FETSJÖN

Compilation of Results from Drill-Logs of 52 Diamond-Drill Holes from (2006/2007) with available historical information from the Geological Survey of Sweden (SGU)

Plan Maps : Map-Scale 1:5000 (A4)
Sections : 1:1500 (A4)
September 2018

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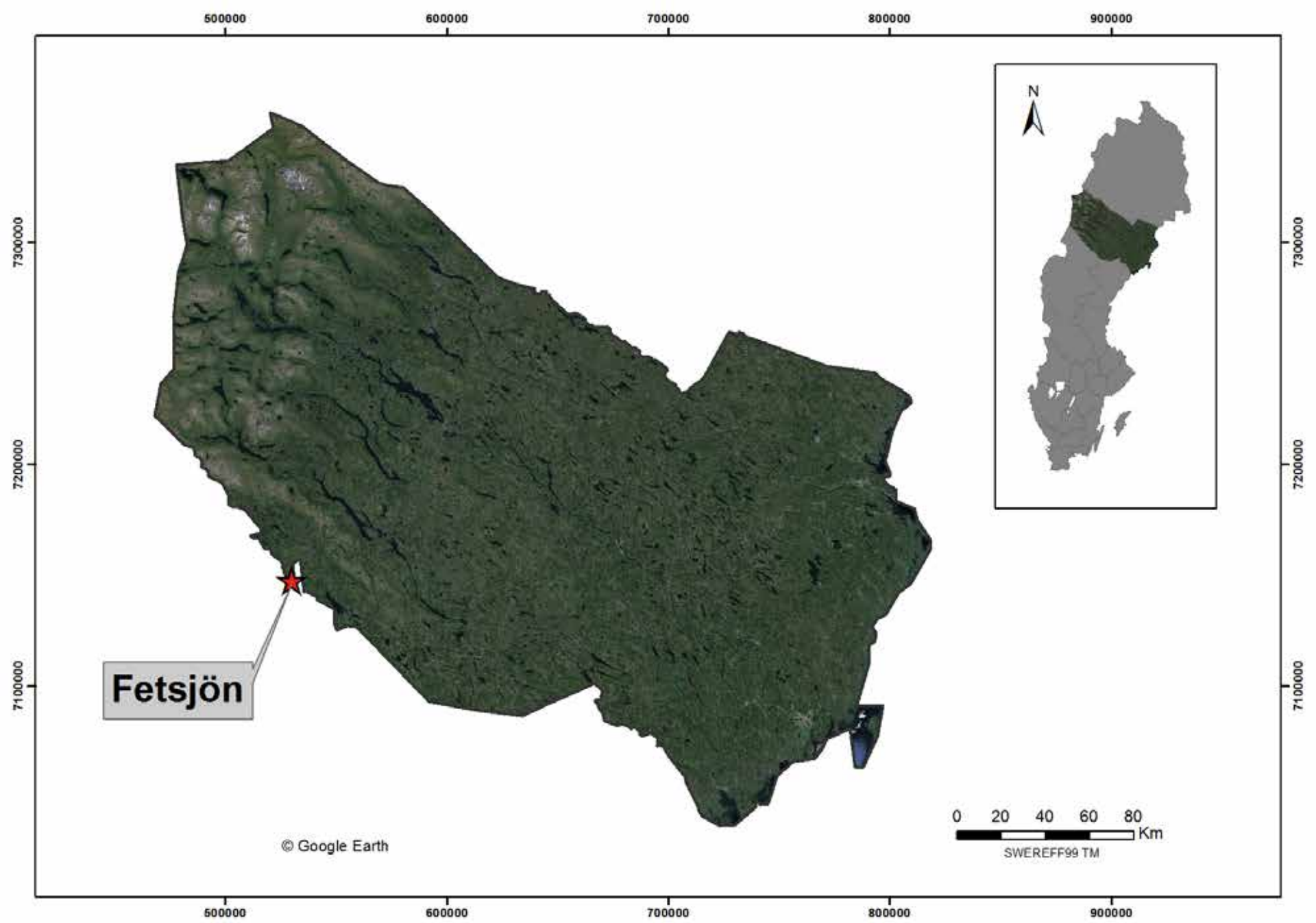
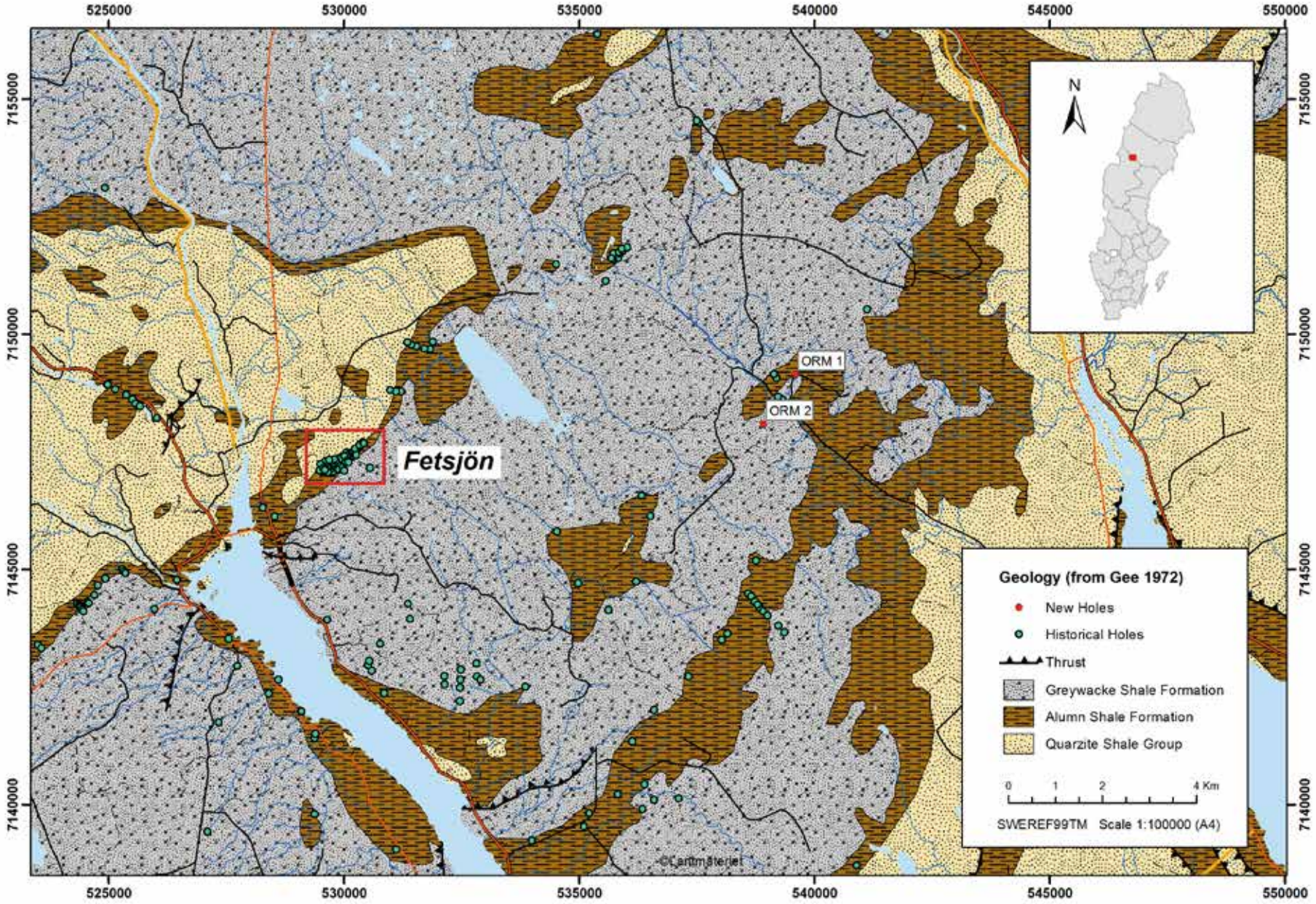
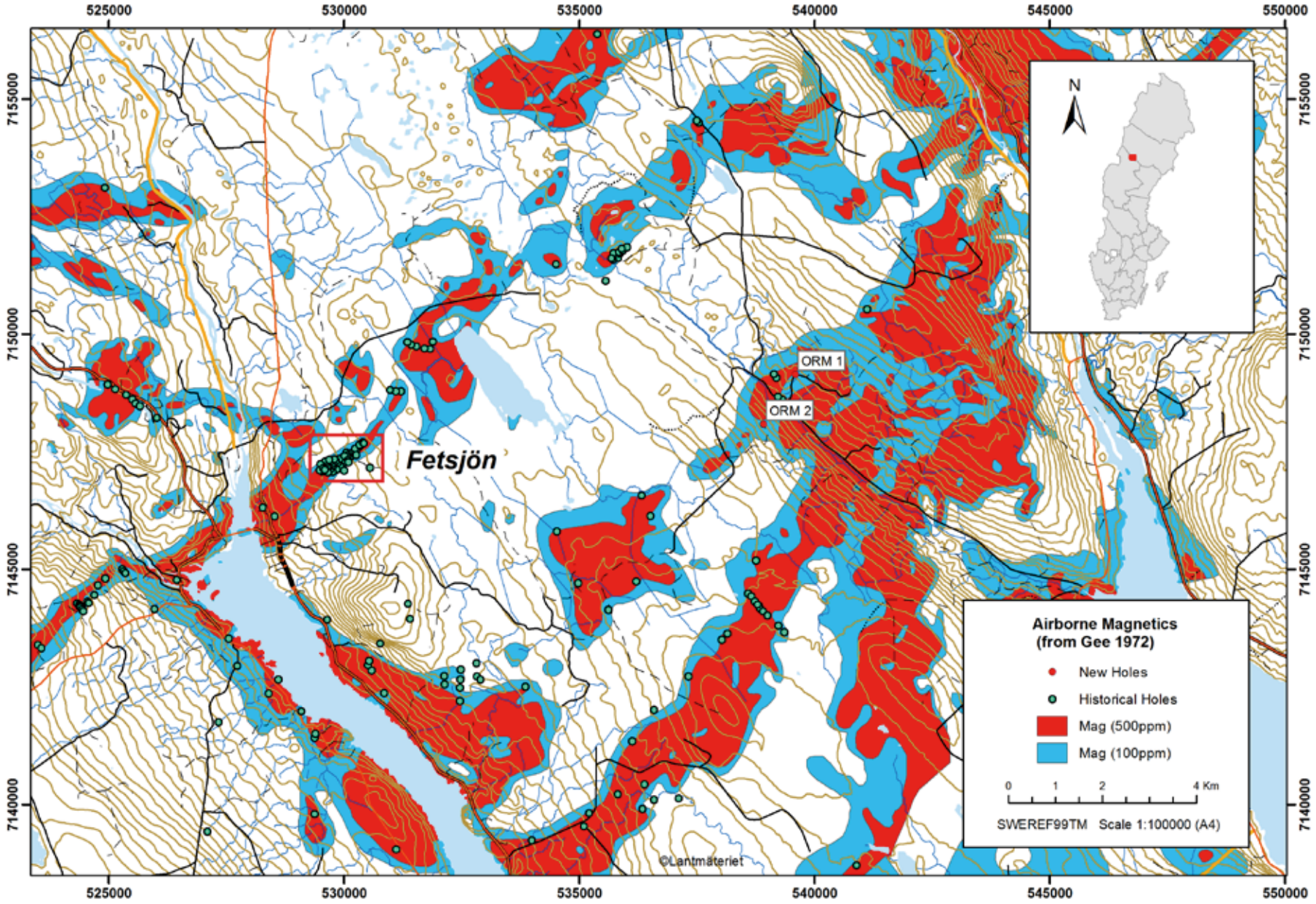


