TERRANE METALS CORP.

Integrating ARD Prevention into the Mt. Milligan Project

December 2008

Project Information

- Project is 155 km northwest of Prince George, BC
- Proven and Probable Mineral Reserve - 334 Mt averaging 0.22% copper and 0.43 grams per tonne gold
- Large scale open pit mining from two pits
- 60,000 tonnes per day processing plant
- Peak mine production of 44 Mt/a @ 0.82 waste:ore strip ratio
- Conventional copper-gold concentrator with flotation
- Two tailing streams:
  - cleaner tailing (7,200 tpd)
  - scavenger tailing (52,800 tpd)
- Capital cost of $917 million
- 700 direct jobs during construction and 400 jobs during operations

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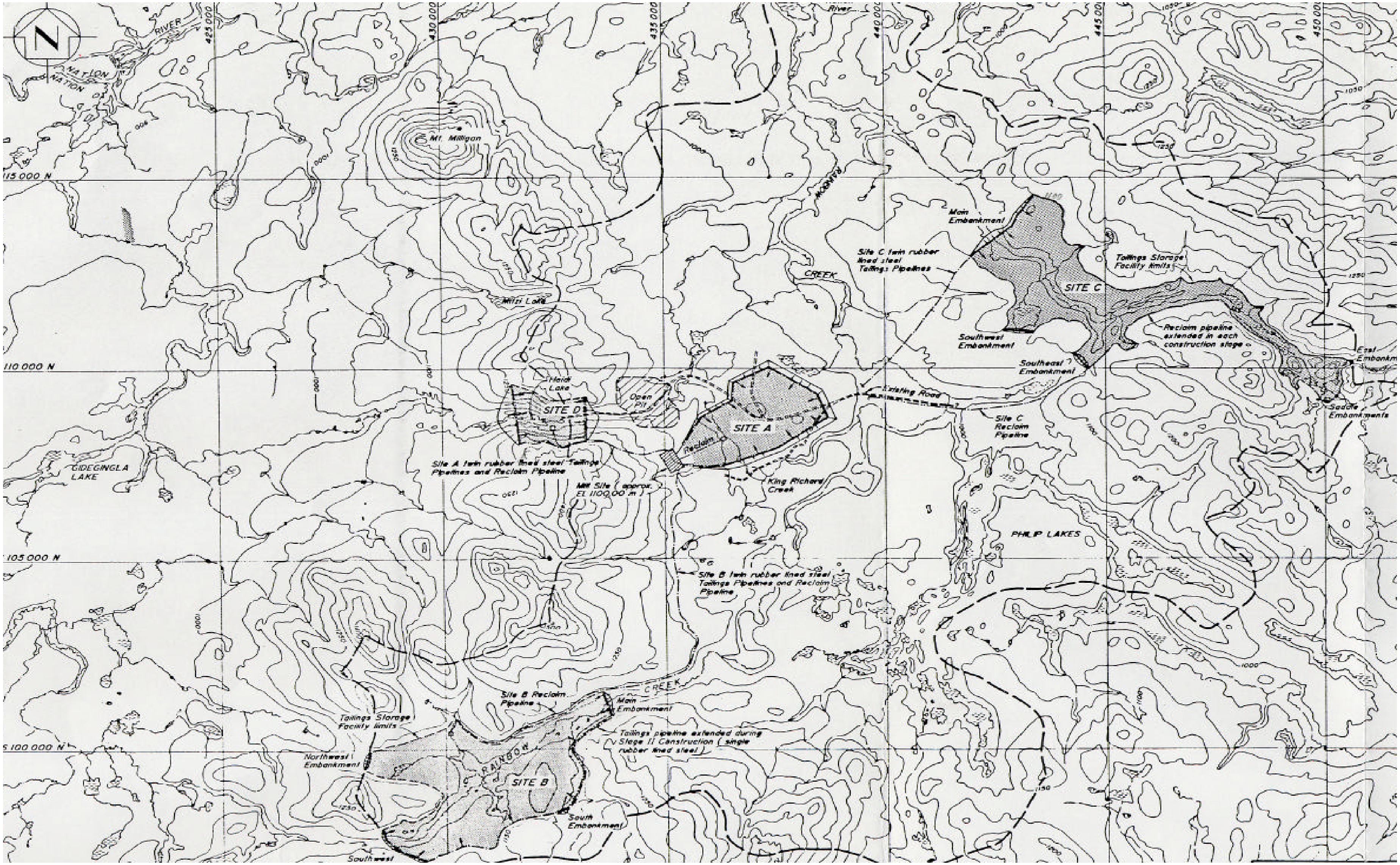
Waste Disposal Alternatives



