ENGINEERING REPORT

for

CONTRACT NUMBER DACW 33-83-D-0006
WORK ORDER NUMBER 0030

SUBSURFACE INVESTIGATION

SECTION 107, SMALL BOAT NAVIGATION PROJECT
ROCKPORT HARBOR AND PIGEON COVE
ROCKPORT, MASSACHUSETTS

Prepared for:

U.S. Army Corps of Engineers
New England Division
424 Trapelo Road
Waltham, Massachusetts 02254

DECEMBER 13, 1985
Project No. 60262

EGA

RECEIVED
DEC 16 1985
GEOTECHNICAL
ENGINEERING BRANCH

EGA
EASTERN GEOTECHNICAL ASSOCIATES • BRIGGS
164 Washington Street, Norwell, MA 02061 ▶ Telephone (617) 773-1744

December 13, 1985

U.S. ARMY CORPS OF ENGINEERS
New England Division
424 Trapelo Road
Waltham, Massachusetts

Attention: Richard Reardon

RE: Contract DACW-33-83-D-0006
Work Order No. 0030

Dear Mr. Reardon:

In accordance with Work Order No. 0030, dated May 24, 1985, attached is one final copy of our Engineering Report for the subsurface investigation performed at Rockport Harbor and Pigeon Cove, Rockport, Massachusetts for proposed anchorages.

If you have any questions or comments, please do not hesitate to call.

Very truly yours,

Charles H. Gross, P.E.

CHG:cc

Attachments

TABLE OF CONTENTS

1.0 GENERAL

1.1 Authorization
1.2 Project Site
1.3 Purpose
1.4 Scope of the Investigation

2.0 QUALITY CONTROL

2.1 Equipment
2.2 Records
2.3 Procedures

3.0 QUALITY ASSURANCE CERTIFICATION

Table 1 Summary of Activities

Figure 1 Probe Location Plan - Rockport Harbor
Figure 2 Probe Location Plan - Pigeon Cove

Appendix A Inspection and Exploration Instructions
Appendix B Safety Reports
Appendix C Field Logs of Probes - Rockport Harbor
Appendix D Field Logs of Probes - Pigeon Cove
Appendix E Survey Field Notes

1.0 GENERAL

1.1 Authorization

The work reported herein was performed under Contract DACW 33-83-D-0006, Work Order Number 0030, dated May 24, 1985. The authority for this project was derived from Section 107 of the 1960 Rivers and Harbors Act, as amended.

1.2 Project Site

The site is located in Rockport Harbor and Pigeon Cove in Rockport, Massachusetts.

1.3 Purpose

The purpose of this work was to determine the rock line for the proposed anchorage in Rockport Harbor and Pigeon Cove in Rockport, Massachusetts.

1.4 Scope of the Investigation

Inspection and exploration instructions, which were provided by the Army Corps of Engineers, New England Division, are included in Appendix A. The project subsurface investigation employed machine probes.

Work under this delivery order is separated into two areas: Rockport Harbor and Pigeon Cove. The Rockport Harbor area exploration program consisted of drilling seventy machine probes. The Pigeon Cove area exploration program consisted of drilling ninety-four machine probes. The probe locations are shown on the Probe Location Plans, Figures 1 and 2.

The machine probes were performed in accordance with paragraph "8c. (3)" page C-14 of the specifications using "AW" size drill rods. The probes were driven to elevation -15.0 ft. Mean Low Water (M.L.W.) or refusal.

2.0 QUALITY CONTROL

2.1 Equipment

The following equipment and tools were used to perform the work:

a. Drilling Platform: A 16 by 12 ft. wooden raft was used as the drilling platform. The raft was moved by a 16 ft. Boston Whaler powered by a seventy-five horsepower Johnson outboard motor or a 30 ft. lobster fishing boat.

b. Core Drill: The core drill used was a modern hydraulically driven rotary head unit manufactured by Acker Drill Company.

c. Drive Hammer: The drive hammer used to advance the drill rods for probes weighed approximately 300 pounds.

d. Rods: AW-size drill rods were used for probes.

2.2 Records

NED Forms 58 and 58A were used to record pertinent drilling and sampling operations. The probe logs include the following information for probes:

1. Name of Project
2. Site location designation.
3. Ground elevation at location of exploration.
4. Date exploration performed.
5. Method of penetration.
6. Depth of penetration.
7. Density of material encountered, determined by sound and performance of probing operation.
8. Name of driller and field inspector.
9. Blows/ft. of penetration.

The test probe logs contained the following information:

1. Hole number, hole designation and elevation of top of hole.

2. Make and manufacturer's model designation of equipment.

3. Type of drilling and sampling operation by depth.

4. Dates and time by depth when drilling operations were performed.

5. Depth to bottom of hole.

2.3 Procedures

a. The machine probes were made by advancing an open end AW drill rod from the mud line to elevation - 15.0 feet mean low water or refusal by the impact of a 300 pound hammer falling freely through an 18 inch drop, recording the blows per foot of penetration. Refusal is defined as 100 blows with no penetration or bouncing refusal.

b. The location of each probe was established by turning an angle from control points on shore and using stadia readings for measuring the correct distance. Bottom elevations were calculated by determining surface water elevations utilizing a tide gauge, and subtracting the depth of water to the mud line.

3.0 QUALITY CONTROL CERTIFICATION

I hereby certify that the above-mentioned records, equipment, and procedures were used to perform the subsurface exploration described herein. I also certify that the work was performed in a professional manner and meets the requirements set forth in the work order.

CERTIFIED 13 December 1985

David S. Campbell

TABLE #1

Pigeon Cove
Rockport, MA

Summary of Activities

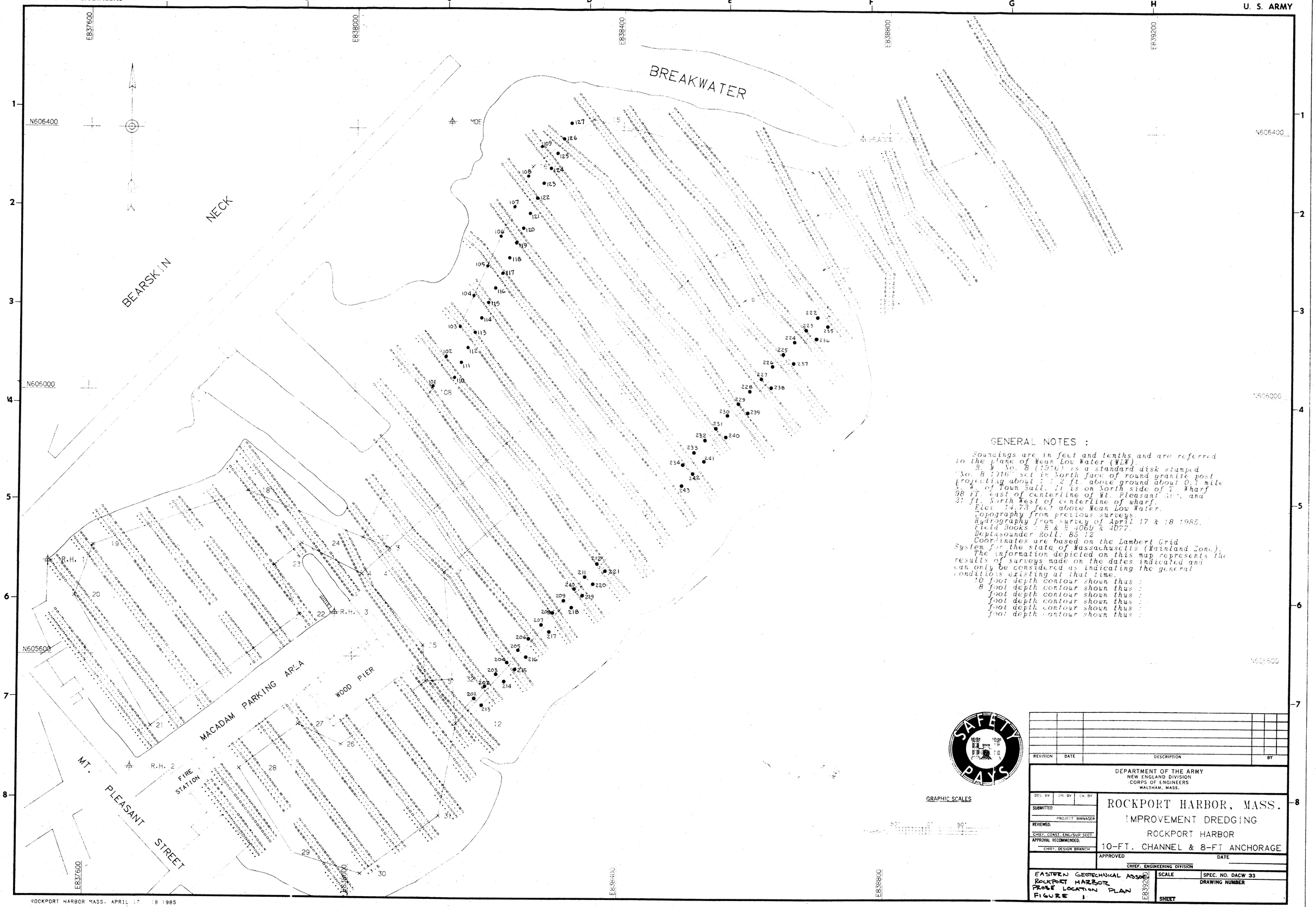
Date	Activity
11 July	Mobilized barge from Granite Pier to Pigeon Cove. Drove probes 105-1, 104-2, 103-3 for a total of 6.3 feet.
12 July	Drove probes 101-4, 102-5, 106-6, 113-7, 120-8 and 127-9 for a total of 8.5 feet.
15 July	Loaded barge and set transit. Drove probes 131-10, 126-11, 119-12, 112-13, 111-14, 110-15, 109-16 and 108-17 for a total of 29.9 feet.
16 July	Started probes at 9:00, anchor stuck between 10:35 and 11:20. Drove probes 107-18, 114-19, 121-20, 128-21, 129-22, 123-23, 116-24, 105-25 and 122-26 for a total of 24.4 feet.
17 July	Moved near probes at breakwall and set transit on new location. Drove probes 124-27, 117-28, 118-29, 125-30, 130-31, 251-32, 238-33 and 252-34 for a total of 19.9 feet.
18 July	Drove probes 239-35, 240-36, 253-37, 244-38 and 257-39 for a total of 18.7 feet.
19 July	Drove probes 254-40, 255-41, 259-42, 258-43, 260-44, 261-45 and 262-46 for a total of 27.5 feet.
22 July	Rain in morning, loaded barge, moved near location and set transit. Drove probes 243-47, 242-48, 241-49, 263-50, 250-51, 205-52, 249-53, 248-54 and 247-55 for a total of 18.8 feet.
23 July	Barge hung up due to low tide for 3-1/2 hours. Drove probes 222-56, 221-57, 220-58, 219-59, 218-60, 225-61, 226-62 and 227-63 for a total of 35.6 feet.
24 July	Drove probes 213-64, 212-65, 211-65, 206-67, 207-68, 208-69, 214-70, 215-71, 216-72, 217-73, 210-74, 209-75 and 204-76 for a total of 52.0 feet.

TABLE #1

Date	Activity
25 July	Rig down, waiting for Fishing boat to move 10:25 - 10:55. Drove probes 224-77, 223-78, 229-79, 228-80, 234-81, 233-82, 232-83, 201-84, 202-85, 203-86, 256-87, 245-88 and 246-89 for a total of 44.1 feet.
26 July	Checked Rockport Harbor, etc. 9:35 to 1:00, rain at 10:30. Drove probes 237-90, 235-091, 231-92, 230-93 and 236-94 for a total of 34.8 feet.
29 July	Moved to Rockport Harbor. Drove probes 101-1 and 110-2 for a total of 14.1 feet.
30 July	Load barge, set transit and had to move survey rod to shoot distance 8:00 - 10:30. Drove probes 111-3, 102-4, 112-5, 113-6, 103-7, 114-8, 104-9, 115-10 and 116-11 for a total of 42.9 feet.
31 July	Moved transit 12:10 - 1:00, Moved barge to inside dock due to rain 2:15 - 3:30. Drove probes 117-12, 105:13, 118-:14, 119-15, 106-16, 120-17, 121-18 and 122:19 for a total of 33.7 feet
1 August	No probes due to rain and strong winds.
2 August	Moved transit 12:15 - 12:45. Drove probes 123-20, 124-21, 125-22, 126-23, 127-24, 109-25, 108-26 and 107-27 for a total of 33.2 feet
5 August	Tide low, moved on other side of harbor 8:00 - 10:00. Moved transit 11:45 - 12:45. Drove probes 234-28, 242-29, 242-30, 241-31, 240-32 and 239-33 for a total of 40.6 feet.
6 August	Moved transit 11:30 - 12:25. Drove probes 212-34, 221-35, 220-36, 219-37, 218-38, 226-39, 238-40, 237-41, 236-42 and 235-43 for a total of 39.4 feet.

Table #1

Date	Activity
7 August	Drove probes 211-44, 210-45, 209-46, 208-47, 207-48, 206-49, 222-50, 223-51, 224-52, 225-53. Total drill footage of 51.7'.
8 August	Drove probes 217-54, 216-55, 215-56, 214-57, 203-58, 202-59, 227-60, 228-61, 229-62. Total drill footage of 53.6'.
9 August	Drove probes 230-63, 231-64, 252-65, 233-66, 213-67, 201-68, 204-69, 205-70. Total drill footage of 56.1'.



GENERAL NOTES :

Soundings are in feet and tenths and are referred to the plane of Mean Low Water (MLW).

B. M. No. 8 (1916) is a standard disk stamped "No. 8 1916" set in North face of round granite post projecting about 1 1/2 ft. above ground about 0.1 mile N. W. of Town Hall. It is on North side of T. Wharf 98 FT. East of centerline of Mt. Pleasant Ave. and 21 ft. North West of centerline of wharf.

Elev. 14.73 feet above Mean Low Water.

Topography from previous surveys.

Hydrography from survey of April 17 & 18 1985.

Field Books : R & H 4069 & 4077.

Depthsounder Roll: 85 12

Coordinates are based on the Lambert Grid System for the state of Massachusetts (Mainland Zone).

The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time.

10 foot depth contour shown thus :
8 foot depth contour shown thus :
foot depth contour shown thus :
foot depth contour shown thus :
foot depth contour shown thus :
foot depth contour shown thus :

REVISION	DATE	DESCRIPTION	BY

DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
WALTHAM, MASS.

DES. BY | DR. BY | CK. BY

SUBMITTED: PROJECT MANAGER

REVIEWED: CHIEF, COAST. ENG/SUR SECT.

APPROVAL RECOMMENDED: CHIEF, DESIGN BRANCH

ROCKPORT HARBOR, MASS.

IMPROVEMENT DREDGING

ROCKPORT HARBOR

10-FT. CHANNEL & 8-FT ANCHORAGE

APPROVED DATE

CHIEF, ENGINEERING DIVISION

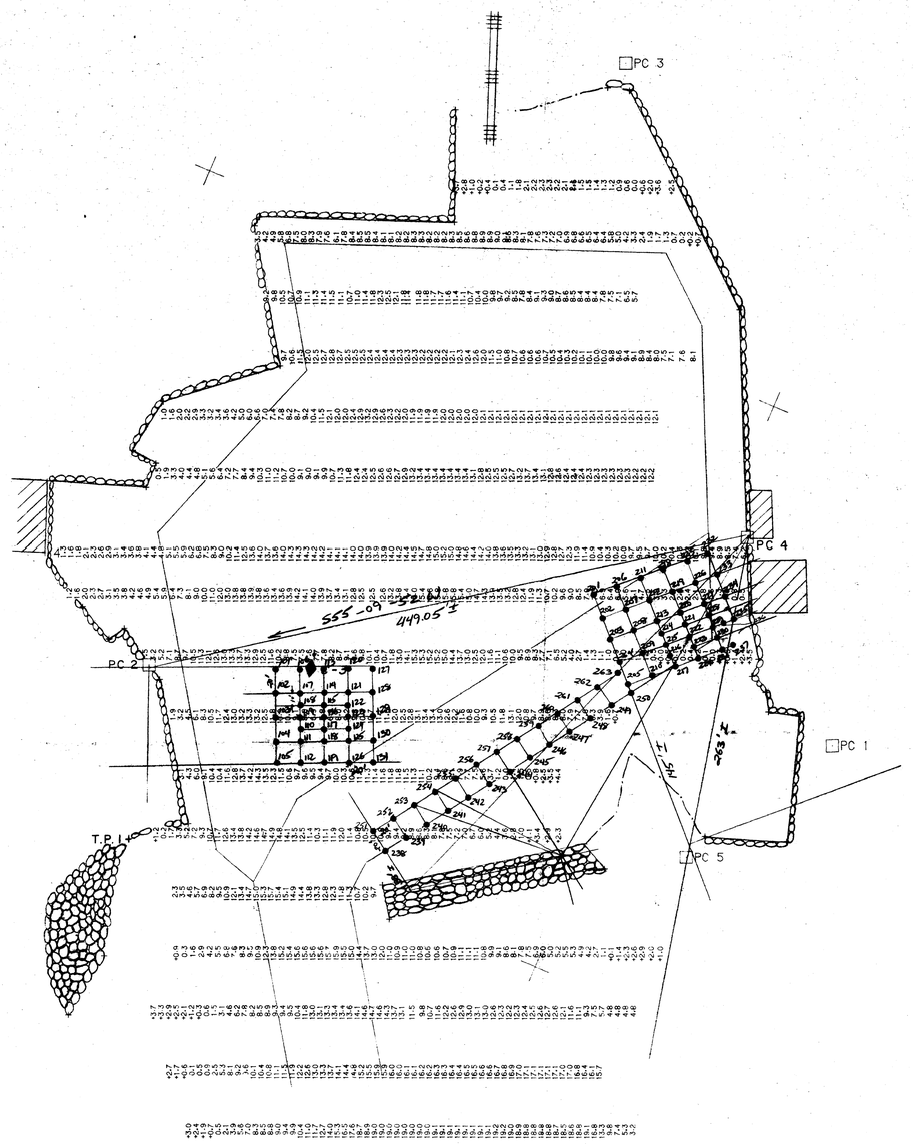
EASTERN GEOTECHNICAL ASSOC.
ROCKPORT HARBOR
PROBE LOCATION PLAN
FIGURE 1

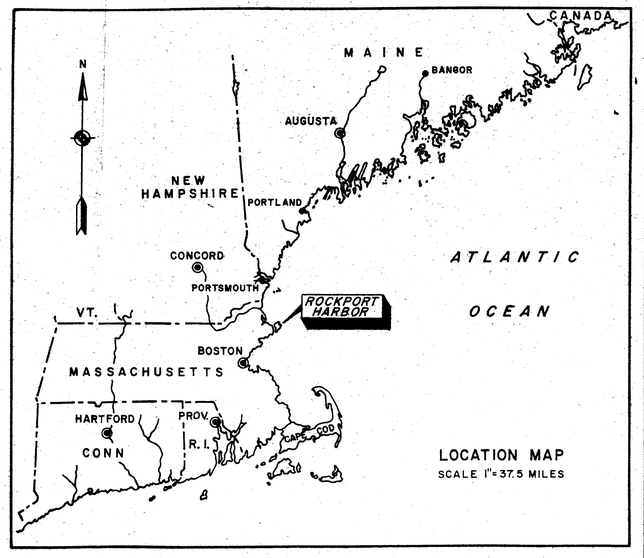
SCALE | SPEC. NO. DACW 33

DRAWING NUMBER

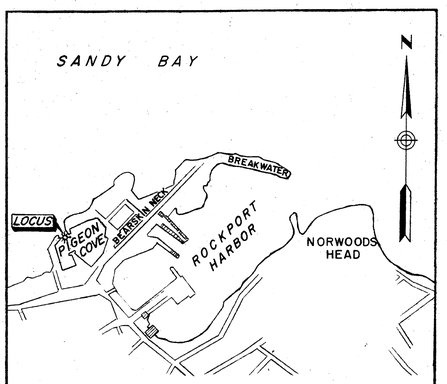
SHEET

CORPS OF ENGINEERS U. S. ARMY





LOCATION MAP
SCALE 1"=37.5 MILES



VICINITY MAP
SCALE 1 : 5000

FROM U.S.C. & G.S. CHART 13279

GENERAL NOTES

Soundings are in feet and tenths and are reffered to the plane of Mean Low Water.

Hydrography from surveys of February 7 and 11, 1985.

Field books: R.&H. 4069, 4077 and 4079.

Fathometer roll: 85-1.

Coordinates are on the Lambert Grid System for the Commonwealth of Massachusetts.

B.M. 8 (1916) is a standard disk, stamped "No. 8 1916," set in north face of round granite post projecting about 1½' above ground, about 0.1 mile northwest of town hall. It is on north side of T wharf, 98' east of centerline of Mount Pleasant Ave. and 21' northwest of centerline of wharf. Elev. 14.73' above M.L.W.

"The information depicted on this map represents the results of surveys made on the dates indicated and can only be considered as indicating the general conditions existing at that time."

8 Ft. depth contour shown thus: — — — — — —

10 " " " " " : ——— ——— ———

INDEX OF FLOATING AIDS			
NO.	DATE	STATE PLANE COORDINATES	GEOGRAPHIC POSITION
C-3	2-11-85	N612167.45 E835735.59	42°-40'-35.7"N 70°-37'-24.3"W

GRAPHIC SCALES

1"=37.5 MI. 25 0 25 50 75 MI.

1"=50' 50' 0 50' 100'

1:5000 500' 0 500'

REVISION	DATE	DESCRIPTION	BY

DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
WALTHAM, MASS.

DES. BY E.J.K. | DR. BY E.J.K. | CK. BY

SUBMITTED: PROJECT MANAGER

REVIEWED: CHIEF, COAST. ENG/SUR SECT.

APPROVAL RECOMMENDED: CHIEF, DESIGN BRANCH

ROCKPORT HARBOR, MA.
IMPROVEMENT DREDGING
PIGEON COVE
10-FT. CHANNEL AND 8-FT. ANCHORAGE

APPROVED CHIEF, ENGINEERING DIVISION

DATE MARCH 1985

EASTERN GEOTECHNICAL ASSOCS.
PIGEON COVE
PROBE LOCATION PLAN
FIGURE 2

SCALE: 1"=50' | SPEC. NO. DACW 33

DRAWING NUMBER F-20

SHEET 1 OF 1

PIGEON COVE ROCKPORT MA.

MAKEPEACE P-6164

APPENDIX A

Inspection and Exploration Instructions

ATTACHMENT NO. 1

GEB REQUISITION NO. 85-58 - DACW 33-83-D-0006

DELIVERY ORDER NO. 0030

INSPECTION AND EXPLORATION INSTRUCTIONS

PROJECT: Section 107, Small Boat Navigation Project

SITE: Rockport Harbor and Pigeon Cove, Rockport, MA

PURPOSE: The subsurface investigations are to determine the rock line for the proposed anchorage in Rockport Harbor and Pigeon Cove, Rockport, MA

1. SCOPE OF INVESTIGATION

a. Locate one hundred and sixty-four (164) 300# machine probes by survey using EDM. Coordinates are shown on Attachment No. 2 for probes and control points. Elevations will be determined utilizing a tide gage established by the survey crew. Mean low water (MLW) datum shall be used on all probe logs and throughout the geotechnical report.

b. One hundred and sixty-four (164) machine probes shall be driven to an elevation of -15 MLW or refusal in accordance with paragraph 8c.(3), page C-14 of the specifications and shall be performed using "A" size rods.

c. A geotechnical inspector shall act as field inspector while performing the probes. The inspector shall provide telephone reports to Mr. Wong, Corps of Engineers, at 617-647-8177 at least every two working days.

2. SITE CONDITIONS

The proposed exploration program is in Pigeon Cove and Rockport Harbor, Rockport, MA. All of proposed explorations are within the tidal range. It is anticipated that water depths at the exploration site range from 0 to 25 feet. The exploration program shall be organized such that explorations in high areas are accomplished during high tides to avoid grounding of the float.

3. RIGHTS OF ENTRY

The Contractor is responsible for securing all rights of entry, approvals, permits, etc. necessary for the performance of the work.

4. COORDINATION

Mr. Terrance Wong, Corps of Engineers, 617-647-8177, shall be contacted five days prior to start of work and at least every two working days by the geotechnical inspector to report on how work is progressing and what types of materials are being encountered.

5. EXPLORATION NUMBERS

The machine probes designated 101 through 127 and 201 through 243 for Rockport Harbor and 101 through 131 and 201 through 263 for Pigeon Cove and located on Attachment No. 3 shall be numbered FP-85-101 through FP-85-127 and FP-85-201 through FP-85-243 for Rockport Harbor and FP-85-101 through FP-85-131 and FP-85-201 through FP-85-263 for Pigeon Cove corresponding to the designated number shown on Attachment No. 2 and 3. The new numbers shall be indicated on the exploration logs and shown on a plan of explorations.

6. GOVERNMENT REVIEW

The Government will review the draft submittal as well as the completed work. Subsequent to such review, the Contractor shall accomplish any corrections which may be directed as the result of the Government review.

7. COMPLETION SCHEDULE

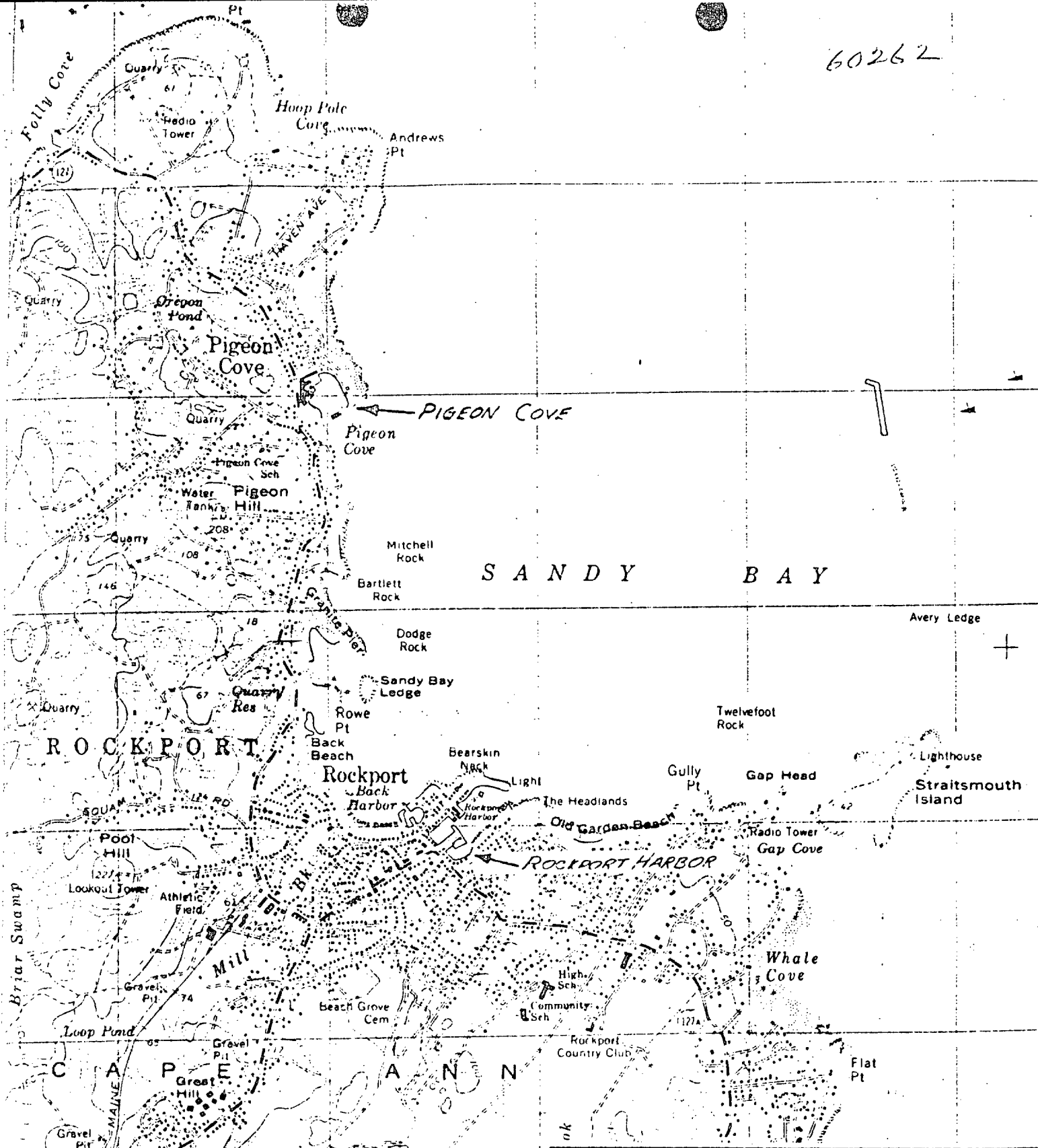
Services under this delivery order shall start within 10 calendar days after receipt of delivery order. Duration of field work is estimated to be 20 work days. The geotechnical report shall be submitted in draft format for review by the Government, postmarked no later than seven calendar days after completion of the field work. Government review will take approximately ten calendar days from receipt of draft report. The final geotechnical report shall be submitted postmarked no later than seven calendar days after receipt of draft report including the action taken on possible Government comments.

8. QUALITY CONTROL

You will be held responsible for the quality of the maps submitted and for all damages caused the Government as a result of your negligence in the performance of any services furnished under the contract.

Although submissions required by your contract are technically reviewed by the Government, it is emphasized that your work must be prosecuted using proper internal controls and review procedures. The letter of transmittal for each submission which you make shall include a certification that the submission has been subjected to your own review and coordination procedures to insure (a) completeness for each discipline commensurate with the level of effort required for that submission, (b) elimination of conflicts, errors and omissions, and (c) the overall professional and technical accuracy of the submission. Documents which are significantly deficient in any of these areas will be returned to you for correction and/or upgrading prior to our completing our review. Contract submission dates will not be extended if a resubmission of draft material is required for this reason.

60262



DEPARTMENT OF THE ARMY
NEW ENGLAND DIVISION
CORPS OF ENGINEERS
WALTHAM, MASS.

DES BY
DR BY
CK BY

MASS.
QUADRANGLE LOCATION

ROCKPORT, MASS.
N4235—W7031/7.5
1973
SCALE 1:25 000

GEOTECH. ENG. BR. SCALE:
BK NO. DATE:

ATTACHMENT 2
Sheet 1 of

60262

WA000209

U.S.A. Engineer Division
Corps of Engineers
New England

SURVEY STATION DATA

Waterway: ROCKPORT HBR. MASS.

Station: □ HEADLANDS

Coordinates:

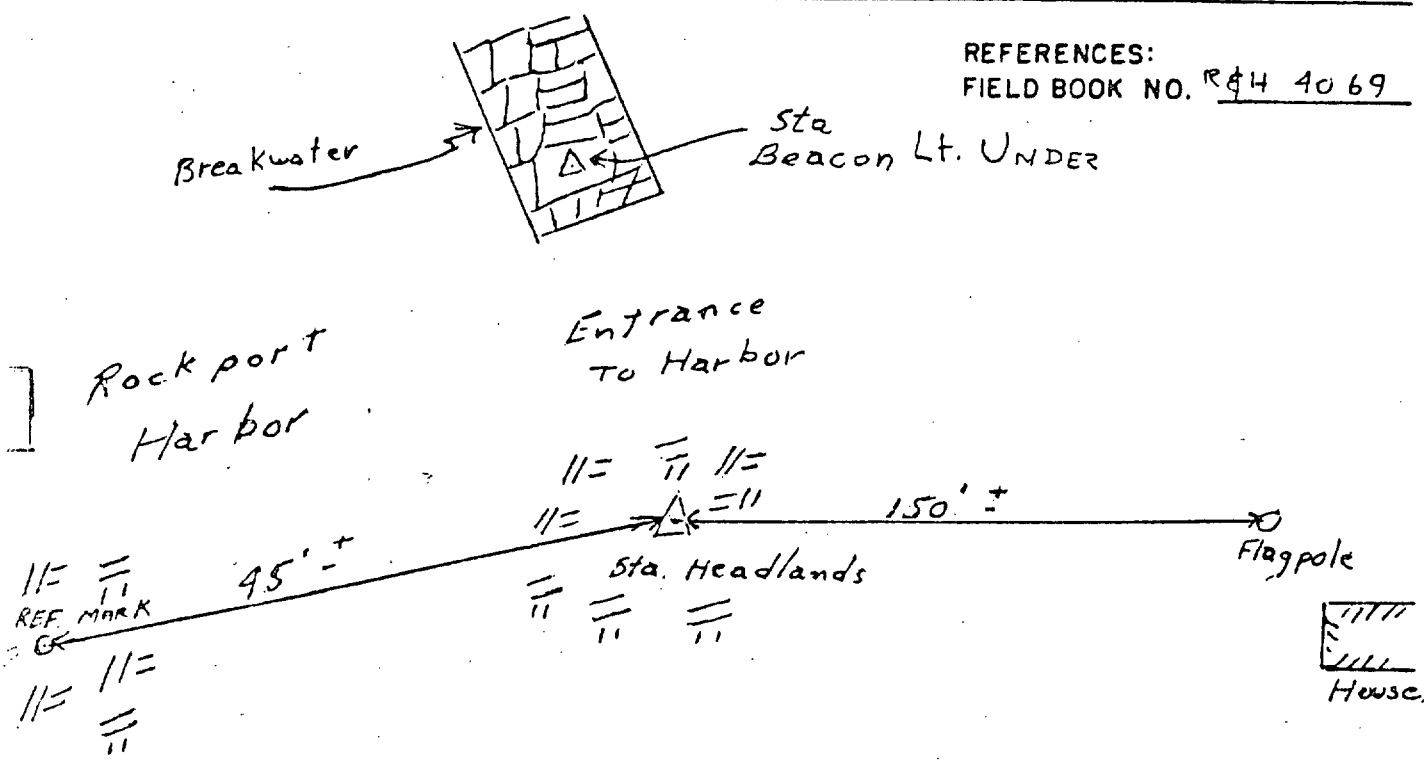
N or S	E or W
605950.887	839078.310

Origin △ STONE HAVEN (MGS)

REFERENCE ANGLES

°00'00" on	ANGLE	TO	00°00'00" on	ANGLE	TO

REFERENCES:
FIELD BOOK NO. R&H 4069



SKETCH: NOT TO SCALE

REMARKS: Note: Station Headlands and reference mark located on top of hill, area covered with ledge & boulder. Reference mark higher than station and located almost on [illegible] of ledge area. Station is a standard disc imbedded [illegible] ledge. Rockport also stamped on disc and Headlands located near the junction of Mt. Pleasant St & Atlantic [illegible]

Attachment 2
Sheet 2 of 13

D 539

MA000213

60262

U.S.A. Engineer Division
Corps of Engineers
New England

SURVEY STATION DATA

Waterway: [illegible]

Station: [illegible]

	N or S	E or W
Coordinates:	606410.851	838141.552

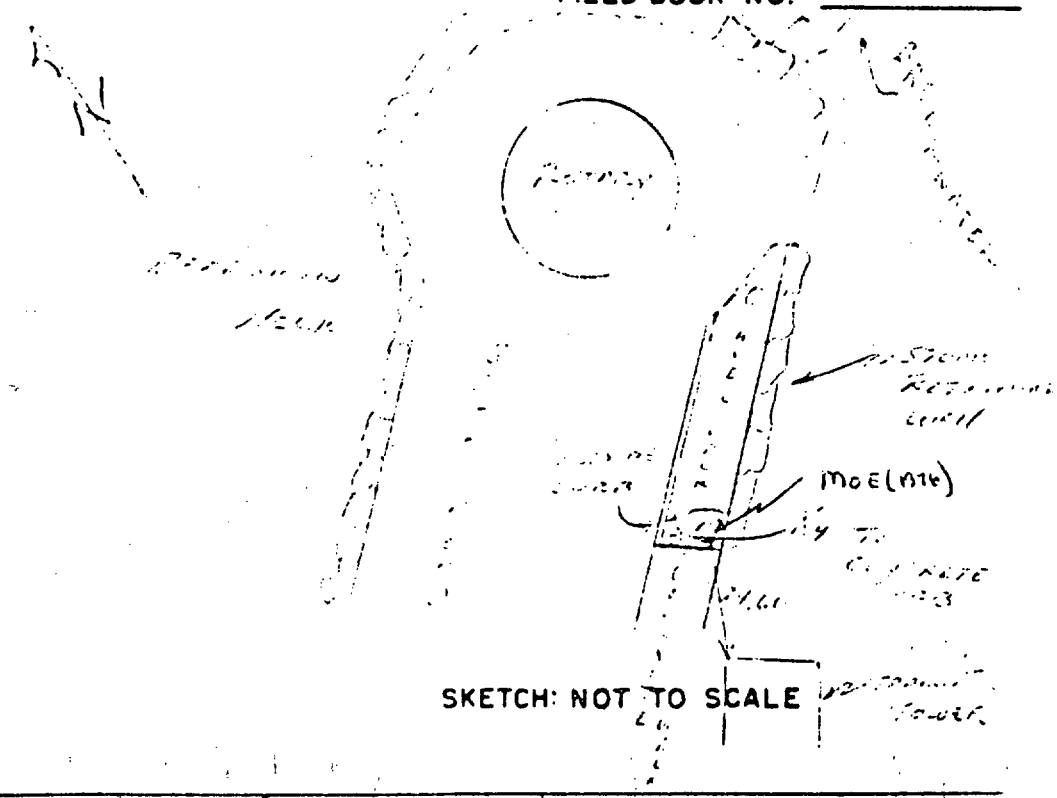
Origin _____

REFERENCE ANGLES

0'00" on	ANGLE	TO

00°00'00" on	ANGLE	TO
[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]
	[illegible]	[illegible]

REFERENCES: [illegible] RH
FIELD BOOK NO. 3860



SKETCH: NOT TO SCALE

MARKS: [illegible]

Attachment 2
Sheet 3 of 13

FORM 520

MA000212

60262

U.S.A. Engineer Division
Corps of Engineers
New England

SURVEY STATION DATA

Waterway: ROCKPORT, MASS

Station: Δ TUNA (1969)

	N or ~~S~~	E or ~~W~~
Coordinates:	605 949.603	838 045.278

Origin _____

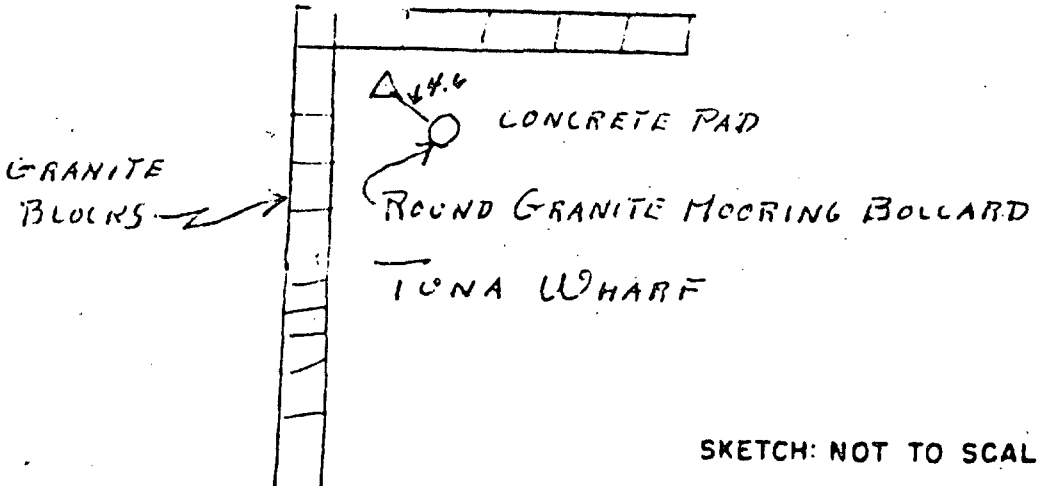
REFERENCE ANGLES

00'00" on	ANGLE	TO

00°00'00" on	ANGLE	TO
Δ BREAK	359-38-00	BEACON

REFERENCES:
FIELD BOOK NO. R&H 1449
Pg. #42

ROCKPORT HARBOR



SKETCH: NOT TO SCALE

MARKS: Δ TUNA (1969) IS A 1/2" D.H. IN CONCRETE PAD ON TUNA WHARF OFF BEARSKIN NECK

4.60 from face of mud granite post + 3 1/2" high
23.46 from corn House
27.68 from corner House

Attachment 2

FORM 539

60262

MA000 218

U.S.A. Engineer Division
Corps of Engineers
New England

SURVEY STATION DATA

Waterway: Pigeon Cove Rock ~~Land~~ Port, MA.

