



BASE OF TILL DRILLING IDENTIFIES EXTENSIVE GOLD MINERALISED CORRIDOR IN FINLAND

Key points

- Reconnaissance base of till (BOT) drilling undertaken to test beneath the ionic leach gold-arsenic soil anomaly on the Paana exploration licence has been completed
- BOT drilling has identified a significant new gold mineralised corridor beneath glacial till cover
- BOT assays define a 1.3 kilometre long gold anomaly with values up to 3.8g/t gold in strongly sheared and altered bedrock (termed the Aarnivalkea prospect)
- This anomaly is still open along strike to the north and south
- The identification of this mineralised corridor validates S2's view on the potential of the district and systematic greenfields methodology in the highly prospective but under-explored Lapland greenstone belt
- Diamond drilling will likely commence in July once the ground is accessible following the spring thaw
- BOT drilling to continue to scope extent of this zone and to test other ionic leach gold anomalies elsewhere in the Lapland greenstone belt

S2 Resources Ltd ("S2" or the "Company") advises that its winter base of till (BOT) reconnaissance drilling campaign on the Paana area in northern Finland has been completed with highly encouraging results.

An extensive reconnaissance BOT program was undertaken with the aim of locating the bedrock source of the gold anomalism previously defined in the summer ionic leach geochemical survey (see Figure 1) and over a coincident structural target defined by magnetic breaks and a gravity low (see Figure 2).

The BOT program comprised 1,363 holes drilled on a 400 x 20 metre grid, with selected infill to 100 x 10 metres. The close spacing is necessary because there is very little or no mechanical or chemical dispersion and the sample is effectively a sample of fresh rock or rubble buried beneath transported

glacial till, unlike Australia where deep weathering creates extensive dispersion and supergene enrichment of gold over broad areas.

The BOT drillhole produces one end of hole sample at the interface of the glacial till with the subjacent bedrock, so it is effectively a rock chip and geochemical sample beneath the cover.

The BOT program has defined a strike extensive corridor of deformed and altered greenstones, comprising strongly sheared and hydrothermal silica, carbonate, sulphide altered rocks of indeterminate origin (see Figure 3). This zone, termed the Aarnivalkea prospect, is 1.3 kilometres long and includes numerous samples grading greater than 0.5 g/t gold, with a peak value of 3.8 g/t gold (see figures 4-7). It is also open along strike to the north and south.

The samples recovered from the drilling comprise highly angular basement rock fragments and not mixed and/or rounded fragments, which suggests that the samples are in-situ or close to their source. Additionally, the anomaly crosses various terrain types so is likely to reflect a real bedrock feature rather than a spurious transported glacial feature or recent geomorphological regime.

The overall size and magnitude of the BOT anomaly at Aarnivalkea is broadly comparable to the original BOT drilling results over what is now Agnico Eagle's 8 million ounce Kittila gold mine, which are publicly available via the GTK's (the Finnish Geological Survey's) website (see Figures 8 and 9). However, the similarity in these results does not imply or guarantee any similarity in the ultimate potential of the prospect. Diamond drilling is required to confirm the presence and extent of mineralisation at Aarnivalkea, which is as yet unknown.

Detailed magnetic and gravity surveys are being planned in order to enable a better structural interpretation which will in turn optimise drilling. The first ever diamond drilling of this new mineralised corridor is scheduled to commence in July. Approximately 80% of the area is accessible all year round with the balance being beneath bogs, drillable when frozen in winter.

The BOT drilling will also be extended to cover the currently open north, south and west flanks of the anomaly.

Other

More BOT drilling is also planned over the Company's various other ionic leach gold anomalies elsewhere in the Lapland greenstone belt, and ground EM is ongoing to follow up VTEM anomalies defined at the nickel-copper prospective Ruopas licence.

The Company has also been notified by the Western Australian Department of Mines, Industry Regulation and Safety (DMIRS) that it has been successful in three ballots for exploration licences covering 173.2 square kilometres in the Fraser Range nickel province (see Figure 10).

