

## Appendix D SEM IMAGES

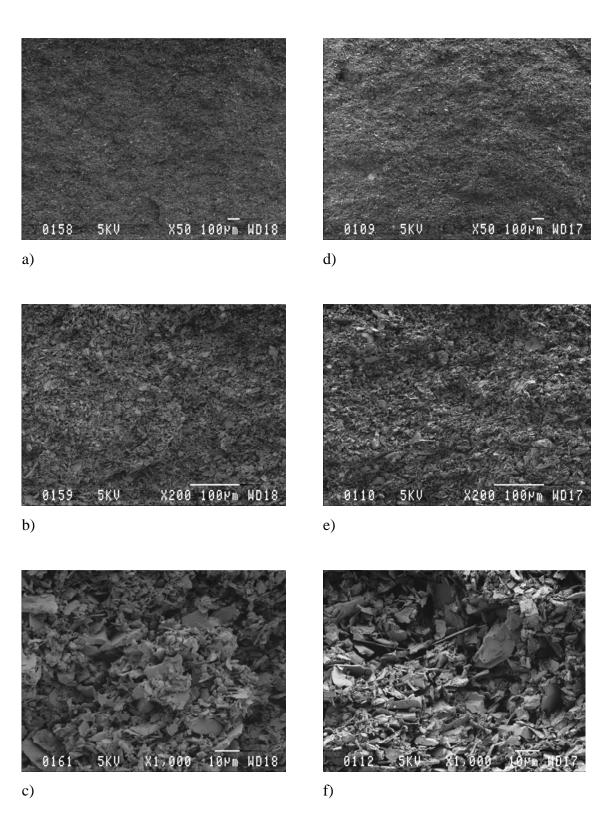
Appendix D includes all SEM images of consolidation and shear samples before the test. These images were used as the basis of the image analysis. Images were taken for each sample with a vertical orientation at magnifications of 50, 200, 500, 1000 and 2000 times. Only magnifications of 50, 200 and 1000 times are attached in the appendix. Sample coding follows that as described in section 3.2. Preparation of SEM samples is described in section 3.8. The testing procedures of all SEM samples are described here and summarized in the table below.

- Flushing/saturation: were used on all triaxial samples. Consolidation samples (-con) used for the SEM were removed after this process.
- Consolidation/creep: isotropic consolidation for all triaxial shear samples.
   Shear samples (-200 or -400) used for the fabric analysis were removed after consolidation and creep has taken place. Creep was allowed for at least 24 hours.
- Desiccation- all samples were desiccated before entering the SEM.

Sample	Material	Flushing/	Consolidation/	Desiccation
		saturation	creep	
Pond undisturbed	Pond			V
P-U-con	Pond	V		V
P-MT-con	Pond	V		V
P-S-con	Pond	V		V
P-U-200	Pond	V	√ (200kPa)	V
P-MT-200	Pond	V	√ (200kPa)	$\sqrt{}$
P-S-200	Pond	V	√ (200kPa)	V
P-U-400	Pond	V	√ (400kPa)	V
P-MT-400	Pond	V	√ (400kPa)	V
P-S-400	Pond	V	√ (400kPa)	V
MB undisturbed	Middle beach			V
MB -U-con	Middle beach	V		V
MB -MT-con	Middle beach	V		V
MB -S-con	Middle beach	V		V
MB -U-200	Middle beach	V	√ (200kPa)	V
MB -MT-200	Middle beach	V	√ (200kPa)	V
MB -S-200	Middle beach	V	√ (200kPa)	V
MB -U-400	Middle beach	V	√ (400kPa)	V
MB -MT-400	Middle beach	V	√ (400kPa)	$\sqrt{}$
MB -S-400	Middle beach	V	√ (400kPa)	V
UB undisturbed	Upper beach			$\sqrt{}$
UB -U-con	Upper beach	V		V
UB -MT-con	Upper beach	V		V
UB -S-con	Upper beach	V		V
UB -U-200	Upper beach	V	√ (200kPa)	V
UB -MT-200	Upper beach	V	√ (200kPa)	V
UB -S-200	Upper beach	V	√ (200kPa)	V
UB -U-400	Upper beach	V	√ (400kPa)	V
UB -MT-400	Upper beach	V	√ (400kPa)	V
UB -S-400	Upper beach	<b>√</b>	√ (400kPa)	V

