TITLE PAGE

TECHNICAL REPORT ON THE

RANCH PROJECT

LIARD MINING DIVISION

BRITISH COLUMBIA, CANADA

LOCATION
LATITUDE: 57°29' N
LONGITUDE: 127°22' W
NTS MAP SHEETS: 094E/05, 06, 11 & 12
(Toodoggone area, northern British Columbia)

PREPARED FOR

GUARDSMEN RESOURCES INC.

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BURNABY, B.C. V5C 1B3
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January 15, 2014

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1.0 SUMMARY

The Ranch Project is located in northern British Columbia about 300 km north of Smithers and 60 km northwest of the past-producing Kemess South mine. It is within the Liard Mining Division and is centered near NAD 83 (Zone 9) UTM coordinates 6371937 N and 598020 E, or near latitude/longitude coordinates 57°29' N and 127°22' W on NTS map sheets 94E/05, 06, 11 & 12. It consists of 47 mineral claims totaling 16,386 hectares, or about 164 km^2. Guardsmen Resources Inc. of Burnaby, B.C. is the 100% owner of the property, free and clear of any encumbrances. Guardsmen currently has no agreements with other parties that pertain to the property.

Legal access to the Ranch Project and to past mine workings on it was provided by the Metsantan Extension to the Omineca Resource Access Road, from the past-producing Lawyers mine, across the Toodoggone River and on to the property. This access road was decommissioned in 1999-2000; currently the property is only accessible by helicopter.

Past work on the Ranch property has identified 19 zones of gold mineralization over a 25 km^2 area. In 1991, Cheni Gold Mines Inc. surface-mined an aggregate of 59,000 tonnes from three small pits in the Bonanza (Ghost), Thesis III and BV Zones. Approximately 41,000 tonnes of ore were treated at the Lawyers mill and about 10,000 ounces of gold were recovered. During August 1986, Energex Mines Ltd. operated a 6 tonnes per day pilot plant on the property; a total of 209 tonnes of high-grade surface ore from the Thesis III A Zone was processed. No mining equipment remains on the property and all past mining disturbances have been reclaimed, except for the Ghost and BV pits which remain open and water-filled, and some trenches in the Bingo Zone.

The nearest major supply center is Smithers, 300 km by air to the south. Smithers has a population of about 5,700 and services roughly 15,000 people living in the Bulkley Valley region. It is a major service centre along both the Yellowhead Highway (No. 16) and the Canadian National Railway, midway between Prince George and the port city of Prince Rupert. It has a long history of supporting and servicing mineral exploration and development in the north-central B.C. region and has an available workforce for exploration and mining.

The closest major infrastructure facility is the Kemess South mine which is currently on care and maintenance while Aurico Gold Inc. carries out additional exploration and related feasibility studies on its proposed Kemess North Underground Mine. Facilities include: electrical power, tied into the B.C. Hydro grid via a 340 km-long power line extending from Mackenzie; a 1,424 m-long gravel airstrip currently serviced by weekly fixed wing flights from Smithers and Prince George; a large mine camp providing room and board to the Aurico workforce; and all-weather road access connecting to major supply centers to the south.

The property is underlain mainly by trachyandesite ash-flows to lapilli tuffs of the Adoogacho and Metsantan Members of the Lower Jurassic Toodoggone Formation. The volcanic sequence is intruded locally by dikes which are compositionally similar to the volcanic units and may represent feeder systems to them. Felsic dikes and irregular bodies of

dacitic, rhyo-dacitic and rhyolitic composition have been encountered in a number of drill holes. These intrusive rocks may be genetically linked to late-stage ore-forming fluids.

Alteration on the Ranch property is of the high-sulphidation (acid-sulphate) epithermal type, characterized by widespread argillization and silicification of andesite-dacite hosts rocks. Important alteration assemblages include alunite-quartz, hematite-illite-quartz, dickite-quartz, quartz-barite and quartz-pyrite, working inwards and downwards in a typical, zoned epithermal alteration system. Principal ore minerals include argentite, electrum, native gold and silver and lesser chalcopyrite, galena and sphalerite. Also present in the area but not confirmed on the property is porphyry-style mineralization.

As currently known, all significant gold mineralization on the Ranch property is hosted by silica-sulphate and silica-sulphide bodies flanked by argillically altered zones. They are controlled by moderately to steeply-dipping fault zones with north-northwesterly, northwesterly and northeasterly orientations. The gold-bearing zones have a crudely elliptical shape and are discontinuous along the controlling fault systems. In the Bonanza deposit, some of the gold-bearing zones are thought to have formed by selective replacement of more permeable tuff units within the volcanic strata. Across and adjacent to the property, gold mineralization is known to occur over a vertical range of about 300 m.

Historical resource estimates have been done on 8 mineralized zones, including the past-producing Bonanza, Thesis III and BV Zones. The large data base utilized to compute these estimates consisted of 14,090 drill hole assays from 34,117.4 m of drilling in 427 holes. There are also 6,275 trench assays in the data base. Post-mining resource estimates on the Bonanza Zone, using a 5 g/t Au cut-off, vary from 69,225 tonnes grading 14.06 g/t Au (Cheni, 1992) to 130,490 tonnes grading 9.80 g/t Au (Micromine, 2007). Those at the Thesis III Zone, using a 3.5 g/t Au cut-off, vary from 13,012 tonnes grading 16.75 g/t Au (Cheni, 1992) to 49,170 tonnes grading 8.03 g/t Au (Micromine, 2007). The post-mining resource estimate at the BV Zone, also using a 3.5 g/t Au cut-off, is 33,870 tonnes grading 9.53 g/t Au (Micromine, 2007). Other resource estimates of note include 52,480 tonnes grading 4.12 g/t Au for the Ridge Zone (Micromine, 2007) and 18,340 tonnes grading 5.01 g/t Au for the Thesis II Zone (Micromine, 2007). The latter two estimates both used a 3.5 g/t Au cut-off.

Because of several inconsistencies in the resource estimates for the same zone, where comparative data is available, and also because many of the resource estimates were prepared before the coming into force of the NI 43-101 *Standards of Disclosure for Mineral Projects*, **the historical resource estimates summarized in Sections 14.1.1 to 14.1.3 of this Report should not be relied upon.**

In 1988, Wright Engineers Limited of Vancouver carried out a Feasibility Study on the Al (Ranch) property, based on a proposed 200 ton per day gravity and bulk sulphide flotation concentrator combined with heap leaching of lower grade process feeds. Metallurgical test work directed towards the milling component of the operation indicated that gravity and flotation gold recoveries for the 5 main ore types were expected to average about 88% overall. Bench-scale metallurgical test work related to the heap leaching part of an operation gave gold recoveries in the 60 to 83% range, however cyanide consumption varied widely, from 1.0 to

18.0 kg/tonne. Estimated overall heap leach recovery for gold was 55%. The leach operation was to be seasonal, from April to October, due to climatic constraints.

The author reviewed Wright Engineers' October 1988 Project Feasibiliy Report and concluded that while **many of its conclusions and cost assumptions are outdated and therefore not relevant**, several of its basic operational assumptions still have some relevance and could be applied to a possible future mining operation on the Ranch Project.

Considerable exploration potential remains on the Ranch Project. All known gold deposits and prospects on the property have been discovered by conventional methods which employed soil geochemistry followed by prospecting, mapping, rock geochemical sampling, trenching and finally diamond drilling. Since the cessation of major surface exploration programs carried out during the period 1981-88, later work has consisted mainly of diamond drilling which yielded only incremental increases to the property's resource base because of the tendency of post-1988 operators to overlap one anothers' work areas without specifically designing their programs to test for potential extensions to known zones or to explore for new zones.

Future discovery of overburden covered near-surface gold deposits, or "blind" deposits at depth, will have to rely more on the drill-testing of geophysical targets such as coincident 3D-IP resistivity-chargeability anomalies. The primary exploration target on the property will remain as structurally-controlled or replacement-style high sulphidation epithermal gold deposits similar to those previously discovered on the property. A secondary, but no less important target type is a buried porphyry copper-gold deposit for which earlier magnetic and IP surveys have partially delineated coincident geophysical anomalies possibly indicative of this deposit type.

A multi-ounce gold assay (267.4 g/t Au or 7.80 oz. Au per ton) of a 2013 verification rock sample, taken from a 0.6 meter-long channel sample collected on the east wall of the BV pit, indicates that there may be potential for delineating a small tonnage of high grade material amenable to selective open cut extraction.

A Phase 1 Exploration Program estimated to cost $3,884,530 is recommended for the Ranch Project. A success-contingent Phase 2 Program is estimated to cost $6,511,375. Work components of the two programs are described below.

The recommended Phase 1 Exploration Program consists of the following work components:

- 1,500 m of NQ diamond drilling to test for potentially economic mineralization within or adjacent to three known, but under-explored gold-bearing zones, namely Bingo, Thesis II and South Ridge;
- 1,500 m of excavator trenching to further test the Bonanza North and Mickey Zones, and to intially test the South Hump Zone;
- 11 km^2 of 3D-IP surveying, utilizing Quantec's high resolution and deep penetrating Orion 3D-IP system. A proposed 10 km^2 survey area would overlap and extend beyond that covered by the 2007 3D-IP survey. The latter returned generally positive results,

but it is necessary to upgrade the resolution and quality of the Ranch 3D-IP data base prior to the drill testing of geophysical anomalies.

In Patti and Steve's Zones, an additional 1 km^2 of 3D-IP surveying is proposed to aid Phase 2 drill hole targeting.

- Prospecting and rock geochemical sampling in the Mickey Zone, in the area of mineralized float just north of the Mickey Zone and at the up-ice end of several gold-in-soil anomalies.

  Additionally, in the BV pit, detailed channel sampling should be completed where possible on the walls and floor of the pit in order to follow-up on the multi-ounce gold assay described above; and
- The engagement of Giroux Consultants Ltd. of Vancouver, B.C. to review the author's findings regarding historical resource estimates as summarized in Sections 14.1.1 to 14.1.4 of the Report. Gary Giroux's insights into the various inconsistencies between historical resource estimates may help to identify the remedial steps that need to be taken to upgrade them to a NI 43-101 compliant status.

A recommended, success-contingent Phase 2 Exploration Program would consist of the following work components:

- 6,500 m of NQ diamond drilling to test the best gold-mineralized zones or Orion 3D-IP targets identified in the Phase 1 program and also to test at least one copper-gold porphyry target as indicated by any coincident chargeability-resistivity-magnetic anomalies delineated by Phase 1 geophysical surveys. About 5,500 m would be allocated to the testing of gold targets and about 1,000 m, to the depth testing of at least one buried porphyry copper-gold target;
- 2,000 m of excavator trenching to follow-up on any encouraging mineralization exposed by Phase 1 trenching work and/or discovered during the course of Phase 1 prospecting and rock geochemical sampling;
- 20 km^2 of Orion 3D-IP surveys to futher explore the Ranch property for high sulphidation gold and porphyry-type copper-gold mineralization in the western parts of the Ranch property; and
- Further resource estimation studies as per any Giroux Consultant Ltd's Phase 1 recommendations.

Contingent on the completion of an option or joint venture agreement with a suitable and well-funded optionor or joint venture partner, Guardsmen intends to proceed with the recommended Phase 1 Exploration Program, or a portion of it, in 2014.

2.0 INTRODUCTION

2.1 Terms of Reference and Purpose

The author was requested by management of Guardsmen Resources Inc. ("Guardsmen"), a private Burnaby-based mining exploration company, to update an independent National Instrument 43-101 compliant Technical Report (the "Report") on its 100% owned Ranch Project located in the Toodoggone District of northern British Columbia. The earlier report, with an effective date of May 18, 2012, was also written by the author.

Throughout this report, the Ranch Project is frequently referred to as the Al (Ranch) property because in its long exploration and development history, it was previously known as the Al property when major work programs were carried out on it in the 1980's. The author's May 2012 Report was an update of two earlier Technical Reports on the Al (Ranch) property written by Paul Hawkins, P. Eng., in 2003 and 2006.

Neither the author of this Report, nor family members or associates, have a business relationship with Guardsmen or any associated companies, nor with any company mentioned in this Report that is likely to materially influence the Report's impartiality or create a perception that its credibility could be compromised or biased in any way. The views expressed herein are genuinely held and deemed independent of Guardsmen.

Moreover, neither the author, nor family members or associates have any financial interest in the outcome of any transaction involving the property considered in this Report other than the payment of normal professional fees for the work undertaken in the preparation of this Report (which is based upon daily charge-out rates and reimbursement of expenses). The payment of such fees is not dependent upon the content or conclusions of either this Report or consequences of any proposed transaction.

2.2 Source of Information and Data

The principal sources of information for this Report include the following:

- "A Technical Report Covering the Lawyers and Al (Ranch) Properties for Bishop Resources Inc., Toodoggone River Area, B.C., Omineca & Liard Mining Divisions, B.C." by Paul A. Hawkins, P. Eng. (dated June 27, 2003);
- "A Technical Report Covering the Ranch Property for Christopher James Gold Corp., Toodoggone River Area, B.C." by Paul A. Hawkins, P. Eng. (dated July 31, 2006);
- "Diamond Drilling, Airborne & Ground Geophysical Surveys, Geological Mapping and Prospecting on the Ranch Property, Toodoggone Area, Northern British Columbia" by B. K. (Barney) Bowen, P. Eng. (dated July 31, 2008); Assessment Report 30132;
- QA/QC Analysis and Resource Estimation of the Ranch Gold Project, by Micromine Consulting Ltd. (dated October 2007);
- "Al Project Feasibility Report, Toodoggone Area, British Columbia" by Wright Engineers Limited of Vancouver, B.C. (dated October 7, 1988);

- "Technical Report on the Ranch Project, Liard Mining Division, British Columbia, Canada" by B.K. (Barney) Bowen, P. Eng., for Guardsmen Resources Inc. (dated May 18, 2012); and
- Geological and analytical data collected during the author's site visit to the Ranch Project on September 2 and 3, 2013.

Another major source of information for the Report comes from assessment reports down-loaded from the B.C. Ministry of Forest, Mines and Lands' website The Map Place (www.empr.gov.bc.ca/Mining/Geoscience/MapPlace). The assessment reports detail the results of extensive historical exploration work carried out by previous operators on the Ranch Project during the period 1972-2007.

Miscellaneous data was supplied to the author by Guardsmen, including: current claims data for the Ranch Project; information on regional geology, geochemistry, aeromagnetic surveys and minfile occurrences within the Ranch Project area; diamond drill hole cross sections and drill hole logs for holes not recorded for assessment and thus not part of the public record; various technical reports pertaining to past production and historical mineral resource estimates for many of the gold-mineralized zones on Ranch Project; and a number of geological references pertaining to the Ranch Project and more generally, to the Toodoggone District of northern British Columbia.

The author reserves the right, but will not be obligated to revise this Report and its conclusions if additional information becomes known to him subsequent to the effective date of the Report.

2.3 Field Involvement of the Qualified Person (Author)

On September 2 and 3, 2013, the author carried out a site visit to the Ranch Project, with the objective of familiarizing himself with many of its known gold-mineralized zones which previously he had not examined in the field. On September 2, four zones were visited and two independent verification samples of mineralized surface bedrock were collected. On September 3, five more zones were visited and twelve verification samples of mineralized and unmineralized outcrop, subcrop and angular float were collected.

Prior to the September 2013 site visit, the author was familiar with the subject property having worked on it in September 2006 and in portions of May, June and September 2007. In 2006 he logged core from the Thesis III Zone under the supervision of Cam Graham, then VP Exploration for Christopher James Gold Corp. ("Christopher James"). In 2007 his primary role was to assist in the supervision of diamond drilling, and the core logging and sampling related to it. Core from both the Bonanza and Mickey Zones was logged. In 2008, the author wrote Assessment Report 30132 which covers all facets of Chistopher James' integrated drilling, geological, geochemical and geophysical exploration program completed in 2007.

The author is familiar with the general geological setting of the Toodoggone District, having been involved in a number of grass-roots and drilling projects in the area during the period 1968 to 2007 for various companies.

2.4 Units and Currency

All units of measurement in this Report are metric unless otherwise stated. Some historical records and figures that are disclosed in this Report are reported in Imperial measurements.

Base metal values are reported in percent (%) or parts per million (ppm). Historical gold and silver grades are reported in their original unit of oz. per ton Au or oz. per ton Ag (ounces per short ton), although in some cases metric equivalents are also given for clarity. Recent gold and silver analyses are reported in parts per billion (ppb) and parts per million (ppm) respectively, or g/t Au and g/t Ag (grams per metric tonne).

Currencies are reported in Canadian dollars unless otherwise stated.

3.0 RELIANCE ON OTHER EXPERTS

The author is required by NI 43-101 *Standards of Disclosure for Mineral Projects* to include descriptions of property title and terms of legal or purchase agreements that are presented in the Report. No Title Opinion for the claims comprising the Ranch Project was provided to the author by Guardsmen. He confirmed Title by independently reviewing the digital Tenure Records on the B.C. Ministry website "Mineral Titles Online" (https://www.mtonline.gov.bc.ca).

To the author's knowledge, Guardmen has not entered into any joint venture or option agreement with other parties on the Ranch Project. Guardsmen is the 100% owner of the all claims comprising the project, free and clear of any liens, royalty obligations or other encumbrances.

The historical resource estimates contained in this Report, including any of their underlying assumptions, parameters and classifications, are quoted "as is" from their source (Section 14.1). The author has not independently audited the resources referenced herein.

For many technical aspects of the Report, including portions of Sections 4.0 to 8.0 and 13.0 to 15.0, the author has relied upon information presented by Paul Hawkins, P. Eng., in his 2003 and 2006 Technical Reports covering the Al (Ranch) Property. Although much of Mr. Hawkins' data that is incorporated into the current Report has not been independently verified by the author, he carefully scrutinized and vetted that which was selected to form part of the Report.

The information on historical mineral processing and metallurgical testing presented in Section 13.1 is mainly sourced from Wright Engineers Limited's October 1988 Project Feasibility Report, Appendix III, titled "Review of Metallurgical Testwork Data for the Al Property by Wright Engineers Limited". Appemdix III of the Wright report summarizes the extensive test work completed by Bacon, Donaldson and Associates Ltd. and Mellis Engineering Ltd., metallurgical consultants, in the mid to late 1980's. Some additional data was sourced from Hawkins' 2006 Technical Report. The author has not independently verified the metallurgical data presented herein.

Some basic operational assumptions of the 1988 Feasibility Report presented in Section 16.1 of this Report have not been independently verified by the author, nor did he seek opinions of outside experts on the conclusions reached by Wright Engineers in their now outdated Feasibility Study.

A petrological report on two of the 2013 verification rock samples was prepared by Fabrizio Colombo, Ph.D., in November 2013. The author discussed with Dr. Colombo the highlights of his findings and has included them in Section 12.2 of the Report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Description and Location

The Ranch Project is located in northern British Columbia about 300 km north of Smithers and 60 km northwest of the past-producing Kemess South mine (see Figures 1a and 1b). Specifically, the claims are located in the Liard Mining Division, on map sheets 94E/05, 06, 11 & 12 at coordinates 57°29' N and 127°22' W or, in NAD 83 (Zone 9) UTM coordinates, 6371937 N and 598020 E.

The Ranch Project is comprised of 47 MTO (Mineral Titles Online) mineral claims totaling 16,386 hectares, or about 164 km^2. Their current 100% owner of record is Guardsmen Resources Inc. of Burnaby, British Columbia. A project claim map is shown in Figure 2 and a claims data summary, including the tenure number, size and expiry date for each claim, is listed in Table 1. The MTO claims were established online in February through October 2005, February 2006, April 2010, October 2012 and February through August 2013. Their areas are defined by specific coordinates predetermined by British Columbia's on-line staking system. All claims are contiguous and unpatented, and have not undergone a legal survey.

The locations of 19 known zones of gold mineralization on the Ranch Project are shown on Figure 12a. The Bonanza, Thesis III and BV Zones are the only zones which have seen minor past production. Historical resource estimates have been done on them and also on 5 other zones.

Effective July 1, 2012, the Mineral Tenure Act Regulations pertaining to the on-line maintenance of mineral claims in British Columbia changed as follows:

- When filing assessment work, there is no longer any filing fee to record such work.
- The previous two-tiered system for annual assessment work requirements, to be assessed on a per hectare basis, has been replaced by a four-tiered system as follows:
    - o for the first two years after July 1, 2012, $5 per hectare;
    - o for the third and fourth years after July 1, 2012, $10 per hectare;
    - o for the fifth and sixth years after July 1, 2012, $15 per hectare; and
    - o for any subsequent year after July 1, 2012, $20 per hectare.

On October 25 and 30, 2013, Guardsmen filed on-line statements of work which together advanced the majority of the Ranch Project claims to the end of the second year of the above four-tiered system. Thus the annual work requirement for most claims is $10 per hectare. The total work requirement cost to advance all Ranch Project claims one full year is appoximately $160,000.

Under 'Park Layers' on the mineral claim map shown on Mineral Titles Online, there is a discrepancy between the outline of the legal park description for the Spatsizi Plateau Wilderness Park (the "Park") when the 'Provincial Parks & Protected Areas' tab is selected, versus the outline of the Park when the 'BC Parks (July 2004) outline' tab is selected. At the time of its writing in 1999, the legal park description described an area, called the "Metsantan Zone", which consisted of a number of mineral claims excluded from the Park. The Metsantan

Zone represents the additional area on the Mineral Titles Online claim map which covers the excluded mineral claims. Any mineral claims currently existing or subsequently acquired in the Metsantan Zone are similarly excluded from the Park. All or a portion of current Ranch mineral claims which lie within the Metsantan Zone are shown on Figure 2.

Further to the above, the Cassiar Iskut-Stikine Land and Resource Management Plan ("LRMP"), approved on October 11, 2000, directs that *"(i) existing mineral title areas at the time of the LRMP approval will be excluded form the Protected Area; (ii) the Metsantan Zone will be open for staking, mineral exploration and mine development for a period of twenty years from plan approval; and (iii) if there are active mineral titles in the area after twenty years, their areas will be added to the Protected Area once the title expires."*

In the near term, the existence of the Metsantan Zone will not materially affect exploration on the Ranch Project except to manage access into mineral tenures adjacent to the protected area to minimize disturbance of seasonal migration of caribou. In the long term, there can be no assurances that future governments will continue this policy.

No surface rights on the Ranch Project are held by Guardsmen or, to the author's knowledge, by any other parties. Guardsmen and/or other parties (whether future optionors or joint venture partners) will be required to obtain all necessary surface rights by way of filing an application for mining leases for the construction and operation of a mine on the Ranch Project. A complete land title review of surface ownership has not been conducted at this time, but Guardsmen is aware that the mineral claims comprising the Ranch Project generally consist of Crown Land, which would make it easier to obtain surface access and rights of use for mineral development. A more detailed analysis will be required.

Past legal access to the Ranch Project was provided by the Metsantan Extension to the Omineca Resource Access Road ("ORAR"), from Cheni Gold Mine Inc's past-producing Lawyers mine across the Toodoggone River and on to the property. This access road was decommissioned in 1999-2000; currently the property is only accessible by helicopter. Other exploration companies active in the area have given some consideration to the re-commissioning of this access road, including the bridge crossing over the Toodoggone River, but as of the effective date of the Report, to the author's knowledge, no commitments nor a decision to do so have been made.

4.2 Agreements

Guardsmen is the 100% owner of the Ranch Project, free and clear of any encumbrances such as royalty obligations to or back-in rights by previous optionors or joint venture partners. There are currently no agreements that pertain to the property.

4.3 Permitting, Environmental Liabilities and Other Issues

A Notice of Work application, dated July 31, 2012, was approved by the Ministry on December 18, 2012, under Amended Mines Act Permit MX-13-130 and Approval # 12-1640567-1218. It allows for the construction of up to 8 helicopter-supported drill sites and 160

line-km of grid establishment for the purpose of conducting induced polarization surveys, over the period December 18, 2012 to November 30, 2014. This approved work permit will require some amendments to better conform with the proposed Phase 1 exploration program described under Recommendations (Section 18.0) in the Report. Additionally, ongoing consultations with First Nations regarding proposed work will need to be finalized.

The author does not anticipate that Guardsmen will encounter any problems obtaining the required permits, although he does advise that sufficient lead time be allowed government agencies to process permit applications well in advance of the start-up date for planned work. Regarding reclamation bonds, $6,000 was posted by Bishop Gold in July 2003 and a further $4,000 was posted by Christopher James in April 2007. Some of these monies may be available to cover reclamation of any new disturbances. An additional bond may have to be posted to cover reclamation of proposed Phase 1 trenching.

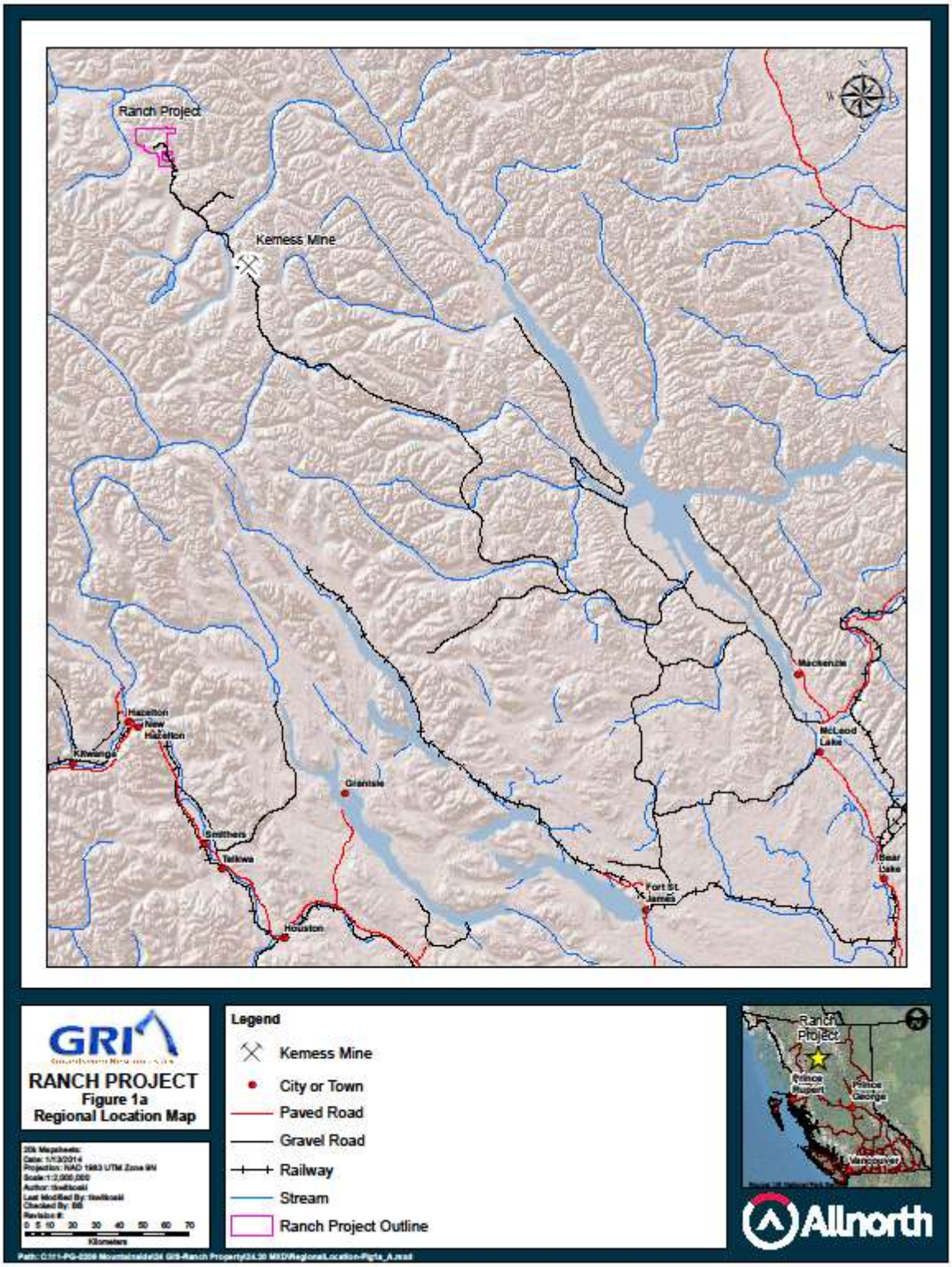
Past mine workings and related minor waste deposits on the Ranch Project are present in the BV, Bonanza (Ghost Pit) and Thesis III Zones where Cheni surface-mined an aggregate of 59,000 tonnes from three small pits in 1991. The BV and Ghost Pits remain open and are currently water-filled. The Thesis III pit was filled in and fully reclaimed by Cheni. No mining equipment remains on the property.

Disturbances are limited to reclaimed drill sites, trenches and 4-wheel drive access roads. Some trenches in the Bingo Zone have not been reclaimed. The decommissioned Metsantan Extension to the ORAR, which provided access to past mine workings on the property, has been reclaimed in part but remains largely intact. The majority of the approximately 34,000 m of historical diamond drill core was buried at the time of trench and pit reclamation in the 1980's and 1990's. Of this total, approximately 7,800 m of core from 52 holes completed by Chistopher James in 2006-07 remains stored on the property.

The close proximity of the Ranch Project to Spatsizi Plateau Wilderness Park and the alpine environment in which the property is located will necessarily require careful planning and execution to mitigate any environmental concerns identified by government agencies, First Nations bands or the general public. The continued use of helicopters and all terrain vehicles for transport of equipment and personell will effectively limit terrain disturbance.

The author is not aware of any other known significant factors or risks related to the Ranch Project that may affect access, title or the right or ability to perform work on the property.

Maintaining good relations with the First Nations people of the area will have to continue to be a high priority to ensure success in any future development.


Ranch Project
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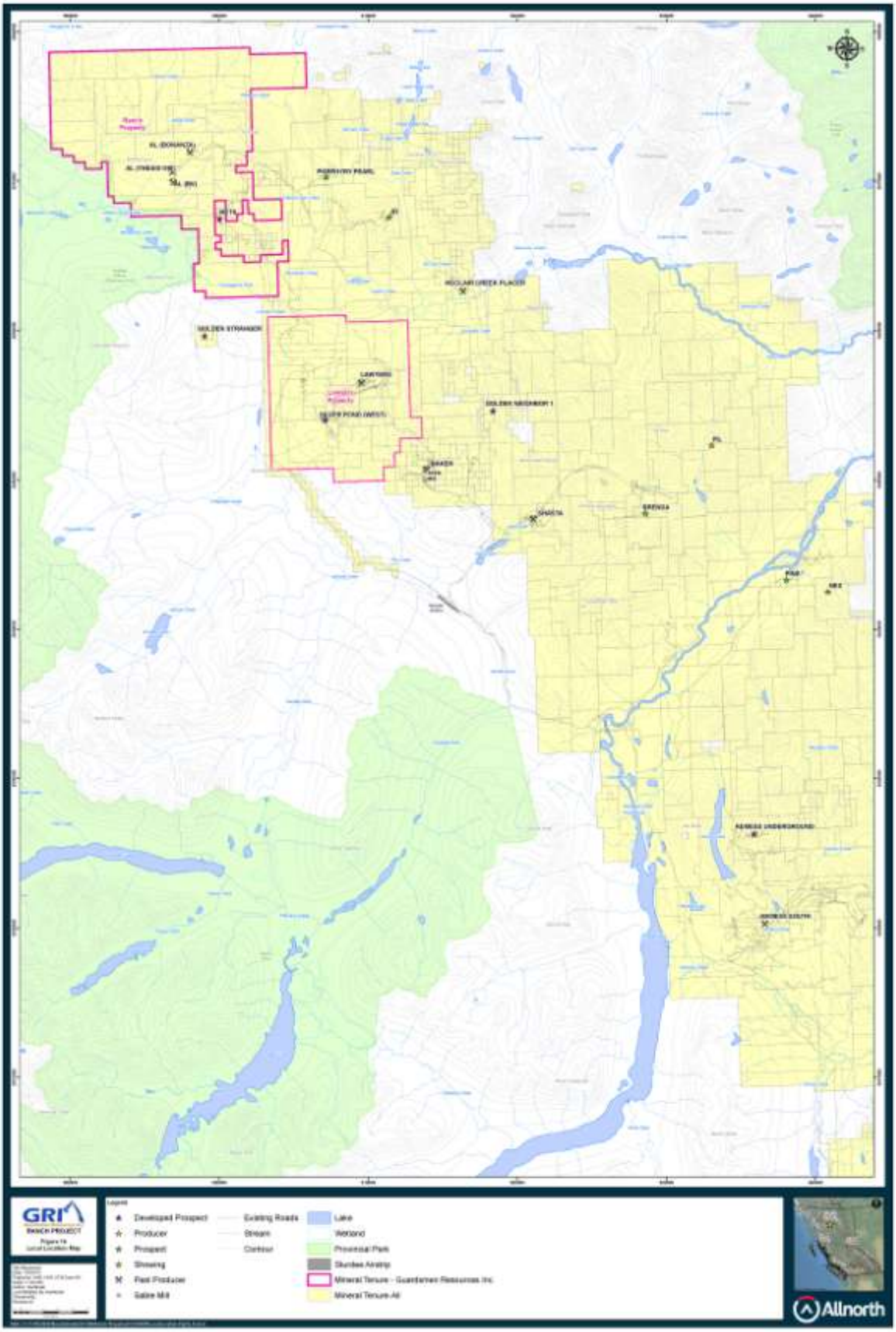
Mackenzie
McLeod Lake
Hazelton
New Hazelton
Kitwanga
Granisle
Smithers
Telkwa
Houston
Fort St. James
Bear Lake
RANCH PROJECT
Figure 1a
Regional Location Map
Legend
Kemess Mine
City or Town
Paved Road
Gravel Road
Railway
Stream
Ranch Project Outline
Ranch Project
Prince Rupert
Prince George
Vancouver
Allnorth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RANCH PROJECT
Developed Prospect
Producer
Prospect
Showing
Past Producer
Gabbe Mill
Existing Roads
Stream
Contour
Lake
Wetland
Provincial Park
Mineral Tenure - Guardsmen Resources Inc.
Mineral Tenure All
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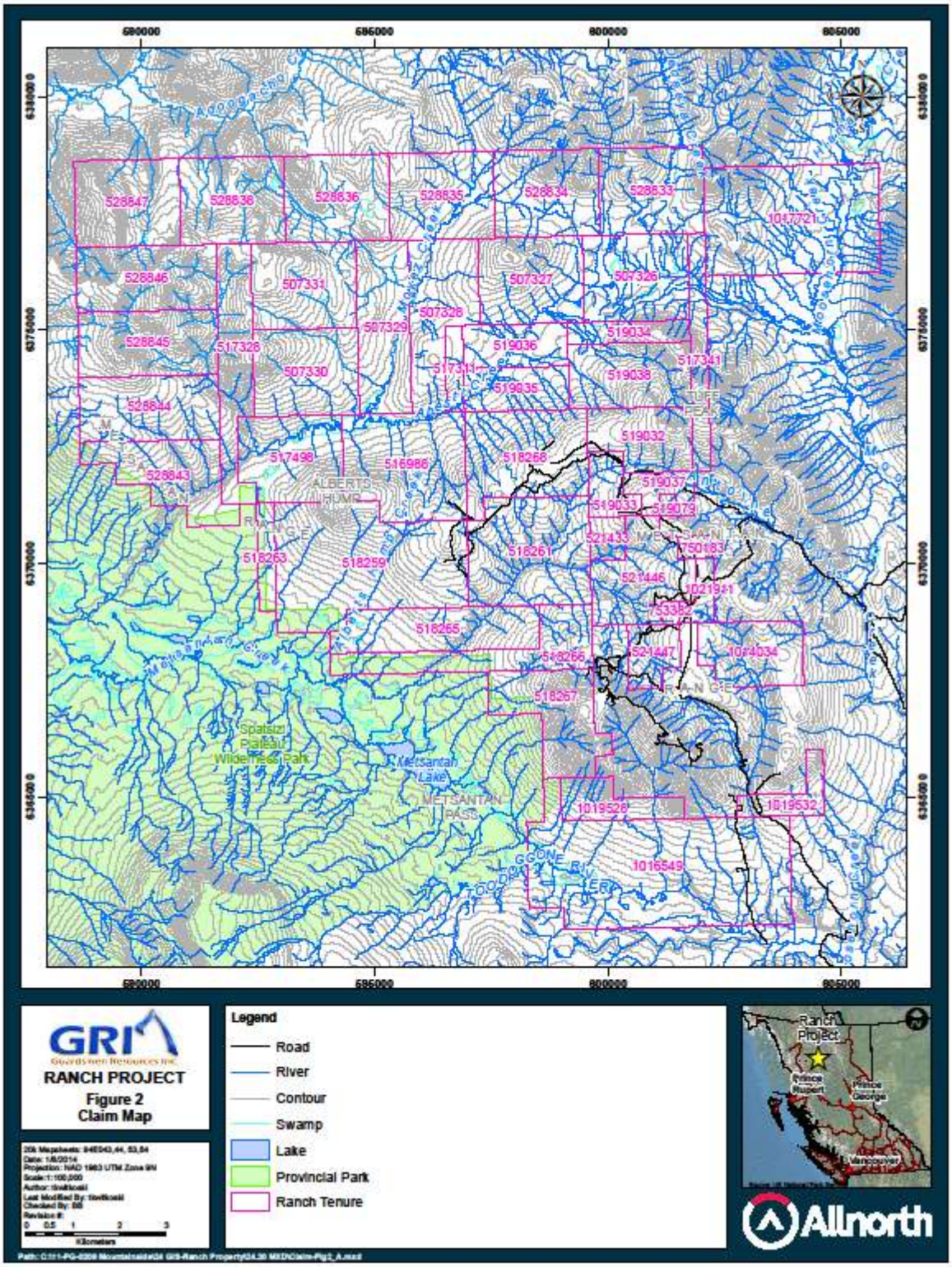
RANCH PROJECT
Figure 2
Claim Map
Legend
Road
River
Contour
Swamp
Lake
Provincial Park
Ranch Tenure
Ranch Project
Prince Rupert
Prince George
Vancouver
Allnorth
Spatsizi Plateau Wilderness Park
Metsantan Lake
METSANTAN PASS
528847
528838
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1016549

Table 1

Ranch Project - Claims Data

Tenure #	Claim Name	Owner	Type	Issue Date	Expiry Date	Area (ha)
507326	AB 1	131812	Mineral	2005/feb/16	2015/nov/15	417.117
507327	AB 2	131812	Mineral	2005/feb/16	2015/nov/15	417.133
507328	AB 3	131812	Mineral	2005/feb/16	2015/nov/15	417.198
507329	AB 4	131812	Mineral	2005/feb/16	2015/nov/15	417.233
507330	AB 5	131812	Mineral	2005/feb/16	2015/nov/15	417.341
507331	AB 6	131812	Mineral	2005/feb/16	2015/nov/15	417.149
516988		131812	Mineral	2005/jul/11	2015/nov/15	574.112
517311	BERT FRACTION	131812	Mineral	2005/jul/12	2015/nov/15	69.554
517328	HUMP BACK	131812	Mineral	2005/jul/12	2015/nov/15	365.153
517341	ALBERT EAST	131812	Mineral	2005/jul/12	2015/nov/15	191.254
517498		131812	Mineral	2005/jul/12	2015/nov/15	400.13
518259		131812	Mineral	2005/jul/26	2015/nov/15	939.948
518261		131812	Mineral	2005/jul/26	2015/nov/15	591.784
518263	ALBERT WEST	131812	Mineral	2005/jul/26	2015/nov/15	87.029
518265	AL 5&6	131812	Mineral	2005/jul/26	2015/nov/15	400.484
518266	AL 5&6 FRACTION	131812	Mineral	2005/jul/26	2015/nov/15	365.702
518267		131812	Mineral	2005/jul/26	2015/nov/15	383.247
518268		131812	Mineral	2005/jul/26	2015/nov/15	504.501
519032		131812	Mineral	2005/aug/14	2015/nov/15	278.311
519033		131812	Mineral	2005/aug/14	2015/nov/15	121.793
519034		131812	Mineral	2005/aug/14	2015/nov/15	121.694
519035		131812	Mineral	2005/aug/14	2015/nov/15	208.686
519036		131812	Mineral	2005/aug/14	2015/nov/15	208.638
519037		131812	Mineral	2005/aug/14	2015/nov/15	104.396
519038	HUMP	131812	Mineral	2005/aug/14	2015/nov/15	365.166
519079	ALPARK	131812	Mineral	2005/aug/15	2015/nov/15	17.401
521433	FURLONG	131812	Mineral	2005/oct/22	2015/nov/15	69.615
521446	ALMET1	131812	Mineral	2005/oct/22	2015/nov/15	365.552
521447	ALMET2	131812	Mineral	2005/oct/22	2015/nov/15	139.314
528833	ALBERTS NORTH 1	131812	Mineral	2006/feb/23	2015/nov/15	416.928
528834	ALBERTS NORTH 2	131812	Mineral	2006/feb/23	2015/nov/15	416.939
528835	ALBERTS NORTH 3	131812	Mineral	2006/feb/23	2015/nov/15	416.942
528836	ALBERTS NORTH 4	131812	Mineral	2006/feb/23	2015/nov/15	416.952
528838	ALBERTS NORTH 5	131812	Mineral	2006/feb/23	2015/nov/15	416.958

* 100% owner of record is Guardsmen Resources Inc. (Client ID # 131812)

Table 1 (continued):

Tenure #	Claim Name	Owner	Type	Issue Date	Expiry Date	Area (ha)
528843	ALBERTS NORTHEAST 1	131812	Mineral	2006/feb/23	2015/nov/15	365.364
528844	ALBERTS NORTHEAST 2	131812	Mineral	2006/feb/23	2015/nov/15	417.415
528845	ALBERTS NORTHEAST 3	131812	Mineral	2006/feb/23	2015/nov/15	417.275
528846	ALBERTS NORTHEAST 4	131812	Mineral	2006/feb/23	2015/nov/15	417.13
528847	ALBERTS NORTHEAST 5	131812	Mineral	2006/feb/23	2015/nov/15	416.962
750183		131812	Mineral	2010/apr/16	2015/nov/15	34.8091
753382	BLOCKED CELL	131812	Mineral	2010/apr/20	2015/nov/15	17.4105
1014034		131812	Mineral	2012/oct/28	2015/nov/15	296.0447
1016549		131812	Mineral	2013/feb/02	2015/nov/15	1307.5799
1017721		131812	Mineral	2013/mar/12	2015/nov/15	868.7548
1019528		131812	Mineral	2013/may/16	2015/nov/15	174.283
1019532		131812	Mineral	2013/may/16	2015/nov/15	121.9946
1021911		131812	Mineral	2013/aug/28	2015/nov/15	69.6361
					Total:	**16,386.0127**

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

Access is via helicopter, based year-round in Smithers, a distance of 300 km south of the property. During the 2014 field season, casual helicopter charter may be available part time, based out of the Kemess mine site which is currently on care and maintenance. Road access to the Kemess South mine is via an all-weather gravel road which connects the mine to supply centers at Mackenzie, Fort St. James and Prince George. Currently there is fixed wing air service from the mine to Prince George and Smithers once or twice a week.

Future road access to the property, if required, could be via a system of active and decommissioned mine access roads which lead northwesterly from the Kemess South mine through the Baker Mine and Lawyers property and onwards to the Ranch property. The closest 'truck unload' point is at the Sturdee airstrip, the effective northern end of the ORAR. The Metsantan Extension to the (Al) Ranch property was decommissioned in 1999-2000 by removing the bridge across the Toodoggone River and culverts between the Lawyers mine and the airstrip. The helicopter flight from Sturdee to the Ranch property takes approximately 15 minutes.

Fixed-wing aircraft out of Smithers or Prince George can service the Sturdee airstrip; however, because the airstrip has not been regularly maintained, most fixed wing service is out of the well-maintained airstrip at the Kemess South mine site.

Typically fuel and heavy equipment are trucked in from Prince George, Mackenzie or Fort St. James to the Sturdee airstrip. More recently, weekly supplies for the property have been trucked into Sturdee from Prince George and then flown to the property by helicopter.

Smithers is serviced daily by one national and two regional carriers. Air Canada Jazz provides flights to and from Vancouver. Hawkair provides service between Smithers and Terrace and Smithers and Vancouver. Central Mountain Air offers flights to and from Terrace, Prince George, Kamloops and Kelowna. Canadian Helicopters has a year-around base in Smithers, providing Jet Ranger and A-Star service for short or longer term contract use. Silver King Helicopters also has a year-around base in Smithers and may be positioning an A-Star helicopter at the Kemess South mine during the 2014 field season.

5.2 Climate

The climate of the property can be described as cool continental with cool summers and cold winters. Temperatures range from 30º Celsius in summer to –20º Celsius in winter. Some permanent ice is present on the property. The summer exploration season lasts from early June into late September. Snowfall accumulations can reach up to two metres over the winter months.

5.3 Local Resources

The nearest major supply center is Smithers, 300 km by air to the south. Smithers has a population of about 5,700 and services roughly 15,000 people living in the Bulkley Valley region. It is a major service centre along both the Yellowhead Highway (No. 16) and the Canadian National Railway, midway between Prince George and the port city of Prince Rupert.

Smithers has a long history of supporting and servicing mineral exploration and development in the north-central and northern B.C. regions, including its support of past operating mines such as Bell and Granisle in the Babine Lake area, Equity Silver near Houston and Kemess South in the Toodoggone District. Its active exploration fraternity includes the Smithers Exploration Group (SEG) which has been serving and promoting the mineral industry in the region since 1971. Smithers has an available workforce for exploration and mining, and is the base for a number of companies which provide contract drilling and other mining-related services to the industry.

The only other industry in the Toodoggone area is adventure tourism, including guided big game hunting and sports fishing.

5.4 Infrastructure

The closest major infrastructure facility is the Kemess South mine which is currently on care and maintenance while Aurico Gold Inc. carries out additional exploration and related feasibility studies on its proposed Kemess North Underground Mine. Facilities include: electrical power, tied into the B.C. Hydro grid via a 340 km-long power line extending from Mackenzie; a 1,424 m-long gravel airstrip currently serviced by weekly fixed wing flights from Smithers and Prince George; a large mine camp providing room and board to the Aurico workforce; and all-weather road access connecting to major supply centers to the south.

The Baker mine, operated by Sable Resources Limited, is located about 25 km southeast of the Ranch property. It is a low throughput open pit and underground mine powered by diesel generation and serviced by seasonally-maintained roads and the nearby Sturdee airstrip. An Atco trailer camp provides summer accommodation to a small workforce.

5.5 Physiography

The Ranch property is located largely above tree line at elevations ranging from 1300 to 1900 m ASL. The area consists of rounded hills with steep talus and overburden covered slopes (Plate 1). Outcrop on the property is sparse and limited predominantly to ridges and creek bottoms. Parts of the property have been disturbed from surface mining activities carried out by Cheni Gold Mines in 1991.

In the alpine, vegetation consists of alpine meadow grasses, heather and shrubs with isolated patches of coniferous trees. In reclaimed areas, the recommended alpine mix provides rich lush green growth for the first year. In subsequent years the lush growth is reduced, due to

lack of nutrients and grazing by ungulates occupying the area. At lower elevations, open forests of pine and hemlock predominate with alders occurring in poorly drained areas or on steep slopes. A number of creeks are present on the property; these have been used for water into October before freezing. Most appear groundwater fed.

The Ranch Project's size, its mostly relatively gentle terrain and its local sources of water are sufficient to accommodate mining facilities, potential mill processing sites, tailings storage areas, heap leach pads and waste disposal sites. The local water supply could easily support any major resource definition drill programs that may be required, should future exploration programs prove successful.

Additional plates depicting the general topography of the project area are presented in Section 7.2.3 of the Report.

Plate 1: View of 2007 Ranch exploration camp (looking northerly)

6.0 HISTORY

6.1 Summary of Prior Ownership and Exploration Activity

A concise summary of the history and development on and around the AL (Ranch) property is given by Graham et al. in their 2006 assessment report (# 28887) on the Ranch property and by Hawkins in his 2003 Technical Report on the AL and Lawyers properties and in his 2006 Technical Report on the Ranch property. Including some additional comments by the author, the history and development of the Ranch property is summarized as follows:

• 1972 (Sumac Mines Ltd.): In the Albert's Hump area, Sumac carried out surface exploration, including the collection of 354 soil and rock samples.

• 1973 (Sumac Mines Ltd.): In the Albert's Hump area, Sumac carried out 8.8 line-km of ground magnetic and Induced Polarization (IP) surveys; additionally, 15 rock samples were collected from 13 hand trenches and 133 grid soil samples were taken.

• 1979 (Energex Minerals Ltd.): Energex optioned a group of four claims (the original AL property) over part of the current Ranch property.

• 1980: The AL property, along with the nearby Moose and JD properties, were optioned to Texasgulf Canada Ltd. who completed reconnaissance geochemical surveys, geological mapping and staking of additional ground south of the current Ranch property. A total of 43 silt, 57 soil and 67 rock samples were collected.

• 1981 (Texasgulf Canada Ltd.): Texasgulf conducted extensive soil sampling on 3 separate grids, along with geological mapping and sampling on many of the alteration-mineralization zones on the property and VLF-EM/magnetometer orientation surveys in selected areas. In this phase of the work program, a total of 2,567 soil and 283 rock samples were collected. Additionally, 6 hand trenches totaling 146 m (274 rock samples) at the Ridge prospect and 4 hand trenches totaling 80 m (151 rock samples) at the Golden Furlong prospect were completed. Results were positive and additional ground was acquired.

• 1982 (Texasgulf Canada Ltd.): Texasgulf conducted additional geological mapping, rock and soil geochemistry, IP surveys, trenching, diamond drilling and a legal survey of corner posts. A total of 1,785 soil samples were collected on several grids from the Bonanza area westwards towards Albert's Hump. Diamond drilling was completed on three zones including: Bonanza-Ridge (8 holes totaling 1,097.7 m), Golden Furlong (2 holes totaling 395.5 m) and Albert's Hump (2 holes totaling 203.3 m). Additionally, 2 trenches totaling 61 m were completed in the Bonanza Zone.