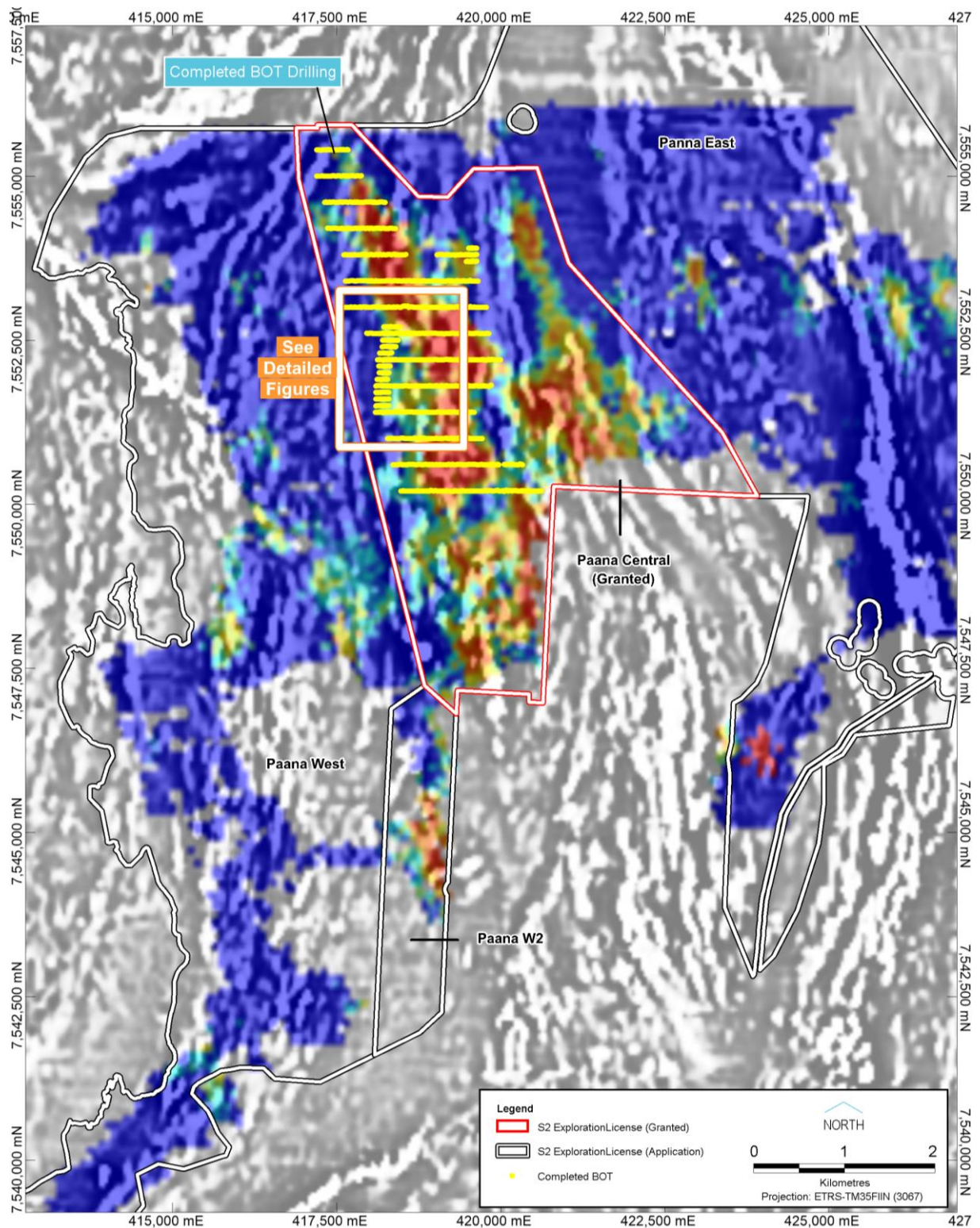


Figure 1. Completed BOT drilling over gold anomalism in ionic leach (colour) and aeromagnetics (greyscale).

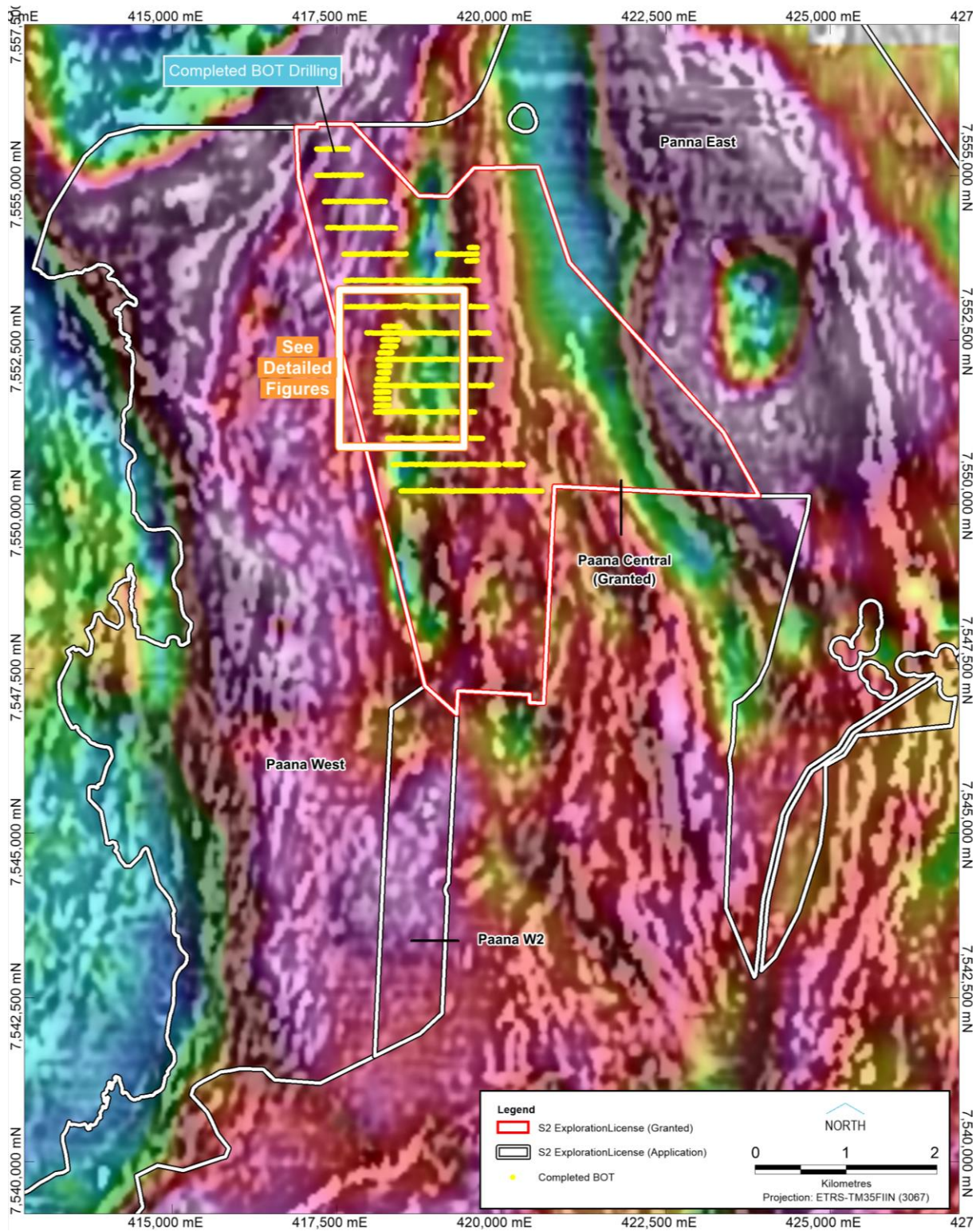


Figure 2. Completed BOT drilling over gravity (colour) and aeromagnetics (greyscale). The anomaly coincides with the western edge of a gravity low that may represent a structure juxtaposing rocks of differing densities or a large hydrothermal alteration cell. The northern and southern continuations of the gravity low have not yet been tested by BOT drilling.

