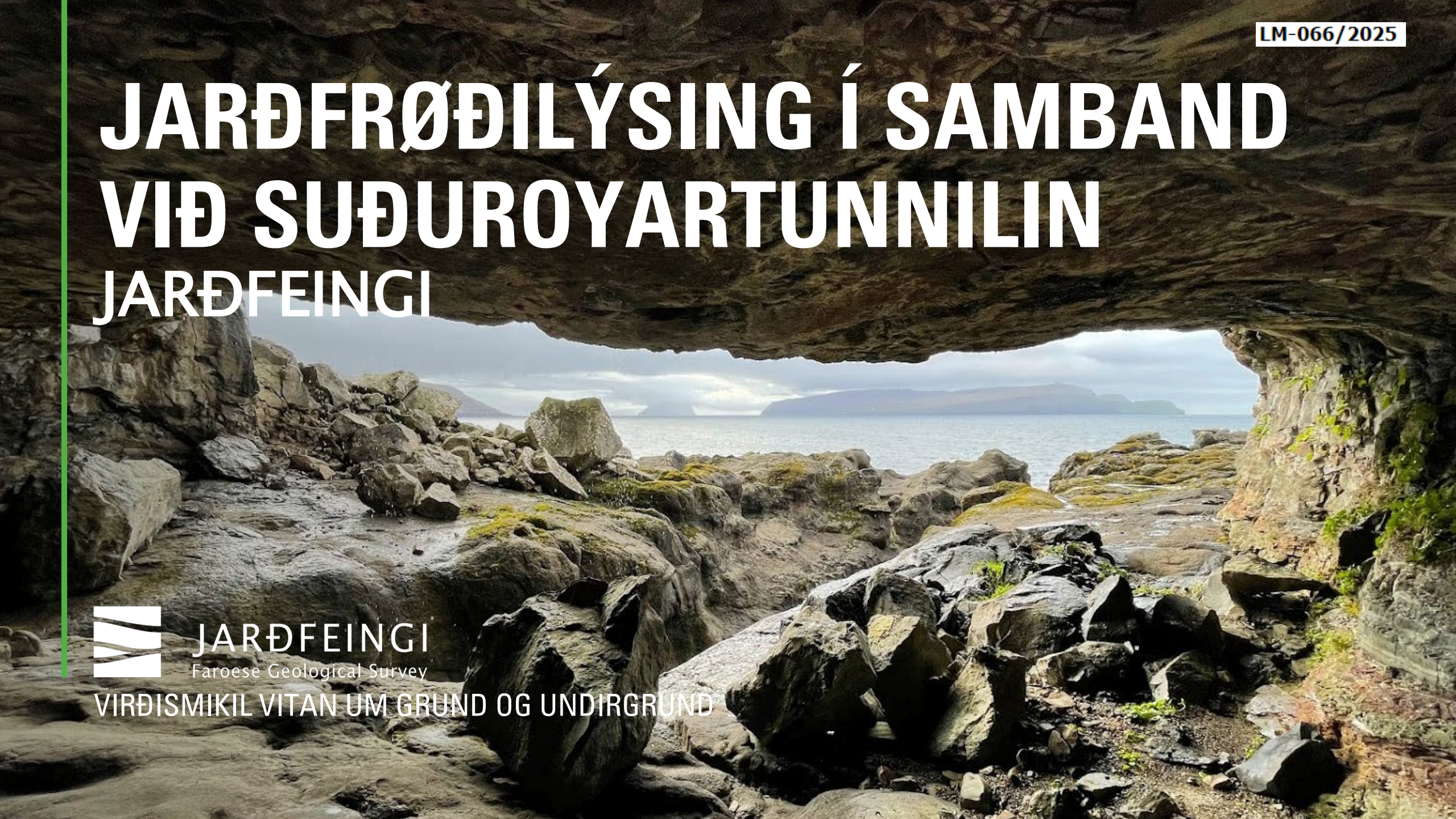
LM-066/2025

JARÐFRØÐILÝSING Í SAMBAND VIÐ SUÐUROYARTUNNILIN

JARÐFEINGI



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VIRÐISMIKIL VITAN UM GRUND OG UNDIRGRUND

INNIHALD

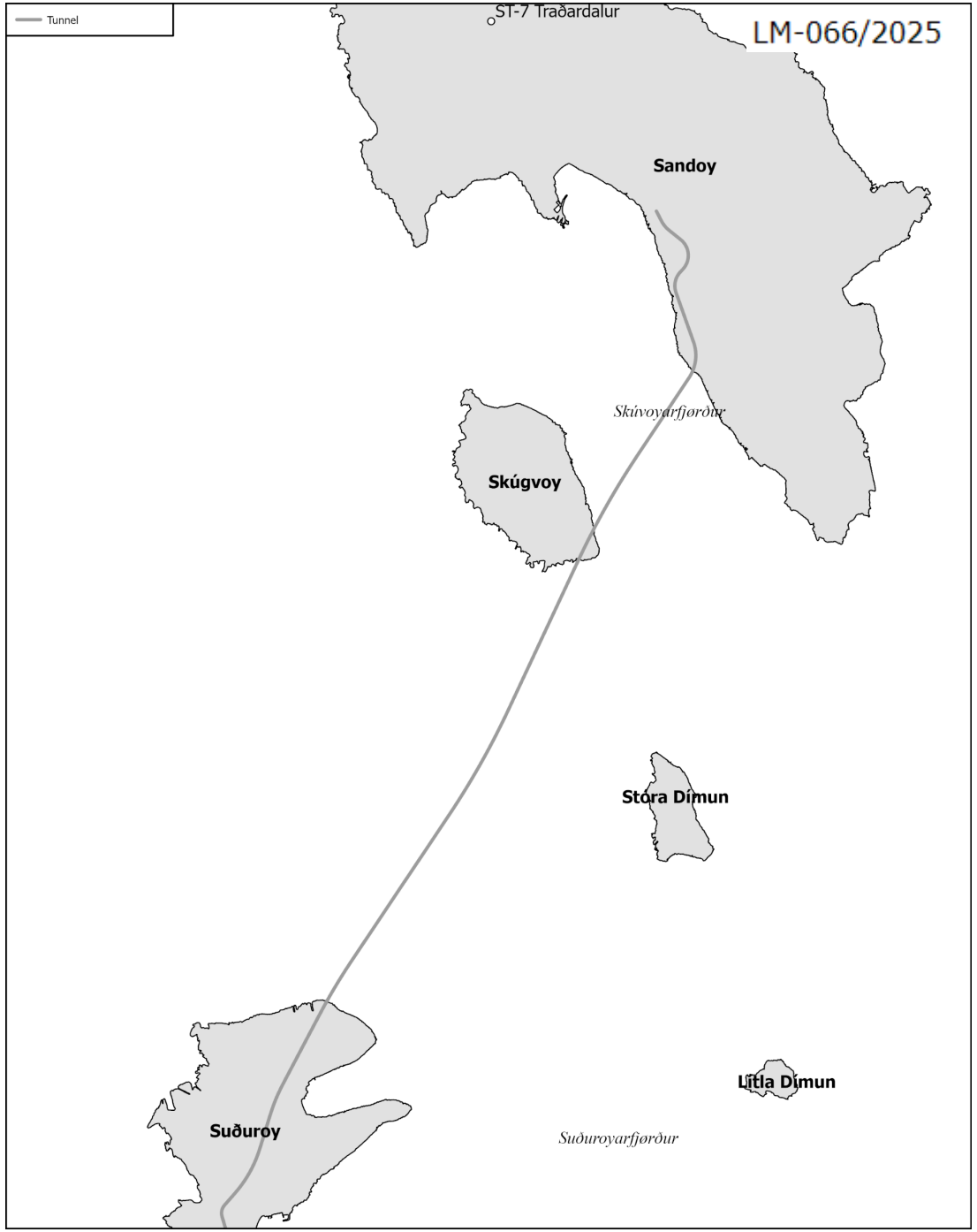
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DÁTUGRUNDARLAG OG ÚRSLIT

NIÐURSTØÐUR OG TILMÆLI

HVAT ER GJØRT OG HVÍ

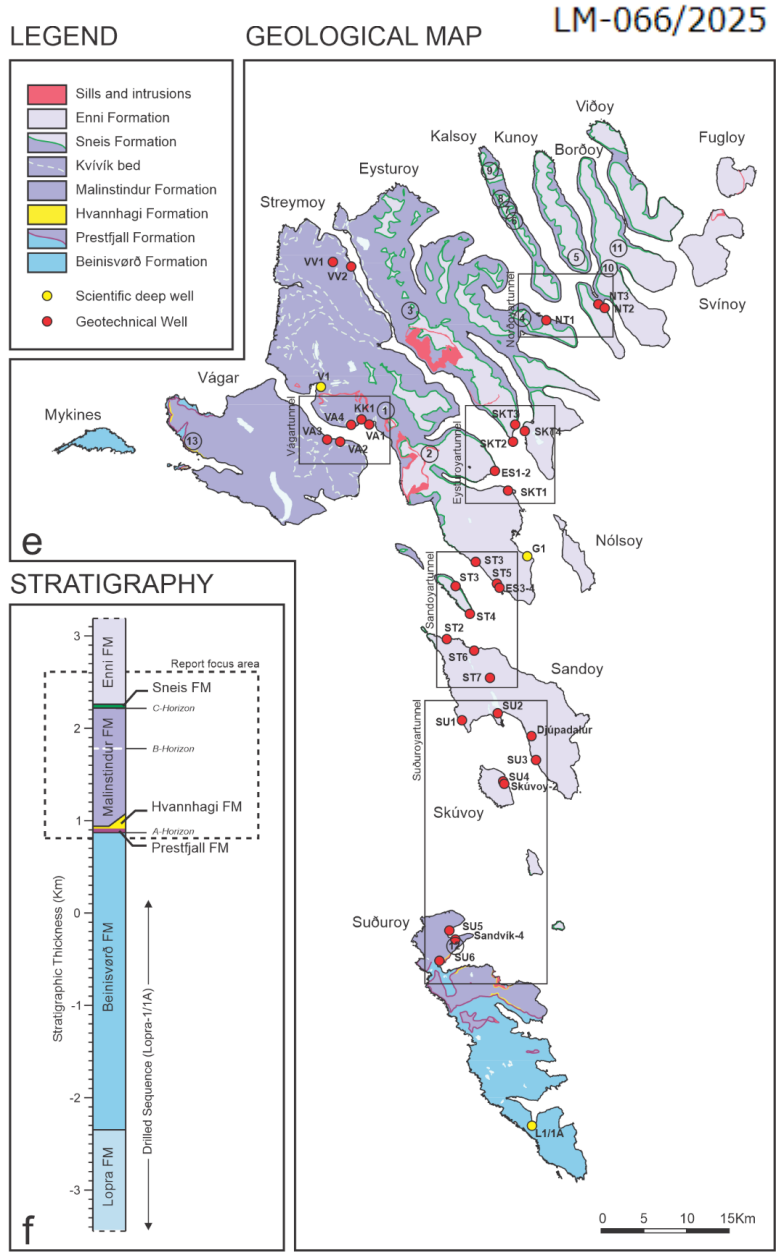
JARÐFRØÐILIGAR FORKANNINGAR



NÓGV VITAN

AÐRAR VERKÆTLANIR
Vitan savnað á sama stað ígjøgnum góð 80 ár.

- Jarðfrøðin & fláarøðin



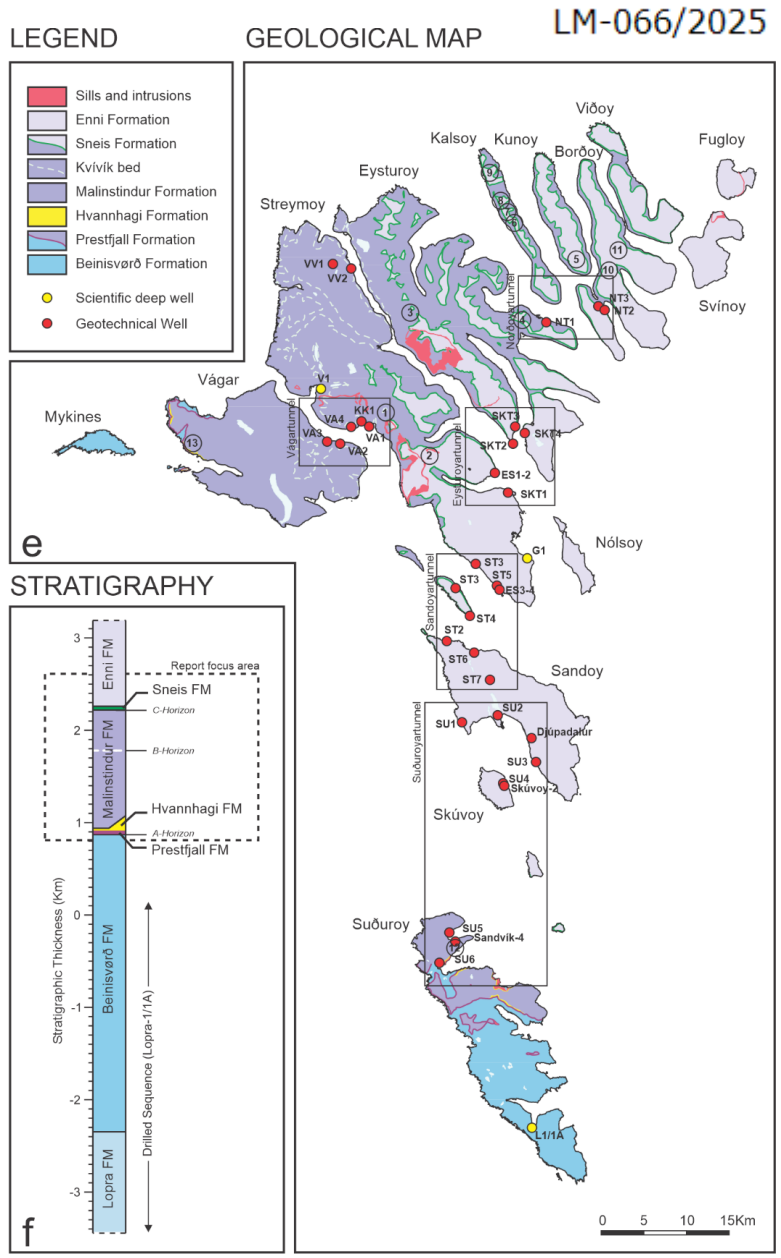
NÓGV VITAN

AÐRAR VERKÆTLANIR
Vitan savnað á sama stað
ígjøgnum góð 80 ár.

- Jarðfrøðin & fláarøðin
- Geotekniskar boringar

Frástøða frá datum frá boringum til tunnilslinjuna

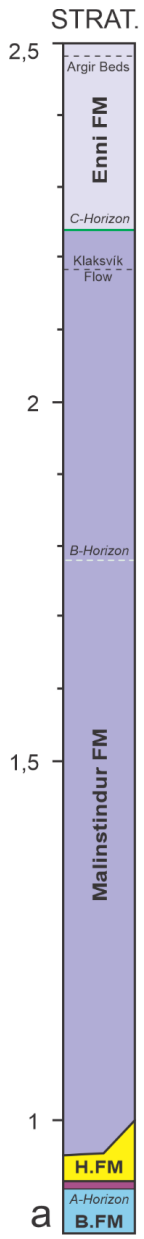
	Vága-	Norðoya-	Eysturoyar-	Sandoyar-	Suðuroyar-
Miðal (m)	568	1152	669	1575	4934
Min (m)	15	218	84	129	164
Max (m)	1264	2354	1729	3135	14129

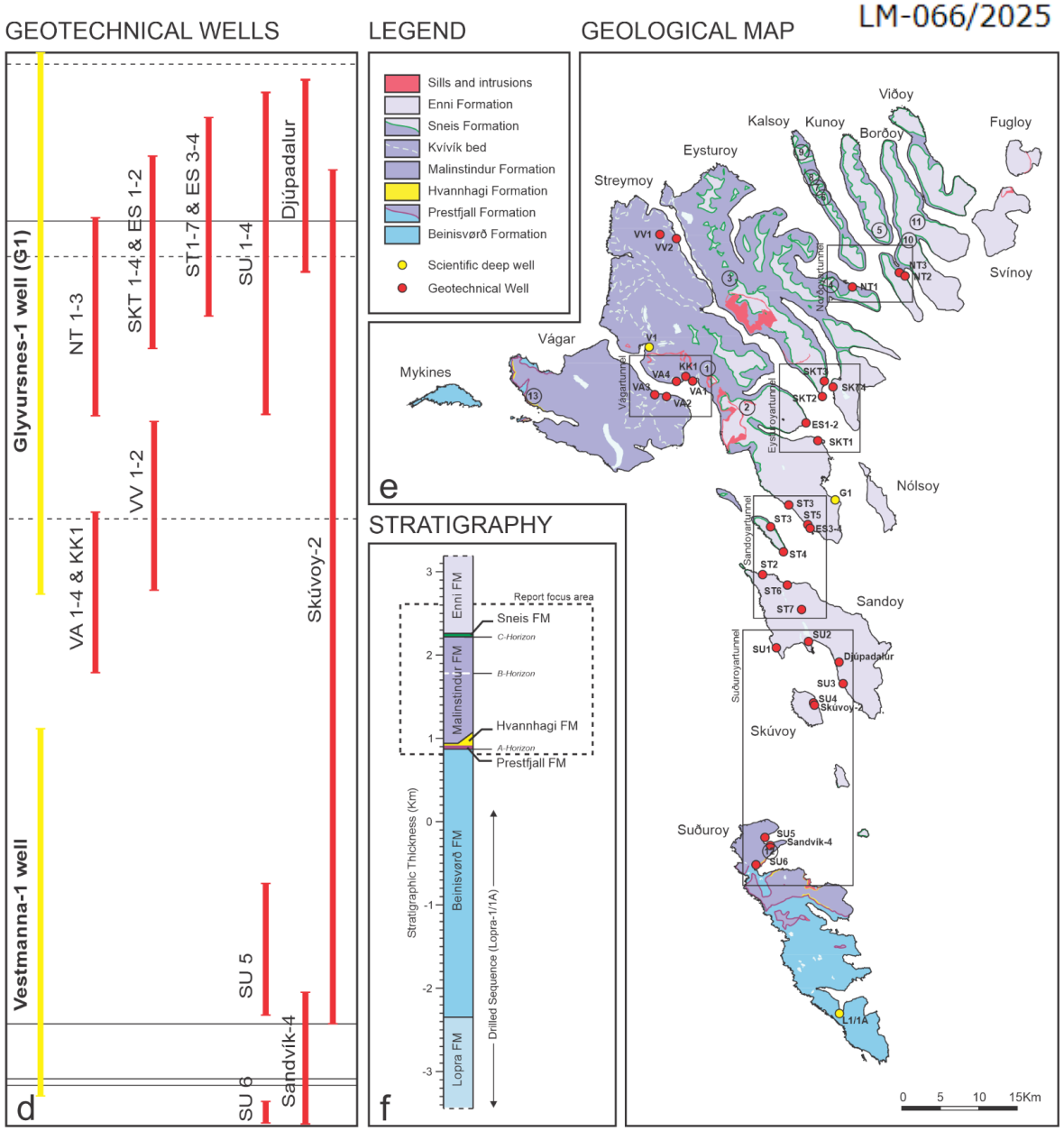


NÓGV VITAN

AÐRAR VERKÆTLANIR
Vitan savnað á sama stað ígjøgnum góð 80 ár.

- Jarðfrøðin & fláarøðin
- Geotekniskar boringar



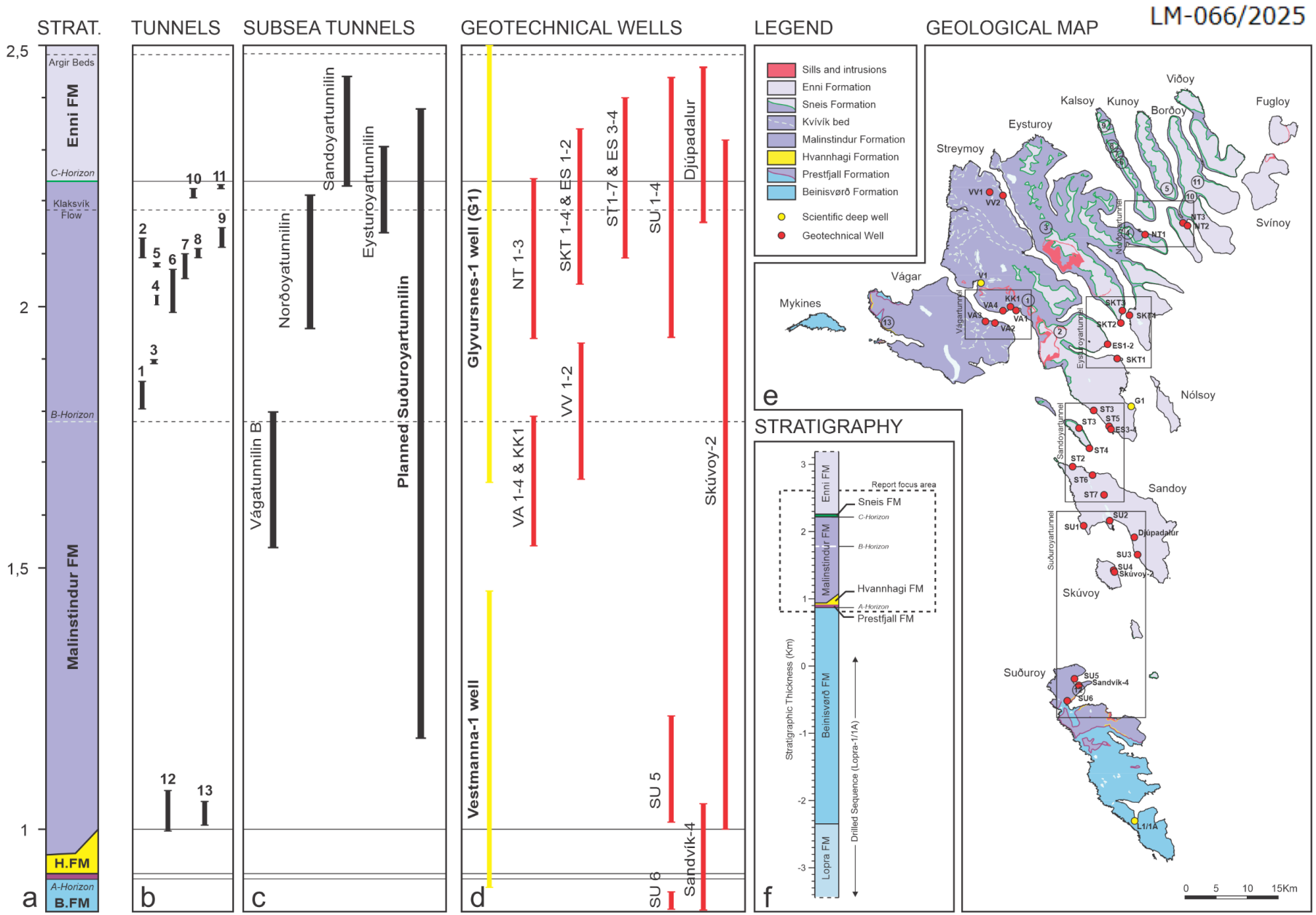


NÓGV VITAN

AÐRAR VERKÆTLANIR

Vitan savnað á sama stað ígjøgnum góð 80 ár.

