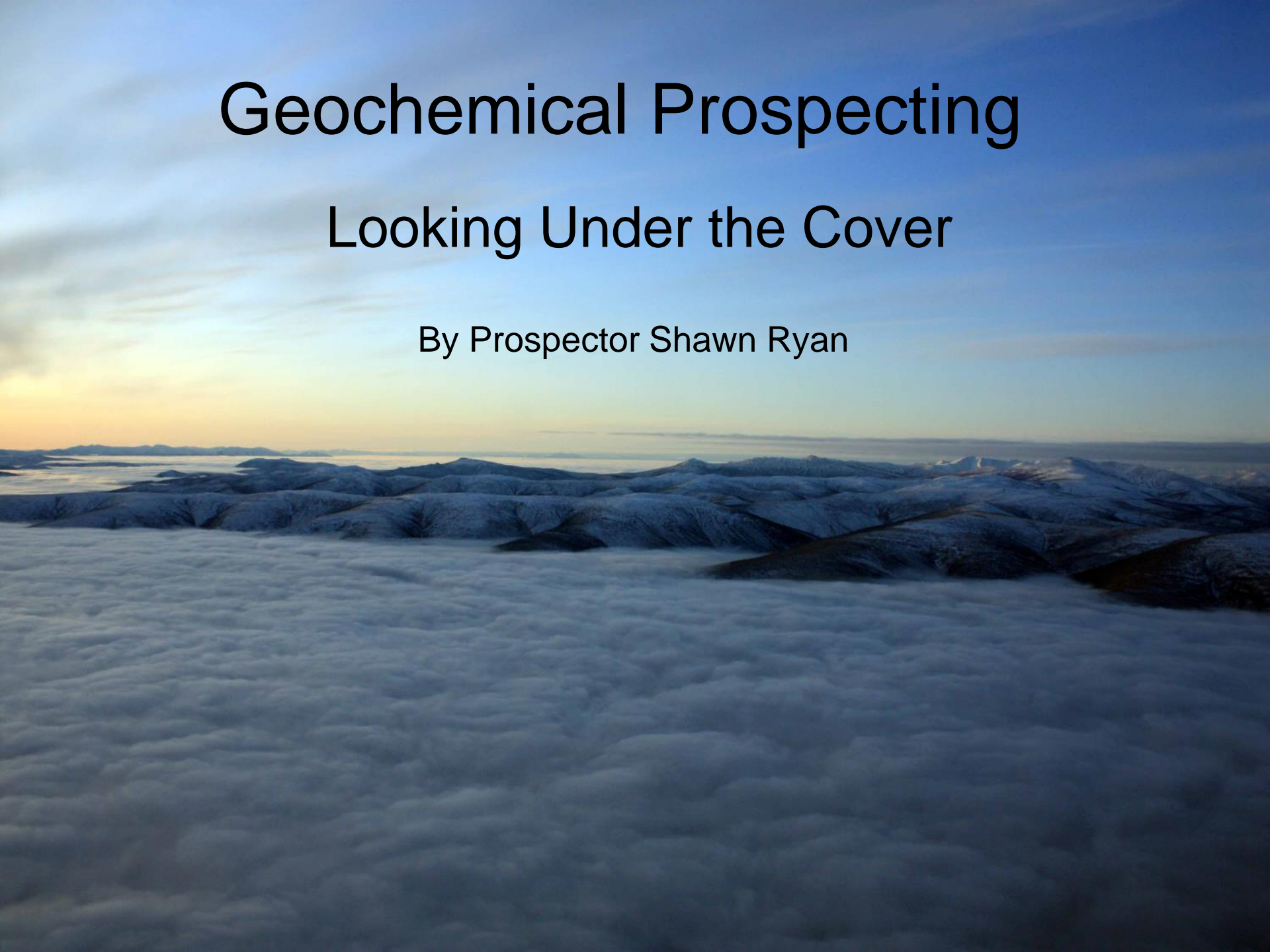


Geochemical Prospecting

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

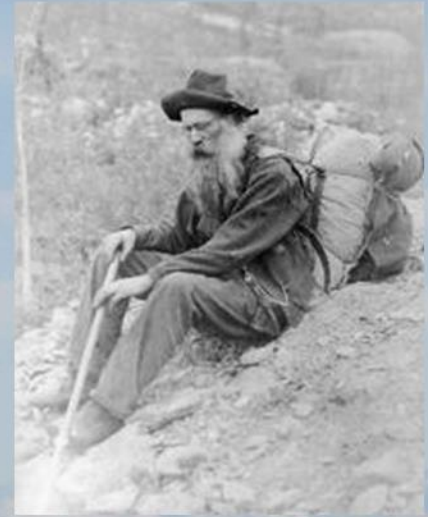
- Keystone and IND Project

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

Geology Map

Government Geology Maps

What the geological setting of a mesothermal gold or massive sulphide deposit sitting in.

Geochemistry

Silts, Soils, Till and Lake Sediments

What the Geochemical Signature look like (sometimes not all gold anomalies are the same even on the same property).

Geophysical Maps

Magnetic and Radiometric Maps

What the signature of a mesothermal gold deposit (magnetic low) versus a massive sulphide (magnetic high). Each deposits has its own characteristics and your research will help point to the right signature to look for.

Structure-Structure-Structure

Regional Structure Maps

I consider structure as the forth leg of a chair, sometimes it's the most important part in locating a deposits.

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)

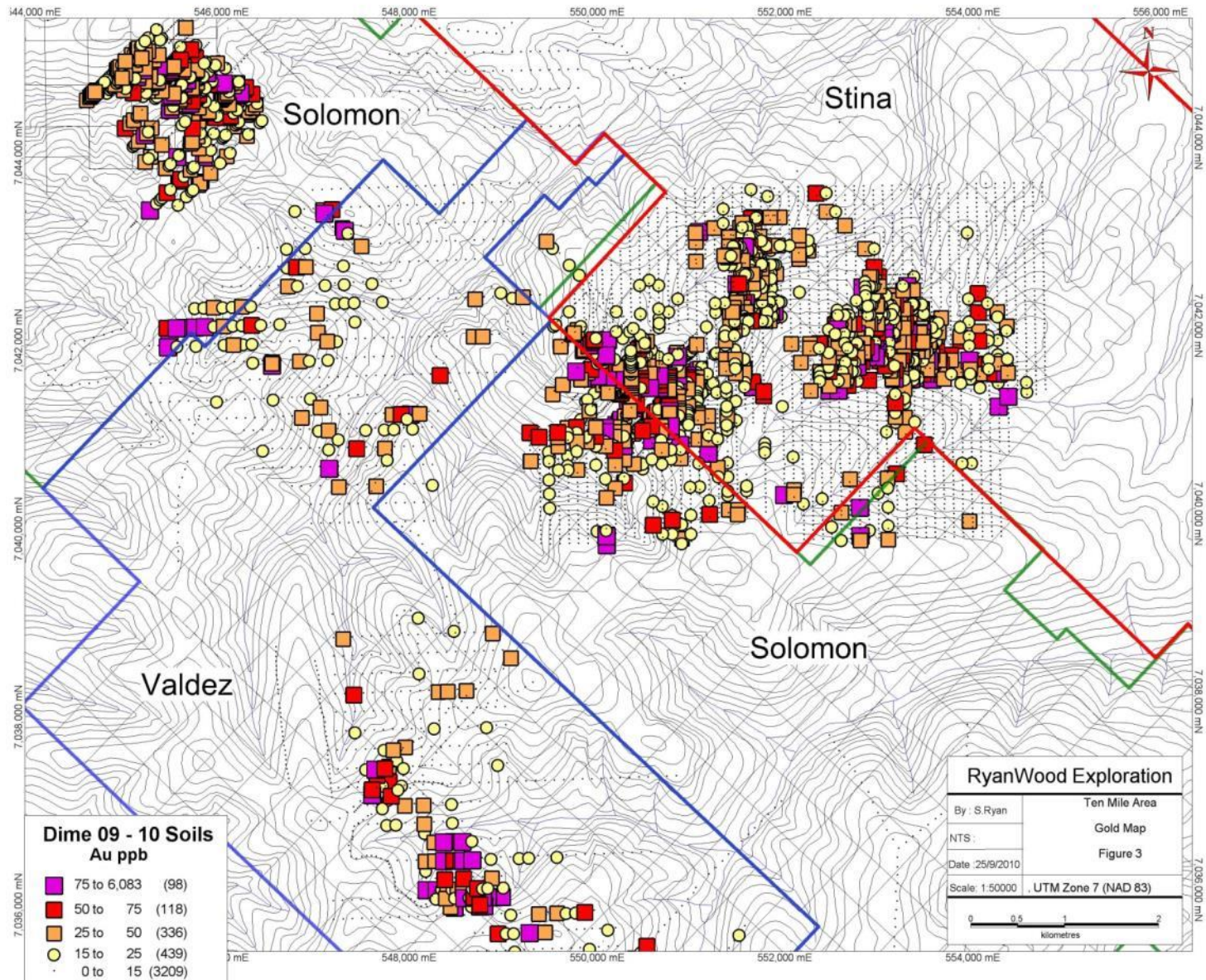
All these Maps add to Creating a Higher Probability of Success

Remember

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

“Our Job is to Sell Hope”

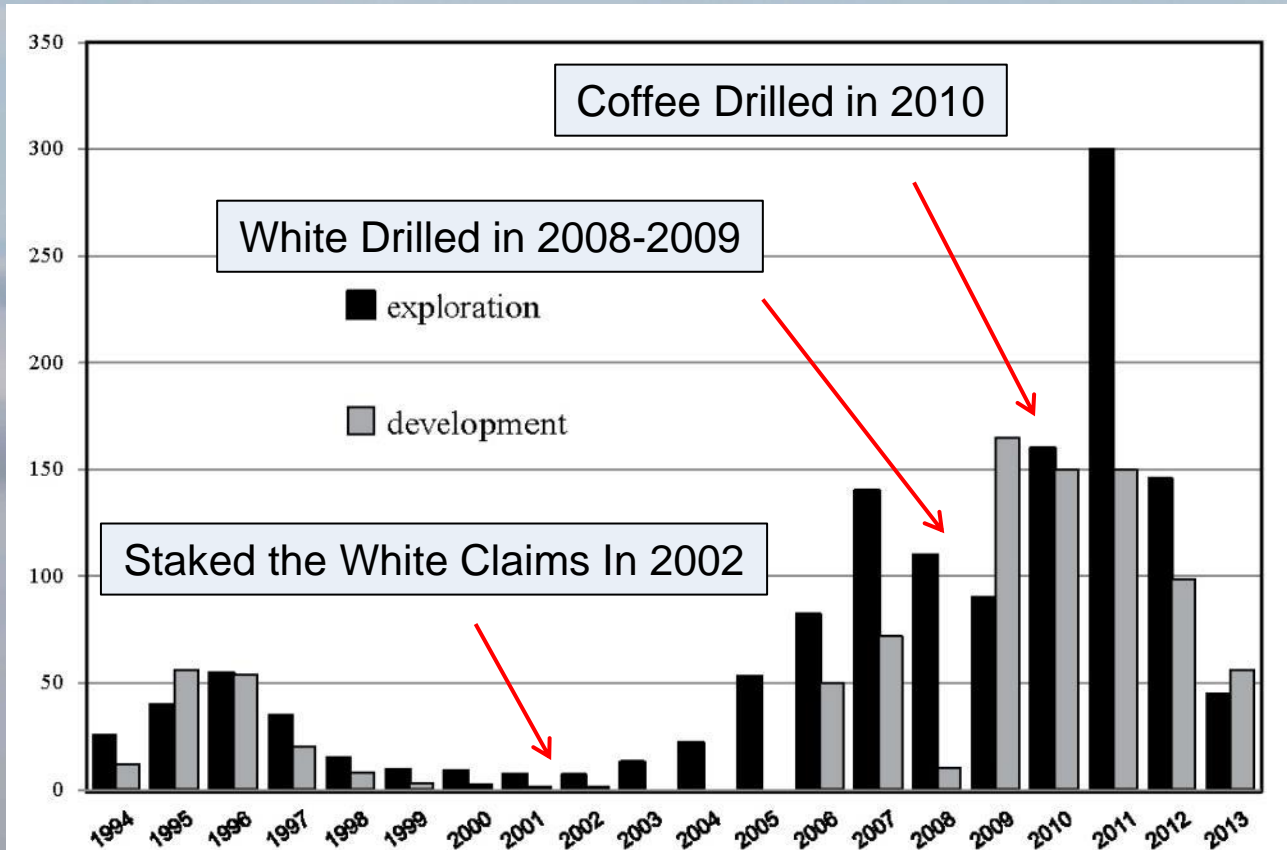
Understand How Your Project Fits In With the Big Picture You May be Holding A Key Piece



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

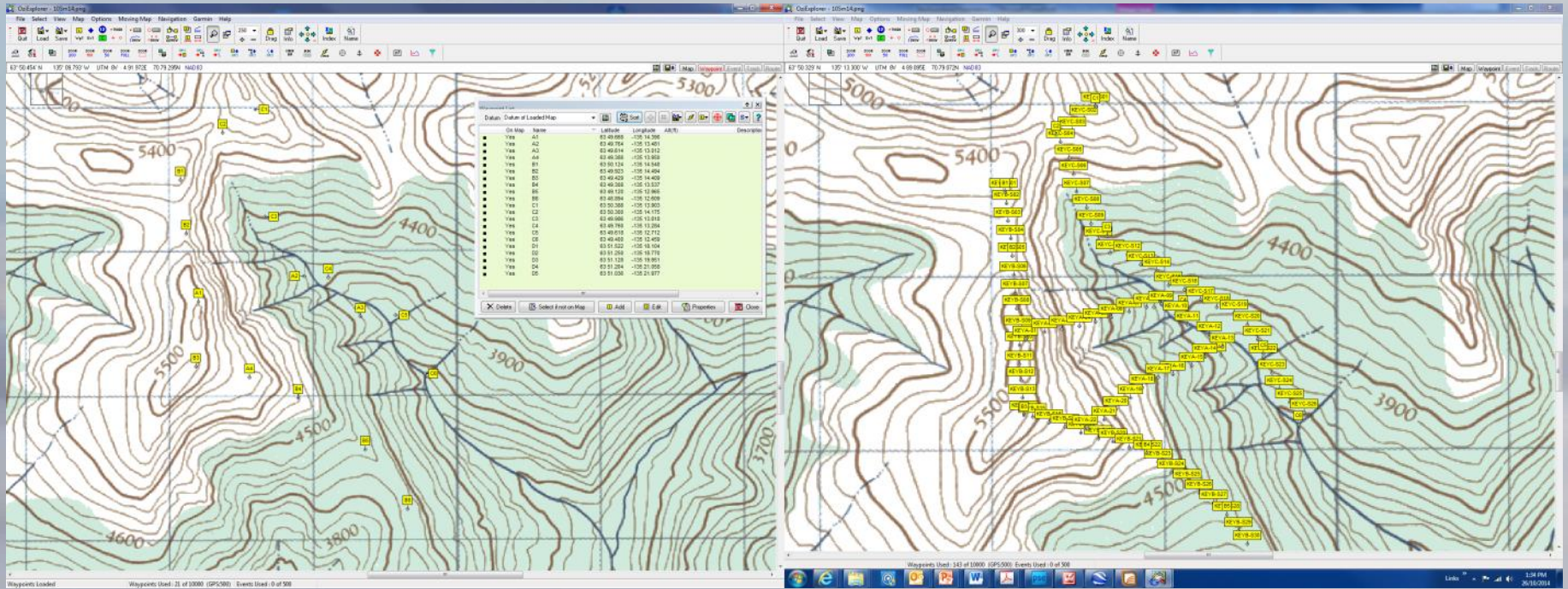


Garmin Map 76cx
Allows you to have
Topo Maps as background



New Garmin Monterra
With Bar Code Scanner
Camera and Video
Data Login capabilities

