



OCEANAGOLD

Managing and validating diamond drilling around complex historic workings

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AusIMM New Zealand Branch
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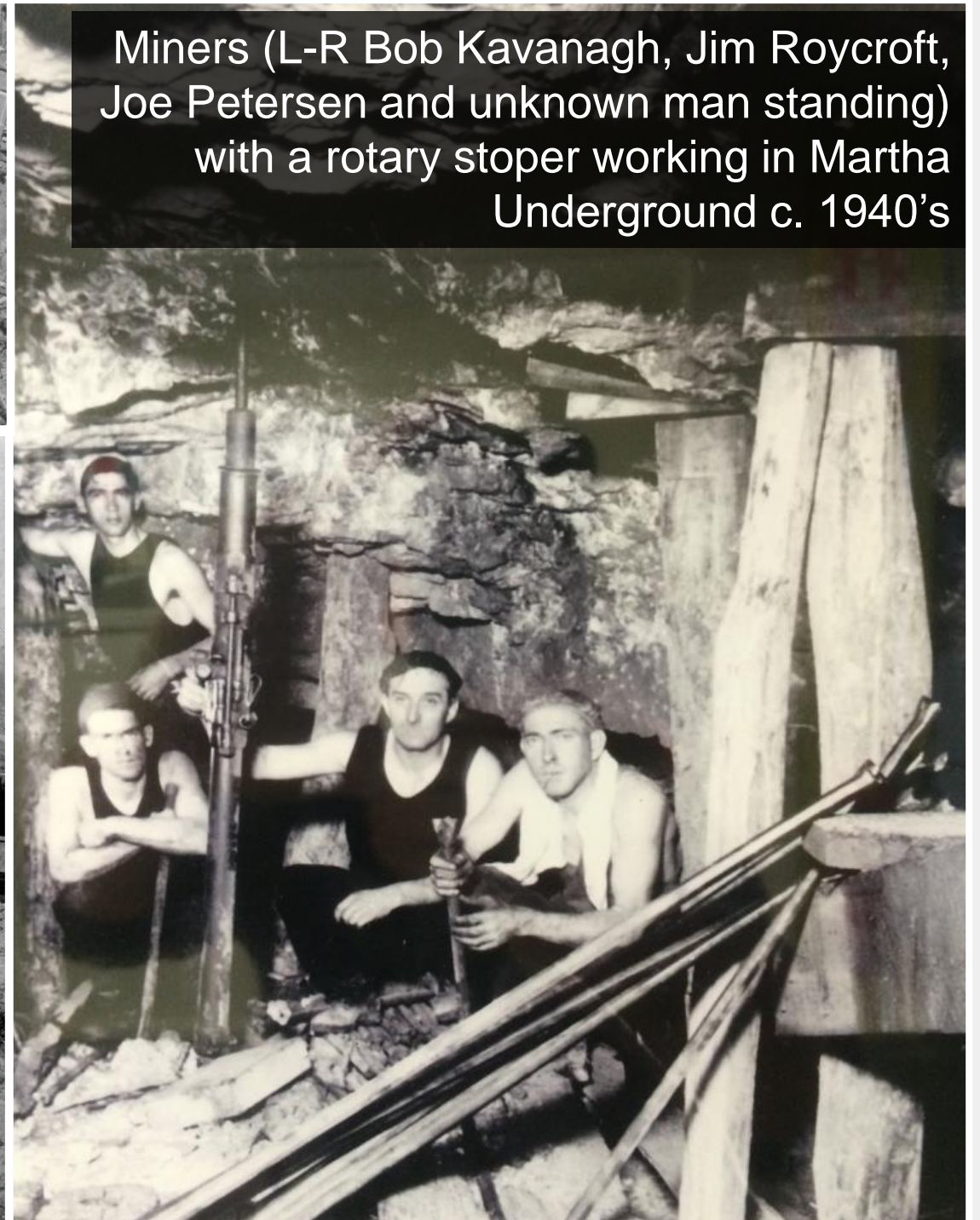
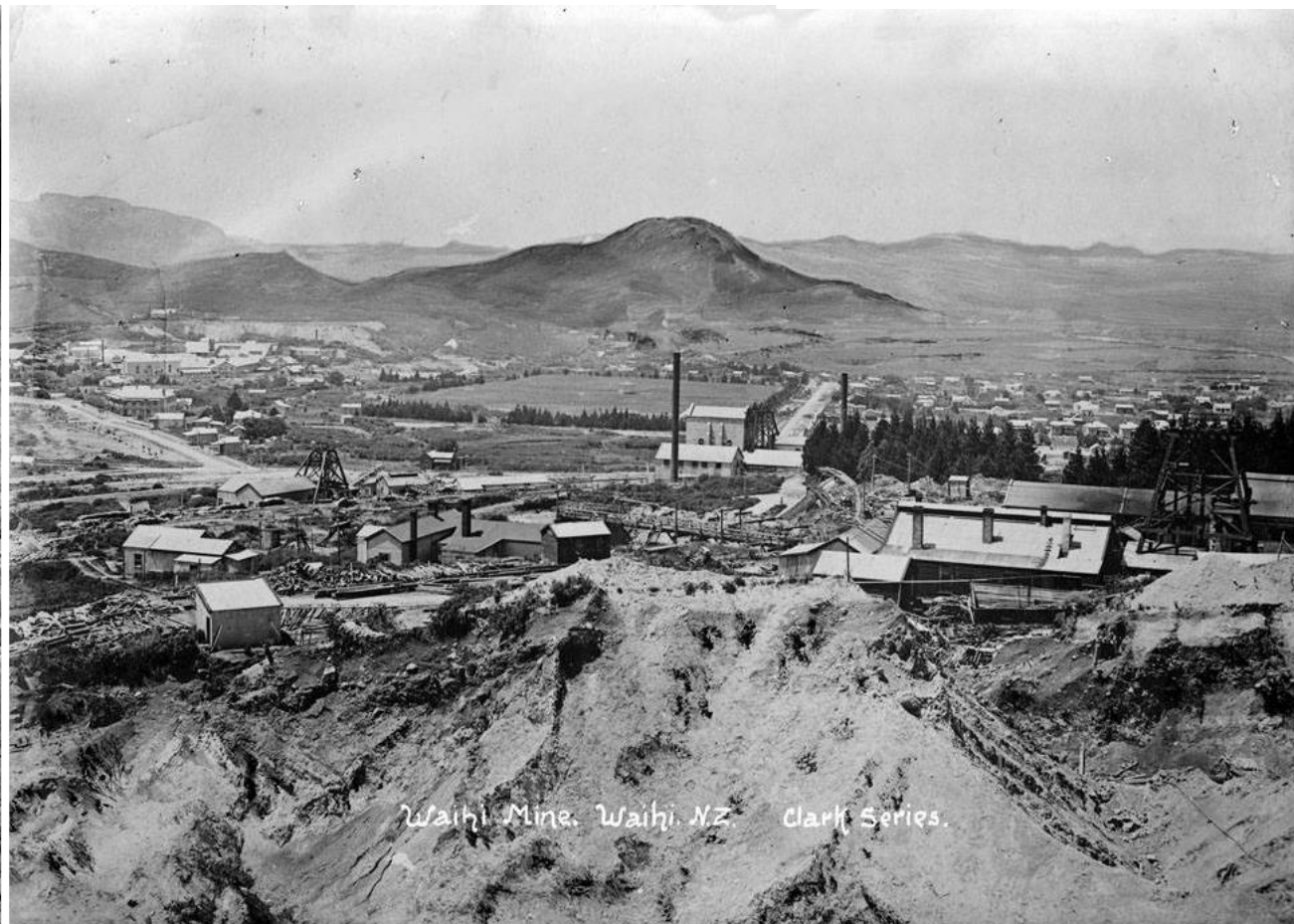
RESPONSIBLE GLOBAL MINER



