

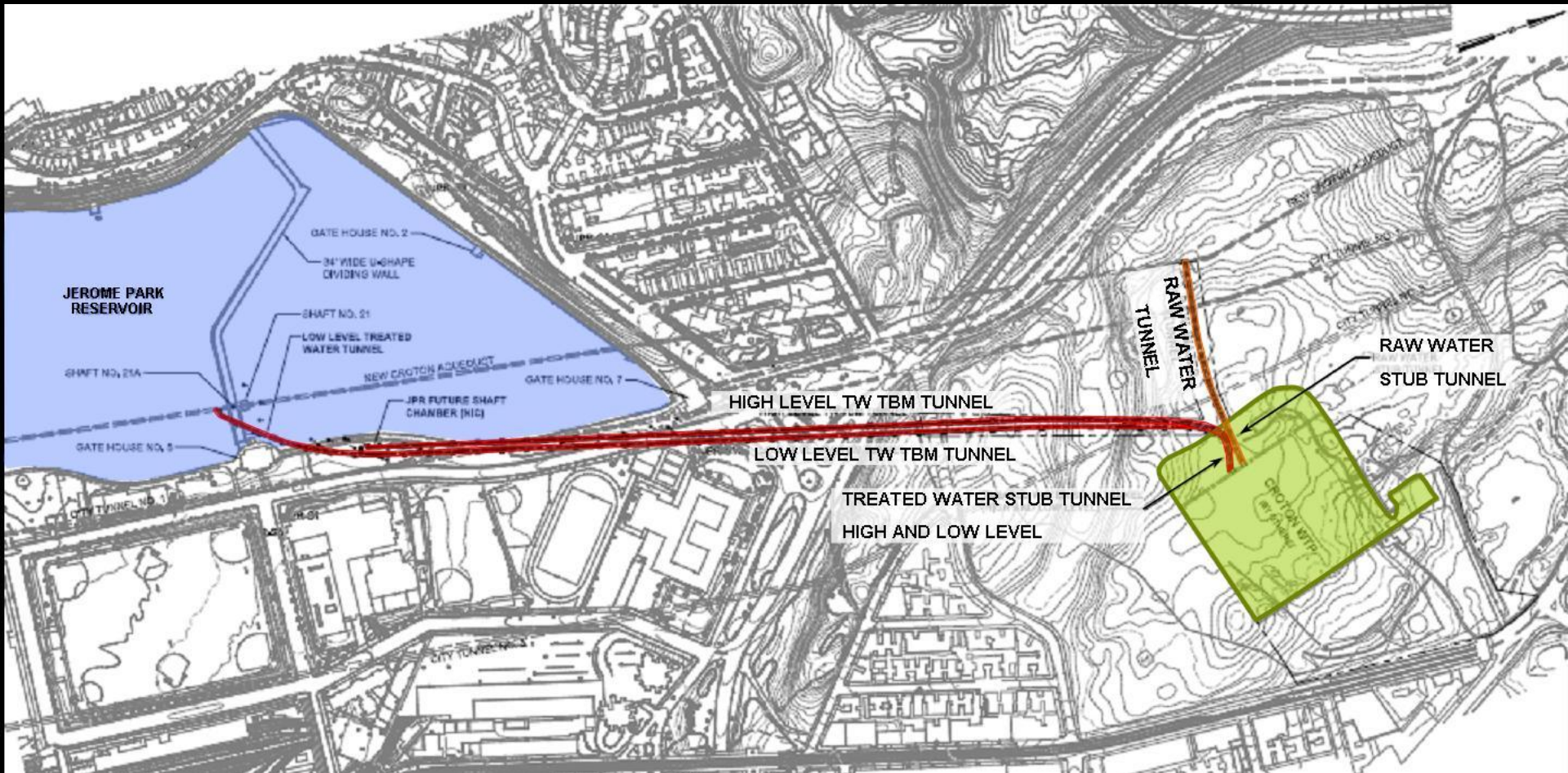
REDEFINING THE SOUTHERN TERMINUS OF THE INTRUSIVE CONTACT BETWEEN THE YONKERS AND FORDHAM GNEISS IN VAN CORTLANDT PARK, NEW YORK CITY, NEW YORK

ISLER, Douglas, E.,
VELLONE, Daniel, A.,
MERGUERIAN, Charles; and
MERGUERIAN, J. Mickey

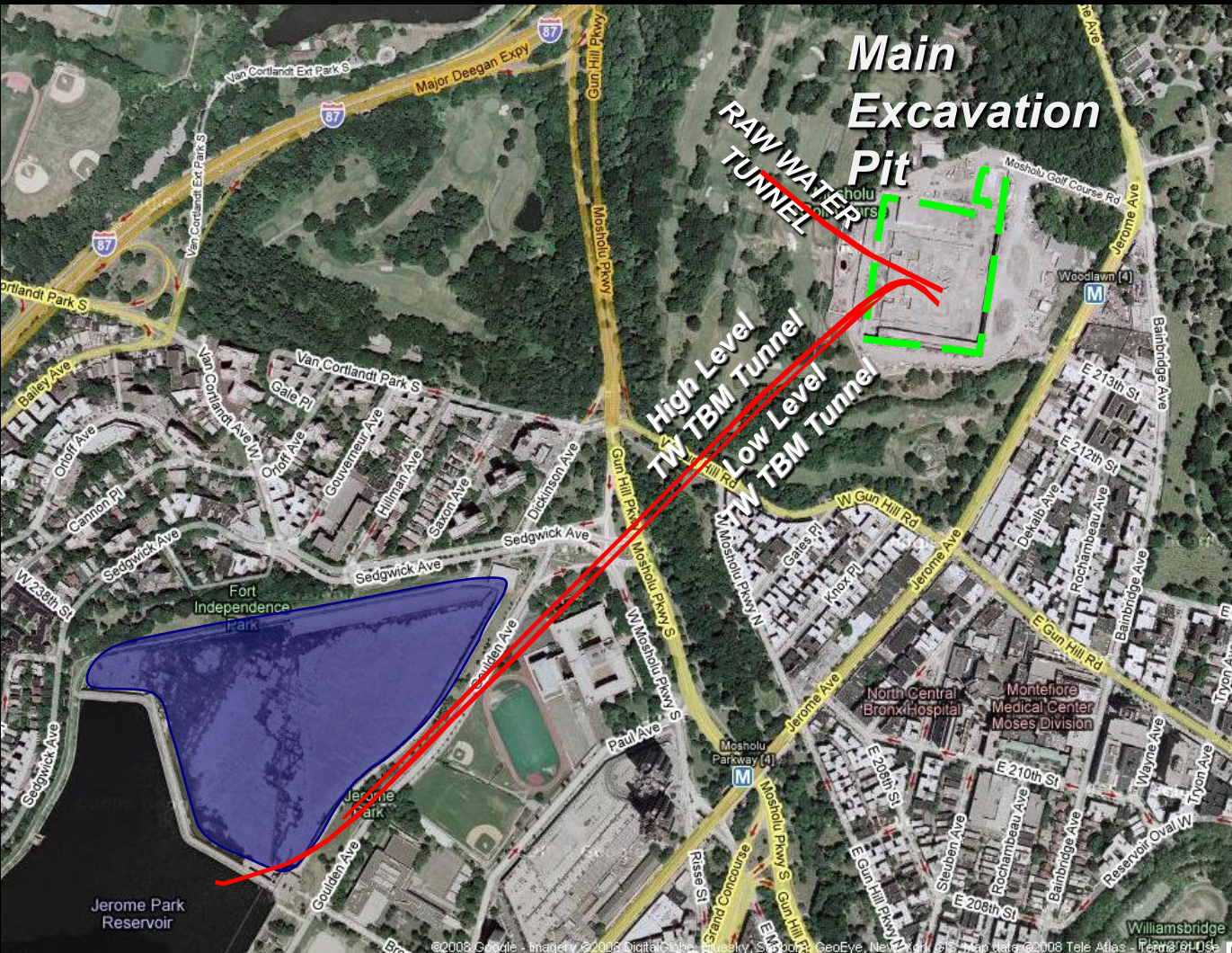




Croton Water Treatment Plant



Tunnel Alignment



- Croton System Water flows into WTP via RWT from NCA
- Distribution via two TWT to Bronx and Manhattan



