

RESULTS OF TRIAXIAL TESTS

FOR

PROPOSED RESERVOIR,  
HAVANT WHICKET,  
HAMPSHIRE.

FOR

PORTSMOUTH AND GOSPORT WATER COMPANY,  
26 & 28 COMMERCIAL ROAD,  
PORTSMOUTH,  
HAMPSHIRE.

PRE-PILING SURVEYS LTD.,  
WEARE WORKS,  
PETERBOROUGH,  
NORTHAMPTONSHIRE.

EDGAR MORTON & PARTNER,  
CONSULTING ENGINEERING  
GEOLOGISTS,  
STYPERSON HOUSE,  
ADLINGTON,  
MACCLESFIELD,  
CHESHIRE.

PORTSMOUTH & GOSPORT WATER CO.  
HAVANT THICKET  
SUMMARY OF TRIAXIAL TEST RESULTS

| BORE | TUBE NO. | DEPTH              | MOISTURE CONT. % | BULK DENSITY LBS/CU.FT. | DRY DENSITY LBS/CU.FT. | TRUE COHESION LBS/SQ.FT. | $\phi^\circ$ | DESCRIPTION                                                           |
|------|----------|--------------------|------------------|-------------------------|------------------------|--------------------------|--------------|-----------------------------------------------------------------------|
| 3    | 151      | 1'6" - 3'0" B.S.   | 20.15            | 128.4                   | 106.9                  | 605                      | 24½          | GREY & BROWN MOTTLED CLAY WITH WATER-WORN PEBBLES.                    |
| 3    | 167      | 4'6" - 6'0" B.S.   | 32.0             | 116.6                   | 88.4                   | 1008                     | 16           | LIGHT BROWN & GREY MOTTLED CLAY, WITH SELENITE CRYSTALS & ROOTS       |
| 3    | 173      | 7'6" - 9'0" B.S.   | 35.6             | 115.4                   | 85.1                   | NIL                      | 27           | LIGHT BROWN MOTTLED CLAY.                                             |
| 3    | 176      | 10'6" - 12'0" B.S. | 26.9             | 121.6                   | 95.3                   | 720                      | 28½          | GREY-BLACK CLAY WITH POCKETS OF FINE SAND.                            |
| 3    | 162      | 13'6" - 15'0" B.S. | 28.0             | 122.0                   | 95.4                   | 980                      | 23           | DARK GREY-BROWN HIGHLY FISSURED CLAY. TRACES OF FINE SAND & CRYSTALS. |
| 3    | 179      | 16'6" - 18'0" B.S. | 26.5             | 122.3                   | 96.8                   | NIL                      | 34           | DARK GREY-BROWN FISSURED CLAY. TRACE OF SILT.                         |
| 3    | 174      | 25'6" - 27'0" B.S. | 24.5             | 125.7                   | 100.9                  | 1585                     | 29           | HIGHLY FISSURED BROWN CLAY WITH TRACES OF BLACK SILT.                 |
| 3    | 183      | 28'6" - 30'0" B.S. | 18.0             | 125.2                   | 106.0                  | NIL                      | 34           | SLIGHTLY FISSURED GREY-BROWN CLAY WITH SILT & FINE SAND DEPOSITS.     |
| 3    | 206      | 37'6" - 39'0" B.S. | 10.4             | 140.4                   | 127.3                  | 2740                     | 19           | BLUE-GREY & PINK MOTTLED CLAY. VIEWS OF RED-BROWN SANDY CLAY.         |
| 4    | 194      | 16'6" - 18'0" B.S. | 30.3             | 121.8                   | 93.5                   | 720                      | 26½          | HIGHLY FISSURED GREY-BROWN CLAY. SMALL SELENITE CRYSTALS.             |
| 4    | 193      | 25'6" - 27'0" B.S. | 25.9             | 122.4                   | 97.3                   | 1370                     | 24           | SLIGHTLY FISSURED GREY CLAY WITH TRACE OF SILT.                       |
| 5    | 199      | 1'6" - 3'0" B.S.   | 33.3             | 111.8                   | 84.0                   | 950                      | 14           | LIGHT BLUE, GREY & BROWN MOTTLED CLAY WITH ROOTS.                     |
| 5    | 172      | 11'6" - 13'0" B.S. | 29.8             | 116.8                   | 89.9                   | NIL                      | 31           | HIGHLY FISSURED FRIABLE GREY-BROWN CLAY, WITH PERIODS DISCOLOURATION. |
| 5    | 188      | 16'6" - 18'0" B.S. | 28.4             | 120.1                   | 93.5                   | NIL                      | 31           | DARK GREY FISSURED CLAY WITH SLIGHT SILT CONTENT.                     |

NOTE: MOISTURE CONTENT AND BULK DENSITY ARE BASED ON THE AVERAGE OF THREE SAMPLES. COHESION AND  $\phi$  VALUES ARE TAKEN FROM THE RESULT SHEETS; ALLOWANCE IS THEREFORE MADE FOR PORE WATER PRESSURE.

IN THE RESULT SHEETS THE FOLLOWING SYMBOLS ARE USED:-

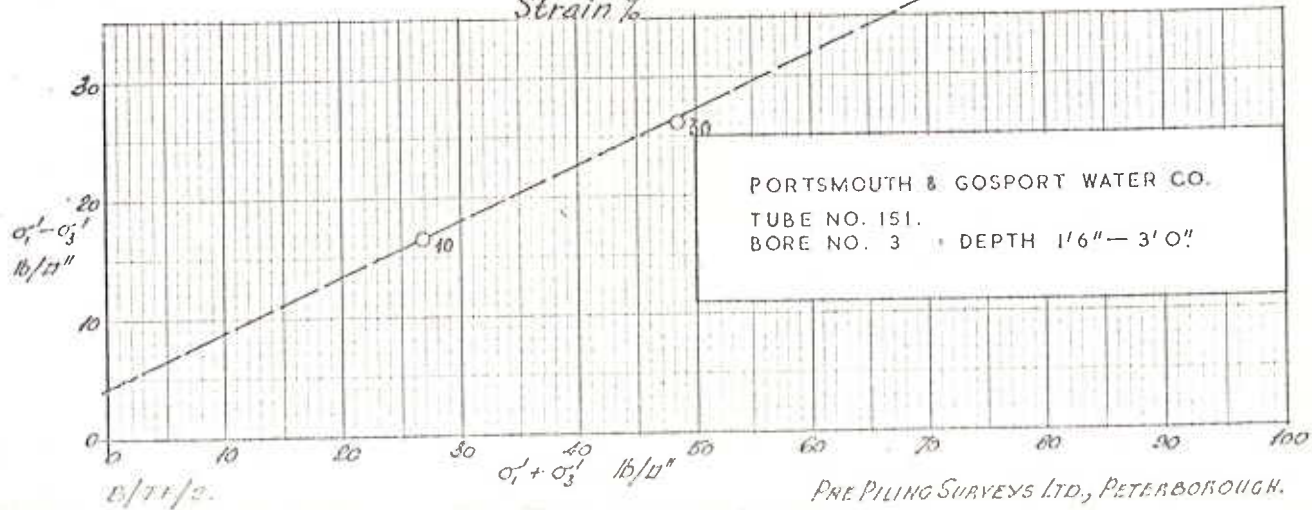
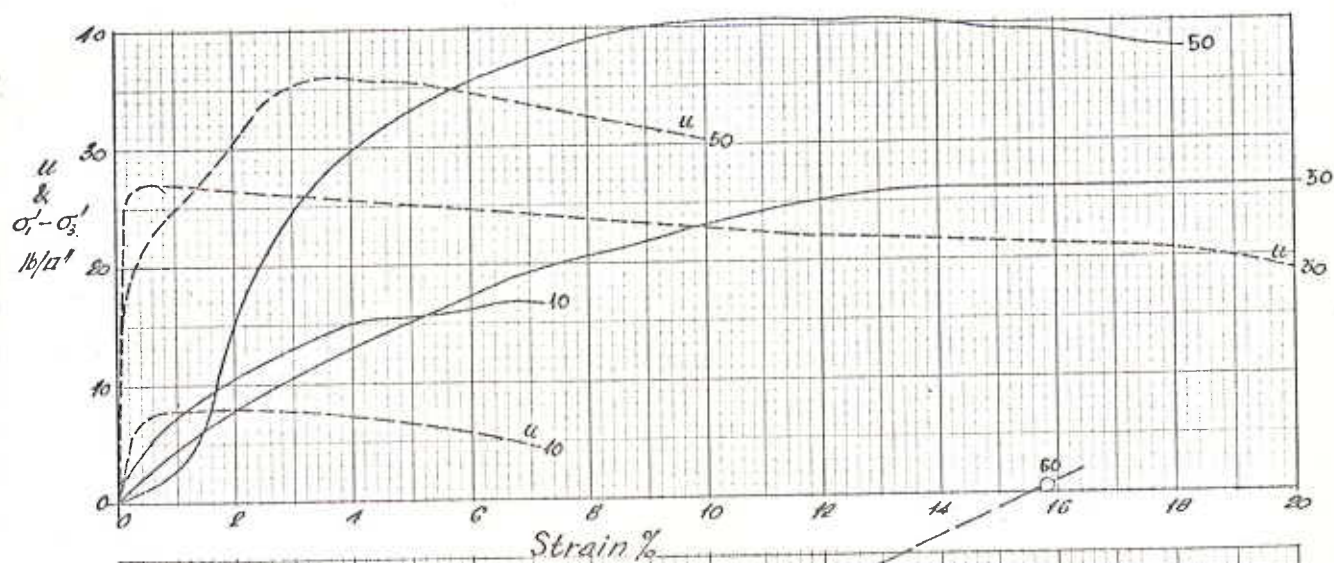
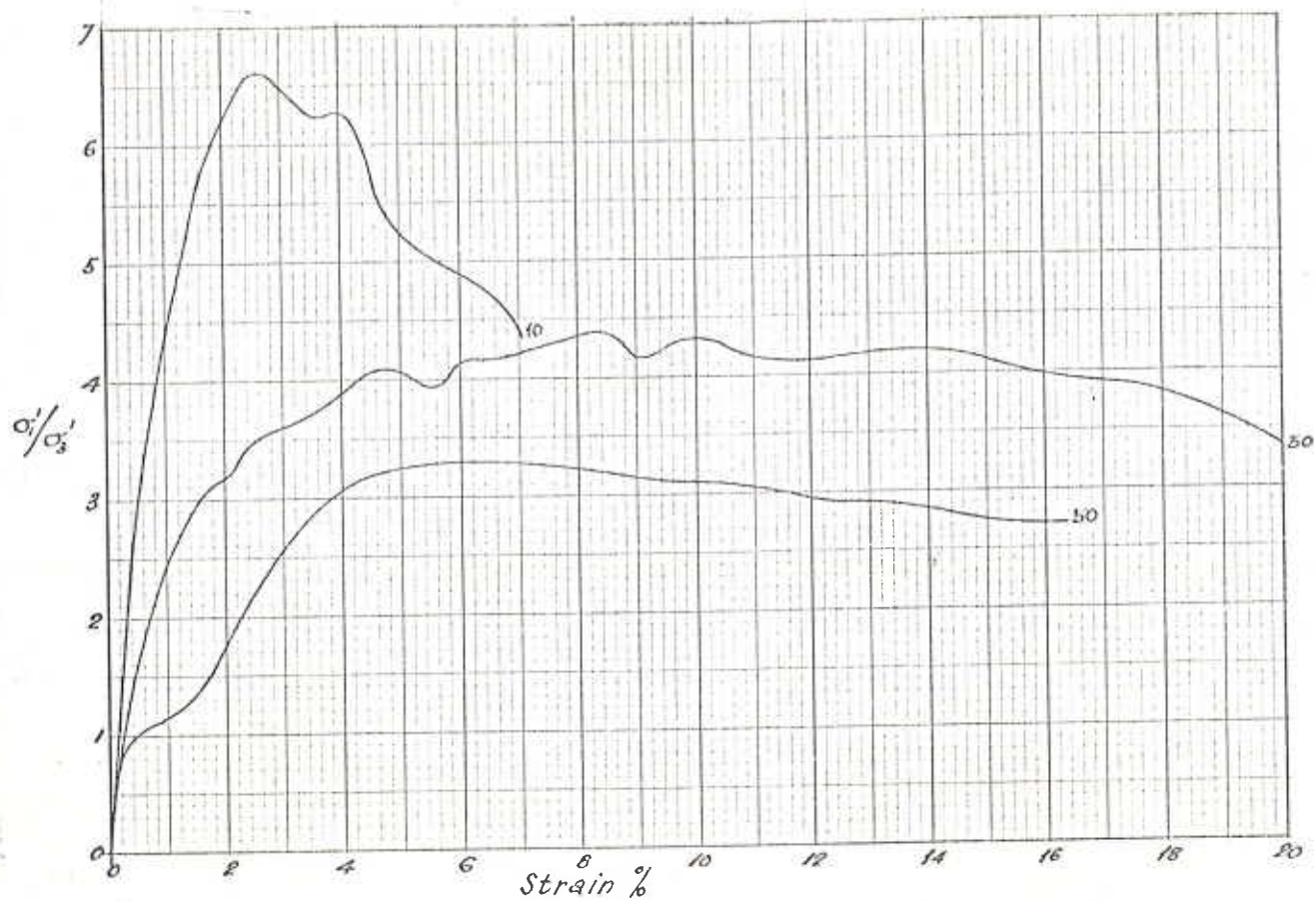
$u$  = PORE WATER PRESSURE.

