Mary Ann Canyon

Drilling & Exploration

of

Placer Gold Deposits

prepared by

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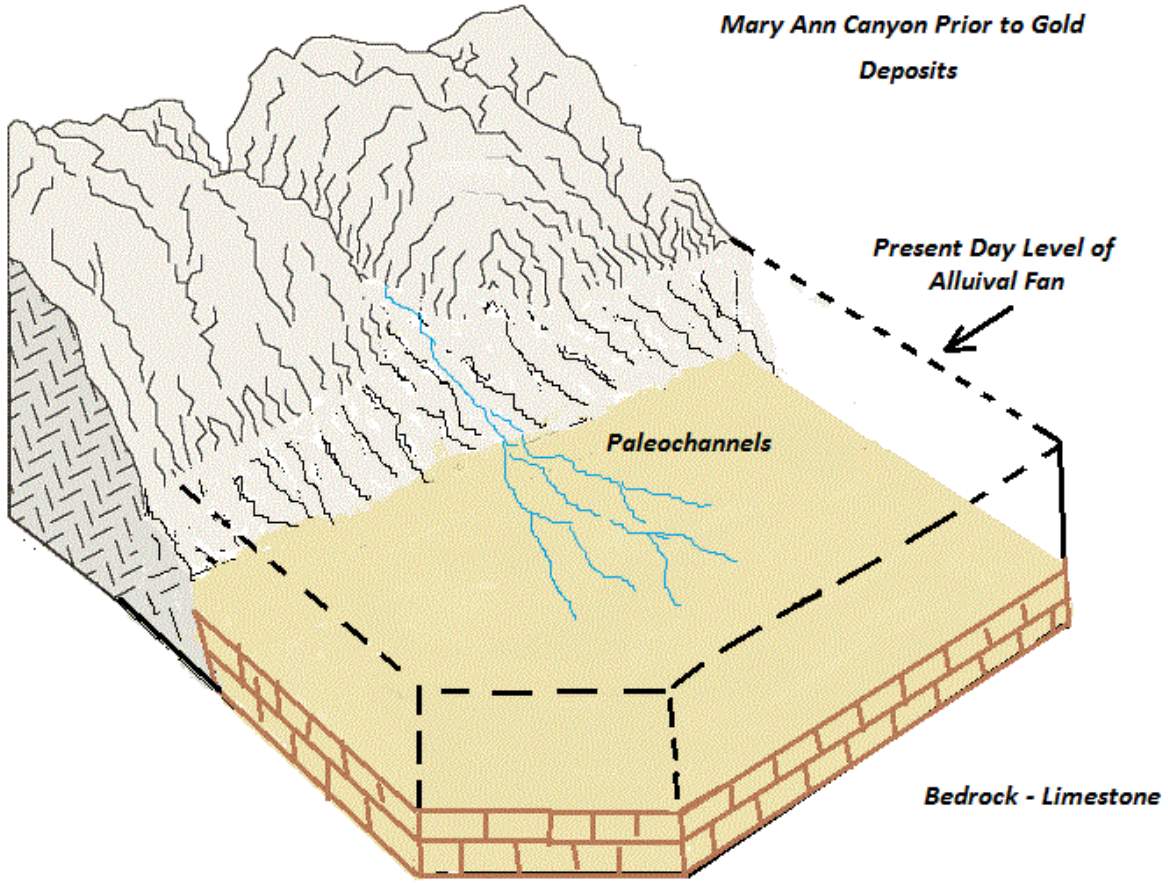
INTRODUCTION

Evolution – development of the Mary Ann Canyon alluvial fan had its beginning over six hundred million years ago, with the intrusion of pre-Cambrian metamorphic and igneous rocks forming the present day Snake Range in eastern Nevada (Skookum Geologic Consulting Jan 2010).

The Mary Ann Canyon alluvial fan development followed a predictable building pattern with several stages. The first stage began with the placement of 'Paleozoic sediments' beginning with Cambrian quartzite sediments, followed by limestone and shales – the bedrock on which the alluvial currently rests. Refer to Diagram 1 (Stiefel Sep 2014).



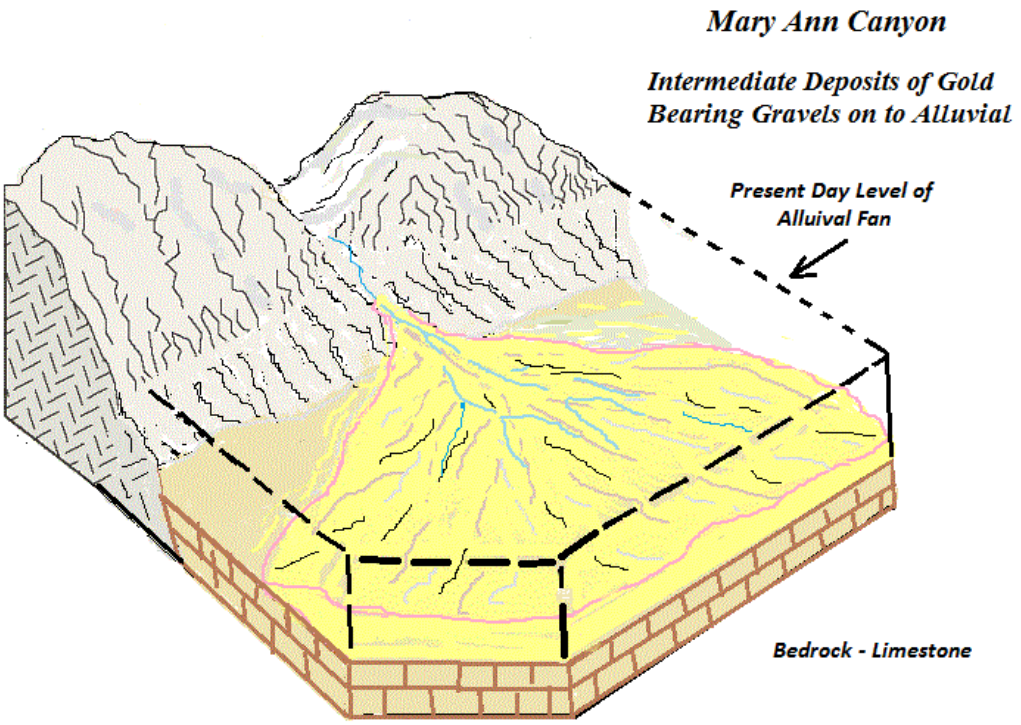
The initial development is characterized by steep mountain slopes promoting the downward movement of pediments containing gold. This pediment movement included frost wedging and gravity - downward creep to the lower elevations where outwash discharges formed paleochannels depositing placer gold in cracks and fractures as well as on top of the bedrock. Wind erosion - movement of fine gold particles has also been determined as a factor in some alluvial placer settings. Heavy rains and heavy snow melt historically produce flooding which move large quantities of pediments (gold bearing material and gravel) onto the alluvial fan.

Fluid calculations (minelinks.com – Alluvial Exploration and Mining) show that a stream moving 1 m/sec will carry a stone or gold nugget weighing approximately 3 ounces; at 2 m/sec movement will occur

for a stone or nugget weighing 45 pounds; at 5 m/sec movement of a 1 ½ ton pediment occurs. Imagine the amount gold bearing pediments carried by a 100 year flood or thousand year flood, moving down the Mary Ann Canyon at 100 m/sec. In the Skookum report, boulders as large as three feet in diameter were identified as being present in the alluvial fan.

There are two types of solid load pediments identified as fill in most alluvial fans. The first is hydrostatic suspension – where gold particles and flakes are carried in the water flow and deposited as the flow in the paleochannels is obstructed or flow velocities reduced. Physics plays an important role in understanding gold and mineral settling rates in the alluvium. Two flakes or nuggets with the same weight but different physical dimensions – the flake or nugget with the smaller surface area tension will drop out first. The second load pediment as described above, is rolled or bounced along in the water flow channel until such time – the flow is reduced to a level where the pediment(s) is deposited. Movement of any size load pediment is subject to some abrasion and/or possible destruction – thus freeing gold to continue in alluvial placement as described. Gold from load locations could also be dissolved in whole or partly reprecipitated on nuclei in the residuum or on similar nuclei as they move along the alluvium in paleochannels. This last process in largely responsible for the formation of nuggets found in alluvial fans (minelinks.com – Alluvial Exploration and Mining).

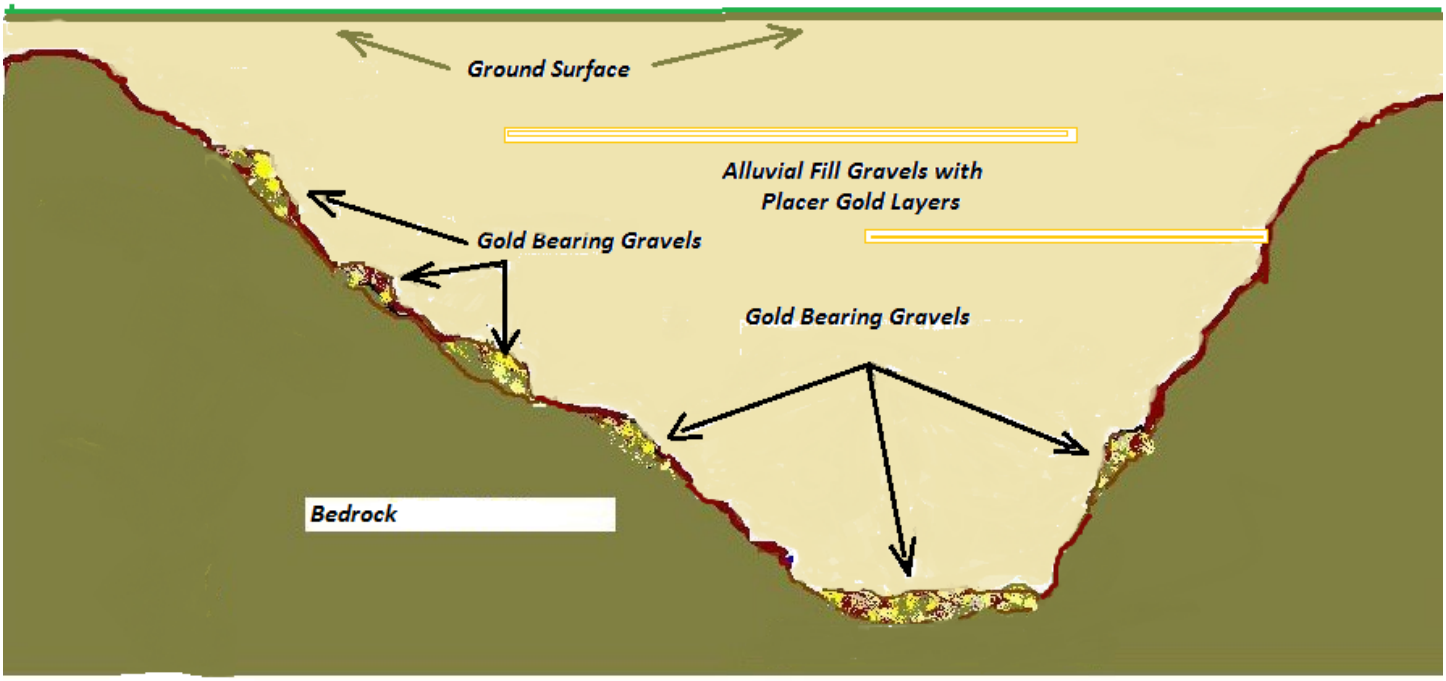
Intermediate stage in the alluvial fan development (Refer to Diagram 2 Stiefel, Sep 2014) is characteristic of significant pediment deposits of material and gold bearing gravels. The original paleochannels, in and on the bedrock have filled with pediments - material and gold bearing as described. Snake Range erosion continued with various types of mechanisms depositing alluvial fill as depicted.



Minerals and gold concentrates in the alluvial fan are of two types: (1) Those with low to medium specific gravity (the light minerals); (2) Those with medium to high specific gravity (the heavy minerals

and gold). These minerals show a physical resistance to mechanical abrasion; chemical resistance to being taken into solution by water; and a tendency to be about the same size dimensionally.

A well-documented belief among miners and established by physics, is that gold will continue to migrate downward in the alluvial fan to the lowest layer of impermeable material / sediment i.e. bedrock or false bedrock. Historically, 'old miners', working the Mary Ann Canyon alluvial fan, hit false bedrock - usually a rhyolite, caliche, or other impermeable material. These false bedrock impermeable layers did hold limited concentrations of gold bearing material. Believing the false bedrock was the bottom, prospectors and miners moved to other mining locations, leaving an undetermined quantity of gold concentration in the lower reaches of the alluvial fan and ancient paleochannels. A paleochannel cross section diagram (Refer to diagram 3, Stiefel Sep 2014) depicts actual bedrock, on which gold and gold bearing concentrations were deposited. Many types of bedrock are pitted, fractured and broken, allowing the gold to heavily concentrate in the bedrock fractures below the surface of the bedrock. Reports indicate limestone is very susceptible to fracturing especially during seismic events and uplifts. Diagram 3, is also a visual representation of false bedrock holding gold layers, which appear suspended in the paleochannel over the heavier gold concentrations on the actual bedrock.

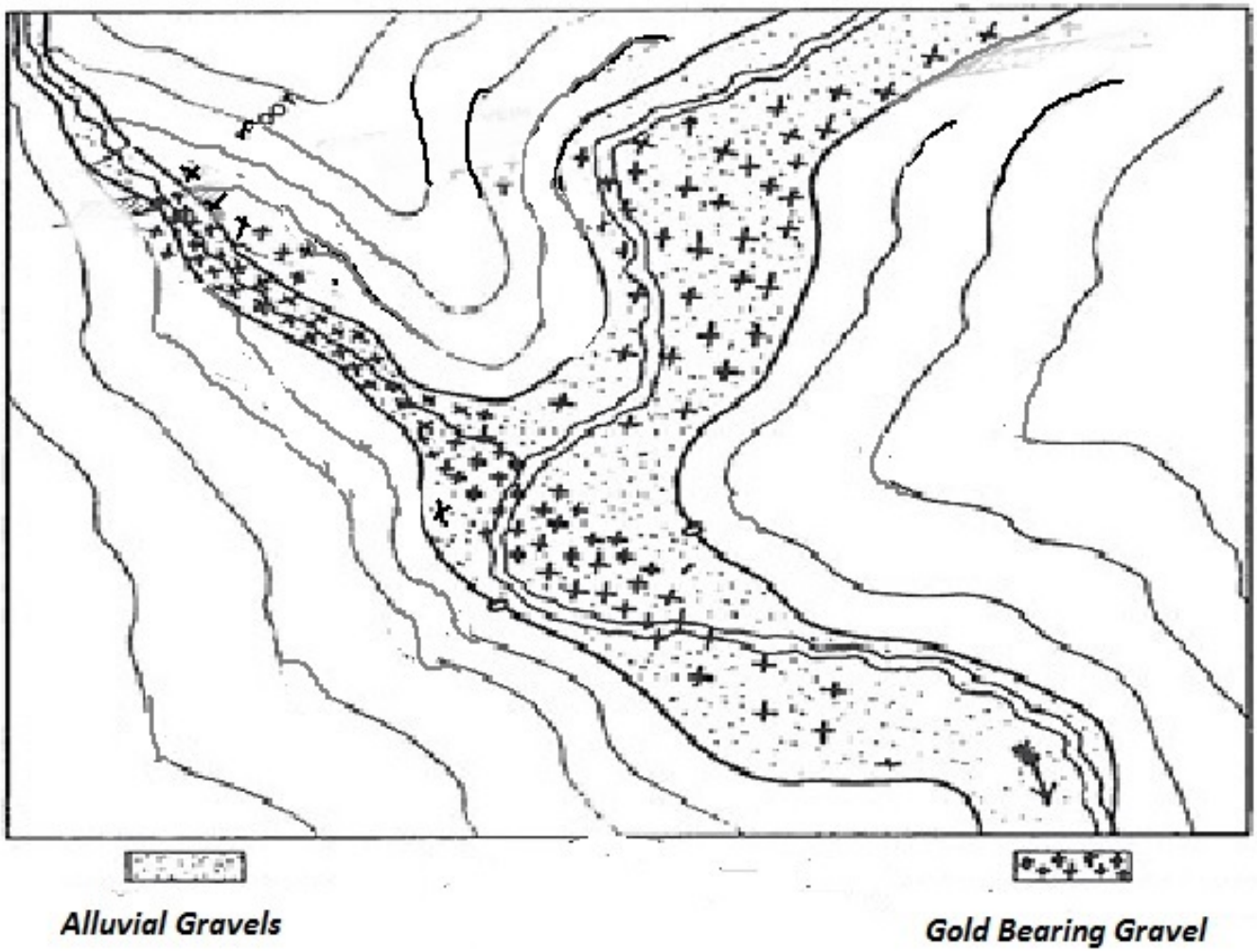


Placer Deposit Locations in Paleochannel Cross Section

A common misperception is that gold will be uniformly deposited in paleochannels and the entire alluvial fill. Physics, as well as weather conditions, water volumes and velocity, distance traveled from the load location(s), type of solid load pediment, specific gravity of material, and hydrostatic suspension play a significant part in gold placement in the ancient paleochannels and alluvial fill. What is valid is that (1) coarser gold is generally deposited first, closest to load location – (same principle used in a mining sluice). (2) The richer and coarsest gold and nuggets are commonly deposited in the layers with other comparative sized coarse material. Finer gold is commonly deposited in sandy sized material farther down the alluvium. (3) As stated above gold will be located with other high specific gravity minerals.

(minelinks.com – Alluvial Exploration and Mining). It is expected that medium and fine grain sized gold will be the primary types of gold recovered during most placer operations.

A visual representation (Diagram 4 Stiefel Sep 2014), attempts to consolidate preceding information of sporadic rather than uniform gold deposits in ancient paleochannel(s). The specific paleochannel locations and gold bearing quantities will be discussed later in this report – and detailed after completion of the drilling and exploration project.

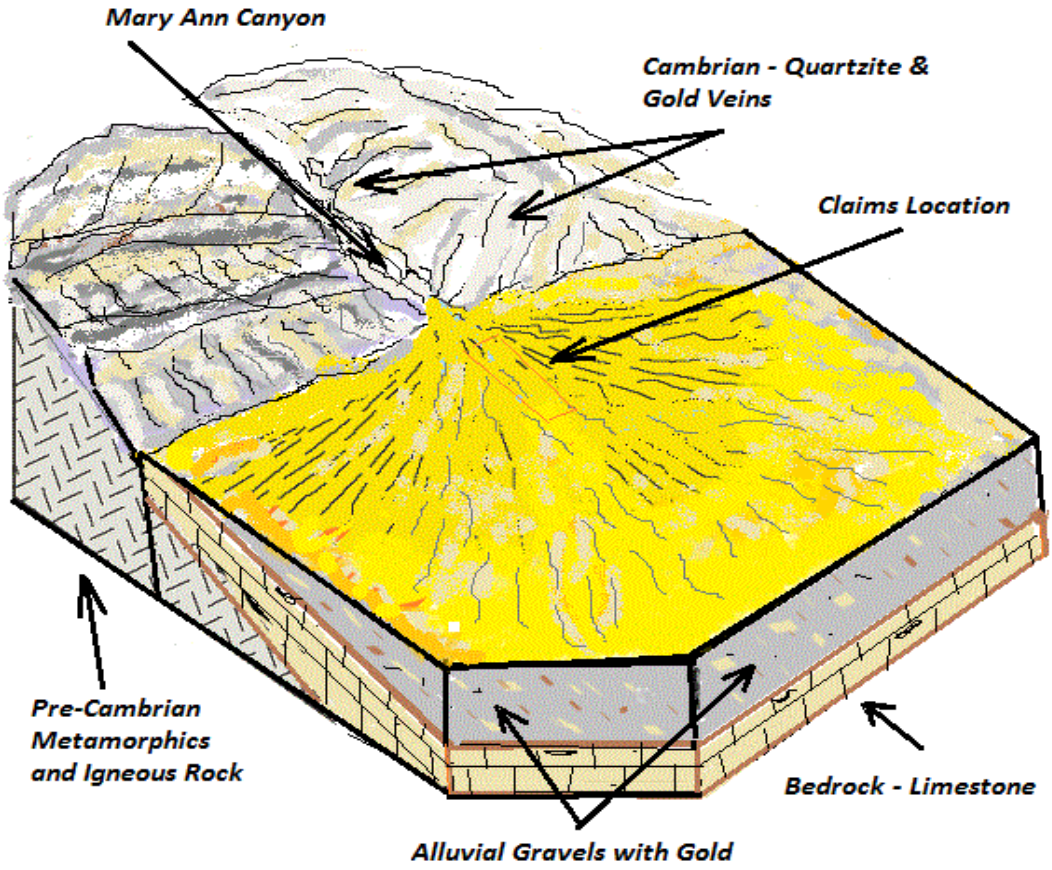


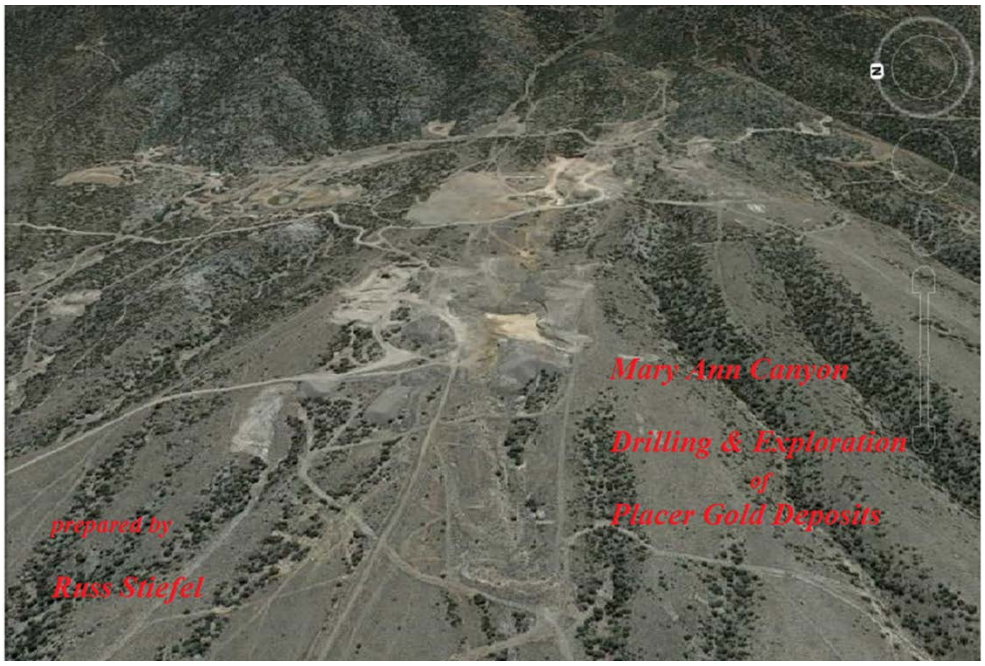
This drawing illustrates the suspected placement of gold bearing gravels in the paleochannels located on bedrock in the Mary Ann Canyon alluvial fan

The present / 'old stage' of the Mary Ann Canyon alluvial fan (Diagram 5, Stiefel Sep 2014) has developed through tens and hundreds of millions of years of alluvial deposits. The current surface structure dips to the west at approximately fifteen degrees. The limestone bedrock dips westerly – estimated at between twenty and twenty five degrees. This estimate resulted from data extrapolated from the Wright Geophysics Report, Sep 2012, on basin fill projections. The report also identified fault strikes and ancient paleochannels on bedrock which will be expanded upon later in this report.

In preparation of this report and formulation of drilling plan and sampling, information, diagrams, and projections, from the Skookum Geologic Report and the Wright Geophysics Report, were key and

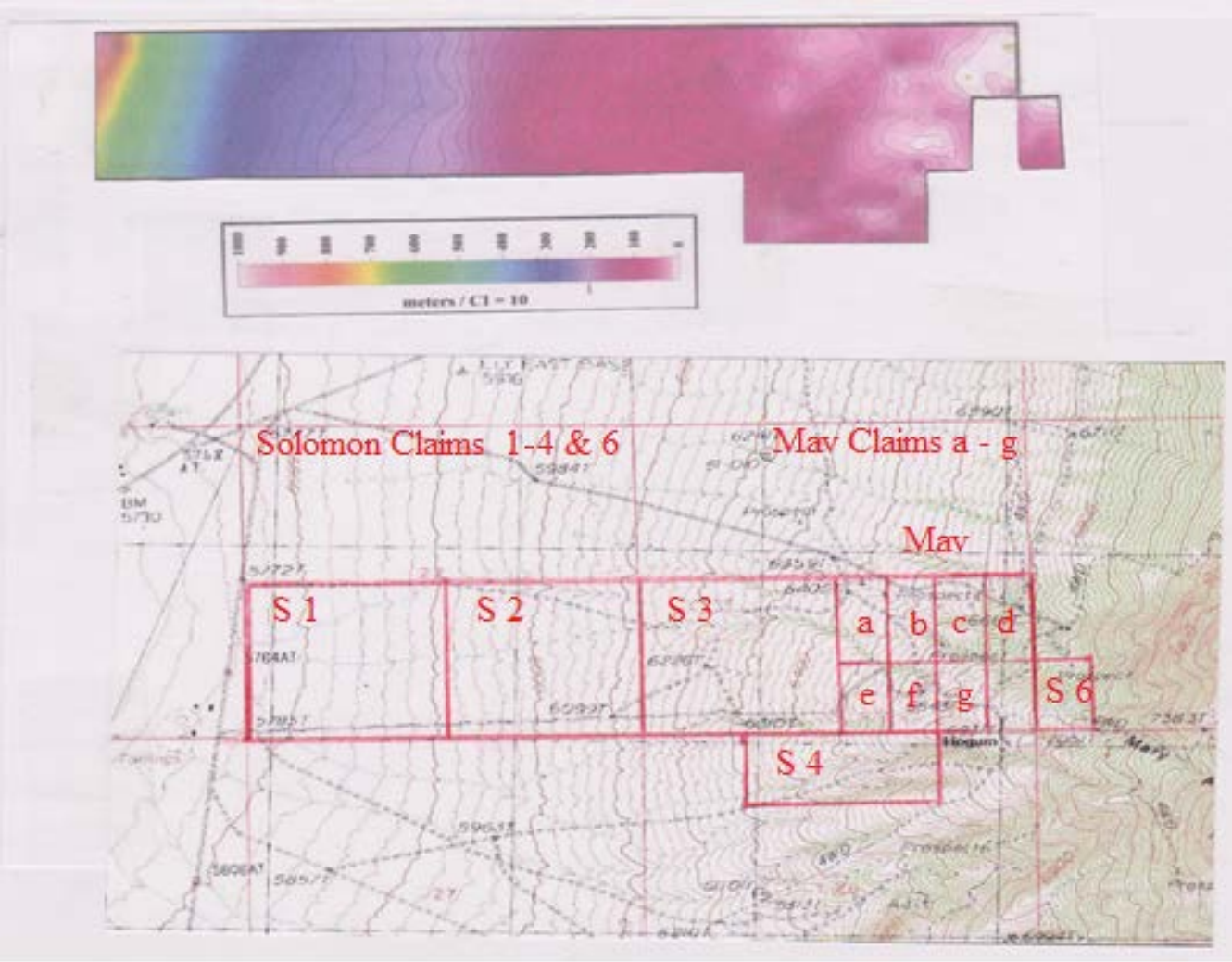
used as a basis for scaled diagrams depicting the locations and paths of paleochannels and faults under the various active claims. Drilling and sampling will determine the location of gold streaks and deposit for determination of mining profitability during the extraction process. Not all gold located during the drilling and sampling process may be economically recoverable, especially at depth.





Google World Photo looking east along the mining claims towards the mouth of the Mary Ann Canyon

The following representation (Diagram 6, Stiefel Sep 2014 – North is at the top) depicts the locations of mining claims identified as MAV 5 a through g (upper right smaller rectangles) and Solomon Claims 1, 2, 3, 4, and 6 (closest to mouth of Mary Ann Canyon). The colored chart at the top of the diagram represents the alluvial fill depth to bedrock, under the claims as determined during the Wright Geophysics Gravity Survey. This will be the working diagram, modified, scaled, and used as the basis for all explanation diagrams and drilling projection diagrams developed for this report. The drilling and exploration efforts will concentrate on Claims MAV a-g and Solomon 3, 4 and 6. The depth to bedrock for claims Solomon 1 and 2 may tend to reduce economic viability of gold recovery at this time.



The Wright Geophysics report identified ancient paleochannels and fault tracings under the described claims. The tracings were extrapolated, scaled, and depicted as Diagram 7 (Stiefel Sep 2014). Manipulation and overlays produced the following. The black dotted lines indicate fault tracing which may have disrupted the flow path of the ancient paleochannels. The faulting tended to raise blocks on the right side of the fault tracings and lowered blocks on the left side. The actual displacements were undetermined. As previously discussed, the faulting opened up crack and fractures in the bedrock and

possibly false bedrock which would allow gold deposits to migrate farther down in the alluvium in heavier concentrations.

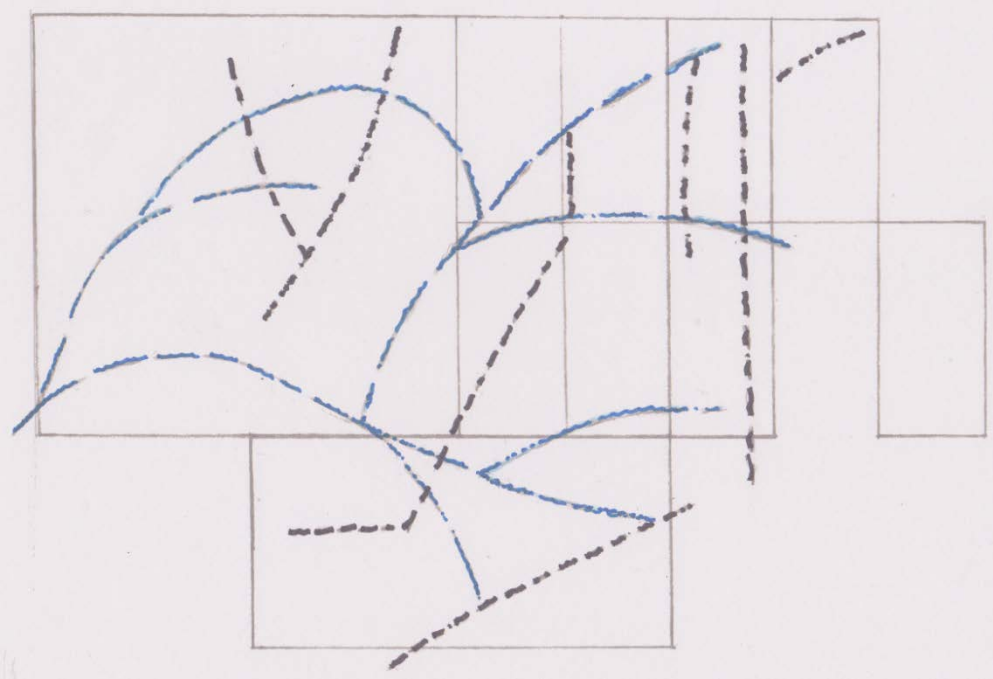


Diagram 7, depicting the paleochannel tracings in blue and the fault tracing in broke black lines.

Diagram 8, depicted an expanded illustration (Stiefel Sep 2014) of the alluvial basin structure in diagram 6. The superimposed paleochannels and fault tracings of diagram 7 onto diagram 8, developed diagram 9 below.

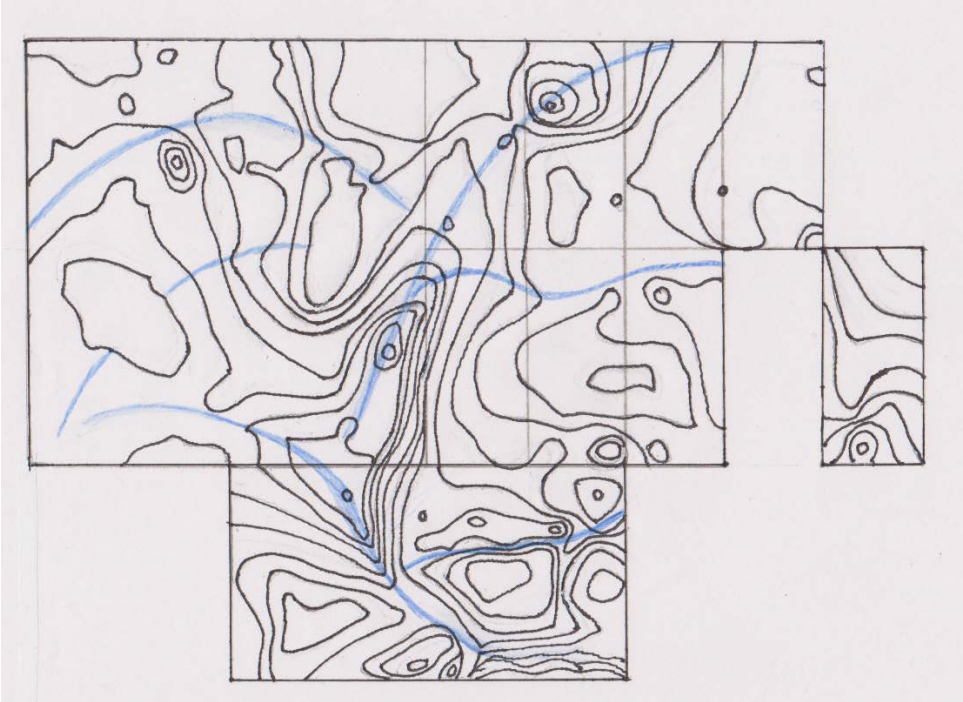


Diagram 9 (Stiefel Sep 2014), illustrates the projected paleochannels and the alluvial topography under the MAV and Solomon Claims as documented in the Wright Geophysics Report. The actual locations, channel and deposit width should be determined during the drilling and exploration phase. Diagram 10 below, is another Geophysical plot example which complements the above paleochannels tracings.

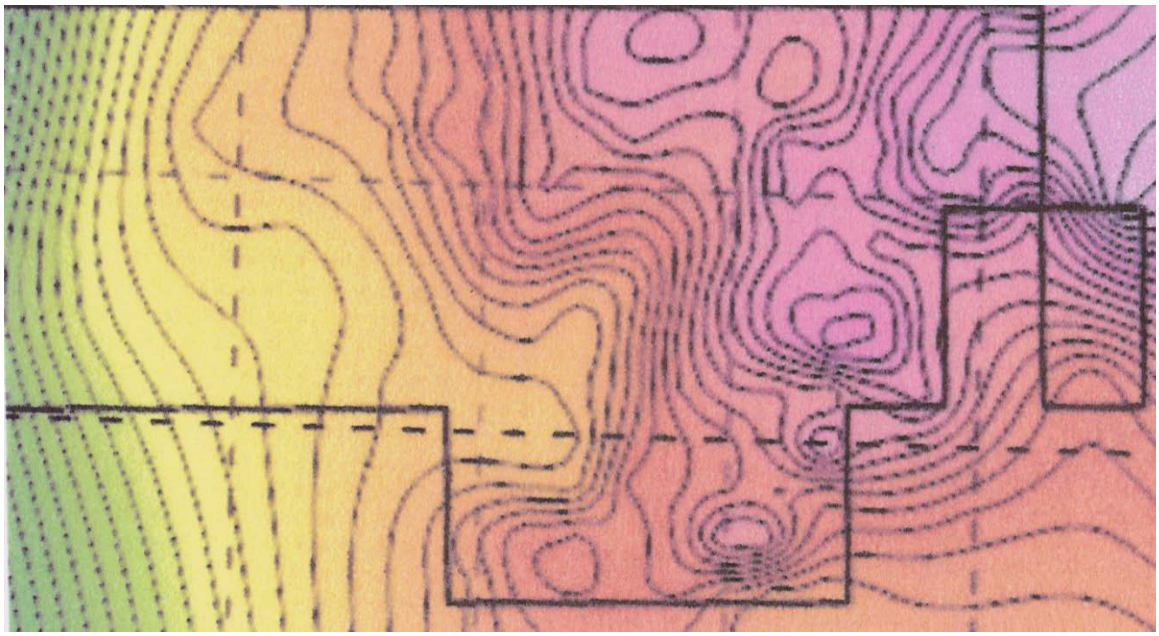


Diagram 10 - CBA Gravity over NAIP Air Photo with geophysical over layer documented in the Wright Geophysics Gravity Survey, Sep 2012.

Phase One Drilling Conclusion

A comprehensive review was conducted of the Skookum Geologic Consulting Report Jan 2010 and the Wright Geophysics, Mary Ann Canyon Property Gravity Survey GIS Database Report, Sep 2012. This phase one drilling and exploration report documents the stages of the Mary Ann Canyon alluvial fan placer development. The report outlines the development of gold transporting paleochannels and the physical movement of gold bearing pediments from the load source above the Mary Ann Canyon into the paleochannels and alluvium. Extrapolation of data supports drilling locations in several MAV claims as well as Solomon claims S3, S4, and S6, as depicted in Diagram 11 (Stiefel Sep 2014) below. The number of holes drilled and total drilling depth is pending economic review and approval.