

PROB (CONTD)

2566

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

DRILLING REPORT

*Attached with
memo on 05/20/91*

COUNTY- FORT BEND CO.
 HIGHWAY NO.- SH-99
 CONTROL- 3510-04-005
 PROJECT NO.-
 DATE- 5/15/91
 GRD. ELEV.- 85.9
 DISTRICT- 12

STRUCTURE- @ OYSTER CK(990C-3 & -4)
 HOLE NO.- 3
 STATION- 962+40.39
 OFFSET- 173.54'LT
 CODED BY- YKW
 GRD. WATER ELEV.- 85.9 (ASSUMED)

D E F P T T . H	PEN 1ST 6IN	PEN 2ND 6IN	S A M N P O L . E	TAT LAT- ULT PSI	WET DEN PCF	MOI %	LL %	PI %	DESCRIPTION OF MATERIAL AND REMARKS
0									CLAY,SILTY,BRN,SOFT,W/SHELL
1									
2									
3				1					
4				2	130	15	47	25	
5	9	8							
6									
7				3					SILT,BRN,V.SOFT,MOI
8				4			26	8	
9				5					
10	2	1							
11				6					CLAY,SILTY,SOFT,BRN,BLK
12				7			32	12	
13				8	129	28	33	17	
14				9					
15	1	1							
16									SILT,BRN,BLK,SOFT,MOI
17									
18				10					
19				11			29		
20	6	11							
21				12			34	14	CLAY,SILTY,BRN,SOFT,MOI
22				13					
23				14					
24				15					SILT,BRN,SOFT,MOI
25	7	14							
26									-DRILLER NOTES W/B SAND
27									
28									SAND,W/SILT,CDMPACT,NO RECOVERY
29									
30	12	17							
31									-DRILLER NOTES W/B SAND
32									
33									
34									
35	17	14							

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DRILLER- MIKE BAHM

LOGGER- R.TIBBITS
TITLE- MATL. ANAL. II

PROB (CONTD)

2566

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS

HOLE NUMBER 3

STRAT NUM.	ELEVATION -FEET-		STRAT THICK NESS FEET	CEN- TROID DEPTH FEET	UNIF. SOIL CLASS	PEN TEST BLOWS/ FOOT	TEST CONST	SOIL WET			VARIANCE TAT	
	FROM	TO						COHES LBS/ SQFT	DENS LBS/ CUFT	INT. FRIC ANG.	PEAK	AVG
1	86	79	7.0	3.5	CL	17.0	60					
2	79	75	4.0	9.0	OTHE	3.0	80					
3	75	70	5.0	13.5	CL	2.0	60					
4	70	65	5.0	18.5	OTHE	17.0	80					
5	65	62	3.0	22.5	CL							
6	62	58	4.0	26.0	OTHE	21.0	80					
7	58	45	13.0	34.5	OTHE	30.0	80					

PROB (CONTD)
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(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS
 DISREGARD TO ELEVATION IS 85.9 FEET

HOLE NUMBER 3

STRATA NUMBER	ELEVATION -FEET-		DESIGN STRESS OF SOIL TONS/SQFT PER STRAT	ALLOWABLE STATIC FRICTIONAL RESISTANCE (DS) TONS PER FT OF PERIMETER PER ACCUM- STRATUM ULATIVE		SR	REDUCED ALLOWABLE STATIC FRICTIONAL RESISTANCE PER ACCUM- STRATUM ULATIVE		BEAR FACTOR NC	POINT BEARING STRENGTH SNC TONS/SQFT	TAT TO PEN RAT
	FROM	TO		PER	ACCUM-		PER	ACCUM-			
1	85.9	78.9	0.28	1.98	1.98	0.7	1.39	1.39	3.62	0.00	0.0
2	78.9	74.9	0.04	0.15	2.13	0.7	0.10	1.49	4.29	0.00	0.0
3	74.9	69.9	0.03	0.17	2.30	0.7	0.12	1.61	3.62	0.00	0.0
4	69.9	64.9	0.21	1.06	3.36	0.7	0.74	2.35	4.29	0.00	0.0
5	64.9	61.9	0.00	0.00	3.36	0.7	0.00	2.35	3.62	0.00	0.0
6	61.9	57.9	0.26	1.05	4.41	0.7	0.73	3.09	4.29	0.00	0.0
7	57.9	44.9	0.38	4.88	9.29	0.7	3.41	6.50	4.29	0.00	0.0

DRILLING LOG

COUNTY FORT BEND CO. STRUCTURE * CYSTER CK (9900-3 & -4) THD DIST 12
 HIGHWAY NO SH-99 HOLE NO 3 DATE 5/15/91
 CONTROL 3510-04-005 STATION 962+40.39 GRD. ELEV. 65.9
 IPE LOCATION 173.54' LT GRD. WATER ELEV. 65.9

