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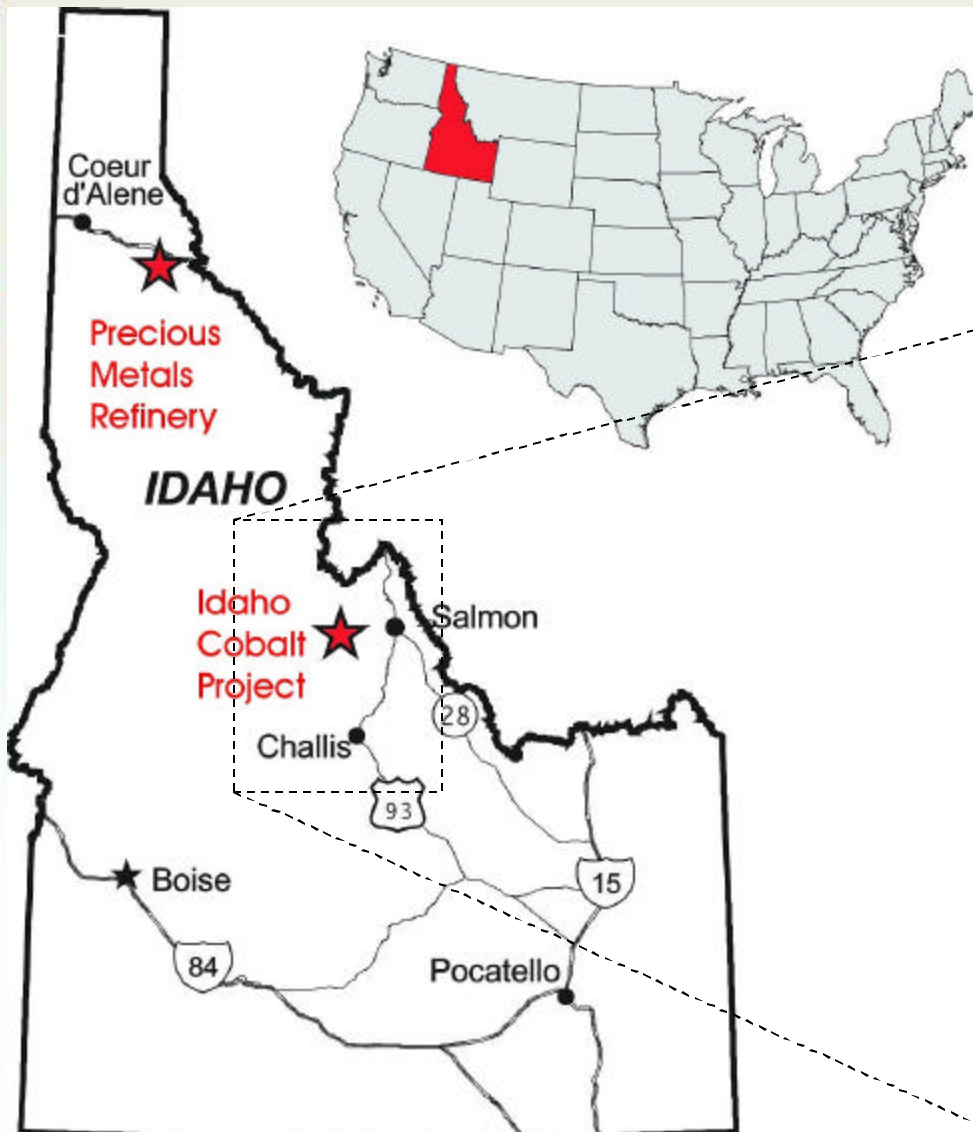
COBALT - A BETTER FUTURE

Co<sup>27</sup>  
58.933

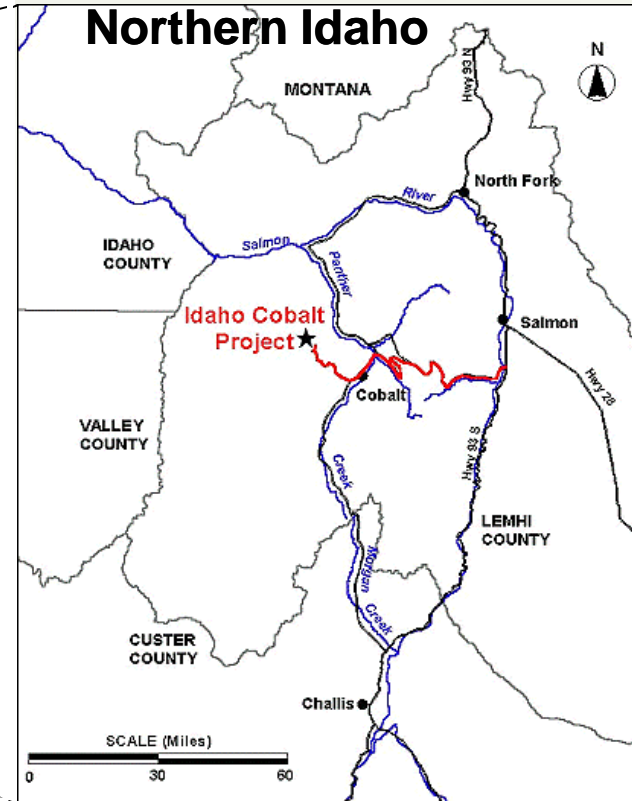
FCO.TSX

FORMATION CAPITAL CORPORATION





**Unique  
Hydrometallurgical  
Complex with Operating  
Precious Metals  
Refinery Located in  
Northern Idaho**



**Primary Cobalt Deposit Located  
in the Blackbird Mining District  
Central Idaho**



## Idaho Cobalt Project - Reserves & Resources

➤ Diluted, proven and probable reserves currently stand at 2.64 mt at:

- ◆ 0.559% cobalt
- ◆ 0.596% copper
- ◆ 0.014 opt gold

Samuel Engineering NI-43-101 Bankable Feasibility Study, July 2007

➤ Cobalt Project Resource utilizing 0.2% cut-off:

Category	Tons	%Cobalt	%Copper	Oz/ton Gold
Measured	1,840,700	0.626	0.592	0.015
Indicated	813,700	0.632	0.681	0.017
Total M&I	2,654,400	0.628	0.619	0.016
Inferred	1,121,600	0.585	0.794	0.017
<b>Contained Metal</b>		<b>46.5 million lbs</b>	<b>50.7 million lbs</b>	<b>60,500 oz</b>