Station: ⊡ P.C #4 (1981)

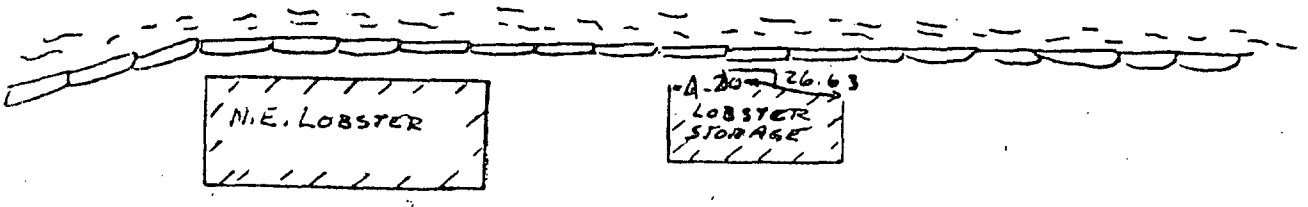
	N or S	E or W
Coordinates:	612 392.376	836022.36Y

Origin △ STONEHAVEN (MGS)

REFERENCE ANGLES

0° 00' 00" on	ANGLE	TO	00° 00' 00" on	ANGLE	TO

REFERENCES:
FIELD BOOK NO. R84 4069



SKETCH: NOT TO SCALE

REMARKS: ⊡ P.C. #4 is a 5/8" drill hole within a cut square on conc. pad in front of bldg.
TIES
1.79' from face of
26.63' from corn. bldg
2.20 from corn bldg.

Attachment 2
Sheet 5 of 12

ED 539

MA000217

60262

S.A. Engineer Division
orps of Engineers
ew England

SURVEY STATION DATA

Waterway: Pigeon Cove, Rockport Mass.

Station: ⊡ P.C. #3 (1981)

Coordinates:

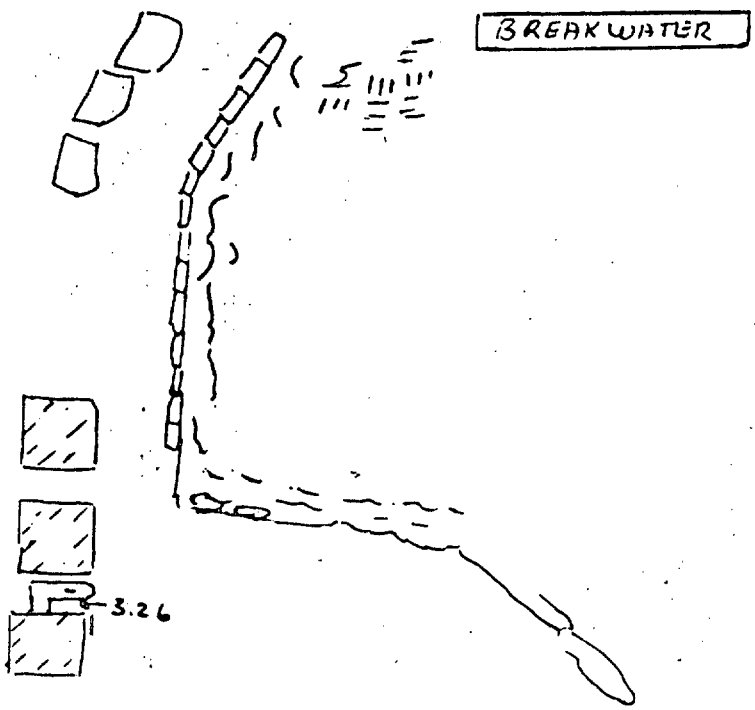
N or S	E or W
612713.420	835777.542

Origin △ Stonehaven (M.G.S.)

REFERENCE ANGLES

00" on	ANGLE	TO

00°00'00" on	ANGLE	TO



REFERENCES:
FIELD BOOK NO. R&11 4069

SKETCH: NOT TO SCALE

MARKS: ⊡ P.C. #3 is a 5/8" drill hole within a cut square on conc. walk of lobster shed called "Crazy-Greek" @ head of Pigeon Cove
3.26' from corn. "Crazy-Greek" Shed.
8.65' from corn. shed.

Attachment 2

539

Sheet 6 of 13

MA000216

60262

U.S.A. Engineer Division
Corps of Engineers
New England

SURVEY STATION DATA

Waterway: (PIGEON COVE) ROCKPORT HARBOR, MASS.

Station: ☐ P.C. # 2 (1981)

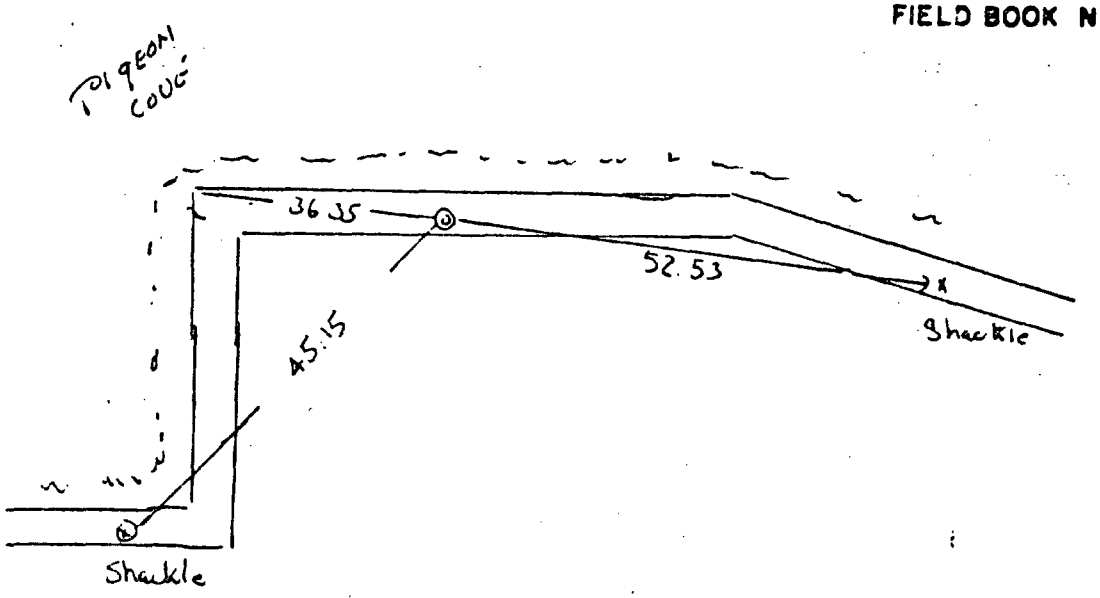
	N or S	E or W
Coordinates:	612107.284	835612.740

Origin △ STONEHAVEN (MGS)

REFERENCE ANGLES

0° 00' 00" on	ANGLE	TO	00° 00' 00" on	ANGLE	TO

REFERENCES:
FIELD BOOK NO. R&H 4069



SKETCH: NOT TO SCALE

REMARKS: P.C. # 2 is a punchmark in top of pin for ringbolt
Ties: 36.35' from cor. of wall
45.15 from center of barge shackle in granite block
1.70' from face of granite block wall
52.53 from center of barge shackle in granite block

Attachment 2
Sheet 7 of 12

ED FORM 539

Corps of Engineers
New England

60262

Waterway: Rockport Harbor - MA.
Pigeon Cove

MA000215

Station: PC # 1 (1981)

Coordinates:

N or S	E or W
612262.618	836152.956

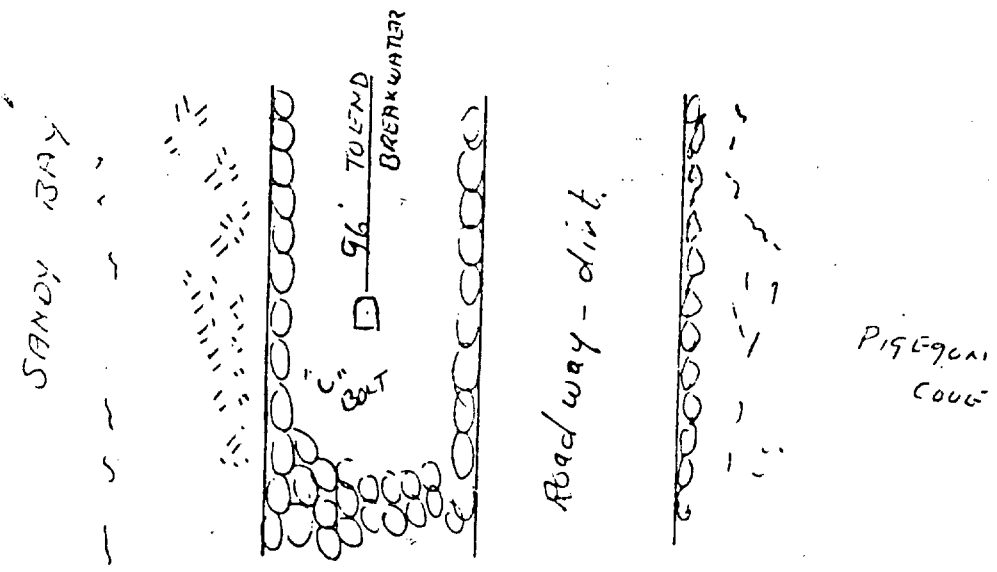
Origin: Δ Stonehaven (MGS)

REFERENCE ANGLES

00° 00' 00" on	ANGLE	TO

00° 00' 00" on	ANGLE	TO

REFERENCES:
FIELD BOOK NO. ____



SKETCH: NOT TO SCALE

REMARKS: PC #1 is a "U" bolt setting in a large granite block @ top of highest breakwater, 96± ' from end of breakwater

NED Form 539 Jun 65

Attachment 2
Sheet 8 of 13

60262

SURVEY STATION DATA

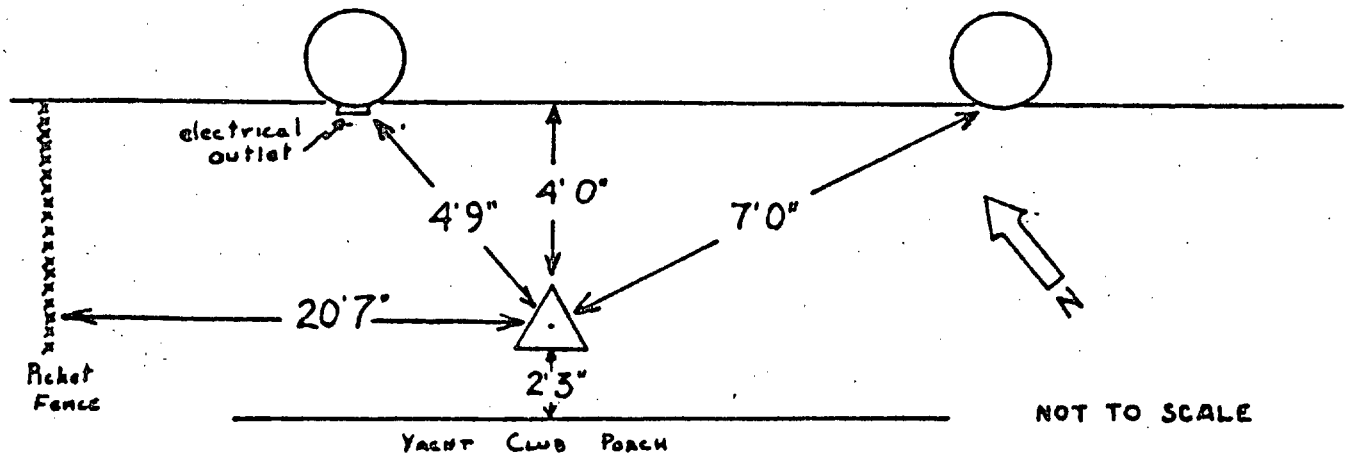
Rockport Harbor, Mass.

Station: YACHT

Coordinates: 605624.32 N 838054.76 E

Reference angles

Zero angle to
TUNA 44^0 45' 40" to BREAKWATER
BREAKWATER 27^0 44'03" to HEADLANDS



Nail in deck planking on harborside of Sandy Bay Yacht Club.
Station is on northeast side of T Wharf.

Attachment 2
Sheet 9 of 13

NED FORM 223
27 Sept 49

NEW ENGLAND DIVISION
CORPS OF ENGINEERS, U.S. ARMY

60262

PAGE 1/2

SUBJECT Rockport Harbor, MA
COMPUTATION Control Point and probe coordinates
COMPUTED BY [illegible] CHECKED BY _____ DATE 5-10-85

North	East	Control Point
606391.07	838771.28	BREAKWATER
605980.88	839078.31	HEADLANDS
606410.94	838141.49	MOE
605949.67	838045.08	TUNA
605624.32	838054.76	YACHT

North	East	Probe No.
606008.37	838115.70	101
606054.09	838135.93	102
606099.81	838156.16	103
606145.54	838176.39	104
606191.26	838196.63	105
606236.99	838216.86	106
606282.71	838237.09	107
606328.43	838257.32	108
606374.16	838277.56	109
606021.11	838148.67	110
606043.97	838158.79	111
606066.84	838168.91	112
606089.70	838179.02	113
606112.56	838189.14	114
606135.42	838199.26	115
606158.28	838209.37	116
606181.15	838219.49	117
606204.01	838229.60	118
606226.87	838239.72	119
606249.73	838249.84	120
606272.59	838259.95	121
606295.45	838270.07	122
606318.32	838280.19	123
606341.18	838290.30	124
606364.04	838300.42	125
606386.90	838310.53	126
606409.76	838320.65	127

Attachment 2
Sheet 10 of 13

NED FORM 223
27 Sept 49

NEW ENGLAND DIVISION
CORPS OF ENGINEERS, U.S. ARMY

60262

PAGE 2/2

SUBJECT Rockport Harbor

COMPUTATION

COMPUTED BY _____ CHECKED BY _____ DATE _____

North	East	Probe No.
605533.18	838179.89	201
605551.83	838196.53	202
605570.49	838213.17	203
605589.15	838229.81	204
605607.80	838246.46	205
605626.46	838263.10	206
605645.12	838279.74	207
605663.77	838296.38	208
605682.43	838313.02	209
605701.09	838329.66	210
605719.74	838346.30	211
605738.40	838362.94	212
605523.19	838191.08	213
605560.51	838224.37	214
605579.16	838241.01	215
605597.82	838257.65	216
605635.13	838290.93	217
605672.45	838324.21	218
605691.10	838340.86	219
605709.76	838357.50	220
605728.41	838374.14	221
606118.18	838695.00	222
606099.52	838678.36	223
606080.86	838661.72	224
606062.21	838645.08	225
606043.55	838628.44	226
606024.89	838611.80	227
606006.24	838595.15	228
605987.58	838578.51	229
605968.93	838561.87	230
605950.27	838545.23	231
605931.61	838528.59	232
605912.96	838511.95	233
605894.30	838495.31	234
606104.86	838709.93	235
606086.21	838693.29	236
606048.89	838660.00	237
606011.58	838626.72	238
605974.27	838593.44	239
605936.96	838560.15	240
605899.64	838526.87	241
605880.99	838510.23	242
605862.33	838493.59	243

NED FORM 233
27 Sept 49

NEW ENGLAND DIVISION
CORPS OF ENGINEERS, U.S. ARMY

6026L

PAGE 1/2

SUBJECT Pigeon Cove, MA
COMPUTATION Control point and probe coordinates
COMPUTED BY CAM CHECKED BY DATE 5-10-85

North	East	Control Point
612262.62	836152.96	PC 1
612107.28	835612.74	PC 2
612392.35	836022.36	PC 4
612713.42	835777.54	PC 3
612131.64	836079.05	PC 5

North	East	Probe No.
612148.07	835707.31	101
612129.71	835715.23	102
612111.35	835723.15	103
612092.98	835731.08	104
612074.62	835739.00	105
612156.00	835725.67	106
612137.63	835733.60	107
612128.45	835737.56	108
612119.27	835741.52	109
612110.09	835745.48	110
612100.90	835749.44	111
612082.54	835757.36	112
612163.92	835744.04	113
612145.55	835751.96	114
612136.37	835755.92	115
612127.19	835759.88	116
612118.01	835763.84	117
612108.83	835767.80	118
612090.46	835775.73	119
612171.84	835762.40	120
612153.48	835770.32	121
612144.29	835774.29	122
612135.11	835778.25	123
612125.93	835782.21	124
612116.75	835786.17	125
612098.38	835794.09	126
612179.76	835780.77	127
612161.40	835788.69	128
612143.03	835796.61	129
612124.67	835804.53	130
612106.31	835812.46	131

NED FORM 223
27 SEPT 40

NEW ENGLAND DIVISION
CORPS OF ENGINEERS, U.S. ARMY

60262

PAGE 2/2

SUBJECT Pigeon Cove

COMPUTATION

COMPUTED BY CHECKED BY DATE

North	East	Probe No.
612301.16	835924.33	201
612286.66	835938.11	202
612272.16	835951.89	203
612257.66	835965.66	204
612243.16	835979.44	205
612314.94	835938.83	206
612300.44	835952.61	207
612285.94	835966.38	208
612271.44	835980.16	209
612256.94	835993.94	210
612328.71	835953.33	211
612314.21	835967.11	212
612299.71	835980.88	213
612292.47	835987.77	214
612285.22	835994.66	215
612277.97	836001.55	216
612270.72	836008.44	217
612342.49	835967.83	218
612327.99	835981.61	219
612313.49	835995.38	220
612306.24	836002.27	221
612298.99	836009.16	222
612291.74	836016.05	223
612284.49	836022.93	224
612356.26	835982.33	225
612341.77	835996.10	226
612327.27	836009.88	227
612320.02	836016.77	228
612312.77	836023.66	229
612305.52	836030.55	230
612298.27	836037.43	231
612370.04	835996.83	232
612355.54	836010.60	233
612341.04	836024.38	234
612326.54	836038.16	235
612319.66	836030.91	236
612305.16	836044.68	237

North	East	Probe No.
612039.59	835848.89	238
612056.13	835860.13	239
612072.68	835871.37	240
612089.22	835882.61	241
612105.76	835893.85	242
612122.31	835905.09	243
612138.85	835916.33	244
612155.39	835927.57	245
612171.94	835938.81	246
612188.48	835950.05	247
612205.02	835961.28	248
612221.57	835972.52	249
612238.11	835983.76	250
612050.83	835832.35	251
612067.37	835843.59	252
612083.92	835854.83	253
612100.46	835866.07	254
612117.00	835877.31	255
612133.55	835888.55	256
612150.09	835899.78	257
612166.63	835911.02	258
612183.18	835922.26	259
612199.72	835933.50	260
612216.26	835944.74	261
612232.81	835955.98	262
612249.35	835967.22	263

APPENDIX B

Safety Reports

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer
THRU: Project Engineer

Date held 7/12/85
Time 08:00 A

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006, W. O. No.0030

Personnel present:
Charlie
Tony Scott
S. Reynolds

Conducted By: Stephen Reynolds

1. Subjects discussed Note, delete, or add):

✓ Individual Protective Equipment - Ear protection, hard hats ✓
✓ Prevention of Falls - ✓
✓ Safe Lifting Techniques -
✓ Emergency Communications -
✓ Fire Prevention -
✓ Sanitation, First Aid -
✓ Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
✓ Hand Tools -
Portable Power Tools -
Woodworking Machinery -
✓ Equipment Maintenance Zero defects) -
✓ Hoisting Equipment -
✓ Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
✓ Water Safety - ✓
Other -

Prepared by: S. Reynolds
Field Engineer

2. Exposure:

Jul 11 Thurs; 3 men, 8 hours exposure
TOTAL EXPOSURE 24 hrs

Signature: [signature]
Project Engineer

3. Forwarded: NED, Waltham, MA

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer
THRU: Project Engineer

Date held 7/19/85
Time 8:00 A

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006, W. O. No. 0030

Conducted By: Stephen Reynolds

Personnel present:
Charles Reil
Anthony Scola
Stephen Reynolds

1. Subjects discussed Note, delete, or add):

✓ Individual Protective Equipment - Ear protection, hard hats
✓ Prevention of Falls -
✓ Safe Lifting Techniques -
✓ Emergency Communications -
✓ Fire Prevention -
✓ Sanitation, First Aid -
✓ Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
✓ Hand Tools -
Portable Power Tools -
Woodworking Machinery -
✓ Equipment Maintenance Zero defects) -
✓ Hoisting Equipment -
✓ Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
✓ Water Safety -
Other -

Prepared by: Stephen P. Reynolds
Field Engineer

2. Exposure:

Jul 12, Friday, Jul 15, Mon, to Jul 18 Thurs
3 men, 8 hrs exposure each day, TOTAL 120 hrs
24 hrs previous exposure + 120 hrs = 144 hrs

Signature:
Project Engineer

3. Forwarded: NED, Waltham, MA

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer
THRU: Project Engineer

Date held 7/26/85
Time 8:00 A

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006, W. O. No. 0030 Personnel present:

Charles Rell
Anthony Scola
Stephen Reynolds

Conducted By: Stephen Reynolds

1. Subjects discussed Note, delete, or add):

✓ Individual Protective Equipment - Ear protection, hard hats
✓ Prevention of Falls -
✓ Safe Lifting Techniques -
✓ Emergency Communications -
✓ Fire Prevention -
✓ Sanitation, First Aid -
✓ Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
✓ Hand Tools -
Portable Power Tools -
Woodworking Machinery -
✓ Equipment Maintenance Zero defects) -
✓ Hoisting Equipment -
✓ Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
✓ Water Safety -
Other -

Prepared by: Stephen P. Reynolds
Field Engineer

2. Exposure:

Jul 19 Friday, Jul 22, Mon to Jul 25, Thurs
3 men / 8 hrs exposure each day. Total 120 hrs
144 previous exposure + 120 hrs = 264 hours

Signature:
Project Engineer

3. Forwarded: NED, Waltham, MA

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer
THRU: Project Engineer

Date held 2 Aug 85
Time 800 A

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006, W. O. No.

Personnel present:
CHARLES REIL
ANTHONY SCOLA
STEPHEN REYNOLDS

Conducted By: STEPHEN REYNOLDS

1. Subjects discussed Note, delete, or add):

✓Individual Protective Equipment - Ear protection, hard hats
✓Prevention of Falls -
Safe Lifting Techniques -
✓Emergency Communications -
✓Fire Prevention -
✓Sanitation, First Aid -
✓Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
✓Hand Tools -
Portable Power Tools -
Woodworking Machinery -
✓Equipment Maintenance Zero defects) -
✓Hoisting Equipment -
✓Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
✓Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
✓Water Safety -
Other -

Prepared by: Stephen P. Reynolds
Field Engineer

2. Exposure:

Jul 26 Friday, Jul 29, Mon to Aug 1 Thurs
3 men / 8 hrs exposure each day. No exposure Aug 1, due to weather.
Total Hrs 96. 264 hrs previous exposure + 96 hrs = 360 hrs

Signature: [illegible]
Project Engineer

3. Forwarded: NED, Waltham, MA

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer
THRU: Project Engineer

Date held 9 Aug 85
Time 3:00p.

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006, W. O. No.

Personnel present:
Charles Reil
Anthony Scola
Stephen Reynolds

Conducted By: Stephen Reynolds

1. Subjects discussed Note, delete, or add):

× Individual Protective Equipment - Ear protection, hard hats
✓ Prevention of Falls -
Safe Lifting Techniques -
✓ Emergency Communications -
✓ Fire Prevention -
✓ Sanitation, First Aid -
✓ Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
✓ Hand Tools -
Portable Power Tools -
Woodworking Machinery -
✓ Equipment Maintenance Zero defects) -
✓ Hoisting Equipment -
✓ Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
✓ Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
Loose Rock and Steep Slopes -
Explosives -
✓ Water Safety -
Other -

Prepared by: Stephen P. Reynolds
Field Engineer

2. Exposure:

Aug 2 Friday, Aug 5 Mon to Aug 9 Friday
3 men / 8hrs exposure each day. TOTAL HRS 144
360 hrs previous exposure + 144 hrs = 504 hrs

JOB COMPLETED ~~Aug 9~~

Signature: John Crowell
Project Engineer

3. Forwarded: NED, Waltham, MA

EASTERN GEOTECHNICAL ASSOCIATES

WEEKLY SAFETY MEETING

TO: Safety Office, NED

FROM: Field Engineer
THRU: Project Engineer

Date held 7-11-85
Time 0800

Weekly safety meeting was held this date for the following personnel:
Contract No. DACW 33-83-D-0006, W. O. No.

Personnel present:
Charlie Riel
Anthony Scola
Frank Sviokla

Conducted By: Steve Reynolds

1. Subjects discussed Note, delete, or add):

✓ Individual Protective Equipment - Ear protection, hard hats
Prevention of Falls -
✓ Safe Lifting Techniques -
✓ Emergency Communications -
✓ Fire Prevention -
Sanitation, First Aid -
✓ Tripping Hazards - trash, hose, nails in lumber -
Staging, Ladders, Concrete Forms -
✓ Hand Tools -
✓ Portable Power Tools -
Woodworking Machinery -
✓ Equipment Maintenance Zero defects) -
✓ Hoisting Equipment -
✓ Ropes, Hooks, Chains and Slings -
Electrical Grounding, Temporary Wiring -
Lockouts for safe clearance procedures -
Electrical, pressure, moving parts -
Welding -
Excavations -
✓ Loose Rock and Steep Slopes -
Explosives -
✓ Water Safety -
Other -

Prepared by: _____
Field Engineer

2. Exposure:

Previous exposure for 7- through 7-
manhrs

Signature: _____
Project Engineer

3. Forwarded: NED, Waltham, MA

APPENDIX C

Rockport Harbor

Field Logs of Probes

TIDE OBSERVATIONS - ROCKPORT HARBOR (MLW)

DATE	TIME	TIDE EL.
29 JUL 85	1420	1.5'
	1500	0.6'
30 JUL 85	1035	8.4'
	1105	8.2'
	1130	8.1'
	1210	7.4'
	1355	4.0'
	1420	3.0'
	1450	2.1'
	1520	1.0'
31 JUL 85	0910	5.3'
	0945	6.3'
	1005	7.0'
	1110	8.3'
	1150	8.5'
	1300	7.6'
	1335	6.8'
	1410	5.7'
2 AUG 85	0935	3.0'
	1005	3.8'
	1050	5.4'
	1120	6.5'
	1210	7.8
	1315	8.7'
	1350	8.5'
	1425	8.0'

DATE	TIME	TIDE EL.
5 AUG 85	1040	1.6'
	1130	3.0'
	1320	6.8'
	1355	7.5'
	1450	8.3'
6 AUG 85	0850	0.8'
	0915	0.4'
	1015	0.4'
	1115	1.1'
	1300	4.8'
	1340	5.5'
	1400	6.6
	1440	7.5
	1500	8.0
7 AUG 85	0945	1.0'
	1040	1.0'
	1115	1.1
	1210	2.4'
	1230	2.8'
	1300	3.5'
	1450	6.8'
	1510	7.3'
	1530	7.7'
	1550	8.0'

TIDE OBSERVATIONS - ROCKPORT HARBOR (MLW) [CONT.]

DATE	TIME	TIDE EL
8 AUG 85	0920	2.5'
	1000	1.8'
	1030	1.5'
	1050	1.5'
	1345	4.0'
	1405	4.4'
	1515	6.5'
	1550	7.2'
	1620	7.6'
9 AUG 85	0730	6.2
	0755	6.0
	0820	5.5'
	0915	3.8'
	1115	1.7'
	1145	1.5'
	1225	1.6
	1300	1.9'

NOTE: ADDITIONAL OBSERVATIONS ON TEST PROBE LOGS

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-1 Desig. 101 Diam. (Casing) N/A

Co-ordinates: N 606,008.370 E 838,115.7000

Elevation Top -5.6 M.L.W. Hammer Wt. 300lb Started 29 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 29 Jul 85

Elevation Top of Rock -11.4 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.4 M.L.W. Obs. Well _____

Total Depth 5.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.5						TIDE EL 1.5', 1420 hr.	
						WATER DEPTH 7.1	
-5.6						TOP OF PROBE EL -5.6	
-6.3	0			.7	WOR	DROVE "AW" ROD PROBE FROM -5.6' TO -11.4' MLW WITH 300lb HAMMER	
-7.3	1			1.0'	23		
-8.3	2			1.0'	33		
-9.3	3			1.0'	35		
-10.3	4			1.0'	20		
-11.3	5			1.0'	14		SILTY CLAY @ tip
-11.4				.1	12		

GENERAL REMARKS:

REFUSAL
END OF PROBE EL -11.4'

WOR - WEIGHT OF RODS

Probe No. FP 101-1

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR MA Page 1 of 2 Pages

Probe FP-85-2 Desig. 110 Diam. (Casing) N/A

Co-ordinates: N 696,021.1100 E 838,148.6700

Elevation Top -7.2 M.L.W. Hammer Wt. 300lb Started 29 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 29 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -15.5 M.L.W. Obs. Well _____

Total Depth 8.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.6						TIDE EL. 0.6', 1500hr.	
						WATER DEPTH 7.8'	
-7.2						TOP OF PROBE EL -7.2'	
-7.5	0			.3	WOR	DROVE "AW" ROD PROBE FROM -7.2' TO -15.5' MLW WITH 300lb HAMMER	
-8.5	1			1.0'	4		
-9.5	2			1.0'	7		
-10.5	3			1.0'	7		
-11.5	4			1.0'	10		
-12.5	5			1.0'	17		
				1.0	34		

GENERAL REMARKS: WOR - WEIGHT OF RODS

Probe No. FP110-2

Site: ROCKPORT HARBOR, MA	Probe No. FP 110-2	Page 2 of 2

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-13.5	6						
-14.5	7			1.0'	22		
-15.5	8			1.0'	19		SILTY CLAY @ top
						END OF PROBE EL-15.5'	

Probe No. FP110-2

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-3 Desig. 111 Diam. (Casing) N/A

Co-ordinates: N 606,043.9700 E 838,158.7900

Elevation Top -7.4 M.L.W. Hammer Wt. 300lb Started 30 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 30 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -15.4 M.L.W. Obs. Well _____

Total Depth 8.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.4						TIDE EL. 8.4', 1035 hr	
						WATER DEPTH 15.8'	
-7.4						TOP OF PROBE EL-7.4	
-8.4	0 1			1.0'	WOR		
-9.4	2			1.0'	2	DROVE "AW" ROD PROBE FROM -7.4' TO 15.4 MLW WITH 300lb HAMMER	
-10.4	3			1.0'	6		
-11.4	4			1.0'	9		
-12.4	5			1.0'	16		
-13.4	6			1.0'	19		

GENERAL REMARKS:

Probe No. FP 111-3

Site: ROCKPORT HARBOR, MA	Probe No. FP 111-3	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-14.4	7			1.0	15		SILTY CLAY @ top
-15.4	8			1.0	16		
						END OF PROBE EL -15.4	

Probe No. FP111-3

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-4 Desig. 102 Diam. (Casing) N/A

Co-ordinates: N 606,054.0900 E 838,135.9300

Elevation Top -5.8 M.L.W. Hammer Wt. 300lb Started 30 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 30 JUL 85

Elevation Top of Rock -10.3 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.3 M.L.W. Obs. Well _____

Total Depth 4.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.2						TIDE EL. 82', 1105 hr.	
						WATER DEPTH 14.0'	
-5.8						TOP OF PROBE EL -5.8'	
-6.6'	0			.8'	WOR	DROVE "AW" ROD PROBE FROM -5.8' TO -10.3 MLW WITH 300lb HAMMER	
-7.6	1			1.0'	6		
-8.6'	2			1.0'	12		
-9.6				1.0'	48		
-10.3				.7	54		NO RECOVERY
						RUFUSAL END OF PROBE EL -10.3'	

GENERAL REMARKS:

Probe No. FP 102.4

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR MA — Page 1 of 2 Pages

Probe FP.85-5 Desig. 112 Diam. (Casing) _____

Co-ordinates: N 606,066.8400 E 838,168.9100

Elevation Top -7.6 M.L.W. Hammer Wt. 300lb Started 30 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 30 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -15.5 M.L.W. Obs. Well _____

Total Depth 7.9' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.1						TIDE EL 8.1', 1130 hr.	
						WATER DEPTH 15.7'	
-7.6						TOP OF PROBE EL -7.6'	
-8.5	0			.9'	WOR		
-9.5	1			1.0'	2	DROVE "AW" ROD PROBE FROM -7.6 TO 15.5 MLW WITH 300lb HAMMER	
-10.5	2			1.0'	7		
-11.5	3			1.0'	6		
-12.5	4			1.0'	12		
-13.5	5			1.0'	10		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP115

Site: ROCKPORT HARBOR, MA	Probe No. FP 112-5	Page 2 of 2

DEPTH ELEV M(LW)	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-14.5	6			1.0'	12		SILTY CLAY @ tip
-15.5'	7			1.0'	15		
						END OF PROBE EL -15.5'	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-6 Desig. 113 Diam. (Casing) N/A

Co-ordinates: N 606,089.7000 E 838,179.0200

Elevation Top -6.2 M.L.W. Hammer Wt. 300lb Started 30 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 30 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -15.3 M.L.W. Obs. Well _____

Total Depth 9.1 Feet Drilled By E.G.A

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.4'						TIDE EL. 7.4', 1210 hr	
						WATER DEPTH 13.6'	
-6.2'						TOP OF PROBE EL -6.2	
	0			1.1'	WOR		
-7.3	1						
-8.3	2			1.0'	4	DROVE "AW" ROD PROBE FROM -6.2 TO -15.3' MLW WITH 300lb HAMMER	
-9.3	3			1.0'	2		
-10.3	4			1.0'	6		
-11.3	5			1.0'	9		
	6			1.0'	12		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 113-6

Site: ROCKPORT HARBOR, MA	Probe No. FP 113-6	Page 2 of 2.

