MILIEUTECHNISCH ADVIESBUREAU HEEL BV

St. Antoniusstraat 10
6097 ND Panheel
Postbus 5049
6097 ZG Heel
Telefoon
(0475) 57 32 31
Telefax
(0475) 57 15 09
E-mail: info@mah-bv.nl
Website: www.mah-bv.nl

ABN AMRO bank
NL47 ABNA 060 35 70 186
KvK Roermond
13038100
BTW-nummer
NL8048.57.544.B01

Waterschap Limburg
T.a.v. dhr. A. van Dijck
Postbus 2207
6040 CC Roermond

uw ref: - onze ref: 0303WAL/19/R rev.1 Panheel, 13 december 2019

Betreft : Aanvullend (water)bodemonderzoek Schelkensbeek te Beesel
Behandeld door : Dhr. drs. M.A.J. de Vaan

Geachte heer van Dijck,

Hierbij ontvangt u de resultaten van het verkennend (water)bodemonderzoek dat is uitgevoerd voor het project 'Gebiedspilot Schelkensbeek – Water in Balans'. Het onderzoek is uitgevoerd in verband met de uit te voeren graaf- / baggerwerkzaamheden ten behoeve van de verdieping van de bestaande watergang (Schelkensbeek).
Voorliggend bodemonderzoek is deels uitgevoerd conform de NEN 5740 (landbodem) en deels volgens de NEN 5720 (waterbodem) en betreft een aanvulling op eerder uitgevoerd onderzoek. In verband met het 'Tijdelijk Handelingskader PFAS' van 8 juli 2019 heeft aanvullend onderzoek plaatsgevonden naar het voorkomen van PFAS en GenX. Verder zijn een drietal extra duikers ook aanvullend conform NEN5740 onderzocht.

Doelstelling
Doel van het (water)bodemonderzoek is het vaststellen of er sprake is van het voorkomen van PFAS en/of GenX ter plaatse van de onderzoekslocatie in verband met het bepalen van de afzetmogelijkheden van de grond en waterbodem.

Waarborg
Het veldwerk is uitgevoerd onder certificaat EC-SIK-20307 "Veldwerk bij milieuhygiënisch bodemonderzoek (vigerende versie), conform VKB protocol 2001 'Plaatsen van handboringen en peilbuizen, maken van boorbeschrijvingen het nemen van grondmonsters en waterpassen' (vigerende versie) en conform VKB protocol 2003 'Veldwerk bij milieuhygiënisch waterbodemonderzoek' (vigerende versie).

Aangezien de onderzoekslocatie geen eigendom is van MAH BV of de overige aan deze bedrijven gelieerde ondernemingen binnen de holding Bloem Beheer BV wordt voldaan aan de eisen van onafhankelijkheid uit de BRL 2000.

Dit bodemonderzoek is door MAH BV met de grootste zorg en conform de vigerende richtlijnen uitgevoerd. Desondanks kunnen de onderzoeksresultaten afwijkingen vertonen met de werkelijke situatie aangezien de resultaten een momentopname zijn en onderhevig kunnen zijn aan veranderingen als gevolg van biologische, chemische en/of fysische processen in de bodem.

Vooronderzoek NEN 5717 / NEN 5725
Voor het vooronderzoek wordt verwezen naar het verkennend (water)bodemonderzoek met rapportnummer 0038WAL/19/R d.d. 2 mei 2019 van MAH BV.

Onderzoeksopzet waterbodem (NEN 5720)
Het verkennend waterbodemonderzoek wordt uitgevoerd conform de NEN5720:2017. De watergang wordt onderzocht volgens de strategie 'Lintvormig water, normale onderzoeksinspanning (LN). De maximale diepte van de graafwerkzaamheden bedraagt volgens informatie van de opdrachtgever max. 0,5 m-bovenzijde waterbodem.

Op basis van de strategie LN worden de volgende boringen en analyses uitgevoerd:
- Totale lengte 3.500 meter, breedte variërend.
- 8 vakken van 10 boringen tot 0,5 m-waterbodem.
- Monstername per bodemlaag van max. 0,5 meter.
- Per bodemlaag van max. 0,5 meter wordt bij gelijke bodemsamenstelling per vak 1 mengmonster samengesteld. Totaal aantal mengmonsters bedraagt derhalve minimaal 8.
- Analyse van de mengmonsters op PFAS en GenX.

Onderzoeksopzet duikers (NEN5740, NEN5707/NEN5897)
Het verkennend bodemonderzoek wordt uitgevoerd conform de NEN5740. Op basis van de gegevens uit het vooronderzoek wordt de strategie onverdacht (ONV) gevolgd.
Conform de strategie worden per duiker de onderstaande werkzaamheden uitgevoerd:
- 2 boringen tot 0,5 m-mv;
- 1 boring tot 2,0 m-mv.

Er wordt per duiker 1 mengmonster van de bovengrond en 1 mengmonster van de ondergrond geanalyseerd op PFAS en GenX. Van de extra duikers is zowel de boven- als de ondergrond ook geanalyseerd op een NEN-pakket grond.

Uitvoering veldwerk
Het veldwerk is door dhr. M. Linssen en dhr. M. Angenent, gecertificeerd veldwerkers van MAH BV uitgevoerd in de periode 24 september 2019 tot en met 4 oktober 2019. Voorafgaand aan de uitvoering van het veldwerk is nog een inspectie uitgevoerd om te verifiëren of de beschikbare informatie uit het vooronderzoek wordt bevestigd. Er zijn geen afwijkingen geconstateerd. Foto's van de locatie zijn opgenomen in bijlage 7.
Het veldwerk voor zowel de land- als waterbodem is uitgevoerd conform onderzoeksopzet. Een situatieschets met de monsternemingspunten is opgenomen in bijlage 2. De boorprofielen zijn opgenomen in bijlage 3. Visueel zijn geen asbestverdachte materialen waargenomen.

Laboratoriumonderzoek
De (water)bodemmonsters zijn voor analyse aangeboden bij het laboratorium van Synlab. Bij het samenstellen van de mengmonsters is rekening gehouden met de samenstelling van de (water)bodemlagen, ligging van de boorpunten en/of de diepte.

<u>Waterbodem</u>
Voor de watergang zijn 8 vakken gemaakt en per vak en per gelijke bodemlaag van 0,5 meter is 1 mengmonster samengesteld uit de vereiste 10 deelmonsters welke zijn geanalyseerd op PFAS en GenX. In totaal zijn 8 mengmonsters samengesteld en geanalyseerd.

<u>Landbodem NEN5740</u>
Conform onderzoeksopzet zijn per duiker 3 boringen/proefgaten gemaakt. Afhankelijk van de bodemsamenstelling zijn minimaal 1 mengmonster van de bovengrond en 1 mengmonster van de ondergrond samengesteld en geanalyseerd op PFAS en GenX.

Analyseresultaten waterbodem

De gehalten aan PFAS en GenX zijn indicatief getoetst aan de normen zoals genoemd in het Tijdelijk Handelingskader (THK) PFAS d.d. 8 juli 2019 en de geactualiseerde versie van 29 november 2019. In tabel 1 zijn de toepassings- / toetsingsnormen weergegeven.

Tabel 1 : toepassingsnormen voor het toepassen van grond en baggerspecie (in µg/kg d.s.)

Categorie	Toepassingssituatie		Toepassingswaarde (µg/kg d.s.) (4) (5)
	Op de landbodem		
4.1	Grond en baggerspecie toepassen boven grondwaterniveau(1)		
	Bodemkwaliteitsklasse	**Bodemfunctieklasse**	
	Wonen of industrie	Wonen of industrie	PFOS = 3 PFOA = 7 GenX = 3 andere PFAS = 3
	Landbouw / natuur	Wonen of industrie	PFAS = 0,8 PFOS = 0,9
	Landbouw / natuur, wonen of industrie	Landbouw / natuur	PFAS = 0,8 PFOS = 0,9
4.2	Baggerspecie toepassen boven grondwaterniveau(1), als bedoeld in art. 35, onder f, BKK (verspreiden van baggerspecie op aangrenzend perceel of weilanddepot)		PFOS = 3 PFOA = 7 GenX = 3 andere PFAS = 3
4.3	Grond en baggerspecie grootschalig toepassen boven grondwaterniveau(1)		PFOS = 3 PFOA = 7, GenX = 3 andere PFAS = 3
4.4	Grond en baggerspecie toepassen in Grondwaterbeschermingsgebieden		Bepalingsgrens = 0,1
4.5	Grond en baggerspecie toepassen onder grondwaterniveau(2), met inbegrip van grootschalige toepassing		PFAS = 0,8 PFOS = 0,9
	In oppervlaktewater		
4.6	Grond toepassen		Bepalingsgrens = 0,1
4.7	Baggerspecie toepassen in hetzelfde oppervlaktewaterlichaam of aansluitende (sedimentdelende) stroomafwaarts gelegen oppervlaktewaterlichamen als bedoeld in artikel 35, onder g, BBK (verspreiden van baggerspecie in zoet of zout oppervlaktewater).		Toepasbaar, wel meten en toetsen op uitschieters.
4.8.1	Baggerspecie toepassen in hetzelfde oppervlaktewaterlichaam in ophogingen in waterbouwkundige constructies, uitgezonderd de diepe plas, als bedoeld in artikel 35, onder d, BBK.		Toepasbaar, wel meten en toetsen op uitschieters.
4.8.2	Baggerspecie toepassen in een ander oppervlaktewaterlichaam in ophogingen in waterbouwkundige constructies, uitgezonderd de diepe plas, als bedoeld in artikel 35, onder d, BBK.		Bepalingsgrens = 0,1
4.9.1	Baggerspecie toepassen in niet-vrijliggende diepe plassen die in open verbinding staan met rijkswater, voor zover is voldaan aan de volgende voorwaarde: in de nabijheid van de diepe plas is geen kwetsbaar object gelegen, als bedoeld op p. 26 van de 'Handreiking voor het herinrichten van diepe plassen'(3)		PFAS = 0,8 PFOS = 3,7
4.9.2	Baggerspecie toepassen in andere diepe plassen dan bedoeld onder 4.9.1		Bepalingsgrens = 0,1

(1) Voor gebieden met een hoge grondwaterstand geldt in plaats van 'boven grondwaterniveau': tot ten hoogste 1 meter onder het maaiveld. Indien de grond als gevolg van zetting op termijn in de verzadigde zone terechtkomt wordt de grond geacht boven grondwater te zijn toegepast.

(2) Voor gebieden met een hoge grondwaterstand geldt in plaats van 'onder grondwaterniveau': op een diepte van 1 meter en meer onder het maaiveld. Indien de grond als gevolg van zetting op termijn in de verzadigde zone terechtkomt wordt de grond geacht boven grondwater te zijn toegepast.

(3) Onder 'diepe plas' wordt verstaan: oppervlaktewaterlichaam, ontstaan als gevolg van zandwinning, grindwinning of kleiwinning of een dijkdoorbraak. Onder 'vrijliggende diepe plas' wordt verstaan: diepe plas, die niet is gelegen in een

oppervlaktewaterlichaam in beheer bij het Rijk en die bovendien boven de spronglaag nauwelijks wordt gevoed door oppervlaktewater van elders (de verblijftijd van het water is voor 90% van het jaar langer dan een maand). Als de diepe plas is gelegen in een groter oppervlaktewaterlichaam wordt de rest van het oppervlaktewaterlichaam beschouwd als oppervlaktewater van elders. Deze plassen zijn aangegeven op de kaart die als bijlage bij dit tijdelijk handelingskader is gevoegd. Onder 'niet-vrijliggende diepe plas' wordt verstaan: diepe plas, gelegen in een oppervlaktewaterlichaam in beheer bij het Rijk, of diepe plas die niet aan de definitie van vrijliggende plas voldoet.

(4) Op de waarden uit deze tabel hoeft geen bodemtypecorrectie te worden toegepast als het gehalte van organische stof minder dan 10% bedraagt.

(5) Tenzij een lokale maximale waarde is vastgesteld (zie paragraaf 5). De toepassingswaarden voor de onderscheiden categorieën van toepassingen worden hieronder toegelicht. De paragraafnummers corresponderen met de nummering in kolom 1 van de tabel.

De laboratoriumcertificaten zijn opgenomen in bijlage 6. De toetsingsresultaten zijn vermeld in tabel 2.

Tabel 2: analyseresultaten PFAS en GenX (waterbodem)

Analyse-nummer	Samenstelling analyse(meng)monster	Gehalten PFAS en GenX	Indicatieve toetsing PFAS THK		Globale samenstelling
	Boornummer(s) en bodemtraject (cm-mv)		Land-bodem	Water-bodem	
MM 1	W01 (15-65) W02 (15-65) W03 (15-65) W04 (15-65) W05 (15-65) W06 (20-70) W07 (20-70) W08 (20-70) W09 (20-70) W10 (20-70)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.7 4.8.1 4.9.1/.2	zand
MM 2	W51 (15-65) W52 (10-60) W53 (10-60) W54 (10-60) W55 (5-55) W56 (5-55) W57 (10-60) W58 (10-60) W59 (15-65) W60 (15-65)	PFOA (<d) PFOS (0,25) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet 4.7 4.8.1 4.9.1	zand
MM 3	W11 (20-70) W12 (20-70) W13 (20-70) W14 (20-70) W15 (20-70) W16 (20-70) W17 (20-70) W18 (20-70) W19 (20-70) W20 (20-70)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.7 4.8.1 4.9.1/.2	zand
MM 4	W21 (20-70) W22 (20-70) W23 (20-70) W24 (20-70) W25 (20-70) W26 (20-70) W27 (0-50) W28 (0-50) W29 (0-50) W30 (0-50)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.7 4.8.1 4.9.1/.2	zand
MM 5	W31 (0-50) W32 (10-60) W33 (40-90) W34 (50-100) W35 (40-90) W36 (50-100) W37 (50-100) W38 (50-100) W39 (50-100) W40 (30-80)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.7 4.8.1 4.9.1/.2	zand
MM 6	W41 (50-100) W42 (50-100) W43 (50-100) W44 (50-100) W45 (10-60) W46 (20-70) W47 (30-80) W48 (40-90) W49 (30-80) W50 (30-80)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.7 4.8.1 4.9.1/.2	zand
MM 7	W61 (30-80) W62 (40-90) W63 (30-80) W64 (40-90) W65 (40-90) W66 (40-90) W67 (50-100) W68 (40-90 W69 (40-90) W70 (30-80)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.7 4.8.1 4.9.1/.2	zand
MM 8	W71 (30-80) W72 (40-90) W73 (40-90) W74 (40-90) W75 (50-100) W76 (40-90) W77 (20-70) W78 (20-70 W79 (10-60) W80 (10-60)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.7 4.8.1 4.9.1/.2	zand

d = detectielimiet

Analyseresultaten landbodem (duikers)
De analyseresultaten van de grondmonsters zijn voor de interventiewaarde getoetst aan de vigerende Circulaire Bodemsanering (Wbb) en voor de bodemkwaliteitsklassen (generiek beleid) aan de toetswaarden uit de vigerende Regeling Bodemkwaliteit (BBK). De gehalten aan PFAS zijn getoetst aan het Tijdelijk Handelingskader PFAS van 8 juli 2019.

De analyseresultaten staan vermeld in de toetsingstabellen (Wbb en BBK) van bijlage 4 en 5. De laboratoriumcertificaten zijn opgenomen in bijlage 6. De aangetoonde verontreinigingen zijn in tabel 3 samengevat.

Tabel 3: analyseresultaten PFAS en GenX (landbodem)

Analyse-nummer	Samenstelling analyse(meng)monster	Gehalten PFAS en GenX	Indicatieve toetsing PFAS THK	
	Boornummer(s) en bodemtraject (cm-mv)		Landbodem	Waterbodem
MM D1	2001-1 (0-50) 2001-2 (0-50) 2001-3 (0-50)	PFOA (0,23) PFOS (0,64) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D2	2001-3 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D3	2002-1 (0-50) 2002-2 (0-50) 2002-3 (0-50)	PFOA (0,24) PFOS (0,52) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D4	2002-3 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D5	2007-1 (0-50) 2007-2 (0-50) 2007-3 (0-50)	PFOA (0,14) PFOS (0,20) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D6	2007-3aa (50-100)	PFOA (0,13) PFOS (<d) overige PFAS (<d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D7	2008-1 (0-50) 2008-2 (0-50) 2008-3aa (0-50)	PFOA (0,19) PFOS (0,21) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D8	2008-3aa (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D9	2676-1 (0-50) 2676-2 (0-50) 2676-3 (0-50)	PFOA (<d) PFOS (0,2) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet

MM D10	2676-3 (50-100) 2676-3 (100-150) 2676-3 (150-200)	PFOA (<d) PFOS (<d) PFBA (1,2) overige PFAS (<d) GenX (<d)	Wonen / industrie	Voldoet niet
MM D11	2047-1 (0-50) 2047-2 (0-50) 2047-3 (0-50)	PFOA (<d) PFOS (0,29) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D12	2047-3 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D13	2048-1 (0-50) 2048-2 (0-50) 2048-3 (0-50)	PFOA (0,30) PFOS (0,18) overige PFAS (<d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D14	2048-3 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D15	2690-1 (0-50) 2690-2 (0-50) 2690-3 (0-50)	PFOA (0,3) PFOS (0,4) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D16	2690-3 (50-100) 2690-3 (100-150) 2690-3 (150-200)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D17	2693-1 (0-50) 2693-2 (0-50) 2693-3 (0-50)	PFOA (0,2) PFOS (<0,3) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D18	2693-3 (50-100) 2693-3 (100-150) 2693-3 (150-200)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D19	2923-1 (0-50) 2923-2 (0-50) 2923-3 (0-50)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D20	2923-3 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D21	2003-1 (0-50) 2003-2 (0-50) 2003-3 (0-50)	PFOA (0,16) PFOS (0,30) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet

MM D22	2003-3 (100-150) 2003-3 (150-200)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D23	2005-1 (0-50) 2005-2 (0-50) 2005-3 (0-50)	PFOA (<d) PFOS (0,30) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D24	2005-3 (50-100)	PFOA (<d) PFOS (0,11) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D25	2010-1 (12-50) 2010-2 (12-50) 2010-3 (0-50)	PFOA (<d) PFOS (0,29) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D26	2010-3 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D27	2081-1 (0-50)	PFOA (<d) PFOS (0,24) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D28	2081-3 (100-150) 2081-3 (150-200)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D29	2909-1 (0-50)	PFOA (0,10) PFOS (<d) overige PFAS (< d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D30	2909-3aa (8-50)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D31	2909-1 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D32	607-1aa (0-50) 607-2aa (0-50) 607-3 (0-50)	PFOA (<d) PFOS (0,32) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet
MM D34	607-3 (50-100)	PFOA (<d) PFOS (0,21) overige PFAS (<d) GenX (<d)	Landbouw / natuur	Voldoet niet

MM D35	XXX-1 (0-50) XXX-2 (0-50)	PFOA (< d), PFOS (0,28), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D36	XXX-3 (0-50)	PFOA (0,18), PFOS (0,33), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D37	XXX-3 (50-100) XXX-3 (100-150)	PFOA (0,21), PFOS (0,16), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D38	2004-1 (0-50) 2004-2 (0-50)	PFOA (0,13), PFOS (0,22), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D39	2004-3 (0-50)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D40	2004-3 (100-150) 2004-3 (150-200)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D41	198-1 (0-50) 198-2 (0-50) 198-3 (0-50)	PFOA (0,19), PFOS (0,23), PFBA (0,12) overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D42	198-3 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6
MM D43	59-1 (0-50) 59-2 (0-50) 59-3 (0-50)	PFOA (0,24), PFOS (0,26), PFBA (0,14); overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D44	59-3 (50-100)	PFOA (0,14), PFOS (< d), PFBA (0,11), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D45	87-1 (0-50) 87-2 (0-50) 87-3 (0-50)	PFOA (0,11), PFOS (0,19), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet niet
MM D46	87-3 (50-100)	PFOA (< d), PFOS (< d), overige PFAS (< d) GenX (< d)	Landbouw / natuur	Voldoet 4.6

d = detectielimiet

Analyseresultaten landbodem NEN onderzoek (aanvullende duikers)
Ten opzicht van het eerder uitgevoerde onderzoek zijn er een aantal extra duikers aan het project toegevoegd en onderzocht. De analyseresultaten van de grondmonsters zijn voor de interventiewaarde getoetst aan de vigerende Circulaire Bodemsanering (Wbb) en voor de bodemkwaliteitsklassen (generiek beleid) aan de toetswaarden uit de vigerende Regeling Bodemkwaliteit (BBK).

De analyseresultaten staan vermeld in de toetsingstabellen (Wbb en BBK) van bijlage 4 en 5. De laboratoriumcertificaten zijn opgenomen in bijlage 6. De aangetoonde verontreinigingen zijn in tabel 4 samengevat.

Tabel 4: Analyseresultaten

Analyse-nummer	Samenstelling analyse(meng)monster	Toetsing WBB	Toetsing BBK (hergebruik)
	Boornummer(s) en bodemtraject (m-mv)		
MM D41N	198-1 (0-50), 198-2 (0-50), 198-3 (0-50)	PAK*	altijd toepasbaar
MM D42N	198-3 (50-100) 198-3 (100-150) 198-3 (150-200)	-	altijd toepasbaar
MM D43N	59-1 (0-50) 59-2 (0-50) 59-3 (0-50)	-	altijd toepasbaar
MM D44N	59-3 (50-100) 59-3 (100-150) 59-3 (150-200)	-	altijd toepasbaar
MM D45N	87-1 (0-50) 87-2 (0-50) 87-3 (0-50)	PAK*, PCB*	altijd toepasbaar
MM D46N	87-3 (50-100) 87-3 (100-150) 87-3 (150-200)	-	altijd toepasbaar

- geen verhoogde gehalten aangetoond;
* gehalte groter dan de achtergrondwaarde (streefwaarde);
** gehalte groter dan de tussenwaarde;
*** gehalte groter dan de interventiewaarde.

AP alle parameters;
BBK Besluit Bodemkwaliteit;
WBB Wet Bodembescherming;

Conclusie
Op basis van onderhavig (water)bodemonderzoek wordt het volgende geconcludeerd:
- over het algemeen zijn er in de waterbodem geen verhoogde gehalten aan PFAS gemeten, enkel in MM 2 is een verhoogd gehalte aan PFOS aangetoond. Het gehalte ligt beneden de toepassingsnorm voor landbouw/natuur voor landbodem. Voor toepassing in oppervlaktewater zijn ook mogelijkheden;
- ter plaatse van de duikerlocaties worden in de bovengrond regelmatig verhoogde gehalten aan PFAS gemeten. Ter plaatse van sommige duikers wordt ook PFAS in de ondergrond (0,5-1,0 m-mv) gemeten. De gehalten liggen grotendeels beneden de toepassingsnorm voor landbouw/natuur voor landbodem en plaatselijk beneden de toepassingsnorm voor wonen/industrie. Voor toepassing in oppervlaktewater zijn er enkel mogelijkheden voor die monsters waar het gehalte aan PFAS beneden de bepalingsgrens ligt;
- zowel de boven- als de ondergrond van de duikers die aanvullend onderzocht zijn, is altijd toepasbaar. Er zijn enkel plaatselijk licht verhoogde gehalten aan PAK en/of PCB aangetoond;
- aangezien de gehalten aan PFAS allemaal beneden de toepassingsnormen uit het Tijdelijk Handelingskader PFAS liggen, zijn er geen aanvullende arbotechnische maatregelen noodzakelijk op basis van de gemeten gehalten aan PFAS.

Wij vertrouwen erop u hiermee voldoende te hebben geïnformeerd. Heeft u naar aanleiding van deze rapportage nog vragen c.q. opmerkingen dan kunt u met ondergetekende contact opnemen.