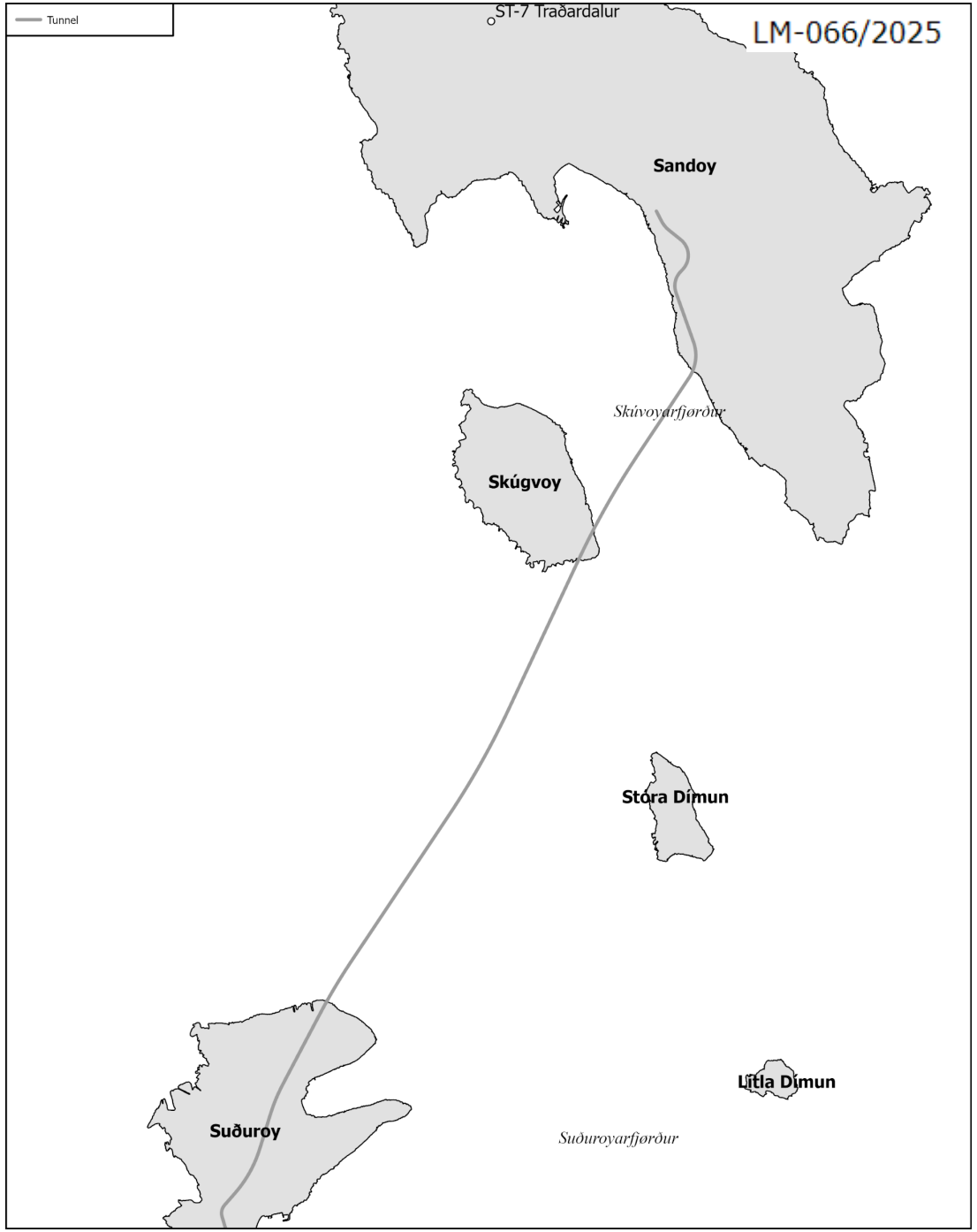
- Jarðfrøðin & fláarøðin
- Geotekniskar boringar
- Aðrir landtunlar
- Aðrir undirsjóvartunlar



HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

- Hendan frágreiðing umfatar einans tunnilslinjuna frá Djúpadali til Sandvíkar
- Armur upp til Skúvoyar er ikki við – *Verður gjørt eftirfylgjandi*
- Nýggjur Sandvíkartunnil er ikki við – *Arbeiðið er í gongd*



HVAT ER GJØRT OG HVÍ

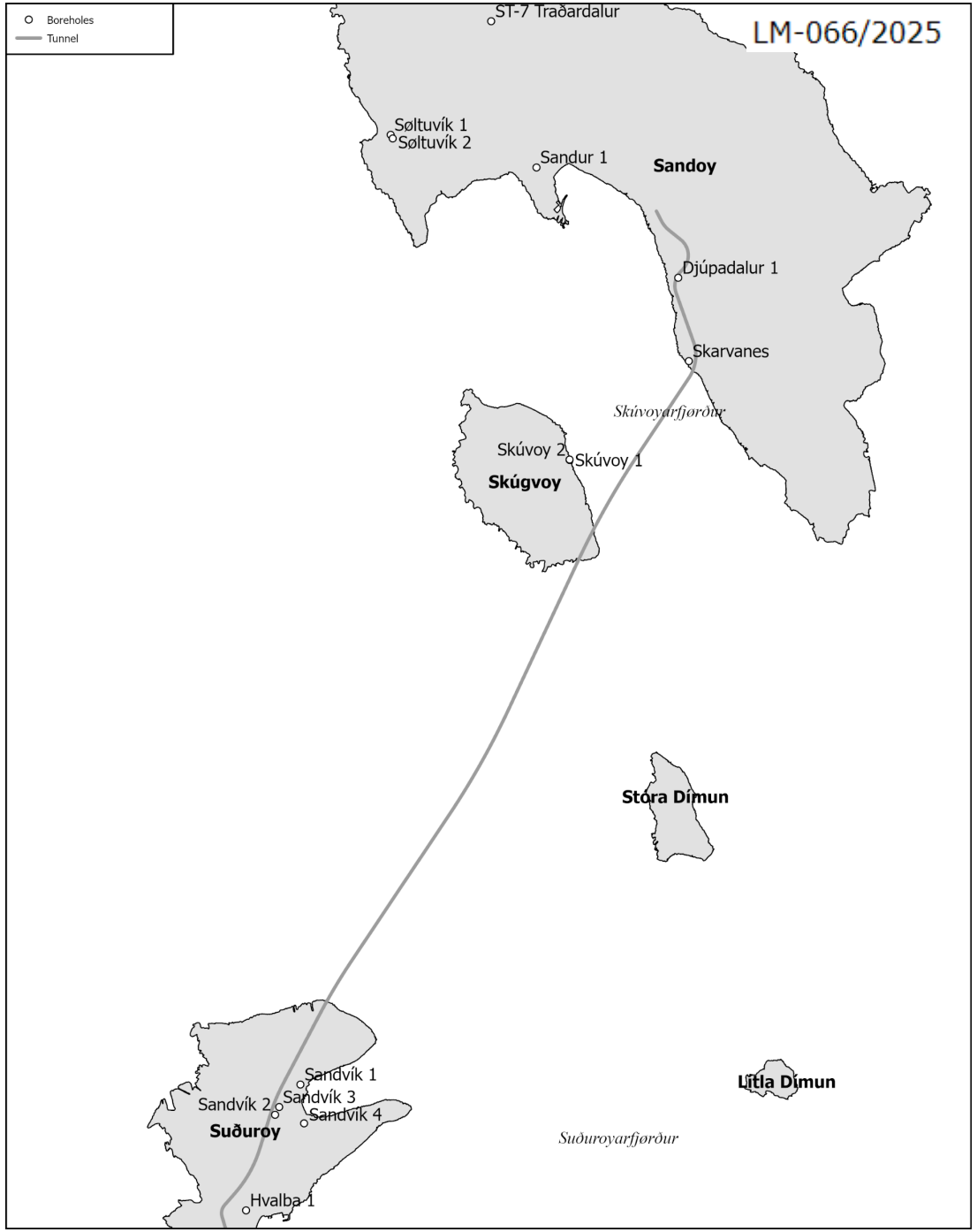
JARÐFRØÐILIGAR FORKANNINGAR

- Geotekniskar boringar og logging

Probe	Output logs
High Resolution Optical Televiewer	Image, Orientation
3-arm caliper probe	Diameter
Electric Log Probe	Resistivity, Natural gamma, Temperature

Table 1. Wire line logs.

Location	Latitude	Longitude	Elevation	Length	Well diameter
	[m]	[m]	[m]	[m]	[inch]
Søltuvík-2	859468.1	205945.0	46.3	317.5	5
Sandur-1	858750.0	209523.1	21.4	204.0	5
Skarvanes-1	853932.0	213312.0	16.2	399.0	5
Skúvoy-1	851475.0	210343.7	4.2	393.8	6
Sandvík-1	835937.8	203656.7	28.5	198.0	5
Sandvík-2*	835189	203023	18	158.0	5
Sandvík-3*	835395	203058	5	153.0	5
Sandvík-4*	834965	203658	100	337.5	5
Hvalba-1	832808.5	202300.5	26.8	300.0	5
Djúpadalur-1 core	856005.9	213052.5	53.8	300.1	3
Skúvoy-2 core	851481.6	210349.0	3.5	1111.3	3

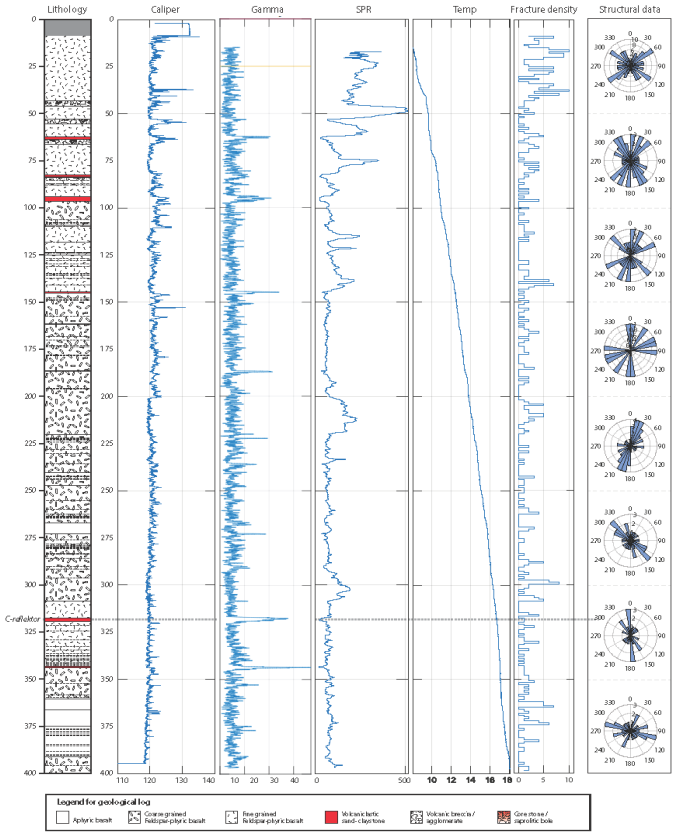


HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

- Geotekniskar boringar og logging

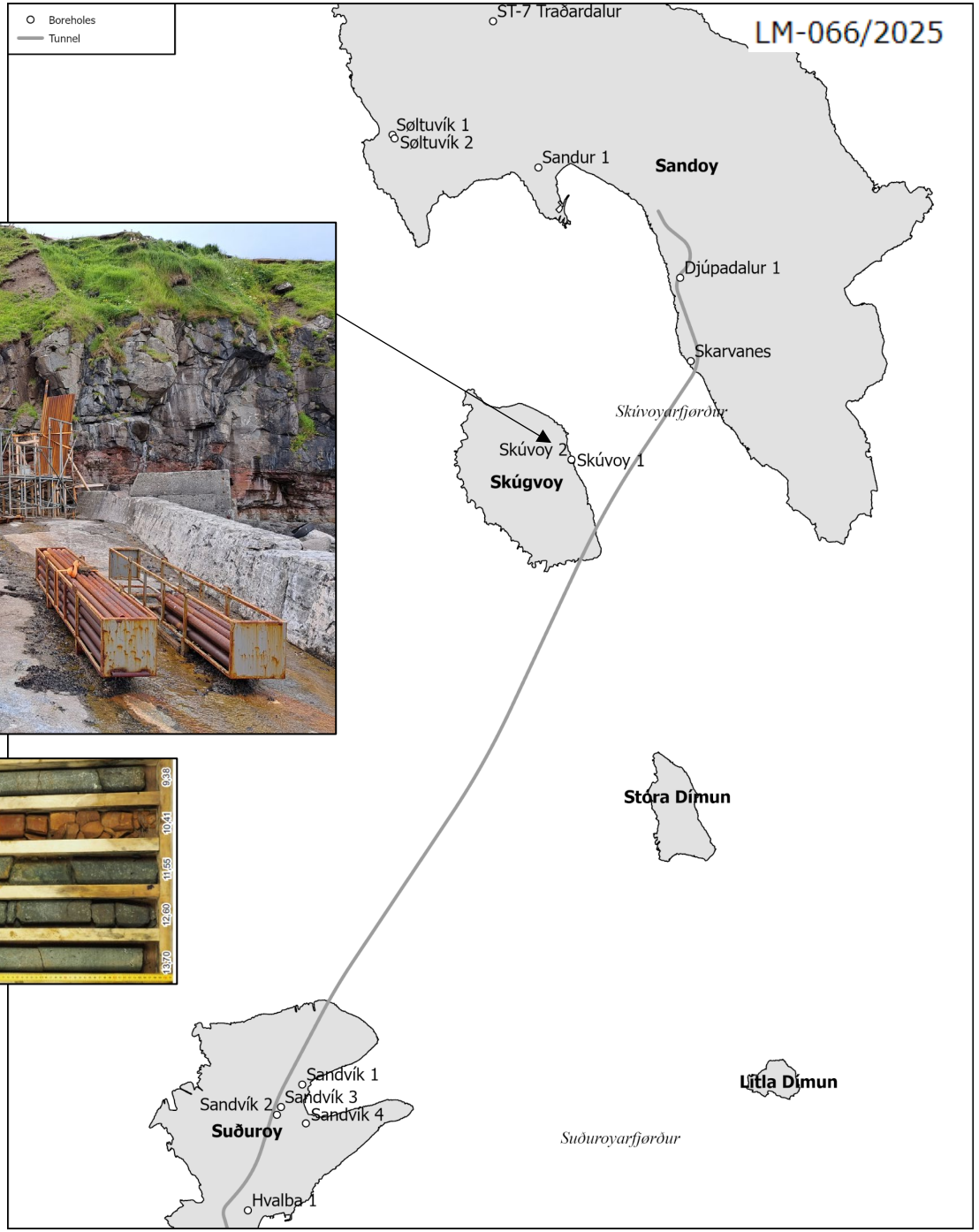
Skarvanes 1 - Compiled stratigraphy, logging results and structural data











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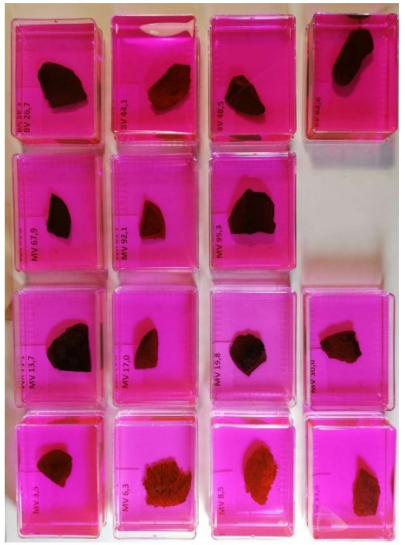
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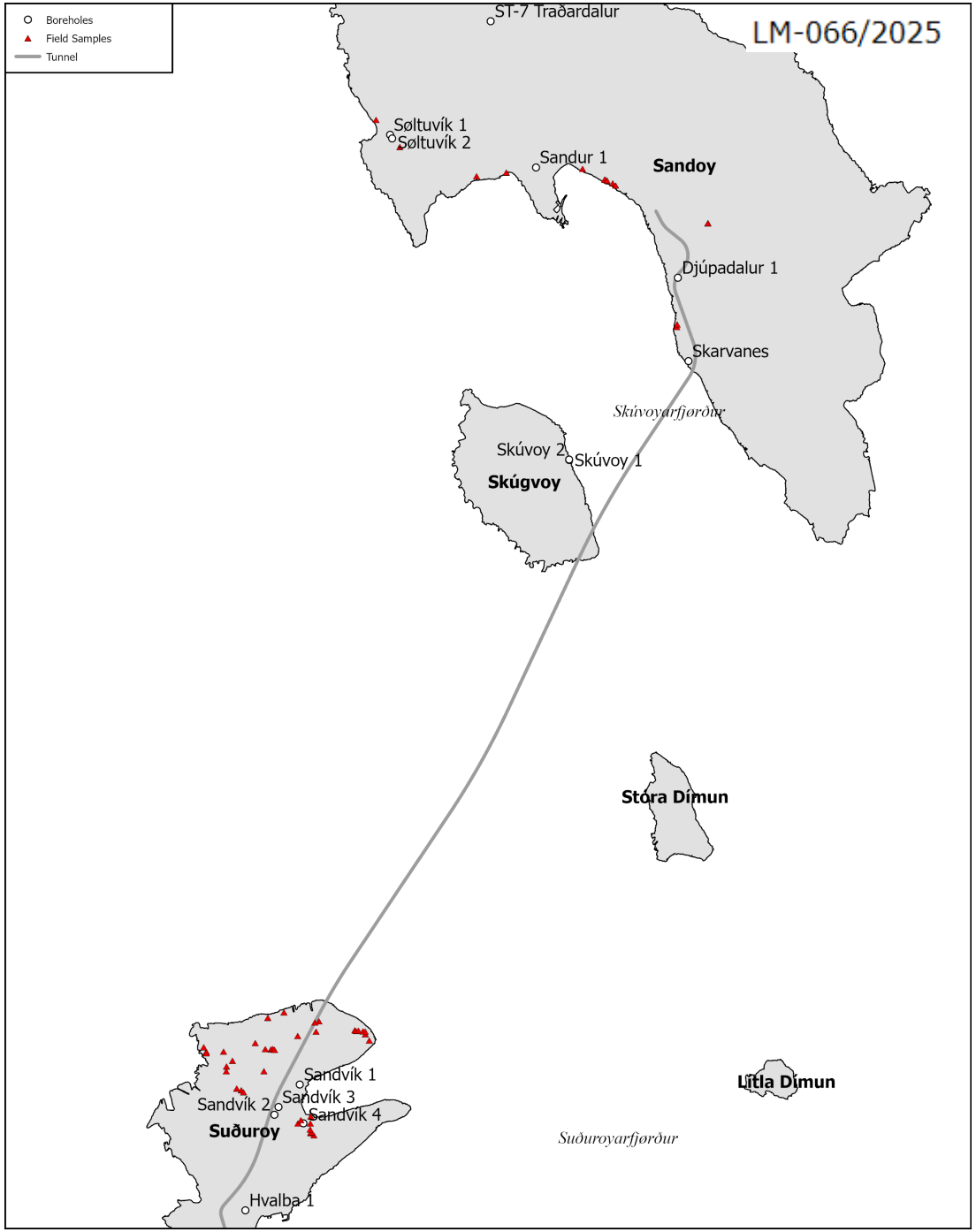
JARÐFRØÐILIGAR FORKANNINGAR

- Geotekniskar boringar og logging
- Jarðfrøðilig kortlegging
  - Jarðfrøðin - fláarøðin
  - Rivur og rivuløg
  - Grótgóðska
  - Grótroyndir (EGI / Geokemi)









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Faroese Geological Survey

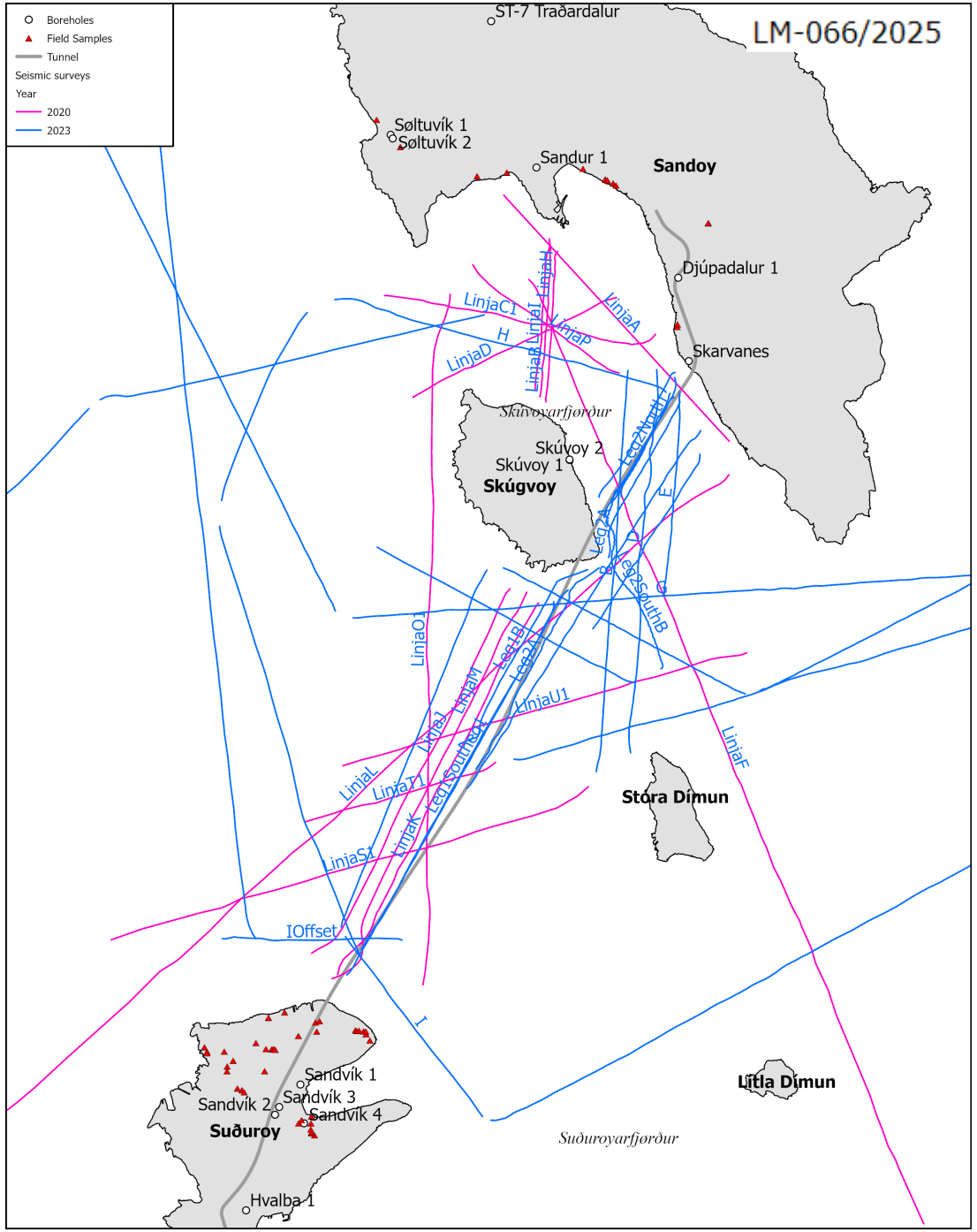
HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

- Geotekniskar boringar og logging
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  - Jarðfrøðin - fláarøðin
  - Rivur og rivuløg
  - Grótgóðska
  - Grótroyndir (EGI / Geokemi)
- Seismikkur



