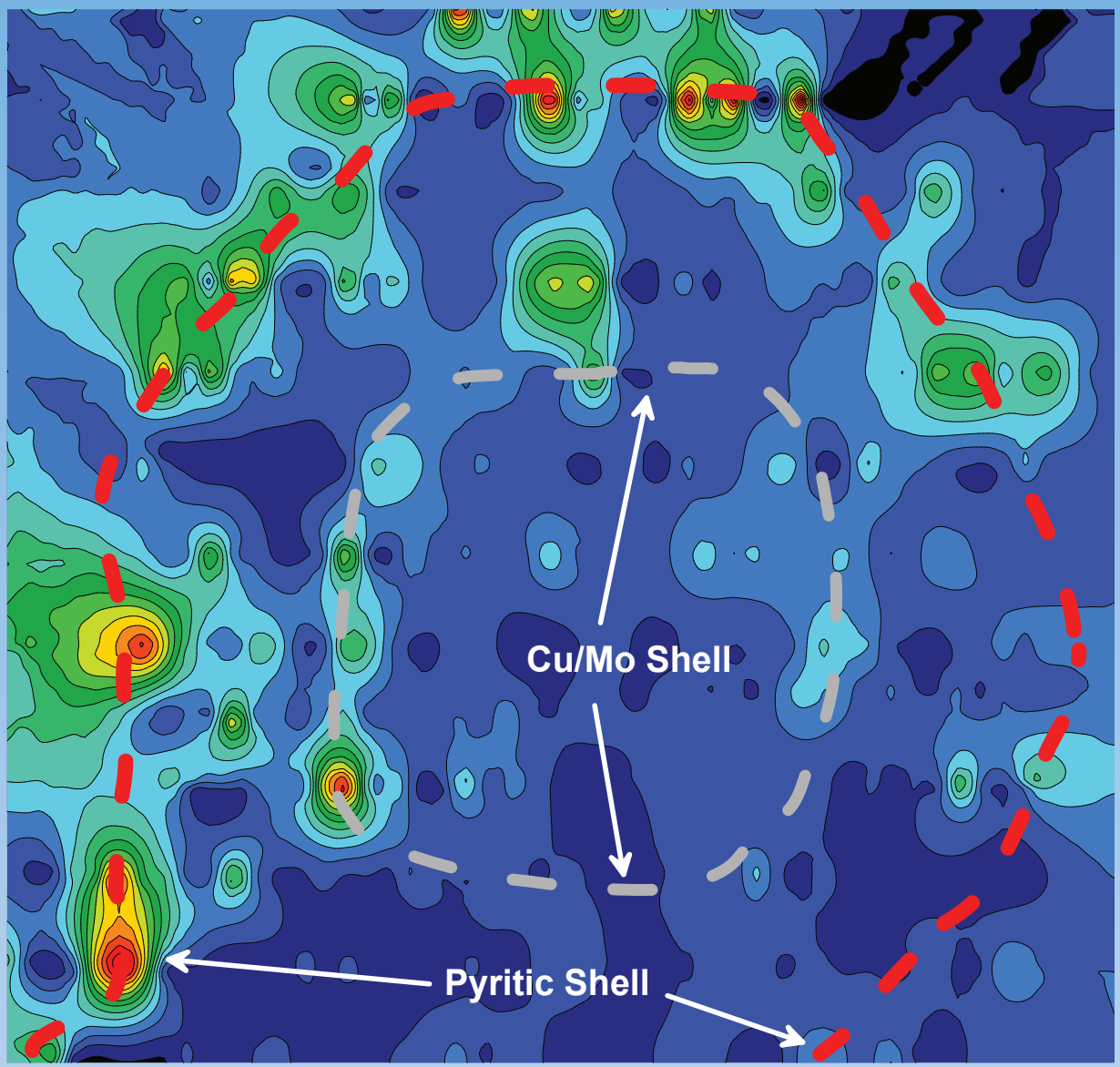
SELECTIVE EXTRACTIONS

Enzyme Leach^{SM} *IV* Services for Mineral Exploration