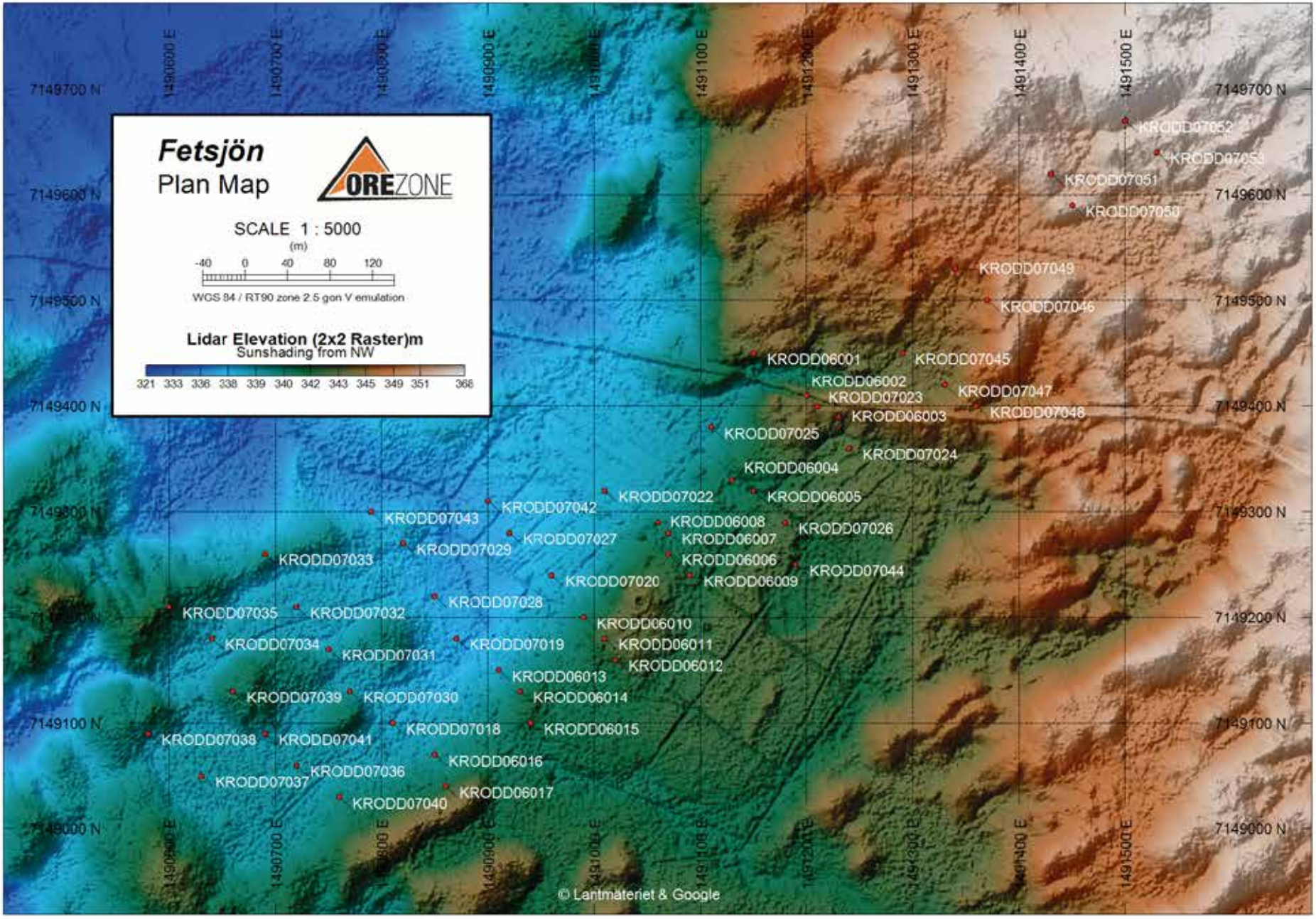
Overview of Project-Position



Regional Geological Position of the Fetsjön-Project



SGU Airborne Magnetics with Position of the Fetsjön-Project



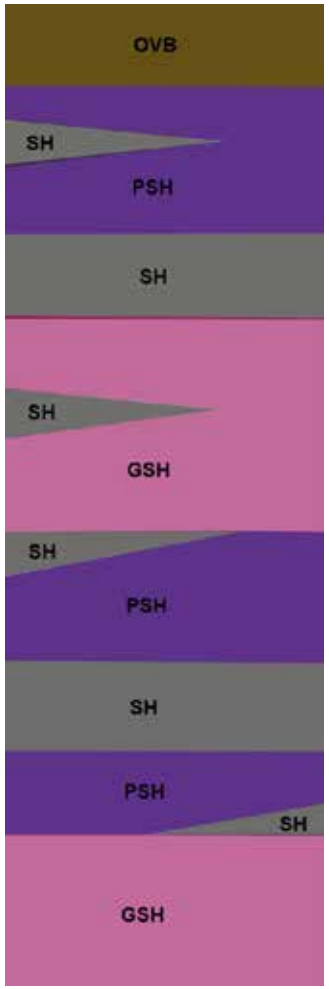
Plan-Map with Drillhole-Positions and Digital Elevation Model (DEM)

Geological and Structural Interpretation

As no tectonical measures were available , the geological interpretation was preliminary made without the estimation of faults and inverse bedding.

Nevertheless there is some indication for at least minor fault tectonics!

Based on the Drillhole-logs from Mawson Resources the following preliminary schematic Lithology-Profile has been developed :



Overburden

Phosphoritic Shale

Shale

Graphitic Shale

Phosphoritic Shale

Shale

Phosphoritic Shale

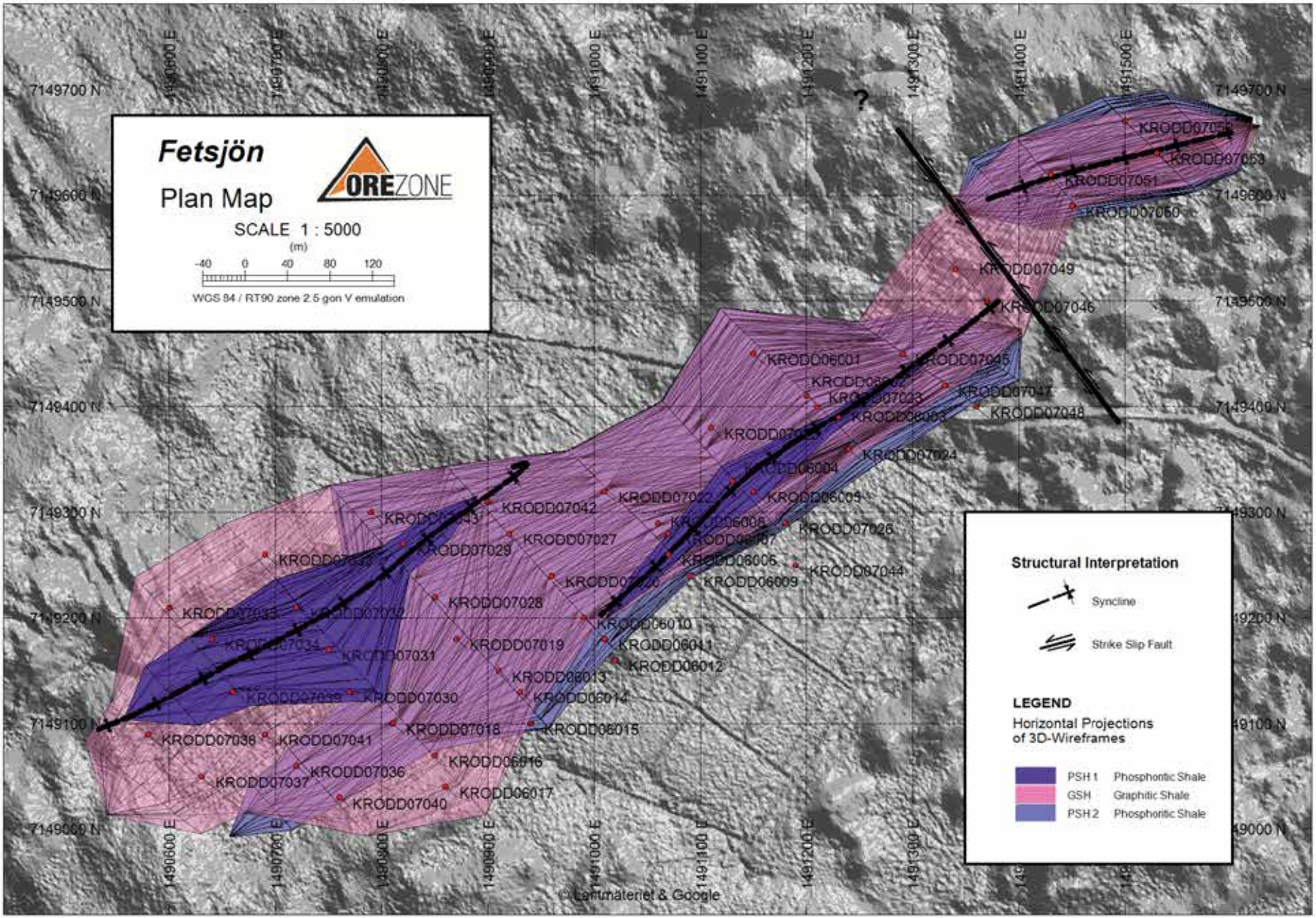
Graphitic Shale

Schematic Lithology Profile

Based on this lithologic scheme a series of 12 NW-SE sections have been constructed with the help of assay-results in the drillhole-traces.
These sections have been wireframed in 3D to create spatial bodies for the Mineralised Geological Units – Graphitic Shale (GSH) and Phosphoritic Shale 1 (PSH 1) and Phosphoritic Shale 2 (PSH 2).

