

A 0001768

LMNED-FS

Lake Pontchartrain, La & Vicinity, Citrus Lakefront
Floodwall, Pile Test at Site #1, N.O. Airport, Contract
No. DACW29-79-L-0286

C/Const Div

C/Engr Div

9 Nov 79

Mr. Lanza/jn/1033

1. The results of the subject pile compression test (pile tip -35 m.s.l.) which were hand-carried to us by the Area Office have been reviewed.
2. The loading procedure performed in subject test was not in accordance with paragraph 6.4.2 of the specifications. The loading and deloading time intervals were shortened considerably as the pile was loaded to 60 tons. Also, due to pump failure, there was difficulty in maintaining load increments. Based on these discrepancies, the test is considered invalid.
3. It is therefore the opinion of this office that the subject pile test be redone according to paragraph 6.5. of the specifications.

CHATRY

PICCIOLA
LMNED-F

JUDLIN
LMNED-D



TEST PILE PROGRAM REPORT

Compression TP-1-2

CITRUS LAKEFRONT FLOODWALL

NEW ORLEANS AIRPORT

AND

LINCOLN BEACH

DACW 29-79-C-0107

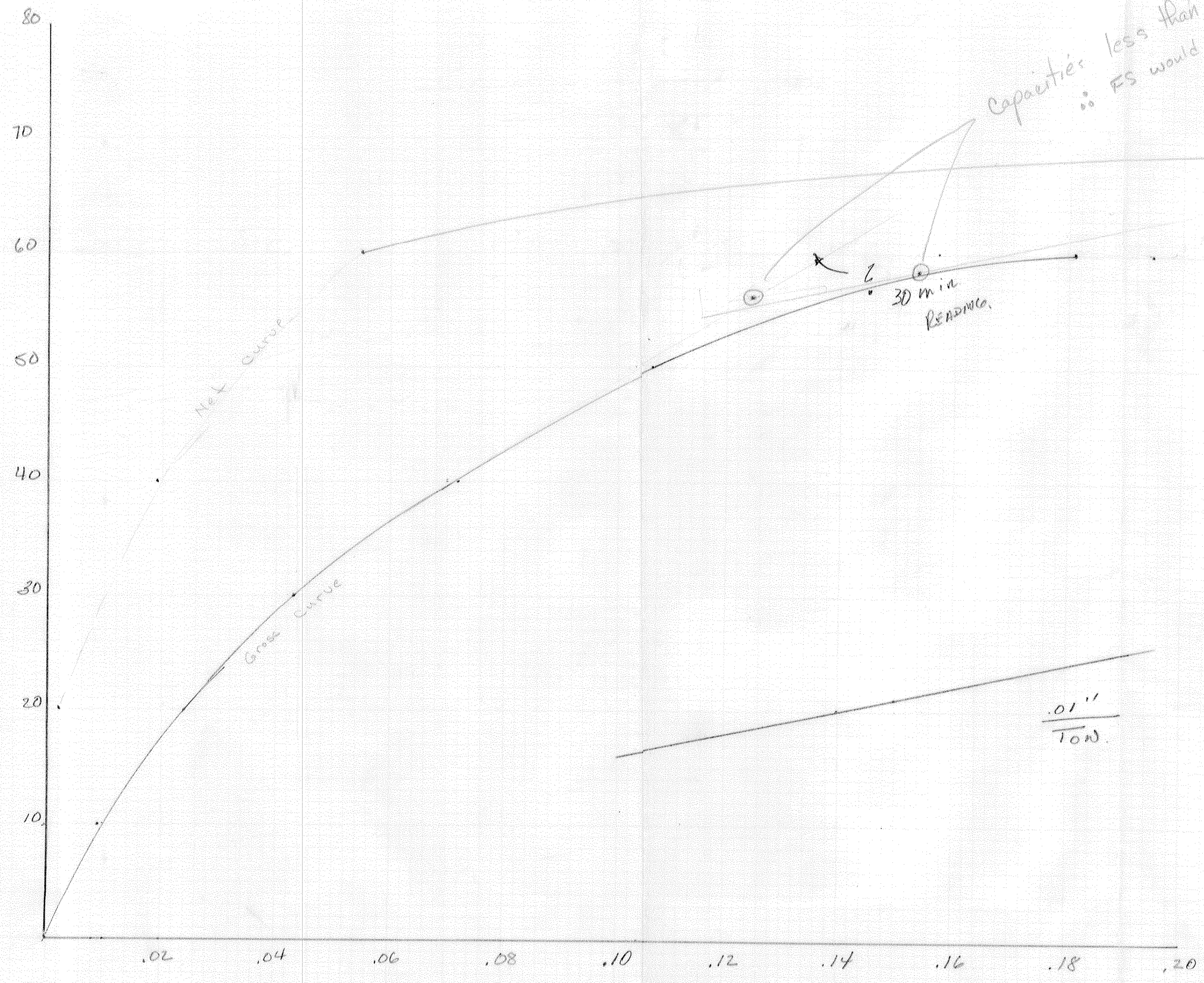
ATLAS CONSTRUCTION CO, INC.

KENNER, LA.

OCTOBER, 1979

SHILSTONE
ENGINEERING TESTING LABORATORY, INC.

