

# EIT RawMaterials

## Mineral Resource Assessment Platform

### Results of epithermal gold assessment, Iceland

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Iceland GeoSurvey (ÍSOR), Reykjavík, Iceland

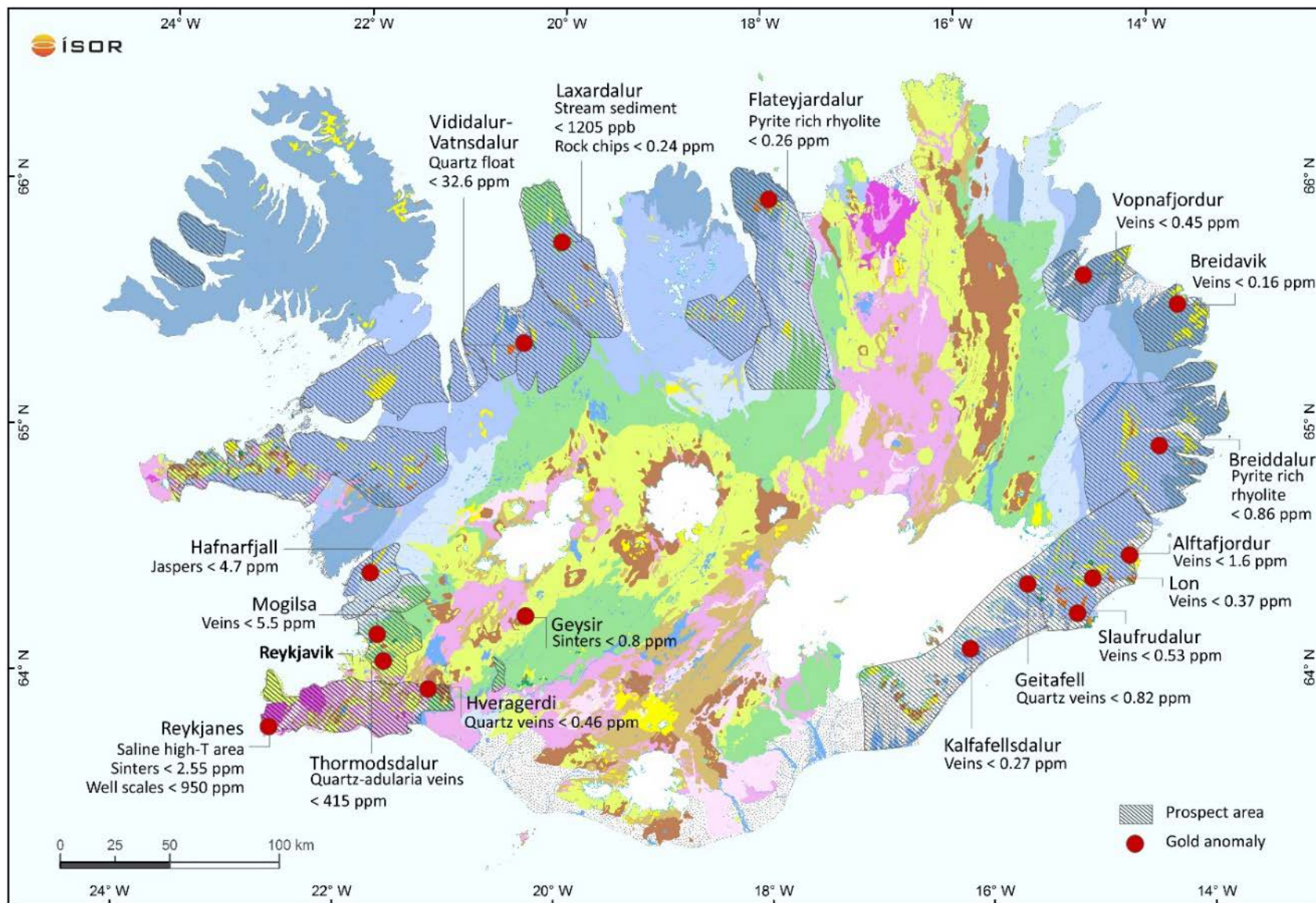


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TBW, Final Meeting, 15.12.2020

