# WOLFDEN

# For North American Metals that Power the Grid and Support the EV Revolution

January 2022



# Disclaimer



This presentation may contain "forward looking information", within the meaning of Canadian securities legislation, which is based on the opinions and estimates of management and are subject to a variety of risks and uncertainties and other factors that could cause actual events or results to differ materially from those projected in the forward looking information. Such risks and uncertainties include, but are not limited to, risks associated with the mining industry, the risk of commodity price and foreign exchange rate fluctuations, the ability of Wolfden to fund the capital and operating expenses necessary to achieve the business objectives of Wolfden, as well as those risks described in public disclosure documents filed by Wolfden. Due to the risks, uncertainties and assumptions inherent in forward-looking information, prospective investors in securities of Wolfden should not place undue reliance on these forward-looking information.

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Don Dudek, P. Geo., Jeremy Ouellette P.Eng., and Ron Little, P. Eng. are the Qualified Persons for the information contained in this presentation who are Qualified Person's within the meaning of National Instrument 43-101.

For further information on the technical data provided in this presentation, including the key assumptions underlying the mineral resource herein, refer to the Sedar filings as listed below and see technical report entitled "*National Instrument 43-101 Technical Report, Pickett Mountain Project Resource Estimation Report, Penobscot County, Maine, USA*" dated January 7, 2019.

Unless otherwise stated, the financial information in this presentation is as reported in the latest quarterly filings or press release related to the financial information of the Corporation.

Pickett Mountain aerial photographs provided courtesy of LandVest

Information in this presentation is as of Jan 7, 2022.

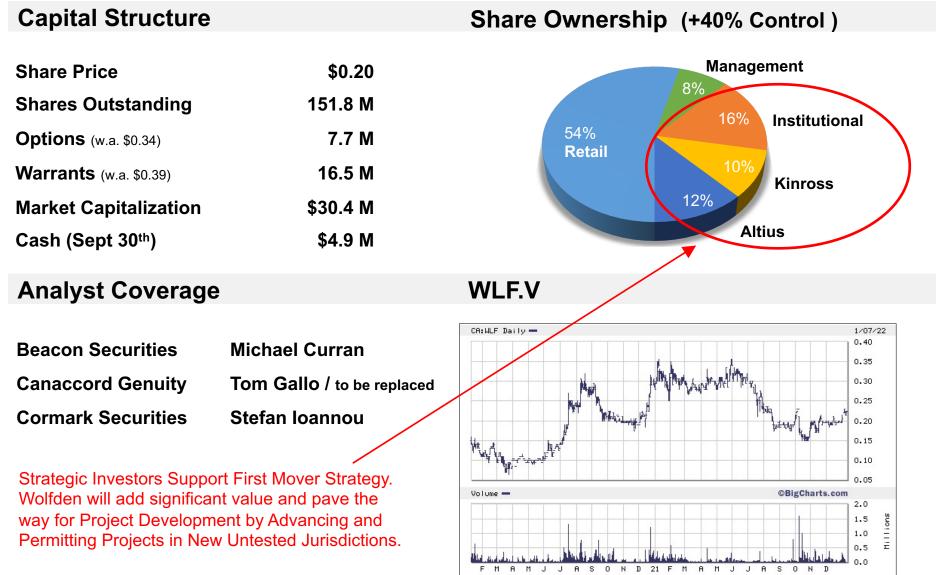
# **Proven Team**



## Board

Ron Little	President & CEO - Founder of Orezone Resources and Orezone Gold
Ewan Downie	Non-Exec Chair - Founder, Founder of Premier Gold, I80 Gold and Wolfden #1
lan Atkinson	Director - Previous CEO of Centerra, Director of Kinross
Don Bubar	Director - Founder of Avalon Metals, Previous VP Exploration Aur,
John Seaman	Director - Previous CFO and Director of Premier, Wolfden #1, Director of I80
Management	
Don Dudek	VP Exploration - Previous CEO Savary Gold, VP Aur, Avion, Endeavour
Jeremey Ouellette	VP Project Development – Previous Trevali, Caribou Operations
Don Hoy	VP Chief Geologist – Previous CEO Wolfden, VP Cliffs and Freewest,
John Breedlove	Manager Exploration US – Previous Chief Geo Doe Run
Advisors	
Rahim Lakha	Market and Investor Development
Bill Fisher	Geologist, Previous Boliden, Aurilean, Globstar, Gold Quest,
Scott Trebilcock	Process Eng. and Markets, Previous Nevsun, currently CEO Kore mining
Joe Spiteri	Long-time leading mining consultant, resource models and technical studies

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#### Advancing Three Project Silos in 2022 – Polymetallic (VMS), Silver and Nickel

- Drill Programs on 3 Significant Projects
- > Q1 and Q2 Drill Programs on Nickel Sulphide in Manitoba and Big Silver in Maine
- Q3 to Q4 Drill Silver Projects in Maine & New Brunswick

#### **Project Milestones in next 3 to 9 months**

- Nickel Projects Initial Resource Reports Q1, Expansion Drill program Q1 2022
- Silver Projects Fall 2021 Drill and Geophysics results in Maine and NB
- Pickett Mt. Rezoning application update Q1 to Q4

#### Financed - \$7M in 2021

- Strategic Partners Kinross and Altius
- New Intuitional investors, Insiders and Long term Investors
- \$0.23M Grant from Manitoba Gov't in 2021 and potential for +\$0.3M in 2022

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# Pickett Mountain Average Grade 9.1% Zn 3.8% Pb 1.1% Cu 102g/t Ag 0.8g/t Au (Cormark Securities metal pricing)

Value per Tonne in Situ = US\$478 (using \$1.15/lb Zn, \$1.0/lb Pb, \$3.0/lb Cu, \$17/oz Ag, \$1,475/oz Au)



A Comparison of Metal Equivalent Resources Pickett Mt (based on Nov 17, 2021 Mineral Resources Statement)

Resource Category	Tonnes Mt	ZnEq M Ibs	ZnEq Grade %	CuEq M Ibs	CuEq Grade %	AgEq K Oz	AgEq Grade g/t	AuEq Oz	AuEq Grade g/t
Indicated	2.72	1,141	19.0	438	7.3%	77,230	882	890,106	10.2
Inferred	3.56	1,488	18.8	571	7.2%	100,683	871	1,160,417	10.0



