

*Diagenesis in the middle–upper Cambrian Xixiangchi Formation
from mineralogy and fluid inclusion analysis: Insight to fluid
history and basin evolution*

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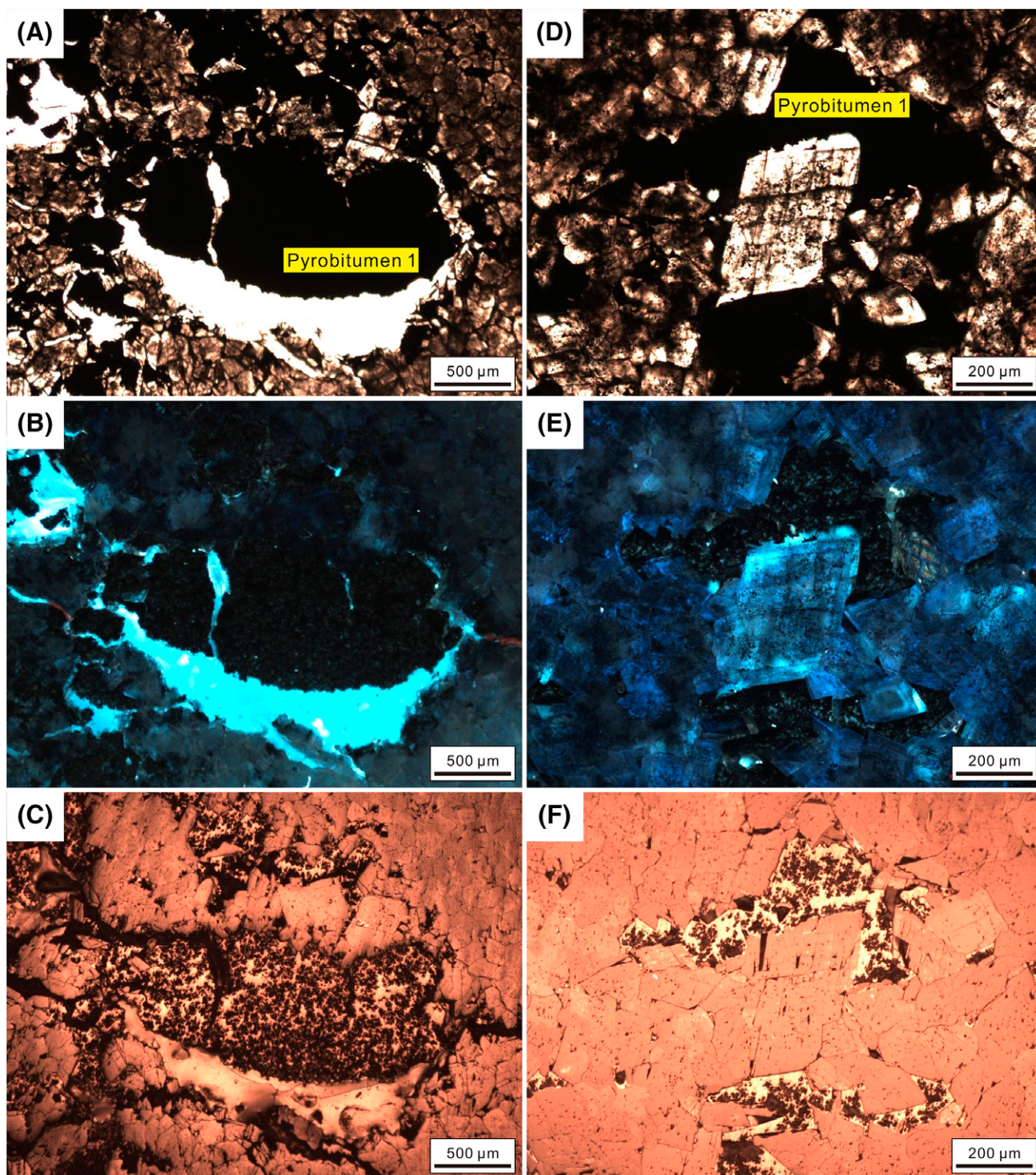


Figure S1. (A) Transmitted light (TL) image showing pyrobitumen 1. (B) Ultraviolet (UV) image of the same field of view as (A). (C) Reflected light (RL) image of the same field of view as (A) and (B). (D) TL image showing pyrobitumen 1. (E) UV image of the same field of view as (D). (F) RL image of the same field of view as (D) and (E).