MDA 2006 NI 43-101 Report



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# Environmentally Sound

- Underground project - small environmental footprint
- 100% reclaimable - modest 135 acre disturbance
- No tailings pond - dry stacked tailings
- Paste backfill - 50% of tailings returned underground
- Water discharge - will meet drinking water quality standards
- Reagents - no dangerous reagents
- Zero discharge facility - hydrometallurgical complex

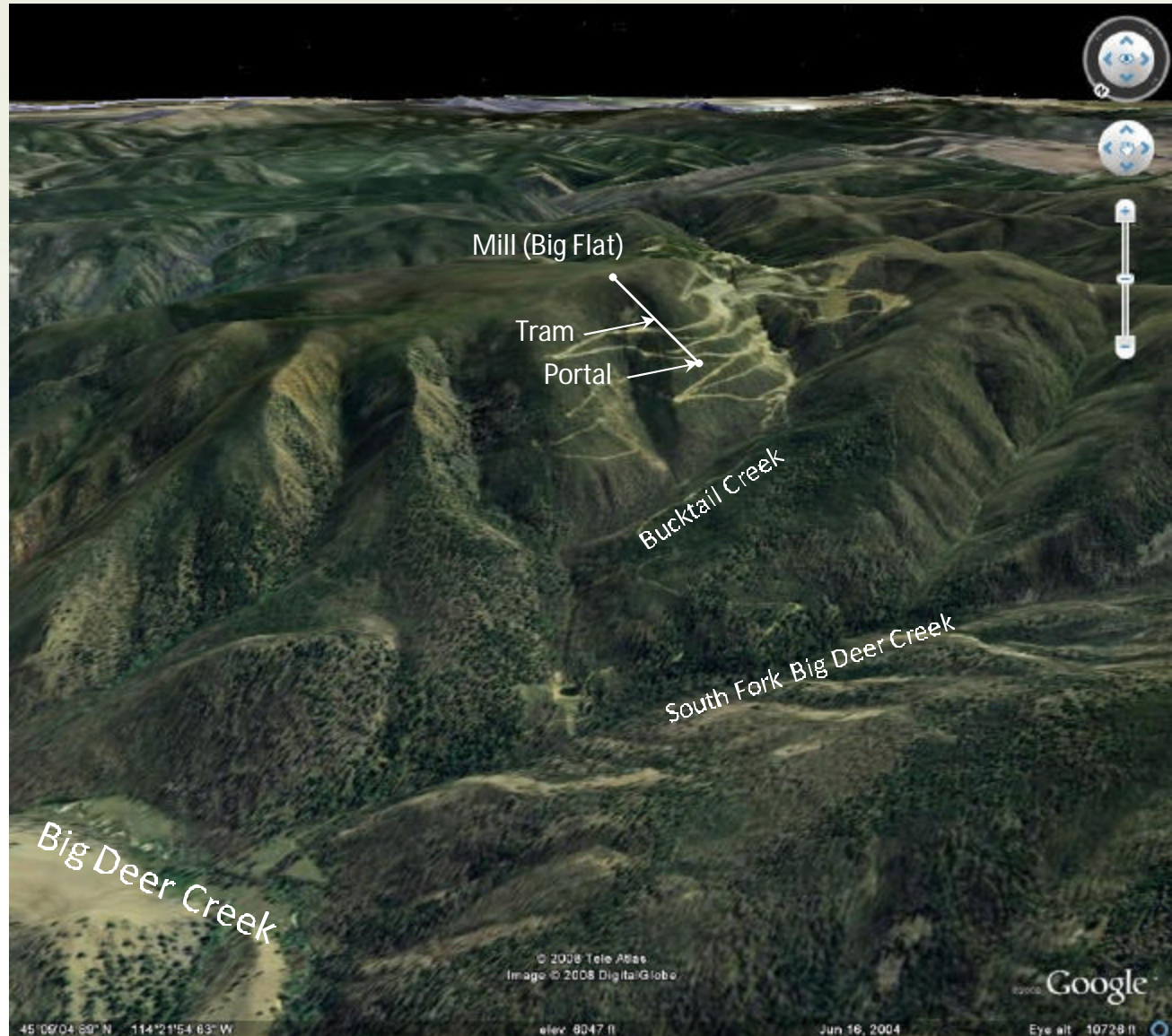




# ICP Production Overview

<b>Production Rate:</b>	800 tons per day
<b>Cobalt Recovery:</b>	+93%
<b>Mill:</b>	Bulk sulphide froth flotation
<b>Beneficiation:</b>	Hydrometallurgical process - SX-EW
<b>Cobalt Production / Year:</b>	Up to 1,500 mt high purity metal
<b>Projected Mine Life:</b>	10+ years (14 years including inferred - not 43-101 compliant) Open along strike and at depth

# Google Oblique of Our Site







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# Site plan in 3D



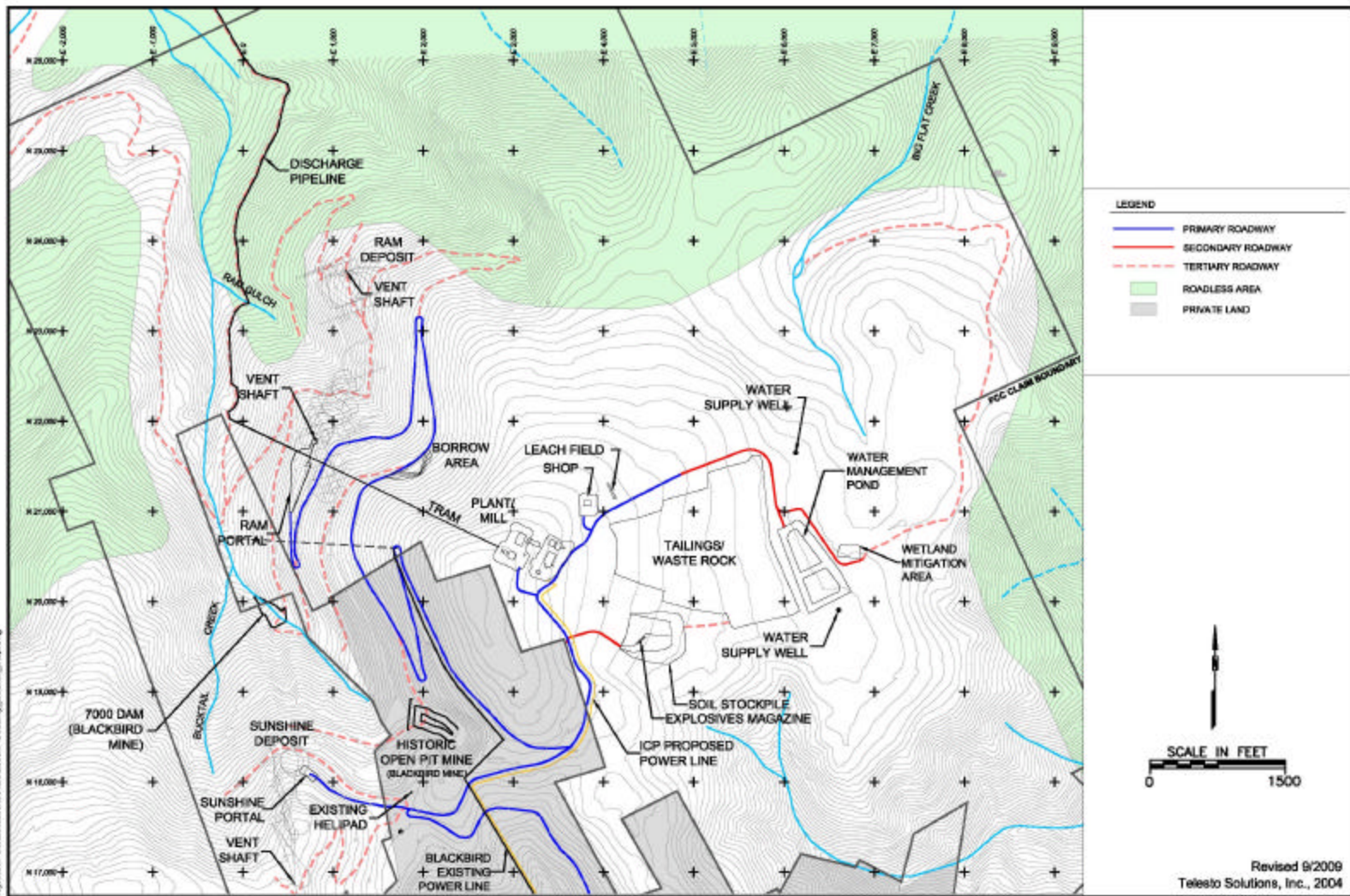
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# Site plan



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1/1/2009 R:\Info\scab\pmp\04\scab\Auriferous\PCO\Facility\_Location.mxd (log)

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**FIGURE 1-3  
GENERAL FACILITY LOCATION MAP**

IDAHO COBALT PROJECT  
PLAN OF OPERATIONS

September 2009





# Tram

- Total Capacity
  - 5.8 ton car
  - 800 tpd ore
  - 333 tpd waste
  - 2 - 300hp motors
- Total Elevation rise 1040 feet
- Total slope length 2865 feet
- Operating 22-hrs per day
- Will function automatically



# Portal Pad Location

- First Portal location
  - 4.6M and counting
    - Geoteck driving 115 ft high Hilfiker wall
  - 1.6M budget
- Second Location
  - 2.3M first estimate after more in-depth look cost could be reduced further.



# Climate

- Mine at 7000 ft elevation
- Mill at 8000 ft elevation
- 7600 ft elevation weather station
  - Average annual temp 34.8F
  - High temp 89.4F
  - Low temp -34.6F
  - Precip 24.4 inches (60% in snow)





# Geometry of the Ore body

- Strike 3200 plus feet
- Dip 48 – 54 degrees
- Vertical Extent 1000 plus feet
- Horizons 9 Not all mineable
  - Exhalative depositional regime
- Stope widths will range from 20-6 ft

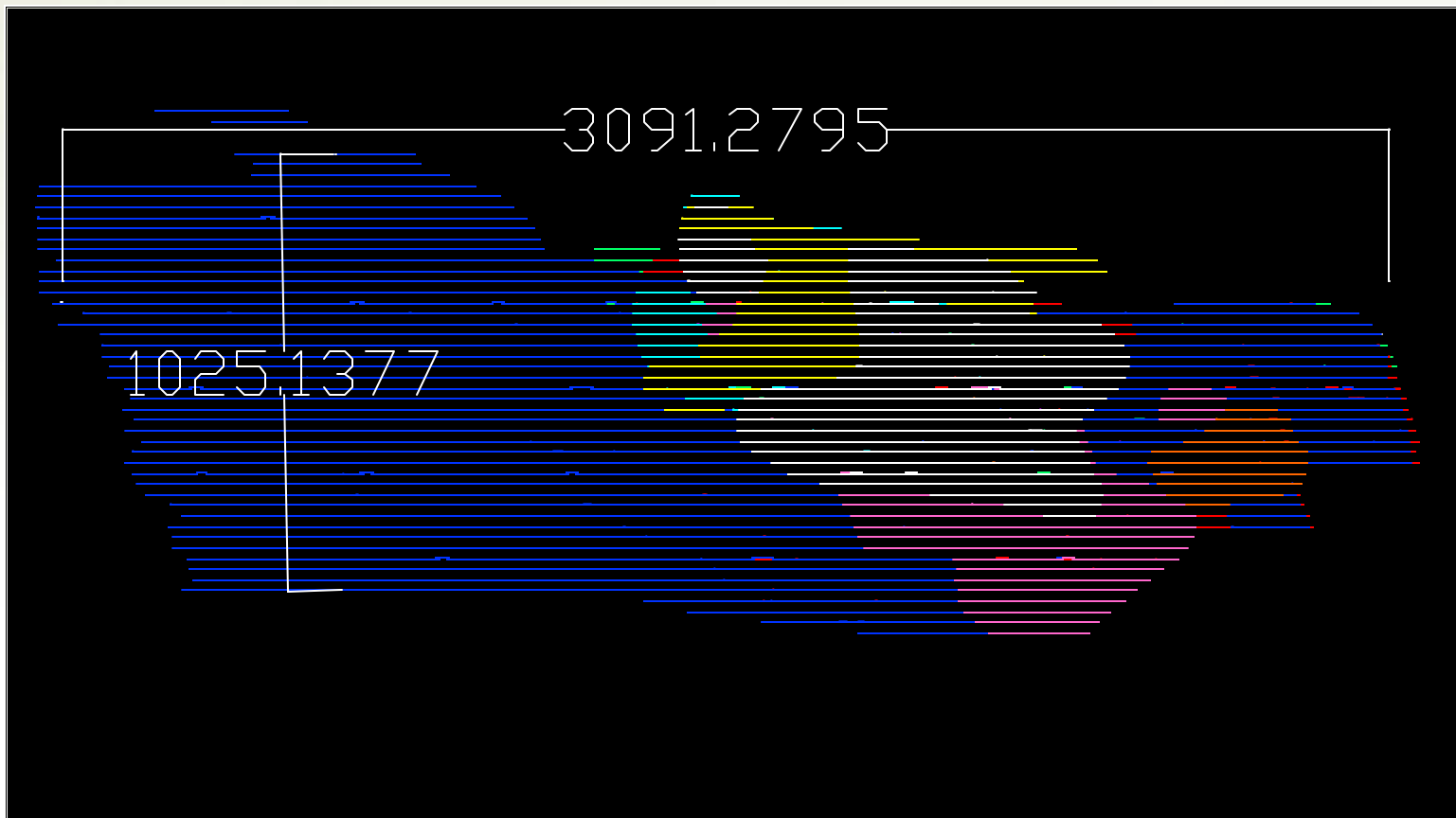


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# Horizon 3023 et al.



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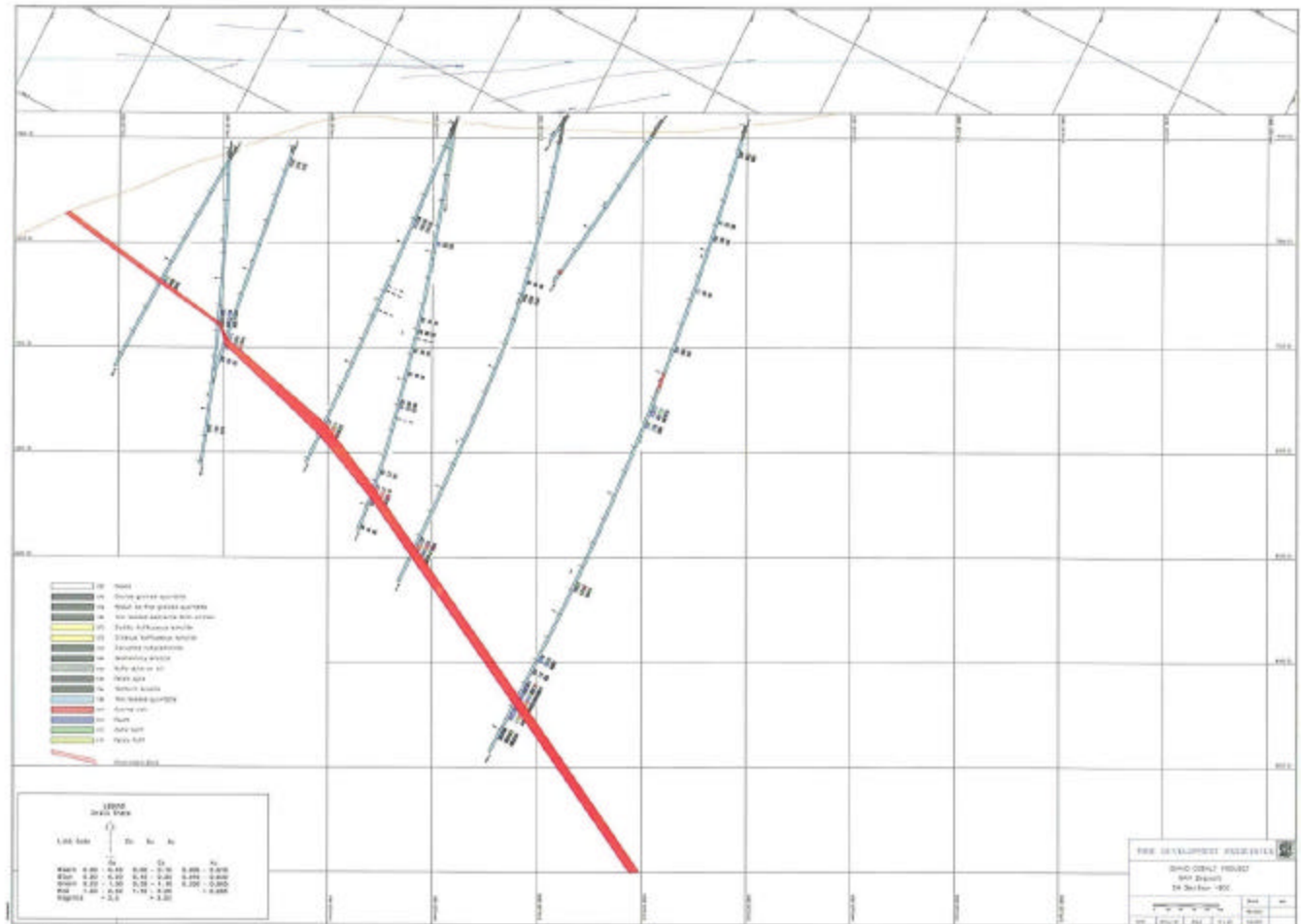


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# Section -800 Most Southerly