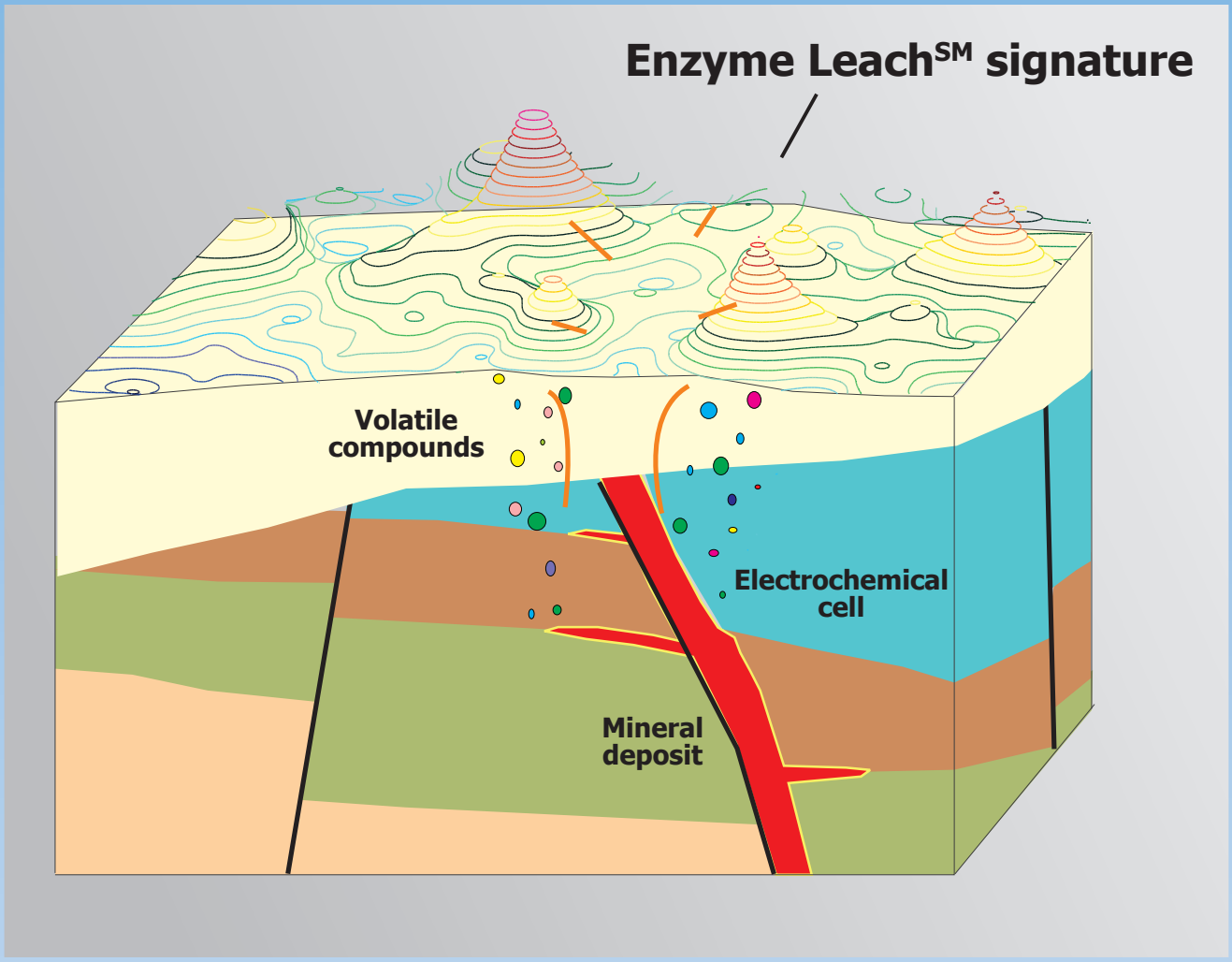
Leading Edge Technology for Mapping Subsurface Geology and Locating Blind Mineralization

