

TECHNICAL REPORT ON THE COLD SPRINGS PROPERTY, CHURCHILL COUNTY, NEVADA, USA



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1 Summary

This Technical Report (the “Report”) for the Cold Springs Property (“Cold Springs” or the “Property”) was prepared by APEX Geoscience Ltd. (“APEX”) at the request of Supernova Metals Corp. (“Supernova” or the “Company”), a British Columbia (BC) corporation. The purpose of this Report is to support Supernova’s listing on the Canadian Securities Exchange (“CSE”), to provide a geological introduction to the Cold Springs Property, to summarize historical and recent work completed on the Property and to provide recommendations for future exploration work programs. The Property is located on the western flank of the Desatoya Mountain Range of west-central Nevada, approximately 80 kilometres (km) (50 miles) east of Fallon, Nevada, and 60 km (37 miles) west-southwest of Austin, Nevada, and lies near known precious metal deposits in the region, including the Rawhide gold-silver mine, located 60 km (37 miles) southwest of Cold Springs in Mineral County.

The Cold Springs Property comprises 22 unpatented Bureau of Land Management (BLM) federal lode mining claims, covering a total area of 455 acres (184 hectares), located in Churchill County. The claims are owned by Manta Minerals Corp. (“Manta”), a wholly owned subsidiary of Silver Range Resources Ltd. (“Silver Range”). Silver Range holds a 100 per cent (%) beneficial interest in the Property. On September 1, 2020, Supernova, and its wholly owned subsidiary Supernova Metals (US) Corp. (“Supernova US”), an Arizona company, entered into an option agreement (the “Agreement”) with Silver Range and Manta to acquire a 75% interest in the Cold Springs Property.

The Cold Springs Property has been explored intermittently since the late 1970’s. Historical work completed on the Property has included geological mapping, geochemical sampling, geophysical surveying and drilling. Surface exploration work was completed by Phelps Dodge in 1979, by the W.X. Syndicate and J. Prochnau & Co. in 1987 and 1988, by Northern Abitibi in 2006, and by Silver Range in 2016 and focused on the central-eastern portion of the Property. Historical rock sampling demonstrates that quartz veins and quartz stockworks at Cold Springs are variably mineralized; results from the sampling programs include up to 69.4 grams per tonne (g/t) gold (Au) and 1,280 g/t silver (Ag) in selective rock grab samples.

Forty-seven (47) drill holes, totalling 3,213 metres (m) (10,540 feet (ft)), were completed at Cold Springs by four separate companies from 1979 to 2007. Drilling was completed by Phelps Dodge in 1980 and 1981, by Asarco in 1983, by the W.X. Syndicate and J. Prochnau & Co. in 1987 and 1988 and by Northern Abitibi in 2006 and 2007. Historical drilling by previous companies appear to have focused on two dissimilar targets. Drilling by Phelps Dodge and Asarco was likely designed to test for a large, low-grade epithermal precious metal deposit. No attempt appears to have been made to locate and systematically drill narrow, high-grade vein systems that are typical of low-sulphidation epithermal systems. Drilling by Northern Abitibi addressed the possible presence of high-grade feeder veins by targeting deep geophysical anomalies that were recognized on wide-spaced, east-west oriented lines. Highlights from the Northern Abitibi drilling program includes 0.4 g/t gold and 22.9 g/t silver over 30.5 m (100 ft), including 2.2 g/t

gold and 98.3 g/t silver over 3.1 m (10.2 ft) from drill hole 07CS-3. Only 2 out of 5 Northern Abitibi drill holes reached target depth.

The Cold Springs Property is situated within the Great Basin segment of the Basin and Range Province, an area characterized by varied topography of north-south trending mountain ranges separated by flat lacustrine-gravel-volcaniclastic-volcanic filled valleys. The Property is located on the western flank of the Desatoya Mountain range, which is mostly underlain by Oligocene to Lower Miocene welded ash flow tuffs, mainly of rhyodacite composition, and lesser intermediate flows, breccias and related hypabyssal rocks. Cold Springs is underlain by mid-Tertiary hydrothermally altered rhyodacite crystal, lithic, and crystal-lithic tuffs, pyroclastic volcanic breccias and rhyolite dikes, and is situated on the northwest rim of a volcanic center associated with the Oligocene ignimbrite event. The northwest quadrant of the interpreted caldera complex hosts numerous gold and silver occurrences. The Property covers an approximately 800 m (2,625 ft) by 350 m (1,148 ft) hilltop exposure of hydrothermally altered and silicified maroon to brown rhyodacite tuffs, minor occurrences of rhyolite dikes and pyroclastic volcanic breccia. Mineralization at the Cold Springs Project is associated with volcanic-rock hosted epithermal colloform-crustiform banded quartz veins, stockwork quartz veins, silicified hydrothermal breccia and silica-flooded rhyolite-rhyodacite tuffs. The banded quartz veins are typically hosted in silicified hydrothermal breccias and stockwork veined moderate to strongly argillic and silica altered (silica flooded) tuffaceous country rock.

Recent work by Supernova and Silver Range at the Property from 2018 to 2020 includes geological mapping, geochemical rock sampling, a three-dimensional induced polarization (3DIP) and resistivity survey and a ground magnetic geophysical survey. The recent geological mapping and sampling program, together with the analysis of historical sampling and drill hole data, provided valuable information on the geological setting and mineralization of the Property. Recent surface exploration indicates that the host tuffs, the silicified breccia and exposed mineralized veins dip toward the west and suggest that the centre of the epithermal system is situated beneath the alluvium, down dropped across a range front fault. Gold highlights from the 2018 rock grab sampling program include 11 samples > 1 g/t Au, 2 samples > 5 g/t Au and a maximum assay of 12.9 g/t Au. The high-grade gold values tend to be in quartz-chalcedony veins associated with the second phase of silicification and lower grade gold tends to be associated with silica flooding in the first phase. Silver highlights include 12 samples > 31 g/t Ag and a maximum assay of 687 g/t Ag.

Aurora Geosciences Ltd. completed a 3DIP and resistivity survey at the Property in September, 2018. The 3DIP and resistivity survey covered the area to the west of the range front fault with focus on the interpreted hanging wall to test for down-dropped epithermal mineralization at Cold Springs. The survey delineated a compact resistivity low (< 35 ohm-m) with a core of much lower resistivity situated approximately 200 m (656 ft) west of the range front fault and on strike with the trend of mineralized veins exposed on the Property.

Supernova engaged APEX to conduct a ground magnetic survey at the Cold Springs Property in October, 2020. The ground magnetic survey covered the entire Property area, with increased focus over historical showings and areas identified as prospective for gold and silver mineralization. The survey defined several magnetic trends within the magnetics map, with the most prevalent being the bifurcation of the magnetic signal's character along the range front fault.

It is the opinion of the Author of this report that recent exploration completed at the Cold Springs Property by Supernova is appropriate for the deposit type being explored and has been carried out in a manner that meets industry standards. Furthermore, based upon the results of the exploration work discussed in this Report, it is the opinion of the Author that the Cold Springs Property is an early stage "Property of Merit" warranting continued exploration work.

Based on results to date, further work is recommended at the Cold Springs Property. Exploration recommendations to locate epithermal gold and silver mineralization will be guided by a Two-Phase approach. Phase 1 should comprise a four (4) hole, approximately 1,200 metre (3,940 ft) diamond drilling program. The proposed drilling will test IP and resistivity targets located west of the hilltop occurrences under alluvial cover in the Cold Springs Valley. The proposed Phase 1 drill targets will consist of possible dissected portions of the hilltop area gold-silver mineralization that may have been down dropped to the west across the Cold Springs range front fault system and is now under Cold Springs Valley alluvial fill. Possible feeder zones for the hilltop-style gold-silver mineralization will also be targets for the proposed Phase 1 diamond drilling program. The estimated cost of the Phase 1 program is \$CDN420,000.00 not including GST (Table 26.1).

Phase 2 exploration is dependent on the results of Phase 1 and includes an ionic leach soil sampling program over areas of the Property covered by thick pediment to generate geochemical drill targets, and ground magnetic inversion modelling to better characterize the causative magnetic bodies and their locations within the Property. Following the soil campaign and geophysical work, a preliminary Phase 2 RC drilling program of approximately 1,500 m (4,920 ft) is recommended. The total cost to complete the Phase 2 program is estimated at \$CDN400,000.00 not including GST.

2 Introduction

2.1 Issuer and Purpose

This Technical Report (the “Report”) for the Cold Springs Property (“Cold Springs” or the “Property”) was prepared by APEX Geoscience Ltd. (“APEX”) at the request of Supernova Metals Corp. (“Supernova” or the “Company”), a British Columbia (BC) corporation. The purpose of this Report is to support Supernova’s listing on the Canadian Securities Exchange (“CSE”), to provide a geological introduction to the Cold Springs Property, to summarize historical and recent work completed on the Property and to provide recommendations for future exploration work programs.

This Technical Report has been prepared in accordance with the Canadian Securities Administration’s (“CSA”s) National Instrument 43-101 (“NI 43-101”) Standards of Disclosure for Mineral Projects and guidelines for technical reporting Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) “Best Practices and Reporting Guidelines” for disclosing mineral exploration. The Effective Date of this Technical Report is January 31, 2021. The Technical Report includes a summary of exploration activities conducted on the Property to date and recommendations for future work.

The Cold Springs Property comprises 22 unpatented Bureau of Land Management (“BLM”) federal lode mining claims, covering a total area of 455 acres (184 hectares), located in Churchill County, Nevada. The claims are owned by Manta Minerals Corp. (“Manta”), a wholly owned subsidiary of Silver Range Resources Ltd. (“Silver Range”). Silver Range holds a 100 per cent (%) beneficial interest in the Property. On September 1, 2020, Supernova, and its wholly owned subsidiary Supernova Metals (US) Corp. (“Supernova US”), an Arizona company, entered into an option agreement (the “Agreement”) with Silver Range and Manta to acquire a 75% interest in the Cold Springs Property.

2.2 Authors and Site Inspection

Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo., President of APEX, is the author of this Report. Mr. Dufresne is independent of Supernova and is a Qualified Person (“QP”) as defined in NI 43-101. The CIM defines a Qualified Person as “an individual who is a geoscientist with at least five years of experience in mineral exploration, mine development or operation or mineral project assessment, or any combination of these; has experience relevant to the subject matter of the mineral project and the technical report; and is a member or licensee in good standing of a professional association.”

Mr. Dufresne is a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta (“APEGA”) and a Professional Geoscientist with the Association of Professional Engineers and Geoscientists of British Columbia (“APEGBC”) and has worked as a geologist for more than 30 years since his graduation from University. Mr. Dufresne has been involved in all aspects of mineral exploration and

mineral resource estimations for precious metal projects and deposits in North America, including epithermal-type gold-silver projects in Nevada and the western United States.

Mr. Dufresne conducted a QP site inspection of the Cold Springs Property for data verification purposes on September 8th, 2020. The site visit included a ground tour of the Property and the observation of historical workings throughout the Property. A total of six samples were collected by Mr. Dufresne during the site inspection; analytical work completed on these samples at an independent laboratory confirmed gold and silver mineralization at the Property.

2.3 Sources of Information

This report contains proprietary and publicly available information. A complete bibliography of references cited in this Technical Report is presented in Section 27. A large portion of the background information for historical exploration, geology and mineralization comes from work performed on the Property and detailed by Benjamin (1987), Ebert (2007), McKee et al. (1987), Morton (2017), Power (2018), and Wilden and Speed (1974). Journal publications by Crafford (2007), Dickinson (2006), Guilbert and Park (1986), Hague and Emmons (1877), Mckee and Conrad (1987), Morrison (1964), Schrader (1947), Sillitoe and Hedenquist (2003), Stewart and Carlson (1976), Taylor (2007), and White and Hedenquist (1995) were used to verify background geological information regarding the regional and local geological setting and mineral deposit potential of the Cold Springs Property.

The Author has reviewed all government and miscellaneous reports and has deemed that these reports and information are valid contributions to the best of his knowledge. The information was used as background information to provide a geological introduction to the Cold Springs Property. The Author takes ownership of the ideas and values as they pertain to this Technical Report.

2.4 Units of Measure

With respect to units of measure, unless otherwise stated, this Technical Report uses:

- Abbreviated shorthand consistent with the International System of Units (International Bureau of Weights and Measures, 2006);
- 'Bulk' weight is presented in both United States short tons ("tons"; 2,000 lbs or 907.2 kg) and metric tonnes ("tonnes"; 1,000 kg or 2,204.6 lbs.);
- Concentrations are given in grams per metric tonne (g/t) equal to parts per million or ounces per short ton (oz/st or opt) or percent (%).
- Geographic coordinates are projected in the Universal Transverse Mercator ("UTM") system relative to Zone 11 of the North American Datum ("NAD") 1983; and,

- Currency in Canadian dollars (CDN\$), unless otherwise specified (e.g., U.S. dollars, US\$; Euros, €).

3 Reliance of Other Experts

The Author did not investigate any legal, political, environmental, or tax matters associated with the Cold Springs Property, and is not an expert with respect to these issues, including the assessment of the legal validity of mining claims, private lands, mineral rights, and property agreements. The Author has relied on Supernova to provide all pertinent information regarding the legal status of the Company, as well as current legal title, material terms of all agreements, material environmental and permitting information, and tax matters that relate to the Cold Springs Property.

Property agreement and environmental permitting documents provided by the Company were reviewed and relevant information was included elsewhere in this Report; however, this Report does not represent a legal, or any other, opinion as to the validity of the agreement or any permits. The following documents, provided by Mr. Sean McGrath, CEO and Director of Supernova, were relied upon to summarize the Cold Springs property agreement, and permit status:

- Section 4.2.1: The “Cold Springs Option Agreement” between Volt Energy Corp. (now Supernova Metals Corp.), Supernova Metals (US) Corp., Silver Range Resources Ltd., and Manta Minerals Ltd., dated September 1, 2020.
- Section 4.3.2: The Cold Springs Notice of Intent (NOI) “Decision – Determination of Required Financial Guarantee Amount” letter addressed to Supernova Metals Corp. from the U.S. Bureau of Land Management (BLM), dated January 7, 2021 (NVN100149). The letter provides approval for the Cold Springs Notice of Intent Drilling Program and outlines conditions attached to the Notice, as well as the required financial guarantee (bond) amount.
- Section 4.3.2: The Cold Springs NOI was approved on January 7, 2021 for a term of 2 years and the “Decision – Personal Bond Accepted” letter addressed to Supernova Metals Corp. from the U.S. Bureau of Land Management, dated January 21, 2021. The letter confirms receipt of the required financial guarantee (bond) for the Cold Springs NOI.

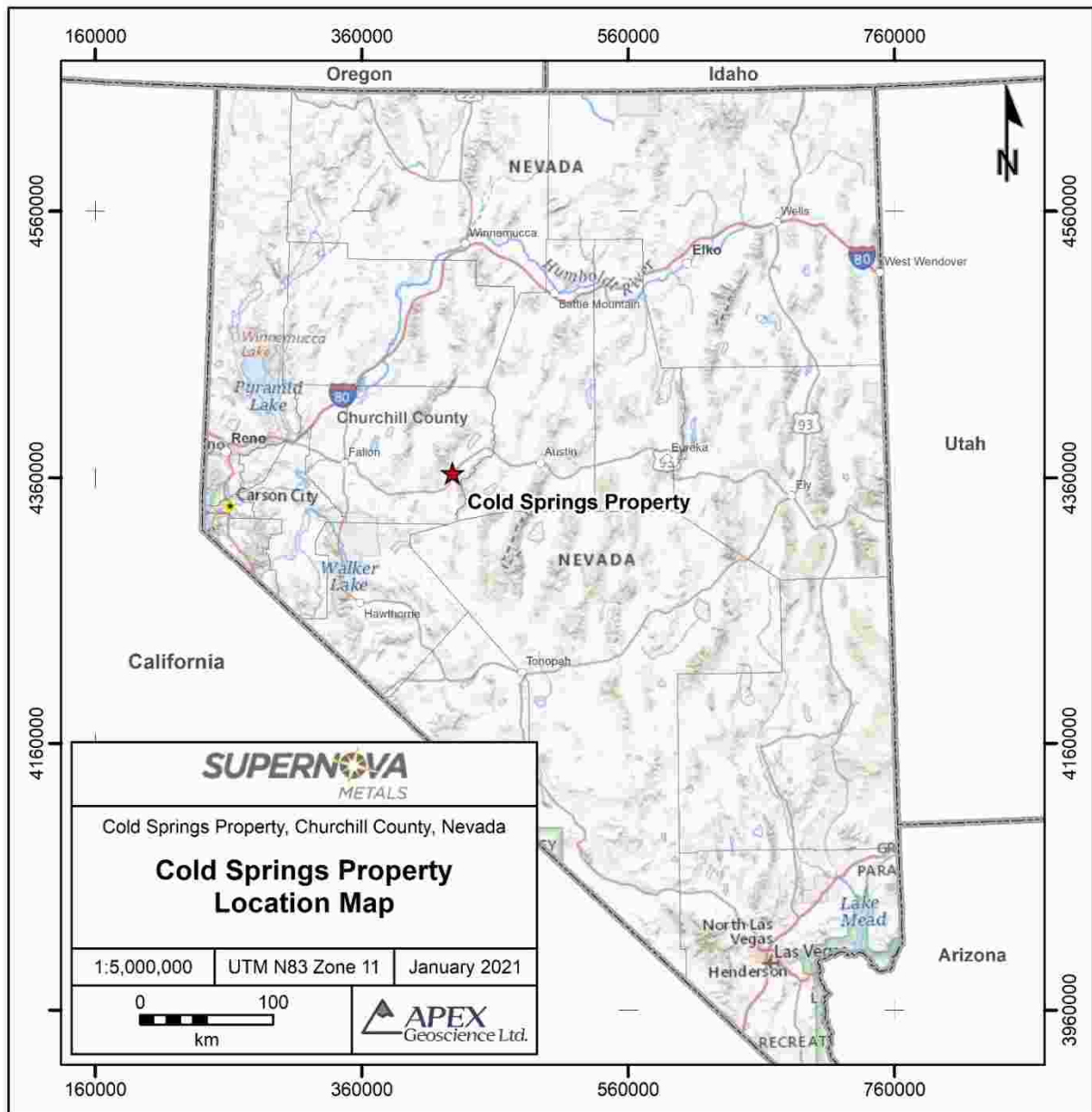
The Author did not attempt to independently verify the legal status of the 22 unpatented lode mining claims listed in Section 4.1 that comprise the Cold Springs Property. However, according to the Bureau of Land Management’s Mineral and Land Record System Reports (MRLS) mining claim records, the Cold Springs claims are listed as active and in good standing as of the Effective Date of this Report.

4 Property Description and Location

4.1 Description and Location

The Cold Springs Property is located on the western flank of the Desatoya Mountain range of west-central Nevada, approximately 80 km (50 miles) east of Fallon, Nevada, and 60 km (37 miles) west-southwest of Austin, Nevada (Figure 4.1). The Property lies within the U.S. Geological Survey (“USGS”) US Topo 7.5-minute series, 1:24:000 scale quadrangle map sheet for Cold Springs, NV. It is centred at approximately 39° 24’ 37” N Latitude; 117° 49’ 42” W Longitude.

Figure 4.1. Cold Springs Property Location Map

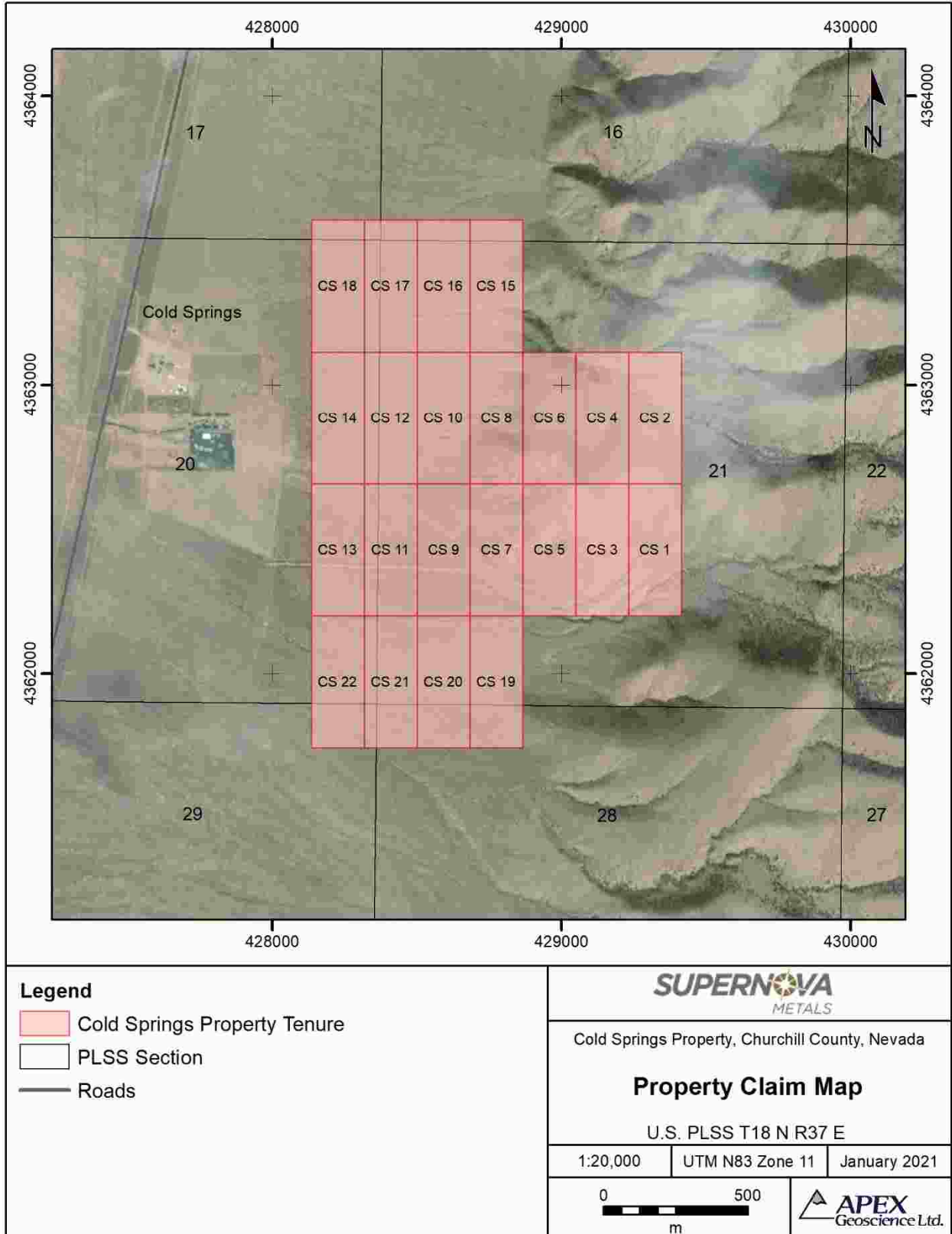


The Cold Springs Property comprises 22 unpatented BLM federal lode mining claims, covering a total area of 454.52 acres (183.94 hectares), located in Churchill County, Township 18 North, Range 37 East, Sections 16, 17, 20, 21, 28, and 29, Mount Diablo Baseline and Meridian (Table 4.1; Figure 4.2). The claims are registered to Manta Minerals Corp., a wholly owned subsidiary of Silver Range Resources Ltd. On September 1, 2020, Supernova executed an option agreement with Silver Range whereby the Company can acquire a 75% interest in the Cold Springs Property. The terms of the agreement are summarized in Section 4.2.1.