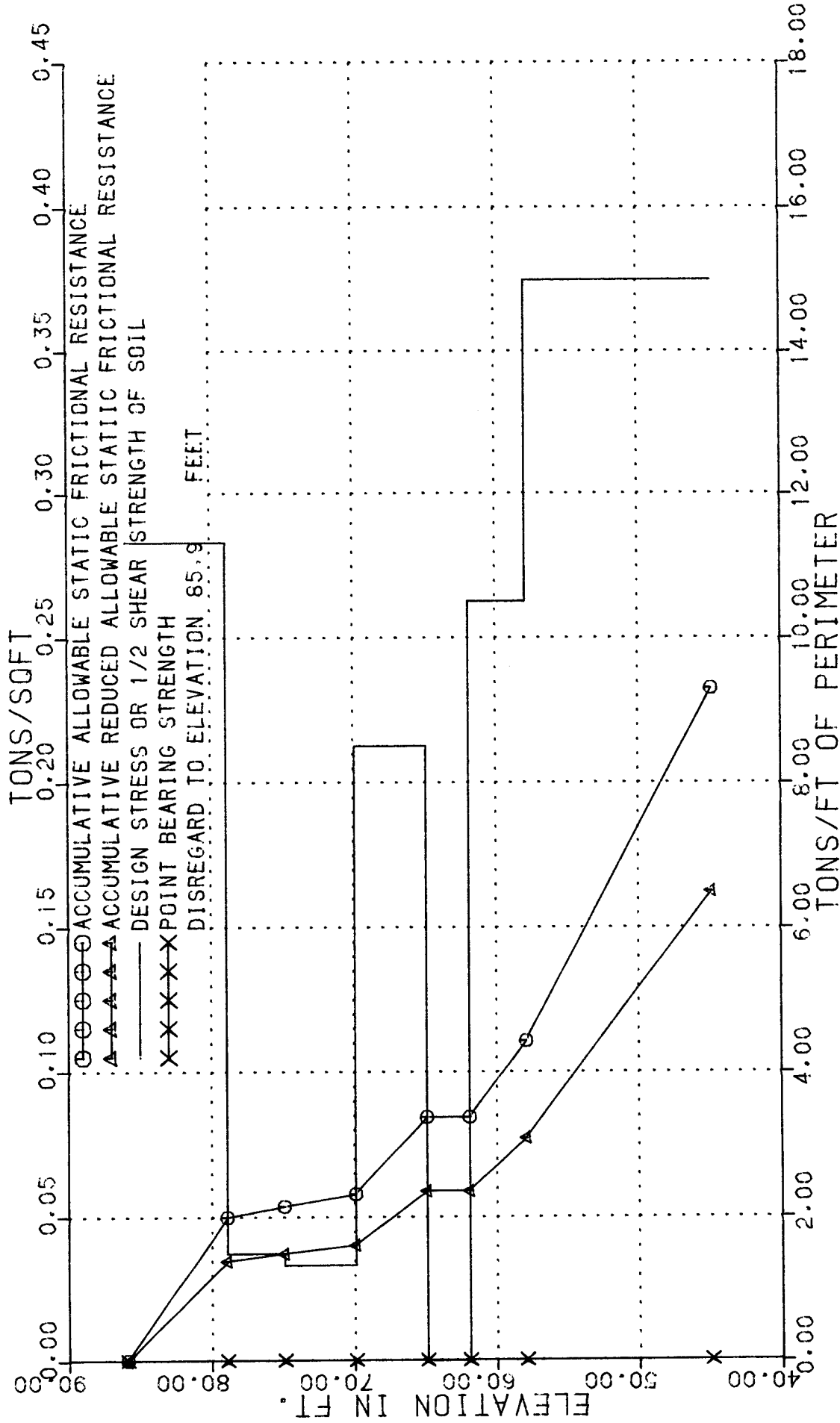
ELEV FT.	LOG	THD PEN. TEST NO. OF BLOWS		DESCRIPTION OF MATERIAL	METHOD OF CORING
		1ST 5"	2ND 5"		
85.9	0			CLAY, SILTY, BRN. SOFT, W/SHELL	0
		9 (6.0")	8 (6.0")		
76.9				SAND, BRN. W/RED BRICK, MOT. V. LOOSE	
	10	2 (6.0")	1 (6.0")		10
74.9				CLAY, SILTY, BRN. MOT. SOFT	
		1 (6.0")	1 (6.0")		
69.9				SILT, BRN. BLK. MOT. LOOSE	
	20	6 (6.0")	11 (6.0")		20
64.9				CLAY, SILTY, BRN. SOFT, MOT	
61.9				SILT, BRN. V. MOT. SL. COMPACT	
		7 (6.0")	14 (6.0")		
57.9				SAND, COMPACT, NO RECOVERY	
	30	12 (6.0")	17 (6.0")		30
		17 (6.0")	14 (6.0")		
	40				40
*REMARKS: NO GWE DATA TAKEN HERE					

DRILLER MIKE BAHM

LOGGER R. TIBBITS

TITLE MATL. ANAL. II

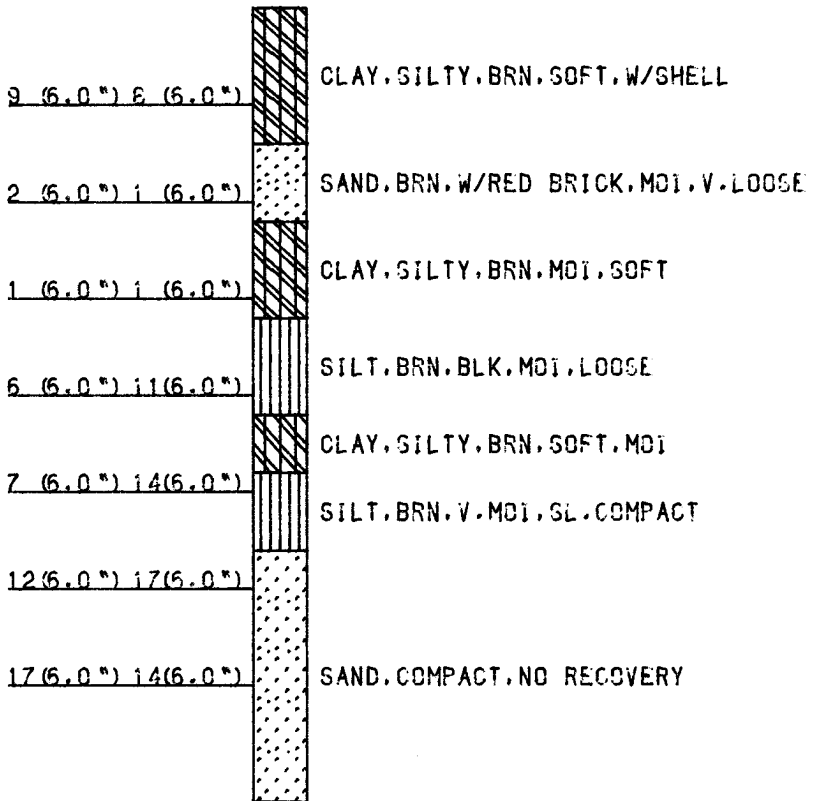
FOUNDING MATERIAL PROPERTIES



COUNTY	FORT BEND CO.	STRUCTURE	CYSTER CK (9930-3 & -4)
HIGHWAY NO	5H-99	HOLE NO	3
CONTROL	3510-04-005	STATION	962+40.39
IPE		LOCATION	173.54' LT
		THD DIST	12
		DATE	5/15/91
		BY	YKW

TEST HOLE NO. 3

GROUND ELEV. 85.9



PROB (CONTD)
2567

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

DRILLING REPORT

Attached with memo on 05/20/91

COUNTY- FORT BEND CO.
HIGHWAY NO.- SH-99
CONTROL- 3510-04-005
PROJECT NO.-
DATE- 5/15/91
GRD. ELEV.- 83.2
DISTRICT- 12

STRUCTURE- @ OYSTER CK(990C-3 & -4)
HOLE NO.- 4
STATION- 963+48.97
OFFSET- 205.60'LT
CODED BY- YKW
GRD. WATER ELEV.- 83.2 (ASSUMED)