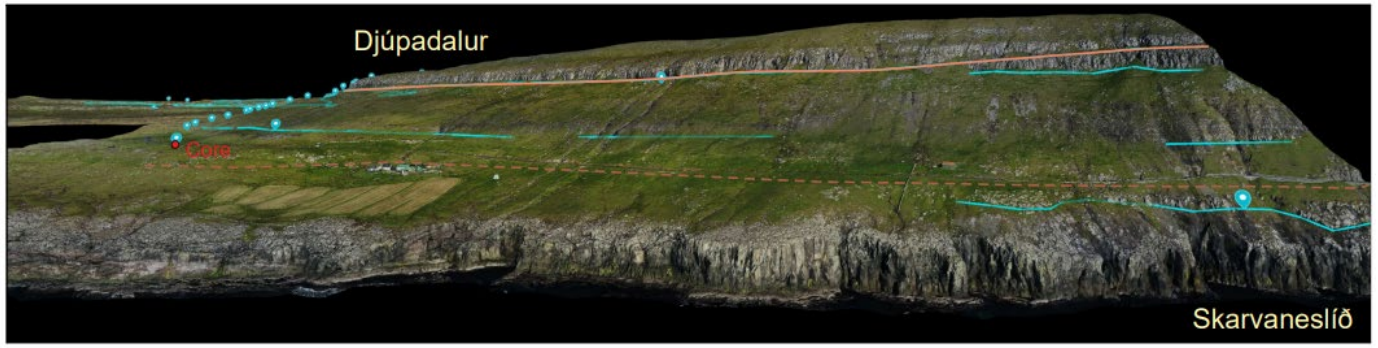


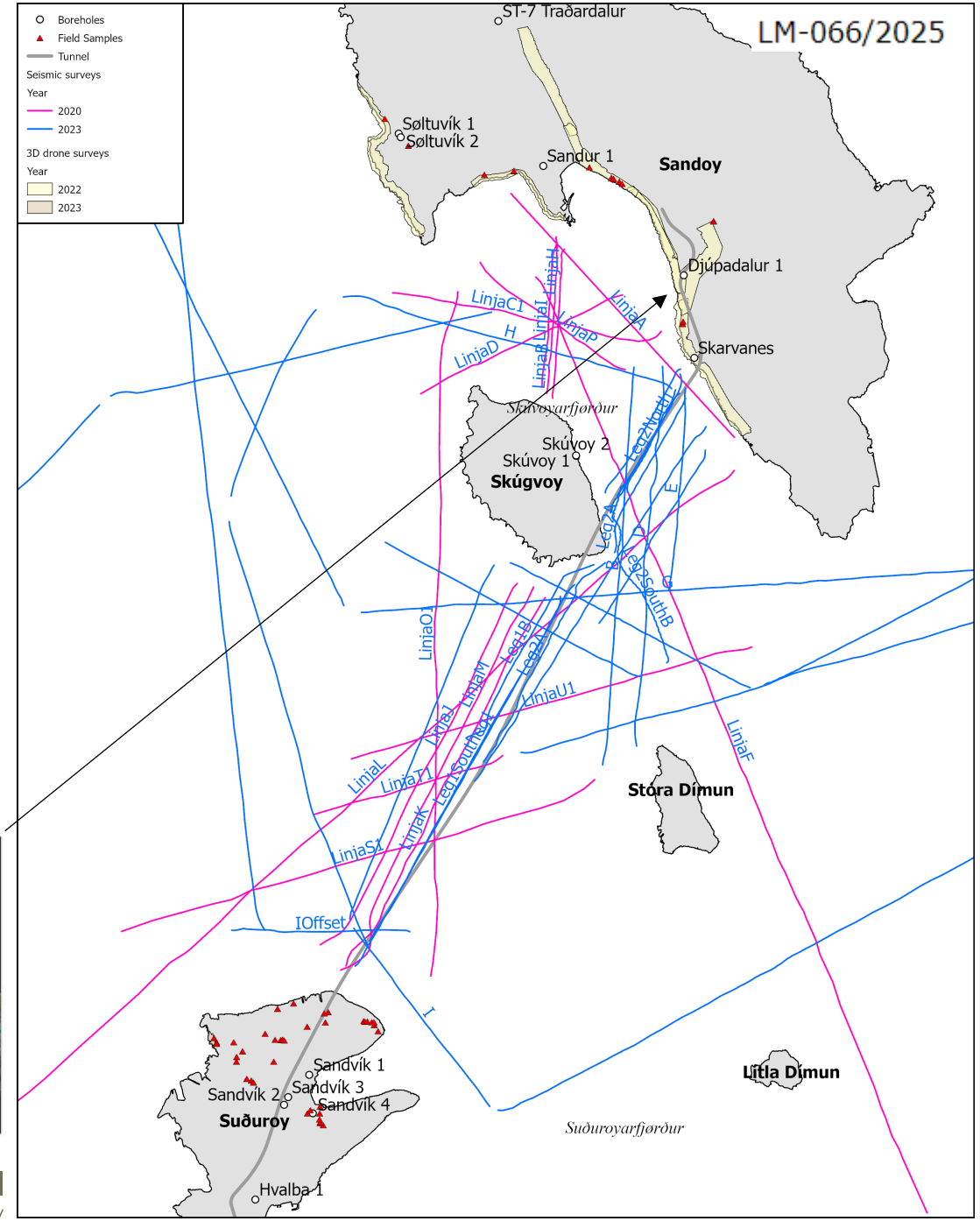


HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

- Geotekniskar boringar og logging
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  - Rivur og rivuløg
  - Grótgóðska
  - Grótroyndir (EGI / Geokemi)
- Seismikkur
- 3D dronu modell

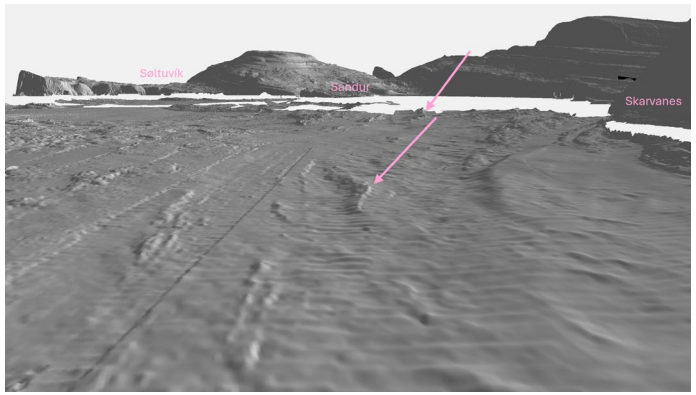


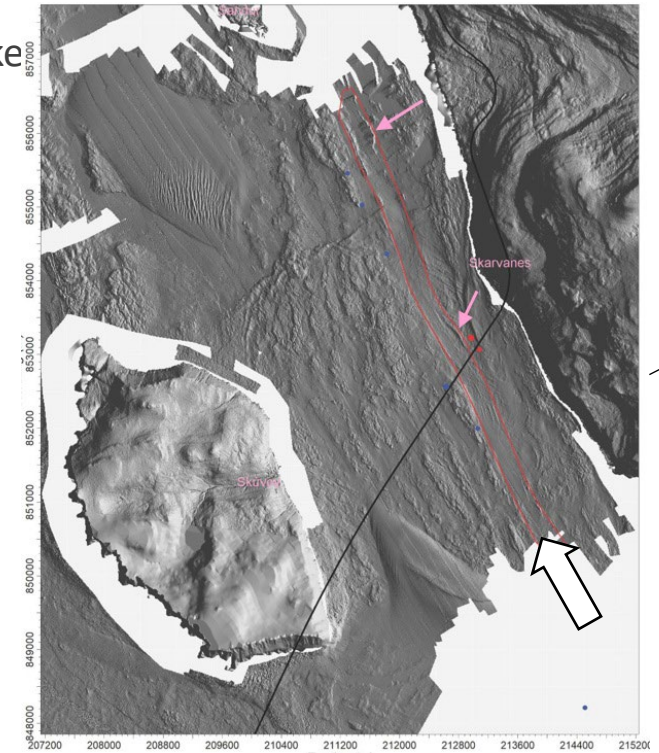


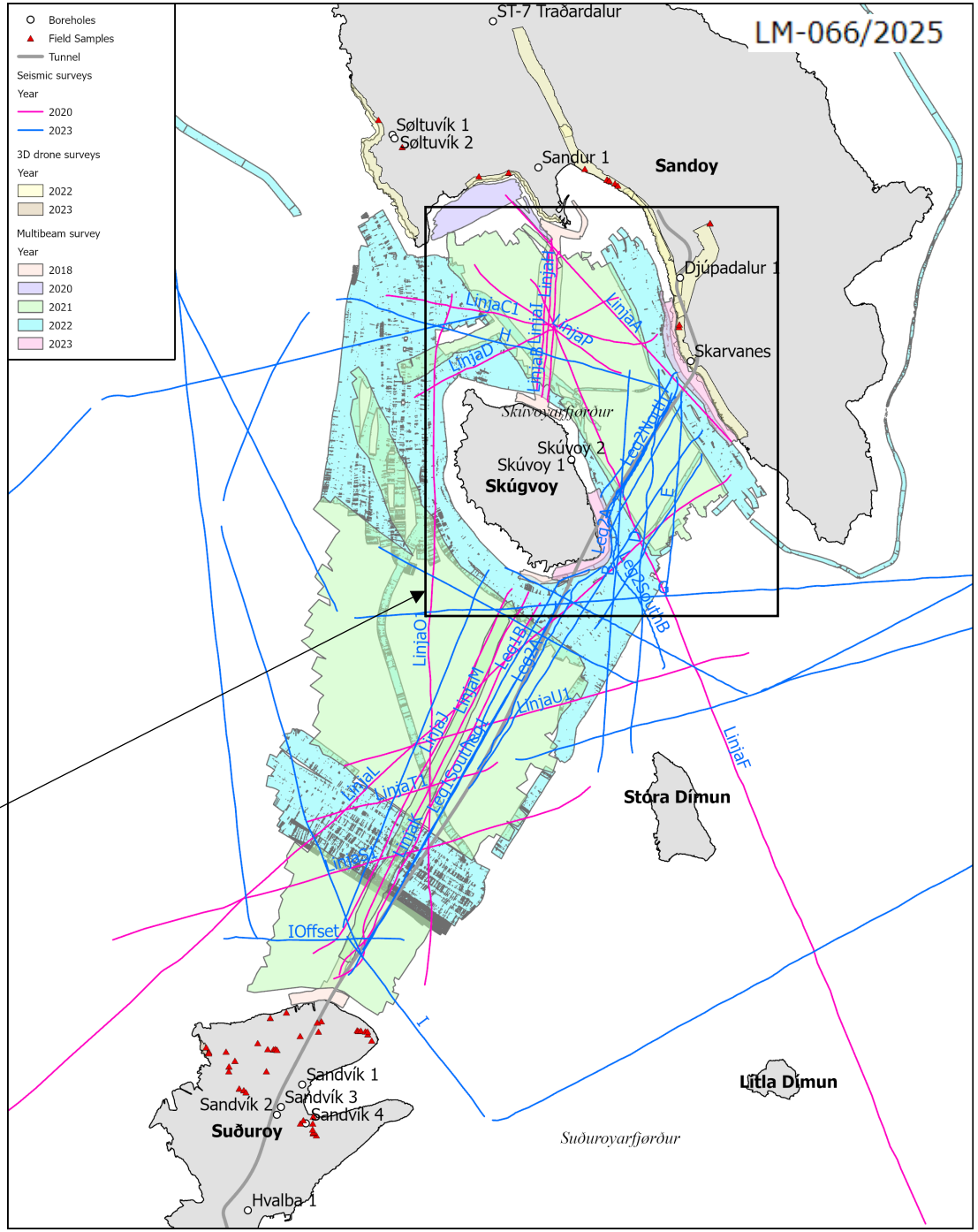
HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

- Geotekniskar boringar og logging
- Jarðfrøðilig kortlegging
  - Jarðfrøðin - fláarøðin
  - Rivur og rivuløg
  - Grótgóðska
  - Grótroyndir (EGI / Geoke
- Seismikkur
- 3D dronu modell
- Havbotnskort / multibeam



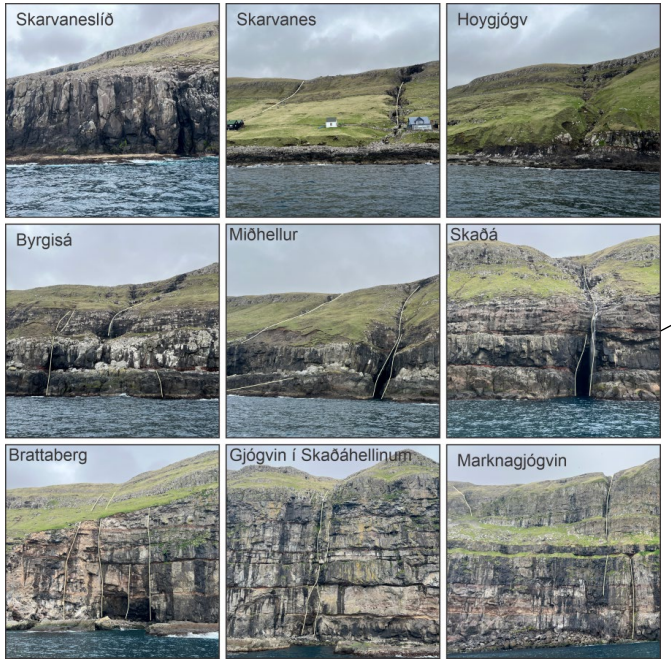


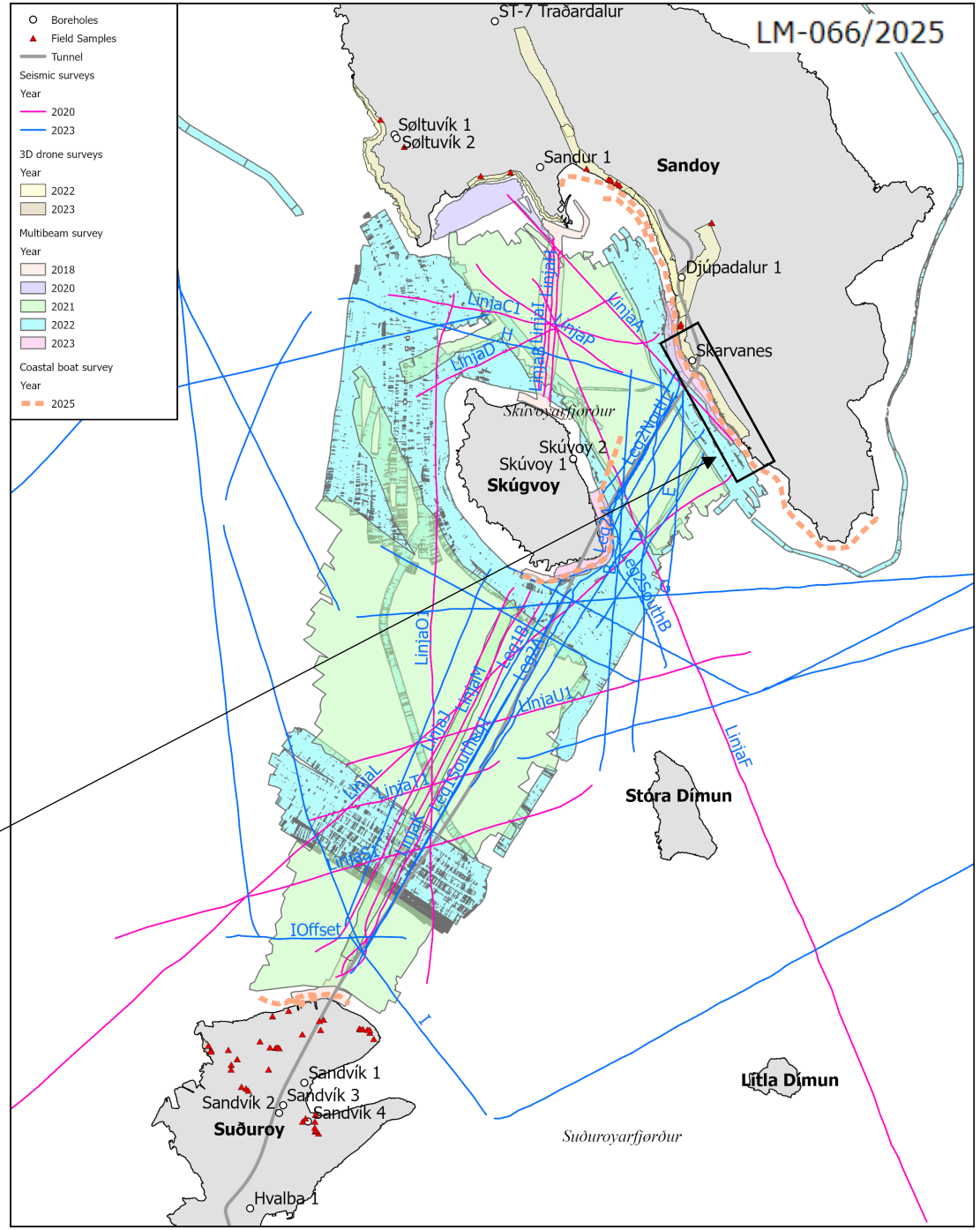


HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

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  - Jarðfrøðin - fláarøðin
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  - Grótroyndir (EGI / Geokemi)
- Seismikkur
- 3D dronu modell
- Havbotnskort / multibeam
- Sigling fram við landi

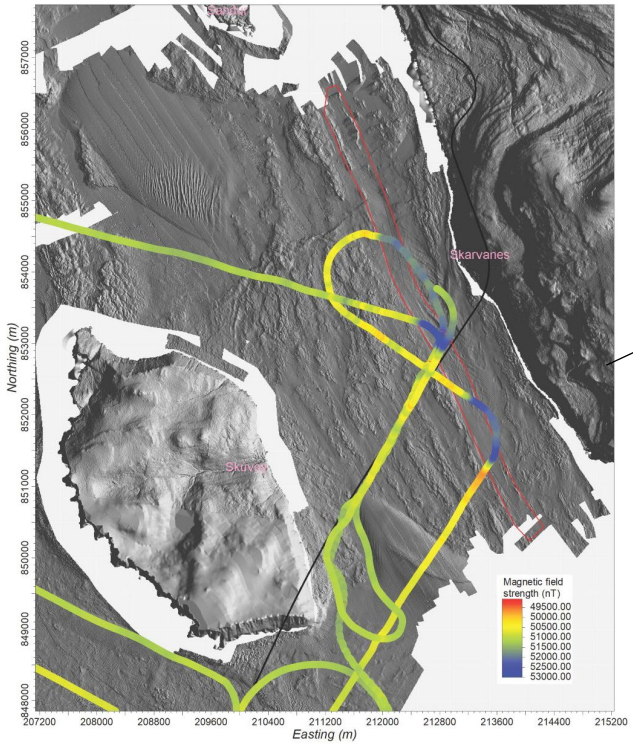


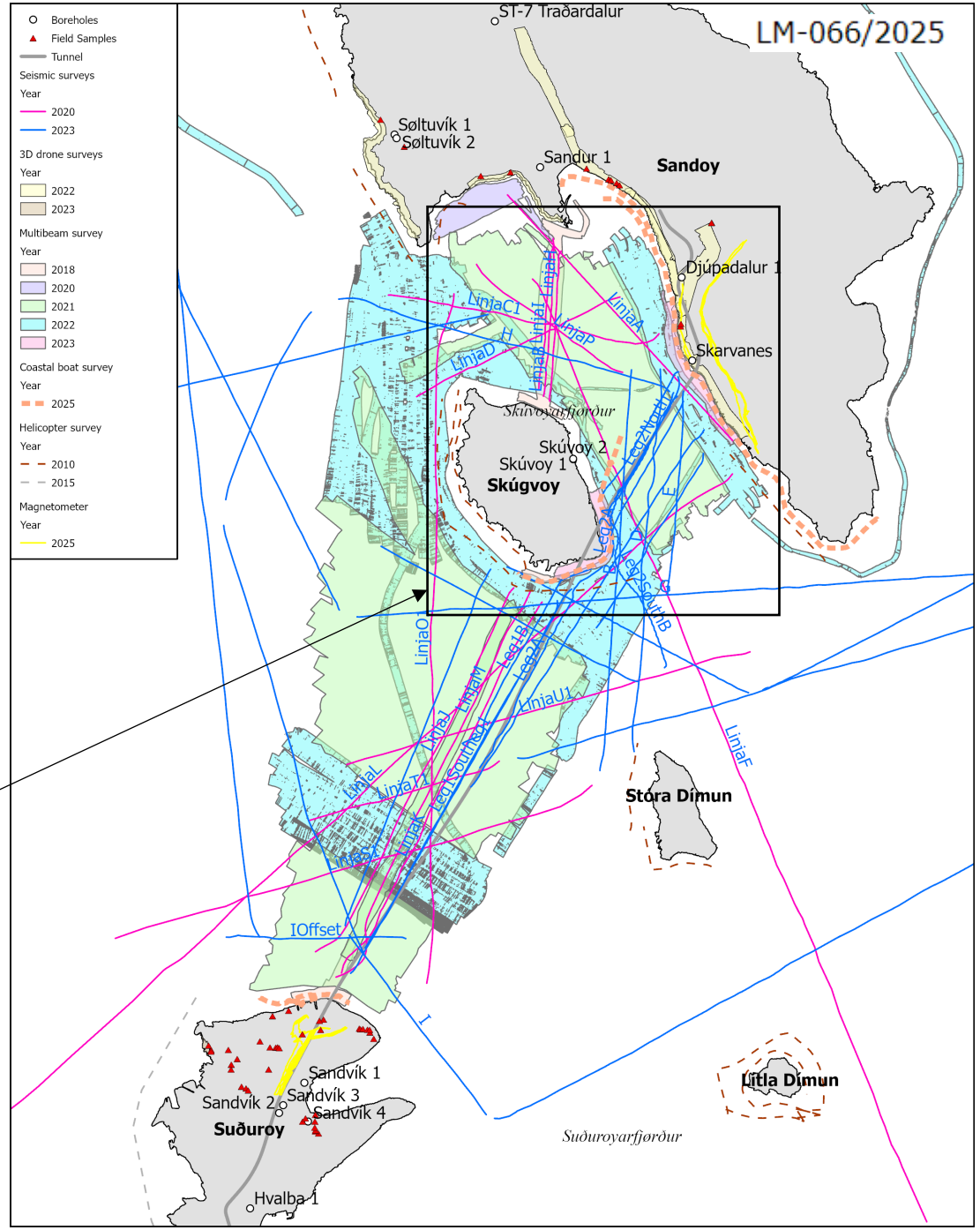


HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

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  - Jarðfrøðin - fláarøðin
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  - Grótroyndir
- Seismikkur
- 3D dronu modell
- Havbotnskort / multibeam
- Sigling fram við landi
- Tyrlumyndir 2010 & 2015
- Magnetometur 2025

