# BUCKO LAKE MINE CLASS 1 NICKEL SULFIDE MINE IN THE HEART OF CANADA



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#### DISCLAIMER

CANICKEL MINING LIMITED, THE 100% OWNER OF THE BUCKO LAKE MINE, CAUTIONS THAT IT CURRENTLY HOLDS OVER \$112 MILLION IN CORPORATE DEBT AND IS ACTIVELY MARKETING THE BUCKO LAKE MINE FOR SALE TO REPAY SUCH DEBT. THE PURPOSE OF THIS PRESENTATION IS FOR PROSPECTIVE BUYERS OF THE BUCKO LAKE MINE ASSET.

#### Forward-Looking Statements:

This presentation contains forward looking statements including those describing the future prospects of the Bucko Lake Mine and the expectations of management that a stated result or condition will occur. Any statement addressing future events or conditions necessarily involves inherent risk and uncertainty. Actual results can differ materially from those anticipated by management at the time of writing due to many factors, the majority of which are beyond the control of the Company and its management.

Since forward-looking statements address future events and conditions, by their very nature they involve inherent risks and uncertainties, actual results could differ materially from those currently anticipated due to a number of factors and risks. These include, but are not limited to: commodity and exchange rate fluctuations, general economic, market or business conditions; risks associated with exploration and development industry in general (e.g., operational risks in development, exploration and production; the uncertainty of Mineral Resource Estimates; the uncertainty of estimates and projections relating to production, costs and expenses, and health, safety and environmental risks); constraint in the availability of services, the current COVID-19 pandemic, changes in legislation impacting the mining industry, adverse weather conditions and uncertainties resulting from potential delays or changes in plans with respect to exploration or development projects or capital expenditures at the Bucko Lake Mine and satellite deposits.

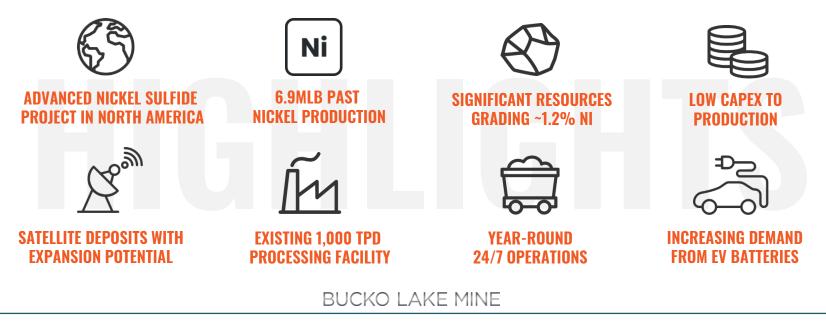
Readers are cautioned that the foregoing list of risk factors should not be construed as exhaustive. The Company undertakes no obligation to publicly update or revise any forward-looking statements except as expressly required by applicable securities laws.

### **INTRODUCTION & ASSET HIGHLIGHTS**

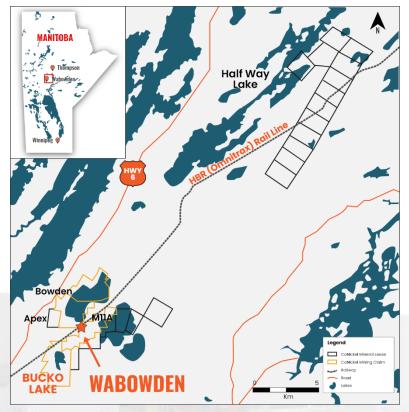
The Bucko Lake Mine and surrounding deposits is located near Wabowden, Manitoba, Canada. From 2009 to 2012, nearly 450Kt of mineralized material were mined to produce 6.9Mlbs of nickel before the mine was put on care and maintenance due to operational challenges and low nickel prices.

Due to surging nickel prices in 2022, driven by the global transition to green energy, results from a new PEA on the Bucko Lake Mine was released in early 2023 showing robust project economics.

