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SCOPE OF ACCREDITATION

SGS Canada Inc.
SGS CANADA MINERALS SERVICES
3260 Production Way Suite E
Burnaby, BC
V5A4W4

Accredited Laboratory No. 744

(Conforms with requirements of CAN-P-1579 , CAN-P-1587 , CAN-P-4E (ISO/IEC 17025:2005))

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CLIENTS SERVED: Mining, Exploration, Research and Industrial Clients -
Worldwide

FIELDS OF TESTING: Chemical/Physical

PROGRAM SPECIALTY AREA: Agriculture Inputs, Food, Animal Health and Plant Protection
(PSA-AFAP) , Mineral Analysis

SCOPE ISSUED ON: 2016-02-22

ACCREDITATION VALID TO: 2020-04-05

CHEMICALS AND CHEMICAL PRODUCTS

Chemicals for Agricultural Industry:

SPPA Potassium in Fertilizers SPPA: Saskatchewan Potash Producers Association, Inc.
(SPPA) Sample Preparation Procedures Standard
Analytical Procedures & Standard Physical Testing
Procedures For The Analysis of Potassium (K2O) and

Sodium Chloride (NaCl) in Potassium Chloride & other
Fertilizers [K₂O; NaCl; KCL]

METALLIC ORES AND PRODUCTS

Metallic Ores:

Rocks and Ores

**(Sediments, sands, soils, stones
Precious Metals)**

Mineral Analysis Testing

(see Note 1 concerning off site physical sample preparation)

Assay, Umpire Assay Work

Mineral Assaying

GE_AAS12E	Determination of Silver in Geological Samples by Nitric and Hydrochloric Acid (aqua regia) Digestion and Atomic-Absorption Spectroscopy (AAS) [Ag;HCl; HNO ₃]
GE_AAS42E	Determination of Silver in Geological Samples by Multi-acid Digestion and Atomic-Absorption Spectroscopy (AAS) [Ag; HNO ₃ ; HClO ₄ ; HF and HCl]
GE_CSA06V	Determination of Total Sulphur and Carbon in Geological Samples Using Infrared (IR) Combustion [S; C; LECO]
GE_FAA313-FAA515	The Determination of Exploration Grade Gold by Lead Fusion Fire Assay and Atomic Absorption Finish [30g.; 50g.; Au; HNO ₃ , HCl, AAS]
GE_FAI313-FAI515	Determination of Gold, Platinum and Palladium by Lead Fusion Fire Assay and Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) [Au; Pt; Pd; HNO ₃ ; HCl]
GE_ICM14B	Determination of Fifty two (52) Elements in Geological Samples using an Aqua Regia Digestion and a Combination of Inductively Coupled Plasma Emission Spectrometry (ICP-OES) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) [HNO ₃ ; HCl; Al; Sb; As; Ba; Be; Bi; B; Ca; Cd; Ce; Cs; Cr; Co; Cu; Ga; Ge; Hf; In; Fe; La; Pb; Li; Lu; Mg; Mn; Hg; Mo; Ni; Nb; P; K; Rb; Sc; Se; Ag; Na; Sr; S; Ta; Te; Tb; Tl; Th; Sn; Ti; U; V; W; Y; Yb, Zn; Zr]