Met vriendelijke groet
Milieutechnisch Adviesbureau Heel BV

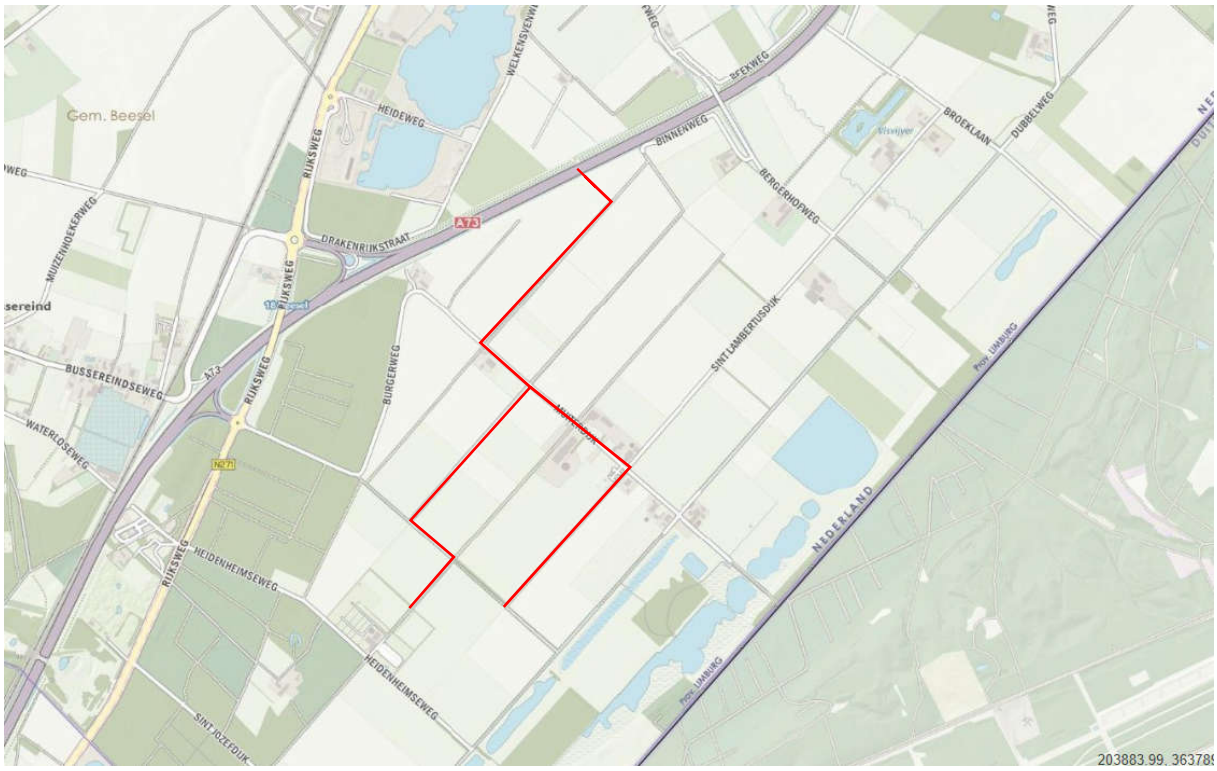
drs. M.A.J. de Vaan
Senior Projectleider

Bijlagen
1. Topografische kaart
2. Tekening met boorpunten
3. Boorprofielen
4. Toetsing Wbb (T12) landbodem
5. Toetsing BBK (T2) landbodem
6. Laboratoriumcertificaten
7. Foto's locatie
8. Legger Waterschap Limburg

BIJLAGEN

BIJLAGE 1

TOPOGRAFISCHE KAART

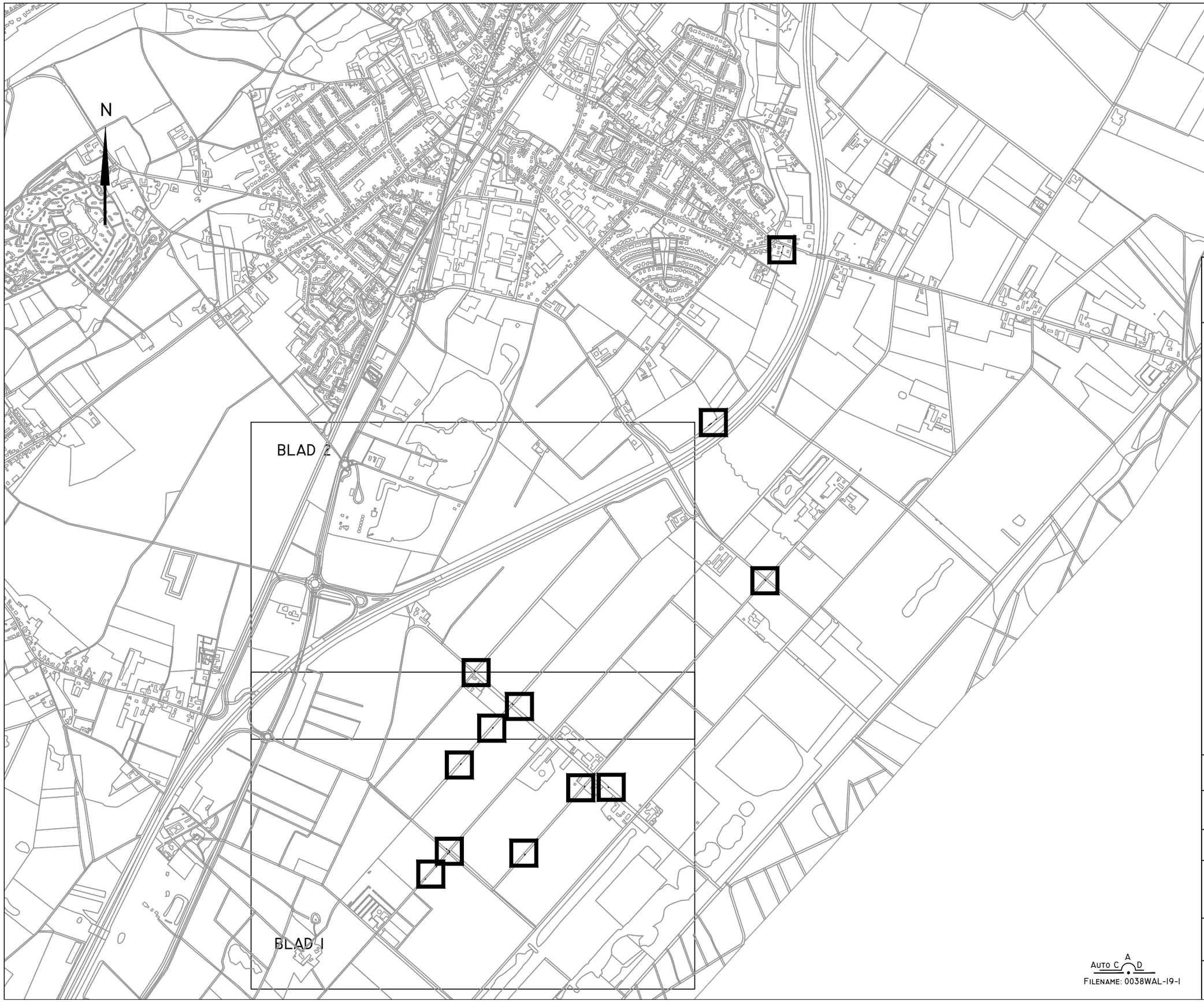


Bron: Provincie Limburg, Atlas Limburg

= globale ligging onderzoekslocatie

BIJLAGE 2

TEKENING MET BOORPUNTEN



BIJLAGE 2-1

SITUATIETEKENING WATERBODEM-ONDERZOEK

LEGENDA

WATERGANG

LOCATIE DUIKER

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

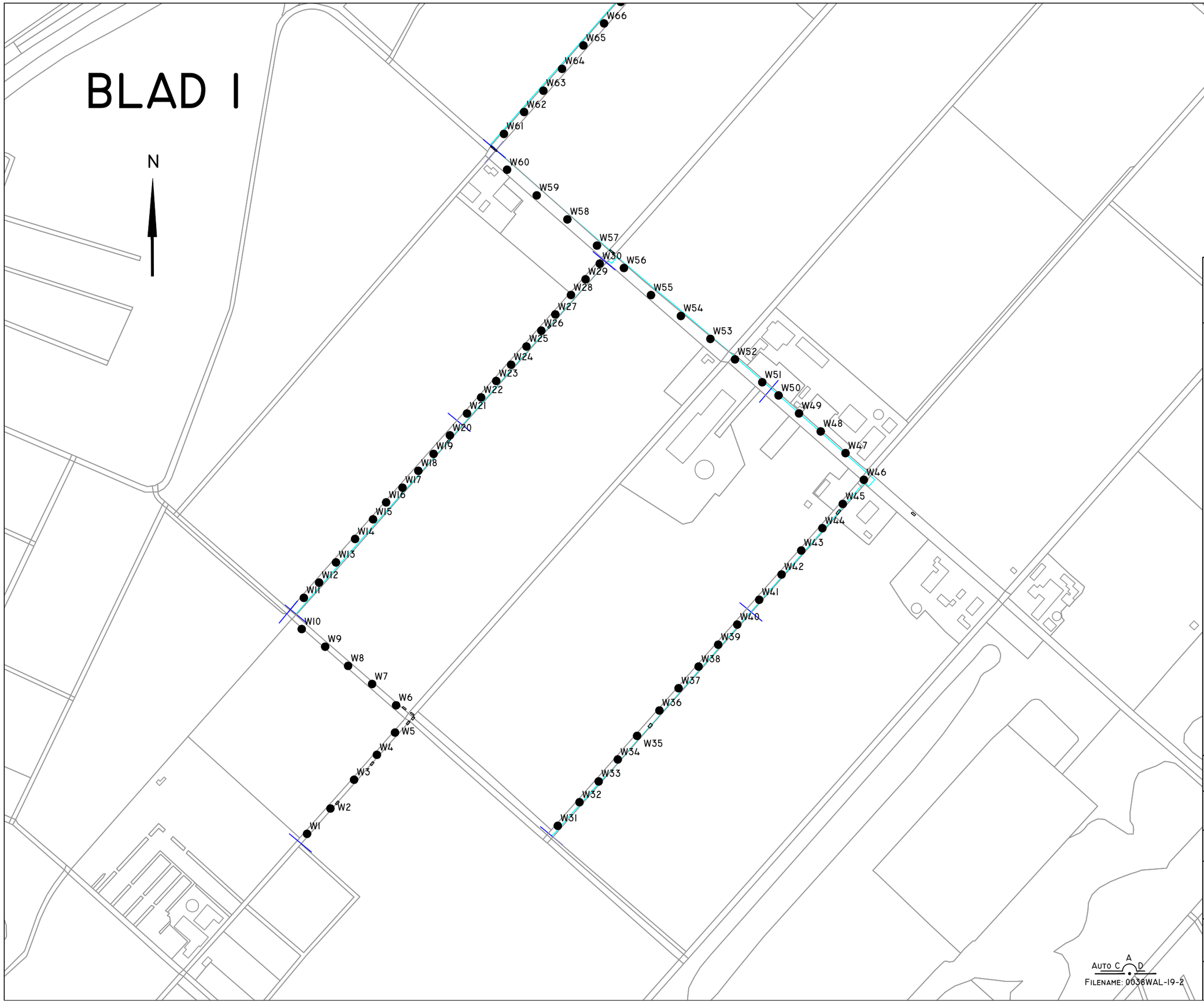
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:NVT /A3

AUTO CAD
FILENAME: 0038WAL-19-1



BIJLAGE 2-2

SITUATIETEKENING WATERBODEM-ONDERZOEK

LEGENDA

WATERGANG

VAKSCHEIDING

W.. BORING IN WATERGANG TOT 0,5 M-WBO

0 50 100 150 200 250

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:

SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:

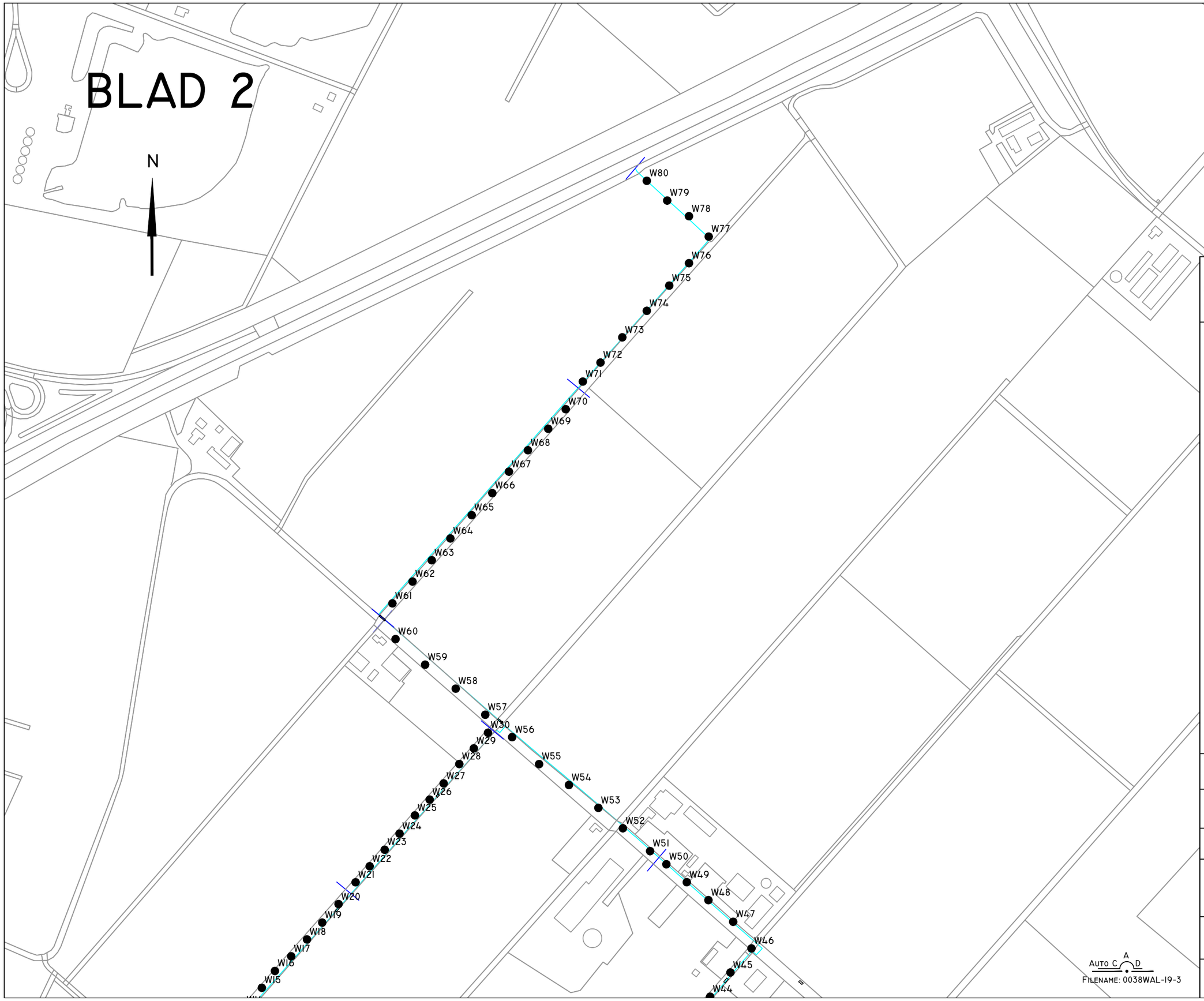
WATERSCHAP LIMBURG

PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:5000/A3



BIJLAGE 2-3

SITUATIETEKENING WATERBODEM-ONDERZOEK

LEGENDA

WATERGANG

VAKSCHEIDING

W.. BORING IN WATERGANG TOT 0,5 M-WBO

0 50 100 150 200 250

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:

SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:

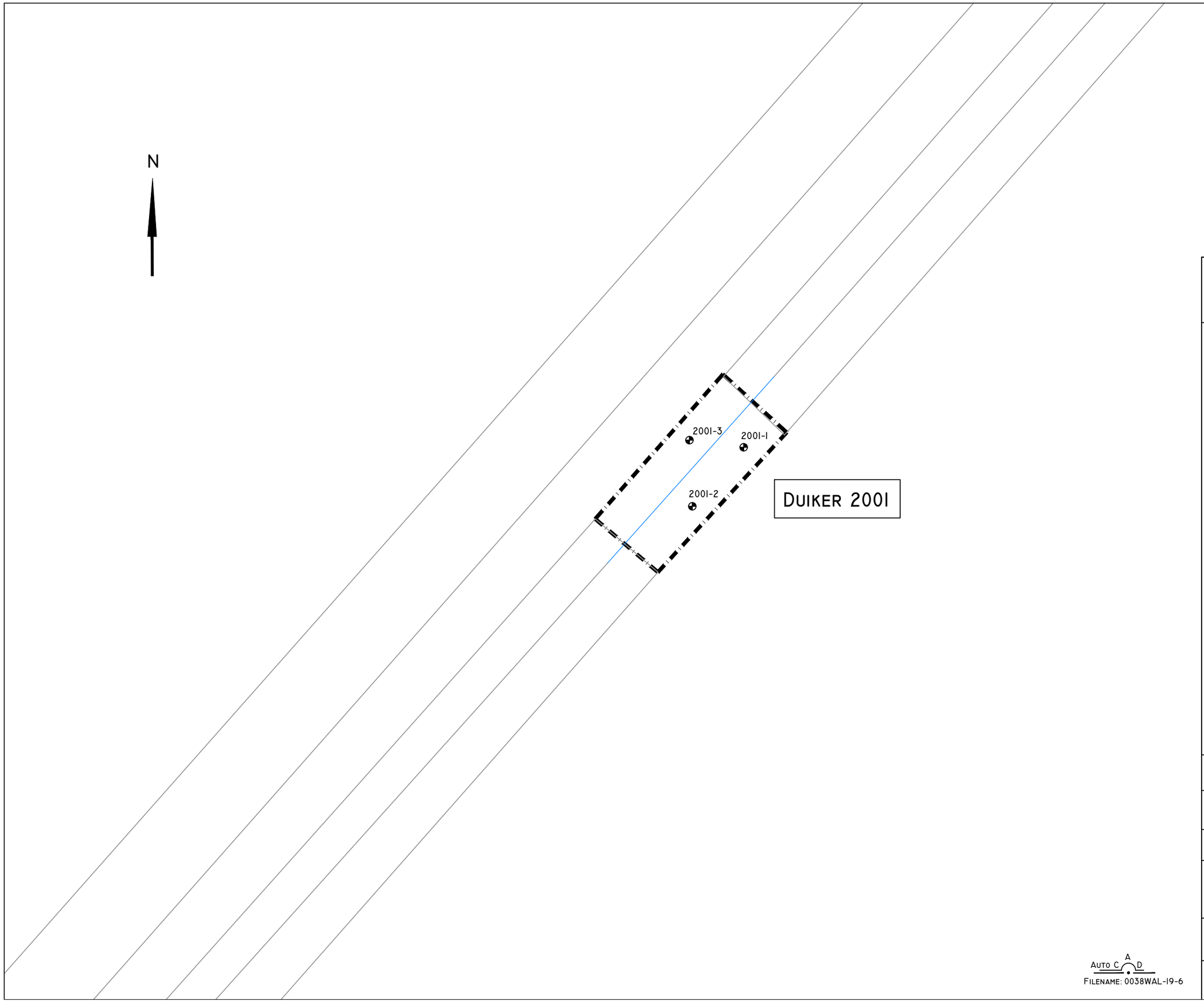
WATERSCHAP LIMBURG

PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:5000/A3



BIJLAGE 2-4
SITUATIETEKENING DUIKER 2001
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

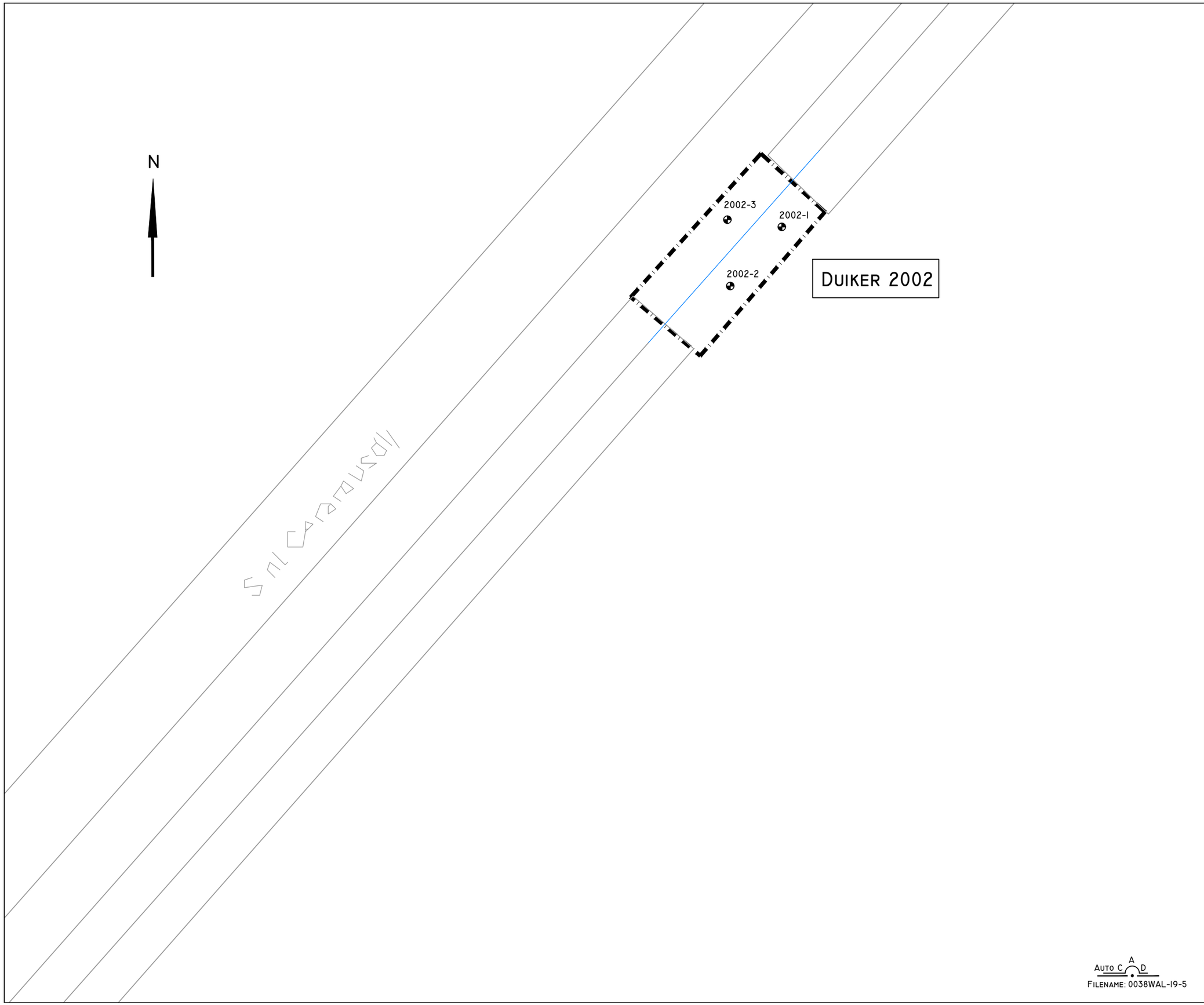
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-6



BIJLAGE 2-5
SITUATIETEKENING DUIKER 2002
BODEMONDERZOEK

LEGENDA

- DUIKER
- ONDERZOEKSLOCATIE
- BORING
- PROEFGAT

0 1 2 3 4 5

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

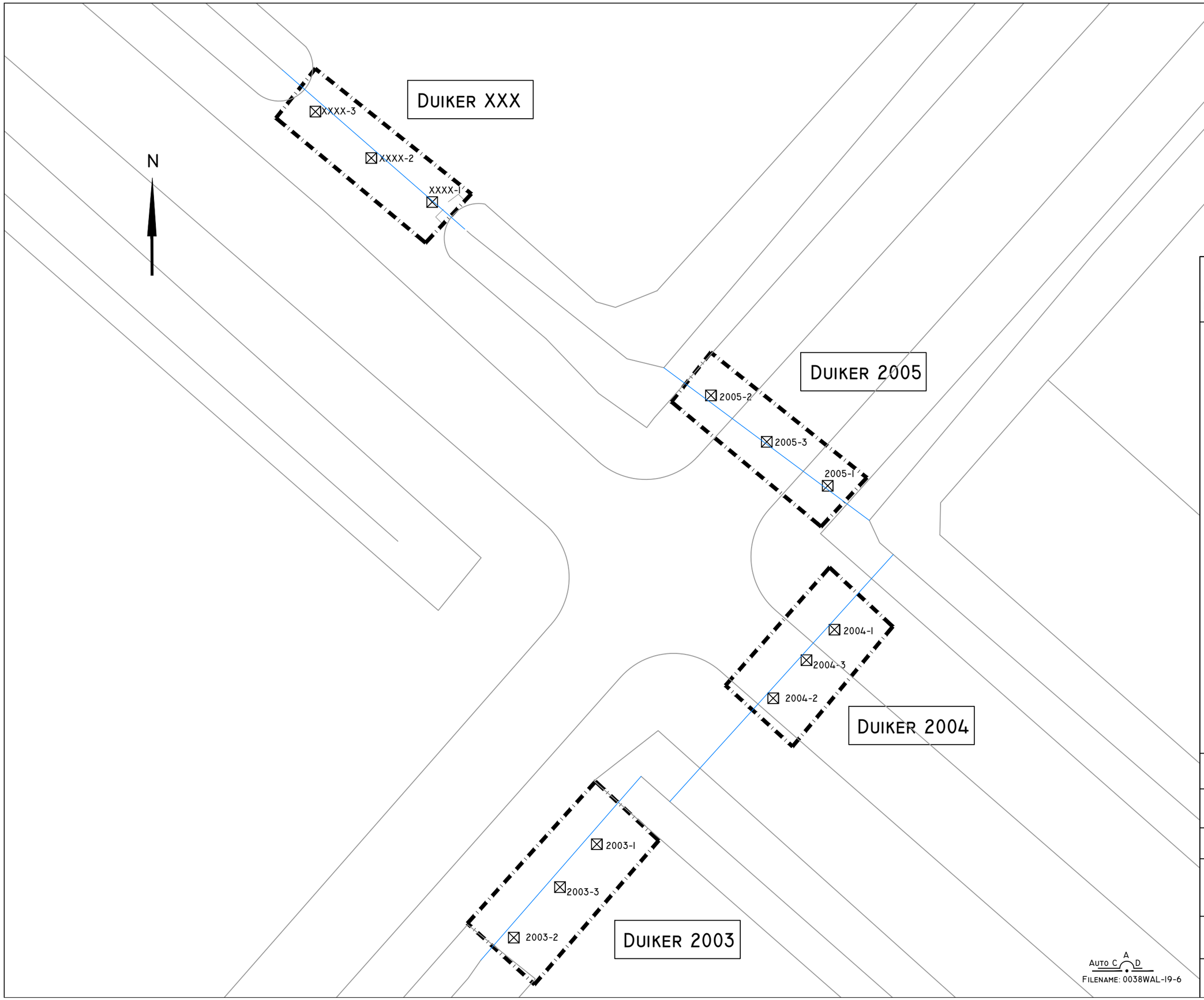
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-5



BIJLAGE 2-6
SITUATIETEKENING DUIKERS
BODEMONDERZOEK

LEGENDA

- DUIKER
- ONDERZOEKSLOCATIE
- BORING
- PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

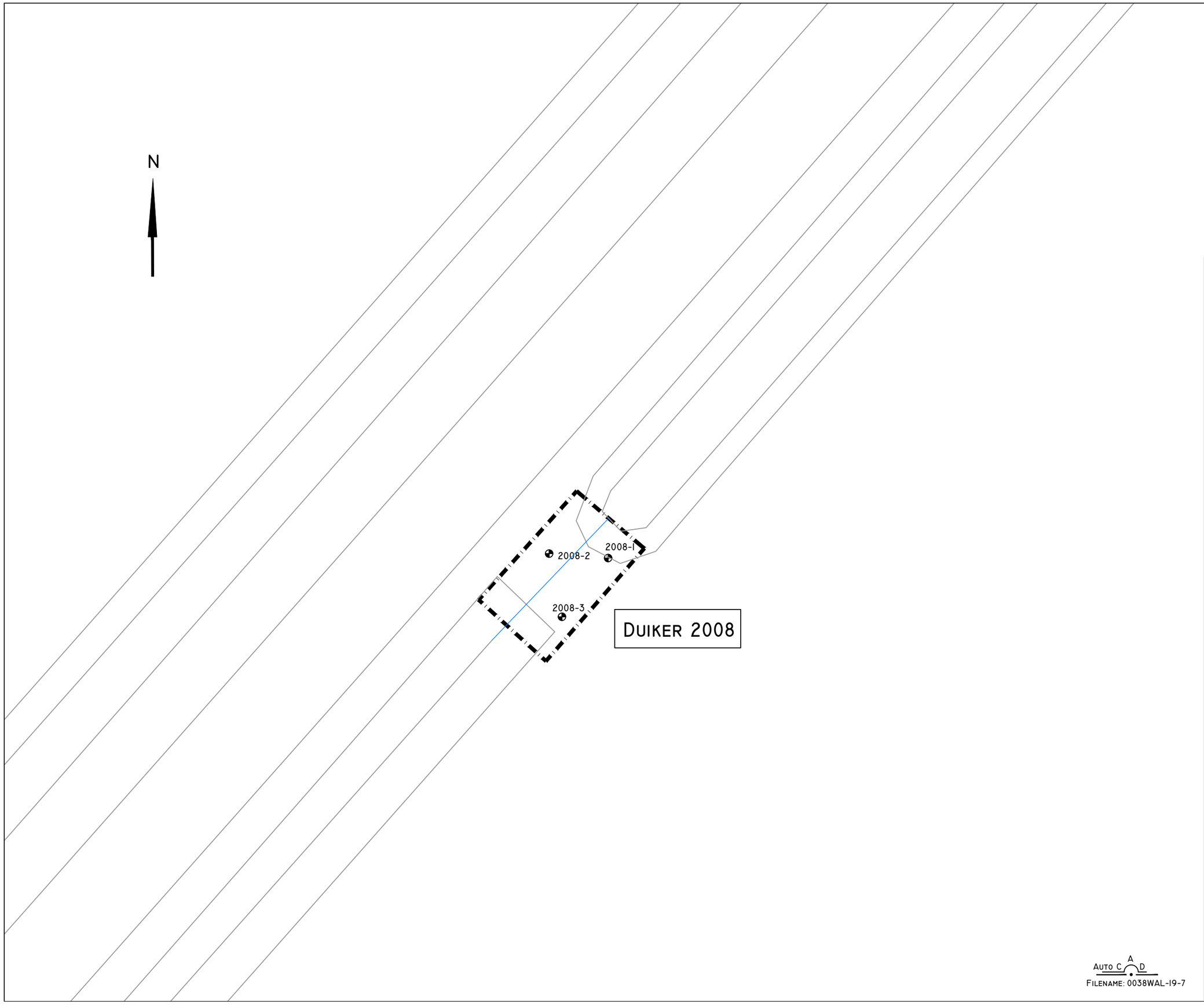
OPDRACHTGEVER:
WATERSCHAP LIMBURG

PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3



BIJLAGE 2-7
SITUATIETEKENING DUIKER 2008
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

