Spartan Gold Ltd. Ziggurat Gold Project Nye County, Nevada, USA N.I. 43-101 Updated Technical Report



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1.0 SUMMARY

At the request of Spartan Gold, Limited ("Spartan"), this technical report has been completed on the Ziggurat project (the "Project") located in the Northumberland Mining District, northern Nye County, Nevada, USA (Figure 1). Since the last N.I. 43-101 report was written in 2008 there have been significant changes in the size of the project and in the advances in the field work and its results, warranting an updated report. This report is based on a compilation and analysis of published and unpublished geological reports prepared by cited persons and field examinations by the author, a "qualified person" within the meaning of National Instrument 43-101.

The Ziggurat project comprises one contiguous claim block totaling 343 unpatented claims covering approximately 3,118.2 hectares (6,860 acres). Spartan controls the Ziggurat project through claim staking, and all claims have been filed with the Nye County Recorder and the Bureau of Land Management (BLM). The project is located 92.8 kilometers (58 miles) north-northeast of Tonopah, and 22.4 kilometers (14 miles) north-northeast of Round Mountain, along the western flank of the Toquima Range. From Carvers Junction, which is the nearest hamlet with a motel located on state highway 376, access is by the graded-dirt road for 16.3 kilometers (10.2 miles) east on improved gravel road (Toquima Range Road) to intersection where a two-track dirt road leads 2.9 kilometers (1.8 miles) northeast to the central portion of the western claim block.

The topography is variably flat-lying to hilly and cut by low-relief to steeply incised dry washes with sagebrush and grass vegetation cover typical of the high deserts of the northern Great Basin. Elevations across the project range between 1844 meters (5500 ft.) in the northeastern portion of the project and 2195 meters (7200 ft.) in the eastern portion of the project. The climate is favorable for year-around mining, with all supplies and services needed for successful exploration and mining programs available in the area.

The project is situated along the Round Mountain-Northumberland Trend in northern Nye County (Figure 1). The Round Mountain-Northumberland Trend is an Oligocene to Miocene age structural zone which hosts multiple, diverse types of precious metal deposits with a combined mineral endowment of over 20 million ounces of gold including Kinross/Barrick's Round Mountain and Gold Hill mines and Newmont's Northumberland Mine.

The area of the current Ziggurat Property (the "Property") was initially traversed by prospectors and miners in the period following the 1859 discovery of the Comstock lode and the 1860 discovery of the Austin silver district. Previous work on the Ziggurat project includes small scattered prospects from either the late 1800's thru the early 1900's, and later work from the latter half of the 1900's. Nine R.C drill holes are believed to have been completed by Newmont Mining Company and/or Homestake Mining Company in the late 1980's and early 1990's. The depth and result of the drill holes is unknown and such data is not available to Spartan at this time. Located adjacent to the middle portion of the Ziggurat claim block are at least ten other drill holes. To the immediate north of the Ziggurat project, five R.C. drill holes were completed in 2006 by Newmont Mining Corporation, all of which failed to return values in excess of 0.01 oz Au/ton. Prospects on the property indicate small-scale exploration in quartz-veins which contain mineralization of pyrite, chalcopyrite, sphalerite and secondary copper oxides.

From 2005 thru 2010, Spartan's present project minority partner, Mexivada Mining, Inc. had conducted field exploration programs on the Ziggurat project including regional scale mapping, detailed outcrop and structural mapping of the property at a scale of 1"=200m, with lithology, alteration and mineralization detailed. Concurrent with mapping rock-chip geochemical sampling was completed, which were analyzed by ALS Chemex in Reno, Nevada, USA. The geochemical sampling has found gold values from anomalous to potentially economic values, and anomalous trace elements values. A ground gravity geophysical survey was completed in 2007.

In 2011 to date Spartan has conducted the expansion of the Ziggurat claim block from 35 to 343 claims, a combined ground magnetics and gravity survey, and additional geological mapping and outcrop sampling.

The surface geology of the Project area has extensive coverage by post mineral, thin alluvial sediments of Quaternary age obscuring the relatively complex geology and making difficult extending any interpretation where there is no outcrop. The gravity and magnetic geophysical surveys have identified an oval-shaped high centered in the project that is elongated east-west. Linear gravity gradients bound the gravity high suggesting structural faceting along a number of horst bounding faults. Similar gravity highs have been successfully targeted for Carlin type gold deposits in northern Nevada. Some of the structures appear to be related to caldera formation.

The Property's premineral geology is complex. The Paleozoic sedimentary rocks have been multiply thrust over one another in imbricate slices. These rocks in turn have been intruded, dissected and covered by multiple stocks, calderas and volcanic deposits, both pre- and postmineral. The field work on the project has defined that the geology of the western portion of the project consists of lower to middle Paleozoic "upper-plate" sedimentary rocks deformed in the upper Paleozoic by both compressional overthrust faulting and folding over the middle Paleozoic "lower plate" sedimentary rocks, granitic intrusions in the middle Mesozoic, and the later formation of the middle Tertiary aged Moores Creek caldera. Large WNW trending structures cut through the property in at least two areas, and appear to have focused mineralization along them.

At the nearby Northumberland mine, Oligocene - Miocene age Carlin-type disseminated gold mineralization is found in several preferential horizons in the sedimentary section and in thrust contacts. The mineralization is controlled by high angle northwest-trending faults in the limestones that preferentially host local high grade gold mineralization.

A moderate sized "window" of "lower plate" limestones has been exposed in the western portion of the Ziggurat project by the erosion of the overlying "upper plate" siltstones, and in the northcenter White Horse Draw target a well defined anticline of the limestones with abundant altered aplite/tufficite dikes, mineralization and anomalous geochemistry has been recently found. Further to the Southeast in the same draw gold values from 0.484 to 1.01 ppm Au have been collected from mineralized structures in the sedimentary rocks. A third area with anomalous geochemistry has been found in some highly fractured, iron stained limestones in the southcenter of the western portion of the project. In the eastern portion of the project only one target has been found so far due to extensive cover, with + 0.5 ppm Au values from quartz vein mineralization in the sedimentary rocks.

The deformed Paleozoic rocks are partially overlain by the Tertiary aged ash-flow lithic tuffs of the Moores Creek formation deposited in the floor of the Moores Creek caldera. The northwest margin of the caldera is thought to be located in the northern part of the project. The outcrop exposures of the Paleozoic formations in the project indicate that they probably higher in the upper plate sequence than the exposures found overlying the mineralization in the Northumberland mine.

Recent exploration at the Northumberland mine located indicates that the mineralized sedimentary host rocks and geologic setting are similar to those of the Property. The announcement in 2010 of the discovery of a new, adjoining deposit there containing three million ounces of gold is also positive for the exploration potential for the Property

From the available evidence and local deposits found near the Property, it is thought that there are several deposit models of interest considered to have the potential to be present on the Ziggurat project. These mineral deposits types include:

- Sediment-hosted disseminated gold-silver like at the nearby Northumberland mine
- Epithermal vein gold-silver deposits
- Epithermal volcanic hosted gold-silver deposits
- Intrusive-related porphyry and skarn gold-silver deposits

Recommendations for an advancing the Ziggurat project's pre drilling exploration include;

- Regional stratigraphic work to define the relative spatial placement of the "upper-plate" lithologies located on the property, in order to help indicate an inferred depth to the overthrust faults and the favorable formations of the "lower-plate" rocks which are mineralized with gold at the Northumberland mine.
- Attempt to acquire existing drill hole data from Newmont, Fronteer, Western States, etc.
- The completion of a controlled source audio-telluric (CSAMT) and/or IP/ Resistivity surveys over target areas in order to confirm and redefine structural locations and delineate any possible alteration.
- The completion of geochemical soil gas and sagebrush biogeochemical surveys over the project at 30 x 100 meter-centers.
- Satellite alteration and structural imagery.

2.0 INTRODUCTION

2.a Issuer

This report has been prepared at the request of Spartan Gold Limited ("Spartan") on the Ziggurat project (the "Property"), within the Northumberland Mining District, Nye County Nevada, U.S.A. (Figure 1).

This report is formatted and prepared in accordance with the Canadian Standard N.I. 43-101. The effective date of the report is the April 30, 2011. There were no material changes to the information on the project between the effective date and the signature date of the report. There are a number of effective dates for information in the Report:

- Database close-off date is April 30, 2011.
- Date of issue for this report is December 28, 2011.

A portion of the project claims were originally staked by Mexivada Mining Corporation, 491 4th Street, Elko, Nevada, USA, 89801, which controls a 25% interest in the project. The remainder was staked by Spartan, which controls a 75% interest. All claims are registered with the Nye County Recorder and with the U.S. Bureau of Land Management (BLM).

2.b Terms of Reference and Purpose for the Report

2.b.1 **Purpose for Report**

This N.I. 43-101 Technical Report documents the significant changes in the size of the project, and the revised scope of project potential from the results of advances in field work on the project completed since 2008, when the last N.I. 43-101 report was written (M. Measures, November 5, 2008). These changes warrant an updated technical report. This report summarizes previous work completed, discusses work completed by Spartan, and makes recommendations for future work.



Figure 1:Regional Location Map of the Ziggurat Project Showing Principal Gold
Deposits and Trends (From Measures, 2008)

2.b.2 Terms of Reference and Definitions

Important Terms used in this report and presented in Table 1.

Silver	Ag
Gold	Au
Copper	Cu
Iron	Fe
Zinc	Zn
Mercury	Hg
Lead	Pb
Molybdenum	Мо
Barium	Ва
Antimony	Sb
Thallium	TI
Arsenic	As
grams per ton	g/t
hectare	На
kilogram	Kg
kilometer	Km
Meter	М
Mean Sea Level	MSL
parts per billion ppb	Ppb
parts per million	Ppm
Quality Assurance and Quality Control	QA/QC
Qualified Person	QP
Reverse Circulation	RC
Diamond Drilling	Ddh
Universal Transverse Mercator	UTM

Table 1. Terms and Definitions Full Name and Abbreviation

2.b.3 Units

This report uses both metric and U.S. Customary System of measurements (English system). All currency references used in this report are expressed in U.S. dollars. The majority of the information concerning the Property in this report is given in metric terms and units, and metric terminology is preferentially used to maintain consistency. A Metric to English conversion chart is included in Section 27.a, "Glossary and Conversion Factors".

2.c Sources of Information and Data

The information presented, opinions, conclusions, and estimates made are based on the compilation of the following published and unpublished information, and field examinations by the author on the Property:

- Information provided by Spartan, and their associated contractors
- Assumptions, conditions, and qualifications as set forth in the report
- Data, reports, and opinions from third-party entities and previous property owners.

All data, maps and reports by cited persons are listed in "References," Section 27.

2.d Property Examination

The author is a "qualified person" within the meaning of National Instrument 43-101 of the Canadian Securities Administration. The author has previous professional experience in the project area and has completed current on-site inspections by conducting geologic reconnaissance mapping in March of 2011.

3.0 RELIANCE ON OTHER EXPERTS (DISCLAIMER)

This report is based on a review of information obtained during the course of exploration, published and unpublished geologic reports and observations made by the author during the recent property examinations. All interpretations and conclusions are based on the author's research and personal examination of the Ziggurat Property. The author cannot guarantee the accuracy of data from historical work, or that there are no errors in such data used to formulate conclusions. The author has visited the property area previously and many of the gold deposits mentioned regionally. On-site inspections, sampling, and mapping were conducted during March of 2011.

The author relied upon contributions from other qualified professionals working for Spartan Gold Limited, (Spartan) or who in the past worked on the property. The author has also relied upon contributions from reports whose author's qualifications are not known, yet have well established reputations as professionals, and others of whom the author has no knowledge. The author has reviewed the work of the other contributors and finds this work has been performed to normal

and acceptable industry and professional standards. The author is not aware of any reason why the information provided by these contributors cannot be relied upon.

An independent, full verification of land title and mineral tenure was not performed by the author. The author is not a legal expert nor has he verified the legality of any underlying agreement(s) that may exist concerning the licenses or other agreements between third parties. However, Spartan has independently verified land ownership and claim (mineral) ownership with legal experts gaining this information through their own documentation processes.

The author has fully relied on information regarding the status of the current Surface Rights, Road Access and Permits through opinions and data supplied by independent consultants and through on-line documents provided by the U.S. Bureau of Land Management (BLM) and U.S. Forest Service.

i The Sources of the Information

The data, maps and reports by cited persons are listed in "References," section 27.

ii The Extent of Reliance

The author has fully relied on information regarding the status of the current Surface Rights, Road Access and Permits through opinions and data supplied by independent consultants, and on-line documents provided by the U.S. Bureau of Land Management (BLM) and U.S. Forest Service. The author has had to rely fully on the accuracy of the exploration and historical data and its manner of collection as presented by previous authors. The author has considerable experience in exploration in the region of the property for the types of deposits looked for on the property, and did not have to rely on previous authors for interpretation of the available data.

iii The Portions of the Technical Report to which the Disclaimer Applies

The disclaimer applies to all portions of the technical report.

A draft copy of the report has been reviewed for factual errors by Spartan. Any changes made as a result of these reviews did not involve any alteration to the conclusions.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.a Area

The Ziggurat property comprises a contiguous block of 343 unpatented claims totaling approximately 3,118.2 hectares (6,860 acres).

4.b Location

The Ziggurat property is located 92.8 kilometers (58 miles) north-northeast of Tonopah, and 22.4 kilometers (14 miles) north-northeast of Round Mountain, along the western flank of the Toquima Range bordering the Big Smokey Valley, within the Northumberland mining district, Nye County, Nevada, USA. The property's claims cover parts of sections 11-14 in T. 12 N., R. 44 E and sections 6 and 7 in T. 12 N., R. 45 E.

The Latitude is $38^{\circ}55' \text{ N}$ and the Longitude is $117^{\circ}00' \text{ W}$.

The U.S.G.S. Topographic maps at 1:24,000 scale that cover the property area are: Jet Spring Carvers NE 7.5' Quadrangles

4.c Mineral Tenure

The Ziggurat project comprises one contiguous claim block totaling 343 unpatented claims covering approximately 3,118.2 hectares (6,860 acres). Spartan controls the Ziggurat project through claim staking, and all claims have been filed with the Nye County Recorder and the Bureau of Land Management (BLM). Current Project boundaries were observed on publicly documented Mineral Title plats, claim maps, and published surface tenure maps. The claims details are listed in Appendix A.

The unpatented claims and their surface rights are property of and subject to the ultimate title of the United States Government. The eastern portion of the unpatented claim block occupy public

lands administered by the U.S. Forest Service (USFS). The western portion of the unpatented claim block occupy public lands administered by the U.S. Bureau of Land management.

The mining claims and details are listed in Appendix A.

4.d Nature of Title

4.d.1 Unpatented Claims

The project's initial 172 unpatented claims were staked in 2007, most were dropped in 2008 leaving 35 in two blocks, and in 2011 an additional 308 claims were staked by Spartan bringing the total to 343. The staking was done in accordance with the laws of Nevada and the U.S. Federal Government per the regulations of the Mining Law of 1872. Annual filing fees and documentation is up to date.

The 172 initial unpatented mining claims at Ziggurat were staked by Mexivada Mining Corporation (Mexivada).

On December 27, 2010, Spartan and Sphere signed an Option and Mining Claim Acquisition Agreement ("Ziggurat Option Agreement) with Mexivada granting Spartan an option to acquire up to a 70% interest in 57 unpatented mining claims owned by Mexivada in Nye County, Nevada, known as the Ziggurat Property. Upon exercising the option, Spartan was to enter into a joint venture agreement with Sphere for further exploration and development of the Property. The Ziggurat Option Agreement was amended by Amendment to Option and Mining Claim Acquisition Agreement ("Ziggurat Amendment") dated March 28, 2011, to enable Spartan to acquire an exclusive 75% interest in the Ziggurat Property without Sphere participation in a joint venture for exploration and project development, and provides for a joint venture between Spartan and Mexivada for such development once Spartan exercises the option. In 2011, 286 additional mining claims were staked by Mexivada in the Ziggurat area, making 343 the total number of mining claims subject to the Ziggurat Option Agreement and the Ziggurat Amendment.

Under the Ziggurat Amendment, Spartan will be deemed to have exercised the Option for the Ziggurat Property as follows:

1. Spartan will pay Sphere US \$117,250 and Mexivada US \$16,750, one-half to be paid to each party within 60 days of the effective date of the S-1 Registration Statement to be filed by Spartan with the US Securities and Exchange Commission, and one-half to be paid at the time Spartan raises capital and obtains funding in the amount of at least US \$2,000,000.

2. Spartan will issue restricted common shares to Sphere (7,862,500 shares) and to Mexivada (837,500 shares) and will issue warrants to purchase Spartan restricted common shares with a strike price of \$1.00 per share within five years to Sphere (3,862,500 warrants) and to Mexivada (837,500 warrants).

3. As additional consideration, the Spartan S-1 Registration Statement is to allocate 500,000 restricted common shares to Sphere and 125,000 restricted common shares to Mexivada.

4. Spartan can acquire a 51% interest in the Ziggurat Property by incurring exploration expenditures of US \$1,500,000 by the third anniversary date of the Ziggurat Amendment, and Spartan can acquire an additional 24% interest by incurring additional exploration expenditures of US \$1,000,000 and completing an industry standard Mining Prefeasibility Study by the fifth anniversary date of the Ziggurat Amendment.

5. The Ziggurat Amendment also provides that Spartan shall pay Mexivada US \$110,000 in installments as follows: \$25,000 upon execution of the Amendment, \$35,000 within 30 days of execution of the Amendment, \$25,000 on or before the second anniversary of the Amendment, and \$25,000 on or before the third anniversary of the Amendment.

6. In order to maintain the Option, Sphere will be required to allot and issue to Mexivada(a) 250,000 of its common shares within 60 days of the signing of the Ziggurat Amendment, and(b) 250,000 of its common shares within 60 days of Spartan acquiring a 75% interest in the Ziggurat Property.

The Ziggurat Amendment also expanded the Area of Interest as defined in the Ziggurat Option Agreement from 1 mile to 5 miles from the current boundary of the Ziggurat Property.

Once Spartan is deemed to have earned a 75% interest in the Ziggurat Property, Spartan and Mexivada shall participate in a joint venture for the purpose of further exploration and development work on the Property, and if warranted, the operation of one or more mines on the Property. At the time of the joint venture, the respective interests in the Ziggurat Property will be 75% to Spartan and 25% to Mexivada.

The proposed transaction remains subject to, among other things, receipt of all requisite Regulatory and other approvals, including the approval of the NEX board of the TSX Venture Exchange.

4.d.2 Private Mineral Right Leases

None of the property has private mineral leases of any kind.

4.d.3 Surface Rights

None of the project has surface or use restrictions of any kind. Normal permitting procedures with the State of Nevada and the BLM apply to this portion of the property. There are currently no access agreements required for these parts of the project.

4.e Royalties and Other Agreements

The known extent and the terms of any royalties, back-in rights, payments, or other agreements and encumbrances to which the property is subject are described in section 4.d above.

