National Instrument 43-101 Technical Report: Geology and Mineralization of the Vernal Project, Nye County, Nevada, USA

Report Date: July 31, 2017
Effective Date: June 20, 2017

Prepared for:

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IMPORTANT NOTICE

This report was prepared as a National Instrument 43-101 Technical Report for Patriot Gold Corp. ("Patriot") by J.J. Brown P.G. LLC ("JJB"). The quality of information, conclusions, and estimates contained herein is consistent with the scope of JJB's services based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Patriot subject to the terms and conditions of their contract with JJB, which permits Patriot to file this report with Canadian Securities Regulatory Authorities pursuant to National Instrument 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other use of this report by any third party is at that party's sole risk.

CERTIFICATE OF QUALIFIED PERSON

I, Jennifer J. Brown, P.G., do hereby certify that:

1. I am currently employed as Principal Geologist by:

   J.J. Brown P.G. LLC
   155A North First Street
   Lander, Wyoming 82520 U.S.A.

2. I am a graduate of the University of Montana and received a Bachelor of Arts degree in Geology in 1996.

3. I am a:
   - Licensed Professional Geologist in the State of Wyoming (PG-3719)
   - Registered Professional Geologist in the State of Idaho (PGL-1414)
   - Registered Member in good standing of the Society for Mining, Metallurgy, and Exploration, Inc. (4168244RM)

4. I have worked as a geologist for a total of 20 years since graduation from the University of Montana, as an employee of various engineering and consulting firms and the U.S.D.A. Forest Service. I have more than 10 collective years of experience directly related to mining and or economic and saleable minerals exploration and resource development, including geotechnical exploration, geologic analysis and interpretation, resource evaluation, and technical reporting.

5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6. I am responsible for the preparation of the report titled "National Instrument 43-101 Technical Report, Geology and Exploration at the Vernal Gold Project, Nye County, Nevada, USA," dated July 31, 2017, with an effective date of June 24, 2017, with specific responsibility for all technical sections of this report.

7. I have had no prior involvement with the property that is the subject of this Technical Report.

8. As of the date of this certificate and as of the effective date of the Technical Report, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information required to be disclosed to make the report not misleading.

9. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.

10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared inaccordance with the standards and guidelines presented therein.

Dated this 31st day of July, 2017.

"Signed" Jennifer J. (J.J.) Brown

Jennifer J. (J.J.) Brown, SME-RM
Printed name of Qualified Person

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LIST OF ACRONYMS

Ag	Silver
Au	Gold
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
ft	Foot
g	gram
g/t	Grams per ton
gpt	Grams per ton
in	Inches
JJB	J.J. Brown P.G. LLC
NI	National Instrument
opt	Ounces per ton
oz	Ounce
oz/ton	Ounces per ton
ppm	Parts per million
QA/QC	Quality Assurance/Quality Control
SRM	Standard Reference Material
tpd	Tons per day
TSX	Toronto Stock Exchange

1. EXECUTIVE SUMMARY

1.1 Introduction

Patriot Gold Corp. (CSE: PGOL) is a junior American mineral exploration company with precious metals properties in Nevada. The Vernal Gold Project, located in Nye County, Nevada, is an early stage gold exploration project, wholly owned by Patriot Gold Corp. ("Patriot"), and is the subject of this report.

Patriot has retained J.J. Brown P.G. LLC ("JJB") to complete an independent review and evaluation of the geology and mineralization of the Vernal Gold Project (the "Vernal Project" or "Project"), including all exploration work carried out to date. The independent review and evaluation is a preliminary study which does not consider general or specific mine design parameters nor mining and/or processing methods, and as such is not intended to demonstrate the technical or economic viability of the Project. This report presents the results of JJB's efforts, and is intended to fulfill the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101 ("NI 43-101").

1.2 Property Description and Ownership

The Vernal Gold Project consists of 12 unpatented federal mining claims covering approximately 240 acres in the northern Nye County, Nevada. The Project is located roughly 9 miles north of the historic townsite of Ione, Nevada, along the western flank of the Shoshone Mounains and within the boundaries of the Toiyabe National Forest. The Project is wholly owned by Patriot via a 2014 mineral claim lease agreement with MinQuest, Inc.

1.3 Geology and Mineralization

The Project area is underlain by a thick sequence of Tertiary felsic tuffs and volcanoclastics which include a small number of basaltic-andesitic dikes and a rhyolite plug dome. The rhyolite plug, exposed in the northwest portion of the claim block, is variably argillized and silicified along northerly trending structures. The rhyolite dome intrudes older units of rhyolite of the Miocene Bonita Canyon Formation (22.6 ma) and quartz latite of the Oligocene Toiyabe Quartz Latite (26.1 ma; Bonham, 1970). The rhyolite intrusive is thought to be Miocene age, though certainly younger than the Bonita Canyon Formation. The geologic setting, including rock types and apparent structural orientations, is consistent with a resurgent dome emplaced in the central portion of a caldera, as interpreted by Patriot and previous operators.

At the Vernal Project, gold-silver mineralization appears to be generally restricted to fault breccia replacement zones locally developed in the lower spherulite member of the Bonita Canyon Formation. Observations of hydrothermal alteration are confined to the northern edge of the flow banded rhyolite and the adjacent central mass of the rhyolite. Mineralization largely occurs as disseminated quartz-pyrite stockwork veins and veinlets that contain fragments of the wallrock, though mineralization has also been observed in the basaltic and andesitic dike that intrudes a fault just east of the silicified zone in the lower spherulitic tuff of the Bonita Canyon Formation, where alteration consists of silicification of the tuff and propylitization of the basaltic andesite.

1.4 Status of Exploration

Modern exploration at the Vernal Project is limited. According to internal historic reports, American Selco ("Amselco") completed a 10-hole drilling program in the early 1980's, in conjunction with mapping and sampling of historic underground workings and a portion of the land surface within the current Project area. Details regarding the drilling program are few, but the drill holes were apparently vertical, concentrated in the northern portion of the Project area, and reportedly did not test known high grade, high angle fault zones.

WX Syndicate conducted reconnaissance mapping and sampling in the central portion of the Project area in the late 1980's and early 1990's. This work reportedly identified considerable low grade gold in quartz stockworks found in float on a rhyolite flow dome at the southern extent of the claim block. WX Syndicate identified a number of historic adits which appear to explore silicified and quartz-veined rhyolite along the western flank of the flow dome, but the exploration program apparently did not result in definition of a specific exploration target worthy of further investigation.

Patriot acquired the Project in 2004, and since that time has completed a comprehensive 1:5,000-scale surface mapping and sampling program, underground mapping and sampling of historic workings, and trench exploration in the western portion of the Project area. Patriot's efforts to date have identified northerly and easterly trending fault zones and anomalous gold along a northerly range-front fault at the western edge of the Project, and have confirmed high grade gold values in druzy veins and veinlets identified during previous investigations.

1.5 Conclusions and Recommendations

While exploration to date is limited, and thus the full extent of mineralization is not presently well defined, exploration work carried out by Patriot and previous operators has confirmed the presence of generally low grade gold in the hydrothermally altered rhyolite and associated volcanic rocks, and specifically within discrete zones of high angle faulting and shearing throughout the western portion of the Project area. Mineralization largely occurs as disseminated quartz-pyrite stockwork veins and veinlets in silicified breccias. Textures of silica found in veins (i.e., quartz and chalcedony) indicate that mineralization formed in a thermally evolving environment which cooled significantly during the hydrothermal event (i.e., instability of chalcedonic silica above ~184°). Accepting this conceptual model, the existing exposures would represent the upper reaches of the system, and potential for a mineralized vein system at depth should certainly exist.

