FireFox Gold Corp. Advances New Targets with Trenching and Geophysics at the Mustajärvi Gold Project in Lapland

16.01.2025 | ACCESS Newswire

SODANKYLÄ, Jan. 16, 2025 - FireFox Gold Corp. (TSXV:FFOX) (OTCQB:FFOXF) ("FireFox" or the "Company") is pleased to announce details from two new targets at its 100%-controlled Mustajärvi Project. FireFox has been growing the land position at the project over the last three years, and Company geologists have identified several structural targets in new areas that are hundreds of metres from previous drilling. In addition to strongly mineralized grab samples, the Triangle Target has benefitted from a modest trenching program that revealed highlights of 1.83 g/t and 1.425 g/t gold over one metre diamond saw cuts. The second new target is called Pikkulehto, and it is located approximately four kilometres east of the main Mustajärvi permit. Pikkulehto is ideally situated among splays of the important Venejoki Shear Zone (VSZ), but glacial sediment cover obscures outcrop.

The Triangle Target lies approximately 700 metres northwest from the high-grade gold mineralization of the East Target (Figure 1). During the fall exploration program, the team excavated a single thirteen-by-six-metre exploration trench near the location of several grab samples that returned 4.82 and 4.41 g/t gold, as previously reported (see Company news release September 17, 2024). The target was discovered by prospecting along an interpreted fault zone that follows a topographic depression that strikes NNW-SSE. The new trench exposed altered bedrock, but deeper overburden in the drainage prevented a full test of the interpreted structure.

Pikkulehto is the easternmost of several new permits that comprise the Mustajärvi Project. Regional magnetics suggests a favourable setting in the area as faults appear to juxtapose magnetic highs and lows, similar to the Mustajärvi Shear Zone, from which FireFox has been reporting high-grade gold since 2019. During the fall of 2024, Company geologists completed detailed ground magnetics surveys over the Pikkulehto permit. A subsequent interpretation of the detailed data suggests the presence of hydrothermal alteration and possible dilatancies related to through-going faults, including splays of the crustal-scale Venejoki Shear Zone. Since there is little or no outcrop, the new Pikkulehto target will be tested with base-of-till (BoT) sampling, the exploration tool that led to the Ikkari discovery by Rupert Resources.

FireFox CEO Carl Lofberg commented, "These new results are significant because Mustajärvi has been perceived as a small target. Along only two kilometres of strike length of the Mustajärvi Shear Zone, we have reported numerous high-grade drill holes and two trenches containing better than 10 g/t gold mineralization. The +4 g/t gold samples at the Triangle Target are more than 500 metres from any previous drilling. Pikkulehto is 4 kilometres from the Mustajärvi drilling. Both of these targets add several more kilometres of undrilled controlling structure to the already-rich Mustajärvi discovery. Stay tuned for further results and drilling from these areas in 2025."

Figure 1 - Mustajärvi exploration permits and new targets over regional total magnetic intensity.

Triangle Target Details

The FireFox team discovered the area during the 2024 exploration program through systematic detailed mapping, during which they encountered an outcrop of massive to semi-massive hematite, later confirmed by assay to be gold mineralized. The anomalous grab samples and the trench sit on the margin of an interpreted NNW-SSE striking fault zone that runs through a topographic depression. Since the excavator could not penetrate the deeper cover in the depression, the full width and extent of the alteration and fault zone are not known at this time. Even though gold mineralization is only known so far on the margin of the structure, the target is believed to have room to grow because the magnetic low (and topographic low) persists for hundreds of metres to the south (Figure 2).

Trench1

The first trench excavated in the Triangle Target was thirteen metres long and six metres wide, oriented WSW-ENE (see Figure 3). The orientation was determined based on the preliminary interpretation of a NNW-SSE striking fault zone located in the adjacent topographic low. The trenching confirmed the mapping observations and also provided useful information about the orientation of the mineralization.

The trenching revealed a zone of significant alteration, including massive to semi-massive hematite, clay, and cross cutting quartz veins. The rocks exposed in the trench were weakly to strongly mineralized in gold, including 1.83 and 1.425 g/t in the channel cuts and 1.37 and 0.59 g/t in grab samples.

Figure 2 - The Triangle Target relative to the East and Northeast Targets over detailed ground magnetics.

The trench clearly revealed multiple NNW-SSE trending zones of alteration parallel to the interpreted fault zone and topographic depression. The rocks are deeply weathered, so much of the original textures and mineralogy are destroyed. The host bedrock is interpreted to be metasediments of the Sodankylä group. The presence of abundant iron oxide suggests that some of that oxidation may have come from supergene alteration of sulphide minerals, but sampling encountered no fresh pyrite in the excavation.