• 1983 (Texasgulf Canada Ltd.): Texasgulf conducted extensive surface exploration on the Ranch property, including trenching, geological mapping and soil sampling, which led to the discovery of the "Verrenass" Zone (a very high-grade portion of the Bonanza Zone) and the Thesis II Zone. A total of 811 soil samples were collected on 2 separate grids, 48 back-hoe trenches (2,694 m) were completed in the Bonanza-Ridge area and on the Thesis II Zone, 687 panel samples and 11 soil profiles (53 samples) were collected from the Bonanza-Ridge trenches and prior to trenching at Thesis II, 12 surface rock samples were collected.

• 1983-84 (Newmont Canada Limited): Newmont carried out preliminary surface work on the Chuck and Moyez claims north of the AL property (now covered by Ranch property claims) where air photo lineaments had been staked by them in 1982. A total of 331 grid and reconnaissance soil samples and 126 silt samples were collected. Results of these programs failed to delineate any zones of economic interest.

• 1984 (Texasgulf Canada Ltd.): Texasgulf conducted extensive trenching and diamond drilling of the Bonanza, Ridge and Thesis II Zones, as well as on the newly discovered high-grade Thesis III and BV (Barite Vein) Zones. Work included: 32 back-hoe trenches (1,505 m) in the Thesis III and BV Zones; diamond drilling in the BV (8 holes, 575.4 m), Thesis III (4 holes, 269.5 m), Bonanza-Verrenass (4 holes, 135.6 m), Thesis II (2 holes, 143.0 m) and Ridge (1 hole, 87.4 m) Zones; and the collection of 605 rock samples taken during the surface evaluation of base and precious metals soil anomalies identified in earlier surveys. The property was subsequently returned to Energex by Texasgulf.
• 1985 (Miramar Energy Corporation): The Chuck-Moyez property was purchased by Miramar from Newmont in early 1985. Miramar collected 20 rock chip, 36 silt and 10 heavy metal samples on the property. No ore grade precious metal occurrences were discovered on the claims.
• 1985 (Energex Minerals Ltd.): Energex completed trenching, mapping and panel rock sampling on the Bingo Zone and carried out diamond drilling in the BV and Thesis III Zones. Geological mapping and rock geochemical sampling was completed on the Bloss, Patti, Steve's, Ring, Eric and Pond Zones. Additionally, 7 diamond drill holes totaling 271.3 m were completed in the Bonanza area (2 holes on the Ghost Zone and 5 holes on the Verrenass Zone).
• 1985 (Texpez Oil and Gas Corp.): Texpez carried out preliminary surface work on the Wolf II claim now covered by claims in the northeast part of the Ranch property. A total of 693 soil samples were taken on 2 separate grids and 5 rock samples were also collected. Soil sample results revealed 3 areas containing anomalous gold values, locally accompanied by anomalous concentrations of barite. Highest rock sample results were 2.2 ppm Ag and 15 ppb Au.
• 1985 (Yukon Gold Placers Ltd.): Yukon carried out geological mapping and rock geochemical sampling on the Moytan 1 and 2 claims located in an area which is now in the northwestern part of the Ranch property. Yukon collected 22 rock chip samples, none of which identified any precious metals occurrences.
• 1986 (E.L.E. Energy Inc.): In early 1986, a 10,000 line-km airborne magnetic and VLF-EM survey was completed across the Toodoggone District. "E.L.E." commissioned Western Geophysical Aero Data Limited to recover and examine in detail airborne data gathered across the Indian Gold 1 and 2 claims. These claims are located at the western edge of the Ranch property, where its boundary adjoins the Spatsizi Plateau Wilderness Park.
• 1986 (Miramar Energy Corporation): Miramar completed 8.3 km of VLF-EM and resistivity surveys on 2 separate grids on the Chuck-Moyez property, following up on previous geological areas of interest.
• 1986 (Lacana Mining Corporation): Lacana completed 5 diamond drill holes totaling 615.7 m on the Patti Zone, located in the southeastern part of the Ranch property.
• 1986 (Duke Minerals Ltd.): Duke completed a preliminary surface work program on the Discovery 1 and 2 claims which were located immediately northwest of Metsantan Lake. These now expired claims are located just within the Spatsizi Plateau Wilderness Park, near the southern boundary of the Ranch property. Duke's work program consisted of 4.7 line-km of IP surveys, 8.3 line-km of grid soil surveys and 9.7 line-km of VLF-EM surveys. The IP survey outlined a resistive zone coincident with moderately anomalous gold-in-soil values. This target was tested later in 1986 with 7 diamond drill holes totaling 427.0 m. Assays of 30 core samples taken showed little or no gold present in the area drilled.
• 1986 (Energex Minerals Ltd.): Energex completed a major integrated exploration program on the AL property, including: 83 diamond drill holes totaling 3,683 m in 4 zones (Thesis II and

III, Bonanza and BV); 141 back-hoe trenches totaling about 3,900 m and the collection of 1,140 samples from them; back-hoe stripping of areas within the Bonanza, BV and Thesis III Zones and the collection of 545 one-meter long channel samples within the stripped areas; geophysical orientation surveys using 7 systems over known areas of mineralization; instrument surveying of all 1986 drill holes and trenches which were tied in to a local property grid; the establishment of 6 detailed and 2 reconnaissance soil grids over several parts of the property (2,878 soil samples were collected); and extensive prospecting, mapping and sampling of altered rocks over the detailed soil grids and known alteration zones (323 rock samples were collected). Additionally, Energex constructed a pilot plant with a 6 tonnes per day capacity to process high-grade ore from the Thesis III A Zone; a total of 209 tonnes of ore was processed.

• 1986 (Beachview Resources Ltd.): For the now expired 20-unit Wolf 1 claim, in the north-central part of the Ranch property, Beachview commissioned Western Geophysical Aero Data Limited to recover and examine in detail airborne data gathered from the 10,000 line-km, district-wide airborne survey completed in 1986 (see "E.L.E." 1986 above).

• 1986 (Toodoggone Syndicate): For the now expired 20-unit Spike claim, in the north-central part of the Ranch property, the Toodoggone Syndicate commissioned Western Geophysical Aero Data Limited to recover and examine in detail airborne data gathered from the 10,000 line-km, district-wide airborne survey completed in 1986 (see Beachview Resources, 1986 above).

• 1987 (Deleware Resources Corp.): Deleware completed a preliminary surface work program on the now expired Adoog 1-6 claims which were located in what is now the far northwest corner of the Ranch property. Thirty-six rock samples were submitted for gold and silver analyses but none returned significant values.

• 1987 (Energex Minerals Ltd.): Energex drilled 8,600 m in 122 holes, mainly directed towards proving up reserves in the Bonanza and BV Zones. This total includes 8 holes drilled in the Ridge Zone to follow-up on encouraging precious metals results from earlier drill programs.

• 1988 (Energex Minerals Ltd.): Energex completed 70 diamond drill holes totaling 6,308.8 m in 8 widespread zones across the AL property. The 1988 objectives were to test, by drilling, second order, previously sampled surface showings for open-pitable ore grade material and also to drill-test deeper levels of the Bonanza Zone. About 50% of the drilling was carried out on the Bonanza Zone, 25% on the Bingo Zone and the remainder on the Ridge, BV South, Thesis II and III 'B', JK and Eric Zones. Extensive stripping was carried out on the Bonanza Zone and a lesser amount on the BV South Zone. By the end of 1988, a total of 19 surface gold showings had been discovered on and around what is now Guardsmen's Ranch property.

Energex also commissioned Wright Engineers Limited of Vancouver, B.C. to carry out a feasibility study for the proposed open pit mining on the Bonanza, Thesis III and BV Zones, and coordinated extensive metallurgical testing. All this work was funded by flow-through financing and aimed at a self-financed development. Changes in the structure of flow-through financing in 1989 precluded Energex's ability to continue to raise money and carry out this development plan.

• 1990 (Miramar Energy Corporation): Miramar collected a total of 278 soil samples along 5 separate contour soil lines spread randomly across its Chuck-Moyez property, searching for epithermal precious metal deposits such as those on the adjacent Al property. Although results showed generally low gold and silver values, one noticeable aspect of the data set was the

consistently high, and possibly anomalous, concentrations of barite. Only one of the 278 samples returned a value below 100 ppm Ba.

• 1990 (Cheni Gold Mines Inc.): Cheni optioned the AL property and completed an access road from their Lawyer's property to the Bonanza Zone.

• 1991 (Cheni Gold Mines Inc.): Cheni surface-mined an estimated 41,200 tonnes of ore grading 9.2 g/t Au from the BV, Thesis and Bonanza Zones and trucked it approximately 40 km to the Lawyers mill for processing. About 10,000 ounces of gold were recovered from this open pit mining activity.

• 1996-97 (AGC Americas Gold Corporation): "AGC" acquired an option on the AL property and added it to their large claim holdings in the area. During 1997, AGC formed a joint venture with Antares Mining Corporation and conducted a 24 hole, two-stage diamond drilling program on the Bonanza and Thesis III zones, an orientation IP survey with variably-spaced lines surveyed across the Bonanza, Thesis III and BV Zones, and a helicopter-borne EM-magnetometer-radiometric survey over the property.

• 2001 (Guardsmen Resources Inc.): The Mining Leases covering the Bonanza, Thesis III and BV Zones were allowed to lapse on July 21, 2001. In addition, AGC allowed their claims in the Albert's Hump area to lapse. Guardsmen acquired the property by staking the Ranch claims in August 2001. Additional claims were added to the property between 2002 and 2005 as previous claims expired.

• 2002 (Guardsmen Resources Inc.): In December 2002, Guardsmen optioned the Ranch property to Bishop Gold Inc.

• 2003 (Bishop Gold Inc.): Bishop conducted a limited 10-hole (712 m) diamond drilling program on the Bonanza Zone.

• 2005 (Guardsmen Resources Inc.): Guardsmen formed a joint venture with Bishop Gold Inc. on the Ranch property. The joint venture was subsequently terminated and Guardsmen retained a 100% interest in the Ranch property.

• 2006 (Christopher James Gold Corp.): In June 2006, Christopher James acquired an exclusive option to purchase all of the shares of Guardsmen Resources Inc. Guardsmen's principal asset was its 100% interest in the Ranch property. In August and September 2006, Christopher James completed the drilling of 625 m of diamond drilling in 7 holes on the Thesis III Zone and carried out surface mapping and sampling in several areas on the property.

• 2007 (Christopher James Gold Corp.): Work completed by Christopher James on the Ranch property during the 2007 field season consisted of the following: the drilling of 45 diamond drill holes totaling 7,194 m in four mineralized zones on the property (Bonanza, Thesis II and III and Mickey); mapping, prospecting and geochemical sampling in two areas well outside the drill areas (Patti and AB Zones); a helicopter-borne magnetic gradiometer survey consisting of 2,229 line km within a single, 54 km^2 block in the southern part of the property; and a 3D-IP survey totaling 61 line-km completed in the southern part of the property, over and adjacent to known zones of gold mineralization.

• 2008-2012 (Guardsmen Resources Inc.): Guardsmen kept the Ranch property on a care and maintenance basis during this 5-year period. No exploration or development work was carried out on the property.

6.2 Key Exploration Results from Previous Operators

A summary of prior ownership and exploration activity on the Ranch Project was presented in Section 6.1. In this section, some key exploration results from previous operators are presented. Past drill results pertaining to the Bonanza, Thesis III and BV Zones and many other mineralized zones on the property are presented in Section 7.2.3.

6.2.1 Grid Soil Surveys

Extensive, property-wide grid soil surveys, covering a large area measuring some 27 km^2, were completed by Texasgulf and Energex during the period 1981-86 (Figure 3). Follow-up prospecting and trenching, and later diamond drilling of many of the gold soil anomalies outlined by these surveys has led to the discovery of most known gold-mineralized zones on the property.

A noticeable feature that can be observed in Figure 3 is that many known zones of mineralization are located at or near the southern end of a spatially-related gold soil anomaly. This suggests that significant portions of some anomalies may represent down-ice glacial transport, in a northerly direction, of eroded mineralized bedrock. Examples of this include the gold soil anomalies associated with the Bonanza, Bingo and Thesis II Zones. The up-ice source of several soil anomalies (eg. the one southwest of the BV Zone, the cluster of gold anomalies on the north side of Albert's Hump and another cluster between Patti and Steve's Zones) has not been located; these areas and others like them warrant follow-up prospecting and rock geochemical sampling.

The limit of the 2013 grid soil survey on the south flank of Albert's Hump is also shown on Figure 3. Results of this soil sampling are discussed in Section 9.2 of the Report.

6.2.2 Rock Geochemical Sampling

Figure 4 presents a colour-coded, symbol plot of all anomalous gold-in-rock values (at >100 ppb) for several hundred surface prospecting samples collected by Texasgulf during the period 1980-84 and Christopher James in 2006. Most anomalous sites are located in or adjacent to known areas of gold mineralization.

There are, however, a number of samples that define anomalous sample clusters which have no known source. The two most prominent are the Mickey Zone (discussed in Section 7.2.3 of the Report) and a second area a short distance to the north of the Mickey Zone. The latter area contains samples with values up to 13,819 ppb Au and has not been tested by trenching or diamond drilling. It is located just to the northeast (ie. down-ice) of a silica-altered, northwest-trending fault structure along which the source area for these mineralized rock samples may occur.

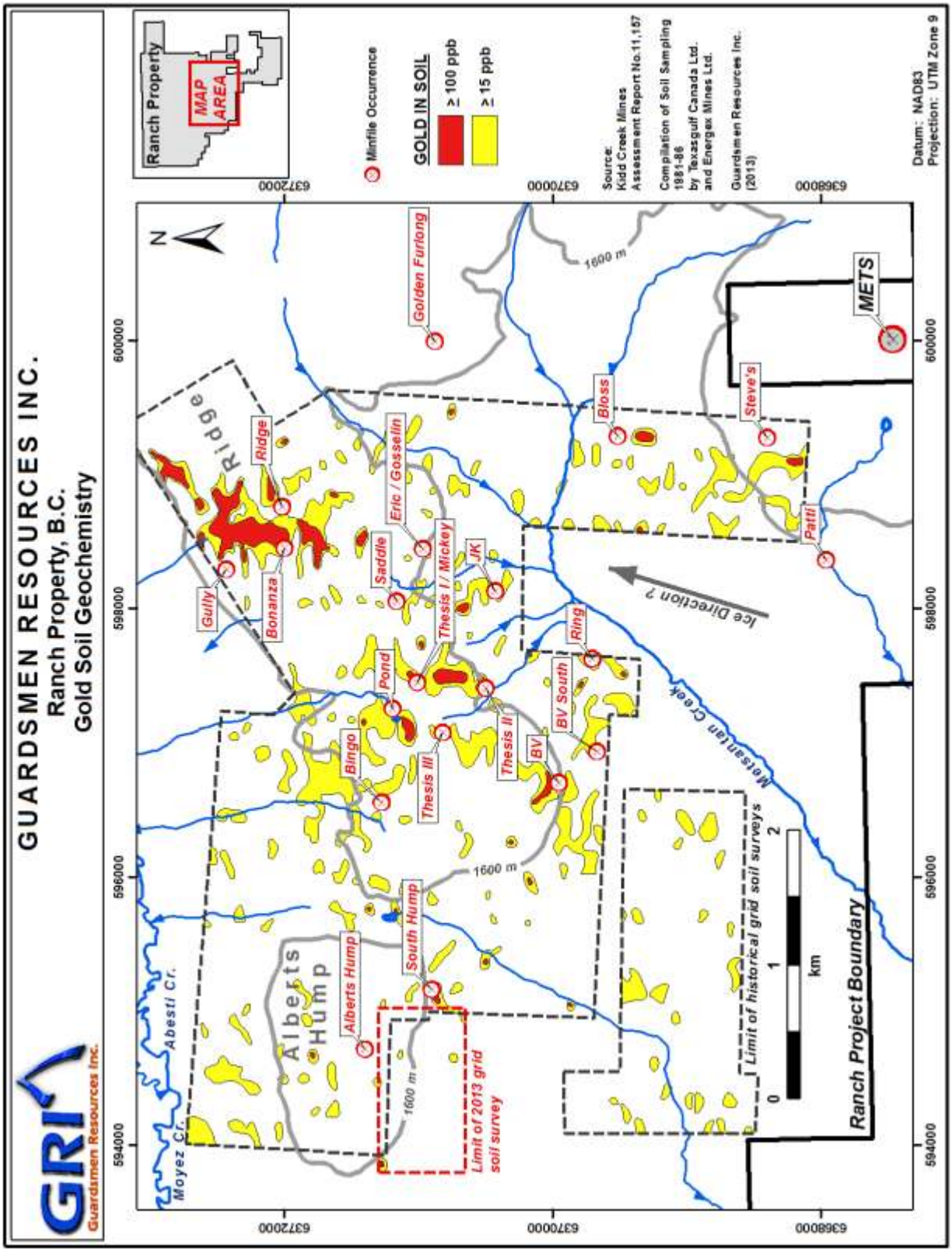


Figure 3: Ranch Project – Gold Soil Geochemical Map

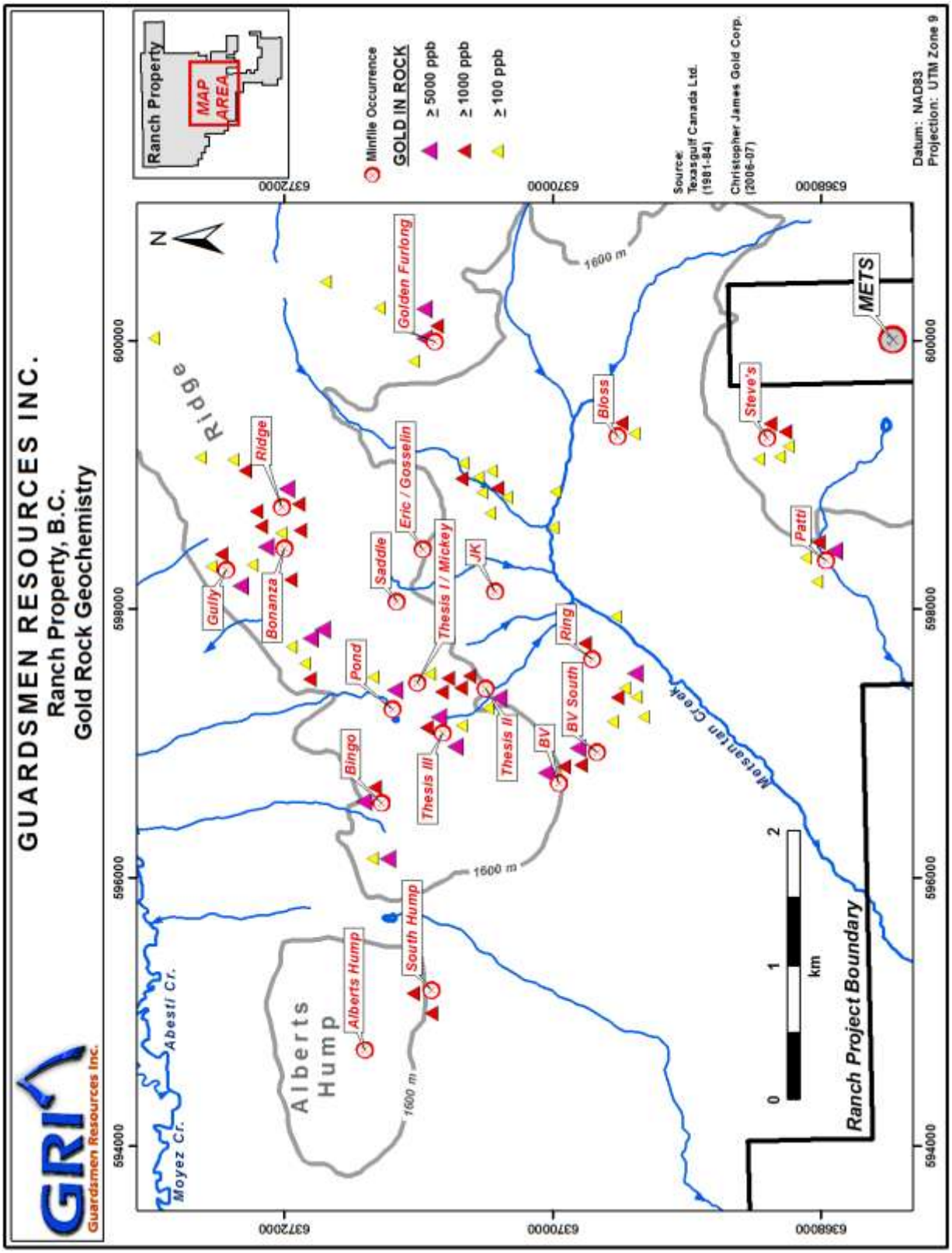


Figure 4: Ranch Project – Gold Rock Geochemical Map

6.2.3 Airborne Magnetic Gradiometer Survey (2007)

The 2007 helicopter-borne magnetic gradiometer survey completed by Aeroquest International on behalf of Christopher James covered all historic gold deposits and minfile occurrences on the property. The Total Magnetic Intensity (TMI) component of the survey identified three discreet aeromagnetic highs which display prominently on Figure 5. These include:

• a roughly circular feature measuring about 700 m in diameter centered about 600 m west-southwest of the Thesis III Zone;
• an elongated, north-northwest trending feature measuring about 1,800 m by 400 m and centered about 1 km northwest of the Albert's Hump minfile occurrence; and
• a small roughly circular feature measuring about 200 m in diameter centered about 1,400 m northwest of the Thesis III Zone.

The author suggests that these aeromagnetic features may represent high-level intrusions, possibly co-magmatic with Toodoggone volcanic rocks. They may have provided the "heat engine" for the volcanic-hydrothermal system depicted in the Schematic Model shown in Figure 18 (Section 8.1) of the Report. The presence of such buried intrusive bodies would concur with geological consultant Richard Nielson's comment in Section 7.2.3 of this Report. He states that "a large porphyry (copper?) type of intrusion is believed to underlie the entire property. Aqueous fluids degassed from the deep intrusion, following steep fractures, and in some areas were closely followed by the intrusion of rhyolite and quartz-latite porphyries."

On the northeast flank of the 700 m-diameter aeromagnetic high described above is a distinct northwest-trending aeromagnetic low which passes through or nearby the Thesis II and III Zones. It is thought to represent a property-scale fault system which hosts gold mineralization in the Thesis area.

Another prominent magnetic feature on Figure 5 which deserves mention are two strong, positive, linear anomalies which straddle the likely northwest extension of the Thesis fault system. They are located about 2 km northwest of Thesis III and may represent rhyodacite dikes similar to those which are present in the Bonanza and Thesis III Zones. If so, and if such dikes are genetically related to gold mineralization, then this area represents an attractive target for further exploration.

6.2.4 3D-IP Survey (2007)

The 2007 3D-IP survey completed by SJ Geophysics Ltd. on behalf of Christopher James covers an area over and adjacent to the three main known zones of gold mineralization on the property. The 3D-IP data package includes resistivity and chargeability plan maps at several elevation levels below the land surface and a number of east-west resistivity and chargeability interpreted sections. Resistivity and chargeability plan maps at 75 m and 150 m below the land surface are shown in Figures 6 and 7 respectively.

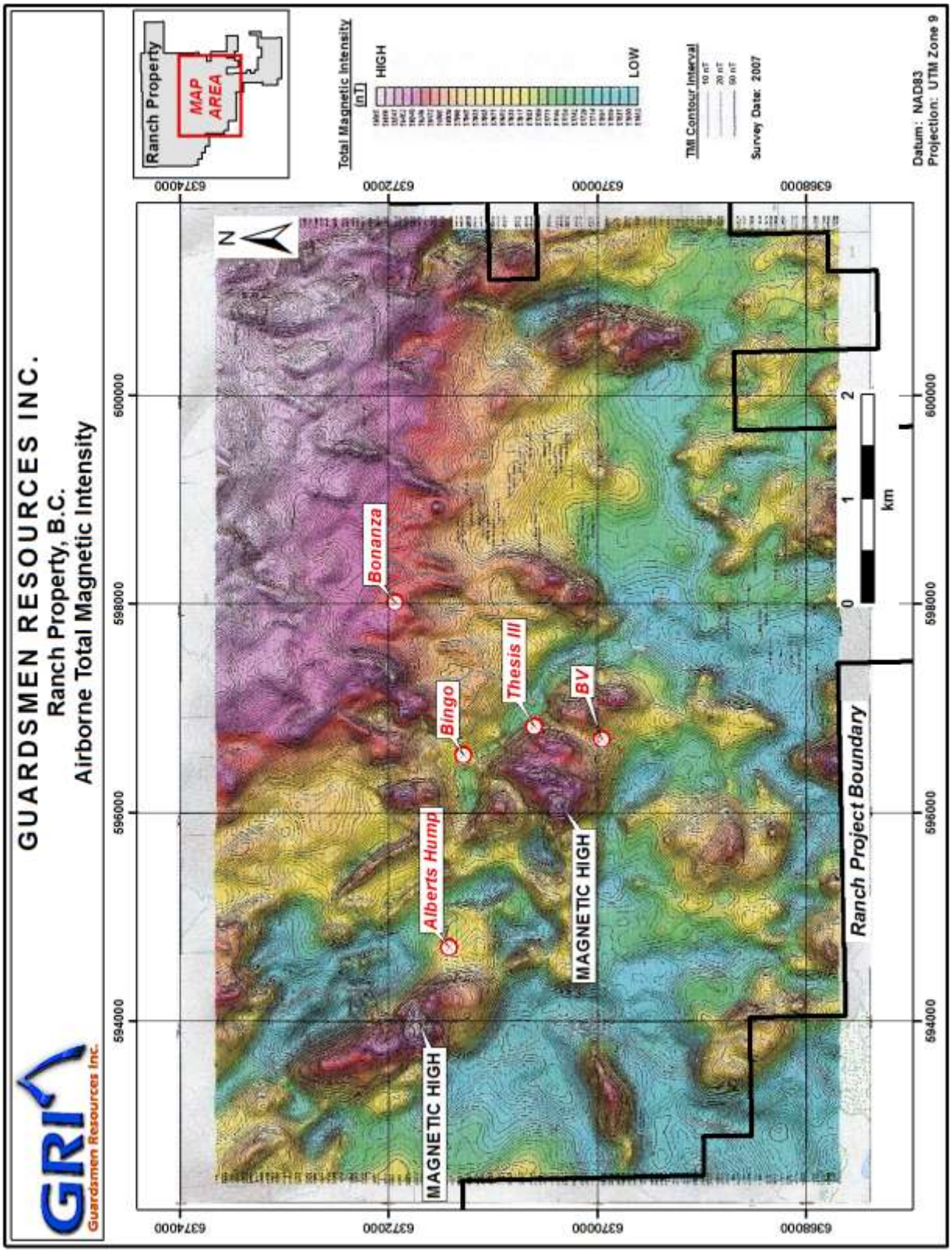


Figure 5: Ranch Project – Aeromagnetic Map (TMI)

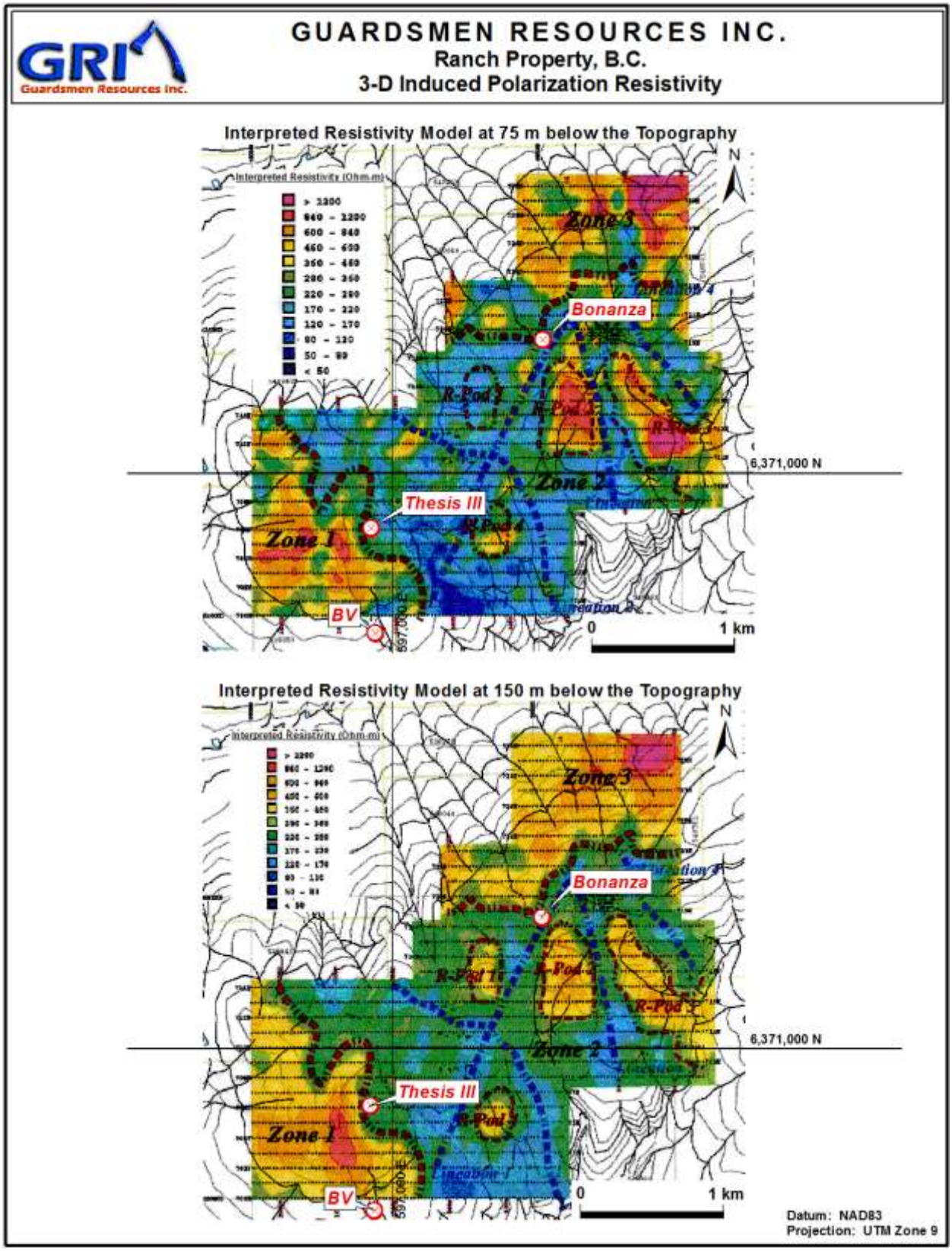


Figure 6: Ranch Project – 3D-IP Resistivity Map

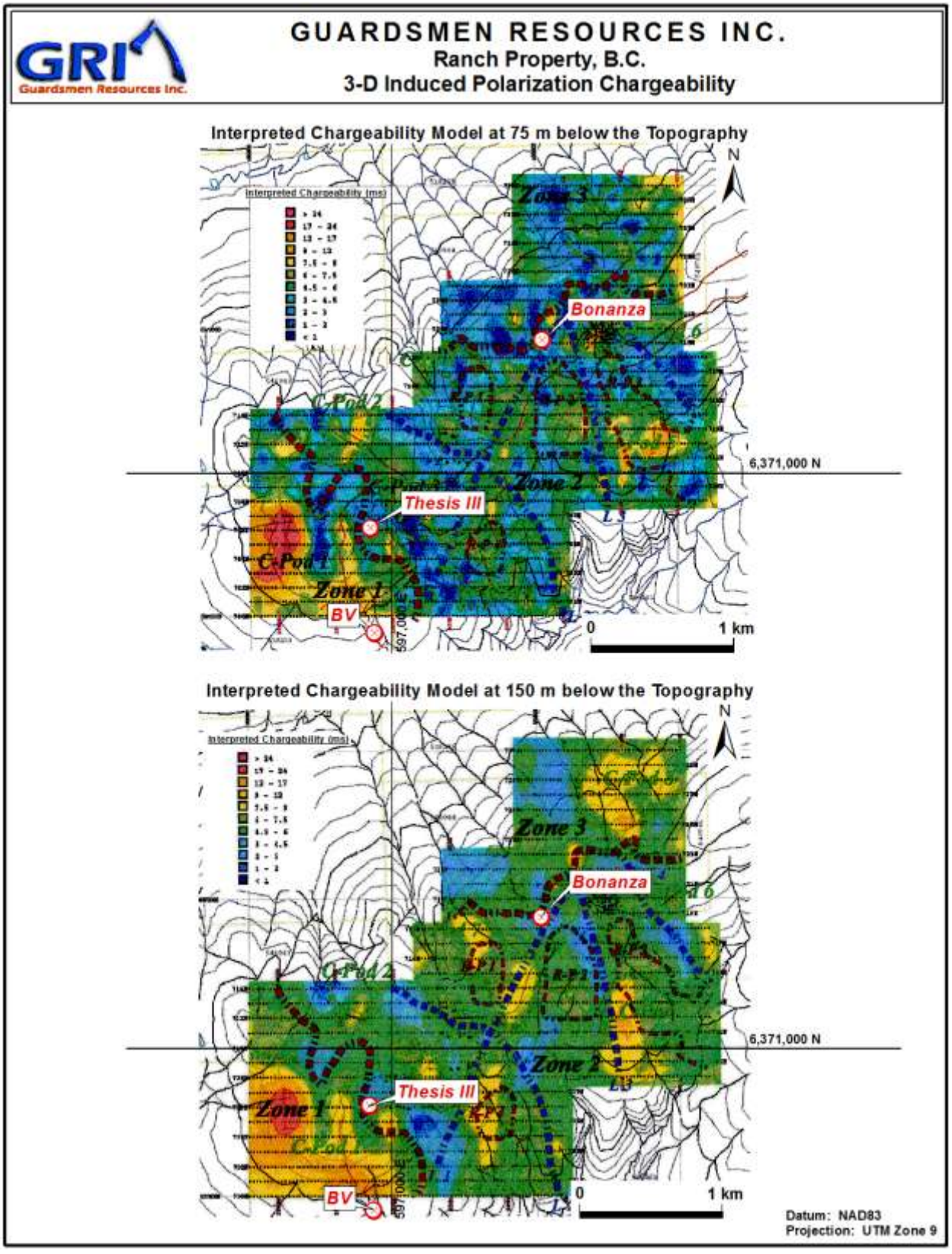


Figure 7: Ranch Project – 3D-IP Chargeability Map

Orientation IP surveys on the Al (Ranch) property carried out by Energex and others, and 2007 orientation work carried out by Chistopher James, suggest that 3D-IP would likely prove effective in exploring, to depths of about 400 m, for "blind" gold deposits not detectable by surface prospecting and soil geochemical surveys. Coincident resistivity and chargeability anomalies may be indicative of strongly silicified zones (higher resistivity) accompanied by significant amounts of sulphides (higher chargeability). It is known that higher concentrations of gold on the Ranch property occur in this alteration-mineralization type.

Under ideal circumstances, IP chargeability responses are a measurement of the amount of disseminated metallic sulphides in the subsurface rocks. Unfortunately, there are other rock materials that give rise to chargeability effects, including clay minerals such as those at Ranch which are ubiquitous in the argillically-altered wall rocks which envelope the gold-bearing zones. Additionally, in some zones (notably at Bonanza), pyritic silicified zones at depth contain low gold values. There is no certainty that a given 3D-IP target will prove to represent rock that is significantly enriched in gold. Topographic variations add another level of complexity to 3D-IP interpretation. Because of these complexities, it is always prudent to incorporate other data sets to assist in geophysical interpretation and drill targeting.

The 2007 3D-IP survey was successful in defining a number of coincident resistivity-chargeability anomalies outside of known zones of gold mineralization; they may be indicative of auriferous, suphide-bearing silicified zones at depth.

Of particular interest to the author is the chargeability anomaly designated as Zone 1 (also referred to as "C-Pod 1"), at both the 75 m and 150 m levels below the topography, as shown in Figure 7. Peak chargeability values of this anomaly exceed 24 milli-seconds. The anomaly is coincident with the Zone 1 resistivity anomaly shown on Figure 6 and is also coincident with the 700 m diameter aeromagnetic high described in Section 6.2.3 above. It is suggested that to the west-southwest of the Thesis II and III Zones, this coincident chargeability-resistivity-magnetic anomaly may be related to a sulphide-bearing, porphyry-type intrusion at depth.

6.3 Historical Drilling

During the period 1982-2007, Kidd Creek Mines Ltd., Energex Mines Ltd., Christopher James Gold Corp. and several other junior mining companies completed 427 diamond drill holes totaling 34,117.4 m on 14 separate gold-mineralized zones on the Al (Ranch) property (Table 2). Drilling totals for the three main resource areas which have seen minor past production are 18,778.1 m in 223 holes in the Bonanza Zone, 4,667.0 m in 70 holes in the Thesis III Zone and 2,278.2 m in 48 holes in the BV Zone. Other zones in which significant amounts of drilling have been carried out include: Ridge, 2,203.8 m in 16 holes; Bingo, 1,545.0 m in 14 holes; Mickey, 1,340.8 m in 9 holes; Thesis II, 989.0 m in 16 holes; and the Patti Zone, 615.7 m in 5 holes. Technical aspects of the historical drilling in these eight zones are discussed in some detail below. A diamond drill hole plan for each of the three main resources areas accompanies the descriptive text.

Other gold-mineralized zones that have seen limited past drilling include: Discovery 1 and 2 claims, 427.0 m in 7 holes; Golden Furlong, 395.5 m in 2 holes; BV South, 362.0 m in 10 holes; Albert's Hump, 203.3 m in 2 holes; JK, 167.0 m in 2 holes; and Eric, 145.0 m in 3 holes.

Assay/analytical results and descriptions of the alteration and mineralization encountered in drill holes in all zones are presented in Section 7.2.3.

Table 2

Ranch Project
Diamond Drill Hole Summary
(All Zones)

Zone	Work Period	Core Size	No. of Holes	Meters
Bonanza	1984 - 2007	HQ, NQ, BTW	223	18,778.10
Thesis III	1984 - 2007	HQ, NQ, BQ	70	4,667.00
BV	1984 - 1987	HQ, NQ	48	2,278.20
Ridge	1984 - 1988	HQ, NQ	16	2,203.80
Bingo	1988	NQ	14	1,545.00
Mickey	2007	HQ, NQ	9	1,340.80
Thesis II	1984 - 2007	HQ, NQ, BQ	16	989.00
Patti	1986	BQ	5	615.70
Discovery 1 & 2 claims	1987	BQ	7	427.00
Golden Furlong	1982	NQ	2	395.50
BV South	1988	BQ	10	362.00
Alberts Hump	1982	NQ	2	203.30
JK	1988	NQ	2	167.00
Eric	1988	NQ	3	145.00
		Total:	**427**	**34,117.40**

6.3.1 Bonanza Zone

In the Bonanza Zone, past diamond drilling during the period 1984 to 2007 consists of 18,778.1 m of HQ, NQ and BTW (B Thin-Wall) size core in 223 holes. The majority of the drilling was carried out by Energex from 1984-88; it tested the steeply dipping Verrenass, Bonanza West and Bonanza South fissure-type structures over a north-south distance of about 450 m at a nominal section spacing of about 20 m (Figure 8a). The Energex drilling also tested the central Ghost portion of the zone along a series of closely-spaced sections oriented at 048°/228°. On average, the Energex drilling tested the Bonanza Zone to vertical depths of about 100 m.

The Energex drilling which tested the above fissure-type structures was inclined mainly at -45° to the northeast and easterly, with some similarly-inclined holes directed to the southwest or westerly. Because most of the fissure-type structures have a sub-vertical dip, the true widths of any mineralized intercepts within the drill holes would be about 70% of the intercept length. For those Energex holes which tested the central Ghost Zone, the 048°/228° directed holes are sub-parallel to a series of northeast-trending post-mineral faults which have disrupted the continuity of mineralization in this portion of the deposit. Despite this, the mainly northeast directed holes, where they have encountered mineralization, have returned a number of significant intercepts, the true widths of which appear to be about 90% of the intercept lengths (see Figure 13b).

Post-Energex, three separate diamond drilling programs were carried out in the central Ghost portion of the deposit by AGC (1997), Bishop Gold (2003) and Christopher James (2007). The locations of the drill holes comprising these programs relative to the Energex drill holes are shown in Figures 8b to 8d respectively. These figures clearly demonstrate the confined and over-lapping distributions of the three post-Energex drilling programs. AGC's 17 drill holes were mainly inclined at -45° along an azimuth of 048° on Energex Section 10S (see Figure 13b); three holes were inclined at -45° along an azimuth of 138°, perpendicular to Section 10S. Nine of ten of Bishop Gold's holes were inclined at -45° along an azimuth of 048°, similar in orientation to the majority of the Energex and AGC holes. The tenth Bishop hole was drilled vertically. Christopher James completed 29 holes on 6 east-west sections spaced 25 m apart. The holes were inclined from -55° to -60°; about half were inclined due west and the remainder, due east. For holes inclined to the west or east, the true widths of any fissure-type structures encountered would be about 60% of the intercept lengths. For any west-dipping Ghost structures intersected, true widths would be about 60% (or less) of the intercept lengths for holes inclined due west versus about 90% for holes inclined due east. On average, the Christopher James holes tested the Bonanza Zone to a vertical depth of about 150 m.

The relative proportions of HQ, NQ and BTW core sizes utilized at Bonanaza are 40%, 18% and 7% respectively, with an additional 35% of combined HQ-NQ drilling done in 2007. Recoveries for all core sizes are reported as generally “good” for the earlier drill programs and >90% for the drilling completed in 2007.

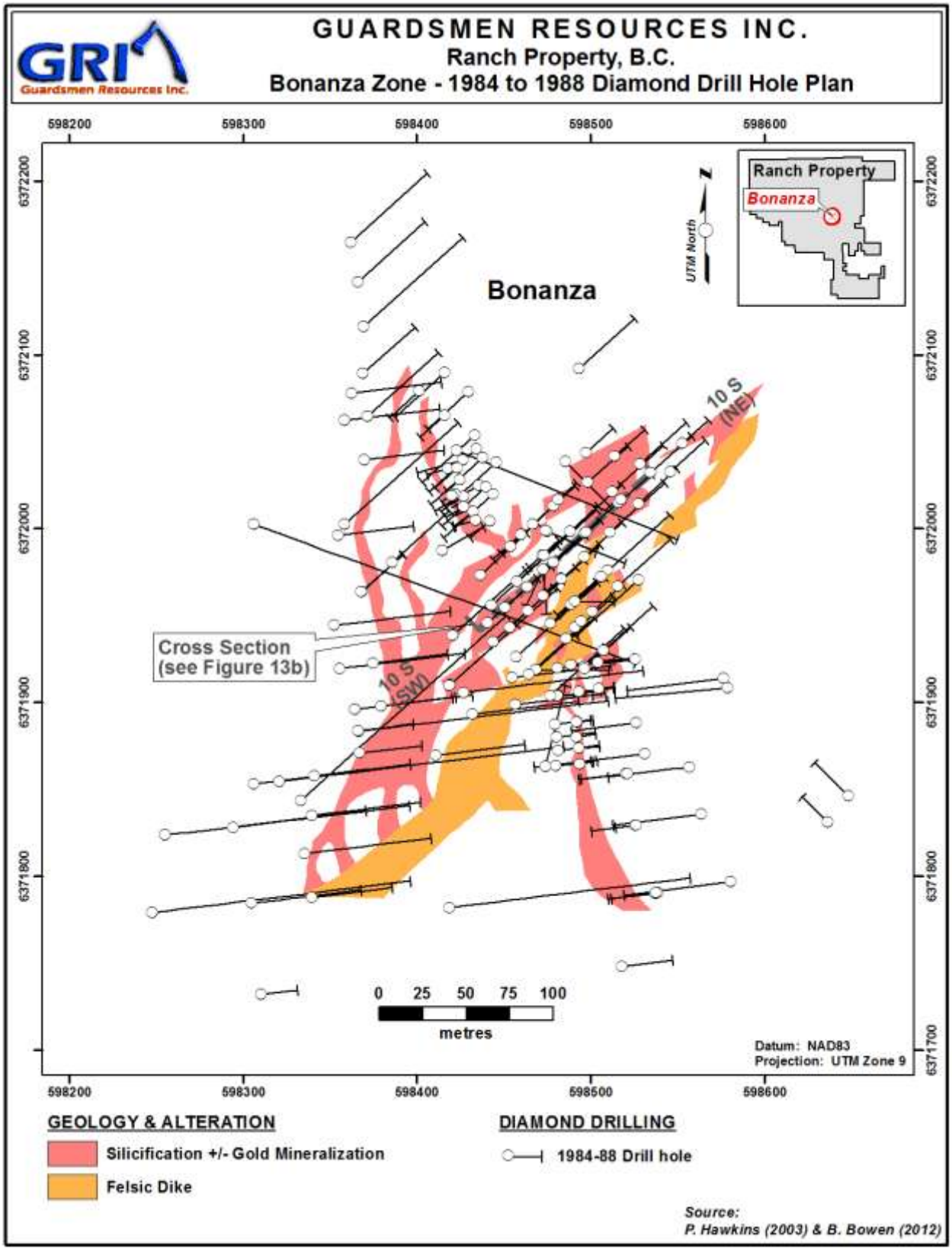


Figure 8a: Ranch Project – 1984 to 1988 Diamond Drill Hole Plan (Bonanza Zone)

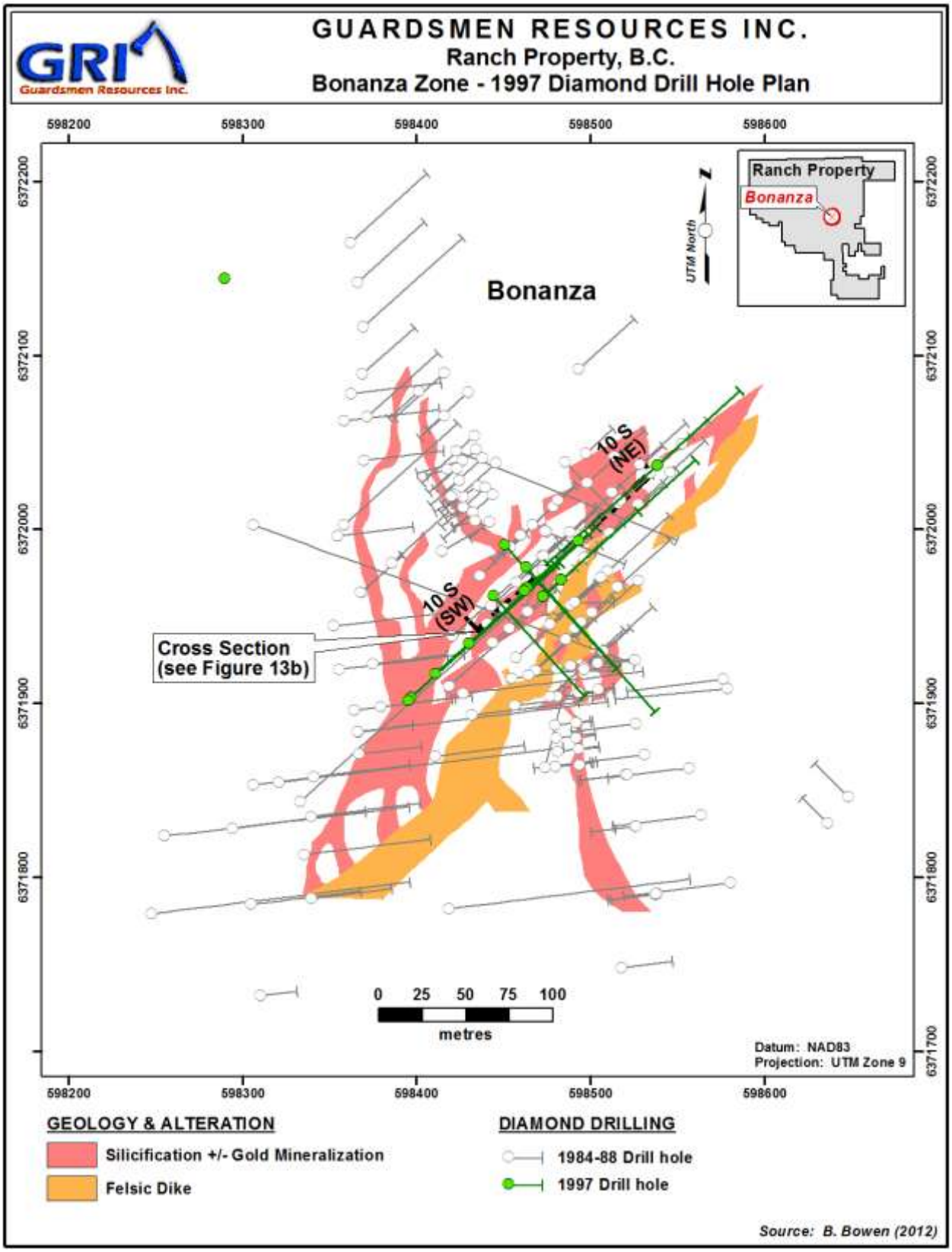


Figure 8b: Ranch Project – 1997 Diamond Drill Hole Plan (Bonanza Zone)