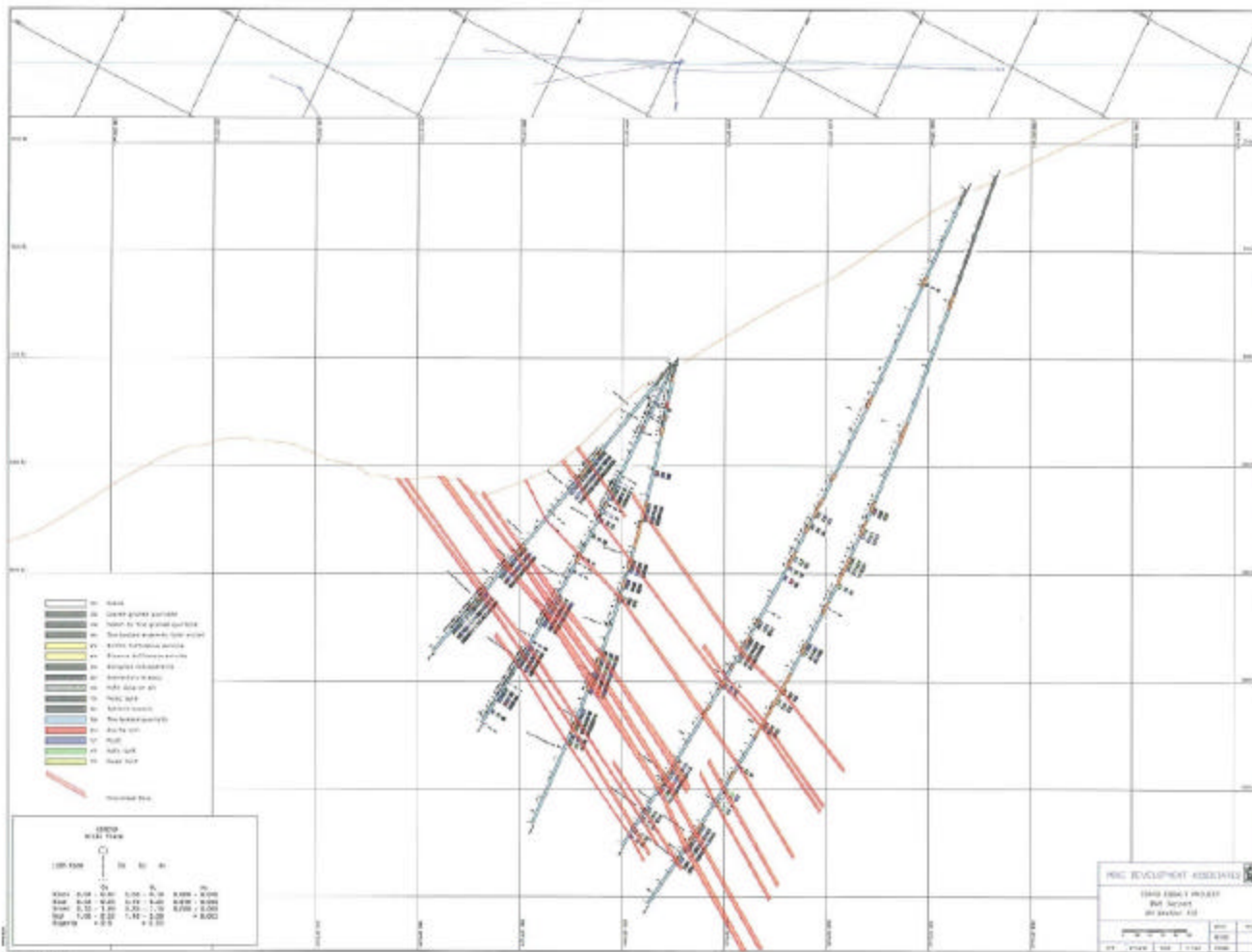
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# Section 400



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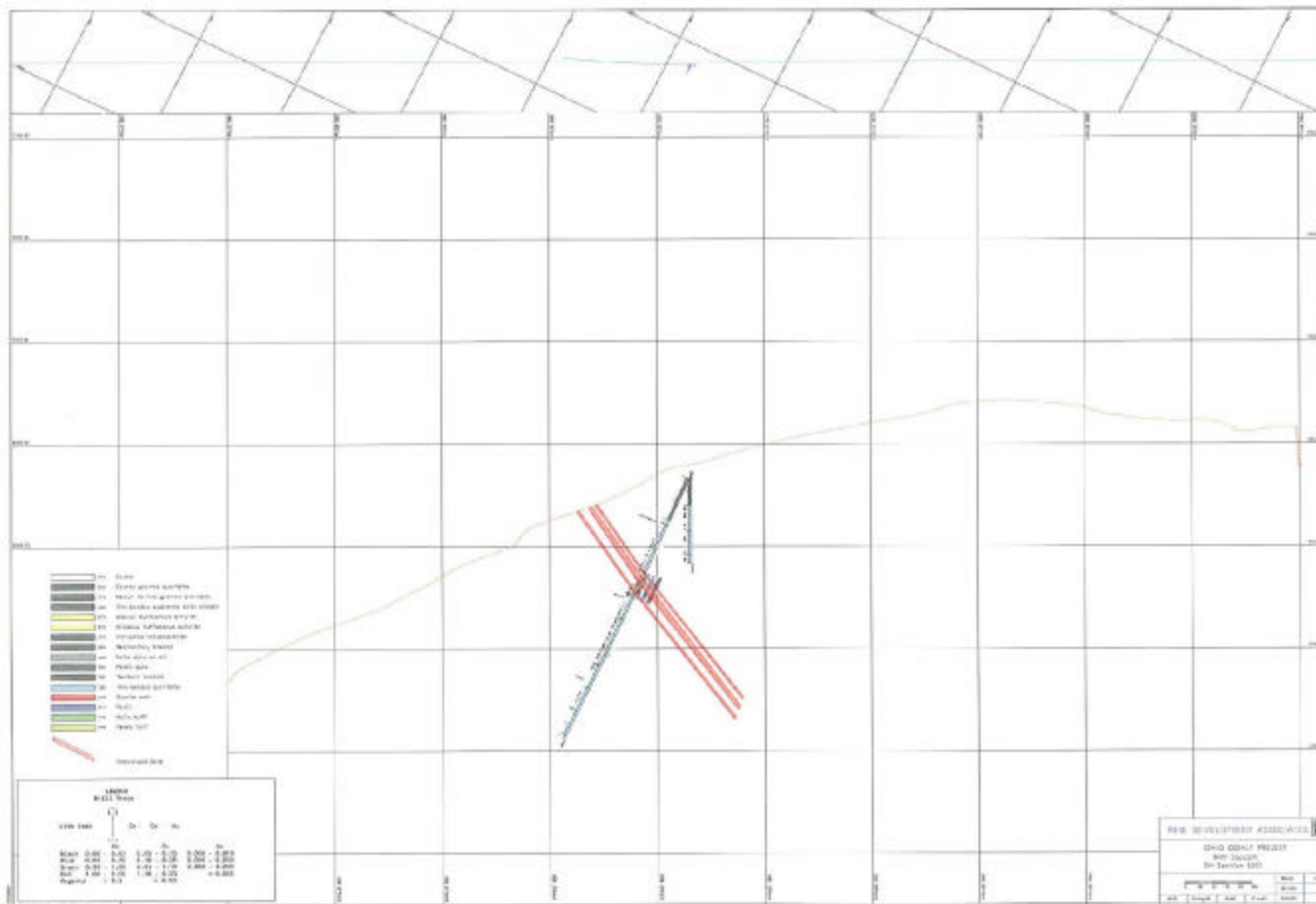


