



AVILES
ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

BORING 91-205

TYPE D & R100 3"Core LOCATION See Plan

PLATE

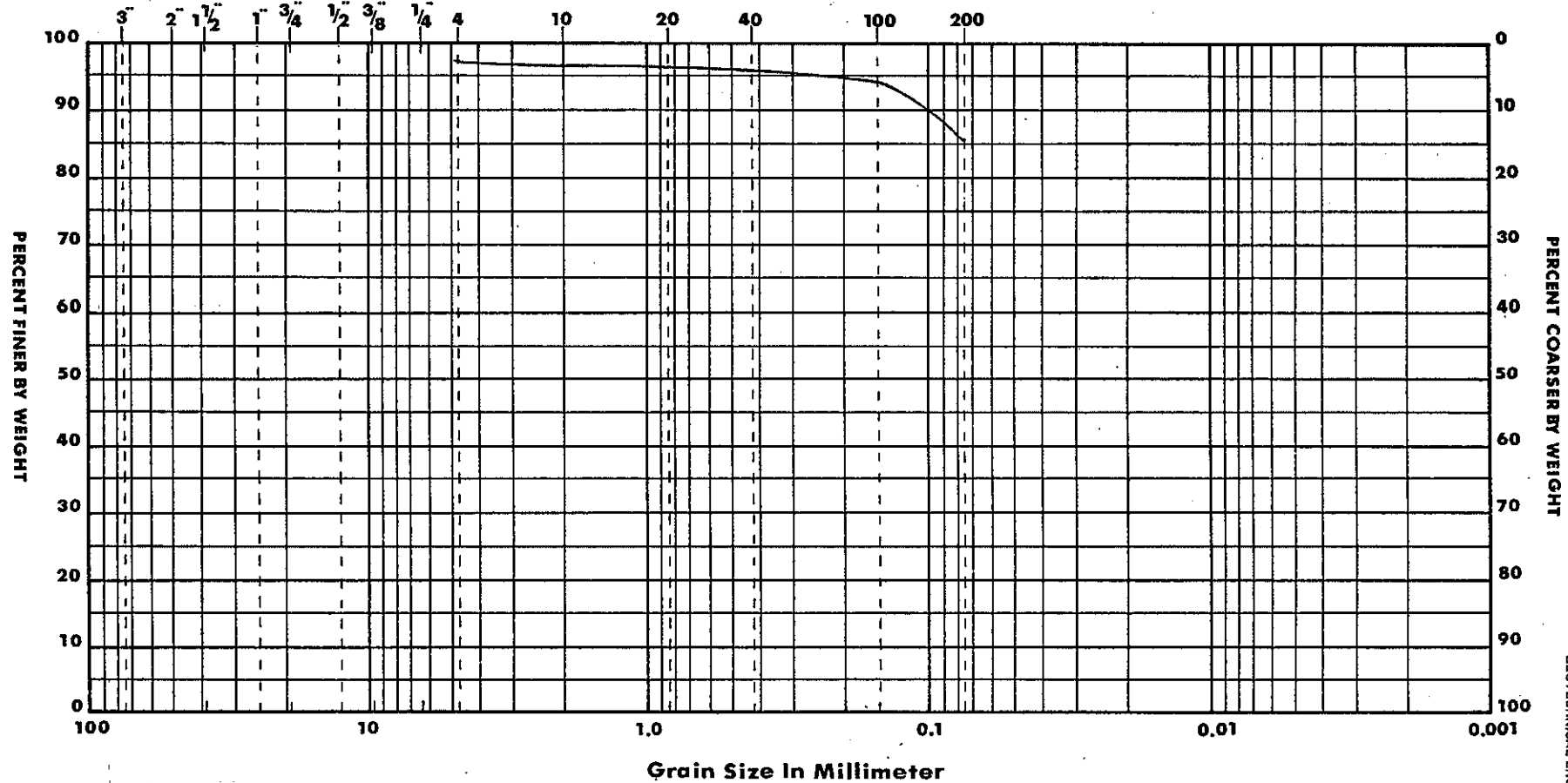


PROJECT: SALT BAYOU WATER CONTROL STRUCTURE

[illegible]

GRAIN SIZE CURVES

U.S. STANDARD SIEVE SIZES



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Curve No.

Boring No.

Depth, Ft.