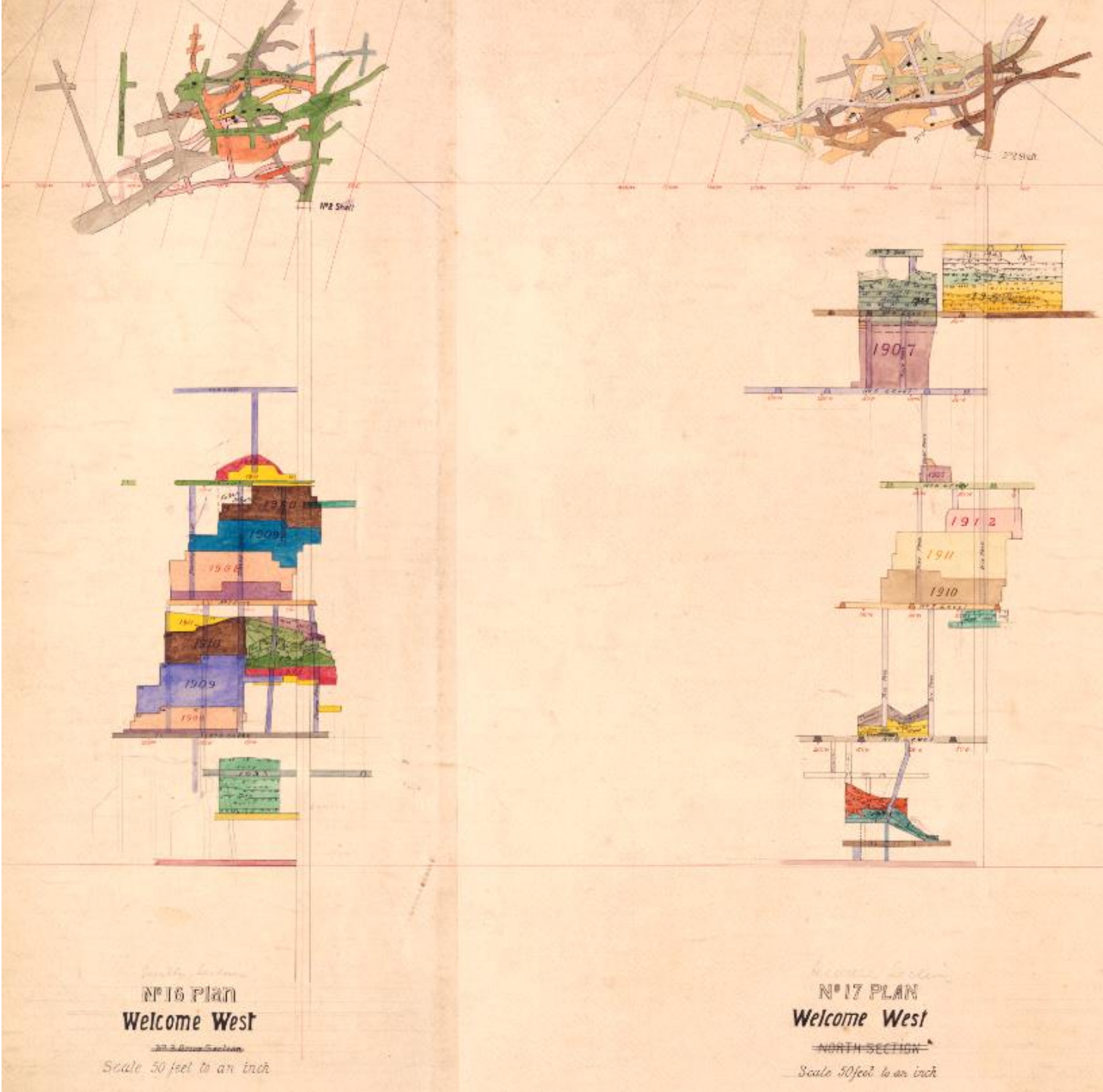
Historically mined
between 1887 - 1952
by Waihi Gold Mining
Company and Grand
Junction Company