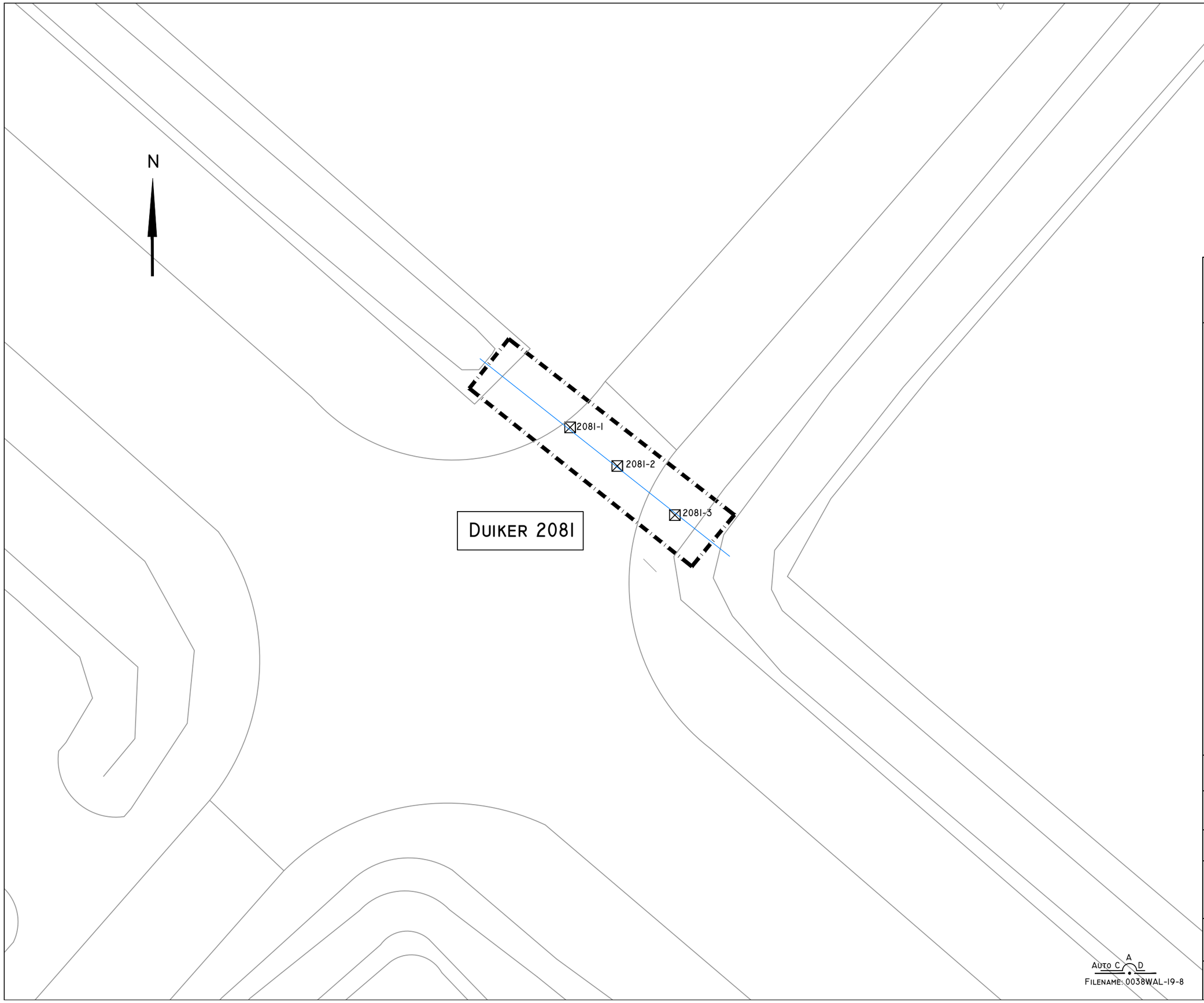
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-7



BIJLAGE 2-8
SITUATIETEKENING DUIKER 2081
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

PROJECT:
SCHELKENSBEEK TE BEESEL

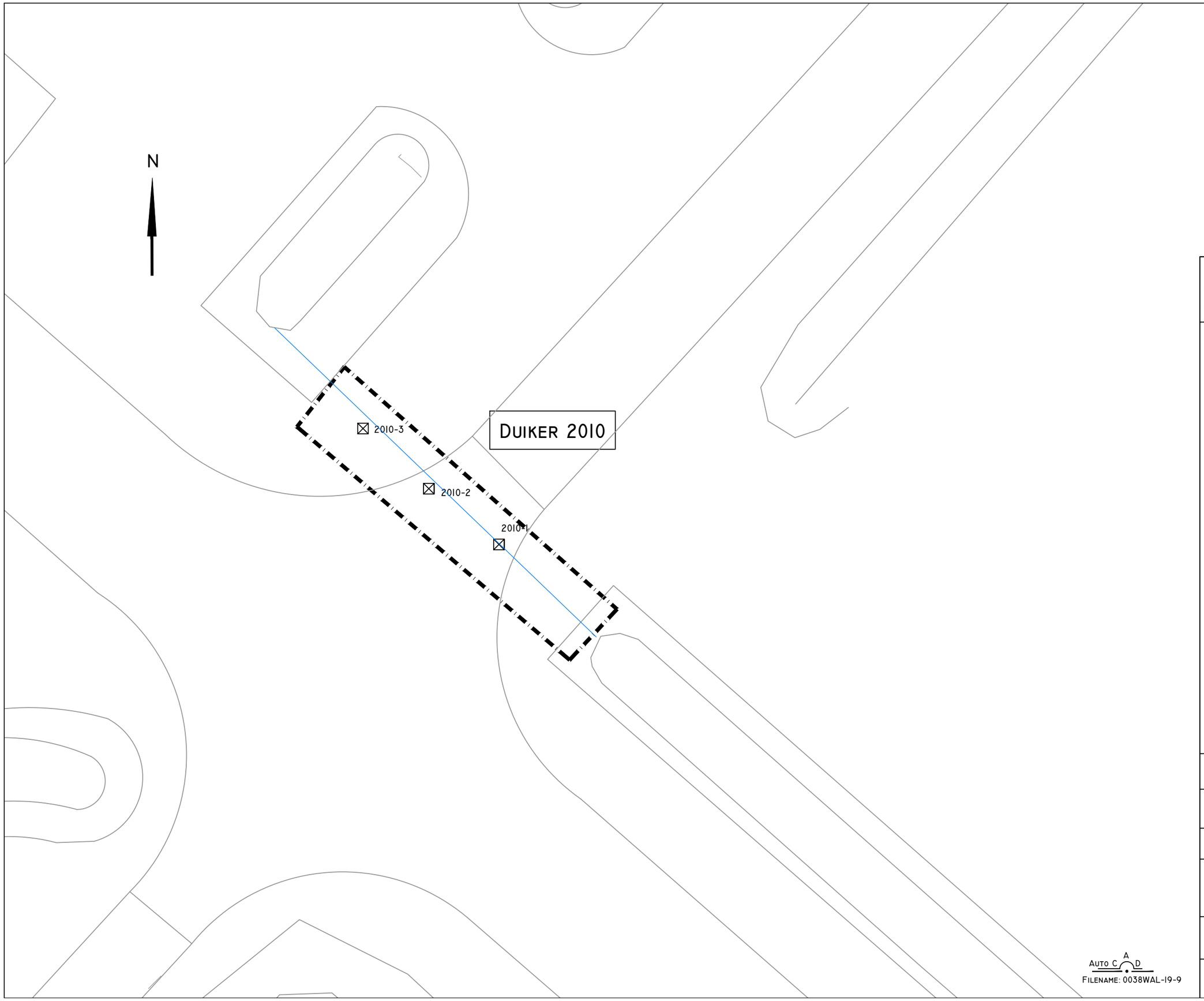
OPDRACHTGEVER:
WATERSCHAP LIMBURG

PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3



BIJLAGE 2-9
SITUATIETEKENING DUIKER 2010
BODEMONDERZOEK

LEGENDA

- DUIKER
- ONDERZOEKSLOCATIE
- BORING
- PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

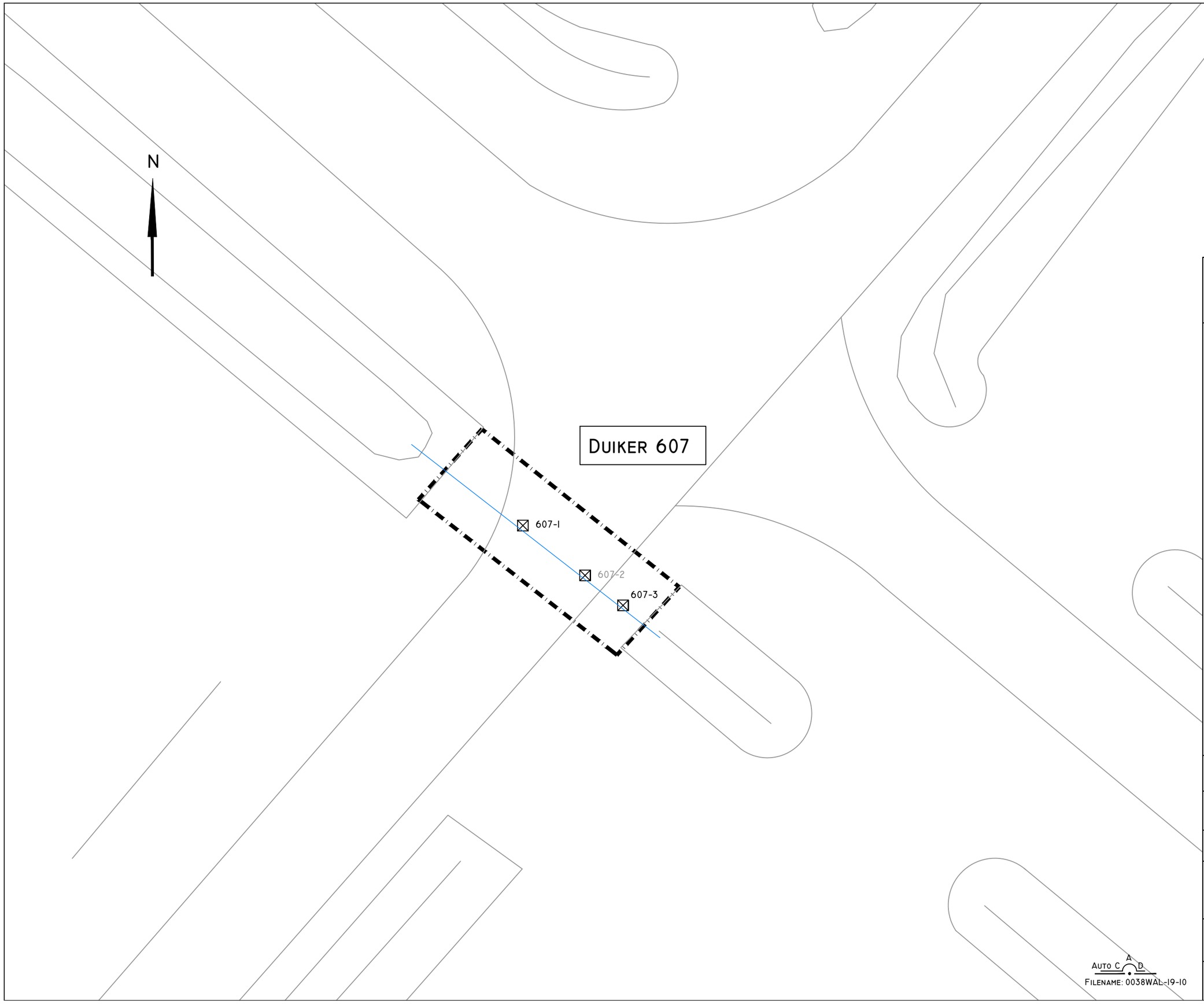
OPDRACHTGEVER:
WATERSCHAP LIMBURG

PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3



BIJLAGE 2-10
SITUATIETEKENING DUIKER 607
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

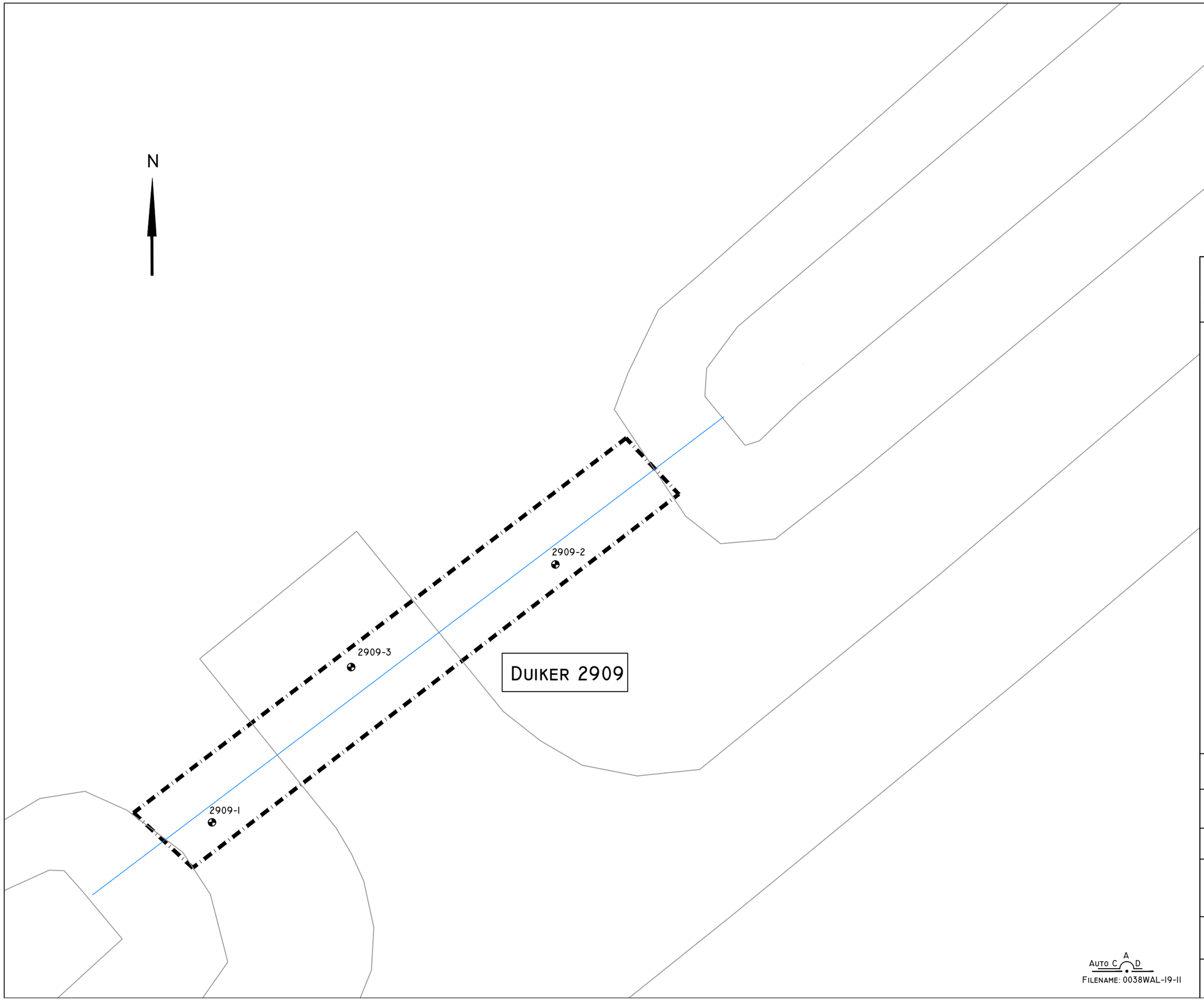
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-10



BIJLAGE 2-II
SITUATIETEKENING DUIKER 2909
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

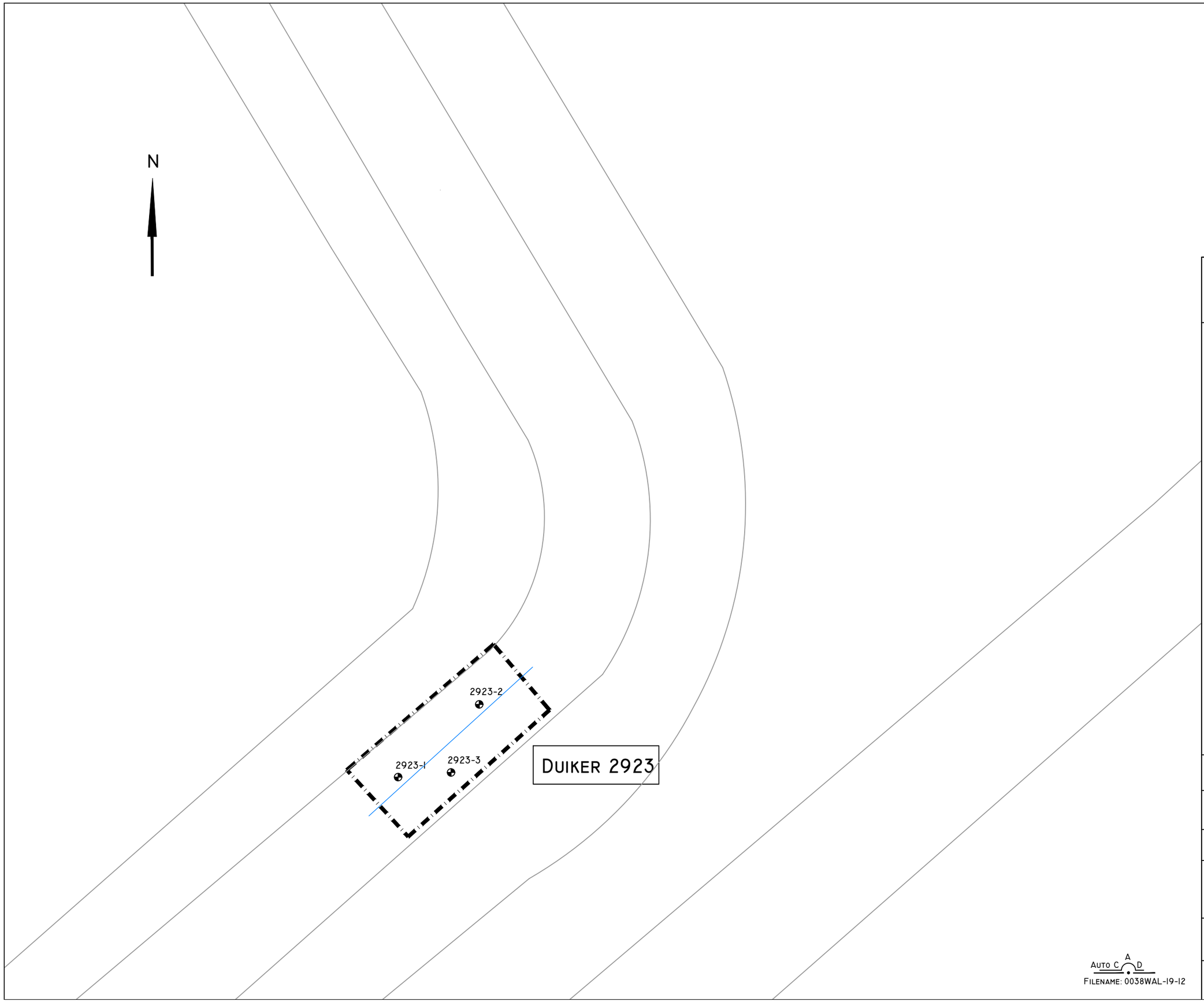
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-11



BIJLAGE 2-12
SITUATIETEKENING DUIKER 2923
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

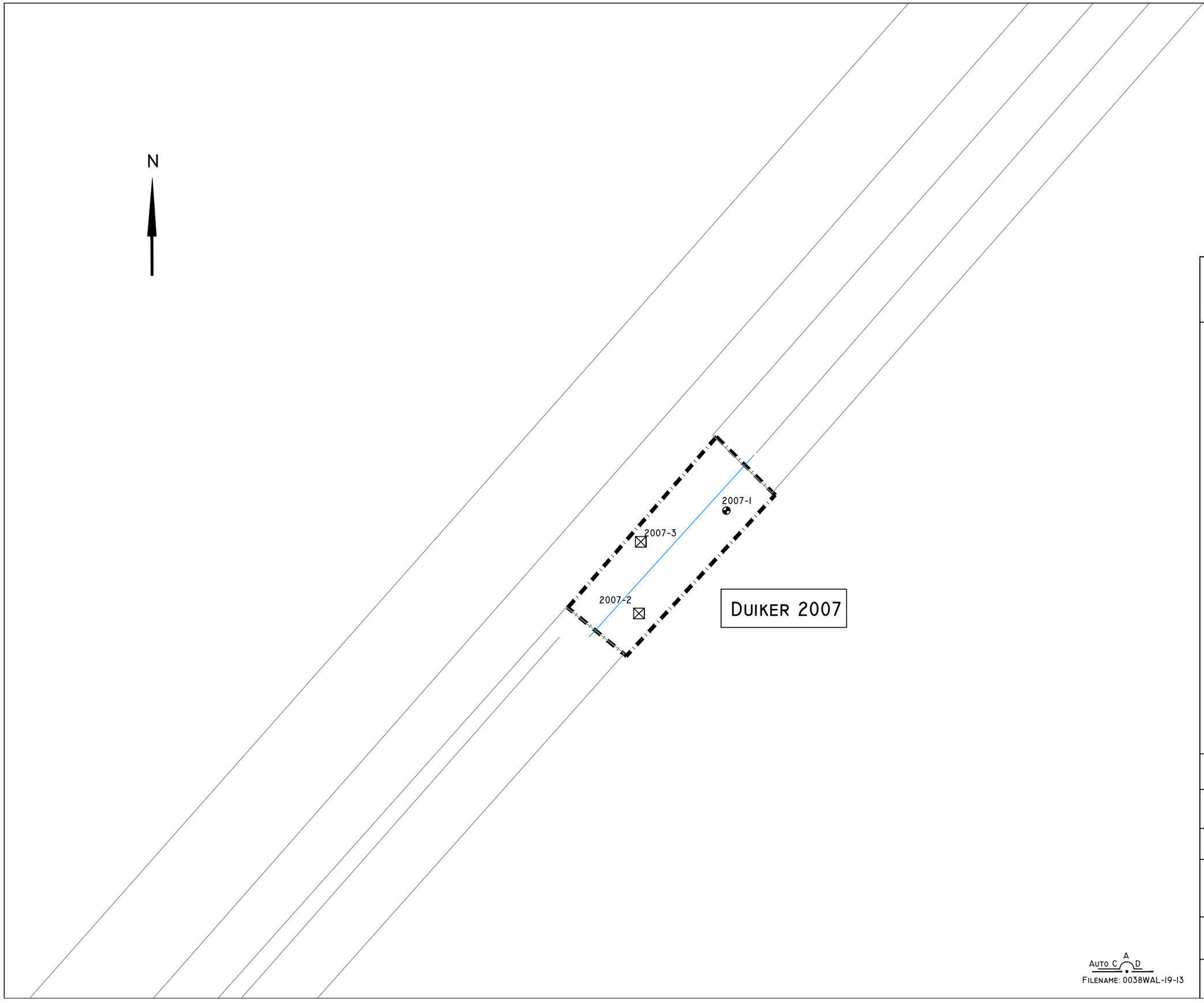
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-12



BIJLAGE 2-13
SITUATIETEKENING DUIKER 2007
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

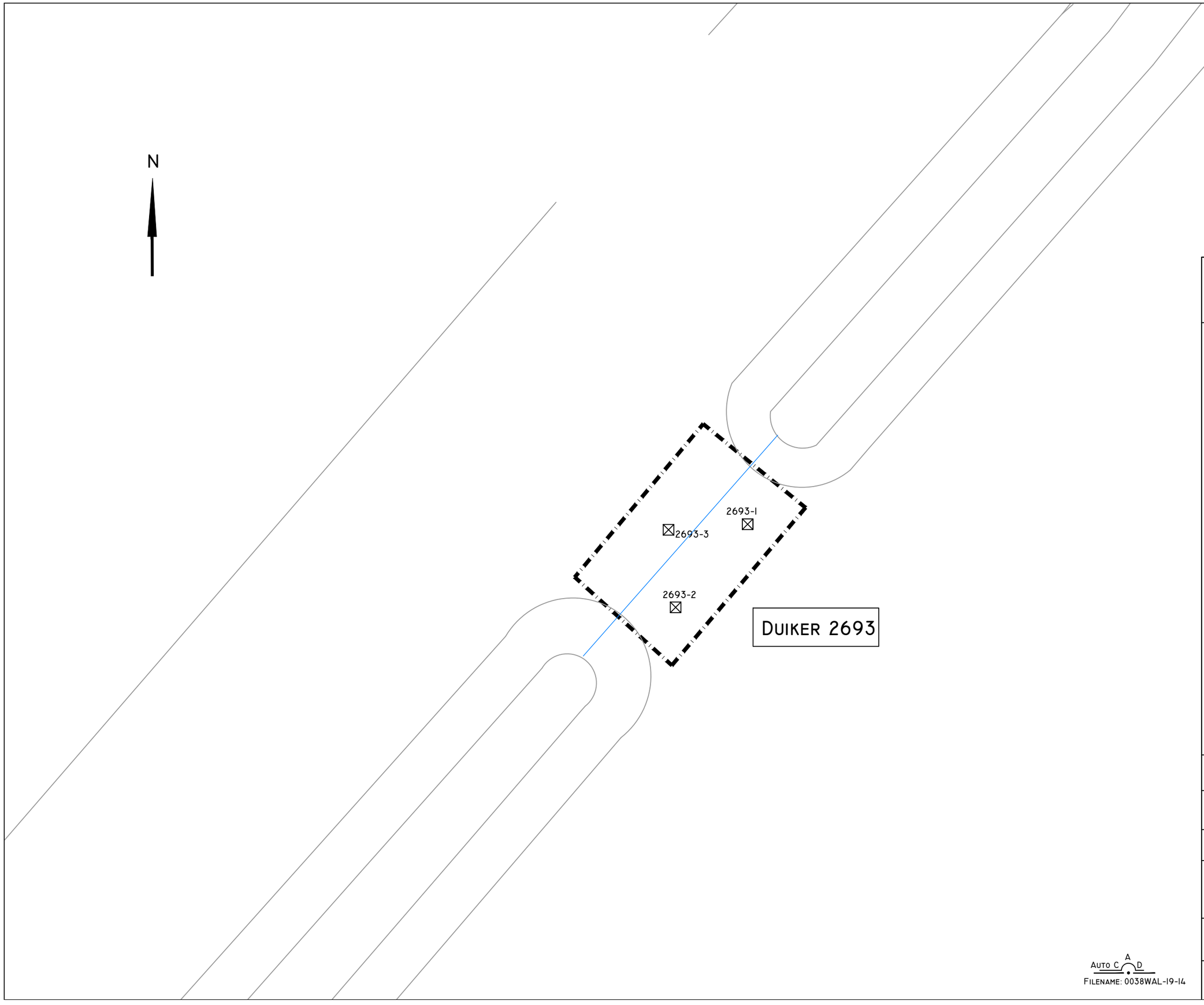
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-13



BIJLAGE 2-14
SITUATIETEKENING DUIKER 2693
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