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General Arrangement

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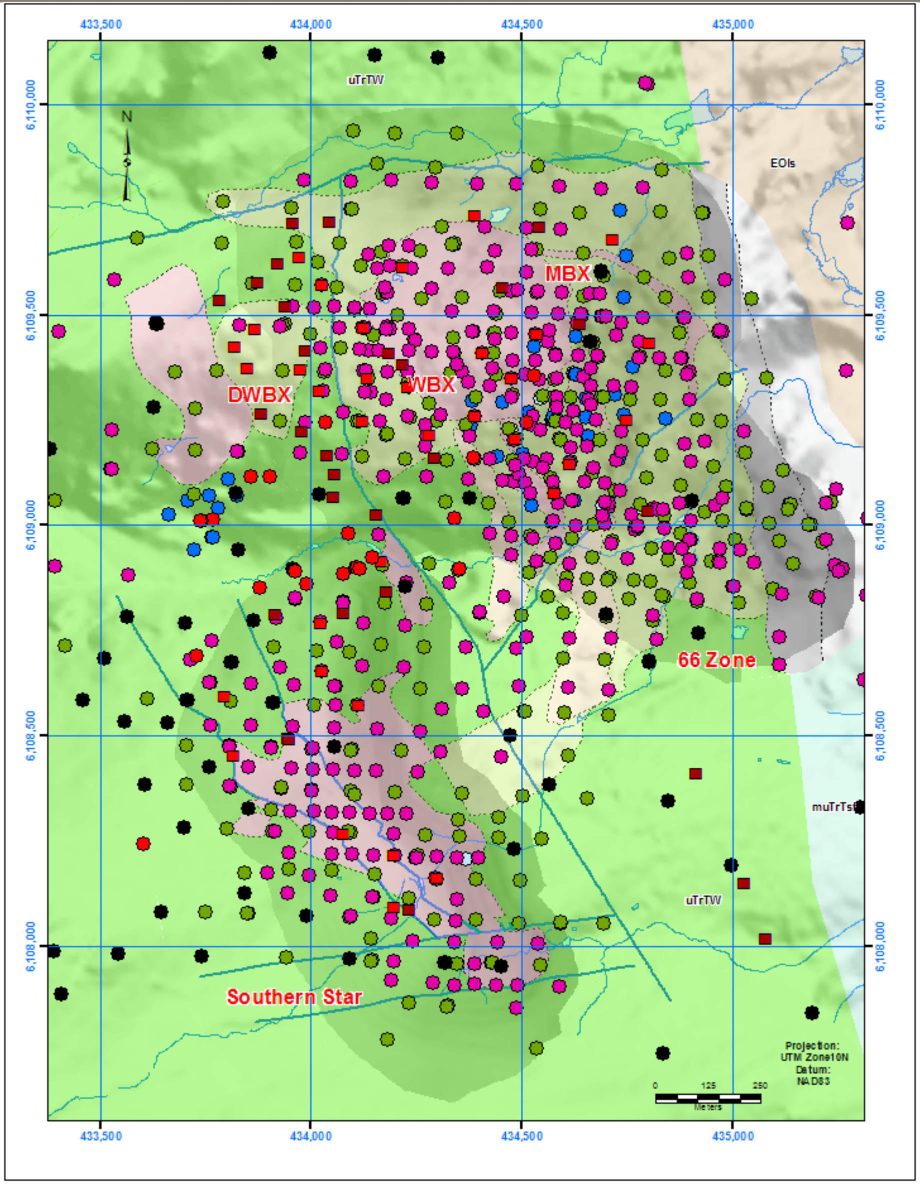
M E T A L S C O R P.

Drill Holes



Over 1000 drill holes!

ARD/ML Database

- Mineralogical studies of fresh and weathered rock
- over 1800 Acid Base Accounting (ABA) assays
- over 5000 multi-element scans
- 59 shake flask extractions
- 56 Net Acid Generation tests
- 23 tailing solution assays from metallurgical studies
- 7 column tests
- 16 humidity cell tests.

