



INTERCALIBRATION TESTS SEDIMENT FOR GRAIN SIZE ANALYSIS

To the Referents of participating laboratories

This is to inform you of the work plan for sediment intercalibration tests to be performed in 2010.

Please note the following:

- ✚ Under the terms of the work plan, it is possible to carry out up to 2 tests, as set out in SCHEDULE 1.
- ✚ **The timing** of the tests is as follows:
 - sending of samples to the laboratories by **September 2010**;
 - transmission of results by the laboratories within 30 working days of receipt of samples (**30th October 2010**) for **Test 1** and 60 working days of receipt of samples (**31th December 2010**) for **Test 2**.
- ✚ On receiving the samples each Referent of each laboratory must compile SCHEDULE 6 and send it, preferably by e-mail, to project@csaricerche.com, or by fax to (Italy) 0541 791045.
- ✚ To ensure that the tests are carried out properly, on receipt of SCHEDULE 6 the Coordinating Laboratory will assign an Identification Code to each participating laboratory and inform them.
- ✚ Each laboratory participating in the intercalibration tests will conduct granulometric analysis in accordance with its own protocols.
- ✚ **The analytical results**, expressed as percentages, should be presented in tabular format. For Test 1 the results can be shown in terms of the sand, silt and clay dimensional categories (SCHEDULE 2). Where appropriate, the results can be expressed in ½ phi intervals (SCHEDULE 3). For Test 2 the results must be displayed as set out in SCHEDULE 4.
- ✚ **Communications** between laboratories will preferably be by e-mail, to project@csaricerche.com, or by fax to (Italy) 0541 791045. Further information can be obtained from Dr. Matteucci Gabriele by ringing our offices on 0541 791050 or by writing to gmatteucci@csaricerche.com.
- ✚ **The Tests** will be sent to the laboratories by courier. The samples will be sent without refrigeration. It is however advised that they be kept in the refrigerator at ~ 4°C from the moment they are received until the analyses are conducted. For this cycle of tests it is requested that laboratories provide just one result per sample per test, regardless of the number of replicates performed. In the event that a measurement cannot be made, leave the relevant box in the table blank (do not put 0 or some other annotation).
- ✚ The Laboratories will receive 3 containers, labelled **Sample 1**, **Sample 2** and **Sample 3**.



- ✚ The “proficiency” assessment (z-score) will be conducted on the basis of variation coefficients, expressed as percentages.
- ✚ **The transmission of the results** should preferably be via e-mail, to project@csaricerche.com, or by fax to (Italy) 0541 791045. Should any difficulty in the transmission of data arise, contact Dr. Matteucci Gabriele on (Italy) 0541 791050.
- ✚ At the end of the work a **technical report** on the results will be sent to the Referents of all participating laboratories.
- ✚ There will be a **final workshop** for the presentation and discussion of the results, to be held by April 2011.
- ✚ **The cost** of the samples is shown in SCHEDULE 5, which should be filled out in its entirety, with particular attention to the obligatory field and sent to Gruppo CSA by the 31th August 2010.
- ✚ **Shipping costs** shall be borne by the participant.

We remain at your disposal for any further explanation and/or clarification you may require.

