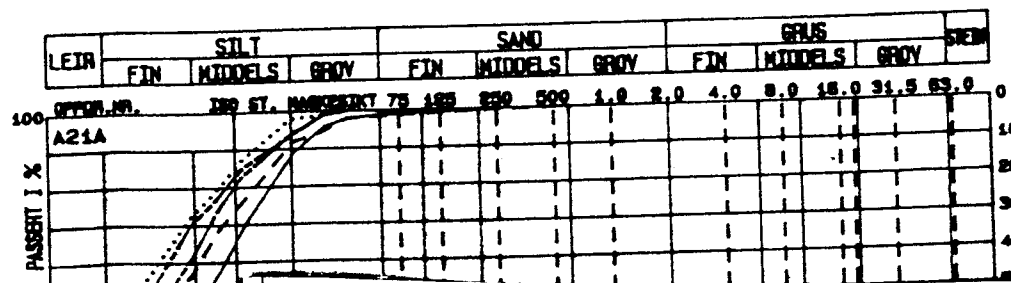


| Oppdr.nr. : A21A | | Analyseår: 1996 | | Prøvetaker: NGI 54MM | | | | | | | | | |
|------------------|------------------------|-----------------|---------------|----------------------|----|----|-------------------------------|----------------|-------------------------------|----|----|----|-------|
| Dybde i m | Materiale | Prøve | Vanninnhold % | | | | γ _{KN/m³} | S _t | Skjærstyrke kN/m ² | | | | Bl. % |
| | | | 20 | 40 | 60 | 80 | | | 20 | 40 | 60 | 80 | |
| 1 | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | |
| 4 | FLIS SLAMBLANDET | 1 | | | | | 10.4 | | | | | | 33.8 |
| 5 | FLIS teglsteinrester | 2 | | | | | 10.4 | | | | | | 82.4 |
| 6 | FLIS finsand trerester | 3 | | | | | 11.0 | | | | | | 28.8 |
| 7 | FLIS finsand silt | 4 | | | | | 7.1 | | | | | | 38.8 |
| 8 | FLIS trebiter | 5 | | | | | 6.7 | | | | | | 78.7 |
| 9 | FLIS trebiter | 6 | | | | | 7.8 | | | | | | 88.8 |
| 10 | FLIS | 7 | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | |
| 12 | LEIRIG SILT | 8 | | | | | 18.2 | | | | | | 3.2 |
| 13 | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | |
| 16 | SILTIG LEIRE | 10 | | | | | 18.4 | 7 | | | | | 3.2 |
| 17 | | | | | | | | | | | | | |
| 18 | SILTIG LEIRE | 11 | | | | | 18.4 | 4 | | | | | |
| 19 | | | | | | | | | | | | | |
| 20 | LEIRE | 12 | | | | | 18.2 | | | | | | |
| 21 | | | | | | | | | | | | | |
| 22 | LEIRE | 13 | | | | | 18.8 | 6 | | | | | |
| 23 | | | | | | | | | | | | | |
| 24 | LEIRE | 14 | | | | | 18.2 | 3 | | | | | |
| 25 | | | | | | | | | | | | | |
| 26 | LEIRE | 15 | | | | | 18.3 | 4 | | | | | |



Soe 2 I

Vedlegg til rapport: A-21A nr. 2 av 20.08.96

| | | |
|---|--------------------|----------------------------------|
| HULL NR. 2-BP, TOTALSONDERING OG PRØVESERIE, BJØRVIKAUTST. OG PAULSENKAIA | Målestokk 1:200 | Boret: nov.-95 |
| | | Tegn.: 19.02.96 PN |
| GRUNNUNDERSØKELSE: E18 MELLOM EKEBERGTUNNELEN OG OSLOTUNNELEN | | Saksb.: FRF |
| | | Tegning nr. A-21A - 27 |

STATENS VEKSTEN

| PROFIL NR. | OPDR. NR. | STATION |
|------------|-----------|---------|
| 8157 | 12MV | |
| 8157 | 12MV | |
| 8157 | 12MV | |
| 8157 | 12MV | |
| 8157 | 12MV | |

Bjørvikautstikkeren og Paulsenkaia. Tolkningsparametre fra treaksialforsøk, effektivpenningbasis