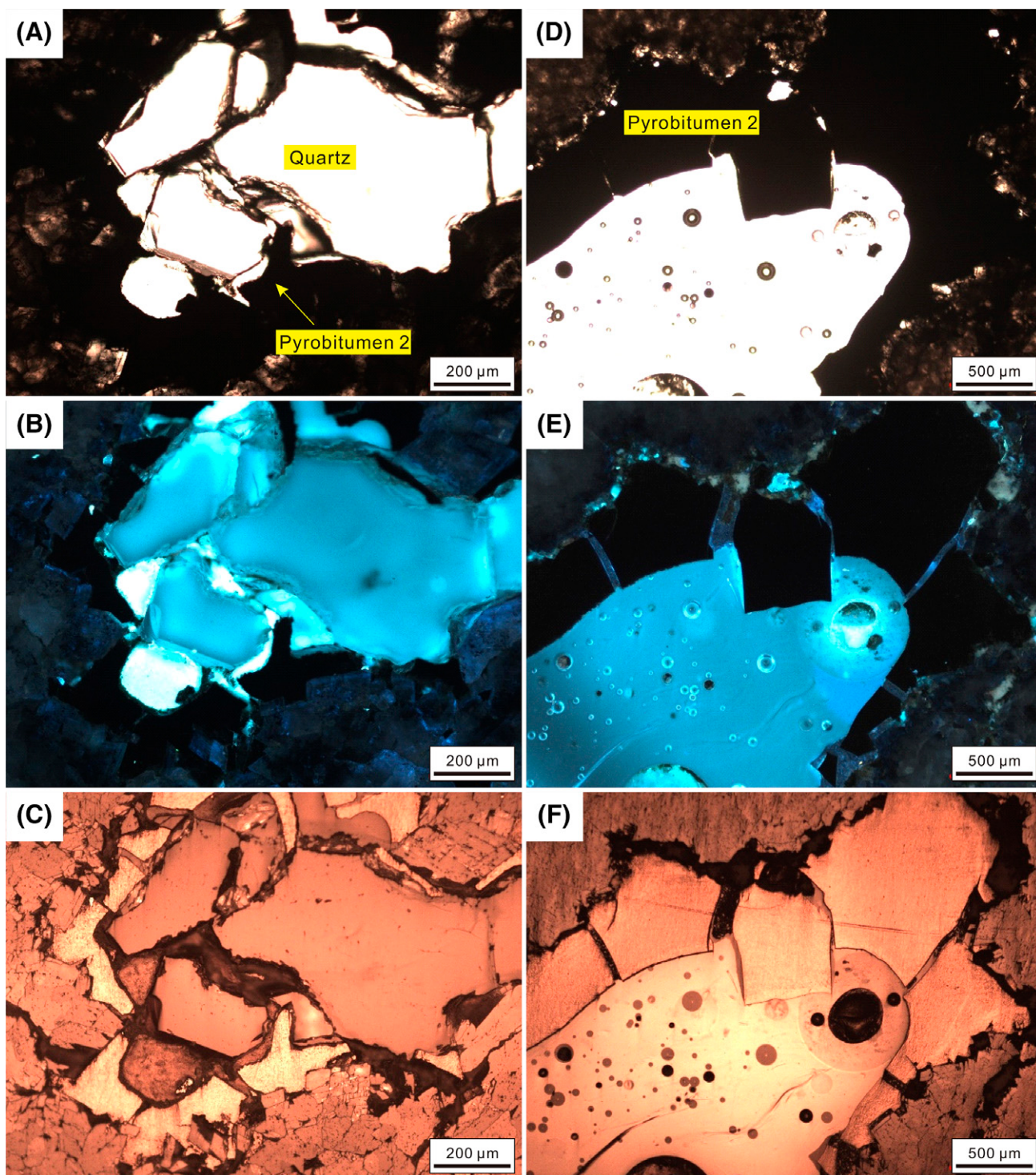


Figure S2. (A) Transmitted light (TL) image showing pyrobitumen 2. (B) Ultraviolet (UV) image of the same field of view as (A). (C) Reflected light (RL) image of the same field of view as (A) and (B). (D) TL image showing pyrobitumen 2. (E) UV image of the same field of view as (D). (F) RL image of the same field of view as (D) and (E).