#### THE BUCKO LAKE MINE IS ONE OF THE MOST ADVANCED NICKEL SULFIDE PROJECTS IN NORTH AMERICA TODAY



#### **BUCKO LAKE LOCATION & ACCESS**



- Location: 2 km outside Wabowden, Manitoba (106 km SSW of Thompson and 650 km N of Winnipeg).
- Access: from Provincial Highway 6 and all-weather gravel roads and seasonal trails extending from the highway.
- Transport: Project area transected by the HBR (Omnitrax) Rail Line to Churchill and a major hydro electric transmission line heading south along Hwy 6.
- Labour: Town of Wabowden has ~400 permanent residents with all necessary utilities, phone and internet.
- Mining-friendly: Main orebody located under Bucko Lake, a small body of shallow water not exceeding 2 m in depth. The lake does not have cottages or inhabitants close by and is an area of little interest to the local population.
- Seasonality: 24/7 all-weather operation, with the winter offering increased access due to surrounding wetlands freezing.

### **BUCKO LAKE TODAY**

- The Bucko Lake Mine has been under Care & Maintenance since June 2012 due to depressed nickel prices.
- There are no significant technical issues to preclude successful mining and processing of nickelcopper mineralization.
- Optimization of mining methods and Life of Mine planning with cemented paste backfill hold the key to successful mine restart.





### **PRODUCTION HISTORY & OFFTAKE/NSR AGREEMENT**

BUCKO LAKE MINE PRODUCTION HISTORY							
Year	Ores Mined (tonnes)	Ores Milled (tonnes)	Head Grade	Mill Recovery Rate	Nickel Produced	Nickel Payable Sold	
2009	135,931	124,970	1.00%	55.52%	1,382,606	1,152,697	
2010	131,884	131,884	1.23%	69.00%	2,476,116	2,125,202	
2011	107,451	102,069	1.18%	61.00%	1,631,916	1,363,534	
2012	72,256	76,650	1.12%	75.65%	1,437,510	1,445,523	
Total	447,522	435,573			6,928,148	6,086,956	



Final Product – Filter Cake Concentrate

#### **GLENCORE OFFTAKE & NSR**

- All nickel concentrate is shipped to Glencore's Sudbury, Ontario smelter under payment terms specified in a 2007 offtake agreement which remains in place today. These terms are subject to fluctuations in the spot market price for nickel.
- A 2.5% net smelter return (NSR) is payable to Glencore on the proceeds of production for all nickel sold at a monthly average daily spot price greater than US\$6.00/lb of nickel.



Concentrate being loaded for shipment to Sudbury

### **BUCKO LAKE 2023 MINERAL RESOURCE ESTIMATE**

- From discovery in 1962 to 2013, 808 holes totaling 223,715 m were drilled at the Bucko Lake deposit and surrounding areas.
- 2023 NI43-101-compliant Mineral Resource Estimate, with an effective date of January 13, 2023, incorporated results from 428 drill holes drilled from 1962-2013 of:
  - Measured & Indicated: 5.7Mt @ 1.24% Ni & 0.11% Cu
  - Inferred: 10.6Mt @ 1.18% Ni & 0.13% Cu

Bucko Lake Mine Mineral Resource Estimate at 0.7% Ni Cut-Off <sup>(1-6)</sup>							
Classification Tonnes (k) Ni (%) Ni (Mlb) Cu (%) Cu (Mlb)							
Measured	1,753	1.25	48.32	0.09	3.40		
Indicated	3,975	1.23	107.94	0.11	9.99		
Measured + Indicated	5,727	1.24	156.26	0.11	13.39		
Inferred	10,587	1.18	275.59	0.13	31.15		

#### Notes:

1. Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.

2. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

3. The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource. While an Inferred Mineral Resource must not be considered to be, or converted into, a Mineral Reserve, it is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.

4. The Mineral Resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions (2014) and Best Practices Guidelines (2019) prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.

5. Mined areas and barren pegmatite dykes were depleted from the estimate.

6.The 0.70% Ni cut-off grade was based on an underground long-hole method mining cost of \$60/t, processing cost of \$33/t, G&A cost of \$12/t, Ni price of US\$8.75/lb, 79% process recovery, 90% smelter payable, 16% mass pull, \$276/t smelter treatment charge, \$105/t concentrate freight cost, 2.5% NSR royalty, \$1/t penalty charge and \$3/t price participation cost.