4.f Environmental Liabilities

To the authors present knowledge there are no environmental liabilities to which the property is subject. Previous drilling activities have been reclaimed and remediated to the satisfaction of both federal and state agencies.

4.g Permits

The author is not aware of any permits currently in progress or filed regarding future exploration activities on the Property. All customary federal and state requirements for permitting and bonding will be required prior to any future drilling, drill access construction, trenching, or bulk sampling programs. No unusual conditions are expected to impact the future permitting and bonding process for exploration or development activities on the Property.

<u>Claims Maintenance</u>: All of the unpatented lode mining claims in the Ziggurat property are registered as being currently valid with the BLM, and all these lode mining claims are valid until

noon on September 1, 2012, at which time and date they shall all expire unless renewed with the BLM. The BLM and U.S. Forest Service controls the ownership of the mineral and surface rights to the land covered by the unpatented lode mining claims. Ownership and control of the mineral rights to the unpatented lode mining claims is granted exclusively to Issuer and Vendor by the BLM and U.S. Forest Service while such claims are validly held and in good legal standing, which they presently are legal and in good, non-contested standing, according to the records of the BLM and U.S. Forest Service as published on April 15, 2011. To maintain such valid legal standing, Issuer must pay an annual maintenance fee to the BLM prior to noon on September 1st of each calendar year, which currently is \$140.00 per claim, and to file an annual "Notice of Intent To Hold" with Nye County and pay a fee that presently is \$10.50 per claim plus \$4.00 per document submitted to the County. There are no other encumbrances to which these properties are subject, as known by the author.

In reporting the recorded title, the author has relied entirely on information provided by the United States Bureau of Land Management ("BLM"), the Issuer, and Mexivada. The comments in this section do not represent a legal opinion and only preliminary investigations into the actual recorded title have been made by the author.

There are no placer claims located within the Ziggurat property. There are no mine dumps or previous mining operations present on the property. There are no known mining hazards on this property, to include drilling fluids, drill waste or debris. Several kilometers of roads, trails and several old drill pads and sites were developed during the previous drilling campaigns and utility companies and are available for use by the issuer if needed, which would minimize the construction of new trails and sites in the work areas.

<u>Permitting for New Exploration</u>: Exploration permits and reclamation bonds are required from the U.S. Bureau of Land Management and U.S. Forest Service prior to conducting exploration programs on federal government land, i.e., the unpatented mining claims. No obvious hindrances to the permitting process are extant on the property. No permits are required at this time for conducting exploration work on the private lands held under lease. No permits are required in the immediate future for conducting exploration work on the private lands held under lease, unless such work covers a surface area of more than 5 acres, at which point a permit for such expanded work would be required from the State of Nevada.

In starting exploration on the property, Issuer is required to apply for an exploration "Notice of Intent to Conduct Exploration" from the BLM and U.S. Forest Service offices. This "NOI" would be applicable for all exploration in a combined surface work area of less than 5 acres in size, and Issuer should confine its Phase 1 work program to less than 5 acres to acquire approval from the BLM and U.S. Forest Service for such an NOI. If additional area would be required in the future, Issuer could reclaim the previous work to reduce the area of net disturbance, or apply for a "Plan of Operations" from the BLM and U.S. Forest Service. Regulations state that under ideal circumstances that the BLM and U.S. Forest Service should grant approval or ask for further NOI information from the Issuer within a 30-day period. A Plan of Operations may take 6 to 12 months or more to acquire from the BLM and U.S. Forest Service. The amount of disturbance to be conducted under the NOI would be calculated using a Microsoft-Excel format spreadsheet supplied by the BLM and U.S. Forest Service, to tally up the area of expected disturbance and the costs to conduct such "Notice-Level" operations. Once this amount has been calculated, Issuer would apply for a Reclamation Bond to supply to the BLM and U.S. Forest Service prior to work, to ensure that reclamation would occur in the event of possible financial default by the Issuer. Issuer can either make a 100% deposit of such BLM and U.S. Forest Service -approved bond amount, with the BLM and U.S. Forest Service directly, or go through the Nevada Division of Minerals in Carson City, Nevada, which agency can manage the bond for the Issuer, for a 3% annual fee. When the Reclamation Bond is in place and the BLM and U.S. Forest Service has signed off on the Notice of Intent, typically a 2-month process, Issuer may begin work on the Property. After completion of the work program, Issuer reclaims the Property for the work done, and the BLM and U.S. Forest Service typically then will refund 60% of the bond amount, keeping the rest until vegetation has re-established itself on the Property in a sufficient fashion. The process of obtaining a Plan of Operations is beyond the scope of this report.

4.h Other Factors and Risks

To the extent known by the author, there are no other significant factors and risks that may affect access, title, or the right or ability to perform work on the Property.

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.a Topography, Elevation, and Vegetation

The property geography is variably flat-lying to hilly cut by dry, sandy washes exhibiting both low relief and sharp margins with sagebrush and grass vegetation cover. Elevations across the project range between 1844 meters (6050-ft.) in the western portion of the project and rising to 2195 meters (7200-ft.) in the eastern portion of the project.

Local vegetation varies depending on elevation, exposure, and available moisture. The lower slopes are covered by saltbrush and sagebrush with sparse grasses. The washes are generally scrubbed partially bare by occasional floods. Sagebrush and sparse grasses thrive on the middle slopes while mountain mahogany, juniper and piñon trees grow on the higher slopes. Notable wildlife in the area consists of occasional mule deer, elk, pronghorn antelope, wild horses, coyotes, mountain lion, jackrabbits and cottontail rabbits.

5.b Access to the property

The Ziggurat property is accessible from Tonopah, Nevada by traveling 9.6 kilometers (6 miles) east on paved highway 6 and 92.8 kilometers (60 miles) north on paved state highway 376 to the Toquima Range Road turnoff. From the turnoff travel 16.3 kilometers (10.2 miles) east on improved gravel road (Toquima Range Road) to intersection where a two-track dirt road leads 2.9 kilometers (1.8 miles) northeast to the central portion of the western claim block.

5.c Proximity of the property to a population center, and the nature of transport

Tonopah is the largest town for the region. It has a population of 2,000. Much closer at 20 miles distance is Round Mountain, with a few small satellite villages (Carvers) and an aggregate population of over 1,000. Both have airstrips for private plane use.

5.d Climate and length of the operating season

The climate is typical of the high desert of the Great Basin, characterized by cool to cold winters with moderate snowfalls and temperatures ranging from -20 to 15 °C (-10 to 55 °F), and hot summers with broad temperature ranges from day to night averaging between 5 to 36 °C (40 to 98 °F). The area is fairly dry; the summers have infrequent rains, although locally intense storms may develop at any time of year. Average annual precipitation is 9.57 inches (24.3 cm), with recordable precipitation typically occurring only 79 days of the year. Annual snowfall averages 28.2 inches (72 cm). A significant portion of the annual precipitation comes during the winter and spring months as snow and rain, summers and falls are typically dry.

The climate is characterized by winters with temperatures ranging from -8 to 7 °C (16 to 45 °F) and summers ranging between 12 to 33 °C (54 to 91 °F). Average annual rainfall in the region is estimated at 18.4 cm (7.25 inch) per year. A significant portion of precipitation comes during the month of March as both rain and snow.

Exploration and development activities in the area may be conducted year-around, with only occasional weather-related difficulties. Mining operations are routinely conducted year-around in the region, especially at the Round Mountain Mine, which has a very similar geography as the property's, with only occasional weather related difficulties.

5.e Sufficiency of surface rights for mining operations, the availability and sources of power, water, mining personnel, potential tailings storage areas, potential waste disposal areas, heap leach pad areas, and potential processing plant sites.

The property has no surface water rights as there are no year-round flowing streams on it. To the best of the author's knowledge the properties subsurface water rights have not been examined. The author assumes that there will be sufficient subterranean water to supply any likely mining operation as that has been the general case in Northern Nevada's mining districts.

The Ziggurat Property's location in central Nevada and the remote, Big Smokey Valley and Toquima range area is fortuitous. The region has long been a center for mining and livestock ranching, with a substantial portion of the population and workforce oriented to natural resource operations. Mining is a major element in the region's economy and its leading employer, so

exploration and development projects are generally welcomed by the local populace as current and future employment opportunities. The political climate of the area is decidedly pro-mining. The region has readily available most of the supplies and services needed to conduct successful exploration and mining programs.

Tonopah is the largest town major supply center for the region, however is somewhat limited in mining operation - related supply services. Exploration supplies and contactors can be found locally. Most mining operation - related supplies are available at Carlin and Elko located approximately three hours drive to the north or Reno, four hours travel time to the west. They have all the needed equipment, supplies and services for mining companies to conduct full sequence exploration and mining development projects.

Sufficient surface rights for potential tailings storage areas, waste disposal areas, heap leach pad areas, and processing plant sites will need to be acquired from the federal government. The topography is generally relatively gently sloping to the west with narrow, confined, dry wash bottoms. The terrain does not pose significant challenges for the construction of mining or milling related facilities. Areas for waste dumps and tailings impoundment facilities are abundant.

The project has excellent infrastructure with the major regional power line going through it, excellent subsurface water resources adjacent, and it has good road access from state highway 376 and the Toquima Range Road.

6.0 HISTORY

Much of the following is taken from the technical report written for Fronteer Development Group Incorporated titled, "Technical Report on the Northumberland Project, Nye County, Nevada, USA: Resource Update 2008", and authored by Christopher Lee, (P. Geo) and Jim Ashton, (P. Eng).

6.a Area History (with prior ownership of the property and ownership changes)

Historically the Northumberland district primarily produced gold, together with some silver, barite and turquoise. Prospecting and limited mining extended over a large area encompassing that part of the Toquima Range approximately between the Mount Jefferson massif on the south and

the county line on the north (Kleinhampl and Ziony, 1984). The original Northumberland district was located at the head of the East Northumberland Canyon in the northern Toquima Range in 1866. The name was changed to Monitor in 1875, and then back to Northumberland in 1879 (Tingley, 1998).

The exploration and production history of the Northumberland District occurred during two periods. The first began in 1866, when relatively minor amounts of silver were extracted from veins by underground mining methods. The most important of these were the Lady Cummings, the Northumberland and the Detroit. A very short-lived camp named Learnville was organized in 1868 and mining was conducted until 1870 (Paher, 1970 p.361).



Figure 2. Ziggurat Project Property Locations, Regional Topography, Geological Structures and Anomalies (Sources: Fronteer Gold, 2010, Heyl, 2011)

Major interest in the district was renewed with the discovery of low-grade gold ore in 1936 (Kral, 1951), and continues to the present day. The Northumberland Mining Company (NMC) established the Northumberland Mine and acquired the main properties in 1938, churn-drilled the area and began production in 1939 (Kleinhampl and Ziony, 1984). Operation continued until late-1942, when the federal government shut down gold mines by order L-208 as a result of World War II. Gold exploration was the main activity at Northumberland between 1942 and 1975. Exploration drilling programs were conducted by Kerr-McGee Oil Industries in 1966-67, and by Homestake Mining Company in 1968 (Kleinhampl and Ziony, 1984). In the mid-1970's, Cypress Mines Corporation began exploration and drilling within the main Northumberland district. Work completed by Cyprus resulted in the development of two distinct oxide gold deposits and began mining operations in 1981 (Shilling and Hall, 1980). Cyprus terminated heap-leach operations in mid-1985.

Western States Mining Company (WSMC) acquired the Northumberland property in 1985. WSMC mined material from the two open pits developed by Cyprus from 1987 to 1990, with the primary ore production coming from the Chipmunk pit. WSMC ceased mining in 1990 and placed emphasis on exploration. Gold production from the WSMC heaps ended in 1991. Deep holes drilled in Mormon Canyon approximately one-half mile west of the Chipmunk pit led to the discovery of the Zanzibar deposit in 1991. Further drilling in the southwestern portion of the Mormon Canyon target area resulted in the discovery of the high-grade Rockwell deposit in 1992. WSMC's interest in the Northumberland project was held by Nevada Western, a wholly owned subsidiary. Nevada Western entered into a joint venture with Newmont Mining Corporation in December 2003. Through a series of transactions, Nevada Western became a wholly owned subsidiary of NewWest in 2005. Newmont, as operator of the joint venture, immediately began exploration work including soil geochemical sampling, geological mapping, geophysical surveys, metallurgical testing, and drilling. From 2004 through 2007, Newmont spent \$8,700,000 exploring the Northumberland property. Newmont completed an IP survey totaling 12.4 line miles in the Ziggurat target area. Five RC drill holes were completed at the Ziggurat area in 2006, all of which failed to return values in excess of 0.01 oz Au/ton. In 2004 and 2005 Newmont added 57 claims in the Ziggurat target area on the west side of the Northumberland claim block.

Located to the immediate south of the Ziggurat property is the Moores Creek mineralized area. The Moores Creek area has never been organized as either a mining district or camp. The initial

discovery and most of the work may date from the periods of 1864-90 or 1906-20, which were periods of intense prospecting for gold and silver in the Twin River, Jett, Jefferson Canyon and the Northumberland mining district (Kleinhampl and Ziony, 1984). The absence of substantial development indicates that little success was achieved in Moores Creek. A cluster of prospects and workings are located in the SW quarter of section 1, Township 11 North and Range 44 East. Presently this area is controlled by Kenneth Berg of Carvers, Nevada and staked as the JJ (Jumping Jack) claims.

Approximately 15 miles south-southwest of the Ziggurat property along the Northumberland-Round Mountain trend is the Round Mountain open pit mine. The Round Mountain deposit contained at least 16 million ounces of gold and 15 million ounces of silver before mining (Boden, 1992). It is presently in production by Kinross who is the operator of a joint venture between Kinross gold and Barrick gold corporations. Kinross acquired its 50% ownership interest in the Round Mountain open pit mine and became the operator upon completion of the combination with Echo Bay on January 31, 2003. An affiliate of Barrick Gold Corporation owns the remaining 50% interest in the joint venture known as the Smoky Valley Common Operation (SVCO). The first recorded gold production from the Round Mountain District was in 1906. Approximately 350,000 ounces of gold was produced from 1906 through to 1969, much of it from alluvial mining operations.

The SVCO was formed in 1975 to operate the mine. Copper Range Company held a 50% interest and Felmont Oil Company and Case Pomeroy Company each held a 25% interest in the original SVCO. Commercial production commenced in 1977. Since that time, over 10.2 million ounces of gold has been produced from the mine. Homestake Mining Company (HMC) acquired a 25% interest in the mine in 1984. Echo Bay Mines Incorporated acquired a 50% interest in 1985. On July 1, 2000, HMC increased its interest in the Round Mountain Mine to 50%. Barrick Gold Corporation completed a merger with HMC in 2001 thereby acquiring the Homestake's 50% interest in the mine. Kinross acquired a 50% interest in 2003, a result of the Kinross, TVX Gold Incorporated Echo Bay merger. Host for most of the known mineralization is the tuff of Round Mountain, the extracaldera equivalent of the intracaldera tuff of Round Mountain. The primary spatial control of mineralization at the mine is a set of west-northwest striking, steeply dipping, oblique-slip faults.

Located approximately 3 kilometers north-northeast of the Round Mountain mine along the Northumberland-Round Mountain trend is the Gold Hill Deposit. The Gold hill deposit is in development stage and planned to be an open pit gold operation run by Kinross with an estimated production start-up date of 2011. Reserve estimates derived on 12/31/05 are in the order of 0.75 million ounces of gold. Historically, about 41,000 ounces of gold and 185,000 ounces of silver were produced from the Gold Hill mine.

6.b Previous Work (the type, amount, quantity, and general results of exploration work undertaken by any previous owners or operators)

Previous work on the Ziggurat property is limited to small scattered prospects and nine R.C drill holes indicated by reclaimed sites and drill cuttings on the surface. The drill holes are believed to have been completed by Newmont Mining Company and/or Homestake Mining Company in the late 1980's and early 1990's, however this is speculation. The depth and result of the drill holes is unknown, and such data is not available to Spartan at this time.

Located adjacent to the middle of Spartan's Ziggurat claim block are at least ten other drill holes. Again, it is unknown which company completed these drill holes.

To the immediate north of the Ziggurat property five R.C. drill holes were completed in 2006 by Newmont Mining Corporation, all of which failed to return values in excess of 0.01 oz Au/ton (Lee and Ashton, 2008) (Figure 3). Other drill sites were observed by Spartan in the pediment south of the Ziggurat property. Prospects on the property indicate small- scale exploration in quartz veins which contain mineralization of pyrite, chalcopyrite, sphalerite and copper oxides.



Figure 3. Location Map Of Known Drillholes and Property Geology For The Ziggurat Project (Redfern, 2011)

6.c Significant historical mineral resource and mineral reserve estimates

There are no known, historical mineral resources or mineral reserve estimates for the Property.

6.d **Production from the property.**

There has been no known mineral production from the Property.

7.0 GEOLOGICAL SETTING AND MINERALIZATION

7.a Geological Setting

The Ziggurat property is located in the central portion of the Basin and Range province along the Round Mountain-Northumberland mineral trend. The Round Mountain-Northumberland mineral trend is an Oligocene to Miocene aged structural zone striking north-northeast and parallels the Getchell trend in northern Nevada. The Round Mountain-Northumberland trend hosts gold and

silver mineralization at Barrick/Kinross' Round Mountain and Gold Hill mines, Newmont's Northumberland mine, and the Jefferson Canyon deposit. Mineralization also occurs along this trend to the south at Manhattan and Tonopah.

Within the Great Basin province exposed rock units range from late Pre-Cambrian metasediments to Pleistocene cinder cones and lava flows. Tectonic events include alternating periods of continental scale compression, extension and shearing.

The Great Basin is most noted as an extensional terrain, with the eastern and western edges of the province having moved apart by some 100 kilometers (161 miles) in the past 40 million years. Prior to the extensional movement, the region had seen at least three periods of compression during the late Paleozoic, Mesozoic and Cenozoic. The two oldest events, the late Paleozoic Antler and the early Mesozoic Sonoma orogenies are characterized by large-scale eastward directed low-angle faulting. Both events led to the juxtaposition of diverse Paleozoic facies in the region of the Toquima Range (Kleinhampl and Ziony, 1984).

7.a.1 Regional Geology and Structure

The Toquima Range is segmented north to south into six relatively discrete geologic and topographic blocks. The White Rock Mountain block lies on the north and is succeeded southward by the Northumberland block. The Mount Jefferson block of Tertiary volcanic rocks is next and followed by the Belmont-Round Mountain block of Cretaceous plutons. South of the Belmont-Round Mountain block is the Bald Mountain Tertiary block followed by the Manhattan block composed primarily of Paleozoic rock (Kleinhampl and Ziony, 1985).