High Water Treated Tunnel

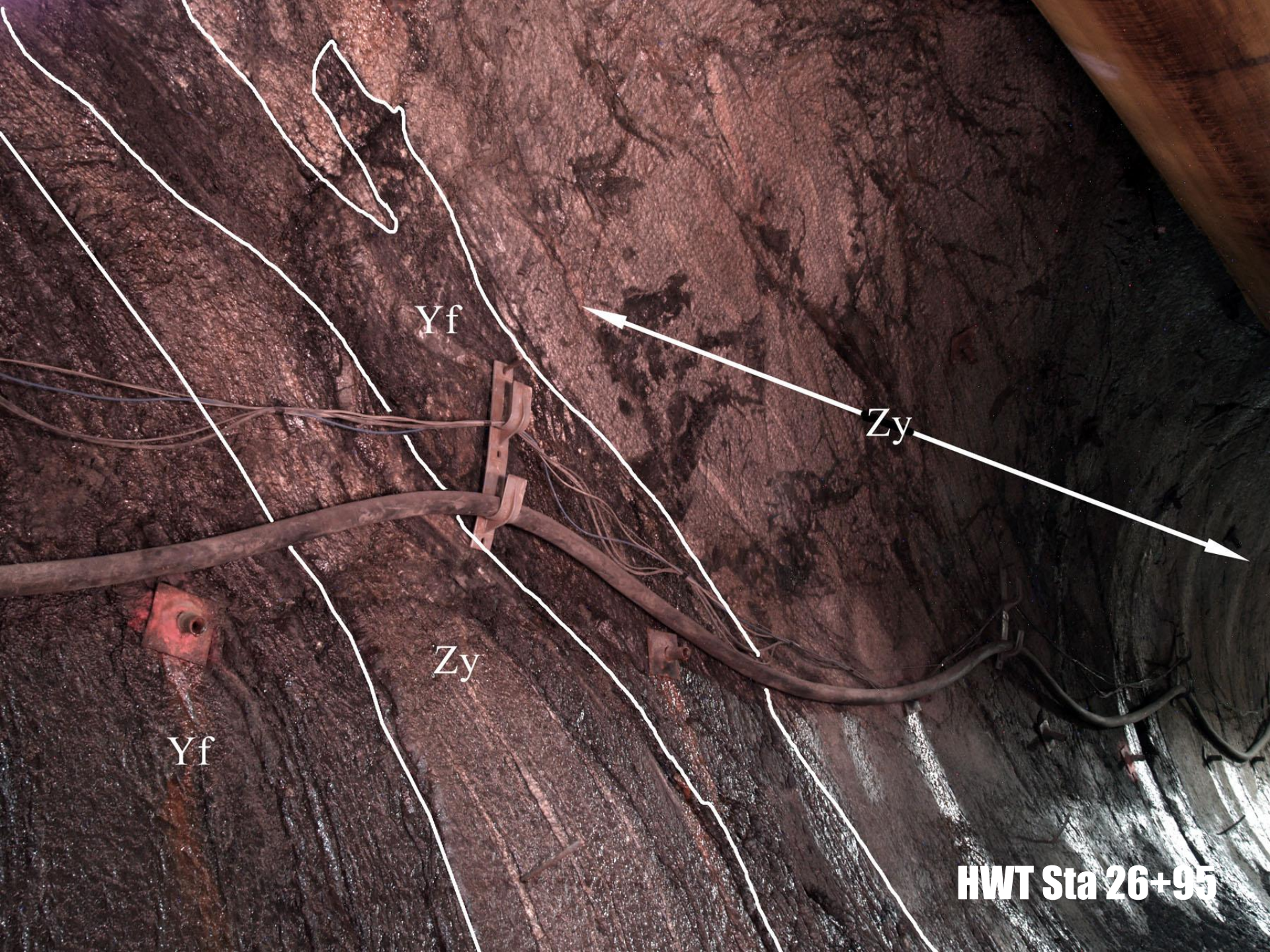


Zy

HWT Sta 37+00

zy

HWT Sta 26+95



Yf

Zy

Zy

Yf

HWT Sta 26+95

Mosholu Fault



HWT Sta 26+75

Mosholu Fault – Sta 26+75 HWT



Yf

382

HWT Sta 11+15

Yf

77450

HWT Sta 10+00

Yf



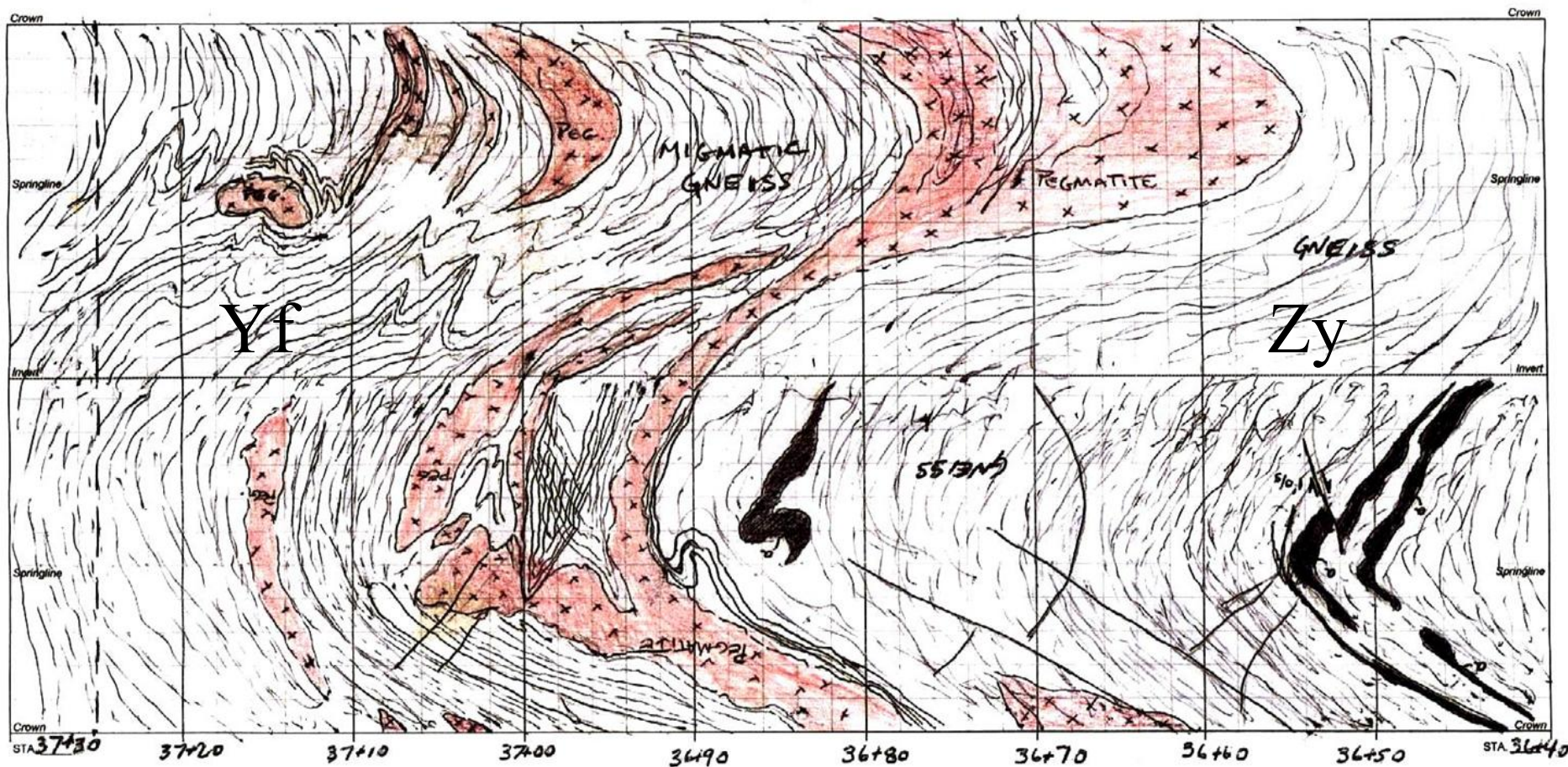
HWT Sta 9+50

Low Water Treated Tunnel

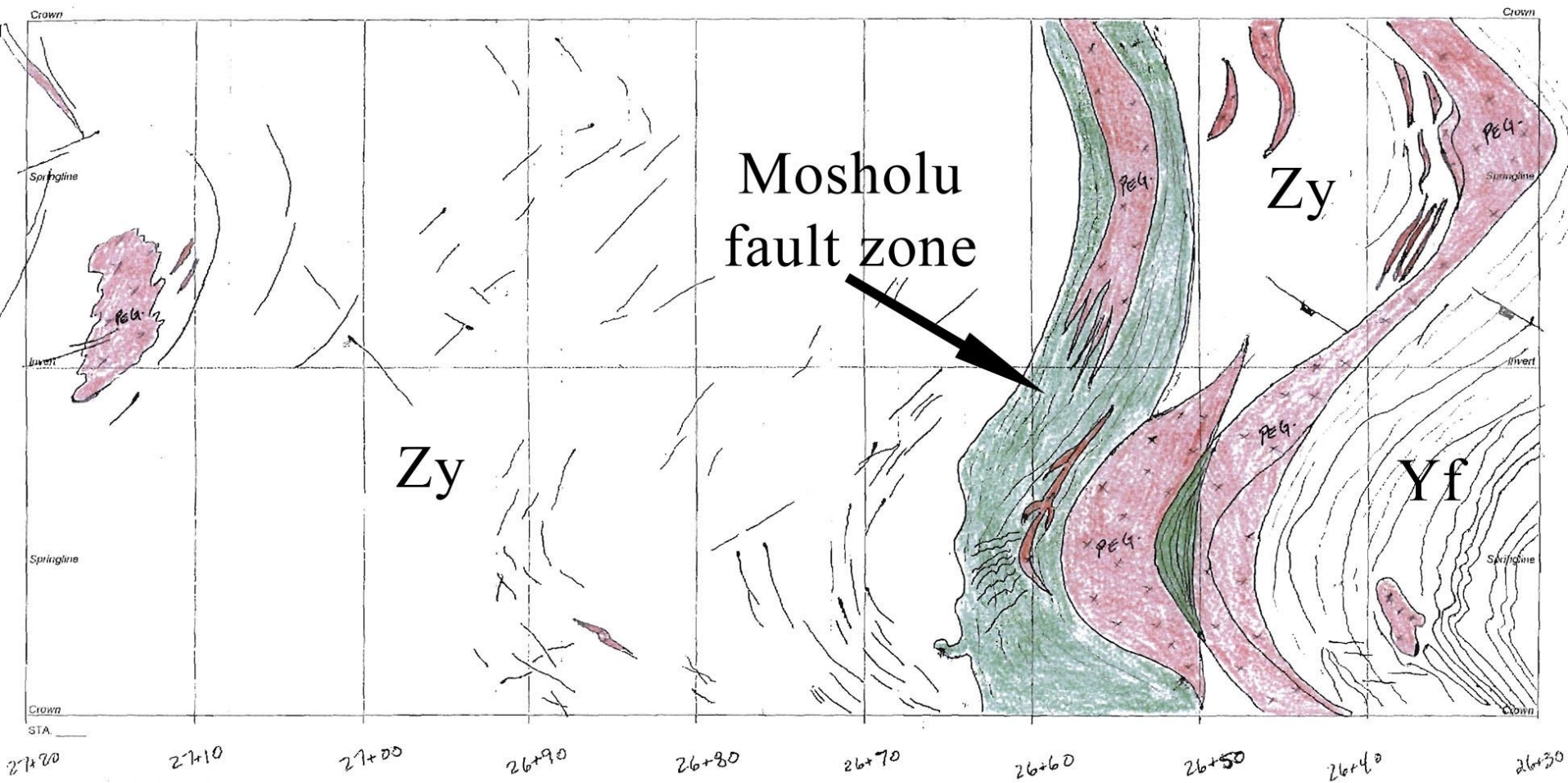


Geologic Sketch No. : 1
Beginning Station (ft.): 37+30
End Station (ft.): 36+40

Sketch Prepared By: Daniel Vellone, PG Date: 15 APRIL 2008
Sketch Reviewed By: Doug Isler, PG Date:



LWT Sta 37+30 - 36+40



LWT Sta 27+20 - 26+30

Zy

LWT Sta 34+90



zy

LWT Sta 34+90



Zy

LWT Sta 26+75

Zy

Zy

Yf

Mosholu Fault

LWT Sta 26+65



Mosholu Fault



LWT Sta 26+57

Yf



LWT Sta 26+45

Yf

LWT Sta 26+45

Yf

LWT Sta 25+30



Yf

LWT Sta 7+20

Yf

LWT Stub End – Dec 2008

Yf

LWT Stub End – Dec 2008



YI

LWT (NCA) – Jan 2009

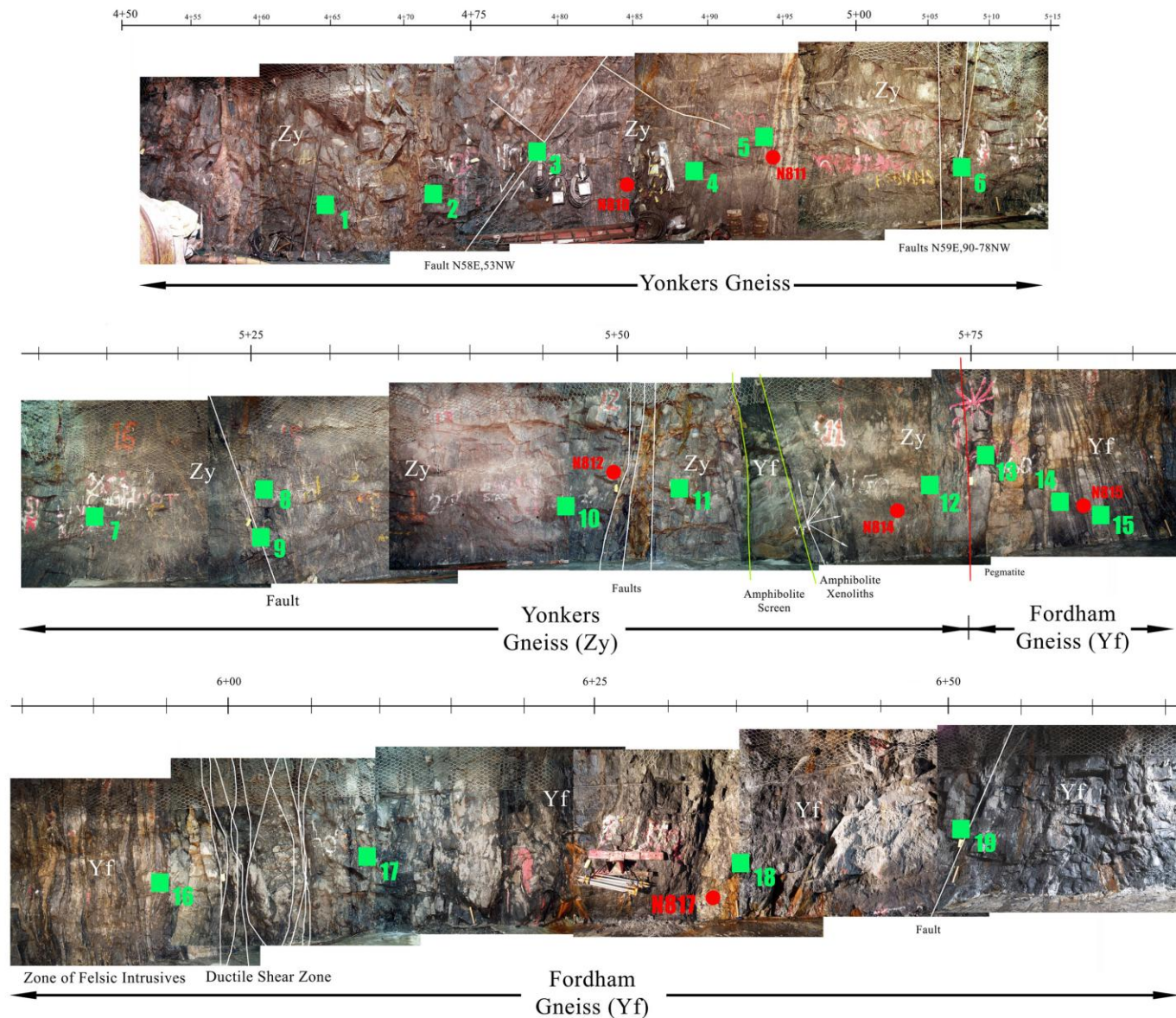


LWT (NCA) – Jan 2009

Raw Water Tunnel



New Croton Water Treatment Plant, Bronx New York - North Wall Raw Water Tunnel, Stations 4+50 to 6+65



● Rock Sample ■ Field Stations

Mapping by C. Merguerian 2009



Zy

Sta 450 - 463



Zy

Sta 462 - 4/5

Zy

Sta 475 - 488

Zy

Sta 488 - 500

Zy

POBILU
DIV

ESBUNA

Sta 495 - 512

16

Zy

ST-11-VI-1
ST-11-VI-2
ST-11-VI-3
ST-11-VI-4
ST-11-VI-5
ST-11-VI-6
ST-11-VI-7
ST-11-VI-8
ST-11-VI-9
ST-11-VI-10
ST-11-VI-11
ST-11-VI-12
ST-11-VI-13
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ST-11-VI-94
ST-11-VI-95
ST-11-VI-96
ST-11-VI-97
ST-11-VI-98
ST-11-VI-99
ST-11-VI-100

Sta 512 - 525

A photograph of a rock face, likely a tunnel wall, showing horizontal layering and various paint markings. A metal mesh is visible at the top. The rock is dark grey and brown, with some yellow and red paint applied in horizontal bands. A small yellow tag is attached to a crack on the left. A wooden stick is visible at the bottom right.

Zy

Sta 525 - 538



Zy

Sta 538 - 550



Zy

Sta 550 - 562



Yf

Zy

Yf

Yf

Sta 562 - 575



Zy

Yf

Sta 565



Sta 575 - 588



Yf

Sta 588 - 600



Yf

Sta 600 - 612



Yf

Sta 612 - 625

A photograph of a rock face in a tunnel or mine. The rock is dark and layered, with some areas showing reddish and yellowish staining. A white mesh net is visible at the top. A red metal frame with a bundle of white pipes or rods is attached to the rock face on the left. The text 'Yf' is in the upper right, and 'Sta 625 - 638' is at the bottom right.