In order to advance the Vernal Project, the geologic model needs to be both refined and tested. The combined style of alteration and mineralization present within the Project area is recognized on a regional scale as suggestive of large, low grade, bulk tonnage type deposits. Given that the mineralization encountered to date at the Vernal Project is confined to discrete and quite narrow structures, the viability of a bulk-mineable type of ore deposit seems unlikely. However, the structural preparation present at Vernal, in conjunction with regional alteration and known mineralization, suggest that the Project area is peripheral to a more significant mineralized system.

Future exploration and sampling at the Vernal Project should be conducted with the intent of identifying the specific controls on alteration and known mineralization, i.e. whether these are limited to, or a combination

of, facies changes in the rhyolite, the contact between the rhyolite and the surrounding tuffs, ring fractures, or a sympathetic structure from a range front fault. A reasonable first step toward that goal is to complete a rigorous surface mapping and sampling program, one specifically designed to better define the extent and orientation of known and unknown structures within the Project area, as well as to collect analytical data, such as 51 element ICP suite, suitable for use in drawing conclusions regarding the depositional parameters and setting with regard to mineralization. A limited geophysical program might also prove useful in delineating and characterizing the structural setting of the Project area, but no specific recommendation is offered here as that field of study is outside the author's area of expertise.

2. INTRODUCTION

2.1 Issuer and Terms of Reference

Patriot Gold Corp. (CSE: PGOL) is a junior American mineral exploration company with precious metals poperties in Nevada. The Vernal Gold Project is an early stage gold exploration project located in Nye County, Nevada, is wholly owned by Patriot Gold Corp. ("Patriot"), and is the subject of this report.

Patriot retained J.J. Brown P.G. LLC ("JJB") to complete an independent review and evaluation of the geology and mineralization of the Vernal Gold Project (the "Vernal Project" or "Project"), including all exploration work carried out to date. The independent review and evaluation is a preliminary study which does not consider general or specific mine design parameters nor mining and/or processing methods, and as such is not intended to demonstrate the technical or economic viability of the Project. This report presents the results of JJB's efforts, and is intended to fulfill the Standards of Disclosure for Mineral Projects according to Canadian National Instrument 43-101 ("NI 43-101").

2.2 Sources of Information

A portion of the background information and technical data on which this study relies was obtained from the following documents:

Hitchborn, A.D. (1982). Vernal (Ag Au) Prospect – Ione Valley Submittal; Internal memorandum prepared for Amselco Exploration Inc., March 1982.

Ilchik, R.P. (1983). Vernal Property 1982 Summary Report; Internal report prepared for Amselco Exploration Inc., January 1983.

McLean, D.A. (1983). Vernal Property 1983 Summary Report; Internal report prepared for American Selco, December 1983.

Duerr, H. (2005). Vernal Project, Nye County, Nevada; Internal report prepared for Patriot Gold, Inc., May 2005.

The information contained in current report Sections 5 through 8 was largely presented in, and in some cases is excerpted directly from, the reports listed above. JJB has reviewed this material in detail, and finds the information sourced from these reports and presented herein to be reasonable and appropriate with regard to guidance provided by NI 43-101 and associated Form NI 43-101F1.

Additional information was requested from and provided by Patriot. With respect to Sections 9 through 13 of this report, the author has relied in part on historical information including exploration reports, technical papers, and maps generated by previous operators and associated third party consultants. The author cannot guarantee the quality, completeness, or accuracy of historical information, nor its preparation in accordance with NI 43-101 standards. Historical documents and data sources used during the preparation of this report are cited in the text, as appropriate, and are summarized in report Section 27.

2.3 Qualified Persons and Personal Inspection

This report is endorsed by Ms. J.J. Brown, P.G., SME-RM. Ms. Brown is a licensed Professional Geologist in the states of Idaho and Wyoming, and is recognized as a Qualified Person (QP) with regard to geology and mineral resources according to United States, Canadian National Instrument 43-101 (NI 43-101), Australian (JORC), and South African (SAMREC) standards. Ms. Brown has 20 years of experience as a consulting geologist and has contributed to numerous NI 43-101 Technical Reports on geology, exploration, mineral resources and reserves, economic assessment, and pre-feasibility and feasibility level studies over the past five years.

On June 13, 2017, J.J. Brown inspected the property accompanied by Patriot representatives Trevor Newton, Zachary Black, and Bob Coale. Local access to the Project area was attained via an unimproved two-track road, which is currently in rough condition and requires 4-wheel drive, high clearance transport.

While on site, the parties traversed the west-central portion of the Project area along partially reclaimed access roads constructed during the Amselco drill program. Ms. Brown conducted general geologic field reconnaissance, including inspection of previously mapped historic workings, drill pads, and sample locations.

Field observations during the site visit generally confirm previous reports on the geology of the Project area. Bedrock lithologies, alteration types, and significant structural features are all consistent with descriptions provided in existing exploration summaries, and the author did not see any evidence in the field that might refute the current interpretation of the local geologic setting (as described D.A. McLean (1983), Herb Duerr (2005), and others, with only minor variations).

No definitive evidence of gold mineralization was encountered during the site visit- within historic workings or otherwise- but a wealth of circumstantial evidence was observed with regard to the gold-bearing system described by previous operators, namely the presence of obvious hydrothermal alteration along established fluid conduits (faulting) and associated stockwork quartz veining and limonite stained fracture surfaces.

2.4 Units of Measure

Unless otherwise stated, all measurements reported here are empirical, and currencies are expressed in constant 2017 U.S. dollars.

3. RELIANCE ON OTHER EXPERTS

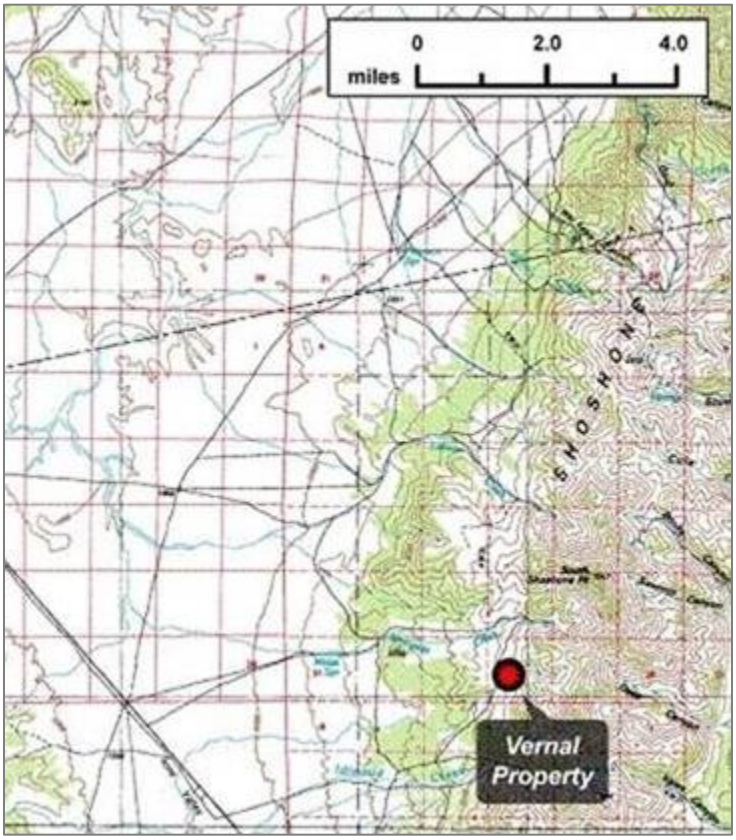
JJB has fully relied upon and disclaims responsibility for information regarding property ownership and mineral tenure for the Project, which was provided by Patriot and is presented in Section 4 of this report. Regarding environmental aspects of the Project, JJB has also relied wholly upon information provided by Patriot. JJB has not reviewed the permitting requirements nor independently verified the permitting status or environmental liabilities associated with the Project, and disclaims responsibility for that information, which is also presented in current report Section 4.