Figure 4. View To The West From Near Ziggurat Wash Over The Upper Plate Siltstones/Phyllites And Alluvium Across the Big Smokey Valley To The Toiyabe Range

In the White Rock Mountain and Northumberland blocks, Paleozoic rocks comprise a series of imbricate thrust sheets containing contrasting lithologies of relatively contemporaneous ages (Kay and Crawford, 1964). The Toquima Range is underlain by a thick sequence of Paleozoic carbonate and clastic sedimentary rocks. During the Devonian-Mississippian Antler Orogeny, Ordovician to Devonian western assemblage deep-water siliciclastic rocks were thrust eastward over coeval eastern assemblage shelf carbonate and clastic rocks along the regionally extensive Prospect Mountain Thrust Fault.

This structurally highest thrust, which may be equivalent to the Roberts Mountain thrust of northcentral Nevada, has emplaced an intricately folded allochthonous assemblage of Ordovician chert and intermediate volcanic rocks on carbonate and transitional assemblage Cambrian to Devonian strata. The latter are exposed as windows between Mill and Ike's Canyon and between Northumberland and Water Canyons. A large fold north of Mill Canyon trends northeasterly, whereas the one south of Water Canyon trends northwesterly, suggesting varied directions of tectonic transport for the different tectonic slices (Kay and Crawford, 1964).

The Toquima caldera complex lies in the middle of an extensive west-northwest belt of Oligocene and early Miocene volcanic rocks, consisting mainly of silicic ash-flow tuffs (Stewart and others, 1977). The belt is approximately 200 kilometers wide and 800 kilometers long and has been broken into north-northeast trending ranges and valleys of the Basin and Range Province. The Toquima caldera complex lies near the central portion of the Toquima Range, a north-northeast trending, gently west-tilted horst block. Two other volcanic centers are exposed in the Toquima Range and include the 32-Ma Northumberland caldera (McKee, 1974) located to the north of the Toquima Caldera complex and the 25-Ma Manhattan caldera (Shawe and Snyder, 1988) located to the south.

Tertiary igneous activity in the vicinity of the Toquima caldera complex began with the intrusion of a hypabyssal granodiorite stock and a north-northeast trending, broadly bimodal andesite/rhyolite dike swarm northeast of Round Mountain (Boden, 1992). Fission-track and K-Ar ages for the granodiorite and dike swarm range between 37-34 Ma (Shawe and others, 1986). Silicic pyroclastic volcanism commenced soon thereafter with the eruption of the megabreccia of Dry Canyon at 32.3 Ma (Boden, 1986). During the ensuing 10 Ma eight major volcanic units were deposited in and around the Toquima caldera complex including the tuffs of Moores Creek, Mount Jefferson and Trail Canyon.

A large granitic pluton on the west side of the Toquima Range intrudes allochthonous rocks along the Lander County line. A much smaller dioritic body of Jurassic age intrudes autochthonous rocks in Northumberland Canyon in the heart of the Northumberland mining district (Kleinhampl and Ziony, 1985).

The Ziggurat property is located in the northern portion of the Toquima caldera complex within the Moores Creek caldera. The Moores Creek caldera formed approximately 27.2 Ma upon the eruption of the tuff of Moores Creek (Boden, 1992). The northern structural margin of the Moores Creek caldera is marked by a south-facing arcuate zone of severely deformed and

brecciated Paleozoic sedimentary rocks that bounds the tuff of Moores Creek. The arcuate breccia zone is a much as 0.5 kilometers wide and is intruded by a flow-layered porphyritic rhyolite plug with a K-Ar age of 26.6 +/- 0.5 Ma (Boden, 1992). The plug is presently exposed as prominent pinnacle named Mount Ziggurat located approximately 2 kilometers north of Mexivada's eastern claim block. A large exposure of Paleozoic sedimentary rocks on the northwestern margin of the Moores Creek caldera is interpreted as part megabreccia, wherein the host tuff of Moores Creek forms dikes or septa between brecciated megaclasts, and as possible caldera floor (Boden, 1992).

7.a.2 Property Geology

The Property's geology is complex. The Paleozoic sedimentary rocks have been multiply thrust over one another in imbricate slices. These rocks in turn have been intruded, dissected and covered by multiple stocks, calderas and volcanic deposits, both pre- and postmineral.

Boden (1992) completed a comprehensive map of the Toquima Caldera Complex which included the geology of the Ziggurat property (Figure 4). This is the most complete published mapping to date of the Ziggurat property; however the work primarily focused on volcaniclastic rocks associated with the caldera complex. Mapping by Mexivada further describes sedimentary rocks located on the property.

Work at the Northumberland mine to the northeast of the Ziggurat property suggests that the carbonate and siliciclastic rocks occur as both allochthonous and autochthonous units. Multiple, stacked thrust faults seem to be present.

7.a.3 Sedimentary Rocks

Mapping by (Boden, 1992) grouped Paleozoic rocks exposed on the Ziggurat property into one map unit comprised of shale and limestone (Osl) (Figure 4). The unit is described as interbedded dark shale and limestone and their metamorphosed equivalents including phyllite, knotty schist, marble and local calc-silicates. The sequence is complexly folded and faulted. Limestone beds are often characterized by contorted folding and siliciclastic beds are typically isoclinally folded. Mapping efforts by Mexivada in 2007 identified three Paleozoic sedimentary lithologic units on the Ziggurat property. A description of these lithologic units is outlined below.

7.a.3.1 Paleozoic Sedimentary Rocks

a. Siltstone/Phyllite Unit

The predominate lithology of the property is an Upper Plate siltstone/phyllite unit (Oss), which is thinly bedded, platy, fossil poor, laminated and ranging from buff to maroon to light-red to yellow-white in color. The variations in color of the siltstones appears to be the result of effects or lack of hydrothermal alteration, which is well displayed in the Ziggurat Wash.



Figure 5. Prominent Cliffs Of Upper Plate Ordovician Siltstones Metamorphosed To Phyllites and Subsequently Altered And Mineralized, Ziggurat Wash

The unit is highly disturbed structurally, with convoluted folding and often very intense fracturing. The unit contains minor amounts of interbedded limestone layers, which are typically 1-2 cm thick beds, however noted to be up to 4 cm in thickness. Abundance of interbedded limestone within the siltstone unit increases near the apparent basal portion. Chert layering is also observed in sections. This appears to be a Western facies unit that has been allochthonly overthrust to the east.



Figure 6. Ordovician Siltstones/Phyllites with Overlying Quaternary Gravels

The siltstones/phyllites have been arched in a northeasterly trending anticline in the west central portion of the project, which has then through erosion allowed the exposure of the limestones underneath. It is most likely to be the Lower Ordovician Vinnini formation, although the middle portion of the Ordovician Zanzibar formation also is a silty/shaley member. On some geologic maps the undifferentiated sediments of the project have been identified as the Zanzibar. The Vinnini overlays all the main host horizons at Northumberland, and the Zanzibar is an overlying, host, and underlying unit to the mineralization there.

As is stated before, the geology of the project is complex and much has yet to be determined on it. Other possible identifications for this unit include the Lower Cambrian Gold Hill formation, the Lower Ordovician Nine Mile Canyon formation, and the Middle Ordovician Palmetto formation.
b. Limestone Unit

A second mapped lithology exposed on the property is a unit comprised of limestone (OIs), which is commonly medium-bedded, and locally thin-bedded and is medium to dark grey in color. The limestone unit typically contains minor amounts of thin interbeds of siltstone, which are less than 1-cm in thickness and occur as partings in the medium-bedded limestone. In some places a significant amount of chert is also found in the limestones.

Localized bedding controlled silicification occurs in the upper portion of the limestone unit (OIs) near contact with overlying siltstone (Oss). Hematization, decalcification, and silicification from alteration has also been observed in areas. The unit is exposed in an anticlinal window in the west central portion of the property where the overlying upper plate Siltstone/Phyllite has been eroded away.

Of note is the extensive, often intensely convoluted folding and faulting found in the limestones. This and a scarcity of fossils suggests the potential identification of the unit. At the Northumberland mine the fossiliferous, graphitic, ore bearing Silurian-Devonian Roberts Mountain formation of limestones and dolomites is the top of the autochthonus, or lower plate section. It has been overthrust from the west by the Antler orogeny Roberts Mountain, Mormon, and Prospect Mountain thrusts, respectively in downward sequence. It is underlaid by the upper Ordovician Hanson Creek/Toquima formation dolomites, which also can be mineralized. These are then underlaid by the Zanzibar formation moderately to finely layered limestones and shales/siltstones, which are mineralized at depth. The Zanzibar is also found mineralized in slivers caught in the thrust sheets above the Roberts Mountain formation.

Intensely deformed rocks are typical in the upper plate thrust sheets, and that the limestones exposed are neither graphitic, fossiliferous, and are not dolomitic strongly suggests that the limestones are of the middle Ordovician Zanzibar formation and probably are above the mineralized horizons found at the Northumberland mine.



Figure 7. Altered Ordovician Limestone Unit

c. Interbedded Limestone Quartzite Unit

The third mapped sedimentary lithologic unit is comprised of interbedded limestone and quartzite (Olsq), which is medium-bedded, dull-grey to light brownish-gray in color. The unit locally contains crinoid stem hash within the limestone portions of the unit. The limestone is moderately recrystallized making fossil identification difficult. Quartzite within the unit occurs as lenses and beds to 2 meters in thickness. Quartzite commonly contains milky-quartz veinlets which appear to have "sweated" from the quartzite during metamorphism.

7.a.3.2 Tertiary Sedimentary Rocks

Tertiary sedimentary deposits identified are restricted to Quaternary overburden. The Paleozoic and Tertiary rocks are under a cover of Quaternary pediment gravels in Poker Flats.

a. Quaternary Overburden

Typical basin-fill sedimentary deposits comprise the named unit denominated as Qg. Rocks include fanglomerate (conglomerate derived from alluvial fan deposits), lacustrine sandstone, siltstone, clay, and limestone. Vitric ash and tuffaceous rocks are also included.

Alluvium, Unit Qal, consists of relatively thinly bedded, course-grained, poorly sorted, unconsolidated sand and gravel. Most of the material is locally derived, reflecting bedrock composition in the immediate vicinity and upstream.

7.a.4 Igneous Rocks

7.a.4.1 Volcanic Rocks – Tertiary

The Ziggurat project is located in one of the places most highly affected by titanic volcanism in the geologic history of the continent. No less than a dozen calderas erupted within 40 miles of the project during the mid Tertiary, 20- 35 Ma. Volcanic rocks exposed on the Ziggurat Property are the felsic tuffaceous deposits of the late Oligocene Moores Creek Caldera which disturbed, overlap and cover Paleozoic sediments in the eastern block of the Ziggurat property. The northwest margin of the caldera is thought to be located in the northern part of the project. The following are descriptions of these volcaniclastic units from Boden (1992).

a. Tuff of Moores Creek (Tm)

The tuff of Moores Creek is described as light-tan to grayish, moderately to densely welded, crystal-rich, biotite rhyolitic ash-flow and pumice-lapilli tuff. The unit contains 20-25% crystals of sanidine, quartz, plagioclase and biotite. Phenocryst content and proportions change little with stratigraphic height. Unit is characterized by conspicuous, light colored, porphyritic fiamme as much as 30 cm long locally. The maximum exposed thickness is 900 meters. Weighted mean K-Ar age of the unit is 27.2 +/-0.6 Ma (Boden, 1986).

b. Lithic-rich and Megabreccia Member (Tmb)

This member is described as weak to moderately welded, lithic-rich tuff breccia and coarse collapse breccia. Clasts consist predominately of Paleozoic sedimentary rocks but also include porphyritic volcanic rocks. Some of the clasts are sufficiently large to be mapped separately (see Tslb). The abundance and size of clasts increase toward the margin of the Moores Creek caldera. Near the mouth of Pine Creek the unit contains local exotic megablocks of welded tuff (Boden, 1992).



Figure 8. Lithic-rich and Megabreccia Member (Tmb) Of The Tertiary Moores Creek Tuff

c. Shale and Limestone Breccia (Tslb)

In the vicinity of the Property a northeast trending band of deformed Ordovician sedimentary rock in a matrix of ash-flow tuff was mapped. Boden (1992) defined these rocks as strongly brecciated shale and limestone (and their metamorphosed equivalents) containing local selvages, dikes, and matrix of ash-flow tuff related to either the tuff of Mores Creek (Tm) or to

the megabreccia of Dry Canyon (Tdb). This unit occurs as a disrupted caldera floor or as relatively homolithic lenses of caldera-collapse breccia. The unit occurs in and area of low relief with an exposed thickness of lees that 30 meters (Boden, 1992).

d. Tufficite Dikes (Tt)

Boden (1992) described tufficite dikes as local selvages, dikes, and matrix of ash-flow tuff related to either the tuff of Moores Creek (Tm) or to the megabreccia of Dry Canyon (Tdb). The dikes were not mapped at the scale mapped by Boden (1992). Tufficite dikes and selvages are located within highly deformed Paleozoic rock in the northwest portion of the Ziggurat property. The rocks are fine grained, cream-buff to light-tan with a groundmass comprised of pinkish-orange potassium feldspar, white plagioclase, quartz and very-fine pumice. The "dikes" are 0.2-2.0 meters thick and occupy zones of dilation within highly deformed Paleozoic sedimentary rock.

7.a.4.2 Intrusive Rocks – Tertiary

No intrusive rocks are exposed on the property, however localized calc-silicate alteration was noted by Mexivada indicating the existence of an unrecognized intrusive body located in the subsurface. Calc-silicate alteration was noted in the northern portion of the western Ziggurat claim group indicating a buried intrusive to the north of the claim block. Extensive Jurassic aged granitic intrusives are prevalent at the Northumberland mine and played a key role in preparing channel ways for later, mineralizing fluids.

7.a.5 Structure

Paleozoic sedimentary rocks on the Ziggurat property are highly deformed due to a complex structural history of Paleozoic compressional overthrust events later compounded by Mesozoic intrusions and faulting, and then mid to late Tertiary volcanism related to the nesting of several calderas that each collapsed, including the underlying late Oligocene Moores Creek Caldera (27.2 Ma) and the nearby Northumberland Caldera. This was followed by the dramatic extensional faulting and movements of the Basin and Range epoch from the mid Miocene to the present day.

The field work on the project has defined that the geology of the western portion of the project consists of lower to middle Paleozoic "upper-plate", allochthonous western facies siliciclastic sedimentary rocks. These were deformed in the upper Paleozoic Antler and Sonoma orogenies by compressional overthrust faulting and folding over the middle Paleozoic "lower plate", autochthonous eastern facies carbonate sedimentary rocks.

The late Paleozoic overthrusting orogeny created a large isoclinal fold which crosses the northern half of the western claim block with a hingeline oriented east-northeast and recumbent to the south. This fold was then in turn affected by a later, north-northeasterly trending anticline that parallels that of the ore deposit hosting Northumberland window anticline to the northeast.

The subsequent, younger anticline formed a moderate sized "window" of "lower plate" limestones which has been exposed in the western portion of the Ziggurat project by the erosion of the overlying "upper plate" siltstones. In the north-center of this area, in White Horse Draw it was recently found an exploration target where the younger anticline is well defined. The target has strongly deformed, broken and altered limestones with abundant altered aplite dikes, mineralization and anomalous geochemistry.

The Paleozoic folds are segmented, discontinuous and faulted by high-angled structures related to the Tertiary Moores Creek Caldera and the west-southwesterly Ziggurat fault. The fold is indicated within the limestone unit (OIs) mapped by Mexivada. On the southern, recumbent side of the isoclinal fold there is a mineralized high-angled east-northeast shear. The shear structures cut tufficite dikes emplaced during the collapse of the Moores Creek caldera. Caldera related structures are typically high-angled and oriented roughly northwest to north-northwest.

Late Tertiary Basin and Range Structures feature prominently in the Property's modern geography, providing spectacular views of horst and graben geology. This extensional movement started in the mid Miocene (17 Ma) and continues to this day along prominent north-northeasterly range front normal faults. The Toquima range at the Property has been gently rotated to dip to west, and there the range front fault is buried under valley floor sediments. But just a few a few miles to the south the soaring, massive front of Mt. Jefferson represents a separate block that has been lifted differently.

7.b MINERALIZATION

7.b.1 Property Mineralization

The Round Mountain-Northumberland Trend is an Oligocene to Miocene age structural northnortheasterly zone parallel to the well known Getchell trend of northern Nevada. It hosts multiple, diverse types of precious metal deposits with a combined mineral endowment of over 20 million ounces of gold including Kinross/Barrick's Round Mountain and Gold Hill mines and Newmont's Northumberland Mine.

Surface mapping and rock-chip geochemistry results on the Ziggurat Property indicate two spatially separate mineralized systems located on the western block Ziggurat property, and a third (and potentially forth) type of mineralization on the eastern block of the Property.

On the western block is first there is a base metal (Cu-Zn-Pb) system associated with and contained in milky quartz veining. This mineralizing system appears weak and is probably distal to a porphyry system.

The second system present is the one of greatest potential. It is a Carlin-type Au-Ag system which contains elevated Au, As, Sb and Ba. It occurs along strong structures of several directions and may be focused at the intersection of high angled faults with preferential formational contacts. The outcrop exposures of the Paleozoic formations in the project indicate a location probably higher in the upper plate sequence than the exposures found overlying the mineralization in the Northumberland mine.

The presence of positive exploration indicators in the western portion of the Ziggurat project such as a moderate sized "window" of "lower plate" limestones and the showy alteration and structural disruption of the upper plate phyllites in the north side of the property, has attracted exploration efforts in the past. The limestones have widespread decalcification veining and alteration, and hematization in some limited areas related to faulting.

This year a discovery was made of the north-center Whitehorse Draw target. It demonstrates many of the characteristics of a Carlin type deposit. A well defined anticline paralleling the one at Northumberland with an overthrust contact and window, severely structurally disrupted

limestones, strong decalcification, local silicification, strong sulfide mineralization, abundant and very strongly argillically altered aplite dikes, and anomalous geochemistry are found in this target. Further to the east-southeast (the same controlling trend as at Northumberland) in the same draw gold values from 0.484 to 1.01 ppm Au have been collected from mineralized, altered structures in the upper plate sedimentary rocks.

Recent exploration at the Northumberland Carlin type gold deposit located nearby indicates that the mineralized sedimentary host rocks and geologic setting are similar to those of the Property. The announcement in 2010 of the discovery of a new, adjoining deposit there containing three million ounces of gold is also positive for the exploration potential for the Property.

The third, and potentially fourth types of mineralization found are on the eastern portion of the Property. The area is mostly covered by alluvium but there is exposed epithermal veining with decent precious metal values. The anomalous geochemistry has been found in from a prospect in the eastern portion of the project. A sample gave a + 0.5 ppm Au value from epithermal quartz vein mineralization. As the area is extensively underlaid by the felsic volcanic Moores Creek tuffs, it is possible to have a disseminated, volcanic hosted deposit as a target as well.

a. Quartz-Vein Base Metal Mineralization

Quartz mineralization occurs as milky-white veins and veinlets throughout the western Ziggurat property. Quartz material is typically highly fractured and crushed. Quartz veining does not follow caldera related structures and is highly cataclastic indicating that veins were emplaced prior to deformation associated to the formation of the Moores Creek caldera. The veins commonly contain pyrite, chalcopyrite and trace sphalerite. Secondary mineralization occurs as hematite and copper oxide minerals. The largest vein exposed on the property extends approximately 390 meters along a west-northwest trend. The vein is exposed in isolated outcrops and subcrops within weakly oxidized siltstone which display discordant orientations due to caldera-related faulting. The vein is less than 1.5 meters thick and is comprised of composite "layered" veins. Geochemical rock-chip sampling of the quartz veins indicates elevated silver, copper, zinc and lead.