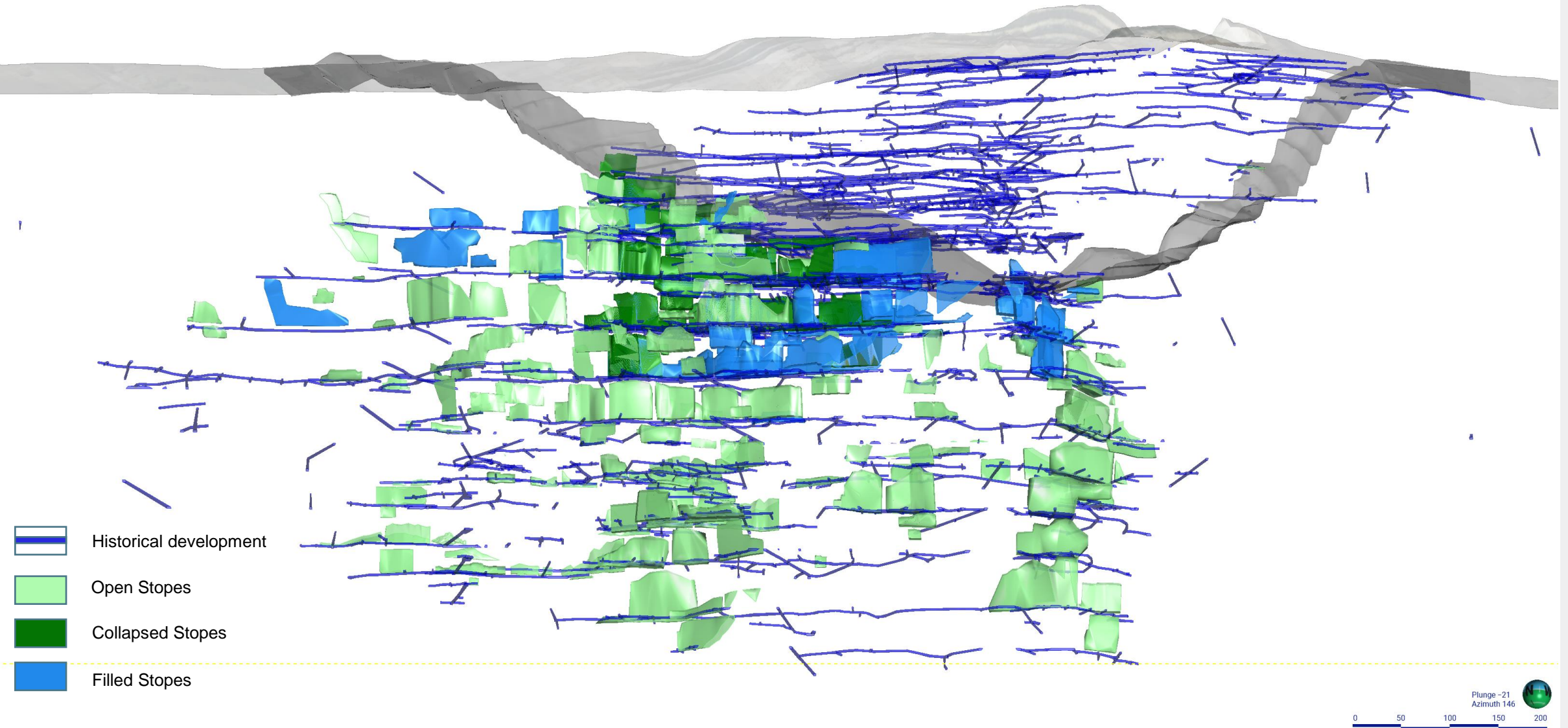
Miners (L-R Bob Kavanagh, Jim Roycroft,
Joe Petersen and unknown man standing)
with a rotary stoper working in Martha
Underground c. 1940's