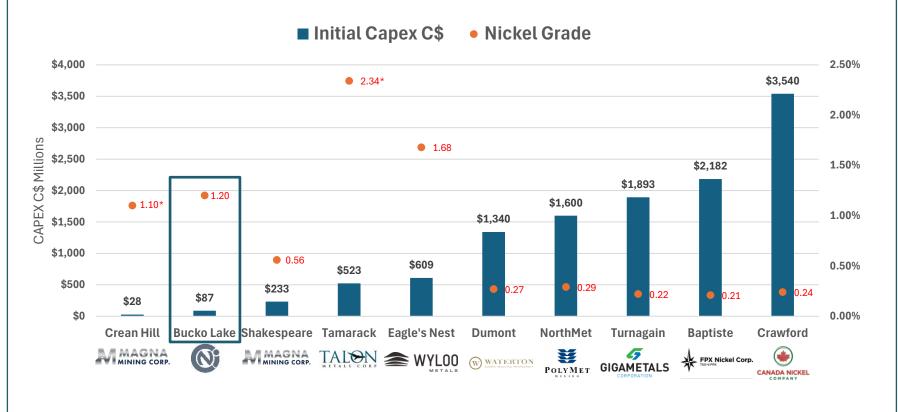
### **2023 PEA FINANCIAL SUMMARY**

- 2023 PEA indicates that the project would be rehabilitated and placed into operations to produce 101 Mlbs of payable nickel over 13 years.
- Initial capital costs of \$87 million (including \$11 million contingency) with payback in 3.3 years.
- Using a base case future life-of-mine (LOM) nickel price assumption of US\$9.84/lb, the Project generates:
  - Pre-tax NPV<sub>6%</sub> of \$205 million and IRR of 32%
  - After-tax NPV%<sub>6%</sub> of \$169 million and IRR of 30%
- Sensitivity analysis using a recent spot nickel price of US\$13/Ib for LOM, the Project generates:
  - Pre-tax NPV6% of \$531 million and IRR of 65%
  - After-tax NPV6% of \$389 million and IRR of 59%
- Average cash costs of US\$4.91/Ib Ni and AISC of US\$6.48/Ib Ni.

\*Cautionary Statement: The Bucko Lake PEA was prepared in accordance with NI43-101 Standards of Disclosure for Mineral Projects. Readers are cautioned that the PEA is preliminary in nature. It includes Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the PEA outcome will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

General	
Nickel Price (US\$/Ib)	9.84
Exchange Rate (US\$:CDN\$)	0.77
LOM (years)	13.0
Production	
Total Ni Production (MIb)	100.9
Average Annual Ni Production (Mlb)	7.8
Operating Costs	
Mining Cost (\$/t Mined)	66.04
Processing Cost (\$/t Processed)	17.73
G&A Cost (\$/t Processed)	9.97
Total Operating Costs (\$/t Processed)	93.74
NSR Royalty (%)	2.50
Cash Costs (US\$/Ib Ni)	4.91
AISC (US\$/Ib Ni)	6.48
Capital Costs ("CAPEX")	
Initial Capital (\$M)	86.7
Sustaining Capital (\$M)	191.8
Closure Costs (\$M)	14.0

#### **INITIAL CAPEX & NICKEL GRADE COMPARISONS**



\*Nickel Equivalent Grade Source: Latest company technical reports

### **2023 PEA PRODUCTION SCHEDULE SUMMARY**

- Based on known geotechnical stability issues experienced by previous operators, the 2023 PEA based its mine design and planning on geomechanical input and recommendations from Knight Piésold Ltd.
- Recommendations were based on an extensive review of historical mine performance, experience at similar operating mines, and empirical methods.
- The main mining method of long-hole mining, on both transverse and longitudinal orientations, was selected to ensure maximum geotechnical stability and grade control flexibility while minimizing initial capital expenditure requirements.
- It is estimated to take one year of pre-production and two years of production to reach the steady-state rate of 1,500 tpd. See production schedule summary below:

PRODUCTION SCHEDULE SUMMARY							
Item	Year 1	Year 2	Year 3	Year 4-8 Average	Year 9-13 Average	LOM Total	
Tonnes Mined	293,900	486,800	528,000	528,000	514,000	6,516,700	
Grade %Ni	1.34	1.28	1.31	1.29	0.91	1.14	
Average tpd Mined	835	1,383	1,500	1,500	1,500	1,500	

