

## BLOCK SAMPLE PREPARATION PROCEDURE

Undisturbed block soil samples were prepared following the procedure described in Fugro Test Procedure No. 300. Undisturbed samples (2.5-inches in diameter x 6.0-inches in length) were trimmed from undisturbed block samples (9 ½-inch diameter by 12-inch high). Three trimming methods were employed: 1) cut and shape, 2) capillary tension, and 3) freezing.

The cut and shape trimming method consisted of trimming the block sample according to the method described by Lambe (1951) and was used on samples exhibiting cementation or cohesion.

Trimming by the capillary tension method consisted of flooding the block sample with water and then allowing the sample to drain. The remaining water present in the soil matrix tended to hold the material together by capillary action.

Trimming of the block sample was accomplished by employing a lucite cylinder (2.5-inches inside diameter x 6.0-inches in length). The lucite cylinder was placed directly on the undisturbed block material. Material was then removed from around the base of the cylinder as the cylinder was lowered to add support to the soil column being produced. The sample was subsequently removed from the tube upon completion of the sampling operation. The capillary tension method of sample trimming was used on fine, cohesionless material.

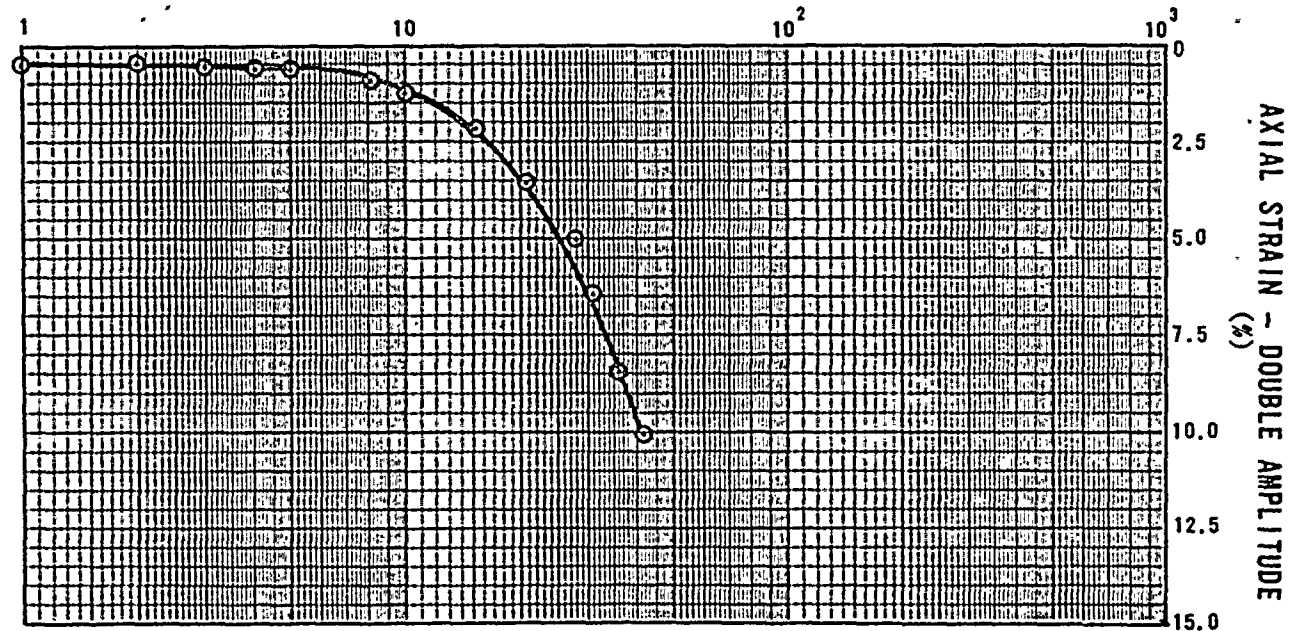
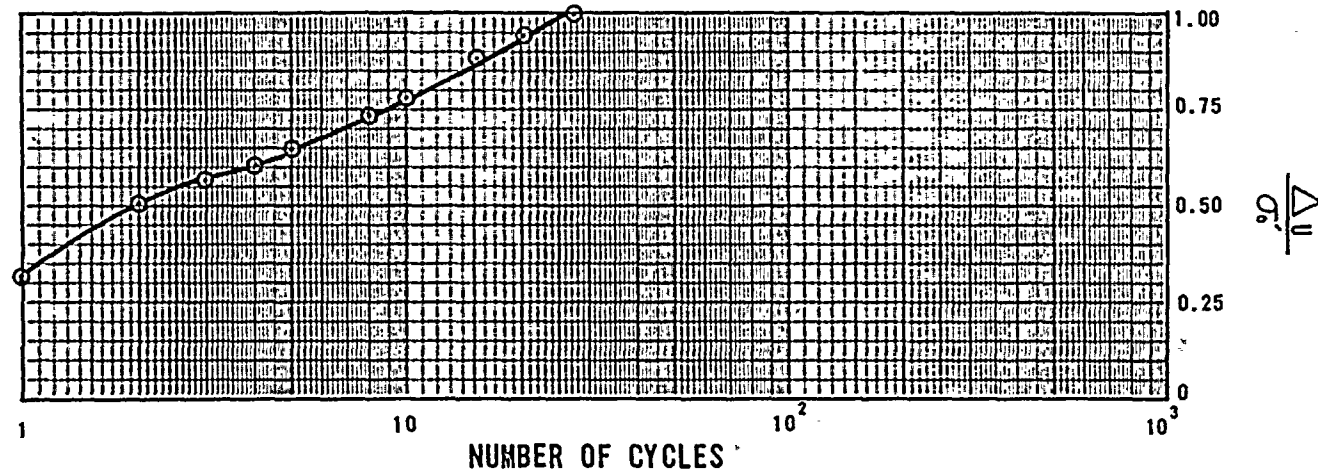


Trimming by the freezing method consisted of placing the undisturbed block sample in a liquid nitrogen bath (-320 F) until frozen. The sample was then trimmed by the method described by Lambe (1951).



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-SP-20	8	40-42.5'	35	0.26	



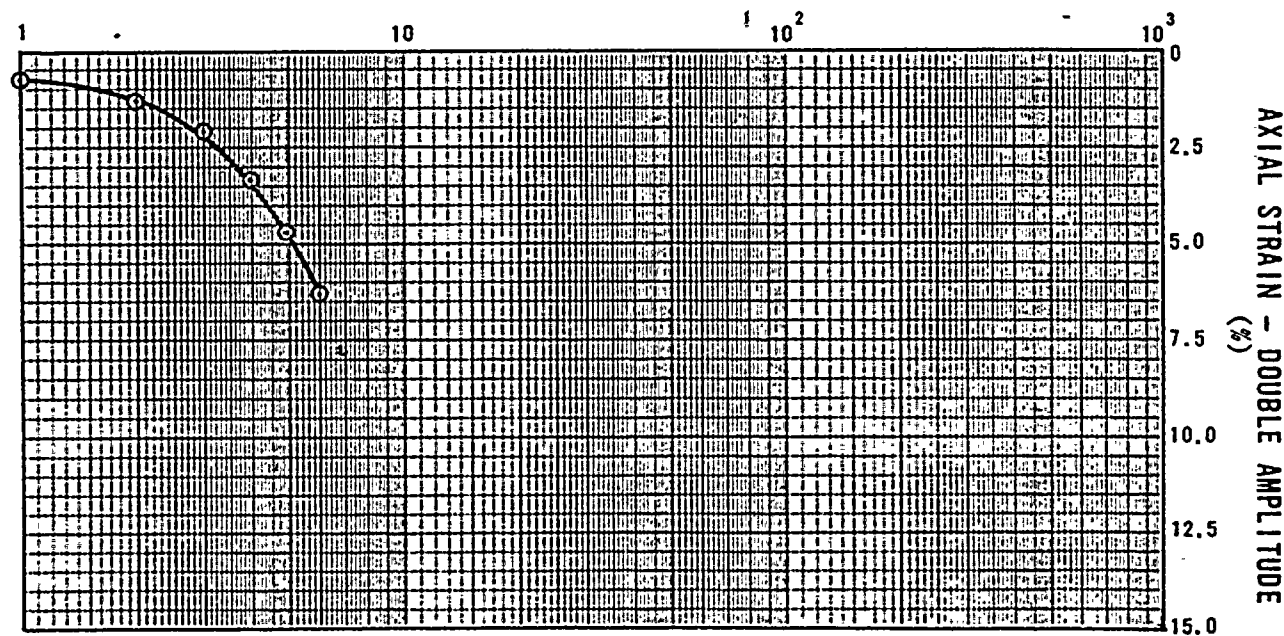
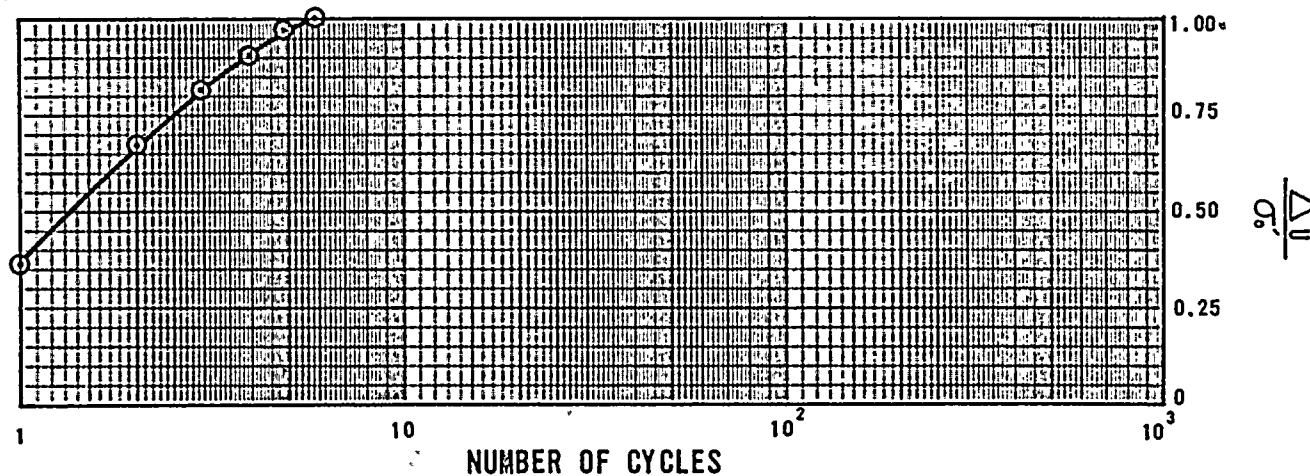
LABORATORY DYNAMIC TEST DATA

2F.21.141



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-B3	30	71-74'	54.0	0.25	



LABORATORY DYNAMIC TEST DATA

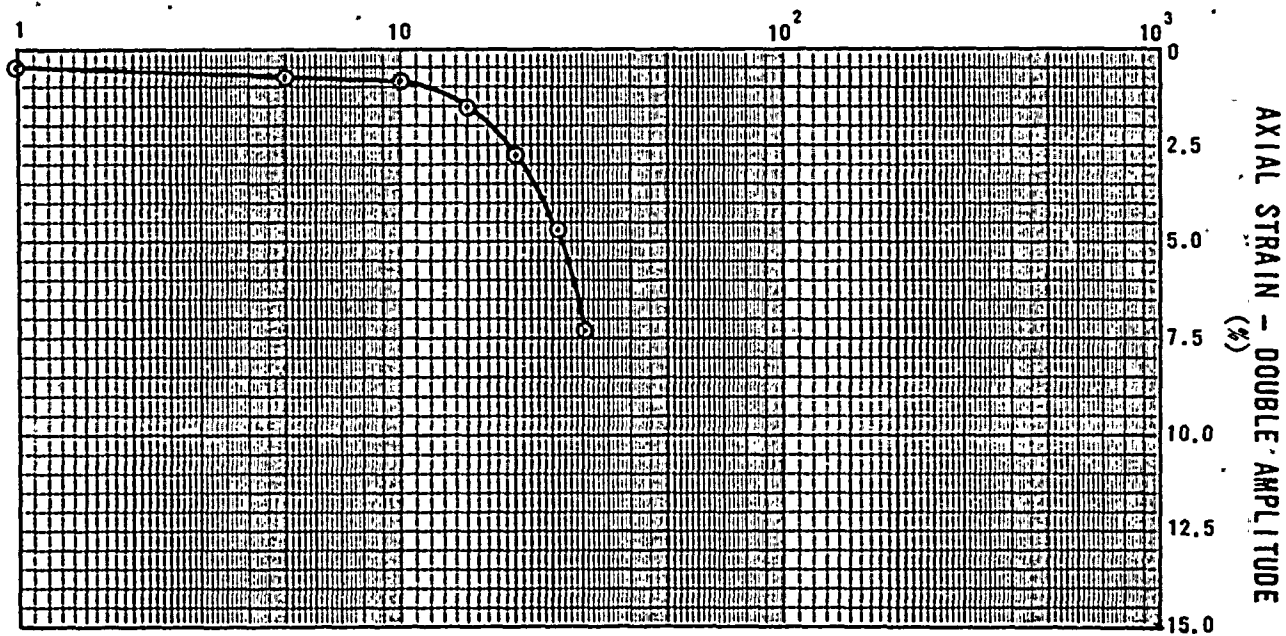
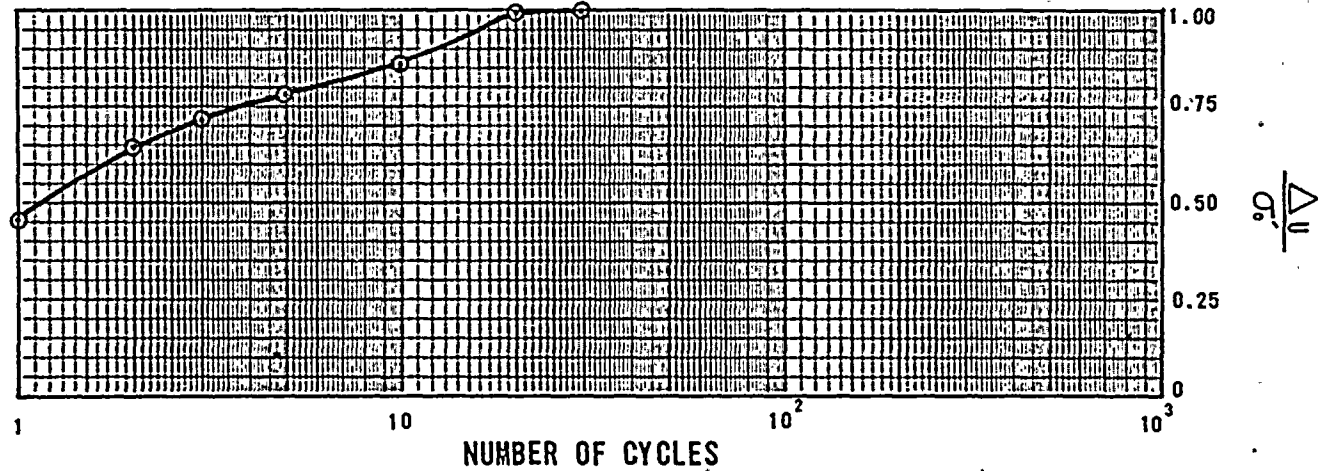
2F.21.142





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-B3	30	71-74'	54.0	0.206	



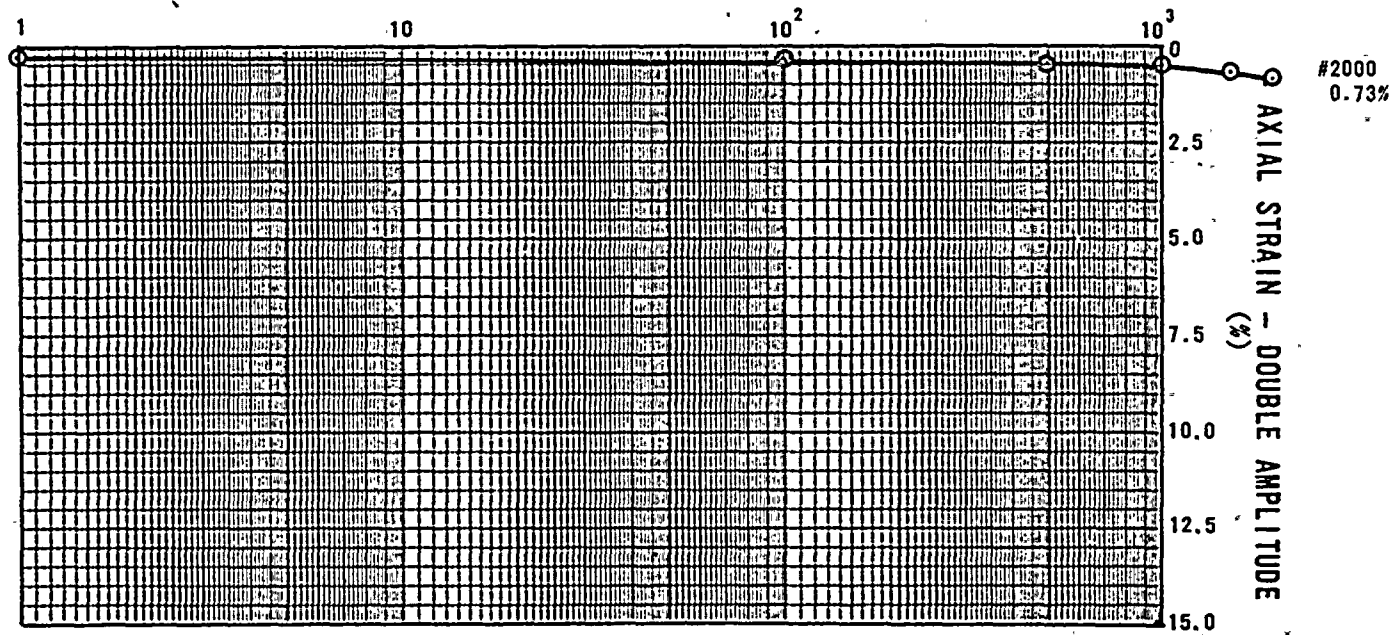
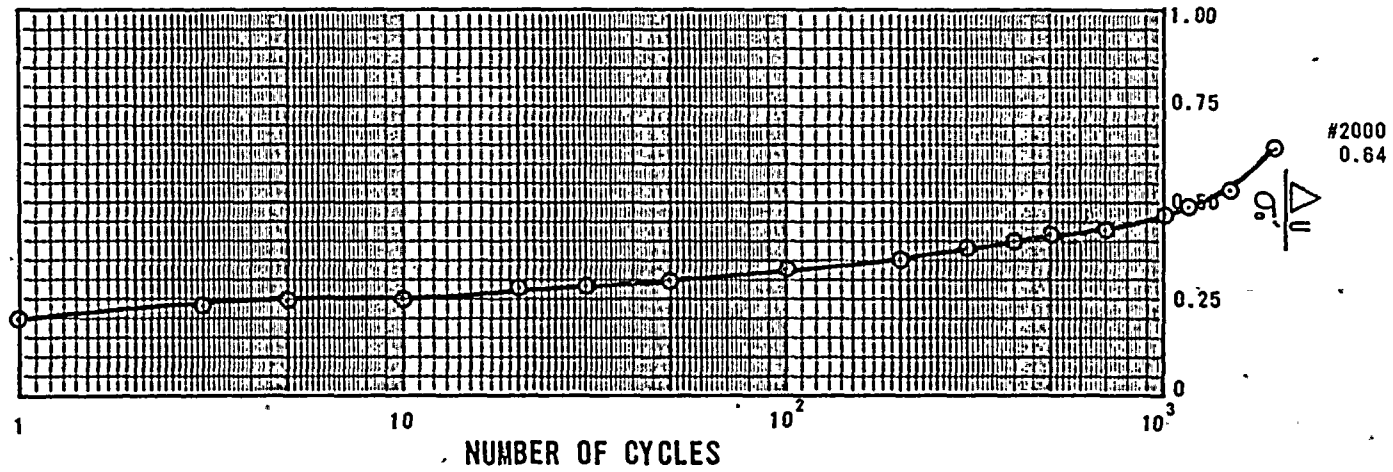
LABORATORY DYNAMIC TEST DATA

2P.21.143



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	1A	36-37'	31	0.48	



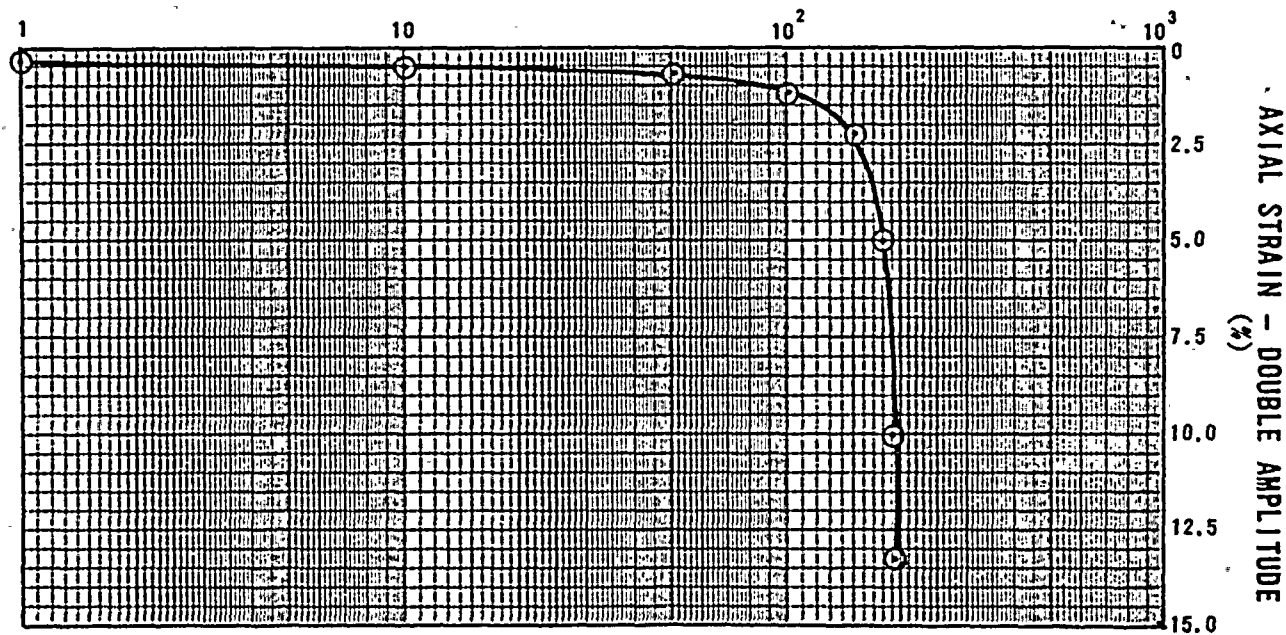
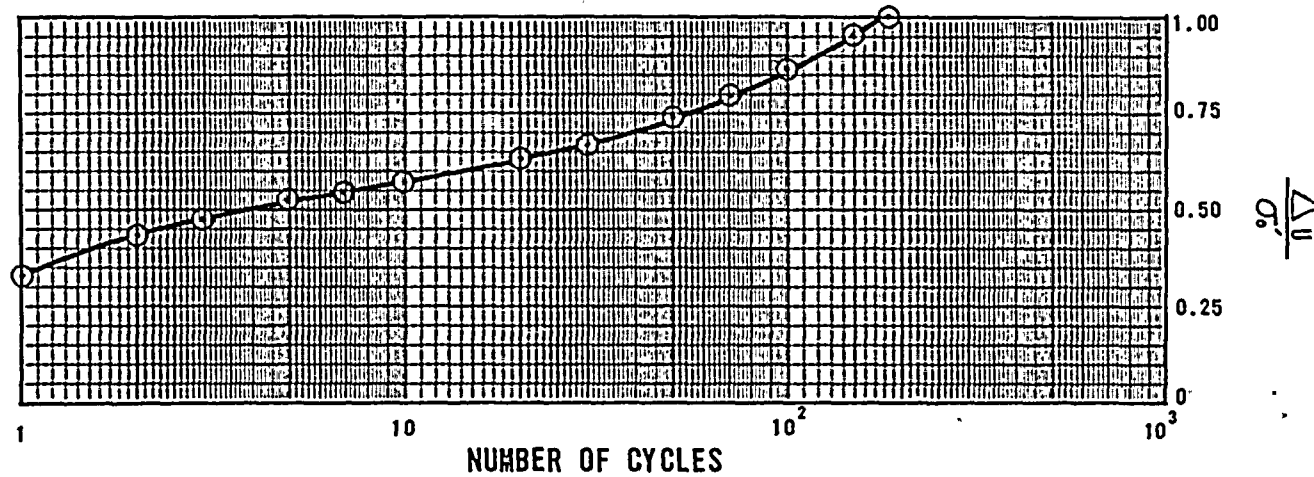
LABORATORY DYNAMIC TEST DATA