Material

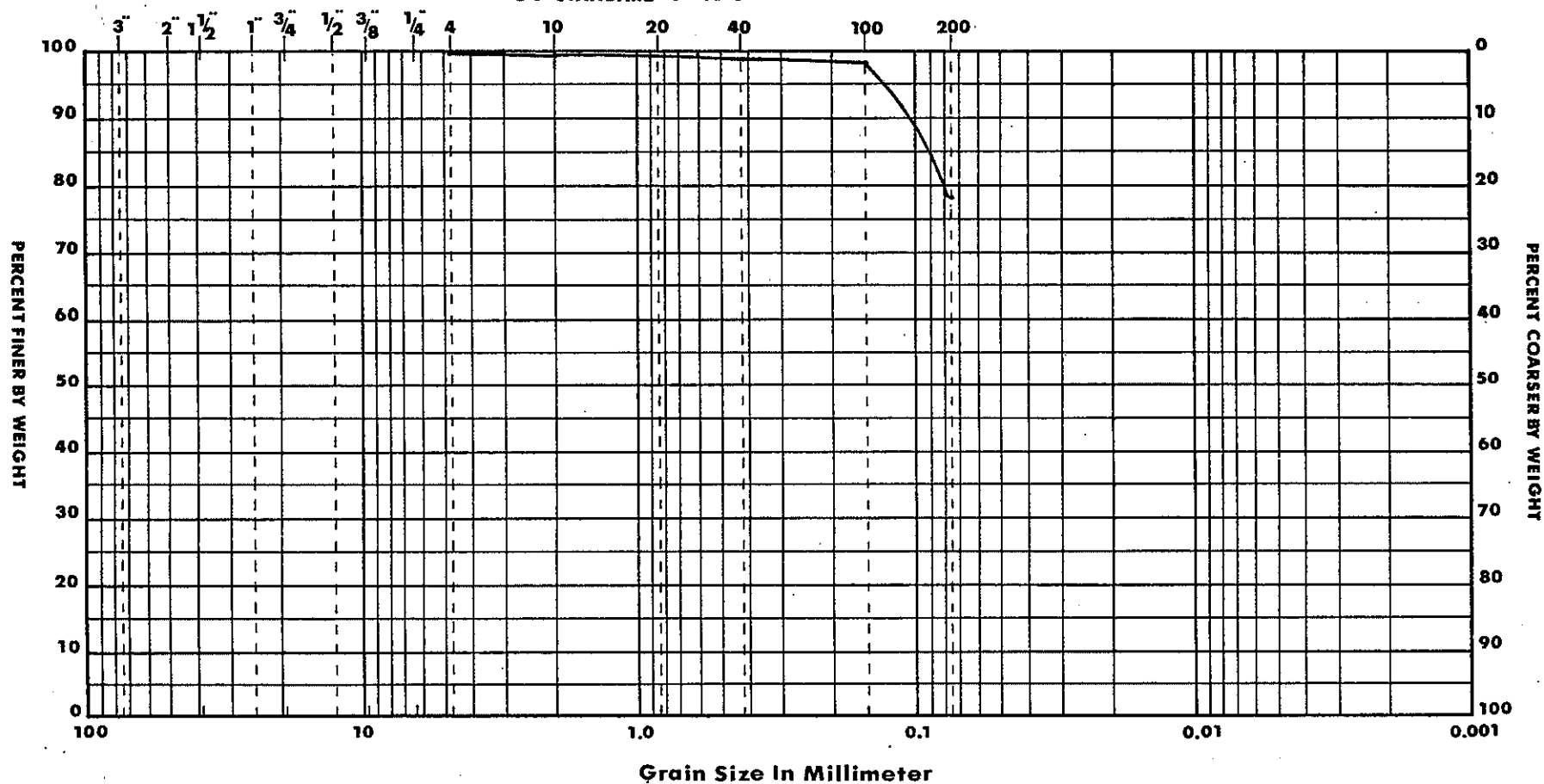
91-205

1'-3'

Very soft dark gray silty clay (OH)
w/ sand partings, shells

GRAIN SIZE CURVES

U S STANDARD SIEVE SIZES



GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Curve No.

Boring No.

Depth, Ft.