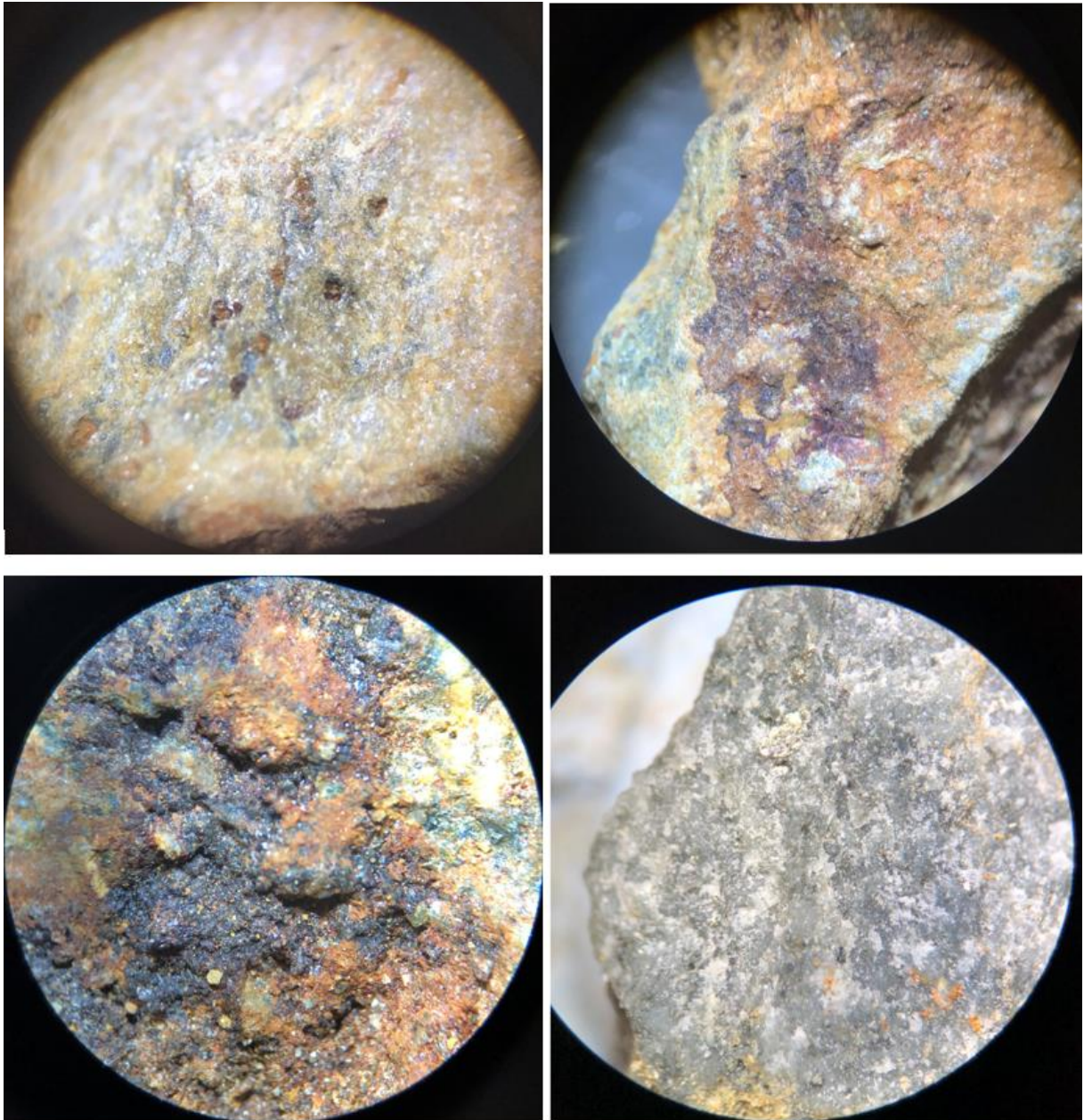


Figure 3. Magnified photographs of end of hole BOT samples (field of view approximately 1 centimetre). Top left and right: strongly sheared, silicified, sericitised and sulphide-bearing BOT chips grading 3.8 g/t gold from hole 14579; bottom left and right: strongly silicified and sulphidised BOT chips grading 1.3 g/t gold from hole 14581.