Figure 9. Whitehorse Target Of Strongly Disrupted And Altered Limestones Cut By Numerous Intensely Altered Tufficite Dikes

b. Carlin-Type Au-Ag Mineralization

Mapping and sampling efforts by Mexivada since 2007 indicate zones of significant structural and bedding controlled "Carlin-type" mineralization on the western Ziggurat property. This mineralization is associated with both east-northeast and northwest trending shear structures along with an east-northeast trending isoclinal fold. Mineralization within shear zone faults and includes coarse to fine grained pyrite (now hematite), veined and open-space crystal fluorite and minor barite and localized zones with scorodite. Pyrite mineralization associated with the shear is pervasive and included within weakly-silicified siltstone adjacent strongly silicified structures. The east-northeast trending shear and subsequent alteration and mineralization events post-date deformation related to both isoclinal folding and Oligocene (27 Ma) Moores Creek caldera collapse structures.

At the nearby Northumberland mine, Oligocene-Miocene age Carlin-type disseminated gold mineralization is found in several preferential horizons in the sedimentary section and in thrust contacts. The high grade gold and silver mineralization is controlled by high angle, northwest-trending faults in the limestones centered on the north-northeasterly Northumberland anticline/window.



Figure 10. Detailed Geology and Alteration Map of Whitehorse Draw Area, Northwest Sector, Ziggurat Project (Redfern, 2011)

7.b.2 Local Alteration

Alteration types on the Property range for weak to intense, and generally show a strong, positive correlatory relationship with structures and formational contacts.

Alteration in the limestones is most distally seen by weak, widespread decalcification calcite veining. Approaching the center of the alteration, the decalcification veining becomes steadily more intense and dolomitic alteration starts to appear. Further in hematization appears, and finally silicification (jasperiodization), leach cavities, and sulfides becomes present.

Moderate calc-silicate alteration of thinly bedded limestones is also located in the northern portion of the western Ziggurat claim block. The calc-silicate altered unit is in fault contact with moderate to densely silicified limestone.



Figure 11. Strong Decalcification Calcite Veining In Limestones

The alteration indicates proximity to a concealed intrusive body, perhaps located to the north of the Ziggurat property.

In the siltstones/phyllites, the most prevalent alteration is the weak phyllitization of the rocks. As the alteration in the phyllites becomes stronger, increased hematitic iron oxidation (red) and mild bleaching (argillization) occurs. At this point leisegang banding of the iron oxides becomes noticeable. Leisegang banding, often called "picture rock", is a good exploration indicator for Carlin type deposits. This then passes to increased jarositic iron oxidation (yellow) and the

phyllites become noticeably more argillically altered and much lighter colored. At the extreme the phyllites are very white from intense argillic alteration with very strong iron oxide contents.



Figure 12. Intensely Argillically Altered And Mineralized Tufficite Dike From The Whitehorse Target

The intruding tufficite dikes are abundant in the core anticlinal zone of the Whitehorse target. The dikes show intense, argillically alteration and strong iron oxide mineralization. The tufficite dikes in the northwest portion of the property are also weakly sericitized. Sericite alteration occurs in the groundmass. Localized zones of intense sericitization accompanied by pyrite mineralization were found in tufficite dikes along east-northeast shear structures that cut the dikes.



Figure 13. Phyllites Showing Argillic Alteration and Liesegang Banding At Ziggurat Wash

8.0 DEPOSIT TYPES

From the available evidence and local deposits found near the Property, it is thought that there are several deposit models of interest considered to have the potential to be present on the Ziggurat project. These mineral deposits types include:

- Sediment-hosted disseminated gold-silver Carlin Type, like at the nearby Northumberland mine
- Epithermal vein gold-silver deposits
- Epithermal volcanic hosted gold-silver deposits
- Intrusive-related porphyry and skarn gold-silver deposits

8.a Carlin Type, Sediment-Hosted Au-Ag Deposits

Carlin-type deposits are characterized by bulk mineable extremely fine-grained disseminated gold, typically hosted in silty carbonates, primarily rimming fine grained arsenian pyrite. Gold occurs evenly distributed throughout host rocks in stratabound concordant zones and in discordant breccias. Host rocks are most commonly thin-bedded silty or argillaceous carbonaceous limestone and dolomite, commonly with carbonaceous shale. Although less productive, non-carbonate siliciclastic and rare meta-volcanic rocks are also host rocks. Felsic plutons and dikes are also mineralized at some deposits. Host rocks to the Nevadan deposits were deposited in shelf-basin transitional environments which are allochthonous in thrust slices that have been overprinted buy Miocene basin and range extension.

Ore mineralogy includes micron-sized native gold, pyrite with arsenian rims, arsenopyrite, stibnite, realgar, orpiment, cinnabar, fluorite, barite and rare thallium minerals. Gangue mineralogy includes fine-grained quartz, barite, clay minerals and late-stage calcite veins. Alteration mineralogy is strongly controlled by local stratigraphic and structural features. Typically there is a central core of strong silicification close to mineralization with silica veins and jasperiod. Peripheral to mineralization there is typically argillic alteration and decarbonization of carbonate rocks ("sanding"). Carbonaceous material is present in some deposits (Schroeter and Poulsen, 1996).

There are three genetic models for Carlin-type of deposits and include, 1) epithermal, 2) distalskarn and 3) deep crustal fluid models.

The epithermal (high level – formed at less than a kilometer in depth) model was once widely accepted since the early 1970's but now is discounted for most deposits. Mineralization was thought to result from shallow Miocene magmatism related to basin and range extension. New discoveries of deep ore bodies, mineralogical and fluid inclusion studies have cast doubt on the epithermal model.

The distal skarn model is currently very popular because many deposits occur with or near porphyritic intrusions, skarns and calc-silicate rocks. In this model carbonate-hosted disseminated gold is thought to be related to collapse of intrusion-centered porphyry-type hydrothermal systems. Examples would include Magee Creek, Bald Mountain, McCoy-Cove,

Battle Mountain, and Cortez Hills. Although compelling for many deposits, this model fails to explain several districts where no related magmatism has yet been observed, i.e. Jerritt Canyon.

The deep-crustal fluid model has been recently proposed to account for inferred deep mixing of different fluids from different reservoirs as demanded by light stable isotopic and fluid inclusion data. Variants of this model imply only indirect links to magmatism, and suggest a simple Paleogene age for the Nevadan deposits and relate them to a unique period of pre-basin and range crustal extension and associated faults that are controlled by pre-existing Paleozoic and Mesozoic structures.

Carlin-type deposits have structurally controlled, higher grade root feeder systems. The Carlintype gold bearing ore solutions were channeled upward throughout the Carlin Trend along major WNW- to NNE-trending fault zones and along sheared and rifted basement rocks, inboard from the North American continental margin, 36-40 Ma. Barrick's Meikle deposit at the northern end of the Carlin Trend is a fault-controlled deposit that contains more than 7,000,000 ounces of gold along a 1 km strike length of the Post Fault system, mostly in Siluro-Devonian lower plate carbonate rocks.

Tectonic brecciation adjacent to steep normal faults is also common. Mineralization controls include a mixture of faults, folds, and favorable stratigraphic horizons. The Carlin type gold deposits also show an association with altered mafic and felsic dikes.

Alteration mineralogy is strongly controlled by local stratigraphic and structural features. Typically there is a central core of strong silicification close to mineralization with silica veins and jasperiod. Peripheral to mineralization there is typically argillic alteration and decarbonization (decalcification-dolomitization) of carbonate rocks ("sanding") often with silica replacement, which can generate collapse breccias from the volume loss. Remobilized carbonaceous material is present in some deposits (Schroeter and Poulsen, 1996). In harder, more siliceous rocks, mineralization consists of jasperoid and veining ranging from millimeter-sized stockwork quartz veinlets to meter-sized vitreous quartz veins.

Regionally in Nevada, Carlin-type gold mineralization is concentrated along northwest to northeast trending, medium- to low-angle, regional, Jurassic-age shear zones, and younger north-northwest-trending low- and high-angle shears.

8.b Porphyry Intrusive Related Precious and Base Metal Deposits

A generic Porphyry Intrusive Related type deposit is modeled after deposits located in several districts with Carlin-type related deposits such as the Bald Mountain, Maggie Creek, McCoy/Cove, Battle Mountain, and Cortez mining districts. This type of deposit is similar and perhaps an end-member of varying Carlin-type deposits which are spatially associated with Mesozoic and Tertiary plutons. In the general model, a hydrothermally mineralized intrusive igneous porphyry system has distinct metals deposited in defined, spatial zones that are controlled by temperature, pressure, and chemical regimes. Within the igneous porphyry system a "porphyry type," large volume, low grade base metal (Cu, Mo, W, Au) deposit is formed. When the hydrothermal system's mineralizing fluids from the porphyry intrusive contact certain surrounding, highly chemically reactive rock formations, such as limestones and dolomites, the resulting metasomatic alterations form skarn deposits, noted for high grade base and precious metal bearing sulfide mineralization bodies. In the general model more distal yet are found Carlin type mesothermal gold deposits and bonanza and disseminated, epithermal Au-Ag deposits.

8.b.1 Skarn Base Metal Mineralization

Exposed in the clastic sediments in the northern portion of the Ziggurat property is evidence of calc-silicate alteration, which is called skarn mineralization. These deposits form at high temperatures and pressures found at the contact between a hot intrusive body and adjoining, usually carbonate rich country rocks. The country rocks minerals are converted into calc-silicate minerals forming rocks such as skarn, hornfels and marble. In the skarn formation zone high sulfide to massive sulfide replacement deposits are commonly found.

Skarn deposits occur as stratabound-stratiform disseminated and high grade polymetallic sulfide replacement deposits within calc-silicate hornfels and coarsely recrystallized limestone. Sulfide mineralization within these deposit types is controlled primarily by contact metasomatism and sulfide replacement of the limestone.

White dolomite and calcite veins and "zebra rock" recrystallization textures are common at the transitional contacts. Spatially, very close to skarn deposits, are found "Carlin-type" gold deposits and jasperoid ore bodies.

8.b.2 Porphyry Cu – Mo – Au - Ag Mineralization

Also associated with intrusive related deposits is when the intrusive itself is economically mineralized. These are called "porphyry deposits" from the Greek word for the prevalent texture of the host rock, which is of medium to large crystals in a fine ground mass. The intrusive rock has mineralized by sulfides in disseminations and webs of narrow stockwork veinlets. These can be some of the largest metal bearing deposits in the world, and are of keen interest in exploration. Several notable mines that have both Carlin and Porphyry type include Battle Mountain, Ruth, and Bingham Canyon.

8.c Epithermal vein Au-Ag deposits

Several of these veins deposits have been mined in the region of the Ziggurat property. These include the original mines at Round Mountain, Northumberland, Gold Hill, and at the Jefferson Canyon, Manhattan, Berlin, Austin, and Kingston districts. They are often with significant base metal content and are found in every rock type. That similar type veins have been found and prospected on the property is encouraging for this target type.

8.d Epithermal volcanic hosted Au-Ag deposits

Associated with epithermal volcanic hosted veins, when the volcanic rocks have the right characteristics of permeability they can host large, low grade disseminated deposits. Nearby is perhaps the largest such deposit, Round Mountain, as well as Gold Hill and Jefferson Canyon. That the Ziggurat property has basically the same volcanic units as the aforementioned deposits have, the presence of epithermal mineralization on the property makes this an exploration possibility.

9.0 EXPLORATION

Exploration activities completed on the Ziggurat project by Spartan include grassroots and generative level prospecting, rock-chip sampling, detailed and regional mapping, ground gravity and magnetic geophysical surveys.

Claims were staked on the Ziggurat Property based on the presence of favorable geologic units, adjacent gold deposits and mineralization, and the potential for favorable structural controls and geologic host formations within the Property.

Since the last technical report by M. Measures in 2008, significant exploration work completed on the Ziggurat property include:

• Evaluation and field confirmation work in 2007 and 2011 on the earlier geochemical programs.

Exploration activities completed on the Ziggurat property to date by Spartan Gold Ltd. Include:

- Geophysical evaluation of the property in February, 2011, including a Gravity Survey (including 136 acquired and historic data points) and a Ground Magnetics survey. The evaluation was designed and supervised by Wright Geophysics Inc., an Elko Nevada based contractor and data was collected by Magee Geophysical Services LLC of Reno, Nevada
- Geological evaluation and interpretation of non-proprietary exploration data.

9.a Survey

No definitive tie-in survey has been completed to date. Claim staking and Geophysical contractors have been using hand held GPS instruments without a tied-in base station. The GPS units have used the NAD 1927 datum.

9.b Geologic Mapping

During the summer of 2005 was completed regional scale mapping and prospecting within and surrounding the present Ziggurat property. In the summer of 2007 was initiated detailed outcrop and structural mapping of the property at a scale of 1" = 200m. The mapping involved outcrop mapping of lithology, alteration and mineralization. Digital orthophoto interpretation of structural lineaments also was competed, and indicated lineaments within the property boundaries were field checked during the summer 2007. In 2011 additional detailed mapping was advanced.

9.c Geochemical Sampling

Concurrent with prospecting and mapping efforts, in the past was collected a total of 109 rockchip and channel samples from within the Ziggurat block. Rock samples were analyzed by ALS Chemex laboratories in Reno, Nevada. Rock-chip and channel sample geochemistry results indicate generally anomalous gold, silver, arsenic, barium, copper, zinc and lead values. Elevated geochemical values from the sample population mainly occur in the western claimblock where mineralized Ordovician sediments are well exposed. Appendix B lists geochemical results for Au, Ag, As, Cu, Pb, Sb and Zn. In 2011 Wright compiled the geochemistry with the 1992 geology by Bowden and the 2011 geophysical interpretations. Gold, arsenic and copper rock chip geochemistry results are presented in Figures 9 and 10. The proportional symbols conform to the explanation shown below.





Figure 14: Rock Chip Au, Interpretation over Topography (Boden, 1992, Wright, 2011)

The three figures show the anomalous values in Au, As, and Cu from the rock sampling. In the west and central areas the three elements have anomalies which are proximal to the three low gravity density alteration features (i.e. hatched circles) and appear to have northwesterly trends. But it also must be taken in account that the samples were mostly collected in the bottoms of

washes which primarily have northwesterly trends. As the rock sampling is expanded throughout the project area more definitive interpretations can be made.

Sample density over the eastern portion of the property is sparse due to a lack of outcrop. However, three gold samples in the vicinity of the interpreted eastern magnetite destructive alteration (i.e. cross-hatched area) returned value in the 0.01 to 0.16 ppm range and show a northerly trend.



Figure 15: Rock Chip As, Interpretation over Topography (Boden, 1992, Wright, 2011)

Figure 11 shows the structures interpreted from the magnetics along with the gold rock chip data over the geology of Boden (1992). It is noted in the geophysics section of this report that structures within the limestones are not mapped well by the magnetics.

The highest gold value from the western part of the claim block contained 1.01 ppm Au sampled from a densely silicified limestone within a mineralized high-angled north-northwest oriented structure. A second sample from the same mineralized structure yielded a result of 0.484 ppm

Au. Both of these samples contain elevated silver with Ag:Au ratios in the order of 5. These samples also contain relatively elevated As and Sb.



Figure 16: Rock Chip Cu, Interpretation over Topography (Boden, 1992, Wright, 2011)

Another strongly anomalous Au value was indicated in the southeast corner of the western claim block along the structural contact between laminated siltstone and medium-bedded limestone. The sample yielded a value of 0.672 ppm Au with 4.54 ppm Ag.

Elevated levels of barium in rock-chip geochemistry results occur throughout the property with 40 samples containing >1000 ppm (0.1%) Ba, and a highest value of 8320 ppm Ba. This is to be expected given the broad scale occurrence of barite in the Northumberland district.

The highest values of Ba at the Ziggurat property are spatially associated with an east-northeast shear zone and isoclinal fold crossing the northern half of the western part of the claim block. Pervasive elevated levels of barium may indicate mineralogical controls at the Ziggurat property are similar to that found at the Northumberland mine. Geochemical values for arsenic also indicate elevated levels locally associated with the east-northeast shear and isoclinal fold with values up to 8930 ppm arsenic. The east-northeast shear also contains elevated antimony with values to 1580 ppm Sb and elevated thallium and mercury.



Figure 17: Au Rock Chips, Magnetic Structure over Geology (Boden, 1992, Wright, 2011)

Elevated values for copper and zinc were detected within a quartz vein located in the northernquarter of the western part of the claim block with two samples approaching 1.5% combined Cu and Zn. Sample #1033 contained 8440 ppm Cu (0.8% Cu) and 6830 ppm Zn (0.68% Zn) while sample #1094 contained 2340 ppm Cu (0.2% Cu) and 10,000 ppm (.98% Zn). These samples were also anomalous in silver, yet contained only low level anomalous gold. One sample from the same vein yielded a value for lead at 683 ppm Pb.

In the eastern Ziggurat block Ordovician sediments are covered by a thin layer (<50m) of relatively non-mineralized tuffaceous volcanoclastic rocks of the Moores Creek caldera.

Only three samples were collected from this eastern claim block, however one sample contained 0.034 ppm gold. This sample was a (1m) select channel-sample along a limonite filled fracture within Moores Creek tuff. The presents of anomalous gold in the tuff suggests the underlying Ordovician sediments may be mineralized and that further examination of concealed mineralization must be considered.

Surface rock-chip and channel geochemistry results indicate two spatially separate mineralizing systems located on the western block of the Ziggurat property. The first is a Cu-Zn +/- Pb

system with mineralization associated with and contained in milky quartz veins. The quartz veins have been highly deformed by structures associated with the formation of the Moores Creek caldera, and thus predate the caldera collapse. The second is a Carlin-style Au-Ag system which contains elevated As, Sb and Ba, and occurs along an east-northeast trending isoclinal fold hinge and shear and in north-northwest high-angled structures. The Au-Ag Carlin-type mineralization occurs in structures which both pre-date and post-date deformation associated with the collapse of the Moores Creek caldera. Quartz-vein base-metal mineralization appears to only occur in structures which pre-date the caldera. The focus of further mineral exploration should concentrate on the Au-Ag mineralized structures, primarily where they intersect.

No soil or other geochemical sampling programs have been completed as of the date of this report.

9.d Geophysical Surveys

Spartan Gold Ltd. has had completed on the Ziggurat property a geophysical evaluation by Gravity survey (including 136 acquired and historic data points) and a Ground Magnetics survey by Wright Geophysics in February, 2011 with the objectives of to delineate structures, lithologies and alteration within both the volcanic and sediment lithologies on the western side of the Toquima Range.