FireFox geologists mapped the trench from west to east (least altered to most altered). The units are described from west to east as weakly altered metasedimentary rocks, hematite-stained metasedimentary rocks, kaolinite zone, fragmental quartz vein zone, and hematite zone (Figure 3). The hematite content increases with proximity to the interpreted fault, and the highest gold grades occur in the iron-rich unit. The quartz vein zone also contains remnants of veins with abundant hematized cavities. The kaolinite zone appears to be transitional between the hematite and quartz and the weakly altered metasedimentary rocks, and the clay alteration is similar to that recorded in trenching at the Mustajärvi Central and East Targets.

The geologists elected to cut two diamond saw channels along the trench perpendicular to the interpreted structure and the strike of the alteration zones. Each channel sample was approximately 1.0 metre in length.

Figure 3 - Trench 1 at Triangle target with gold results and geology on air photo.

The channel sampling of Trench 1 returned notable gold mineralization in three samples, where the gold content was above the cut-off of 0.5 g/t (see Table 1). Channel 1 was 12.89 m long and contained a single metre interval of 1.425 g/t Au, with the surrounding samples also containing highly anomalous gold levels. Channel 2 contained a zone of two metres averaging 1.34 g/t Au, which was also surrounded by highly anomalous, but below cutoff grade gold. In addition, two of the grab samples taken from the trench contained 1.37 g/t and 0.589 g/t Au, respectively.

Table 1. Channel Samples from Triangle Target Trench1 (West to East).

Channel	From (m)	To (m)	Interval (m)	Sample Wt. (kg)	Au (g/t)
Channel1	0.00	0.93	0.925	4.13	0.006
Channel1	0.93	1.96	1.038	3.68	<0.005
Channel1	1.96	2.95	0.985	4.67	0.016
Channel1	2.95	3.92	0.976	5.06	0.005
Channel1	3.92	4.93	1.006	3.43	0.005
Channel1	4.93	5.94	1.008	3.98	<0.005
Channel1	5.94	6.98	1.037	5.72	0.005

Channel1	6.98	7.95	0.972	4.53	0.02
Channel1	7.95	8.95	1	2.71	0.022
Channel1	8.95	9.92	0.971	3.77	0.125
Channel1	9.92	10.96	1.044	2.32	1.425
Channel1	10.96	11.85	0.888	4.62	0.431
Channel1	11.85	12.89	1.043	3.07	0.245
Channel2	0	1.03	1.028	5.67	0.007
Channel2	1.03	2.05	1.026	4.83	0.018
Channel2	2.05	3.01	0.957	7.13	0.011
Channel2	3.01	3.94	0.926	4	0.855
Channel2	3.94	4.93	0.994	4.36	1.825
Channel2	4.93	5.96	1.027	3.45	0.283

Pikkulehto Program details

FireFox's 100%-owned Pikkulehto exploration permit area is located approximately four kilometres east of the main Mustajärvi permit, and it covers roughly 3.2 km^2. Pikkulehto lies within splays of the Venejoki Shear Zone, an important crustal scale shear zone that intersects with the Sirkka Shear Zone to the northeast. The property is also close to the interpreted contact between the Sodankylä and Savukoski Group rocks, a contact that hosts high-grade gold at the main Mustajärvi permit. Based on the current understanding, the bedrock geology includes quartz-rich metasedimentary rocks, gabbros and mafic volcanic rocks, while graphitic schists and cherts of the Savukoski Group lie less than one kilometer to the northwest from the permit. Two historic gold occurrences, Pikku-Mustavaara and Tuongankuusikko, are located within approximately a 1 km radius from the permit boundary (see Figure 1). In the past, the Geological Survey of Finland (GTK) and Outokumpu conducted limited exploration within the permit area, including four drill holes with depths less than 20 metres, and minimal surface sampling (18 till samples); no significant gold was reported.

New detailed ground magnetic surveys provide better insights into the structural complexity present in the permit area. The southern parts of the permit are cut by a roughly E-W trending magnetic low anomaly interpreted as an ENE-WSW trending fault zone with multiple bends or jog-like geometries (see Figure 4). These are interpreted as dilational jogs in a dextral strike-slip fault zone, similar to those seen straddling the Mustajärvi Shear Zone. Similar types of fault zones are also interpreted to the north and south of this ENE-WSW trending structure. There is good evidence that this structural system is linked to the adjacent Venejoki Shear Zone, which itself is connected to the Sirkka Shear Zone (a major D1 structure) (Figures 1 and 4).