Hull 2-BP: 169A

| Dybde [m] | Type forsøk | P_o [kPa] | $\sigma_v'_{kons}$ [kPa] | K_o | u_o [kPa] | w [%] | ΔV [cm ³] | a [kPa] | ϕ [°] | D | Materiale | Bilag |
|-----------|-------------|-------------|--------------------------|-------|-------------|-------|-------------------------------|---------|------------|------------|--------------|-------|
| 17,7 | CAUA1 | -105 | 102,9 | 0,6 | 159 | 37 | 6,0 | 10 | 27 | -0,2→-0,6 | siltig leire | 39 |
| 25,6 | CAUA1 | -175 | 168,9 | 0,6 | 238 | 31 | 8,0 | | | -0,2→-0,95 | leire | |
| 17,6 | CAUP3 | -105 | 102 | 0,6 | 158 | 37 | 6,0 | 0 | 23 | -0,6→-0,9 | siltig leire | 40 |
| 25,7 | CAUP3 | -175 | 168 | 0,6 | 237 | 31 | 7,0 | | | -1,0→-1,5 | leire | |

Bjørvikautstikkeren og Paulsenkaia. Tolkningsparametre fra treaksialforsøk, totalspenningsbasis

Hull 2-BP: 169 A

| Dybde [m] | Type forsøk | p_o' [kPa] | $\sigma_v'_{\text{loss}}$ [kPa] | K_o | u_o [kPa] | w [%] | ΔV [cm ³] | s_u [kPa] | s_v/p_o' | s_u [kPa] | s_v/p_o' | Materiale | Bilag |
|--------------|----------------|-----------------|------------------------------------|-------|----------------|------------|----------------------------------|--------------------|------------|---------------------|------------|-----------------------|-------|
| | | | | | | | | $\epsilon_v = 2\%$ | | $\epsilon_v = 10\%$ | | | |
| 17,7 | CAUA1 | -105 | 102,9 | 0,6 | 159 | 37 | 6,0 | 34 | 0,32 | 37 | 0,35 | siltig leire leire | 39 |
| 25,6 | CAUA1 | -175 | 168,9 | 0,6 | 238 | 31 | 8,0 | 48 | 0,27 | 51 | 0,29 | | |
| 17,6 | CAUP3 | -105 | 102 | 0,6 | 158 | 37 | 6,0 | 14 | 0,13 | 22 | 0,21 | siltig leire leire | 40 |
| 25,7 | CAUP3 | -175 | 168 | 0,6 | 237 | 31 | 7,0 | 10 | 0,06 | 20 | 0,11 | | |

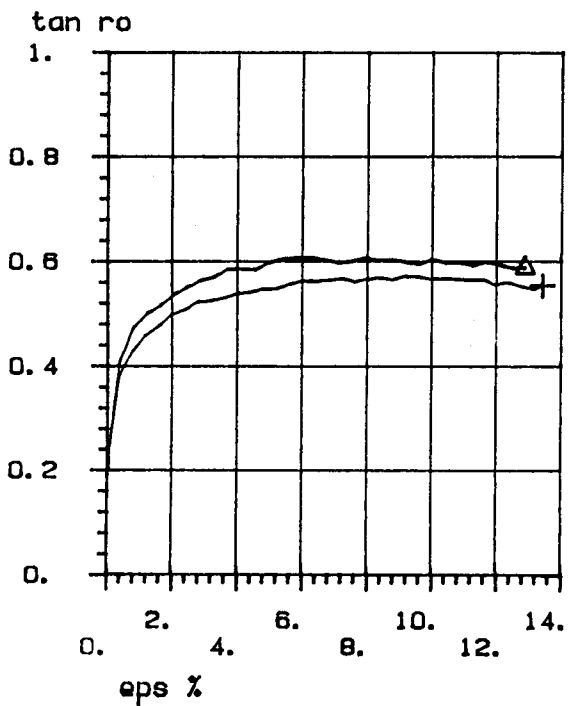
Bjørvikautstikkeren og Paulsenkaia. Tolkningsparametre fra ødometerforsøk

