAV1	G	-.041	8.788	.050	9.675
10	WA4	G	-.256	9.443	.262	9.295
11	WA1	G	-.329	9.633	.332	10.161
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.300	4.732	1.805	23.132
16	WDW7B	IN	-.283	4.647	1.781	23.132
17	WD1B	IN	-2.058	21.759	.461	8.027
18	WFE7	KIP	-.573	9.992	.485	10.140
19	WFW7	KIP	-.410	9.443	.415	9.295
20	WF1	KIP	-.691	8.661	.734	14.048
21	WD1-WD7	IN	-.816	14.576	4.775	22.899

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 6
 INPUT MOTION MS 3
 NO. OF DATA POINTS 3145

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		66.417	
2	WD1	IN	-4.022	24.336	2.263	17.491
3	WD2	IN	-4.381	24.399	2.176	17.534
4	WD3	IN	-5.251	24.399	2.668	17.597
5	WD4	IN	-4.997	24.420	2.560	17.597
6	WD5	IN	-4.585	24.420	2.278	17.618
7	WD6	IN	-4.121	24.399	2.013	17.597
8	WD7	IN	-3.917	24.315	1.920	17.534
9	WAV1	G	-.706	19.667	.884	24.948
10	WA4	G	-.730	13.731	.538	15.759
11	WA1	G	-.911	17.344	.807	15.844
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.902	17.555	3.928	24.336
16	WDW7B	IN	-1.898	17.534	3.877	24.378
17	WD1B	IN	-3.977	24.336	2.259	17.491
18	WFE7	KIP	-1.233	14.555	1.217	15.738
19	WFW7	KIP	-1.016	14.576	.757	13.858
20	WF1	KIP	-1.707	13.689	2.211	19.393
21	WD1-WD7	IN	-.496	14.576	.435	15.759

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 6
 INPUT MOTION MS 4
 NO. OF DATA POINTS 2988

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		63.100	
2	WD1	IN	-3.836	16.752	5.085	13.731
3	WD2	IN	-3.500	16.752	4.741	13.731
4	WD3	IN	-3.421	16.562	4.707	13.562
5	WD4	IN	-3.345	16.520	4.639	13.562
6	WD5	IN	-3.097	16.541	4.489	13.520
7	WD6	IN	-2.872	16.541	4.393	13.499
8	WD7	IN	-2.780	16.520	4.352	13.499
9	WAV1	G	-.546	20.533	.539	15.949
10	WA4	G	-.417	20.512	.395	20.660
11	WA1	G	-.508	20.386	.479	20.533
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.356	13.499	2.791	16.520
16	WDW7B	IN	-4.303	13.499	2.760	16.520
17	WD1B	IN	-3.819	16.752	5.067	13.731
18	WFE7	KIP	-.766	19.984	.625	19.857
19	WFW7	KIP	-.570	11.861	.342	21.991
20	WF1	KIP	-1.838	13.266	1.422	13.520
21	WD1-WD7	IN	-1.911	19.181	4.768	16.076

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 6
 INPUT MOTION MS 5
 NO. OF DATA POINTS 426

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	- .000		8.978	
2	WD1	IN	-6.839	4.246	3.001	6.528
3	WD2	IN	-14.008	7.182	15.649	6.042
4	WD3	IN	-23.723	6.443	26.989	6.126
5	WD4	IN	-24.416	6.591	25.797	6.316
6	WDS	IN	-14.385	6.485	16.560	6.359
7	WD6	IN	-9.343	6.523	5.618	6.464
8	WD7	IN	-6.454	4.204	1.188	7.858
9	WAV1	G	-7.543	5.514	10.788	5.492
10	WA4	G	-25.805	5.661	25.836	8.387
11	WA1	G	-2.564	5.492	1.110	4.521
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.015	2.641	6.453	4.204
16	WDW7B	IN	-.071	8.175	6.369	4.225
17	WD1B	IN	-6.804	4.267	1.040	5.471
18	WFE7	KIP	-1.337	5.154	1.319	5.535
19	WFW7	KIP	-1.331	6.591	.604	4.732
20	WF1	KIP	-2.719	4.225	1.487	4.626
21	WD1-WD7	IN	-2.904	8.323	3.036	6.528

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 7
 INPUT MOTION MS 1
 NO. OF DATA POINTS 2741

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.882	
2	WD1	IN	-1.793	23.111	.282	4.478
3	WD2	IN	-1.809	23.111	.297	4.563
4	WD3	IN	-1.780	23.111	.309	4.563
5	WD4	IN	-1.778	23.195	.334	4.647
6	WD5	IN	-1.754	23.047	.300	5.049
7	WD6	IN	-1.726	23.111	1.244	23.913
8	WD7	IN	-1.703	23.111	2.239	45.376
9	WAV1	G	-.533	9.781	.439	11.703
10	WA4	G	-.426	12.189	.376	11.323
11	WA1	G	-.204	11.175	.238	12.569
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.290	4.732	1.801	23.111
16	WDW7B	IN	-.249	4.795	1.616	23.111
17	WD1B	IN	-1.778	23.111	.278	4.584
18	WFE7	KIP	-1.050	9.126	.856	9.041
19	WFW7	KIP	-.877	9.147	.682	13.964
20	WF1	KIP	-1.944	12.696	1.930	9.063
21	WD1-WD7	IN	-3.139	45.440	.145	9.591

WALL TEST-
MAXIMUM AND MINIMUM DATA

WALL 7
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2704

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.101	
2	WD1	IN	-2.030	21.590	.461	7.901
3	WD2	IN	-1.990	21.611	.435	7.880
4	WD3	IN	-1.895	21.611	.368	7.880
5	WD4	IN	-1.815	21.526	.349	7.816
6	WD5	IN	-1.763	22.646	.286	4.584
7	WD6	IN	-1.726	23.026	.267	4.563
8	WD7	IN	-1.712	22.942	2.226	25.434
9	WAV1	G	-.546	10.161	.364	11.513
10	WA4	G	-.346	10.182	.329	11.534
11	WA1	G	-.106	11.724	.170	10.267
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.262	4.647	1.837	23.026
16	WDW7B	IN	-.250	4.563	1.613	23.026
17	WD18	IN	-2.030	21.632	.455	7.901
18	WFE7	KIP	-.893	10.140	.748	9.126
19	WFW7	KIP	-.978	9.612	.079	15.062
20	WF1	KIP	-.441	10.415	2.259	13.858
21	WD1-WD7	IN	-3.136	52.728	.704	9.126

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 7
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2536

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.552	
2	WD1	IN	-3.972	14.069	2.153	7.225
3	WD2	IN	-4.216	14.069	2.230	8.302
4	WD3	IN	-4.509	14.048	2.760	8.302
5	WD4	IN	-4.801	14.006	3.450	9.253
6	WD5	IN	-4.510	14.027	2.709	8.302
7	WD6	IN	-4.116	14.048	2.105	8.281
8	WD7	IN	-3.893	14.069	1.916	45.778
9	WAV1	G	-.850	4.373	.881	5.598
10	WA4	G	-.546	5.598	.529	3.781
11	WA1	G	-.638	4.521	.825	6.802
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.928	7.267	3.903	14.090
16	WDW7B	IN	-1.899	7.267	3.884	14.090
17	WD1B	IN	-3.919	14.090	2.197	7.246
18	WFE7	KIP	-1.184	6.570	1.016	4.457
19	WFW7	KIP	-.867	5.661	.674	3.802
20	WF1	KIP	-3.405	3.464	2.923	5.028
21	WD1-WD7	IN	-2.755	45.778	.368	5.514

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 7
 INPUT MOTION MS 4
 NO. OF DATA POINTS 2893

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		61.093	
2	WD1	IN	-3.793	16.837	5.053	13.879
3	WD2	IN	-3.656	16.773	4.919	13.879
4	WD3	IN	-3.635	16.752	4.698	13.942
5	WD4	IN	-3.718	16.710	4.520	13.942
6	WD5	IN	-3.353	16.710	4.396	13.668
7	WD6	IN	-2.975	16.689	4.363	13.647
8	WD7	IN	-2.782	16.646	4.330	13.647
9	WAV1	G	-.606	14.365	.435	14.217
10	WA4	G	-.417	14.787	.411	22.223
11	WA1	G	-.319	14.766	.331	14.978
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.530	13.647	2.809	16.604
16	WDW7B	IN	-4.324	13.626	2.780	16.668
17	WD18	IN	-3.796	16.879	5.057	13.879
18	WFE7	KIP	-1.062	14.344	.847	23.385
19	WFW7	KIP	-.650	9.654	.641	18.421
20	WF1	KIP	-2.067	13.414	2.570	13.900
21	WD1-WD7	IN	-3.600	18.146	2.045	14.048

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 7
 INPUT MOTION MS 5
 NO. OF DATA POINTS 699

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000	-	14.745	-
2	WD1	IN	-6.845	4.457	4.175	8.387
3	WD2	IN	-6.937	4.457	1.138	13.457
4	WD3	IN	-12.974	7.795	2.464	5.830
5	WD4	IN	-21.730	7.795	4.349	5.746
6	WD5	IN	-12.865	7.795	2.412	5.852
7	WD6	IN	-6.514	4.436	.587	5.978
8	WD7	IN	-6.421	4.436	4.067	8.260
9	WAV1	G	-4.623	8.281	3.742	8.218
10	WA4	G	-3.387	7.816	2.495	8.281
11	WA1	G	-5.345	8.196	4.433	8.281
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.443	8.281	6.421	4.436
16	WDW7B	IN	-3.425	8.281	6.401	4.436
17	WD1B	IN	-6.791	4.457	4.701	8.408
18	WFE7	KIP	-5.431	8.281	6.523	8.196
19	WFW7	KIP	-1.057	7.816	1.806	8.196
20	WF1	KIP	-3.688	4.457	5.324	8.365
21	WD1-WD7	IN	-1.847	8.091	1.514	12.231

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 8
 INPUT MOTION MS 1
 NO. OF DATA POINTS 3082

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		65.086	
2	WD1	IN	-1.771	23.237	.280	4.711
3	WD2	IN	-1.800	23.237	.297	4.732
4	WD3	IN	-1.772	23.153	.296	4.732
5	WD4	IN	-1.809	22.921	.318	5.450
6	WD5	IN	-1.815	23.406	.310	4.985
7	WD6	IN	-1.813	23.301	.277	4.901
8	WD7	IN	-1.807	23.385	.276	4.732
9	WAV1	G	-.424	8.851	.384	9.168
10	WA4	G	-.356	9.126	.498	9.189
11	WA1	G	-.038	8.999	.041	9.063
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.286	4.732	1.800	23.237
16	WDW7B	IN	-.268	4.669	1.802	23.385
17	WD1B	IN	-1.768	23.005	.265	4.690
18	WFE7	KIP	-1.030	9.168	.955	8.830
19	WFW7	KIP	-.896	8.725	.926	9.189
20	WF1	KIP	-2.777	8.640	2.096	8.851
21	WD1-WD7	IN	-.167	8.788	.179	9.189

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 8
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2940

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.086	
2	WD1	IN	-2.038	21.569	3.332	13.562
3	WD2	IN	-2.001	21.569	.411	7.901
4	WD3	IN	-1.911	21.569	.361	7.837
5	WD4	IN	-1.849	21.526	.313	7.774
6	WD5	IN	-1.825	22.857	.301	4.985
7	WD6	IN	-1.810	22.921	.285	4.647
8	WD7	IN	-1.803	22.921	.282	4.732
9	WAV1	G	-.235	9.274	.219	10.584
10	WA4	G	-.236	9.253	.245	9.189
11	WA1	G	-.028	10.034	.031	14.428
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.285	4.647	1.804	22.921
16	WDW7B	IN	-.283	4.415	1.800	23.005
17	WD1B	IN	-2.015	21.526	.456	7.858
18	WFE7	KIP	-.480	14.999	.622	9.232
19	WFW7	KIP	-.858	8.387	.604	9.189
20	WF1	KIP	-1.901	13.900	1.480	14.217
21	WD1-WD7	IN	-.777	14.428	4.196	13.562

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 8
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2662

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		56.213	
2	WD1	IN	-3.896	14.978	2.141	8.196
3	WD2	IN	-3.942	14.978	2.140	8.196
4	WD3	IN	-3.941	14.978	2.072	8.196
5	WD4	IN	-3.945	15.062	2.032	8.196
6	WD5	IN	-3.936	14.999	1.973	8.218
7	WD6	IN	-3.907	14.978	1.941	8.175
8	WD7	IN	-3.887	14.999	1.919	8.218
9	WAV1	G	-.568	5.323	.666	6.485
10	WA4	G	-.678	11.745	.638	6.506
11	WA1	G	-.181	12.041	.111	12.252
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.920	8.218	-3.887	15.062
16	WDW7B	IN	-1.893	8.218	3.875	15.062
17	WD1B	IN	-3.882	15.041	2.129	8.196
18	WFE7	KIP	-1.416	11.914	1.300	11.851
19	WFW7	KIP	-1.367	11.598	1.231	11.936
20	WF1	KIP	-3.927	12.062	3.478	5.260
21	WD1-WD7	IN	-.398	5.302	.307	6.485

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 8
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3051

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		64.431	
2	WD1	IN	-3.778	16.921	4.993	13.921
3	WD2	IN	-3.624	16.942	4.886	13.921
4	WD3	IN	-3.379	16.963	4.666	13.921
5	WD4	IN	-3.102	16.921	4.488	13.858
6	WD5	IN	-2.912	16.815	4.311	13.858
7	WD6	IN	-2.821	16.731	4.280	13.689
8	WD7	IN	-2.792	16.731	4.317	13.668
9	WAV1	G	-.462	21.252	.455	15.316
10	WA4	G	-.445	21.315	.497	21.463
11	WA1	G	-.239	21.505	.359	21.421
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.304	13.689	2.801	16.731
16	WDW7B	IN	-4.280	13.689	2.794	16.731
17	WD18	IN	-3.768	16.921	4.992	13.942
18	WFE7	KIP	-.863	20.724	.976	14.724
19	WFW7	KIP	-.498	13.773	1.602	21.442
20	WF1	KIP	-1.243	20.745	3.769	11.936
21	WD1-WD7	IN	-1.892	19.372	2.082	14.133

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 8
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2536

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.552	
2	WD1	IN	-2.966	11.534	2.192	17.217
3	WD2	IN	-3.038	11.534	2.368	6.950
4	WD3	IN	-3.104	11.576	3.123	8.703
5	WD4	IN	-3.174	11.006	3.824	8.725
6	WD5	IN	-3.108	11.555	2.691	8.682
7	WD6	IN	-3.076	11.534	2.367	6.929
8	WD7	IN	-3.059	11.513	2.293	17.217
9	WAV1	G	-.597	29.913	.841	12.485
10	WA4	G	-.724	8.027	.691	12.696
11	WA1	G	-.784	12.485	.912	7.478
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.290	17.217	3.063	11.513
16	WDW7B	IN	-2.254	17.217	3.067	11.534
17	WD1B	IN	-2.962	11.534	2.199	17.217
18	WFE7	KIP	-1.226	7.246	1.230	4.669
19	NFW7	KIP	-1.370	9.020	1.432	29.617
20	WF1	KIP	-4.801	12.231	4.775	29.279
21	WD1-WD7	IN	-.200	8.344	.248	5.154

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 8
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2715

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.333	
2	WD1	IN	-8.442	4.436	3.526	8.450
3	WD2	IN	-7.919	4.394	3.424	8.450
4	WD3	IN	-7.361	4.373	3.398	9.147
5	WD4	IN	-7.237	14.027	3.547	9.147
6	WD5	IN	-7.125	14.893	3.455	8.788
7	WD6	IN	-7.087	14.893	3.419	8.767
8	WD7	IN	-7.051	14.893	3.429	8.070
9	WAV1	G	-.643	7.520	.744	5.197
10	WA4	G	-.586	18.717	.521	7.077
11	WA1	G	-.735	10.034	.724	12.379
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.416	8.049	7.032	14.893
16	WDW7B	IN	-3.390	8.070	7.024	14.893
17	WD18	IN	-8.455	4.478	3.518	8.471
18	WFE7	KIP	-.858	11.302	.942	6.866
19	WFW7	KIP	-1.306	21.125	1.547	13.351
20	WF1	KIP	-3.559	11.872	5.184	4.267
21	WD1-WD7	IN	-5.762	4.521	4.059	5.112

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 8
 INPUT MOTION MS 5
 NO. OF DATA POINTS 636

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000	-	13.414	
2	WD1	IN	-6.715	4.288	.026	2.746
3	WD2	IN	-6.804	4.288	5.121	5.683
4	WD3	IN	-6.867	4.288	13.131	5.323
5	WD4	IN	-6.871	4.288	17.458	5.323
6	WD5	IN	-6.642	4.288	10.973	6.654
7	WD6	IN	-6.516	4.246	4.684	6.464
8	WD7	IN	-6.465	4.225	.187	6.464
9	WAV1	G	-2.015	5.492	.918	4.563
10	WA4	G	-.942	5.514	4.354	5.345
11	WA1	G	-1.290	5.535	4.679	5.345
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	S	--	--	--	--
15	WDE7B	IN	-.211	6.549	6.455	4.225
16	WDW7B	IN	-.175	6.549	6.410	4.246
17	WD1B	IN	-6.677	4.267	.018	1.986
18	WFE7	KIP	-1.128	4.521	1.785	5.492
19	WFW7	KIP	-1.893	5.894	.366	5.387
20	WF1	KIP	-6.273	4.647	3.962	4.267
21	WD1-WD7	IN	-1.006	8.534	1.182	5.323

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 9
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2557

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.995	
2	WD1	IN	-3.951	15.189	2.207	8.387
3	WD2	IN	-4.018	15.189	2.183	8.387
4	WD3	IN	-6.684	15.189	3.522	8.387
5	WD4	IN	-4.011	15.189	2.104	8.365
6	WD5	IN	-3.987	15.231	1.991	8.450
7	WD6	IN	-3.918	15.189	1.936	8.450
8	WD7	IN	-3.926	15.252	1.901	8.450
9	WAV1	G	-.837	6.844	.932	7.837
10	WA4	G	-.875	5.999	.819	6.063
11	WA1	G	-.174	16.477	.139	6.274
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.947	8.492	3.913	15.210
16	WDW7B	IN	-1.876	8.471	3.910	15.252
17	WD1B	IN	-3.961	15.210	2.209	8.408
18	WFE7	KIP	-1.947	5.619	1.652	7.964
19	WFW7	KIP	-1.599	16.139	1.033	6.063
20	WF1	KIP	-3.874	6.042	3.167	15.801
21	WD1-WD7	IN	-.436	5.514	.416	6.697

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 9
 INPUT MOTION MS 4
 NO. OF DATA POINTS 2946

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.213	
2	WD1	IN	-3.828	16.984	5.060	14.006
3	WD2	IN	-3.696	16.984	4.991	13.921
4	WD3	IN	-5.742	16.984	8.001	13.921
5	WD4	IN	-3.228	16.984	4.581	13.921
6	WD5	IN	-2.948	16.794	4.360	13.921
7	WD6	IN	-2.834	16.773	4.328	13.731
8	WD7	IN	-2.759	16.752	4.354	13.731
9	WAV1	G	-.848	14.428	.663	14.259
10	WA4	G	-.586	21.526	.590	17.555
11	WA1	G	-.169	17.449	.147	21.590
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.356	13.731	2.781	16.794
16	WDW7B	IN	-4.326	13.731	2.760	16.773
17	WD18	IN	-3.823	16.984	5.034	14.006
18	WFE7	KIP	-1.254	13.900	1.566	14.407
19	WFW7	KIP	-1.470	13.478	.764	17.745
20	WF1	KIP	-4.315	18.696	2.548	22.773
21	WD1-WD7	IN	-1.912	19.414	2.027	14.154

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 9
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2415

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		50.995	
2	WD1	IN	-3.007	11.661	2.213	17.365
3	WD2	IN	-3.047	11.661	2.292	7.013
4	WD3	IN	-5.137	11.661	4.082	7.013
5	WD4	IN	-3.211	5.767	2.532	7.013
6	WD5	IN	-3.113	11.703	2.425	7.013
7	WD6	IN	-3.083	11.661	2.296	7.035
8	WD7	IN	-3.067	11.682	2.289	17.365
9	WAV1	G	-.841	5.725	.819	5.514
10	WA4	G	-.874	5.683	.942	5.598
11	WA1	G	-.415	8.049	.670	7.753
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.304	17.386	3.071	11.703
16	WDW7B	IN	-2.271	17.386	3.064	11.703
17	WD1B	IN	-2.977	11.682	2.220	17.386
18	WFE7	KIP	-1.590	5.514	1.763	5.661
19	WFW7	KIP	-2.221	5.683	2.056	7.774
20	WF1	KIP	-7.056	7.753	5.161	7.499
21	WD1-WD7	IN	-.129	6.042	.124	8.070

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 9
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2510

