Geochemical Prospecting
Looking Under the Cover
By Prospector Shawn Ryan
The Modern Day Prospector
- GIS Tricks and Tips
- Sun Shading
- Google Earth Presentation
- Digital Photos of samples

Geochemical Prospecting Looking Under The Cover
- Discovery of the White and Coffee Gold Deposits

Geochemical Case Studies
King Solomon, QV, Rosebute, Chant, Lira, Bonanza, and Og

Having a Second Look at the Data
- Keystone and IND Project

New Tools Coming Out

Discussion About Terms of Option Deals
The Modern Day Prospector
The Modern Day Prospector

A New Reality in the Prospecting World

Someone once told me “The days of a Prospector coming out of the bush with a high grade piece of gold in a new showing and getting a deal are over, you must bring me evidence of a large mineralize system from there we will find the showings”.
The Modern Day Prospector

So How do you as a Prospector located a Mineralize Systems?

By Blending Science and Your Prospecting Intuition

80% of my prospecting work is by Researching in the winter months and 20% is actually gathering samples and prospecting during the summer months.

Prospecting is like Hunting or Trapping you must first understand the game that you are looking for before going out.
I Create a Rough Probability Map based on what I call the 4 Pillars of Exploration

<table>
<thead>
<tr>
<th>Geology Map</th>
<th>Geochemistry</th>
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<tbody>
<tr>
<td><strong>Government Geology Maps</strong></td>
<td><strong>Silts, Soils, Till and Lake Sediments</strong></td>
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<tr>
<td>What the geological setting of a mesothermal</td>
<td>What the Geochemical Signature look like</td>
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<td>gold or massive sulphide deposit sitting in.</td>
<td>(sometimes not all gold anomalies are the same</td>
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<td>even on the same property).</td>
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<table>
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<tr>
<th>Geophysical Maps</th>
<th>Structure-Structure-Structure</th>
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<tr>
<td><strong>Magnetic and Radiometric Maps</strong></td>
<td><strong>Regional Structure Maps</strong></td>
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<tr>
<td>What the signature of a mesothermal gold</td>
<td>I consider structure as the forth leg of a</td>
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<td>deposit (magnetic low) versus a massive sulphide</td>
<td>chair, sometimes it’s the most important part</td>
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<td>(magnetic high). Each deposits has its own</td>
<td>in locating a deposits.</td>
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<td>characteristics and your research will help</td>
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<td>point to the right signature to look for.</td>
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Other Question to Ask Yourself

What’s the Footprint or Size of the Deposit going to look like?

What’s the Regional Glacial Direction?

What’s the Surficial Geology as to aid in Sampling Method (Soils or Till)

All these Maps add to Creating a Higher Probability of Success

Remember

“We are in the Only Business Where The Norm is to Fail”

“Our Job is to Sell Hope”
Understand How Your Project Fits In With the Big Picture
You May be Holding A Key Piece
The Exploration Cycle
The Double Edge Sword of Downturns
Keep looking

It Takes me on Average of 3 to 5 Years of Working a Property to get a Option Deal
The Exploration Gamble

Mining Properties are like Hands

The More Hands You Play the Higher Your Odds

But only if You Understand the Card Game

Technology and Science are the Aces to Success
The Art of Prospecting

“GPS” a Friend of the Prospector

Garmin Map 76cx
Allows you to have Topo Maps as background

New Garmin Monterra
With Bar Code Scanner Camera and Video Data Login capabilities
A Friendly GPS Programs
The Art of Prospecting

As a prospector the name of the game is to gather data and present the results in order to get an Option Deal. Historical Presentation used stencils, white out and lots of color crayons.
The Art of Prospecting
GIS Programs

QGIS - Free
GeoSetter - Free
Tricks and Tips To Help with Presentation
Tricks

- MapInfo Surface Gridding Soils
- Sun Shading Soil Color Grids

It's all about how you look at your data.
Using Arsenic Sun Shading To Help Find Gold Patterns

Arsenic Soil Map
MapInfo Sun Shading

Arsenic Soil Color Gridding
MapInfo Sun Shading

Arsenic Soil Color Gridding
MapInfo Sun Shading

Arsenic Soil Color Gridding
MapInfo Sun Shading

Arsenic Soil Color Gridding
Google Earth
For Presentation
Normal Way to Present Data
Google Earth with Airborne Magnetics

Gold Soil Anomaly Map

Placer Gold Creek
Gold over Potassium Background
Gold over Magnetic Background
Tips

Using Digital Photos to Help Present Your Data

A Photo can be Worth An Option Deal?
High Grade Gold Soil Sample
Soil produce assays of 3.2 Grams Gold
3.2 Grams Au Soil Sample Site
Photo taken 15 meters from High grade Soil
Soil from QV Discovery Site
PDM Cu – Au Porphyry
Sending Your Photo’s to Google Earth With Geosetter