LOAD
10
TONS



Capacities less than 60 tons
FS would be less than 1.5 no good

30 min.
READINGS

0.01"
TON

SETTLEMENT IN INCHES

CITRUS LAKEFRONT FLOODWALL
PILE TEST TP1-2 (Comp.)
30-31 Oct 79

Shilstone



GEOTECHNICAL ENGINEERING
CONSTRUCTION MATERIALS TESTING AND INSPECTION
ENGINEERS - CHEMISTS

ENGINEERING

TESTING LABORATORY, INC.

BATON ROUGE, LOUISIANA 70802 / 1068 NEOSHO AVENUE / (504) 387-3149
MONROE, LOUISIANA 71201 / 315 NORTH SECOND STREET / (318) 387-2327
NEW ORLEANS, LOUISIANA 70112 / 814 CONTI STREET / (504) 524-8395

October 31, 1979

Atlas Const. Co., Inc.
P. O. Box 10
Kenner, La. 70063

Gentlemen:

Shilstone Engineering Testing Laboratory, Inc. is very proud to have participated in the pile load test program for the Citrus Lakefront Floodwall, New Orleans, La.

Transmitted herewith is our report which represents the scope of the work, procedures used and the data obtained along with our conclusions. Should you have any questions, we will remain available to discuss any portion of the work or our report at your convenience.

As the work on the Floodwall progresses, we would like very much to continue to provide testing laboratory and inspection services. We feel our experience with local conditions and wide range of engineering and inspection services uniquely qualify us for this work.

The cooperation and assistance we received from Atlas Construction Co., Inc. personnel at the site are sincerely appreciated, and we look forward to working for you again.

Yours very truly,
SHILSTONE ENGINEERING
TESTING LABORATORY, INC.

Frank A. Tusa
Branch Manager
Construction Service

FAT: jm

OFFICES OF AFFILIATED CORPORATIONS:

ALBANY, ATLANTA, AUGUSTA, GA.; CARBONDALE, CHAMPAIGN, DOWNERS GROVE, EAST PEORIA, PEORIA, SPRINGFIELD, IL.; FT. WAYNE, TERRE HAUTE, WEST LAFAYETTE, IN.;
ANN ARBOR, DETROIT, FLINT, LANSING, MI.; WINSTON-SALEM, NC.; COLUMBUS, DAYTON, OH.; AUSTIN, BEAUMONT, CORPUS CHRISTI, EAGLE PASS, FREEPORT,
HARKER HEIGHTS, HARLINGEN, HOUSTON, LAREDO, SAN ANTONIO, THOMPSONS, VICTORIA, TX.

Report indicates test ran on
TP-1-1. However test actually
ran on TP-1-2

TEST: Compression TP -1 - ²/~~1~~
DATE: October 31, 1979
JOB: Citrus Lakefront Floodwall
New Orleans Airport and
Lincoln Beach
New Orleans, La.
Test Pile Program
DACW-29-79-C-0107

AUTHORITY FOR WORK:

Shilstone Engineering Testing Laboratory, Inc. was requested by Atlas Const. Co. to conduct a test pile program at the site of the Citrus Lakefront Floodwall on Haynes Boulevard near New Orleans Airport and Lincoln Beach, New Orleans, La.

SPECIFICATIONS FOR TEST:

Instructions received were to conduct the test in strict accordance with ASTM D 1143-74 and as amended by the Corps of Engineers.

METHOD OF LOAD TEST:

The load was applied to the test pile by one 150 ton hydraulic jack working against approximately 156 tons of dead weight.

The load was applied in increments and at rates according to specifications in order to prevent shock loading.

Settlement of the piles was determined by securing readings with an engineer's level on scales calibrated to 0.01 inches which were attached to the piles and bench marks.

Settlement was also measured through a reference beam system utilizing dial micrometers calibrated to 0.001 inches which were attached to the pile proper.



LOG OF DRIVING



Three reports for two piles?
 Don't know which is correct.
 JR

PILE DRIVING REPORT

PROJECT DACW-29-79-B-0107 PILE NO. TP 1-1
 CONTRACTOR Atlas Construction Co. LOCATION Test Pile No. 1 Sta 3+28.67

HAMMER: TYPE: Concrete
 MAKE & MODEL Vulcan 06 DIMENSIONS 12"X12" - 38.0'
 WT. RAM 6500lbs STROKE 3.0' LENGTH IN LEADS 38.0'
 ENERGY DELIVERED 19,500 F/Lbs. VERTICAL (XX): BATTER 1 ON ()

DESCRIPTION AND DIMENSIONS OF
 DRIVING CAP Regular (K) 123/4" Sq. ELEVATION OF GROUND 1.69'
 SPEED: RATED _____ MEASURED 54 ELEVATION OF CUT-OFF 3.0'
 STEAM OR AIR PRESSURE: ELEVATION OF PILE TIP -25.00 msl.
 AT HAMMER 97 AT BOILER _____ ELEVATION OF SPLICES ~~26.0'~~