4. PROPERTY DESCRIPTION AND LOCATION

4.1 Project Location

The Vernal Gold Project is located in Nye County, Nevada, approximately 8 miles north of the historic townsite of Ione. The Project covers a total of 240 acres of land surface along the western flank of South Shoshone Mountain, all within the boundaries of the Toiyabe National Forest. The approximate center of the Project area is located at approximately N39°01'45.37" latitude and W117°34'49.26" longitude. Map coverage of the Project area is provided by the South Shoshone Peak 1:24,000-scale, 7.5-minute U.S.G.S. topo quad.

Figure 4-1 Vernal Project Location



4.2 Mineral Tenure, Agreements and Encumbrances

The Vernal Project is wholly owned by Patriot via a mining claim lease agreement with MinQuest, Inc. dated 2004. The Project consists of 12 unpatented federal lode mining claims all located on U.S.D.A. Forest Service land surface. The claims are contiguous and occupy portions of Section 34, T14N, R39E, and Section 3, T13N, R39E, Mount Diablo Baseline and Meridian (Figure 4-2). All claims are active as of the date of this report, with assessment fees paid in full through 2017. Claim information is summarized in Table 4-1.

Figure 4-2 Vernal Project Claim Boundaries

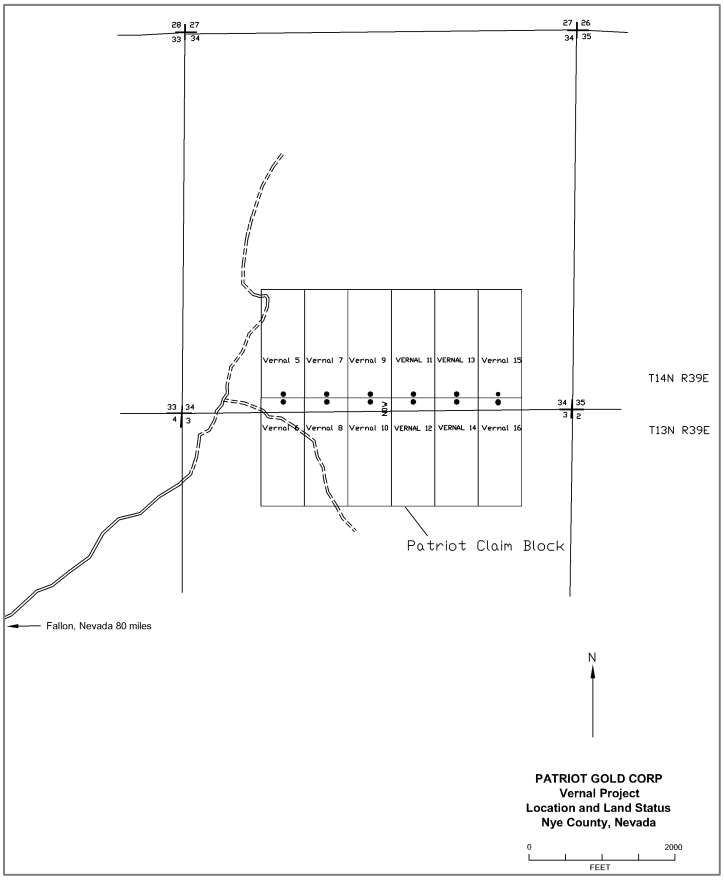


Table 4-1 Vernal Project Claim Summary

Serial No.	Mer Twn Rng Sec Quad	Claim Name	Claimant(s)	Type	Status	Location Date	Last Assessment
NMC841093	21 0140N 0390E 034 SE	VERNAL 11	PATRIOT GOLD CORP	LODE	ACTIVE	10/16/2002	2 0 1 7
NMC841094	21 0140N 0390E 034 SE	VERNAL 12	PATRIOT GOLD CORP	LODE	ACTIVE	10/16/2002	2 0 1 7
NMC841095	21 0140N 0390E 034 SE	VERNAL 13	PATRIOT GOLD CORP	LODE	ACTIVE	10/16/2002	2 0 1 7
NMC841096	21 0140N 0390E 034 SE	VERNAL 14	PATRIOT GOLD CORP	LODE	ACTIVE	10/16/2002	2 0 1 7
NMC849705	21 0140N 0390E 034 SW	VERNAL 5	PATRIOT GOLD CORP	LODE	ACTIVE	4/12/2003	2 0 1 7
NMC849706	21 0140N 0390E 034 SW	VERNAL 6	PATRIOT GOLD CORP	LODE	ACTIVE	4/12/2003	2 0 1 7
NMC849707	21 0140N 0390E 034 SW	VERNAL 7	PATRIOT GOLD CORP	LODE	ACTIVE	4/12/2003	2 0 1 7
NMC849708	21 0140N 0390E 034 SW	VERNAL 8	PATRIOT GOLD CORP	LODE	ACTIVE	4/12/2003	2 0 1 7
NMC849709	21 0140N 0390E 034 SW,SE	VERNAL 9	PATRIOT GOLD CORP	LODE	ACTIVE	4/12/2003	2 0 1 7
NMC849710	21 0140N 0390E 034 SW,SE	VERNAL 10	PATRIOT GOLD CORP	LODE	ACTIVE	4/12/2003	2 0 1 7
NMC849711	21 0140N 0390E 034 SE	VERNAL 15	PATRIOT GOLD CORP	LODE	ACTIVE	4/12/2003	2 0 1 7
NMC849712	21 0140N 0390E 034 SE	VERNAL 16	PATRIOT GOLD CORP	LODE	ACTIVE	4/12/2003	2 0 1 7

4.3 Permits and Environmental Liabilities

There are no active permits for exploration or mining activities currently in place as of the date of this report. Any proposed exploration or mining activities will be subject to federal land use regulations as well as Nevada state environmental regulations. Authorization for modest exploration activities (less than 5 acres of surface disturbance) may be obtained without extensive environmental baseline work. Permits for significant exploration activity at the Project will be issued by the the federal government, and may require public notice. Evaluation of the potential impacts to the following resources will need to be addressed during the application process for future exploration and/or operating permits:

- Air
- Water
- Biological
- Threatened and endangered species
- Conflicting land usage
- Cultural resources

Additional evaluation may be required for potential impacts to wild horses, existing grazing allotments, and/or water rights.

The Project is not subject to any known environmental liabilities. The Austin mining district is an active mining district with a long history of mineral resource exploration and development, and as such Patriot does not anticipate any social, community, or regulatory obstructions to the Project. JJB knows of no other current or potential future significant factors or risks that might affect access, title, or the right or ability to perform work on the Project.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Access and Climate

General access to the Project vicinity is available via State Route 844 to just west of Ione, then north on Ione Valley Road to NF-060 (the intersection of which is marked with a large iron signpost with the letters 'BSA'), and east on NF-060 to NFDR-114 Trail. Local access to the Project site is provided by NFDR-114 Trail, an unimproved two-track suitable only for 4-wheel drive, high clearance transport.

The climate local to project area is typical of an arid, high-desert setting, with cold winters and generally hot, dry summers. The town of Gabbs, roughly 20 miles to the southeast and the community nearest the Project area for which climate data is available, reports annual average temperatures ranging from a high of 94°F in July, to a low of about 20°F in January. Precipitation in the vicinity of the Project area ranges from about 5 to 7 inches, with most precipitation occurring as snowfall during the winter months and occasional heavy rains associated with late summer thunderstorms. Patriot anticipates that Project activities will be restricted during the winter months and otherwise during occasional periods inclement (wet) weather.

5.2 Local Resources and Infrastructure

Modest supplies and basic municipal amenities are available in Fallon, approximately 90 miles to the west of the Project, and Tonopah, 80 miles to the south. The nearest source of major mine supply, equipment and personnel is the city of Reno, roughly 140 miles west of the Project area via State Highway 50 and Interstate 80. Access to the Union Pacific Rail System is available in Fernley, just 27 miles to the west of Fallon.

No major electrical power or communications systems extend to the Project area, and existing infrastructure is limited to the partially reclaimed drilling access roads in the central portion of the claim block. An on-site water source does not currently exist, but could presumably be established via permitting and construction of a groundwater well within the Project boundary. Surface area within the Project boundary provides adequate space for all planned exploration activities at this early stage of Project development.

5.3 Physiography

Elevation of the Project area ranges from about 7800 to 8600 ft, with hillsides commonly exceeding 30° in slope. Surface waters in the region are scarce and ephemeral. Vegetation within the Project area consists of a discontinuous cover of pinon, juniper, sage brush, and bunch grasses typical of the high desert environment. Bedrock outcrops are few and scattered, and colluvial overburden ranges from 0 to upwards of 30 ft in thickness.

6. HISTORY

6.1 History of Ownership and Development

Exploration in the Vernal Project area began near the turn of the century, as prospectors ventured outward from polymetallic discoveries near Grantsville, roughly 15 miles south of the present-day Project area. A number of short adits and prospect pits within the Project area provide evidence of historic exploration and minor development. Previous exploration reports indicate at least 8 historic adits on the property with an estimated cumulative footage of about 900 ft.

Specific ownership of the Vernal Project prior to the late 1900's is unclear. Amselco staked the claims which make up the present-day Project area in 1982, as part of a larger group of 30 total lode claims. Between 1982 and 1984, Amselco completed mapping and surface sampling programs as well as a 10-hole rotary campaign totaling 3000 ft, all within the current Project claim block. WX Syndicate held the Project from 1987 to 1994, and completed reconnaissance-level mapping and sampling in the central portion of the Project area during that time. This work reportedly identified considerable low grade gold in quartz stockworks found in float on a rhyolite flow dome at the southern extent of the claim block (which had apparently been reduced to 18 claims at that time). The Project changed hands at least twice between 1994 and 2004, when it was acquired by Patriot. The Project was held in 1997 by Apex Energy and in 2004 by MinQuest, but the author is not aware of any significant exploration work carried out by either company.

6.2 Historical Production

While some gold was likely produced at the Vernal property during development of the historic adits and underground workings, no records of gold or other production are known to exist.

6.3 Historic Mineral Resource and Mineral Reserve Estimates

No mineral resource or mineral reserve estimates have been reported for the Vernal Project, historic or otherwise.

7. GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

The following description of the regional geologic setting of the Vernal Project is largely excerpted and/or modified from Nevada Bureau of Mines and Geology Bulletin 99A, 'Geology of Northern Nye County, Nevada', prepared by Kleinhampl and Ziony (1985).

The Vernal Project is located along the western flank of the southern Shoshone Mountains within the Great Basin sub-province of the Basin and Range province of western North America. The Basin and Range geo-physiographic province is characterized by generally north-south trending block faulted mountain ranges, separated by alluvium-filled valleys. The Great Basin subprovince is specifically characterized by internal drainage. Topographic relief varies across the Basin and Range from 1,500 feet to in excess of 5,000 vertical feet, and structural relief commonly exceeds topographic relief.

Surface exposures in the Shoshone Mountains and surrounding region are dominated by Tertiary rocks, which consist chiefly of widespread and thick pyroclastic material in ash-flow tuff sheets of silicic to intermediate composition. Subordinate andesitic to dacitic lavas and associated intrusive and extrusive masses are intercalated with the tuff sheets near the base of the volcanic section, and mafic lavas form a thin cap to the volcanic section in some areas. Less abundant rhyolitic extrusive and intrusive bodies are widely scattered aerially and stratigraphically and locally compose the basal rocks. The intermontane valleys generally are filled with Pleistocene alluvial fill locally as thick as a few thousand feet, and are covered with a veneer of Holocene sediments.

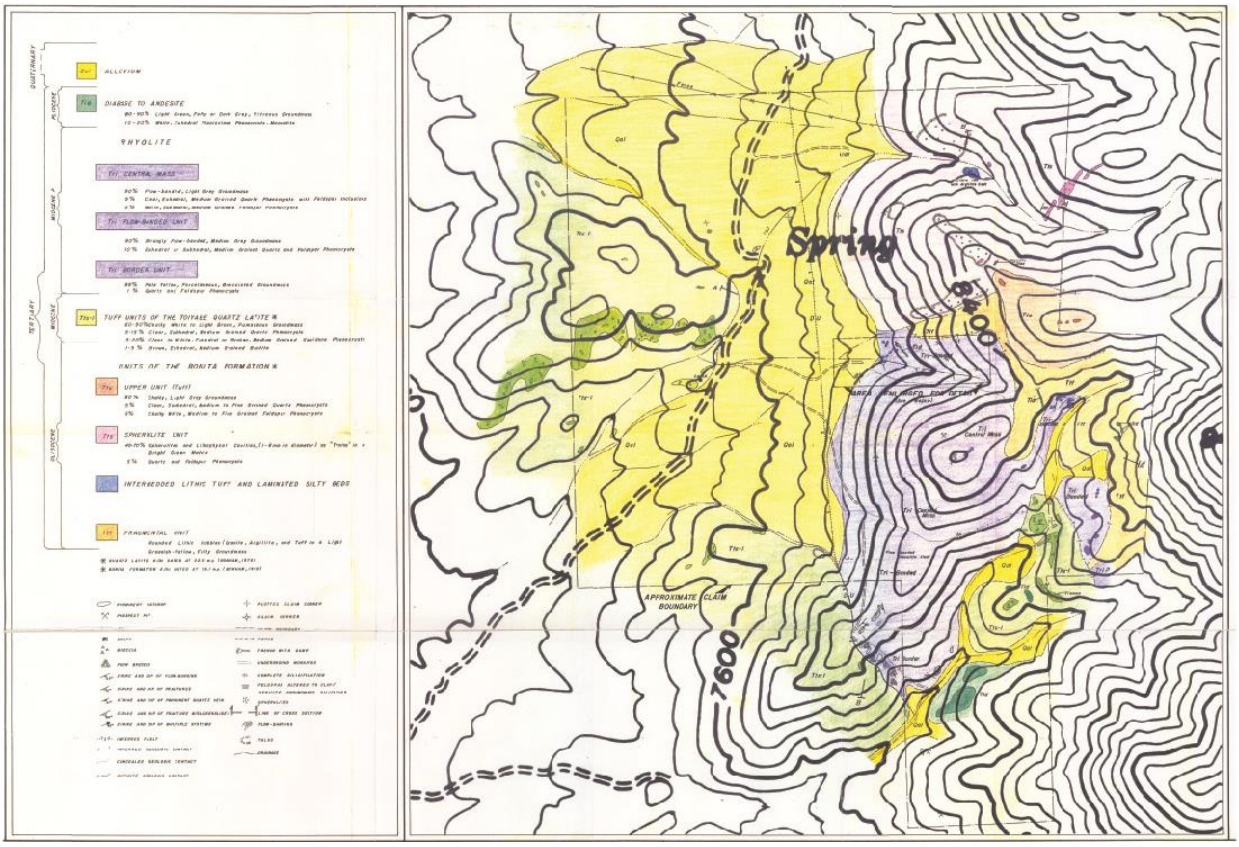
Early and middle Tertiary tectonism is distinguished by widespread volcanism throughout the region that mainly preceded Basin and Range normal faulting. Pulses of volcanism in the Oligocene and Miocene led to the formation of numerous calderas, shield domes, and other constructional volcanic features. The caldera complexes were the sources for the enormous volumes of widespread ash flow tuffs. Some of the calderas commonly impinge and coalesce with one another to form diversely aged complexes. The later calderas in these places partly obliterate or conceal earlier ones. Scattered west- to northwest-striking faults form lineaments that could represent left-lateral slip during early Tertiary time.