Standards Council of Canada Accredited Laboratory No. 744

GE_ICM40B	Determination of Forty Nine (49) Elements in Geological Samples using Multi-acid digestion and a Combination of Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) [HCl; HNO ₃ ; HF; HClO ₄ ; Ag; Al; As; Ba; Be; Bi; Cd; Ca; Ce; Cs; Cr; Co; Cu; Ga; Hf; In; Fe; K; La; Li; Lu; Mg; Mn; Mo; Ni; Nb; P; Pb; Rb; Sb; Sc; Se; Na; Sr; S; Ta; Te; Tb; Tl; Th; Sn; Ti; W; U; V; Yb; Y; Zn; Zr]
GE_ICM90A	Determination of Fifty-five (55) Elements in Geological Samples using Sodium Peroxide Fusion and a Combination of Inductively Coupled Plasma Optical Emission Spectrometry (ICP-OES) and Inductively Coupled Plasma Mass Spectrometry (ICP-MS) [Na ₂ O ₂ ; HNO ₃ ; C ₄ H ₆ O ₃ ; Ag; Al; As; Ba; Be; Bi; Ca; Cd; Ce; Co; Cr; Cs; Cu; Dy; Er; Eu; Fe; Ga; Gd; Ge; Hf; Ho; In; K; La; Li; Lu; Mg; Mn; Mo; Nb; Nd; Ni; P; Pb; Pr; Rb; Sb; Sc; Sm; Sn; Sr; Ta; Tb; Th; Tl; Ti; Tm; U; V; W; Y; Yb, Zn; Zr]
GE_ICP14B	Determination of Thirty-Four (34) Elements in Geological Samples using Aqua Regia Digestion and Inductively Coupled Plasma Emission Spectrometry [Ag; Al; As; Ba; Be; Bi; Ca; Cd; Cr; Co; Cu; Fe; Hg; K; La; Li; Mg; Mn; Mo; Na; Ni; P; Pb; S; Sb; Sc; Sn; Sr; Ti; V; W; Y; Zn; Zr; HCl; HNO ₃]
GE_ICP40B	Determination of Thirty Two (33) Elements in Geological Samples using Multi-Acid Digestion and Inductively Coupled Plasma Emission Spectrometry (ICP-OES) [HCl; HNO ₃ ; HF; HClO ₄ ; Ag; Al; As; Ba; Be; Bi; Cd; Ca; Cr; Co; Cu; Fe; K; La; Li; Mg; Mn; Mo; Na; Ni; P; Pb; S; Sb; Sc; Sn; Sr; Ti; W; V; Y; Zn; Zr]
GO_FAG303-FAG505	Determination of Ore Grade Gold by Lead Fusion Fire Assay and Gravimetric Finish [30g.; 50g.; Au; HNO ₃ ; NH ₄ OH]
GO_ICP90Q	Determination of Six (6) Elements in Mineralized Geological Samples (Ore Grade) using Sodium Peroxide Fusion and Inductively Coupled Plasma Emission Spectrometry (ICP-OES) [Na ₂ O ₂ ; HNO ₃ ; C ₄ H ₆ O ₆ ; Co; Cu; Pb; Mo; Ni; Zn]
GT_GC_GO_XRF76V	Preparation and Determination of Major Element Oxides, LOI by Borate Fusion and Xray Fluorescence Spectrometry [SiO ₂ , Al ₂ O ₃ , Fe ₂ O ₃ , MgO, CaO, Na ₂ O, K ₂ O, P ₂ O ₅ , MnO, TiO ₂ , Cr ₂ O ₃ ; V ₂ O ₅ ; LOI; XRF]

Notes:

The physical sample preparation involving accredited test methods for Minerals Analysis as listed on the scope of accreditation may be performed at SGS Canada Minerals Services - Burnaby, or at off-site

Standards Council of Canada Accredited Laboratory No. 744

sample preparation locations (Garson, Ontario) that are monitored regularly for quality control and quality assurance practices.

CAN-P-4E (ISO/IEC 17025): General Requirements for the Competence of Testing and Calibration Laboratories (ISO/IEC 17025-2005)

CAN-P-1579:2014: Requirements for the Accreditation of Mineral Analysis Testing Laboratories

CAN-P-1587: Requirements - Accreditation of Agriculture Inputs, Food, Animal Health and Plant Protection Testing Laboratories

Chantal Guay, ing., P. Eng.
Vice President, Accreditation
Services

Date: 2016-02-22

Number of Scope Listings: 14

SCC 1003-15/919

Partner File #0

Partner: