# "Seizing Opportunity and Creating Value"



#### **EXPLORING in CANADA and MEXICO - Corporate Presentation**

TSX Venture: SSE US OTC: SSEBF Frankfurt: S6Q

www.silverspruceresources.com



### **Cautionary Statement**

Investors are cautioned that, except for statements of historical fact, certain information contained in this document includes "forward-looking information" with respect to a performance expectation for SSE. Such forward-looking statements are based on current expectations, estimates and projections formulated using assumptions believed to be reasonable and involving a number of risks and uncertainties which could cause actual results to differ materially from those anticipated. Such factors include, without limitation, fluctuations in foreign exchange markets, the price of commodities in both the cash market and futures market, changes in legislation, taxation, controls and regulations of national and local governments and political and economic developments in Canada and other countries where SSE carries-out or may carry-out business in the future, the availability of future business opportunities and the ability to successfully integrate acquisitions or operational difficulties related to technical activities of mining and reclamation, the speculative nature of exploration and development of mineral deposits located, including risks in obtaining necessary licences and permits, reducing the quantity or grade of reserves, adverse changes in credit ratings, and the challenge of title. The Company does not undertake an obligation to update publicly or revise any forward-looking statements or information, whether as a result of new information, future events or otherwise, unless so required by applicable securities laws.



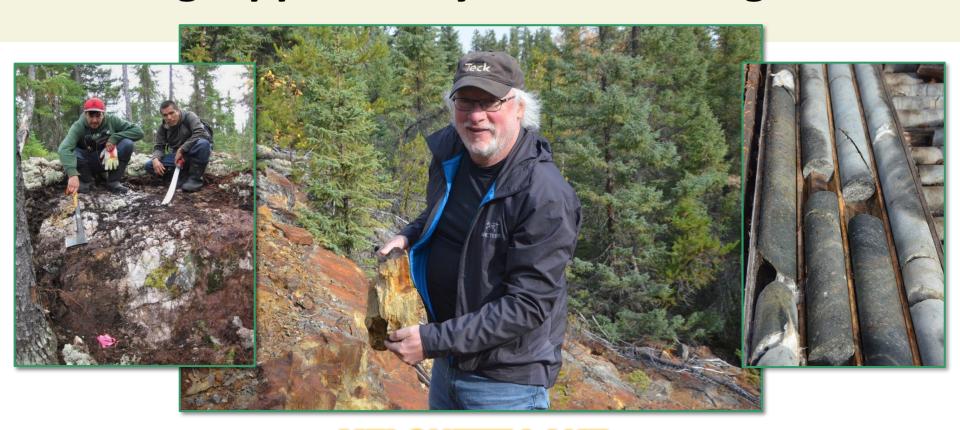
## **Project Locations - Canada**







# "Seizing Opportunity and Creating Value"



### EXPLORING in CANADA MELCHETT LAKE Zn-Ag-Au-Cu VMS Project

TSX Venture: SSE US OTC: SSEBF Frankfurt: S6Q

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Melchett Lake
Zn-Ag-Au-Cu
VMS Project,
Ontario, Canada





### Melchett Lake - Project Overview

- ✓ Silver Spruce signed an agreement to acquire 100% of the 2,124-hectare **Melchett Lake** project located within an historically active region including Copper Lake's Marshall Lake VMS project
- ✓ Map staking and acquisitions increased the Property to its current 7,822 hectares to complete coverage of the known mineralization reported over 22 km strike length
- ✓ Additional staking to the east and west to cover more gold, silver and base metal targets
- ✓ High grade surface samples have yielded up to 28.8 g/t Gold, 655 g/t Ag and 19% Zinc
- Geochemistry highly favorable for VMS footwall alteration and proximal mineralization
- Drilling and borehole geophysics identified increasing copper and conductive targets at depth
- ✓ Numerous drill targets in peripheral oxide and sulphide facies exhalite and iron formation



