

## EFA Testing of Sample3 (pushed)

Side Wall of Scour Hole

Vane test: Undrained Shear Strength 24 kPa

Undrained Residual Shear Strength 8.5 kPa

Test data: 04-14-2004

### **Observation during the testing:**

1. In first step, velocity of testing was 0.18m/s. No scour was found after about 2 minutes.
2. Then velocity was increased to 0.23m/s. Erosion rate was very low.
3. When the velocity was increased to about 0.3m/s, erosion rate increased obviously. Fine particles were removed by the flow gradually.
4. With 0.4m/s velocity, erosion rate was very high. The sample was uniform.
5. When the velocity was increased to 0.57 m/s, the main button must be pushed continuously.

Table 1 Shear Stress, Velocity, and Erosion Rate in EFA testing of Sample3 (pushed)

Velocity (m/sec)	0.183	0.234	0.295	0.315	0.438	0.57
Shear Stress (Pa)	0.128	0.197	0.297	0.334	0.592	0.944
Erosion Rate (mm/hr)	0.0	2.348	4.986	9.574	352.941	654.545