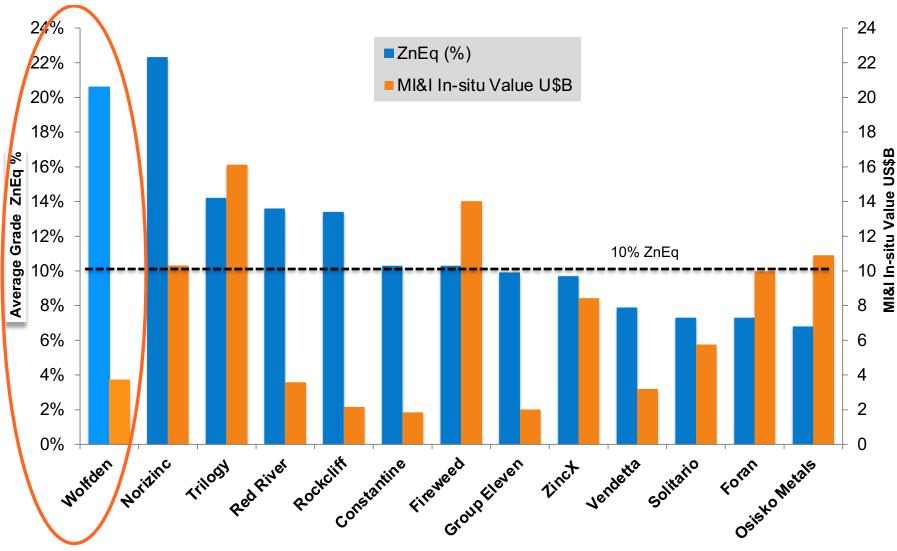
NC	NOVEMBER 17, 2021 - MINERAL RESOURCE STATEMENT using 7% Cutoff													
Category	Tonnes	% Zn	% Pb	% Cu	g/t Ag	g/t Au	Density	% ZnEq						
Indicated	2,724,000	8.91	3.83	1.22	97.2	0.8	3.84	17.72						
Inferred	3,593,600	9.27	3.83	1.00	105.4	0.7	3.81	17.65						

SEPTEMBER 14, 2020 - MINERAL RESOURCE STATEMENT using 7% Cutoff for PEA													
Category	Tonnes	% Zn	% Pb	% Cu	g/t Ag	g/t Au	Density	% ZnEq					
Indicated	2,177,000	9.25	3.68	1.32	96.4	0.9	3.98	18.23					
Inferred	2,294,000	9.79	3.88	1.15	101.1	0.9	3.99	18.62					

SENSITIVITY TO CUT-OFF GRADES - INDICATED MINERAL RESOURCE - November 17, 2021												
% ZnEq												
Cut-off Grade	Tonnes	% Zn	% Pb	% Cu	g/t Ag	g/t Au	Density	% ZnEq				
3 % ZnEq	5,539,000	5.25	2.22	0.92	64.0	0.6	3.85	11.12				
4 % ZnEq	4,723,000	5.95	2.52	0.99	71.2	0.6	3.84	12.44				
5 % ZnEq	3,752,000	7.10	3.02	1.09	81.5	0.7	3.83	14.50				
7 % ZnEq	2,724,000	8.91	3.83	1.22	97.2	0.8	3.84	17.72				
9 % ZnEq	2,393,000	9.69	4.17	1.28	103.9	0.9	3.84	19.08				

SENSITIVITY TO CUT-OFF GRADES - INFERRED MINERAL RESOURCE – November 17, 2021												
% ZnEq												
Cut-off Grade	Tonnes	% Zn	% Pb	% Cu	g/t Ag	g/t Au	Density	% ZnEq				
3 % ZnEq	6,471,000	5.88	2.42	0.82	71.7	0.6	3.83	11.83				
4 % ZnEq	5,426,000	6.79	2.79	0.87	81.9	0.6	3.81	13.44				
5 % ZnEq	4,479,000	7.90	3.25	0.92	93.5	0.7	3.79	15.33				
7 % ZnEq	3,593,000	9.27	3.83	1.00	105.4	0.7	3.81	17.65				
9 % ZnEq	3,003,000	10.46	4.32	1.05	114.2	0.8	3.82	19.57				

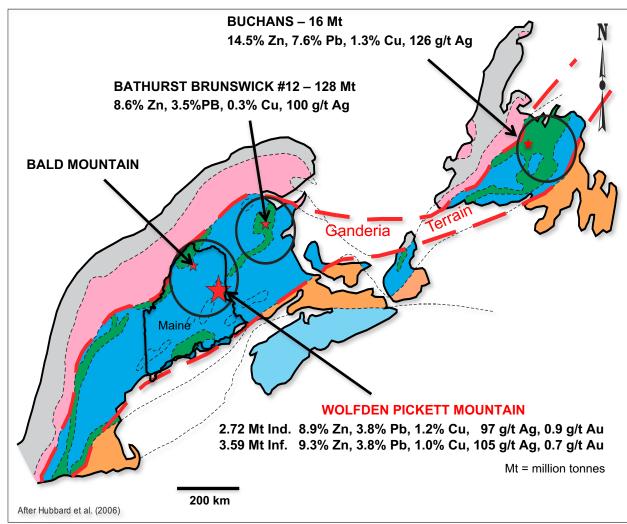
Using US\$1.20/lb Zn, \$2.50/lb Cu, \$1.00/lb Pb, \$16.00/oz Ag, and \$1,200/oz/Au



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#### **Tectonic Map of the Appalachians**



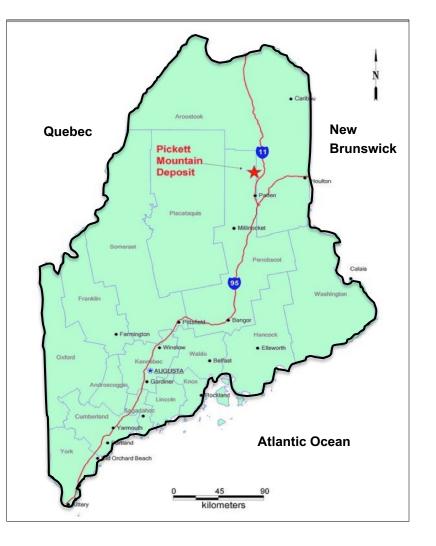
• Ganderia Terrain geologic belt hosts world-scale endowment of high-grade Zn-Pb-Cu-Ag massive sulphide deposits

