PINE POINT
MINING LIMITED

Project History & Update

Towards Developers Assessment Report (DAR)

(Interim)

February 10, 2025

Overview

1. Introduction to the PPML Team
2. Zinc in Western Canada
3. History & Company Overview
4. Pine Point Project Update & Key Milestones
5. Geology
6. Mining
7. Infrastructure & Site Layout Design
8. Water Management Strategies
9. Tailings Management
10. Environmental, Social and Regulatory Considerations
11. Closing Remarks

Zinc

Pine Point is a Zinc-Lead Mine Development Project that could potentially be a top ten global "Clean Zinc Concentrate" producer.

Galvanization is the main use for zinc …

Why is Zinc a critical mineral?

Cement production creates 8-9% of annual GHG emissions globally!

Zinc galvanization of rebar in cement can extend the life of concrete infrastructure by reducing the necessity of replacing it in 50 years and instead increasing the life to 100-200 years potentially.

Therefore, reducing GHG emissions …

3. History of Pine Point | Cominco era

Pre-1885 First mineralization identified on surface during the Klondike Gold Rush

1898 First claims staked

1899 Area deemed too remote for Zinc and Lead to be mined economically

1925-1930 (Cominco) Early exploration drilling
5 deposits discovered

Great Depression and World War 2

1947-1955 (Cominco) Major Exploration Program
New deposits found

History of Pine Point | Cominco era and exploration

Infrastructure

1961 Federal Government, Cominco, Canadian National Railways, and Northern Canada Power Corporation

- Taltson Hydroelectrical system
- Railway from Edmonton to Pine Point Mine Site
- 100km of 25m-wide Haulage Roads were built

1963 Completion of Pine Point townsite

1964 Cominco begins mining

51 deposits mined (all east of Buffalo River)

- 49 open pit
- 2 underground

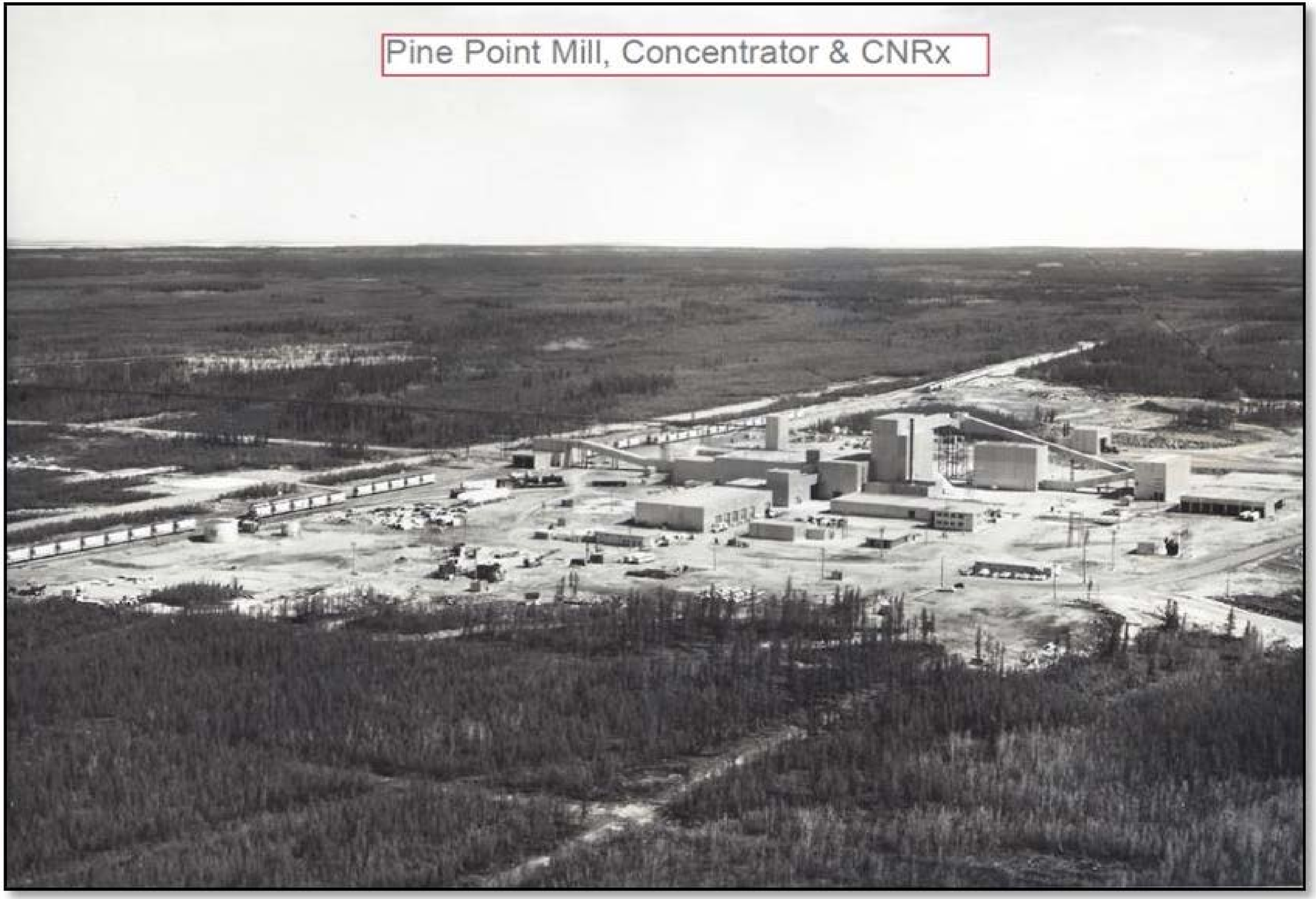
1988 Pine Point Mine closes

Exploration

1964–1984
Cominco – New deposits discovered during the mine life

1975–1984
Westmin – New discoveries west of the Buffalo River

Total # of drill holes ~22,000



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Cominco Era Mill Site Looking Northeast

Cominco Era

“Twinkle Toes”

Cominco Era Open Pit Mine

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View Towards Mill Site

Town of Pine Point

From left to right

Bill Kirkpatrick
President of Cominco

holding on to Claim Post No.1

Bill Jewitt
President Pine Point Mines

N. R. Crump
CP Railway Chairman

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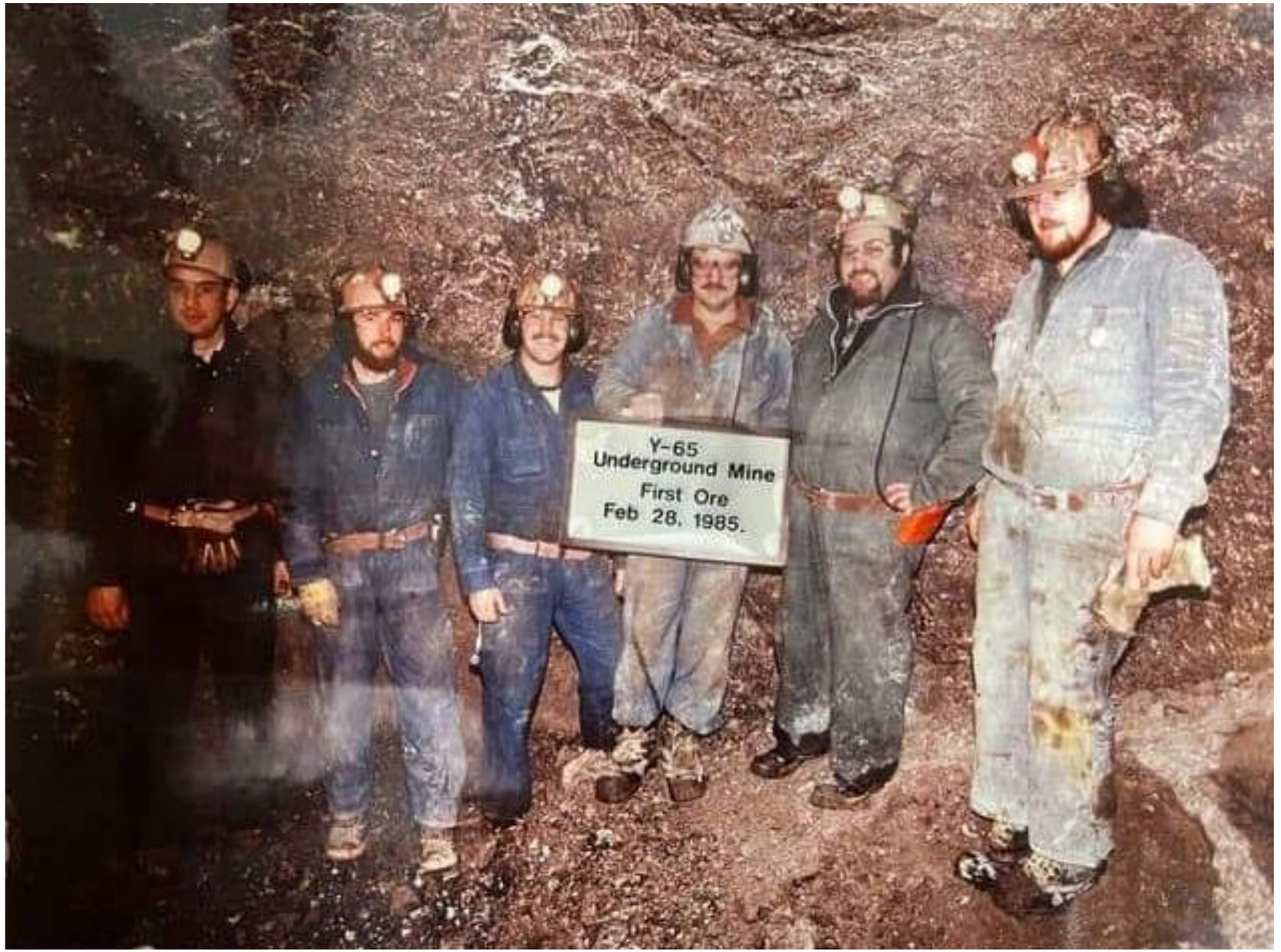
Cominco Era Site Tour



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Cominco Era
1985: Y65 First Ore
One of Two
Underground Mines

Core & First Concentrate

Year:	Ore Milled:	Grade of Ore Milled (Lead):	Grade of Ore Milled (Zinc):	Lead Concentrate:	Grade:	Zinc Concentrate:	Grade:
1965	75,000 tons	4·3 %	7·6 %	4,000 tons	?	8,000 tons	?
1966	1,458,000 tons	4·9 %	10·5 %	79,000 tons	?	241,000 tons	?
1967	1,521,000 tons	4·7 %	9·7 %	83,000 tons	?	233,000 tons	?
1968	2,138,000 tons	3·5 %	6·6 %	87,000 tons	?	223,000 tons	?
1969	3,605,000 tons	3·2 %	7·4 %	137,000 tons	75·0 %	431,000 tons	57·0 %
1970	3,860,000 tons	3·0 %	7·1 %	135,000 tons	?	451,000 tons	?
1971	3,892,000 tons	2·6 %	6·5 %	118,000 tons	?	416,000 tons	?
1972	3,810,000 tons	2·7 %	6·2 %	119,000 tons	75·5 %	391,000 tons	55·6 %
1973	3,896,000 tons	2·9 %	6·0 %	130,000 tons	?	371,000 tons	57·6 %
1974	4,135,000 tons	2·5 %	5·3 %	123,000 tons	76·8 %	357,000 tons	56·7 %
1975	3,905,000 tons	2·4 %	4·9 %	104,000 tons	78·2 %	301,000 tons	57·9 %
1976	3,773,000 tons	1·7 %	5·3 %	72,000 tons	74·4 %	323,000 tons	57·4 %
1977	3,443,000 tons	2·1 %	5·3 %	85,000 tons	73·5 %	290,000 tons	56·6 %
1978	3,290,000 tons	2·6 %	5·9 %	100,000 tons	76·5 %	302,000 tons	58·5 %
1979	3,291,000 tons	1·9 %	5·5 %	74,000 tons	73·7 %	288,000 tons	57·3 %
1980	3,626,000 tons	1·9 %	5·5 %	82,000 tons	76·0 %	315,000 tons	57·7 %
1981	3,636,000 tons	2·0 %	4·8 %	86,000 tons	77·1 %	274,000 tons	58·4 %
1982	2,445,000 tons	2·9 %	7·3 %	85,000 tons	76·5 %	287,000 tons	57·3 %
1983	985,000 tons	2·7 %	8·2 %	32,000 tons	73·8 %	130,000 tons	56·9 %
1984	2,512,000 tons	2·3 %	7·6 %	68,000 tons	75·2 %	303,000 tons	58·7 %
1985	2,356,000 tons	3·0 %	8·2 %	83,000 tons	74·7 %	300,000 tons	59·2 %
1986	3,271,000 tons	4·1 %	8·7 %	164,000 tons	73·9 %	458,000 tons	57·5 %
1987	3,514,000 tons	3·9 %	9·6 %	163,000 tons	77·1 %	533,000 tons	59·5 %
1988	979,000 tons	3·3 %	9·7 %	37,000 tons	78·4 %	152,000 tons	59·3 %
Total:	**69,416,000 tons**	**2·9 %**	**7·1 %**	**2,250,000 tons**		**7,378,000 tons**	

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Cominco Historical Production

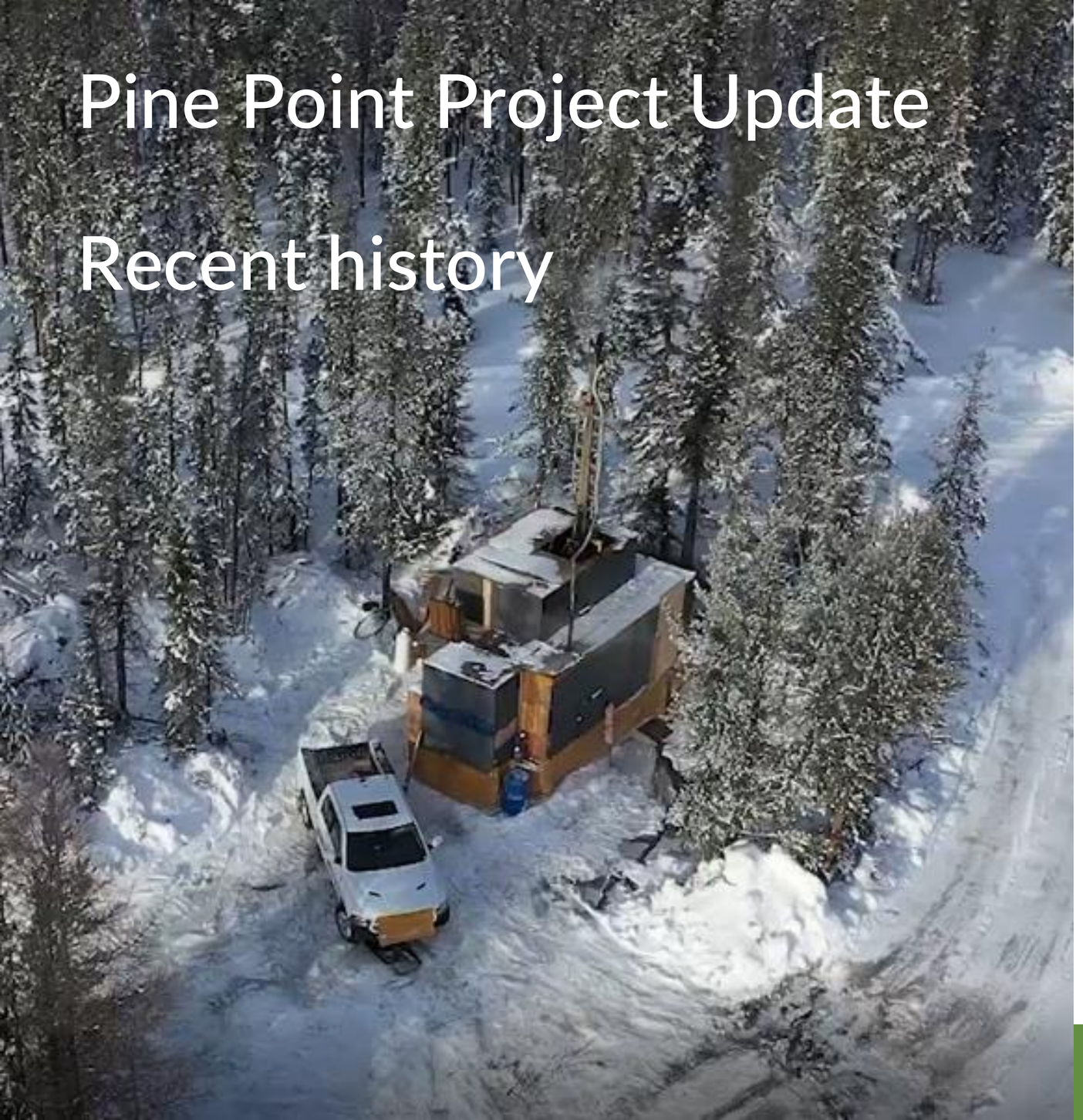
Total for 24 Years:

69.4 Mst or 64.3Mt

@ ~ 10% Zn + Pb

Pine Point Project Update

Recent history



2003	**Tamerlane Expl. acquires R Burns Claims**
2005-06	Environmental Baseline Studies
2007	DAR Submitted, Environmental Assessment
2008	Land Use Permit (LUP) issued
2009	Feasibility R-190 deposit west of Buffalo River
2013	Receivership
2016	Darnley Bay acquires project from receivership; rebrands as **Pine Point Mining Limited (PPML)**
2018 Q1	**Osisko Metals acquired PPML**

Project Update

2018-24: PPML Summary

- **2018-24:** Six Year Definition Drilling Program
  - 30-metre spacing for Indicated Resources
  - 2500 drill holes, 167 kilometres to improve confidence in mineralization
- **2018, 2019:** Initial Mineral Resource Estimates (**MRE**'s)
- **2020 & 2022:** Preliminary Economic Assessments (PEA)

- **April 2023:** JV with Appian Capital Advisory LLP
- **June 2023:** Appian Team and QP Site Visit
- **H2 2023:** Water Mgmt. / Waste Mgmt. / EA / Synergy Sessions
- **2023-24:** Definition/Trade Off Studies (~ PFS)
- **June 2024:** Feasibility Study (**FS**) Resource Base MRE
  - **49.5 Mt of Indicated Resources @ 5.52% ZnEq**
  - **8.3 Mt of Inferred @ 5.64% ZnEq:**
    - Objective: Convert Inferred Resources During Operational Period to Prolong Mine Life

Current and upcoming activities

- Definition/Trade Off Studies (~ PFS)
- Processing Pre-Concentration (In/Out)
- Defining Throughput Rate
- Detailing Water Management Plan
- Detailing Waste Management Plan
- Waste Rock In Pit or Stockpiles
- Overburden Piles
- Tailings "In Pit" & "TSF"

Other initiatives underway

- **2018-2024:** Base Line Environmental
- **2024-25:**
  - Q1 2025: Community "Townhall Meetings"
  - Project Description (PD) for DAR
  - Mid 2025: Feasibility Study (FS)
  - Socio Economic Agreement w GNWT
  - 3 Benefit Agreements (IBA's)

Advancing Sustainability with the TSM Initiative

By advancing our Towards Sustainable Mining (TSM) implementation, we demonstrate a commitment to responsible resource development, ensuring long-term asset value, easier capital access, and a competitive edge in the global market.

Leadership in Sustainability

- Adoption of TSM signals our alignment with global sustainability best practices, ensuring compliance with evolving expectations from stakeholder, investors, regulators, and international markets.

Stakeholder Trust

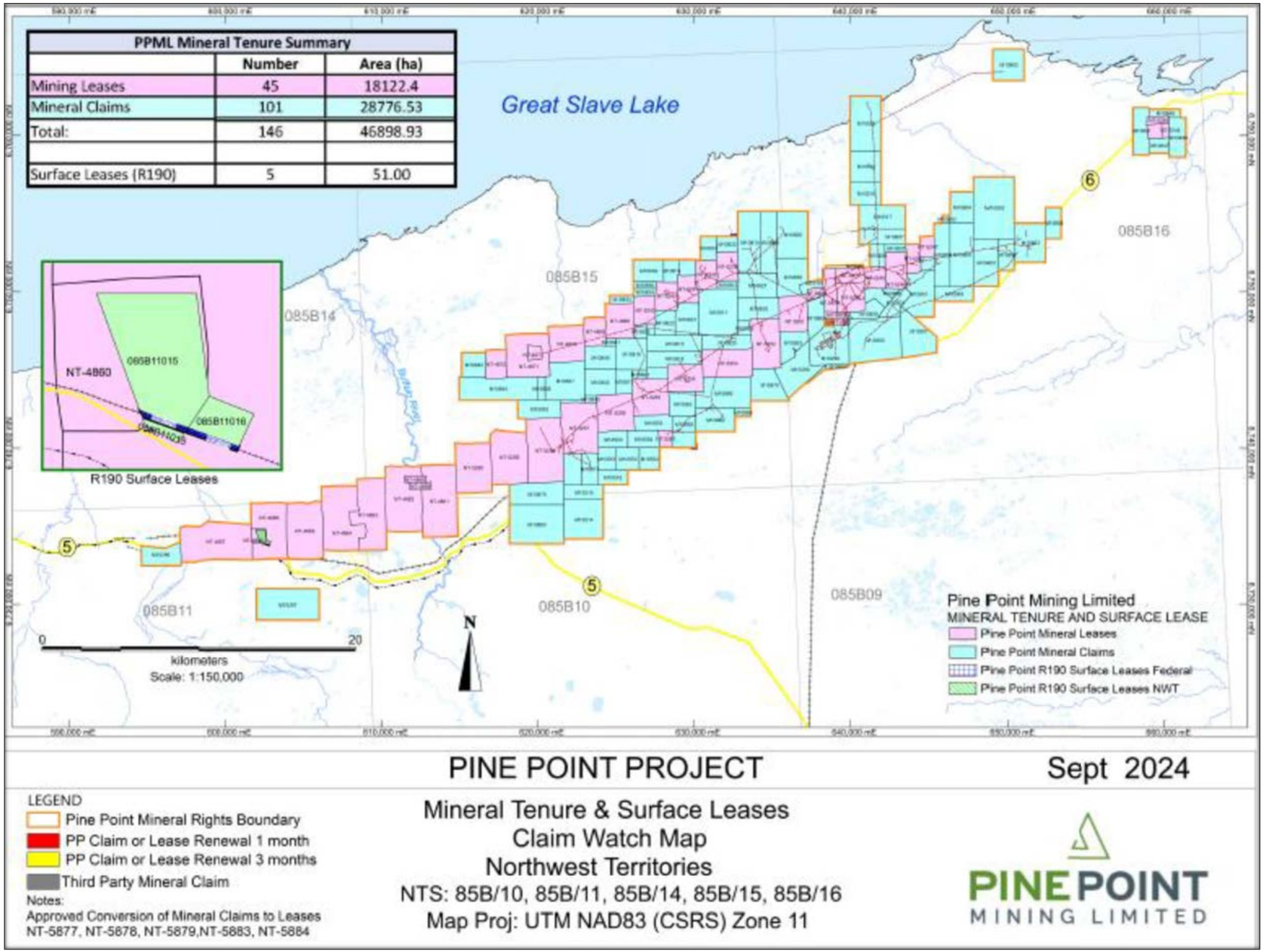
- TSM aligns with our commitment to transparency and ethical practices, building trust with local communities, regulators, and key stakeholders, which is critical for operational continuity and license to operate.

Risk Management

- Meeting TSM standards reduces operational and reputational risks, safeguarding investment against potential disruptions or market pressures.

Protecting Asset Value

- TSM ensures our operations adhere to globally recognized responsible mining practices, mitigating environmental, social, and governance (ESG) risks. This enhances the long-term value and stability of the asset.



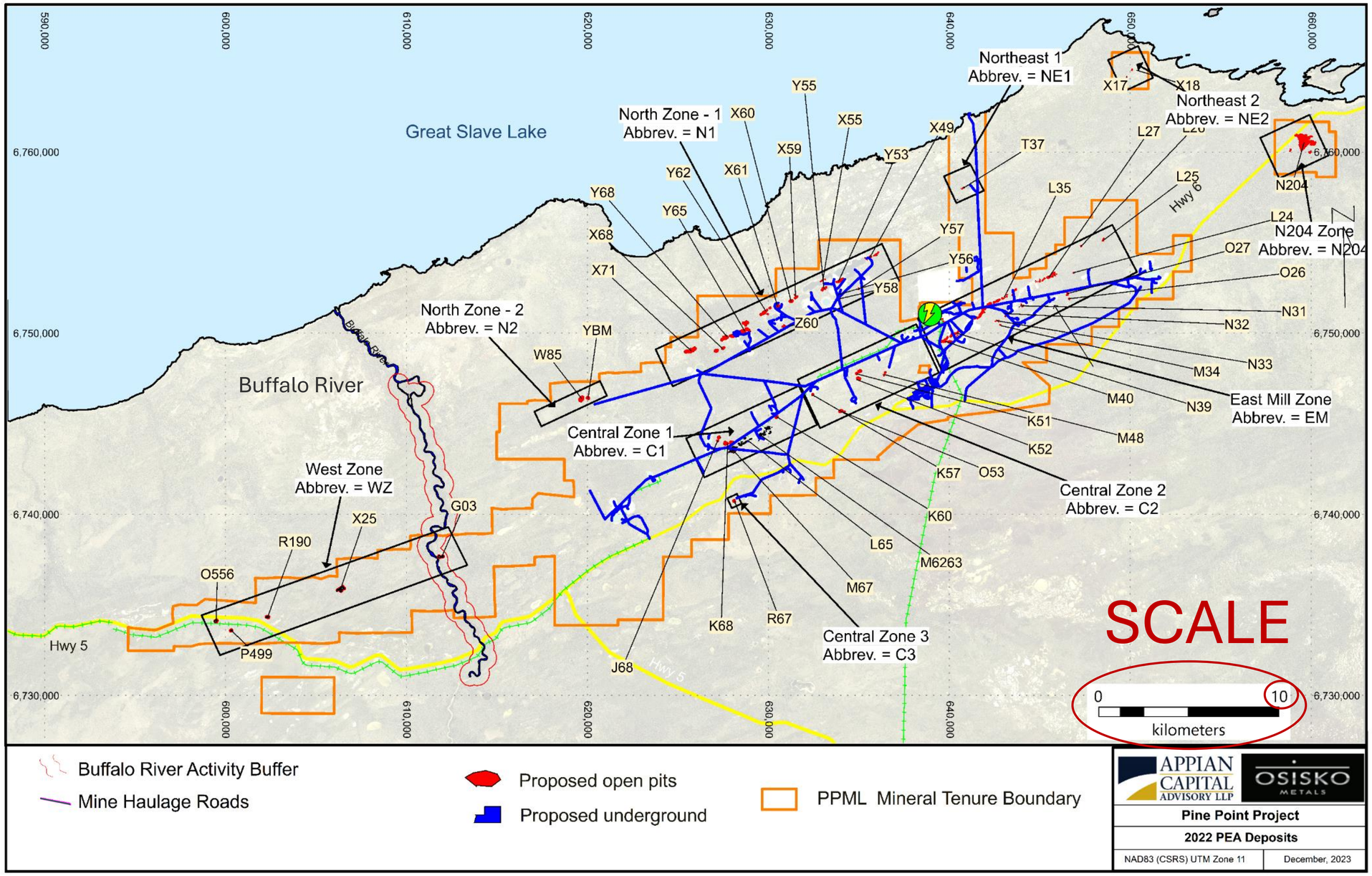
Mineral claim holdings

- 2018: Initial PPML Mineral Claims in pink
- 2019: Mineral Claims in blue
  - resulted from Collaboration Agreements

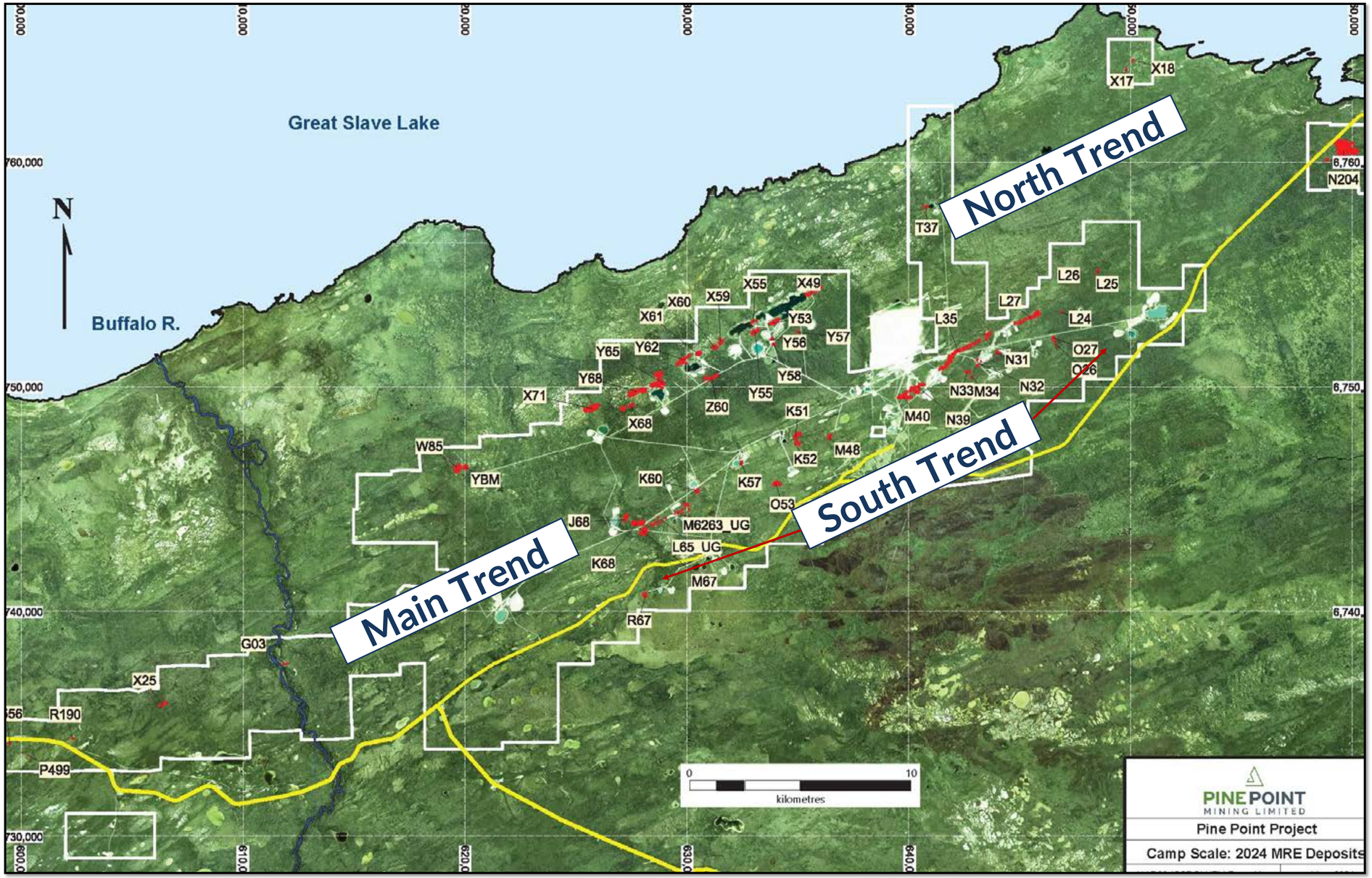
Collaboration was key to Pine Point Mining development project success so far

Project schedule | Key milestones

H2 2025	Submit “Developers Assessment Report” (DAR) that includes answers to the “Terms of Reference” that were asked by the Environmental Review Board (MVEIRB) This is the beginning of the permitting process
~2028	Objective for approval & permits needed for construction
~ 2029-30	Planned Construction Start
2030	Commissioning or testing of mill & operational startup to nameplate design
2030-~2042	Life of mine based on Indicated Resources in Mineral Resource Estimate Exploration and potentially expand on Inferred Resources
~2042	Active Closure: active reclamation - earthworks, soil placement, seeding, etc.
~2044-54	Passive Closure: monitoring, adaptation and reporting



Pine Point camp



Pine Point camp

Geology

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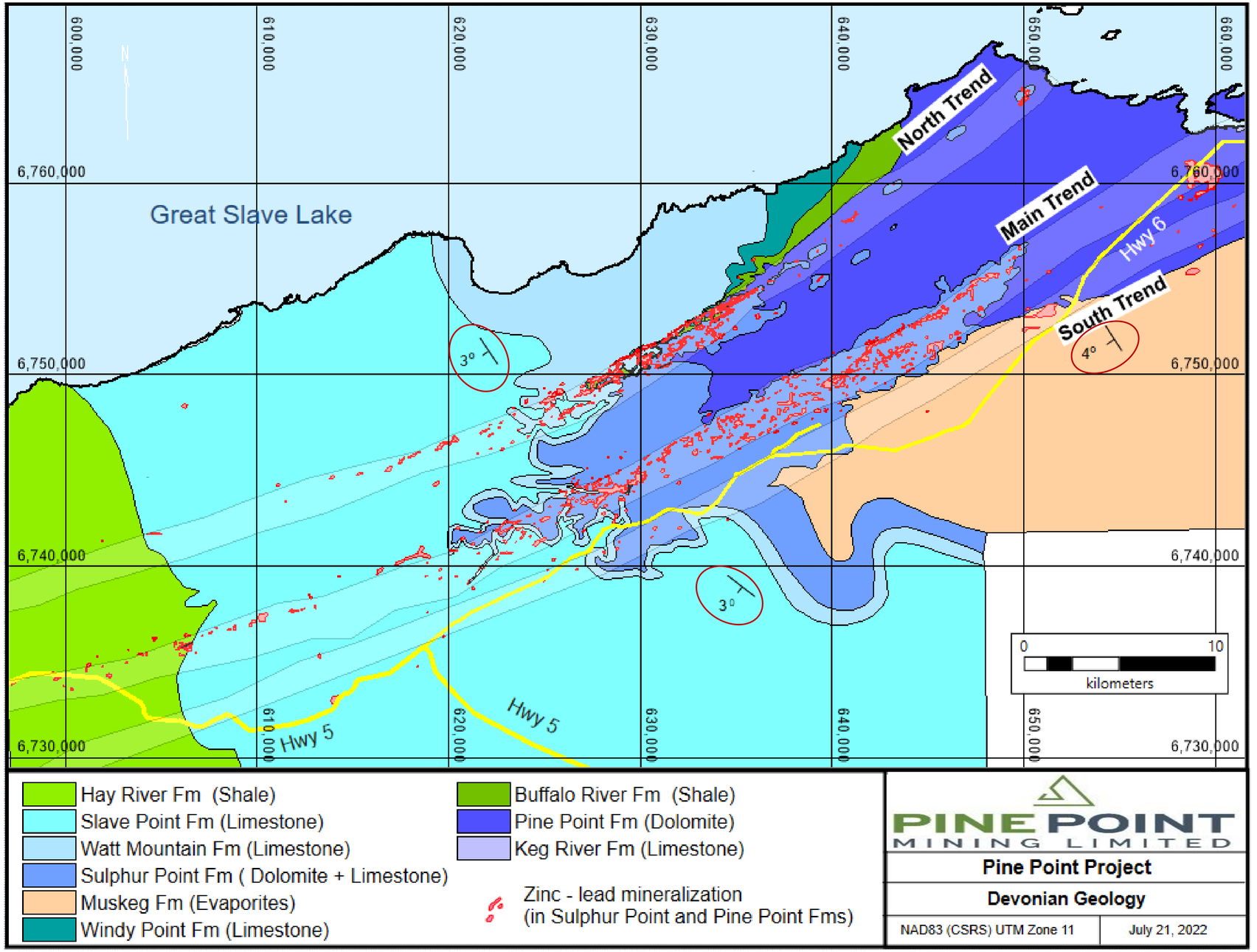
Carbonate Host Rocks Barrier Reef Complex



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Regional geology

Sedimentary Carbonate Host Rocks

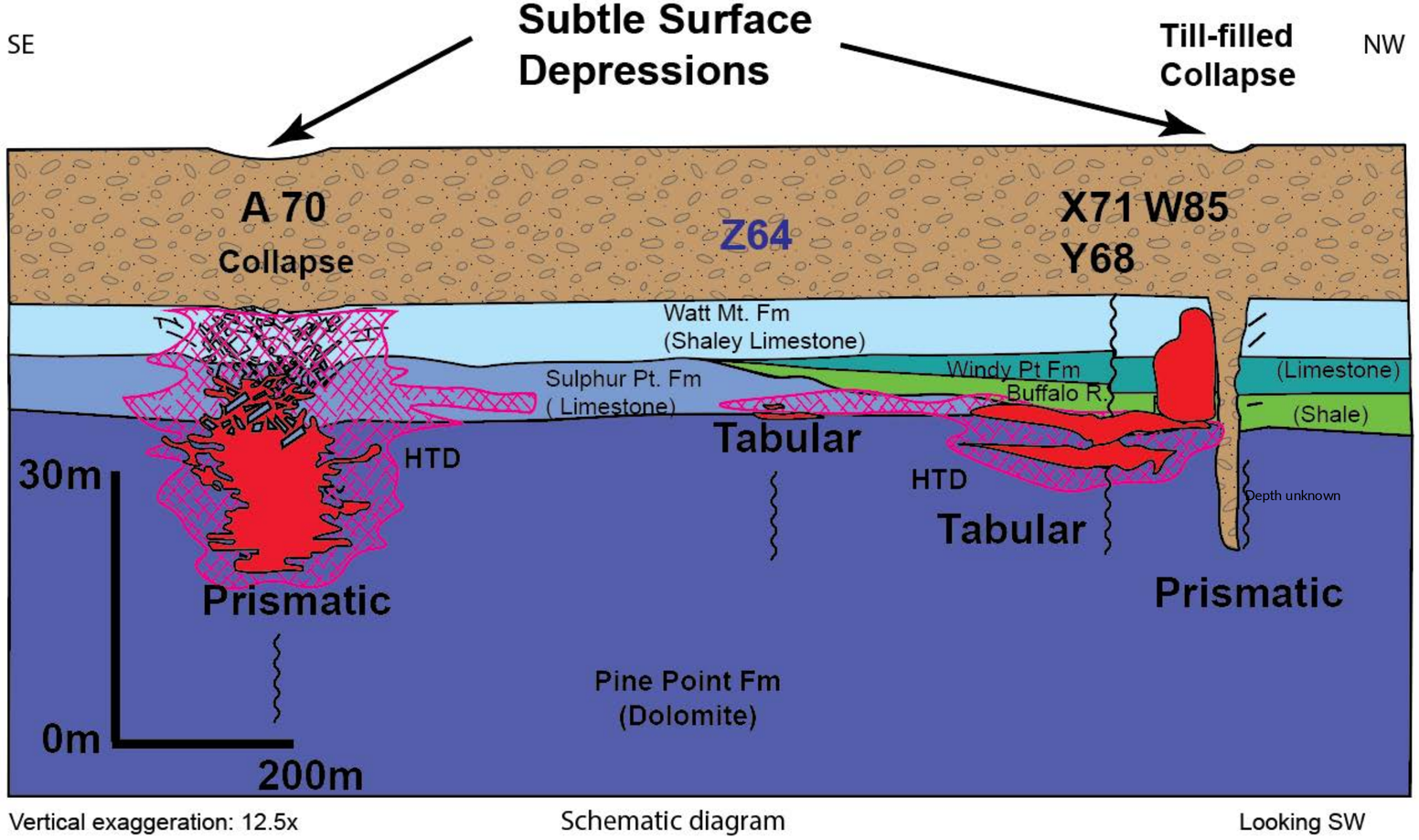
- Pine Point formation in dark blue
- Sulfur Point formation in medium blue

All flat lying sediments slightly dipping/tilted 3 to 5 degrees to the west

Mineralization | Deposit types

Prismatic Type
Vertical Build-Up
From Tabulars

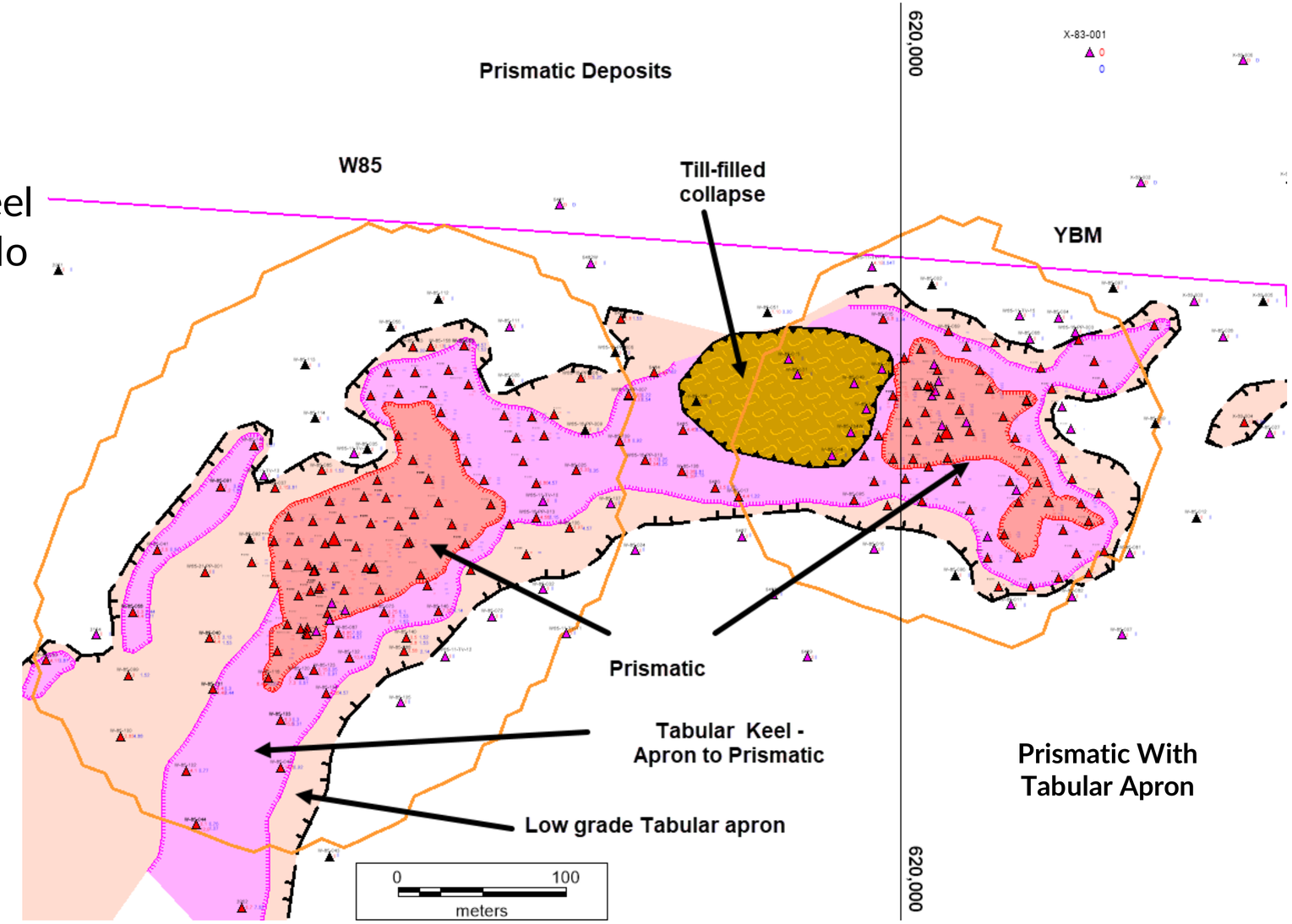
Tabular Type
Kilometer Long
Fluid Channel Ways