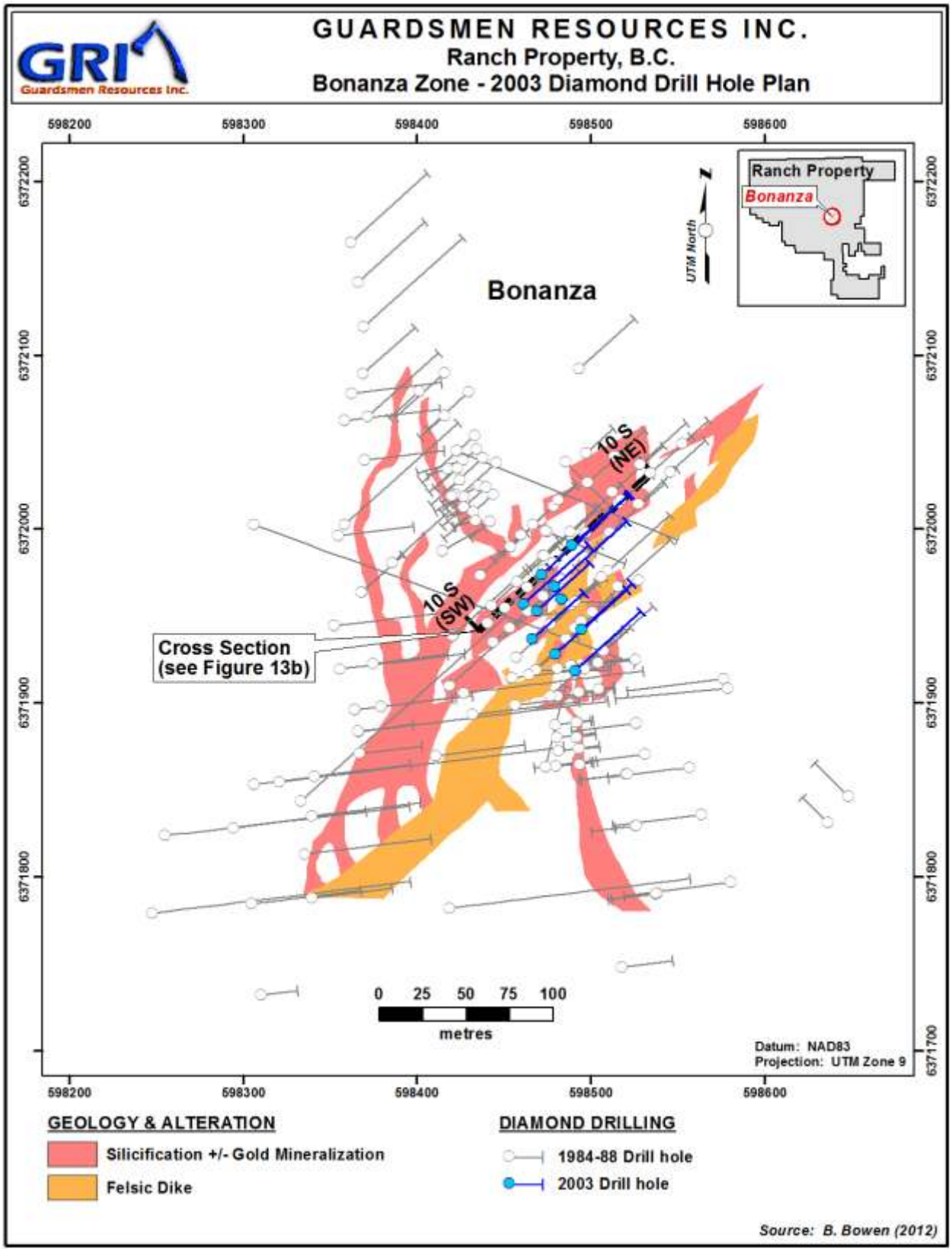


Figure 8c: Ranch Project – 2003 Diamond Drill Hole Plan (Bonanza Zone)

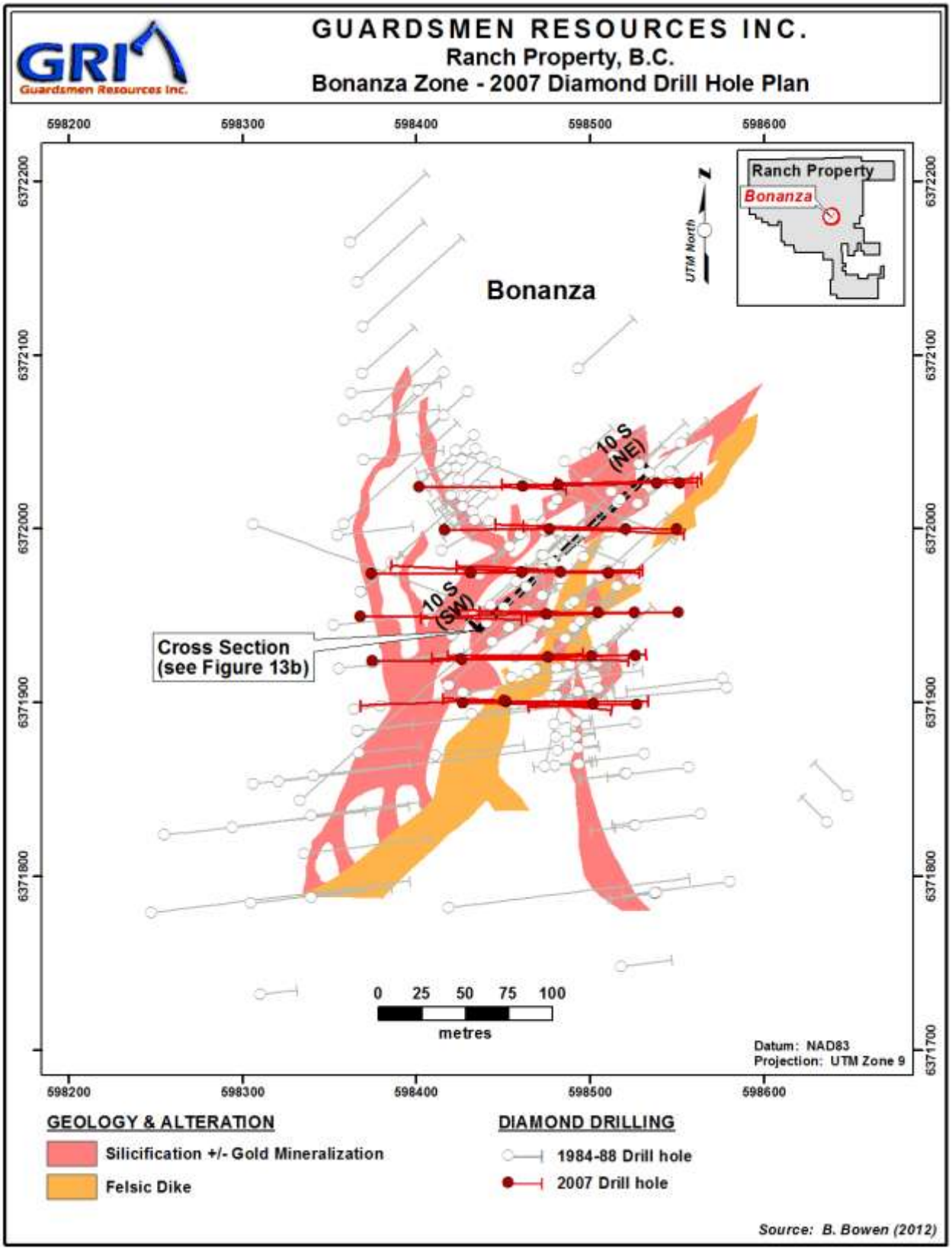


Figure 8d: Ranch Project – 2007 Diamond Drill Hole Plan (Bonanza Zone)

6.3.2 Thesis III & II Zones

Thesis III Zone

In the Thesis III Zone, past diamond drilling during the period 1984 to 2007 consists of 4,667.0 m of HQ, NQ and BQ size core in 70 holes. About 60% of the total meterage was completed mainly by Energex from 1985 to 1988; it tested the Thesis III Zone over a northwest-southeast strike length of about 200 m down to vertical depths of about 100-125 m (Figure 9a). In the southeast-central part of the zone, the drill holes are tightly clustered along 10 m-spaced sections oriented northeast-southwest, with an added density of drilling created by a number of drill holes fanned from common collar locations. The focus of this clustered drill pattern is the high-grade Thesis III 'A' Zone which has seen minor past production.

The sectional drilling completed by Energex, with holes inclined at -45° to -65° to the southwest or northeast, returned mineralized intercepts the true widths of which would appear to be about 50-70% of the intercept lengths (see Figure 14b). For the fan holes drilled off-section, their intercept lengths relative to true widths are difficult to determine, but it's likely that in a number of holes, widths of mineralization are considerably exaggerated.

Post-Energex, two separate diamond drilling programs were carried out in the Thesis III Zone by AGC (1997) and Christopher James (2006-07). The locations of the drill holes comprising these programs relative to the Energex drill holes are shown in Figures 9b and 9c respectively. Similar to the post-Energex drilling at Bonanza, the latter drilling at Thesis III is more or less overlapping and directed towards higher grade mineralization, in this case the 'A' Zone. The 5 holes completed by AGC are considered to be sectional (southwest-directed) drilling, with the true widths of mineralized intercepts being about 50% (or possibly less) to 70% of intercepts lengths. Similarly, for the sectional drilling completed by Christopher James, the true widths of mineralized intercepts are about 50% to 70% of intercepts lengths. For the Christopher James' holes inclined either due east or west, one or more intercepts in these holes may contain exaggerated intercept lengths relative to true widths of mineralization.

The relative proportions of HQ, NQ and BQ core sizes utilized at Thesis III are 45%, 33% and 4% respectively, with an additional 18% of combined HQ-NQ drilling done in 2007. Earlier drill programs which targeted the 'A' Zone encountered difficult drilling conditions due to strongly fractured rock. For example, in 1986, recoveries were below 50% in short sections of all but one of the Energex holes. Otherwise, recoveries for all core sizes are reported as generally “fair to good” for the earlier drill programs and between 80-90% for the drilling completed in 2006-07.

Thesis II Zone

At Thesis II, past drilling consists of 989.0 m in 16 holes. All holes are inclined -45° to -50° to the south-southwest, roughly perpendicular to the overall west-northwesterly trend of the gold-bearing zone. Single or two-hole drill fences are spaced about 15 to 20 m apart. To date, the zone has been tested to a maximum vertical depth below surface of about 100 m, in Hole 07-45 at the southeast end of the zone.

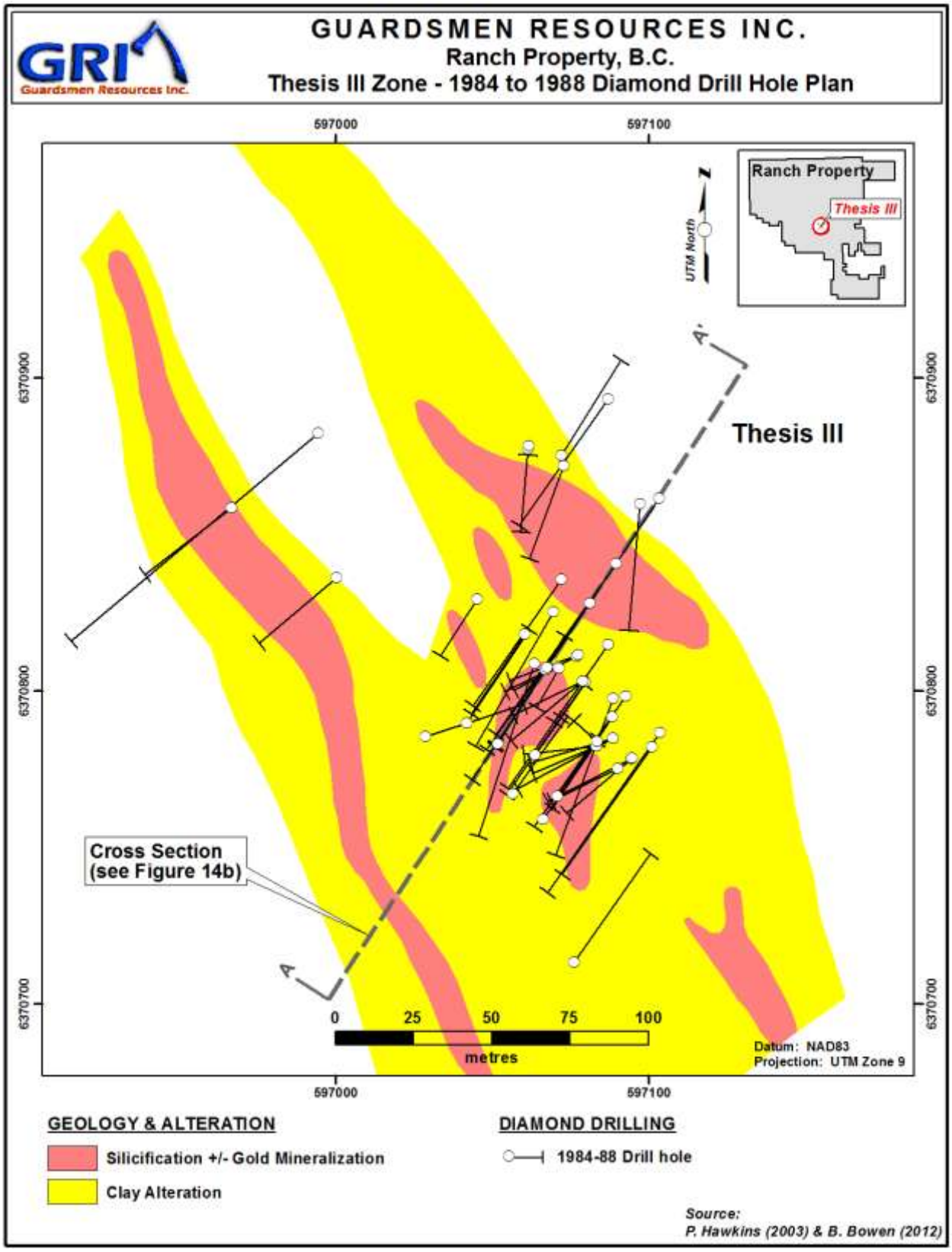


Figure 9a: Ranch Project – 1984 to 1988 Diamond Drill Hole Plan (Thesis III Zone)

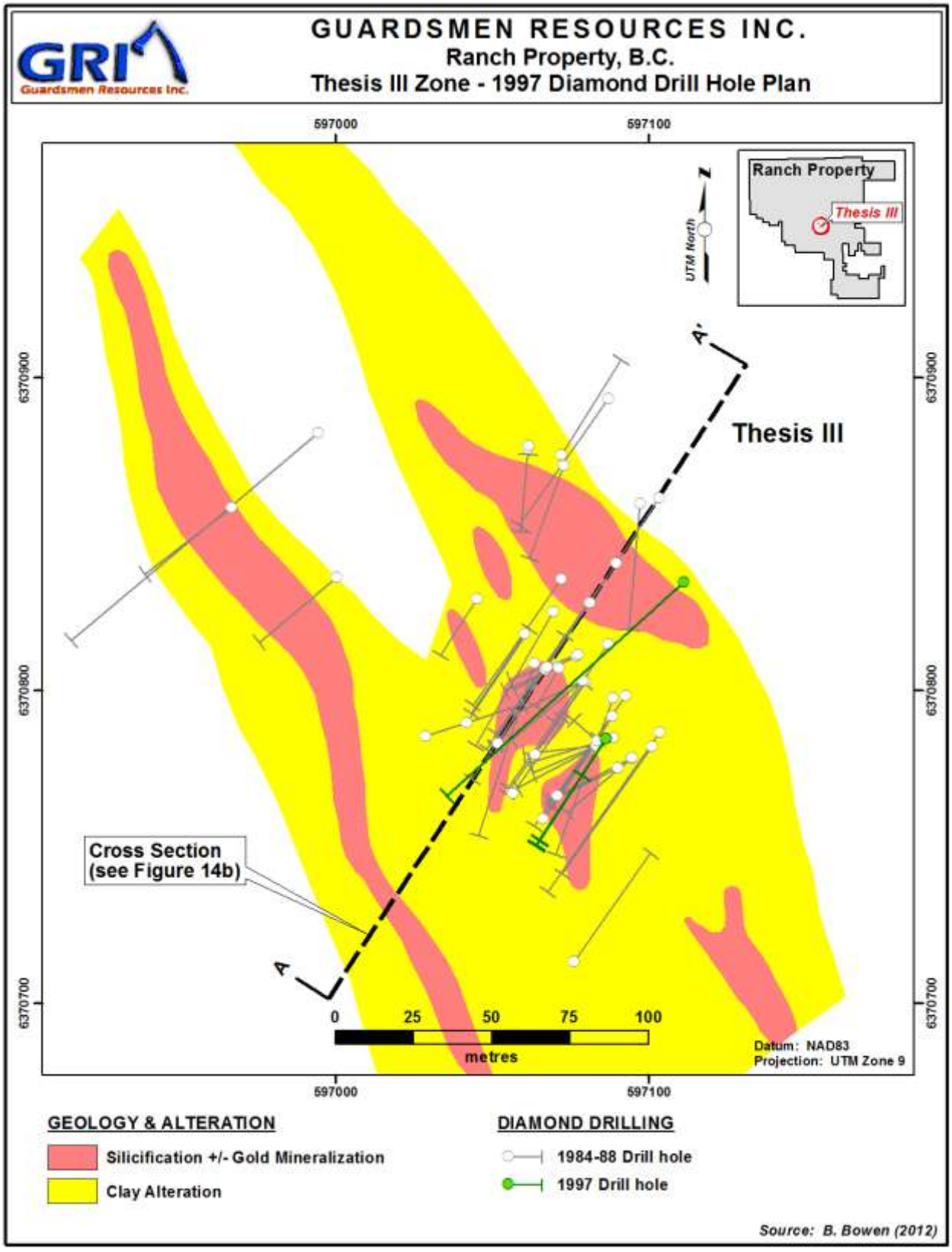


Figure 9b: Ranch Project – 1997 Diamond Drill Hole Plan (Thesis III Zone)

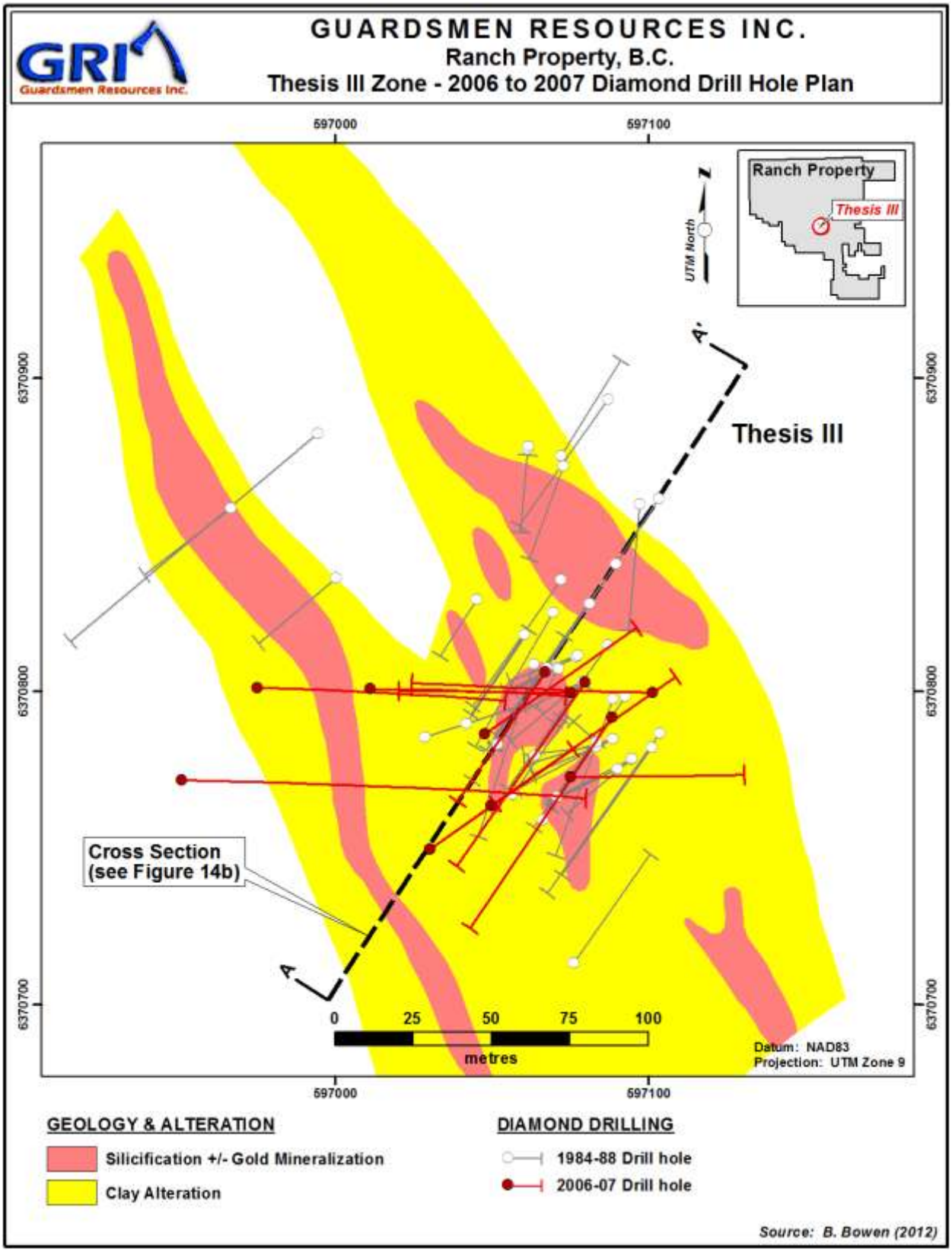


Figure 9c: Ranch Project – 2006 to 2007 Diamond Drill Hole Plan (Thesis III Zone)

At its northwestern end, where the zone dips steeply to the northeast, true widths are about 80-90% of reported core length intercepts of the silica host rock. At its southeastern end, where the zone dips steeply to the southwest, true widths are about 35-50% of reported core length intercepts.

Four separate drilling programs were carried out on the Thesis II Zone during the period 1984 to 2007. Core sizes varied from BQ to NQ to HQ. The relative proportions of each utilized at Thesis II are 35%, 14% and 35% respectively, with an additional 15% of combined HQ-NQ drilling done in 2007. Recoveries for all core sizes are reported as generally "good" for the earlier drill programs and between 80-90% for the drilling completed in 2007.

6.3.3 BV and BV South Zones

BV Zone

In the BV Zone, past diamond drilling during the period 1984 to 1987 consists of 2,278.2 m of HQ and NQ size core in 48 holes. The majority of the total meterage was completed by Energex from 1985 to 1987; it tested the BV Zone over a northwest-southeast strike length of about 350 m down to vertical depths of about 50-60 m (Figure 10). Most of the drilling has taken place within a 180 m-long segment which was the focus of past open pit mining. There has been no post-Energex drilling completed in the BV Zone by other operators.

The drill holes are inclined at -45° to -65° along a sectional azimuth of 020°/200°, with most holes directed to the southwest, opposite to the moderately to steeply northeast-dipping BV structure (see Figure 15b). True widths of mineralization for these holes range from about 70 to 90% (or greater) of drill hole intercept lengths. For the drill holes inclined to the northeast in the same direction as the dip of the structure, mineralized intercept lengths could be much greater than true widths of mineralization and are therefore not representative.

The relative proportions of HQ and NQ core sizes utilized at BV are 75% and 25% respectively. Recoveries for both core sizes are reported as generally "good" in these earlier drill programs.

BV South Zone

At BV South, past drilling consists of 362.0 m in 10 holes. Five two-hole drill fences are spaced 25 to 35 m apart over a distance of about 120 m along the south-southeast strike of the zone. On each drill fence, there is a shallow hole inclined at -45° and a steeper hole inclined at -85°. All holes are inclined to the west-southwest, roughly perpendicular to the strike of the gold-bearing zone. To date, the zone has been tested to a maximum vertical depth below surface of about 40 m, in Hole 88-08 in the southern part of the zone.

The zone reportedly dips 25° to 35° to the east; thus true widths of mineralization for drill holes inclined at -45° and -85° westerly are about 95% and 85% respectively of reported core intercept lengths.

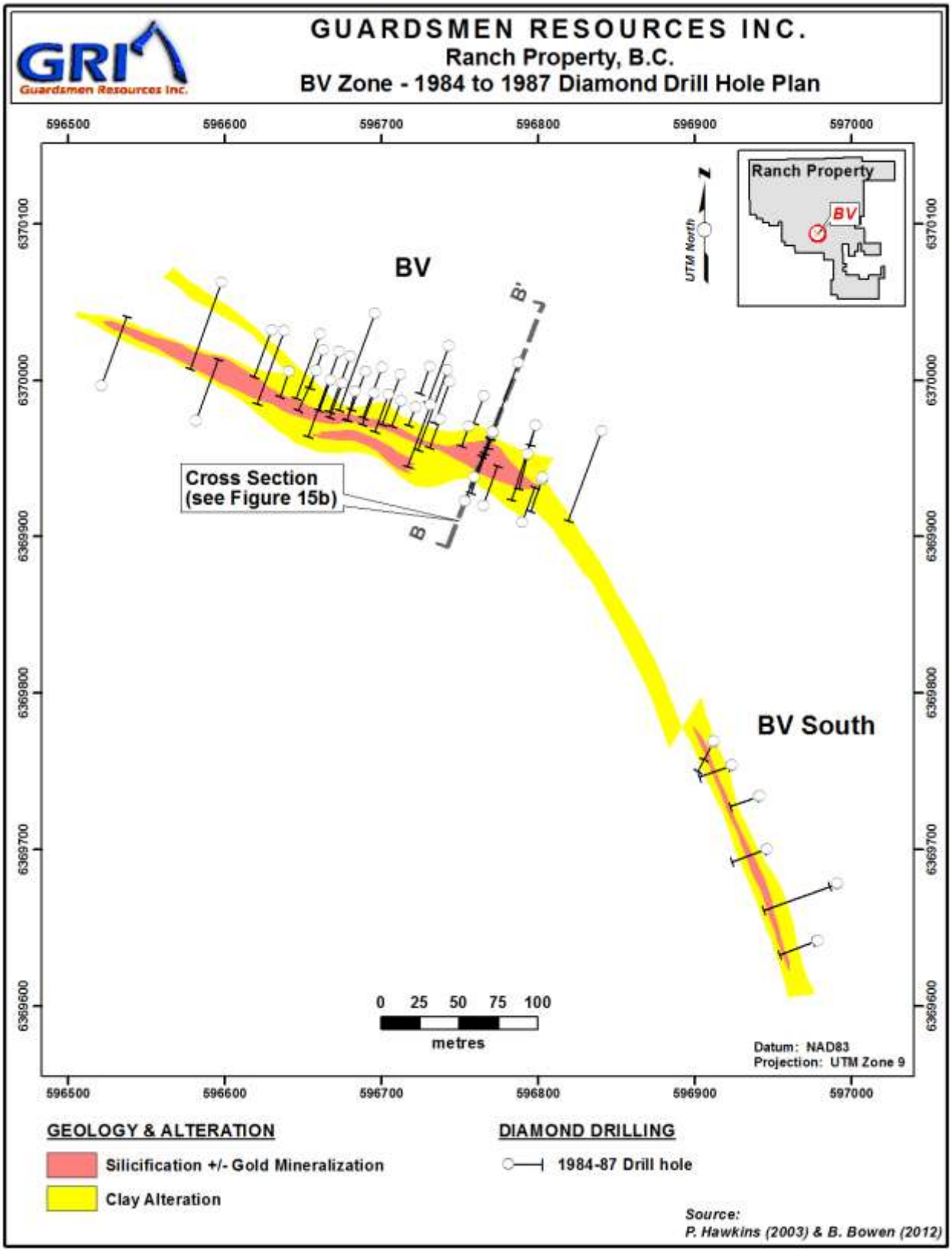


Figure 10: Ranch Project – 1984 to 1987 Diamond Drill Hole Plan (BV Zone)

Only one phase of drilling (in 1988) was carried out on the BV South Zone. It was done using smaller diameter BQ core but despite this, drilling reportedly recovered approximately 100% of the sample.

6.3.4 Ridge Zone

In the Ridge Zone, past diamond drilling during the period 1984 to 1988 consists of 2,203.8 m of HQ and NQ size core in 16 holes. The majority of the total meterage was completed by Energex from 1987 to 1988; it tested the Ridge Zone over a northeast-southwest strike length of about 700 m down to a maximum vertical depth of about 215 m. Most of the drilling has taken place along variably-spaced sections within a 275 m-long segment within which a silica-hematite altered host rock contains gold-silver mineralization in single and multiple bands over zone widths of up to 30 m. There has been no post-Energex drilling completed in the Ridge Zone by other operators.

The drill holes are inclined at -45° to -65° along sectional azimuths of 310° to 315°, with all holes directed to the northwest, opposite to the moderately southeast-dipping Ridge structure. True widths of mineralization for these holes range from about 80 to 90% of drill hole intercept lengths.

The relative proportions of HQ and NQ core sizes utilized at Ridge are 69% and 31% respectively. Recoveries for both core sizes are reported as generally “good”.

6.3.5 Bingo Zone

At Bingo, past drilling consists of 1,545.0 m in 14 NQ holes. The drilling tested the zone over a north-south distance of about 250 m on east-west cross sections spaced about 15 to 30 m apart. In the central part of the drill area, holes are inclined at -45° due east, whereas in the northern and southern parts, holes are inclined at -45° to -65° due west. Hole depths vary from about 57 to 173 m. Core recoveries for all holes are reported as "good".

The gold-bearing silica host rocks at Bingo reportedly dip easterly, more shallowly at the northwest end of the zone and more steeply at its southeast end. Therefore, in the central portion of the deposit, easterly inclined holes would have returned mineralized intercept lengths less representative of true widths of gold-bearing zones compared to holes drilled due west at the northern and southern ends of the zone. Because the author was unable to locate copies of the Bingo drill hole sections, it is difficult to ascertain the exact relationship between mineralized core lengths and true widths of mineralization for this zone.

6.3.6 Mickey Zone

Nine HQ-NQ holes totaling 1,340.8 m tested the Mickey Zone over a north-south distance of approximately 400 m on three east-west sections spaced about 200 m apart. The holes were inclined at mainly -55° to the east; two holes were inclined -55° to the west. The range of vertical depths at which favourable silicified intervals were encountered in drill holes is from about 90 to 140 m.

Vuggy silica-altered rock, similar to that hosting gold mineralization in other zones on the Ranch property, was intersected in Holes A07-036, 040 and 042. Additionally, non-porous pervasively silicified rock was intersected in Holes A07-036 and 037. However, little is known of the strike and dip of these silica-altered zones, and therefore their true widths, relative to the cored, 2.0 to 11.0 m intercept lengths encountered, is unknown.

Only one phase of drilling (in 2007) was carried out on the Mickey Zone. It was done using HQ and NQ-size core; recoveries were very good, averaging >90%.

6.3.7 Patti Zone

At the Patti Zone, a north-trending 60 m wide gold-bearing silica outcrop was tested with 5 BQ diamond drill holes totaling 615.7 m by Lacanana Mining Corporation in 1986 (see Figure 16 in Section 7.2.3). The central part of the outcrop was tested with four holes. One was inclined due north at -45°, and another from the same set-up, due south at -45°. The other two holes were inclined due west at -45° (ie. perpendicular to the first two holes) on section lines spaced about 80 m apart. A fifth hole was collared about 170 m north-northeast of the first two and drilled southwesterly into the silica-altered zone. To date, the zone has been tested to a maximum vertical depth below surface of about 100 m in LM-86-1.

A number of <0.5 to 6.0 m-long gold-mineralized intercepts were encountered in the four holes which tested the central part of the zone. Little is known of the strike and dip of these structurally-controlled zones of mineralization; thus their true widths, relative to the intercept lengths cored, is unknown.

Lacana's BQ drill holes reportedly achieved core recoveries in the 60-90% range. Future drilling at Patti should utilize larger NQ or HQ core sizes in order to maintain recoveries in the >90% range, given the known nugget effect of gold mineralization on the Ranch property.

6.4 Sample Preparation, Analyses and Security by Previous Operators

On the Ranch Project, the review of sample preparation, analyses and security carried out by previous operators can be sub-divided into two main time periods: (i) pre-2006, during which time there is generally poor to occasionally good documentation of sample preparation and related procedures; and (ii) 2006-07, during which time surface exploration and diamond drilling programs conducted by Christopher James are well documented and were thoroughly reviewed by Micromine prior to completing its modeling and resource estimates of eight separate gold mineralized zones on the property.

Summaries for the above two time periods are presented below. They are supplemented by information previously presented in Paul Hawkins' June 2003 and July 2006 Technical Reports on the Al (Ranch) property, and by the author's thorough review of assessment reports which detail the extensive historical data base on the property.

6.4.1 Pre-2006 Sample Preparation, Analyses and Security

Ancillary Surveys

The author reviewed in detail assessment reports covering to varying degrees the sampling methodologies and analyses for geochemical silt, soil and rock sampling and the survey methods for geophysical programs carried out on the Al (Ranch) property during the period 1972 to 2007. Based upon this review, the author is satisfied that the geochemical sampling work and subsequent analyses, and the geophysical surveys were undertaken in a way that conformed to industry standards at the time work was carried out. More detail can be found in assessment reports detailing past work programs. All assessment report references are listed in Section 19.0 of the Report. Little or no sample security and quality assurance/quality control (QA/QC) information is given in the assessment reports.

Backhoe Trenching

Major back-hoe trenching and (rock) panel sampling programs were completed by Texasgulf Canada Ltd. in 1983-84 and Energex Minerals Ltd. in 1985-86. Texasgulf utilized a Case 450 back-hoe flown by Hecules aircraft to the Sturdee airstrip and then driven to the Al (Ranch) property. One to two metre-wide trenches were dug into bedrock, the depth to which varied from 0.5 to 2.0 m. Only rarely was bedrock not exposed. Prior to sampling, floors were hand-mucked and brushed clean.

Texasgulf's trenching procedures included:

- Panel areas on the trench floors were sampled where the intensity of alteration indicated potential gold and/or silver mineralization. Bedrock with visible mineralization was sampled in panels of 0.5 m (along the trench) by 1.0 m (across the trench).
- Intense silicification without visible mineralization was sampled in panels of 1.0 m (along the trench) by 0.5 m (across the trench).
- Panels 2.0 m long by 0.5 m wide were used for zones of intense alteration with lower, apparent mineralization potential.
- Panel samples weighing approximately 10 kg were shipped to Acme Analytical Laboratories Ltd. of Vancouver and analysed for Au and Ag by both geochemical and fire assay methods. Fire assays were done using a "1/2 assay ton" sample size and analyzing the -100 mesh fraction.
- Texasgulf's 'chain of security' protocols for samples shipped to Acme from the Al (Ranch) property are not documented, nor is any QA/QC information stated in the reports.

Energex's trench sampling procedures are not as well documented as those of Texasgulf's. Average depth and width of trenches were about 1.5 m for each. One meter-long channel samples weighing up to 10 kg each were collected where silicification was encountered, utilizing a moil-tipped, gas-driven plugger. Grab samples were collected and analyzed by geochemical methods where sampled rock was thought to have a lower probability of carrying gold.

Energex shipped its trench samples to CDN Resource Laboratories Ltd. in Delta, B.C. Samples were crushed, riffled to yield approximately 250 g and then ring-pulverized to approximately -100 mesh. Gold fire assays were done with a gravimetric finsih on a 20 g sample. Similar to Texasgulf, Energex's 'chain of security' protocols are not documented, nor is any information on QA/QC procedures presented in their reports.

From the above description, it would appear that the trench sampling procedures used by Texasgulf were more rigorous than those of Energex; both companies' methods conformed to industry standards at the time work was carried out.

Diamond Drilling

Pre-2006 sample prepration, analyses and security related to diamond drilling programs carried out by previous operators are summarized as follows:

• *Texasgulf Canada Ltd.(1982 & 1984):* The 1982 drill core was routinely split by a core splitter and sampled with a standard sample interval of about 0.5 to 1.0 metre; changes in alteration and/or 1ithology influenced the sample interval considerably. In 1984, all core was diamond saw-cut, sampled and photographed. NQ-size core was used in both drill programs.

The 1982 core samples were shipped to Min-En Laboratories Ltd. in North Vancouver where they were analyzed geochemically for Au, Ag, Cu, Pb and Zn. The 1984 samples were shipped to CDN Laboratories Ltd. in Delta, B.C and were geochemically analyzed for gold and silver; samples containing >1,000 ppb Au were re-analyzed by fire assay methods.

The 'chain of security' protocols for samples shipped to the two labs from the Al (Ranch) property are not documented, nor is any information on QA/QC procedures presented in the reports.

• *Energex Minerals Ltd. (1985-88):* Drill core was routinely cut in half with a diamond saw and sampled with standard interval lengths of approximately 0.5 to 1.0 metre, depending on degree of silicification and barite content. HQ core was used from 1985-87; in 1988, mostly NQ and lesser BQ core was used. In comparing the three sizes of core used, Energex concluded that NQ core is the most practical and efficient. The only drawback of using NQ versus HQ core is a possible shortage of core for bulk metallurgical testing. In 1987-88, all drill holes were surveyed by the company surveyor as they were completed.

Recoveries overall were good to excellent, although some very strongly broken ground in the Thesis III zone proved difficult to drill, with many holes returning recoveries of <50% over short intervals. Sludge samples in core loss sections were virtually barren of rock material, and were considered almost useless as assay samples.

In 1985 and 1987, Energex sent its samples to to CDN Laboratories Ltd. in Delta, B.C, where samples were fire assayed (20 g split, gravimetric finish) and, in 1985 at least, high assays were cross-checked at a second laboratory, using a 30 g reject split and multiple assays. Visible gold is readily apparent in the higher grade sections, which presents a potentially difficult sampling task. It is not clear if CDN Laboratories was used for core assaying in 1986 and 1988.

The 'chain of security' protocols for samples shipped to the two labs from the Al (Ranch) property are not documented, nor is there any information on QA/QC procedures presented in the reports.

• *Lacana Mining Corporation (1986):* Lacana's drilling in the Patti Zone was done with BQ-size core which was transported to the Baker mine site for logging, splitting and storage. Core recoveries were generally in the 60 to 90% range. No details are available on sampling, QA/QC and security protocols.

Core samples were shipped via air to Acme Analytical Laboratories Ltd. of Vancouver, B.C. The rocks were pulverized to -100 mesh. From a 0.5 g sample, silver analysis was done by AA methods and multi-element analysis by ICP methods. For the gold analysis, a MIBK extract was derived from a 10.0 gram sample and gold was then determined by AA methods.

• *AGC Americas Gold Corporation (1997):* AGC completed HQ, NQ and B-thinwall (BTW) diamond drilling in the Bonanza Zone and HQ and NQ drilling in the Thesis III Zone. Sampling procedures included the following:

- Core was split with a core splitter, with half the core sent for analysis to Eco-Tech Laboratories Ltd. in Kamloops. Sampling interval was generally one metre or less depending on geological contacts or alteration. Samples were not taken across contacts. Any rock that appeared altered was sampled, with sampling continuing at least two metres into unaltered wallrock.
- Sample quality and recovery for HQ and NQ core was considered very good, while that for BQ core was only considered good, with a decrease in recovery in fractured or broken sections.
- Samples were shipped in 20 litre plastic pails or rice bags by air to Prince George or Smithers and then by Bus Parcel Express to the Eco-Tech laboratory. Samples were only identified by shipment number, a project number and a six digit sample number.
- The remaining core was stored at two exploration campsites southeast of the Al (Ranch) property. Subsequent reclamation of the campsites destroyed all remaining 1997 AGC core. Sample pulps and rejects were still in storage as of June 2003. Their current status is unknown.
- At the Eco-Tech laboratory, standard rock sample preparation procedures for crushing and pulverizing were used. A 15 g sample was initially subjected to geochemical gold analysis (FA/AA) to enable a lower detection limit of 5 ppb Au. Values >500 ppb Au were re-analyzed using gold fire assay methods, with a one assay-ton sample size. Geochemical analyses for Ag, Cu, Pb and Zn were also done on all samples by AA methods.
- Some metallics screen assaying on 300 g samples was done at Eco-Tech in Kamloops and at Loring Laboratories Ltd. in Calgary, and some pulps and rejects were re-assayed at Loring. Fire assays and metallic screen analyses compared very well in the Phase I program at Bonanza; therefore the latter analysis was not continued for the remainder of the program.
- In the author’s opinion, AGC's sampling, QA/QC and security protocols met or exceeded the industry standards of 1997. The program included duplicates and check assaying at two laboratories but did lack the specific inclusion of blind standards and blanks.

• *Bishop Gold Inc. (2003):* Bishop Gold's program of BTW diamond drilling was confined to the Bonanza Zone. Sampling procedures included the following:

- Drill hole collar locations were surveyed by an outside contractor using differential GPS survey equipment. Dip tests were taken at the bottom of 7 of the 10 holes drilled; very little deviation was noted from the initial drill lineup.
- For the first three holes, whole core samples were sent to Acme Analytical Laboratories Ltd. in Vancouver for analysis; the remaining holes were split with a core splitter, with half the core submitted to Acme for analysis. Some of the remaining core may still be stored on the Ranch property, but its condition and useability is unknown. Sample pulps and rejects were still in storage at Acme as of December 2003. Their current status is unknown.
- The sample interval was generally one metre or less, depending on geological or alteration contacts. Samples were not taken across contacts. Any rock that appeared altered was sampled, with sampling continuing at least one metre into unaltered wallrock.
- Although sample quality and recovery for the BTW core was considered acceptable, there was a decrease in recovery in fractured or broken sections.
- Samples were shipped in rice bags by ground transport to Prince George and transferred to Byers' Transport Express to the Acme laboratory in Vancouver. Samples were identified by a six-digit sample number only.
- At the laboratory, all samples were analyzed using gold fire assay methods, with a one assay-ton sample size. Every 10th sample and any sample that assayed over 2 g/t Au was also analyzed by 30 element ICP analysis. Metallic screen assays were run for any sample that assayed over 100 g/t Au and select samples from potentially higher-grade zones were also subjected to metallic screen assay; silver assays were run for all samples that returned geochemical silver values over 30 ppm.
- Acme inserted 14 internal standard assay samples, one for every 30 samples run. If the standard sample did not return values with a deviation of less than 3.5% for the assays or 10% deviation for the ICP analyses, the sample was automatically rerun.
- In the author's opinion, Bishop's sampling, QA/QC and security protocols met the industry standards of 2003, with the exception of its whole core sampling for the first three holes of the drill program.

6.4.2 2006-07 Sample Preparation, Analyses and Security

Ancillary Surveys

The author reviewed in detail Assessment Reports 28887 and 30132 covering the methodologies and analyses for surface rock sampling and the survey methods for geophysical programs carried out by Christopher James on the Ranch property in September 2006 and May to September 2007. Based upon this review, the author is satisfied that the rock geochemical sampling work and subsequent analyses, and the geophysical surveys were undertaken in a way that met or exceeded industry standards for 2006-07. More information can be found in the two assessment reports detailing these work programs (see References - Section 19.0). Sample preparation, analyses and security protocols for the surface rock samples were similar to those described below for the 2006-07 core samples.

Diamond Drilling

Christopher James' 2006-07 sample preparation, analyses and security procedures were reviewed by Micromine in October 2007; those of 2007 were later summarized by the author in Assessment Report 30132. They include:

- NQ diamond drilling was carried out in the Thesis III Zone in 2006; in 2007, HQ and NQ2 drilling was completed in four separate zones.
- All 2007 drill hole collars were surveyed using a Geo Explorer XT differential GPS unit which has a horizontal accuracy of less than 0.5 metre and a vertical accuracy of about 1 to 2 metres. Down-hole surveys were executed with an EZI Digital Reflex System which gave the deviation of dip and azimuth down the hole.
- All core was photographed then logged in detail at the site. Logging included the recording of recovery and RQD data for each entire hole. Main zones of mineralized vuggy and pervasive silica were sampled continuously, with a sample interval of mainly one metre. Argillically or sericitically-altered wall rocks to silicified zones were generally sampled at one to two metre(s) intervals. Weakly (propylitically) altered wall rocks were sampled at 2.0 m intervals for a distance of about 6 m before and past more strongly altered and mineralized zones.
- Half of the sawed core was retained in the core box and the other half was placed into numbered plastic sample bags which were then placed into labeled and numbered five-gallon pails. The latter were sealed with a lid before they were shipped by helicopter and then by truck to the ALS Chemex laboratory in North Vancouver for gold, silver and multi-element analyses. All retained 2006-07 core is stored on the property at the 2007 exploration camp located about 500 m southwest of the Bonanza Zone.
- Sampling and assaying procedures were subject to a rigorous QA/QC program which included insertion of standards and blanks for each batch of samples shipped, and the sawing of 1/4 split core samples for dulpicate analyses. Micromine reviewed the results of the standards and blanks analyses and believed them to be within acceptable limits.
- Some 2007 sample lengths were <0.3 metre in length. Micromine recommended that sample lengths should not be shorter than 30 cm to provide sufficient sample representivity.
- Christopher James did not submit any of the 2006-07 assay pulps to an umpire lab. Micromine recommended that in the future, about 3% of all duplicate samples should also be analyzed at an umpire lab; this would provide information on potential assay bias and should become part of the standard QA/QC protocol in the future.
- Core recoveries for all zones generally exceeded 85-90%. In some cases, the triple-tube method was used for low recovery holes in the Thesis III Zone. Micromine observed no direct correlation between sample grades and core recovery and concluded that the 2006-07 core recovery was satisfactory.
- At the Chemex laboratory, gold analyses were done by fire assay fushion with AA finish, using a 30 g sample size. Any assays over 100 ppm were fire assayed with a gravity finish. Trace level determinations were done using a conventional ICP-AES analysis.
- Chemex's sample preparation procedures included: (i) weighing, drying and finely crushing to >70 % passing a 2 mm screen; (ii) taking a split of up to 1000 g and pulverizing it to >85 % passing a 75 micron screen.

- Micromine concluded that the 2006-07 sampling, QA/QC and security protocols were acceptable and recommended some modifications be incorporated into future drill programs. The author concurs with Micromine's conclusions.

6.5 Data Verification by Previous Operators

A review of data verification by previous operators is presented below under three sub-headings: (i) data verification by the author during his review of the historical assessment reports which comprise an important part of the Ranch Project data base; (ii) data verification observations, mainly on the historical diamond drilling data base, documented by Hawkins in his June 2003 and July 2006 Technical Reports on the Al (Ranch) property; and (iii) data verification studies carried out by Micromine during its 2007 modeling and resource estimation work on the many gold mineralized zones on the Ranch property.

6.5.1 Data Verification from Assessment Reports

As all surface exploration on the Ranch Project is historical, and with some of it dating back 40 years, the author has been unable to verify the quality of these data other than to carefully review PDF copies of assessment reports which form part of the historical data base in the public domain. In his review of this data, the author did not recognize any procedures which would run contrary to normal exploration practices at the time the work was done, other than one instance in 2003 where some whole core was submitted to a laboratory for analysis. Overall, the historical data is considered by the author to constitute a reliable source of technical information on the Ranch Project.

6.5.2 Data Verification Observations & Studies Documented by Hawkins (2003 & 2006)

In his June 2003 and July 2006 Technical Reports on the Al (Ranch) property, Mr. Hawkins discusses several data verification-related subjects. The more important of these are:

• The destruction of all or most drill core during reclamation at the Al and nearby properties prevents any independent verification of results from many of the historical drilling programs, including those carried out by Texasgulf, Energex, AGC and Bishop.

• Persons who were not at arm’s length from previous owners may have collected some of the data or produced the some of the work product used or referenced in his (Hawkins') reports. Non-arm's length supervision of a technical work program could introduce a bias to results, which would be difficult to quantify without direct access to past diamond drill core and other sample materials.

• Many of the mineralized zones on the Ranch Project are structurally complex and often characterized by the presence of localized, highly erratic gold mineralization. Such mineralization inherently complicates data verification studies and related drilling programs specifically designed to check past work.

Such is the case in the central portion of the Bonanza Zone, where overlapping drill programs carried out by Texasgulf, Energex, AGC, Bishop and Christopher James, and the attempted twinning of 1987 Energex holes by AGC, has led to uncertainty regarding the zone's grade and tonnage potential. This matter is discussed in detail below under the sub-heading *"Strathcona Audit"* and is also discussed in Section 6.5.3.

Strathcona Audit

Strathcona Mineral Services Ltd. ("Strathcona") was retained by Antares Mining and Exploration Corporation ("ANZ") to review its mineral holdings as part of its TSX corporate governance policy. In 1997, ANZ was a joint venture partner with AGC on the Al (Ranch) property. In the fall of 1997, Strathcona completed an audit of the Al property. In its final audit report (Guttenberg & Dumka, 1998), Strathcona expressed concern regarding the failure in 1997 to replicate drill intersections obtained in 1987 on the Bonanza Zone and metallic gold assay problems between laboratories. Key Strathcona observations include the following:

• The most important results from work at Bonanza in 1997 were those from the drill holes completed by AGC on Section 10S. On this section, Energex's Hole A87-30 had returned 21.4 g/t Au over 32.6 m, with individual half-metre assays of up to 366 g/t Au. High grade intercepts of 22.3 g/t Au over 22.7 m were also reported from Hole A87-60, located on the same section 45 m to the northeast, while other holes on this section had generally lower average grades over shorter core lengths. The weighted average grade of 543 samples of mineralized, silicified rock from 294 m of core drilled on section 10S in 1985-87 is 9.1 g/t Au. Cutting of 27 assays, which represent 5% of the population, to 40 g/t Au, reduces the average grade to 6.9 g/t.

• AGC Hole AL97-01 twinned hole A87-30 and returned 2.3 g/t Au over 20 m, followed by 1.4 g/t Au over 16 m, which is about 10% of the grade-thickness value of hole A87-30. The area on section 10S drilled in 1985-87 was intersected by seven holes in 1997. The average grade of 194 m of core (210 samples) of silicified, mineralized rock from the 1997 holes is 2.1 g/t Au, well below the 9.1 g/t received in 1985-87. Only five 1997 samples (2.4%) assayed >10 g/t Au, while in the 1985-87 drilling 96 samples (17.7%) had assays over 10 g/t Au and 9 had assays over 100 g/t Au.