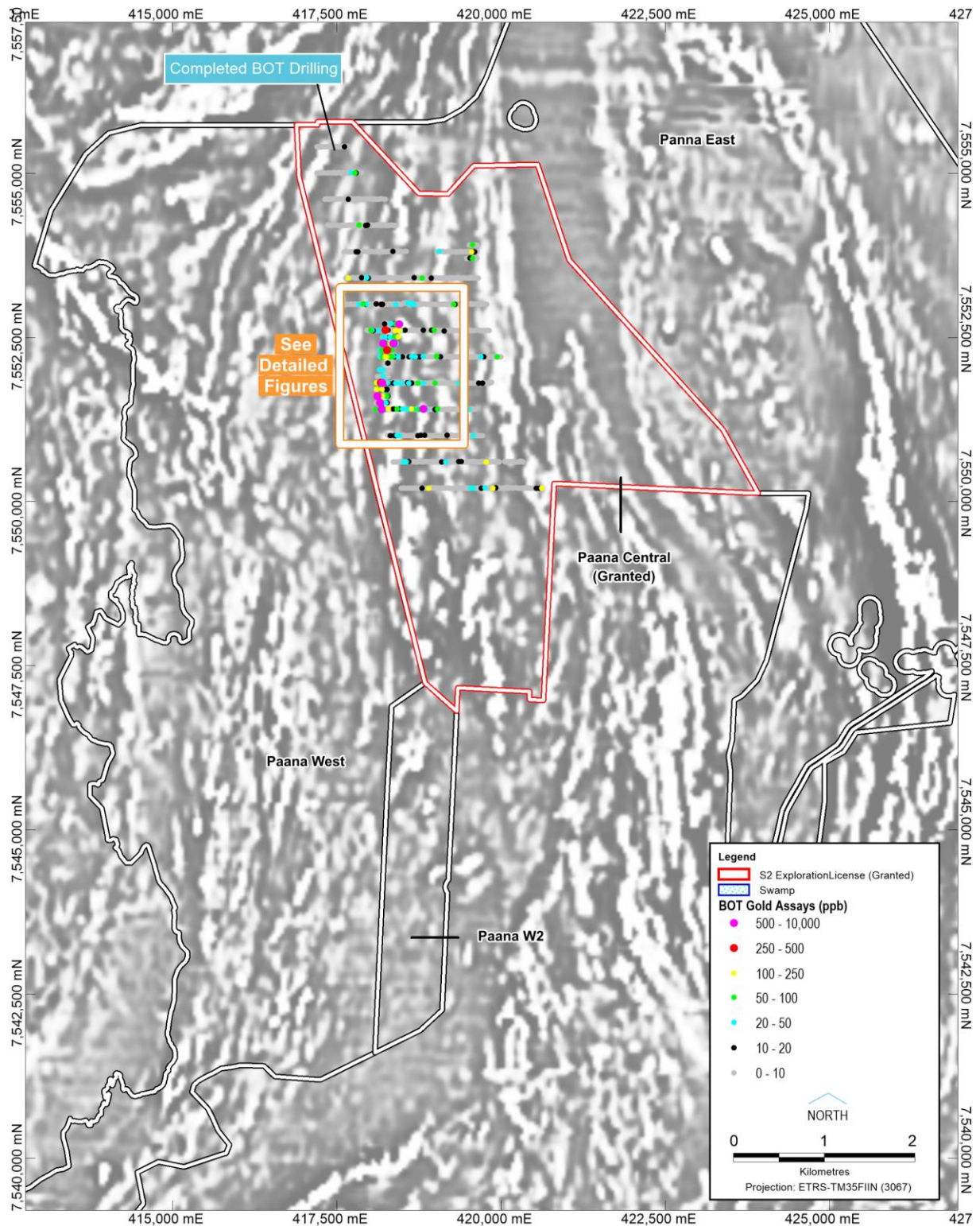


Figure 4. Gold anomalism in BOT drilling over aeromagnetics (greyscale).

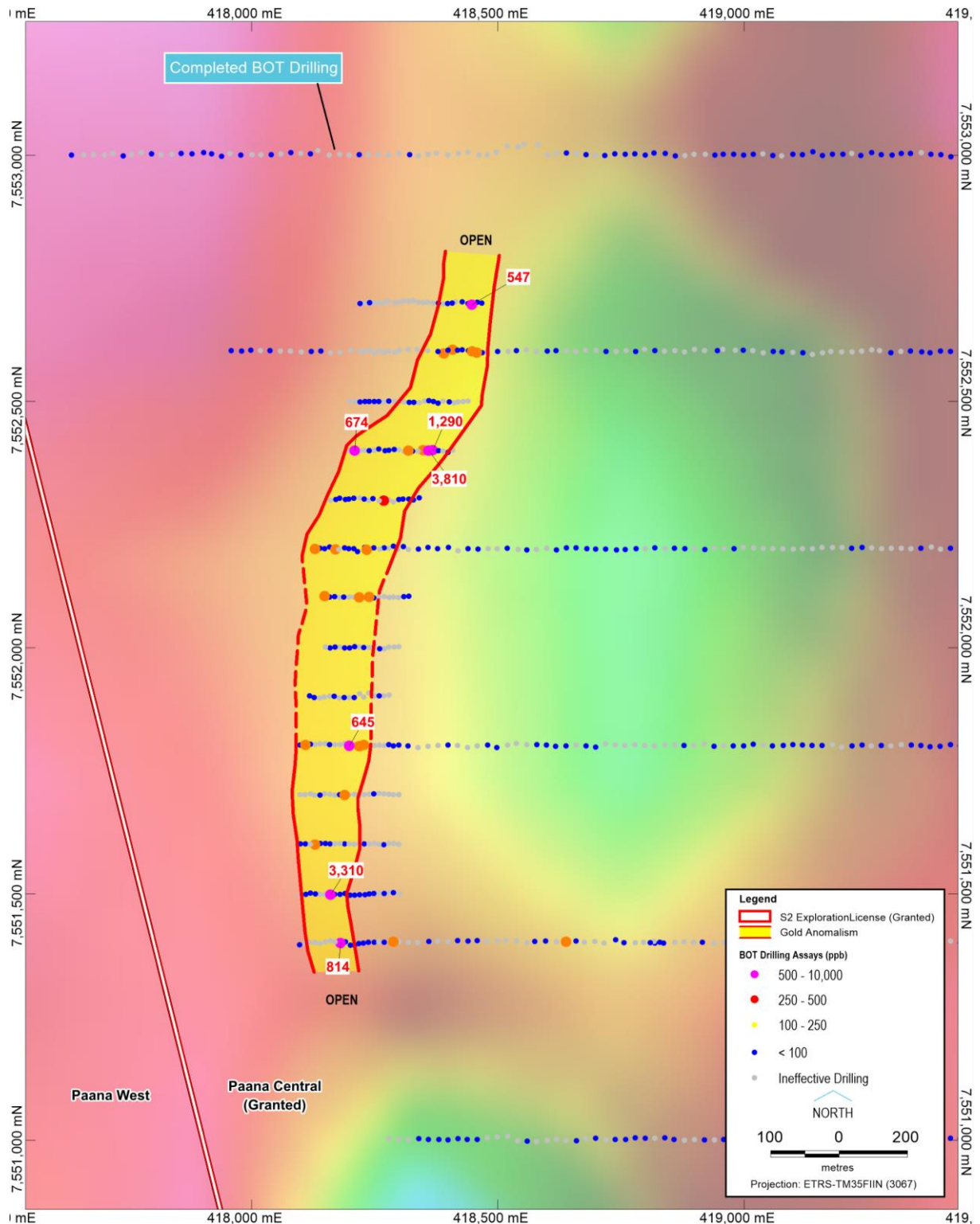


Figure 5. Detailed plan of the Aarnivalkea prospect showing gold anomalism in BOT drillholes and outline of anomaly over gravity. The anomaly follows a strong gravity gradient that may represent a structure juxtaposing more dense rocks (left hand side/pink) and less dense rocks or alteration (right hand side/green).

