BULK MINERALS

COAL & BIOMASS
IRON ORE
BAUXITE
MANGANESE
CHROME
PHOSPHATE
FERRO ALLOYS
NICKEL LATERITE
ABOUT BUREAU VERITAS

Bureau Veritas is a world leader in testing, inspection and certification. Our mission is at the heart of key challenges: quality, health and safety, environmental protection and social responsibility.

Through our wide range of expertise, impartiality and independence, we foster confidence between companies, public authorities and clients.

For exploration and mining clients, our world-wide network of laboratories, provides exploration and grade control data.

Our metallurgical pilot plant and process optimization services enable more efficient extraction of payable metals.

Moving downstream, accurate determination of quality and quantity is critical at key points in the supply chain and whenever the ownership of minerals transfers between buyers and sellers.

Bureau Veritas offers inspection, sampling and testing services in major global transit and trading locations.

Our solutions help our clients improve their profitability and contribute to sustainability and the reduction of waste.

BUREAU VERITAS ALSO OFFERS SERVICES IN ENVIRONMENTAL TESTING, USED OIL ANALYSIS, HSE CERTIFICATION, SUPPLY CHAIN TRACEABILITY, SUSTAINABILITY CERTIFICATION, CYBER-SECURITY, CERTIFICATION
BULK MINERALS LABORATORY LOCATIONS

MORE THAN 60 BULK MINERALS LABORATORIES OPERATING IN 27 COUNTRIES
This map displays laboratories offering bulk minerals testing services. For a full list of Bureau Veritas’ laboratory locations please contact us.
BUREAU VERITAS OFFERS GLOBAL METALLURGICAL TESTING & PROCESS OPTIMIZATION SERVICES

BUREAU VERITAS OPERATE OVER 60 COMMERCIAL AND ONSITE BULK MINERALS LABORATORIES FOR COAL, IRON ORE, PHOSPHATE & BAUXITE MINERS
SHIPPING & TRADING

BUREAU VERITAS’ INDEPENDENT GLOBAL SERVICES ARE AVAILABLE AT EVERY MAJOR PORT & TERMINAL

INDUSTRY

BUREAU VERITAS OFFERS ONSITE QA / QC AND SUPPLY CHAIN TRACEABILITY
EXPLORATION & MINING

BUREAU VERITAS OPERATES COMMERCIAL AND MINE-SITE LABORATORIES ON SIX CONTINENTS

COAL SERVICES:
- BoreCore programs
- Coke reactivity
- Drop Shatter testing
- Float / Sink
- Mineralogy
- Proximate & Ultimate analysis
- Sample preparation

ORES SERVICES:
- Fusion
- LOI
- Mineralogy
- XRF packages
- Sample preparation
- Specialized chemistry
Bureau Veritas operates the world’s largest XRF minerals laboratory located in Western Australia.

**DEDICATED FIBROUS MINERAL PREPARATION**

**ROBOTIC SAMPLE PREPARATION & FUSION - 5,000 SAMPLES PER DAY**

**LASER ABLATION ICP-MS TRACE ELEMENT ANALYSIS**

**XRF PACKAGES** (Iron Ore, Bauxite, Manganese, Chromite, Phosphate ores)

**LOI** (single / multipoint LOI by robotic Thermo Gravimetric Analyser)

**SPECIALIZED CHEMISTRY AND MINERALOGY**

**PERTH GEOANALYTICAL PROCESSES OVER TWO MILLION SAMPLES PER YEAR**
AS WE BUILD A MORE SUSTAINABLE FUTURE, LABORATORY PARTNERSHIP SOLUTIONS DELIVERS QUALITY ASSURANCE AND COST-SAVINGS

SAVINGS
TRUST
INNOVATION
GLOBAL
SUSTAINABILITY

OIL, GAS & CHEMICALS | FOOD & AGRI | METALS & MINERALS | ENVIRONMENTAL

We operate a global network of over 300+ laboratories across key markets to provide support with core product testing in conjunction with water, emissions, soil and surfaces analyses and to certify existing environmental operations.

MORE INFO

RESHAPEYOURLAB@BUREAUVERITAS.COM
FOCUS ON
BAUXITE, GUINEA

With over 37 years’ experience in Guinea, Bureau Veritas has established long term cooperation with a variety of clients.