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# Section 1600



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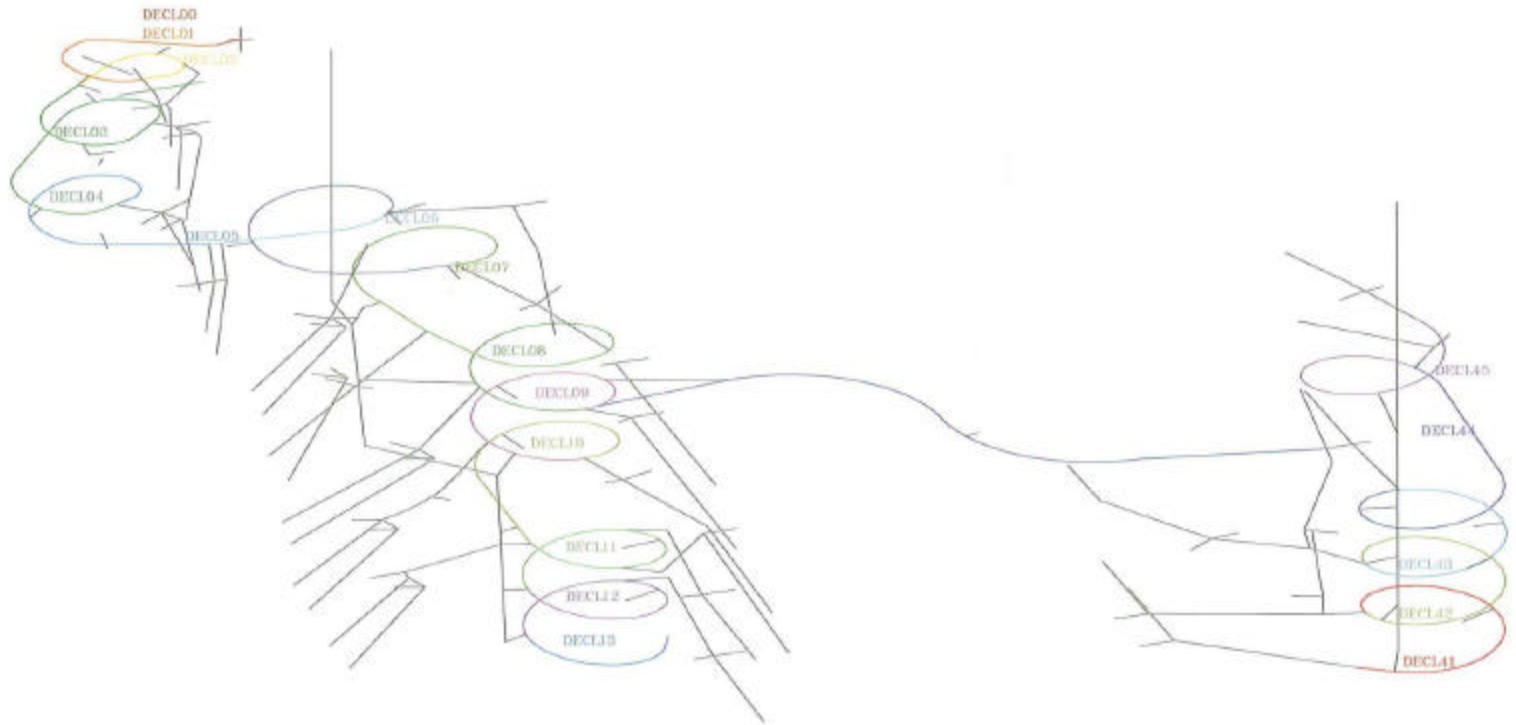
# Original Mine Design for Feasibility



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Ram Declines

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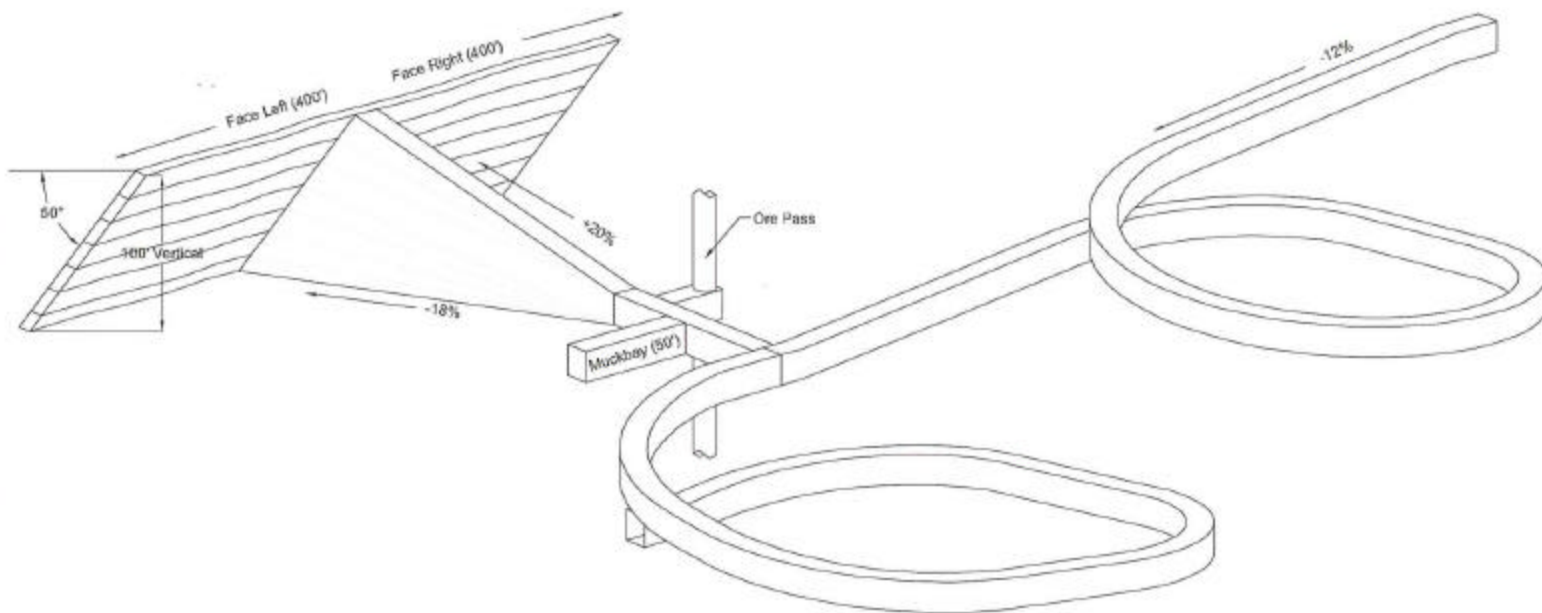


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# Original Stope Access



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# General Mine Design Parameters

- No more Corners than are necessary!
  - No spiral ramps!
    - Increase cost to build
    - Increase cost to maintain
    - Safety hazard
  - Maximum grade on all haulage ways 15%
  - Maximum grade on all attack ramp 20%
  - Maximum grade on any corner 10%



- Corners 75-ft radius
- Minimum pillar thickness 35 feet secondary structures.
- Minimum pillar thickness 100 feet primary structures.