JETTING PRESSURE AND ELEVATIONS: INSPECTOR C. Gould DATE 10/2/79

TIME: START DRIVING 1102 FINISH DRIVING 1112 DRIVING TIME 0.10
 INTERRUPTIONS (TIME, TIP ELEV. & REASON) None

DRIVING RESISTANCE

FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS		
0	1	15	↓	30	19	45	_____	60	_____	75	_____	90	_____
1	1	16	↓	31	25	46	_____	61	_____	76	_____	91	_____
2	3	17	3	32	24	47	_____	62	_____	77	_____	92	_____
3	3	18	1	33	26	48	_____	63	_____	78	_____	93	_____
4	1	19	5	34	31	49	_____	64	_____	79	_____	94	_____
5	_____	20	4	35	25	50	_____	65	_____	80	_____	95	_____
6	_____	21	4	36	22	51	_____	66	_____	81	_____	96	_____
7	_____	22	4	37	14" ⁽ⁿ⁾ 36'6"	52	_____	67	_____	82	_____	97	_____
8	_____	23	5	38	_____	53	_____	68	_____	83	_____	98	_____
9	2	24	7	39	_____	54	_____	69	_____	84	_____	99	_____
10	2	25	7	40	_____	55	_____	70	_____	85	_____	100	_____
11	_____	26	4	41	_____	56	_____	71	_____	86	_____	101	_____
12	_____	27	6	42	_____	57	_____	72	_____	87	_____	102	_____
13	_____	28	4	43	_____	58	_____	73	_____	88	_____	103	_____
14	_____	29	6	44	_____	59	_____	74	_____	89	_____	104	_____

PILE DRIVING REPORT

PROJECT Lakefront Levee & Lincoln Beach PILE NO. T.P. 1-2

CONTRACTOR Atlas Construction Co. LOCATION Test Site No. 1

HAMMER: Vulcan 90 TYPE: Prestressed Concrete

MAKE & MODEL Harrington DIMENSIONS 12" x 12"

WT. RAM 6,500 STROKE 3 ft. LENGTH IN LEADS 39' 3"

ENERGY DELIVERED 19,500 VERTICAL (XX): BATTER 1 ON ()

DESCRIPTION AND DIMENSIONS OF 12 3/4"

DRIVING CAP Regular (K) 123/4" sq. ELEVATION OF GROUND 1.69

SPEED: RATED 60 MEASURED 54 ELEVATION OF CUT-OFF +3.0

STEAM OR AIR PRESSURE: ELEVATION OF PILE TIP -35.0

AT HAMMER 97 AT BOILER ELEVATION OF SPLICES _____

JETTING PRESSURE AND ELEVATIONS: INSPECTOR C. Tozel DATE 2 October 1979

TIME: START DRIVING 11:02 FINISH DRIVING 11:12 DRIVING TIME 0:10

INTERRUPTIONS (TIME, TIP ELEV. & REASON) _____

DRIVING RESISTANCE

FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	
0	1	15	1	30	19	45		60		75		90
1	1	16	1	31	25	46		61		76		91
2	3	17	3	32	24	47		62		77		92
3	3	18	6	33	26	48		63		78		93
4	2	19	4	34	26	49		64		79		94
5		20	4	35	25	50		65		80		95
6		21	5	36	23	51		66		81		96
7		22	4	37	36.6 14	52		67		82		97
8		23	5	38		53		68		83		98
9	2	24	6	39		54		69		84		99
10	2	25	6	40		55		70		85		100
11		26	10	41		56		71		86		101
12		27	11	42		57		72		87		102
13		28	12	43		58		73		88		103
14		29	15	44		59		74		89		104

PILE DRIVING REPORT

PROJECT Lakefront Levee & Lincoln Beach PILE NO. T.P. 1-1

CONTRACTOR Atlas Construction Co. LOCATION Test Site #1

HAMMER: Vulcan 90 TYPE: Prestressed Concrete

MAKE & MODEL Harrington DIMENSIONS 12" x 12"

WT. RAM 6,500 STROKE 3' LENGTH IN LEADS 29.3

ENERGY DELIVERED ~~19,500~~ 19,500 VERTICAL (XX): BATTER 1 ON ()

DESCRIPTION AND DIMENSIONS OF DRIVING CAP Regular (K) 12 3/4" sq. ELEVATION OF GROUND 1.69

SPEED: RATED 60 MEASURED 54 ELEVATION OF CUT-OFF +3.0

STEAM OR AIR PRESSURE: ELEVATION OF PILE TIP -25.0

AT HAMMER 97 AT BOILER ELEVATION OF SPLICES

JETTING PRESSURE AND ELEVATIONS: INSPECTOR C. Tozel DATE 2 October 1979

TIME: START DRIVING 11:37 FINISH DRIVING 11:40 DRIVING TIME 0:03

INTERRUPTIONS (TIME, TIP ELEV. & REASON)

DRIVING RESISTANCE

FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	FT	NO. OF BLOWS	
0	1	15	1	30		45		60		75		90
1	2	16	1	31		46		61		76		91
2	2	17	2	32		47		62		77		92
3	2	18	3	33		48		63		78		93
4	2	19	4	34		49		64		79		94
5	2	20	5	35		50		65		80		95
6	3	21	5	36		51		66		81		96
7	3	22	5	37		52		67		82		97
8	2	23	7	38		53		68		83		98
9	3	24	9	39		54		69		84		99
10	3	25	10	40		55		70		85		100
11	2	26	11	41		56		71		86		101
12	2	27	9	42		57		72		87		102
13		28	5	43		58		73		88		103
14		29		44		59		74		89		104

LOAD TEST DATA



PROJECT: Citrus Lakefront Floodwall TEST: Compression
 14" Square
 PILE NO. TP - 1 PILE TYPE: Precast Concrete JACK: 150 ton hydraulic