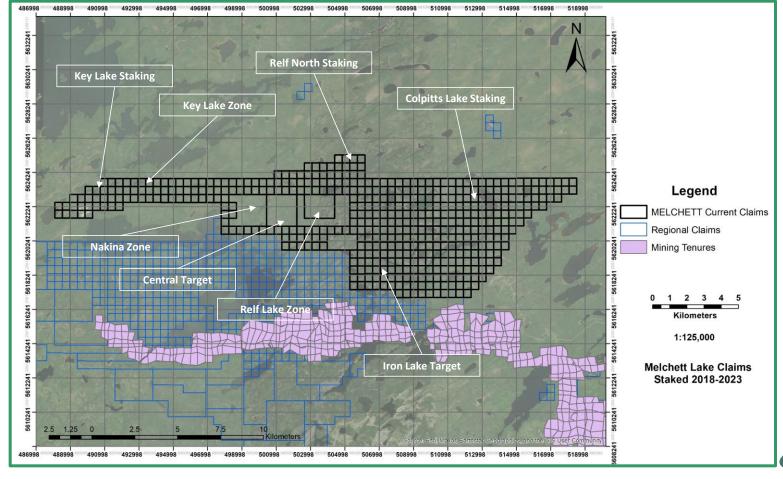


#### **Melchett Lake - The Potential**

- ✓ The Property lies 110 km north of Geraldton, Ontario and 60 km north of Nakina at 50°45' north latitude and 86°59' west longitude
- ✓ The Ontario Geological Survey Exploration Highlights in 2016-2017 reported "The potential of discovery of economic zinc-lead-silver-gold-bearing VMS deposits in the Melchett Lake greenstone belt is high
- ✓ The multi-kilometre strike length of the known areas of mineralization from surface to >500 metres depth, depth potential indicated by the downhole Maxwell modelling, broad and highly favorable alteration type and intensity, and mineralization, increasing Cu to Zn with depth, intense alteration profile similar to well-known polymetallic deposits, and presence of high-grade values of both precious metals and base metals provide Silver Spruce Resources Inc. with an opportunity to grow with the strong gold, silver and zinc markets.
- ✓ Quantec Spartan MT Survey will focus on high priority deep Relf targets
- Compilation of our ArcGIS database will extend through several historical Au-Ag-Cu-Zn showings and geochemical anomalies identified on the eastern and western claims

### **Melchett Lake - Property Claims**

Melchett Lake claims showing areas of recent staking by Company and Vendor (Key Lake, Relf North and Colpitts Lake), known zones of Zn-Ag-Cu-Au-Pb mineralization, and targets with indicated geophysical, geochemical and/or geological anomalies.





### **Melchett Lake - The Property Geology**

Style, Grade, Size, Structure and Location with Potential

- ✓ Polymetallic Zn-Pb-Cu-Ag-Au VMS style mineralization
- ✓ Similar in character to ore deposits at Geco, Mattabi, Winston Lake, Brunswick, Rouyn-Noranda, Lyon Lake, Murchison, Snow Lake
- ✓ Road, 4x4 trail, fixed wing floatplane, helicopter and boat access to property



- ✓ 22 km strike length of the known areas of mineralization, more depth potential indicated by Maxwell modelling, airborne and downhole EM anomalies
- ✓ Broad core intervals (>200 m) and depths (surface to >500m),
  increasing Cu/Zn in intense alteration profile, multi-element depletion
  and enrichment zones
- ✓ High grade lenses of Zn & Ag, variable Cu, Au, & Pb
- ✓ Zn to 19.1%, Ag to 655 g/t, Au to 28.8 g/t, Cu to 1.65%, Pb to 1.2%

### **Melchett Lake - Mineral Occurrences**

#### Mineral Occurrence Highlights - Ontario Geological Survey

| Occurrence/Prospect<br>and Location                                   | Mineral Deposit Inventory<br>(MDI) Number | Assay Highlights   | Description of Occurrence   |  |  |
|---|---|--|---|--|--|
| Nakina Mines Prospect<br>(Nakina 1 Zone)<br>(499534E, 5622152N)       | MDI42L14SE00005                           | 14.85% Zn, 0.13% Cu, 0.92 oz/ton Ag<br>and 0.30 oz/ton Au (assay from trench;<br>Nakina Mines Ltd., 1968)  | Polymetallic pyrite-sphalerite-<br>chalcopyrite-galena mineralization<br>occurs within felsic to intermediate   |  |  |
|   |   | 8.25% Zn, 1.08% Pb, 0.76 oz/ton Ag<br>and 0.20 oz/ton Au (Hole N-4, Nakina<br>Mines Ltd., 1968)            | metavolcanic schists within abundant<br>pyrite, sericite and chloritic alteration.  |  |  |
| Lun-Kerr Occurrence<br>(Relf Zone)<br>(503908E, 5622130N)             | MDI42L15SW00003                           | 19.1% Zn, 0.40% Cu, 2.2% Pb and<br>16.4 oz/ton Ag (assay from trench,<br>Shawmine Explorations Ltd., 1964) | Polymetallic pyrite-sphalerite-<br>chalcopyrite-galena mineralization<br>occurs within muscovite-sericite schists<br>and quartzo-feldspathic mica schists |  |  |
| Aldor Exploration Gold<br>Occurrence<br>(512492E, 5616455N)           | MDI42L10NW00007                           | 0.52 oz/ton over 25 cm   | Sample from quartz vein in a quartz<br>gabbro dike (later interpreted to be a<br>mafic metavolcanic unit)   |  |  |
| Campbell Occurrence<br>(506406E, 5618999N;<br>location approximate)   | n/a                                       | 1.8% Zn, 1.0% Cu and 0.06 oz/ton Au (assay from grab sample)   | Disseminated copper, zinc, gold<br>mineralization from pyritic quartz-sericite<br>schist (altered felsic pyroclastic rocks)                               |  |  |
| Molly Lake Occurrence<br>(508192E, 5617632N;<br>location approximate) | n/a                                       | 1.5 % Zn and 0.17 oz/ton Au  | Mineralization consists of massive<br>pyrrhotite in a 3 m thick amphibolite<br>schist layer   |  |  |