Regards

Venice, 08/06/2010

Scientific Coordinator

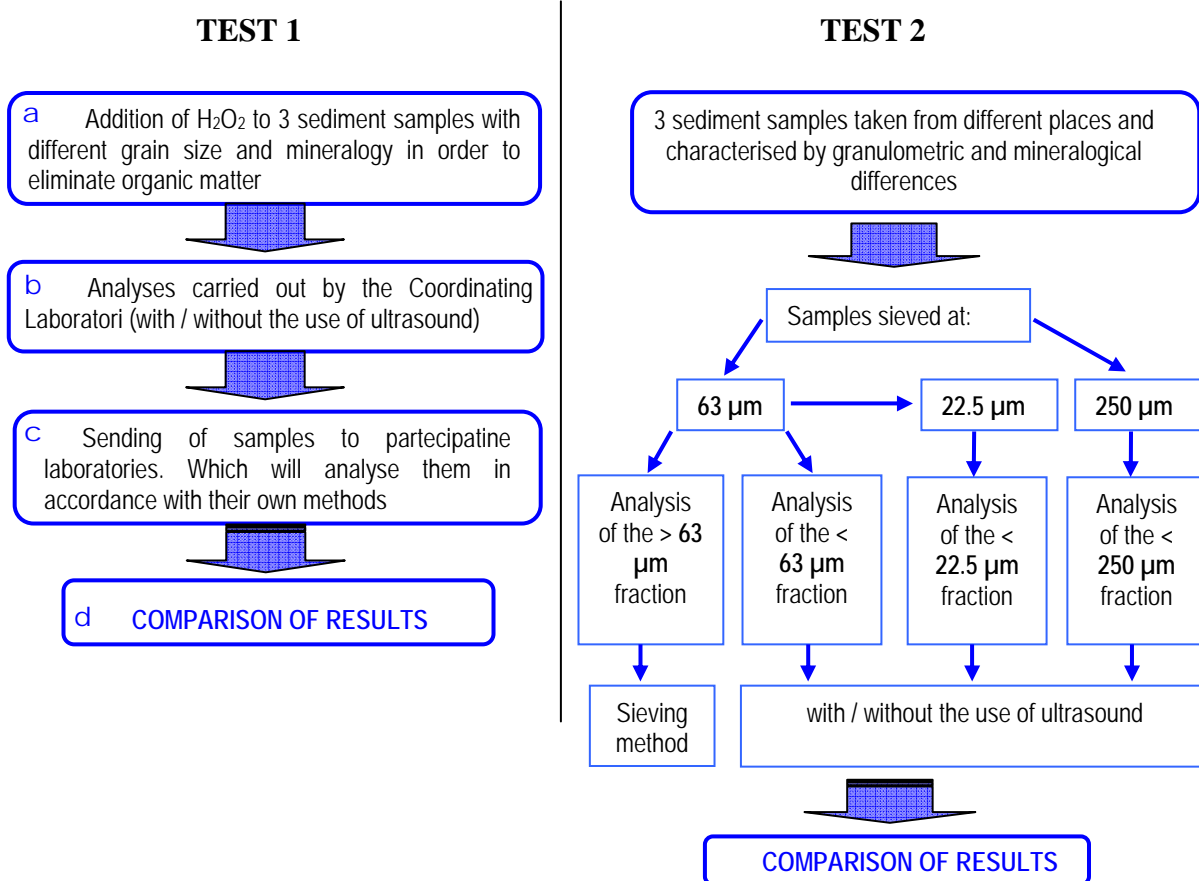
Prof. E. Molinaroli



SCHEDULE 1

TESTS	Period
1	September 2010
1 + 2*	September 2010

*Test 1 is a condition for participation in Test 2.





SCHEDULE 2

For Test 1

Fraction		Grain size interval	Results(%)
SAND		2 mm ÷ 0.063 mm	
PELITE		< 0.063 mm	
	SILT	0.063 mm ÷ 0.002 mm	
	CLAY	< 0.002 mm	



SCHEDULE 3

For Test 1

Laboratory Identification Code:.....

Date when analysis performed:

Grain size interval				Results
μm		phi		(%)
1414	2000	-0.5	-1.0	
1000	1414	0.0	-0.5	
707.1	1000	0.5	0.0	
500.0	707.1	1.0	0.5	
353.6	500.0	1.5	1.0	
250.0	353.6	2.0	1.5	
176.8	250.0	2.5	2.0	
125.0	176.8	3.0	2.5	
88.4	125.0	3.5	3.0	
62.5	88.4	4.0	3.5	
44.2	62.5	4.5	4.0	
31.3	44.2	5.0	4.5	
22.5	31.3	5.5	5.0	
15.6	22.5	6.0	5.5	
11.0	15.6	6.5	6.0	
7.8	11.0	7.0	6.5	
5.7	7.8	7.5	7.0	
3.9	5.7	8.0	7.5	
2.9	3.9	8.5	8.0	
2.0	2.9	9.0	8.5	
1.5	2.0	9.5	9.0	
0.98	1.5	10.0	9.5	
	< 0.98		> 10.0	



SCHEDULE 4

For Test 2

Laboratory Identification Code:.....

Date when analysis performed:

Analysis of the > 63 µm fraction

Grain size interval				Results
µm		phi		(%)
1414	2000	-0.5	-1.0	
1000	1414	0.0	-0.5	
707.1	1000	0.5	0.0	
500.0	707.1	1.0	0.5	
353.6	500.0	1.5	1.0	
250.0	353.6	2.0	1.5	
176.8	250.0	2.5	2.0	
125.0	176.8	3.0	2.5	
88.4	125.0	3.5	3.0	
62.5	88.4	4.0	3.5	
	< 62.5		< 4.0	



Analysis of the < 63 µm fraction

Samples treated with ultrasound				
Grain size interval				Results
µm		phi		(%)
	> 62.5		< 4.0	
44.2	62.5	4.5	4.0	
31.3	44.2	5.0	4.5	
22.5	31.3	5.5	5.0	
15.6	22.5	6.0	5.5	
11.0	15.6	6.5	6.0	
7.8	11.0	7.0	6.5	
5.7	7.8	7.5	7.0	
3.9	5.7	8.0	7.5	
2.9	3.9	8.5	8.0	
2.0	2.9	9.0	8.5	
1.5	2.0	9.5	9.0	
0.98	1.5	10.0	9.5	
	< 0.98		> 10.0	

Samples not treated with ultrasound				
Grain size interval				Results
µm		phi		(%)
	> 62.5		< 4.0	
44.2	62.5	4.5	4.0	
31.3	44.2	5.0	4.5	
22.5	31.3	5.5	5.0	
15.6	22.5	6.0	5.5	
11.0	15.6	6.5	6.0	
7.8	11.0	7.0	6.5	
5.7	7.8	7.5	7.0	
3.9	5.7	8.0	7.5	
2.9	3.9	8.5	8.0	
2.0	2.9	9.0	8.5	
1.5	2.0	9.5	9.0	
0.98	1.5	10.0	9.5	
	< 0.98		> 10.0	



