



Basic Data

Database Clay

I 10142

sample: AVG / Padulazzu

country: Italy

supplier: SSB

sender:

received: 30-SEP-2010

amount: 1.57 kg

condition: raw clay

colour of raw clay: mixed, see remarks

RAL: xxx

colour of powder: light beige red

RAL: ...

water content	27.9	%
MB-adsorption	452	mg/g
montmorillonite	103	%
carbonate (CO ₂)	1.1	%
pH-value (100+8)	8.7	—
whiteness	27.4	%
specific surface	68	m ² /g

swelling volume	ml/2g
water 0 h	7
water 24 h	7
saline solution 0 h	8
saline solution 24 h	8

XRD:

quartz	.25	%
mica	0	%
kaolinite	0	%
feldspar	1.5	%
cristobalite	.5	%
calcite	0	%
dolomite	0	%
others		
Sum quartz+cristobalite	.75	%

CEC	92	meq/100g	
Ca	38	Mg	46
Na	28	K	2.5
Al	.9	Fe	0

mineralogy

☒ albite
☒ hematite
☒ montmorillonite

test report:

remarks:

date: 04-JAN-2011

colour of raw clay: beige red (3012) + brown red (3011) + light salmon red

images available: NO



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Database Clay

I 10142

sample: AVG / Padulazzu

heavy metals:

As	4	ppm
Pb	17	ppm
Cr	19	ppm
Cd	0	ppm
Ni	10	ppm
Zn	83	ppm
Cu	18	ppm
Mn	1240	ppm
Co	12	ppm
Hg	0	ppm

other elements:

Ba	375	ppm
Sn	21	ppm
Mo	0	ppm
Sb	3	ppm
Tl	0	ppm
Se	0	ppm
V	22	ppm
Bi	2	ppm
Ga	18	ppm
In	23	ppm
Li	20	ppm
Sr	78	ppm
P	370	ppm
La	25	ppm
Sc	14	ppm
Zr	250	ppm
Y	37	ppm
Be	2	ppm
S	145	ppm

available: ☒ DTA / TG
☒ IR
☒ ASAP

silicate analysis:

SiO ₂	54	%
Fe ₂ O ₃	6	%
Al ₂ O ₃	19.7	%
MgO	4.6	%
CaO	1.6	%
K ₂ O	.51	%
Na ₂ O	1.6	%
TiO ₂	.73	%
loss on ignition (1000°C)	10.5	%

CNS:

C	0	%
N	0	%
S (Leco)	0	%

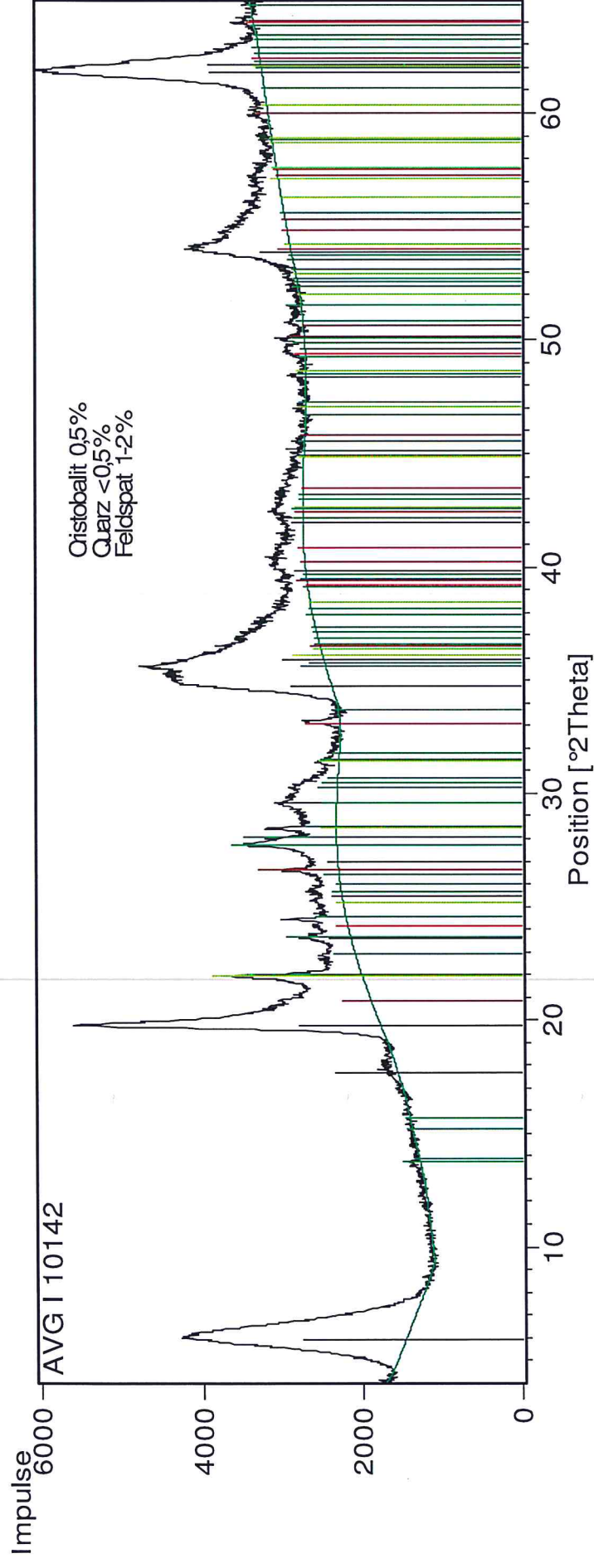
ions:

chloride	.14	%
sulfate	.043	%
fluoride	.18	%

pore volume (CCl₄):

0-140 Å		ml/g
0-250 Å		ml/g
0-800 Å		ml/g
pore volume (nitrogen)		—
13-210 Å	.074	cm ³ /g
13-400 Å	.102	cm ³ /g
13-3000 Å	.151	cm ³ /g

dioxin / furan:



Reflexliste
00-013-0135; Ca _{0.2} (Al, Mg) ₂ Si ₄ O ₁₀ (OH) ₂ · 4 H ₂ O; Montmorillonite-15A
00-024-0072; Fe ₂ O ₃ ; Hematite
00-020-0572; Na Al Si ₃ O ₈ ; Albite, disordered
00-011-0695; SiO ₂ ; Cristobalite, syn
00-005-0490; SiO ₂ ; Quartz, low