Table 4.1. Cold Springs Property Mining Claim Details

Owner	Claim Name	Location Date	BLM Case Serial Number	BLM Recording Date	County Document Number	County Recording Date
Manta Minerals Corp	CS 1	10/13/2016	NV101841318	11/28/2016	458034	12/01/2016
Manta Minerals Corp	CS 2	10/13/2016	NV101841319	11/28/2016	458035	12/01/2016
Manta Minerals Corp	CS 3	10/13/2016	NV101841320	11/28/2016	458036	12/01/2016
Manta Minerals Corp	CS 4	10/13/2016	NV101841321	11/28/2016	458037	12/01/2016
Manta Minerals Corp	CS 5	10/13/2016	NV101841322	11/28/2016	458038	12/01/2016
Manta Minerals Corp	CS 6	10/13/2016	NV101841323	11/28/2016	458039	12/01/2016
Manta Minerals Corp	CS 7	10/13/2016	NV101841324	11/28/2016	458040	12/01/2016
Manta Minerals Corp	CS 8	10/13/2016	NV101841325	11/28/2016	458041	12/01/2016
Manta Minerals Corp	CS 9	10/13/2016	NV101841326	11/28/2016	458042	12/01/2016
Manta Minerals Corp	CS 10	10/13/2016	NV101842701	11/28/2016	458043	12/01/2016
Manta Minerals Corp	CS 11	09/22/2018	NV101713780	10/03/2018	470182	10/03/2018
Manta Minerals Corp	CS 12	09/22/2018	NV101713781	10/03/2018	470183	10/03/2018
Manta Minerals Corp	CS 13	09/22/2018	NV101713782	10/03/2018	470184	10/03/2018
Manta Minerals Corp	CS 14	09/22/2018	NV101713783	10/03/2018	470185	10/03/2018
Manta Minerals Corp	CS 15	09/22/2018	NV101713784	10/03/2018	470186	10/03/2018
Manta Minerals Corp	CS 16	09/22/2018	NV101713785	10/03/2018	470187	10/03/2018
Manta Minerals Corp	CS 17	09/22/2018	NV101713786	10/03/2018	470188	10/03/2018
Manta Minerals Corp	CS 18	09/22/2018	NV101713787	10/03/2018	470189	10/03/2018
Manta Minerals Corp	CS 19	09/22/2018	NV101713788	10/03/2018	470190	10/03/2018
Manta Minerals Corp	CS 20	09/22/2018	NV101713789	10/03/2018	470191	10/03/2018
Manta Minerals Corp	CS 21	09/22/2018	NV101713790	10/03/2018	470192	10/03/2018
Manta Minerals Corp	CS 22	09/22/2018	NV101713791	10/03/2018	470193	10/03/2018

Figure 4.2. Cold Springs Property Tenure Map



Unpatented BLM lode mining claims are subject to an annual maintenance fee of USD\$165 per claim payable to the U.S. Department of the Interior, BLM on or before September 1 of each year. A notice of intent to hold must also be filed annually with the Churchill County Recorder on or before November 1 each year, along with the requisite filing fee of USD\$12 per claim plus a USD\$18 fee per document. The federal BLM maintenance fees, and county filing fees and taxes for the Cold Springs Property have been paid in full for 2020 - 2021. The current total holding costs for the Property are estimated at USD\$3,912 annually.

The Author did not attempt to independently verify the legal status of the 22 unpatented BLM lode mining claims that comprise the Cold Springs Property; however, according to the BLM's Mineral and Land Record System Reports (MLRS) mining claim records, the Cold Springs claims are listed as active and in good standing as of the Effective Date of this Report. Records from the Churchill County Recorder show that the notice of intent to hold for the 2021 assessment year was submitted with the requisite fee and recorded on July 16, 2020.

4.2 Royalties and Agreements

4.2.1 Cold Springs Option Agreement

The Cold Springs mining claims are registered to Manta Minerals Corp. ("Manta"), a Nevada company with offices in Juneau, Alaska. Manta is a wholly owned subsidiary of Silver Range Resources Ltd. ("Silver Range"), a British Columbia company with offices in Vancouver, BC. Silver Range holds a 100% beneficial interest in the Property. On September 1, 2020, Supernova Metals Corp., formally known as Volt Energy Corp., a British Columbia company with offices in Vancouver, BC, and its wholly owned subsidiary Supernova Metals (US) Corp. ("Supernova US"), an Arizona company, entered into an option agreement (the "Agreement") with Silver Range and Manta to acquire a 75% interest in the Cold Springs Property.

Under the terms of the Agreement, Silver Range grants the exclusive right and option to acquire a 75% legal and beneficial interest in the Cold Springs Property (the "Option"). To exercise the Option, Supernova agrees to:

(a) Pay Silver Range an aggregate \$300,000 as follows:

- \$10,000 upon the execution of the LOI (completed);
- an additional \$20,000 on or before November 30, 2020 (completed);
- an additional \$20,000 on or before February 28, 2021;
- an additional \$50,000 on or before August 31, 2021;
- an additional \$100,000 on or before August 31, 2022;
- an additional \$100,000 on or before August 31, 2023.

(b) Complete a minimum of 2,000 metres of drilling on the Property, on or before August 31, 2023.

Prior to any operations carried out on the Property by or on behalf of Supernova, Silver Range shall deliver all documentation necessary to transfer registered ownership in the Cold Springs claims into the name of Supernova US. Within 30 days of receipt of the documents, Supernova shall file the documents with the applicable State and Federal government agencies in accordance with applicable mining law and have registered ownership of the claims transferred into the name of Supernova US. Prior to Supernova satisfying the terms of the Agreement, Supernova shall hold legal ownership of the Property in trust for Silver Range.

Upon Supernova exercising the Option, Silver Range shall be deemed to have retained a royalty of 2.5% of Net Smelter Returns (NSR) related to precious and non-precious metals from commercial production at the Property. Supernova may purchase 60% of the royalty at any time after the Option has been exercised for a cash payment of \$1,250,000, lowering it to a 1% NSR.

Supernova is required to maintain the mineral claims active and in good standing during the term of the Agreement.

4.2.2 Nevada State Tax

Production from Cold Springs would be subject to the State of Nevada Net Proceeds of Mine Tax. The tax calculated on a sliding scale based on the ratio of net proceeds to gross proceeds, from a rate of 2% to 5% of production net proceeds (Table 4.2).

Table 4.2. Net Proceeds of Mine Tax Rates (NRS 362.140)

Net Proceeds as Percentage of Gross Proceeds	Rate of Tax as Percentage of Net Proceeds
Less than 10	2.00
10 or more but less than 18	2.50
18 or more but less than 26	3.00
26 or more but less than 34	3.50
34 or more but less than 42	4.00
42 or more but less than 50	4.50
50 or more	5.00

The rate of tax upon an operation for which the net proceeds in a calendar year exceed USD\$4,000,000 is 5 percent (NRS 362.140).

4.3 Permitting, Environmental Liabilities and Significant Factors

4.3.1 Permitting

The Cold Springs Property is located on public lands administered by the BLM. Exploration, mining and milling activities on public lands are subject to the BLM's surface management program and applicable legislation. The following paragraphs summarize the BLM permitting requirements for exploration activities.

Activities that generally cause negligible disturbance are considered to be “casual use”, including collecting geochemical rock, soil or mineral specimens using hand tools; hand-panning; or non-motorized sluicing. Operators may use motorized vehicles for casual use activities provided that it is consistent with applicable regulations, off-road vehicle use designations and any temporary closures ordered by the BLM. These types of activities do not require the operator to notify, consult or seek approval from the BLM, and no financial guarantee is required. BLM field staff and management are given discretion to determine what activities would ordinarily result in no or negligible disturbance (BLM, 2012).

Activities that result in more than negligible disturbance are not considered casual use. These activities generally include mechanized earth moving equipment, truck mounted drilling equipment and motorized vehicles in areas closed to off-road vehicle use. Operations that use chemicals in the recovery or processing of minerals (i.e. cyanide leaching), or explosives are also not considered casual use. A Notice of Intent (NOI) is required for exploration activities greater than casual use, causing surface disturbance of 5 acres or less. Any activities causing more than negligible disturbance that do not qualify as a notice-level operation, including all mining, must be conducted under an approved Plan of Operations (BLM, 2012).

For notice-level operations, a complete Notice of Intent must be filed with the BLM District/Field Office a minimum of 15 calendar days prior to commencing operations. A Notice must include relevant information about the operator, a description of the proposed activities, a reclamation plan, and a reclamation cost estimate. Within 15 days of receiving the Notice, the District/Field Office will review the filing for completeness, determine whether the operation qualifies as a notice-level operation and inform the operator if any additional actions are required. The BLM will then determine whether the Notice is complete and if the operations will cause any unnecessary or undue degradation. Once these criteria are met, and the operator furnishes an acceptable financial guarantee, the operator may commence operations (BLM, 2012).

A Plan of Operations (“PoO”) is required for surface disturbance greater than casual use, unless the activities qualify for a Notice filing. The BLM’s review of a PoO can be divided into six general categories: completeness review, environmental analysis, financial guarantee establishment, approval decision, monitoring, and reclamation and closure. The level of detail required, and amount of time required to review and approve a PoO varies considerably depending on the type and complexity of proposed activities, affected resources, level of environmental analysis, amount of interagency coordinate required, public controversy, and other site-specific conditions. The PoO must contain at minimum all the information required under 43 CFR 3809.401(b) in order to be considered complete; however, BLM reviewers are allowed considerable judgement in identifying applicable information and the required level of detail (BLM, 2012).

A Nevada Division of Environmental Protection Reclamation Permit is also required for PoO level operations. Other State environmental permits may also be required in conjunction with the PoO, depending on the scope of the operation.

4.3.2 Cold Springs Notice of Intent

On December 21, 2020, Supernova submitted a Notice of Intent to the BLM for a drilling program at the Cold Springs Property. The NOI (NVN100149) was approved on January 7, 2021 for a term of 2 years. A total of 0.91 acres of disturbance is Authorized under the Notice, which includes 7 drill pads and approximately 1,100 ft of overland travel. As a condition of the Notice, Supernova furnished an acceptable financial guarantee (bond) in the amount of USD\$8,691, based on the BLM Notice Level Exploration Reclamation Cost Model. The bond (NVB002508) was received by the BLM Nevada State Office in the required amount on January 20, 2021.

To meet BLM reclamation standards, plugging of all drill holes, re-contouring of all constructed roads and drill pads, backfilling trench excavations, de-compacting and/or de-rutting, as necessary, of overland travel routes, and reseeding is required for the disturbance proposed in the Notice. Termination of liability under the bond will be permitted only after the BLM Nevada State Office is satisfied that there is no outstanding liability or until satisfactory replacement bond coverage is furnished.

4.3.3 Environmental Liabilities and Significant Factors

The Author is not aware of any social, political, or environmental liabilities to which the Property may be subject, or any other significant factors or risks that would affect access, title or Supernova's ability to perform exploration, development, or production work on the Cold Springs Property. There are several open shafts and stopes on the Property; however, these shafts and stopes have been fenced off in accordance with the Nevada Division of Minerals Minimum Hazard Securing Standards for Adits and Shafts. A few of the fences are in disrepair and should be inspected and repaired where necessary.

There are no other significant factors or risks that the Author is aware of that would affect access, title or the ability to perform work on the Property.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

The Cold Springs Property is located on the western flank of the Desatoya Mountains of west-central Nevada, within Churchill County. It is approximately 80 km (50 miles) east of Fallon, Nevada and 80 km (50 miles) west of Austin, Nevada, by road. The nearest major city is Reno, Nevada, located 200 km (125 miles) west of the Property by road. The Property boundary is about 600 m (2000 ft) east of U.S. Route 50.

Access to the Property is via U.S. Route 50 to the Cold Springs Station turnoff, located between mile post markers 81 and 82. From Cold Springs Station, a series of dirt roads, jeep trails, and/or old drill access roads provide access to most areas of the Property. Many of the older drill roads have been reclaimed, deactivated or washed out.

5.2 Site Topography, Elevation and Vegetation

Central Nevada lies within the Great Basin physiographic section of the Basin and Range Province. The area is characterized by north-south trending mountain ranges separated by broad valleys filled with lacustrine-gravel-volcaniclastic deposits. The Cold Springs Property is situated on the western flank of the north-northwest trending Desatoya Mountains, bordering the north-northeast trending Cold Springs Valley to the west. The east-west trending Cold Springs Canyon lies approximately 1.2 km (0.75 miles) south of the Property boundary. Local topography consists of gentle to moderate slopes crosscut by shallow, dry creek beds.

Elevations range from around 1,500 m (4,900 ft) above mean sea level (AMSL) in Cold Springs Valley to over 3,000 m (9,850 ft) AMSL in the Desatoya Mountains. The highest point in the Desatoya range is Desatoya Peak at 3,041 m (9,977 ft) AMSL, located approximately 8 km (5 miles) southeast of the Property. Elevations on the Property range from about 1,700 m (5,600 ft) AMSL in the west to 1,870 m (6130 ft) AMSL in the east.

Vegetation is typical of central Nevada. Sagebrush is abundant on the valley floors. Pinyon Pine predominates at higher elevations.

5.3 Climate

The climate at Cold Springs is typical of the northern Great Basin, characterized by hot, dry summers and cold winters. Humidity and precipitation are low. Climate data for nearby Middlegate recorded between 1988 and 2013 show average July high and low temperatures of 33 °C (92 °F) and 10 °C (49.5 °F), respectively, and average January high and low temperatures of 7 °C (45.1 °F) and -9 °C (16.2 °F), respectively. Average annual rainfall is 144 mm (5.68 inches) and annual average snowfall is 89 mm (3.5 inches) (Western Regional Climate Center, 2021).

5.4 Local Resources and Infrastructure

Nevada is the top gold-producing state in the U.S. and is well equipped to supply any goods or services required for mining and exploration. Cold Springs is well situated along U.S. Route 50, a major east-west route in the U.S. Highway System. Accommodations, food, and limited retail sales are available immediately adjacent to the Property at Cold Springs Station. The closest fuel available is at Middlegate, approximately 23 km (14 miles) southwest by road.

The city of Fallon is located approximately 80 km (50 miles) west of the Property by road. According to the United States Census of 2010, Fallon has a population of 8,606. All services are available in Fallon, including housing, hotels, groceries, restaurants, supplies, general labour, hospitals, schools, and many other goods and services. Some industry services are also available, including drilling contractors and heavy equipment operators. The town of Austin is slightly closer by road but is much smaller and offers fewer services.

Reno, with a metro population of over 425,000, offers extensive infrastructure and support for the mining industry. Full industry services are available, including multiple drilling contractors, heavy equipment operators, assay labs, mining and exploration supplies, skilled labour, and technical services.

Power lines run along the U.S. Route 50 corridor, 600 m (2,000 ft) west of the Cold Springs Property boundary.

There is no surface water on the Cold Springs Property. Water for drilling can be purchased and trucked from the town of Gabbs, Nevada, located approximately 74 km (46 miles) south of the Property by road. Similar arrangements could be made in Austin or Fallon. Several wells exist in the immediate area surrounding the Property, listed by the Nevada Division of Water Resources (“NDWR”) as either “Active” or “Inactive” and classified by type of use. To utilize an Active well, a lease agreement for water use would have to be negotiated with the owners of the water rights. Unless the well is already permitted for Mining and Milling use, a permit change application would need to be approved by the NDWR. To utilize an Inactive well, a new permit application would need to be approved by the NDWR.

Surface rights sufficient for mining operations on unpatented claims are provided for under the General Mining Law of 1872, subject to the BLM’s surface management program and applicable legislation.

The Project can be accessed year-round. Most exploration activities associated with fieldwork and drilling can likely be conducted year-round, although there may be periods in December to March, where snow conditions at the higher elevations may temporarily impede fieldwork.

6 History

6.1 Early Development

The Cold Springs Property is located within or adjacent to the poorly defined Eastgate Mining District. It is immediately east of Cold Springs Station, a former Pony Express station. The date of the earliest mineral discovery within the district is unknown, but a letter dating from 1935 states that gold-silver mineralization was first discovered at Cold Springs in the 1860’s. The earliest recorded work in the Cold Springs area, consisting of sporadic prospecting for gold and silver, dates back to the early 1900’s.

By the early 1930’s, development at the Cold Springs Property consisted of 3 adits and 3 shafts as well as numerous trenches. Mine records from the Eastgate District between 1935 and 1957 document production of 3,247 ounces of gold and 38,152 ounces of silver from 8,724 tons of ore (Willden and Speed, 1974).

During the early 1950's, G. Peer reportedly drove 610 metres (2,000 ft) of adits and drifts, excavated 122 metres (400 ft) of shaft, and conducted surface stripping with a bulldozer. No shipments of ore were reported (Benjamin, 1987; McKee et al., 1987).

6.2 Ownership History

The Cold Springs mineralized area was first staked in 1907, with later assessment work activity on 50 claims between 1915 and 1923 (Benjamin, 1987). The area was again re-staked in 1950 by G. Peer as the Oroplata claims, which overlap the current Cold Springs Property (Benjamin, 1987; McKee et al., 1987).

In 1979, Phelps Dodge Corp. ("Phelps Dodge") optioned the OROPLATA #1 to #3 claims from M. Fitzgerald and staked the GATE #1 to #40 claims around them. Surface exploration and minor drilling was completed but Phelps Dodge dropped the claims (Benjamin, 1987).

In 1982, Asarco Inc. ("Asarco") and M. Fitzgerald re-staked the GATE and OROPLATA claims as the CS claims. Asarco completed eight reverse circulation (RC) drill holes but subsequently released its interest to M. Fitzgerald in 1985 (Benjamin, 1987).

In 1987, the W.X. Syndicate and J. Prochnau & Co. ("W.X. Syndicate") optioned the project and conducted exploration, including twenty-six drill holes in 1987 and 1988 (Power, 2018). The option and claims were subsequently dropped in the early 1990's.

Claim records from the BLM's MRLS show that the area was recorded as the COLD 1 to 64 claims under Cordilleran Exploration Co. LLC in January 2000 and subsequently abandoned in September of the same year. The COLD-29 to -36 and -49 to -58 claim block was staked and recorded under Buckskin Resources LLC in February 2003. The 18 COLD claims were subsequently optioned to Northern Abitibi Mining Corp. ("Northern Abitibi") in 2006, who conducted surface exploration and RC drilling.

MLRS records show that the 18 COLD claims were transferred to Nevada Eagle Resources in 2011 and to Pilot Gold (USA) Inc. in 2015. An additional 27 claims were staked and recorded in 2010 under Pilot Gold (USA) Inc. and Buckskin Resources LLC. The 18 Pilot Gold (USA) Inc. claims were transferred to Nevada Eagle Resources in 2011 and were allowed to lapse in 2012. The 9 Buckskin Resources LLC claims were transferred to Nevada Eagle Resources in 2011 and to Pilot Gold (USA) Inc. in 2015. The remaining COLD claims lapsed in 2015.

In 2016, Silver Range's wholly owned subsidiary, Manta Minerals, re-staked the area as the CS 1 to 10 claims. The CS 11 to 22 claims were added in 2018. Silver Range compiled the historical data and conducted surface exploration, some of which is summarized below in Sections 6.3 and 9.

6.3 Surface Exploration

The Cold Springs Property has been explored intermittently since the late 1970's. Surface exploration work was completed by Phelps Dodge in 1979, by the W.X. Syndicate and J. Prochnau & Co. in 1987 and 1988, by Northern Abitibi in 2006, and by Silver Range in 2016. Recent surface exploration work completed by Supernova and Silver Range is discussed in Section 9.

During 1979, Phelps Dodge completed surface work comprising geological mapping, rock sampling and induced polarization (IP) and resistivity (Res) geophysical surveys. Rock sampling targeted a large, silicified breccia zone on the hill in the eastern part of the current Property that encompasses the historical workings. Of 34 samples collected, ten (10) returned values over 1.0 g/t gold (Au), up to a high of 4.5 g/t Au from silicified rhyolite breccia collected near a historical shaft at the top of the hill. Significant silver (Ag) values of over 1 ounce per short ton (opt or oz/st; 1 opt = 34.286 g/t) were reported for 6 samples, up to a high of 27.0 opt (926 g/t) Ag in a brecciated and silicified rhyolite-trachyte sample collected on the western slope of the hill near a historical adit, that also returned 2.3 g/t Au. Copper (Cu), lead (Pb), zinc (Zn) and molybdenum (Mo) values were also reported.

The Phelps Dodge IP/Res survey identified a weakly chargeable, high resistivity area 2,000 to 2,500 ft wide and at least 2,500 ft long that included the silicified hill. The response was attributed to low sulphide concentrations and widespread silicification. Additional IP/Res surveying was recommended (Hauck, 1979).

During 1987 and 1988, the W.X. Syndicate completed work comprising surface and underground mapping, and rock sampling. Surface rock sampling focused on testing breccia zones and quartz veining on the hill encompassing the historical workings and had a wider overall footprint than the previous Phelps Dodge sampling. Of 41 surface rock samples collected, 6 returned values over 1 g/t Au, up to a high of 8.3 g/t Au with 9.03 opt (310 g/t) Ag from an altered quartz vein breccia collected on the western slope of the hill near a historical adit. Underground rock chip sampling returned results up to 0.41 g/t Au with 1.32 opt (45.3 g/t) Ag.

During 2006, Northern Abitibi completed surface work comprising prospecting, soil geochemical sampling, geological mapping, and 7.5-line kilometres (line-km) of Controlled Source Audio Magneto Tellurics (CSAMT) geophysical surveying. Geological mapping identified a series of shallowly dipping, northwest trending quartz veins within a broader area of stockwork (Northern Abitibi Mining Corp., 2006) and altered and brecciated volcanic rocks, coincident with the silicified hill sampled by previous operators. They suggested the zone is open along strike, projecting under alluvial cover at both ends (Northern Abitibi Mining Corp., 2006).

The rock sampling was focused within the northwest trending quartz vein area on the hill that contains the historical workings (Figures 6.1 and 6.2). The results verified historical rock sampling results reported by previous operators and demonstrates that quartz veins at Cold Springs are variably mineralized with both high-grade and low-grade

sections (Northern Abitibi Mining Corp., 2006). Of the 28 grab, composite grab, and discontinuous chip samples collected, 12 returned values greater than 1 g/t Au, up to a high of 69.4 g/t Au with 1,280 g/t Ag from a crustiform-colloform banded quartz vein grab sample with 1-3% sulphide bands collected on the east side of the hill.

The Northern Abitibi soil sampling covered an area approximately 700 m by 500 m on the central and southeast part of the silicified hill (Figures 6.3 and 6.4). A total of 123 samples were collected on 4 lines oriented at 048° azimuth and spaced approximately 180 m (590.5 ft) apart. A nominal sample spacing of 25 m (82 ft) was used. Another 8 samples were collected northeast of the current Property boundary. The soil samples were not analyzed for gold; however, silver, and arsenic values show a general spatial correlation with gold and silver values in rock samples, and with the mapped quartz veining and silicified breccia zones. Anomalies were defined over an area of approximately 400 m (1,312 ft) long by 60 to 230 m (197 to 755 ft) wide. The silver and arsenic soil anomalies are open to the northwest.

Quantec Consulting Inc. was retained by Northern Abitibi to complete 5 lines (7.5 line-km) of CSAMT at Cold Springs in 2006. The survey covered an area approximately 1.5 km (0.93 miles) by 700 m (2,297 ft) over the central area of the silicified hill, extending southwest into the pediment, and to the southeast of the current Property. The lines were oriented at 050° azimuth, 1,500 m (4,921 ft) in length, and spaced 175 m (574 ft) apart. The CSAMT survey identified three sub-parallel, linear resistivity lows, which Northern Abitibi interpreted to be possible feeder structures below a resistive silica cap (Northern Abitibi Mining Corp., 2006). The 2006-2007 Northern Abitibi drilling targeted the anomalies identified by the CSAMT survey.

During 2016, Silver Range completed rock and soil verification sampling at the Cold Springs Property. A total of 12 rocks and 8 soil samples were collected (Figures 6.1 to 6.4). The rocks were collected in the vicinity of historical workings, drill holes and surface samples with gold values ranging from 0.35 g/t to 20.1 g/t and silver values ranging from 18.1 g/t to 1,770 g/t. Eight samples returned gold values greater than 1 g/t, seven of which returned silver values greater than 100 g/t. Unlike the previous Northern Abitibi soils, the 8 Silver Range soils were analyzed for gold. The gold values are labelled on Figures 6.3 and 6.4. The 2016 sampling verified the presence of high-grade gold and silver mineralization on the silicified hill.

Silver range completed additional sampling, along with IP/Res ground geophysics in 2018. This recent work is discussed in Section 9.

Figure 6.1. Cold Springs Historical Rock Sampling Showing Au (g/t)

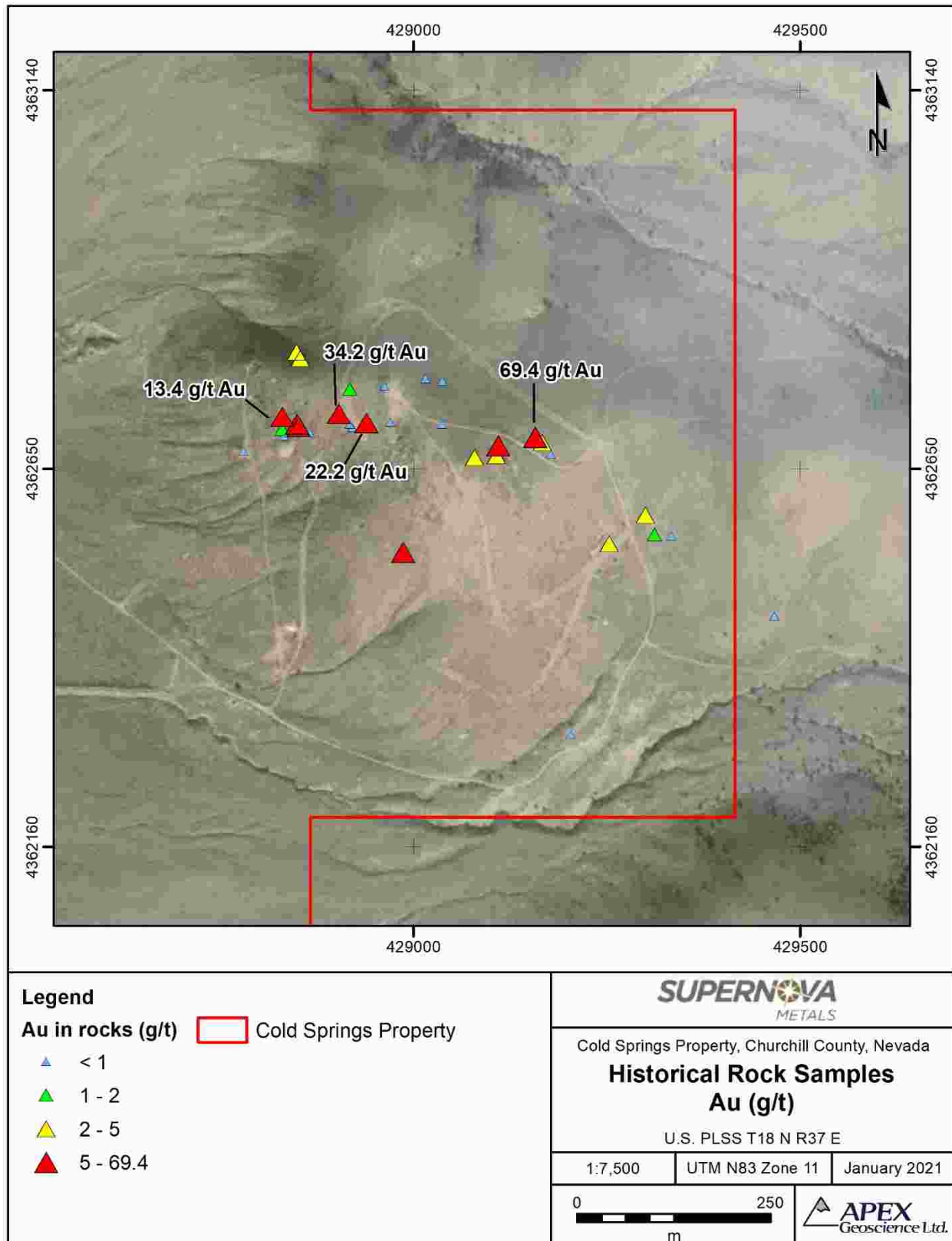


Figure 6.2. Cold Springs Historical Rock Sampling Showing Ag (g/t)

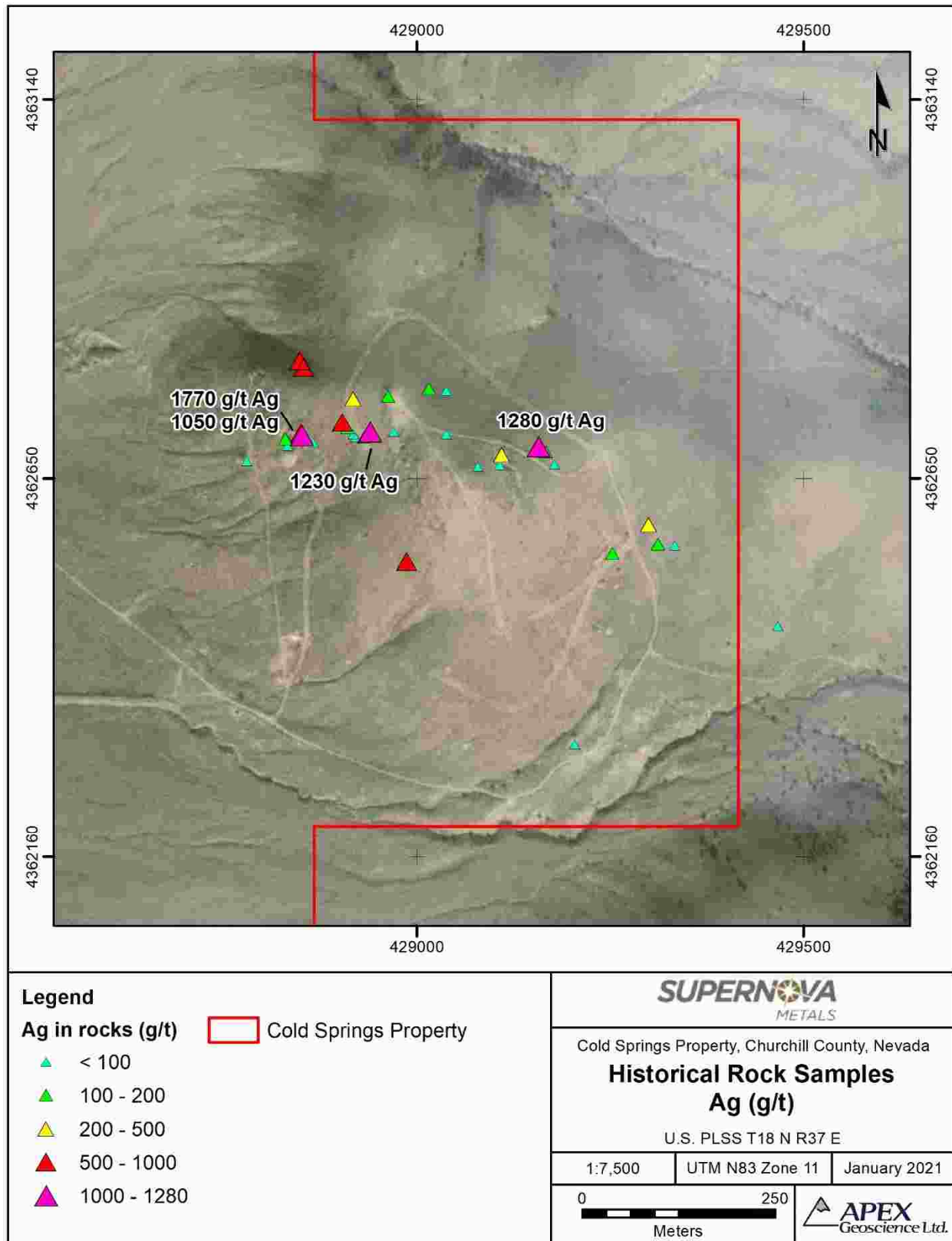


Figure 6.3. Cold Springs Historical Soil Sampling Showing As (ppm)

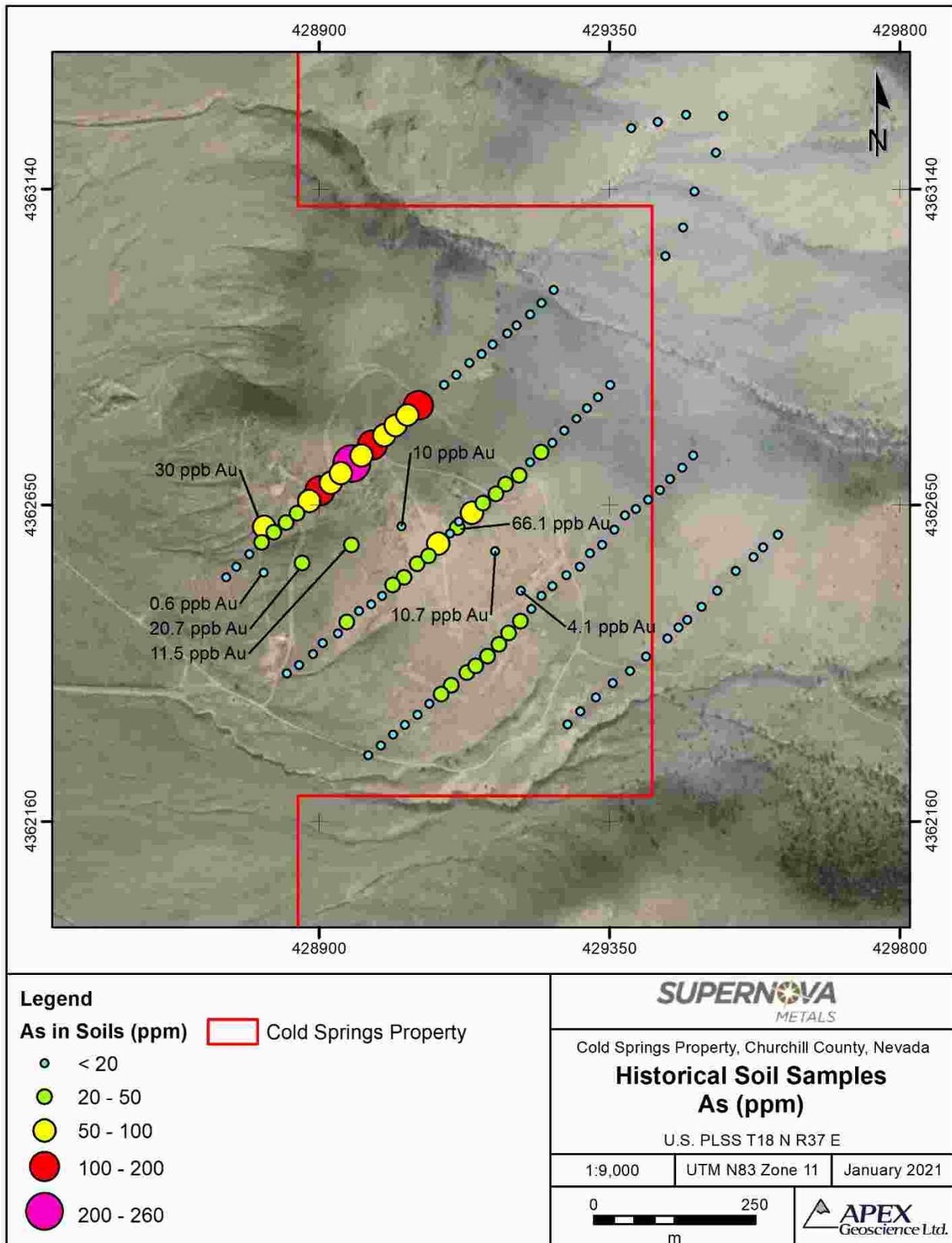
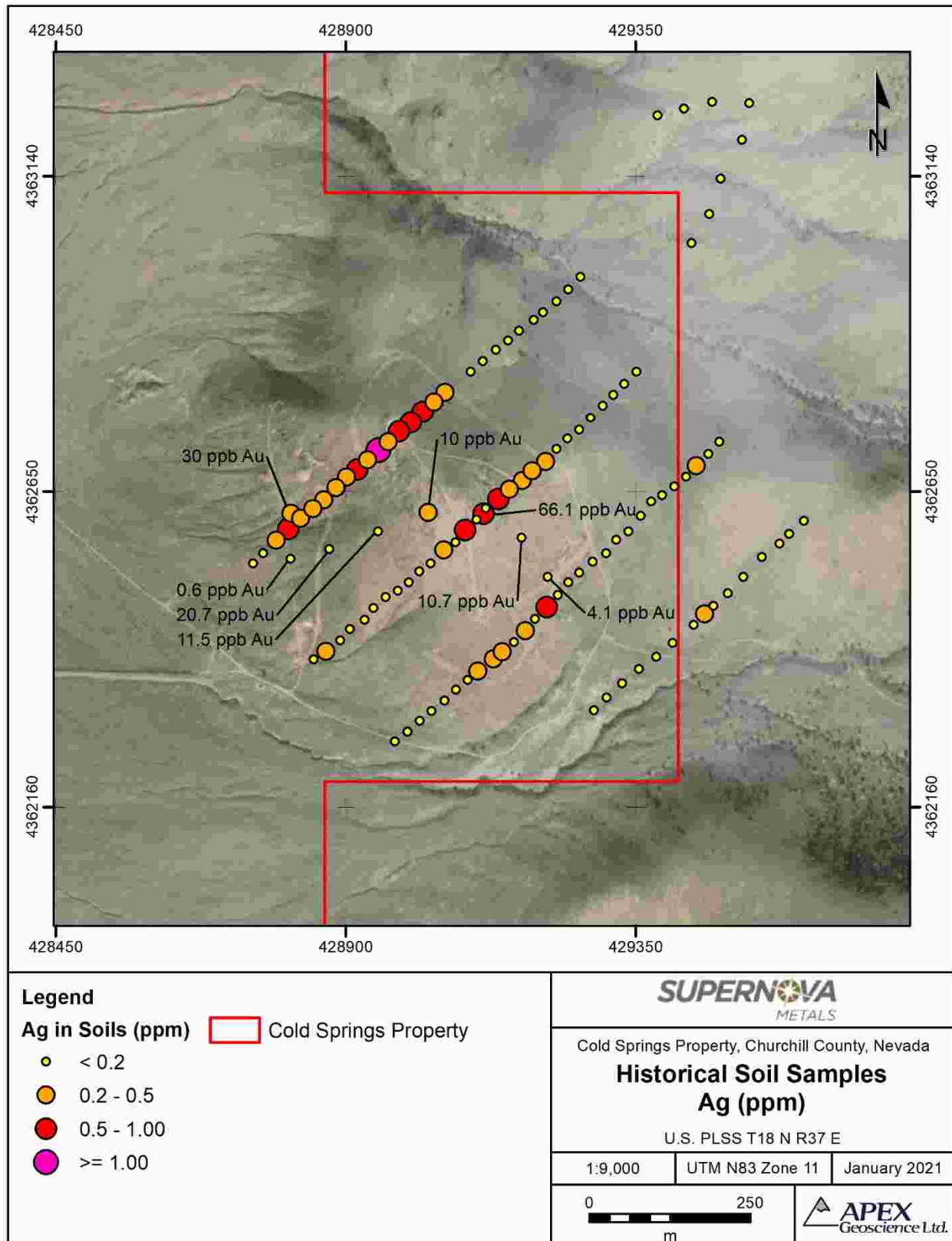


Figure 6.4. Cold Springs Historical Soil Sampling Showing Ag (ppm)



6.4 Drilling

Drilling was completed by Phelps Dodge in 1980 and 1981, by Asarco in 1983, by the W.X. Syndicate and J. Prochnau & Co. in 1987 and 1988, and by Northern Abitibi in 2006 and 2007. A total of 3,213 metres (10,540 ft) in 47 drill holes has been completed historically at Cold Springs. Historical drill hole locations are presented in Figure 6.5. Significant historical weighted average gold and silver grades are presented in Table 6.1.

During 1980 and 1981, Phelps Dodge completed 457 m (1,500 ft) of rotary and hammer drilling in 8 vertical holes (G-01 to G-08). The drilling was concentrated on the east side of the current Property to test mineralization on the top and southeast side of the hill, and in the pediment west of the hill. The best reported results were 0.65 g/t Au with 25.4 g/t Ag over 21.34 m from variably brecciated and pyritic rhyolite – quartz latite tuff in hole G-04, located on the southeast flank of the hill; and 0.34 g/t Au over 3.05 m from quartz latite – rhyodacite porphyry in hole G-8, located on the south flank of the hill. Hole G-05, located west of the base of the hill in the inferred hanging wall of the range front fault, intersected 29 m (100 ft) of alluvium and 18 m (60 ft) of Pleistocene lake sediments without intersecting bedrock.

During 1983, Asarco completed 683 m (2,242 ft) of RC drilling in 8 holes (CS83-01 to CS83-08). Three inclined holes (-60°) tested veins on the west flank of the hill, four vertical holes tested the top and northern part of the hill, and one tested the southern flank of the hill. The best result achieved was 0.78 g/t Au with 7.1 g/t Ag over 21.34 m from surface, including 4.25 g/t Au over 3.05 m, in CS83-04, located on the hilltop.

During 1987 and 1988, the W.X. Syndicate completed 408 m (1,338 ft) of RC drilling in 26 holes (GTE-87-01 to GTE-88-26). In 1987, they completed 7 holes. Holes GTE-87-01, -02, and -03 were collared in the pediment along the west flank of the hill, targeting the down-dip and along strike projections of flat-dipping siliceous volcanic units, in the inferred hanging wall of the range front fault. The holes intersected unmineralized fresh tuff beneath 20 to 25 m (70 to 80 ft) of overburden. No significant results were returned from these holes. Holes GTE-87-04, -05, -06, and -07 were collared in the vicinity of the historical underground workings and previously sampled quartz veins, approximately 40 to 70 m north of CS83-04. The holes were lost at shallow depths in the mine workings on the hanging wall side of a flat-dipping vein zone. The highest grade achieved was 0.13 g/t Au with 27.0 g/t Ag over 3.05 m from a variably silicified tuff breccia in GTE-87-04.

Figure 6.5. Cold Springs Historical Drill Hole Locations

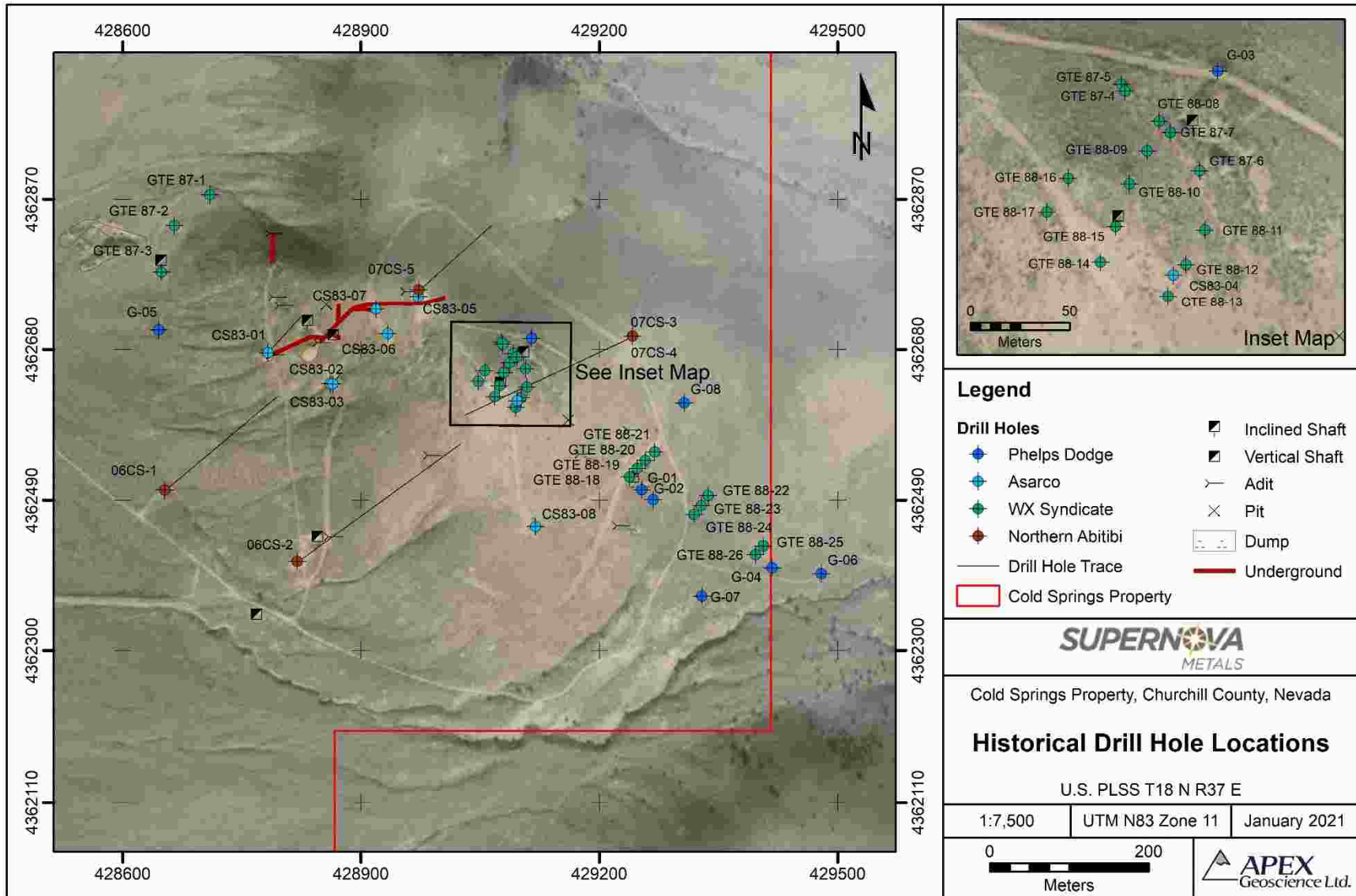


Table 6.1. Significant Historical Weighted Average Gold and Silver Grades

Hole ID	From (m)	To (m)	Interval (m)*	Au (ppm)	Ag (ppm)
G-04	41.15	62.48	21.34	0.65	25.4
G-08	35.05	38.10	3.05	0.34	<0.3
CS83-01	45.72	48.77	3.05	0.55	<0.3
and	82.30	85.34	3.05	<0.03	27.8
CS83-04	0.00	21.34	21.34	0.78	7.1
including	6.10	18.29	12.19	1.25	8.3
including	9.14	12.19	3.05	4.25	9.3
CS83-06	15.24	21.34	6.10	0.15	15.8
GTE-87-04	6.10	9.14	3.05	0.13	27.0
GTE-88-10	3.66	10.97	7.32	0.21	5.1
GTE-88-11	3.66	14.63	10.97	0.24	12.4
GTE-88-15	7.32	10.97	3.66	0.89	17.0
GTE-88-16	0.00	7.32	7.32	0.25	5.6
GTE-88-21	3.66	10.97	7.32	0.26	1.4
06CS-2	274.32	275.84	1.52	0.19	43.4
07CS-3	51.82	82.30	30.48	0.40	22.8
including	57.91	67.06	9.14	1.08	53.6
including	59.44	62.49	3.05	2.17	98.1
and	102.10	103.63	1.53	0.31	13.1
and	109.73	111.25	1.52	0.21	17.6
07CS-4	53.34	56.39	3.05	0.46	60.4
07CS-5	0.00	3.05	3.05	0.20	5.0

*Interval column may not sum due to rounding.

In 1988, the W.X. Syndicate completed an additional 18 short holes, ranging from 4 to 15 m (12 to 48 ft) in depth. The holes were drilled in two clusters: holes GTE-88-08 to -17 were drilled on the hilltop in the vicinity of the historical workings and Asarco drill hole CS83-04; holes GTE-88-18 to -26 were drilled in the far eastern area of the current Property where Phelps Dodge and Asarco had drilled previously. The holes on the top of the hill defined an area of anomalous low-grade gold ranging from 0.05 to 0.46 g/t Au over entire hole lengths. The best result achieved was 0.89 g/t Au with 17.0 g/t Ag over 3.66 m from silicified tuff in hole GTE-88-15.

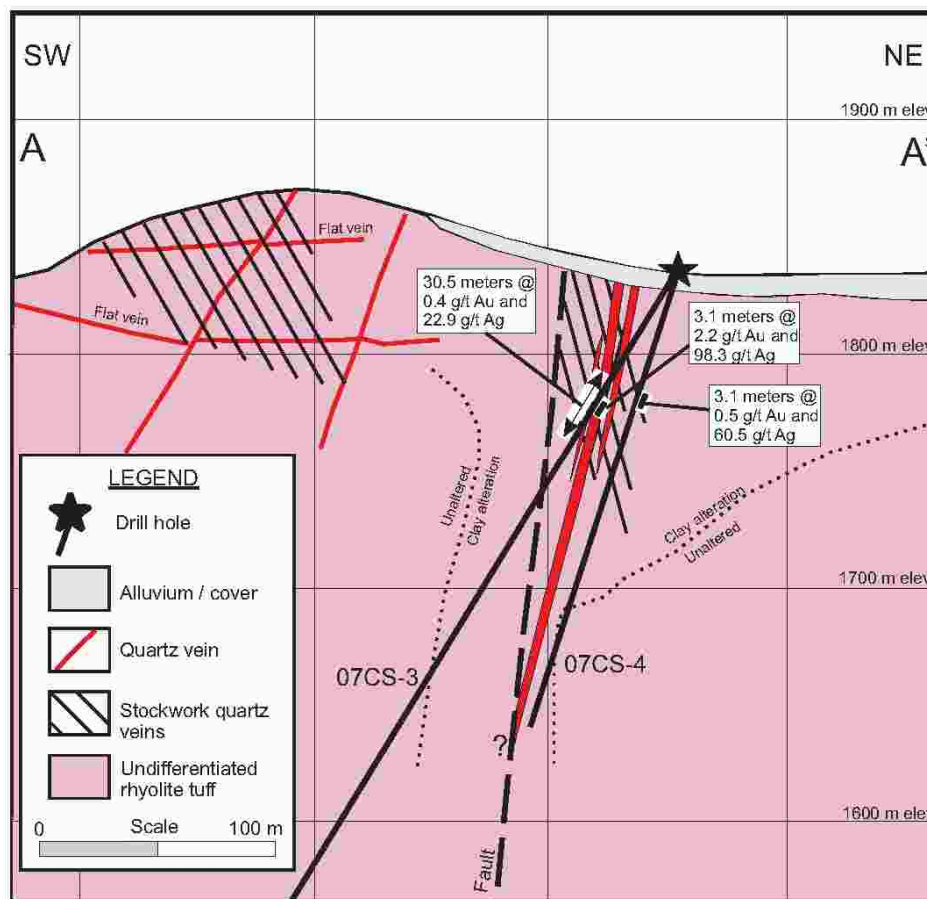
During December 2006 and January 2007, Northern Abitibi completed 1,664 m (5,460 ft) of RC drilling in 5 holes (06CS-1 to 07CS-5). Holes 06CS-1 and 06CS-2 were angled holes drilling northeast designed to test a covered range front fault and deep CSAMT geophysical anomalies that directly underlie quartz veining at surface. Hole 06CS-1 was lost at 341.4 m before completely testing the geophysical anomalies. Both holes intersected zones of clay alteration associated with the range front fault, but neither hole intersected any significant quartz veining or silicification (Northern Abitibi Mining Corp.,

2007a). No significant gold values were returned; however, 43.4 g/t Ag with 0.19 g/t Au over 1.52 m was intersected in pale green to grey rhyolite tuff with strong to moderate clay alteration in hole 06CS-2 (Ebert, 2007).

Holes 07CS-3, -4, and -5 were angled holes drilling southwest, collared northeast of the first two drill holes on the east side of the silicified hilltop area. They were designed to test near-vertical CSAMT geophysical anomalies along a 250-metre strike length. Holes 07CS-3 and -4 were drilled from the same pad at -58° and -72° dip, respectively (Figure 6.6). Hole 07CS-3 intersected oxidized quartz veining and stockwork-style silicification between 36.6 and 85.3 m hole depth, including a 1.5 m wide interval of quartz at 36.6 m, a 4.6 m wide interval of quartz at 51.8, and a 1.5 m interval of quartz at 59.4 m. The hole returned values of 1.08 g/t Au with 53.6 g/t Ag over 9.1 m, including 2.17 g/t Au and 98.1 g/t Ag over 3.05 m, corresponding with the third vein zone. A halo of low-grade anomalous gold surrounds the mineralized zone (Ebert, 2007).

Hole 07CS-4 was lost due to difficult drilling conditions and did not intersect significant quartz veining. The hole returned values of 0.45 g/t Au with 60.4 g/t Ag over 3.05 m within a zone of quartz stockwork veining (Ebert, 2007).

Figure 6.6. Drill Holes 07CS-3 and 07CS-4 Simplified Cross Section Looking Northwest (Source: Northern Abitibi, 2007b)



Hole 07CS-5 was collared 250 m northwest along strike from 07CS-5, drilling northeast at a -58° dip. The hole was designed to test a prominent vertical CSAMT conductivity anomaly (Ebert, 2007). The hole intersected 0.20 g/t Au with 5.0 g/t Ag over 3.05 metres from surface.

Early exploration by Phelps Dodge, Asarco, and the W.X. Syndicate at Cold Springs focused primarily on shallow, vertical drilling to test for a large low-grade epithermal precious metal deposit within silicified lithic breccia tuff and lithic crystal tuff units. No sustained attempt appears to have been made to locate and systematically drill narrow, high-grade vein systems that are typical of low-sulphidation epithermal systems. Drilling by Northern Abitibi did test for the possible presence of high-grade feeder veins by targeting deep CSAMT geophysical anomalies. The main range front fault, or an unidentified zone to the west, were interpreted to be the likely feeder structures for the exposed stockwork mineralization (Ebert, 2007). However, the results of the Northern Abitibi drilling did not produce any evidence of a mineralized feeder structure. Further work was recommended by the Northern Abitibi exploration team, including targeting untested CSAMT anomalies; however, the option agreement was terminated, and the claims were allowed to lapse.

7 Geological Setting and Mineralization

7.1 Regional Geology

The Cold Springs Property is in the western Great Basin, a physiographic region that is characterized by north- to northeast-trending mountain ranges and intervening valleys underlain by Mesozoic- and Cenozoic-aged volcanic, plutonic-hypabyssal, and sedimentary rocks. The Great Basin is characterized by internal drainage, high temperature (>150-degree Celsius) geothermal systems and episodic magmatism that is associated with multimillion-ounce precious metal mining districts (Dickinson, 2006).

Cursory geological surveys within Churchill County performed prior to the 1970's are published in reports by Hague and Emmons (1877), Schrader (1947) and Morrison (1964). These reports were later incorporated into a 1:250,000 scale geological map by the Nevada Bureau of Mines and Geology (NBMG), (Wilden and Speed, 1974). In 1976 the NBMG published a 1:250,000-scale geological map of northcentral Nevada which covered eastern Churchill County (Stewart and Carlson, 1976) and in 1987 the USGS published a 1:62,500-scale ("15-degree sheet") geological map of the Desatoya Range in southeastern Churchill County (McKee and Conrad, 1987). Crafford (2007) later completed a Nevada-wide geological compilation at 1:250,000 scale, which updated the lithological unit names in the Cold Springs area. The geological descriptions used herein are based on the NBMG and USGS publications. The main lithological units are described in Table 7.1, while regional geology is illustrated on Figure 7.1. Map, lithological descriptions and units are after Crafford (2007) from "Target Report for the Cold Springs Property" by Archer, Cathro & Associates, for Silver Range Resources (Morton, 2017).

Figure 7.1. Regional Geology of the Cold Springs Property (after Crafford, 2007)

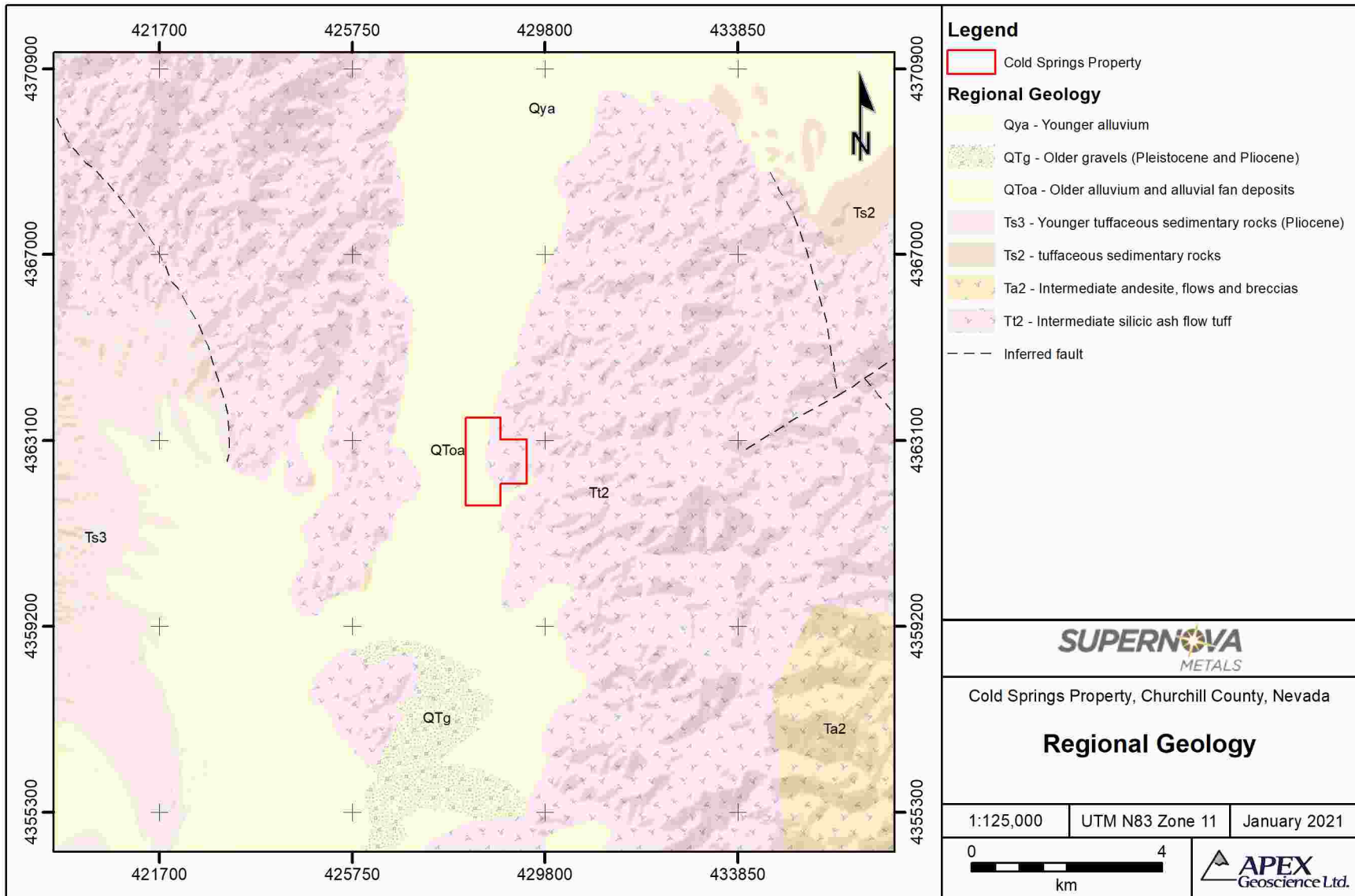


Table 7.1. Lithological Units (after Crafford, 2007)

Age	Unit	Description
Quaternary	Qya	Younger alluvium, comprising stream channel deposits, lacustrine sediments and small areas of wind-blown sand.
Pliocene to Pleistocene	Qtg	Older gravels, comprising pre-Lake Lahontan weakly consolidated gravel, sand and pediment gravels.
	Qtoa	Older alluvium and alluvial fan deposits.
Miocene to Pliocene	Ts3	Younger tuffaceous sedimentary rocks.

The Desatoya Range is mostly underlain by Oligocene to Lower Miocene welded ash flow tuffs (Tt2), mainly of rhyodacite composition, and lesser intermediate flows, breccias and related hypabyssal rocks (Ta2). These rocks are part of a collapsed caldera, which has been obscured by later faulting and erosion and developed during a dramatic period of volcanic eruptions in southwestern North America known as the ignimbrite flare-up (Benjamin, 1987; Best et al., 2013).

In the Cold Springs area, Tt2 is characterized as red to brown, densely welded tuff that contains abundant plagioclase phenocrysts with lesser amounts of quartz and biotite, minor sanidine and rare hornblende. Southeast of the Property Ta2 is preserved as a down-dropped block of quartz latite tuff along a high-angle, northeast- to northwest-trending fault. The volcanic rocks generally dip east to southeast but have an enigmatic orientation in the southern part of the range.

In the Cold Springs area two packages of pebbly mudstone, shale and well-sorted tuff and conglomerate are differentiated as an older unit (Ts2) which is interlayered with Tt2 and a younger unit (Ts3) which overlies Tt2. North of the Property, a small lobe of hornblende-to-pyroxene, phyrlic andesite basalt unconformably overlies Tt3.

Pliocene to present deposits of lacustrine sediments, alluvium and wind-blown sand characterize the range fronts and valley floors. Older alluvium (QToa) and lesser gravels (QTg) border the mountain ranges, while younger alluvium (Qya) comprises stream channel deposits, Quaternary lacustrine sediments, and small areas of wind-blown sand.

7.2 Property Geology

The Cold Springs Property is underlain by mid-Tertiary hydrothermally altered rhyodacite crystal, lithic, and crystal-lithic tuffs, pyroclastic volcanic breccias and rhyolite dikes. The Property is situated on the northwest rim of a volcanic center associated with the Oligocene ignimbrite event. Numerous gold and silver occurrences occur in the northwest quadrant of the interpreted caldera complex. Geological mapping was conducted in the Cold Springs area in 2006 by Northern Abitibi and in 2018 by Silver Range. The following geological descriptions are based on a combination of Northern Abitibi's work, investigations by government geologists and recent observations made by geologists on behalf of Silver Range and Supernova. The Cold Springs Property geology

map and a schematic cross section of the mapped area are shown in Figures 7.2 and 7.3, respectively.

The Property covers an approximately 800-metre by 350-metre hilltop exposure of hydrothermally altered and silicified maroon to brown rhyodacite tuffs, minor occurrences of rhyolite dikes, and pyroclastic volcanic breccia. Most of the historical workings on the Property, which include several small shafts, adits, stopes, roads and bulldozer trenches target quartz veins, stockwork quartz veins and silicified hydrothermal breccia.

According to mapping by Northern Abitibi, several rhyolite- to rhyodacite-tuff units occur in the Property area, distinguished by color and lithic fragment content. The most dominant on surface is a maroon to brown crystal rich rhyodacite tuff with 5% to 10% lithic fragments (Figure 7.4A). The rock contains 25%-40% 1 to 3 millimeter size crystals of quartz, feldspar and biotite along with centimeter size lithic fragments. In places the rock is very massive, and in places it contains minor vugs and voids. The next most abundant tuff on surface is a crystal-lithic tuff with 10% to 25% white pumice and rhyolite lithic fragments in a gray to maroon quartz-feldspar-biotite crystal rich matrix (Figure 7.4B). The tuff locally contains up to 5% vugs and voids, is moderately welded, and locally has flattened pumice fragments (“fiamme structures”). In the sub-surface light gray, dark gray, and maroon to brown crystal rich tuffs are common (Ebert, 2007).

Along the main hilltop “silicified knob”, apparently associated with the larger zones of silicification, is a fine-grained massive rhyolite (Figure 7.4C). This rhyolite has about 10%, 1 mm quartz and feldspar phenocrysts in a fine-grained tan matrix. This is interpreted to be an intrusive rhyolite phase, probably a dike. Limited outcrop and overprinting silicification make it difficult to identify and trace this unit at surface. Spatially associated with the intrusive rhyolite is a volcanic intrusion-breccia with rounded to subrounded argillic-altered rhyolite clasts in a fine grained maroon volcanic matrix (Figure 7.4D) (Ebert, 2007).

Mapping by Northern Abitibi identified a series of northwest-striking, sub-parallel quartz veins within the broader silicified zones. Observations made by Silver Range, however, describe quartz veins with two principal orientations, north-northeast and east. The veins are reported to be up to eight metres wide, with an average width of one metre with dips that range from steep to sub-horizontal. Most of the high-angle vein sets observed by the Author and geologists on behalf of Supernova are reported to strike north-northwest and northwest, in agreement with the Northern Abitibi reports. Two parallel, northwest-trending faults are mapped on the Property, which may be part of a range-front fault system along the western edge of the Desatoya Mountains. A clay-rich surface sample, collected from a shaft that intersected the southern-most fault, was analyzed in the field by a portable TerraSpec mineral spectrometer. Two clay minerals, kaolinite and montmorillonite, were identified. These clay minerals are part of an argillic clay alteration assemblage commonly associated with epithermal hydrothermal systems.

Figure 7.2. Silver Range Property Geology Map

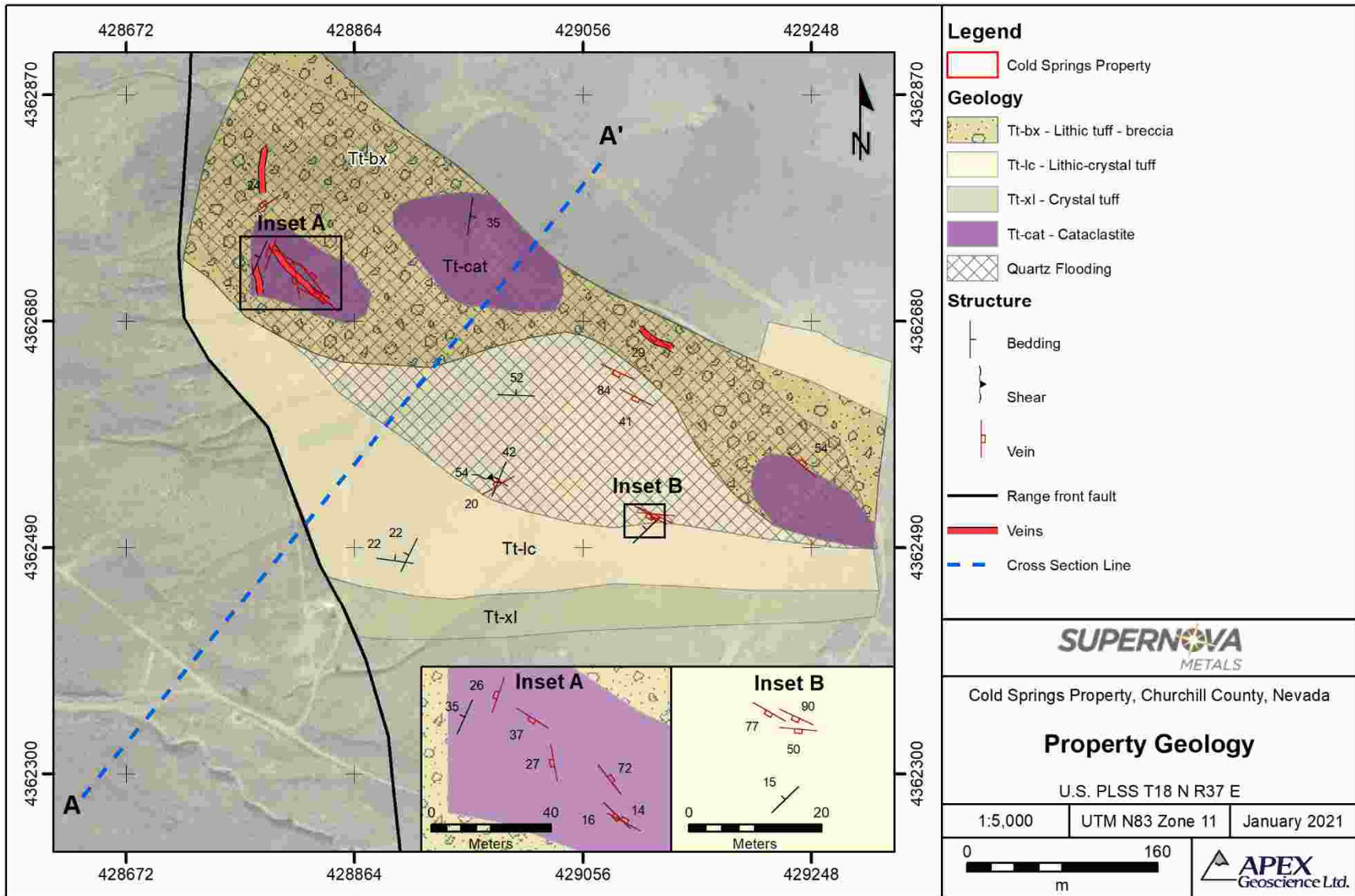


Figure 7.3. Cross Sectional View A-A' (from Power, 2018). The location of section A-A' is shown in Figure 7.2. transecting from southwest to northeast.

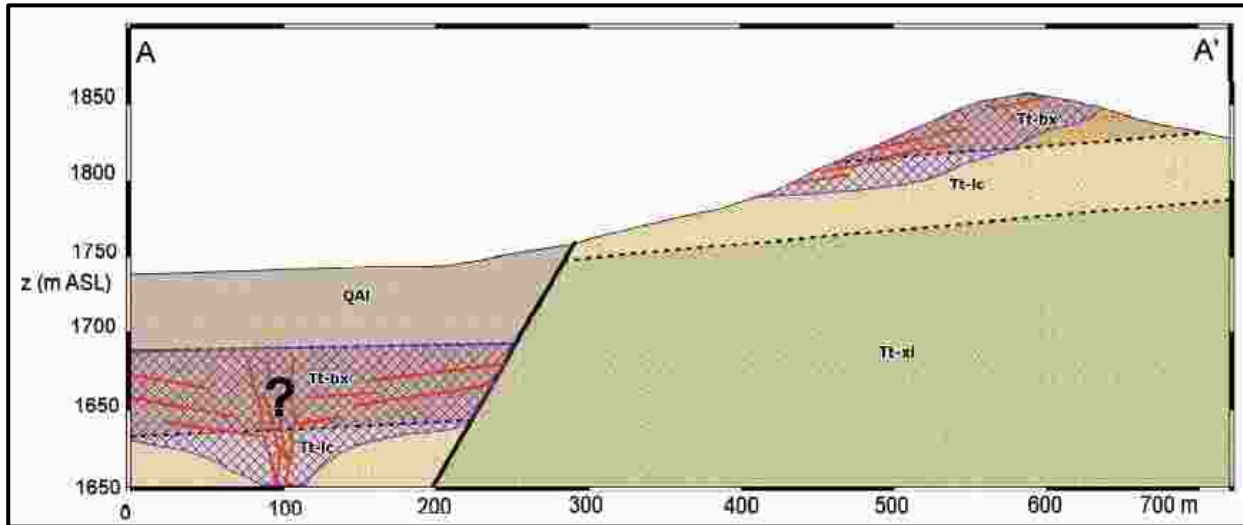
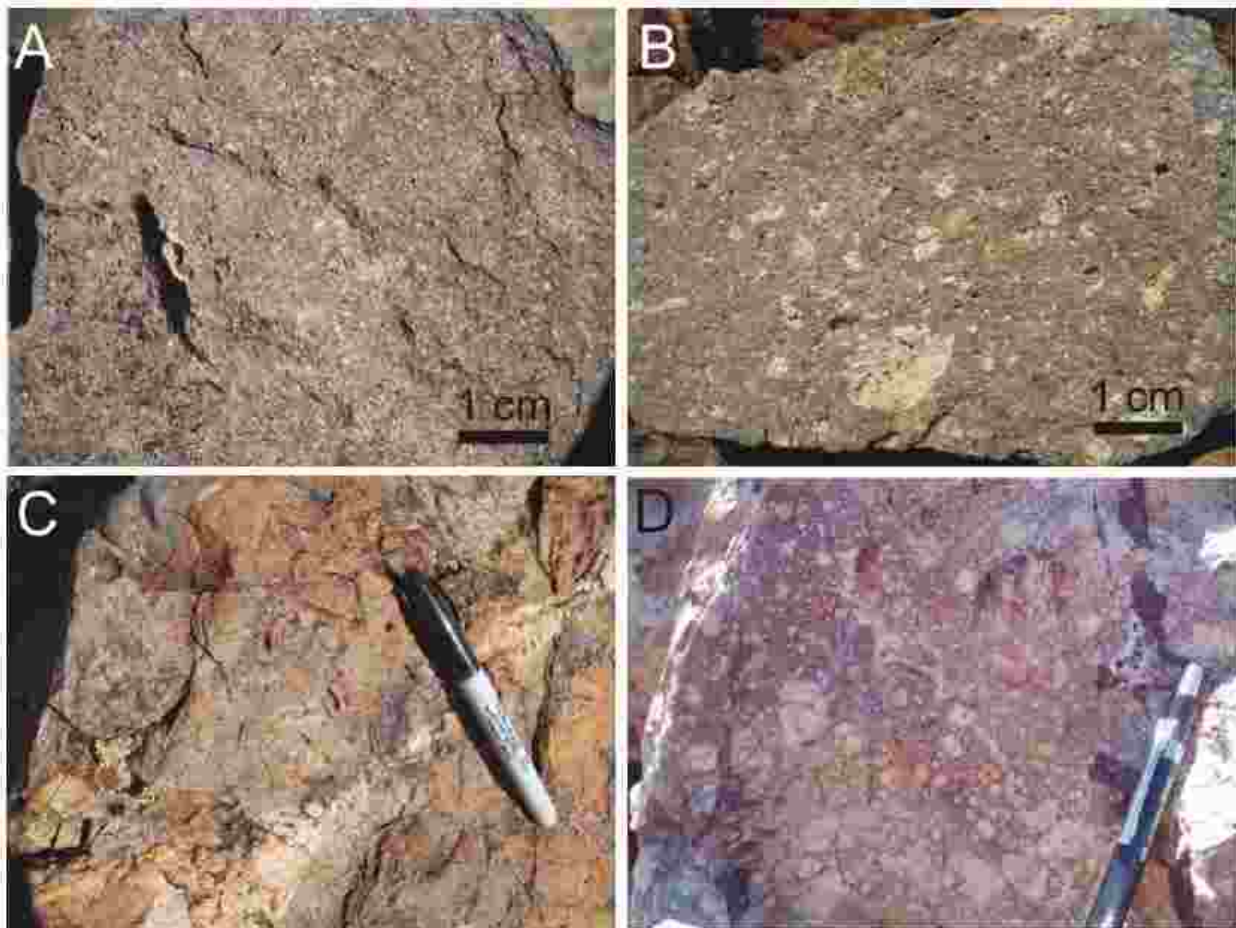


Figure 7.4. Main Rock Types at the Cold Springs Property (from Ebert, 2007)



7.3 Mineralization

Mineralization at the Cold Springs Project is associated with volcanic-rock hosted epithermal colloform-crustiform banded quartz veins, stockwork quartz veins, silicified hydrothermal breccia and silica-flooded rhyolite-rhyodacite tuffs. The banded quartz veins are typically hosted in silicified hydrothermal breccias and stockwork veined moderate to strongly argillic and silica altered (silica flooded) tuffaceous country rock. Most of the quartz veins exposed on the silicified hilltop gold-silver mineral occurrence strike northwest and are shallow dipping, with some dipping southwest and some dipping northeast. Nine measurements of shallow-dipping veins were recorded by Northern Abitibi from veins 30 cm to 3 m in width. Seven of these veins have dips between 15 and 35 degrees, 4 dip southwest and 3 dip northeast. One vein changes dip along strike from northeast to southwest, indicating the veins are somewhat irregular. Numerous irregular shallow- and steep-dipping veinlets surround the larger veins to form sheeted and stockwork zones.

Several steeply dipping veins have been observed at the hilltop area as well. One vein observed by geologists on behalf of Supernova on the east flank of the hilltop area strikes northwest and dips sub-vertical. At least two veins were observed on the west flank of the hilltop mineral occurrence that strike northwest and dip steeply as well. The steeply dipping vein on the east side of the hilltop area, manifested in the subsurface as a near-vertical CSAMT conductive anomaly, was drill-tested by Northern Abitibi and produced a drill intercept of 30.5-metres containing 0.4 g/t Au and 22.9 g/t Ag (hole 07CS-3). It is likely that the drill intercepts reported by Phelps Dodge in hole G-04 (21.34 m containing 0.65 g/t Au + 25.4 g/t Ag) and ASARCO in hole CS83-04 (21.34 m containing 0.78 g/t Au + 7.1 g/t Ag) collared on the east side of the hilltop area are from the same vein system drilled by Northern Abitibi in hole 07CS-3. Two of the larger veins on the west side of the hilltop area strike northwest and dip sub-vertical to steeply southwest. These veins were not intersected during Northern Abitibi's drill program, suggesting to them that they do not persist at depth. Based on review of available Northern Abitibi and other historical drill data it does not appear that the steeply dipping potential feeder veins that occur on the west flank of the hilltop area have been adequately drill tested to depth.

Exposed veins are composed of mostly white to clear fine-grained sugary quartz with minor chalcedony. The veins are locally brecciated and have abundant bladed "quartz-after-calcite "pseudomorph" textures, with localized colloform and crustiform banding. Thin gray sulphide(?) bands (possibly argentite-acanthite, Ag_2S) occur in high-grade portions of the veins. Adularia (hydrothermal potassium feldspar) has not yet been identified in the quartz vein material but is typically fine to very-fine grained in epithermal vein systems and therefore difficult to see without microscopy. Adularia is typically ubiquitous as a gangue mineral in low-sulphidation quartz-adularia-sericite epithermal vein systems, however, and is likely present in the Cold Springs quartz vein system paragenetically and intimately associated with gold and silver mineralization in the quartz vein material. Bladed quartz-after-calcite "angel wing" quartz pseudomorphs, common in the shallow and steeply dipping "fissure" veins, suggest deposition of quartz and calcite

+ adularia + gold-silver (electrum) + Ag₂S (argentite-acanthite) possibly due to hydrothermal boiling events.

The hydrothermal system at Cold Springs is likely a low-sulphidation epithermal system and therefore contains very-low quantities of sulphide minerals (typically <~2%). Iron-sulphide (pyrite-marcasite) are the only sulphide minerals definitively identified in the quartz veins and silica flooded tuffs, but dark grey to black bands within banded quartz veins (“ginguro” banding) and stockwork veining have been tentatively field-identified by Northern Abitibi and geologists on behalf of Supernova as argentite-acanthite (Ag₂S). Pyrite-marcasite occurs mostly as partially to completely oxidized to iron-hydroxide (limonite), although some relatively fresh pyrite-marcasite has been observed as well. The silver/gold ratio at Cold Springs is high, in the 40:1 to 50:1 range. It is speculated by the Author and geologists on behalf of Supernova that gold likely occurs with silver as electrum, possibly adhered to the surface of silica, adularia, and pyrite-marcasite grains. Silver likely occurs with gold as electrum and as the silver-sulphide argentite-acanthite (Ag₂S).

Argillic alteration of the rhyodacite tuff vein wall rock is comprised of kaolinite + smectite/montmorillonite clays + sericite/illite replacing feldspar phenocrysts, pumice and lithic fragments and volcanic ash ground mass, with biotite crystals typically altered to iron-oxides + chlorite. Northern Abitibi RC drilling intersected broad zones of clay altered rhyolite-rhyodacite tuff consisting of soft pale green to gray chips, with bleached clay altered biotite and pale green to chalky white feldspars. Locally, biotite grains are altered to chlorite and minor amounts of epidote which, along with various smectite clays ± zeolites, are part of a typical propylitic alteration assemblage associated with low-sulphidation epithermal systems.

At the Cold Springs Property gently to steep west to southwest dipping and north to northwest-striking gold and silver bearing quartz-chalcedony veins up to 70 m long and 2 m thick cut a larger zone of argillic and silica altered tuff and silicified hydrothermal breccia. Northwest striking, steeply dipping quartz veins occur on both the east and west flanks of the silicified hilltop. These banded quartz veins are typically 1-3 metres wide and sub-vertical to steeply southwest dipping. These steeply dipping veins are strong candidates to have functioned as feeder veins and have not yet been adequately tested as such in the subsurface. The silicified breccia near the top of the hill contains >0.10 g/t Au and >2.0 g/t Ag, while higher grades occur in larger, mostly northwest striking, steeply dipping quartz vein systems. Historical grab samples collected from these veins yielded up to 64.9 g/t Au and 1,280 g/t Ag, while initial sampling by Silver Range in 2016, produced grab samples containing up to 20.1 g/t Au and 1,770 g/t Ag from similar material.

8 Deposit Types

Supernova is currently evaluating the Cold Springs Property for epithermal low sulphidation silica associated precious metal (gold and silver) mineralization. Epithermal deposits are products of volcanism-related hydrothermal activity at shallow depths and low temperatures, with deposition occurring within 1 to 2 km of the surface at a temperature of <150 to 300°C (Guilbert and Park, 1986; White and Hedenquist, 1995). These deposits frequently occur at centres of young volcanism and may be associated with hot spring environments (Taylor, 2007). Epithermal deposits form from hydrothermal fluids, primarily by replacement or by open-space filling. Mineralization may occur as siliceous vein fillings, irregular branching fissures, stockworks, breccia pipes, and disseminations. Epithermal deposits are generally Tertiary or Quaternary in age, they are typically younger than their host but may be of a similar age to their host rocks when the host rocks are volcanic in origin (Taylor, 2007).

Vein and bulk-tonnage style epithermal Au and Ag deposits are generally grouped as high- or low-sulphidation type deposits (Sillitoe and Hedenquist, 2003). These deposit types are distinguished based on the presences of certain gangue or ore minerals or the mineralizing fluid's sulphidation state. Sillitoe and Hedenquist (2003) provide the following distinctions:

- High-sulphidation deposits contain high-sulphidation state, sulphide-rich assemblages typically pyrite-energite, pyrite-luzonite, pyrite-famatinite, and pyrite-covellite hosted by leached silicic rock with a halo of advanced argillic minerals.
- Low-sulphidation deposits contain the sulphide-low pair, pyrite-arsenopyrite, with typically low relative quantities of arsenopyrite. These sulphides occur with banded quartz veins, chalcedony, and adularia plus subordinate calcite. Minor amounts of copper may be present in as chalcopyrite or tetrahedrite-tennantite. Trace pyrrhotite may be present in some deposits.

The Cold Springs precious metal mineralization is the product of a low-sulphidation epithermal hydrothermal system. Gold-silver mineralization occurs in shallow and steeply dipping colloform/crustiform banded quartz-chalcedony-calcite "fissure" veins, silicified hydrothermal breccias, and stockwork quartz veins hosted by hydrothermally "quartz-adularia-sericite" altered Miocene-Oligocene crystal-lithic tuffs and pyroclastic fragmental volcanic rocks. The Cold Springs Property precious metal mineralization is associated with low total gangue and ore-stage sulphide minerals, primarily pyrite-marcasite and argentite-acanthite. It is speculated that gold likely occurs with silver as electrum. Silver/gold ratios are relatively high, typically in the 40:1 to 50:1 range. Specifically, Cold Springs is a low-sulphidation quartz-adularia-sericite epithermal vein system that is hosted by pyroclastic rocks associated with large volume caldera-related ignimbrite eruptive events.

The Cold Springs gold-silver mineralization is typical of the epithermal systems associated with the caldera-sourced pyroclastic volcanic rocks of the central Nevada

“Great Ignimbrite Eruption” event, including those of the Tonapah Mining District and Round Mountain area.

9 Exploration

The Cold Springs Property is being explored by Supernova for low-sulphidation epithermal Au-Ag mineralization. Supernova acquired the exclusive right and option to acquire a 75% interest in the Property on September 1, 2020, through an option agreement with Silver Range Resources Ltd. (“Silver Range”) and Manta Minerals Corp. Recent exploration conducted on the Property from 2018 to 2020 has included geological mapping, geochemical rock sampling, ground induced polarization (IP), resistivity (Res) and magnetic geophysical surveys.

9.1 Geological Mapping and Geochemical Rock Sampling

A geological mapping and geochemical sampling program was conducted over the Property in late 2018. The geological mapping covered approximately 45 acres (18.3 ha) in the central eastern Property area. Bedrock on the Property was mapped into three units: crystal tuff, lithic-crystal tuff and lithic breccia tuff. The following overview of the geological mapping program has been summarized from a news release by Silver Range dated October 31, 2018 (Silver Range Resources Ltd., 2018).

The rhyodacitic crystal tuff through lithic-crystal tuff generally dips to the west and is overlain by maroon coloured lithic breccia tuff. In the area of mapping, this assemblage is exposed on a central hill bounded to the west by a north-striking normal range front fault, which has dropped the host assemblage down-dip to the west. Two phases of silicification, confined to the lithic breccia tuff and the uppermost lithic crystal tuff, have been mapped on the Property and are interpreted to be associated with introduction of gold mineralization. The first stage of silicification is characterized by widespread, pervasive, centimetre-scale quartz veining and silica flooding of a permeable matrix. The second phase is characterized by cross-cutting quartz-chalcedony veins that dip moderately to the west-southwest. Four main veins were mapped on the Property with exposed strike lengths up to 70 m (230 ft) and widths of up to 2 m (6.5 ft). Low-sulphidation epithermal textures were observed in the veins, including colloform banding, bladed quartz after calcite, brecciation and annealing. In addition, clots of pyrite and bands of silver sulphides and sulphosalts were observed (Silver Range Resources Ltd., 2018).

The geological mapping program included the collection of 26 rock samples. Gold highlights from the 2018 sampling program include 11 samples > 1 g/t Au, 2 samples > 5 g/t Au and a maximum assay of 12.9 g/t Au. The high-grade gold values tend to be in quartz-chalcedony veins associated with the second phase of silicification and lower grade gold tends to be associated with silica flooding in the first phase. Silver highlights include 12 samples > 31 g/t Ag and a maximum assay of 687 g/t Ag. Silver Range’s geological map of the Cold Springs Property (Figure 7.2) and the results for Au and Ag from the 2018 rock sampling program are shown in Figures 9.1 and 9.2, respectively.

Figure 9.1. 2018 Rock Samples Au (g/t)

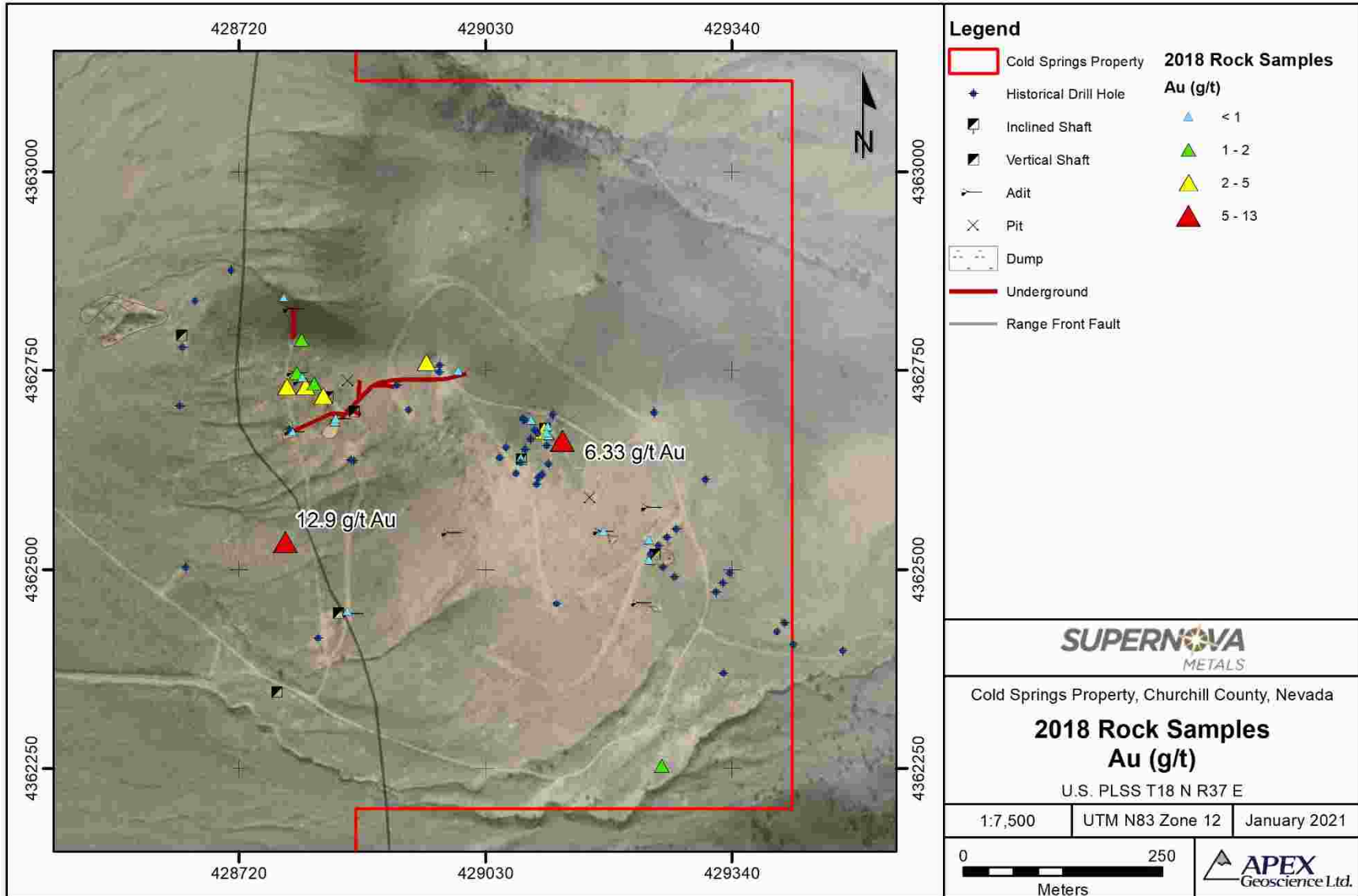
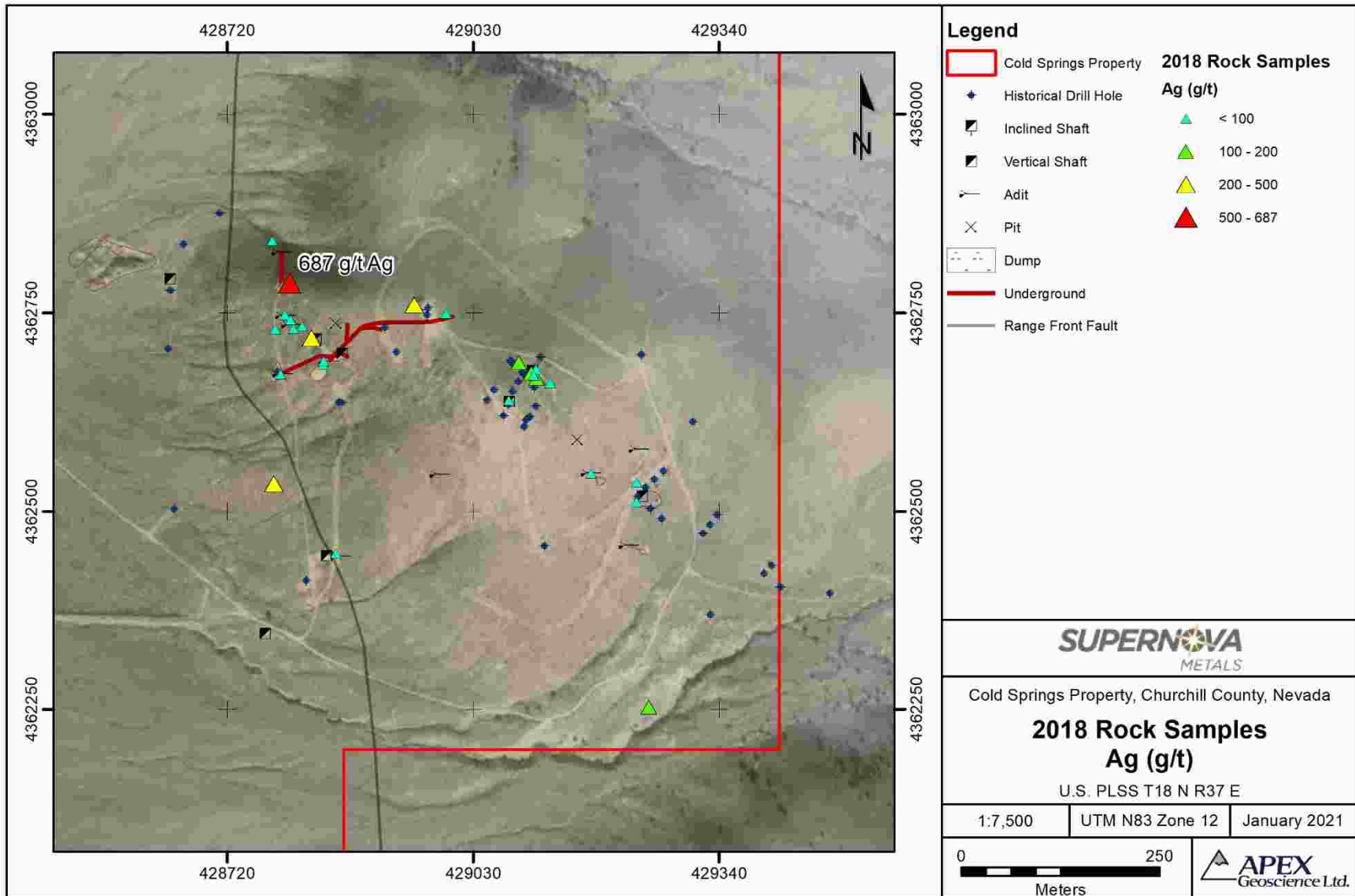


Figure 9.2. 2018 Rock Samples Ag (g/t)



The geological mapping and sampling program, together with the analysis of historical sampling and drill hole data, provided valuable information on the geological setting and mineralization of the Property. Recent surface exploration indicates that the host tuffs, the silicified breccia and exposed mineralized veins dip toward the west and suggest that the centre of the epithermal system is situated beneath the alluvium, down dropped across a range front fault.

9.2 Induced Polarization Survey

Aurora Geosciences Ltd. completed a three-dimensional induced polarization and resistivity (3DIP) survey from September 24 to 29, 2018, on behalf of Silver Range. The survey comprised 4 north-south oriented lines spaced 150 m apart (L200, L350, L500 and L650) for a total length of 1,350 m and one 925 m long east-west oriented line (T720). Line T720 was not used to generate depth slices. A 50 m “a” dipole spacing was used. The survey utilized the included Iris ELREC Pro 10 channel receiver and GDD TXII 50000W transmitter. Stainless steel rods were used as potential electrodes.

The 3DIP survey covered the area to the west of the range front fault with focus on the interpreted hanging wall to test for down-dropped epithermal mineralization. The survey delineated a compact resistivity low (<35 ohm-m) with a core of much lower resistivity situated approximately 200 m (656 ft) west of the range front fault and on strike with the trend of mineralized veins exposed on the Property. The depth to the top of the compact resistivity low measures approximately 80 m (262 ft) which is consistent with the depth of bedrock in the area. The compact resistivity low extends to the maximum depth of the survey which is estimated at approximately 200 m (656 ft). Silver Range has interpreted this resistivity low as a zone of argillic alteration surrounding a possible steeply dipping hydrothermal source region for epithermal mineralization (Silver Range Resources Ltd., 2018). Induced polarization 3D depth slices for chargeability and resistivity at 75 m are shown in Figures 9.3 and 9.4, respectively. Three-dimensional (3D) chargeability and conductivity isosurfaces are shown in Figures 9.5 and 9.6, respectively.

Figure 9.3. Induced Polarization 3D Chargeability, Constant Depth Slice at 75 m

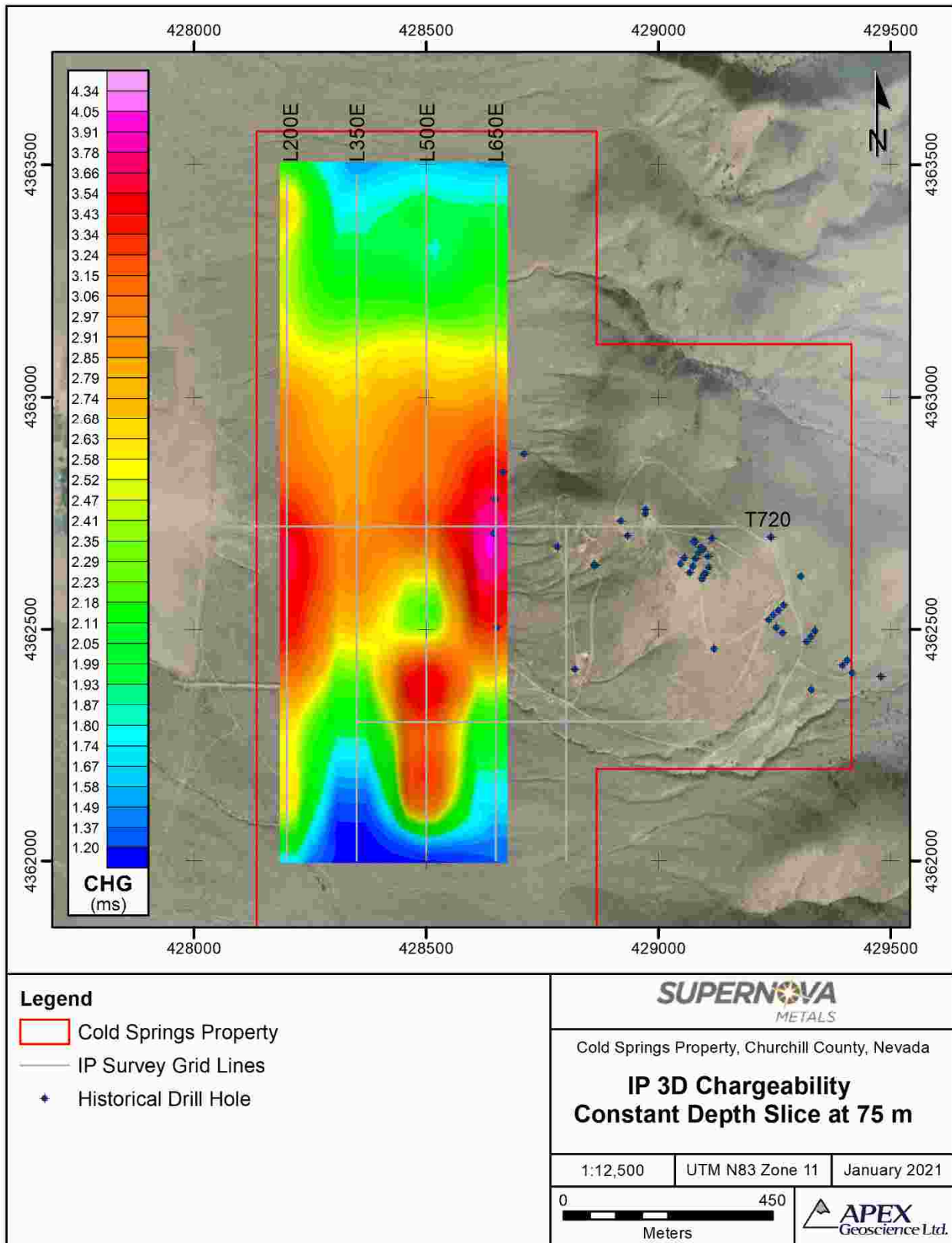


Figure 9.4. Induced Polarization 3D Resistivity, Constant Depth Slice at 75 m

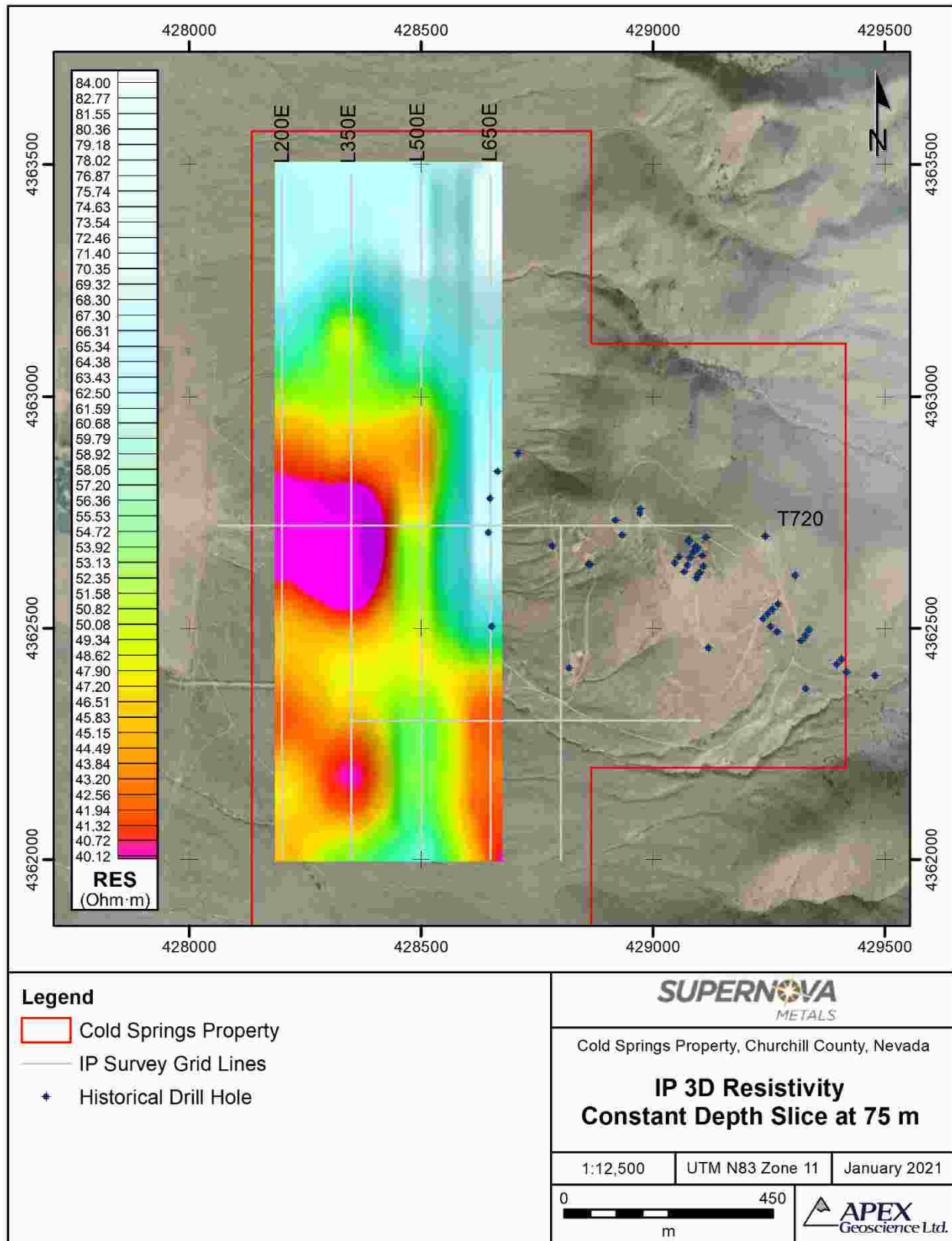


Figure 9.5. 2018 IP 3D Resistivity Survey Chargeability Isosurfaces, Oblique View Looking to the North-northwest

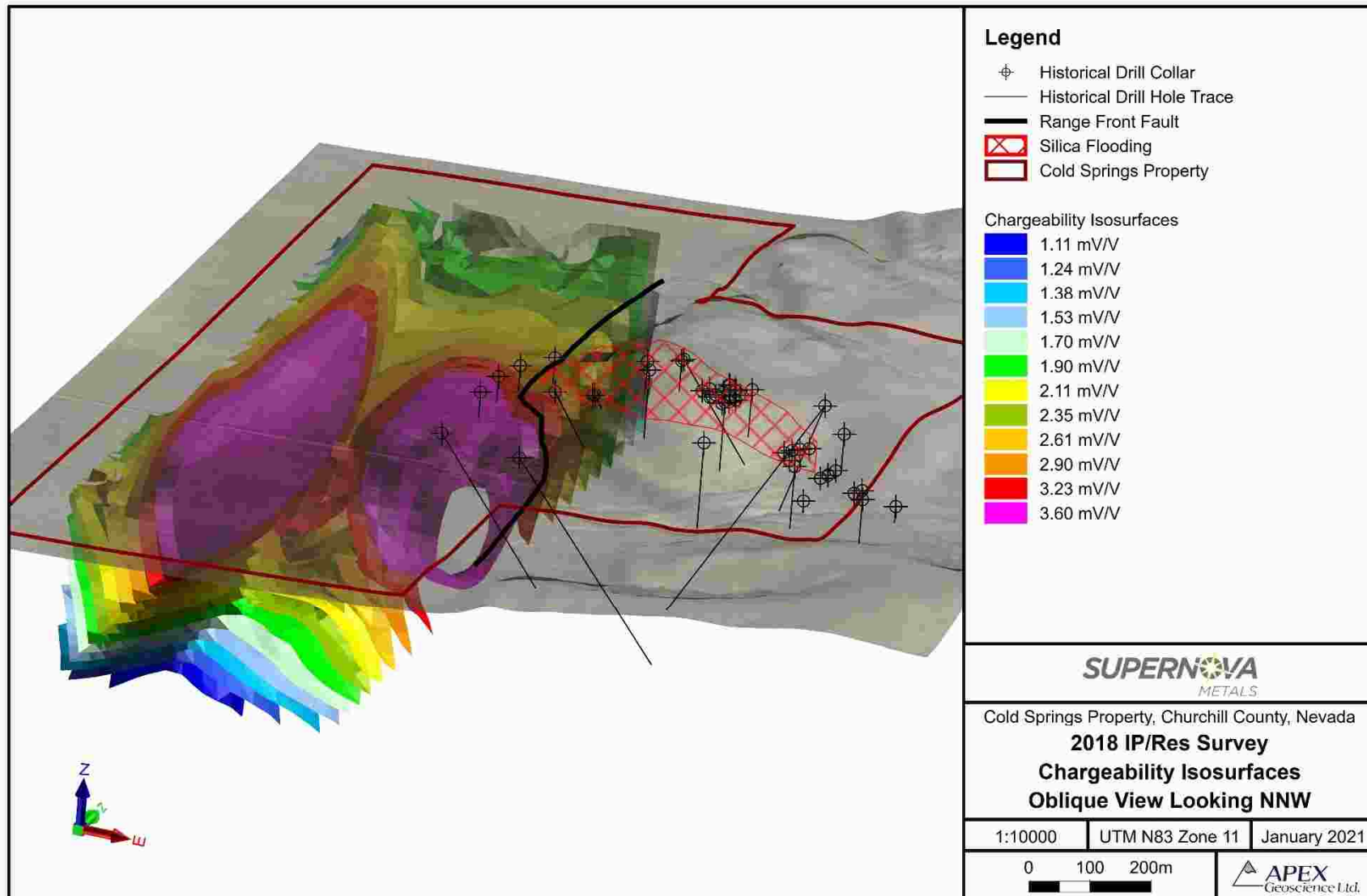
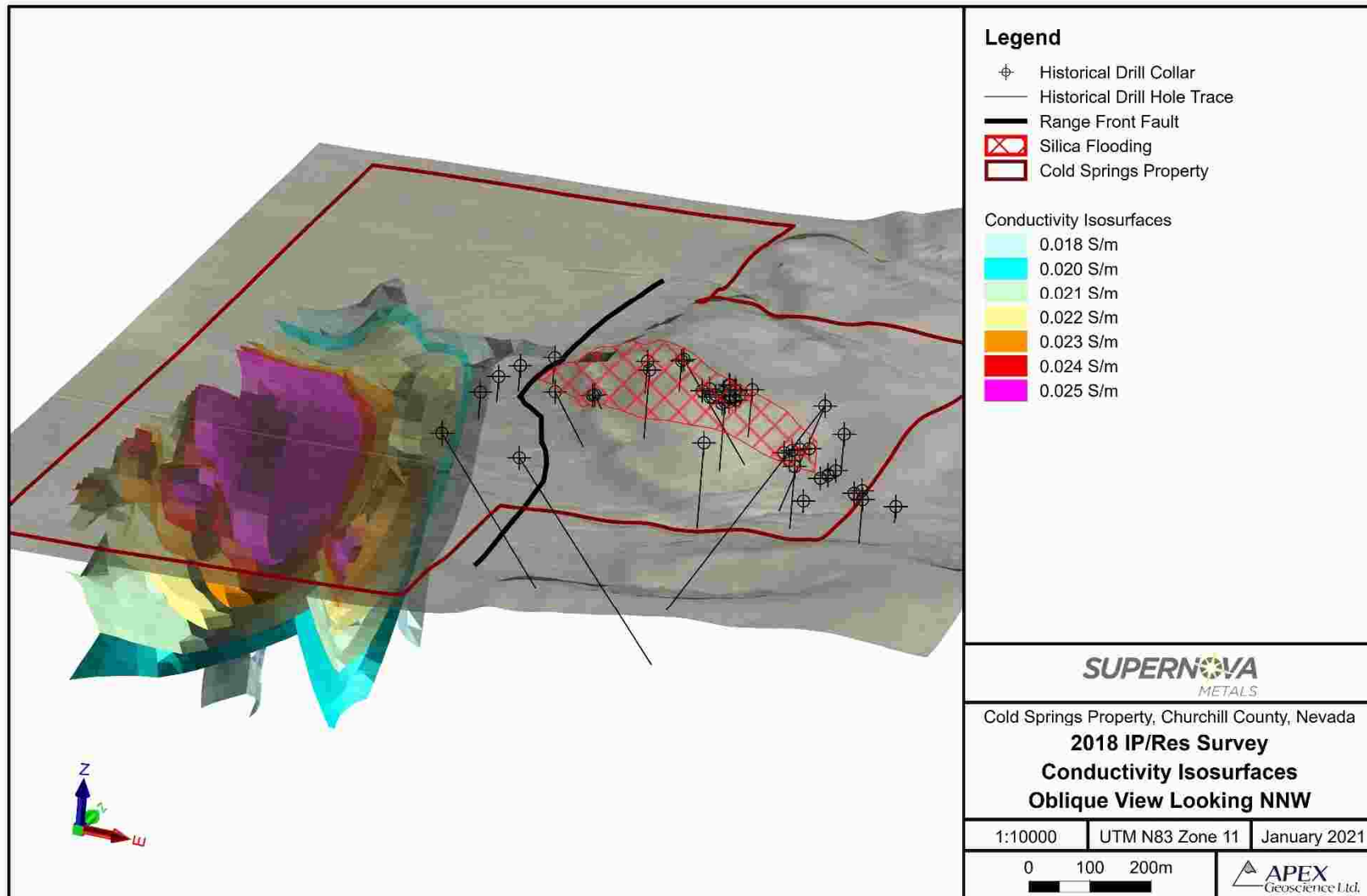


Figure 9.6. 2018 IP 3D Resistivity survey Conductivity Isosurfaces, Oblique View Looking to the North-northwest



9.3 Magnetic Survey

Supernova contracted APEX Geoscience Ltd. (“APEX”) to conduct a ground magnetic survey at the Cold Springs Property in late 2020. The survey was completed over the Cold Springs claim blocks, with increased focus over historical showings and areas identified as very prospective for gold and silver mineralization. The survey was completed over the course of 3 field days, between the dates of October 17th and October 19th, 2020.

The area identified for ground geophysical surveying enclosed an area that amounted to approximately 185 ha (457 acres). The magnetic surveying was completed over a grid consisting of 27 traverse lines oriented 090°/270° at 100 m (328 ft) line spacing with 50 m (164 ft) infill lines across the main deposit area and 3 lines at 000°/180° over the main deposit area. The geophysical grid summary statistics are presented in Table 9.1. Images of the Residual Magnetic Intensity (RMI) and reduced-to-pole (RTP) RMI are presented in Figures 9.7 and 9.8, respectively.

Table 9.1. 2020 Ground Magnetic Geophysical Grid Summary Statistics

Survey method	Survey days	Grid lines	Line spacing (m)	Line lengths (m)	Total stations	Station spacing (m)	Total line-km
Magnetic	3	30	50-100	745-1285	43742	0.76	27.2

The ground magnetics surveying was performed using a GEM GSM-19V Overhauser walking magnetometer system with an integrated GNSS receiver. The magnetometer records the total magnetic intensity readings and position of each readings using a cycle time of 1 second. To account for the diurnal variations in the magnetics survey data, GEM GSM-19 base magnetometers are set up at locations near the ground magnetics survey grid where the total magnetic intensity is recorded every three seconds using a clock that had been synchronized with the walking magnetometer’s GNSS clock.

Several magnetic trends are discernible within the RTP magnetics map, with the most prevalent being the bifurcation of the magnetic signal’s character along the range front fault. West of the range front shows longer wavelength and lower amplitude responses than the area east of the fault where there is little cover acting to obscure the magnetics. The areas west of the range show a broad zone of reduced magnetic amplitude, which can be important from the aspect of signals associated with hydrothermal and alteration zones.

Figure 9.7. 2020 Ground Magnetic Survey at the Cold Springs Property (Residual Magnetic Intensity)

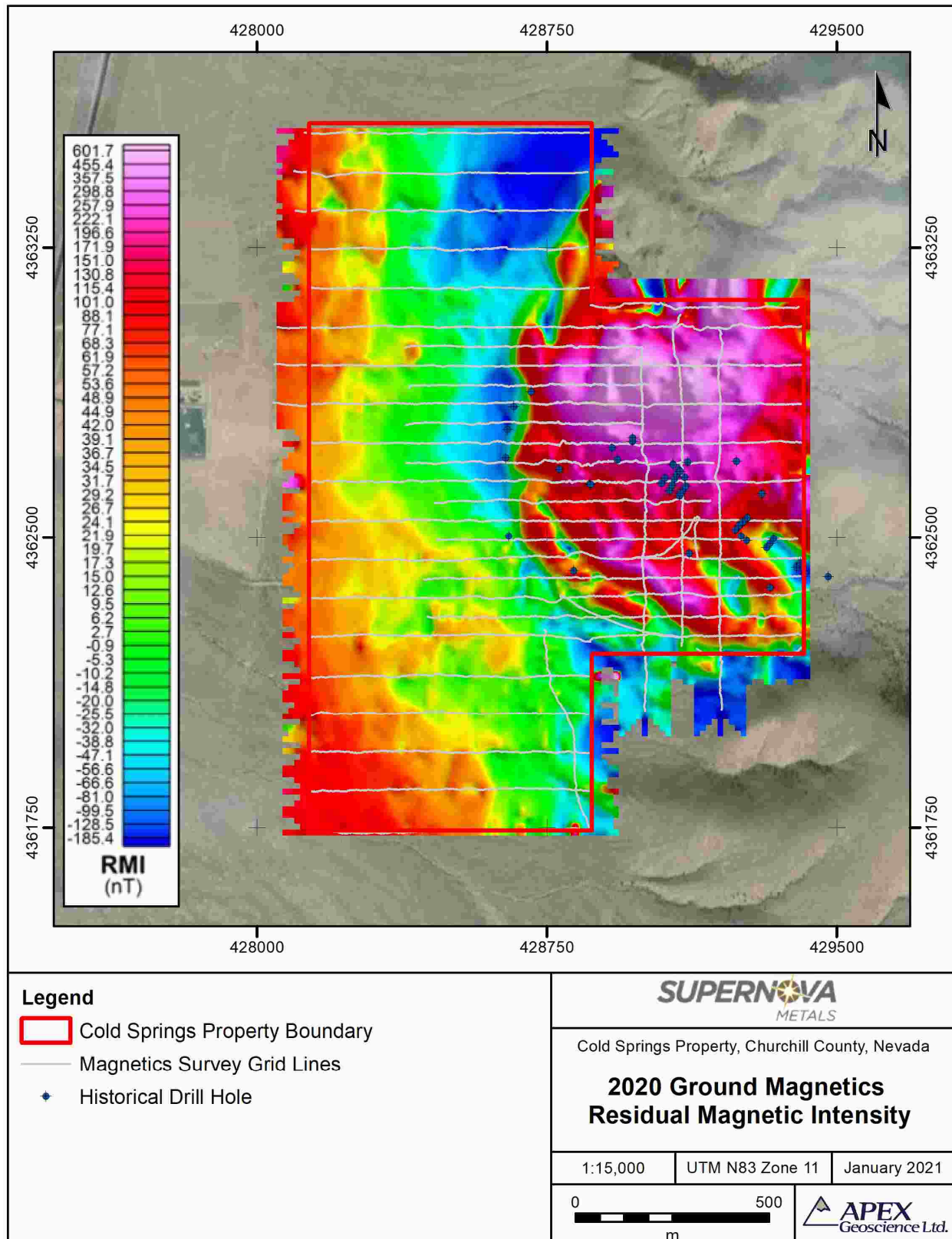
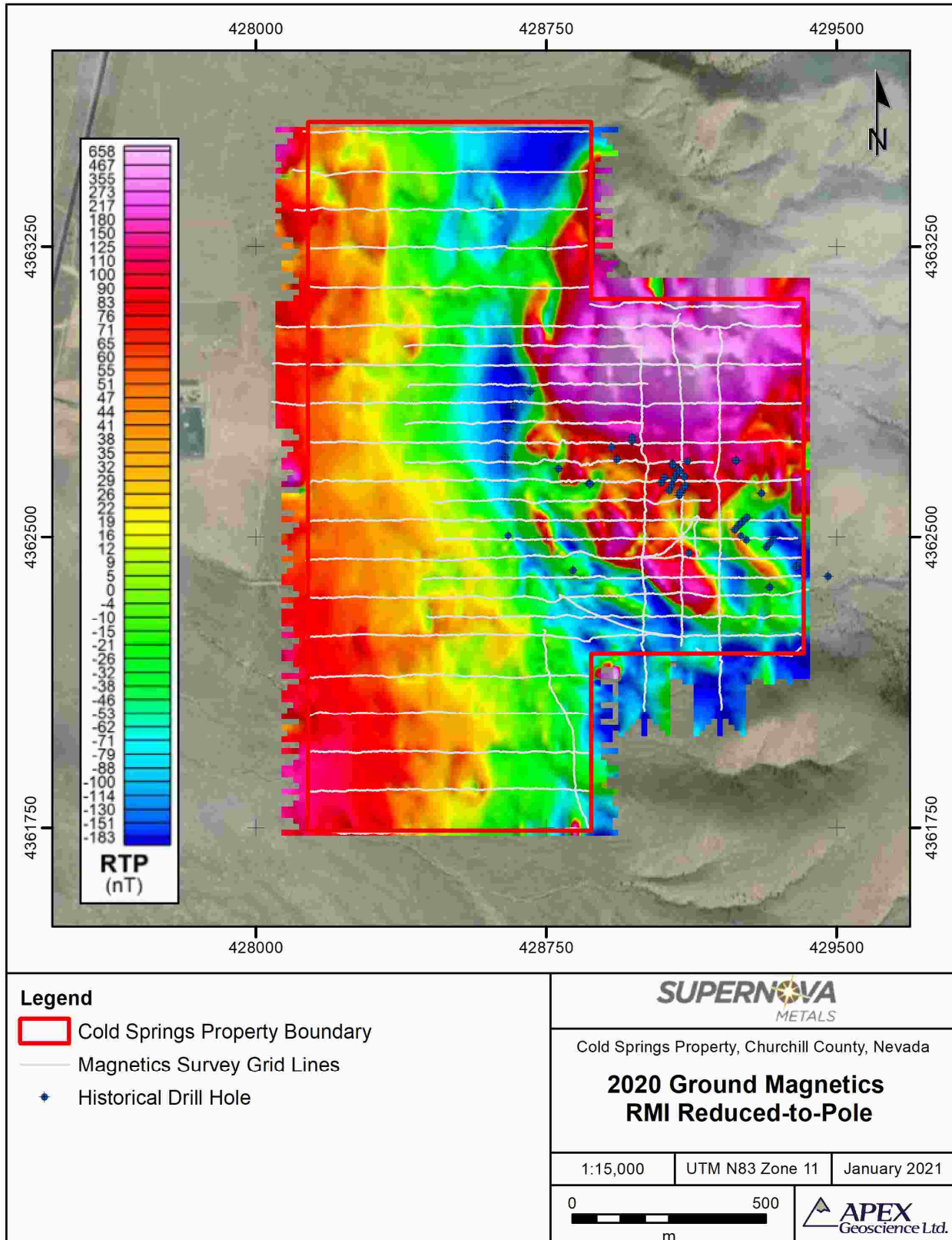


Figure 9.8. 2020 Ground Magnetic Survey at the Cold Springs Property (Residual Magnetic Intensity Reduced-to-Pole)



10 Drilling

Supernova has yet to conduct any drilling at the Cold Springs Property. A summary of the historical drill programs completed by companies other than Supernova is presented in Section 6. None of this work was conducted by or on behalf of Supernova.

11 Sample Preparation, Analyses and Security

The following section describes the sampling techniques, analytical procedures and sample security measures employed by Silver Range during the execution of a recent 2018 rock sampling program at the Cold Springs Property.

The sampling techniques, analytical procedures and sample security measures employed by previous operators for historical exploration on the Property are also discussed. The bulk of historical exploration within the Property was completed by previous operators, including Phelps Dodge, Asarco, W.X. Syndicate, Northern Abitibi and Silver Range.

11.1 2018 Rock Sampling Program

A geological mapping and sampling program was completed over the central eastern Property area by Silver Range in 2018. The program included the collection of 26 rock samples. The rock samples were shipped to ALS Minerals' laboratories ("ALS") in Reno, Nevada, for preparation of pulps using standard methods. Pulps were forwarded to ALS in Vancouver, Canada, for analysis.

The 2018 rock samples were analysed for gold by fire assay (FA) followed by atomic absorption spectroscopy (AAS) finish (ALS method Au-AA25) and 35 element geochemistry using a nitric acid aqua regia digestion and inductively coupled plasma atomic emission spectroscopy (ICP-AES) finish (ALS method ME-ICP41). Silver was analysed using aqua regia digestion followed by ICP-AES (ALS method Ag-OG46). Over limit analysis for silver was conducted using FA fusion gravimetric analysis (ALS method Ag-GRA21). Whole rock analysis for 14 oxide compounds was completed on two 2018 rock samples using an acid digestion followed by ICP-AES (ALS method ME-ICP06).

ALS is an ISO 9001:2015 certified and ISO/IEC 17025:2005 accredited geo-analytical laboratory and is independent of Supernova and the Author.

11.2 Historical Surface Sampling

11.2.1 Northern Abitibi Mining Corp.

In 2006, Northern Abitibi collected 28 rock samples and 131 soil samples over the central eastern Property area. The soil samples were collected at a nominal sample spacing of 25 m (80 ft) along northeast trending lines spaced approximately 180 m (600

ft) apart. The depth of sample collection varied from 10 to 20 cm (3.9 to 7.9 inches). The soil and rock samples were shipped to ALS-Chemex Laboratories in Vancouver, Canada, for preparation and analysis.

The 2006 rock samples were analysed for gold by FA followed by AAS finish (ALS method Au-AA23), and 35 element geochemistry using a nitric acid aqua regia digestion and ICP-AES finish (ALS method ME-ICP41). Silver was analysed using aqua regia digestion followed by ICP-AES (ALS method Ag-AA46). Over limit analysis for gold was conducted using FA with a gravimetric finish (ALS method Au-GRA21). Multi-element analysis of the 2006 soil samples was completed using a nitric acid aqua regia digestion and ICP-AES finish (ALS method ME-ICP41).

ALS is an ISO 9001:2015 certified and ISO/IEC 17025:2005 accredited geo-analytical laboratory and is independent of Supernova and the Author.

11.2.2 Silver Range Resources Ltd.

In 2016, Silver Range Resources Ltd. collected 12 rock samples and 8 soil samples over the central eastern Property area. Most of the soils were collected over one main line at interval spacings of 100 m (328 ft). The soil and rock samples were shipped to ALS in Reno, Nevada, for preparation of pulps using standard methods. Pulps were forwarded to ALS in Vancouver, Canada, for analysis.

The 2016 rock samples were analysed for gold by FA followed by AAS finish (ALS method Au-AA25) and 35 element geochemistry using a nitric acid aqua regia digestion and ICP-AES finish (ALS method ME-ICP41). Silver was analysed using aqua regia digestion followed by ICP-AES (ALS method Ag-OG46). Over limit analysis for silver was conducted using fire assay fusion gravimetric analysis (ALS method Ag-GRA21). Multi-element analysis of the 2016 soil samples was completed using aqua regia digestion followed by inductively coupled plasma mass spectroscopy (ALS method ME-MS41L).

ALS is an ISO 9001:2015 certified and ISO/IEC 17025:2005 accredited geo-analytical laboratory and is independent of Supernova and the Author.

11.3 Historical Drilling

Forty-seven drill holes, totalling 3,213 m (10,540 ft), were completed at the Cold Springs Property by four separate companies from 1980 to 2007. Information on drill programs conducted by Phelps Dodge, Asarco and the W.X. Syndicate has been derived from original drill logs and assay certificates, and historical summary reports, and is summarized in the following points:

- Phelps Dodge (1980-1981): Geological logging was completed on paper templates with fields for from-to, core recovery, lithology, alteration and metallization. Information in the drill log header included project name/location, hole number, coordinates, drill type, drilling date, bit size, total depth and logger name. A graphic

log summary was completed for some of the holes. The logs were also transcribed into a digital format, which included gold and silver assay values. Drill samples were collected on 1.5 m (5 ft) intervals.

- Asarco (1983): Original lab certificates show that drill samples from Asarco's 1983 CS83 drilling program were collected on 3 m (10 ft) intervals. Samples were analysed at Hunter Mining Laboratory Inc. in Sparks, Nevada, for gold, silver and mercury using analytical methods FA 1AT and Flameless AA.
- W.X. Syndicate (1987-1988): Geological logging was completed on paper templates with fields for depth, lithology, alteration, comments, Au (ppm) and Ag (ppm). Information in the drill log header included project name/location, hole number, coordinates, total depth, angle, drill date and logger name. Original lab certificates show that drill samples were analysed for gold and silver by Bondar-Clegg Inc. in Sparks, Nevada. The reports do not include documentation on the analytical method used (W.X. Syndicate, 1987; 1988).

11.3.1 Northern Abitibi Mining Corp.

Five drill holes, totalling 1,664.2 m, were completed by Northern Abitibi at the Property from 2006 to 2007. The drilling was completed using a Schramm 685W truck mounted RC drill rig using a Mincon face sampling hammer or a tricone drill bit. Two samples of comparable weight and volume were collected by the drilling contractor on 1.5 m (5 ft) intervals using a wet splitter and a 'Y'. The samples were split directly into porous polyester bags (20 x 24 inch) placed within buckets to ensure the collection of the sample fines. One sample was sent for assay and the second duplicate sample was stored under solar panels at a specified location to serve as a permanent record of the drill hole (Ebert, 2007). Geological logging was completed on paper templates with fields for depth, lithology, alteration, oxidation, description, sulphide percentage, quartz chip percentage, sample number and recovery. Information in the drill log header included the hole number, coordinates, azimuth, dip, total depth, drill date and logger name.

The samples were picked up at the drill site by American Assay Laboratories Inc. ("American Assay") and delivered to the American Assay laboratory in Reno, NV, for preparation and analysis. The 2006 and 2007 drill chip samples were analysed for gold by fire assay (American Assay method FA-30). Silver analysis was completed using aqua regia digestion and atomic absorption (American Assay method D2A). Over limit analysis for silver was completed using fire assay.

American Assay is an ISO/IEC 17025:2005 accredited geo-analytical laboratory and is independent of Supernova and the Author.

11.4 Quality Assurance – Quality Control

11.4.1 2018 Rock Sampling Program

To the best of the Author's knowledge, Silver Range did not perform any quality assurance – quality control (QA-QC) during their 2018 rock sampling program; however, the rock samples were submitted to ALS for sample preparation and analysis. ALS is an ISO 9001:2015 certified and ISO/IEC 17025:2005 accredited geo-analytical laboratory with a quality control program that includes quality control steps through sample preparation and analysis. The Author has reviewed the ALS quality control certificate of analysis for the 2018 rock samples and no issues were reported. It is the Author's opinion that the sampling program was acceptable in a preliminary capacity; especially given the small scale of the program and the early-stage of exploration at the Property.

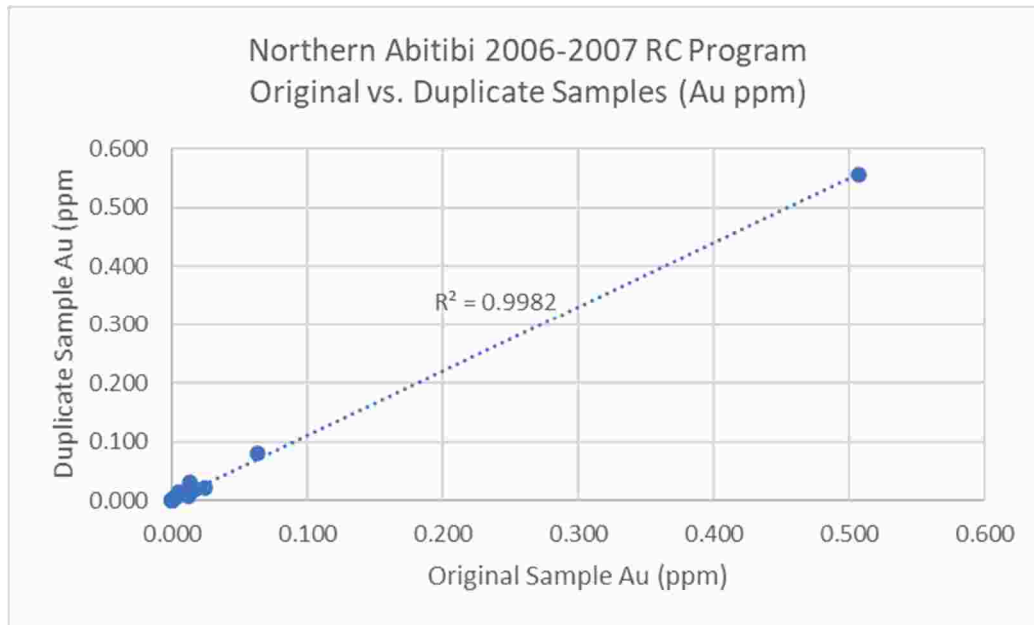
Any future sampling program, however, should establish a sampling protocol that includes rigorous QA-QC. The use of quality control methods will quantify sampling and analytical error and will indicate where the entire analytical process improvements are required to reduce risk and increase the accuracy of any targeting (or other) decisions. Quality control procedures to monitor the sampling and analysis of a next-stage reconnaissance program at the Cold Springs Property to collect and analyze geological materials should include field duplicates, blanks and certified sample standards.

11.4.2 Historical Surface Exploration and Drilling

With the exception of drilling completed by Northern Abitibi, little information is available regarding sampling or QA-QC procedures employed by previous operators.

Northern Abitibi's analytical QA-QC program for drilling included the collection of duplicate samples and the insertion of blank reference materials in the drill sample stream. The 2006-2007 drill program yielded the collection of 1,115 drill samples with 712 samples sent for analysis. A total of 19 duplicates were submitted for analysis at an average rate of 1 in every 37 samples. A total of 4 blank reference materials were inserted at an average rate of 1 in every 178 samples. The blank reference material used was sourced from drill hole 06CS-01. A bivariate plot illustrating the original drill samples for Au versus duplicate assays for Au is shown in Figure 11.1.

Figure 11.1. Bivariate plot of original drill sample assays versus field duplicate assays (n = 18 assays)



11.5 Adequacy of Sample Collection, Preparation, Security and Analytical Procedures

The Author has reviewed the adequacy of the recent and historical exploration information as conducted by Silver Range and by other operators. In the Author's opinion, the sample preparation, analytical and QA-QC procedures are adequate for this stage of exploration at the Cold Springs Property.

Given the circa-1980's age of the surface sampling and drilling completed by Phelps Dodge, Asarco, and the W.X. Syndicate, the lack of information with respect to sampling procedures, security, and QA-QC procedures is not unusual. The Author has no reason to doubt the results of this work, given the availability of high-quality original source data including copies of drill logs and assay certificates.

The Phelps Dodge, Asarco, and W.X. Syndicate drilling was done prior to the implementation of ISO/IEC accreditation standards. At the time, Bondar-Clegg was a major international assay laboratory used by many exploration companies including APEX, and Hunter Mining Laboratory Inc. was a widely used regional assay laboratory. Subsequently, more modern exploration by Northern Abitibi and Silver Range predictably includes better documented analytical and QA-QC procedures. The Author believes that the results reported are reliable and adequate for the stage of exploration at the Cold Springs Property.

In the future, the Author recommends that the sample collection, preparation, security, analytical procedures, and QA-QC procedures of any Supernova-led exploration program is current with CIM standards and guidelines and robust enough to develop confidence for any future mineral estimations including mineral resource/reserve 3D modelling.

12 Data Verification

12.1 Data Verification Procedures

Data verification procedures applied by the Author included reviewing available original laboratory certificates and comparing this information against the electronic datasets, with any inconsistencies being flagged and reviewed. Copies of original laboratory certificates were available for all Asarco and W.X. Syndicate drilling. Original logs with assay values were available for Phelps Dodge Drilling. Only one original laboratory certificate was available for review for the Northern Abitibi drilling (Northern Abitibi drill hole CS-2).

There were no significant differences with respect to the Company's databases and the archived analytical certificates. In the opinion of the Author of this Report, industry standard procedures have been used that are acceptable for ensuring the accuracy of all analytical data pertaining to exploration work conducted by the Company.

12.2 Qualified Person Site Inspection

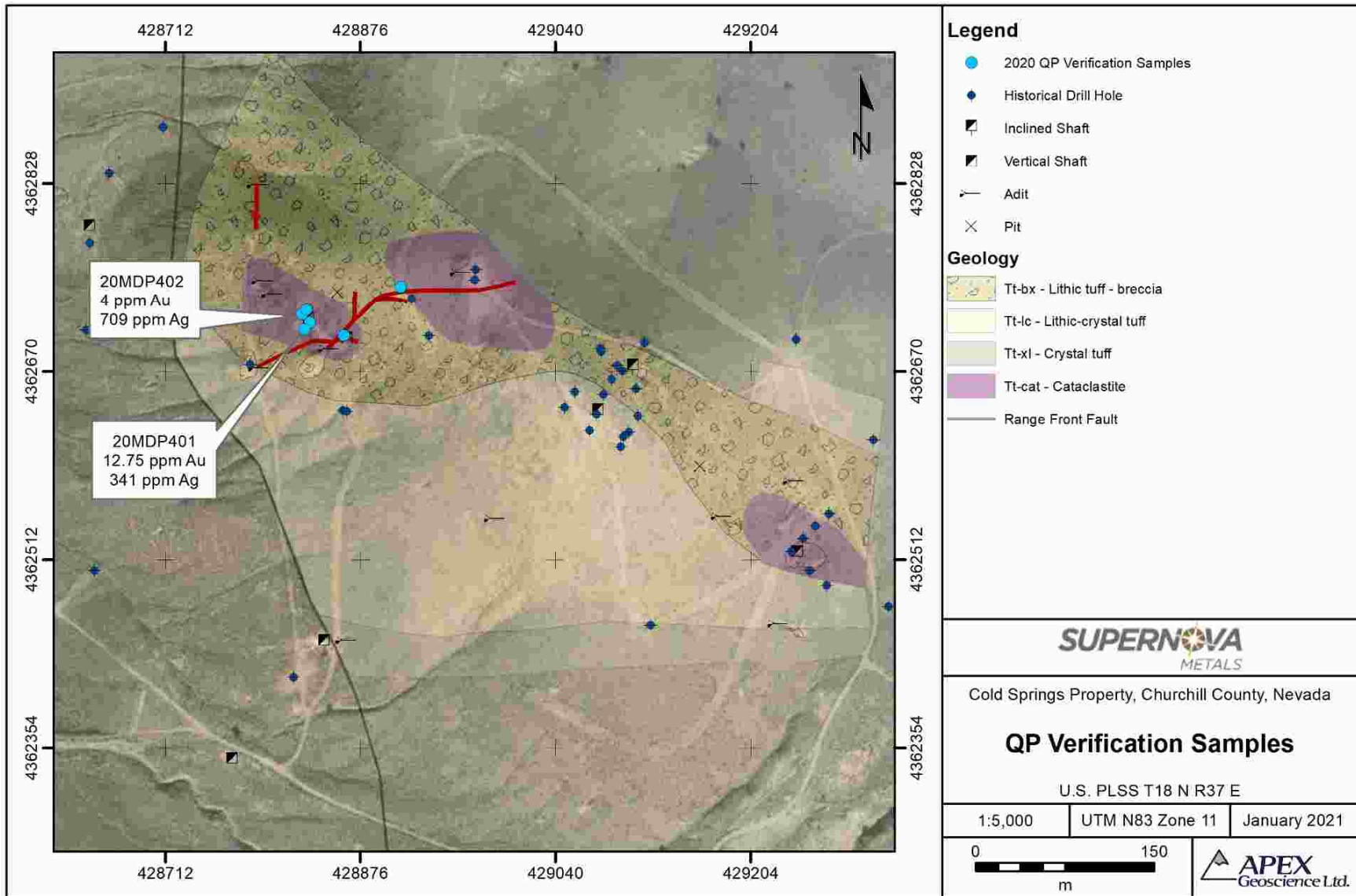
The Author of this Technical Report, Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo., President of APEX, and an independent QP visited the Property on September 8, 2020. The site visit included a ground tour of the Property, the observation of historical workings throughout the Property and the collection of six verification samples. Gold and silver analytical results from the QP verification samples is presented in Table 12.1 and shown in Figure 12.2.