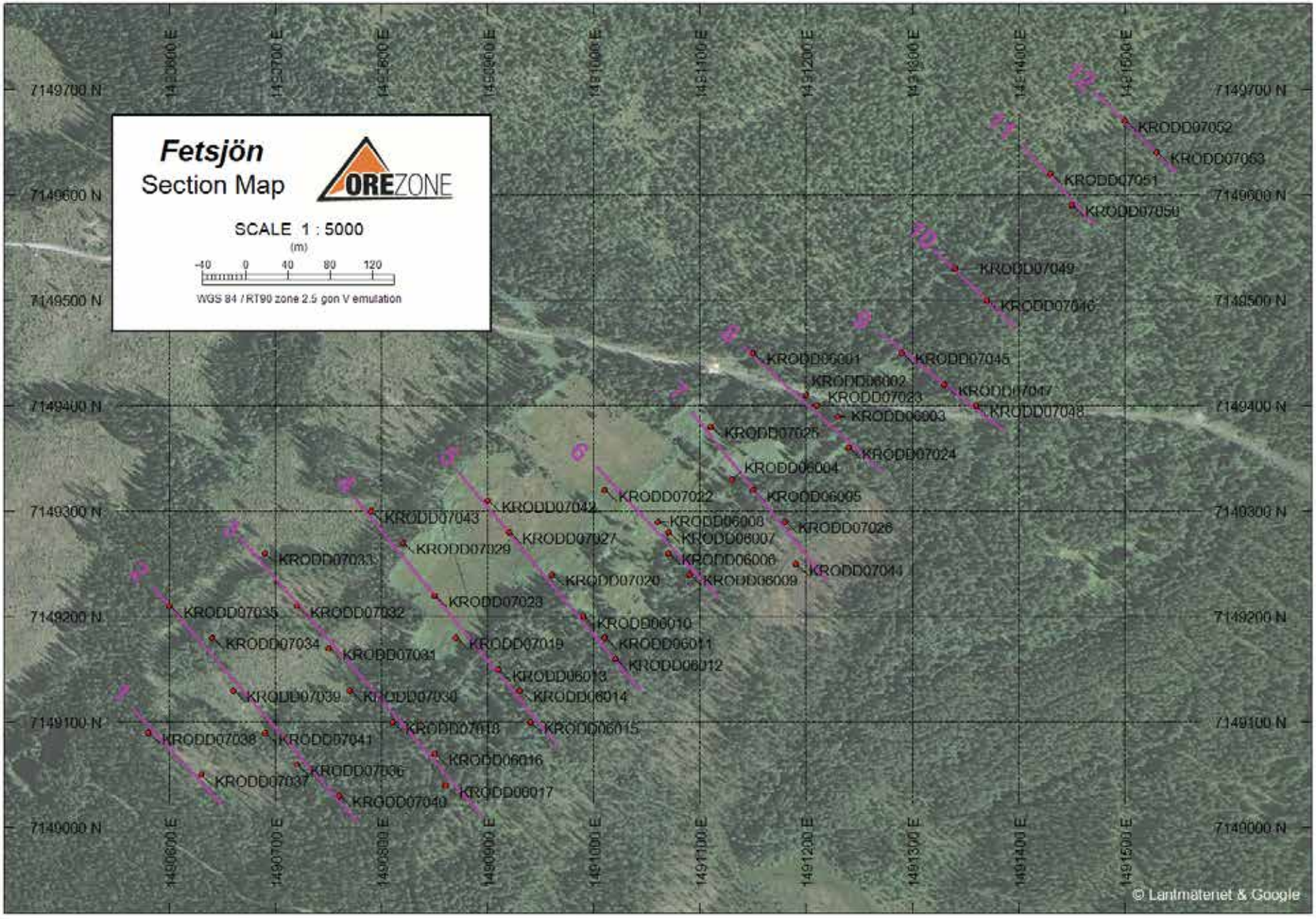
The Main Fold-Axes could be constructed and one Strike-Slip Fault in the NE-Corner of the area had to be postulated.

The following slide shows the Main Geological Units projected to 2D-Plan-Map.

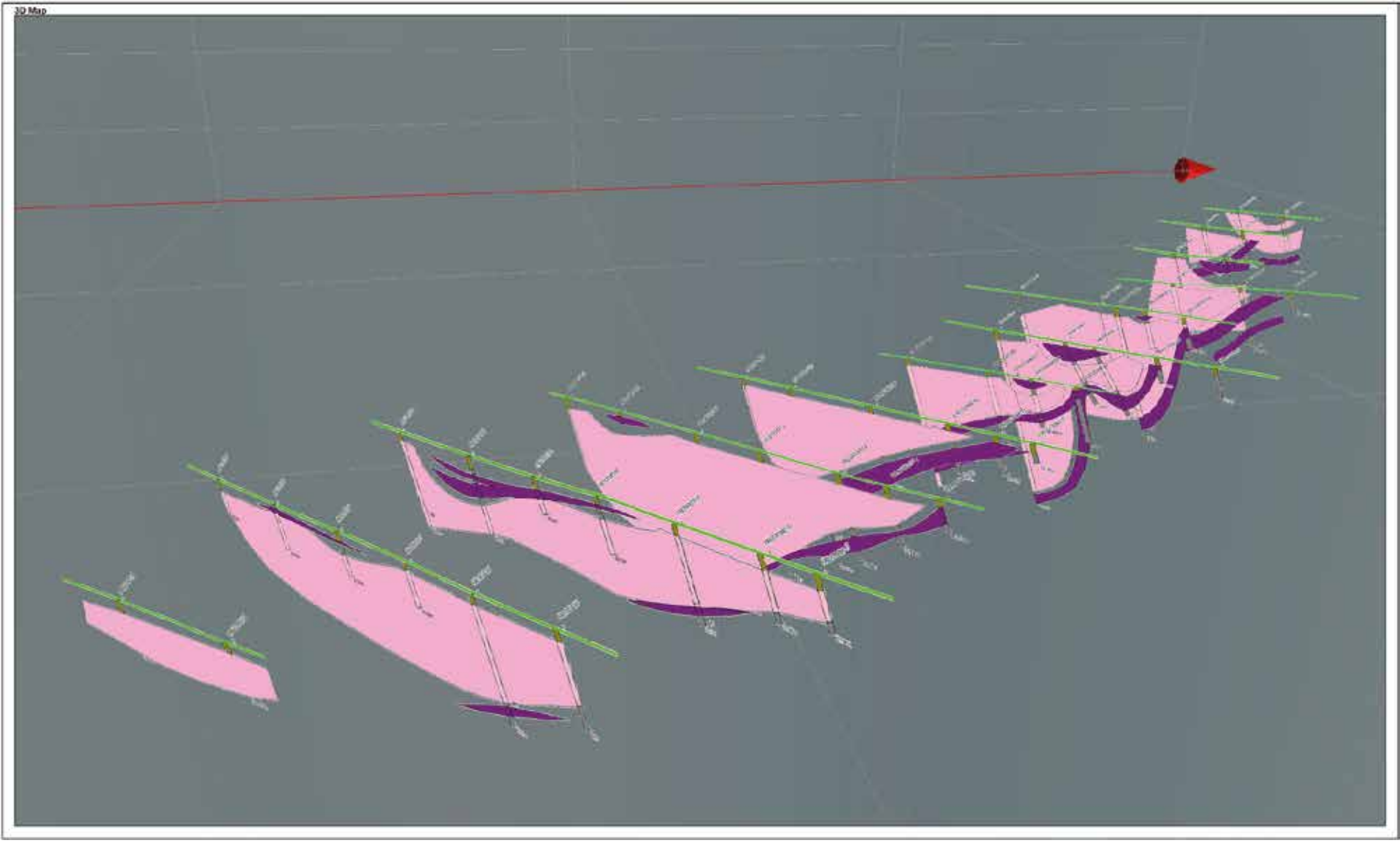


Geological and Structural Detail-Map projected from 3D-Wireframes of Drillhole-

Positions of the NW-SE Sections on the Plan-Map and 3D-Screenshot of all Sections with Drillhole-Traces preliminary Geological Interpretation.



