

**The Grant Hartford Corporation**  
**Garnet Project**  
**Geology and Exploration Report for 2009**

**Executive Summary**

The Garnet Project is located fifty miles east of Missoula in Granite County, Montana. The project area sits in the historic gold mining district of Garnet. This mining district produced approximately 150,000 ounces of gold from underground hard rock mining and an additional 500,000 ounces from the many placer operations from the late 1800's through the start of WWII. The gold contained in the hard rock deposits is primarily found in shallow to moderately dipping quartz veins, stock work systems, and shear zones, hosted by Cretaceous granodiorite, Paleozoic sediments, and upper Proterozoic quartzites.

During the 2<sup>nd</sup> half of 2008, the Grant Hartford Corporation ("GHC") began a definition drilling program consisting of 54 reverse circulation drill holes (13,203 feet) examining three ore systems. Drill targets were based on results of exploration conducted by Pegasus Gold between Dec., 1989 and Dec., 1992. Pegasus completed 147 reverse circulation holes (47,646 feet) and six core holes (1,710 feet) and took 4,110 samples including soil, trench, channel, rock chip, dump, underground, and stream sediment samples. Other exploration activities completed by Pegasus include geochemical soil analysis, induced polarization, VLF and air magnetometer surveys, surface and underground mapping and sampling, historic dump surveys, and trench and grab sampling. All data from the Pegasus drill program was conveyed to GHC through an agreement with Pegasus Gold Corporation and is being used for exploration and resource modeling. In addition numerous historical documents, maps, and various other geologic reports are being used for future exploration and mine planning.

The 2009 exploration drill program targeted completion of 150 reverse circulation drill holes to further define underground and pit gold resources on the Nancy Hanks/Dewey deposits. 111 reverse circulation drill holes totaling 37,763 feet were completed during this period. Of these, 62 holes totaling 21,840 feet were drilled in the greater Nancy Hanks Pit area. Total drill footage for 2009 is nearly 3 times the footage drilled by GHC in 2008. In addition to the Nancy Hanks Pit area, the program included exploration of the Willie Vein System and began definition of the Tostman and Tiger deposits in the greater project area. This drilling in addition to GHC's 2008 drill results and previous drill programs are being used to create both pit and underground gold resource models using Vulcan 3-D modeling software.

One of the most significant exploration activities completed in 2009 includes acquisition of Maptek's Vulcan 3-D geologic modeling software and input of all previous drill results and data. Other activities include implementation of a geophysics program conducted on the Willie vein system, creation of a "geologic team" to expand our knowledge of the Garnet District, updating of surface geologic maps, metallurgical test work for mill planning, various placer exploration activities, Lidar mapping and creation of high resolution topographic maps and aerial photos, and continued compilation of historic maps and data for future exploration and mine planning.

## **Introduction**

This report details drill plans, results, and conclusions of exploration activities conducted at the Garnet Project by the Grant Hartford Corporation during the 2009 season. Drilling commenced in mid-May and ended for the season in mid- December. Drilling was halted primarily to service drill equipment, evaluate 2009 exploration results, input and evaluate data for mine planning, create reserve models, and begin planning our exploration goals for 2010. All drilling was completed by O'Keefe Drilling of Butte, MT, using reverse circulation rigs.

## **Geologic Setting**

The Garnet Project is located in the Garnet Range in West Central Montana. This property can be found in the historic Garnet Mining District. There have been numerous geologic evaluations over the years of the Garnet Range (c.f. Pardee, 1917, Kaufman, 1957, Sears, 1990, Reichl and Reynolds, 1988 to 1990).

There are three main geologic units in the project area. The Pre-Cambrian Garnet Range Quartzite, a Paleozoic sequence of sedimentary deposits, and the Cretaceous age Garnet Range Granodiorite. The Paleozoic sedimentary rocks sequence includes limestones, dolomitic limestones, and various shales. Most of the economically enriched zones occur within a few hundred feet of the contact between the Garnet Range granodiorite and the Paleozoic sedimentary sections. There are local marble units probably formed from limestones contacting the intrusive Garnet Range Stock (granodiorite). The Garnet Range Stock ranges from an un-altered, medium grained, salt and pepper granodiorite to highly chloritic and/or propylitically altered, iron stained sections.

Structurally, the district has a general east-west fabric which parallels the contact between the granodiorite and the sedimentary rocks. There are several large fault systems none of which indicate movement of over a few hundred feet. Most of the faults strike E-W in the Nancy Hanks system and range from 20-40 degrees dipping north. More complex faulting is found in the south east portion of the project area and structures strike NE/SW with perpendicular faults. Fractured zones and/or bedding planes along the contact area, allowed hot fluids (probably associated with the stock placement) to permeate the granodiorite and fill fractures in the sedimentary sections and leave economically valuable minerals. Many of the fractures are quartz filled and contain various low levels of sulfides (primarily pyrite). The higher grade veins generally contain large amounts of leached sulfides and give rise to a "red ore" such as the one found in the Nancy Hanks Mine which averaged around 8 OPT Au. Gold is the most common economic mineral in the district including telluride minerals, with minor amounts of silver and copper.

## 2009 Exploration Goals and Results

Grant Hartford's 2009 exploration program was designed to expand on the 2008 GHC drill results and results of Pegasus Gold's exploration project (1989-1992). The Pegasus Garnet Project Summary (Stimson, 1992), identified 16 different "mineralized areas" of high grade gold ore. Numerous historical reports, production records, and maps were also used to determine the most promising targets.

Due to the encouraging results obtained in the first three zones drilled in 2008, no drilling was conducted on any of the other targets suggested by Pegasus. All three 2008 targets were found in the Nancy Hanks/Dewey vein systems. The 2009 exploration program continued to define the Nancy Hanks area and expand the exploration to 3 additional high grade targets containing mineralized material indicated by limited drilling conducted by Pegasus. These include the Willie Vein, the Tiger Vein, and the Tostman mineralized zone. Grant Hartford completed 111 holes totaling 37,763 feet in 2009. Plans called for confirmation of these high-grade intercepts, tightening drill spacing for more accurate reserve estimation, moving more mineralized material into a reserve category, and evaluating the high-grade intercepts for underground extraction.

The Nancy Hanks project area has had a significant amount of exploration conducted in the low grade, open pit mineralized zone. Using Vulcan 3-D modeling software, this data has been evaluated as an overall resource containing 611,244 ounces Au. This resource model indicates total contained ounces of gold and is in the indicated and inferred category. Modeling is currently being conducted to further define a mineable reserve and 2010 exploration activities will be designed to complete the final definition of the gold resource contained in this portion of the project. Two confirmation holes were drilled along side two sets of twin core/reverse circulation holes completed by Pegasus and results closely mirrored previous results.

High grade vein systems beneath the Nancy Hanks pit area are being modeled and current block model results indicate a resource in the indicated category containing 70,550 tons of ore grade material containing 13,000+ ounces gold in one of the major vein structures. These high-grade veins are open ended down dip and laterally and appear to be getting wider and higher grade at depth. Current drill results indicate this vein structure has a great potential to continue down dip and recent geological models imply this is in the direction of the gold source. This vein system appears to be a continuation of the structures mined historically during the Nancy Hanks and Dewey production period. The 2010 exploration program will further define this deposit.