Date	Load Cell	Load tons	Time	Elapsed Time	EXTENSOMETERS			Settlement 10 ⁻³ in	Remarks
					No. 4	No. 6	Mean		
10/30		0	0858	0	3.000	3.000	0.000		
		10	0903	5	2.989	2.984	2.987	0.013	
	1921	(7)	0905	72	2.992	2.986	2.989	0.011	
			0906	8	2.993	2.986	2.990	0.010	
			0903	15	2.994	2.987	2.991	0.009	
			0928	30	2.993	2.987	2.990	0.010	
			0958	60	2.993	2.987	2.990	0.010	
			1058	120	2.995	2.987	2.991	0.009	
		20	1103	5	2.983	2.976	2.980	0.020	
	3195	(17.5)	1105	72	2.982	2.975	2.979	0.021	
			1106	8	2.982	2.975	2.979	0.021	
			1113	15	2.982	2.975	2.979	0.021	
			1128	30	2.982	2.974	2.978	0.022	
			1158	60	2.981	2.973	2.977	0.023	
			1258	120	2.980	2.972	2.976	0.024	
		10	1303	5	2.990	2.983	2.987	0.013	
	1921	0	1328	5	2.998	2.995	2.997	0.003	
			1348	20	2.999	2.996	2.998	0.002	
		20	1353	105	2.978	2.974	2.976	0.024	
	3195	(17.5)	1413	20	2.980	2.973	2.977	0.023	
		30	1418	5	2.964	2.956	2.960	0.040	
	4471	(28)	1420	72	2.964	2.956	2.960	0.040	
			1421	8	2.964	2.955	2.960	0.040	
			1428	15	2.965	2.955	2.960	0.040	
			1443	30	2.963	2.954	2.959	0.039	
								Train passing 1523	
			1513	60	2.964	2.953	2.959	0.039	
			1613	120	2.962	2.952	2.957	0.043	
		40	1618	5	2.942	2.931	2.937	0.063	
	5756	(38)	1620	72	2.940	2.929	2.935	0.065	
			1621	8	2.940	2.928	2.934	0.066	
			1628	15	2.940	2.928	2.934	0.066	
			1643	30	2.938	2.926	2.932	0.068	
								Train passing 1640	
			1713	60	2.936	2.925	2.931	0.069	
			1813	120	2.934	2.922	2.928	0.072	
		30	1818	5	2.945	2.934	2.940	0.060	
	4471	(28)	1838	20	2.943	2.934	2.939	0.061	
		20	1843	5	2.954	2.945	2.950	0.050	
	3195	(17.5)	1903	20	2.955	2.946	2.951	0.049	
	1921	10	1908	5	2.968	2.959	2.964	0.036	
								Train passing 1902	

PROJECT: Citrus Lakefront Floodwall

TEST: Compression

FILE NO. TP - 1-~~2~~² PILE TYPE: 14" Square Precast Concrete JACK: 150 ton hydraulic

Date	Load Cell	Load tons	Time	Elapsed Time	EXTENSOMETERS			Settlement 10 ⁻³ in	Remarks
					No. 4	No. 6	Mean		
10/30	1921	10	1928	20	2.968	2.960	2.964	0.036	
		0	1933	5	2.984	2.975	2.980	0.020	
		0	1953	20	2.984	2.977	2.981	0.019	
		20	2003	10	2.964	2.952	2.958	0.042	
	3195	17.5	2023	20	2.964	2.952	2.958	0.042	
		40	2033	10	2.936	2.923	2.930	0.070	Train passing 2040
	5756	38	2053	20	2.933	2.920	2.927	0.073	
		50	2058	5	2.910	2.896	2.903	0.097	
	7011	47	2100	72	2.907	2.894	2.901	0.099	
			2101	8	2.907	2.894	2.901	0.099	
			2108	15	2.905	2.892	2.899	0.101	
			2123	30	2.904	2.891	2.898	0.102	
			2153	60	2.901	2.888	2.895	0.105	Train passing 2214
			2253	120	2.900	2.886	2.893	0.107	
		60	2258	5	2.874	2.860	2.867	0.133	
	7977	55	2300	7	2.872	2.858	2.865	0.135	Blew gasket on pump; load re-
			2301	8	2.872	2.858	2.865	0.135	leased to 0
			2308	15	2.872	2.858	2.865	0.135	in increments
			2323	30	2.872	2.858	2.865	0.135	
		50	2328	5	2.878	2.865	2.872	0.128	
	7011	47	2338	10	2.878	2.865	2.872	0.128	
		40	2342	5	2.890	2.875	2.883	0.117	
	5756	38	2352	10	2.890	2.875	2.883	0.117	
		20	2357	5	2.911	2.901	2.906	0.094	
10/31	3195	17.5	0007	10	2.911	2.901	2.906	0.094	
		0	0012	5	2.950	2.939	2.945	0.055	
			0725	13	2.933	2.945	2.939	0.061	
		10	0735	10	2.918	2.931	2.925	0.075	
	1921	7 1/2	0755	20	2.918	2.931	2.925	0.075	
		20	0805	10	2.908	2.917	2.913	0.087	
	3195	18	0825	20	2.907	2.916	2.912	0.088	
		40	0835	10	2.877	2.886	2.883	0.117	
	5756	37	0855	20	2.875	2.883	2.879	0.121	
		60	0900	5	2.839	2.846	2.843	0.157	
	8271	58	0902	7 1/2	2.832	2.839	2.836	0.164	
			0903	8	2.832	2.839	2.836	0.164	
			0910	15	2.827	2.834	2.831	0.169	
			0925	30	2.822	2.829	2.826	0.174	

SHILSTONE ENGINEERING TESTING LABORATORY, INC.
Measuring Settlement by Engineers Level and Scale

Date & Time	P1 BM	P2	P3	P4	P6	P7	P8	Test Pile P5	Settle- ment
0858	9.99	2.71	3.13	3.1	5.1	1.98	2.93	3.47	0.00
0903								3.47	0.00
0905								3.47	0.00
0906								3.47	0.00
0913								3.47	0.00
0928								3.47	0.00
0958	9.97	2.71	3.13	3.1	5.1	1.98	2.93	3.47	0.00
1058	9.97	2.71	3.13	3.1	5.1	1.98	2.93	3.47	0.00
1103								3.48	0.01
1105								3.48	0.01
1106								3.48	0.01
1113								3.48	0.01
1128								3.48	0.01
1158	9.97	2.71	3.13	3.1	5.1	1.98	2.93	3.48	0.01
1258								3.48	0.01
1303	9.97	2.71	3.13	3.1	5.1	1.98	2.93	3.47	0.00
1323								3.47	0.00
1328								3.47	0.00
1348								3.47	0.00
1353								3.48	0.01
1413	9.97	2.68	3.10	3.00	5.00	1.96	2.90	3.48	0.01
1418								3.50	0.03
1420								3.50	0.03
1421								3.50	0.03
1428								3.50	0.03
1443								3.50	0.03
1513	9.97	2.68	3.10	3.00	5.00	1.96	2.90	3.51	0.04
1613								3.51	0.04
1618	9.97	2.68	3.10	3.00	5.00	1.96	2.90	3.53	0.06
1620								3.53	0.06
1621								3.53	0.06
1628								3.53	0.06
1643								3.53	0.06
1713	9.98	2.67	3.10	3.00	5.00	1.95	2.90	3.53	0.06
1813	9.98	2.67	3.10	3.00	5.00	1.95	2.90	3.53	0.06
1818								3.53	0.06
1838								3.52	0.05
1843								3.52	0.05
1903								3.51	0.04
1908								3.50	0.03
1928	9.98	2.67	3.10	3.00	5.00	1.95	2.90	3.50	0.03
1933								3.48	0.01
1953								3.48	0.01
2003								3.50	0.03

SHILSTONE ENGINEERING TESTING LABORATORY, INC.
Measuring Settlement by Engineers Level and Scale

Date & Time	P1 BM	P2	P3	P4	P6	P7	P8	Test Pile P5	Settle- ment
2023								3.50	0.03
2033	9.98	2.67	3.10	3.00	5.00	1.95	2.90	3.53	0.06
2053								3.54	0.07
2058								3.57	0.10
2100								3.57	0.10
2101								3.57	0.10
2108								3.57	0.10
2123	9.99	2.66	3.10	3.01	5.01	1.96	2.90	3.57	0.10
2153								3.57	0.10
2253	9.99	2.66	3.10	3.01	5.01	1.96	2.90	3.57	0.10
2258								3.60	0.13
2300								3.60	0.13
2301								3.60	0.13
2308								3.60	0.13
2323								3.60	0.13
2328	2.99	2.66	3.10	3.01	5.01	1.96	2.90	3.59	0.12
2338								3.59	0.12
2342								3.58	0.11
2352								3.58	0.11
2357								3.55	0.08
10/31									
0012								3.51	0.04
0725	2.99	2.72	3.15	3.01	5.01	2.00	2.92	3.51	0.04
0735								3.54	0.07
0755								3.54	0.07
0805								3.55	0.08
0825								3.55	0.08
0835								3.58	0.11
0855								3.58	0.11
0900								3.61	0.14
0902								3.62	0.15
0903								3.62	0.15
0910	2.99	2.66	3.09	3.00	5.01	2.95	2.88	3.63	0.16
0925								3.63	0.16
0955								3.63	0.16
1000								3.75	0.28
1012								3.65	0.18
1031								3.85	0.38
1015								3.75	0.28
1030								3.75	0.28

70

Load Settlement Curve
Test Pile 1-2
Compression Test.