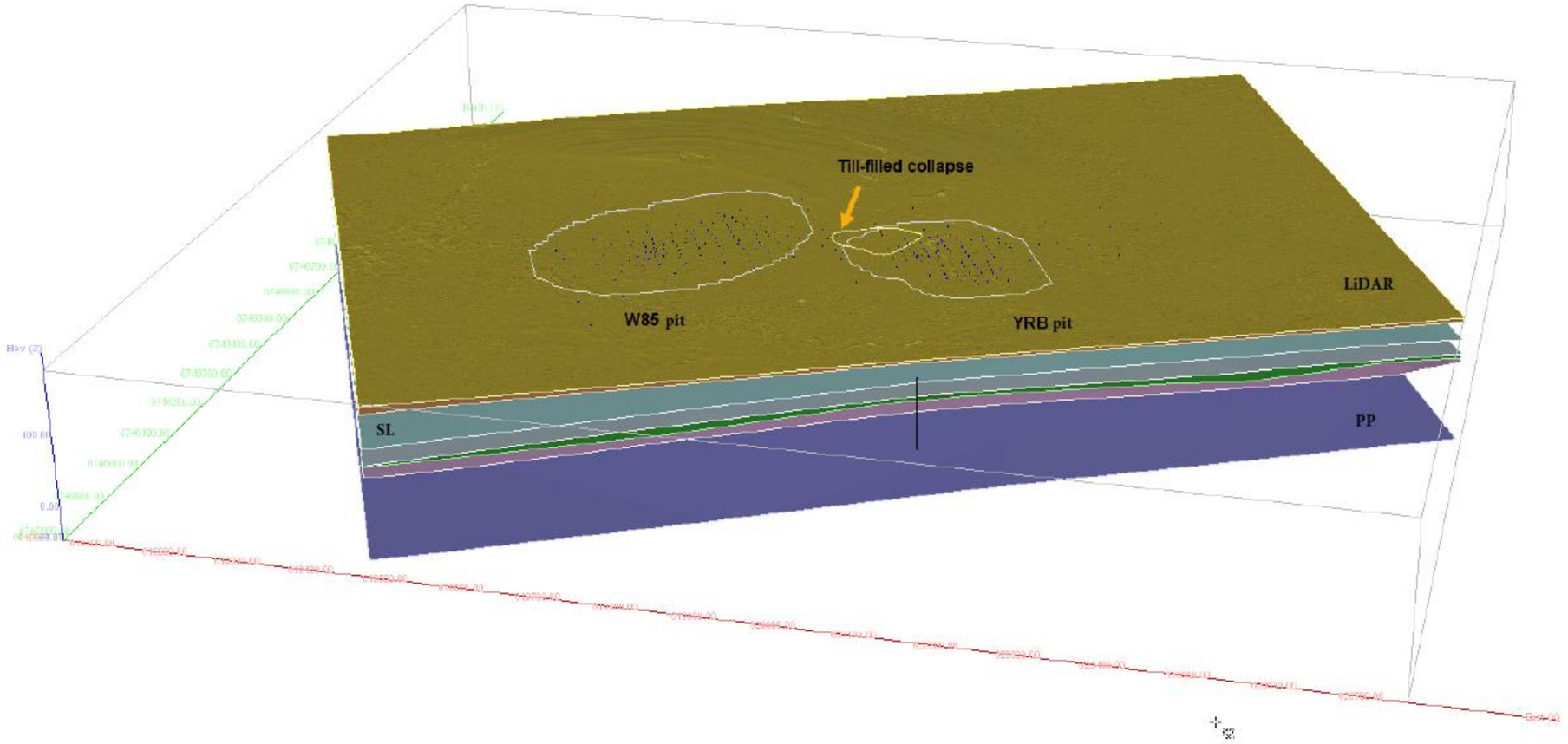
Earlier exploration underestimated the role of structure