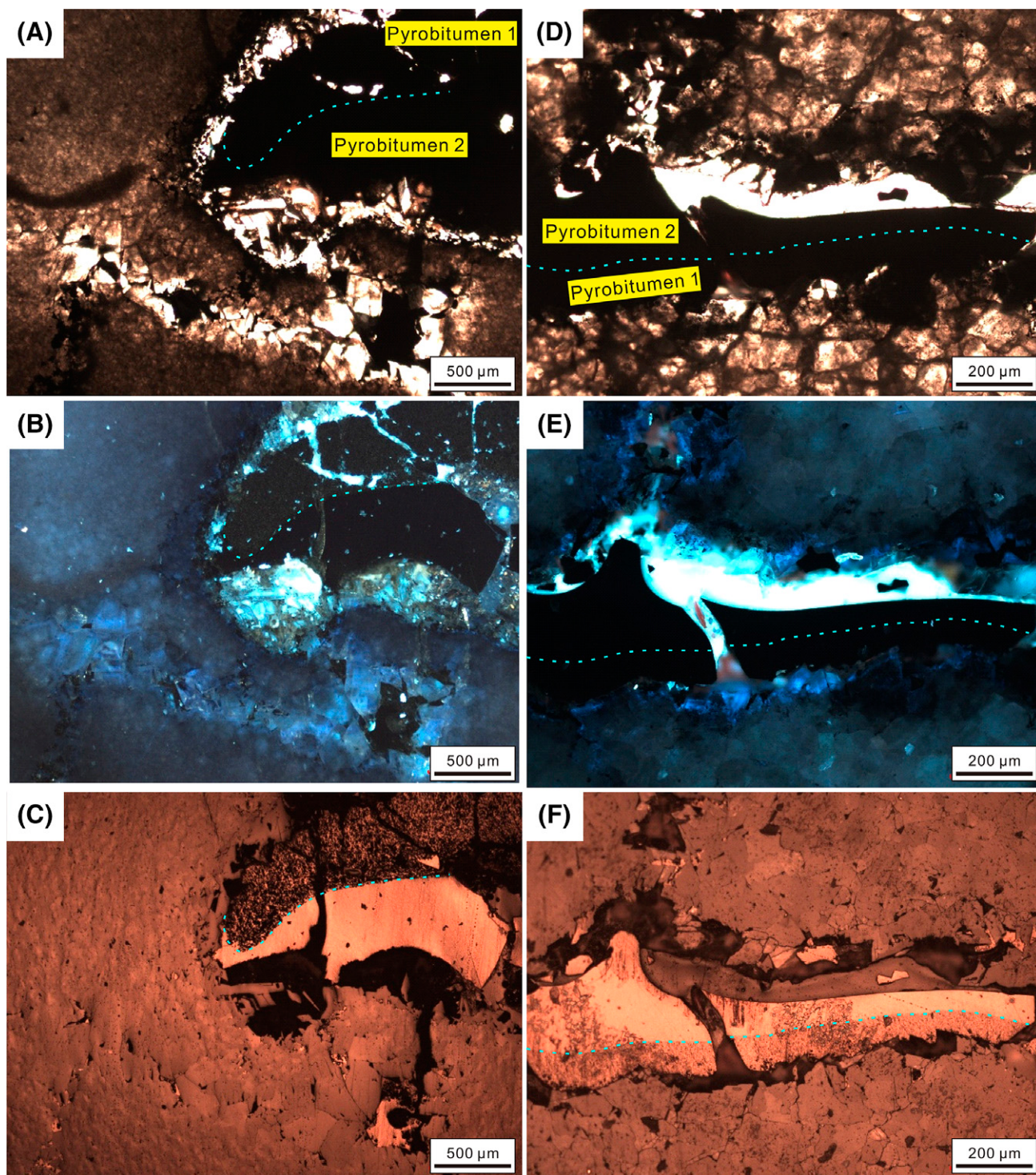


Figure S3. (A) Transmitted light (TL) showing pyrobitumen 1 and pyrobitumen 2 coexisting in the same pore with a smooth interface, pyrobitumen 1 showing an obtuse wetting angle. (B) Ultraviolet (UV) image of the same field of view as (A). (C) Reflected light (RL) image of the same field of view as (A) and (B). (D) TL image showing pyrobitumen 1 directly coating on the pore inner wall and pyrobitumen 2 covering on pyrobitumen 1 with a