Yf

Sta 625 - 638



Yf

Sta 638 - 650



Yf

Sta 650 - 663



Yf

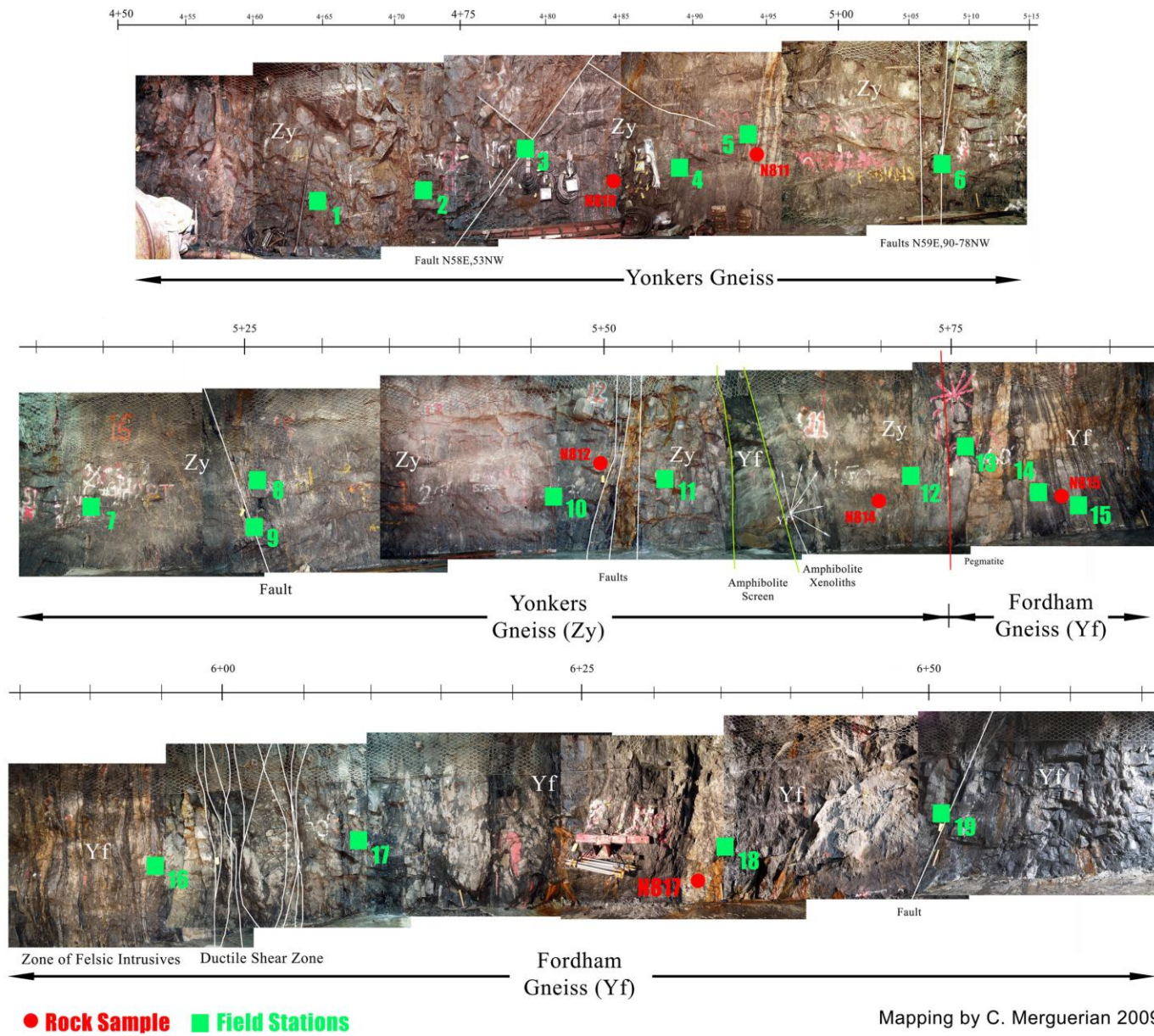
Sta 663 - 675



Yf

Sta 675 - 683

New Croton Water Treatment Plant, Bronx New York - North Wall Raw Water Tunnel, Stations 4+50 to 6+65





Yonkers Gneiss

Sta 518

Zy

Sta 550

Sta 550

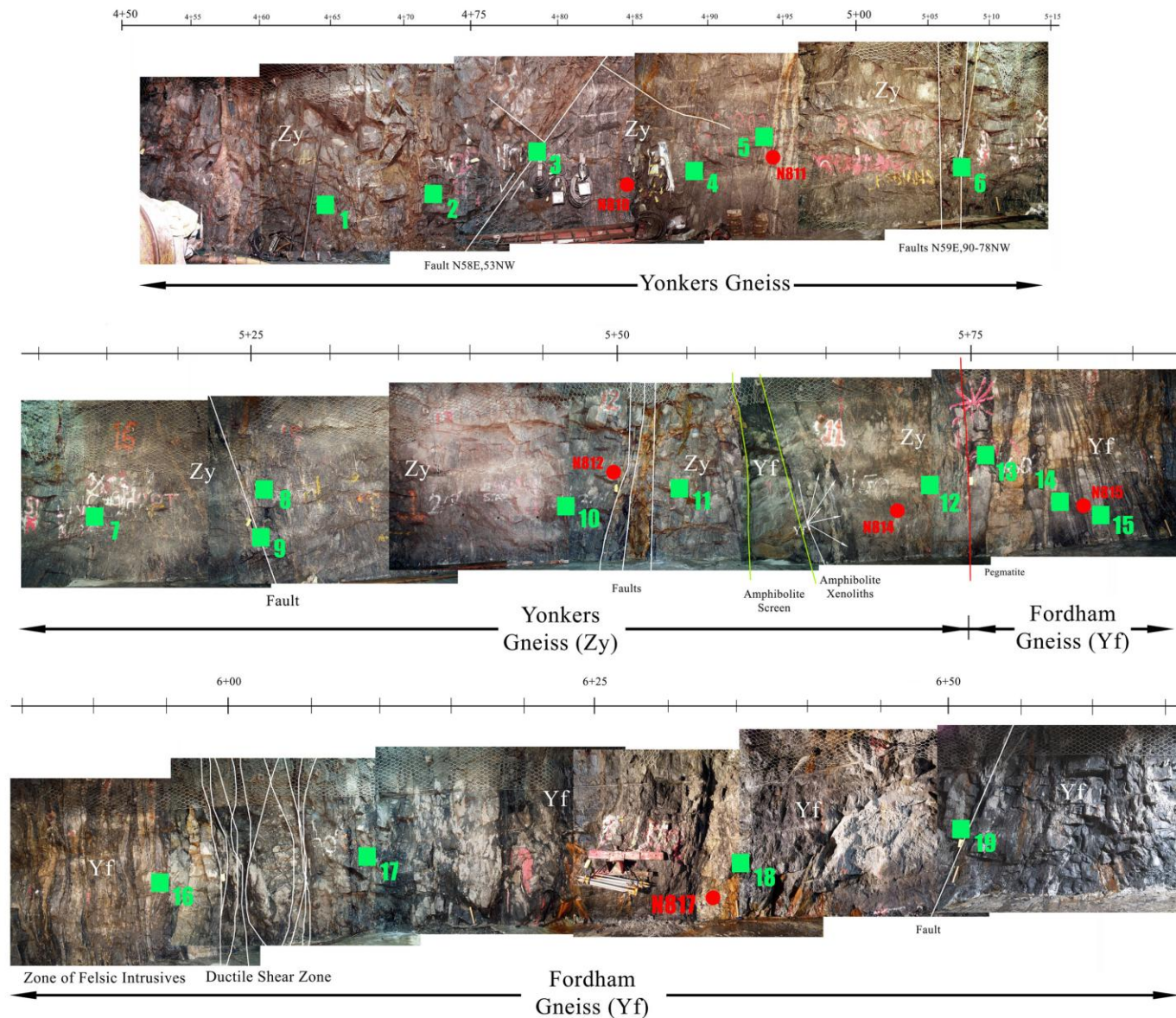


Sta 600



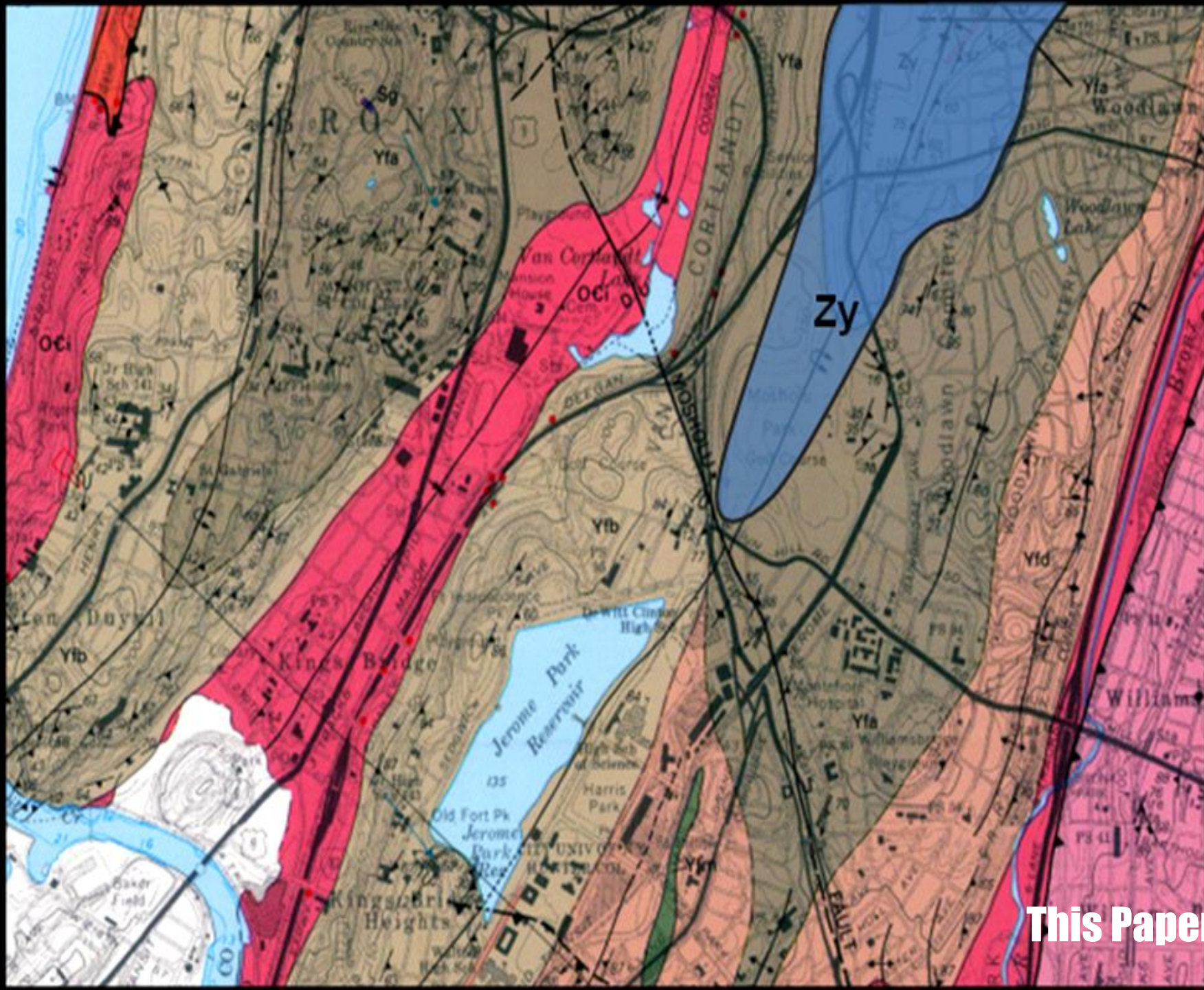
Sta 585

New Croton Water Treatment Plant, Bronx New York - North Wall Raw Water Tunnel, Stations 4+50 to 6+65

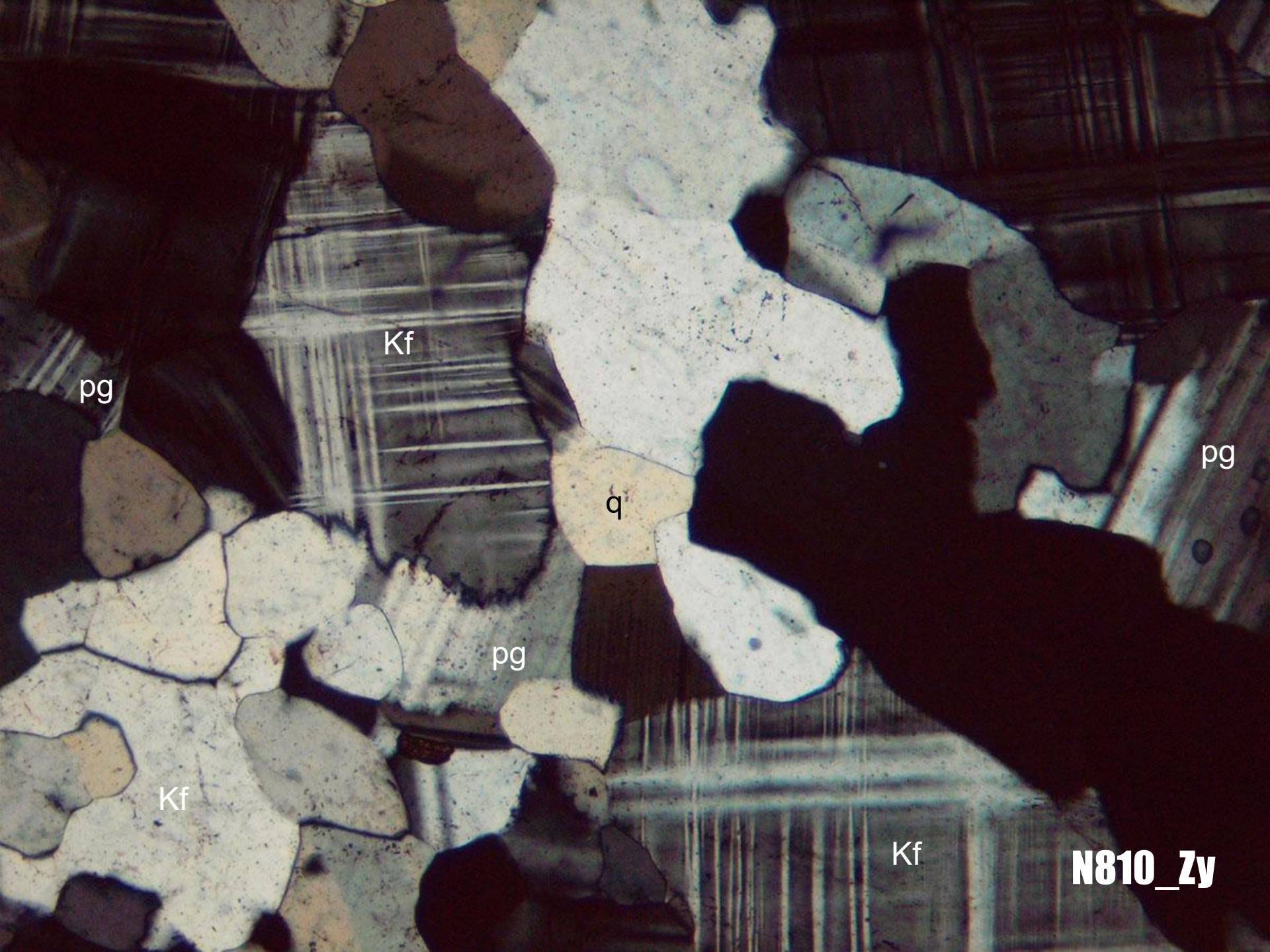


● Rock Sample ■ Field Stations

Mapping by C. Merguerian 2009



This Paper



Kf

pg

q

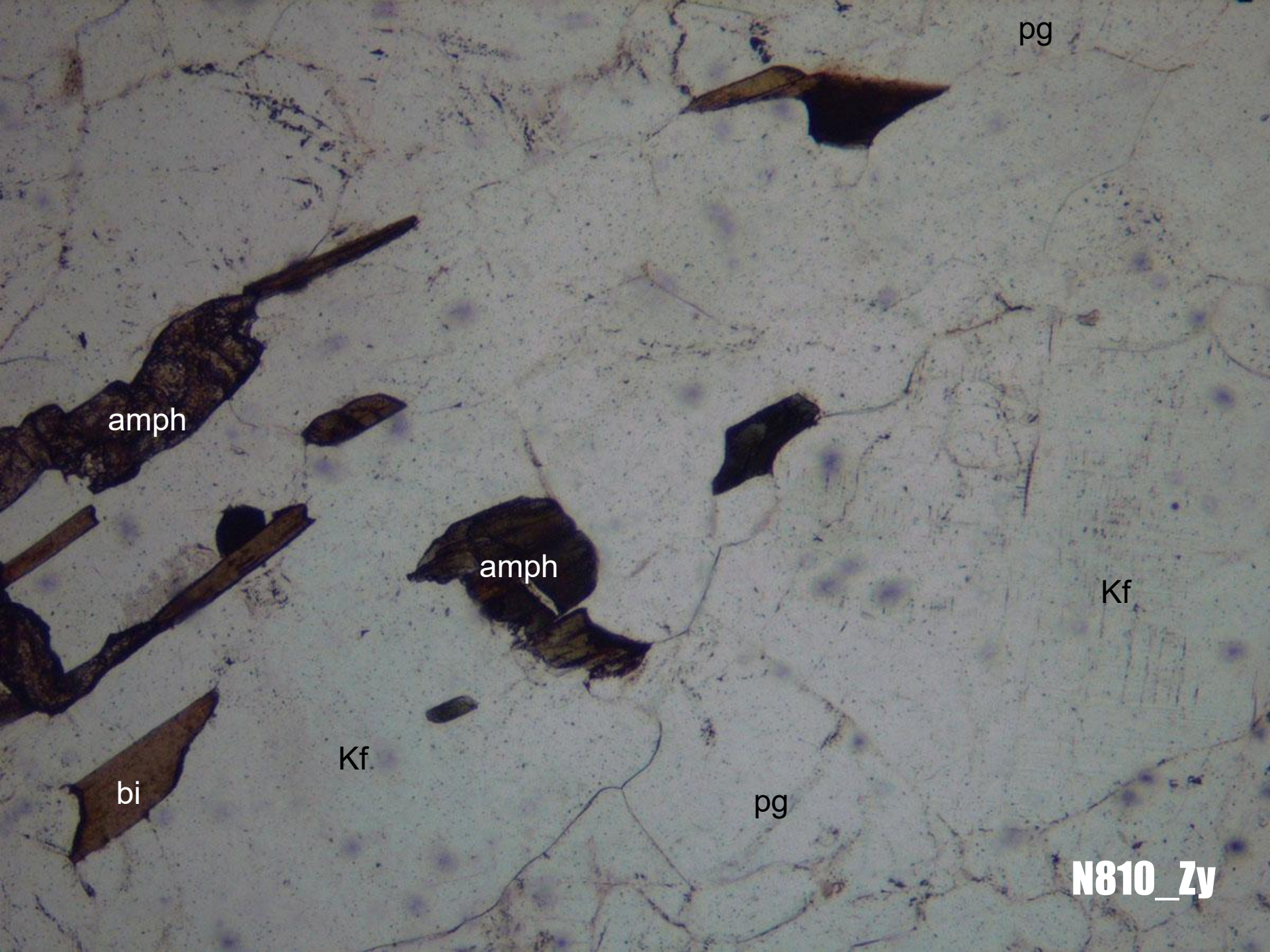
pg

pg

Kf

Kf

N810_zy



pg

amph

amph

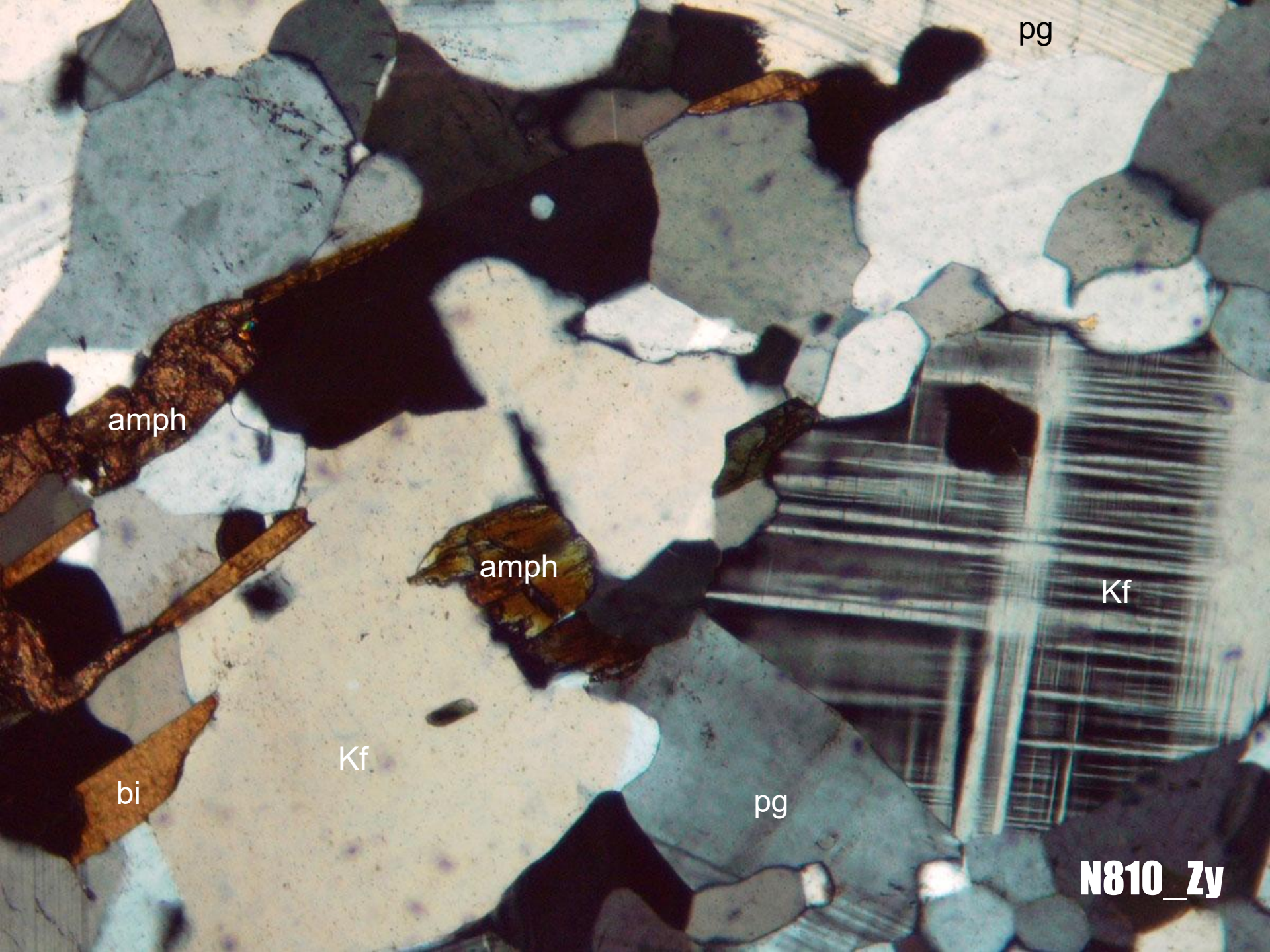
Kf

Kf

bi

pg

N810_Zy



pg

amph

amph

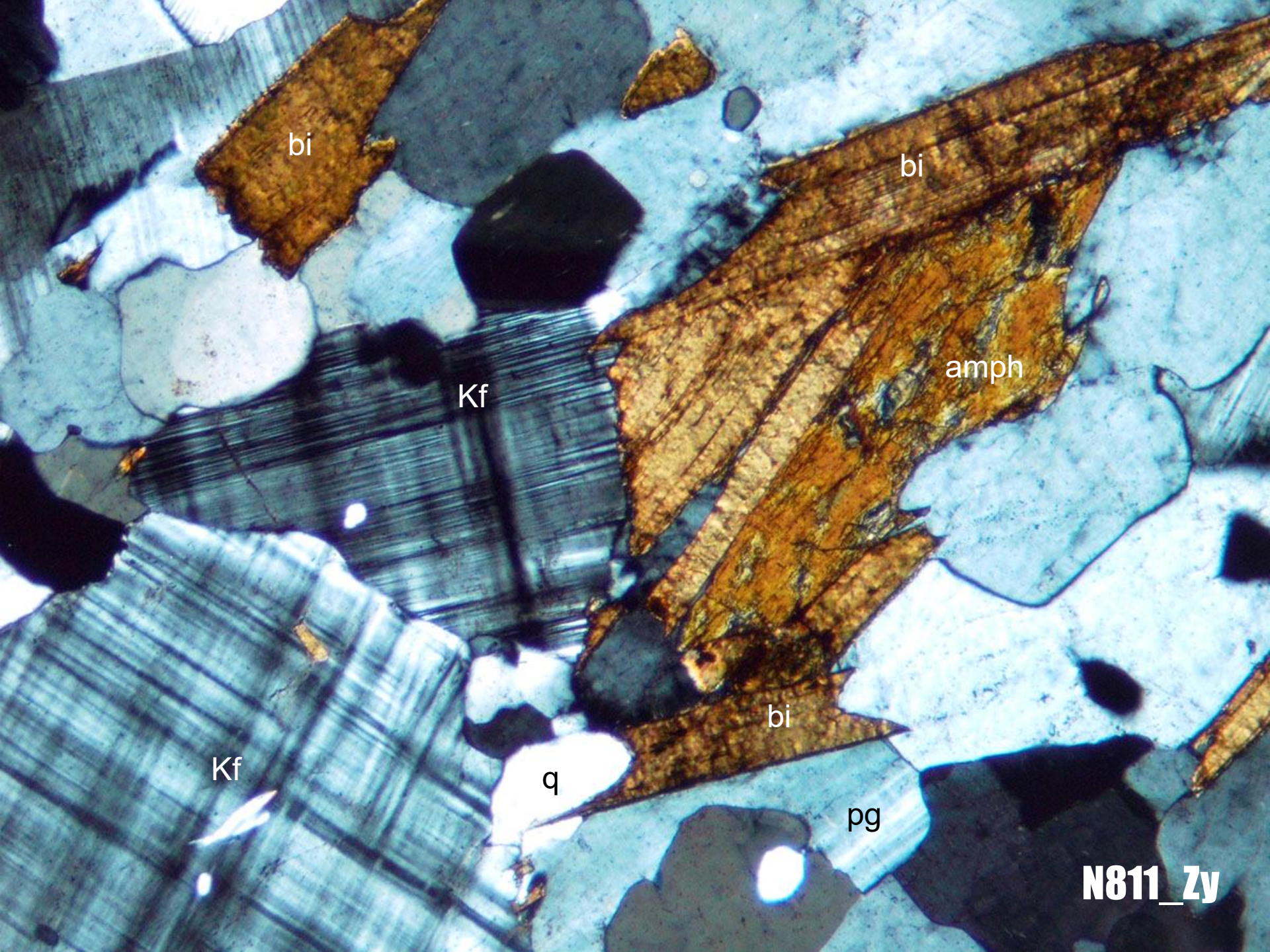
Kf

Kf

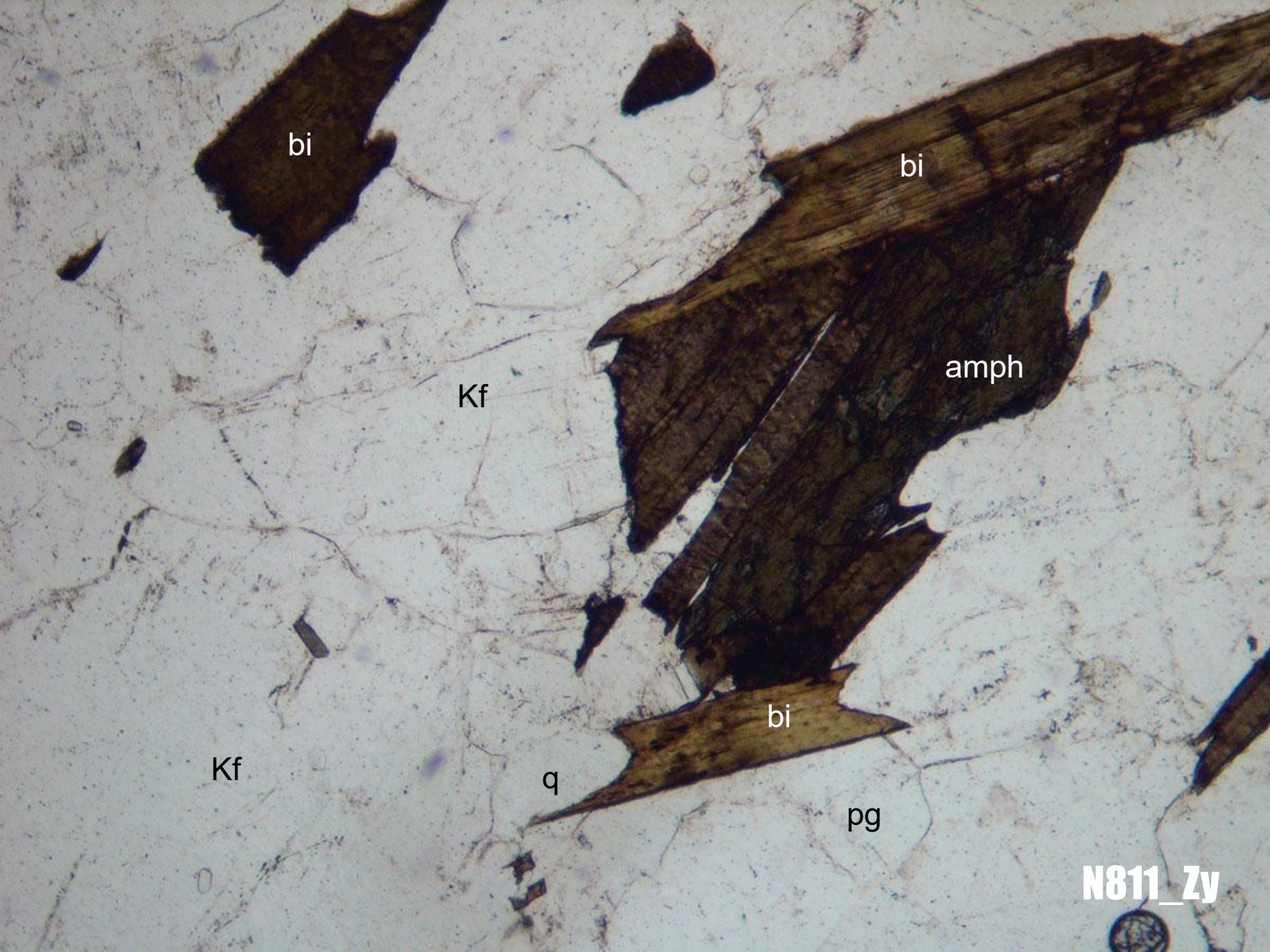