• This discrepancy could have several causes, including drill hole locations in 1997 that did not match the 1985-87 locations and faulty assaying or reporting of assays. The collars of the old holes had been destroyed by stripping in preparation for mining by Cheni in 1991 and the surface was further changed by reclamation work performed after mining was terminated. AGC/ANZ were able to tie their drill holes into the original grid by using old survey markers outside of the disturbed area, and one therefore has to assume that the locations are correct as shown. This is supported by the rock types which coincide reasonably well on the old and new sections. The collar of Hole AL97-01 was about 2 m below the elevation of A87-30 which puts the new collar 2 m back from the pierce point of the old hole at this level.

• Assaying of the original samples was done at CDN Resource Laboratories in Delta, B. C. and check assays run at Chemex in North Vancouver. The 1997 samples were assayed at Eco-Tech Laboratories Ltd. in Kamloops, B.C. With all the remaining core and likely all the rejects and pulps no longer available, it is impossible to confirm these assays.

• The rather complicated structure of the Bonanza Zone with faults shown to run almost parallel to section 10S, and coarse gold could explain some of the differences between the two drill campaigns, but it is unlikely that these conditions would consistently have caused lower values in the 1997 drilling.

• Some high gold values were received in 1997, such as in hole AL97-04 which twinned Hole 87-47 and returned 32.9 g/t Au over 7.0 m, including two assays of 82 g/t Au and 83 g/t Au. This compares to 17.5 g/t Au over 18.6 m in Hole 87-47, which had values up to 161 g/t Au. Expressed in grade-thickness, this is 30% higher than in AL97-04.

Hawkins reviewed Strathcona's findings and concluded that:

• The absence of the original collar markers for the drill holes in the Bonanza Zone hinders the confidence in any interpretation of the contrasting results between the two drilling programs.

• Statistical analysis of the Energex assay data indicated that a very high proportion of the metal content of the mineralized zone (>40%) was coming from a small proportion of the sample data (~15%). This small population of high-grade samples was not fully tested by the 1997 program.

• The problems between the laboratories can be explained in part by the fact that some 1997 metallic assay results were obtained from quartered core as all original sample material including rejects was consumed at Eco-Tech. The Bonanza Zone is a high-nugget effect deposit. Laboratories are usually very effective at making the submitted samples homogeneous and producing consistent duplicates but the mineralization itself is highly erratic and discontinuous on a local scale.

• In general, the issues raised in the Strathcona Audit reflect the complex nature of mineralization on the AL property and do not reflect any serious assay problem.

In reviewing both Strathcona's findings and Hawkins' comments above, the author agrees with Hawkins' statement that *"the absence of the original collar markers for the drill holes in the Bonanza Zone hinders the confidence in any interpretation of the contrasting results between the two drilling programs."* As can be seen on the Bonanza Zone Geology Plan (see Figure 13a), the distribution of gold-bearing silica zones is complex. In the case of the twinned pair of Holes A87-30 and AL97-01, any appreciable divergence of their relative collar locations, or any down-hole divergence, might impact the comparative results of these two holes considerably. It is also known that high grade mineralization at Bonanza is very erratic and localized; any appreciable divergence in the relative locations of twinned pairs of holes might yield widely contrasting results.

In 2006, Hawkins revisted the Ranch site and carried out re-sampling of AGC's Hole 97-12 which was drilled in the central portion of the Bonanza Zone, perpendicular to the 1997 and earlier holes drilled along Section 10S at an azimuth of 048°/228°. In this hole, Hawkins selected a 13 m-long interval from 54.0 to 67.0 m as a check on 1997 assays. The remaining half of the core was sampled, with the assaying performed at Loring Laboratories Ltd. in Calgary, Alberta. The re-sampled interval returned 4.07 g/t Au over 13 m compared to 6.07 g/t Au over 13 m in 1997; a high-grade interval between 60.0 to 66.0 m returned 11.93 g/t Au in 1997 but only 8.85 g/t Au in 2006. Hawkins stated that “gold assays were generally 30% lower in 2006 but given the erratic nature of gold this is considered acceptable”.

6.5.3 Data Verification Studies Carried Out by Micromine (2007)

The key verification study carried out by Micromine was in the central portion of the Bonanza Zone where, as discussed in Section 6.5.2 above, several overlapping drill programs carried out by previous operators returned differing results, leading to uncertainty regarding the zone's resource potential.

At Bonanza, there are no direct twins for 2007 drill holes versus pre-2007 drill holes. Recognizing this, Micromine interpolated grades into the same block model, separately using

the historical sampling results (drill holes and trenches) and 2007 sampling results (drill holes only). The area where both drilling campaigns took place forms the central part of the Bonanza Zone. It was restricted by the following coordinates: between 598,360E and 598,565E and 6,371,890N and 6,372,040N. The 2007 holes are oriented approximately due east or west whereas the earlier drill holes are mainly oriented northeast or southwest, along azimuths of 048° or 228°.

The Bonanza block model and wireframe based on all available analytical information was used for the Micromine study. Resources were estimated using: (i) the 2007 sampling results only; (ii) all pre-2007 sampling data (drill holes and trenches); and (iii) pre-2007 drill hole data only. Comparative results are as follows:

- 2007 drill holes (246 samples): model grade = 2.70 g/t Au; sample grade = 2.90 g/t Au;
- Pre-2007 drill holes and trenches (2,244 samples): model grade = 6.02 g/t Au; sample grade = 6.08 g/t Au; and
- Pre-2007 drill holes (1,931 samples): model grade = 6.33 g/t Au; sample grade = 5.11 g/t Au

The modeled grade using pre-2007 drill holes and trenches versus that for 2007 drill holes is higher by a factor of 2.23; that using pre-2007 drill holes only is higher by a factor of 2.34. Micromine considered this wide variance unacceptable and suggested that the higher block model grades generated using pre-2007 data may in part be a function of greater sample density. The author agrees with this supposition and further suggests that the pre-2007 drilling, which was mainly oriented along azimuths of 048° or 228°, may have introduced a positive assay bias to core samples due to the presence of predominantly northeast-trending mineralized structures in this part of the Bonanza Zone.

Micromine also attempted to run the process which finds the paired samples from different exploration campaigns within a specified distance. One, two and three metre(s) separations were tested. The coefficient of correlation was close to 0 in all cases; therefore no correlation was observed between the paired samples.

In their October 2007 Technical Report, Micromine states *that "results of the above test clearly show that it is necessary to support the higher grades obtained during historic exploration, and to understand where the difference is coming from."* They further state that *"If further investigations do not support the historic analytical results, the latter would have to be excluded from any resource estimations."*

7.0 GEOLOGICAL SETTING AND MINERALIZATION

The main sources of information for the regional geology and mineralization description presented in Sections 7.1.1 and 7.1.2 below are from Staargard (1994) and Hawkins (2003 and 2006). The former provides an excellent synopsis of the regional geological setting of the Toodoggone District in his Consultant's Report for Electrum Resource Corporation on the Pil claims, while Hawkins provides succinct descriptions of the principal mineral deposits in the area in his Technical Reports on the Al (Ranch) and Lawyers properties. Some additional information pertaining to the regional geological setting of the area is presented by the author.

7.1 Regional Setting of the Ranch Project

7.1.1 Geology

The Ranch property is located near the northwestern limit of the Toodoggone District which has seen significant levels of exploration and mine development over the past three decades (Figure 11).

Staargaard summarized the regional geology of the Toodoggone District as follows (with some modifier comments or edits by the writer in *italics*):

"The Toodoggone area is situated in the Intermontane Belt, near its eastern margin. The oldest rocks in the region are limestones and rhyolitic tuffs of the Permian Asitka Group. These are overlain by mafic to intermediate flows and related fragmental and sedimentary rocks of the Upper Triassic Takla Group. Overlying these in turn are volcanics of the Lower Jurassic Toodoggone Formation, a complexly intercalated pile of largely subaerial, high potassium, calc-alkaline latite and dacite flows, fragmental rocks and related sediments exceeding 2,200 metres in thickness. Two main periods of eruptive activity are evident and the formation is subdivided into six members on the basis of lithology, mineral assemblage, texture and field relationships." *(Table 3).*

The youngest stratified rocks in the area are those which comprise the Middle to Upper Cretaceous Sustut Group. These occupy the southwestern part of the Figure 11 map area. They consist of a lower section of chert, quartz pebble conglomerate and felsic ash tuff and an upper section of mudstone-siltstone with coal layers.

"A series of comagmatic plutons were emplaced during the lower volcanic cycle and were partly unroofed and eroded during a brief period of uplift before commencement of the upper cycle."

"Extensive and repeated faulting led to the development of an asymmetric collapse feature and served to localize epithermal vein-type gold-silver mineralization *at many localities such as Shasta, Baker Mine and Lawyers, and high sulphidation gold-silver mineralization such as that present at the Bonanza, Thesis III and BV Zones on the Ranch property (see Figure 11). All but*

the Baker Mine are hosted in Toodoggone volcanic rocks. The Baker mine, although of the same general age as the other deposits, is hosted by older Takla Group rocks. A number of porphyry copper-gold deposits and prospects, including the Kemess *South* Mine and the *Kemess North* deposit in the *southeastern* portion of the Toodoggone area, are apparently related to plutons comagmatic with Toodoggone Formation *volcanic rocks.*".

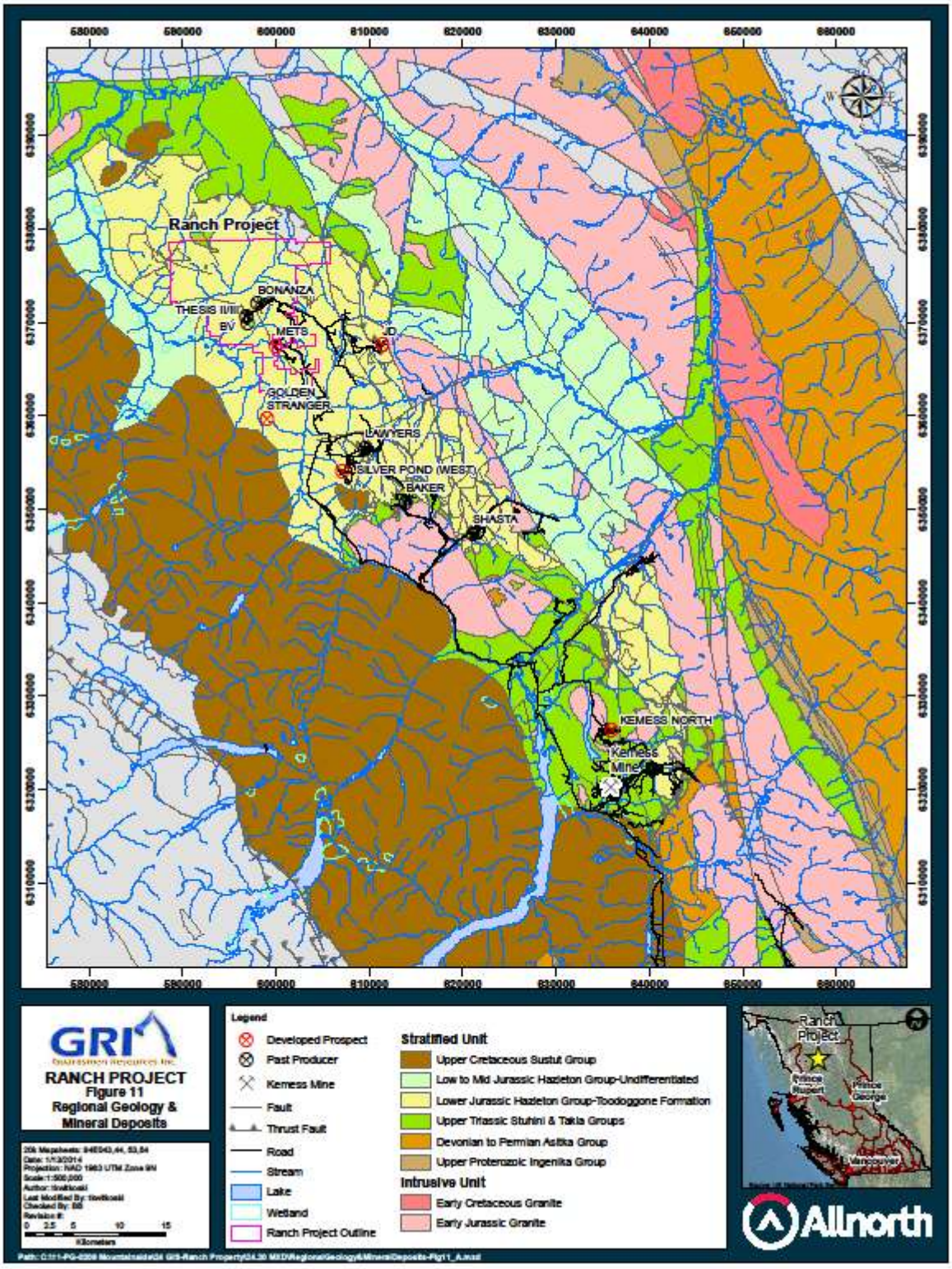
Table 3
Jurassic Toodoggone Formation Lithostratigraphic Column

FORMATION MEMBER	ERUPTIVE CYCLE	AGE (Ma)	MEMBER DESCRIPTIONS
Saunders	Upper	192.9 to 194	Trachyandesite tuffs
Attycelley		193.8	Dacite tuffs and related feeder dikes and sub-volcanic domes
McClair			Heterogeneous lithic tuffs, andesite flows and sub-volcanic dikes and plugs
Metsantan	Lower	197 to 200	Trachyandesite latite flows and tuffs
Moyez			Well-layered crystal and ash tuffs
Adoogacho		197.6	Trachyandesite ash flows to lapilli tuffs and reworked equivalents

7.1.2 Mineral Deposits

A number of past producing mines and developed prospects plot within the map area of Figure 11. Those discussed below include Lawyers, Silver Pond, Baker, Shasta, Kemess South and Kemess North. The Bonanza, Thesis and BV high-sulphidation prospects are discussed in Section 7.2.3, under alteration and mineralization of the Ranch Project. The Mets, Golden Stranger and JD developed prospects are described in Section 15.0 (Adjacent Properties) of this Report.

The following descriptions are presented in order to provide the reader with background information on the types, sizes and styles of the various deposits which characterize precious and base metals mineralization in the Toodoggone District. **The information on these developed prospects and past producing mines is not necessarily indicative of the mineralization that may be present within the Ranch Project area.**


Ranch Project
BONANZA
THESIS II/III
BV
METS
JD
GOLDEN STRANGER
LAWYERS
SILVER POND (WEST)
BAKER
SHASTA
KEMESS NORTH
Kemess Mine
GRI
RANCH PROJECT
Figure 11
Regional Geology & Mineral Deposits
Legend
Developed Prospect
Past Producer
Kemess Mine
Fault
Thrust Fault
Road
Stream
Lake
Wetland
Ranch Project Outline
Stratified Unit
Upper Cretaceous Sustut Group
Low to Mid Jurassic Hazleton Group-Undifferentiated
Lower Jurassic Hazleton Group-Toodoggone Formation
Upper Triassic Stuhini & Takla Groups
Devonian to Permian Asitka Group
Upper Proterozoic Ingenika Group
Intrusive Unit
Early Cretaceous Granite
Early Jurassic Granite
Prince Rupert
Prince George
Vancouver
Allnorth

Lawyers (094E 066)

In 1969, gold was discovered on the Lawyers prospect by Kennco Explorations (Western) Limited while exploring the area for porphyry copper deposits. Serem Inc. optioned the property in 1978 and by 1987 had acquired a 100% interest in the project. Serem later changed its name to Cheni Gold Mines Inc.

Low sulphidation epithermal gold-silver mineralization at Lawyers occurs in quartz vein stockworks and chalcedony breccia zones which appear to be controlled by fracture systems related to graben margins. Mineralized zones are hosted in volcanic strata of the Lower Volcanic Cycle of the Toodoggone Formation.

Mineralization consists of fine-grained pyrite, native gold, electrum, native silver and acanthite and minor amounts of chalcopyrite, sphalerite and galena. Gangue consists of chalcedony, quartz and minor calcite, hematite and barite. Detailed investigations indicate that a minimum of four phases of chalcedony and quartz deposition are present, of which amethystine quartz is the latest (Vulimiri et al, 1986). Alteration of the zones displays vertical zonation, with argillic at higher elevations, silicification-adularia-sericite at intermediate levels and silicification-adularia at lower elevations. These are enveloped laterally by zones of propylitic alteration which consist of chlorite and minor epidote, calcite and hematite veinlets.

Three main mineralized zones were defined on the Lawyers property by 1989 when the property was put into production as a 550 ton per day underground operation. The projected life of the operation was ten years. Proven and probable reserves at opening were 1,037,600 tons @ 0.209 oz. Au per ton and 7.57 oz. Ag per ton (Wright, 1986). Between 1989 and 1992, the Lawyers Mine produced 171,177 oz. Au and 3,548,459 oz. Ag. Overall recoveries were 93.5% for gold and 73.5% for silver. Capital costs for the project were $57.4 million, including $6.5 million to complete an access road to the property in 1987.

In 1991, metal prices were at historical lows and a strong Canadian dollar forced the increase of the cut-off grade to 0.20 oz. per ton gold equivalent (Cheni, 1991a). This change resulted in a 42% reduction in ore reserves. High operating costs forced the closure of the mine in 1992, with the exhaustion of economic underground reserves. Limited exploration in 1993-94 failed to find further ore. Decommissioning of the Lawyers mill site began in 1996 and the reclamation program on the site was largely complete in 1999, with the removal of all equipment and closure of mine workings. Mining Leases were allowed to lapse in January 2000 and the property was acquired by staking by Guardsmen Resources Inc. in November 2000. As of December 2013, the recorded 100% owner of the property is PPM Phoenix Precious Metals Corp., a West Vancouver-based private mining company associated with Guardsmen.

There are no mineral resources or reserves on the property that meet the current standards under NI 43-101 *Standards of Disclosure for Mineral Projects.*

Silver Pond (094E 163)

The Silver Pond prospect was discovered in 1984 when gold-bearing quartz float was noted on the east side of Cloud Creek. Follow-up geophysical and geochemical surveys defined a southeast-trending resistivity high and a partly coincident gold soil anomaly. Precious metals-bearing mineralization was discovered by a trenching and drilling program in 1985.

Two general styles of high sulphidation (acid-sulphate) type epithermal gold-silver mineralization occur at Silver Pond. These consist of vein and breccia-type ore shoots and pods, such as the Silver Pond West and Silver Creek prospects, and high-level stockwork-type mineralization such as the Silver Pond North prospect. The mineralized zones are hosted in volcanic strata of the Lower Volcanic Cycle of the Toodoggone Formation.

Two types of mineralization are recorded: (i) narrow veins and stringers of multistage silica with minor calcite, epidote, chlorite, pyrite and laumontite, rare amethystine quartz with traces of galena, chalcopyrite, sphalerite, electrum, native silver and acanthite; and (ii) zones of intense to pervasive silicification which are usually associated with hydrothermal brecciation and intense multiphase veining.

Alteration associated with the epithermal mineralization consists of pervasive silicification grading outward into weaker silicification, sericitization, and argillic and potassic alteration. A two kilometre-wide alteration zone covers much of the area and is marked by a gossan comprised of abundant goethite, jarosite and hematite. Quartz, alunite, kaolinite, montmorillonite, dickite, illite, sericite, and minor amounts of barite, fluorite, limonite and pyrite comprise secondary minerals in intermediate to advanced argillically-altered zones. Propylitic alteration is characterized by chlorite and pyrite replacement of the original mafic minerals and epidote and albite replacement of igneous plagioclase.

The Silver Pond West developed prospect was the focus of an extensive drill program in 1987, consisting of 6,759 m in 62 holes. Diamond drilling intersected gold mineralization over a strike length of greater than 400 m and over a vertical interval of 200 m. Significant intercepts range up to 12.3 g/t Au and 324.4 g/t Ag over a true width of 2.12 m (Assessment Report 16952).

A preliminary mineral inventory estimate was done by Kennedy and Vogt (1987). They reported a “drill-indicated” resource of 62,100 tonnes @ 5.85 g/t Au, using a cut-off grade of 2.4 g/t Au and a specific gravity of 2.88. The mineral resource estimate does not include allowance for dilution. It was prepared before the coming into force of the NI 43-101 *Standards of Disclosure for Mineral Projects.*

As of December 2013, the recorded 100% owner of the claims covering the Silver Pond prospect is PPM Phoenix Precious Metals Corp.

Baker (094E 026)

The first operating lode gold mine in the Toodoggone District was the Baker Mine. Gold was discovered in quartz veins on the Baker (Chappelle) property in 1969. In 1981, the property was placed into production by DuPont of Canada as a 110 tonnes per day ("tpd") high-grade underground operation on the "A" Vein. Operations ceased in 1983 as reserves were exhausted.

In 1989, with newly developed road access, Sable Resources Ltd. acquired DuPont's Baker Mill and with improvements, increased production capacity from 110 to 245 tpd and carried out production on the "B" Vein during the period 1991 to 2001. Since the 1980's, production from the A and B veins has totaled approximately 41,300 ounces of gold, 766,000 ounces of silver and 13,000 kilograms of copper. The true widths of these vein structures vary from 2.4 to 7.6 m, with typical grades of 0.5 oz. per ton Au, 5 oz. per ton Ag and 1% Cu.

At the Baker Mine property, seven quartz vein systems occur within Takla Group host rocks; two (the A and B Veins) have been mined. All veins occur within an uplifted block of brightly iron-stained basalt and andesite flows. The veins occupy two principal trends, northeast and east-southeast. Wallrocks are variably silicified and altered to sericite, clay minerals and carbonate with intensity of alteration increasing towards vein structures.

Gold-silver values are generally associated with highly fractured and occasionally brecciated white to grey, vuggy quartz veins containing 1 to 10 per cent pyrite, and to a lesser extent, occur in silicified wallrock. Higher grade mineralization is associated with grey quartz, which occasionally contains visible argentite. The latter is commonly associated with disseminated grains of pyrite, chalcopyrite and very minor sphalerite. High grade gold-silver values occasionally occur in narrow, 1-5 cm wide, crosscutting silicified shears. Visible gold is rare. Significant precious metals were found to be contained in a flat-lying shoot 200 m in length by 3 m wide and extending to a depth of 40 m below surface.

The small tonnage gold-silver deposits around the Baker Mine are very high grade, typical of epithermal type deposits. Although many of these deposits are currently without established mineral reserves, they have good potential for the discovery of additional mineralization. The Baker property's past production is indicative of the mineral potential for this type of deposit in the Toodoggone District.

The information on the Baker deposits and current and past production from them is not necessarily indicative of the mineralization on the Ranch property. This information provides contrast between high-grade gold deposits with modest tonnages compared to potentially large, bulk tonnage low-grade operations. The historical and current estimates are relevant to the mineral potential for similar types of deposits in the Toodoggone District. The reliability of their historical reserve estimates is unclear with respect to recent mining activity and the resultant remaining tonnage and grade. There is, however, clear potential for the discovery of additional gold and silver-bearing, vein-hosted deposits both on the Baker property and elsewhere in the Toodoggone District.

Shasta (094E 050)

The Shasta deposit was discovered in the 1970's by Newmont Mining, and in the 1980's it was explored by Homestake Mining and Esso Minerals Canada Limited. In 1989, Esso reported possible reserves of 1,020,000 tonnes @ 5.7 g/t Au, including 537,000 tonnes @ 8.7 g/t Au (Holbek, 1989). These historical estimates were completed before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects* and use categories other than those stipulated for current use. They would now likely be classified as inferred mineral resources.

Since 1989, extensive exploration has been conducted on the Shasta property. Some 257 surface diamond drill holes have identified 11 mineralized zones. Three of these, the Creek, JM and D zones, have been developed and at least partially exploited. Under an arrangement with International Shasta Resources and Homestake Mining, Sable Resources mined and processed (at the Baker mill) 117,000 tons of ore from the JM and D Zones. The initial 1989 open-pit operation shifted to an underground operation in 1990 and production from the JM and D deposits averaged 50,000 tons each with ore grades of 0.25 oz. Au per ton and 17 oz. Ag per ton. In 2004-05, Sable mined an additional 15,000 tons of ore from an open pit at the Creek zone. Current plans for the Creek zone now involve underground development (Sable, 2007).

In total, Sable has extracted over 20,000 ounces of gold and 1.1 million ounces of silver from the Shasta property (Sable, 2007).

The Shasta deposit is an epithermal multiphase quartz-carbonate stockwork vein/breccia deposit containing significant silver and gold mineralization. It is spatially related to a dacitic dome of Lower to Middle Jurassic age. Mineralized zones are hosted by pyroclastic rocks that were deposited on the flank of the coeval dacite dome. The pyroclastic rocks, which unconformably overlie Stuhini Group volcanic rocks, belong to the Attycelley Member of the Upper Volcanic Cycle of the Toodoggone Formation.

The Shasta deposits consist of multiple overlapping quartz-calcite stockwork vein/breccias zones that occur as narrow (<1 m) curviplanar breccias that pinch and swell within wider (>10 m), variably altered and veined sections over strike lengths of up to 500 m. Quartz and calcite gangue occur individually in single-stage veins, as multistage banded veins and breccias, and also are intimately mixed in single stage veins. Both gangue minerals display open-space filling textures in banded veins and rare drusy vugs.

Native gold and silver, electrum and acanthite mineralization occurs erratically within quartz and calcite stockwork veins and breccias. Grades of mineralization appear to be independent of the intensity of alteration or brecciation. However, some of the highest silver values occur in late-stage calcite breccia zones. Gold to silver ratios throughout the deposit vary considerably, from 1:10 to 1:100, with a deposit average of about 1:45. Native gold and silver, electrum and acanthite mineralization is associated with finely disseminated grey sulphides and coarser grained pyrite. The main sulphide phases are pyrite, sphalerite, galena and minor chalcopyrite, in decreasing order of abundance.

The information on the Shasta deposits and current and past production from them is not necessarily indicative of the mineralization on the Ranch property.

Kemess South (094E 094)

Discovered in 1983, extensive diamond drilling by El Condor Resources Ltd. from 1990 to 1991 outlined the present Kemess South deposit. Royal Oak Mines Inc. acquired the property from El Condor in 1995.

The Kemess South porphyry copper-gold deposit had historical mineable reserves in 1996 of 221,000,000 tons @ 0.018 oz. Au per ton and 0.224 % Cu (Royal Oak, 1997). Royal Oak's mineable reserves included allowances for mining losses and dilution. This historical estimate was completed before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects* and used categories other than those stipulated for current use. This historical resource estimate would now likely be classified as probable mineral reserves.

The operation was a low-grade bulk tonnage operation based on the economics of scale, which enabled the mining of low-grade material. The mine was planned as a large open pit operation at a rate of 40,000 tons of ore per day, with a fifteen year mine life. The average stripping ratio for the project over its mine life was estimated to be about 1.18 to 1. Gold-copper concentrate was trucked along the ORAR to the rail-head at Mackenzie, B.C., where it was loaded into covered rail cars for shipment to the Horne Smelter in Rouyn-Noranda, Quebec, Canada.

The project had an original capital cost estimate of $350 million. A further $50 million came from the Province of B.C. as grants for infrastructure improvements. The final capital cost for the project was about $650 million, which significantly exceeded the original estimate. This capital cost overrun caused serious financial problems for Royal Oak, which eventually relinquished ownersip of the property, via several creditor transactions, to Northgate Exploration Limited.

Production commenced in April 1998 and continued without interruption until March 2011. Total production statistics include 473,376,688 tonnes mined and 228,732,478 tonnes milled, yielding 91,903,400 grams (2,954,763 oz.) gold, 4,871,000 grams (156,606 oz.) silver and 355,450,336 kg (783,633,852 lb.) copper.

The Kemess South deposit is hosted by the Early Jurassic Maple Leaf intrusion, a gently inclined sill-like body of quartz monzodiorite which intrudes Takla Group volcanic and sedimentary rocks. The ore body measures 1,700 m long by 650 m wide and ranges from 100 m to over 290 m thick. A blanket of copper-enriched supergene mineralization containing native copper overlies hypogene ore and comprises 20% of the deposit.

The highest grades of gold and copper in the deposit correlate with zones of intense quartz stockwork development, accompanied by intense potassium feldspar selvages and local magnetite stringers and disseminations. The potassic alteration is strongly developed in the

western two-thirds of the deposit where it overprints earlier sericite and calcite alteration. Sericitization does not show a consistent association with gold or copper mineralization.

Pyrite, the dominant sulphide in the deposit, occurs as veins and fracture coatings accompanying quartz stringers. Chalcopyrite occurs as disseminated grains and in quartz stockwork veins. Native gold is included within or is peripheral to grains of chalcopyrite, and higher gold grades correlate closely with higher copper grades in the hypogene zone.

The above information on the Kemess South deposit, and its past production data, is not necessarily indicative of the mineralization on the Ranch property. This information provides contrast between large bulk tonnage, low-grade gold-copper deposits and high-grade gold deposits with modest tonnages. The historical data is relevant to the bulk tonnage mineral potential of the Toodoggone District.

Kemess North (094E 021)

Kemess North is located about 6 km north of Kemess South. Mining companies were first attracted to the area by a large gossan that is the surface expression of the Kemess North porphyry copper-gold deposit. Exploration programs were carried out by Kennco Explorations (Western) Limited from 1966-71, Getty Mines Ltd. from 1975-76 and El Condor Resources Ltd. from 1986-93. By the end of 1993, a total of 15,039 m of diamond drilling in 78 holes had partially delineated the Kemess North deposit over a strike length of 1,200 m, a true thickness of about 300 m and to 400 m down-dip.

In 2000, Northgate Exploration Ltd. completed 12 diamond drill holes totaling 4,100 m at Kemess North. Their results and those from earlier drilling programs defined a total of 360 million tonnes grading 0.299 g/t Au and 0.154% Cu (Northgate Exploration Ltd., News Release - January 22, 2000). The following year, Northgate completed 16 holes totaling 8,200 m. This drilling defined a significantly larger and higher grade inferred mineral resource which was estimated to be 442 million tonnes grading 0.4 g/t Au and 0.23% Cu, using a gold equivalent cut-off grade of 0.6 g/t (Stockwatch - November 14, 2001).

In a news release dated August 2, 2011, Northgate announced positive results for a Preliminary Assessment on its Kemess North Underground Project, in which Northgate proposed to develop an underground block/panel cave operation with an average annual production of 95,000 ounces of gold and 41.4 million pounds of copper over a mine-life of approximately 12 years. The Kemess Underground deposit is located at a depth of 300 to 500 m below surface within the larger Kemess North deposit.

Analysis of the geotechnical data compiled during the 2010 drill season and from previous drilling campaigns indicates that the Kemess North orebody is well suited to block caving. The envisaged block cave operation would leverage the existing infrastructure and mill facilities at the Kemess South mine, including a permitted area for tailings storage in the Kemess South open pit.

The Preliminary Assessment is based on Indicated Mineral Resources for the Kemess Underground deposit as of December 31, 2010. The resources were estimated using a Cdn$15 per tonne net smelter return ("NSR") cut-off for vertical columns of blocks at metal prices of US$1,100 per oz. gold and US$2.80 per lb. copper. The Kemess Underground Indicated Mineral Resource is 136.5 million tonnes grading of 0.56 g/t Au and 0.29% Cu. There is also an Inferred Mineral Resource, estimated using the same NSR cut-off, of 6.0 million tonnes grading 0.42 g/t Au and 0.22% Cu.

On October 26, 2011, Toronto, Ontario-based AuRico Gold announced it had completed the acqusition of Northgate Minerals Corporation by way of a plan of arrangement. Under the terms of the acquisition, AuRico, among other things, acquired all of the issued and outstanding common shares of Northgate on the basis of 0.365 of an AuRico common share for each common share of Northgate.

In a news release dated March 28, 2012, Aurico outlined its plans to fund a US$7 million work program at Kemess North in order to complete a Feasibility Study of the proposed underground operation. In a subsequent news release dated April 15, 2013, AuRico announced results from the Feasibility Study that outlines the proposed development of an underground block cave operation with average annual production of 105,000 ounces of gold and 44 million pounds of copper at cash costs of $213 per ounce of gold, net of by-product credits, over a mine-life of approximately 12 years. As of the effective date of this Report, to the author's knowledge, AuRico has not made a positive decision to proceed with the proposed underground development.

At Kemess North, a sub-volcanic quartz monzonite stock and related dikes have intruded Takla Group volcanic rocks. Porphyry-style copper-gold mineralization is hosted in potassically-altered zones developed both within the monzonite and adjacent country rock. Higher grade copper-gold mineralization is associated with stockworks, veins and disseminations of pyrite, chalcopyrite and magnetite that form as replacements of earlier ferromagnesian silicate minerals. Outward from the potassically-altered zone, the onset of a propylitic alteration assemblage of chlorite, carbonate, pyrite, pink zeolite and minor epidote is marked by a pronounced decrease in copper and gold concentrations.

The above information on the Kemess North deposit, and the proposed underground development of it, is not necessarily indicative of the mineralization on the Ranch property. This information demonstrates the potential for the mining of porphyry-type deposits, by bulk underground methods, in the Toodoggone District. The reader is reminded, however, that in the case of Kemess North, its operational synergies with Kemess South have enhanced its possible economic viability.

7.2 Local Geology of the Ranch Project

The descriptions that follow in Sections 7.2.1 to 7.2.3 below are sourced from several previous reports including:

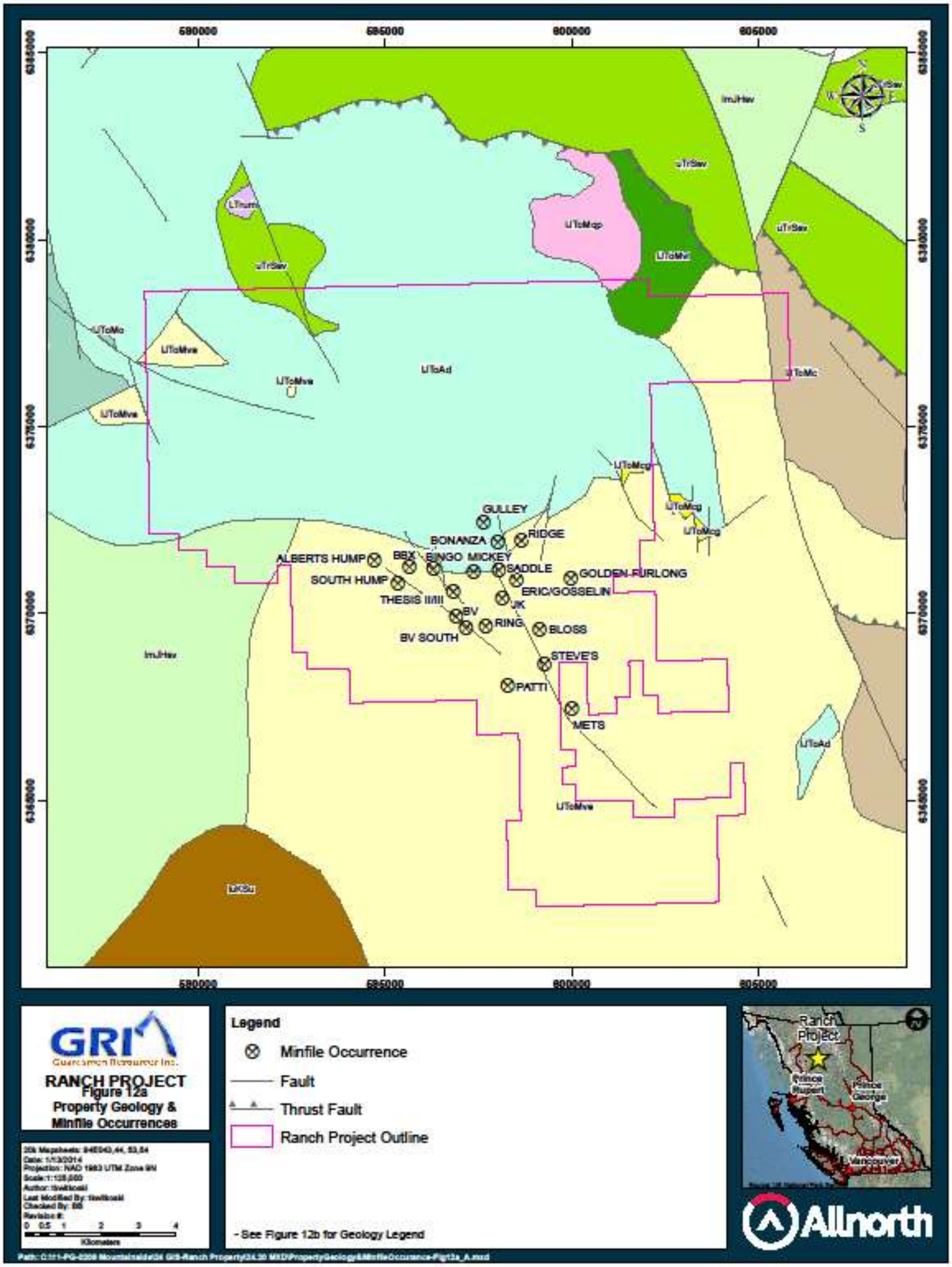
- 51 assessment reports in PDF format downloaded from the B.C. Ministry's ARIS (Assessment Report Indexing System) website. The reports cover exploration work on the Ranch property completed by previous operators during the period 1972 to 2007.
- Assessment Report 30132, which covers the last major integrated work program carried out on the Ranch property in 2007. The report was written by B. K (Barney) Bowen, P.Eng., who supervised a portion of the field work and who is also the author of this Report.
- a Technical Report on the Lawyers and Al (Ranch) Properties written by Paul Hawkins, P. Eng. (June 2003) and a later Technical Report on the Ranch Property also written by Hawkins (July 2006);
- a private report, titled "Toodoggone Properties, British Columbia, Exploration Overview", written by N. Caira, L. Eccles et al. for Energex Minerals Ltd. and dated January 1990. It provides an excellent summary of the very large exploration data base generated by Energex and others during the period 1972 to 1988; and
- a Technical Report on the Ranch Project written by B. K. (Barney) Bowen, P. Eng, (May 2012)

Additionally, in Section 7.2.3, descriptions of the alteration and mineralization in some known gold-mineralized zones have been updated to include observations made by the author and/or Bob Lane, P. Geo. during their site visit to the Ranch Project on September 2-3, 2013.

7.2.1 Lithology

Volcanic strata of the Lower Volcanic Cycle of the Lower Jurassic Toodoggone Formation underlie most of the Ranch property (see Figure 12a and related Figure 12b). The northern two-thirds of the property are underlain by trachyandesite ash-flows to lapilli tuffs and reworked equivalents of the Adoogacho Member. Overlying trachyandesite (latite) flows with lenses of lapilli tuff of the Metsantan Member occupy the southern part of the property. Other volcanic and sedimentary rocks of limited extent include small areas of Metsantan Member volcanic conglomerate and finer bedded epiclastic rocks exposed in the eastern part of the property and Upper Triassic Stuhini Group undivided arc volcanic and sedimentary rocks in the northern part of the property. A subvolcanic plug or flow dome related to Toodoggone volcanism is present in the northeastern part of the property.

Lithological contacts are rarely observed. Many units appear to grade into one another and the compositional differences between most untis are minimal. Local unconformities are also fairly common between and within units; equally common are fault contacts between units. Many units have reworked equivalents, where tuffaceous and block material have been moved or washed by local alluvial processes such as debris slides/flows, sheet wash, stream channeling and other erosive activities present in a dynamic, subaerial volcanic environment.


GULLEY
RIDGE
BONANZA
ALBERTS HUMP
BBX
BINGO
MICKEY
SADDLE
GOLDEN-FURLONG
SOUTH HUMP
ERIC/GOSSELIN
THESIS II/III
JK
BV
RING
BLOSS
BV SOUTH
STEVE'S
PATTI
METS
GRI
RANCH PROJECT
Figure 12a
Property Geology &
Minfile Occurrences
Legend
Minfile Occurrence
Fault
Thrust Fault
Ranch Project Outline
- See Figure 12b for Geology Legend
Ranch Project
Allnorth

Legend for Figure 12a

Intrusive Rocks

lJToMqp	Lower Jurassic Subvolcanic plug or flow dome related to Toodoggone volcanism
LTrum	Late Triassic Hornblendite

Volanic and Sedimentary Rocks

luKSu	Mid to upper Cretaceous Sustut Group - lower section of chert quartz pebble conglomerate & felsic ash stuff; upper section of mudstone-siltstone with coal layers.
lmJHsv	Lower to middle Jurassic Hazelton Group - epiclastic & felsic volcanic unit; minor sediments, including limestone
lJToMc	McClair Member - heterogeneous lithic tuffs, andesite flows & sub-volcanic dikes & plugs
lJToMva	Metsantan Member - trachyandesite latite flows and tuffs
lJToMvl	Metsantan Member - debris flow deposits
lJToMcg	Metsantan Member - volcanic conglomerate & finer bedded epiclastic rocks
lJToMo	Moyez Member - dacitic crystal tuff with volcanic conglomerate at base
lJToAd	Adoogacho Member - trachyandesite ash flows to lapilli tuffs & reworked equivalents
uTrSsv	Upper Triassic - Stuhini Group - undivided volcanic & sedimentary rocks

GRI
Guardsmen Resources Inc.

RANCH PROJECT
Figure 12b
Legend for Figure 12a

The volcanic sequence is intruded locally by dikes which are compositionally similar to the volcanic units and may represent feeder systems to them. Felsic dikes and irregular bodies of dacitic, rhyo-dacitic and rhyolitic composition have been encountered in a number of drill holes. These intrusive rocks may be genetically linked to late-stage ore-forming fluids.

7.2.2 Structure

Structural interpretation is limited by poor rock exposure. Where bedrock is exposed, the volcanic units are generally flat-lying or dip gently to the west. No folding has been observed. Locally steeper dips (usually less than 30°) are likely the result of the original paleo topography and/or block rotations across fault planes.

The dominant structures in the area are steeply dipping faults which define a prominent regional northwest structural fabric trending 140° - 170°. In turn, high angle, northeast-striking faults (approximately 060°) appear to truncate and displace northwest-striking faults. Collectively these faults form a boundary for variably rotated and tilted blocks underlain by monoclinal strata.

The geometry and chronology of fault movements are poorly understood, and reconstructions are tenuous. Geophysics, trenching and drilling indicate that there are severe structural complexities associated with many of the zones of alteration and mineralization.

Block fault dip-slip movement is suggested where alteration zones are abruptly truncated, and strike-slip movement is common along many linear silicified zones. Slickensides and oriented tectonic breccias are locally present.

7.2.3 Alteration and Mineralization

Alteration on the Ranch property is commonly of the high-sulphidation (acid-sulphate) epithermal type, characterized by widespread argillization and silicification of andesite-dacite hosts rocks. Important alteration assemblages include alunite-quartz, hematite-illite-quartz, dickite-quartz, quartz-barite and quartz-pyrite, working inwards and downwards in a typical, zoned epithermal alteration system. Principal ore minerals include argentite, electrum, native gold and silver and lesser chalcopyrite, galena and sphalerite. Also present in the area but not confirmed on the property is porphyry-style mineralization.

As currently known, all significant gold mineralization on the Ranch property is hosted by silica-sulphate and silica-sulphide bodies flanked by argillically altered zones. They are controlled by moderately to steeply-dipping fault zones with north-northwesterly, northwesterly and northeasterly orientations. The gold-bearing zones have a crudely elliptical shape and are discontinuous along the controlling fault systems. In the Bonanza deposit, some of the gold-bearing zones are thought to have formed by selective replacement/silicification of more permeable tuff units within the volcanic strata. Gold mineralization is known to occur over a vertical range of about 200 m, extending from about 1,700 m at surface in the Bonanza Zone to about 1,500 m in elevation at depth in the Thesis II Zone. This vertical range is extended if one includes the adjacent Mets deposit near the southeastern boundary of the

Ranch Project. The upper portions of gold-barite-silica mineralization at Mets occur at an elevation of about 1,800 m.

The dominant alteration assemblage immediately adjacent to auriferous zones is dickite-quartz; this alteration type generally contains only geochemically anomalous amounts of gold, locally accompanied by anomalous concentrations of zinc, lead and/or copper. Potentially economic gold grades are almost invariably encountered only in the alteration assemblages consisting of quartz-barite-pyrite +/- copper sulphides and/or sulphosalts, and quartz-pyrite +/- copper sulphides or rarely copper-lead-zinc sulphides.

On surface, zones of argillic alteration weather recessively and are typically obscured by alpine vegetation or underlie linear swamps. Where exposed on surface, they comprise strongly limonite and jarosite-stained argillic and lesser vuggy silica altered felsenmeer.

Conventional surface exploration for gold on the Ranch property is essentially a search for alteration assemblages composed mainly of silica, preferably with 5-10% porosity and accompanied by sulphate or sulphide minerals. The most common method utilized to vector in towards such silica zones is grid soil geochemistry followed by mapping, prospecting and rock geochemical sampling. Gold-bearing silica zones are then tested by back-hoe trenching, channel or panel sampling of exposed bedrock and then diamond drilling to determine their gold content and size. To date, this method of sequential surface exploration has been successful in the discovery of 19 gold occurrences of greater or lesser importance (Figure 12a). More sophisticated geophysical methods (eg. 3D-IP) designed to target "blind" deposits not exposed at surface have, to date, been very much under-utilized on the Ranch property.

The three mineralized zones on the Ranch property which have seen minor past production are BV, Thesis III and Bonanza. Gold mineraliztion at the BV deposit is hosted by a quartz-barite-pyrite-sericite assemblage; that at the Thesis III deposit by a quartz-barite-pyrite (chalcopyrite, galena, sphalerite) assemblage; and that at the Bonanza deposit, by quartz-barite and quartz-pyrite-chalcopyrite-enargite-bornite-(barite) assemblages. Mineral assemblages on other zones are similar. A quartz-hematite-pyrite assemblage is important at the Ridge and Thesis II Zones.

The more important gold-bearing deposits and prospects, with their minfile numbers in brackets, are described under separate sub-headings below.

Bonanza Zone (094E 079)

The Bonanza deposit occurs within a structurally complex zone of silicification and clay alteration, at the intersection of the north-northwestly trending Bonanza fault system and the northeastly-trending Ghost fault system (Figure 13a). The deposit has been extensively trenched and drill-tested over a north-south strike length of about 450 m down to, on average, vertical depths of about 100 m (Plate 2). At its widest, the alteration zone exceeds 100 m in width. Year 2007 drill holes completed by Christopher James Gold Corp. in the Bonanaza deposit area show that while well-developed silica-pyrite zones persist to vertical depths of 125 m to 150 m or more, gold values exceeding 1.0 g/t were rarely encountered below about 60 m

to 70 m vertically below surface. There remains the possibility that steeply plunging mineralized shoots may persist to greater depths than those encountered in the 2007 drill holes.

Gold-bearing silicification in the deposit core ranges up to about 20 m in true width. Individual shoots dip vertically to moderately westerly. Gold grades usually exceed 1.0 g/t and range up to several hundred grams per tonne in localized, erratic high grade sections. Their random distribution does not appear to be the result of post-mineral dislocation; they are thought to be an intrinsic feature of the Bonanza deposit. Pyrite is common below depths of about 10 m; its content ranges from 1-5%, and is locally higher. Copper sulphides, notably chalcopyrite, bornite and covellite, and lesser copper sulphosalts, occur in certain zones.

The overall surface alteration pattern shows a series of broad silica-altered zones in the center of the deposit which trend northeasterly. In cross-section (Figure 13b), they appear sheet-like, dip moderately to the west or southwest and alternate with sections of relatively unaltered andesite tuff. The silica zones are thought to have formed from the selective replacement of more permeable tuff units within the volcanic strata. They are characterized by strongly silicified rock with high porosity, very low barite content, moderate pyrite content and locally heavy copper sulphide content. This style of mineralization offers the potential for development of thicker ore zones which may be more amenable to open pit mining or bulk undergound mining methods such as sub-level cave or room and pillar.

Flanking the central area, which averages about 60 m in width, are a series of silificied fissures with northerly to northwest trends. These include the Bonanza West and Verrenass structures on the northwest side of the deposit core, and the Bonanza South structure on the southeast side. These zones are relatively linear, steeply-dipping and narrow and consist of high-porosity, quartz-barite-sulphide veins and tabular bodies that become progressively narrower away from the central core of the deposit. They have not been recognized in the central deposit area, not even as faulted remnants. This suggests that the thicker zones of gold-bearing silica which developed along the northeasterly-trending Ghost fault system may post-date the narrower, northerly or northwesterly-trending “fissure-type” gold-bearing structures.

Also present in the central and northeastern parts of the Bonanza deposit area is a northeasterly-trending, 10-20 m wide, rhyodacitic quartz-feldspar porphyry dike which truncates alteration and mineralization and is itself locally offset by several strands of the Ghost fault system.

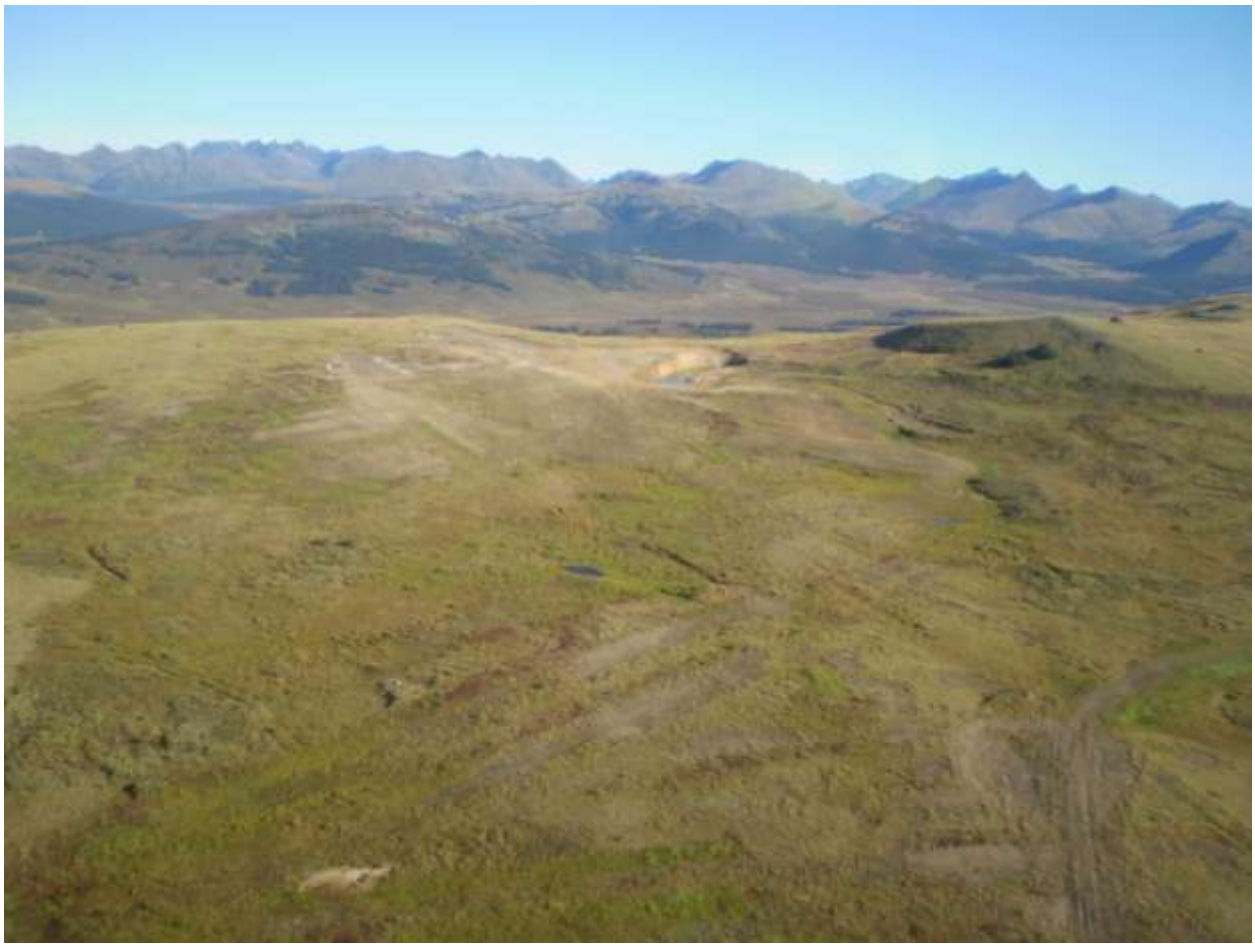


Plate 2: Reclaimed drill and trench areas in the Bonanza Zone. Ghost Pit near center of photograph (looking northerly)

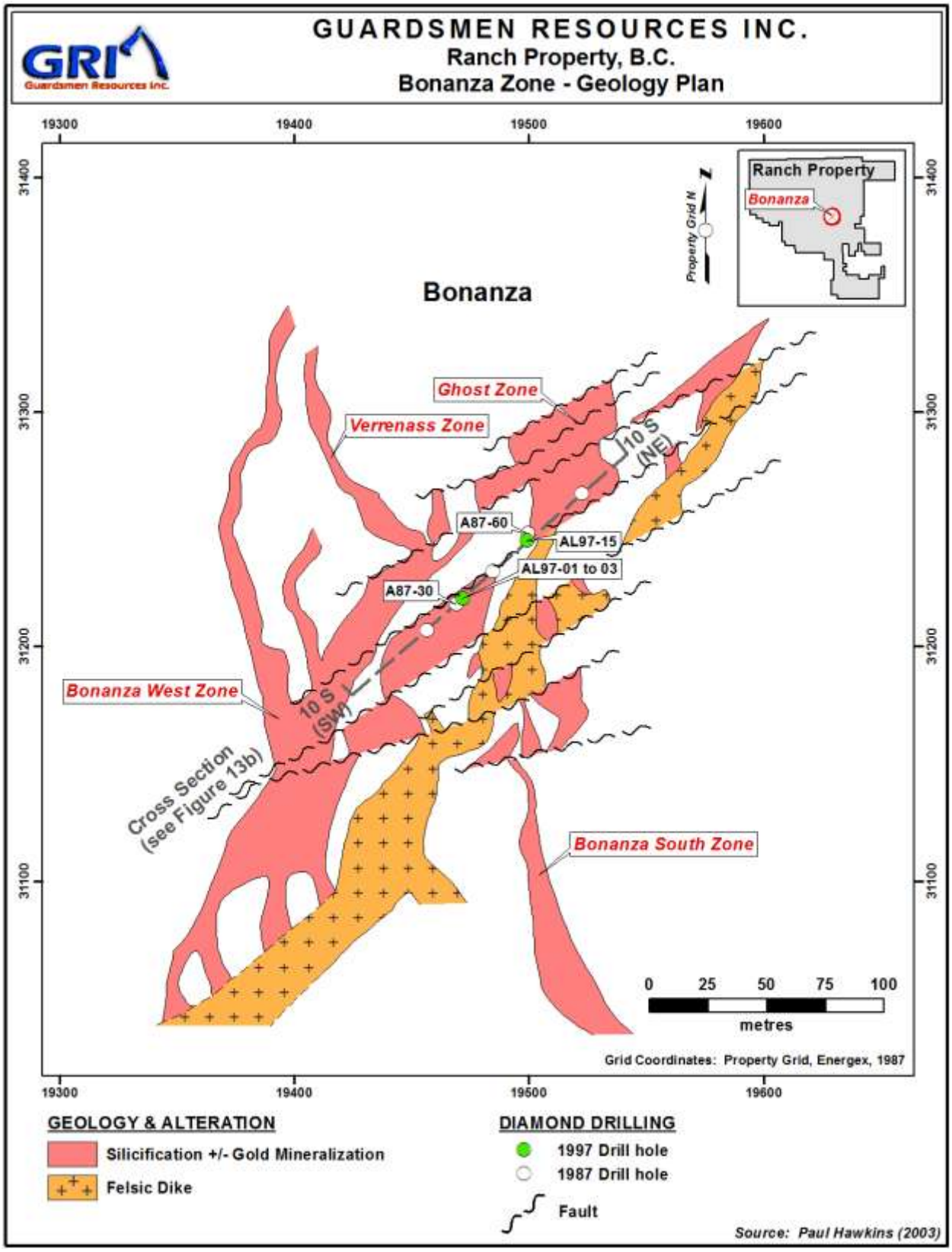


Figure 13a: Ranch Project - Geology Plan (Bonanza Zone)

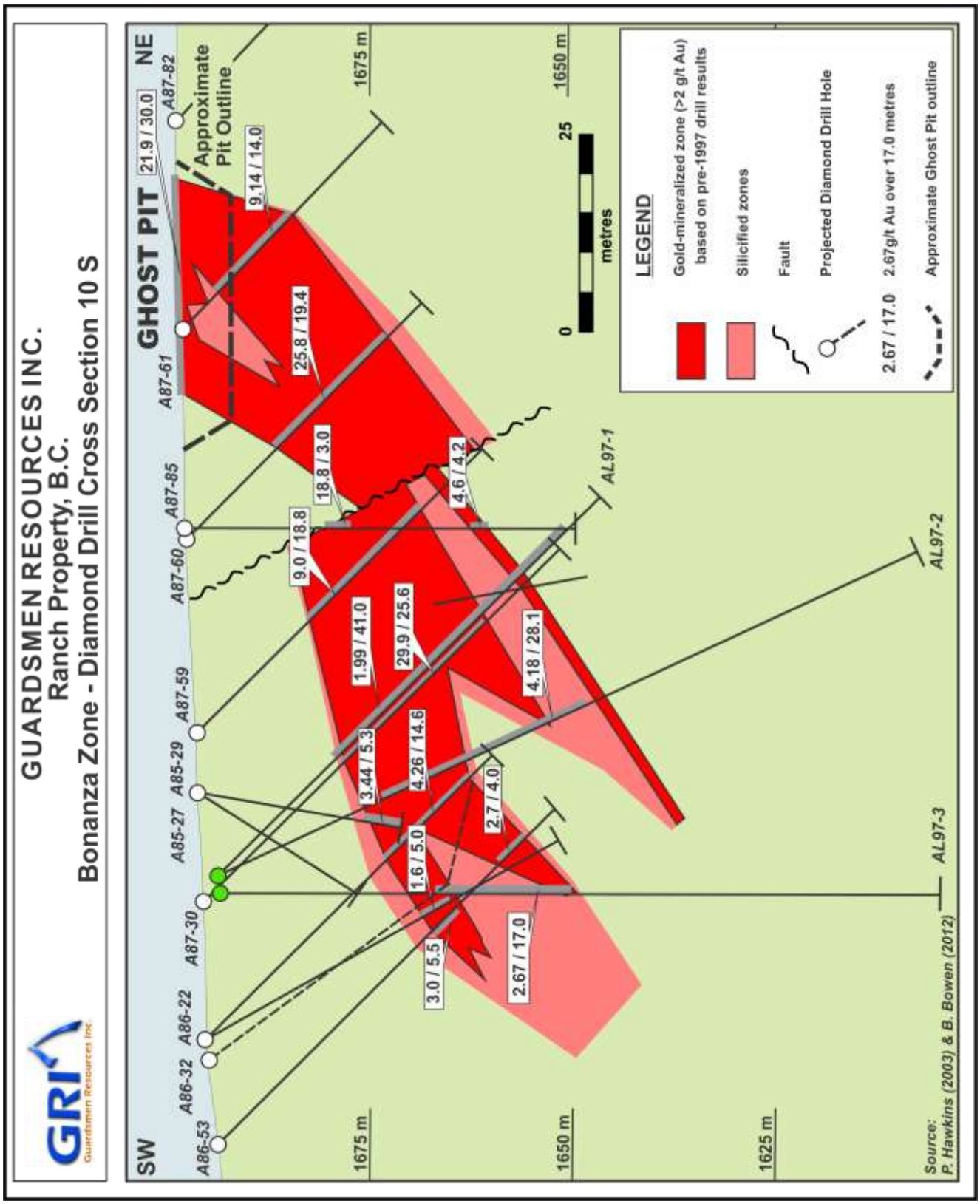


Figure 13b: Ranch Project – DDH Cross Section 10 S (Bonanza Zone)

A tabulation of gold mineralized intercepts in historical drill holes along Energex Section 10S in the central portion of the Bonanza Zone is presented in Table 4.

Table 4

Ranch Project
Gold Intercept Summary
Bonanza Zone Diamond Drilling
(Section 10S)

Hole #	From (m)	To (m)	Interval (m)	g/t Au
A85-29	20.9	26.2	5.3	3.44
A86-22	31.5	46.1	14.6	4.26
A86-32	30.5	35.5	5	1.6
	42.7	45.6	2.9	2.53
A86-53	34.5	40	5.5	3
	50.2	54.1	3.9	2.7
A87-30	23.6	49.2	25.6	29.9
	54.7	56.8	2.1	3.83
A87-59	20.1	38.9	18.8	9
	42.2	43.7	1.5	3.33
A87-60	16.5	35.9	19.4	25.8
A87-81	6.1	20.3	14.2	9.14
A87-85	18.3	21.3	3	18.8
	32.1	36.3	4.2	4.6
AL97-01	20	61	41	1.99
AL97-02	22	50.1	28.1	4.18
AL97-03	26	43	17	2.67
AL97-15	15.9	39.2	23.3	4.39
	66.4	69.4	3	1.85

Dr. Jim Shannon, a consultant to Christopher James, logged several core holes from the Bonanza deposit area in July 2007. His key findings for Bonanza include:

• Field evidence suggests a possible genetic relationship between the rhyodacite porphyry dikes and gold mineralization. The silicified zones and hydrothermal breccias are spatially associated with the rhyodacite dike. Detailed petrographic analysis of the dike shows minor disseminated chalcopyrite associated with disseminated pyrite and minor barite associated with carbonate alteration of alkali feldspar phenocrysts.
• There is a distinct lack of open-space vein textures, banded veins, crustification textures and quartz-calcite textures, indicative of boiling, that are commonly developed in adularia-sericite type (low sulphidation) systems. The lack of these textures and the lack of evidence of adularia argue against a significant low-sulphidation overprint in the Bonanza deposit area.
• Hydrothermal breccias are well developed at Bonanza and occur over a vertical extent of at least 120 m. The thickest hydrothermal breccia intercepts on Section 6372000N are about 7 to

11 m thick. Hydrothermal breccias locally contain clasts and fragments of mineralized material including vuggy silica, barite and pyrite. Some hydrothermal breccias are mineralized with variable amounts of disseminated and wispy stringer pyrite, disseminated to clotty barite and disseminated pyrite, enargite, chalcopyrite, galena and sphalerite(?).

Thus, the hydrothermal breccias are inter-mineralization and locally contain significant gold mineralization, such as the 2.0 m-long intercept grading 12.17 g/t Au in Hole 07-09. Other hydrothermal breccia zones encountered in the 2007 drilling were also gold-bearing, but lower in tenor. The abundance of hydrothermal breccias and the associated very fine- to fine-grained silica and vuggy silica impart a high-level epithermal character to the system.

• Structural complexities, especially at Bonanza, are indicated by numerous faults and fault zones intersected by drilling. Most faults are brittle and post-mineralization. Significant offsets are indicated by juxtaposition of rock types and contrasting alteration types. Many, if not a majority of lithologic and alteration contacts are faults.

Thesis III Zone (094E 091)

The Thesis III deposit is located about 1.8 km southwest of the Bonanza Zone. It occurs within a complex alteration zone hosted by the northwest-trending Thesis fault system, which also hosts the Thesis II deposit 400 m to the southeast and other mineralized zones to the northwest, including the Bingo deposit. A photograph of the Thesis III Zone drill area is shown in Plate 3.

The Thesis III deposit has been extensively trenched and drill-tested over a strike length of about 300 m down to, on average, vertical depths of about 100 m. At its widest, the alteration zone exceeds 100 m in width. It is comprised of three distinct core zones of silicification (known as “A”, “B” and “C”) separated and surrounded by haloes of intense argillic alteration developed in a porphyrytic andesite host rock (Figure 14a). In contrast to Bonanza, Thesis III contains broad argillic alteration halos around the core silica zones, suggesting that they are less telescoped than the relatively narrow argillic alteration halos at Bonanza.

In plan view, the alteration pattern as a whole appears to be roughly elliptical. The central “A” zone is flanked by a linear “B” zone to the southwest and a roughly circular “C” zone to the northeast. At surface, all three zones narrow rapidly to linear silicified zones to the northwest; exposure to the southeast is limited by locally deep overburden, transported gossanous material and steep, gullied topography. The concentration of higher gold values, brecciation and veining in the central “A” zone suggests the majority of the pre- and syn-hydrothermal activity and structural disruption was confined to this zone.

Plate 3: Reclaimed drill area in the Thesis III Zone. Metsantan Mountain in the background (looking southeasterly)

Moderate to high grade gold mineralization is directly associated with barite and is hosted by silicified, brecciated and micro-fractured rock with a characteristic porous, vuggy texture, resulting from the leaching of corroded, clay-altered plagioclase phenocrysts. Vugs are partially filled or lined with barite crystals. Some coarse gold, up to 2 mm in diameter, occurs as dendritic or mossy crystals growing on barite or lying along quartz-barite crystal boundaries. Most of the gold, however, is on the order of 10-100 microns in diameter.

Trench results returned up to 36.42 g/t (1.06 oz. per ton) Au over 26.4 m (86.6 ft.), including several individual 0.5 m-long channel samples which assayed in the 100-400 g/t Au range. In drill holes, the best values are mainly within 15 m of surface.

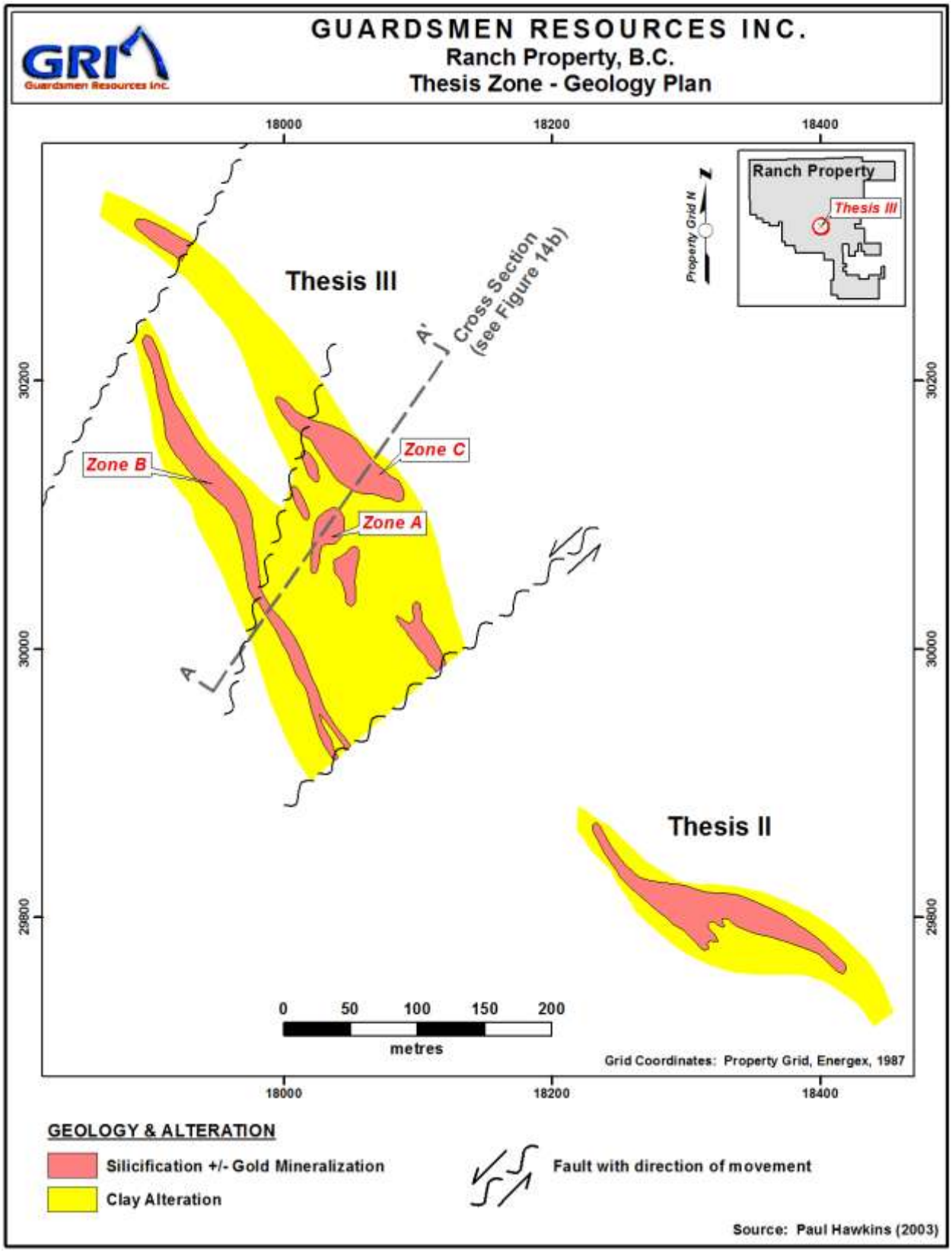


Figure 14a: Ranch Project - Geology Plan (Thesis III)

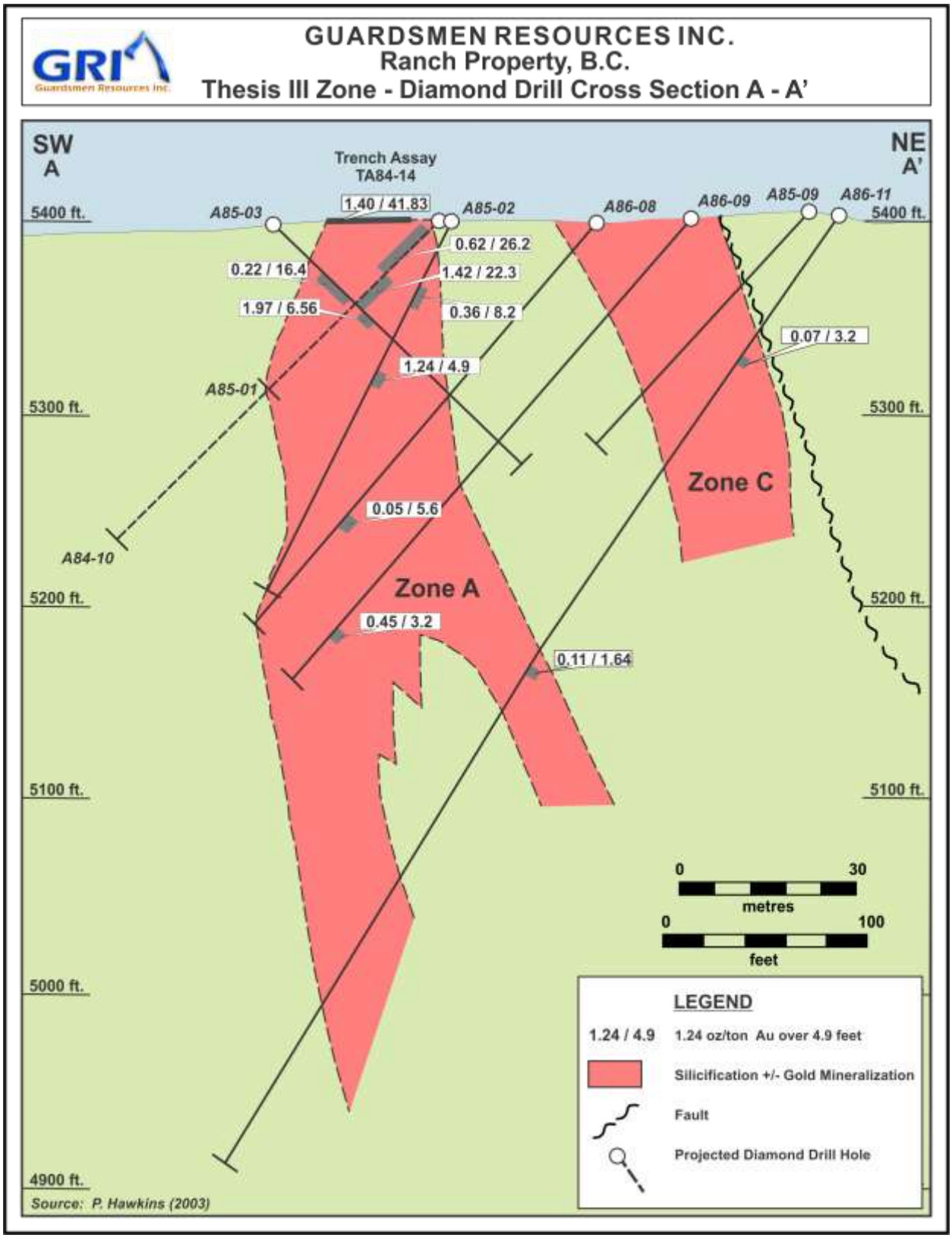


Figure 14b: Ranch Project – Cross Section A-A' (Thesis III Zone)

The higher grade "A" zone plunges steeply southeast. However, overall, the silicified body containing it appears to have a near vertical orientation (Figure 14b). Hole 86-11, which was collared in the center of the "A" zone outcrop and drilled at an inclination of -59° to a depth of 193 m, returned a mineralized intercept of 8.08 g/t Au over 3.97 m at a depth of about 70 m below surface.

Christopher James' 2006 drilling in the "A" zone area returned intercepts of 16.0 m grading 11.87 g/t Au in Hole 06-01 and 24.0 m grading 10.75 g/t Au in Hole 06-02. These higher-grade intercepts were cut at relatively shallow depths ranging from 10-30 m below surface; their true widths are not known. The 2007 drill results were lower in grade; the best intercept was 3.0 m grading 6.55 g/t Au in Hole 07-30. This oxidized silica intercept is at a shallow depth, at top of bedrock from 6.0-9.0 m, and contains variable amounts of goethite and limonite.

Christopher James' 2007 drilling program at Thesis III generally tested the zone at greater depths and returned low grade (<3.0 g/t Au) intercepts over lengths of 1 to 6 m; true widths of the intercepts are not known. In the 2007 drill logs, no visible gold is noted. This is in contrast to the 2006 Thesis III drill logs, in which visible gold was frequently noted in association with barite in vuggy silica-altered rock. The higher grade mineralization encountered in 2006 likely is due, at least in part, to the greater abundance of visible gold at shallow depths in the Thesis III Zone. The presence of mineralized silica zones at depth, albeit low grade, may indicate that there is some potential for adding resources at depth at Thesis III.

BV Zone (094E 099)

The BV (Barite Vein) Zone is the third of three zones on the Ranch property which saw limited past open pit production (see Plate 4) and also received considerable reserve/resource definition drilling. It is located about 900 m southwest of the Thesis III Zone and lies along the major northwest-trending BV fault.

The BV Zone has been explored by trenching and drilling over a strike length of about 350 m and reportedly remains open along strike in both directions. The northern half of the zone trends west-northwest and is hinged to a southern half that trends northwesterly (Figure 15a). Most of the drilling and trenching has taken place within a 180 m-long segment of increased dilation located immediately west-northwest of the hinge area. Here the alteration zone attains widths of up to about 40 m and the main BV structure dips steeply to the north; an upwards-converging, hangingwall splay dips about 30° to the north, and pinches out at about 25 m below surface (Figure 15b).

Plate 4: BV Pit (looking southeasterly)

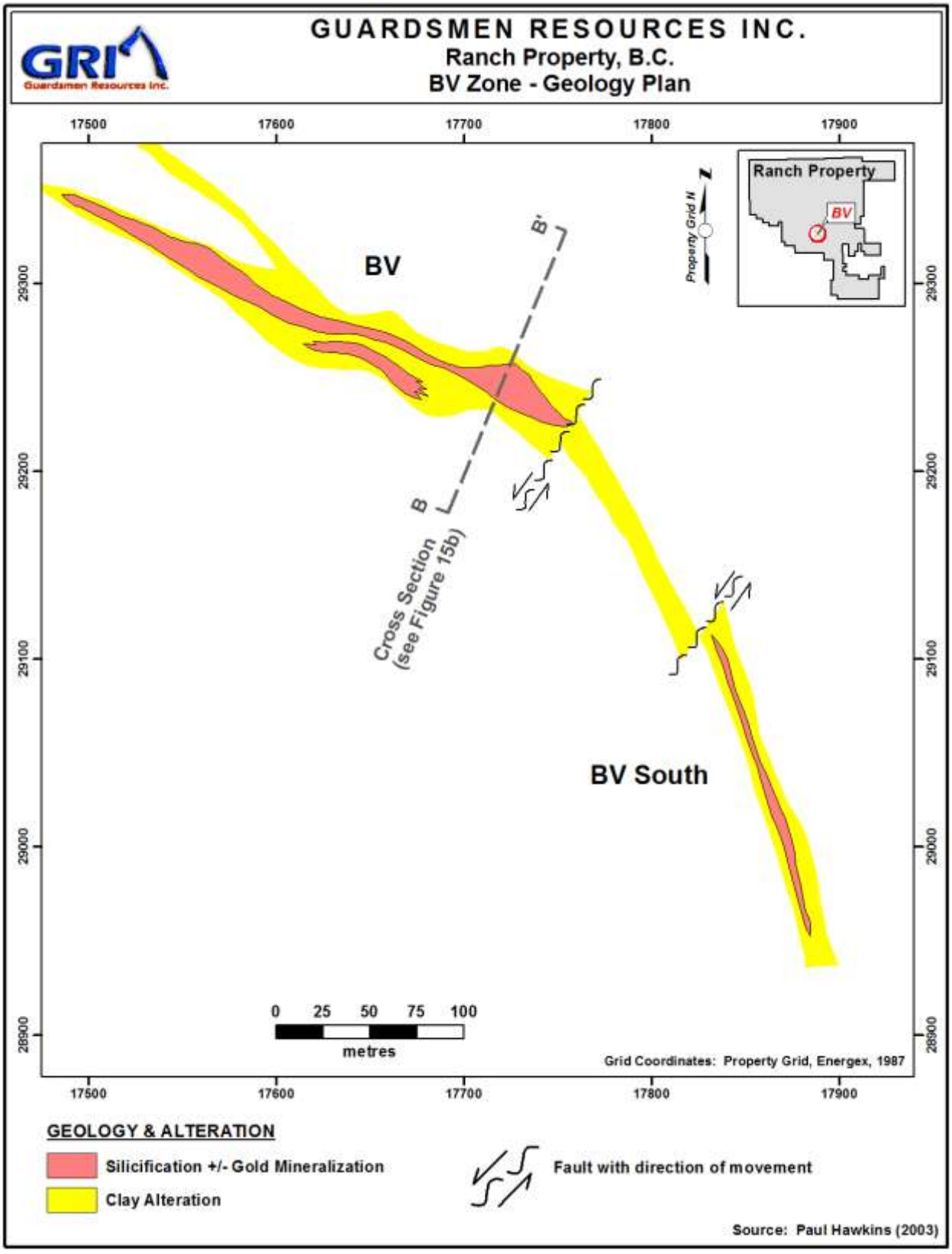


Figure 15a Ranch Project - Geology Plan (BV Zone)

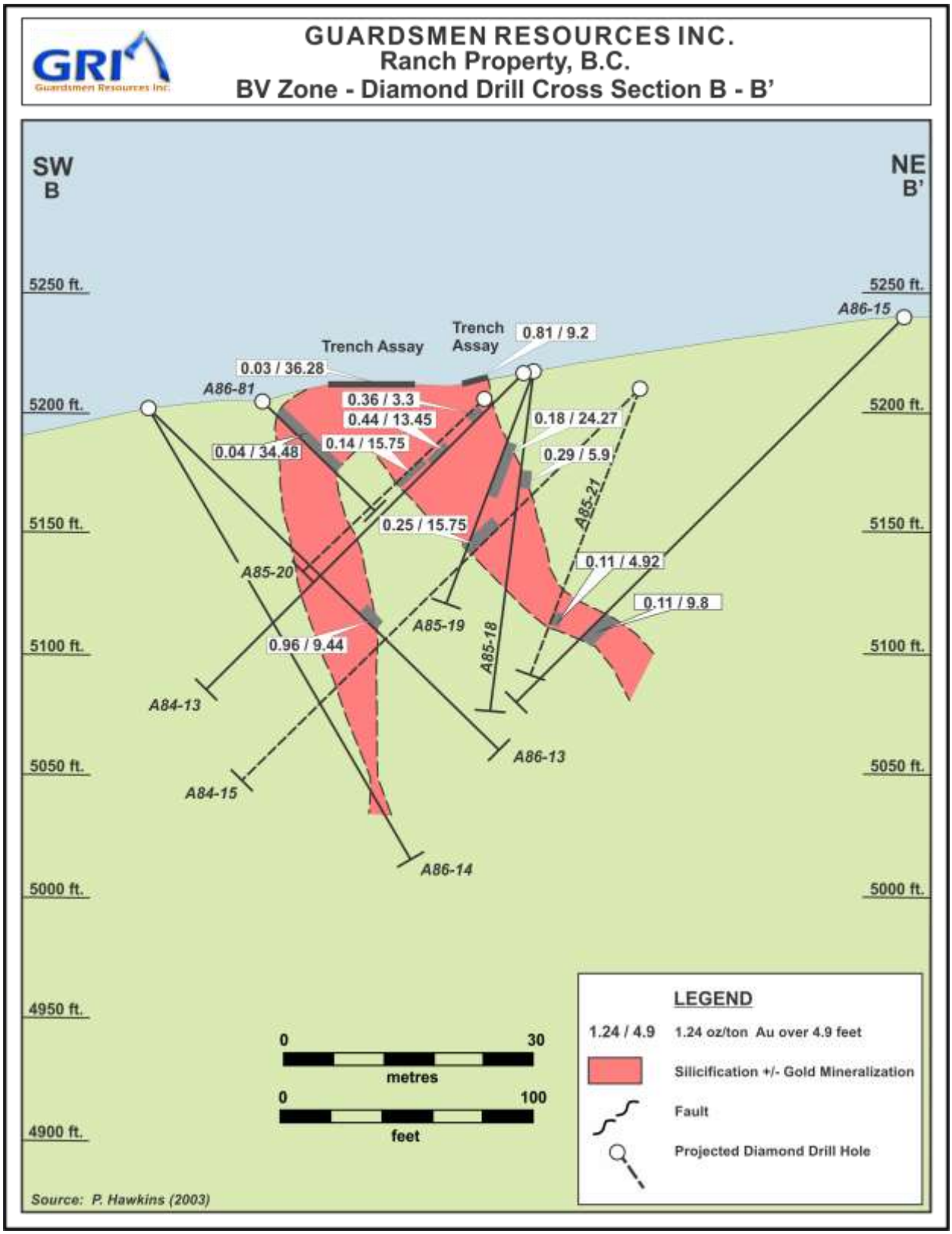


Figure 15b: Ranch Project – Cross Section B-B' (BV Zone)

The silicified gold-bearing core itself averages about 10 m in width and overall is more vein-like in character and more continuous along strike than the other main zones. It contains one or more sub-parallel, 0.2 to 2.0 m wide barite veins which contain the bulk of the gold mineralization. The occurrence of minor galena and chalcopyrite in the zone, its higher than average silver content and the chalcedonic rather than porous and sinter-like texture of the silica all suggest a deeper epithermal emplacement for the BV deposit relative to the Bonanza and Thesis III deposits. Historical drilling indicates that gold mineralization in the BV Zone persists to at least 50 m below surface, to about the 1,535 m elevation level.

Ridge Zone (094E 078)

The moderately southeast-dipping Ridge Zone is located about 300 m east of the Bonanza deposit. It is a distinct northeast-trending silicified and hematized structure which has been traced by drilling, trenching and surface prospecting over a strike length of about 700 m. The silica-hematite host rock contains gold-silver mineralization in single and multiple bands over zone widths of up to 30 m; drilling indicates mineralization extends down-dip for about 200 m.

The average gold grade is lower and the silver grades are generally higher at Ridge than those typically found in the main mineralized zones elsewhere on the property. The distribution of precious metals within the altered zones is somewhat erratic and mineralized zones tend to be lensoidal and somewhat discontinuous. However, trenching and wide-spaced diamond drilling completed by Energex in 1987-88, near the southwest end of the Ridge Zone, indicate that a 150-200 m-long segment contains gold and silver values of interest. Here, starting at 30 m below surface, is a single mineralized zone with a true width of 5-10 m and grades in the 3.5 to 5.5 g/t Au range. This zones persists to a vertical depth of at least 150 m and is considered to represent an example of an uneroded, intact, "blind" mineralized shoot.

The Ridge structure may be truncated by a fault at its northeast end, beyond where it has been tested by trenching and drilling. At its southwest end, fault offset segments 50 m to the northwest (the Shark Zone) and 170 m to the southeast (the South Ridge Zone) have been identified by trenching. Trench TA86-109 across the South Ridge Zone exposed a mineralized interval grading 2.10 g/t Au across 16.2 m. It appears that this zone has not been drill-tested.

Thesis II Zone (094E 091)

As mentioned earlier in the Report, the Thesis II deposit is located about 400 m southeast of Thesis III and is contained within the Thesis fault system, a northwest-trending belt of nearly continuous argillic alteration and lesser silicification with a known strike length of at least 2.2 km. On surface, the zone of silicification strikes approximately 280°. At its west-northwestern end, it dips steeply to the northeast; towards its east-southeastern end, it rolls over and dips steeply to the southwest.

The zone is marked by a prominent, 100 m-long silicified outcrop which attains widths of up to 40 m or more. Trenching and drilling by Texas Gulf and Energex during the period 1983-88 tested a strike length of about 200 m. The southeastern drill holes indicate an increase

in grade in this direction, suggesting that the better gold mineralized zones at Thesis II may plunge to the southeast.

The best drill results to date, in Hole 88-47 at the southeastern end of the zone, returned 3.45 g/t Au over a core length of 33.3 m, including an 11.0 m sub-interval grading 8.02 g/t Au. These intercepts are at a vertical depth of about 60 m below surface. Because this drill hole was drilled at an angle considerably oblique to the host rock's contacts, the true widths of these intercepts are considerably less (in the order of 12 m and 4 m) than their respective core lengths.

Hole 07-045, tested the Thesis II Zone at depth, approximately 40 m vertically below Hole 88-47. Hole 07-045 returned core lengths of 6.0 m grading 1.67 g/t Au from 107-113 m and 6.0 m grading 2.43 g/t Au from 120-126 m. These intercepts were encountered at vertical depths below surface of 90 and 100 m and represent relatively narrow true widths of about 2.0-2.5 m. The gold-bearing interval from 107-113 m is characterized by more massive rather than vuggy silica (although some vuggy silica is present) and contains 3-10% disseminated pyrite and minor disseminated chalcopyrite and enargite. The lower interval, from 120-126 m, is characterized by vuggy silica with 3-5% disseminated pyrite but with no copper sulphides noted. It would appear that the well mineralized silica intercept encountered in Hole 88-47 has split into two narrower and lower grade zones at depth.

Mickey Zone (no minfile number)

In 2006, mapping and prospecting work carried out by Christopher James outlined a new zone of interest named the Mickey Zone centered about 500 m north of Thesis II and about 1.4 km southwest of the Bonanza Zone. Systematic panel-chip samples were taken on all outcrops and felsenmeer along a north-south trending corridor some 1,500 m long and 50-150 m wide. High-grade samples in this zone include 80.56 and 9.7 g/t Au. Of a total of 111 samples taken, 49 samples assayed >1 g/t Au and the average of all samples was 1.36 g/t Au. At the end of the 2006 field season, the Mickey zone was considered a high-priority target for the discovery of high-grade gold mineralization in either a single tabular ore shoot or a series of ore shoots.

In 2007, Christopher James tested the Mickey Zone with 9 diamond drill holes totaling 1,340.8 m over over a north-south distance of approximately 400 m on three east-west sections spaced about 200 m apart. The holes were inclined at mainly -55° to the east; two holes (07-041 and 042) were inclined -55° to the west.

Vuggy silica-altered rock, similar to that hosting gold mineralization at other zones on the Ranch property, was intersected from 113-116 m in Hole A07-036, from 131-142 m in Hole A07-040 and from 133-136 m in Hole A07-042. In addition, pervasively silicified rock was intersected from 106-113 m and 142-147 m in Hole A07-036 and from 136-138 m and 167-170 m in Hole A07-037. Both vuggy and pervasively silica-altered intercepts contain abundant disseminated pyrite in the 5-20% range. The metals contents of these zones ranged from <0.01 to 0.19 ppm Au, <1 to 34.3 ppm Ag and up to 732 ppm Cu. True widths of the silica-altered intercepts are unknown.

The range of vertical depths at which the favourable silicified intervals were encountered in the drill holes is from about 90 to 140 m, which is considerably deeper than the known 60 m vertical extent of gold mineralization at the Bonanza Zone. It could be that had the drilling at the Mickey Zone targeted it at shallower depths, any silica-altered zones encountered may have had higher precious metals contents.

There is the possibility that the 2006 surface sampling on the Mickey Zone may not have been taken from bedrock or subcrop, but rather from transported blocks of mineralized rock sourced from an area other than that tested by the 2007 drilling. Plate 5 below is a photograph taken during the author's 2013 site visit, near the southern end of the Mickey Zone. It shows a sub-rounded float(?) boulder that likely has been transported some distance, suggesting that at least some of the gold-bearing samples collected by Christopher James in 2006 were taken from transported material.

Plate 5: Sub-rounded mineralized float(?) in the Mickey Zone; near 2006 rock sample # 7879 (739 ppb Au)

Bingo Zone (094E 193)

The Bingo Zone lies about 600 m northwest of the Thesis III deposit, along the Thesis fault zone. Bingo is comprised of two parallel zones of silicification, including a strongly defined western zone 350 m long, and a shorter, partially "blind" eastern zone. Both zones dip northeasterly, more shallowly at their northwest ends and more steeply at their southeast ends. A photograph of historical trenches in the central part of the Bingo Zone is shown in Plate 6.

Gold grades in Bingo trenches range from moderately anomalous (500 ppb) across widths of 6 to 10 m up to 3.3 g/t Au across 4.4 m. Fourteen 1988 drill holes confirmed these surface indications of large amounts of low grade silica-hosted gold mineralization; several holes also cut a narrower structure or structures 2 to 5 m wide with grades in the 3 to 5 g/t Au range, accompanied by silver and copper values up to 179 g/t and 2.4% respectively. The entire Bingo Zone is strongly anomalous in copper; some individual 0.5 m-long core sample lengths assay up to 3.92%.

Plate 6: Historical trenches in the central part of the Bingo Zone. Albert's Hump in the central background (looking westerly)

Bingo's silver grades are typically higher than most other zones on the Ranch property, with the exception of the Ridge Zone. The highest silver assay from an individual 0.5-long sample interval at Bingo assayed 243.0 g/t in Hole 88-11.

Two types of silica alteration were observed in the drill holes. A narrow band of dense, grey, cherty quartz is present in almost all drill sections, in the hangingwall of a zone of more porous, baritic silica. Both types contain abundant pyrite and chalcopyrite.

The Bingo Zone is open along strike to the northwest and southeast and to depth. Of particular interest are deeper drill intercepts encountered in the southeastern part of the zone, where several holes yielded wide intercepts of low grade gold mineralization hosted by pyrite and chalcopyrite-bearing silica-altered rock. A 44.0 m-long interval from 106.57 to 150.57 m in Hole 88-12 returned average grades of 1.23 g/t Au, 5.68 g/t Ag and 0.29% Cu, including a 5.0 m-long intercept grading 1.17 g/t Au, 5.20 g/t Ag and 1.16% Cu from 142.57 to 147.57 m. Other holes that returned interesting gold, silver and copper grades include: Hole 88-04, which returned 2.24 g/t Au, 10.99 g/t Ag and 0.63% Cu over 13.73 m from 58.67 to 72.40 m (including 6.35 g/t Au, 21.25 g/t Ag and 3.24% Cu over 1.0 m from 60.17 to 61.17 m) and Hole 88-11, which returned 1.89 g/t Au, 57.56 g/t Ag and 0.82% Cu over 9.06 m from 64.09 to 73.15 m (including 4.99 g/t Au, 179.1 g/t Ag and 2.42% Cu over 2.0 m from 66.09 to 68.09 m). True widths of all these sulphide-bearing silica intercepts are unknown.

The Bingo Zone remains a large and intriguing drill target at depths of 100 m or more. Energex suggested that deep-penetrating geophysics would be useful in discerning mineralized zones at depth.

BBX (094E 193) and Albert's Hump (094E 085) Zones

The BBX Zone is located about 500 m west-northwest of the Bingo Zone. Alteration at BBX is dominantly alunitic, with local silicification and argillization. The main alteration zone is bounded on the south side by a greater than 120 m wide hornblende-feldspar porphyry dike. A narrow zone of hematitic quartz breccia at the contact of the dike and the alunitic alteration zone contains anomalous gold values up to 1,380 ppb in surface grab samples.

A similar zone of alunitic alteration is present in the Albert's Hump Zone located a further kilometer to the west-northwest of BBX (see Plate 7). Here, quartz-alunite alteration lies at relatively higher elevations, and is flanked at lower elevations by silicic and silicic-argillic altered zones. In 1982, Texasgulf tested the quartz-alunite zones with two diamond drill holes collared about 500 m apart. Hole 82-11, the southwesterly hole, encountered intensely altered volcanic rocks from 2.5 m (top of bedrock) to about 35 m depth in the hole. The altered rocks carry anomalous metal values to 2,280 ppm Zn, 158 ppm Pb and 3.4 ppm Ag, but gold values are low, in the 5-20 ppb range. Hole 82-12, the northeasterly hole, encountered variably altered alunitic, silicic and locally pyrophyllitic rocks from 3.4 m (top of bedrock) to about 95 m depth in the hole. The altered rocks carry anomalous metal values to 1,150 ppm Zn, 600 ppm Pb and 2.3 ppm Ag, but gold values again are low, in the 5-20 ppb range. From 95 m to the end of the hole at 127 m, a felsic rhyodacitic intrusive body was encountered.

The drilling at Alberts Hump was done without the aid of more sophisticated geophysical survey methods, such as 3D-IP (see Section 6.2), now commonly used to detect potentially gold-bearing, silica-altered zones at depth.

Plate 7: Alunite alteration zone on the east slope of Albert's Hump
(looking northeasterly)

South Hump Zone (094E 195)

On the south flank of Albert's Hump is the South Hump Zone. Here, four well-exposed, northwest-trending parallel bands of silicification, each 5 to 10 m wide and up to 280 m long, lie within a large area of weak argillic alteration and anomalous base metals geochemistry. The silicic zones are vuggy, locally pyritic and/or intensely hematized, and contain minor barite. Grab samples of this silicic material have returned values up to 2.6 g/t Au and 13.8 g/t Ag.

The soil geochemical patterns in the area do not conform to the northwesterly trends of the silicified zones. There is a large northeast-trending lead-zinc anomaly, with local enrichment of gold and barite. It may represent a mineralized, northeast-trending structure or may be the result of complex geochemical dispersion patterns in the area.

No back-hoe trenching or drilling has been carried out in the South Hump Zone.

Patti Zone (094E 101)

The Patti Zone is located on the southwest flank of Metsantan Mountain, about 4 km south of the Bonanza deposit. The zone comprises two closely-spaced, parallel, north-trending spines or hogback ridges of completely silicified rock, surrounded by a large halo of advanced argillic, argillic-silicic and rare silicic-pyritic or quartz-alunite alteration zones. The hogback ridges coalesce on the south end of the zone, forming a massive silica outcrop approximately 60 m wide (Plate 8). The overall dimensions of the alteration zone are at least 350 m long and up to 250 m wide.

Plate 8: Patti Zone: large area of silica alteration in center of photograph (looking northwesterly)

In 1985, Energex carried out geological mapping and rock geochemical sampling in the Patti Zone. Within the massive silica outcrop described above, over an area measuring about 180 m north-south by 50 m east-west, Energex collected 18 grab samples. Of these, 16 returned values of >100 ppb Au, 8 returned values of >1.0 g/t Au and 2 returned values of >5.0 g/t Au, including a peak value of 58.5 g/t Au. In the same area, a 2007 grab sample collected by Guardsmen returned a value of 13.6 g/t Au. About 150 m to the west of this sampled area, near the known western limit of the Patti Zone, six grab samples containing anomalous gold values from >100 ppb up to 3200 ppb define a second northerly trending target area measuring 90 m north-south by about 20 m east-west (Figure 16).

Within the silicified rock, gold mineralization is closely associated with massive barite in veins and breccias. Fracture-controlled barite veins commonly strike east-southeasterly and dip sub-vertically. One 15 cm wide brecciated barite-(quartz) vein observed by the author is oriented at 350°/75° E. The gold-barite mineralization is thought to post-date the main silica-clay hydrothermal event.

In 1986, Lacana Mining Corp. tested the main silicified outcrop with 5 diamond drill holes. The drill holes encountered some mineralization of interest, including: 1.68 g/t Au over 2.0 m from 20.0 to 22.0 m in Hole LM-86-1; 6.58 g/t Au over 0.15 m, in a massive pyrite vein, from 133.85 to 134.0 m, also in Hole LM-86-1; and 2.91 g/t Au over 6.0 m from 58.0 to 64.0 m in Hole LM-86-4. True widths of these mineralized intercepts are not known. Lacana did not drill test the gold-bearing zone near the westen limit of the Patti Zone.

The trace element geochemistry of Lacana's drill core showed anomalous concentrations of arsenic and antimony. Lacana concluded that the 1986 drilling may have tested part of a weakly mineralized silica cap overlying a possible buried precious metals deposit at depth.

Golden Furlong Zone (094E 080)

The Golden Furlong Zone is located about 2 km east-southeast of the Bonanza Zone. It is an intensely silicified, north-northeasterly trending spine of rock which can be traced for over 200 m along strike and varies from 25 to 60 m in width. The zone is composed of essentially pure silica with minor hematite and limonite, and is hosted by a tuffaceous unit. Sporadic zones of intense clay and sulphate (alunite) alteration become more common towards the northern end of the zone.

In 1981, Kidd Creek discovered traces of native gold in drusy quartz-filled vugs and along fractures at the southern end of the zone. Grab samples of this material returned values to 27.8 g/t Au. Later in the season, trenching across this part of the zone returned low gold values.

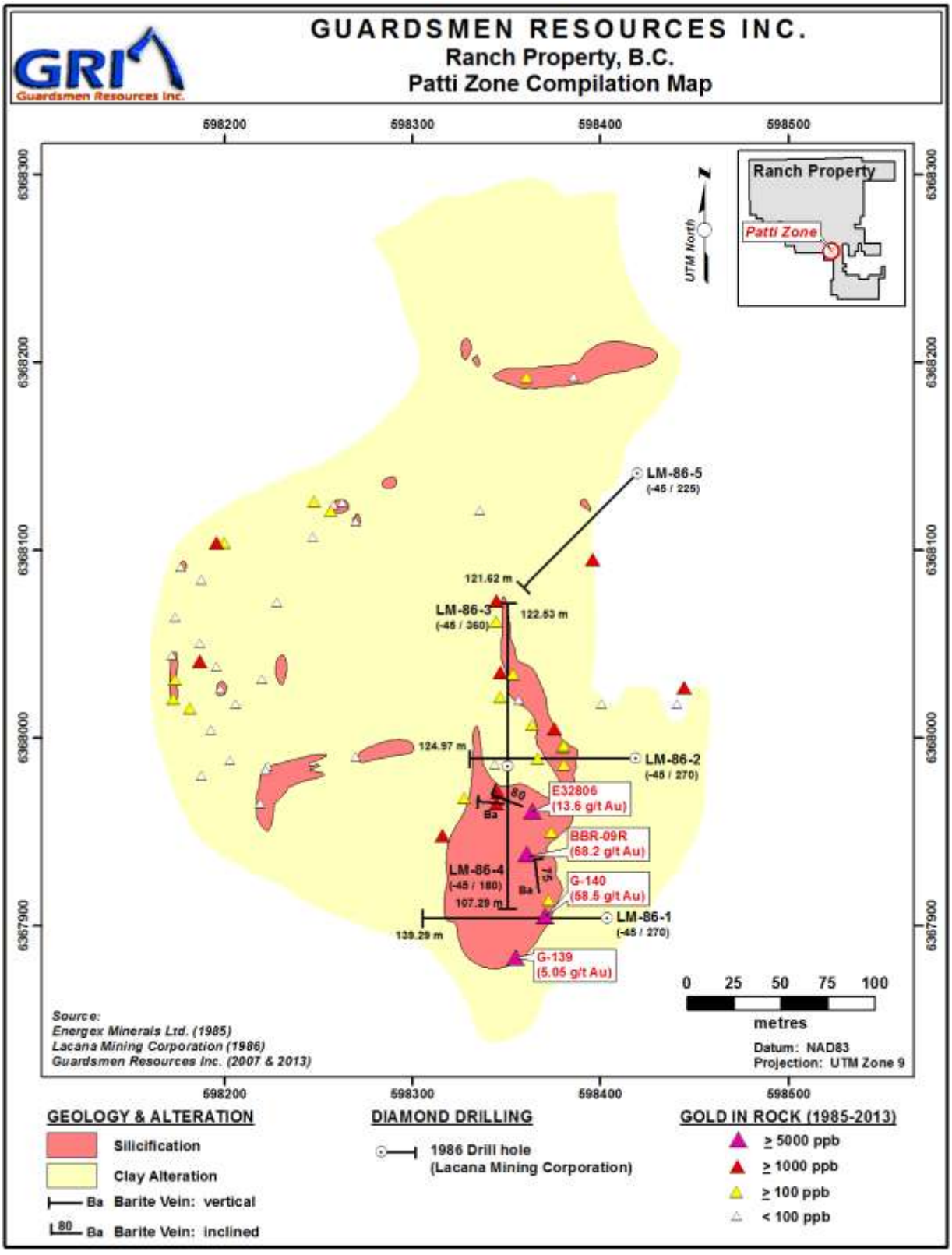


Figure 16: Ranch Project – Patti Zone Compilation Map

In 1982, Kidd Creek completed two diamond drill holes at the southern end the Golden Furlong Zone. Hole 82-01, drilled to a total depth of 185.9 m beneath the native gold showing, returned generally low values to 130 ppb Au and 2.9 ppm Ag. Hole 82-02, collared about 80 m to the north-northeast, was drilled to a total depth of 210.4 m. In the lower part of the hole, below about 175 m, several narrow intervals each a few meters in length contained 1-3% finely disseminated pyrite and traces of chalcopyrite. These sulphide-bearing zones returned anomalous values up to 425 ppb Au and 10.2 ppm Ag.

Other Minfile Occurrences

Several other gold prospects occur at various locations on the Ranch property. Historically, they have been considered to be of a lower priority than the zones described above. Nevertheless, as one or more may develop into target areas warranting further work, including drilling, some of them are briefly described below.

Steve's Zone (094E 102)

Steve's Zone is located about 3.5 km south-southeast of of the Bonanza Zone. It is a large, roughly ovoid-shaped alteration zone measuring 450 m long by 300 m wide. It is cored by three separate siliceous outcrops separated by zones of silicic or argillic-silicic alteration.

Barite is common only in silicified rocks in the southeastern part of the zone, where it occurs as breccia matrix in zones up to one metre wide, and in massive veins up to 20 cm wide. A one metre-long chip sample taken from a barite-rich breccia zone assayed 2.80 g/t Au. A one metre-long channel sample taken across a 15-20 cm wide barite vein and including about 80-85 cm of silicified wallrock, assayed 1.20 g/t Au. Both samples were collected by Energex in 1985.

No back-hoe trenching or drilling has been carried out in Steve's Zone.

Ring Zone (094E 103)

Located about 800 m southeast of the BV Zone, along the southeast-trending BV fault, the Ring Zone comprises an extensive area of argillic and lesser silicic alteration measuring about 600 m long by 300 m wide. Silicified zones occur as isolated outcrops and are elongated in a northerly direction, across the general grain of the overall alteration zone.

Silicified zones are composed of cryptocrystalline quartz with considerable limonite on fracture planes and in vugs. Barite is rare. A large ferricrete gossan lies in the valley bottom below the Ring Zone. It suggests that at shallow depths, the silicified zones are sulphide bearing.

Trenching by Energex in 1985 showed that the gold values in the silicified zones are generally low, averaging about 250 ppb. A grab sample of silicified rock taken from a trench in the southeastern part of the zone returned a value of 1,600 ppb Au. A 1981 surface grab sample taken by Kidd Creek from the same area assayed 14.74 g/t Au.

No drilling has been carried out in the Ring Zone.

JK Zone (094E 194)

The JK Zone is located about 1.2 km southwest of the Bonanza Zone. It was discovered in 1986 by Energex while trenching a gold soil anomaly. The zone has been traced for 170 m, strikes north-northeasterly, dips sub-vertically or steeply to the west, is up to 11 m in thickness in surface trenches and is flanked by intensely argillically-altered wall rocks. The brittle silica host rock carries abundant Py (up to 15%); only traces of barite were noted and the silica lacks the porosity typical of the high-grade Thesis III and Bonanza Zones.

Two Energex drill holes tested the central part of the zone in 1988, below the widest and highest grade mineralized intervals exposed in the 1986 trenches. Hole 88-13 returned an intercept of 5 m (core length) grading 2.17 g/t Au. True thickness of this mineralized intercept is about 3.5 m. Drilling indicated that the true thickness of the silica host rock is in the order of 8 to 12 m at depths of 40 to 60 m vertically below surface.

Eric and Gosselin Zones

The Eric Zone is located along the Bonanza fault system, about 1.1 km south of the Bonanza deposit. Trench TA88-19, at the south end of the zone, returned a mineralized interval of 5.25 g/t Au over 13 m. Holes 88-39 to 41 tested the Eric Zone directly below this trench. Broken ground resulted in Holes 88-39 and 40 being terminated prematurely. Hole 88-39, the shallower of the two holes, entered the pyrite +/- chalcopyrite-bearing siliceous host rock at about 11.0 m and was terminated at a depth of 17.1 m. Low grade gold values, from 0.60 to 1.55 g/t, were encountered in this interval. Hole 88-40 returned no significant values, nor did Hole 88-41, which successfully penetrated through the siliceous host rock at a vertical depth of about 50 m below surface. It is possible that Holes 88-40 and 41 were drilled beneath a south-plunging mineralized shoot which was encountered in the surface trench and Hole 88-39.

About 200 m east of the Eric Zone is the Gosselin Zone, where blebs of barite have been found associated with silica-altered rock; however, surface gold values in trenches have been found to be low. The Gosselin Zone is probably a left-lateral offset segment of the Bonanza structure.

BV South Zone

The BV South Zone lies along the BV fault, south of the past-producing BV Zone. It strikes south-southeast and dips 25° to 35° to the east. Energex stripped the area in 1988 and exposed a strongly silicified zone measuring 6 to 10 m wide by about 60 m long. These widths are apparent and greater than true widths because of the relatively shallow dip of the zone. Channel sampling in the northern half of the stripped area returned good gold values, where barite and pyrite are more common and where silicification is most intense. The best channel sampled interval returned 12.73 g/t Au over 5.1 m in the northernmost part of the zone.

Ten diamond drill holes tested the zone over a strike length of about 100 m, including four holes in the southern part of the zone which tested it for an additional 45 m beyond the stripped area. Holes BV88-01 to 04, drilled beneath the better mineralized northern part of the zone, returned values in the <1.0 to 7.45 g/t Au range; the best intercept graded 4.85 g/t Au over 2.0 m (approximately true width) from 10.5 to 12.5 m in Hole BV88-04. The remainder of the holes generally returned values of <1.0 g/t Au, with the rare individual sample interval grading up to 2.95 g/t Au over 1.0 m (from 35.4 to 36.4 m in Hole BV88-07). The narrow veins and veinlets of barite seen on surface were virtually absent in the drill holes.

The association between the BV South and the Ring Zones remains uncertain, but similarities in alteration styles and their proximity to one another suggests that the two zones may be structurally related.

Gulley Zone

The Gulley Zone, which in earlier Kidd Creek assessment reports is referred to as the "Sulphide Showing", is located about 500 m northwest of the Bonanza Zone. It consists of a northeast-trending band of weak silicification and quartz veining which has been traced by trenching over a distance of about 120 m. Minor pyrite and base metals (chalcopyrite, galena and sphalerite) mineralization are present in the zone. Gold grades from grab samples range up to 5.6 g/t Au.

The Gully Zone appears to pinch out along strike to the northeast and southwest. Energex (1988) considered this zone to be a lower priority target area, but did note its significance in that it represents yet another gold-bearing structure on the property.

Bonanza North

A large gold-in-soil anomaly is present north of the Bonanza Zone, in a gently north-sloping area of alpine terrain (Plate 9). It trends northerly and, at a ≥100 ppb threshold, measures about 500 m long by about 100-150 m wide (Figure 17). It is by far the largest and strongest gold soil anomaly identified on the property to date (see Figure 3 in Section 6.2.1).

The mainly overburden-covered area was examined by the author and Bob Lane on September 3, 2013. Five trenches (labeled A to E on Figure 17) were located within the soil anomaly. Two (A and D) were reclaimed and two (B and C) may not have reached bedrock. Much of the trench labeled E is floored by angular subcrop of unaltered purple-maroon volcanic rock. A nearby outcrop of the same unaltered rock suggests that the northern part of the soil anomaly may be reflecting down-ice transport of mineralized float.

At the east end of the trench labeled B, a select 2013 grab sample (BBR-012R) collected by the author returned an anomalous gold value of 1597 ppb. The sample consisted of locally vuggy, intensely silicified rock containing fairly abundant, tabular barite crystals. It was taken from (likely local) subcrop/felsenmeer material in a rock-piled berm on the side of the trench.

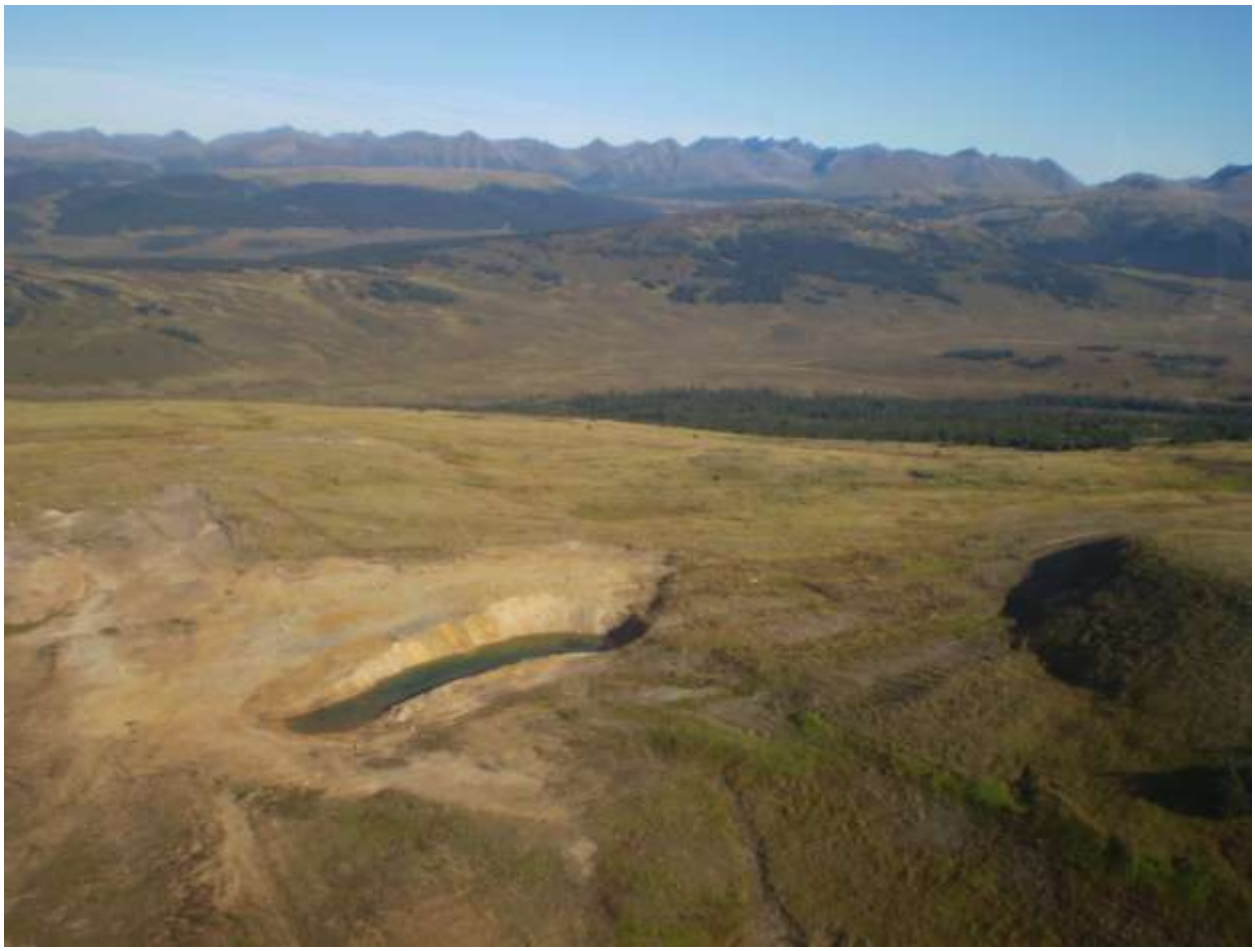


Plate 9: Ghost Pit in Bonanza Zone. Bonanza North gold soil geochemical anomaly located in center-right part of photo (looking northwesterly)

Two historical trenches near or within the southern part of the soil anomaly also returned anomalous gold values. A 1.30 m-long channel sample in Trench 87-13A returned a value of 6.15 g/t Au. It reportedly contained quartz, barite and sulphides. A 0.80 m-long channel sample of vuggy silica, in Trench 87-23, returned a value of 1.25 g/t Au. The other historical trenches shown in Figure 17 either encountered no significant mineralization or, for several, there is no analytical data available.

Anomalous gold values were also encountered in three historical diamond drill holes within or on the west flank of the soil anomaly. Hole 87-100, within the anomaly, intersected 2.52 m grading 1.09 g/t Au in pyritic, siliceous rock. Hole 87-109, on the west flank of the anomaly, intersected 1.83 m grading 3.63 g/t Au (no description available). Nearby Hole 87-110 intersected several 0.5-2.0 m-long mineralized intervals, including 2.0 m of vuggy, brecciated silica grading 1.36 g/t Au and another interval of similar rock which graded 7.0 g/t Au over 0.5 m.

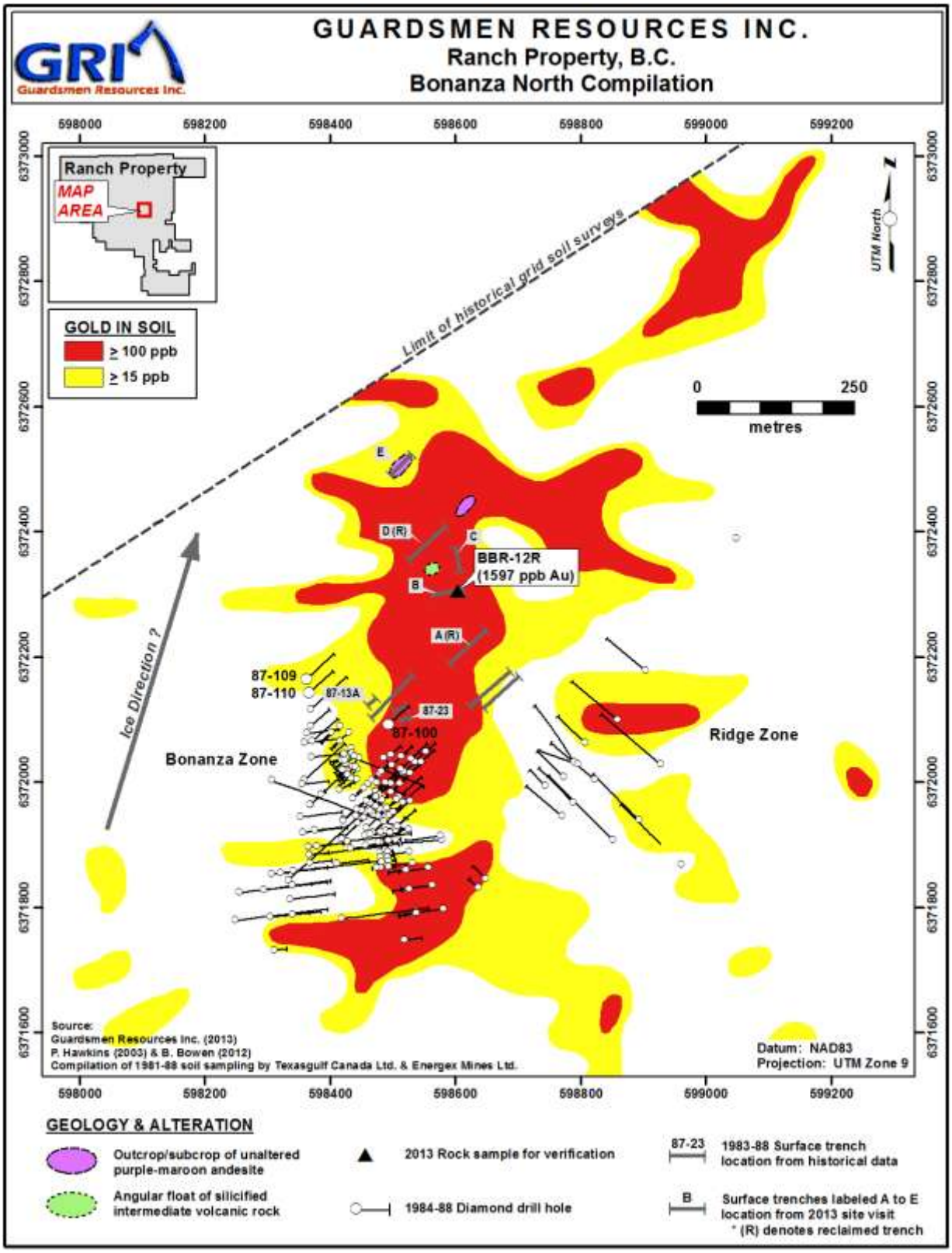


Figure 17: Ranch Project – Bonanza North Compilation Map

8.0 DEPOSIT TYPES

8.1 Deposit Types

The descriptions of deposit types in this section are based, in large measure, on Deposit Types presented by Paul Hawkins in Sections 3.1.0 to 3.3.0 of his October 2003 Technical Report Covering the Lawyers and Al (Ranch) Properties. His comments are supplemented by observations made by the author during his onsite core logging and supervision of diamond drilling programs on the Ranch Project in September 2006 and during portions of May, June and September 2007. Also referenced in this section is the B.C. Geological Survey's Bulletin 86, titled "Geology of the Early Jurassic Toodoggone Formation and Gold-Silver Deposits in the Toodoggone River Map Area, Northern British Columbia" (Diakow et al., 1993).

The Toodoggone District is host to a number of mineral deposits and prospects, several of which are described in Section 7.1.2 of this Report. Deposits include both high and low sulphidation epithermal gold-silver vein and replacement types and porphyry copper-gold types, all of which are genetically related to Early Jurassic volcanic and intrusive activity in an extensional setting. A schematic cross-section of the deposit types and their zonal relationships is shown in Figure 18.

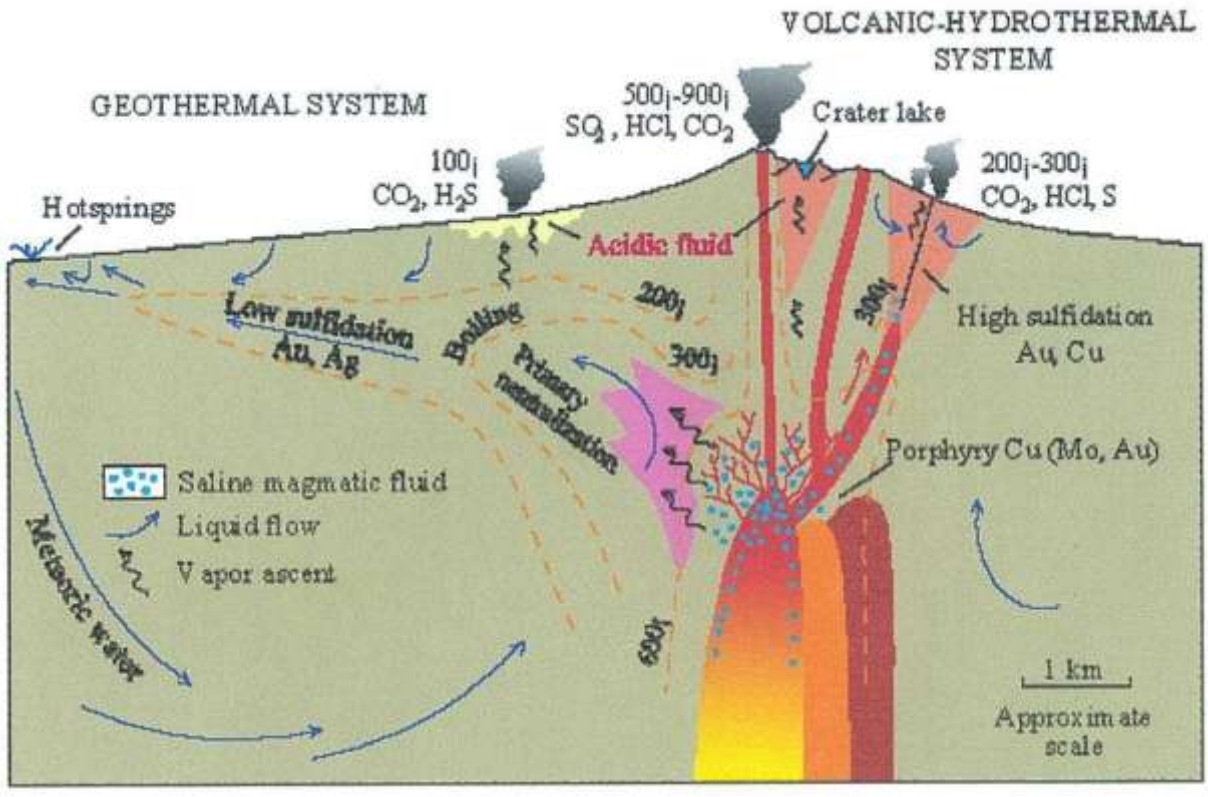


Figure 18: Ranch Project - Schematic Model for Toodoggone Epithermal Mineralization

8.1.1 High Sulphidation Epithermal Deposits

High sulphidation epithermal deposits are also called acid-sulphate, quartz-alunite, alunite-kaolinite-pyrophyllite or advanced argillic types. They occur as veins, vuggy breccias and sulphide-silica replacement pods to massive lenses within volcanic host rocks associated with high level hydrothermal systems marked by acid-leached, advanced argillic and silicic alteration. Their setting is usually within extensional and trans-tensional environments, commonly in volcano-plutonic continent-margin and oceanic arc and back-arc settings. They occur in zones with high-level magmatic emplacements where strato-volcanoes and other volcanic edifices are constructed above plutons.

Deposits are commonly irregular in shape, controlled in part by host rock permeability and the geometry of ore-controlling structures. Multiple, cross-cutting composite veins are common; texturally the mineralization is characterized by vuggy, porous silica derived as a residual product of acid leaching. Hydrothermal breccias and massive wallrock replacements associated with fine-grained quartz are also common features associated with high sulphidation deposits.

Mineralization consists of pyrite, enargite/luzonite, chalcocite, covellite, bornite, gold, electrum, and less commonly chalcopyrite, sphalerite, tetrahedrite/tennantite, galena, marcasite, arsenopyrite, silver sulphosalts and tellurides including goldfieldite. Two types of ore are commonly present: (i) massive enargite-pyrite and/or (ii) quartz-alunite-gold. Gangue mineralogy consists principally of quartz-pyrite or quartz-barite; carbonate minerals are absent.

Alteration minerals consist principally of: quartz, kaolinite/dickite, alunite, barite, hematite, sericite/illite, amorphous clays, pyrophyllite, andalusite, diaspore, corundum, tourmaline and native sulphur with subordinate amounts of dumortierite, topaz, zunyite and jarosite. Advanced argillic alteration is a common alteration type and can be aerially extensive and visually prominent. Quartz occurs as fine-grained replacements and as vuggy, residual silica in acid-leached rocks. Weathered rocks may contain abundant limonite, jarosite, goethite and/or hematite, generally in a groundmass of kaolinite and quartz. Fine-grained supergene alunite veins and nodules are common.

Ore controls in volcanic edifices are commonly caldera ring and radial fractures, (particularly at their intersections), fracture sets in resurgent domes and flow-dome complexes, and hydrothermal breccia pipes and diatremes. Faults and breccias in and around intrusive centers appear to be important controls. Permeable lithologies can also be favourable host rocks, capped in some deposits by less permeable, hydrothermally altered silica, clay and alunite-bearing ‘lithocaps’. The deposits can occur over considerable depths, ranging from high-temperature solfataras (sulfurous fumaroles) at the paleosurface down into cupolas of intrusive bodies at depth.

Recent research into the high sulphidation genetic model, mainly in the southwest Pacific and in the Andes of South America, has shown that these deposits are commonly genetically related to high-level intrusions and at several locales, they tend to overlie and flank porphyry copper-gold deposits. Multiple stages of mineralization are common, presumably

related to periodic tectonism with associated intrusive activity and magmatic hydrothermal fluid generation.

The high sulphidation deposit type has become a focus for exploration throughout the circum-Pacific region because of the economically important gold and copper grades in some deposits.

8.1.2 Low Sulphidation Epithermal Deposits

Low sulphidation epithermal gold-silver deposits are also called adularia-sericite or quartz-adularia types which form in high-level (epizonal) to near-surface environments. They consist of quartz veins, stockworks and breccias commonly exhibiting open-space filling textures and are associated with volcanic-related hydrothermal or geothermal systems. The deposits occur within volcanic island and continent-margin magmatic arcs and/or continental volcanic fields in an extensional structural setting.

The depth of formation of these high-level deposits is from surface (in hotsprings systems) to about 1 km below surface along regional-scale fracture zones related to grabens, resurgent calderas, flow-dome complexes and rarely, maar diatremes. Settings also include extensional structures (normal and splay faults, ladder veins and cymoid loops, etc.) in volcanic fields; locally graben or caldera-fill clastic rocks are present. High-level, subvolcanic stocks and/or dikes and pebble breccia diatremes occur in some areas. Locally resurgent or domal structures are present and are related to underlying intrusive bodies.

The age of this type of epithermal mineralization varies. Tertiary deposits are most abundant world-wide but in B.C. Jurassic deposits are important. Mineralization appears closely related in time to the host volcanic rocks but invariably it is slightly younger in age.

Ore zones are typically localized in fault or fracture systems, but also may occur in permeable lithologies. Upward-flaring ore zones centered on structurally controlled hydrothermal conduits are typical. Large (>1 m wide and hundreds of meters in strike length) to small veins and stockworks are common with lesser disseminations and replacements. Vein systems can be laterally extensive but ore shoots have relatively restricted vertical extents. Ore bodies form where dilational openings and cymoid loops develop, typically where the strike or dip of veins change. Hangingwall fractures adjacent to mineralized structures are particularly favourable for the development of high-grade ore shoots.

Textural features associated with mineralization include open-space filling, symmetrical layering, crustification, comb structures, colloform banding and multi-phase breccias. Ore minerals present include pyrite, electrum, gold, silver, argentite and lesser amounts of chalcopyrite, sphalerite, galena, tetrahedrite, silver sulphosalts and/or selenide minerals. Gangue minerals include quartz, amethyst, chalcedony, quartz pseudomorphs after calcite and calcite, with lesser amounts of adularia, sericite, barite, fluorite, Ca-Mg-Mn-Fe carbonate minerals (such as rhodochrosite), hematite and chlorite. Epithermal silver deposits generally have higher base metals contents than do gold or gold-silver types.

Deposits can be strongly zoned horizontally and vertically. Downward vertical zonation occurs over a 250 to 350 m interval, from a base metals poor, gold and silver-rich top to a relatively silver-rich base metals intermediate zone, to an underlying base metals-rich zone grading at depth into a sparse base metals-bearing pyritic zone. At depth, deposits can be postulated to occur above or peripheral to porphyry and possibly skarn-type mineralization.

Silicification of host rocks is extensive, occurring as multiple generations of quartz and chalcedony commonly accompanied by adularia and calcite. Pervasive silicification in vein envelopes is flanked by sericite-illite-kaolinite assemblages. Intermediate argillic alteration (kaolinite-illite-montmorillonite [smectite]) forms adjacent to some veins and advanced argillic alteration (kaolinite-alunite) may form at the tops of mineralized zones. Propylitic alteration dominates at depth and peripherally. Weathered outcrops are often characterized by resistant quartz +/- alunite 'ledges' flanked by extensive bleached, clay-altered zones with supergene alunite, jarosite and limonite.

8.1.3 Porphyry Deposits

The porphyry deposit type consists of bulk tonnage-style copper-molybdenum-gold mineralization commonly related to feldspar porphyritic intrusions. Core areas consist of intrusive-hosted, disseminated copper sulphides, largely chalcopyrite and bornite, commonly with accessory molybdenum and gold. Mineralization is spatially associated with the core intrusion, but not necessarily confined to it. Stocks are typified by concentric zones of potassic, phyllic (sericitic) and propylitic alteration, commonly with argillic (clay) alteration and overlying zones of advanced argillic alteration. Some secondary (supergene) mineralization commonly occurs near-surface, marked by oxidation of sulphide minerals and enrichment of economic minerals. Deposit boundaries are determined by economic factors that outline ore zones within larger areas of low-grade, concentrically zoned mineralization.

The Kemess South and North copper-gold deposits belong to the calc-alkaline variety of the porphyry deposit type. Both are described in Section 7.1.2 of this Report. Pyrite, chalcopyrite and magnetite are associated with well-developed quartz stockwork veins and veinlets within potasically-altered zones hosted by porphyritic quartz monzonite intrusions and adjacent wall rocks. The Jurassic age mineralization is spatially, temporally and genetically associated with the intrusions. Alkaline porphyry copper-gold deposits are associated with syenitic and other alkalic rocks and are considered to be a distinct deposit type.

Porphyry deposits occur in orogenic belts at convergent plate boundaries and are commonly linked to subduction-related magmatism. They also occur in association with the emplacement of high-level stocks during extensional tectonism related to strike-slip faulting and back-arc spreading following continent margin accretion. The geological setting of these deposits is a high-level (epizonal) stock emplacement in volcano-plutonic arcs. Virtually any type of country rock can host mineralization, but commonly the high-level stocks and related dikes intrude their coeval volcanic piles.

Pyrite is the predominant sulphide mineral in porphyry deposits. Magnetite and rarely hematite are abundant in some deposits. Ore minerals include chalcopyrite, molybdenite, lesser

bornite and rare (primary) chalcocite. Subordinate minerals are tetrahedrite/tennantite, enargite and minor gold, electrum and arsenopyrite. In many deposits late veins commonly contain galena and sphalerite in a gangue of quartz, calcite and barite. Gangue minerals in mineralized veins are mainly quartz with lesser biotite, sericite, K-feldspar, magnetite, chlorite, calcite, epidote, anhydrite and tourmaline. Many of these minerals are also pervasive alteration products of primary igneous mineral grains.

Alteration mineralogy consists of quartz, sericite, biotite, K-feldspar, albite, anhydrite/gypsum, magnetite, actinolite, chlorite, epidote, calcite, clay minerals and tourmaline. Early formed alteration can be overprinted by younger assemblages. Central and early formed potassic zones (K-feldspar and biotite) commonly coincide with ore. This alteration can be flanked in volcanic hostrocks by biotite-rich rocks (biotite 'hornfels') that grade outward into propylitically-altered rocks. The older alteration assemblages in copper-bearing zones can be partially to completely overprinted by later potassic, phyllic and less commonly argillic alteration assemblages. Rarely, in the uppermost parts of some porphyry deposits, advanced argillic (kaolinite-pyrophyllite) alteration is present.

Weathering results in **s**econdary (supergene) zones carrying chalcocite, covellite and other Cu_2S minerals (digenite, djurleite, etc.), chrysocolla, native copper and copper oxides, carbonates and sulphate minerals. Oxidized and leached zones at surface are marked by ferruginous 'cappings' with supergene clay minerals, limonite, goethite, hematite, jarosite and residual quartz.

Ore zones, particularly those with higher gold content, can be associated with magnetite-rich rocks and thus are indicated by magnetic highs in magnetic surveys. Alternatively, the more intensely hydrothermally altered rocks, particularly those with quartz-sericite-pyrite (phyllic) alteration produce magnetic and resistivity lows. Pyritic haloes surrounding copper zones respond well to induced polarization (IP) surveys but in sulphide-poor systems the ore itself provides the only significant IP response.

8.2 Exploration Model

The primary exploration target on the Ranch Project is a structurally-controlled or replacement-style high sulphidation epithermal gold deposit similar to those previously discovered on the property. A secondary, but no less important target type is a buried porphyry copper-gold deposit for which earlier magnetic and IP surveys have partially delineated coincident geophysical anomalies possibly indicative of this deposit type.

An exploration model for both high sulphidation gold and related porphyry-tpye copper-gold mineralization is depicted in Figure 19. It shows a schematic representation of both structurally-controlled (eg. the BV and Thesis III Zones) or replacement-style (eg. the Ghost Zone at Bonanza) gold-mineralized zones located at or near surface. Similar mineralized zones are postulated to lie at depth, along favourable fault structures or within more permeable Toodoggone volcanic units. Enveloping the siliceous gold-bearing host rocks are variably developed zones of intense argillic alteration which at depth are shown to be less well developed and admixed with some sericitic (phyllic) alteration. Also shown at higher or the

highest levels in the vertical epithermal column are broad zones of quartz-alunite alteration (eg. Alberts Hump) and massive silica caps (eg. Patti or Steve's Zones), both of which may be underlain by gold-mineralized zones of some size. Another component of the model are low-grade to geochemically anomalous pyritic siliceous zones known to underlie higher grade mineralization at the Bonanza and Thesis III Zones and which are likely present at moderate to greater depths elsewhere on the property.

The 'heat engine' driving the metalliferous hydrothermal fluids along permissive channelways within the volcanic strata are presumed to be coeval hypabyssal porphyritic stocks and related felsic dikes and breccia bodies. The stocks are postulated to lie at depth and may or may not have porphyry-style copper-gold mineralization associated with them. Those that do would be characterized by the development of intense quartz stockworks, strong potassium silicate alteration and veins and disseminations of pyrite, chalcopyrite and magnetite both within the stock and in the adjacent volcanic country rocks.

All known gold deposits and prospects on the Ranch Project have been discovered by conventional methods. Typically soil geochemistry has been followed by prospecting, mapping, rock geochemical sampling, trenching and finally diamond drilling. Future discovery of overburden covered near-surface gold deposits, or "blind" deposits at depth, will have to rely more on the drill-testing of geophysical targets such as concident 3D-IP resistivity-chargeability anomalies. These can be screened prior to drilling by layering-in appropriate geological data sets such as air photo lineaments and structural-alteration patterns identified by historical surface mapping and diamond drilling.

Additional ground magnetic and deep-penetrating, high-resolution IP surveys are required to better define 'blind' high sulphidation-type gold targets and more deeply buried copper-gold porphyry targets prior to testing them by drilling.

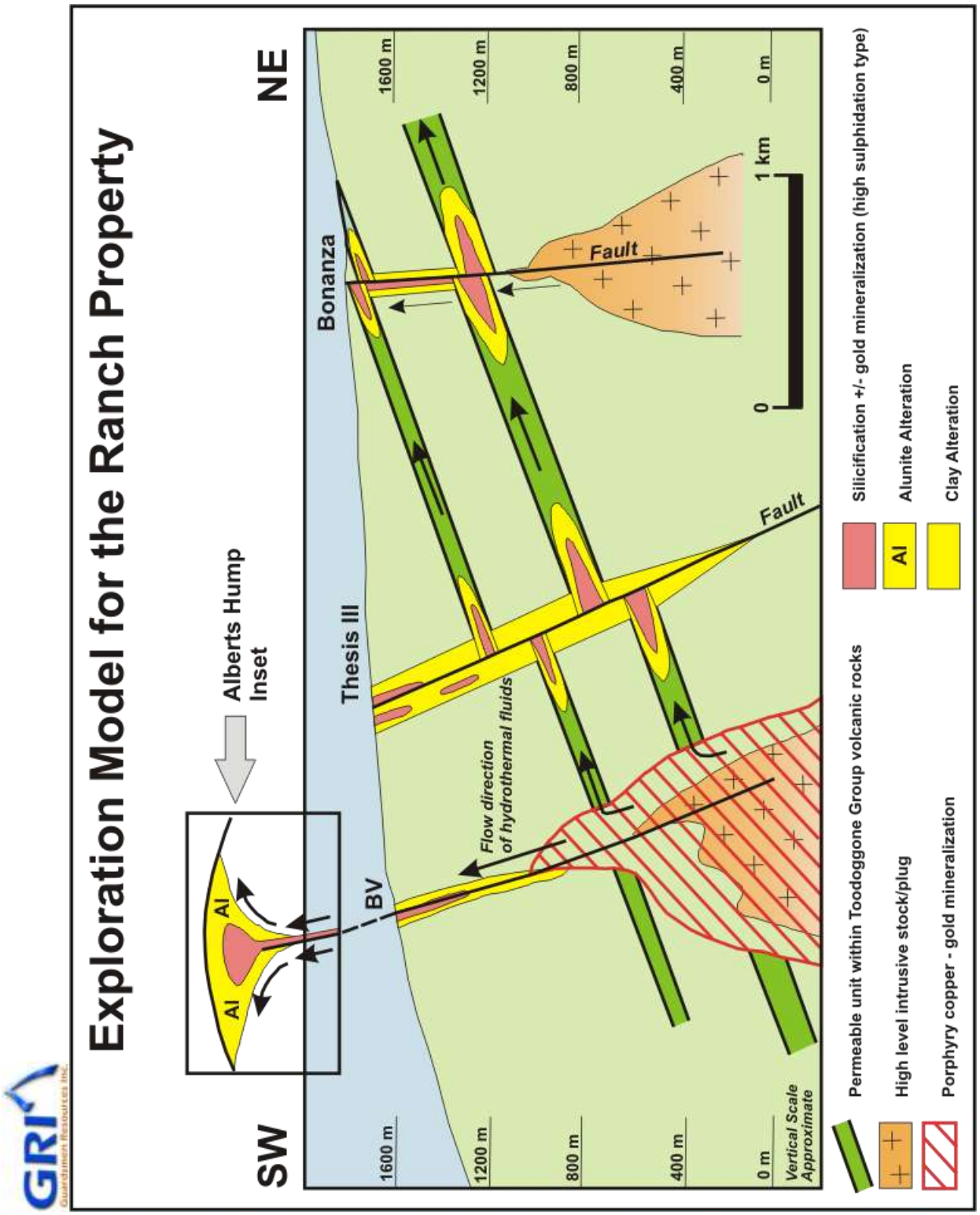


Figure 19: Ranch Project – Exploration Model

9.0 EXPLORATION

9.1 Exploration by Previous Operators

Historical exploration on the (Al) Ranch property and key results of past work have been described in Sections 6.1 to 6.5 and 7.2.3 of this Report.

9.2 Exploration by Guardsmen

9.2.1 2013 Work Program

From August 25 to September 1, 2013, a 5-man Guardsmen crew, supervised by Scott Gifford, President of Guardsmen, completed a grid soil survey on the south slope of Albert's Hump over an area measuring 1,200 m east-west by 650 m north-south. The limit of the 2013 grid soil survey is shown on Figure 3 in Section 6.2.1. Its placement was designed to allow for some overlap with historical grid soil surveys.

Purposed of the work was twofold: (i) to provide additional survey coverage in the prospective Albert's Hump and South Hump areas; and (ii) to complete the required assessment work on claims comprising the Ranch Project, the majority of which were due to expire in November 2013.

The crew was based in a scaled-down version of Christopher James' 2007 exploration camp located about 500 m southwest of the Bonanza Zone. Two ATV's (all-terrain vehicles) were used to travel daily to and from the grid area.

A total of 365 soil samples were submitted to Acme Analytical Laboratories Ltd. in Vancouver for gold and multi-element ICP analyses.

9.2.2 Soil Survey Results

Gold analytical results for the 2013 soil survey were mostly low with only three sample sites returning >15 ppb (threshold) values, including 40.3 ppb at 6370650 N / 694950 E, 26.2 ppb at 6370800 N / 694650E and 27.4 ppb at 6371200 N / 694650 E. One definitely anomalous value of 228.8 ppb Au was returned from a sample site at 6371300 N / 693900 E.

All four sample sites are isolated from one another and, with the exception of the latter site, do not represent anomalies of interest. The 228.8 ppb Au anomaly in the northwest corner of the grid area remains open to the northwest.

10.0 DRILLING

10.1 Drilling by Previous Operators

Historical drilling by previous operators on the Al (Ranch) property has been described in Sections 6.1 and 6.3 of this Report; key drilling results are presented in 7.2.3 of the Report.

10.2 Drilling by Guardsmen

To date, Guardsmen has not conducted any drilling programs on the Ranch property.

11.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 Sample Preparation, Analyses and Security by Previous Operators

Historical sample preparation, analyses and security by previous operators are discussed in Section 6.4 of this Report

11.2 Sample Preparation, Analyses and Security by Guardsmen

11.2.1 Introduction

In Section 9.2.2, the results of Guardsmen's 2013 grid soil survey in the Albert's Hump area were presented. Below, its protocols for the collection, preparation, analyses and security of soil samples taken are briefly discussed. Regarding sample preparation methods described below, it should be noted that Scott Gifford, President of Guardsmen, participated in the collection of the 2013 soil samples.

In the author's opinion, the sample preparations, security and analytical procedures carried out on the soil samples collected by Guardsmen in 2013 are of a high standard.

11.2.2 2013 Soil Sample Protocols

Soil samples were collected along east-west grid lines spaced 50 m apart. Sample spacing along the lines was 50 m. The "B" horizon was only locally well-developed, so samples were principally collected from the "C" horizon. At six sites, both "B" and "C" horizon materials were sampled. Locally, swampy depressions and exposed bedrock prevented sampling in several locations of the grid. "B" horizon sample depths varied from 6 to 34 cm, averaging about 20 cm, whereas "C" horizon sample depths varied from 17 to 43 cm, averaging about 34 cm.

An effort was made to avoid contamination from surface material or buried organic materials. Larger rock fragments were removed. The average sample size was about 400 grams. Sample material was placed in a standard kraft sample bag, with the sample number labeled by its UTM (NAD 83, Zone 9) coordinates. An appropriately numbered survey ribbon was hung on nearby vegetation.

For each sample, the following field notes were recorded: sampler; property name; target area; date; sample site UTM coordinates; sample number; sample depth; sample colour; and sample description. Field notes were later compiled into a digital file.

Samples were hung to dry prior to packing them in well-sealed rice bags and, along with a shipment notice, shipped via a commercial truck carrier to Acme Analytical Laboratories Ltd. in Vancouver for analysis. At the Acme lab, the samples were dried at 60°

Celsius and sieved to -80 mesh (0.18 mm or 180μm). Fifteen gram splits were analyzed for gold and multi-elements by an inductively-coupled plasma mass spectrometry (ICP-MS) method.

In addition to the blanks and standards inserted into the sample stream by the lab, a quality control (QC) sample pair, consisting of one of two low grade standards (CDN-ME-19 or CDN-ME-1206) followed by one blank (CDN-BL-10), was inserted by Bob Lane, P. Geo, at an average rate of approximately one pair per 50 soil samples. A total of seven QC sample pairs were analyzed in the same manner as the soil samples. A review of the values returned for the blank showed no contamination in sample preparation. A review of the values returned for the standards showed an acceptable range of results.

There is no relationship between the laboratory, Acme Analytical Laboratories Ltd. and Guardsmen.. Acme is ISO 9001:2005 certified for the provision of assays and geochemical analysis and is also ISO/IEC 17025:2005 certified for gold by Fire Assay.

12.0 DATA VERIFICATION

12.1 Data Verification by Previous Operators

Historical data verification by previous operators is discussed in Section 6.5 of this Report. The discussion is supplemented by several comments and observations by the author on this topic.

12.2 Author's Verification Sampling

12.2.1 Introduction

On September 2 and 3, 2013, the author carried out a site visit to the Ranch Project, with the objective of familiarizing himself with many of its known gold-mineralized zones which previously he had not examined in the field. On September 2, four zones were visited via all-terrian vehicle (ATV) transport and two independent verification samples of mineralized surface bedrock were collected. On September 3, using helicopter transport, five more zones were visited and twelve verification samples of mineralized and unmineralized outcrop, subcrop and angular float were collected.

On the second day of the site visit, the author was accompanied by Bob Lane, P. Geo., who assisted in the collection of verification samples and in making geological observations which added to the author's better understanding of the various zones' mineralized settings.

Sample results for the various zones are discussed under separate sub-headings below. A location map for the 2013 verification samples is presented in Figure 20. Table 5 presents selected analytical results and descriptions for the 2013 verification samples. Please refer to Section 7.2.3 of the Report for additional descriptive comments on the nine zones visited during the 2013 site visit.

12.2.2 Sample Collection and Preparation

Rock samples collected for analyses were mainly composite or select grabs of variably mineralized, altered or unmineralized (wallrock) material. They were taken for the purpose of determining what gold concentration might accompany a given mineralization type or occurrence.

About 2-3 kg of sample material was placed into an 8 inch by 13 inch, 2 mil plastic bag and numerically labeled with a sample number identical to that of a felt pen-labeled 4 inch piece of flagging placed inside the sample bag. Each sample bag was securely closed with a "zap strap".