Hull 2-BP: 169A

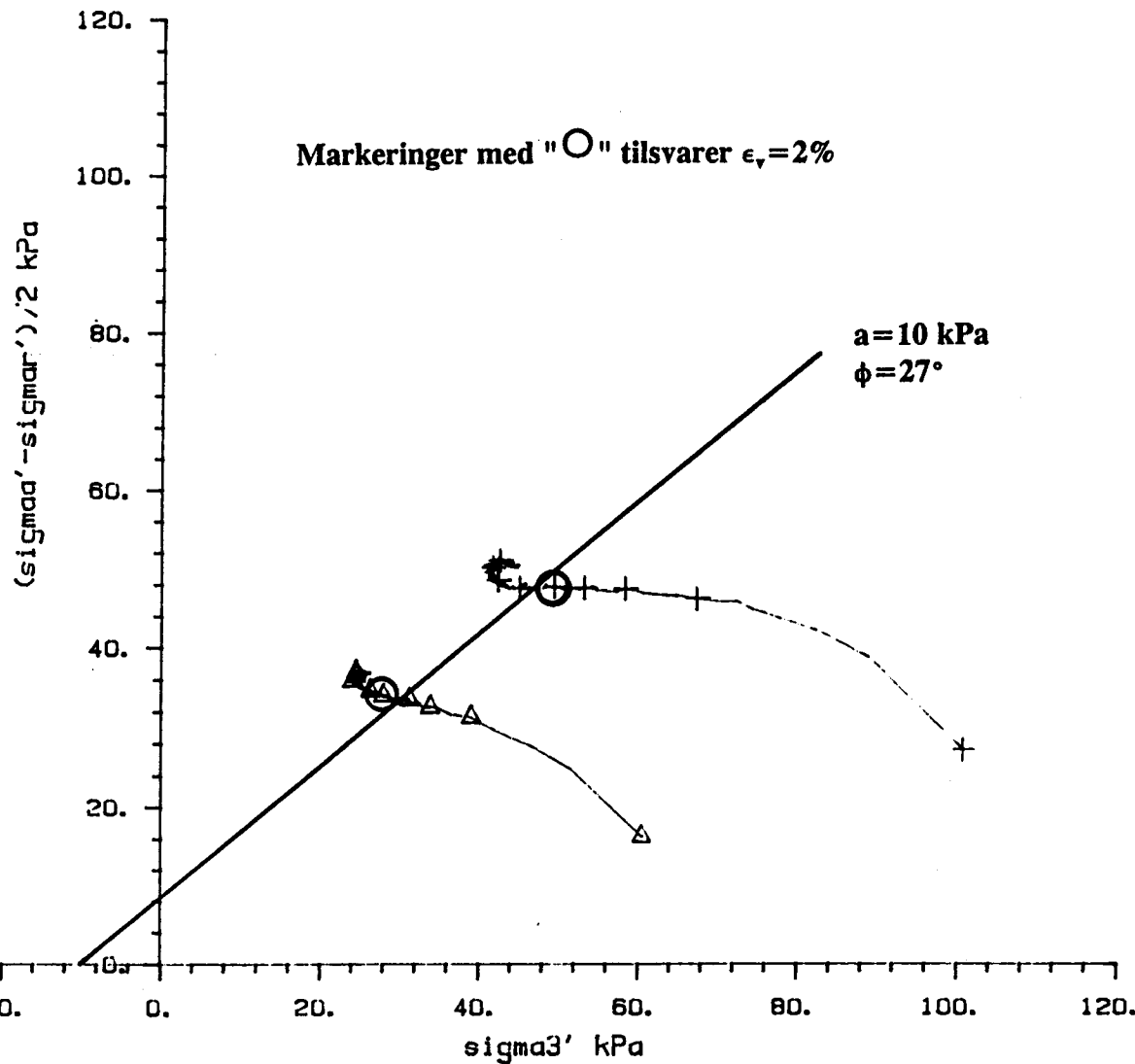
| Dybde [m] | P_o' [kPa] | P_c' * [kPa] | M [MPa] | m | c_{v1} [m ² /år] | c_{v2} [m ² /år] | w [%] | Materiale | Bilag |
|--------------|-----------------|-------------------|------------|------|----------------------------------|----------------------------------|----------|--------------|-------|
| 15,6 / 15,6 | ~90 | 100 | 3 | 17 | 14 | 9 | - / - | siltig leire | 45 |
| 23,4 / 23,4 | ~155 | 160 ! | 4 | 20,5 | 8 | 8 | 34 / 33 | leire | 46 |