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pg

N810_Zy



N811_Zy



bi

bi

amph

Kf

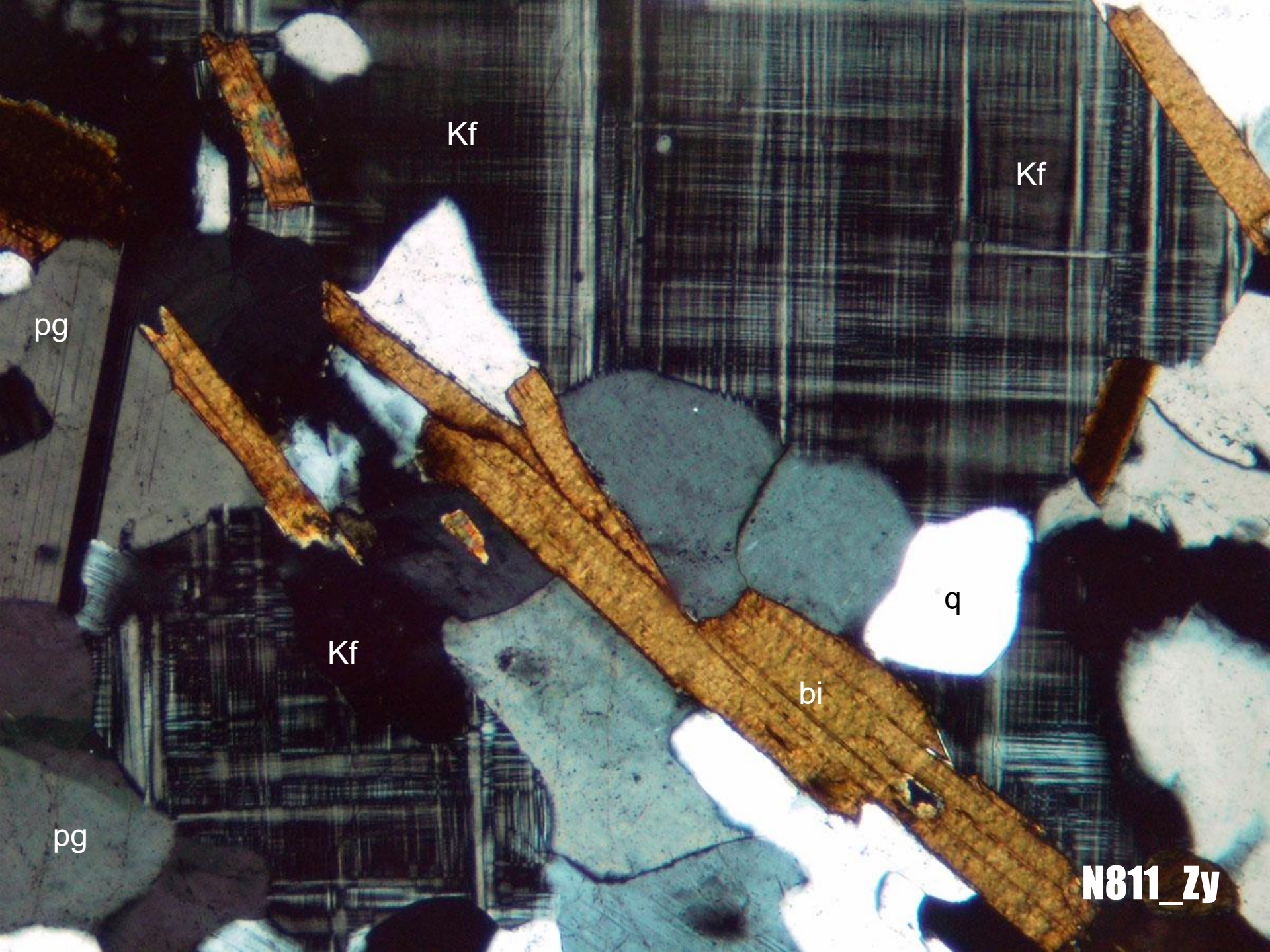
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Kf

Kf

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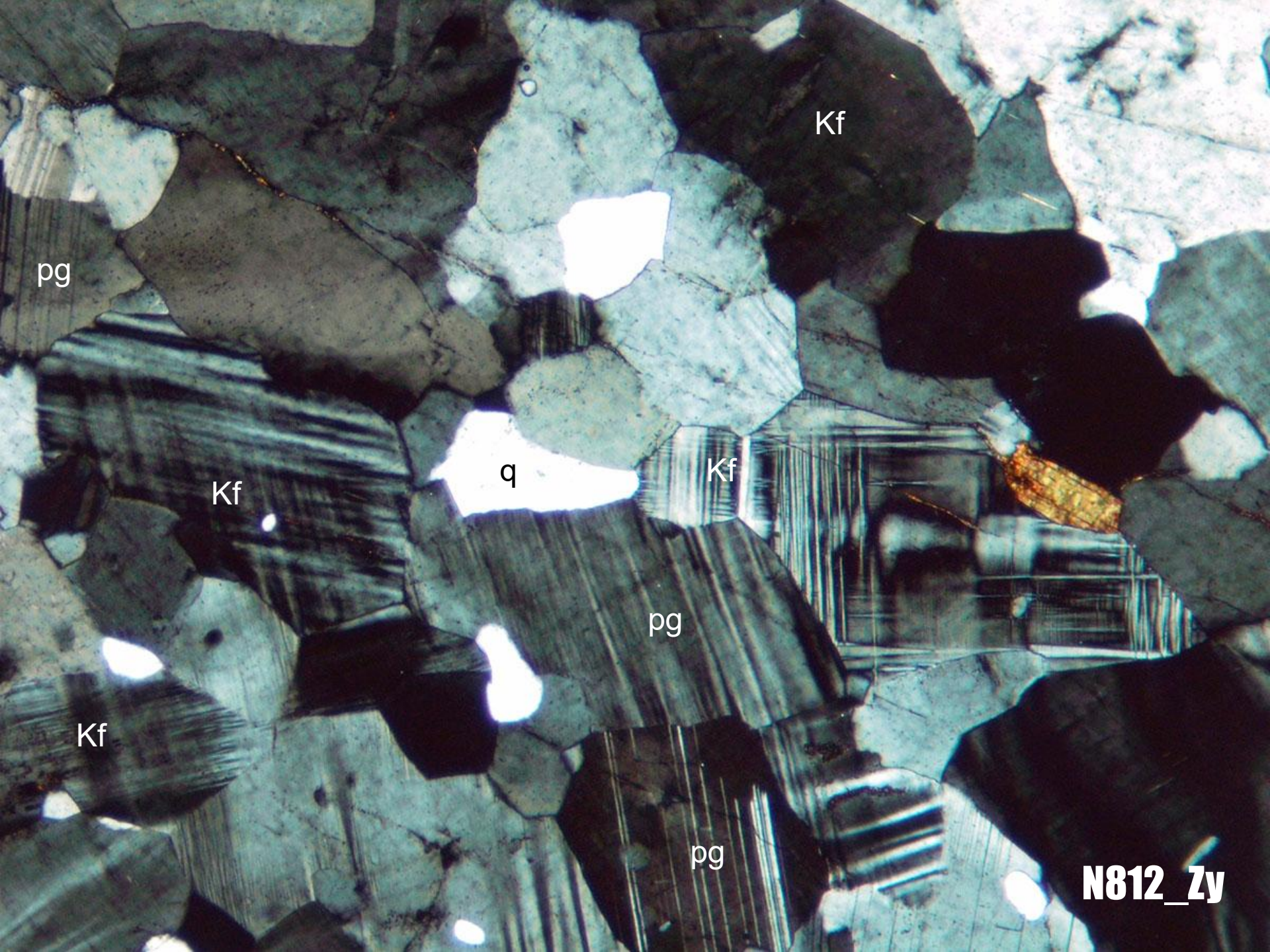
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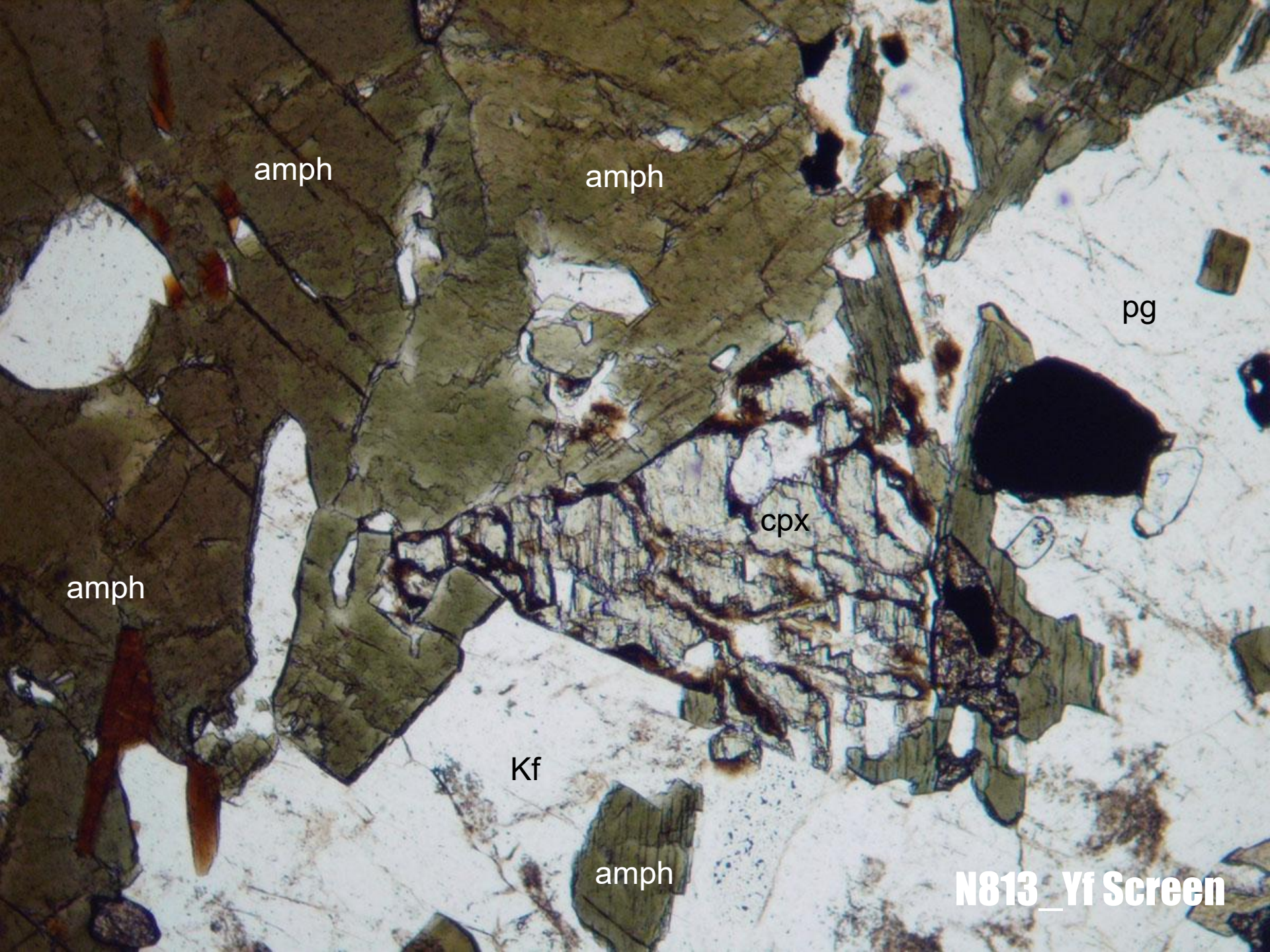
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Kf

pg

N812_Zy



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amph

pg

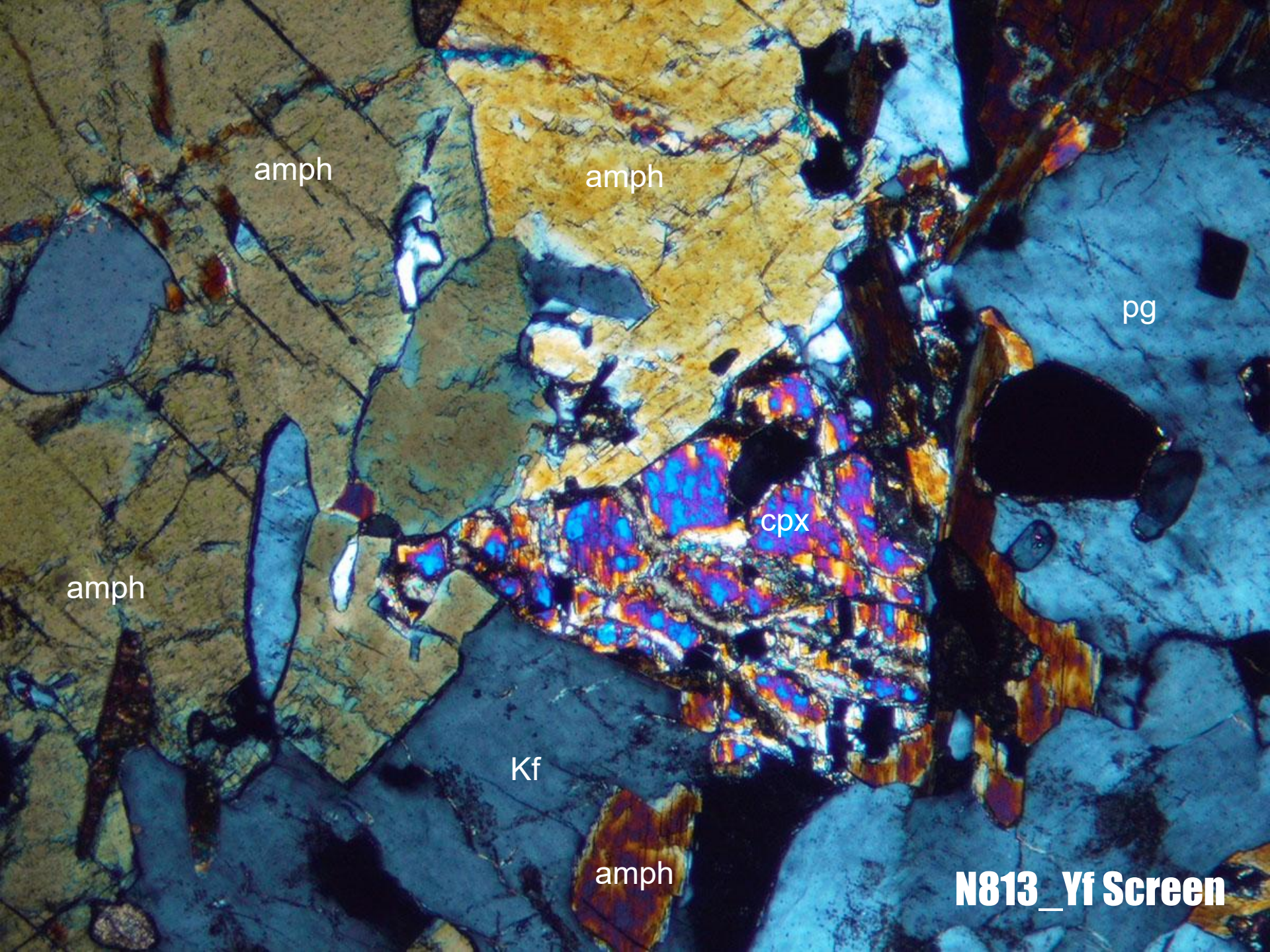
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amph

Kf

amph

N813_Yf Screen



amph

amph

pg

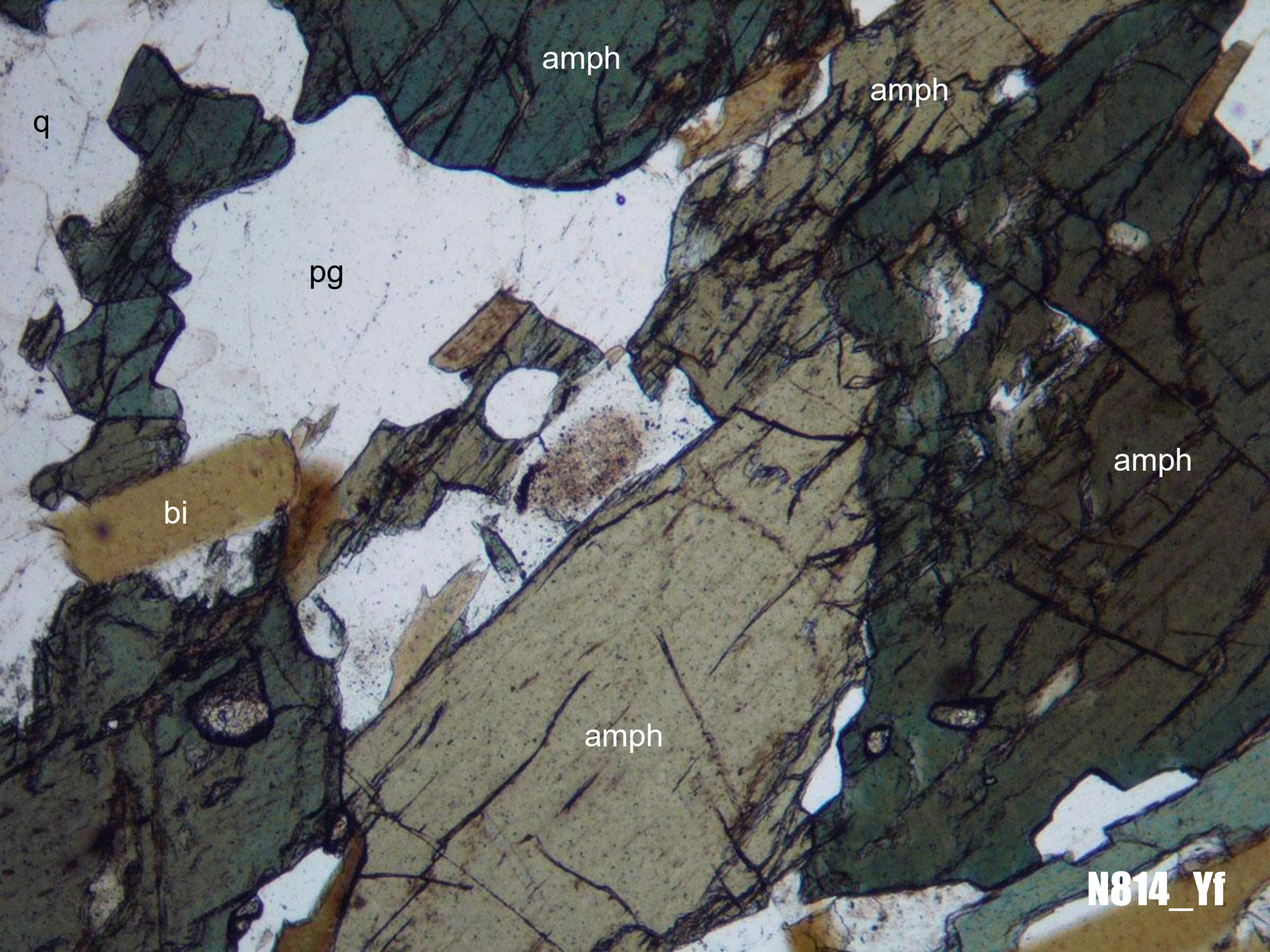
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Kf

amph

N813_Yf Screen



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amph

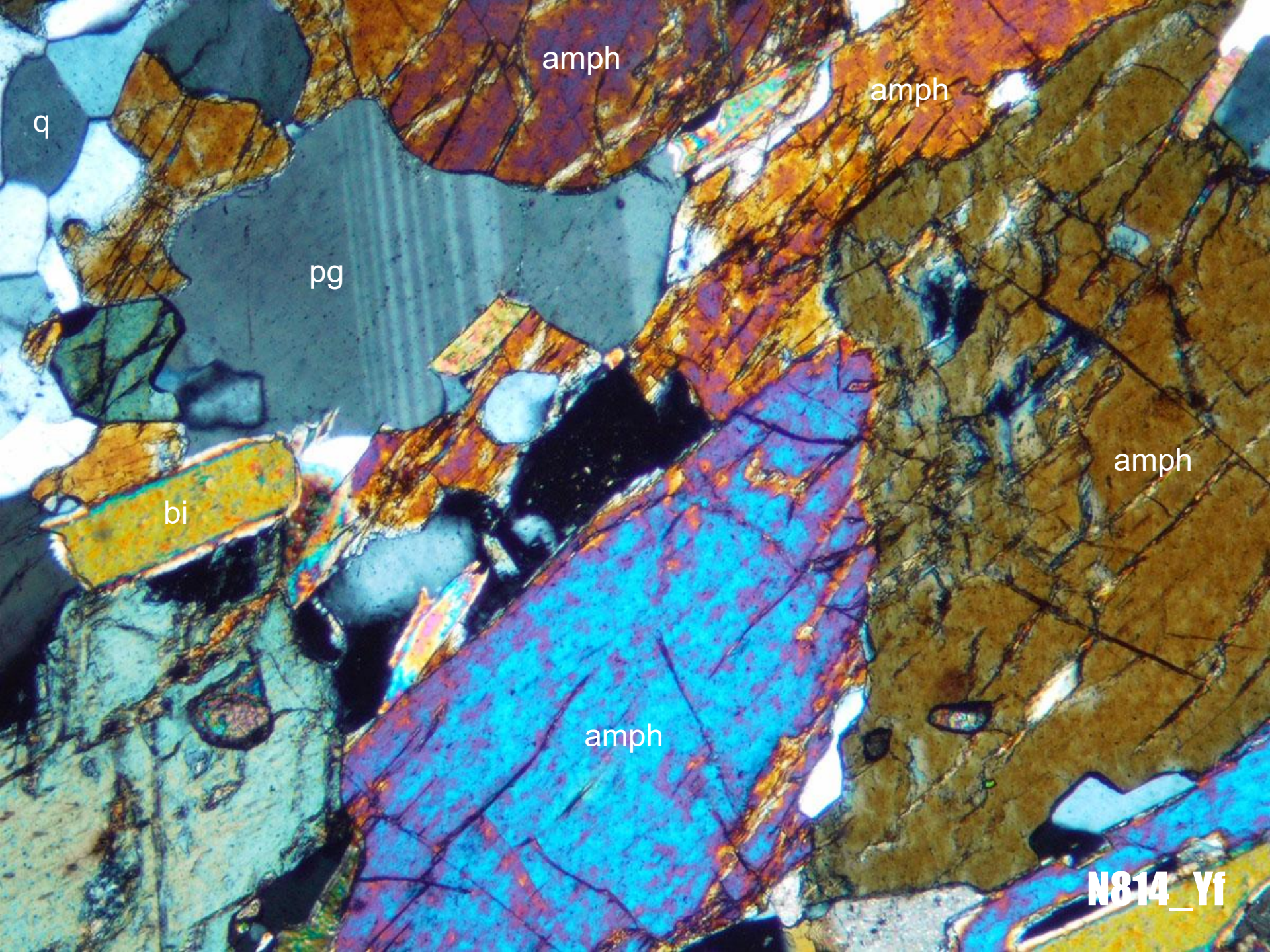
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amph

