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DRILL ROCK SOIL SEDIMENT: REFERENCE STANDARDS: *PREPARATION SERVICES*

This brochure describes MEG's sample preparation laboratory 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.

GEOCHEMICAL STANDARDS

We use our Rosskamp 12" Roll crusher, rotary splitters and ceramic ball mill to make Geochemical Reference Standards (GRS). MEG operates two splitters, each with 12 buckets, and a ball mill with a 250 Kg capacity. MEG has an extensive rock and biogeochemical GRS inventory from a wide spectrum of naturally mineralized areas. We can also make uniform high-grade GRSs to your specifications. Normal cost per 50 g envelope is $3.45. Please enquire about pricing for bulk packaging. Starting materials can be other Standard Reference Materials (SRM, CRM), or ore from your favorite mine. The bulk material can be prepared as received, or either serially diluted or enriched to give you a suite of metal concentrations at any concentration you need.

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 bring 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. But please keep in mind, MEG can prep samples for any lab, not just those we are familiar with.

All of the associate laboratories provide multi-element packages, which in particular is a capability encouraged by MEG. Commonly 10 to 50 elements are reported from these instrumental techniques for costs under US $20. With improved understanding and recognition of metal zonation around natural and anthropogenic deposits, primary and secondary element data are of increasing importance in determining the location and character of the geochemical target.

In choosing a laboratory, you need to consider the suitability of a particular analytical method and the character of the material to be analyzed. Please inquire about details by calling MEG.

Turnaround at MEG is typically 4 to 7 days. With shipping, your analytical data can be expected within 2-3 weeks from receipt at MEG. Most of the laboratories will do RUSH jobs, which should be negotiated with the analytical laboratory. MEG will honor any RUSH requirements you may have.

Several of the analytical laboratories offer volume discounts. If you are sending other geochemical samples to a particular laboratory, make arrangements with them to include discounts toward the samples MEG will be preparing for you.

MEG occupies a unique niche in the geochemical services industry. As an independent laboratory, we can help you monitor good preparation and analytical technique, by including with every group of samples, a discrete stream of blind standards, replicates, and blanks. 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 with our own programs to create geochemical reports you know you can trust.

PREP EQUIPMENT

MEG is Nevada's only independent full service sample preparation laboratory. This means you get the best prep, and because we work with all of the analytical labs in the industry, you get your choice of the best analysis without sacrificing one for the other.

We are focused at MEG on preparing your samples cleanly, accurately, and consistently. Additionally, we are positioned to assure you unsurpassed quality since we incorporate QA/QC protocols you don't find at other laboratories. These include randomization and true-blind standards, replicates and blanks sent on for analysis. In this 43-101 era, it is an important consideration to JV partners and shareholders in your company. Our equipment inventory rivals the best in the industry:

Abbe 4x6 Ceramic Ball Mill
Denver 6X6 Corrugated Jaw Crusher (0.25 in, 6.3 mm)
Bico 6X8 Flat Plate Jaw Crusher (10 mesh, 1.7 mm)
Rosskamp 12" Roll Crusher (10 mesh, 1.7 mm)
Bico 8" Plate Pulverizer (80 mesh, 180 um), 2 each
TM Ring&Puck Pulverizer (150 mesh, 106 um), 2 each
Ro-Tap Sieve Shaker, 2 each
12 Bucket Rotary Splitter, 2 each
Grieve B3H-500 480v Drying Oven
Grieve SB-350 480v Drying Oven
Grieve 3X3X3 230v Drying Oven
Despatch 230v Drying Oven
250 Kg Ceramic Ball Mill
4ea 3-Place Electronic Scales
1 ea 4-Place Electronic Scale
1 ea 2-Place Electronic Scale

The rock lab can dry and crush 500 samples/day and pulverize 300 samples/day, all in an ultra-clean facility (count them, 6 DCE Vokes Dust Collectors).

Ask MEG for a bid on your next drilling project.

QUALITY CONTROL PROGRAM

Known controls and several blind standards, replicates & blanks are included with every job that leaves MEG. These QA/QC samples are strategically positioned so that every batch of 30 within the submittal is monitored for precision & accuracy. This adds only about 4% to 9% to the total cost.