Material

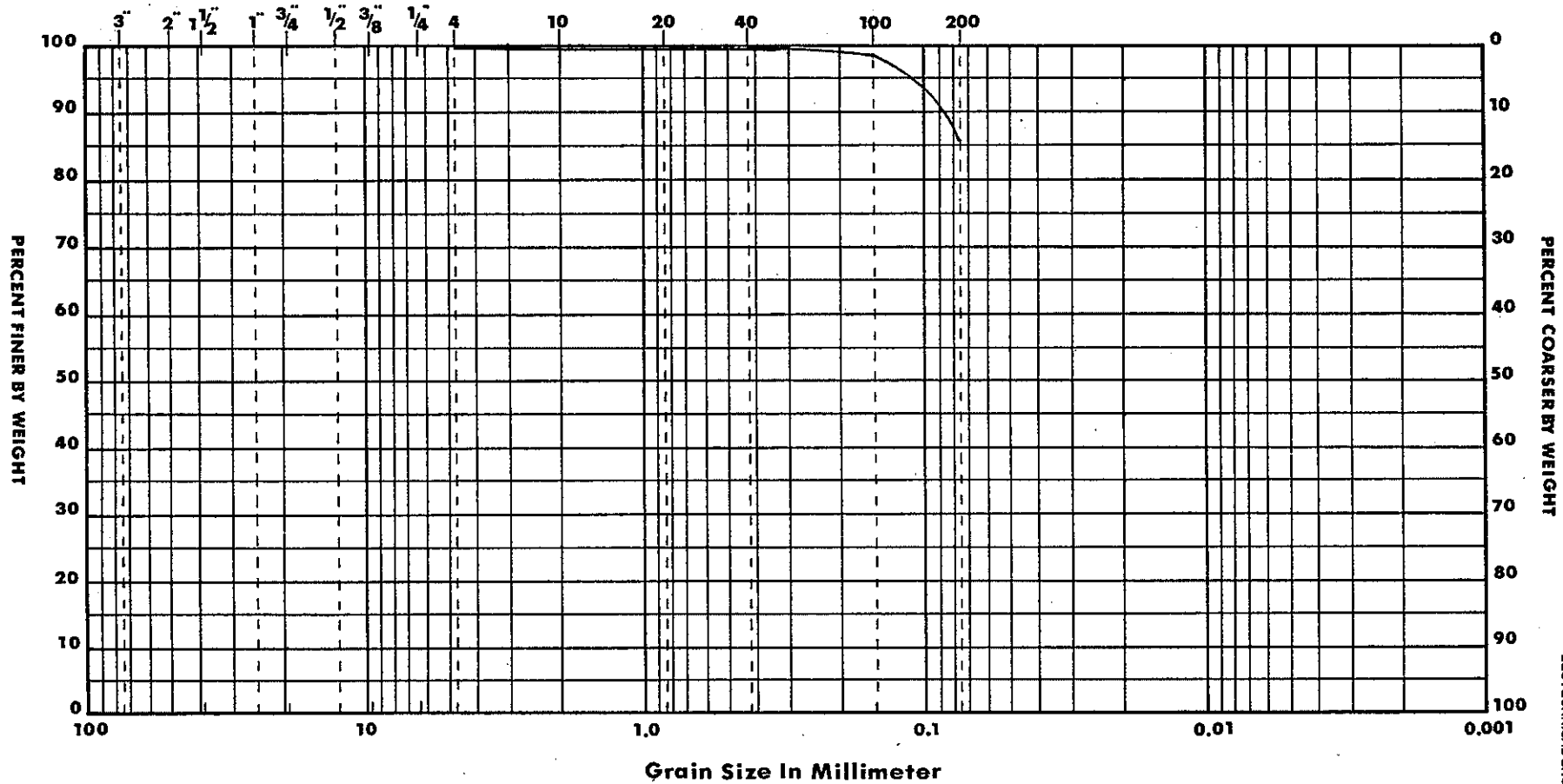
91-205

5'-7'

Very soft dark gray silty clay (OH)
w/ sand partings

GRAIN SIZE CURVES

U.S. STANDARD SIEVE SIZES



AVILES
ENGINEERING CORP.
GEOTECHNICAL ENGINEERS

GRAVEL		SAND			SILT	CLAY
COARSE	FINE	COARSE	MEDIUM	FINE		

Curve No.

Boring No.

Depth, Ft.

Material

91-205

11'-13'

Medium tan & gray clay (CH)

Review of Aviles Report
on Salt Bayou Water Control Structure

1. The plates showing description of materials, moisture content, unit dry weight, shear strength and atterberg limits are somewhat misleading. The presentation of unconfined compressive stress as a shear strength does ^{not} ~~not~~ appear appropriate. Shear strength is usually taken as one half the unconfined compressive stress.
2. A comparison of the plots of pocket penetrometer readings with those shown on the driller's log appears to indicate that most if not all of the field readings were used on the plots. The contracts states: "The consistency of undisturbed cohesive materials shall be determined in the laboratory by taking pocket penetrometer readings in accordance with procedures outlined in Paragraph 8.6." Were pocket penetrometer readings taken in the laboratory?
3. A number of the torvane readings shown on the plots indicate no shear strength. What in fact were the torvane readings? A tabulation of the torvane readings should have been presented on the Summary of Laboratory Test Data.
4. The moisture - density relationship does not appear reasonable for some samples. Sample 6 from Boring No. 91-202 and

Sample 2 from Borings No. 91-206 appears to have this unreasonable relationship.