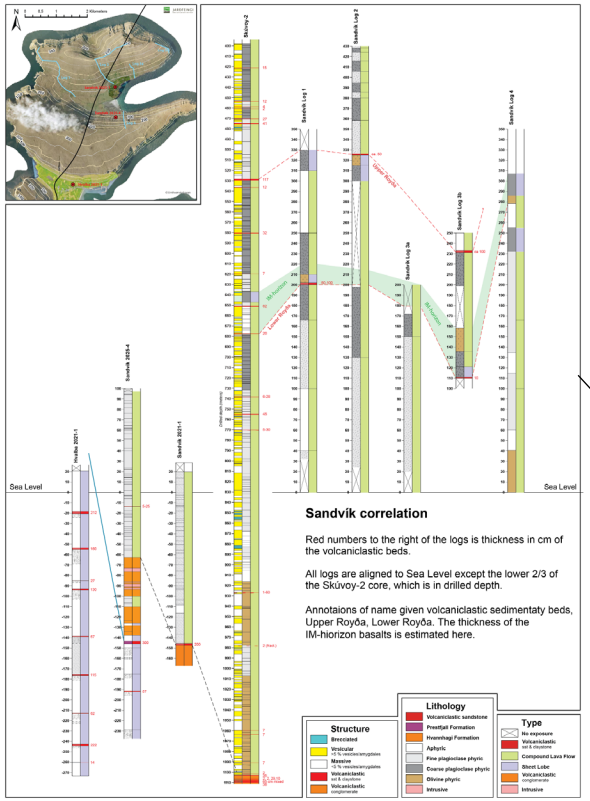


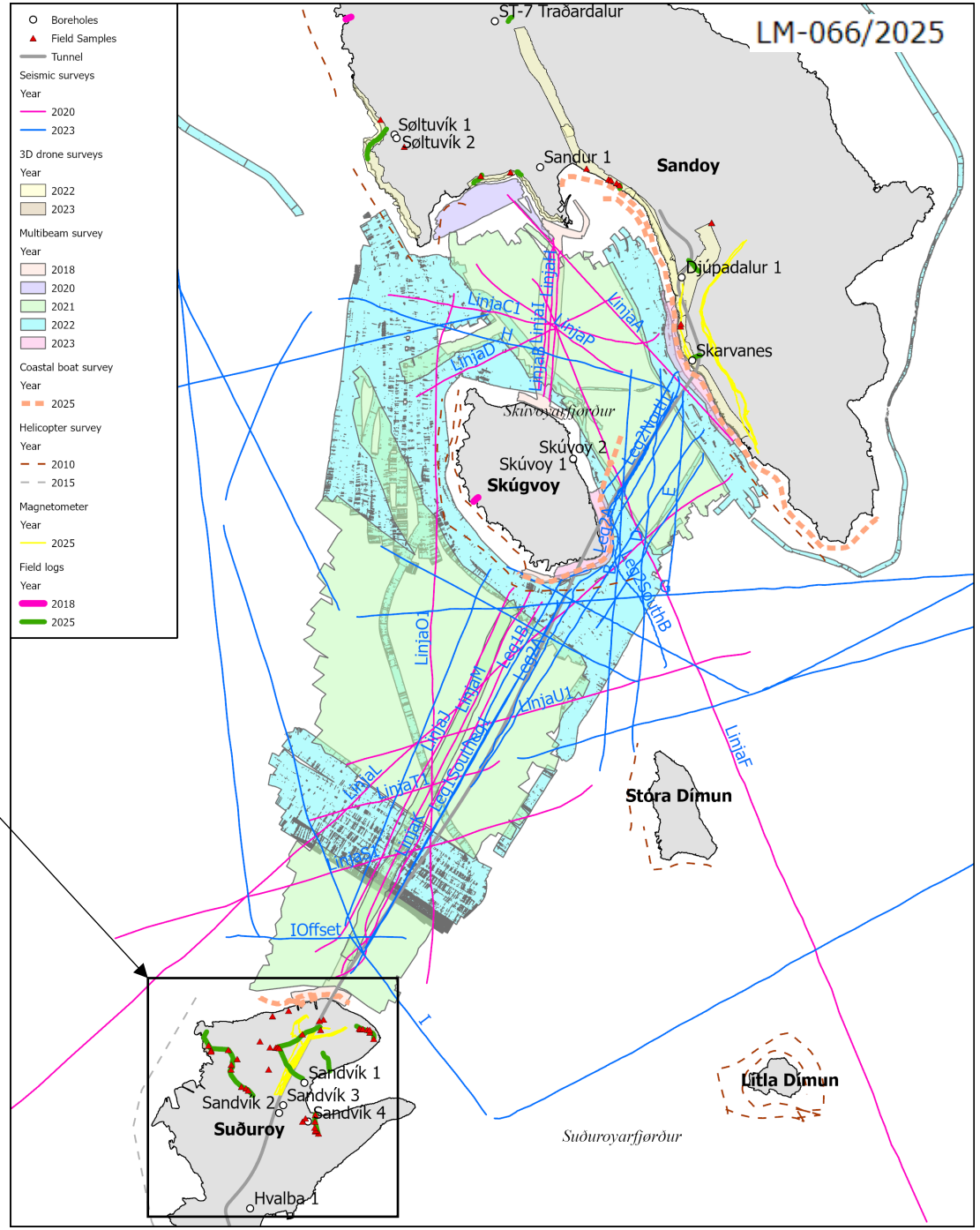


HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

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- Seismikkur
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- Havbotnskort / multibeam
- Sigling fram við landi
- Tyrlumyndir 2010 & 2015
- Magnetometur 2025
- Feltarbeiði / loggar

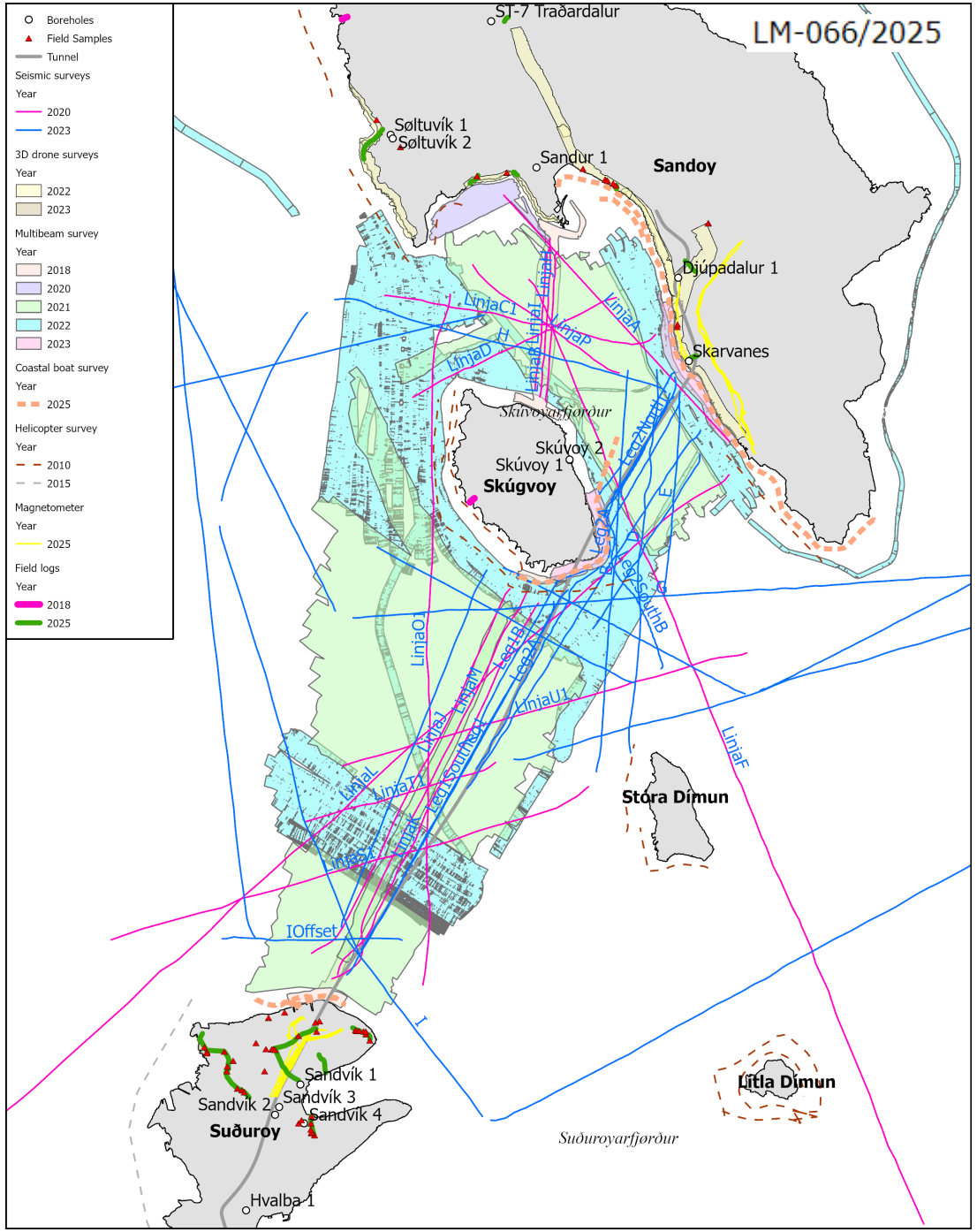




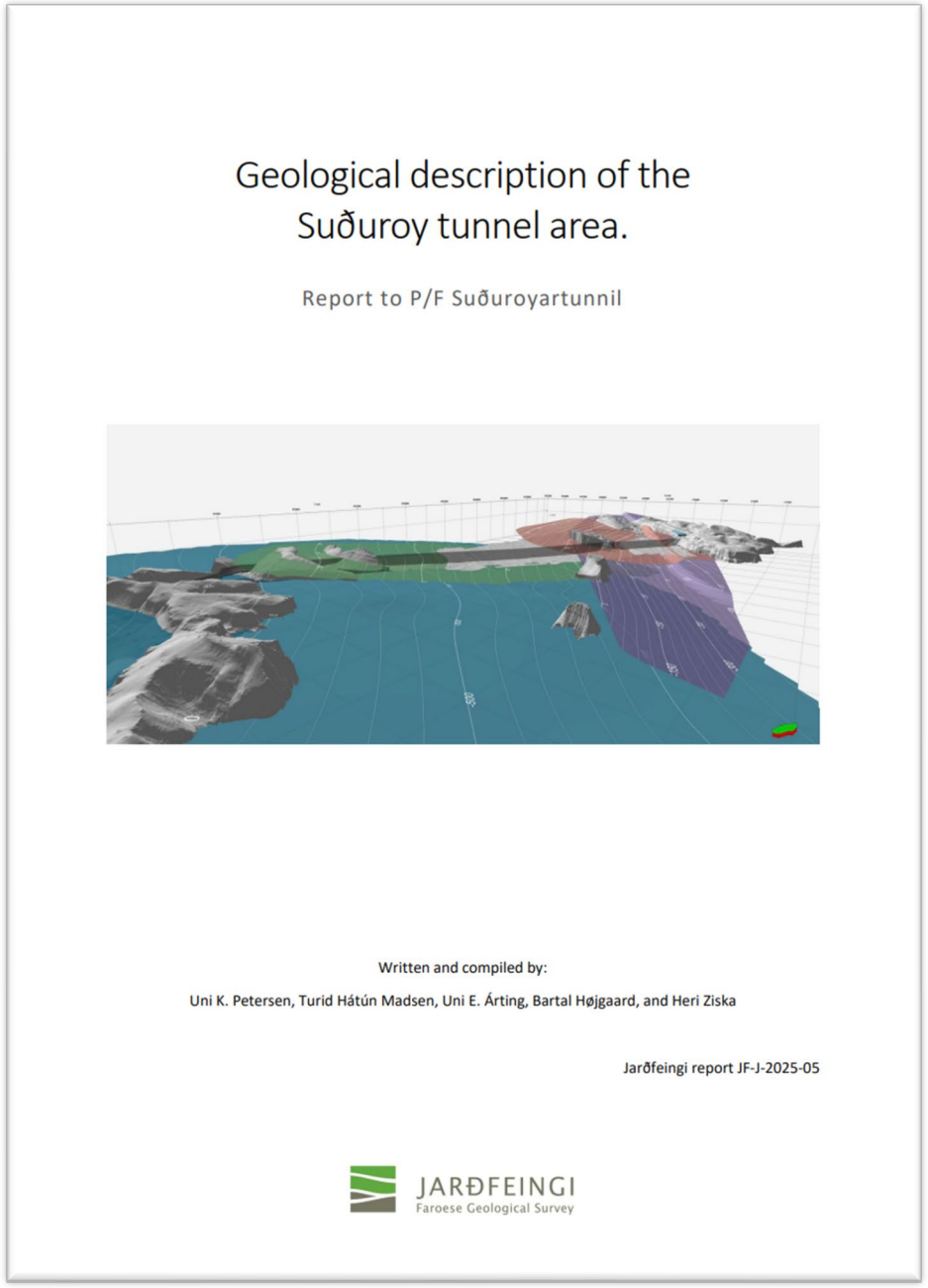
HVAT ER GJØRT OG HVÍ

JARÐFRØÐILIGAR FORKANNINGAR

- Geotekniskar boringar og logging
- Jarðfrøðilig kortlegging
  - Jarðfrøðin - fláarøðin
  - Rivur og rivuløg
  - Grótgóðska
  - Grótroyndir (EGI / Geokemi)
- Seismikkur
- 3D dronu modell
- Havbotnskort / multibeam
- Sigling fram við landi
- Tyrlumyndir 2010 & 2015
- Magnetometur 2025
- Feltarbeiði / loggar



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Appendix list

Appendix A - QC of multibeam

Appendix B - QC core logging, synthetic, and refraction seismic velocities

Appendix C - Map and Profile of the Suðuroy subsea tunnel

Appendix D - Field localities - Suðuroy

Appendix E - Field work – Sandoy/Skúvoy

Appendix F - Geochemistry

Appendix G -Ethylene Glycol Index (EGI) – cores and field samples

Appendix H – Q-system cores

Appendix I - Field and core samples

Appendix J – Photo Profiles from Sandoy

Appendix K -Søltuvík-2 borehole

Appendix L - Sandur-1 borehole

Appendix M - Skúvoy-1 borehole

Appendix N - Skarvanes-1 borehole

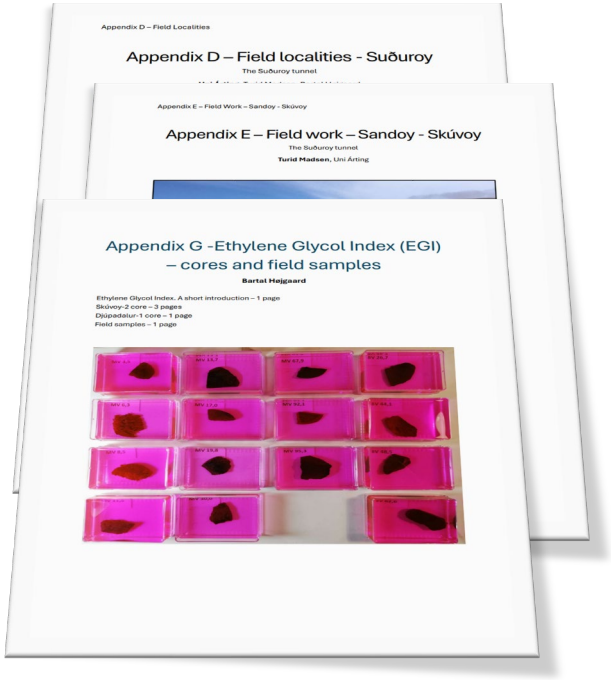
Appendix O - Sandvík-1 borehole

Appendix P - Hvalba-1 borehole

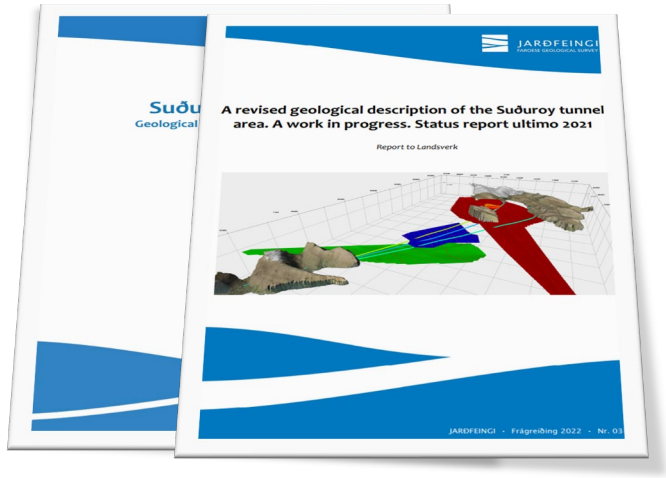
Appendix Q - Skúvoy-2 core

Appendix R - Djúpadalur-1 core

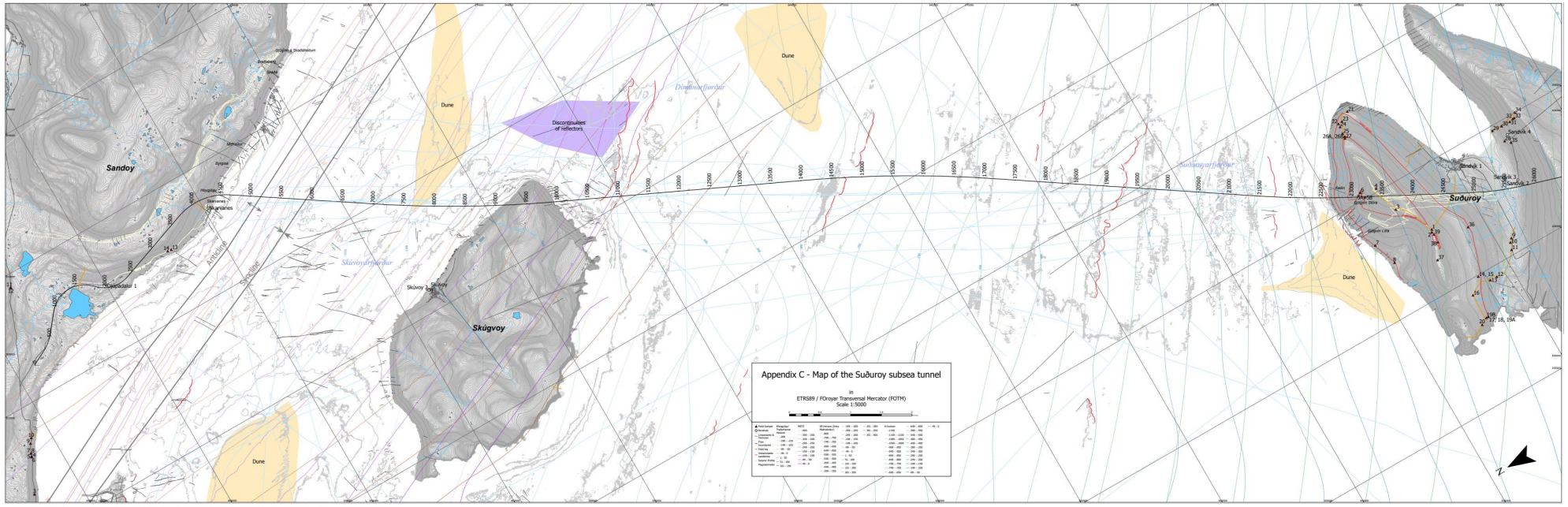
Appendix S - Sandvík-4 Borehole



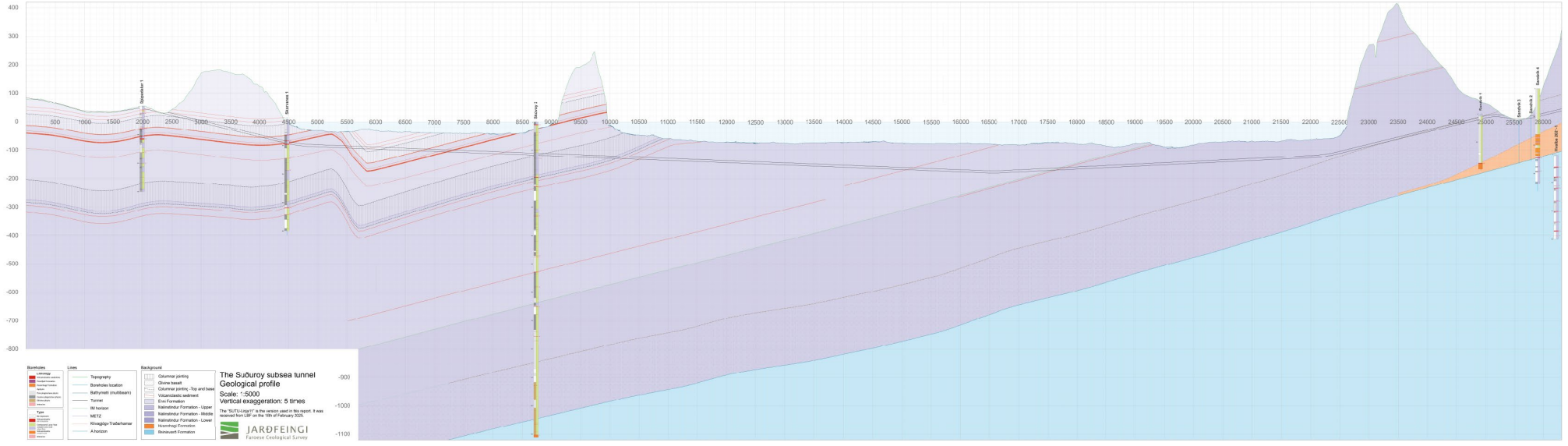
Frágreiðingar frá 2018, 2021 + Appendix



DÁTUGRUNDARLAG OG ÚRSLIT



Appendix C The Suðuroy subsea tunnel - geological profile

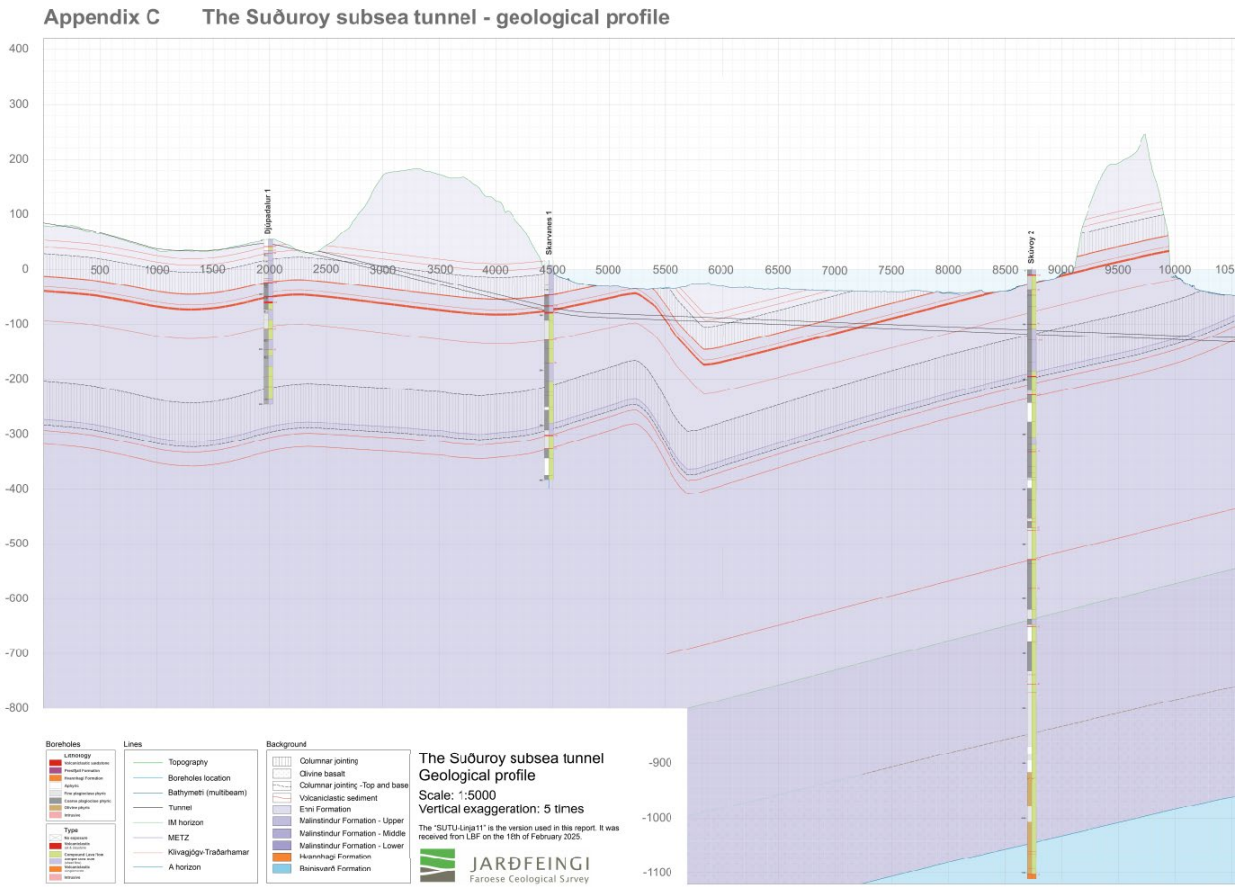


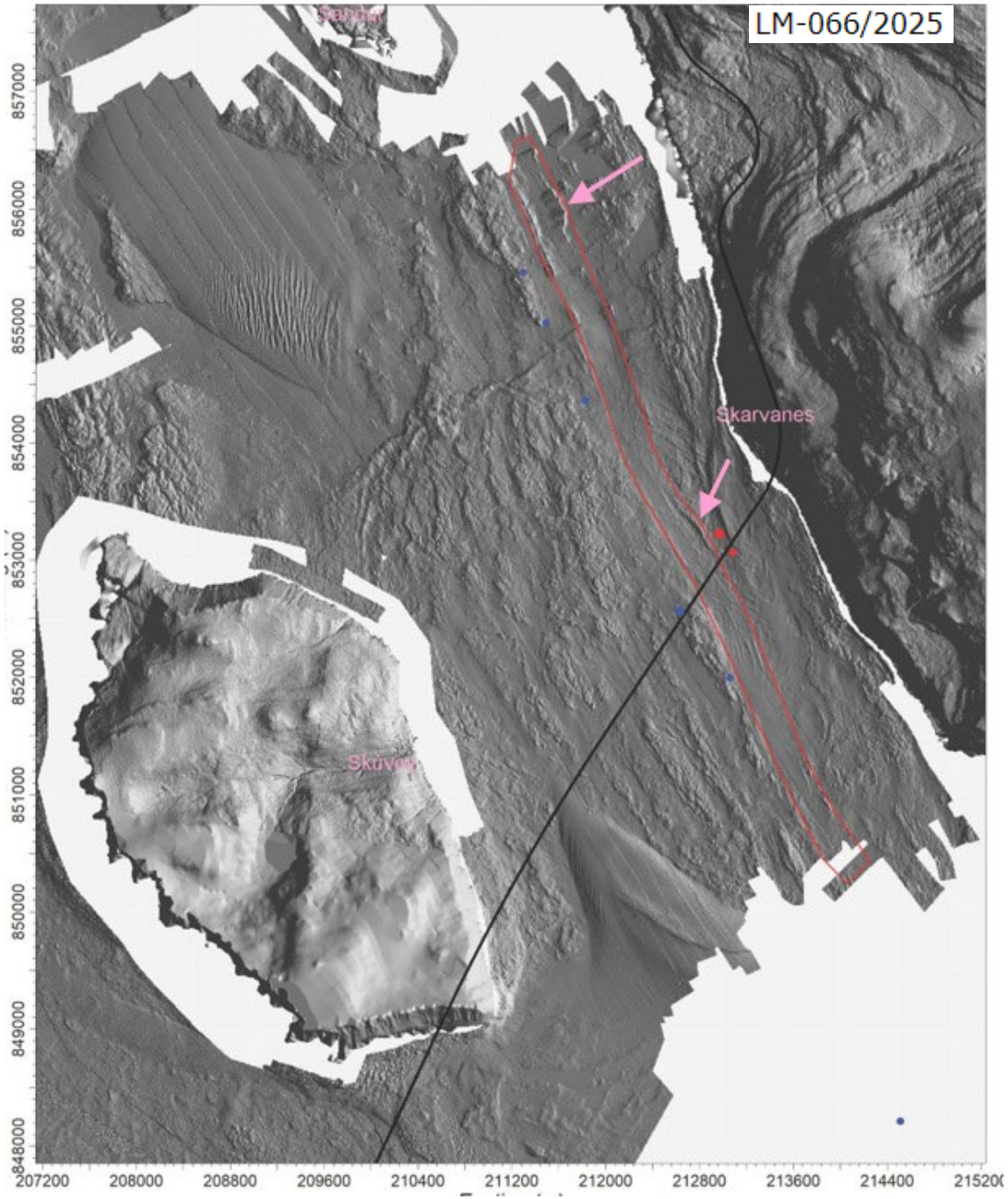
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DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR – Faldur *(en. Fold)*

