Rock Properties Division

Geotechnical Testing

AGAT Laboratories is a leading provider of material, aggregate, soil and rock testing. Using state of the art equipment, AGAT provides routine and customized solutions for all geotechnical and materials testing applications. Mining, tailings, construction and aggregate are just a few of the areas routinely serviced by AGAT and our team of experts.

AGAT is committed to providing the highest quality products for our clients. All testing is subject to rigorous quality control measures and multiple levels of data review. We know the importance of quick turnaround with results you can trust. Our goal is to work collaboratively with our clients to ensure they are getting the product they need, when they need it.

Reach out to your business development representative or contact us on **info@agatlabs.com**.

Unit# 106, 2730 39th Av NE Calgary, Alberta T1Y 7H6 **P:** 587-391-2540

Testing Capabilities

Failure Analysis

Examination by Scanning Electron Microscopy Binocular Microscope Imaging

Material Identification

Examination by Scanning Electron Microscopy Binocular Microscope Imaging Elemental Mapping by XRF

Method

Proprietary Methodology Proprietary Methodology

Method

Proprietary Methodology Proprietary Methodology Proprietary Methodology

Aggregate Alkali Reactivity - Accelerated MethodCSA A23.2-25AAggregate Alkali Reactivity - Extended MethodCSA A23.2-14AAtterberg LimitsASTM D4318Capillary Suction Time (CST)API 131/ISO 10416:2002Clay Lumps in Natural AggregateCSA A23.2-3ADensity of SoilASTM D7263Dynamic Linear Swell Meter (LSM)Proprietary MethodologyGradation of Fine AggregateASTM C136Hot Rolling Dispersion (price per fluid)API 131/ISO 10416:2002Hydraulic Cond - Constant Head, <1" Drain Rock (in Shelby tubes)ASTM D2434HydrometerCSA A23.2-4ALow-Density Granular Material in AggregateCSA A23.2-4AMoisture ContentASTM D2216Organic Content Soil (LOI)ASTM D2216Organic Content Soil (LOI)ASTM D2216Protor - ModifiedASTM D422Petrographic Examination of AggregatesCSA A23.2-15AProctor - StandardASTM D4254/D4253Relative Density (Max/Min)ASTM D4254/D4253Relative Density (Max/Min)CSA A23.2-16ARelative Density and Absorption of Coarse Aggregate (Saturated Surface-dry)CSA A23.2-4ARelative Density and Absorption of Fine Aggregate (Saturated Surface-dry)CSA A23.2-4ARelative Density and Absorption of Fine Aggregate (Saturated Surface-dry)CSA A23.2-4ASatence of Unconfined Coarse Aggregate to Freezing and ThawingCSA A23.2-4ASolium (or Magnesium) Sulfate SoundnessASTM D4683Soli Water Characteristic CurveASTM D6836Specific Gravity - Gas PycnometryASTM D685	Soil and Aggregate Tests	Method
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Specific Gravity - Gas Pycnometry ASTM D5550	Sodium (or Magnesium) Sulfate Soundness	ASTM C88
	Soil Water Characteristic Curve	ASTM D6836
Specific Gravity - Water Pycnometry ASTM D854	Specific Gravity - Gas Pycnometry	ASTM D5550
	Specific Gravity - Water Pycnometry	ASTM D854

Rock and Concrete Tests	Method
Brazilian Tensile Strength (per point)	ASTM D3967
Compression of Concrete Cylinder	ASTM C39
Direct Shear	ASTM D5607
Leeb Hardness (price per point)	ASTM C805
Petrographic Examination of Hardened Concrete	ASTM C856
Point Loading	ASTM D5731
Slump Test	ASTM C143
Triaxial - Consolidated Undrained	ASTM D4767
Triaxial - Rock, Multi-stage	ASTM D7012
Triaxial - Rock, Single stage	ASTM D7012A
UCS - with Modulus	ASTM D7012D
UCS - without Modulus	ASTM D7012C