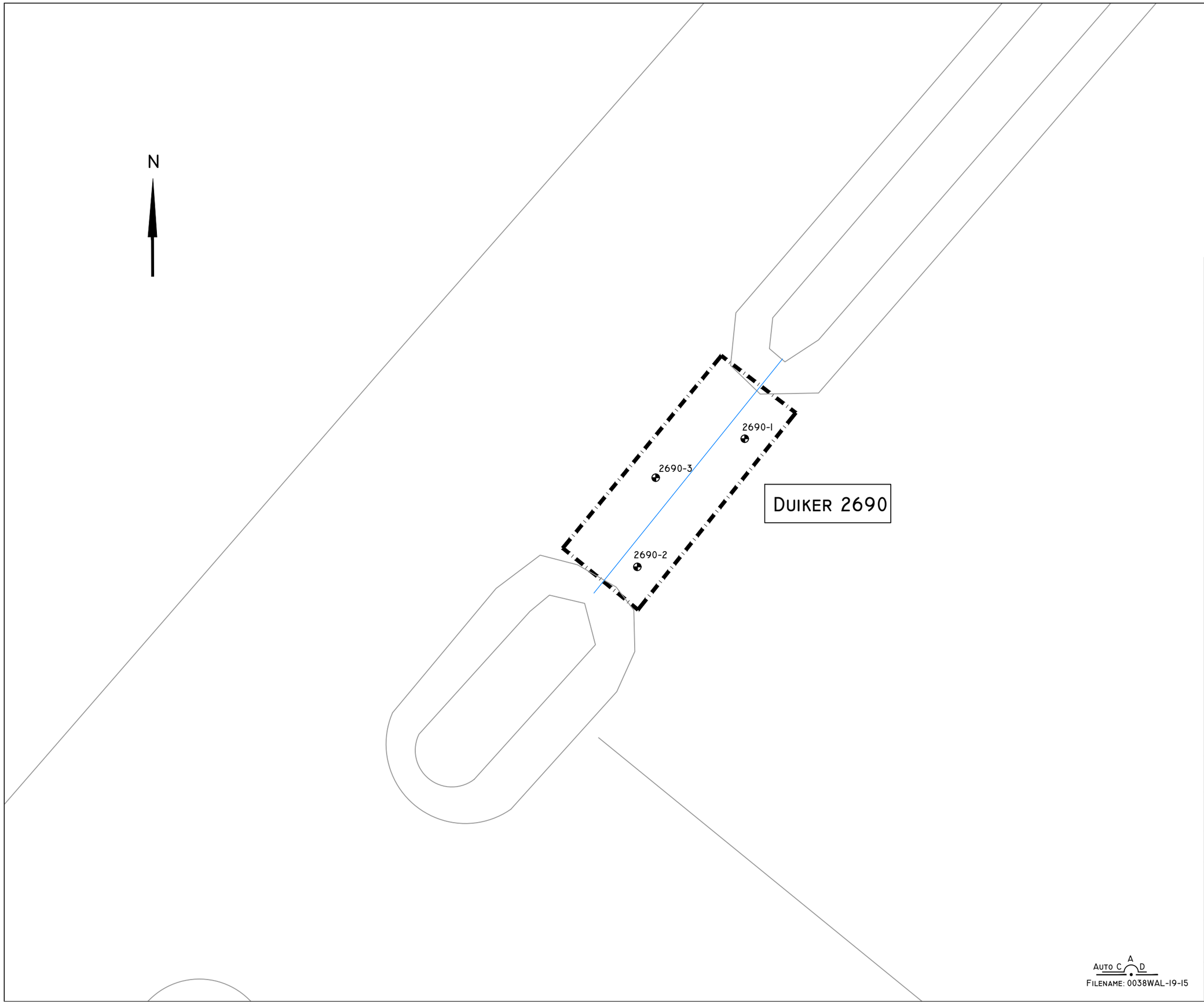
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-14



BIJLAGE 2-15
SITUATIETEKENING DUIKER 2690
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

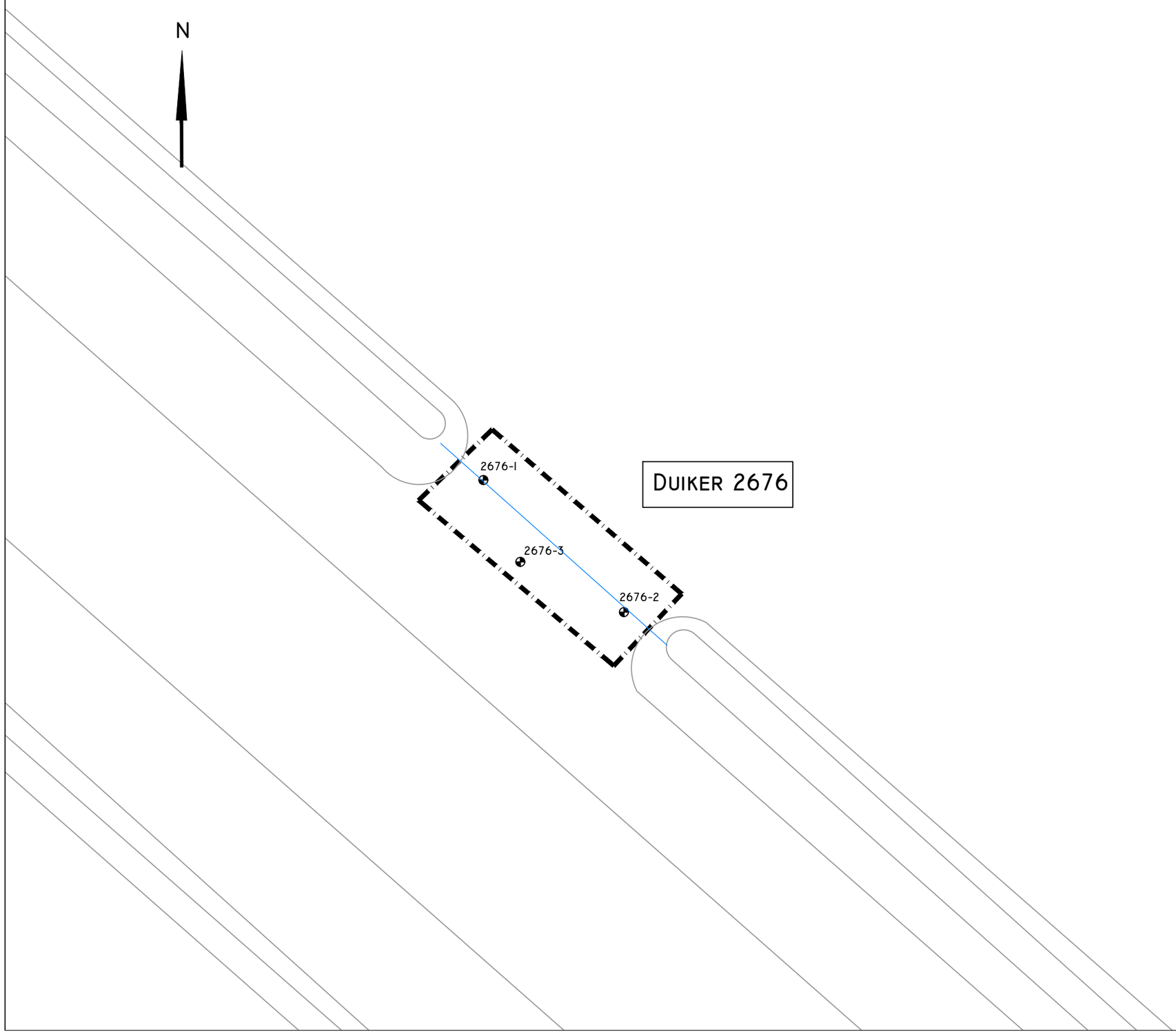
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-15



BIJLAGE 2-16
SITUATIETEKENING DUIKER 2676
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

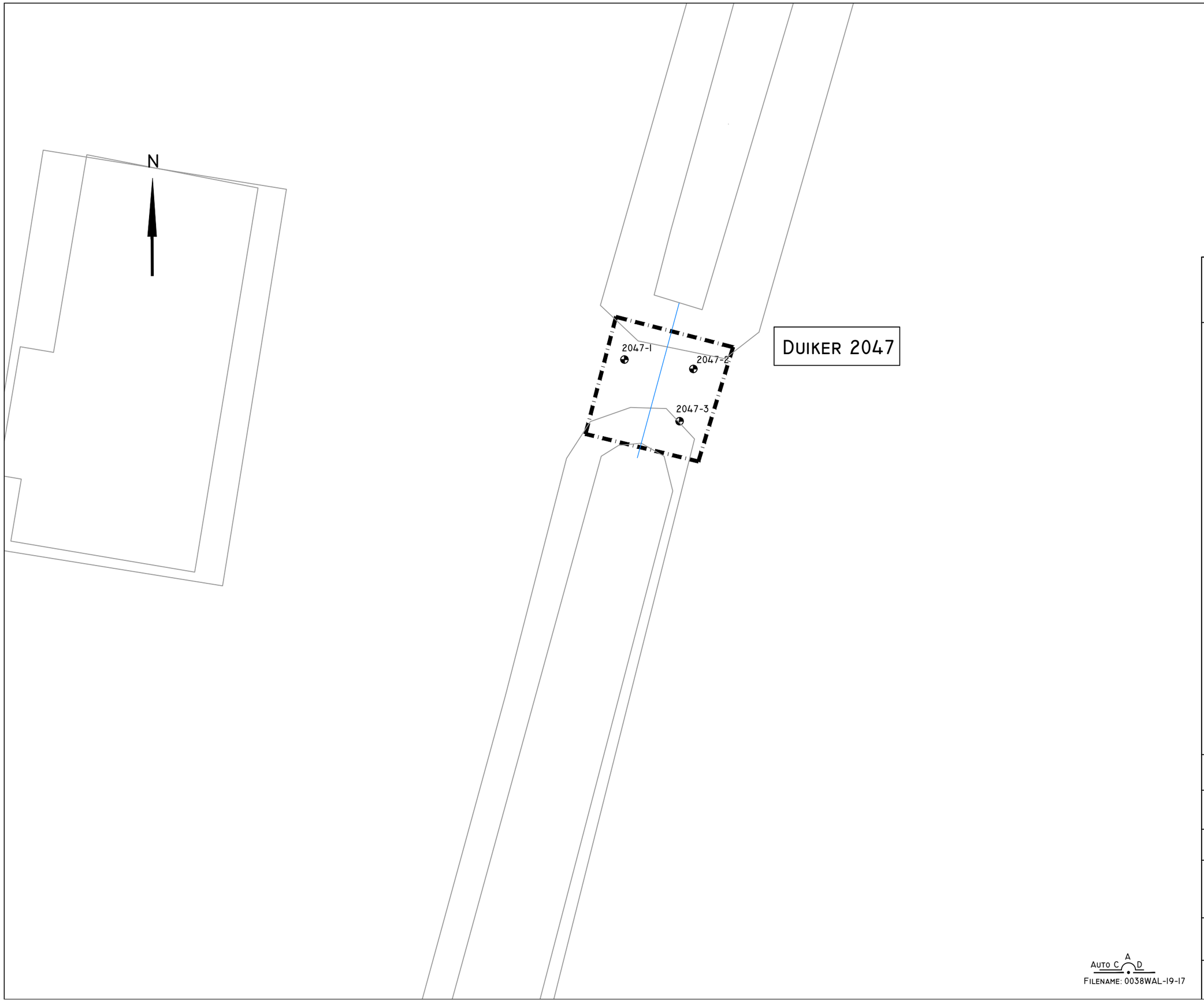
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-16



BIJLAGE 2-17
SITUATIETEKENING DUIKER 2047
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

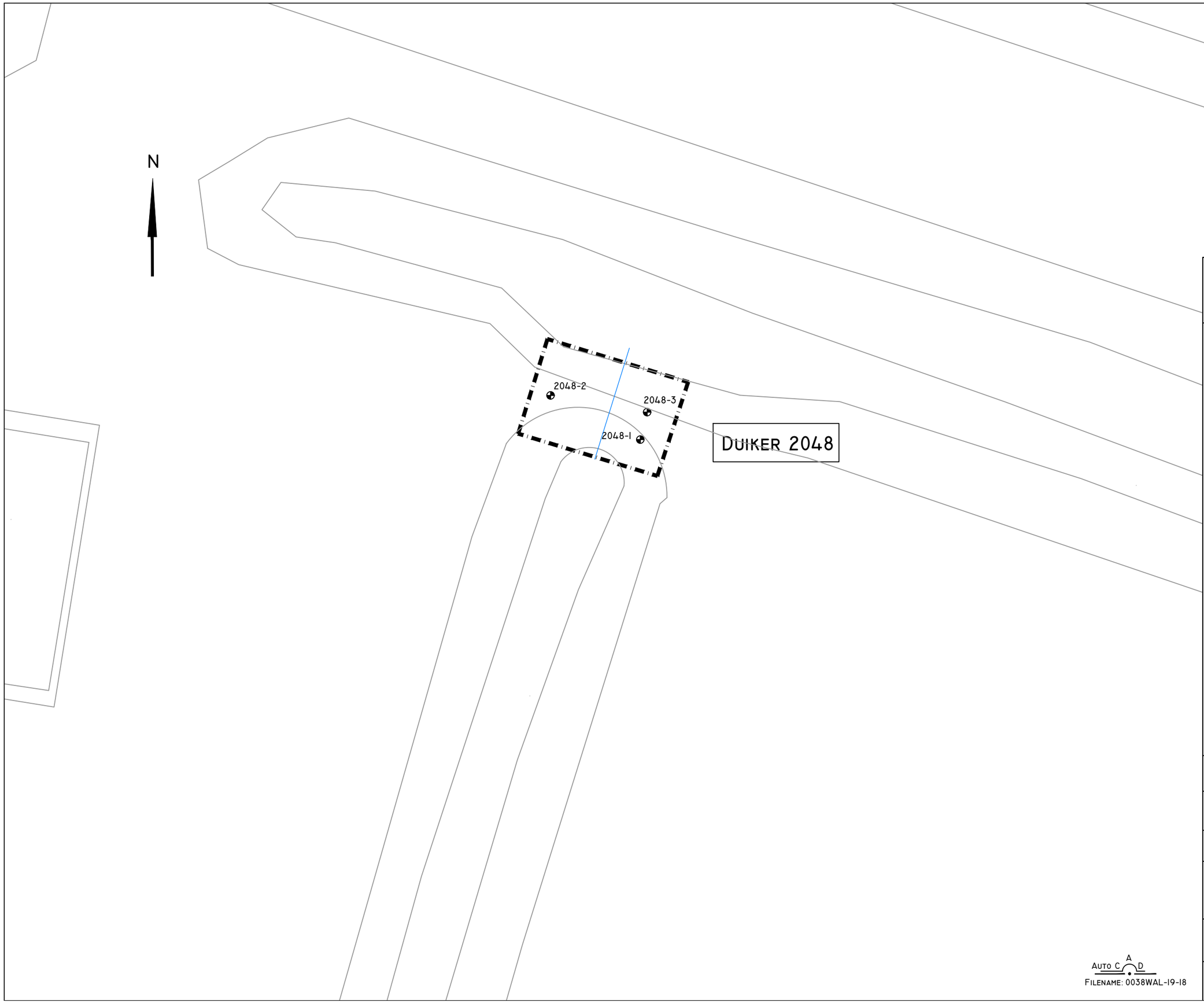
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-17



BIJLAGE 2-18
SITUATIETEKENING DUIKER 2048
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

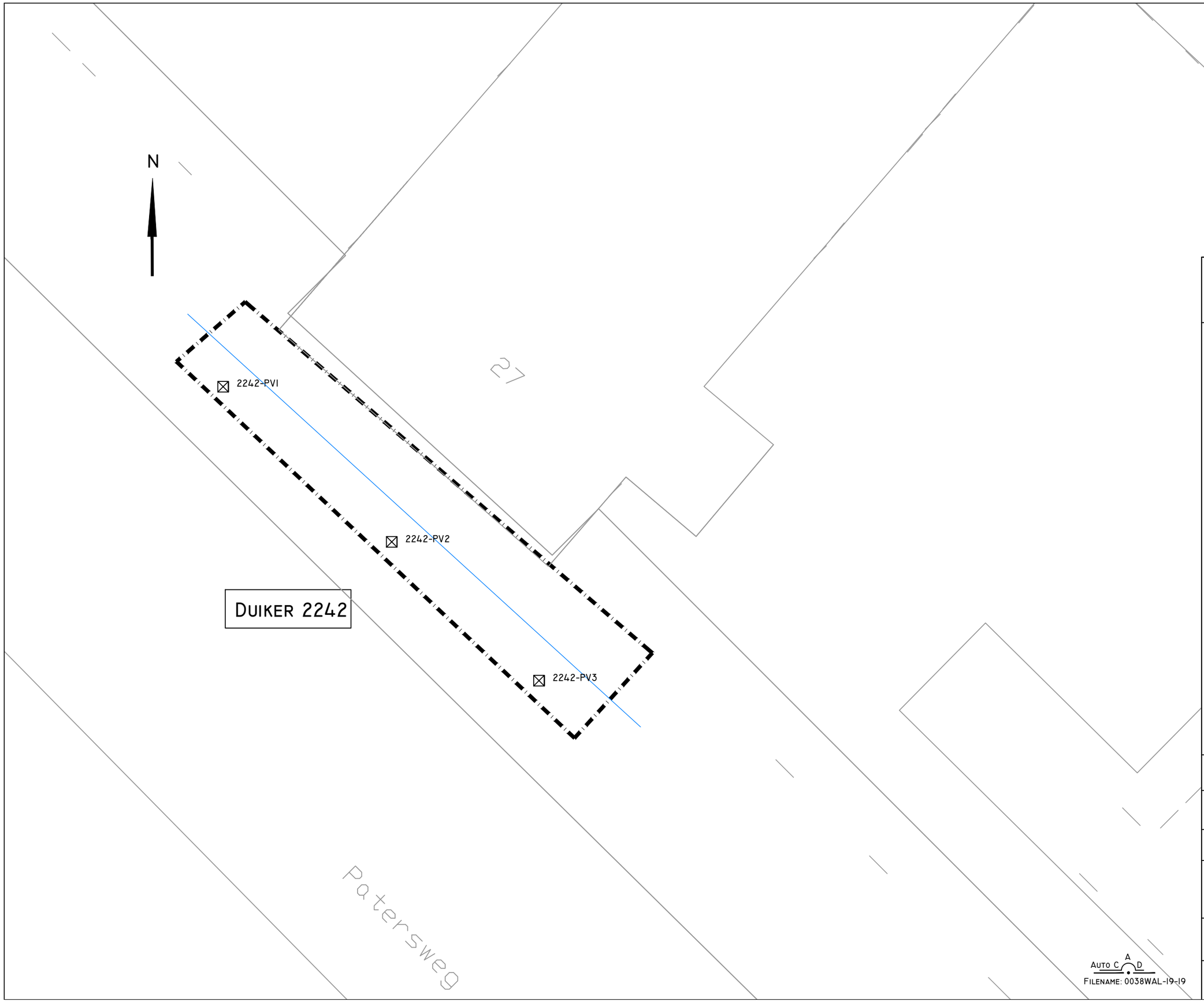
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-18



BIJLAGE 2-19
SITUATIETEKENING DUIKER 2242
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

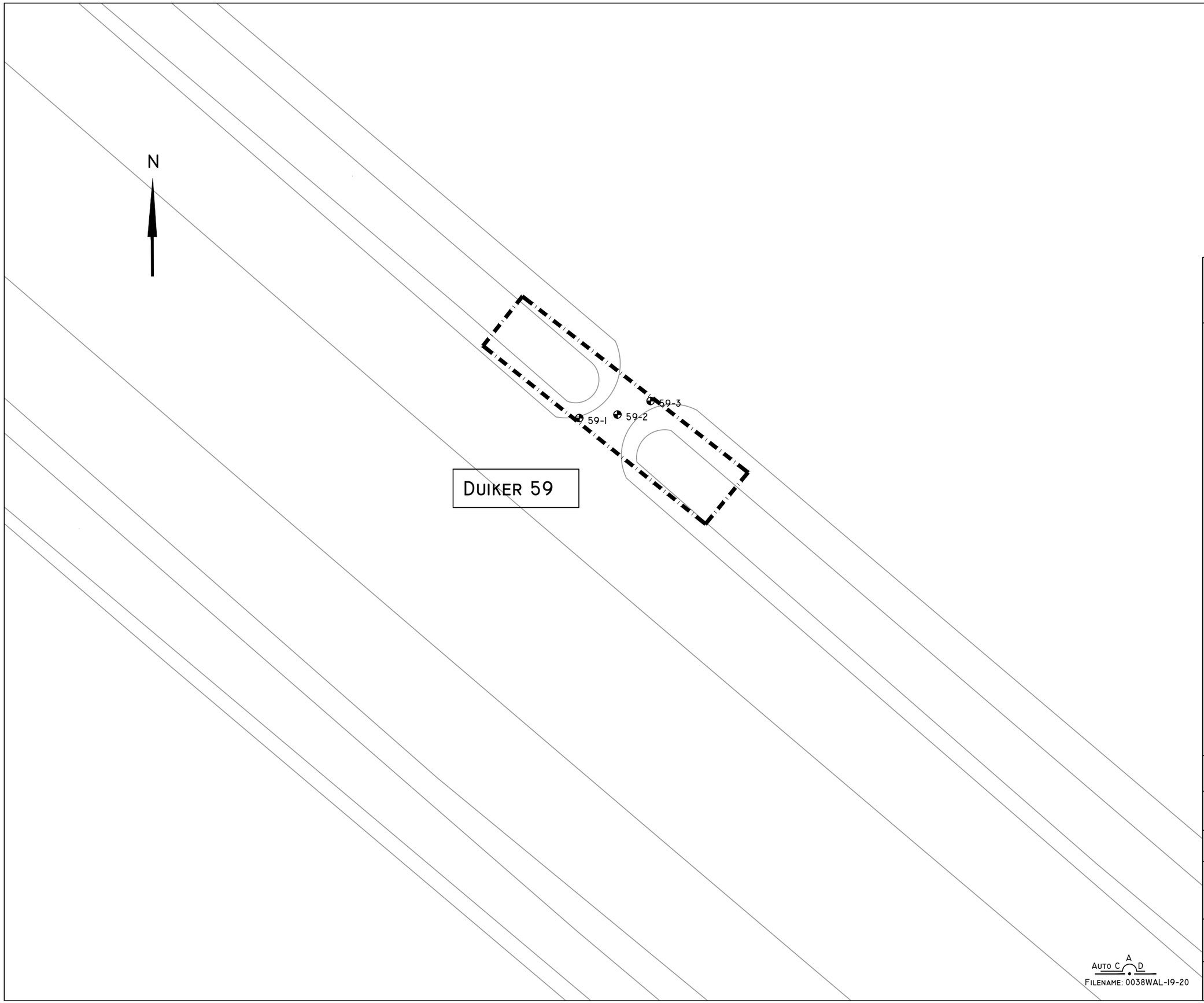
PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-19



BIJLAGE 2-20
SITUATIETEKENING DUIKER 2242
BODEMONDERZOEK

LEGENDA

- DUIKER
- ONDERZOEKSLOCATIE
- BORING
- PROEFGAT

0 1 2 3 4 5

PROJECT:
SCHELKENSBEEK TE BEESEL

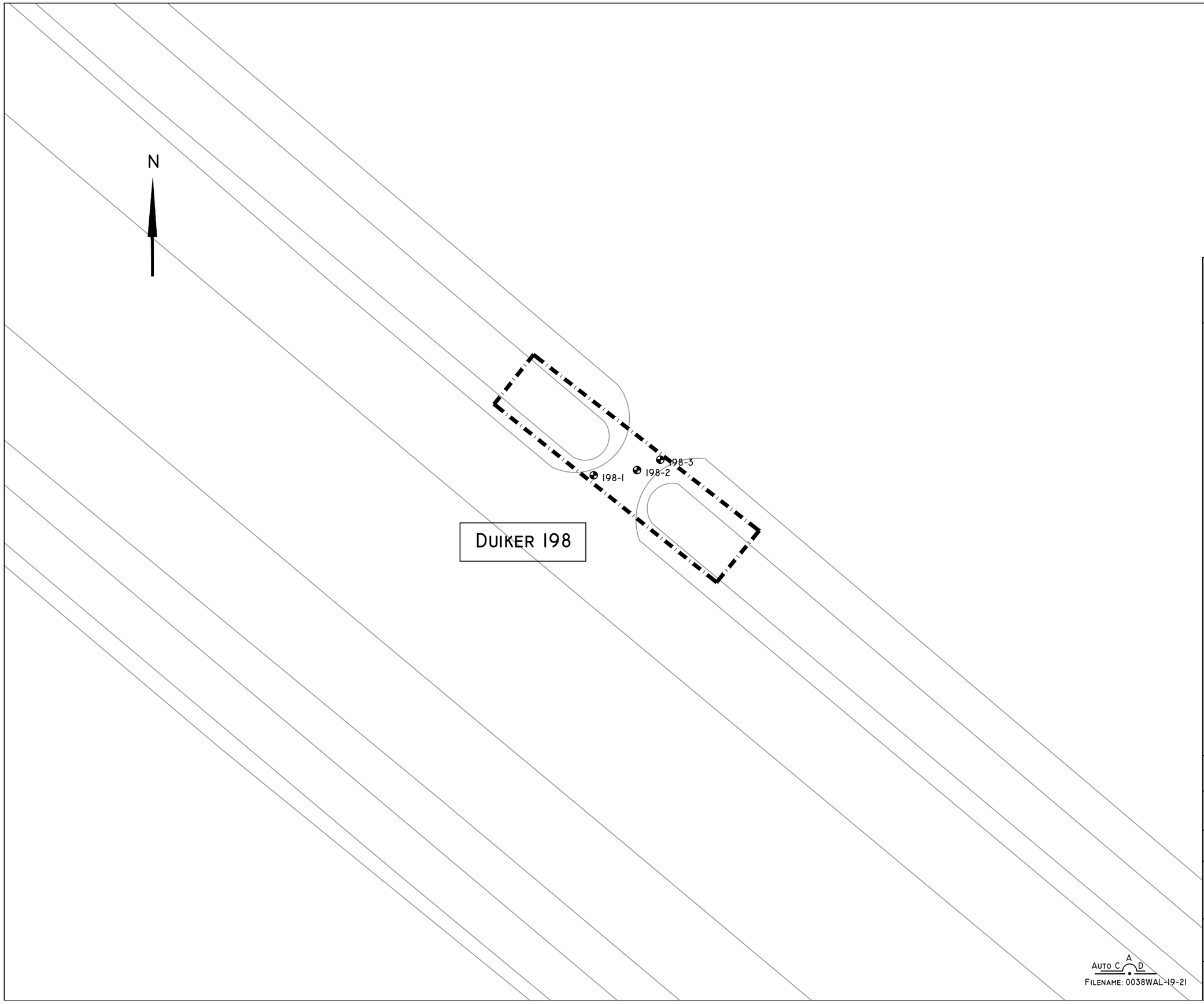
OPDRACHTGEVER:
WATERSCHAP LIMBURG

PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3



Auto C A D
Filename: 0038WAL-19-21

BIJLAGE 2-21
SITUATIETEKENING DUIKER 2242
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