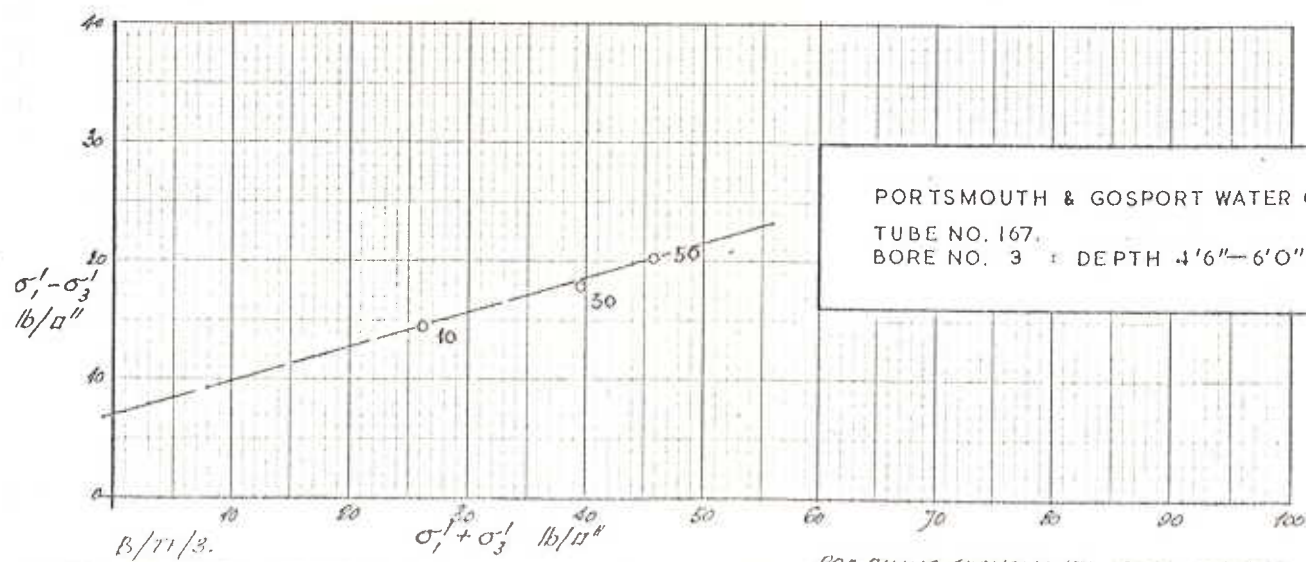
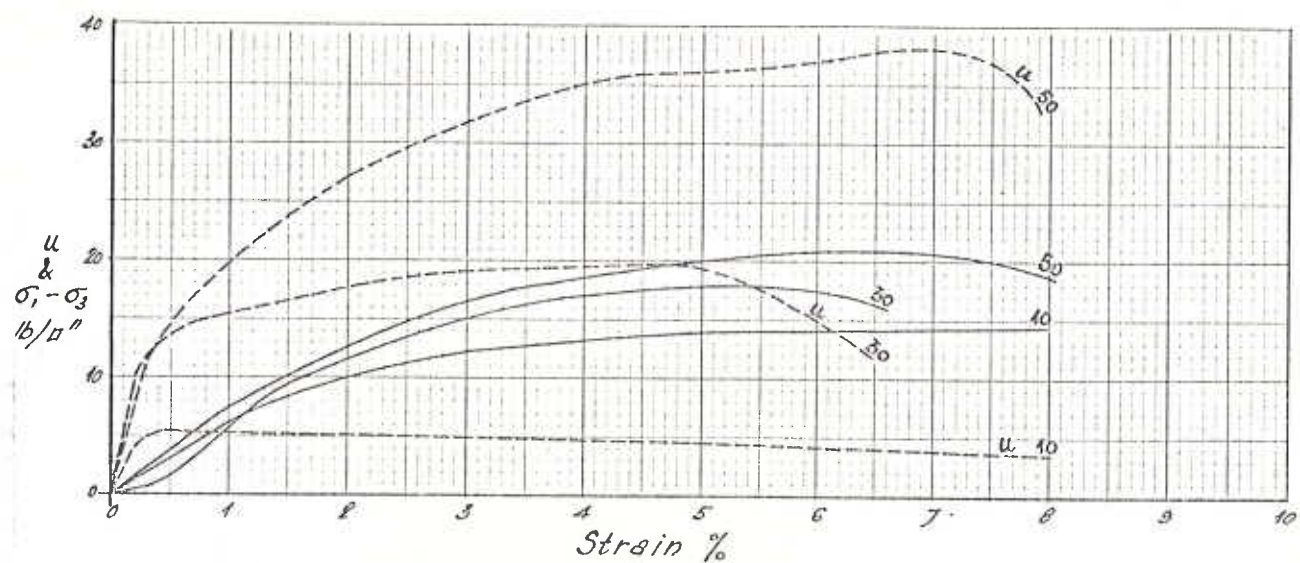
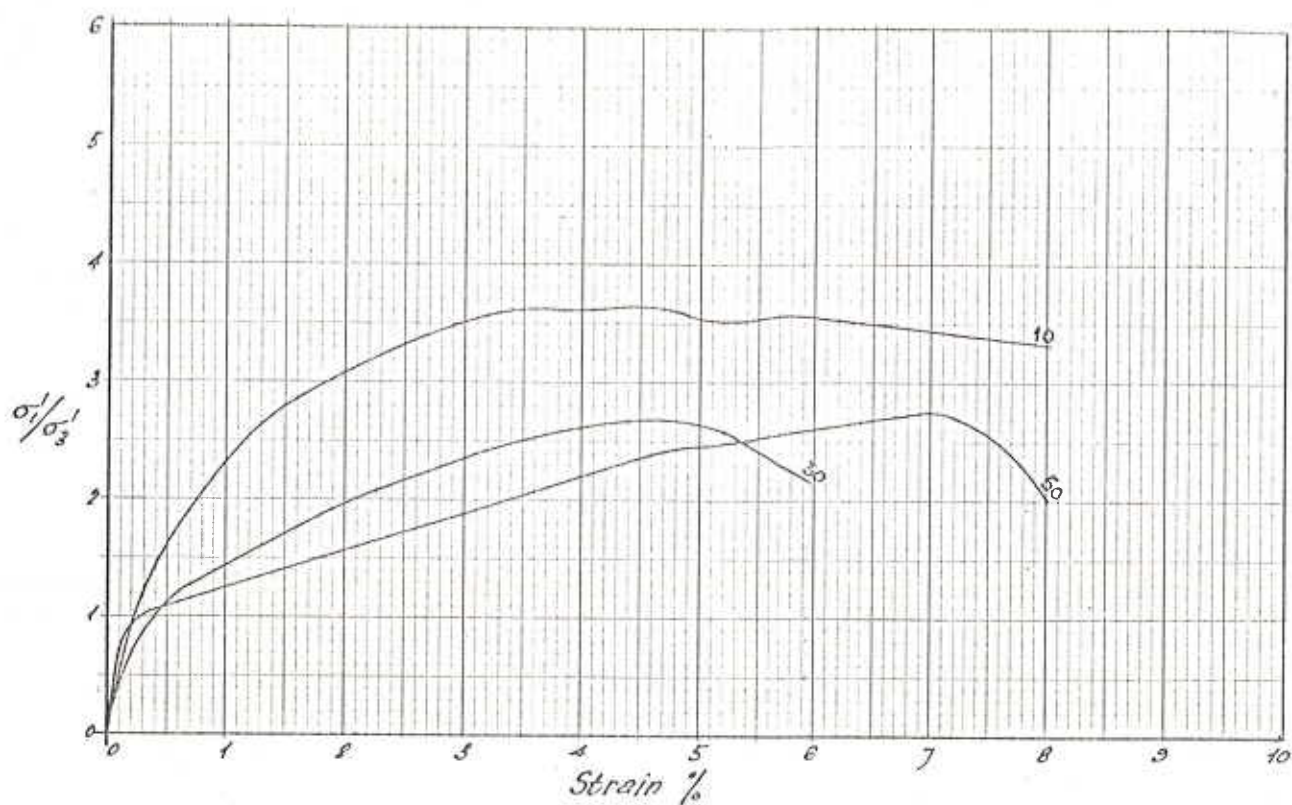
$\sigma_1'$  = DEVIATOR STRESS.

$\sigma_3$  = CELL PRESSURE.

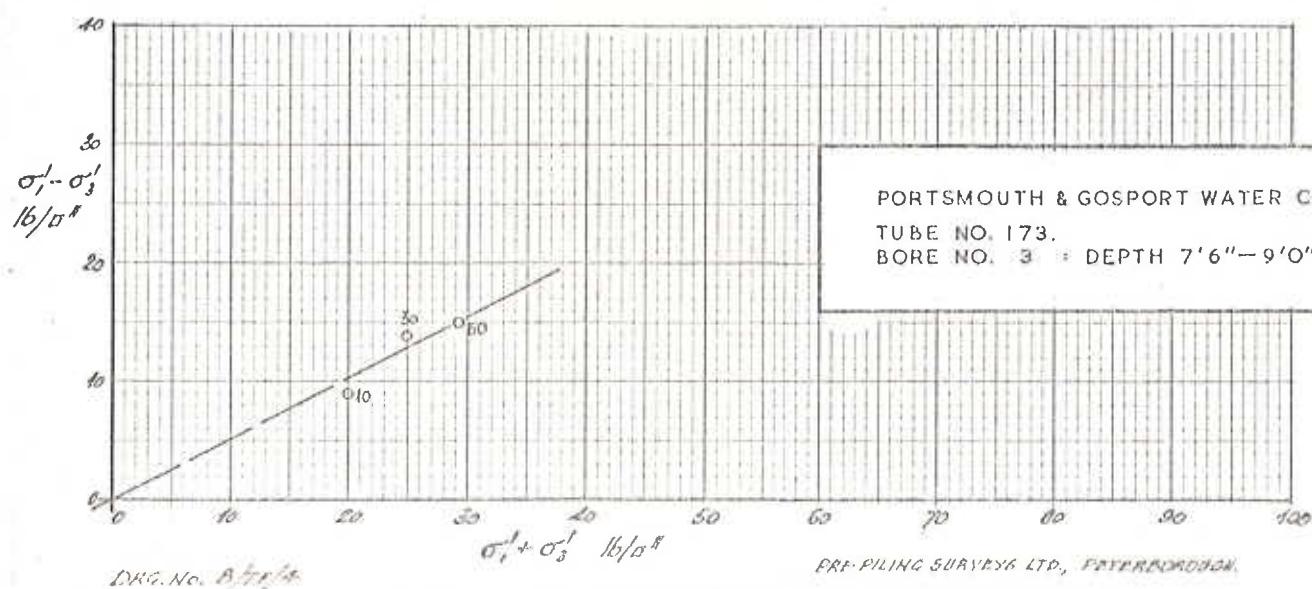
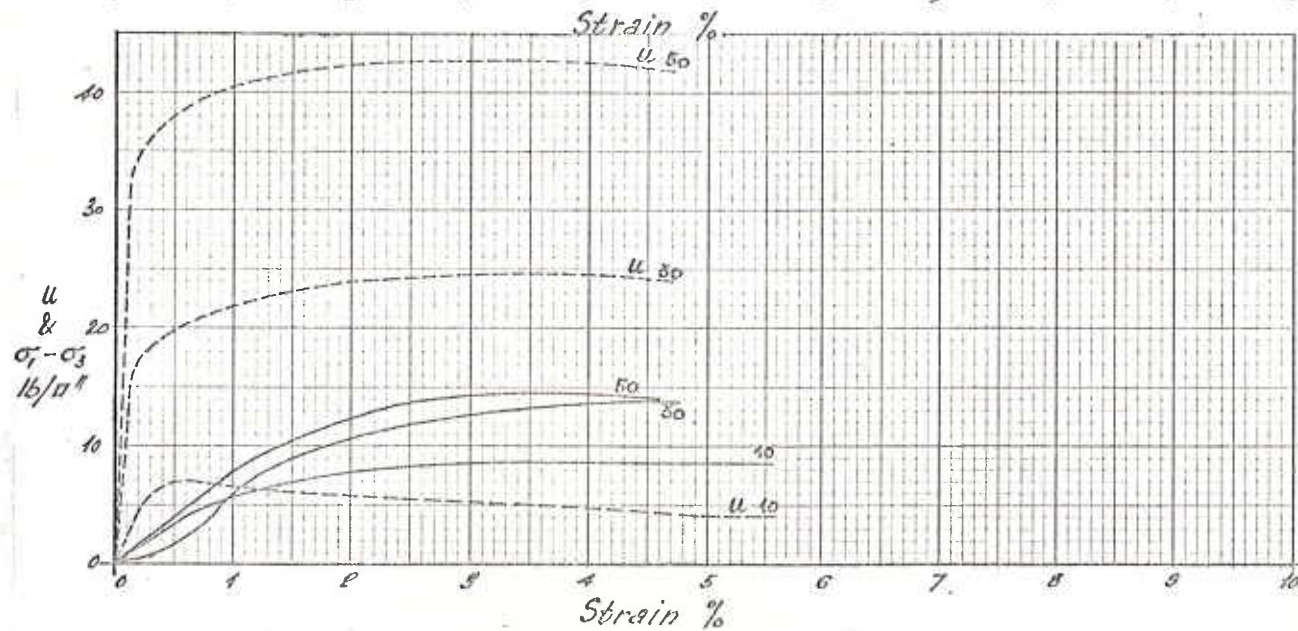
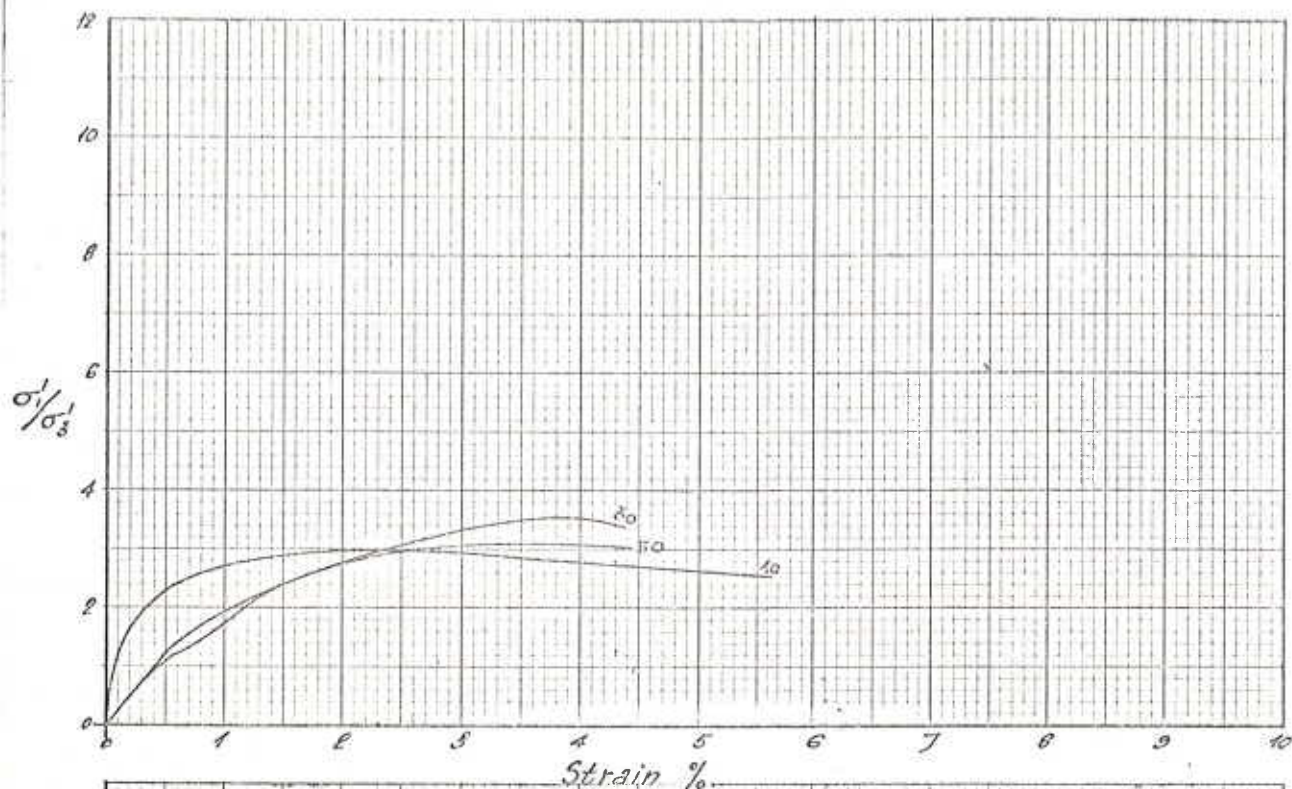
$\sigma_1'$  = DEVIATOR STRESS MINUS PORE WATER PRESSURE