# Map of gold anomalies discovered in Iceland

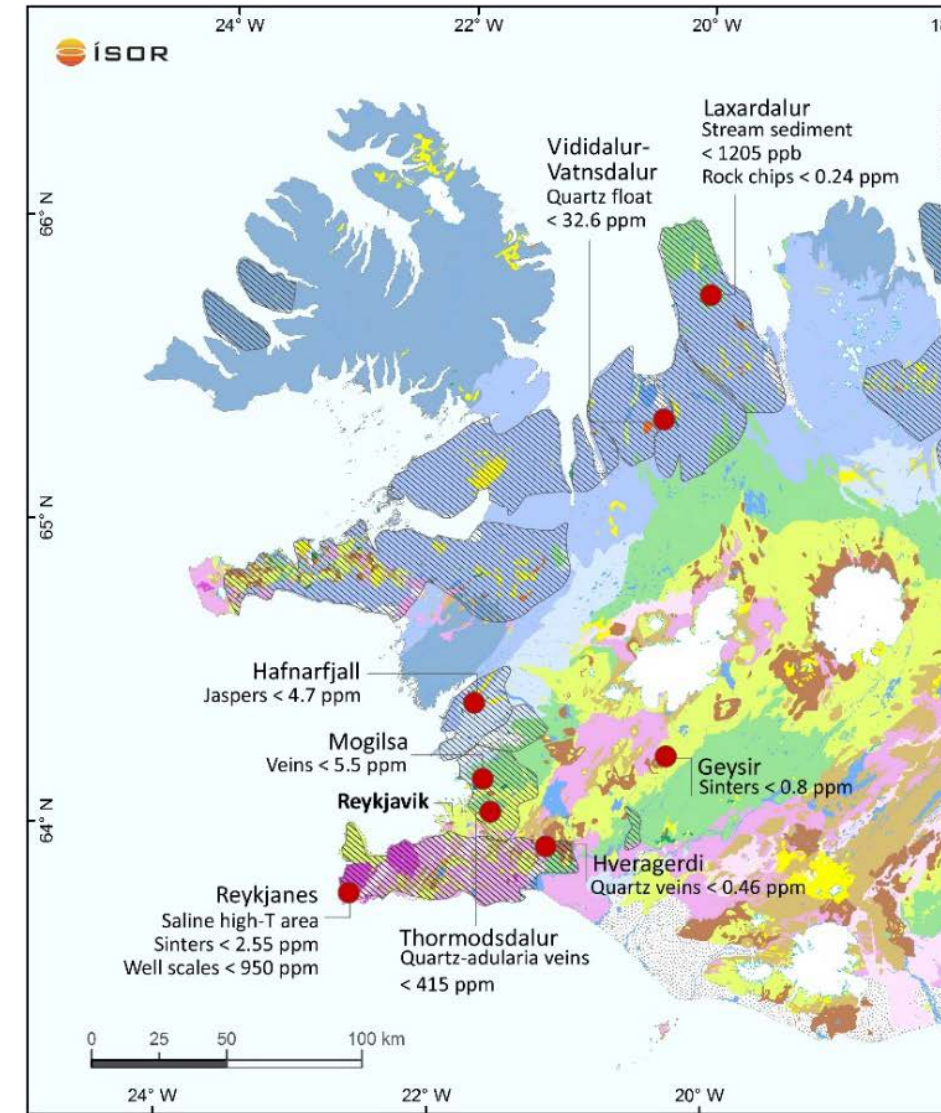
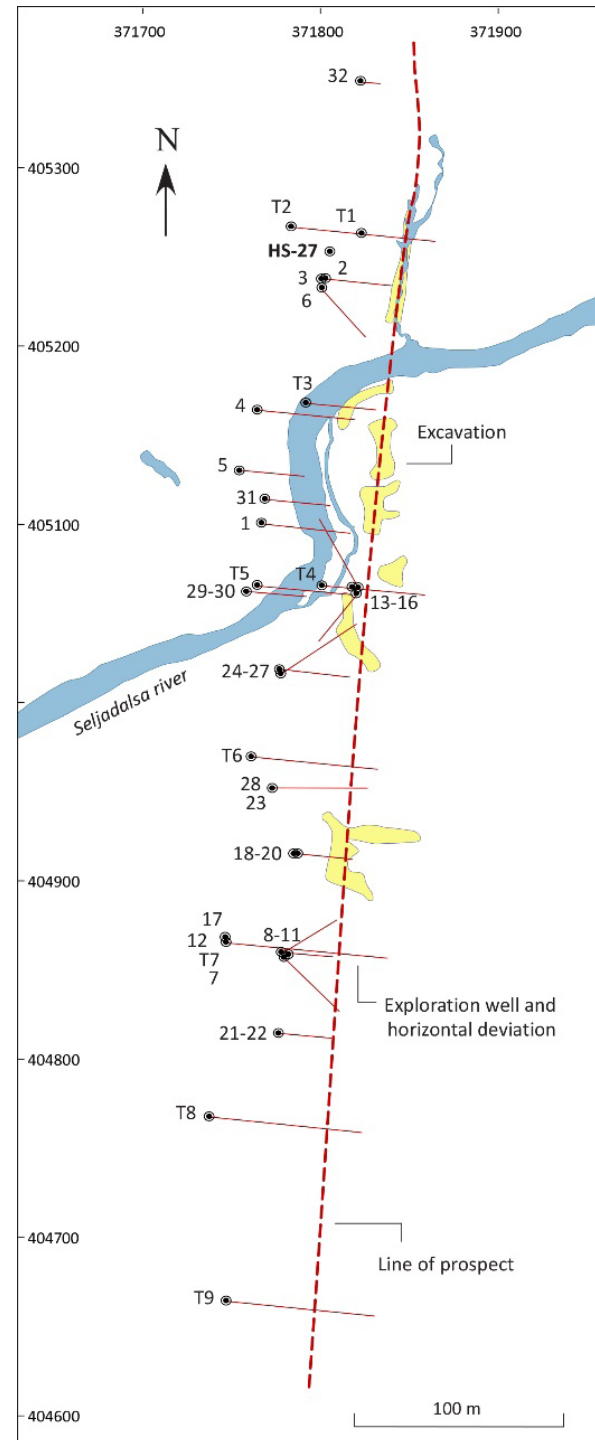
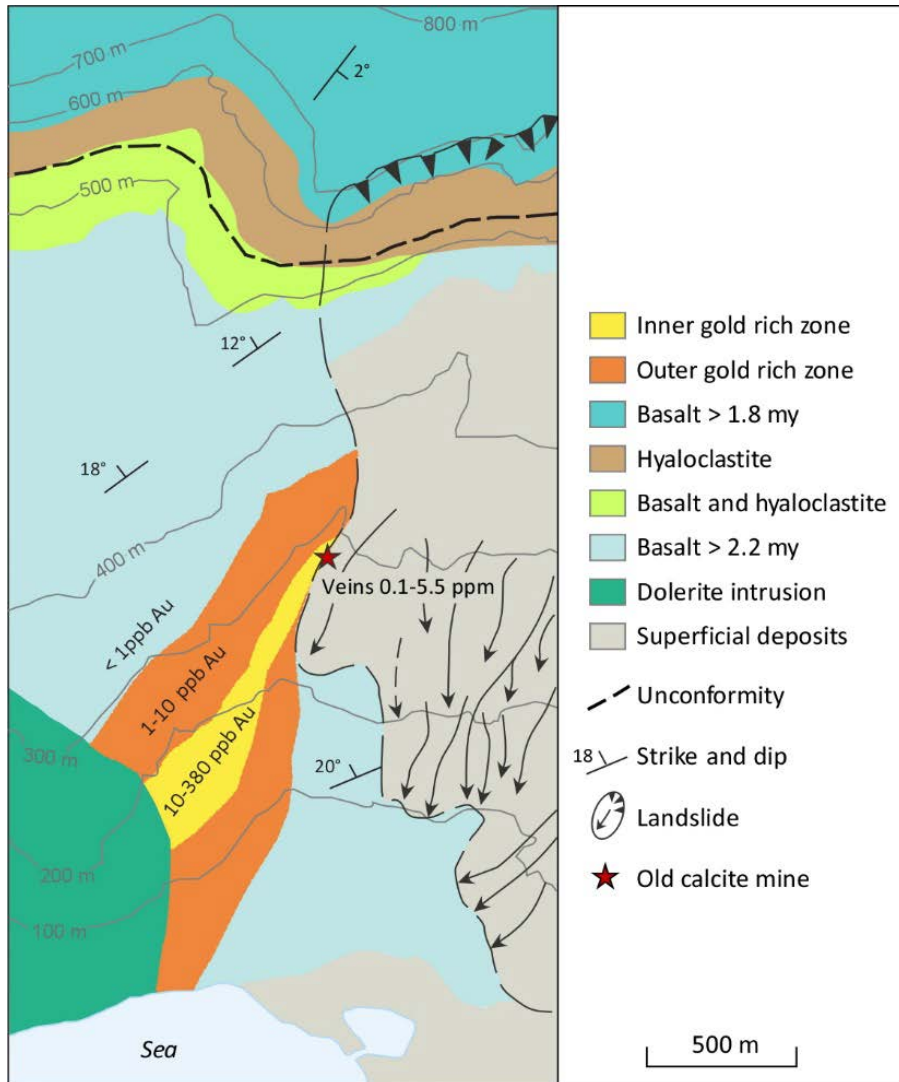


