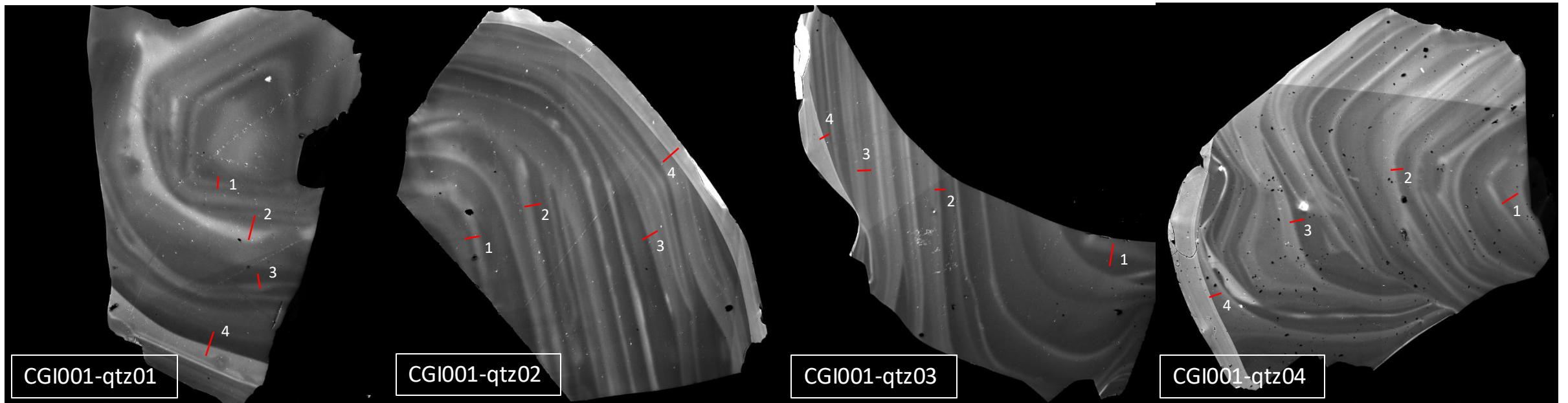
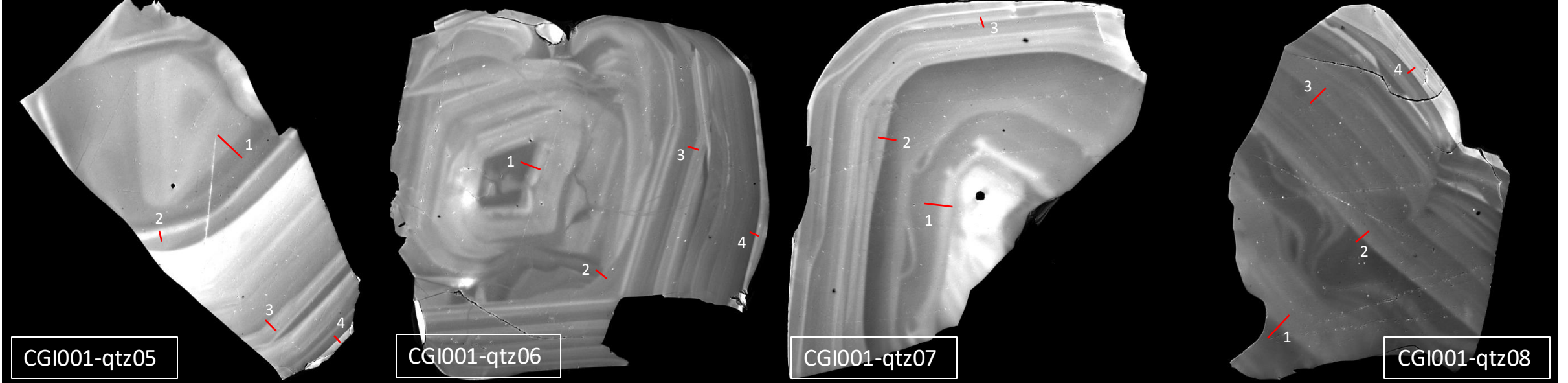


This supplementary file accompanies the article:

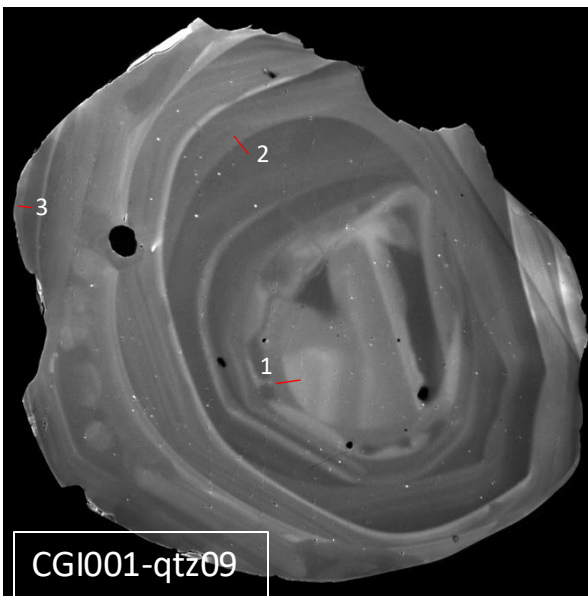
Wang, S., Gualda, G. A. R., Lubbers, J. and Kent, A. J. R. (2025) "Fast or slow: An evaluation of Ti-in-quartz diffusion coefficients through comparisons of quartz and plagioclase diffusion times", *Volcanica*, 8(1), pp. 189–202. doi: 10.30909/vol/rjq2443.



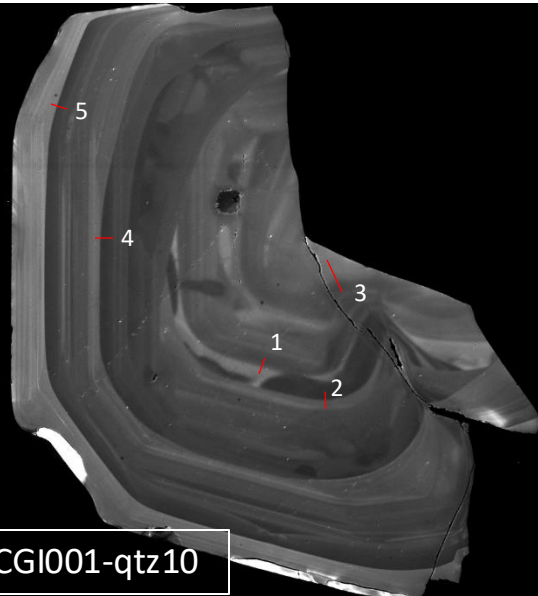
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 T	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 2.10 mm	Det: CL	500 μm	View field: 1.70 mm	Det: CL	500 μm	View field: 1.90 mm	Det: CL	500 μm	View field: 2.05 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/31/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/31/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/31/20	Vanderbilt Univ E	BI: 20.00	Date(m/d/y): 12/31/20	Vanderbilt Univ EES



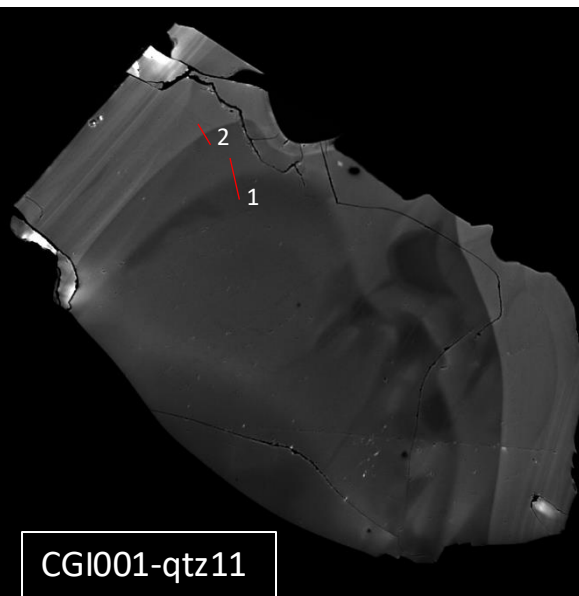
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.80 mm	Det: CL	500 μm	View field: 1.50 mm	Det: CL	200 μm	View field: 1.85 mm	Det: CL	500 μm	View field: 1.50 mm	Det: CL	200 μm
BI: 20.00	Date(m/d/y): 12/31/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/31/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 01/01/21	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 01/01/21	Vanderbilt Univ EES



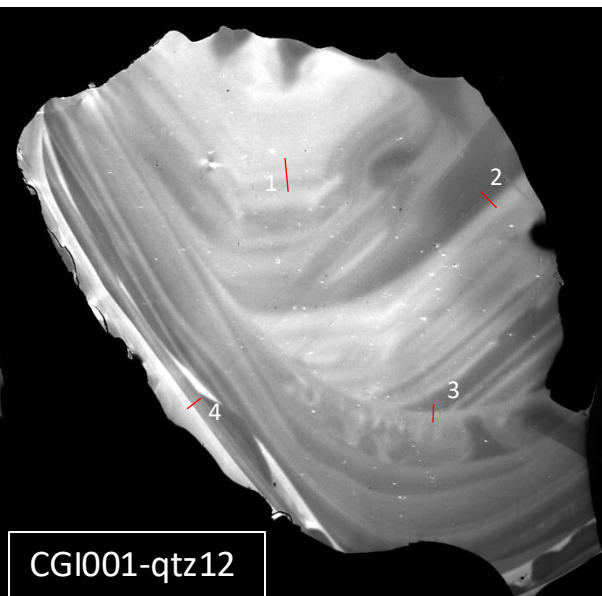
CGI001-qtz09



CGI001-qtz10



CGI001-qtz11



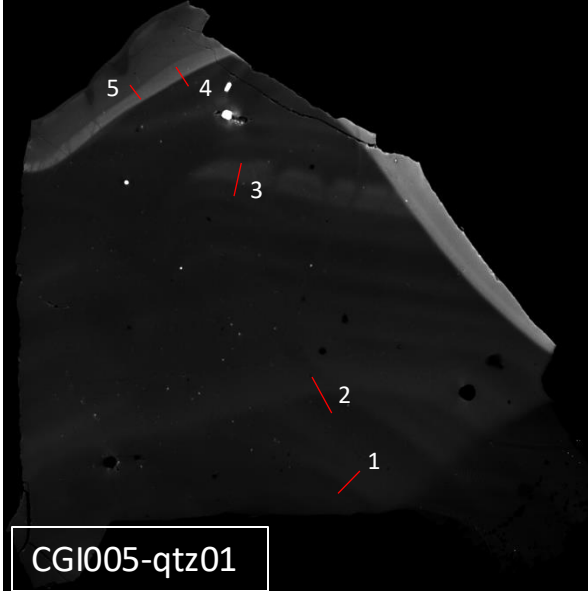
CGI001-qtz12

SEM HV: 15.0 kV Scan speed: 9
View field: 1.50 mm Det: CL
BI: 20.00 Date(m/d/y): 01/01/21

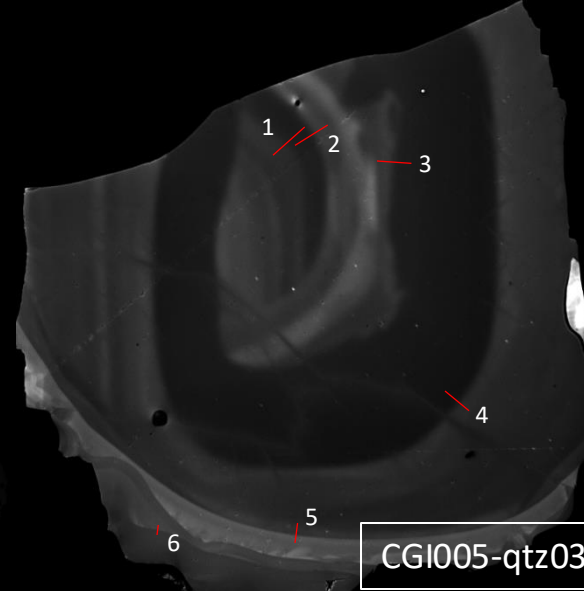
VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 2.00 mm Det: CL
BI: 20.00 Date(m/d/y): 01/02/21

VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.50 mm Det: CL
BI: 20.00 Date(m/d/y): 01/02/21

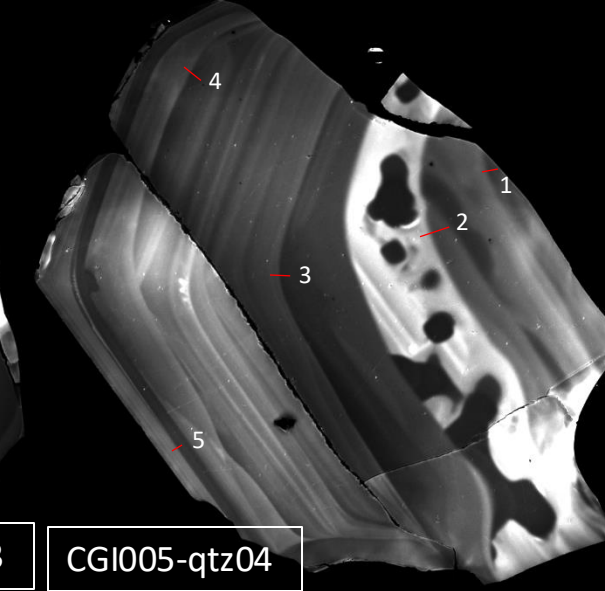
VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 2.10 mm Det: CL
BI: 20.00 Date(m/d/y): 01/02/21



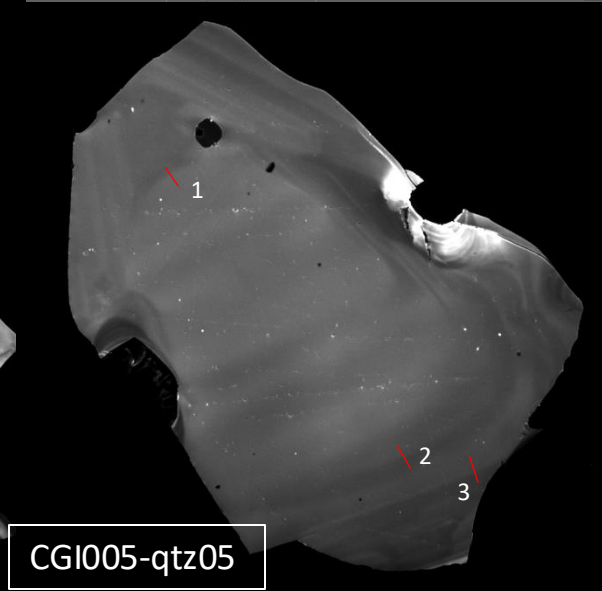
CGI005-qtz01



CGI005-qtz03



CGI005-qtz04



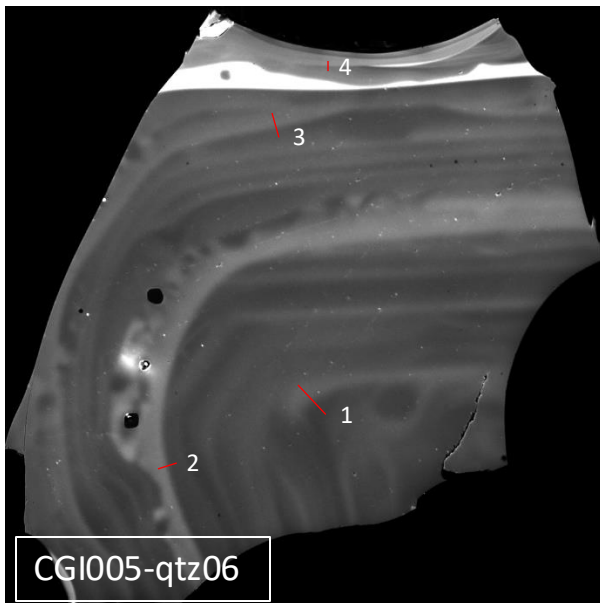
CGI005-qtz05

SEM HV: 15.0 kV Scan speed: 9
View field: 1.70 mm Det: CL
BI: 20.00 Date(m/d/y): 01/02/21

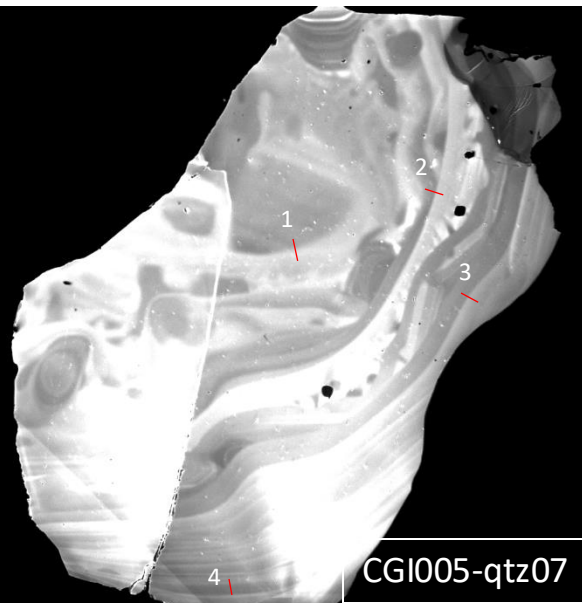
VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.40 mm Det: CL
BI: 20.00 Date(m/d/y): 01/02/21

VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.90 mm Det: CL
BI: 20.00 Date(m/d/y): 01/03/21

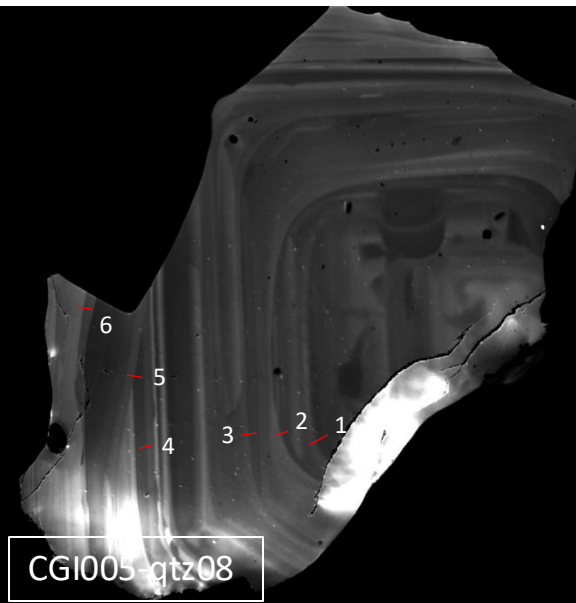
VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.90 mm Det: CL
BI: 20.00 Date(m/d/y): 01/03/21



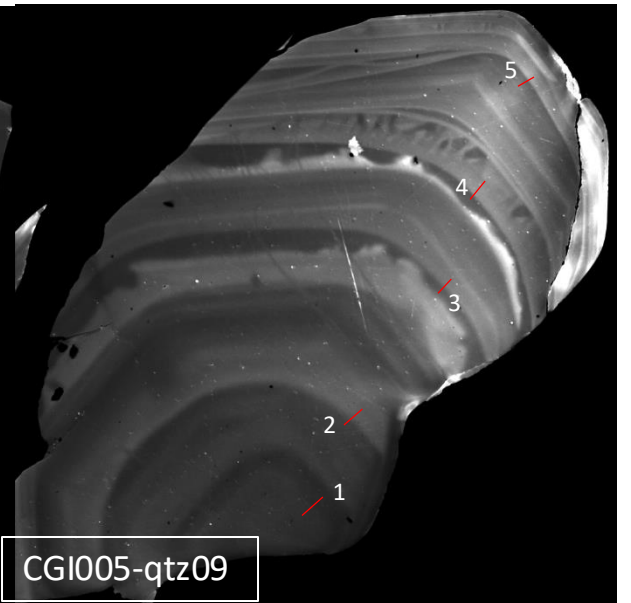
CGI005-qtz06



CGI005-qtz07



CGI005-qtz08



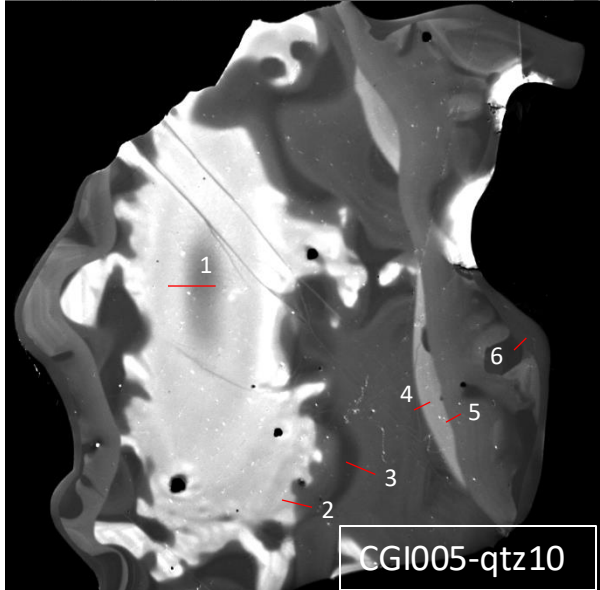
CGI005-qtz09

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.05 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 01/03/21 Vanderbilt Univ EES

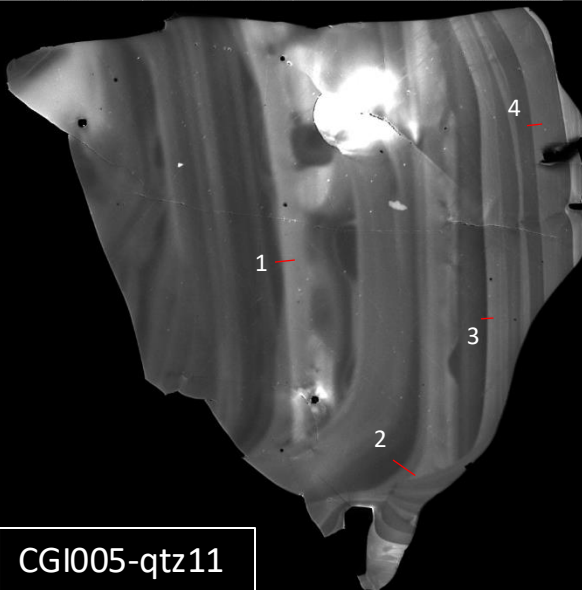
SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.10 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 01/03/21 Vanderbilt Univ EES

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 1.90 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 01/03/21 Vanderbilt Univ EES

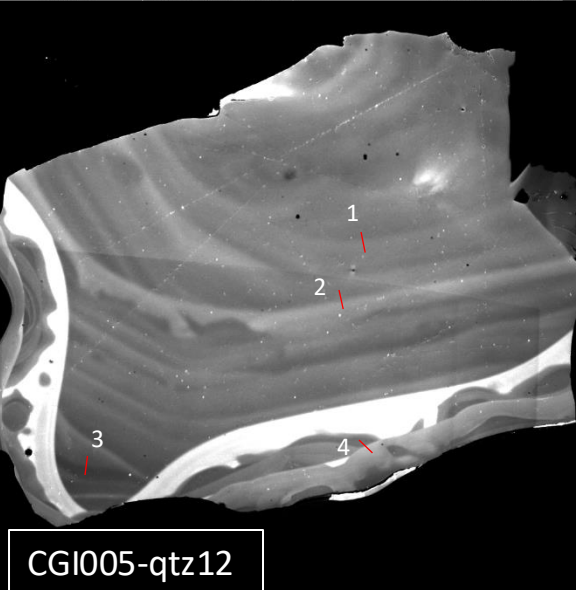
SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.40 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 01/03/21 Vanderbilt Univ EES