SKYLINE
ASSAYERS & LABORATORIES

Enzyme Leach[SM] *IV* Services

Survey Design
Mobilization and Sample Collection
Data Evaluation and Plotting
Pattern Interpretation
Report Generation and Target Recommendation

Enzyme Leach[SM] *IV*
H_2O Prewash *Enzyme Leach*[SM] *IV*
TerraSol[SM] Leach
Na Pyrophosphate Leach
Hydroxylamine Leach
Oxalic Acid Leach
KI + Ascorbic Acid Leach



Enzyme Leach[SM] *IV* Services aid in the detection of mineral deposits at depths ranging from a few meters to more than one thousand meters. Our proprietary selective extraction techniques were developed over the past 30 years and have been successfully utilized to locate many types of mineral deposits in the subsurface. Ore bodies are indicated by a host of elements that are distributed into positive and negative patterns at the surface, above and around the edges of mineral deposits. Trace elements become trapped at parts-per-billion and parts-per-trillion levels within amorphous oxide coatings on sand and silt grains in the soil or sediment in the near-surface environment. Selective leaching of the amorphous MnO_2 within these coatings, and subsequent analysis for up to 68 trace and major elements by ICP-Mass Spectrometry reveals repeatable patterns that indicate blind mineral bodies. Determining a large number of parameters makes the technology robust. The *Enzyme Leach*[SM] *IV* is the most effective selective extraction for specifically attacking amorphous MnO_2 and thereby generates the highest background-to-anomaly contrast.

Enzyme Leach[SM] *IV* Services will take your project from survey design and sample collection to data interpretation and target definition. Our expert staff of geologists and geochemists will design the most appropriate soil geochemistry program for your project. Our years of experience, discovery successes, and ongoing research programs combine to make us the leader in selective extraction technologies.

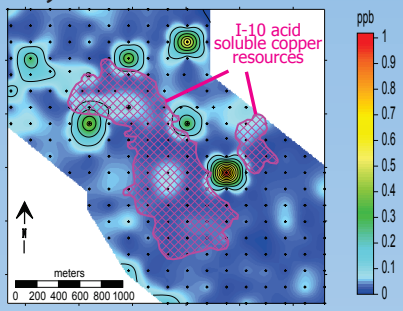
I-10 Copper deposit, south-central Arizona

Enzyme Leach[SM] and *TerraSol*[SM] data from B-horizon soil samples collected above the buried I-10 Cu deposit in south-central Arizona yield diagnostic signatures indicative of the distribution and structural control of this blind Cu mineralization. The skarn and sediment-hosted oxide Cu resource at I-10 has been estimated at 440 million tons averaging 0.39% total Cu at a 0.1% total Cu cutoff. The resource is covered by 250 feet of barren alluvium on the north and 600 feet on the south.

Distinct patterns in these data sets reveal the presence of this blind mineral deposit, and the underlying porphyry as well as some of the suspected primary structures associated with this magmatic-hydrothermal system. In this case, the shallowly buried structures are marked by patterns in the *TerraSol*[SM] data, whereas the *Enzyme Leach*[SM] results show some of the more deeply buried features such as the porphyry stock beneath the southern end of the oxide copper deposit. Recognizing and combining these types of diagnostic patterns into a comprehensive geochemical model leads to mineral deposit discovery and aids resource development.

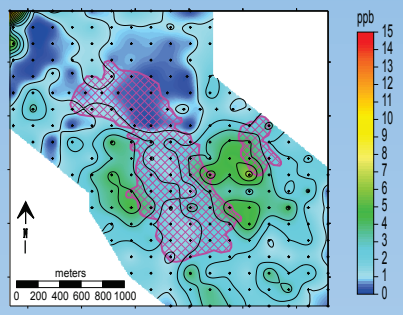
Enzyme Leach[SM] Rhenium

Rhenium, the ninth rarest element, often forms halos or partial halos above the edges of Cu and Mo bearing deposits. At I-10, Re detected by *Enzyme Leach*[SM] forms a distinct halo above the northern half of the oxide Cu body.