- Seismikkur, boringar, loggar og feltarbeiði



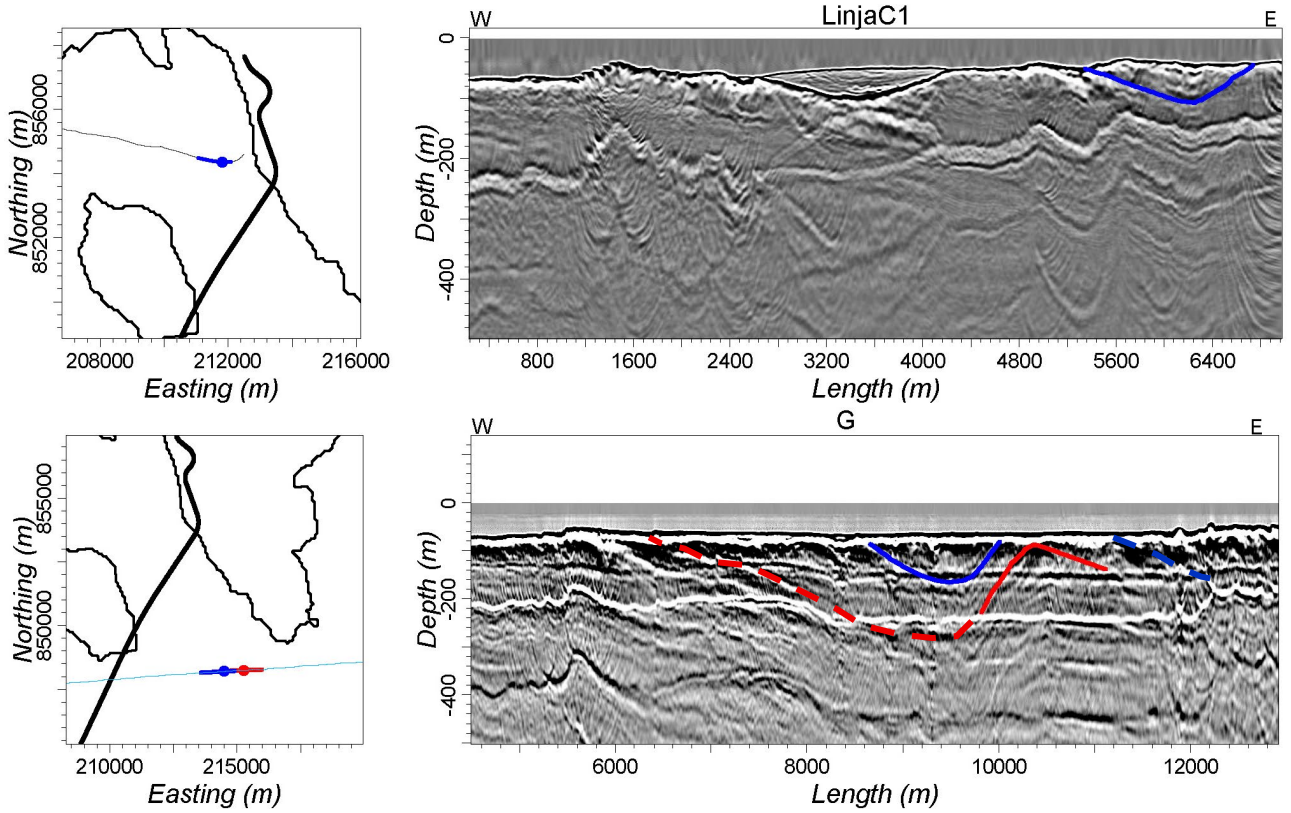


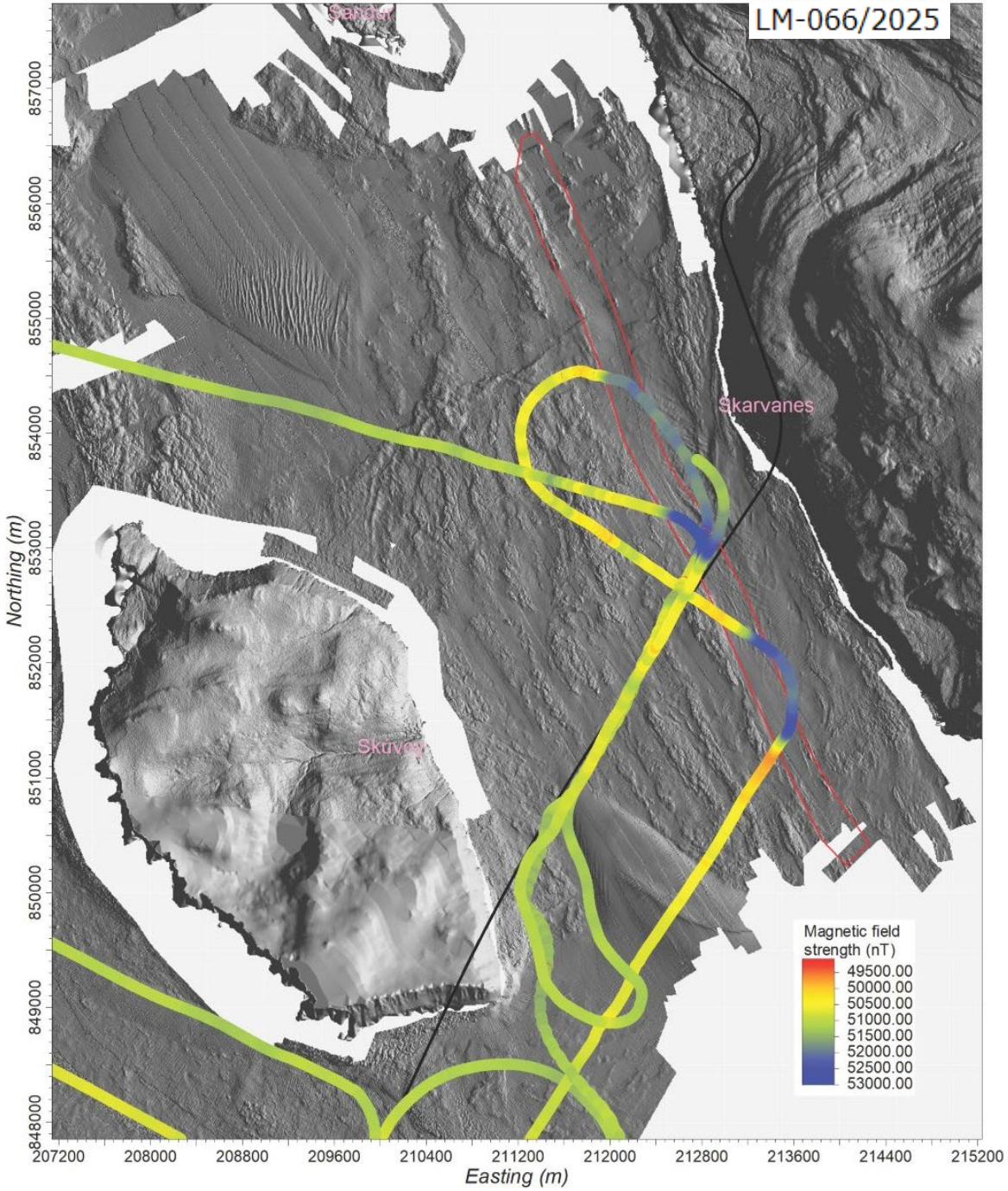
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DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR - Faldur

- Seismikkur & magnetometer-kanningar



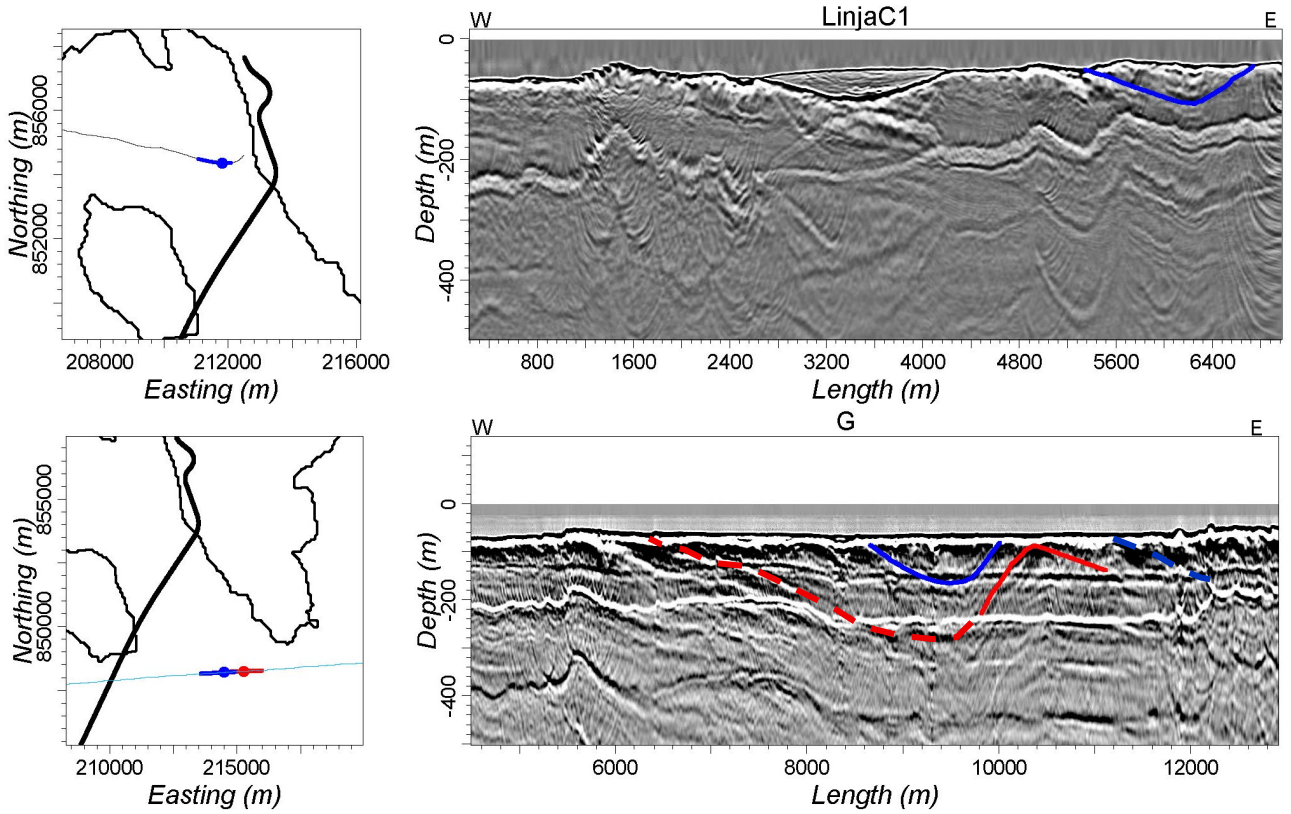


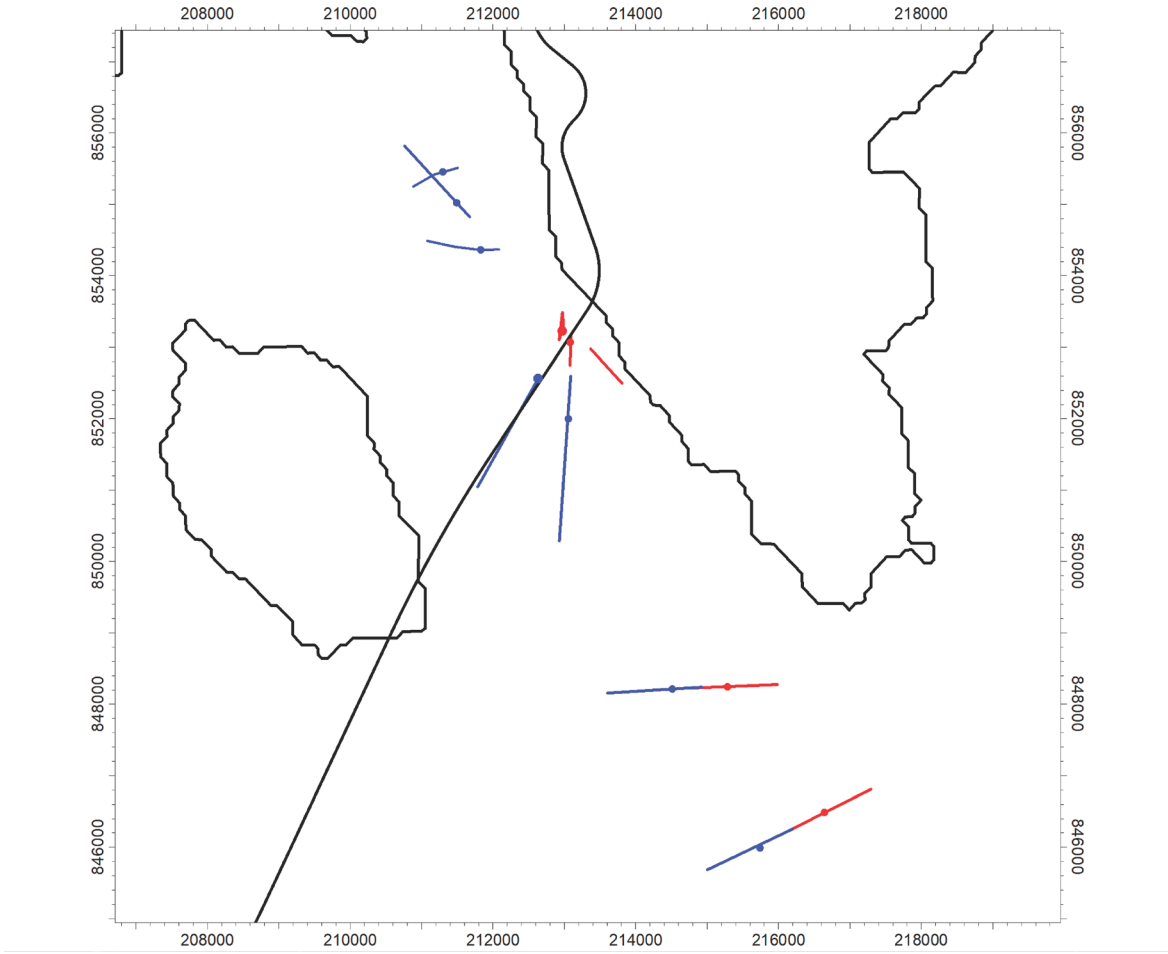
JARÐFEINGI
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DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR - Faldur