2T.21.144



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	1B	36-37	31	0.40	



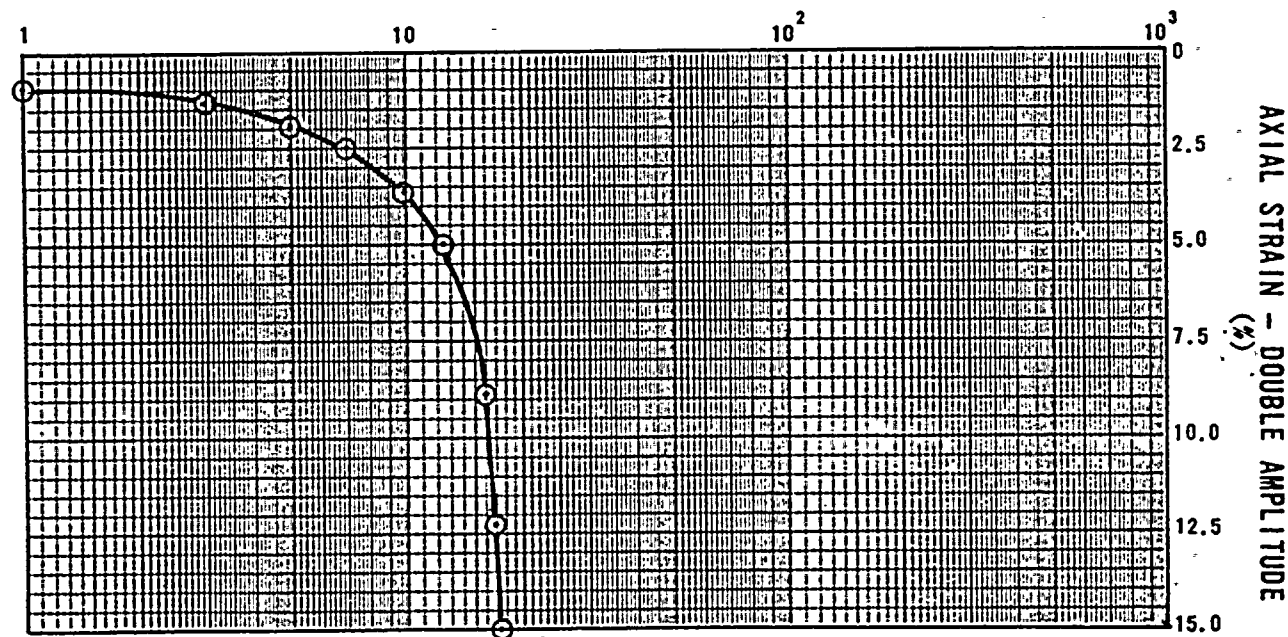
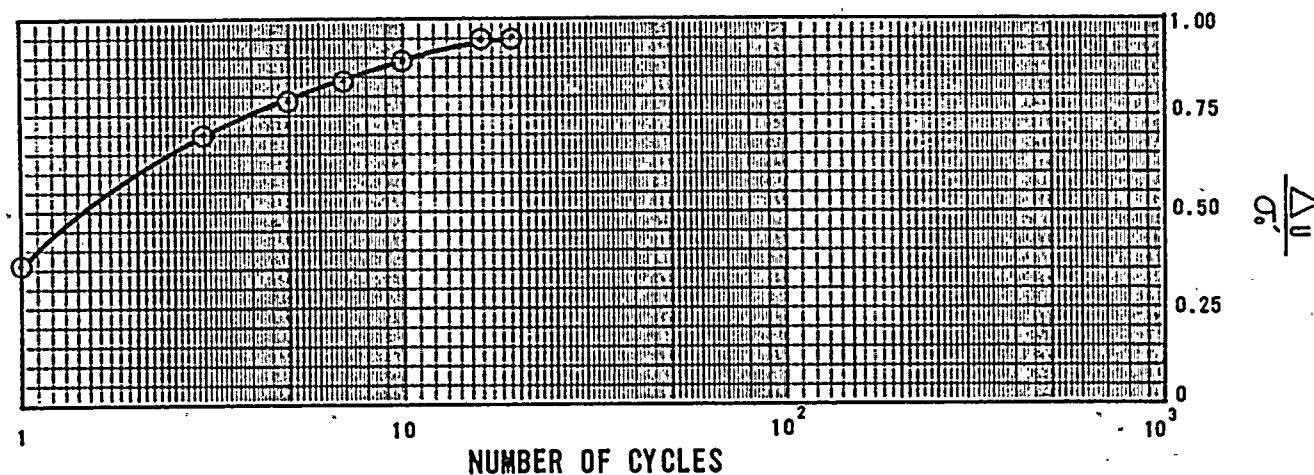
LABORATORY DYNAMIC TEST DATA

2T.21.145



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma'_{dc}/2\sigma'_0$	
U2-LB-1	1C	35-36	31	0.48	



LABORATORY DYNAMIC TEST DATA

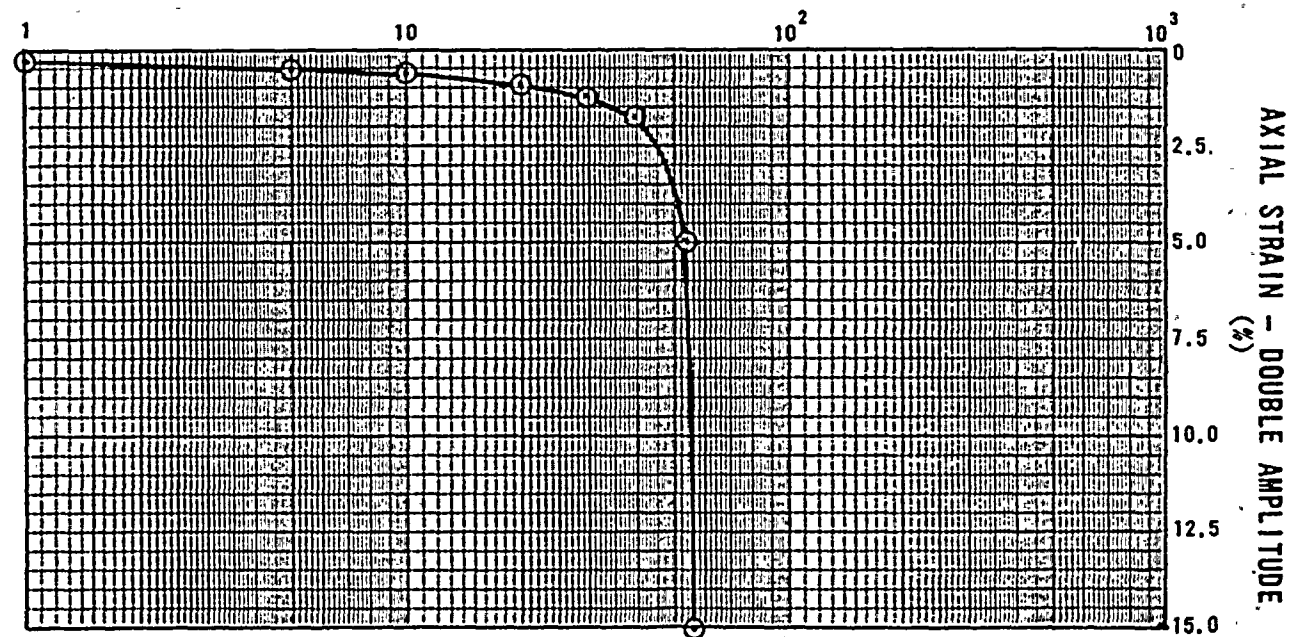
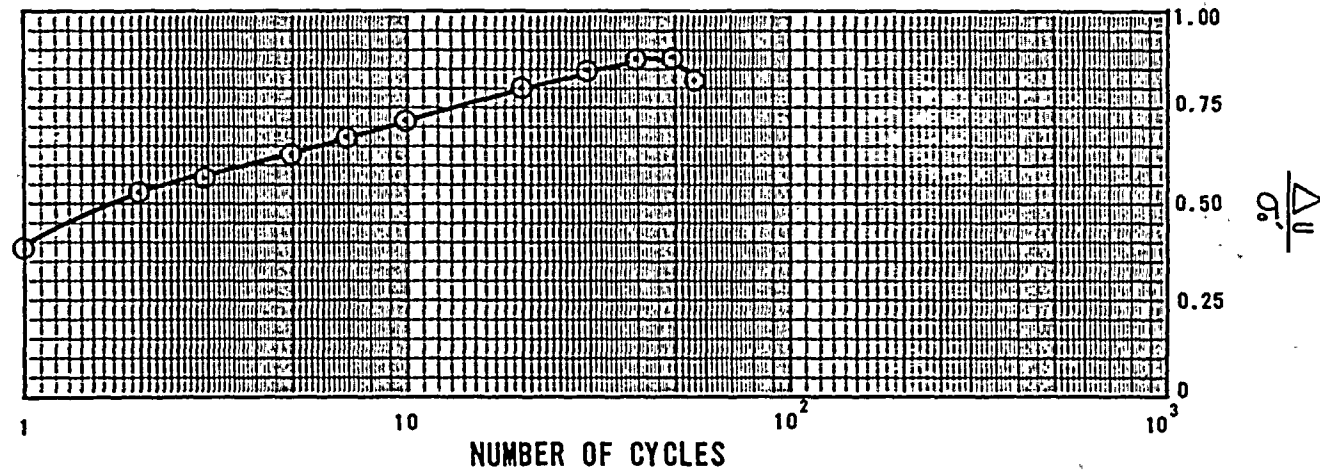
2F. 21.146





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_o$ (PSI)	$\sigma_{dc}/2\sigma'_o$	
U2-LB-1	1D	35-36	31	0.45	



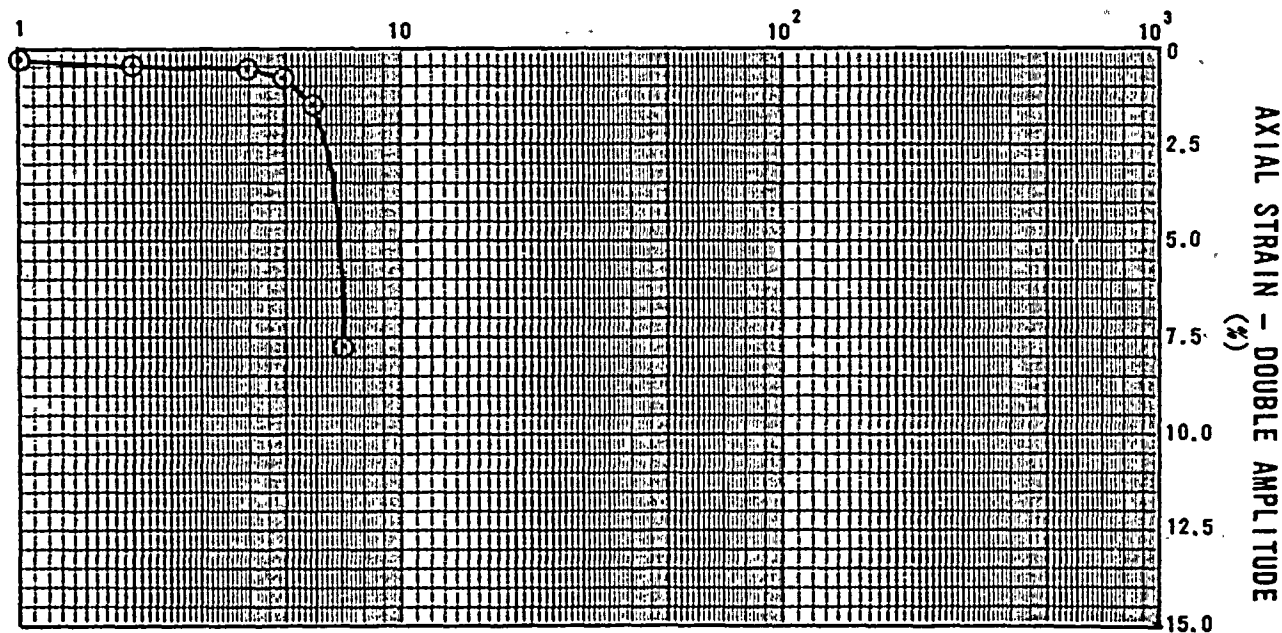
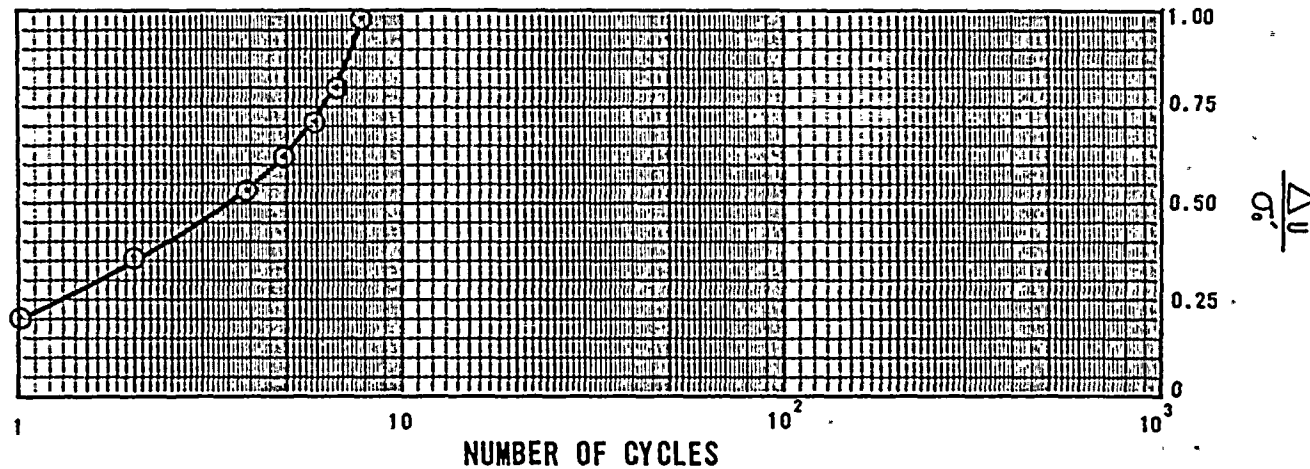
LABORATORY DYNAMIC TEST DATA

2T.21.147



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	2A	32-33	28	0.23	



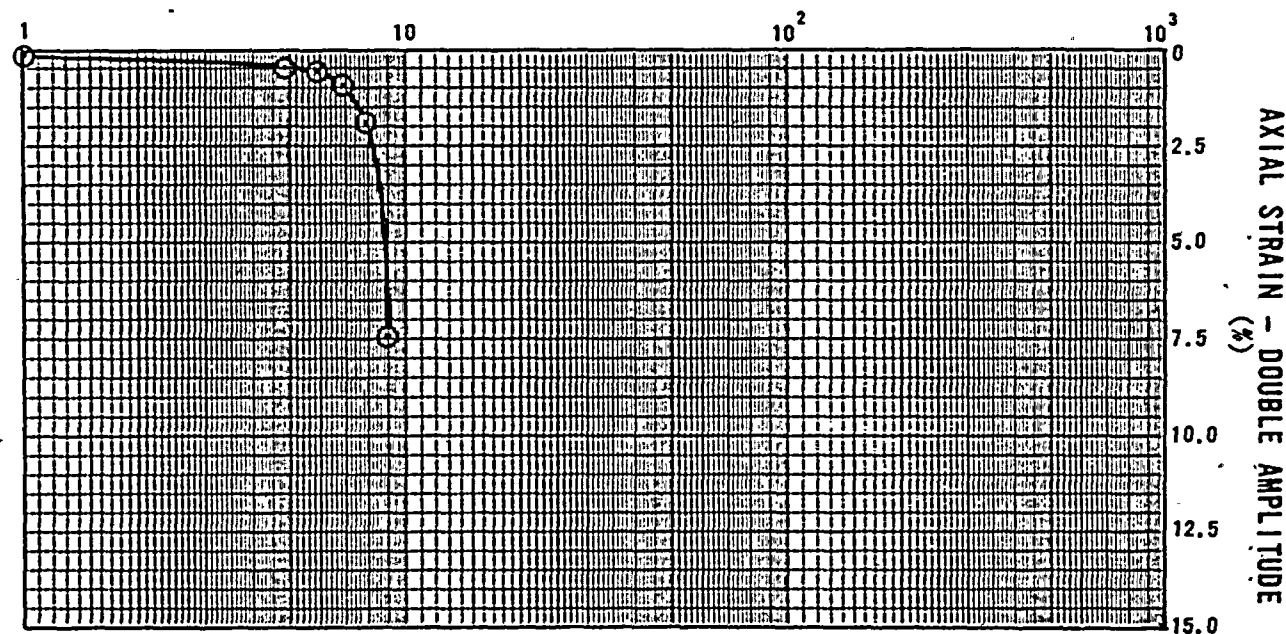
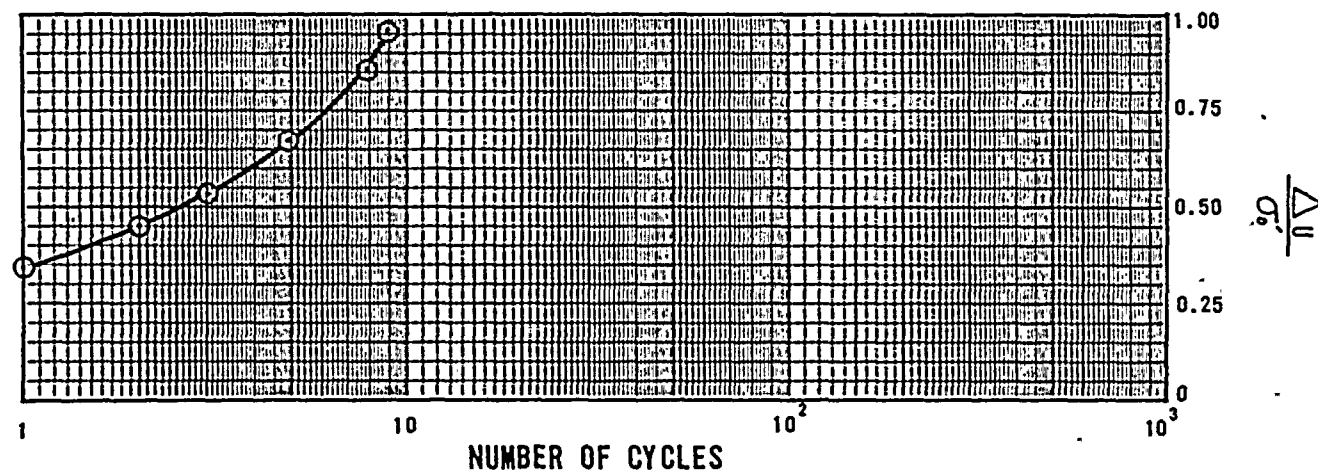
LABORATORY DYNAMIC TEST DATA

2T.21.148



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_o$ (PSI)	$\sigma'_{dc}/2\sigma'_o$	
U2-LB-1	2B	32-33	28.0	0.175	



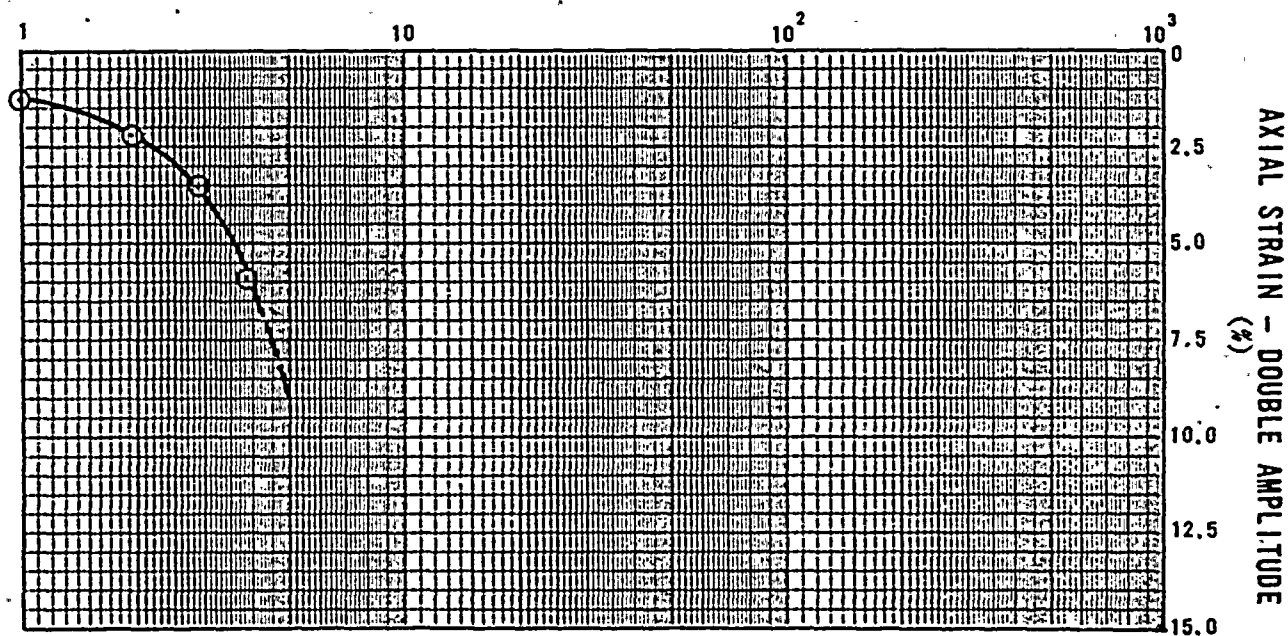
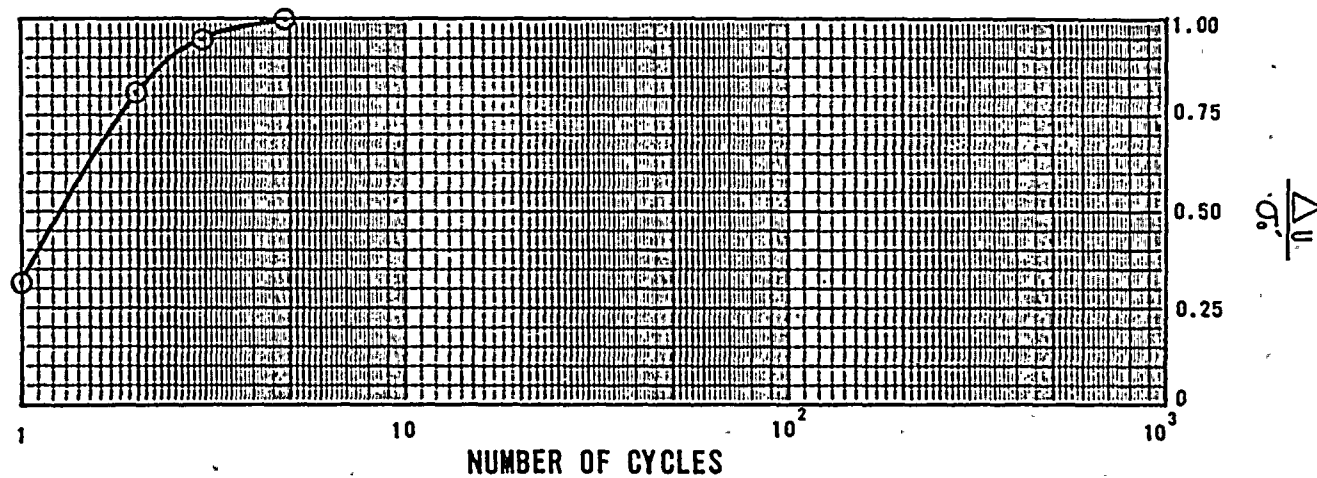
LABORATORY DYNAMIC TEST DATA

