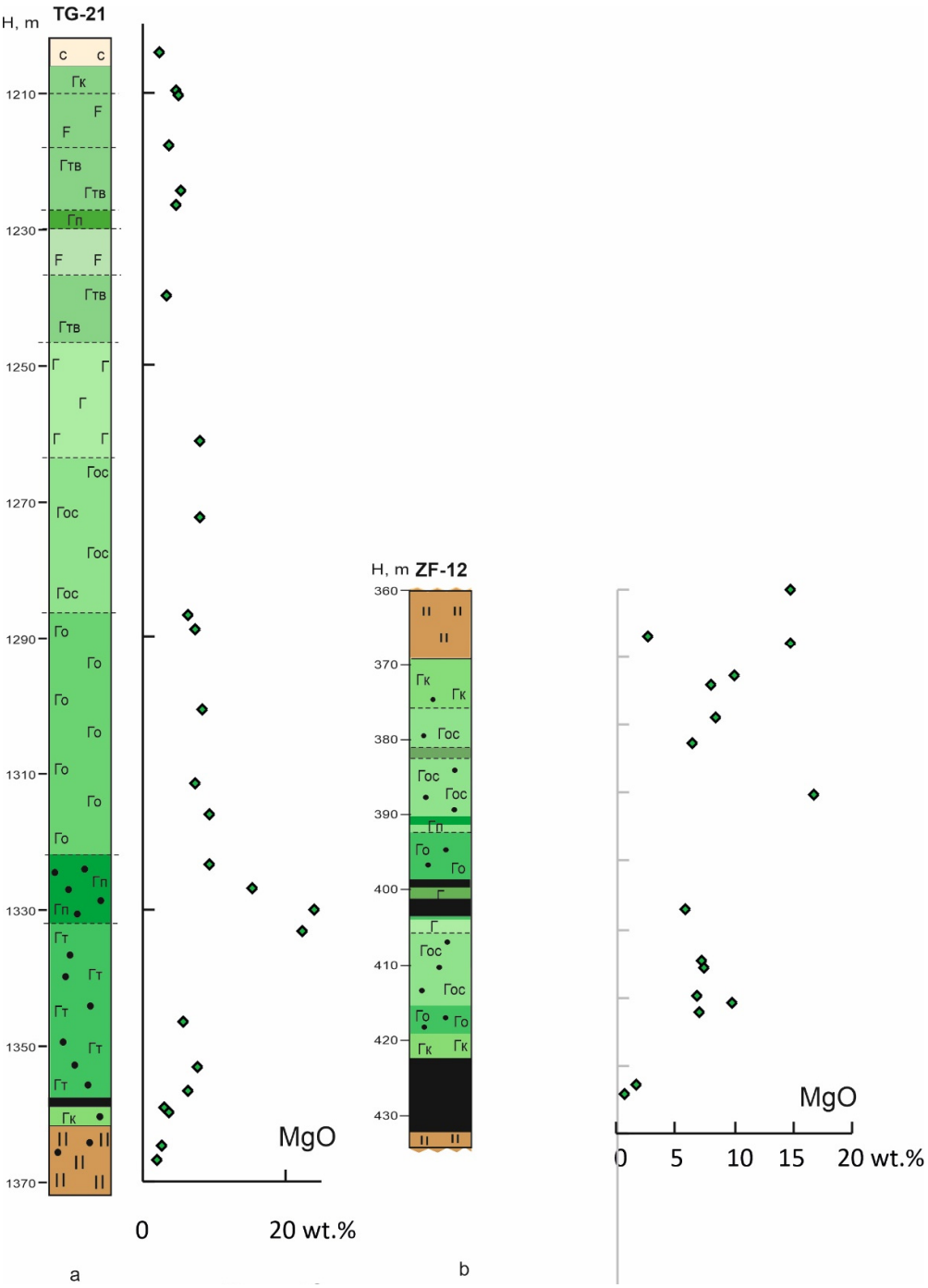
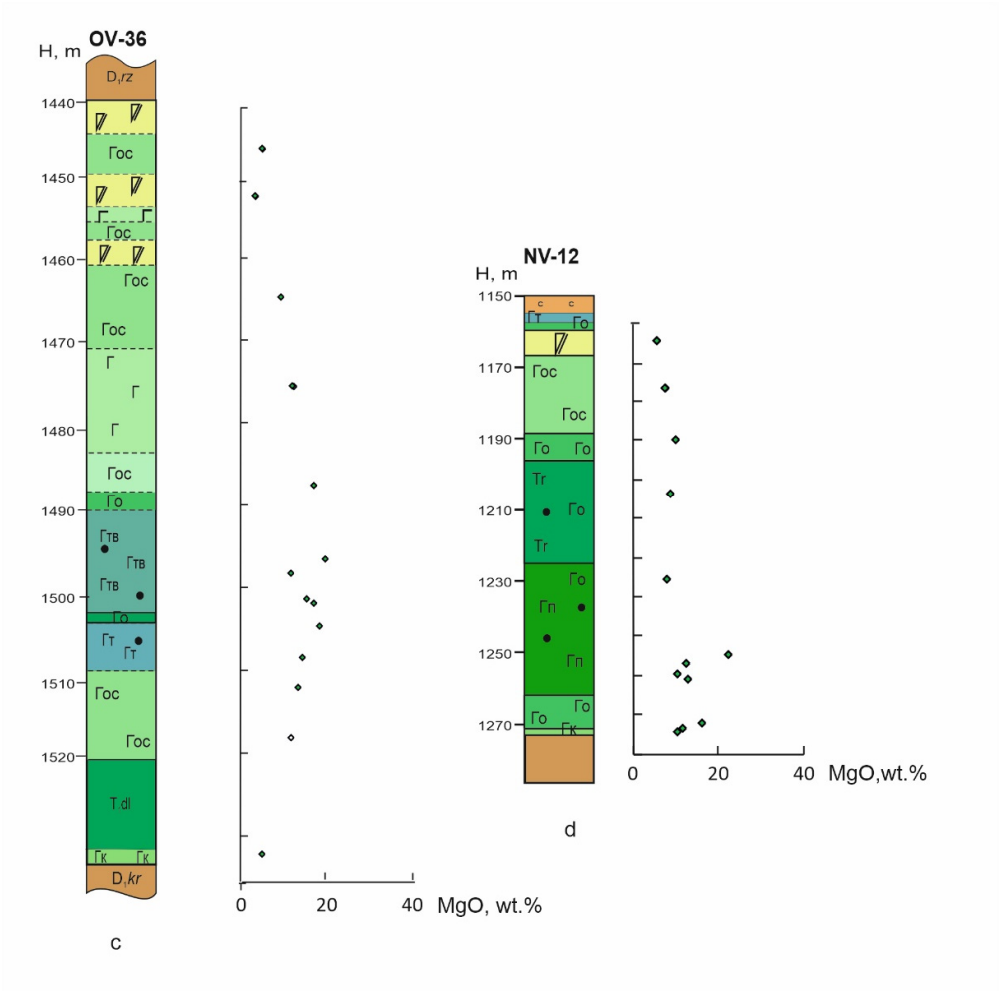
Supplementary Materials: Chemical Characteristics of Ore-Bearing Intrusions and Origin of PGE–Cu–Ni Mineralization in the Norilsk Area