*Franzson et al., 2016*

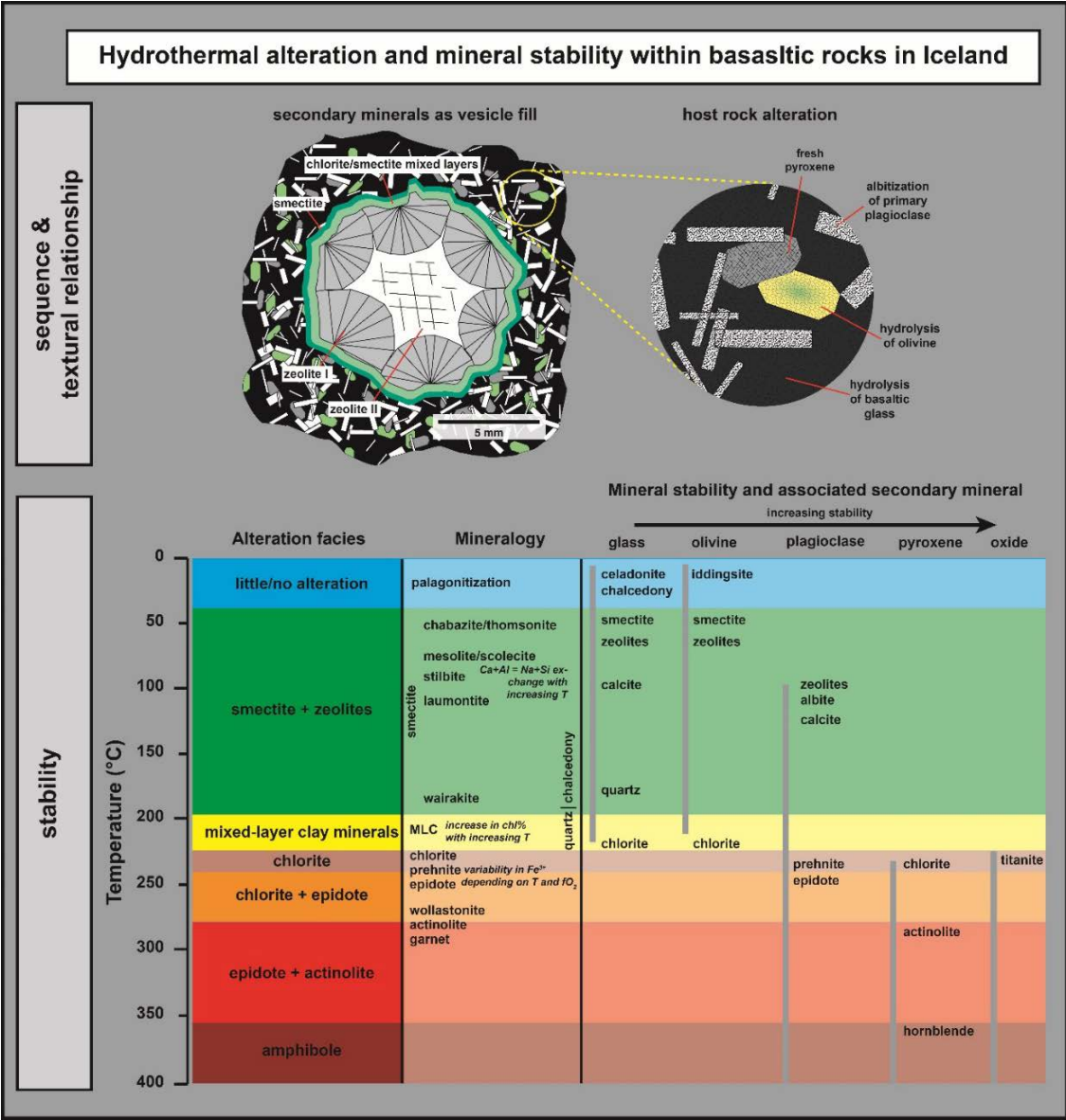
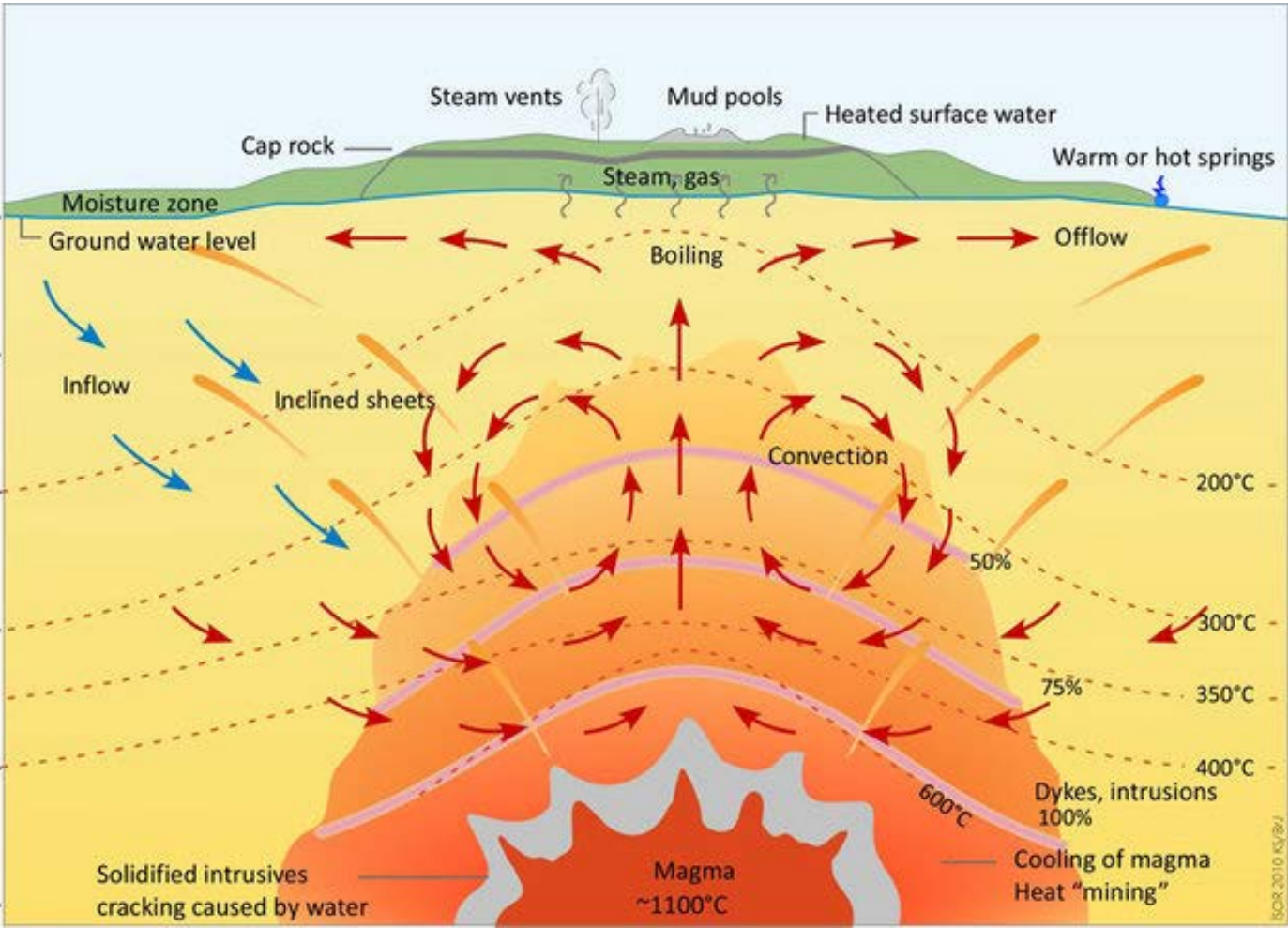
Supported by:  **RawMaterials**  
Connecting matters