PROJECT:
Schelkensbeek te Beesel

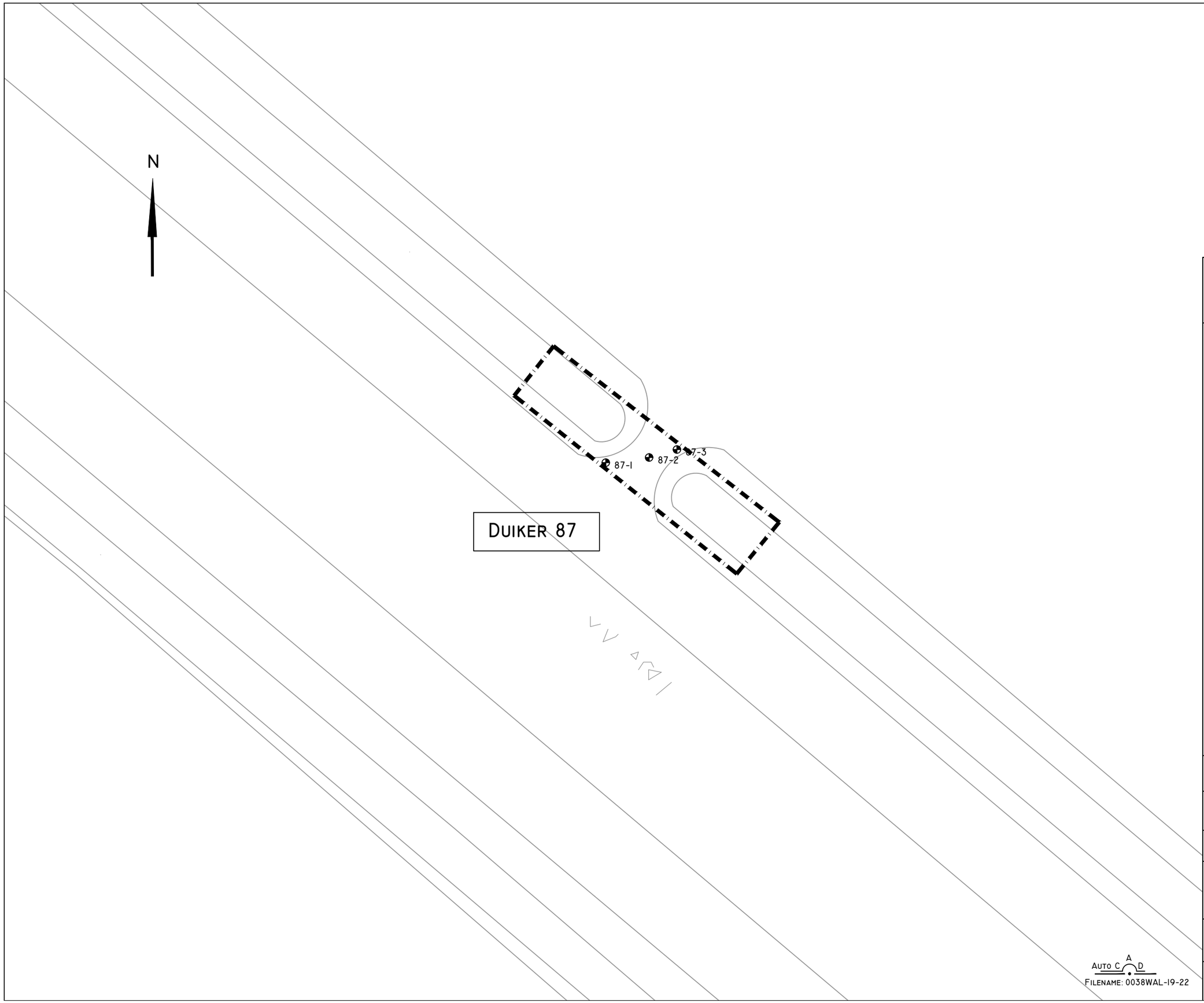
OPDRACHTGEVER:
Waterschap Limburg

PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

Milieutechnisch
Adviesbureau Heel BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3



BIJLAGE 2-22
SITUATIETEKENING DUIKER 2242
BODEMONDERZOEK

LEGENDA

DUIKER

ONDERZOEKSLOCATIE

BORING

PROEFGAT

0 1 2 3 4 5

AAN DEZE TEKENING KUNNEN GEEN RECHTEN WORDEN ONTLEEND

PROJECT:
SCHELKENSBEEK TE BEESEL

OPDRACHTGEVER:
WATERSCHAP LIMBURG

PROJECTLEIDER : EH
TEKENAAR : EH
PROJECTNR. : 0038WAL/19
DATUM : 01-05-2019
VERSIE : 1.0

MILIEUTECHNISCH
ADVIESBUREAU HEEL BV

TEL. : 0475-573231
FAX : 0475-571509

SCHAAL 1:100 /A3

AUTO CAD
FILENAME: 0038WAL-19-22

BIJLAGE 3

BOORPROFIELEN

Legenda (conform NEN 5104)

grind
- Grind, siltig
- Grind, zwak zandig
- Grind, matig zandig
- Grind, sterk zandig
- Grind, uiterst zandig

zand
- Zand, kleïig
- Zand, zwak siltig
- Zand, matig siltig
- Zand, sterk siltig
- Zand, uiterst siltig

veen
- Veen, mineraalarm
- Veen, zwak kleïig
- Veen, sterk kleïig
- Veen, zwak zandig
- Veen, sterk zandig

klei
- Klei, zwak siltig
- Klei, matig siltig
- Klei, sterk siltig
- Klei, uiterst siltig
- Klei, zwak zandig
- Klei, matig zandig
- Klei, sterk zandig

leem
- Leem, zwak zandig
- Leem, sterk zandig

overige toevoegingen
- zwak humeus
- matig humeus
- sterk humeus
- zwak grindig
- matig grindig
- sterk grindig

geur
- geen geur
- zwakke geur
- matige geur
- sterke geur
- uiterste geur

olie
- geen olie-water reactie
- zwakke olie-water reactie
- matige olie-water reactie
- sterke olie-water reactie
- uiterste olie-water reactie

p.i.d.-waarde
- >0
- >1
- >10
- >100
- >1000
- >10000

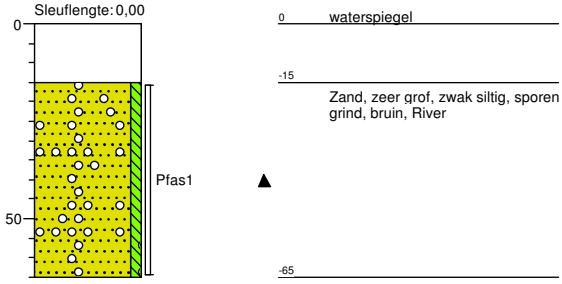
monsters
- geroerd monster
- ongeroerd monster
- volumering

overig
- bijzonder bestanddeel
- Gemiddeld hoogste grondwaterstand
- grondwaterstand
- Gemiddeld laagste grondwaterstand
- slib
- water

peilbuis
- blinde buis
- casing
- hoogste grondwaterstand
- gemiddelde grondwaterstand
- laagste grondwaterstand
- zand afdichting
- bentoniet/mikoliet/klei afdichting
- grind afdichting
- filter

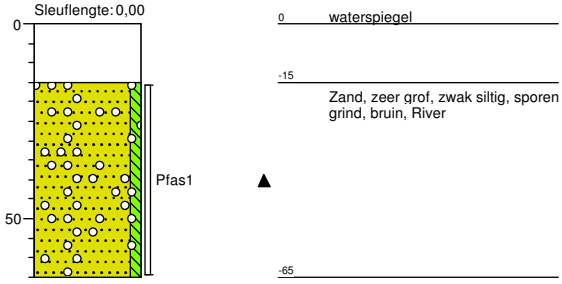
Boring: W01

Sleufbreedte:0,00
Sleuflengte:0,00



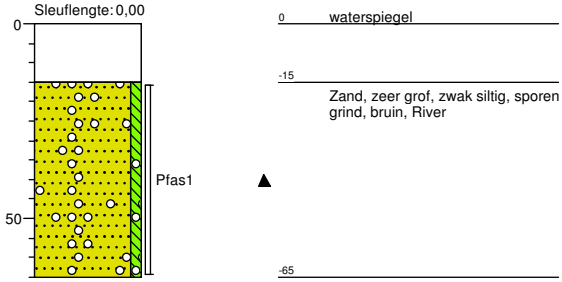
Boring: W02

Sleufbreedte:0,00
Sleuflengte:0,00



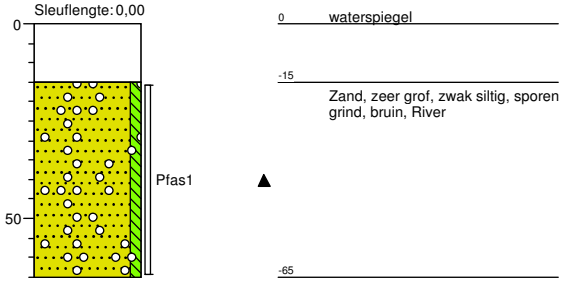
Boring: W03

Sleufbreedte:0,00
Sleuflengte:0,00



Boring: W04

Sleufbreedte:0,00
Sleuflengte:0,00

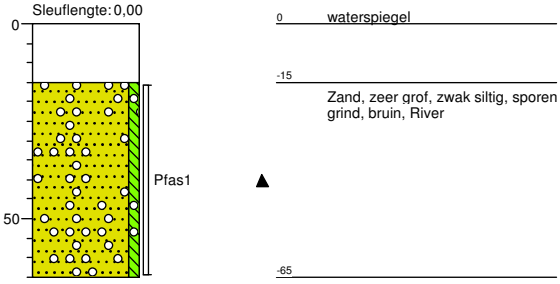


Schelkensbeek

Projectcode: 0303WAL-19_PFAS

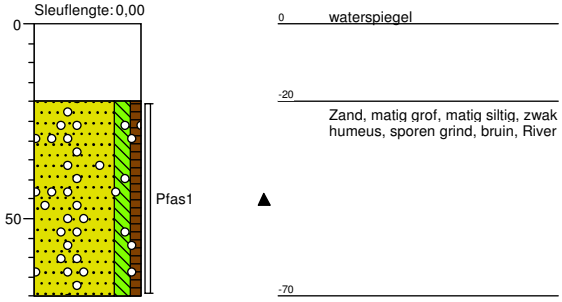
Boring: W05

Sleufbreedte:0,00
Sleuflengte:0,00



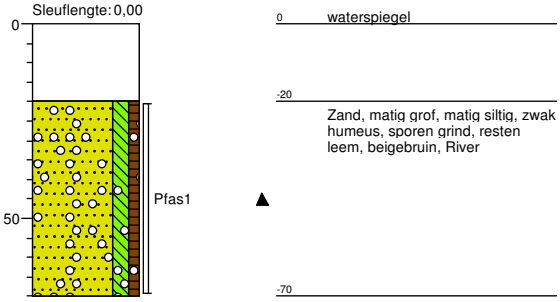
Boring: W06

Sleufbreedte:0,00
Sleuflengte:0,00



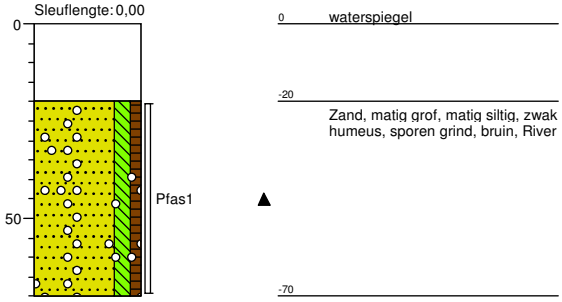
Boring: W07

Sleufbreedte:0,00
Sleuflengte:0,00



Boring: W08

Sleufbreedte:0,00
Sleuflengte:0,00

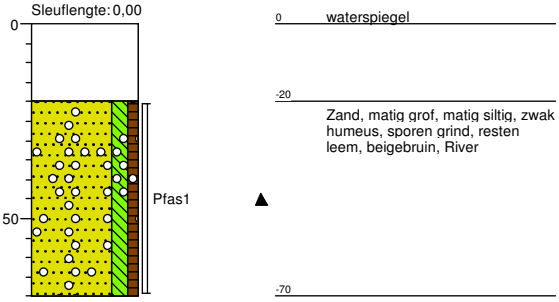


Schelkensbeek

Projectcode: 0303WAL-19_PFAS

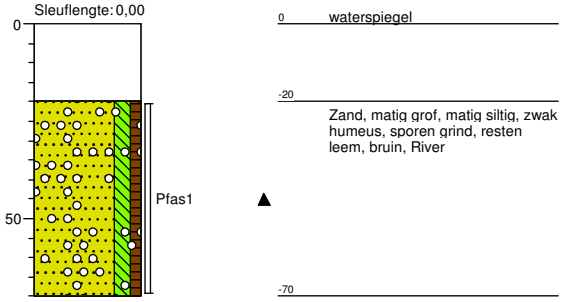
Boring: W09

Sleufbreedte:0,00
Sleuflengte:0,00



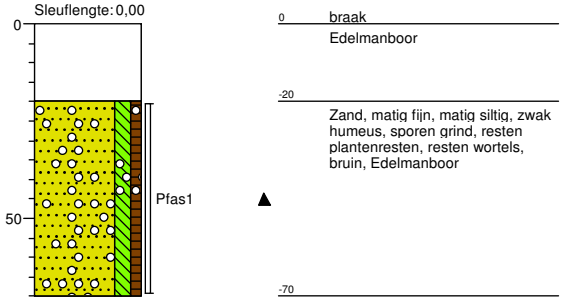
Boring: W10

Sleufbreedte:0,00
Sleuflengte:0,00



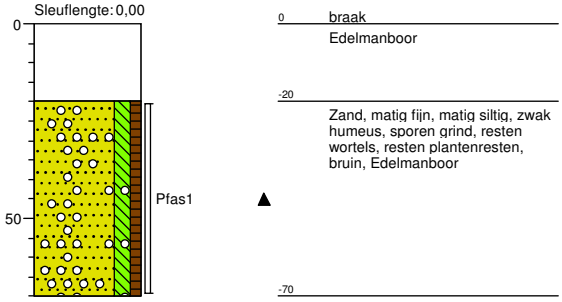
Boring: W11

Sleufbreedte:0,00
Sleuflengte:0,00



Boring: W12

Sleufbreedte:0,00
Sleuflengte:0,00

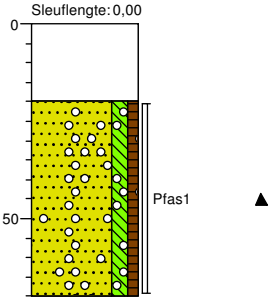


Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W13

Sleufbreedte:0,00
Sleuflengte:0,00



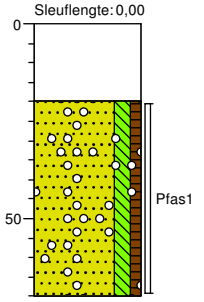
0 braak
Edelmanboor

-20
Zand, matig fijn, matig siltig, zwak humeus, sporen roest, sporen grind, resten plantenresten, bruin, Edelmanboor

-70

Boring: W14

Sleufbreedte:0,00
Sleuflengte:0,00



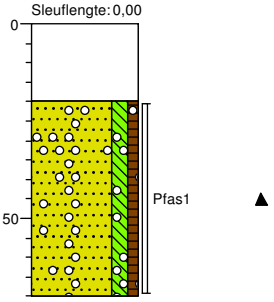
0 braak
Edelmanboor

-20
Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, bruin, Edelmanboor

-70

Boring: W15

Sleufbreedte:0,00
Sleuflengte:0,00



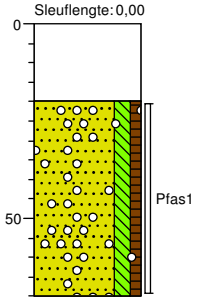
0 braak
Edelmanboor

-20
Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-70

Boring: W16

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-20
Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten plantenresten, resten wortels, grijsbruin, Edelmanboor

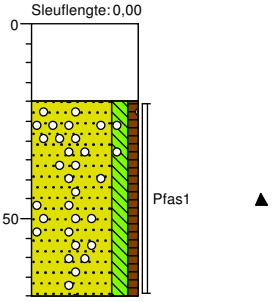
-70

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W17

Sleufbreedte:0,00
Sleuflengte:0,00



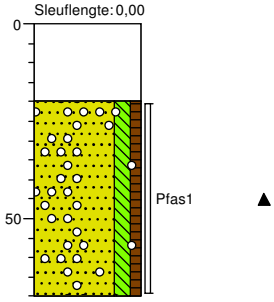
0 braak
Edelmanboor

-20 Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten plantenresten, resten wortels, donkerbruin, Edelmanboor

-70

Boring: W18

Sleufbreedte:0,00
Sleuflengte:0,00



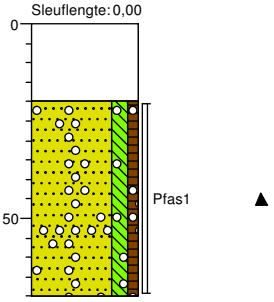
0 braak
Edelmanboor

-20 Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, sporen wortels, resten plantenresten, donkerbruin, Edelmanboor

-70

Boring: W19

Sleufbreedte:0,00
Sleuflengte:0,00



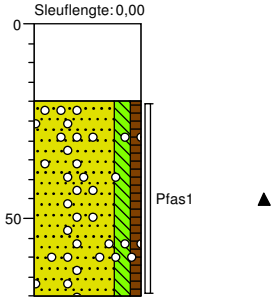
0 braak
Edelmanboor

-20 Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

-70

Boring: W20

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-20 Zand, matig fijn, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, grijs, Edelmanboor

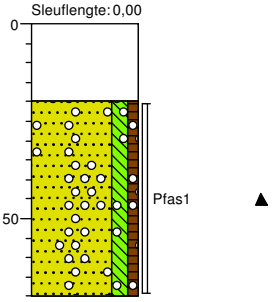
-70

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W21

Sleufbreedte:0,00
Sleuflengte:0,00



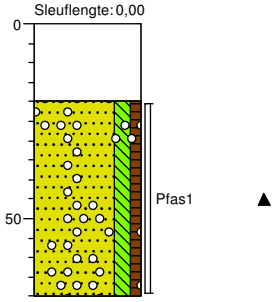
0 braak
Edelmanboor

-20
Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

-70

Boring: W22

Sleufbreedte:0,00
Sleuflengte:0,00



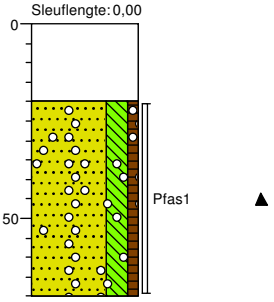
0 braak
Edelmanboor

-20
Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

-70

Boring: W23

Sleufbreedte:0,00
Sleuflengte:0,00



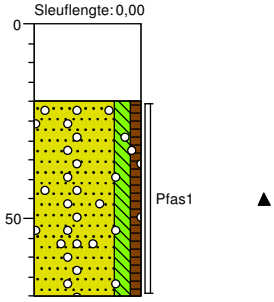
0 braak
Edelmanboor

-20
Zand, matig grof, sterk siltig, zwak humeus, sporen grind, resten plantenresten, donkerbruin, Edelmanboor

-70

Boring: W24

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-20
Zand, zeer grof, matig siltig, zwak humeus, sporen grind, resten plantenresten, resten wortels, grijsbruin, Edelmanboor

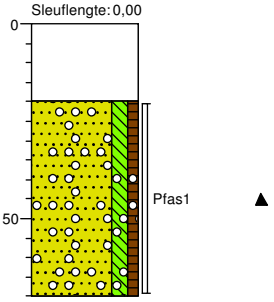
-70

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W25

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Edelmanboor

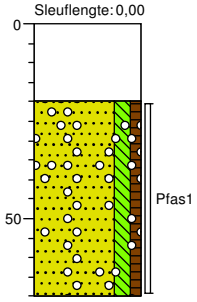
-20

Zand, matig grof, matig siltig, zwak humeus, brokken grind, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-70

Boring: W26

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Edelmanboor

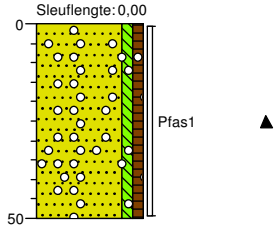
-20

Zand, matig fijn, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

-70

Boring: W27

Sleufbreedte:0,00
Sleuflengte:0,00



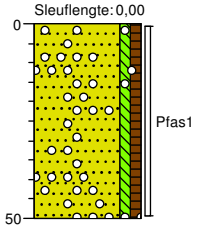
0 braak

Zand, matig grof, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, bruin, Edelmanboor

-50

Boring: W28

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Zand, matig grof, zwak siltig, zwak humeus, sporen grind, resten plantenresten, donkerbruin, Edelmanboor

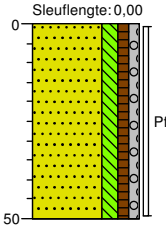
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W29

Sleufbreedte:0,00
Sleuflengte:0,00



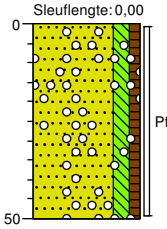
0 braak

Zand, zeer grof, matig siltig, zwak humeus, zwak grindig, resten plantenresten, resten wortels, grijsbruin, Edelmanboor

-50

Boring: W30

Sleufbreedte:0,00
Sleuflengte:0,00



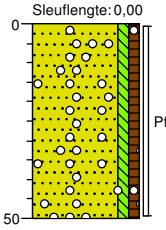
0 braak

Zand, zeer grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten plantenresten, resten wortels, grijsbruin, Edelmanboor

-50

Boring: W31

Sleufbreedte:0,00
Sleuflengte:0,00



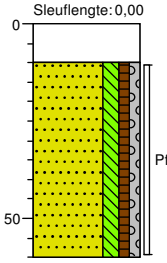
0 braak

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, grijs, Edelmanboor

-50

Boring: W32

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Edelmanboor

-10

Zand, zeer grof, matig siltig, zwak humeus, zwak grindig, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

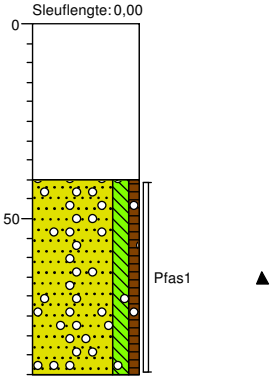
-60

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W33

Sleufbreedte:0,00
Sleuflengte:0,00



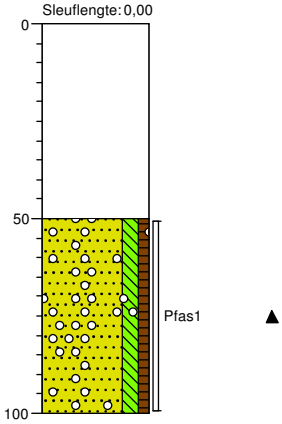
0 braak
Edelmanboor

-40
Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

-90

Boring: W34

Sleufbreedte:0,00
Sleuflengte:0,00



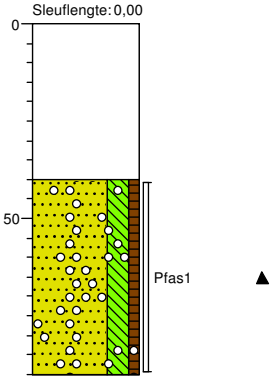
0 braak
Edelmanboor

-50
Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

-100

Boring: W35

Sleufbreedte:0,00
Sleuflengte:0,00



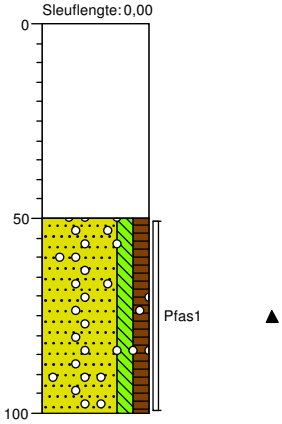
0 braak
Edelmanboor

-40
Zand, matig grof, sterk siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-90

Boring: W36

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-50
Zand, matig grof, matig siltig, matig humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

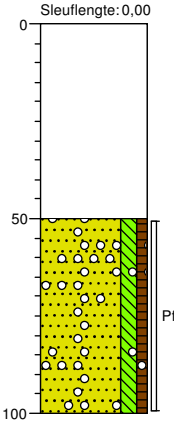
-100

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W37

Sleufbreedte:0,00
Sleuflengte:0,00



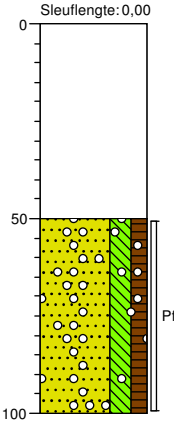
0 braak
Edelmanboor

-50 Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-100

Boring: W38

Sleufbreedte:0,00
Sleuflengte:0,00



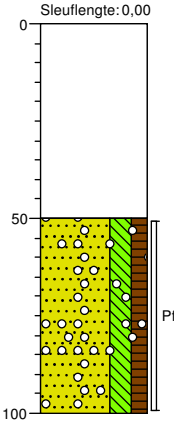
0 braak
Edelmanboor

-50 Zand, matig grof, sterk siltig, matig humeus, sporen grind, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-100

Boring: W39

Sleufbreedte:0,00
Sleuflengte:0,00



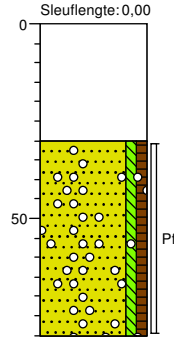
0 braak
Edelmanboor

-50 Zand, matig grof, sterk siltig, matig humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-100

Boring: W40

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-30 Zand, matig grof, zwak siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

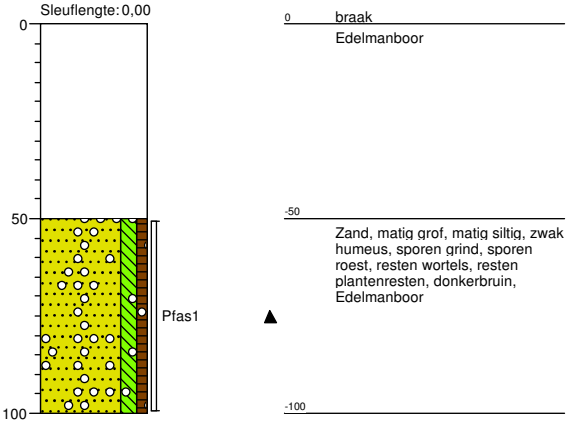
-80

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

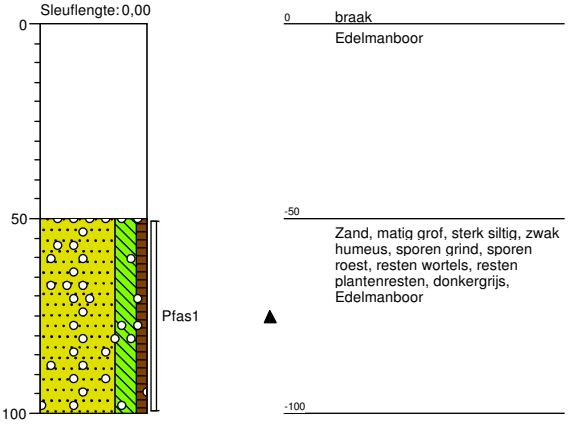
Boring: W41

Sleufbreedte:0,00
Sleuflengte:0,00



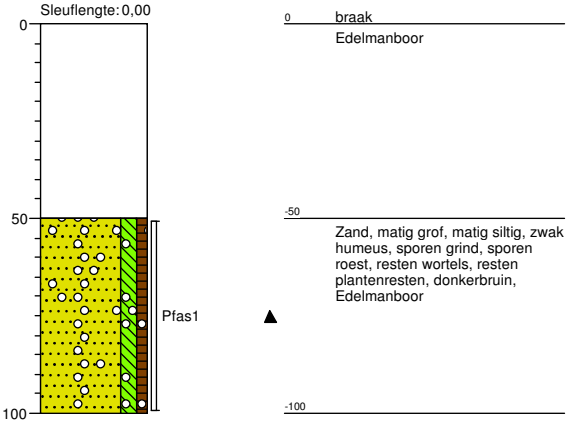
Boring: W42

Sleufbreedte:0,00
Sleuflengte:0,00



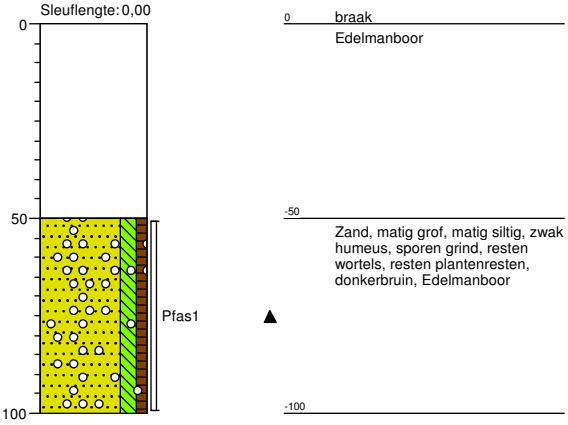
Boring: W43

Sleufbreedte:0,00
Sleuflengte:0,00



Boring: W44

Sleufbreedte:0,00
Sleuflengte:0,00

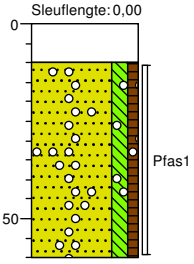


Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W45

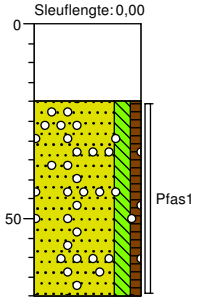
Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor
-10
Zand, matig fijn, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, donkergrijs, Edelmanboor
-60