- Seismikkur & magnetometer-kanningar

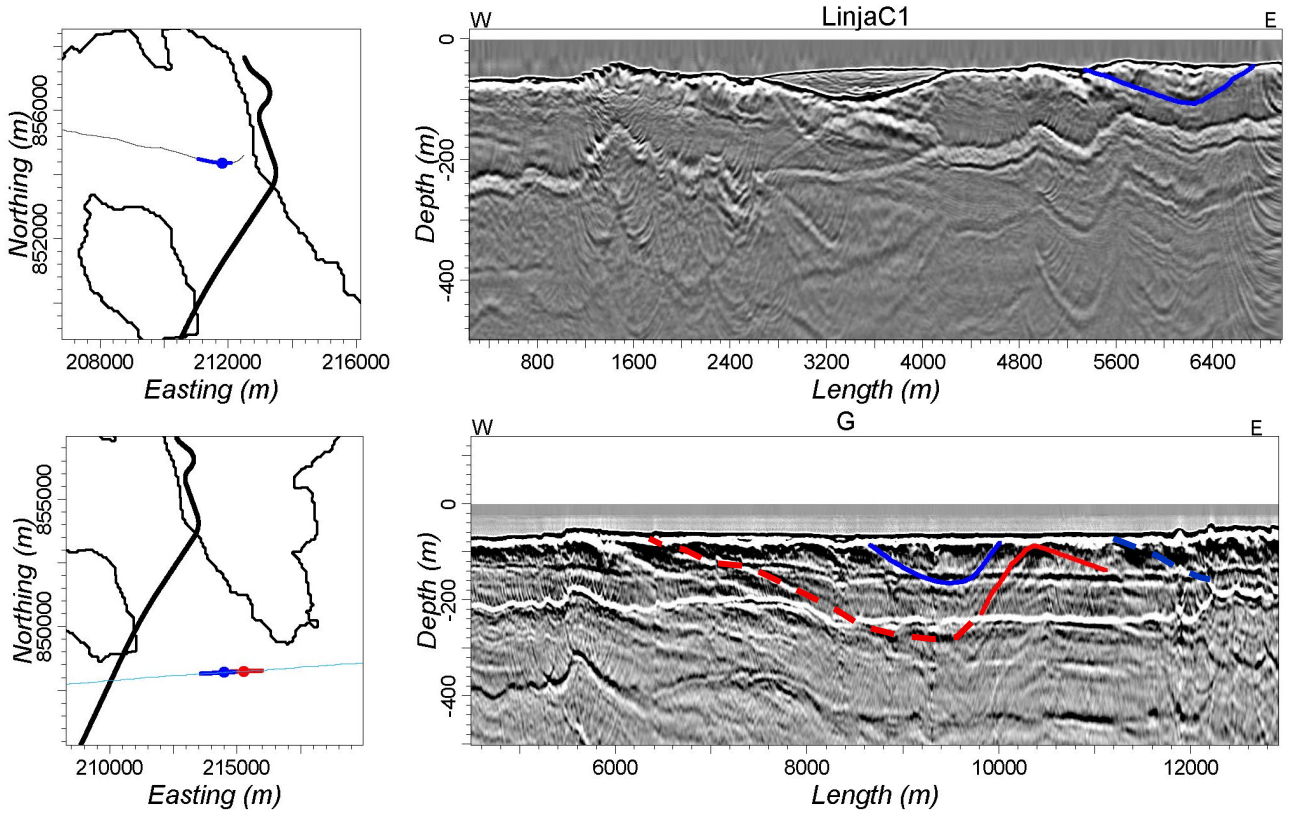


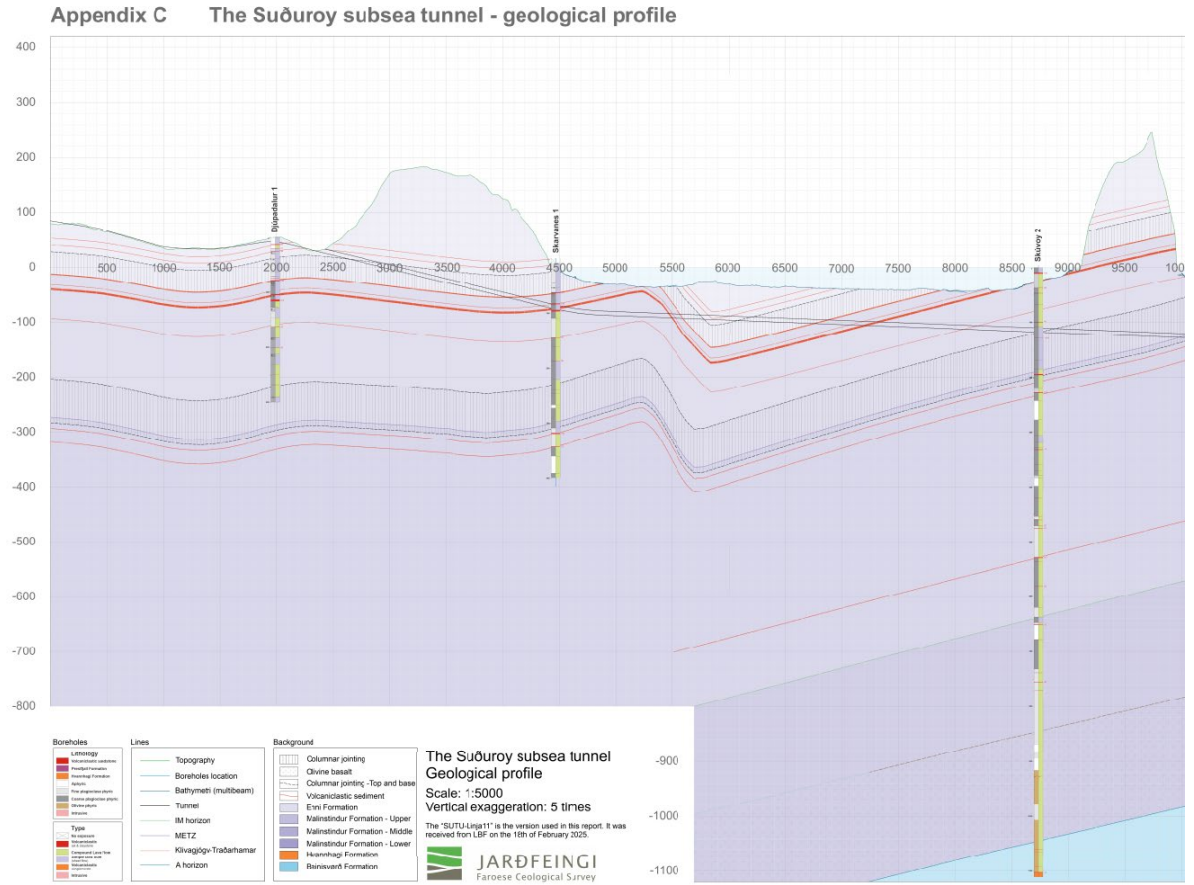


DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR - Faldur

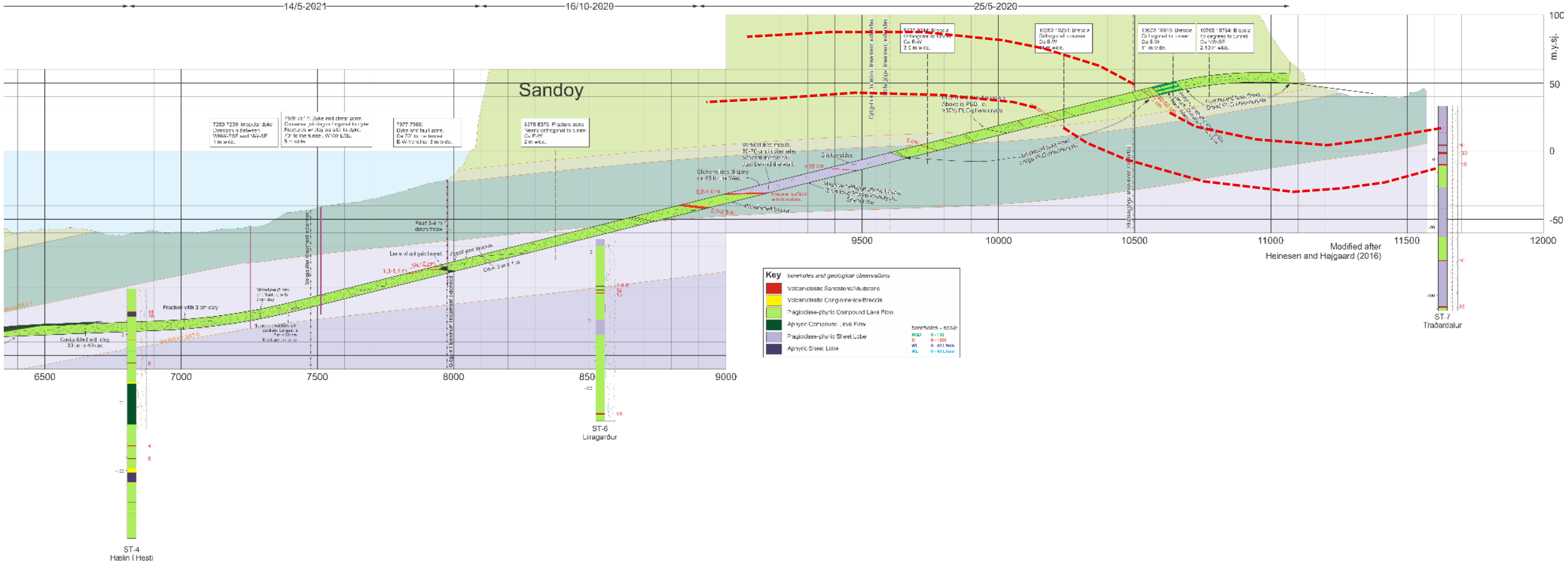
- Seismikkur & magnetometer-kanningar





DÁTUGRUNDARLAG OG ÚRSLIT

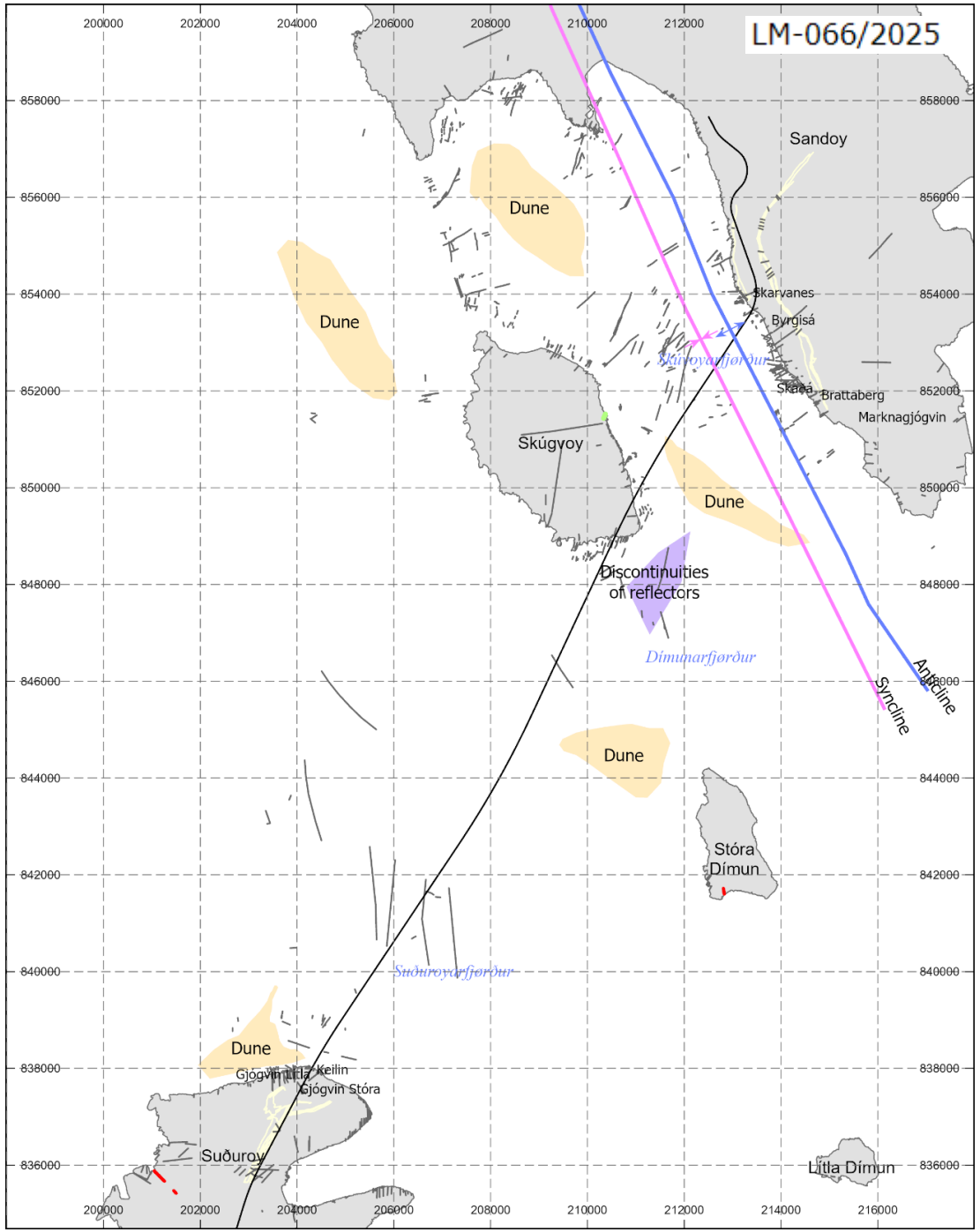
Sandoyartunilin (Sunnari endin)



DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR

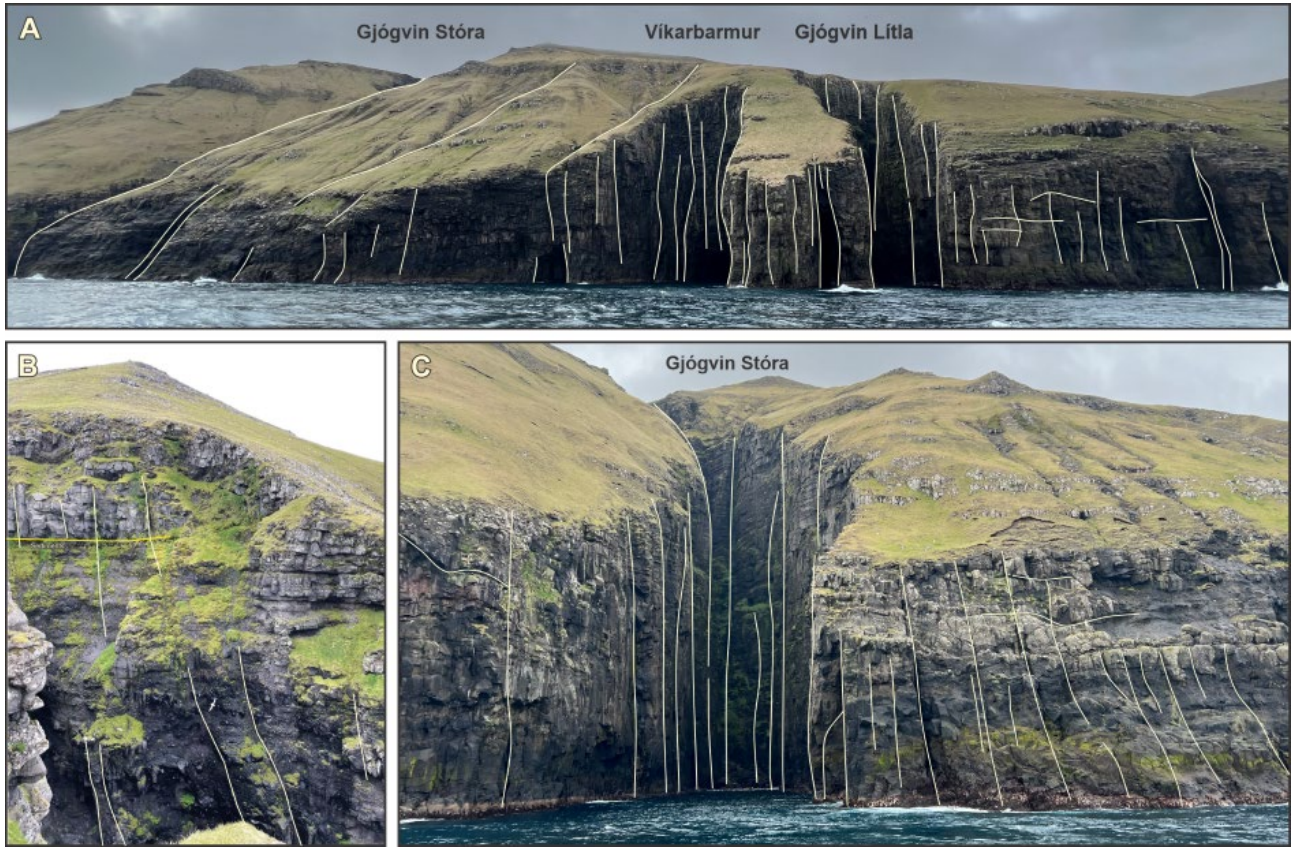
- **Rivur og rivuløg**

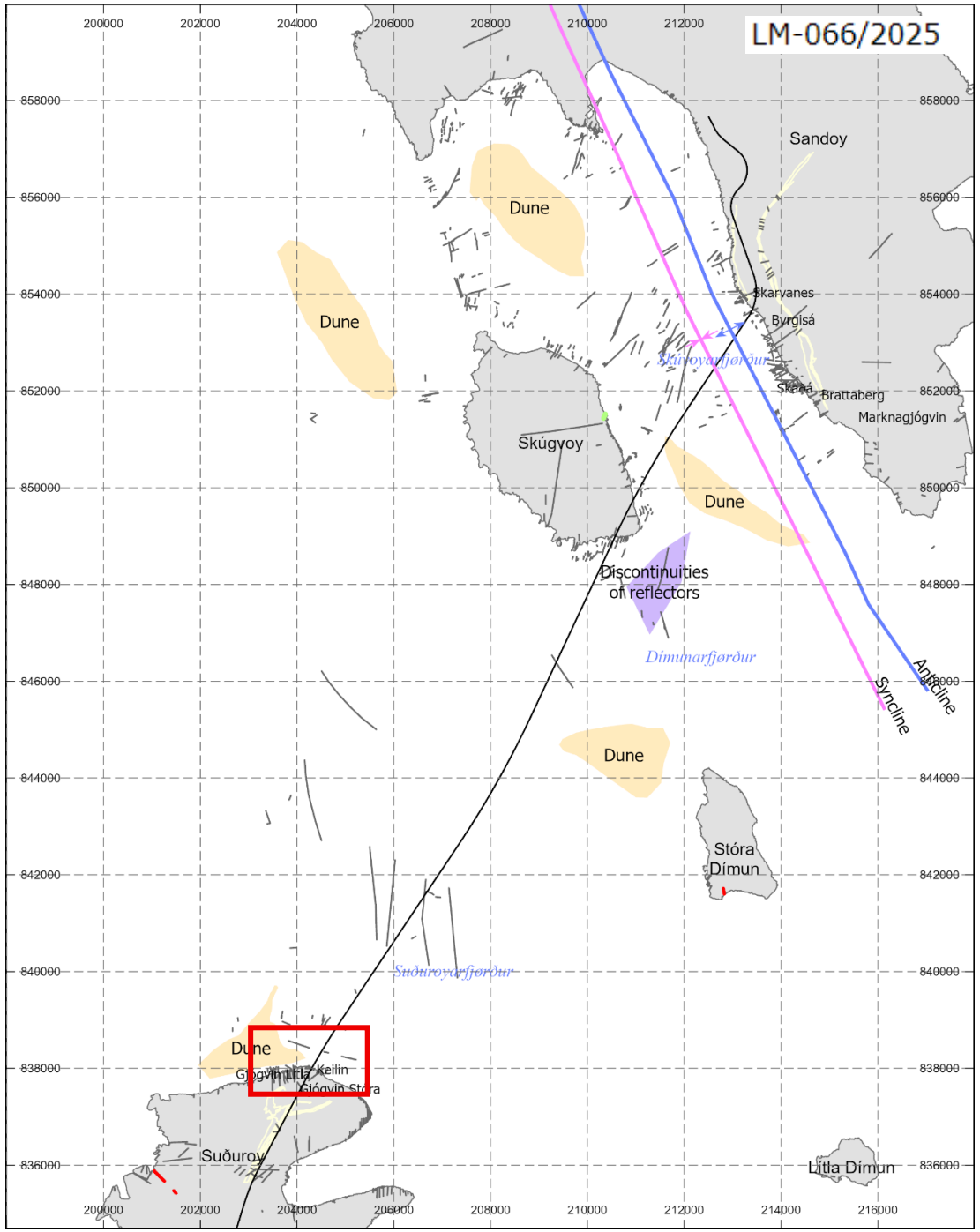


DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR

- Rivur og rivuløg





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Faroese Geological Survey

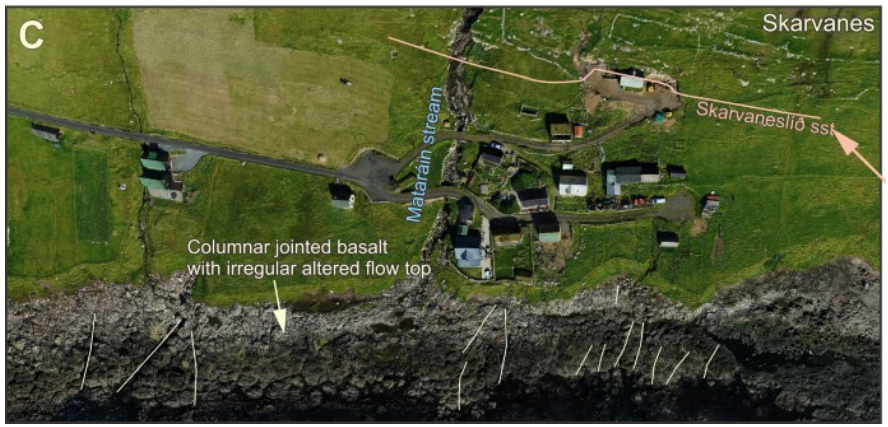
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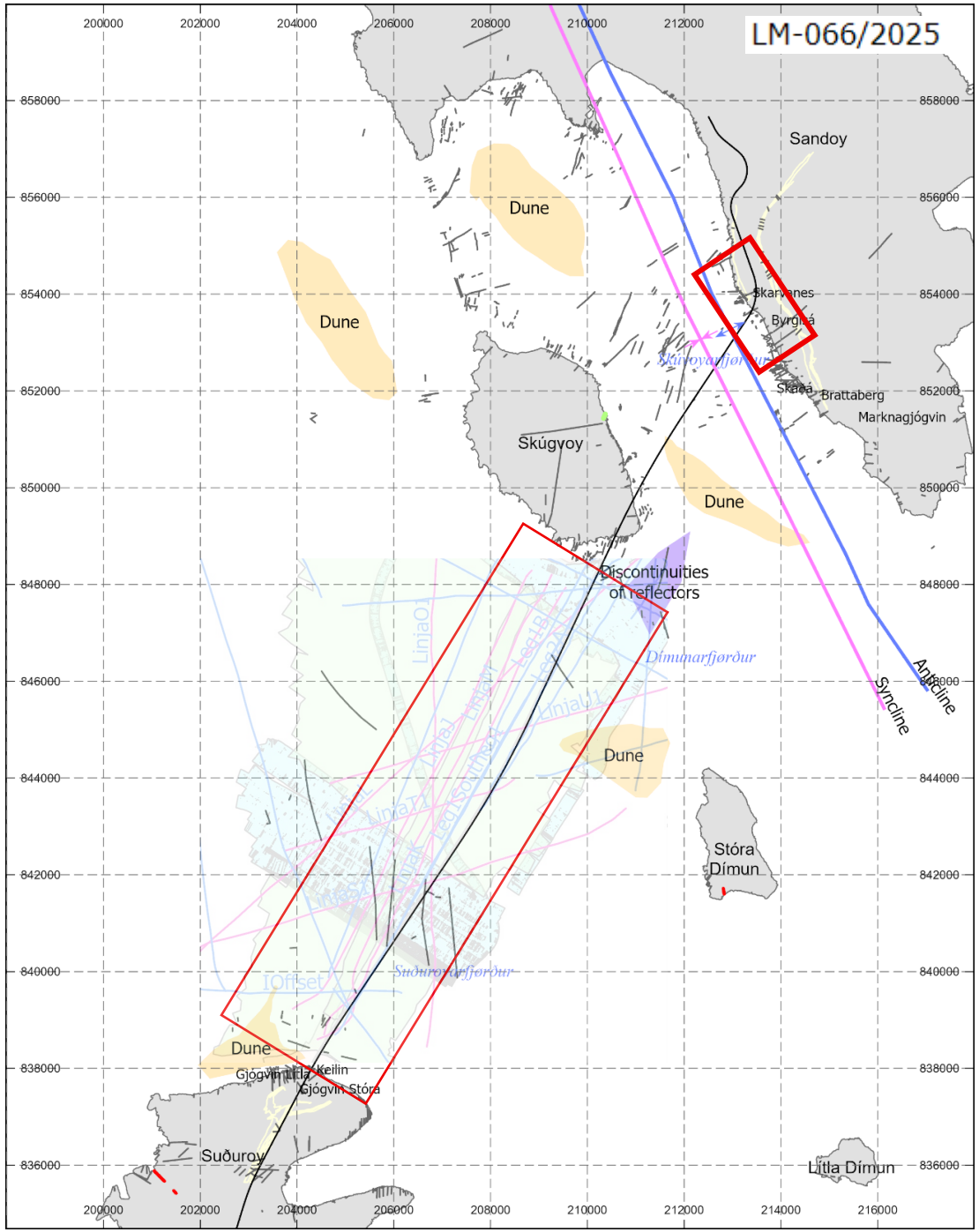
JARÐFRØÐILIGAR FORKANNINGAR

- Rivur og rivuløg





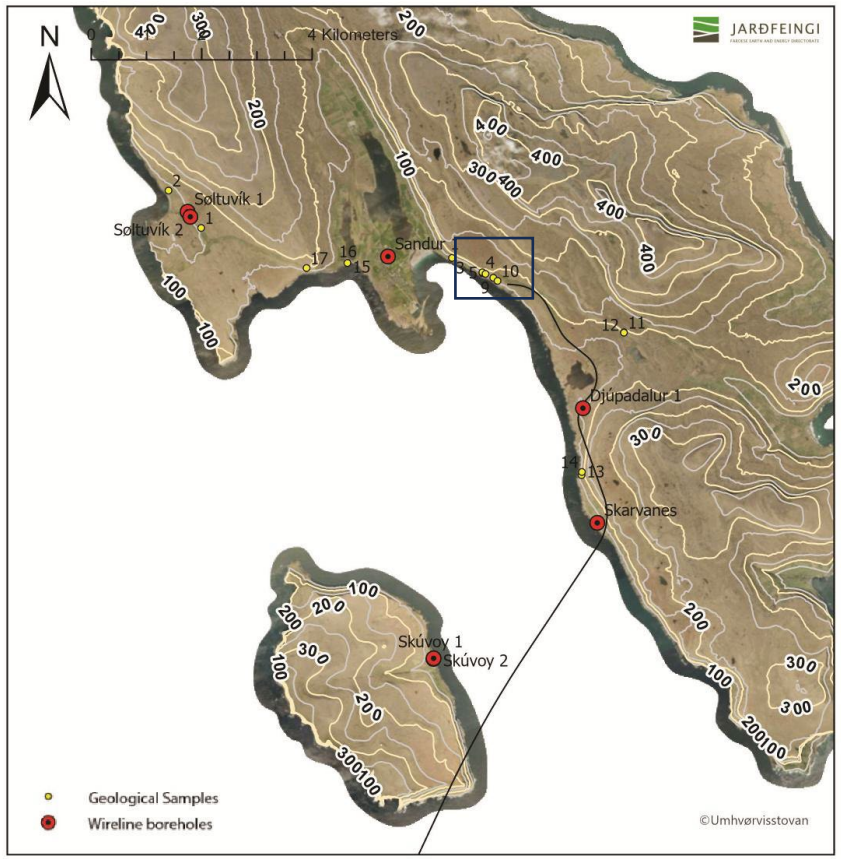




DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR

- Legugrýtislindir



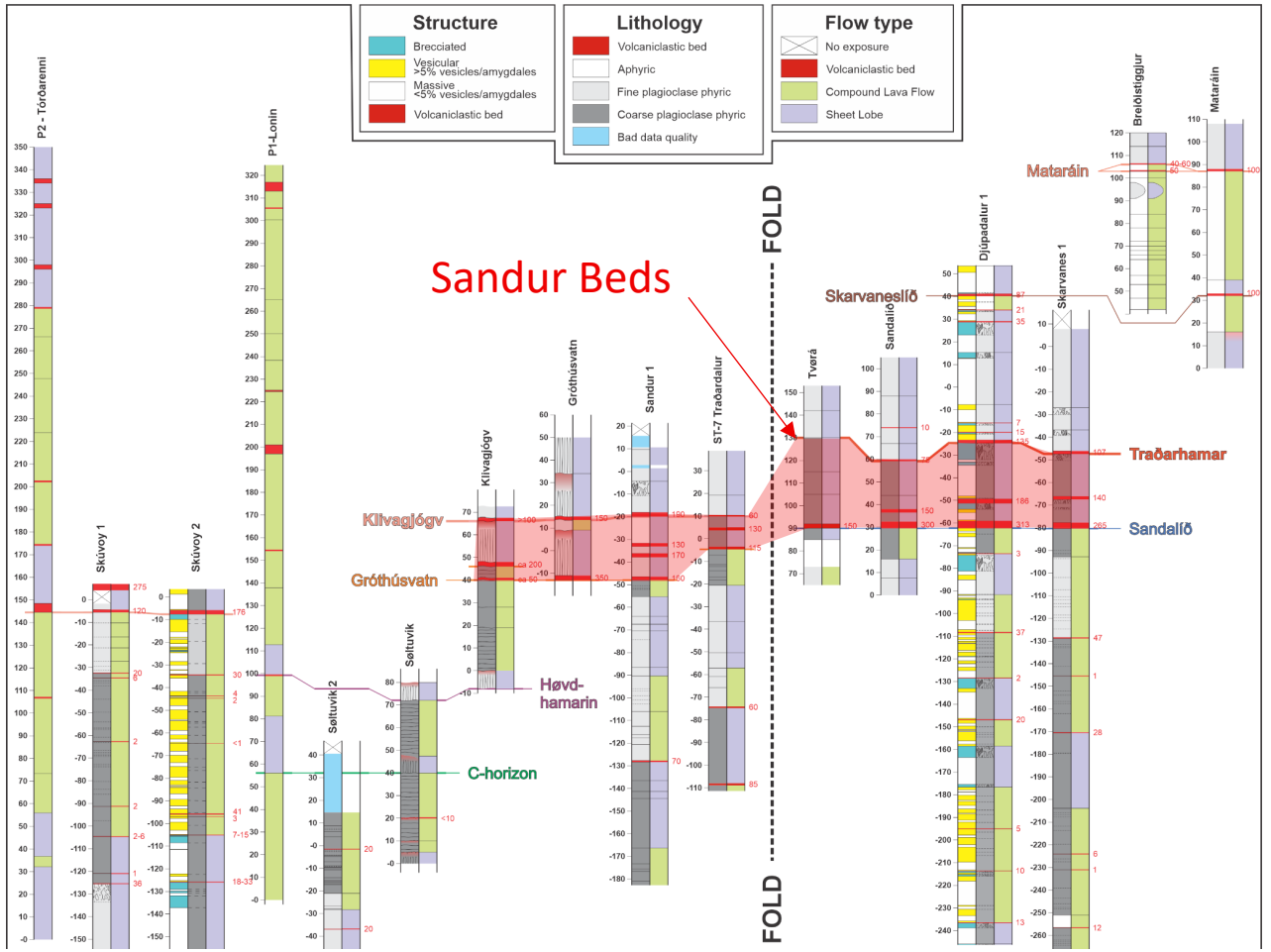
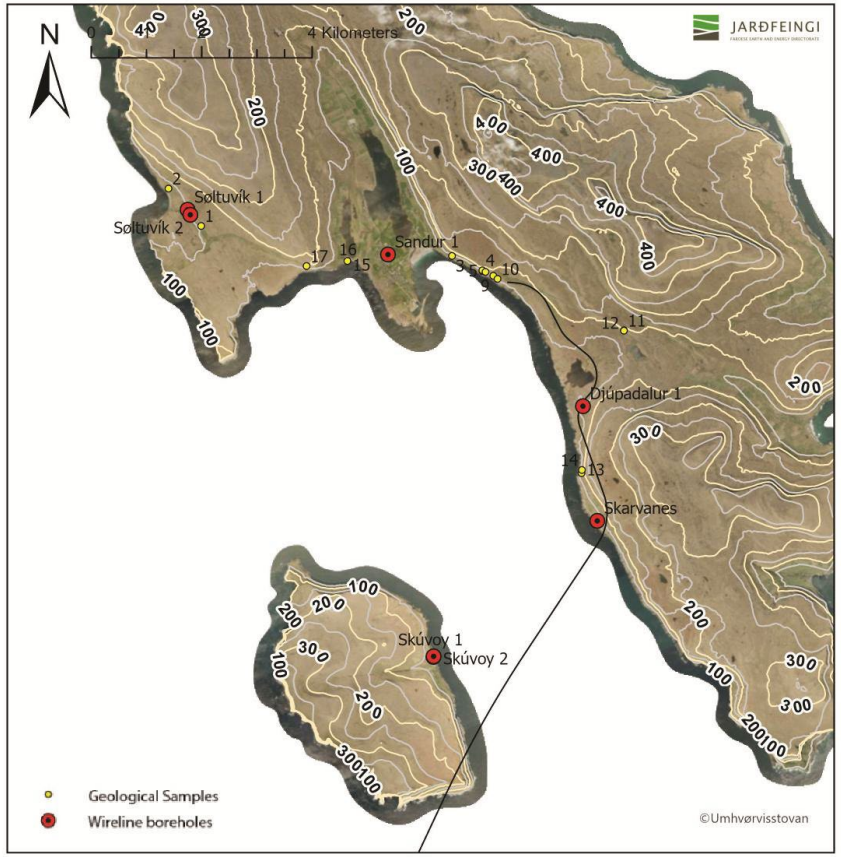


Figure 37. Correlation panel for Sandoy-Skúvoy area logs and boreholes to METZ.