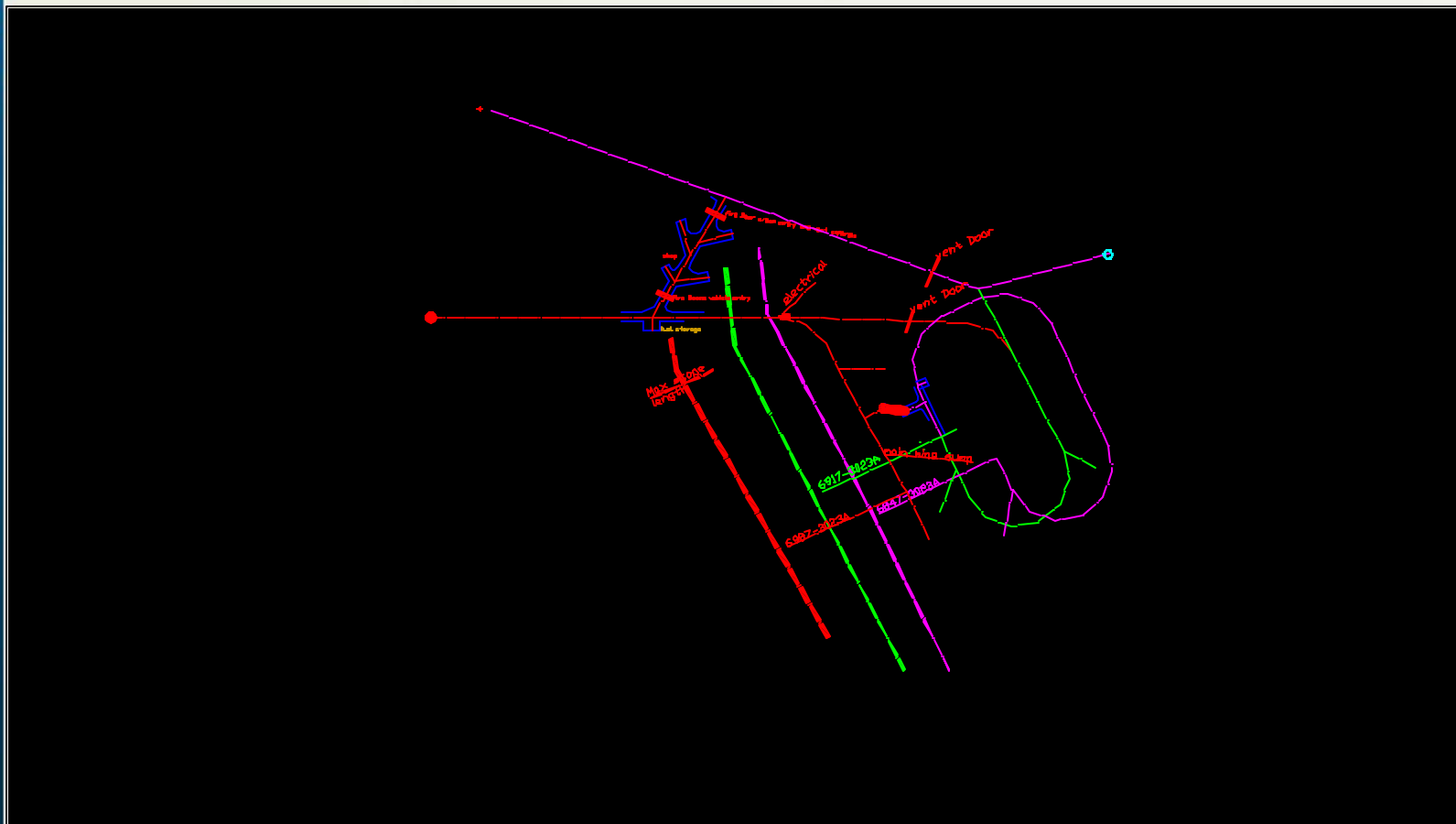


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# First Three Laterals



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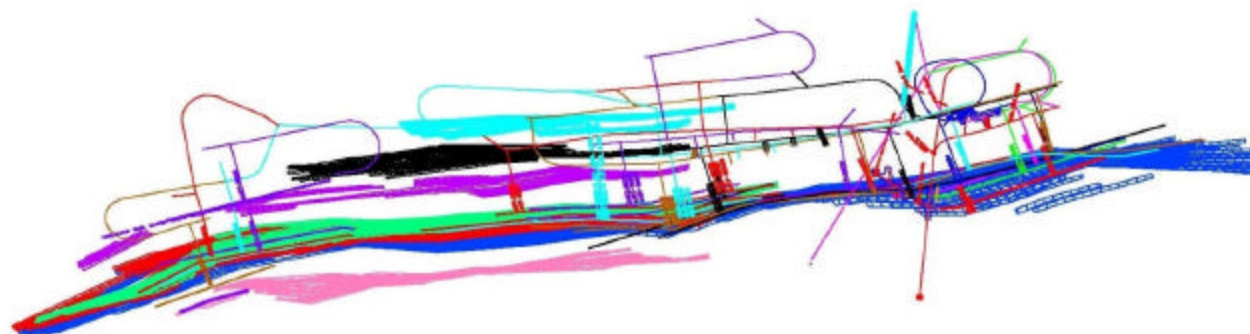




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# Overall Mine Plan

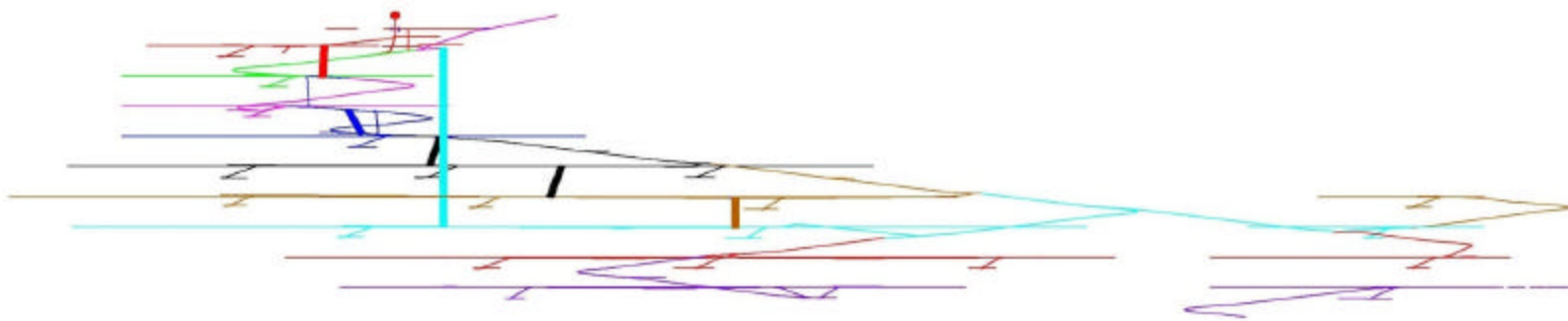


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# Mine Long Section



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# Mining Methods

- Mechanized Cut and Fill
  - 70 foot vertical lifts (84-ft on slope)
- LHD Accessed slusher stopes
  - Transition at narrower widths
    - Grade up – haulage/milling cost down
    - Operators vision high grade - miners vision ease of mucking, bolting, drilling and blasting
  - Reduced DPM's
- Longhole sublevel stoping
  - As ground conditions permit