• BATHURST CAMP 349 Mt World's largest VMS district w/ Production of 134 Mt

BUCHANS CAMP 112 Mt
Production 16 Mt

• WOLFDEN PICKETT MTN. Continuation of Ganderia Terrain belt into Maine - Heavily underexplored and undeveloped





#### Location

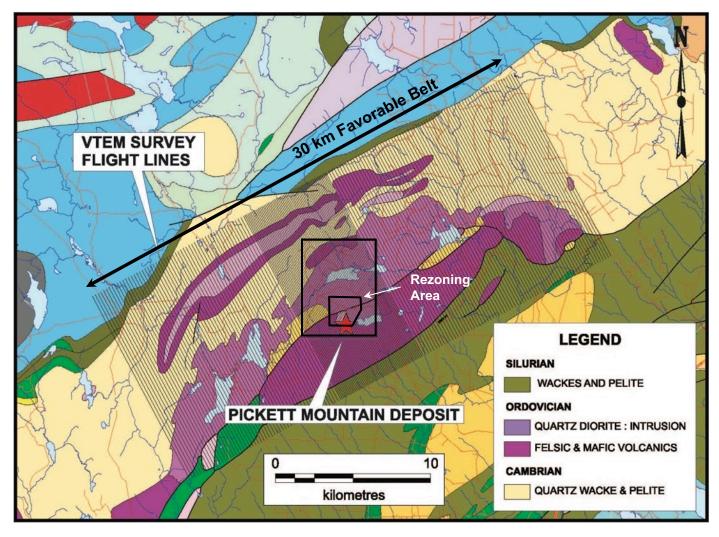
- 45 miles from US-Canada Border
- 3 miles off State Hwy 11
- 15 miles to railway siding
- Power line and excellent Lumber roads
- No population within +2 km of site

## New Mining Code 2017

- Streamlined permitting process
- Underground mining allowed for metals
- Dry stack tailings required
- 100 year bond on monitoring
- No Federal involvement in permitting

# Wolfden Flew the Entire 30 km Belt

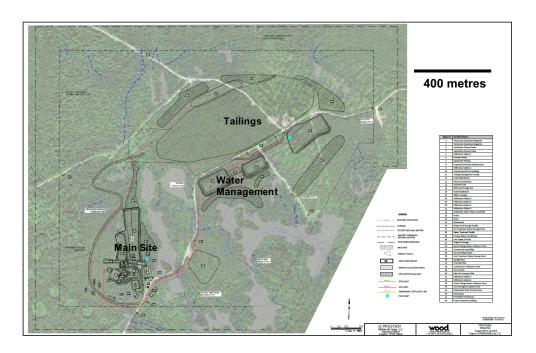




Airborne Geophysics completed over the entire favorable belt (see VTEM flight lines)

Other targets similar to Pickett Mt. identified

Potential for discovery of new deposits nearby and in the 30km belt



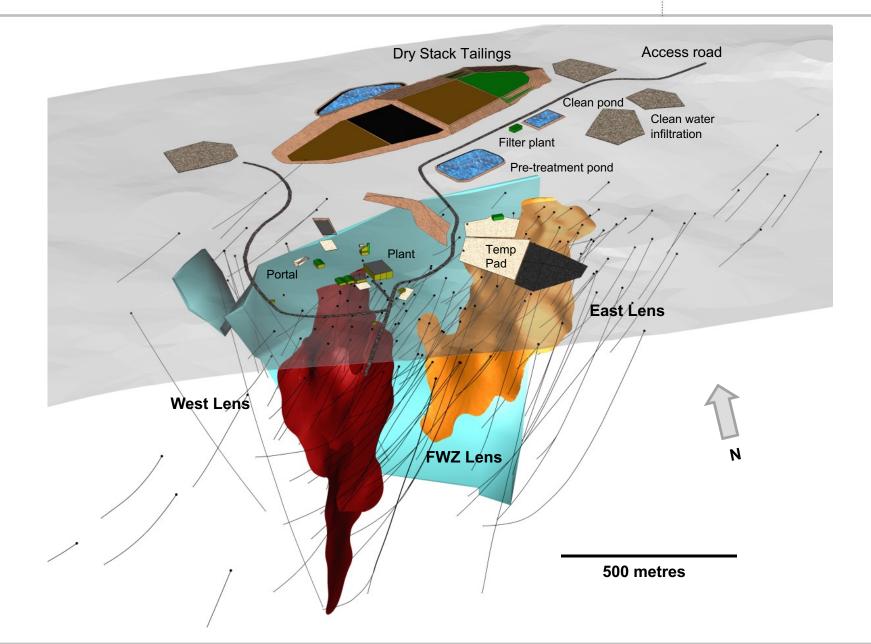
- US\$ 198 Million After-Tax <u>NPV8%</u> to Wolfden
- 37% After-Tax IRR
- <u>2.4 year Payback</u> and 10 year mine life

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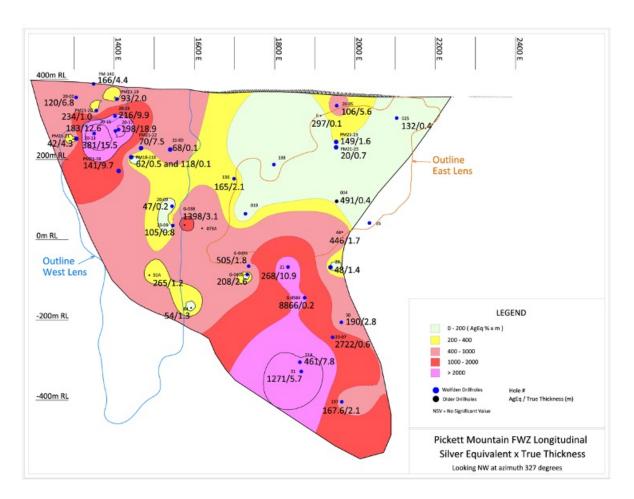
- \$0.38/Ib Zinc AISC (Breakeven price)
- US\$148 M Initial Capex including \$13M Closure costs and 20% Contingency
- > Small Footprint with Low Impacts. Layout avoids all wetlands and water bodies
- > All water returned to ground is filtered and treated to same quality as background
- Creates +130 jobs and over US\$400 M in estimated revenues to the State
- Local communities very supportive