D E F P T T . H	PEN 1ST 6IN	PEN 2ND 6IN	S A		TAT LAT- ULT PSI	WET DEN PCF	MOI %	LL %	PI %	DESCRIPTION OF MATERIAL AND REMARKS
			M P L	N O .						
0										CLAY,SILTY,BRN,SOFT,ORG,MOI
1				1						
2				2		132		42	24	
3										
4				3						
5	6	4								
6										SILT,BRN,SOFT,MOI
7										
8										
9										
10	2	2								
11										
12										
13				4		133				SAND,CLAYEY,BRN,V.SOFT,MOI
14				5				29	6	
15	5	1								
16										SILT,BRN,NO RECOVERY
17										
18				6				38	17	CLAY,SILTY,BRN,SOFT,MOI
19				7						
20	3	4								
21										SAND,NO RECOVERY
22										-DRILLER NOTES W/B SAND
23										
24										
25	18	18								
26										
27										
28										
29										
30	21	22								

DRILLER- MIKE BAHM

LOGGER- R.TIBBITS
TITLE- MATL. ANAL. II

PROB (CONTD)

2567

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS

HOLE NUMBER 4

STRAT NUM.	ELEVATION -FEET-		STRAT THICK NESS FEET	CEN- TROID DEPTH FEET	UNIF. SOIL CLASS	PEN TEST BLOWS/ FOOT	SOIL WET TEST CONST	COHES LBS/ SQFT	DENS LBS/ CUFT	INT. FRIC ANG.	VARIANCE TAT	
	FROM	TO									PEAK	AVG RATIO
1	83	77	6.0	3.0	CL	10.0	60					
2	77	70	7.0	9.5	OTHE	4.0	80					
3	70	67	3.0	14.5	SC	6.0	70					
4	67	65	2.0	17.0	OTHE							
5	65	62	3.0	19.5	CL	7.0	60					
6	62	52	10.0	26.0	OTHE	39.5	80					

PROB (CONTD)

2567

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS
DISREGARD TO ELEVATION IS 83.2 FEET

HOLE NUMBER 4

STRATA NUMBER	ELEVATION -FEET-		DESIGN STRESS OF SOIL TONS/SQFT PER STRAT	ALLOWABLE STATIC FRICTIONAL RESISTANCE (DS) TONS PER FT OF PERIMETER PER ACCUM-		SR	REDUCED ALLOWABLE STATIC FRICTIONAL RESISTANCE ----- PER ACCUM-		BEAR FACTOR NC	POINT BEARING STRENGTH SNC TONS/SQFT	TAT TO PEN RAT
	FROM	TO		PER STRATUM	ULATIVE		PER STRATUM	ULATIVE			
1	83.2	77.2	0.17	1.00	1.00	0.7	0.70	0.70	3.62	0.00	0.0
2	77.2	70.2	0.05	0.35	1.35	0.7	0.24	0.94	4.29	0.00	0.0
3	70.2	67.2	0.09	0.26	1.61	0.7	0.18	1.12	4.29	0.00	0.0
4	67.2	65.2	0.00	0.00	1.61	0.7	0.00	1.12	4.29	0.00	0.0
5	65.2	62.2	0.12	0.35	1.96	0.7	0.24	1.37	3.62	0.00	0.0
6	62.2	52.2	0.49	4.94	6.89	0.7	3.46	4.83	4.29	0.00	0.0

DRILLING LOG

COUNTY FORT BEND CO. STRUCTURE 5 CYSTER CK (9900-3 & -4) THD DIST 12
 HIGHWAY NO SH-99 HOLE NO 4 DATE 5/15/91
 CONTROL 3510-04-005 STATION 963+46.97 GRD. ELEV. 63.2
 IPE LOCATION 205.60' LT GRD. WATER ELEV. 63.2

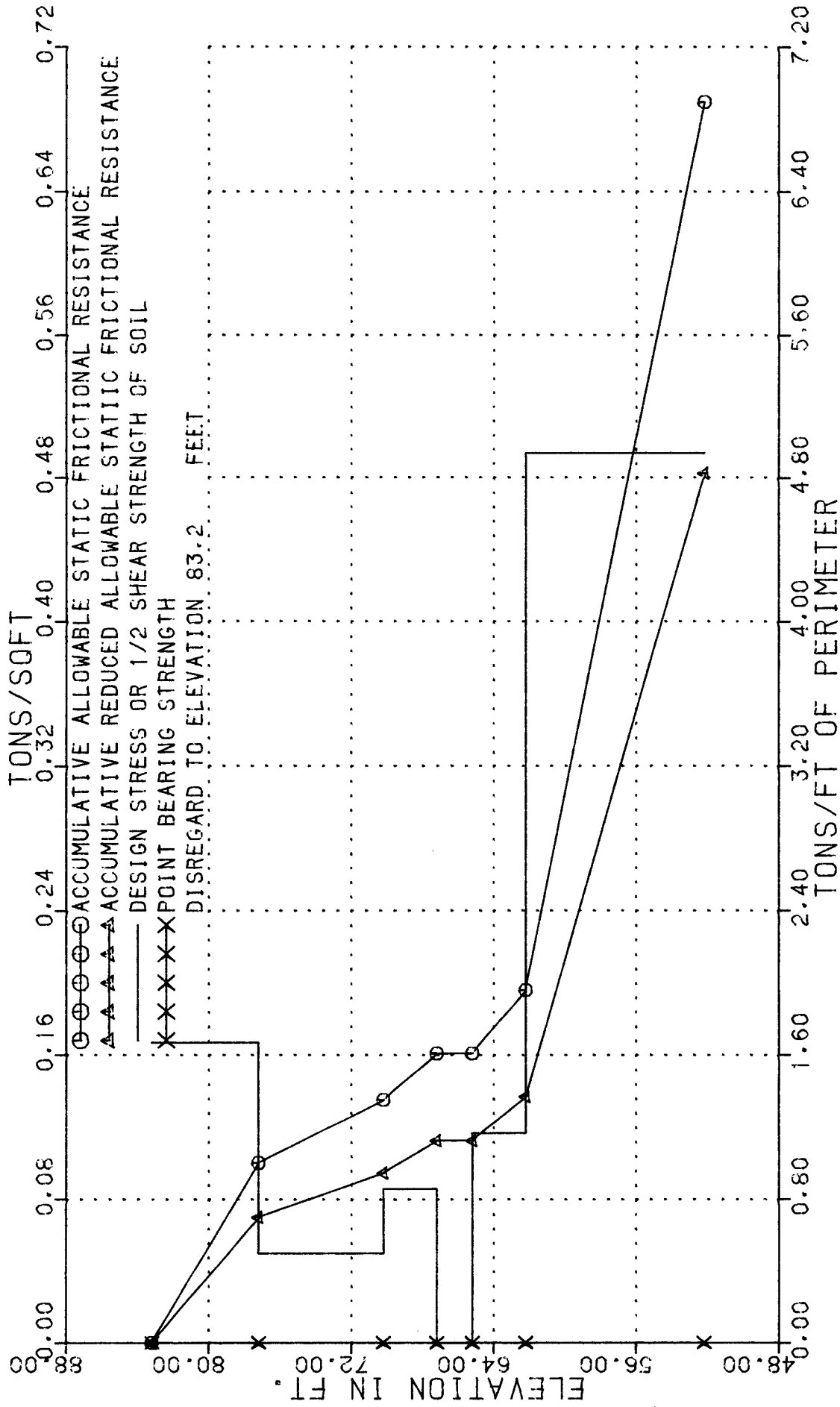
ELEV FT.	LOG	THD PEN. TEST NO. OF BLOWS		DESCRIPTION OF MATERIAL	METHOD OF CORING
		1ST 5"	2ND 5"		
83.2	0			CLAY, SILTY, BRN, SOFT, ORG. MOI	0
		6 (6.0")	4 (6.0")		
77.2	10			SILT, BRN, W/RED BRICK, MOI	10
		2 (6.0")	2 (6.0")		
70.2	20			SAND, CLAYEV, BRN, V. SOFT, V. MOI	
		5 (6.0")	1 (6.0")		
67.2	30			SAND, BRN, SOFT, MOI	
		3 (6.0")	4 (6.0")		
62.2	30			SAND, NO RECOVERY	
		18 (6.0")	16 (6.0")		
		21 (6.0")	22 (6.0")		
*REMARKS: NO GWE DATA TAKEN HERE					