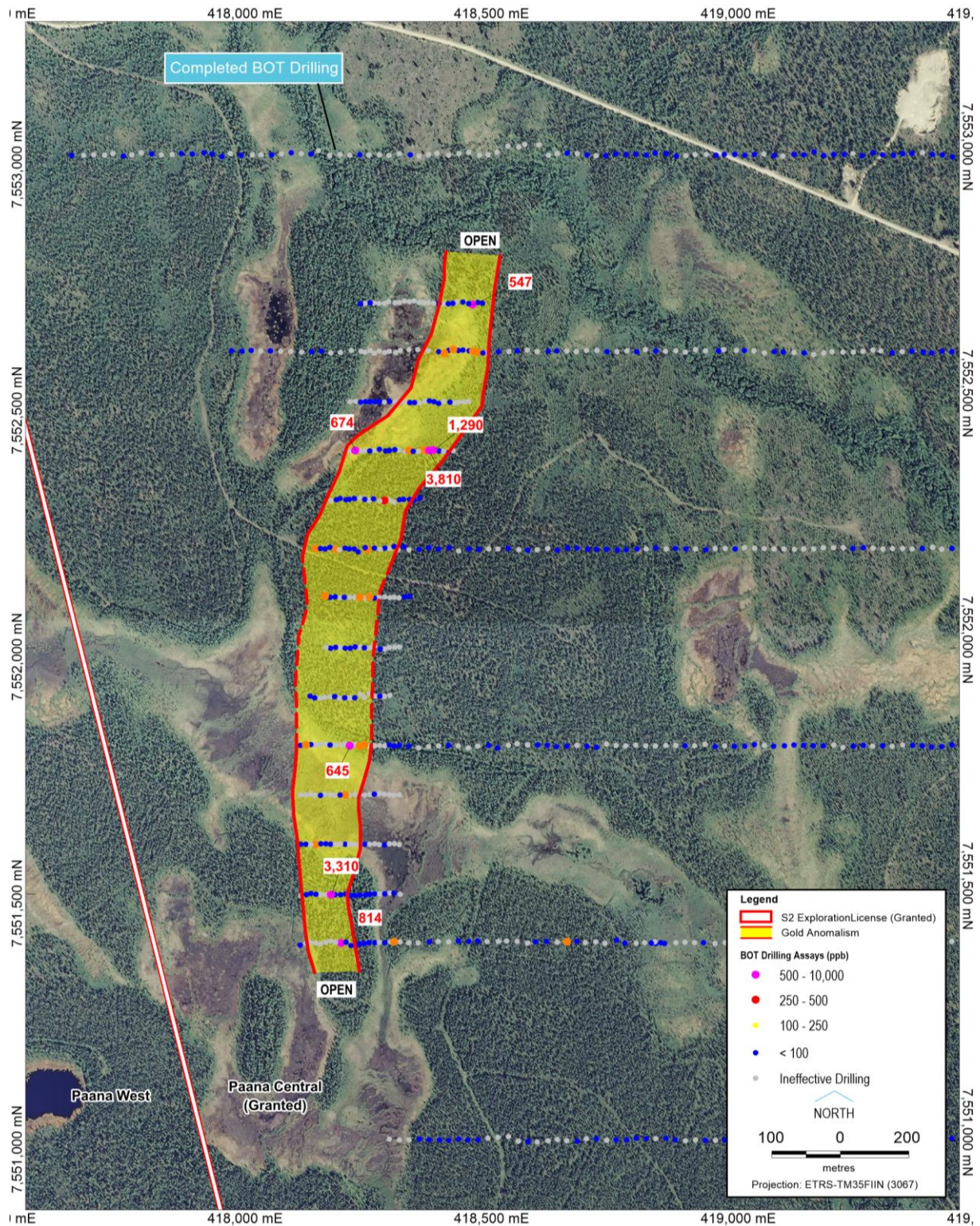


Figure 6. Detailed plan of the Aarnivalkea prospect showing gold anomalism in BOT drillholes and outline of anomaly over terrain airphoto. The bedrock anomaly forms a coherent NNE trending zone beneath a variety of superimposed recent/current terrains (hills and drainage) with a predominant WNW-ESE trend.

