

# Inorganic Application Note



## Carbon and Moisture in Aggregates

### Sample Preparation

Crush to powder.

### Instrument Settings

Calibration Standard: LECO or NIST standard

Nominal Sample Weight: 0.5 grams

Analysis Time: ~7 minutes

### Special Accessories

Use 781-335 Quartz Combustion Boat

### Procedure

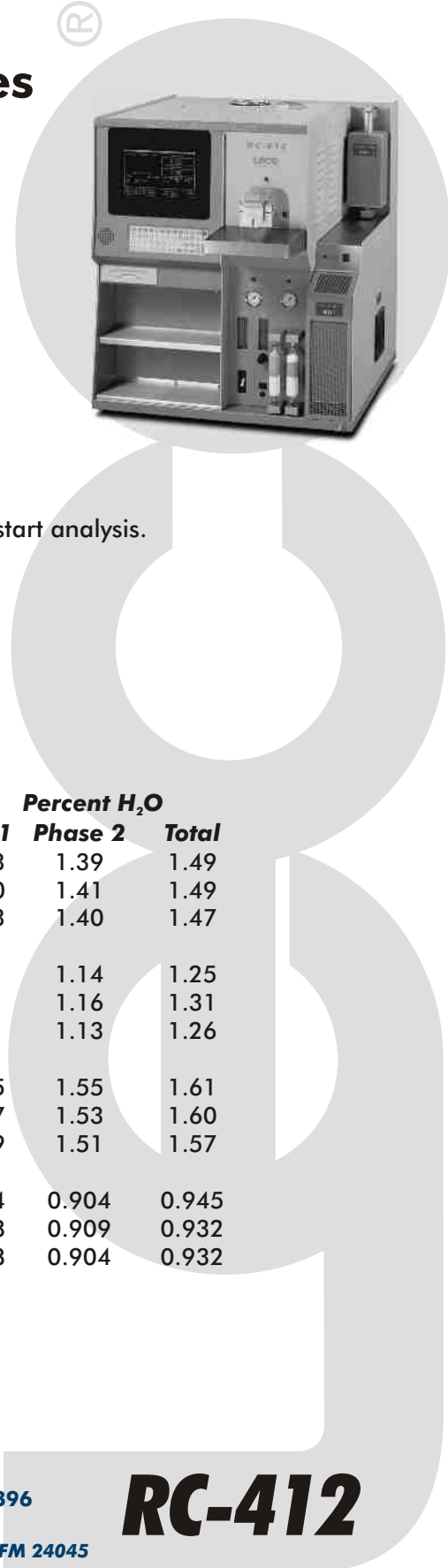
Weigh sample into tared quartz combustion boat, record weight, and start analysis.

### Furnace Program

	Starting Temp (°C)	Ending Temp (°C)	Ramp Rate (°C/min)	Hold Time (Sec.)
Phase 1	105	105	0	300
Phase 2	105	900	200	120

### Typical Results

Sample Material	Weight (grams)	Percent Carbon			Percent H <sub>2</sub> O		
		Phase 1	Phase 2	Total	Phase 1	Phase 2	Total
Rock #1	0.4998	0.00301	0.313	0.316	0.0943	1.39	1.49
	0.5095	0.00269	0.312	0.315	0.0800	1.41	1.49
	0.4857	0.00248	0.316	0.318	0.0723	1.40	1.47
Rock #2	0.5061	0.00502	0.154	0.159	0.114	1.14	1.25
	0.5095	0.00740	0.156	0.164	0.144	1.16	1.31
	0.5024	0.00587	0.155	0.161	0.131	1.13	1.26
Rock #3	0.5013	0.00190	0.0980	0.100	0.0645	1.55	1.61
	0.5030	0.00174	0.0954	0.0971	0.0677	1.53	1.60
	0.5022	0.00123	0.0944	0.0959	0.0539	1.51	1.57
Rock #4	0.5035	0.0017	0.0850	0.0867	0.0414	0.904	0.945
	0.5068	0.00055	0.102	0.103	0.0238	0.909	0.932
	0.5035	0.00033	0.0933	0.0936	0.0278	0.904	0.932



LECO Corporation  
3000 Lakeview Ave. • St. Joseph, MI 49085-2396  
Phone: 800-292-6141 • Fax: 269-982-8977  
info@leco.com • www.leco.com • ISO-9001 No. FM 24045

# RC-412