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Analyserapport

Certicon Kwaliteitsk. BV
[redacted]
Keplerlaan 14
6716 BS EDE

Uw projectnaam	: Onderzoek TGG Eemshaven - deelpartij 2
Uw projectnummer	: P2019-0402
SYNLAB rapportnummer	: 12999589, versienummer: 1
Rapport-verificatienummer	: UUJWPUJQ

Rotterdam, 08-04-2019

Geachte heer/mevrouw,

Hierbij ontvangt u de analyse resultaten van het laboratoriumonderzoek ten behoeve van uw project P2019-0402. Het onderzoek werd uitgevoerd conform uw opdracht. De gerapporteerde resultaten hebben uitsluitend betrekking op de geteste monsters. De door u aangegeven omschrijvingen voor de monsters en het project zijn overgenomen in dit analyserapport.

Het onderzoek is uitgevoerd door SYNLAB Analytics & Services B.V., gevestigd aan de Steenhouwerstraat 15 in Rotterdam (NL). Indien het onderzoek is uitgevoerd door derden of het SYNLAB laboratorium in Frankrijk (99-101 Avenue Louis Roche, Gennevilliers) is dit in het rapport aangegeven.

Dit analyserapport bestaat inclusief bijlagen uit 7 pagina's. In geval van een versienummer van '2' of hoger vervallen de voorgaande versies. Alle bijlagen maken onlosmakelijk onderdeel uit van het rapport. Alleen vermenigvuldiging van het hele rapport is toegestaan.

Mocht u vragen en/of opmerkingen hebben naar aanleiding van dit rapport, bijvoorbeeld als u nadere informatie nodig heeft over de meetonzekerheid van de analyseresultaten in dit rapport, dan verzoeken wij u vriendelijk contact op te nemen met de afdeling Customer Support.

Wij vertrouwen er op u met deze informatie van dienst te zijn.

[redacted]

[redacted]

Analyserapport

Projectnaam	Onderzoek TGG Eemshaven - deelpartij 2	Orderdatum	21-03-2019
Projectnummer	P2019-0402	Startdatum	21-03-2019
Rapportnummer	12999589 - 1	Rapportagedatum	08-04-2019

Nummer	Monstersoort	Monsterspecificatie
001	Grond	M1-5
002	Grond	M1-6

Analyse	Eenheid	Q	001	002
ANALYSES UITGEVOERD DOOR DERDEN				
Dioxines (PCDD/PCDF)			zie bijlage	zie bijlage
I-PCDD/F-TEQ Lower Bound	ng/kgds		0.3	0
I-PCDD/F-TEQ Upper Bound	ng/kgds		5.9	5.9
WHO-PCDD/F-TEQ Lower Bound	ng/kgds		0.3	0
WHO-PCDD/F-TEQ Upper Bound	ng/kgds		6.5	6.4
PBDE			zie bijlage	zie bijlage

Paraaf :

SYNLAB

Certicon Kwaliteitsk. BV

Analyserapport

Projectnaam	Onderzoek TGG Eemshaven - deelpartij 2	Orderdatum	21-03-2019
Projectnummer	P2019-0402	Startdatum	21-03-2019
Rapportnummer	12999589 - 1	Rapportagedatum	08-04-2019

Analyse	Monstersoort	Relatie tot norm
Dioxines (PCDD/PCDF)	Grond	Analyse uitbesteed
I-PCDD/F-TEQ Lower Bound	Grond	Idem
I-PCDD/F-TEQ Upper Bound	Grond	Idem
WHO-PCDD/F-TEQ Lower Bound	Grond	Idem
WHO-PCDD/F-TEQ Upper Bound	Grond	Idem
PBDE	Grond	Idem

Monster	Barcode	Aanlevering	Monstername	Verpakking
001	Y7665951	21-03-2019	21-03-2019	ALC201
002	Y7665938	21-03-2019	21-03-2019	ALC201

Paraaf :

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REPORT

issued by an Accredited Laboratory

Report No. 19113527

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194 AG ROTTERDAM

Applies to

Information about the project ***Soil***

Project number : 12999589

Information about sample and sampling

Invoice reference	: P77652	Date of Arrival	: 2019-03-25
Sampling date	: 2019-03-21	Time of Arrival	: 1200
Sample name	: 12999589-001 M1-5		
Depth of sampling	: -		
Sampler	: -		

Results of the analyses

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 11465	Dry substance	89.8	± 8.98	%
SIS-CEN/TS 16190:2013mod	2378 TCDD	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	12378 PeCDD	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	123478 HxCDD	< 2	± 0.70	ng/kg DS
SIS-CEN/TS 16190:2013mod	123678 HxCDD	2.2	± 0.77	ng/kg DS
SIS-CEN/TS 16190:2013mod	123789 HxCDD	< 2	± 0.70	ng/kg DS
SIS-CEN/TS 16190:2013mod	1234678 HpCDD	7.9	± 2.4	ng/kg DS
SIS-CEN/TS 16190:2013mod	OCDD	11	± 3.3	ng/kg DS
SIS-CEN/TS 16190:2013mod	2378 TCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	12378 PeCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	23478 PeCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	123478 HxCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	123678 HxCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	123789 HxCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	234678 HxCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	1234678 HpCDF	< 5	± 1.5	ng/kg DS
SIS-CEN/TS 16190:2013mod	1234789 HpCDF	< 5	± 1.5	ng/kg DS
SIS-CEN/TS 16190:2013mod	OCDF	< 10	± 3.0	ng/kg DS
Calculated acc. NATO	I-PCDD/F-TEQ Lower Bound	0.30	± 0.70	ng/kg DS
Calculated acc. NATO	I-PCDD/F-TEQ Upper Bound	5.9	± 2.1	ng/kg DS
Calculated acc. WHO2005	WHO-PCDD/F-TEQ LB	0.30	± 0.70	ng/kg DS
Calculated acc. WHO2005	WHO-PCDD/F-TEQ UB	6.5	± 2.3	ng/kg DS
	Dry substance (1)	92.3		%
GC/MS (*)	2,4,4'-TrBDE #28 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4'-TeBDE # 47 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4',5-PnBDE #99 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4',6-PnBDE #100 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4',5,5'-HxBDE #153 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4',5,6'-HxBDE #154 (1)	< 0.2		mg/kg TS