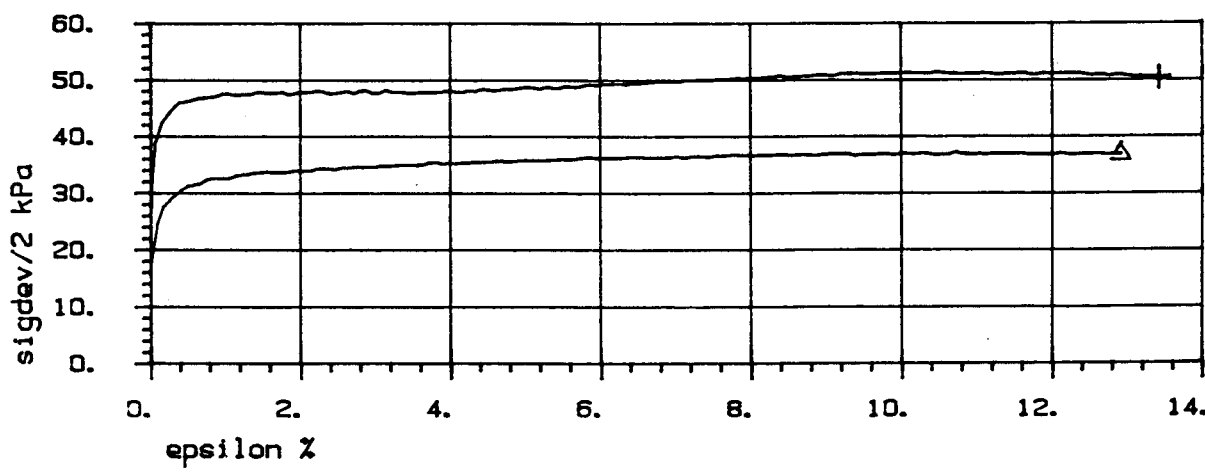
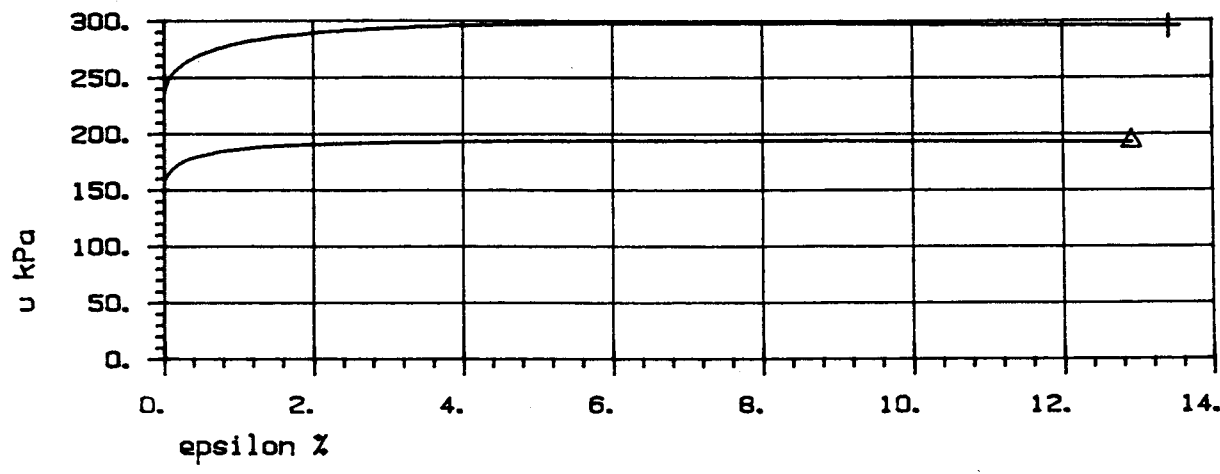
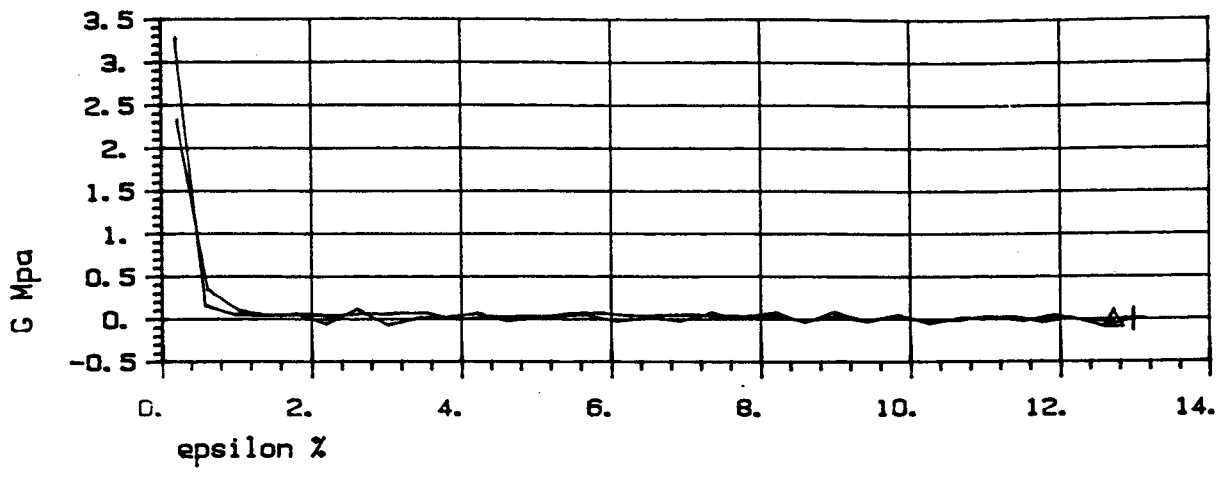
| SYMB | PROFIL | Dybde, m | Labnr. | Forsøkttype | dW, cm ³ |
|------|----------|----------|--------|-------------|---------------------|
| + | 6157-12V | 25.60 | 15D | CAUA1 | 8.00 |
| Δ | 6157-12V | 17.70 | 11D | CAUA1 | 6.00 |