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.002	
2	WD1	IN	-8.489	4.288	3.581	8.281
3	WD2	IN	-8.011	4.246	3.431	8.302
4	WD3	IN	-12.376	4.204	5.490	8.133
5	WD4	IN	-7.099	14.027	3.243	8.513
6	WD5	IN	-7.055	14.006	3.248	8.577
7	WD6	IN	-7.061	14.703	3.377	7.943
8	WD7	IN	-7.149	14.745	3.471	7.901
9	WAV1	G	-.834	5.176	.671	5.007
10	WA4	G	-.725	5.429	.603	5.556
11	WA1	G	-.177	10.584	.230	5.640
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.510	7.922	7.115	14.703
16	WDW7B	IN	-3.444	7.922	7.105	14.703
17	WD1B	IN	-8.553	4.309	3.558	8.260
18	WFE7	KIP	-1.159	5.218	1.396	5.154
19	WFW7	KIP	-3.214	4.140	2.684	4.373
20	WF1	KIP	-3.792	5.218	4.196	4.352
21	WD1-WD7	IN	-5.702	4.373	4.386	4.964

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 9
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2494

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.664	
2	WD1	IN	-7.180	14.597	3.883	7.795
3	WD2	IN	-7.240	14.597	3.667	8.492
4	WD3	IN	-11.924	14.597	7.143	6.887
5	WD4	IN	-7.092	14.555	5.666	6.929
6	WD5	IN	-7.162	14.661	4.641	6.929
7	WD6	IN	-7.110	14.576	3.652	7.901
8	WD7	IN	-7.122	14.597	3.452	7.816
9	WAV1	G	-.989	4.922	1.669	4.267
10	WA4	G	-1.147	6.401	1.042	5.154
11	WA1	G	-.717	7.225	.857	7.161
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.439	7.837	7.151	14.640
16	WDW7B	IN	-3.407	7.795	7.115	14.618
17	WD16	IN	-7.177	14.597	3.866	7.795
18	WFE7	KIP	-2.743	4.246	2.149	7.161
19	WFW7	KIP	-3.286	4.035	2.946	4.267
20	WF1	KIP	-6.630	9.696	3.504	4.732
21	WD1-WD7	IN	-3.045	28.561	1.071	4.225

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 9
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2279

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		48.123	
2	WD1	IN	-6.703	11.534	5.594	9.084
3	WD2	IN	-6.673	11.576	5.908	9.063
4	WD3	IN	-11.127	11.619	10.451	9.041
5	WD4	IN	-6.737	11.619	6.688	8.999
6	WD5	IN	-6.562	11.640	5.328	6.971
7	WD6	IN	-6.315	11.640	4.709	7.013
8	WD7	IN	-6.196	11.661	4.601	17.365
9	WAV1	G	-.714	13.710	.700	7.647
10	WA4	G	-1.184	5.176	1.560	5.323
11	WA1	G	-.394	24.167	.725	9.337
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.602	17.365	6.212	11.682
16	WDW7B	IN	-4.545	17.386	6.192	11.661
17	WD1B	IN	-6.719	11.513	5.573	9.084
18	WFE7	KIP	-1.375	13.604	1.442	6.084
19	WFW7	KIP	-3.234	4.880	2.991	5.281
20	WF1	KIP	-6.921	5.197	6.820	5.302
21	WD1-WD7	IN	-5.266	6.126	4.121	9.105

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 9
 INPUT MOTION MS 8
 NO. OF DATA POINTS 2526

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.340	
2	WD1	IN	-8.546	4.309	3.562	8.239
3	WD2	IN	-8.380	4.309	3.451	8.344
4	WD3	IN	-13.351	4.267	6.250	8.049
5	WD4	IN	-7.788	4.246	4.296	8.027
6	WD5	IN	-7.614	14.724	4.081	8.027
7	WD6	IN	-7.436	14.745	3.928	7.964
8	WD7	IN	-7.317	14.724	4.011	7.943
9	WAV1	G	-.900	7.880	.910	16.055
10	WA4	G	-1.189	7.626	1.031	10.922
11	WA1	G	-.504	18.886	.876	5.323
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.006	7.922	7.312	14.766
16	WDW7B	IN	-3.977	7.943	7.310	14.766
17	WD1B	IN	-8.554	4.309	3.546	8.260
18	WFE7	KIP	-1.530	18.822	1.574	7.858
19	WFW7	KIP	-2.246	6.211	1.860	11.281
20	WF1	KIP	-5.532	9.464	8.052	4.183
21	WD1-WD7	IN	-6.524	4.394	4.957	5.007

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 9
 INPUT MOTION MS 7
 NO. OF DATA POINTS 436

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		9.189	
2	WD1	IN	-8.100	4.584	3.783	9.147
3	WD2	IN	-7.935	4.584	.046	1.922
4	WD3	IN	-23.448	6.401	.066	1.922
5	WD4	IN	-22.394	5.957	.148	1.204
6	WD5	IN	-14.224	8.302	.072	2.873
7	WD6	IN	-6.975	4.605	.030	1.922
8	WD7	IN	-6.908	4.584	4.349	8.513
9	WAV1	G	-8.697	6.211	5.378	6.147
10	WA4	G	-5.732	5.957	2.072	6.253
11	WA1	G	-3.387	5.999	4.310	5.978
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.814	8.534	6.881	4.605
16	WDW7B	IN	-3.811	8.513	6.890	4.605
17	WD18	IN	-8.125	4.584	3.782	9.189
18	WFE7	KIP	-5.865	6.126	6.517	6.190
19	WFW7	KIP	-1.786	5.535	1.948	6.316
20	WF1	KIP	-6.251	5.957	8.182	4.626
21	WD1-WD7	IN	-2.259	6.190	.526	5.978

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 10
 INPUT MOTION MS 1
 NO. OF DATA POINTS 2804

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		59.213	
2	WD1	IN	-1.798	23.216	.280	4.626
3	WD2	IN	-1.805	23.216	2.835	46.749
4	WD3	IN	-1.824	23.280	.300	4.943
5	WD4	IN	-1.842	23.047	.349	4.647
6	WD5	IN	-1.837	23.301	.300	4.880
7	WD6	IN	-1.838	23.280	.266	4.626
8	WD7	IN	-1.828	23.280	.260	4.943
9	WAV1	G	-.339	8.703	.386	8.872
10	WA4	G	-.269	9.548	.262	9.443
11	WA1	G	-.059	12.971	.089	11.724
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.258	4.711	1.837	23.280
16	WDW7B	IN	-.268	4.859	1.809	23.280
17	WD1B	IN	-1.790	23.237	.276	4.753
18	WFE7	KIP	-.523	8.577	.529	9.232
19	WFW7	KIP	-.946	9.253	.003	1.458
20	WF1	KIP	-2.637	8.534	.026	1.331
21	WD1-WD7	IN	-.202	8.725	.226	9.126

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 10
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2825

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		59.657	
2	WD1	IN	-2.054	21.463	.459	7.795
3	WD2	IN	-2.011	21.484	.419	7.795
4	WD3	IN	-1.940	21.463	.357	7.626
5	WD4	IN	-1.877	21.484	.330	7.711
6	WD5	IN	-1.839	22.519	.298	4.647
7	WD6	IN	-1.807	22.963	.287	4.626
8	WD7	IN	-1.798	22.963	.284	4.626
9	WAV1	G	-.202	8.598	.273	9.929
10	WA4	G	-.284	10.161	.166	10.077
11	WA1	G	-.057	10.182	.041	10.055
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.297	4.394	1.796	22.899
16	WDW7B	IN	-.282	4.394	1.795	22.878
17	WD1B	IN	-2.047	21.484	.463	7.816
18	WFE7	KIP	-.294	9.929	.356	9.126
19	WFW7	KIP	-.557	8.281	.153	21.716
20	WF1	KIP	-1.261	8.809	.527	14.111
21	WD1-WD7	IN	-.792	14.323	.734	8.999

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 10
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2583

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.544	
2	WD1	IN	-3.945	14.830	2.177	7.985
3	WD2	IN	-3.953	14.830	3.339	17.407
4	WD3	IN	-3.944	14.830	2.520	8.788
5	WD4	IN	-3.943	14.090	2.362	8.725
6	WD5	IN	-3.946	14.851	2.133	8.746
7	WD6	IN	-3.920	14.830	1.992	8.027
8	WD7	IN	-3.905	14.830	1.919	8.027
9	WAV1	G	-.071	7.563	.783	7.711
10	WA4	G	-.547	7.394	.445	9.168
11	WA1	G	-.283	5.514	.608	9.633
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.943	8.027	3.894	14.830
16	WDW7B	IN	-1.910	8.027	3.890	14.851
17	WD1B	IN	-3.930	14.830	2.179	8.006
18	WFE7	KIP	-.794	4.457	.794	6.506
19	WFW7	KIP	-.562	7.668	.769	4.457
20	WF1	KIP	-1.896	6.739	2.975	4.204
21	WD1-WD7	IN	-.430	5.091	.340	6.274

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 10
 INPUT MOTION MS 4
 NO. OF DATA POINTS 2956

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.424	
2	WD1	IN	-3.791	16.879	5.051	13.858
3	WD2	IN	-3.627	16.879	4.938	13.921
4	WD3	IN	-3.371	16.879	4.736	13.921
5	WD4	IN	-3.108	16.879	4.430	13.900
6	WD5	IN	-2.925	16.731	4.484	13.626
7	WD6	IN	-2.790	16.625	4.415	13.626
8	WD7	IN	-2.769	16.625	4.349	13.626
9	WAV1	G	-.543	14.597	.664	13.816
10	WA4	G	-.628	14.217	.512	10.077
11	WA1	G	-.403	14.492	.376	13.161
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.332	13.626	2.796	16.646
16	WDW7B	IN	-4.349	13.647	2.758	16.646
17	WD1B	IN	-3.789	16.858	5.046	13.879
18	WFE7	KIP	-.562	12.907	.605	14.259
19	WFW7	KIP	-.645	9.654	.977	15.273
20	WF1	KIP	-1.987	13.879	2.247	15.738
21	WD1-WD7	IN	-3.652	17.048	2.025	14.048

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 10
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2331

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.221	
2	WD1	IN	-3.003	11.344	2.233	17.006
3	WD2	IN	-3.288	11.429	2.891	15.421
4	WD3	IN	-3.630	11.429	3.831	15.421
5	WD4	IN	-3.416	11.429	3.174	15.421
6	WD5	IN	-3.215	11.365	2.558	17.090
7	WD6	IN	-3.109	11.344	2.371	17.027
8	WD7	IN	-3.065	11.344	2.289	17.027
9	WAV1	G	-.624	5.007	.889	7.394
10	WA4	G	-.590	12.527	.810	4.964
11	WA1	G	-.748	12.717	1.079	12.696
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.286	17.006	3.070	11.344
16	WDW7B	IN	-2.282	17.027	3.061	11.344
17	WD1B	IN	-2.979	11.344	2.220	17.027
18	WFE7	KIP	-.755	4.922	.704	28.561
19	WFW7	KIP	-.589	5.594	.897	4.183
20	WF1	KIP	-2.075	6.971	2.747	4.542
21	WD1-WD7	IN	-.188	4.669	.253	5.239

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 10
 INPUT MOTION MS 6
 NO. OF DATA POINTS 499

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		10.520	
2	WD1	IN	-8.555	4.859	4.552	7.499
3	WD2	IN	-12.591	9.316	18.403	8.133
4	WD3	IN	-23.919	9.316	27.103	8.302
5	WD4	IN	-23.654	8.809	26.234	6.513
6	WD5	IN	-13.694	8.703	8.465	8.577
7	WD6	IN	-9.387	8.809	8.640	8.746
8	WD7	IN	-6.439	4.647	5.248	9.274
9	WAV1	G	-2.836	7.267	2.056	7.373
10	WA4	G	-.708	7.351	.668	7.563
11	WA1	G	-3.229	7.225	5.538	7.267
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.262	9.358	6.437	4.647
16	WDW7B	IN	-3.266	9.358	6.421	4.669
17	WD1B	IN	-8.536	4.880	5.206	7.499
18	WFE7	KIP	-2.967	7.351	4.931	7.246
19	WFW7	KIP	-.609	6.633	1.096	6.675
20	WF1	KIP	-2.244	6.633	4.583	4.669
21	WD1-WD7	IN	-5.746	4.943	4.345	5.514

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 11
 INPUT MOTION MS 1
 NO. OF DATA POINTS . . . 2746

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.988	
2	WD1	IN	-1.792	22.857	.287	4.267
3	WD2	IN	-1.817	22.921	.291	4.331
4	WD3	IN	-1.788	22.921	.308	4.415
5	WD4	IN	-1.862	22.456	.296	4.436
6	WD5	IN	-1.801	22.878	.306	4.288
7	WD6	IN	-1.803	22.921	.281	4.415
8	WD7	IN	-1.796	22.921	.282	4.415
9	WAV1	G	-.363	8.915	.367	8.767
10	WA4	G	-.274	8.936	.346	8.767
11	WA1	G	-.036	9.401	.037	9.189
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.275	4.331	1.813	22.857
16	WDW7B	IN	-.276	4.309	1.801	22.942
17	WD1B	IN	-1.783	22.836	.286	4.373
18	WFE7	KIP	-.671	8.725	.653	8.894
19	WFW7	KIP	-.370	9.506	.623	9.084
20	WF1	KIP	-.885	8.767	1.222	8.429
21	WD1-WD7	IN	-.206	8.344	.186	8.767

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 11
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2809

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		59.319	
2	WD1	IN	-2.236	48.249	.460	8.218
3	WD2	IN	-2.075	48.249	.405	8.154
4	WD3	IN	-1.955	48.291	.357	8.154
5	WD4	IN	-1.899	48.291	.309	8.154
6	WD5	IN	-1.837	48.313	.294	8.070
7	WD6	IN	-1.805	23.343	1.292	23.364
8	WD7	IN	-1.803	23.174	.260	5.049
9	WAV1	G	-4.016	48.270	1.374	48.228
10	WA4	G	-1.064	48.313	.757	48.439
11	WA1	G	-.577	48.334	.404	48.313
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.277	4.964	1.819	23.259
16	WDW7B	IN	-.246	4.711	1.828	23.322
17	WD1B	IN	-2.130	48.249	.464	8.239
18	WFE7	KIP	-1.931	48.207	2.441	48.249
19	WFW7	KIP	-.063	9.908	1.248	48.439
20	WF1	KIP	-1.616	48.376	4.186	48.291
21	WD1-WD7	IN	-.791	14.745	.743	9.422

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 11
 INPUT MOTION MS 3
 NO. OF DATA POINTS . . . 2531

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.446	
2	WD1	IN	-3.939	14.935	2.182	8.112
3	WD2	IN	-3.988	14.914	2.191	8.112
4	WD3	IN	-3.939	14.935	2.168	8.133
5	WD4	IN	-3.951	14.999	2.104	8.133
6	WD5	IN	-3.943	14.999	2.023	8.154
7	WD6	IN	-3.916	14.914	1.967	8.133
8	WD7	IN	-3.906	14.999	1.910	8.154
9	WAV1	G	-.671	5.260	.555	6.401
10	WA4	G	-.565	5.218	.400	6.739
11	WA1	G	-.150	12.083	.156	15.590
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.911	8.133	3.902	14.999
16	WDW7B	IN	-1.902	8.133	3.888	14.999
17	WD1B	IN	-3.945	14.956	2.195	8.133
18	WFE7	KIP	-.997	5.323	.887	4.415
19	WFW7	KIP	-.582	15.823	.962	4.521
20	WF1	KIP	-1.720	11.957	2.615	4.331
21	WD1-WD7	IN	-2.839	12.295	4.481	14.724

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 11
 INPUT MOTION MS 4
 NO. OF DATA POINTS 2967

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.656	
2	WD1	IN	-3.809	16.731	5.067	13.710
3	WD2	IN	-3.657	16.689	4.948	13.689
4	WD3	IN	-3.392	16.689	4.696	13.689
5	WD4	IN	-3.174	16.689	4.463	13.668
6	WD5	IN	-2.915	16.689	4.249	13.689
7	WD6	IN	-2.809	16.499	4.281	13.478
8	WD7	IN	-15.054	46.390	6.479	48.672
9	WAV1	G	-.487	14.449	.384	20.512
10	WA4	G	-.507	14.492	.420	23.280
11	WA1	G	-.155	14.513	.222	14.555
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.516	13.478	2.802	16.499
16	WDW7B	IN	-4.297	13.499	2.837	46.517
17	WD1B	IN	-3.813	16.710	5.063	13.731
18	WFE7	KIP	-.634	21.125	.721	21.040
19	WFW7	KIP	-.313	14.492	.964	8.070
20	WF1	KIP	-.770	12.696	2.607	13.266
21	WD1-WD7	IN	-7.458	48.672	13.788	50.911

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 11
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2331

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.221	
2	WD1	IN	-2.983	11.196	2.214	16.921
3	WD2	IN	-3.195	11.217	2.329	6.675
4	WD3	IN	-3.356	7.858	3.538	8.365
5	WD4	IN	-3.279	11.196	3.010	8.344
6	WD5	IN	-3.202	11.217	2.362	6.654
7	WD6	IN	-3.121	11.175	2.318	16.921
8	WD7	IN	-3.051	11.175	2.302	16.921
9	WAV1	G	-.779	4.880	.710	8.619
10	WA4	G	-.903	12.443	1.214	5.112
11	WA1	G	-.645	8.661	.949	8.133
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.285	16.900	3.070	11.196
16	WDW7B	IN	-2.277	16.900	3.058	11.196
17	WD1B	IN	-2.984	11.196	2.212	16.900
18	WFE7	KIP	-1.305	5.049	1.028	4.859
19	WFW7	KIP	-.933	12.569	.890	10.077
20	WF1	KIP	-3.817	5.049	2.995	6.063
21	WD1-WD7	IN	-.115	8.027	.148	5.133

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 11
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2510

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.002	
2	WD1	IN	-7.699	4.035	3.569	8.133
3	WD2	IN	-7.609	4.056	3.438	8.133
4	WD3	IN	-7.263	4.056	3.207	7.985
5	WD4	IN	-7.011	13.879	3.182	7.985
6	WD5	IN	-6.960	13.900	3.175	7.985
7	WD6	IN	-6.960	14.576	3.372	7.816
8	WD7	IN	-7.021	14.576	3.443	7.816
9	WAV1	G	-2.198	4.331	.576	4.521
10	WA4	G	-.677	7.119	.690	7.225
11	WA1	G	-.500	4.352	.495	7.182
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.445	7.816	--	--
16	WDW7B	IN	-3.393	7.795	7.038	14.597
17	WD1B	IN	-7.757	4.056	7.011	14.597
18	WFE7	KIP	-.833	4.521	3.556	8.154
19	WFW7	KIP	-.862	5.830	2.646	4.309
20	WF1	KIP	-2.584	4.373	.681	5.070
21	WD1=WD7	IN	-5.543	4.309	3.477	3.993
					4.190	4.838

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 11
 INPUT MOTION MS S
 NO. OF DATA POINTS 394

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		8.302	
2	WD1	IN	-6.300	4.183	.025	2.112
3	WD2	IN	-6.860	4.183	4.641	5.112
4	WD3	IN	-25.005	6.443	27.055	5.978
5	WD4	IN	-22.941	6.464	27.029	6.190
6	WD5	IN	-14.255	6.401	17.404	6.253
7	WD6	IN	-9.513	6.591	10.978	6.380
8	WD7	IN	-8.093	7.943	.883	6.443
9	WAV1	G	-3.085	5.133	1.009	4.457
10	WA4	G	-1.074	5.387	2.839	5.306
11	WA1	G	-1.402	5.112	4.729	5.091
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.390	8.196	6.482	4.140
16	WDW7B	IN	-1.395	8.175	6.469	4.162
17	WD1B	IN	-6.033	4.183	.016	2.641
18	WFE7	KIP	-1.100	4.478	1.935	5.028
19	WFW7	KIP	-.598	5.049	1.000	4.563
20	WF1	KIP	-1.795	4.542	3.514	5.049
21	WD1-WD7	IN	-1.828	6.443	7.619	6.739

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 13
 INPUT MOTION MS 1
 NO. OF DATA POINTS . . . 3129

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		66.079	
2	WD1	IN	-1.812	25.223	2.175	24.632
3	WD2	IN	-1.812	25.223	.283	6.654
4	WD3	IN	-2.372	25.244	.390	6.654
5	WD4	IN	-1.860	25.223	.349	6.739
6	WD5	IN	-1.798	24.906	.307	6.823
7	WD6	IN	-1.808	25.139	.277	6.887
8	WD7	IN	-1.800	25.139	.278	6.887
9	WAV1	G	-.051	13.541	.055	13.731
10	WA4	G	-.259	13.710	.358	13.562
11	WA1	G	-.455	10.774	.404	13.562
12	WA3	G	-.301	13.414	.408	13.562
13	WA5	G	-.188	11.344	.271	13.562
14	WA7	G	-.181	11.576	.184	10.541
15	WDE7B	IN	-.267	6.908	1.821	25.223
16	WDW7B	IN	-.283	6.654	1.780	25.308
17	WD1B	IN	-1.799	25.244	.281	6.675
18	WF1	KIP	-.673	11.809	.809	13.541
19	WF2	KIP	-.163	3.338	.587	13.562
20	WF3	KIP	-1.133	14.787	.474	11.154
21	WD1-WD7	IN	-.290	10.731	3.649	24.632

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 13
 INPUT MOTION MS 2
 NO. OF DATA POINTS 3056