Leuenberger Air Turbo Otter – SSE director Davison at Cordingley Lake base





## **Melchett Lake - Property Access**

Taken from helicopter over Relf Lake looking SW to Melchett Lake





### **Melchett Lake - Exploration Documents**

- ✓ Signed Agreement with Aroland First Nation in Q2 2021
- ✓ Signed Agreement with Ginoogaming First Nation in Q3 2021
- ✓ Updated agreements with AFN and GFN Oct 24
- ✓ Archaeological study Phase 1 complete, advanced Phase 1 proposal approved and ready to activate
- ✓ Permit for core claims with Ministry of Mines through 2024, new permit application in progress
- ✓ Permit on peripheral claims through to 2026, new permit application in progress





### **Melchett Lake - Exploration Documents**

- Contracted Pleson Geoscience for camp construction and operations, ready for re-start
- ✓ Contracted MPX Geophysics for Mag/VLF/Gamma Survey completed Q4 2021
- ✓ Contracted Western Heritage for Phase 1 Archeological Report, including a Traditional Land Use and Occupancy Study Q4 2021, report complete Q2 2023, new phase scheduled for summer 2025
- ✓ Contracted In3D Geoscience for geophysical interpretation and compilation, completed Phase 1 and 2
- ✓ Contracted Eagle Mapping for property-wide LiDAR survey, completed Q1 2023
- Contracted GeoCloud Analytics for LiDAR interpretation, completed draft Q2 2023





### Melchett Lake - Recent Exploration Completed

- ✓ Signed Agreement with Aroland First Nation in Q2 2021, Ginoogaming First Nation in Q3 2021
- ✓ Updated agreements with AFN and GFN Oct 2024, and June 2025
- ✓ Archaeological study Phase 1 complete, advanced Phase 1 proposal approved
- Permit for core claims with Ministry of Mines through 2024, new permit application in progress
- ✓ Permit on peripheral claims through to 2026, new permit application in progress
- ✓ Pleson Geoscience for camp construction and operations
- ✓ MPX Geophysics for Mag/VLF/Gamma Survey completed Q4 2021
- ✓ Western Heritage for Phase 1 Archeological Report, including a Traditional Land Use and Occupancy Study Q2 2023, new phase scheduled
- ✓ In3D Geoscience for geophysical interpretation and compilation
- ✓ Eagle Mapping for property-wide LiDAR survey, completed Q1 2023
- ✓ GeoCloud Analytics for LiDAR interpretation, completed draft Q2 2023
- Scoping metallurgy and mineralogy in progress Blue Coast Research,

### **Melchett Lake - Exploration Plans**

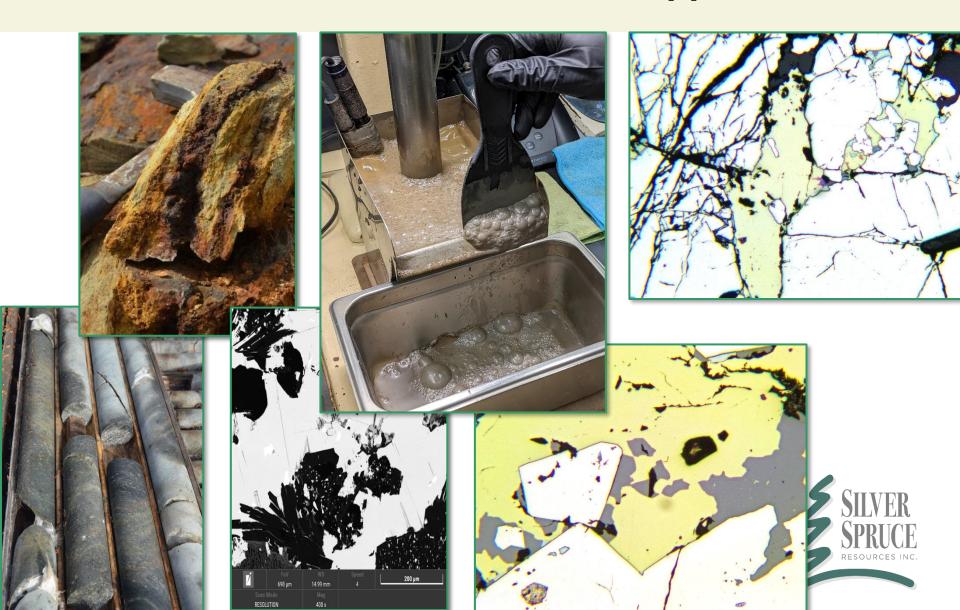
- ✓ Line-cutting for Spartan MT survey, Q3 2025
- ✓ Contracts Quantec Geoscience for Spartan survey, Q3/4 2025
- ✓ GIS Compilation, Re-Interpretation of BHPEM, HeliTEM and Regional Magnetic Surveys 2024/2025 ongoing
- ✓ Structural and lineament mapping, Prospecting, Soil and Rock Geochemistry, Targeted geological mapping Q3/4 2025
- ✓ Drilling Phase 1 Au and Ag-Zn, 2,500m, Phase 2 Au and Ag/Zn 5,000m 2025/2026
- ✓ Phase 1 Budget \$500,000 to Q1 2026
- ✓ Phase 2 Budget \$1,000,000 incl. drilling to Q3 2026
- ✓ Phase 3 Budget \$1,500,000 incl. drilling to Q4 2026