SERVICES

Design and implementation of manual sampling protocol as per ISO 8685 / ISO 6153
Sample processing as per ISO 6140
Moisture determination as per ISO 9033
Draft survey
Chemical analysis
Witnessing of loading operations with daily reports and final inspection report
Provision of onsite laboratories services (Prep, XRF, FTIR)

OPERATING AT THE FOLLOWING PORTS:
KAMSAR, KATOUGOUMA & DAPILON, BEL AIR AND CONAKRY
BUREAU VERITAS’ KEY TECHNICAL CENTRES SUPPORT CLIENTS ACROSS THE WORLD WITH COAL AND MINERAL ORE CHARACTERIZATION & BENEFICIATION PROJECTS

SERVICES:
- Flotation
- Hydro-metallurgy
- Magnetic separation
- Comminution
- Gravity separation
- Slurry characterization
- Leaching studies

Bureau Veritas offer services from

BATCH SCALE BENCHTOP METALLURGICAL TESTS
to

LARGE SCALE PILOT PLANT CAPABILITIES
Offering services from early exploration phases through scoping, pre-feasibility, and feasibility studies.

**SERVICES**

Automated QEMSCAN  
Laser ablation ICP-MS  
Optical microscopy  
VIS-IR spectral  
Vitrinite reflectance / Maceral analysis  
XRD

**SPECIALIST IN-HOUSE VIS-IR SPECTRAL SERVICES INCLUDE**  
ASD-FTIR AND MACHINE LEARNING TECHNOLOGY
BUREAU VERITAS’ INDEPENDENT INSPECTION AND TESTING SOLUTIONS HELP OUR CLIENTS MINIMIZE COMMERCIAL, OPERATIONAL AND ENVIRONMENTAL RISKS THROUGHOUT THEIR GLOBAL SUPPLY CHAINS

SERVICES:
- Weighing supervision & draft surveying
- Sampling & sample preparation
- Loading and discharge inspection
- Mechanical sampling system – design, bias testing and compliance auditing
- Commercial settlement analysis
- Certification
Bureau Veritas is a leading provider of inspection and testing services on biomass materials. We provide services to the biomass supply chain which includes inspection, sampling & sample preparation, laboratory testing and on-site facilities. We provide expert testing across a wide range of solid fuel commodities and biomass commodities including pellets, chips, PKS and briquettes. Utilizing up to date LIMS software ensures data integrity and traceability at all stages of the testing process.

**OUR ACCREDITATIONS**

ISO 17025 Accreditation

ENplus® & GoodChips® Certified Laboratories

**BIOMASS IS A SUSTAINABLE AND RENEWABLE BASELOAD ENERGY SOURCE WHICH IS PLAYING AN INCREASINGLY IMPORTANT ROLE IN THE ENERGY MIX IN ORDER TO ACHIEVE CO₂ EMISSION TARGETS.**

**BUREAU VERITAS’ SERVICES HELP TO ENSURE THE QUALITY AND SUSTAINABILITY REQUIREMENTS OF OUR CLIENTS.**

**MEHMET GUNŞÜR**

Global Market Leader
Coal & Ferrous Metals
TRADE & SHIPMENT
SELECTED HIGHLIGHTS

Bureau Veritas inspected **10.3 MILLION TONNES** of COAL & PETCOKE exported from USA & CANADA.

Bureau Veritas inspected **30.7 MILLION TONNES** of exported COAL from COLOMBIA.

Bureau Veritas inspected **10.2 MILLIONS TONNES** of COAL aboard **138 VESSELS** exported from MOZAMBIQUE.
Bureau Veritas inspected 44.4 MILLION TONNES of COAL exported from AUSTRALIA.

Bureau Veritas CHINA inspected 86.6 MILLION TONNES of IRON ORE.

INDONESIA, the world’s largest coal exporter, exported 456.4 MILLION TONNES of COAL. Bureau Veritas inspected 64.4 MILLION TONNES.

Bureau Vertias inspected 62.3 MILLION TONNES of COAL & COKE aboard 1,067 VESSELS imported to and exported from INDIA.

Bureau Veritas inspected 44.4 MILLION TONNES of COAL exported from AUSTRALIA.
SERVICES & SOLUTIONS DEDICATED TO SUSTAINABILITY

BUREAU VERITAS IS A “BUSINESS TO BUSINESS TO SOCIETY” SERVICES COMPANY. OUR MISSION IS TO SHAPE TRUST BETWEEN BUSINESSES, PUBLIC AUTHORITIES AND CONSUMERS.