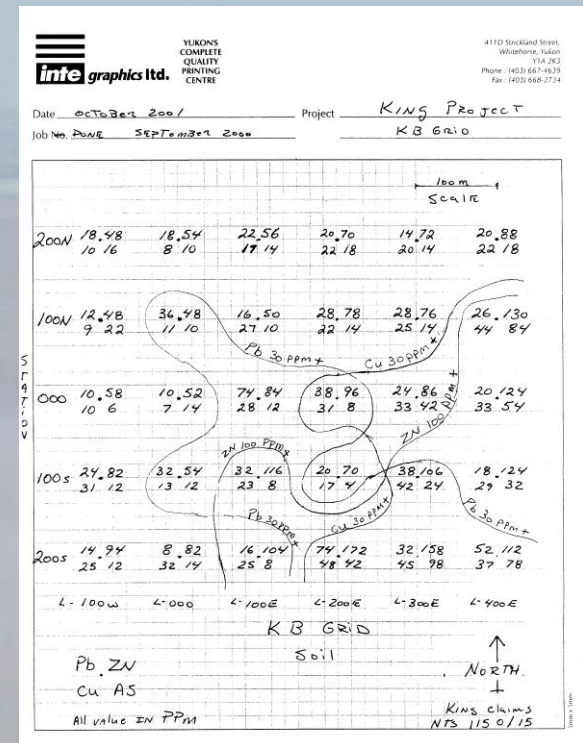
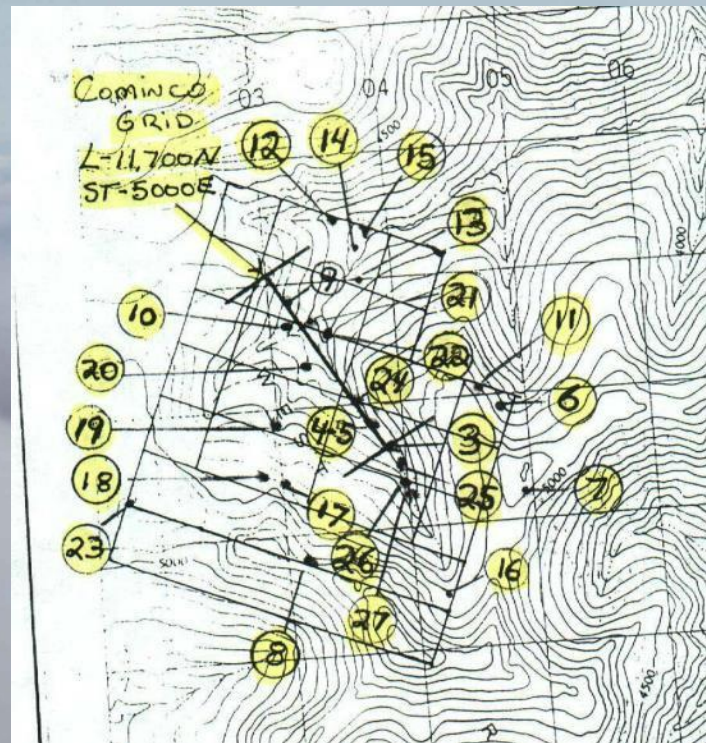
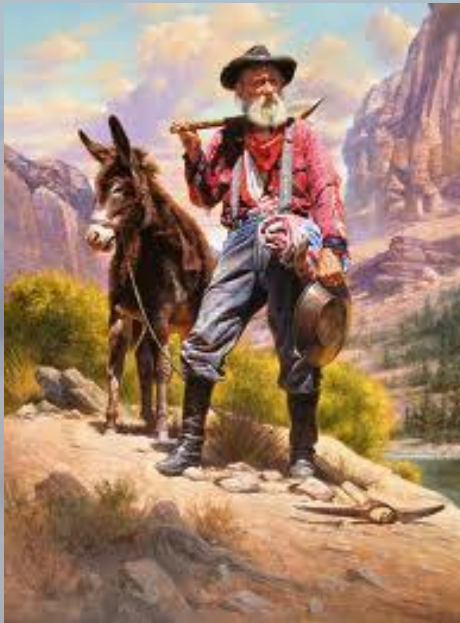
OziExplorer



A Friendly GPS Programs

The Art of Prospecting

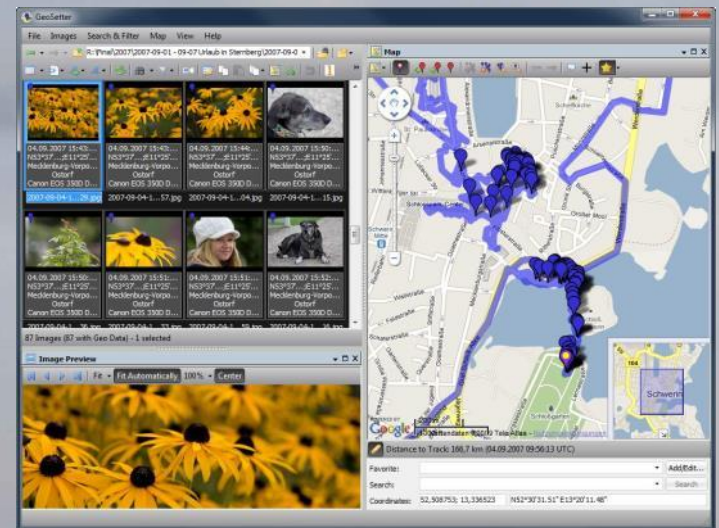
As a prospector the name of the game is to gather data and present the results in Order to get an Option Deal. Historical Presentation used stencils, white out and Lots of color crayons.




The Art of Prospecting GIS Programs



QGIS - Free



GeoSetter - Free

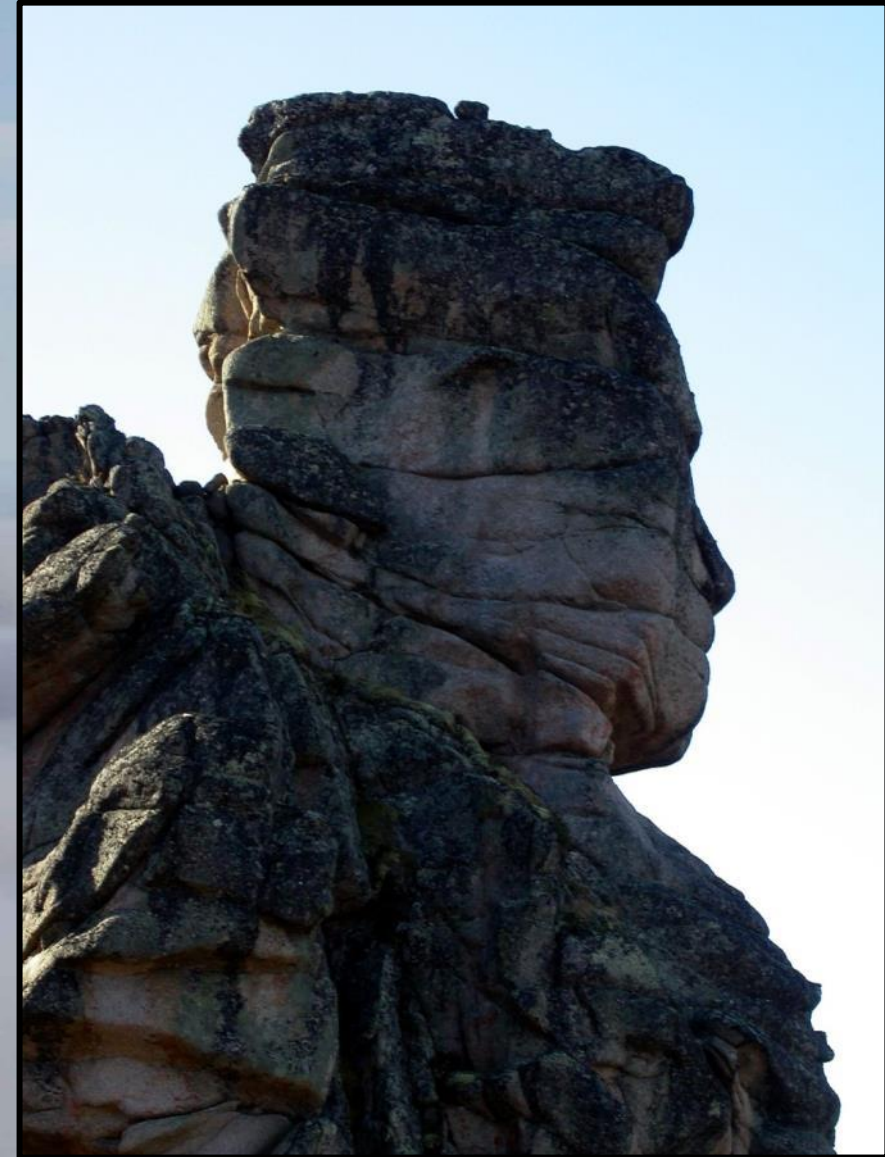


Tricks and Tips To Help with Presentation

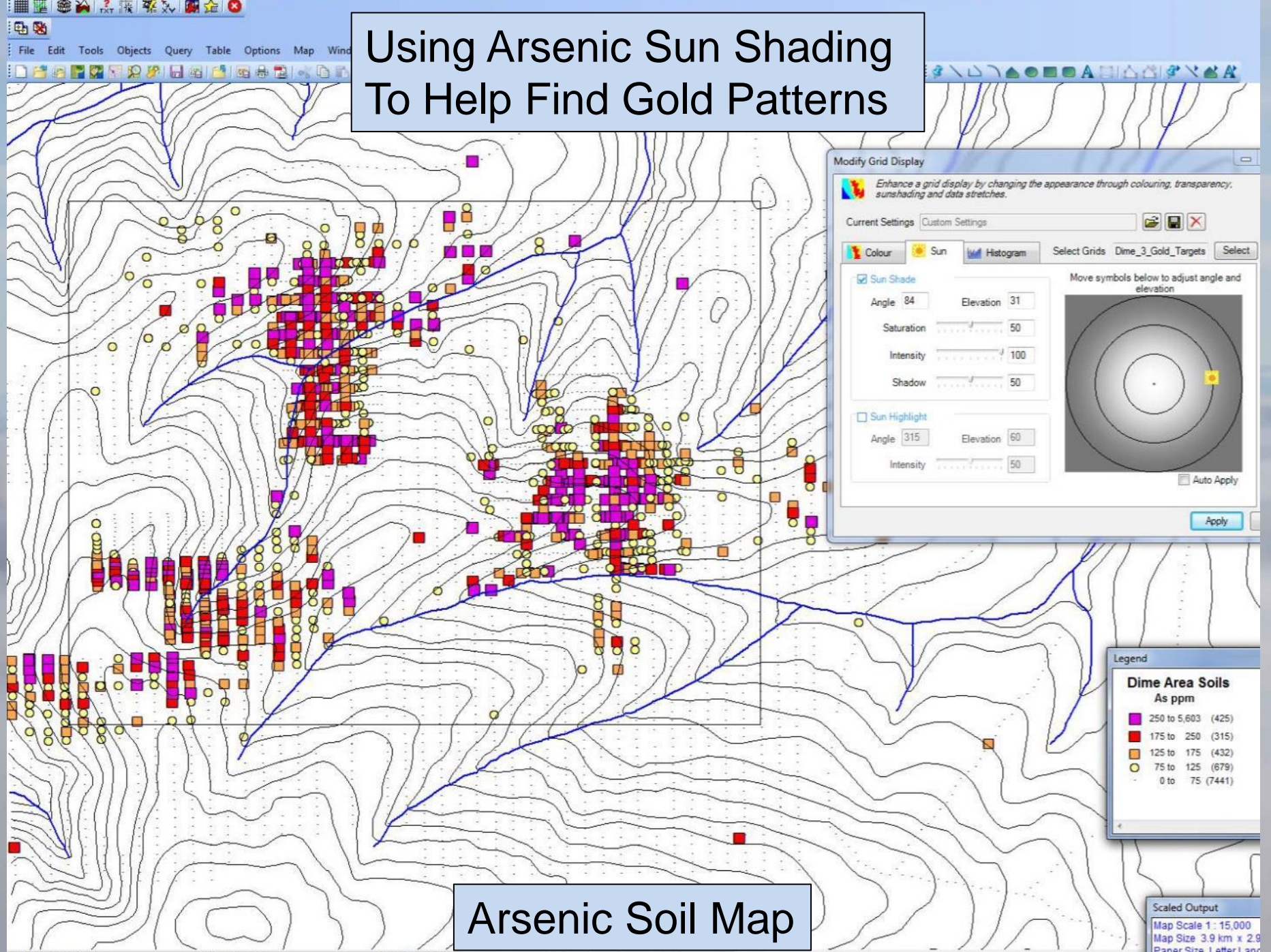
Tricks

- MapInfo Surface Gridding Soils
- Sun Shading Soil Color Grids

Its all about How You
Look at Your Data

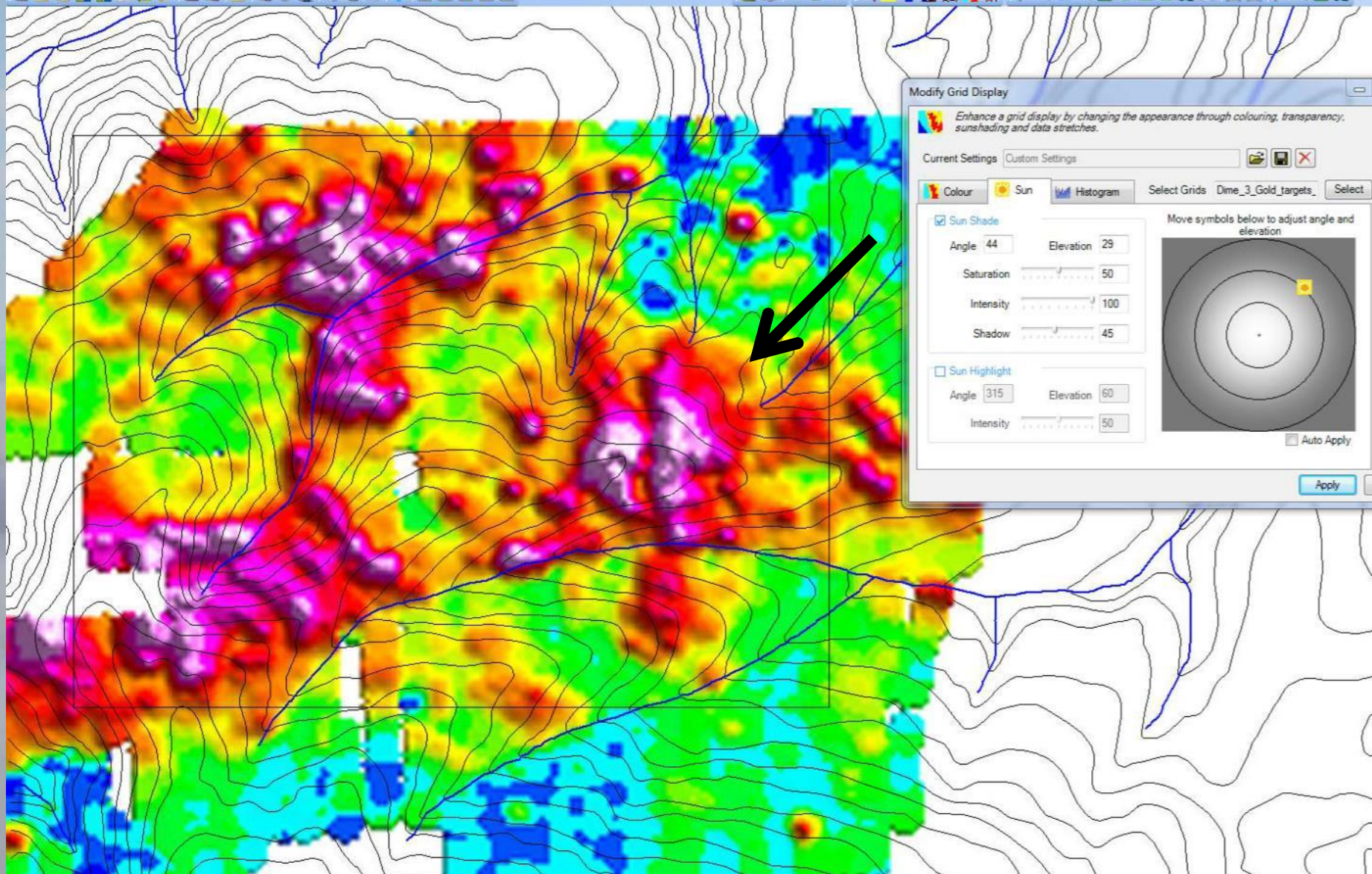


Using Arsenic Sun Shading To Help Find Gold Patterns



Arsenic Soil Map

MapInfo Sun Shading



Modify Grid Display

Enhance a grid display by changing the appearance through colouring, transparency, sunshading and data stretches.

Current Settings Custom Settings

Colour Sun Histogram Select Grids Dime_3_Gold_targets Select

Sun Shade

Angle 44 Elevation 29

Saturation 50

Intensity 100

Shadow 45

Sun Highlight

Angle 315 Elevation 60

Intensity 50

Move symbols below to adjust angle and elevation

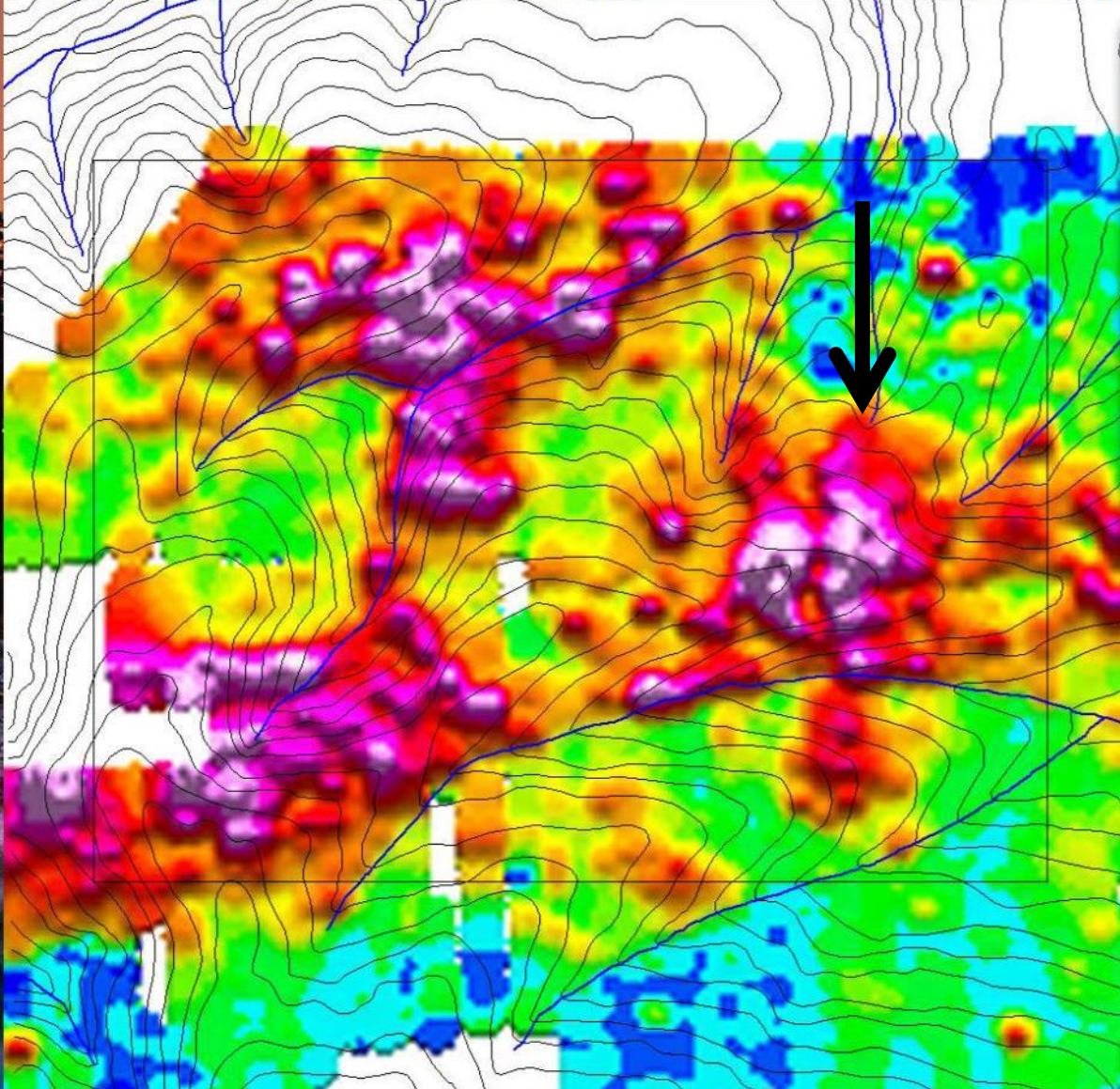
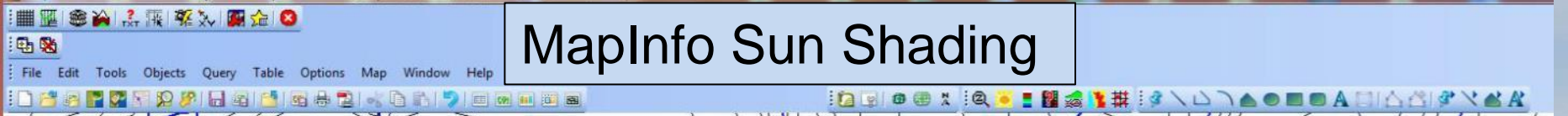
Auto Apply

Apply

Arsenic Soil Color Gridding

Scaled Output
Map Scale 1 : 15,000
Map Size 3.9 km x 2.9
Paper Size Letter Land

MapInfo Sun Shading



Modify Grid Display

Enhance a grid display by changing the appearance through colouring, transparency, sunshade and data stretches.

Current Settings Custom Settings

Colour Sun Histogram Select Grids Dime_3_Gold_targets_a Select

Sun Shade

Angle 2 Elevation 28

Saturation 50

Intensity 100

Shadow 45

Sun Highlight

Angle 315 Elevation 60

Intensity 50

Move symbols below to adjust angle and elevation

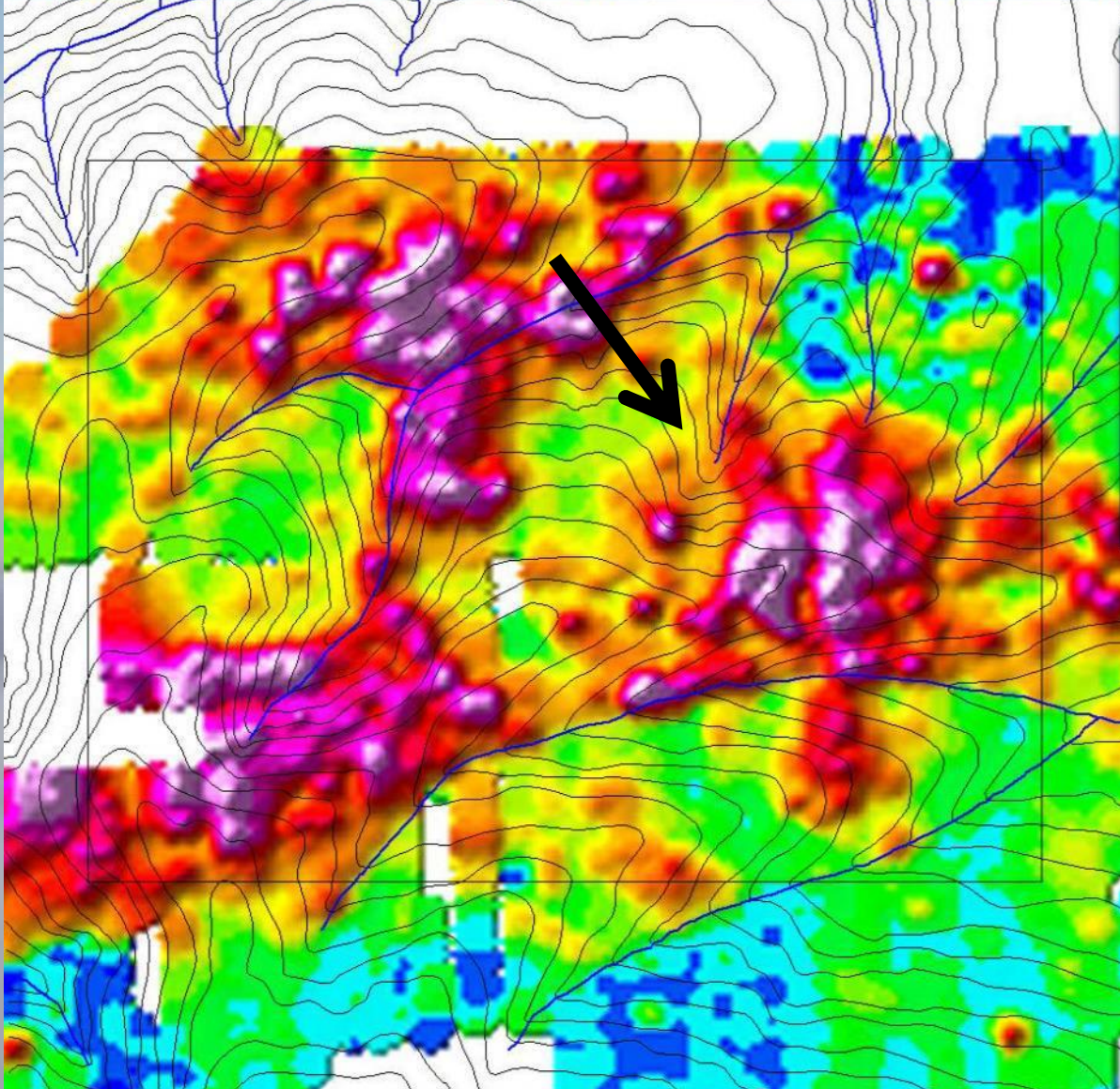
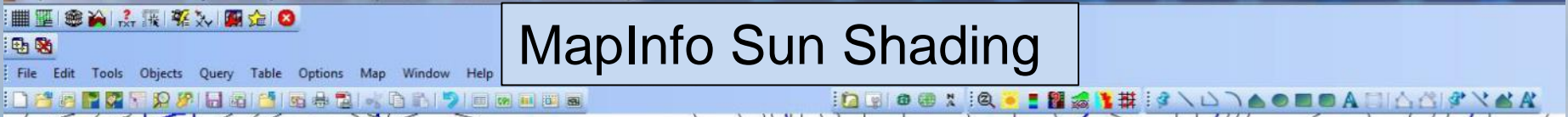
Auto Apply

Apply

Arsenic Soil Color Gridding

Scaled Output
Map Scale 1 : 15,000
Map Size 3.9 km x 2.9
Paper Size Letter Land

MapInfo Sun Shading



Modify Grid Display

Enhance a grid display by changing the appearance through colouring, transparency, sunshade, and data stretches.