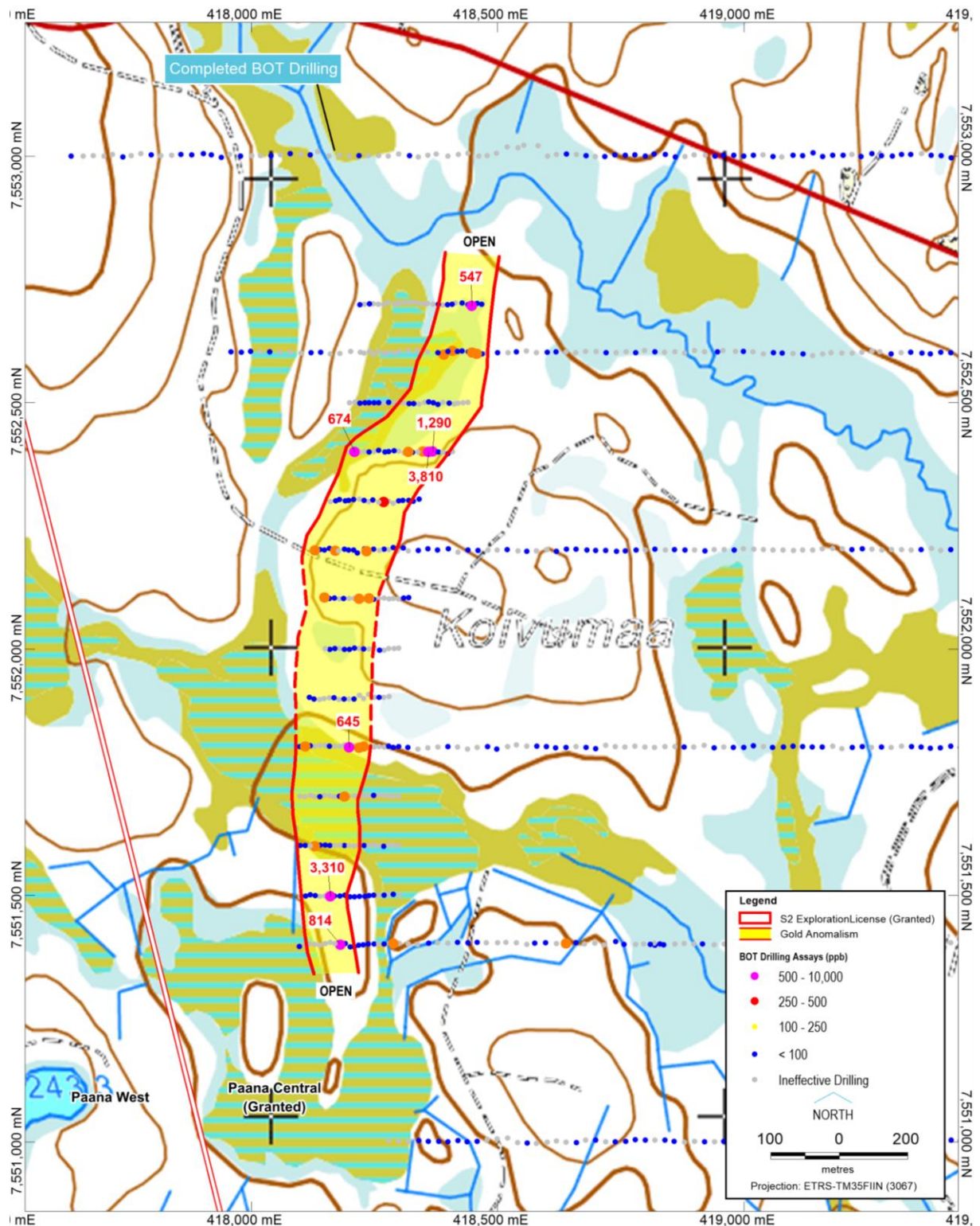


Figure 7. Detailed plan of the Aarnivalkea prospect showing gold anomalism in BOT drillholes and outline of anomaly over topography map. Active drainage is shown in blue and swampy areas as green and blue lines. The area is well accessed by public roads and forestry tracks.

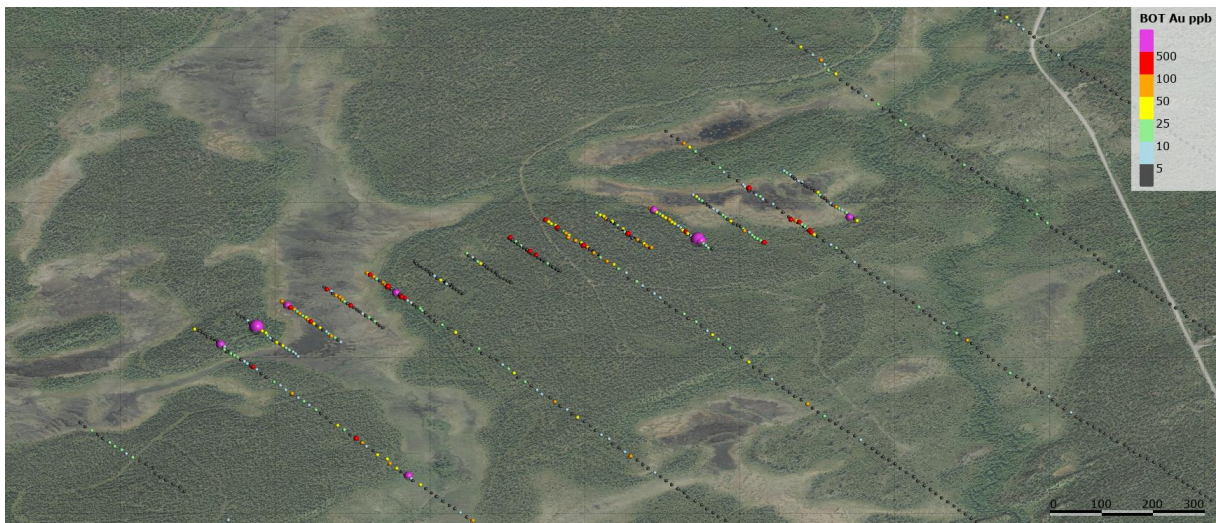


Figure 8. Isometric view of S2's BOT sampling results at Aarnivalkea, over aerial photography draped on topography.

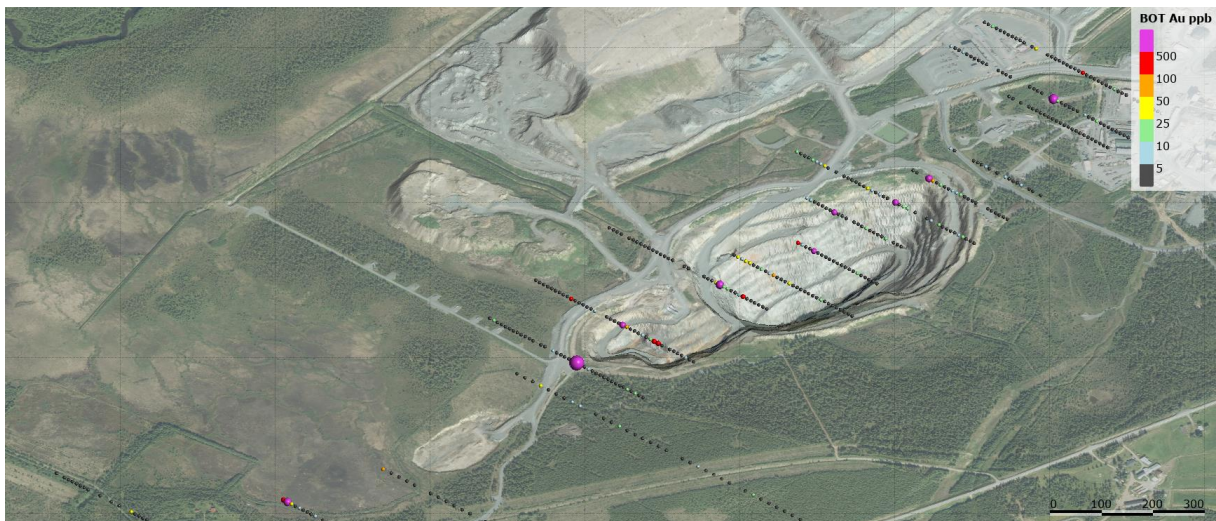


Figure 9. Isometric view of original BOT sampling results at Kittila (BOT data from GTK's website).