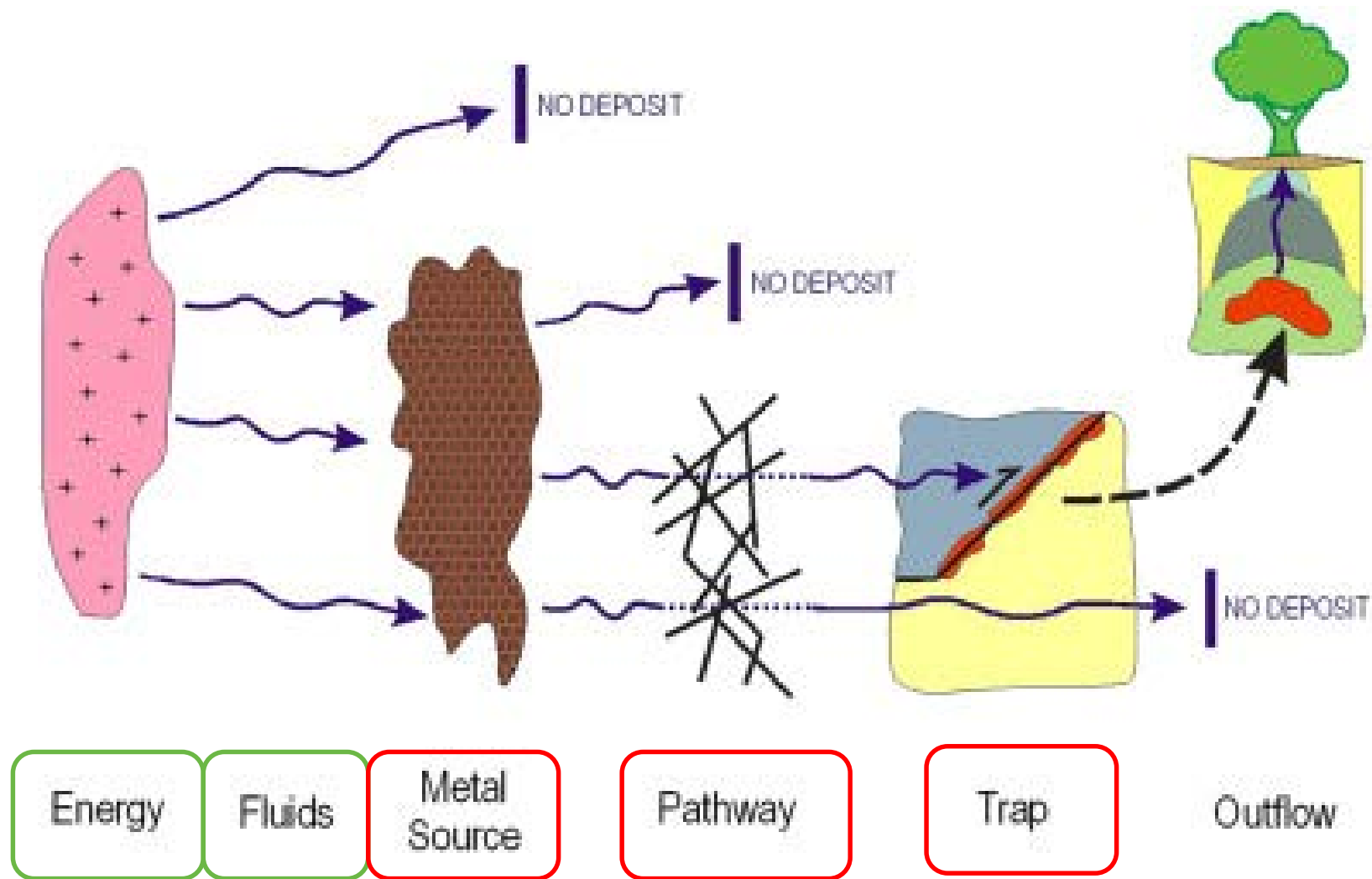
# Prospects



# High-Temperature Hydrothermal System



# The mineral systems concept of ore formation

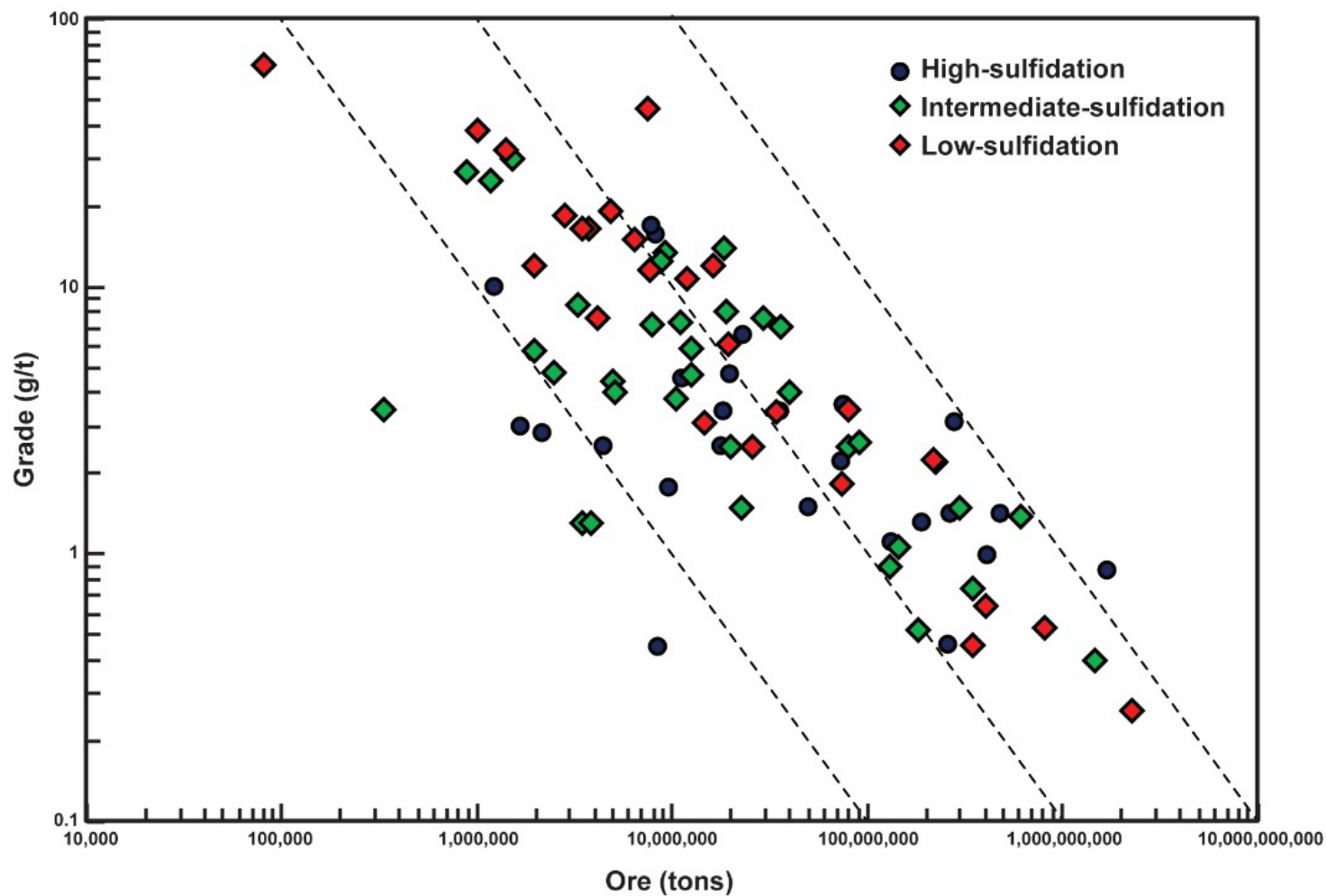


*Payne et al., 2015*

Supported by:



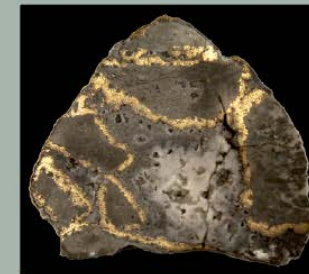
# Grade/tonnage model



John et al., 2018

## Descriptive Models for Epithermal Gold-Silver Deposits

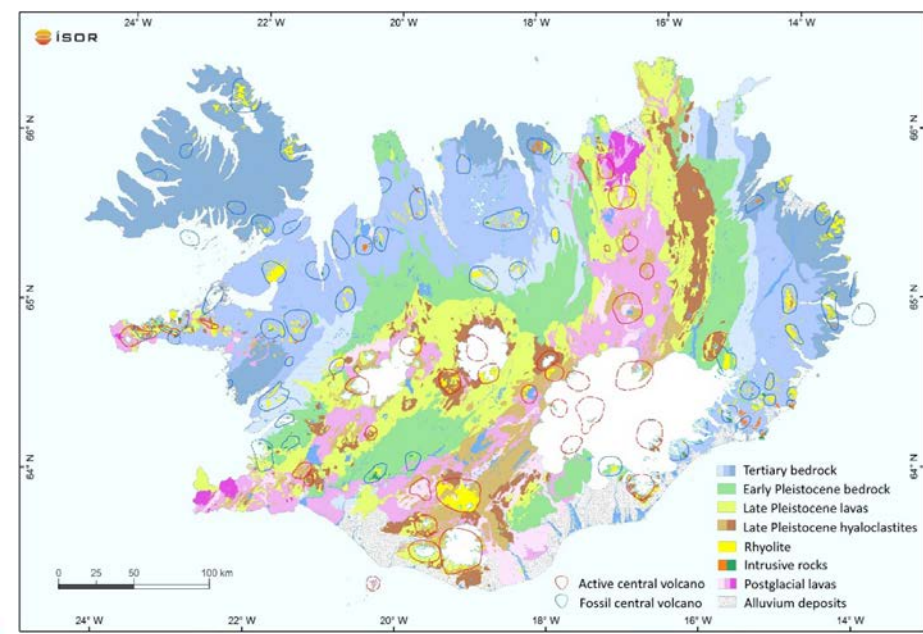
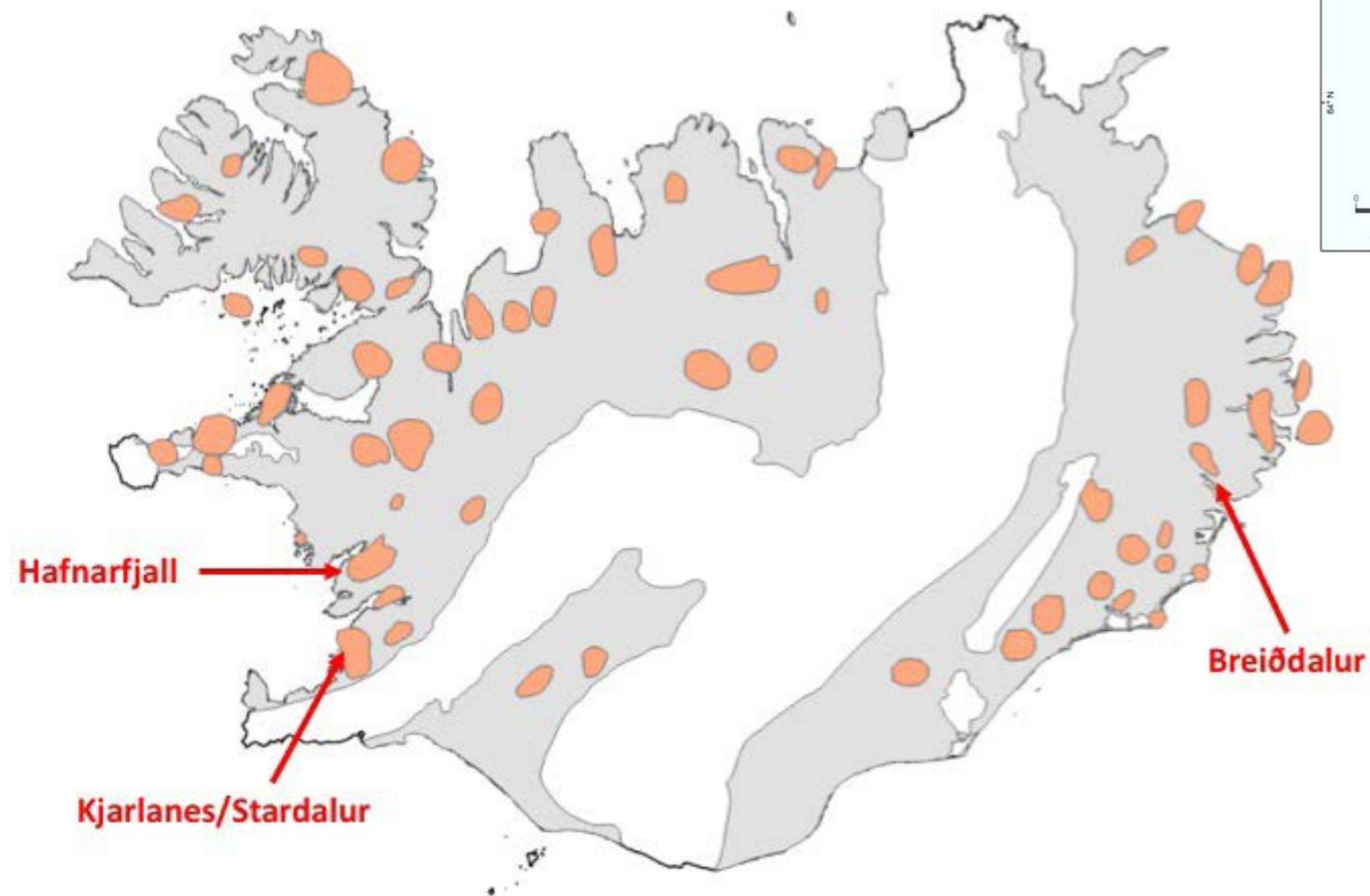
Chapter Q of  
Mineral Deposit Models for Resource Assessment