Current Settings Custom Settings

Colour Sun Histogram Select Grids Dime_3_Gold_targets_a Select

Sun Shade

Angle 313 Elevation 28

Saturation 50

Intensity 100

Shadow 45

Sun Highlight

Angle 315 Elevation 60

Intensity 50

Move symbols below to adjust angle and elevation

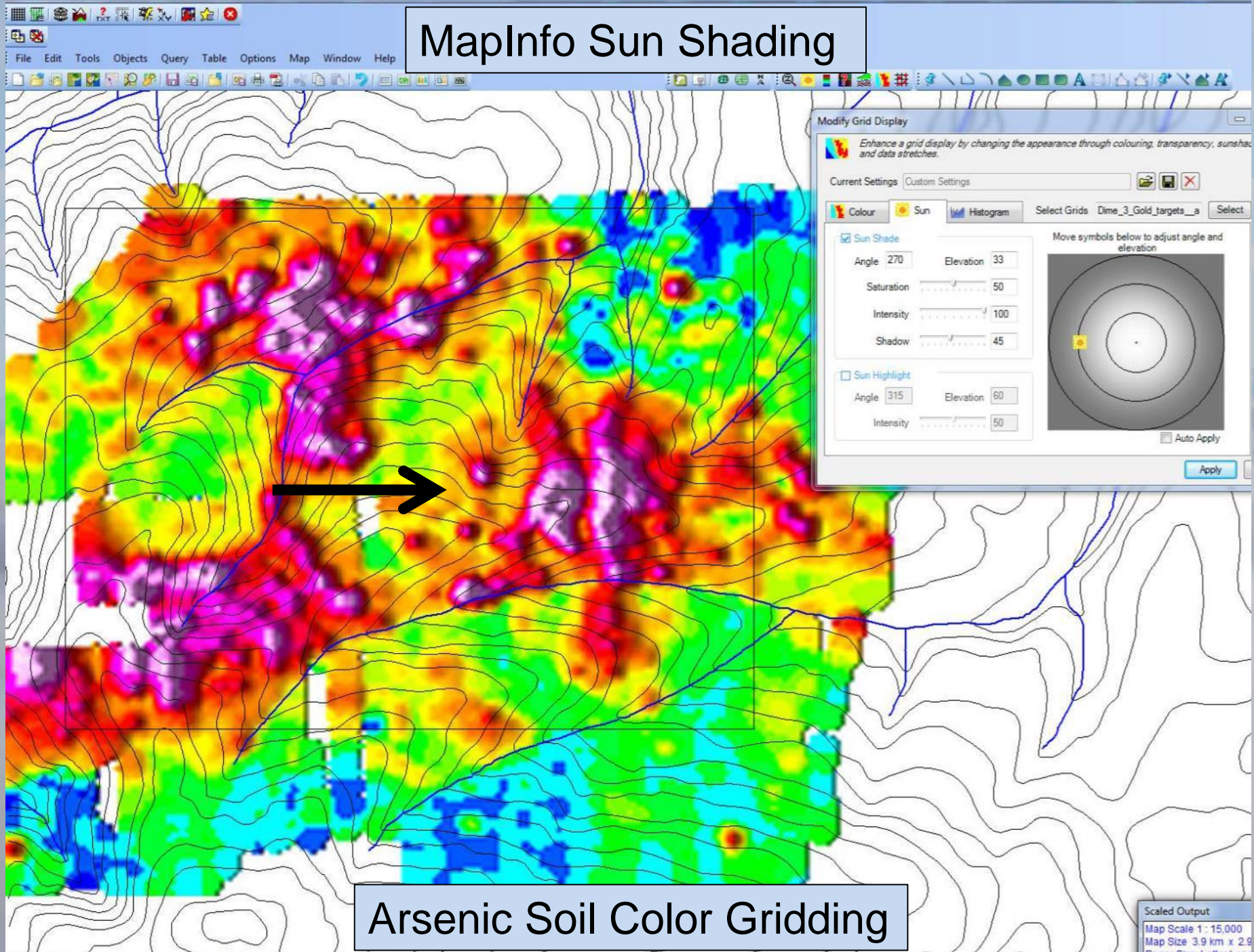
Auto Apply

Apply

Arsenic Soil Color Gridding

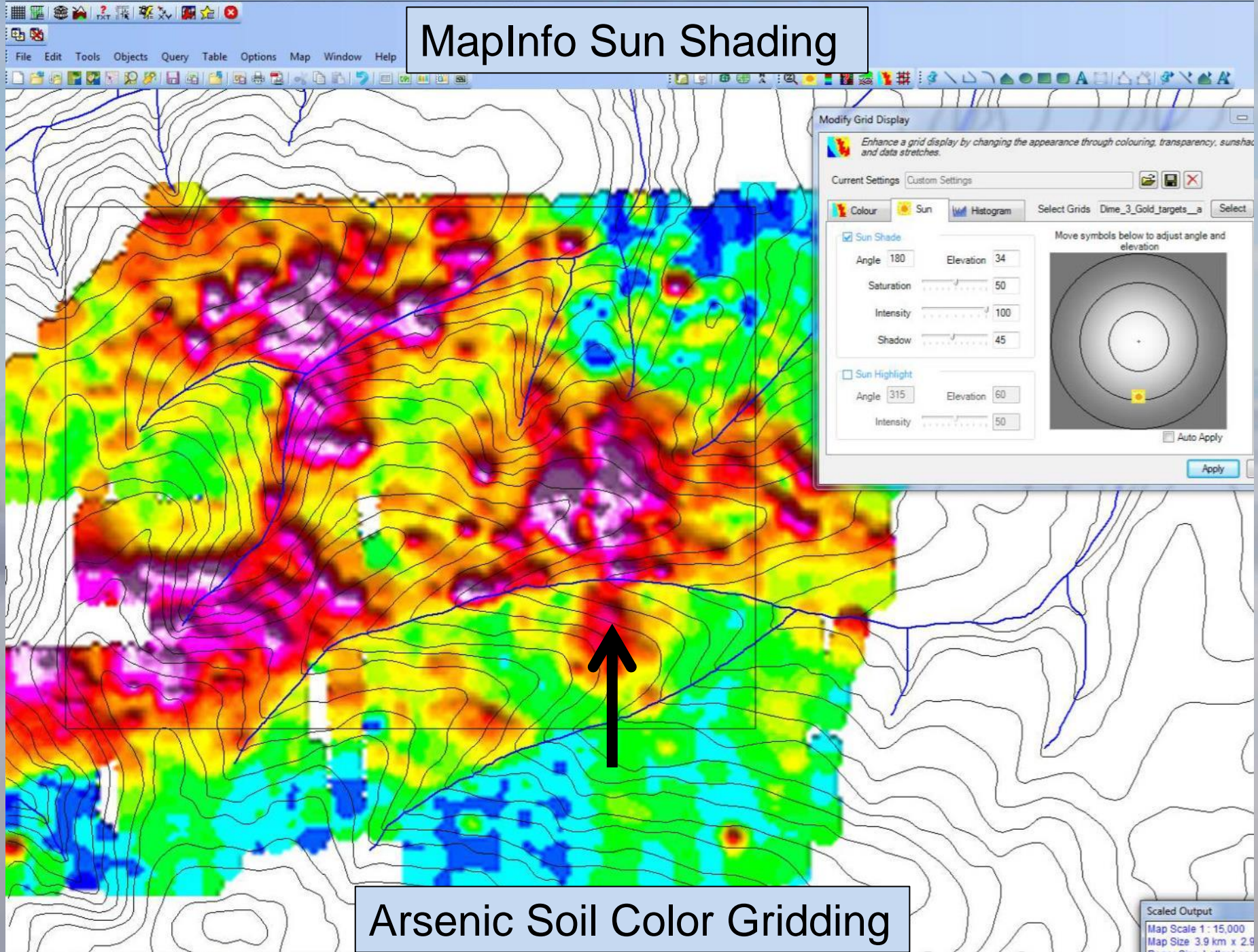
Scaled Output
Map Scale 1 : 15,000
Map Size 3.9 km x 2.9
Paper Size Letter Land

MapInfo Sun Shading



Arsenic Soil Color Gridding

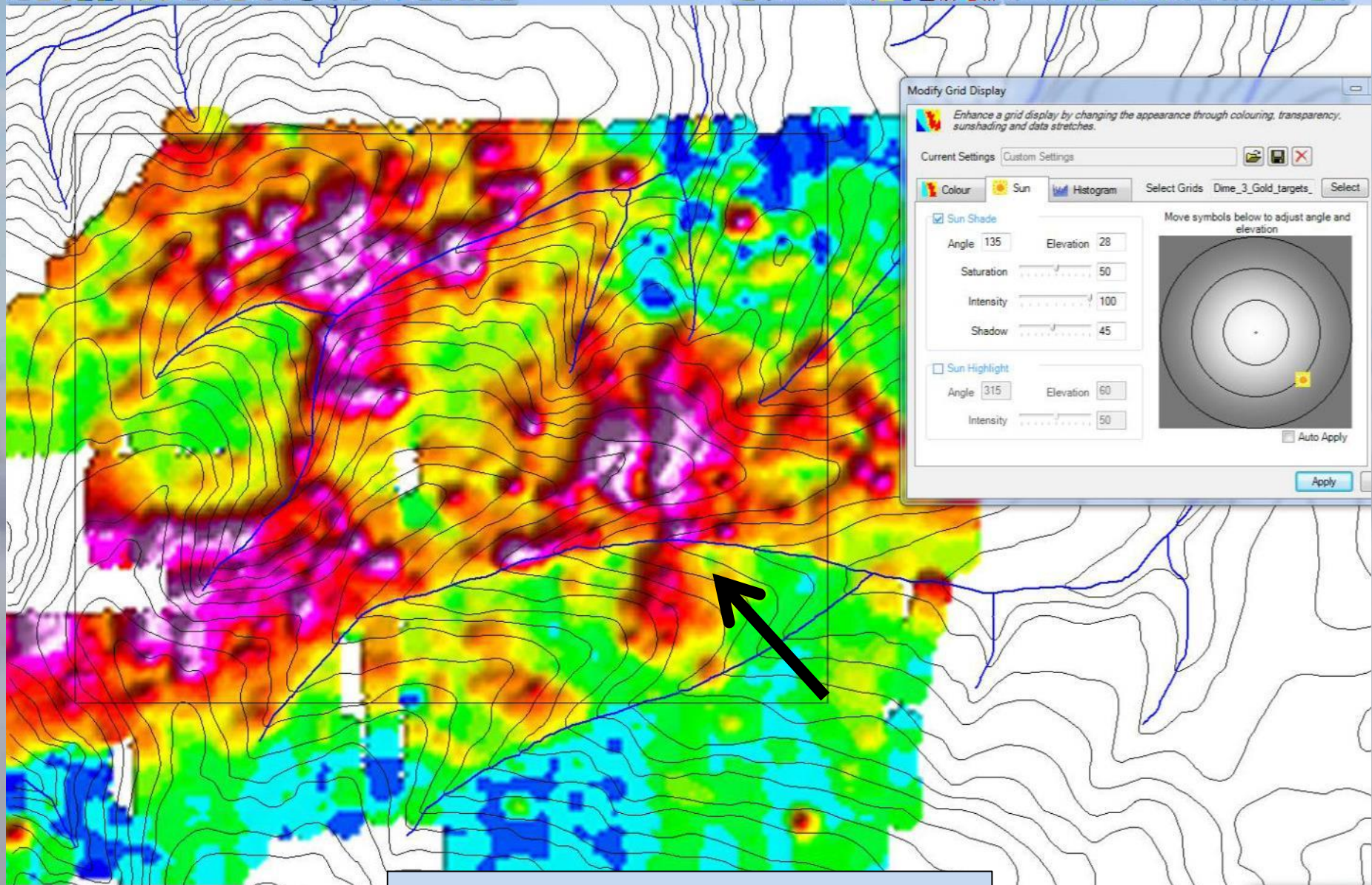
MapInfo Sun Shading



Arsenic Soil Color Gridding

Scaled Output
Map Scale 1 : 15,000
Map Size 3.9 km x 2.9
Paper Size Letter Land

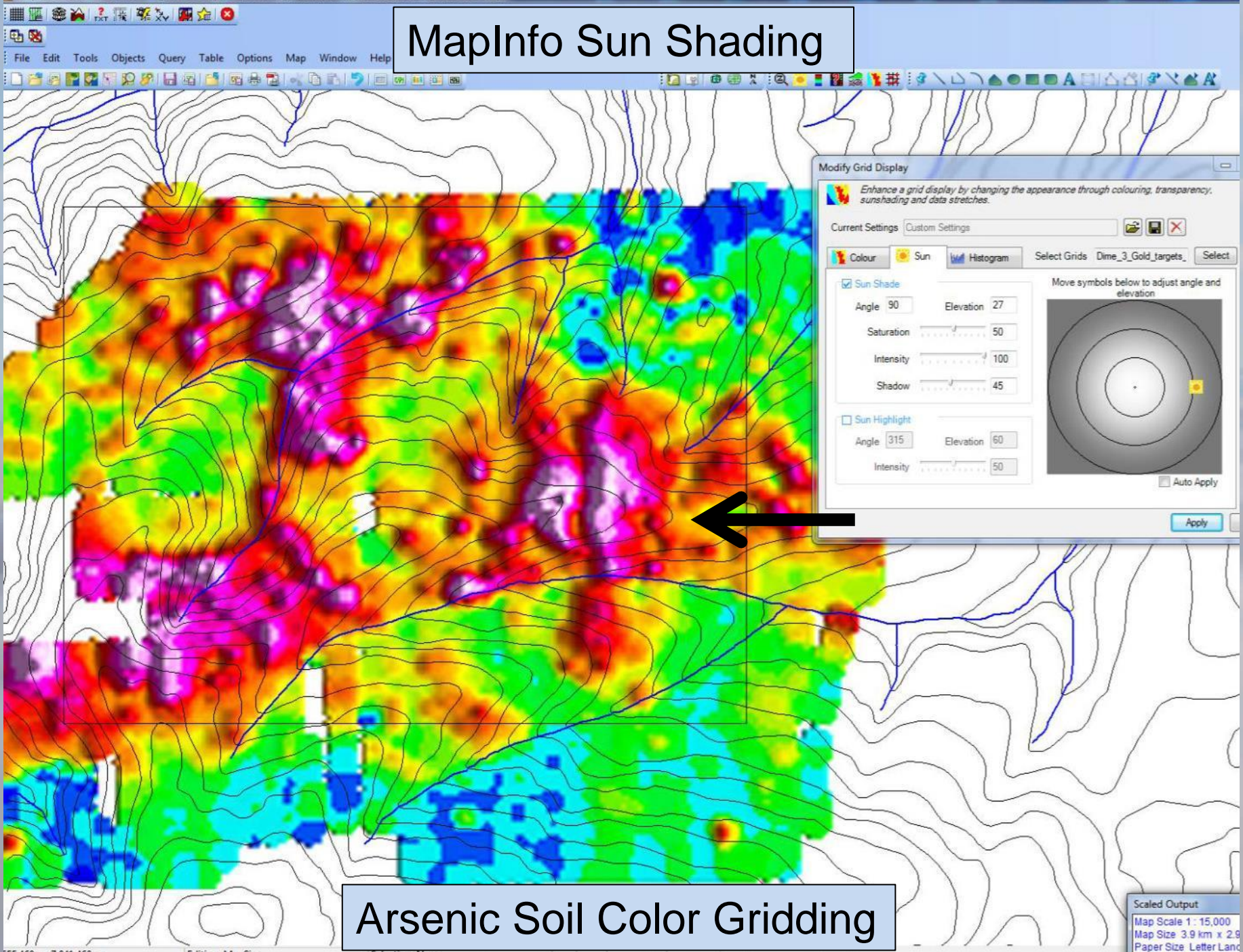
MapInfo Sun Shading



Arsenic Soil Color Gridding

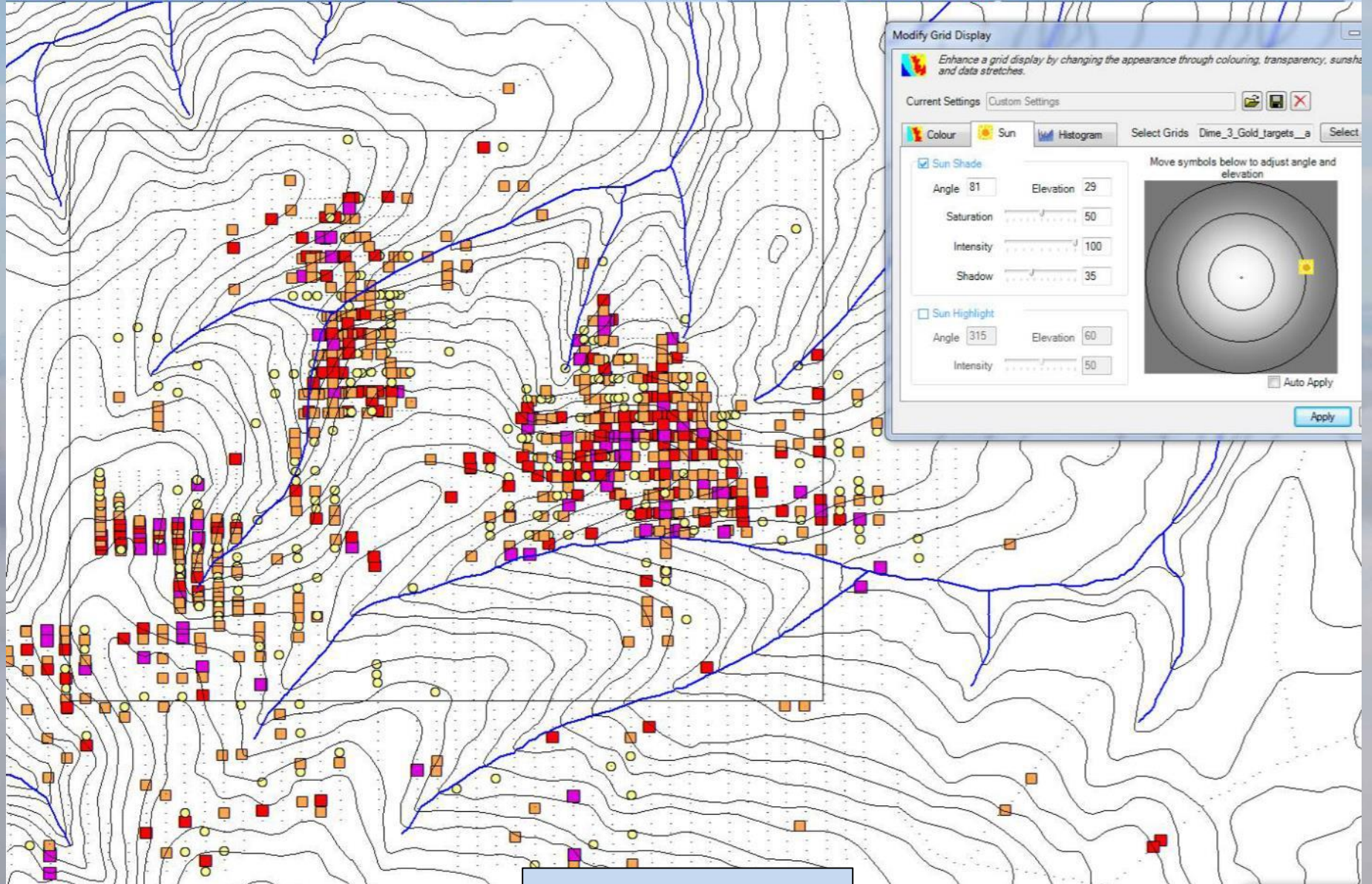
Scaled Output
Map Scale 1 : 15,000
Map Size 3.9 km x 2.9
Paper Size Letter Land

MapInfo Sun Shading



Arsenic Soil Color Gridding

Scaled Output
Map Scale 1: 15,000
Map Size 3.9 km x 2.9
Paper Size LetterLanc



Modify Grid Display

Enhance a grid display by changing the appearance through colouring, transparency, sunshade and data stretches.

Current Settings Custom Settings

Colour Sun Histogram Select Grids Dime_3_Gold_targets_a Select

Sun Shade

Angle 81 Elevation 29

Saturation 50

Intensity 100

Shadow 35

Sun Highlight

Angle 315 Elevation 60

Intensity 50

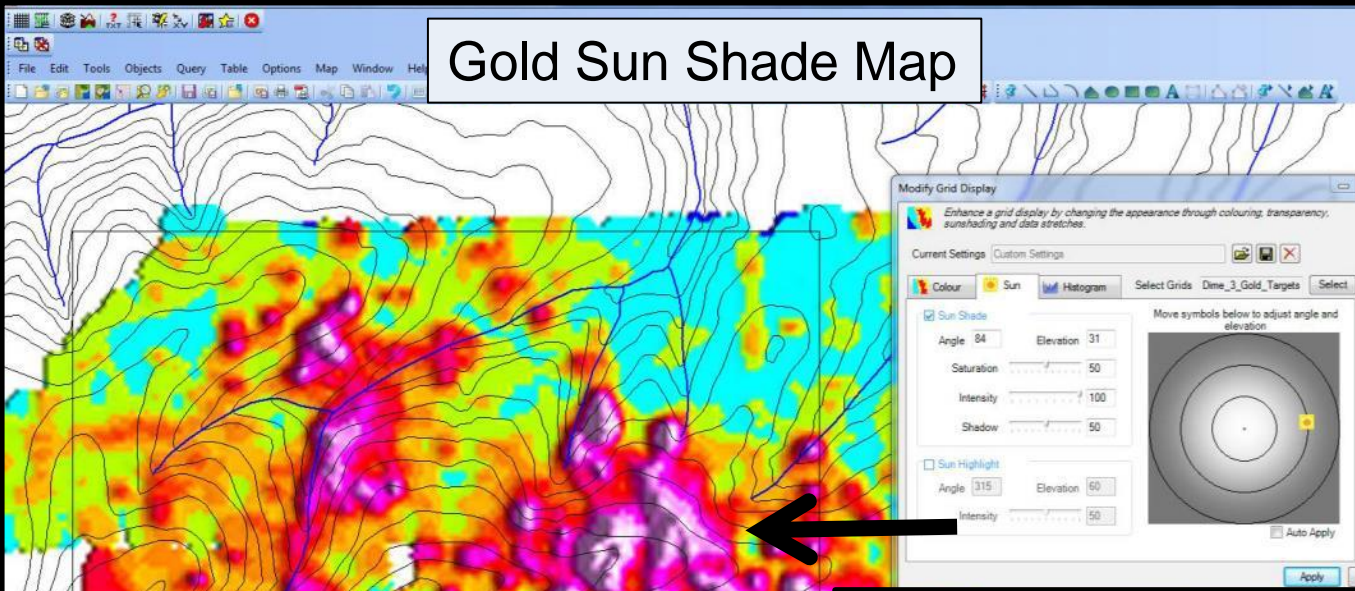
Move symbols below to adjust angle and elevation

Auto Apply

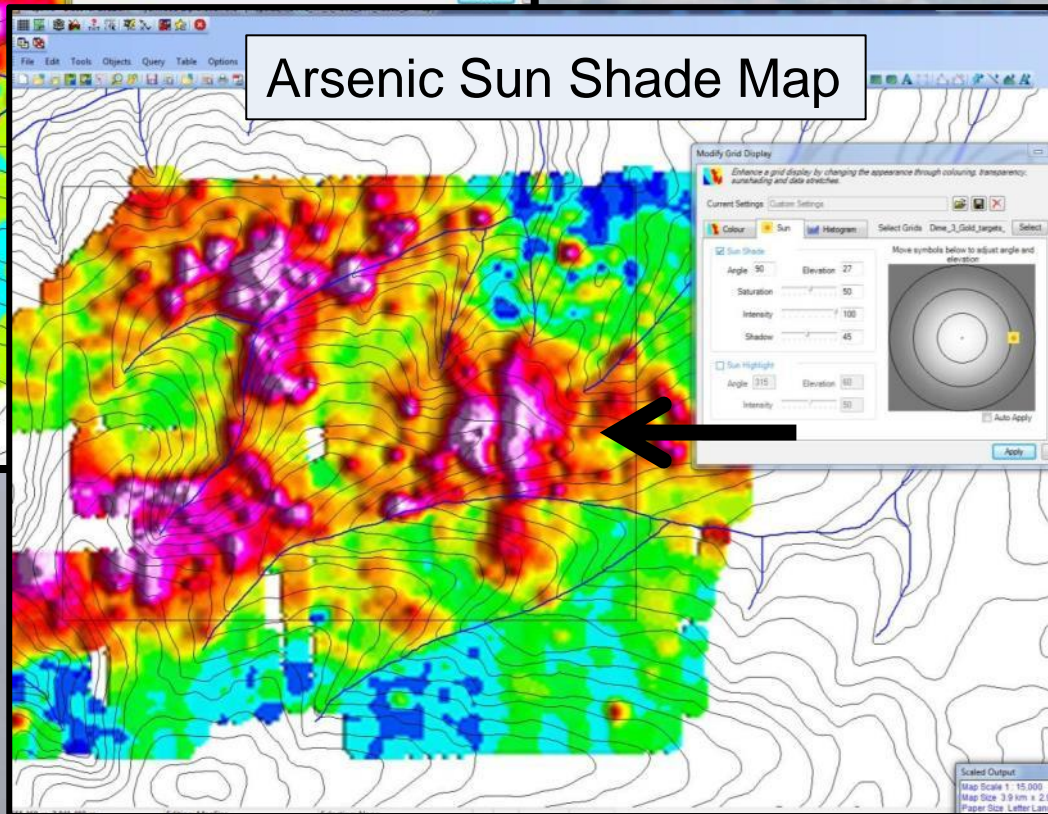
Apply

Gold Soil Map

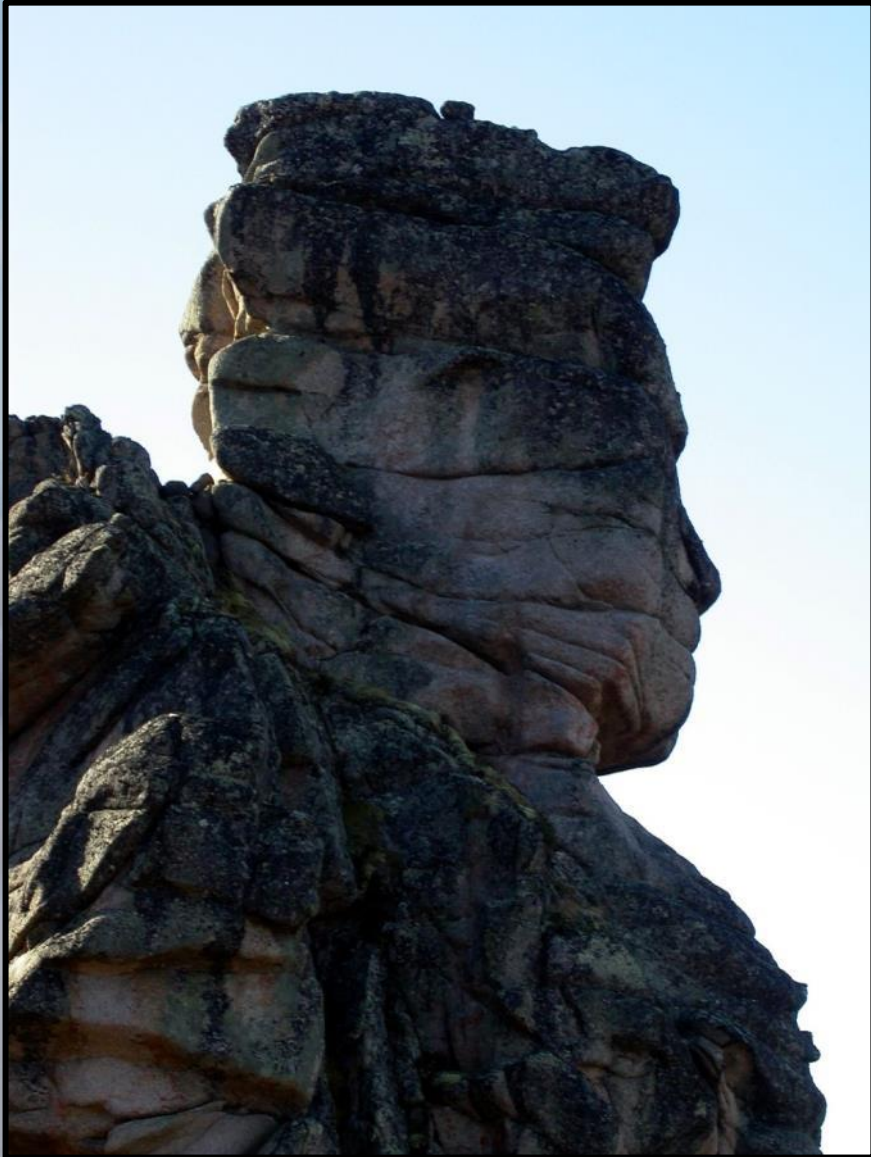
Gold Sun Shade Map



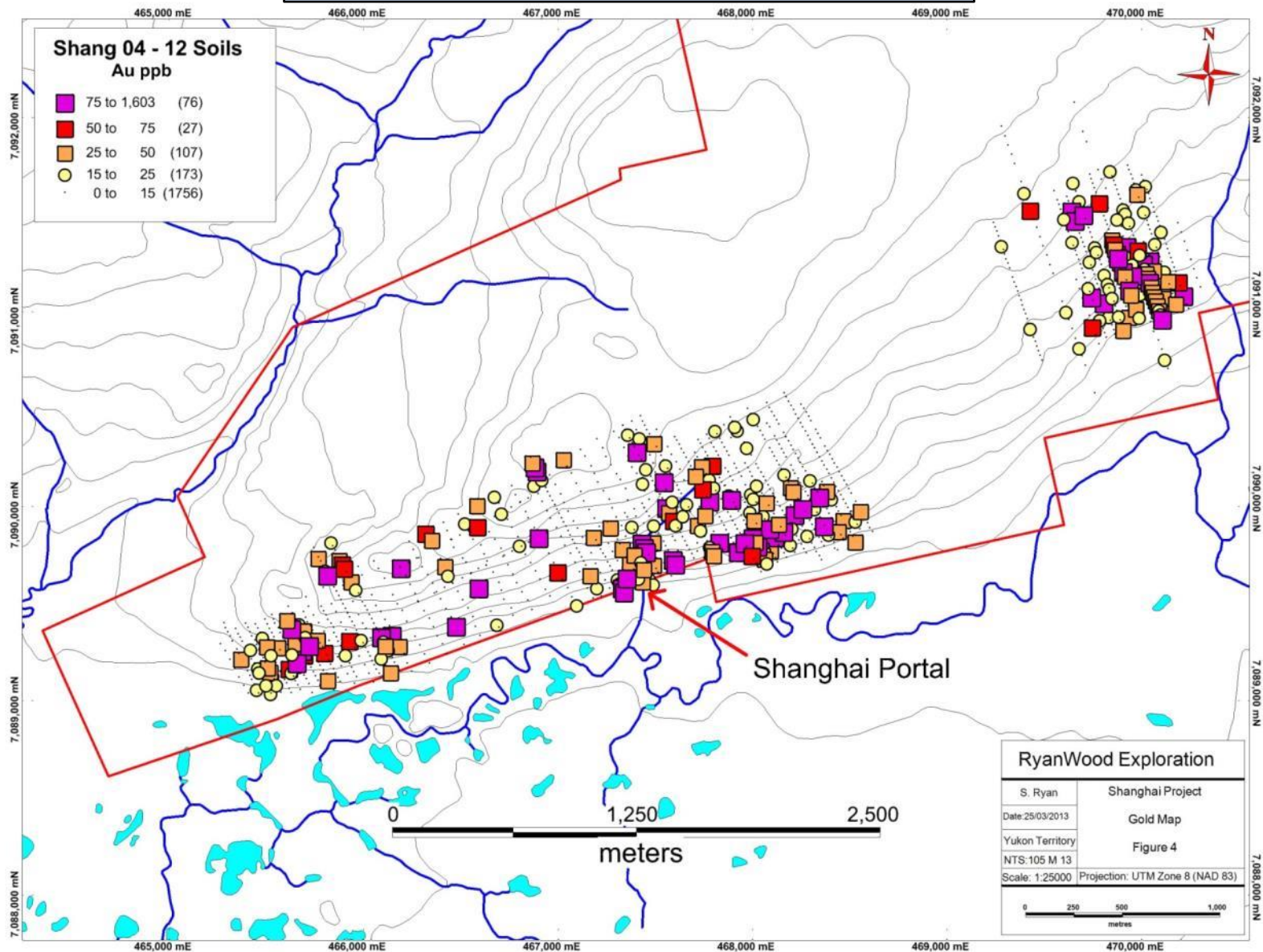
Arsenic Sun Shade Map



Google Earth For Presentation

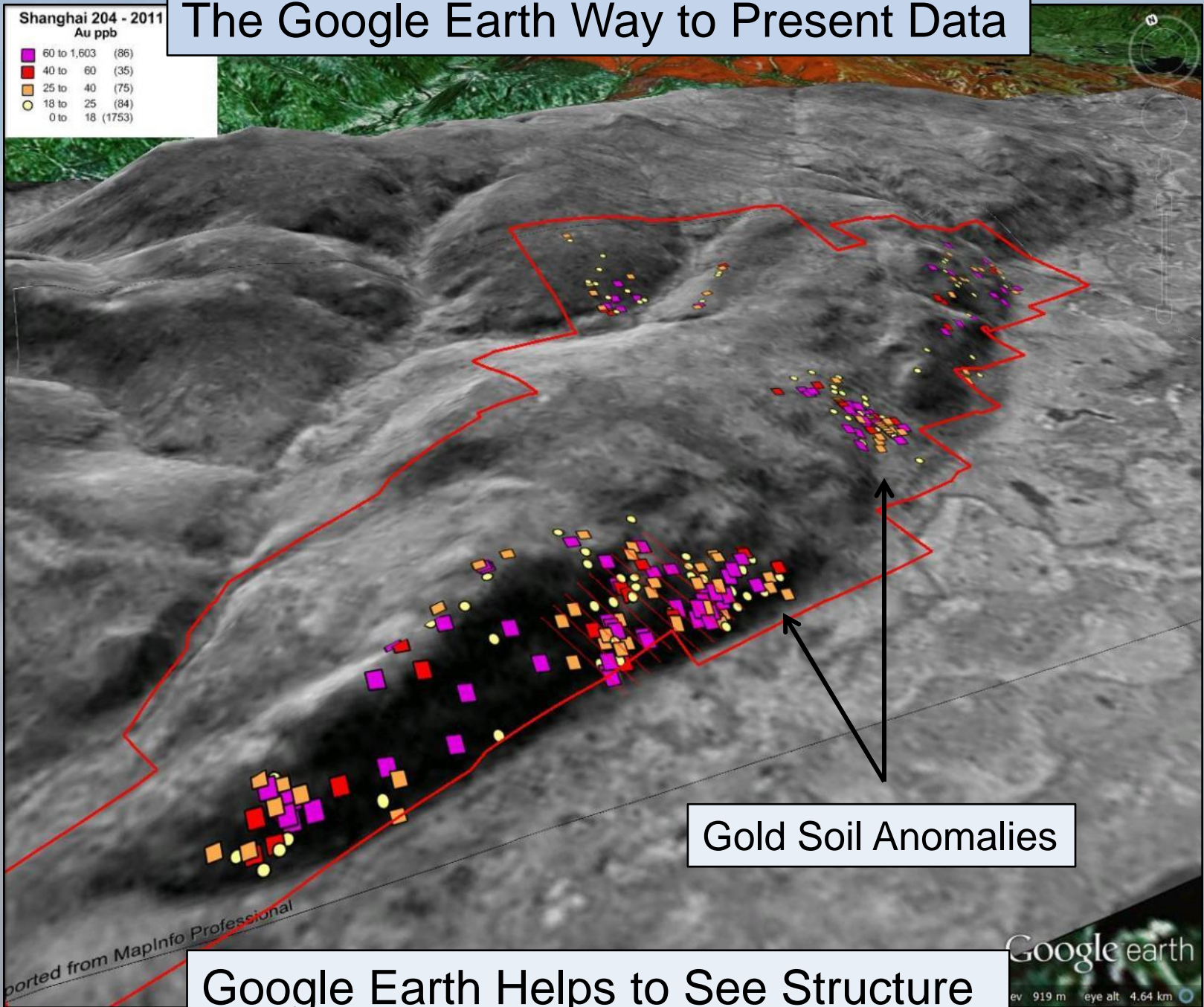


Normal Way to Present Data



The Google Earth Way to Present Data

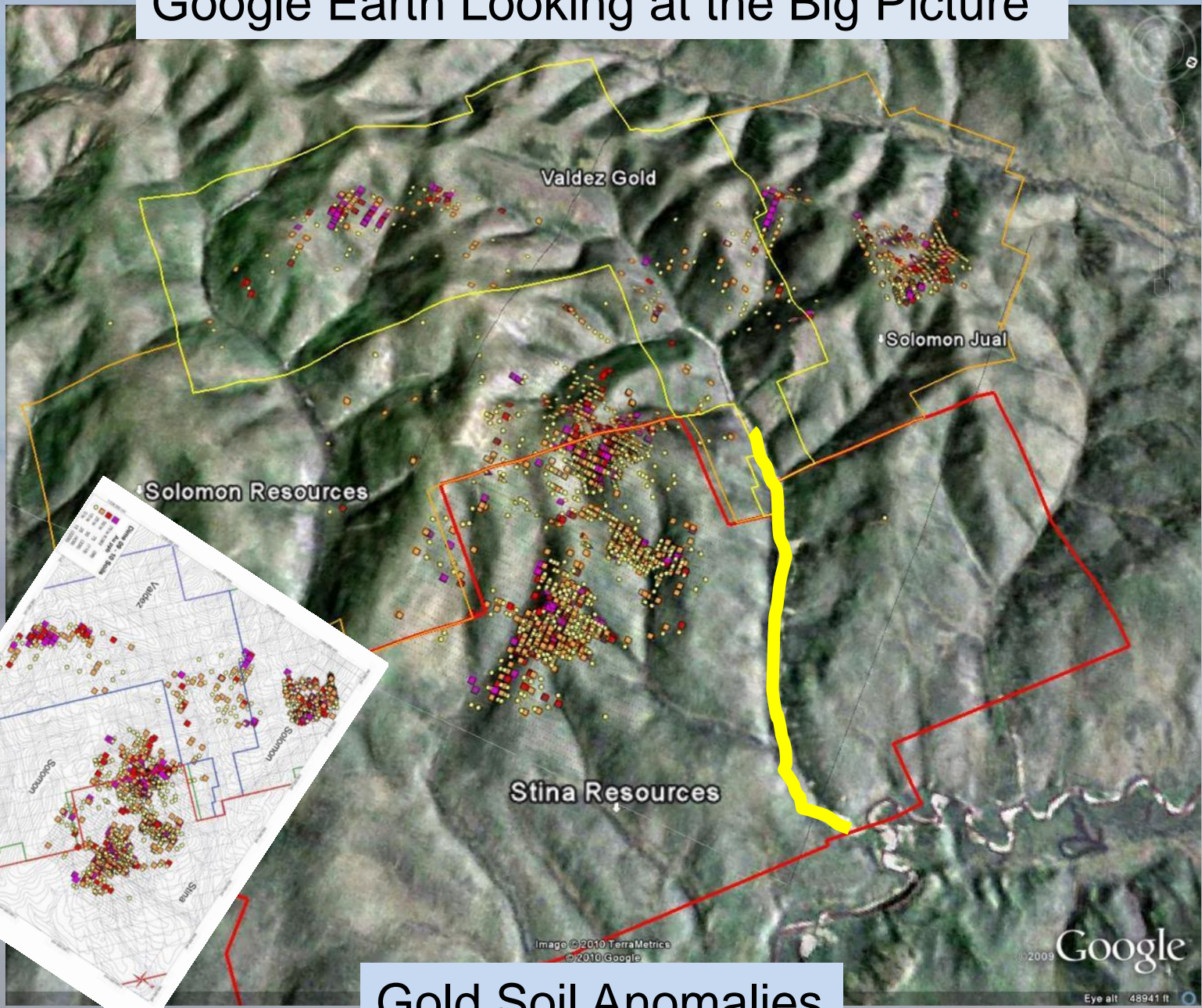
Shanghai 204 - 2011
Au ppb



Gold Soil Anomalies

Google Earth Helps to See Structure

Google Earth Looking at the Big Picture



Solomon Resources

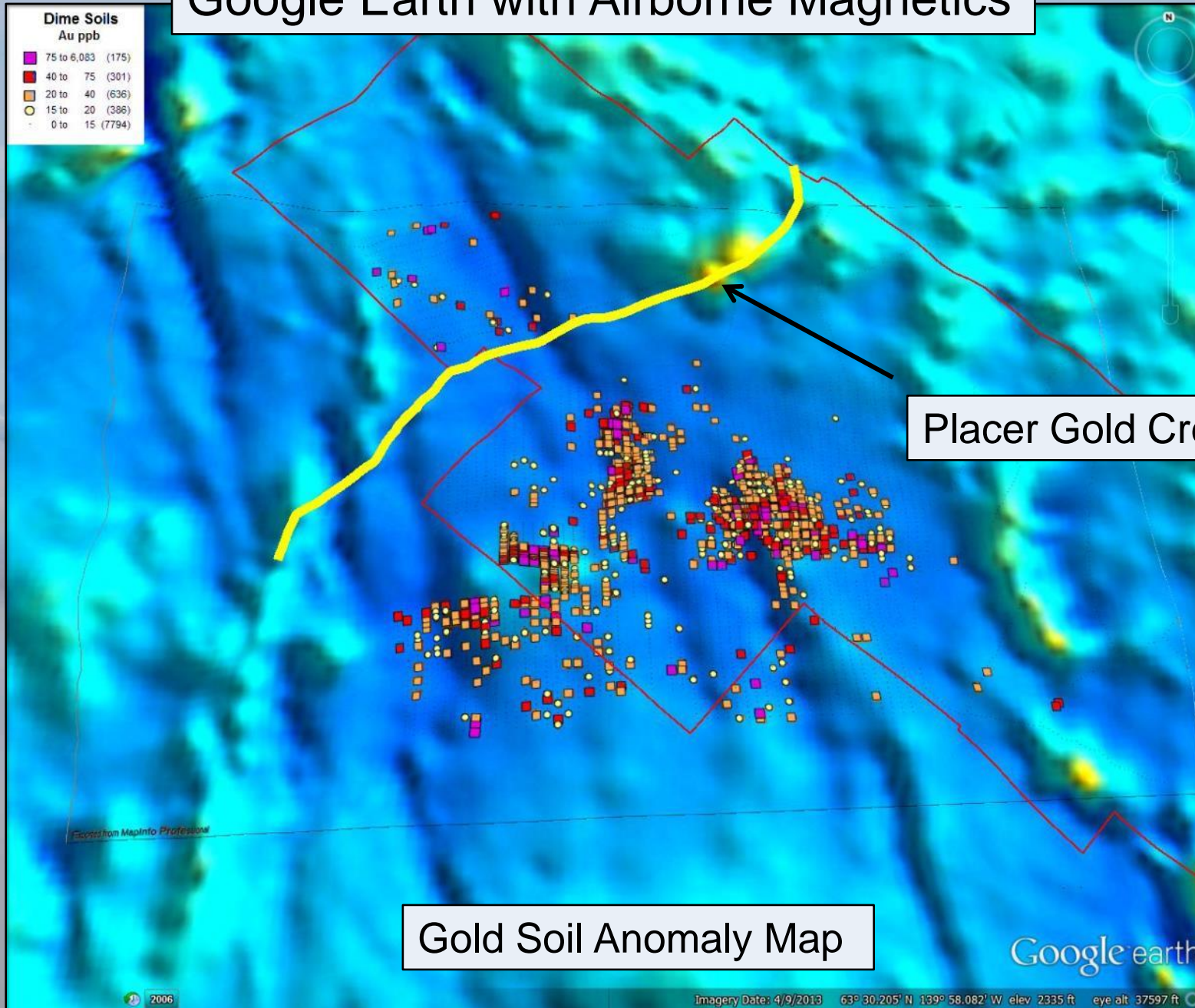
Valdez Gold

Solomon Jual

Stina Resources

Gold Soil Anomalies

Google Earth with Airborne Magnetics



Google Earth with Government Satellite Map

CCR 12-13 XRF Soils

Zn ppm

- 1,500 to 44,078 (172)
- 600 to 1,500 (317)
- 300 to 600 (428)
- 175 to 300 (414)
- 1 to 175 (914)

Og 2004 - 2011 Soils

Zn ppm

- 1,500 to 11,100 (394)
- 600 to 1,500 (558)
- 300 to 600 (597)
- 175 to 300 (605)
- 5 to 175 (1204)

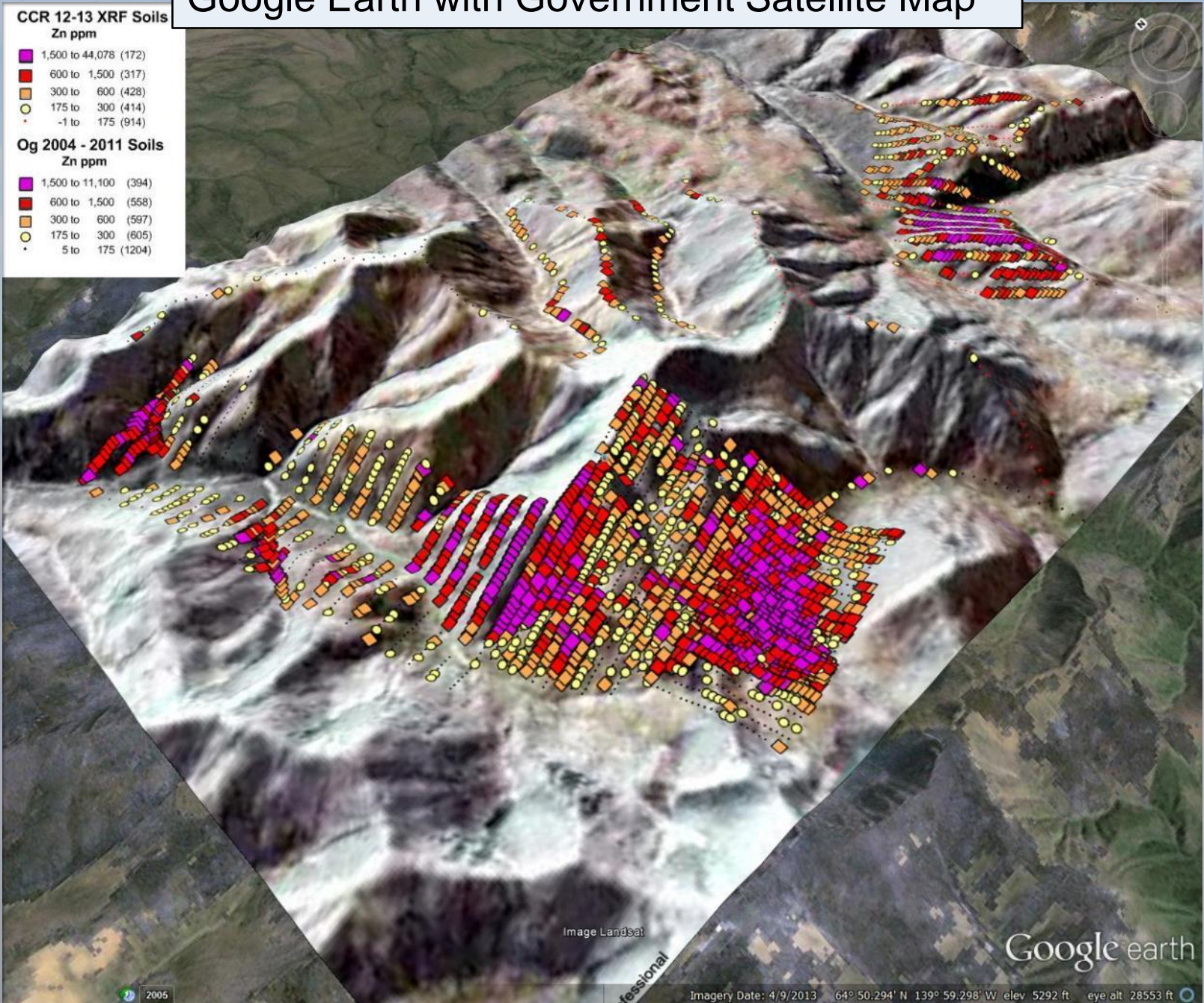


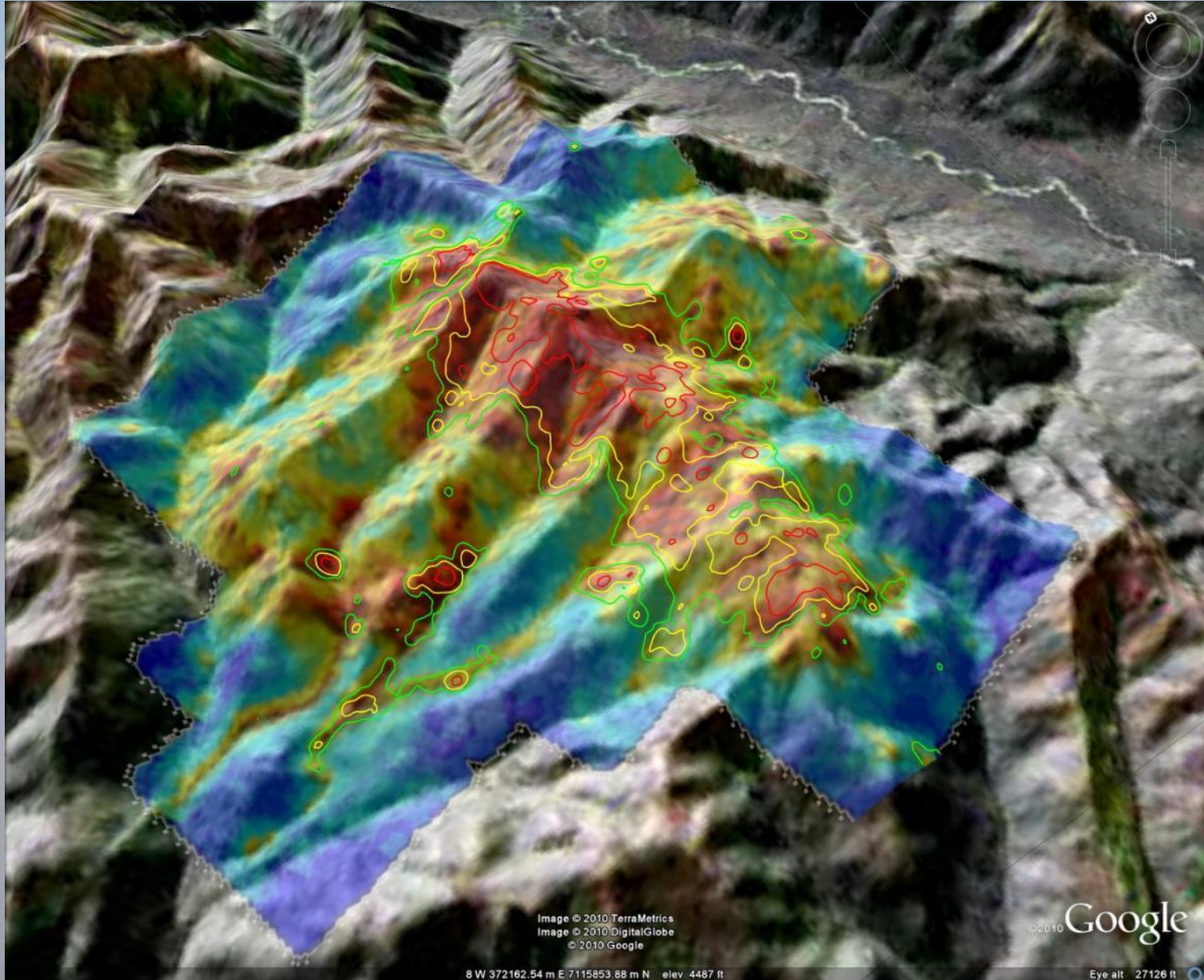
Image Landsat

Google earth

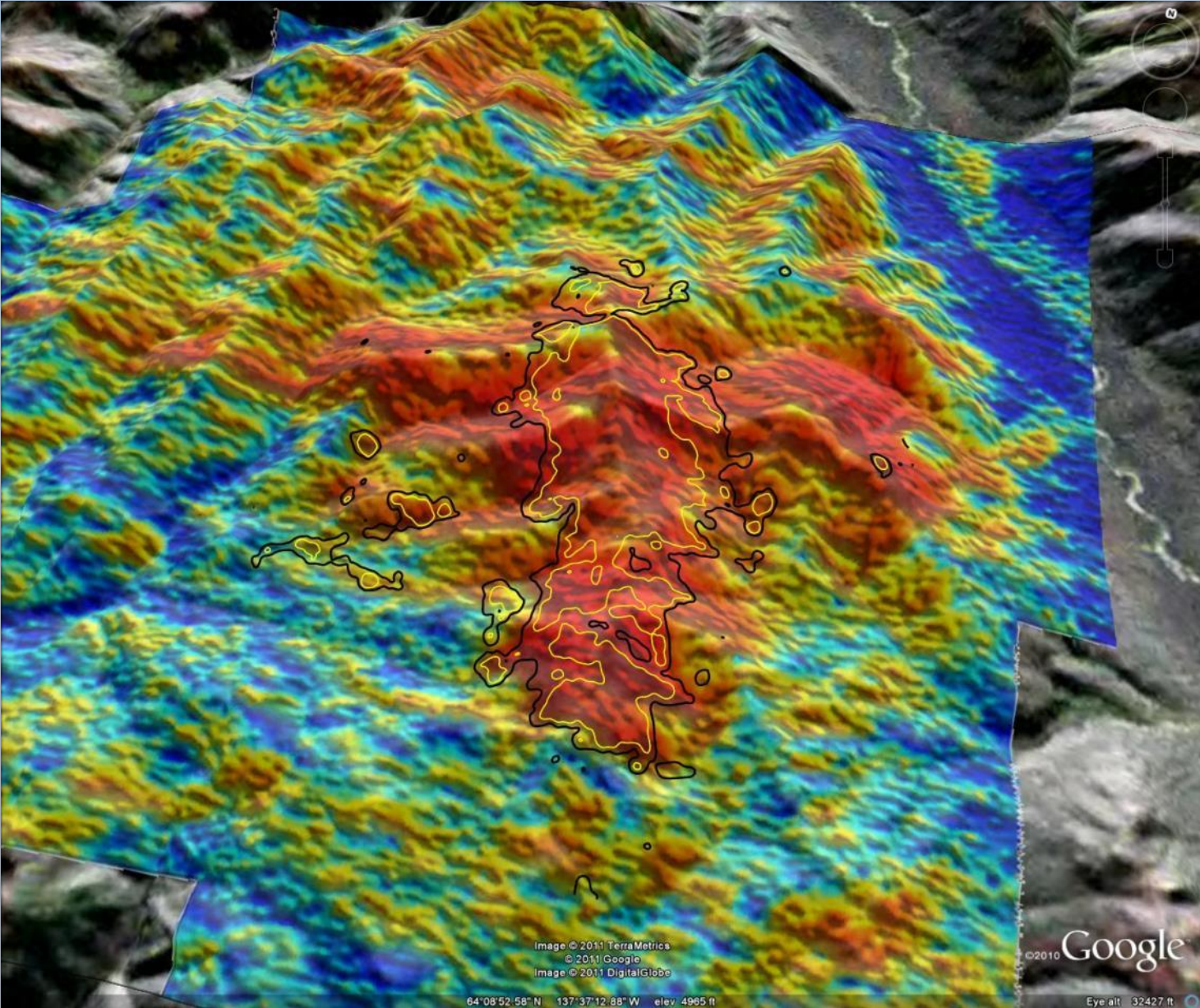
Imagery Date: 4/9/2013 64° 50.294' N 139° 59.298' W elev 5292 ft eye alt 28553 ft