DRILLER MIKE BAHM

LOGGER R. TIBBITS

TITLE MATL. ANAL. II

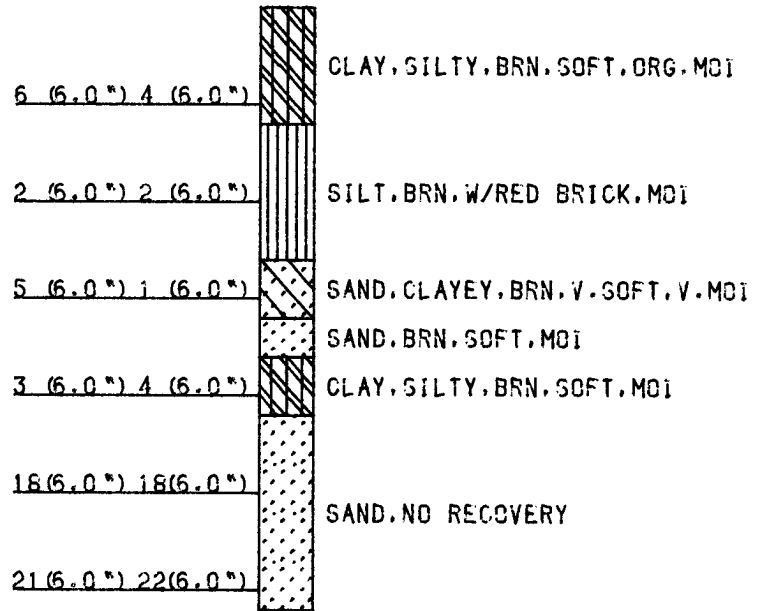
FOUNDING MATERIAL PROPERTIES



COUNTY	FORT BEND CO.	STRUCTURE	CYSYTER CK (9900-3 & -4)
HIGHWAY NO	SH-99	HOLE NO	4
CONTROL	3510-04-005	STATION	963+46.97
IPE		LOCATION	235.60' LT
		THD DIST	12
		DATE	5/15/91
		BY	YKW

TEST HOLE NO. 4

GROUND ELEV. 63.2



September 21, 1989

MEMORANDUM TO: Mr. George Kishi, P.E.

FROM: *For* Michael K. Ho, P.E. *Stanley Kjin*, P.E.

SUBJECT: CSJ: 3510-04-005
SH 99 @ Oyster Creek
Soil Test Reports

Attached for your use and further handling are the two soil test reports for the subject project. If you have any questions, please contact John P. Gianotti at Ext. 4-351.

JPG:en
Attachments

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 65 28 32
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 75 14 17
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 80 50/4.75 50/3.00
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 85 11 12
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SAND, NO RECOVERY

SAND, GRAVELLY, MED, DRILLED OUT, W. B.

SAND, DRILLED OUT, W. B.

SAND, MEDIUM, DRILLED OUT, W. B.

SAND, DRILLED OUT, W. B.

SAND, DRILLED OUT, W/STONE LAYERS

-DRILLER NOTE: 6" STONE LAYER

SAND, TAN, SL. COMPACT, WATER BEARING

CLAY, BROWN, GRAY, NO CORE

CLAY, BROWN, TAN

-W/SM CALC.

-W/SM CALC.

-W/SM CALC.

CLAY, SILTY, BROWN, W/STONE

28 0- 57 138 19 50

29 0- 56 137 20

30 19

15 45

34 18 26

35 0- 3 124 23 30

DRILLER- MIKE BAHM

LOGGER- AL FARRELL

TITLE-

PROB (CONTD)

1972

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS

HOLE NUMBER 1

STRAT NUM.	ELEVATION -FEET-		STRAT THICK NESS FEET	CEN- TRIOD DEPTH FEET	UNIF. SOIL CLASS	PEN TEST BLOWS/ FOOT	SOIL WET CUHES DENS LBS/ LBS/ CUFT	INT. FRIC ANG.	VARIANCE TAT -----				
	FROM	TO							PEAK	AVG	RATIO		
1	78	66	12.0	6.0	CH	5.5	50	755	127	0.0	2.2	1.5	3.2
2	66	60	6.0	15.0	SC	5.0	70	432	118	0.0			
3	60	54	6.0	21.0	OTHE	15.0	80	341	123	0.0	1.1	0.7	3.5
4	54	49	5.0	26.5	OTHE	21.0	80						
5	49	43	6.0	32.0	OTHE	22.0	80						
6	43	38	5.0	37.5	OTHE	17.0	80						
7	38	18	20.0	50.0	OTHE	49.3	80						
8	18	9	9.0	64.5	OTHE	40.5	80						
9	9	-2	11.0	74.5	CH	31.5	50	4072	137	0.0			
10	-2	-13	11.0	85.5	CL	74.6	60	245	124	0.0			

PROB (CONTD)
 1972

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS
 DISREGARD TO ELEVATION IS 77.6 FEET

HOLE NUMBER 1

STRATA NUMBER	ELEVATION -FEET-		DESIGN STRESS OF SOIL TONS/SQFT PER STRAT	ALLOWABLE STATIC FRICTIONAL RESISTANCE (DS) TUNS PER FT OF PERIMETER PER ACCUM-		REDUCED ALLOWABLE STATIC FRICTIONAL RESISTANCE ----- PER ACCUM-			BEAR FACTOR NC	POINT BEARING STRENGTH SNC TONS/SQFT	TAT TO PEN RAT
	FROM	TO		PER STRATUM	ULATIVE	SR	STRATUM	ULATIVE			
1	77.6	65.6	0.19	2.27	2.27	0.7	1.59	1.59	2.57	0.00	1.7
2	65.6	59.6	0.11	0.65	2.92	0.7	0.45	2.04	4.29	0.00	1.5
3	59.6	53.6	0.09	0.51	3.43	0.7	0.36	2.40	4.29	0.00	0.5
4	53.6	48.6	0.26	1.31	4.74	0.7	0.92	3.32	4.29	0.00	0.0
5	48.6	42.6	0.27	1.65	6.39	0.7	1.15	4.47	4.29	0.00	0.0
6	42.6	37.6	0.21	1.06	7.45	0.7	0.74	5.22	4.29	0.00	0.0
7	37.6	17.6	0.62	12.31	19.77	0.7	8.62	13.84	4.29	0.00	0.0
8	17.6	8.6	0.51	4.56	24.32	0.7	3.19	17.03	4.29	0.00	0.0
9	8.6	-2.4	1.02	11.20	35.52	0.7	7.84	24.86	2.57	0.00	1.6
10	-2.4	-13.4	0.06	0.67	36.19	0.7	0.47	25.34	3.62	0.00	0.0

DRILLING LOG

COUNTY FORT BENT CO.
 HIGHWAY NO SH 99
 CONTROL 3510-04-005
 IPE

STRUCTURE SH 99 AT OYSTER CREEK
 HOLE NO 1
 STATION 959+84.80
 LOCATION 16.30' RT

THD DIST 12
 DATE 07/18/89
 GRD. ELEV. 77.6
 GRD. WATER ELEV. 52.3

ELEV FT.	LOG	THD PEN. TEST NO. OF BLOWS		DESCRIPTION OF MATERIAL	METHOD OF CORING
		1ST 6"	2ND 6"		
77.6	0			CLAY, BROWN, WET	0
		3 (6.0")	3 (6.0")		
	10	2 (6.0")	3 (6.0")		10
65.6		2 (6.0")	3 (6.0")	SAND, CLAYEY, BROWN	
59.6	20	3 (6.0")	12 (6.0")	SAND, SILTY, BROWN, FINE, WATER BEARING	20
53.6		11 (6.0")	10 (6.0")	SAND, NO RECOVERY	
48.6	30	11 (6.0")	11 (6.0")	SAND, BROWN, LT. GRAY, MEDIUM, W.B.	30
42.6		10 (6.0")	7 (6.0")	SAND, NO RECOVERY	
37.6	40	8 (6.0")	14 (6.0")	SAND, DRILLED OUT, WATER BEARING	40
		31 (6.0")	29 (6.0")		
	50	33 (6.0")	39 (6.0")		50
		24 (6.0")	19 (6.0")		
17.6	60	9 (6.0")	12 (6.0")	SAND, DRILLED OUT.	60
		28 (6.0")	32 (6.0")		
8.6	70	13 (6.0")	17 (6.0")	CLAY, BROWN, GRAY	70
		14 (6.0")	17 (6.0")		
-2.4	80	50 (4.7")	50 (3.0")	CLAY, SILTY, BROWN, W/STONE	60
		11 (6.0")	12 (6.0")		
	90	22 (6.0")	24 (6.0")		90

