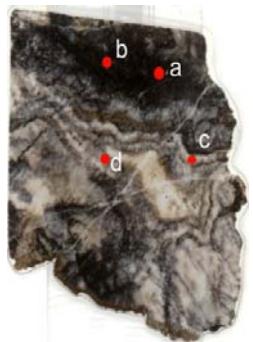


Table DR1 Carbon and oxygen isotopic compositions of cap dolostone and different cavity filling components*.

Sample	Description	$1000 \times {}^{13}\text{C}_{\text{VPDB}}$	$1000 \times {}^{18}\text{O}_{\text{VPDB}}$
ZB07-5-a-a	isopach. dolomite cement	-4.31	-13.89
ZB07-5-a-b	isopach. dolomite cement	-3.9	-14.12
ZB07-5-a-c	isopach. dolomite cement	-3.16	-7.05
ZB07-5-a-d	isopach. dolomite cement	-4.64	-9.16
ZB07-5-b-a	isopach. dolomite cement	-3.6	-8.54
ZB07-5-b-b	dolomite and quartz	-6.3	-11.8
ZB07-5-b-c	isopach. dolomite cement	-3.62	-7.65
ZB07-5-c-a	dolostone clast	-2.95	-11.25
ZB07-5-c-b	isopach. dolomite cement	-3.16	-9.37
ZB07-5-c-c	blocky calcite fill	-46.35	-6.78
ZB07-5-c-d	blocky calcite fill	-43.53	-7.47
ZB07-5-c-e	isopach. dolomite cement	-6.36	-10.9
ZB07-5-c-f	isopach. dolomite cement	-6.12	-11.13
ZB07-5-c-g	isopach. dolomite cement	-4.28	-8.72
ZB07-7-a	dolostone clast	-4.26	-9.51
ZB07-7-b	isopach. dolomite cement	-6.16	-12.66
ZB07-7-c	blocky calcite fill	-32.99	-9.04
ZB07-7-d	isopach. dolomite cement	-5.69	-12.03
ZB07-7-e	isopach. dolomite cement	-10.41	-9.08
ZB07-7-f	blocky calcite fill	-5.19	-13.94
ZB07-7-g	blocky calcite fill	-7.35	-11.39
ZB09-17-a	dolostone clast	-3.16	-8.49
ZB09-17-b	recrystallized dolomite	-5.28	-11.74
ZB09-17-c	blocky calcite fill	-8.11	-16.22
ZB09-17-d	isopach. dolomite cement	-3.54	-9.01
ZB09-17-e	isopach. dolomite cement	-4.12	-9.31
ZB09-17-3-a	isopach. dolomite cement	-4.64	-8.98
ZB09-17-3-b	isopach. dolomite cement	-5.44	-10.4
ZB09-17-3-c	isopach. dolomite cement	-5.04	-12.46

*Samples for carbon and oxygen isotope analyses were scraped with scalpel on thick thin sections and polished slab (ZB09-17-3) under microscope, and isotopic analyses were done in Laboratory on Biotechnology and Bioanalysis at Washington State University.



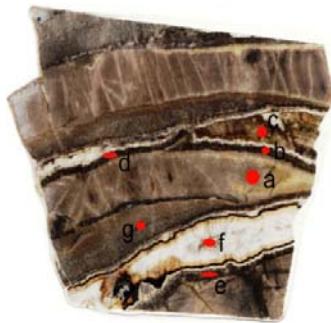
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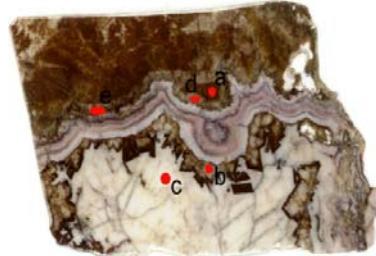
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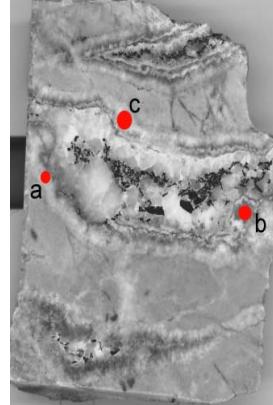
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ZB07-7



ZB09-17



ZB09-17-3