Table 12.1. Location and results of verification samples collected at the Cold Springs Property by Michael Dufresne in September 2020

SampleID	Easting	Northing	Elevation	Au (ppm)	Ag (ppm)
20MDP400	428834	4362711	1797	0.04	5.05
20MDP401	428829	4362705	1796	12.75	341
20MDP402	428827	4362718	1795	4	709
20MDP403	428831	4362722	1798	0.109	6.11
20MDP404	428862	4362700	1806	0.253	13
20MDP405	428910	4362741	1840	0.093	2.89

The verification samples were submitted to ALS Vancouver for analysis by 30-gram FA and ICP-AES (ALS method Au-ICP21) and 61 element geochemistry using four acid digestion with ICP-MS finish (ALS method ME-MS61). Over limit analysis for gold (>10 ppm Au) was conducted using FA with a gravimetric finish (ALS method Au-GRA21). Over limit analysis for silver (>100 ppm Ag) was conducted using hydrofluoric - nitric acid – perchloric acid digestion with hydrochloric acid leach with ICP-AES or AAS finish (ALS method Ag-OG62). ALS is an ISO 9001:2015 certified and ISO/IEC 17025:2005 accredited geo-analytical laboratory and is independent of Supernova and the Author.

Figure 12.1. QP Property visit rock grab sample locations with select results



Of the 6 site visit samples, 4 samples contained anomalous gold values >0.1 ppm Au, including 12.75 ppm Au from sample 20MDP401 and 4 ppm Au from sample 20MDP402. In addition, over-limit silver values >100 ppm Ag were returned from the high-grade gold samples with samples 20MDP401 and 20MDP402 yielding 341 ppm Ag and 709 ppm Ag, respectively. Sample 20MDP401, a colloform and crustiform quartz vein sample with goethite ± sulphides, was collected from angular float near a historical mining shaft. Sample 20MDP402, a cherty silicified rhyolite and quartz vein with goethite, iron-manganese in fractures ± sulphides, was collected from large angular blocks of float beside a historical mining shaft. It should also be noted that anomalous arsenic (As) and antimony (Sb) values, classic epithermal precious metal mineralization indicator elements, were identified by the site visit samples up to maximum values of 246 ppm As and 142 ppm Sb.

12.3 Validation Limitations

Based on the site visit and verification sampling, the Author has no reason to doubt the historical and reported exploration results.

12.4 Adequacy of the Data

The QP has reviewed the adequacy of the exploration information and the Property's visual, physical, and geological characteristics. He has found no significant issues or inconsistencies that would cause one to question the data's validity. In the Author's opinion, the data is adequate for this stage of exploration at the Cold Springs Property and is suitable for use in this Report.

13 Mineral Processing and Metallurgical Testing

Supernova has yet to conduct mineral processing and/or metallurgical testing at the Cold Springs Property.

14 Mineral Resource Estimates

Supernova has yet to conduct mineral resource/reserve modelling or estimations. There are no known mineral resources or reserves outlined at the Cold Springs Property.

Sections 15-22 are not required.
The Cold Springs Property is an early-stage exploration project.

23 Adjacent Properties

There are currently no relevant development projects in the Property's immediate vicinity. Active gold projects in the area include Kermode Resources Ltd.'s Eastgate project located approximately 25 km (15.5 miles) south of the Property and Almadex Minerals Ltd.'s Paradise-Davis project located approximately 70 km (43.5 miles) south of the Property (Figure 23.1). Both projects are early-stage exploration properties targeting epithermal gold-silver deposits (Almadex Minerals Ltd., 2020; Kermode Resources Ltd., 2021).

Operational gold mines in the area of the Cold Springs Property include the Rawhide Gold-Silver Mine, located approximately 60 km (37 miles) southwest of the Property and the Round Mountain Mine, located approximately 100 km (62 miles) to the southeast of the Property (Figure 23.1). The following sub-sections briefly summarize information on the Rawhide and Round Mountain gold-silver deposits. These mineral deposits are discussed simply as examples of the deposit type that Supernova is exploring for at the Cold Springs Property.

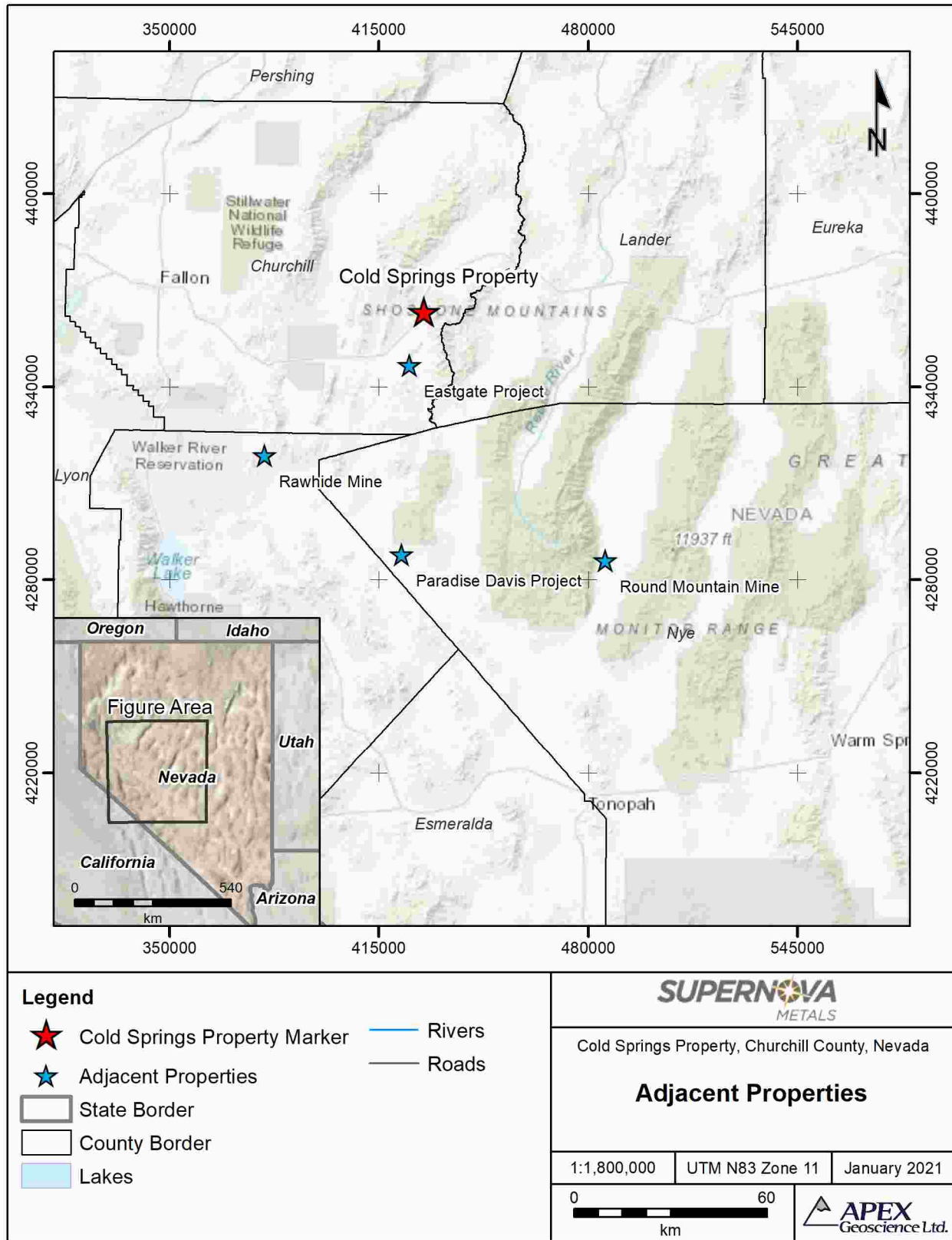
The reader is cautioned that there are no mineral resources or reserves identified at the Cold Springs Property at this time and the discussion that follows does not imply the presence of comparable mineralization at the Cold Springs Property. The Author of this Report has not visited or worked at any of the projects discussed in Section 23 and where references are made to current mineral resources, the Author has not verified the information.

23.1 Rawhide Mine

Rawhide is a producing gold and silver open-pit heap leach mine operated by Rawhide Mining LLC in Mineral County, NV, located approximately 60 km (37 miles) to the southwest of the Cold Springs Property. The mine has been in operation since 1990, with total production of 1.7 million ounces of gold and 14.4 million ounces of silver to date (Ely Gold Inc., 2021). Gold and silver mineralization at Rawhide were historically mined from low-sulphidation epithermal veins, vein swarms and replacement zones (Ely Gold Inc., 2021; Gray et al., 1996). The current focus of mining operations is on lower grade bulk tonnage gold and silver mineralization occurring within volcanic units and at intrusive contacts (EMX Royalty Corp., 2019).

The Rawhide volcanic centre (approximately 80 km² (50 miles²) in size) hosts the gold-silver mineralization in the Rawhide district. The rocks within the volcanic centre range from basalt to rhyolite in composition, with a series of coalescing intermediate lava flows and lava dome complexes (John et al., 2015). Ore at Rawhide is hosted primarily by fractured andesite and mineralized rock consists of sheeted to stockwork quartz-adularia-pyrite veins. The ore has undergone quartz-adularia-illite-pyrite alteration with more distal argillic alteration and the deposits are oxidized to depths of 215 m (705 ft). Hypogene ores at Rawhide include electrum, silver sulphides, selenides and sulfosalts; oxide ores at Rawhide include silver halides (John et al., 2015).

Figure 23.1. Notable properties adjacent to the Cold Springs Property



Mineralization at Rawhide is controlled by structural events associated with Miocene tectonics of the Walker Lane structural zone. Major orebodies are located at intersections of faults, or are bounded by faults, with zones of preferential mineralization within the orebodies corresponding to major sets of fault orientations (Gray, 1996).

The Author has not verified the above information at the Rawhide Mine and such information is not necessarily indicative of the mineralization that exists or may exist on the Cold Springs Property.

23.2 Round Mountain Mine

Kinross Gold Corp.'s Round Mountain Mine is a producing gold and silver open-pit mill and heap leach mine in Nye County, Nevada, located approximately 100 km (62 miles) southeast of the Cold Springs Property. Commercial production at Round Mountain commenced in 1977 with the mine producing approximately 15.4 million ounces of gold to date (Kinross Gold Corp., 2020).

Round Mountain is a low-sulphidation epithermal volcanic hosted hot springs gold silver deposit. The Round Mountain deposit is characterized by disseminated mineralization hosted in an upper Oligocene aged poorly welded rhyolitic ash-flow tuff that has undergone propylitic, potassic and high-level silicic and intermediate argillic alteration (Henry et al., 1997; Sander and Einaudi, 1990). The ash flows are pooled within a source caldera, the Round Mountain Caldera. The margin of the Round Mountain Caldera and related structures provided the structural conduits for the hydrothermal system that introduced gold mineralization at Round Mountain (Hanson, 2006). Gold mineralization occurs as electrum associated with quartz, adularia, pyrite and iron oxides (Hanson, 2006).

The Round Mountain Mine, a conventional open pit, measures approximately 3,350 m (11,000 ft) long in the northwest-southeast direction and 2,680 m (8,800 ft) wide. Gold is recovered using three independent processing operations, including crushed ore heap leaching, run-of-mine ore heap leaching and gravity/flotation plant. The Round Mountain Mineral Reserve and Resource Estimates, effective December 31, 2020 and classified in accordance with CIM definition standards for mineral resources and mineral reserves, are listed below in Table 23.1.

Table 23.1. Round Mountain Mineral Reserve and Resource Estimates (Kinross Gold Corp., 2021)

	Tonnes (thousands)	Grade (g/t)	Ounce (thousands)
Proven and Probable Mineral Reserves ¹	89,168	0.8	2,245
Measured and Indicated Mineral Resources ¹	173,376	0.7	3,734
Inferred Mineral Resources ¹	96,437	0.5	1,563

¹Estimated using cut-off grades based on an assumed gold price of \$1,200 per ounce.

The Author has not verified the above information including the mineral reserves and resources at the Round Mountain Mine and such information is not necessarily indicative of the mineralization that exists or may exist on the Cold Springs Property.

24 Other Relevant Data and Information

The Author is not aware of any other relevant data or information with respect to the Cold Springs Property that is not disclosed in this Report.

25 Interpretation and Conclusions

25.1 Results and Interpretations

The Cold Springs Property is situated within the Great Basin segment of the Basin and Range Province, an area characterized by varied topography of north-south trending mountain ranges separated by flat lacustrine-gravel-volcaniclastic-volcanic filled valleys. The Property is located on the western flank of the Desatoya Mountain range of west-central Nevada and covers 455 acres (184 hectares) of land in Churchill County. The Property lies near known precious metal deposits in the region, including the Denton-Rawhide gold-silver mine, located 60 km (37 miles) southwest of Cold Springs in Mineral County.

This Technical Report on the Cold Springs Property was prepared by APEX at the request of Supernova. The purpose of this Report is to support Supernova's listing on the CSE, to provide a geological introduction to the Cold Springs Property, to summarize historical and recent work completed on the Property and to provide recommendations for future exploration work programs.

It is the opinion of the Author of this report that recent exploration completed at the Cold Springs Property by Silver Range and Supernova is appropriate for the deposit type being explored and has been carried out in a manner that meets industry standards. Furthermore, based upon the results of the exploration work discussed in this Report, it is the opinion of the Author that the Cold Springs Property is a "Property of Merit" warranting continued exploration work.

The following conclusions can be drawn from recent and historical work completed at the Cold Springs Property:

- The Cold Springs Property lies in a favourable geological setting and is being explored by Supernova for epithermal style Au-Ag mineralization.
- The Property is underlain by mid-Tertiary hydrothermally altered rhyodacite crystal, lithic, and crystal-lithic tuffs, pyroclastic volcanic breccias and rhyolite dikes, and is situated on the northwest rim of a volcanic center associated with the

Oligocene ignimbrite event. The northwest quadrant of the interpreted caldera complex hosts numerous gold and silver occurrences.

- Recent and historical surface work completed on the Property has included geological mapping, geochemical sampling and geophysical surveying. Highlights from rock sampling programs include grabs of up to 69.4 g/t Au and 1,280 g/t Ag. Historical exploration has identified several targets that warrant additional testing.
- Forty-seven drill holes, totalling 3,205.9 m, were completed within the Cold Springs Property by four separate companies from 1979 to 2007. Historical drilling by previous companies appears to have focused on two dissimilar targets. Drilling by Phelps Dodge and Asarco was likely designed to test for a large, low-grade epithermal precious metal deposit. No attempt appears to have been made to locate and systematically drill narrow, high-grade vein systems that are typical of low-sulphidation epithermal systems. Drilling by Northern Abitibi addressed the possible presence of high-grade feeder veins by targeting deep geophysical anomalies that were recognized on wide-spaced, east-west oriented lines. Highlights from the Northern Abitibi drilling program includes 0.4 g/t Au and 22.9 g/t Ag over 30.5 m, including 2.2 g/t Au and 98.3 g/t Ag over 3.1 m from drill hole 07CS-3. Only 2 out of 5 Northern Abitibi drill holes reached target depth.
- Recent geological mapping and historical drill results suggest that the host tuffs, the large silicified breccias and the high-grade quartz veins dip west toward the Cold Springs Valley floor and likely down dropped to the west beneath the alluvial valley fill across a range front fault system. It is hypothesized that the mineralization exposed on the hill at Cold Springs appears to be the eastern periphery of a larger epithermal system hidden beneath Cold Springs Valley fill.
- The recent IP/Res geophysical survey has identified a large resistivity low west of the flanking range front fault and the exposed hilltop mineralized rock and beneath Cold Springs Valley alluvial valley-fill. The anomaly is interpreted to be possible hydrothermal silicification and/or argillic alteration associated with a large paleo hydrothermal system.
- The recent ground magnetic survey highlighted several magnetic trends within the Property, with the most prevalent being the divergence of the magnetic signal's character along the range front fault. The areas west of the range show a broad zone of reduced magnetic amplitude, which can be important from the aspect of signals associated with hydrothermal and alteration zones.
- The samples collected during the Author's site visit confirmed the presence of gold and silver mineralization at the Property with up to 12.75 ppm Au and 709 ppm Ag.

25.2 Risks and Uncertainties

The Cold Springs Property is subject to the typical external risks that apply to all mining projects, such as change in metal prices, availability of investment capital, changes in government regulations, community engagement, and general environmental concerns. The three latter points are mitigated to a certain extent by jurisdiction. Nevada is a mining friendly state with well established mining law and permitting processes.

There is no guarantee that future exploration by Supernova will result in the discovery of additional gold mineralization, definition of a mineral resource, or an economic mineral deposit. However, in the Author's opinion there are no significant risks or uncertainties that could reasonably be expected to affect the reliability or confidence in the currently available exploration information with respect to the Cold Springs Property.

26 Recommendations

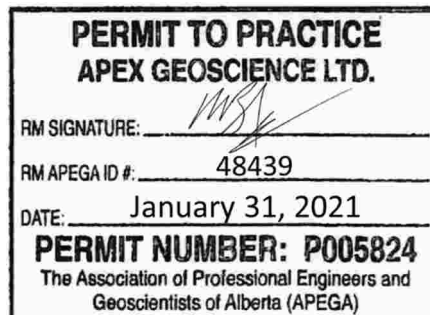
Based on results to date, further work is recommended at the Cold Springs Property. Exploration recommendations to locate epithermal vein gold and silver mineralization will be guided by a Two-Phase approach. Phase 1 should comprise a four hole, approximately 1,200 metre (3,940 ft) diamond drill program. The proposed drilling will test IP and resistivity targets located west of the hilltop occurrence under alluvial cover in the Cold Springs Valley. The proposed Phase 1 drill targets will consist of possible dissected portions of the hilltop area gold-silver mineralization that may have been down dropped to the west across the Cold Springs range front fault system and is now under Cold Springs Valley alluvial fill. Possible feeder veins for the hilltop-style gold-silver mineralization will also be targets for the proposed Phase 1 diamond drilling program. The estimated cost of the Phase 1 program is estimated at CDN\$420,000.00 not including GST (Table 26.1).

Phase 2 exploration is dependent on the results of Phase 1 and includes an ionic leach soil sampling program over areas of the Property covered by thick pediment to generate geochemical drill targets, and ground magnetic inversion modelling to better characterize the causative magnetic bodies and their locations within the Property. Following the soil campaign and geophysical work, a preliminary Phase 2 RC drilling program of approximately 1,500 m (4,920 ft) is recommended. The total cost to complete the Phase 2 program is estimated at CDN\$400,000.00 not including GST (Table 26.1).

Table 26.1. Proposed budget for the recommended exploration program at the Cold Springs Property

Phase 1	
Item	Estimated Cost (\$CAD)
Core Drilling (1,200 metres)	
Core Drilling Cost (\$275/metre all up - incl. dirt work, fuel & water)	\$330,000.00
Core Analytical (250 samples @ \$40/sample)	\$10,000.00
Salaries - Geologists, Geotechs & Office Support	\$50,000.00
Rentals, Supplies & Supplies	\$15,000.00
Flights, Accommodations & Meals	\$15,000.00
Total Phase 1 Cost, Excluding GST	\$420,000.00
Phase 2	
Item	Estimated Cost (\$CAD)
Ionic Leach Soil Sampling (500 samples)	
Salaries - Geologists, Samplers & Office Support	\$35,000.00
Soil Analytical (500 samples @ \$40/sample)	\$20,000.00
Rentals, Supplies & Freight	\$15,000.00
Flights, Accommodations & Meals	\$25,000.00
Ground Magnetic Inversion Modelling	
Salaries - Geophysicists	\$4,000.00
Software Rentals	\$1,000.00
RC Drilling (1,500 metres)	
Core Drilling Cost (\$120/metre all up - incl. dirt work, fuel & water)	\$180,000.00
Core Analytical (1,000 samples @ \$40/sample)	\$40,000.00
Salaries - Geologists, Geotechs & Office Support	\$50,000.00
Rentals & Supplies	\$15,000.00
Flights, Accommodations & Meals	\$15,000.00
Total Phase 2 Cost, Excluding GST	\$400,000.00
Grand Total, Excluding GST	\$820,000.00

APEX Geoscience Ltd.



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Edmonton, Alberta, Canada

Date: January 31, 2021

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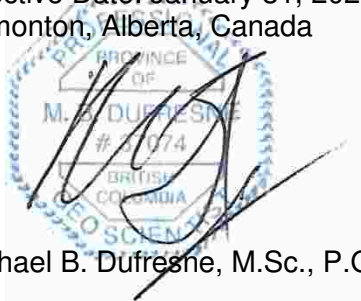
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28 Certificate of Author

I, Michael Dufresne, M. Sc., P. Geol., P. Geo., do hereby certify that:

1. I am President and a Principal of APEX Geoscience Ltd., 11450 - 160 St NW #100, Edmonton, AB, Canada, T5M 3Y7.
2. I graduated with a B.Sc. Degree in Geology from the University of North Carolina at Wilmington in 1983 and a M.Sc. Degree in Economic Geology from the University of Alberta in 1987.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists (“APEGA”) of Alberta since 1989 and a Professional Geoscientist with the Association of Professional Engineers and Geoscientists (“APEGBC”) of British Columbia since 2012.
4. I have worked as a geologist for more than 30 years since my graduation from University and have extensive experience with exploration for, and the evaluation of, gold deposits of various types, including epithermal gold and silver deposits in Nevada and the Western US.
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 all sections of the “Technical Report on the Cold Springs Property, Churchill County, Nevada, USA”, with an Effective Date of January 31, 2021 (the “Report”). I visited the Cold Springs Property on September 8, 2020 and can verify the Property, mineralization and the infrastructure at the Cold Springs Property.
7. To the best of my knowledge, information and belief, the Technical Report contains all relevant scientific and technical information that is required to be disclosed, to make the Technical Report not misleading.
8. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
9. I am independent of the issuer, the vendor and the Property applying all of the tests in section 1.5 of both NI 43-101 and 43-101CP.
10. I have not had any prior involvement with the Property that is the subject of the Technical Report.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory Authority and any publication by them for regulatory purposes, including electronic publication in the public company files or their websites.

Effective Date: January 31, 2021
Edmonton, Alberta, Canada



Michael B. Dufresne, M.Sc., P.Geol., P. Geo.

Appendix 1 – Author’s 2020 Property Visit Analytical Certificate

On file and available at the office of APEX Geoscience Ltd.