Analysis of the < 22.5 µm fraction

Samples treated with ultrasound				
Grain size interval			Results	
µm		phi		(%)
	> 22.5		< 5.5	
15.6	22.5	6.0	5.5	
11.0	15.6	6.5	6.0	
7.8	11.0	7.0	6.5	
5.7	7.8	7.5	7.0	
3.9	5.7	8.0	7.5	
2.9	3.9	8.5	8.0	
2.0	2.9	9.0	8.5	
1.5	2.0	9.5	9.0	
0.98	1.5	10.0	9.5	
	< 0.98		> 10.0	

Samples not treated with ultrasound				
Grain size interval			Results	
µm		phi		(%)
	> 22.5		< 5.5	
15.6	22.5	6.0	5.5	
11.0	15.6	6.5	6.0	
7.8	11.0	7.0	6.5	
5.7	7.8	7.5	7.0	
3.9	5.7	8.0	7.5	
2.9	3.9	8.5	8.0	
2.0	2.9	9.0	8.5	
1.5	2.0	9.5	9.0	
0.98	1.5	10.0	9.5	
	< 0.98		> 10.0	



Analysis of the < 250 µm fraction

Samples treated with ultrasound			
Grain size interval			Results
µm	phi		(%)
	> 250.0		< 2.0
176.8	250.0	2.5	2.0
125.0	176.8	3.0	2.5
88.4	125.0	3.5	3.0
62.5	88.4	4.0	3.5
44.2	62.5	4.5	4.0
31.3	44.2	5.0	4.5
22.5	31.3	5.5	5.0
15.6	22.5	6.0	5.5
11.0	15.6	6.5	6.0
7.8	11.0	7.0	6.5
5.7	7.8	7.5	7.0
3.9	5.7	8.0	7.5
2.9	3.9	8.5	8.0
2.0	2.9	9.0	8.5
1.5	2.0	9.5	9.0
0.98	1.5	10.0	9.5
	< 0.98		>10.0

Samples not treated with ultrasound			
Grain size range			Results
µm	phi		(%)
	> 250.0		< 2.0
176.8	250.0	2.5	2.0
125.0	176.8	3.0	2.5
88.4	125.0	3.5	3.0
62.5	88.4	4.0	3.5
44.2	62.5	4.5	4.0
31.3	44.2	5.0	4.5
22.5	31.3	5.5	5.0
15.6	22.5	6.0	5.5
11.0	15.6	6.5	6.0
7.8	11.0	7.0	6.5
5.7	7.8	7.5	7.0
3.9	5.7	8.0	7.5
2.9	3.9	8.5	8.0
2.0	2.9	9.0	8.5
1.5	2.0	9.5	9.0
0.98	1.5	10.0	9.5
	< 0.98		> 10.0



SCHEDULE 5

Spett.le **Gruppo CSA S.p.A.**
 Via Al Torrente 22
 47923 RIMINI RN
c.a. Dr. Gabriele Matteucci
gmatteucci@csaricerche.com

Re: Application form for participation in intercalibration tests in 2010

This is to inform you that this Laboratory, whose details are given below, agrees to participate in the intercalibration tests in accordance with the conditions set out in the notice of 24/03/2010 received by this laboratory.

LABORATORY DETAILS:

<i>Name</i>		.....
<i>Referent:</i>	.....	
<i>Address:</i>	Street name.....		
	n°.....		
	Post Code .....City.....Country.....		
	Telephone..... <i>fax</i>		
<i>Tax Code</i> <i>(required)</i>	.....	<i>VAT n°</i> <i>(required)</i>	.....
<i>Secretary:</i>	.....	
<i>E-mail:</i>	.....	

INTERCALIBRATION TEST(S) THAT THE LABORATORY INTENDS TO CARRY OUT:

<input type="checkbox"/>	Test 1	
<input type="checkbox"/>	Test 1	Test 2



This laboratory hereby undertakes to:

- send the results of the intercalibration tests in accordance with the procedures supplied with the samples;
- send to Gruppo CSA S.p.A. via al Torrente, 22 - 47923 Rimini (RN) Italy the total sum resulting from the cost of the test and transport, as per the following table. Gruppo CSA will send receipt of the relevant invoice.

	Costs*
Test 1	100.00 €
Test 1 – Test 2	200.00 €

* excluding VAT.

Bank account details

IBAN: IT07S0322624200000001170154

-

SWIFT: UNICRITMM

.....
(city and date)

Referent of Laboratory

.....



SCHEDULE 6

To be sent by Laboratory Referents on receipt of samples.

Laboratory	.....
Method used for preparation of sample	..........
Instrumentation / equipment used	..........
Condition of sample	Intact <input type="checkbox"/> Damaged <input type="checkbox"/> Notes:.....
Details of payment for enrolment	

Referent of Laboratory

.....