Blind standards, replicates & blanks US $5.90
Known controls ..…….. each US $5.90
Randomization ..…….. each US $1.10

MEG LABS operates as an independent prep service to assure your geochemical samples are properly treated prior to analysis. MEG and the analytical labs will each invoice for their respective services. Data reporting is strictly proprietary, between you and the analytical laboratory. MEG is involved only to assure quality through randomization, controls, and blind standards, replicates and blanks. If you require QA/QC compilations, please refer to the services described above.

REFERENCE STANDARDS

See ***Reference Standard Brochure***

Standards are an essential part of any quality assurance program. MEG is prepared to help you create a suite of standards for your future survey and drilling programs. Rock samples are crushed and pulverized to 95% pass 10 mesh. The pulp is ground in a ball mill to achieve thorough blending. Finally, 50 g aliquots are put into kraft envelopes with removable labels. These can be hermetically heat sealed. Cost per 100 Kg (estimate):

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)

ROCK LABORATORIES

ROCK & DRILL SAMPLES

Rocks are crushed to 95% pass10 mesh. MEG has two jaw crushers and a 12" roll crusher to get this done right. Riffle splitting produces a 250 g subsample, which is pulverized in a chromium steel ring & puck barrel. Mild steel barrels are used to avoid Cr traces. Plate pulverizing is available for improved sizing (-80 mesh) before splitting. Ceramic plates can be used when alloy traces are undesirable. For those samples that are likely to have severe nugget effects, rotary splitting methods are used to maximize subsample representation.

Carry-over contamination is reduced with barren sand and gravel washes between each sample. The same rigorous QA/QC procedures used in all MEG work is also used here.

SPECIAL ROCK PACKAGE: 1 Kg

Crush, split, pulverize to 200 mesh …..US $9.50

Gravel & sand washes at every step.

Super clean, very competitive.

ROCK & DRILL SAMPLES

WEIGHT	DRY (120 C)	CRUSH 95% -10 Mesh
1Kg	US $2.00 …..	US $ 3.80
Plus	US $0.35/Kg ...	US $ 0.35/Kg

(Includes gravel wash between each sample)

PLATE PULVERIZE (<3 Kg to -80 mesh)

Chromium steel..... US $ 4.75
Ceramic..... US $ 7.95
Each additional Kg ..... US $ 0.45

(Includes sand wash between each sample)

RING PULVERIZE (250 g to -200 mesh)

Chromium steel..... US $ 5.90
Mild steel (no Cr)..... US $ 6.30

(Includes sand wash between each sample)

ADDITIONAL ROCK SERVICES

Compositing (volumetric per pulp) ….. US $ 1.55
Compositing (gravimetric per pulp) …. US $ 2.80
Riffle split +$0.25/Kg …… US $ 1.70
Rotary split + $1.25/Kg ……. US $ 2.80
Duplicate pulp …… US $ 1.00
Weigh for INAA …… US $ 2.40
Weigh (all other) …… US $ 1.00
Transfer to drying tray …… US $ 0.90
Standards Replicates Blanks (each) … US $ 5.90
Randomize …….. US $ 1.20
Surcharges ……... US $65/hr
Shipping ..... COST + $25 Handling
Rush jobs..... add 50%
Drill Core Splitting & Sawing (/foot) QUOTE

Rosskamp 12 inch roll crusher with dedicated dust collector. Throughput: 30 samples per hour.

REGOLITH LABORATORIES

SOIL & SEDIMENT

MEG's soil and sediment sample preparation is particularly well suited for low level detection. Extra care is taken to prevent inter-lab contamination from high level sources. All drying, pulverizing, splitting, and sizing devices are kept scrupulously clean with a superior dust collection system that virtually eliminates all air-borne dust. Several of MEG's associate analytical labs offer highly sensitive methods with exceptionally low detection. Multi-element INAA, GF/AAS, ICP, and MASS SPEC methods are well served by MEG's clean prep. The same rigorous QA/QC procedures used in all MEG works are also used here.

