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REFERENCE STANDARDS

This brochure describes MEG's procedures for preparation of standard reference materials (SRM's) and related services. MEG is uniquely positioned as an independent prep-only lab servicing the mining industry. This gives the mining and exploration community assured third-party quality control on critical samples, like those from the drill rig.

OVERVIEW

MEG is an independent sample preparation laboratory, working closely with several analytical laboratories to provide geochemical data for the mining and environmental industries. Established in 1984, it is now highly regarded for its sample preparation, quality control, reference standards, and attention to detail. It is fully equipped to handle drill core and cuttings, rock chip, soil, sediment, vegetation, humus, and other exploration materials, providing special care to samples that may contain labile constituents at ppb and ppt concentrations.

MEG's success is due in part to its use of sound quality control / quality assurance (QA/QC) procedures. Standards, replicates and blanks are dubbed blindly into every job as a daily monitor of its and the analytical laboratory's performance. MEG is out of the data loop, creating double blind testing where only the client has all of the information to assess the quality of the analysis. This works particularly well because MEG is independent of the analytical labs it works with.

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SCOPE

As the mining industry has grown globally, so has MEG. Because of MEG's outstanding reputation, samples are received from around the world. Please note our import permits:

SOIL: P330-09-00260 (Expires 12-16-2012)
VEGETATION: PDEP-07-00480 (10-4-2010)

Permit and Quarantine Stickers must be applied to the outside of all shipping containers. Please notify MEG prior to shipping for late information on USDA import requirements.

SRM SOURCES

MEG has access to several ore, soil, and vegetation types with a wide variety of naturally occurring metal grades and concentrations. Whenever possible, we manufacture SRM's using natural material only. This is always true for vegetation standards, but for rock and soil standards, we will dope material with nominal grades of naturally occurring metals up to concentrations that meet exploration and drilling requirements. Particularly for fire assay work, it is important that some portion of the economic mineralization is bound mineralogically as a test of the fire fusion process. Because many samples are analyzed for multi-element suites, it is equally important that associated elements (toxics, pathfinders, etc) are part of the SRM matrix.

MEG maintains a limited inventory of readily available SRM's for both internal and external use. The current inventory includes gold and silver, **AND** a variety of other materials from porphyry Cu and Mo deposits, and yet other deposits of copper, tungsten, cobalt, nickel, platinum, and uranium. BLANK's are also important in an analytical submittal, and we produce these from barren country rock, or quartz sand. This material is sold in 50-100 g envelopes and comes with a minimal number of preliminary assays to establish a reference value for later use. Call MEG for current pricing and availability.

Most SRM manufacturing comes under contract from operating mines. Under these circumstances, rock from the mine is shipped to MEG for processing. A good match of ore characteristics and ancillary metal assemblages between SRM and sample not only blinds the SRM in the sample stream, but also creates an analytical environment that gives more accurate and precise results. We can handle bulk quantities of 100 Kg efficiently. Turnaround is usually 10-30 days.

SRM PROCEDURES

Rock and soil starting materials are dried in controlled electric ovens at appropriate temperatures to reduce volatile losses (if this is an important requirement). Jaw crushers and a roll-crusher are used to create a predominantly 40-mesh product. A ceramically lined ball-mill with a capacity of 150Kg reduces particle size to 150-200 mesh. Rotary splitters (12 bucket, 27Kg) are used to further homogenize the sample before packaging in 50-100g paper envelopes. If required, these are heat-sealed in plastic. Homogeneity testing is done through one of MEG's associate analytical laboratories.

Vegetation starting material is washed to remove external dust, and then dried in microwave ovens. A Wiley Mill is used to reduce twigs and leaves to 0.5-2 mm particles. A bottle-roll process is used to blend the organic mass to homogeneity.

The SRM can now be used as is for pulp analysis, INAA, or it can be ashed with samples as required.

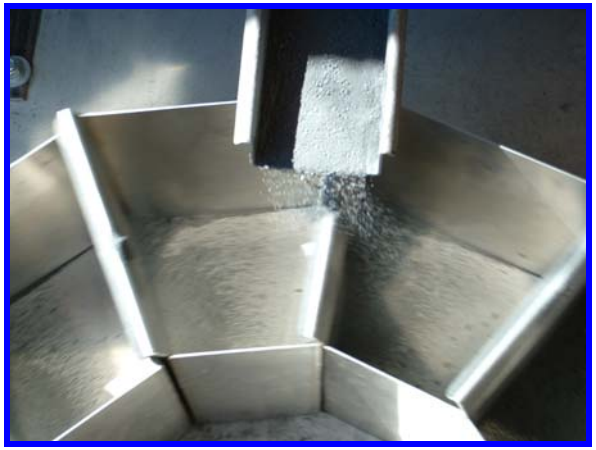
ANALYTICAL ASSOCIATES

The associate laboratories are those having analytical capabilities that stand up well to continual quality assurance monitoring. They run the gamut from neutron activation analysis (INAA), inductively coupled plasma emission spectroscopy (ICP/ES), mass spectrometry (MS), graphite furnace/ atomic absorption spectroscopy (GF/AAS) to just good ole reliable fire assay. However, these labs offer more than just instrumental capability. They have also demonstrated an ability to do well with exotic media like vegetation and soils prepared for ultra low detection and selective leaching.