Basin and Range normal faults, which generally strike north to northeast, represent the latest stage of structural development and account for present topography. These faults apparently were initiated in the middle Miocene, had major movement in the Pliocene, and have been recurrently active to the present.

7.2 Local and Property Geology

The following description of the geology local to the Project area is largely excerpted and/or modified from McLean (1983). JJB has reviewed this information and associated supporting documentation in detail, and finds the discussion and interpretations presented herein to be reasonably accurate and suitable for use in this report.

Figure 7-1 Local Geologic Map, Vernal Gold Project (Ilchik, 1982)



7.2.1 Lithology

The oldest Tertiary unit in the Project vicinity consists of an aerially limited outcrop of the Underdown Tuff. The Underdown Tuff is a densely welded ash-flow tuff, the lower portion of which contains highly compacted pumice fragments (fiamme) and is gray in color, in contrast to the upper portion, which is more crystalline and brown in color. Unconformably overlying the Underdown Tuff is the middle member of the Oligocene Bonita Canyon Formation. This member consists of a lithic tuff breccia, much of which is volcaniclastic in nature and includes volcanic siltstone and conglomerate. Exposures of this unit indicate a very low angle dip, on the order of 8° to 15°.

Exposures of the lower member of the Bonita Canyon Formation within the Project area are restricted to the immediate area of the historic mine workings. The lower member consists of a flow-banded, spherulitic rhyolite lava. Spherulite development varies but is diagnostic of the unit. Baseball sized masses of weathered spherulites locally occur in the float. The unit is laterally restricted and does not overly the Underdown Tuff to the south.

The upper member of the Bonita Canyon Formation is the most aerially extensive of all the volocanics in the Project vicinity. This unit is described as a devitrified tuff, and also spherulitic though the spherulites are

really very small and the float often appears densely crystalline. There is a pronounced angular unconformity at the base of this unit, observable in the extreme northeast portion of the map area (Figure 7-2).

Unconformably overlying the Bonita Canyon Formation is the Miocene Toiyabe Quartz Latite. The Toiyabe Quartz Latite is a densely welded, crystal-rich ash-flow tuff, and is well exposed in outcrop in the western third of the map area as well as along the crest of the Shoshone range to the east. The Toiyabe is approximately 1200 feet thick on South Shoshone Peak (Bonham 1970), approximately 1.5 miles north of the Project area. The upper surface of this unit is erosional, thus true thickness is uncertain.

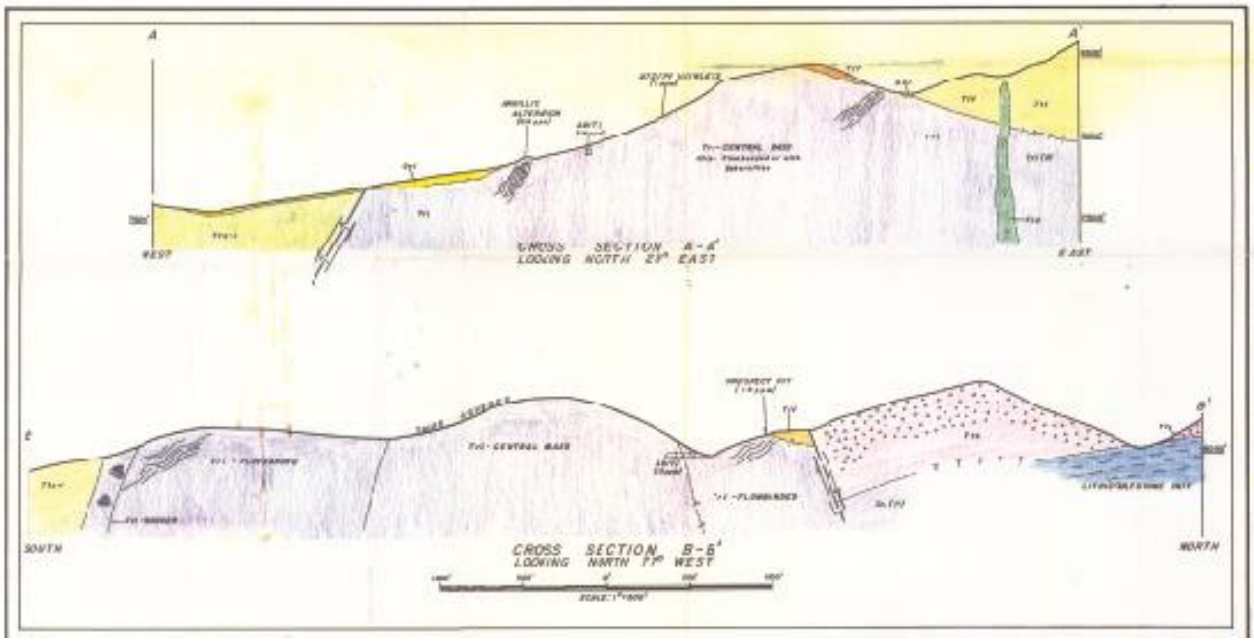
A flow-banded rhyolite outcrops as a north-trending ridge in the central part of the map area. The basal contact is not exposed, but it presumably overlies the Underdown Tuff and may locally overlap the lower member of the Bonita Canyon Formation along its northern margin.

Intruding through the rhyolite lava is a rhyolite plug dome. This plug is interpreted as being explaced in the vent from which the rhyolite lava flow erupted. Locally the dome contains weakly flow banded float, but largely consists of cream to tan colored, dense rhyolite. Irregularly-shaped outcrops of this unit intrude the middle member of the Bonita Canyon Formation to the east of the dome. It is speculated that this dome was complaced along the ring- fracture zone of a yet to be identified caldera.

Dikes of basaltic andesite locally intrude all members of the Bonita Canyon Formation and the Underdown Tuff, but are not observed intruding the Toiyabe Quartz Latite. Bonham (1970) has suggested either a Miocene or Pliocene age for these rocks.

North-south and east-west cross sections of the Vernal Project are presented as Figure 7-2. The cross sections were prepared by Ilchik (1982) and the section lines (A-A' and B-B') are shown on Figure 7-1.

Figure 7-2 Cross Sections A-A' and B-B' (Ilchik, 1982)



7.2.2 Structure

The Toiyabe Quartz Latite is juxtaposed against the rhyolite lava (unit Trl) in the extreme southern part of the map area. This is interpreted as an extension of an alluvium concealed Basin and Range type rangefront fault. Stratigraphic throw on this fault is estimated to be in excess of 1400 feet, based on offsets in the Toiyabe Quartz Latite (Bonham, 1970).

Bonham (1970) has mapped a number of closely-spaced N-NE trending normal faults in the Bonita Canyon Formation, roughly 4 miles northeast of the map area. The northeastern part of the map area is inferred to contain a number of such faults due to stratigraphic displacements between the middle and upper members of the Bonita Canyon Formation. The exact position of most of these faults is unclear due to the lack of structural control (outcrop) in this area. Movement on the mapped faults is believed to be dip-slip only, although there may be a strike-slip component to some of the previously mentioned unidentified faults. Bonham (1970) states that dip-slip components of 200-500 ft are typical, but this is difficult to verify in the map area given the lack of outcrop.

The lack of mapped faulting in the Toiyabe Quartz Latite indicates that much of the faulting is Oligocene in age. Bonham (1970) draws a similar conclusion for this portion of the Shoshone Mountains.

Faults mapped underground generally trend N-NE and dip from 75°-85° to the northwest, though a small number of flat lying faults have been observed in at least one historic adit.