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OV-36
H, m
D,rz
Гос
Г
Го
Гтв
Гт
Гк
T,dl
D,kr
1440
1450
1460
1470
1480
1490
1500
1510
1520
0
20
40
MgO, wt.%
c
NV-12
H, m
Тг
Гп
Ек
1150
1170
1190
1210
1230
1250
1270
0
20
40
MgO,wt.%
d

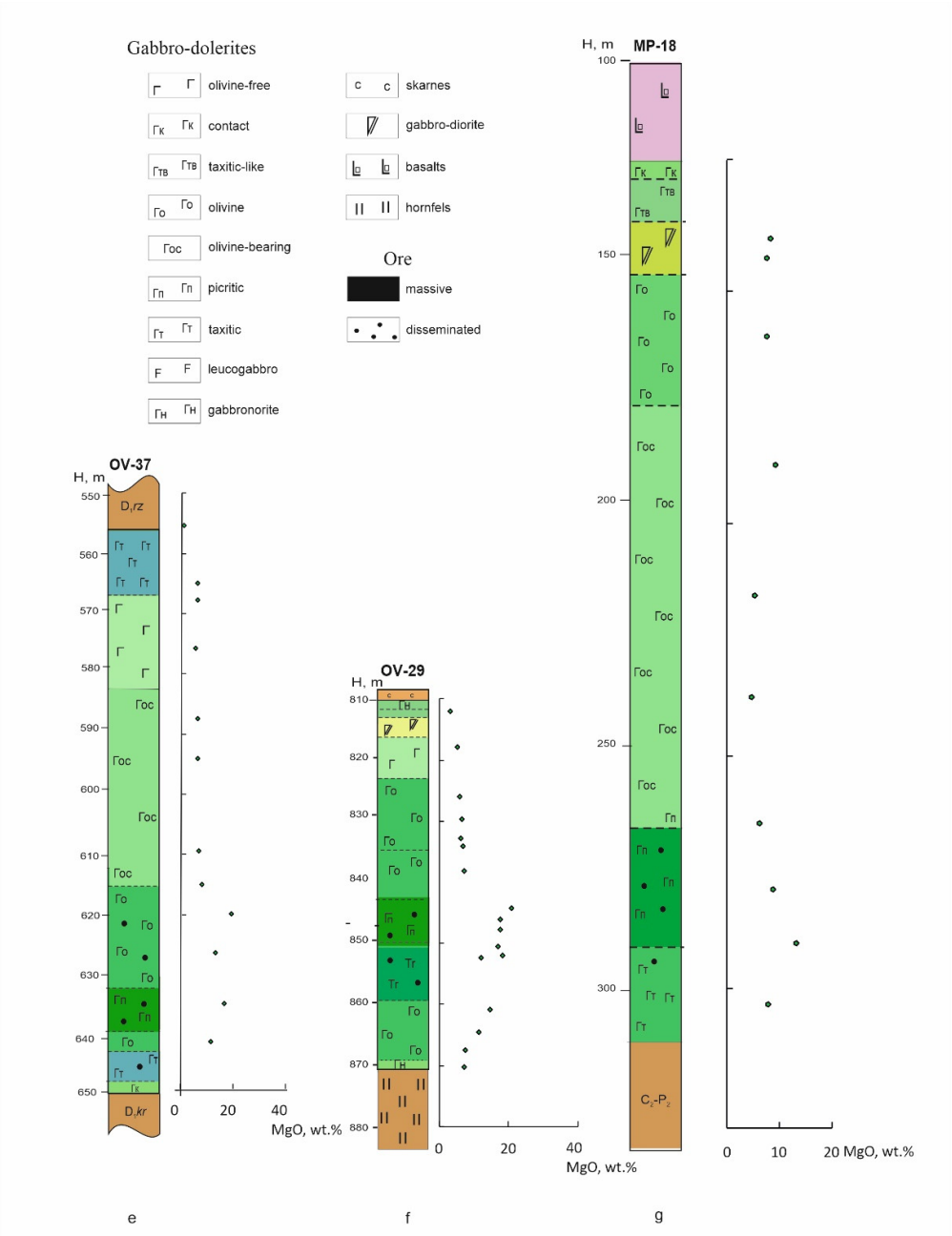


Figure S1. Distribution of MgO in the studied drillholes: (**a**) TG-21, (**b**) ZF-12, (**c**) OV-36, (**d**) NV-12, (**e**) OV-37, (**f**) OV-39, and (**g**) MP-18. H—depth, m.