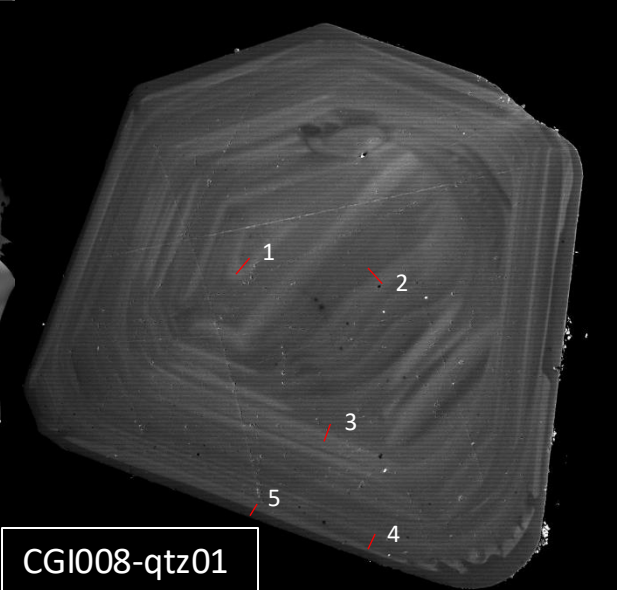
CGI005-qtz10



CGI005-qtz11



CGI005-qtz12



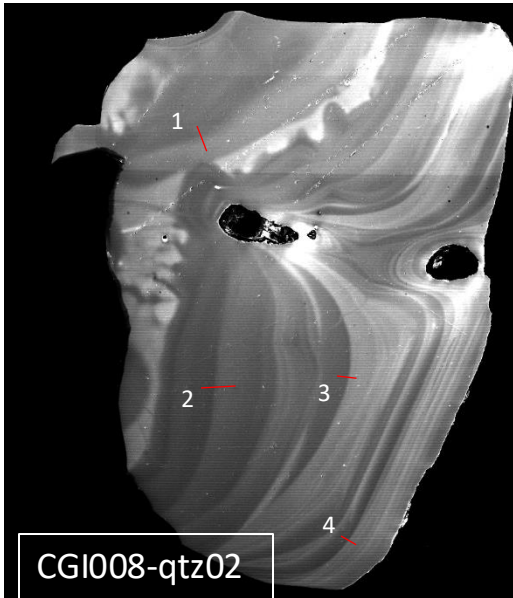
CGI008-qtz01

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.10 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 01/03/21 Vanderbilt Univ EES

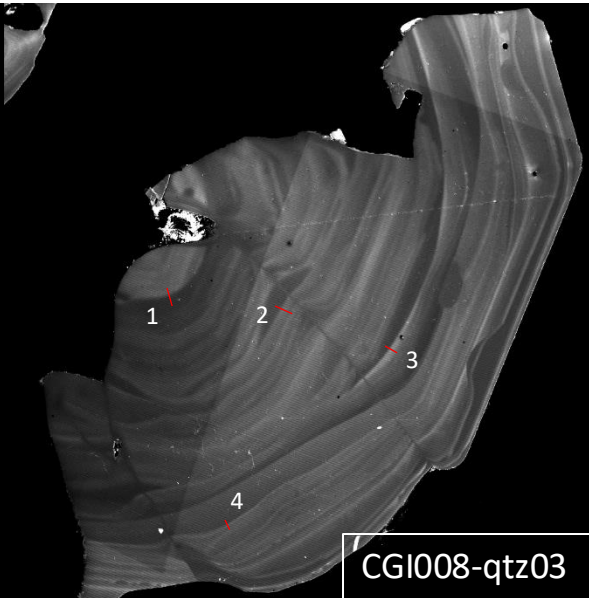
SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.30 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 01/03/21 Vanderbilt Univ EES

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.70 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 01/03/21 Vanderbilt Univ EES

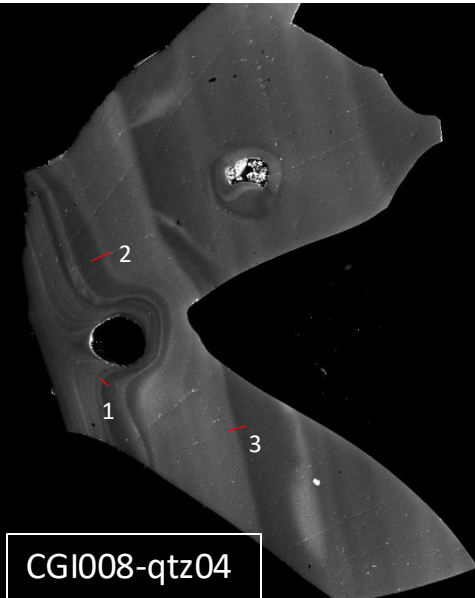
SEM HV: 15.0 kV Scan speed: 8 VEGA3 TESCAN
View field: 1.50 mm Det: CL 200 µm
BI: 20.00 Date(m/d/y): 12/28/20 Vanderbilt Univ EES



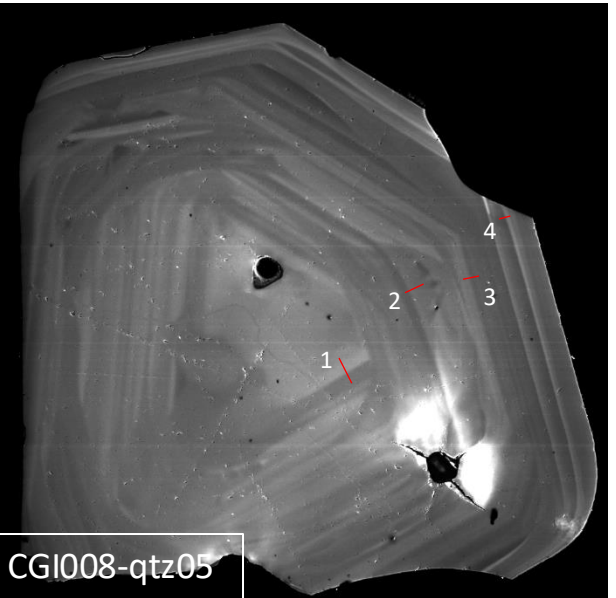
CGI008-qtz02



CGI008-qtz03

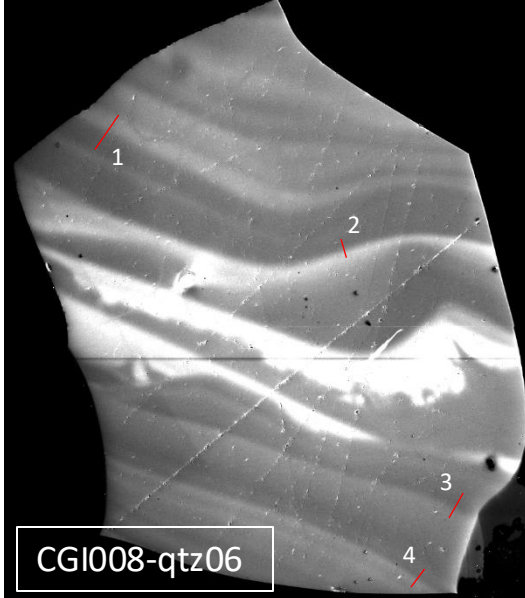


CGI008-qtz04

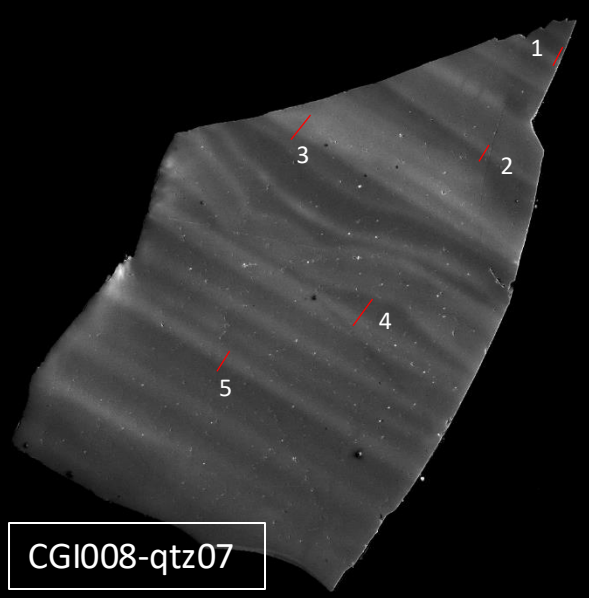


CGI008-qtz05

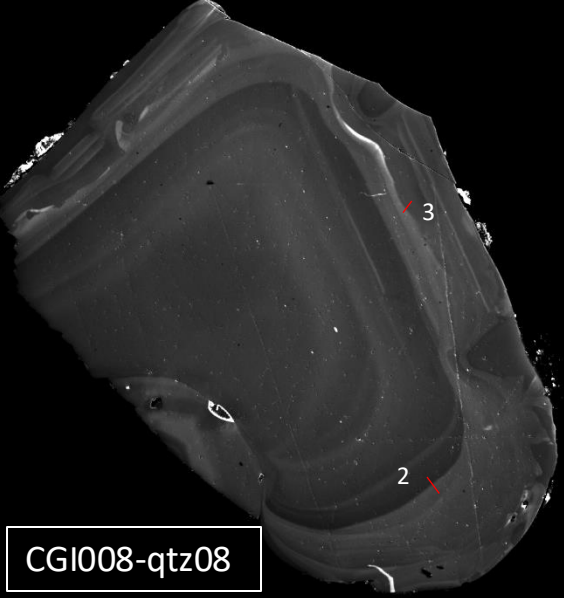
SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 2.40 mm	Det: CL	500 μm	View field: 2.80 mm	Det: CL	500 μm	View field: 2.70 mm	Det: CL	500 μm	View field: 1.45 mm	Det: CL	200 μm
Bi: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	Bi: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	Bi: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	Bi: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES



CGI008-qtz06



CGI008-qtz07

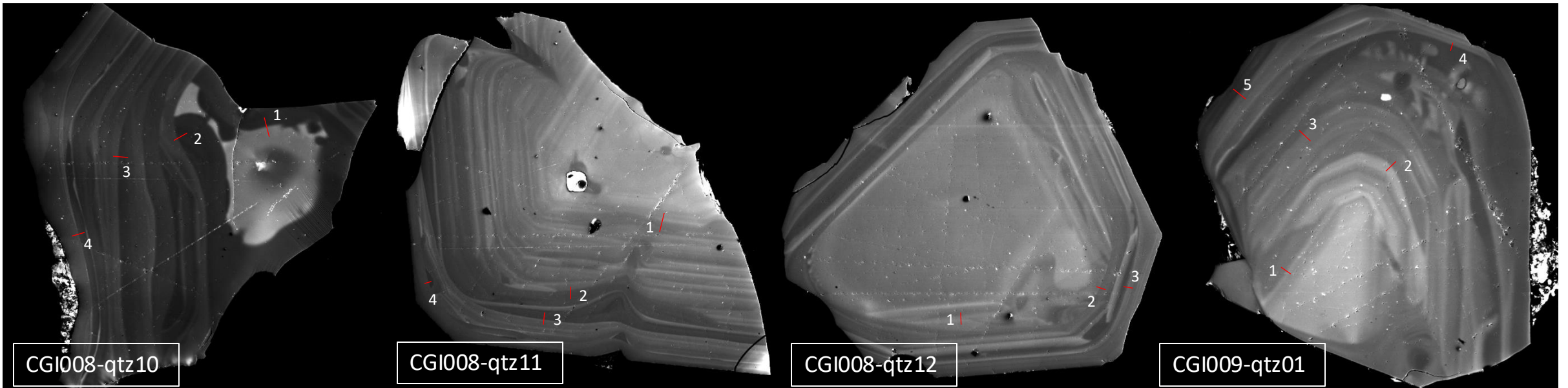


CGI008-qtz08

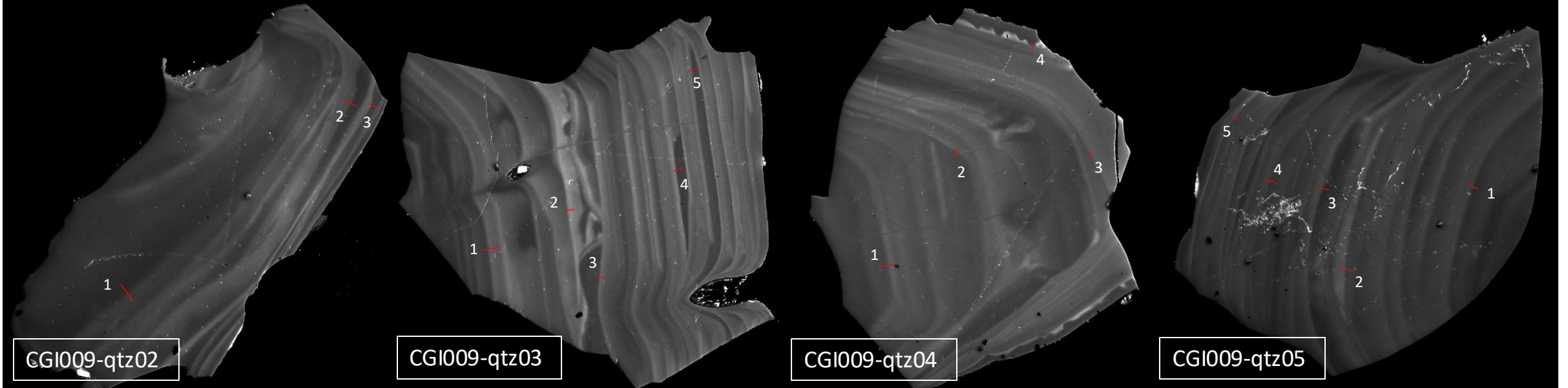


CGI008-qtz09

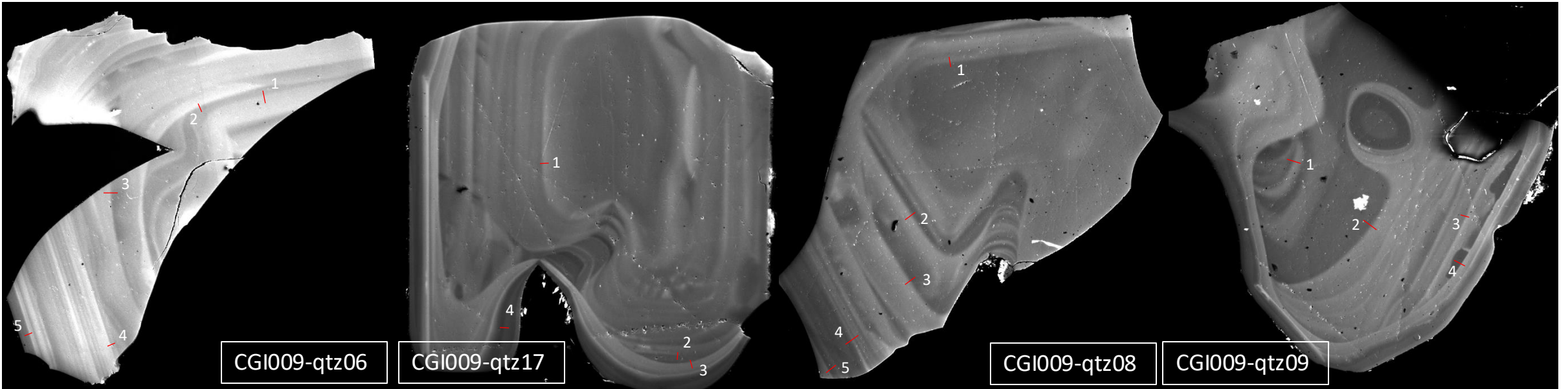
SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN
View field: 1.90 mm	Det: CL	500 μm	View field: 1.90 mm	Det: CL	500 μm	View field: 2.05 mm	Det: CL	500 μm	View field: 2.00 mm	Det: CL	500 μm
Bi: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	Bi: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	Bi: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	Bi: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES



SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.80 mm	Det: CL	500 μm	View field: 1.80 mm	Det: CL	500 μm	View field: 1.70 mm	Det: CL	500 μm	View field: 1.15 mm	Det: CL	200 μm
BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES



SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.75 mm	Det: CL	500 μm	View field: 1.75 mm	Det: CL	500 μm	View field: 1.40 mm	Det: CL	200 μm	View field: 1.50 mm	Det: CL	200 μm
BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES



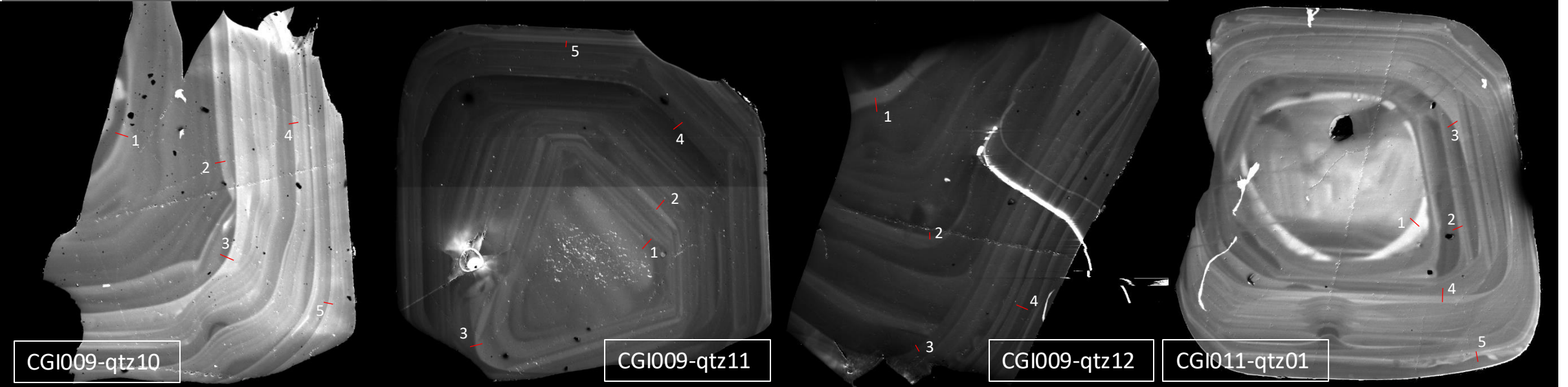
CGI009-qtz06

CGI009-qtz17

CGI009-qtz08

CGI009-qtz09

SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 2.00 mm	Det: CL	500 μm	View field: 1.20 mm	Det: CL	200 μm	View field: 2.30 mm	Det: CL	500 μm	View field: 2.10 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES



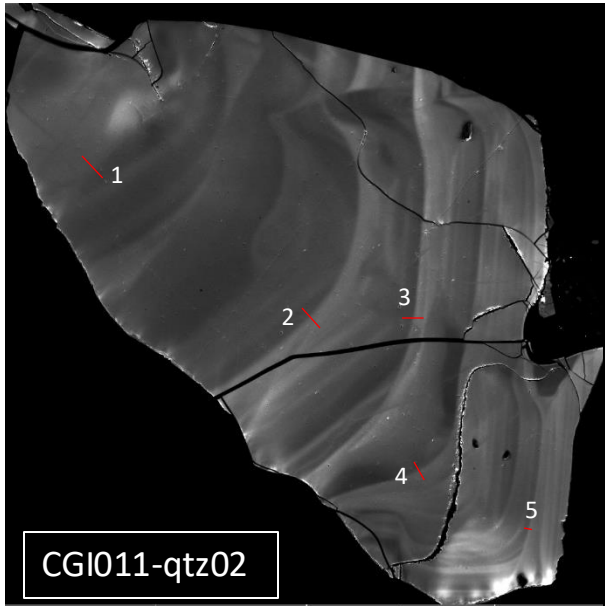
CGI009-qtz10

CGI009-qtz11

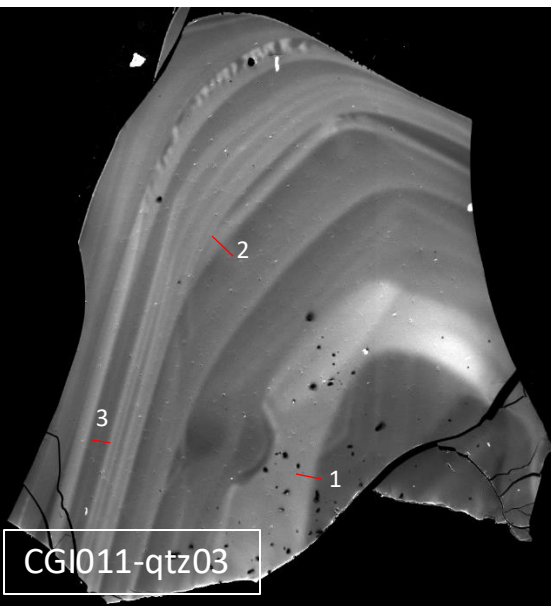
CGI009-qtz12

CGI011-qtz01

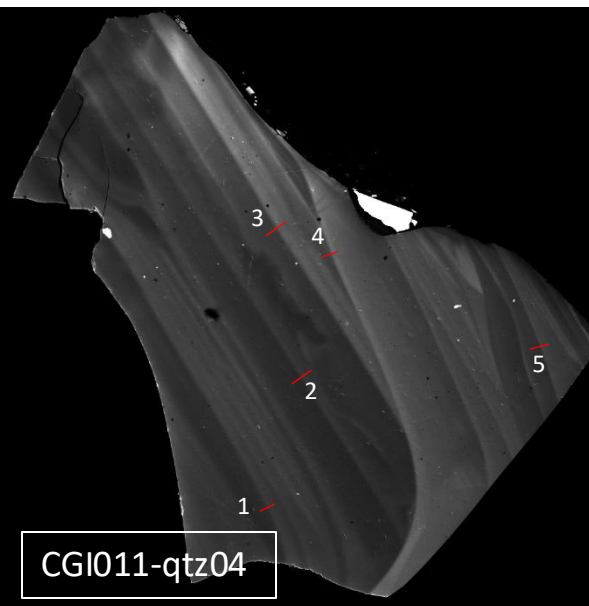
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.90 mm	Det: CL	500 μm	View field: 1.70 mm	Det: CL	500 μm	View field: 2.00 mm	Det: CL	500 μm	View field: 2.00 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/28/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES



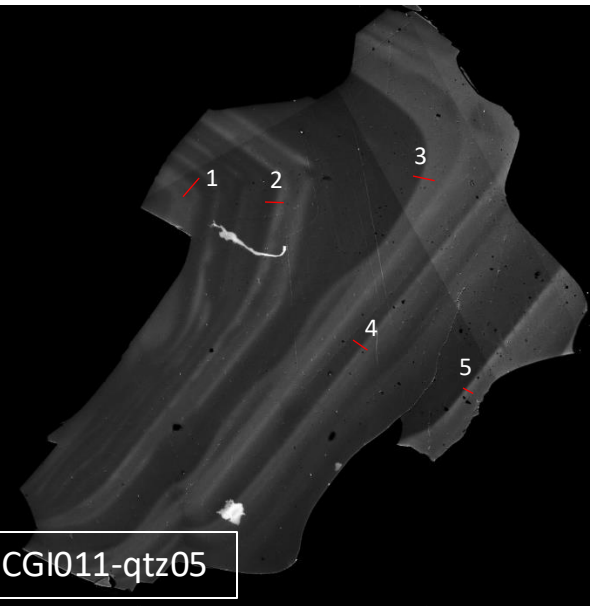
CGI011-qtz02



CGI011-qtz03



CGI011-qtz04



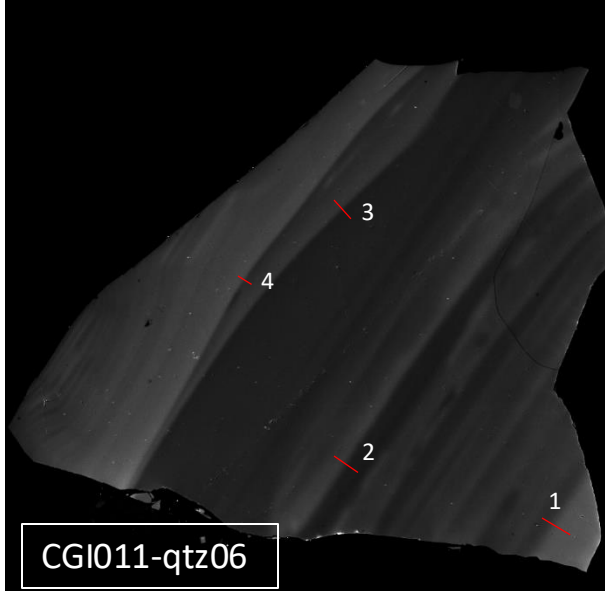
CGI011-qtz05

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.60 mm	Det: CL	500 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

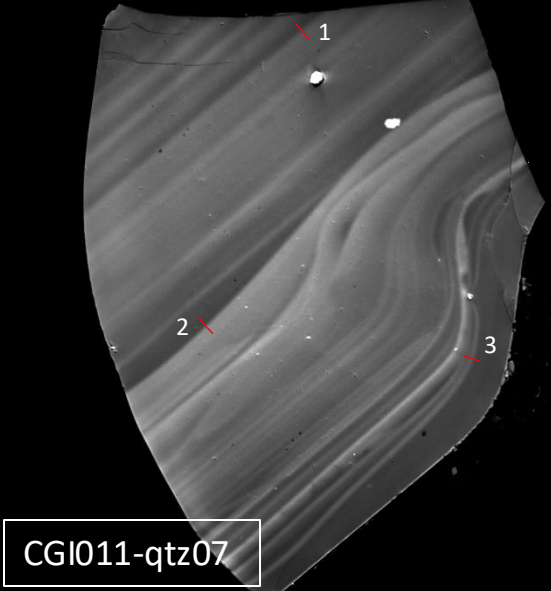
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.55 mm	Det: CL	200 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.80 mm	Det: CL	500 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

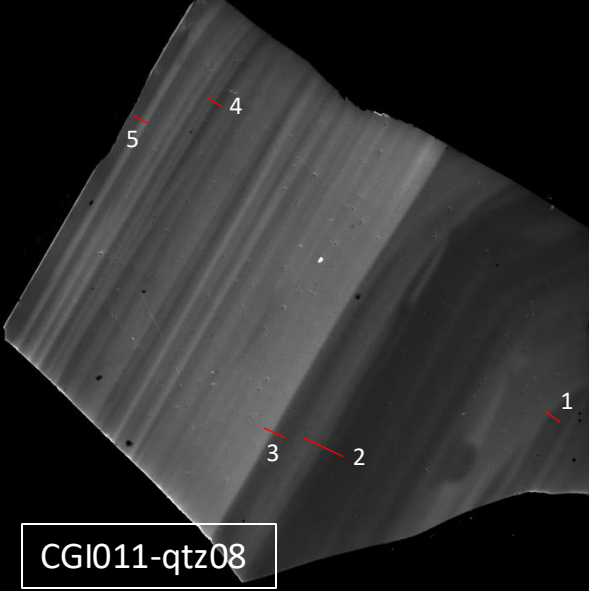
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 2.20 mm	Det: CL	500 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES



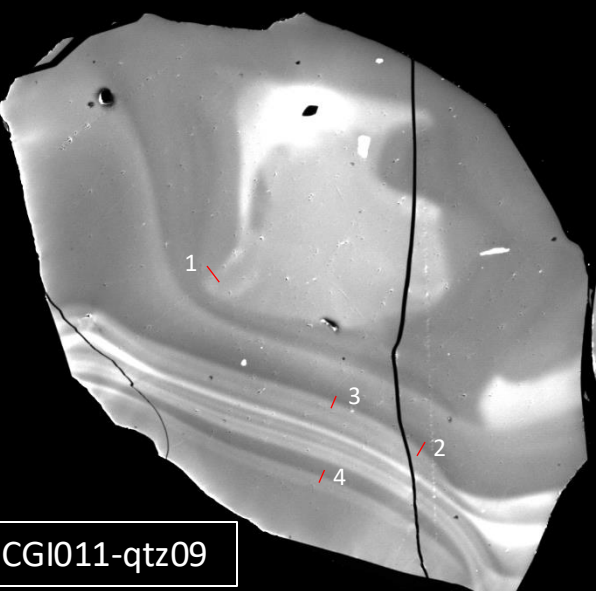
CGI011-qtz06



CGI011-qtz07



CGI011-qtz08



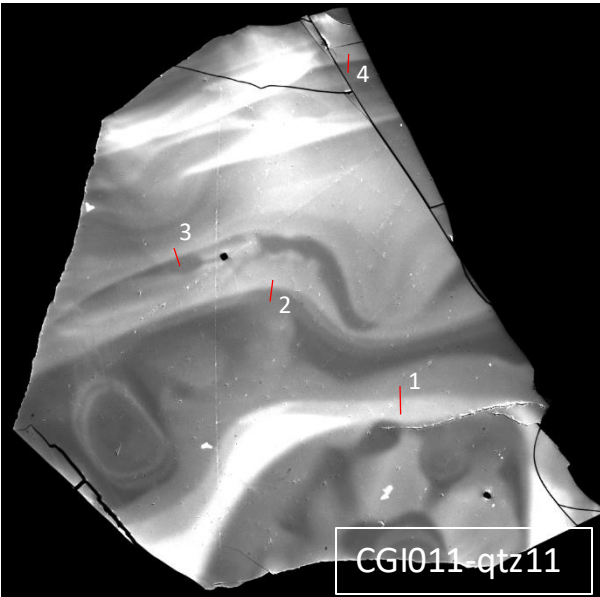
CGI011-qtz09

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.65 mm	Det: CL	500 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

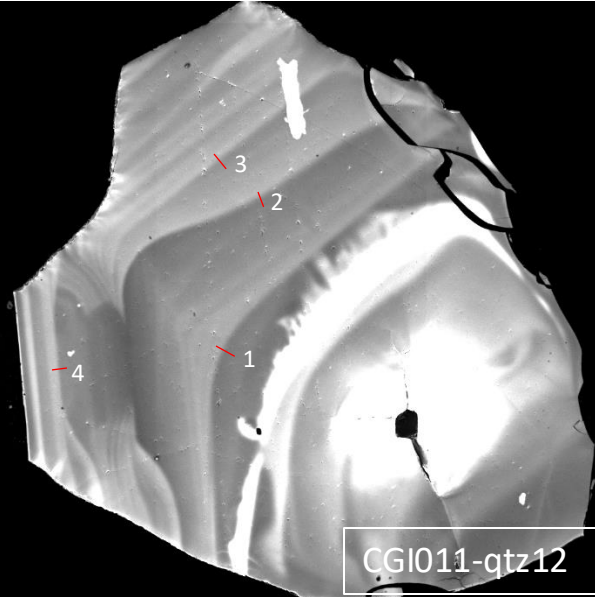
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.25 mm	Det: CL	200 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.30 mm	Det: CL	200 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

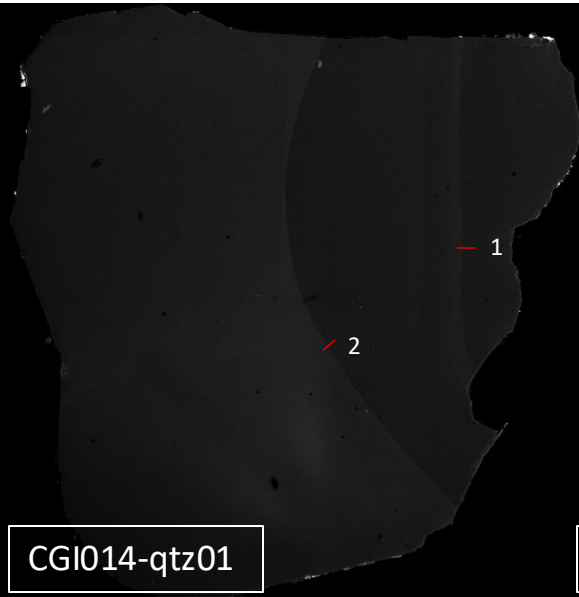
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.10 mm	Det: CL	200 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES



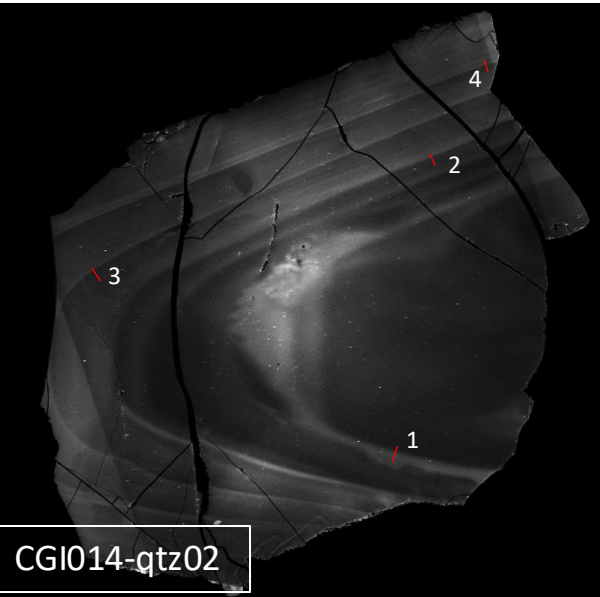
CGI011-qtz11



CGI011-qtz12

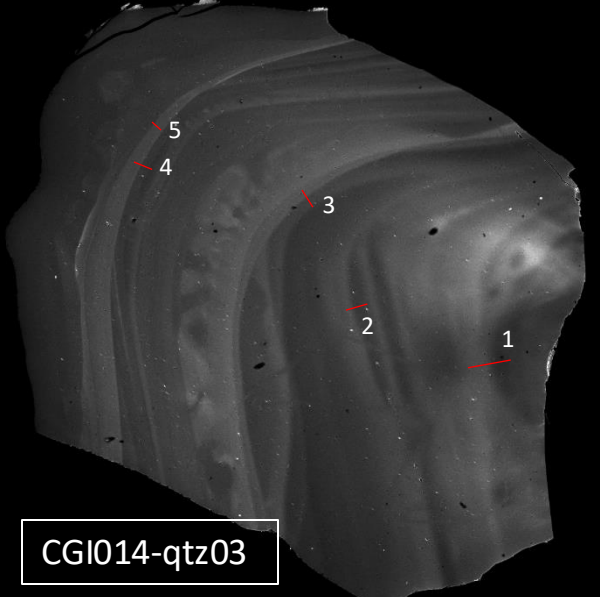


CGI014-qtz01

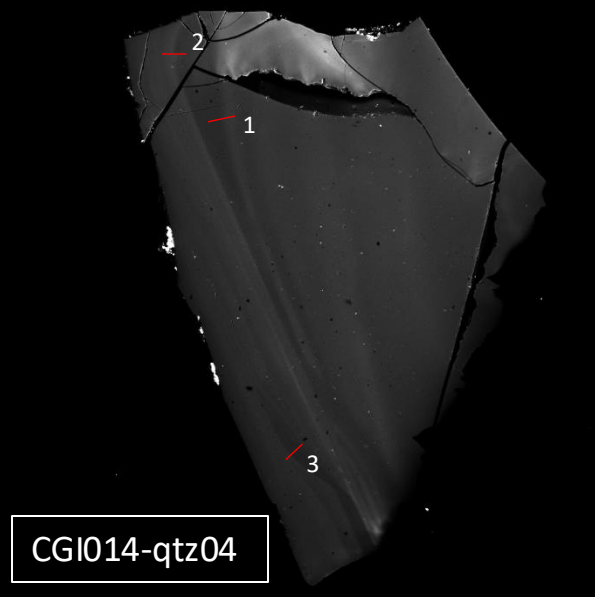


CGI014-qtz02

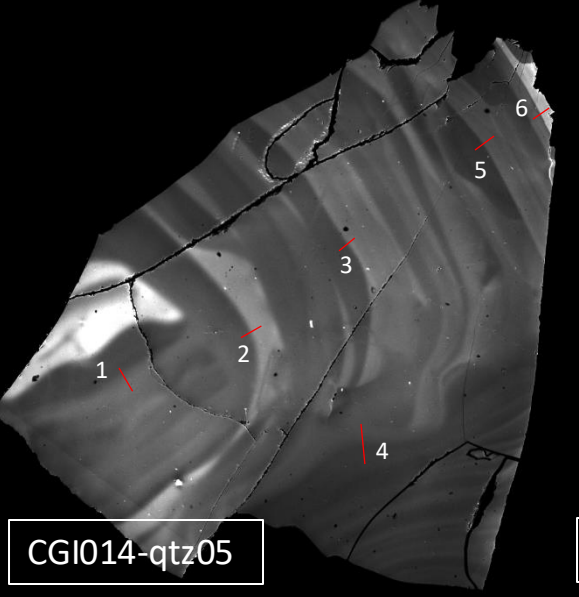
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN
View field: 1.60 mm	Det: CL	500 µm	View field: 1.55 mm	Det: CL	200 µm	View field: 1.60 mm	Det: CL	500 µm	View field: 2.00 mm	Det: CL	500 µm
BI: 20.00	Date(m/d/y): 12/30/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/30/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES



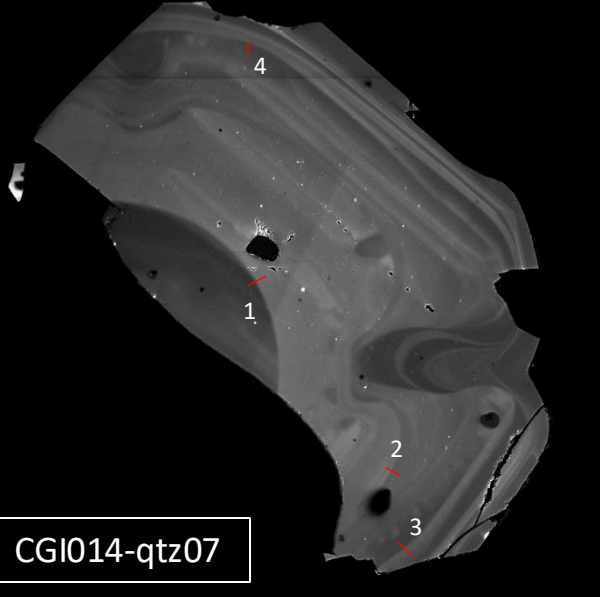
CGI014-qtz03



CGI014-qtz04

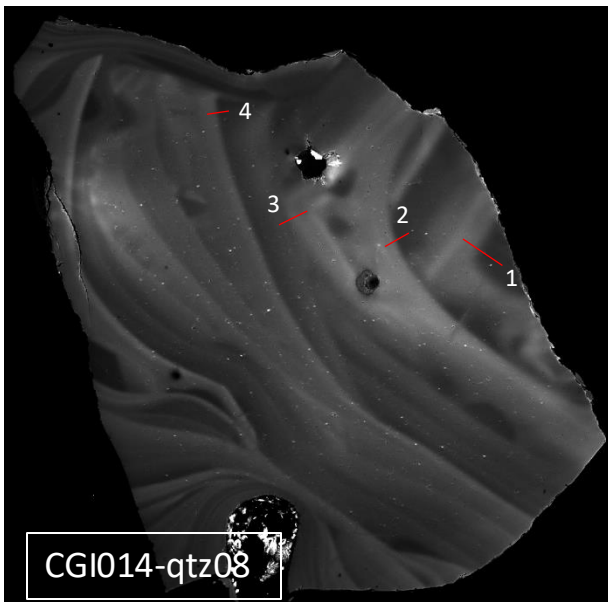


CGI014-qtz05

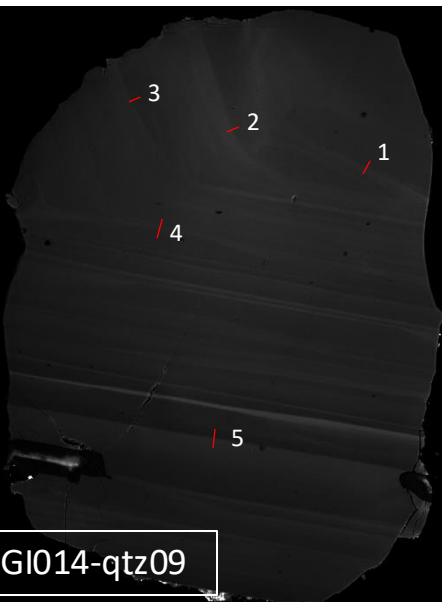


CGI014-qtz07

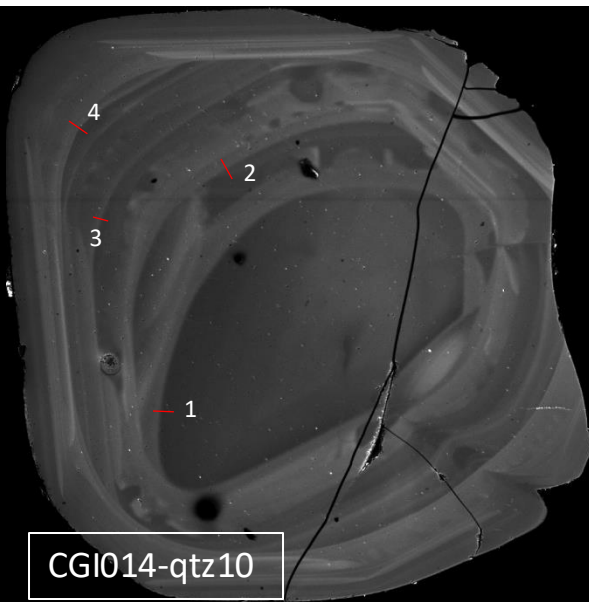
SEM HV: 15.0 kV	Scan speed: 8	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.80 mm	Det: CL	500 µm	View field: 1.60 mm	Det: CL	500 µm	View field: 1.90 mm	Det: CL	500 µm	View field: 1.50 mm	Det: CL	200 µm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES



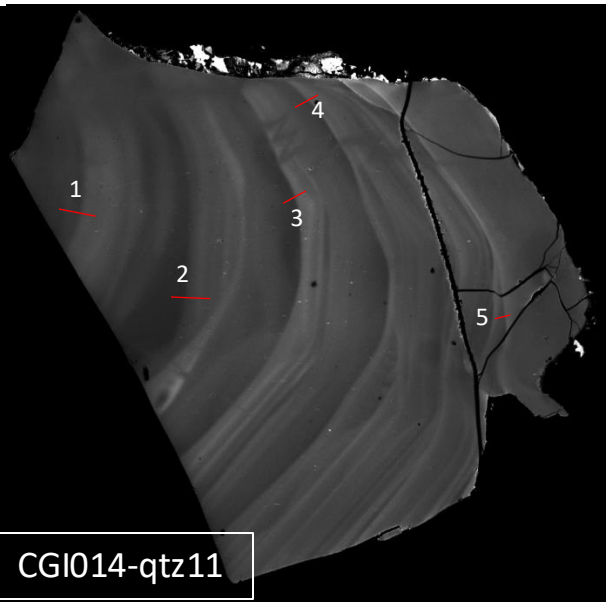
CGI014-qtz08



CGI014-qtz09



CGI014-qtz10



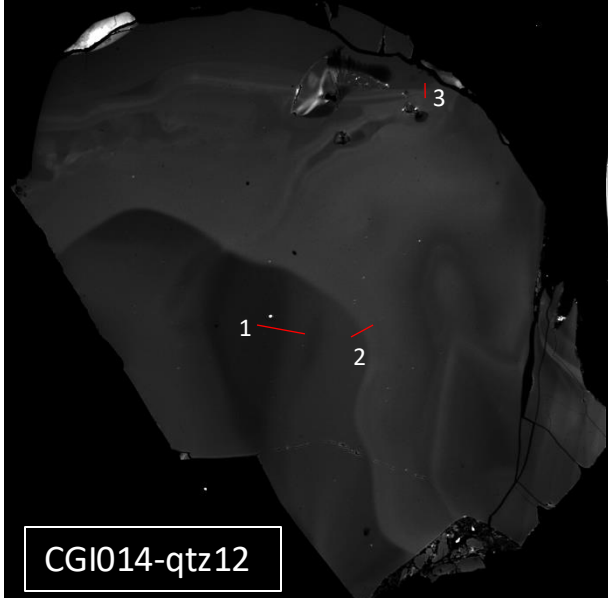
CGI014-qtz11

SEM HV: 15.0 kV Scan speed: 9
View field: 1.55 mm Det: CL
BI: 20.00 Date(m/d/y): 12/29/20

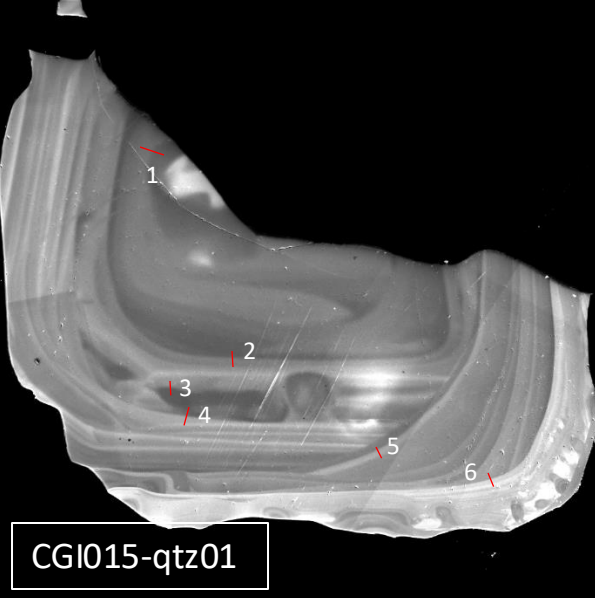
VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.55 mm Det: CL
BI: 20.00 Date(m/d/y): 12/29/20

VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.55 mm Det: CL
BI: 20.00 Date(m/d/y): 12/29/20

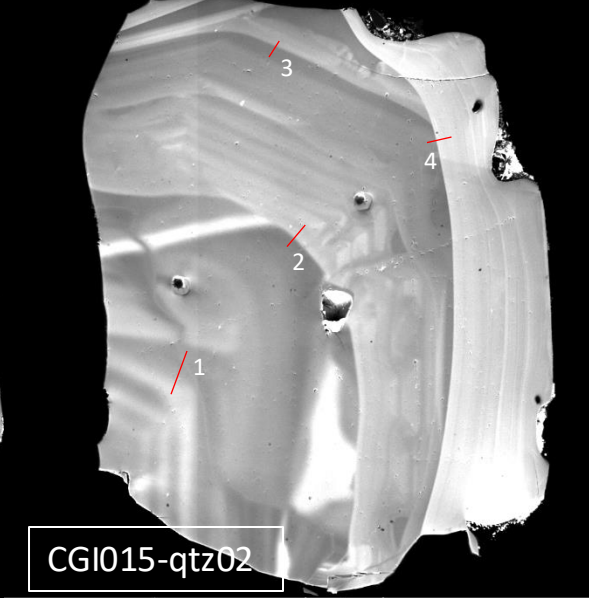
VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.50 mm Det: CL
BI: 20.00 Date(m/d/y): 12/29/20



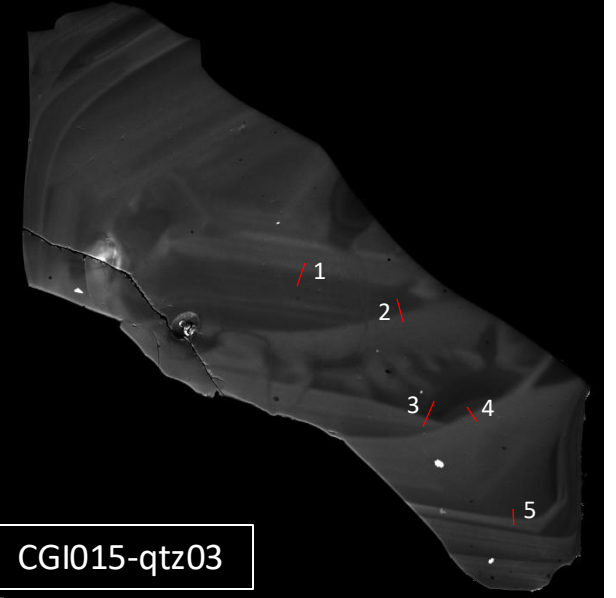
CGI014-qtz12



CGI015-qtz01



CGI015-qtz02



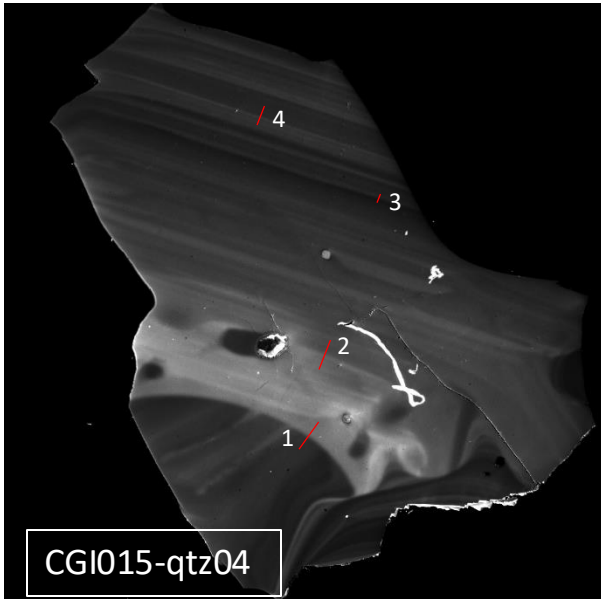
CGI015-qtz03

SEM HV: 15.0 kV Scan speed: 9
View field: 1.65 mm Det: CL
BI: 20.00 Date(m/d/y): 12/29/20

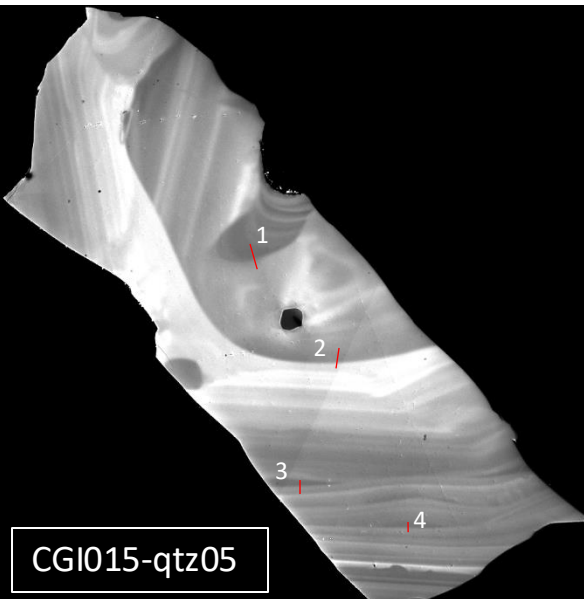
VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.80 mm Det: CL
BI: 20.00 Date(m/d/y): 12/30/20

VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.55 mm Det: CL
BI: 20.00 Date(m/d/y): 12/30/20

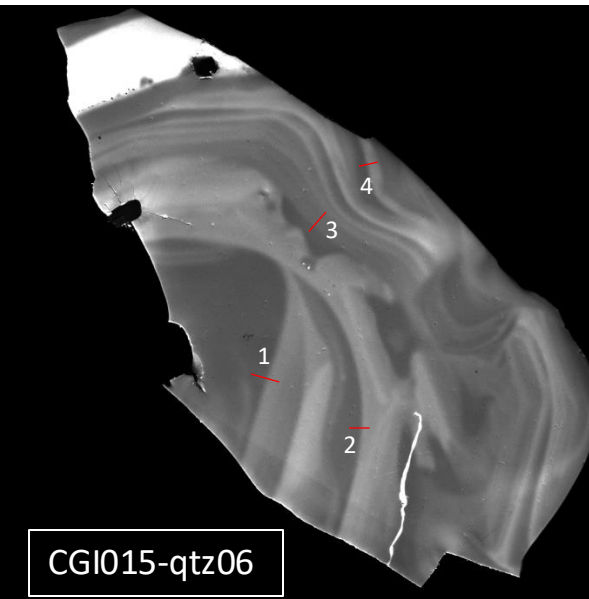
VEGA3 TESCAN SEM HV: 15.0 kV Scan speed: 9
View field: 1.75 mm Det: CL
BI: 20.00 Date(m/d/y): 12/31/20



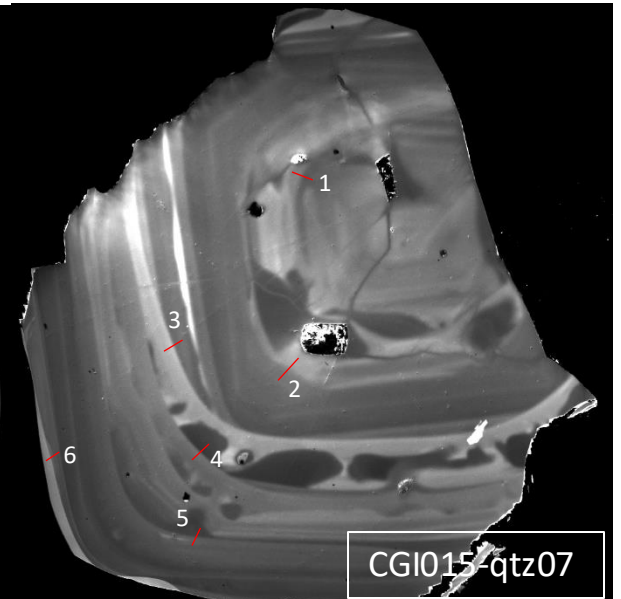
CGI015-qtz04



CGI015-qtz05



CGI015-qtz06



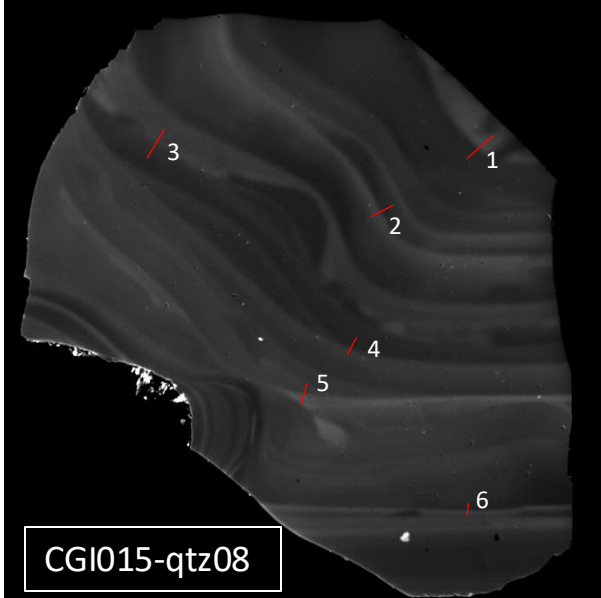
CGI015-qtz07

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.00 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 12/31/20 Vanderbilt Univ EES

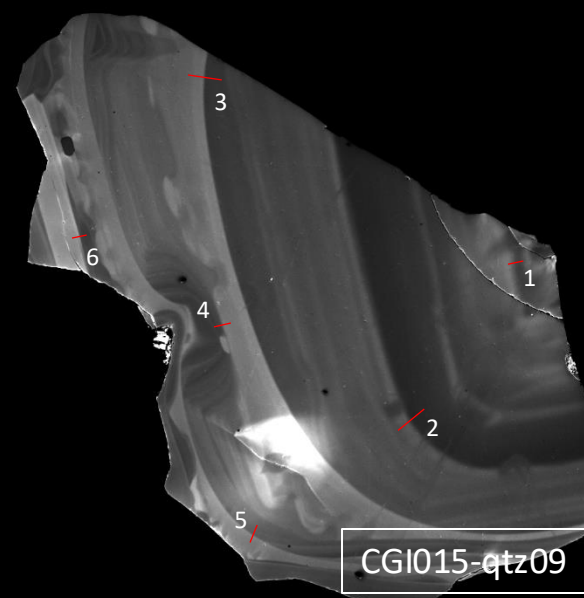
SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 1.90 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 12/31/20 Vanderbilt Univ EES

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 1.70 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 12/31/20 Vanderbilt Univ EES

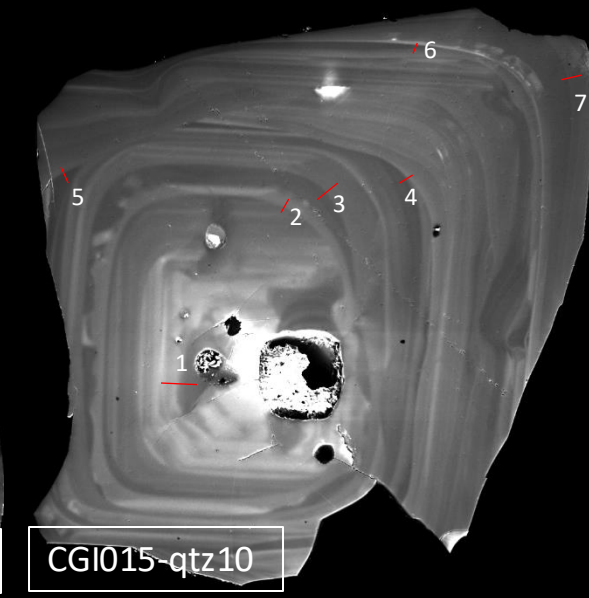
SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.25 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 12/31/20 Vanderbilt Univ EES