2T.21.149



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	3A	32-33	28	0.3	



LABORATORY DYNAMIC TEST DATA

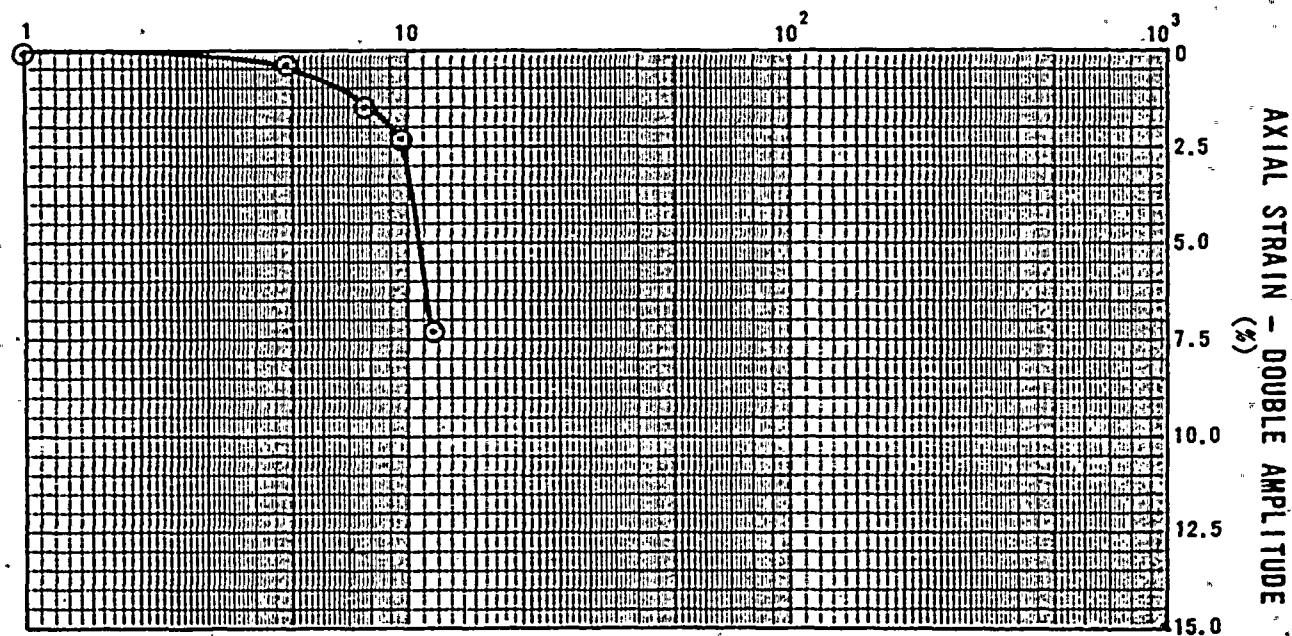
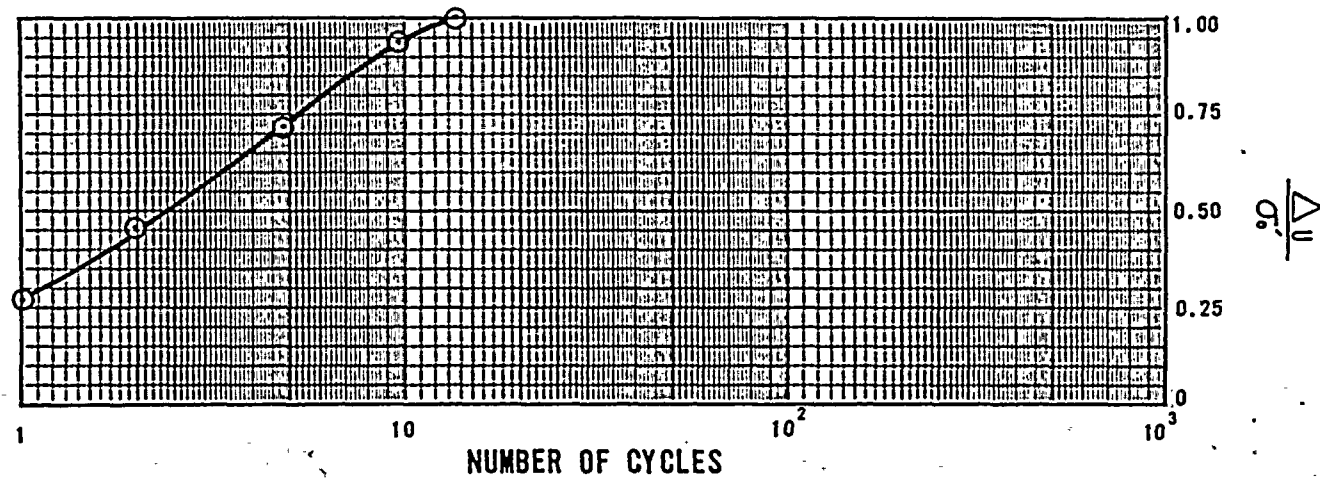
27.21.150





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_o$ (PSI)	$\sigma_{dc}/2\sigma'_o$	
U2-LB-1	3C	32-33	28	0.23	



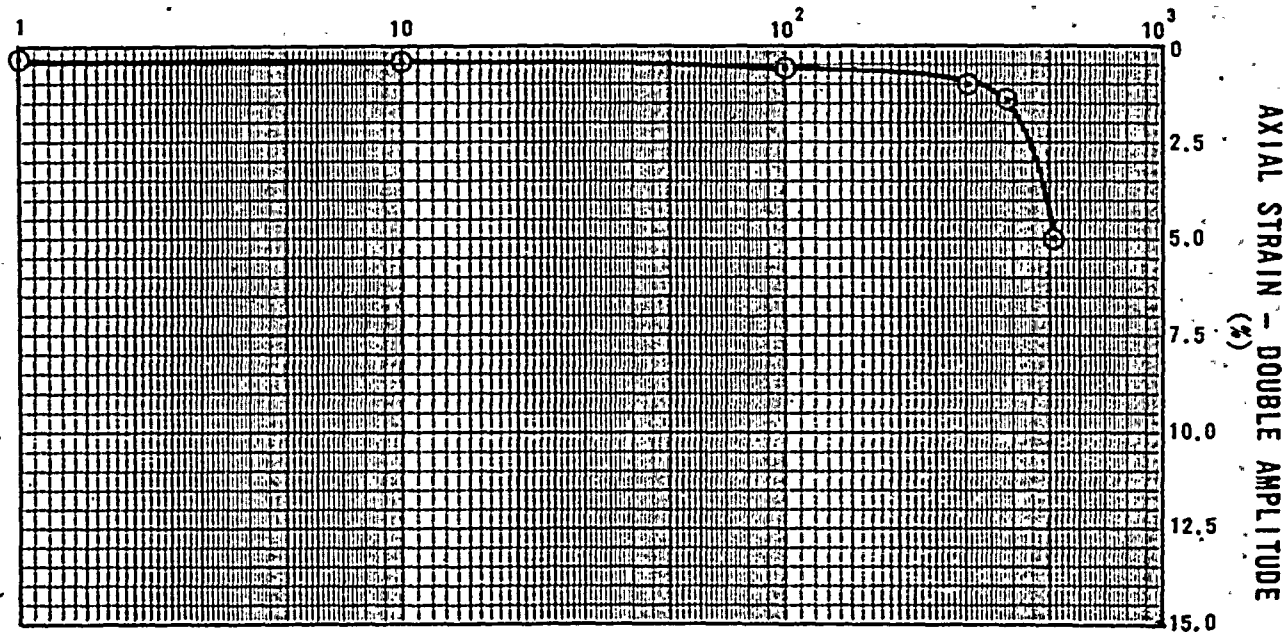
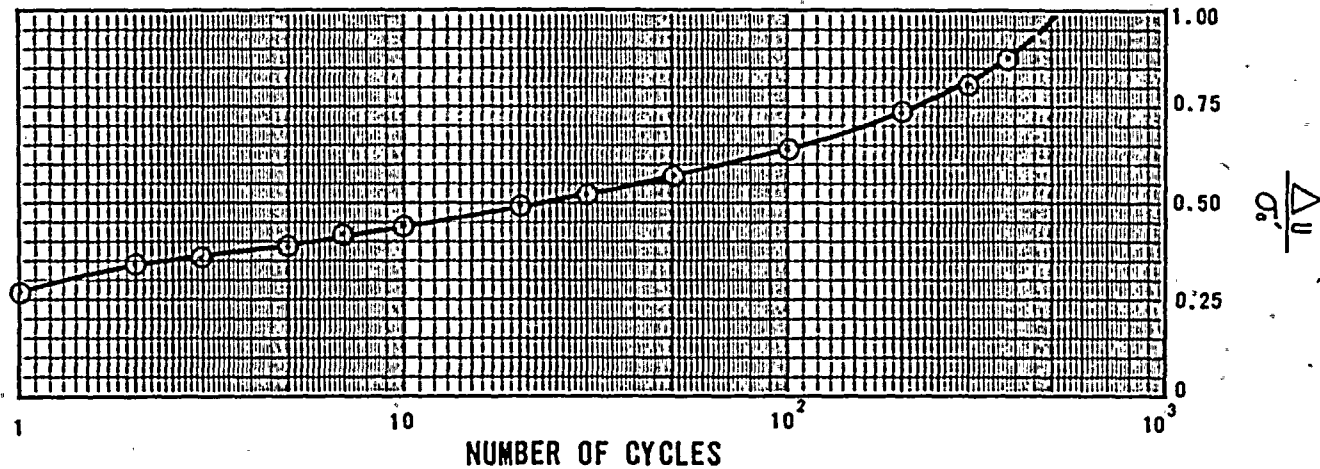
LABORATORY DYNAMIC TEST DATA

2T.21.151



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	4A	39.5-40.33	35	0.40	



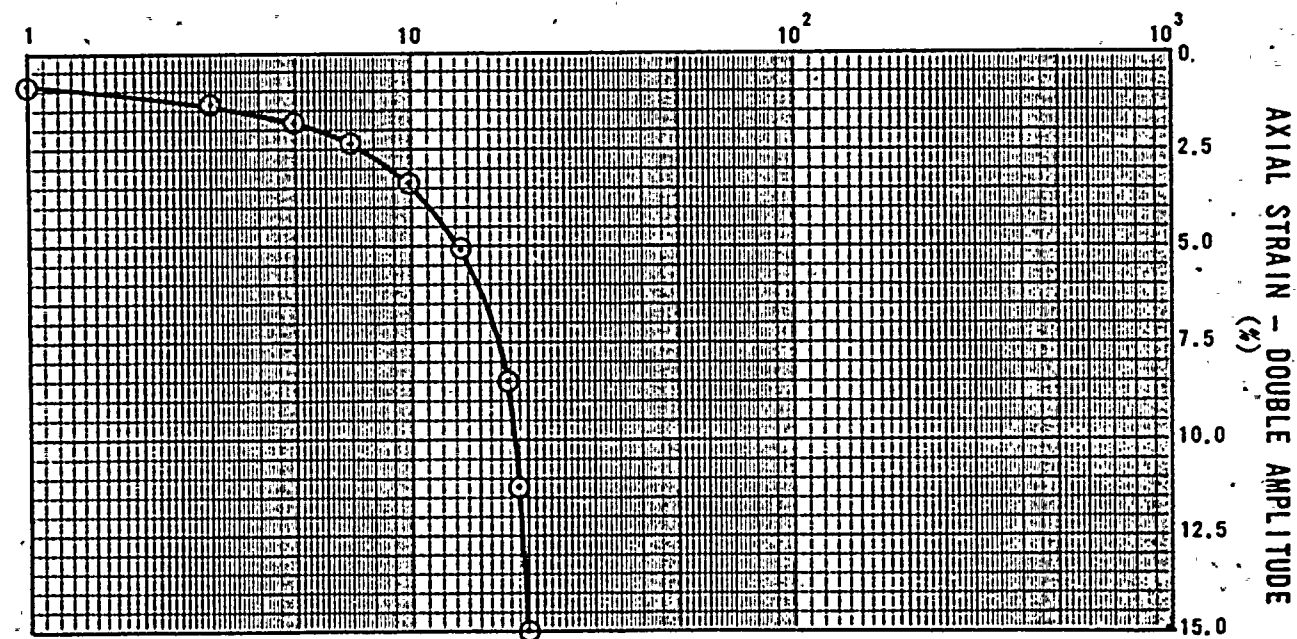
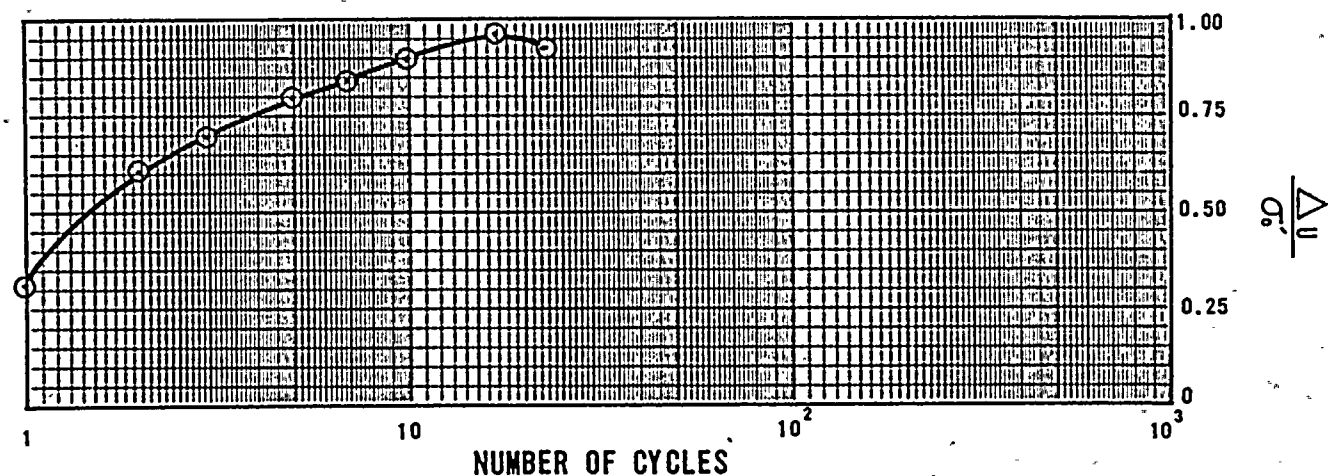
LABORATORY DYNAMIC TEST DATA

2T.21.152

THE  
RECORD  
OF  
THE  
PROCEEDINGS  
OF  
THE  
LEGISLATIVE  
COUNCIL  
OF  
THE  
STATE  
OF  
NEW  
YORK  
IN  
THE  
YEAR  
1898

# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	4B	39.5-40.3	35	0.48	



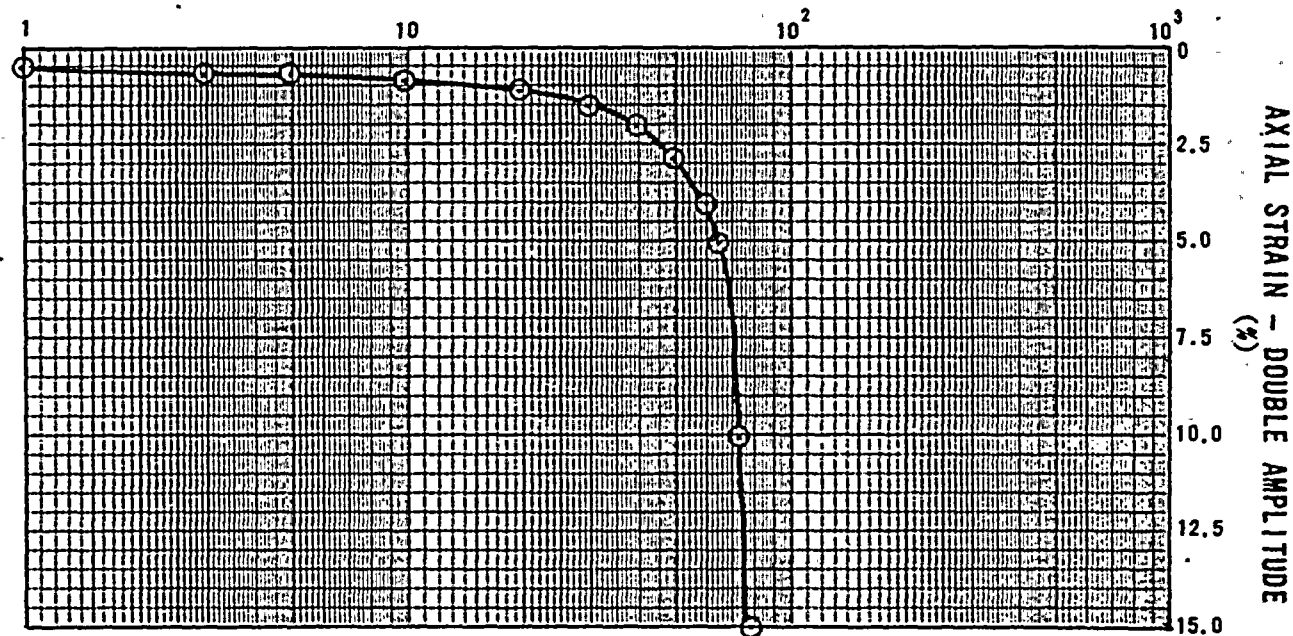
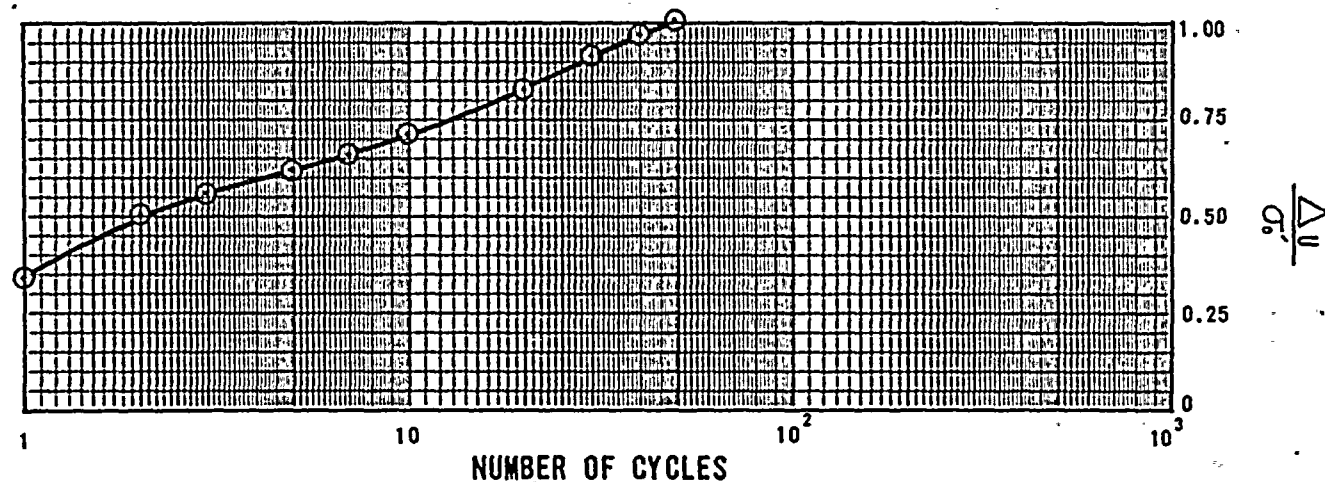
LABORATORY DYNAMIC TEST DATA

2T.21.153



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	4C	39.5-40.3	35	0.45	



LABORATORY DYNAMIC TEST DATA

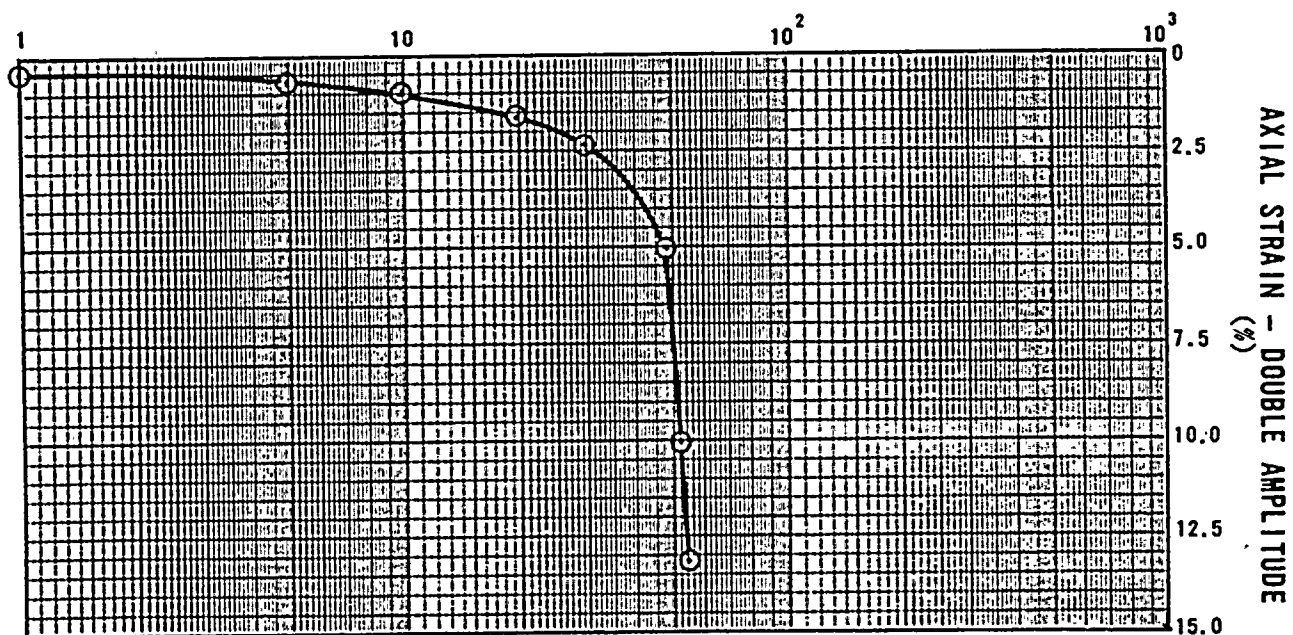
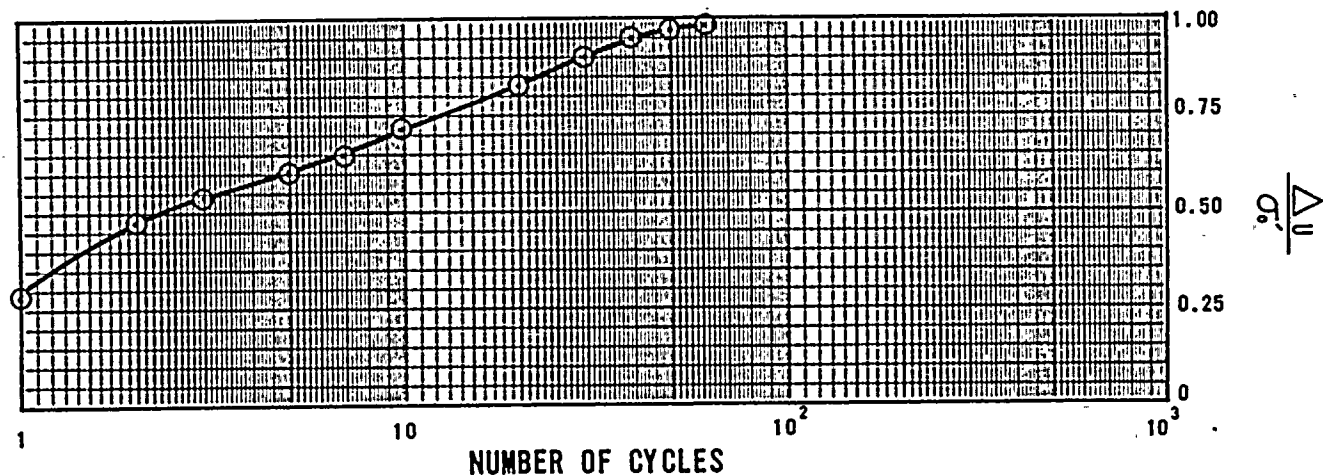
2T.21.154





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

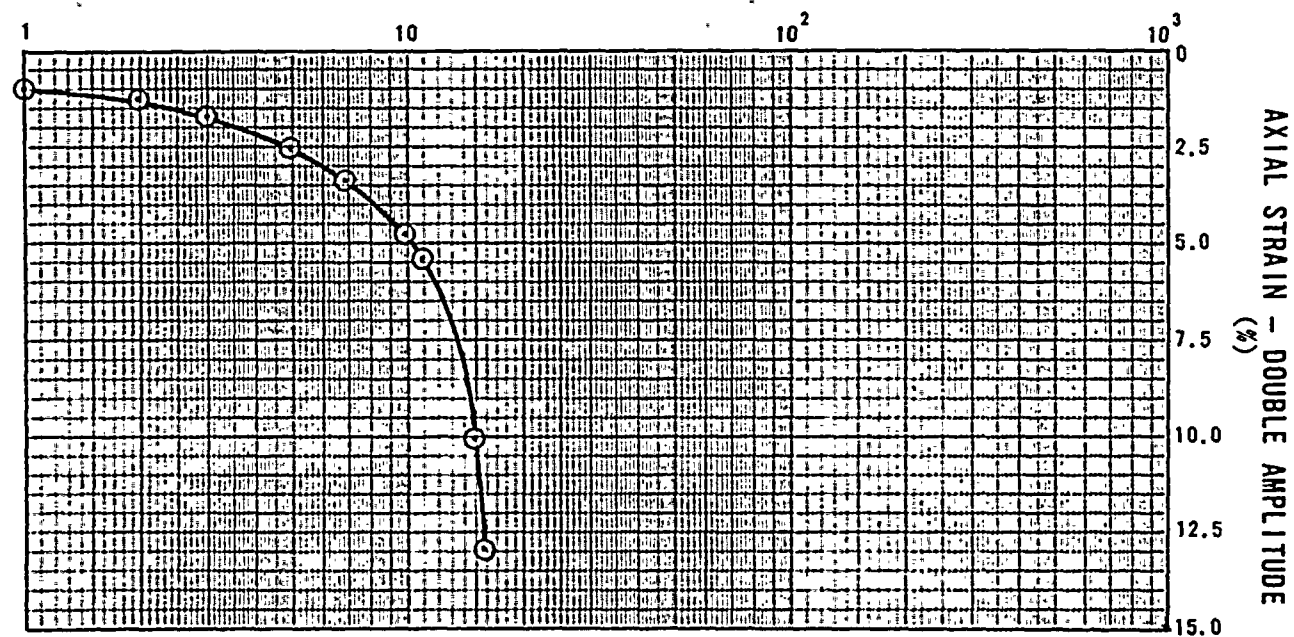
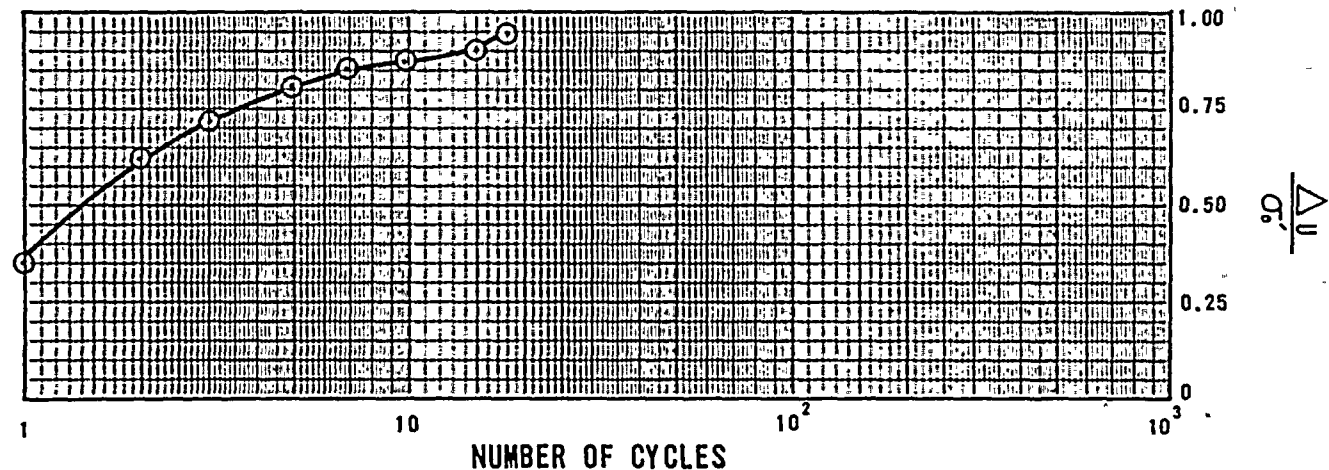
BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma'_{dc}/2\sigma'_0$	
U2-LB-1	4D	39.5-40.3	35	0.50	