smooth interface. (E) UV image of the same field of view as (D). (F) RL image of the same field of view as (D) and (E).

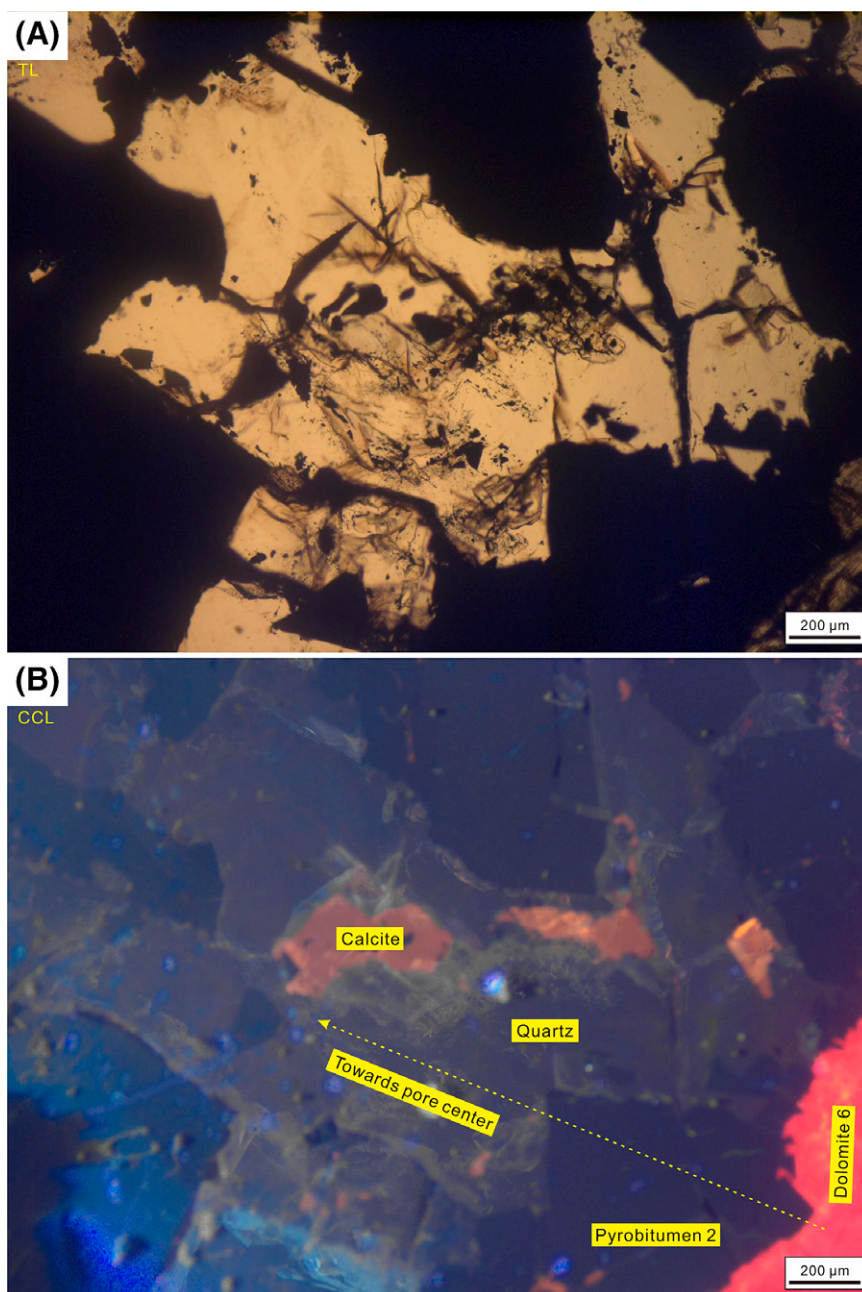


Figure S4. (A) Transmitted light image showing dolomite 6, pyrobitumen 2, quartz and calcite in dissolution pores. (B) Cold cathodoluminescence image of the same field of view as (A), showing dolomite 6 with bright red color, bitumen 2 with dark color, quartz with dark brown color, and calcite with dull yellow color.