SUSTAINABILITY IS EMBEDDED INTO OUR STRATEGY, OUR ENTIRE ORGANIZATION, AND ACROSS ALL OUR BUSINESSES.
ACCESSBV IS BUREAU VERITAS’ DIGITAL PLATFORM THAT DELIVERS THE DATA YOU NEED, WHEN YOU NEED IT.

With near-real time updates you can gain valuable time and commercial advantage with oversight of your activities across the globe.

WATCH our AccessBV overview video
TRANSPORTABLE MOISTURE LIMIT (TML)

TML is the maximum moisture content of a cargo that is considered safe for transportation in ships.

Bureau Veritas is at the forefront of correct sampling and testing of cargoes that may liquefy.

From actual moisture content to all current TML methods of the IMSBC Code, there are 500+ locations that can help.

Bureau Veritas performs all six tests mentioned in IMSBC Code:

- Flow Table Test
- Penetration Test
- Proctor/Fagerberg Test
- Modified Proctor/Fagerberg Test for Iron Ore Fines
- Modified Proctor/Fagerberg Test for Coal
- Modified Proctor/Fagerberg Test for Bauxite

Download our TML White Paper to learn more.
USED OIL ANALYSIS

BUREAU VERITAS OPERATES USED OIL ANALYSIS LABORATORIES AROUND THE WORLD.

Our programs identify trends in wear and contamination and monitors changes in the physical properties of lubricants and hydraulic oils. Laboratory data analysts can then pinpoint equipment problems in their earliest stages and make informed recommendations that can improve machine reliability, reduce maintenance and repair costs and significantly extend equipment life.

With LOAMS, our exclusive Lube Oil Analysis Management System software. It has never been easier for equipment managers and maintenance personnel to optimize productivity using real-time Oil Analysis data.

KEY FLUIDS TESTED:
- NEW AND USED LUBRICANTS
- COOLANTS
- DISTILLATE FUELS
- METAL-WORKING FLUIDS
- GREASES AND WIRE LUBRICANTS
- REFRIGERANTS
- TURBINE OILS
- WASTE OILS
- DEPOSITS AND FILTER CONTENTS

MORE INFO
BUREAU VERITAS OFFERS ON-SITE QUALITY CONTROL & QUALITY ASSURANCE SOLUTIONS AND BRINGS TRANSPARENCY TO SUPPLY CHAINS

SERVICES:
- Quality & quantity inbound raw materials
- Process control QA/QC
- Supply chain traceability
- Certification of quality & HSE systems
- Sustainability & carbon certification
Bureau Veritas provides full laboratory services to the steelworks at Whyalla.

Services begin at ore exploration and continue through all stages of the mining, processing and steel making activities to certification of final products. Services include:

- **Coke Making**
- **Iron Making**
- **Steel Making**
- **Steel Product Testing**
- **Certification**
- **Oil Condition Monitoring**
- **Environmental Analysis**

**Benefits to Customers**

- QHSE focus
- Experience managing large projects
- Technical expertise
- Geoanalytical test work conducted in Whyalla
- Mineral processing work conducted in Whyalla
- Waste disposal / return
- Reduced freight complexity

**Capability to process up to 2,500 samples per day**
CLIENT SURVEY

BUREAU VERITAS SCORES HIGHLY ON SERVICE, QUALITY AND DELIVERY

TechValidate survey of 135 Bureau Veritas Metals & Minerals clients

HOW DO YOU RATE BUREAU VERITAS’ SERVICES COMPARED TO OTHERS IN THE INDUSTRY

- BETTER 89%
- MUCH BETTER 8%

Does Bureau Veritas perform accurate inspection and testing services with INDEPENDENCE AND INTEGRITY?

- 0%
- 97%

How well does Bureau Veritas Metals & Minerals MEET YOUR NEEDS?

- 0%
- 75%
- 96%

VERY WELL  EXTREMELY WELL
99% of clients are satisfied with our **ON TIME DELIVERY OF SERVICES**

97% of clients are satisfied with our **ACCURACY OF INSPECTION / TESTING RESULTS**

95% of clients are satisfied with our **FEES AND INVOICING**

99% of clients are satisfied with our **CUSTOMER SERVICE**