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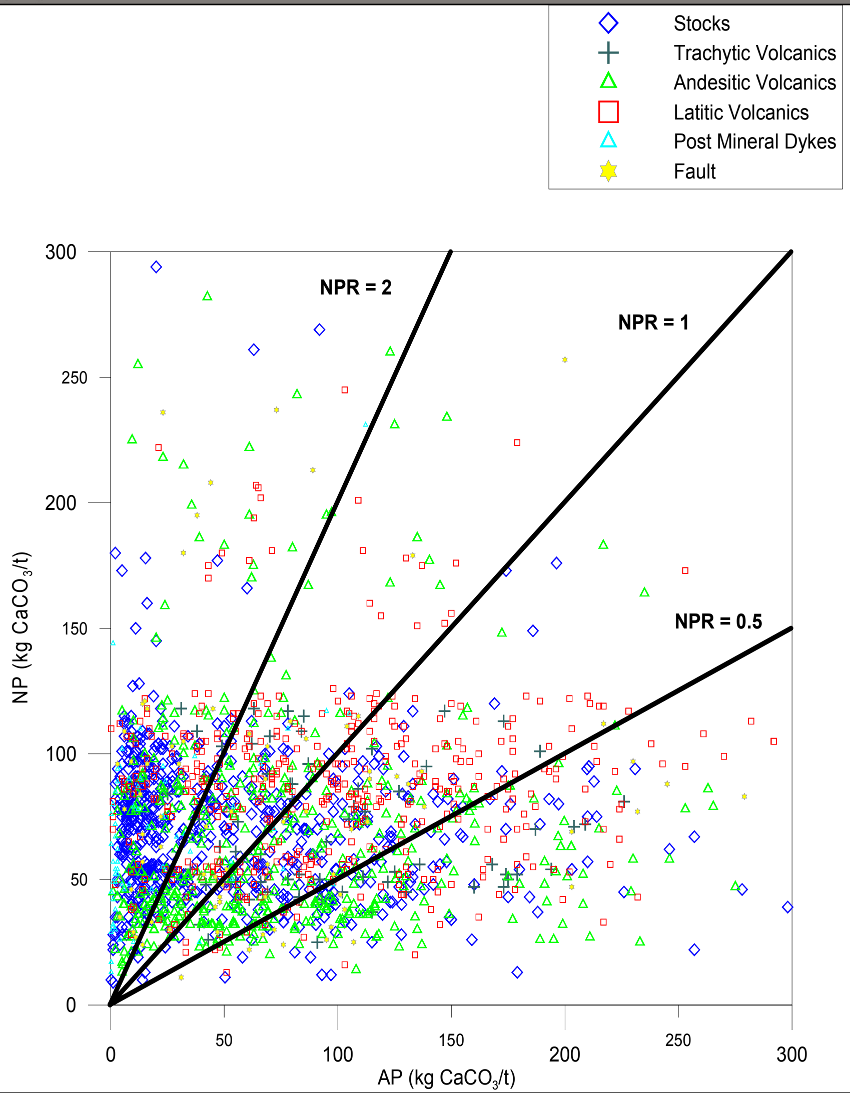