About the Central Lapland Greenstone Belt

The Central Lapland Greenstone Belt is a Proterozoic belt of volcanics and sediments that contains Agnico Eagle's 8 million ounce Kittila gold mine and Anglo American's 44 million tonne Sakatti nickel-copper deposit. Both are world class examples of their respective commodity and deposit style, with Kittila being lode gold and Sakatti being magmatic sulphide. Despite the presence of these two significant deposits, there has been relatively little effective exploration – particularly drilling - in comparison to regions such as Western Australia, so the potential mineral endowment and the potential for additional discoveries is considered very high.

S2 has a large and strategic ground position in this belt and is systematically undertaking greenfields exploration with the aim of discovering another significant gold or base metal deposit. This staged approach involves initial reconnaissance techniques such as regional geochemical surveys and airborne geophysics as a necessary prerequisite to managing the cost of its ground holdings and defining more focused drill targets, and is therefore a long term strategy.

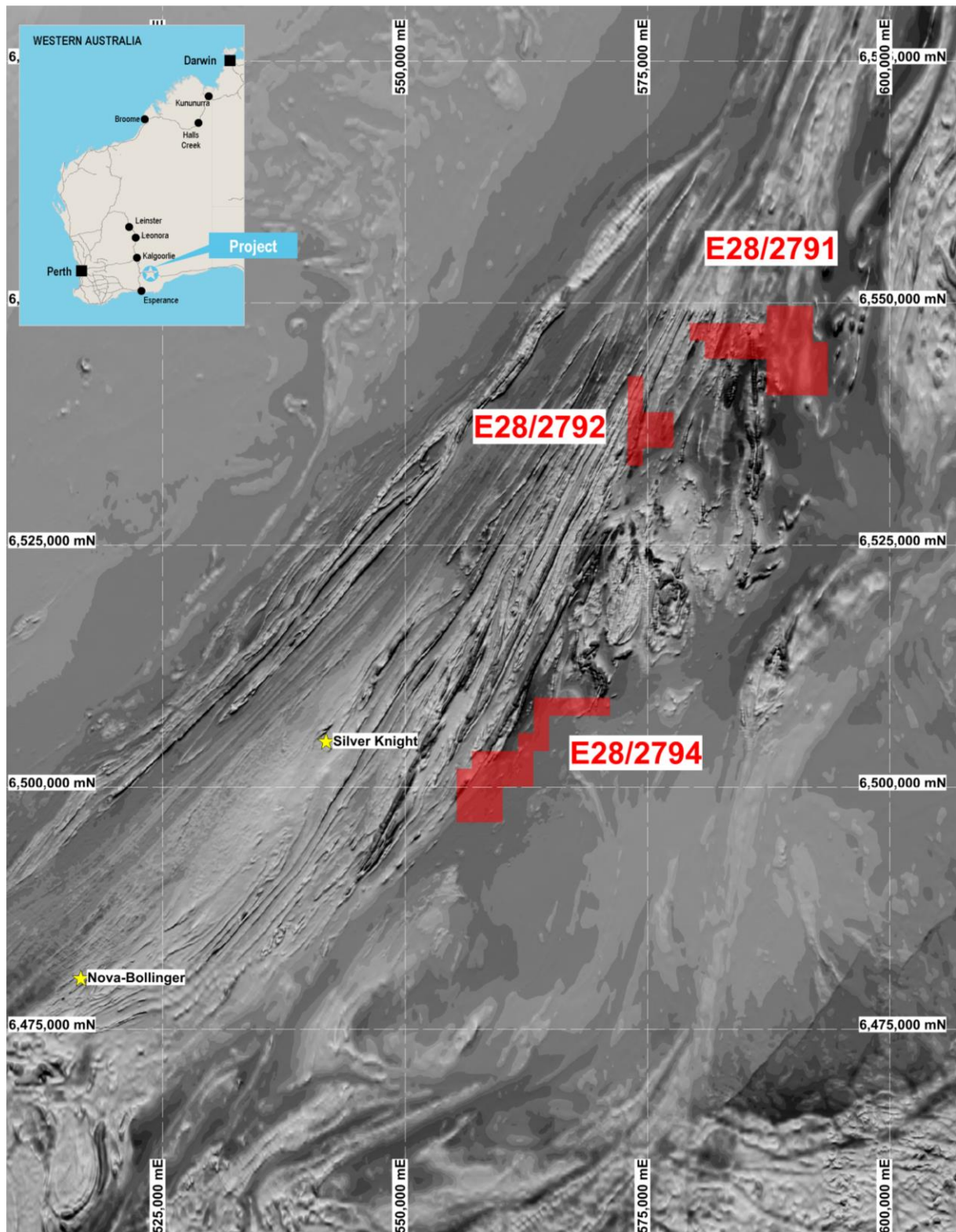


Figure 10. New Fraser Range Exploration licence applications awarded to S2 in a DMIRS ballot (shown in red).

Acknowledgements

S2 would like to acknowledge the efforts of its Finnish team, Moreenityo Macklin drilling, ALS Laboratories in Sodankyla and Dublin, TUKES, the local community and reindeer herders,



For further information, please contact:

Mark Bennett
Managing Director & CEO
+61 8 6166 0240

Anna Neuling
Executive Director & Company Secretary
+61 8 6166 0240

Competent Persons statements

The information in this report that relates to Exploration Results from Finland is based on information compiled by Andy Thompson, who is an employee and shareholder of the Company. Mr Thompson is a member of the Australian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience of relevance to the style of mineralization and the types of deposits under consideration, and to the activities undertaken, to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Thompson consents to the inclusion in this report of the matters based on information in the form and context in which it appears.