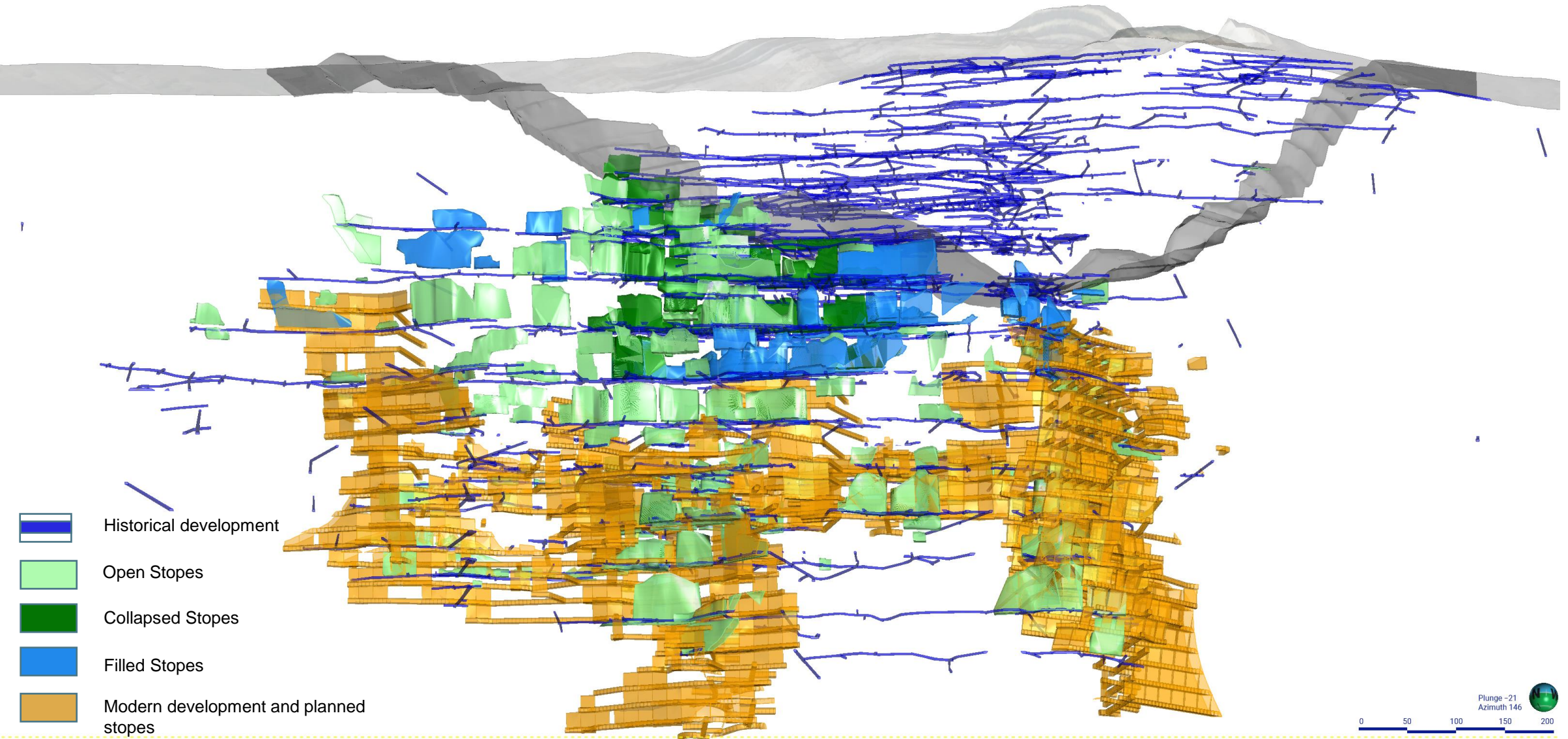
Rescued: from the bin to reference material