Previously in 2007 the objective was geophysically mapping the margins of a basement outlier in the vicinity of the property. The basement outliner is surrounded by Quaternary alluvium and Tertiary volcanics. Survey dates spanned February 13-18, 2007. Data was reviewed, interpreted and reported by Wright Geophysics (Wright, 2007).

The following is mostly taken from Wright, 2011:

The evaluation was designed and supervised by James Wright of J. L. Wright Geophysics Inc., an Elko Nevada based contractor and data was collected by Magee Geophysical Services LLC out of Reno, Nevada. A total of 136 gravity stations were acquired from February 21 to 23, 2011. The stations were located on a 350 by 350 m grid within the claim blocks, as well as a number of widely spaced reconnaissance stations along surrounding roads. Figure 2 shows the

complete station posting along with the property outline over topography, also included are stations from the earlier 2007 survey. The two data sets were merged for processing.



Figure 18. Gravity Station Locations (Wright, 2011)



Figure 19. Ground Magnetic Survey Lines (Wright, 2011)

2011 Survey Procedure

A ground magnetic survey was conducted during the period of February 18 through 23, 2011. A total of about 140 line kilometers of magnetic data were acquired along 200m spaced north-south lines. Figure 3 shows a station posting over topography. Geometrics Model G858 magnetometers were used for the line surveying and real-time differentially-corrected GPS used for positioning. Measurements of the total magnetic intensity were taken in the continuous mode at two-second intervals along the north-south lines resulting in a station spacing of approximately two meters. A base magnetometer was operated during all periods of data acquisition and recorded readings every two seconds as well.

Of the several geophysical methods available to be used in exploring for Carlin-Type gold deposits, it has been found that Gravity and Magnetics surveys work well and are extensively used in Carlin-Type gold deposit exploration in Nevada. Both of these methods are good at defining major geologic formation changes, basement geology, the presence of intrusives, and fault structures. These methods can be scaled down from planetary to continental to regional to district to property sized areas and in increasing details.

Results of the gravity survey indicate that gravity is dominated by an oval-shaped high that is elongated east-west with modest two milligal amplitude above background. The gravity drops to the southwest into the Big Smokey Valley, as would be expected. Linear gravity gradients bound the gravity high suggesting structural faceting along a number of horst bounding faults. The gravity high corresponds with Ordovician sediments (Osl) mapped by Boden (1992). The gravity indicates the Osl sediments extend to the south of beneath shallow cover for approximately 500 meters beyond the mapped (Osl) unit. Horst bounding structures often serve as conduits for mineralizing fluids. Localization of fluids often takes place at structural intersections. The relationship of the interpreted structures with any anomalous geochemistry should be reviewed (Wright, 2007).

The following is directly taken from Wright, 2011:

INTERPRETATION

The total field magnetic data, presented in Figure 5, exhibit a data range spanning only 250 nT, which indicates the volcanic units to be relatively felsic. Of course, any Paleozoic sediments are essentially non-magnetic. Weak smooth responses across the extreme northwestern portion of the survey are likely produced by magnetic variations within basin fill material exiting the drainage which passes both sides of Mount Ziggurat to the east.



Figure 20: Magnetic Survey Total Field (TF) over Topography (Wright, 2011)

Figure 6 shows the reduced to pole (RTP) magnetics over the geology of Boden (1992). Also shown on the figure are interpreted structures as dashed lines and areas of alteration as white hatched polygons. The three hatched circles are based upon the gravity results to be discussed later. Rocks identified with a blue color and labeled Osl are Ordovician sediments composed primarily of siltstones and limestones. As would be expected, this unit correlates with an area of flat magnetics. The southeastern portion of the survey is typified by more active magnetics associated with rocks mapped as rhyolitic tuffs and megabreccia associated with the Moores Creek caldera. Such lithologies are consistent with the relatively low level magnetic responses noted previously.

Cutting the rock units are a number of northwest and east-west directed structures. One of the east-west structures is quite persistent and extends across the entire survey. Similar large scale east-west structures are noted both to the north and south. The drainage north of Mount Ziggurat and Moores Creek are topographic expressions of these structures. Certainly similar features occur within the Osl, but are not reflected in the magnetics. As well, extensions of the northwest oriented structures into the Osl should also be expected.



Figure 21: RTP Magnetics over Geology with Interpretation (Boden, 1992, Wright, 2011)

An unusual north-south oriented magnetic low cuts the elevated magnetic responses in the survey's southeast portion. The central portion of the low is highlighted with white cross-hatching

in Figure 6. Structural traces also tend to become ill defined in this feature. Such reduction of magnetic responses can be produced by magnetite destructive alteration. The cross cutting nature of the anomaly suggests some form of north-south structural control.

Figure 7 presents the complete Bougeur anomaly (CBA) of the gravity over the topography - CBA is the basic gravity product. A strong gravity low extends along the west side of the survey and is produced by thick, low density basin fill in Big Smoky Valley. Central to the survey is a prominent elliptical gravity high produced by Paleozoic basement rocks.

The residual (RES) gravity, shown in Figure 8, enhances the central gravity high, as well as finer scale features in the gravity. Beneath the residual gravity is the geology of Boden (1992). Interpreted structures, based on the gravity, are depicted with dashed lines. Also shown is an interpreted caldera margin with a heavy hachured line. Finally, a gravity low which parallels the interpreted caldera margin, but shifted to the south, is overlain with a mottled hatching. This gravity low is interpreted as reflecting volcanoclastic sediments (i.e. moat sediments) along the margin of the caldera.



Figure 22: CBA Gravity over Topography (Wright, 2011)

The caldera margin, as interpreted from the gravity, matches reasonably well with that proposed by Boden (1992). As should be the case, the Osl mapped in the central portion of the survey matches the central gravity high very well. The Osl contact is marked with dotted lines. Additional Osl mapped north of the caldera margin also correlates with elevated gravity. Interestingly, Mount Ziggurat falls directly on the interpreted caldera margin.

The gravity and mapped geology suggest collapse and separation along the caldera margin with in-filling of sediments. Separation of the central Osl mass from that to the north occurred along the caldera margin, which would explain the observed distribution of Osl.

Numerous north-south to north-northwest oriented structures are interpreted from the gravity, which could be radial structures related to the caldera development. As such, these should be dilatant and serve as conduits to fluid flow. Three semi-circular gravity lows, designated with white hatched circles, are bounded by structures. The lows are produced by low density material bounded by the structures. Decalcification of limestone is one possible cause for such reduction in density.



Figure 23: RES Gravity over Geology with Interpretation (Boden, 1992, Wright, 2011)

A number of other features, such as local increases in overburden thickness, can produce such anomalies. However, close association with structures is considered a favorable attribute, the structures providing conduits for the decalcifying fluids.

Conclusions And Recommendations

The gravity and magnetic results define a caldera margin with the property located immediately within the caldera. An interior block of Paleozoic sediments (Osl) is separated from the main bedrock mass to the north by the caldera margin and intervening moat sediments. Both the Osl and volcanic units within the caldera are cut by northwest and east-west oriented structures. Alteration of two types (i.e. magnetite destructive and decalcification) is recognized and demonstrated to have associated anomalous rock chip geochemistry. Furthermore, the anomalous geochemistry appears to be structurally controlled by several of the interpreted structures.

Ground examination of the areas of interpreted alteration is strongly recommended, including soil geochemical sampling. If results are encouraging, then an induced polarization (IP) survey should be undertaken to further delineate the alteration and any possible sulfide distributions in sufficient detail as to permit drill testing.

10.0 DRILLING

Spartan has not conducted any exploration drilling on the Poker Flats Property. Historical drilling has been outlined in section 8.2, "Previous Work". No drill data from historical drilling was available to Spartan at the time of this report.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

Sample information for the samples collected by the various companies working on the Ziggurat property in the three decades previous to Spartan Gold Ltd. besides that of Mexivada Mining, Inc. is not available.

11.a Sampling Method and Approach

The 160 rock-chip samples collected from the Ziggurat property during the course of geological mapping and prospecting were select, characterization samples intended to relate geochemical

factors to observed geological features and to identify target areas of anomalous values for exploration focus and potential future drilling. They were not intended, nor should they be used, to imply anything regarding contained, defined mineral resources. Their use is in establishing the potential for the existence of mineral resources or the lack of therewith. All of the sampling work is intended to aid in understanding the geological and geochemical framework of the project and further work needs to be completed.

Sample methodologies include outcrop composite rock-chip, channel, subcrop composite grab, and select and composite float samples. The variety in sample type is a reflection of the variance in what type of outcrop exposure is presented in the field. The samples are generally collected while geologic mapping is done. Coordinates of the sample location are taken from a GPS instrument and notes describing the sample are written to be later inputted into the project database. Generally sample sizes would range in weight from 1.5 to 5 kg.

11.b Sample Preparation, Analysis and Security (QA/QC)

Rock-chip samples collected by Mexivada and Spartan were submitted to the Reno and Elko offices of ALS Chemex where the facility receives and prepares samples for analysis. At that point the assay lab takes responsibility for the security and quality of the samples with their internal procedures and QAQC programs. Samples collected by the author were maintained in locked storage until delivered to ALS Chemex. Standard sample preparation for rock samples involves logging the sample into the laboratory sample tracking system, then drying, crushing and pulverizing the entire sample is completed so that no greater than 80% passes a 75-micron screen. Analyses were performed by ALS Chemex laboratories in Reno, Nevada USA. Gold was analyzed with fire-assay pre-concentration followed by dissolution of the resulting metallic bead in an aqua regia solution and final analysis by atomic absorption spectrophotometry (Chemex code Au-AA24). Trace elements were determined by four acid "near total" digestion (Chemex code ME-MS61).

Preparation and analytical methods employed by ALS Chemex, MEG, and IPL are deemed by the writer to conform to reasonable industry standard data verification controls. The writer is not aware of any sampling factors that could have affected the accuracy or reliability of sampling results.

12.0 DATA VERIFICATION

12.a Data verification procedures applied by the qualified person

The author carried out land status checks and two field examinations of the Property. The author also collected field samples to confirm anomalous geochemical results. The author did discuss the sample and survey work with Richard Redfern. The author did complete a review of the few existing assay certificates and field reports.

ALS Chemex sample preparation and analytical methods are deemed by the author to conform to reasonable data verification standards. The project has not become advanced enough to warrant a specific QAQC program other than what the assay lab does in-house.

12.b Limitations on or failure to conduct such verification, and the reasons for any such limitations or failure

Drill sample pulps and splits were unavailable for check assaying.

12.c Opinion on the adequacy of the data for the purposes used in the technical report

The author did discuss the sample and survey work with Richard Redfern, who carried out geochemical surveys on and adjacent to the property. The author has worked extensively in the region of the property and has been on the property in the past. The author did a review of the Redfern assay certificates. ALS Chemex sample preparation and analytical methods are deemed by the author to conform to reasonable data verification standards. The project has not become advanced enough to warrant a specific QA/QC program other than what the assay lab does in-house. The work of the geophysicist James Wright is well known in the Nevada mining industry and is considered to be of the highest quality.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

This section is not applicable for this property.

14.0 MINERAL RESOURCE ESTIMATES

This section is not applicable for this property.

15.0 MINERAL RESERVE ESTIMATES

This section is not applicable for this property.

16.0 MINING METHODS

This section is not applicable for this property.

17.0 RECOVERY METHODS

This section is not applicable for this property.

18.0 PROJECT INFRASTRUCTURE

This section is not applicable for this property.

19.0 MARKET STUDIES AND CONTRACTS

This section is not applicable for this property.

20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.a Environmental Studies

The project is located in a region that is considered to have a delicate environment yet also one in which sensible precautions will prevent any major damage to the environment. Present regulations will require completion of archaeological and biological surveys prior to filing the permits needed in order to initiate any major disturbance or drilling activities.

No environmental liabilities are known on the Property. Historic exploration disturbances predate the involvement of Spartan Gold Ltd., and no responsibility is attributable to Spartan.

20.b Permits

Permitting is detailed in section 4.g.

In the past the firms exploring the Ziggurat Property have successfully completed exploration drilling programs to the satisfaction of the various state and federal regulatory agencies. Most of the firms actively exploring in the region are knowledgeable of the regulations and have not encountered great difficulty in complying with the government authorities. The project permitting and regulatory process is well established by both federal and state statutes.

It is important to note that permits are required for all exploration or mining activities that produce significant surface disturbance.

Reclamation bonds are also required prior to any projects involving drilling or surface disturbance. Once environmental surveys are completed (section 20.1 above), Spartan will file with the BLM and the U.S. Forest Service to receive the permitting needed to create surface disturbances and commence drilling. The first level of disturbance is less than 5 acres. Once that limit is passed it will be necessary to file a plan of operation which requires more extensive environmental surveys, precautions, remediation commitments and bondings.

Permitting for less than five acres of exploration disturbance on the unpatented mining claims requires a Notice Level form submitted to the BLM and U.S. Forest Service . The form details the disturbance and plans for the reclamation of the disturbance. Acknowledgement by the BLM and U.S. Forest Service of the Notice Level form and bonding for the estimated cost of reclamation is required prior to conducting any exploration disturbance. Federal regulations require the acknowledgement of an exploration notice filing within 15 days of receipt by the BLM and U.S. Forest Service.

Permitting for more than five acres of exploration disturbance on the unpatented mining claims requires a Plan of Operations ("POO") submitted to the BLM and U.S. Forest Service. The POO is a more detailed document than the Notice, and requires more detailed descriptions of the anticipated disturbance and its impact on the area of exploration; thus more time is required to process a POO.

Disturbance on private ground, including patented lode mining claims, does not require any permitting. If the cumulative disturbance exceeds five acres, permitting and bonding is required with the State of Nevada using a process similar to the BLM and U.S. Forest Service Notice Level process. The completion of the State process is required at the end of the year in which the disturbance is completed.

No permits have been applied for or submitted.

20.c Social or Community Impact

No social impact studies have been generated as of yet due to the property being in its early exploration stages. There are no negative impacts anticipated with the property.

21.0 CAPITAL AND OPERATING COSTS

This section is not applicable for this property.

22.0 ECONOMIC ANALYSIS

This section is not applicable for this property.

23.0 ADJACENT PROPERTIES

The Northumberland gold deposit is a good analog of potential for sediment-hosted mineralization at the Ziggurat property. The Northumberland deposit is located approximately 15 kilometers (9.3 miles) northeast of the Property. Other adjacent properties include the Round Mountain and Gold Hill deposits located approximately 23.1 kilometers and 15.6 kilometers respectively, south-southwest of the Ziggurat property. The Round Mountain and Gold Hill deposits are in alignment with the Round Mountain-Northumberland Trend, yet are volcanic hosted Au-Au deposits.

23.a Northumberland Deposit

Most of the following is taken from a technical report written for Fronteer Development Group Incorporated titled, "Technical Report on the Northumberland Project, Nye County, Nevada, USA: Resource Update 2008", and authored by Christopher Lee, (P. Geo) and Jim Ashton, (P. Eng).

The Northumberland mineralization occurs as stacked, sediment-hosted, finely disseminated, Carlin-type gold-silver deposits. Intrusive rocks also host significant mineralization. This deposit type and overall geologic setting of mineralization are quite similar to the Goldstrike deposit of the northern Carlin Trend. The gold-silver mineralization at Northumberland occurs in a cluster of eight more-or-less spatially distinct deposits that form an arcuate belt approximately 2.6 kilometers (1.6 miles) long in an east-west direction with a width of 0.48 kilometers (0.3 miles). The deposits are generally stratiform and follow three low-angle tectono-stratigraphic host horizons near the crest and within the west limb of the Northumberland anticline. The host more are structural discontinuities that include the intersection zone of the Prospect and Mormon thrusts and two bedding-plane faults.

The overall geometry of the deposits and the higher-grade zones within the deposits appears to be locally influenced by east-trending low-angled structures in the area of the crest of the anticline.

Gold occurs as micron to sub-micron sized particles that are intimately associated with sulfides. The gold is disseminated primarily within sedimentary units, although intrusive rocks host a significant portion of the mineralization. Silver occurs in a complex assemblage of copperantimony sulfides and arsenic sulfosalts. The total sulfide content is less than five percent; pyrite, arsenopyrite and marcasite are the most abundant species present. The mineralization is associated with both silicification and decalcification of carbonate hosts, and quartz-illite-pyrite alteration of igneous hosts.

More details of the Northumberland mine history along with amounts of produced ounces of gold and silver can be found in section 6.1, "Area History" of this report.

23.b Round Mountain Deposit

The Round Mountain deposit is located in central Nevada on the western edge of the Toquima Range approximately 23 kilometers south-southwest of the Ziggurat property. As of January 2003, combined proven and probable reserves were reported as 192.1 million tons grading 0.020 opt gold (using lower cutoffs of 0.006 opt for oxide ore and 0.010 opt for sulfide ore) (Fenne et all, 2003). Although silver is a byproduct, it is not modeled or projected as part of the
proven and probable reserve. Reserve calculations were supervised by Frank K. Fenne, RMGC Chief Geologist, a Professional Geologist registered with the Board of Registration for Professional Geologists for the State of Idaho, and a "qualified person" as described in NI 43-101.

The deposit is an example of a Tertiary age, low sulfidation, epithermal, volcanic hosted, hot-springs type, gold-silver system, and is located along the margin of a buried volcanic caldera. Intracaldera collapse features and sympathetic faulting in basement rocks provided major conduits allowing mineralized hydrothermal fluids to deposit gold and silver along a west-northwesterly trend within volcanic units. Minor mineralization occurs in Paleozoic rocks along the caldera margin and is generally associated with narrow northwest trending structures (Fenne et al, 2003).

The tuff of Round Mountain consists of an upper and a lower member. The lower member, overlying basement rocks, is moderately- to densely-welded ash-flow tuff. The upper tuff member consists of three subunits: the lower is poorly welded; the middle is densely welded; and the upper is moderately welded. Mineralization occurs primarily within the poorly-welded tuff and is disseminated. Densely-welded tuff shows fracture-controlled mineralization. Moderately-welded tuff shows both disseminated and fracture-controlled mineralization (Kinross website, October, 2008).

The restricted extent of alteration and generally low salinity of hydrothermal fluids indicate a smaller heat source than the magma body responsible for forming the original caldera. Henry et al (1996) suggest that the hydrothermal system responsible for mineralization at Round Mountain was driven by an as of now undetected buried intrusion.

23.c Gold Hill Deposit

Located approximately 3 kilometers north-northeast of the Round Mountain mine along the Northumberland-Round Mountain trend is the Gold Hill Deposit. The Gold hill deposit is in development stage and planned to be an open pit gold operation run by Kinross with an estimated production start-up date of 2011. Reserve estimates derived on 12/31/05 are in the order of 0.75 million ounces of gold. Historically, about 41,000 ounces of gold and 185,000 ounces of silver were produced from the Gold Hill mine (Kinross website, October, 2008).