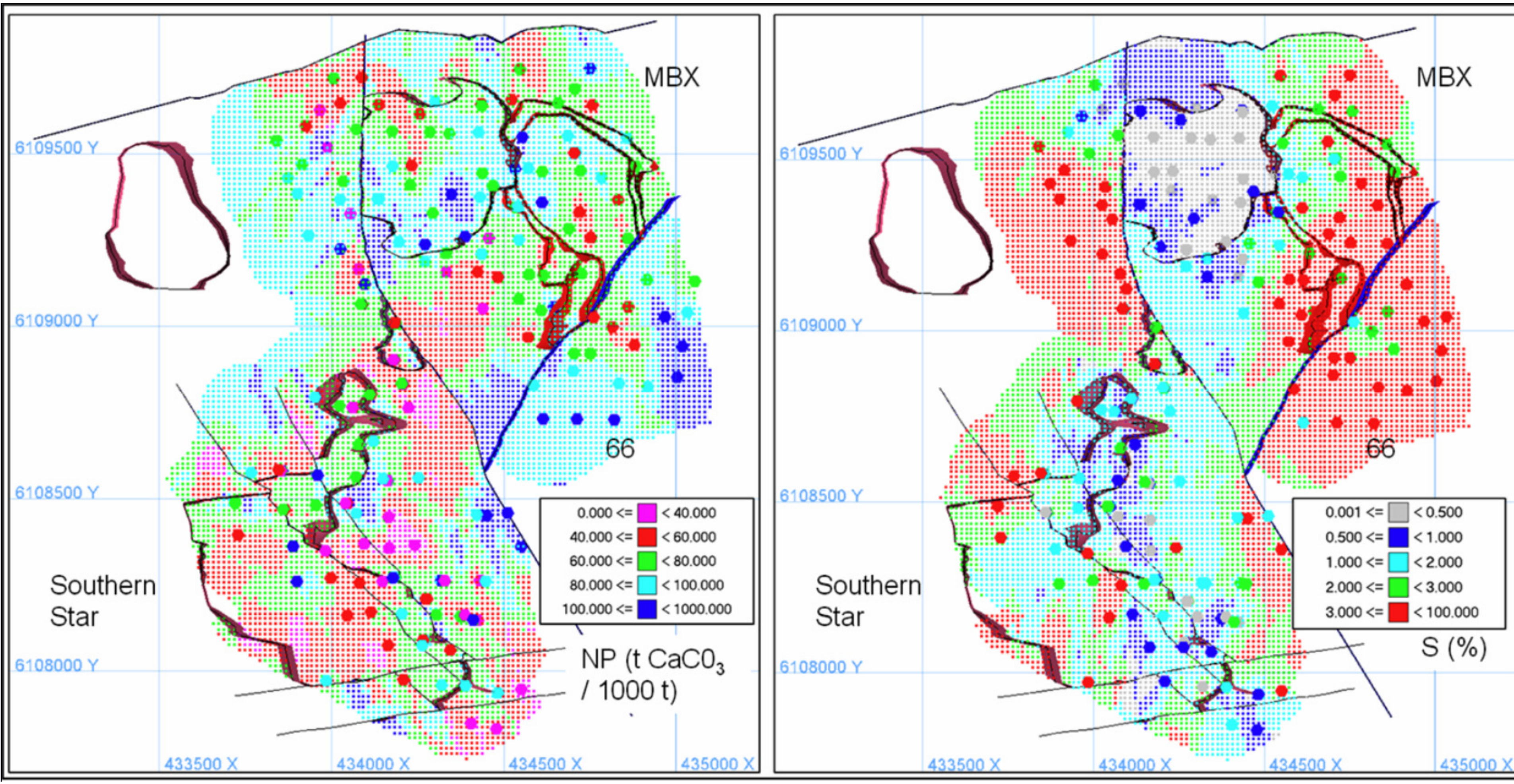
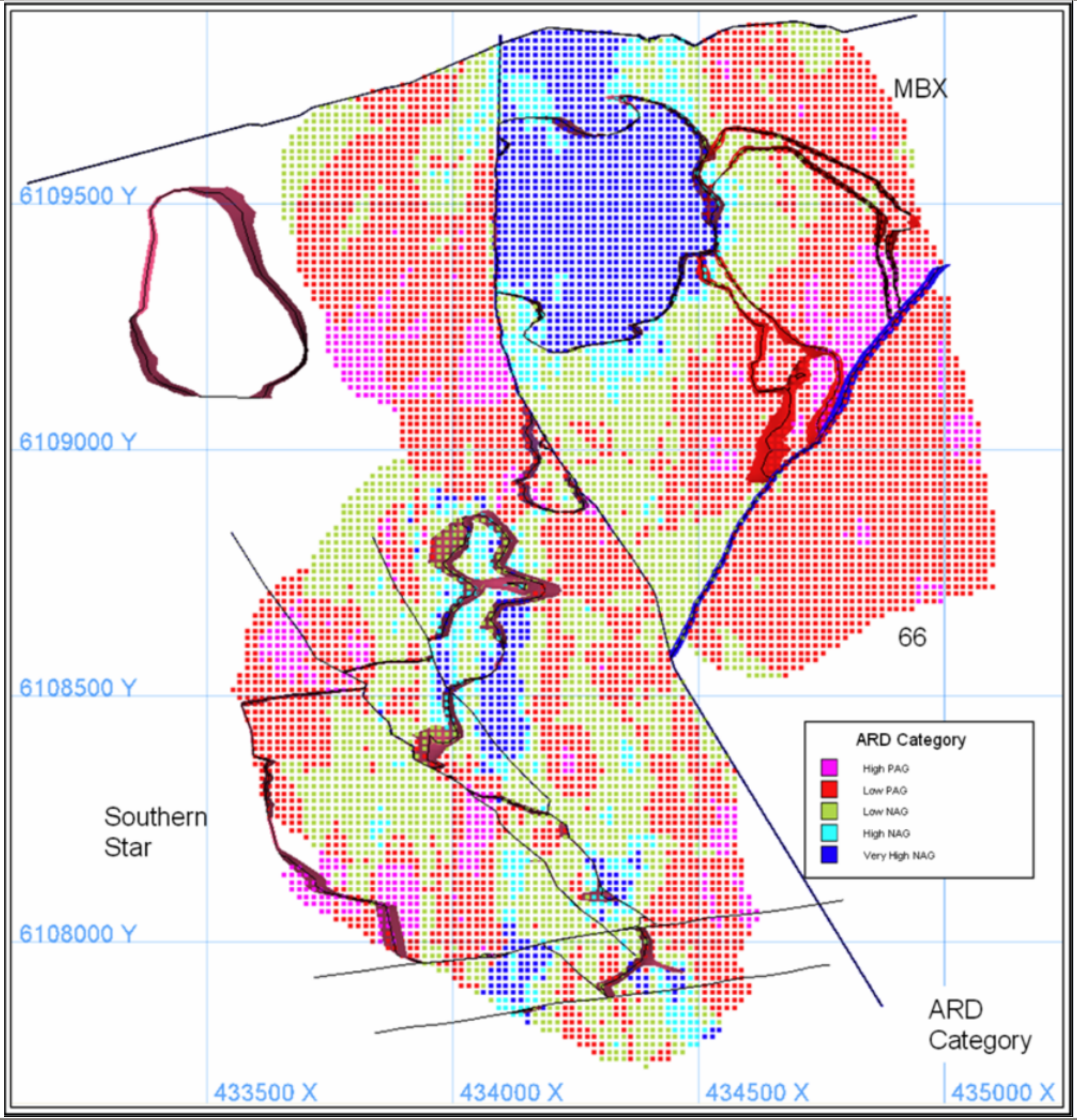
Results from ABA