Scientific Investigations Report 2010-5070-Q

U.S. Department of the Interior  
U.S. Geological Survey

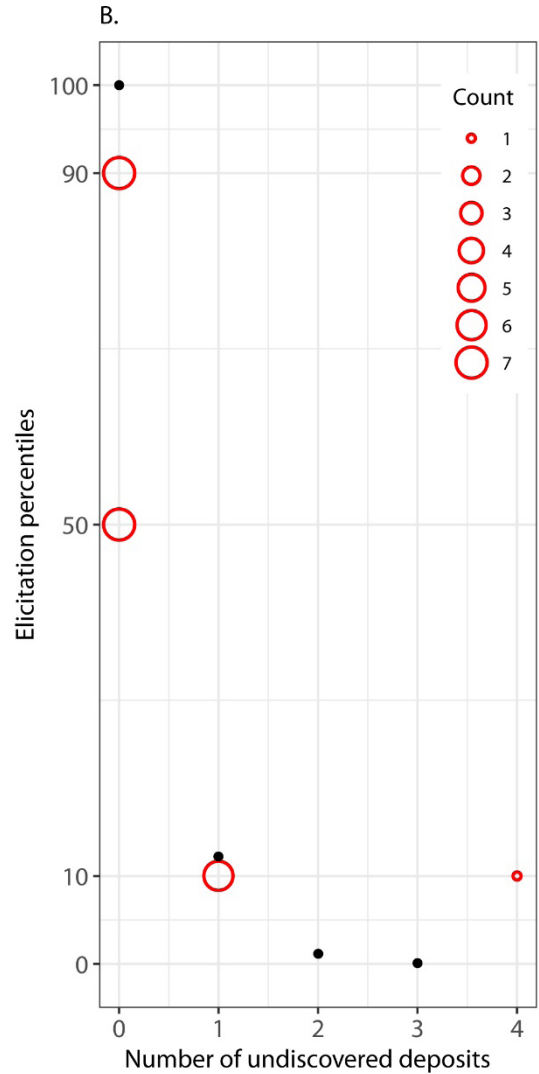
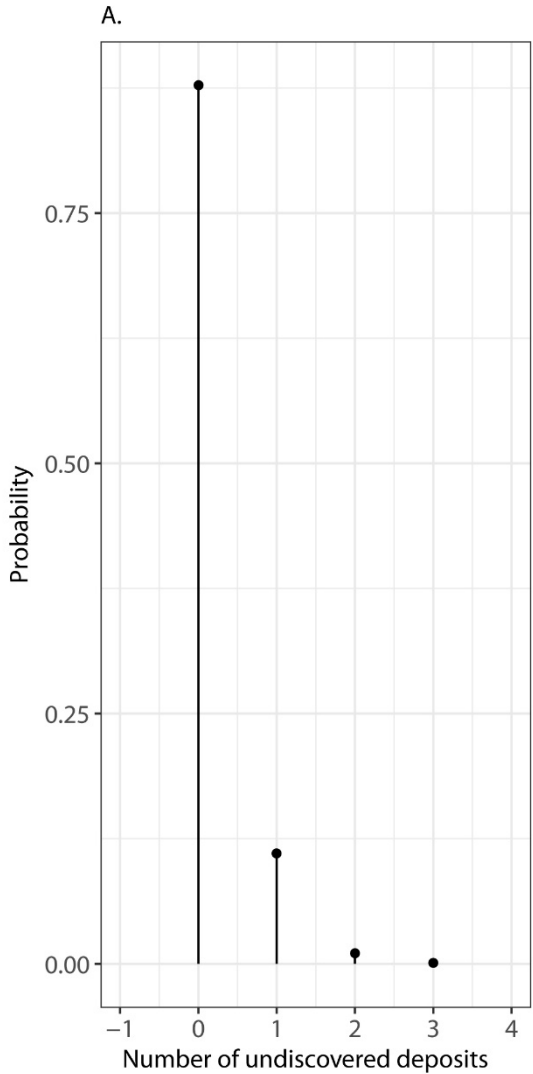
# Permissive tracts