Mineralization facies | W85 Prismatic

- Prismatic
- Tabular HG Keel
- Tabular LG Halo

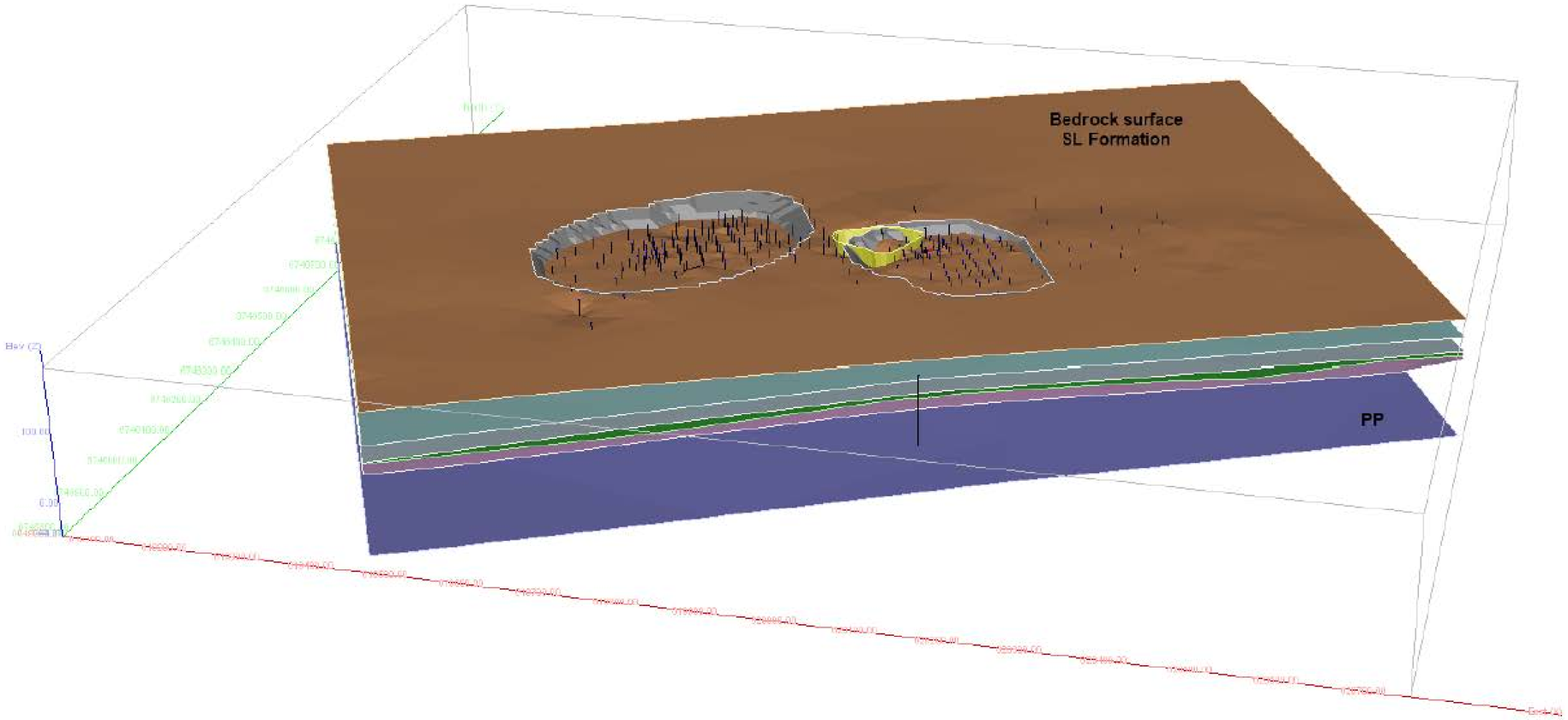


W85-YBM Prismatic

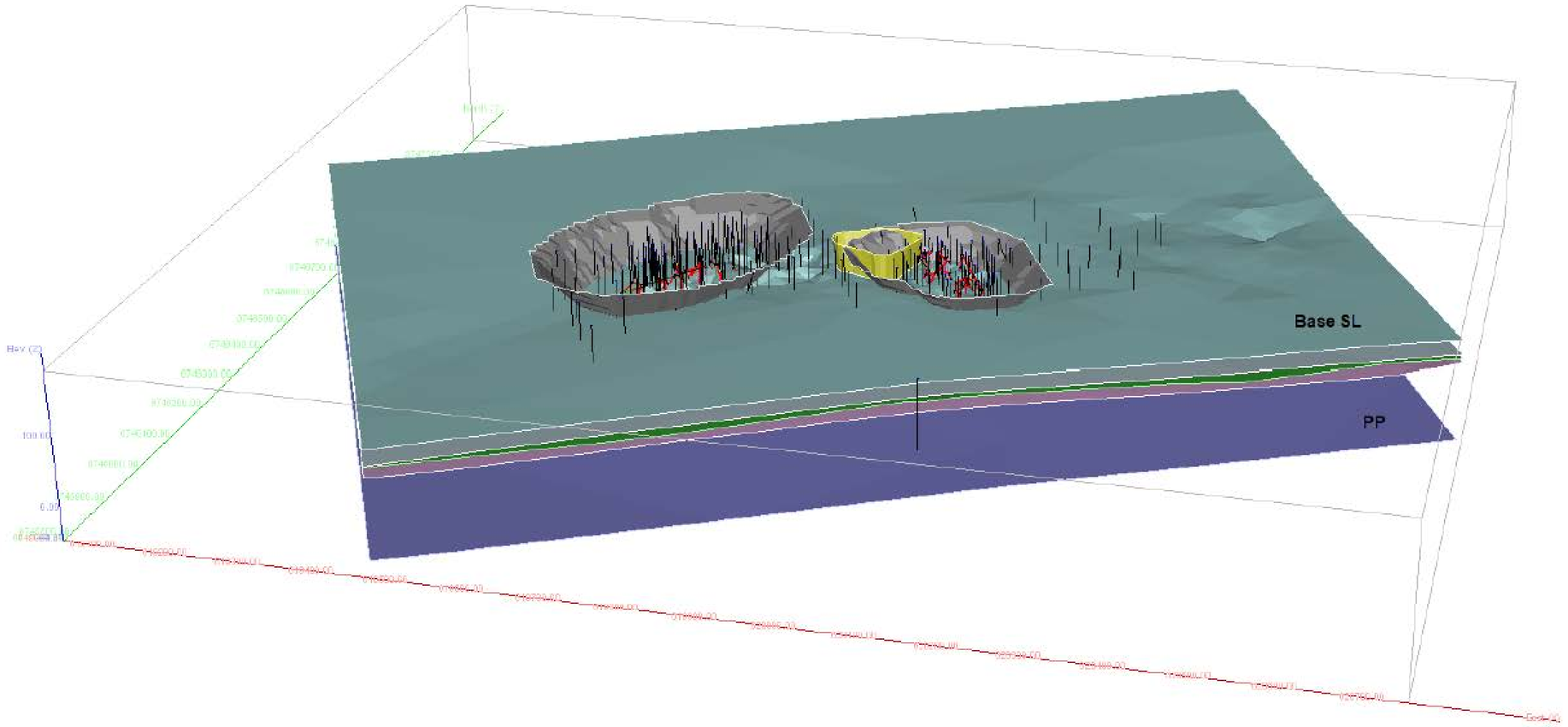


Surfaces are the base of each formation

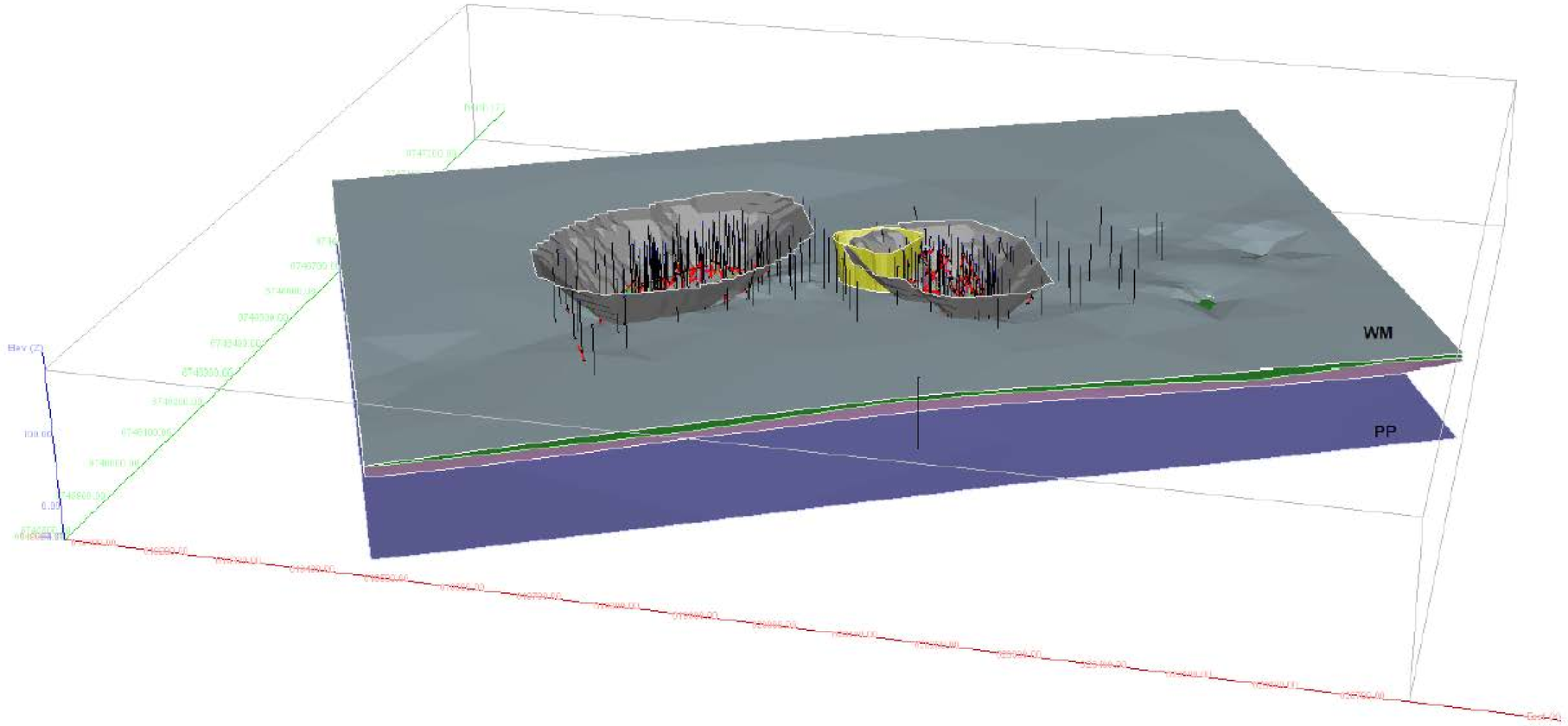
Bedrock | Slave Point formation



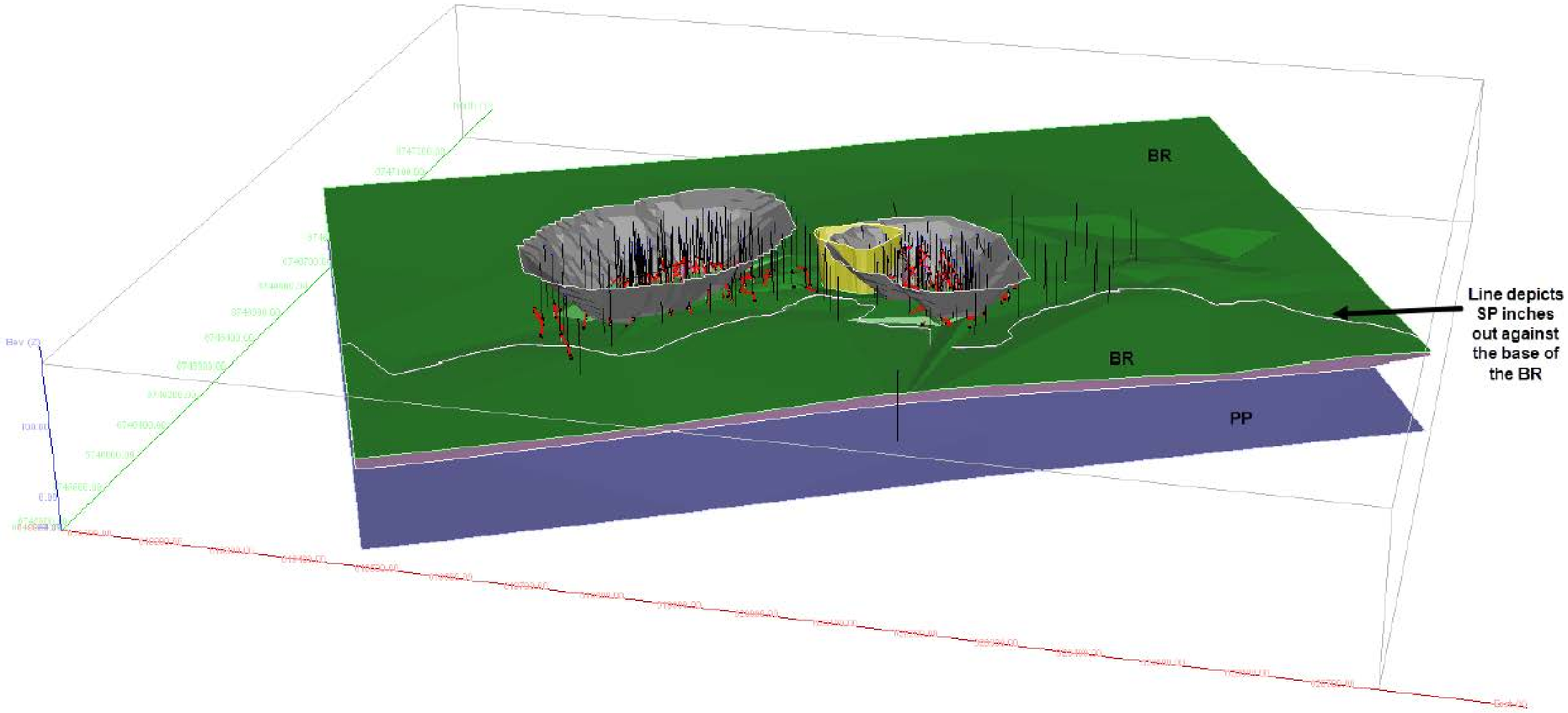
Base of Slave Point Formation



Base of Watt Mountain formation

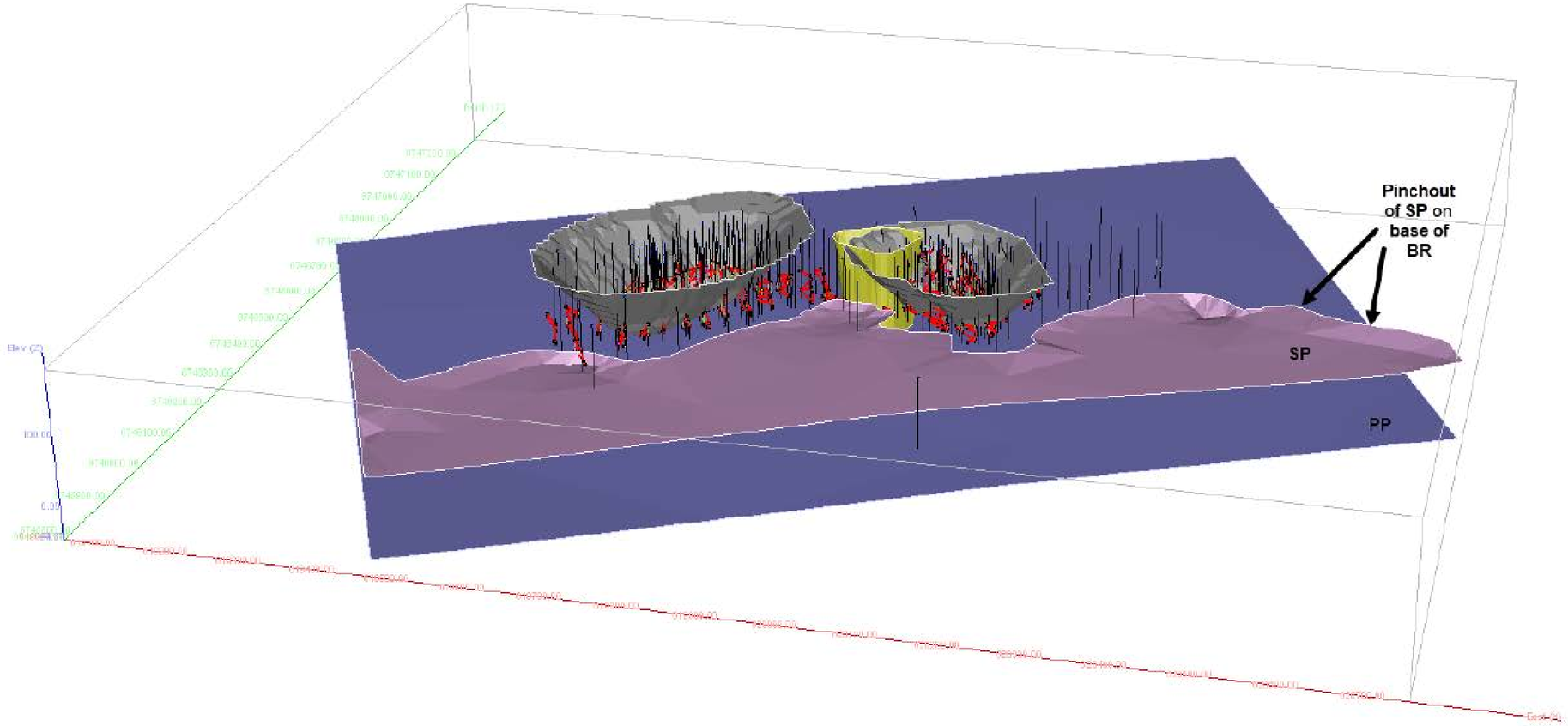


Base of Buffalo River formation

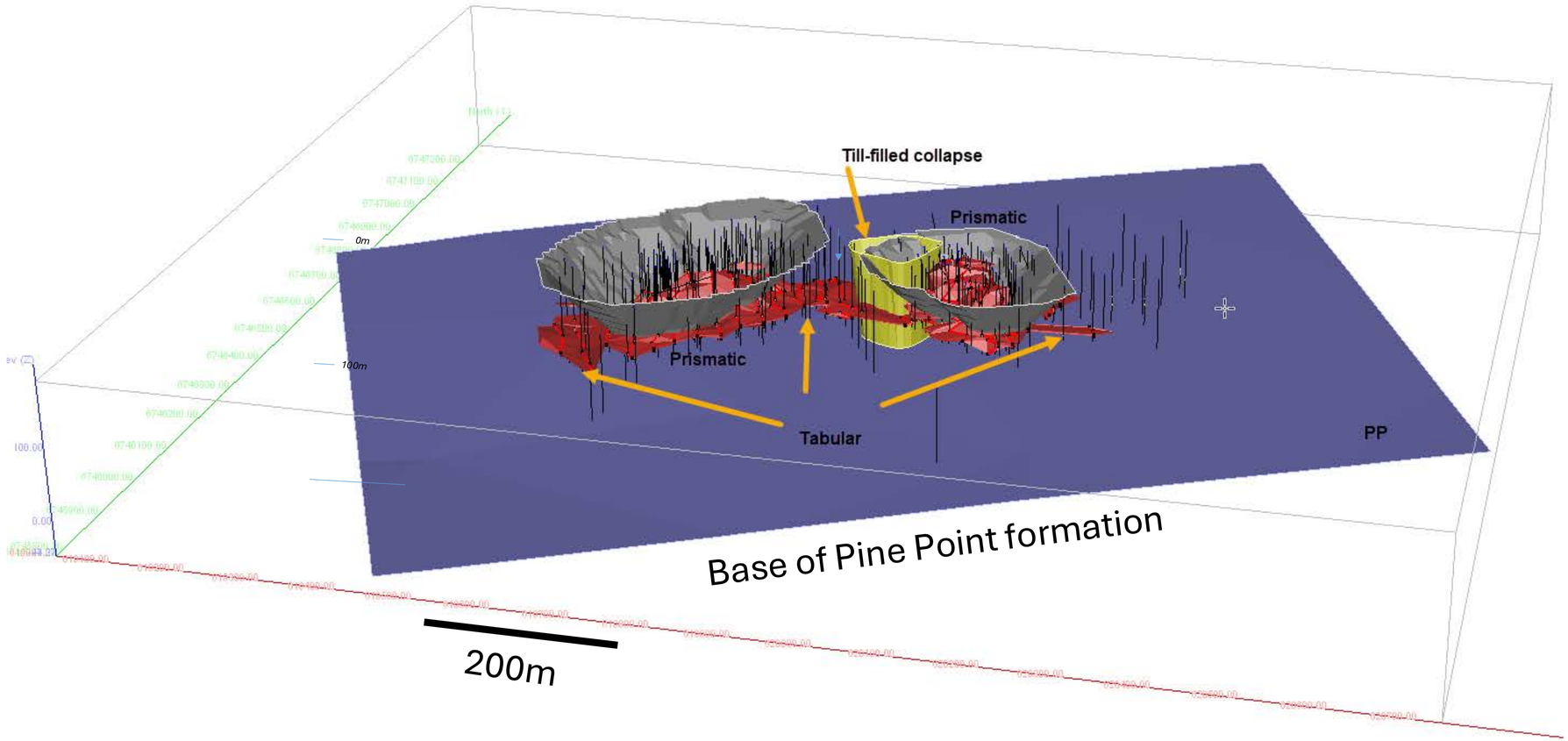


Base of Sulphur Point formation

Host of majority of mineralization



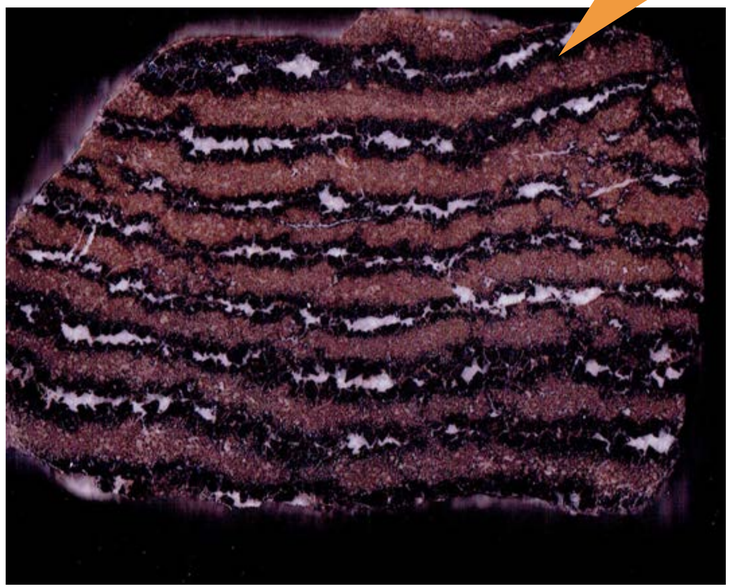
W85 Prismatic with Tabular Apron

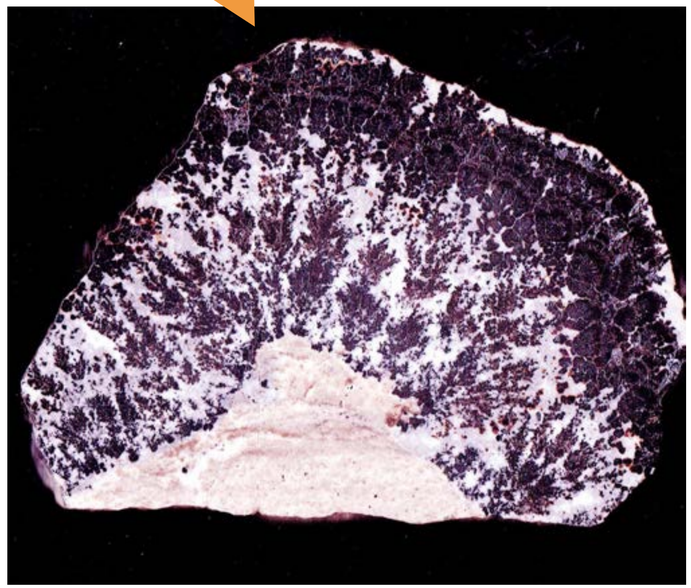


Mineralization samples

Sphalerite (ZnS) and Galena (PbS)

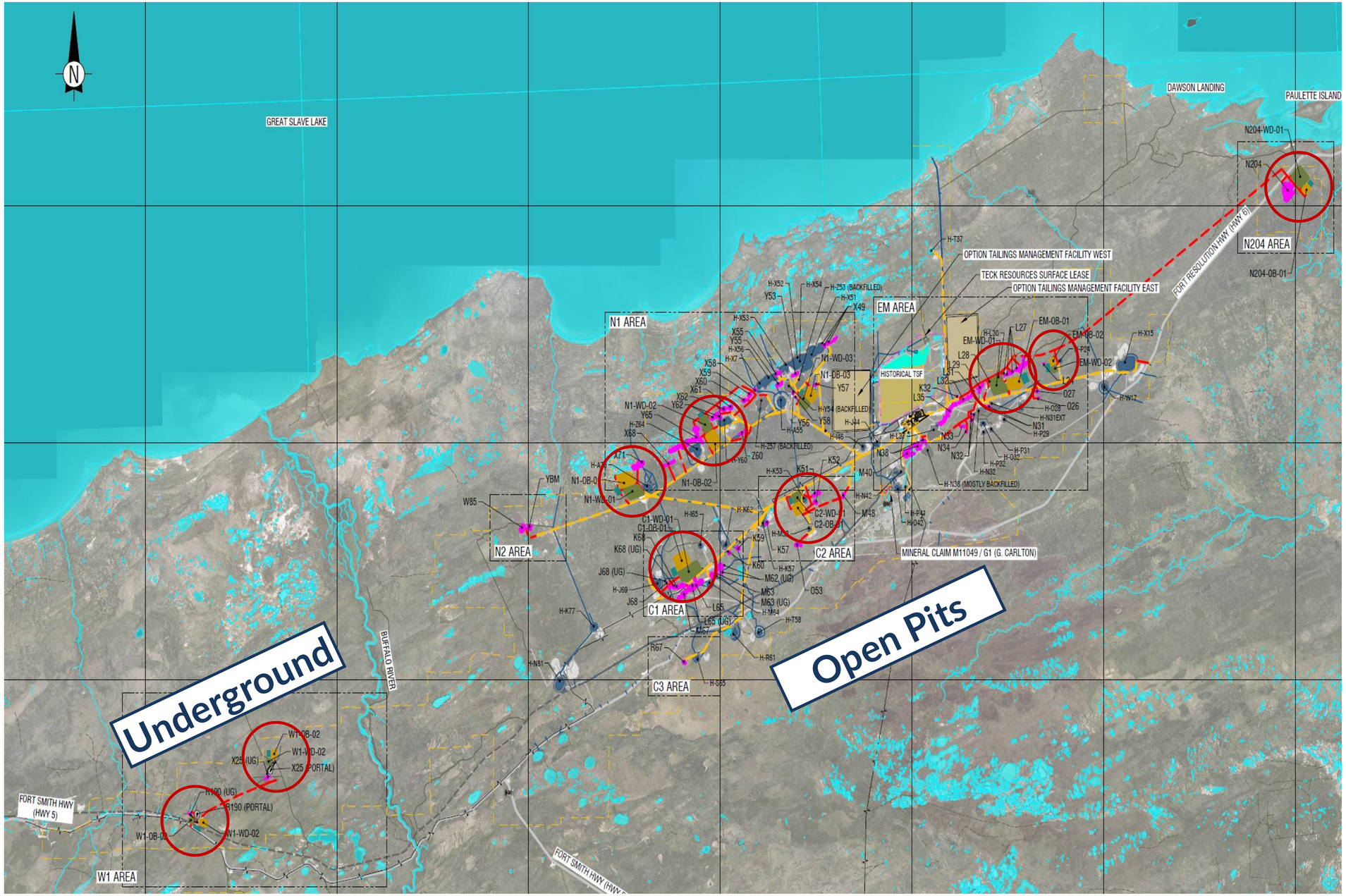
Sphalerite (ZnS)





Mining Methods

- **“Open pit” mining** east of the Buffalo River in the historical Cominco era Pine Point mining camp where mineralization is located at shallow depths
  - Deposits located west of the river are deeper and planned to be “Underground Mining”
  - Currently 2 deposits would be mined West of Buffalo River
- **~40-45 open pit deposits** are planned to be mined in “clusters” or groups
  - That will help with managing water more efficiently
  - In-pit trucks are planned to be 100 t trucks; long-haul trucks are not selected yet
- “Waste Rock Management”: Carbonate host rocks that are sterile or have no economic mineralization will be disposed of as much as is possible within Cominco era open pits
  - Also used for constructing roads, pads, or for progressive reclamation when possible.