Plan-Map of NW-SE Sections on Satellite Image

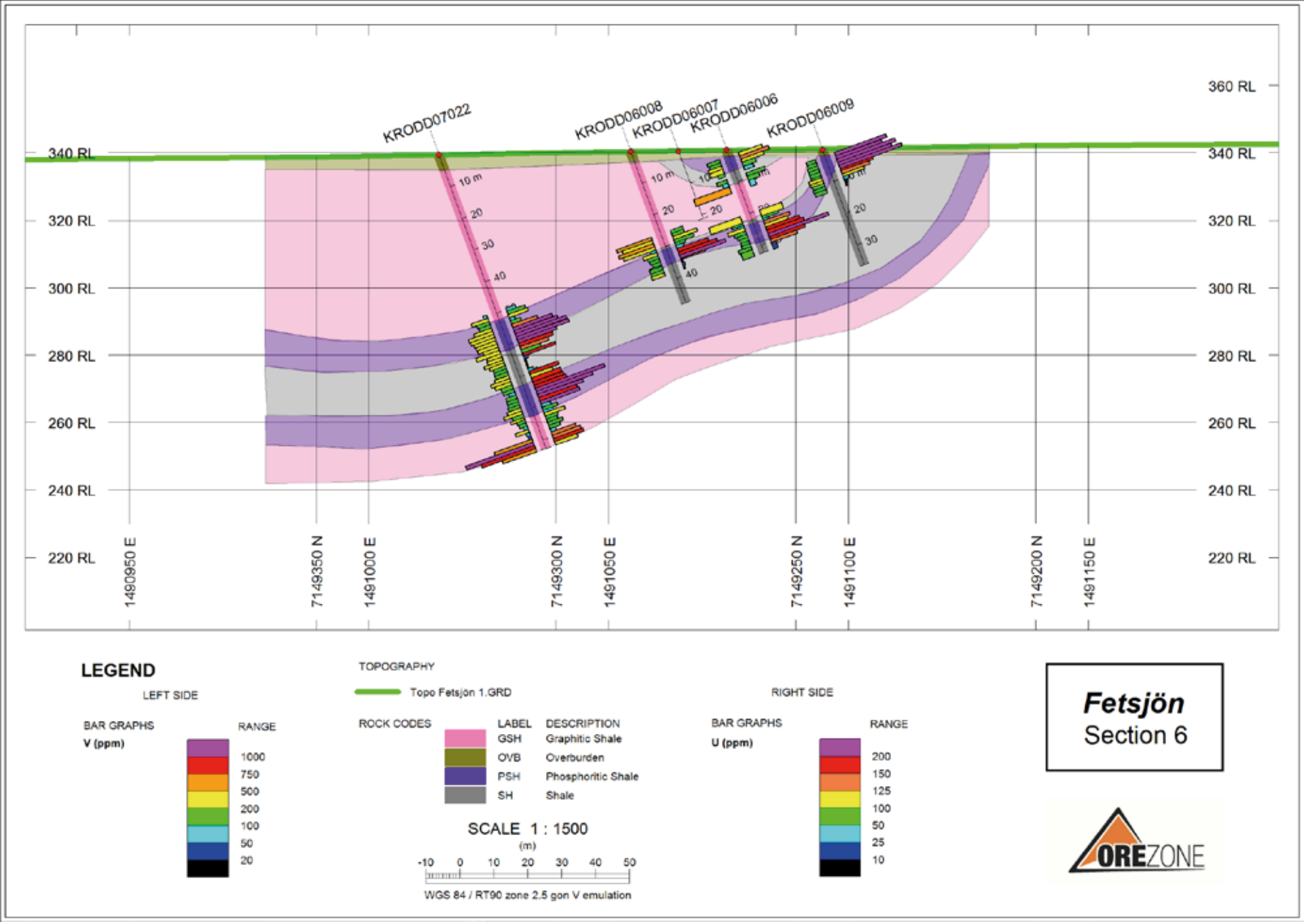


Spatial Position of the Sections and the Mineralised Units.
3D-Screenshot with view to N

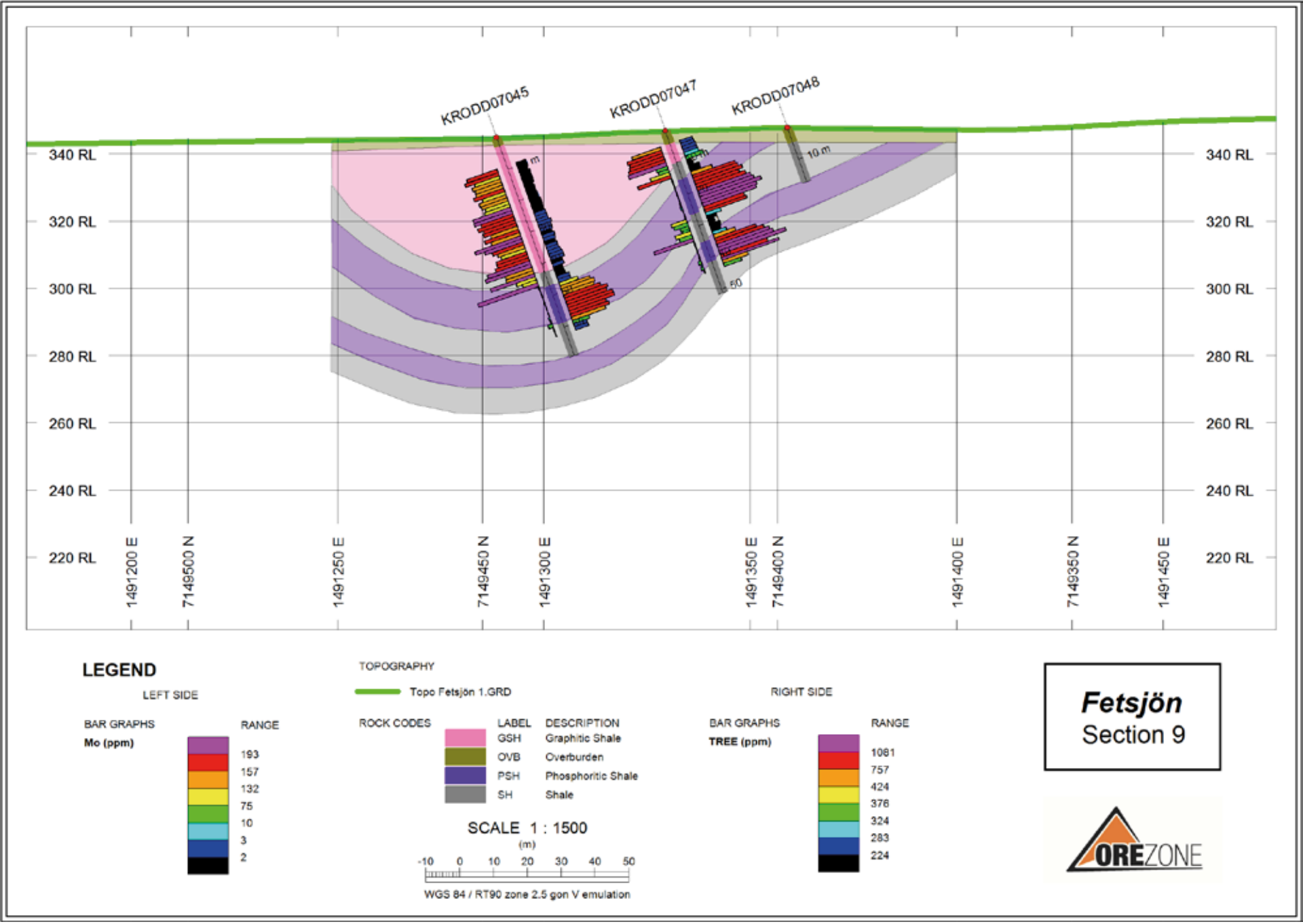
Example Sections

Section 6 with an overlay of Vanadium-Assays (left side) and Uranium (right side).
Section 9 with an overlay of Molybdenum-Assays (left side) and Total Rare Earth Elements (TREE).
Strip-Log for a typical Drillhole: KRODD07045.