Cross section showing extent of historical workings mined between 1887 – 1955...



Cross section showing extent of workings mined between 1887 – 1955...with modern mine workings



Safety has come a long way...

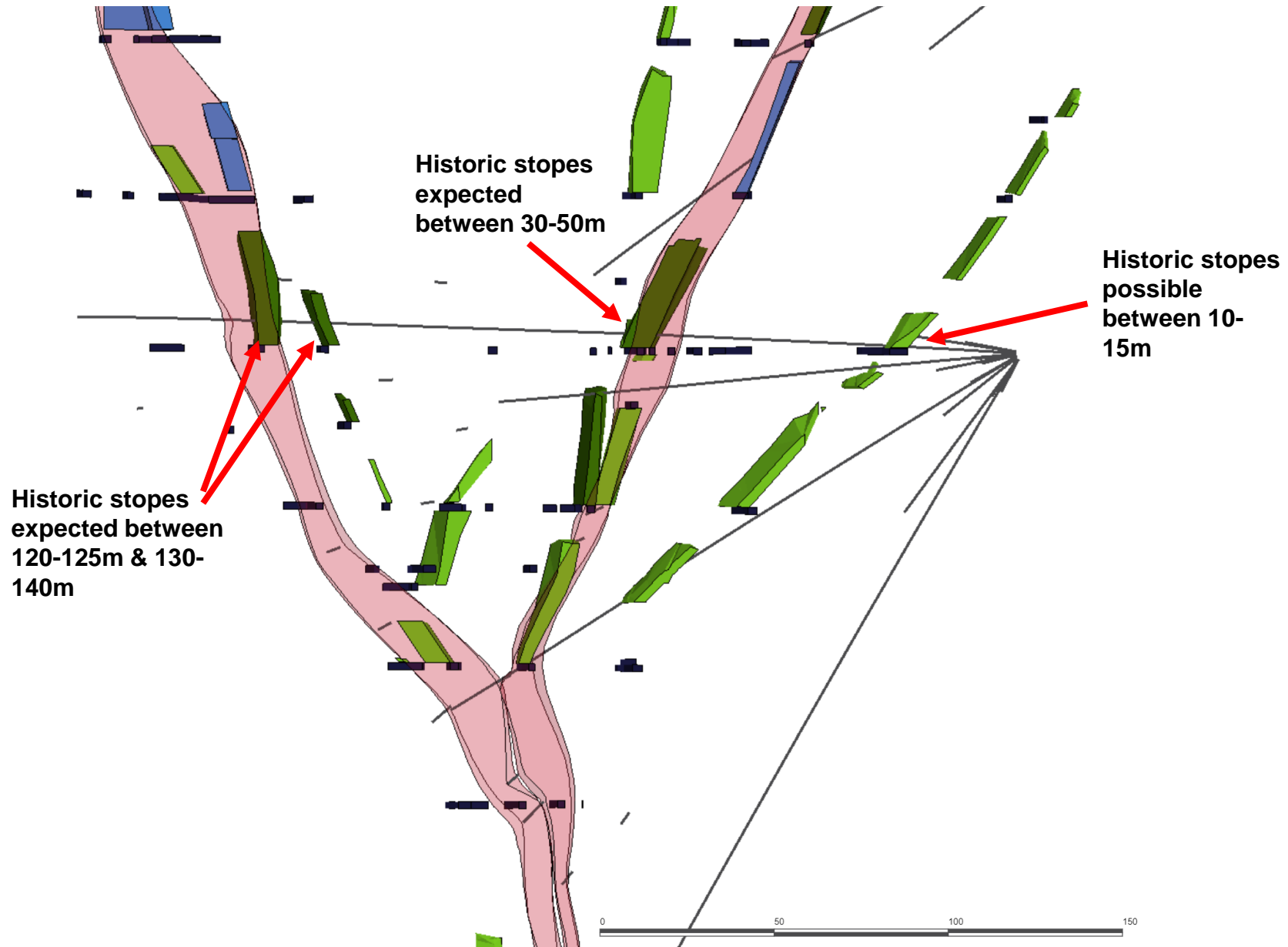