Jointing is well developed in the silicified area of the lower spherulite tuff. Mapping of joint attitudes shows an apparent random pattern, but Rose diagram plots reveal preferred orientations of N10-30°E and N50-70°W. Dips are quite steep and generally fall within two discrete ranges: 80°NW-70°NE, and 80°-90°SE. Jointing underground can also be segretated into two discrete ranges: N50°-60°W and N0°-10°E, with steep (50°) associated dips favoring an orientation of 70° to 89°NE.

7.2.3 Alteration and Mineralization

Hydrothermal alteration is subtle throughout most of the property, and appears to be largely controlled by structural preparation and permeability of the surrounding rock types. Alteration largely consists of devitrification of the volcanics and localized zones of hydrothermal alteration along structures. Hydrothermal alteration is concentrated at the crest and along the northern margin of the rhyolite plug, and consists mostly of the development of green colored clays and sericite that obliterate the textures of the affected rock.

At Vernal, silicification takes the form of druzy quartz veins and silica flooding of breccia zones. A 200-ft wide zone of silicification outcrops on the northwestern margin of the plug dome. The degree of silicification varies along strike from partial to total replacement by fine grained chalcedonic silica. Wallrock is also locally silicified adjacent to the few mineralized fault breccia zones that occur within the lower spherulite member of the Bonita Canyon Formation. Iron sulfide is noted within some of the silicified breccia. Silicification is also observed at and near the summit of the plug dome.

The volcanoclastic to pyroclastic rocks of the Bonita Canyon Formation are permeable and elastic within the claim block. Propylitic alteration is relatively wide spread in the Bonita Canyon Formation, but intense

quartz-sericite alteration is restricted to a few tens of centimeters from fault zones, possibly due to the permeable nature of the rock, whereby fluids were rapidly 'absorbed' as they progressed to the surface.

Alteration in the rhyolite intrusive includes quartz veins and stockworks within breccias related to faults. Intense quartz-sulfide alteration is directly associated with these fault zones and the accompanying breccias. Propylitic alteration is not as wide spread in the intrusive rhyolite. A zone of quartz stockworks within the rhyolite intrusive could be due to close-spaced faults or crackle breccia related to a cooling episode of the intrusive (Duerr, 2005).

Significant gold-silver mineralization occurs primarily in fault breccia replacement zones locally developed in the lower spherulite member of the Bonita Canyon Formation. Mineralization occurs as disseminated quartz-pyrite stockwork veins and veinlets that contain fragments of the wallrock. Limited study of polished sections (Amselco, 1983) reveals that the gold and silver occur as inclusions within pyrite grains. Most of those inclusions consist of electrum, which is mostly gold and ranges in size from 3 to 33 microns, averaging 7 microns. Minor petzite occurs in association with the electrum.

Mineralization also occurs in the basaltic adesite dike that intrudes a fault just east of the silicifed zone in the lower spherulitic tuff of the Bonita Canyon Formation. Associated alteration consists of silicification of the tuff and propylitization of the basaltic andesite. Quartz druse fills fractures in both the dike and the tuff.

8. DEPOSIT TYPE

Based on the data and information currently available, the Vernal Project is probably best described as a low-sulfidation epithermal gold deposit. Epithermal gold-silver deposits are important sources of gold and silver worldwide (Simmons and others, 2005). They form at less than 1.5-km depth and less than 300°C in mainly subaerial hydrothermal systems (Henley and Ellis, 1983; Hedenquist and Lowenstern, 1994). These hydrothermal systems developed in association with calc-alkaline, alkaline, and less frequently, tholeiitic magmatism, most commonly in volcanic arcs at convergent plate margins, but also in intra-arc, back-arc, and post-collisional rift settings. In addition, some non-magmatically heated epithermal deposits that formed by deep circulation of meteoric water along steep extensional faults are present in northern Nevada.

Epithermal gold-silver deposits have highly variable characteristics, including ore and alteration mineralogy and gold, silver, and base metal (Cu, Pb, Zn) contents, and formed in diverse geologic environments (Hedenquist and others, 2000; Sillitoe and Hedenquist, 2003; Simmons and others, 2005). Two principal types of deposits are low sulfidation (also called quartz-adularia or adularia-sericite) and high-sulfidation (also called quartz-alunite or acid-sulfate). In northern Nye County, isotopically dated epithermal gold-silver deposits range in age from about 26 to 17 Ma (Kleinhampl and Ziony, 1985).

Low-sulfidation deposits are common in the western half of northern Nye County and are widespread throughout much of the northern Great Basin. Tonopah and Round Mountain are the two largest low-sulfidation epithermal deposits in the regional vicinity of the Project area. Tonopah formed in a large intermediate-composition to silicic volcanic complex that contains ash-flow tuffs, possibly erupted from an underlying caldera-forming magma source (Bonham and Garside, 1979); lava flows and breccias; and shallow intrusions. Because of this complex igneous history, the rocks responsible for mineralization are uncertain. The ore at Tonopah is contained mostly in banded and brecciated quartz±calcite±adularia veins, locally with high copper, lead, and zinc contents. In contrast, Round Mountain formed along the margin of a rhyolitic ash-flow caldera, where ore is mostly disseminated in nonwelded tuff, has subequal gold and silver contents, and contains very low concentrations of base metals.

At the Vernal Project, gold-silver mineralization appears to be generally restricted to fault breccia replacement zones locally developed in the lower spherulite member of the Bonita Canyon Formation. Observations of hydrothermal alteration are confined to the northern edge of the flow banded rhyolite and the adjacent central mass of the rhyolite. The specific controls on alteration and mineralization at Vernal are not yet well understood, and further work is needed to determine if the controlling factors are limited to, or a combination of, facies changes in the rhyolite, the contact between the rhyolite and the surrounding tuffs, ring fractures, or a sympathetic structure from a range front fault. However, the structural preparation present at Vernal, in conjunction with regional alteration and known mineralization, suggest that the Project area is likely peripheral to a more significant mineralized system.

9. EXPLORATION

Modern exploration at the Vernal Project is limited. Recent exploration programs include work conducted by Amselco from 1982 to 1984, and WX Syndicate from 1987 to 1994. Amselco appeared to concentrate their efforts, including drilling, largely within the unnamed drainage in which the majority of historic surface disturbance is located. Exploration by WX Syndicate included reconnaissance sampling and mapping throughout the present-day Project area. The author is unaware of any historic mapping, sampling, or other forms of exploration work that may have been completed at the Project by previous operators outside of Amselco and WX Syndicate.

9.1.1 Amselco Exploration

In addition to a 10-hole rotary drilling program (see report Section 10), Amselco carried out geologic mapping of surface and underground workings in the primary target area central to the modern-day claim block. Surface mapping was completed on an aerial photo base at 1:200 scale. Additional exploration work included a vegetation orientation survey and sampling of accessible underground workings. Random sampling of the accessible mine workings did not detect anomalous gold-silver mineralization, and the biogeochemical sampling of pinyon pine and sagebruch resulted in single point anomalies, even though the sample spacing was only 50ft. The combined results of the rock and vegetation sampling efforts, as interpreted by Amselco, indicate that mineralization is likely largely limited to the immediate vicinity of discrete and narrow, high-angle joint planes and faults.

9.1.2 WX Syndicate Exploration

WX Syndicate conducted reconnaissance-level mapping and sampling throughout 'the area of alteration', including the rhyolite flow-dome in the southern portion of the claim block. Both surface and underground mapping was completed at 1:2400 scale. Rock samples collected by WX SYndicate reportedly showed sporadic high values with one exceptional value of 0.244 ppm Au in argillized rhyolite with minor druzy quartz veinlets. Sampling 1000 ft south of the historic mine workings returned anomalous gold (0.1 to 0.87 ppm) from float chips and outcrop over a 1000-ft^2 area.

