Fireweed Announces Positive Metallurgical Test Results

15.05.2018 | GlobeNewswire

VANCOUVER, British Columbia, May 15, 2018 (GLOBE NEWSWIRE) -- Fireweed Zinc Ltd. (“Fireweed” or the “Company”) (TSX-V:FWZ) is pleased to announce positive results from metallurgical tests conducted as part of the Preliminary Economic Assessment (“PEA”) work underway for the Macmillan Pass Zinc Project, Yukon. Base Metallurgical Laboratories of Kamloops, BC, performed the test work under supervision by Fireweed’s PEA contractor, JDS Energy and Mining, Inc. (“JDS”).

Highlights

- Excellent metallurgical results based on the most extensive and representative work to date.
- The “global” composite zinc concentrate graded 58% Zn at 89% Zn recovery. The “global” lead concentrate contained 61% Pb at 75% Pb recovery.
- The zinc results compare favorably to a 2012 test program which resulted in concentrate containing 58% Zn at 80% recovery.
- High quality, low iron concentrate is expected to be attractive to smelters.

“The results give us confidence that the Macmillan Pass project will produce concentrates desirable to potential traders and global smelter customers,” commented Brandon Macdonald, CEO. “These results confirm and improve upon past metallurgical studies and will help inform the economics in our upcoming PEA. We expect to announce PEA results in the coming weeks.”

Table 1. Summary of Macmillan Pass Global (65% Tom + 35% Jason) Composite Metallurgical Results

Product	Grade			Metal Recoveries (%)		
	Zinc %	Lead %	Silver g/t	Lead	Zinc	Silver
Feed	7.3	3.2	44	100	100	100
Lead Concentrate*	8.9	61.5	688	75	5	59
Zinc Concentrate*	58.4	2.2	88	7	89	22

*Note: Lead and Zinc are a weighted average from Lock Cycle Tests BL0236 LCT45 cycles D&E

Description of Metallurgical Test Work

This new work not only extended coverage into previously untested deposit zones, but also included test procedures, such as dense media separation (DMS) tests, not undertaken in prior programs.

Core were selected from eight drill holes spatially, mineralogically and grade representative of the known deposit zones. Drill core was large, HQ size core (61.1 mm (2.4 inch) diameter). Total sample weight was 553.5 kg (1,220 lbs), including 5% hanging-wall and footwall waste rock dilution.

For the first phase of testing, the eight core were combined into five composite samples: two from the Tom West zone, one from Tom East and two from Jason Main. This phase included mineralogy, comminution and flotation tests.

A second set of three composites was then prepared from the five phase one composites. These three composites represent both the major deposits, Tom (combined West and East), Jason Main, and a “global” sample made up of a 65% Tom and 35% Jason blend, representative of the total projected project production across both deposits. This second set of composite samples underwent locked

cycle testing to determine recovery and concentrate grades close to what would be expected in an operating plant. Analyses for other elements in the concentrates, and tailing filtration tests, were also completed.

Mineralogy

Tests revealed acceptable liberation of sphalerite and galena at a primary grind of P_{80} 50 µm (80% passing through a 50 micron mesh).

Comminution

Comminution test work determined the grinding energy required to liberate lead and zinc minerals prior to flotation, and abrasion testing to determine mill and grinding media wear characteristics:

- The composites tested had SAG Circuit Specific Energy (SCSE) values of 7.82 and 9.2 kWh/t.
- Bond ball mill work index (BWi) tests at a sieve size of 106 µm showed the material to be moderately soft with BWi values ranging from 8.8 to 14.0 kWh/t.
- Abrasion index results averaged 0.27 g.

These low specific energy and bond work indices predict relatively low energy consumption for grinding.

Locked Cycle Testing (LCT)

LCT simulates a continuous, stable, processing plant flotation circuit. The LCT employed a conventional flotation flowsheet at a target primary grind size of P_{80} 50 µm. Regrinding was included in both the lead and zinc circuits, with grind sizes of 15 µm and 25 µm respectively. The LCT45 results for the global blend sample had an average lead concentrate grade of 61% Pb at 75% Pb recovery, and an average zinc concentrate grade of 58% Zn at 89% Zn recovery.

Other Elements

The iron levels are low, at about 1.5%, a feature desired by zinc smelters. Deleterious element levels were generally low, except for mercury at 155 ppm and silica at 4% in the global zinc concentrate. Either or both may incur modest smelter penalties. See Appendix for values of other elements in concentrates.

Conclusions

The Tom and Jason deposits reacted well to conventional flotation concentration processing. The global material, simulating blending of feed from Tom and Jason zones, also reacted well, revealing no material issues with blending Tom and Jason mineralization. This ability to blend material will allow flexibility in planning mining and processing scenarios. Concentrate recoveries and grades were all excellent. Details of these metallurgical tests will be presented in the pending PEA report.