DEPTH		CORE/SAMPLE			BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
	1"	NO.	SIZE	DEPTH RANGE			
-12.3'				1.0'	16		
-13.3	7						
				1.0'	15		
-14.3	8						SILTY CLAY @ tip
				1.0'	18		
-15.3	9						
						END OF PROBE EL -15.3	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-7 Desig. 103 Diam. (Casing) N/A

Co-ordinates: N 606,099.8100 E 838,156.1600

Elevation Top -3.0 M.L.W. Hammer Wt. 300lb Started 30 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 30 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -6.7 M.L.W. Obs. Well _____

Total Depth 3.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.7						TIDE EL. 6.7', 1300hr	
						WATER DEPTH 9.7'	
-3.0						TOP OF PROBE EL - 3.0	
-3.7	0			.7'	WOR		
-4.7	1			1.0'	8	DROVE "AW" ROD PROBE FROM -3.0' TO -6.7' MLW WITH 300 lb HAMMER	
-5.7	2			1.0'	10		
-6.7	3			1.0	16		SILTY CLAY @ tip
						REFUSAL END OF PROBE EL -6.7'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 103-7

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-8 Desig. 114 Diam. (Casing) N/A

Co-ordinates: N 606,112.5600 E 838,189.1400

Elevation Top -4.3 M.L.W. Hammer Wt. 300lb Started 30 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 30 JUL 85

Elevation Top of Rock -5.3 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.3 M.L.W. Obs. Well _____

Total Depth 1.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.0						TIDE EL 4.0, 1355 hr	
						WATER DEPTH 8.3'	
-4.3'						TOP OF PROBE EL -4.4'	
-4.6	0			.3	WOR	DROVE 1" ROD PROBE FROM -4.3' TO -5.3' MLW WITH 300lb HAMMER	NO RECOVERY
-5.3	1			.7	13		
						REFUSAL END OF PROBE EL -5.3	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 114-8

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-859 Desig. 104 Diam. (Casing) N/A

Co-ordinates: N 606,145.4500 E 838,176.3900

Elevation Top -3.4 M.L.W. Hammer Wt. 300lb Started 30 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 30 JUL 85

Elevation Top of Rock -6.1 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -6.1 M.L.W. Obs. Well _____

Total Depth 2.7 Feet Drilled By E.G.A.

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.0'						TIDE EL. 3.0', 1420 hr	
						WATER DEPTH 6.4'	
-3.4						TOP OF PROBE EL-3.4'	
-3.6	0			.2	WOR	DROVE "AW" ROD PROBE FROM -3.4' TO -6.1 MLW WITH 300 lb HAMMER	NO RECOVERY
-4.6	1			1.0'	8		
-5.6	2			1.0'	17		
-6.1	2.7'			.5	22		
						REFUSAL END OF PROBE EL -6.1'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 104-9

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-10 Desig. 115 Diam. (Casing) N/A

Co-ordinates: N 606,135.4200 E 858,199.2600

Elevation Top -4.2 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A -6.4 Feet
Elevation Bottom -6.4 M.L.W.
Total Depth 2.2 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18 in
Casing Left -
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 30 JUL 85
Completed 30 JUL 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.1'						TIDE EL. 2.1', 1450hr	
						WATER DEPTH 6.3'	
-4.2						TOP OF PROBE EL-4.2'	
	0			.9	WOH	DROVE 'AW' ROD PROBE FROM -4.2' TO -6.4' MLW WITH 300 lb HAMMER	
-5.1							
	1			1.0'	15		NO RECOVERY
-6.1							
-6.4	2			.3'	16		
						REFUSAL END OF PROBE EL.-6.4	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 115-10

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-11 Desig. 116 Diam. (Casing) N/A

Co-ordinates: N 606,158.2800 E 838,209.3700

Elevation Top -6.7 M.L.W. Hammer Wt. 300 lb Started 30 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 30 JUL 85

Elevation Top of Rock -10.5 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.5 M.L.W. Obs. Well _____

Total Depth 3.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0'						TIDE EL. 1.0', 1520 hr	
						WATER DEPTH 7.7'	
-6.7'						TOP OF PROBE EL -6.7	
-7.2'	0			.5	WOH	DROVE "AW" ROD PROBE FROM -6.7' TO -10.5' MLW WITH 300 lb HAMMER	
-8.2	1			1.0'	4		
-9.2'	2			1.0'	10		
-10.2'	3			1.0'	46		SILTY CLAY @ tip
-10.5				.3	30		
						REFUSAL END OF PROBE EL -10.5'	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 116-11

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, / MA Page 1 of 2 Pages

Probe FP-85-12 Desig. 117 Diam. (Casing) N/A

Co-ordinates: N 606,181.1500 E 838,219.4900

Elevation Top -6.9 M.L.W. Hammer Wt. 300lb Started 31 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 31 JUL 85

Elevation Top of Rock -13.9 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.9 M.L.W. Obs. Well _____

Total Depth 7.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.3						TIDE EL 5.3', 0910hr	
						WATER DEPTH 12.2'	
-6.9						TOP OF PROBE EL -6.9	
-7.5	0			.6'	WOH	DROVE "AW" ROD PROBE FROM -6.9' TO -13.9' MLW WITH 300lb HAMMER	
-8.5	1			1.0'	3		
-9.5	2			1.0'	5		
-10.5	3			1.0'	6		
-11.5	4			1.0'	11		
-12.5	5			1.0'	8		

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 117-12

Site: ROCKPORT HARBOR, MA	Probe No. FP 117-12	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-13.5	6			1.0'	12		SILTY CLAY @ tip
-13.9				.4	21		
						REFUSAL END OF PROBE EL -13.9	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA. Page 1 of 1 Pages

Probe FP-85-13 Desig. 105 Diam. (Casing) N/A

Co-ordinates: N 606,191.2600 E 838,196.6300

Elevation Top -4.8 M.L.W. Hammer Wt. 300lb Started 31 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 Completed 31 JUL 85

Elevation Top of Rock -7.5 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.5 M.L.W. Obs. Well _____

Total Depth 2.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.3'						TIDE EL 6.3', 0945hr	
						WATER DEPTH 11.1'	
-4.8'						TOP OF PROBE EL -4.8'	
	0						
	1			1.7'	WOH	DROVE "AW" ROD PROBE FROM -4.8' TO -7.5' MLW WITH 300lb HAMMER	
-6.5'							
	2			1.0'	30		NO RECOVERY
-7.5							
						REFUSAL / 16 BLOWS END OF PROBE EL -7.5'	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 105-13

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MASS Page 1 of 2 Pages

Probe FP-85-14 Desig. 118 Diam. (Casing) N/A

Co-ordinates: N 606,204.0100 E 838,229.6000

Elevation Top -3.6 M.L.W. Hammer Wt. 300lb Started 31 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 31 JUL 85

Elevation Top of Rock -13.6 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.6 M.L.W. Obs. Well _____

Total Depth 10.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.0'						TIDE EL. 7.0', 1005 hr	
						WATER DEPTH 10.6'	
-3.6							
-4.7	0 1			1.1	—	SLID OF BOULDER	
-5.7	2			1.0	3		
-6.7	3			1.0	12	DROVE "AW" ROD PROBE FROM -3.6' TO 13.6' MLW WITH 300lb HAMMER	
-7.7	4			1.0	38		
-8.7	5			1.0	40		
	6			1.0	40		

GENERAL REMARKS:

Probe No. FP 118-14

Site: ROCKPORT HARBOR, MA	Probe No. FP 118 - 14	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-9.7				1.0'	19		
-10.7	7						
				1.0'	32		
-11.7	8						
				1.0'	34		
-12.7	9						SILTY CLAY @ tip
				.9	75		
-13.6	10						
						REFUSAL END OF PROBE EL -13.6'	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-15 Desig. 119 Diam. (Casing) N/A

Co-ordinates: N 606,226.8700 E 838,239.7200

Elevation Top -3.9' M.L.W. Hammer Wt. 300lb Started 31 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 31 JUL 85

Elevation Top of Rock -5.4' M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.4' M.L.W. Obs. Well _____

Total Depth 1.5' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.3						TIDE EL 8.3, 1110 hr.	
						WATER DEPTH 12.2'	
-3.9						TOP OF PROBE EL -3.9	
-4.2	0			.3	WOR	DROVE "AW" ROD PROBE FROM -3.9' TO -5.4' MLW WITH 300 lb HAMMER	NO RECOVERY
-5.2	1			1.0	16		
-5.4				.2	24	REFUSAL / BOULDER ? END OF PROBE EL -5.4	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 119-15

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR / MASS Page 1 of 1 Pages

Probe FP-85-16 Desig. 106 Diam. (Casing) N/A

Co-ordinates: N 606,236.9900 E 838,216.8600

Elevation Top -6.3 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -8.5 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -8.5 M.L.W.
Total Depth 2.2 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left —
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 31 JUL 85
Completed 31 JUL 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.5						TIDE EL 8.5', 1150 hr	
						WATER DEPTH 14.2'	
-6.3						TOP OF PROBE EL -6.3'	
	0			1.0'	4	DROVE "AW" ROD PROBE FROM -6.3 TO -8.5' MLW WITH 300 lb HAMMER	
-7.3	1						
				1.0	8		NO RECOVERY
-8.3	2			.2'	16		
-8.5						REFUSAL END OF PROBE EL -8.5	

GENERAL REMARKS:

Probe No. FP 106-16

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-17 Desig. 120 Diam. (Casing) N/A

Co-ordinates: N 606,249.7300 E 838,249.8400

Elevation Top -6.0 M.L.W. Hammer Wt. 300lb Started 31 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 31 JUL 85

Elevation Top of Rock -8.0 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -8.0 M.L.W. Obs. Well _____

Total Depth 2.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.6						TIDE EL 7.6', 1300 hr	
						WATER DEPTH 13.6'	
-6.0						TOP OF PROBE EL -6.0'	
-7.0	0 1			1.0	WOR	DROVE "AW" ROD PROBE FROM -6.0' TO -8.0' MLW WITH 300lb HAMMER	
-8.0	2			1.0	8		NO RECOVERY
						REFUSAL END OF PROBE EL -8.0'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 120-17

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR / MASS Page 1 of 1 Pages

Probe FP-85-18 Desig. 121 Diam. (Casing) N/A

Co-ordinates: N 606,272.5900 E 838,259.9500

Elevation Top -6.3 M.L.W. Hammer Wt. 300lb Started 31 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 31 JUL 85

Elevation Top of Rock -12.3 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -12.3 M.L.W. Obs. Well _____

Total Depth 6.0' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.8						TIDE EL 6.8', 1335hr	
						WATER DEPTH 13.1'	
-6.3						COVE BOTTOM / TOP OF PROBE	- EL. 6.3'
	0						
-7.7	1			1.4	WOH		
-8.7	2			1.0'	2		
-9.7	3			1.0'	4	DROVE "AW" ROD PROBE FROM -6.3 TO -12.3' MLW WITH 300 lb HAMMER	
-10.7	4			1.0'	6		
-11.7	5			1.0'	25		SILTY CLAY @ tip
-12.3	6			.6	50		

GENERAL REMARKS:

REFUSAL
END OF PROBE EL -12.3

WOH = WEIGHT OF HAMMER

Probe No. FP 121-18

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-RS-19 Desig. 122 Diam. (Casing) N/A

Co-ordinates: N 606,295.4500 E 838,270.0700

Elevation Top -4.3 M.L.W. Hammer Wt. 300lb Started 31 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 31 JUL 85

Elevation Top of Rock -7.6 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.6 M.L.W. Obs. Well _____

Total Depth 2.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.7						TIDE EL 5.7', 1410 hr	
						WATER DEPTH 10.0'	
-4.3						TOP OF PROBE EL-4.3	
	0						
-5.7	1			1.4	WOR	DROVE "AW" ROD PROBE FROM -4.3 TO -7.6' MLW WITH 300 lb HAMMER	
-6.7	2			1.0	23		
-7.6	3			.9	34'		NO RECOVERY
						REFUSAL END OF PROBE EL-7.6'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP122-19

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA — Page 1 of 1 Pages

Probe FP 85-20 Desig. 123 Diam. (Casing) N/A

Co-ordinates: N 606,318.3200 E 838,280.1100

Elevation Top -4.6 M.L.W. Hammer Wt. 300 lb Started 2 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 2 Aug 85

Elevation Top of Rock -8.2 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -8.2 M.L.W. Obs. Well _____

Total Depth 3.6 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH (ELEV MLW)	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.0'						TIDE EL 3.0', 0985 hr.	
						WATER DEPTH 7.6'	
-4.6						TOP OF PROBE EL -4.6	
-5.2	0			.6	WOR	DROVE "AW" ROD PROBE FROM -4.6' TO -8.2' MLW WITH 300 lb HAMMER	
-6.2	1			1.0	23		
-7.2	2			1.0	65		
-8.2	3			1.0	7.2		SILTY SAND w/clay @ tip
						REFUSAL END OF PROBE EL -8.2	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 123-20

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MASS Page 1 of 2 Pages

Probe FP-8521 Desig. 124 Diam. (Casing) N/A

Co-ordinates: N 606,341.1800 E 838,290.3000

Elevation Top -4.8 M.L.W. Hammer Wt. 300lb Started 2 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in

Elevation Top of Rock -11.9 M.L.W. Casing Left _____ Completed 2 Aug 85

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.9 M.L.W. Obs. Well _____

Total Depth 7.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.8'						TIDE EL 3.8', 1005 hr	
						WATER DEPTH 8.6'	
-4.8'						COVE BOTTOM / TOP OF PROBE	EL. - 4.8'
-5.7	0			.9'	WOR		
-6.7	1			1.0'	4		
-7.7	2			1.0'	12	DROVE "AW" ROD PROBE FROM -4.8' TO -11.9' MLW WITH 300 lb HAMMER.	
-8.7	3			1.0'	11		
-9.7	4			1.0'	51		
-10.7				1.0'	37		

GENERAL REMARKS:

Probe No. FP 124-21

Site: ROCKPORT HARBOR, MA	Probe No. FP 124-21	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-11.7				10'	66		SILTY CLAY @ tip
				.2	45		
-11.9						REFUSAL END OF PROBE EL-12.0	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR / MASS Page 1 of 1 Pages

Probe FP 85-22 Desig. 125 Diam. (Casing) N/A

Co-ordinates: N 606,364.0400 E 838,300.4200

Elevation Top -5.5 M.L.W. Hammer Wt. 300 lb Started 2 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 2 AUG 85

Elevation Top of Rock -8.9 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -8.9 M.L.W. Obs. Well _____

Total Depth -3.4' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.4'						TIDE EL. 5.4, 1050 hr	
						WATER DEPTH 10.9'	
-5.5						TOP OF PROBE EL-5.5'	
-6.3	0			0.8'	WOR		
-7.3	1			1.0'	5	DROVE AW" ROD PROBE FROM -5.5' TO -8.9' MLW WITH 300 lb HAMMER	
-8.3	2			1.0	12		
-8.9	3			.6'	24		SILTY CLAY @ tip
						REFUSAL END OF PROBE EL -8.9	

GENERAL REMARKS: WOR- weight of rods

Probe No. FP 125-22

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MASS Page 1 of 1 Pages

Probe FP-8528 Desig. 126 Diam. (Casing) N/A

Co-ordinates: N 606,386.9000 E 838,310.5300

Elevation Top -5.9 M.L.W. Hammer Wt. 300lb Started 2 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 2 AUG 85

Elevation Top of Rock -10.4 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.4 M.L.W. Obs. Well _____

Total Depth 4.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH	1"=	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.5						TIDE EL 6.5', 1120 hr	
						WATER DEPTH 12.4'	
-5.9'						TOP OF PROBE EL -5.9	
-6.7	0			.8	WOR		
-7.7	1			1.0'	10	DRIVE "AW" ROD PROBE FROM -5.9' TO -10.4' MLW WITH 300 lb HAMMER.	
-8.7	2			1.0'	42		
-9.7	3			1.0'	34		
-10.4	4			.7'	40		
						REFUSAL END OF PROBE EL -10.4	

GENERAL REMARKS:

Probe No. FP 126-28

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR / MA — Page 1 of 1 Pages

Probe FP-85-25 Desig. 109 Diam. (Casing) N/A

Co-ordinates: N 606,374.1600 E 838,277.5600

Elevation Top -4.4 M.L.W. Hammer Wt. 300 lb Started 2 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 2 Aug 85

Elevation Top of Rock -9.2 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.2 M.L.W. Obs. Well _____

Total Depth 4.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH	1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.7						TIDE EL 8.7, 1315 hr	
						WATER DEPTH 13.1'	
-4.4'						TOP OF PROBE EL -4.4'	
-5.2	0			.8	WOR		
-6.2	1			1.0'	12	DROVE "AW" ROD PROBE FROM -4.4' TO -9.2' MLW WITH 300 lb HAMMER	
-7.2	2			1.0'	21		
-8.2	3			1.0'	16		
-9.2	4			1.0	44		SILTY CLAY @ tip
						REFUSAL END OF PROBE EL -9.2	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 109-25

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-24 Desig. 127 Diam. (Casing) N/A

Co-ordinates: N 606,409.7600 E 838,320.1500

Elevation Top -4.8 M.L.W. Hammer Wt. 300lb Started 2 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 2 AUG 85

Elevation Top of Rock -9.4 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.4 M.L.W. Obs. Well _____

Total Depth 4.6 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH	1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.8'						TIDE EL. 7.8', 1210 hr.	
						WATER DEPTH 12.6'	
-4.8'						COVE BOTTOM / TOP OF PROBE	EL. -4.8
-5.2	0			.4	WOR	DROVE "AW" ROD PROBE FROM -4.8' TO -9.4' MLW WITH 300lb HAMMER	SILTY CLAY slightly to mod crstely plastic, 10-15% fine sand, brown.
-6.2	1			1.0'	6		
-7.2	2			1.0'	8		
-8.2	3			1.0'	20		
-9.2	4			1.0'	40		
-9.4				.2	50		
						REFUSAL END OF PROBE EL -9.4	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP127-24

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-26 Desig. 108 Diam. (Casing) N/A

Co-ordinates: N 606,328.4300 E 838,257.3200

Elevation Top -4.4 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -6.9 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -6.9 M.L.W.
Total Depth 2.5 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left —
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 2 Aug 85
Completed 2 Aug 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.5						TIDE EL. 8.5', 1350 hr.	
						WATER DEPTH 12.9'	
-4.4						TOP OF PROBE EL -4.4	
-4.7	0			.3	WOR		
-5.7	1			1.0	5	DROVE "AW" ROD PROBE FROM -4.4' TO -6.9' MLW WITH 300lb HAMMER	
-6.7	2			1.0	34		NO RECOVERY
				.2	28		
-6.9						REFUSAL END OF PROBE EL -6.9	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 108-26

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-27 Desig. 107 Diam. (Casing) N/A

Co-ordinates: N 606,282.7100 E 838,237.0900

Elevation Top -4.2 M.L.W. Hammer Wt. 300lb Started 2 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 2 AUG 85

Elevation Top of Rock -6.9 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -6.9 M.L.W. Obs. Well _____

Total Depth 2.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.0						TIDE EL 8.0', 1425 hr	
						WATER DEPTH 12.2'	
-4.2						TOP OF PROBE EL. -4.2	
-4.9				.7	WOR	DROVE "AW" ROD PROBE FROM -4.2' TO -6.9' MLW WITH 300lb HAMMER	
-5.9				1.0'	9		
-6.9				1.0'	52		SILTY CLAY & tip
						REFUSAL END OF PROBE EL -6.9	

GENERAL REMARKS: WOR - weight of rod

Probe No. FP107-27

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR MA Page 1 of 1 Pages

Probe FP-85-28 Desig. 234 Diam. (Casing) N/A

Co-ordinates: N 605,894.3000 E 830,495.3100

Elevation Top -6.1 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -13.7 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -13.7 M.L.W.
Total Depth 7.6 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EG-A
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 5 AUG 85
Completed 5 AUG 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.6						TIDE EL 1.6', 1040 hr.	
						WATER DEPTH 7.7'	
-6.1						TOP OF PROBE EL. -6.1	
-6.4	0			.3	WOR		
-7.4	1			1.0'	2		
-8.4	2			1.0'	4		
-9.4	3			1.0'	4	DROVE "AW" ROD PROBE FROM -6.1 TO 13.7' MLW WITH 300lb HAMMER	
-10.4	4			1.0'	8		
-11.4	5			1.0'	8		
				1.0	11		

GENERAL REMARKS:

Probe No. FP 234-28

Site: ROCKPORT HARBOR, MA	Probe No. FP 234-28	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-12.4							
-13.4				1.0	11		SILTY CLAY moderately plastic, gray
-13.7				.3	14		
---						REFUSAL END OF PROBE EL-13.7'	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-29 Desig. 242 Diam. (Casing) N/A

Co-ordinates: N 605,880.9900 E 838,510.2300

Elevation Top -5.4 M.L.W. Hammer Wt. 300lb Started 5 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 5 AUG 85

Elevation Top of Rock -12.3 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -12.3 M.L.W. Obs. Well _____

Total Depth 6.9 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.0'						TIDE EL 3.0', 1130 hr.	
						WATER DEPTH 8.4'	
-5.4						TOP OF PROBE EL -5.4'	
-6.4	0 1			1.0'	WOR	DROVE AW ROD PROBE FROM -5.4' TO -12.3' MLW WITH 300lb HAMMER	
-7.4'	2			1.0'	2		
-8.4	3			1.0'	4		
-9.4	4			1.0'	5		
-10.4	5			1.0'	8		
-11.4	6			1.0'	8		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 242-29

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-30 Desig. 243 Diam. (Casing) N/A

Co-ordinates: N 605,862.3300 E 838,493.5900

Elevation Top -6.5 M.L.W. Hammer Wt. 300 lb Started 5 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 5 Aug 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -15.2 M.L.W. Obs. Well _____

Total Depth 8.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.8						TIDE EL 6.8', 1320 hr	
						WATER DEPTH 13.3'	
-6.5						TOP OF PROBE EL -6.5	
	0						
	1						
	2			3.7	WOH	DROVE "AW" ROD PROBE FROM -6.5' TO -15.2' MLW WITH 300 lb HAMMER	
-10.2	3						
-11.2	4			1.0	2		
-12.2	5			1.0	3		

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP243-30

Site: ROCKPORT HARBOR, MA	Probe No. FP 243-30	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-13.2	6				5		SILTY CLAY moderately plastic, 10-15% fine sand gray
-14.2	7				25		
-15.2	8				27		
						END OF PROBE EL-15.2'	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-31 Desig. 241 Diam. (Casing) N/A

Co-ordinates: N 605,899.6400 E 838,526.8700

Elevation Top -2.3 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -9.0 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -9.0 M.L.W.
Total Depth 6.7 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left —
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 5 Aug 85
Completed 5 Aug 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5						TIDE EL 7.5, 1355 hr	
						WATER DEPTH 9.8'	
-2.3						TOP OF PROBE EL -2.3	
-3.0'	0			.7	—	SLID OFF BOULDER	
-4.0'	1			1.0'	3		
-5.0	2			1.0'	6	DROVE "AW" ROD PROBE FROM -2.3' TO -8.0' MLW WITH 300lb HAMMER	
-6.0	3			1.0'	12		
-7.0	4			1.0'	10		
-8.0	5			1.0'	15		

GENERAL REMARKS:

Probe No. FP241-31

Site: ROCKPORT HARBOR, MA	Probe No. FP 241-31	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-9.0				1.0'	28		SILTY CLAY @ tip
						REFUSAL END OF PROBE EL -9.0	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA — Page 1 of 2 Pages

Probe FP-85-32 Desig. 240 Diam. (Casing) N/A

Co-ordinates: N 605,936.9600 E 838,560.1500

Elevation Top -1.1 M.L.W. Hammer Wt. 300 lb Started 5 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in. Completed 5 AUG 85

Elevation Top of Rock -7.6 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.6 M.L.W. Obs. Well _____

Total Depth 6.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.3						TIDE EL 8.3', 1450 hr	
						WATER DEPTH 9.4	
-1.1						TOP OF PROBE EL -1.1	
-1.3	0			.2	WOR		
-2.3	1			1.0	39		
-3.3	2			1.0'	4	DROVE "AW" ROD PROBE FROM -1.1' TO -7.6' MLW WITH 300 lb HAMMER	
-4.3	3			1.0'	7		
-5.3	4			1.0'	14		
-6.3	5			1.0'	45		SILTY CLAY
				1.0'	52		

GENERAL REMARKS:

Probe No. FP 240-32

Site: ROCKPORT HARBOR, MA	Probe No. FP 240-32	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-7.6				-3	20		
						REFUSAL END OF PROBE EL -7.6	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-33 Desig. 239 Diam. (Casing) N/A

Co-ordinates: N 605,974.2700 E 838,593.4400

Elevation Top -1.4 M.L.W. Hammer Wt. 300lb Started 5 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 5 Aug 85

Elevation Top of Rock -1.4 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.6 M.L.W. Obs. Well _____

Total Depth 4.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.3						TIDE EL 8.3, 1450 hr.	
						WATER DEPTH 9.7	
-1.4						TOP OF PROBE EL -1.4'	
-1.6	0			.2	WOR		
-2.6	1			1.0'	20	DROVE "AW" ROD PROBE FROM -1.4' TO -5.6' MLW WITH 300lb HAMMER	SILTY CLAY @tip
-3.6	2			1.0'	46		
-4.6	3			1.0'	43		
-5.6'	4			1.0'	50		
						REFUSAL END OF PROBE EL -5.6	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 239-33

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR MA Page 1 of 1 Pages

Probe FP-85-34 Desig. 212 Diam. (Casing) N/A

Co-ordinates: N 605,738.4000 E 838,362.9400

Elevation Top -8.2 M.L.W. Hammer Wt. 300lb Started 6 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 6 AUG 85

Elevation Top of Rock -10.8 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.8 M.L.W. Obs. Well _____

Total Depth 2.6 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.8'						TIDE EL 0.8', 0850 hr.	
						WATER DEPTH 9.0'	
-8.2						TOP OF PROBE EL -8.2'	
-8.5	0			.3	WOR	DROVE "AW" ROD PROBE FROM -8.2 TO -10.8' MLW WITH 300lb HAMMER	NO RECOVERY
-9.5	1			1.0'	7		
-10.5	2			1.0'	15		
-10.8				.3	50		
						REFUSAL END OF PROBE EL -10.8'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 212-34

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-35 Desig. 221 Diam. (Casing) N/A

Co-ordinates: N 605,728.4100 E 858,374.1400

Elevation Top -7.5 M.L.W. Hammer Wt. 30016 Started 6 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in

Elevation Top of Rock -11.8 M.L.W. Casing Left _____ Completed 6 Aug 85

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.8 M.L.W. Obs. Well _____

Total Depth 4.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.5						TIDE EL 0.5, 0915 hr.	
						WATER DEPTH 8.0	
-7.5						TOP OF PROBE EL -7.5	
	0						
-9.3	1			1.8'	WOR	DROVE "AW" ROD PROBE FROM -7.5 TO -11.8' MLW WITH 30016 HAMMER.	
-10.3	2			1.0	22		
-11.3	3			1.0	60		SILTY SAND widely graded 15-20% gravel, coarse to fine sand, mostly fine, 15-20% slightly plastic fines gray
-11.8'	4			.5	79		
						REFUSAL END OF PROBE EL -11.8'	

GENERAL REMARKS: WOR - WEIGHT OF RODS

Probe No. FP 221-35

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR MA Page 1 of 1 Pages

Probe FP-85-36 Desig. 220 Diam. (Casing) N/A

Co-ordinates: N 605,709.7600 E 838,357.5000

Elevation Top -6.6 M.L.W. Hammer Wt. 300lb Started 6 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 6 AUG 85

Elevation Top of Rock -12.0 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -12.0 M.L.W. Obs. Well _____

Total Depth 5.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.4						TIDE EL 0.4', 0945 hr	
						WATER DEPTH 7.0'	
-6.6						TOP OF PROBE EL -6.6'	
	0						
	1			2.0'	WOH		
-8.6	2					DROVE "AW" ROD PROBE FROM -6.6' TO -12.0' MLW WITH 300 lb HAMMER	
-9.6	3			1.0'	29		
-10.6	4			1.0'	67		
-11.6	5			1.0'	62		SILTY SAND w/gravel
-12.0	5.4			.4'	50		
						REFUSAL END OF PROBE EL -12.0'	

GENERAL REMARKS:

Probe No. FP 220-36

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA — Page 1 of 1 Pages

Probe FP-219-37 Desig. 219 Diam. (Casing) N/A

Co-ordinates: N 605,691.1000 E 938,340.8600

Elevation Top -5.2 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -10.3 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -10.3 M.L.W.
Total Depth 5.1 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left —
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 6 AUG 85
Completed 6 AUG 85

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
						TIDE EL 0.4, 1015 hr.	
						WATER DEPTH 5.6'	
-5.2						TOP OF PROBE EL -5.2	
	0						
-6.9	1			1.7'	WOH		
-7.9	2			1.0'	32	DROVE "AW" ROD PROBE FROM -5.2' TO -10.3' MLW WITH 300 lb HAMMER	
-8.9	3			1.0'	61		
-9.9	4			1.0'	70		SILTY SAND w/gravel & rip
-10.3	5			.4	50		
						REFUSAL END OF PROBE EL -10.3	

GENERAL REMARKS: WOH — WEIGHT OF HAMMER

Probe No. FP 219-37

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-38 Desig. 218 Diam. (Casing) N/A

Co-ordinates: N 605,672.4500 E 838,324.2100

Elevation Top -2.4 M.L.W. Hammer Wt. 300lb Started 6 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 6 Aug 85

Elevation Top of Rock -7.5 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.5 M.L.W. Obs. Well _____

Total Depth 5.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.1'						TIDE EL. 1.1' @ 1115 hr.	
						WATER DEPTH 3.5'	
-2.4						TOP OF PROBE EL. -2.4'	
	0						
-3.9	1			1.5'	WOR		
-4.9	2			1.0'	2	DROVE "AW" ROD PROBE FROM -2.4' TO -7.5' MLW WITH 300lb HAMMER	
-5.9	3			1.0'	16		
-6.9	4			1.0'	33		SILTY SAND w/gravel
-7.5	5			.6	37		
						REFUSAL END OF PROBE EL-7.5	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 218-38

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA — Page 1 of 1 Pages

Probe FP-~~85~~ 39 Desig. 226 Diam. (Casing) N/A

Co-ordinates: N 606,043.5500 E 838,628.4400

Elevation Top -3.2 M.L.W. Hammer Wt. 300lb Started 6 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 6 AUG 85

Elevation Top of Rock -9.5 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.5 M.L.W. Obs. Well _____

Total Depth 6.3' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.8'						TIDE EL. 4.8', 1300hr.	
						WATER DEPTH 8.0'	
-3.2						TOP OF PROBE EL - 3.2'	
-3.5	0			.3'	WOR	DROVE "AW" ROD PROBE FROM -3.2' TO -9.5' MLW WITH 300 lb HAMMER	SILTY CLAY @ tip
-4.5	1			1.0'	5		
-5.5	2			1.0'	3		
-6.5	3			1.0'	19		
-7.5	4			1.0'	18		
-8.5'	5			1.0'	23		
-9.5				1.0	22		

GENERAL REMARKS:

REFUSAL /13 blows 0"
END OF PROBE EL -9.5'

WOR - weight of rod

Probe No. FP 226-39

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA — Page 1 of 1 Pages

Probe FP-85-40 Desig. 238 Diam. (Casing) N/A

Co-ordinates: N 606,011.5800 E 838,626.7200

Elevation Top -2.2 M.L.W. Hammer Wt. 300lb Started 6 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in

Elevation Top of Rock -5.4' M.L.W. Casing Left — Completed 6 Aug 85

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.4 M.L.W. Obs. Well _____

Total Depth 3.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
						TIDE EL 5.5', 1340 hr.	
						WATER DEPTH 7.7	
-2.2						TOP OF PROBE -2.2'	
-2.6	0			.4	WOR		
-3.6'	1			1.0'	3	DROVE 4" ROD PROBE FROM -2.2' TO -5.4' MLW WITH 300lb HAMMER	
-4.6'	2			1.0'	6		NO RECOVERY
-5.4				.8	35		
						REFUSAL END OF PROBE EL -5.4'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 238-40

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR MA Page 1 of 1 Pages

Probe FP-85-41 Desig. 237 Diam. (Casing) N/A

Co-ordinates: N 606,048.8900 E 838,660.0000

Elevation Top -3.2 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -5.5' M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -5.5 M.L.W.
Total Depth 2.3 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 6 Aug 85
Completed 6 Aug 85

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.6						TIDE EL 6.6', 1400 hr.	
						WATER DEPTH 9.8'	
-3.2						TOP OF PROBE EL -3.2	
-3.5	0			.3'	WOR		
-4.5'	1			1.0'	5	DROVE "AW" ROD PROBE FROM -3.2' TO -5.5' MLW WITH 300lb HAMMER	
-5.5'	2			1.0	24		NO RECOVERY
						REFUSAL END OF PROBE EL -5.5	

GENERAL REMARKS: WOR- WEIGHT OF ROD

Probe No. FP 237-41

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-8542 Desig. 236 Diam. (Casing) N/A

Co-ordinates: N 606,086.2100 E 838,693.2900

Elevation Top -4.0' M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -6.0' M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -6.0' M.L.W.
Total Depth 2.0' Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 6 AUG 85
Completed 6 AUG 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5'						TIDE EL. 7.5', 1440 hr	
						WATER DEPTH 11.5'	
-4.0'						TOP OF PROBE EL -4.0'	
-4.6	0			.6'	WOR	DROVE 4" AW ROD PROBE FROM -4.0' TO -6.0' MLW WITH 300lb HAMMER	NO RECOVERY
-5.6	1			1.0'	15		
-6.0'	2			.4	32		
						REFUSAL END OF PROBE EL -6.0'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 236-42

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-43 Desig. 235 Diam. (Casing) N/A

Co-ordinates: N 606,104.8600 E 838,709.3900

Elevation Top -4.1 M.L.W. Hammer Wt. 300lb Started 6 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 6 AUG 85

Elevation Top of Rock -7.2 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.2 M.L.W. Obs. Well _____

Total Depth -3.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.0'						TIDE EL. 8.0', 1500 hr.	
						WATER DEPTH 12.1'	
-4.1						TOP OF PROBE EL -4.1	
	0						
	1			1.7'	WOH	DROVE "AW" ROD PROBE FROM -4.1 TO -7.2' MLW WITH 300lb HAMMER	
-5.8							
	2			1.0'	8		
-6.8							
-7.2	3			.4	5		NO RECOVERY
						REFUSAL END OF PROBE EL -7.2'	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 235-43

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP85-44 Desig. 211 Diam. (Casing) N/A

Co-ordinates: N 605,719.7400 E 838,346.3000

Elevation Top -7.9' M.L.W. Hammer Wt. 300lb Started 7 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 7 AUG 85

Elevation Top of Rock -9.8' M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.8' M.L.W. Obs. Well _____

Total Depth 1.9' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0'						TIDE EL 1.0', 0945 hr.	
						WATER DEPTH 8.9'	
-7.9'						TOP OF PROBE EL -7.9'	
	0			1.1	WOR	DROVE "AW" ROD PROBE FROM -7.9' TO -9.8' MLW WITH 300 lb HAMMER	
-9.0'	1						
-9.8	1.9'			.8'	26		NO RECOVERY
						REFUSAL END OF PROBE EL -9.8	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 211-44

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-45 Desig. 210 Diam. (Casing) N/A

Co-ordinates: N 605,701.0900 E 838,329.6600

Elevation Top -7.3 M.L.W. Hammer Wt. 300 lb Started 7 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 7 Aug 85

Elevation Top of Rock -12.8 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -12.8 M.L.W. Obs. Well _____

Total Depth 5.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0'						TIDE EL 1.0', 1040 hr	
						WATER DEPTH 8.3'	
-7.3'						TOP OF PROBE EL -7.3	
	0						
-8.3'	1			1.0'	WOR		
-9.3	2			1.0'	15	DROVE "AW" ROD PROBE FROM -7.3' TO -12.8' MLW WITH 300 lb HAMMER	
-10.3	3			1.0'	52		
-11.3	4			1.0'	69		
-12.3	5			1.0'	55		SILTY SAND w/gravel some clay.
-12.8	5.5			.5	50		
						REFUSAL END OF PROBE EL -12.8'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 210-45

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-46 Desig. 209 Diam. (Casing) N/A

Co-ordinates: N 605,682.4300 E 838,313.0200

Elevation Top -7.0 M.L.W. Hammer Wt. 300 lb Started 7 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 7 AUG 85

Elevation Top of Rock _____ M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -16.9 M.L.W. Obs. Well _____

Total Depth 9.9 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.1						TIDE EL 1.1, 1115 hr	
						WATER DEPTH 8.1	
-7.0'						TOP OF PROBE EL -7.0'	
	0						
-8.9'	1			1.9	WOH		
-9.9	2			1.0'	20	DROVE "AW" ROD PROBE FROM -7.0' TO -16.9' MLW WITH 300 lb HAMMER	
-10.9'	3			1.0'	45		
-11.9'	4			1.0'	45		
-12.9'	5			1.0'	60		

GENERAL REMARKS: WOH - weight of hammer.