# **Discovery of Footwall Lens (FWZ)**





# **Footwall Lens Longitudinal Section AgEq**



The Footwall Lens(FWZ) occurs 150 metres north of the West and East Lens (in this image, 150m behind the West and East Lens)

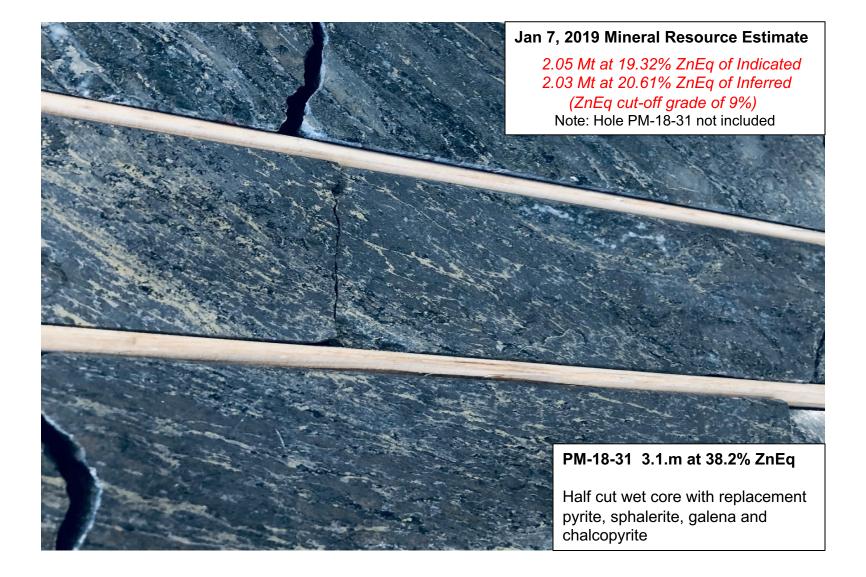
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FWZ has Silver enrichment of up to 200 oz/tonne