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Gold Hill is an epithermal, low-sulfidation, volcanic-hosted, hot-springs type, gold-silver deposit. Gold mineralization occurs as electrum. Approximate content at Gold Hill is 50% gold and 50% silver. Silver also occurs as native silver and in a variety of minerals including acanthite, stephanite, and polybasite (Harvey, 2005). The host rock at Gold Hill includes densely welded rhyolite tuff (Gold Hill tuff) of the Mount Jefferson Caldera. The Mount Jefferson tuff overlies the Moores Creek tuff. These Tertiary volcanic rocks overlie a volcanic mega-breccia that, in turn, overlies Paleozoic meta-sediments.

The Gold Hill deposit is hosted by Oligocene age (26 Ma) Gold Hill tuff. This host rock is unconformably overlain by up to 100 meters (300 feet) of laminated sinter interlayered with silicified volcaniclastic sediment and chalcedonized pyritic mud. More than 140 meters (460 feet) of post-mineral rhyolitic pumice and lithic tuff unconformably overlies the sinter. Alluvium covers nearly the entire deposit. A flow-banded rhyolite body lies beneath most of the deposit at a depth of more than 220 meters (720 feet).

The principal feature in the area is the Gold Hill vein and its sub-parallel veins. These veins all strike N75°W and dip variably and steeply to the south near the surface, but dip back to the north at depth. These veins are banded quartz, but can also be composed of crushed quartz and rhyolite. Veins branch and coalesce, and where two periods of veining intersect, higher-grade pods generally exist. The entire zone is up to 150 meters (500 ft) wide and is 900 meters (3,000 ft) long, and is open to the west. Range front faults have cut the vein system, forming downdropped blocks to the west. The top of the system is exposed to the east; and is covered by alluvium to the west. The hydrothermal center of mineralization is interpreted to lie to the west of Gold Hill, and may be associated with a caldera unrecognized beneath valley fill.

23.d Jefferson Canyon

The Jefferson Canyon silver-gold mining district is controlled by Mexivada Mining Inc and a small block of claims of the Round Mountain Gold Company (Barrick/Kinross). It is located 50 miles north-northwest of Tonopah and five miles east-northeast of Round Mountain, six miles southeast of Gold Hill, on the western side of the Toquima Range.

Elevations on the property range between 7,160 feet and 8,600 feet.

The Jefferson Canyon mining district, one of Nevada's early mining camps, was mined for silver and gold beginning in the 1870's. By the mid 1870s, eight underground mines were operating along the west-northwest trending, epithermal, low sulfidation quartz-adularia Prussian vein system. Minerals found in the veins include pyrite, chalcopyrite, native gold and silver, electrum, silver sulfides and sulfosalts, stibnite, galena, and sphalerite. These mines produced over ten thousand tons of high-grade gold-silver ores, yielding approximately between 400,000 to 800,000 ounces of silver and some gold.

In the early 1980s drilling by Copper Range Exploration for the Round Mountain Joint Venture delineated two, low grade mineralized zones, "Pit A" and "Pit B". The "Pit A" zone was reported to contain 10.5 million tons of mineralization grading 0.007 opt Au and 1.48 opt Ag (0.24 g/T Au and 50.7 g/T Ag). The "Pit B" Zone was reported to contain 3.7 million tons of mineralization grading 0.02 opt Au and 0.13 opt Ag (0.69 g/T Au and 4.46 g/T Ag). Gold values as high as 0.85 opt Au are present in the "Pit B" area at Jefferson, along with high silver values to in excess of 40 opt Ag. The gold grade appears to improve eastward from the Prussian vein workings.

These drill-indicated bodies of silver-gold mineralization in the "Pit A" and "Pit B" target areas at Jefferson were defined and quantified before the advent of National Instrument 43-101.

The project was subsequently explored by drilling by Echo Bay for the Round Mountain Joint Venture in the mid to late 1980's.

The local geology consists of thrust-deformed, lightly metamorphosed Paleozoic sedimentary rocks cut by Cretaceous, Eocene (Carlin-age) and younger Tertiary igneous intrusions, and later buried by massive ash-flow tuffs of mid-Tertiary ages. Many of the tuffs are the same as at nearby Round Mountain, Gold Hill, and at Ziggurat. These volcanic tuffs were deposited during the creation of the several calderas in the region. The project is cut by the west-northwest trending Jefferson Canyon fault. It is thought to mark the southern margin of the Mt. Jefferson calderas and to be a major, crustal bounding block fault and regional control on gold-silver mineralization.

The mineralization of the project was controlled by the Jefferson Canyon fault. There is evidence that the sedimentary rocks have Carlin-type and skarn mineralization as well as the epithermal vein and disseminated mineralization which also affected the volcanic and intrusive units.

24.0 Other Relevant Data and Information

To the best of the authors' knowledge, there is no other relevant data pertaining to the Poker Flats Property that is not covered in this report.

25.0 Interpretation and Conclusions

The Ziggurat Property of Spartan Gold Ltd. is situated along the Round Mountain-Northumberland Trend in northern Nye County. The Round Mountain-Northumberland Trend is an Oligocene to Miocene age structural zone which hosts multiple, diverse types of precious metal deposits with a combined mineral endowment of over 20 million ounces of gold including Kinross/Barrick's Epithermal vein and disseminated-type Round Mountain and Gold Hill gold mines and Newmont's Carlin-type Northumberland gold mine.

Past exploration on the Property has focused on the window of altered and structurally disrupted limestones and overlying phyllites on the western block. The similarities in the geology with that of nearby Northumberland and other Carlin-type deposits are significant. But this year the discovery of the Whitehorse Draw target has upped the correlation.

The Whitehorse Draw target has geology that mirrors that at Northumberland. It has a well defined north-northeasterly anticline paralleling the one at Northumberland with an overthrust contact and window, severely structurally disrupted limestones, strong decalcification, local silicification, strong sulfide mineralization, abundant and very strongly argillically altered, intrusive aplitic tufficite dikes, and anomalous geochemistry. It is traversed by a structural zone that also parallels the controlling trend at Northumberland with the same manner of juxtaposition. Further to the southeast along the structure outcrop gold values from 0.484 to 1.01 ppm Au have been collected.

The outcrop exposures of the Paleozoic formations in the project indicate a location probably higher in the upper plate sequence than the exposures found hosting the mineralization in the Northumberland mine. The overthrust exposed at the Whitehorse Draw target may be the Roberts Mountain Thrust, which at Northumberland can be mineralized but it is above the main gold mineralization zones and higher than the other, imbricate thrusts found underneath it. The Roberts Mountain Thrust is where the Vinnini formation clastic siltstones, shales and cherts are

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overthrust upon the Zanzibar platey limestones. The sedimentary rocks on the Property appear to match this, which means the main exploration target horizons are potentially 200 to 1000 meters at depth below the surface.

The gravity studies made in 2011 show the Property has underneath it a gravity high, which are often associated with Carlin-type. Gravity highs are often caused by igneous intrusives. Intrusive bodies are often closely associated with Carlin-type deposits and at Northumberland the spatial relationship is very strong. The geophysical studies also show a strong west-northwest fabric trending through the Property and a potential correlation with geochemical anomalies.

Recent exploration at the Northumberland Carlin type gold deposit located nearby indicates that the mineralized sedimentary host rocks and geologic setting are similar to those of the Property. The announcement in 2010 of the discovery of a new, adjoining deposit there containing three million ounces of gold is also positive for the exploration potential for the Property.

The potential for epithermal types of mineralization is found on the eastern portion of the Property. The area is mostly covered by alluvium but there is exposed epithermal veining with decent precious metal values. A sample gave a + 0.5 ppm Au value from epithermal quartz vein mineralization. As the area is extensively underlaid by the felsic volcanic Moores Creek tuffs, it is possible to have a disseminated, volcanic hosted deposit as a target as well.

The property has extensive alluvial cover which has limited exploration in the past. The adjoining deposits are good analogs of the potential sediment and volcanic hosted mineralization that could be encountered on the property. The Property needs further exploration, especially the testing of the Whitehorse Draw Target at depth.

26.0 Recommendations

It is recommended that the next exploration stages on the Ziggurat Property should be to continue to advance on the current work. The geophysics program should now advance to IP/Resistivity surveys to find sulfide mineralization and silicification at depth. Geochemical surveys should more extensively sample existing outcrops with the idea of using trace element zonation for targeting. Concurrently small hand samples should be collected for hyperspectral analysis to find alteration zoning. Additionally Soil Gas, Sage Brush, and Soil surveys should be

made over the entire property. The lines should be with line spacing at 500' centers. Sage samples should be collected at 200' intervals. Infill work should be conducted after anomalies are identified, preferably at 50' by 100' centers.

It is recommended that the property continue be geologically mapped in moderate detail with an eye on alterations, mineralized structures, lithologic unit identification and stratigraphy. All the neighboring deposits and prospects should be visited and studied if possible to develop an understanding of lithologies, mineralization, and alterations. From such a visit local geology and mineralization model can be made in preparation for anticipated future drilling. Another task, but no less important, is the creation of satellite imagery and remote sensing modeling for identifying areas of alteration and the structural regime of the property and district.

All of the above is in order to more effectively target drilling on the property. Drilling should be done by diamond drilling methods in order to allow proper lithologic unit, structure and alteration identifications. It is key to a successful exploration program on the property to know where one is located relative to potential gold mineralization zones and formations. Lastly but most importantly, the Whitehorse Draw Target on the Ziggurat property of Spartan Gold Ltd. should be drilled in the center of the junction between the anticline and the west-northwesterly structure to at least 200 meters depth into the Hanson Creek/Toquima formation dolomites in the lower plate.

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27.a GLOSSARY AND CONVERSION FACTORS

Glossary

Allochthon	A body of rock that has been transported to its present position, usually over a considerable distance, displacement may be due to lateral thrusting and over folding or by gravity gliding.
Autochthon	A succession of rock beds that have been moved comparatively little from their original site of formation, although they may be folded and faulted extensively.
Alluvium	Relatively recent stream deposits comprised of clastic and detrital materials transported by a stream or river and deposited as the river floodplain.
Anomaly	A geochemical or geophysical character which deviates from regularity.
Alteration	Any change in the mineralogical composition of a rock that is brought about by physical or chemical means.
Argillic	Pertaining to clay or clay minerals and clay alteration.
Autochthon	Applied to material that was formed indigenous to its present position.
Breccia	A rock composed of highly angular fragments.
Epithermal Deposit	Shallow low-temperature hydrothermal mineralization.
Felsic	A term applied to light-colored igneous minerals and igneous rocks rich in quartz, feldspar, feldspathoids, muscovite and corundum.
Gangue	That portion of an ore deposit that is of no commercial value but occurs as accessory minerals such as quartz, calcite, fluorite, K-feldspar, sericite and clays.
Graben	A down thrown, linear, crustal block bordered lengthwise by normal faults.
Horst	Up thrown crustal block lying between two steep-angled faults.
Hydrothermal	Heated or hot aqueous-rich solutions and the rocks, ore deposits, and alteration products produced by them.
Normal Fault	A high angle (>50-degrees), dip-slip fault on which displacement of the hanging wall is downwards relative to the foot wall.
Orogeny	Mountain building, particularly by folding and thrusting.

Phenocrysts	Relatively large and often well-formed crystals set in a finer groundmass within igneous rocks.
Pyroclastic	Volcanic materials explosively or aerially ejected from a volcanic vent.
Reverse/Thrust Fault	A dip-slip fault in which the relative displacement of the hanging wall is upwards. A thrust is a low-angled reverse fault.
Skarn	Derived from limestone and dolomite by the addition of silica, iron, magnesium and aluminum to form a suite of lime-bearing silicate minerals.
Stock	Igneous intrusion approximately circular in plan that has steep contacts with the country rock and a surface area of 20 sq. kilometers or less.
Stockwork	A rock mass or mineral deposit formed by networks of small, irregular veins so closely space that it may be mined as a unit.
Tectonic	Pertaining to rock structures and forms resulting from deformation of the earth's crust and its consequent structural effects.

CONVERSION FACTORS

To Convert From	То	Multiply By
Feet	Meters	0.3048
Meters	Feet	3.2808
Miles	Kilometers (kilometers)	1.8520
Kilometers	Miles (statute)	0.6214
Acres	Hectare (ha) or sq. Hectameter	0.4047
Hectares	Acres	2.471
Grams	Ounces (Troy)	0.03215
Grams/Tonnes	Ounces (Troy)/Short Ton	0.02917
Tonnes (metric)	Pounds	2205
Tonnes (metric)	Short Tons	1.1023

27.b CERTIFICATE OF AUTHOR

Allen David V. Heyl, B.Sc., C.P.G. PO BOX 4054, Evergreen, Colorado, USA 80437 Tel: (1-720)544-1419, <u>Email: adheyl@yahoo.com</u>

I, Allen David V. Heyl, do hereby certify that:

- 1 I graduated with a B.Sc. degree in Geology from Ft. Lewis College, Durango, Colorado in 1982.
- I am a member in good standing with the American Institute of Professional Geologists and the Society of Economic Geologists. I am a Certified Professional Geologist (C.P.G. # 11277) with the American Institute of Professional Geologists.
- 3. I have worked as a professional exploration geologist for a total of 27 years in the Americas.
- 4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101), and relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- 5. I am responsible for the preparation of the technical report titled, "Technical Report on the Ziggurat Gold Project, Nye County, Nevada, USA", dated December 28th, 2011. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 6 I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading. This report is based on geological assessment reports, raw assay data, personal interviews, field work and

published and unpublished reports researched by me/or provided to me by Spartan Gold Limited. I have visited the property personally.

- 7 I am independent of the issuer applying all tests in section 1.5 of the National Instrument 43-101.
- 8 I consent to the filing of the Technical Report with any stock exchange or other regulatory authority and any publication, including electronic publication, in the company public files on their websites accessible to the public, of the Technical Report.

Date:

This report, "Technical report on the Ziggurat Gold Project, Nye County, Nevada, USA" was written by Allen David V. Heyl, B.Sc., C.P.G. and dated in Evergreen, Colorado this twenty-eighth day of December, 2011.

Signature of Qualified Person (Muthor)



APPENDIX A Table 2. Claim Information

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG No.51	27-Sep-08	6-Oct-08	716760	6-Oct-08	997965	NE	14	12N	44E
ZIGG No.53	27-Sep-08	6-Oct-08	716762	6-Oct-08	997967	NE	14	12N	44E
ZIGG No.54	27-Sep-08	6-Oct-08	716763	6-Oct-08	997968	NE,SE	14	12N	44E
ZIGG No.55	27-Sep-08	6-Oct-08	716764	6-Oct-08	997969	NE	14	12N	44E
ZIGG No.56	27-Sep-08	6-Oct-08	716765	6-Oct-08	997970	NE,SE	14	12N	44E
ZIGG No.77	27-Sep-08	6-Oct-08	716770	6-Oct-08	997974	SE,NE	11,14	12N	44E
ZIGG No.78	27-Sep-08	6-Oct-08	716771	6-Oct-08	997975	SE,NE	11,14	12N	44E
ZIGG No.79	27-Sep-08	6-Oct-08	716772	6-Oct-08	997976	SE,NE	11,14	12N	44E
GJ No. 182	27-Sep-08	6-Oct-08	716784	6-Oct-08	997988	NW,NE	13,14	12N	44E
GJ No. 183	27-Sep-08	6-Oct-08	716785	6-Oct-08	997989	NW,SW,NE,SE	13,14	12N	44E
GJ No. 184	27-Sep-08	6-Oct-08	716786	6-Oct-08	997990	NW	13	12N	44E
GJ No. 185	27-Sep-08	6-Oct-08	716787	6-Oct-08	997991	NW,SW	13	12N	44E
GJ No. 186	27-Sep-08	6-Oct-08	716788	6-Oct-08	997992	NW	13	12N	44E
GJ No. 187	27-Sep-08	6-Oct-08	716789	6-Oct-08	997993	NW,SW	13	12N	44E
GJ No. 188	21-Nov-10	9-Dec-10	756255	10-Dec-10	1032514	NW	13	12N	44E
GJ No. 189	21-Nov-10	9-Dec-10	756256	10-Dec-10	1032515	NW,SW	13	12N	44E
GJ No. 190	21-Nov-10	9-Dec-10	756257	10-Dec-10	1032516	NW,NE	13	12N	44E
GJ No. 191	21-Nov-10	9-Dec-10	756258	10-Dec-10	1032517	NE,SE,NW,SW	13	12N	44E
GJ No. 192	21-Nov-10	9-Dec-10	756259	10-Dec-10	1032518	NE	13	12N	44E
GJ No. 193	21-Nov-10	9-Dec-10	756260	10-Dec-10	1032519	NE,SE	13	12N	44E
GJ No. 194	21-Nov-10	9-Dec-10	756261	10-Dec-10	1032520	NE	13	12N	44E
GJ No. 195	21-Nov-10	9-Dec-10	756262	10-Dec-10	1032521	NE,SE	13	12N	44E
GJ No. 196	21-Nov-10	9-Dec-10	756263	10-Dec-10	1032522	NE	13	12N	44E
GJ No. 197	21-Nov-10	9-Dec-10	756264	10-Dec-10	1032523	NE,SE	13	12N	44E
GJ No. 198	21-Nov-10	9-Dec-10	756265	10-Dec-10	1032524	NE	13	12N	44E
GJ No. 199	21-Nov-10	9-Dec-10	756266	10-Dec-10	1032525	NE,SE	13	12N	44E
GJ No. 230	27-Sep-08	6-Oct-08	716791	6-Oct-08	997995	SE,SW,NW,NE	11,12,13,14	12N	44E
GJ No. 231	27-Sep-08	6-Oct-08	716792	6-Oct-08	997996	SW,NW	12,13	12N	44E
GJ No. 232	27-Sep-08	6-Oct-08	716793	6-Oct-08	997997	SW,NW	12,13	12N	44E
GJ No. 233	21-Nov-10	9-Dec-10	756267	10-Dec-10	1032526	SW,NW	12,13	12N	44E
GJ No. 234	21-Nov-10	9-Dec-10	756268	10-Dec-10	1032527	SE,SW,NW,NE	12,13	12N	44E
GJ No. 235	21-Nov-10	9-Dec-10	756269	10-Dec-10	1032528	SE,NE	12,13	12N	44E
GJ No. 236	21-Nov-10	9-Dec-10	756270	10-Dec-10	1032529	SE,NE	12,13	12N	44E
GJ No. 237	21-Nov-10	9-Dec-10	756271	10-Dec-10	1032530	SE,NE	12,13	12N	44E
GJ No. 238	21-Nov-10	9-Dec-10	756272	10-Dec-10	1032531	SE,NE	12,13	12N	44E