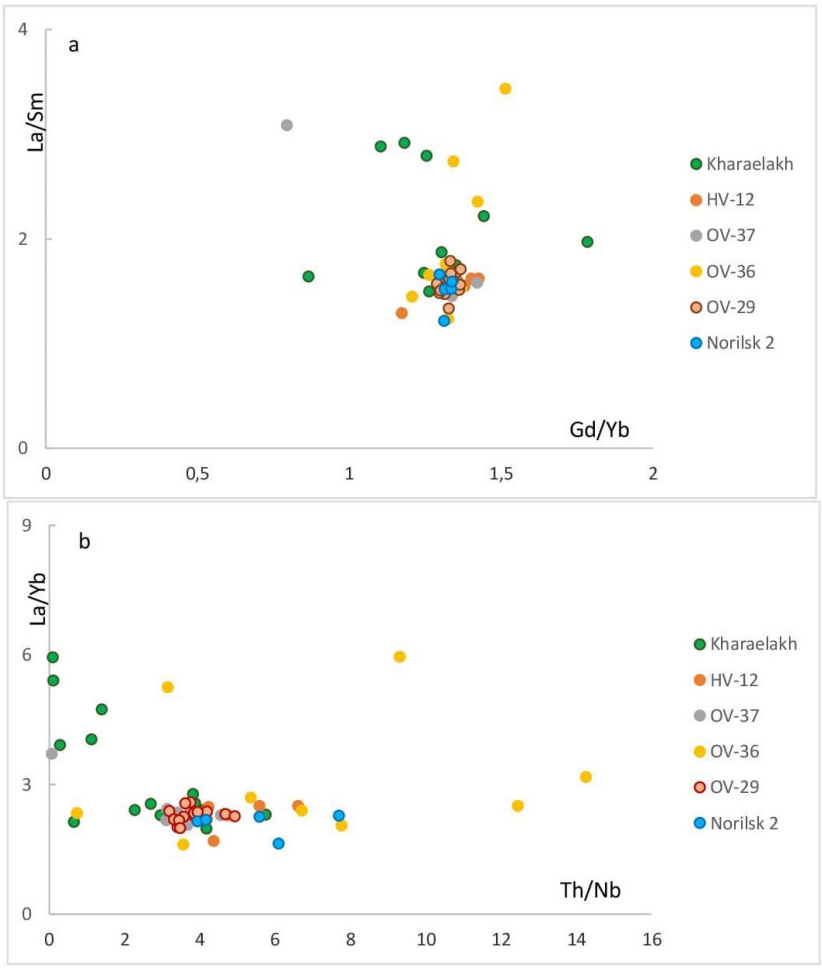
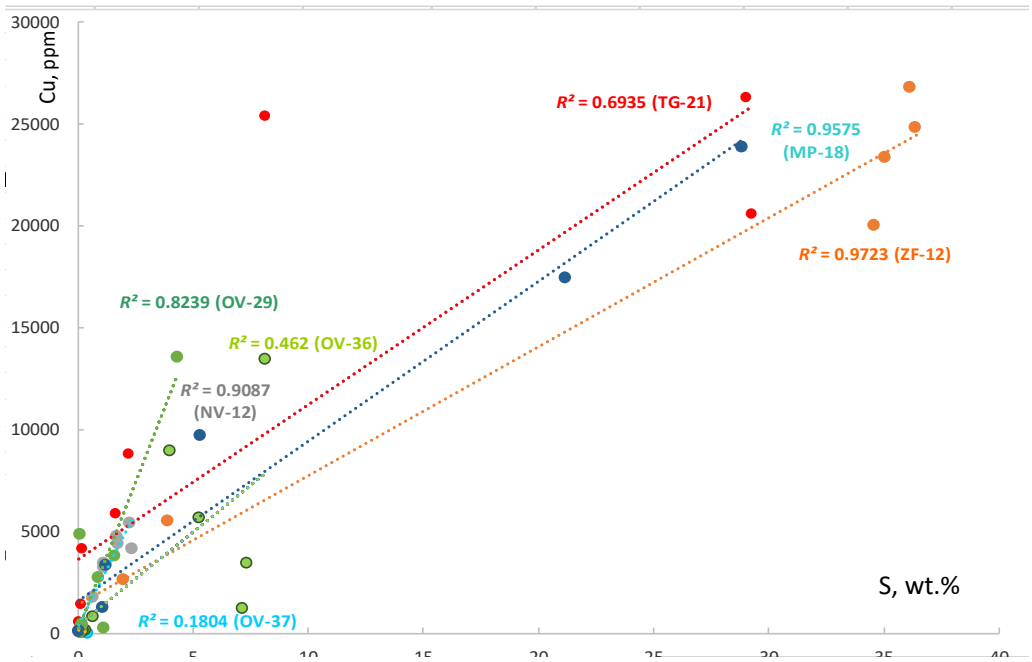