Associated sulphide stringer mineralization between West Lens and FWZ

Deeper higher grade area indicates potential for additional tonnage







#### Big Silver – Silver & Polymetallic - Maine (First mover advantage)

 Zoned hydrothermal breccias/replacement zones with Silver, Gold and Base metals

#### Bathurst Mining Camp Silver and Polymetallic – New Brunswick

✓ Large land holdings with Silver and Base Metal Targets

## Rice Island - Nickel Sulphide Project – Manitoba near infrastructure

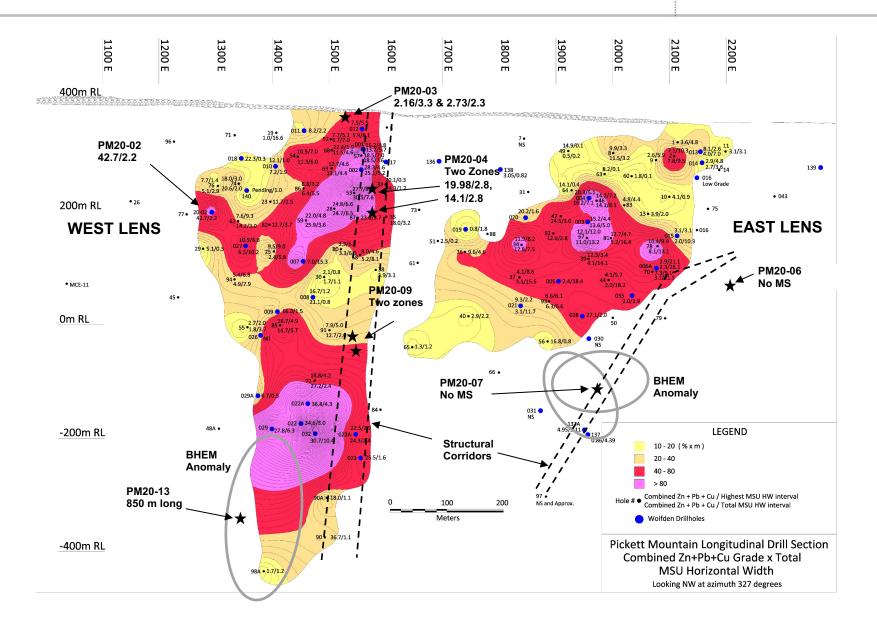
✓ Higher grade Ni with Cu and Co

#### Nickel Island Nickel Sulphide Project - Manitoba

✓ Higher grade Ni with potential PGE's

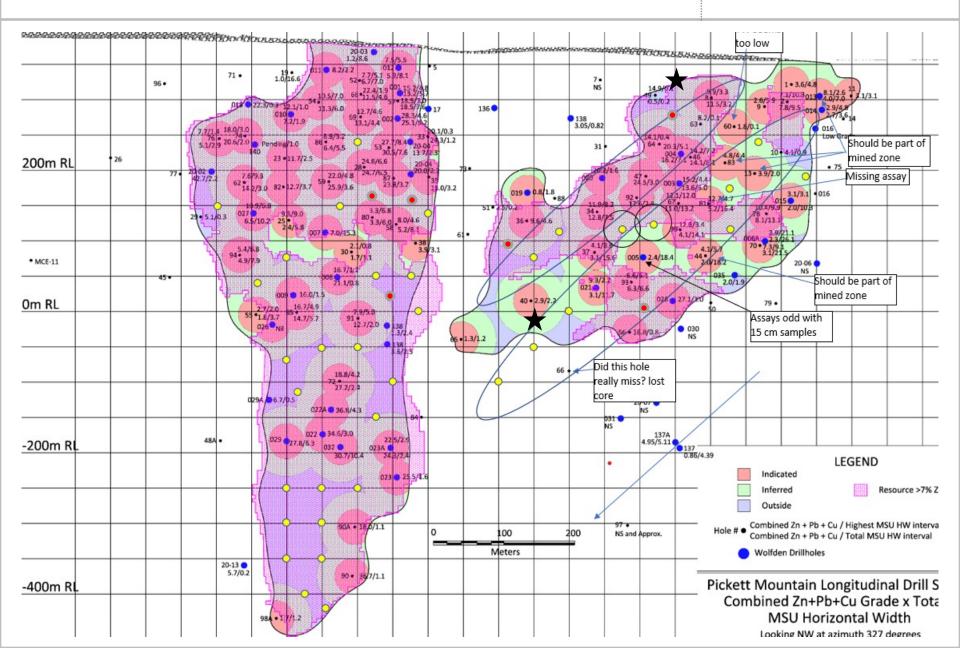
# **Drill Hole Longitudinal Section**





# **Future Infill Drilling for Reserves**







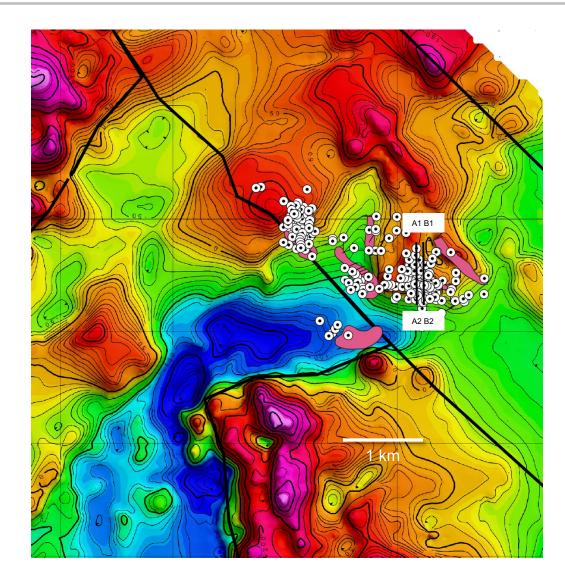
PRODUCT	WEIGHT			GRADE			% DISTRIBUTION				
	t/d	Cu(%)	Pb(%)	Zn(%)	Au(g/t)	Ag(g/t)	Cu	Pb	Zn	Au	Ag
ORE FEED	100.00	1.60	4.80	12.60	0.94	84.4	100.0	100.0	100.0	100.0	100.0
COPPER CONCENTRATE	5.36	23.10	3.40	2.82	2.31	429.7	77.4	3.8	1.2	13.3	27.3
LEAD CONCENTRATE	7.31	0.35	50.90	8.28	2.63	457.2	1.6	77.5	4.8	20.4	39.6
ZINC CONCENTRATE	20.85	0.86	1.50	53.00	0.56	45.0	11.2	6.5	87.7	12.5	11.1
PLANT TAILINGS	66.48	0.24	0.88	1.19	0.75	27.8	9.8	12.2	6.3	53.8	22.0

- Preliminary metallurgical work (1984) on drill core produced three floatation concentrates with recoveries of 88% Zinc, 78% Lead and 77% Copper
- These are excellent recoveries in comparison to most volcanogenic massive sulphide deposits in the North American Appalachians
- Further metallurgical and base line studies will be completed for future economic studies



# **Big Silver Project - Geophysics**





- Excellent correlation between Silver Mineralization, local magnetic highs and a large magnetic low
- Other potential similar targets in the area
- Airborne data is being reprocessed to better define the cross-cutting geological features
- Underscores the rational for additional ground acquisition
- Section lines A and B plotted

# **Big Silver Project – Soil Survey Results**



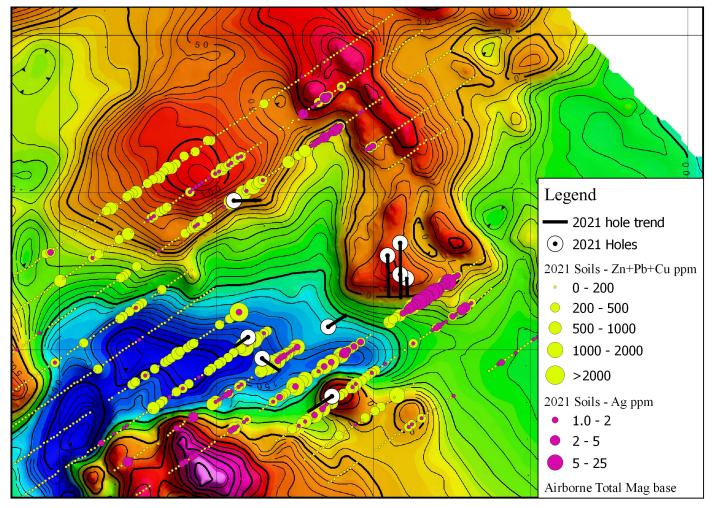
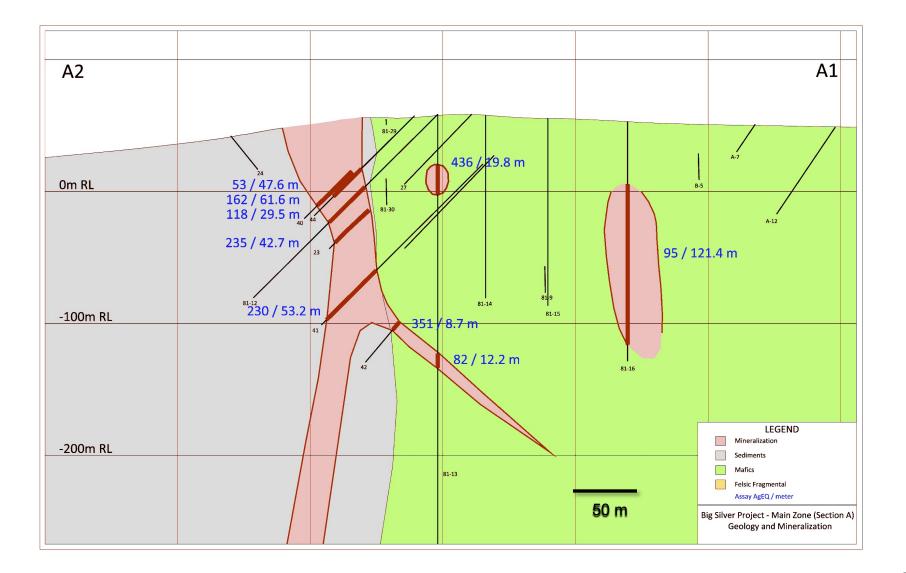