PREPARATION COSTS

Dry @ 40C +$0.35/Kg ..... US $2.00
Air Drying + $0.35/Kg …… US $2.00
Transfer to drying pan ……..…. US $1.00
Transfer to new bag ……..… US $1.75
Randomize ..... US $ 1.20
Disaggregate (with sand wash) …….. US $ 2.35

Dry Sieve: Samples under 1 Kg:

(Includes thorough vacuum between each sample)

-35 mesh ……. + $0.95/Kg..... US $ 1.40
-60 mesh ..…….. + $0.95/Kg..... US $ 1.70
-80 mesh …….. + $1.10/Kg..... US $ 1.95
-150 mesh …… + $1.20/Kg..... US $ 2.30
-200 mesh …… + $1.30/Kg..... US $ 2.60
-325 mesh …… + $1.45/Kg..... US $ 2.95
Bracket Sieve (ie.-80+150)** ….... US $ 4.25
Bracket Sieve (ie.-150+325)** ….... US $ 5.25
Bracket sieve each additional Kg ….. US $ 1.45
Wet Sieve (per Kg) ……..... US $ 4.95
Compositing (gravimetric per pulp) US $ 2.80
Riffle split +$0.10/Kg …….. US $ 1.70
Weigh for INAA…….... US $ 2.40
Weigh (all other) ..... US $ 1.00
Rush jobs ..... add 50%
Surcharges ..... US $65/hr
Soil disposal (USDA regulated) ..... US $ 0.95
Shipping ..... COST +$25 Handling
Standards Replicates Blanks (each) ….. US $ 5.90

**Particularly well suited for selective leach methods.

FIELD SERVICES

MEG also offers vegetation, soil, sediment and rock sample collection. Often, surveys cover both exposed and covered terrains, where samples of just soils or vegetation alone are not enough. MEG can put one crew in the field to complete the entire geochemical survey and expedite the preparation and analysis of all your samples together. Quality assurance methods can also be incorporated during the field work.

FIELD COSTS

Crew ..... US $ 295/day
Supervisor ..... US $ 475/day
Vehicle ..... US $ 0.70/mile
Expenses ..... Cost + 10%

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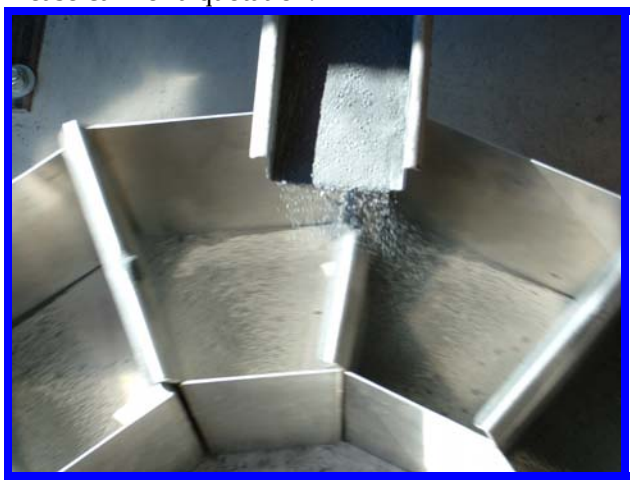
DRILL SAMPLE PICKUP

MEG will pick up samples from the drill rig. Cost incurs mileage and driver fees and is dependent on distance from Washoe Valley. Pickup in Winnemucca is $450, for example. This is approximately $1.50 per sample (5 foot interval). Please call for a quotation.



Two rotary splitters with 27 Kg capacity and 12 buckets each are used extensively for splitting and blending sample, and for the manufacture of standard reference materials.

CONSULTING SERVICES

MEG is expert in the field of biogeochemistry. MEG can provide detailed examples and discussions on methods for minerals exploration and environmental studies. Specific services include field and office training, data review, and interpretation leading to target selection and assessment.

MEG is expert in the area of quality assurance. Standards, replicates, blanks and randomization schemes are your measures of quality. If you are understaffed, or need help creating a quality assurance program, MEG can monitor your QA/QC stream as an impartial advocate to assure your data's accuracy and precision. This involvement is by invitation only; otherwise MEG is totally out of the data loop.

MEG is expert in soil gas collection methods with particular focus on mercury. Survey design, integrative and in situ collection, sample preparation, analysis, and interpretation are based on decades of experience.

Office ..... US $ 105 /hour
Field ..... US $1050 /day

OTHER SERVICES

SAMPLE PREPARATION:
- Vegetation

CONSULTING:
- Radon Soil Gas
- Mercury Soil Gas
- Biogeochemistry
- Selective Soil Extractions
- Laboratory QA/QC

SOIL GAS ANALYSIS
- Jerome Mercury Detection
- Tekran Mercury Detection
- Radon Soil Gas Detection

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