*REMARKS: GWE @ 52.3' at end of drilling

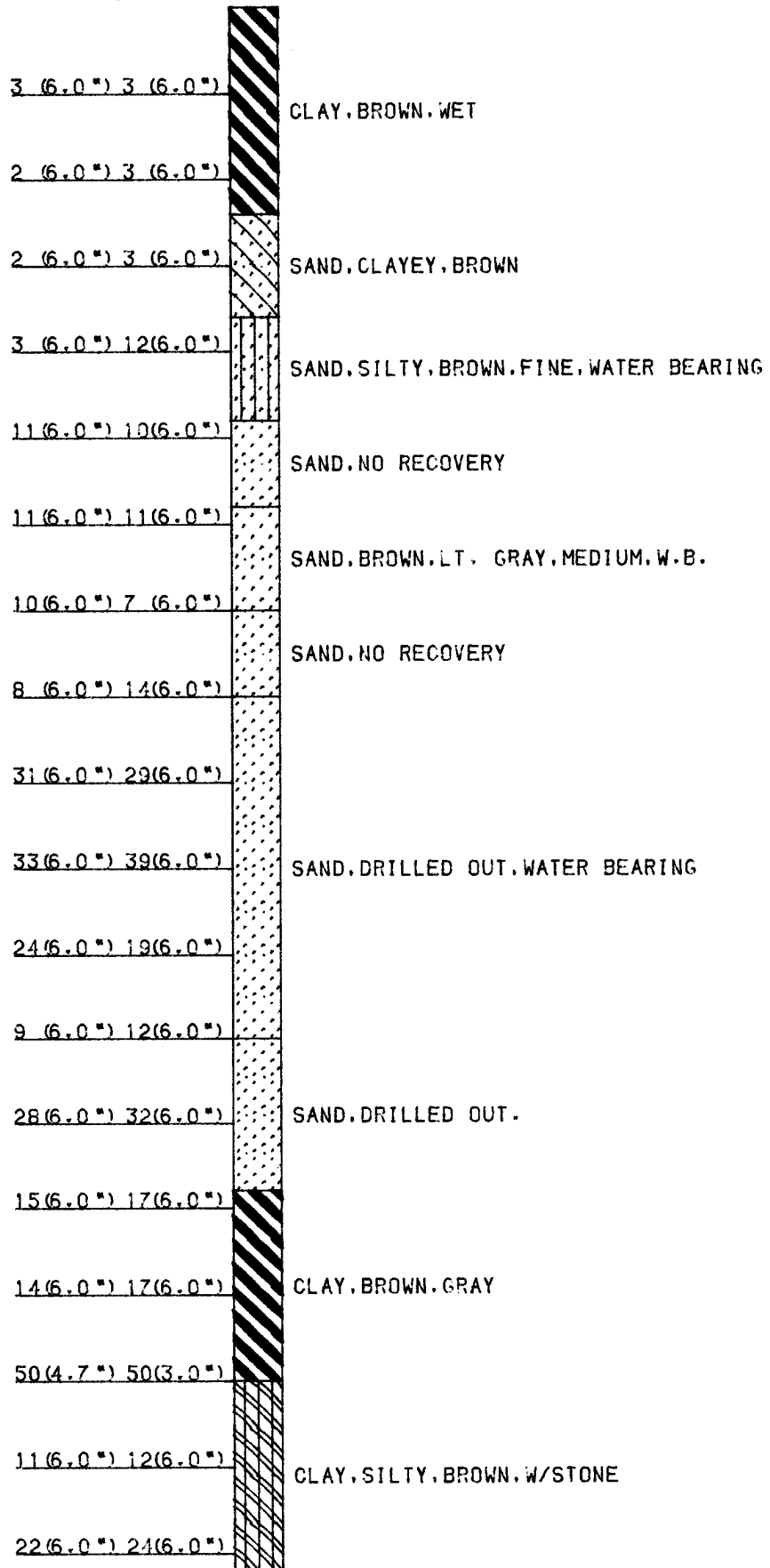
DRILLER MIKE BAHM

LOGGER AL FARRELL

TITLE

TEST HOLE NO. 1

GROUND ELEV. 77.6



PROB (CONTD)
 1972 (NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

DRILLING REPORT

COUNTY- FORT BENT CO. STRUCTURE- SH 99 AT OYSTER CREEK
 HIGHWAY NO.- SH 99 HOLE NO.- 2
 CONTROL- 3510-04-005 STATION- 961+93.60
 PROJECT NO.- OFFSET- 50.90' LT
 DATE- 07/18/89 CODED BY- SFY
 GRD. ELEV.- 80.3 GRD. WATER ELEV.- 70.1
 DISTRICT- 12

D E F P T T . H	PEN 1ST 6IN	PEN 2ND 6IN	S A		TAT LAT- ULT PSI	WET DEN PCF	MOI %	LL %	PI %	DESCRIPTION OF MATERIAL AND REMARKS
			M P L	N O .						
0										CLAY, SL. SILTY, BROWN, SOFT
1										
2										
3	3	3								
4			1			26				SILT, BROWN, SOFT, WET
5			2			29				
6			3	0-	3	120	27			-W/SOME CLAY
7			4			31				-W/SOME CLAY
8	2	2								
9			5	0-	1	114	29			
10			6	0-	1	117	30			SILT, BROWN, SOFT, WET
11			7			30				
12			8			28				
13										
14			9	0-	6	126	28			SAND, SILTY, BROWN, LOOSE
15			10			28	38			
16										
17										SILT, BROWN, SOFT, WET
18	2	3								
19			11			25				
21										
22										
23	3	2								
24			12			28				
25			13	0-	3	114	26			
26			14	0-	3	125	31			
27										
28	2	3								
29			15	0-	6	125	28	31		
30			16	0-	5	122	31			SILT, BROWN, SOFT, W/SOME CLAY, WET
31										
32										
33	2	2								
34			17			25				
35			18	0-	3	121	24			
36			19			25				

37			20		28	31	SAND, SL. SILTY, LT. GRAY, W/COMPACT
38	21	23					
39			21		20		CLAY, SILTY BROWN, STIFF
40			22	0- 12	123	35	61
41			23	0- 17	119	39	SAND - DRILLED OUT
42			24			22	
43	8	9					
44							
45							
46							
47							
48	17	22					
49							
50							
51							
52							
53	39	17					
54							
55							
56							
57							SILT, CLAYEY, BROWN, FIRM, W/SOME CALCS
58	21	14					
59			25			26	
60			26			26	27
61							
62							SAND, SILTY, BROWN, SOFT
63	7	8					
64			27	0- 7	120	27	
65			28			24	27
66							
67							
68	6	7					
69			29			36	-WATERBEARING SAND
70			30			25	-WATERBEARING SAND
71							-WATERBEARING SAND
72							CLAY, BROWN, GRAY, STIFF
73	10	10					
74			31	0- 34	133	20	44
75			32	0- 51	133	20	-GRAY, TAN
76			33	0- 51	135	20	
77			34	0- 48	131	19	
78	12	31					
79							
80							
81							
82							
83	17	16					

DRILLER- MIKE BAHM

LUGGER- AL FARRELL
TITLE-

PROB (CONTD)

1972

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS

HOLE NUMBER 2

STRAT NUM.	ELEVATION -FEET-		STRAT THICK NESS FEET	CEN- TRIOD DEPTH FEET	UNIF. SOIL CLASS	PEN TEST BLOWS/ FOOT	TEST CONST	SOIL WET COHES LBS/ SQFT	DENS LBS/ CUFT	INT. FRIC ANG.	VARIANCE TAT -----			
	FROM	TO									PEAK	AVG	RATIO	
1	80	76	4.0	2.0	CL	6.0	60							
2	76	70	6.0	7.0	OTHE	4.0	80	151	117	0.0				
3	70	66	4.0	12.0	OTHE			101	117	0.0				
4	66	63	3.0	15.5	OTHE			439	126	0.0				
5	63	50	13.0	23.5	OTHE	5.0	80	290	121	0.0	0.9	0.6	3.6	
6	50	43	7.0	33.5	OTHE	4.0	80	295	121	0.0				
7	43	41	2.0	38.0	OTHE	44.0	80							
8	41	39	2.0	40.0	CH			850	123	0.0				
9	39	23	16.0	49.0	OTHE	37.3	80	1217	119	0.0				
10	23	18	5.0	59.5	OTHE	35.0	80							
11	18	7	11.0	67.5	OTHE	14.0	80	475	120	0.0				
12	7	-3	10.0	78.0	CL	31.5	60	3317	133	0.0	6.2	3.1	4.0	