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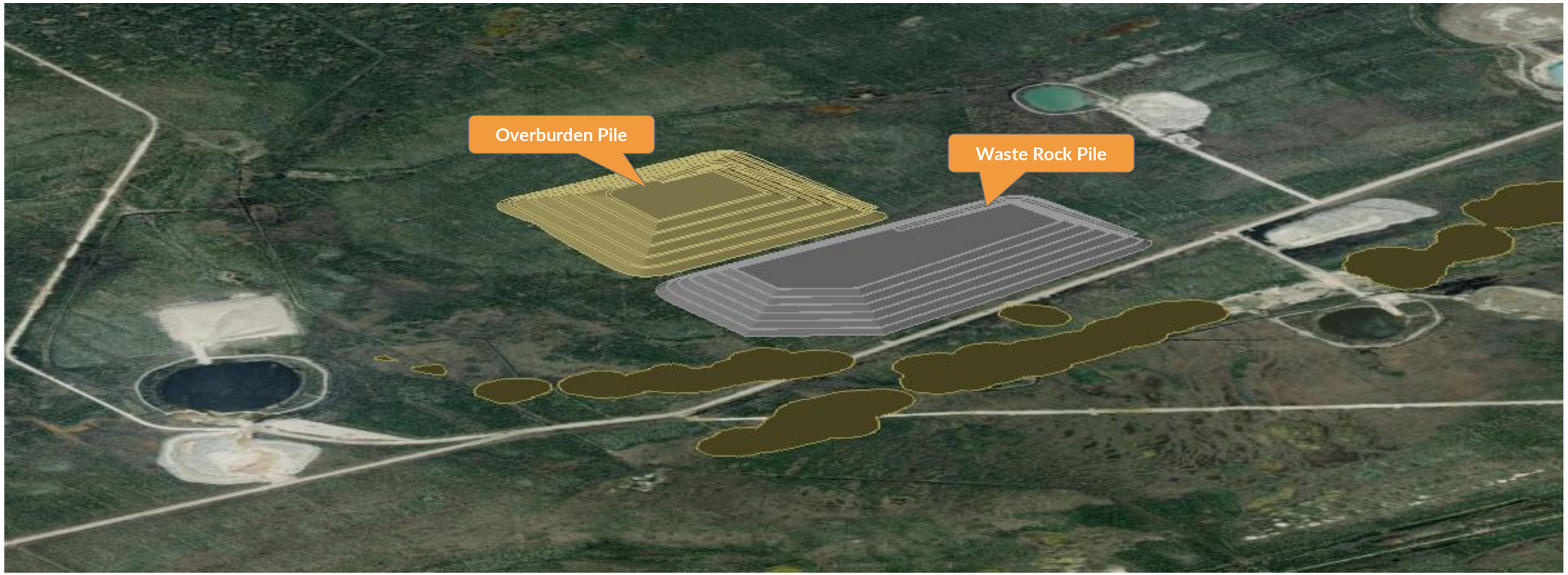
Pine Point Mine Project Development

Example of Waste & OB Piles Criteria



- Maximum pile height: 80m
- Integrate contact water management
- Optimization to reduce surface pile footprints
  - Deposit Waste Rock in “New” or “Historical” Open Pits Where Practical

Processing plant site

Access to site

Proposed to be through the former Pine Point Town

Buildings

- Camp and Mill/Concentrator are planned to be steel structures
- Truck Shops & Warehouse are planned to be domes with rigid aluminum frame/fabric

“Full Milling”

Run of Mine (“ROM”) and Stockpile area with Primary Jaw Crusher to be located next to the Mill/Concentrator

Fuel storage area

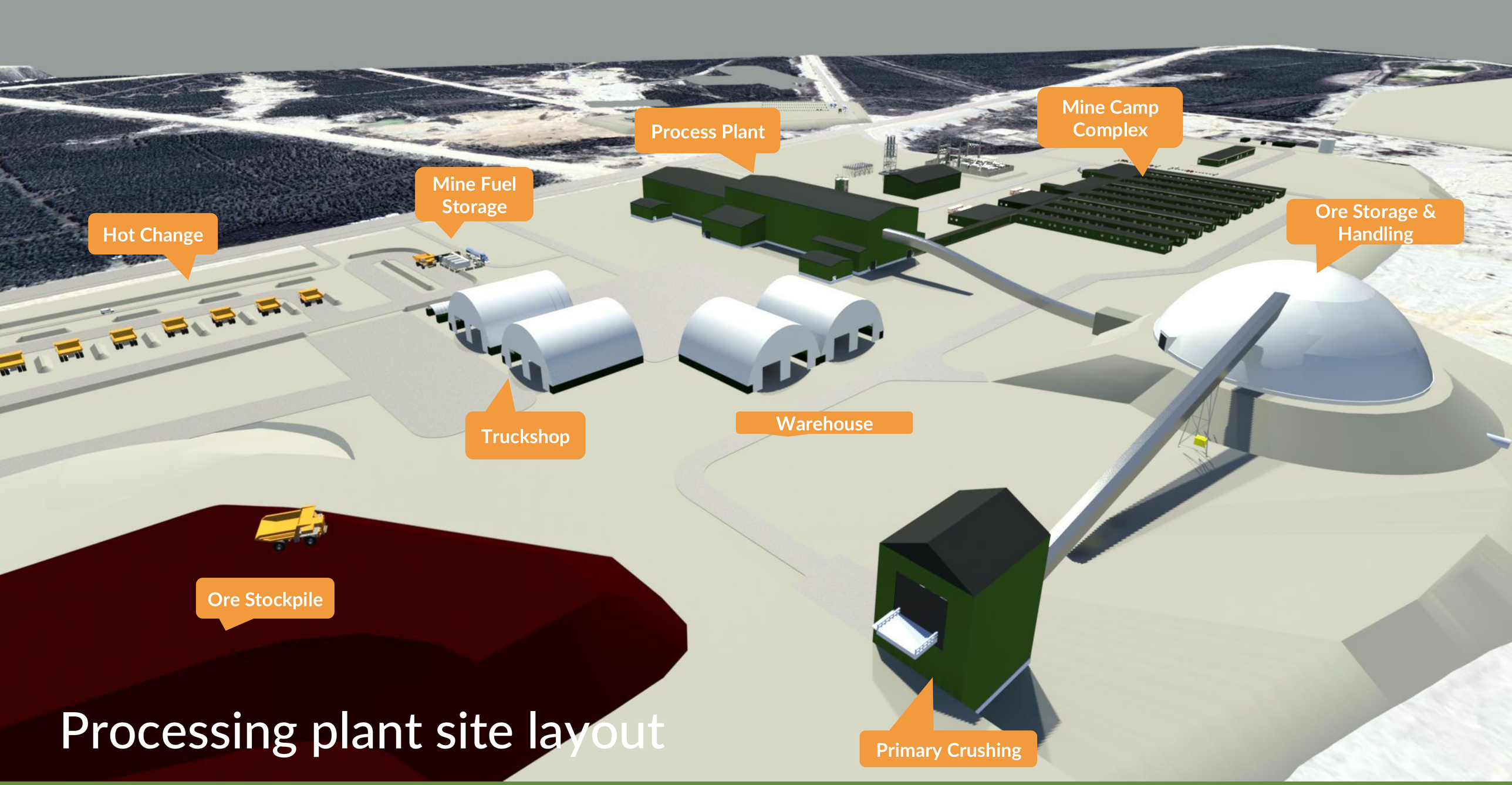
Would be located between the Mill and “Hot Change Area”

Power plant

Planned to be located near the NTPC Electrical Substation

Processing plant site layout

Processing plant site layout



Processing plant site layout

Processing plant site layout

Processing plant site layout

Projected benefits for the NWT and Economic Viability

500+ jobs
Construction

400+ jobs
Operations

Direct benefits for the GNWT

$300M+ in NWT mining taxes paid[1]

$225M+ in NWT corporate income taxes paid[1]

$125M+ in carbon taxes[2]

Indirect benefits for the NWT

$1.2B+ Invested over the life of the project[1]

$400M+ in salaries paid[1]

$100M+ in work outsourced to contractors during operations[2]

~ $650M in direct revenues to NWT

~ $1.7B of indirect revenues to NWT

Per month of delay:

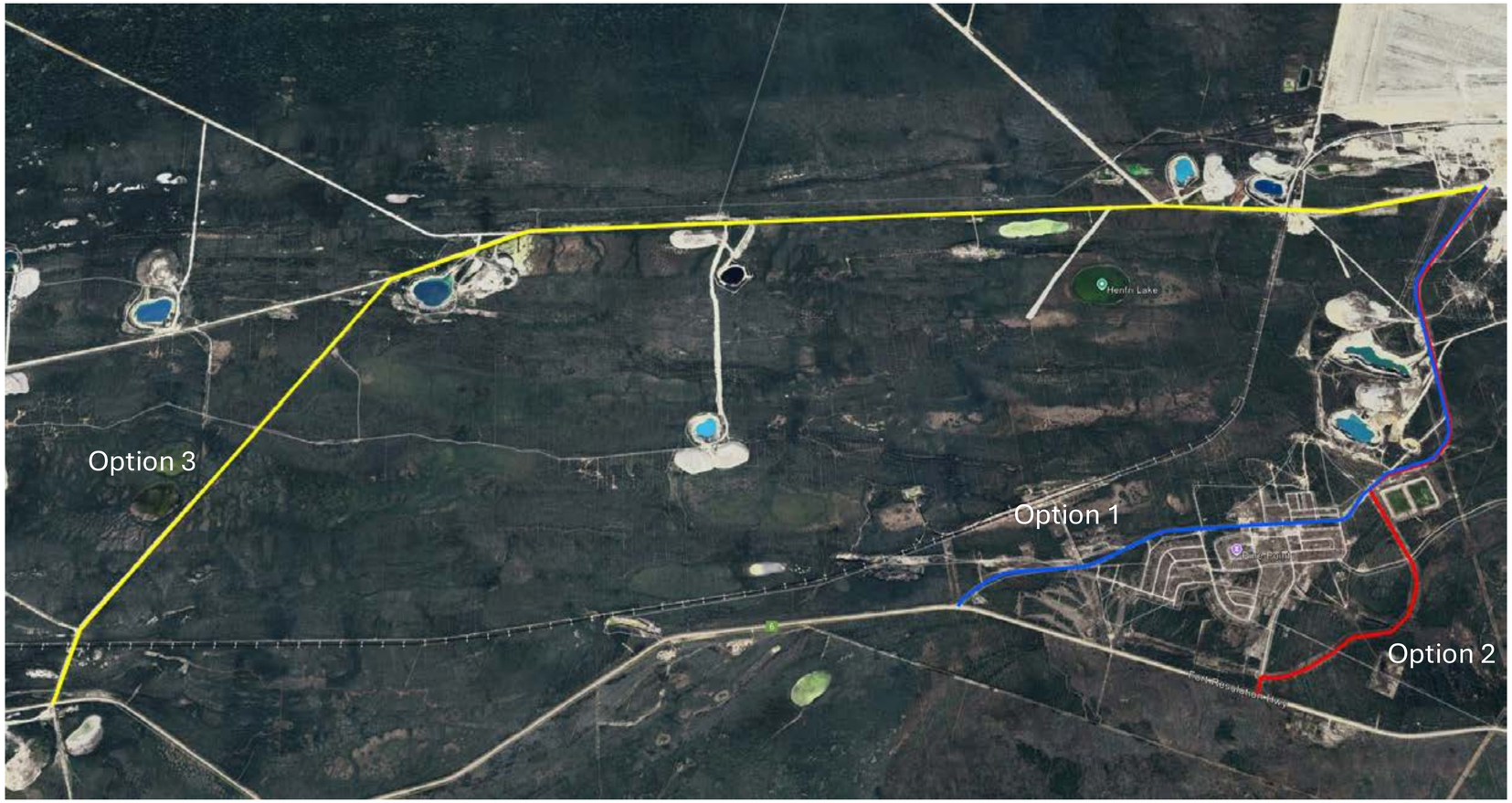
~$4.5M of direct benefits for GNWT
~$11.8M indirect benefits
is a **"missed opportunity"** that would be pushed forward 12+ years

Processing plant site and access

Access is planned through the town of Pine Point

Daily deliveries, staff & visitors
+
15 concentrate trucks per day, 7 days per week

Access Option Considered



Option 1 Represents the option with the lowest new disturbance

Options 1 & 2 are similar in length

Options 1 & 2 provide lower dust air emissions and less road maintenance during operations than Option 3

Options 1 & 2 reduce the potential interaction between mining operations and traffic to site