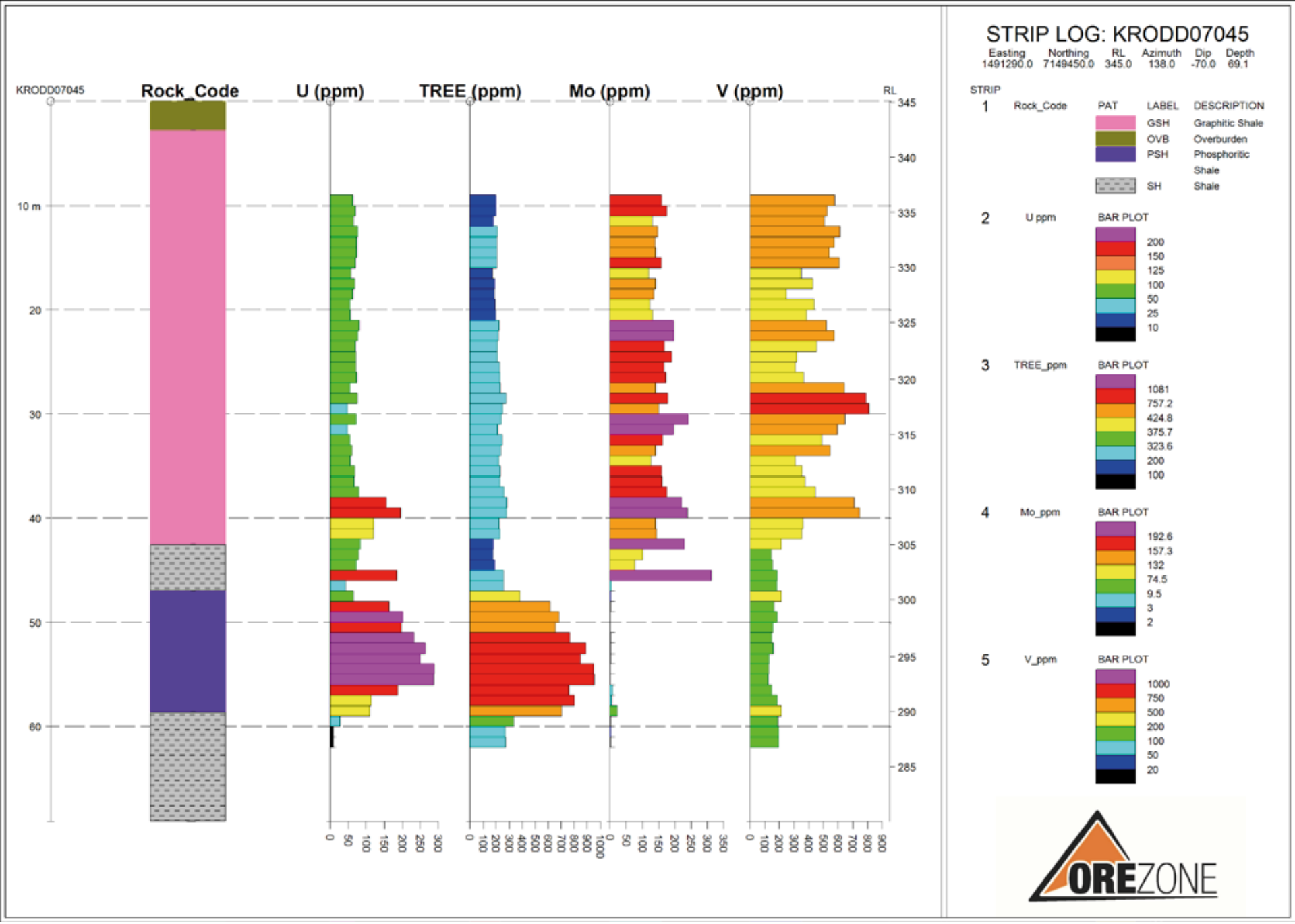
Uranium and Total Rare Earth Elements (TREE) are clearly bound to the Phosphoritic Shale (PSH) Units –
whereas V, Mo, Ni, Cu and V reflect the Structures of the Graphitic Shale (GSH).



Example Section 6 with Vanadium-Assays (left side) and Uranium-Assays (right side)



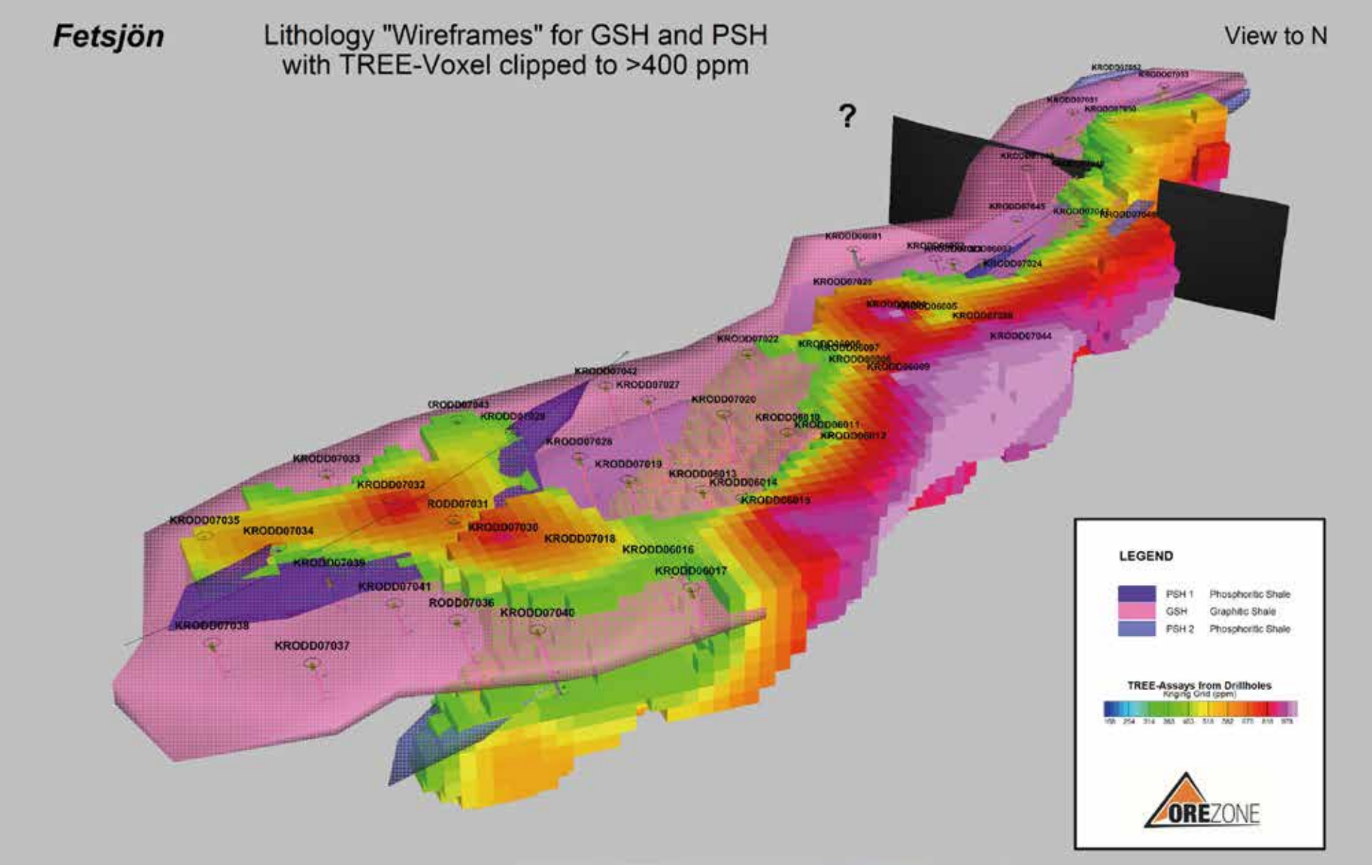
Example Section 9 with Molybdenum-Assays (left side) and **T**otal **R**are **E**arth **E**lement-Assays (right side)