60

50

40

30

20

10

0

LOAD IN TONS

SETTLEMENT IN INCHES

1st Loading

2nd Loading

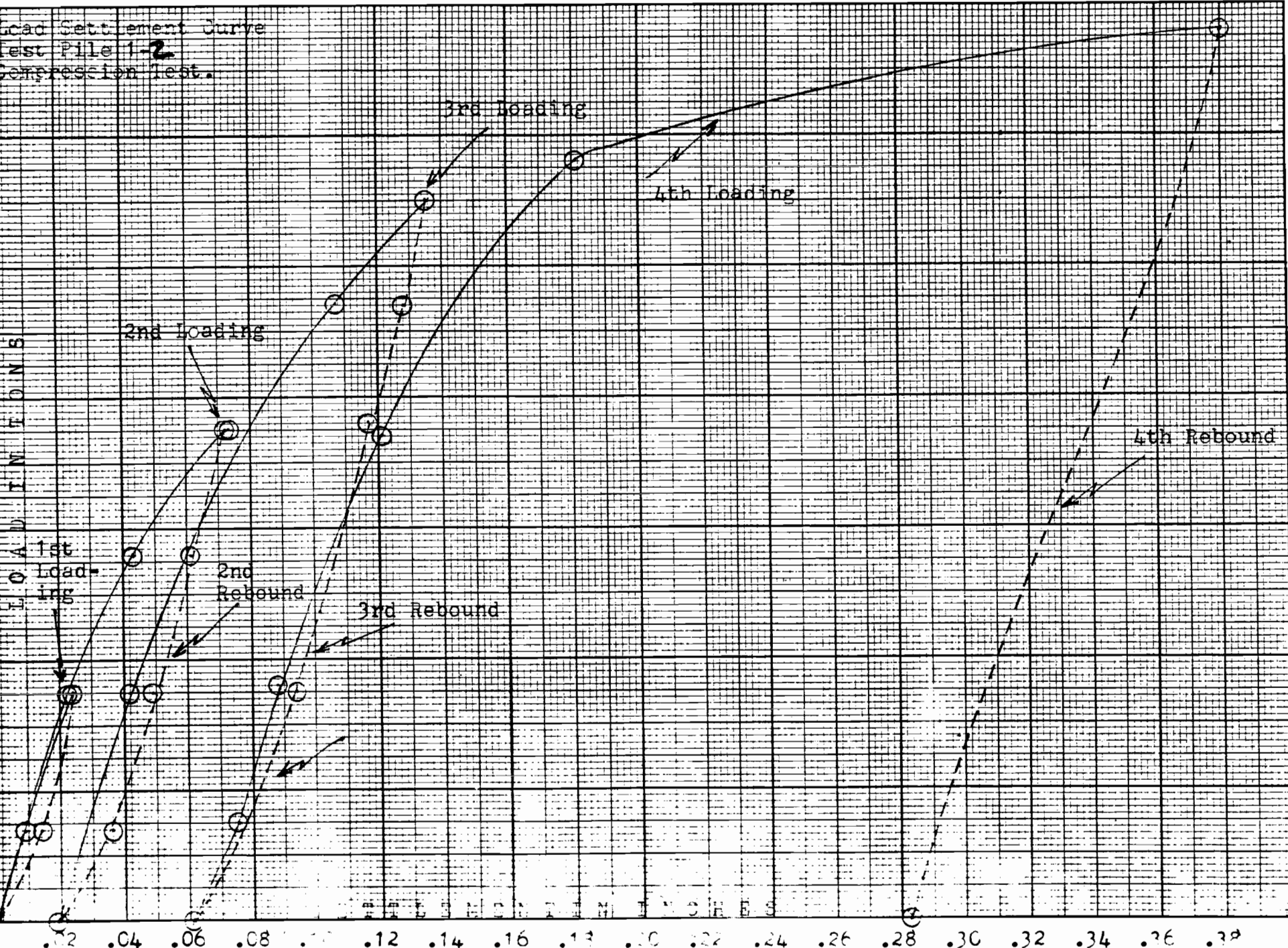
3rd Loading

4th Loading

2nd Rebound

3rd Rebound

4th Rebound



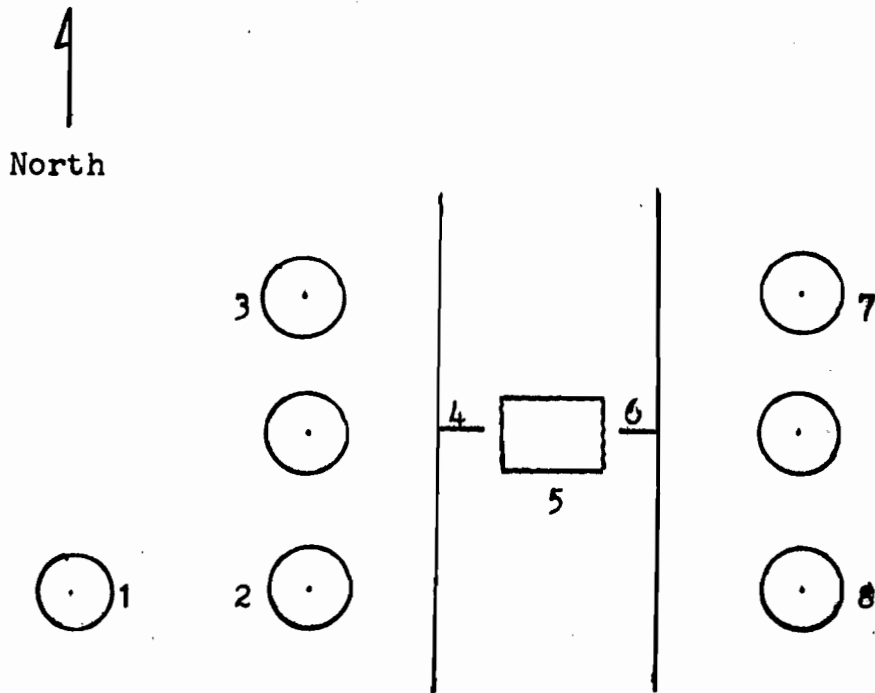
APPENDIX




CITRUS LAKEFRONT FLOODWALL
NEW ORLEANS AIRPORT & LINCOLIN BEACH

TP-1 COMPRSSION TEST

Schematic diagram showing the positioning of the Test Pile, Reactor Piles, Reference Beams and Reference Points.



 Engineers Level

NOTE:
Numbers refer to reference points.