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		64.537	
2	WD1	IN	-2.070	22.097	2.166	23.449
3	WD2	IN	-2.022	22.097	.424	8.281
4	WD3	IN	-2.557	22.097	.474	8.260
5	WD4	IN	-1.901	22.097	.336	8.175
6	WD5	IN	-1.810	23.406	.314	5.049
7	WD6	IN	-1.798	23.554	1.108	23.744
8	WD7	IN	-1.805	23.385	.281	5.049
9	WAV1	G	-.036	9.591	.023	9.696
10	WA4	G	-.167	9.739	.140	9.612
11	WA1	G	-.262	10.013	.233	9.591
12	WA3	G	-.183	9.739	.158	9.612
13	WA5	G	-.143	9.739	.128	9.232
14	WA7	G	-.136	9.739	.154	8.746
15	WDE76	IN	-.277	5.049	1.808	23.385
16	WDW7B	IN	-.275	4.964	1.798	23.533
17	WD16	IN	-2.044	22.054	.461	8.344
18	WF1	KIP	-.316	9.696	.260	11.682
19	WF2	KIP	-.148	9.105	.381	9.612
20	WF3	KIP	-.653	14.661	.446	9.337
21	WD1-WD7	IN	-.794	14.893	3.968	23.449

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 13
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2925

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		61.769	
2	WD1	IN	-4.002	17.048	2.674	32.406
3	WD2	IN	-3.991	17.048	2.237	10.203
4	WD3	IN	-5.201	17.069	2.849	10.203
5	WD4	IN	-4.038	17.027	4.925	14.999
6	WD5	IN	-3.963	17.048	1.979	10.203
7	WD6	IN	-3.913	17.048	1.936	10.246
8	WD7	IN	-3.901	17.069	1.907	10.267
9	WAV1	G	-.121	9.950	.139	8.661
10	WA4	G	-.584	6.464	.615	8.577
11	WA1	G	-.685	10.077	.754	8.577
12	WA3	G	-.582	7.309	.739	8.577
13	WA5	G	-.545	6.464	.439	9.168
14	WA7	G	-.605	6.443	.365	7.816
15	WDE7B	IN	-1.918	10.267	3.916	17.111
16	WDW7B	IN	-1.896	10.246	3.865	17.090
17	WD18	IN	-3.975	17.069	2.260	10.224
18	WF1	KIP	-1.340	8.703	1.371	8.471
19	WF2	KIP	-.605	6.464	.617	6.697
20	WF3	KIP	-2.453	6.422	1.518	8.556
21	WD1-WD7	IN	-.476	7.309	4.338	32.406

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 13
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3108

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		65.635	
2	WD1	IN	-3.841	18.632	5.089	15.611
3	WD2	IN	-3.698	18.611	4.951	15.611
4	WD3	IN	-4.496	18.611	6.193	15.611
5	WD4	IN	-3.180	18.569	4.613	15.611
6	WD5	IN	-2.671	18.548	4.259	15.548
7	WD6	IN	-2.602	18.400	4.304	15.379
8	WD7	IN	-2.782	18.400	4.331	15.379
9	WAV1	G	-.075	14.661	.102	16.034
10	WA4	G	-.391	16.372	.371	14.518
11	WA1	G	-.370	16.097	.324	15.569
12	WA3	G	-.379	16.372	.388	14.618
13	WA5	G	-.382	16.372	.311	14.616
14	WA7	G	-.385	15.189	.328	20.385
15	WDE78	IN	-4.337	15.379	2.790	18.400
16	WDW78	IN	-4.272	15.400	2.788	18.421
17	WD13	IN	-3.810	18.632	5.075	15.632
18	WF1	KIP	-.516	16.435	.553	22.414
19	WF2	KIP	-.212	15.210	.523	12.992
20	WF3	KIP	-1.408	15.168	.998	14.597
21	WD1-WD7	IN	-1.915	21.104	2.048	15.823

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 13
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2904

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		61.326	
2	WD1	IN	-7.245	16.583	3.948	9.760
3	WD2	IN	-7.240	16.583	3.895	9.760
4	WD3	IN	-9.461	16.583	4.970	9.760
5	WD4	IN	-7.323	16.604	4.911	35.849
6	WD5	IN	-7.116	16.583	3.512	9.781
7	WD6	IN	-7.095	16.583	3.438	9.781
8	WD7	IN	-7.066	16.583	3.393	9.760
9	WAV1	G	-.529	8.323	.510	8.344
10	WA4	G	-.906	5.978	.795	9.696
11	WA1	G	-1.111	6.887	1.093	6.232
12	WA3	G	-.801	6.887	.810	8.049
13	WA5	G	-.935	5.978	5.782	8.133
14	WA7	G	-.905	5.978	.680	0.147
15	WDE7B	IN	-3.403	9.760	7.075	16.583
16	WDW7B	IN	-3.385	9.802	7.010	16.583
17	WD18	IN	-7.190	16.583	3.913	9.760
18	WF1	KIP	-1.667	5.957	1.849	8.006
19	WF2	KIP	-1.211	5.978	.834	6.232
20	WF3	KIP	-2.059	5.936	2.141	9.675
21	WD1-WD7	IN	-.818	6.844	3.735	27.610

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 13
 INPUT MOTION MS 6-1
 NO. OF DATA POINTS 3045

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		64.304	
2	WD1	IN	-6.541	6.760	3.572	10.795
3	WD2	IN	-6.022	6.760	3.451	10.731
4	WD3	IN	-9.471	6.675	4.293	10.710
5	WD4	IN	-7.189	16.520	4.104	46.728
6	WD5	IN	-6.976	16.456	3.187	10.499
7	WD6	IN	-7.014	17.217	3.395	10.393
8	WD7	IN	-7.025	17.217	3.437	10.393
9	WAV1	G	-.125	6.633	.109	9.739
10	WA4	G	-.489	10.098	.708	9.739
11	WA1	G	-.520	6.644	.537	7.520
12	WA3	G	-.455	6.633	.561	7.542
13	WA5	G	-.604	6.612	.712	9.739
14	WA7	G	-.691	7.457	.486	6.844
15	WDE7B	IN	-3.445	10.393	7.038	17.238
16	WDW7B	IN	-3.386	10.415	6.980	17.259
17	WD1B	IN	-6.535	6.781	3.549	10.774
18	WF1	KIP	-.627	6.823	.729	7.520
19	WF2	KIP	-.691	6.612	.479	9.623
20	WF3	KIP	-2.393	6.528	1.673	9.717
21	WD1-WD7	IN	-5.843	6.844	4.185	7.436

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 13
 INPUT MOTION MS 6-2
 NO. OF DATA POINTS 2967

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.656	
2	WD1	IN	-8.549	6.126	3.560	10.077
3	WD2	IN	-8.016	6.105	3.452	10.077
4	WD3	IN	-9.453	6.021	4.292	10.077
5	WD4	IN	-7.201	15.886	4.105	36.039
6	WD5	IN	-6.958	15.823	3.238	9.760
7	WD6	IN	-7.016	16.583	3.398	9.739
8	WD7	IN	-7.033	16.583	3.429	9.739
9	WAV1	G	-.293	7.056	.503	7.077
10	WA4	G	-.551	5.978	.834	6.950
11	WA1	G	-.512	6.190	.638	6.866
12	WA3	G	-.898	7.035	.660	7.119
13	WA5	G	-.767	7.013	1.062	6.950
14	WA7	G	-.911	5.957	.739	7.056
15	WDE7B	IN	-3.445	9.760	7.047	16.583
16	WDW7B	IN	-3.401	9.760	6.967	16.604
17	WD1B	IN	-8.536	6.147	3.547	10.140
18	WF1	KIP	-.751	6.971	.593	6.844
19	WF2	KIP	-.745	5.957	.806	6.950
20	WF3	KIP	-2.124	5.936	1.783	9.084
21	WD1-WD7	IN	-5.826	6.190	4.173	6.781

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 13
 INPUT MOTION MS 7
 NO. OF DATA POINTS 786

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		16.625	
2	WD1	IN	-6.876	5.999	2.181	6.654
3	WD2	IN	-14.753	7.542	17.258	7.098
4	WD3	IN	-26.163	8.260	27.155	7.140
5	WD4	IN	-23.233	8.851	29.188	7.351
6	WDS	IN	-14.969	14.344	17.048	7.457
7	WD6	IN	-6.853	5.999	5.009	7.732
8	WD7	IN	-6.826	5.999	.012	4.225
9	WAV1	G	-2.052	6.006	6.913	6.675
10	WA4	G	-25.767	7.394	25.784	7.457
11	WA1	G	-4.212	6.675	1.436	6.253
12	WA3	G	-5.346	7.288	9.977	7.330
13	WA5	G	-27.057	7.436	24.518	7.605
14	YA7	G	-5.202	7.626	1.705	6.211
15	WDE7B	IN	-.008	.159	6.841	5.977
16	WDW7B	IN	-.018	2.472	6.774	6.021
17	WD1B	IN	-6.832	5.999	1.695	6.675
18	WF1	KIP	-1.537	6.084	1.041	6.253
19	WF2	KIP	-1.299	6.063	1.808	6.253
20	WF3	KIP	-4.797	6.021	3.969	6.232
21	WD1-WD7	IN	-.077	6.084	5.142	6.654

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 1
 NO. OF DATA POINTS 3112

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		65.720	
2	WD1	IN	-1.799	23.871	10.215	.697
3	WD2	IN	-1.811	23.871	10.215	.697
4	WD3	IN	-1.808	23.956	16.972	.676
5	WD4	IN	-1.809	23.956	17.011	.697
6	WD5	IN	-1.834	24.040	10.186	.718
7	WD6	IN	-1.809	23.871	6.760	.697
8	WD7	IN	-1.806	23.871	6.735	.718
9	WAV1	G	-.034	11.682	2.196	.676
10	WA4	G	-.230	13.414	2.031	.676
11	WA1	G	-.469	12.020	2.049	.697
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.280	5.450	6.816	.676
16	WDW7B	IN	-.273	5.471	6.888	.676
17	WD1B	IN	-1.787	23.850	10.119	.676
18	WF1	KIP	-.795	12.147	5.002	.676
19	WF2	KIP	-.464	2.197	5.149	.676
20	WF3	KIP	-1.391	2.176	10.087	.718
21	WD1-WD7	IN	-2.469	24.019	4.323	61.642

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2946

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.213	
2	WD1	IN	-2.074	22.329	3.723	28.793
3	WD2	IN	-2.042	22.329	.418	8.682
4	WD3	IN	-1.955	22.392	.364	8.513
5	WD4	IN	-1.981	41.489	.352	5.873
6	WD5	IN	-1.842	23.498	.287	5.345
7	WD6	IN	-1.822	23.829	.264	5.323
8	WD7	IN	-1.824	23.744	.707	23.892
9	WAV1	G	-.027	9.906	.017	10.034
10	WA4	G	-.132	10.077	.144	11.407
11	WA1	G	-.241	11.260	.236	11.407
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.272	5.323	1.821	23.829
16	WDW7B	IN	-.246	5.239	1.814	23.829
17	WD1b	IN	-2.062	22.350	.460	8.661
18	WF1	KIP	-.334	10.161	.328	10.626
19	WF2	KIP	-.099	9.168	.864	9.929
20	WF3	KIP	-.863	9.696	2.181	14.999
21	WD1-WD7	IN	-2.535	23.892	3.968	31.117

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2741

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.882	
2	WD1	IN	-4.016	16.351	4.213	37.560
3	WD2	IN	-4.011	16.351	2.220	9.527
4	WD3	IN	-3.988	16.351	2.137	9.527
5	WD4	IN	-3.951	16.351	2.072	9.548
6	WD5	IN	-3.943	16.372	1.979	9.570
7	WD6	IN	-3.940	16.351	1.907	9.527
8	WD7	IN	-3.926	16.351	1.886	9.591
9	WAV1	G	-.089	9.253	.058	7.922
10	WA4	G	-.491	6.612	.478	9.527
11	WA1	G	-.754	6.612	.766	9.527
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.901	9.570	3.932	16.372
16	WDW7B	IN	-1.869	9.570	3.887	16.393
17	WD1B	IN	-3.969	16.372	2.244	9.527
18	WF1	KIP	-1.090	7.774	1.234	7.922
19	WF2	KIP	-.226	7.943	1.139	11.407
20	WF3	KIP	-1.061	7.880	4.603	5.746
21	WD1-WD7	IN	-.465	6.633	4.338	37.560

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 4
 NO. OF DATA POINTS 2956

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.424	
2	WD1	IN	-3.847	17.280	5.063	14.238
3	WD2	IN	-3.717	17.280	4.958	14.238
4	WD3	IN	-3.424	17.280	4.711	14.238
5	WD4	IN	-3.142	17.217	4.460	14.238
6	WD5	IN	-2.900	17.217	4.243	14.154
7	WD6	IN	-2.803	17.048	4.280	14.027
8	WD7	IN	-2.781	17.048	4.322	14.027
9	WAV1	G	-.065	19.646	.076	19.625
10	WA4	G	-.401	14.724	.282	21.040
11	WA1	G	-.444	14.724	.413	21.040
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.330	13.985	2.803	17.048
16	WDW7B	IN	-4.275	14.048	2.756	17.069
17	WD1B	IN	-3.823	17.280	5.061	14.260
18	WF1	KIP	-.629	21.019	.801	20.491
19	WF2	KIP	-.604	14.111	.663	15.738
20	WF3	KIP	-2.256	18.991	2.397	7.880
21	WD1-WD7	IN	-1.905	19.731	3.312	51.376

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2783

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.769	
2	WD1	IN	-7.218	15.780	3.957	8.978
3	WD2	IN	-7.222	15.780	3.914	8.978
4	WD3	IN	-7.176	15.823	3.787	8.978
5	WD4	IN	-7.093	15.801	3.667	8.978
6	WD5	IN	-7.074	15.780	3.591	8.999
7	WD6	IN	-7.034	15.780	3.483	8.999
8	WD7	IN	-7.018	15.801	3.450	9.020
9	WAV1	G	-.140	7.330	.148	7.436
10	WA4	G	-.968	5.218	.984	5.450
11	WA1	G	-1.466	7.394	1.381	7.246
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.460	8.999	7.015	15.801
16	WDW7B	IN	-3.421	8.999	6.946	15.823
17	WD1B	IN	-7.179	15.790	3.913	8.978
18	WF1	KIP	-1.943	7.225	2.353	7.373
19	WF2	KIP	-1.337	5.218	.699	5.450
20	WF3	KIP	-3.343	7.330	3.878	5.176
21	WD1-WD7	IN	-2.519	27.779	.750	5.429

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2804

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		59.213	
2	WD1	IN	-8.550	5.345	3.721	56.150
3	WD2	IN	-8.064	5.323	3.446	9.295
4	WD3	IN	-7.225	5.260	3.255	9.274
5	WD4	IN	-7.002	15.104	3.146	9.126
6	WDS	IN	-6.985	15.062	3.177	9.063
7	WD6	IN	-6.998	15.759	3.369	8.978
8	WD7	IN	-7.036	15.759	3.426	8.957
9	WAV1	G	-.073	6.126	.075	8.344
10	WA4	G	-.621	5.176	.438	6.084
11	WA1	G	-.464	5.429	.538	6.084
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.430	8.978	7.041	15.759
16	WDW7B	IN	-3.390	8.978	6.959	15.801
17	WD1b	IN	-8.514	5.345	3.548	9.337
18	WF1	KIP	-.788	6.063	.575	6.168
19	WF2	KIP	-.861	6.781	.542	7.499
20	WF3	KIP	-1.882	5.492	3.397	5.133
21	WD1-WD7	IN	-5.801	5.408	4.165	5.999

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2610

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.115	
2	WD1	IN	-6.758	12.654	5.598	10.203
3	WD2	IN	-6.067	12.654	5.212	10.203
4	WD3	IN	-6.464	12.738	4.785	8.408
5	WD4	IN	-6.344	12.738	4.626	8.196
6	WD5	IN	-6.226	12.781	4.532	8.175
7	WD6	IN	-6.163	12.802	4.542	18.505
8	WD7	IN	-6.127	12.802	4.563	18.505
9	WAV1	G	-.271	6.866	.370	6.908
10	WA4	G	-1.302	8.978	2.578	6.633
11	WA1	G	-.718	8.851	.583	6.802
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.569	18.505	6.136	12.802
16	WDW7B	IN	-4.503	18.527	6.072	12.823
17	WD1B	IN	-6.719	12.654	5.605	10.203
18	WF1	KIP	-1.660	6.612	1.046	7.140
19	WF2	KIP	-1.241	6.844	2.360	6.908
20	WF3	KIP	-6.972	6.612	5.210	8.957
21	WD1-WD7	IN	-5.319	7.246	4.092	10.246

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 8
 NO. OF DATA POINTS 2610

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.115	
2	WD1	IN	-6.756	12.654	5.598	10.203
3	WD2	IN	-6.667	12.654	5.212	10.203
4	WD3	IN	-6.464	12.738	4.785	8.408
5	WD4	IN	-6.344	12.738	4.626	8.196
6	WD5	IN	-6.226	12.781	4.532	8.175
7	WD6	IN	-6.163	12.802	4.542	18.505
8	WD7	IN	-6.127	12.802	4.563	18.505
9	WAV1	G	-.271	6.866	.370	6.908
10	WA4	G	-1.302	8.978	2.578	6.633
11	WA1	G	-.718	8.851	.583	6.802
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.569	18.505	6.136	12.802
16	WDW7B	IN	-4.503	18.527	6.072	12.823
17	WD1B	IN	-6.719	12.654	5.605	10.203
18	WF1	KIP	-1.660	6.612	1.046	7.140
19	WF2	KIP	-1.241	6.844	2.360	6.908
20	WF3	KIP	-6.972	6.612	5.210	8.957
21	WD1-WD7	IN	-5.319	7.246	4.092	10.246

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 7
 NO. OF DATA POINTS 2767

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.431	
2	WD1	IN	-7.207	16.034	4.226	56.488
3	WD2	IN	-7.233	16.034	3.979	9.253
4	WD3	IN	-7.236	16.034	3.958	9.253
5	WD4	IN	-7.188	16.055	3.928	9.253
6	WD5	IN	-7.252	16.034	3.977	9.253
7	WD6	IN	-7.212	16.055	3.980	9.253
8	WD7	IN	-7.207	16.055	3.979	9.253
9	WAV1	G	-.246	6.401	.127	6.422
10	WA4	G	-1.341	6.401	1.451	7.626
11	WA1	G	-1.454	7.668	1.306	7.520
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.991	9.253	7.186	16.055
16	WDW7B	IN	-3.910	9.274	7.161	16.055
17	WD18	IN	-7.177	16.055	3.927	9.253
18	WF1	KIP	-2.560	7.499	2.008	7.647
19	WF2	KIP	-1.691	7.732	1.058	7.520
20	WF3	KIP	-5.531	5.704	4.784	6.337
21	WD1-WD7	IN	-.082	11.196	4.320	56.488

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 9.1
 NO. OF DATA POINTS 2520

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.214	
2	WD1	IN	-7.445	12.358	6.188	9.929
3	WD2	IN	-7.347	12.358	5.775	9.929
4	WD3	IN	-7.104	12.443	5.283	7.943
5	WD4	IN	-6.949	12.527	5.138	7.943
6	WD5	IN	-6.872	12.527	4.962	7.880
7	WD6	IN	-6.770	12.506	5.006	18.231
8	WD7	IN	-6.728	12.527	5.024	18.210
9	WAV1	G	-.536	6.675	.636	6.612
10	WA4	G	-1.900	6.570	3.414	6.633
11	WA1	G	-.809	6.577	.660	6.380
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.043	18.231	6.739	12.527
16	WDW7B	IN	-4.962	18.231	6.658	12.527
17	WD15	IN	-7.396	12.358	6.172	9.929
18	WF1	KIP	-1.603	6.337	1.205	8.682
19	WF2	KIP	-1.710	6.549	2.496	6.380
20	WF3	KIP	-7.206	6.612	5.218	6.147
21	WD1-WD7	IN	-5.652	6.950	4.503	9.971

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 8.1
 NO. OF DATA POINTS 2799

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		59.107	
2	WD1	IN	-9.402	5.704	3.910	9.696
3	WD2	IN	-8.869	5.661	3.823	9.612
4	WD3	IN	-8.256	5.598	3.699	9.591
5	WD4	IN	-7.939	5.577	3.679	9.358
6	WD5	IN	-7.836	15.463	4.052	9.358
7	WD6	IN	-7.871	16.118	4.331	9.316
8	WD7	IN	-7.932	16.139	4.387	9.316
9	WAV1	G	-.418	7.880	.895	6.570
10	WA4	G	-2.130	7.732	2.946	6.591
11	WA1	G	-.819	6.654	.734	6.063
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.383	9.316	7.920	16.139
16	WDW7B	IN	-4.342	9.337	7.854	16.139
17	WD18	IN	-9.365	5.725	3.906	9.696
18	WF1	KIP	-1.205	6.042	1.000	9.443
19	WF2	KIP	-1.604	8.978	2.609	6.591
20	WF3	KIP	-8.490	6.570	5.948	7.711
21	WD1-WD7	IN	-7.194	5.767	5.298	6.380

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 7.1
 NO. OF DATA POINTS 2793