9.1.3 Patriot Exploration

Since acquiring the Project in 2004, Patriot has completed a 1:50000-scale mapping program, surface and underground sampling, and trench exploration, all within the general vicinity of areas of known mineralization.

In October 2008, a rubber tired backhoe was used to open the entrance to the largest adit near the center of the Project area, and then to expose a range-front fault approximately 400 feet northeast of the adit. Trenching exposed approximately 70 ft of subcrop, including a silicified structure immediately adjacent to a zone of stockworked, bleached and weakly silicified tuff, and 275 ft of underground workings. Seven samples were collected from the underground workings and five samples were collected from the trench.

Underground mapping and sampling of the adit showed two sets of structures. A northerly trending set showed brecciation over 3 to 15 inches in width. The northerly trending faults are steeply dipping westward to near vertical. An easterly fault zone was followed along its strike for about 50 ft and a raise to surface

follows the fault upward for at least 70 ft. It is assumed this fault zone had some production. The easterly fault is up to 48 inches in width and dips 45° to 60° to the north. This fault is either offset by the northerly trending faults described above or pinches and swells. Outside of the above described faults the tuff observed in the adit wall is virtually unaltered. Overall assay results from underground and trench samples average less than 0.064 ppm Au, with a high of 0.484 ppm Au over a reported 10-ft sample length along the range-front structure. Rock chip assay results from a total of 56 samples show an average of roughly 0.04 ppm Au, with 9 of the total samples returning a grade of 0.5 ppm Au or greater. The most significant gold values in rock chips samples reportedly come from veining in tuffaceous rocks north of the nearly east-west contact of the plug.

10. DRILLING

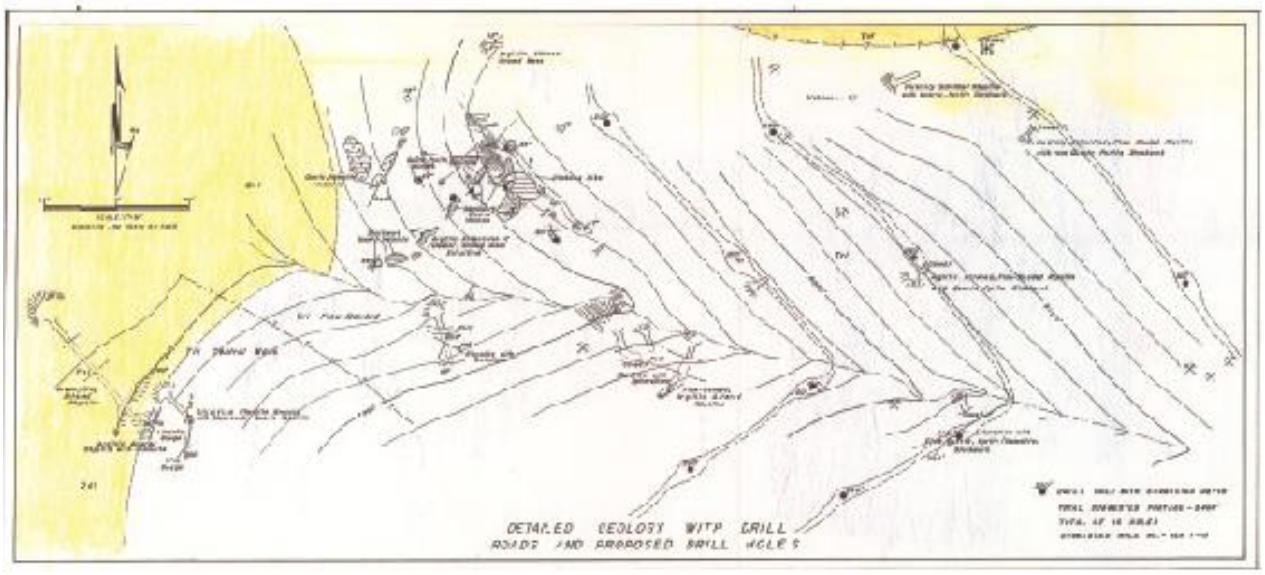
To date, no drilling has been carried out at the Vernal Project by or on behalf of Patriot. The author is aware of only one drilling program conducted within the present-day Project area, Amselco's 1983 drilling program, and details regarding the drilling and sampling methods and subsequent results are somewhat limited. The following paragraphs summarize the information available, as presented in internal Amselco documents (HItchborn et al., 1983; McLean, 1983).

10.1.1 Amselco Drilling Exploration

Amselco's rotary drilling program began on July 27, 1983 and concluded on July 31, 1983. Ten drillsites were selected primarily for their proximity to anomalies near old mine workings, as delineated during the 1982 sampling program. Footage drilled totaled roughly 3000 feet and samples were analyzed for Au, Ag, As, Sb. Drill access was constructed using a large dozer, which bladed wide road cuts through the slope of the drainage. There is no indication in available records that the road cuts were sampled or mapped.

The historic exploration and summary reports prepared for Amselco do not include a list of drillhole collar coordinates, nor a final map of the drillhole locations. The drillhole locations shown in Figure 10-1 are 'as-proposed', versus, 'as-drilled'. Given the length of time that has past since the holes were drilled, the author was not able to verify each of the proposed drillhole locations during the site visit. However, based on field observations of at least two obvious drill pads, in conjunction with the location of the partially reclaimed access roads, the author believes that the proposed drillholes, as mapped in Figure 10-1, probably closely represent the location of the holes as they were actually drilled. The proposed holes are not identified by drillhole ID, and Figure 10-1 is presented here to give the reader a general sense of the layout of the holes only.

Figure 10-1 Amselco Drillhole Locations



Examination of drill cuttings revealed that disseminated pyrite was almost ubiquitous in the cuttings, but there were no associated precious metals. Assay results indicate that mineralization of up to 0.4 opt Au and

0.88 opt Ag is confined to narrow drusy quartz-chalcedony replacement-type veins in the volcanics. Ore minerals are electrum (AuAg) and petzite (Ag_3AuTe) as inclusions in disseminated pyrite. Minor amounts of base metals occur as galena, sphalerite, and chalcopyrite inclusions in the pyrite grains in rare pyrite-quartz veinlets.

Mineralization was also encountered in the basaltic andesite dike that intrudes a fault just east of the silicifed zone in the lower spherulitic tuff of the Bonita Canyon Formation. Alteration consists of silicification of the tuff and propylitization of the basaltic andesite. Quartz druse fills fractures in both the basalt and the tuff. A single drillhole (VER-1) intercepted (but was terminated before completely drilling through) this dike/fault zone downdip, and gold values of 0.34 ppm were encountered over a 10-foot interval (240 to 250 ft). The fact that this dike does not cut the dome or the associated lava flow indicates that it intrudes a pre-mineralization fault zone that was later mineralized.

Of the 3000 feet drilled, only 235 feet contained detectable (+0.1 ppm gold). The highest gold value reported is 1.34 ppm (0.039 opt) over a 5-ft interval (VER-2). Drill intercepts containing detectable gold are summarized in Table 10-1.