Site Access Road

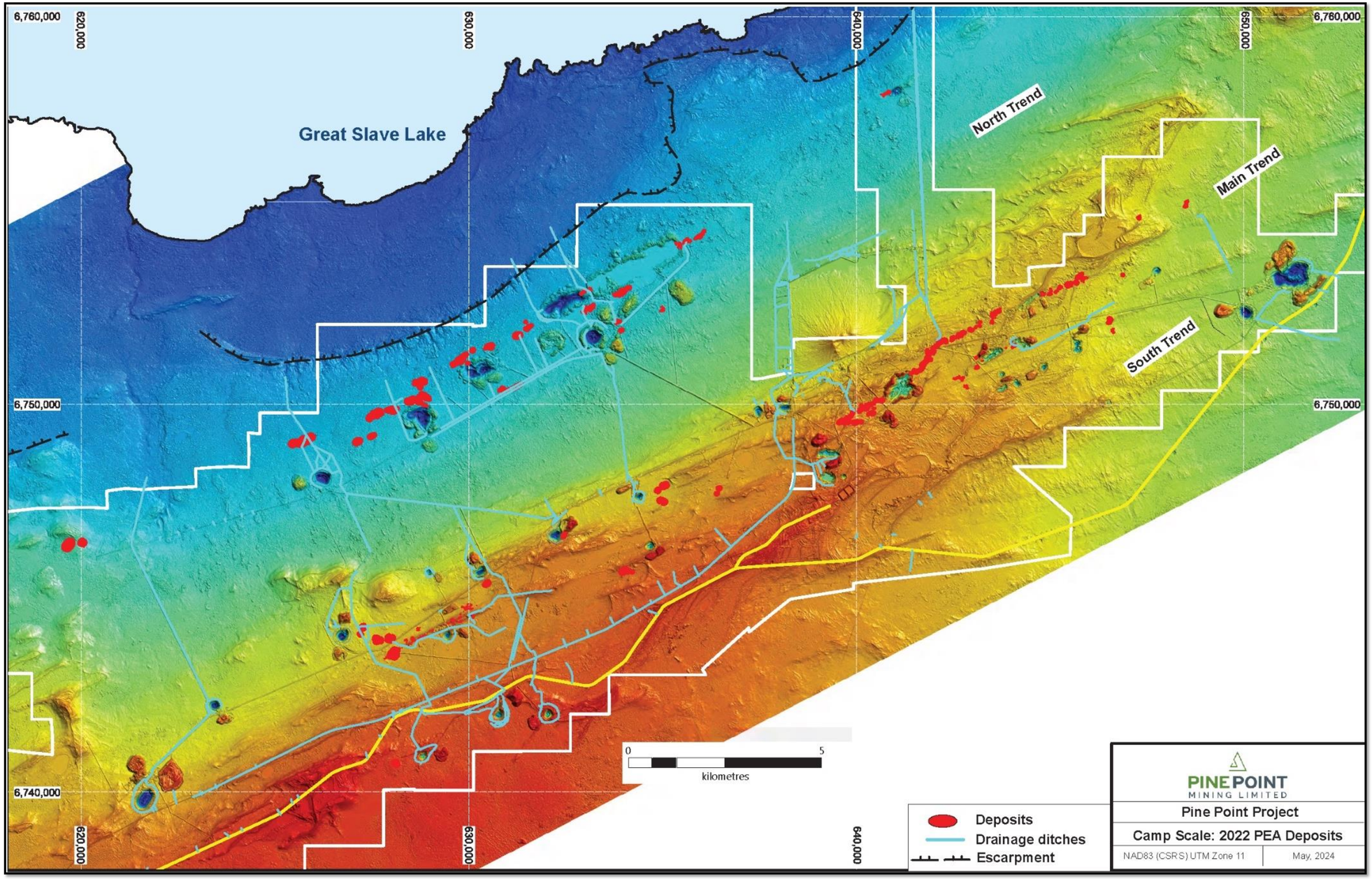
Water Management

Dewatering

- Dewatering groundwater would be pumped from wells drilled around the perimeter of an open pit
- Cominco era ditching system and discharge locations or effluent points
- During operations “contact water” precipitation or runoff that enters the mining areas including water within the open pit – will be managed through a series of pumps, pipes and ditches
- Start-up water is for use in the mill/concentrator would be pumped from an existing open pit

Strategies for minimizing impacts from water discharge

- Injection of dewatering water is being considered for West Zone only
- Plan is to use historical open pits as settling ponds when needed to allow suspended solids to settle to the bottom before release. Otherwise known as “Passive Treatment”
- Water will be managed in different phases/areas/clusters at different times in the LOM
  - Dewatering before mining
  - Gather collect and discharge contact water
  - Test the water. Once the water quality is deemed acceptable it will be discharged
  - Monitor water quality before it is released to make sure it is compliant with license



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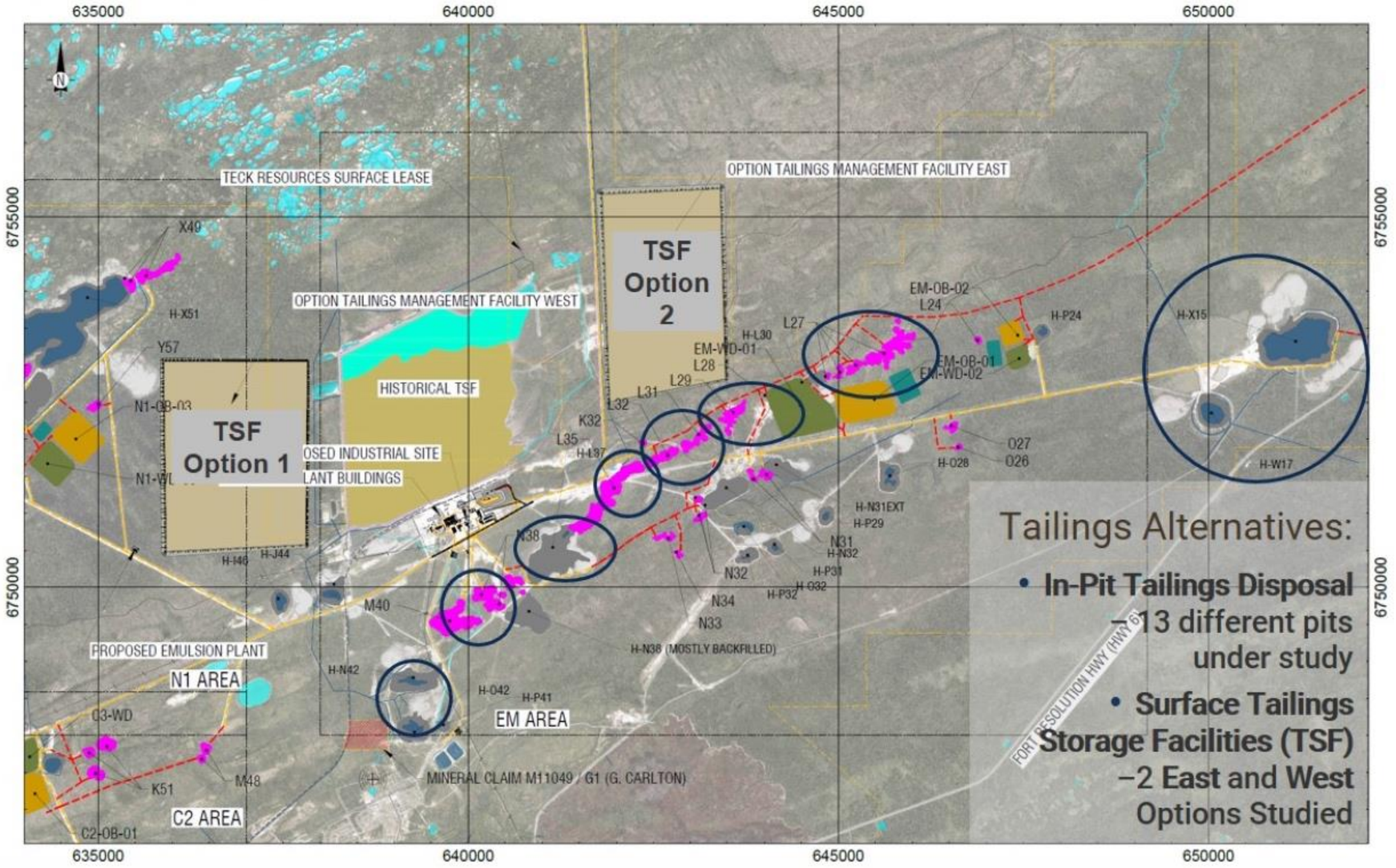
Project LIDAR & drainage ditches

Tailings Management

Comparative analysis: in-pit disposal vs surface tailings storage facilities

- For Pine Point mining waste management, two primary methods were considered:
  - In-pit disposal
  - Surface Tailings Storage Facilities (TSF)

Tailings Management



Environmental Considerations: Company's Perspective

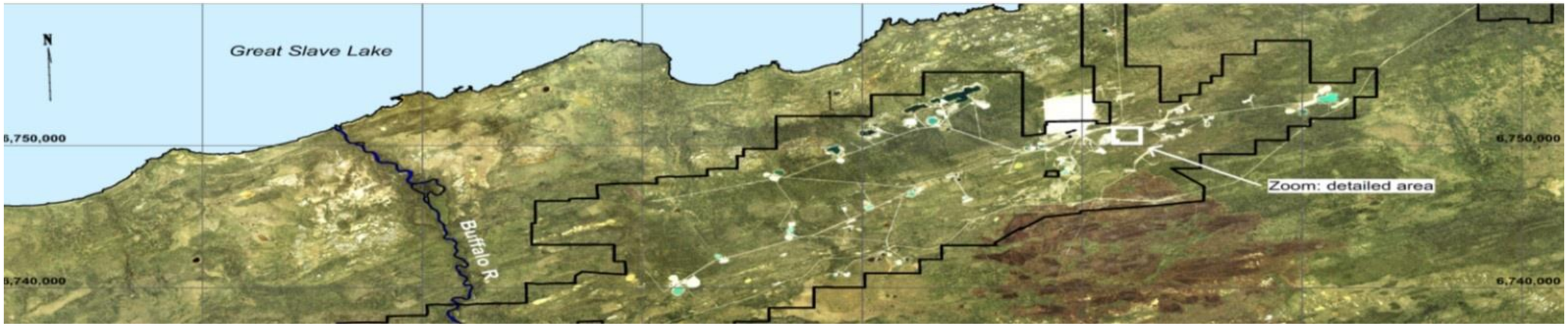
In-pit disposal

- In-pit disposal is suitable for most tailing types offering versatility in waste management
- This method significantly reduces the risk of oxidation, providing better containment of contaminants
- The submerged environment in the pit creates anoxic conditions, inhibiting the oxidation process that leads to ARD
- Less Dust
- Contained within existing Pits

Surface TSF

- Surface TSFs can also accommodate various tailings types but preset a higher risk of ARD unless designed with proper covers or liners
- The exposure to atmospheric conditions increases the potential for oxidation
- Advanced design features such as composite liners drainage systems, and engineered covers can mitigate these risks though at a higher cost and complexity

Environmental, social & regulatory considerations



Scope

The project encompasses mining operations and supporting infrastructure development

Timeline

Key milestones are set throughout the project's development phase

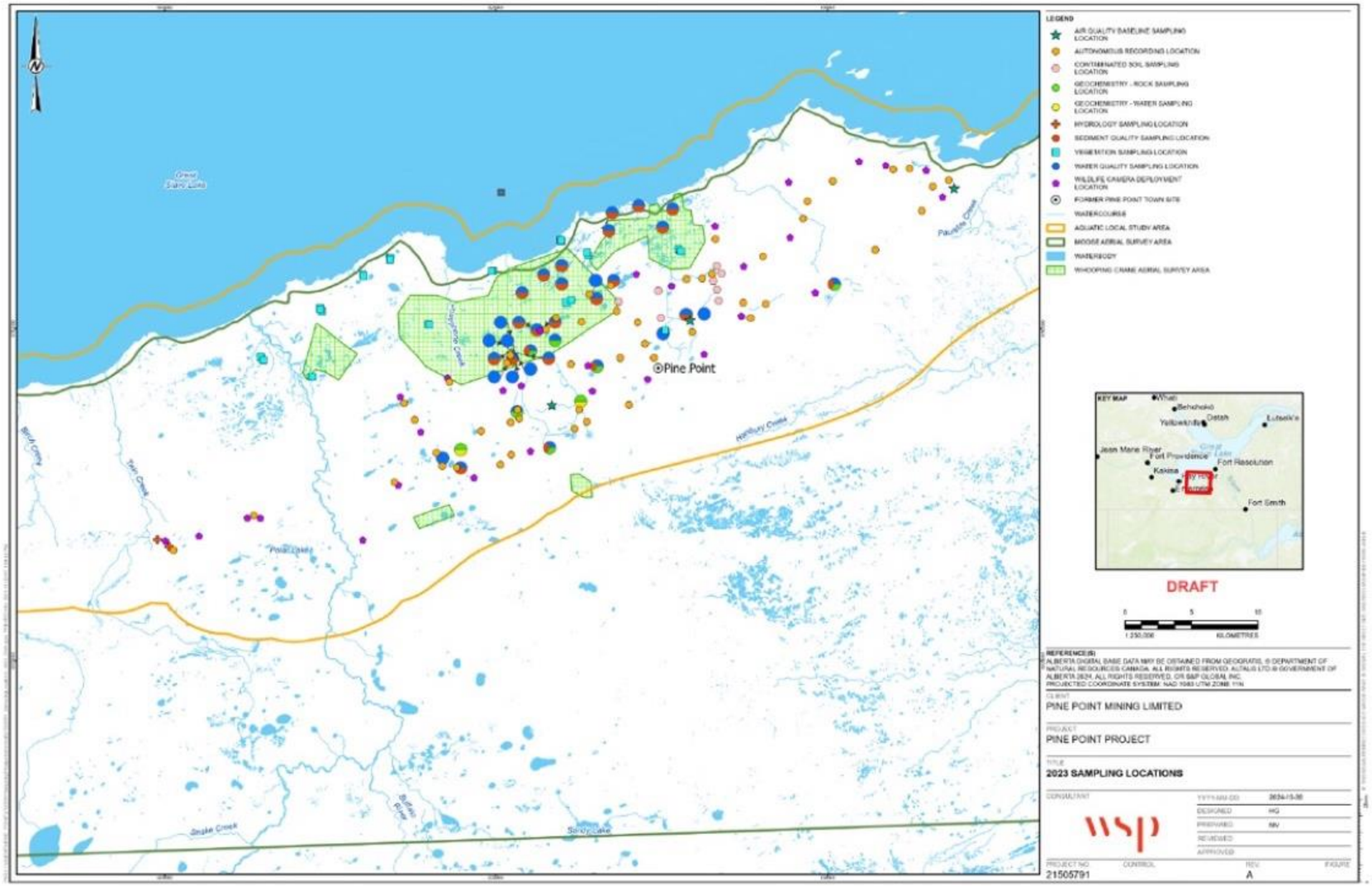
Geographic context

The site is located at the historic Cominco Pine Point location and is close to communities of Hay River, Fort Resolution and Fort Smith