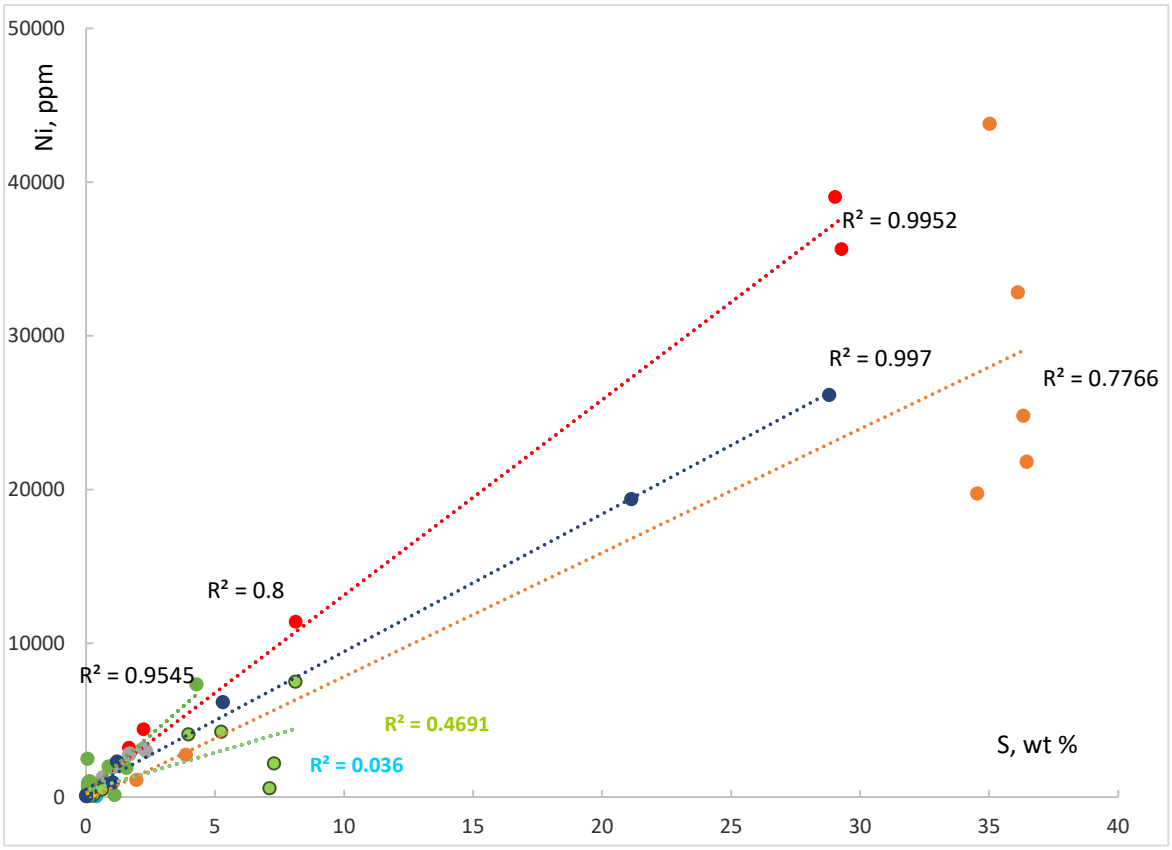