**Driller Graham
Tonkin and Offsider
Steve Alsdoff
drilling PQ on “The
Elephant Rig” a
Longyear 44, 1981.**

Forewarned is forearmed

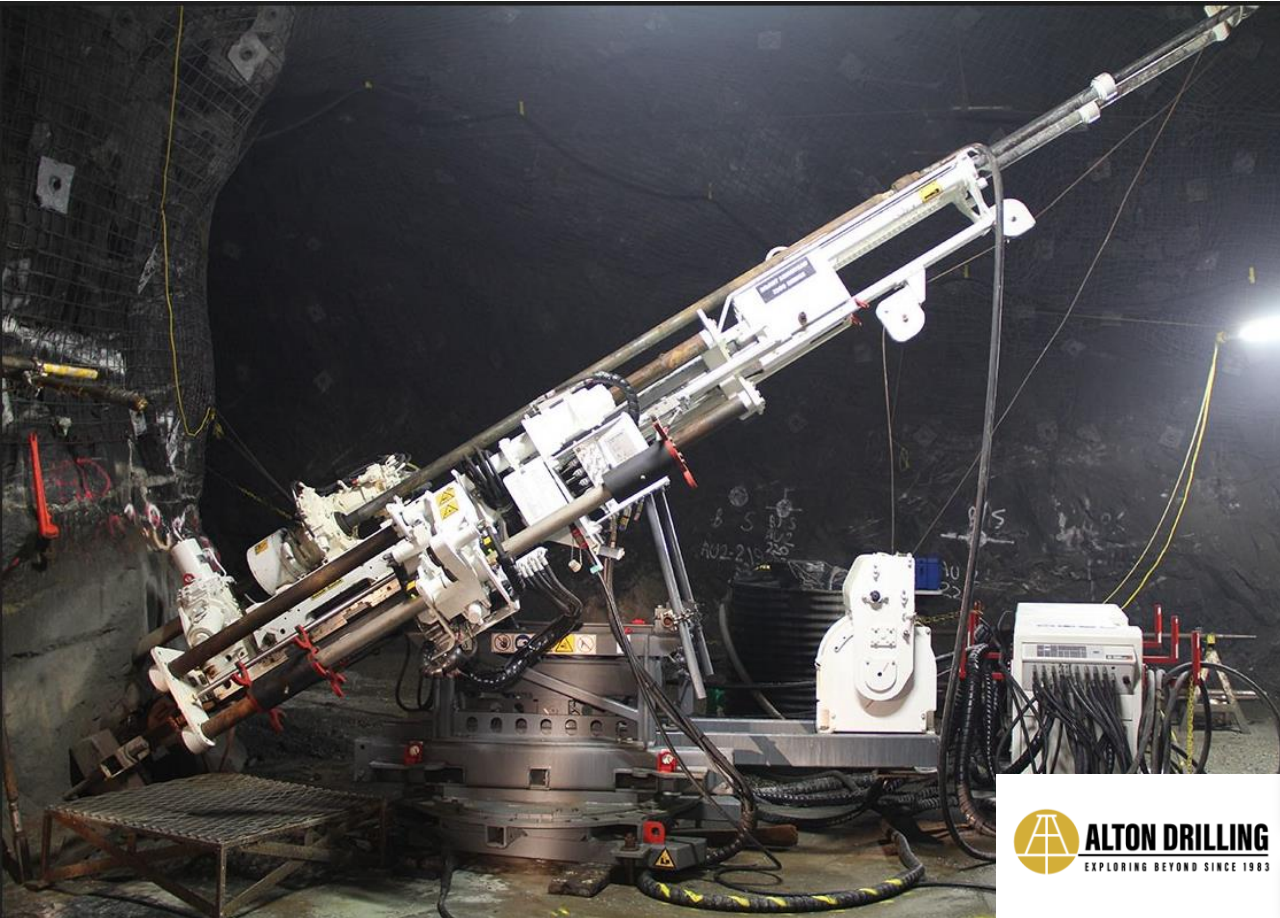
Drillers know when to expect voids and are given detailed section views with the drillhole design sheet

