

Supplemental Table file: Details of experimental sample characteristics and information on consolidation and triaxial tests. For larger context see Urgeles et al. (2007).

Table 1: Sample characteristics

Sample	Depth(mbsf)	UNIT	Bulk density (g/cm <sup>3</sup> )	Grain density (g/cm <sup>3</sup> )	Initial Porosity	Saturation
3081322D001H02WR	41.5	1B SLUMP	1.68	2.7	60.06	1.01
3081322D002H02WR	71.5	1C	1.74	2.7	56.1	1.00
3081324B013H01WR	109.6	1D SLUMP	1.86	2.7	49.79	1.02
3081324C004H02WR	201.5	1E	1.85	2.7	50.39	1.01

Table 2: Samples' consolidation data ( $u_b$ :backpressure;  $\sigma'_c$ : Consolidation stress;  $\sigma'_{v0}$ : In situ effective stress assuming hydrostatic conditions;  $\sigma'_v$ : In situ effective stress; OCR: OverConsolidation Ratio)

Sample	$u_b$ (kPa)	B-value	Strain after consolidation (%)	$\sigma'_c$ (kPa)	Final Porosity	Hydrostatic pressure (kPa)	Overburden stress (kPa)	$\sigma'_{v0}$ (kPa)	$\sigma'_v$ for $\lambda=0.6$ (kPa)	OCR at $\sigma'_c$ (assumes $\lambda=0.6$ )
3081322D001H02WR	110	0.905	3.47	140	56.67	416.46	658.75	242.29	96.92	1.00
3081322D002H02WR	120	0.95	1.57	80	54.91	717.52	1182.25	464.73	185.89	2.32
3081324B013H01WR	144	1.00	1.88	130	49.43	1099.86	1874.61	774.75	309.90	2.38
3081324C004H02WR	41	0.95	0.02	250	49.33	2022.09	3605.24	1583.15	633.26	2.53

Table 3: Samples' shearing data ( $q$ :  $(\sigma_1-\sigma_3)/2$ ;  $p'$ :  $(\sigma_1+\sigma_3)/2$ ;  $u_f$ : Pore pressure at failure)

Sample	Strain rate (%/h)	$q$ at failure (kPa)	$q/\sigma'_c$	$p'$ at failure (kPa)	$p/\sigma'_c$	$q/p'$	$u_f$ (kPa)	$u_f/\sigma'_c$	Friction angle (°)	Strain at failure (%)
3081322D001H02WR	0.53	71.87	0.51	133.87	0.96	0.54	188	1.34	30.76	10.3
3081322D002H02WR	0.52	56.05	0.70	105.05	1.31	0.53	151	1.89	30.58	12.44
3081324B013H01WR	0.52	84.96	0.65	157.96	1.22	0.54	197	1.52	30.82	14.29
3081324C004H02WR	0.52	154.59	0.62	316.59	1.27	0.49	128	0.51	27.98	14.99