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- Legugrýtislindir, grótgóðska











DÁTUGRUNDARLAG OG ÚRSLIT

Composite well log — **Project: The Suðuroy Tunnel**

Well: Skúvoy-2-2023, Faroe Islands

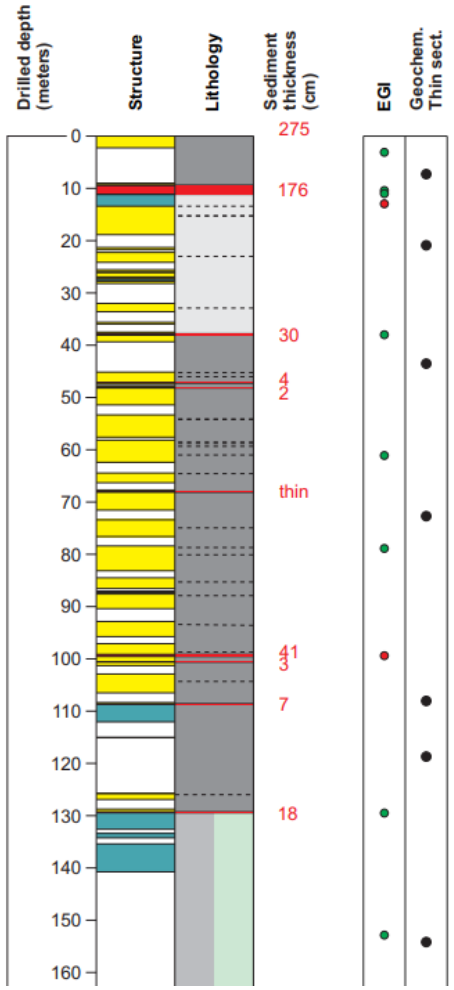
Position: Y = 851481,626 X = 210348,983 Z = 3,540 m, Datum: FOTM, Length: 1111,25 m

STRUCTURE
- Brecciated
- Vesicular >5 % vesicles/amygdales
- Massive <5 % vesicles/amygdales
- Volcaniclastic

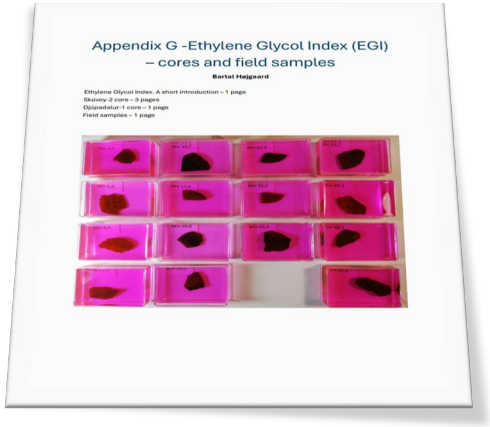
LITHOLOGY
- Aphyric basalt
- Fine feldspar basalt PLG < 5 mm
- Medium feldspar basalt 5 mm < PLG < 1cm
- Coarse feldspar basalt PLG >1cm
- Sparse feldspar basalt PLG < 2%
- Olivine basalt
- Very altered basalt
- Sand- and claystone

EGI - Ethylene Glycol Index
- EGI: 1-2
- EGI: 3-6
- EGI: 7-11

OTHER
- No core
- Geochemistry Thin section



Included in Appendix Q – The Skúvoy Core



Included in Appendix G

Skúvoy-2 core **Ethylene Glycol Index (EGI)**

Sample number	Drilled depth	Lithology	Result	Effect (DOD)	Time (TR)	EGI
S2BH01	3,10	Fg. Plg	No change after 35 days	1	0	1
S2BH02	10,41	Red volc. sst	No change after 35 days	1	0	1
S2BH03	11,00	Green volc. Sst	No change after 35 days	1	0	1
S2BH04	11,00	Green volc. Sst	Single fracture after 35 days	2	0	2
S2BH05	12,95	Fg plg alt	Minor spalling after 1 day	1	6	7
S2BH06	38,00	Green volc. Sst. (rundtæring)	Some spalling after 35 days	2	0	2
S2BH07	38,00	Green volc. Sst. (rundtæring)	No change after 35 days	1	0	1
S2BH08	61,10	Cg plg alt	No change after 35 days	1	0	1
S2BH09	61,10	Cg plg alt	No change after 35 days	1	0	1
S2BH10	61,10	Cg plg alt	No change after 35 days	1	0	1
S2BH11	78,88	Cg plg	No change after 35 days	1	0	1
S2BH12	99,40	Green volc. Sst.	No change after 35 days	1	0	1
S2BH13	99,40	Green volc. Sst.	Minor swelling after 2 days	2	5	7
S2BH14	99,40	Green volc. Sst.	No change after 35 days	1	0	1
S2BH15	129,50	Red volc. sst	No change after 35 days	1	0	1
S2BH16	152,85	Mg plg	No change after 35 days	1	0	1

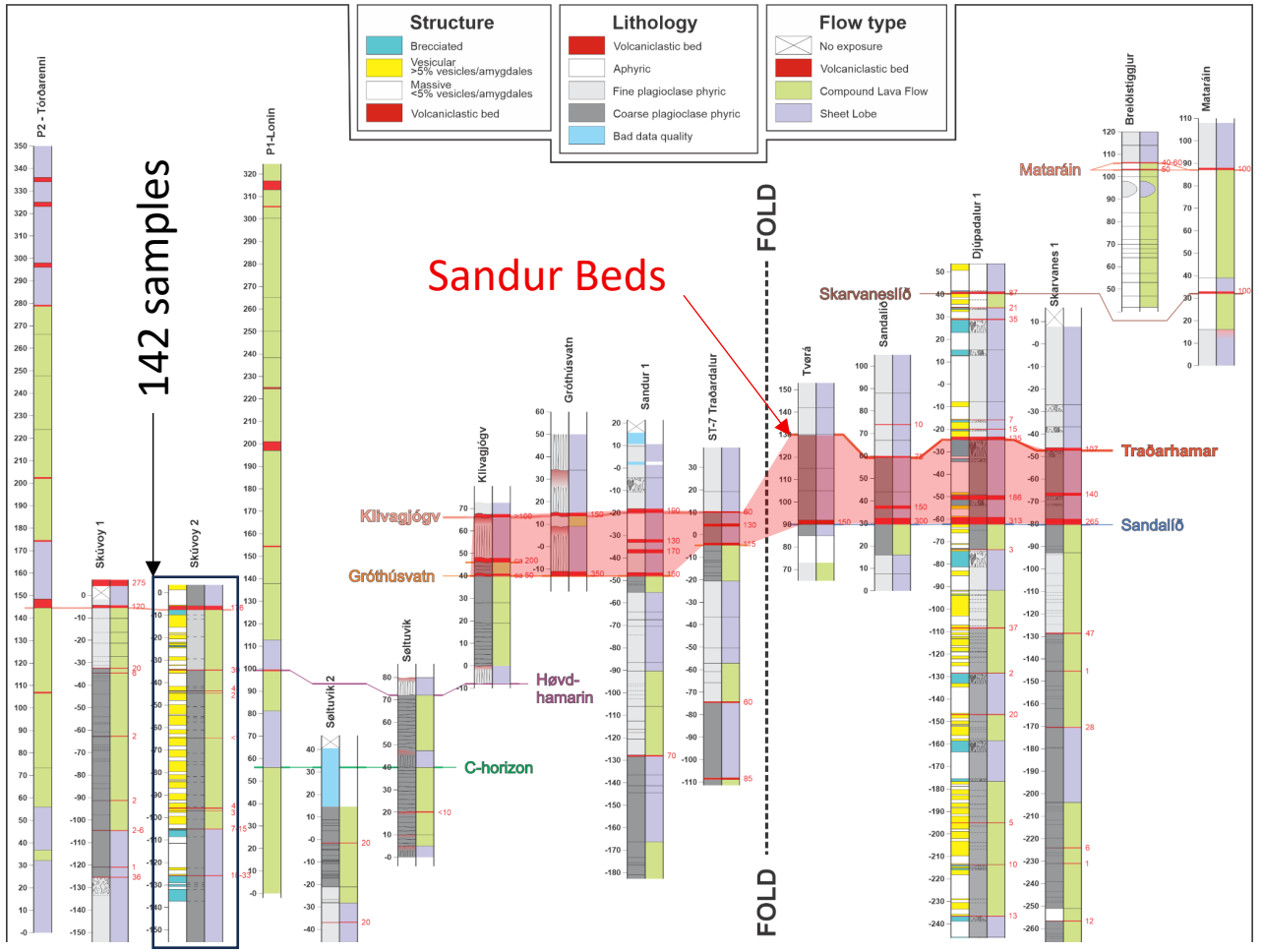
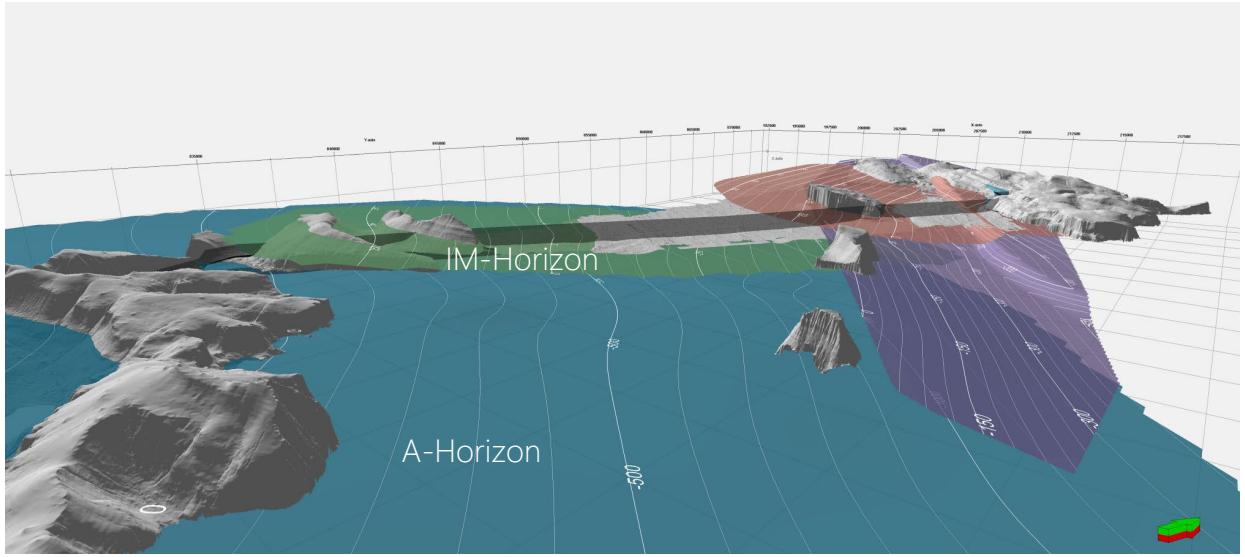
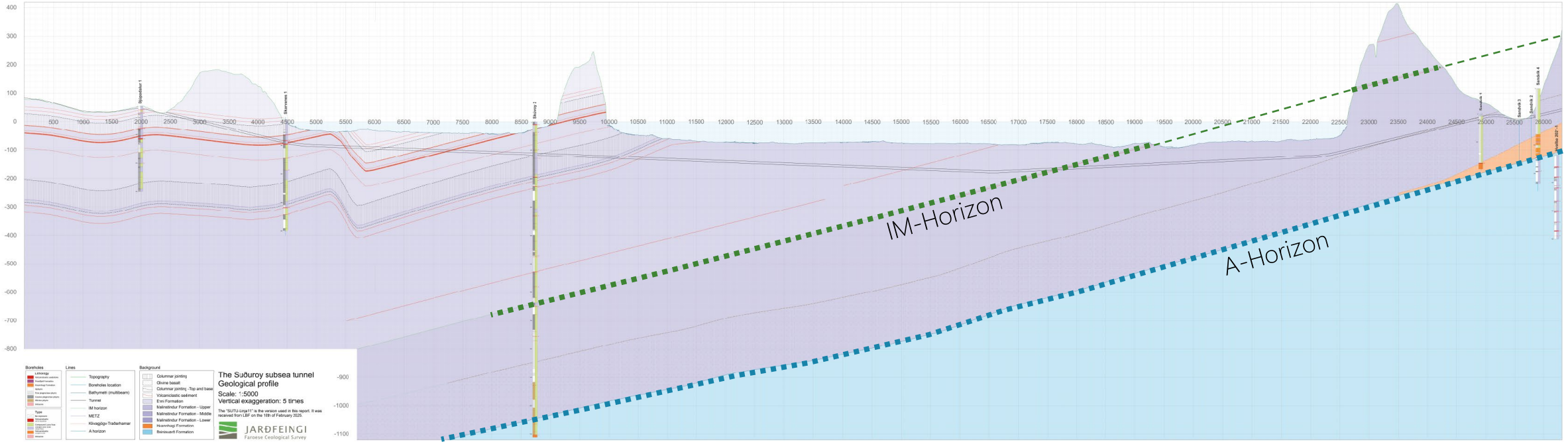


Figure 37. Correlation panel for Sandoy-Skúvoy area logs and boreholes to METZ.

DÁTUGRUNDARLAG OG ÚRSLIT



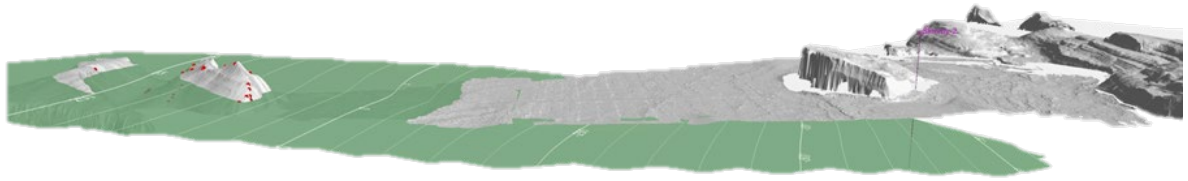
Appendix C The Suðuroy subsea tunnel - geological profile

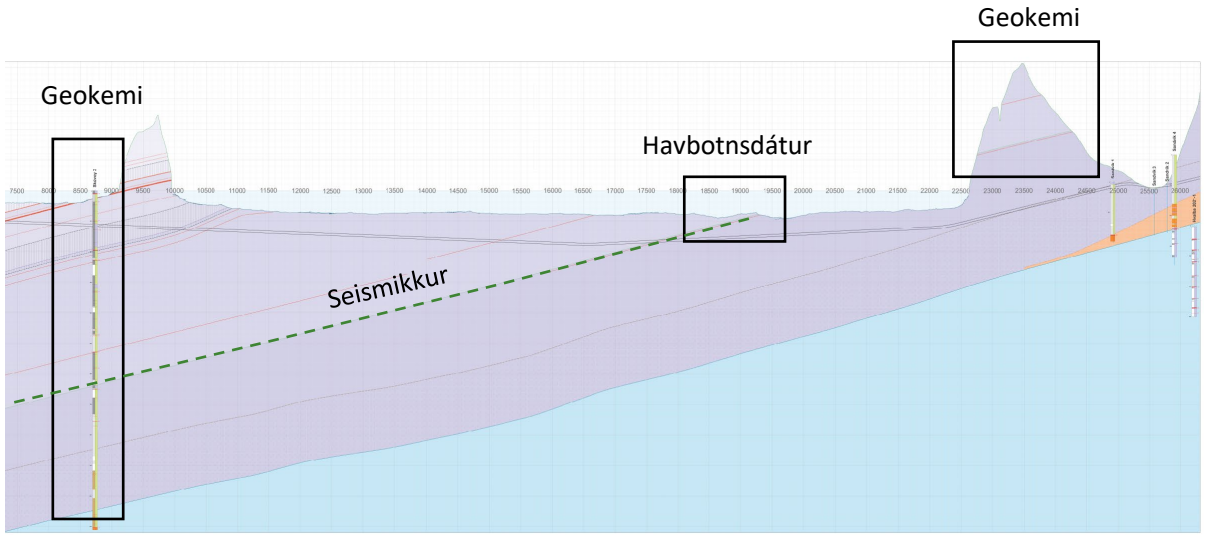


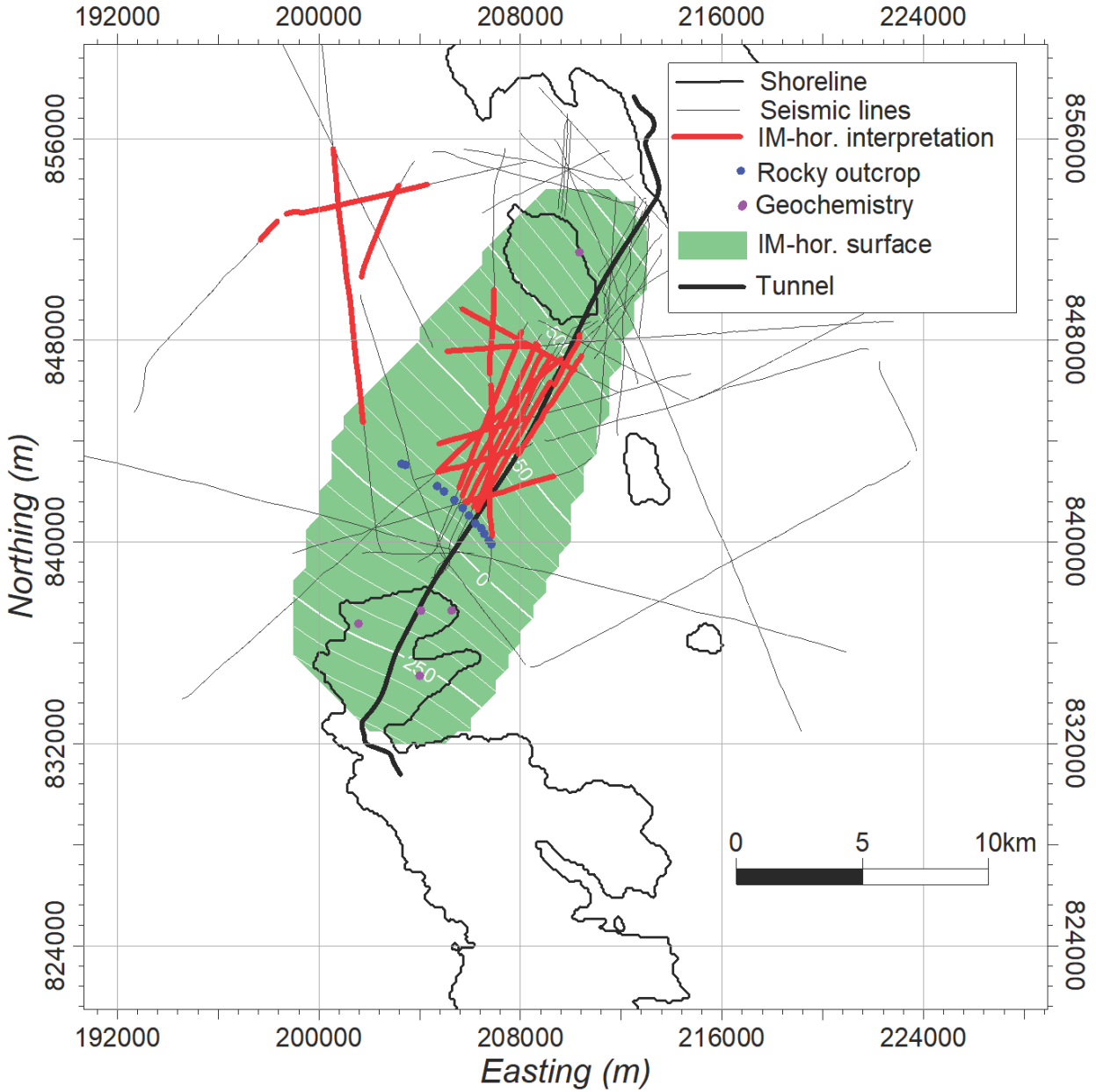
DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR

- Seismikkur, geokemi og havbotnsdátur



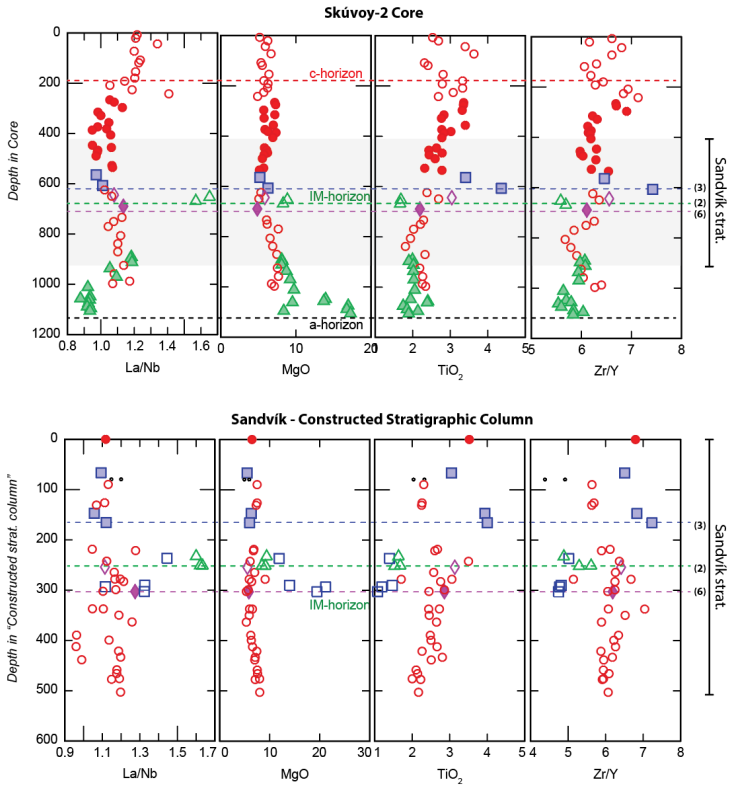


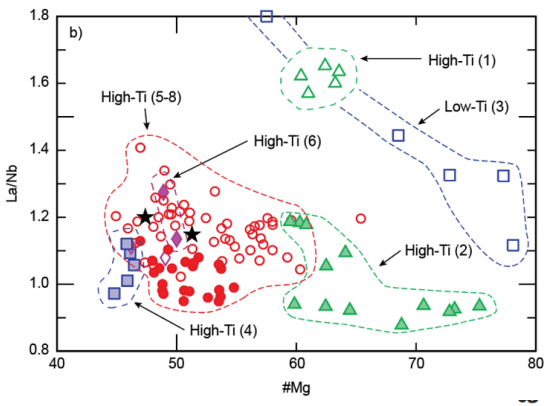


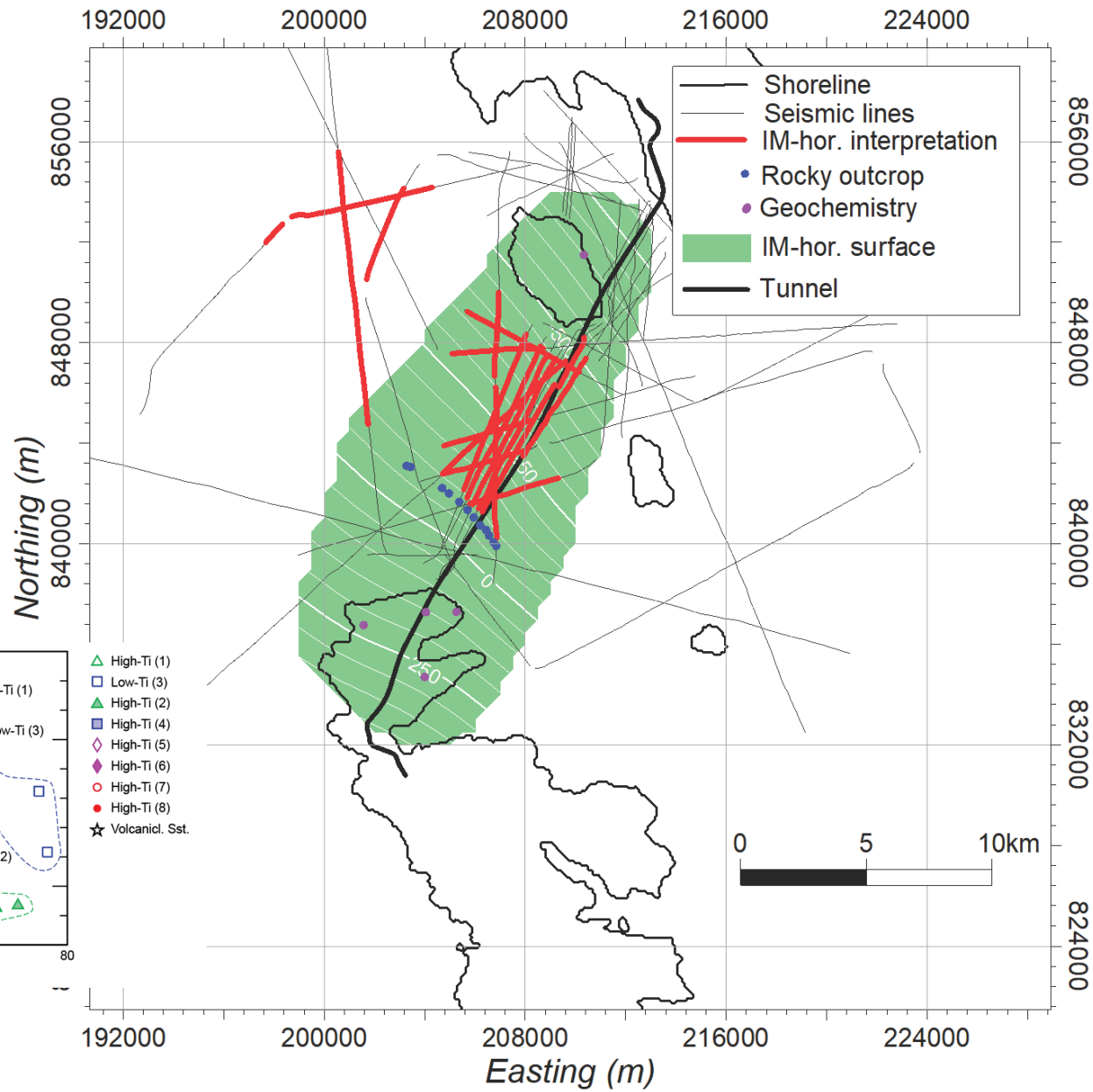
DÁTUGRUNDARLAG OG ÚRSLIT

JARÐFRØÐILIGAR FORKANNINGAR

- Seismikkur, geokemi og havbotnsdátur

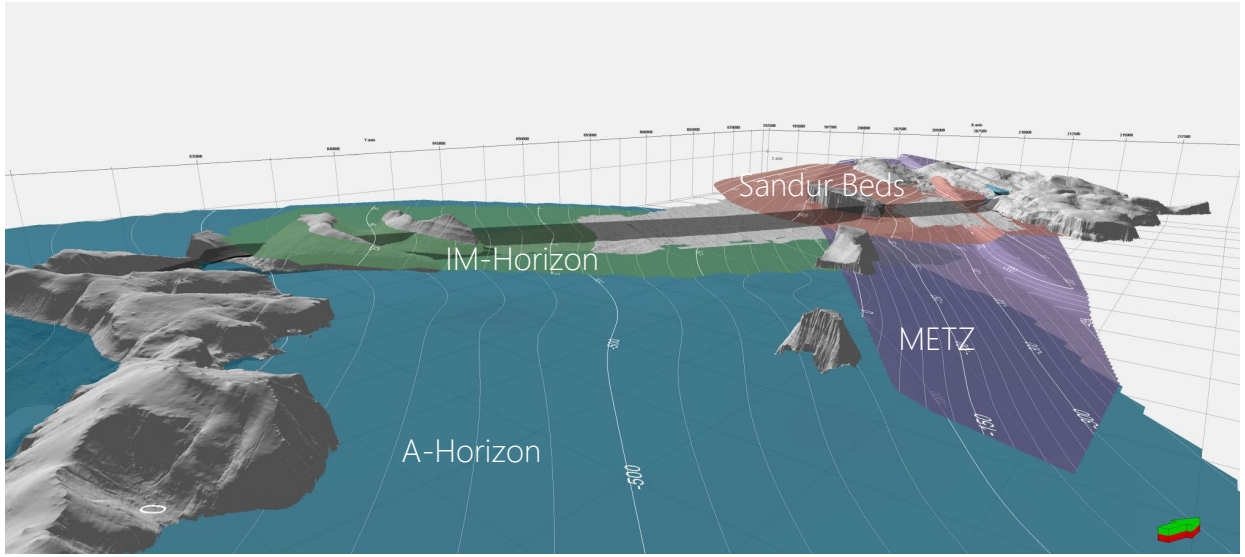


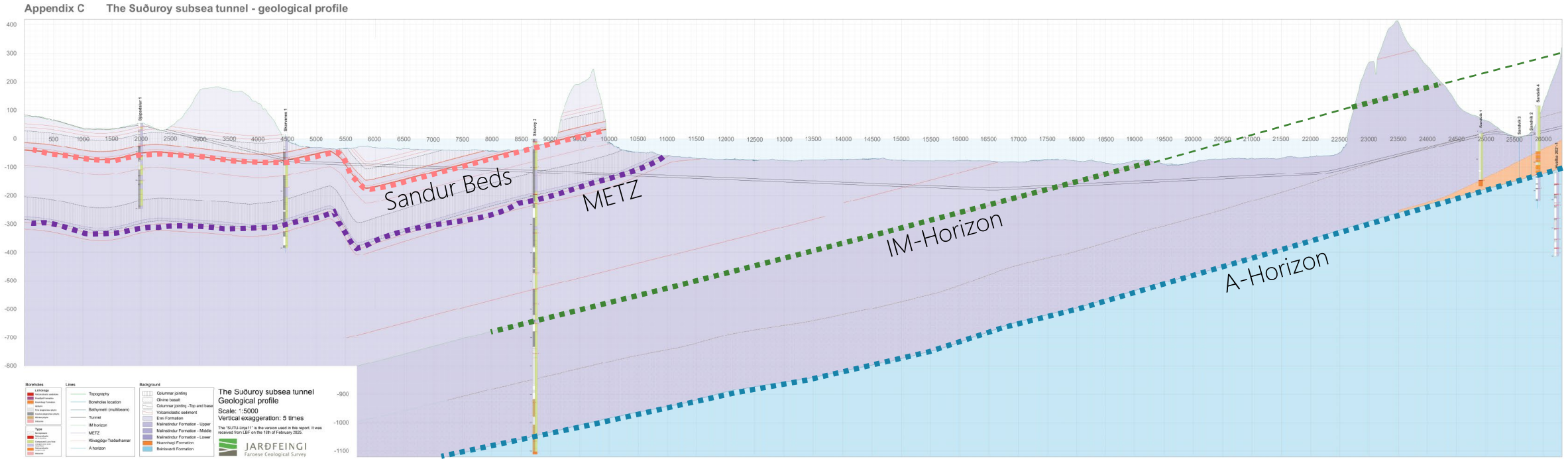




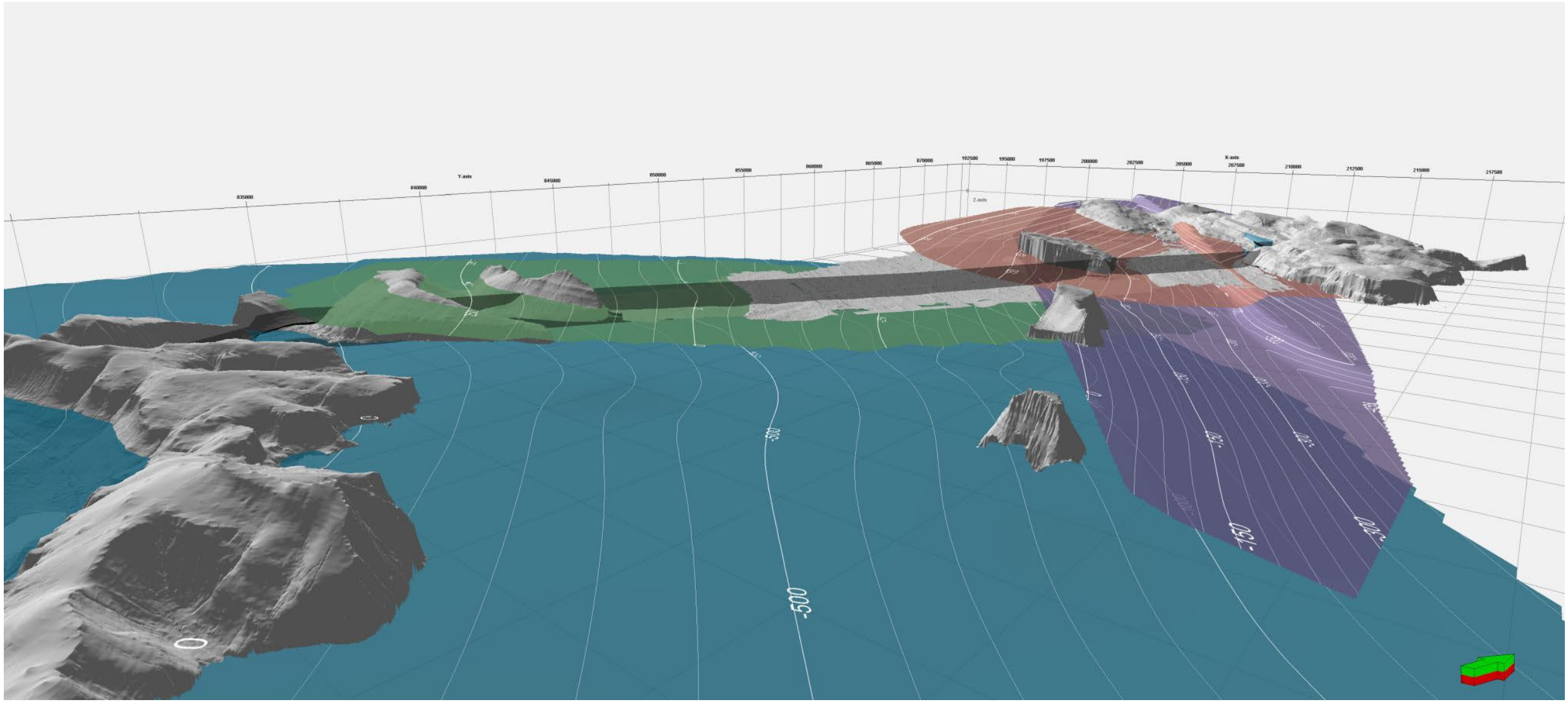
JARÐFEINGI
Faroese Geological Survey

DÁTUGRUNDARLAG OG ÚRSLIT





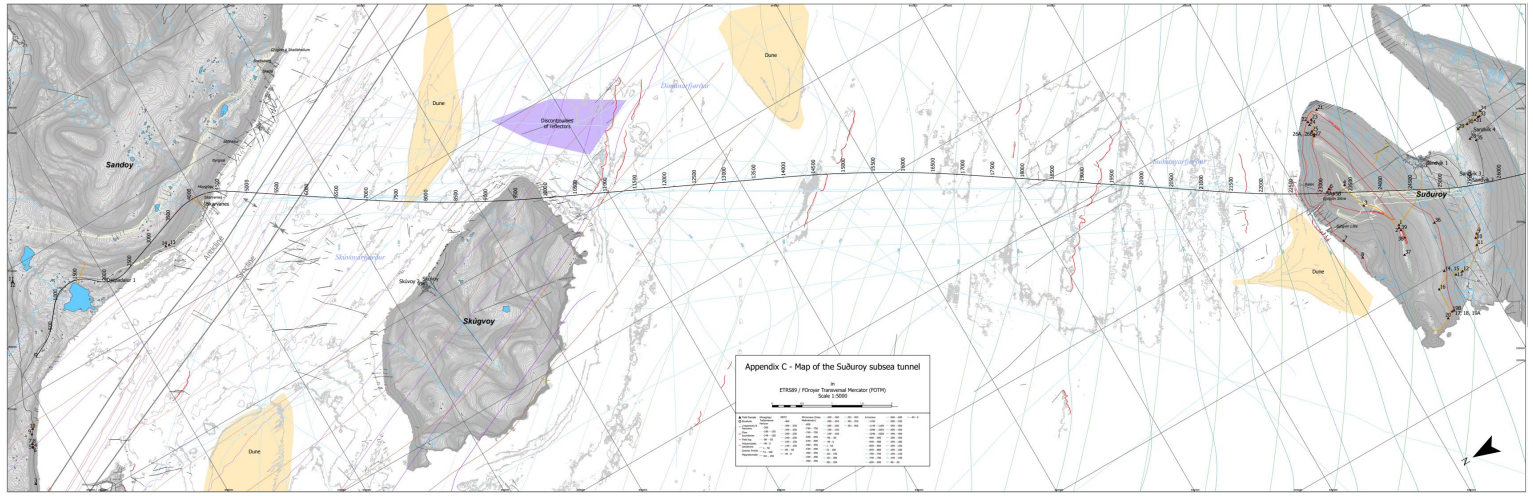
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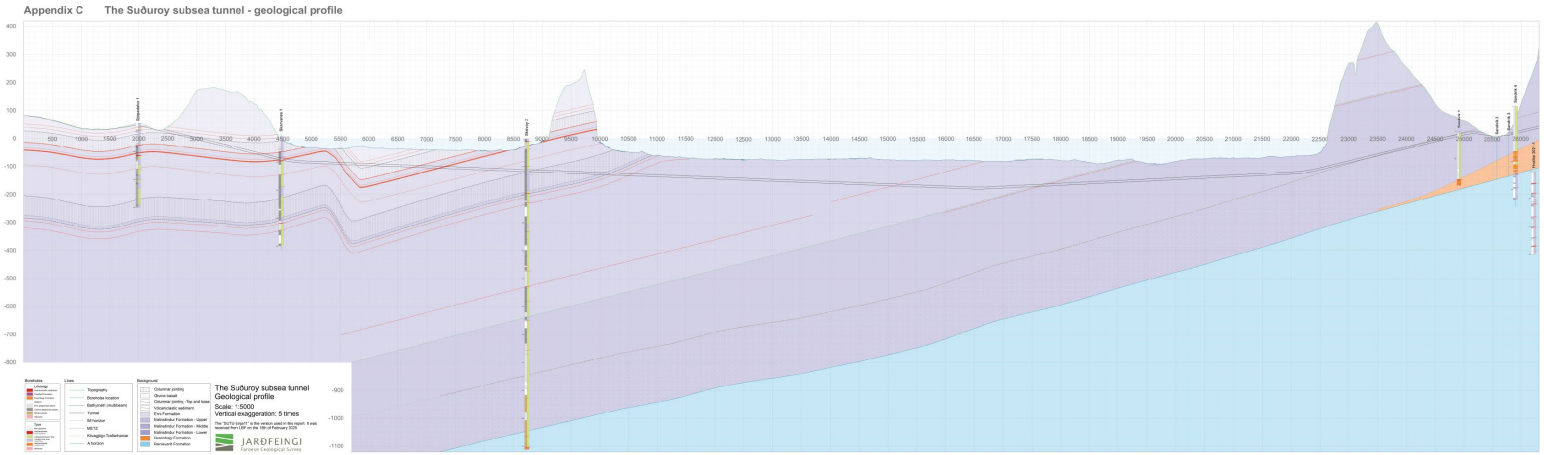


NIÐURSTØÐUR

JARÐFRØÐILIGAR NIÐURSTØÐUR

- Haldfast jarðfrøðiligt model yvir alla tunnilslinjuna frá Djúpadali til Sandvíkar
- Faldur eftir tunnilslinjuni millum Sandoy og Skúvoy
- At síggja til, ikki nógvar rivur á havbotninum eftir tunnilslinjuni. Serliga í Suðuroyarfirði
- Leyst og “svellandi” grót í ávísum legugrýtislingum (m.a. Sandur Beds)
- Stabbagrót í ávísum fláum (m.a. METZ)

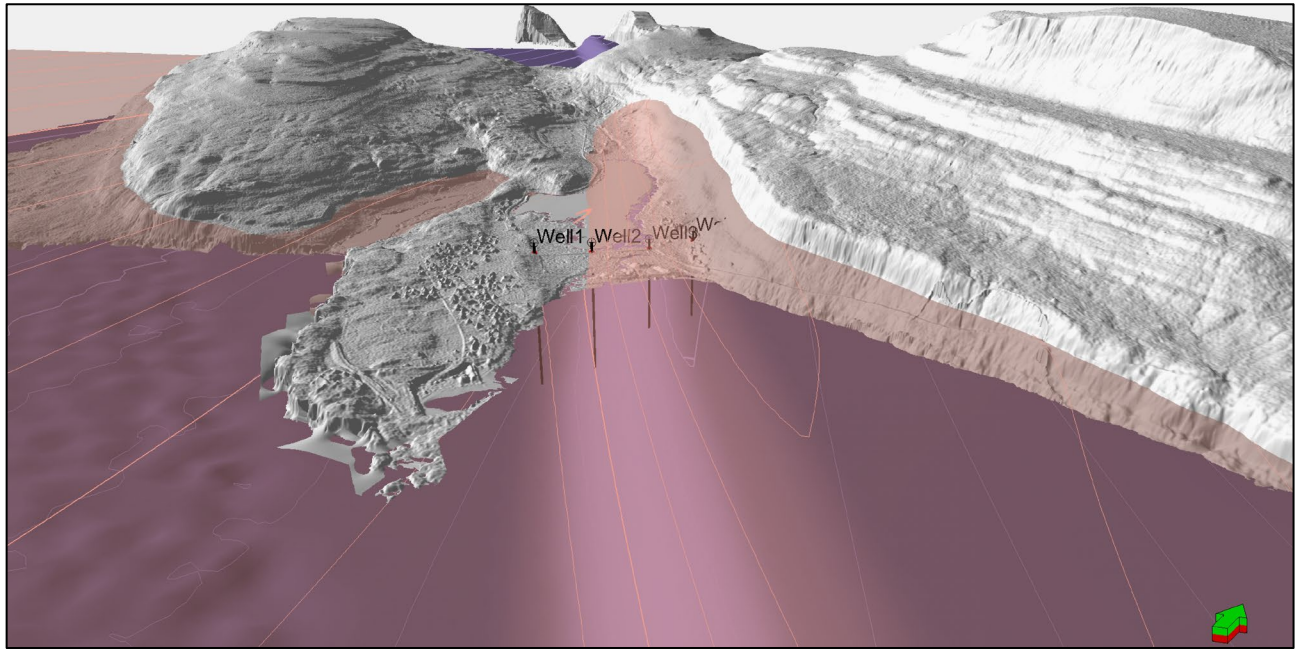




TILMÆLI

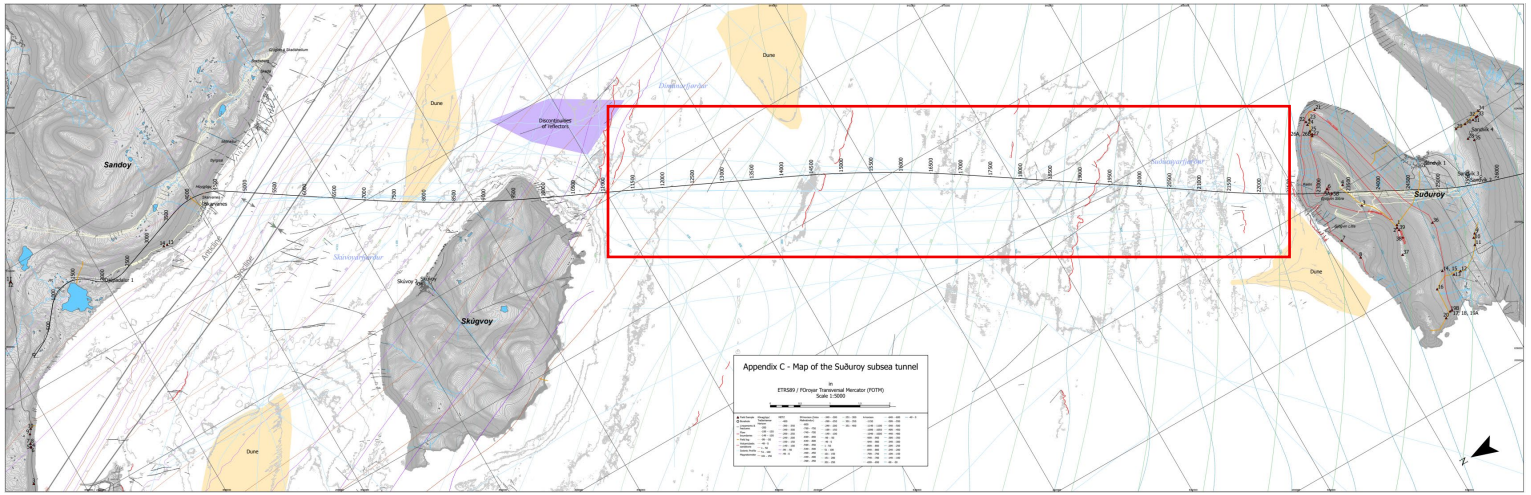
FALDUR

- Gera boringar á Sandoynni fyri at kanna “faldin” nærri
- Eftirkanna dátur frá Sandoyartunlinum í samband við faldin



RIVUR Í SUÐUROYARFIRÐI

- Nýggjar havbotnsdátur úr Suðuroyarfjørði (Multibeam og magnetmátingar)



LM-066/2025

TAKK FYRI / SPURNINGAR?

JARÐFEINGI



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VIRÐISMIKIL VITAN UM GRUND OG UNDIRGRUND