Figure 3. Soil Sample Map 2021– Combined Zn + Pb + Cu ppm and Ag ppm (g/t) on airborne magnetic base

Hole ID	From (m)	To (m)	Length (m)	AgEq Oz/t	\$ Value/t	Zn %	Cu %	Pb %	Ag g/t	Zn+Cu+Pb
BH-27	106.7	137.6	30.9	11.77	\$ 212	2.48	0.15	1.07	139.27	3.71
80-1	37.5	86.0	48.5	7.65	\$ 138	2.11	0.03	0.58	116.36	2.71
83-11	10.7	64.3	53.6	6.24	\$ 112	0.96	0.00	0.25	140.76	1.21
BS-41	162.5	203.0	40.5	8.54	\$ 154	1.86	0.22	0.59	133.46	2.66
BS-21	159.2	207.3	48.1	6.88	\$ 124	1.55	0.20	0.31	107.95	2.07
A-8	208.0	301.7	93.6	3.75	\$ 68	1.80	0.00	0.79	4.27	2.59
BS-40	34.4	96.0	61.6	4.96	\$ 89	1.04	0.00	0.38	92.17	1.42
BS-23	93.9	137.6	43.7	7.01	\$ 126	2.07	0.18	0.76	70.64	3.01
81-13	38.6	55.4	16.8	15.60	\$ 281	3.56	0.00	1.14	279.06	4.70
BS-29	150.9	195.6	44.7	5.85	\$ 105	1.81	0.19	1.05	38.16	3.05
83-9	60.7	91.4	30.8	4.93	\$ 89	0.64	0.00	0.17	117.49	0.81
B-1	36.6	61.0	24.4	6.26	\$ 113	0.51	0.00	0.67	146.02	1.18
81-30	24.1	64.0	39.9	3.66	\$ 66	0.41	0.00	0.10	91.41	0.50
BS-34	189.6	243.8	54.3	3.12	\$ 56	1.26	0.13	0.53	4.88	1.92
BS-5	38.9	56.4	17.5	7.93	\$ 143	1.88	0.00	0.32	148.92	2.19
BS-28	119.5	160.6	41.1	3.68	\$ 66	1.33	0.12	0.40	24.46	1.85
BS-32	181.4	207.9	26.5	5.66	\$ 102	2.15	0.13	0.85	30.54	3.13
81-12	77.7	122.0	44.3	3.13	\$ 56	1.35	0.00	0.33	22.71	1.69
A-4	142.8	158.5	15.7	8.72	\$ 157	4.30	0.00	1.42	20.50	5.72
81-16	140.2	160.3	20.1	6.39	\$ 115	3.08	0.08	0.68	23.15	3.84
BS-24	97.1	124.4	27.2	4.43	\$ 80	1.65	0.14	0.57	24.69	2.36
BS-3	69.6	91.0	21.4	5.68	\$ 102	2.99	0.00	0.74	11.87	3.73
BS-34	246.9	288.0	41.1	2.70	\$ 49	1.07	0.14	0.42	3.53	1.62







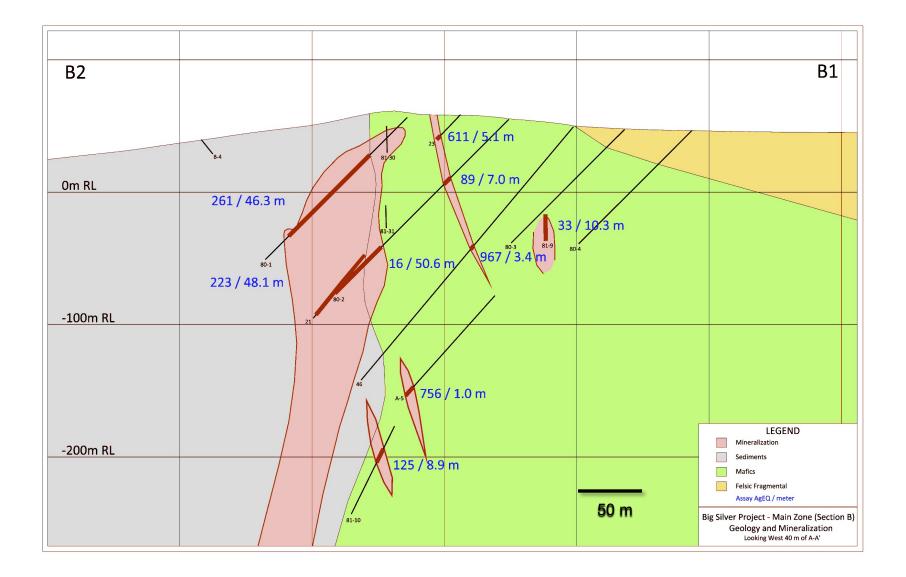
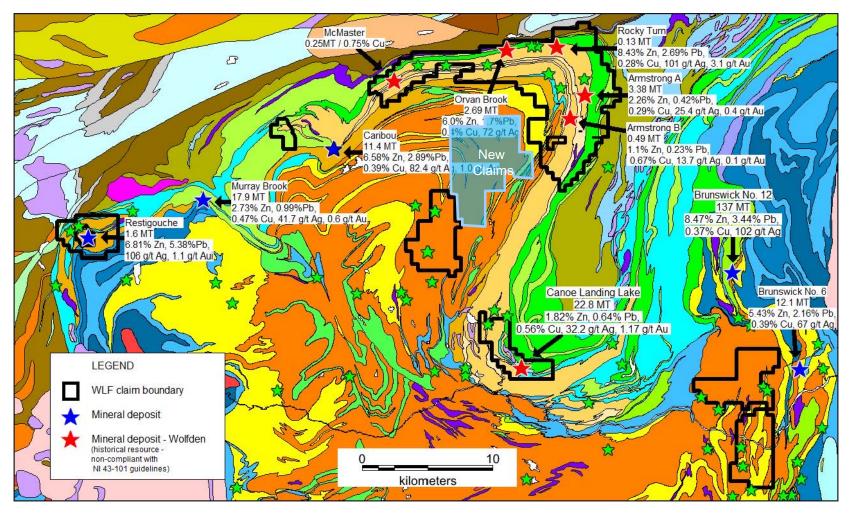