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.981	
2	WD1	IN	-7.996	15.886	4.363	9.063
3	WD2	IN	-8.005	15.907	4.391	9.063
4	WD3	IN	-7.990	15.907	4.397	9.063
5	WD4	IN	-7.937	15.907	4.385	9.063
6	WD5	IN	-7.966	15.907	4.389	9.063
7	WD6	IN	-7.959	15.907	4.385	9.084
8	WD7	IN	-7.948	15.907	4.375	9.084
9	WAV1	G	-.281	6.232	.233	6.253
10	WA4	G	-1.889	7.499	1.457	7.351
11	WA1	G	-1.487	7.478	1.424	7.732
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.362	9.084	7.953	15.907
16	WDW7B	IN	-4.364	9.084	7.872	15.907
17	WD1B	IN	-7.922	15.886	4.340	9.064
18	WF1	KIP	-2.492	5.535	2.847	7.457
19	WF2	KIP	-1.093	7.563	2.007	7.330
20	WF3	KIP	-5.084	7.309	6.688	7.542
21	WD1-WD7	IN	-.099	7.436	3.831	39.461

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 9.2
 NO. OF DATA POINTS 1743

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		36.800	
2	WD1	IN	-8.116	11.576	6.748	9.168
3	WD2	IN	-8.008	11.619	6.311	9.168
4	WD3	IN	-7.757	11.703	5.769	7.373
5	WD4	IN	-7.572	11.703	5.575	7.161
6	WD5	IN	-7.480	11.724	5.439	7.161
7	WD6	IN	-7.387	11.767	5.475	17.470
8	WD7	IN	-7.350	11.767	5.480	17.470
9	WAV1	G	-.612	5.936	.866	5.873
10	WA4	G	-2.231	5.767	3.574	5.894
11	WA1	G	-1.121	6.042	.915	5.725
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.508	17.470	7.346	11.767
16	WDW7B	IN	-5.416	17.470	7.277	11.767
17	WD1B	IN	-8.079	11.598	6.746	9.168
18	WF1	KIP	-1.637	5.873	1.903	6.021
19	WF2	KIP	-1.429	5.809	2.241	5.619
20	WF3	KIP	-8.321	5.598	5.032	5.408
21	WD1-WD7	IN	-6.370	6.211	4.929	9.210

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 8A
 NO. OF DATA POINTS 2762

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.326	
2	WD1	IN	-9.389	4.880	3.929	8.830
3	WD2	IN	-8.847	4.816	3.798	8.746
4	WD3	IN	-8.071	4.732	3.587	8.746
5	WD4	IN	-7.620	4.732	3.397	8.746
6	WD5	IN	-7.286	14.597	3.679	8.513
7	WD6	IN	-7.189	15.294	3.917	8.492
8	WD7	IN	-7.210	15.294	3.970	8.471
9	WAV1	G	-.248	7.035	.379	5.725
10	WA4	G	-1.643	6.887	2.173	5.725
11	WA1	G	-.613	4.985	.739	5.218
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.985	8.471	7.183	15.294
16	NDW7B	IN	-3.906	8.492	7.161	15.294
17	WD1B	IN	-9.353	4.859	3.909	8.851
18	WF1	KIP	-1.313	5.176	1.429	5.746
19	WF2	KIP	-1.635	8.344	1.299	5.609
20	WF3	KIP	-7.776	5.704	4.555	5.556
21	WD1-WD7	IN	-7.383	4.922	4.848	5.535

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 88
 NO. OF DATA POINTS 2788

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.875	
2	WD1	IN	-9.375	5.323	3.912	9.295
3	WD2	IN	-8.760	5.302	3.748	9.295
4	WD3	IN	-7.698	5.218	3.426	9.210
5	WD4	IN	-6.987	5.197	3.129	9.232
6	WD5	IN	-6.353	5.176	2.992	8.957
7	WD6	IN	-5.888	15.780	3.152	8.957
8	WD7	IN	-5.786	15.738	3.185	8.936
9	WAV1	G	-.201	6.105	.230	6.147
10	WA4	G	-1.808	5.725	1.301	5.788
11	WA1	G	-.018	6.211	.753	5.640
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.174	8.957	5.808	15.780
16	WDW7B	IN	-3.171	8.957	5.724	15.759
17	WD16	IN	-9.353	5.345	3.898	9.316
18	WF1	KIP	-1.110	5.767	.763	7.309
19	WF2	KIP	-.774	6.063	1.210	7.542
20	WF3	KIP	-3.002	6.147	4.830	5.176
21	WD1-WD7	IN	-7.727	5.387	3.968	5.999

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 8C
 NO. OF DATA POINTS 2746

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.988	
2	WD1	IN	-9.377	4.774	3.897	8.767
3	WD2	IN	-8.696	4.753	3.683	8.703
4	WD3	IN	-7.390	4.711	3.256	8.661
5	WD4	IN	-6.322	4.647	2.839	8.661
6	WDS	IN	-5.452	4.605	2.451	8.429
7	WD6	IN	-4.708	14.513	2.461	8.387
8	WD7	IN	-4.473	15.189	2.475	8.387
9	WAV1	G	-.288	5.049	.149	5.577
10	WA4	G	-1.731	5.176	1.118	5.133
11	WA1	G	-.756	5.683	.655	5.112
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.463	8.387	4.492	15.231
16	WDW7B	IN	-2.454	8.408	4.427	15.210
17	WD1B	IN	-9.354	4.774	3.898	8.767
18	WF1	KIP	-.940	5.091	.670	5.154
19	WF2	KIP	-.896	5.197	.901	5.218
20	WF3	KIP	-3.164	8.070	3.599	4.626
21	WD1-WD7	IN	-8.046	4.838	3.839	36.440

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 7.3
 NO. OF DATA POINTS . . . 2830

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		59.762	
2	WD1	IN	-9.420	14.999	5.173	8.175
3	WD2	IN	-9.446	14.999	5.198	8.175
4	WD3	IN	-9.433	14.978	5.206	8.175
5	WD4	IN	-9.392	14.978	5.196	8.196
6	WD5	IN	-9.404	14.999	5.199	8.196
7	WD6	IN	-9.068	15.062	5.179	8.175
8	WD7	IN	-8.867	15.062	5.166	8.175
9	WAV1	G	-.336	6.612	.460	6.591
10	WA4	G	-2.476	6.612	2.089	7.901
11	WA1	G	-1.950	7.753	2.089	4.669
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.154	8.196	9.395	14.999
16	WDW7B	IN	-5.135	8.196	9.311	14.999
17	WD1B	IN	-9.355	14.999	5.120	8.196
18	WF1	KIP	-3.145	4.647	2.736	7.732
19	WF2	KIP	-1.833	6.612	1.752	7.689
20	WF3	KIP	-6.500	6.422	6.992	6.591
21	WD1-WD7	IN	-2.527	26.174	3.833	55.580

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 80
 NO. OF DATA POINTS 2783

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.769	
2	WD1	IN	-9.414	5.112	3.888	9.063
3	WD2	IN	-8.520	5.112	3.506	9.084
4	WD3	IN	-6.479	5.112	2.691	9.063
5	WD4	IN	-4.512	5.112	1.903	9.063
6	WDS	IN	-2.457	5.070	1.088	9.084
7	WD6	IN	-.732	15.780	.325	8.978
8	WD7	IN	-.024	5.535	.029	56.615
9	WAV1	G	-.113	5.366	.070	5.640
10	WA4	G	-.660	5.619	.614	5.577
11	WA1	G	-.564	5.154	.528	5.894
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.022	57.333	.027	2.112
16	WDW7B	IN	-.012	1.817	.023	5.999
17	WD1B	IN	-9.376	5.112	3.895	9.105
18	WF1	KIP	-.879	5.873	.597	5.176
19	WF2	KIP	-.474	5.556	.873	5.577
20	WF3	KIP	-.972	1.732	1.844	5.598
21	SD1-WD7	IN	-9.412	5.112	3.895	9.063

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 9-N
 NO. OF DATA POINTS 2463

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.009	
2	WD1	IN	-6.754	11.661	5.618	9.232
3	WD2	IN	-6.669	11.724	5.241	9.253
4	WD3	IN	-6.515	11.724	4.842	7.246
5	WD4	IN	-6.370	11.851	4.699	7.246
6	WD5	IN	-6.284	11.830	4.593	7.246
7	WD6	IN	-6.160	11.830	4.580	17.555
8	WD7	IN	-6.105	11.830	4.586	17.555
9	WAV1	G	-.784	13.097	1.630	12.865
10	WA4	G	-1.523	5.640	1.615	5.767
11	WA1	G	-.557	12.928	.802	30.272
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.597	17.555	6.102	11.830
16	WDW7B	IN	-4.517	17.555	6.071	11.851
17	WD1B	IN	-6.706	11.682	5.609	9.253
18	WF1	KIP	-.782	15.675	.707	15.844
19	WF2	KIP	-1.324	5.049	.631	8.091
20	WF3	KIP	-5.246	12.844	3.937	12.675
21	WD1-WD7	IN	-5.522	6.274	4.348	50.404

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 8-N
 NO. OF DATA POINTS 2709

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.206	
2	WD1	IN	-8.537	4.584	3.552	8.598
3	WD2	IN	-8.164	4.563	3.487	8.619
4	WD3	IN	-7.646	4.500	3.571	8.344
5	WD4	IN	-7.255	4.478	3.870	8.281
6	WD5	IN	-7.129	15.020	3.634	8.260
7	WD6	IN	-7.192	15.041	3.908	8.239
8	WD7	IN	-7.211	15.041	3.982	8.218
9	WAV1	G	-1.177	5.577	2.007	5.556
10	WA4	G	-1.449	6.063	1.230	5.598
11	WA1	G	-.604	4.669	.582	6.450
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.960	8.218	7.222	15.020
16	WDW7B	IN	-3.942	8.218	7.129	15.041
17	WD1B	IN	-8.505	4.605	3.542	6.546
18	WF1	KIP	-.936	5.323	.950	5.999
19	WF2	KIP	-1.090	6.739	1.163	4.711
20	WF3	KIP	-3.435	6.528	4.221	4.457
21	WD1-WD7	IN	-8.570	4.669	4.816	5.281

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 14
 INPUT MOTION MS 7-N
 NO. OF DATA POINTS 840

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		17.724	
2	WD1	IN	-6.853	4.309	12.318	9.844
3	WD2	IN	-14.442	9.950	16.629	9.823
4	WD3	IN	-23.385	10.858	26.521	10.393
5	WD4	IN	-13.507	14.640	6.141	8.260
6	WD5	IN	-7.078	11.281	4.837	8.218
7	WD6	IN	-6.914	4.331	4.151	8.112
8	WD7	IN	-6.858	4.309	3.959	8.091
9	WAV1	G	-3.235	9.422	6.087	9.295
10	WA4	G	-8.597	9.295	1.798	6.464
11	WA1	G	-4.054	9.717	4.481	9.379
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.937	8.112	6.865	4.309
16	WDW7B	IN	-3.924	8.112	6.807	4.331
17	WD1B	IN	-6.807	4.309	11.949	9.844
18	WF1	KIP	-3.293	9.358	2.381	9.443
19	WF2	KIP	-1.144	5.218	1.196	8.112
20	WF3	KIP	-4.719	6.443	4.760	4.331
21	WD1-WD7	IN	-1.136	9.464	10.533	9.823

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2650

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.960	
2	WD1	IN	-3.984	14.682	10.173	.570
3	WD2	IN	-3.999	14.682	10.160	.570
4	WD3	IN	-3.969	14.682	16.932	.570
5	WD4	IN	-3.978	14.682	16.960	.570
6	WD5	IN	-3.966	14.703	10.170	.591
7	WD6	IN	-3.928	14.682	6.732	.570
8	WD7	IN	-3.919	14.682	6.715	.570
9	WAV1	G	-.090	6.443	2.185	.570
10	WA4	G	-.580	4.014	2.030	.570
11	WA1	G	-.629	7.668	2.045	.570
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.062	14.682	6.810	.591
16	WDW7B	IN	-3.898	14.682	6.913	.591
17	WD1B	IN	-2.220	7.795	10.167	.570
18	WF1	KIP	-1.073	7.330	4.997	.613
19	WF2	KIP	-.557	4.880	5.009	.591
20	WF3	KIP	-2.994	3.993	10.075	.591
21	WD1-WD7	IN	-2.737	33.124	4.255	17.660

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3093

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		65.318	
2	WD1	IN	-3.854	17.217	5.109	14.175
3	WD2	IN	-3.734	17.217	5.000	14.175
4	WD3	IN	-3.447	17.217	4.745	14.175
5	WD4	IN	-3.147	17.153	4.483	14.175
6	WD5	IN	-2.968	17.153	4.258	14.111
7	WD6	IN	-2.821	16.984	4.307	13.942
8	WD7	IN	-2.791	16.984	4.354	13.942
9	WAV1	G	-.075	13.203	.119	21.590
10	WA4	G	-.337	12.865	.460	13.393
11	WA1	G	-.475	12.844	.383	20.322
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7S	IN	-2.617	16.984	4.062	13.942
16	WDW76	IN	-2.762	17.006	4.320	13.964
17	WD1B	IN	-4.966	14.217	3.740	17.217
18	WF1	KIP	-.594	21.505	.578	20.977
19	WF2	KIP	-.421	12.865	.411	19.034
20	WF3	KIP	-1.486	13.731	1.020	18.949
21	WD1-WD7	IN	-2.080	7.563	2.035	14.386

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2736

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.777	
2	WD1	IN	-7.230	15.654	3.963	8.809
3	WD2	IN	-7.245	15.632	3.925	8.809
4	WD3	IN	-7.196	15.654	3.798	8.809
5	WD4	IN	-7.145	15.654	3.702	8.809
6	WD5	IN	-7.161	15.675	3.572	8.830
7	WD6	IN	-7.080	15.654	3.491	8.809
8	WD7	IN	-7.064	15.675	3.447	8.830
9	WAV1	G	-.212	7.225	.236	5.049
10	WA4	G	-.881	5.007	.955	7.056
11	WA1	G	-1.276	7.204	1.326	7.056
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-6.589	15.675	3.222	8.830
16	WDW7B	IN	-6.989	15.675	3.441	8.830
17	WD1B	IN	-3.847	8.809	7.025	15.632
18	WF1	KIP	-2.075	7.182	1.953	7.035
19	WF2	KIP	-.887	5.007	.965	5.260
20	WF3	KIP	-3.322	4.985	1.907	7.119
21	WD1-WD7	IN	-3.109	48.693	4.860	20.238

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2688

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		56.763	
2	WD1	IN	-8.557	4.647	3.781	11.640
3	WD2	IN	-8.092	4.647	3.484	8.661
4	WD3	IN	-7.273	4.563	3.268	8.661
5	WD4	IN	-7.019	14.365	3.188	8.492
6	WD5	IN	-7.029	14.449	3.162	8.344
7	WD6	IN	-7.027	15.168	3.377	8.323
8	WD7	IN	-7.065	15.147	3.443	8.323
9	WAV1	G	-.099	4.500	.116	5.577
10	WA4	G	-.750	4.500	.393	5.387
11	WA1	G	-.511	4.795	.509	5.387
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-6.589	15.104	3.197	8.323
16	WDW7B	IN	-6.982	15.147	3.421	8.323
17	WD1B	IN	-3.466	8.661	8.338	4.669
18	WF1	KIP	-.573	4.774	.726	4.943
19	WF2	KIP	-.630	4.500	.722	5.471
20	WF3	KIP	-2.744	4.457	1.092	7.901
21	WD1-WD7	IN	-5.776	4.732	5.246	11.640

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2489

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.559	
2	WD1	IN	-6.758	11.682	5.624	9.253
3	WD2	IN	-6.654	11.703	5.281	9.253
4	WD3	IN	-6.445	11.745	4.813	7.267
5	WD4	IN	-6.276	11.830	4.717	7.204
6	WD5	IN	-6.260	11.851	4.586	7.204
7	WD6	IN	-6.154	11.851	4.579	17.597
8	WD7	IN	-6.131	11.851	4.589	17.576
9	WAV1	G	-.686	5.894	1.255	5.999
10	WA4	G	-1.729	5.915	1.394	6.084
11	WA1	G	-.721	6.274	.901	5.852
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.727	11.851	4.288	17.597
16	WDW7B	IN	-6.063	11.872	4.566	17.597
17	WD1B	IN	-5.498	9.253	6.577	11.703
18	WF1	KIP	-1.134	6.253	.795	15.442
19	WF2	KIP	-2.438	5.873	1.691	5.704
20	WF3	KIP	-4.835	5.852	4.252	5.683
21	WD1-WD7	IN	-5.506	6.253	4.620	20.491

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 8
 NO. OF DATA POINTS 2751

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.093	
2	WD1	IN	-8.550	4.816	3.572	8.768
3	WD2	IN	-8.123	4.795	3.486	8.788
4	WD3	IN	-7.541	4.711	3.406	8.703
5	WD4	IN	-7.207	4.669	3.522	8.513
6	WD5	IN	-7.159	14.640	3.821	8.471
7	WD6	IN	-7.196	15.273	3.945	8.450
8	WD7	IN	-7.242	15.294	4.001	8.450
9	WAV1	G	-.017	6.908	.705	7.035
10	WA4	G	-1.596	6.929	1.423	5.704
11	AA1	G	-.088	5.725	.620	7.050
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	AA7	G	--	--	--	--
15	WDE7b	IN	-6.754	15.294	3.705	8.450
16	ADW7B	IN	-7.164	15.294	3.972	8.450
17	WD10	IN	-3.467	6.809	8.331	4.836
18	AF1	KIP	-1.004	8.577	.825	7.225
19	AF2	KIP	-1.551	8.091	1.003	6.781
20	AF3	KIP	-4.145	8.006	3.946	5.683
21	AD1-W07	IN	-6.542	4.880	4.856	5.492

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 7
 NO. OF DATA POINTS 2636

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.664	
2	WD1	IN	-7.223	15.041	3.983	8.218
3	WD2	IN	-7.245	15.041	4.153	8.239
4	WD3	IN	-7.239	15.041	4.675	8.260
5	WD4	IN	-7.281	15.083	4.743	8.281
6	WD5	IN	-7.278	15.041	4.392	8.239
7	WD6	IN	-7.238	15.041	4.110	8.218
8	WD7	IN	-7.231	15.041	4.022	8.218
9	WAV1	G	-1.129	6.802	2.404	6.971
10	WA4	G	-3.637	6.781	2.185	5.852
11	WA1	G	-1.301	7.542	1.346	4.669
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-6.745	15.041	3.756	8.218
16	WDW7B	IN	-7.169	15.062	3.963	8.218
17	WD1B	IN	-3.857	8.218	7.013	15.041
18	WF1	KIP	-1.863	7.816	2.143	6.464
19	WF2	KIP	-1.873	6.781	1.841	4.669
20	WF3	KIP	-4.838	7.816	5.726	6.464
21	WD1-WD7	IN	-3.107	47.003	.094	.000

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 10
 NO. OF DATA POINTS 2634

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.622	
2	WD1	IN	-6.069	11.576	4.509	17.322
3	WD2	IN	-6.086	11.576	4.563	17.301
4	WD3	IN	-6.089	11.576	4.613	17.301
5	WD4	IN	-6.099	11.576	4.650	17.301
6	WD5	IN	-6.135	11.576	4.630	17.322
7	WD6	IN	-6.132	11.576	4.604	17.301
8	WD7	IN	-6.139	11.576	4.589	17.322
9	WAV1	G	-2.191	5.704	2.039	12.865
10	WA4	G	-1.970	5.640	1.838	5.429
11	WA1	G	-1.456	13.266	2.254	5.661
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.713	11.576	4.304	17.322
16	WDW7B	IN	-6.081	11.598	4.549	17.322
17	WD1B	IN	-4.399	17.301	5.874	11.598
18	WF1	KIP	-2.004	12.675	1.900	13.604
19	WF2	KIP	-1.805	5.640	1.883	5.429
20	WF3	KIP	-4.370	5.197	4.861	5.408
21	WD1-WD7	IN	-3.060	20.956	.130	13.795

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 10.2
 NO. OF DATA POINTS 2515

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.106	
2	WD1	IN	-7.289	12.231	5.447	17.977
3	WD2	IN	-7.511	12.231	5.535	17.977
4	WD3	IN	-7.322	12.231	5.627	7.584
5	WD4	IN	-7.320	12.210	5.652	17.977
6	WD5	IN	-7.391	12.231	5.577	17.977
7	WD6	IN	-7.354	12.231	5.556	17.977
8	WD7	IN	-7.370	12.231	5.521	17.977
9	WAV1	G	-2.901	6.063	2.564	13.245
10	WA4	G	-3.427	5.978	2.235	13.245
11	WA1	G	-1.323	6.253	1.502	13.520
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7b	IN	-6.866	12.252	5.164	17.977
16	WDW7B	IN	-7.301	12.252	5.474	17.977
17	WD18	IN	-5.297	17.977	7.079	12.252
18	WF1	KIP	-2.898	5.957	2.110	14.259
19	WF2	KIP	-1.980	5.978	1.539	9.126
20	WF3	KIP	-7.170	5.957	6.095	13.224
21	WD1-WD7	IN	-.231	6.084	.169	13.372

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 15
 INPUT MOTION MS 7.2
 NO. OF DATA POINTS 478