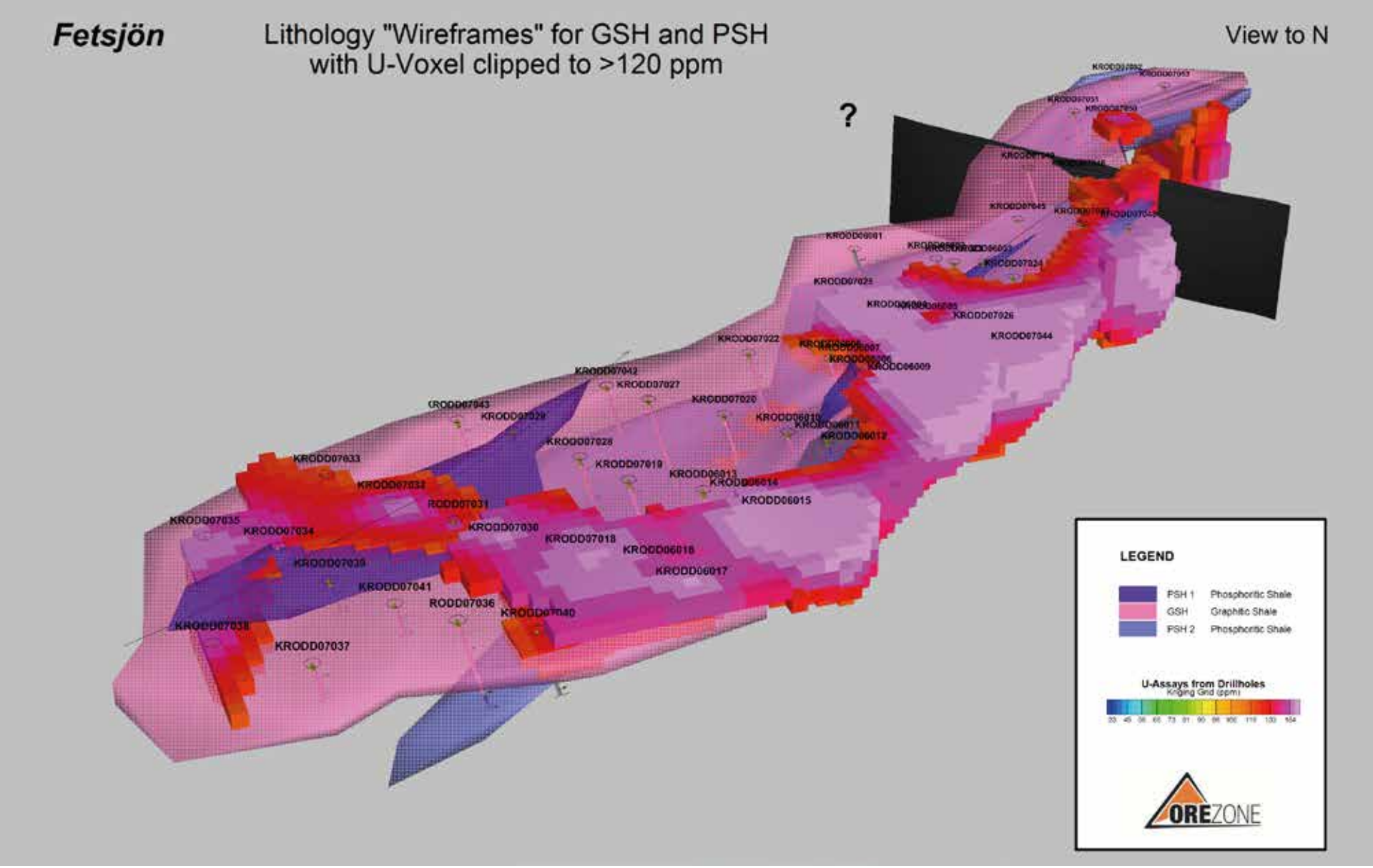
Strip-Log for a typical Drillhole (KRODD07045) with different trends for U/TREE and

3D Model of the Mineralised Shales with an overlay of Assays for TREE, U, Mo, Ni, Cu and V.