Figure S2. Diagrams Gd/Yb vs La/Sm (**a**) and Th/Nb vs La/Yb (**b**) for rocks of the Norilsk intrusions.

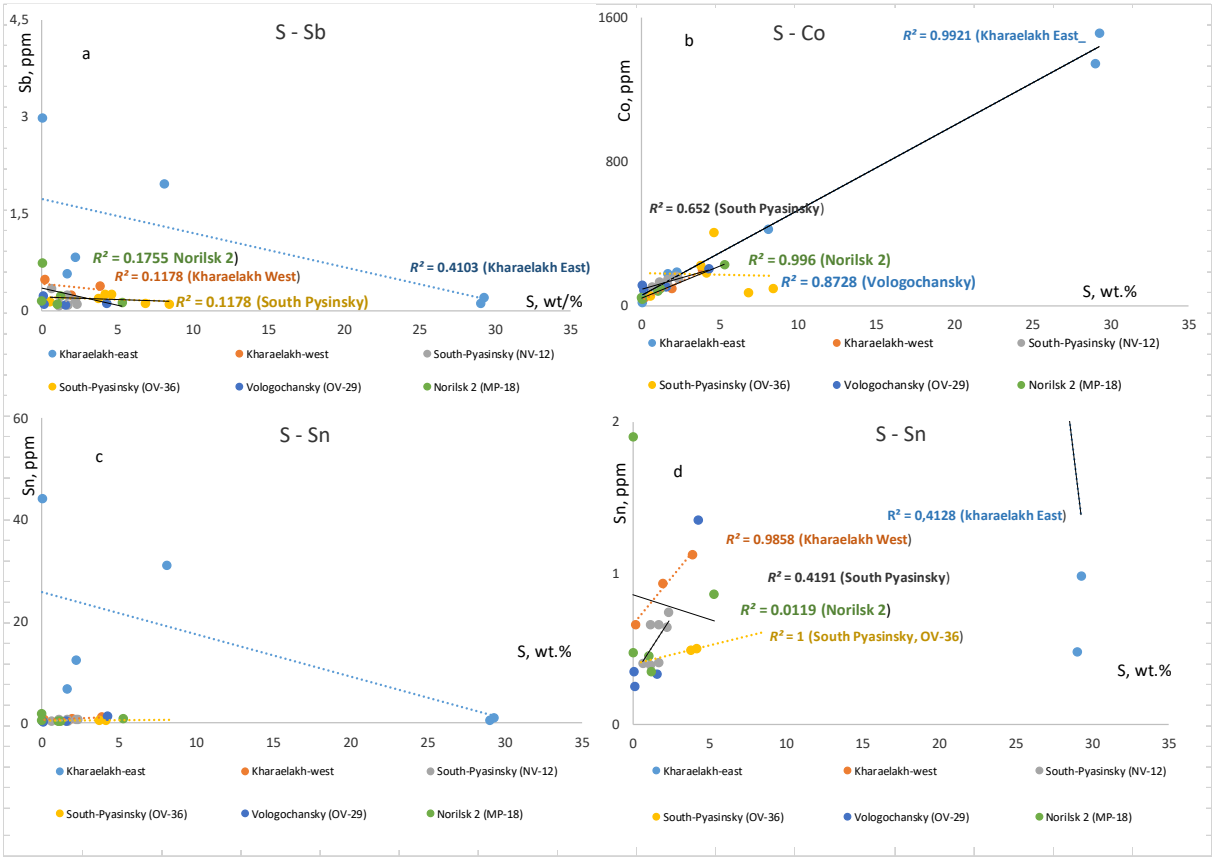


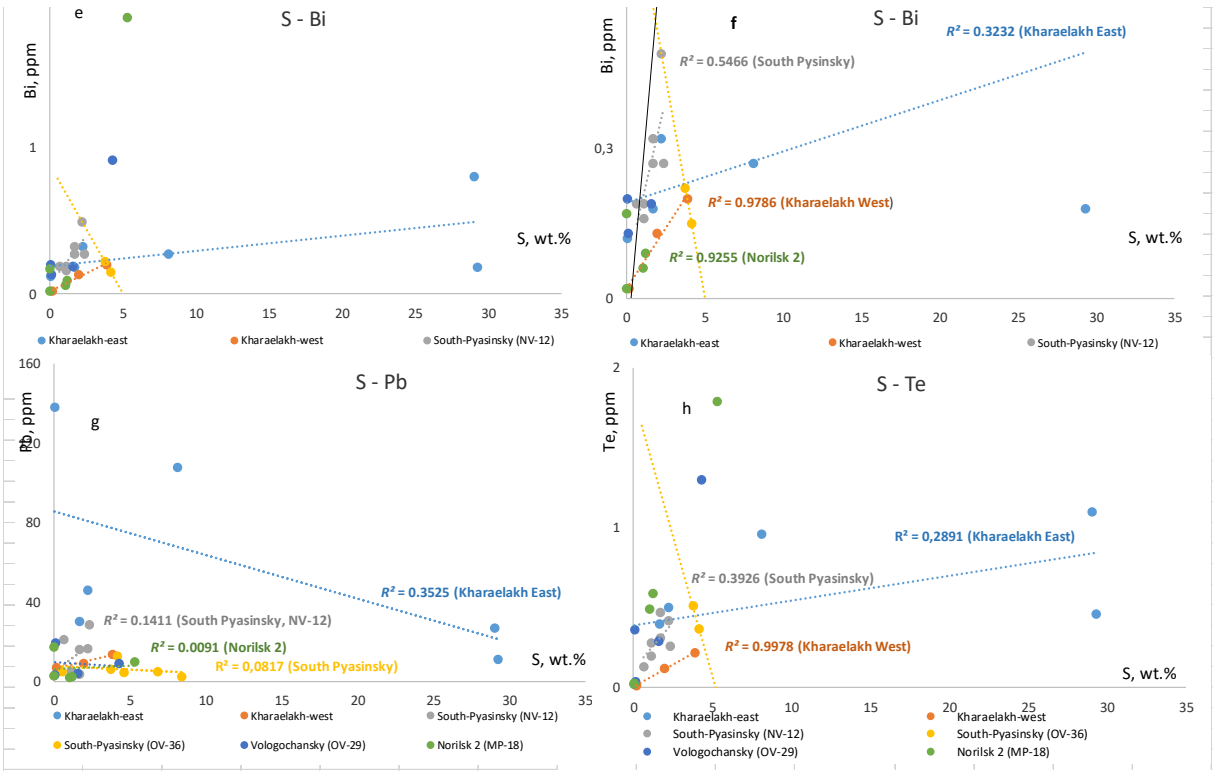
(**a**)