# Breiðdalur - MAPWizard results

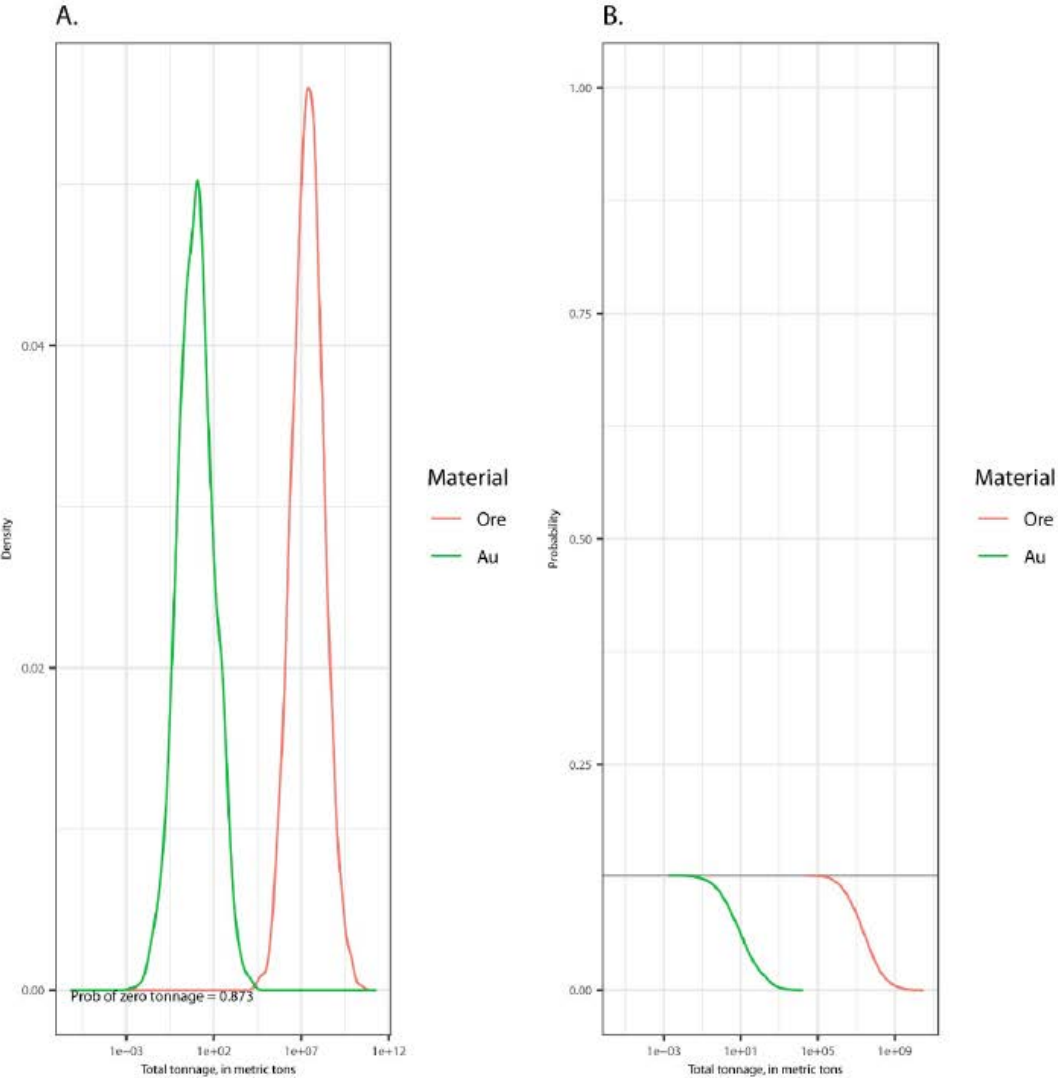
Expert	Weight	N90	N50	N10
GOF	1	0	0	1
HF	1	0	0	1
VH	1	0	0	1
TBW	1	0	0	1
BGR	1	0	0	1
GME	1	0	0	1
TB	0.5	0	0	4

Type	negative binomial
Mean	0.135
Variance	0.144
St. Dev.	0.379
Mode	0
Smallest N deposits in pmf	0
Largest N deposits in pmf	3
Inform. entropy	0.413

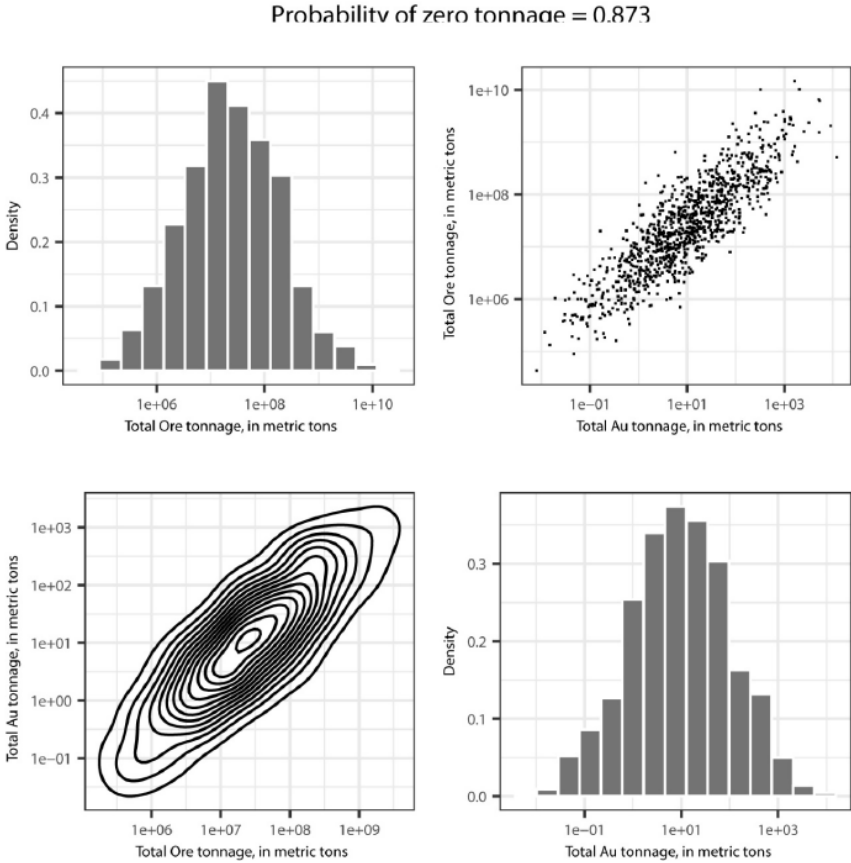




# Breiðdalur - MAPWizard results



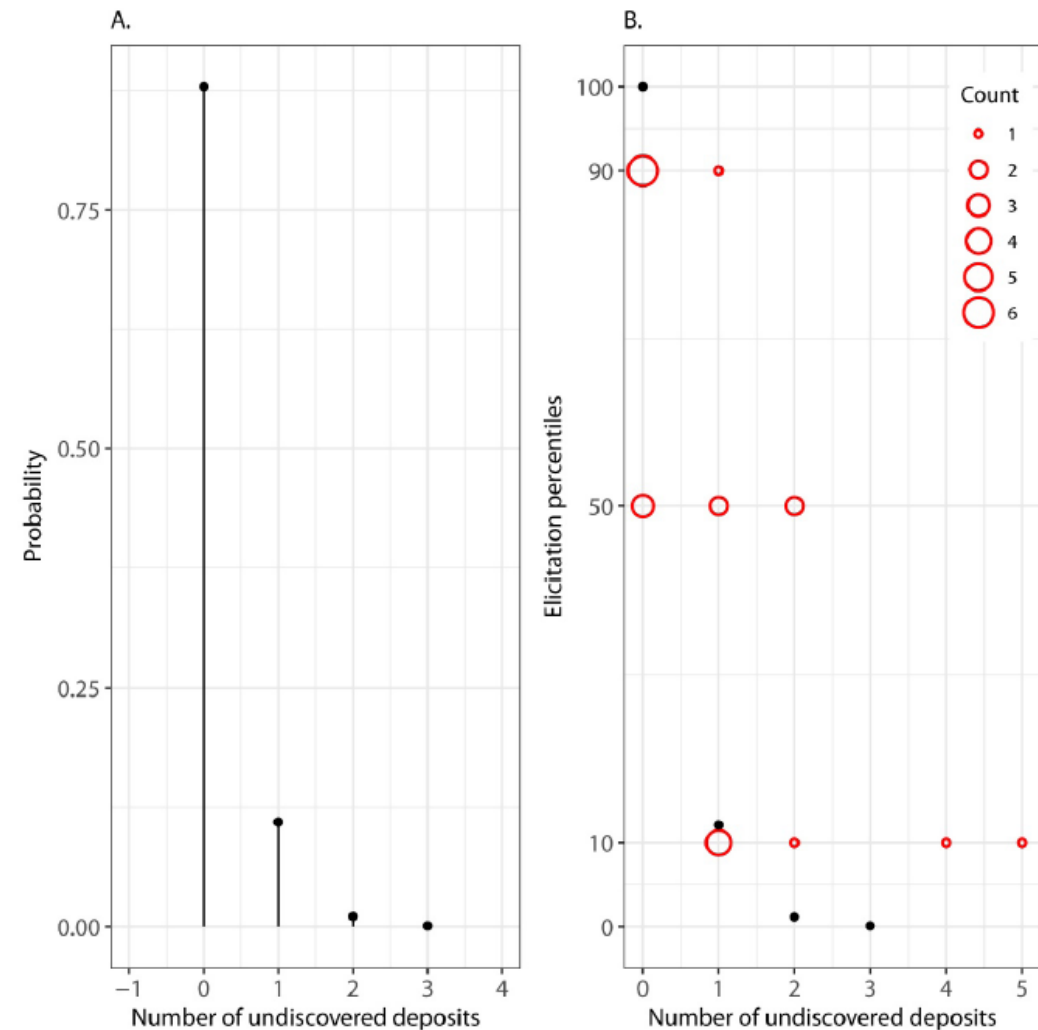
	Quantile							Mean	Probability of	
	0.05	0.1	0.25	0.5	0.75	0.9	0.95		None	Mean or greater
Ore (Mt)	0	0	0	0	0	4.55	42.8	27.1	0.87	0.06
Au (t)	0	0	0	0	0	1.45	17.00	17.40	0.87	0.05