Korr. modell
1, 2, 4.
1, 2, 4.



+ a = 10.0 kPa
Δ a = 10.0 kPa





| SYMB | PROFIL | Dybde, m | Labnr. | Forsøektype | dW, cm ³ |
|------|----------|----------|--------|-------------|---------------------|
| + | 6157-12V | 25.60 | 150 | CAUA1 | 8.00 |
| △ | 6157-12V | 17.70 | 110 | CAUA1 | 6.00 |

TREKSIALFORSØK

Hull 2-BP

OPD. A21A

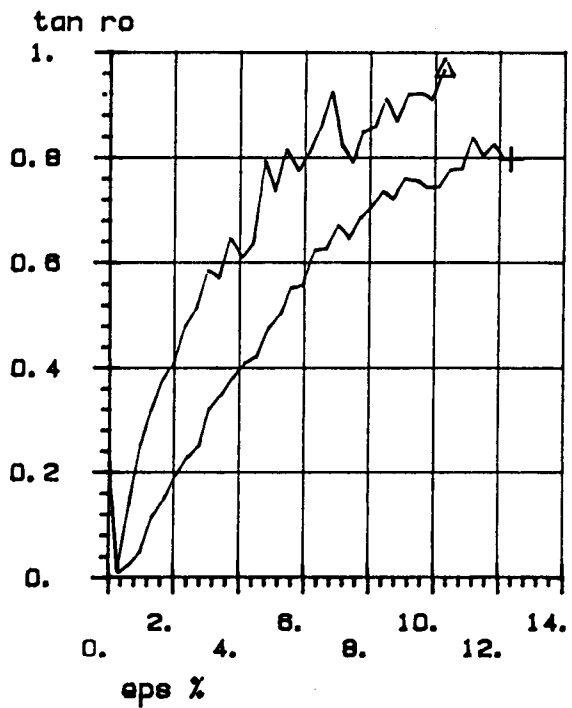
VEGLABORATORIET

DATO 6 06

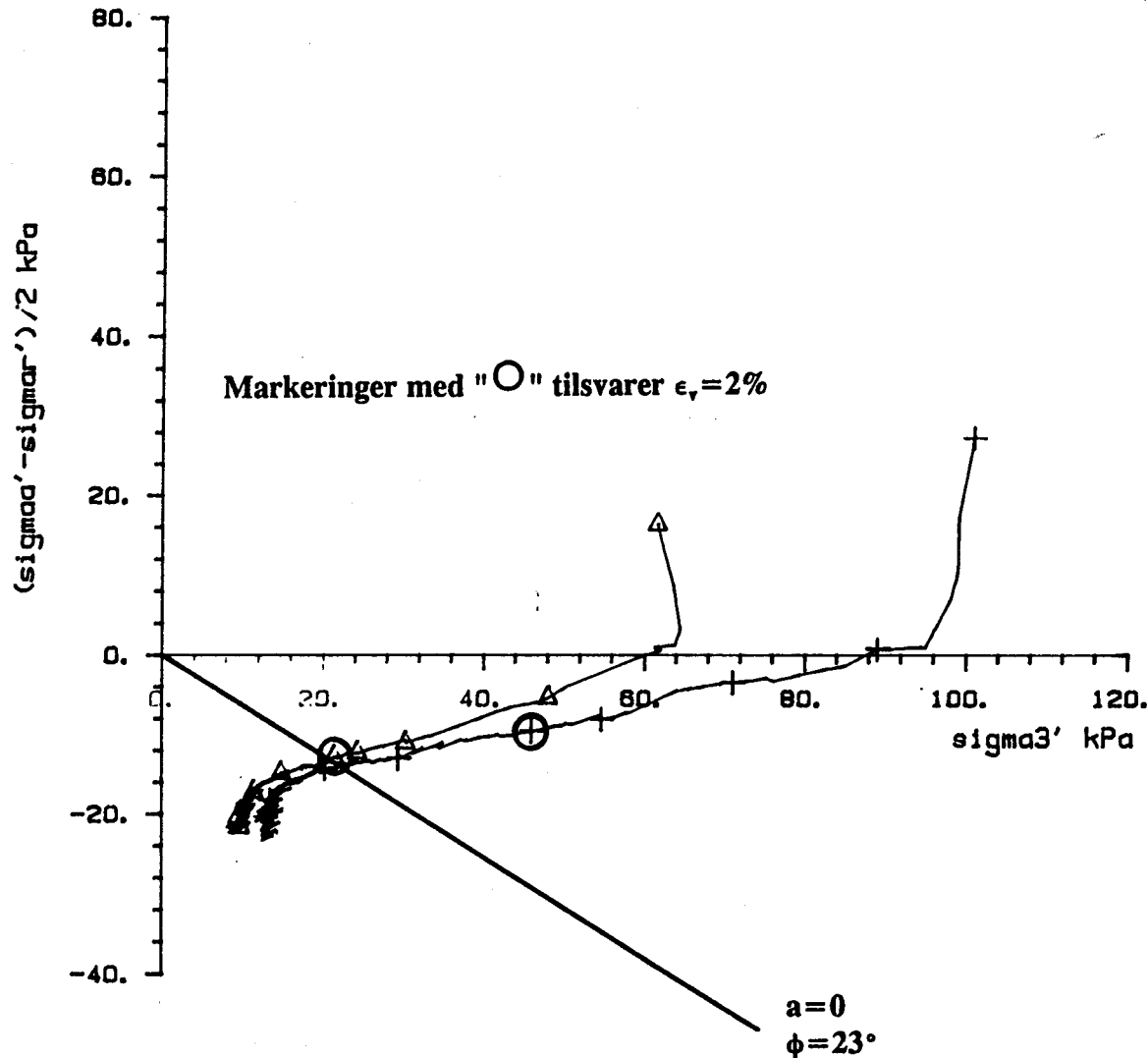
BILAG 39b

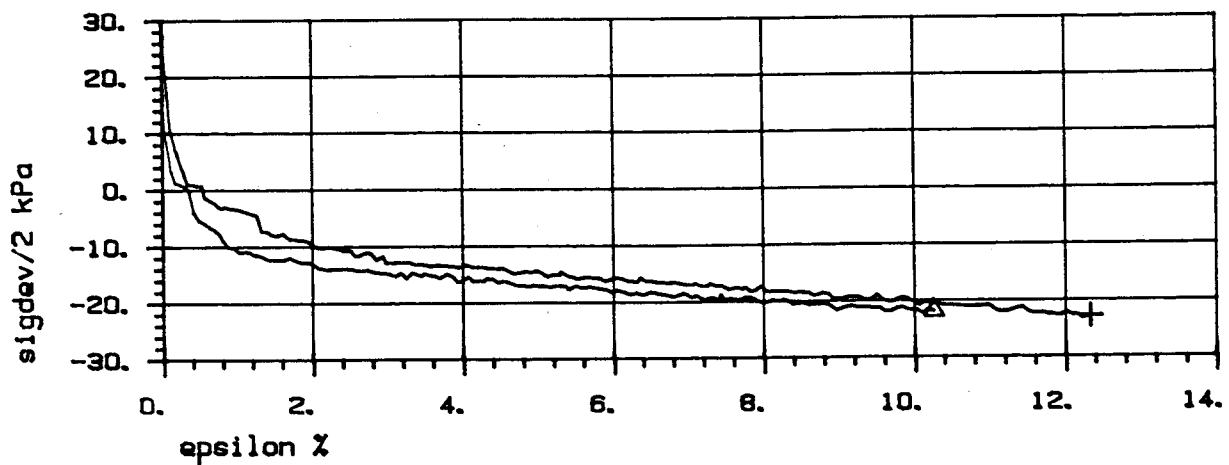
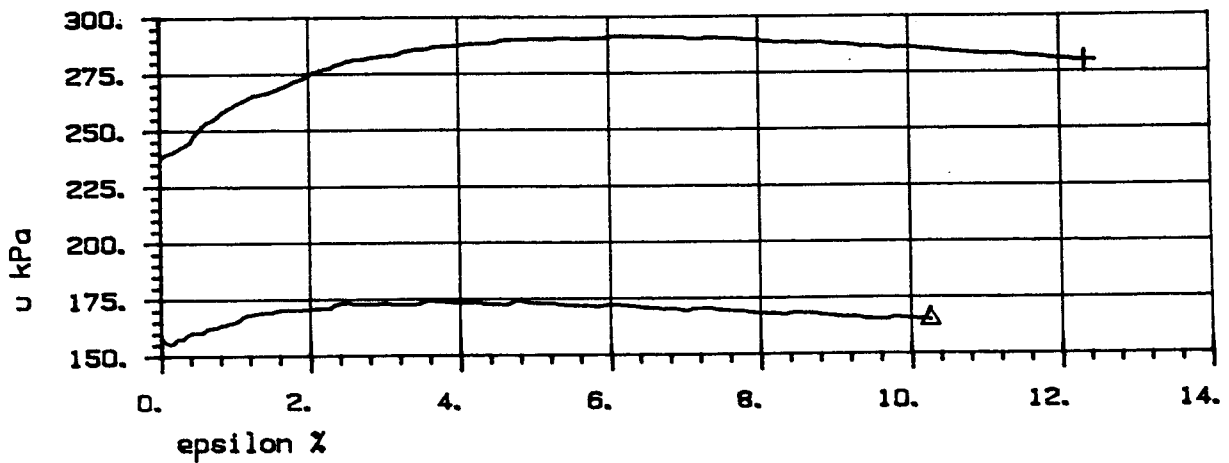
