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Effectiveness and mechanism of natural attenuation at a petroleum-hydrocarbon contaminated site

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## ACCEPTED MANUSCRIPT

1	Effectiveness and mechanism of natural attenuation at a
2	petroleum-hydrocarbon contaminated site
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15	
16	Abstract
17	This study applied an integrated method for evaluating the effectiveness and
18	mechanism of natural attenuation (NA) of petroleum-hydrocarbon contaminated
19	groundwater. Site groundwater and soil samples were analysed to characterize spatial
20	and temporal variations in petroleum hydrocarbons, geochemical indicators, microbial
21	diversity and isotopes. The results showed that the area of petroleum hydrocarbon
22	contamination plume decreased almost 60% in four years, indicating the presence of

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