$\sigma_3$  = CELL PRESSURE " " "





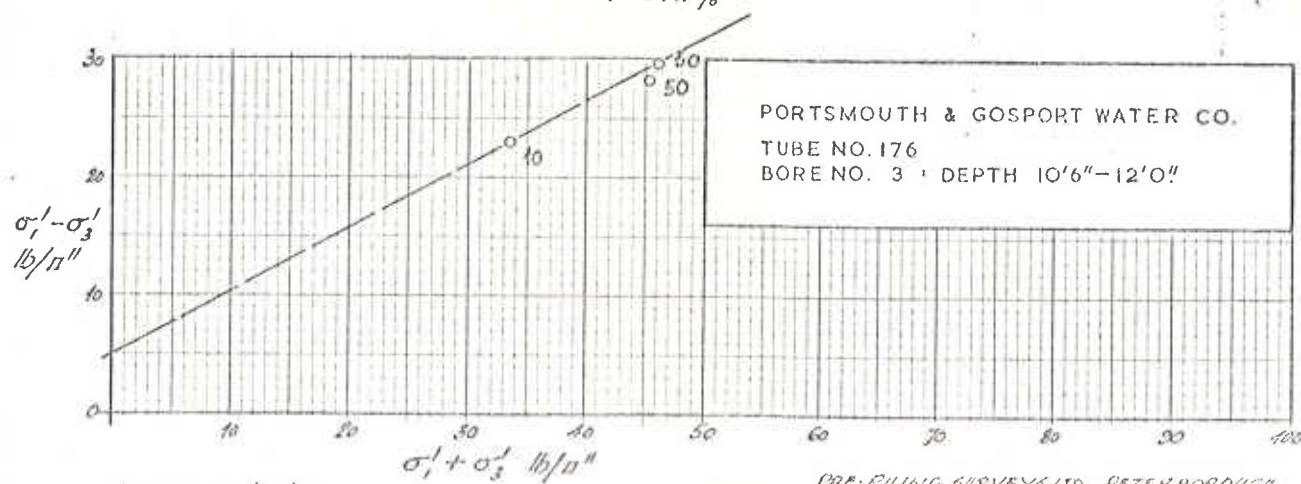
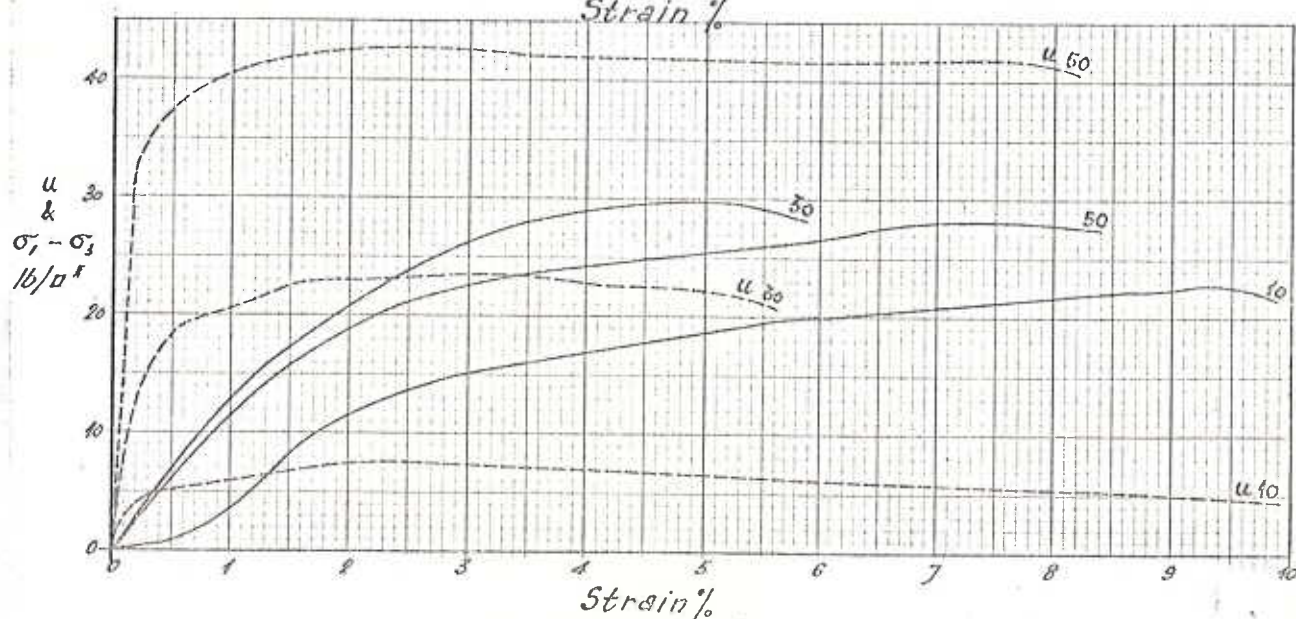
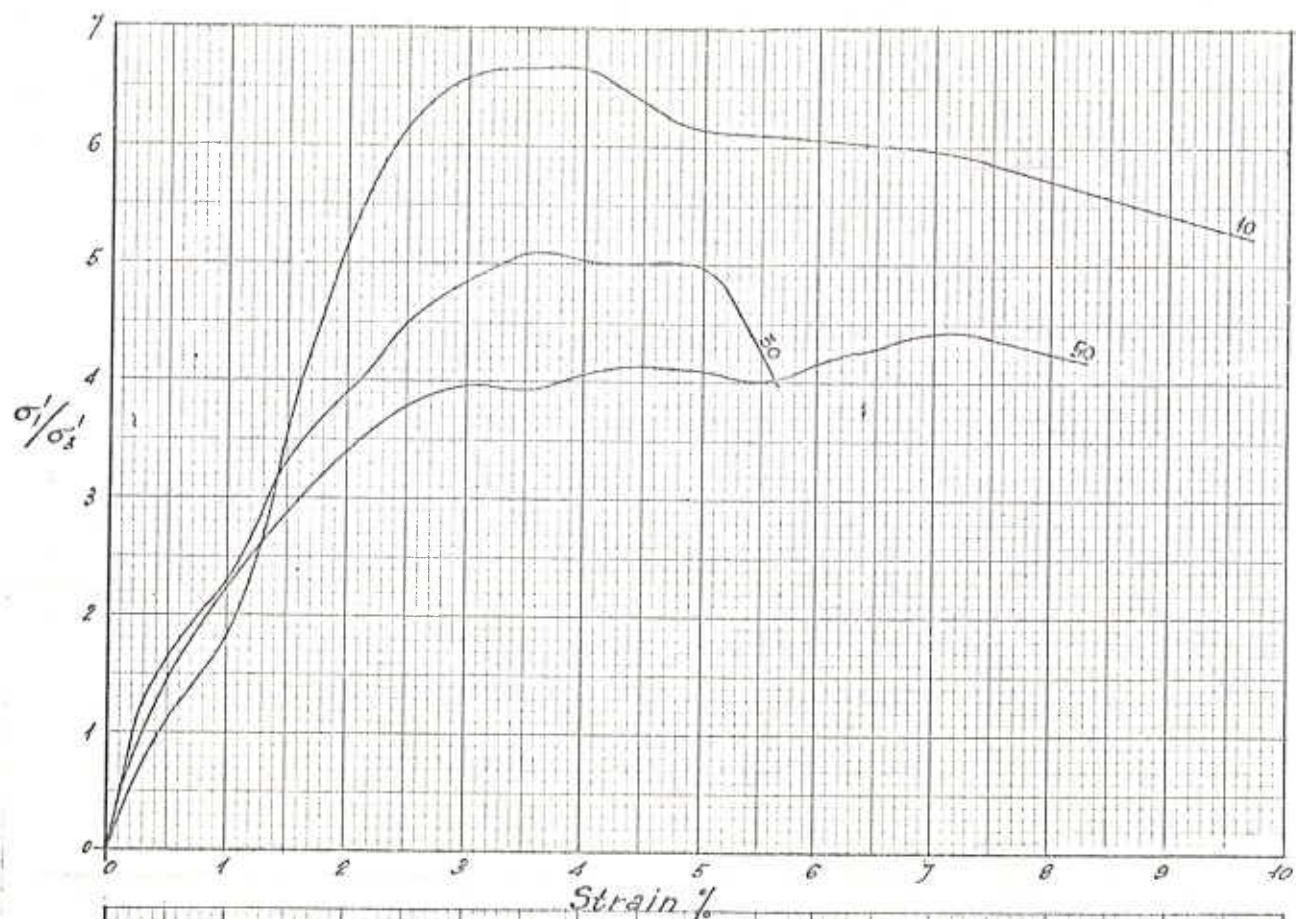
PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 167.  
BORE NO. 3 : DEPTH 4'6" - 6'0"



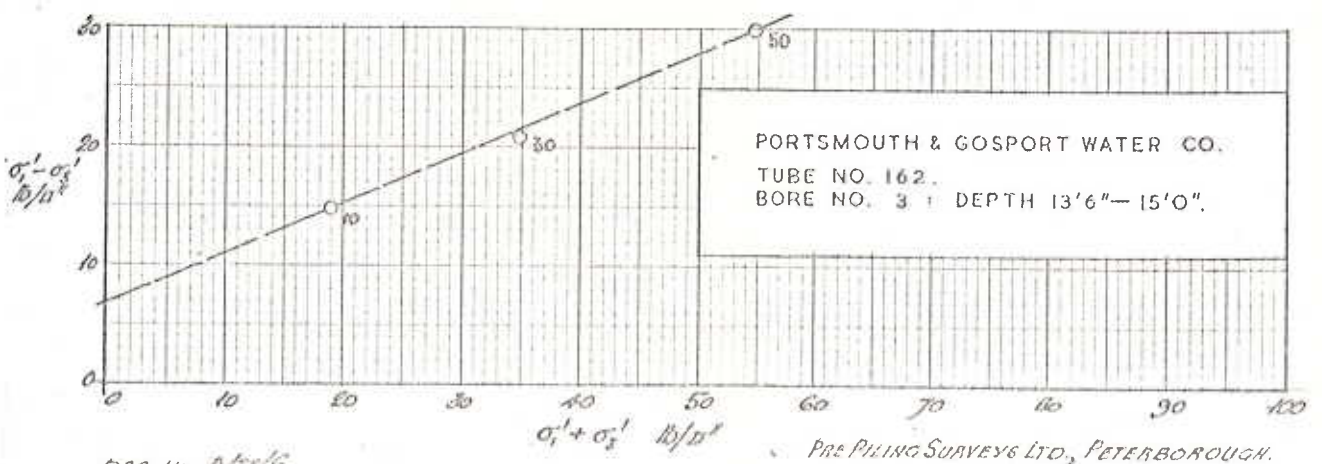
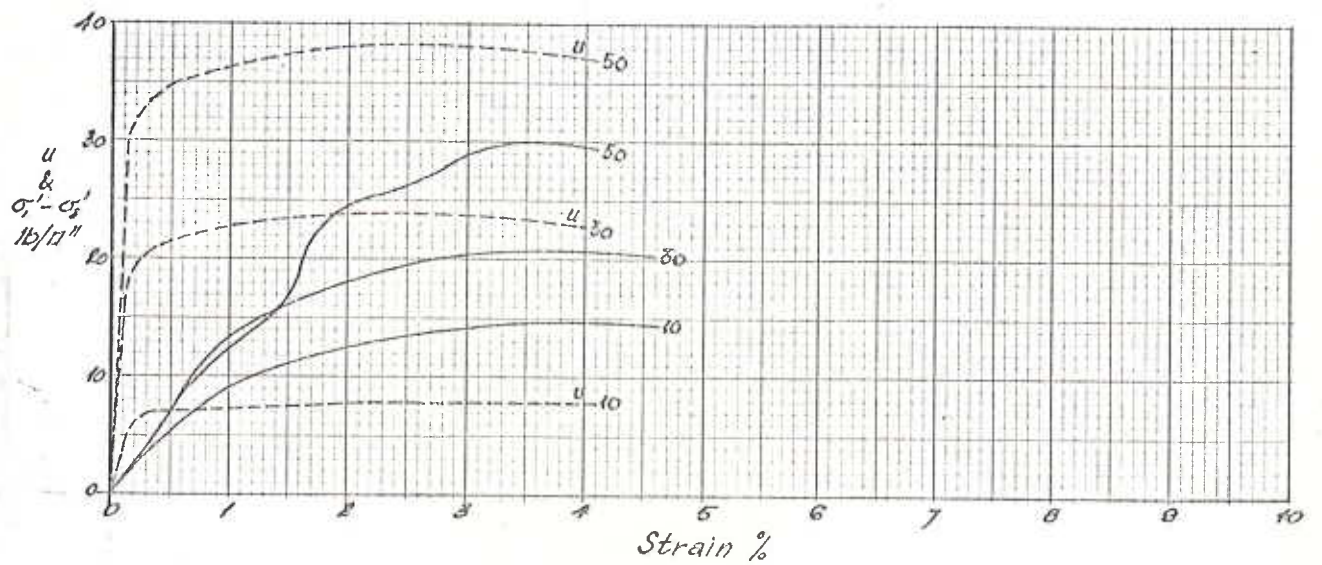
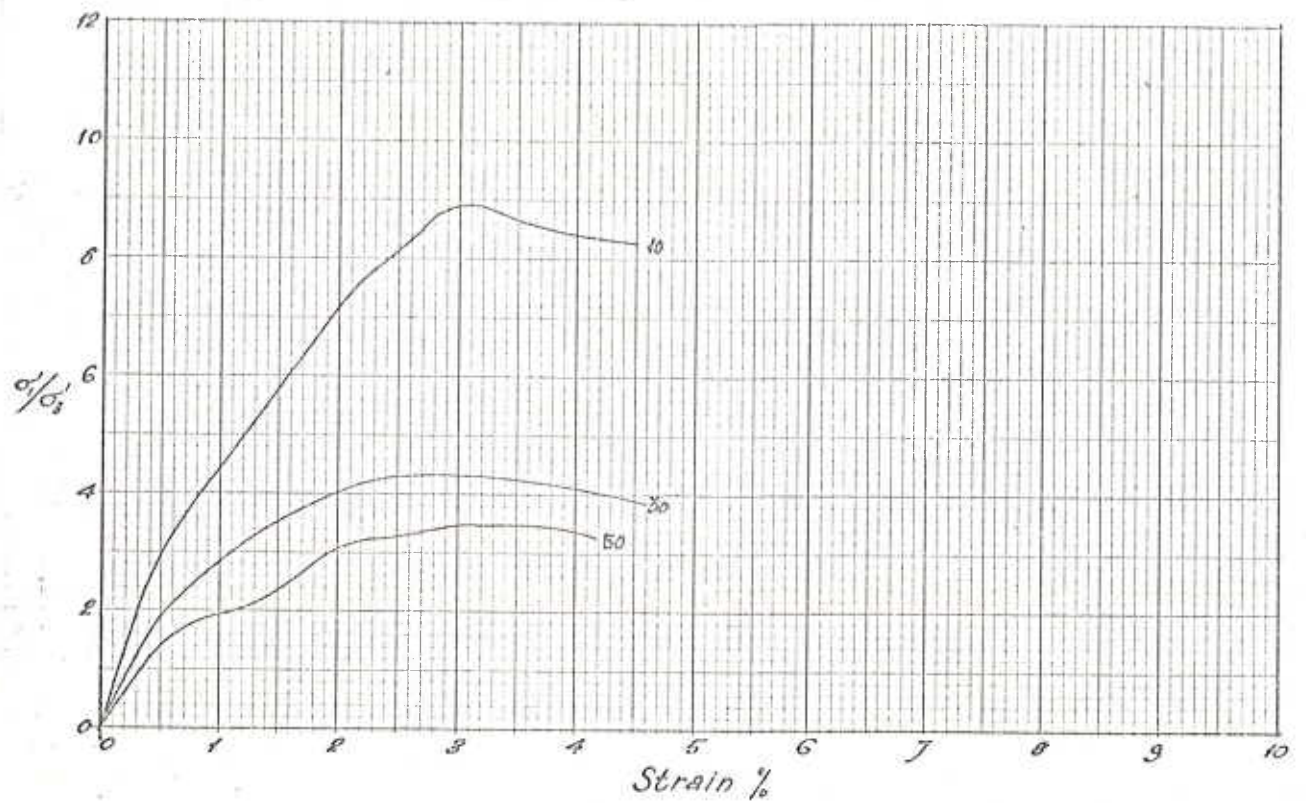
PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 173.  
BORE NO. 3 : DEPTH 7'6" - 9'0"