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		10.077	
2	WD1	IN	-8.297	4.943	.098	.000
3	WD2	IN	-8.355	4.943	1.656	5.556
4	WD3	IN	-8.420	4.943	12.504	5.556
5	WD4	IN	-8.413	4.943	14.372	5.556
6	WD5	IN	-8.360	4.964	7.610	5.577
7	WD6	IN	-8.235	4.943	.439	5.577
8	WD7	IN	-8.197	4.943	.013	2.324
9	WAV1	G	-8.364	5.619	5.429	5.556
10	WA4	G	-1.014	5.007	6.134	5.577
11	WA1	G	-2.557	5.598	2.300	5.197
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE78	IN	-7.680	4.943	.017	2.810
16	WDW78	IN	-8.168	4.943	.009	2.324
17	WD10	IN	-.005	3.528	8.048	4.943
18	WF1	KIP	-2.393	5.577	2.273	5.176
19	WF2	KIP	-1.167	5.852	2.039	5.197
20	WF3	KIP	-5.051	4.964	5.962	5.176
21	WD1-WD7	IN	-.115	4.922	5.105	5.788

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 16
 INPUT MOTION MS 1
 NO. OF DATA POINTS 3035

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		64.093	
2	WD1	IN	-1.786	23.998	3.978	6.612
3	WD2	IN	-1.802	23.998	.275	5.492
4	WD3	IN	-1.786	23.977	.297	5.556
5	WD4	IN	-2.025	47.594	.473	8.936
6	WD5	IN	-1.820	23.998	.319	5.514
7	WD6	IN	-1.800	23.977	.285	5.556
8	WD7	IN	-1.792	24.061	.280	5.556
9	WAV1	G	-.046	12.358	.051	12.506
10	WA4	G	-.267	13.626	.304	12.379
11	WA1	G	-.452	12.506	.383	10.584
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.280	5.640	1.819	24.061
16	WDW7B	IN	-.286	5.556	1.774	24.125
17	WD1B	IN	-1.784	24.019	.275	5.514
18	WF1	KIP	-.652	12.210	.606	12.358
19	WF2	KIP	-.171	2.556	.552	12.379
20	WF3	KIP	-.913	13.604	.465	2.535
21	WD1-WD7	IN	-.252	9.546	3.803	6.612

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 16
 INPUT MOTION MS 2
 NO. OF DATA POINTS . . . 3162

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		67.198	
2	WD1	IN	-2.077	23.280	3.971	29.955
3	WD2	IN	-2.050	23.280	.423	9.591
4	WD3	IN	-1.948	23.280	.374	9.464
5	WD4	IN	-2.164	51.122	.419	18.653
6	WD5	IN	-1.830	24.251	.301	6.464
7	WD6	IN	-1.798	24.632	.290	6.274
8	WD7	IN	-1.796	24.632	.287	6.359
9	WAV1	G	-4.224	46.686	26.992	22.266
10	WA4	G	-.146	10.985	.170	10.858
11	WA1	G	-.232	11.260	.228	10.837
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.296	6.359	1.799	24.632
16	WDW7B	IN	-.269	6.126	1.795	24.737
17	WD1B	IN	-2.061	23.301	.460	9.591
18	WF1	KIP	-.290	11.260	.218	12.316
19	WF2	KIP	-.184	10.351	.251	10.858
20	WF3	KIP	-.490	10.224	.475	9.971
21	WD1-WD7	IN	-.781	16.139	3.879	29.955

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 16
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2919

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		61.642	
2	WD1	IN	-3.976	15.527	4.464	20.871
3	WD2	IN	-3.992	15.506	2.240	8.682
4	WD3	IN	-3.966	15.527	2.164	8.682
5	WD4	IN	-3.991	15.611	2.067	8.682
6	WD5	IN	-3.931	15.548	2.022	8.682
7	WD6	IN	-3.915	15.548	1.944	8.682
6	WD7	IN	-3.894	15.548	1.912	8.725
9	WAV1	G	-3.163	4.859	26.093	5.387
10	WA4	G	-.639	5.788	.473	6.950
11	WA1	G	-.789	8.556	.705	7.056
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.924	8.746	3.904	15.548
16	WDW7B	IN	-1.885	8.725	3.861	15.548
17	WD1B	IN	-3.955	15.527	2.222	8.703
18	WF1	KIP	-1.158	7.077	1.276	8.387
19	WF2	KIP	-.596	4.943	.310	8.133
20	WF3	KIP	-1.719	4.901	1.296	7.626
21	WD1-WD7	IN	-2.932	12.865	4.327	20.871

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 16
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3119

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		65.867	
2	WD1	IN	-3.819	18.189	5.079	15.189
3	WD2	IN	-3.707	18.189	4.990	15.189
4	WD3	IN	-3.419	18.167	4.726	15.189
5	WD4	IN	-3.131	18.189	4.473	15.189
6	WD5	IN	-2.929	18.167	4.238	15.125
7	WD6	IN	-2.819	17.998	4.320	14.956
8	WD7	IN	-2.800	17.998	4.339	14.956
9	WAV1	G	-2.393	15.738	18.792	15.675
10	WA4	G	-.305	8.851	.242	19.963
11	WA1	G	-.419	15.675	.333	15.506
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.329	14.956	2.798	17.998
16	WDW7R	IN	-4.260	14.978	2.779	17.998
17	WD1B	IN	-5.814	18.210	5.050	15.210
18	WF1	KIP	-.498	15.611	.407	20.893
19	WF2	KIP	-.099	15.062	.478	19.963
20	WF3	KIP	-1.256	14.745	.877	15.210
21	WD1-WD7	IN	-1.893	20.660	3.736	51.376

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 16
 INPUT MOTION MS S
 NO. OF DATA POINTS 2835

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		59.866	
2	WD1	IN	-7.253	15.168	4.435	40.053
3	WD2	IN	-7.268	15.168	4.156	8.387
4	WD3	IN	-7.216	15.168	5.040	7.457
5	WD4	IN	-7.108	15.210	4.430	7.457
6	WD5	IN	-7.108	15.210	3.960	8.429
7	WD6	IN	-7.085	15.210	3.533	8.408
8	WD7	IN	-7.060	15.189	3.424	8.408
9	WAV1	G	-4.326	12.717	13.369	12.696
10	WA4	G	-1.222	7.774	.987	5.809
11	WA1	G	-1.157	5.492	1.403	7.880
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.427	8.408	7.052	15.210
16	WDW7B	IN	-3.390	8.408	6.973	15.210
17	WD1B	IN	-7.166	15.168	3.899	8.387
18	WF1	KIP	-1.559	5.471	1.476	6.718
19	WF2	KIP	-.756	5.450	1.059	6.675
20	WF3	KIP	-2.673	4.563	2.769	7.288
21	WD1-WD7	IN	-.653	5.471	4.269	40.053

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 16
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2778

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.664	
2	WD1	IN	-8.603	5.218	3.548	9.210
3	WD2	IN	-8.145	5.197	3.476	9.210
4	WD3	IN	-7.255	5.133	3.277	9.126
5	WD4	IN	-7.089	15.041	3.134	9.063
6	WD5	IN	-6.991	14.978	3.186	8.830
7	WD6	IN	-7.052	15.675	3.381	8.851
8	WD7	IN	-7.082	15.675	3.407	8.851
9	WAV1	G	-4.637	5.492	26.997	5.133
10	WA4	G	-.528	8.260	.540	6.196
11	WA1	G	-.467	5.302	.499	5.978
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.400	8.872	7.074	15.675
16	WDW7B	IN	-3.361	8.872	6.993	15.675
17	WD1B	IN	-8.503	5.239	3.534	9.232
18	WF1	KIP	-.606	5.281	.574	5.957
19	WF2	KIP	-.592	5.070	.397	5.302
20	WF3	KIP	-2.037	5.028	1.801	8.175
21	WD1-WD7	IN	-5.660	5.302	4.215	5.673

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 16
 INPUT MOTION MS 7
 NO. OF DATA POINTS 651

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		13.731	
2	WD1	IN	-6.853	5.260	.631	5.957
3	WD2	IN	-14.918	6.485	15.247	6.359
4	WD3	IN	-25.151	9.084	24.770	6.422
5	WD4	IN	-24.667	10.985	25.540	6.570
6	WD5	IN	-13.924	6.802	16.245	6.675
7	WD6	IN	-9.660	6.929	7.345	6.802
8	WD7	IN	-6.843	5.281	.516	5.492
9	WAV1	G	-3.373	6.063	6.393	5.978
10	WA4	G	-25.815	6.549	25.788	6.697
11	WA1	G	-3.063	5.978	1.006	5.535
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.019	2.852	6.832	5.281
16	WDW7B	IN	-.030	1.584	6.749	5.281
17	WD1B	IN	-6.787	5.281	.307	5.978
18	WF1	KIP	-1.253	5.345	1.249	5.894
19	WF2	KIP	-1.013	5.323	1.381	5.598
20	WF3	KIP	-3.150	5.302	3.048	5.577
21	WD1-WD7	IN	-2.576	5.492	3.985	6.147

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2783

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.769	
2	WD1	IN	-3.969	15.907	2.276	9.041
3	WD2	IN	-3.992	15.928	2.234	9.041
4	WD3	IN	-3.950	15.928	2.151	9.041
5	WD4	IN	-3.965	15.928	2.054	9.041
6	WD5	IN	-3.946	15.949	1.961	9.041
7	WD6	IN	-3.913	15.907	1.918	9.041
8	WD7	IN	-3.900	15.907	1.903	9.105
9	WAV1	G	-.069	7.119	.080	5.502
10	WA4	G	-.594	5.281	.475	7.394
11	WA1	G	-.034	7.246	.720	7.394
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.924	9.105	3.914	15.928
16	WDW7B	IN	-1.878	9.084	3.666	15.928
17	WD1B	IN	-3.952	15.907	2.248	9.041
18	WF1	KIP	-.837	9.147	.904	9.020
19	WF2	KIP	-.390	5.345	.626	5.429
20	WF3	KIP	-2.842	5.239	1.425	5.640
21	WD1-WD7	IN	-.463	6.126	.436	7.330

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3051

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		64.431	
2	WD1	IN	-3.829	17.048	5.108	14.027
3	WD2	IN	-3.711	17.048	4.983	14.027
4	WD3	IN	-3.422	17.048	4.716	14.027
5	WD4	IN	-3.127	17.006	4.401	14.027
6	WD5	IN	-2.903	16.984	4.240	13.964
7	WD6	IN	-2.810	16.815	4.299	13.795
8	WD7	IN	-2.788	16.794	4.326	13.795
9	WAV1	G	-.039	14.323	.060	14.449
10	WA4	G	-.342	21.378	.257	20.850
11	WA1	G	-.320	14.830	.318	20.829
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.335	13.795	2.801	16.815
16	WDW7B	IN	-4.263	13.795	2.779	16.837
17	WD1B	IN	-3.820	17.048	5.068	14.048
18	WF1	KIP	-.708	21.357	.414	20.808
19	WF2	KIP	-.290	13.879	.774	10.267
20	WF3	KIP	-2.312	7.626	.744	18.760
21	WD1-WD7	IN	-1.885	19.519	4.413	33.990

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS S
 NO. OF DATA POINTS 2688

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		56.763	
2	WD1	IN	-7.218	15.970	3.937	9.126
3	WD2	IN	-7.238	15.970	3.888	9.126
4	WD3	IN	-7.172	15.970	3.762	9.147
5	WD4	IN	-7.107	15.970	3.648	9.126
6	WD5	IN	-7.126	15.992	3.527	9.126
7	WD6	IN	-7.068	15.970	3.456	9.168
8	WD7	IN	-7.058	15.992	3.425	9.168
9	WAV1	G	-.137	5.345	.111	5.323
10	WA4	G	-1.187	5.345	1.096	7.478
11	WA1	G	-1.081	6.211	1.106	5.598
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.444	9.168	7.038	15.992
16	WDW7B	IN	-3.379	9.168	6.989	15.992
17	WD1B	IN	-7.182	15.970	3.901	9.147
18	WF1	KIP	-1.310	7.499	1.689	7.373
19	WF2	KIP	-.916	5.345	.536	7.415
20	WF3	KIP	-2.939	5.323	3.221	7.457
21	WD1-WD7	IN	-2.782	46.137	4.744	49.834

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2772

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.537	
2	WD1	IN	-8.540	5.049	3.553	9.020
3	WD2	IN	-8.064	5.028	3.467	9.020
4	WD3	IN	-7.182	4.943	3.261	8.936
5	WD4	IN	-6.999	14.787	3.144	8.957
6	WD5	IN	-6.978	14.809	3.210	8.788
7	WD6	IN	-7.049	15.506	3.383	8.703
8	WD7	IN	-7.067	15.506	3.469	8.703
9	WAV1	G	-.105	4.901	.080	5.978
10	WA4	G	-.776	4.901	.390	5.387
11	WA1	G	-.492	5.197	.488	5.830
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.417	8.703	7.057	15.527
16	WDW7B	IN	-3.362	8.703	6.984	15.548
17	WD1B	IN	-8.499	5.070	3.542	9.041
18	WF1	KIP	-.535	5.176	.653	5.788
19	WF2	KIP	-.251	4.901	.960	5.070
20	WF3	KIP	-3.412	4.859	.979	5.133
21	WD1-WD7	IN	-5.790	5.133	4.373	38.553

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2552

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.890	
2	WD1	IN	-6.745	12.506	5.614	10.055
3	WD2	IN	-6.061	12.527	5.240	10.077
4	WD3	IN	-6.443	12.590	4.802	8.281
5	WD4	IN	-6.311	12.590	4.605	8.049
6	WD5	IN	-6.245	12.633	4.504	7.985
7	WD6	IN	-6.155	12.654	4.556	18.379
8	WD7	IN	-6.122	12.654	4.563	18.379
9	WAV1	G	-.316	6.781	.460	6.739
10	WA4	G	-1.539	8.830	2.376	6.739
11	WA1	G	-.021	8.725	.576	10.098
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.589	18.379	6.105	12.654
16	WDW7B	IN	-4.500	18.400	6.072	12.675
17	WD1B	IN	-6.708	12.506	5.608	10.055
18	WF1	KIP	-.822	8.682	1.123	6.443
19	WF2	KIP	-1.249	6.675	2.074	6.485
20	WF3	KIP	-4.077	6.633	4.452	6.718
21	WD1-WD7	IN	-5.300	7.077	4.129	10.098

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS R
 NO. OF DATA POINTS 2846

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		60.100	
2	WD1	IN	-6.526	5.070	3.560	9.084
3	WD2	IN	-8.063	5.049	3.469	8.999
4	WD3	IN	-7.499	4.964	3.345	8.978
5	WD4	IN	-7.183	4.943	3.338	8.746
6	WD5	IN	-7.127	14.872	3.714	8.703
7	WD6	IN	-7.176	15.506	3.967	8.703
8	WD7	IN	-7.211	15.506	3.998	8.703
9	WAV1	G	-.477	5.450	.595	5.936
10	WA4	G	-2.096	7.119	2.829	5.957
11	WA1	G	-.789	6.042	.626	5.830
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.990	8.703	7.198	15.506
16	WDW7B	IN	-3.942	8.703	7.131	15.548
17	WD1B	IN	-8.491	5.091	3.553	9.084
18	WF1	KIP	-.850	6.084	1.066	5.408
19	WF2	KIP	-1.007	8.365	1.765	5.957
20	WF3	KIP	-4.512	8.260	5.228	5.936
21	WD1-WD7	IN	-6.559	5.154	5.016	42.208

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 7
 NO. OF DATA POINTS 2736

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.777	
2	WD1	IN	-7.234	15.189	3.965	8.365
3	WD2	IN	-7.243	15.189	3.996	8.365
4	WD3	IN	-7.239	15.189	4.006	8.365
5	WD4	IN	-7.211	15.189	3.989	8.387
6	WD5	IN	-7.259	15.189	4.002	8.387
7	WD6	IN	-7.243	15.189	3.983	8.365
8	WD7	IN	-7.238	15.189	3.974	8.365
9	WAV1	G	-.390	6.802	.513	6.844
10	WA4	G	-2.228	6.802	1.562	6.950
11	WA1	G	-1.536	6.887	1.288	6.718
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.960	8.387	7.233	15.189
16	WDW7B	IN	-3.939	8.387	7.160	15.231
17	WD1B	IN	-7.179	15.210	3.916	8.387
18	WF1	KIP	-2.284	6.760	2.023	6.612
19	WF2	KIP	-1.134	5.492	1.719	6.718
20	WF3	KIP	-4.760	5.450	3.953	6.697
21	WD1+WD7	IN	-3.072	45.228	4.223	49.200

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 10
 NO. OF DATA POINTS 2463

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.009	
2	WD1	IN	-6.050	11.724	4.521	17.449
3	WD2	IN	-6.077	11.745	4.547	17.449
4	WD3	IN	-6.090	11.745	4.569	17.470
5	WD4	IN	-6.065	11.724	4.572	17.470
6	WD5	IN	-6.140	11.724	4.555	17.470
7	WD6	IN	-6.127	11.724	4.590	17.449
8	WD7	IN	-6.132	11.745	4.583	17.449
9	WAV1	G	-.210	5.785	.275	6.021
10	WA4	G	-1.505	5.767	1.447	5.830
11	WA1	G	-1.473	13.119	1.202	12.675
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.607	17.470	6.129	11.724
16	WDW7B	IN	-4.519	17.470	6.062	11.745
17	WD1B	IN	-6.007	11.724	4.487	17.470
18	WF1	KIP	-1.736	13.097	1.706	5.788
19	WF2	KIP	-1.660	5.746	1.121	5.830
20	WF3	KIP	-4.278	5.619	4.142	12.654
21	WD1-WD7	IN	-3.072	43.561	4.753	26.681

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 9-N
 NO. OF DATA POINTS 2431

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		51.333	
2	WD1	IN	-6.754	11.872	5.640	9.401
3	WD2	IN	-6.651	11.957	5.478	9.401
4	WD3	IN	-6.690	11.978	5.076	9.422
5	WD4	IN	-6.610	11.978	4.763	7.415
6	WD5	IN	-6.425	11.978	4.604	7.415
7	WD6	IN	-6.223	11.999	4.504	17.703
8	WD7	IN	-6.133	12.020	4.578	17.724
9	WAV1	G	-.827	12.950	1.043	24.484
10	WA4	G	-1.112	16.055	1.241	7.119
11	WA1	G	-.533	5.239	.678	5.809
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.569	17.724	6.154	12.020
16	WDW7B	IN	-4.524	17.745	6.053	12.020
17	WD1B	IN	-6.714	11.872	5.611	9.422
18	WF1	KIP	-.724	6.443	.581	7.668
19	WF2	KIP	-.824	6.042	.927	8.281
20	WF3	KIP	-3.091	5.999	3.025	13.309
21	#D1-WD7	IN	-5.363	6.422	4.324	36.525

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 8-N
 NO. OF DATA POINTS 2620

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.326	
2	WD1	IN	-8.550	4.753	3.565	8.703
3	WD2	IN	-8.357	4.732	3.589	8.767
4	WD3	IN	-7.886	4.711	3.611	9.168
5	WD4	IN	-7.404	4.626	3.881	9.147
6	WD5	IN	-7.268	14.534	3.759	8.387
7	WD6	IN	-7.233	15.168	3.935	8.365
8	WD7	IN	-7.233	15.168	3.968	8.365
9	WAV1	G	-.948	9.506	1.511	5.683
10	WA4	G	-1.067	5.556	1.310	6.739
11	WA1	G	-.649	4.964	.666	6.971
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.954	8.365	7.226	15.189
16	WDW7B	IN	-3.915	8.387	7.166	15.210
17	WD18	IN	-8.517	4.752	3.553	8.725
18	WF1	KIP	-.666	4.795	.590	9.950
19	WF2	KIP	-.924	4.626	1.059	6.718
20	WF3	KIP	-3.425	5.450	3.166	6.675
21	WD1-WD7	IN	-6.554	4.816	4.828	5.429

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 17
 INPUT MOTION MS 7-N
 NO. OF DATA POINTS 389

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		8.196	
2	WD1	IN	-6.868	4.859	13.763	5.936
3	WD2	IN	-13.523	6.021	17.175	5.852
4	WD3	IN	-23.691	6.950	26.931	6.168
5	WD4	IN	-15.111	6.422	.162	2.450
6	WD5	IN	-9.499	5.746	.060	3.232
7	WD6	IN	-6.901	4.859	.033	1.838
6	WD7	IN	-6.843	4.859	.033	1.838
9	WAV1	G	-3.076	5.640	6.598	5.725
10	WA4	G	-6.145	5.408	1.355	5.535
11	WA1	G	-3.909	5.725	3.519	5.406
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.040	1.922	6.821	4.859
16	WDW7B	IN	-.015	1.986	6.777	4.859
17	WD1b	IN	-6.805	4.859	13.365	5.936
18	WF1	KIP	-3.036	5.535	4.019	5.387
19	WF2	KIP	-.951	4.901	.885	5.112
20	WF3	KIP	-3.321	5.725	2.029	5.112
21	WD1-WD7	IN	-1.708	5.514	16.084	5.852

