

FIELD GEOSCAN



Field Rock-Eval Analyser for Geochemical Analysis

Pyrolysis · Oxidation · FID Detection · IR cell · GEOWORKS Software · Portable & Field-Ready

40°C – 850°C

Temperature Range

1 sample

Sample Capacity

~30 minutes

Analysis Time

The FIELD GEOSCAN is the portable, field-ready version of Vinci's proven Rock-Eval instrument. It features a single oven performing both pyrolysis and oxidation cycles, delivering laboratory-grade S1, S2, Tpeak, Tmax, S3, S4, S5, TIC, and TOC results on-site within 30 minutes. Built on decades of Rock-Eval heritage, it brings exploration-grade geochemistry directly to the wellsite.

Key Parameters:

S1 · S2 · Tpeak · Tmax · API Gravity Index · S3 · S4 · S5 · TIC · TOC



UNIQUE BENEFITS



Proven Technology

Built on Rock-Eval — industry-standard geochemical analysis trusted worldwide



Fast Results

POPI-equivalent results in just 30 minutes per sample



Shale Play Capable

Light and heavy oil-end analysis for shale play and reservoir characterisation



Field-Portable

Wheeled transport case for safe, easy deployment on-site



API Gravity Index

Reservoir method includes calculated API gravity index for oil quality assessment



Upgradeable System

Optional S3–S5, TIC and TOC determination via gas-switching after pyrolysis



HOW IT WORKS



Strategically placed thermocouples monitor and regulate oven temperatures for precise, user-specified multi-ramp heating profiles.



TECHNICAL SPECIFICATIONS

Parameter	Specification
Pyrolysis Temp. Range	As low as 40°C (or ambient +20°C) up to 850°C
Sample Capacity	1 sample
Heating Rates	Adjustable 1–50 °C/min, in steps of 1 °C/min
Heating Ramps	Up to 5 programmable ramps
Detectors	FID (hydrocarbons) IR cell for CO, CO2 (optional)
Carrier Gases	N2 (pyrolysis) · Zero Air (oxidation/FID) · H2 (FID) · Air (cooling)
N2 Gas Requirements	99.99% purity 2 bar 100 mL/min
H2 Gas Requirements	99.99% purity 2 bar 30 mL/min
Air Requirements	99.99% purity 3 bar 400 mL/min
Power Supply	100–240 V, 50/60 Hz, 1500 W
Dimensions (W×L×H)	40 × 50 × 50 cm (without workstation)
Weight	35 Kg (base version) and 50 kg (with upgrade for S3, S4, S5, TIC and TOC)
Software	Rock7 (control & acquisition) + GEOWORKS (analysis & interpretation)

OPTIONAL UPGRADE

Extends the FIELD GEOSCAN with S3, S4, S5, TIC (Total Inorganic Carbon) and TOC (Total Organic Carbon) determination. After pyrolysis, carrier gas automatically switches to air for oxidation. An IR analyser monitors CO and CO2 throughout both phases, improving Oxygen Index (OI) accuracy.

S3CO / S3CO2

Pyrolysis phase
Oxygen Index accuracy

S4CO / S4CO2

Oxidation phase
TIC determination

TOC

Total Organic Carbon
Default upgrade output

TIC

Total Inorganic Carbon
via S4CO & S4CO2

Upgrade includes:

Additional Mass Flow Controller (N2/Air switching) · Vacuum Pump · IR Analyser (CO & CO2)

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