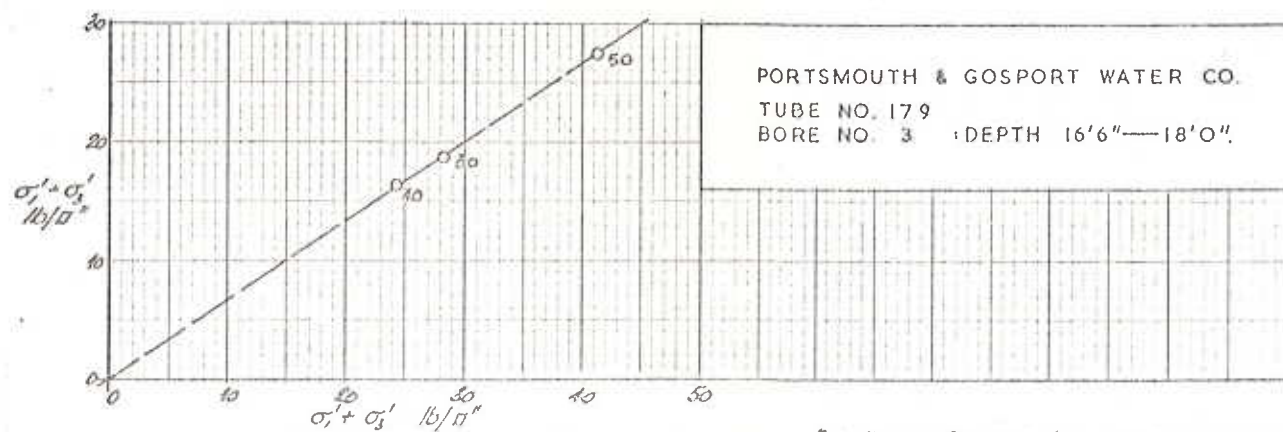
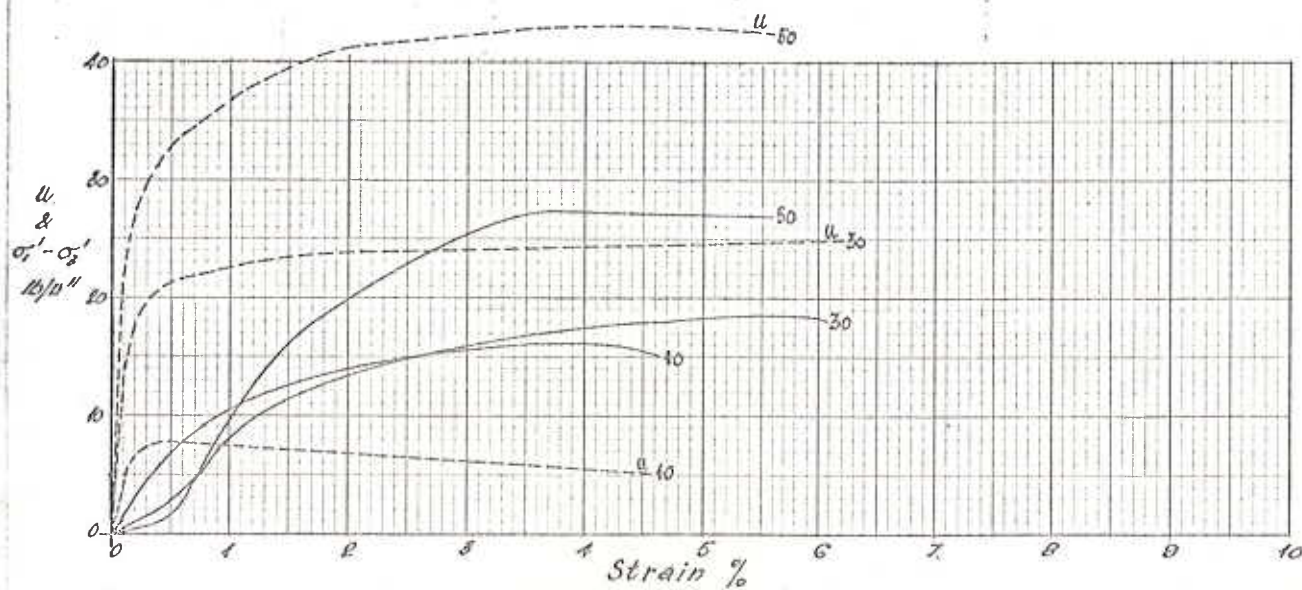
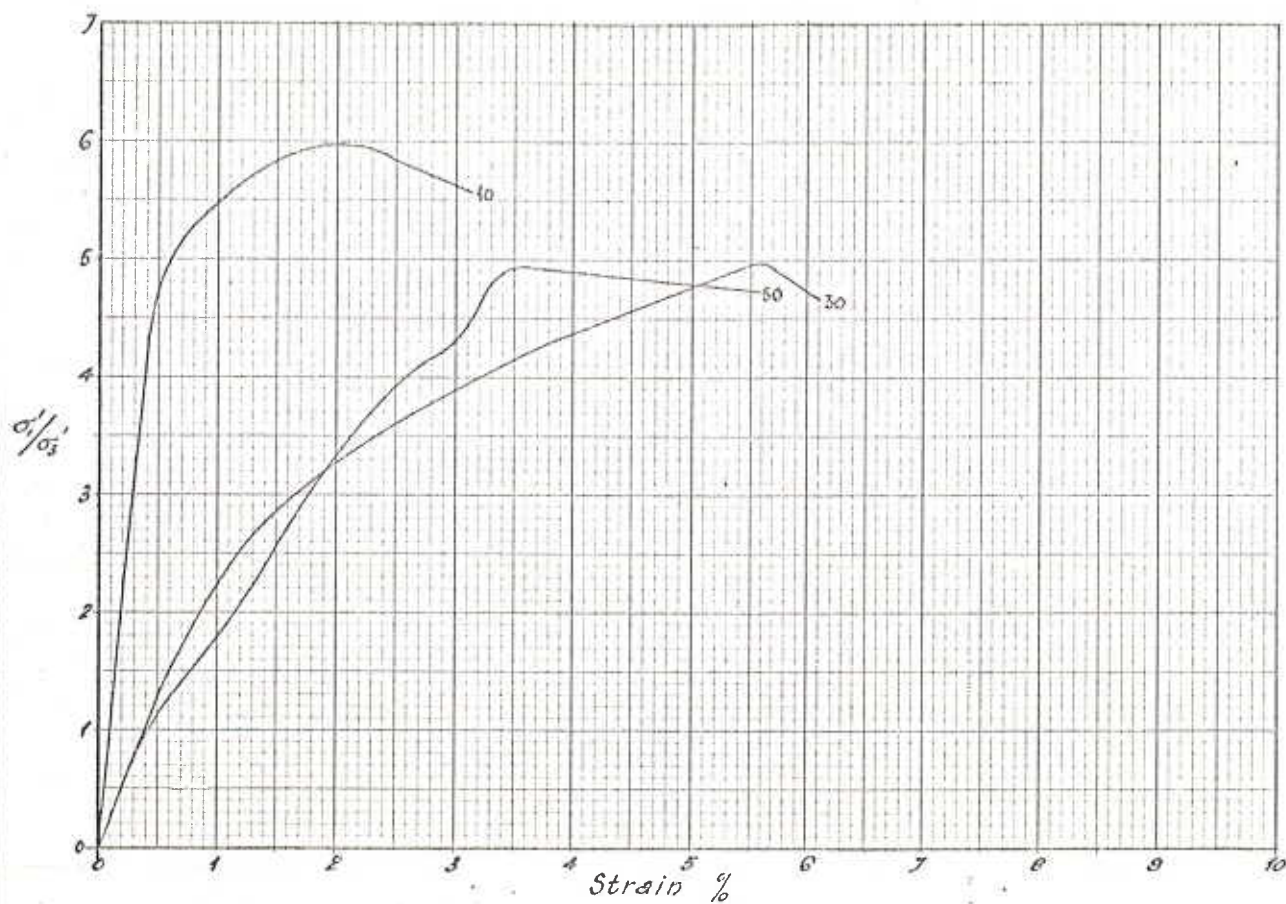
DRG. No. 8/11/4

ERR. PILING SURVEYS LTD., PETERBOROUGH.

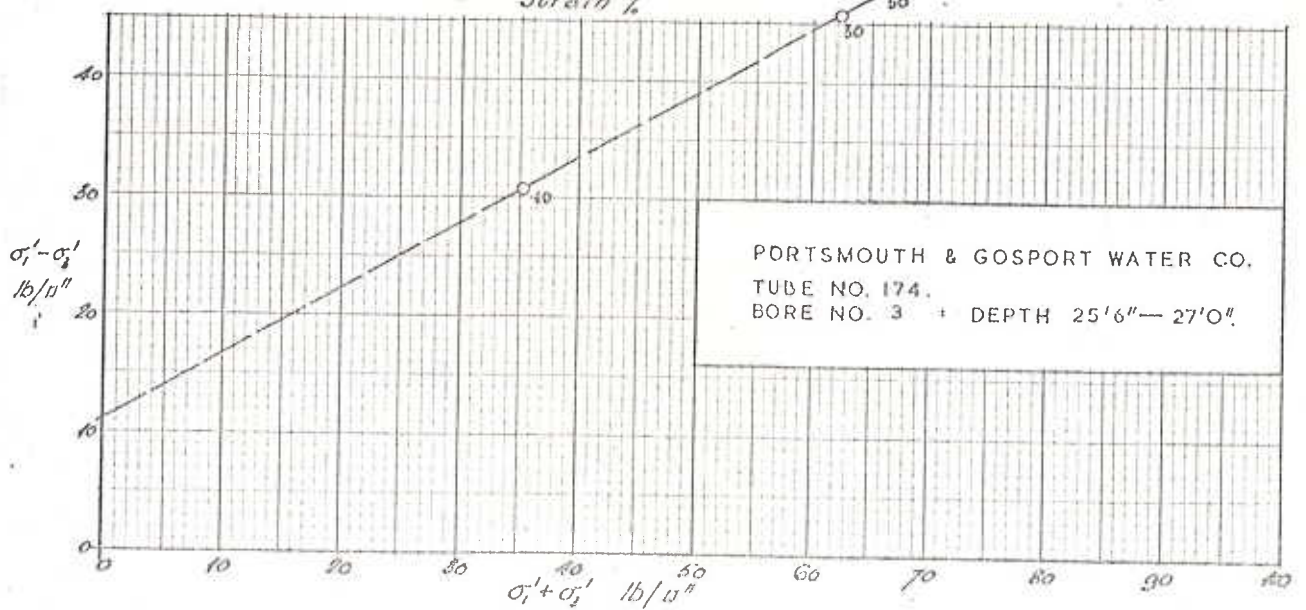
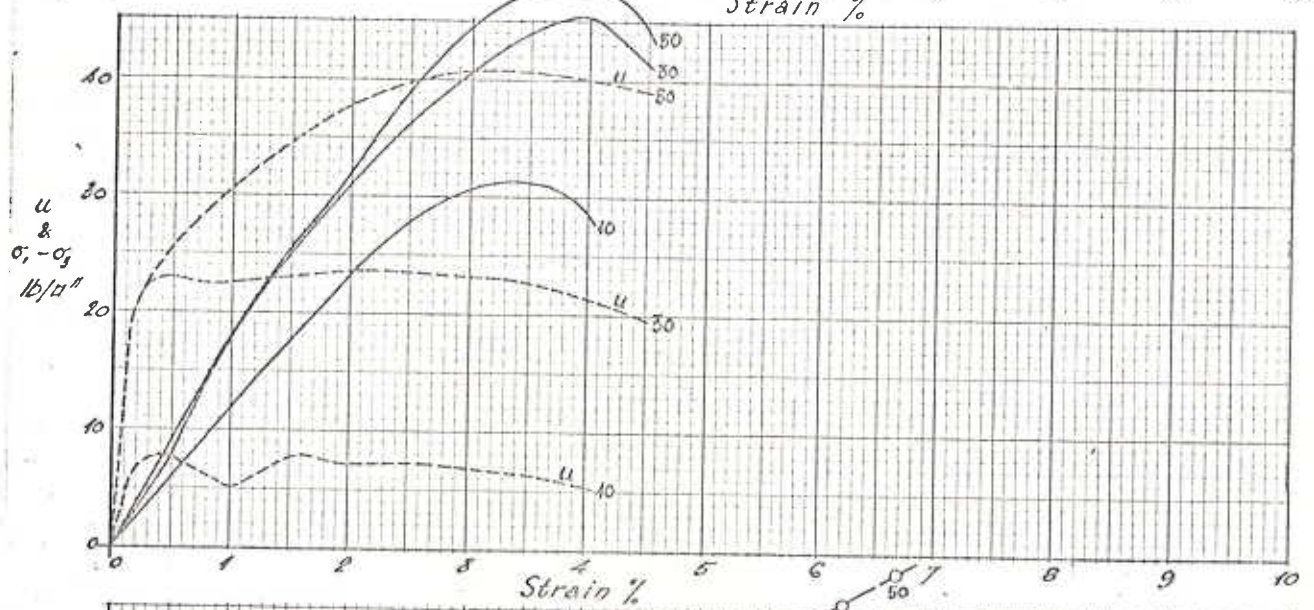
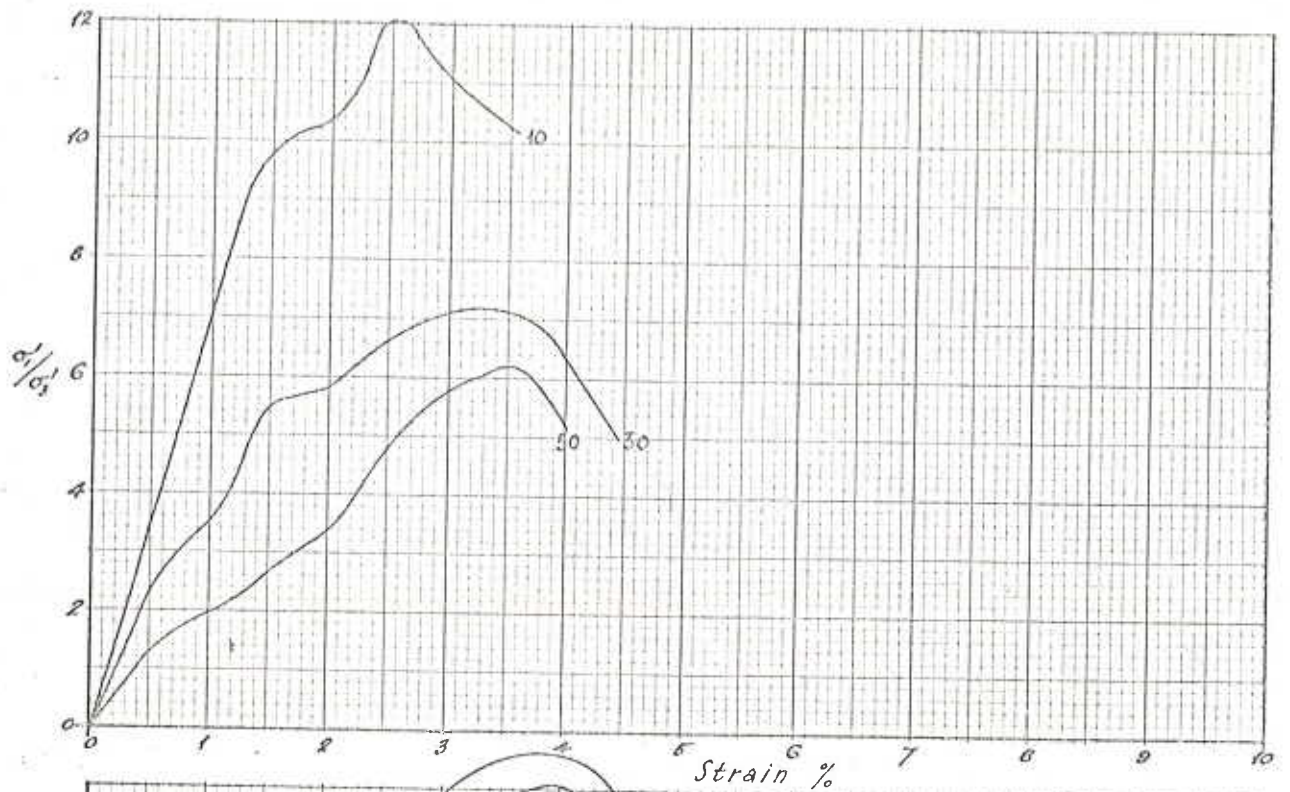


PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 176  
BORE NO. 3 : DEPTH 10'6"-12'0"

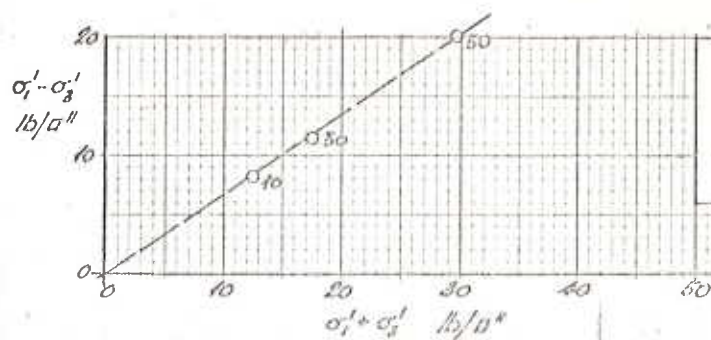
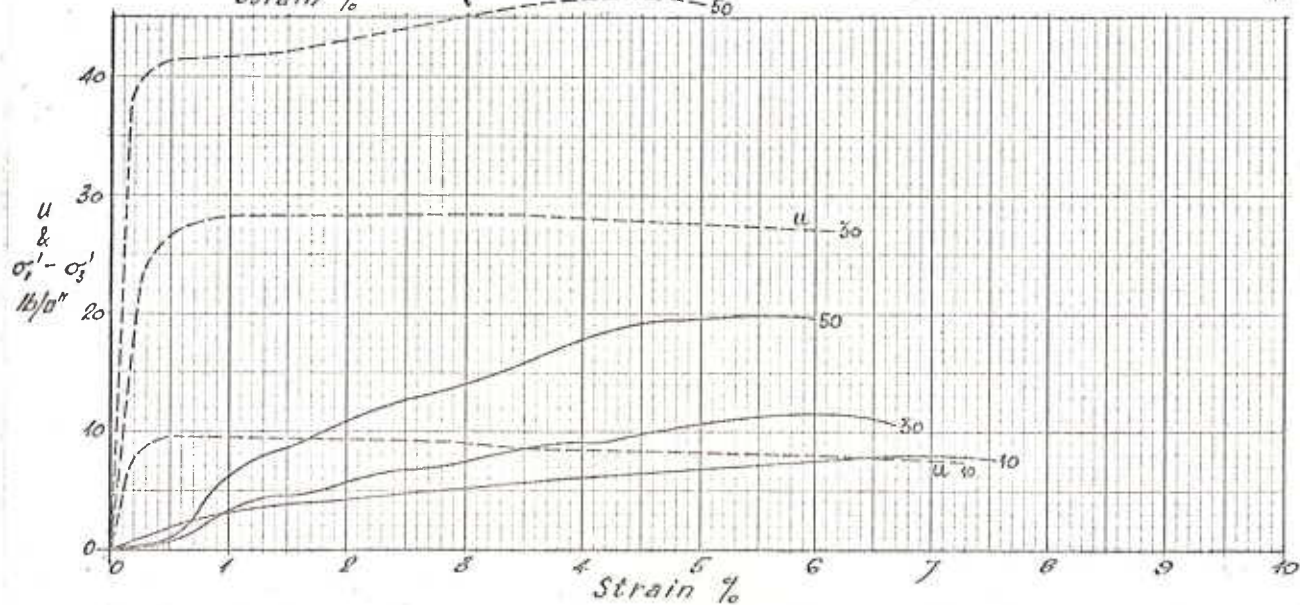
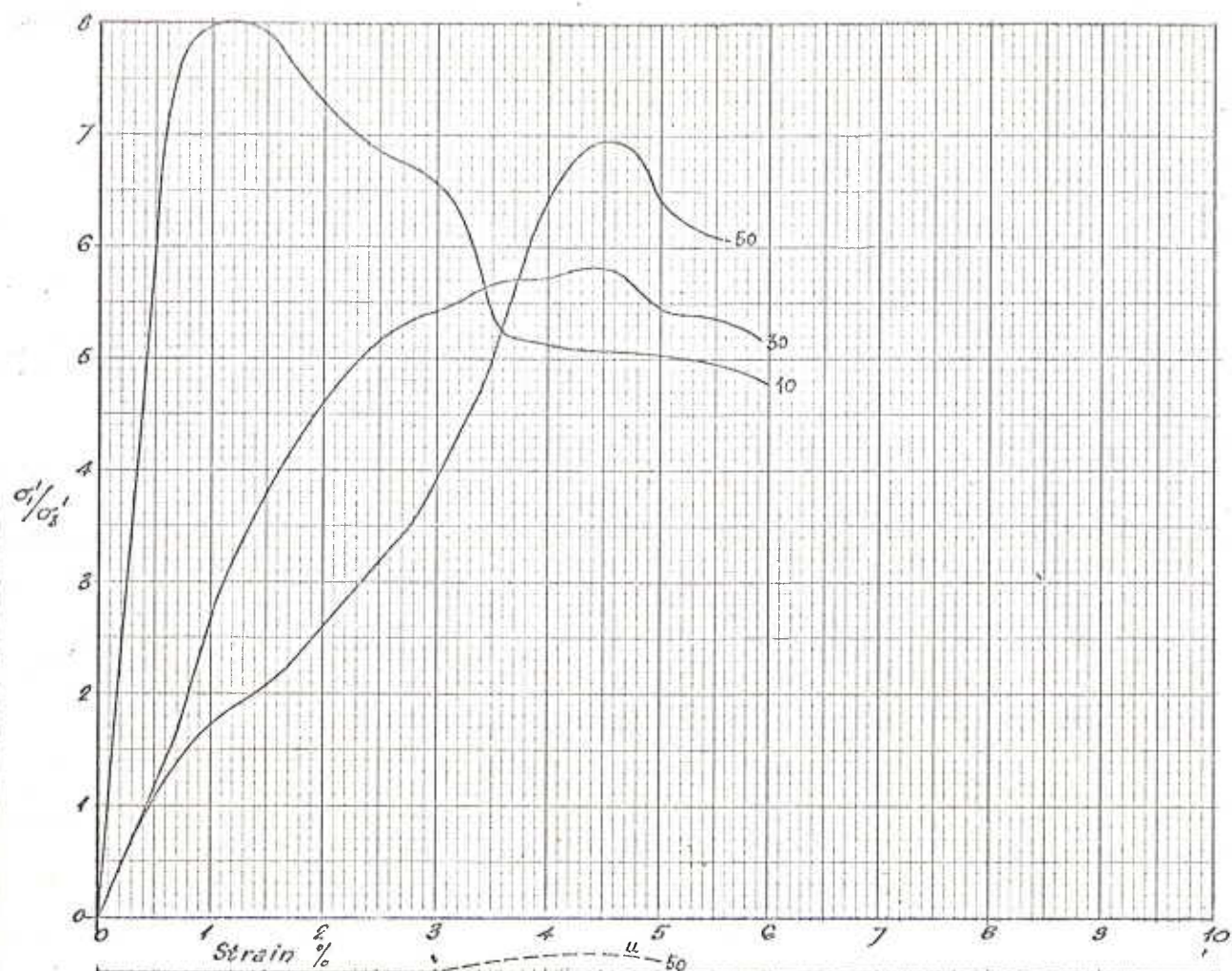




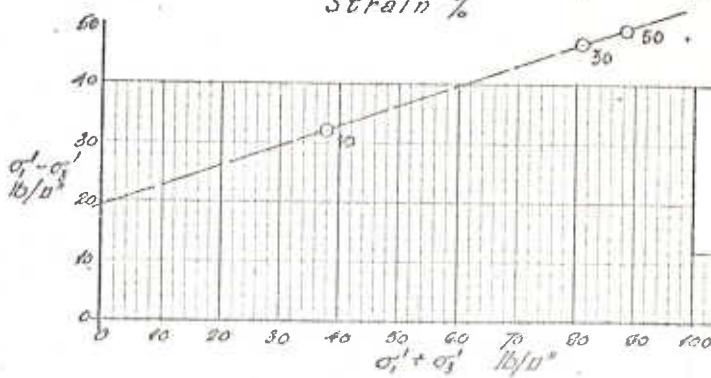
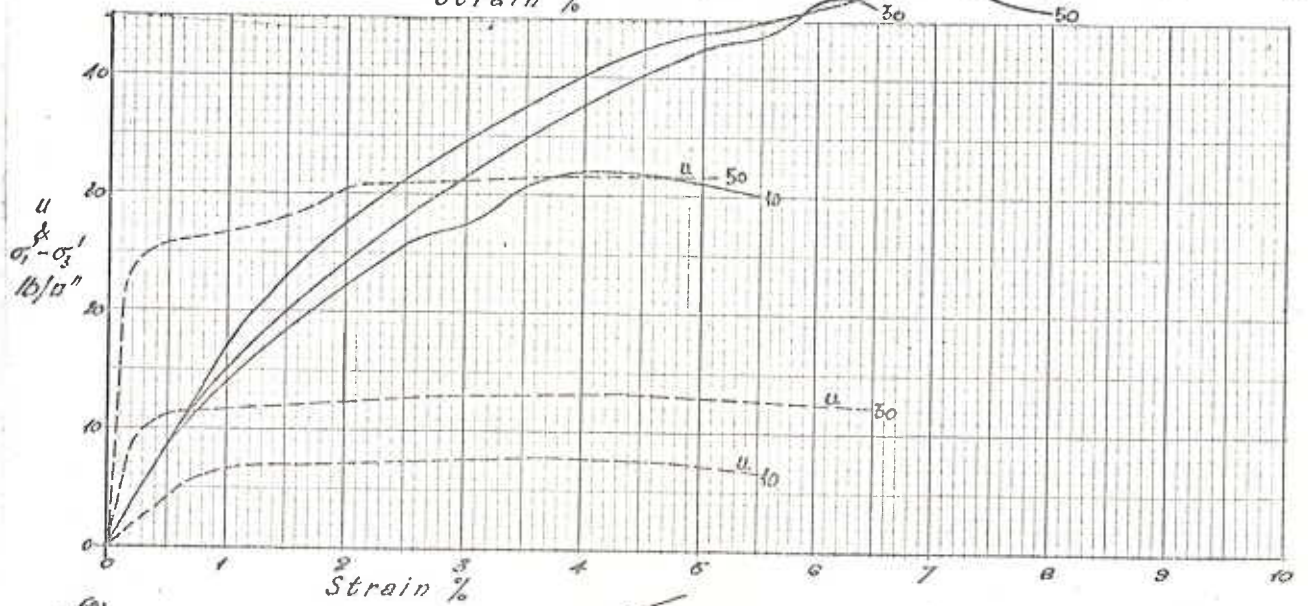
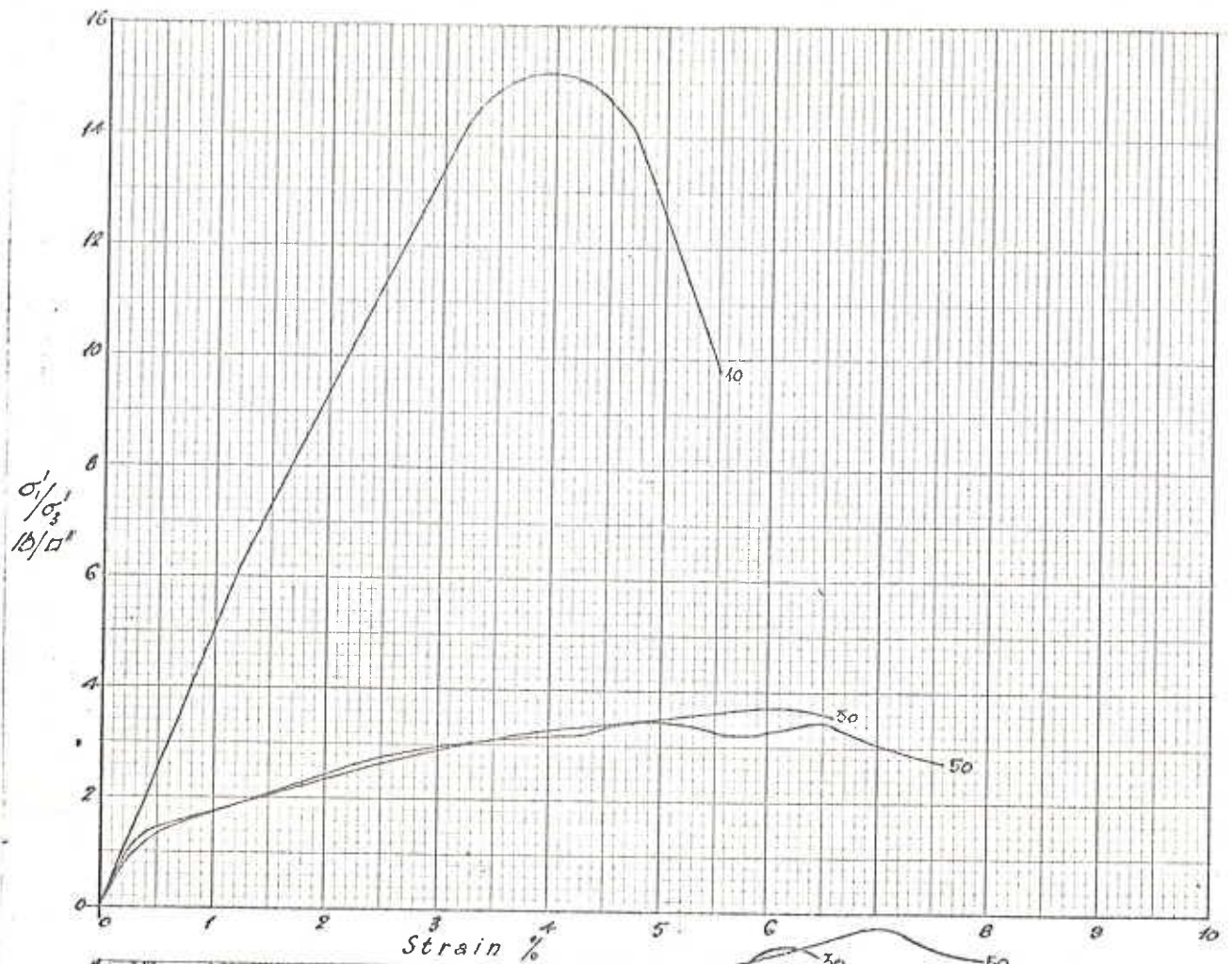
PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 179  
BORE NO. 3 : DEPTH 16'6" — 18'0".



