Elemental Microanalysis Ltd
1 Hameldown Road
Okehampton
EX20 1UB
United Kingdom
Telephone: 01837 54446
Fax: 01837 54544
Web: www.elementalmicroanalysis.com

Certificate of Analysis
Part No. B2352
Green Petroleum Coke Standard

Certificate Number: 742721

All analysis reported on a dried basis value	Mean	Exp. Unc.	n=	k=	Methods used
Mass percent Sulphur	1.11	± 0.11	45	2.02	ASTM D4239, D1552
Mass percent Ash	*(0.14)	---	6	---	ASTM D3174, D4422
Mass percent Volatile Matter	12.91	± 0.93	30	2.05	ASTM D3175, D7582
Mean BTU/lb	15,697	± 43	6	2.57	ASTM D5865
Fixed Carbon (Calculated)	*(86.95)	---	---	---	ASTM D3172
Mass percent Carbon	91.58	± 0.85	6	2.57	ASTM D5373
Mass percent Hydrogen	4.06	± 0.17	6	2.57	ASTM D5373
Mass percent Nitrogen	1.78	± 0.06	6	2.57	ASTM D5373
PPM – ug/g Nickel	188	± 24	6	2.57	ASTM D5056, D6376, D5600
PPM – ug/g Iron	254	± 50	6	2.57	ASTM D5056, D6376, D5600
PPM – ug/g Vanadium	111	± 8	6	2.57	ASTM D5056, D6376, D5600
PPM – ug/g Calcium	62	± 13	6	2.57	ASTM D5056, D6376, D5600
PPM – ug/g Silicon	156	± 20	6	2.57	ASTM D5056, D6376, D5600

*() – indicates informational value only

This Certified Reference Material is traced to NIST SRM 2718a and SRM 2719; High purity materials: Phenylalanine, EDTA. The BTU is traceable to Benzoic Acid NIST 39j

The intended use of this material is for the verification of test analysis by the above listed or other valid methods. The precision value represents the expanded degree of uncertainty based on errors from analytical assay by a consensus of approved labs, at a 95% confidence level utilizing ANOVA, ISO Guide 35, and the Guide to Uncertainty Measurement. Metrological traceability is to the SI derived unit of mass fraction expressed as mass fraction percent, ug/g, or BTU/lb. When necessary, professional judgment is applied toward consideration of data and statistical information. Normal testing procedures should be employed when using this standard; this includes using the reproducibility and repeatability factors based upon your test method. Refer to your test method or instrument manufacturer for typical and minimum sample size.

The material used to produce this RM was identified in accordance with ARI-LAB-603. The samples for round robin testing were selected in accordance with ARI-LAB-625. The above values relate only to the material used to produce this standard. The analytical samples are recommended to be dried per the test method used. This bottle contains 50g, -60 mesh (250u) green petroleum coke powder. Keep bottle sealed immediately after use and store under normal laboratory conditions. While unable to determine a definite shelf life this reference should be reviewed 20 years from date of certification. Once opened this certificate is valid for 2 years. Remedies for any claimed defect in this product will be limited to product replacement or refund of the purchase price. In no event shall Elemental Microanalysis Ltd be liable for incidental or consequential damages. This certificate cannot be reproduced except in full.

This Reference Material (RM) is traceable to the above-mentioned references and consensus of multiple test methods. For good laboratory practice it is recommended that all reference standards be verified as fit for purpose prior to use.

EXPIRATION DATE: THIS CRM IS VALID FOR TWO YEARS FROM THE DATE OF OPENING

Certified on the 4th of January 2022

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