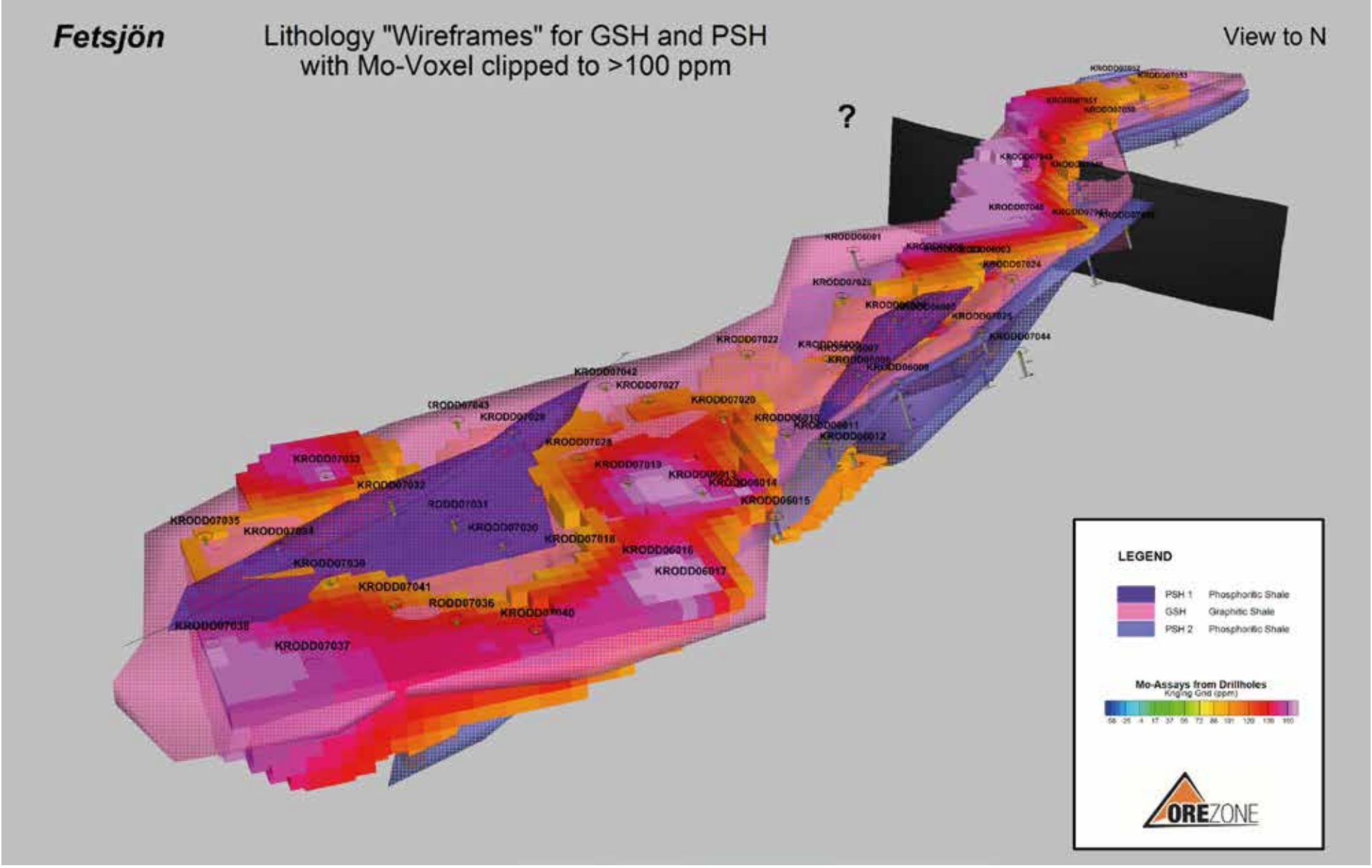
The Geochemical Trends appear even more clearly in 3D-Space.
The following slides show 3D-bodies from the Mineralised Shales with an overlay of 3D-Grids (Voxels) for the elements above. The data of the voxels have been clipped so that only the high-grade areas show and the underlying 3D-bodies can be recognized. That makes it easy to compare the different trends.



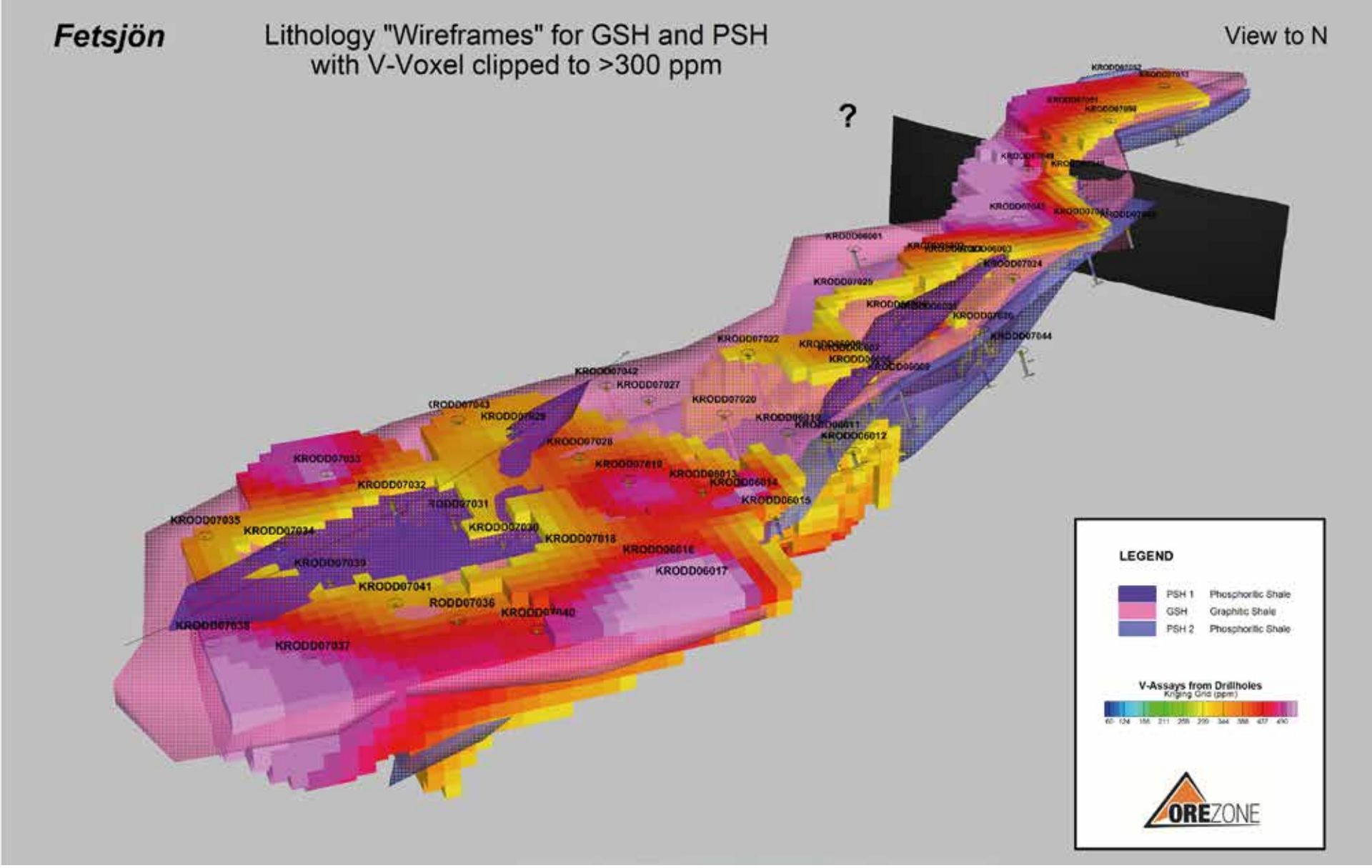
The Assays of the **T**otal **R**are **E**arth **E**lements (TREE) show their maximum within the Phosphoritic Shales (PSH 1+2)



Even the Uranium (U)-Assays show the same trend as TREE and culminate in the Phosphoritic Shales (PSH 1+2)



On the other hand show Molybdenum (Mo)-Assays their highest values within the Graphitic Shale (GSH)



Vanadium (V) shows clearly a similar trend as Molybdenum (Mo) and the same can also be shown for Nickel (Ni) and Copper (Cu).

Conclusions

The area of Fetsjön shows two units of metallogenic potential within the Alumn Shale Formation:

The **Phosphoritic Shale (PSH)** which holds mostly **Rare Earth Elements** and Uranium,
and
The **Graphitic Shale (GSH)** with enrichment mainly of **Vanadium**, **Molybdenum**, Nickel and Copper.

Unfortunately no assays were available for **Graphite**, but as similar rocks from the region (e.g. Ormbäcken) have shown values of >10% C it should be quite interesting to reassay the existing core for Graphite – nevertheless if the ongoing discussion about battery-metals is regarded.