#### \*Source: January 16, 2023 CaNickel Mining Limited Press Release entitled "CANICKEL ANNOUNCES POSITIVE PRELIMINARY ECONOMIC ASSESSMENT AND UPDATED MINERAL RESOURCE ESTIMATE FOR BUCKO LAKE MINE"

# **2023 PEA CAPITAL & OPERATING COST SUMMARY**

CAPITAL COST ESTIMATE SUMMARY					
ITEM	\$ M				
Site and General	5.0				
Utilities and Services	2.0				
Underground Mine Development	18.1				
Underground Mining (All Else)	28.1				
Process Plant Equipment and Buildings	13.1				
Tailings Management Facility	4.1				
Owner's Costs	5.0				
Contingency	11.3				
Total Capital Cost	86.7				

- Initial CAPEX estimates are modest as the bulk of project infrastructure is already in place - majority of costs relate to underground mine rehabilitation, pre-production development, and process plant capacity upgrades.
- Sustaining capital costs over LOM are estimated at \$192M the costs are primarily for sustained underground mine development and equipment, and to incrementally increase the TMF capacity.
- Closure costs are estimated at \$14M, of which CaNickel has already paid a \$2.54M financial security bond.

LOM AVERAGE OPERATING COSTS					
ITEM	Operating Cost (\$/t processed)				
Underground Mining	66.04				
Processing	17.73				
General & Administration	9.97				
Total Unit Cost	93.74				

- Majority of operating costs have been estimated from first principles, with a minor amount of factoring from historical actual site costs and estimates from P&E's experience at other mines.
- Concentrate transport, smelting, refining, penalties and price participation costs are based on a sales agreement with Glencore established in 2007 before the mine went into production which remains in effect.

### **PROCESSING FACILITY & 2023 PEA EXPANSION PLANS**

- Designed to treat 1,000 tpd of nickel-bearing ore 24/7.
- 2023 PEA envisages upgrades to the conventional flotation plant to be consistent with the Company's existing permits. The current process plant design includes:
  - jaw and cone crushers;
  - rod and ball mills;
  - flotation circuit with rougher/scavenger/cleaner cells;
  - concentrate thickener, Larox pressure filter, concentrate handling facility for transport to smelter
  - paste backfill plant; and
  - tailings storage facility and water reclaim.
- Other than rehabilitation of existing equipment, process plant upgrades to a 1,500 tpd capacity are planned to consist of:
  - installation of a secondary cone crusher with associated screens, conveyors and dust collection;
  - expanded crushed mineralized material feed bin;
  - additional flotation cells, including a column cell for the final cleaning stage;
  - rougher concentrate regrind mill; and
  - modification and completion of the paste backfill plant, including the installation of vacuum filters.



Existing Ball Mill



**Existing Flotation Circuit** 

### **ADDITIONAL PROJECT INFRASTRUCTURE & PEA PLANS**

#### **Backfill Plant:**

- CaNickel spent \$5.9 million to construct a new paste backfill plant in 2012 to reduce backfill costs and increase quality.
- The system was installed just prior to mine suspension and therefore not commissioned.
- 2023 PEA looks at completion of the plant and modification, including the installation of vacuum filters. Cemented paste backfill from the plant will be used to provide improved stope and ground support, to improve stope cycling compared to previous operational backfill practices, and to reduce the amount of tailings stored on surface.

#### Tailings Management Area (TMA):

- Interim TMA built in 2009-2011 covers 8 ha and contains 410,000 tonnes of tailings - currently at full capacity.
- Permanent 36.3-ha tailings storage starter cell was constructed in 2011-2012 for \$4.3 million, with a 4.3 ha decant pond. The tailings pond has 520,000 tonnes (180,000 m<sup>3</sup>) of capacity remaining for 2 years of tailings production.
- 2023 PEA sees the capacity of the starter dam and pond increased during the pre-production period and in the first year of production, in order that the facility can contain 7.5 years of tailings production.