Figure 1. Big Silver Core photo – sedimentary breccia with silicified clasts and 10-15% light brown sphalerite (zinc mineralization)

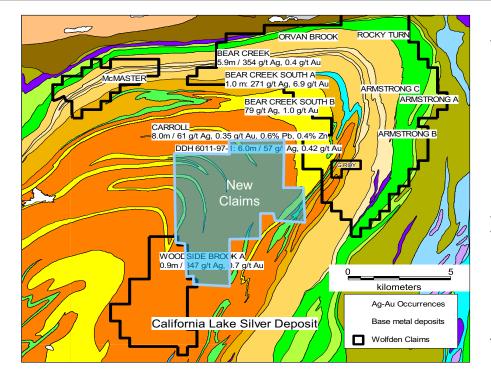




- Wolfden has a dominant land position in the prolific VMS Bathurst Camp
- 100% interest in 6 historic massive sulphide deposits

# Silver Projects – Bathurst, NB







#### California Lake

3.5 m at 579 g/t Ag, 1.13 g/t Au
3.0 m at 442 g/t Ag, 0.72 g/t Au
4.7 m at 459 g/t Ag, 0.45 g/t Au
1 km strike that is open along strike and depth Au and BM assays incomplete

#### Woodside Brook

Single hole 0.9 m at 347 g/t Ag, 0.70 g/t Au Large silver-arsenic soil anomaly associated with the prospect

#### <u>Caroll</u>

8 m at 61 g/t Ag, 0.34 g/t Au

#### **Bear Creek**

5.9 m at 353 g/t Ag, 0.34 g/t Au

- 7.7 m at 175 g/t Ag, 0.66 g/t Au
- 9.7 m at 146 g/t Ag, 1.52 g/t Au

## <u>Upsalquitch</u>

6 m at 156 g/t Ag, 731 g/t Sb

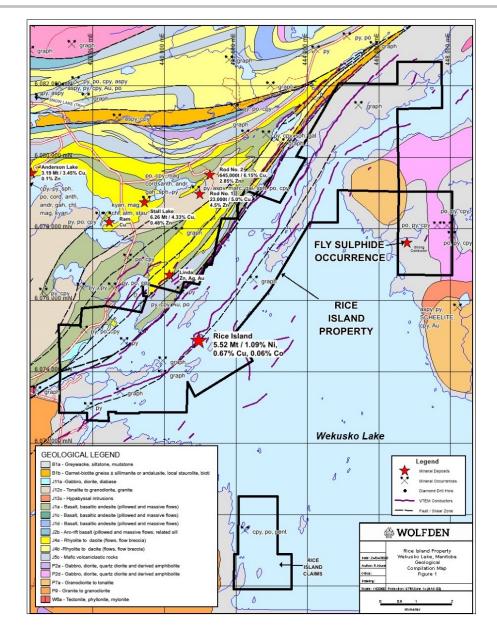
True widths are ~80% of lengths shown



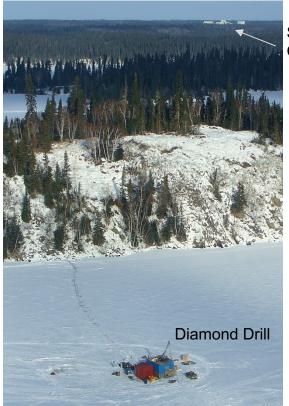


Figure 2. California Lake Zone core photo – multi-stage cross-cutting hydrothermal breccia. Darker areas contain fine grained sulphides including sphalerite, galena, tetrahedrite and arsenopyrite. Fractures, outside of breccia are also sulphide-bearing.





- 38 km<sup>2</sup> property near town of Snow Lake
- Ni-Cu-Co deposit associated with a NEtrending magnetic high and coincident conductor (Eastern Magnetic Trend)
- Priority Drill Targets along trends with similar signature to the Rice Island deposit