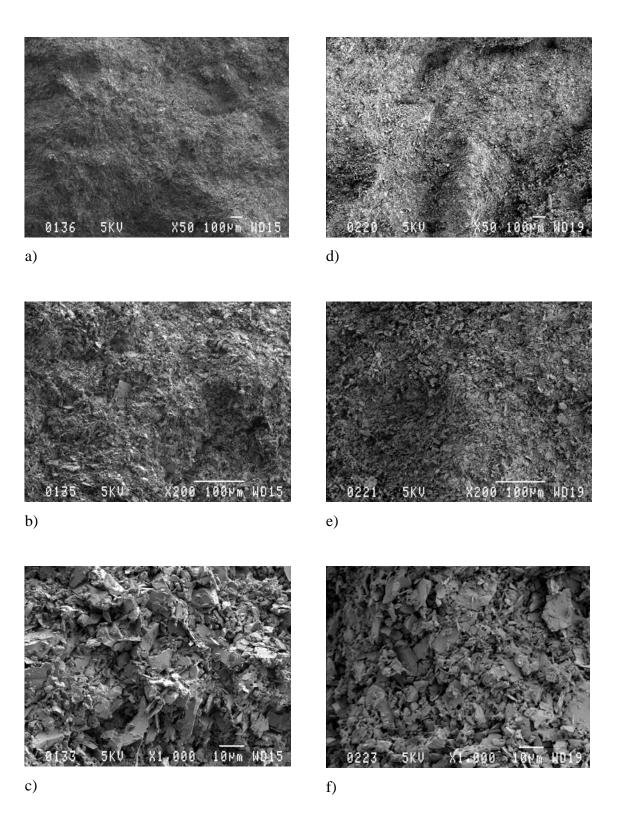


Pond in situ P-U-con



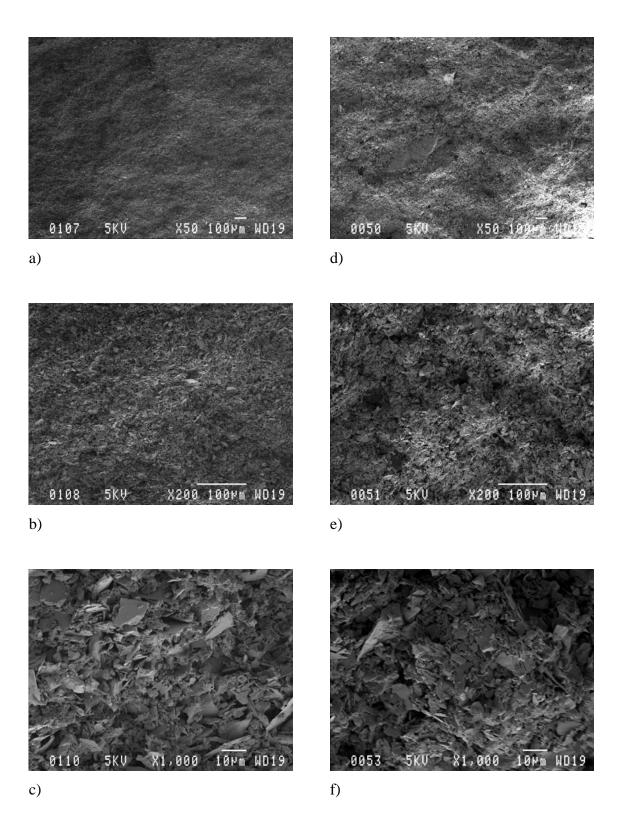


P-MT-con P-S-con



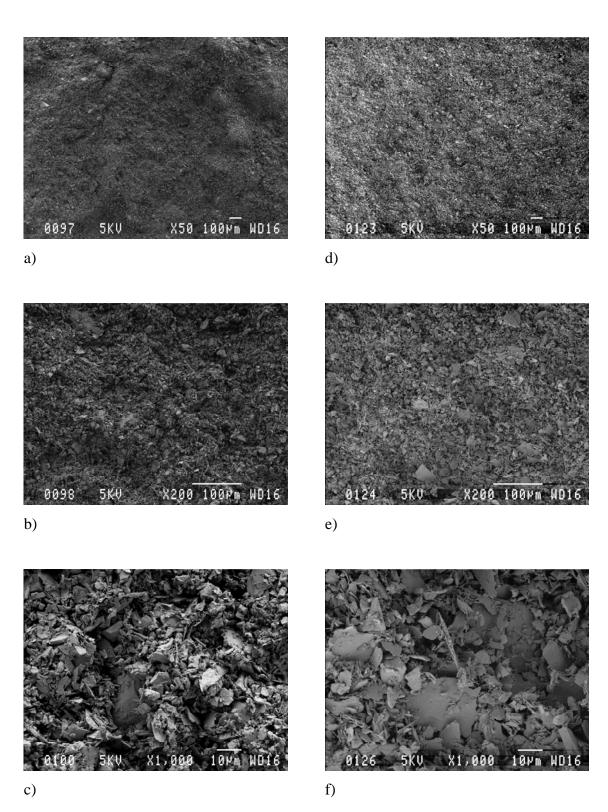