Table 10-1 Amselco Drilling - Significant Intercepts

Hole ID	From (ft)	To (ft)	Au (ppm)	Ag (ppm)
VER-1	145	165	0.03	<1
VER-1	150	155	0.13	1
VER-1	155	160	0.34	1
VER-1	160	165	0.68	1
VER-1	180	185	0.2	1
VER-1	190	195	0.1	1
VER-1	195	200	0.1	1
VER-1	205	210	0.14	<1
VER-1	240	245	0.34	1
VER-1	245	250	0.34	2
VER-2	5	10	0.1	<1
VER-2	10	15	0.2	<1
VER-2	60	65	0.4	<1
VER-2	65	70	0.1	<1
VER-2	100	105	0.1	<1
VER-2	105	110	0.2	<1
VER-2	125	130	0.1	<1
VER-2	130	135	0.1	<1
VER-2	135	140	0.2	<1
VER-2	145	150	1.34	<1
VER-2	150	155	0.1	<1
VER-2	215	220	0.1	<1
VER-3	140	145	0.3	<1
VER-4	130	135	0.1	<1
VER-4	135	140	0.1	<1
VER-4	230	235	0.1	<1
VER-5	none	--	--	--
VER-6	25	30	0.3	1
VER-6	30	35	0.2	1
VER-6	35	40	0.34	1
VER-6	60	65	0.24	1
VER-6	65	70	0.1	1
VER-6	80	85	0.24	1
VER-6	145	150	0.68	1
VER-6	150	155	0.68	1
VER-6	160	165	0.3	1
VER-7	none	--	--	--
VER-8	90	95	0.1	<1
VER-8	95	100	0.4	<1
VER-8	100	105	0.1	<1
VER-8	120	125	0.2	<1
VER-8	130	135	0.1	<1
VER-9	115	120	0.03	<1
VER-9	120	125	0.1	<1
VER-9	205	210	0.1	<1
VER-10	5	10	0.1	1
VER-10	25	30	0.3	1
VER-10	30	35	0.2	1
VER-10	35	40	0.3	1

11. SAMPLE PREPARATION, ANALYSIS AND SECURITY

Details and information regarding sample preparation, analysis and security are insufficient to warrant summary or discussion in this report. Future exploration work at the Vernal Project should rely on formal, written sample handling procedures and protocols, including in-house Quality Assurance/Quality Control programs specific to both sample collection and laboratory analysis.

12. DATA VERIFICATION

As the intent of this report is to present a current and credible interpretation of the Project geology and mineralization, the author has relied largely on publically available, regional and local geologic data and information, as well as historical reports and records specific to the Project area. Information from these sources was ground-truthed to the extent possible during on-site inspection of the property.

Field observations during the site visit generally confirm previous reports on the geology of the Project area. Bedrock lithologies, alteration types, and significant structural features are all consistent with descriptions provided in existing exploration summaries, and the author did not see any evidence in the field that might refute the current interpretation of the local geologic setting (as described D.A. McLean (1983), Herb Duerr (2005), and others, with only minor variations).

Given the short duration of the site visit, including a full day lost to inclement weather, the author did not have adequate time or opportunity to collect samples suitable for verification of reported gold grades. However, based in part on the lack of significantly anomalous grades reported, and largely on the availability of original assay data and other supporting documentation, the author considers the reported assay values to be reasonably reliable and suitable for use in drawing at least preliminary conclusions regarding the mineral potential of the Project area.

Other limitations to the data verification effort include lack of access to the majority of the historic underground workings, absence of drill hole logs and collar locations, and lack of available detailed information with regard to drilling and sampling procedures and protocols.

13. MINERAL PROCESSING AND METALLURGICAL TESTING

As of the effective date of this report, no mineral processing or metallurgical test work has been carried out at the Vernal Project.

14. MINERAL RESOURCE ESTIMATES

At present, the quantity and quality of available drilling and sampling data is insufficient for use in estimating mineral resources according to the standards and requirements of NI 43-101, and therefore no mineral resource estimate is presented herein.

15. MINERAL RESERVE ESTIMATE

Mineral reserves have not yet been estimated for the Vernal Project.

16. MINING METHODS

No general or specific mining concepts were evaluated for inclusion in this report.

17. RECOVERY METHODS

Mining and recovery methods were not evaluated as part of this study.

18. PROJECT INFRASTRUCTURE

At this time, the Vernal Project is not considered an advanced property as defined by NI 43-101 Part 1, Definitions and Interpretations, and this report section is not required.

19. MARKET STUDIES AND CONTRACTS

The anticipated product from eventual mining at the Vernal Project is gold, a fungible commodity. No off-take agreements or discussions with potential buyers for gold were undertaken as part of this study.

20. ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

At this time, the Vernal Project is not considered an advanced property as defined by NI 43-101 Part 1, Definitions and Interpretations, and this report section is not required.

21. CAPITAL AND OPERATING COSTS

Anticipated capital and operating costs were not considered as part of this study.

22. ECONOMIC ANALYSIS

No economic analysis was completed as part of this study.

23. ADJACENT PROPERTIES

The Vernal Gold Project is surrounded by federally owned land surface administered by the U.S.D.A. Forest Service. The author knows of no active mineral claims held by other parties which border the Project area, nor of any immediately adjacent or other properties which might materially affect the interpretation or evaluation of the mineralization or exploration targets of the Project.

24. OTHER RELEVANT DATA AND INFORMATION

This report summarizes all data and information material to the Project as of June 20, 2017. JJB knows of no other relevant technical or other data or information that might materially impact the interpretations and conclusions presented herein, nor of any additional information necessary to make the report more understandable or not misleading.

25. INTERPRETATION AND CONCLUSIONS

The Vernal Project area surrounds a small rhyolitic plug which intruded a sequence of volcanic flows. Based on currently available data and information, the geologic setting appears generally consistent with a resurgent dome emplaced into the central or peripheral portion of a caldera, as interpreted by Patriot and previous operators. Field observations during the site visit confirm previous reports on the geology of the Project area, and the author did not see any evidence in the field that might refute the current interpretation of the local geologic setting or conceptual geologic model.

While exploration to date is limited, and thus the full extent of mineralization is not presently well defined, exploration work carried out by Patriot and previous operators has confirmed the presence of generally low gold in the hydrothermally altered rhyolite and associated volcanic rocks, and specifically within discrete zones of high angle faulting and shearing throughout the western portion of the Project area. Mineralization largely occurs as disseminated quartz-pyrite stockwork veins and veinlets in silicified breccias. Textures of silica found in veins (i.e., quartz and chalcedony) indicate that mineralization formed in a thermally evolving environment which cooled significantly during the hydrothermal event (i.e., instability of chalcedonic silica above ~184°). Accepting this conceptual model, the existing exposures would represent the upper reaches of the system, and potential for a mineralized vein system at depth should certainly exist.

26. RECOMMENDATIONS

In order to advance the Vernal Project, the geologic model needs to be both refined and tested. The combined style of alteration and mineralization present within the Project area is recognized on a regional scale as suggestive of large, low grade, bulk tonnage type deposits. Given that the mineralization encountered to date at the Vernal Project is confined to discrete and quite narrow structures, the viability of a bulk-mineable type of ore deposit seems unlikely at this time. However, the structural preparation present at Vernal, in conjunction with regional alteration and known mineralization, suggest that the Project area is likely peripheral to a more significant mineralized system.

Future exploration and sampling at the Vernal Project should be conducted with the specific intent of identifying the controls on alteration and known mineralization, i.e. whether these are limited to, or a combination of, facies changes in the rhyolite, the contact between the rhyolite and the surrounding tuffs, ring fractures, or a sympathetic structure from a range front fault. A reasonable first step toward that goal is to complete a rigorous surface mapping and sampling program, one specifically designed to better define the extent and orientation of known and unknown structures within the Project area, as well as to collect analytical data, such as 51 element ICP suite, suitable for use in drawing conclusions regarding the depositional parameters and setting with regard to mineralization. A limited geophysical program might also prove useful in delineating and characterizing the structural setting of the Project area, but no specific recommendation is offered here as that field of study is outside the author's area of expertise. Estimated costs for surface mapping and sampling, as described above, are presented in Table 26-1.

Table 26-1 Estimated Cost – Surface Mapping and Sampling Program

Task	Est. Cost
Exploration program design	$5,000
Surface mapping and sample collection	$50,000
Laboratory analysis	$15,000
Interpretation and reporting	$10,000
Total	**$80,000**

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