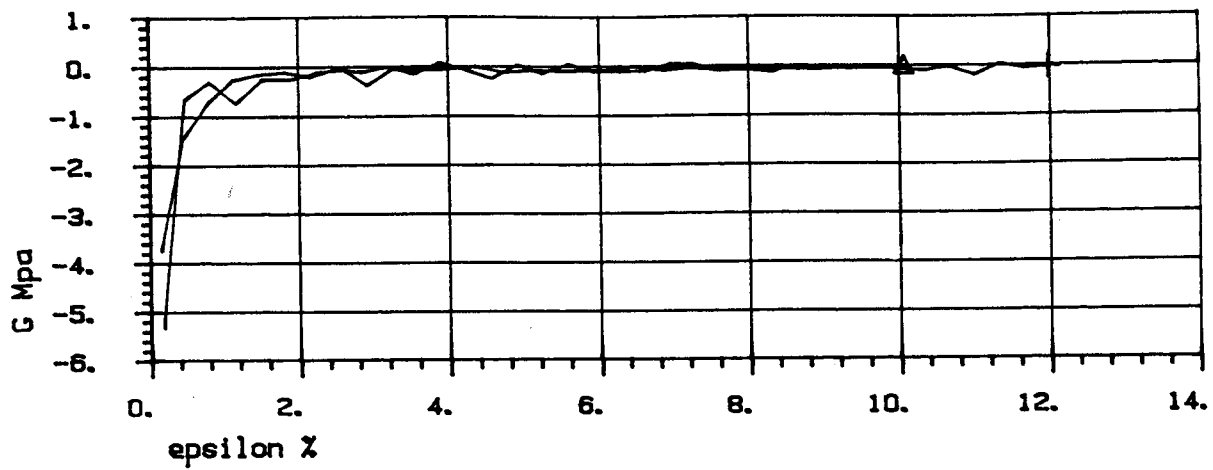
| SYMB | PROFIL | Dybde, m | Labnr. | Forektype | dW, cm ³ |
|------|----------|----------|--------|-----------|---------------------|
| + | 8157-12V | 25.70 | 15C | CAUP3 | 7.00 |
| Δ | 8157-12V | 17.80 | 11C | CAUP3 | 6.00 |