Paste Backfill Plant (2012)



TMA (2012)

#### **FUTURE PERMITTING REQUIREMENTS**



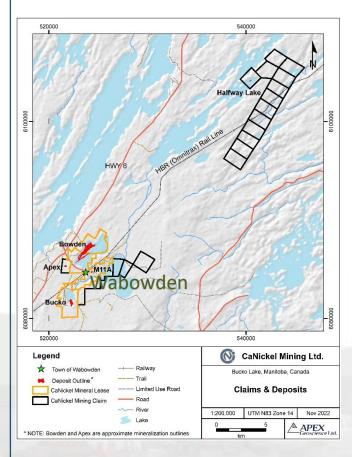
- Existing Manitoba Environment Act License 2808 RR, issued in September 2011 under the Manitoba Environment Act, requires the submission and approval of a Notice of Alteration ("NOA") to restore and upgrade the Bucko Lake Mine including a potential new access road.
- The NOA must be reviewed and approved by the Manitoba Conservation and Climate, Environmental Approvals Branch.
- The NOA will include details of the Bucko Project such as construction activities, timing, emission controls and waste management strategies, as well as environmental effects of the proposed Alteration.
- Once an NOA has been issued for the Project, and with Manitoba approval, permit and license applications can be submitted for other specific Bucko revitalization-related activities such as mine dewatering and underground rehabilitation, petroleum storage, and hazardous waste management.
- The only federal permit or approval required is related to the storage and management of explosives.



### **BUCKO LAKE FACILITY & EQUIPMENT**



### SATELLITE DEPOSITS – HISTORICAL RESOURCES

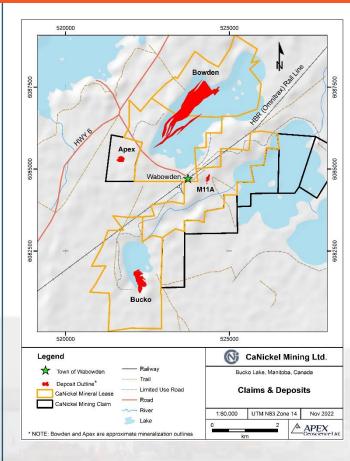


 Exploration since 1950s led to the discovery and definition of historical mineral resources at FOUR satellite deposits: (1) Bowden Lake, (2) M11A, (3) Halfway Lake and (4) Apex.

*HISTORICAL RESOURCES – FOR REFERENCE ONLY* 2012 NI43-101 Technical Report on Reserves and Resources for Satellite Deposits							
Resource/ Reserve Category	Cut-off Grade Ni%	Tonnes	Ni % Grade	Contained Nickel (Ib)	Contained Nickel (Kg)		
		Bowde	en Lake				
Total Inferred Resources	1.00	2,044,000	1.16	52,281,000	23,715,000		
MIIA							
Total Indicated Resources	1.00	800,000	1.17	20,639,000	9,362,000		
Total Inferred Resources	1.00	525,000	1.11	12,850,000	5,829,000		
		Halfwc	ıy Lake				
Total Inferred Resources	1.00	900,000	1.20	23,814,000	10,802,000		
Apex							
Total Inferred Resources	1.00	41,000	1.19	1,076,000	488,000		
Total Satellite Deposit Inferred Resources	1.00	3,510,000	1.16	90,021,000	40,834,000		

\*Source: October 2012 NI43-101 Technical Report Regarding Update to Reserves and Resources, by Lane A. Griffin, P.Geo., BS.Geo.; Paul L. Martin, P. Eng., BS Mining Eng.; and Chris C. Broili, P. Geo., MS Geo.

#### **BOWDEN & M11A SATELLITE DEPOSITS**



#### **Bowden Lake:**

- 2 mineral leases and 4 mining claims covering 1,498 ha located ~8 km NE of the Bucko Lake mine.
- Easily accessible by all-weather gravel roads.
- Discovered by Falconbridge, which drilled 61 holes over 23,412 m between 1960-1996; Crowflight drilled seven holes in 2005.
- Ultramafic-associated Ni sulfide mineralization.
- Large-tonnage, lower-grade deposit containing historical resources of 63 Mt @ 0.68% Ni at 0.5% cutoff with significant exploration upside potential.