PROB (CONTD)
 1972

(NOTE: NO SOIL IS DISREGARDED FOR STRENGTH ANALYSIS)

SOIL STRENGTH ANALYSIS RESULTS
 DISREGARD TO ELEVATION IS 80.3 FEET

HOLE NUMBER 2

STRATA NUMBER	ELEVATION -FEET-		DESIGN STRESS OF SOIL TONS/SQFT PER STRAT	ALLOWABLE STATIC FRICTIONAL RESISTANCE (DS) TONS PER FT OF PERIMETER PER ACCUM-		REDUCED ALLOWABLE STATIC FRICTIONAL RESISTANCE ----- PER ACCUM-			BEAR FACTOR NC	POINT BEARING SNC TONS/SQFT	TAT TO PEN RAT
	FROM	TO		PER	ACCUM-	SR	PER	ACCUM-			
1	80.3	76.3	0.10	0.40	0.40	0.7	0.28	0.28	3.62	0.00	0.0
2	76.3	70.3	0.04	0.23	0.63	0.7	0.16	0.44	4.29	0.00	0.8
3	70.3	66.3	0.03	0.10	0.73	0.7	0.07	0.51	4.29	0.00	0.0
4	66.3	63.3	0.11	0.33	1.06	0.7	0.23	0.74	4.29	0.00	0.0
5	63.3	50.3	0.07	0.94	2.00	0.7	0.66	1.40	4.29	0.00	1.2
6	50.3	43.3	0.07	0.52	2.52	0.7	0.36	1.76	4.29	0.00	1.5
7	43.3	41.3	0.55	1.10	3.62	0.7	0.77	2.53	4.29	0.00	0.0
8	41.3	39.3	0.21	0.42	4.04	0.7	0.30	2.83	2.57	0.00	0.0
9	39.3	23.3	0.30	4.87	8.91	0.7	3.41	6.24	4.29	0.00	0.7
10	23.3	18.3	0.44	2.19	11.10	0.7	1.53	7.77	4.29	0.00	0.0
11	18.3	7.3	0.12	1.31	12.40	0.7	0.91	8.68	4.29	0.00	0.7
12	7.3	-2.7	0.83	8.29	20.70	0.7	5.81	14.49	3.62	0.00	1.6

DRILLING LOG

COUNTY FORT BENT CO. STRUCTURE SH 99 AT OYSTER CREEK
 HIGHWAY NO SH 99 HOLE NO 2
 CONTROL 3510-04-005 STATION 961+93.60
 TPE LOCATION 50.90' LT

THD DIST 12
 DATE 07/18/89
 GRD. ELEV. 80.3
 GRD. WATER ELEV. 70.1

ELEV FT.	LOG	THD PEN. TEST NO. OF BLOWS		DESCRIPTION OF MATERIAL	METHOD OF CORING
		1ST 6"	2ND 6"		
80.3	0			CLAY, SL. SILTY, BROWN, SOFT	C
		3 (6.0")	3 (6.0")		
76.3				SILT, BROWN, SOFT	
		2 (6.0")	2 (6.0")		
70.3	10			SILT, BROWN, SOFT, WET	10
66.3				SAND, SILTY, BROWN, LOOSE	
63.3		2 (6.0")	3 (6.0")	SILT, BROWN, SOFT, WET	
	20				20
		3 (6.0")	2 (6.0")		
		2 (6.0")	3 (6.0")		
50.3	30			SILT, BROWN, W/SOME CLAY, SOFT, WET	30
		2 (6.0")	2 (6.0")		
43.3		21 (6.0")	23 (6.0")	SAND, SL. SILTY, LT. GRAY, WB, COMPACT	
41.3				CLAY, SILTY, BROWN, STIFF	
39.3	40			SAND - DRILLED OUT	40
		8 (6.0")	9 (6.0")		
		17 (6.0")	22 (6.0")		
	50				50
		39 (6.0")	17 (6.0")		
23.3		21 (6.0")	14 (6.0")	SILT, CLAYEY, BROWN, FIRM, W/SOME CALCS	
	60				60
18.3		7 (6.0")	8 (6.0")	SAND, SILTY, BROWN, SOFT	
		6 (6.0")	7 (6.0")		
	70				70
7.3		10 (6.0")	10 (6.0")	CLAY, BROWN, GRAY, TAN, STIFF	
		12 (6.0")	31 (6.0")		
	80				80
		17 (6.0")	16 (6.0")		
*REMARKS: GWE @ 70.1' at end of drilling					