The faults interpreted within the Pikkulehto permit could represent splaying branch faults from the Venejoki Shear Zone (Figures 1 and 4). Interestingly, within the Pikkulehto permit area, these ENE-WSW trending fault zones seem to delineate low-magnetic lens-like geometries, which may indicate hydrothermal fluid activity. There are also later northeast striking faults crosscutting the area, likely the D3 event known to host gold.

Figure 4 - Ground magnetics interpretation in the Pikkulehto permit area. Black arrows indicate E-W directed tension related to the N-S trending D4 faults.

The abundant structural intersections from multiple generations of faulting combined with the variable

magnetic response, resemble the setting at the Central, Northeast, and East zones at the main Mustajärvi permit, where high-grade gold has been drilled repeatedly since 2019. These analogues to nearby gold mineralization and structural patterns observed at Pikkulehto highlight the potential for gold discovery in the area. Until recently, the Firefox team had solely performed bedrock & boulder mapping and ground magnetic surveys in the area. It is clear now that the glacial sediments obscure the bedrock sufficiently to warrant a BoT sampling survey at Pikkulehto so that these structural targets can be tested.

Methodology & Quality Assurance

The trenching campaign was conducted in an accessible area with limited young forest cover, minimizing environmental impact. To maintain the safety of the working team the trenches were gradually sloped and slightly extended in width. The channel sample intervals were measured with a measuring tape, the measurement results were refined with a high-precision RTK-GPS device. Trenches were channel sampled with a diamond saw for the entire exposure in order to extract large consistent samples while cutting primary structures and veins as close to true thickness as possible. Where the rock integrity was compromised by weathering and alteration, geologists collected the samples with hammer and chisel.

Samples reported in this news release were collected by FireFox geologists, who transported the samples to the Company's secure facility in Sodankylä. After documentation and insertion of quality assurance samples, the rock samples were delivered to an ALS sample prep lab in Sodankylä. The samples were then crushed to -2 mm, split and pulverized into 1kg pulps, before being shipped to the ALS facility in Rosia Montana, Romania for gold by fire assay of 50 gm aliquots with AAS finish (method Au-AA24). Other elements, altogether 48, were measured after four-acid digestion by ICP-AES and ICP-MS (method ME-MS61) at the ALS facility located in Loughrea, Ireland.

ALS Laboratories is a leading international provider of assay and analytical data to the mining industry. All ALS geochemical hub laboratories, including the Irish facility, are accredited to ISO/IEC 17025:2017 for specific analytical procedures. The Firefox QA/QC program consists of insertion of certificated standard material and blanks inserted by Firefox into the analytical batches did not show deviations from recommended values.

Patrick Highsmith, Certified Professional Geologist (AIPG CPG # 11702) and director of the Company, is a qualified person as defined by National Instrument 43-101. Mr. Highsmith has helped prepare, reviewed, and approved the technical information in this news release.

About FireFox Gold Corp.

FireFox Gold Corp is listed on the TSX Venture Stock Exchange under the ticker symbol FFOX. FireFox also trades on the OTCQB Venture Market Exchange in the US under the ticker symbol FFOXF. The Company has been exploring for gold in Finland since 2017 where it holds a large portfolio of prospective ground.

Finland is one of the top mining investment jurisdictions in the world as indicated by its multiple top-10 rankings in recent Fraser Institute Surveys of Mining Companies. Having a strong mining law and long mining tradition, Finland remains underexplored for gold. Recent exploration results in the country have highlighted its prospectivity, and FireFox is proud to have a Finland based CEO and technical team.

For more information, please refer to the Company's website and profile on the SEDAR+ website at www.sedarplus.ca.

On behalf of the Board of Directors,

"Carl Löfberg"
Chief Executive Officer

CONTACT:

FireFox Gold Corp.
Email: info@firefoxgold.com
Telephone: +1-778-938-1994

Forward Looking Statements

The information herein contains forward looking statements that are subject to a number of known and unknown risks, uncertainties and other factors that may cause actual results to differ materially from those anticipated in our forward-looking statements. Factors that could cause such differences include changes in world commodity markets, equity markets, the extent of work stoppage and economic impacts that may result from illness, extreme weather, changes in government and changes to regulations affecting the mining industry.

Forward-looking statements in this release may include statements regarding: the intent to conduct additional drilling; the belief as to the location of the most prospective gold targets; the location of targets for future drill programs; and the current and future work program, including the extent and nature of exploration to be conducted in 2025. Although we believe the expectations reflected in our forward-looking statements are reasonable, results may vary.

The forward-looking statements contained herein represent the expectations of FireFox as of the date of dissemination and, accordingly, are subject to change after such date. Readers should not place undue importance on forward-looking statements and should not rely upon this information as of any other date. FireFox does not undertake to update this information at any particular time except as required in accordance with applicable laws.

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

SOURCE: FireFox Gold Corp