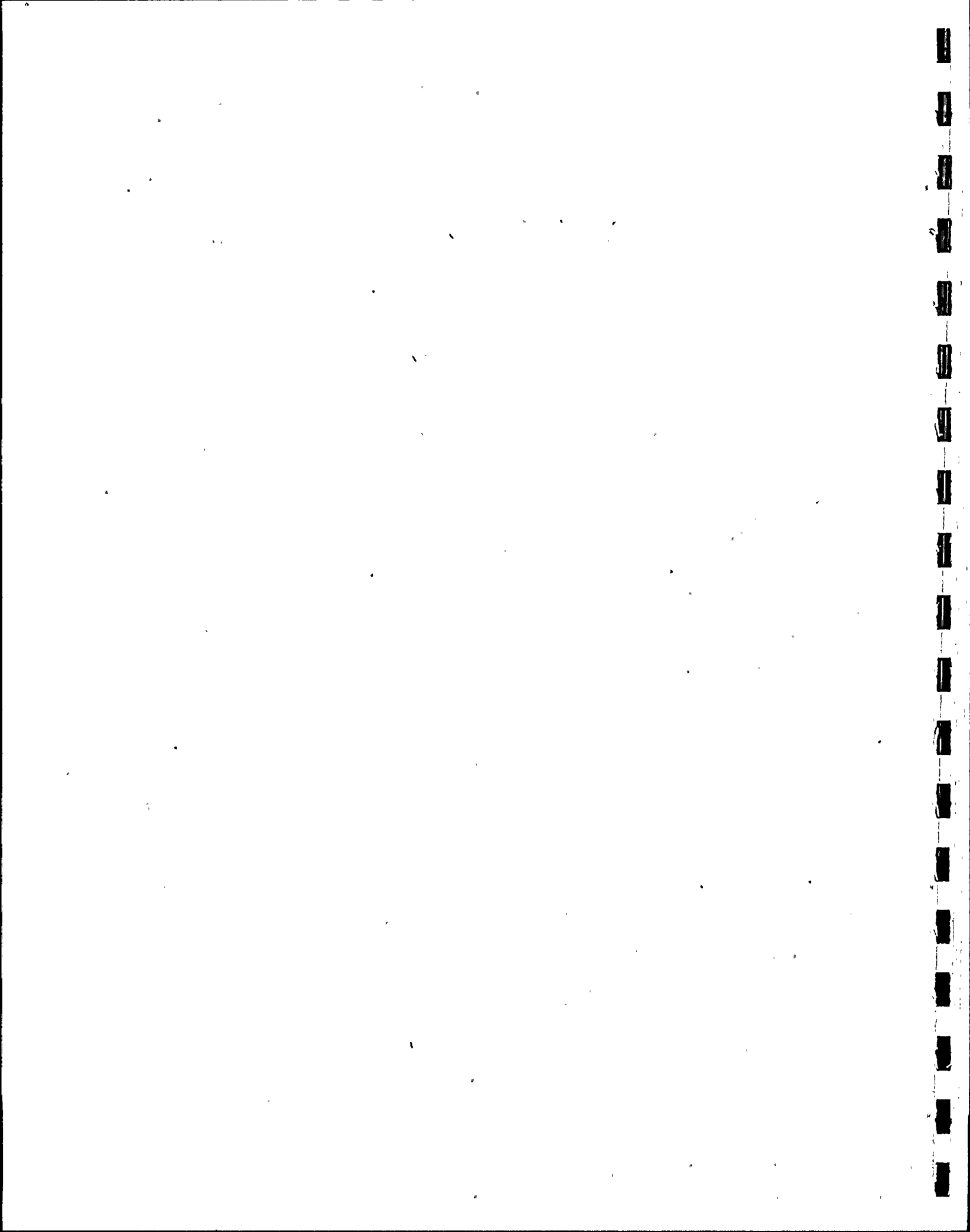




# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

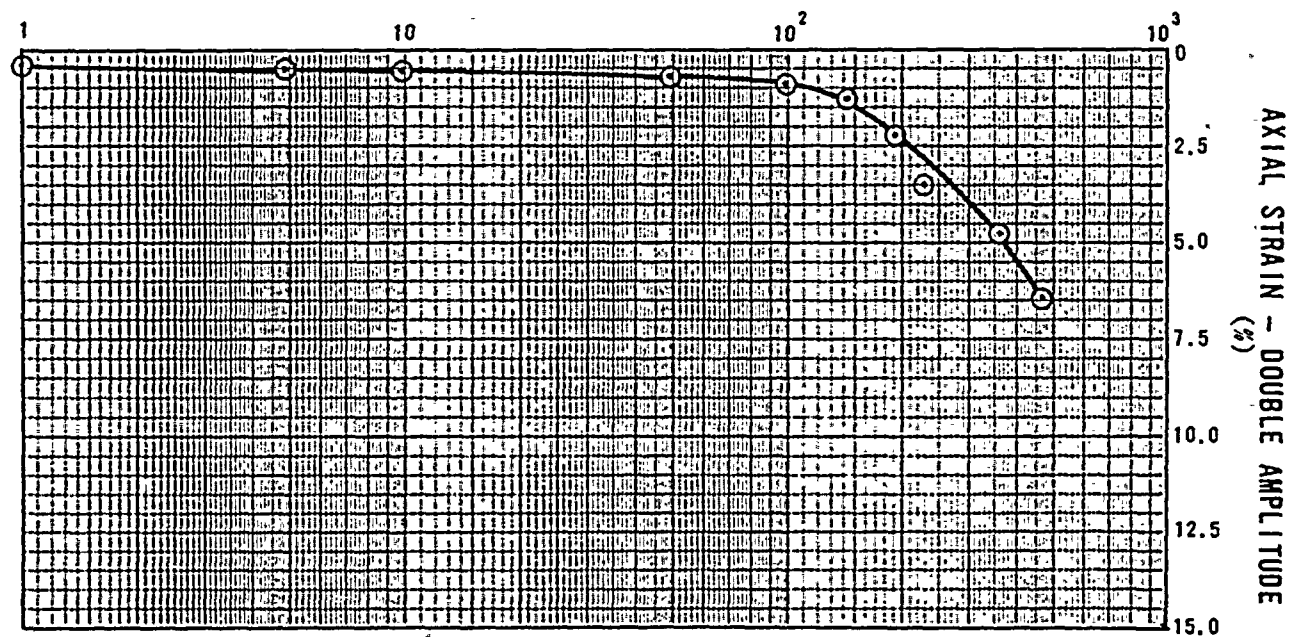
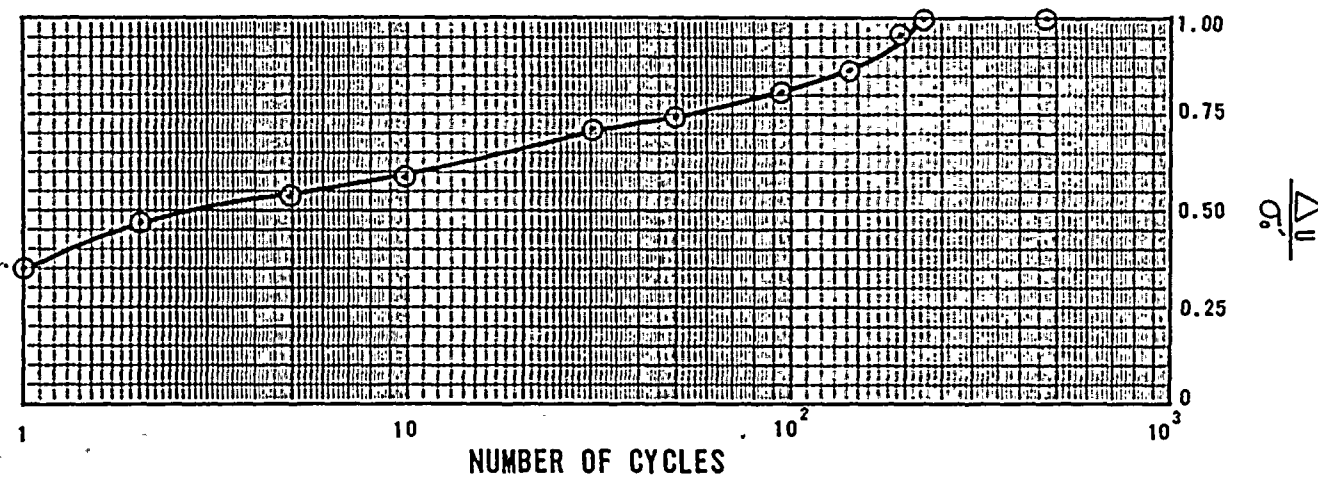
BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	5B	39.5-40.3	35	0.45	





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	7A	39.5-40.3	35	0.4	



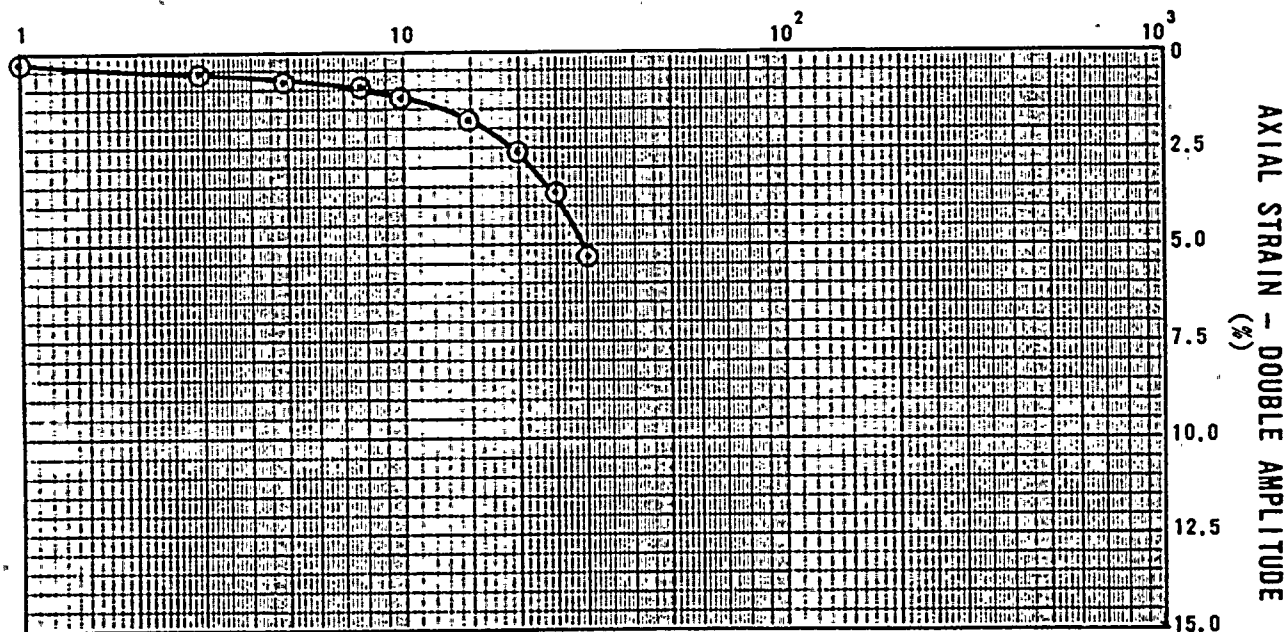
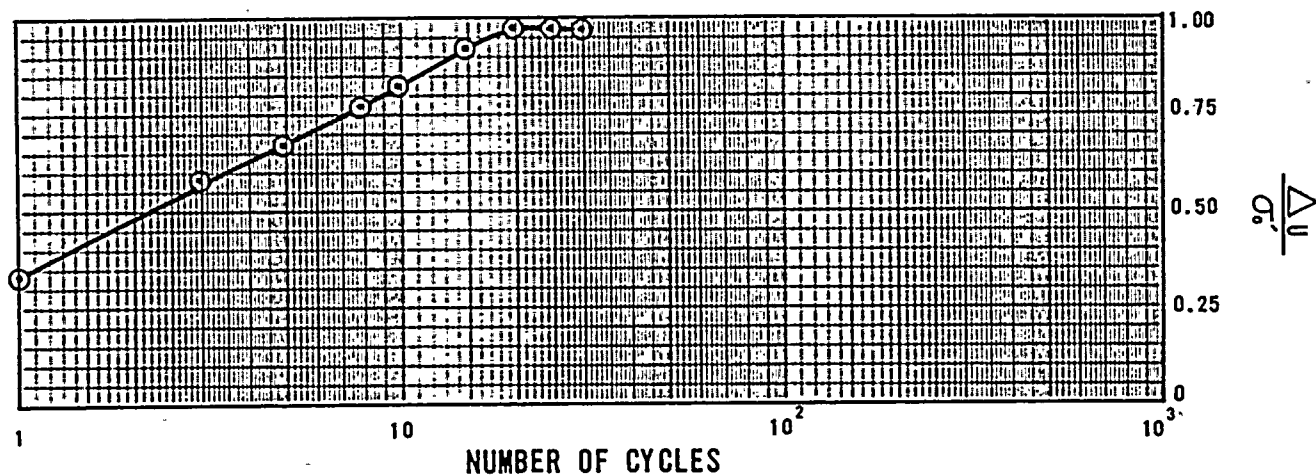
LABORATORY DYNAMIC TEST DATA

2T.21.157



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_o$ (PSI)	$\sigma_{dc}/2\sigma'_o$	
U3-LB-1	10A	30.7-31.8	26.0	0.43	



LABORATORY DYNAMIC TEST DATA

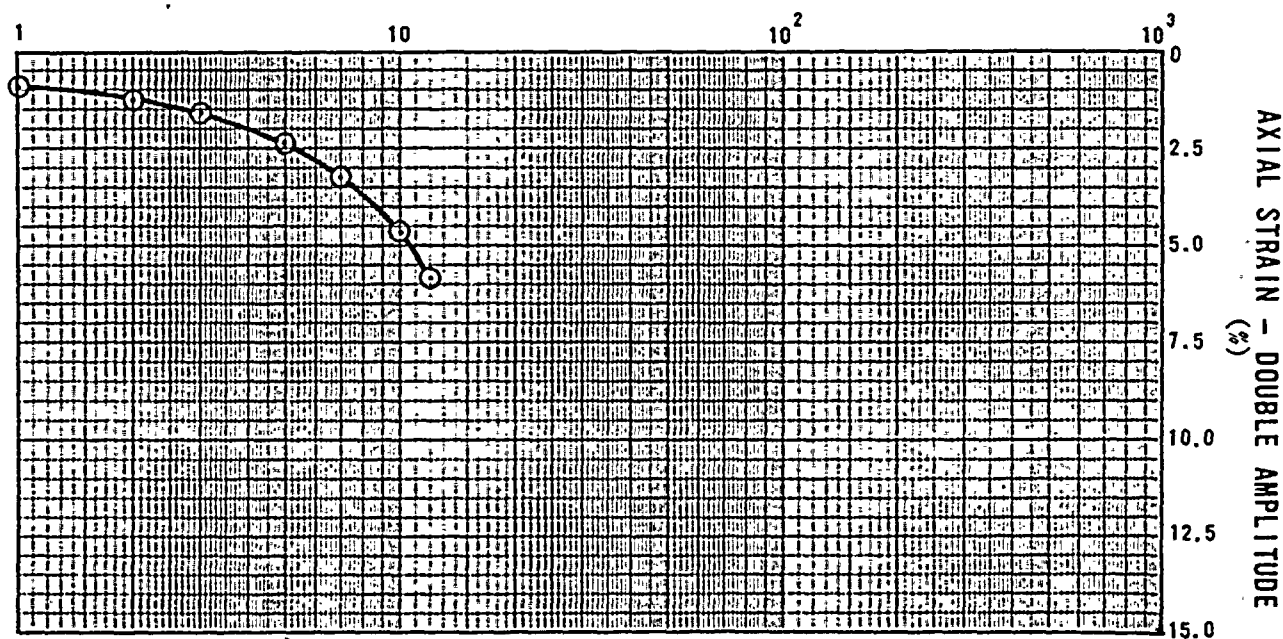
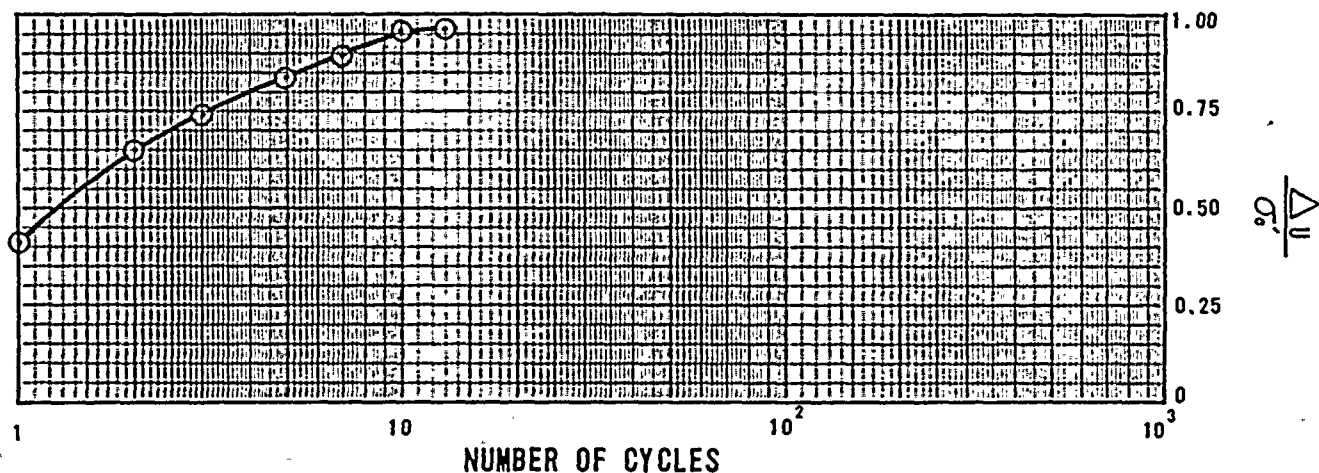
2T.21.158





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-LB-1	10B	30.7-31.8	26.0	0.48	



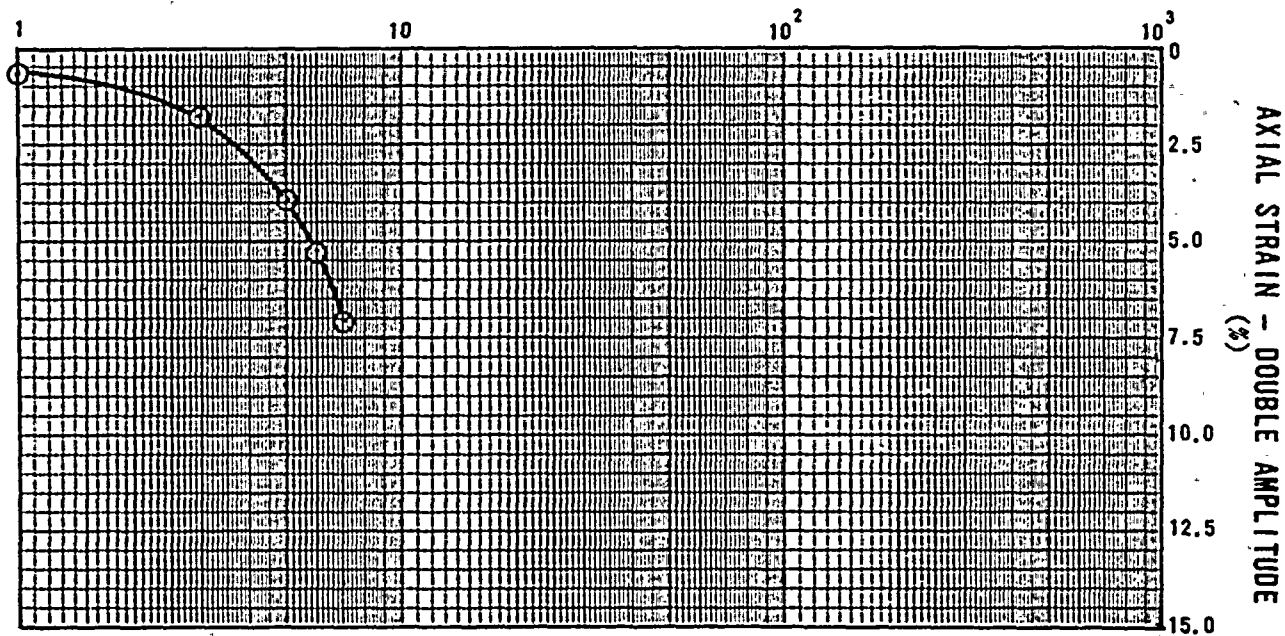
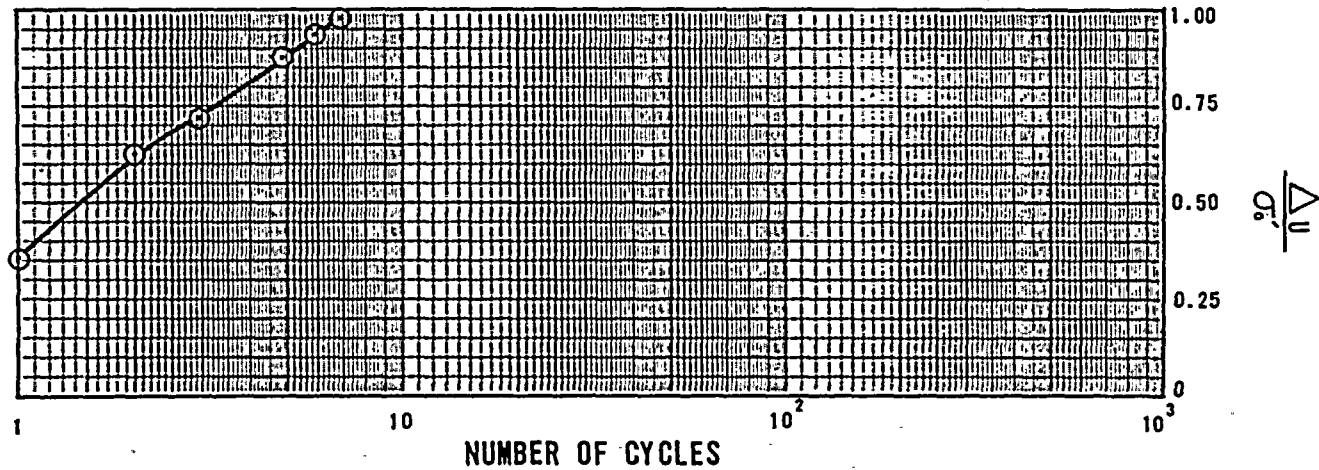
LABORATORY DYNAMIC TEST DATA

2F.21.159



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-LB-2	12A	34.4-35.0	28.0	0.40	