P-U-200 P-MT-200



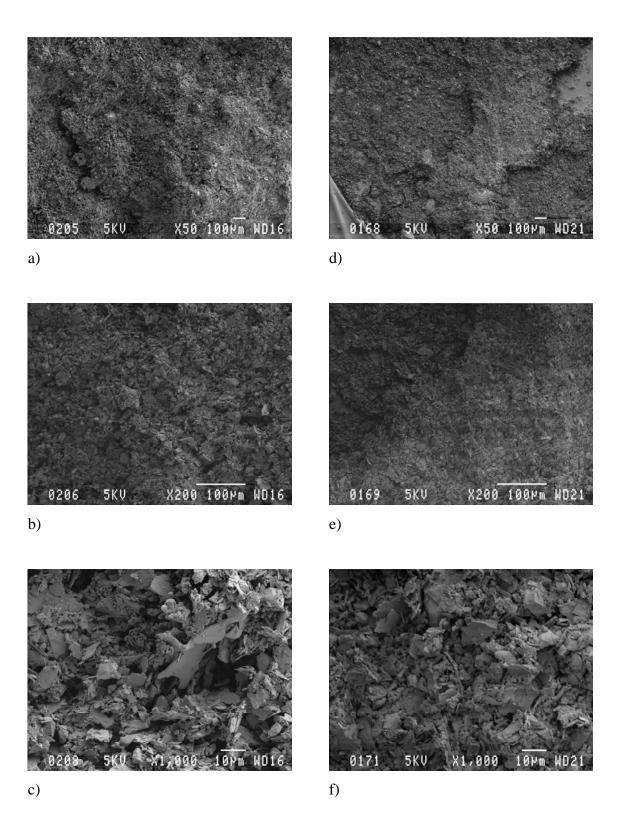


P-S-200 P-U-400



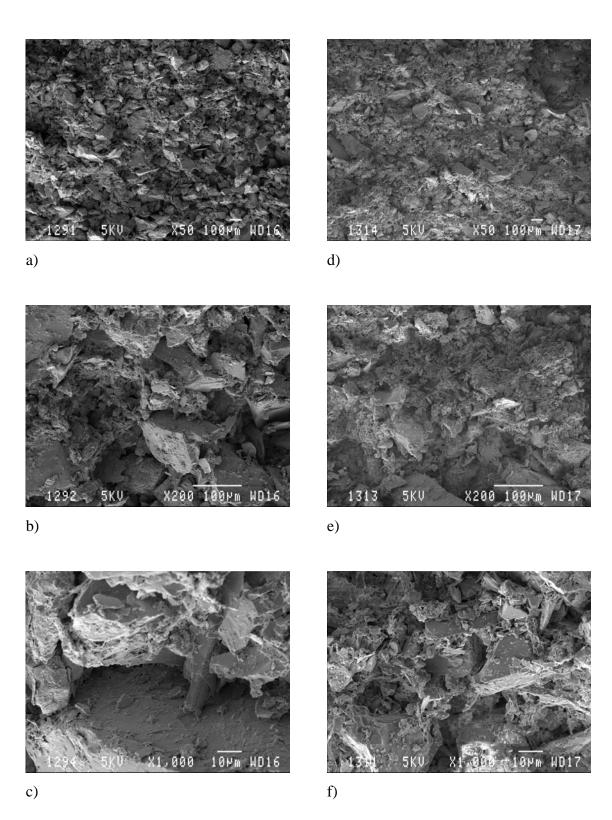


P-MT-400 P-S-400





MB in situ MB-U-con





MB-MT-con MB-S-con