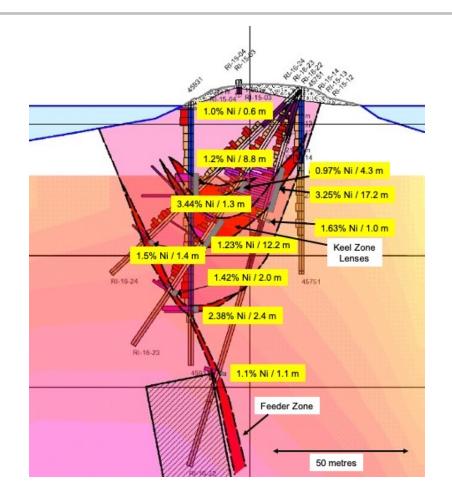


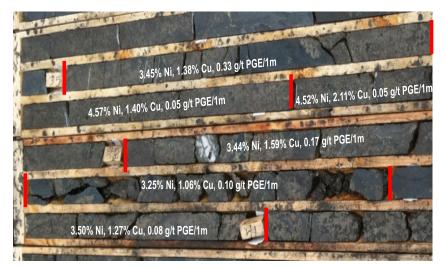
Stall Lake Complex 4km

**Rice Island** 

# **Rice Island Deposit Cross Section**







Portion of Hole 16-22 14.7 m at 3.63% Ni, 1.13% Cu, 0.12% Co

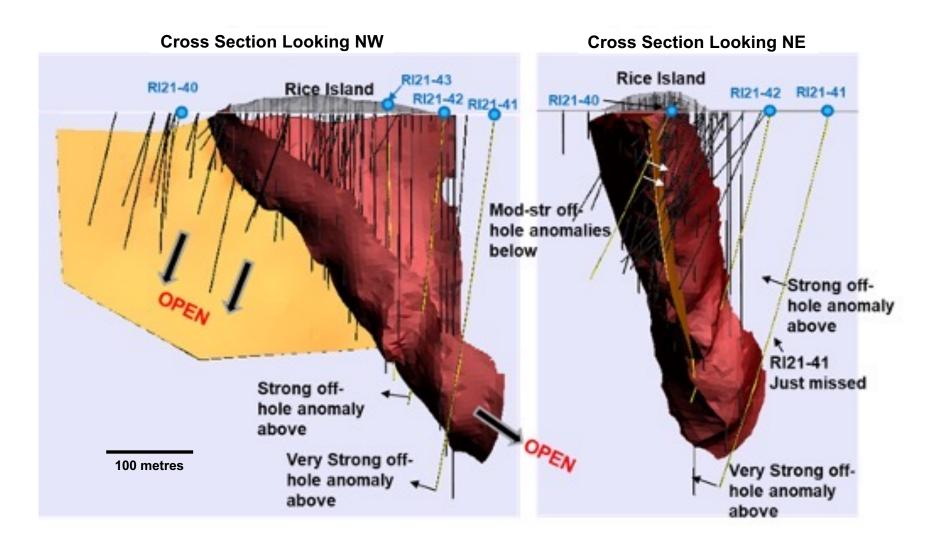
- Keel Zone Open at Depth +480 metres
- Several Very Strong Conductors outside known limits of SW-Trend are untested
- Dec 13, 2021 NI43-101 Mineral Resource Estimate:

4.3 Mt at 1.1% NiEq Indicated

3.7 Mt at 0.9% NiEq Inferred

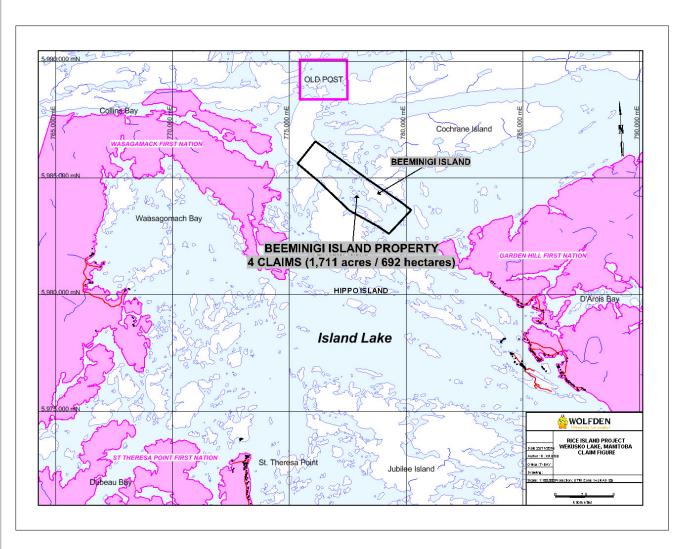
# **Rice Island 2021 Drill Results**

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RI21-43: 9 m of 1.20% NiEq; RI21-42: 14 m of 0.80% NiEq; RI21-40: 2m of 1.30% NiEq.

# **Wolfden - ILTC Community Partnership**



Initially, exploration will focus on the Beeminigi Island claims, currently held by Wolfden

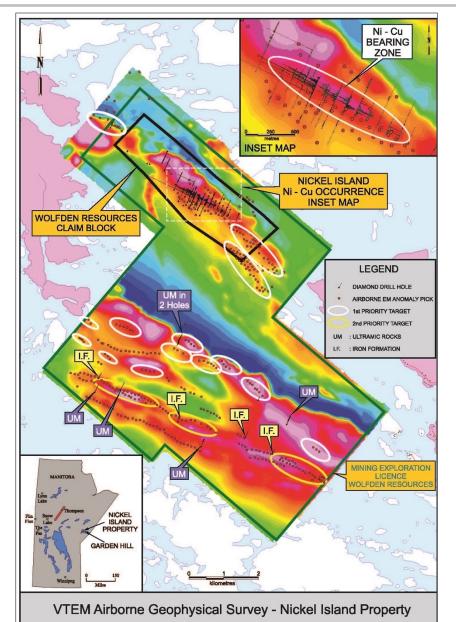
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- This area is located 5 kilometres south of the Old Post (no work to occur in the Old Post area)
  - The Partnership will assess other opportunities in due course under an MOU





#### **District-Scale High Grade Nickel Opportunity**

 Two large prospective target areas for nickel sulphides defined by airborne geophysics (VTEM)

#### North Target Area

- Two (1 km) priority drill targets to SE of the Nickel Island occurrence with similar geophysical signatures
- Historic INCO drill intercepts not followed-up:

4.6 m at 4.3% Ni 2.9 m at 3.1% Ni 7.6 m at 1.9% Ni 21.3 m at 1.2% Ni

**8.5 Mt at 0.86% NiEq Inferred Resources** NI43-101 Compliant Jan 3, 2022

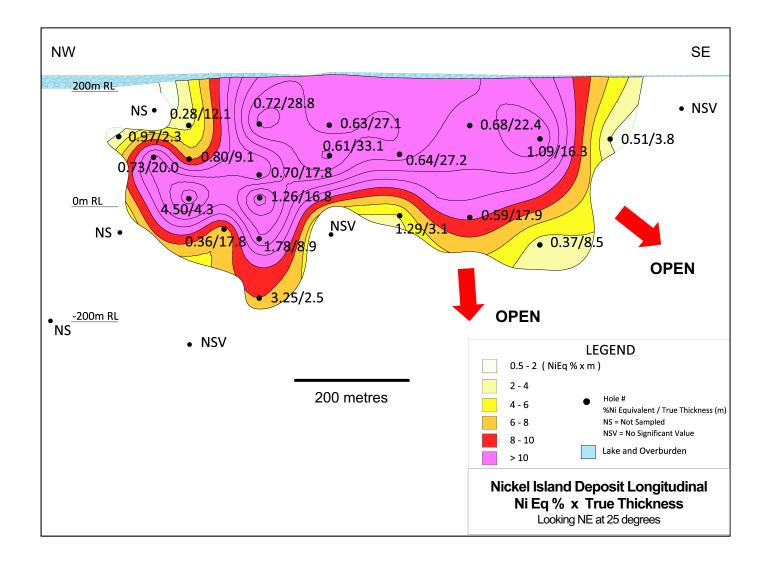
#### South Target Area

• 10 km magnetic feature with conductors

Joint Venture Agreement with Island Lake Tribunal Progressing after MOU signed in 2019

Potential Drill Campaign/Demo planned for 2021 <sup>33</sup>





# **Contact Details**

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