Block Model Results – NP and S



Block Model Results – ARD Category



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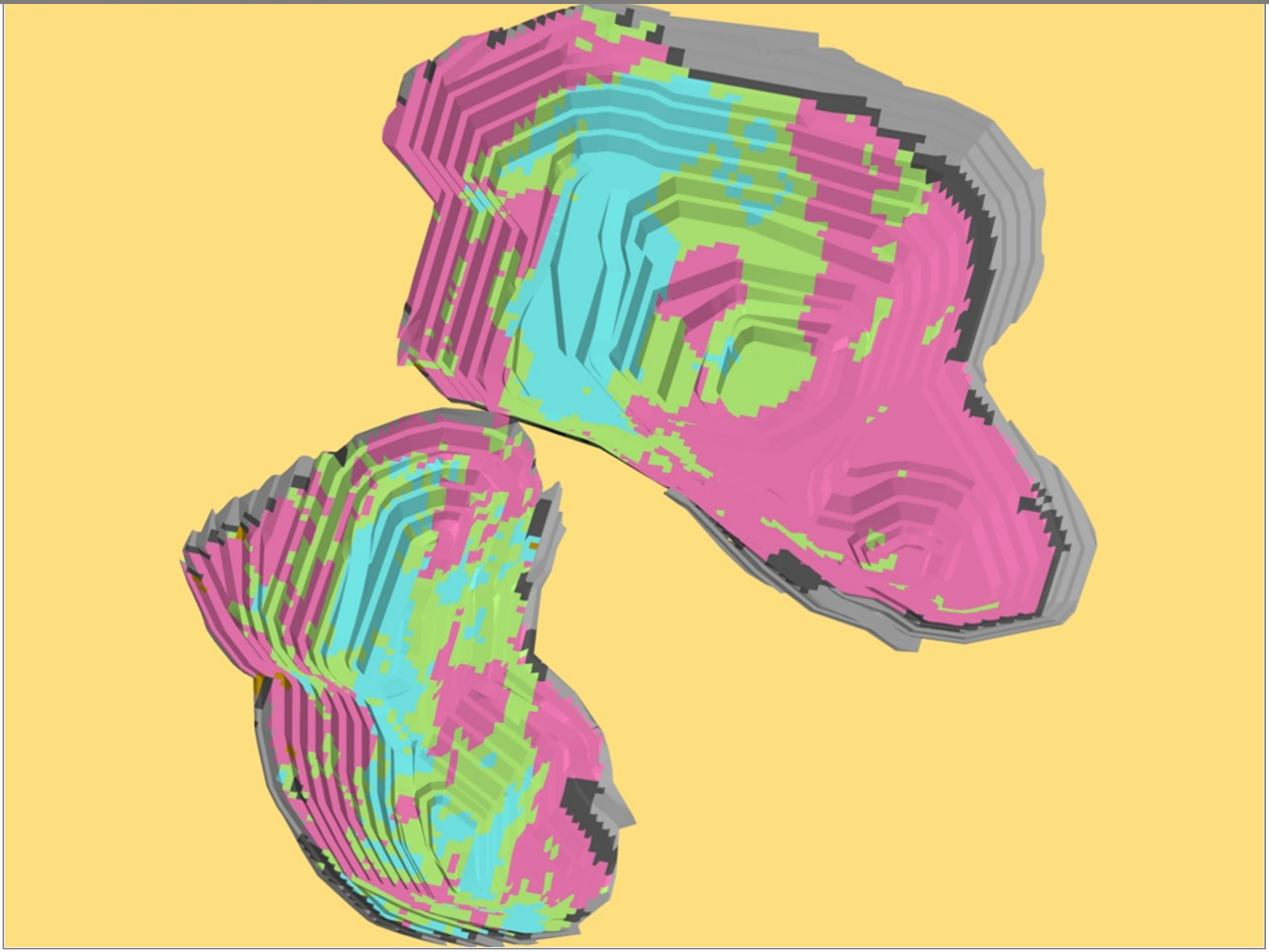
Ultimate Pit Walls ARD Potential