#### **M11A:**

- Mineral lease covering 439 ha located ~4.5 km NE of the Bucko Lake mine and 1 km east of Wabowden.
- 75 holes totaling 34,900 m were drilled from 2005 to 2013 by Crowflight/ CaNickel.
- A variable sized elongate lenticular disseminated sulfide body with a strike over 500 m delineated.
- Historical Indicated resources of 0.8 Mt @ 1.17% Ni and Inferred resources of 0.5 Mt @ 1.11% Ni (1.0% cutoff) with significant exploration upside.

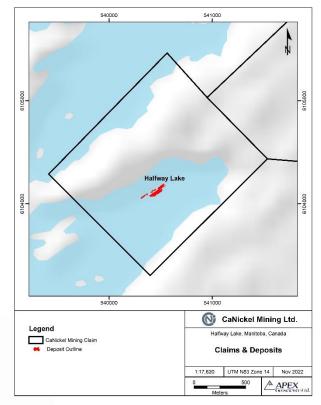
### HALFWAY LAKE & APEX SATELLITE DEPOSITS

#### Halfway Lake:

- 13 mining claims covering 3,137 ha located ~25 km from the Bucko Lake mine.
- Ultramafic-associated nickel sulfide mineralization.
- Extensive exploration carried out by Falconbridge from 1960-70 and 13 holes were drilled in the 1990s.
- Historical Inferred resources of 0.99 Mt @ 1.20% Ni (1.0% Ni cutoff).
- Similar deposit style and grade to Bucko with better ground conditions.
- Significant discovery potential for higher grade material.

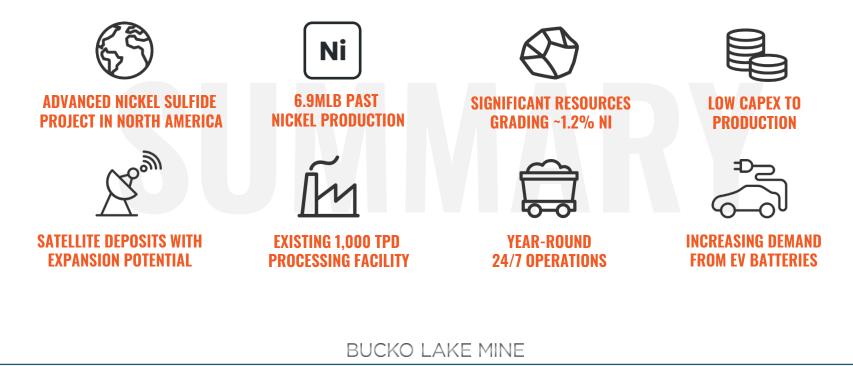
#### Apex:

- Located on mining claim covering 135 hectares ~4km north of the Bucko Lake mine
- From 2007-8, Crowflight drilled 13 holes totaling 4,263 m.
- Additional resource expansion potential remains at depth.



#### **OPPORTUNITY SUMMARY**

The Bucko Lake Mine represents one of the most advanced Class 1 nickel sulfide assets in a Tier 1 jurisdiction today. Along with satellite resources that offer the potential for future viable discoveries and operations, the asset is poised to become a critical mineral producer for years to come.





### **APPENDIX - EXPLORATION HISTORY**

- 1956: Thompson Nickel Belt discovered in Manitoba
- 1959: Marbenor Mines Limited acquires land containing Bucko Lake deposit
- **1962:** Marbenor options property to Falconbridge after intersecting 1.54% Nickel over 6.3m in drill hole M77-B
- 1970: 53-hole program and over 21,000 m of work was completed
- 1971/2: All-weather access road developed, three-compartment shaft sunk to 356 m below surface, and +900 m of drift was developed on the 305 m level.
- 1974: Shaft capped and allowed to flood; site demobilized
- 1990: Additional geophysical surveys and 6,880 m of drilling completed
- **2000:** Nuinsco Resources Ltd. conducts DD drill program testing the continuity of mineralization and followed up in 2001 with 7,100 m of work
- **2004:** Crowflight options Bucko Lake from Falconbridge and drills 32,246 m to infill areas of known mineralization, expand resources and reserves, and obtain bulk sample material for metallurgical testing
- **2008:** Crowflight rehabilitates former Falconbridge shaft, builds related facilities, and carries out underground in-fill drilling to delineate mineral reserves and increase geotechnical database
- 2012: CaNickel releases updated mineral reserves/resources based on drill results obtained from surface/underground drilling from the 1960s to 2012
- 2013: CaNickel completes 8,683 m in 17 holes at the Bucko Lake North area; 7,157 m in 12 holes at the M11A satellite deposit area; and 3,078 m in four holes at the Bowden Lake prospect