(*) :Method not accredited by Swedac
(1) Result supplied by RPS Mountainheath, UK

The stated uncertainty of measurement is calculated using a coverage k = 2. Measurement uncertainty for accredited microbiological analyses are available from the laboratory upon request.

(continued)

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Applies to

Information about the project	*Soil*
Project number	: 12999589

Information about sample and sampling

Invoice reference	: P77652	Date of Arrival	: 2019-03-25
Sampling date	: 2019-03-21	Time of Arrival	: 1200
Sample name	: 12999589-001 M1-5		
Depth of sampling	: -		
Sampler	: -		

Results of the analyses

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
GC/MS (*)	2,2',3,4,4',5',6-HpBDE #183 (1)	< 0.2		mg/kg TS
GC/MS (*)	DekaBDE #209 (1)	< 0.2		mg/kg TS

(*) :Method not accredited by Swedac
(1) Result supplied by RPS Mountainheath, UK

The stated uncertainty of measurement is calculated using a coverage k = 2. Measurement uncertainty for accredited microbiological analyses are available from the laboratory upon request.

Linköping 2019-04-08

The report has been reviewed and approved by

Responsible reviewer

Control numbers 7284 0889 1686 6845

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Rotterdam

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Applies to

Information about the project	*Soil*
Project number : 12999589	

Information about sample and sampling

Invoice reference	: P77652	Date of Arrival	: 2019-03-25
Sampling date	: 2019-03-21	Time of Arrival	: 1200
Sample name	: 12999589-002 M1-6		
Depth of sampling	: -		
Sampler	: -		

Results of the analyses

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 11465	Dry substance	89.8	± 8.98	%
SIS-CEN/TS 16190:2013mod	2378 TCDD	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	12378 PeCDD	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	123478 HxCDD	< 2	± 0.70	ng/kg DS
SIS-CEN/TS 16190:2013mod	123678 HxCDD	< 2	± 0.70	ng/kg DS
SIS-CEN/TS 16190:2013mod	123789 HxCDD	< 2	± 0.70	ng/kg DS
SIS-CEN/TS 16190:2013mod	1234678 HpCDD	< 5	± 1.5	ng/kg DS
SIS-CEN/TS 16190:2013mod	OCDD	< 10	± 3.0	ng/kg DS
SIS-CEN/TS 16190:2013mod	2378 TCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	12378 PeCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	23478 PeCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	123478 HxCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	123678 HxCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	123789 HxCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	234678 HxCDF	< 2	± 0.60	ng/kg DS
SIS-CEN/TS 16190:2013mod	1234678 HpCDF	< 5	± 1.5	ng/kg DS
SIS-CEN/TS 16190:2013mod	1234789 HpCDF	< 5	± 1.5	ng/kg DS
SIS-CEN/TS 16190:2013mod	OCDF	< 10	± 3.0	ng/kg DS
Calculated acc. NATO	I-PCDD/F-TEQ Lower Bound	0.0	± 0.70	ng/kg DS
Calculated acc. NATO	I-PCDD/F-TEQ Upper Bound	5.9	± 2.1	ng/kg DS
Calculated acc. WHO2005	WHO-PCDD/F-TEQ LB	0.0	± 0.70	ng/kg DS
Calculated acc. WHO2005	WHO-PCDD/F-TEQ UB	6.4	± 2.2	ng/kg DS
	Dry substance (1)	90.5		%
GC/MS (*)	2,4,4'-TrBDE #28 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4'-TeBDE # 47 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4',5-PnBDE #99 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4',6-PnBDE #100 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4',5,5'-HxBDE #153 (1)	< 0.2		mg/kg TS
GC/MS (*)	2,2',4,4',5,6'-HxBDE #154 (1)	< 0.2		mg/kg TS

(*) :Method not accredited by Swedac
(1) Result supplied by RPS Mountainheath, UK

The stated uncertainty of measurement is calculated using a coverage k = 2. Measurement uncertainty for accredited microbiological analyses are available from the laboratory upon request.

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Information about the project	*Soil*
Project number : 12999589	

Information about sample and sampling

Invoice reference	: P77652	Date of Arrival	: 2019-03-25
Sampling date	: 2019-03-21	Time of Arrival	: 1200
Sample name	: 12999589-002 M1-6		
Depth of sampling	: -		
Sampler	: -		

Results of the analyses

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
GC/MS (*)	2,2',3,4,4',5',6-HpBDE #183 (1)	< 0.2		mg/kg TS
GC/MS (*)	DekaBDE #209 (1)	< 0.2		mg/kg TS

(*) :Method not accredited by Swedac
(1) Result supplied by RPS Mountainheath, UK

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Linköping 2019-04-08
The report has been reviewed and approved by

Responsible reviewer
Control numbers 7181 0686 1687 6148