# Hafnarfjall - MAPWizard results

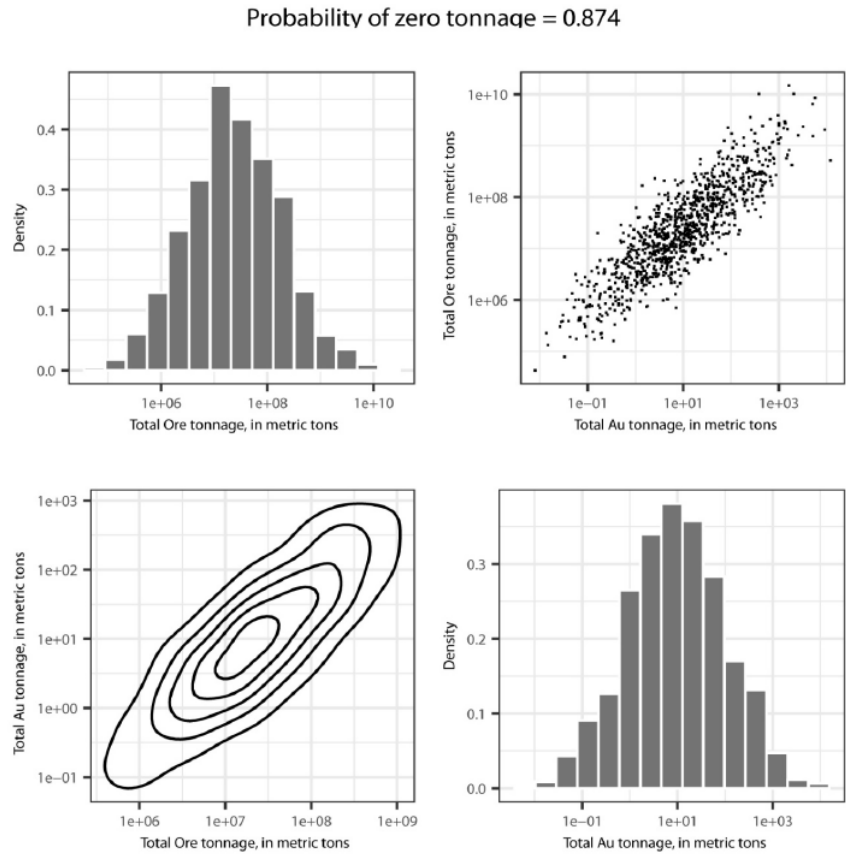
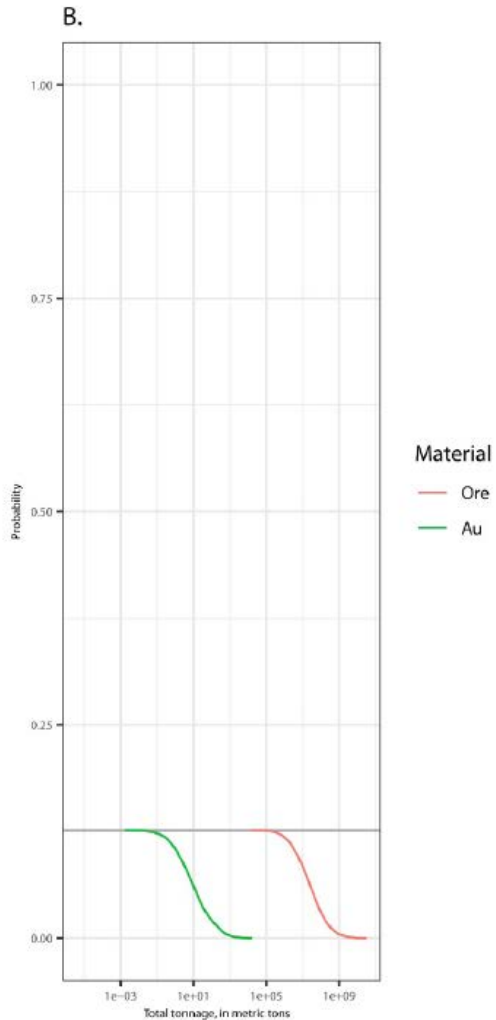
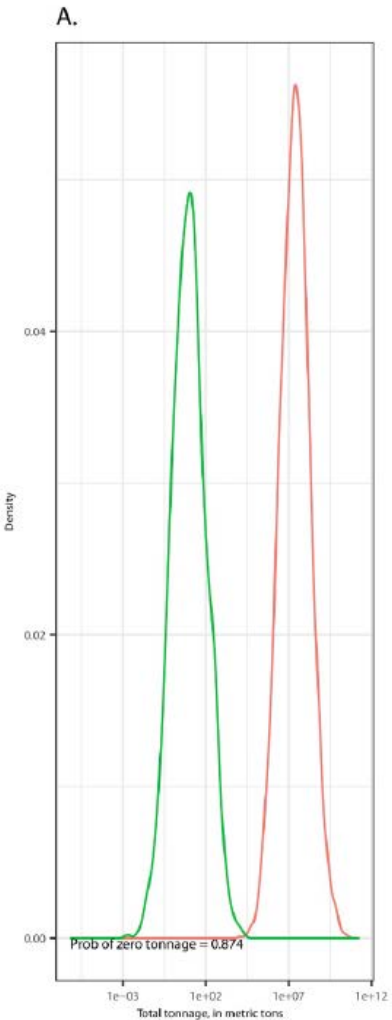
Expert	Weight	N90	N50	N10
GOF	1	0	2	4
HF	1	0	1	1
VH	1	0	0	1
TBW	1	0	0	1
BGR	1	0	1	2
GME	1	0	0	1
TB	0.5	1	2	5

Type	negative binomial
Mean	0.134
Variance	0.143
St. Dev.	0.378
Mode	0
Smallest N deposits in pmf	0
Largest N deposits in pmf	3
Inform. entropy	0.410



# Hafnarfjall - MAPWizard results

	Quantile							Mean	Probability of	
	0.05	0.1	0.25	0.5	0.75	0.9	0.95		None	Mean > greater
Ore (Mt)	0	0	0	0	0	4.32	42	27	0.87	0.06
Au (t)	0	0	0	0	0	1.37	16.80	17.40	0.87	0.05