amph

N814_Yf



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amph

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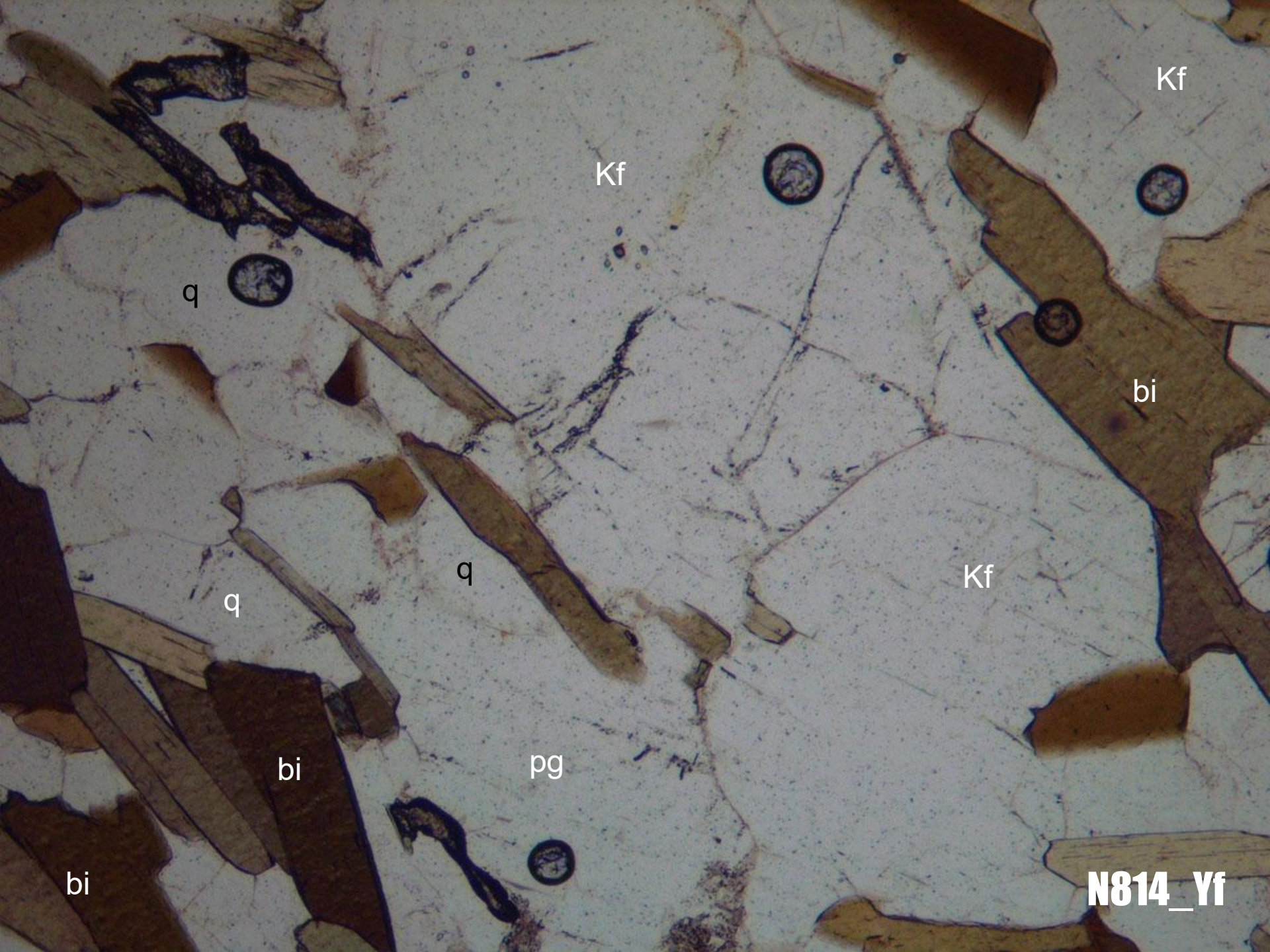
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amph