Some Findings

- Two types of tailing:
  - Scavenger tailing is low sulphur – NAG
  - Cleaner tailing is high sulphur (HCT generated ARD in 2.6 years) – PAG
- From the block model, about 37% of the waste rock (25% of the total waste including overburden) has a NPR less than one
- PAG and NAG waste rock blocks tend to cluster
- Acidic drainage has not been produced from laboratory testing of waste rock.
  - High sulphur/low carbonate (NPR = 0.5) HCT ran for 9.5 years generated neutral pH leachate with low metal concentrations.
  - NAG test results are consistent with ABA
  - Humidity cells and sequential NAG suggest NPR cutoff between one and two
  - Nevertheless chose a NPR segregation criteria of 2.0
- Oxide/weathered waste rock somewhat higher metal leaching compared to non-oxidized waste rock

Waste Management Principles

- Segregate and submerge PAG waste rock and cleaner tailing
- Segregate and submerge oxide/weathered waste rock
- Use NAG waste rock and overburden for construction
- Use scavenger tailing for TSF cover material

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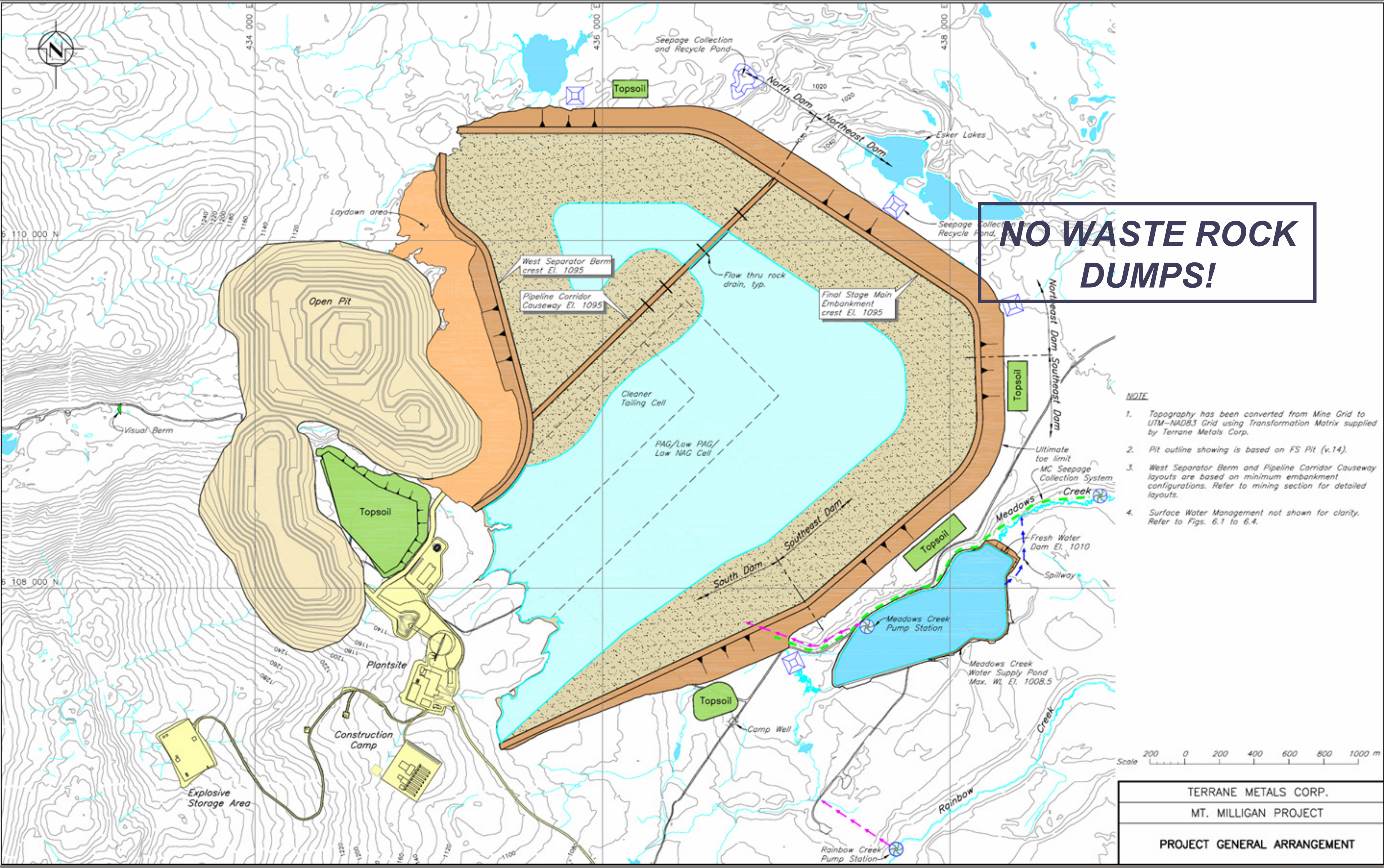
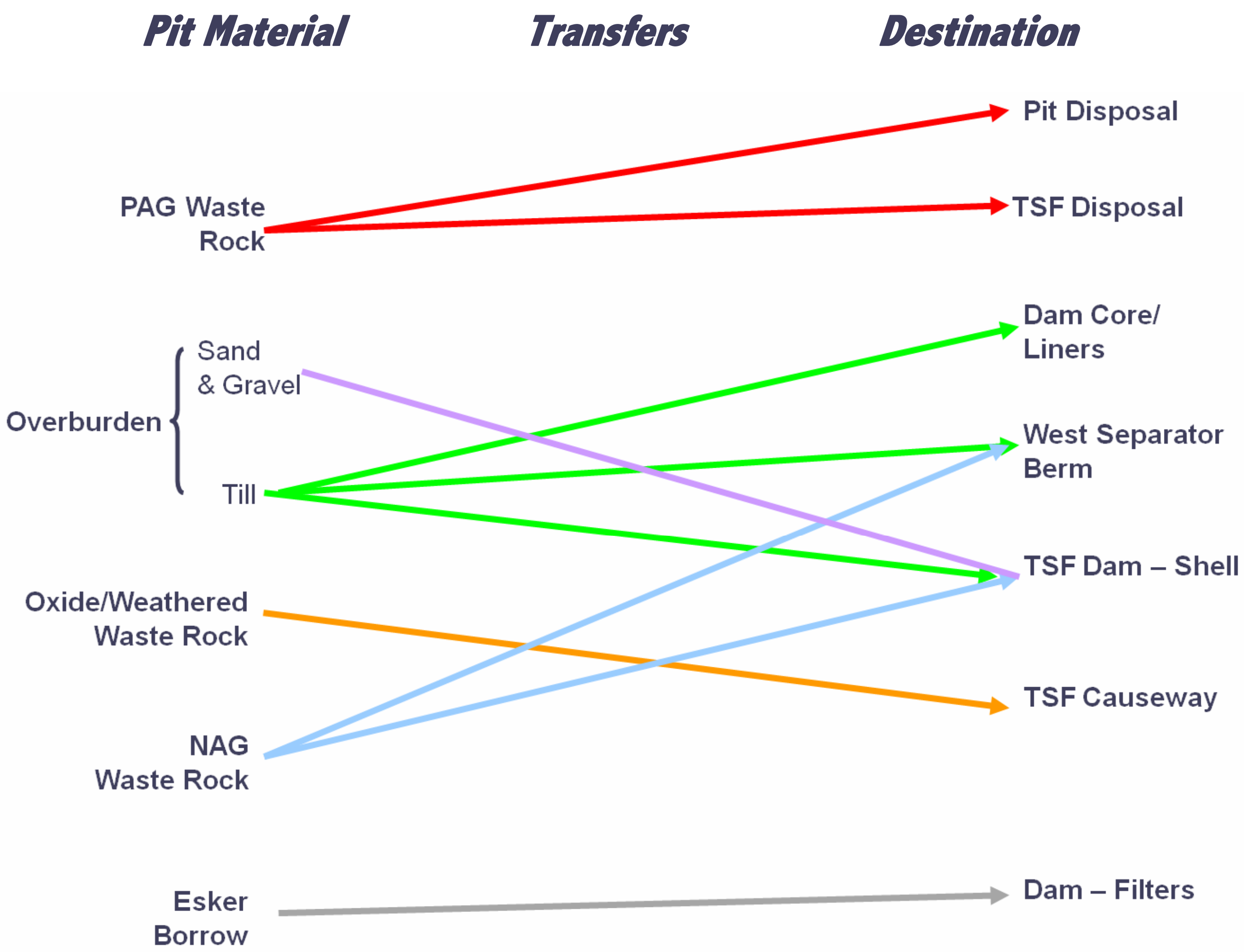
Annual Waste Material Production

	Waste								
				Sulphide					
Year	Overburden (kt)	Weathered Rock (kt)	Oxide (kt)	VH NAG (kt)	High NAG (kt)	Low NAG (kt)	Low PAG (kt)	High PAG (kt)	Total (kt)
2010									
2011	16,257	1,060	1,669	518	0	2	372	3	19,881
2012	9,026	2,828	5,191	4,401	0	92	23	0	21,561
2013	8,974	4,353	2,401	2,612	497	745	2,021	497	22,100
2014	9,979	2,028	127	4,802	43	488	3,339	1,292	22,098
2015	9,992	2,537	954	1,170	346	2,147	3,291	1,664	22,101
2016	5,931	4,495	636	2,064	841	4,317	2,919	896	22,099
2017	3,803	1,279	112	2,581	841	2,676	7,208	3,598	22,098
2018	5,710	1,851	490	2,868	797	3,336	5,907	1,139	22,098
2019	5,579	1,195	918	2,891	744	2,021	4,012	740	18,100
2020	3,927	2,186	1,285	2,781	528	2,797	3,992	604	18,100
2021	1,427	691	518	1,659	582	3,072	5,449	703	14,101
2022	2,869	563	376	782	336	2,654	4,867	605	13,052
2023	2,965	1,126	551	303	170	2,253	4,354	604	12,326
2024	783	579	14	154	819	4,048	5,388	636	12,421
2025	0	0	0	135	805	3,748	2,879	93	7,660
2026	0	0	0	766	1,146	2,348	415	0	4,675
2027	0	0	0	68	178	283	6	0	535
Total	**87,222**	**26,771**	**15,242**	**30,555**	**8,673**	**37,027**	**56,442**	**13,074**	**275,007**