# Paste Fill

- Dewatered Tailing
  - Hydraulically placed paste
  - 14-28 day cure time
- 4% cement standard stope fill
- 10% cement underhand stope
  - Combination of paste, and cemented gob



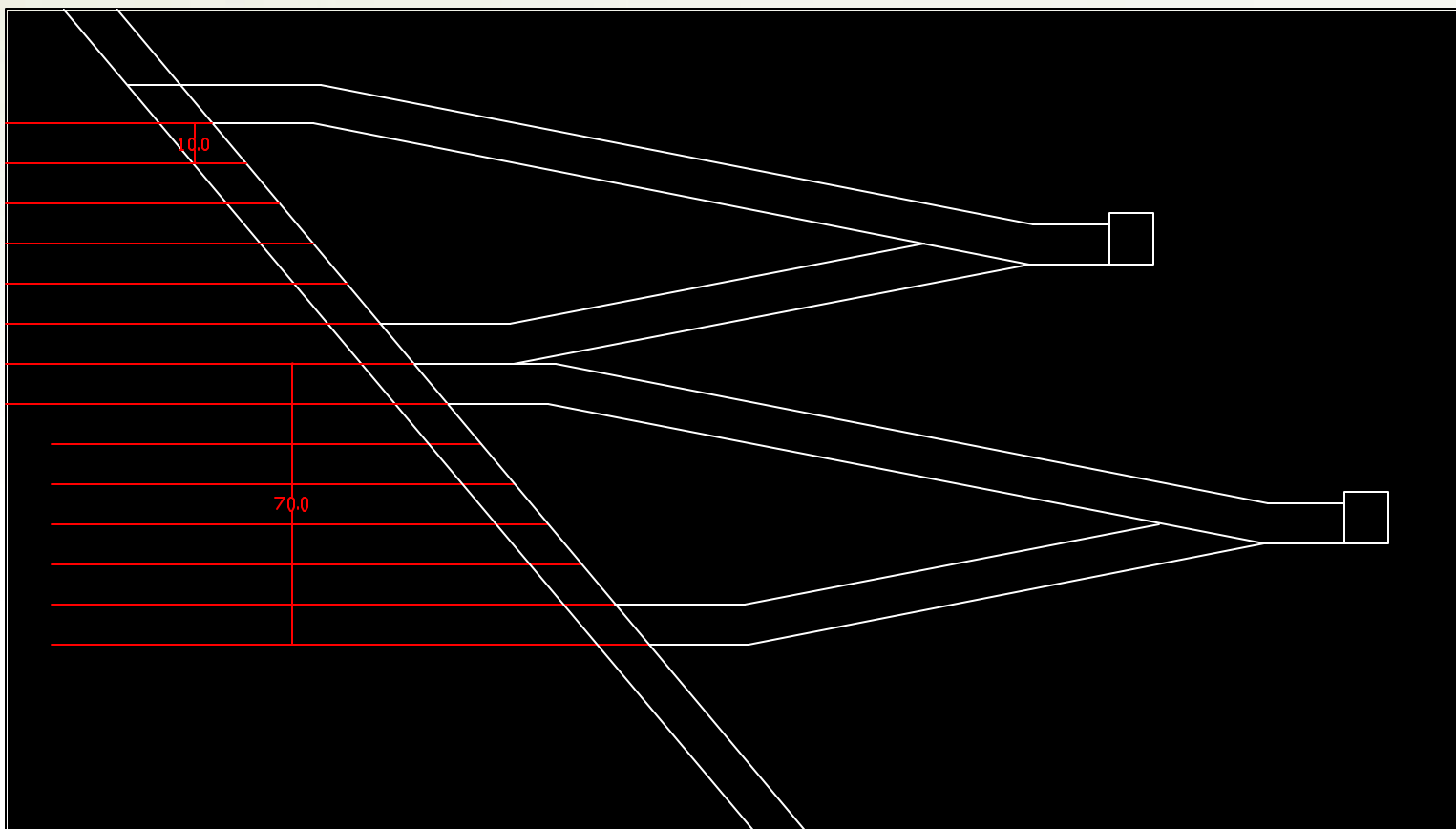


# Ground Conditions

- RMR
  - Ave range 50-59 fair
  - All data taken from core
  - RMR consistent within rock types
    - Quartzites majority of rock - RMR fair or better
    - BTE Biotitic Tuffaceous Exhalative – RMR Very Poor
    - STE Siliceous Tuffaceous Exhalative (hard, competent) – RMR ?
  - Differs along strike of the orebody declining to the North
  - Differs on scale Micro or Macro



# Typical Access Ramp



# Secondary Excavations

- Main decline will connect laterals
- Each lateral will have:
  - Powder Mag
  - Primer Mag
  - Escape way (utility raise)
  - Ventilation Controls
  - Sump and drains
  - Muckbays at each stope



# Ore Transportation

- Ore will be moved from the heading using 2yd LHD
- Ore will be mucked from muckbays to a 20-ton truck and transported to the Tram loading station. (50 ton capacity)





# Ventilation

- Two portals
  - Intake
    - One of the main decline ramps initially
    - Later intake to a vertical alimak raise
  - Exhaust
    - Combination of ramps and raises
      - Raises will be combination of shot longhole and raisebore or alimak raises.
      - Raises will also be escapeway and utility



# Vent Cont.

- Main Fans 200,000 cfm +
- Secondary fans as air is required
  - Slusher stopes
  - LHD stopes
  - Longhole stoping
- Ventilation controls will be with a series of airlock doors and curtains as required.



# Conclusion

The reality of each project is that there is a “Feasibility Study” which is then optimized ( converted from paper to a operational plan) staying within an economic standard that will eventually fit the business plan of the operator.



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# THE END

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