Historical Development levels



-  Vein
-  Historical development
-  STO all
-  STC and MC all
-  Blue= STF all

The tricky business of drilling air...drilling innovations



IDEACTION.
SUCCESS FROM INSIDE OUT
altondrilling.co.nz

Inside an historic open stope



Intercepted drives



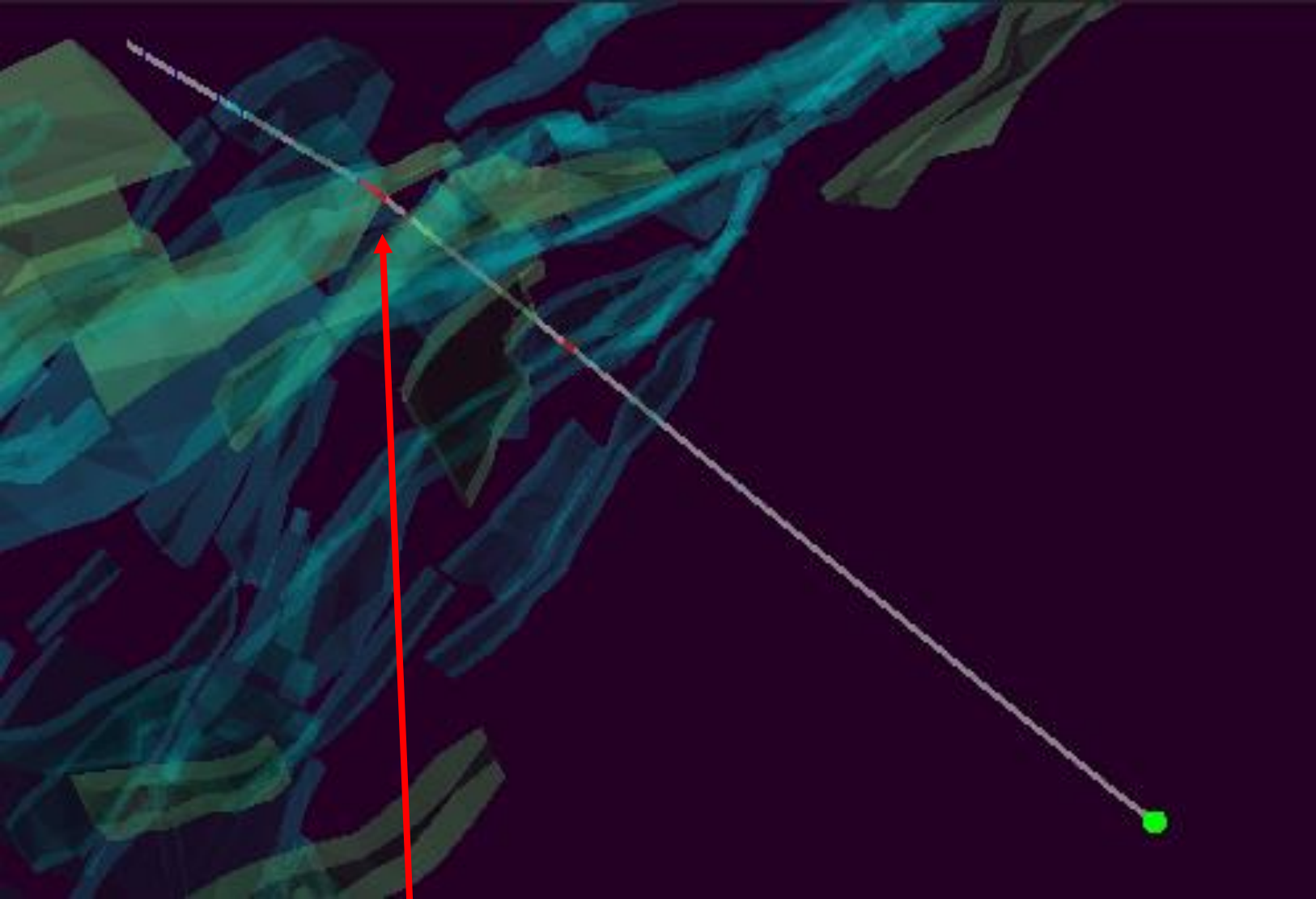
Intercepted drives



Intercepted drives



Deviation checks



Notice the bend in the drillhole as it intersects the historic stope

The DeviGyro
Overshot Xpress



High quality data

- **Hole Location** – surveyed collar
- **Downhole surveys** – azimuth and dip
- **Logging** – peer validated
- **Assay results** – validated alongside logging & photos + QC checks

Hole ID	Logged by	Collar	Survey	Geology							Assay	Grouting	Locked	Reject Bin	Historic	Comments
	Logged by			Lith	SG	Geotech	Orientation	Recovery	Core Storage/Di scarded	pdf	Validation Check Spreadshee				Stope A	
RYE17OR1MR2273	DH	✓	✓	✓	✗	✓	✓	✓	✓	✓		✓				Assays back 07/07/2023
EMW9FW3MG2278	FG	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✗	✗		Awaiting OR Ag Assays
844SP6MN2284	DH	✓	✓	✓	✗	✓	✓	✓	✓	✓		✓				
EMW8FW3MG2285	CC	✓		✓	✗	✗	✓	✓	✓	✓	✓	✗				

Spreadsheet detailing validation requirements for each hole

Overall ranking – score assigned based on quality of above checks



LOOKU	DESCRIPTION
1	No known validation issues
2	One field not validated (having missing data or issues)
3	Two or more fields not validated (having missing data or issues)
4	Serious known data issue

Conclusion



Acknowledgements

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