N814_Yf



Kf

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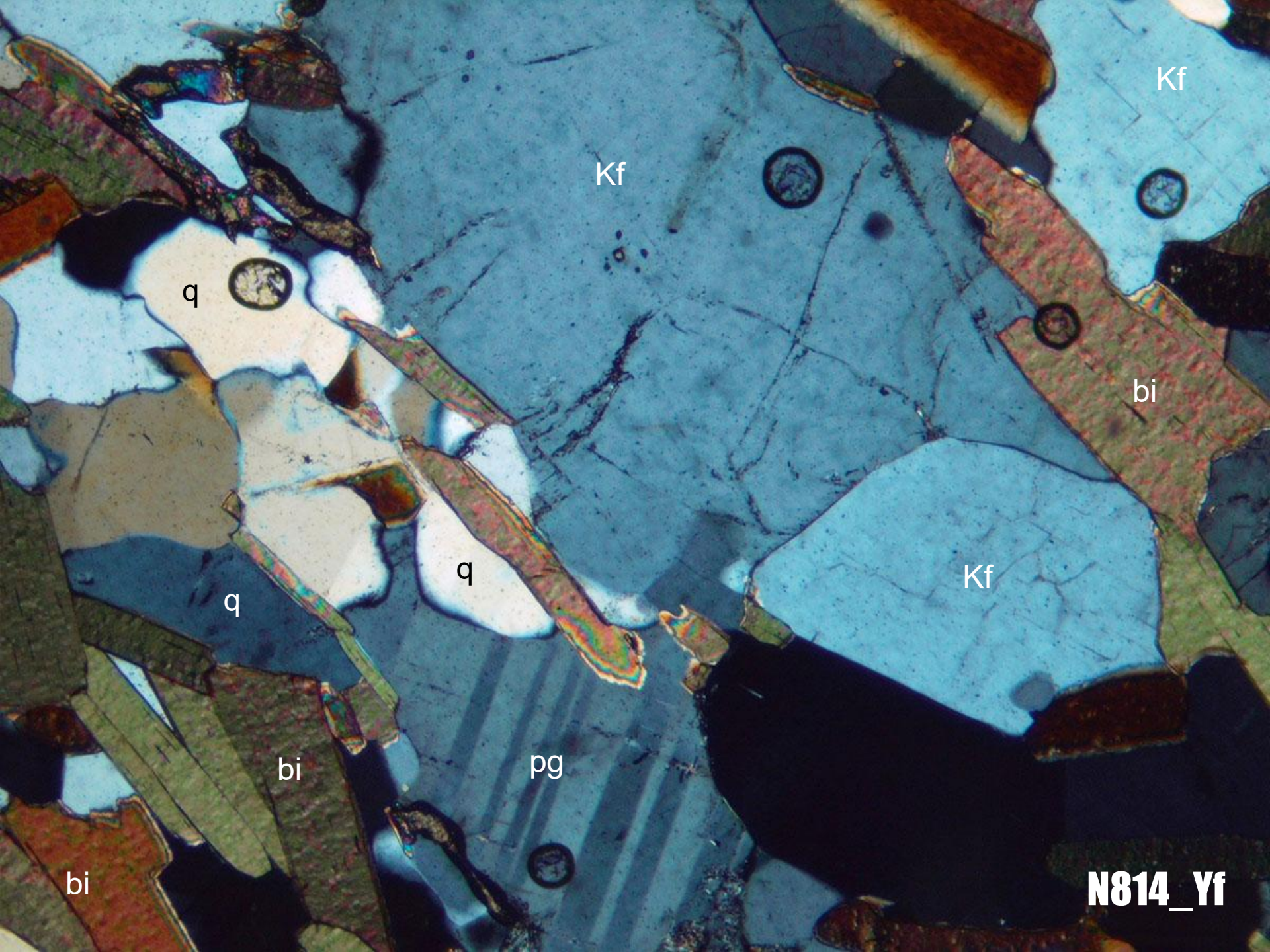
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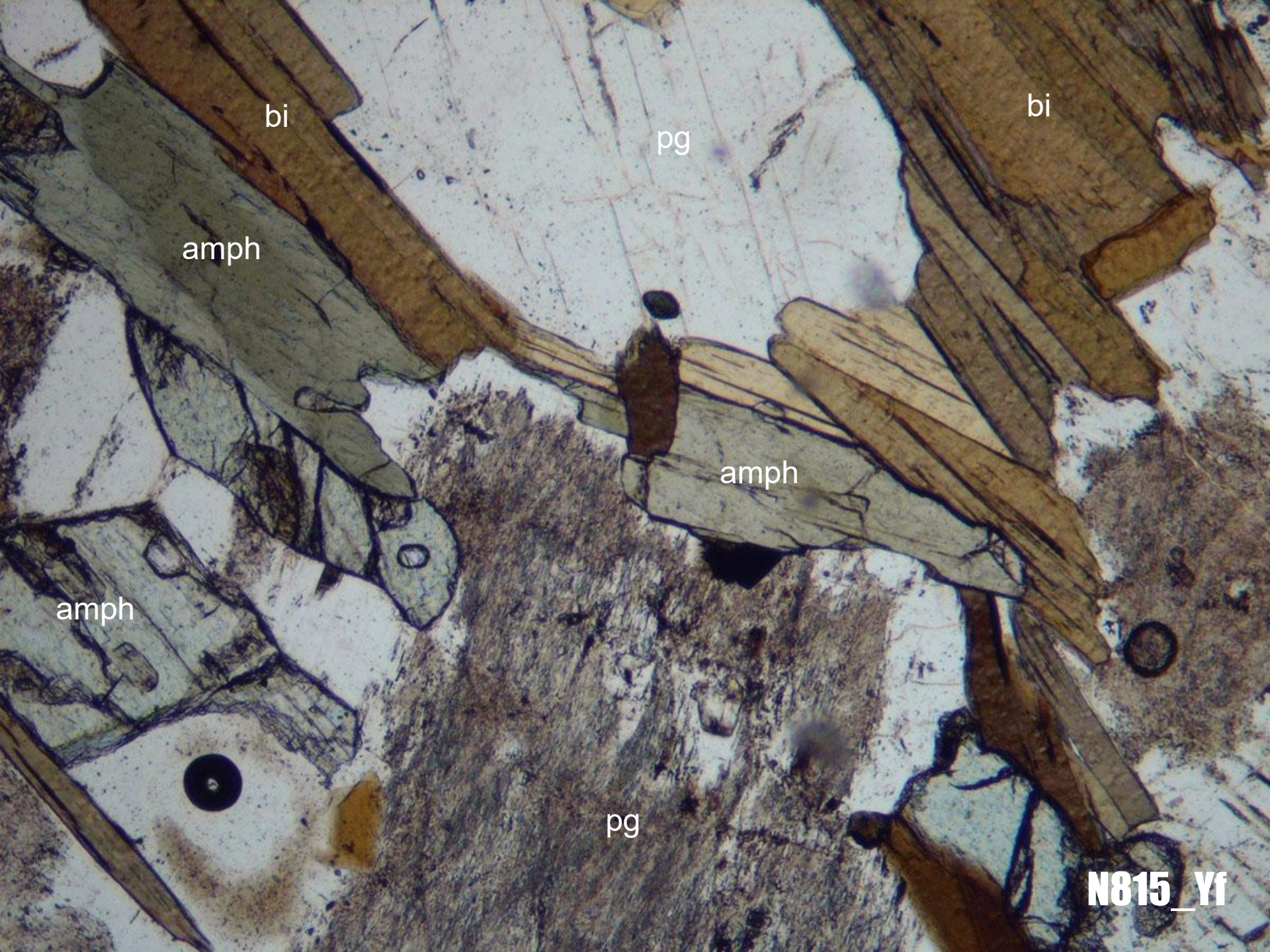
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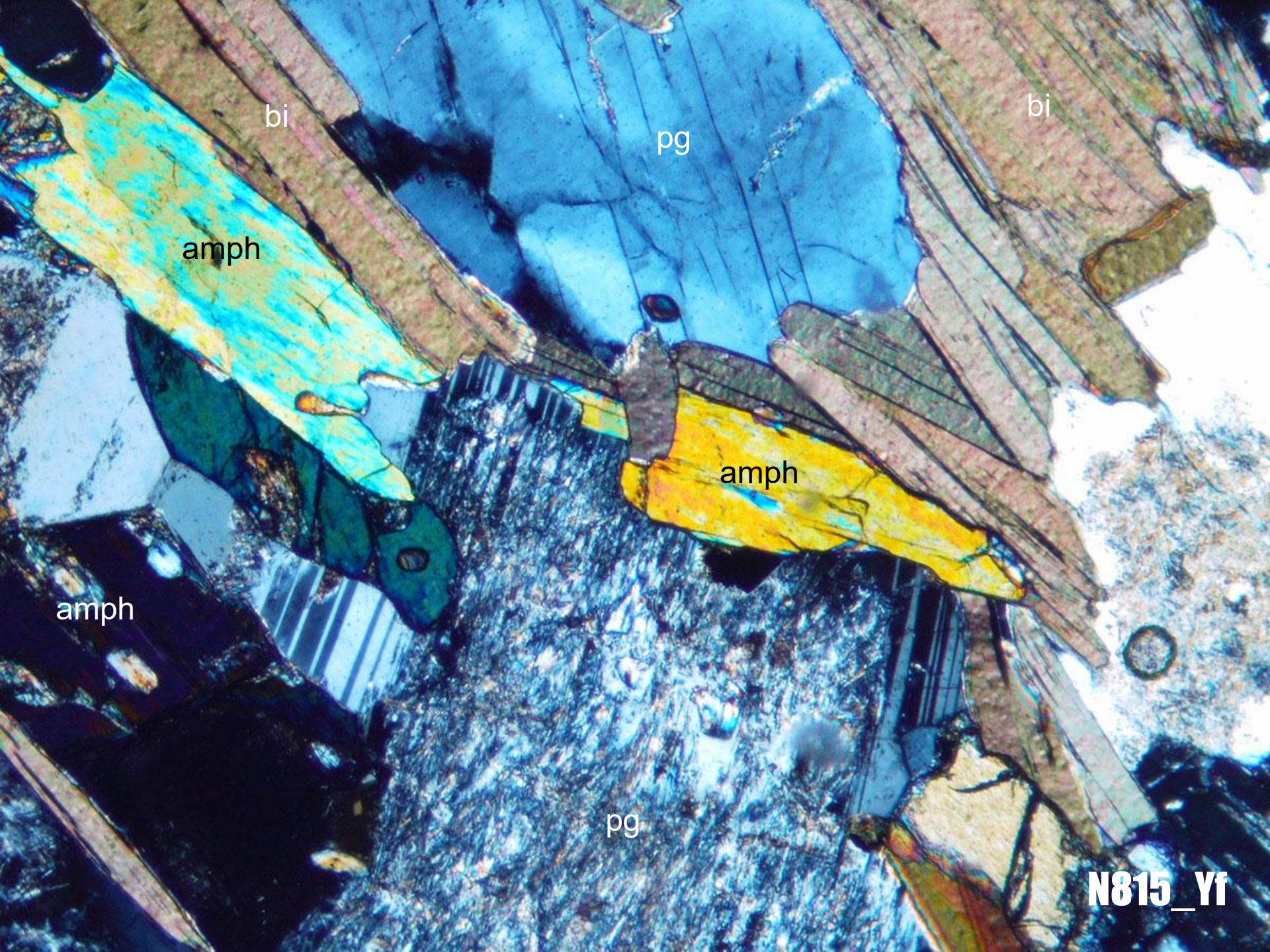
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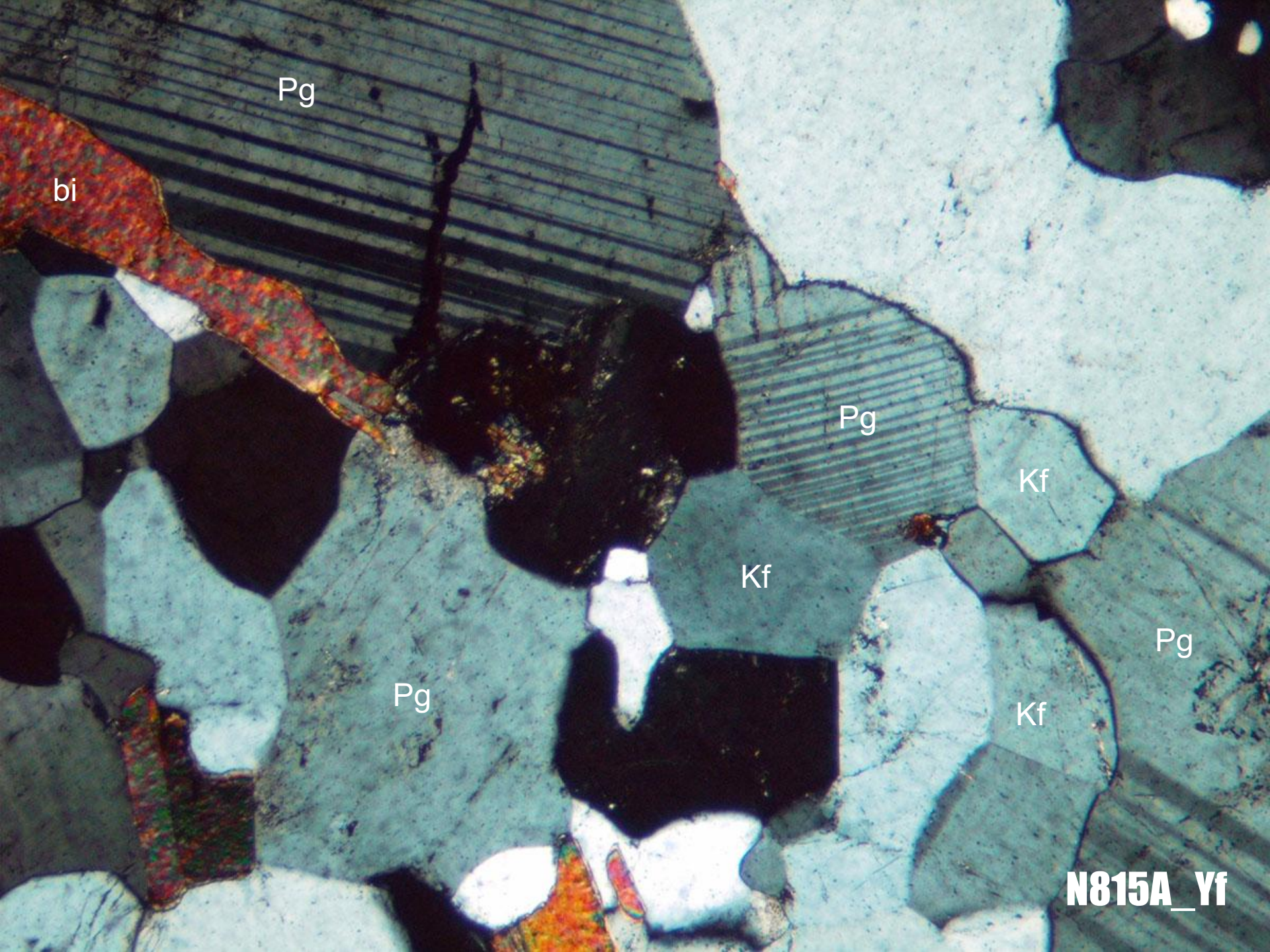
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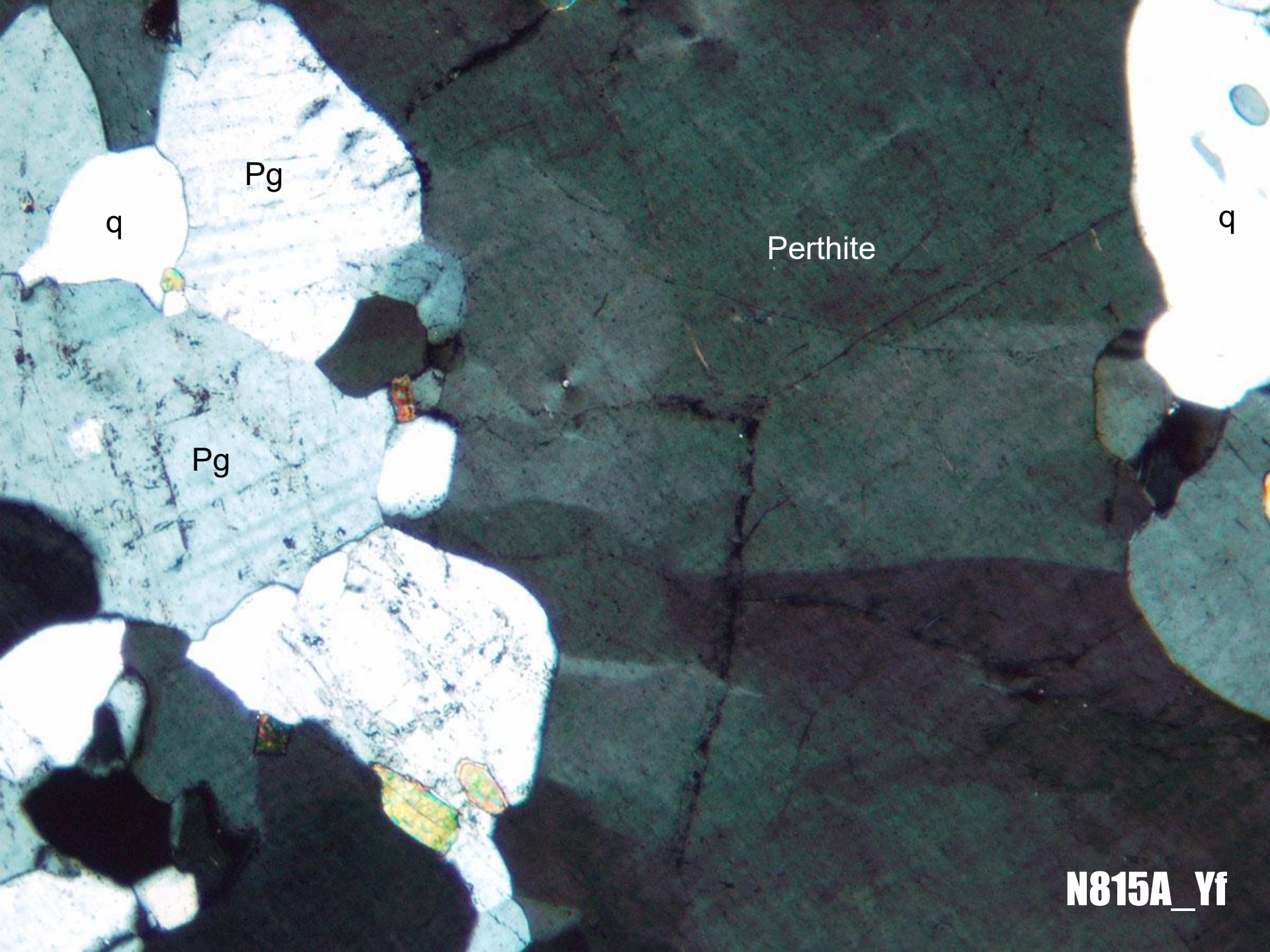
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N815A_Yf



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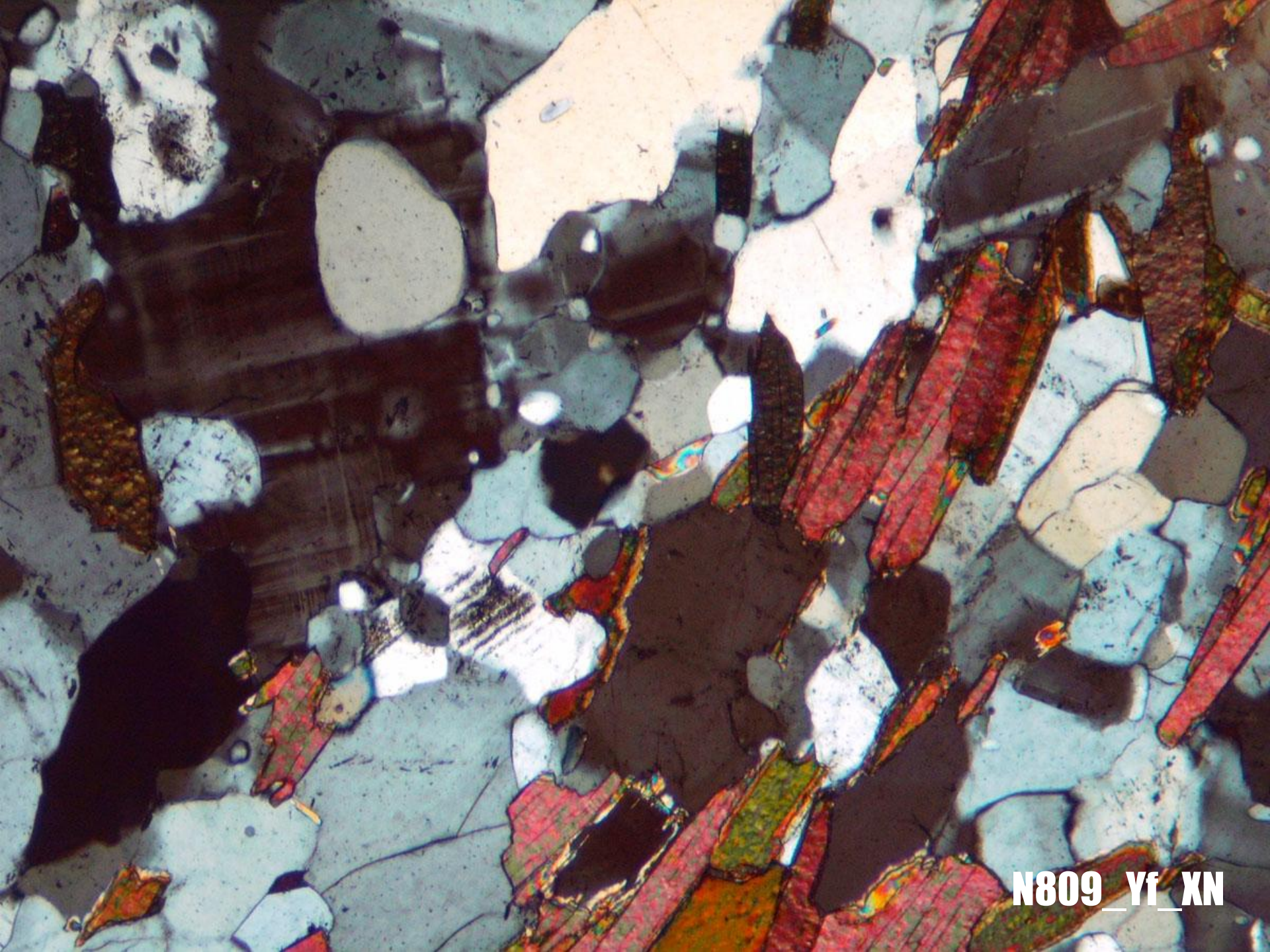
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N809_Yf_XN