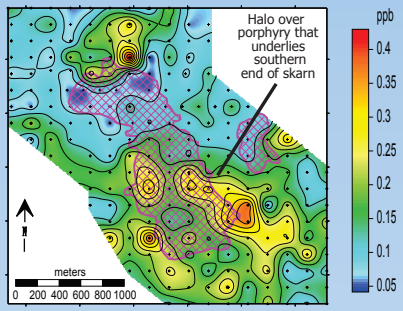
TerraSol[SM] Gold

Gold is detected by *TerraSol*[SM] in a halo that is above the edges of the I-10 deposit. The central low associated with this Au halo precisely demarcates the buried mineral deposit.



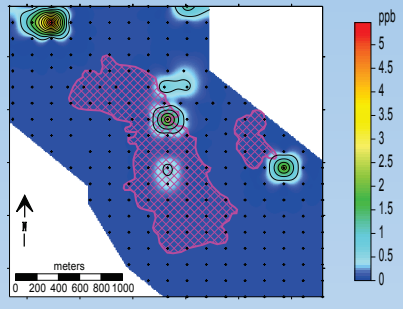
Enzyme Leach[SM] Thallium

Thallium by *Enzyme Leach*[SM] is suggesting the presence of an underlying porphyry stock. Very limited drilling has encountered porphyry-style mineralization beneath the southern end of the I-10 deposit but this has not been explored. These data suggest that a significant porphyry system is present at depth.



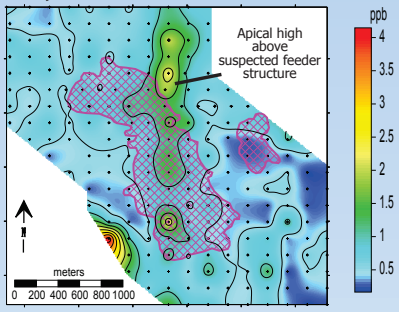
TerraSol[SM] Thallium

A north-trending Tl high in the *TerraSol*[SM] data suggests a structural zone in the subsurface, but the porphyry stock that is clearly indicated by *Enzyme Leach*[SM] Tl is not detected by the *TerraSol*[SM] data.



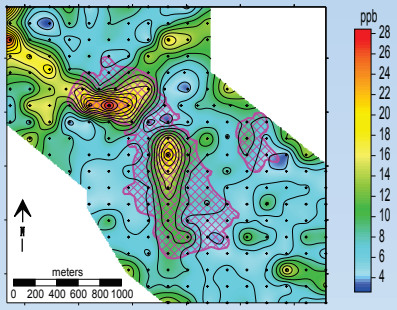
Enzyme Leach[SM] Niobium

Niobium is part of a class of elements that is an effective indicator of deep structural zones which can be detected in *Enzyme Leach*[SM] patterns. The relationships between this Nb high, the Tl halo in the above figure, and the oxide Cu body, imply that a deep north-trending fault zone may have been important to the genesis of this Cu system. This deep zone has not been explored.



TerraSol[SM] Niobium

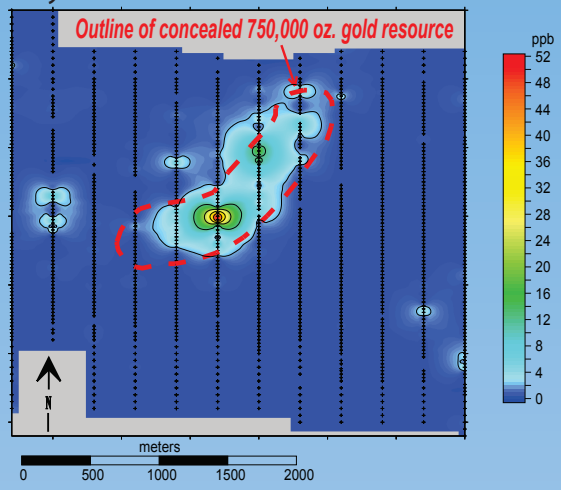
The *TerraSol*[SM] Nb data reveal apparent shallower northeast- and northwest-trending faults as well as the mineralized core of the Cu-oxide deposit along a north-trending zone. The deeper portions are marked by the *Enzyme Leach*[SM] Nb distribution.