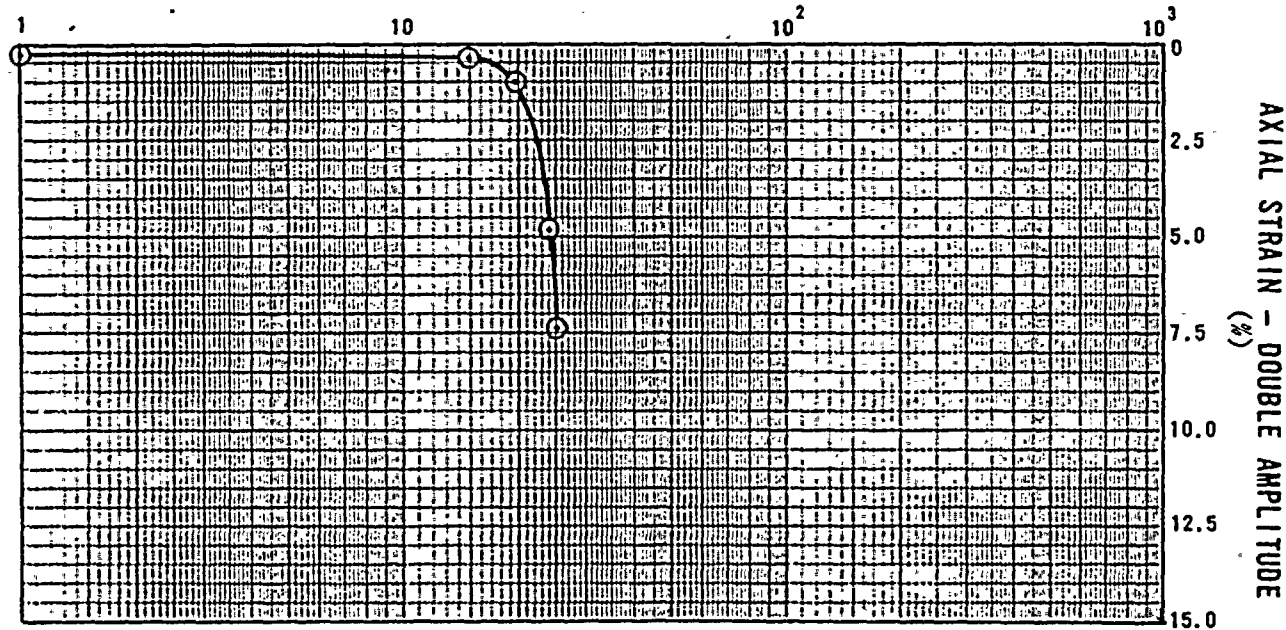
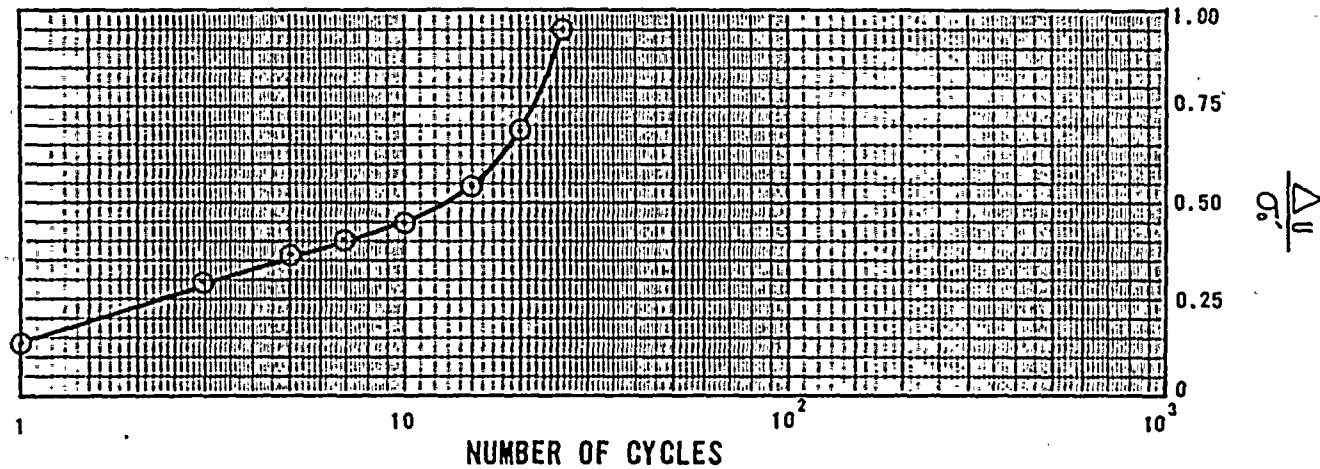
LABORATORY DYNAMIC TEST DATA

2F.21.160



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-LB-2	13	34.9-35.6	30	0.25	



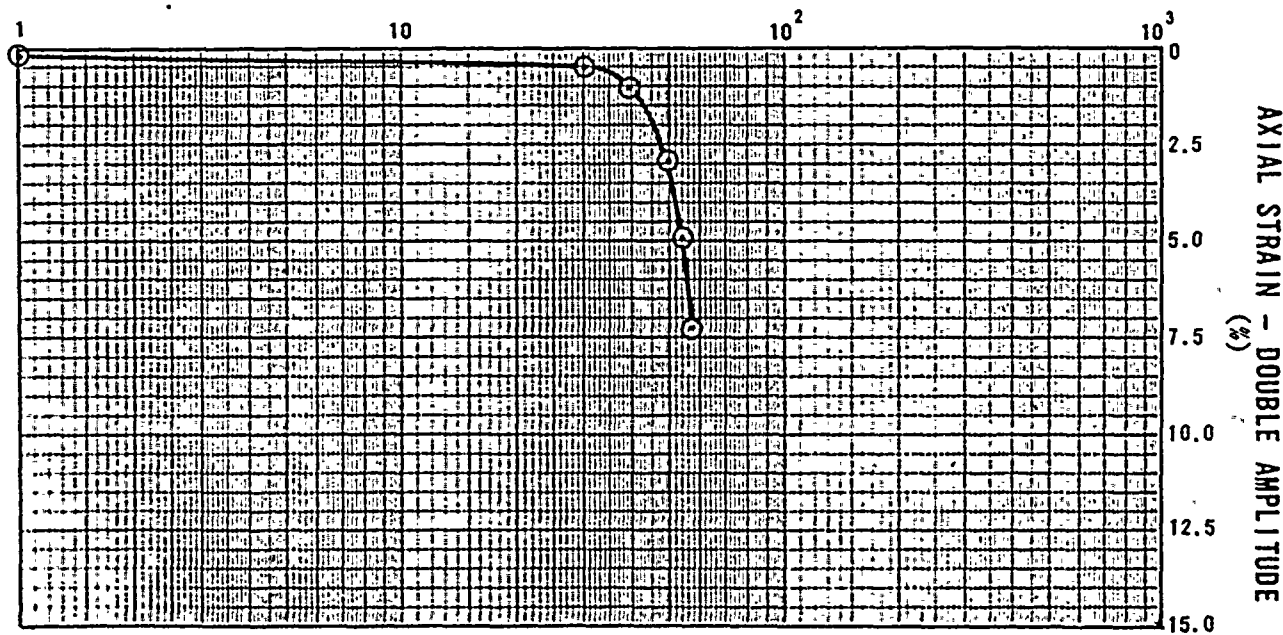
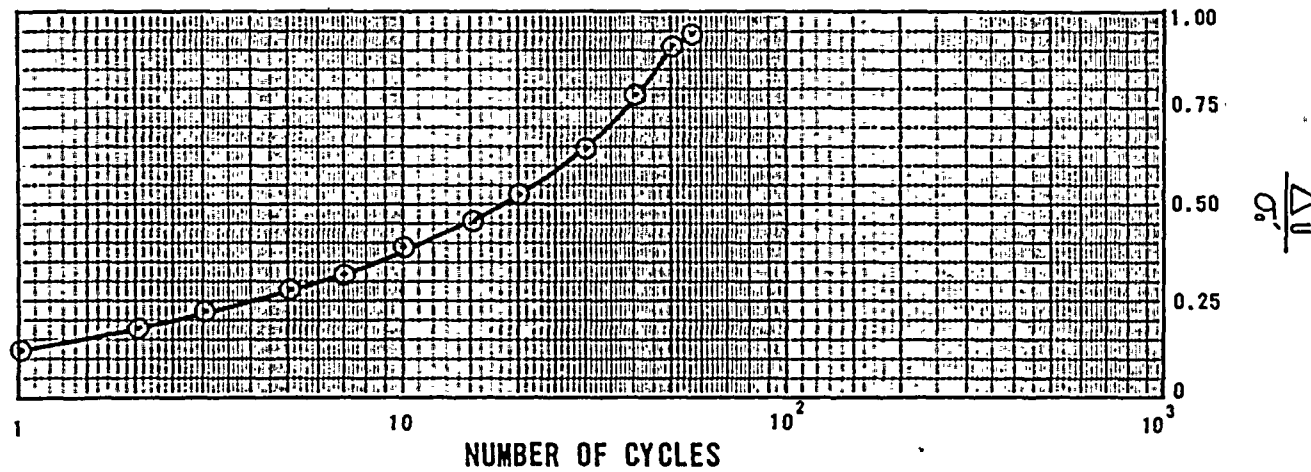
LABORATORY DYNAMIC TEST DATA

2F.21.161



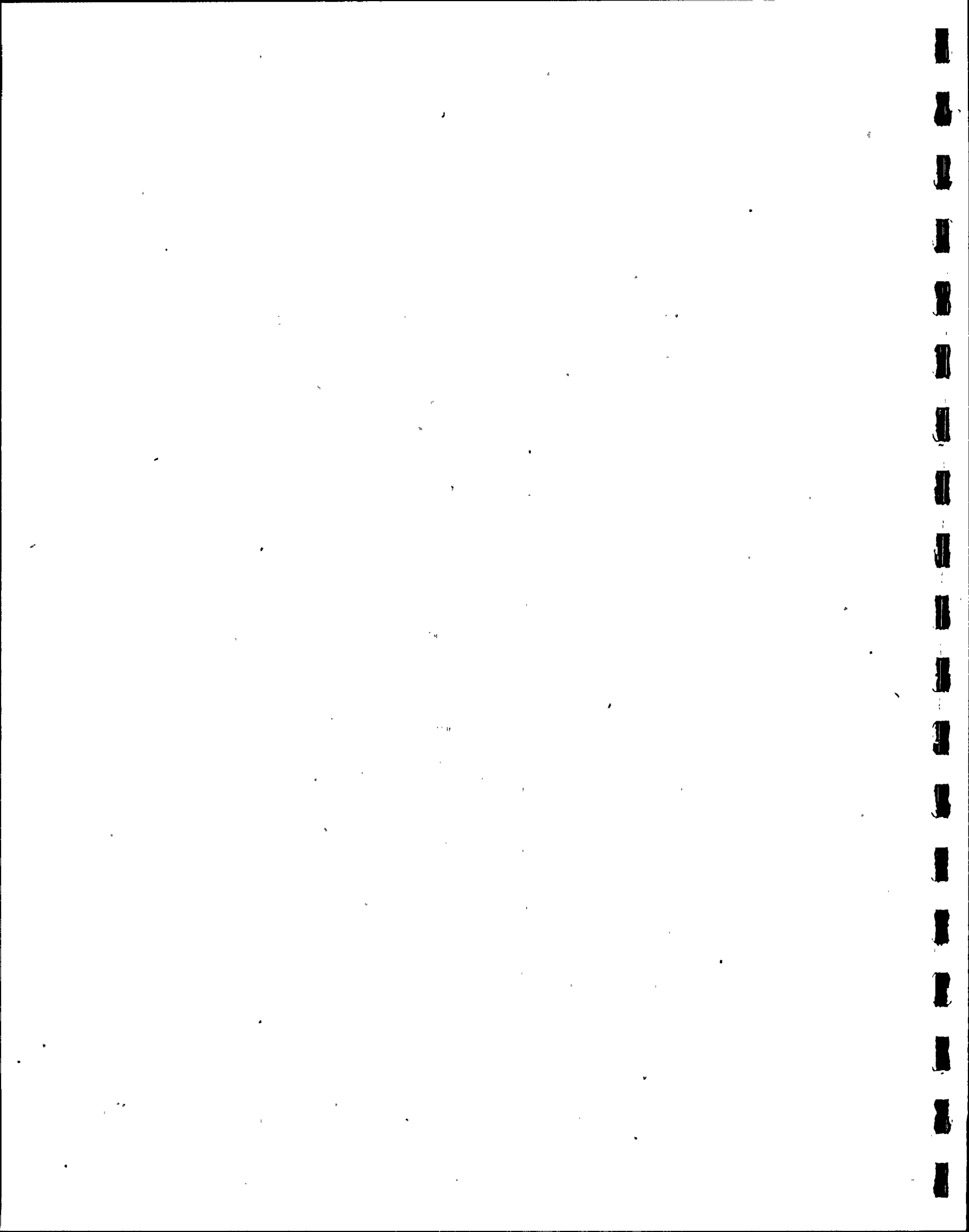
# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-LB-1	15A	35.9-36.7	30.0	0.40	



LABORATORY DYNAMIC TEST DATA

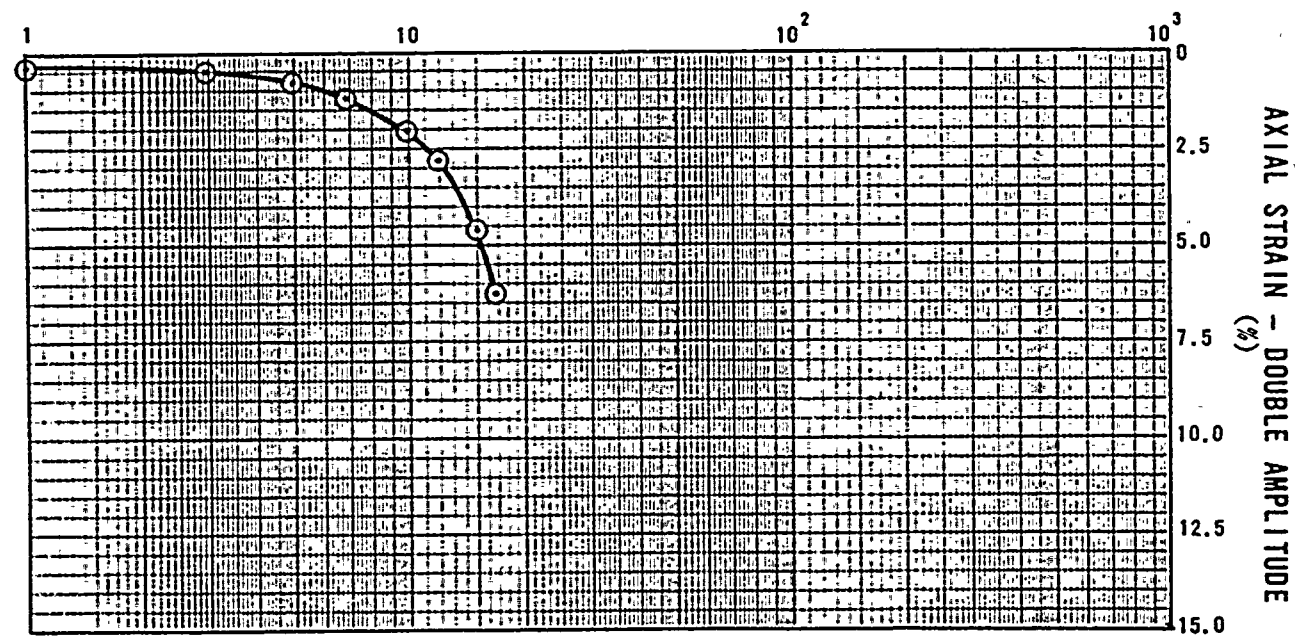
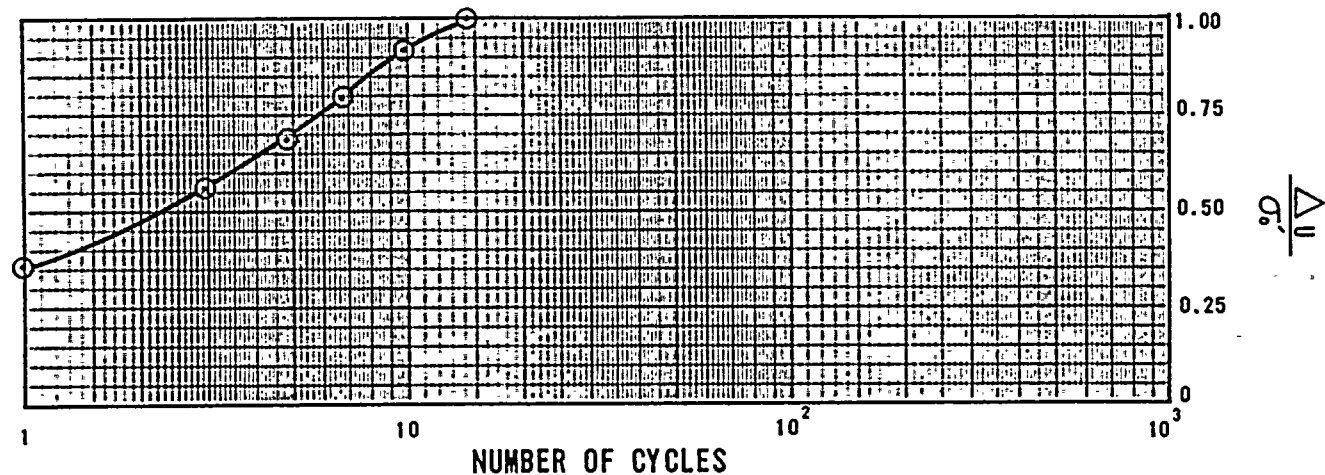
2T.21.162





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-LB-2	15B	35.9-36.7	30.0	0.43	



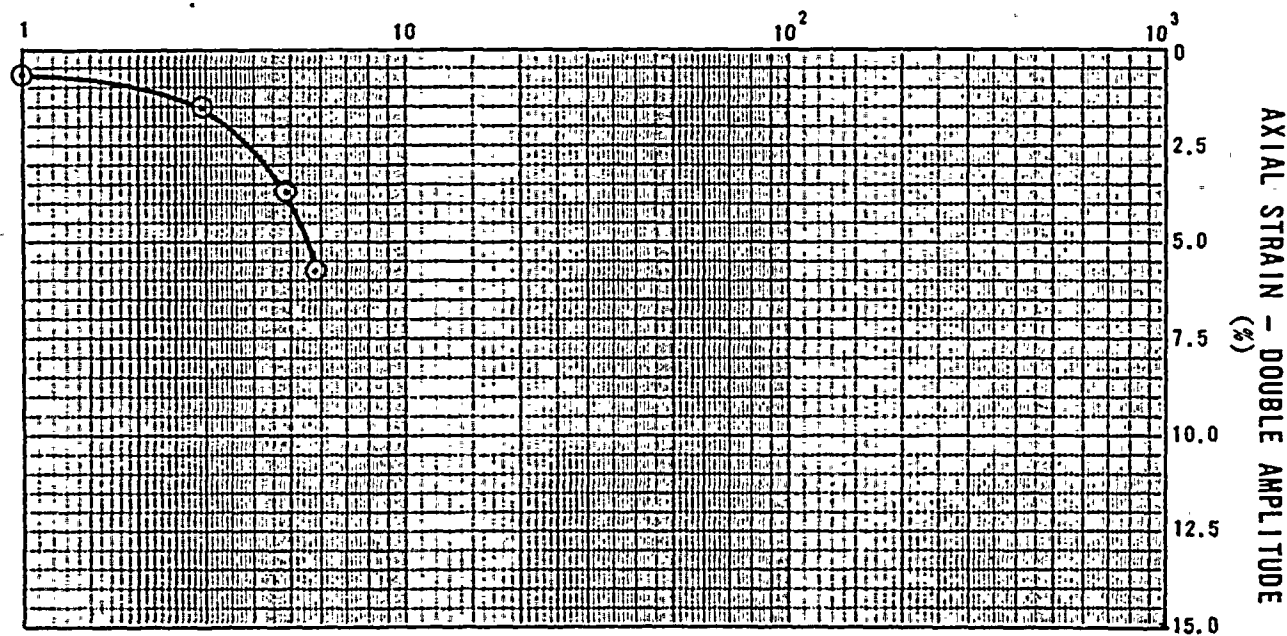
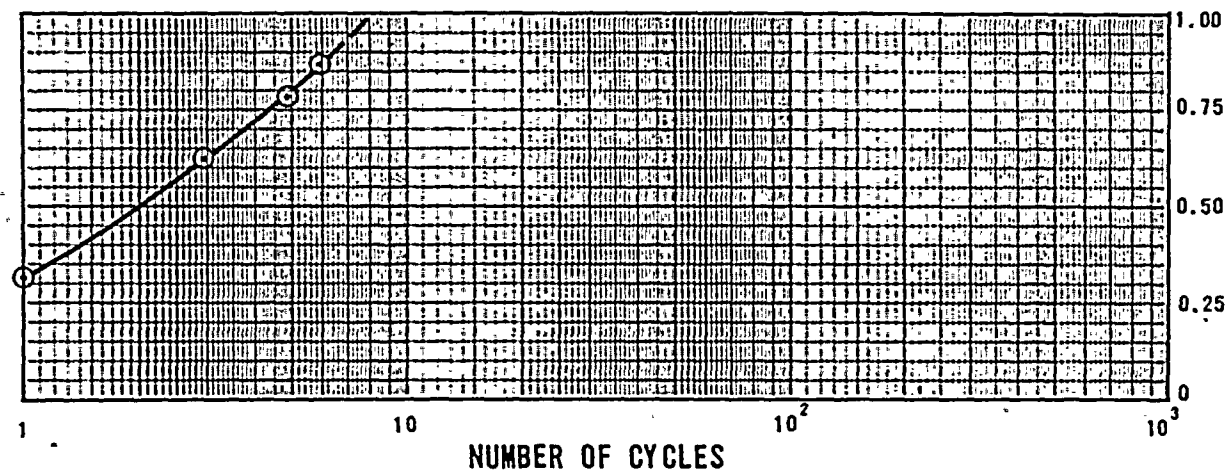
LABORATORY DYNAMIC TEST DATA

2F.21.163



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-LB-2	16	36.8-37.6	32.0	0.25	



Note: Results not used due to excessive disturbance during sampling.

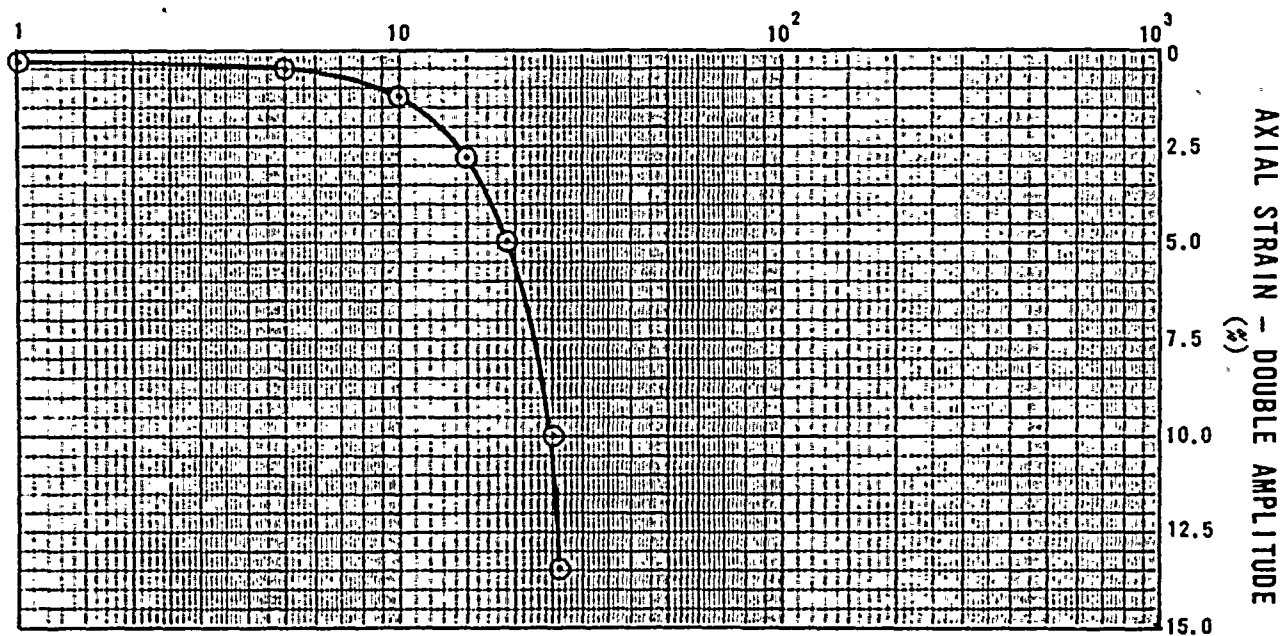
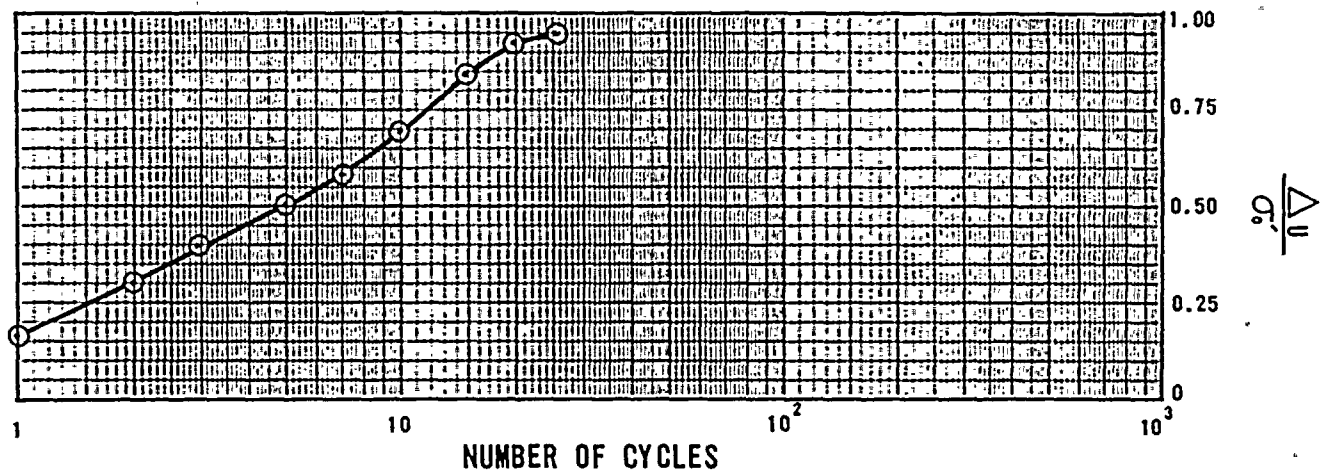
LABORATORY DYNAMIC TEST DATA

