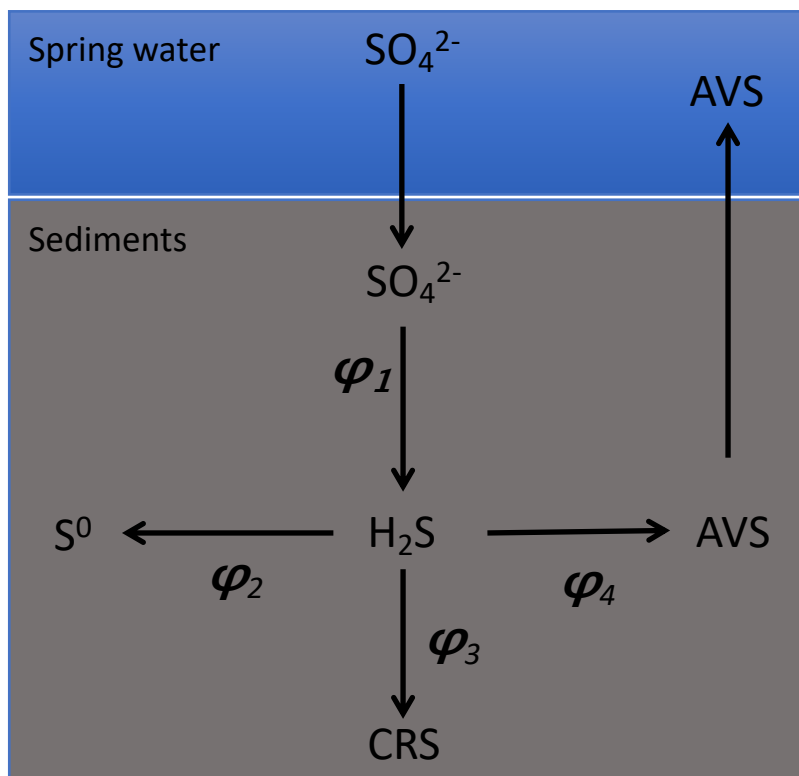


**Fig. S3. Potential sulfide fates in Gypsum Hill Spring 4 sediments.**  $\varphi$  indicate fluxes between various S pools. AVS: acid volatile sulfur, CRS: chromium reducible sulfur.



$$\varphi_1 = \varphi_{SO_4^{2-} - H_2S}$$

$$\varphi_2 = \varphi_{H_2S - S^0}$$

$$\varphi_3 = \varphi_{H_2S - CRS}$$

$$\varphi_4 = \varphi_{H_2S - AVS}$$