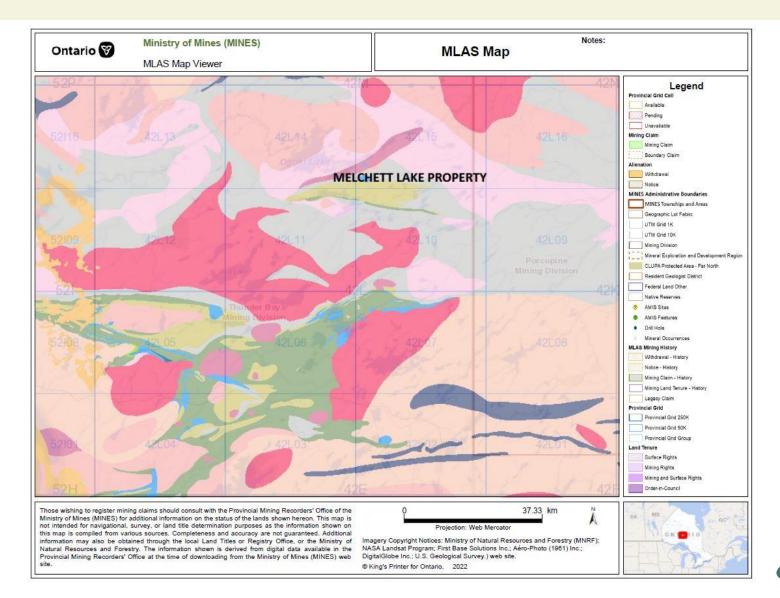
Heavy gossan in sulphide zone, dark ferroan sphalerite lens