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG No.01	21-Nov-10	9-Dec-10	756273	10-Dec-10	1032532	SE,SW	13	12N	44E
ZIGG No.02	21-Nov-10	9-Dec-10	756274	10-Dec-10	1032533	SE,SW,NW,NE	13,24	12N	44E
ZIGG No.03	21-Nov-10	9-Dec-10	756275	10-Dec-10	1032534	SE	13	12N	44E
ZIGG No.04	21-Nov-10	9-Dec-10	756276	10-Dec-10	1032535	SE,NE	13,24	12N	44E
ZIGG No.05	21-Nov-10	9-Dec-10	756277	10-Dec-10	1032536	SE	13	12N	44E
ZIGG No.06	21-Nov-10	9-Dec-10	756278	10-Dec-10	1032537	SE,NE	13,24	12N	44E
ZIGG No.07	21-Nov-10	9-Dec-10	756279	10-Dec-10	1032538	SE	13	12N	44E
ZIGG No.08	21-Nov-10	9-Dec-10	756280	10-Dec-10	1032539	SE,NE	13,24	12N	44E
ZIGG No.09	21-Nov-10	9-Dec-10	756281	10-Dec-10	1032540	SE	13	12N	44E
ZIGG No.10	21-Nov-10	9-Dec-10	756282	10-Dec-10	1032541	SE,NE	13,24	12N	44E
ZIGG No.63	21-Nov-10	9-Dec-10	756283	10-Dec-10	1032542				
ZIGG No.64	21-Nov-10	9-Dec-10	756284	10-Dec-10	1032543				
ZIGG No.65	21-Nov-10	9-Dec-10	756285	10-Dec-10	1032544				
ZIGG No.66	21-Nov-10	9-Dec-10	756286	10-Dec-10	1032545				
ZIGG No.67	21-Nov-10	9-Dec-10	756287	10-Dec-10	1032546	SW,SE	13,14	12N	44E
ZIGG No.68	21-Nov-10	9-Dec-10	756288	10-Dec-10	1032547	SW,SE,NE,NW	13,14,23,24	12N	44E
ZIGG No.69	21-Nov-10	9-Dec-10	756289	10-Dec-10	1032548	SW	13	12N	44E
ZIGG No.70	21-Nov-10	9-Dec-10	756290	10-Dec-10	1032549	SW,NW	13,24	12N	44E
ZIGG No.71	21-Nov-10	9-Dec-10	756291	10-Dec-10	1032550	SW	13	12N	44E
ZIGG No.72	21-Nov-10	9-Dec-10	756292	10-Dec-10	1032551	SW,NW	13,24	12N	44E
ZIGG No.73	21-Nov-10	9-Dec-10	756293	10-Dec-10	1032552	SW	13	12N	44E
ZIGG No.74	21-Nov-10	9-Dec-10	756294	10-Dec-10	1032553	SW,NW	13,24	12N	44E
ZIGG 300	17-Feb-11		765839		1043928	NW	3,4,9,10	12N	44E
ZIGG 301	17-Feb-11		765840		1043929	SW, NW	3,10	12N	44E
ZIGG 302	17-Feb-11		765841		1043930	SW, NW	3,10	12N	44E
ZIGG 303	17-Feb-11		765842		1043931	SW, NW	3,10	12N	44E
ZIGG 304	17-Feb-11		765843		1043932	NE	3,10	12N	44E
ZIGG 305	17-Feb-11		765844		1043933	SE, NE	3,10	12N	44E
ZIGG 306	17-Feb-11		765845		1043934	SE, NE	3,10	12N	44E
ZIGG 307	17-Feb-11		765846		1043935	SE, NE	3,10	12N	44E
ZIGG 308	17-Feb-11		765847		1043936	SW, SE, NE, NW	2,3,10,11	12N	44E
ZIGG 309	17-Feb-11		765848		1043937	NE, NW	9,10	12N	44E
ZIGG 310	17-Feb-11		765849		1043938	NW	10	12N	44E
ZIGG 311	17-Feb-11		765850		1043939	NW	10	12N	44E
ZIGG 312	17-Feb-11		765851		1043940	NW	10	12N	44E
ZIGG 313	17-Feb-11		765852		1043941	NW, NE	10	12N	44E
ZIGG 314	17-Feb-11		765853		1043942	NE	10	12N	44E
ZIGG 315	17-Feb-11		765854		1043943	NE	10	12N	44E

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG 316	17-Feb-11		765855		1043944	NE	10	12N	44E
ZIGG 317	17-Feb-11		765856		1043945	NE, NW	10,11	12N	44E
ZIGG 318	17-Feb-11		765857		1043946	NE, SE, NW, SW	9,10	12N	44E
ZIGG 319	17-Feb-11		765858		1043947	NW, SW	10	12N	44E
ZIGG 320	17-Feb-11		765859		1043948	NW, SW	10	12N	44E
ZIGG 321	17-Feb-11		765860		1043949	NW, SW	10	12N	44E
ZIGG 322	17-Feb-11		765861		1043950	NW, SW, NE, SE	10	12N	44E
ZIGG 323	17-Feb-11		765862		1043951	NE, SE	10	12N	44E
ZIGG 324	17-Feb-11		765863		1043952	NE, SE	10	12N	44E
ZIGG 325	17-Feb-11		765864		1043953	NE, SE	10	12N	44E
ZIGG 326	17-Feb-11		765865		1043954	NE, SE, NW, SW	10,11	12N	44E
ZIGG 327	18-Feb-11		765866		1043955	SE, SW, NW, NE	9,10,15,16	12N	44E
ZIGG 328	18-Feb-11		765867		1043956	SW, NW	10,15	12N	44E
ZIGG 329	18-Feb-11		765868		1043957	SW, NW	10,15	12N	44E
ZIGG 330	18-Feb-11		765869		1043958	SW, NW	10,15	12N	44E
ZIGG 331	18-Feb-11		765870		1043959	SW, SE, NW, NE	10,15	12N	44E
ZIGG 332	18-Feb-11		765871		1043960	SE, NE	10,15	12N	44E
ZIGG 333	18-Feb-11		765872		1043961	SE, NE	10,15	12N	44E
ZIGG 334	18-Feb-11		765873		1043962	SE, NE	10,15	12N	44E
ZIGG 335	18-Feb-11		765874		1043963	SE, SW, NW, NE	10,11,14,15	12N	44E
ZIGG 336	18-Feb-11		765875		1043964	SW, NW	11,14	12N	44E
ZIGG 337	18-Feb-11		765876		1043965	SW, NW	11,14	12N	44E
ZIGG 338	18-Feb-11		765877		1043966	SW, NW	11,14	12N	44E
ZIGG 339	18-Feb-11		765878		1043967	SW, NW	11,14	12N	44E
ZIGG 340	18-Feb-11		765879		1043968	SW, SE, NW, NE	11,14	12N	44E
ZIGG 341	18-Feb-11		765880		1043969	NE, NW	16,15	12N	44E
ZIGG 342	18-Feb-11		765881		1043970	NW	15	12N	44E
ZIGG 343	18-Feb-11		765882		1043971	NW	15	12N	44E
ZIGG 344	18-Feb-11		765883		1043972	NW	15	12N	44E
ZIGG 345	18-Feb-11		765884		1043973	NW, NE	15	12N	44E
ZIGG 346	18-Feb-11		765885		1043974	NE	15	12N	44E
ZIGG 347	18-Feb-11		765886		1043975	NE	15	12N	44E
ZIGG 348	18-Feb-11		765887		1043976	NE	15	12N	44E
ZIGG 349	18-Feb-11		765888		1043977	NE, NW	15,14	12N	44E
ZIGG 350	18-Feb-11		765889		1043978	NW	14	12N	44E
ZIGG 351	18-Feb-11		765890		1043979	NW	14	12N	44E
ZIGG 352	18-Feb-11		765891		1043980	NW	14	12N	44E

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG 353	18-Feb-11		765892		1043981	NW	14	12N	44E
ZIGG 354	18-Feb-11		765893		1043982	NW, NE	14	12N	44E
ZIGG 355	18-Feb-11		765894		1043983	NE, SE, NW, SW	16,15	12N	44E
ZIGG 356	18-Feb-11		765895		1043984	NW, SW	15	12N	44E
ZIGG 357	18-Feb-11		765896		1043985	NW, SW	15	12N	44E
ZIGG 358	18-Feb-11		765897		1043986	NW, SW	15	12N	44E
ZIGG 359	18-Feb-11		765898		1043987	NW, SW, NE, SE	15	12N	44E
ZIGG 360	18-Feb-11		765899		1043988	NE, SE	15	12N	44E
ZIGG 361	18-Feb-11		765900		1043989	NE, SE	15	12N	44E
ZIGG 362	18-Feb-11		765901		1043990	NE, SE	15	12N	44E
ZIGG 363	18-Feb-11		765902		1043991	NE, SE, NW, SW	15,14	12N	44E
ZIGG 364	18-Feb-11		765903		1043992	NW, SW	14	12N	44E
ZIGG 365	18-Feb-11		765904		1043993	NW, SW	14	12N	44E
ZIGG 366	18-Feb-11		765905		1043994	NW, SW	14	12N	44E
ZIGG 367	18-Feb-11		765906		1043995	NW, SW	14	12N	44E
ZIGG 368	18-Feb-11		765907		1043996	NW, SW, NE, SE	14	12N	44E
ZIGG 369	18-Feb-11		765908		1043997	NE, SE	14	12N	44E
ZIGG 370	18-Feb-11		765909		1043998	SE, SW	16,15	12N	44E
ZIGG 371	18-Feb-11		765910		1043999	SW	15	12N	44E
ZIGG 372	18-Feb-11		765911		1044000	SW	15	12N	44E
ZIGG 373	18-Feb-11		765912		1044001	SW	15	12N	44E
ZIGG 374	18-Feb-11		765913		1044002	SW, SE	15	12N	44E
ZIGG 375	18-Feb-11		765914		1044003	SE	15	12N	44E
ZIGG 376	18-Feb-11		765915		1044004	SE	15	12N	44E
ZIGG 377	18-Feb-11		765916		1044005	SE	15	12N	44E
ZIGG 378	19-Feb-11		765917		1044006	SE, SW	15,14	12N	44E
ZIGG 379	19-Feb-11		765918		1044007	SW	14	12N	44E
ZIGG 380	19-Feb-11		765919		1044008	SW	14	12N	44E
ZIGG 381	19-Feb-11		765920		1044009	SW	14	12N	44E
ZIGG 382	19-Feb-11		765921		1044010	SW	14	12N	44E
ZIGG 383	19-Feb-11		765922		1044011	SW, SE	14	12N	44E
ZIGG 384	19-Feb-11		765923		1044012	SE	14	12N	44E
ZIGG 385	19-Feb-11		765924		1044013	SW, SE, NE, NW	14,15,22,23	12N	44E
ZIGG 386	19-Feb-11		765925		1044014	SW, NW	14,23	12N	44E
ZIGG 387	19-Feb-11		765926		1044015	SW, NW	14,23	12N	44E
ZIGG 388	19-Feb-11		765927		1044016	SW, NW	14,23	12N	44E
ZIGG 389	19-Feb-11		765928		1044017	SW, NW	14,23	12N	44E

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG 390	19-Feb-11		765929		1044018	SW, SE, NW, NE	14,23	12N	44E
ZIGG 391	19-Feb-11		765930		1044019	SE, NE	14,23	12N	44E
ZIGG 392	20-Feb-11		765931		1044020	NE, NW	22,23	12N	44E
ZIGG 393	20-Feb-11		765932		1044021	NW	23	12N	44E
ZIGG 394	20-Feb-11		765933		1044022	NW	23	12N	44E
ZIGG 395	20-Feb-11		765934		1044023	NW	23	12N	44E
ZIGG 396	20-Feb-11		765935		1044024	NW	23	12N	44E
ZIGG 397	20-Feb-11		765936		1044025	NW, NE	23	12N	44E
ZIGG 398	20-Feb-11		765937		1044026	NE	23	12N	44E
ZIGG 399	20-Feb-11		765938		1044027	NE	23	12N	44E
ZIGG 400	16-Feb-11		765939		1044028	NE	23	12N	44E
ZIGG 401	16-Feb-11		765940		1044029	NE, NW	23,24	12N	44E
ZIGG 402	16-Feb-11		765941		1044030	NW	24	12N	44E
ZIGG 403	16-Feb-11		765942		1044031	NW	24	12N	44E
ZIGG 404	16-Feb-11		765943		1044032	NW	24	12N	44E
ZIGG 405	16-Feb-11		765944		1044033	NW	24	12N	44E
ZIGG 406	16-Feb-11		765945		1044034	NW, NE	24	12N	44E
ZIGG 407	16-Feb-11		765946		1044035	NE	24	12N	44E
ZIGG 408	16-Feb-11		765947		1044036	NE	24	12N	44E
ZIGG 409	16-Feb-11		765948		1044037	NE	24	12N	44E
ZIGG 410	20-Feb-11		765949		1044038	NE, SE, NW, SW	22,23	12N	44E
ZIGG 411	20-Feb-11		765950		1044039	NW, SW	23	12N	44E
ZIGG 412	20-Feb-11		765951		1044040	NW, SW	23	12N	44E
ZIGG 413	20-Feb-11		765952		1044041	NW, SW	23	12N	44E
ZIGG 414	20-Feb-11		765953		1044042	NW, SW	23	12N	44E
ZIGG 415	20-Feb-11		765954		1044043	NW, SW, NE, SE	23	12N	44E
ZIGG 416	20-Feb-11		765955		1044044	NE, SE	23	12N	44E
ZIGG 417	20-Feb-11		765956		1044045	NE, SE	23	12N	44E
ZIGG 418	16-Feb-11		765957		1044046	NE, SE	23	12N	44E
ZIGG 419	16-Feb-11		765958		1044047	NE, SE, NW, SW	23,24	12N	44E
ZIGG 420	16-Feb-11		765959		1044048	NW, SW	24	12N	44E
ZIGG 421	16-Feb-11		765960		1044049	NW, SW	24	12N	44E
ZIGG 422	16-Feb-11		765961		1044050	NW, SW	24	12N	44E
ZIGG 423	16-Feb-11		765962		1044051	NW, SW	24	12N	44E
ZIGG 424	16-Feb-11		765963		1044052	NW, SW, NE, SE	24	12N	44E
ZIGG 425	16-Feb-11		765964		1044053	NE, SE	24	12N	44E
ZIGG 426	16-Feb-11		765965		1044054	NE, SE	24	12N	44E

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG 427	16-Feb-11		765966		1044055	NE, SE	24	12N	44E
ZIGG 428	26-Feb-11		765967		1044056	NE, SE, NW	24,14	12N	44,44 1/2
ZIGG 429	26-Feb-11		765968		1044057	NW, NE	14	12N	44 1/2
ZIGG 430	26-Feb-11		765969		1044058	NW, NE	13,14	12N	44 1/2
ZIGG 431	26-Feb-11		765970		1044059	NW	13	12N	44 1/2
ZIGG 432	26-Feb-11		765971		1044060	NW	13	12N	44 1/2
ZIGG 433	26-Feb-11		765972		1044061	NW	13	12N	44 1/2
ZIGG 434	26-Feb-11		765973		1044062	NW, NE	13	12N	44 1/2
ZIGG 435	26-Feb-11		765974		1044063	NE	13	12N	44 1/2
ZIGG 436	26-Feb-11		765975		1044064	NE	13	12N	44 1/2
ZIGG 437	26-Feb-11		765976		1044065	NE	13	12N	44 1/2
ZIGG 438	26-Feb-11		765977		1044066	NE	13	12N	44 1/2
ZIGG 439	26-Feb-11		765978		1044067	NE, NW	13,18	12N	44 1/2,45
ZIGG 440	26-Feb-11		765979		1044068	NW	18	12N	45
ZIGG 441	26-Feb-11		765980		1044069	NW	18	12N	45
ZIGG 442	26-Feb-11		765981		1044070	NW	18	12N	45
ZIGG 443	26-Feb-11		765982		1044071	NW, NE	18	12N	45
ZIGG 444	26-Feb-11		765983		1044072	NE	18	12N	45
ZIGG 445	26-Feb-11		765984		1044073	NE	18	12N	45
ZIGG 446	27-Feb-11		765985		1044074	NE	18	12N	45
ZIGG 447	27-Feb-11		765986		1044075	NW, NE	17,18	12N	45
ZIGG 448	27-Feb-11		765987		1044076	NE	17	12N	45
ZIGG 449	27-Feb-11		765988		1044077	NW	17	12N	45
ZIGG 450	27-Feb-11		765989		1044078	NW	17	12N	45
ZIGG 451	27-Feb-11		765990		1044079	NW	17	12N	45
ZIGG 452	27-Feb-11		765991		1044080	NW, NE	17	12N	45
ZIGG 453	27-Feb-11		765992		1044081	NE	17	12N	45
ZIGG 454	27-Feb-11		765993		1044082	NE	17	12N	45
ZIGG 455	26-Feb-11		765994		1044083	SE, NE, NW, SW	24,25,14	12N	44, 44 1/2
ZIGG 456	26-Feb-11		765995		1044084	NW, SW, NE, SE	14	12N	44 1/2
ZIGG 457	26-Feb-11		765996		1044085	NW, SW, NE, SE	13,14	12N	44 1/2
ZIGG 458	26-Feb-11		765997		1044086	NW, SW	13	12N	44 1/2
ZIGG 459	26-Feb-11		765998		1044087	NW, SW	13	12N	44 1/2
ZIGG 460	26-Feb-11		765999		1044088	NW, SW	13	12N	44 1/2
ZIGG 461	26-Feb-11		766000		1044089	NVV, SW, NE, SE	13	12N	44 1/2
ZIGG 462	26-Feb-11		766001		1044090	NE, SE	13	12N	44 1/2
ZIGG 463	26-Feb-11		766002		1044091	NE, SE	13	12N	44 1/2