2005

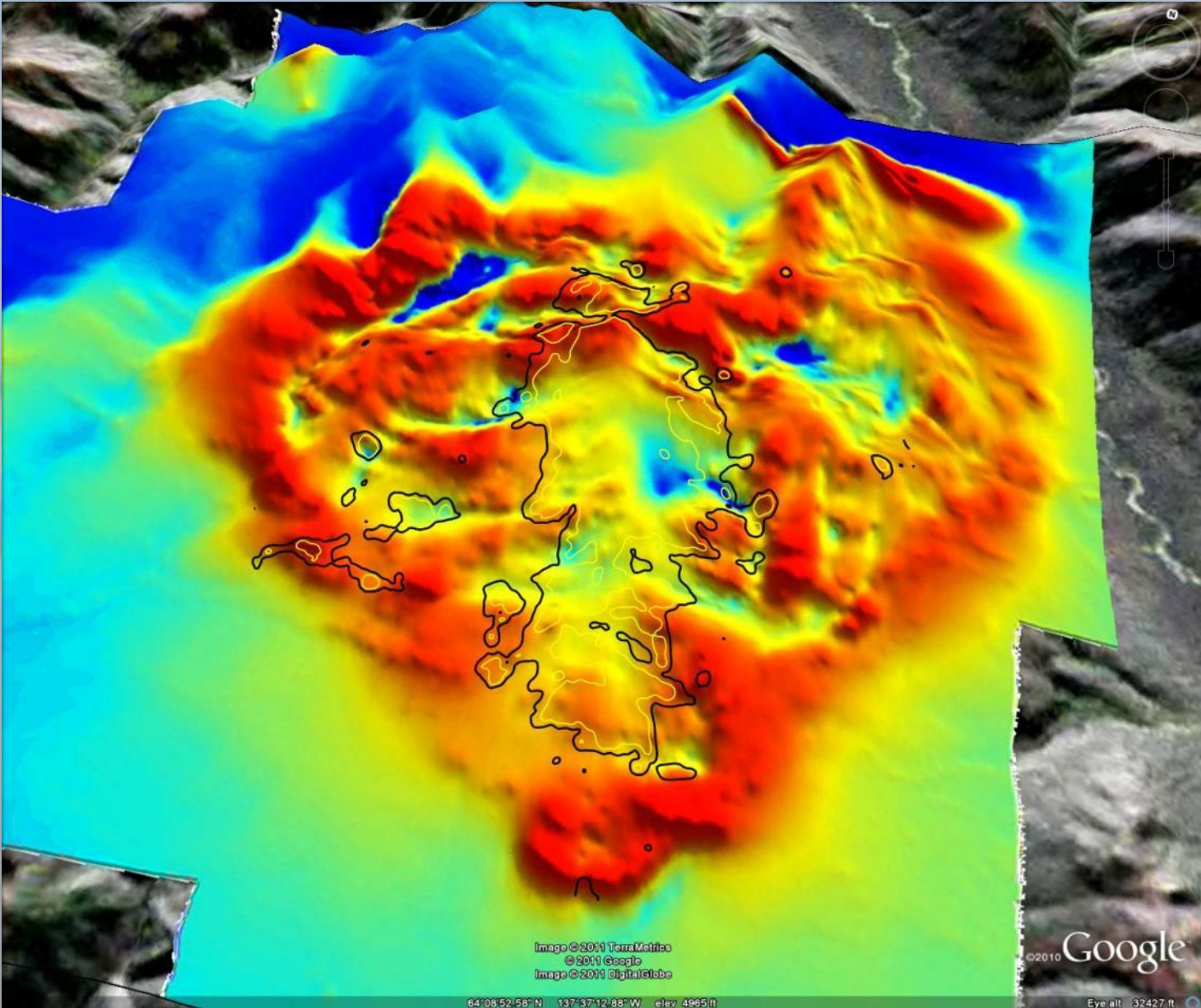
Gold over Arsenic Background



Gold over Potassium Background



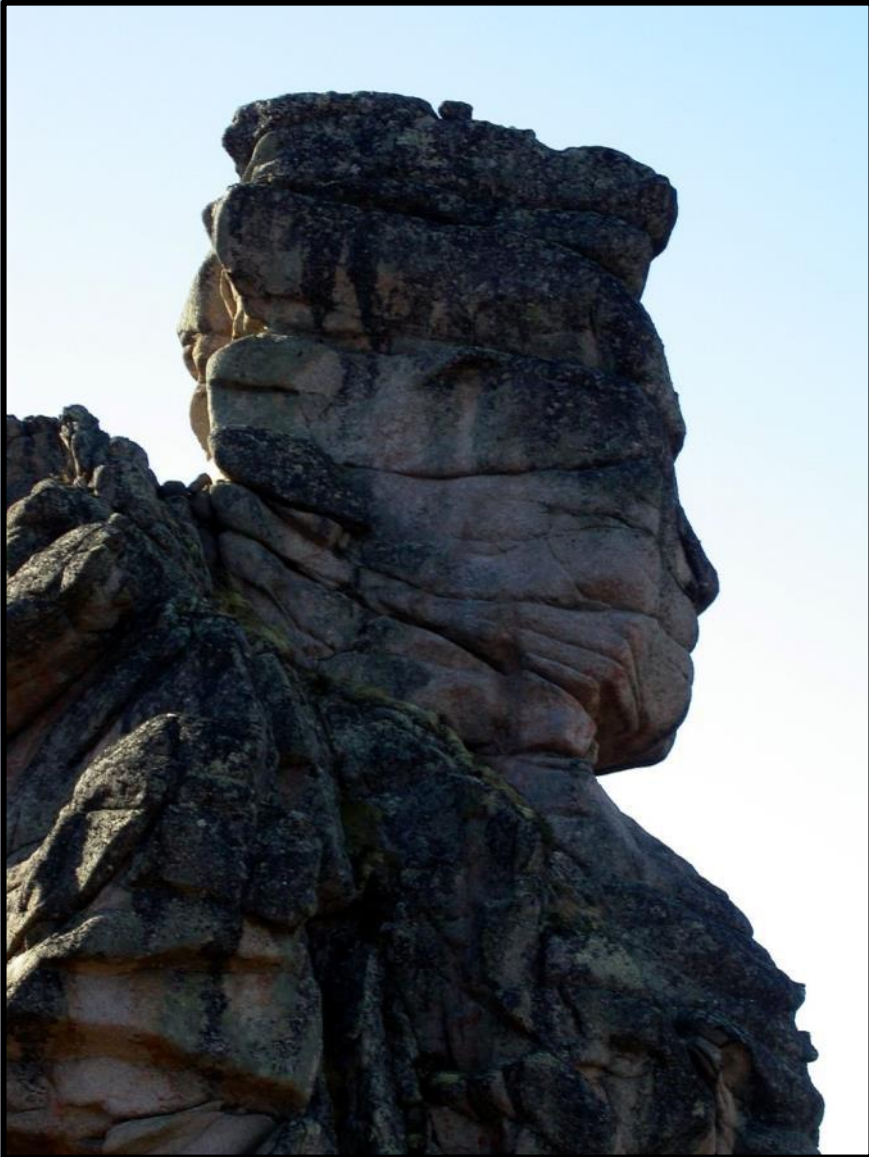
Gold over Magnetic Background

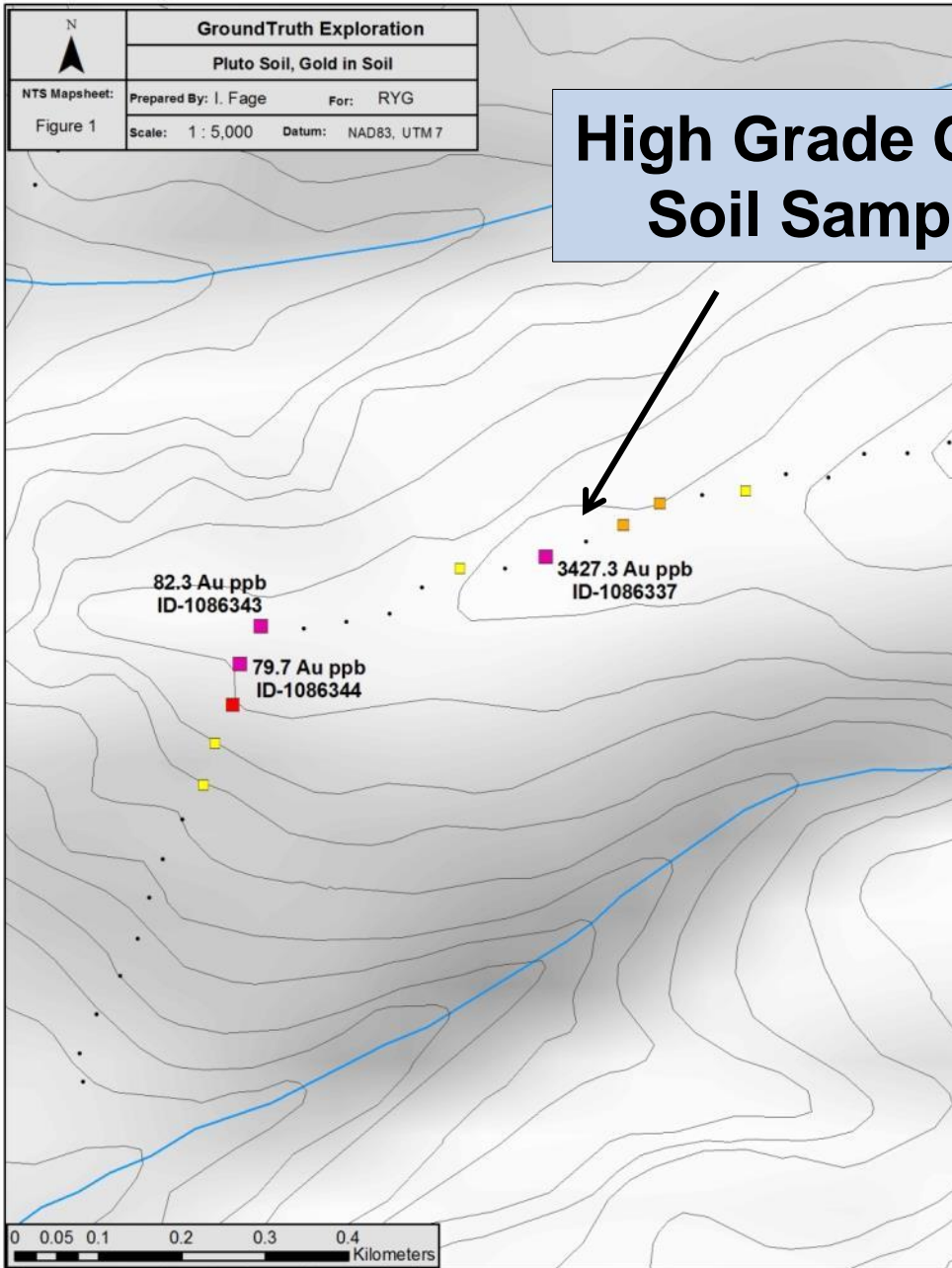


Tips

Using Digital Photos to Help
Present Your Data

A Photo can be Worth
An Option Deal?

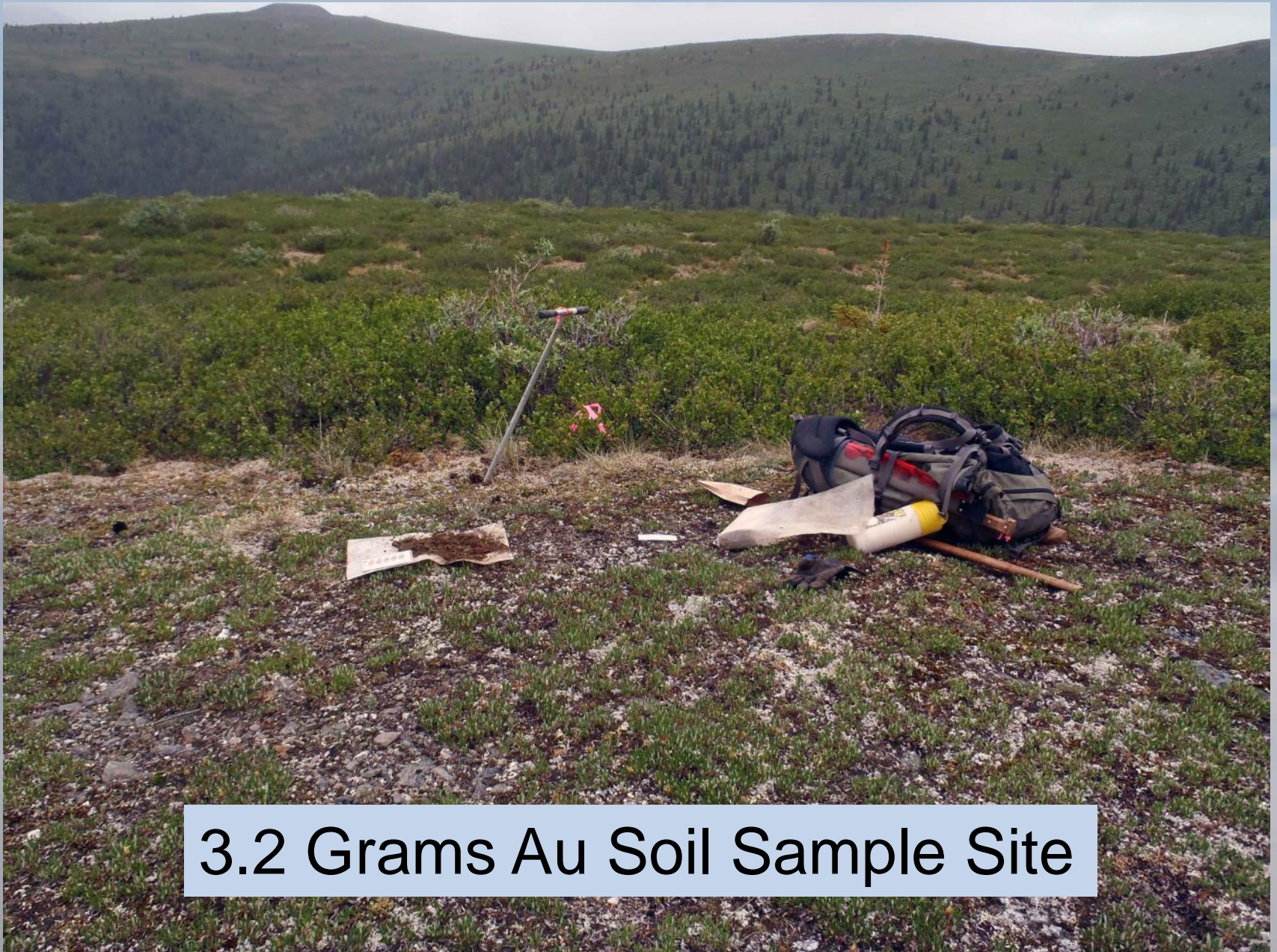




**High Grade Gold
Soil Sample**



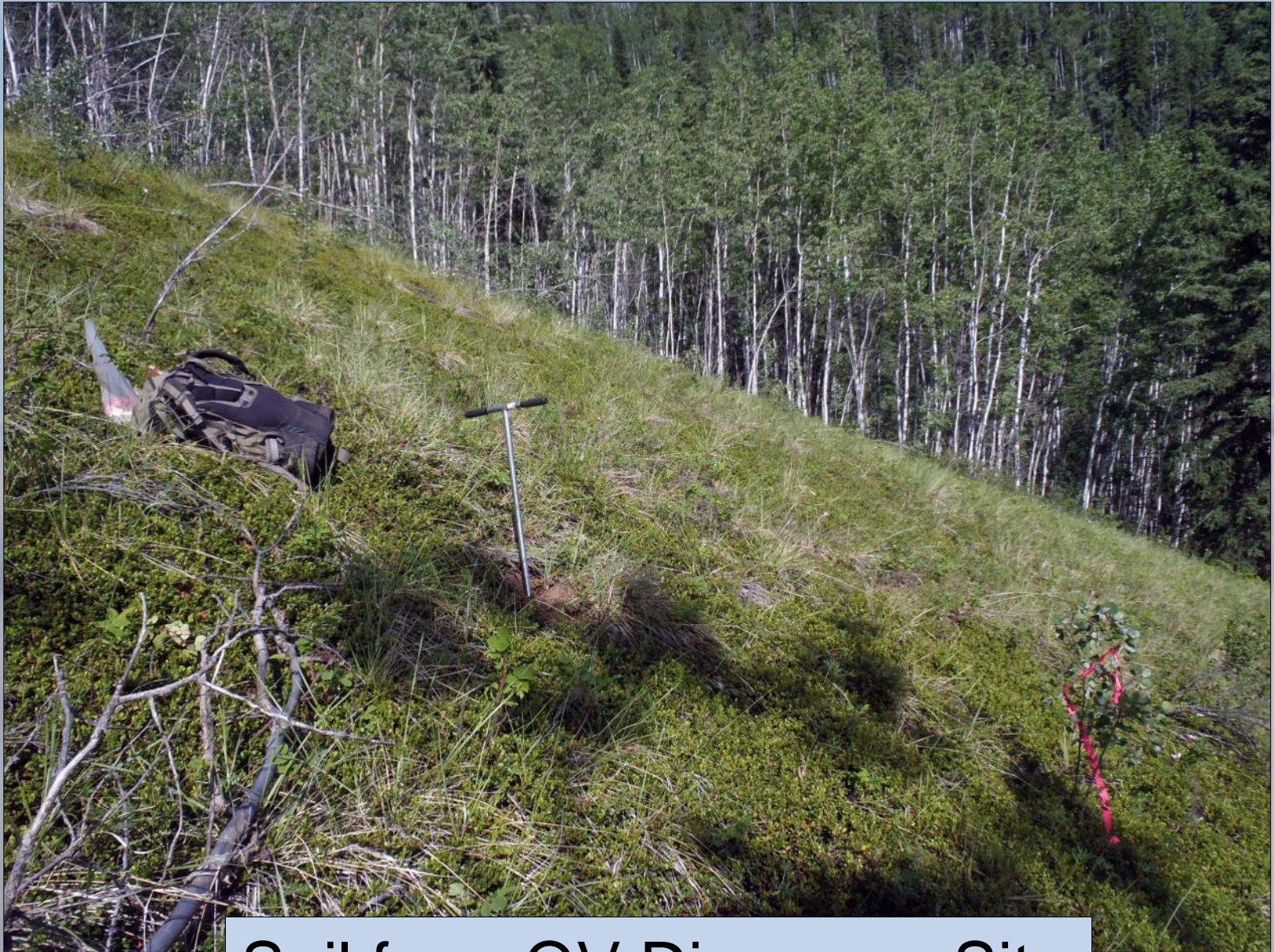
Soil produce assays of 3.2 Grams Gold



3.2 Grams Au Soil Sample Site



Photo taken 15 meters from High grade Soil



Soil from QV Discovery Site

PDM Cu – Au Porphyry



Raven Zinc MVT





Sending Your Photo's to Google Earth With Geosetter

oogle earth

2005

Imagery Date: 4/9/2013 63° 19.336' N 133° 16.400' W elev 2423 ft eye alt 21842 ft