For each sample, the following field notes were recorded: sampler; property name; target area; date; sample site coordinates (UTM, NAD 83 - Zone 9); sample number and rock sample description. Features of the sampled zone were also recorded. These included size of the occurrence, its orientation (strike and dip if measurable), host rock, sulphides present and

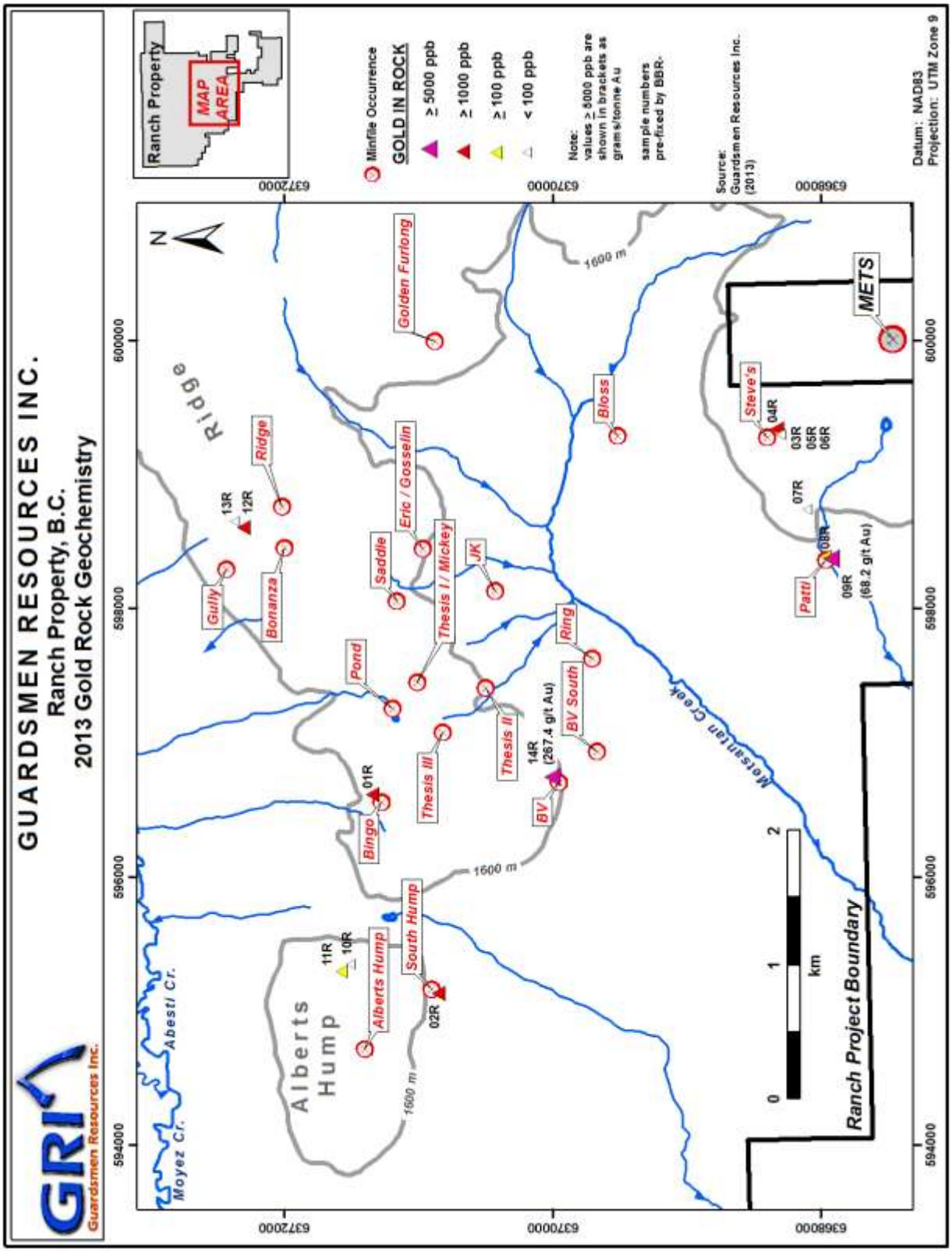


Figure 20: Ranch Project – Location Map for 2013 Verification Rock Samples

Table 5
Ranch Project - Selected Analytical Results and Descriptions
for 2013 Verification Rock Samples

Sample #	UTM Co-ord. (NAD83)		Gold Analyses		Remarks
	East	North	Au (ppb)	Au (g/t[1])	
BBR-01R	596613	6371342	1101.7		**Bingo Zone**: random chip sample over 1 meter diameter outcrop; same location as 2006 rock sample # 7874 (420 ppb Au); strongly silicified rock, locally vuggy with well-developed barite crystals in vugs; generally rusty (limonitic) with darker goethite spots possibly after disseminated Py; non-magnetic
BBR-02R	595132	6370851	2743.1		**South Hump Zone**: select grab sample of rusty (limonite-goethite), silicified volcanic rock; taken from shallow blast pit within which is 2006 rock sample # 7959 (515 ppb Au); locally vugs contain greater concentrations of goethite; posible trace barite; non-magnetic
BBR-03R	599345	6368338	10.5 11.1 (REP[2])		**Steve's Zone**: random grab sampe of intensely silicified rock with a crypto-crystal-line texture; generally rusty (limonite > goethite) weathered surfaces; locally vuggy with greater concentrations of geothite in vugs; also one <1 mm wide geothite fracture-filling possibly after Py; non-magnetic
BBR-04R	559339	6368330	1150.3		**Steve's Zone**: select grab sampe of calcite-quartz-barite veinlet cutting altered host rock consisting of pale grey crypto-crystalline silica; non-magnetic; veinlet is 2 cm wide and oriented at 125°/-90°
BBR-05R	599304	6368308	3.5		**Steve's Zone**: random grab sampe of massive crypto-crystalline silica with minor limonite coating some fractures; non-magnetic

[1] g/t = gram(s) per metric tonne
[2] REP = repeat assay from same pulp

Table 5 (continued):

Sample #	UTM Co-ord. (NAD83)		Gold Analyses		Remarks
	East	North	Au (ppb)	Au (g/t)	
BBR-06R	599297	6368297	6.8		**Steve's Zone**: random grab sample of massive crypto-crystalline silica with minor limonite; similar to BBR-05R; non-magnetic
BBR-07R	598742	6368106	1.4		**Patti Zone**: composite grab from Fe-oxide frost boil' with angular float to subcrop of pale grey intermediate volcanic rock; 0.5-1% fine grained diss. Py; texture of silica is more granular rather than crypto-crystalline; non-magnetic
BBR-08R	598381	6367986	223.6		**Patti Zone**: composite chip from outcrop; pockets of med. grained crystalline barite in silicified and locally 'frothy' silica; faint banding in silica-rich zones follows 000°/42°E; pockets of limonite and trace relict Py; host rock is dacitic volcanic rock
BBR-09R	598361	6367938	80725.4	67.4 69.0 (NP-R[3])	**Patti Zone**: select grab sample of brecciated barite-(quartz) vein with wallrock fragments of crypto-crystalline silica as vein inclusions; vein is ~15 cm true width and is oriented at 350° / 75° E; fractures are dusted with very minor limonite; non-magnetic
BBR-10R	595356	6371503	8.1		**Albert's Hump**: select grab of sugary-textured, fine-grained silica (commonly vuggy); vugs lined with limonite; sample site near zone of intense, white-coloured clay alteration zone
BBR-11R	595302	6371573	113.2		**Albert's Hump**: composite chip from outcrop; pervasively silicified rock, 2/3's of which exhbits vuggy textute similar to BBR-10R; re-mainder of sample is more massive, fine-grained silica; rock is cut by occasional <1mm scale qtz. vlts; weak-mod. limonite on waethered surfaces and in vugs; non-magnetic
BBR-12R	598604	6372305	1597		**Bonanza North**: select grab of pervasively silicified rock (vuggy +/-) with fairly abundant tabular barite crystals; sample taken from (likely local) subcrop/felsenmeer material in rock-piled berm on south side of old trench; weak to locally mod. limonite on fractures and in vugs; non-magnetic

Table 5 (continued):

Sample #	UTM Co-ord. (NAD83)		Gold Analyses		Remarks
	East	North	Au (ppb)	Au (g/t)	
BBR-13R	598604	6372305	10.1		**Bonanza North**: same location as BBR-12R; select grab of pervasively clay-altered rock with some fine silica; rock is indurated with moderate+ limonite; non-magnetic
BBR-14R	596723	6369980	>100,000 >100,000 (REP)	275.3 285.7 (REP) 272.2 (NP-R[3]) 236.2 (NP-R-REP[4])	**BV Zone**: 0.6 m-long channel sample collected on east wall of pit across a portion of northeast-dipping barite vein; barite is white, coarse-grained and crystalline (tabular habit); trace fine-grained sulphides; some limonite on fractures and locally indurated; non-magnetic

[3] NP-R = new pulp from sample reject material
[4] NP-R-REP = repeat assay of same pulp from sample reject material

their amounts in percent, and any other data that would aid in later interpretation after receipt of analytical results. All field notes were later compiled into a digital file.

The samples were placed in three well-sealed rice bags and shipped via helicopter, pickup truck then Greyhound Express to the author's home office in Surrey, B.C. Here each sample was photographed and further examined using a hand lens and a binocular microscope. Along with a shipment notice, they were then hand-delivered by the author to Acme Analytical Laboratories Ltd's main facility in Vancouver, B.C.

In the Acme lab, one kilogram of material was crushed to 80% passing 10 mesh, from which a 250 gram split was pulverized to 85% passing 200 mesh. From the pulverized "assay pulps", 15 gram splits were analyzed for 36 elements (including gold) by Inductively Coupled Plasma - Mass Spectrometry (ICP-MS) methods. Over-limit gold analyses were later fire assayed (30 gram split - gravimetric). Quality control/quality assurance (QA/QC) samples were done only at the laboratory.

There is no relationship between the laboratory, Acme Analytical Laboratories Ltd. and the author. As stated earlier, Acme is ISO 9001:2005 certified for the provision of assays and geochemical analysis and is also ISO/IEC 17025:2005 certified for gold by Fire Assay.

12.2.3 Verification Sample Results

Bingo Zone

The Bingo Zone was briefly visited by the author on September 2. Several trenches were examined and 3 diamond drill hole collar posts were located, including Hole 88-12 at UTM coordinates 6371189 N / 596664 E. This hole is located in the southeast part of the Bingo Zone and reportedly intersected a 44.0 m-long interval (true width unknown) from 106.57 to 150.57 m which returned average grades of 1.23 g/t Au, 5.68 g/t Ag and 0.29% Cu.

At UTM coordinates 6371342 N / 596613 E, in the floor of an old trench, a random 2013 chip sample (BBR-01R) taken over a one metre diameter outcrop of baritic, strongly silicified rock returned a value of 1101.7 ppb Au. A 2006 rock sample (#7874) taken by Christopher James within the same outcrop returned a value of 420 ppb.

South Hump Zone

The South Hump Zone was briefly visited by the author on September 2. A shallow blast pit at UTM coordinates 6370851 N / 595132 E has exposed silicified volcanic bedrock within which a 2006 rock sample (#7959) taken by Christopher James returned a value of 515 ppb Au. The author's 2013 select grab sample (BBR-02R), taken from the same blast pit, returned a value of 2743.1 ppb Au.

Thesis III Zone

The Thesis III Zone was briefly visited by the author on September 2. Two photos of the reclaimed drill area were taken. No verification samples were collected.

Mickey Zone

The southern end of the Mickey Zone was briefly visited by the author on September 2. Two areas of strongly silicified felsenmeer(?) or possible float were examined. Sampling of these two areas by Christopher James in 2006 returned values of 739 and 1257 ppb Au (sample #'s 7879 and 7881 respectively). No 2013 verification samples were collected at either sample location.

Steve's Zone

Steve's Zone was briefly visited by the author and Bob Lane on September 3. On a prominent knoll, three random grab samples (BBR-03R, -05R and -06R) of intensely silicified volcanic(?) rock returned low gold values of 10.5 ppb, 3.5 ppb and 6.8 ppb respectively. A select garb sample (BBR-04R) of a narrow calcite-quartz-barite veinlet cutting the silicified

wallrock returned a value of 1150.3 ppb Au. The latter result is consistent with historical (1985) sampling results in Steve's Zone, which show that higher gold values are associated with barite in veins and barite-rich breccia zones cutting intensely silicified wallrocks.

Patti Zone

The Patti Zone was briefly visited by the author and Bob Lane on September 3. Highlight of three verification samples collected were results from BBR-09R which returned an initial ICP-MS gold value of 80725.4 ppb. An over-limit fire assay from the same pulp returned a gold value of 67.4 g/t Au (1.97 oz. Au per ton) . A fire assay of a second pulp produced from sample reject material returned a value of 69.0 g/t Au (2.01 oz. Au per ton).

BBR-09R is a select grab sample of a 15 cm wide, brecciated barite-(quartz) vein with wallrock fragments of crypto-crystalline silica as vein inclusions (Plate 10). A photomicrograph of a polished thin section from a piece of the vein shows micron size gold particles disseminated in barite gangue (Plate 11).

The high grade gold values of BBR-09R confirm reported historical high grade values (to 58.5 g/t Au) in barite veins which cut a large outcrop of intensely silicified rock in the southern part of the Patti Zone (see Figure 16 on page 91).

Plate 10: Patti Zone: character sample of barite-(quartz) vein (BBR-09R)

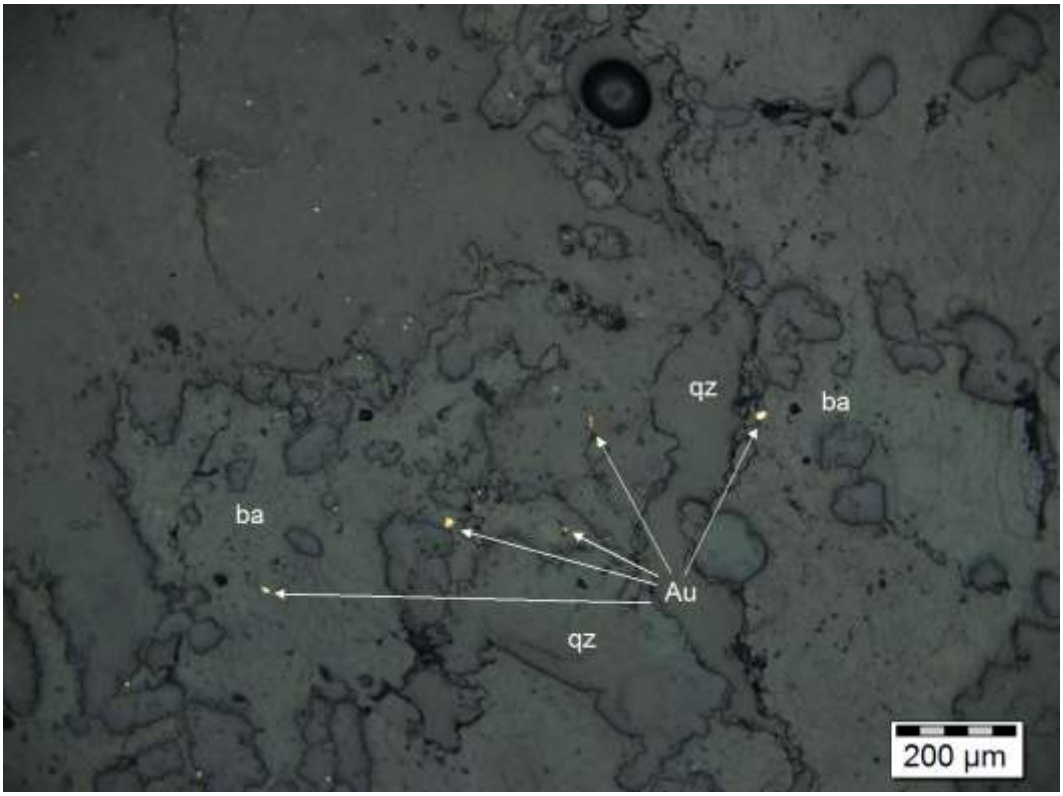


Plate 11: Photomicrograph of BBR-09R (Patti Zone) showing micron size gold particles in barite

Albert's Hump

A prominent alunite alteration zone on the east slope of Albert's Hump was briefly examined by the author and Bob Lane on September 3 (see Plate 7 on page 88). Its northeast limit is marked by a linear gulley trending northwesterly and, based on observed outcrop and felsenmeer, the zone of alunite alteration appears to be about 60 m wide.

Two verification samples were collected within the alteration zone. BBR-10R is a select grab of sugary-textured, commonly vuggy, fine grained silica; it returned a value of 8.1 ppb Au. BBR-11R is a composite chip taken from a pervasively silicified outcrop exhibiting both vuggy and massive textures; it returned a weakly anomalous value of 113.2 ppb Au.

BV Zone

The past-producing BV open pit was briefly visited by the author and Bob Lane on September 3. A 0.6 meter-long channel sample (BBR-14R), collected on the east wall of the pit across a porion of the northeast-dipping BV (barite +/- quartz) vein, returned a very high ICP-MS value of >100,000 ppb Au. Subsequent fire assays from both the original pulp and a second pulp from sample reject material returned an average value of 267.4 g/t Au (7.80 oz. Au per ton). True width of the BV vein at this sample location is unknown.

A character sample of BV vein material, taken from the floor of the pit about 20 m from BBR-14R, is shown in Plate 12. A photomicrograph of a polished thin section, from a piece of the vein material comprising sample BBR-14R, shows micron size gold forming convoluted "wires" precipitated in quartz gangue (Plate 13).

Plate 12: BV Zone: character sample of BV Vein (barite +/- quartz) taken from floor of BV Pit

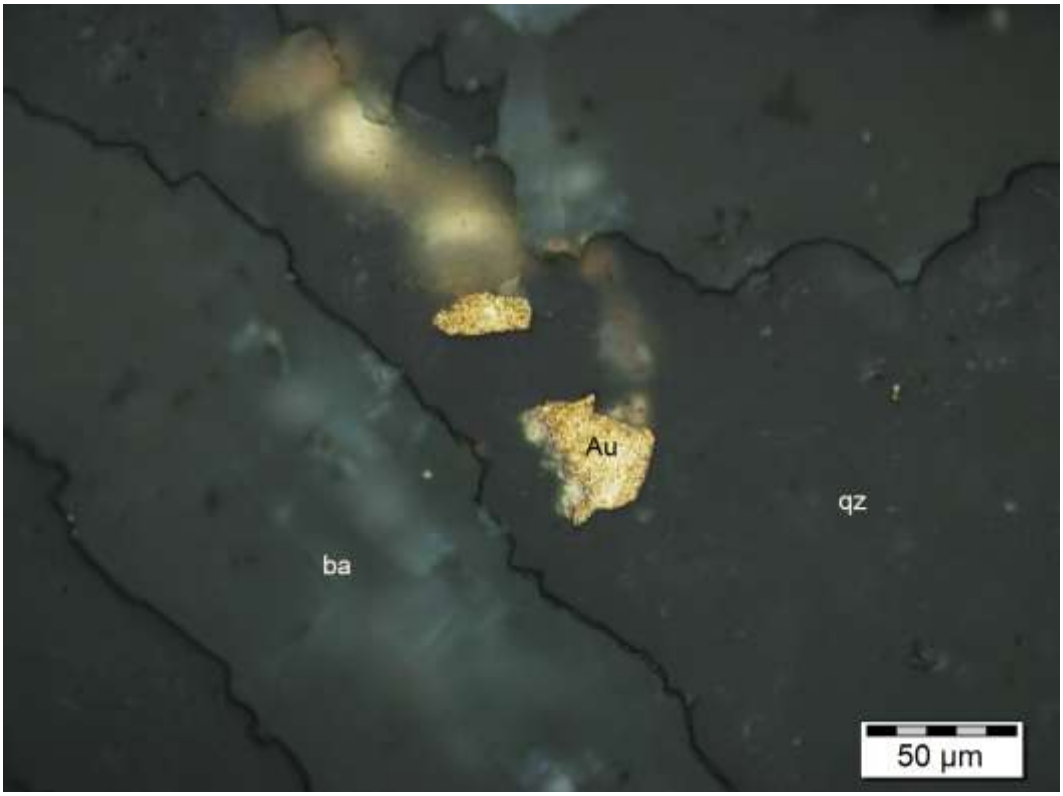


Plate 13: Photomicrograph of BBR-14R (BV Vein) showing gold forming convoluted "wires" precipitated in quartz

Bonanza North

The area containing the large gold soil anomaly north of the Bonanza Zone was examined by the author and Bob Lane on September 3. Purpose of the site visit to this area was to investigate the extent to which the soil anomaly had been tested by historical trenching and to prospect for altered and mineralized outcrop and/or angular float within the anomaly. The reader is asked to refer to pages 94 to 96 in Section 7.2.3, where historical trenching and diamond drilling results are collated with results of the 2013 site visit to the Bonanza North area.

13.0 MINERAL PROCESSING AND METALLURIGICAL TESTING

13.1 Historical Mineral Processing and Metallugical Testing

The information on historical mineral processing and metallurgical testing presented below is mainly sourced from Wright Engineers Limited's October 1988 Project Feasibility Report, Appendix III, titled "Review of Metallurgical Testwork Data for the Al Property by Wright Engineers Limited". Some additional data was sourced from Hawkins' 2006 Technical Report on the Ranch Property. The information in this section is considered relevant because it provides a metallurgical framework from which future test work can be planned and executed.

13.1.1 Metallurgical Testing

The Al Project 1988 Feasibility Study was based on a 200 ton per day gravity and bulk sulphide flotation concentrator combined with heap leaching of lower grade process feeds. To evaluate this proposed milling and heap leach operation, Energex commissioned Bacon, Donaldson and Associates Ltd. and Mellis Engineering Ltd. to carry our extensive lab scale test work to determine optimum process parameters. Milling and heap leaching test procedures and results are discussed under separate sub-headings below.

Milling

In bullet form, the key findings of the metallurgical test work related to the milling part of an operation which had been proposed in 1988, but not advanced, were:

• Most of the test work was directed towards a mill circuit comprising crushing, grinding incorporating gravity concentration, flotation, cyanidation of the flotation concentrate and recovery of gold in a Merill Crowe circuit.

• Five major process feeds were identified: Bonanza Oxide, Bonanza Sulphide, Thesis III Oxide, Thesis III Sulphide and BV Sulphide.

• Estimated gravity and flotation recoveries for the 5 ore types were: Bonanza Oxide (84.3%); Bonanza Sulphide (88.4%); Thesis III Oxide (89.8%); Thesis III Sulphide (88.4%); and BV Sulphide (84.3%). The overall average gold recovery was about 88%.

• Cyanide extraction of flotation concentrate for the above 5 ore types varied from 69.0% for Bonanza Sulphide to 99.6% for Thesis III oxide. About 57% of the mineral reserve is contained in Bonanza Sulphide ore whose flotation concentrates are refractory; this is due largely to the presence of copper.

• Gold values in concentrates were estimated using ore concentration, head grades and recoveries. They varied from 90 g/t in Bonanza Sulphide concentrate to 1,500 g/t in Thesis III oxide jig flotation concentrate. Silver values varied from 24 g/t in Thesis III Sulphide concentrate to 82 g/t in Bonanza Sulphide concentrate.

• 30 element ICP analysis for the Bonanza Sulphide, Thesis III Sulphide and BV sulphide concentrates showed that the Bonanza Sulphide concentrate generally had greater concentrations of elements which could result in increased smelter penalties. These include values of arsenic up to 500 ppm, antimony up to 3,380 ppm, bismuth up to 0.023% and mercury up to 20 ppm.

Lead values varied from 240 ppm in Thesis III Sulphide concentrate to 1,420 ppm in three other zones. Zinc values varied from 120 ppm in Thesis III Sulphide concentrate to 1,590 ppm in Bonanza Sulphide concentrate. Iron values ranged from 5.78% in 3 zones to 36.62% in Bonanza Sulphide concentrate. Sulphur values ranged from 6.64% in 3 zones to 42.04% in Bonanza Sulphide concentrate.

• The sulphide concentrates were found to be relatively low-grade and would therefore incur high transportation and smelting costs per ounce of gold produced; conversely, the oxide concentrates are of higher grade and amenable to cyanidation.

• Test work showed that very little revenue improvement is obtained by the use of on-site cyanide as compared to shipping the concentrates to a smelter. Wright Engineers recommended that a simple flotation option be used; the plant would be easier to operate and permitting and environmental monitoring costs would be lower.

Heap Leaching

In bullet form, the key findings of the metallurgical test work related to the heap leaching part of an operation which had been proposed in 1988, but not advanced, were:

• A heap leach circuit was to be used to recover gold from low-grade ore (2 to 8 g/t Au). Heap leach material was to be taken from all 3 pits, but the majority (76%) was to come from the Bonanza Zone.

• Excessive cyanide consumption was a major consideration in the selection of types of process feed that could be heap leached.

• Gold recoveries used in the heap leaching metallurgical balance were based on bottle roll and column cyanidation tests done by the metallurgical consultants. The bench-scale tests gave recoveries in the 60 to 83% range, however cyanide consumption varied widely, from 1.0 to 18.0 kg/tonne. Estimated overall heap leach recovery for gold was 55%.

• The variable response to cyanidation seen in the bench-scale tests was attributed in part to the copper content of the test samples, and in part to the size fractions used in cyanidation and the variation in cyanide solution concentration from test to test.

• To determine heap leach operating costs, an average cyanide consumption of 3.0 kg/tonne was used by Wright Engineers, although it was not known what percentage of ore could be leached at this average consumption.

• In commercial (operating) practice, the presence of high cyanide consuming material could adversely affect recovery by causing cyanide starvation to material at the bottom of the heap.

• An area of 1.5 hectares would have been required for leach pads and ponds. Operation of the heap leach pads was to be completed by the end of Year 3 of the proposed operation, after cessation of mining, unless additional reserves for heap leaching were identified.

• The leach operation was to be seasonal, from April to October, due to climatic constraints.

13.1.2 Recommended Future Test Work

In their October 1988 Feasibility Report, Wright Engineers proposed additional metallurgical test work, including:

(i) locked cycle flotation tests on drill core composites for each ore type to properly determine concentrate/grade/recovery relationships;

(ii) bottle roll cyanidation tests on ground drill core samples for each ore type to determine potential whole ore agitation leach recoveries; and
(iii) column leach tests on drill core rejects for each ore type to establish its heap leach potential.

Wright Engineers further commented that as of the time of writing of the feasibility report, column leach test results on low grade sulphide drill core material were imminent. They commented that "*particular attention should be paid to the copper content of the material - low copper material may yield good recoveries but this is of little value unless high and low copper material can be separated in the pit."*

13.1.3 Mineral Processing

Past mineral processing on the Al (Ranch) property consisted of minor pilot plant production of high-grade Thesis III "A" Zone ore by Energex in 1986 and the processing of an estimated 41,200 tonnes of ore from the Bonanza, Thesis III and BV Zones at Cheni's Lawyers mill in 1991. These two campaigns of mineral processing are briefly described below.

Pilot Plant Operation

During August 1986, Energex operated a nominal 6 tonnes per day pilot plant on the Al (Ranch) property; a total of 209 tonnes of high-grade surface ore from the Thesis III A Zone was processed. Recoveries by standard jig and flotation methods exceeded 91%, with heads averaging 47.6 g/t Au. The test program established the simple metallurgy of the A Zone deposit; correlation of recovered grade versus calculated grade for the bulk samples added to the confidence level of the deposit's estimated average grade.

Trace element analysis of composite millhead samples from the pilot plant indicated that average elemental abundances for metals and trace elements were as follows: 48.85 ppm Au, 1.1 ppm Ag, 18.0 ppm Cu, 22.0 ppm Pb, 6.0 ppm Zn, 6.0 ppm Mo, 1115 ppm Ba (partial), W (not detected), 8.0 ppm As, 12.0 ppm Sb and 0.20 ppm Hg. Iron content is low; only traces of pyrite, hematite or limonite group minerals are present at surface. Mercury, arsenic and antimony values are also low. The relatively high strontium content suggests that the barite is a high strontium variety.

Milling (Lawyers Mill)

In 1989, Cheni optioned the Al (Ranch) property from Energex, with the aim of providing additional ore to feed their Lawyers mill. In 1991, Cheni mined an estimated 41,200 tonnes from three small open pits at the BV Zone (32,000 tonnes), the Thesis III Zone (4,500 tonnes) and the Bonanza Zone (4,700 tonnes). Based on truck sampling data, the average grade of ore mined was 9.2 g/t Au. Open pit mining at BV was outlined in a prospectus filed with B.C. Ministry of Energy and Mines during the Mine Development Process; the Bonanza and Thesis III pits were considered small bulk samples.

Cheni's original plan was to mine 50,000 tonnes from the BV pit and 5,000 tonnes from each of the Thesis III and Bonanza Zones; the planned 60,000 tonnes target was not reached. The main shortfall was at BV where an error resulted in ore being stripped as overburden; an unstable pit wall prevented the removal of additional planned tonnage.

At Bonanza, Cheni mined 4,700 tonnes from the Ghost Pit which was 10 m by 33 m in area and about 7 m deep. Two other smaller pits were developed on other nearby high-grade zones, Verrenass and Bonanza South. During development, blast-holes were drilled and sampled for grade control; within the eventual pit, samples averaged 7.9 g/t Au uncut or 7.5 g/t Au when cut to 22.0 g/t Au, using analytical data from the Cheni mill.

The Bonanza material contained locally high copper values which caused process problems at the Lawyers mill and later within the tailings. It is not clear if all of the Bonanza material trucked to the mill was processed. Bonanza ore would have been more desirable for blending as a sweetener at the Kemess South Mine, had it been in production at the time.

During reclamation of the site, the various pits were re-contoured and tailings from the old Energex pilot plant were deposited in the water-filled BV pit.

13.2 Mineral Processing and Metallurgical Testing by Guardsmen

To the writer's knowledge, Guardsmen has not carried out any mineral processing or metallurgical testing on the Ranch Project to date.

14.0 MINERAL RESOURCE ESTIMATES

14.1 Resource Estimates by Previous Operators

Several historical resource estimates have been carried out by past operators. Of these, in the author's opinion, the most pertinent are:
(i) Gemcom Mine Services Inc. (Steffen et al., 1988): Gemcom's 1988 computer block model reserves for the Bonanza, Thesis III and BV Zones formed the basis of Wright Engineers Limited's October 1988 Project Feasibility Report on the Al Project;
(ii) Cheni Gold Mines Inc. (Cheni, 1991): After completing a program of surface bulk sampling in the Bonanza and Thesis III Zones and open pit mining in the BV Zone, Cheni recalculated mineral inventories in the Bonanza and Thesis III Zones. These resource estimates are outdated; they do not include data from later drilling programs carried out in 1997, 2003 and 2007. However, they remain relevant because they reflect a more conservative approach to resource estimation, based on Cheni's operational experience at the past-producing Lawyers mine, at the Mets property (see Section 15.1.1) and on the Al (Ranch) property.
(iii) Micromine Consulting (Bilki et al., 2007): After completion of the last historical drilling program on the Ranch Project in 2007, Christopher James commissioned Micromine to carry out resource modeling and estimations on the three main zones and on several other known zones of mineralization which had seen varying amounts of historical trenching and diamond drilling. Micromine's resource estimates incorporate all past historical trenching and diamond drilling data and therefore are considered to be the most complete of the three sets of historical resource estimates summarized below. In Micromine's October 2007 Report, it is not clearly stated if the tonnages mined by Cheni from the above three zones were removed from the resource modeling performed by Micromine.

In Section 14.1.4 below, comparisons are made between the above historical estimates. The comparisons are somewhat subjective due to a number of factors, including but not limited to: (i) the different assay and geological data bases available at the time the resource estimates were carried out; (ii) the different resource estimation methodologies employed by past operators; and (iii) the lack of uniform cut-off grades used in the resource estimates. Furthermore, the historical resource estimates completed by Gemcom and Cheni were completed before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects.* They use categories other than those stipulated for current use. While Micromine's resource estimates were done after the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects*, Micromine states in the Executive Summary of their report that *"the purpose of the resource modeling was to estimate the magnitude of the property; therefore, the reported resources are not compliant with the NI 43-101, JORC or any equivalent Code."*

14.1.1 Gemcom Mines Services Inc. (1988)

In 1988, Gemcom Mine Services Inc. (Steffen et al., 1988) estimated geological reserves based on Energex-supplied computer databases consisting of drill hole data, trenching data, channel data, location information, geological data and all assay data. The exact PC-Mine software version used is not known. Gemcom methodologies are described in bullet as follows:

• A computerized ore body modeling technique known as three dimensional block modeling was used to calculate ore reserves. A three-dimensional block model is a numerical representation of a deposit that uses a regular matrix of blocks, where each block represents a homogeneous volume of rock.
• Each block is given a set of attributes which represent the properties of the rock in the block. For the models constructed for the AL project, each block was allocated a rock type (which could either be waste or ore), a specific gravity, and a gold grade.
• Rock type attributes were determined by overlaying digitized mineralized outlines on each section over the matrix of blocks. Blocks falling inside the mineralized outline were given the mineralized rock type; blocks falling outside were given the waste rock type.
• Density values were allocated directly from rock types into each block *(author's note: Gemcom does not state the number of density determinations used in its resource modeling, nor do they state if the densities were proportionately representative of the entire deposits)*.
• Gold grades were interpolated into each block from drill hole, trenching and channel sampling data. The interpolating technique used was weighted averaging, using a weighting factor of the inverse of the distance squared of an assay from the block centroid.

Gemcom reported in-situ resources for all three zones using various cut-off grades. Wright Engineers used Gemcom's estimates in their 1988 Project Feasibility Report.

Gemcom also reported pit reserves for all three zones; its methodologies for doing so are described in bullet form below:
• Open pits were computer generated using the PC-MINE software system. On this system, pits are generated and evaluated sequentially within a three dimensional block model. Known pit slopes are projected upwards to a predetermined topographic surface from starting pit bases or pushbacks on various levels in the block model.
• Each pit generated was progressively deeper and larger and was designed around identifiable ore targets comprised of blocks containing grade values above cut-off. Each increment was evaluated for profitability using block model economic values calculated from mining cost and revenue data. All profitable and practical mining increments were included to make up the final pits and non-profitable and impractical increments were left out.
• Design procedures were used to develop the pits so that the cost of waste removal in the pit increments was generally paid for by ore near the bottom of the expansion; thus, ore higher in the pit did not "pay" for waste material lower down. An increased mining cost with increased depth was not specifically included in the pit evaluations.

In its resource estimation studies, Gemcom also addressed the problem of assigning an area of influence to the high-grade gold intersections in the Bonanza, Thesis III and BV Zones. It was generally accepted that the erratic high grade values were real and that cutting of assays was not justified. The Bonanza Zone exhibited the most severe nugget effect and to deal with it, Gemcom used the following steps and rationale:
• In order to better determine the effects of erratic high-grade assays at Bonanza, two models were created: an "Undifferentiated Grade Zone Model", in which high-grade assays were not treated any differently than other assays; and a "High Grade Model", in which high-grade zones were delineated and modeled separately from low grade zones.

• "To create the High Grade Model, geological interpretation of high grade zones was performed by Energex geologists in the same manner as the general geological interpretation. Assay values occurring within high grade zones were used to assign block grades within only the interpreted high grade zones.
• Rock type attributes were determined by overlaying digitized mineralized outlines on each section over the matrix of blocks. Blocks falling inside the mineralized outline were given the mineralized rock type; blocks falling outside were given the waste rock type.
• Due to the effects of assigning high grade assays over larger distances, the Undifferentiated Model provides a higher estimate of grade and tonnage than the High Grade Model. In other words, the interpreted High Grade Model restricts the effects of high grade assays to a smaller volume than does the Undifferentiated Model.
• In order to comment on the relative merits of the two estimates, knowledge of the grade distribution is clearly required. Statistical analysis of the assay data indicated that a very high proportion of the metal content of the Bonanaza orebody (over 40%) was coming from a small proportion of the sample data (approximately 15%). Detailed surface bulk sampling has indicated that the high grade values actually exist and are not anomalous or due to sampling errors, so it was felt that effective use of the high grade assays, rather than the arbitrary cutting of them, should be used.
• In using a 30 m search radius for interpolation for all assays, including high-grade assays, an assumption is made that the distribution of high grade assays is not localized. The High Grade Model assumes a more local distribution of high-grade values and is therefore a more conservative estimate of the distribution of high-grade values.
• In their 1988 report, Gemcom stated "It is important to note that the model created with high grade and low grade zones treated separately provides a more realistic representation of the ore body then does the undifferentiated model. Despite its slightly lower grade and tonnage figures, we recommend the use of this model for further ore reserve estimates."

Table 6 summarizes Gemcom's 1988 in-situ reserve estimates for the Bonanza, Thesis III and BV Zones using cut-off grades of 3.5 and 5.0 g/t Au. For the Bonanza Zone, estimates for both the Undifferentiated Grade Zone and High Grade Models are shown.

14.1.2 Cheni Gold Mines Inc. (1992)

Bonanza Zone

After mining 4,700 tonnes from the Ghost Pit in 1991, Cheni manually recalculated the remaining Bonanza mineral inventory for the three zones (Verrenass, Ghost and South Bonanza) which comprise the deposit.

Cheni's 1992 mineral inventory estimate for the Bonanza Zone is summarized in Table 7. The cut-off grade used was 5.0 g/t Au, assays were uncut and no dilution was applied. There is no information on what density value or values were used. The mineral inventory was prepared before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects*. It differs from currently defined resource categories in that the reserves shown in Table 6 would now be reported as mineral resources. Probable reserves would be classified as indicated and possible reserves would now be classified as inferred mineral resources.

Table 6

Ranch Project
1988 Gemcom Resource Summary
(Bonanza, Thesis III and BV Zones)

Zone	Grade Zone Model	Cut-off Grade (g/t Au)	Metric Tonnes	Grade (g/t Au)
Bonanza	Undifferentiated	5	150,950	14.24
	Undifferentiated	3.5	237,680	10.56
	High Grade	5	83,340	14.95
	High Grade	3.5	181,780	9.22
Thesis III	Undifferentiated	5	24,060	14.4
	Undifferentiated	3.5	32,000	11.86
BV	Undifferentiated	5	46,630	12.11
	Undifferentiated	3.5	65,640	9.81

In early 1992, Cheni completed an an internal feasibility study from which it developed a mineable reserve of 36,670 tonnes grading 15.56 g/t Au, using as its basis the Bonanza mineral inventory estimate shown in Table 6. It was based on a gold price of US$355 per ounce, a gold recovery rate of 75%, a strip ratio of 4.75:1 and 25% dilution at zero grade. Cheni never did follow through with its planned 1992 mining of the Bonanza Zone and later wrote the reserve off. Given today's much higher gold prices and higher costs of good and services, Cheni's internal feasibility study data (details of which are not known) are not relevant.

Thesis III Zone

After mining 4,500 tonnes from the high grade Thesis III (A Zone) Pit in 1991, Cheni manually recalculated the remaining Thesis III mineral inventory.

Cheni's 1992 mineral inventory estimate for the Thesis III Zone is summarized in Table 7. The cut-off grade used was 3.5 g/t Au and the densities used were 2.53 for oxide and 2.75 for sulphide. Assays were uncut and no dilution was applied. The mineral inventory was prepared before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects*. It differs from currently defined resource categories in that the reserves shown in Table 7 would now be reported as mineral resources. Probable reserves would be classified as indicated and possible reserves would now be classified as inferred mineral resources.

Cheni eliminated from its "Open Pit Reserves" the southeast extension of the Thesis III Zone because it averaged between 3 to 5 m in width. The relatively narrow width for this segment of the zone, and its attendant high stripping ratio, made it uneconomic to mine from surface. Several high-grade intersections were present in the deleted blocks; there may remain some potential here for the development of additional resources at depth.

Table 7

Ranch Project
1992 Cheni Resource Summary
(Bonanza and Thesis III Zones)

Zone	Cut-off Grade (g/t Au)	Metric Tonnes	Grade (g/t Au)
Bonanza	5	69,225	14.06
Thesis III	3.5	13,012	16.75
BV*	n/a	n/a	n/a

* Cheni did not re-calculate resources at BV after open pit mining in 1991

BV Zone

In the summer of 1991, Cheni reportedly mined 49,790 tonnes grading 10.95 g/t from the BV Pit. Cheni concluded that 3.5 g/t Au was the economic cut-off for an open pit operation at BV in 1991. It reportedly trucked to the Lawyers mill site 32,000 tonnes for later processing and left behind some gold-bearing material in the overburden pile and some below an unstable pit wall.

Cheni's 1991 program mined out the known reserves on this zone, essentially high-grading all of the better-mineralized near surface portion of the deposit. Although Cheni did not manually recalculate remaining resources at BV, there may remain potential here for the development of additional resources at depth or along strike to the northwest and southeast.

14.1.3 Micromine Consulting (Bilki et al., 2007):

Micromine Consulting was commissioned by Christopher James to conduct resource modeling and related studies on the Ranch Project during August to September 2007. Specifically, Micromine carried out a site inspection, an analysis of QA/QC data, a laboratory inspection, resource modeling, model validation and reporting. Only those aspects related to

resource modeling and model validation are discussed in this section. The other items are discussed in Sections 6.4 and 6.5 of this Report. Micromine's report did not evaluate the economics of the project, nor did it address aspects related to mineral processing.

Resource Modeling

Purpose of the resource modeling was to estimate the property's total gold resource from an extensive historical data base supplied to Micromine by Christopher James. The gold resource is contained within eight known mineralized zones, including the past-producing Bonanza, Thesis III and BV zones discussed in Sections 14.1.1 and 14.1.2 above, and the less well explored Ridge, Bingo, Thesis II, BV South and "Ore Body 7" Zones, all of which (except for "Ore Body 7") are described to varying degrees in Section 7.2.3 of the Report. Table 8 presents Micromine's resource summary for all zones using "uncut" and 100 g/t "top cut" gold assay values and cut-off values of 3.5 and 5.0 g/t Au.

Table 8

Ranch Project
2007 Micromine Resource Summary
(All Zones)

Zone	Cut Value for Gold	Cut-off Grade (g/t Au)	Metric Tonnes	Grade (g/t Au)
Bonanza	Uncut	5	135,190	10.95
	Uncut	3.5	216,740	8.4
	100 g/t "top cut"	5	135,190	9.8
	100 g/t "top cut"	3.5	216,740	7.68
Thesis III	Uncut	5	31,990	11.88
	Uncut	3.5	53,670	8.78
	100 g/t "top cut"	5	31,990	10.65
	100 g/t "top cut"	3.5	53,670	8.03
BV	Uncut	5	64,390	11.13
	Uncut	3.5	83,660	9.53
	100 g/t "top cut"	5	64,390	10.9
	100 g/t "top cut"	3.5	83,660	9.35

Table 8 (continued):

Zone	Cut Value for Gold	Cut-off Grade (g/t Au)	Metric Tonnes	Grade (g/t Au)
Ridge	Uncut	5	6,460	5.75
	Uncut	3.5	52,480	4.12
	100 g/t "top cut"	5	6,460	5.75
	100 g/t "top cut"	3.5	52,480	4.12
Bingo	Uncut	5	0	0
	Uncut	3.5	8,730	4.11
	100 g/t "top cut"	5	0	0
	100 g/t "top cut"	3.5	8,730	4.11
Thesis II	Uncut	5	6,300	6,54
	Uncut	3.5	18,340	5.01
	100 g/t "top cut"	5	6,300	6,54
	100 g/t "top cut"	3.5	18,340	5.01
BV South	Uncut	5	480	8.34
	Uncut	3.5	1,140	5.72
	100 g/t "top cut"	5	480	8.34
	100 g/t "top cut"	3.5	1,140	5.72
Ore Body 7	Uncut	5	0	0
	Uncut	3.5	0	0
	100 g/t "top cut"	5	0	0
	100 g/t "top cut"	3.5	0	0

Micromine's resource modeling methodologies are described in bullet form below:

• The resource estimates for all eight mineralized zones were done using using two "top" or assay cuts of 100 and 200 g/t Au; additionally, resource estimates for all zones were done with no top cut applied.

• The Master Data Base at Ranch was constructed from four separate excel data bases, including three drill hole databases (historical, 2006 and 2007) and one trench data base. The trench data base was treated the same way as the drill hole data bases. Drill hole assay totals

include 12,412 (historical), 289 (2006) and 1,389 (2007). There is also a total of 6,275 trench assays in the data base.

• Five-meter topography contours were digitized from plans, imported into MapInfo GIS software and gridded. The grid nodes were then transferred to MICROMINE and used to create a topographic digital terrain model of the area.

• Classical statistical analysis was implemented to estimate the natural cut-off grade for gold mineralization and also to determine the distribution parameters of gold grades. From the log normal gold histogram for all samples, it was estimated that the natural cut-off grade is about 0.5 g/t Au. However, for the interpretation of the gold mineralized envelope(s) on section, a 1.0 g/t cut-off was used. The 1.0 g/t Au grade interpretation was for all eight mineralized zones.

• Before wireframing was undertaken, the following processes were carried out:

(i) Each cross section and plan view was displayed on screen and the interpretation checked;

(ii) All interpreted assay strings were snapped to the corresponding drill hole intervals (i.e. the interpretation was constrained in the 3rd dimension);

(iii) Every drill hole intersection within the mineralized zone was interpreted to ensure the data selection process would be free of errors;

(iv) The interpretation was extended half the distance between the secions lines, from the corresponding first and last interpreted cross section; and

(v) If a mineralized envelope did not extend to the adjacent drill hole section, it was projected half way to the next section and terminated. The general dip and direction of the mineralized envelope was maintained from section to section, where data allowed it to be done.

• Wireframing included the following steps:

(i) The interpreted assay strings were used to generate 3-D solid wireframes for each mineralized envelope;

(ii) Each set of mineralized envelopes that corresponds to a separate zone of mineralization was wire-framed individually and saved as a separate wireframe except for the structurally complex Bonanza Zone, where 5 separate wire-frames were generated;

(iii) A total of 12 wire-frames were created and the following names were used: Bonanza, Bonanza1, Bonanza2, Bonanza3, Bonanza4, Thesis III, BV1 (BV Zone), Ridge, Bingo, Thesis II, BV2 (BV South) and Ore Body 7. Figures 21 to 23 show '"snap-shots" of the 3-D solid wireframes created for the Bonanza, Thesis III and BV zones respectively; and

(iv) Every section (or plan) was displayed on the computer screen along with the closest interpreted section (or plan). If the corresponding envelope did not appear on the next cross section, the former was projected half way to the next section, where it was terminated.

• Solid wire-frames for each mineralized envelope were used to select the drill hole assays which were flagged accordingly. The classical statistical analysis then was repeated for gold within mineralized envelopes.

• An empty block model was created for Bonanza and the other mineralized zone sets separately. The empty block model was restricted to the wire-frame set. A block size of 5 x 5 x 5 m with sub-celling down to 1 x 1 x 1 m was used.

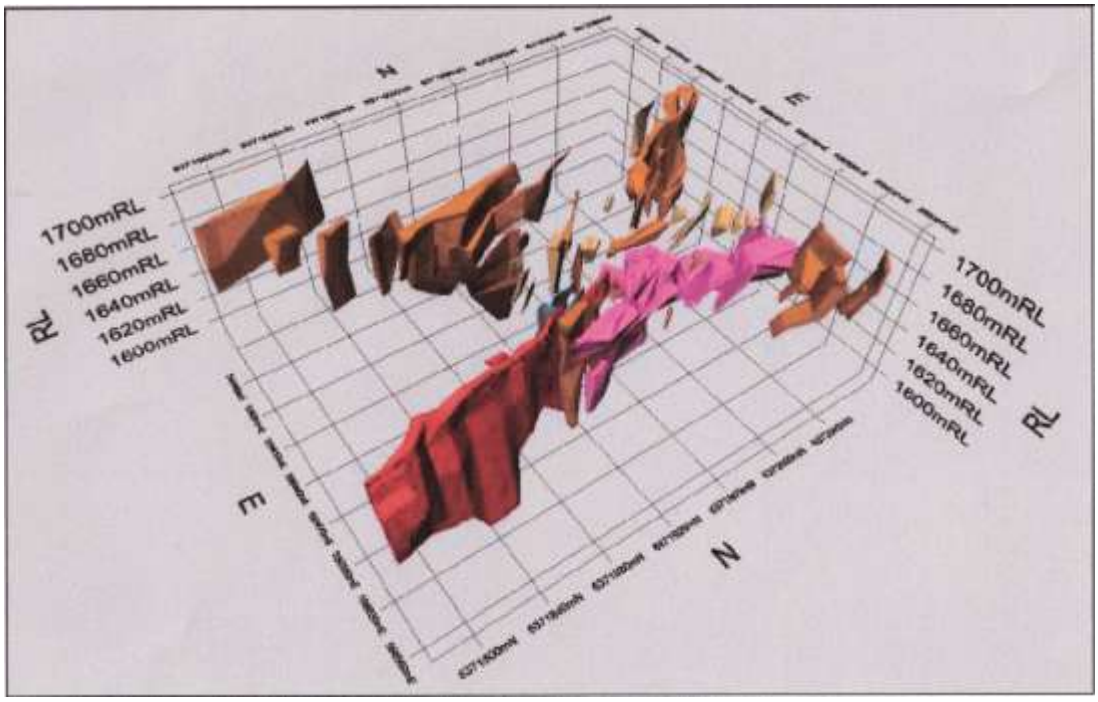


Figure 21: Ranch Project - 3D Wireframe Model (Bonanza Zone)

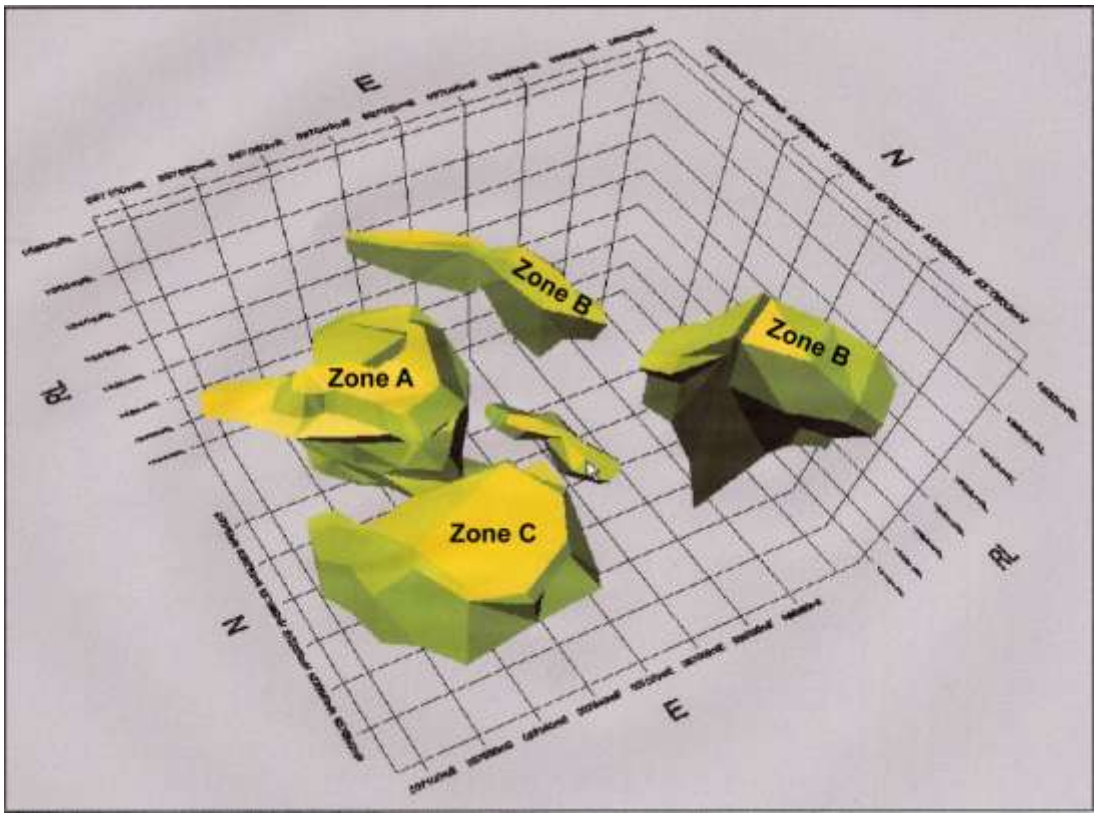


Figure 22: Ranch Project - 3D Wireframe Model (Thesis III Zone)

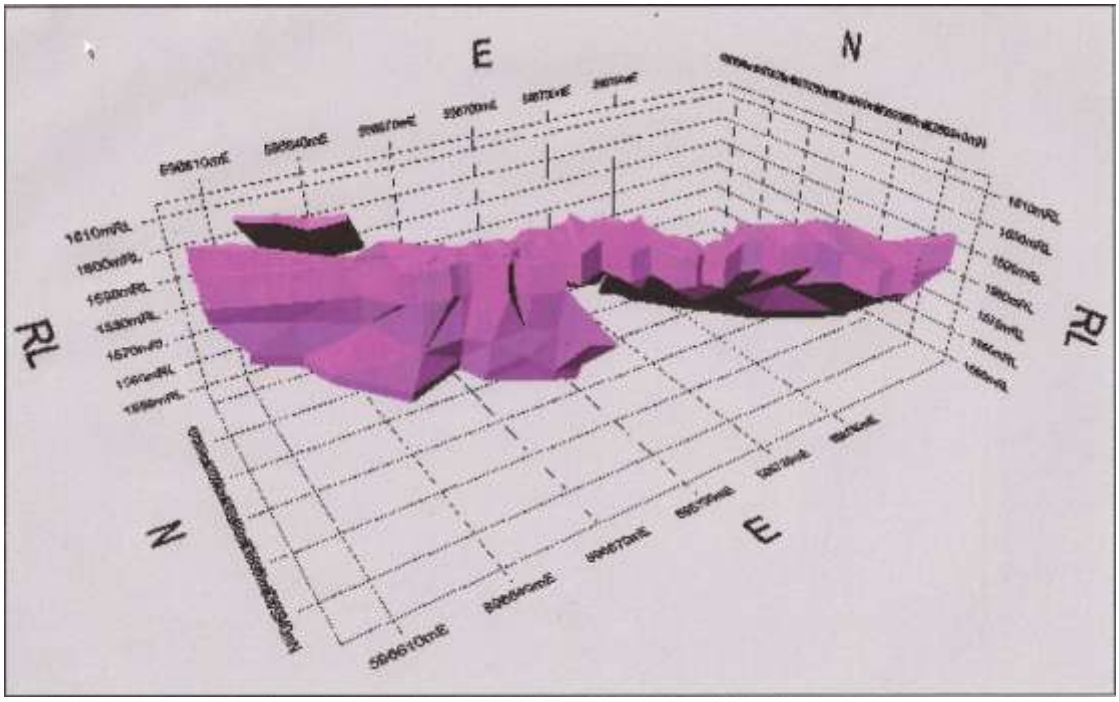


Figure 23: Ranch Project - 3D Wireframe Model (BV Zone)

• Gold grades were interpolated into the empty block model using the Inverse Distance Weighting (IDW) method. The IDW method was used as there were an insufficient number of samples for variography for individual mineralized zones.
• The IDW process was performed at different search radii until all cells were interpolated. The model cells that did not receive a grade estimate from the first interpolation run were used in the next interpolation with greater search radii. If a model cell was interpolated using samples from only one drill hole during the first run, the cell was cleared and was populated in the second run. Subsequent search radii were doubled to interpolate the remaining blocks.
• The IDW^2 and IDW^3 algorithm(s) were used to interpolate the grades. Both processes used the same search ellipsoid parameters.
• Declustering was performed during the interpolation process by using four sectors within the search neighbourhood. Each sector was restricted to a maximum of four points, and the search neighbourhood was restricted to an overall minimum of 3 points for first two runs and to one point for further runs. The maximum combined number of samples allowable for the interpolation was therefore 16.
• The search ellipsoid radii were used to determine the class of the block.
• Specific gravity and moisture were not calculated or measured in the laboratory or at the Ranch Project site. A value of 2.5 t/m^3 was defaulted for all resource estimates.