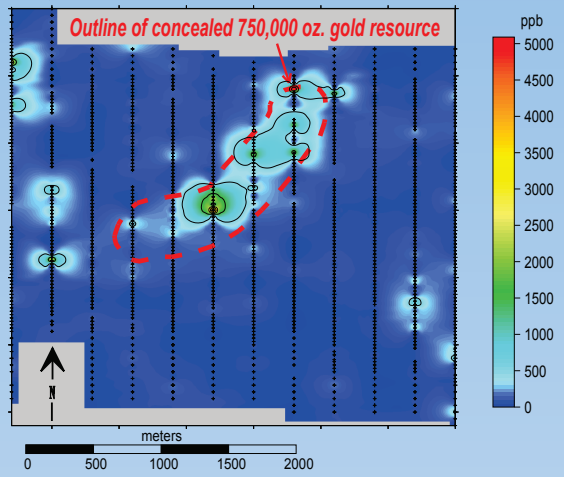
Antimonio, Mexico
Enzyme Leach[SM] Gold Discovery

The original target at Antimonio was a set of detachment faults that subcrop beneath about 10 m of alluvium. It was initially thought that the *Enzyme Leach*[SM] anomaly was indicating gold mineralization in this fault zone, but drilling showed these faults to be barren of economic grades of gold. Consequently, deeper drilling was initiated in order to explain the strong *Enzyme Leach*[SM] anomaly. This led to the discovery of a sizable gold resource (est. 750,000 oz.) in the rocks beneath the detachment faults.

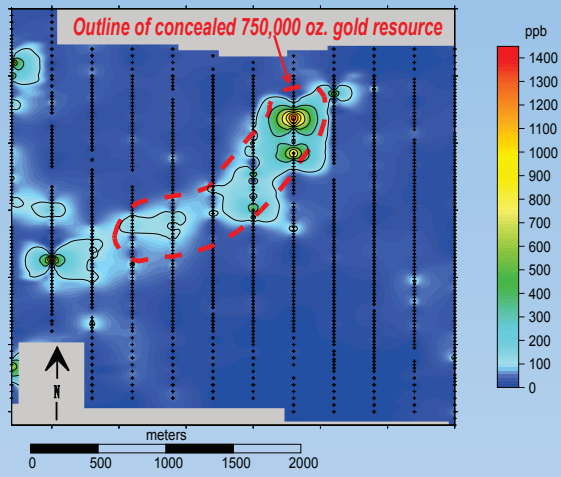
Enzyme Leach[SM] Gold



Enzyme Leach[SM] Arsenic



Enzyme Leach[SM] Antimony



Enzyme Leach[SM] *IV*
Detection Limits

Analyte	ppb
Ag	0.1
Al	500
As	0.1
Au	0.005
Ba	0.5
Be	0.1
Bi	0.5
Br	1
Ca	500
Cd	0.1
Ce	0.01
Cl †	1000
Co	0.2
Cr	3
Cs	0.01
Cu	0.8
Dy	0.01
Er	0.01
Eu	0.01
Fe	1000
Ga †	0.3
Gd	0.01
Ge †	0.05
Hf	0.01
Hg †	0.1
Ho	0.01
I	0.5
In	0.01
K	5000
La	0.01
Li	0.5
Lu	0.01
Mg	2000
Mn	0.4
Mo	0.1
Na	5000
Nb	0.1
Nd	0.01
Ni	0.8
Os	0.5
Pb	0.1
Pd	0.5
Pr	0.01
Pt	0.5
Rb	0.1
Re	0.005
Ru	0.5
S †	10000
Sb	0.01
Sc	10
Se	1
Sm	0.01
Sn	0.2
Sr	0.1
Ta	0.02
Tb	0.01
Te	0.5
Th	0.01
Ti	10
Tl	0.005
Tm	0.01
U	0.01
V	0.1
W	0.1
Y	0.05
Yb	0.01
Zn	5
Zr	0.1

† Results Semi-Quantitative

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