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG 464	26-Feb-11		766003		1044092	NE, SE	13	12N	44 1/2
ZIGG 465	26-Feb-11		766004		1044093	NE, SE	13	12N	44 1/2
ZIGG 466	26-Feb-11		766005		1044094	NE, SE, NW, SW	13,18	12N	44 1/2, 45
ZIGG 467	26-Feb-11		766006		1044095	NW, SW	18	12N	45
ZIGG 468	26-Feb-11		766007		1044096	NW, SW	18	12N	45
ZIGG 469	26-Feb-11		766008		1044097	NW, SW	18	12N	45
ZIGG 470	26-Feb-11		766009		1044098	NW, SW, NE, SE	18	12N	45
ZIGG 471	26-Feb-11		766010		1044099	NE, SE	18	12N	45
ZIGG 472	26-Feb-11		766011		1044100	NE, SE	18	12N	45
ZIGG 473	27-Feb-11		766012		1044101	NE, SE	18	12N	45
ZIGG 474	27-Feb-11		766013		1044102	NW, SW, NE, SE	17.18	12N	45
ZIGG 475	27-Feb-11		766014		1044103	NW, SW	17	12N	45
ZIGG 476	27-Feb-11		766015		1044104	NW, SW	17	12N	45
ZIGG 477	27-Feb-11		766016		1044105	NW, SW	17	12N	45
ZIGG 478	27-Feb-11		766017		1044106	NW, SW	17	12N	45
ZIGG 479	27-Feb-11		766018		1044107	NW, SW, NE, SE	17	12N	45
ZIGG 480	27-Feb-11		766019		1044108	NE, SE	17	12N	45
ZIGG 481	27-Feb-11		766020		1044109	NE, SE	17	12N	45
ZIGG 482	26-Feb-11		766021		1044110	SW, NE	14,25	12N	44 1/2, 44
ZIGG 483	26-Feb-11		766022		1044111	SW, SE	14	12N	44 1/2
ZIGG 484	26-Feb-11		766023		1044112	SW, SE	13,14	12N	44 1/2
ZIGG 485	26-Feb-11		766024		1044113	sw	13	12N	44 1/2
ZIGG 486	26-Feb-11		766025		1044114	SW	13	12N	44 1/2
ZIGG 487	26-Feb-11		766026		1044115	SW	13	12N	44 1/2
ZIGG 488	26-Feb-11		766027		1044116	SW, SE	13	12N	44 1/2
ZIGG 489	26-Feb-11		766028		1044117	SE	13	12N	44 1/2
ZIGG 490	26-Feb-11		766029		1044118	SE	13	12N	44 1/2
ZIGG 491	26-Feb-11		766030		1044119	SE	13	12N	44 1/2
ZIGG 492	27-Feb-11		766031		1044120	SE	13	12N	44 1/2
ZIGG 493	27-Feb-11		766032		1044121	SE, SW	13,18	12N	44 1/2, 45
ZIGG 494	27-Feb-11		766033		1044122	SW	18	12N	45
ZIGG 495	27-Feb-11		766034		1044123	SW	18	12N	45
ZIGG 496	26-Feb-11		766035		1044124	SW	18	12N	45
ZIGG 497	26-Feb-11		766036		1044125	SW, SE	18	12N	45
ZIGG 498	26-Feb-11		766037		1044126	SE	18	12N	45
ZIGG 499	26-Feb-11		766038		1044127	SE	18	12N	45
ZIGG 500	26-Feb-11		766039		1044128	SE	18	12N	45

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG 501	26-Feb-11		766040		1044129	SW, SE	17,18	12N	45
ZIGG 502	26-Feb-11		766041		1044130	SW	17	12N	45
ZIGG 503	27-Feb-11		766042		1044131	SW	17	12N	45
ZIGG 504	27-Feb-11		766043		1044132	SW	17	12N	45
ZIGG 505	27-Feb-11		766044		1044133	SW	17	12N	45
ZIGG 506	27-Feb-11		766045		1044134	SW, SE	17	12N	45
ZIGG 507	27-Feb-11		766046		1044135	SE	17	12N	45
ZIGG 508	27-Feb-11		766047		1044136	SE	17	12N	45
ZIGG 509	19-Feb-11		766048		1044137	SE, NE, SW, NW	12,13,7,18	12N	44 1/2, 45
ZIGG 510	19-Feb-11		766049		1044138	SW, NW	7,18	12N	45
ZIGG 511	19-Feb-11		766050		1044139	SW, NW	7,18	12N	45
ZIGG 512	19-Feb-11		766051		1044140	SW, NW	7,18	12N	45
ZIGG 513	19-Feb-11		766052		1044141	SW, SE, NW, NE	7,18	12N	45
ZIGG 514	19-Feb-11		766053		1044142	SE, NE	7,18	12N	45
ZIGG 515	19-Feb-11		766054		1044143	SE, NE	7,18	12N	45
ZIGG 516	19-Feb-11		766055		1044144	SE, NE	7,18	12N	45
ZIGG 517	20-Feb-11		766056		1044145	SE, SW, NW, NE	7,8,17,18	12N	45
ZIGG 518	20-Feb-11		766057		1044146	SW, NW	8,17	12N	45
ZIGG 519	20-Feb-11		766058		1044147	SW, NW	8,17	12N	45
ZIGG 520	20-Feb-11		766059		1044148	SW, NW	8,17	12N	45
ZIGG 521	20-Feb-11		766060		1044149	SW, NW	8,17	12N	45
ZIGG 522	20-Feb-11		766061		1044150	SW, SE, NW, NE	8,17	12N	45
ZIGG 523	20-Feb-11		766062		1044151	SE, NE	8,17	12N	45
ZIGG 524	20-Feb-11		766063		1044152	SE, NE	8,17	12N	45
ZIGG 525	19-Feb-11		766064		1044153	SE, SW	12,7	12N	44 1/2, 45
ZIGG 526	19-Feb-11		766065		1044154	SW	7	12N	45
ZIGG 527	19-Feb-11		766066		1044155	SW	7	12N	45
ZIGG 528	19-Feb-11		766067		1044156	SW	7	12N	45
ZIGG 529	19-Feb-11		766068		1044157	SW, SE	7	12N	45
ZIGG 530	19-Feb-11		766069		1044158	SE	7	12N	45
ZIGG 531	19-Feb-11		766070		1044159	SE	7	12N	45
ZIGG 532	19-Feb-11		766071		1044160	SE	7	12N	45
ZIGG 533	20-Feb-11		766072		1044161	SE, SW	7,8	12N	45
ZIGG 534	20-Feb-11		766073		1044162	SW	8	12N	45
ZIGG 535	20-Feb-11		766074		1044163	SW	8	12N	45
ZIGG 536	20-Feb-11		766075		1044164	SW	8	12N	45
ZIGG 537	20-Feb-11		766076		1044165	SW	8	12N	45

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG 538	20-Feb-11		766077		1044166	SW, SE	8	12N	45
ZIGG 539	20-Feb-11		766078		1044167	SE	8	12N	45
ZIGG 540	20-Feb-11		766079		1044168	SE	8	12N	45
ZIGG 541	25-Feb-11		766080		1044169	NW, SW	7	12N	45
ZIGG 542	25-Feb-11		766081		1044170	NW, SW	7	12N	45
ZIGG 543	25-Feb-11		766082		1044171	NW, SW	7	12N	45
ZIGG 544	25-Feb-11		766083		1044172	NW, SW, NE, SE	7	12N	45
ZIGG 545	25-Feb-11		766084		1044173	NE,SE	7	12N	45
ZIGG 546	25-Feb-11		766085		1044174	NE, SE	7	12N	45
ZIGG 547	25-Feb-11		766086		1044175	NE, SE	7	12N	45
ZIGG 548	25-Feb-11		766087		1044176	NE, SE, NW, SW	7,8	12N	45
ZIGG 549	25-Feb-11		766088		1044177	NW, SE	8	12N	45
ZIGG 550	25-Feb-11		766089		1044178	NW, SE	8	12N	45
ZIGG 551	25-Feb-11		766090		1044179	NW, SE	8	12N	45
ZIGG 552	25-Feb-11		766091		1044180	NW, SE	8	12N	45
ZIGG 553	25-Feb-11		766092		1044181	NW, SW, NE, SE	8	12N	45
ZIGG 554	25-Feb-11		766093		1044182	NE, SE	8	12N	45
ZIGG 555	25-Feb-11		766094		1044183	NE, SE	8	12N	45
ZIGG 556	25-Feb-11		766095		1044184	SW, NW	6,7	12N	45
ZIGG 557	25-Feb-11		766096		1044185	SW, NW	6,7	12N	45
ZIGG 558	25-Feb-11		766097		1044186	SW, SE, NW, NE	6.7	12N	45
ZIGG 559	25-Feb-11		766098		1044187	SE, NE	6,7	12N	45
ZIGG 560	25-Feb-11		766099		1044188	SE, NE	6,7	12N	45
ZIGG 561	25-Feb-11		766100		1044189	SE, NE	6,7	12N	45
ZIGG 562	25-Feb-11		766101		1044190	SW, SE, NE, NW	5,6,7,8	12N	45
ZIGG 563	25-Feb-11		766102		1044191	SW, NW	5,8	12N	45
ZIGG 564	25-Feb-11		766103		1044192	SW, NW	5,8	12N	45
ZIGG 565	25-Feb-11		766104		1044193	SW, NW	5,8	12N	45
ZIGG 566	25-Feb-11		766105		1044194	SW, NW	5,8	12N	45
ZIGG 567	25-Feb-11		766106		1044195	SE, SW, NW, NE	5,8	12N	45
ZIGG 568	25-Feb-11		766107		1044196	SE, NE	5,8	12N	45
ZIGG 569	25-Feb-11		766108		1044197	SE, NE	5,8	12N	45
ZIGG 570	17-Feb-11		766109		1044198	SW	6	12N	45E
ZIGG 571	17-Feb-11		766110		1044199	SW	6	12N	45E
ZIGG 572	17-Feb-11		766111		1044200	SW, SE	6	12N	45E
ZIGG 573	17-Feb-11		766112		1044201	SE	6	12N	45E
ZIGG 574	17-Feb-11		766113		1044202	SE	6	12N	45E

		FILING	FILE	FILING	FILE	1/4	SECTION	TWP.	RANGE
CLAIM	LOCATION	DATE	NO.	DATE	NO.	SECT.			
NAME	DATE	COUNTY	COUNTY	BLM	BLM				
ZIGG 575	17-Feb-11		766114		1044203	SE	6	12N	45E
ZIGG 576	17-Feb-11		766115		1044204	SW, SE	5,6	12N	45E
ZIGG 577	17-Feb-11		766116		1044205	SW	5	12N	45E
ZIGG 578	17-Feb-11		766117		1044206	SW	5	12N	45E
ZIGG 579	17-Feb-11		766118		1044207	SW	5	12N	45E
ZIGG 580	17-Feb-11		766119		1044208	SW	5	12N	45E
ZIGG 581	17-Feb-11		766120		1044209	SE, SW	5	12N	45E
ZIGG 582	17-Feb-11		766121		1044210	SE	5	12N	45E
ZIGG 583	17-Feb-11		766122		1044211	SE	5	12N	45E

APPENDIX B

Surface Rock-Chip Sample Geochemistry

	Nad 27, Zone 11		Au	Ag	As	Cu	Pb	Sb	Zn
Sample_ID	UTM_East	UTM_North	Ppm	ppm	ppm	ppm	ppm	ppm	ppm
M05-1002	504625	4305705	0.01	0.1	4.8	3.5	25.6	1.44	39
M05-1003	504618	4304949	0.034	0.14	8.6	5.3	26.6	1.44	37
M05-1033	500469	4306358	0.018	18.3	41.5	8440	11.2	7.77	6830
M05-1093	500402	4306411	0.013	0.25	65.8	6.9	3.4	5.5	73
M05-1094	500364	4306436	0.015	23.5	19.1	2340	48.7	11.8	10000
M05-1095	500364	4306440	-0.005	0.24	-5	17.1	8	1.85	73
M05-1096	500132	4306504	-0.005	0.09	16	11.6	6.1	1.27	27
M05-1097	500317	4306736	-0.005	0.13	-5	15	9.6	1.55	68
M05-1105	504686	4305855	-0.005	0.1	8.6	4.7	24.7	1.32	40
1111	500074	4306698	-0.005	0.07	11	11	5.6	0.82	41
1112	500073	4306521	-0.005	0.04	8	5.1	4.5	0.5	19
1113	500162	4306524	-0.005	0.1	70.2	7	9.2	3.05	122
1114	500187	4306521	-0.005	0.08	16.7	9.5	5.8	2.13	112
1115	500066	4306475	-0.005	0.05	-5	5.9	4.4	0.37	15
1116	500125	4306485	-0.005	0.11	51	8.8	7.9	1.9	40
1117	500134	4306477	-0.005	0.07	11.8	3.4	6.6	0.95	67
1118	500133	4306465	-0.005	0.2	33.8	62.3	683	2.59	306
1119	500156	4306497	-0.005	0.12	170	22.9	9.4	12.35	110
1120	500266	4306438	-0.005	0.17	13	15.4	23.4	1.69	146
1121	500558	4306268	0.205	3.06	24.4	9.7	7.9	37.2	10
1122	500557	4306270	0.076	2.14	37	10.4	10.8	25.3	33
1123	499976	4306271	-0.005	0.09	12	6.8	6.7	1.66	53
1124	500010	4306272	-0.005	0.05	15	35.2	24.5	2.55	72
1125	500039	4306258	-0.005	0.12	580	11.2	7.7	70.4	67
1126	500076	4306217	0.056	0.24	991	29.7	28.2	149.5	15
1127	500139	4306221	0.048	0.31	241	29.5	18.5	94.4	7
1128	500108	4306196	-0.005	0.28	447	72.7	7	43.1	111
1129	500091	4306208	-0.005	0.06	872	72.2	7.7	47.6	83
1130	500492	4306100	-0.005	0.03	16.7	4.4	4.8	2.58	44
1131	500496	4306112	-0.005	0.09	371	7	5.6	21.3	36
1132	500436	4306118	-0.005	0.14	31.3	13.2	12.8	7.68	140
1133	500429	4306112	-0.005	0.11	37.2	9.5	9.3	5.15	75
1134	500418	4306108	-0.005	0.12	10.4	16.2	14.1	5.12	235
1135	500317	4306180	-0.005	0.09	1430	57.8	14.1	336	588
1136	500251	4306154	0.018	1.05	8930	7.6	19.5	1575	98
1137	500269	4306177	0.038	0.05	2000	21.8	12.1	243	33
1138	500279	4306193	0.018	0.14	316	4.8	6.3	59.8	10
1139	500275	4306190	-0.005	0.23	368	12.8	11.3	52.1	27
1140	499299	4305420	-0.005	0.34	11.1	3.7	149	1.84	604
1141	499885	4305836	-0.005	0.03	3.8	3.1	5.9	0.42	11
1142	499931	4305828	-0.005	0.03	14.1	4.5	9.8	1.03	34
1143	499924	4305783	-0.005	0.03	2.2	6	4.7	0.29	6
1144	499793	4305180	0.484	3	13.3	6.3	3.6	33.3	9

	Nad 27, Zone 11		Au	Ag	As	Cu	Pb	Sb	Zn
Sample_ID	UTM_East	UTM_North	Ppm	ppm	ppm	ppm	ppm	ppm	ppm
1151	499953	4306055	-0.005	0.07	63.3	42.6	10.4	4.6	68
1159	500402	4306731	-0.005	0.05	-5	7.7	6.9	1.11	45
1160	500593	4306543	-0.005	0.05	17.8	8.6	8.3	0.98	43
1161	500493	4306542	-0.005	0.04	8.6	12.1	10.1	0.65	43
1162	499909	4306690	-0.005	0.22	58	13.1	9	1.58	317
1163	499883	4306586	0.005	0.06	14	9.1	8.7	1.04	28
1164	499892	4306537	-0.005	0.08	32.1	6.5	5.1	2.04	37
1165	499849	4306512	-0.005	0.56	29.5	18.8	16.7	2.62	450
1166	499863	4306506	-0.005	0.4	10.9	14.2	10.2	3.61	184
1167	499822	4306506	0.078	0.43	49	45.1	13.2	3.62	290
1168	499829	4306508	-0.005	0.58	123	37.4	14.9	4.08	619
1169	499825	4306506	-0.005	0.25	5.7	13.4	10.9	2.38	165
1170	499836	4306513	0.005	1.48	43.8	17.2	18.9	5.16	150
1171	499751	4306496	-0.005	0.33	122	9.4	9.2	5.9	384
1172	499744	4306480	0.007	0.65	23.2	37.8	16.5	2.2	491
1173	499746	4306480	0.006	0.26	347	13.9	10.5	17.8	696
1174	499710	4306478	-0.005	0.57	21.8	36.5	15.2	2.4	800
1175	499700	4306475	-0.005	0.11	10.7	11	3.2	1.44	55
1176	499866	4306401	-0.005	0.16	44.5	29	12	3.33	57
1177	499867	4306402	0.009	0.16	34.6	25.4	10.2	4.7	56
1178	499889	4306464	0.011	0.08	38.8	5.9	7.5	2.44	42
1179	499915	4306442	-0.005	0.07	26.6	7.3	3.2	1.56	43
1180	499784	4306416	-0.005	0.16	971	16.3	14.7	92.4	237
1181	499806	4306423	-0.005	0.11	32.7	8.3	6.7	2.5	57
1182	499763	4306399	0.021	0.11	27	17.2	35.6	4.66	42
1183	499965	4306226	0.046	0.04	709	6.5	9.3	128	43
1184	500043	4306223	0.007	0.07	136.5	16.9	21.7	30.6	86
1185	500047	4306218	-0.005	0.15	421	54.7	11	33.5	72
1186	500025	4306191	-0.005	0.05	183	6.7	4.9	17	24
1187	500022	4306189	-0.005	0.07	1380	12.5	8.4	89.7	50
1188	500034	4305026	0.005	0.56	11.7	8.3	3.4	27.4	106
1189	499825	4305179	1.005	4.86	17.8	6.4	3.3	63.8	12
1192	499526	4304939	-0.005	0.04	23.1	5.4	7.6	14.8	16
1193	499611	4305000	-0.005	0.07	3.9	3.9	6.8	1.45	7
1194	499550	4305094	-0.005	0.14	108	10.8	71.4	18	133
1195	499515	4305007	0.009	0.19	48.2	7.9	23.3	4.31	48
1206	500024	4305032	-0.005	0.24	12.1	12.8	7	16.65	131
1207	500011	4305406	-0.005	0.07	2940	5.1	42.2	395	31
1208	500143	4305372	0.012	1.06	50	67.3	14.9	12.5	100
1209	500207	4305405	0.005	0.05	38	3.8	20	10.6	212
1210	500479	4305544	0.672	4.54	48.5	8.8	9.7	131.5	41
1214	500517	4305694	0.011	0.09	242	13.4	5.9	23.2	102
1215	500541	4305728	0.154	3.05	66.5	10.1	9.6	46.9	41
1248	500336	4306171	-0.005	0.02	68	21.9	17.3	8.6	4/
1249	500306	4306164	0.011	0.11	1810	65.5	8.4	206	63
1250	500298	4306180	0.016	0.06	898	69.2	13.1	82.2	15
1251	500313	4306198	0.022	0.15	1105	49.3	4.7	92.8	56
1252	500195	4306204	-0.005	0.22	294	30.1	14.5	113.5	18

	Nad 27, Zone 11		Au	Ag	As	Cu	Pb	Sb	Zn
Sample_ID	UTM_East	UTM_North	ppm	ppm	ppm	ppm	ppm	ppm	ppm
1252	500195	4306204	-0.005	0.22	294	30.1	14.5	113.5	18
1253	500211	4306193	-0.005	0.05	70.2	18.3	20.8	10.05	26
1254	500220	4306197	0.014	0.23	1270	85.6	6.9	102	599
1255	500132	4306178	-0.005	0.53	303	44.7	17.1	30.1	81
1256	500098	4306205	-0.005	0.07	900	40.4	7.3	70.2	34
1257	500525	4306227	0.076	2.19	58.9	11.8	6.1	49.4	11
1258	500485	4306225	0.039	0.5	325	8	9.2	60.6	48
1259	499772	4305286	0.007	1.28	29.7	43	6.4	17.9	109
1260	499781	4305326	0.059	14.95	26.3	41.5	7	18	73
1261	499716	4305426	-0.005	0.62	37.5	41.5	13	10.55	63