## **Melchett Lake – Technical Appendix**

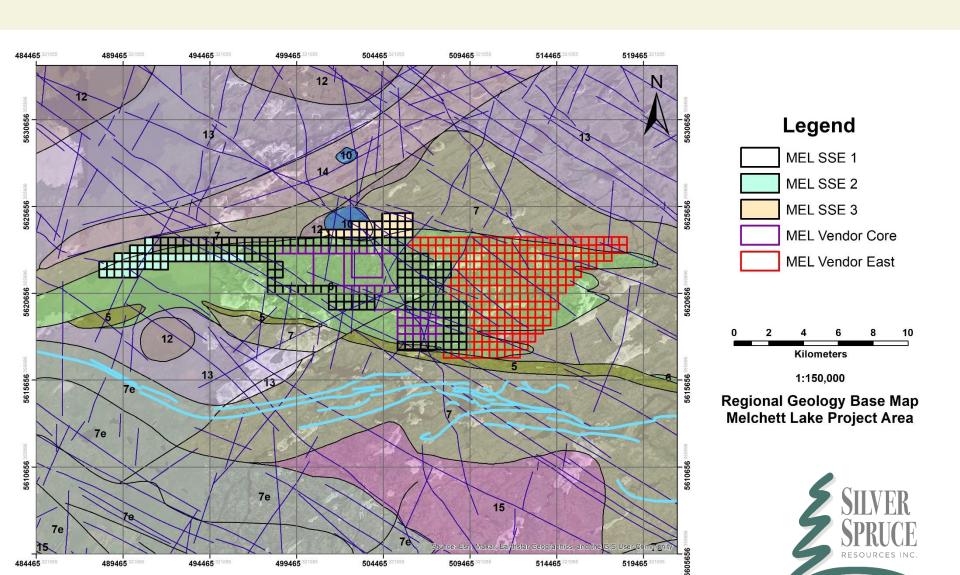


### **Melchett Lake – District Geology Map**



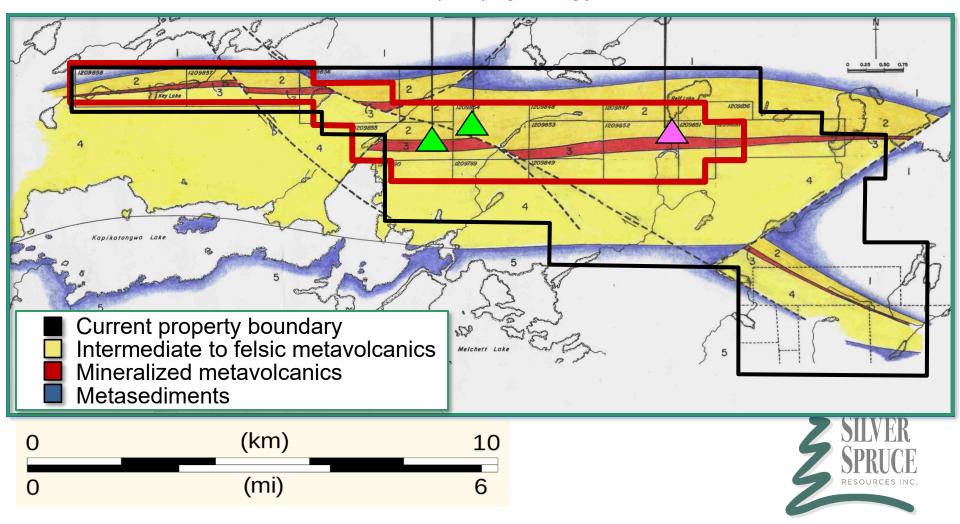


### Melchett Lake - Regional Geology Map



### Melchett Lake - Historical Geology Map

Melchett Lake historical claims (red), geology and mineral occurrences



### **Melchett Lake – Target Evaluation**

- ✓ <u>Geological Anomalies</u> defined by intense alteration and local high grades of mineralization
- Magnetic anomalies define structural complexity and potential stacking of mineralization
- Resistivity anomalies due to footwall or hangingwall alteration of VMS deposits (chlorite, sericite, silica, etc.)
- Chargeability anomalies caused by disseminated sulphide mineralization typically in the order of 1-5%
- Conductivity anomalies resulting from lenticular massive to semimassive sulphide bodies
- ✓ <u>Zones of depletion</u> typical of hydrothermal systems related to VMS deposits: Calcium, Strontium, Sodium
- ✓ <u>Zones of enrichment</u> typical of hydrothermal systems related to VMS deposits: Silver, Magnesium, Barium, Alteration Index #

2019 Relf Zone - main trench area looking NNE across structural fabric





Relf Zone rock sampling from main trench area - Davison 1983, 1984

| Sample | Target | Zinc ppm | Lead ppm | Copper ppm | Silver ppm | Gold ppb | Zinc % | Silver g/t |
|--------|--------|----------|----------|------------|------------|----------|--------|------------|
| A-244  | Relf   | >10000   | 5400     | 1900       | >100       | 78       | 7.03   | 120.7      |
| A-245  | Relf   | >10000   | 5600     | 3500       | >100       | 900      | 8.65   | 133.7      |
| A-246  | Relf   | >10000   | >10000   | 2600       | >100       | 110      | 7.97   | 181        |
| A-247  | Relf   | >10000   | 5500     | 7000       | >100       | 1700     | 6.19   | 160.2      |
| A-248  | Relf   | >10000   | 3700     | 3200       | >100       | 250      | 8.65   | 133.7      |
| A-249  | Relf   | >10000   | 1900     | 2100       | 64         | 97       | 10.3   |            |
| A-250  | Relf   | >10000   | 1500     | 620        | 11         | 34       | 4.23   |            |
| A-253  | Relf   | >10000   | 300      | 610        | 7          | 84       | 5.13   |            |
| A-923  | Relf   | >10000   | 2480     | 1420       | 62         | 70       | NR     |            |
| A-925  | Relf   | >10000   | 645      | 2120       | 29         | 57       | NR     |            |
| A-926  | Relf   | >10000   | 420      | 2500       | 23.2       | 15       | NR     |            |



2019 - heavy gossan in sulphide zone, dark ferroan sphalerite lens







### Melchett Lake – Example of Relf Zone Sampling

| Sample No. | Zinc % | Lead % | Copper % | Silver g/t | Gold g/t |
|------------|--------|--------|----------|------------|----------|
| 1061       | 12.90  | 1.920  | 0.288    | 552        | 0.020    |
| 1062       | 2.63   | 0.870  | 0.116    | 254        | 0.012    |
| 1063       | 2.77   | 0.356  | 0.164    | 157        | 0.037    |
| 1064       | 11.60  | 0.866  | 0.507    | 278        | 0.028    |
| 1065       | 16.80  | 2.400  | 0.075    | 655        | 0.018    |
| 1066       | 8.26   | 0.330  | 0.972    | 170        | 0.025    |
| 1067       | 11.10  | 1.300  | 0.142    | 394        | 0.022    |
| 1068       | 9.88   | 0.558  | 0.154    | 179        | 0.035    |

Relf Zone rock sampling from main trench area - 1997



#### **Melchett Lake - Nakina Zone**

SSE Director Greg Davison and Project Geologist Luc Lepage at Nakina Zone trenching areas