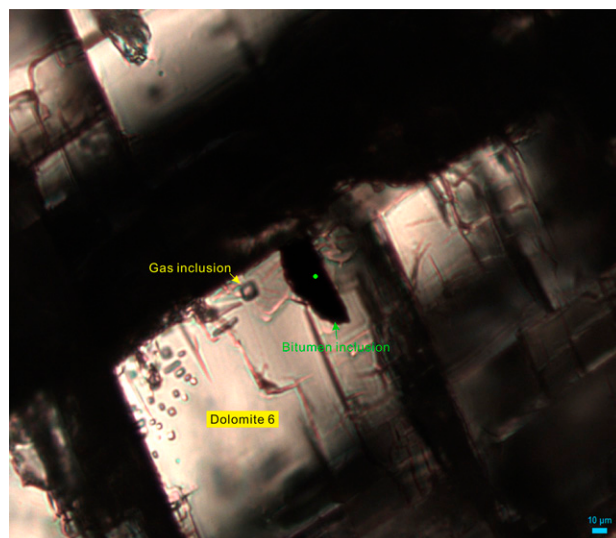


Figure S5. Transmitted light image showing primary gas and primary bitumen inclusions in dolomite 6 (taken by Raman microscopy).

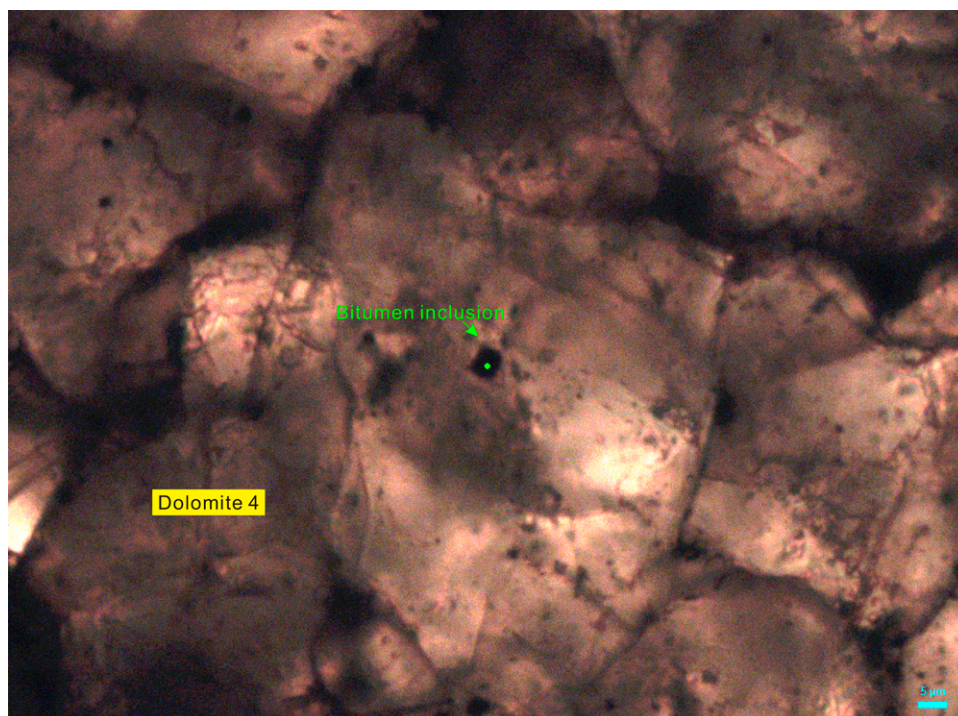


Figure S6. Transmitted light image showing primary bitumen inclusion in dolomite 4 (taken by Raman microscopy).