2P.21.164



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	18A	43-43.8	37.0	0.30	



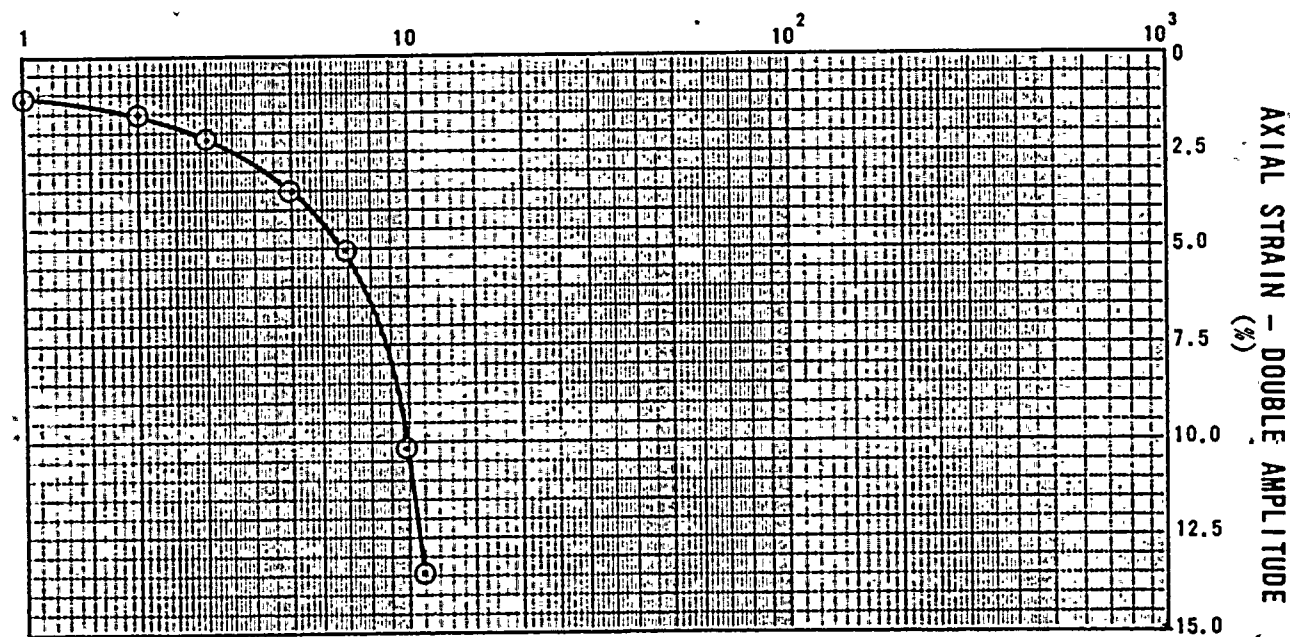
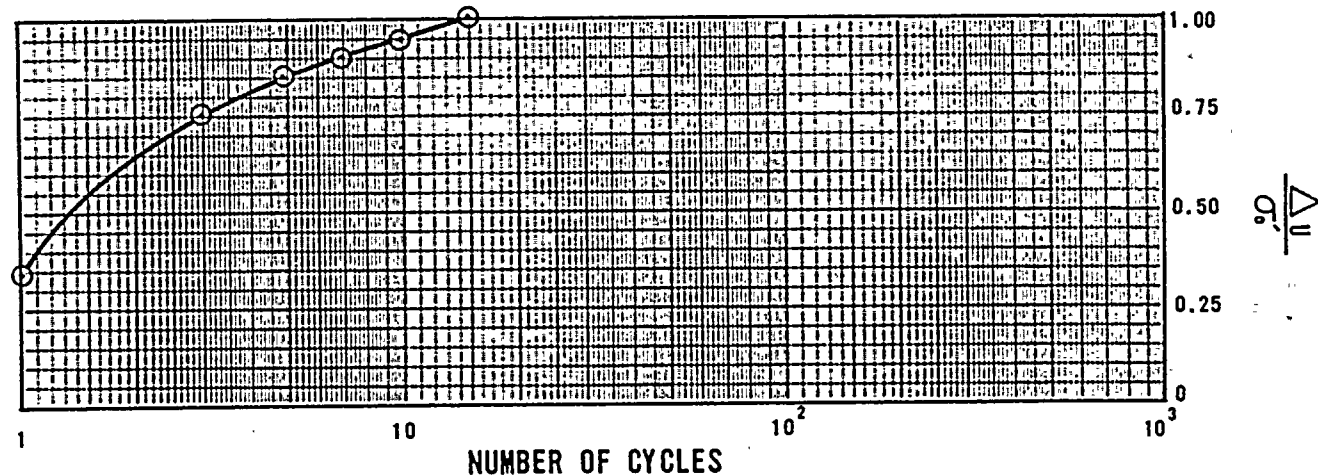
LABORATORY DYNAMIC TEST DATA

27.21.165



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_o$ (PSI)	$\sigma_{dc}/2\sigma'_o$	
U2-LB-1	18B	43-43.8	37.0	0.35	



LABORATORY DYNAMIC TEST DATA

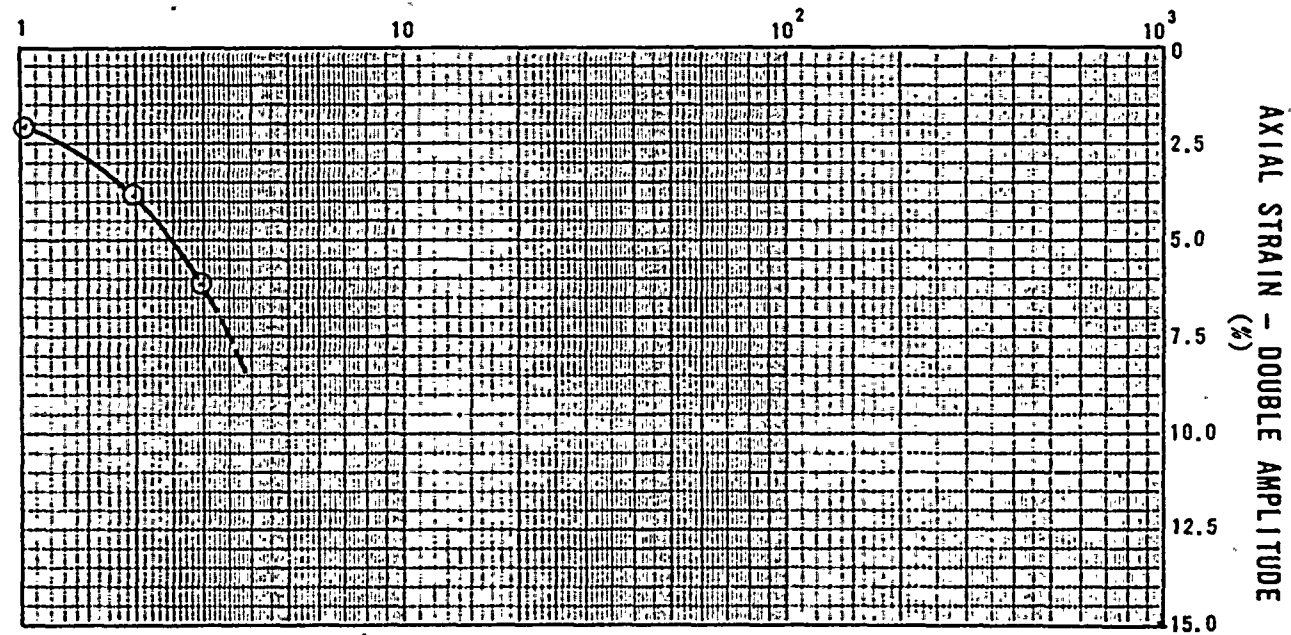
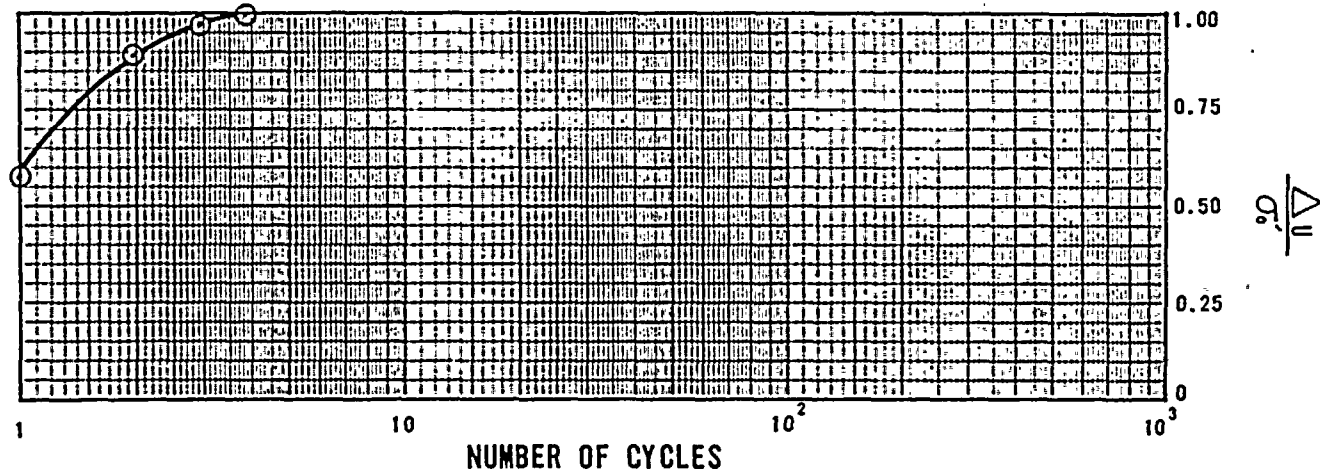
2F.21.166





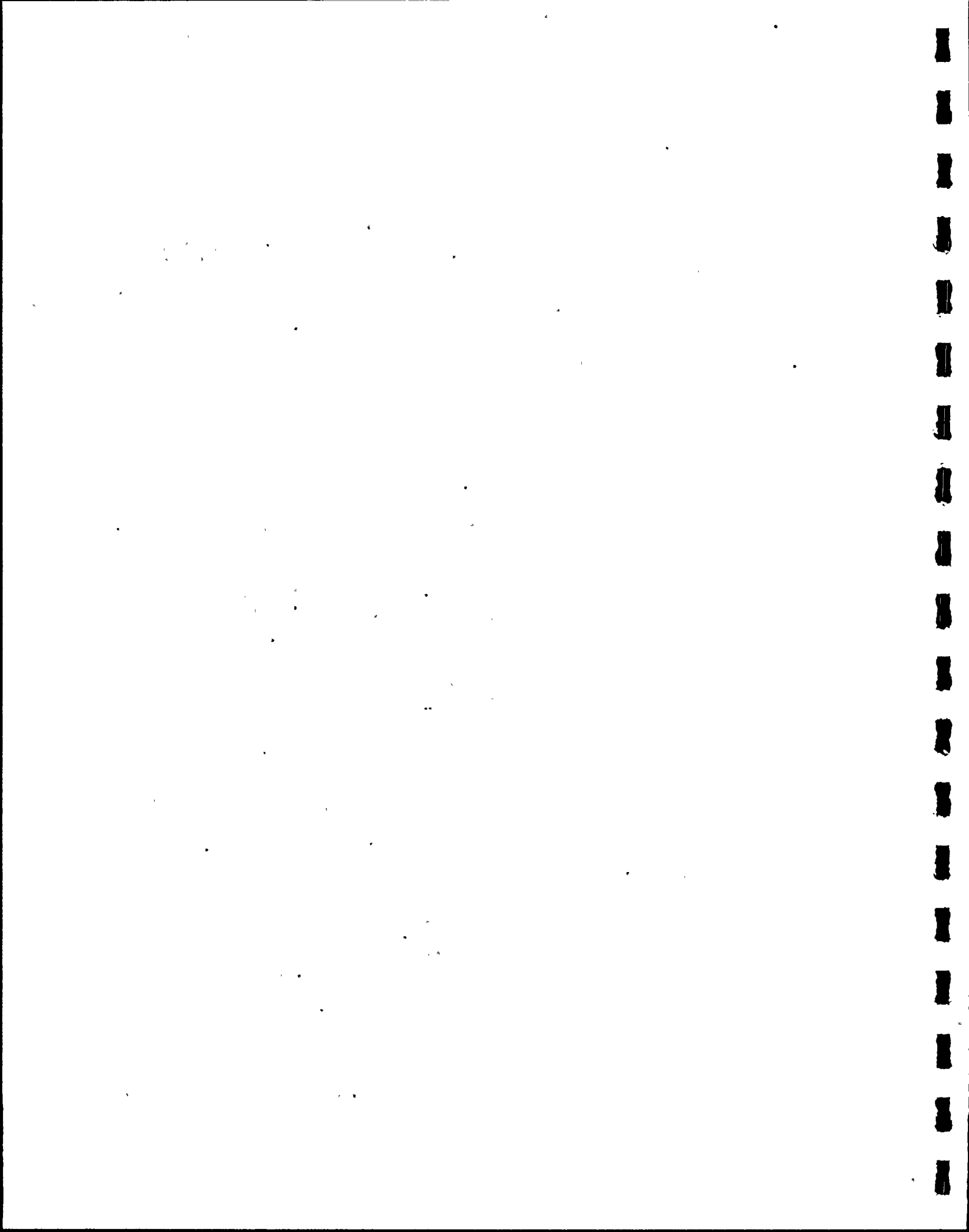
# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-LB-2	19C	36	31.0	0.30	



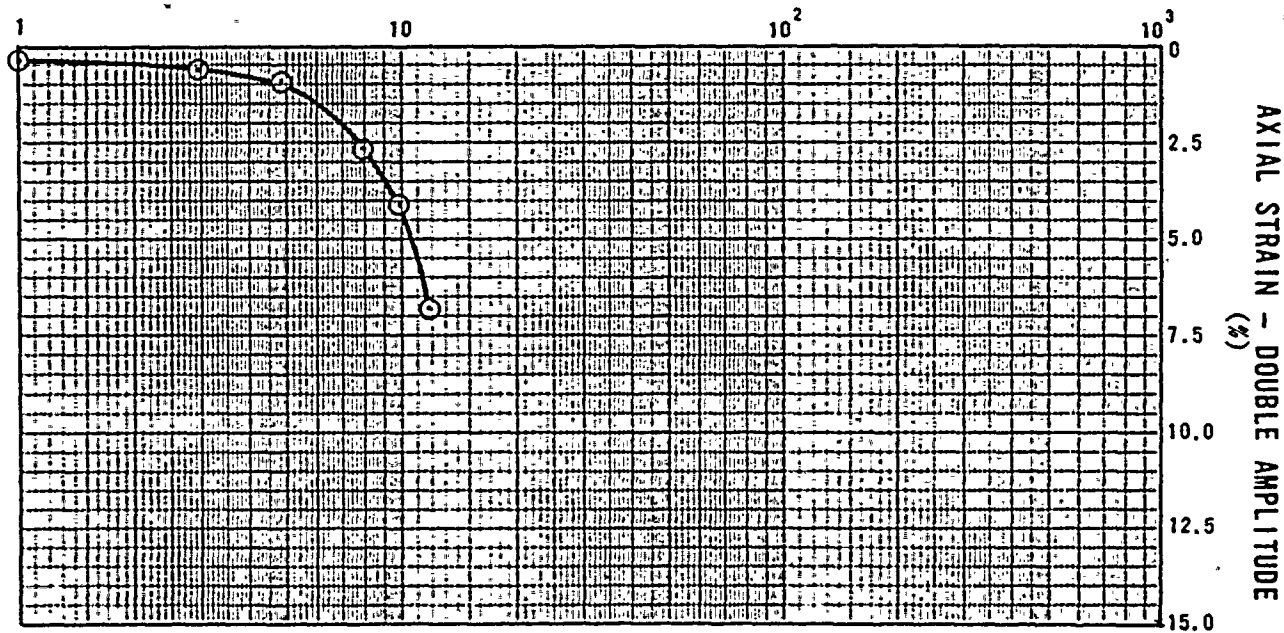
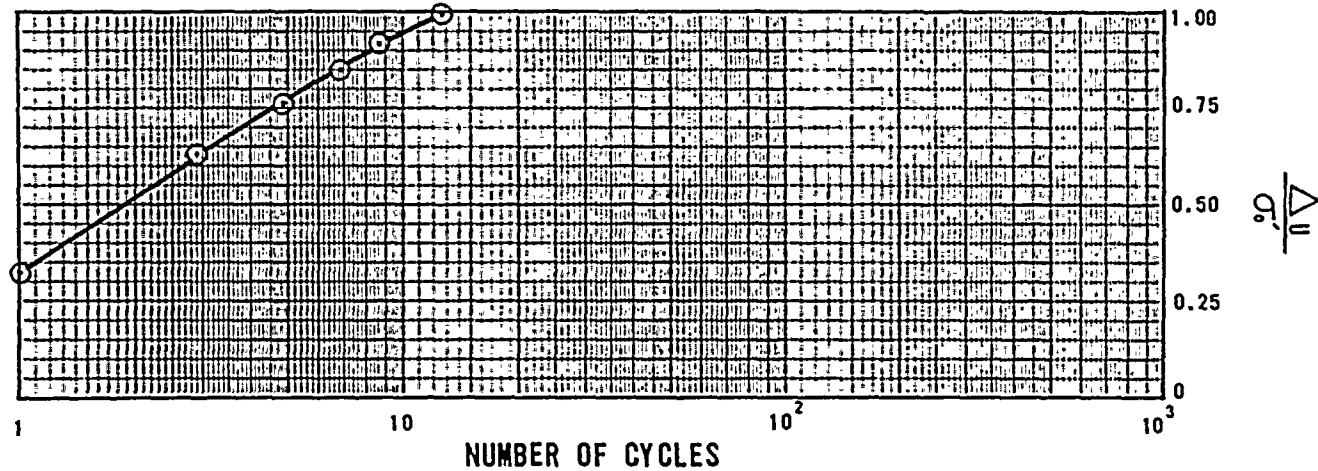
LABORATORY DYNAMIC TEST DATA

2T.21.167



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_o$ (PSI)	$\sigma_{dc}/2\sigma'_o$	
U2-LB-1	20	43.7-44.5	38.0	0.25	



LABORATORY DYNAMIC TEST DATA

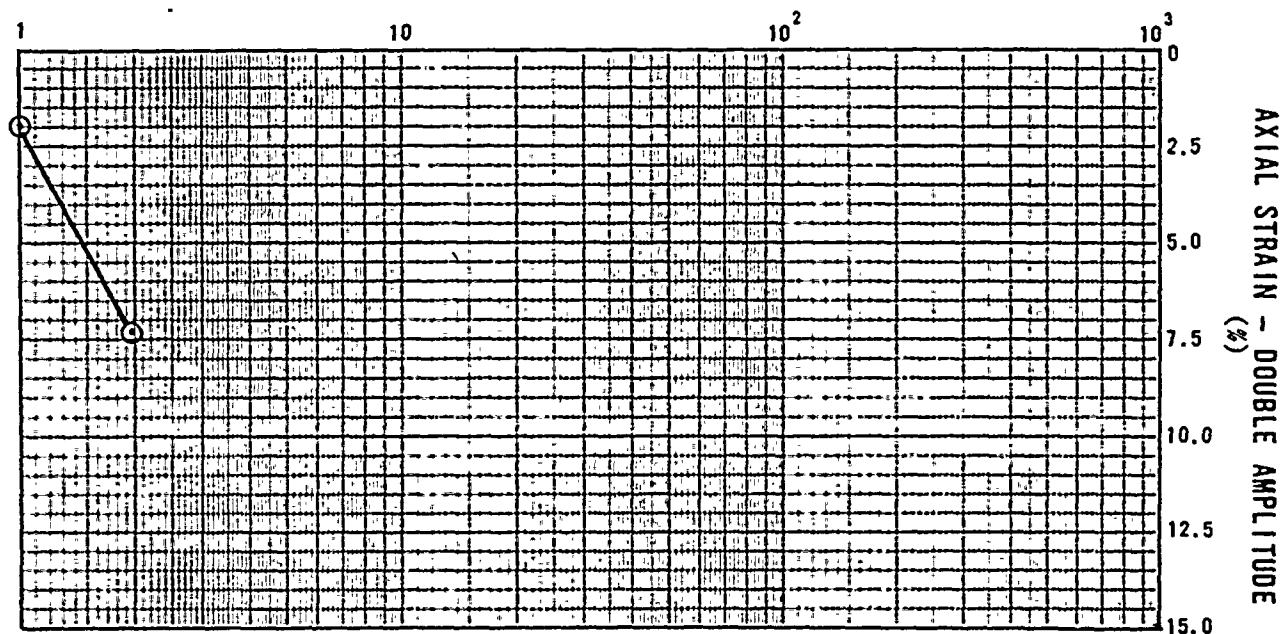
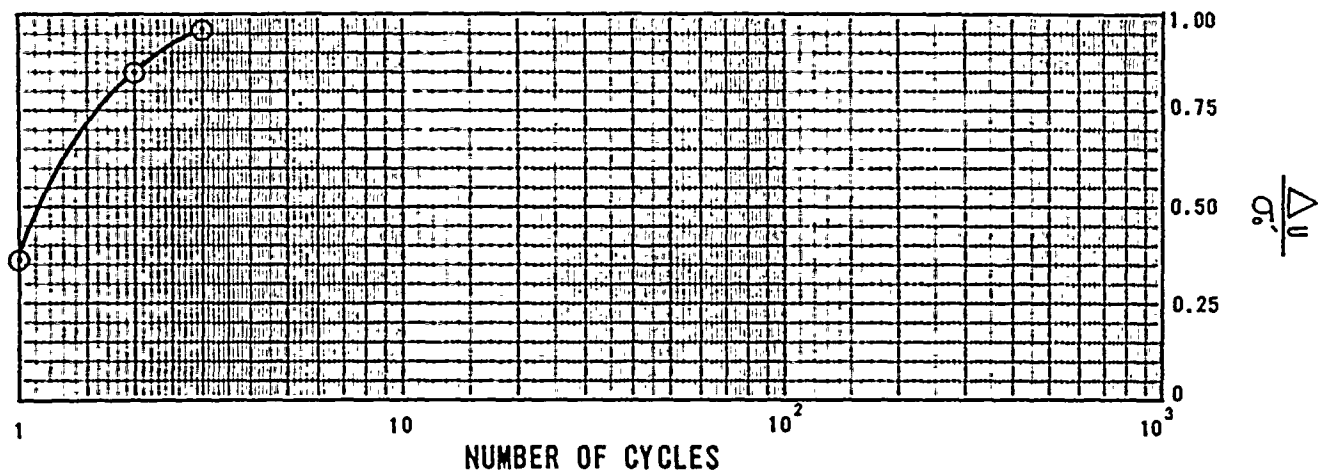
2F. 21.168



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U3-LB-2	23C	38.2-39.1	34.0	0.25	

Note: Results not used due to sample necking.