Labs (usually 6-8) with reputable assay capabilities provide homogeneity testing and initial assay data for SRM's. Since requirements are different for each material, several local, national, and international laboratories are available for this testing. If you have a favorite lab, we will be happy to have your material tested there, too.

MEG uses its own SRM's for client sample preparation work. In this regard, it occupies a unique niche in the geochemical services industry. As an independent laboratory, we help you monitor good preparation and analytical technique, by including with every group of samples, a discrete stream of blind standards, replicates, and blanks that are blind to the analytical laboratory. We can also randomize samples as a means of isolating sources of systematic error along the custodial chain. And, we can work closely with you to blind any of your own standards, mixing and matching to create geochemical reports you know you can trust.

Blind standards, replicates & blanks US $5.90
Known controls ..…….. each US $5.90
Randomization ..…….. each US $1.20



INVENTORY SUMMARY: GRS *(01-JAN-2010)*

GOLD & SILVER (ppm)

GRS 0.076
GRS 0.184 (Ag 0.187)
GRS 0.234
GRS 0.320
GRS 0.440
GRS 0.687 (Ag 9.585)
GRS 0.965
GRS 1.156
GRS 1.347
GRS 1.526
GRS 1.911
GRS 2.093 (Ag 17.218)
GRS 2.416
GRS 3.397 (Ag 26.267)
GRS 3.752
GRS 4.516
GRS 5.4 (Pending)
GRS 8.2 (Pending)
GRS 9.6 (Pending)
GRS 10.9 (Pending)

PLATINUM / PALLADIUM

Stillwater (Pending)

MOLYBDENUM

OC43: TMo = 0.036%, OxMo = 0.011%
OC48: TMo = 0.079%, OxMo = 0.021%

COPPER -MOLYBDENUM-SILVER

A106008X: = 0.075% Cu, 0.01% Mo, 1.4 ppm Ag
A106009X: = 0.136% Cu, 0.01% Mo, 1.4 ppm Ag
A106010X: = 0.215% Cu, 0.01% Mo, 1.4 ppm Ag
A106011X: = 0.291% Cu, 0.02% Mo, 2.2 ppm Ag
A106012X: = 0.388% Cu, 0.03% Mo, 3.3 ppm Ag
A106013X: = 0.574% Cu, 0.03% Mo, 4 ppm Ag
A106013X: = 1.428% Cu, 0.03% Mo, 7 ppm Ag

NEVADA LEAD-ZINC-SILVER

PPM:	Ag	Au	%Pb	%Zn	%Cu
Ag-1:	248	1.1	6.3	10.5	0.24
Ag-2:	293	1.0	6.5	11.2	0.25
Ag-3:	2684	1.6	6.2	10.4	0.23

URANIUM

Schwartzwalder CO 195 ppm U

ORE CHARACTERIZATION (Locations):

Borealis NV 0.7 ppm Au
Central City CO 7 ppm Au
Rosebud NV 0.6 ppm Au, 3.7 ppm Ag
Clyde Mine CO 475 ppm W
FMD1 Mine CO 4700 ppm Cu, 930 Pb, 24000 Zn
FMD2 Mine CO 1850 ppm Cu, 260 Pb, 9800 Zn
Copper King CO 1800 ppm Ni, 105 Co, 500 Cr
Gibellini NV 2.8% Ni, 0.5 V, 0.2 Co, 0.2 Cu
Mt. Hamilton 1 NV 0.2% Mo, 0.6ppm A**g**
Mt. Hamilton 2 NV 4.5% Mo, 2.3ppm Ag

BLANKS

Barren Landscape Rock / 3 Kg @ $3.95
Barren Quartz Sand / 50 g envelopes @ $5.90

SRM MANUFACTURING COSTS

Cost per 100Kg of Rock (estimate):
Dry, crush, pulverize, blend …. US $1500.00
Package in Kraft envelopes..... US $2400.00
Heat seal (add) .....…..... US $2400.00
Round Robin Assay …….... US $3000.00
Average cost per 50 g envelope = $3.45
= ($ 69/Kg)

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