Probe No. FP 209-46

Site: ROCKPORT HARBOR, MA	Probe No. FP 209-46	Page 2 of 2

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-13.9	6			1.0'	85		SILTY SAND w/gravel
-14.9	7			1.0'	35		
-15.9	8			1.0'	32		
-16.9	9 9.9'			1.0'	57		
						END OF PROBE EL -16.9'	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-47 Desig. 208 Diam. (Casing) N/A

Co-ordinates: N 605,663.7700 E 838,296.3800

Elevation Top -6.1 M.L.W. Hammer Wt. 300lb Started 7 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in

Elevation Top of Rock -10.1 M.L.W. Casing Left — Completed 7 Aug 85

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.1 M.L.W. Obs. Well _____

Total Depth 4.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.4'						TIDE EL. 2.4', 1210 hr	
						WATER DEPTH 8.5'	
-6.1'						TOP OF PROBE EL -6.1	
	0						
	1			1.5'	WOR		
-7.6'						DROVE "AW" ROD PROBE FROM -6.1' TO -10.1' MLW WITH 300 lb HAMMER	
	2			1.0'	19		
-8.6'							
	3			1.0'	26		SILTY SAND w/gravel
-9.6'							
-10.1	4			.5	53		
						REFUSAL END OF PROBE EL -10.1	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 208-47

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-48 Desig. 207 Diam. (Casing) N/A

Co-ordinates: N 606,645.1200 E 838,279.7400

Elevation Top -4.9 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -14.1 M.L.W.
Total Depth 9.2' Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left —
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 7 AUG 85
Completed 7 AUG 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.8'						TIDE EL 2.8', 1230 hr.	
						WATER DEPTH 8.7'	
-4.9						TOP OF PROBE EL -4.9'	
-6.2	0 1			1.3'	WOR	DROVE "AW" ROD PROBE FROM -4.9' TO -14.1' MLW WITH 300 lb HAMMER	
-7.2	2			1.0'	4		
-8.2'	3			1.0'	2		
-9.2	4			1.0'	26		
-10.2	5			1.0'	58		
				1.0	86		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 207-48

Site: ROCKPORT HARBOR, MA	Probe No. FP 207-49	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATER ALS
-11.2'							
-12.2'	6			1.0	52		
-13.2'	7			1.0'	60		
-14.1'	8			.9	100		SILTY SAND w/gravel
						REFUSAL END OF PROBE EL -14.1	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-49 Desig. 206 Diam. (Casing) N/A

Co-ordinates: N 605,626.4600 E 838,263.1000

Elevation Top -6.4 M.L.W. Hammer Wt. 300lb Started 7 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 7 AUG 85

Elevation Top of Rock -9.7 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.7 M.L.W. Obs. Well _____

Total Depth -3.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.5'						TIDE EL. 3.5', 1300 hr.	
						WATER DEPTH 9.9'	
-6.4'						TOP OF PROBE EL -6.4'	
-7.4'	0 1			1.0'	21	DROVE "AW" ROD PROBE FROM -6.4' TO -9.7' MLW WITH 300 lb HAMMER	NO RECOVERY
-8.4'	2			1.0'	39		
-9.4'	3			1.0'	54		
-9.7'				.3	24		
						REFUSAL END OF PROBE EL-9.7'	

GENERAL REMARKS:

Probe No. FP206-49

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR / MA Page 1 of 1 Pages

Probe FP-85-50 Desig. 222 Diam. (Casing) N/A

Co-ordinates: N 606,118.1800 E 838,695.0000

Elevation Top -5.4 M.L.W. Hammer Wt. 300lb Started 7 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 7 AUG 85

Elevation Top of Rock -7.9 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.9 M.L.W. Obs. Well _____

Total Depth -2.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.8						TIDE EL. 6.8'; 1450hr.	
						WATER DEPTH 12.2'	
-5.4						TOP OF PROBE EL -5.4'	
-5.9	0			.5'	WOR		
-6.9	1			1.0'	16	DROVE "AW" ROD PROBE FROM -5.4' TO -7.9' MLW WITH 300lb HAMMER	NO RECOVERY
-7.9	2			1.0'	14		
						REFUSAL END OF PROBE EL-7.9'	

GENERAL REMARKS: WOR- WEIGHT OF ROD

Probe No. FP 222-50

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-51 Desig. 223 Diam. (Casing) N/A

Co-ordinates: N 606,099.5200 E 838,678.3600

Elevation Top -5.6 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -10.1 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -10.1 M.L.W.
Total Depth 4.5 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 7 AUG 85
Completed 7 AUG 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.3'						TIDE EL. 7.3', 1510 hr.	
						WATER DEPTH 12.9'	
-5.6'						TOP OF PROBE EL -5.6'	
-6.1	0			.5	WOR	DROVE 4" ROD PROBE FROM -5.6' TO -10.1' MLW WITH 300lb HAMMER	
-7.1	1			1.0'	2		
-8.1	2			1.0'	4		
-9.1	3			1.0'	9		
-10.1	4			1.0'	45'		NO RECOVERY
						REFUSAL END OF PROBE EL -10.1'	

GENERAL REMARKS: WOR-WEIGHT OF ROD

Probe No. FP 223-51

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-52 Desig. 224 Diam. (Casing) N/A

Co-ordinates: N 606,080.8600 E 838,661.7200

Elevation Top -4.9' M.L.W. Hammer Wt. 300lb Started 7 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 7 AUG 85

Elevation Top of Rock -9.7' M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.7' M.L.W. Obs. Well _____

Total Depth 4.8' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.7'						TIDE EL 7.7', 1530 hr.	
						WATER DEPTH 12.6'	
-4.9'						TOP OF PROBE EL-4.9'	
-5.5'	0			.6	WOR	DROVE "AW" ROD PROBE FROM -4.9' TO -9.7' MLW WITH 300lb HAMMER	
-6.5'	1			1.0'	4		
-7.5'	2			1.0'	3		
-8.5'	3			1.0'	7		
-9.5'	4			1.0'	13		NO RECOVERY
-9.7				.2	5		
						REFUSAL END OF PROBE EL-9.7'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 224-52

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-53 Desig. 225 Diam. (Casing) N/A

Co-ordinates: N 606,062.2100 E 838,645.0800

Elevation Top -4.1' M.L.W. Hammer Wt. 300 lb Started 7 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 7 Aug 85

Elevation Top of Rock -10.2' M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.2' M.L.W. Obs. Well _____

Total Depth -6.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.0						TIDE EL. 8.0', 1550 hr	
						WATER DEPTH 12.1'	
-4.1'						TOP OF PROBE EL -4.1'	
-4.7'	0			.6	WOR	DROVE "AW ROD" PROBE FROM -4.1 TO -10.2' MLW WITH 300 lb HAMMER	SILTY CLAY @ tip
-5.7'	1			1.0'	2		
-6.7'	2			1.0'	5		
-7.7'	3			1.0'	13		
-8.7	4			1.0'	13		
-9.7'	5			1.0'	14		
-10.2'	6			.5	15		

GENERAL REMARKS: REFUSAL END OF PROBE EL -10.2'

Probe No. FP 225-54

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-54 Desig. 217 Diam. (Casing) N/A

Co-ordinates: N 605,635.1300 E 838,290.9300

Elevation Top -1.4' M.L.W. Hammer Wt. 300 lb Started 8 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 8 Aug 85

Elevation Top of Rock -6.5' M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -6.5' M.L.W. Obs. Well _____

Total Depth 5.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.5'						TIDE EL 2.5', 0920 hr.	
						WATER DEPTH 3.9'	
-1.4'						TOP OF PROBE EL -1.4'	
-2.2'	0			.8	WOR		
-3.2'	1			1.0'	7		
-4.2'	2			1.0'	40	DROVE "AW" ROD PROBE FROM -1.4' TO -6.5' MLW WITH 300 lb HAMMER	
-5.2	3			1.0'	58		
-6.2'	4			1.0'	82		SILTY SAND widely graded, 10-15% gravel, coarse to fine sand, mostly fine, 15-20% slightly plastic fines brown
-6.5'	5			.3			
						REFUSAL END OF PROBE -6.5'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 217-54

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-~~85~~55 Desig. 216 Diam. (Casing) N/A

Co-ordinates: N 605,597.8200 E 838,257.6500

Elevation Top -1.7 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -8.7 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -8.7 M.L.W.
Total Depth -7.0 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 30016
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 8 AUG 85
Completed 8 AUG 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.8'						TIDE EL 1.8', 1000hr	
						WATER DEPTH 3.5'	
-1.7'						TOP OF PROBE EL -1.7'	
-2.8	0 1			1.1	WOR	DROVE "AW" ROD PROBE FROM -1.7' TO -8.7' MLW WITH 30016 HAMMER	SILTY SAND w/gravel @ tip
-3.8	2			1.0'	1		
-4.8	3			1.0'	1		
-5.8	4			1.0'	7		
-6.8'	5			1.0'	4		
	6			1.0	33		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 216-55

Site: ROCKPORT HARBOR, MA	Probe No. FP 216-55	Page 2 of 2

DEPTH ELEV (MLW)	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-7.8				.9	44		
-8.7	8					REFUSAL END OF PROBE EL -8.7	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-56 Desig. 215 Diam. (Casing) N/A

Co-ordinates: N 605,579.1600 E 838,241.0100

Elevation Top -1.3 M.L.W. Hammer Wt. 300lb Started 8 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 8 AUG 85

Elevation Top of Rock -5.6 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.6 M.L.W. Obs. Well _____

Total Depth 4.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.5'						TIDE EL. 1.5', 1030 hr	
						WATER DEPTH 2.8'	
-1.3						TOP OF PROBE EL -1.3	
-1.6	0			.3	WOR		
-2.6	1			1.0'	1	DROVE "AW ROD PROBE FROM -1.3' TO -5.6' MLW WITH 300lb HAMMER	
-3.6	2			1.0'	3		
-4.6	3			1.0'	2		
-5.6	4			1.0	4		NO RECOVERY
						REFUSAL END OF PROBE EL -5.6'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 215-56

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-57 Desig. 214 Diam. (Casing) N/A

Co-ordinates: N 605,560.5100 E 838,224.3700

Elevation Top -3.0 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -8.5 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -8.5 M.L.W.
Total Depth 5.5' Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left —
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 8 Aug 85
Completed 8 Aug 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.5'						TIDE EL 1.5', 1050 hr.	
						WATER DEPTH 4.5'	
-3.0'						TOP OF PROBE EL. -3.0	
-4.3	0 1			1.3	WOH		
-5.3	2			1.0'	38		
-6.3	3			1.0'	56	DROVE "AW" ROD PROBE FROM -3.0' TO -8.5' MLW WITH 300 lb HAMMER	
-7.3	4			1.0'	66		SILTY SAND w/gravel
-8.3	5			1.0	94		
				.2	50		
-8.5						REFUSAL END OF PROBE EL -8.5'	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 214-57

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR / MA Page 1 of 1 Pages

Probe FP-85-58 Desig. 203 Diam. (Casing) N/A

Co-ordinates: N 605,570.4900 E 838,213.1700

Elevation Top -5.7 M.L.W. Hammer Wt. 300lb Started 8 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 8 AUG 85

Elevation Top of Rock -7.8 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.8 M.L.W. Obs. Well _____

Total Depth 2.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.0'						TIDE EL 4.0', 1345 hr.	
						WATER DEPTH 10.3'	
-5.7'						TOP OF PROBE EL -5.7	
	0			1.1'	WOR	DROVE "AW" ROD PROBE FROM -5.7' TO -7.8' MLW WITH 300lb HAMMER	
-6.8'	1						
				1.0	40		NO RECOVERY
-7.8'	2						
						REFUSAL END OF PROBE EL -7.8	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 203-58

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR / MA Page 1 of 2 Pages

Probe FP-85-59 Desig. 202 Diam. (Casing) N/A

Co-ordinates: N 605,551.5300 E 835,196.5300

Elevation Top -7.2 M.L.W. Hammer Wt. 300lb Started 8 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 8 Aug 85

Elevation Top of Rock -13.5 M.L.W. Casing Left -

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.5 M.L.W. Obs. Well _____

Total Depth 6.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.4'						TIDE EL 4.4', 1405 hr.	
						WATER DEPTH 11.6'	
-7.2'						TOP OF PROBE EL -7.2'	
	0						
-8.2'	1			1.0'	WOR		
-9.2'	2			1.0'	9	DROVE "AW" ROD PROBE FROM -7.2' TO -13.5' MLW WITH 300 lb HAMMER	
-10.2'	3			1.0'	32		
-11.2'	4			1.0'	44		
-12.2'	5			1.0'	73		SILTY SAND w/gravel
-13.2'	6			1.0'	75		

GENERAL REMARKS: WOR-WEIGHT OF RODS

Probe No. FP 202-59

Site: ROCKPORT HARBOR, MA.	Probe No. FP 202-59	Page 2 of 2

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
	1" = 2						
-13.5				.3	50		
						REFUSAL END OF PROBE EL-13.5'	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-60 Desig. 227 Diam. (Casing) N/A

Co-ordinates: N 606,024.8900 E 838,611.8100

Elevation Top -2.4 M.L.W. Hammer Wt. 300lb Started 8 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 8 Aug 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.5 M.L.W. Obs. Well _____

Total Depth 8.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.5'						TIDE EL 6.5', 1515 hr	
						WATER DEPTH 8.9'	
-2.4						TOP OF PROBE EL -2.4'	
	0						
-3.5	1			1.1'	WOR		
-4.5	2			1.0'	5		
-5.5'	3			1.0'	5	DROVE 4" AW ROD PROBE FROM -2.4' TO -10.5' MLW WITH 300 lb HAMMER	
-6.5'	4			1.0'	8		
-7.5'	5			1.0'	14		
				1.0'	14		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 227-60

Site: ROCKPORT HARBOR, MA.	Probe No. FP 227-60	Page 2 of 2

DEPTH ELEV (MLW)	DEPTH 1" = 2	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-8.5	6			1.0'	19		SILTY CLAY @ tip
-9.5	7						
				1.0'	30		
-10.5	8						
						REFUSAL END OF PROBE EL-10.5	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-61 Desig. 228 Diam. (Casing) N/A

Co-ordinates: N 606,006.2400 E 838,595.1500

Elevation Top -2.8' M.L.W. Hammer Wt. 300lb Started 8 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 8 Aug 85

Elevation Top of Rock -9.5' M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.5' M.L.W. Obs. Well _____

Total Depth 6.7' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.2'						TIDE EL 7.2', 1550 hr	
						WATER DEPTH 10.0'	
-2.8						TOP OF PROBE EL -2.8	
-3.3	0			.5	WOR	DROVE "AW" ROD PROBE FROM -2.8' TO -9.5' MLW WITH 300lb HAMMER	
-4.3	1			1.0'	2		
-5.3	2			1.0'	6		
-6.3	3			1.0'	9		
-7.3	4			1.0'	14		
-8.3	5			1.0'	13		SILTY CLAY @ tip

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 228-61

Site: ROCKPORT HARBOR, MA	Probe No. FP 228-61	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE RECV'Y	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-9.3				1.0	31		
-9.5				.2			
						REFUSAL END OF PROBE EL -9.5	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA — Page 1 of 2 Pages

Probe FP-8562 Desig. 229 Diam. (Casing) N/A

Co-ordinates: N 605,987.5900 E 838,578.5100

Elevation Top -3.2' M.L.W. Hammer Wt. 300lb Started 8 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 8 Aug 85

Elevation Top of Rock -11.7' M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.7' M.L.W. Obs. Well _____

Total Depth 8.5' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.6'						TIDE EL. 7.6', 1620 hr.	
						WATER DEPTH 10.8'	
-3.2'						TOP OF PROBE EL -3.2'	
-4.2'	0			1.0'	6	BOULDERS - RODS MEASURE TO EL -2.8'	
-5.2	1			1.0'	5		
-6.2	2			1.0'	10	DROVE 1w ROD PROBE FROM -3.2' TO -11.7' MLW WITH 300 lb HAMMER,	
-7.2	3			1.0'	23		
-8.2	4			1.0'	30		
-9.2	5			1.0'	54		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 229-62

Site: ROCKPORT HARBOR, MA	Probe No. FP 229-62	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-10.2	6			10'	58		SILTY CLAY @ tip
-11.2	7			10'	54		
-11.7	8			.5	55		
						REFUSAL END OF PROBE EL -11.7	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT, HARBOR, MA Page 1 of 1 Pages

Probe FP-85-63 Desig. 230 Diam. (Casing) N/A

Co-ordinates: N 605,968.9300 E 838,561.8700

Elevation Top -3.0 M.L.W. Hammer Wt. 300lb Started 9 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 9 AUG 85

Elevation Top of Rock -5.4 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.4 M.L.W. Obs. Well _____

Total Depth 2.4' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.2						TIDE EL 6.2, 0730hr.	
						WATER DEPTH 9.2'	
-3.0						TOP OF PROBE EL-3.0'	
-3.4	0			.4	WOR		
-4.4	1			1.0'	5	DROVE 2½" ROD PROBE FROM -3.0' TO -5.4' MLW WITH 300lb HAMMER	NO RECOVERY
-5.4	2			1.0'	7		
						REFUSAL END OF PROBE EL -5.4'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 230-63

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR / MA Page 1 of 2 Pages

Probe FP 85-64 Desig. 231 Diam. (Casing) N/A

Co-ordinates: N 605,950.2700 E 838,545.2300

Elevation Top -1.4 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -8.7 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -8.7 M.L.W.
Total Depth 7.3 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 9 Aug 85
Completed 9 Aug 85

DEPTH ELEV MLW	DEPTH 1" = 2	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
						TIDE EL 6.0', 0755hr	
						WATER DEPTH 7.4	
-1.4						TOP OF PROBE EL -1.4	
-2.8	0 1			1.4	WOR		
-3.8	2			1.0'	6	DROVE "AW ROD PROBE FROM -1.4' TO -8.7' WITH 300lb HAMMER	
-4.8	3			1.0'	9		
-5.8	4			1.0'	15		
-6.8	5			1.0	23		
	6			1.0	20		

GENERAL REMARKS: WOR-WEIGHT OF ROD

Probe No. FP 231-64

Site: ROCKPORT HARBOR, MA	Probe No. FP 231-64	Page 2 of 2

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-7.8							
-8.7	7			.9	40		SILTY CLAY moderately plastic, gray
						REFUSAL END OF PROBE EL-8.7	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-85-65 Desig. 232 Diam. (Casing) N/A

Co-ordinates: N 605,931.6100 E 838,528.5900

Elevation Top -1.4 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -12.3 M.L.W.
Total Depth 10.9 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 9 Aug 85
Completed 9 Aug 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.5						TIDE EL 5.5 ', 0820	
						WATER DEPTH 6.9'	
-1.4'						TOP OF PROBE EL -1.4'	
	0						
-2.9	1			1.5	WOR		
-3.9	2			1.0	17		
-4.9	3			1.0'	3	DROVE "AW" ROD PROBE FROM -1.4' TO -12.3' MLW WITH 300 lb HAMMER	
-5.9	4			1.0'	12		
-6.9	5			1.0'	17		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 232-65

Site: ROCKPORT HARBOR, MA	Probe No. FP 232-65	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-7.9				1.0	21		SILTY CLAY @ tip
-8.9				1.0	20		
-9.9				1.0	33		
-10.9				1.0	29		
-11.9				1.0	32		
-12.3				.4	45		
						REFUSAL END OF PROBE EL-12.3	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP-8566 Desig. 233 Diam. (Casing) N/A

Co-ordinates: N 605,912.9600 E 838,511.9500

Elevation Top -2.5 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -14.5 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -14.5 M.L.W.
Total Depth 12.0 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left -
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 9 AUG 85
Completed 9 AUG 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.8						TIDE EL. 3.8, 0915 hr	
						WATER DEPTH 6.3'	
-2.5						TOP OF PROBE EL-2.5	
-3.0	0			.5	WOR		
-4.0	1			1.0'	5		
-5.0	2			1.0'	4		
-6.0	3			1.0'	8	DROVE "AW" ROD PROBE FROM -2.5' TO -14.5' MLW WITH 300lb HAMMER	
-7.0	4			1.0'	9		
-8.0	5			1.0	9		

GENERAL REMARKS: WOR-WEIGHT OF ROD

Probe No. FP 233-66

Site: ROCKPORT HARBOR, MA	Probe No. FP 233-66	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-9.0	6			1.0'	10		SILTY CLAY @ tip
-10.0	7			1.0'	12		
-11.0	8			1.0'	15		
-12.0	9			1.0'	17		
-13.0	10			1.0'	17		
-14.0	11			1.0'	28		
-14.5	12			.5	14		
						REFUSAL END OF PROBE EL-14.5	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-67 Desig. 213 Diam. (Casing) N/A

Co-ordinates: N 605,523.000 E 838,811.0800

Elevation Top -5.5 M.L.W. Hammer Wt. 300lb Started 9 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 9 Aug 85

Elevation Top of Rock -9.3 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.3 M.L.W. Obs. Well _____

Total Depth 3.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.7						TIDE EL 1.7', 1115 hr	
						WATER DEPTH 7.2'	
-5.5						TOP OF PROBE EL -5.5	
	0						
	1			1.9	WOH	DROVE "AW" ROD PROBE FROM -5.5' TO -9.3 MLW WITH 300 lb HAMMER	
-7.4							
	2			1.0	5		
-8.4							
	3			.9	14		NO RECOVERY
-9.3							
						REFUSAL END OF PROBE EL -9.3	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 213-67

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 2 Pages

Probe FP ~~85-68~~ 201 Desig. 201 Diam. (Casing) N/A

Co-ordinates: N 605,533.1800 E 838,179.8900

Elevation Top -8.0 M.L.W. Hammer Wt. 300lb Started 9 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 9 Aug 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -16.1 M.L.W. Obs. Well _____

Total Depth 8.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
						TIDE EL 1.5', 1145 hr.	
						WATER DEPTH 9.5'	
-8.0						TOP OF PROBE EL -8.0'	
	0			1.1	WOR		
-9.1	1						
-10.1	2			1.0'	1		
-11.1	3			1.0'	24	DROVE "AW" ROD PROBE FROM -8.0' TO -16.1' MLW WITH 300 lb HAMMER	
-12.1	4			1.0'	23		
-13.1	5			1.0'	46		
	6			1.0'	62		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 201-68

Site: ROCKPORT HARBOR, MA	Probe No. FP 201-68	Page 2 of 2

DEPTH		CORE/SAMPLE			BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
	1"	NO.	SIZE	DEPTH RANGE			
-14.1	7	T		1.0'	70		SILTY SAND, w/gravel
-15.1	8						
				1.0'	58		
-16.1	9						
						END OF PROBE EL -16.1	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP-85-69 Desig. 204 Diam. (Casing) N/A

Co-ordinates: N 605,589.1500 E 850,229.8100

Elevation Top -4.4 M.L.W. Hammer Wt. 300 lb Started 9 AUG 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 9 AUG 85

Elevation Top of Rock -9.4 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.4 M.L.W. Obs. Well _____

Total Depth 5.0' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.6'						TIDE EL 1.6, 1225 hr	
			//			WATER DEPTH 6.0'	
-4.4'						TOP OF PROBE EL -4.4'	
	0			1.1	WOR		
-5.5	1						
	2			2.0	1	DROVE "AW" ROD PROBE FROM -4.4' TO -9.4' MLW WITH 300 lb HAMMER	
-7.5	3						
				1.0'	2		
-8.5	4						NO RECOVERY
				.9	17		
-9.4							
						REFUSAL END OF PROBE EL -9.4'	

GENERAL REMARKS: WOR- WEIGHT OF ROD

Probe No. FP 204-69

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site ROCKPORT HARBOR, MA Page 1 of 1 Pages

Probe FP ~~85-70~~ 205 Desig. 201 Diam. (Casing) N/A

Co-ordinates: N 605,607.9000 E 838,246.4600

Elevation Top -4.5 M.L.W. Hammer Wt. 300lb Started 9 Aug 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 9 Aug 85

Elevation Top of Rock -11.1 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.1 M.L.W. Obs. Well _____

Total Depth 6.6 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.9						TIDE EL 1.9', 1300hr	
						WATER DEPTH 6.4'	
-4.5'						TOP OF PROBE EL-4.5	
	0						
	1						
	2			3.6	WOH	DROVE "AW" ROD PROBE FROM -4.5 TO -11.1' MLW WITH 300lb HAMMER	
	3						
-8.1							
	4			10'	16		
-9.1							
	5			1.0	58		SILTY SAND widely graded 15-20% gravel, coarse to fine sand, 15-20% slightly plastic fines, gray
-10.1							
	6						

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP205-70

Site: ROCKPORT HARBOR, MA	Probe No. FP 205-70	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-11.1				1.0	68		
						REFUSAL END OF PROBE EL -11.1	

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 211-66	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-16.3	6			1.0	52		
						RUFUSAL END OF PROBE EL -16.3	

10:40 A

U. S. ARMY CORPS OF ENGINEERS NEW ENGLAND DIVISION FIELD LOG OF TEST PROBE	Site Pigeon Cove / Rockport, MA Page 1 of 1 Pages Probe FP-85-67 Desig. 206 Diam. (Casing) NA Co-ordinates: N 612,314.9400 E 835,938.8300

Elevation Top	-8.7 M.L.W.	Hammer Wt. 300lb	Started 24 Jul
Total Overburden Drilled	Feet	Hammer Drop 18 in	Completed 24 Jul
Elevation Top of Rock	-13.2 M.L.W.	Casing Left	
Total Rock Drilled	N/A Feet	Subsurface Water Data	Page
Elevation Bottom	-13.2 M.L.W.	Obs. Well	
Total Depth	4.5 Feet	Drilled By	EGA
Core Recovered	N/A % No. Boxes	Mfg. Des. Drill	Acker
Core Recovered	N/A Ft: Diam. In.	Inspected By:	S. Reynolds
Soil Samples	N/A In. Diam. No.	Classification By:	
Soil Samples	N/A In. Diam. No.	Classification By:	

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-0.5						TIDE EL -0.5, 1040hr	
						WATER DEPTH 8.2'	
-8.7						COVE BOTTOM / TOP OF PROBE	EL. -8.7'
	0 1 2			3.0	WOH	DROVE "AW" ROD PROBE FROM -8.7' TO -13.2' MLW WITH 300lb HAMMER	Sandy SILT nonplastic 20-25% v. fine sand gray
-11.7	3			1.0'	10		
-12.7	4			6"	15		
-13.2						REFUSAL END OF PROBE EL -13.2'	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 206-66

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of 2 Pages

Probe FP-85-68 Desig. 207 Diam. (Casing) N/A

Co-ordinates: N 612,300.4400 E 835,952.6100

Elevation Top -4.7 M.L.W. Hammer Wt. 300 lb Started 24 July

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 24 July

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -12.0 M.L.W. Obs. Well _____

Total Depth 7.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill Acker

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. Reynolds

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-0.5						TIDE EL -0.5', 1050 hr	
						WATER DEPTH	
-4.7						COVE BOTTOM / TOP OF PROBE	EL. -4.7'
	1, 2, 3			3.0'	WOH	DROVE "AW" ROD PROBE FROM -4.7' TO -12.0' MLW WITH 300 lb HAMMER	
-7.7	4'						
-8.7	5'			1.0'	5		
-9.7	6'			1.0'	10		SANDY SILT, gray @ tip
-10.7	7'			1.0	7		

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 207-68

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 207-63	Page 2 of 2

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE RECVY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-11.7	1" = 2'	—		1.0	17		
-12.0				.3			
						RUFUSAL END OF PROBE EL-12.0	

U. S. ARMY CORPS OF ENGINEERS NEW ENGLAND DIVISION FIELD LOG OF TEST PROBE	Site PIGEON COVE / ROCKPORT, MA Page 1 of 2 Pages Probe FP-8569 Desig. 208 Diam. (Casing) N/A Co-ordinates: N 612,285.9400 E 835,966.5800

Elevation Top -2.7 M.L.W. Hammer Wt. 300lb Started 24 JUL 85
Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 24 JUL 85
Elevation Top of Rock -9.5 M.L.W. Casing Left _____
Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____
Elevation Bottom -9.5' M.L.W. Obs. Well _____
Total Depth 6.8' Feet Drilled By EGA Assoc.
Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER
Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS
Soil Samples N/A In. Diam. ____ No. Classification By: _____
Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-0.3						TIDE EL. -0.3', 1120hr	
						WATER DEPTH 2.4'	
-2.7						COVE BOTTOM / TOP OF PROBE	EL. -2.7'
-4.5	0 1			1.8'	WOH		
-5.5	2			1.0'	2	DROVE "AW" ROD PROBE FROM -2.7' TO -9.5' MLW WITH 300 lb HAMMER	
-6.5	3			1.0'	6		
-7.5	4			1.0'	8		
-8.5	5			1.0'	8		

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 208-69

Site: PIGEON COVE, ROCKPORT MA	Probe No. FP 208-69	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-9.5				1.0	13		NO RECOVERY
						REFUSAL END OF PROBE EL -9.5	

Probe No. FP 208-69

12:10

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-70 Desig. 214 Diam. (Casing) N/A

Co-ordinates: N 612,292.4700 E 835,987.7700

Elevation Top -2.0 M.L.W. Hammer Wt. 300lb Started 24 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 24 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -6.3 M.L.W. Obs. Well _____

Total Depth 4.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.8						TIDE EL 0.8', 1210 hr.	
						WATER DEPTH 2.8'	
-2.0						COVE BOTTOM / TOP OF PROBE	EL. -2.0'
-3.5	0 1			1.5	WOR	DROVE "AW" ROD PROBE FROM -2.0' TO -6.3' MLW WITH 300lb HAMMER	
-4.5	2			1.0	14		
-5.5	3			1.0	37		
-6.3	4			10"	22		NO RECOVERY
						REFUSAL END OF PROBE EL -6.3	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 214-70

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP 215-71 Desig. 215 Diam. (Casing) N/A

Co-ordinates: N 612,285.2200 E 835,994.6600

Elevation Top -1.2 M.L.W. Hammer Wt. 300 lb Started 24 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 24 JUL 85

Elevation Top of Rock -2.8 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -2.8 M.L.W. Obs. Well _____

Total Depth 1.6 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.7						TIDE EL 1.7', 1240 hr.	
						WATER DEPTH	
-1.2						COVE BOTTOM / TOP OF PROBE	EL. -1.2'
				10'	WOR	DROVE "AW" ROD PROBE FROM -1.2 TO -2.8' MLW. WITH 300 lb HAMMER	
-2.2							
-2.8				7"	8		NO RECOVERY
						RUFUSAL END OF PROBE EL -2.8	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 215-71

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-72 Desig. 216 Diam. (Casing) N/A

Co-ordinates: N 612,277.9760 E 836,001.5500

Elevation Top -0.2 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -0.2 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -0.2 M.L.W.
Total Depth 0.0 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 24 JUL 85
Completed 24 JUL 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.0						TIDE EL 2.0', 1250 hr	
						WATER DEPTH 2.2'	
-0.2						COVE BOTTOM / TOP OF PROBE	EL. -0.2'
						REFUSAL / FROM OUTCROP ON SHORELINE	
						END OF PROBE EL -0.2'	

GENERAL REMARKS:

Probe No. FP 216-72

1:10

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-~~8573~~ Desig. 217 Diam. (Casing) N/A

Co-ordinates: N 612,270.7200 E 836,008.4400

Elevation Top -0.2 M.L.W. Hammer Wt. 300lb Started 24 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 24 JUL 85

Elevation Top of Rock -0.2 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -0.2 M.L.W. Obs. Well _____

Total Depth 0.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.7						TIDE EL. 2.7', 1310hr.	
						WATER DEPTH 2.8'	
-0.2						COVE BOTOM / TOP OF PROBE	EL. -0.2'
						REFUSAL / FROM OUTCROP ON SHORELINE	
						END OF PROBE EL -0.2	

GENERAL REMARKS:

Probe No. FP 127-73

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-~~85-74~~ Desig. 210 Diam. (Casing) _____

Co-ordinates: N 617,256.9400 E 835,993.9400

Elevation Top -0.9 M.L.W. Hammer Wt. 300 lb Started 24 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 24 JUL 85

Elevation Top of Rock -5.7 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.7 M.L.W. Obs. Well _____

Total Depth 4.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKERI

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.4						TIDE EL 3.4'	
						WATER DEPTH 4.3	
-0.9						COVE BOTTOM / TOP OF PROBE	EL. -0.9'
-1.5	0			7"	WOR		
-2.5	1			1.0'	10		
-3.5	2			1.0'	7	DROVE 2½" ROD PROBE FROM -0.9' TO -5.7' MLW WITH 300 lb HAMMER	
-4.5	3			1.0'	22		
-5.5	4			1.0'	45		SILTY SAND & clay
-5.7				.2'	29		
						RUFUSAL END OF PROBE EL -5.7	

GENERAL REMARKS:

Probe No. FP210-74

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-75 Desig. 209 Diam. (Casing) N/A

Co-ordinates: N 612,271.4400 E 835,980.1600

Elevation Top -2.0 M.L.W. Hammer Wt. 300 lb Started 24 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 24 JUL 85

Elevation Top of Rock -7.3 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.3 M.L.W. Obs. Well _____

Total Depth 5.3 Feet Drilled By EGA Assoc.

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.6						TIDE EL 5.6', 1420 hr.	
						WATER DEPTH 7.6'	
-2.0						COVE BOTTOM / TOP OF PROBE	EL. -2.0'
-2.8	0			9'	WOR	DROVE "AW" ROD PROBE FROM -2.0' TO -7.3' MLW WITH 300 lb HAMMER	
-3.8	1			1.0	10		
-4.8	2			1.0	8		
-5.8	3			1.0	25		
-6.8	4			1.0	60		
-7.3	5			6"	29		SILTY SAND & tip
						RUFUSAL END OF PROBE EL -7.3'	

GENERAL REMARKS:

Probe No. FP 209-75

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of 1 Pages

Probe FP-7596 Desig. 204 Diam. (Casing) N/A

Co-ordinates: N 612,257.6600 E 835,965.6600

Elevation Top -2.0 M.L.W. Hammer Wt. 300lb Started 24 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 24 Jul 85

Elevation Top of Rock -3.0 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -3.0 M.L.W. Obs. Well _____

Total Depth 1.0' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill Acker

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. Reynolds

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.6' 7.0						TIDE EL 6.6', 1455 hr	
			1			WATER DEPTH 8.6'	
-2.0						COVE BOTTOM / TOP OF PROBE	EL. -2.0'
	0			.2	WOR	RUFUSAL / BOULDER	
-3.0	1			.8	15	MOVED OVER 2'. RODS TO EL -2.2'. DROVE .8' TO EL -3.0' RUFUSAL	NO RECOVERY
						REFUSAL END OF PROBE EL -3.0	
						DROVE "AW" ROD PROBE FROM -2.0' TO -3.0' MLW WITH 300lb HAMMER	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 204-76

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-77 Desig. 224 Diam. (Casing) N/A

Co-ordinates: N 612,284.4900 E 836,022.9300

Elevation Top -0.7 M.L.W. Hammer Wt. 300lb Started 25 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 25 JUL 85

Elevation Top of Rock -2.0 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -2.0 M.L.W. Obs. Well _____

Total Depth 1.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.7						TIDE EL 2.7', 0915 hr.	
1.3							
						WATER DEPTH 3.4'	
-0.7						COVE BOTTOM / TOP OF PROBE	EL. - 0.7'
-1.1	0			.4'	WOR	DROVE AW ROD PROBE FROM -0.7' TO -2.0' MLW. WITH 300 lb HAMMER	
-2.0	1			.9	4		NO RECOVERY
						RUFUSAL END OF PROBE EL -2.0	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 224-77

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-78 Desig. 223 Diam. (Casing) N/A

Co-ordinates: N 612,291.7400 E 836,016.0500

Elevation Top -1.4 M.L.W. Hammer Wt. 300lb Started 25 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 25 JUL 85

Elevation Top of Rock -3.8 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -3.8 M.L.W. Obs. Well _____

Total Depth 2.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.0						TIDE EL 2.0', 0930hr.	
						WATER DEPTH 3.4'	
-1.4						COVE BOTTOM / TOP OF PROBE	EL. - 1.4'
-1.8	0			.4'	WOR	DROVE "AW" ROD PROBE FROM -1.4' TO -3.8' MLW WITH 300 lb HAMMER	
-2.8	1			1.0'	3		
-3.8'	2			1.0	25		NO RECOVERY
						RUFUSAL END OF PROBE EL - 3.8	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 223-78

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE/ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-79 Desig. 229 Diam. (Casing) N/A

Co-ordinates: N 612,312.7700 E 836,023.6600

Elevation Top -2.2 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -5.6 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -5.6 M.L.W.
Total Depth 3.4 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 25 JUL 85
Completed 25 JUL 85

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0						TIDE EL 1.0', 0955hr	
						WATER DEPTH 3.2'	
-2.2'						COVE BOTTOM / TOP OF PROBE	EL. -2.2'
	0						
	1			2.0'	WOR	DROVE "AW" ROD PROBE FROM -2.2' TO -5.6' MLW WITH 300 lb HAMMER	
-4.2	2						
				1.0'	3		
-5.2	3						
-5.6				.4	10		NO RECOVERY
						REFUSAL END OF PROBE EL -5.6'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 229-79

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-228-80 Desig. 228 Diam. (Casing) N/A

Co-ordinates: N 612,320.0200 E 836,016.7700

Elevation Top -2.4 M.L.W. Hammer Wt. 300 lb Started 25 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 25 JUL 85

Elevation Top of Rock -8.6 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -8.6 M.L.W. Obs. Well _____

Total Depth 6.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.9						TIDE EL 0.9', 1005 hr	
						WATER DEPTH 3.3'	
-2.4'						COVE BOTTOM / TOP OF PROBE	EL. -2.4'
	0						
	1			2.0'	WOR		
-4.4'	2						
-5.4	3			1.0'	2	DROVE "AW" ROD PROBE FROM -2.4' TO -8.6' MLW WITH 300 lb HAMMER	
-6.4'	4			1.0'	7		
-7.4	5			1.0'	10		
-8.4	6			1.0'	30		SILTY SAND @ tip

GENERAL REMARKS: 2' -8.6
RUFUSAL . 2' 11 BLOWS
END OF PROBE EL-8.6

WOR-WEIGHT OF ROD

Probe No. FP 228-80

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-858 Desig. 234 Diam. (Casing) N/A

Co-ordinates: N 612,341.0400 E 836,024.3800

Elevation Top 0.5 M.L.W. Hammer Wt. 300 lb Started 25 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 25 Jul 85

Elevation Top of Rock -7.6 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.6 M.L.W. Obs. Well _____

Total Depth 5.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.5						TIDE EL. 0.5', 1025 hr	
						WATER DEPTH 3.8'	
-3.3						COVE BOTTOM / TOP OF PROBE	EL. - 3.3'
	0						
	1			2.8	WOH	DROVE "AW" ROD PROBE FROM -3.3' TO -7.6' MLW WITH 300 lb HAMMER	
	2						
-6.1							
	3			1.0	6		
-7.1							
-7.6	4			.5	14		NO RECOVERY
						RUFUSAL END OF PROBE EL -7.6	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 234-81

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of ___ Pages

Probe FP-85-82 Desig. 233 Diam. (Casing) N/A

Co-ordinates: N 612,355.5400 E 836,010.6000

Elevation Top -8.0 M.L.W. Hammer Wt. 300lb Started 25 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 25 JUL 85

Elevation Top of Rock -13.0 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.0 M.L.W. Obs. Well _____

Total Depth 5.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-0.2						TIDE EL -0.2', 1110 hr.	
						WATER DEPTH 7.8'	
-8.0						COVE BOTTOM / TOP OF PROBE	EL. -8.0'
	0						
	1			1.7	WOH		
-9.7						DROVE "AW" ROD PROBE FROM -8.0' TO -13.0' MLW WITH 300lb HAMMER	
	2			1.0'	24		
-10.7							
	3			1.0'	45		
-11.7							
	4			1.0'	66		SILTY SAND w/gravel @ tip
-12.7							
-13.0	5			.3	30		
						REFUSAL END OF PROBE EL -13.0	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 233-82

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of 1 Pages

Probe FP-85-83 Desig. 232 Diam. (Casing) N/A

Co-ordinates: N 612,370.0400 E 835,996.8300

Elevation Top -10.4 M.L.W. Hammer Wt. 300lb Started 25 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 25 Jul 85

Elevation Top of Rock -16.5 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -16.5 M.L.W. Obs. Well _____

Total Depth 6.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill Acker

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. Reynolds

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-0.3						TIDE EL. -0.3', 1120 hr	
						WATER DEPTH 10.1	
-10.4						COVE BOTTOM / TOP OF PROBE	EL. -10.4'
	0						
	1			1.7	WOR		
-12.1							
	2					DROVE "AW" ROD, PROBE FROM -10.4' TO -16.5' MLW WITH 300 lb HAMMER	
	3			2.4	WOH		
-14.5	4						
-15.5				1.0'	13		
-16.5				1.0'	68		SILTY SAND & f/p

GENERAL REMARKS:

REFUSAL
END OF PROBE EL -16.5'

WOR - WEIGHT OF ROD
WOH - WEIGHT OF HAMMER

Probe No. FP 232-83

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of ___ Pages

Probe FP-85-84 Desig. 201 Diam. (Casing) N/A

Co-ordinates: N 612,301.1600 E 835,924.3300

Elevation Top -8.5 M.L.W. Hammer Wt. 300 lb Started 25 Jul 85

Total Overburden Drilled ___ Feet Hammer Drop 18 in Completed 25 Jul 85

Elevation Top of Rock -13.6 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data ___ Page ___

Elevation Bottom -13.6 M.L.W. Obs. Well ___

Total Depth 5.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes ___ Mfg. Des. Drill Acker

Core Recovered N/A Ft: ___ Diam. ___ In. Inspected By: S. Reynolds

Soil Samples N/A In. Diam. ___ No. Classification By: ___

Soil Samples N/A In. Diam. ___ No. Classification By: ___

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.0						TIDE EL 0.0, 1215 hr	
						WATER DEPTH 8.5'	
-8.5						COVE BOTTOM / TOP OF PROBE	EL -8.5'
-10.1	0 1			1.6'	WOR	DROVE "AW" ROD PROBE FROM -8.5' TO -13.6' MLW WITH 300 lb HAMMER.	SILTY SAND w/ gravel
-11.1	2			1.0	6		
-12.1	3			1.0	8		
-13.1	4			1.0	25		
-13.6	5			6"	30		
						REFUSAL END OF PROBE EL -13.6	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 201-84

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-85 Desig. 202 Diam. (Casing) N/A

Co-ordinates: N 612,286.6600 E 835,938.1100

Elevation Top -6.3 M.L.W. Hammer Wt. 300 lb Started 25 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 25 JUL 85

Elevation Top of Rock -11.0 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.0 M.L.W. Obs. Well _____

Total Depth 4.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.5						TIDE EL. 0.5', 1250 hr.	
						WATER DEPTH 6.8'	
-6.3						COVE BOTTOM / TOP OF PROBE	EL. -6.3'
-7.8	0 1			1.5'	WOH		
-8.8	2			1.0'	3	DROVE "AW" ROD PROBE FROM -6.3' TO 11.0' MLW WITH 300 lb HAMMER	
-9.8	3			1.0	5		
-10.8	4			1.0'	57		
-11.0				.2'	20		NO RECOVERY
						RUFUSAL END OF PROBE EL -11.0'	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 202-85

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of ___ Pages

Probe FP-85-86 Desig. 203 Diam. (Casing) N/A

Co-ordinates: N 612,272.1600 E 835,951.8900

Elevation Top -4.0 M.L.W. Hammer Wt. 300lb Started 25 Jul 85

Total Overburden Drilled ___ Feet Hammer Drop 18 in. Completed 25 Jul 85

Elevation Top of Rock -5.8 M.L.W. Casing Left ___

Total Rock Drilled N/A Feet Subsurface Water Data ___ Page ___

Elevation Bottom -5.8 M.L.W. Obs. Well ___

Total Depth 1.8' Feet Drilled By EGA

Core Recovered N/A % No. Boxes ___ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ___ Diam. ___ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ___ No. Classification By: ___

Soil Samples N/A In. Diam. ___ No. Classification By: ___

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.1'						TIDE EL 1.1'	
						WATER DEPTH 5.1	
-4.0						COVE BOTTOM / TOP OF PROBE	EL. -4.0'
-4.2				.2'	WOR	DROVE "AW" ROD PROBE FROM -4.0' TO -5.8' MLW WITH 300lb HAMMER	
-5.2					14		
-5.8				.6	19		NO RECOVERY
						RUFUSAL END OF PROBE EL -5.8	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 203-86

2·50

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of 1 Pages

Probe FP-85-87 Desig. 256 Diam. (Casing) _____

Co-ordinates: N 612,133.5500 E 835,888.5500

Elevation Top -8.7 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -11.2 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -11.2 M.L.W.
Total Depth 3.3 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 25 JUL 85
Completed 25 JUL 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.7						TIDE EL 4.7', 1450 hr	
						WATER DEPTH 13.4'	
-8.7						COVE BOTTOM / TOP OF PROBE EL. - 8.7'	
-9.2				6"	WOR		
-10.2				1.0	7	DROVE "AW" ROD PROBE FROM -8.7' TO -12.0' MLW WITH 300 lb HAMMER	
-11.2				1.0	18		
-12.0				9"	10		NO RECOVERY
						REFUSAL END OF PROBE EL-12.0'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP256-87

3:50 4:00 [illegible]

U. S. ARMY CORPS OF ENGINEERS NEW ENGLAND DIVISION FIELD LOG OF TEST PROBE	Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages Probe FP-85-88 Desig. 245 Diam. (Casing) _____ Co-ordinates: N 612,155.3900 E 835,927.5700

Elevation Top	-1.5 M.L.W.	Hammer Wt. 300 lb	Started 25 JUL 85
Total Overburden Drilled	_____ Feet	Hammer Drop 18 in	Completed 25 JUL 85
Elevation Top of Rock	-2.3 M.L.W.	Casing Left _____	
Total Rock Drilled	N/A Feet	Subsurface Water Data	_____ Page _____
Elevation Bottom	-2.3 M.L.W.	Obs. Well _____	
Total Depth	0.8 Feet	Drilled By EGA	
Core Recovered N/A %	No. Boxes _____	Mfg. Des. Drill ACKER	
Core Recovered N/A Ft:	____ Diam. ____ In.	Inspected By: S. REYNOLDS	
Soil Samples N/A	In. Diam. ____ No.	Classification By: _____	
Soil Samples N/A	In. Diam. ____ No.	Classification By: _____	

DEPTH	1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.5						TIDE EL 6.5', 1550 hr	
						WATER DEPTH 8.0'	
-1.5						COVE BOTTOM / TOP OF PROBE	EL. -1.5'
-2.3	0			.8	1		NO RECOVERY
						REFUSAL / 5 BLOWS END OF PROBE EL -2.3 DROVE AW 'ROD PROBE FROM -1.5' TO -2.3' MLW WITH 300 lb HAMMER	

GENERAL REMARKS:

Probe No. FP245-88

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-89 Desig. 246 Diam. (Casing) N/A

Co-ordinates: N 612,171.9400 E 835,938.8100

Elevation Top -0.3 M.L.W. Hammer Wt. 300lb Started 25 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 25 JUL 85

Elevation Top of Rock -0.8 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -0.8 M.L.W. Obs. Well _____

Total Depth 0.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5'						TIDE EL. 7.5', 1610 HR.	
						WATER DEPTH 7.8'	
-0.3						COVE BOTTOM / TOP OF PROBE	EL. -0.3'
-0.8				.5	8		NO RECOVERY
						RUFUSAL / BOULDERS END OF PROBE EL-0.8	
						DROVE AW ROD PROBE FROM -0.3' TO -0.8' MLW WITH 300 lb HAMMER	

GENERAL REMARKS:

Probe No. FP 246-89

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE/ROCKPORT, MA Page 1 of 2 Pages

Probe FP-8590 Desig. 237 Diam. (Casing) N/A

Co-ordinates: N 612,305.1600 E 836,044.6800

Elevation Top 1.4 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -8.0 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -8.0 M.L.W.
Total Depth 9.4 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 26 Jul 85
Completed 26 Jul 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.2						TIDE EL. 7.2', 0750hr.	
						WATER DEPTH 5.8	
1.4						COVE BOTTOM/TOP OF PROBE	EL. -1.4'
0.5	0 1			.9'	WOR		
-0.5	2			1.0'	7		
-1.5	3			1.0'	10	DROVE "AW" ROD PROBE FROM 1.4' TO -8.0' MLW WITH 300 lb HAMMER	
-2.5	4			1.0'	13		
-3.5	5			1.0'	3		
-4.5	6			1.0'	12		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 237-90

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 237-91	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-5.5	7			1.0'	42		
-6.5	8			1.0'	26		
-7.5	9			1.0'	18		Sandy Silt or Sand
-8.0	9.4'			.5	22		
						REFUSAL END OF PROBE EL -8.0	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of 2 Pages

Probe FP-235-91 Desig. 235 Diam. (Casing) N/A

Co-ordinates: N 612,326.5400 E 836,038.1600

Elevation Top 0.5 M.L.W. Hammer Wt. 300lb Started 26 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 26 Jul 85

Elevation Top of Rock -7.8 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.8 M.L.W. Obs. Well _____

Total Depth 8.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill Acker

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S Reynolds

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.0						TIDE EL 7.0' 0815 hr.	
						WATER DEPTH 7.5'	
0.5'						COVE BOTTOM / TOP OF PROBE	EL. -0.5'
0.2'	0			.3	WOR		
-0.8	1			1.0'	6		
-1.8	2			1.0	12		
-2.8	3			1.0'	2	DROVE 4w" ROD PROBE FROM 0.5' TO -7.8' MLW WITH 300 lb HAMMER	
-3.8	4			1.0'	12		
-4.8	5			1.0'	20		
	6				17		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 235-91

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 235-91	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-5.8							
-6.8	7			1.0'	43		
-7.8	8			1.0'	65		SILTY SAND & tip
						REFUSAL END OF PROBE EL-	

Probe No. FP 235-91

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of ___ Pages

Probe FP-8592 Desig. 231 Diam. (Casing) _____

Co-ordinates: N 612,298.2700 E 836,037.4300

Elevation Top -1.2 M.L.W. Hammer Wt. 300lb Started 26 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 26 Jul 85

Elevation Top of Rock -6.4' M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -6.4' M.L.W. Obs. Well _____

Total Depth 5.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
						TIDE EL. 6.0', 850hr	
						WATER DEPTH 7.2'	
-1.2						COVE BOTTOM / TOP OF PROBE	EL. -1.2'
-1.5'	0			.3'	WOR		
-2.5	1			1.0'	2		
-3.5	2			1.0'	19	DROVE AW ROD PROBE FROM -1.2' TO -6.4' MLW WITH 300lb HAMMER	
-4.5	3			1.0'	15		
-5.5	4			1.0'	32		
-6.4	5			.8	34		SILTY SAND @ tip
						RUFUSAL END OF PROBE EL-6.4	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP231-92

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-93 Desig. 230 Diam. (Casing) N/A

Co-ordinates: N 612,305.5200 E 836,030.5500

Elevation Top -0.8 M.L.W. Hammer Wt. 300 lb Started 26 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 26 Jul 85

Elevation Top of Rock -5.2 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.2 M.L.W. Obs. Well _____

Total Depth 4.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.4'						TIDE EL. 5.4', 0910hr	
						WATER DEPTH 6.2'	
-0.8'						COVE BOTTOM / TOP OF PROBE	EL. -0.8'
	0						
-1.8'	1			1.0'	1		
-2.8'	2			1.0'	12	DROVE 4½" ROD PROBE FROM -0.8' TO -5.2' MLW WITH 300 lb HAMMER	
-3.8'	3			1.0'	6		
-4.8'	4			1.0	25		SILTY SAND @ tip
-5.2	4.4'			.4'	17		
						REFUSAL END OF PROBE EL -5.2	

GENERAL REMARKS:

Probe No. FP 230-93

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA — Page 1 of 2 Pages

Probe FP-8594 Desig. 236 Diam. (Casing) N/A

Co-ordinates: N 612,319.6600 E 836,030.9100

Elevation Top -1.7 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -8.2 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -8.2 M.L.W.
Total Depth 6.5 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left —
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 26 Jul 85
Completed 26 Jul 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.8'						TIDE EL. 4.8', 0925hr	
						WATER DEPTH 6.5'	
-1.7						COVE BOTTOM / TOP OF PROBE	EL. -1.7'
	0						
-3.2	1			1.5	WOR		
-4.2	2			1.0'	4	DROVE 2" ROD PROBE FROM -1.7' TO -8.2' MLW WITH 300 lb HAMMER	
-5.2	3			1.0'	14		
-6.2	4			1.0'	34		
-7.2	5			1.0'	51		
	6						

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 236-94

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 236-94	Page 2 of 2

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-8.2				1.0'	100		SILTY SAND & TIP
						REFUSAL END OF PROBE EL-8.2	

APPENDIX D

Pigeon Cove

Field Logs of Probes

TIDE OBSERVATIONS - PIGEON COVE (MLW)

DATE	TIME	TIDE EL
12 JUL 85	0930	6.5'
	1000	5.5'
	1030	5.0'
	1120	4.0'
	1400	2.0'
15 JUL 85	1050	7.3
	1200	5.0'
	1430	2.7'
	1515	2.0'
16 JUL 85	0900	5.9'
	1005	7.2'
	1105	7.8'
	1145	7.4'
	1300	6.2'
	1330	5.5'
	1400	4.4'
17 JUL 85	0955	6.8'
	1040	7.2'
	1110	7.5'
	1145	7.8'
	1205	7.6'
	1220	7.5'
	1430	4.5'
	1515	3.3'
18 JUL 85	0915	4.0'
	1020	6.0'
	1105	7.4'
	1310	8.5'
19 JUL 85	1150	7.8'
	1210	8.0'
	1310	7.8'
	1335	7.8'
	1430	7.5'
	1500	6.8'
	1525	6.2'
22 JUL 85	1035	1.0'
	1125	2.8'
	1150	3.8'
	1330	7.5'
	1400	8.4'
	1420	8.8'
	1445	9.0'
	1500	9.0'
	1535	9.2'
23 JUL 85	1140	1.6'
	1210	2.4'
	1250	4.0
	1320	5.7'
	1400	6.6'
	1430	7.5'
	1450	8.2'
	1520	8.8'
24 JUL 85	0900	1.1'
	0930	0.0'
	1000	-0.3

TIDE OBSERVATIONS - PIGEON COVE (MLW) [CONT.]

DATE	TIME	TIDE EL
24 JUL 85	1040	-0.5'
	1050	-0.5'
	1120	-0.3'
	1210	0.8'
	1240	1.7'
	1310	2.7'
	1330	3.4'
	1420	5.6'
	1455	6.6'
25 JUL 85	0915	2.7'
	0930	2.0'
	0955	1.0'
	1005	0.9'
	1025	0.5'
	1110	-0.2'
	1120	-0.3'
	1215	0.0'
	1250	0.5'
	1320	1.1'
	1450	4.7'
	1550	6.5'
	1610	7.5'
26 JUL 85	0750	7.2'
	0815	7.0'
	0850	6.0'
	0910	5.4'
	0925	4.8'

DATE	TIME	TIDE EL
11 JUL 85	1245 HR	1.0'
	1330 HR	2.0'
	1415 HR	2.5'

NOTE: ADDITIONAL OBSERVATIONS ON TEST PROBE LOGS

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-1 Desig. 105 Diam. (Casing) N/A

Co-ordinates: N 612,074.6200 E 835,739.0000

Elevation Top -12.8 M.L.W. Hammer Wt. 300 lb Started 11 JUL 85

Total Overburden Drilled 1.1 Feet Hammer Drop 18" Completed 11 JUL 85

Elevation Top of Rock ____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data N/A Page ____

Elevation Bottom -13.8 M.L.W. Obs. Well ____

Total Depth 1.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes ____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: ____

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0'						TIDE EL. 1.0', 1245hr	
						WATER DEPTH 13.8'	
						EL - 10.8' 1 BLOW, ROD DROPPED 2 FT @ ANGE	
-12.8'							
	0			1.0'	5	DROVE "AW" ROD PROBE FROM -12.8' TO -13.8' WITH 300 lb HAMMER 18 blows / 1" REFUSAL	NO RECOVERY
-13.8'	1						
						END OF PROBE EL. -13.9	

GENERAL REMARKS:

Probe No. FP105-1

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-2 Desig. 104 Diam. (Casing) N/A

Co-ordinates: N 612,092.9800 E 835,331.0800

Elevation Top — 12.8 M.L.W. Hammer Wt. 300 lb Started 11 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 11 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -15.8' M.L.W. Obs. Well _____

Total Depth 3.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.0						TIDE EL. 2.0', 1330 hr.	
						WATER DEPTH 14.8'	
-12.8'						COVE BOTTOM / TOP OF PROBE	EL. -12.8
	0						
	1			2.0'	WOR	ROD DROPPED 2 FT @ ANGLE.	
-14.8'	2					DROVE "AW" ROD PROBE FROM -12.8' TO -15.8' WITH 300 lb HAMMER	
				1.0	10		
-15.8'	3						
						END OF PROBE EL -15.8'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 104-2

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-3 Desig. 103 Diam. (Casing) N/A

Co-ordinates: N 612,111.3500 E 835,723.1500

Elevation Top -13.0 M.L.W.
Total Overburden Drilled — Feet
Elevation Top of Rock N/A M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -15.2 M.L.W.
Total Depth 2.2 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft : Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left N/A
Subsurface Water Data Page
Obs. Well
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: S. REYNOLDS
Classification By:

Started 11 JUL 85
Completed 11 JUL 85

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.5						TIDE EL. 2.5' 12/15/85	
						WATER DEPTH 15.5'	
-13.0						COVE BOTTOM / TOP OF BOTTOM	EL. -13.0'
	0			.2	WOR	WOR. FOR 3"	
-14.2	1			1.0'	24	DROVE "AW" ROD PROBE FROM -13.0 TO -15.2' WITH 300 lb HAMMER	
-15.2	2			1.0'	141		NO RECOVERY
						END OF PROBE EL -15.2'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 103-3

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-4 Desig. 101 Diam. (Casing) N/A

Co-ordinates: N 612,148.0700 E 735,707.3100

Elevation Top -8.7 M.L.W. Hammer Wt. 300 lb Started 12 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 12 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.2 M.L.W. Obs. Well _____

Total Depth 0.5 Feet Drilled By E.G.A.

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.5						TIDE EL. 6.5', 0930	
						WATER DEPTH 15.2'	
-8.7						COVE BOTTOM / TOP OF PROBE	EL. -8.7'
-9.2	0 / 0.5			6"	W.O.R		NO RECOVERY
						REFUSAL & END OF PROBE EL -9.2	

GENERAL REMARKS: W.O.R - WEIGHT OF ROD

Probe No. FP101-4

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-5 Desig. 102 Diam. (Casing) N/A

Co-ordinates: N 612,129.7100 E 835,715.2300

Elevation Top -10.5 M.L.W. Hammer Wt. 300lb Started 12 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 12 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.7 M.L.W. Obs. Well _____

Total Depth 1.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.5						TIDE EL. 5.5', 1000hr	
						WATER DEPTH 15.0'	
-10.5						COVE BOTTOM / TOP OF PROBE	EL. 10.5'
	0			1.0	5	DROVE "AW" ROD PROBE FROM -10.5 TO -11.7' MLW WITH 300lb HAMMER	NO RECOVERY
	1						
-11.7				2"	8		
						REFUSAL	
						END OF PROBE EL - 11.7	

GENERAL REMARKS:

Probe No. FP 102-5

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE — Page 1 of 1 Pages

Probe FP-85-6 Desig. 106 Diam. (Casing) N/A

Co-ordinates: N 612,156.0000 E 835,725.6700

Elevation Top -9.5 M.L.W.
Total Overburden Drilled 2.5 Feet
Elevation Top of Rock ____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -12.0 M.L.W.
Total Depth 2.5 Feet
Core Recovered N/A % No. Boxes ____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18
Casing Left N/A
Subsurface Water Data N/A Page ____
Obs. Well N/A
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: S. REYNOLDS
Classification By: ____

Started 12 JUL 85
Completed 12 JUL 85

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.0						TIDE EL 5.0; 1030 hr	
						Water Depth 14.5'	
-9.5						COVE BOTTOM / TOP OF PROBE	EL. -9.5'
	0			1.0	9	DROVE AW" ROD PROBE FROM -9.5' TO -12.0' MLW WITH 300lb HAMMER	
-10.5	1						
				1.0	29		
-11.5	2						
-12.0	2.5			6"	30/6"	NO PENETRATION LAST 10 BLOWS	
						REFUSAL END OF PROBE, EL -12.0	

GENERAL REMARKS:

Probe No. FP 106-6

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-7 Desig. 113 Diam. (Casing) N/A

Co-ordinates: N 612,163.9200 E 835,744.0400

Elevation Top -8.8 M.L.W.
Total Overburden Drilled — Feet
Elevation Top of Rock — M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -11.8 M.L.W.
Total Depth 3.0 Feet
Core Recovered N/A % No. Boxes
Core Recovered N/A Ft: Diam. In.
Soil Samples N/A In. Diam. No.
Soil Samples N/A In. Diam. No.

Hammer Wt. 300 lb
Hammer Drop 18
Casing Left N/A
Subsurface Water Data N/A Page
Obs. Well
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By:
Classification By:

Started 12 JULY 85
Completed 12 JUL 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.0'						TIDE EL. 4.0' 1120hr	
						WATER DEPTH 12.8'	
-8.8'						COVE BOTTOM / TOP OF PROBE	EL. -8.8'
-9.8'	0 1'			1.0'	2	DROVE "AW" ROD PROBE FROM -8.8' TO -11.8' MLW WITH 300 lb HAMMER	
-10.8'	2'			1.0'	9		
-11.8'	3'			1.0'	32		SILTY SAND @ tip
						REFUSAL END OF PROBE EL -11.8	

GENERAL REMARKS:

Probe No. FP113-7

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-8 Desig. 120 Diam. (Casing) N/A

Co-ordinates: N 612,171.8400 E 835,762.4000

Elevation Top -9.2 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -11.8 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -11.8 M.L.W.
Total Depth 2.6 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left N/A
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 12 Jul 85
Completed 12 Jul 85

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.0						TIDE EL 2.0', 1400hr	
						WATER DEPTH 11.2'	
-9.2						COVE BOTTOM / TOP OF PROBE	EL. -9.2'
	0			10" 1.8'	2 WOR	RODS COULD HAVE SLID OFF BOULDER	
-11.0						DROVE "AW" ROD PROBE FROM -9.2' TO -11.8' MLW WITH 300lb HAMMER	
-11.8	2			10"	2		
						REFUSAL END OF PROBE EL. -11.8	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP120-8

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-9 Desig. 127 Diam. (Casing) N/A

Co-ordinates: N 612,179.7600 E 835,780.7702

Elevation Top -10.8 M.L.W. Hammer Wt. 300 lb Started 12 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in

Elevation Top of Rock -11.6 M.L.W. Casing Left N/A Completed 12 JUL 85

Total Rock Drilled N/A Feet Subsurface Water Data N/A Page _____

Elevation Bottom -11.6 M.L.W. Obs. Well _____

Total Depth 0.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2.5'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.0						TIDE EL. 2.0', 14 Nov 85	
						WATER DEPTH 12.8'	
-10.8						COVE BOTTOM / TOP OF PROBE	EL. -10.8'
	0			9"	24		NO RECOVERY
-11.6	0.8					RUFUSAL END OF PROBE EL -11.6' DROVE "AW" ROD PROBE FROM -10.5' TO -11.6' MLW WITH 300 lb HAMMER	

GENERAL REMARKS:

Probe No. FP-127-9

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-131-10 Desig. 131 Diam. (Casing) N/A

Co-ordinates: N 612,106.3100 E 835,812.4600

Elevation Top -11.7 M.L.W. Hammer Wt. 300lb Started 15 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 15 JUL 85

Elevation Top of Rock -14.7 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -14.7 M.L.W. Obs. Well _____

Total Depth 3.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.3						TIDE EL. 7.3' 10:50A.	
						WATER DEPTH 19.0'	
-11.7						COVE BOTTOM / TOP OF PROBE	EL.-11.7'
	0			1.0'	WOR	DROVE "AW" ROD PROBE FROM -11.7' TO -14.7' MLW WITH 300lb HAMMER	
-12.7	1						
				1.0'	7		
-13.7	2						
				1.0'	70		SILTY SAND w/gravel & fir
-14.7	3						
						REFUSAL END OF PROBE EL-14.7'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 131-10

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-11 Desig. 126 Diam. (Casing) N/A

Co-ordinates: N 612,098.3800 E 835,794.0900

Elevation Top -10.9 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -14.9 M.L.W.
Total Depth 4.0 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left N/A
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 15 JUL 85
Completed 15 JUL 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.8						TIDE EL 6.8', 1115 hr.	
						WATER DEPTH 17.7'	
-10.9						COVE BOTTOM/TOP OF PROBE	EL. -10.9'
	0			1.0'	WOR		
-11.9	1						
				1.0'	40	DROVE "AW" ROD PROBE FROM -10.9' TO -14.9' MLW WITH 300 lb HAMMER	
-12.9	2						
				1.0'	29		
-13.9	3						
				1.0'	24		SILTY SAND w/gravel
-14.9	4						
						END OF PROBE EL -14.9'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 126-11

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-12 Desig. 119 Diam. (Casing) N/A

Co-ordinates: N 612,090.4600 E 835,775.7300

Elevation Top -10.0 M.L.W. Hammer Wt. 300lb Started 15 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 15 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -15.4 M.L.W. Obs. Well _____

Total Depth 5.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.8						TIDE EL. 5.8', 1140 hr	
						WATER DEPTH 15.8'	
-10.0						COVE BOTTOM / TOP OF PROBE	EL. -10.0'
-12.4				2.4	WOR *	DROVE "AW" ROD PROBE FROM -10.0' TO -15.4' MLW WITH 300lb HAMMER	
-13.4				1.0'	13		
-14.4				1.0'	46		
-15.4				1.0'	22		SILTY SAND w/ gravel
						END OF PROBE EL-15.4	

GENERAL REMARKS: -AREA CONTAINS LARGE BOULDERS INITIAL MEASUREMENT COULD HAVE BEEN ON TOP OF BOULDER.

WOR - WEIGHT OF ROD

Probe No. FP 119-12

12.00

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP 112-13 Desig. 112 Diam. (Casing) _____

Co-ordinates: N 617,882.5400 E 835,757.3600

Elevation Top -10.5 M.L.W. Hammer Wt. 300lb Started 15 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop _____ Completed 15 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -14.3 M.L.W. Obs. Well _____

Total Depth 3.9 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.0						TIDE EL 5.0', 1200hr	
						WATER DEPTH 15.5'	
-10.5						COVE BOTTOM / TOP OF PROBE	EL. -10.5'
	0			1.0'	WOR		
-11.5	1						
				1.0'	7	DROVE "AW" ROD PROBE FROM -10.5' TO -14.3' MLW WITH 300lb HAMMER	
-12.5	2						
				1.0'	48		
-13.5	3						
				10"	60		SILTY SAND w/gravel
-14.3	3'-10"						
						REFUSAL END OF PROBE EL. -14.3	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 112-13

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE/ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-14 Desig. 111 Diam. (Casing) N/A

Co-ordinates: N 62,100.9000 E 835,749.4400

Elevation Top -9.8 M.L.W. Hammer Wt. 300 lb Started 15 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in

Elevation Top of Rock -13.3 M.L.W. Casing Left N/A Completed 15 JUL 85

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.3 M.L.W. Obs. Well _____

Total Depth 3.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV. M.LW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.2						TIDE EL. 4.2', 1250 hr.	
						WATER DEPTH 14.0'	
-9.8						COVE BOTTOM - TOP OF PROBE EL. -9.8	
	0						
-10.8	1			1.0'	W.O.R		
-11.8	2			1.0'	3		
-12.8	3			1.0'	37		
-13.3	3.5			.5'	60		NO RECOVERY
						REFUSAL END OF PROBE - EL-13.3	

GENERAL REMARKS: W.O.R. = WEIGHT OF ROD

Probe No. FP 111-14

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE/ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-14 Desig. 111 Diam. (Casing) N/A

Co-ordinates: N 612,100.9000 E 835,749.4400

Elevation Top -9.8 M.L.W. Hammer Wt. 300 lb Started 15 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 15 JUL 85

Elevation Top of Rock -13.3 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.3 M.L.W. Obs. Well _____

Total Depth 3.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV. M.LW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.2						TIDE EL. 4.2', 1250 hr.	
						WATER DEPTH 14.0'	
-9.8						COVE BOTTOM - TOP OF PROBE EL. -9.8	
	0						
-10.8	1			1.0'	W.O.R		
-11.8	2			1.0'	3		
-12.8	3			1.0'	37		
-13.3	3.5			.5'	60		NO RECOVERY
						REFUSAL END OF PROBE - EL-13.3	

GENERAL REMARKS: W.O.R. = WEIGHT OF ROD

Probe No. FP 111-14

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-15 Desig. 110 Diam. (Casing) N/A

Co-ordinates: N 617,110.0900 E 835,745.6800

Elevation Top -9.3 M.L.W. Hammer Wt. 300lb Started 15 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 15 Jul 85

Elevation Top of Rock -12.3 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -12.3 M.L.W. Obs. Well _____

Total Depth 3.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.5						TIDE EL. 3.5', 1345hr	
						WATER DEPTH 12.8'	
-9.3						COVE BOTTOM / TOP OF PROBE	EL. -9.3'
	0			1.0	WOR		
-10.3	1			1.0	4	DROVE "AW" ROD PROBE FROM -9.3' TO -12.3' MLW WITH 300lb HAMMER	
-11.3	2			1.0	28		NO RECOVERY
-12.3	3					REFUSAL END OF PROBE EL-12.3	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP110-15

2:30 PM

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-16 Desig. 109 Diam. (Casing) N/A

Co-ordinates: N 612,119.2700 E 835,741.5200

Elevation Top -8.5 M.L.W. Hammer Wt. 300lb Started 15 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 15 JUL 85

Elevation Top of Rock -11.5 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.5 M.L.W. Obs. Well _____

Total Depth 3.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.7						TIDE EL 2.7', 1430 hr.	
						WATER DEPTH 11.2'	
-8.5						COVE BOTTOM / TOP OF PROBE	EL - 8.5'
	0						
	1			1.8'	WOR	DROVE "AW" ROD PROBE FROM -8.5' TO -11.5' MLW WITH 300lb HAMMER	
-10.3							
	2			1.0'	12		
-11.3							
	3			.2'	21		NO RECOVERY
-11.5						REFUSAL. END OF PROBE EL - 11.5	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 109-16

18'-3"
9'-6"
8'8
+2.0
8'-9"
6.9
6.8
8.2'
RODS
15.0
10.0

3.15 AM

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT Page 1 of 1 Pages

Probe FP-85-17 Desig. 108 Diam. (Casing) N/A

Co-ordinates: N 612,128.4500 E 835,757.5600

Elevation Top -6.8 M.L.W. Hammer Wt. 300 lb Started 15 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 15 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.6 M.L.W. Obs. Well _____

Total Depth 4.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.0						TIDE EL 2.0', 1515 hr.	
						WATER DEPTH 8.8'	
-6.8						COVE BOTTOM / TOP OF PROBE	EL. -6.8'
-8.6	0 1			1.8' 1.8'	WOR	DROVE "AW" ROD PROBE FROM -6.8' TO -11.6' MLW WITH 300 lb HAMMER	
-9.6	2			1.0'	4		
-10.6	3			1.0'	8		
-11.6'	4 4.8'			1.0'	4	ANGLED OF BOULDER 4 BLOWS THEN REFUSAL. MOVED RIG OVER 2' - REFUSAL AT -10.6	NO RECOVERY
						REFUSAL END OF PROBE EL - 11.6'	

GENERAL REMARKS: - WOR - WEIGHT OF ROD

Probe No. FP 108-17

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-107-18 Desig. 107 Diam. (Casing) _____

Co-ordinates: N 612,137.6300 E 835,733.6000

Elevation Top -6.5 M.L.W. Hammer Wt. 300 lb Started 16 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 16 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data N/A Page _____

Elevation Bottom -7.5 M.L.W. Obs. Well _____

Total Depth 1.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.5						TIDE EL. 6.5' 9:25 A.	
						WATER DEPTH 13.0'	
-6.5						COVE BOTTOM / TOP OF PROBE	EL. 6.5'
-7.2				9"	WOR	DROVE "AW" ROD PROBE FROM -6.5' TO -7.5' MLW WITH 300 lb HAMMER	NO RECOVERY
-7.5				9"	50/3	REFUSAL END OF PROBE EL -7.5	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP-107-18

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-19 Desig. 114 Diam. (Casing) N/A

Co-ordinates: N 612,145.5500 E 835,751.9600

Elevation Top -7.0 M.L.W. Hammer Wt. 300lb Started 16 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 16 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data N/A Page _____

Elevation Bottom -8.7 M.L.W. Obs. Well _____

Total Depth 1.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.0						TIDE EL. 7.0' ,0945hr	
			/			WATER DEPTH 14.0'	
-7.0						COVE BOTTOM / TOP OF PROBE	EL - 7.0'
	0			1.5'	WOR	DROVE "AW" ROD PROBE FROM -7.0' TO -8.7' MLW WITH 300 lb HAMMER	
	1						
-8.7	1.5					2 blows / 2"	NO RECOVERY
						REFUSAL 20 blows	
						END OF PROBE EL - 8.7	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 114-19

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT MA Page 1 of 1 Pages

Probe FP-85-20 Desig. 121 Diam. (Casing) N/A

Co-ordinates: N 612,153.4800 E 835,770.3200

Elevation Top -9.6 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -13.3 M.L.W.
Total Depth 3.7 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300lb
Hammer Drop 18
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 16 JUL 85
Completed 16 JUL 85

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.2						TIDE EL. 7.2, 1005 hr.	
						WATER DEPTH 16.8'	
-9.6						COVE BOTTOM / TOP OF PROBE	EL - 9.6'
	0			1.2'	WOR	DROVE "AW" ROD PROBE FROM -9.6' TO -13.3' MLW WITH 300 lb HAMMER	
-10.8	1						
				1.0	9		
-11.8'	2						
				1.0'	67		
-12.8'	3						
-13.3	3.7			0.5'	73/6"		NO RECOVERY
						REFUSAL END OF PROBE EL-13.3	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP120-20

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-21 Desig. 128 Diam. (Casing) N/A

Co-ordinates: N 612,161.4000 E 835,788.6900

Elevation Top -11.2 M.L.W. Hammer Wt. 300lb Started 16 Jul 85

Total Overburden Drilled — Feet Hammer Drop 18in

Elevation Top of Rock — M.L.W. Casing Left N/A Completed 16 Jul 85

Total Rock Drilled N/A Feet Subsurface Water Data N/A Page

Elevation Bottom -15.4 M.L.W. Obs. Well

Total Depth 4.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes Mfg. Des. Drill ACKER

Core Recovered N/A Ft: Diam. In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. No. Classification By:

Soil Samples N/A In. Diam. No. Classification By:

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.8						TIDE EL 7.8', 1105hr -	
						WATER DEPTH 18.0'	
-11.2						COVE BOTTOM / TOP OF PROBE	EL -11.2'
-12.4	0 / 1			1.2'	WOR	DROVE "AW" ROD PROBE FROM -11.2' TO -15.4' MLW WITH 300lb HAMMER	
-13.4	2			1.0'	1		
-14.4	3			1.0'	15		
-15.4	4.2			1.0'	95		NO RECOVERY
						END OF PROBE EL -15.4	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FB128-21

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-22 Desig. 129 Diam. (Casing) N/A

Co-ordinates: N 612,143.0300 E 835,796.6100

Elevation Top -10.5 M.L.W. Hammer Wt. 300lb Started 16 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 16 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left NA

Total Rock Drilled N/A Feet Subsurface Water Data N/A Page _____

Elevation Bottom -15.0 M.L.W. Obs. Well _____

Total Depth 4.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.0						TIDE EL. 7.0', 1230hr.	
						WATER DEPTH 17.5'	
-10.5						COVE BOTTOM / TOP OF PROBE	EL. -10.5'
-11.0	0			6"	WOR	DROVE "AW" ROD PROBE FROM -10.5' TO -15.0' MLW WITH 300lb HAMMER	
-12.0	1			1.0'	1		
-13.0'	2			1.0'	8		
-14.0	3			1.0'	12		
-15.0	4.5			1.0	46		SILTY SAND w/gravel
						END OF PROBE EL. -15.0	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP-129-22

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-~~85~~-23 Desig. 123 Diam. (Casing) _____

Co-ordinates: N 612,135.1100 E 835,778.2500

Elevation Top -9.6 M.L.W. Hammer Wt. 300lb Started 16 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 16 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data N/A Page _____

Elevation Bottom -12.1 M.L.W. Obs. Well _____

Total Depth 3.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.2						TIDE EL. 6.2', 1300hr	
						WATER DEPTH 15.8'	
-9.6						COVE BOTTOM / TOP OF PROBE	EL. -9.6'
	0			1'-3"	WOR	DROVE "AW" ROD PROBE FROM -9.6' TO -12.1' MLW WITH 300lb HAMMER	
-10.8	1						
				1.0	14		
-11.8	2						
-12.1				9"	30		NO RECOVERY
						REFUSAL END OF PROBE EL. -12.1	

GENERAL REMARKS:

Probe No. FP 123-23

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-24 Desig. 116 Diam. (Casing) N/A

Co-ordinates: N 612,127.1900 E 835,759.8800

Elevation Top -7.5 M.L.W. Hammer Wt. 300 lb Started 16 JUL 85

Total Overburden Drilled 0.5 Feet Hammer Drop 18 in Completed 16 JUL 85

Elevation Top of Rock ____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data ____ Page ____

Elevation Bottom -8.0 M.L.W. Obs. Well ____

Total Depth 0.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes ____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: ____

Soil Samples N/A In. Diam. ____ No. Classification By: ____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.5						TIDE EL. 5.5', 1330 hr	
						WATER DEPTH 13.0'	
-7.5						COVE BOTTOM/TOP OF PROBE	EL. -7.5'
-8.0				6"	WOR	- WEIGHT OF ROD	NO RECOVERY
						REFUSAL, 7 BLOWS END OF PROBE EL. -8.0	

GENERAL REMARKS: PROBE SLID OFF BOULDER BEFORE PENETRATING 6". BOULDER APPROX 1.5' ABOVE ELEV. -7.5

Probe No. FP 116-24

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-~~85~~-25 Desig. 105 Diam. (Casing) N/A

Co-ordinates: N 612,136.3700 E 835,755.9200

Elevation Top -6.6' M.L.W. Hammer Wt. 300lb Started 16 JUL 85

Total Overburden Drilled 0.7' Feet Hammer Drop 18in Completed 16 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.3 M.L.W. Obs. Well _____

Total Depth 0.7' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.4						TIDE EL. 4.4', 1400hr	
						WATER DEPTH 11.0'	
-6.6						COVE BOTTOM / TOP OF PROBE	El. -6.6'
-7.3	0			8"	W.OR	- WEIGHT OF ROD	NO RECOVERY
						REFUSAL 10 BLOWS END OF PROBE -7.3 PROBE SET ON BOULDERS	

GENERAL REMARKS: PROBE DEPTH OF 8" COULD BE RODS SLIDING OFF BOULDERS

Probe No. FB 105-25

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-26 Desig. 122 Diam. (Casing) N/A

Co-ordinates: N 612,144.2900 E 835,774.2900

Elevation Top -10.1 M.L.W. Hammer Wt. 300lb Started 16 Jul 85

Total Overburden Drilled 1.6 Feet Hammer Drop 18in Completed 16 Jul 85

Elevation Top of Rock M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data Page

Elevation Bottom -12.7 M.L.W. Obs. Well

Total Depth 1.6 Feet Drilled By EGA

Core Recovered N/A % No. Boxes Mfg. Des. Drill ACKER

Core Recovered N/A Ft : Diam. In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. No. Classification By:

Soil Samples N/A In. Diam. No. Classification By:

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.3						TIDE EL. 3.3, 1440hr.	
						WATER DEPTH 13.3'	
-10.1						COVE BOT./TOP OF PROBE	EL. -10.1'
-10.8'	0			9"	WOR	DROVE "AW" ROD PROBE FROM -10.1' TO -12.7' MLW WITH 300lb HAMMER	
-11.8	1			1.0'	19		
-12.7	2			10"	72		NO RECOVERY
						REFUSAL END OF PROBE EL -12.7	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP-122-26

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT MA Page 1 of 1 Pages

Probe FP-85-27 Desig. 124 Diam. (Casing) N/A

Co-ordinates: N 612,125.9300 E 835,782.2100

Elevation Top -9.2 M.L.W. Hammer Wt. 300 lb Started 17 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 17 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.2 M.L.W. Obs. Well _____

Total Depth 0 Feet Drilled By EG&A

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.8						TIDE EL 6.8, 0955hr	
						WATER DEPTH 16.0'	
-9.2						COVE BOTTOM / TOP OF PROBE	EL. -9.2' NO RECOVERY
						REFUSAL / PROBE ON TOP OF BOULDER	
						END OF PROBE EL. -9.2	

GENERAL REMARKS:

Probe No. FP-124-27

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of 1 Pages

Probe FP-95-28 Desig. 117 Diam. (Casing) N/A

Co-ordinates: N 612,118.0100 E 835,763.5100

Elevation Top -10.3 M.L.W. Hammer Wt. 300 lb Started 17 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 17 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -14.2 M.L.W. Obs. Well _____

Total Depth 3.9 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill Acker

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. Reynolds

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.2						TIDE EL. 7.2', 1040hr	
						WATER DEPTH 17.5	
-10.3						COVE BOTTOM / TOP OF PROBE	EL. - 10.3'
-11.3	0			1.0'	WOR		
-12.3	1			1.0'	12	DROVE "AW" ROD PROBE FROM -10.3' TO -14.2' MLW WITH 300 lb HAMMER	
-13.3	2			1.0	16		
-14.0	3			8"	10		SILTY SAND w/gravel
				2"	50		
-14.2						REFUSAL END OF PROBE EL - 14.2	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 117-28

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE/ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-29 Desig. 118 Diam. (Casing) N/A

Co-ordinates: N 612,108.8300 E 835,767.8000

Elevation Top -11.5 M.L.W. Hammer Wt. 300 lb Started 17 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 17 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.7 M.L.W. Obs. Well _____

Total Depth 2.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5'						TIDE EL. 7.5, 1110 hr	
						WATER DEPTH 18.0'	
-11.5						COVE BOTTOM / TOP OF PROBE	EL. 11.5'
-12.0	0			6"	WOR	DROVE "AW" ROD PROBE FROM -11.5' TO -13.7' MLW WITH 300 lb HAMMER	
-13.0	1			10"	20		
-13.7	3			9"	32		NO RECOVERY
						REFUSAL END OF PROBE EL -13.7	

GENERAL REMARKS:

Probe No. FP-118-29

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-30 Desig. 125 Diam. (Casing) N/A

Co-ordinates: N 612,116.7500 E 835,786.1700

Elevation Top -10.3 M.L.W. Hammer Wt. 300 lb Started 17 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 17 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.6 M.L.W. Obs. Well _____

Total Depth 0.3 Feet Drilled By E.G.A.

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV M(LW)	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.8'						TIDE EL 7.8', 1145 hr	
						WATER DEPTH 18.1'	
-10.3						COVE BOTTOM / TOP OF PROBE	EL. -10.3'
-10.6	0			.3'	4		NO RECOVERY
						REFUSAL END OF PROBE EL -10.6' DROVE "AW" ROD PROBE FROM -10.3' TO -10.6' MLW WITH 300 lb HAMMER	

GENERAL REMARKS:

Probe No. FP 125-30

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-31 Desig. 130 Diam. (Casing) N/A

Co-ordinates: N 612,124.6700 E 835,804.5300

Elevation Top -11.6 M.L.W. Hammer Wt. 300 lb Started 17 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 17 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -15.8 M.L.W. Obs. Well _____

Total Depth 4.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5'						TIDE EL 7.5', 1220 hr.	
						WATER DEPTH 19.1'	
-11.6						COVE BOTTOM / TOP OF PROBE	EL. 11.6'
	0				WOR		
-12.8'	1			1.0'	13		
-13.8	2			1.0'	25	DROVE "AW" ROD PROBE FROM -11.6' TO -15.8' MLW WITH 300 lb HAMMER	
-14.8	3			1.0'	34		
-15.8'	4			1.0'	45		SILTY SAND @ tip
						END OF PROBE EL -15.8	

GENERAL REMARKS:

Probe No. FP 130-31

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-251-32 Desig. 25B Diam. (Casing) N/A

Co-ordinates: N 612,050.8300 E 835,832.3900

Elevation Top -11.3 M.L.W. Hammer Wt. 300 lb Started 17 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 17 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -12.7 M.L.W. Obs. Well _____

Total Depth 1.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=.5'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.0						TIDE EL 5.0' 1400 hr	
						WATER DEPTH 16.3'	
-11.3'						COVE BOTTOM / TOP OF PROBE	EL. 11.3'
-11.8	0			2"	WOR	2"	
-12.5	1			1.0	3	DROVE "AW" ROD PROBE FROM -11.3' TO -12.7' MLW WITH 300 lb HAMMER	NO RECOVERY
-12.7				3"	3		
						REFUSAL END OF PROBE EL -12.7	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 251-32

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-33 Desig. 238 Diam. (Casing) N/A

Co-ordinates: N 612,039.590 E 835,848.8900

Elevation Top -10.7 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -14.8 M.L.W.
Total Depth 4.1 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 17 JUL 85
Completed 17 JUL 85

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.5						TIDE EL + 4.5', 1430 hr	
						WATER DEPTH 15.2'	
-10.7						COVE BOTTOM / TOP OF PROBE	EL -10.7'
-10.9	0			3"	WOR		
-11.9	1			1.0	2		
-12.9	2			1.0	3	DROVE "AW" ROD PROBE FROM -10.7' TO -14.8' MLW WITH 300 lb HAMMER	
-13.9	3			1.0	8		
-14.8	4			10"	50		NO RECOVERY
						REFUSAL END OF PROBE EL -14.8'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 238-33

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-252-34 Desig. 252 Diam. (Casing) N/A

Co-ordinates: N 612,067.3700 E 885,843.5900

Elevation Top -11.5 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -15.3 M.L.W.
Total Depth 3.8 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 17 JUL 85
Completed 17 JUL 85

DEPTH ELEV	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
3.3						TIDE EL 3.3', 1515 hr	
						WATER DEPTH 14.8'	
-11.5						COVE BOTTOM / TOP OF PROBE	EL. -11.5'
-11.7	0			3"	WOR	DROVE "AW" ROD PROBE FROM -11.5' TO -15.3' MLW WITH 300 lb HAMMER	
-12.7	1'			1.0'	2		
-13.7	2'			1.0'	6		
-14.7	3'			1.0'	14		SILTY SAND @ tip
-15.3	3.8'			6"	12		
						REFUSAL. END OF PROBE EL -15.3'	

GENERAL REMARKS:

Probe No. FP252-34

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT MA Page 1 of 1 Pages

Probe FP-~~85~~-35 Desig. 239 Diam. (Casing) N/A

Co-ordinates: N 612,056.1300 E 835,860.1300

Elevation Top -9.5 M.L.W. Hammer Wt. 300 lb Started 18 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 18 JUL 85

Elevation Top of Rock -12.3 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -12.3 M.L.W. Obs. Well _____

Total Depth 2.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.0						TIDE EL. 4.0', 0915	
						WATER DEPTH 13.5'	
-9.5						COVE BOTTOM / TOP OF PROBE	EL. - 9.5'
-10.3	0			9"	WOR	DROVE "AW" ROD PROBE FROM -9.5' TO -12.3' MLW WITH 300 lb HAMMER	
-11.3	1			1.0	6		
-12.3	2			1.0	2		NO RECOVERY
						REFUSAL END OF PROBE EL -12.3'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 239-35

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-36 Desig. 240 Diam. (Casing) N/A

Co-ordinates: N 612,072.6800 E 835,871.3700

Elevation Top -9.4 M.L.W. Hammer Wt. 300 lb Started 18 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 18 Jul 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A -13.6 Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.6 M.L.W. Obs. Well _____

Total Depth 4.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.0						TIDE EL. 6.0', 1020hr	
						WATER DEPTH 13.6'	
9.4'						COVE BOTTOM / TOP OF PROBE	EL- 9.4'
9.6	0			3"	WOR		
-10.6	1			1.0	13		
-11.6	2			1.0	8	DROVE "AW" ROD PROBE FROM -9.4' TO -13.6' MLW WITH 300 lb HAMMER	
-12.6	3			1.0	8		
-13.6	4			1.0	14		NO RECOVERY
						RUFUSAL END OF PROBE EL-13.6	

GENERAL REMARKS:

Probe No. FP 240-36

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-~~85-31~~ Desig. 253 Diam. (Casing) N/A

Co-ordinates: N 612,093.8200 E 835,854.8300

Elevation Top -8.8 M.L.W. Hammer Wt. 300 lb Started 18 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 18 JUL 85

Elevation Top of Rock -13.0 M.L.W. Casing Left NA

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.0 M.L.W. Obs. Well _____

Total Depth 4.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.5						TIDE EL. 8.5 1310	
						WATER DEPTH 17.3'	
-8.8						COVE BOTTOM / TOP OF ROCK	EL. -8.8'
	0			3"	WOR		
-10.0	1			1.0	8		
-11.0	2			1.0	3	DROVE "AW" ROD PROBE FROM -8.8' TO -13.0' MLW WITH 300 lb HAMMER	
-12.0	3			1.0	17		
-13.0	4			1.0	32		NO RECOVERY
						REFUSAL 17 BLOWS END OF PROBE EL -13.0'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 253-31

12:50 - 2:00

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT Page 1 of 1 Pages

Probe FP-85-38 Desig. 244 Diam. (Casing) N/A

Co-ordinates: N 612,138.8500 E 835,916.3300

Elevation Top -1.8 M.L.W. Hammer Wt. 300 lb Started 18 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 18 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -4.0 M.L.W. Obs. Well _____

Total Depth 2.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5'						TIDE EL. 7.5' 1345 hr	
						WATER DEPTH 9.3'	
-1.8						COVE BOTTOM / TOP OF PROBE	EL. -1.8'
	0			1.4'	–	PROBE SLID OFF BOULDER	
-3.2	1					DROVE "AW" ROD PROBE FROM -1.8' TO -4.0' MLW WITH 300 lb HAMMER	
-4.0	2			9"	18"		NO RECOVERY
						REFUSAL END OF PROBE EL -4.0'	

GENERAL REMARKS:

Probe No. FP 244-38

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-39 Desig. 257 Diam. (Casing) N/A

Co-ordinates: N 612,150.0900 E 835,889.7800

Elevation Top -8.9 M.L.W. Hammer Wt. 300 lb Started 18 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 18 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.7 M.L.W. Obs. Well _____

Total Depth 4.8 Feet Drilled By IEGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.8						TIDE EL. 6.8, 1420 hr.	
						WATER DEPTH 15.7'	
-8.9						COVE BOTTOM / TOP OF PROBE	EL. -8.9'
-9.9	0 1			1.0'	2	DROVE "AW" ROD PROBE FROM -8.9' TO -13.7' MLW WITH 300 lb HAMMER	SILTY SAND w/gravel
-10.9	2			1.0'	4		
-11.9	3			1.0'	10		
-12.9	4			1.0'	58		
-13.7'	4.8			10"	90		
						REFUSAL END OF PROBE EL -13.7	

GENERAL REMARKS:

Probe No. FP 257-40

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-40 Desig. 254 Diam. (Casing) N/A

Co-ordinates: N 612,100.4600 E 835,866.0700

Elevation Top -8.0 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -13.0 M.L.W.
Total Depth 5.0 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left N/A
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S REYNOLDS
Classification By: _____
Classification By: _____

Started 19 Jul 85
Completed 19 Jul 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.8'						TIDE EL 7.8' 11.50	
						WATER DEPTH 15.8'	
-8.0						COVE BOTTOM / TOP OF PROBE	EL. -8.0'
	0			3"	WOR		
-9.2	1			1.0'	12		
-10.2	2			1.0'	4	DROVE "AW" ROD PROBE FROM -8.0' TO -13.0' MLW WITH 300 lb HAMMER	
-11.2	3			1.0'	9		
-12.2	4			1.0'	23		
-13.0	5			10"	26		NO RECOVERY
						REFUSAL END OF PROBE EL -13.0'	

GENERAL REMARKS:

Probe No. FP 254-40

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-255-41 Desig. 255 Diam. (Casing) N/A

Co-ordinates: N 612,117.0000 E 836,877.3100

Elevation Top -8.7 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock _____ M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -12.4 M.L.W.
Total Depth 3.7 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left N/A
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 19 JUL 85
Completed 19 JUL 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.0						TIDE EL 8.0', 1210hr	
						WATER DEPTH 16.7'	
-8.7						COVE BOTTOM / TOP OF PROBE	EL. -8.7'
-9.5	0			10"	WOR	DROVE "AW" ROD PROBE FROM -8.7' TO -12.4' MLW WITH 300 lb HAMMER	
-10.5	1			1.0	16		
-11.5	2			1.0	35		
-12.4	3 3.7			10"	40		NO RECOVERY
						REFUSAL END OF PROBE EL -12.4	

GENERAL REMARKS:

Probe No. FP-255-41

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of 1 Pages

Probe FP-85-42 Desig. 259 Diam. (Casing) N/A

Co-ordinates: N 612,183.1800 E 835,922.7600

Elevation Top -2.3 M.L.W. Hammer Wt. 300 lb Started 19 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 19 Jul 85

Elevation Top of Rock -5.1 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -5.1 M.L.W. Obs. Well _____

Total Depth 2.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill Acker

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. Reynolds

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.8						TIDE EL 7.8, 1310 hr.	
						WATER DEPTH 10.1'	
-2.3						COVE BOTTOM / TOP OF PROBE	EL. -2.3'
	0			1.0'	20	DROVE "AW" ROD PROBE FROM -2.3' TO -5.1' MLW WITH 300 lb HAMMER	
-3.3	1						
				1.0'	8		
-4.3	2						
				0.8'	3		NO RECOVERY
-5.1	28						
						REFUSAL END OF PROBE EL -5.1'	

GENERAL REMARKS:

Probe No. FP 259-42

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE/ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-42 Desig. 258 Diam. (Casing) N/A

Co-ordinates: N 617,166.6300 E 835,911.0200

Elevation Top -4.0 M.L.W. Hammer Wt. 300 lb Started 19 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 19 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.5 M.L.W. Obs. Well _____

Total Depth 3.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.8						TIDE EL. 7.8', 1335 hr	
						WATER DEPTH 11.8'	
-4.0						COVE BOTTOM / TOP OF PROBE	EL. -4.0'
	0			1.0'	11	BOULDERS, RODS measured 11.5 water.	
-5.0	1						
-6.0	2			1.0'	8	DROVE "Lw" ROD PROBE FROM -4.0' TO -7.5' MLW WITH 300 lb HAMMER	
-7.0	3			1.0'	8		
-7.5	3.5			6"	3		SILTY SAND @ tip
						REFUSAL	
						END OF PROBE EL - 7.5	

GENERAL REMARKS:

Probe No. FP258-42

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 2 Pages

Probe FP-85-44 Desig. 260 Diam. (Casing) N/A

Co-ordinates: N 612,199.7200 E 835,933.5000

Elevation Top -1.2 M.L.W. Hammer Wt. 300 lb Started 19 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 19 JUL 85

Elevation Top of Rock -7.8 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -7.8 M.L.W. Obs. Well _____

Total Depth 6.6 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5						TIDE EL. +7.5', 1430 hr.	
						WATER DEPTH 8.7'	
-1.2						COVE BOTTOM / TOP OF PROBE	EL. -1.2'
-1.8	0			7"	WOR		
-2.8	1			1.0	8		
-3.8	2			1.0	10	DROVE "AW" ROD PROBE FROM -1.2' TO -7.8' MLW WITH 300 lb HAMMER	
-4.8	3			1.0	3		
-5.8	4			1.0	9		
-6.8	5			1.0	6		

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 260-44

Site: PIGEON COVE, ROCKPORT, MA	Probe No. FP 260-44.	Page 2 of 2

DEPTH ELEV MLW	DEPTH ft.	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-7.8	6 6.6			1.0	30		SILTY SAND etp
						REFUSAL END OF PROBE EL -7.8	

Probe No. FP 260-44

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-45 Desig. 261 Diam. (Casing) N/A

Co-ordinates: N 612,216.2600 E 835,944.7400

Elevation Top -0.7 M.L.W. Hammer Wt. 300lb Started 19 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 19 JUL 85

Elevation Top of Rock -4.5 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -4.5 M.L.W. Obs. Well _____

Total Depth 3.8 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.8						TIDE EL. 6.8', 1500hr.	
						WATER DEPTH 7.5	
-0.7						COVE BOTTOM / TOP OF PROBE	EL. -0.7'
	0			1.0'	3	BOULDERS	
-1.7	1						
				1.0'	24	DROVE "AW" ROD PROBE FROM -0.7' TO -4.5' MLW WITH 300 lb HAMMER	
-2.7	2						
				1.0'	5		
-3.7	3						
				10"	6		NO RECOVERY
-4.5	3.8						
						REFUSAL END OF PROBE EL-4.5	

GENERAL REMARKS:

Probe No. FP 261-45

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-46 Desig. 262 Diam. (Casing) _____

Co-ordinates: N 617,232.8100 E 835,955.9800

Elevation Top -0.8 M.L.W. Hammer Wt. 300lb Started 19 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 19 Jul 85

Elevation Top of Rock -2.9 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom _____ M.L.W. Obs. Well _____

Total Depth 2.1 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.2						TIDE EL + 6.2', 1525hr.	
						WATER DEPTH 7.0'	
-0.8						COVE BOTTOM / TOP OF PROBE	EL. -0.8'
-1.8				1.0	10	BOULDERS DROVE "AW" ROD PROBE FROM -0.8' TO -2.9' MLW WITH 300 lb HAMMER	
-2.8				1.0	12		NO RECOVERY
-2.9				0.1		REFUSAL END OF PROBE EL -2.9	

GENERAL REMARKS:

Probe No. FP 262-46

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-47 Desig. 243 Diam. (Casing) N/A

Co-ordinates: N 612,122.3100 E 835,905.0900

Elevation Top -8.2 M.L.W. Hammer Wt. 300 lb Started 22 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 22 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.9 M.L.W. Obs. Well _____

Total Depth 1.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV. MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.0						TIDE EL. 1.0, 1035	
						WATER DEPTH	
-8.2						COVE BOTTOM / TOP OF PROBE	EL. - 8.2'
-8.4	0			3"	WOR		
-9.4	1			1.0'	3	DROVE "AW" ROD PROBE FROM -8.2 TO -9.9' MLW WITH 300 lb HAMMER.	
-9.9	1.7			6"	4		NO RECOVERY
						REFUSAL END OF PROBE - 9.9	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP-243-46

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-242-47 Desig. 242 Diam. (Casing) N/A

Co-ordinates: N 617,105.7600 E 835,893.8500

Elevation Top -8.6 M.L.W. Hammer Wt. 300lb Started 22 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 22 JUL 85

Elevation Top of Rock -11.1 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -11.1 M.L.W. Obs. Well _____

Total Depth 2.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.8'						TIDE EL. 2.8', 1125hr	
						WATER DEPTH 11.4'	
-8.6'						COVE BOTTOM / TOP OF PROBE	EL. - 8.6'
-9.3	0			8"	WOR		
-10.3	1			1.0	5	DROVE "AW" ROD PROBE FROM -8.6' TO -11.1' MLW WITH 300lb HAMMER	
-11.1	2 2.5			10"	4		NO RECOVERY
						REFUSAL END OF PROBE EL -11.1'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 242-47

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-48 Desig. 241 Diam. (Casing) N/A

Co-ordinates: N 617,081.2200 E 835,882.6100

Elevation Top -8.2 M.L.W. Hammer Wt. 300 lb Started 22 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 22 JUL 85

Elevation Top of Rock -13.4 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -13.4 M.L.W. Obs. Well _____

Total Depth 5.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.0'						TIDE EL + 4.0, 1200 hr.	
						WATER DEPTH 12.2'	
-8.2'						COVE BOTTOM / TOP OF PROBE	EL - 8.2'
-8.6'	0			5"	WOR		
-9.6'	1			1.0'	12		
-10.6'	2			1.0'	8	DROVE "AW" ROD PROBE FROM -8.2' TO -13.4' MLW WITH 300 lb HAMMER	
-11.6'	3			1.0'	6		
-12.6'	4			1.0'	12		
-13.4'	5			10"	30	REFUSAL	Silty Sand @ tip
						END OF PROBE EL -13.4'	

GENERAL REMARKS:

Probe No. FP 241-48

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE, ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-49 Desig. 263 Diam. (Casing) N/A

Co-ordinates: N 612,289.3500 E 835,967.7200

Elevation Top -1.2 M.L.W. Hammer Wt. 300lb Started 22 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 22 JUL 85

Elevation Top of Rock -2.6 M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -2.6 M.L.W. Obs. Well _____

Total Depth 1.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5'						TIDE EL. 7.5', 1330hr	
						WATER DEPTH 8.7'	
-1.2						COVE BOTTOM / TOP OF PROBE	EL. -1.2'
	0			1.2	WOR	COULD BE A BOULDER. DROVE 2" ROD PROBE FROM -1.2' TO -2.6' MLW WITH 300lb HAMMER	
-2.4	1						NO RECOVERY
				.2	24		
-2.6						REFUSAL END OF PROBE EL -1.6	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 263-49

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of ___ Pages

Probe FP-85-51 Desig. 250 Diam. (Casing) N/A

Co-ordinates: N 612,238.1100 E 835,983.7600

Elevation Top -0.5 M.L.W.
Total Overburden Drilled ___ Feet
Elevation Top of Rock -1.7 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -1.7 M.L.W.
Total Depth 1.2 Feet
Core Recovered N/A % No. Boxes ___
Core Recovered N/A Ft: ___ Diam. ___ In.
Soil Samples N/A In. Diam. ___ No.
Soil Samples N/A In. Diam. ___ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left -
Subsurface Water Data ___ Page ___
Obs. Well ___
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: ___
Classification By: ___

Started 22 JUL 85
Completed 22 JUL 85

DEPTH ELEV. MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.4'						TIDE EL. 8.4', 1400hr-	
						WATER DEPTH 8.9'	
-0.5'						COVE BOTTOM / TOP OF PROBE	EL. - 0.5'
-1.2'	0			.7	WOR	DRONE "AW" ROD PROBE FROM -0.5' TO -1.7' MLW WITH 300 lb HAMMER	
-1.7'	1			.5	9		NO RECOVERY
						RUFUSAL END OF PROBE EL -1.7'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP250-51

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-52 Desig. 205 Diam. (Casing) N/A

Co-ordinates: N 612,243.1600 E 835,979.4400

Elevation Top -0.8 M.L.W. Hammer Wt. 300lb Started 22 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 22 JUL 85

Elevation Top of Rock -1.3 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -1.3 M.L.W. Obs. Well _____

Total Depth 0.5' Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.8'						TIDE EL. 8.8', 1420 hr	
						WATER DEPTH 9.6'	
-0.8'						COVE BOTTOM / TOP OF PROBE	EL. -0.8'
-1.0	0			.2'	WOR		
-1.3	.5			.3'	5		NO RECOVERY
						REFUSAL END OF PROBE EL -1.3 DROVE "AW" ROD PROBE FROM -0.8 TO -1.3' MLW WITH 300lb HAMMER	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 205-52

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-53 Desig. 248 Diam. (Casing) N/A

Co-ordinates: N 612,205.0200 E 835,961.2800

Elevation Top 0.1 M.L.W. Hammer Wt. 300lb Started 22 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18in Completed 22 JUL 85

Elevation Top of Rock -0.6 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -0.6 M.L.W. Obs. Well _____

Total Depth 0.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
9.0						TIDE EL. 9.0, 1445 hr	
						WATER DEPTH 8.9"	
0.1						COVE BOTTOM / TOP OF PROBE	EL. - 0.1'
-0.1	0			.2	WOR		
-0.6	0.7			.5	14		NO RECOVERY
						RUFUSAL END OF PROBE EL -0.6 DROVE "AW" ROD PROBE FROM 0.1 TO -0.6' MLW WITH 300lb HAMMER	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 249-53

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-~~25-54~~ Desig. 249 Diam. (Casing) N/A

Co-ordinates: N 612,221.5700 E 835,972.5200

Elevation Top 0.8 M.L.W. Hammer Wt. 300 lb Started 22 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 22 JUL 85

Elevation Top of Rock -2.4 M.L.W. Casing Left –

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -2.4 M.L.W. Obs. Well _____

Total Depth 3.2 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
9.0'						TIDE EL. 9.0', 1500	
						WATER DEPTH 8.2'	
0.8'						COVE BOTTOM / TOP OF PROBE	EL. -0.8'
0.2	0			.6	WOR	DROVE "AW" ROD PROBE FROM 0.8' TO -2.4' MLW WITH 300 lb HAMMER	
-0.8	1			1.0	8		
-1.8	2			1.0	30		
-2.4	3			.6	13		NO RECOVERY
						REFUSAL END OF PROBE EL -2.4	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 249-54

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-55 Desig. 247 Diam. (Casing) N/A

Co-ordinates: N 612,188.4800 E 835,980.0500

Elevation Top -1.5 M.L.W. Hammer Wt. 300 lb Started 22 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 22 JUL 85

Elevation Top of Rock -3.9 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -3.9 M.L.W. Obs. Well _____

Total Depth 2.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
9.2'						TIDE EL. 9.2', 1535	
						WATER DEPTH 10.7'	
-1.5						COVE BOTTOM / TOP OF PROBE	EL. -1.5'
	0			1.1	WOR	DROVE "AW" ROD PROBE FROM -1.5' TO -3.9' MLW WITH 300 lb HAMMER	
-2.6	1'						
				1.0	8		
-3.6	2'						
-3.9	2.4'			.3	10		NO RECOVERY
						RUFUSAL END OF PROBE EL -3.9	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 247-55

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-56 Desig. 222 Diam. (Casing) N/A

Co-ordinates: N 612,298.9900 E 836,009.1600

Elevation Top -1.0 M.L.W. Hammer Wt. 300 lb Started 23 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 23 JUL 85

Elevation Top of Rock -4.0 M.L.W. Casing Left –

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -4.4 M.L.W. Obs. Well _____

Total Depth 3.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.6						TIDE EL. 1.6', 1140 hr	
						WATER DEPTH 2.6'	
-1.0						COVE BOTTOM / TOP OF PROBE	EL. -1.0'
-1.66	0			7"	WOR		GRAVELLY SAND, coarse to fine
-2.2'	1			10 1.0	12	DROVE "AW" ROD PROBE FROM -1.0' TO -4.4' MLW WITH 300 lb HAMMER	
-3.2'	2			1.0	24		
-4.4'	3			10"	24		
						REFUSAL: END OF PROBE EL -4.4	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 222-56

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-85-57 Desig. 221 Diam. (Casing) N/A

Co-ordinates: N 612,306.2400 E 836,0022700

Elevation Top -1.9 M.L.W. Hammer Wt. 300lb Started 23 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 23 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -6.5 M.L.W. Obs. Well _____

Total Depth 4.6 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"=2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
2.4'						TIDE EL 2.4', 1210hr	
						WATER DEPTH	
-1.9						COVE BOTTOM / TOP OF PROBE	EL. -1.9'
	0					DROVE "AW" ROD PROBE FROM -1.9' TO -6.5' MLW WITH 300 lb HAMMER	
	1			1.8'	WOR		
-3.7'							
	2			1.3'	WOH	EL -4.1	
-5.0	3					MOVED 2' FOR SECOND ATTEMPT OF PROBE. HIT BOULDER EL -4.1 REFUSAL	
-6.0				1.0	15		
-6.5				.5	6		NO RECOVERY
						END OF PROBE EL -6.5'	

GENERAL REMARKS: RODS ANGLED OFF BOULDER AT EL -5.0, MOVED LOCATION

Probe No. FP 221-57

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 2 Pages

Probe FP 220-57 Desig. 220 Diam. (Casing) NA

Co-ordinates: N 672,313.4900 E 835,955.3800

Elevation Top -2.1 M.L.W. Hammer Wt. 300 lb Started 23 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 23 Jul 85

Elevation Top of Rock -10.1 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.1 M.L.W. Obs. Well _____

Total Depth 8.0 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH	1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
4.0'						TIDE EL 4.0, 1250 hr	
						WATER DEPTH 6.1	
-2.1						COVE BOTTOM / TOP OF PROBE	EL. -2.1'
	0					DROVE "AW" ROD PROBE FROM -2.1 TO -10.1' MLW WITH 300 lb HAMMER	GRAVELLY SAND poorly graded, 20-25% gravel coarse to fine sand, 15-20% slightly plastic fines, dark gray
	1						
	2			4.8'	WOH & PUSH		
	3						
	4						
-6.9							
	5			1.0	7		
-7.9							

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 220-57

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 220-58	Page 2 of 2

DEPTH		CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-8.9	1" = 2'			1.0	6		
-9.9	7			1.0	67		
				.2	37		
-10.1						RUFUSAL END OF PROBE EL -10.1	

Probe No. FP 220-57

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP-~~85-59~~ Desig. 219 Diam. (Casing) _____

Co-ordinates: N 617,327.9900 E 835,981.6100

Elevation Top -6.1 M.L.W. Hammer Wt. 300 lb Started 23 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 23 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.6 M.L.W. Obs. Well _____

Total Depth 4.5 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV. MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
5.7						TIDE EL 5.7', 1320 hr	
						WATER DEPTH 11.8'	
-6.1						COVE BOTTOM / TOP OF PROBE	EL. -6.1'
	0, 1, 2, 3			3.7'	WOH + PUSH	DROVE "AW" ROD PROBE FROM -6.1 TO -10.6' MLW WITH 300 lb HAMMER	
-9.9							
-10.6	4			.7'	50		NO RECOVERY
						RUFUSAL END OF PROBE EL-10.6	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 219-58

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove, Rockport, MA Page 1 of 1 Pages

Probe FP-85-60 Desig. 218 Diam. (Casing) N/A

Co-ordinates: N 612,342.4900 E 835,967.8300

Elevation Top -8.8 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -14.0 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom _____ M.L.W.
Total Depth 5.2 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft : _____ Diam. _____ In.
Soil Samples N/A In. Diam. _____ No.
Soil Samples N/A In. Diam. _____ No.

Hammer Wt. 300lb
Hammer Drop 18in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 23 JUL 85
Completed 23 JUL 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
6.6						TIDE EL. 6.6, 1400 hr	
						WATER DEPTH 15.4'	
-8.8						COVE BOTTOM / TOP OF PROBE	EL. -8.8'
	0						
-9.8	1			1.0'	WOR		
-10.8	2			1.0'	1	DROVE "AW" ROD PROBE FROM -8.8' to -14.0' MLW WITH 300 lb HAMMER	
-11.8	3			1.0'	1		
-12.8	4			1.0'	7		
-13.9	5			1.0'	90		NO RECOVERY
-14.0			.15			RUFUSAL 27 BLOWS END OF PROBE EL -14.0'	

GENERAL REMARKS: WOR - WEIGHT OF ROD

Probe No. FP 218-60

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 2 Pages

Probe FP-85-61 Desig. 225 Diam. (Casing) N/A

Co-ordinates: N 612,356.2600 E 835,982.3300

Elevation Top -10.1 M.L.W. Hammer Wt. 300 lb Started 23 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 23 JUL 85

Elevation Top of Rock -16.8 M.L.W. Casing Left —

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -16.8 M.L.W. Obs. Well _____

Total Depth 6.7 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
7.5						TIDE EL 7.5, 1430 hr	
						WATER DEPTH 17.6'	
-10.1						COVE BOTTOM / TOP OF PROBE	EL. 10.1'
	0						
	1			4.1'	WOH	DROVE "AW" ROD PROBE FROM -10.1 TO 16.8' MLW WITH 300 lb HAMMER	
	2						
	3						SILTY SAND
-14.2	4						
-15.2	5			1.0'	4		
	6			1.0'	13		

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 225-61

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 225-61	Page 2 of 2

DEPTH	1" = 5'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-16.2 -16.8				.6'	50		
						RUFUSAL END OF PROBE EL -16.8	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT — Page 1 of 1 Pages

Probe FP-85-62 Desig. 226 Diam. (Casing) N/A

Co-ordinates: N 612,341.7700 E 335,996.1000

Elevation Top -7.7 M.L.W.
Total Overburden Drilled _____ Feet
Elevation Top of Rock -13.3 M.L.W.
Total Rock Drilled N/A Feet
Elevation Bottom -13.3 M.L.W.
Total Depth 5.6 Feet
Core Recovered N/A % No. Boxes _____
Core Recovered N/A Ft: ____ Diam. ____ In.
Soil Samples N/A In. Diam. ____ No.
Soil Samples N/A In. Diam. ____ No.

Hammer Wt. 300 lb
Hammer Drop 18 in
Casing Left _____
Subsurface Water Data _____ Page _____
Obs. Well _____
Drilled By EGA
Mfg. Des. Drill ACKER
Inspected By: S. REYNOLDS
Classification By: _____
Classification By: _____

Started 23 Jul 85
Completed 23 Jul 85

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.2						TIDE EL 8.2', 1450 hr	
						WATER DEPTH 15.9'	
-7.7						COVE BOTTOM / TOP OF PROBE	EL. -7.7
	0						
	1			2.9'	WOH		
	2					DROVE "AW" ROD PROBE FROM -7.7 TO -13.3' MLW WITH 300 lb HAMMER	
-10.6							
	3			1.0'	1		
-11.6							
	4			1.0'	14		
-12.6							
	5			.7'	75		
-13.3							
						REFUSAL / END OF PROBE EL -13.3'	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP226-62

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove, Rockport, MA Page 1 of 2 Pages

Probe FP-85-63 Desig. 227 Diam. (Casing) N/A

Co-ordinates: N 612,327.2700 E 836,009.8800

Elevation Top -2.5 M.L.W. Hammer Wt. 300lb Started 23 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18in

Elevation Top of Rock -8.9 M.L.W. Casing Left _____ Completed 23 Jul 85

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -8.9 M.L.W. Obs. Well _____

Total Depth 6.4 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill Acker

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. Reynolds

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1"= 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
8.8						TIDE EL. 8.8, 1520 hr.	
						WATER DEPTH 11.3'	
-2.5						COVE BOTTOM / TOP OF PROBE	EL. -2.5'
-3.5	0 1'			1.0'	WOR		
-5.5	2' 3'			2.0'	WOH	DROVE "AW" ROD PROBE FROM -2.5' TO -8.9' MLW WITH 300lb HAMMER	
-6.5	4'			1.0'	1		
-7.5	5'			1.0'	8		
-8.5	6'			1.0'	32		

GENERAL REMARKS: WOR - WEIGHT OF ROD
WOH - WEIGHT OF HAMMER

Probe No. FP227-63

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 227-63	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-8.9				.4	50		SILTY SAND
						RUFUSAL END OF PROBE EL- 8.9	

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 2 Pages

Probe FP-213-64 Desig. 213 Diam. (Casing) N/A

Co-ordinates: N 617,297.7100 E 835,990.8800

Elevation Top -2.3 M.L.W. Hammer Wt. 300lb Started 24 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 24 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -9.3 M.L.W. Obs. Well _____

Total Depth 7.0 Feet Drilled By E.G.A.

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft: ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
1.1						TIDE EL 1.1, 0900 hr	
						WATER DEPTH 3.4'	
-2.3						COVE BOTTOM / TOP OF PROBE	EL. -2.3'
	0						
	1			2.0	WOH		
-4.3	2						
-5.3	3			1.0	3	DROVE "AW" ROD PROBE FROM -2.3' TO -9.3' MLW WITH 300lb HAMMER	
-6.3	4			1.0'	5		
-7.3	5			1.0'	16		
-8.3	6			1.0'	21		

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP 213-64

Site: PIGEON COVE / ROCKPORT, MA	Probe No. FP 213-64	Page 2 of 2

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	CORE/SAMPLE SIZE	CORE/SAMPLE DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-9.3				1.0	55		SILTY SAND & TP
						REFUSAL END OF PROBE EL-9.3	

Probe No. FP 213-64

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site PIGEON COVE / ROCKPORT, MA Page 1 of 1 Pages

Probe FP 85-65 Desig. 212 Diam. (Casing) N/A

Co-ordinates: N 612,314.1200 E 835,967.1100

Elevation Top -5.8 M.L.W. Hammer Wt. 300 lb Started 24 JUL 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 24 JUL 85

Elevation Top of Rock _____ M.L.W. Casing Left N/A

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -10.1 M.L.W. Obs. Well _____

Total Depth 4.3 Feet Drilled By EGA

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill ACKER

Core Recovered N/A Ft : ____ Diam. ____ In. Inspected By: S. REYNOLDS

Soil Samples N/A In. Diam. ____ No. Classification By: _____

Soil Samples N/A In. Diam. ____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
0.0						TIDE EL 0.0, 930 hr	
						WATER DEPTH 5.8'	
-5.8						COVE BOTTOM / TOP OF PROBE	EL. -5.8'
	0' 1' 2'			2.9	WOH	DROVE "AW" ROD PROBE FROM -5.8' TO -10.1' MLW WITH 300 lb HAMMER	
-8.7	3'			1.0	4		
-9.7	4			5"	12		NO RECOVERY
-10.1						REFUSAL END OF PROBE EL -10.1	

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP212-65

U. S. ARMY
CORPS OF ENGINEERS
NEW ENGLAND DIVISION

FIELD LOG OF TEST PROBE

Site Pigeon Cove / Rockport, MA Page 1 of 2 Pages

Probe FP-8566 Desig. 211 Diam. (Casing) N/A

Co-ordinates: N 612,328.7100 E 835,953.3300

Elevation Top -9.4 M.L.W. Hammer Wt. 300lb Started 24 Jul 85

Total Overburden Drilled _____ Feet Hammer Drop 18 in Completed 24 Jul 85

Elevation Top of Rock -16.3 M.L.W. Casing Left _____

Total Rock Drilled N/A Feet Subsurface Water Data _____ Page _____

Elevation Bottom -16.3 M.L.W. Obs. Well _____

Total Depth 6.9 Feet Drilled By EGA Inc

Core Recovered N/A % No. Boxes _____ Mfg. Des. Drill Acker

Core Recovered N/A Ft: _____ Diam. _____ In. Inspected By: S. Reynolds

Soil Samples N/A In. Diam. _____ No. Classification By: _____

Soil Samples N/A In. Diam. _____ No. Classification By: _____

DEPTH ELEV MLW	DEPTH 1" = 2'	CORE/SAMPLE NO.	SIZE	DEPTH RANGE	BLOWS PER FT. / CORE REC'VY	SAMPLING AND CORING OPERATIONS	CLASSIFICATION OF MATERIALS
-0.3						TIDE EL -0.3, 1000hr	
-9.4							El. -9.4'
	0						
	1						
	2			3.9	W.O.H.	DROVE "AW" ROD PROBE FROM -9.4' TO -16.3' MLW WITH 300lb HAMMER	
	3						SILTY SAND @ tip
-13.3							
	4			1.0	13		
-14.3							
	5			1.0	36		
-15.3							

GENERAL REMARKS: WOH - WEIGHT OF HAMMER

Probe No. FP211-66

APPENDIX E

Survey Field Notes

ROCKPORT HARBOR SURVEY NOTES FOR FIELD LOCATIONS

COORDINATE FILE: ROCKP LENGTH = 400 POINTS; TIME ON FILE: 8 47 54.43
PROBES ROCKPORT ***** JOB #0

********** COGO **********

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING	ELEVATION	DATE
RADIAL STAKE OUT - OCC.PT:				4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT				5	605,624.3200	838,054.7600	YACHT	JULY 29
AR 231 58 13.87	NE	50 15 58.77	91.8307	101	606,008.3700	838,115.7000		
AR 237 06 44.72	NE	55 24 29.62	125.8355	110	606,021.1100	838,148.6700		
RADIAL STAKE OUT - OCC.PT:				4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT				5	605,624.3200	838,054.7600	YACHT	
AR 232 02 06.68	NE	50 19 51.58	147.7243	111	606,043.9700	838,158.7900		
AR 222 43 44.04	NE	41 01 28.94	138.4098	102	606,054.0900	838,135.9300		
AR 228 17 13.75	NE	46 34 58.65	170.4778	112	606,066.8400	838,168.9100		JULY 30
AR 225 25 50.85	NE	43 43 35.75	193.7739	113	606,089.7000	838,179.0200		
AR 218 11 59.34	NE	36 29 44.24	186.7640	103	606,099.8100	838,156.1600		
AR 223 11 37.52	NE	41 29 22.42	217.4544	114	606,112.5600	838,189.1400		
AR 215 33 14.48	NE	33 50 59.38	235.7374	104	606,145.4500	838,176.3900		
AR 221 23 53.65	NE	39 41 38.55	241.4012	115	606,135.4200	838,199.2600		
AR 219 55 34.53	NE	38 13 19.43	265.5359	116	606,158.2800	838,209.3700		
RADIAL STAKE OUT - OCC.PT:				4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT				5	605,624.3200	838,054.7600	YACHT	
AR 218 42 02.20	NE	36 59 47.10	289.8307	117	606,181.1500	838,219.4900		
AR 213 48 15.64	NE	32 06 00.54	285.1896	105	606,191.2600	838,196.6300		JULY 31
AR 217 39 52.34	NE	35 57 37.24	314.2236	118	606,204.0100	838,229.6000		
AR 216 46 45.71	NE	35 04 30.61	338.7102	119	606,226.8700	838,239.7200		
AR 212 34 41.27	NE	30 52 26.17	334.7554	106	606,236.9900	838,216.8600		

RADIAL STAKE OUT - OCC.PT:			21	606,491.1477	838,356.6645	DH
BACKSIGHT			3	606,410.9400	838,141.4900	MOE
AR 314 18 43.55 SW	23 52 07.82	263.9962	120	606,249.7300	838,249.8400	
AR 314 18 47.72 SW	23 52 11.99	239.0003	121	606,272.5900	838,259.9500	
AR 314 18 44.05 SW	23 52 08.33	214.0004	122	606,295.4500	838,270.0700	

JULY 31

RADIAL STAKE OUT - OCC.PT:			21	606,491.1477	838,356.6645	DH
BACKSIGHT			3	606,410.9400	838,141.4900	MOE
AR 314 18 43.83 SW	23 52 08.10	188.9914	123	606,318.3200	838,280.1900	
AR 314 18 49.96 SW	23 52 14.23	163.9956	124	606,341.1800	838,290.3000	
AR 314 18 44.71 SW	23 52 08.99	138.9957	125	606,364.0400	838,300.4200	
AR 314 18 53.72 SW	23 52 17.99	113.9999	126	606,386.9000	838,310.5300	
AR 314 18 46.59 SW	23 52 10.86	89.0000	127	606,409.7600	838,320.6500	

AUGUST 2

RADIAL STAKE OUT - OCC.PT:			20	606,496.6993	838,331.7829	DH
BACKSIGHT			3	606,410.9400	838,141.4900	MOE
AR 318 07 43.57 SW	23 52 08.83	134.0000	109	606,374.1600	838,277.5600	
AR 318 07 43.42 SW	23 52 13.68	184.0089	108	606,328.4300	838,257.3200	
AR 318 07 46.70 SW	23 52 11.96	234.0046	107	606,282.7100	838,237.0900	

AUGUST 2

RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	STK
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 18 30 21.14 SW	85 34 24.08	242.5415	161	605,894.3000	838,495.3100	234
AR 14 53 50.87 SW	81 57 53.81	229.1476	169	605,880.9900	838,510.2300	242
AR 11 10 29.44 SW	78 14 32.38	248.7574	170	605,862.3300	838,493.5900	243
AR 19 17 28.85 SW	86 21 31.79	210.6833	168	605,899.6400	838,526.8700	241
AR 30 38 10.38 NW	82 17 46.68	178.5899	167	605,936.9600	838,560.1500	240
AR 46 01 10.75 NW	66 54 46.31	156.1980	166	605,974.2700	838,593.4400	239

AUGUST 5

RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	STK
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 73 08 58.17 NW	39 46 58.89	169.8563	153	606,043.5500	838,628.4400	226
AR 64 41 14.83 NW	48 14 42.23	143.0000	165	606,011.5800	838,626.7200	238
AR 83 21 02.38 NW	29 34 54.68	156.2350	164	606,048.8900	838,660.0000	237
AR 98 43 41.17 NW	14 12 15.89	178.6520	163	606,086.2100	838,693.2900	236
AR 104 51 47.59 NW	8 04 09.47	193.7534	162	606,104.8600	838,709.9300	235

AUGUST 6

RADIAL STAKE OUT - OCC.PT:			5	605,624.3200	838,054.7600	YACHT
BACKSIGHT			4	605,949.6700	838,045.0800	TUNA
AR 71 23 27.56 NE	69 41 12.46	328.6170	139	605,738.4000	838,362.9400	212
AR 73 39 09.89 NE	71 56 54.79	335.9141	148	605,728.4100	838,374.1400	221
AR 75 56 38.19 NE	74 14 23.09	314.5656	147	605,709.7600	838,357.5000	220
AR 78 33 56.67 NE	76 51 41.57	293.7904	146	605,691.1000	838,340.8600	219
AR 81 34 35.95 NE	79 52 20.85	273.7148	145	605,672.4500	838,324.2100	218

AUGUST 6

RADIAL STAKE OUT - OCC.PT:			5	605,624.3200	838,054.7600	YACHT
BACKSIGHT			4	605,949.6700	838,045.0800	TUNA
AR 73 34 51.99 NE	71 52 36.89	306.7581	138	605,719.7400	838,346.3000	211
AR 76 06 03.59 NE	74 23 48.49	285.4184	137	605,701.0900	838,329.6600	210
AR 79 01 24.58 NE	77 19 09.48	264.7168	136	605,682.4300	838,313.0200	209
AR 82 25 52.21 NE	80 43 37.11	244.8194	135	605,663.7700	838,296.3800	208
AR 86 25 19.42 NE	84 43 04.33	225.9395	134	605,645.1200	838,279.7400	207
AR 91 06 56.49 NE	89 24 41.39	208.3510	133	605,626.4600	838,263.1000	206
RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 101 19 42.88 NW	11 36 14.18	209.4407	149	606,118.1800	838,695.0000	222
AR 95 26 32.50 NW	17 29 24.56	195.5401	150	606,099.5200	838,678.3600	223
AR 88 44 19.85 NW	24 11 37.21	184.0017	151	606,080.8600	838,661.7200	224
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

AUGUST 7

AUGUST 7

RADIAL STAKE OUT - OCC.PT:				5	605,624.3200	838,054.7600	YACHT	
BACKSIGHT				4	605,949.6700	838,045.0800	TUNA	
AR 89 05 00.51 NE	87 22 45.41	236.4173	144	605,635.1300	838,290.9300	217		AUGUST 8
AR 99 08 44.24 SE	82 33 30.86	204.6133	143	605,597.8200	838,257.6500	216		
AR 105 20 01.16 SE	76 22 13.94	191.6468	142	605,579.1600	838,241.0100	215		
AR 110 28 21.70 SE	71 13 53.40	167.3063	130	605,570.4900	838,213.1700	203		
AR 118 47 08.94 SE	62 55 06.16	159.2279	129	605,551.8300	838,196.5300	202		
			141	605,560.5100	838,224.3700	214		
RADIAL STAKE OUT - OCC.PT:				16	605,913.0200	838,737.1280		
BACKSIGHT				5	605,624.3200	838,054.7600	YACHT	
AR 64 41 14.84 NW	48 14 42.22	167.9866	154	606,024.8900	838,611.8100	227		AUGUST 8
AR 56 13 14.31 NW	56 42 42.75	169.8462	155	606,006.2400	838,595.1500	228		
AR 48 06 31.91 NW	64 49 25.15	175.2680	156	605,987.5800	838,578.5100	229		
RADIAL STAKE OUT - OCC.PT:				16	605,913.0200	838,737.1280	STK	
BACKSIGHT				5	605,624.3200	838,054.7600	YACHT	
AR 40 37 33.60 NW	72 18 23.46	183.9600	157	605,968.9300	838,561.8700	230		AUGUST 9
AR 33 55 04.04 NW	79 00 53.02	195.4799	158	605,950.2700	838,545.2300	231		
AR 28 01 35.94 NW	84 54 21.12	209.3650	159	605,931.6100	838,528.5900	232		
AR 22 55 02.10 SW	89 59 05.04	225.1780	160	605,912.9600	838,511.9500	233		
RADIAL STAKE OUT - OCC.PT:				5	605,624.3200	838,054.7600	YACHT	
BACKSIGHT				4	605,949.6700	838,045.0800	TUNA	
AR 128 16 27.62 SE	53 25 47.48	169.7363	140	605,523.1900	838,191.0800	213		AUGUST 9
AR 127 46 20.59 SE	53 55 54.51	154.8032	128	605,533.1800	838,179.8900	201		
AR 103 03 52.10 SE	78 38 23.00	178.5481	131	605,589.1500	838,229.8100	204		
AR 96 37 46.43 SE	85 04 28.67	192.4105	132	605,607.8000	838,246.4600	205		

PIGEON COVE SURVEY NOTES FOR FIELD LOCATIONS DATE

RADIAL STAKE OUT - OCC.PT:					41	612,033.8228	835,644.4288	PK	
BACKSIGHT					172	612,107.2800	835,612.7400	PC2	
AR	90 00 00.00	NE	66 39 54.20	102.9958	180	612,074.6200	835,739.0000	105PC	
AR	79 00 48.26	NE	55 40 42.46	104.9190	179	612,092.9800	835,731.0800	104PC	
AR	68 46 22.00	NE	45 26 16.20	110.4875	178	612,111.3500	835,723.1500	103PC	
AR	52 09 47.37	NE	28 49 41.58	130.4088	176	612,148.0700	835,707.3100	101PC	JULY 11+12
AR	59 46 34.94	NE	36 26 29.14	119.1938	177	612,129.7100	835,715.2300	102PC	
AR	56 57 24.11	NE	33 37 18.31	146.7222	181	612,156.0000	835,725.6700	106PC	
AR	60 46 30.20	NE	37 26 24.40	163.8526	188	612,163.9200	835,744.0400	113PC	
AR	63 51 26.47	NE	40 31 20.68	181.5653	195	612,171.8400	835,762.4000	120PC	
AR	66 23 16.58	NE	43 03 10.78	199.7163	202	612,179.7600	835,780.7700	127PC	

RADIAL STAKE OUT - OCC.PT:					41	612,033.8228	835,644.4288	PK	
BACKSIGHT					172	612,107.2800	835,612.7400	PC2	
AR	90 00 00.00	NE	66 39 54.20	182.9997	206	612,106.3100	835,812.4600	131PC	
AR	90 00 06.21	NE	66 40 00.41	162.9911	201	612,098.3800	835,794.0900	126PC	
AR	90 00 06.62	NE	66 40 00.82	142.9957	194	612,090.4600	835,775.7300	119PC	JULY 15
AR	90 00 00.53	NE	66 39 54.73	122.9912	187	612,082.5400	835,757.3600	112PC	
AR	80 45 57.75	NE	57 25 51.95	124.6062	186	612,100.9000	835,749.4400	111PC	
AR	76 17 30.12	NE	52 57 24.33	126.6019	185	612,110.0900	835,745.4800	110PC	
AR	71 59 05.51	NE	48 38 59.71	129.3365	184	612,119.2700	835,741.5200	109PC	
AR	67 52 42.40	NE	44 32 36.60	132.7695	183	612,128.4500	835,737.5600	108PC	

RADIAL STAKE OUT - OCC.PT:					41	612,033.8228	835,644.4288	PK	
BACKSIGHT					172	612,107.2800	835,612.7400	PC2	
AR	63 59 52.03	NE	40 39 46.24	136.8482	182	612,137.6300	835,733.6000	107PC	
AR	67 14 18.96	NE	43 54 13.16	155.0675	189	612,145.5500	835,751.9600	114PC	
AR	69 47 21.35	NE	46 27 15.56	173.6849	196	612,153.4800	835,770.3200	121PC	
AR	71 50 49.39	NE	48 30 43.60	192.5805	203	612,161.4000	835,788.6900	128PC	JULY 16
AR	77 40 16.45	NE	54 20 10.65	187.3108	204	612,143.0300	835,796.6100	129PC	
AR	76 12 48.35	NE	52 52 42.56	167.8309	198	612,135.1100	835,778.2500	123PC	
AR	74 22 18.97	NE	51 02 13.17	148.4804	191	612,127.1900	835,759.8800	116PC	
AR	70 43 39.97	NE	47 23 34.17	151.4801	190	612,136.3700	835,755.9200	115PC	
AR	72 56 54.96	NE	49 36 49.16	170.4903	197	612,144.2900	835,774.2900	122PC	

RADIAL STAKE OUT - OCC.PT:			41	612,033.8228	835,644.4288		
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 79 34 19.51 NE	56 14 13.71	165.7329	199	612,125.9300	835,782.2100	124PC	
AR 78 09 01.35 NE	54 48 55.55	146.1045	192	612,118.0100	835,763.8400	117PC	
AR 82 02 10.29 NE	58 42 04.49	144.3833	193	612,108.8300	835,767.8000	118PC	JULY 17
AR 83 00 17.01 NE	59 40 11.21	164.2178	200	612,116.7500	835,786.1700	125PC	
AR 83 45 46.10 NE	60 25 40.31	184.0804	205	612,124.6700	835,804.5300	130PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 333 55 32.06 SW	29 05 24.22	390.8193	257	612,050.8300	835,832.3500	251PC	JULY 17
AR 331 01 16.32 SW	26 11 08.48	393.1049	244	612,039.5900	835,848.8900	238PC	
AR 333 39 01.81 SW	28 48 53.96	370.9053	258	612,067.3700	835,843.5900	252PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 330 35 36.07 SW	25 45 28.23	373.3128	245	612,056.1300	835,860.1300	239PC	
AR 330 07 05.96 SW	25 16 58.12	353.5348	246	612,072.6800	835,871.3700	240PC	JULY 18
AR 333 20 13.98 SW	28 30 06.13	351.0799	259	612,083.8200	835,854.8300	253PC	
AR 327 31 59.99 SW	22 41 52.14	274.7810	250	612,138.3500	835,916.3300	244PC	
AR 331 40 27.31 SW	26 50 19.46	271.5065	263	612,150.0900	835,899.7800	257PC	

RADIAL STAKE OUT - OCC.PT:			39	612,092.2180	835,984.9919	DH	
BACKSIGHT			174	612,392.3500	836,022.3600	PC4	
AR 266 52 02.94 NW	86 02 07.42	119.2072	260	612,100.4600	835,866.0700	254PC	
AR 275 51 47.91 NW	77 02 22.45	110.4968	261	612,117.0000	835,877.3100	255PC	
AR 318 18 38.93 NW	34 35 31.44	110.4961	265	612,183.1800	835,922.2600	259PC	JULY 19
AR 308 04 22.15 NW	44 49 48.21	104.9237	264	612,166.6300	835,911.0200	258PC	
AR 327 18 32.89 NW	25 35 37.47	119.1977	266	612,199.7200	835,933.5000	260PC	
AR 334 55 28.28 NW	17 58 42.09	130.4095	267	612,216.2600	835,944.7400	261PC	
AR 341 14 35.72 NW	11 39 34.65	143.5542	268	612,232.8100	835[redacted].9[redacted]	26[redacted]	

AR 318 16 38.95 NW	34 35 31.44	110.4951	265	612,183.1800	835,922.2600	259PC	JULY 14
AR 308 04 22.15 NW	44 49 48.21	104.9237	264	612,166.6300	835,911.0200	258PC	
AR 327 18 32.89 NW	25 35 37.47	119.1977	266	612,199.7200	835,933.5000	260PC	
AR 334 55 28.28 NW	17 58 42.09	130.4095	267	612,216.2600	835,944.7400	261PC	
AR 341 14 35.72 NW	11 39 34.65	143.5542	268	612,232.8100	835,955.9800	262PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 328 18 33.57 SW	23 28 25.72	294.4042	249	612,122.3100	835,905.0900	243PC	
AR 328 59 14.94 SW	24 09 07.09	314.0838	248	612,105.7600	835,893.8500	242PC	
AR 329 35 10.74 SW	24 45 02.89	333.7931	247	612,089.2200	835,882.6100	241PC	
AR 325 55 18.74 SW	21 05 10.90	153.2626	269	612,249.3500	835,967.2200	263PC	JULY 22
AR 318 53 08.66 SW	14 03 00.82	158.9967	256	612,238.1100	835,983.7600	250PC	
AR 320 53 07.23 SW	16 02 59.39	155.2410	211	612,243.1600	835,979.4400	205PC	
AR 321 06 17.04 SW	16 16 09.20	177.9040	255	612,221.5700	835,972.5200	249PC	
AR 322 53 39.70 SW	18 03 31.86	197.0363	254	612,205.0200	835,961.2800	248PC	
AR 324 21 51.97 SW	19 31 44.13	216.3139	253	612,188.4800	835,950.0500	247PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 312 52 59.21 SW	8 02 51.37	94.2885	228	612,298.9900	836,009.1600	222PC	
AR 317 58 05.02 SW	13 07 57.18	88.4225	227	612,306.2400	836,002.2700	221PC	
AR 323 43 21.45 SW	18 53 13.61	83.3476	226	612,313.4900	835,995.3800	220PC	JULY 23
AR 337 10 32.71 SW	32 20 24.87	76.1759	225	612,327.9900	835,981.6100	219PC	
AR 352 23 49.17 SW	47 33 41.33	73.8887	224	612,342.4900	835,967.8300	218PC	
AR 352 47 54.67 SW	47 57 46.83	53.8970	231	612,356.2600	835,982.3300	225PC	
AR 332 16 22.22 SW	27 26 14.37	56.9906	232	612,341.7700	835,996.1000	226PC	
AR 315 41 27.58 SW	10 51 19.74	66.2658	233	612,327.2700	836,009.8800	227PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 323 57 22.28 SW	24 07 14.43	101.5025	219	612,299.7100	835,980.8800	213PC	
AR 352 00 47.61 SW	47 10 39.77	113.8840	212	612,314.9400	835,938.6300	206PC	
AR 352 09 43.18 SW	47 19 35.34	93.8892	217	612,328.7100	835,953.3300	211PC	
AR 340 04 01.89 SW	35 13 54.05	95.7731	218	612,314.1200	835,967.1100	212PC	
AR 342 01 48.64 SW	37 11 40.79	115.3799	213	612,300.4400	835,952.6100	207PC	
AR 332 35 00.24 SW	27 44 52.39	120.2366	214	612,285.9400	835,966.3800	208PC	
AR 323 56 14.20 SW	19 06 06.36	105.7000	220	612,292.4700	835,987.7700	214PC	JULY 24
AR 319 19 57.55 SW	14 29 49.71	110.6532	221	612,285.2200	835,994.6600	215PC	
AR 315 08 49.09 SW	10 18 41.25	116.2576	222	612,277.9700	836,001.5500	216PC	
AR 311 21 51.65 SW	6 31 43.81	122.4239	223	612,270.7200	836,008.4400	217PC	
AR [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

AR	342 01 48.64 SW	37 11 40.79	115.3799	213	612,300.4400	835,952.6100	207PC		
AR	332 35 00.24 SW	27 44 52.39	120.2366	214	612,285.9400	835,966.3800	208PC		
AR	323 56 14.20 SW	19 06 06.36	105.7000	220	612,292.4700	835,987.7700	214PC	JULY 24	
AR	319 19 57.55 SW	14 29 49.71	110.6532	221	612,285.2200	835,994.6600	215PC		
AR	315 08 49.09 SW	10 18 41.25	116.2576	222	612,277.9700	836,001.5500	216PC		
AR	311 21 51.65 SW	6 31 43.81	122.4239	223	612,270.7200	836,008.4400	217PC		
AR	316 41 19.56 SW	11 51 11.72	138.3603	216	612,256.9400	835,993.9400	210PC		
AR	324 04 31.86 SW	19 14 24.02	128.0628	215	612,271.4400	835,980.1600	209PC		
AR	327 39 53.94 SW	22 49 46.09	146.1379	210	612,257.6600	835,965.6600	204PC		

RADIAL STAKE OUT - OCC.PT:				174	612,392.3500	836,022.3600	PC4	
BACKSIGHT				172	612,107.2800	835,612.7400	PC2	
AR	304 31 57.82 SE	0 18 10.02	107.8615	230	612,284.4900	836,022.9300	224PC	
AR	308 25 27.32 SW	3 35 19.48	100.8077	229	612,291.7400	836,016.0500	223PC	
AR	303 53 58.65 SE	0 56 09.19	79.5906	235	612,312.7700	836,023.6600	229PC	
AR	309 15 17.33 SW	4 25 09.48	72.5457	234	612,320.0200	836,016.7700	228PC	JULY 25
AR	302 34 51.69 SE	2 15 16.15	51.3497	240	612,341.0400	836,024.3800	234PC	
AR	322 33 11.05 SW	17 43 03.21	38.6429	239	612,355.5400	836,010.6000	233PC	
AR	353 41 10.14 SW	48 51 02.30	33.9045	238	612,370.0400	835,996.8300	232PC	
AR	351 54 20.74 SW	47 04 12.90	133.8861	207	612,301.1600	835,924.3300	201PC	
AR	343 23 43.27 SW	38 33 35.43	135.1608	208	612,286.6600	835,938.1100	202PC	
AR	335 13 10.31 SW	30 23 02.47	139.3257	209	612,272.1600	835,951.8900	203PC	
AR	332 10 34.65 SW	27 20 26.81	291.3461	262	612,133.5500	835,888.5500	256PC	
AR	326 38 17.42 SW	21 48 09.58	255.2160	251	612,155.3900	835,927.5700	245PC	
AR	325 35 43.95 SW	20 45 36.10	235.7142	252	612,171.9400	835,938.8100	246PC	
RADIAL STAKE OUT - OCC.PT:				174	612,392.3500	836,022.3600	PC4	
BACKSIGHT				172	612,107.2800	835,612.7400	PC2	
AR	290 28 35.65 SE	14 21 32.19	90.0015	243	612,305.1600	836,044.6800	237PC	
AR	291 20 06.61 SE	13 30 01.24	67.6801	241	612,326.5400	836,038.1600	235PC	JULY 26
AR	295 44 06.08 SE	9 06 01.76	95.2793	237	612,298.2700	836,037.4300	231PC	
AR	299 26 49.87 SE	5 23 17.97	87.2154	236	612,305.5200	836,030.5500	230PC	
AR	298 07 37.37 SE	6 42 30.47	73.1911	242	612,319.6600	836,030.9100	236PC	

ROCKPORT HARBOR SURVEY NOTES FOR FIELD LOCATIONS

COORDINATE FILE: ROCKP LENGTH = 400 POINTS: TIME ON FILE: 8 47 54.43
PROBES ROCKPORT ***** JOB #0

********** COGO **********

FROM TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING	ELEVATION	DATE
RADIAL STAKE OUT - OCC.PT:			4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT	JULY 29
AR 231 58 13.87 NE	50 15 58.77	91.3307	101	606,008.3700	838,115.7000		
AR 237 06 44.72 NE	55 24 29.62	125.8355	110	606,021.1100	838,148.6700		
RADIAL STAKE OUT - OCC.PT:			4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT	
AR 232 02 06.68 NE	50 19 51.58	147.7243	111	606,043.9700	838,158.7900		
AR 222 43 44.04 NE	41 01 28.94	138.4098	102	606,054.0900	838,135.9300		JULY 30
AR 228 17 13.75 NE	46 34 58.65	170.4778	112	606,066.8400	838,168.9100		
AR 225 25 50.85 NE	43 43 35.75	193.7739	113	606,089.7000	838,179.0200		
AR 218 11 59.34 NE	36 29 44.24	186.7640	103	606,099.8100	838,156.1600		
AR 223 11 37.52 NE	41 29 22.42	217.4544	114	606,112.5600	838,189.1400		
AR 215 33 14.48 NE	33 50 59.38	235.7374	104	606,145.4500	838,176.3900		
AR 221 23 53.65 NE	39 41 38.55	241.4012	115	606,135.4200	838,199.2600		
AR 219 55 34.53 NE	38 13 19.43	265.5359	116	606,158.2800	838,209.3700		
RADIAL STAKE OUT - OCC.PT:			4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT	
AR 218 42 02.20 NE	36 59 47.10	289.8307	117	606,181.1500	838,219.4900		
AR 213 48 15.64 NE	32 06 00.54	285.1896	105	606,191.2600	838,196.6300		JULY 31
AR 217 39 52.34 NE	35 57 37.24	314.2236	118	606,204.0100	838,229.6000		
AR 216 46 45.71 NE	35 04 30.61	338.7102	119	606,226.8700	838,239.7200		
AR 212 34 41.27 NE	30 52 26.17	334.7554	106	606,236.9900	838,216.8600		

RADIAL STAKE OUT - OCC.PT:			21	606,491.1477	838,356.6645	DH
BACKSIGHT			3	606,410.9400	838,141.4900	MOE
AR 314 18 43.55 SW	23 52 07.82	263.9962	120	606,249.7300	838,249.8400	
AR 314 18 47.72 SW	23 52 11.99	239.0003	121	606,272.5900	838,259.9500	
AR 314 18 44.05 SW	23 52 08.33	214.0004	122	606,295.4500	838,270.0700	

JULY 31

RADIAL STAKE OUT - OCC.PT:			21	606,491.1477	838,356.6645	DH
BACKSIGHT			3	606,410.9400	838,141.4900	MOE
AR 314 18 43.83 SW	23 52 08.10	188.9914	123	606,318.3200	838,280.1900	
AR 314 18 49.96 SW	23 52 14.23	163.9956	124	606,341.1800	838,290.3000	
AR 314 18 44.71 SW	23 52 08.99	138.9957	125	606,364.0400	838,300.4200	
AR 314 18 53.72 SW	23 52 17.99	113.9999	126	606,386.9000	838,310.5300	
AR 314 18 46.59 SW	23 52 10.86	89.0000	127	606,409.7600	838,320.6500	

AUGUST 2

RADIAL STAKE OUT - OCC.PT:			20	606,496.6993	838,331.7829	DH
BACKSIGHT			3	606,410.9400	838,141.4900	MOE
AR 318 07 43.57 SW	23 52 08.83	134.0000	109	606,374.1600	838,277.5600	
AR 318 07 43.42 SW	23 52 13.68	184.0089	108	606,328.4300	838,257.3200	
AR 318 07 46.70 SW	23 52 11.96	234.0046	107	606,282.7100	838,237.0900	

AUGUST 2

RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	STK
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 18 30 21.14 SW	85 34 24.08	242.5415	161	605,894.3000	838,495.3100	234
AR 14 53 50.87 SW	81 57 53.81	229.1476	169	605,880.9900	838,510.2300	242
AR 11 10 29.44 SW	78 14 32.38	248.7574	170	605,862.3300	838,493.5900	243
AR 19 17 28.85 SW	86 21 31.79	210.6833	168	605,899.6400	838,526.8700	241
AR 30 38 10.38 NW	82 17 46.68	178.5899	167	605,936.9600	838,560.1500	240
AR 46 01 10.75 NW	66 54 46.31	156.1980	166	605,974.2700	838,593.4400	239

AUGUST 5

RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	STK
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 73 08 58.17 NW	39 46 58.89	169.8563	153	606,043.5500	838,628.4400	226
AR 64 41 14.83 NW	48 14 42.23	148.0000	165	606,011.5800	838,626.7200	238
AR 83 21 02.38 NW	29 34 54.68	156.2350	164	606,048.8900	838,660.0000	237
AR 98 43 41.17 NW	14 12 15.89	178.6520	163	606,086.2100	838,693.2900	236
AR 104 51 47.59 NW	8 04 09.47	193.7534	162	606,104.8600	838,709.9300	235

AUGUST 6

RADIAL STAKE OUT - OCC.PT:			5	605,624.3200	838,054.7600	YACHT
BACKSIGHT			4	605,949.6700	838,045.0800	TUNA
AR 71 23 27.56 NE	69 41 12.46	328.6170	139	605,738.4000	838,362.9400	212
AR 73 39 09.89 NE	71 56 54.79	335.9141	148	605,728.4100	838,374.1400	221
AR 75 56 38.19 NE	74 14 23.09	314.5656	147	605,709.7600	838,357.5000	220
AR 78 33 56.67 NE	76 51 41.57	293.7904	146	605,691.1000	838,340.8600	219
AR 81 34 35.95 NE	79 52 20.85	273.7148	145	605,672.4500	838,324.2100	218

AUGUST 6

RADIAL STAKE OUT - OCC.PT:			5	605,624.3200	838,054.7600	YACHT
BACKSIGHT			4	605,949.6700	838,045.0800	TUNA
AR 73 34 51.99 NE	71 52 36.89	306.7581	138	605,719.7400	838,346.3000	211
AR 76 06 03.59 NE	74 23 48.49	285.4184	137	605,701.0900	838,329.6600	210
AR 79 01 24.58 NE	77 19 09.48	264.7168	136	605,682.4300	838,313.0200	209
AR 82 25 52.21 NE	80 43 37.11	244.8194	135	605,663.7700	838,296.3800	208
AR 86 25 19.42 NE	84 43 04.33	225.9395	134	605,645.1200	838,279.7400	207
AR 91 06 56.49 NE	89 24 41.39	208.3510	133	605,626.4600	838,263.1000	206
RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 101 19 42.88 NW	11 36 14.18	209.4407	149	606,118.1800	838,695.0000	222
AR 95 26 32.50 NW	17 29 24.56	195.5401	150	606,099.5200	838,678.3600	223
AR 88 44 19.85 NW	24 11 37.21	184.0017	151	606,080.8600	838,661.7200	224
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

AUGUST 7

AUGUST 7

RADIAL STAKE OUT - OCC.PT:			5	605,624.3200	838,054.7600	YACHT	
BACKSIGHT			4	605,949.6700	838,045.0800	TUNA	
AR 89 05 00.51 NE	87 22 45.41	236.4173	144	605,635.1300	838,290.9300	217	AUGUST 8
AR 99 08 44.24 SE	82 33 30.86	204.6133	143	605,597.8200	838,257.6500	216	
AR 105 20 01.16 SE	76 22 13.94	191.6468	142	605,579.1600	838,241.0100	215	
AR 110 28 21.70 SE	71 13 53.40	167.3063	130	605,570.4900	838,213.1700	203	
AR 118 47 08.94 SE	62 55 06.16	159.2279	129	605,551.8300	838,196.5300	202	
			141	605,560.5100	838,224.3700	214	
RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280		
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT	
AR 64 41 14.84 NW	48 14 42.22	167.9866	154	606,024.8900	838,611.8100	227	AUGUST 8
AR 56 13 14.31 NW	56 42 42.75	169.8462	155	606,006.2400	838,595.1500	228	
AR 48 06 31.91 NW	64 49 25.15	175.2680	156	605,987.5800	838,578.5100	229	
RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	STK	
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT	
AR 40 37 33.60 NW	72 18 23.46	183.9600	157	605,968.9300	838,561.8700	230	AUGUST 9
AR 33 55 04.04 NW	79 00 53.02	195.4799	158	605,950.2700	838,545.2300	231	
AR 28 01 35.94 NW	84 54 21.12	209.3650	159	605,931.6100	838,528.5900	232	
AR 22 55 02.10 SW	89 59 05.04	225.1780	160	605,912.9600	838,511.9500	233	
RADIAL STAKE OUT - OCC.PT:			5	605,624.3200	838,054.7600	YACHT	
BACKSIGHT			4	605,949.6700	838,045.0800	TUNA	
AR 128 16 27.62 SE	53 25 47.48	169.7363	140	605,523.1900	838,191.0800	213	AUGUST 9
AR 127 46 20.59 SE	53 55 54.51	154.8032	128	605,533.1800	838,179.8900	201	
AR 103 03 52.10 SE	78 38 23.00	178.5481	131	605,589.1500	838,229.8100	204	
AR 96 37 46.43 SE	85 04 28.67	192.4105	132	605,607.8000	838,246.4600	205	