Crowflight drilling at Bucko Lake (Summer 2008)



Crowflight drilling at Bucko Lake (Winter 2008)

# **APPENDIX - DEVELOPMENT & PRODUCTION HISTORY**

#### Jan-Sept 2006: Crowflight undertakes full project permitting

- **Nov 2006:** Construction begins; dewatering and rehabilitation of historical threecompartment, 330-metre-deep shaft
- **Dec 2007:** Construction of the mill building, de-watering and rehabilitating the shaft to the 1,000-foot level is complete
- Mar 2008: Crowflight receives license from province to commence production
- Nov 2008: Commissioning of mill and first production of nickel concentrate
- Feb 2009: First concentrate shipped to Xstrata's nickel smelter in Sudbury
- **Oct 2010:** Operations suspended so company can bring in underground mining equipment and internal operations team to make operational adjustments
- Apr 2011: Operations resume; Crowflight renamed to CaNickel Mining
- Sept 2011: CaNickel granted revised Environment Act License to construct and operate a land-based tailing management area at Bucko Lake
- Dec 2011: Reduction of operations due to low nickel prices
- Jan 2012: CaNickel attempts C&F mining and long-hole stoping mining methods
- Apr 2012: Operations ramped up to full capacity
- Jun 2012 Present: CaNickel suspends mill operations due to lower nickel prices and higher mining costs for cut-and-fill mining methods; operations enter Care & Maintenance



Construction of Headframe (2008)



Construction of Mill Building (2008)



#### **APPENDIX – 2023 PEA UNDERGROUND MINE DEVELOPMENT**

The 2023 PEA has adopted the following mine development strategy to overcome previously known issues:

- Rehabilitate and re-use existing development while avoiding stopes in historical production areas:
  - Refit and re-use the existing shaft for broken rock conveyance
  - o Rehabilitate and re-use the existing ramp for trackless equipment access
  - Convert the existing 1,000 ft (305 m) Level exploration drift into new primary access on hanging wall ("HW") side of the deposit
- Change access orientation to the HW from the footwall (FW) to improve geotechnical stability of the parallel wireframed domains.
- Improve the ventilation system by relocating ventilation raises to the HW side of the deposit using raise-bores from the 1,000 ft Level to surface.
- Postpone capital development while mining previously accessed areas.
- FW drifts will allow improved grade selection, bypassing low-grade areas and allowing improvement of the grade profile by targeting more high-grade areas earlier.
- Alimak ventilation raises will be attached to FW drifts to facilitate bypassing of levels in a mining block versus using drop raises, allowing further postponement of lateral development.
- Areas of development to be situated away from weaker ultramafic contact areas. Development will be done either outside the ultramafic unit or fully inside the unit with improved ground support versus previous efforts at the mine. Intersections with the ultramafic unit, while unavoidable, will be minimized.

#### **APPENDIX – 2023 PEA MINING METHOD**

The PEA is based on an underground mine operating at a mining rate of 1,500 tpd for a mine life of 13 years using the following mining method:

- Long-hole mining, on both transverse and longitudinal orientations, has been chosen as the main mining method with a small subset (~2% of tonnes) of cut-and-fill mining above existing workings.
- The sublevel spacing is set at 20 m (floor to floor) to allow use of top-hammer or in-the-hole drills. Mining will be carried out bottom-up in "blocks" approximately 100 to 150 m in height.
- A stope width of 12 m was selected to limit the hydraulic radius, enhance stability and reduce cable bolting requirements.
- Cemented paste backfill will be utilized to provide improved stope and ground support, to improve stope cycling compared to previous
  operational backfill practices, and to reduce the amount of tailings stored on surface.
- A modular approach to mining will be used:
  - Stopes will be segregated into high-grade (average 1.31% Ni mined grade) and low-grade (average 0.88% Ni mined grade) areas using a 1.0% Ni mined grade as the nominal split between high and low grades.
  - Low-grade mining areas are deferred where possible to postpone development costs and improve the production grade profile (segregation and selection done both vertically and laterally).
  - A combination of cemented paste backfill, transverse cross-cuts, and top-hammer drills will allow for the extraction of low-grade stopes situated between mined-out high-grade stopes later in mine life using up-hole drilling.
- Mining will be kept above the 1,000 ft Level until high-grade stopes in the area are depleted prior to developing a ramp to the next block to
  minimize CAPEX. This strategy will be repeated in consecutive blocks until the maximum mine depth of approximately 900 m below surface is
  reached.
- Initial production will use diesel trucks to haul material to the shaft with later production to use battery-powered electric trucks to limit ventilation requirements as the mine progresses deeper.
- Trucks will not enter FW drifts and load-haul-dump equipment will haul all material to level access re-muck bays where the trucks will be loaded. This allows smaller FW drift profiles and reduces ventilation requirements on the levels.
- Trucks will predominantly haul to the shaft and a portion of the tonnage from above the 1,000 ft Level will be trucked up the existing ramp directly to surface.

# **APPENDIX – EXPLORATION HISTORY SUMMARY TABLE**

Su	Summary of Drilling at Bucko Lake & Satellite Deposits since 1960s						
Company Name	Year	Property	Metres Drilled	# of holes			
Falconbridge/Nuinsco/ Crowflight	1962-2008	Bucko Lake	101,174	340			
CaNickel/ Crowflight	2009-2012	Bucko Lake	42,471	285			
CaNickel	2013	Bucko Lake	8,683	17			
Subtotal Bucko			152,328	642			
Falconbridge/ Crowflight	2007-2008	Halfway Lake	23,671	82			
Falconbridge/ Crowflight/CaNickel	1960-2012	MIIA	34,900	132			
Crowflight	2007-2008	Apex	5,134	17			
Falconbridge/ Crowflight/CaNickel	1963-2012	Bowden Lake	40,200	91			
Subtotal Satellites			110,675	322			
GRAND TOTAL			263,003	964			

\*Sources: October 2012 NI43-101 Technical Report Regarding Update to Reserves and Resources, by Lane A. Griffin, P.Geo., BSGeo.; Paul L. Martin, P. Eng., BS Mining Eng.; and Chris C. Broili, P. Geo., MS Geo., Consulting Geologist. APEX Geosciences drill hole compilation from historical drill hole data – January 2023.

### **BUCKO LAKE GEOLOGY & MINERALIZATION**

#### GEOLOGY

- Inside the Thompson Nickel Belt, a northeastern trending zone several kilometres wide and 100 km long with a distinctive gravity and magnetic geophysical signature.
- Underlain by Archean gneisses and Proterozoic ultramafic intrusive rocks. Gneisses have been intruded by Aphebian ultramafic sills.
- Nickel deposits are genetically and spatially related to serpentine sills. Present distribution is the result of re-mobilization during the long and complex tectonic history of the Thompson Belt.

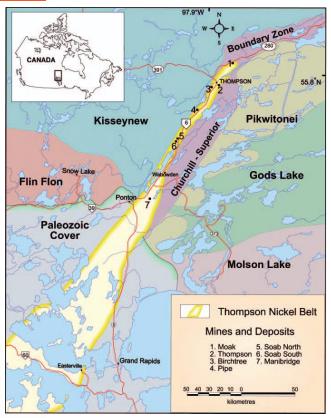
#### **MINERALIZATION**



Net Textured Sulphides at Bucko Lake

- Disseminated to net textured sulfides containing pentlandite, pyrrhotite, mackinawite, pyrite, and chalcopyrite.
- Mineralization is locally remobilized along fractures within the ultramafic intrusion and along contacts with pegmatite and gneiss.
- Broad zones of disseminated lower grade mineralization typically envelope higher grade net textured to semi-massive sulfide layers or shoots within segregated portions of the ultramafic intrusion.

**BUCKO LAKE MINE** 



Source: Location of the Thompson Nickel Belt in northern Manitoba (modified... | Download Scientific Diagram (researchgate.net)