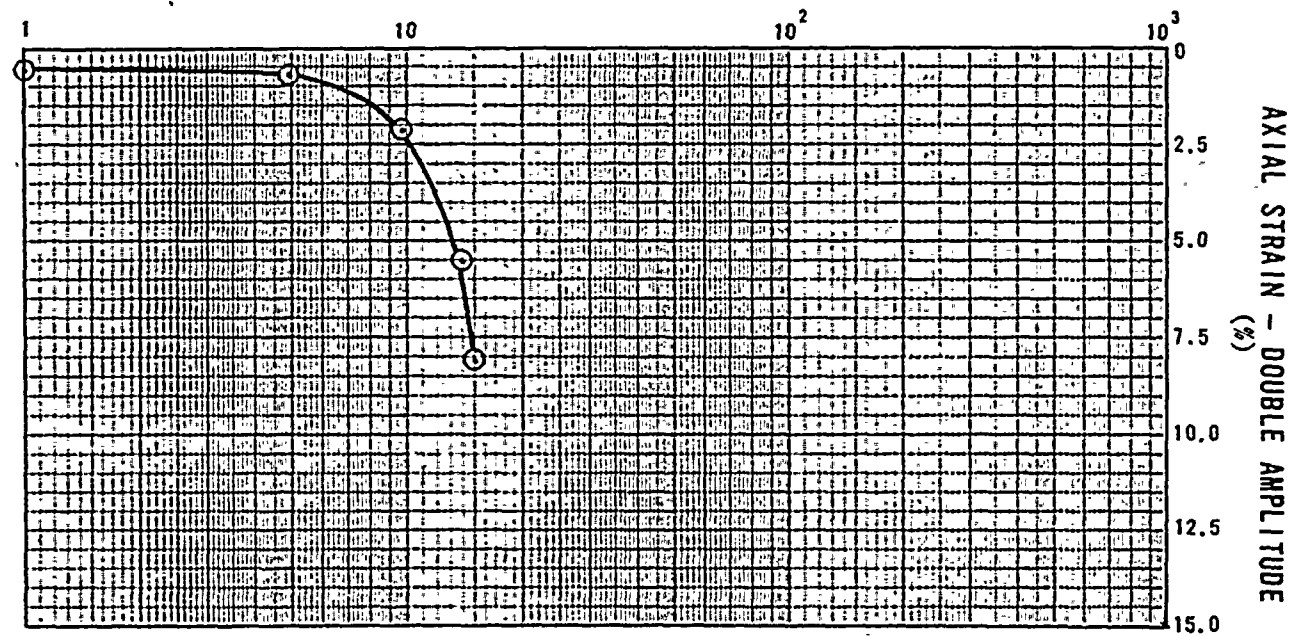
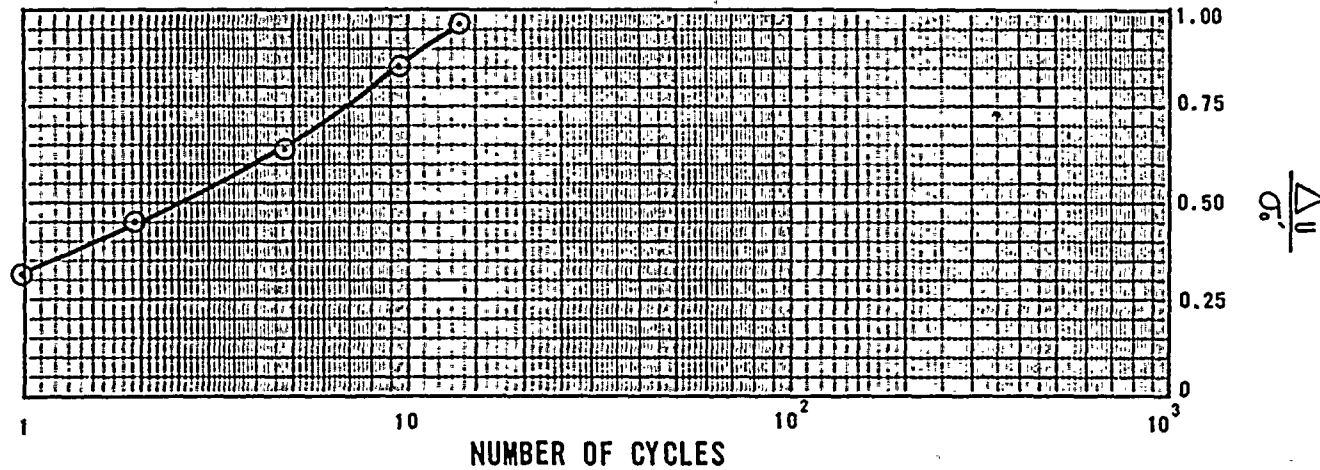
LABORATORY DYNAMIC TEST DATA

2T.21.169



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
U2-LB-1	24	44.7-45.6	39.0	0.25	



LABORATORY DYNAMIC TESTING DATA

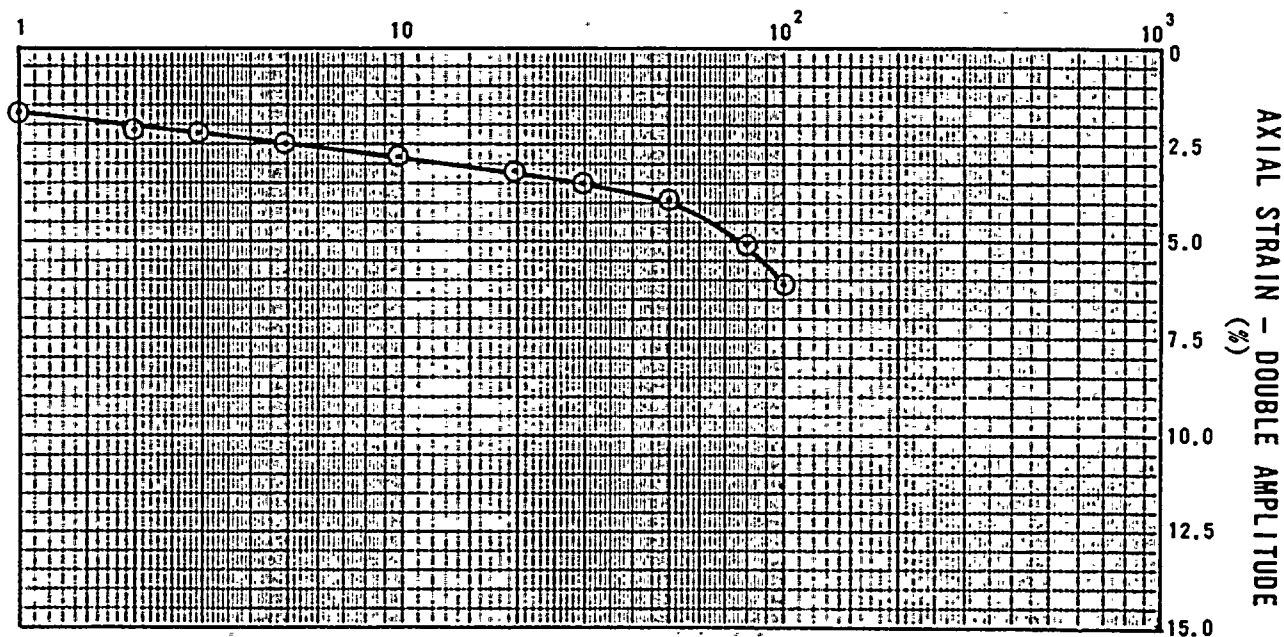
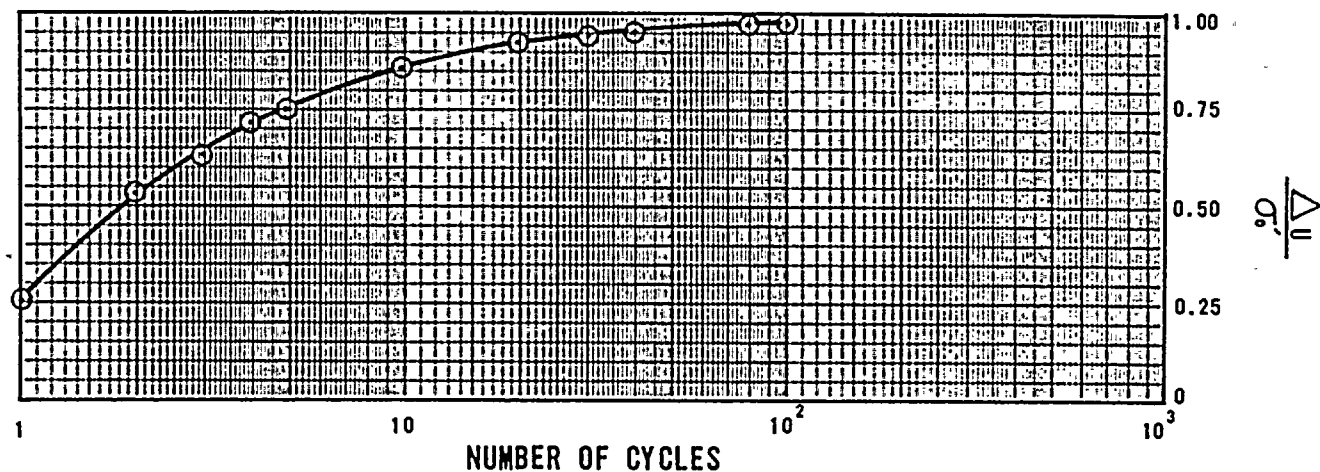
24.21.170





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

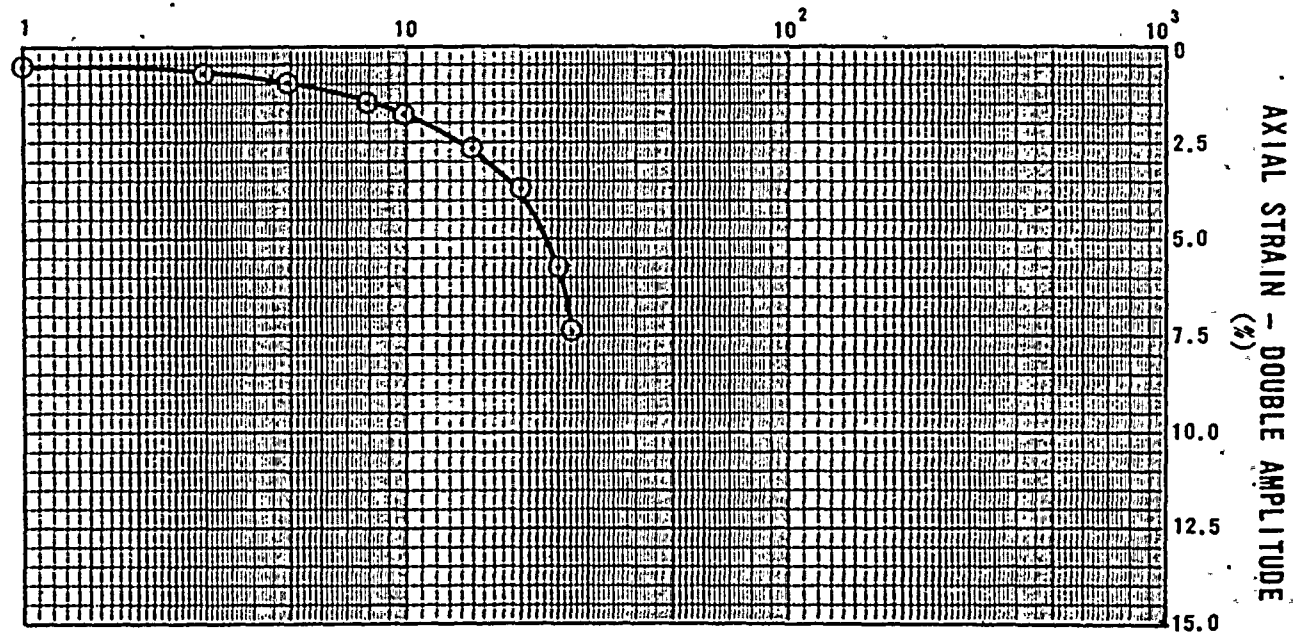
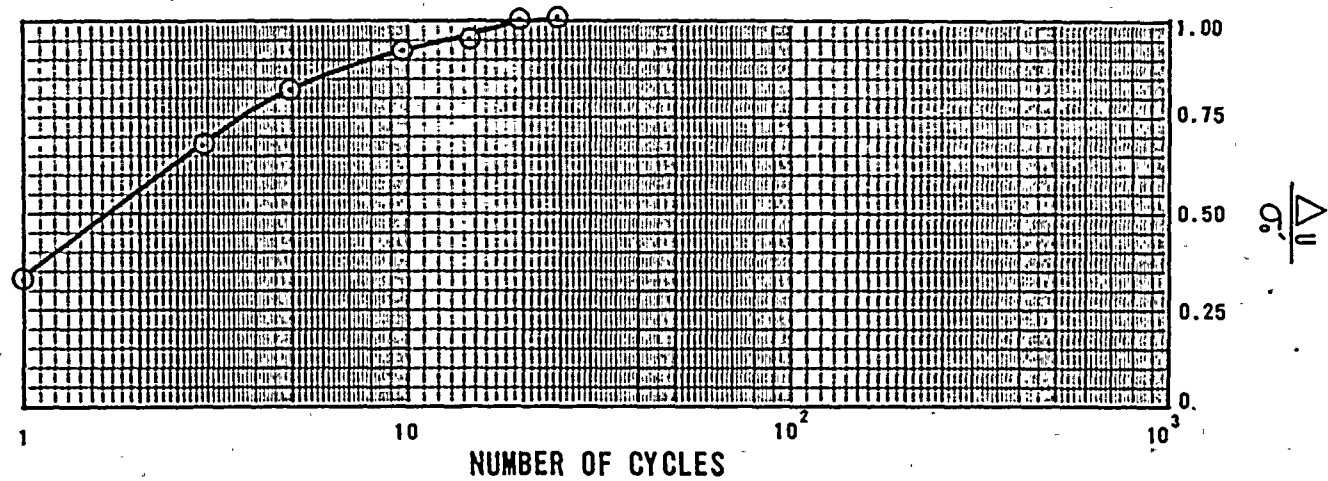
BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
L10 TRENCH	4RA	19-20	17.0	0.375	





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_o$ (PSI)	$\sigma_{dc}/2\sigma'_o$	
LIQ TRENCH	4RB	19-20	17.0	0.43	



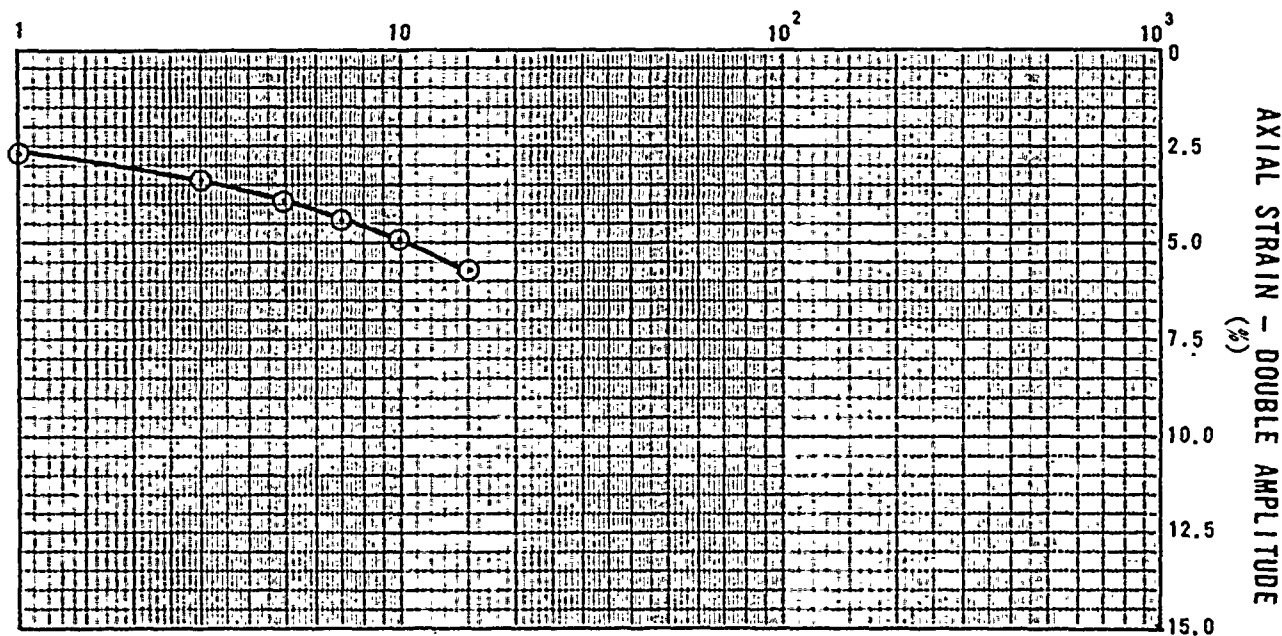
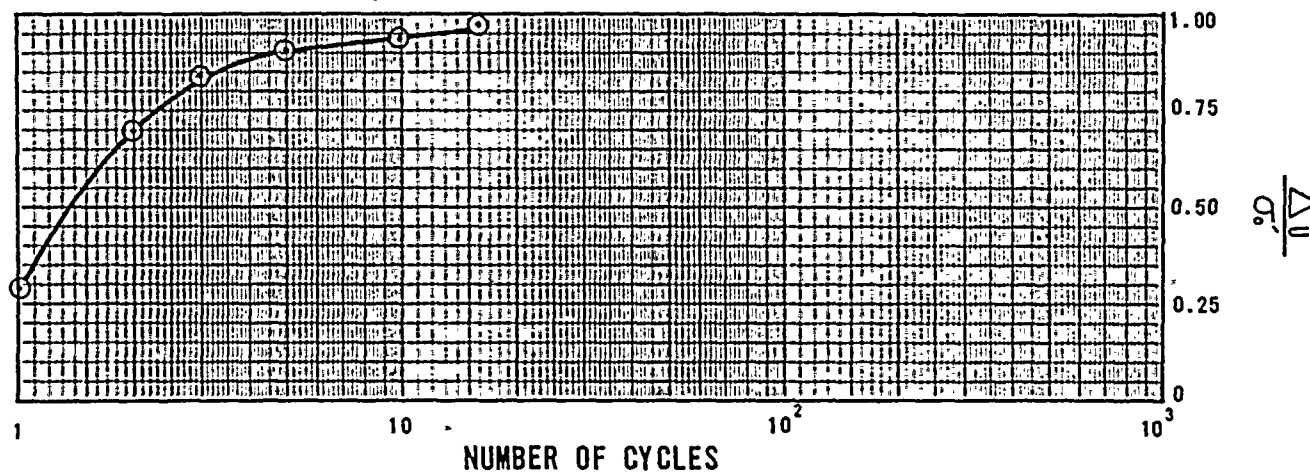
LABORATORY DYNAMIC TEST DATA

2F.21.172



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
PTW-1	5R	15-20	17.0	0.45	



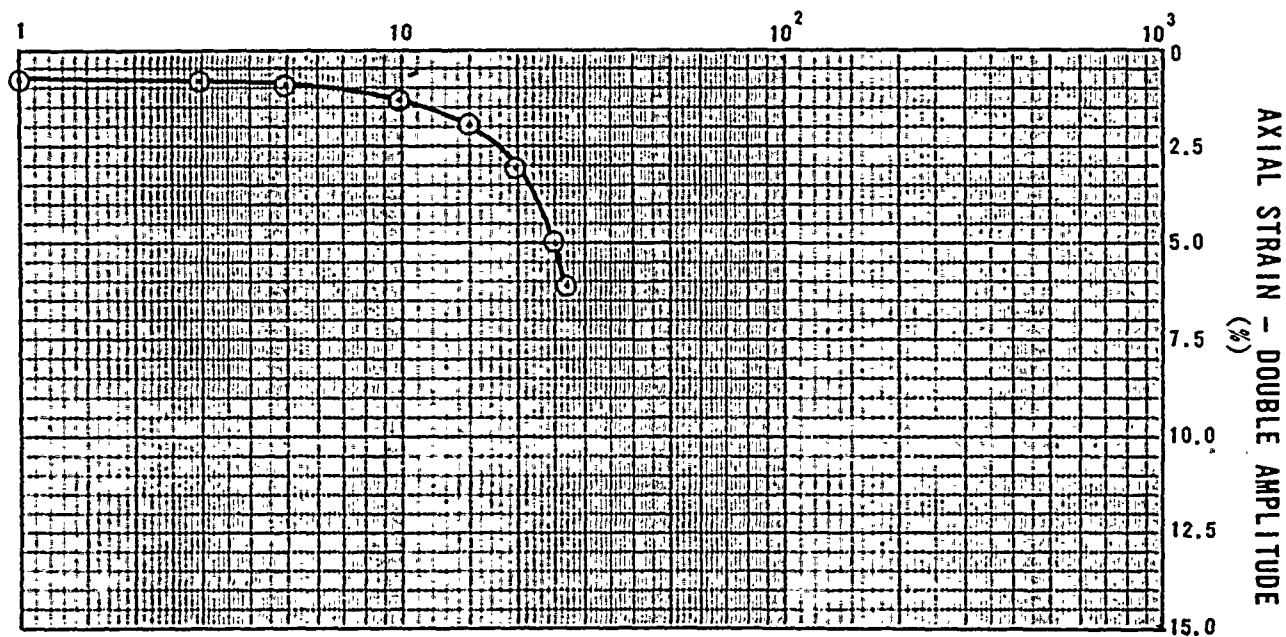
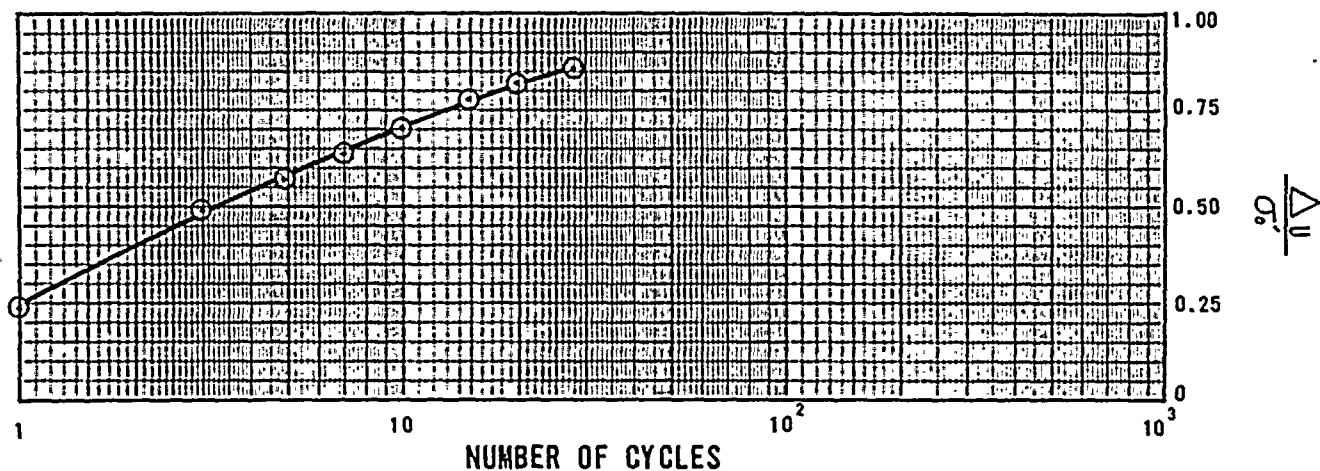
LABORATORY DYNAMIC TEST DATA

2T.21.173



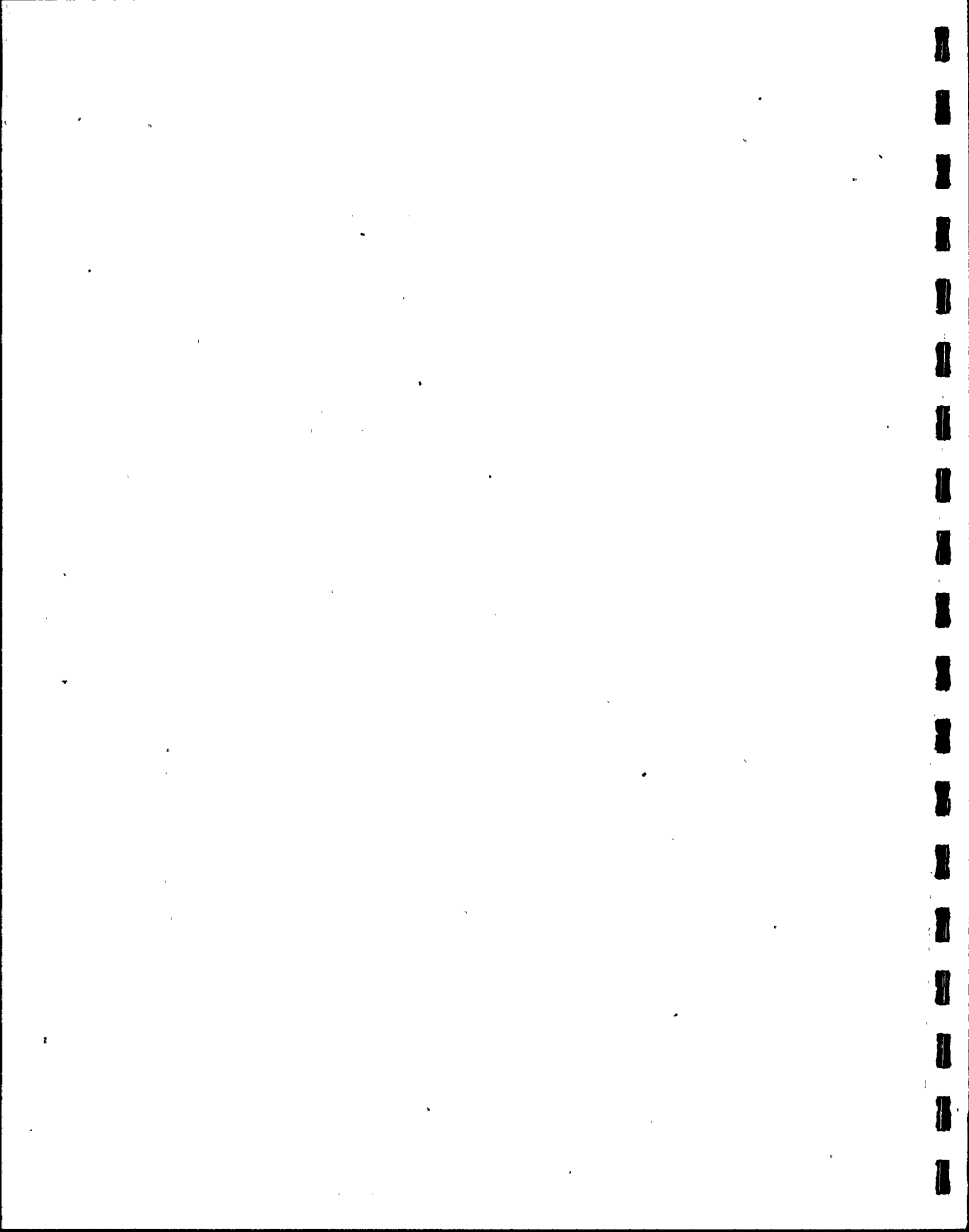
# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
PTW-1	6R	25-30	26.0	0.48	