Mine General Arrangement



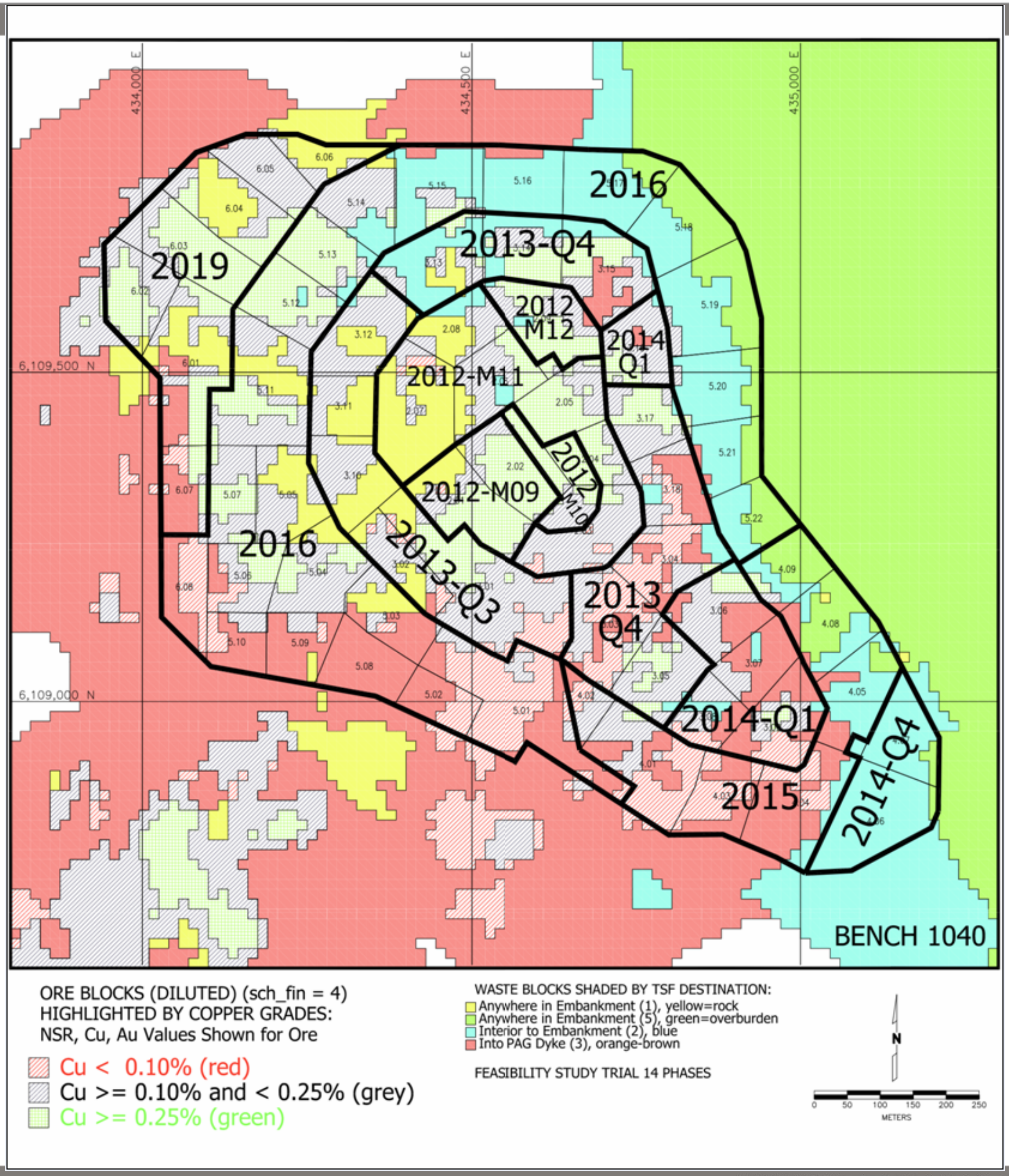
NO WASTE ROCK DUMPS!


Pit Material
Transfers
Destination
Pit Disposal
PAG Waste Rock
TSF Disposal
Dam Core/ Liners
Sand & Gravel
Overburden
West Separator Berm
Till
TSF Dam – Shell
Oxide/Weathered Waste Rock
TSF Causeway
NAG Waste Rock
Esker Borrow
Dam – Filters

Waste Distribution by Final Destination (kt)

Location	Overburden	Weathered Rock	Oxide	VH NAG	High NAG	Low NAG	Low PAG	High PAG	Total
TSF Core Zones	9,342								9,342
TSF Downstream Fill	32,850	0	0	25,433	5,200	40	0	0	63,523
TSF Upstream Fill	14,040								14,040
WSB – Core Zone	1,388								1,388
West Separator Berm	4,201	105	0	3,552	973	231	0	0	10,398
WSB – Laydown	25,371	6	9	650	686	0	0	0	25,386
P C Causeway	15	26,428	15,204	27	18	18	114	10	41,834
PAG Separator Dyke	15	232	29	59	472	34,107	55,907	13,064	103,885
MBX-66 Backfill				834	1,324	2,631	421	0	5,210
TOTAL	**87,222**	**26,771**	**15,242**	**30,555**	**8,673**	**37,027**	**56,442**	**13,074**	**275,006**