### Nancy Hanks Pit Area Drill Hole Highlights

Drill Hole	From	To	Interval	Grade OPT Au
GHN41-09	290	320	30'	.409
-including	295	300	5'	1.775
GHN52-09	345	500	155'	.095
GHN56-09	330	360	30'	.246
GHD98-09	185	205	20'	.384
-including	190	195	5'	1.212
GHD99-09	115	120	5'	1.700
	160	170	10'	.331

The Willie Vein System had 30 reverse circulation drill holes completed totaling 9,333 feet in 2009. This drill program was based on 2 drill holes completed by Pegasus totaling 615 feet which intercepted a high grade quartz vein structure contained in the Garnet Range Quartzite. Plans to further delineate this structure were a top priority for 2009 and drill results confirmed the existence of a mineralized quartz vein within a bleached quartzite structure. Vein structures were intercepted in nearly every hole completed here. This vein is from 5-15 feet thick and appears to be relatively uniform and to continue down dip and laterally. Furthest down dip intercepts appear to be getting wider and higher grade. This vein system is open in 2 directions and GHC anticipates additional exploration will continue on the Willie this year to further define the gold resource. Using the Vulcan 3-D modeling software, these drill results have been used to create a mineable ore solid nearly 400 feet along strike containing 72,000 tons @ .226 OPT gold. Drill spacing is adequate to place this in a measured category.

#### Willie Vein Drill Hole Highlights

Drill Hole	From	To	Intercept	Grade OPT Au
GHW6-09	145	165	20'	.255
-including	145	150	5'	.695
GHW62-09	345	355	10'	.239
GHW64-09	305	358	53'	.366
-including	325	335	10'	1.273
GHW66-09	270	390	20'	.158
-including	285	290	5'	.342

The Tostman mineralized zone is located approximately 1800' west of the Nancy Hanks pit area. This deposit was drilled by Pegasus Gold who encountered both lower grade pit type material as well as higher grade underground veins. The geology here is very similar to the Nancy Hanks pit area and this mineralized zone is contained in altered Garnet Range granodiorite adjacent to the contact zone with the sedimentary sequences. This is typical of many of the historic mines located in the Garnet Mining District. Grant Hartford included the Tostman in the 2009 exploration plan to further define this deposit, confirm the data reported by Pegasus, and begin modeling to create initial reserve estimates. During 2009, GHC drilled 10 holes on the Tostman deposit totaling 3,800 feet and was able to confirm much of the data presented by Pegasus. Several high grade veins were encountered as well as intervals of lower grade mineralization. An overall resource has been modeled with current drill information and indicates 99,700 contained ounces of gold in an indicated and inferred category. Additional drilling will be conducted here in 2010 to further define this deposit as it is open in 3 directions.

#### Tostman Deposit Drill Hole Highlights

Drill Hole	From	To	Intercept	Grade OPT Au
GHC57-09	320	325	5'	.262
GHC58-09	275	280	5'	.294
GHC59-09	120	125	5'	.290
GHC106-09	335	360	25'	.175
-including	335	340	5'	.582

The Tiger vein system is contained in an altered sedimentary sequence just south of the Nancy Hanks Pit area. This contact area is highly altered from the adjacent intrusive stock and contains marble and altered limestones with intrusive granodiorite sills deposited along bedding planes. This vein was mined historically and mineralized material is contained in an oxidized vein approximately 10 feet in thickness. Nine holes were completed on the Tiger claim in 2009 totaling 2,790 feet. Of these nine, only four targeted the vein structure. The remaining 5 holes were water/condemnation holes which were sampled, but no significant mineralization was observed. Further drilling to the east in 2010 will determine the extents of this vein structure.

**Tiger Vein Drill Hole Highlights**

Drill Hole	From	To	Intercept	Grade OPT Au
GHT96-09	120	130	10'	.268
-including	120	125	5'	.444

**Other 2009 Exploration Activities**

**Vulcan**

GrantHartford Corp. purchased the Vulcan 3-D geologic modeling software early in 2009. All historic and current drill data has been input for drill planning and mine planning. GHC enlisted WGM of Missoula, MT to conduct a Lidar air survey of the project area. This survey has a tolerance of 2' or less and extremely accurate and current topography and an aerial photography of the project has been imported to Vulcan. Many of the historic mine workings, roads, and various other features in the area have been digitized and imported to Vulcan. These historic workings help indicate the potential location of potential ore bodies in addition to mine planning activities. Using all available data, Vulcan is being used to create mineable ore zones, reserve reports, mine planning, geologic mapping, and exploration planning for 2010.