LABORATORY DYNAMIC TEST DATA

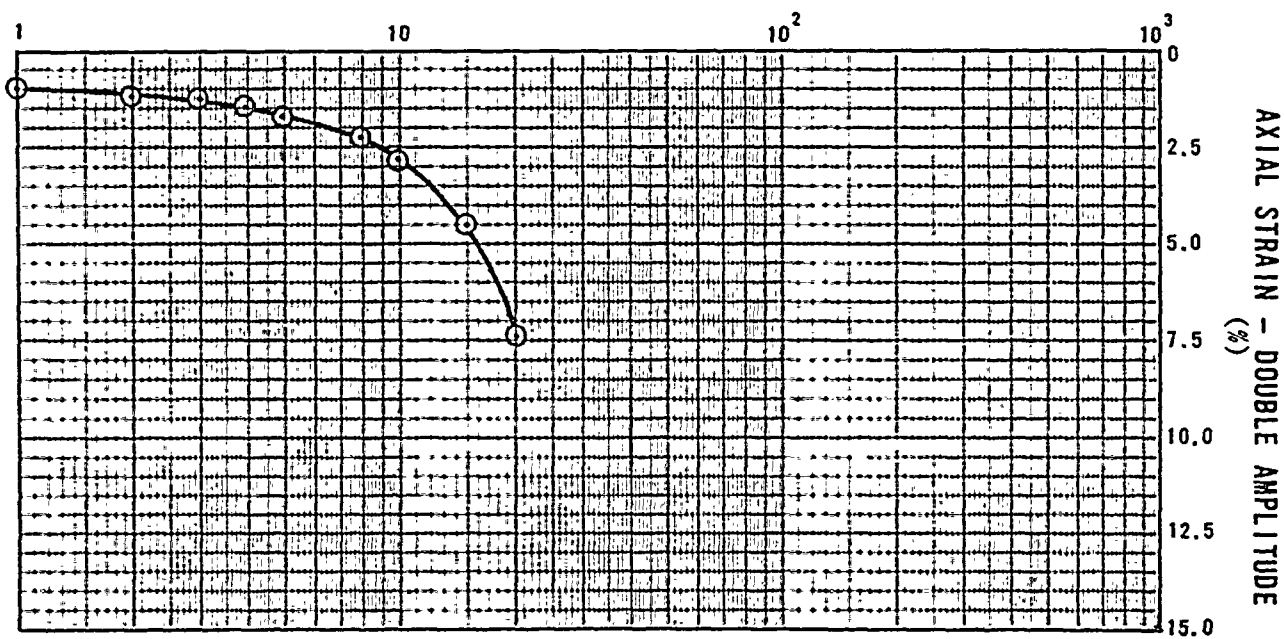
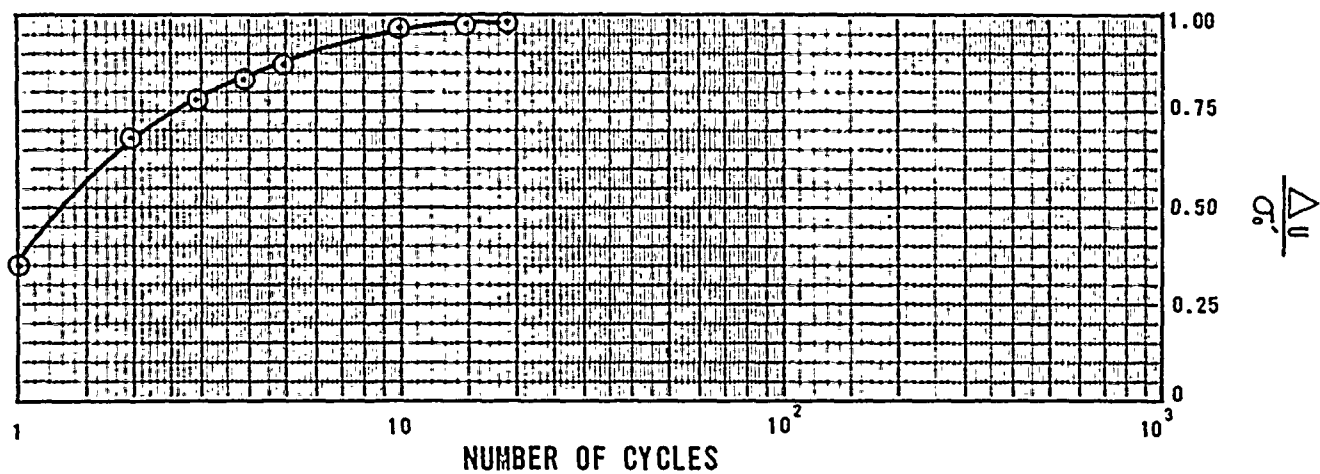
2T.21.174





# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_0$ (PSI)	$\sigma_{dc}/2\sigma'_0$	
PTW-1	8R	30-32.5	26.0	0.45	



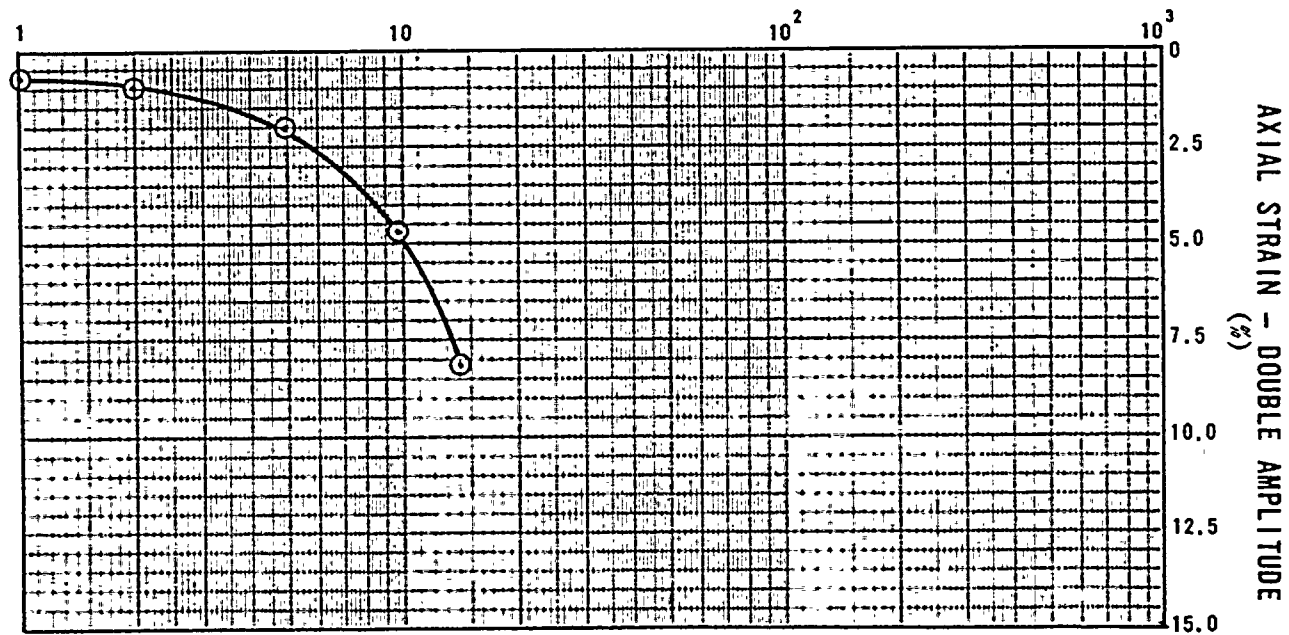
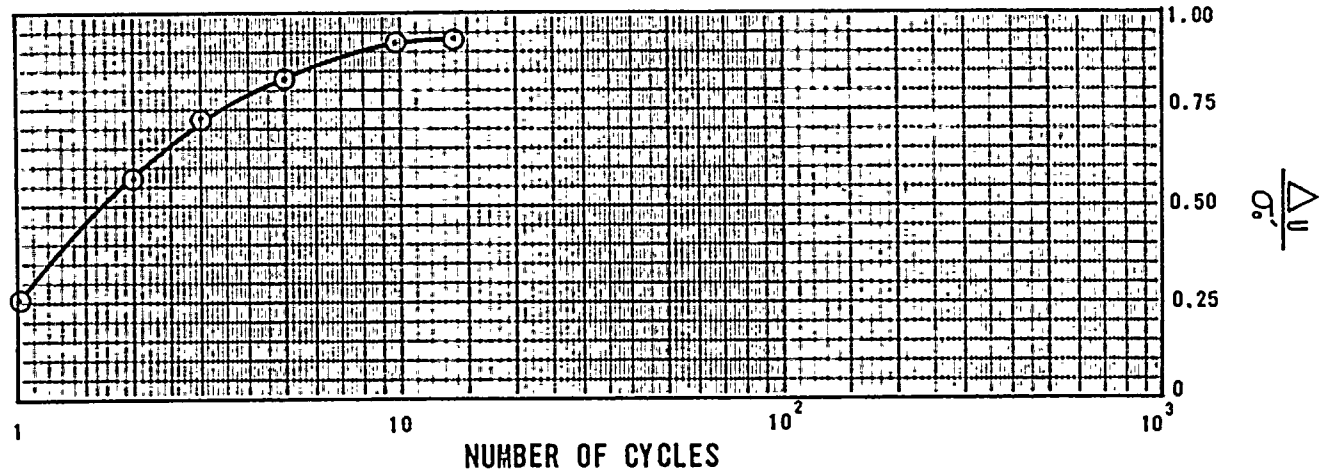
LABORATORY DYNAMIC TEST DATA

2T.21.175



# CYCLIC TRIAXIAL LIQUEFACTION TEST RESULTS

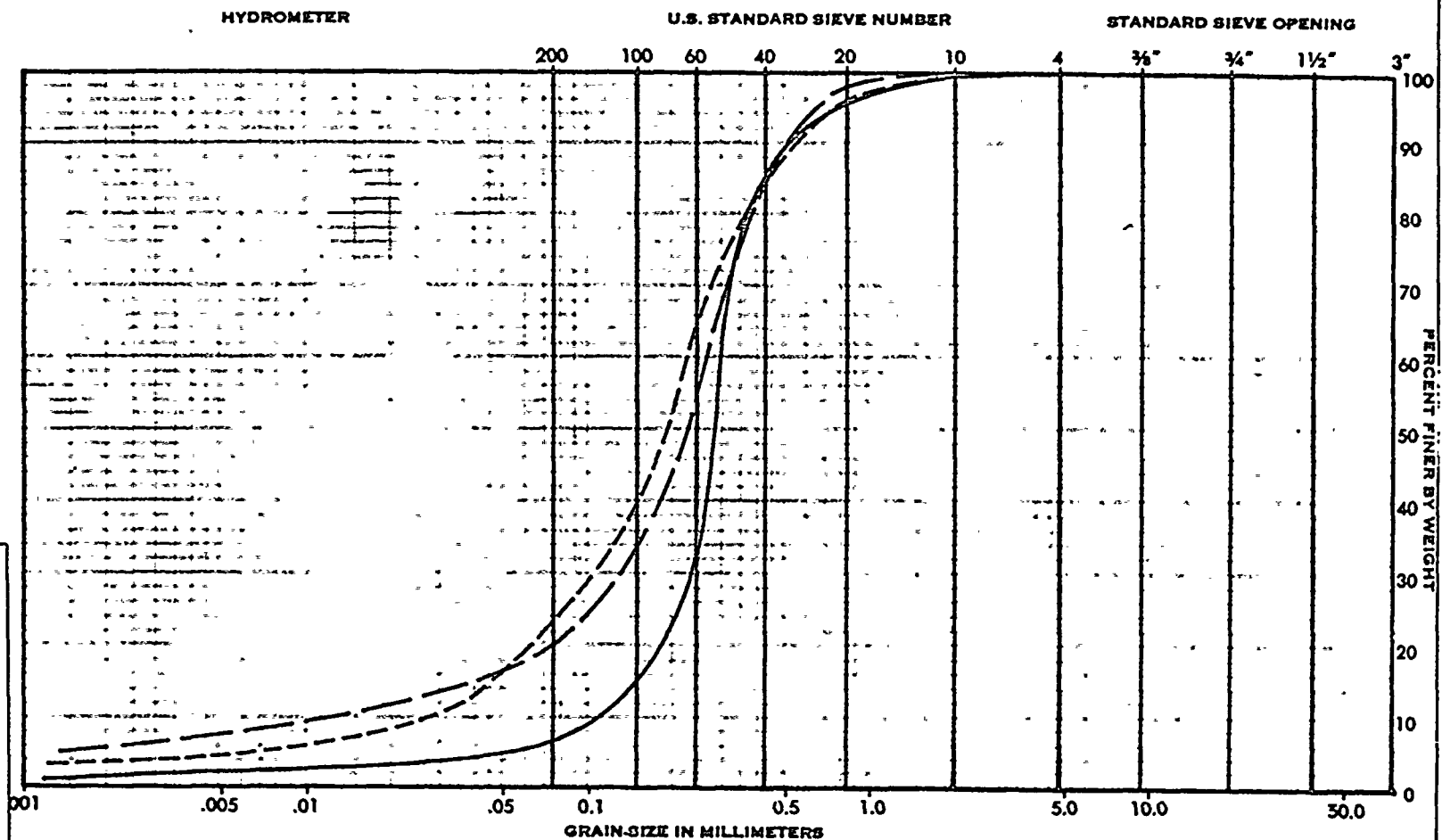
BORING NO.	SAMPLE NO.	SAMPLE DEPTH (ft)	$\sigma'_o$ (PSI)	$\sigma_{dc}/2\sigma'_o$	
U2-LB-1	5A	39.5-40.3	35.0	0.42	



LABORATORY DYNAMIC TEST DATA

2F.21.176

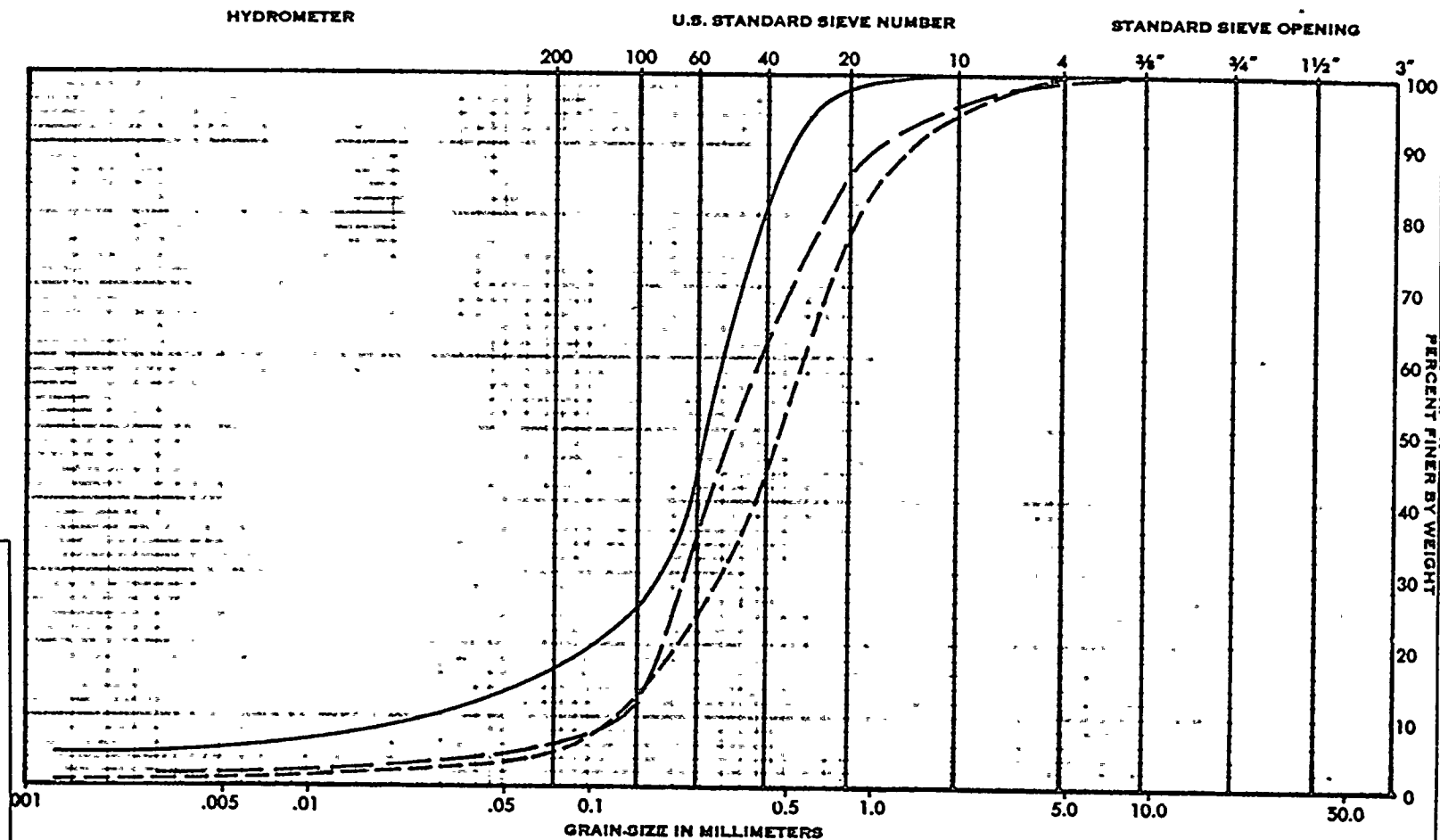




SILT OR CLAY	SAND			GRAVEL	
	FINE	MEDIUM	COARSE	FINE	COARSE

SYMBOL	BORING NUMBER	SAMPLE NUMBER	SAMPLE INTERVAL	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL TYPE
—	U3-LB-2	13	34.9-35.8				
---	U3-LB-2	15 A&B	35.9-36.7				
---	U2-LB-1	18A	43-43.8				





SILT OR CLAY

SAND

GRAVEL

FINE

MEDIUM

COARSE

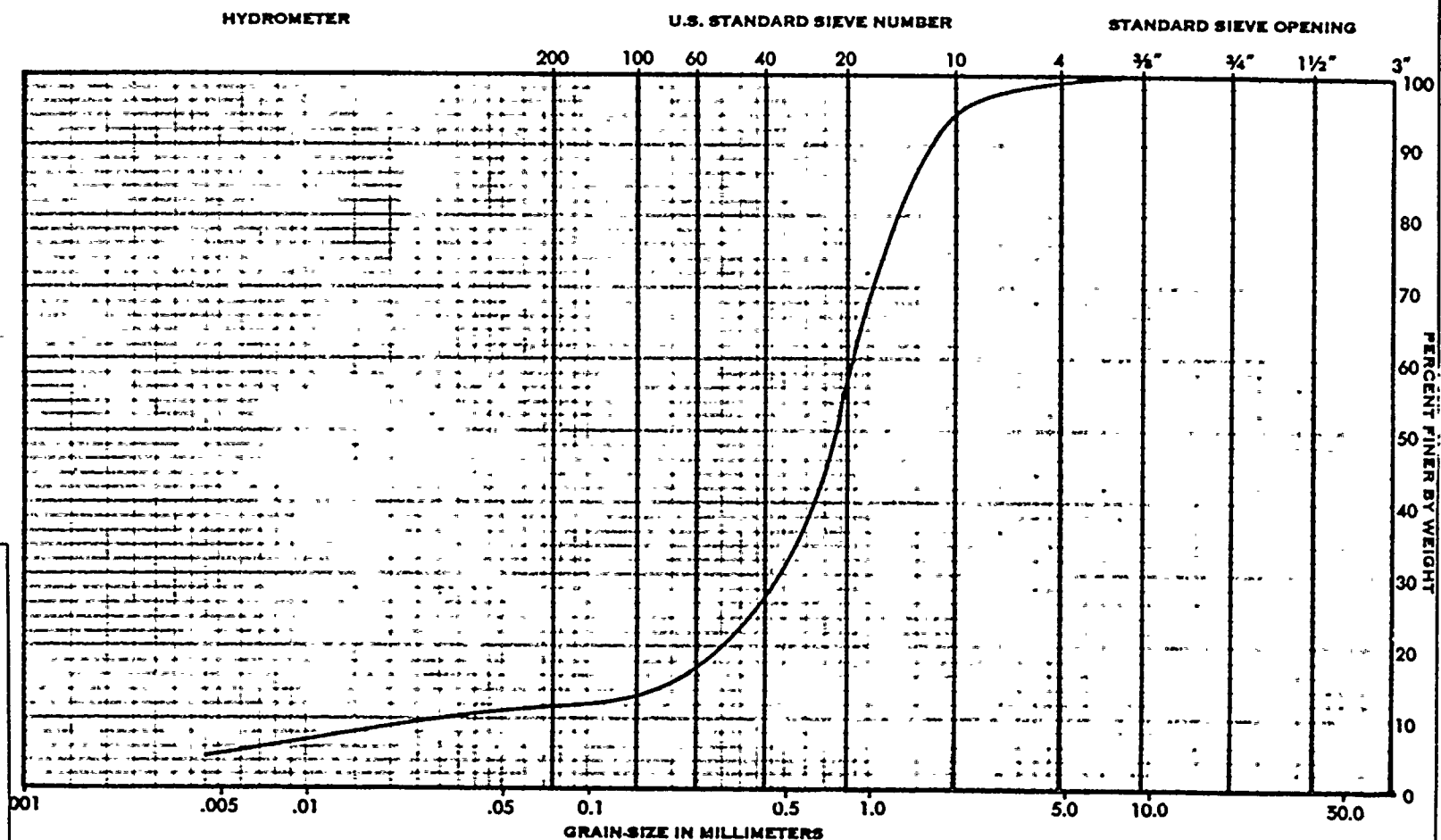
FINE

COARSE

SYMBOL	BORING NUMBER	SAMPLE NUMBER	SAMPLE INTERVAL	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL TYPE
————	U2-LB-1	18B	43-43.8				
- - - -	U3-LB-2	19C	35.9-36.7				
- . - .	U2-LB-1	20	43.7-44.5				



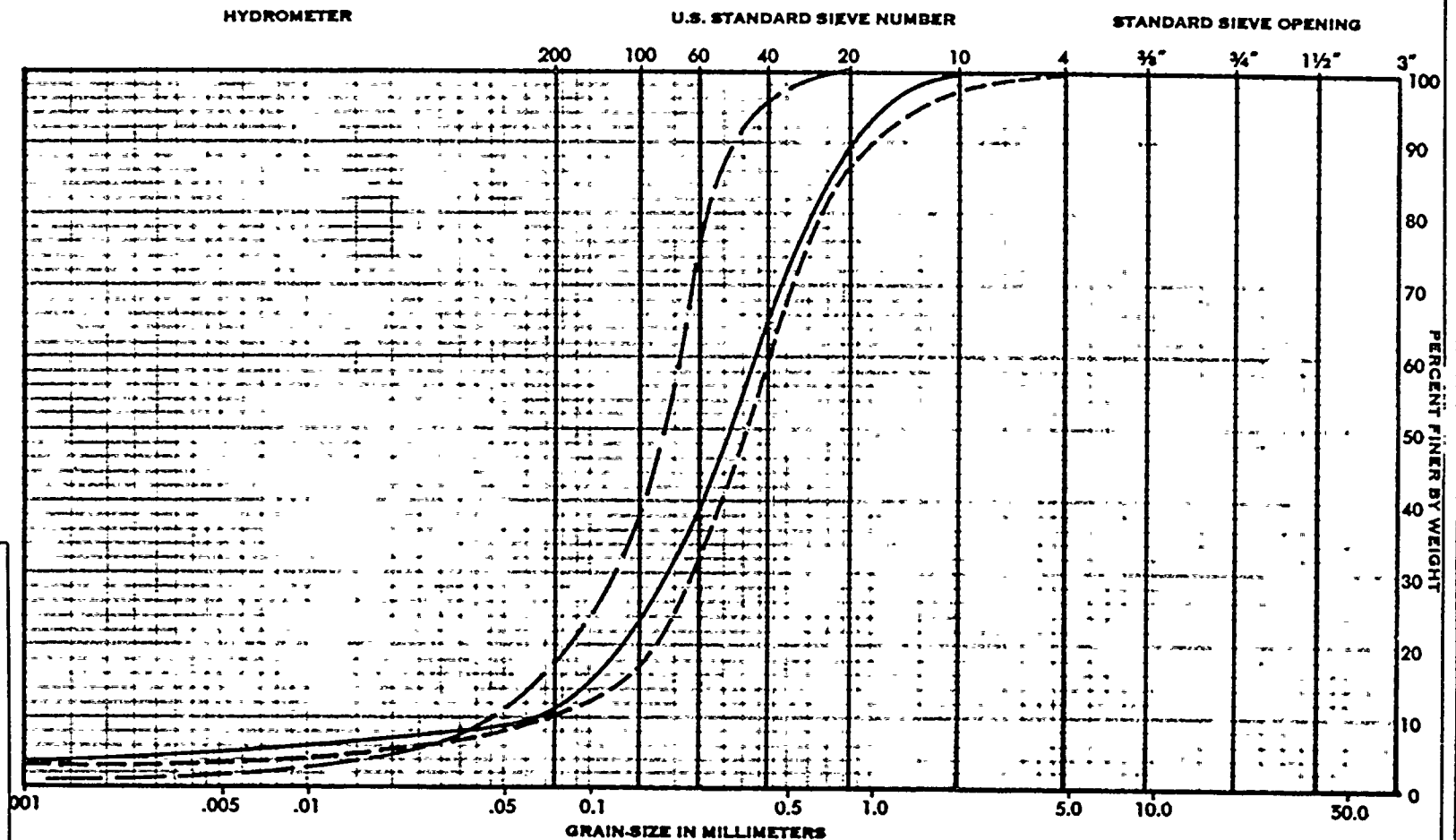




SILT OR CLAY	SAND			GRAVEL	
	FINE	MEDIUM	COARSE	FINE	COARSE

SYMBOL	BORING NUMBER	SAMPLE NUMBER	SAMPLE INTERVAL	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL TYPE
—	U2-LB-1	24	44.7-45.6				





SILT OR CLAY	SAND			GRAVEL	
	FINE	MEDIUM	COARSE	FINE	COARSE

SYMBOL	BORING NUMBER	SAMPLE NUMBER	SAMPLE INTERVAL	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX	SOIL TYPE
— — — —	U3-LB-1	10A	30.7-31.8				
— — — —	U3-LB-1	10B	30.7-31.8				
— — — —	U3-LB-2	12A	34.4-35.0				