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2699

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		56.995	
2	WD1	IN	-3.976	15.210	2.293	8.323
3	WD2	IN	-3.992	15.210	2.246	8.323
4	WD3	IN	-3.942	15.210	2.170	8.323
5	WD4	IN	-3.976	15.210	2.076	8.302
6	WD5	IN	-3.976	15.231	1.984	8.323
7	WD6	IN	-3.899	15.210	1.935	8.387
8	WD7	IN	-3.894	15.210	1.914	8.387
9	WAV1	G	-.852	5.450	.821	8.323
10	WA4	G	-.507	4.626	.491	5.556
11	WA1	G	-.116	6.612	.125	6.154
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.644	15.210	1.820	8.387
16	WDW7B	IN	-3.878	15.231	1.881	8.387
17	WD18	IN	-2.214	8.323	3.858	15.210
18	WFE7	KIP	-.957	7.880	1.103	8.027
19	WFK7	KIP	-.436	7.880	.584	4.732
20	WF1	KIP	-2.232	4.542	1.592	12.189
21	WD1-WD7	IN	-.447	5.408	.459	6.612

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3030

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		63.987	
2	WD1	IN	-3.842	16.963	5.105	13.964
3	WD2	IN	-3.732	16.963	4.986	13.964
4	WD3	IN	-3.419	16.963	4.721	13.942
5	WD4	IN	-3.166	16.900	4.452	13.900
6	WD5	IN	-2.924	16.421	4.301	13.879
7	WD6	IN	-2.801	16.731	4.332	13.710
8	WD7	IN	-2.780	16.731	4.337	13.710
9	WAV1	G	-.385	14.703	.448	13.900
10	WA4	G	-.505	14.703	.426	20.629
11	WA1	G	-.085	13.773	.104	13.795
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.621	16.731	4.057	13.710
16	WDW7B	IN	-2.761	16.731	4.298	13.731
17	WD10	IN	-4.965	13.964	5.739	16.963
18	WFE7	KIP	-.575	21.273	.458	20.745
19	WFW7	KIP	-.496	9.739	.418	8.999
20	WF1	KIP	-1.029	13.499	1.334	13.964
21	WD1-WD7	IN	-1.860	19.414	4.486	5.070

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTIUN MS 5
 NO. OF DATA POINTS 2625

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.432	
2	WD1	IN	-7.232	15.379	3.954	8.534
3	WD2	IN	-7.243	15.379	3.898	8.534
4	WD3	IN	-7.181	15.379	3.767	8.534
5	WD4	IN	-7.136	15.379	3.679	8.556
6	WD5	IN	-7.122	15.379	3.563	8.556
7	WD6	IN	-7.050	15.379	3.467	8.556
8	WD7	IN	-7.036	15.400	3.440	8.556
9	WAV1	G	-1.214	4.616	1.374	6.887
10	WA4	G	-.945	5.619	1.003	5.007
11	WA1	G	-.157	5.683	.227	5.661
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-6.576	15.379	3.220	8.556
16	WDW7B	IN	-6.976	15.379	3.414	8.577
17	WD18	IN	-3.632	8.534	7.019	15.358
18	WFE7	KIP	-1.588	7.013	1.795	6.781
19	WFW7	KIP	-.745	4.753	.851	5.007
20	WFI	KIP	-2.678	4.732	2.028	6.866
21	WD1-WD7	IN	-2.760	48.123	4.217	47.594

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2583

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.544	
2	WD1	IN	-8.563	4.753	3.566	8.746
3	WD2	IN	-6.104	4.711	3.469	8.703
4	WD3	IN	-7.266	4.647	3.271	8.619
5	WD4	IN	-7.035	14.513	3.177	8.619
6	WD5	IN	-7.004	14.555	3.179	8.556
7	WD6	IN	-7.006	15.189	3.399	8.387
8	WD7	IN	-7.024	15.210	3.438	8.367
9	WAV1	G	-.517	5.640	.554	5.514
10	WA4	G	-.539	4.605	.597	5.492
11	WA1	G	-.133	4.605	.143	5.561
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE79	IN	-6.570	15.210	3.222	8.387
16	WDW7B	IN	-6.968	15.252	3.387	8.429
17	WD16	IN	-3.465	8.746	8.339	4.753
18	WFE7	KIP	-.638	4.795	.768	5.471
19	WFW7	KIP	-.479	4.584	.813	4.753
20	WF1	KIP	-2.436	4.542	1.469	4.943
21	WD1-WD7	IN	-5.737	4.816	4.882	11.830

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2379

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		50.235	
2	WD1	IN	-6.755	11.471	5.606	9.020
3	WD2	IN	-6.061	11.492	5.062	9.041
4	WD3	IN	-6.407	11.492	4.824	7.246
5	WD4	IN	-6.302	11.640	4.640	7.035
6	WD5	IN	-6.249	11.661	4.566	17.344
7	WD6	IN	-6.154	11.640	4.581	17.344
8	WD7	IN	-6.149	11.640	4.562	17.344
9	WAV1	G	-.604	6.042	.599	5.408
10	WA4	G	-1.047	5.704	1.624	5.471
11	WA1	G	-.717	6.725	1.194	7.068
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.745	11.640	4.283	17.365
16	WDW7B	IN	-6.095	11.661	4.508	17.365
17	WD1B	IN	-5.486	9.041	6.567	11.471
18	WFE7	KIP	-.962	6.021	.708	6.675
19	WFW7	KIP	-1.548	5.661	1.880	5.471
20	WF1	KIP	-4.440	8.027	3.796	12.569
21	WD1-WD7	IN	-5.232	6.063	4.809	32.670

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 8 .
 NO. OF DATA POINTS 2599

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.882	
2	WD1	IN	-8.551	4.394	3.542	8.365
3	WD2	IN	-8.121	4.373	3.539	8.302
4	WD3	IN	-7.544	4.309	3.559	8.302
5	WD4	IN	-7.208	4.288	3.972	8.049
6	WD5	IN	-7.132	14.217	4.043	8.070
7	WD6	IN	-7.210	14.851	3.999	8.049
8	WD7	IN	-7.230	14.851	3.978	8.049
9	WAV1	G	-.727	5.345	.725	5.154
10	WA4	G	-1.002	6.781	2.302	5.323
11	WA1	G	-.809	5.281	1.160	5.302
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-6.757	14.872	5.743	8.049
16	WDW7B	IN	-7.158	14.872	3.929	8.049
17	WD1B	IN	-3.454	8.408	8.331	4.415
18	WFE7	KIP	-.786	6.464	.693	5.873
19	WFW7	KIP	-1.006	5.154	1.084	7.013
20	WFI	KIP	-4.507	7.605	4.403	5.302
21	WD1-WD7	IN	-6.472	4.500	4.834	5.112

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 7
 NO. OF DATA POINTS 2578

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.439	
2	WD1	IN	-7.223	15.020	3.965	8.175
3	WD2	IN	-7.248	14.999	4.019	8.175
4	WD3	IN	-7.215	14.999	4.307	7.753
5	WD4	IN	-7.187	15.020	4.514	7.732
6	WD5	IN	-7.262	15.020	4.037	8.196
7	WD6	IN	-7.225	14.999	4.019	8.196
8	WD7	IN	-7.219	14.999	3.989	8.196
9	WAV1	G	-1.280	6.357	1.570	6.823
10	WA4	G	-2.413	6.802	2.693	6.929
11	WA1	G	-1.444	6.866	1.445	7.647
12	WA3	G	--	--	--	--
13	WA5	C	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-6.756	15.020	3.719	8.196
16	WDW7B	IN	-7.151	15.041	3.959	8.196
17	WD1B	IN	-3.835	8.175	7.016	14.999
18	WFE7	KIP	-1.540	5.260	1.644	6.802
19	WFW7	KIP	-1.317	6.802	1.206	5.450
20	WF1	KIP	-3.982	5.260	5.062	5.429
21	WD1-WD7	IN	-3.097	26.153	4.244	35.511

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 10
 NO. OF DATA POINTS 2904

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		61.326	
2	WD1	IN	-6.044	11.323	4.544	17.069
3	WD2	IN	-6.086	11.344	4.567	17.069
4	WD3	IN	-6.115	11.323	4.576	17.069
5	WD4	IN	-6.110	11.323	4.587	17.069
6	WD5	IN	-6.181	11.344	4.569	17.069
7	WD6	IN	-6.133	11.344	4.602	17.069
8	WD7	IN	-6.127	11.344	4.594	17.069
9	WAV1	G	-1.290	5.366	1.555	12.886
10	WA4	G	-1.950	12.823	2.002	5.176
11	WA1	G	-1.323	5.197	1.955	5.176
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.731	11.344	4.301	17.069
16	WDW7B	IN	-6.060	11.365	4.552	17.069
17	WD18	IN	-4.392	17.069	5.876	11.344
18	WFE7	KIP	-1.565	12.802	1.833	12.971
19	WFW7	KIP	-.985	4.985	1.341	5.176
20	WF1	KIP	-4.597	4.964	5.082	5.154
21	WD1-WD7	IN	-3.035	26.279	.116	5.302

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 10.2
 NO. OF DATA POINTS 2410

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		50.890	
2	WD1	IN	-7.292	11.450	5.448	17.153
3	WD2	IN	-7.339	11.450	5.499	17.153
4	WD3	IN	-7.317	11.450	5.668	6.781
5	WD4	IN	-7.349	11.450	5.703	6.781
6	WD5	IN	-7.375	11.429	5.551	17.153
7	WD6	IN	-7.370	11.429	5.516	17.153
8	WD7	IN	-7.363	11.450	5.489	17.153
9	WAV1	G	-1.348	12.527	1.449	5.239
10	WA4	G	-2.141	5.112	1.860	12.823
11	WA1	G	-1.115	14.515	2.263	12.823
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-6.883	11.450	5.153	17.153
16	WD#7B	IN	-7.284	11.450	5.459	17.175
17	WD10	IN	-5.288	17.153	7.088	11.450
18	WFE7	KIP	-1.852	12.928	2.195	12.379
19	WFW7	KIP	-2.463	17.153	1.259	8.344
20	WF1	KIP	-6.231	5.091	4.515	12.379
21	WD1-WD7	IN	-.288	5.281	4.739	33.039

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 18
 INPUT MOTION MS 7.2
 NO. OF DATA POINTS 315

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		6.633	
2	WD1	IN	-8.218	3.971	.804	4.542
3	WD2	IN	-14.452	6.633	14.221	5.323
4	WD3	IN	-22.705	5.619	18.216	5.197
5	WD4	IN	-23.356	5.704	27.303	5.345
6	WD5	IN	-14.813	5.535	15.912	5.408
7	WD6	IN	-9.098	6.549	4.590	5.514
8	WD7	IN	-8.338	6.633	.015	1.436
9	AAV1	G	-3.014	4.732	2.383	4.246
10	AA4	G	-25.565	4.795	25.569	4.753
11	AA1	G	-3.155	4.647	7.095	4.542
12	AA3	G	--	--	--	--
13	AA5	G	--	--	--	--
14	AA7	G	--	--	--	--
15	WDE7B	IN	-7.703	3.993	.013	1.436
16	WDW7B	IN	-8.082	3.993	.008	1.436
17	WD1B	IN	-7.453	4.542	7.965	3.993
18	WFE7	KIP	-1.667	3.993	2.031	4.225
19	WFW7	KIP	-1.005	4.035	2.097	4.246
20	WFI	KIP	-4.386	4.056	3.317	4.225
21	WD1-WD7	IN	-7.077	3.971	7.987	6.274

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 10
 INPUT MOTION MS 1
 NO. OF DATA POINTS 2846

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		60.100	
2	WD1	IN	-1.777	23.597	.297	8.365
3	WD2	IN	-1.858	23.618	.297	5.091
4	WD3	IN	-3.123	23.512	.513	8.365
5	WD4	IN	-1.907	23.427	.506	5.007
6	WD5	IN	-1.900	23.427	.329	5.640
7	WD6	IN	-1.831	23.512	2.105	46.327
8	WD7	IN	-1.805	23.427	1.401	48.735
9	NAV1	G	-3.792	42.461	2.321	42.440
10	WA4	G	-1.157	9.105	1.399	42.461
11	WA1	G	-.658	42.546	.561	9.356
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7D	IN	-.312	5.049	1.850	23.554
16	WDW7B	IN	-.282	5.049	1.819	23.554
17	WD16	IN	-1.788	23.597	.315	42.398
18	WFE7	KIP	-4.800	9.358	4.854	9.274
19	WFW7	KIP	-2.529	42.503	2.799	9.295
20	WF1	KIP	-5.161	9.358	7.476	9.274
21	WD1-WD7	IN	-3.040	48.735	.364	9.274

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 19
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2725

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.544	
2	WD1	IN	-2.046	21.315	.467	7.626
3	WD2	IN	-2.024	21.315	.408	7.647
4	WD3	IN	-3.234	21.294	.583	7.499
5	WD4	IN	-1.950	21.294	.363	4.457
6	WD5	IN	-1.871	22.963	.323	4.457
7	WD6	IN	-1.816	22.329	2.112	51.714
8	WD7	IN	-1.831	22.646	1.072	21.209
9	WAV1	G	-.236	8.999	.294	9.781
10	WA4	G	-.422	10.246	.390	10.330
11	WA1	G	-.087	10.055	.060	10.309
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.513	4.183	1.849	22.688
16	WDW7B	IN	-.268	4.077	1.819	22.688
17	AD1B	IN	-2.043	21.315	.460	7.626
18	WFE7	KIP	-.687	10.203	.782	10.309
19	WFW7	KIP	-.775	10.224	.701	8.894
20	WF1	KIP	-1.933	8.281	1.854	10.309
21	WD1=WD7	IN	-3.013	21.209	.735	8.830

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 19
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2515

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.108	
2	WD1	IN	-3.941	14.978	2.217	8.133
3	WD2	IN	-3.985	14.978	2.200	8.133
4	WD3	IN	-6.685	14.978	3.609	8.133
5	WD4	IN	-4.027	14.956	2.096	8.133
6	WD5	IN	-4.019	14.956	2.044	8.154
7	WD6	IN	-3.961	14.956	2.092	3.697
8	WD7	IN	-3.968	14.978	1.907	8.154
9	WAV1	G	-.770	5.260	.675	6.422
10	WA4	G	-.692	7.964	.673	6.443
11	WA1	G	-.153	7.964	.178	7.689
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.918	8.154	4.010	14.999
16	WDW7B	IN	-1.877	8.133	3.964	14.999
17	WD1B	IN	-3.944	14.978	2.206	8.133
18	WFE7	KIP	-1.485	7.922	1.670	6.401
19	WFW7	KIP	-.880	6.528	1.235	4.542
20	WF1	KIP	-4.648	4.552	3.080	6.422
21	WD1-WD7	IN	-.394	5.218	.397	6.401

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WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 19
INPUT MOTION MS 4
NO. OF DATA POINTS 2995

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		63.311	
2	WD1	IN	-3.774	16.308	5.053	13.330
3	WD2	IN	-3.011	16.330	4.909	13.206
4	WD3	IN	-5.753	16.245	8.045	13.206
5	WD4	IN	-3.249	16.245	4.653	13.245
6	WD5	IN	-3.024	16.266	4.423	13.245
7	WD6	IN	-2.846	16.055	4.303	13.097
8	WD7	IN	-2.814	16.055	4.385	13.097
9	WAV1	G	-.574	13.773	.484	13.288
10	AA4	G	-.045	9.971	.645	19.076
11	AA1	G	-.195	9.971	.147	12.033
12	AA3	G	--	--	--	--
13	AA5	G	--	--	--	--
14	AA7	G	--	--	--	--
15	WDE7B	IN	-4.379	13.055	2.859	16.097
16	WDW7B	IN	-4.368	13.097	2.809	16.097
17	WD1B	IN	-3.799	16.330	5.020	13.309
18	WFE7	KIP	-1.410	14.069	1.377	19.055
19	WFW7	KIP	-1.067	9.084	1.202	13.608
20	WFI	KIP	-3.012	18.590	3.610	9.168
21	WD1-WD7	IN	-1.903	16.759	2.008	13.520

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 19
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2321

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.010	
2	WD1	IN	-2.968	11.619	2.234	17.322
3	WD2	IN	-3.026	11.682	2.299	17.301
4	WD3	IN	-5.176	11.682	3.984	17.322
5	WD4	IN	-3.128	11.703	2.388	17.301
6	WD5	IN	-3.105	11.682	2.376	17.344
7	WD6	IN	-3.035	11.640	2.317	17.322
8	WD7	IN	-3.034	11.619	2.302	17.344
9	WAV1	G	-1.033	5.577	.613	5.514
10	WA4	G	-1.117	5.619	.979	7.964
11	WA1	G	-.257	5.598	.223	8.006
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.336	17.322	3.068	11.661
16	WDW7B	IN	-2.299	17.344	3.037	11.661
17	WD1B	IN	-2.972	11.640	2.246	17.344
18	WFF7	KIP	-2.198	5.556	1.654	5.471
19	WFW7	KIP	-1.767	5.619	1.561	13.161
20	WF1	KIP	-5.486	5.556	6.213	5.450
21	WD1-WD7	IN	-2.719	25.392	.112	5.619

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 19
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2505

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.897	
2	WD1	IN	-7.995	4.077	3.574	8.175
3	WD2	IN	-7.667	4.077	3.413	8.175
4	WD3	IN	-12.290	4.035	5.499	8.006
5	WD4	IN	-7.235	13.985	3.385	8.006
6	WD5	IN	-7.069	13.921	3.204	8.006
7	WD6	IN	-7.003	14.618	3.312	7.795
8	WD7	IN	-7.098	14.618	3.476	7.795
9	WAV1	G	-2.453	4.331	.914	4.119
10	WA4	G	-.780	4.394	.596	4.711
11	WA1	G	-.582	4.394	.296	4.309
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE78	IN	-3.493	7.816	7.129	14.576
16	WDW78	IN	-3.448	7.816	7.071	14.597
17	WD18	IN	-8.000	4.098	3.547	8.154
18	WFE7	KIP	-3.206	4.309	1.490	4.500
19	WFW7	KIP	-1.158	4.352	1.523	4.246
20	WF1	KIP	-6.098	3.993	3.289	4.690
21	WD1-WD7	IN	-5.711	4.288	4.280	4.838

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 19
 INPUT MOTION MS S
 NO. OF DATA POINTS 2589

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.671	
2	WD1	IN	-7.179	14.872	3.946	8.091
3	WD2	IN	-7.224	14.914	3.875	8.978
4	WD3	IN	-13.644	13.455	8.186	8.978
5	WD4	IN	-8.508	13.478	5.250	9.041
6	WD5	IN	-7.546	13.478	4.441	9.020
7	WD6	IN	-7.156	14.935	3.719	8.957
8	WD7	IN	-7.100	14.935	3.459	8.133
9	WAV1	G	-1.399	7.689	1.294	7.542
10	WA4	G	-.717	4.352	.843	4.605
11	WA1	G	-.844	7.520	1.056	7.457
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.493	8.133	7.128	14.893
16	WDW7B	IN	-3.453	8.133	7.089	14.393
17	WD13	IN	-7.181	14.893	3.922	8.091
18	WFE7	KIP	-2.353	7.668	2.332	4.584
19	WFW7	KIP	-1.088	5.936	1.486	4.626
20	WF1	KIP	-5.310	4.309	5.935	4.584
21	WD1-WD7	IN	-.715	5.197	.834	4.542

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 19
 INPUT MOTION MS 9
 NO. OF DATA POINTS 489

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		10.309	
2	ND1	IN	-4.953	5.577	7.389	10.309
3	ND2	IN	-6.559	6.739	5.002	3.845
4	ND3	IN	-22.388	7.964	8.059	3.845
5	ND4	IN	-19.536	6.401	4.647	3.866
6	ND5	IN	-10.592	6.401	4.194	3.866
7	ND6	IN	-2.547	7.964	4.095	3.993
8	ND7	IN	-3.127	5.218	5.464	6.612
9	NAV1	G	-7.907	6.760	4.788	6.675
10	WA4	G	-5.812	6.422	1.378	6.908
11	WA1	G	-2.885	6.823	3.075	6.422
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	NDE7B	IN	-4.469	6.633	3.103	5.218
16	NDW7B	IN	-4.439	6.633	3.109	5.218
17	ND48	IN	-4.979	5.598	7.401	10.309
18	NFE7	KIP	-6.238	6.739	5.923	6.654
19	NFW7	KIP	-3.091	6.422	2.482	6.867
20	WF1	KIP	-6.056	5.133	6.931	6.654
21	ND1-ND7	IN	-5.256	5.661	3.766	8.260

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS 1
 NO. OF DATA POINTS 2757

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		58.220	
2	WD1	IN	-1.000	23.005	.286	4.415
3	WD2	IN	-1.014	22.984	.292	4.457
4	WD3	IN	-3.008	22.984	4.801	22.640
5	WD4	IN	-1.769	22.625	6.539	14.302
6	WD5	IN	-1.030	23.005	.518	4.901
7	WD6	IN	-1.020	22.984	.288	4.478
8	WD7	IN	-1.023	22.984	.280	4.563
9	WAV1	G	-.393	9.337	.560	9.464
10	WA4	G	-.517	9.591	.557	9.485
11	WA1	G	-.131	9.591	.123	9.548
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.291	4.436	1.823	23.005
16	WDW7B	IN	-.268	4.478	1.830	23.047
17	WD1B	IN	-1.771	22.942	.284	4.478
18	WFE7	KIP	-.929	9.020	1.244	9.464
19	WFN7	KIP	-.676	9.020	1.137	9.464
20	WF1	KIP	-2.515	9.379	1.844	8.915
21	WD1-WD7	IN	-.202	8.492	.214	8.894