Boring: W46

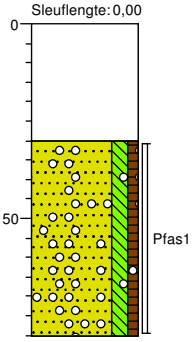
Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor
-20
Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkerbruin, Edelmanboor
-70

Boring: W47

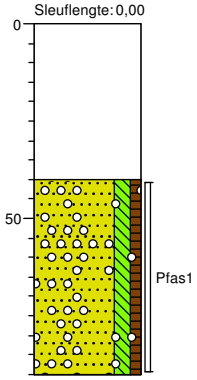
Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor
-30
Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, grijs, Edelmanboor
-80

Boring: W48

Sleufbreedte:0,00
Sleuflengte:0,00



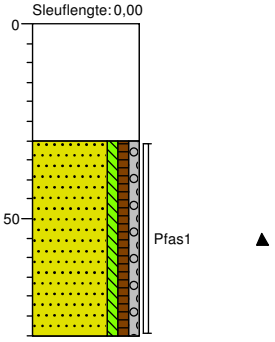
0 braak
Edelmanboor
-40
Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, donkergrijs, Edelmanboor
-90

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W49

Sleufbreedte:0,00
Sleuflengte:0,00



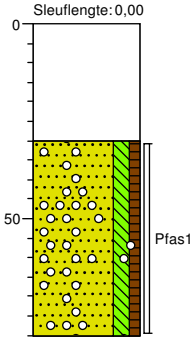
0 braak
Edelmanboor

-30 Zand, matig fijn, zwak siltig, zwak humeus, zwak grindig, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

-80

Boring: W50

Sleufbreedte:0,00
Sleuflengte:0,00



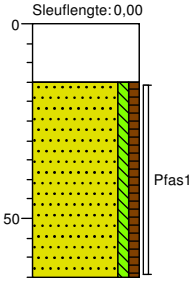
0 braak
Edelmanboor

-30 Zand, matig fijn, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-80

Boring: W51

Sleufbreedte:0,00
Sleuflengte:0,00



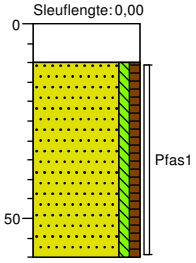
0 waterspiegel

-15 Zand, matig fijn, zwak siltig, zwak humeus, bruingrijs, Edelmanboor

-65

Boring: W52

Sleufbreedte:0,00
Sleuflengte:0,00



0 waterspiegel

-10 Zand, matig fijn, zwak siltig, zwak humeus, bruin, Edelmanboor

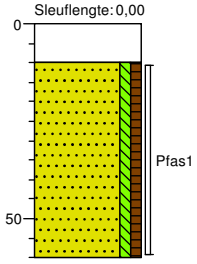
-60

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W53

Sleufbreedte:0,00
Sleuflengte:0,00



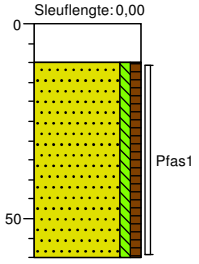
0 waterspiegel

-10 Zand, matig fijn, zwak siltig, zwak humeus, bruin, Edelmanboor

-60

Boring: W54

Sleufbreedte:0,00
Sleuflengte:0,00



0 waterspiegel

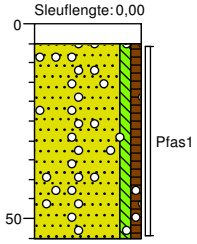
Edelmanboor

-10 Zand, matig fijn, zwak siltig, zwak humeus, resten leem, bruinbeige, Edelmanboor

-60

Boring: W55

Sleufbreedte:0,00
Sleuflengte:0,00



0 waterspiegel

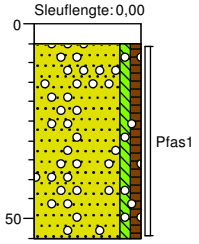
-5 Edelmanboor

Zand, matig grof, zwak siltig, zwak humeus, sporen grind, bruinbeige, Edelmanboor

-55

Boring: W56

Sleufbreedte:0,00
Sleuflengte:0,00



0 waterspiegel

-5 Edelmanboor

Zand, matig grof, zwak siltig, zwak humeus, sporen grind, bruinbeige, Edelmanboor

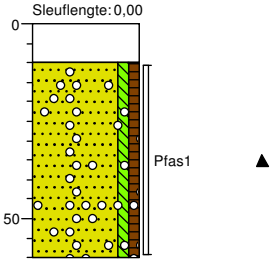
-55

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W57

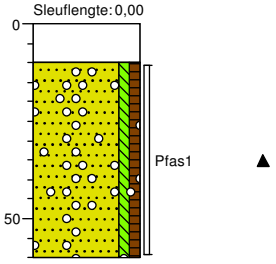
Sleufbreedte:0,00
Sleuflengte:0,00



0 waterspiegel
Edelmanboor
-10
Zand, matig grof, zwak siltig, zwak humeus, sporen grind, bruinbeige, Edelmanboor
-60

Boring: W58

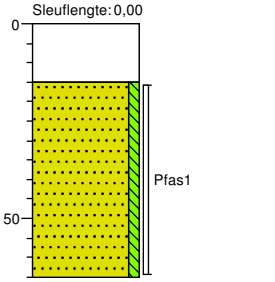
Sleufbreedte:0,00
Sleuflengte:0,00



0 waterspiegel
Edelmanboor
-10
Zand, matig grof, zwak siltig, zwak humeus, sporen grind, bruinbeige, Edelmanboor
-60

Boring: W59

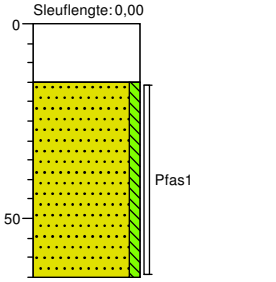
Sleufbreedte:0,00
Sleuflengte:0,00



0 waterspiegel
Edelmanboor
-15
Zand, matig fijn, zwak siltig, beigebruin, Edelmanboor
-65

Boring: W60

Sleufbreedte:0,00
Sleuflengte:0,00



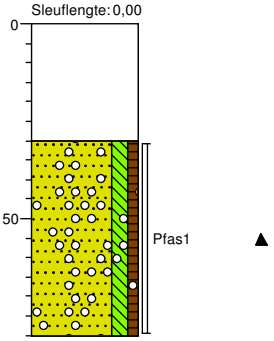
0 waterspiegel
Edelmanboor
-15
Zand, matig fijn, zwak siltig, grijsbeige, Edelmanboor
-65

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W61

Sleufbreedte:0,00
Sleuflengte:0,00



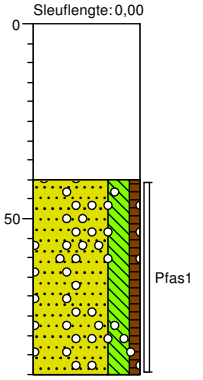
0 braak
Edelmanboor

-30 Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, beigebruin, Edelmanboor

-80

Boring: W62

Sleufbreedte:0,00
Sleuflengte:0,00



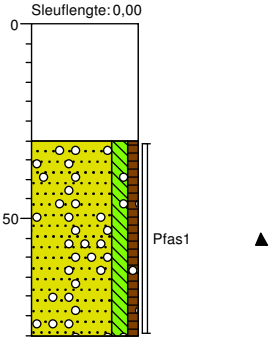
0 braak
Edelmanboor

-40 Zand, matig grof, sterk siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-90

Boring: W63

Sleufbreedte:0,00
Sleuflengte:0,00



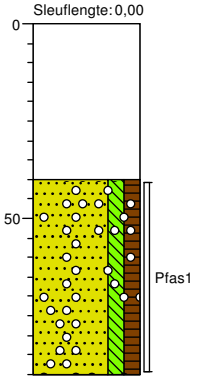
0 braak
Edelmanboor

-30 Zand, matig fijn, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

-80

Boring: W64

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-40 Zand, matig fijn, matig siltig, matig humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

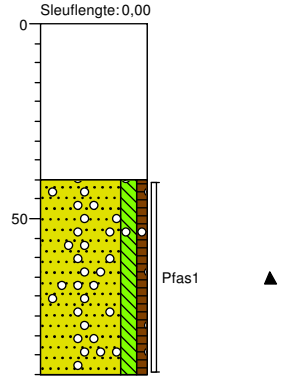
-90

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W65

Sleufbreedte:0,00
Sleuflengte:0,00



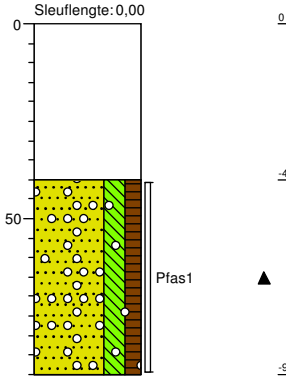
0 braak
Edelmanboor

-40 Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

-90

Boring: W66

Sleufbreedte:0,00
Sleuflengte:0,00



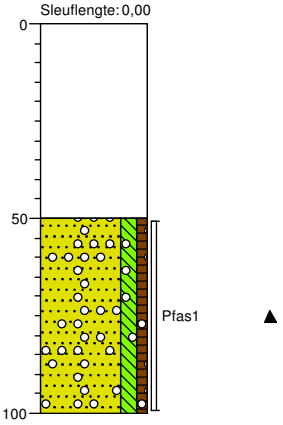
0 braak
Edelmanboor

-40 Zand, matig grof, sterk siltig, matig humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, beigebruin, Edelmanboor

-90

Boring: W67

Sleufbreedte:0,00
Sleuflengte:0,00



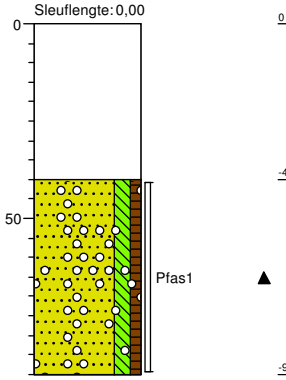
0 braak
Edelmanboor

-50 Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkerbruin, Edelmanboor

-100

Boring: W68

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-40 Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

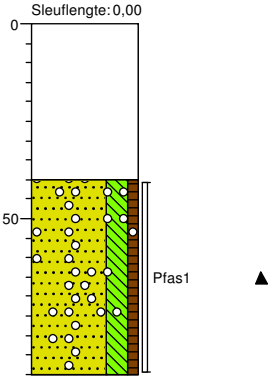
-90

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W69

Sleufbreedte:0,00
Sleuflengte:0,00



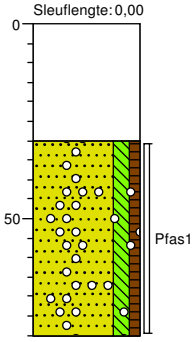
0 braak
Edelmanboor

-40 Zand, matig grof, sterk siltig, zwak humeus, sporen grind, zwak roesthoudend, resten wortels, sporen plantenresten, donkergrijs, Edelmanboor

-90

Boring: W70

Sleufbreedte:0,00
Sleuflengte:0,00



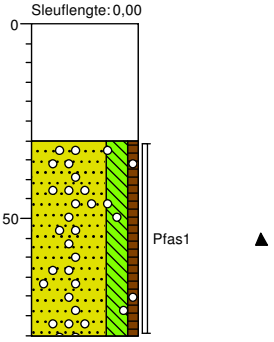
0 braak
Edelmanboor

-30 Zand, matig fijn, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

-80

Boring: W71

Sleufbreedte:0,00
Sleuflengte:0,00



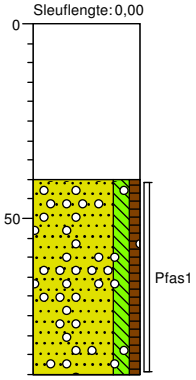
0 braak
Edelmanboor

-30 Zand, matig grof, sterk siltig, zwak humeus, sporen grind, zwak roesthoudend, resten wortels, resten plantenresten, oranjegrijs, Edelmanboor

-80

Boring: W72

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-40 Zand, matig grof, matig siltig, zwak humeus, sporen grind, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

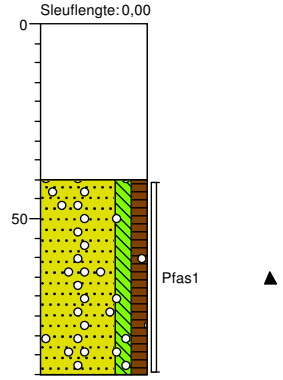
-90

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W73

Sleufbreedte:0,00
Sleuflengte:0,00



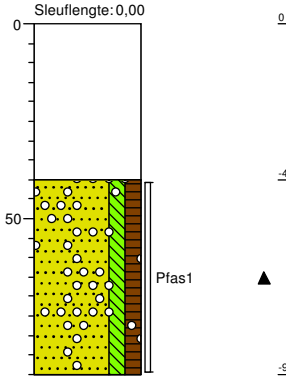
0 braak
Edelmanboor

-40 Zand, matig grof, matig siltig, matig humeus, sporen grind, zwak roesthoudend, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

-90

Boring: W74

Sleufbreedte:0,00
Sleuflengte:0,00



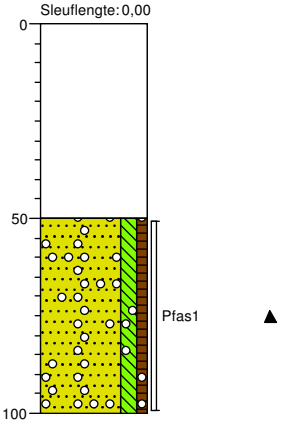
0 braak
Edelmanboor

-40 Zand, matig grof, matig siltig, matig humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

-90

Boring: W75

Sleufbreedte:0,00
Sleuflengte:0,00



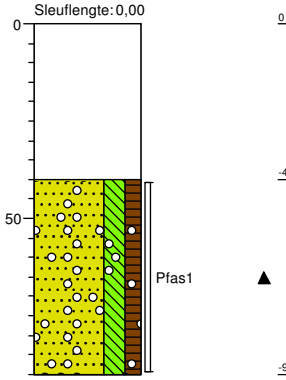
0 braak
Edelmanboor

-50 Zand, matig grof, matig siltig, zwak humeus, sporen grind, sporen roest, resten wortels, sporen plantenresten, donkergrijs, Edelmanboor

-100

Boring: W76

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak
Edelmanboor

-40 Zand, matig grof, sterk siltig, matig humeus, sporen grind, zwak roesthoudend, resten wortels, resten plantenresten, donkergrijs, Edelmanboor

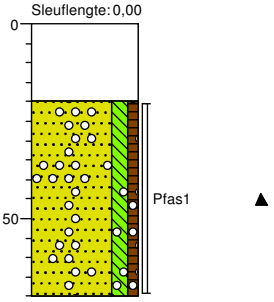
-90

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: W77

Sleufbreedte:0,00
Sleuflengte:0,00



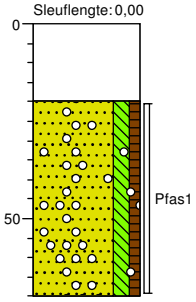
0 braak
Edelmanboor

-20
Zand, matig grof, matig siltig, zwak humeus, sporen grind, zwak roesthoudend, resten wortels, resten plantenresten, oranje, Edelmanboor

-70

Boring: W78

Sleufbreedte:0,00
Sleuflengte:0,00



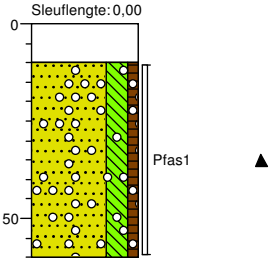
0 braak
Edelmanboor

-20
Zand, matig grof, matig siltig, zwak humeus, sporen grind, zwak roesthoudend, resten wortels, resten plantenresten, oranjebruin, Edelmanboor

-70

Boring: W79

Sleufbreedte:0,00
Sleuflengte:0,00



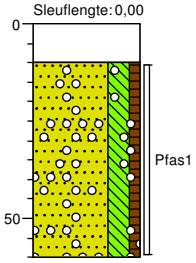
0 braak
Edelmanboor

-10
Zand, zeer grof, sterk siltig, zwak humeus, sporen grind, zwak roesthoudend, resten wortels, resten plantenresten, beigebruin, Edelmanboor

-60

Boring: W80

Sleufbreedte:0,00
Sleuflengte:0,00



0 waterbodem
Edelmanboor

-10
Zand, matig grof, sterk siltig, zwak humeus, sporen grind, zwak roesthoudend, resten wortels, resten plantenresten, oranjebruin, Edelmanboor

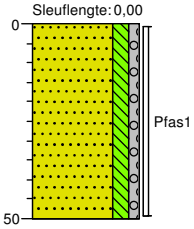
-60

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 198-1

Sleufbreedte:0,00
Sleuflengte:0,00



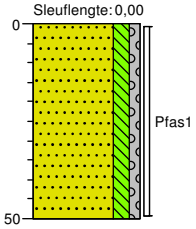
0 berm

Zand, matig grof, matig siltig, zwak grindig, beigebruin, Edelmanboor

-50

Boring: 198-2

Sleufbreedte:0,00
Sleuflengte:0,00



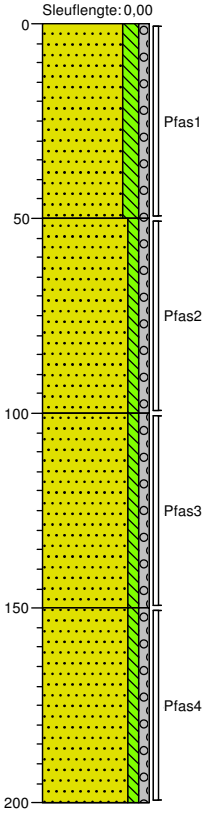
0 berm

Zand, matig grof, matig siltig, zwak grindig, grijsbruin, Edelmanboor

-50

Boring: 198-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 berm

Zand, matig grof, matig siltig, zwak grindig, licht geelbruin, Edelmanboor

-50

Zand, matig grof, zwak siltig, zwak grindig, beigegeel, Edelmanboor

-100

Zand, matig grof, zwak siltig, zwak grindig, bruingrijs, Edelmanboor

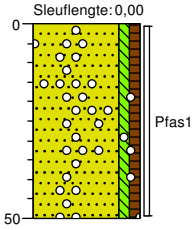
-150

Zand, matig grof, zwak siltig, zwak grindig, grijs, Edelmanboor

-200

Boring: 2001-1

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, resten wortels, sporen roest, bruin, Edelmanboor

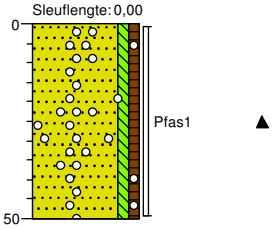
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2001-2

Sleufbreedte:0,00
Sleuflengte:0,00



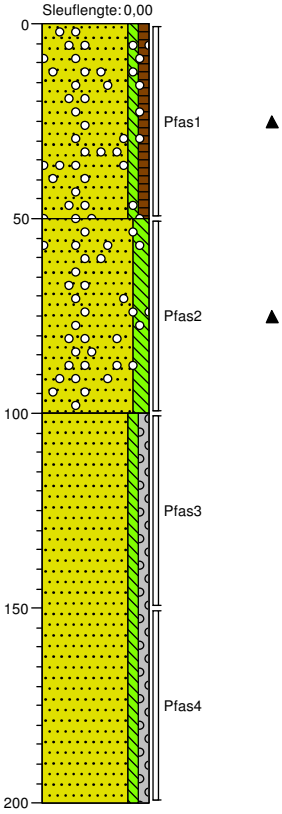
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, bruin, Edelmanboor

-50

Boring: 2001-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, bruin, Edelmanboor

-50

Zand, matig grof, matig siltig, sporen grind, sporen roest, beigebruin, Edelmanboor

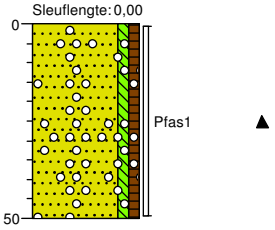
-100

Zand, zeer grof, zwak siltig, zwak grindig, grijs, Edelmanboor

-200

Boring: 2002-1

Sleufbreedte:0,00
Sleuflengte:0,00



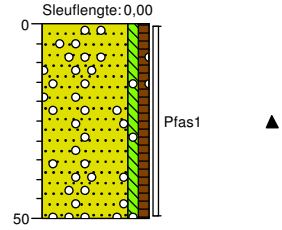
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, bruin, Edelmanboor

-50

Boring: 2002-2

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, bruin, Edelmanboor

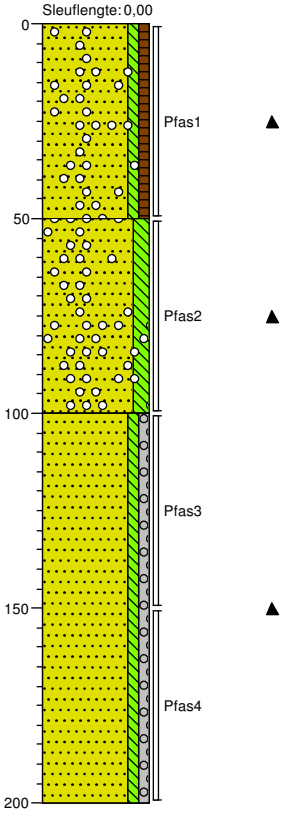
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2002-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, zwak roesthoudend, resten wortels, donkerbruin, Edelmanboor

-50

Zand, matig grof, matig siltig, sporen grind, zwak roesthoudend, donkerbruin, Edelmanboor

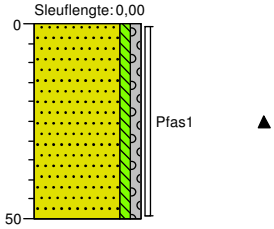
-100

Zand, zeer grof, zwak siltig, zwak grindig, zwak roesthoudend, beigegrijs, Edelmanboor

-200

Boring: 2003-1

Sleufbreedte:0,00
Sleuflengte:0,00



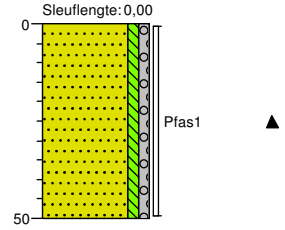
0 verharding

Zand, matig grof, zwak siltig, zwak grindig, brokken aardewerk, sporen puingranulaat, sporen roest, donkergrijs, Edelmanboor

-50

Boring: 2003-2

Sleufbreedte:0,00
Sleuflengte:0,00



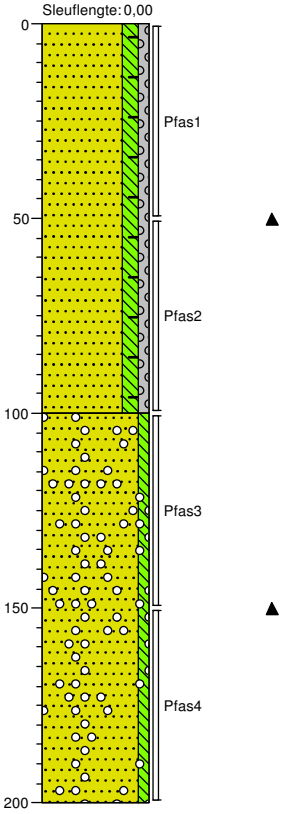
0 verharding

Zand, matig grof, zwak siltig, zwak grindig, brokken aardewerk, sporen kolengruis, sporen puingranulaat, sporen roest, donkergrijs, Edelmanboor

-50

Boring: 2003-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 verharding

Zand, matig grof, matig siltig, zwak grindig, zwak roesthoudend, sporen baksteen, brokken aardewerk, sporen kolengruis, donkerbruin, Edelmanboor

-100

Zand, matig grof, zwak siltig, sporen roest, sporen grind, sporen aardewerk, beigebruin, Edelmanboor

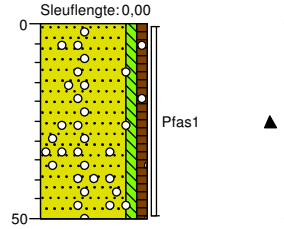
-200

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2004-1

Sleufbreedte:0,00
Sleuflengte:0,00



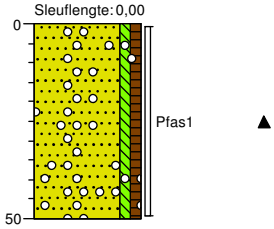
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten plantenresten, grijsbruin, Edelmanboor

-50

Boring: 2004-2

Sleufbreedte:0,00
Sleuflengte:0,00



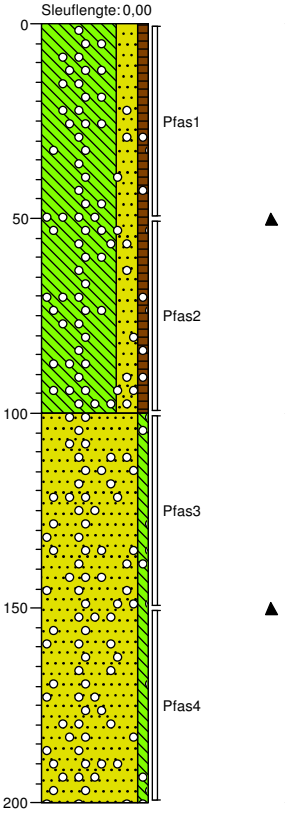
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten plantenresten, grijsbruin, Edelmanboor

-50

Boring: 2004-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Leem, sterk zandig, zwak humeus, sporen roest, sporen grind, resten plantenresten, grijsbruin, Edelmanboor

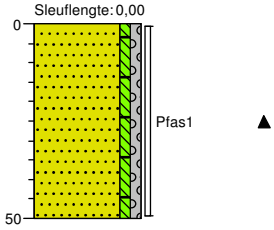
-100

Zand, zeer grof, zwak siltig, sporen grind, zwak roesthoudend, grijsbeige, Edelmanboor

-200

Boring: 2005-1

Sleufbreedte:0,00
Sleuflengte:0,00



0 verharding

Zand, matig grof, zwak siltig, zwak grindig, sporen aardewerk, sporen kolengruis, sporen baksteen, donkergrijs, Edelmanboor

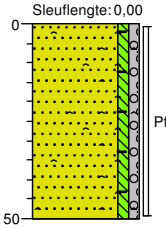
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2005-2

Sleufbreedte:0,00
Sleuflengte:0,00



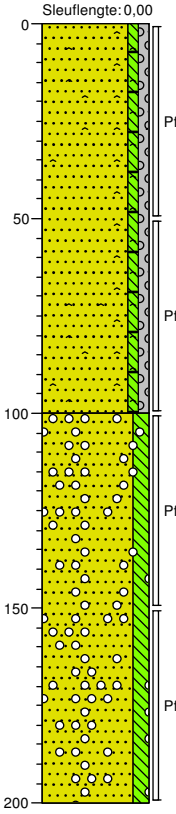
0 verharding

Zand, matig grof, zwak siltig, zwak grindig, sporen aardewerk, sporen kolengruis, sporen asfalt, sporen baksteen, donkerbruin, Edelmanboor

-50

Boring: 2005-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 verharding

Zand, matig grof, zwak siltig, zwak grindig, brokken aardewerk, sporen asfalt, sporen kolengruis, sporen baksteen, beigebruin, Edelmanboor

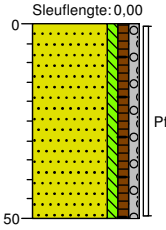
-100

Zand, matig grof, matig siltig, sporen grind, bruinbeige, Edelmanboor

-200

Boring: 2007-1

Sleufbreedte:0,00
Sleuflengte:0,00



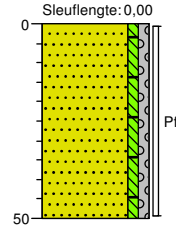
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, zwak grindig, brokken baksteen, resten wortels, zwak roesthoudend, donkerbruin, Edelmanboor

-50

Boring: 2007-2

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig fijn, zwak siltig, zwak grindig, zwak roesthoudend, sporen baksteen, brokken puin, donkerbruin, Edelmanboor

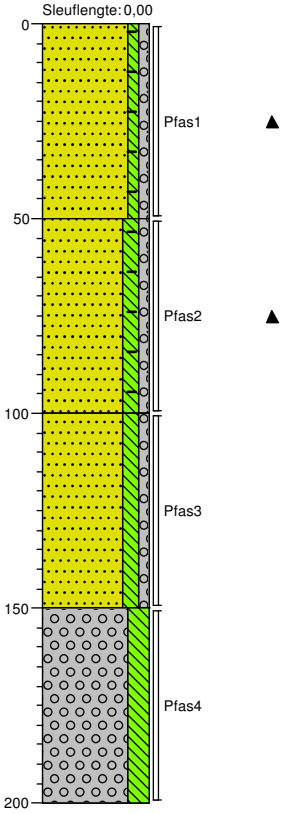
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2007-3aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig grof, zwak siltig, zwak grindig, sporen baksteen, brokken puin, zwak roesthoudend, donkerbruin, Edelmanboor

-50

Zand, matig grof, matig siltig, zwak grindig, zwak roesthoudend, sporen baksteen, beigebruin, Edelmanboor

-100

Zand, zeer grof, matig siltig, zwak grindig, grijs, Edelmanboor

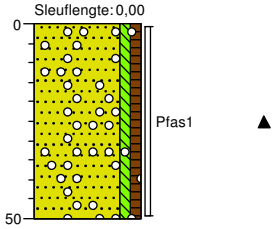
-150

Grind, matig grof, siltig, grijs, River

-200

Boring: 2008-1

Sleufbreedte:0,00
Sleuflengte:0,00



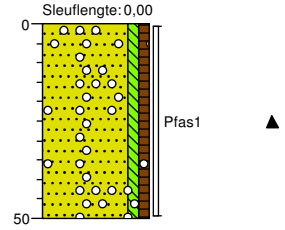
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, bruin, Edelmanboor

-50

Boring: 2008-2

Sleufbreedte:0,00
Sleuflengte:0,00



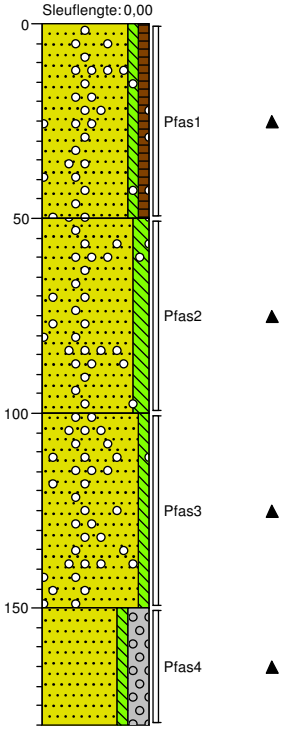
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, bruin, Edelmanboor

-50

Boring: 2008-3aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, bruin, Edelmanboor

-50

Zand, matig grof, matig siltig, zwak roesthoudend, sporen grind, resten leem, beigegrijs, Edelmanboor

-100

Zand, zeer grof, zwak siltig, sporen grind, zwak roesthoudend, oranjegrijs, Edelmanboor

-150

Zand, zeer grof, zwak siltig, sterk grindig, zwak roesthoudend, grijs, Edelmanboor, Stuit op grind.....

