

RAPPORT SGS ANALYTICAL SERVICES

Onderwerp	:	Bepaling van vluchtige organische chloorkoolwaterstoffen (VOCI) en BTEX in een watermonster van de BioBTX pilotplant
Opdrachtgever	:	Akker, van M.
Rapportnummer	:	/SGS/2022061
Rapportdatum	:	17-11-2022
Kostenplaats	:	Lab werk
Referentie klant	:	221116-01
Referentie SGS	:	Wezeman, Bert

Inleiding

Op verzoek van opdrachtgever wordt een watermonster onderzocht op vluchtige organische gechloreerde componenten (VOCI) zoals weergegeven in tabel 1. In hetzelfde monster worden de concentraties aan benzeen, tolueen, ethylbenzeen, para-,meta- en ortho-Xyleen (BTEX) bepaald.

Aanvullend wordt het monster nog onderzocht op eventuele aanwezigheid van andere (gechloreerde) componenten. In een later stadium wordt besloten of dit monster nog onderzocht wordt op de aanwezigheid van componenten zoals weergegeven in bijlage 2. Dit betreffen VOX componenten die op laag niveau > 1 µg/l gemeten kunnen worden.

Monster:

Omschrijving: water van olie PB156 Monsterdatum: 07-11-2022 Fles: Schott 250ml met blauwe dop Inhoud: ca 100 ml

Bevindingen

Zie tabel 1 en 2 voor de resultaten van de VOCI en BTEX componenten. Het overzicht van de screening gemeten in de Full scan mode wordt in bijlage 1 weergegeven. Het bijbehorende chromatogram en een vergroting worden in de bijlagen 3 en 4 getoond.

Bijlage 2 geeft de overige componenten weer welke tot de VOX groep behoren. Ondanks het gegeven dat deze niet aangetoond zijn met de screening analyse in full scan mode betekent dit niet dat deze afwezig zijn in dit monster. De X staat voor chloride, bromide of fluoride.

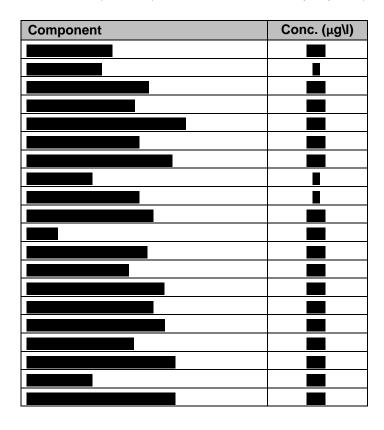
Aanbeveling

Om een bevestiging te krijgen over de aan- of afwezigheid van de overige VOX componenten is het aan te bevelen om deze stoffen selectief te meten in SIM mode.

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Tabel 1: VOX (CI, Br, F) in water van de BioBTX pilotplant (PB156) d.d. 7-11-2022



Tabel 2: BTEX in water van de BioBTX pilotplant (PB156) d.d. 7-11-2022

Component	μg\l
Benzeen	104000
Tolueen	71500
Ethylbenzeen	5900
mp-Xyleen	5800
o-Xyleen	3600

For and on behalf of SGS Nederland B.V.

Fabian P. Mulder Natural Resources Oil, Gas & Chemical Analytical Services Branch Manager

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Component	Waarschijnlijkheid (%)	CAS

Bijlage 1: overzicht componenten in water van de BioBTX pilotplant (PB156) d.d. 7-11-2022

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Furan	

Bijlage 2: tabel met overige VOX componenten van de VOX groep, X=CI, Br of F



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Bijlage3: TIC chromatogram BioBTX water PB156 d.d. 7-11-2022

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SGS Nederland B.V. Oosterhorn 4, 9936 HD, Delfzijl, the Netherlands



Bijlage3: TIC chromatogram BioBTX water PB156 d.d. 7-11-2022 vergroot



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RAPPORT SGS ANALYTICAL SERVICES

Onderwerp	:	Bepaling van diverse parameters in een water monster PB156 van BioBTX
Opdrachtgever	•	van Akker, Matthijs
Rapportnummer	:	/BioBTX/2022000
Rapportdatum	:	01-12-2022
Kostenplaats	:	BioBTX
Referentie klant	:	221121-01
Referentie SGS	:	Wezeman, Bert

Monster omschrijving: water PB156 Monsterdatum: 22-11-2022

Component	Resultaat (µg/l)	
Arseen (As)	10	
Cadmium (Cd)	< 1	
Kobalt (Co)	< 10	Ontsluiting: EN-ISO 54321 Analyse: NEN-EN-ISO 17294-2
Kwik (Hg)	< 0.1	(ICP-MS)
Lood (Pb)	< 10	
Nikkel (Ni)	< 10	
Telluur (Te)	< 10	

Component	Resultaat (mg/l)	
CZV		NEN 6633

Anionen	Resultaat (mg/l)	Methode
Fluoride (F ⁻)	< 1	
Chloride (Cl ⁻)	70	
Nitriet (NO2 ⁻)	< 0.5	ISO 10304-1/4, ISO15061
Nitraat (NO₃⁻)	7	
Sulfaat (SO ₄ ²⁻)	30	
Fosfaat (PO43-)	< 1	

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РАК	Resultaat (µg/l)	Methode
	B	

PAK's: In verband met de matrix is (zijn) de rapportage grens(zen) verhoogd.

Aromaat	Resultaat (µg/l)	Methode

Vluchtige verbindingen, Benzeen: Het resultaat moet worden beschouwd als semi-kwantitatief. Vluchtige verbindingen, Cumeen: In verband met de matrix is (zijn) de rapportage grens(zen) verhoogd.

	Resultaat (µg/l)	Methode
AOX als Cl	< 220 [*]	Conform WAC/IV/B/011

In verband met de matrix is (zijn) de rapportage grens(zen) verhoogd.

	Resultaat (µg/l)	Methode
EOX als Cl	6.8	Conform NEN 6402

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