Future Metallurgical Plans

Additional metallurgical work is planned for 2018 to build and improve on these results. Objectives of future work will include:

1. Build up of a full geometallurgical block model to better predict recoveries, concentrate grades and general optimization and coordination of mining and processing operations.
2. Better understand variability in lead and silver metallurgical performance. Additional test work will be performed to optimize and improve lead performance.
3. Further optimize the concentrates to improve their specifications.

Technical information directly related to the metallurgical work in this news release has been reviewed and

approved by Kelly McLeod, P.Eng., Senior Process Engineer for JDS Energy & Mining Inc. and a ‘Qualified Person’ as defined under Canadian National Instrument 43‑101. Other technical information (not directly related to the metallurgical work) has been reviewed and approved by Brandon Macdonald, P.Geo, a ‘Qualified Person’ as defined under Canadian National Instrument 43‑101.

Definitive Option Agreements Signed

Further to the Company’s news release dated March 27, 2018 announcing the signing of letter option agreements with Constantine Metal Resources Ltd./Carlin Gold Corporation and Golden Ridge Resources Ltd. for large neighbouring claimblocks, Fireweed is pleased to announce that definitive option agreements have been signed and TSX Venture Exchange approval received for both options.

About Fireweed Zinc Ltd.: Fireweed Zinc is a public mineral exploration company focused on zinc and managed by a veteran team of mining industry professionals. The Company is advancing its large 470 km^2 Macmillan Pass Project in Yukon, Canada, which is host to the 100% owned Tom and Jason zinc-lead-silver deposits with recently announced new Mineral Resources (see Fireweed news release dated January 10, 2018 for details) and a pending PEA economic study. The project also includes option agreements on large blocks of adjacent claims (MAC, MC, MP, Jerry, BR and NS) which cover projected extensions of mineralization from the Jason area and areas where previous exploration identified zinc, lead and silver geochemical anomalies in critical host geology.

Additional information about Fireweed Zinc and its Macmillan Pass Project, can be found on the Company’s website at www.FireweedZinc.com and on SEDAR at www.sedar.com.

ON BEHALF OF FIREWEED ZINC LTD.

“Brandon Macdonald”

CEO & Director

Neither the 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.

Forward-Looking Statements
This news release contains “forward-looking” statements and information relating to the Company and the Macmillan Pass Project that are based on the beliefs of Company management, as well as assumptions made by and information currently available to Company management. Such statements reflect the current risks, uncertainties and assumptions related to certain factors including but not limited to, without limitations, exploration and development risks, expenditure and financing requirements, general economic conditions, changes in financial markets, the ability to properly and efficiently staff the Company’s operations, the sufficiency of working capital and funding for continued operations, title matters, First Nations relations, operating hazards, political and economic factors, competitive factors, metal prices, relationships with vendors and strategic partners, governmental regulations and oversight, permitting, seasonality and weather, technological change, industry practices, and one-time events. Additional risks are set out in the Company’s prospectus dated May 9, 2017 and filed under the Company’s profile on SEDAR at www.sedar.com. Should any one or more risks or uncertainties materialize or change, or should any underlying assumptions prove incorrect, actual results and forward-looking statements may vary materially from those described herein. The Company does not undertake to update forward‐looking statements or forward‐looking information, except as required by law.

APPENDIX: SELECTED LEAD AND ZINC CONCENTRATE ELEMENT ANALYSIS RESULTS**

Element	Symbol	Units	Analytical Method	Global Lead Concentrate	Global Zinc Concentrate
Zinc	Zn	%	AR-AA	8.3	58.2
Lead	Pb	%	AR-AA	63.8	2.2

Silver	Ag	g/t	AR-AA	688	88
Antimony	Sb	ppm	AR-ICP	642	32
Arsenic	As	ppm	AR-ICP	152	24
Bismuth	Bi	ppm	AR-ICP	<2	4
Carbon	C	%	Leco	2.4	0.68
Cadmium	Cd	ppm	AR-ICP	488	1870
Cobalt	Co	ppm	AR-ICP	24	20
Chromium	Cr	ppm	AR-ICP	93	54
Copper	Cu	ppm	AR-ICP	195	712
Iron	Fe	%	AR-AA	1.6	1.4
Mercury	Hg	ppm	AR-ICP	40	155
Manganese	Mn	ppm	AR-ICP	69	168
Molybdenum	Mo	ppm	AR-ICP	21	6
Nickel	Ni	ppm	AR-ICP	71	36
Selenium	Se	ppm	AR-ICP	46	< 5
Silica	SiO2	%	FUS-Na_2O_2 -ICP	2.37	3.98
Sulfur	S	%	FUS-Na_2O_2 -ICP	16	30.8
Vanadium	V	ppm	AR-ICP	58	29

**Note: Concentrates analyses from Lock Cycle Test BL0236 LCT45 cycle E

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