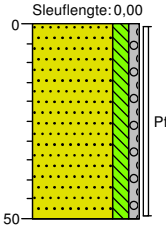
-180

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2010-1aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



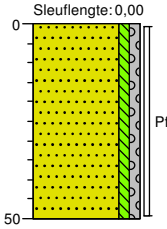
0 berm

Zand, matig grof, matig siltig, zwak grindig, donker bruingrijs, Edelmanboor

-50

Boring: 2010-2aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



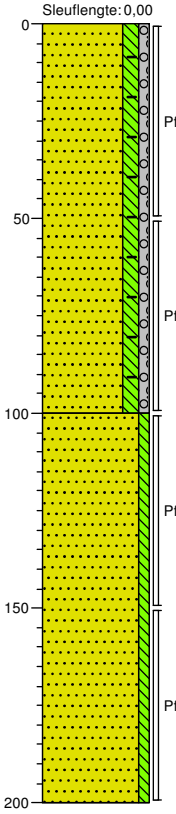
0 berm

Zand, matig grof, zwak siltig, zwak grindig, donkerbruin, Edelmanboor

-50

Boring: 2010-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 asfalt

Zand, matig grof, matig siltig, zwak grindig, sporen roest, sporen baksteen, sporen kolengruis, grijsbruin, Edelmanboor

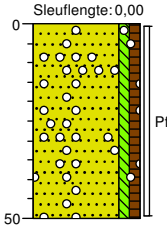
-100

Zand, matig grof, zwak siltig, donkergrijs, Edelmanboor

-200

Boring: 2047-1

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig grof, zwak siltig, zwak humeus, sporen roest, sporen grind, resten wortels, bruin, Edelmanboor

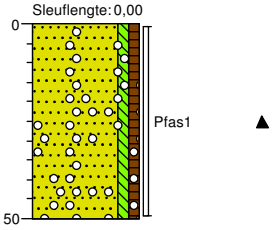
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2047-2

Sleufbreedte:0,00
Sleuflengte:0,00



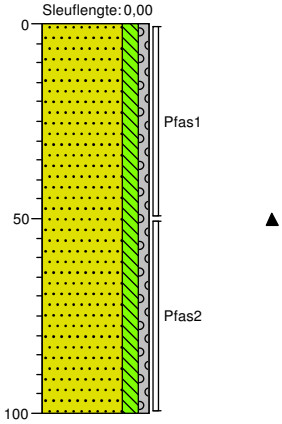
0 weiland

Zand, matig grof, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, resten plantenresten, grijsbruin, Edelmanboor

-50

Boring: 2047-3

Sleufbreedte:0,00
Sleuflengte:0,00



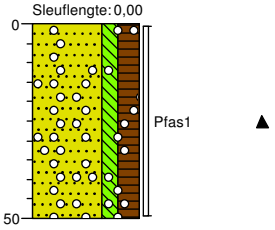
0 weiland

Zand, matig grof, matig siltig, zwak grindig, zwak roesthoudend, resten wortels, grijsbruin, Edelmanboor, Stuit op????

-100

Boring: 2048-1

Sleufbreedte:0,00
Sleuflengte:0,00



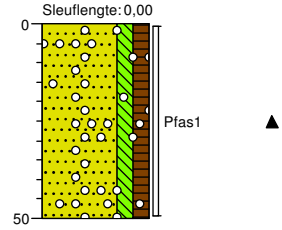
0 weiland

Zand, matig grof, matig siltig, sterk humeus, volledig wortels, matig plantenresten houdend, matig grindhoudend, bruin, Edelmanboor

-50

Boring: 2048-2

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig grof, matig siltig, matig humeus, matig plantenresten houdend, matig wortelhoudend, sporen grind, zwak roesthoudend, donkerbruin, Edelmanboor

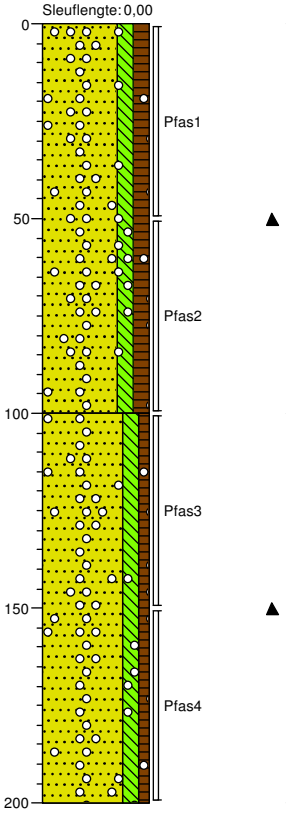
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2048-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig grof, matig siltig, matig humeus, sporen grind, zwak roesthoudend, resten wortels, resten plantenresten, bruin, Edelmanboor

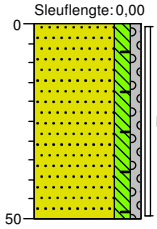
-100

Zand, zeer grof, matig siltig, zwak humeus, sporen roest, sporen grind, resten wortels, donkerbruin, Edelmanboor

-200

Boring: 2081-1aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



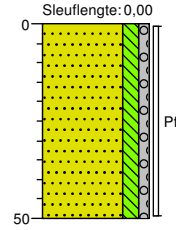
0 berm

Zand, matig grof, matig siltig, zwak grindig, sporen baksteen, beigebruin, Edelmanboor

-50

Boring: 2081-2aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



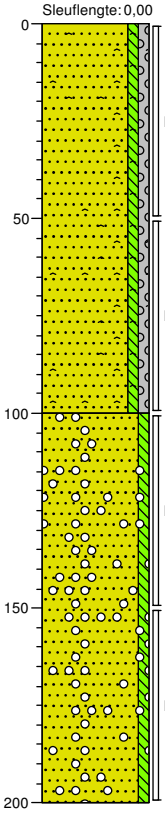
0 berm

Zand, matig grof, matig siltig, zwak grindig, beigebruin, Edelmanboor

-50

Boring: 2081-3aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



0 berm

Zand, matig grof, zwak siltig, zwak grindig, sporen kolengruis, sporen asfalt, sporen aardewerk, bruin, Edelmanboor

-100

Zand, matig grof, zwak siltig, sporen grind, sporen roest, donkergrijs, Edelmanboor

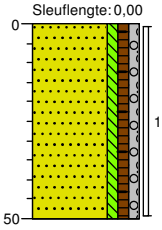
-200

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2676-1

Sleufbreedte:0,00
Sleuflengte:0,00



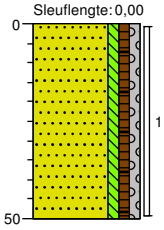
0 braak

Zand, matig grof, zwak siltig, zwak humeus, zwak grindig, sporen baksteen, sporen roest, resten wortels, bruinbeige, Edelmanboor

-50

Boring: 2676-2

Sleufbreedte:0,00
Sleuflengte:0,00



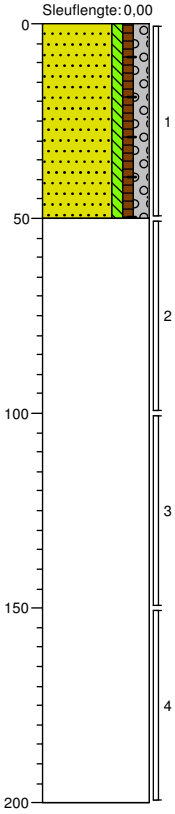
0 braak

Zand, matig grof, zwak siltig, zwak humeus, zwak grindig, resten plantenresten, sporen kolengruis, sporen baksteen, grijsbeige, Edelmanboor

-50

Boring: 2676-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Zand, matig grof, zwak siltig, zwak humeus, matig grindig, sporen baksteen, bruinbeige, Edelmanboor

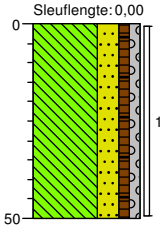
-50

Volledig stol, geelbeige, Edelmanboor

-200

Boring: 2690-1

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Leem, sterk zandig, zwak humeus, zwak grindig, sporen kolengruis, resten wortels, sporen baksteen, sporen roest, grijsbruin, Edelmanboor

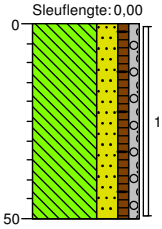
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2690-2

Sleufbreedte:0,00
Sleuflengte:0,00



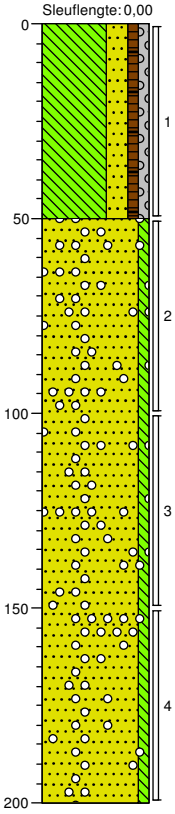
0 braak

Leem, sterk zandig, zwak humeus, zwak grindig, sporen kolengruis, sporen baksteen, resten plantenresten, grijsbruin, Edelmanboor

-50

Boring: 2690-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Leem, sterk zandig, zwak humeus, zwak grindig, sporen wortels, sporen kolengruis, sporen baksteen, grijsbruin, Edelmanboor

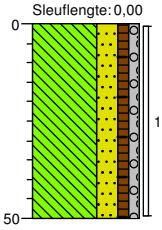
-50

Zand, matig grof, zwak siltig, sporen grind, sporen roest, beige, Edelmanboor

-200

Boring: 2693-1

Sleufbreedte:0,00
Sleuflengte:0,00



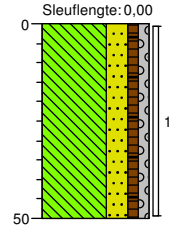
0 braak

Leem, sterk zandig, zwak humeus, zwak grindig, sporen baksteen, resten wortels, sporen kolengruis, bruin, Edelmanboor

-50

Boring: 2693-2

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Leem, sterk zandig, zwak humeus, zwak grindig, sporen kolengruis, resten wortels, sporen baksteen, sporen roest, bruin, Edelmanboor

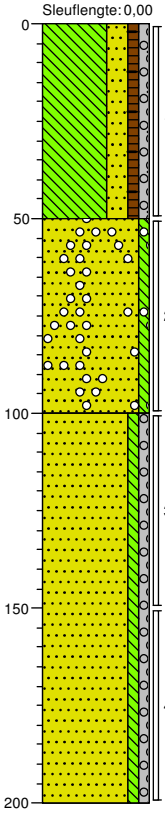
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2693-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 braak

Leem, sterk zandig, zwak humeus, zwak grindig, resten wortels, sporen baksteen, sporen kolengruis, beigebruin, Edelmanboor

-50

Zand, matig grof, zwak siltig, sporen grind, sporen roest, beige, Edelmanboor

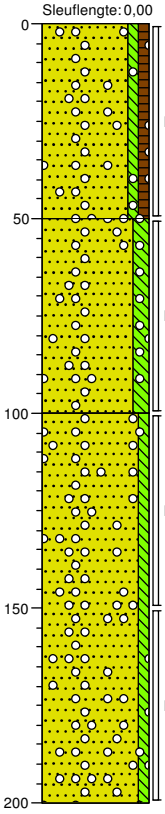
-100

Zand, zeer grof, zwak siltig, zwak grindig, grijsbeige, Edelmanboor

-200

Boring: 2909-1

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig grof, zwak siltig, zwak humeus, sporen grind, sporen roest, grijsbruin, Edelmanboor

-50

Zand, matig grof, matig siltig, sporen grind, sporen roest, beigebruin, Edelmanboor

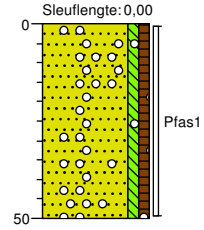
-100

Zand, matig grof, zwak siltig, sporen roest, sporen grind, donkergrijs, Edelmanboor

-200

Boring: 2909-2aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



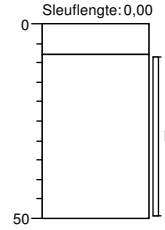
0 weiland

Zand, matig grof, zwak siltig, zwak humeus, sporen grind, bruinbeige, Edelmanboor

-50

Boring: 2909-3aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



0 klinker

Edelmanboor

-8

Volledig puingranulaat, bruinrood, Edelmanboor

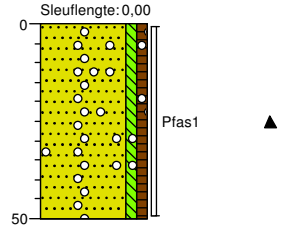
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 2923-1

Sleufbreedte:0,00
Sleuflengte:0,00



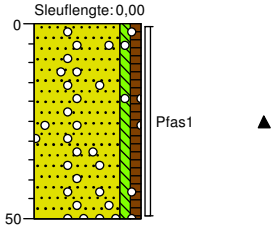
0 weiland

Zand, matig grof, zwak siltig, zwak humeus, sporen grind, sporen roest, bruinbeige, Edelmanboor

-50

Boring: 2923-2

Sleufbreedte:0,00
Sleuflengte:0,00



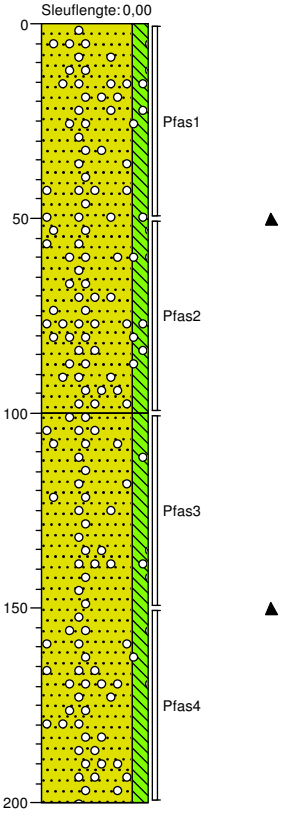
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen roest, resten wortels, bruinbeige, Edelmanboor

-50

Boring: 2923-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Zand, matig grof, matig siltig, sporen grind, zwak roesthoudend, beigebruin, Edelmanboor

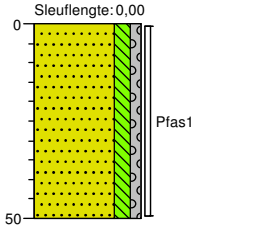
-100

Zand, matig grof, matig siltig, sporen grind, sporen roest, donkergrijs, Edelmanboor

-200

Boring: 59-1

Sleufbreedte:0,00
Sleuflengte:0,00



0 berm

Zand, matig grof, matig siltig, zwak grindig, bruin, Edelmanboor

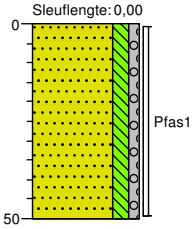
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 59-2

Sleufbreedte:0,00
Sleuflengte:0,00



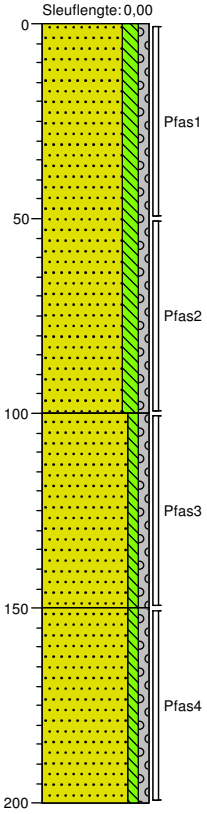
0 berm

Zand, matig grof, matig siltig, zwak grindig, licht beigebruin, Edelmanboor

-50

Boring: 59-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 berm

Zand, matig grof, matig siltig, zwak grindig, sporen roest, licht roestbruin, Edelmanboor

-100

Zand, matig grof, zwak siltig, zwak grindig, sporen roest, roestgrijs, Edelmanboor

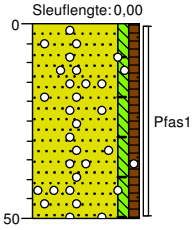
-150

Zand, matig grof, zwak siltig, zwak grindig, grijs, Edelmanboor

-200

Boring: 607-1aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



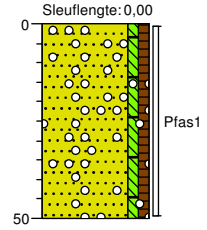
0 berm

Zand, matig grof, zwak siltig, zwak humeus, sporen baksteen, sporen grind, donkerbruin, Edelmanboor

-50

Boring: 607-2aangepast

Sleufbreedte:0,00
Sleuflengte:0,00



0 berm

Zand, matig grof, zwak siltig, zwak humeus, sporen baksteen, sporen grind, bruinbeige, Edelmanboor

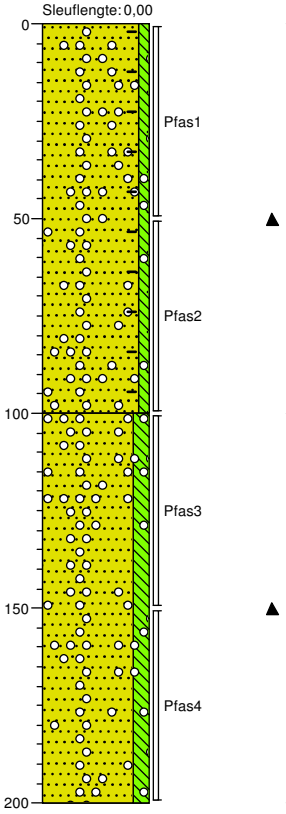
-50

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: 607-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 asfalt

Zand, matig grof, zwak siltig, sporen grind, sporen baksteen, beigebruin, Edelmanboor

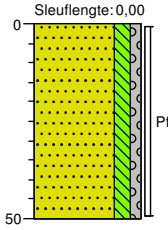
-100

Zand, matig grof, matig siltig, zwak roesthoudend, sporen grind, donkergrijs, Edelmanboor

-200

Boring: 87-1

Sleufbreedte:0,00
Sleuflengte:0,00



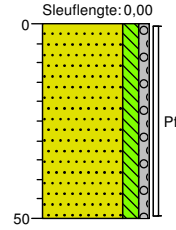
0 berm

Zand, matig grof, matig siltig, zwak grindig, geelbeige, Edelmanboor

-50

Boring: 87-2

Sleufbreedte:0,00
Sleuflengte:0,00



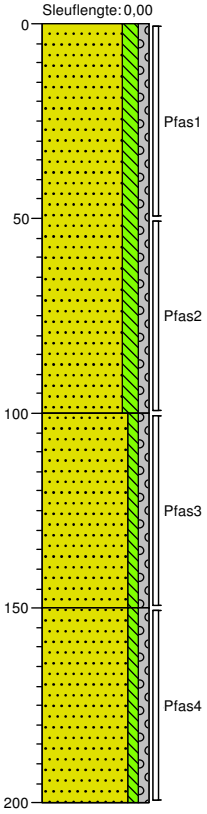
0 berm

Zand, matig grof, matig siltig, zwak grindig, licht beigebruin, Edelmanboor

-50

Boring: 87-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 berm

Zand, matig grof, matig siltig, zwak grindig, sporen roest, licht roestbruin, Edelmanboor

-100

Zand, matig grof, zwak siltig, zwak grindig, geelgrijs, Edelmanboor

-150

Zand, matig grof, zwak siltig, zwak grindig, bruingrijs, Edelmanboor

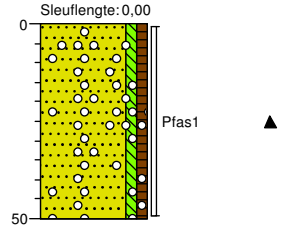
-200

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

Boring: XXX-1

Sleufbreedte:0,00
Sleuflengte:0,00



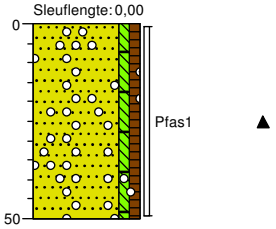
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen roest, sporen grind, resten plantenresten, bruin, Edelmanboor

-50

Boring: XXX-2

Sleufbreedte:0,00
Sleuflengte:0,00



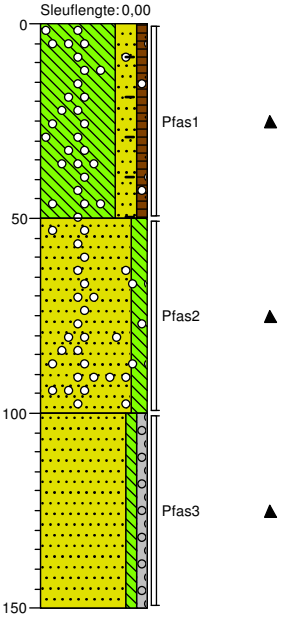
0 weiland

Zand, matig fijn, zwak siltig, zwak humeus, sporen grind, sporen baksteen, resten plantenresten, bruin, Edelmanboor

-50

Boring: XXX-3

Sleufbreedte:0,00
Sleuflengte:0,00



0 weiland

Leem, sterk zandig, zwak humeus, sporen grind, sporen baksteen, resten plantenresten, bruin, Edelmanboor

-50

Zand, zeer grof, matig siltig, sporen grind, zwak roesthoudend, geelbeige, Edelmanboor

-100

Zand, zeer grof, zwak siltig, zwak grindig, sporen roest, beigegrijs, Edelmanboor, Stuit op grind.....

-150

Schelkensbeek

Projectcode: 0303WAL-19_PFAS

BIJLAGE 4

TOETSING WBB (T12) LANDBODEM

Projectnaam Schelkensbeek
Projectcode 0303WAL-19_PFAS

Tabel: Analyseresultaten grond (as3000) monsters (gehalten in mg/kgds, tenzij anders aangegeven)

Monstercode	MM D41N[1]			MM D42N[2]			MM D43N[3]		
Bodemtype[bt)]	1			2			3		
	or	*br*		*or*	*br*		*or*	*br*	
droge stof (gew.-%)	91.5	--	--	92.5	--	--	93.5	--	--
gewicht artefacten (g)	<1	--	--	<1	--	--	<1	--	--
aard van de artefacten (-)	Geen		--	Geen		--	Geen		--
organische stof (gloeiverlies) (% vd DS)	3.3	--	--	1.1	--	--	2.4	--	--
KORRELGROOTTEVERDELING									
lutum (bodem) (% vd DS)	5.1	--	--	2.6	--	--	6.6	--	--
METALEN									
barium[+]	24	67		24	86.5		27	66.4	
cadmium	0.28	0.435		<0.2	0.239		0.27	0.427	
kobalt	<1.5	2.76		<1.5	3.46		2.4	5.61	
koper	7.2	12.9		<5	7.09		6.8	12	
kwik°	<0.05	0.0474		<0.05	0.0498		<0.05	0.0467	
lood	15	21.8		<10	10.9		12	17.3	
molybdeen	<0.5	0.35		<0.5	0.35		<0.5	0.35	
nikkel	3.1	7.19		4.1	11.4		4.0	8.43	
zink	34	67.8		<20	32.2		34	64.9	
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN									
naftaleen	<0.01	--	--	<0.01	--	--	<0.01	--	--
fenantreen	0.15	--	--	<0.01	--	--	0.10	--	--
antraceen	0.02	--	--	<0.01	--	--	0.02	--	--
fluoranteen	0.37	--	--	<0.01	--	--	0.23	--	--
benzo(a)antraceen	0.18	--	--	<0.01	--	--	0.11	--	--
chryseen	0.18	--	--	<0.01	--	--	0.13	--	--
benzo(k)fluoranteen	0.16	--	--	<0.01	--	--	0.11	--	--
benzo(a)pyreen	0.20	--	--	<0.01	--	--	0.13	--	--
benzo(ghi)peryleen	0.18	--	--	<0.01	--	--	0.12	--	--
indeno(1,2,3-cd)pyreen	0.18	--	--	<0.01	--	--	0.12	--	--
pak-totaal (10 van VROM) (0.7 factor)	1.627	1.63	*	0.07	0.07		1.077	1.08	
POLYCHLOORBIFENYLEN (PCB)									
PCB 28 (µg/kgds)	<1	--	--	<1	--	--	<1	--	--
PCB 52 (µg/kgds)	<1	--	--	<1	--	--	<1	--	--
PCB 101 (µg/kgds)	<1	--	--	<1	--	--	<1	--	--
PCB 118 (µg/kgds)	<1	--	--	<1	--	--	<1	--	--
PCB 138 (µg/kgds)	1.0	--	--	<1	--	--	<1	--	--
PCB 153 (µg/kgds)	1.1	--	--	<1	--	--	<1	--	--
PCB 180 (µg/kgds)	<1	--	--	<1	--	--	<1	--	--
som PCB (7) (0.7 factor) (µg/kgds)	5.6	17		4.9	24.5	[a]	4.9	20.4	[a]
MINERALE OLIE									
fractie C10-C12	<5	--	--	<5	--	--	<5	--	--
fractie C12-C22	<5	--	--	<5	--	--	6	--	--
fractie C22-C30	13	--	--	<5	--	--	9	--	--
fractie C30-C40	11	--	--	<5	--	--	7	--	--
totaal olie C10 - C40	20	60.6		<20	70		20	83.3	

Monstercode en monstertraject

[1] *13114251-035 MM D41N 198-1 (0-50) 198-2 (0-50) 198-3 (0-50)*

[2] *13114251-037 MM D42N 198-3 (50-100) 198-3 (100-150) 198-3 (150-200)*

[3] *13114251-039 MM D43N 59-1 (0-50) 59-2 (0-50) 59-3 (0-50)*

De resultaten zijn voor de interventiewaarde getoetst aan de toetsingswaarden zoals vermeld in de Circulaire bodemsanering per 1 juli 2013, Staatcourant 27 juni 2013, Nr. 16675 en voor de achtergrondwaarde aan het Besluit Bodemkwaliteit, Staatscourant 20 december 2007, Nr. 247. Tevens zijn de volgende wijzigingen doorgevoerd: De gewijzigde grenswaarden van een aantal OCB (per 30-07-2008) (www.Senternovem.nl) en de wijziging in de Staatscourant 67 van 7 april 2009 en met wijzingen zoals beschreven in de Staatscourant nr. 22335 (02-11-2012).