Shovel Cut Bench Plan



Implementation Plan Elements

- maintain and develop the ARD block model
- test blast hole samples to verify the accuracy of the ARD block model and make adjustments as necessary
- implement the segregation plan using geological and engineering controls and a dispatch system
- maintain and check records to ensure that the management plan is followed as planned

Dispatch System

- Every piece of production equipment (e.g., shovels, haul trucks, track dozer) will have GPS
- Dispatcher located in a look-out above the open pit will operate the system.
- Engineering department will transmit bench plans to the shovel and track dozer operators.
- Operators will see on screens plans with ore/waste and ARD boundaries and the location of their equipment relative to the bench plans in real time.
- The shovel and/or track dozer will segregate waste units according to the bench plan.
- Dispatch system will transmit the nature of the material and the required dump location for each load to screens in the truck driver cabs.

Site Analytical Methods

Waste Type	No. Samples/Year	Analyses
Oxide/Weathered	30	Visual with occasional samples tested for acid soluble copper
NAG/PAG waste rock	400	Leco S and CO2 (surrogate for NP) and ICP Ca (additional surrogate)
	60	External lab ABA

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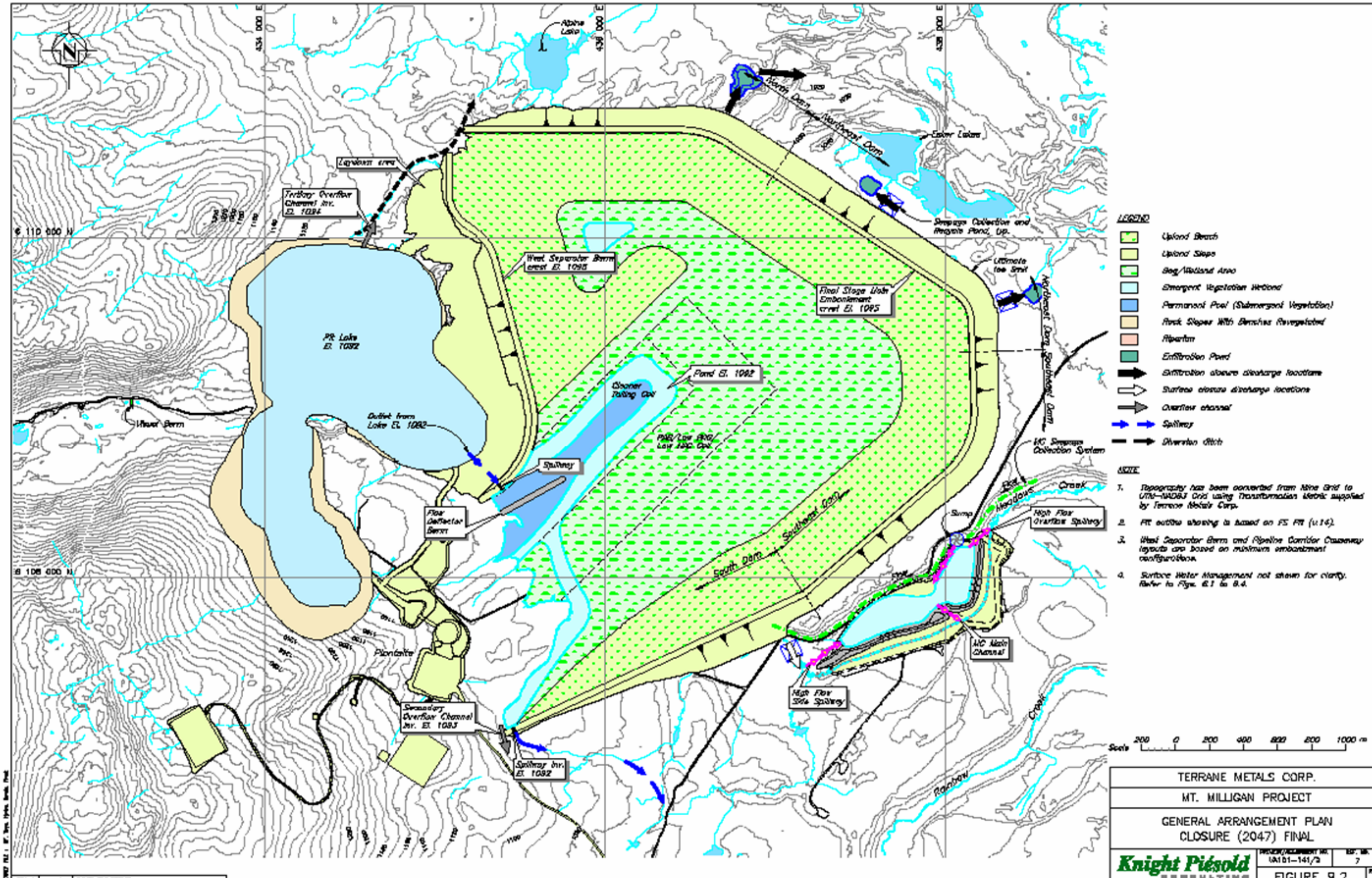
Closure 2047



"WASTE IS MORE IMPORTANT THAN ORE"