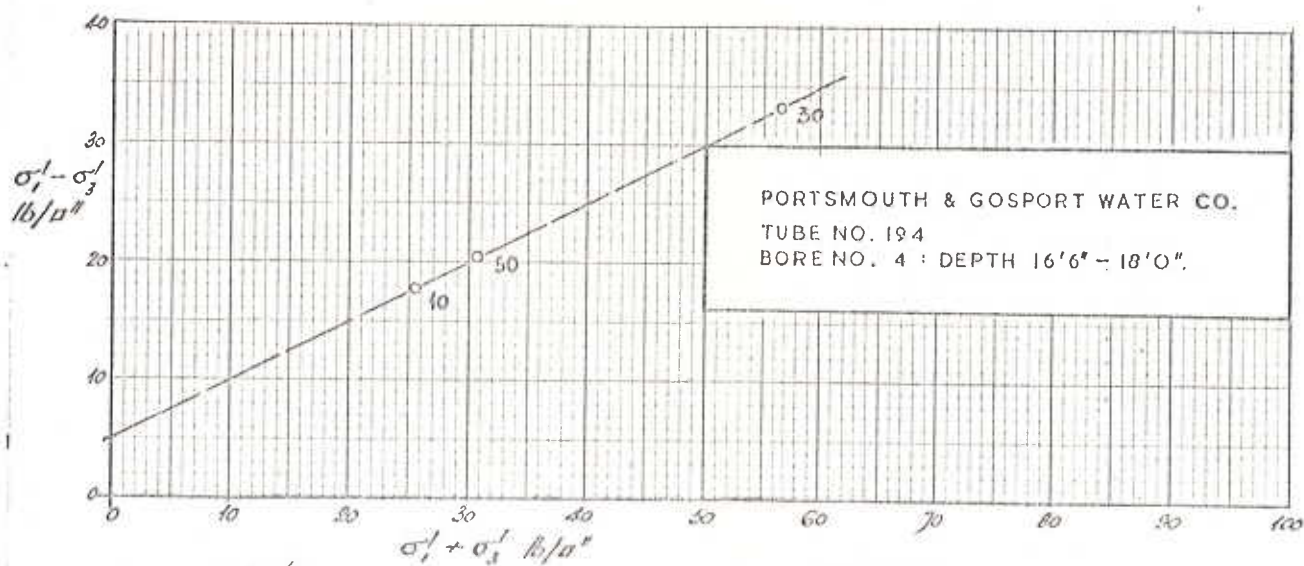
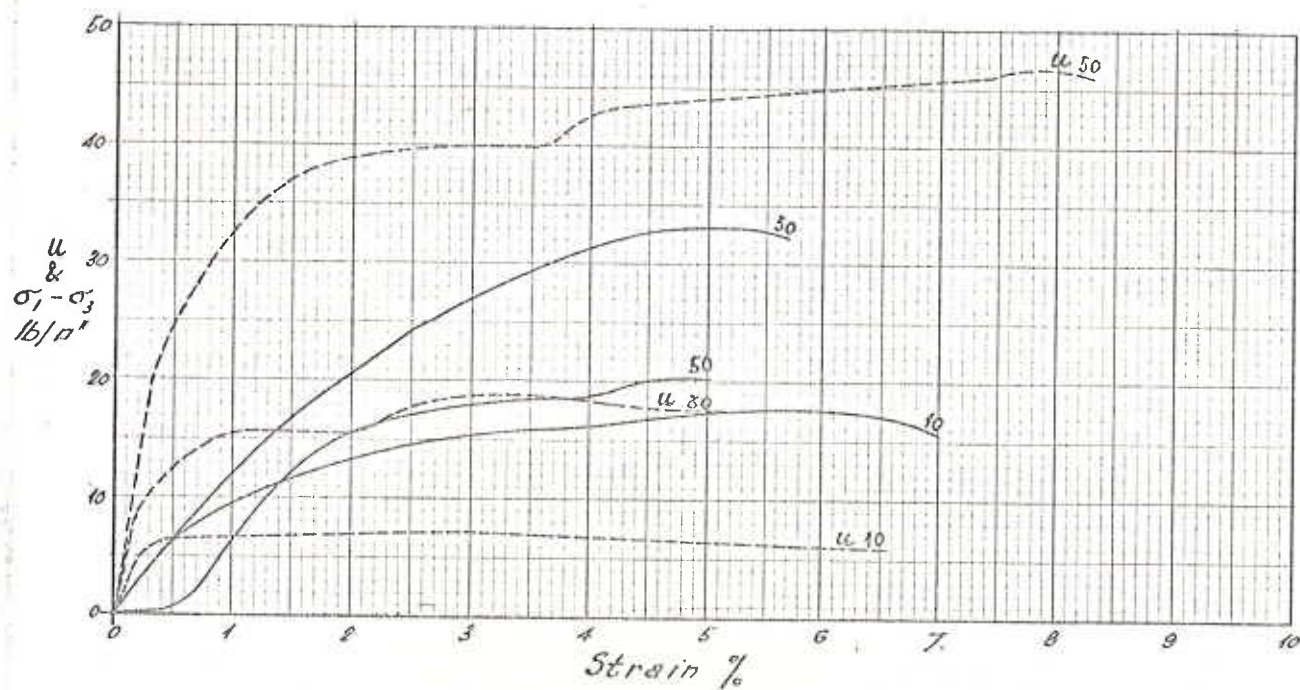
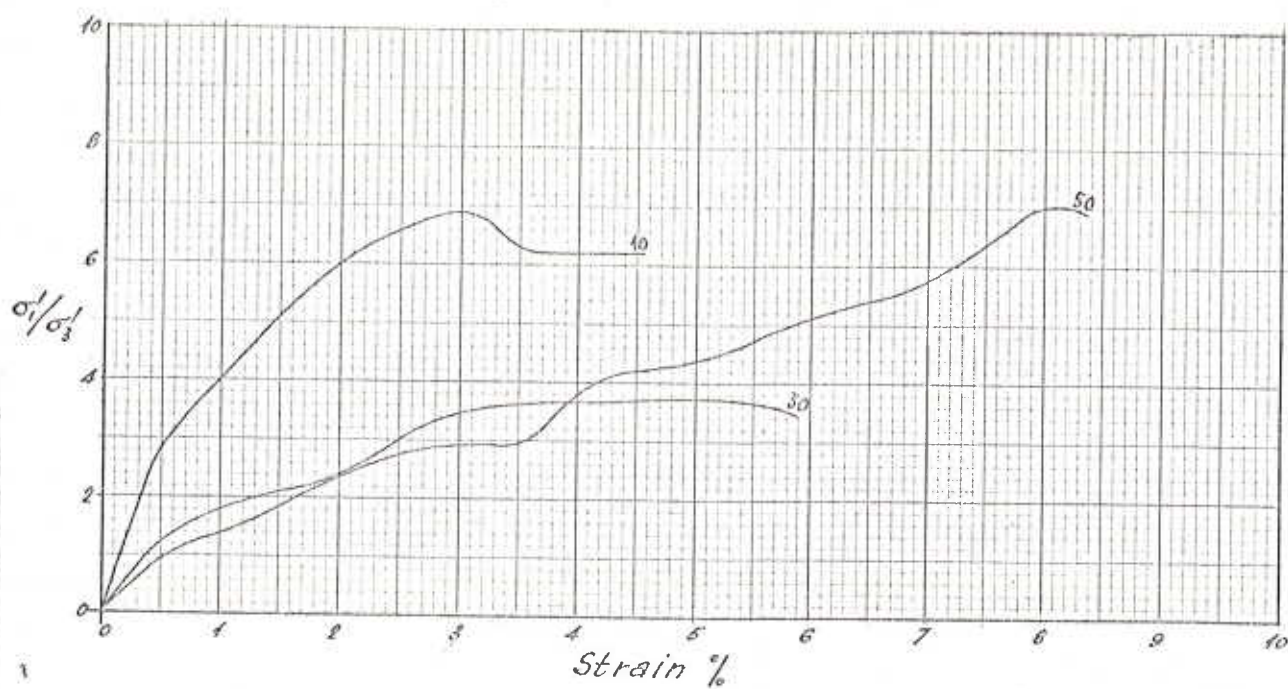
PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 174.  
BORE NO. 3 + DEPTH 25'6" — 27'0".