Annexure 1

The following Tables are provided to ensure compliance with the JORC code (2012) edition requirements for the reporting of exploration results.

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	<i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i>	Base of Till (BoT) drilling is undertaken by Moreenitoy Macklin Oy of Sattanen, Finland. Holes are drilled to bedrock or blade refusal and a 20cm sample is collected at the end of hole for geochemical analysis and lithological logging. All are forwarded for analyses by ALS Laboratories.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used</i>	Sampling and QAQC procedures are carried out using S2 protocols as per industry best practice.
	<i>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information</i>	The BoT samples are sent to ALS Laboratories in Sodankyla, Finland for preparation that includes weighing and then screening to produce a sieved fraction <180 micron for analyses for gold and base metals.
Drilling techniques	<i>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i>	Base of Till drilling is by a percussion flow through sample bit that can collect a 20cm sample of bedrock material at the base of glacial deposits up to 20m thick.
Drill sample recovery	<i>Method of recording and assessing core and chip sample recoveries and results assessed</i>	BoT samples are visually inspected and photographed to assess if they are likely to be a basement sample or whether the hole has failed to reach basement due to boulders or excessive cover thickness.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples</i>	Sample quality is qualitatively logged recording sample condition, with quantity of fines versus coarse chips.
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	No relationship has been seen to exist
Logging	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	The logging uses a standard legend developed by S2 which is suitable for wireframing of the basement interface. Exploration holes are not geotechnically logged but resource holes are.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	All chips have been photographed wet.
	<i>The total length and percentage of the relevant intersections logged</i>	All chips from BoT holes were logged in full.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core was drilled or sampled
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Bot samples are dried and sieved. A representative portion of the coarse fraction is retained and logged
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Samples were delivered by S2 personnel to ALS Minerals laboratory in Sodankyla, Finland for preparation that includes weighing and then screening to produce a sieved fraction <180 micron for analyses for gold and base metals. The prepared samples are forwarded to ALS Minerals Loughrea, Ireland, for analysis.
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	Full QAQC system in place to determine accuracy and precision of assays
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	No core was drilled or sampled
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Samples are of appropriate size for geochemical reconnaissance
Quality of assay data and laboratory tests	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	All samples were analysed by ALS Minerals Loughrea, Ireland. Samples analysed for gold undergo a 25g aqua regia digestion with ICP-MS finish (code Au-TL43). Samples analysed for Ag, As, Bi, Ca, Cd, Cu, Fe, Hg, Mg, Mn, Mo, Ni, P, Pb, S, Sb, Ti & Zn undergo an aqua regia digestion with ICP-AES Finish (code ME-ICP41).
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	No geophysical tools were used to determine any element concentrations.
	<i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i>	Full QAQC system in place including Certified Standards and blanks of appropriate matrix and levels
Verification of sampling and assaying	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Andy Thompson has personally inspected all sample chips.
	<i>The use of twinned holes.</i>	No twinned holes were drilled within the main infilled anomaly.
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Primary sampling data is collected in a set of standard Excel templates. The information is managed by S2's database manager for validation and compilation into S2's central database.
	<i>Discuss any adjustment to assay data.</i>	No adjustments made
Location of data points	<i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i>	BoT collars were located with a handheld GPS with an accuracy of within 3 metres.
	<i>Specification of the grid system used.</i>	The grid system used is the Standard Finnish National Grid ETRS-TM35FIN
	<i>Quality and adequacy of topographic control.</i>	Excellent quality topographic maps produced by the Finnish Authority – National Land Survey of Finland.(NLS)

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	<i>Data spacing for reporting of Exploration Results.</i>	Drill holes are BoT geochemical samples at this stage and drilled at 400m by 20m for initial reconnaissance and 100m by 10m for detailed infill.
	<i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i>	Data spacing, sampling technique and distribution is not sufficient at this stage to allow the estimation of mineral resources.
	<i>Whether sample compositing has been applied.</i>	No sample compositing has been applied.
Orientation of data in relation to geological structure	<i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i>	Geochemical sampling of basement interface only.
	<i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i>	Geochemical sampling of basement interface only.
Sample security	<i>The measures taken to ensure sample security.</i>	Chain of custody is managed by S2 personnel. Drill samples and core is visually checked at the drill rig and then transported to S2's logging and cutting facilities by S2 personnel for logging, cutting and sampling. Bagged samples are transferred to ALS Laboratories in Sodankylä, Finland by S2 personnel.
Audits or reviews	<i>The results of any audits or reviews of sampling techniques and data.</i>	No audits or reviews have been conducted at this stage.

SECTION 2 REPORTING OF EXPLORATION RESULTS

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.	The Aarnivalkea prospect is located within the Paana Central Exploration Licence. ML2018:0081 The exploration licences are 100% owned by Sakumpu Exploration Oy, a Finnish registered 100% owned subsidiary of S2
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	All of the Exploration Licences are in good standing and no known impediments exist on the tenements being actively explored.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	The Aarnivalkea prospect is a greenfield discovery with historic BoT holes drilled in the region by Outokumpu not having been assayed for gold.
Geology	Deposit type, geological setting and style of mineralisation.	The prospect style is a shearzone hosted orogenic gold deposit within the Central Lapland Greenstone belt.
Drill hole Information	A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 	Refer to sample plans in text.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.	Results are single point geochemical samples at the end of the BoT hole.
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.	None used.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	None used.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	The trend of mineralisation at the prospects described is broadly north-south. Other orientation such as dip or dip direction are not known at present. Diamond drilling will be used to determine this. Refer to figures in body of text.
Diagram	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to Figures in body of text.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results considered significant are reported.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	No other exploration data present.
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	Permits to drill at Aarnivalkea are in place. Diamond drilling will be possible in both winter and summer and will commence as soon as road conditions allow rig access after the spring thaw. Detailed airborne magnetics will be flown as soon as practical in the next month.