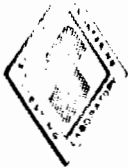
Calculation of Calibration Curve For Pile
Lincoln Beach Test Pile

Load (psi) = Tons x Lbs./Tons x 1/Area of one (1) ram at
28.27 Square Inches.

Example: For a 10 Ton applied load:

Load (psi) = 10T x 2000 lbs./T x 1/28.27 Square inches
= 705.5 PSI say 706





SHILSTONE ENGINEERING TESTING LABORATORY, INC.



<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ATLANTA, GEORGIA ZIP CODE 30306 600 VIRGINIA AVE., N.E. PHONE (404) 872-0705	BATON ROUGE, LA. ZIP CODE 70802 1088 NEOSHO ST. PHONE (504) 387 3149	MONROE, LA. ZIP CODE 71201 315 N. SECOND ST. PHONE (318) 387 2327	NEW ORLEANS, LA. ZIP CODE 70112 814 CONTI ST. PHONE (504) 524-8395	BEAUMONT, TEXAS ZIP CODE 77701 2276 PARK ST. PHONE (713) 838-1694	FREEPORT, TEXAS ZIP CODE 77541 415 NORTH AVENUE F PHONE (713) 233 6366	HOUSTON, TEXAS ZIP CODE 77007 1714 MEMORIAL DR. PHONE (713) 224 2047

TESTED FOR: Atlas Construction Co., Inc.
P. O. Box 10
Kenner, La. 70063

PROJECT: CITRUS LAKEFRONT FLOODWALL
N.O. AIRPORT AND LINCOLN BEACH
NEW ORLEANS, LA.
TEST PILE PROGRAM

DATE: October 29, 1979

OUR REPORT NO.: 76-9188

REMARKS:

This is to certify that on October 29, 1979 two (2) Model 656-3041, three (3) inch travel Starret Dial Micrometers were calibrated against a Kraut Kramer Model D Standard thickness step wedge and found to be true to 0.01 inches.

SHILSTONE ENGINEERING
TESTING LABORATORY, INC.

Frank A. Tusa
Construction Services
Branch Manager



SHILSTONE ENGINEERING TESTING LABORATORY, INC.



<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ATLANTA, GEORGIA ZIP CODE 30306 600 VIRGINIA AVE., N.E. PHONE (404) 872-0795	BATON ROUGE, LA. ZIP CODE 70802 1068 NIOSHO ST. PHONE (504) 387-3149	MONROE, LA. ZIP CODE 71201 315 N. SECOND ST. PHONE (318) 387-2327	NEW ORLEANS, LA. ZIP CODE 70112 814 CONTI ST. PHONE (504) 524-8395	BEAUMONT, TEXAS ZIP CODE 77701 2278 PARK ST. PHONE (713) 838-1694	FREERPORT, TEXAS ZIP CODE 77541 415 NORTH AVENUE F PHONE (713) 233-8368	HOUSTON, TEXAS ZIP CODE 77007 1714 MEMORIAL DR. PHONE (713) 224-2047

CITRUS LAKEFRONT FLOODWALL,
N.O. AIRPORT AND LINCOLN BEACH
PROJECT: NEW ORLEANS, LA.
TEST PILE PROGRAM

TESTED FOR: Atlas Construction Co., Inc.
P. O. Box 10
Kenner, La. 70063

PROJECT:

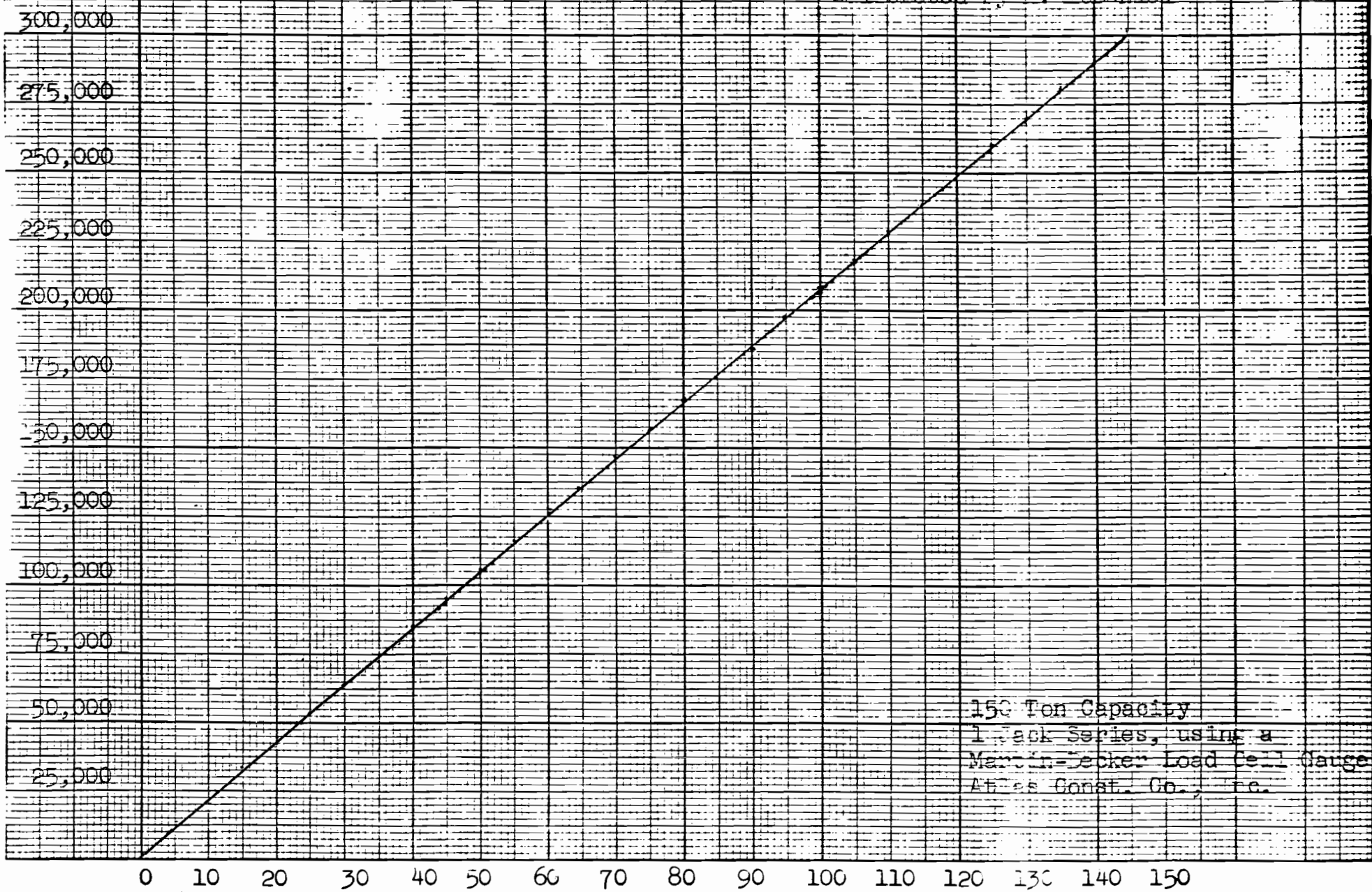
DATE: October 29, 1979

OUR REPORT NO.: 76-9188

REMARKS:	LOAD IN TONS	TESTIG MACHINE IN POUNDS	STRAIN INDICATOR
	5	10,000	12.73
	10	20,000	19.21
	15	30,000	25.54
	20	40,000	31.95
	25	50,000	38.14
	30	60,000	44.71
	35	70,000	50.80
	40	80,000	57.56
	45	90,000	63.64
	50	100,000	70.11
	55	110,000	76.44
	60	120,000	82.71
	65	130,000	88.94
	70	140,000	95.28
	75	150,000	101.34
	80	160,000	107.90
	85	170,000	113.70
	90	180,000	120.02
	95	190,000	126.12
	100	200,000	132.85
	105	210,000	138.70
	110	220,000	144.83
	115	230,000	150.96
	120	240,000	157.28
	125	250,000	163.56
	130	260,000	169.47
	135	270,000	175.65
	140	280,000	181.88
	145	290,000	187.88
	150	300,000	194.24

Handwritten signature

October 5, 1945
Sillstone Engineering
Testing Laboratory, Inc.
Calibrated by W. McDaniel



150 Ton Capacity
1 Jack Series, using a
Martin-Decker Load Cell Gauge
Atlas Const. Co., Inc.

LOAD IN TONS



SHILSTONE ENGINEERING TESTING LABORATORY, INC.



<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ATLANTA, GEORGIA ZIP CODE 30306 600 VIRGINIA AVE., N.E. PHONE (404) 872-0795	BATON ROUGE, LA. ZIP CODE 70802 1068 NEOSHO ST. PHONE (504) 387-3149	MONROE, LA. ZIP CODE 71201 315 N. SECOND ST. PHONE (318) 387-2327	NEW ORLEANS, LA. ZIP CODE 70112 814 CONTI ST. PHONE (504) 524-8305	BEAUMONT, TEXAS ZIP CODE 77701 2276 PARK ST. PHONE (713) 838-1694	FREEPORT, TEXAS ZIP CODE 77541 415 NORTH AVENUE F PHONE (713) 233-8366	HOUSTON, TEXAS ZIP CODE 77007 1714 MEMORIAL DR. PHONE (713) 224-2047

CITRUS LAKEFRONT FLOODWALL
 N.O. AIRPORT AND LINCOLN BEACH
 PROJECT: NEW ORLEANS, LA.
 TEST PILE PROGRAM

TESTED FOR: Atlas Const. Co., Inc.
 P. O. Box 10
 Kenner, La. 70063

DATE: October 29, 1979

OUR REPORT NO.: 76-9188

REMARKS:	LOAD IN TONS	TESTING MACHINE IN POUNDS	GAUGE PRESSURE (PSI)
	5	10,000	353.7
	10	20,000	707.5
	15	30,000	1061.2
	20	40,000	1414.9
	25	50,000	1768.6
	30	60,000	2122.4
	35	70,000	2476.1
	40	80,000	2829.9
	45	90,000	3183.6
	50	100,000	3537.3
	55	110,000	3891.1
	60	120,000	4244.8
	65	130,000	4598.5
	70	140,000	4952.2
	75	150,000	5306.0
	80	160,000	5659.7
	85	170,000	6013.4
	90	180,000	6367.2
	95	190,000	6720.9
	100	200,000	7074.6
	105	210,000	7428.3
	110	220,000	7782.0
	115	230,000	8135.8
	120	240,000	8489.6
	125	250,000	8843.3
	130	260,000	9197.0
	135	270,000	9550.8
	140	280,000	9904.5
	145	290,000	10258.2
	150	300,000	10611.9

Frank A. ...