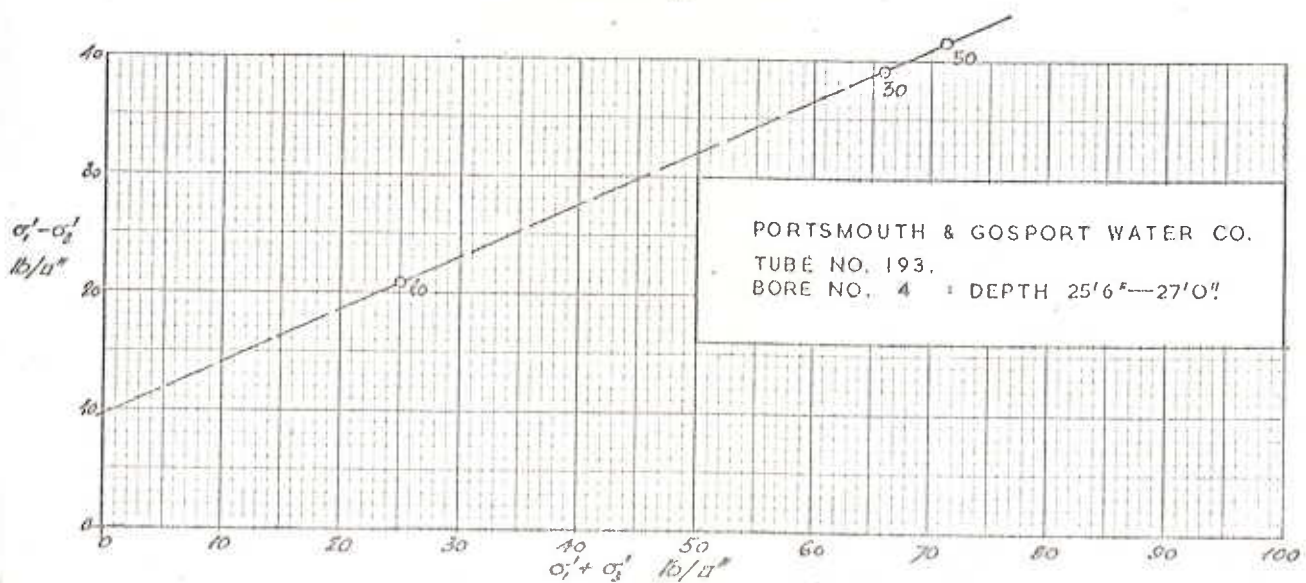
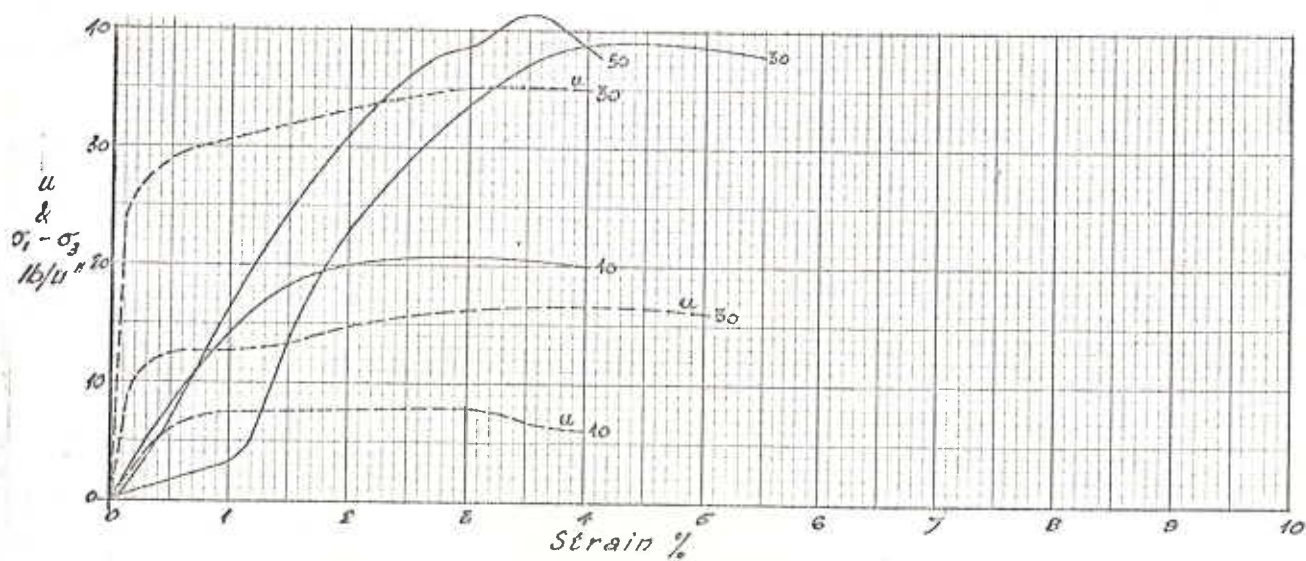
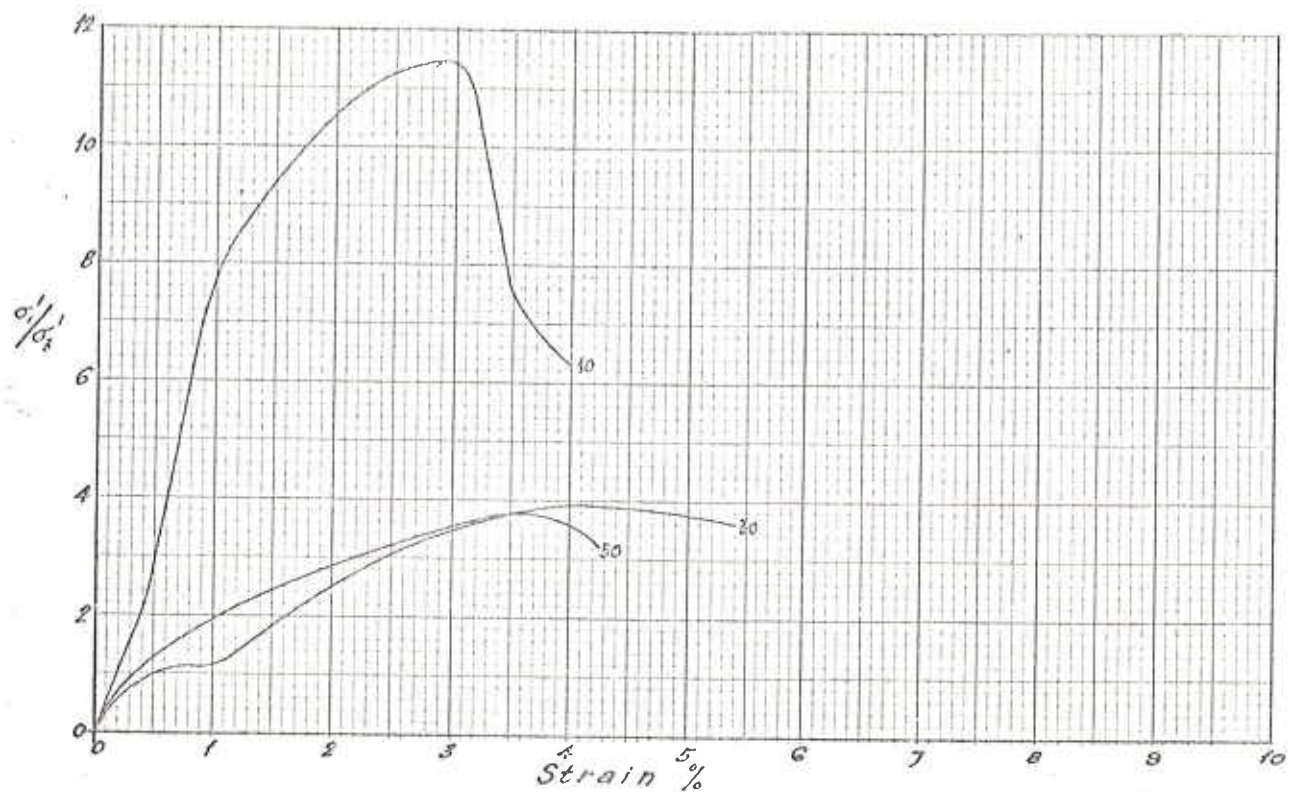


PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 183  
BORE NO. 3 DEPTH 28'6"-30'0".

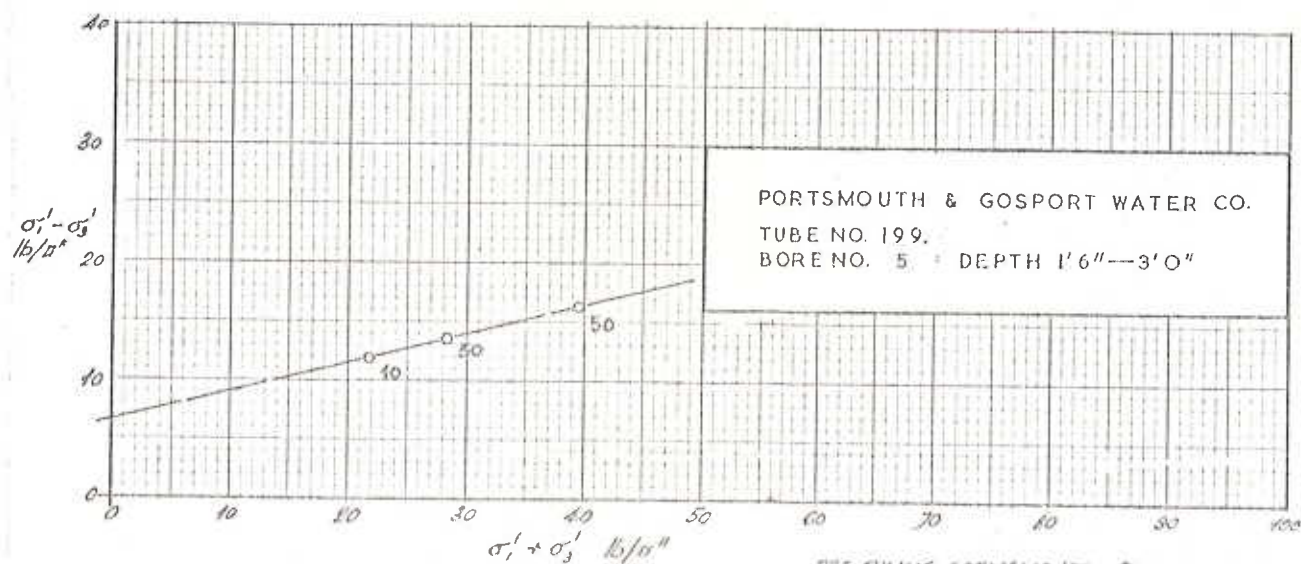
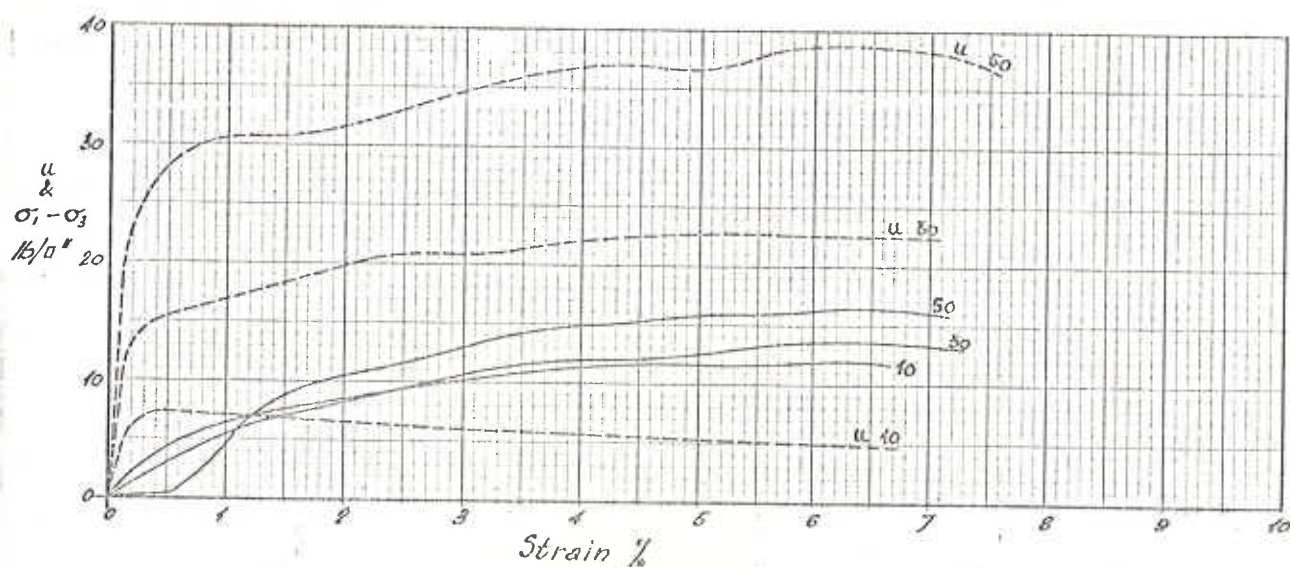
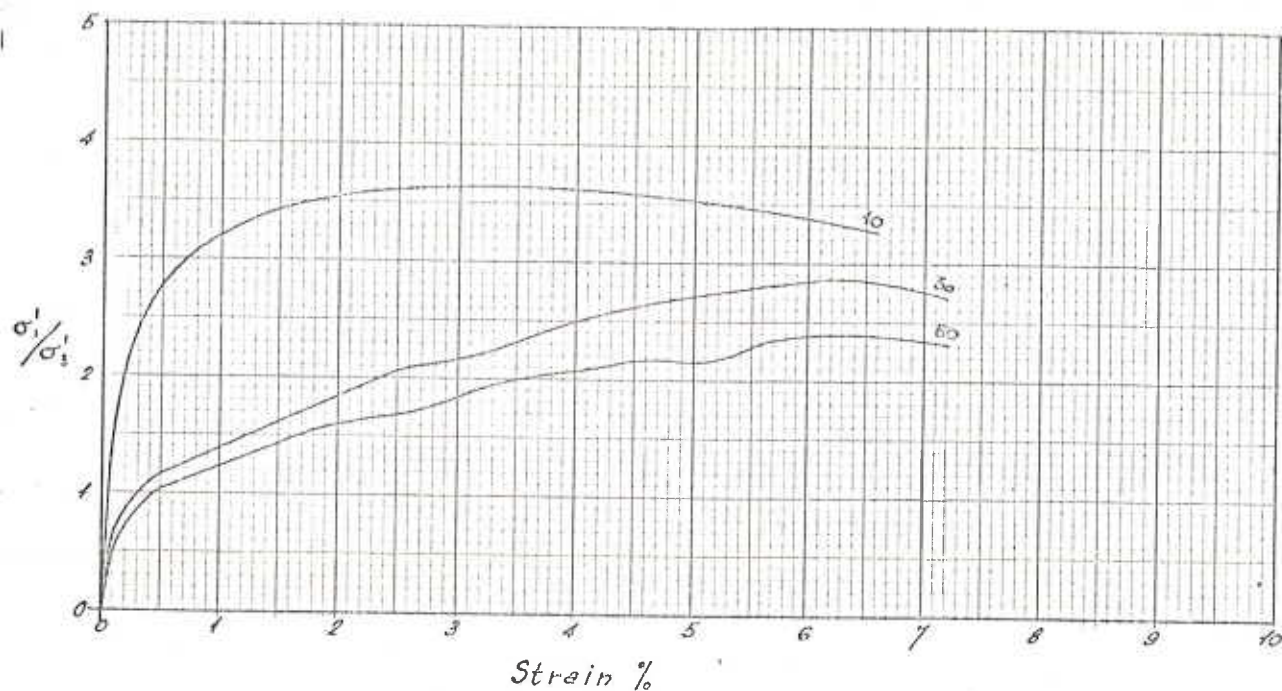