**Geophysics**

GHC worked with Echotech of Missoula, MT to evaluate the data gathered by Pegasus Gold. It was determined that the data was not very useful to us as more modern techniques give much better information. A down hole geophysics program was conducted on the Willie vein system and geophysical data is currently being processed and will be imported to Vulcan for analysis and use in exploration planning.

**Geologic team**

A geologic team was brought together in 2009 to increase knowledge and ability to handle our increasing geologic needs. Team members include:

- Bob Flesher – V.P. of Geology and Mining for GHC.
- Dr. Jim Sears – U of M Geology professor and Board member for GHC.
- Jeff Switzer – Field Geologist and recent U of M graduate under Dr. Sears.
- Sarah Clark – Field Geologist and recent U of M graduate under Dr. Sears.
- Joe Faubian – CDM consulting geologist.

Creation of our geologic team has given us the ability to bring a wide range of knowledge together to accomplish a higher level of exploration and focus. Dr. Sears has conducted numerous geologic mapping activities in the Garnet Mining District and is a great source of geologic information. We will be expanding our ability to evaluate the geology and mining potential of the district in 2010 by adding additional Vulcan licenses useable by other members of the team.

#### Metallurgical Testing

Samples were created from drill cuttings for various ore zones and grade ranges in 2009. These tests were conducted by Dawson labs of Salt Lake City, Utah and are currently being used for mill design and planning.

#### Mine planning

Mine planning activities were on-going during 2009. Underground extraction plans were created for the Willie vein model by Small Mine Development of Boise, Idaho. SMD is an underground mine contractor and has extensive experience in underground mining techniques. Underground mining plans will also be created early in 2010 for the high grade veins in the vicinity of the Nancy Hanks Pit area. Open pit planning is in the initial stages and will be expanded as 2010 drilling progresses.

#### Mapping

Geologic mapping has become a top priority for GHC and a significant amount of surface mapping was conducted (primarily by Dr. Sears) in 2009. More accurate definition of the contact zone will continue to be updated in 2010. This information will help us target potentially undiscovered deposits which may lie in proximity to the contact zone. A thorough knowledge of the geologic conditions of the district will greatly increase our potential for successful exploration activities.

#### **Conclusion**

GrantHartford made great strides in further definition and understanding of the Garnet Mining District in 2009. The drill program for 2009 was quite successful with multiple high-grade zones intercepted as well as expanding the definition of the lower pit grade material. The Company's 2009 drill program continued to verify and expand ore zones identified by Pegasus (1989-1992) and the GHC 2008 findings. Results of exploration of the Willie zone was able to prove the existence of a high grade vein which has been modeled and a preliminary mine plan has been created. Drilling on the Nancy Hanks deposit continued to confirm historic records of high grade vein systems at shallow depths reported in historic mining documents with open boundaries in several directions. A greater understanding of the geology and ore zone configurations was attained in 2009 which will provide us with the ability to explore the potential mineralized zones in a more efficient and productive manner in 2010. The addition of the Vulcan software and creation of the "geologic team" has allowed us to greatly expand our knowledge database and will give GHC the ability to make even more informed exploration decisions in the future. The 2009 exploration season was an overall success with several of the mineralized zones being able to be brought into a resource category.

## **References**

Stimson, Eric, 1992 Garnet Project Summary. Pegasus Gold Corporation  
Internal report

**Forward-looking statements:** This press release contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, which address future events and conditions, which are subject to various risks and uncertainties. The Company's actual results and financial position could differ materially from those anticipated in such forward-looking statements as a result of numerous factors, some of which may be beyond the Company's control. These factors include: results of exploration activities and development of mineral properties, fluctuations in the marketplace for the sale of minerals, the inability to implement corporate strategies, the ability to obtain financing, currency fluctuations, general market and industry conditions and other risks disclosed in the Company's filings with the United States Securities and Exchange Commission.

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