### Melchett Lake - 2019 Rock Sampling

#### Nakina and Relf Zone rock sampling - Silver Spruce 2019

| Sample No. | Target | Zinc ppm | Lead ppm | Copper ppm | Silver ppm | Gold ppm | Zinc % | Silver g/t |
|------------|--------|----------|----------|------------|------------|----------|--------|------------|
| 108101     | Nakina | 20       | 10.6     | 16.5       | 1.1        | 0.031    |        |            |
| 108102     | Nakina | 2        | 0.4      | 0.7        | 0.02       | 0.002    |        |            |
| 108103     | Nakina | 3310     | 892      | 58.6       | 1.6        | 0.088    |        |            |
| 108104     | Nakina | >10000   | 6690     | 399        | 4.06       | 0.383    | 3.24   |            |
| 108105     | Nakina | 108      | 63.8     | 11.8       | 0.31       | 0.022    |        |            |
| 108106     | Nakina | 230      | 22.5     | 52         | 1.04       | 0.012    |        |            |
| 108201     | Relf   | 203      | 12.4     | 51.7       | 1.02       | 0.012    |        |            |
| 108204     | Relf   | >10000   | 622      | 1465       | 27         | 0.053    | 3.98   |            |
| 108205     | Relf   | >10000   | 634      | 1470       | 27.5       | 0.03     | 1.08   |            |
| 108207     | Relf   | >10000   | 1185     | 2250       | 52.7       | 0.034    | 4.42   |            |
| 108210     | Relf   | >10000   | 2740     | 5180       | >100       | 0.737    | 9.12   | 131        |
| 108211     | Relf   | >10000   | 863      | 2050       | 39.1       | 0.054    | 4.89   |            |
| 108217     | Relf   | >10000   | 9650     | 1600       | >100       | 0.119    | 14.7   | 301        |

### Melchett Lake – Example of Relf Zone Sampling



Historical unsampled drill core samples stacked from 2007-2008 drilling at Relf Lake Zone showing unweathered brown ferroan sphalerite, pyrite, chalcopyrite lenses hosted by a quartz-feldsparbiotite±garnet schist 'matrix' with banded 'volcanoclastic' texture.



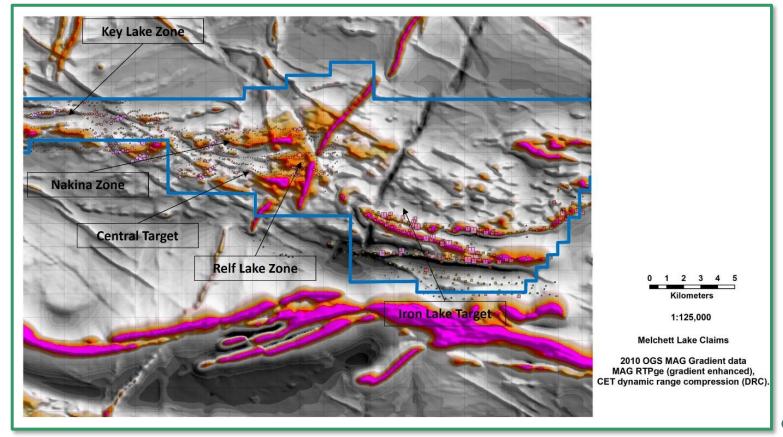
### **Melchett Lake - Target Evaluation**

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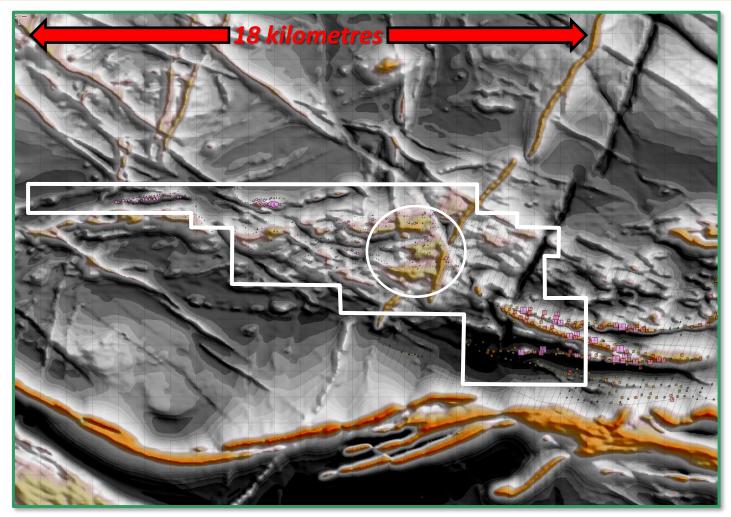
### Melchett Lake - Geophysical Targeting

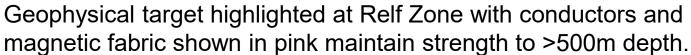
Claims (outlined in blue) showing magnetic gradient data and EM anomalies (pink squares with proportional size to strength), NE and NW diabase linears and tightly folded iron formation with high magnetic intensity (bright pink). Known zones of An-Ag-Cu-Au-Pb mineralization and target areas focused along coincident MAG/EM and structural loci.