PIGEON COVE SURVEY NOTES FOR FIELD LOCATIONS

DATE

RADIAL STAKE OUT - OCC.PT:			41	612,033.8228	835,644.4288	PK	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 90 00 00.00 NE	66 39 54.20	102.9958	180	612,074.6200	835,739.0000	105PC	
AR 79 00 48.26 NE	55 40 42.46	104.9190	179	612,092.9800	835,731.0800	104PC	
AR 68 46 22.00 NE	45 26 16.20	110.4875	178	612,111.3500	835,723.1500	103PC	
AR 52 09 47.37 NE	28 49 41.58	130.4088	176	612,148.0700	835,707.3100	101PC	JULY 11+12
AR 59 46 34.94 NE	36 26 29.14	119.1938	177	612,129.7100	835,715.2300	102PC	
AR 56 57 24.11 NE	33 37 18.31	146.7222	181	612,156.0000	835,725.6700	106PC	
AR 60 46 30.20 NE	37 26 24.40	163.8526	188	612,163.9200	835,744.0400	113PC	
AR 63 51 26.47 NE	40 31 20.68	181.5653	195	612,171.8400	835,762.4000	120PC	
AR 66 23 16.58 NE	43 03 10.78	199.7163	202	612,179.7600	835,780.7700	127PC	

RADIAL STAKE OUT - OCC.PT:			41	612,033.8228	835,644.4288	PK	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 90 00 00.00 NE	66 39 54.20	182.9997	206	612,106.3100	835,812.4600	131PC	
AR 90 00 06.21 NE	66 40 00.41	162.9911	201	612,098.3800	835,794.0900	126PC	
AR 90 00 06.62 NE	66 40 00.82	142.9957	194	612,090.4600	835,775.7300	119PC	
AR 90 00 00.53 NE	66 39 54.73	122.9912	187	612,082.5400	835,757.3600	112PC	JULY 15
AR 80 45 57.75 NE	57 25 51.95	124.6062	186	612,100.9000	835,749.4400	111PC	
AR 76 17 30.12 NE	52 57 24.33	126.6019	185	612,110.0900	835,745.4800	110PC	
AR 71 59 05.51 NE	48 38 59.71	129.3365	184	612,119.2700	835,741.5200	109PC	
AR 67 52 42.40 NE	44 32 36.60	132.7695	183	612,128.4500	835,737.5600	108PC	

RADIAL STAKE OUT - OCC.PT:			41	612,033.8228	835,644.4288	PK	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 63 59 52.03 NE	40 39 46.24	136.8482	182	612,137.6300	835,733.6000	107PC	
AR 67 14 18.96 NE	43 54 13.16	155.0675	189	612,145.5500	835,751.9600	114PC	
AR 69 47 21.35 NE	46 27 15.56	173.6849	196	612,153.4800	835,770.3200	121PC	
AR 71 50 49.39 NE	48 30 43.60	192.5805	203	612,161.4000	835,788.6900	128PC	JULY 16
AR 77 40 16.45 NE	54 20 10.65	187.3108	204	612,143.0300	835,796.6100	129PC	
AR 76 12 48.35 NE	52 52 42.56	167.8309	198	612,135.1100	835,778.2500	123PC	
AR 74 22 18.97 NE	51 02 13.17	148.4804	191	612,127.1900	835,759.8800	116PC	
AR 70 43 39.97 NE	47 23 34.17	151.4801	190	612,136.3700	835,755.9200	115PC	
AR 72 56 54.96 NE	49 36 49.16	170.4903	197	612,144.2900	835,774.2900	122PC	

RADIAL STAKE OUT - OCC.PT:			41	612,033.8228	835,644.4288		
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 79 34 19.51 NE	56 14 13.71	165.7329	199	612,125.9300	835,782.2100	124PC	
AR 78 09 01.35 NE	54 48 55.55	146.1045	192	612,118.0100	835,763.8400	117PC	
AR 82 02 10.29 NE	58 42 04.49	144.3833	193	612,108.8300	835,767.8000	118PC	JULY 17
AR 83 00 17.01 NE	59 40 11.21	164.2178	200	612,116.7500	835,786.1700	125PC	
AR 83 45 46.10 NE	60 25 40.31	184.0804	205	612,124.6700	835,804.5300	130PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 333 55 32.06 SW	29 05 24.22	390.8193	257	612,050.8300	835,832.3500	251PC	JULY 17
AR 331 01 16.32 SW	26 11 08.48	393.1049	244	612,039.5900	835,848.8900	238PC	
AR 333 39 01.81 SW	28 48 53.96	370.9053	258	612,067.3700	835,843.5900	252PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 330 35 36.07 SW	25 45 28.23	373.3128	245	612,056.1300	835,860.1300	239PC	
AR 330 07 05.96 SW	25 16 58.12	353.5348	246	612,072.6800	835,871.3700	240PC	JULY 18
AR 333 20 13.98 SW	28 30 06.13	351.0799	259	612,083.8200	835,854.8300	253PC	
AR 327 31 59.99 SW	22 41 52.14	274.7810	250	612,138.3500	835,916.3300	244PC	
AR 331 40 27.31 SW	26 50 19.46	271.5065	263	612,150.0900	835,899.7800	257PC	

RADIAL STAKE OUT - OCC.PT:			39	612,092.2180	835,984.9919	DH	
BACKSIGHT			174	612,392.3500	836,022.3600	PC4	
AR 266 52 02.94 NW	86 02 07.42	119.2072	260	612,100.4600	835,866.0700	254PC	
AR 275 51 47.91 NW	77 02 22.45	110.4968	261	612,117.0000	835,877.3100	255PC	
AR 318 18 38.93 NW	34 35 31.44	110.4961	265	612,183.1800	835,922.2600	259PC	JULY 19
AR 308 04 22.15 NW	44 49 48.21	104.9237	264	612,166.6300	835,911.0200	258PC	
AR 327 18 32.89 NW	25 35 37.47	119.1977	266	612,199.7200	835,933.5000	260PC	
AR 334 55 28.28 NW	17 58 42.09	130.4095	267	612,216.2600	835,944.7400	261PC	
AR 341 14 35.72 NW	11 39 34.65	143.5542	268	612,232.8100	835[redacted].98[redacted]	26[redacted]	

AR 318 18 38.93 NW	34 35 31.44	110.4961	265	612,183.1800	835,922.2600	259PC	JULY 19
AR 308 04 22.15 NW	44 49 48.21	104.9237	264	612,166.6300	835,911.0200	258PC	
AR 327 18 32.89 NW	25 35 37.47	119.1977	266	612,199.7200	835,933.5000	260PC	
AR 334 55 28.28 NW	17 58 42.09	130.4095	267	612,216.2600	835,944.7400	261PC	
AR 341 14 35.72 NW	11 39 34.65	143.5542	268	612,232.8100	835,955.9800	262PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 328 18 33.57 SW	23 28 25.72	294.4042	249	612,122.3100	835,905.0900	243PC	
AR 328 59 14.94 SW	24 09 07.09	314.0838	248	612,105.7600	835,893.8500	242PC	
AR 329 35 10.74 SW	24 45 02.89	333.7931	247	612,089.2200	835,882.6100	241PC	
AR 325 55 18.74 SW	21 05 10.90	153.2626	269	612,249.3500	835,967.2200	263PC	JULY 22
AR 318 53 08.66 SW	14 03 00.82	158.9967	256	612,238.1100	835,983.7600	250PC	
AR 320 53 07.23 SW	16 02 59.39	155.2410	211	612,243.1600	835,979.4400	205PC	
AR 321 06 17.04 SW	16 16 09.20	177.9040	255	612,221.5700	835,972.5200	249PC	
AR 322 53 39.70 SW	18 03 31.86	197.0363	254	612,205.0200	835,961.2800	248PC	
AR 324 21 51.97 SW	19 31 44.13	216.3139	253	612,188.4800	835,950.0500	247PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 312 52 59.21 SW	8 02 51.37	94.2885	228	612,298.9900	836,009.1600	222PC	
AR 317 58 05.02 SW	13 07 57.18	88.4225	227	612,306.2400	836,002.2700	221PC	
AR 323 43 21.45 SW	18 53 13.61	83.3476	226	612,313.4900	835,995.3800	220PC	JULY 23
AR 337 10 32.71 SW	32 20 24.87	76.1759	225	612,327.9900	835,981.6100	219PC	
AR 352 23 49.17 SW	47 33 41.33	73.8887	224	612,342.4900	835,967.8300	218PC	
AR 352 47 54.67 SW	47 57 46.83	53.8970	231	612,356.2600	835,982.3300	225PC	
AR 332 16 22.22 SW	27 26 14.37	56.9906	232	612,341.7700	835,996.1000	226PC	
AR 315 41 27.58 SW	10 51 19.74	66.2658	233	612,327.2700	836,009.8800	227PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 323 57 22.28 SW	24 07 14.43	101.5025	219	612,299.7100	835,980.8800	213PC	
AR 352 00 47.61 SW	47 10 39.77	113.8840	212	612,314.9400	835,938.8300	206PC	
AR 352 09 43.18 SW	47 19 35.34	93.8892	217	612,328.7100	835,953.3300	211PC	
AR 340 04 01.89 SW	35 13 54.05	95.7731	218	612,314.1200	835,967.1100	212PC	
AR 342 01 48.64 SW	37 11 40.79	115.3799	213	612,300.4400	835,952.6100	207PC	
AR 332 35 00.24 SW	27 44 52.39	120.2366	214	612,285.9400	835,966.3800	208PC	
AR 323 56 14.20 SW	19 06 06.36	105.7000	220	612,292.4700	835,987.7700	214PC	JULY 24
AR 319 19 57.55 SW	14 29 49.71	110.6532	221	612,285.2200	835,994.6600	215PC	
AR 315 08 49.09 SW	10 18 41.25	116.2576	222	612,277.9700	836,001.5500	216PC	
AR 311 21 51.65 SW	6 31 43.81	122.4239	223	612,270.7200	836,008.4400	217PC	
AR [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

AR	342 01 48.64 SW	37 11 40.79	115.3799	213	612,300.4400	835,952.6100	207PC			
AR	332 35 00.24 SW	27 44 52.39	120.2366	214	612,285.9400	835,966.3800	208PC			
AR	323 56 14.20 SW	19 06 06.36	105.7000	220	612,292.4700	835,987.7700	214PC	JULY 24		
AR	319 19 57.55 SW	14 29 49.71	110.6532	221	612,285.2200	835,994.6600	215PC			
AR	315 08 49.09 SW	10 18 41.25	116.2576	222	612,277.9700	836,001.5500	216PC			
AR	311 21 51.65 SW	6 31 43.81	122.4239	223	612,270.7200	836,008.4400	217PC			
AR	316 41 19.56 SW	11 51 11.72	138.3603	216	612,256.9400	835,993.9400	210PC			
AR	324 04 31.86 SW	19 14 24.02	128.0628	215	612,271.4400	835,980.1600	209PC			
AR	327 39 53.94 SW	22 49 46.09	146.1379	210	612,257.6600	835,965.6600	204PC			
RADIAL STAKE OUT - OCC.PT:				174	612,392.3500	836,022.3600	PC4			
BACKSIGHT				172	612,107.2800	835,612.7400	PC2			
AR	304 31 57.82 SE	0 18 10.02	107.8615	230	612,284.4900	836,022.9300	224PC			
AR	308 25 27.32 SW	3 35 19.48	100.8077	229	612,291.7400	836,016.0500	223PC			
AR	303 53 58.65 SE	0 56 09.19	79.5906	235	612,312.7700	836,023.6600	229PC			
AR	309 15 17.33 SW	4 25 09.48	72.5457	234	612,320.0200	836,016.7700	228PC	JULY 25		
AR	302 34 51.69 SE	2 15 16.15	51.3497	240	612,341.0400	836,024.3800	234PC			
AR	322 33 11.05 SW	17 43 03.21	38.6429	239	612,355.5400	836,010.6000	233PC			
AR	353 41 10.14 SW	48 51 02.30	33.9045	238	612,370.0400	835,996.8300	232PC			
AR	351 54 20.74 SW	47 04 12.90	133.8861	207	612,301.1600	835,924.3300	201PC			
AR	343 23 43.27 SW	38 33 35.43	135.1608	208	612,286.6600	835,938.1100	202PC			
AR	335 13 10.31 SW	30 23 02.47	139.3257	209	612,272.1600	835,951.8900	203PC			
AR	332 10 34.65 SW	27 20 26.81	291.3461	262	612,133.5500	835,888.5500	256PC			
AR	326 38 17.42 SW	21 48 09.58	255.2160	251	612,155.3900	835,927.5700	245PC			
AR	325 35 43.95 SW	20 45 36.10	235.7142	252	612,171.9400	835,938.8100	246PC			
RADIAL STAKE OUT - OCC.PT:				174	612,392.3500	836,022.3600	PC4			
BACKSIGHT				172	612,107.2800	835,612.7400	PC2			
AR	290 28 35.65 SE	14 21 32.19	90.0015	243	612,305.1600	836,044.6800	237PC			
AR	291 20 06.61 SE	13 30 01.24	67.6801	241	612,326.5400	836,038.1600	235PC	JULY 26		
AR	295 44 06.08 SE	9 06 01.76	95.2793	237	612,298.2700	836,037.4300	231PC			
AR	299 26 49.87 SE	5 23 17.97	87.2154	236	612,305.5200	836,030.5500	230PC			
AR	298 07 37.37 SE	6 42 30.47	73.1911	242	612,319.6600	836,030.9100	236PC			

ROCKPORT HARBOR SURVEY NOTES FOR FIELD LOCATIONS

COORDINATE FILE: ROCKR LENGTH = 400 POINTS: TIME ON FILE: 8 47 54.43
PROBES ROCKPORT ***** JOB #0

********** COGO **********

FROM	TYPE	BEARING	DISTANCE	TO	NORTHING	EASTING	ELEVATION	DATE
RADIAL STAKE OUT - OCC.PT:				4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT				5	605,624.3200	838,054.7600	YACHT	JULY 29
AR 231 58 13.87	NE	50 15 58.77	91.3307	101	606,008.3700	838,115.7000		
AR 237 06 44.72	NE	55 24 29.62	125.8355	110	606,021.1100	838,148.6700		
RADIAL STAKE-OUT - OCC.PT:				4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT				5	605,624.3200	838,054.7600	YACHT	
AR 232 02 06.68	NE	50 19 51.58	147.7243	111	606,043.9700	838,158.7900		
AR 222 43 44.04	NE	41 01 28.94	138.4098	102	606,054.0900	838,135.9300		JULY 30
AR 228 17 13.75	NE	46 34 58.65	170.4778	112	606,066.8400	838,168.9100		
AR 225 25 50.85	NE	43 43 35.75	193.7739	113	606,089.7000	838,179.0200		
AR 218 11 59.34	NE	36 29 44.24	186.7640	103	606,099.8100	838,156.1600		
AR 223 11 37.52	NE	41 29 22.42	217.4544	114	606,112.5600	838,189.1400		
AR 215 33 14.48	NE	33 50 59.38	235.7374	104	606,145.4500	838,176.3900		
AR 221 23 53.65	NE	39 41 38.55	241.4012	115	606,135.4200	838,199.2600		
AR 219 55 34.53	NE	38 13 19.43	265.5359	116	606,158.2800	838,209.3700		
RADIAL STAKE OUT - OCC.PT:				4	605,949.6700	838,045.0800	TUNA	
BACKSIGHT				5	605,624.3200	838,054.7600	YACHT	
AR 218 42 02.20	NE	36 59 47.10	289.8307	117	606,181.1500	838,219.4900		
AR 213 48 15.64	NE	32 06 00.54	285.1896	105	606,191.2600	838,196.6300		JULY 31
AR 217 39 52.34	NE	35 57 37.24	314.2236	118	606,204.0100	838,229.6000		
AR 216 46 45.71	NE	35 04 30.61	338.7102	119	606,226.8700	838,239.7200		
AR 212 34 41.27	NE	30 52 26.17	334.7554	106	606,236.9900	838,216.8600		

RADIAL STAKE OUT - OCC.PT:				21	606,491.1477	838,356.6645	DH
BACKSIGHT				3	606,410.9400	838,141.4900	MOE
AR 314 18 43.55 SW	23 52 07.82	263.9962	120	606,249.7300	838,249.8400		
AR 314 18 47.72 SW	23 52 11.99	239.0003	121	606,272.5900	838,259.9500		
AR 314 18 44.05 SW	23 52 08.33	214.0004	122	606,295.4500	838,270.0700		

JULY 31

RADIAL STAKE OUT - OCC.PT:				21	606,491.1477	838,356.6645	DH
BACKSIGHT				3	606,410.9400	838,141.4900	MOE
AR 314 18 43.83 SW	23 52 08.10	188.9914	123	606,318.3200	838,280.1900		
AR 314 18 49.96 SW	23 52 14.23	163.9956	124	606,341.1800	838,290.3000		
AR 314 18 44.71 SW	23 52 08.99	138.9957	125	606,364.0400	838,300.4200		
AR 314 18 53.72 SW	23 52 17.99	113.9999	126	606,386.9000	838,310.5300		
AR 314 18 46.59 SW	23 52 10.86	89.0000	127	606,409.7600	838,320.6500		

AUGUST 2

RADIAL STAKE OUT - OCC.PT:				20	606,496.6993	838,331.7829	DH
BACKSIGHT				3	606,410.9400	838,141.4900	MOE
AR 318 07 43.57 SW	23 52 08.83	134.0000	109	606,374.1600	838,277.5600		
AR 318 07 43.42 SW	23 52 13.68	184.0089	108	606,328.4300	838,257.3200		
AR 318 07 46.70 SW	23 52 11.96	234.0046	107	606,282.7100	838,237.0900		

AUGUST 2

RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	STK
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 18 30 21.14 SW	85 34 24.08	242.5415	161	605,894.3000	838,495.3100	234
AR 14 53 50.87 SW	81 57 53.81	229.1476	169	605,880.9900	838,510.2300	242
AR 11 10 29.44 SW	78 14 32.38	248.7574	170	605,862.3300	838,493.5900	243
AR 19 17 28.85 SW	86 21 31.79	210.6833	168	605,899.6400	838,526.8700	241
AR 30 38 10.38 NW	82 17 46.68	178.5899	167	605,936.9600	838,560.1500	240
AR 46 01 10.75 NW	66 54 46.31	156.1980	166	605,974.2700	838,593.4400	239

AUGUST 5

RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	STK
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 73 08 58.17 NW	39 46 58.89	169.8563	153	606,043.5500	838,628.4400	226
AR 64 41 14.83 NW	48 14 42.23	148.0000	165	606,011.5800	838,626.7200	238
AR 83 21 02.38 NW	29 34 54.68	156.2350	164	606,048.8900	838,660.0000	237
AR 98 43 41.17 NW	14 12 15.89	178.6520	163	606,086.2100	838,693.2900	236
AR 104 51 47.59 NW	8 04 09.47	193.7584	162	606,104.8600	838,709.9300	235

AUGUST 6

RADIAL STAKE OUT - OCC.PT:			5	605,624.3200	838,054.7600	YACHT
BACKSIGHT			4	605,949.6700	838,045.0800	TUNA
AR 71 23 27.56 NE	69 41 12.46	328.6170	139	605,738.4000	838,362.9400	212
AR 73 39 09.89 NE	71 56 54.79	335.9141	148	605,728.4100	838,374.1400	221
AR 75 56 38.19 NE	74 14 23.09	314.5656	147	605,709.7600	838,357.5000	220
AR 78 33 56.67 NE	76 51 41.57	293.7904	146	605,691.1000	838,340.8600	219
AR 81 34 35.95 NE	79 52 20.85	273.7148	145	605,672.4500	838,324.2100	218

AUGUST 6

RADIAL STAKE OUT - OCC.PT:			5	605,624.3200	838,054.7600	YACHT
BACKSIGHT			4	605,949.6700	838,045.0800	TUNA
AR 73 34 51.99 NE	71 52 36.89	306.7581	138	605,719.7400	838,346.3000	211
AR 76 06 03.59 NE	74 23 48.49	285.4184	137	605,701.0900	838,329.6600	210
AR 79 01 24.58 NE	77 19 09.48	264.7168	136	605,682.4300	838,313.0200	209
AR 82 25 52.21 NE	80 43 37.11	244.8194	135	605,663.7700	838,296.3800	208
AR 86 25 19.42 NE	84 43 04.33	225.9395	134	605,645.1200	838,279.7400	207
AR 91 06 56.49 NE	89 24 41.39	208.3510	133	605,626.4600	838,263.1000	206
RADIAL STAKE OUT - OCC.PT:			16	605,913.0200	838,737.1280	
BACKSIGHT			5	605,624.3200	838,054.7600	YACHT
AR 101 19 42.88 NW	11 36 14.18	209.4407	149	606,118.1800	838,695.0000	222
AR 95 26 32.50 NW	17 29 24.56	195.5401	150	606,099.5200	838,678.3600	223
AR 88 44 19.85 NW	24 11 37.21	184.0017	151	606,080.8600	838,661.7200	224
AR 81 [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

AUGUST 7

AUGUST 7

RADIAL STAKE OUT - OCC.PT:		5	605,624.3200	838,054.7600	YACHT	
BACKSIGHT		4	605,949.6700	838,045.0800	TUNA	
AR 89 05 00.51 NE 87 22 45.41	236.4173	144	605,635.1300	838,290.9300	217	AUGUST 8
AR 99 08 44.24 SE 82 33 30.86	204.6133	143	605,597.8200	838,257.6500	216	
AR 105 20 01.16 SE 76 22 13.94	191.6468	142	605,579.1600	838,241.0100	215	
AR 110 28 21.70 SE 71 13 53.40	167.3063	130	605,570.4900	838,213.1700	203	
AR 118 47 08.94 SE 62 55 06.16	159.2279	129	605,551.8300	838,196.5300	202	
		141	605,560.5100	838,224.3700	214	
RADIAL STAKE OUT - OCC.PT:		16	605,913.0200	838,737.1280		
BACKSIGHT		5	605,624.3200	838,054.7600	YACHT	
AR 64 41 14.84 NW 48 14 42.22	167.9866	154	606,024.8900	838,611.8100	227	AUGUST 8
AR 56 13 14.31 NW 56 42 42.75	169.8462	155	606,006.2400	838,595.1500	228	
AR 48 06 31.91 NW 64 49 25.15	175.2680	156	605,987.5800	838,578.5100	229	
RADIAL STAKE OUT - OCC.PT:		16	605,913.0200	838,737.1280	STK	
BACKSIGHT		5	605,624.3200	838,054.7600	YACHT	
AR 40 37 33.60 NW 72 18 23.46	183.9600	157	605,968.9300	838,561.8700	230	AUGUST 9
AR 33 55 04.04 NW 79 00 53.02	195.4799	158	605,950.2700	838,545.2300	231	
AR 28 01 35.94 NW 84 54 21.12	209.3650	159	605,931.6100	838,528.5900	232	
AR 22 55 02.10 SW 89 59 05.04	225.1780	160	605,912.9600	838,511.9500	233	
RADIAL STAKE OUT - OCC.PT:		5	605,624.3200	838,054.7600	YACHT	
BACKSIGHT		4	605,949.6700	838,045.0800	TUNA	
AR 128 16 27.62 SE 53 25 47.48	169.7363	140	605,523.1900	838,191.0800	213	AUGUST 9
AR 127 46 20.59 SE 53 55 54.51	154.8032	128	605,533.1800	838,179.3900	201	
AR 103 03 52.10 SE 78 38 23.00	178.5481	131	605,589.1500	838,229.8100	204	
AR 96 37 46.43 SE 85 04 28.67	192.4105	132	605,607.8000	838,246.4600	205	

PIGEON COVE SURVEY NOTES FOR FIELD LOCATIONS

DATE

RADIAL STAKE OUT - OCC.PT: 41 612,033.8228 835,644.4288 PK
BACKSIGHT 172 612,107.2800 835,612.7400 PC2

AR	90	00	00.00	NE	66	39	54.20	102.9958	180	612,074.6200	835,739.0000	105PC
AR	79	00	48.26	NE	55	40	42.46	104.9190	179	612,092.9800	835,731.0800	104PC
AR	68	46	22.00	NE	45	26	16.20	110.4875	178	612,111.3500	835,723.1500	103PC
AR	52	09	47.37	NE	28	49	41.58	130.4088	176	612,148.0700	835,707.3100	101PC
AR	59	46	34.94	NE	36	26	29.14	119.1938	177	612,129.7100	835,715.2300	102PC
AR	56	57	24.11	NE	33	37	18.31	146.7222	181	612,156.0000	835,725.6700	106PC
AR	60	46	30.20	NE	37	26	24.40	163.8526	188	612,163.9200	835,744.0400	113PC
AR	63	51	26.47	NE	40	31	20.68	181.5653	195	612,171.8400	835,762.4000	120PC
AR	66	23	16.58	NE	43	03	10.78	199.7163	202	612,179.7600	835,780.7700	127PC

JULY 11+12

RADIAL STAKE OUT - OCC.PT: 41 612,033.8228 835,644.4288 PK
BACKSIGHT 172 612,107.2800 835,612.7400 PC2

AR	90	00	00.00	NE	66	39	54.20	182.9997	206	612,106.3100	835,812.4600	131PC
AR	90	00	06.21	NE	66	40	00.41	162.9911	201	612,098.3800	835,794.0900	126PC
AR	90	00	06.62	NE	66	40	00.82	142.9957	194	612,090.4600	835,775.7300	119PC
AR	90	00	00.53	NE	66	39	54.73	122.9912	187	612,082.5400	835,757.3600	112PC
AR	80	45	57.75	NE	57	25	51.95	124.6062	186	612,100.9000	835,749.4400	111PC
AR	76	17	30.12	NE	52	57	24.33	126.6019	185	612,110.0900	835,745.4800	110PC
AR	71	59	05.51	NE	48	38	59.71	129.3365	184	612,119.2700	835,741.5200	109PC
AR	67	52	42.40	NE	44	32	36.60	132.7695	183	612,128.4500	835,737.5600	108PC

JULY 15

RADIAL STAKE OUT - OCC.PT: 41 612,033.8228 835,644.4288 PK
BACKSIGHT 172 612,107.2800 835,612.7400 PC2

AR	63	59	52.03	NE	40	39	46.24	136.8482	182	612,137.6300	835,733.6000	107PC
AR	67	14	18.96	NE	43	54	13.16	155.0675	189	612,145.5500	835,751.9600	114PC
AR	69	47	21.35	NE	46	27	15.56	173.6849	196	612,153.4800	835,770.3200	121PC
AR	71	50	49.39	NE	48	30	43.60	192.5805	203	612,161.4000	835,788.6900	128PC
AR	77	40	16.45	NE	54	20	10.65	187.3108	204	612,143.0300	835,796.6100	129PC
AR	76	12	48.35	NE	52	52	42.56	167.8309	198	612,135.1100	835,778.2500	123PC
AR	74	22	18.97	NE	51	02	13.17	148.4804	191	612,127.1900	835,759.8800	116PC
AR	70	43	39.97	NE	47	23	34.17	151.4801	190	612,136.3700	835,755.9200	115PC
AR	72	56	54.96	NE	49	36	49.16	170.4903	197	612,144.2900	835,774.2900	122PC

JULY 16

RADIAL STAKE OUT - OCC.PT:			41	612,033.8228	835,644.4288		
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 79 34 19.51 NE	56 14 13.71	165.7329	199	612,125.9300	835,782.2100	124PC	
AR 78 09 01.35 NE	54 48 55.55	146.1045	192	612,118.0100	835,763.8400	117PC	
AR 82 02 10.29 NE	58 42 04.49	144.3833	193	612,108.8300	835,767.8000	118PC	JULY 17
AR 83 00 17.01 NE	59 40 11.21	164.2178	200	612,116.7500	835,786.1700	125PC	
AR 83 45 46.10 NE	60 25 40.31	184.0804	205	612,124.6700	835,804.5300	130PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 333 55 32.06 SW	29 05 24.22	390.8193	257	612,050.8300	835,832.3500	251PC	JULY 17
AR 331 01 16.32 SW	26 11 08.48	393.1049	244	612,039.5900	835,848.8900	238PC	
AR 333 39 01.81 SW	28 48 53.96	370.9053	258	612,067.3700	835,843.5900	252PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 330 35 36.07 SW	25 45 28.23	373.3123	245	612,056.1300	835,860.1300	239PC	
AR 330 07 05.96 SW	25 16 58.12	353.5348	246	612,072.6800	835,871.3700	240PC	JULY 18
AR 333 20 13.98 SW	28 30 06.13	351.0799	259	612,083.8200	835,854.8300	253PC	
AR 327 31 59.99 SW	22 41 52.14	274.7810	250	612,138.8500	835,916.3300	244PC	
AR 331 40 27.31 SW	26 50 19.46	271.5065	263	612,150.0900	835,899.7800	257PC	

RADIAL STAKE OUT - OCC.PT:			39	612,092.2180	835,984.9919	DH	
BACKSIGHT			174	612,392.3500	836,022.3600	PC4	
AR 266 52 02.94 NW	86 02 07.42	119.2072	260	612,100.4600	835,866.0700	254PC	
AR 275 51 47.91 NW	77 02 22.45	110.4968	261	612,117.0000	835,877.3100	255PC	
AR 318 18 38.93 NW	34 35 31.44	110.4961	265	612,183.1800	835,922.2600	259PC	JULY 19
AR 308 04 22.15 NW	44 49 48.21	104.9237	264	612,166.6300	835,911.0200	258PC	
AR 327 18 32.89 NW	25 35 37.47	119.1977	266	612,199.7200	835,933.5000	260PC	
AR 334 55 28.28 NW	17 58 42.09	130.4095	267	612,216.2600	835,944.7400	261PC	
AR 341 14 35.72 NW	11 39 34.65	143.5542	268	612,232.8100	835[redacted]5.9[redacted]	26[redacted]	

AR 318 18 38.93 NW	34 35 31.44	110.4961	265	612,183.1800	835,922.2600	259PC	JULY 19
AR 308 04 22.15 NW	44 49 48.21	104.9237	264	612,166.6300	835,911.0200	258PC	
AR 327 18 32.89 NW	25 35 37.47	119.1977	266	612,199.7200	835,933.5000	260PC	
AR 334 55 28.28 NW	17 58 42.09	130.4095	267	612,216.2600	835,944.7400	261PC	
AR 341 14 35.72 NW	11 39 34.65	143.5542	268	612,232.8100	835,955.9800	262PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 328 18 33.57 SW	23 28 25.72	294.4042	249	612,122.3100	835,905.0900	243PC	
AR 328 59 14.94 SW	24 09 07.09	314.0838	248	612,105.7600	835,893.8500	242PC	
AR 329 35 10.74 SW	24 45 02.89	333.7931	247	612,089.2200	835,882.6100	241PC	
AR 325 55 18.74 SW	21 05 10.90	153.2626	269	612,249.3500	835,967.2200	263PC	JULY 22
AR 318 53 08.66 SW	14 03 00.82	158.9967	256	612,238.1100	835,983.7600	250PC	
AR 320 53 07.23 SW	16 02 59.39	155.2410	211	612,243.1600	835,979.4400	205PC	
AR 321 06 17.04 SW	16 16 09.20	177.9040	255	612,221.5700	835,972.5200	249PC	
AR 322 53 39.70 SW	18 03 31.86	197.0363	254	612,205.0200	835,961.2800	248PC	
AR 324 21 51.97 SW	19 31 44.13	216.3139	253	612,188.4800	835,950.0500	247PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 312 52 59.21 SW	8 02 51.37	94.2885	228	612,298.9900	836,009.1600	222PC	
AR 317 58 05.02 SW	13 07 57.18	88.4225	227	612,306.2400	836,002.2700	221PC	
AR 323 43 21.45 SW	18 53 13.61	83.3476	226	612,313.4900	835,995.3800	220PC	JULY 23
AR 337 10 32.71 SW	32 20 24.87	76.1759	225	612,327.9900	835,981.6100	219PC	
AR 352 23 49.17 SW	47 33 41.33	73.8887	224	612,342.4900	835,967.8300	218PC	
AR 352 47 54.67 SW	47 57 46.83	53.8970	231	612,356.2600	835,982.3300	225PC	
AR 332 16 22.22 SW	27 26 14.37	56.9906	232	612,341.7700	835,996.1000	226PC	
AR 315 41 27.58 SW	10 51 19.74	66.2658	233	612,327.2700	836,009.8800	227PC	

RADIAL STAKE OUT - OCC.PT:			174	612,392.3500	836,022.3600	PC4	
BACKSIGHT			172	612,107.2800	835,612.7400	PC2	
AR 323 57 22.28 SW	24 07 14.43	101.5025	219	612,299.7100	835,980.8800	213PC	
AR 352 00 47.61 SW	47 10 39.77	113.8840	212	612,314.9400	835,938.8300	206PC	
AR 352 09 43.18 SW	47 19 35.34	93.8892	217	612,328.7100	835,953.3300	211PC	
AR 340 04 01.89 SW	35 13 54.05	95.7731	218	612,314.1200	835,967.1100	212PC	
AR 342 01 48.64 SW	37 11 40.79	115.3799	213	612,300.4400	835,952.6100	207PC	
AR 332 35 00.24 SW	27 44 52.39	120.2366	214	612,285.9400	835,966.3800	208PC	
AR 323 56 14.20 SW	19 06 06.36	105.7000	220	612,292.4700	835,987.7700	214PC	JULY 24
AR 319 19 57.55 SW	14 29 49.71	110.6532	221	612,285.2200	835,994.6600	215PC	
AR 315 08 49.09 SW	10 18 41.25	116.2576	222	612,277.9700	836,001.5500	216PC	
AR 311 21 51.65 SW	6 31 43.81	122.4239	223	612,270.7200	836,008.4400	217PC	
AR [redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	

AP	342	01	48.64	SW	37	11	40.79	115.3799	213	612,300.4400	835,952.6100 207PC
AR	332	35	00.24	SW	27	44	52.39	120.2366	214	612,285.9400	835,966.3800 208PC
AR	323	56	14.20	SW	19	06	06.36	105.7000	220	612,292.4700	835,987.7700 214PC
AR	319	19	57.55	SW	14	29	49.71	110.6532	221	612,285.2200	835,994.6600 215PC
AR	315	08	49.09	SW	10	18	41.25	116.2576	222	612,277.9700	836,001.5500 216PC
AR	311	21	51.65	SW	6	31	43.81	122.4239	223	612,270.7200	836,008.4400 217PC
AR	316	41	19.56	SW	11	51	11.72	138.3603	216	612,256.9400	835,993.9400 210PC
AR	324	04	31.86	SW	19	14	24.02	128.0628	215	612,271.4400	835,980.1600 209PC
AR	327	39	53.94	SW	22	49	46.09	146.1379	210	612,257.6600	835,965.6600 204PC

JULY 24

RADIAL STAKE OUT - OCC.PT:									174	612,392.3500	836,022.3600 PC4
BACKSIGHT									172	612,107.2800	835,612.7400 PC2
AR	304	31	57.82	SE	0	18	10.02	107.8615	230	612,284.4900	836,022.9300 224PC
AR	308	25	27.32	SW	3	35	19.48	100.8077	229	612,291.7400	836,016.0500 223PC
AR	303	53	58.65	SE	0	56	09.19	79.5906	235	612,312.7700	836,023.6600 229PC
AR	309	15	17.33	SW	4	25	09.48	72.5457	234	612,320.0200	836,016.7700 228PC
AR	302	34	51.69	SE	2	15	16.15	51.3497	240	612,341.0400	836,024.3800 234PC
AR	322	33	11.05	SW	17	43	03.21	38.6429	239	612,355.5400	836,010.6000 233PC
AR	353	41	10.14	SW	48	51	02.30	33.9045	238	612,370.0400	835,996.8300 232PC
AR	351	54	20.74	SW	47	04	12.90	133.8861	207	612,301.1600	835,924.3300 201PC
AR	343	23	43.27	SW	38	33	35.43	135.1608	208	612,286.6600	835,938.1100 202PC
AR	335	13	10.31	SW	30	23	02.47	139.3257	209	612,272.1600	835,951.8900 203PC
AR	332	10	34.65	SW	27	20	26.81	291.3461	262	612,133.5500	835,888.5500 256PC
AR	326	38	17.42	SW	21	48	09.58	255.2160	251	612,155.3900	835,927.5700 245PC
AR	325	35	43.95	SW	20	45	36.10	235.7142	252	612,171.9400	835,938.8100 246PC
RADIAL STAKE OUT - OCC.PT:									174	612,392.3500	836,022.3600 PC4
BACKSIGHT									172	612,107.2800	835,612.7400 PC2
AR	290	28	35.65	SE	14	21	32.19	90.0015	243	612,305.1600	836,044.6800 237PC
AR	291	20	06.61	SE	13	30	01.24	67.6801	241	612,326.5400	836,038.1600 235PC
AR	295	44	06.08	SE	9	06	01.76	95.2793	237	612,298.2700	836,037.4300 231PC
AR	299	26	49.87	SE	5	23	17.97	87.2154	236	612,305.5200	836,030.5500 230PC
AR	298	07	37.37	SE	6	42	30.47	73.1911	242	612,319.6600	836,030.9100 236PC

JULY 25

JULY 26