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2646

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		55.875	
2	WD1	IN	-2.081	21.336	.469	7.668
3	WD2	IN	-2.035	21.336	.413	7.647
4	WD3	IN	-3.226	21.336	4.042	22.097
5	WD4	IN	-1.854	21.315	6.537	14.302
6	WD5	IN	-1.816	21.336	.322	4.352
7	WD6	IN	-1.810	22.857	.289	4.267
8	WD7	IN	-1.818	22.604	.285	4.331
9	WAV1	G	-.292	9.908	.321	10.415
10	WA4	G	-.492	10.499	.457	10.393
11	WA1	G	-.115	10.077	.101	10.351
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.290	4.436	1.831	22.794
16	WDW7B	IN	-.280	4.119	1.810	22.815
17	WD16	IN	-2.044	21.336	.463	7.689
18	WFE7	KIP	-.859	9.886	.869	10.372
19	WFW7	KIP	-.553	10.499	1.153	9.189
20	WF1	KIP	-2.435	10.077	1.453	10.774
21	WD1-WD7	IN	-.805	14.196	.749	6.851

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2494

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.664	
2	WD1	IN	-3.980	14.661	2.218	7.858
3	WD2	IN	-3.976	14.745	2.220	7.837
4	WD3	IN	-6.618	14.745	3.763	7.837
5	WD4	IN	-3.944	14.640	6.544	11.767
6	WD5	IN	-3.972	14.766	2.140	7.837
7	WD6	IN	-3.952	14.745	2.001	7.837
8	WD7	IN	-3.935	14.745	1.934	7.858
9	WAV1	G	-.810	7.732	.682	7.584
10	WA4	G	-1.035	7.711	.744	7.837
11	WA1	G	-.187	7.689	.273	7.668
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.927	7.901	3.943	14.703
16	WDW7B	IN	-1.917	7.880	3.922	14.724
17	WD1B	IN	-3.938	14.682	2.197	7.558
18	WFE7	KIP	-1.716	7.711	1.703	7.816
19	WFW7	KIP	-.845	18.273	1.254	18.928
20	WF1	KIP	-4.299	4.098	2.964	9.717
21	WD1-WD7	IN	-.440	4.964	.393	6.147

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS 4
 NO. OF DATA POINTS 3035

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		64.093	
2	WD1	IN	-3.855	16.499	5.126	13.520
3	WD2	IN	-3.701	16.499	4.979	13.499
4	WD3	IN	-5.840	16.499	7.918	13.499
5	WD4	IN	-3.289	16.477	4.561	13.499
6	WD5	IN	-3.000	16.456	4.336	13.499
7	WD6	IN	-2.850	16.266	4.306	13.288
8	WD7	IN	-2.807	16.245	4.387	13.288
9	WAV1	G	-.545	14.006	.652	20.322
10	WA4	G	-1.212	20.850	1.129	20.322
11	WA1	G	-.480	21.040	.394	21.019
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.378	13.266	2.837	16.287
16	WDW7B	IN	-4.354	13.266	2.797	16.287
17	WD10	IN	-3.824	16.520	5.048	13.499
18	WFE7	KIP	-2.098	20.829	2.149	20.301
19	WFW7	KIP	-1.710	20.850	1.792	21.167
20	WF1	KIP	-4.882	20.829	5.239	20.322
21	WD1-WD7	IN	-2.521	16.203	2.047	13.689

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2384

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		50.341	
2	WD1	IN	-3.023	11.513	2.281	17.196
3	WD2	IN	-3.022	11.513	2.352	17.175
4	WD3	IN	-5.073	11.534	4.110	17.196
5	WD4	IN	-3.035	11.535	6.540	21.400
6	WD5	IN	-3.051	11.534	2.469	17.196
7	WD6	IN	-3.045	11.492	2.379	17.196
8	WD7	IN	-3.037	11.471	2.328	17.175
9	WAV1	G	-.623	5.429	.792	5.323
10	WA4	G	-1.431	5.471	1.261	12.485
11	WA1	G	-.341	7.035	.216	14.872
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.324	17.196	3.057	11.513
16	WDW7B	IN	-2.299	17.196	3.041	11.513
17	WD1B	IN	-2.975	11.513	2.254	17.196
18	WFE7	KIP	-2.224	5.429	2.246	5.302
19	WFW7	KIP	-2.115	5.471	2.020	5.556
20	WF1	KIP	-5.960	5.408	6.189	5.302
21	WD1-WD7	IN	-.086	4.816	.119	5.492

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2473

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.221	
2	WD1	IN	-6.593	3.993	3.589	7.964
3	WD2	IN	-7.960	3.993	3.526	7.901
4	WD3	IN	-12.236	3.887	5.845	7.901
5	WD4	IN	-7.205	13.795	6.548	25.054
6	WD5	IN	-7.163	13.795	3.405	8.502
7	WD6	IN	-7.108	14.428	3.432	7.668
8	WD7	IN	-7.119	14.407	3.475	7.647
9	WAV1	G	-.702	4.014	1.003	4.753
10	WA4	G	-1.529	5.725	1.348	6.464
11	WA1	G	-.541	15.907	.267	16.393
12	WA3	G	--	--	--	--
13	AA5	G	--	--	--	--
14	AA7	G	--	--	--	--
15	WDE7B	IN	-3.480	7.668	7.144	14.449
16	WDW7B	IN	-3.429	7.647	7.110	14.449
17	WD1B	IN	-6.540	3.993	3.521	7.943
18	WFE7	KIP	-2.145	6.337	2.095	5.809
19	WFN7	KIP	-1.500	6.147	1.784	5.852
20	WF1	KIP	-6.172	3.824	5.362	5.830
21	WD1-WD7	IN	-5.835	4.077	4.264	4.669

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS S
 NO. OF DATA POINTS 2457

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		51.883	
2	WD1	IN	-7.245	14.196	3.916	7.373
3	WD2	IN	-7.165	14.175	4.063	7.373
4	WD3	IN	-11.826	14.154	7.040	7.373
5	WD4	IN	-7.030	14.175	4.229	7.373
6	WD5	IN	-7.133	14.196	3.995	7.373
7	WD6	IN	-7.116	14.175	3.668	7.373
8	WD7	IN	-7.135	14.196	3.495	7.415
9	WAV1	G	-1.208	6.971	1.288	5.640
10	WA4	G	-1.432	5.556	1.655	5.764
11	WA1	G	-.453	7.225	.376	5.514
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.472	7.415	7.121	14.196
16	WDW7B	IN	-3.465	7.415	7.103	14.175
17	WD16	IN	-7.166	14.175	3.874	7.394
18	WFE7	KIP	-2.966	3.655	3.798	5.640
19	WFW7	KIP	-1.276	7.246	3.060	5.663
20	WF1	KIP	-6.155	3.591	6.042	5.661
21	WD1-WD7	IN	-.717	2.478	4.667	28.688

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2300

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		48.566	
2	WD1	IN	-6.778	10.943	5.674	8.513
3	WD2	IN	-6.725	11.006	5.207	6.534
4	WD3	IN	-11.021	10.985	8.229	16.879
5	WD4	IN	-6.491	11.217	6.482	10.055
6	WD5	IN	-6.307	11.175	4.947	16.858
7	WD6	IN	-6.188	11.154	4.768	16.858
8	WD7	IN	-6.158	11.112	4.665	16.837
9	WAV1	G	-.859	5.577	.634	6.971
10	WA4	G	-1.856	5.133	1.517	4.985
11	WA1	G	-.466	5.133	.325	14.956
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.671	16.837	6.169	11.133
16	WDW7B	IN	-4.640	16.858	6.127	11.133
17	WD18	IN	-6.717	10.943	5.571	6.534
18	WFE7	KIP	-2.180	5.091	2.310	4.985
19	WFA7	KIP	-3.740	5.133	3.388	5.007
20	WF1	KIP	-8.660	5.049	7.424	4.964
21	WD1-WD7	IN	-5.339	5.577	4.134	6.577

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS R
 NO. OF DATA POINTS 2573

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.333	
2	WD1	IN	-8.001	3.950	3.574	7.901
3	WD2	IN	-8.217	3.867	3.615	7.850
4	WD3	IN	-13.294	3.845	6.216	7.837
5	WD4	IN	-7.759	3.645	6.520	17.893
6	WD5	IN	-7.374	3.824	4.053	7.584
7	WD6	IN	-7.211	14.344	4.051	7.563
8	WD7	IN	-7.298	14.344	4.082	7.563
9	WAV1	G	-.590	4.119	.593	4.288
10	WA4	G	-1.482	7.182	1.018	7.330
11	WA1	G	-.497	7.457	.380	7.394
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.001	7.563	.303	14.344
16	WDW7B	IN	-4.050	7.584	7.276	14.300
17	WD15	IN	-8.010	3.950	3.522	7.943
18	WFE7	KIP	-2.161	7.415	2.400	4.267
19	WFW7	KIP	-2.357	4.690	3.420	5.915
20	WF1	KIP	-8.513	7.110	6.414	5.894
21	WD1-WD7	IN	-6.560	4.014	4.955	4.620

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 20
 INPUT MOTION MS 7
 NO. OF DATA POINTS 961

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		20.280	
2	WD1	IN	-7.244	14.407	3.943	7.605
3	WD2	IN	-10.116	17.534	4.131	7.647
4	WD3	IN	-21.632	17.259	9.138	7.795
5	WD4	IN	-19.655	17.660	5.765	7.795
6	WD5	IN	-13.300	17.217	4.700	7.816
7	WD6	IN	-7.454	14.471	4.151	7.647
8	WD7	IN	-7.279	14.386	4.060	7.626
9	WAV1	G	-4.618	17.534	4.281	17.449
10	WA4	G	-2.366	17.238	1.349	4.098
11	WA1	G	-1.804	17.470	1.572	17.597
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.020	7.626	7.284	14.407
16	WDW7B	IN	-4.005	7.626	7.249	14.407
17	WD1B	IN	-7.175	14.407	3.918	7.626
18	WFE7	KIP	-6.245	17.513	6.688	17.428
19	WFW7	KIP	-2.312	3.950	3.103	4.119
20	WF1	KIP	-8.991	3.687	7.786	4.077
21	WD1-WD7	IN	-2.316	17.513	1.707	17.660

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 1
 NO. OF DATA POINTS 2746

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.988	
2	WD1	IN	-1.808	22.773	.303	4.331
3	WD2	IN	-1.799	22.773	.284	4.331
4	WD3	IN	-3.009	22.773	.495	4.331
5	WD4	IN	-1.811	22.857	.298	4.415
6	WD5	IN	-1.805	22.688	.298	4.732
7	WD6	IN	-1.821	22.773	1.457	24.209
8	WD7	IN	-1.822	22.773	1.482	21.188
9	AAV1	G	-.460	8.894	.484	8.725
10	AA4	G	-.285	8.915	.414	8.725
11	AA1	G	-.082	8.703	.082	9.126
12	AA3	G	--	--	--	--
13	AA5	G	--	--	--	--
14	AA7	G	--	--	--	--
15	WDE7b	IN	-.278	4.204	1.835	22.794
16	WDA7B	IN	-.250	4.331	1.845	22.773
17	WD16	IN	-1.771	22.878	.285	4.267
18	WFE7	KIP	-1.139	8.703	.657	8.672
19	WFW7	KIP	-.749	8.894	.739	8.725
20	WF1	KIP	-1.143	8.703	1.516	8.387
21	WD1-WD7	IN	-3.051	21.188	.200	8.725

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2709

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.206	
2	WD1	IN	-2.103	21.040	.494	7.351
3	WD2	IN	-2.055	21.019	.426	7.330
4	WD3	IN	-3.271	21.019	.603	7.204
5	WD4	IN	-1.863	21.040	.339	7.267
6	WD5	IN	-1.814	21.125	.301	4.035
7	WD6	IN	-1.814	22.054	1.787	37.581
8	WD7	IN	-1.820	22.371	1.485	35.701
9	WAV1	G	-.507	13.985	.349	9.404
10	WA4	G	-.300	13.752	.344	14.302
11	WA1	G	-.100	13.879	.092	14.027
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.288	3.950	1.843	22.392
16	WDW7B	IN	-.270	3.781	1.815	22.456
17	WD18	IN	-2.084	21.040	.473	7.351
18	WFE7	KIP	-.864	8.651	.890	14.576
19	WFW7	KIP	-.427	10.520	.915	8.640
20	WF1	KIP	-1.065	16.456	2.079	13.731
21	WD1-WD7	IN	-3.179	35.701	.764	8.534

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2505

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000			
2	WD1	IN	-3.975	14.302	52.897	
3	WD2	IN	-3.951	14.280	2.313	7.415
4	WD3	IN	-6.578	14.302	2.284	7.415
5	WD4	IN	-3.957	14.280	3.726	7.415
6	WD5	IN	-3.924	14.238	2.169	7.415
7	WD6	IN	-3.918	14.217	2.089	7.436
8	WD7	IN	-3.915	14.217	2.010	7.415
9	WAV1	G	-1.040	7.246	1.949	7.436
10	WA4	G	-.783	3.097	1.078	7.436
11	WA1	G	-.209	7.309	1.012	7.436
12	WA3	G	--	--	.256	7.288
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.941	7.436	--	--
16	WDW7B	IN	-1.922	7.456	3.954	14.302
17	WD1B	IN	-3.427	14.323	3.915	14.280
18	WFE7	KIP	-2.021	7.415	2.263	7.436
19	WFW7	KIP	-.920	6.019	2.253	7.225
20	WF1	KIP	-3.214	7.415	1.285	7.436
21	WD1-WD7	IN	-2.782	27.441	3.953	3.655
					.375	5.725

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 4
 NO. OF DATA POINTS 2993

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		63.205	
2	WD1	IN	-3.325	17.703	5.124	14.724
3	WD2	IN	-3.035	17.703	4.931	14.682
4	WD3	IN	-5.629	17.703	7.801	14.661
5	WD4	IN	-3.172	17.703	4.478	14.661
6	WD5	IN	-2.949	17.660	4.309	14.597
7	WD6	IN	-2.632	17.470	4.289	14.471
8	WD7	IN	-2.780	17.449	4.371	14.428
9	WAV1	G	-.739	12.675	.554	13.119
10	WA4	G	-.450	12.548	.465	12.717
11	WA1	G	-.167	8.619	.145	8.640
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.387	14.428	2.817	17.470
16	WDW7B	IN	-4.350	14.479	2.787	17.470
17	WD18	IN	-3.780	17.703	5.057	14.724
18	WFE7	KIP	-1.348	13.097	1.064	12.654
19	WFW7	KIP	-.725	12.654	1.260	12.612
20	WF1	KIP	-2.033	14.703	2.970	8.323
21	WD1-WD7	IN	-1.963	20.153	2.203	14.872

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2352

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.665	
2	WD1	IN	-2.966	11.576	2.251	17.280
3	WD2	IN	-2.968	11.576	2.263	17.280
4	WD3	IN	-4.961	11.576	3.790	17.280
5	WD4	IN	-2.999	11.576	2.296	17.280
6	WD5	IN	-3.003	11.555	2.587	13.224
7	WD6	IN	-3.045	11.576	2.318	17.280
8	WD7	IN	-3.049	11.576	2.305	17.280
9	WAV1	G	-.676	5.894	.539	5.450
10	WA4	G	-.695	5.535	.509	5.704
11	WA1	G	-.101	6.675	.114	6.654
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.312	17.280	3.088	11.598
16	WDW7B	IN	-2.299	17.280	3.023	11.598
17	WD1B	IN	-2.939	11.598	2.225	17.301
18	WFE7	KIP	-1.281	5.429	1.606	5.873
19	WFW7	KIP	-.618	5.619	1.355	5.387
20	WF1	KIP	-3.784	5.408	5.172	5.619
21	WD1-WD7	IN	-.239	8.429	.329	5.218

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2515

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.108	
2	WD1	IN	-8.550	4.267	3.581	8.281
3	WD2	IN	-7.848	4.204	3.445	8.281
4	WD3	IN	-11.881	4.183	5.438	8.154
5	WD4	IN	-7.039	14.027	3.151	8.070
6	WD5	IN	-7.030	13.985	3.188	8.556
7	WD6	IN	-7.010	14.682	3.331	7.922
8	WD7	IN	-7.094	14.682	3.452	7.901
9	WAV1	G	-.571	11.534	.573	7.182
10	WA4	G	-.780	4.098	.392	7.182
11	WA1	G	-.129	11.555	.130	11.575
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.423	7.837	7.119	14.703
16	WDW7B	IN	-3.443	7.880	7.049	14.682
17	WD1B	IN	-6.475	4.288	3.544	8.281
18	WFE7	KIP	-1.231	7.161	1.189	11.386
19	WFW7	KIP	-.718	8.725	1.091	4.267
20	WF1	KIP	-2.607	7.182	4.735	4.056
21	WD1-WD7	IN	-5.471	4.331	4.105	4.901

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2531

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.446	
2	WD1	IN	-7.215	14.661	3.797	7.901
3	WD2	IN	-7.088	14.661	3.819	7.880
4	WD3	IN	-11.921	14.682	6.100	7.880
5	WD4	IN	-7.076	14.661	3.717	7.880
6	WD5	IN	-7.128	14.661	3.537	7.858
7	WD6	IN	-7.125	14.661	3.499	7.901
8	WD7	IN	-7.106	14.682	3.457	7.901
9	WAV1	G	-.874	4.183	.893	5.112
10	WA4	G	-.992	4.098	.619	5.133
11	WA1	G	-.099	4.373	.120	4.922
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.455	7.858	7.118	14.703
16	WDW7B	IN	-3.317	7.901	7.228	14.682
17	WD18	IN	-7.150	14.682	3.737	7.880
18	WFE7	KIP	-2.082	5.112	1.873	4.922
19	WFW7	KIP	-.713	4.098	1.510	4.288
20	WF1	KIP	-1.897	4.732	5.416	4.056
21	WD1-WD7	IN	-.875	4.162	.472	6.168

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2242

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		47.341	
2	WD1	IN	-6.774	10.795	5.623	8.344
3	WD2	IN	-6.581	10.795	5.088	8.365
4	WD3	IN	-10.742	10.879	8.029	6.570
5	WD4	IN	-6.304	10.879	4.735	6.316
6	WD5	IN	-6.271	10.964	4.618	6.337
7	WD6	IN	-6.208	10.943	4.571	16.668
8	WD7	IN	-6.150	10.943	4.615	16.646
9	WAV1	G	-1.321	5.260	.737	4.795
10	WA4	G	-.943	4.901	.803	4.838
11	WA1	G	-.247	28.941	.273	5.471
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.646	16.646	6.161	10.964
16	WDW7B	IN	-4.559	16.646	6.145	10.964
17	WD18	IN	-6.699	10.816	5.538	8.365
18	WFE7	KIP	-1.750	4.795	2.580	5.239
19	WFW7	KIP	-1.992	4.985	1.981	4.838
20	WF1	KIP	-6.002	4.753	8.531	4.880
21	WD1-WD7	IN	-5.430	5.387	4.227	8.450

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 8
 NO. OF DATA POINTS 2557

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.995	
2	WD1	IN	-8.575	4.309	3.571	8.260
3	WD2	IN	-7.860	4.288	3.435	8.260
4	WD3	IN	-12.349	4.183	5.485	8.196
5	WD4	IN	-7.204	4.162	3.304	8.218
6	WD5	IN	-7.135	14.006	3.438	7.922
7	WD6	IN	-7.158	14.682	3.796	7.901
8	WD7	IN	-7.254	14.703	4.015	7.901
9	WAV1	G	-.703	5.197	.593	6.422
10	WA4	G	-.893	4.204	.871	6.190
11	WA1	G	-.150	9.591	.188	7.330
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.027	7.922	7.289	14.703
16	WDW7B	IN	-3.994	7.922	7.273	14.745
17	WD18	IN	-8.476	4.331	3.516	8.344
18	WFE7	KIP	-1.256	6.528	1.517	4.163
19	WFW7	KIP	-1.379	4.225	1.904	6.274
20	WF1	KIP	-6.667	6.168	6.349	7.476
21	WD1-WD7	IN	-6.745	4.373	4.611	4.985

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 7-1
 NO. OF DATA POINTS DATA LOST

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC				
2	WD1	IN				
3	WD2	IN				
4	WD3	IN				
5	WD4	IN				
6	WD5	IN				
7	WD6	IN				
8	WD7	IN				
9	WAV1	G				
10	WA4	G				
11	WA1	G				
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN				
16	WDW7B	IN				
17	WD1B	IN				
18	WFE7	KIP				
19	WFH7	KIP				
20	WF1	KIP				
21	WD1-WD7	IN				

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 7-2
 NO. OF DATA POINTS 2494

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.664	
2	WD1	IN	-7.246	14.302	3.860	7.499
3	WD2	IN	-7.281	14.302	3.875	7.499
4	WD3	IN	-12.221	14.302	6.530	7.499
5	WD4	IN	-7.260	14.280	3.982	7.478
6	WD5	IN	-7.312	14.302	4.005	7.499
7	WD6	IN	-7.318	14.302	4.013	7.499
8	WD7	IN	-7.260	14.280	4.014	7.499
9	WAV1	G	-2.120	5.957	1.535	6.147
10	WA4	G	-1.818	7.098	1.423	9.760
11	WA1	G	-.521	11.492	.334	11.091
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.035	7.499	7.312	14.302
16	WDW7B	IN	-3.988	7.520	7.276	14.302
17	WD1B	IN	-7.187	14.302	3.789	7.520
18	WFE7	KIP	-4.022	6.126	4.295	5.936
19	WFW7	KIP	-2.290	7.098	2.632	6.147
20	WF1	KIP	-8.097	5.746	9.970	7.077
21	WD1-WD7	IN	-3.134	42.334	.250	5.999