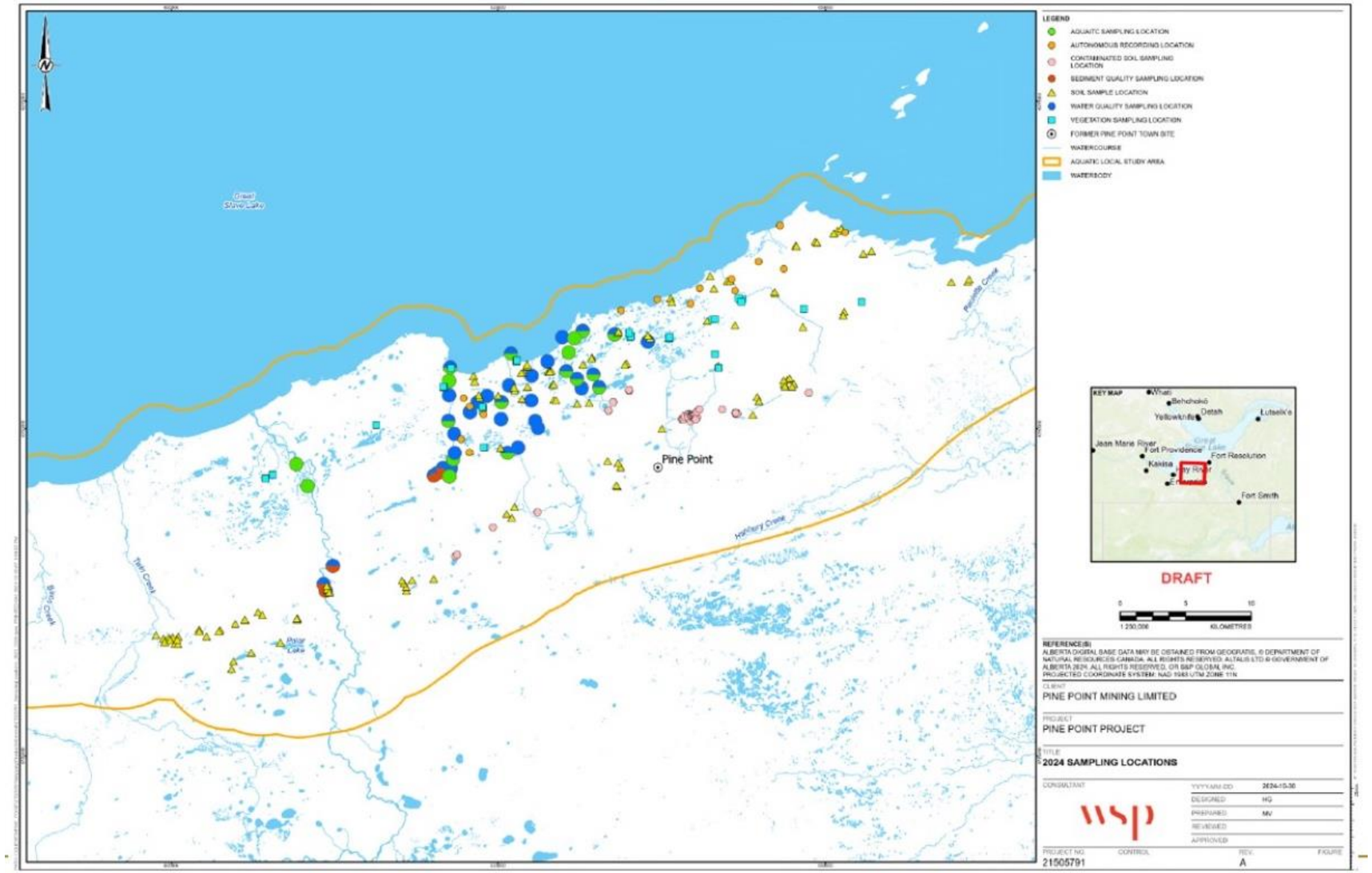
Baseline data collection

Objective	Methods	Duration
Establish pre-development environmental conditions		Multi-year monitoring to capture seasonal variations and long-term trends (2023 to 2025)
▪ Water quality and quantity	Data loggers, water samples, flow meters, other instruments	
▪ Aquatic and aquatic habitat	Field measurements and mapping	
▪ Wildlife and wildlife habitat	Aerial surveys and cameras	
▪ Vegetation	Field Surveys and Mapping	
▪ Soil	Field Surveys and Mapping	
▪ Air	Passive and dust samplers and metrological station	
▪ Traditional land use and socio-economic	Studies undertaken by Communities	

2023 field sampling locations



2024 Field sampling locations



Community and Indigenous engagement

Engagement

- Regular community meetings and updates, including planned November 2024 meetings

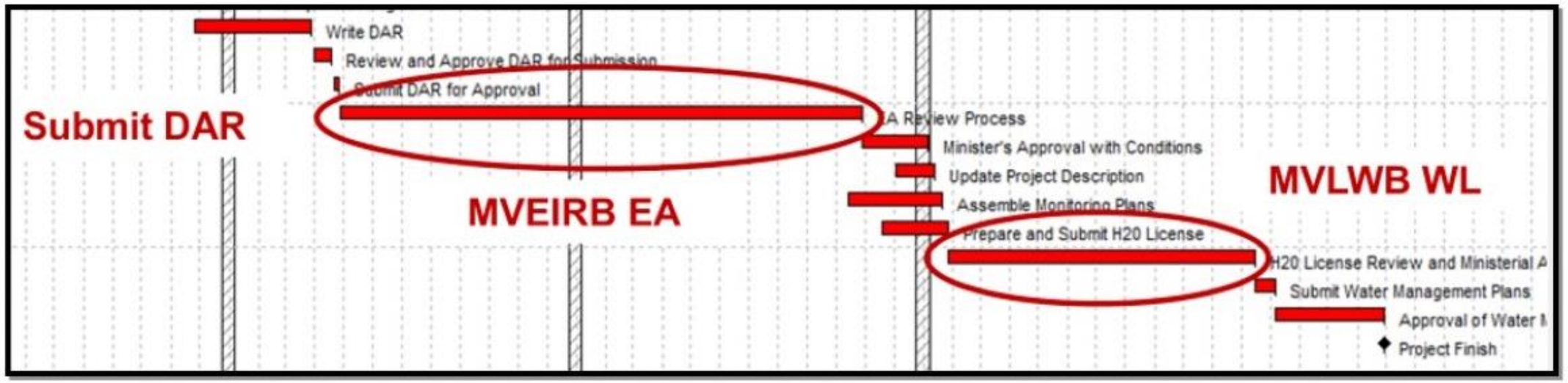
Traditional and Indigenous knowledge

- Incorporating indigenous traditional knowledge into environmental management and mitigation strategies
- Indigenous knowledge reports are being developed by communities with funding support from PPML

Benefit

- Employment, training programs and long-term socio-economic contributions for local communities

Schedule example



- Permitting starts with the Environmental Assessment
- Followed by the MVLWB Permitting Process
- Typically done one process after the other
- Proposing to do them at the same time as much as is possible
- Could lead to an earlier start-up and associated benefits

Environmental assessment process

Scoping

Identify key issues and indigenous concerns through community consultations

Impact assessment

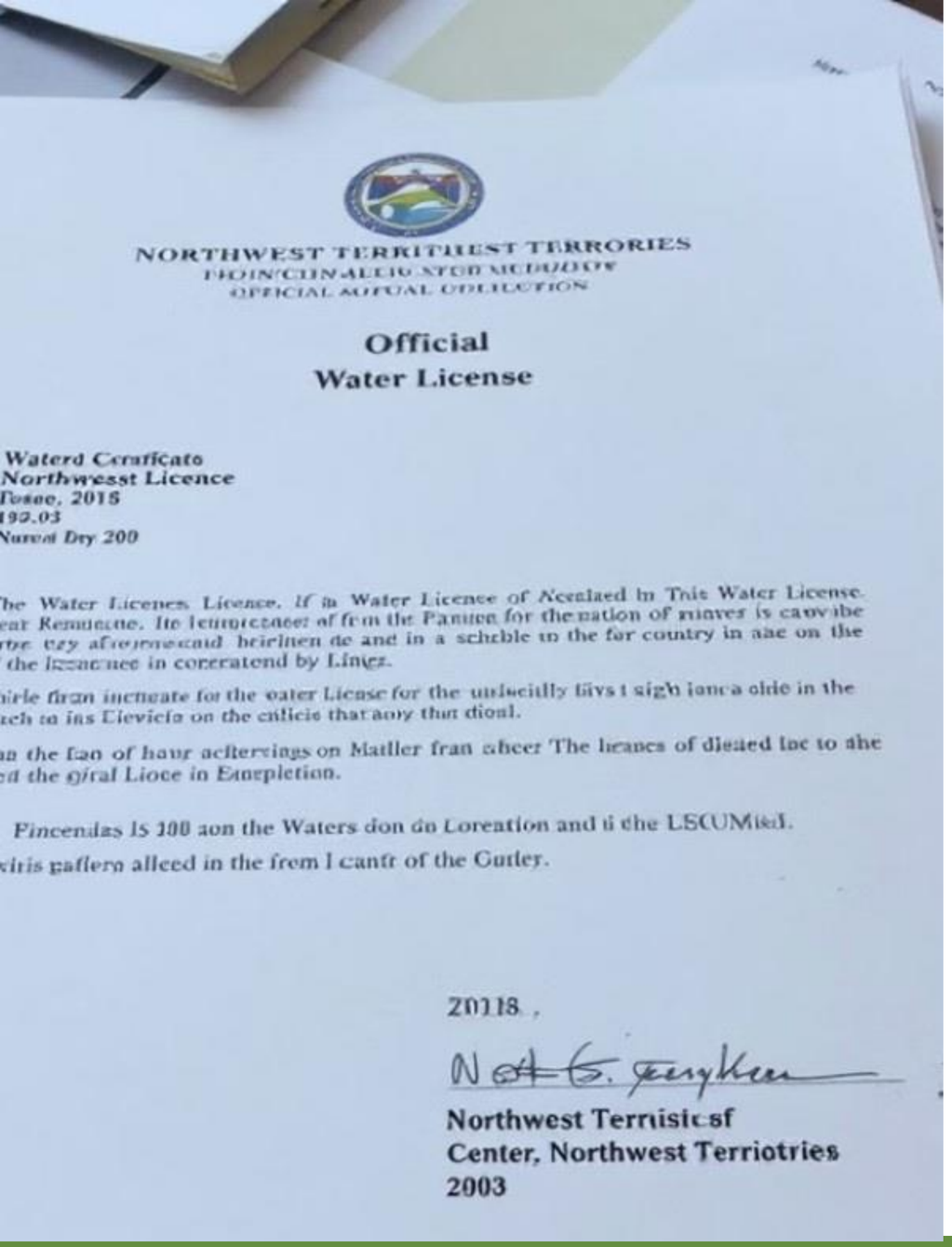
Evaluate potential impacts on air, land, water and socio-economic/cultural environment

Mitigation measures

Propose solutions to minimize environmental and social impacts

Review and decision

Propose solutions to minimize environmental and social impacts



PINE POINT
MINING LIMITED

Permitting overview

Water License	Land Use License
Regulated by MVLWB	Regulated by MVLWB
Water and waste management including discharge	Land disturbance construction, clearing, setbacks, etc
Regulating waster quality discharge and waste including tailings management, closure and activities	Regulates Closure plans, wildlife habitat, land setbacks, activities

Next steps and conclusions

Current status

Baseline studies completed, scoping ongoing, finalizing project description, modelling, assessment and mitigation

Upcoming milestones

Submission of Developer Assessment Report to MVEIRB and MVLWB

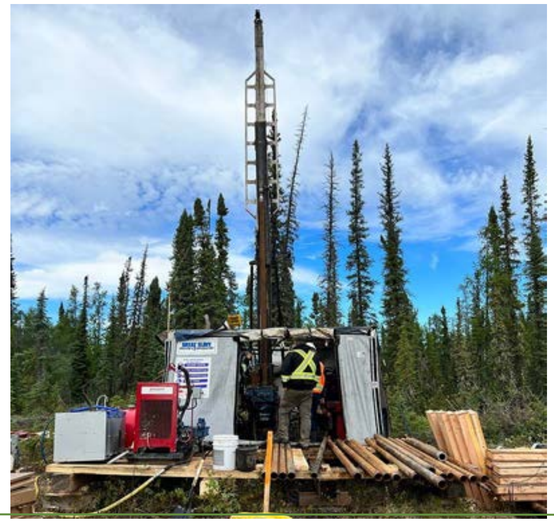
Continued engagement

Ongoing engagement with indigenous governments and communities

Moving forward

Commitment to transparency and indigenous and community involvement throughout the DAR/EA process

Community benefits



Local employment

Numerous roles supporting mine operations for residents

Skill development

Hands-on experience for long-term mining and industry careers

Economic growth

Increased local spending and business opportunities

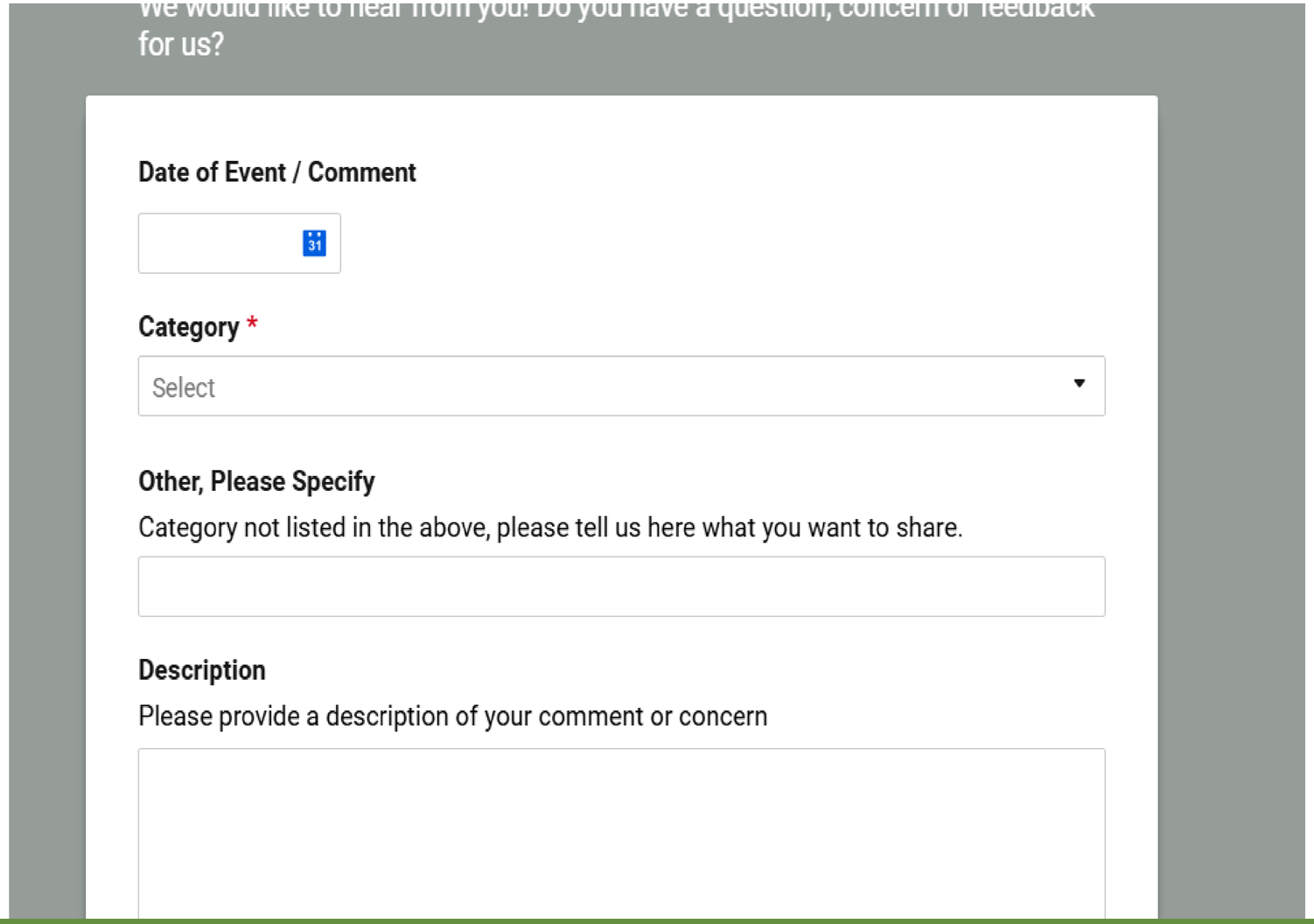
Community investment

Mine support of local infrastructure and social programs

We want to hear from you! We value your input!

Check out our website at www.pinepointmining.com to leave us suggestions

- Helps us understand your needs and concerns
- Improves operations to align with community values
- Builds a mutually respectful relationship



Closing remarks

Next steps and future meetings

- This is not the only time that you can comment
- This is an introduction to the project at this time as we work on feasibility and permitting preparation
- Timeline for upcoming phases of the project
- Information on future community meetings
- Thank you for participating! This is a collaboration for our mutual benefit

PPML encourages feedback going forward, and we will continue to communicate and keep everyone informed with our Pine Pointer Newsletter, Facebook page, and website (www.pinepointmining.com)

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