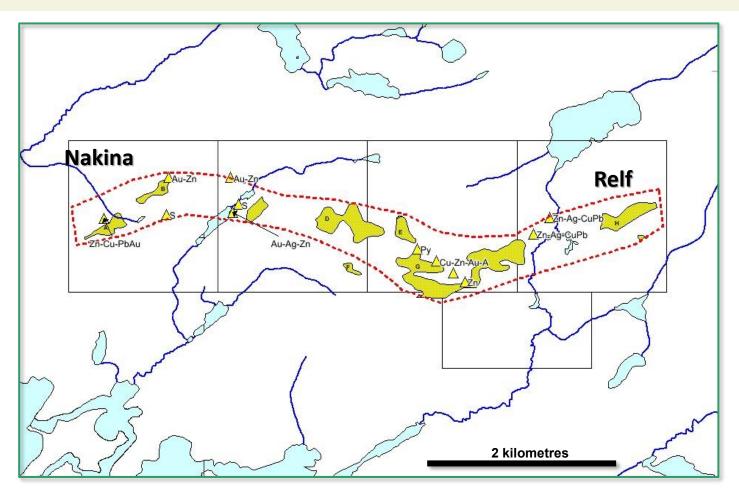
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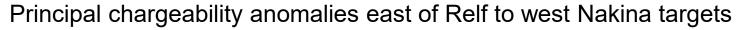






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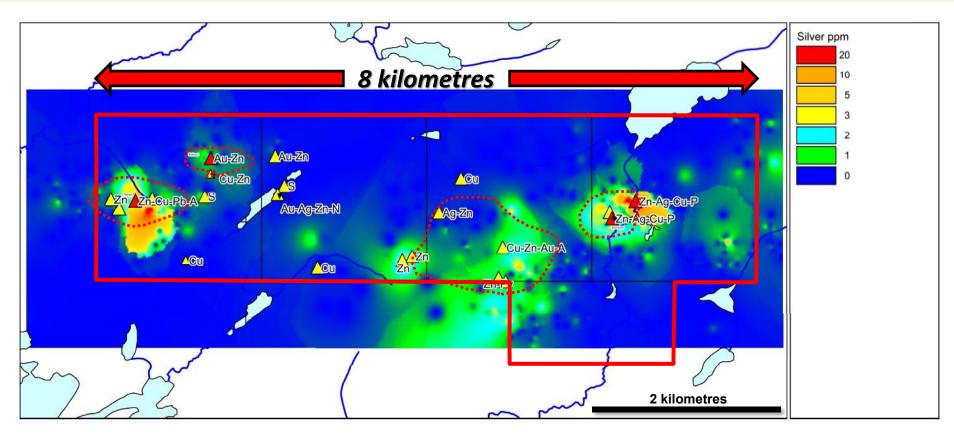


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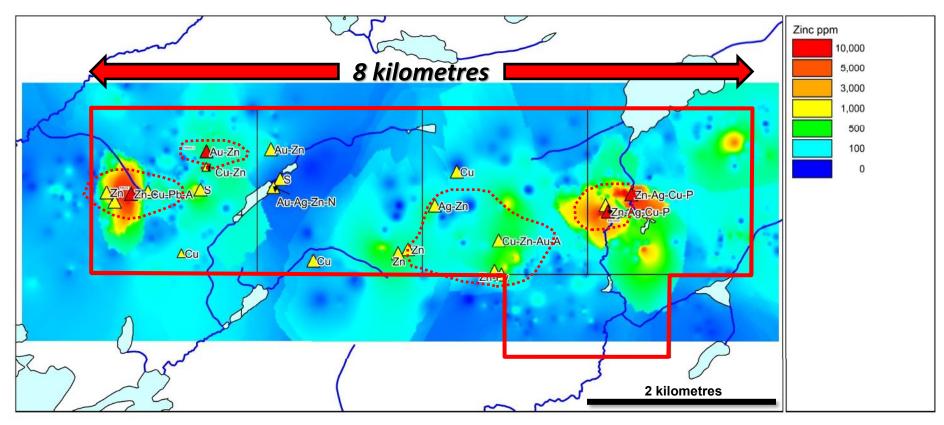
## **Melchett Lake - Geochemistry**