Model Validation

In order to validate the block models of the various zones, Micromine did the following:
• The generated block models were validated against the wireframe volumes.

• Interpolated grades were plotted on every cross section and compared with the sample grades; a strong correlation was observed between the interpolated grades and the sample grades.
• Visual validation of the sections was also carried out to ensure the interpolation process did not excessively smear the sample grades and to check that the local distribution of grades met the expectations and understanding of the structures.

14.1.4 Discussion of Historical Resource Estimates (1988-2007)

As mentioned above, comparisons between historical estimates on the Ranch Project are somewhat subjective due to a number of factors. Nevertheless, in the discussion that follows, the author has attempted, with certain limitations, to "normalize" comparative data so that reasonably objective comparisons can be made.

As mentioned earlier, Micromine does not clearly state in its October 2007 Report if the tonnages mined by Cheni from the Bonanza, Thesis III and BV Zones were removed from the resource models created by Micromine. In the comparisions made below, the author has assumed that the tonnages mined by Cheni **have not** been removed from Micromine's resource models. If they have, then in several of the comparisons made below, the variances between Micromine's resource estimates and those made by Gemcom and Cheni would be even larger than what is stated below.

Because of several inconsistencies in the comparisons made below, and also because of the significant variance of 2007 diamond drilling results in the central part of the Bonanza Zone versus those derived from earlier historical diamond drilling and trenching programs in the same area (see Section 6.5 of this Report), the author has concluded that it is not possible to classify the historical estimates as current mineral resources or mineral reserves. **The historical estimates summarized in Sections 14.1.1 to 14.1.3 of this Report, and compared below, should not be relied upon.**

Bonanza Zone

Gemcom's 1988 estimate for the Bonanza Zone, using the Undiffrentiated Grade Zone Model (see Section 14.1.1) and a 5.0 g/t Au cut-off, generated an in-situ resource of 150,950 tonnes grading 14.24 g/t Au. Its estimate using the more conservative High Grade Model (see Section 14.1.1) and the same cut-off grade generated an in-situ resource of 85,340 tonnes grading 14.95 g/t Au. These resource estimates do not include the results from 24 diamond drill holes totaling 2,754 m completed in the Bonanza Zone by Energex in 1988. About 30% of these holes returned intercepts grading >5.0 g/t Au and therefore there is likely a modest increase in resources not accounted for in Gemcom's 1988 estimates.

In the summer of 1991, Cheni reportedly mined 4,700 tonnes of ore from the Ghost Pit, in the central part of the Bonanza Zone. They later manually recalculated the remaining "probable and possible" mineral inventory, using a 5.0 g/t Au cut-off, generating an estimate of 69,225 tonnes grading 14.06 g/t Au. This figure compares fairly well with Gemcom's High Grade Model, after adjusting the latter to account for the tonnage mined from the Ghost Pit. Cheni's estimates for Bonanza and the other zones are considered by the writer to be the most

conservative of all past operators, given their operational experience in the area and their likely more realistic approach to resource estimation.

From 1997-2007, three separate drilling programs were completed in the Bonanza Zone by AGC Americas Gold Corp. (1997), Bishop Gold (2003) and Christopher James Gold Corp. (2007). For the most part, these programs overlapped not only one another but also the historical drilling completed in 1988 and earlier. Consequently, the later drilling would not have appreciably added to the Bonanza resource tonnage. Because later drilling returned generally lower grade assays in drill core (see Section 6.5 of the Report), any added resources would have been of lower grade.

One of Micromine's more conservative estimates for Bonanza, using a "top cut" of 100 g/t Au and a cut-off grade of 5.0 g/t Au, generated a mineral resource of 135,190 tonnes grading 9.80 g/t Au. After adjusting Micromine's tonnage down to 130,490 tonnes by subtracting the 4,700 tonnes mined by Cheni from the Ghost Pit, one can compare this resource with the earlier estimates of Gemcom (adjusted for tonnage mined from the Ghost Pit) and Cheni. Gemcom's estimate is 80,640 tonnes grading ~15 g/t Au and that of Cheni's is 69,225 tonnes grading 14.05 g/t Au. Clearly Micromine's tonnage estimate is much larger than that of Gemcom or Cheni. The reason(s) for this are not well understood. The writer doesn't believe that the disparity can be attributed solely to a possible increase in resource tonnage resulting from the drilling programs carried out in 1997-2007.

Paradoxically, when one compares the less conservative resource estimates of Gemcom's Undiffrentiated Grade Zone Model to that of Micromine's that used no "top cutting", with both estimates adjusted for tonnage mined from the Ghost Pit, the comparison is more favourable. In this case, Gemcom's estimate is 146,250 tonnes grading ~14 g/t versus Micromine's estimate of 130,490 tonnes grading about 11 g/t Au. Tonnage-wise, these estimates are of a similar magnitude and the lower grade of Micromine's estimate can be atttibuted to the generally lower gardes encountered in the 1997-2007 drilling programs.

Thesis III Zone

Gemcom's 1988 estimate for the Thesis III Zone, using only the Undifferentiated Grade Zone Model and a 3.5 g/t Au cut-off, generated an in-situ resource of 32,000 tonnes grading 11.86 g/t Au. This resource estimate does not include the results from 2 diamond drill holes totaling 192 m completed in the Thesis III Zone by Energex in 1988. One hole cut a narrow core length grading >3.5 g/t Au; therefore Energex's 1988 drilling would have resulted in only a minimal increase in the resource.

In the summer of 1991, Cheni reportedly mined 4,500 tonnes of ore from the Thesis III "A" Pit. They later manually recalculated the remaining "probable and possible" mineral inventory, using a 3.5 g/t Au cut-off, and generated an estimate of 13,012 tonnes grading 16.75 g/t Au. This figure does not compare well with Gemcom's estimate, after adjusting the latter to account for the tonnage mined from the "A" Pit. Gemcom's adjusted total is 27,500 tonnes grading about 12 g/t Au. Had Gemcom created a High Grade Model using similar criteria as

for that at Bonanza, perhaps its estimate for Thesis III may have compared more closely with that of Cheni.

In 1997 and 2006-07, two separate drilling programs were completed by AGC and Christopher James in the Thesis III area. Although the particulars of these programs have not been reviewed by the author in detail, it is believed that for the most part this drilling overlapped earlier historical drilling. It is likely that the 1997 and 2006-07 drilling did not result in a significant increase in tonnage for the Thesis III Zone.

Regarding Micromine's 2007 resource estimates for the Thesis III Zone, the author has compared its 100 g/t "top cut" estimate, adjusted to account for the tonnage mined from the "A" Pit, to Cheni's "probable and possible" mineral inventory manually recalculated after completion of mining at Thesis III. Both estimates used a 3.5 g/t Au cut-off. Micromine's adjusted estimate is 49,170 tonnes grading ~8 g/t Au versus Cheni's estimate (as stated above) of 13,012 tonnes grading 16.75 g/t Au. The tonnages and grades for these two estimates compare poorly.

A comparison was also made between Micromine's "uncut" resource estimate and Gemcom's Undifferentiated Grade Zone Model resource estimate; both were adjusted for tonnage mined from the "A" Pit and both used a 3.5 g/t Au cut-off. In this case, Micromine's estimate is 49,170 tonnes grading ~9 g/t Au versus Gemcom's estimate of 27,500 tonnes grading about 12 g/t Au. The variance in tonnage is considerable and likely cannot be explained solely by a possible increase in tonnage resulting from the 1997 and 2006-07 drilling programs at Thesis III.

BV Zone

Gemcom's 1988 estimate for the BV Zone, using only the Undifferentiated Grade Zone Model and a 3.5 g/t Au cut-off, generated an in-situ resource of 65,640 t grading 9.81 g/t Au. In the summer of 1991, Cheni reportedly mined 49,790 tonnes from the BV Pit (32,000 tonnes of which was reportedly shipped to the Lawyers mill). Therefore, after cessation of mining at BV, Gemcom's adjusted in-situ resource would have been 15,850 tonnes grading ~10 g/t Au. Cheni did not recalculate a remaining resource and considered the BV Zone mined out. Post-mining at BV, there has been no additional exploration carried out on the zone.

A comparison was made between Micromine's "uncut" resource estimate and Gemcom's Undifferentiated Grade Zone Model resource estimate, with both estimates adjusted for tonnage mined from the BV Pit and both using a 3.5 g/t Au cut-off. Micromine's estimate is 33,870 tonnes grading ~9.5 g/t Au versus Gemcom's estimate of 15,850 tonnes grading ~10 g/t Au. The variance in tonnage is considerable and is difficult to explain, given the fact that in the time interval between completion of the two resource estimates, no exploration work has been carried out.

14.2 Resource Estimates by Guardsmen

To date, Guardsmen has carried out no resource modeling or resource estimations on any of the known gold deposits on the Ranch Project.

15.0 ADJACENT PROPERTIES

In preparing this section of the report, the writer relied mainly upon public domain minfile descriptions and assessment reports for three developed prospects, all of which are covered by adjacent or nearby external competitors' claims and by definition, are considered Adjacent Properties. A supplementary source of information for this section was Hawkins' 2006 Technical Report on the Ranch Property. All assessment report references are listed in Section 19 of the report, as is Hawkins' Report, and the property locations are shown on Figure 11. **Readers are cautioned, however, that the author of this Report has not verified the presented information and it is not necessarily representative or indicative of mineralization found on the Ranch Project.**

15.1 Developed Prospects

15.1.1 Mets

The Mets deposit, situated on Metsantan Mountain, is located about 4 km southeast of the Bonanza Zone. It was discovered by Golden Rule Resources Ltd. in 1980 and is currently covered by Mining Lease # 314708 which is 100% owned by Rupert Allen of North Vancouver, B.C. The property hosts several quartz-barite breccia zones for which Golden Rule, from surface diamond drilling and trenching, defined a historical "measured geological resource" of 143,321 tonnes @ 11.31 g/t Au on the "A" Zone (Evans, 1988). This historical estimate was completed before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects* and uses categories other than those stipulated for current use.

Cheni Gold Mines optioned the property in July 1992. From the above historical resource estimate, Cheni estimated a "probable geological reserve" of 75,000 tons grading 0.384 oz. Au per ton (Cheni, 1992). This revised historical estimate was completed before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects.* It uses categories other than those stipulated for current use. The "probable geological reserve" would now likely be classified as indicated mineral resources.

By September 1992, Cheni had developed the property (using trackless equipment) with a 60 m decline to cross-cut the "A" Zone and a 120 m-long exploration drift along the zone, mining about 2,300 tonnes of ore and 3,700 tonnes of waste. After the underground program, Cheni estimated diluted reserves of 53,357 tonnes @ 12.0 g/t Au (Cheni, 1992). These historical diluted reserves would likely be comparable to the current CIMM classification for probable reserves. Later in 1992, with additional data, Cheni recalculated mineable reserves to be 48,564 tonnes @ 11.62 g/t Au. These historical mineable reserves would be comparable to the current classification for proven reserves but would have likely been subsequently downgraded to inferred mineral resources. The reduction of reserves was in part due to a grade reduction based on underground sampling of the zone.

The above historical estimates are relevant to other mineral deposits of the area, including those on Ranch, as they illustrate the application and impact of underground

development, detailed underground sampling, dilution and mining recovery on preliminary resource/reserve estimates, as work progresses on developing a deposit.

Cheni's program also determined there were acid rock drainage issues with the ore; during site reclamation, Cheni put all of the ore and most of the waste back underground. The property was subsequently returned to Golden Rule because of low gold prices.

The Mets developed prospect consists of a tabular core of silicified rock in three separate but genetically linked zones: the A Zone (and its extension), the Footwall Zone and the 400 South Zone. The A zone has a strike length of 140 m, a true thickness of 6 to 10 m and a vertical extent of up to 75 m; it strikes 340° and dips 70°-85° to the west. A mineralized shoot within the A zone has a gentle northwest plunge.

The A Zone is hosted by a quartz-barite breccia zone which occurs near the vertical contact between a footwall andesite and a hangingwall dacite unit. Steeply-dipping, thin breccias generally are higher in grade; when the breccia orientation flattens, such as at depth, grades drop off rapidly. Native gold is the primary ore mineral present with rare occurrences of electrum, argentite, tetrahedrite, pyrite and galena. Gold occurs as free grains and flakes 0.005-2 mm in diameter, adjacent to fragments of quartz and barite within the breccia system. Sulphide mineralization is practically nonexistent in the A Zone.

At its northern end, the A Zone is truncated by the N75 fault, a vertical graben structure striking 050° and dipping 80° south. The block of rock north of the fault is down-dropped, with up to 110 m of vertical displacement. In 1987, deep drilling north of the fault intersected a 4 m wide quartz breccia body (the N75 or A Extension Zone) from which intercepts yielded values ranging from 0.85 g/t Au across 4 m to 22.83 g/t Au across 7.1 m.

The Footwall Zone is a quartz-carbonate breccia body situated within the footwall andesite unit. It has been exposed over a 260 m strike length and is interpreted to strike 340°, with an indeterminate dip. It pinches and swells with a maximum width on surface of 4 m. Its Ag:Au ratio is 2:1 or greater contrasting with a Au:Ag ratio of 10:1 or greater for the A Zone. A one-metre channel sample across it assayed 19.81 g/t Au and 127.86 g/t Ag; a drill intersection of it assayed 19.29 g/t Au over 0.7 m.

Drilling in 1987 also intersected the 400 South Zone, a narrow auriferous quartz breccia body at the same andesite-dacite contact along which the A Zone occurs. Drill intercepts through this zone include 4.11 g/t Au over 1.6 m and 8.03 g/t Au over 1.0 m.

Alteration at the Mets deposit consists of an extensive outer propylitic zone (epidote, chlorite, rare pyrite) and a proximal advanced argillic zone (sericite, kaolinite, dickite) enveloping inner silicic (quartz +/- barite) zones, in both the hangingwall and footwall rocks to the silicic zones. Argillic alteration is primarily developed within the footwall side of the deposit where the alteration envelope can range up to 40 m in thickness.

15.1.2 Golden Stranger

The Golden Stranger developed prospect is located about 12 km south of the Bonanza Zone on claims now owned by Stephen Gower of Parksville, B.C. The original gold-silver showings on the property were discovered by Western Horizons Resources Ltd. in 1983.

The prospect hosts low sulphidation, adularia-sericite type epithermal mineralization hosted by Metsantan Member trachyandesite flows of the Lower Volcanic Cycle of the Toodoggone Formation. The volcanic wall rocks are cut by a series of north to northwesterly-trending fracture/fault systems, along which aplitic dike-like bodies are present. Multistage quartz veining and silicified breccias crosscut both the altered volcanics and the aplitic rocks.

Two divergent breccia zones comprise the Main and West Zones. The Main Zone consists of a quartz vein/breccia system striking northerly with a near-vertical dip. The zone is 50 m wide and extends for 450 m in length. Pyrite, galena, sphalerite, chalcopyrite, chalcocite and covellite are hosted in a quartz-amethyst breccia zone developed at the contact of a trachyandesite unit and an aplite dike. A 1986 trench in the northern part of the Main Zone yielded an interval of 3.9 m grading 14.4 g/t Au; the most southerly trench on the zone, located 390 m along strike, yielded 1.37 g/t Au over 4.0 m. In 1988, drilling on the Main Zone returned several significant intercepts, including 11.55 g/t Au and 6.20 g/t Ag over 3.05 m and 5.99 g/t Au and 12.35 g/t Ag over 3.05 m. True widths of these intercepts are not known.

The West Zone vein-breccia system is not as well-developed as the Main Zone. Drill-testing of it in 1988 returned some low-grade values, including 0.03 g/t Au and 3.1 g/t Ag over 3.1 m and 2.07 g/t Au over 15.0 m. True widths of these intercepts are not known.

Preliminary data on the Main Zone indicates a mineral resource of 498,905 tonnes grading 2.74 g/t Au (Sutton Resources Ltd. report to shareholders, March 30, 1989). This historical estimate was completed before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects.* It uses categories that are not well defined and do not conform with those stipulated for current use.

15.1.3 JD

The JD developed prospect is located about 14 km southeast of the Bonanza Zone on claims now owned by Cameron Scott of Alberni, B.C. Attention first focused on the area in 1931 when a prospector was reported to have taken several thousand dollars worth of gold from placer workings. Much later, in 1971, Sumac Mines Ltd. staked claims in the area to cover lead and zinc showings hosted in quartz veins. Subsequent soil geochemical surveys nearby outlined a 1,500 m-long zone with anomalous silver, lead, zinc and copper values.

Claims covering the JD prospect were optioned by AGC Americas Gold Corp. in 1994. From 1994-98, AGC carried out a substantial amount of diamond drilling and ancillary geochemical and geophysical surveys and discovered two main zones of interest, named Finn and Creek. The Finn Zone is a high sulphidation epithermal-type gold deposit with important values in silver, copper, lead and zinc. It is a structurally-controlled, 600 m long by 400 m

wide, east-west trending zone consisting of a tabular, shallowly-dipping, 15 m thick body of gold-bearing brecciated and silicified rock, enveloped by a large quartz-carbonate vein stockwork with disseminated and massive base metal sulphides. AGC concluded that the mineralized setting of the Finn Zone should perhaps be viewed as a large high-sulphidation epithermal system overlapping with porphyry-style mineralization at depth.

The high-grade polymetallic Creek Zone was discovered by drilling in 1997 and became the focus of exploration in 1998. Hole 97-08 intersected 103.3 g/t Au, 92.2 g/t Ag, 1.34% Cu, 0.46% Pb and 11.7% Zn over 4 m. The true width of this intercept is not known. In 1998, eleven holes were drilled to follow-up the high-grade intersection; results confirmed the presence of stockwork mineralization but overall grades were lower.

A possible mineral resource on the Finn Zone was estimated to be 147,889 tonnes grading 4.40 g/t Au (George Cross News Letter, No. 9, January 13, 1995). This historical estimate was completed before the coming into force of NI 43-101 *Standards of Disclosure for Mineral Projects.* It uses categories other than those stipulated for current use.

In September 2011, the JD property was optioned by Tower Energy (now Tower Resources Ltd.). Tower believes there is potential on the JD property to discover a lower grade, bulk-tonnage gold and silver deposit. In a news release dated August 29, 2012, Tower reported results of its first three confirmation drill holes in the Finn Zone, including a near-surface intersection of 12.6 m grading 10.82 g/t Au and 65.70 g/t Ag. In a later news release dated September 19, 2012, Tower reported the discovery of gold mineralization in the footwall of the Finn Zone. Hole JD-12-009, collared in the footwall, intersected 18.0 m grading 1.74 g/t Au and 4.23 g/t Ag from 3.1-21.0 m, followed by 11.0 m grading 2.48 g/t Au and 5.49 g/t Ag from 29.0-40.0 m.

Tower's 2013 exploration drilling in the eastern part of the JD project area discovered porphyry-style quartz-sericite-pyrite alteration and associated anomalous copper mineralization coincident with a Cu-Au-Ag-Te soil geochemical anomaly, an 800 m by 800 m aeromagnetic high anomaly and a large IP chargeability anomaly (Tower news release dated October 4, 2013). Tower concludes that a program including deep penetrating IP surveys followed by diamond drilling are warranted to fully test the porphyry potential of the JD Project.

16.0 OTHER RELEVANT DATA AND INFORMATION

16.1 Wright Engineers Limited's Feasibility Study (1988)

In 1988, Energex commissioned Wright Engineers Limited of Vancouver, B.C. to complete a Feasibility Study for a proposed 200 ton per day milling and seasonal heap leach mining operation on the Al (Ranch) property. The author reviewed Wright Engineers' October 1988 Project Feasibiliy Report and concluded that while **many of its conclusions and cost assumptions are outdated and therefore not relevant**, several of its basic operational assumptions still have some relevance and could be applied to a possible future mining operation on the Ranch Project.

Some basic operational assumptions of the 1988 Feasibility Report that still have some relevance are briefly described below:

• Pit designs and concentrator feeds were based upon a 3.5 g/t Au cut-off; heap leach feed was based upon a 2.0 g/t Au cut-off within the designed pits. These cut-off values were determined using a gold price of US$450 per oz. In today's US$1,200-1,300 per oz. gold price regime, corresponding cut-off values would likely be lower.

• As a worst case scenario, Wright Engineers carried out an economic analysis for a milling operation only, with no heap leaching. Any future economic analysis on the Ranch Project should also consider this scenario, as heap leaching at this northern B.C. location may prove to be uneconomic.

• Three small pits were designed to be worked by a mining contractor on 5 m benches with standard drilling and blasting followed by front-end loaders placing ore into trucks. The shallow benches, together with extensive blast hole sampling and geological control, would have allowed for excellent sorting at the mine face. These selective grade control measures were to have been employed to minimize dilution; they could still be successfully applied.

• Preliminary specific gravity test results indicated that densities were about 6-10% higher than those used for sulphide process feeds in reserve calculations. Because the sulphide feed made up the largest portion of the 1988 reserve base, a possible upward adjustment of it could have positively impacted profitability of the proposed project.

• In the BV Zone, no significant environmental concerns about acid mine drainage from the waste dumps were identified. Wright Engineers made mention of plans to back-fill the Bonanza pit with Thesis III waste as mitigation for acid mine drainage. Futher studies on this subject will be required for any future possible mining operation at Ranch.

• Wright Engineers concluded that numerous other gold-mineralized zones on the Al (Ranch) property could reasonably be expected to develop additional reserves with further exploration work. This expectation is still valid. Reserve increases would substantially impact profitability after pay-back of fixed capital costs and would allow for the expansion and extension of mine life for any possible future mining operation on the Ranch Project.

• Wright Engineers recognized the short construction season at Al (Ranch), lasting from July to September. They anticipated a 5-month open pit mining season. These operational time constraints haven't changed.

• The two-year project proposed in 1988 was sensitive to project execution and operating parameters. Wright Engineers recommended that a committed, experienced team be employed

to manage the project. The same type of management team would be required for any future possible mining operation at Ranch.

• In the 1988 Feasibility Study, it was suggested that possible savings on mining and concentrate truck hauling costs could be achieved (eg. back-hauling of concentrates on the ORAR). Similar potential savings could possibly be achieved for any future Toodoggone-located mining operation.

16.2 Other Relevant Data and Information

The author is not aware of any other data or information not included in the Report that would make it misleading or would influence the author's opinion of the Ranch Project.

17.0 INTERPRETATION AND CONCLUSIONS

In this section, the author presents his interpretation and conclusions for the Ranch Project. He has completed a thorough review of all available historical data, including detailed reviews of five major technical reports covering a multitude of topics related to the exploration, development and past mining activity on the property. Overall, the author is satisfied that the density and reliability of historical data is equal to that which normally accompanies developed prospects such as those on the Ranch property.

The author's 2013 site visit to the Ranch Project has given him additional insights into the exploration potential of the nine gold-bearing zones which were examined. The knowledge gained from this field examination is reflected in his interpretation and conclusions that are discussed in the respective sub-headings below.

The main uncertainties that could affect the reliability or confidence in the exploration information on the Ranch Project are: (i) the uncertainty regarding historical drill core and trench assay data in the central part of the Bonanza Zone, as discussed in Sections 6.5.2 and 6.5.3 of the Report: and (ii) the unexplained variance of historical resource estimates in the Bonanza, Thesis III and BV Zones, as discussed in Section 14.1.4. Some steps or work that could be undertaken to mitigate these uncertainties are discussed in Section 18.0.

The author is unaware of any additional foreseeable risks or uncertainties that may impact the project’s potential economic viability.

17.1 Known Gold-Bearing Zones

17.1.1 Bonanza Zone

The Bonanza Zone has been extensively explored by several past trenching and diamond drilling programs which successively yielded only incremental increases to its resource base because of the tendency of past operators to overlap one anothers' work areas without specifically designing their programs to test potential extensions to the zone. One exception to this was the 2007 drilling program carried out by Christopher James which attempted, without success, to expand resources to depth.

The Bonanza Zone represents the largest near-surface gold resource that could be potentially mined by open pit methods, but unfortunately the reliability of its resource estimates remains uncertain, mainly due to the fact that drilling programs carried out during the period 1997 to 2007 failed to replicate higher assay results indicated by earlier drilling and trenching campaigns completed from 1983-88. Because all remaining core and likely all rejects and pulps are no longer available, it is impossible to confirm the 1983-88 assays, leaving resolution of this problem unresolved.

17.1.2 Thesis II and III Zones

Thesis III Zone

At Thesis III, drilling by Christopher James and earlier workers has shown that higher-grade intercepts were encountered mainly at relatively shallow depths ranging from 10 to 30 m below surface. The presence of mineralized silica zones at depth, albeit low grade, may indicate that there is some potential for adding resources at depth.

Comparisons of historical resource estimates, namely those carried out by Gemcom (1988), Cheni (1992) and Micromine (2007) indicate that the remaining resource, post-mining by Cheni in 1991, is modest in size and not clearly established due to inconsistencies between historical resource estimates which, for the most part, did not compare well (see Section 14.1.1).

Thesis II Zone

Past drilling at Thesis II indicates an increase in grade in the southeastern part of the zone; better gold mineralized shoots here may plunge to the southeast. Hole 88-47, at the southeastern end of the zone, returned 3.45 g/t Au over a core length of 33.3 m, including an 11.0 m sub-interval grading 8.02 g/t Au. True widths of these intercepts are in the order of 12 m and 4 m respectively. The intercept midpoint is about 60 m vertically below surface. A modest amount of diamond drilling is required to follow-up on the encouraging results from Hole 88-47.

Micromine's 2007 resource estimate for the Thesis II Zone, using "uncut" gold asays and a cut-off grade of 3.5 g/t Au, is 18,340 tonnes grading 5.01 g/t Au. There are no other comparative historical resource estimates available that might validate this estimate, which is not compliant with NI 43-101 *Standards of Disclosure for Mineral Projects*. There is potential to expand this resource, should additional drilling in the southeastern part of the zone return positive results.

17.1.3 BV Zone

The BV Zone has been explored by trenching and drilling over a strike length of about 350 m; most of the historical work, including Cheni's past open pit production, has taken place within a 180 m-long segment in the central part of the zone. Historical drilling indicates that gold mineralzation in the BV Zone persists to at least 50 m below surface and, although narrowing, it reportedly remains open along strike in both directions.

After cessation of mining, Cheni did not recalculate a remaining resource and considered the BV Zone mined out. Adjusting the resource estimates of Gemcom (1988) and Micromine (2007) for the 49,790 tonnes mined by Cheni, a small resource is indicated to remain at BV. However, similar to Thesis III, this resource is not clearly defined due to inconsistencies between the two historical resource estimates (see Section 14.1.4). Additional resource potential may be present along strike and at depth in the BV Zone.

The multi-ounce gold assay (267.4 g/t Au or 7.80 oz. Au per ton) of 2013 verification sample BBR-14R, taken from a 0.6 meter-long channel sample collected on the east wall of the pit across a porion of the northeast-dipping BV vein, indicates that there may be potential for delineating a small tonnage of high grade material amenable to selective open cut extraction.

17.1.4 Ridge Zone

In the hematitic silicified structure that hosts the Ridge Zone, the average gold grade is lower and the silver grades are generally higher than those typically found in mineralized zones elsewhere on the property. Near the southwest end of the zone, a 150 to 200 m-long segment contains a single mineralized zone which starts at 30 m below surface and persists to a vertical depth of at least 150 m. This mineralization is considered to represent an example of an uneroded, intact, “blind” mineralized shoot; other hidden zones like it could be hosted by silicified zones eleswhere on the Ranch property.

Micromine's 2007 resource estimate for the Ridge Zone, using "uncut" gold assays and a cut-off grade of 3.5 g/t Au, is 52,480 tonnes @ 4.12 g/t Au. There are no other comparative historical resource estimates available that might validate this estimate, which is not compliant with NI 43-101 *Standards of Disclosure for Mineral Projects*.

At the southwestern end of the Ridge structure, a southeast-directed fault offset segment (known as the "South Ridge Zone") was tested by surface trenching in 1986. Trench TA86-109 exposed a mineralized silica interval grading 2.10 g/t Au across 16.2 m. It appears that this zone has not been drill-tested; diamond drilling here may demonstrate that higher grade mineralization may be present at depth.

17.1.5 Mickey Zone

Christopher James' 2007 drill test of the Mickey Zone failed to intersect any gold-bearing zones of interest below a north-trending zone of mineralized siliceous felsenmeer which returned values in grab samples up to 80.56 g/t Au. The drilling did, however, encounter several favourable silicified intervals at vertical depths ranging from about 90 to 140 m. It could be that had the drilling at the Mickey Zone targeted it at shallower depths, any silica-altered zones encountered may have had higher precious metals contents, similar to the relatively shallow gold-bearing zones at Bonanza.

There is the possibility that some or perhaps all of the 2006 surface sampling on the Mickey Zone may not have been taken from bedrock or subcrop, but rather from transported blocks of mineralized rock sourced from an area other than that tested by the 2007 drilling. This possibility has been further advanced by the 2013 observation of a sub-rounded float(?) boulder (see Plate 5 on page 85) near the southern end of the Mickey Zone. The boulder is near Christopher James' 2006 sample #7879 which returned a gold value of 739 ppb Au.

17.1.6 Bingo Zone

The copper and silver-rich Bingo Zone, from which individual 0.5 m-long core sample lengths in historical drill holes returned values up to 3.92% Cu and 243.0 g/t Ag, is an underexplored zone which warrants additional drilling. Of particular interest are deeper drill intercepts encountered in the southeastern part of the zone, where values to 1.23 g/t Au, 5.68 g/t Ag and 0.29% Cu over 44.0 m occur in pyrite and chalcopyrite-bearing silica-altered rock. The true widths of this and other nearby intercepts are not known.

Micromine's 2007 resource estimate for the Bingo Zone, using "uncut" gold asays and a cut-off grade of 3.5 g/t Au, defined a small resource of 8,730 tonnes grading 4.11 g/t Au. This estimate is not compliant with NI 43-101 *Standards of Disclosure for Mineral Projects*. There is good potential to expand the known resource by carrying out further diamond drilling in the southeastern part of the zone.

17.1.7 Albert's Hump and BBX Zones

The broad zones of dominantly alunitic or quartz-alunitic alteration in the Albert's Hump and BBX Zones are thought to represent the upper levels of a high-sulphidation epithermal system, below which gold-mineralized zones of some size may be present (see Section 8.2 and Figure 19).

Limited historical drilling at Albert's Hump encountered altered zones containing anomalous lead, zinc and silver values, but low gold values. This drilling was done without the aid of a geophysical survey method such as 3D-IP, now commonly used to detect potentially gold bearing silica-altered zones at depth. A 3D-IP survey will be required in the Albert's Hump and BBX Zones prior to any further drill testing in these areas.

At one locality in the Albert's Hump area, 2013 composite chip sample BBR-11R, taken from a pervasively silicified outcrop within a large zone of alunite alteration, returned a weakly anomalous value of 113.2 ppb Au. This result demonstrates that at Albert's Hump, as at many other gold-bearing zones on the Ranch property, there is a positive correlation between silica alteration and gold mineralization.

17.1.8 South Hump Zone

Exploration of the under-explored South Hump target area will require trenching followed by 3D-IP surveying and diamond drilling in order to evaluate the resource potential of its gold-bearing silicified zones. Recommended work is described in Section 18.1.2.

17.1.9 Patti Zone

Lacana's limited 1986 diamond drilling in the large silica-clay +/- alunite alteration zone at Patti returned some encouraging results, including an intercept (true width unknown) of 2.91 g/t Au over 6.0 m from 58.0 to 64.0 m in Hole LM-86-4. Lacana concluded that the

drilling may have tested part of a weakly mineralized silica cap overlying a possible buried precious metals deposit at depth. Deeper drilling will be required to test this hypothesis.

The high grade gold values of BBR-09R (up to 69.0 g/t Au) confirm reported historical high grade values in barite veins which cut a large outcrop of intensely silicified rock in the southern part of the Patti Zone (see Figure 16 on page 91). This outcrop is assymetrically enclosed within a large zone of clay alteration, suggesting that other prospective, but concealed silica-altered zones may be present nearby. 3D-IP surveying should precede drilling at Patti in order to optimize targeting of any future drill holes.

17.1.10 Golden Furlong Zone

The silica +/- hematite-altered zone at Golden Furlong is similar to that at the Ridge Zone where drilling discovered a "blind" mineralized zone containing a modest gold resource. At depth in the Golden Furlong Zone, a 1982 drill hole encounted several narrow zones containing 1-3% finely disseminated pyrite and traces of chalcopyrite associated with anomalous values up to 425 ppb Au and 10.2 ppm Ag. These sulphide zones may be proximal to a "blind" gold-mineralized zone of unknown size and grade.

17.1.11 Other Minfile Occurrences

Several other gold prospects occur at various locations on the Ranch property; they are described in Section 7.2.3 of this Report. Historically, they have been considered to be of a lower priority than the zones described above; one or more may develop into target areas warranting further work, including drilling. Interpretive comments for the BV South and Steve's Zone are presented below.

BV South Zone

Ten diamond drill holes tested the BV South Zone over a strike length of about 100 m. Micromine's 2007 resource estimate for this zone, using "uncut" gold assays and a cut-off grade of 3.5 g/t Au, is 1,140 tonnes @ 5.72 g/t Au..There are no other comparative historical resource estimates available that might validate this estimate, which is not compliant with NI 43-101 *Standards of Disclosure for Mineral Projects*.

The association between the BV South and Ring Zones remains uncertain, but similarities in alteration styles and their proximity to one another suggests that the two zones may be structurally related.

Steve's Zone

The large silicic-argillic alteration zone at Steve's Zone may represent the upper levels of a high-sulphidation epithermal system, below which gold-mineralized zones of some size may be present. In this respect, it is similar to the Albert's Hump and Patti Zones and as such, warrants further work. No back-hoe trenching or drilling has been carried out in this zone. As

at the Patti Zone, 3D-IP surveying should precede drilling in order to optimize targeting of drill holes.

17.2 Geochemical Targets (Gold)

17.2.1 Gold-in-Soil Anomalies

Gold results of past property-wide grid soil surveys were discussed in Section 6.2.1 of the Report. The up-ice source of several soil anomalies (eg. the one southwest of the BV Zone, the cluster of gold anomalies on the north side of Albert's Hump and another cluster between Patti and Steve's Zones) has not been located; these areas and others like them warrant follow-up prospecting and rock geochemical sampling.

A large gold-in-soil anomaly is present north of the Bonanza Zone (see Figures 3 and 17 on pages 25 and 96 respectively). Although the author suspects that the majority of this anomaly represents down-ice glacial transport of eroded, mineralized bedrock from the Bonanza Zone, there appears to have been been insufficient trenching of the anomaly to fully confirm this suspicion. There is the possibility that at least part of the anomaly may be reflecting the presence of in-situ gold mineralization. Additional back-hoe trenching is required to either upgrade or down-grade this target area. Positive trench results here would necessitate additional back-hoe trenching followed by diamond drilling.

17.2.2 Gold-in-Rock Anomalies

Surface gold-in-rock results from an extensive historical data base were discussed in Section 6.2.2 and compiled in Figure 4. Most anomalous sites are located in or adjacent to known areas of gold mineralization. Two prominent exceptions to this are the many anomalous sites located in the Mickey Zone, discussed earlier in Sections 7.2.3 and 17.1.5, and a second cluster of anomalous sites located a short distance to the north of the Mickey Zone.

The Mickey Zone should be re-evaluated in order to determine whether the anomalous 2006 surface rock samples were taken from bedrock/subcrop or from transported float. Follow-up work should include back-hoe trenching in selected areas. In the area north of the Mickey Zone, prospecting and rock geochemical sampling should be carried out; its objective would be to locate anomalous gold concentrations in bedrock or subcrop.

17.3 Geophysical Targets

17.3.1 Aeromagnetic Anomalies

Results of the 2007 helicopter-borne magnetic gradiometer survey were discussed in Section 6.2.3. The most important finding of the survey was the identification of several roughly circular, elongate or linear aeromagnetic highs thought to represent high-level stocks or dikes which may have provided the "heat engine" for the large volcanic-hydrothermal system developed on the Ranch property. One or more of them may be spatially related to high sulphidation epithermal gold mineralization and/or buried porphyry-style copper-gold

mineralization. Their locations are an important guide to the future placements of additional 3D-IP survey grids in the southwestern and western parts of the property.

17.3.2 3D-IP Resistivity and Chargeability Anomalies

Results of the 2007 3D-IP survey were discussed in Section 6.2.4. The survey was successful in defining a number of coincident resistivity-chargeability anomalies outside of known zones of gold mineralization; some of these may be indicative of auriferous, sulphide-bearing silicified zones at depth. Although the author is encouraged by the generally positive results of the 2007 survey, he feels that it is necessary to upgrade the resolution and quality of the Ranch 3D-IP data base prior to the drill testing of geophysical targets. A survey method for accomplishing this upgrade is recommended in Section 18.1.3.

West-southwest of the Thesis II and III zones, there is a coincident chargeability-resistivity-magnetic anomaly which may be related to a sulphide-bearing, porphyry-type intrusion at depth. Additional, higher resolution 3D-IP survey work is required to fully delineate this target. The initial testing of it will require deep diamond drilling, with vertical hole depths in the order of 400 to 500 m.

18.0 RECOMMENDATIONS

A Phase 1 Exploration Program ("Phase 1") estimated to cost $3,884,530 is recommended for the Ranch Project (Table 9). A success-contingent Phase 2 Program ("Phase 2") is estimated to cost $6,511,375 (Table 10). Components of the two programs are described under separate sub-headings below.

18.1 Phase One Exploration Program

The recommended Phase 1 Program, estimated to cost $3,884,530, consists of diamond drilling, excavator trenching, 3D-IP surveying, prospecting and rock geochemical sampling, and resource estimation studies. The work components are briefly discussed under separate sub-headings below.

18.1.1 Diamond Drilling

A total of 1,500 m of NQ diamond drilling is allocated to test for potentially economic mineralization within or adjacent to three known, but under-explored gold-bearing zones, namely Bingo, Thesis II and South Ridge. Hole depths will vary from about 100 m in the South Ridge Zone to about 250 to 300 m in the Bingo Zone. The rationale for drilling in these zones is presented in the pertinent sub-sections of Section 17.1.

18.1.2 Excavator Trenching

A total of 1,500 m of excavator trenching is recommended to further test the Bonanza North and Mickey Zones and to intially test the South Hump Zone. The rationale for trenching in these zones is presented in the Sections 17.2.1, 17.1.5 and 17.1.8 respectively.

There is currently no road access to the Ranch Project because of the decommissioning of the Metsantan Extension by Cheni in 1999-2000. Mobilizing of an excavator unit to the property will require a larger helicopter to airlift it from the Sturdee airstrip or from a truck unload point close to the Lawyers mine site.

Table 9

RANCH PROJECT

Proposed Phase 1 Work Plan & Budget

Work Type	Description	Total Length	Estimated Cost (CDN$)
Roads & drill sites	Excavator, fuel, Mob/demob	40 days @ $1800 per day	72,000
Diamond drilling (NQ)		1,500 m @ $160/m	240,000
Trenching	Excavator, fuel	12 days @ $1,800 per day	21,600
Core & trench sample analyses	FA Au + ME-ICP	1,300 s @ $25/s	32,500
3D-IP Survey	Quantec Orion System	11 km^2 @ $80,000 per km^2	880,000
Rock (recce + channel samples)	ME-ICP (including Au)	200 s @ $25/s	5,000
Salaries: crew & sub-contractors		$6,500/day approx.	487,500
Helicopter with fuel	Overall support		375,000
Field supplies, freight, fuel, rentals, comm., expediting & camp support			680,000
Travel & accommodation	Crew & contractors mob/demob		32,000
Resource studies	Giroux Consultants		7,500
Permitting, bonding, reclamation			20,000
Claims maintenance	Assessment report writing		10,000
Reporting & geological support	2 P. Geo's		125,000
Sub-total:			2,988,100
MEMI management	20%		597,620
Contingency	10%		298,810
		Phase 1 total:	**$3,884,530**

18.1.3 3D-IP Surveys

A total of 11 km^2 of 3D-IP surveying is recommended, utilizing Quantec's high resolution and deep penetrating "Orion" 3D-IP system which reportedly has the capability to explore down to depths of approximately 750 m below surface. The Orion system, although expensive, will hopefully provide the detailed resolution required to accurately define the generally complex structural and alteration/mineralization settings of the Ranch-type high sulphidation gold deposits and prospects. Concurrently, it will have the potential to provide the depth penetration necessary to explore for and delineate geophysical anomalies indicative of buried copper-gold porphyry-type deposits.

The main proposed survey area of 10 km^2 would overlap and extend beyond that covered by the 2007 3D-IP survey (see Figures 6 and 7), such that there would be multiple known gold zones and an extensive historical data base from which to validate the Orion 3D-IP results. Additionally, with sufficient survey extensions to the southwest of the 2007 coverage area, there will be the opportunity to upgrade and better define the coincident chargeability-resistivity-magnetic anomaly thought to be related to a sulphide-bearing, porphyry-type intrusion at depth. Here, the Orion survey would provide the quality of data required to confidently design a deep drilling test of this multi-response geophysical anomaly.

In Patti and Steve's Zones, an additional 1 km^2 of 3D-IP surveying is proposed to aid proposed Phase 2 drill hole targeting.

Should priority high sulphidation or porphyry-type targets be identified by the Phase 1 Orion survey, they will be tested by diamond drilling in the success-contingent Phase 2 work program.

18.1.4 Prospecting and Rock Geochemical Sampling

Prospecting and rock geochemical sampling is recommended in the Mickey Zone, in the area of mineralized float just north of the Mickey Zone and at the up-ice end of several gold-in-soil anomalies described in Section 17.2.1. Should high priority targets be identified, they will be tested by excavator trenching in the success-contingent Phase 2 work program.

Additionally, in the BV pit, detailed channel sampling should be completed where possible on the walls and floor of the pit in order to follow-up on the multi-ounce gold assay in the 0.6 meter-long channel sample BBR-14R. Detailed sampling here may lead to the identification of a small tonnage of high grade material that may be amenable to selective open cut extraction.

18.1.5 Resource Estimate Studies

It is recommended that Guardsmen engage Giroux Consultants Ltd. of Vancouver, B.C. to review the author's findings regarding historical resource estimates as summarized in Sections 14.1.1 to 14.1.4 of the Report. Gary Giroux, Principal of Giroux Consultants, is a recognized expert in the field of resource estimation. His insights into the various

inconsistencies between historical resource estimates may help to identify the remedial steps that need to be taken to upgrade them to a NI 43-101 compliant status.

18.2 Phase Two Exploration Program

The recommended success-contingent Phase 2 Program, estimated to cost $6,511,375, will consist of diamond drilling, excavator trenching and additional Orion 3D-IP surveying, with some allocation of funds to follow-up on Giroux Consultant's recommendations regarding possible upgrades to historical resource estimates. The diamond drilling, trenching and 3D-IP surveying components of the program are briefly discussed below.

18.2.1 Diamond Drilling

A total of 6,500 m of NQ diamond drilling is recommended to test the best gold-mineralized zones or Orion 3D-IP targets identified in the Phase 1 program and also to test at least one copper-gold porphyry target as indicated by any coincident chargeability-resistivity-magnetic anomalies delineated by Phase 1 geophysical surveys. About 5,500 m would be allocated to the testing of gold targets and about 1,000 m, to the depth testing (in likely two vertical holes) of a buried porphyry copper-gold target.

There is no easy ground access into the Patti and Steve's Zones and therefore, should Phase 2 drilling be warranted in either or both of these zones, the drill equipment utilized here would need to be heli-portable.

18.2.2 Excavator Trenching

A total of 2,000 m of excavator trenching is recommended to follow-up on any encouraging mineralization: (a) exposed by Phase 1 trenching work; and/or (b) discovered during the course of Phase 1 prospecting and rock geochemical sampling.

18.2.3 3D-IP Surveys

A total of 20 km^2 of Orion 3D-IP surveys are recommended to futher explore the Ranch property for high sulphidation gold and porphyry-type copper-gold mineralization in the western parts of the property. The proposed survey area would extend northwesterly from the BV Zone to the Albert's Hump area and beyond.

18.3 Property of Merit Opinion

In the author’s opinion, the exploration potential of Ranch Project is of sufficient merit to justify the recommended Phase 1 program.

Table 10

RANCH PROJECT

Proposed Success-Contingent Phase 2 Work Plan & Budget

Work Type	Description	Total Length	Estimated Cost (CDN$)
Roads & drill sites	Excavator, fuel, Mob/demob	75 days @ $1800 per day	135,000
Diamond drilling (NQ)		6,500 m @ $160/m	1,040,000
Trenching	Excavator, fuel	15 days @ $1,800 per day	27,000
Core & trench sample analyses	FA Au + ME-ICP	4,250 s @ $25/s	106,250
3D-IP Survey	Quantec Orion System	20 km^2 @ $80,000 per km^2	1,600,000
Salaries: crew & sub-contractors		$6,500/day approx.	585,000
Helicopter with fuel	Overall support		475,000
Field supplies, freight, fuel, rentals, comm., expediting & camp support			800,000
Travel & accommodation	Crew & contractors mob/demob		38,000
Resource studies	Giroux Consultants		15,000
Permitting, bonding, reclamation			25,000
Claims maintenance	Assessment report writing		12,500
Reporting & geological support	2 P. Geo's		150,000
Sub-total			5.008,750
MEMI management	20%		1,001,750
Contingency	10%		500,875
		Phase 2 total:	**$6,511,375**

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20.0 SIGNATURE, STAMP AND DATE

The effective date of the Report is January 15, 2014.

Signed and Sealed at Surrey, British Columbia, the 22nd day of January, 2014.

B. K. (Barney) Bowen, P. Eng.

21.0 CERTIFICATE OF QUALIFIED PERSON

I, Brian K. Bowen, hereby certify that:

1. I am a Consulting Geological Engineer and my business address is 12470 99A Avenue, Surrey, British Columbia.

2. I am the author of the report entitled, "Technical Report on the Ranch Project, Liard Mining Division, British Columbia, Canada" (the "**Report**") to which this Certificate applies. The effective date of the Report is January 15, 2014.

3. Through my education, experience and professional standing, I meet the requirements to be a Qualified Person as defined under *National Instrument 43-101*. I am a graduate of the University of British Columbia with a degree of Bachelor of Applied Science in Geological Engineering, obtained in 1970. I have been practicing my profession continuously, for over 40 years, in Canada and elsewhere since graduation. I have been registered with the Association of Professional Engineers and Geoscientists of British Columbia since 1978, registration number 11374

   I have work experience in Canada, the United States, Australia, Europe, Mexico and Brazil, including work on high-sulphidation epithermal gold deposits. My experience includes the overall responsibility for a number of resource definition drill programs on several advanced-stage projects, two of which subsequently became operating open pit or underground metal mines. I am familiar with the general geological setting of the Toodoggone District, having been involved in a number of grass-roots and drilling programs in the area during the period 1968 to 2007 for various companies, including Christopher James Gold Corp. which completed diamond drilling and ancillary surveys on the Ranch Project in 2006-07.

4. I am responsible for all items of the Report, subject to my reliance on other experts as described in Section 3.0 of the Report.

5. I am independent of Guardsmen Resources Inc., as described in Section 1.5 of *National Instrument 43-101*.

6. I have read *National Instrument 43-101*; the Report has been prepared in compliance with it.

7. As of the date of this Certificate and to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.

Signed and Sealed at Surrey, British Columbia, the 22nd day of January, 2014.

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Brian K. (Barney) Bowen, P. Eng.