(**b**)

Figure S3. Diagrams S vs Cu (**a**), S vs Ni (**b**) for rocks of the Norilsk intrusions.


a
S - Sb
Sb, ppm
S, wt/%
R² = 0.1755 Norilsk 2)
R² = 0.1178 (Kharaelakh West)
R² = 0.1178 (South Pysinsky)
R² = 0.4103 (Kharaelakh East)
b
S - Co
Co, ppm
S, wt.%
R² = 0.9921 (Kharaelakh East_
R² = 0.652 (South Pyasinsky)
R² = 0.996 (Norilsk 2)
R² = 0.8728 (Vologochansky)
c
S - Sn
Sn, ppm
S, wt.%
d
S - Sn
Sn, ppm
S, wt.%
R² = 0,4128 (kharaelakh East)
R² = 0.9858 (Kharaelakh West)
R² = 0.4191 (South Pyasinsky)
R² = 0.0119 (Norilsk 2)
R² = 1 (South Pyasinsky, OV-36)
Kharaelakh-east
Kharaelakh-west
South-Pyasinsky (NV-12)
South-Pyasinsky (OV-36)
Vologochansky (OV-29)
Norilsk 2 (MP-18)


e
S - Bi
Bi, ppm
S, wt.%
f
S - Bi
Bi, ppm
S, wt.%
R² = 0.3232 (Kharaelakh East)
R² = 0.5466 (South Pysinsky)
R² = 0.9786 (Kharaelakh West)
R² = 0.9255 (Norilsk 2)
g
S - Pb
Pb, ppm
S, wt.%
R² = 0.3525 (Kharaelakh East)
R² = 0.1411 (South Pyasinsky, NV-12)
R² = 0.0091 (Norilsk 2)
R² = 0,0817 (South Pyasinsky)
h
S - Te
Te, ppm
S, wt.%
R² = 0,2891 (Kharaelakh East)
R² = 0.3926 (South Pyasinsky)
R² = 0.9978 (Kharaelakh West)
Kharaelakh-east
Kharaelakh-west
South-Pyasinsky (NV-12)
South-Pyasinsky (OV-36)
Vologochansky (OV-29)
Norilsk 2 (MP-18)

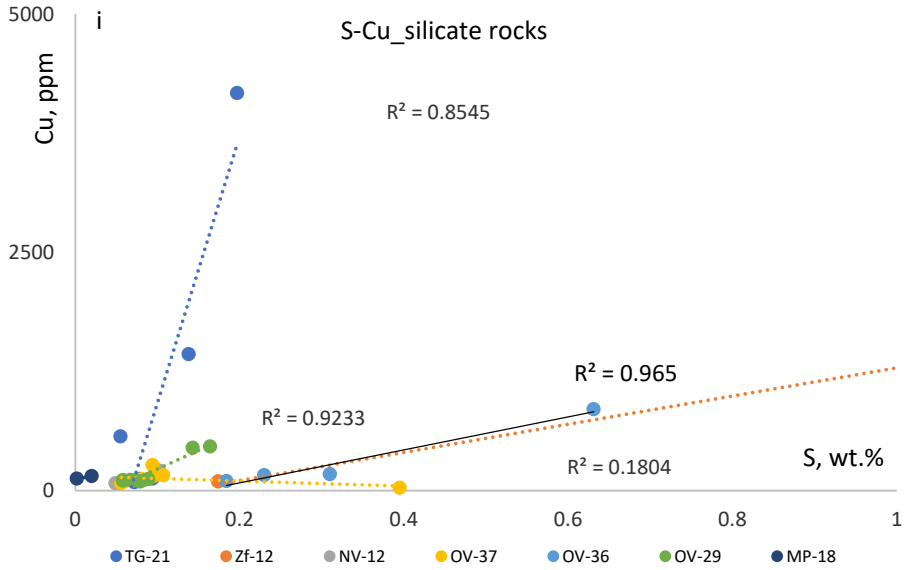


Figure S4. Diagrams of (**a**) Sb-Sa, (**b**) S-Co, (**c**) S-Sn, (**d**, detail c) S-Sn, (**e**) S-Bi, (**f**, detail e) S-Bi, (**g**) S-Pb, (**h**) S-Te, (**i**) S-Cu for rocks of the Norilsk intrusions.