Contoured silver analyses from grab rock samples



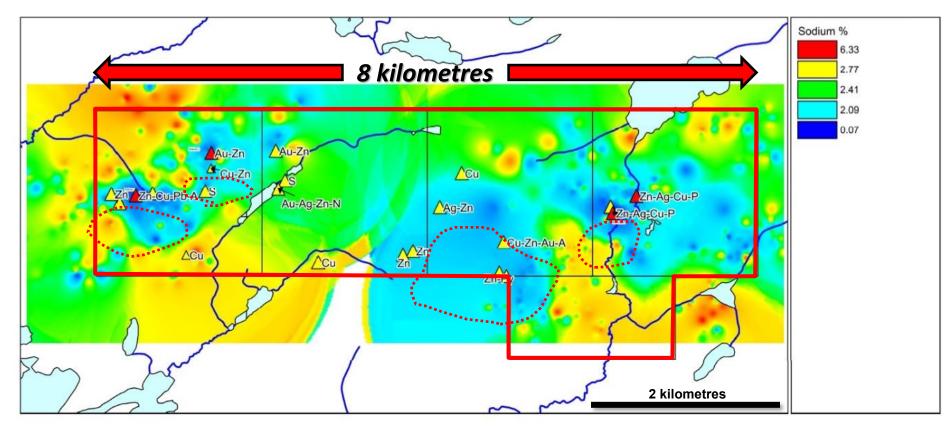
### **Melchett Lake - Geochemistry**



Contoured zinc analyses from grab rock samples



### **Melchett Lake - Geochemistry**



Principal sodium depletion anomalies from grab rock sampling



## Melchett Lake and Geco Comparison

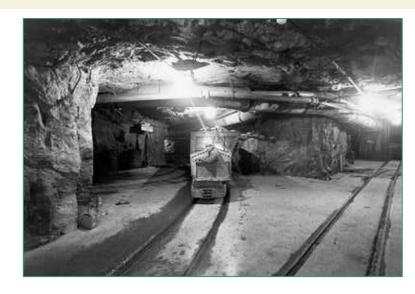
#### Style, Grade, Size, Structure and Location with Potential

- ✓ Polymetallic Zn-Pb-Cu-Ag-Au VMS mineralization e.g., Mattabi, Winston Lake, Brunswick
- ✓ Amphibolite grade in greenstone belt near Manitouwadge Ontario metasedimentary belt
- ✓ Principal host quartz muscovite schist overlain by iron formation
- ✓ Typical steep to vertical E-W orientation with ESE rake (Geco 20°- 35°)
- ✓ Tight folding, multi-stage deformation and remobilization, fold repetition locally indicated.
- ✓ Z-Drag fold in D3 fold nose at Geco; **22 km strike length known at Melchett** (nose to east?)
- ✓ Metal zoning, zinc shallow, copper increase at depth; Cu/Zn and alteration higher with depth
- ✓ Multi-element depletion and enrichment zones; distinctive alteration mineralogy
- ✓ Geco massive to semi-massive to stockwork
- ✓ Melchett stratiform to disseminated; stockwork intersected at depth in Relf Zone?
- ✓ Geco core zone to 100m massive Cp-Sp-Py-Po to disseminated <5m Sp-Py to <70m Cp-Py-Po in Qz-Sericite</p>
- ✓ Geco upper Sp-Py zone as per Relf at Melchett (13.7m trench 13%Zn, 293 g/tAg, 0.26%Cu)
- ✓ Melchett broad intervals (>200 m) and depths (>500m) Sp-Py-Cp in Qz-Sericite
- ✓ Melchett adjacent to massive sulphide? downhole Maxwell model targets
- ✓ Road access to Geco mine; good road to Melchett ~5km, lake access, winter traff

## Geco Mine Value Summary

#### Style, Grade, Size, Structure and Location with Potential

- Discovered 1953
- √ 15Mt at production decision 1954
- ✓ Operating mine 1957
- ✓ Closure 1995
- ✓ Total resource 58 Mt
- √ 33 years pit and U/G production 48 Mt
- ✓ Mine grade 4% Zn, 2% Cu, 52 g/t Ag, 0.3% Pb



- ✓ Startup valuation \$293 million; resource growth 15Mt to 58Mt during mine life
- ✓ 4,000-5,000 tpd mine and mill, main and 3 internal shafts; max depth 1320 metres
- ✓ Mill recovery average Cu 92%, Zn 83%, Ag 72%
- ✓ Annual production Cu 20Kt-30Kt, Zn 32Kt-71Kt, Ag 1.2-1.6MOz
- Annual average value recovered \$300,000,000 (Dec 2020 metal price\$)



### **Melchett Lake - Exploration Plans**

- ✓ Line-cutting for Spartan MT survey, Q3 2025
- ✓ Contracts Quantec Geoscience for Spartan survey, Q3/4 2025
- ✓ GIS Compilation, Re-Interpretation of BHPEM, HeliTEM and Regional Magnetic Surveys 2024/2025 ongoing
- ✓ Structural and lineament mapping, Prospecting, Soil and Rock Geochemistry, Targeted geological mapping Q3/4 2025
- ✓ Drilling Phase 1 Au and Ag-Zn, 2,500m, Phase 2 Au and Ag/Zn 5,000m 2025/2026
- ✓ Phase 1 Budget \$500,000 to Q1 2026
- ✓ Phase 2 Budget \$1,000,000 incl. drilling to Q3 2026
- ✓ Phase 3 Budget \$1,500,000 incl. drilling to Q4 2026



Heavy gossan in sulphide zone, dark ferroan sphalerite lens



# Silver Spruce Resources Inc.

TSX Venture: SSE, USA OTC: SSEBF, Frankfurt: S6Q



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