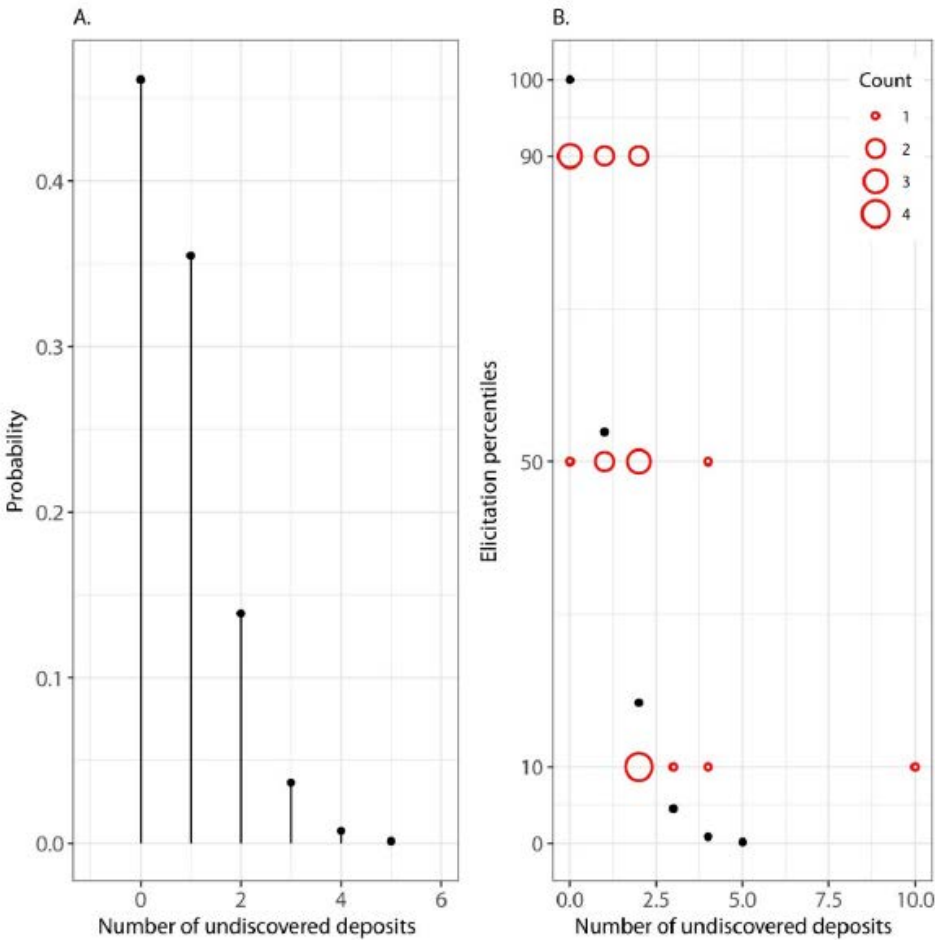




# Kjarlarnes/Stardalur - MAPWizard results

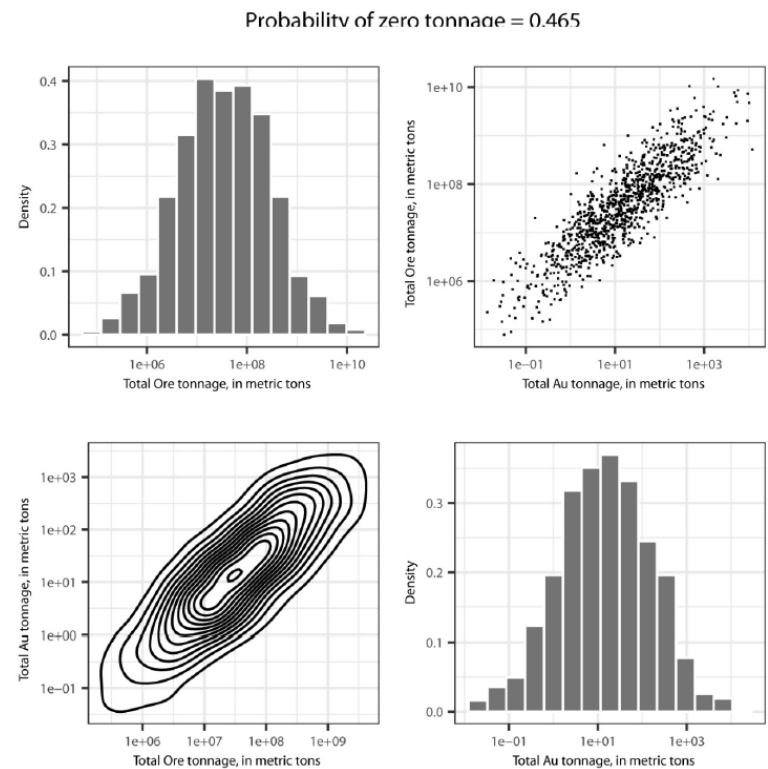
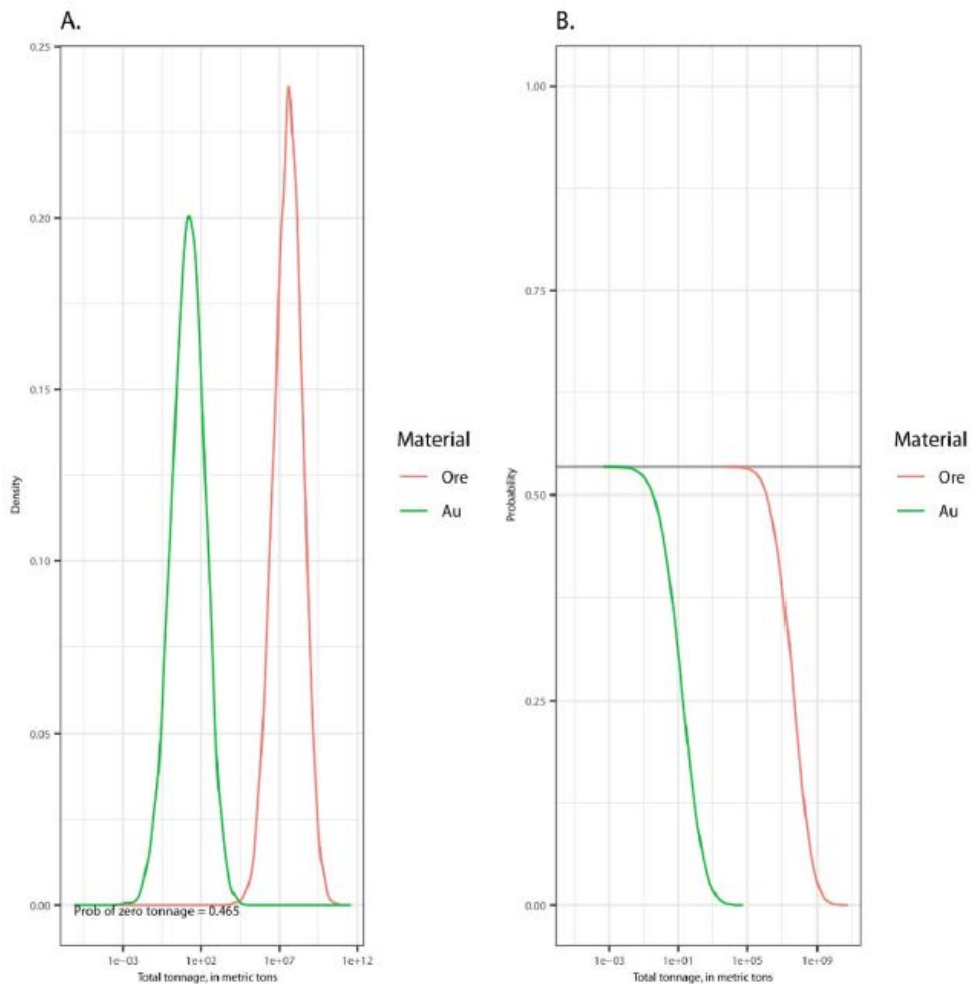
Expert	Weight	N90	N50	N10
GOF	1	1	2	3
HF	1	2	2	2
VH	1	0	0	2
TBW	1	0	1	2
BGR	1	1	2	4
GME	1	0	1	2
TB	0.5	2	4	10

Type	negative binomial
Mean	0.778
Variance	0.784
St. Dev.	0.885
Mode	0
Smallest N deposits in pmf	0
Largest N deposits in pmf	5
Inform. entropy	1.165



# Kjarlarnes/Stardalur - MAPWizard results

	Quantile							Quantile	Probability of	
	0.05	0.1	0.25	0.5	0.75	0.9	0.95		None	Mean or greater
Ore (Mt)	0	0	0	1.36	45.4	240	558	143	0.47	0.14
Au (t)	0	0	0	0.35	19.1	129	354	106	0.47	0.11



# Conclusion & Recommendation

- *Application of the MAPWizard three-part assessment tool for a greenfield*
  - *Incomplete descriptive model of the hydrothermal ore formation model as well as limited exploration data*
    - *This results in a lack vectors that can guide to deposits and hence a low number of estimated deposits.*
  - *Grade/tonnage model based on global scale*



Supported by:



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