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 10
 NO. OF DATA POINTS 2426

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		51.228	
2	WD1	IN	-6.035	11.027	4.567	16.731
3	WD2	IN	-6.151	11.027	4.655	16.752
4	WD3	IN	-10.647	11.027	7.854	16.752
5	WD4	IN	-6.271	11.027	4.856	16.752
6	WD5	IN	-6.235	11.027	4.660	16.752
7	WD6	IN	-6.181	11.048	4.646	16.752
8	WD7	IN	-6.112	11.027	4.597	16.731
9	WAV1	G	-1.000	4.732	1.215	4.901
10	WA4	G	-1.491	4.753	1.378	23.512
11	WA1	G	-.609	27.124	1.096	27.103
12	KA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.580	16.731	6.173	11.048
16	WDW7B	IN	-4.513	16.752	6.135	11.048
17	WD18	IN	-5.991	11.027	4.497	16.752
18	WFE7	KIP	-2.872	11.999	2.950	4.964
19	WFW7	KIP	-1.902	4.711	2.380	4.922
20	WF1	KIP	-4.772	4.859	11.279	4.964
21	WD1-WD7	IN	-.179	5.429	.246	5.028

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 21
 INPUT MOTION MS 10.2
 NO. OF DATA POINTS 525

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		11.069	
2	WD1	IN	-3.595	4.922	6.524	8.302
3	WD2	IN	-10.544	8.154	4.395	3.760
4	WD3	IN	-24.259	8.408	7.750	3.845
5	WD4	IN	-19.263	9.760	4.626	3.824
6	WD5	IN	-11.386	9.865	4.346	3.802
7	WD6	IN	-4.984	7.373	4.674	3.697
8	WD7	IN	-3.707	4.922	5.278	6.274
9	WAV1	G	-8.232	8.175	4.437	8.070
10	WA4	G	-1.980	8.049	1.203	3.824
11	WA1	G	-3.425	8.218	3.697	8.175
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.257	6.274	3.716	7.351
16	WDW7B	IN	-5.207	6.295	3.769	4.922
17	WD18	IN	-3.529	4.922	6.437	6.323
18	WFE7	KIP	-3.663	8.049	5.535	8.154
19	WFW7	KIP	-1.793	4.964	2.092	4.795
20	WFI	KIP	-5.227	4.711	8.049	4.838
21	WD1-WD7	IN	-3.076	8.154	6.395	11.048

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 1
 NO. OF DATA POINTS . . . 2725

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		57.544	
2	WD1	IN	-1.794	22.942	.290	4.478
3	WD2	IN	-1.814	22.942	.285	4.394
4	WD3	IN	-3.004	22.963	.485	4.478
5	WD4	IN	-1.831	22.878	.537	4.394
6	WD5	IN	-1.826	22.794	.307	4.500
7	WD6	IN	-1.833	22.942	2.042	45.841
8	WD7	IN	-1.834	23.026	.266	4.478
9	WAV1	G	-.289	9.337	.300	8.830
10	WA4	G	-.210	9.020	.187	8.830
11	WA1	G	-.046	12.020	.041	11.682
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.274	4.500	1.826	22.899
16	WDW7B	IN	-.266	4.478	1.825	22.942
17	WD1B	IN	-1.769	22.984	.279	4.584
18	WFE7	KIP	-.580	9.147	.622	8.978
19	WFW7	KIP	-.446	17.006	.675	12.569
20	WFI	KIP	-1.045	8.830	2.121	8.513
21	WD1-WD7	IN	-.143	8.703	.223	8.302

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 2
 NO. OF DATA POINTS 2704

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000	-	57.101	
2	WD1	IN	-2.072	21.336	.466	7.605
3	WD2	IN	-2.037	21.336	.422	7.605
4	WD3	IN	-3.263	21.336	.605	7.520
5	WD4	IN	-1.935	21.357	.324	7.542
6	WD5	IN	-1.863	22.371	.291	4.394
7	WD6	IN	-1.828	22.815	2.034	13.689
8	WD7	IN	-1.835	22.667	.272	4.373
9	WAV1	G	-.451	14.196	.418	14.745
10	WA4	G	-.311	9.063	.315	9.717
11	WA1	G	-.070	9.358	.072	9.232
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-.273	4.162	1.838	22.688
16	WDW7B	IN	-.273	4.288	1.816	22.773
17	WD1B	IN	-2.038	21.557	.464	7.626
18	WFE7	KIP	-.901	9.105	.872	9.833
19	WFW7	KIP	-.606	9.041	.847	21.865
20	WF1	KIP	-1.513	8.640	2.643	13.942
21	WD1-WD7	IN	-.816	14.175	.789	8.830

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 3
 NO. OF DATA POINTS 2510

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.002	
2	WD1	IN	-3.901	14.724	2.150	7.901
3	WD2	IN	-3.902	14.724	2.120	7.922
4	WD3	IN	-6.512	14.724	3.456	7.901
5	WD4	IN	-3.904	14.724	2.056	7.922
6	WD5	IN	-3.981	14.745	1.992	7.943
7	WD6	IN	-3.964	14.724	2.022	26.322
8	WD7	IN	-3.972	14.724	1.915	7.922
9	WAV1	G	-.758	4.964	.804	5.133
10	WA4	G	-.634	4.162	.553	5.133
11	WA1	G	-.120	7.204	.123	5.049
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-1.910	7.943	3.968	14.745
16	WDW7B	IN	-1.895	7.943	3.947	14.724
17	WD1B	IN	-3.843	14.724	2.133	7.901
18	WFE7	KIP	-1.424	5.112	1.284	4.943
19	WFW7	KIP	-.134	15.654	1.838	5.133
20	WF1	KIP	-1.304	11.745	5.247	4.140
21	WD1-WD7	IN	-.354	7.753	.377	6.190

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 4
 NO. OF DATA POINTS 2940

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		62.086	
2	WD1	IN	-3.844	16.604	5.118	13.647
3	WD2	IN	-3.697	16.604	4.962	13.647
4	WD3	IN	-5.780	16.604	7.866	13.626
5	WD4	IN	-3.238	16.604	4.511	13.604
6	WD5	IN	-2.993	16.625	4.324	13.604
7	WD6	IN	-2.872	16.456	4.267	13.393
8	WD7	IN	-2.837	16.372	4.378	13.414
9	WAV1	G	-.715	14.428	.566	13.985
10	WA4	G	-.488	14.407	.424	13.985
11	WA1	G	-.356	14.323	.306	14.344
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.362	13.414	2.825	16.393
16	WDW7B	IN	-4.328	13.414	2.811	16.456
17	WD18	IN	-3.796	16.625	5.056	13.647
18	WFE7	KIP	-1.178	19.350	1.575	18.907
19	WFW7	KIP	-.298	8.429	1.567	15.337
20	WF1	KIP	-1.594	18.379	4.097	7.288
21	WD1-WD7	IN	-1.902	19.118	2.123	13.837

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 10/2
 NO. OF DATA POINTS 2342

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.453	
2	WD1	IN	-2.998	11.492	2.270	17.196
3	WD2	IN	-3.016	11.534	2.282	17.196
4	WD3	IN	-5.016	11.555	3.833	17.196
5	WD4	IN	-3.042	11.513	2.291	17.196
6	WD5	IN	-3.077	11.513	2.293	17.217
7	WD6	IN	-3.062	11.513	2.304	17.196
8	WD7	IN	-3.070	11.513	2.316	17.196
9	WAV1	G	-.818	5.830	.899	12.485
10	WA4	G	-.640	5.197	.663	12.506
11	WA1	G	-.073	6.971	.081	5.619
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-2.311	17.217	3.076	11.534
16	WDW7B	IN	-2.298	17.217	3.035	11.534
17	WD1B	IN	-2.957	11.534	2.248	17.217
18	WFE7	KIP	-1.498	12.464	1.771	5.809
19	WFW7	KIP	-.947	5.683	1.311	5.640
20	WF1	KIP	-4.610	5.345	5.518	5.450
21	WD1-WD7	IN	-.123	5.915	.156	5.450

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 6
 NO. OF DATA POINTS 2541

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.657	
2	WD1	IN	-8.495	4.098	3.597	8.070
3	WD2	IN	-7.964	4.077	3.474	8.049
4	WD3	IN	-12.160	4.035	5.500	8.027
5	WD4	IN	-7.060	13.773	3.152	7.901
6	WD5	IN	-7.054	13.795	3.156	7.922
7	WD6	IN	-7.023	14.576	3.320	7.774
8	WD7	IN	-7.131	14.555	3.461	7.753
9	WAV1	G	-1.632	4.246	.988	4.859
10	WA4	G	-.728	5.028	.649	5.345
11	WA1	G	-.150	23.934	.170	5.112
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-3.432	7.774	7.099	14.555
16	WDW7B	IN	-3.441	7.753	7.056	14.555
17	WD1B	IN	-8.361	4.098	3.544	8.154
18	WFE7	KIP	-2.245	4.838	2.624	5.007
19	WFW7	KIP	-1.475	4.267	1.428	4.964
20	WF1	KIP	-3.650	5.049	4.960	3.929
21	WD1-WD7	IN	-5.951	4.225	4.256	4.795

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 5
 NO. OF DATA POINTS 2515

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.108	
2	WD1	IN	-7.216	14.428	4.008	7.626
3	WD2	IN	-7.186	14.407	3.965	7.626
4	WD3	IN	-11.924	14.407	6.449	7.626
5	WD4	IN	-7.181	14.471	3.783	7.626
6	WD5	IN	-7.174	14.428	3.723	7.626
7	WD6	IN	-7.131	14.407	3.571	7.626
8	WD7	IN	-7.131	14.428	3.496	7.626
9	WAV1	G	-1.652	7.204	1.379	4.880
10	WA4	G	-1.116	9.675	1.287	6.274
11	WA1	G	-.257	6.760	.301	6.739
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE78	IN	-3.489	7.626	7.100	14.471
16	WDW78	IN	-3.464	7.626	7.070	14.471
17	WD18	IN	-7.114	14.428	3.943	7.626
18	WFE7	KIP	-3.418	6.253	3.280	6.675
19	WFW7	KIP	-1.676	9.908	1.476	6.760
20	WF1	KIP	-4.664	9.844	5.588	4.690
21	WD1-WD7	IN	-.711	3.908	.709	4.098

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 9
 NO. OF DATA POINTS 2342

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.453	
2	WD1	IN	-6.780	11.344	5.620	8.936
3	WD2	IN	-6.648	11.407	5.097	8.936
4	WD3	IN	-10.797	11.429	8.007	7.140
5	WD4	IN	-6.385	11.471	4.701	6.887
6	WD5	IN	-6.332	11.513	4.593	6.908
7	WD6	IN	-6.230	11.534	4.578	17.217
8	WD7	IN	-6.196	11.513	4.619	17.217
9	WAV1	G	-1.090	29.321	.681	29.365
10	WA4	G	-.404	7.985	.773	5.429
11	WA1	G	-.222	5.218	.265	6.042
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.643	17.217	6.158	11.534
16	WDW7B	IN	-4.564	17.238	6.164	11.534
17	WD1B	IN	-6.702	11.365	5.549	8.957
18	WFE7	KIP	-1.585	29.364	2.110	5.809
19	WFW7	KIP	-2.076	5.577	1.520	5.429
20	WF1	KIP	-7.458	5.345	8.837	5.450
21	WD1-WD7	IN	-5.384	5.978	4.825	22.540

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 8
 NO. OF DATA POINTS 2557

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		53.995	
2	WD1	IN	-8.498	4.352	3.626	8.323
3	WD2	IN	-7.984	4.352	3.518	8.323
4	WD3	IN	-12.529	4.267	5.658	8.502
5	WD4	IN	-7.334	4.267	3.827	29.300
6	WD5	IN	-7.211	14.133	3.350	8.006
7	WD6	IN	-7.222	14.766	3.763	7.985
8	WD7	IN	-7.343	14.787	4.000	7.985
9	WAV1	G	-1.599	4.500	1.124	12.020
10	XA4	G	-1.105	11.598	1.070	11.788
11	WA1	G	-.254	12.020	.302	4.500
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.024	8.006	7.276	14.787
16	WDW7B	IN	-3.919	8.006	7.311	14.787
17	WD18	IN	-8.375	4.373	3.568	8.323
18	WFE7	KIP	-2.799	11.767	3.502	11.576
19	WFW7	KIP	-2.098	5.408	1.604	6.359
20	WF1	KIP	-7.465	7.689	6.076	4.246
21	WD1-WD7	IN	-6.780	4.478	4.948	5.070

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 7
 NO. OF DATA POINTS 2667

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		56.319	
2	WD1	IN	-7.230	14.872	3.913	8.049
3	WD2	IN	-7.227	14.872	3.956	8.049
4	WD3	IN	-12.034	14.851	6.680	8.049
5	WD4	IN	-7.238	14.830	4.051	8.049
6	WD5	IN	-7.287	14.893	4.045	8.049
7	WD6	IN	-7.290	14.872	4.055	8.049
8	WD7	IN	-7.316	14.872	4.078	8.070
9	WAV1	G	-1.583	10.077	1.415	8.049
10	WA4	G	-1.424	10.098	1.551	8.070
11	WA1	G	-.189	10.140	.211	7.985
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.048	8.070	7.287	14.851
16	WDW7B	IN	-4.012	8.070	7.253	14.872
17	WD1B	IN	-7.131	14.851	3.859	8.070
18	WFE7	KIP	-3.765	9.886	3.964	10.055
19	WFW7	KIP	-2.173	7.647	2.051	9.908
20	WF1	KIP	-8.655	6.316	8.455	7.626
21	WD1-WD7	IN	-3.097	28.666	.208	6.549

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 10
 NO. OF DATA POINTS 2667

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		56.319	
2	WD1	IN	-6.101	11.555	4.539	17.238
3	WD2	IN	-6.141	11.555	4.541	17.238
4	WD3	IN	-10.239	11.555	7.567	17.238
5	WD4	IN	-6.164	11.576	4.585	17.217
6	WD5	IN	-6.192	11.576	4.542	17.238
7	WD6	IN	-6.158	11.555	4.590	17.238
8	WD7	IN	-6.147	11.555	4.601	17.238
9	WAV1	G	-1.714	7.753	1.594	5.683
10	WA4	G	-1.780	8.000	1.468	12.527
11	WA1	G	-.272	7.901	.240	13.731
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE78	IN	-4.600	17.238	6.135	11.555
16	WDW78	IN	-4.569	17.238	6.082	11.555
17	WD18	IN	-6.025	11.576	4.486	17.238
18	WFE7	KIP	-3.725	5.661	4.227	7.964
19	WFW7	KIP	-2.681	7.985	2.488	12.781
20	WF1	KIP	-6.969	5.366	11.430	5.471
21	WD1-WD7	IN	-2.747	43.834	.311	7.394

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 10.2
 NO. OF DATA POINTS 2363

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		49.897	
2	WD1	IN	-7.320	11.598	5.438	17.301
3	WD2	IN	-7.473	11.598	5.450	17.301
4	WD3	IN	-12.726	11.619	9.133	17.301
5	WD4	IN	-7.695	11.598	5.540	17.301
6	WD5	IN	-7.627	11.598	5.501	17.301
7	WD6	IN	-7.479	11.619	5.493	17.301
8	WD7	IN	-7.393	11.619	5.481	17.301
9	WAV1	G	-1.715	7.837	1.709	5.767
10	WA4	G	-2.468	8.112	2.077	12.612
11	WA1	G	-.789	11.048	.449	8.091
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.410	17.322	7.409	11.619
16	WDW7B	IN	-5.517	17.344	7.301	11.640
17	WD1B	IN	-7.243	11.619	5.369	17.322
18	WFE7	KIP	-4.116	7.880	3.986	8.091
19	WFW7	KIP	-3.267	5.302	3.447	12.590
20	WFI	KIP	-8.793	5.450	13.742	5.556
21	WD1-WD7	IN	-.310	6.591	.354	5.281

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 7.2
 NO. OF DATA POINTS 2583

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		54.544	
2	WD1	IN	-8.510	15.189	4.700	9.084
3	WD2	IN	-8.583	15.801	4.774	9.105
4	WD3	IN	-14.379	15.801	6.193	9.105
5	WD4	IN	-8.665	15.189	5.006	9.105
6	WD5	IN	-8.697	15.189	4.930	9.105
7	WD6	IN	-8.585	15.907	4.902	9.084
8	WD7	IN	-8.756	15.886	4.868	9.084
9	WAV1	G	-1.074	16.013	1.495	5.577
10	WA4	G	-1.844	7.035	2.374	7.394
11	WA1	G	-.837	7.035	.501	6.929
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-4.817	9.084	8.713	15.886
16	WDW7B	IN	-4.833	9.105	8.712	15.886
17	WD1B	IN	-8.594	15.823	4.623	9.105
18	WFE7	KIP	-3.749	6.337	2.925	7.013
19	WFW7	KIP	-1.957	5.366	3.407	6.337
20	WF1	KIP	-8.086	6.337	7.911	7.013
21	WD1-WD7	IN	-.385	5.492	.290	15.865

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION : : : : : MS 7.3-1
 NO. OF DATA POINTS 2505

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		52.897	
2	WD1	IN	-8.537	4.098	5.076	7.901
3	WD2	IN	-6.086	4.119	5.200	7.901
4	WD3	IN	-14.068	4.119	8.952	7.901
5	WD4	IN	-9.050	4.119	5.439	7.922
6	WD5	IN	-9.241	14.724	5.382	7.901
7	WD6	IN	-8.679	14.766	5.326	7.901
8	WD7	IN	-9.201	14.745	5.269	7.901
9	WAV1	G	-2.918	4.204	2.597	4.394
10	WA4	G	-1.758	6.063	2.153	7.373
11	WA1	G	-.831	4.246	.448	15.316
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.225	7.901	9.484	14.703
16	WDW7B	IN	-5.210	7.922	9.477	14.703
17	WD1B	IN	-8.414	4.119	5.012	7.922
18	WFE7	KIP	-4.376	5.154	3.910	4.183
19	WFW7	KIP	-2.718	4.246	3.065	4.352
20	WF1	KIP	-9.556	5.154	7.004	7.478
21	WD1-WD7	IN	-.530	4.309	.705	14.682

WALL TEST
MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 7.3-2
 NO. OF DATA POINTS 3035

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		64.093	
2	WD1	IN	-8.496	4.140	5.074	7.943
3	WD2	IN	-8.657	4.183	5.196	7.943
4	WD3	IN	-14.644	4.183	8.931	7.943
5	WD4	IN	-9.045	4.183	5.431	7.943
6	WD5	IN	-9.188	14.724	5.354	7.943
7	WD6	IN	-8.677	14.830	5.302	7.943
8	WD7	IN	-9.203	14.787	5.251	7.943
9	WAV1	G	-3.156	4.246	2.530	4.436
10	WA4	G	-1.855	7.563	2.045	6.253
11	WA1	G	-.602	4.268	.420	4.352
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.220	7.943	9.489	14.745
16	WDW7B	IN	-5.223	7.964	9.455	14.745
17	WD1B	IN	-8.402	4.162	5.016	7.964
18	WFE7	KIP	-4.245	4.415	4.415	4.225
19	WFW7	KIP	-2.501	5.070	3.431	4.394
20	WF1	KIP	-9.165	6.190	8.529	7.520
21	WD1-WD7	IN	-.559	4.352	4.265	27.948

WALL TEST
 MAXIMUM AND MINIMUM DATA

WALL 22
 INPUT MOTION MS 7.3-3
 NO. OF DATA POINTS 903

CHANNEL NO.	LABEL	UNITS	MINIMUM VALUE	AT TIME (SEC)	MAXIMUM VALUE	AT TIME (SEC)
1	TIME	SEC	.000		19.055	
2	WD1	IN	-8.518	3.718	5.098	7.520
3	WD2	IN	-8.030	3.760	8.861	8.450
4	WD3	IN	-25.713	6.049	26.402	7.943
5	WD4	IN	-6.971	3.739	16.186	8.450
6	WD5	IN	-9.061	3.739	11.448	8.450
7	WD6	IN	-6.549	3.760	7.042	8.534
8	WD7	IN	-9.238	17.534	5.237	7.520
9	WAV1	G	-3.540	3.824	2.272	4.014
10	WA4	G	-1.933	3.845	1.822	5.809
11	WA1	G	-0.534	7.267	1.176	7.985
12	WA3	G	--	--	--	--
13	WA5	G	--	--	--	--
14	WA7	G	--	--	--	--
15	WDE7B	IN	-5.177	7.520	9.368	15.738
16	WDW7B	IN	-5.211	7.520	9.329	14.386
17	WD18	IN	-8.392	3.718	5.022	7.520
18	WFE7	KIP	-4.087	3.993	3.984	3.802
19	WFW7	KIP	-3.123	4.647	2.790	3.950
20	WF1	KIP	-10.856	5.767	6.830	5.640
21	WD1-WD7	IN	-0.704	11.196	10.407	18.653