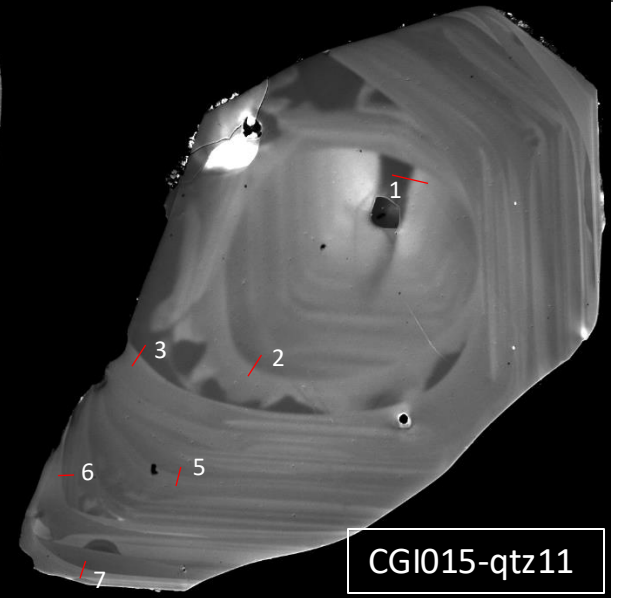
CGI015-qtz08



CGI015-qtz09



CGI015-qtz10



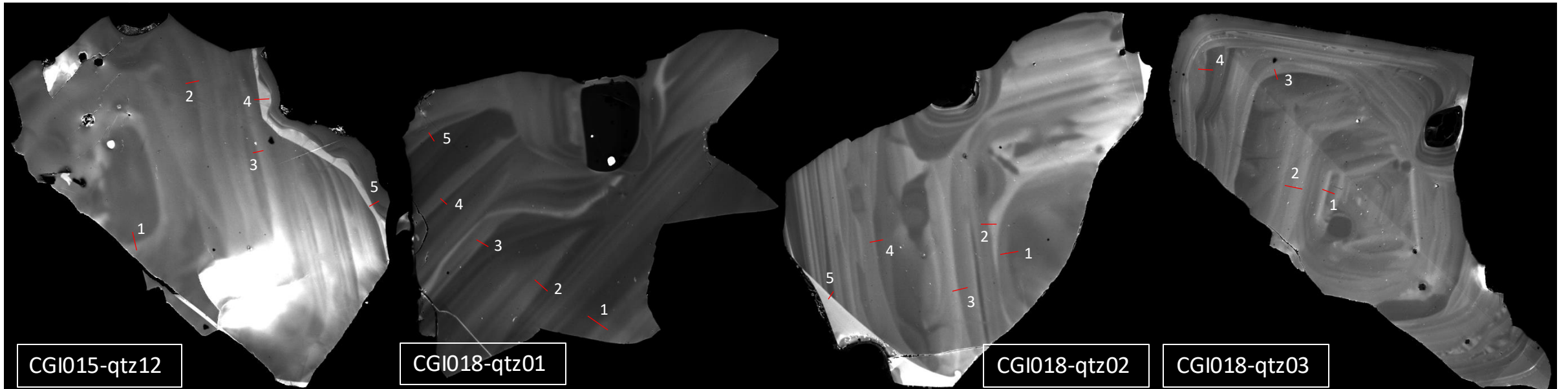
CGI015-qtz11

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 1.15 mm Det: CL 200 µm
BI: 20.00 Date(m/d/y): 12/31/20 Vanderbilt Univ EES

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.15 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 12/31/20 Vanderbilt Univ EES

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 2.05 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 12/31/20 Vanderbilt Univ EES

SEM HV: 15.0 kV Scan speed: 9 VEGA3 TESCAN
View field: 1.70 mm Det: CL 500 µm
BI: 20.00 Date(m/d/y): 12/31/20 Vanderbilt Univ EES



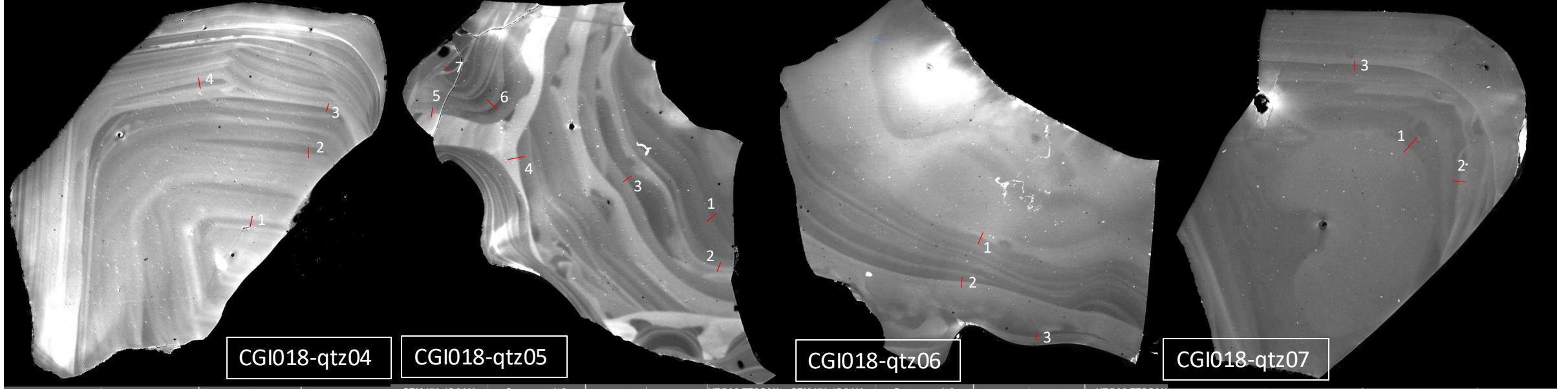
CGI015-qtz12

CGI018-qtz01

CGI018-qtz02

CGI018-qtz03

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 2.30 mm	Det: CL	500 μm	View field: 1.70 mm	Det: CL	500 μm	View field: 1.75 mm	Det: CL	500 μm	View field: 2.10 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/31/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES



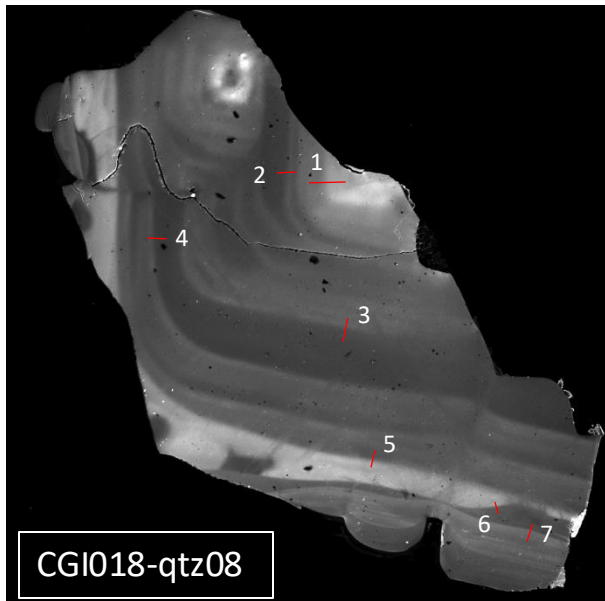
CGI018-qtz04

CGI018-qtz05

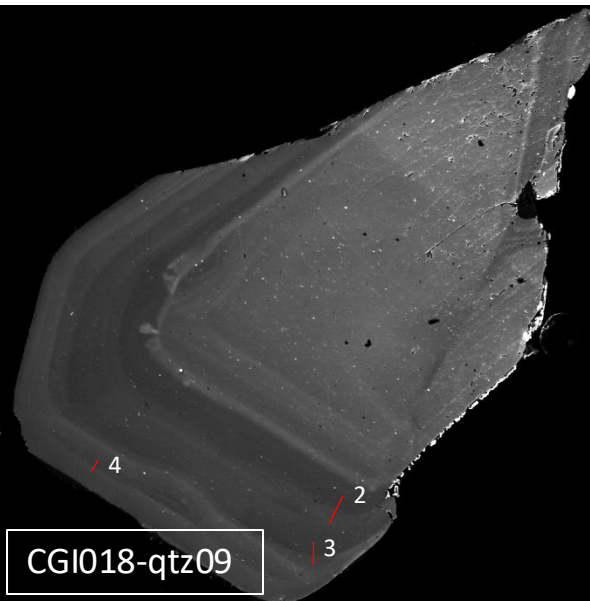
CGI018-qtz06

CGI018-qtz07

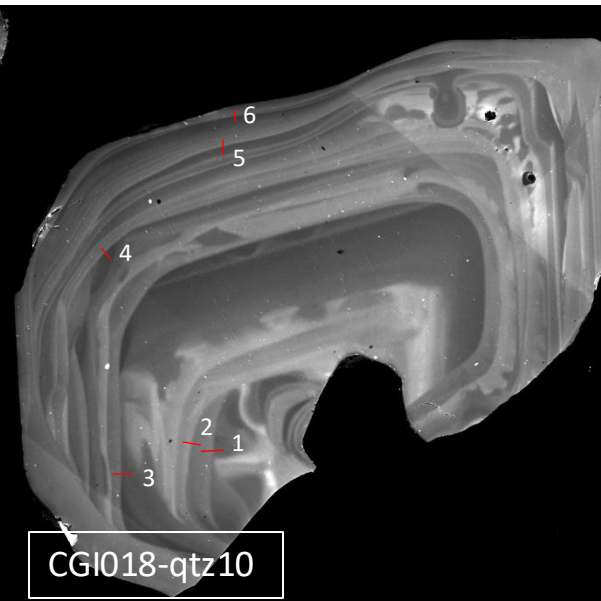
SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN	SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.90 mm	Det: CL	500 μm	View field: 1.60 mm	Det: CL	500 μm	View field: 1.75 mm	Det: CL	500 μm	View field: 1.70 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES	BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES



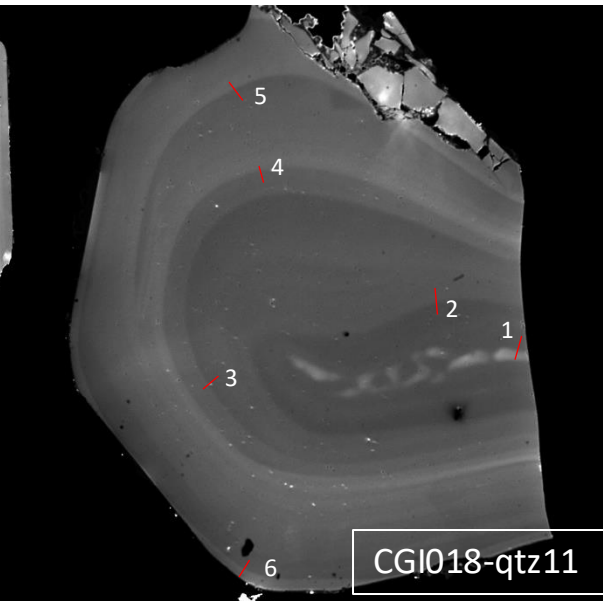
CGI018-qtz08



CGI018-qtz09



CGI018-qtz10



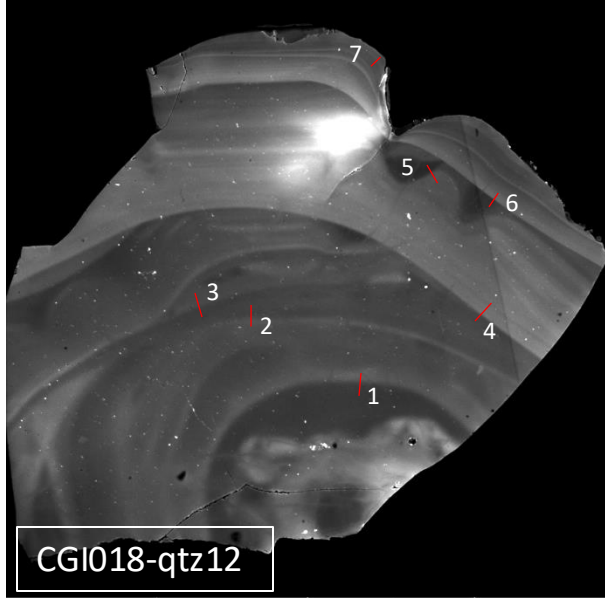
CGI018-qtz11

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 2.30 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 2.25 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 2.60 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.25 mm	Det: CL	200 μm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES



CGI018-qtz12

SEM HV: 15.0 kV	Scan speed: 9	VEGA3 TESCAN
View field: 1.80 mm	Det: CL	500 μm
BI: 20.00	Date(m/d/y): 12/29/20	Vanderbilt Univ EES