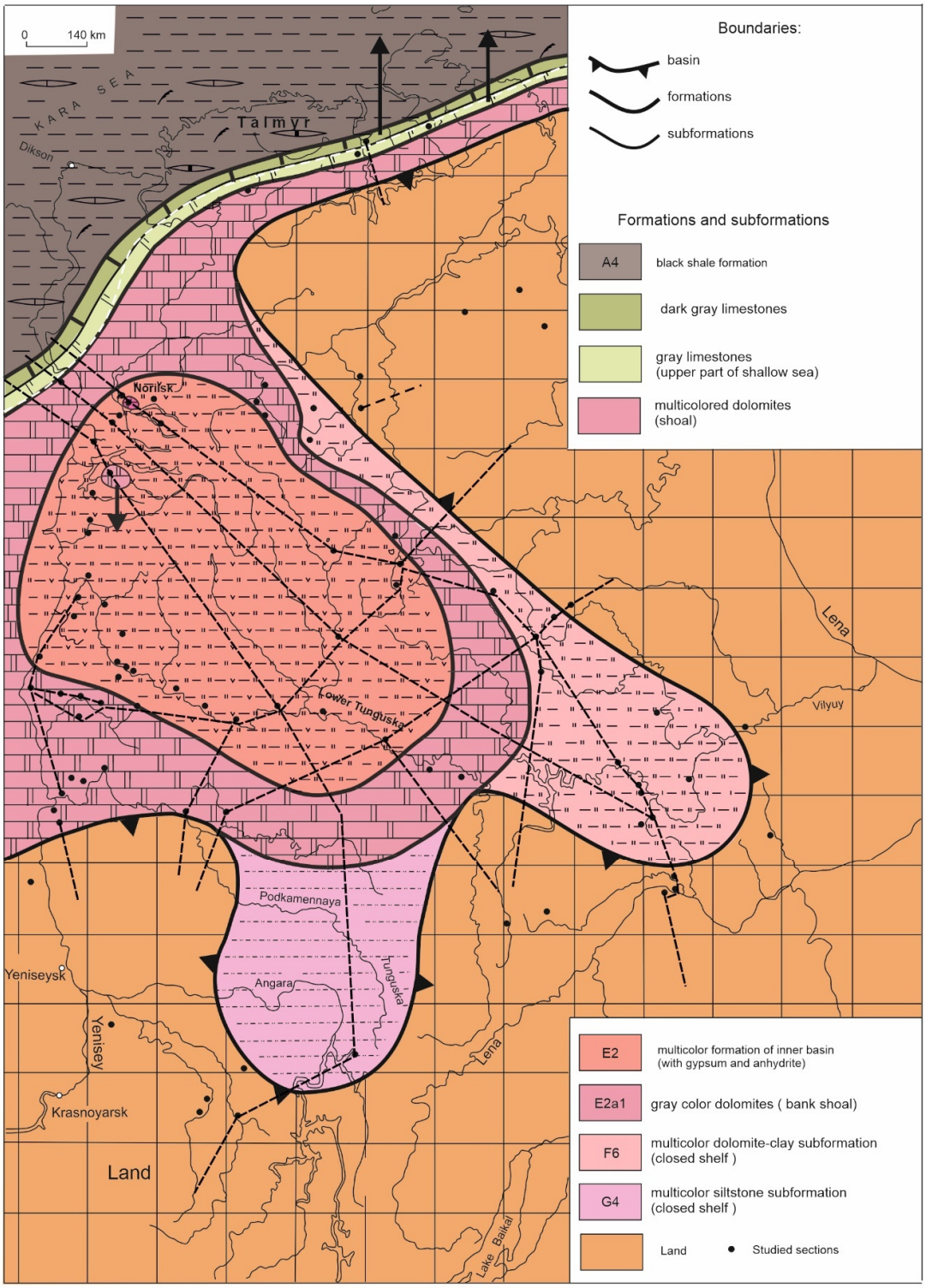


Figure S5. Biogeocenotic map of Silurian basin (Early Postnich time—ps1 and Early Ludford ldg) after Tesakov, 2014 [1].



Figure S6. Veinlet and metasomatic anhydrite (Anh) in gabbro-dolerites (G) in the Pyasinsky-Vologochansky intrusion (sample OV-42/635.7).

References

1. Tesakov, Y.I. *Silurian Basin of the Eastern Siberia*; Paleogeography; INGG: Novosibirsk, Russia, 2014; Volume 3.