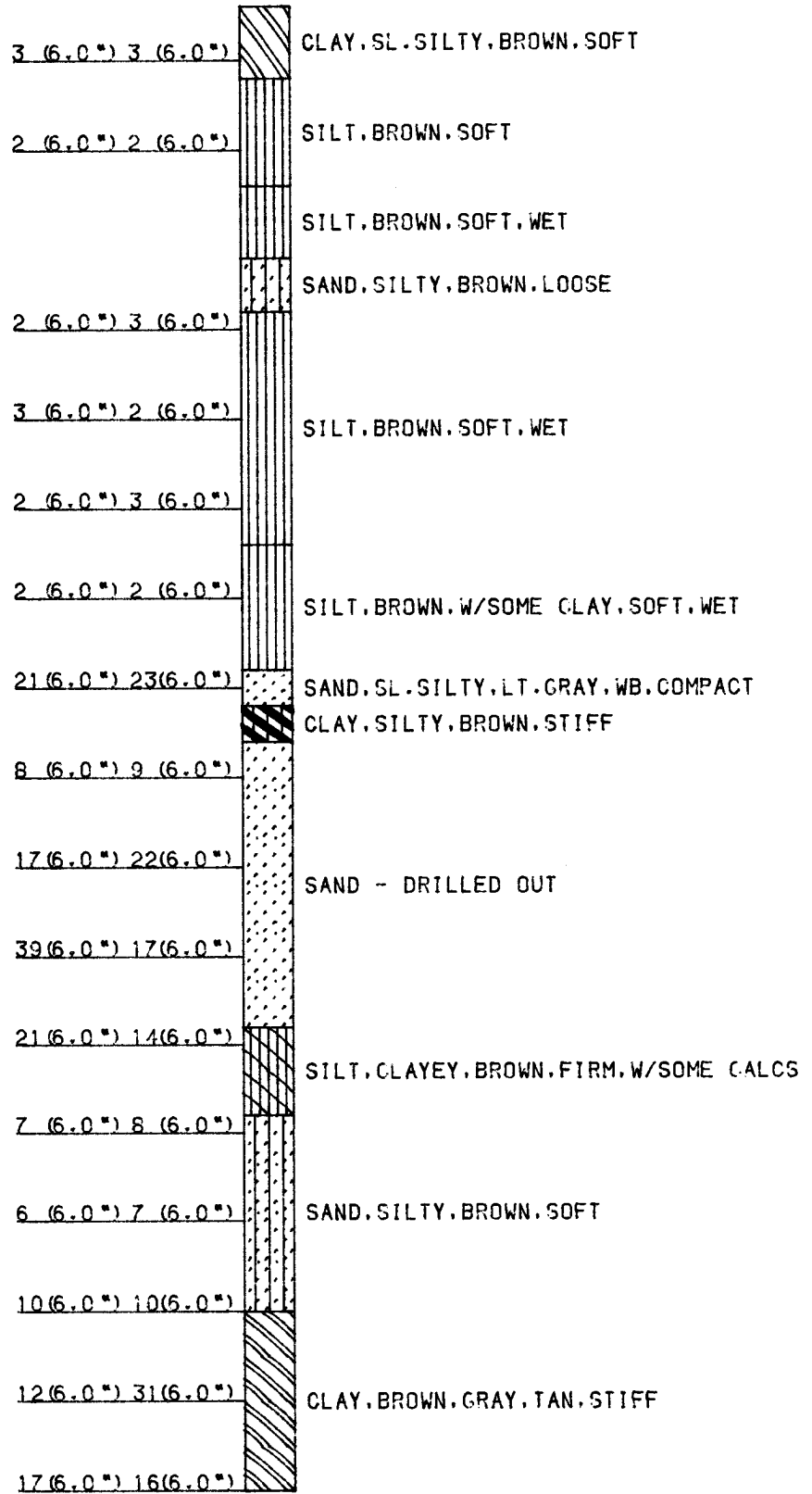
DRILLER MIKE BAHM

LOGGER AL FARRELL

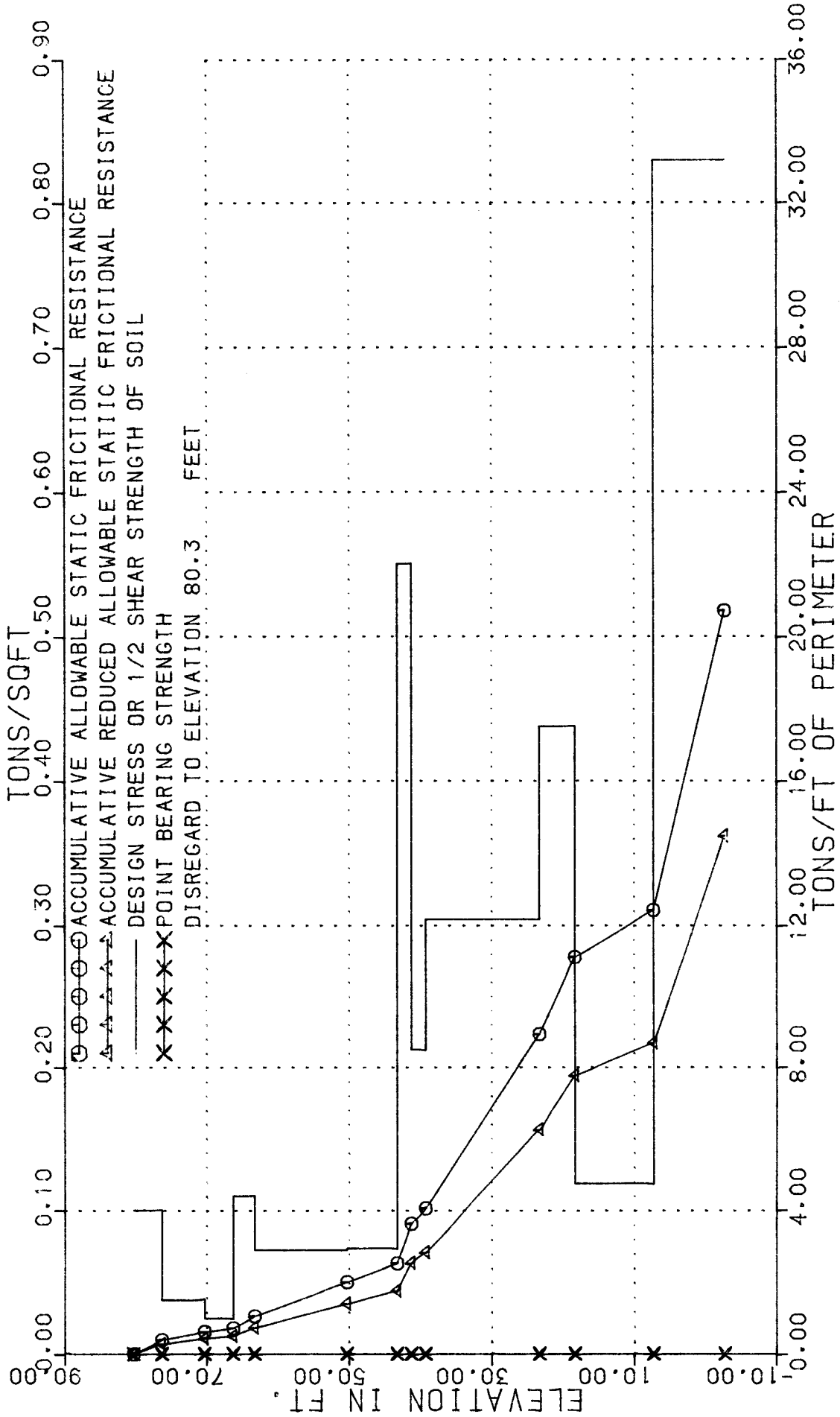
TITLE

TEST HOLE NO. 2

GROUND ELEV. 80.3



FOUNDING MATERIAL PROPERTIES



COUNTY	FORT BENT CO.	STRUCTURE SH 99 AT OYSTER CREEK	THD DIST	12
HIGHWAY NO	SH 99	HOLE NO	DATE	07/18/89
CONTROL	35:0-04-005	STATION	BY	SFY
IPE		LOCATION		
				50.90' LT