Korr. modell



+ a = 0.0 kPa
 Δ a = 0.0 kPa





| SYMB | PROFIL | Dybde, m | Labnr. | Forsøkttype | dW, cm ³ |
|------|----------|----------|--------|-------------|---------------------|
| + | 6157-12V | 25.70 | 15C | CAUP3 | 7.00 |
| △ | 6157-12V | 17.60 | 11C | CAUP3 | 6.00 |

TREKSIALFORSØK

Hull 2-BP

OPD. A21A

VEGLABORATORIET

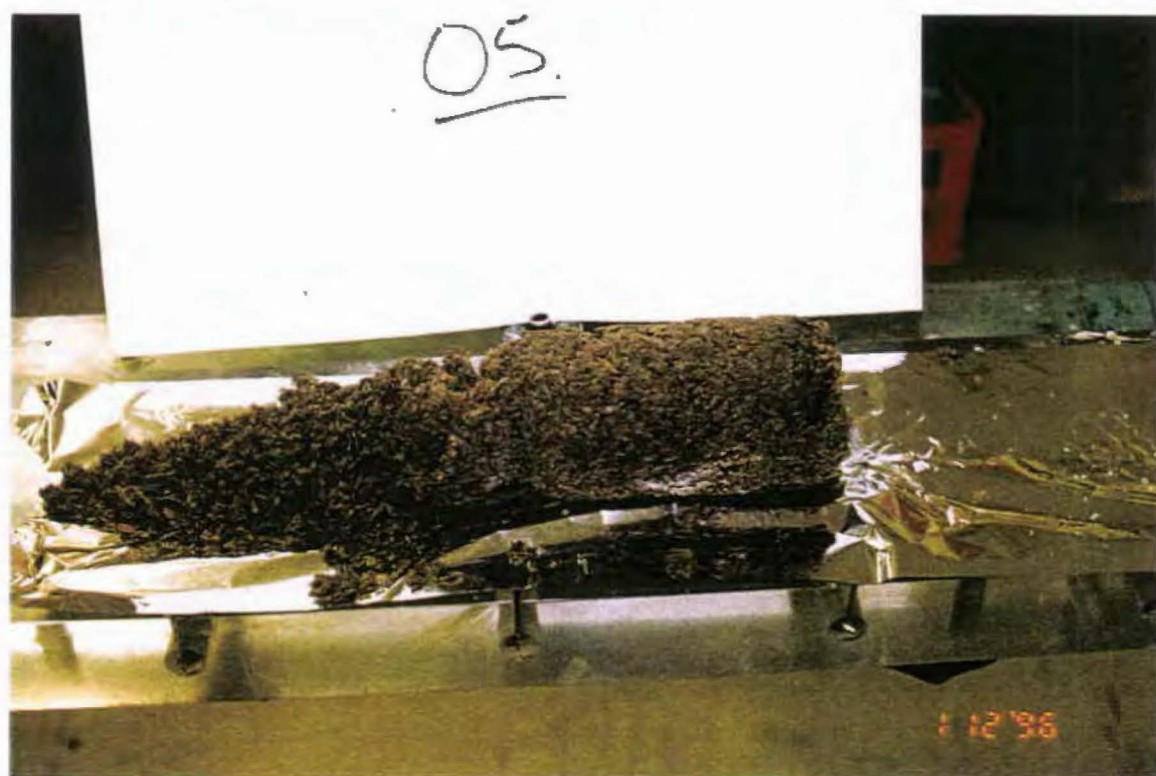
DATO 6 06

BILAG 40b



Bjørvikautstikkeren og Paulsenkaia, Hull 2-BP. Dybde 3,4 - 4,2 meter
og 4,4 - 5,2 meter.

BILAG 72



Bjørvikautstikkeren og Paulsenkaia, Hull 2-BP. Dybde 6,4 - 7,2 meter og 7,4 - 8,2 meter.

BILAG 73



Bjørvikautstikkeren og Paulsenkaia, Hull 2-BP. Dybde 8,4 - 9,2 meter og 9,4 - 10,2 meter.

BILAG 74



Bjørvikautstikkeren og Paulsenkaia, Hull 2-BP. Dybde 11,4 - 12,2 meter og 25,4 - 26,2 meter.

BILAG 75