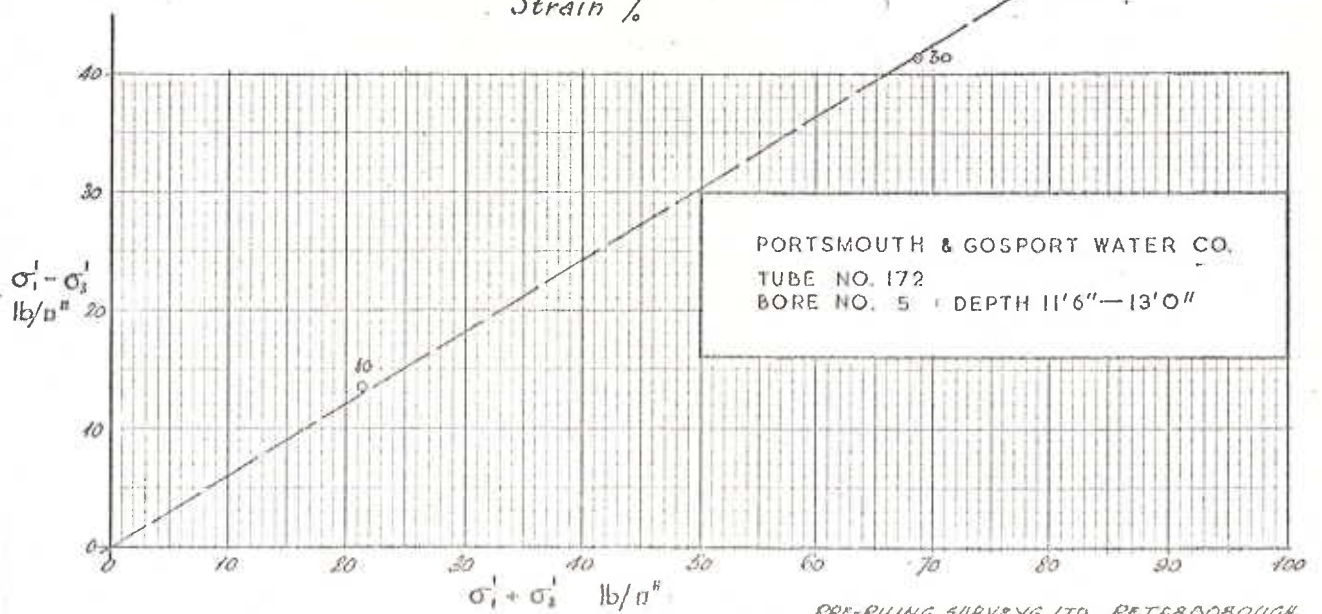
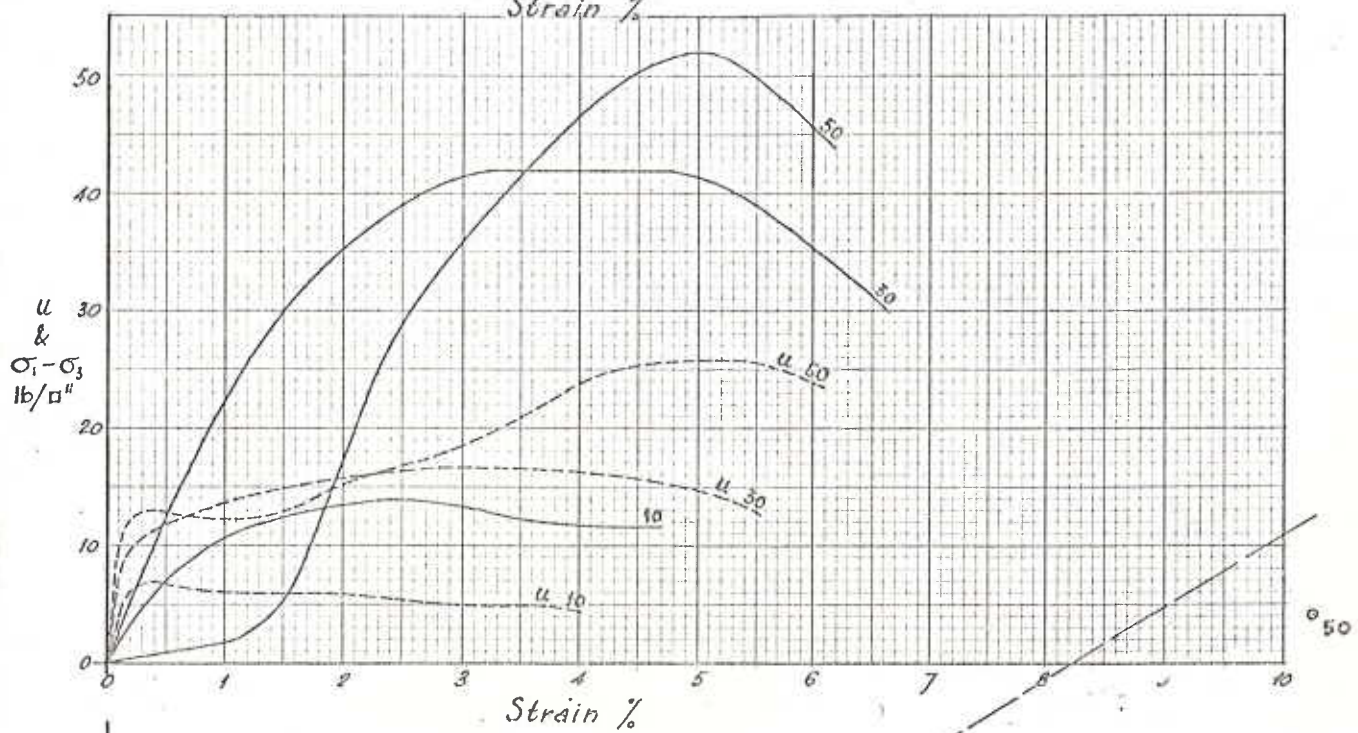
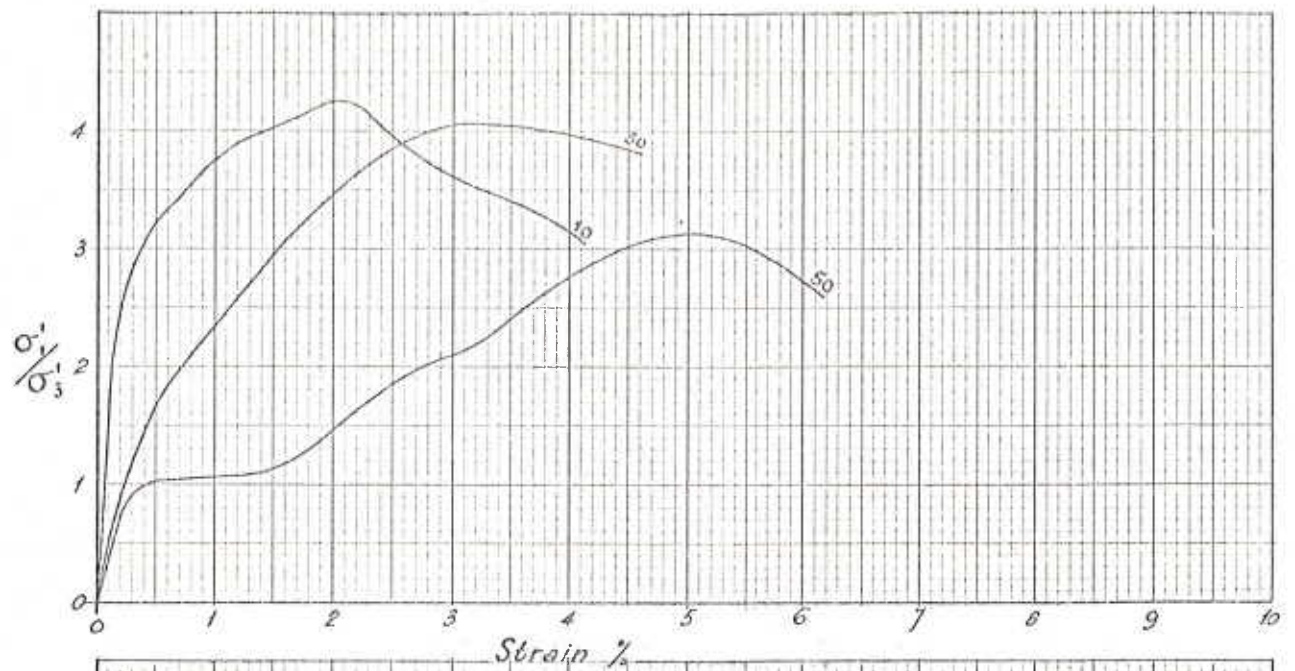
PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 206.  
BORE NO. 3 + DEPTH 37'6" - 39'0".



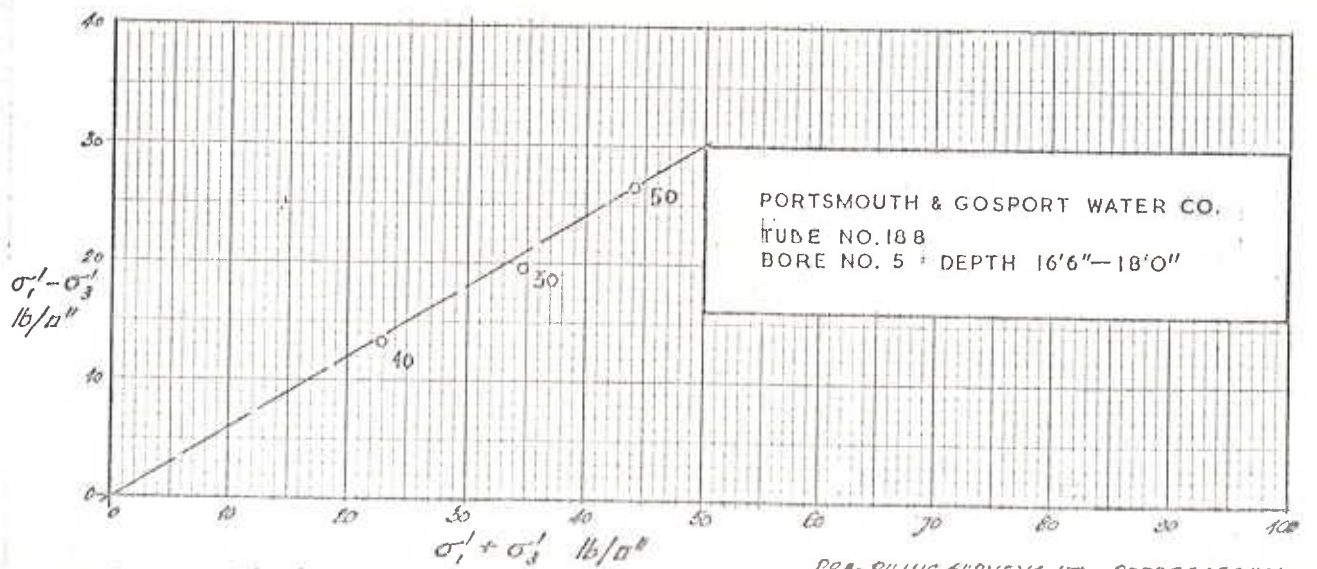
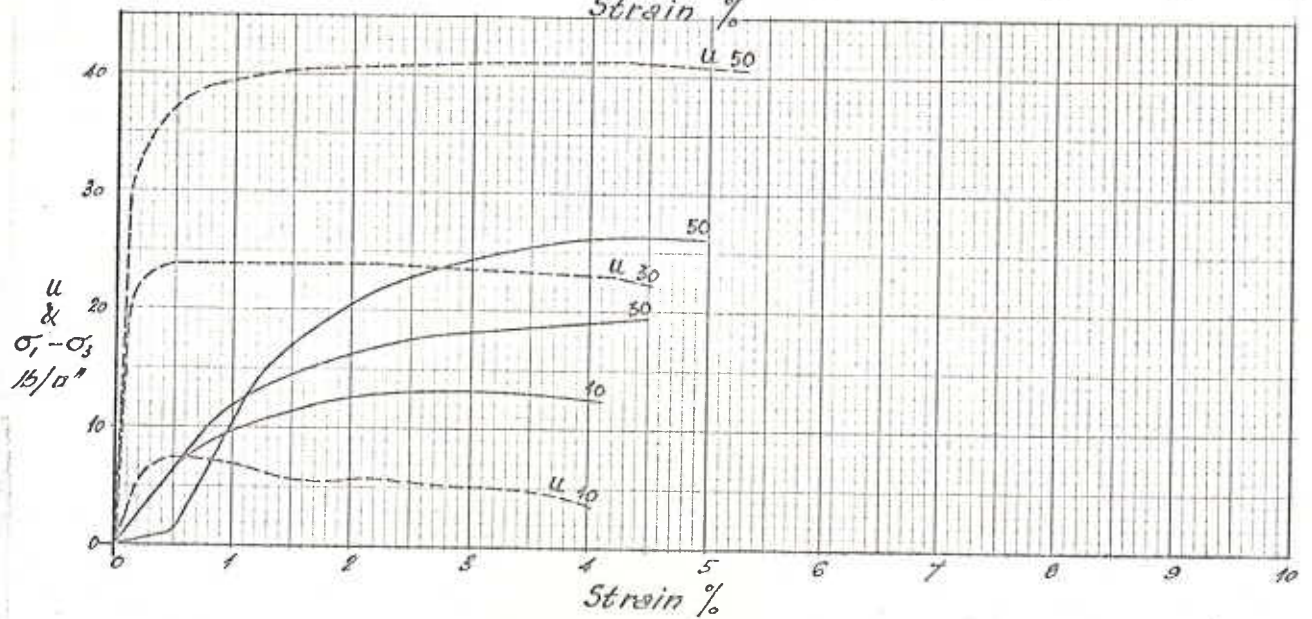
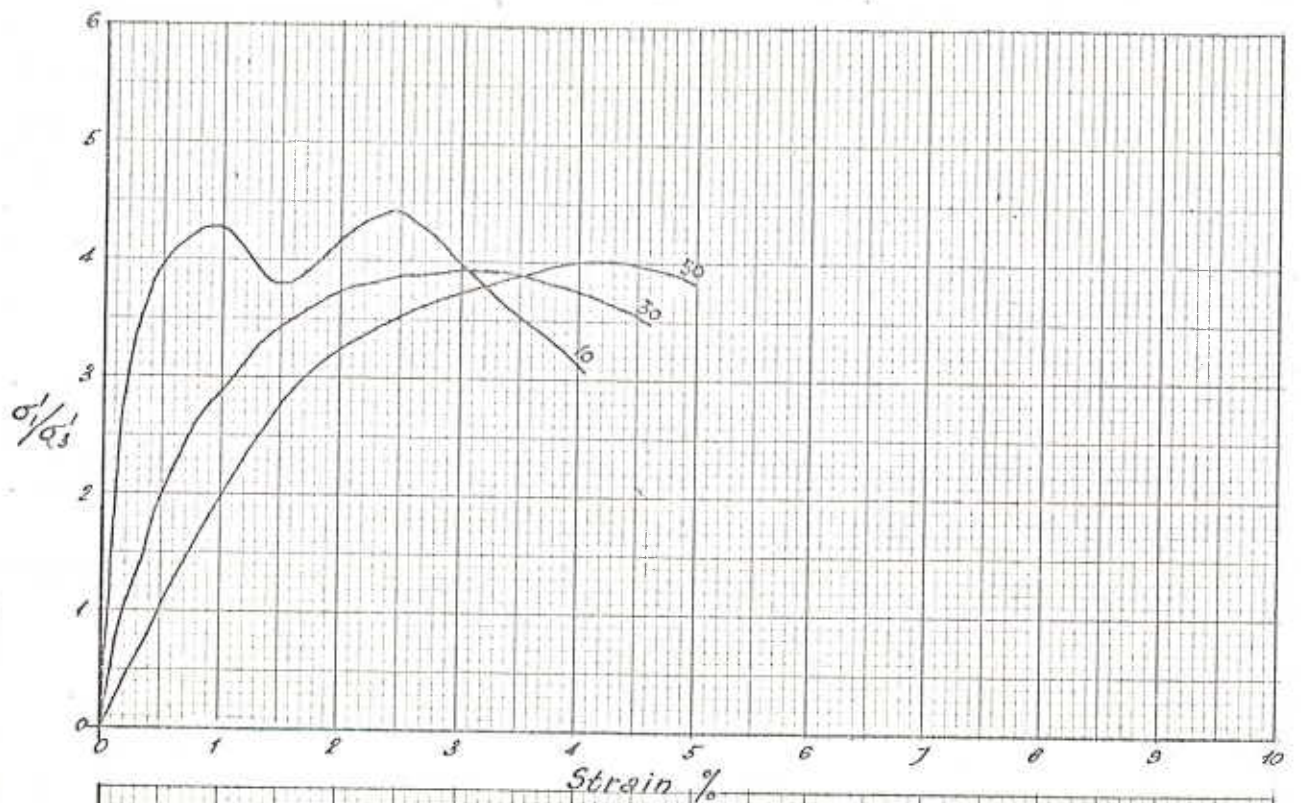


PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 193.  
BORE NO. 4 : DEPTH 25'6" — 27'0"





PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 172  
BORE NO. 5 DEPTH 11'6" - 13'0"



PORTSMOUTH & GOSPORT WATER CO.  
TUBE NO. 188  
BORE NO. 5 : DEPTH 16'6" - 18'0"