* *het gehalte is groter dan de achtergrondwaarde en kleiner dan of gelijk aan het gemiddelde van de achtergrond- en interventiewaarde*

** *het gehalte is groter dan het gemiddelde van de achtergrond- en interventiewaarde en kleiner dan of gelijk aan de interventiewaarde*

*** *het gehalte is groter dan de interventiewaarde*

-- *geen toetsingswaarde voor opgesteld*

\- *niet geanalyseerd*

\# *Verhoogde rapportagegrens, voor meer informatie zie analysecertificaat*

[a] *gecorrigeerd gehalte is groter dan of gelijk aan de achtergrondwaarde (of geen achtergrondwaarde voor opgesteld), maar wel kleiner dan de RBK rapportagegrens zoals beschreven in de Staatscourant nr. 22335 (02-11-2012), dus mag verondersteld worden kleiner dan de achtergrondwaarde te zijn.*

[b] *gecorrigeerd gehalte is groter dan de achtergrondwaarde (of geen achtergrondwaarde voor opgesteld), en groter dan de RBK rapportagegrens zoals beschreven in de Staatscourant nr. 22335 (02-11-2012).*

[+] *De interventiewaarde voor barium geldt alleen voor die situaties waarbij duidelijk sprake is van antropogene verontreiniging en geen sprake is van thermisch gereinigde grond en baggerspecie.*

° *Er staan twee interventie waardes beschreven voor kwik in grond in de circulaire bodemsanering (per 1 juli 2013); 4 mg/kg d.s. voor organisch kwik en 36 mg/kg d.s. voor anorganisch kwik. Het analyse resultaat is het gehalte aan kwik. Er kan daarin geen verder onderscheid worden gemaakt tussen de twee soorten. Voor deze toetsing wordt de eis van 36 mg/kg d.s. gehanteerd.*

[or] *Origineel resultaat*

[br] *Omgerekend resultaat*

[bt)] De achtergrond- en interventiewaarden zijn afhankelijk van de bodemsamenstelling.
Voor de toetsing zijn de grond (as3000) monsters ingedeeld in de volgende bodemtypen: (als humus/lutum niet is gemeten geldt een default waarde van lutum = 25% en organische stof = 10%.)
1: lutum 5.1% humus 3.3%
2: lutum 2.6% humus 1.1%
3: lutum 6.6% humus 2.4%

Projectnaam Schelkensbeek
Projectcode 0303WAL-19_PFAS

Tabel: Analyseresultaten grond (as3000) monsters (gehalten in mg/kgds, tenzij anders aangegeven)

Monstercode	MM D44N[1]			MM D45N[2]			MM D46N[3]		
Bodemtype[bt)]	4			5			6		
	or	*br*		*or*	*br*		*or*	*br*	
droge stof (gew.-%)	88.8	--	--	90.0	--	--	91.7	--	--
gewicht artefacten (g)	<1	--	--	<1	--	--	<1	--	--
aard van de artefacten (-)	Geen		--	Geen		--	Geen		--
organische stof (gloeiverlies) (% vd DS)	<0.5	--	--	2.2	--	--	<0.5	--	--
KORRELGROOTTEVERDELING									
lutum (bodem) (% vd DS)	4.9	--	--	3.4	--	--	3.4	--	--
METALEN									
barium[+]	23	65.4		41	135		<20	46.2	
cadmium	<0.2	0.231		0.25	0.418		<0.2	0.236	
kobalt	3.3	8.81		1.8	5.49		1.5	4.57	
koper	<5	6.58		5.7	11.2		<5	6.91	
kwik°	<0.05	0.048		<0.05	0.0491		<0.05	0.0492	
lood	<10	10.5		13	19.9		<10	10.7	
molybdeen	1.3	1.3		<0.5	0.35		<0.5	0.35	
nikkel	12	28.2		3.8	9.93		4.5	11.8	
zink	<20	29		34	75		<20	31	
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN									
naftaleen	<0.01	--	--	<0.01	--	--	<0.01	--	--
fenantreen	<0.01	--	--	0.19	--	--	<0.01	--	--
antraceen	<0.01	--	--	0.03	--	--	<0.01	--	--
fluoranteen	<0.01	--	--	0.50	--	--	<0.01	--	--
benzo(a)antraceen	<0.01	--	--	0.28	--	--	<0.01	--	--
chryseen	<0.01	--	--	0.35	--	--	<0.01	--	--
benzo(k)fluoranteen	<0.01	--	--	0.24	--	--	<0.01	--	--
benzo(a)pyreen	<0.01	--	--	0.33	--	--	<0.01	--	--
benzo(ghi)peryleen	<0.01	--	--	0.29	--	--	<0.01	--	--
indeno(1,2,3-cd)pyreen	<0.01	--	--	0.29	--	--	<0.01	--	--
pak-totaal (10 van VROM) (0.7 factor)	0.07	0.07		2.507	2.51	*	0.07	0.07	
POLYCHLOORBIFENYLEN (PCB)									
PCB 28 (µg/kgds)	<1	--	--	<1	--	--	<1	--	--
PCB 52 (µg/kgds)	<1	--	--	<1	--	--	<1	--	--
PCB 101 (µg/kgds)	<1	--	--	2.2	--	--	<1	--	--
PCB 118 (µg/kgds)	<1	--	--	1.9	--	--	<1	--	--
PCB 138 (µg/kgds)	<1	--	--	2.4	--	--	<1	--	--
PCB 153 (µg/kgds)	<1	--	--	1.9	--	--	<1	--	--
PCB 180 (µg/kgds)	<1	--	--	<1	--	--	<1	--	--
som PCB (7) (0.7 factor) (µg/kgds)	4.9	24.5	[a]	10.5	47.7	*	4.9	24.5	[a]
MINERALE OLIE									
fractie C10-C12	<5	--	--	<5	--	--	<5	--	--
fractie C12-C22	<5	--	--	<5	--	--	<5	--	--
fractie C22-C30	<5	--	--	14	--	--	<5	--	--
fractie C30-C40	<5	--	--	10	--	--	<5	--	--
totaal olie C10 - C40	<20	70		20	90.9		<20	70	

Monstercode en monstertraject

[1] *13114251-041 MM D44N 59-3 (50-100) 59-3 (100-150) 59-3 (150-200)*

[2] *13114251-043 MM D45N 87-1 (0-50) 87-2 (0-50) 87-3 (0-50)*

[3] *13114251-045 MM D46N 87-3 (50-100) 87-3 (100-150) 87-3 (150-200)*

De resultaten zijn voor de interventiewaarde getoetst aan de toetsingswaarden zoals vermeld in de Circulaire bodemsanering per 1 juli 2013, Staatcourant 27 juni 2013, Nr. 16675 en voor de achtergrondwaarde aan het Besluit Bodemkwaliteit, Staatscourant 20 december 2007, Nr. 247. Tevens zijn de volgende wijzigingen doorgevoerd: De gewijzigde grenswaarden van een aantal OCB (per 30-07-2008) (www.Senternovem.nl) en de wijziging in de Staatscourant 67 van 7 april 2009 en met wijzingen zoals beschreven in de Staatscourant nr. 22335 (02-11-2012).

* *het gehalte is groter dan de achtergrondwaarde en kleiner dan of gelijk aan het gemiddelde van de achtergrond- en interventiewaarde*

** *het gehalte is groter dan het gemiddelde van de achtergrond- en interventiewaarde en kleiner dan of gelijk aan de interventiewaarde*

*** *het gehalte is groter dan de interventiewaarde*

-- *geen toetsingswaarde voor opgesteld*

\- *niet geanalyseerd*

\# *Verhoogde rapportagegrens, voor meer informatie zie analysecertificaat*

[a] *gecorrigeerd gehalte is groter dan of gelijk aan de achtergrondwaarde (of geen achtergrondwaarde voor opgesteld), maar wel kleiner dan de RBK rapportagegrens zoals beschreven in de Staatscourant nr. 22335 (02-11-2012), dus mag verondersteld worden kleiner dan de achtergrondwaarde te zijn.*

[b] *gecorrigeerd gehalte is groter dan de achtergrondwaarde (of geen achtergrondwaarde voor opgesteld), en groter dan de RBK rapportagegrens zoals beschreven in de Staatscourant nr. 22335 (02-11-2012).*

[+] *De interventiewaarde voor barium geldt alleen voor die situaties waarbij duidelijk sprake is van antropogene verontreiniging en geen sprake is van thermisch gereinigde grond en baggerspecie.*

[°] *Er staan twee interventie waardes beschreven voor kwik in grond in de circulaire bodemsanering (per 1 juli 2013); 4 mg/kg d.s. voor organisch kwik en 36 mg/kg d.s. voor anorganisch kwik. Het analyse resultaat is het gehalte aan kwik. Er kan daarin geen verder onderscheid worden gemaakt tussen de twee soorten. Voor deze toetsing wordt de eis van 36 mg/kg d.s. gehanteerd.*

[or] *Origineel resultaat*

[br] *Omgerekend resultaat*

[bt)] De achtergrond- en interventiewaarden zijn afhankelijk van de bodemsamenstelling.
Voor de toetsing zijn de grond (as3000) monsters ingedeeld in de volgende bodemtypen: (als humus/lutum niet is gemeten geldt een default waarde van lutum = 25% en organische stof = 10%.)
4: lutum 4.9% humus 0.5%
5: lutum 3.4% humus 2.2%
6: lutum 3.4% humus 0.5%

Tabel: Toetsingswaarden voor grond (as3000) (I&M-toetsingskader). Het betreft gehalten in mg/kgds, tenzij anders aangegeven

Toetsingswaarden[1)]	AW	1/2(AW+I)	I	RBK eis
METALEN				
barium			920	20
cadmium	0.60	6.8	13	0.20
kobalt	15	102	190	3.0
koper	40	115	190	5.0
kwik	0.15	18	36	0.050
lood	50	290	530	10
molybdeen	1.5	96	190	1.5
nikkel	35	68	100	4.0
zink	140	430	720	20
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN				
pak-totaal (10 van VROM) (0.7 factor)	1.5	21	40	0.35
POLYCHLOORBIFENYLEN (PCB)				
som PCB (7) (0.7 factor) (µg/kgds)	20	510	1000	4.9
MINERALE OLIE				
totaal olie C10 - C40	190	2595	5000	35

1) *AW* *achtergrondwaarde*
1/2(AW+I) *gemiddelde van de achtergrond- en interventiewaarde*
I *interventiewaarde*
RBK *Tabel 1 (rapportagegrenzen), Staatscourant nr. 22335 (02-11-2012).*

De achtergrond- en interventiewaarden zijn afhankelijk van de bodemsamenstelling.
De genoemde toetsings waarden zijn van toepassing op het standaard bodem type 10% humus en 25% lutum.

BIJLAGE 5

TOETSING BBK (T2) LANDBODEM

Toetsing volgens BoToVa, module T.2-Beoordeling kwaliteit ontvangende landbodem
(Toetsversie 3.0.0, toetskader BBK, SIKB versie 13.3.0, toetsingsdatum: 29-10-2019 - 16:28)

Projectcode	0303WAL-19_PFAS	0303WAL-19_PFAS
Projectnaam	Schelkensbeek	Schelkensbeek
Monsteromschrijving	MM D41N	MM D42N
Monstersoort	Grond (AS3000)	Grond (AS3000)
Monster conclusie	**Altijd toepasbaar**	**Altijd toepasbaar**

Analyse	Eenheid	SR	BT	BC	SR	BT	BC
droge stof	%	91.5	**91.5**		92.5	**92.5**	
gewicht artefacten	g	<1			<1		
aard van de artefacten	-	Geen			Geen		
organische stof (gloeiverlies)	%	3.3	**3.3**		1.1	**1.1**	
KORRELGROOTTEVERDELING							
lutum (bodem)	% vd DS	5.1	**5.1**		2.6	**2.6**	
METALEN							
barium+	mg/kg	24	**67**	--	24	**86.5**	--
cadmium	mg/kg	0.28	**0.435**	<=AW	<0.2	**0.239**	<=AW
kobalt	mg/kg	<1.5	**2.76**	<=AW	<1.5	**3.46**	<=AW
koper	mg/kg	7.2	**12.9**	<=AW	<5	**7.09**	<=AW
kwik°	mg/kg	<0.05	**0.0474**	<=AW	<0.05	**0.0498**	<=AW
lood	mg/kg	15	**21.8**	<=AW	<10	**10.9**	<=AW
molybdeen	mg/kg	<0.5	**0.35**	<=AW	<0.5	**0.35**	<=AW
nikkel	mg/kg	3.1	**7.19**	<=AW	4.1	**11.4**	<=AW
zink	mg/kg	34	**67.8**	<=AW	<20	**32.2**	<=AW
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN							
naftaleen	mg/kg	<0.01	**0.007**	-	<0.01	**0.007**	-
fenantreen	mg/kg	0.15	**0.15**	-	<0.01	**0.007**	-
antraceen	mg/kg	0.02	**0.02**	-	<0.01	**0.007**	-
fluoranteen	mg/kg	0.37	**0.37**	-	<0.01	**0.007**	-
benzo(a)antraceen	mg/kg	0.18	**0.18**	-	<0.01	**0.007**	-
chryseen	mg/kg	0.18	**0.18**	-	<0.01	**0.007**	-
benzo(k)fluoranteen	mg/kg	0.16	**0.16**	-	<0.01	**0.007**	-
benzo(a)pyreen	mg/kg	0.20	**0.2**	-	<0.01	**0.007**	-
benzo(ghi)peryleen	mg/kg	0.18	**0.18**	-	<0.01	**0.007**	-
indeno(1,2,3-cd)pyreen	mg/kg	0.18	**0.18**	-	<0.01	**0.007**	-
pak-totaal (10 van VROM) (0.7 factor)	mg/kg	1.627	**1.63**	WO	0.07	**0.07**	<=AW
POLYCHLOORBIFENYLEN (PCB)							
PCB 28	ug/kg	<1	**2.12**	-	<1	**3.5**	-
PCB 52	ug/kg	<1	**2.12**	-	<1	**3.5**	-
PCB 101	ug/kg	<1	**2.12**	-	<1	**3.5**	-
PCB 118	ug/kg	<1	**2.12**	-	<1	**3.5**	-
PCB 138	ug/kg	1.0	**3.03**	-	<1	**3.5**	-
PCB 153	ug/kg	1.1	**3.33**	-	<1	**3.5**	-
PCB 180	ug/kg	<1	**2.12**	-	<1	**3.5**	-
som PCB (7) (0.7 factor)	ug/kg	5.6	**17**	<=AW	4.9	**24.5**	<=AW
MINERALE OLIE							
fractie C10-C12	mg/kg	<5	**10.6**	--	<5	**17.5**	--
fractie C12-C22	mg/kg	<5	**10.6**	--	<5	**17.5**	--
fractie C22-C30	mg/kg	13	**39.4**	--	<5	**17.5**	--
fractie C30-C40	mg/kg	11	**33.3**	--	<5	**17.5**	--
totaal olie C10 - C40	mg/kg	20	**60.6**	<=AW	<20	**70**	<=AW

Monstercode	Monsteromschrijving
13114251-035	*MM D41N 198-1 (0-50) 198-2 (0-50) 198-3 (0-50)*
13114251-037	*MM D42N 198-3 (50-100) 198-3 (100-150) 198-3 (150-200)*

Toetsing volgens BoToVa, module T.2-Beoordeling kwaliteit ontvangende landbodem
(Toetsversie 3.0.0, toetskader BBK, SIKB versie 13.3.0, toetsingsdatum: 29-10-2019 - 16:28)

Projectcode	0303WAL-19_PFAS	0303WAL-19_PFAS
Projectnaam	Schelkensbeek	Schelkensbeek
Monsteromschrijving	MM D43N	MM D44N
Monstersoort	Grond (AS3000)	Grond (AS3000)
Monster conclusie	**Altijd toepasbaar**	**Altijd toepasbaar**

Analyse	Eenheid	SR	BT	BC	SR	BT	BC
droge stof	%	93.5	**93.5**		88.8	**88.8**	
gewicht artefacten	g	<1			<1		
aard van de artefacten	-	Geen			Geen		
organische stof (gloeiverlies)	%	2.4	**2.4**		<0.5	**0.5**	
KORRELGROOTTEVERDELING							
lutum (bodem)	% vd DS	6.6	**6.6**		4.9	**4.9**	
METALEN							
barium⁺	mg/kg	27	**66.4**	--	23	**65.4**	--
cadmium	mg/kg	0.27	**0.427**	<=AW	<0.2	**0.231**	<=AW
kobalt	mg/kg	2.4	**5.61**	<=AW	3.3	**8.81**	<=AW
koper	mg/kg	6.8	**12**	<=AW	<5	**6.58**	<=AW
kwik°	mg/kg	<0.05	**0.0467**	<=AW	<0.05	**0.048**	<=AW
lood	mg/kg	12	**17.3**	<=AW	<10	**10.5**	<=AW
molybdeen	mg/kg	<0.5	**0.35**	<=AW	1.3	**1.3**	<=AW
nikkel	mg/kg	4.0	**8.43**	<=AW	12	**28.2**	<=AW
zink	mg/kg	34	**64.9**	<=AW	<20	**29**	<=AW
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN							
naftaleen	mg/kg	<0.01	**0.007**	-	<0.01	**0.007**	-
fenantreen	mg/kg	0.10	**0.1**	-	<0.01	**0.007**	-
antraceen	mg/kg	0.02	**0.02**	-	<0.01	**0.007**	-
fluoranteen	mg/kg	0.23	**0.23**	-	<0.01	**0.007**	-
benzo(a)antraceen	mg/kg	0.11	**0.11**	-	<0.01	**0.007**	-
chryseen	mg/kg	0.13	**0.13**	-	<0.01	**0.007**	-
benzo(k)fluoranteen	mg/kg	0.11	**0.11**	-	<0.01	**0.007**	-
benzo(a)pyreen	mg/kg	0.13	**0.13**	-	<0.01	**0.007**	-
benzo(ghi)peryleen	mg/kg	0.12	**0.12**	-	<0.01	**0.007**	-
indeno(1,2,3-cd)pyreen	mg/kg	0.12	**0.12**	-	<0.01	**0.007**	-
pak-totaal (10 van VROM) (0.7 factor)	mg/kg	1.077	**1.08**	<=AW	0.07	**0.07**	<=AW
POLYCHLOORBIFENYLEN (PCB)							
PCB 28	ug/kg	<1	**2.92**	-	<1	**3.5**	-
PCB 52	ug/kg	<1	**2.92**	-	<1	**3.5**	-
PCB 101	ug/kg	<1	**2.92**	-	<1	**3.5**	-
PCB 118	ug/kg	<1	**2.92**	-	<1	**3.5**	-
PCB 138	ug/kg	<1	**2.92**	-	<1	**3.5**	-
PCB 153	ug/kg	<1	**2.92**	-	<1	**3.5**	-
PCB 180	ug/kg	<1	**2.92**	-	<1	**3.5**	-
som PCB (7) (0.7 factor)	ug/kg	4.9	**20.4**	<=AW	4.9	**24.5**	<=AW
MINERALE OLIE							
fractie C10-C12	mg/kg	<5	**14.6**	--	<5	**17.5**	--
fractie C12-C22	mg/kg	6	**25**	--	<5	**17.5**	--
fractie C22-C30	mg/kg	9	**37.5**	--	<5	**17.5**	--
fractie C30-C40	mg/kg	7	**29.2**	--	<5	**17.5**	--
totaal olie C10 - C40	mg/kg	20	**83.3**	<=AW	<20	**70**	<=AW

Monstercode	Monsteromschrijving
13114251-039	*MM D43N 59-1 (0-50) 59-2 (0-50) 59-3 (0-50)*
13114251-041	*MM D44N 59-3 (50-100) 59-3 (100-150) 59-3 (150-200)*

Toetsing volgens BoToVa, module T.2-Beoordeling kwaliteit ontvangende landbodem
(Toetsversie 3.0.0, toetskader BBK, SIKB versie 13.3.0, toetsingsdatum: 29-10-2019 - 16:28)

Projectcode	0303WAL-19_PFAS	0303WAL-19_PFAS
Projectnaam	Schelkensbeek	Schelkensbeek
Monsteromschrijving	MM D45N	MM D46N
Monstersoort	Grond (AS3000)	Grond (AS3000)
Monster conclusie	**Klasse wonen**	**Altijd toepasbaar**

Analyse	Eenheid	SR	BT	BC	SR	BT	BC
droge stof	%	90.0	**90**		91.7	**91.7**	
gewicht artefacten	g	<1			<1		
aard van de artefacten	-	Geen			Geen		
organische stof (gloeiverlies)	%	2.2	**2.2**		<0.5	**0.5**	
KORRELGROOTTEVERDELING							
lutum (bodem)	% vd DS	3.4	**3.4**		3.4	**3.4**	
METALEN							
barium+	mg/kg	41	**135**	--	<20	**46.2**	--
cadmium	mg/kg	0.25	**0.418**	<=AW	<0.2	**0.236**	<=AW
kobalt	mg/kg	1.8	**5.49**	<=AW	1.5	**4.57**	<=AW
koper	mg/kg	5.7	**11.2**	<=AW	<5	**6.91**	<=AW
kwik°	mg/kg	<0.05	**0.0491**	<=AW	<0.05	**0.0492**	<=AW
lood	mg/kg	13	**19.9**	<=AW	<10	**10.7**	<=AW
molybdeen	mg/kg	<0.5	**0.35**	<=AW	<0.5	**0.35**	<=AW
nikkel	mg/kg	3.8	**9.93**	<=AW	4.5	**11.8**	<=AW
zink	mg/kg	34	**75**	<=AW	<20	**31**	<=AW
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN							
naftaleen	mg/kg	<0.01	**0.007**	-	<0.01	**0.007**	-
fenantreen	mg/kg	0.19	**0.19**	-	<0.01	**0.007**	-
antraceen	mg/kg	0.03	**0.03**	-	<0.01	**0.007**	-
fluoranteen	mg/kg	0.50	**0.5**	-	<0.01	**0.007**	-
benzo(a)antraceen	mg/kg	0.28	**0.28**	-	<0.01	**0.007**	-
chryseen	mg/kg	0.35	**0.35**	-	<0.01	**0.007**	-
benzo(k)fluoranteen	mg/kg	0.24	**0.24**	-	<0.01	**0.007**	-
benzo(a)pyreen	mg/kg	0.33	**0.33**	-	<0.01	**0.007**	-
benzo(ghi)peryleen	mg/kg	0.29	**0.29**	-	<0.01	**0.007**	-
indeno(1,2,3-cd)pyreen	mg/kg	0.29	**0.29**	-	<0.01	**0.007**	-
pak-totaal (10 van VROM) (0.7 factor)	mg/kg	2.507	**2.51**	WO	0.07	**0.07**	<=AW
POLYCHLOORBIFENYLEN (PCB)							
PCB 28	ug/kg	<1	**3.18**	-	<1	**3.5**	-
PCB 52	ug/kg	<1	**3.18**	-	<1	**3.5**	-
PCB 101	ug/kg	2.2	**10**	-	<1	**3.5**	-
PCB 118	ug/kg	1.9	**8.64**	-	<1	**3.5**	-
PCB 138	ug/kg	2.4	**10.9**	-	<1	**3.5**	-
PCB 153	ug/kg	1.9	**8.64**	-	<1	**3.5**	-
PCB 180	ug/kg	<1	**3.18**	-	<1	**3.5**	-
som PCB (7) (0.7 factor)	ug/kg	10.5	**47.7**	IN	4.9	**24.5**	<=AW
MINERALE OLIE							
fractie C10-C12	mg/kg	<5	**15.9**	--	<5	**17.5**	--
fractie C12-C22	mg/kg	<5	**15.9**	--	<5	**17.5**	--
fractie C22-C30	mg/kg	14	**63.6**	--	<5	**17.5**	--
fractie C30-C40	mg/kg	10	**45.5**	--	<5	**17.5**	--
totaal olie C10 - C40	mg/kg	20	**90.9**	<=AW	<20	**70**	<=AW

Monstercode	Monsteromschrijving
13114251-043	*MM D45N 87-1 (0-50) 87-2 (0-50) 87-3 (0-50)*
13114251-045	*MM D46N 87-3 (50-100) 87-3 (100-150) 87-3 (150-200)*

Verklaring kolommen

SR	*Resultaat op het analyserapport*
BT	*Berekend toetsresultaat (omgerekend naar standaard bodem). Bij organische stof en lutum staan de voor de toetsing gebruikte waarden.*
BC	*Toetsoordeel*

Verklaring toetsingsoordelen

-	*Geen toetsoordeel mogelijk*
--	*Heeft geen normwaarde, zorgplicht van toepassing*
---	*Interventiewaarde ontbreekt, zorgplicht van toepassing*
#	*Verhoogde rapportagegrens, voor meer informatie zie analysecertificaat*
+	*De normen voor barium zijn ingetrokken. Indien er sprake is van verhoogde bariumgehalten ten opzichte van de natuurlijke achtergrond als gevolg van een antropogene bron, kan dit gehalte door het bevoegd gezag worden beoordeeld op basis van de voormalige interventiewaarde voor barium van 625 mg/kg d.s (waterbodem) en de interventiewaarde voor landbodem van 920 mg/kg (landbodem).*
°	*Er staan twee interventie waardes beschreven voor kwik in grond in de circulaire bodemsanering (per 1 juli 2013); 4 mg/kg d.s. voor organisch kwik en 36 mg/kg d.s. voor anorganisch kwik. Het analyse resultaat is het gehalte aan kwik. Er kan daarin geen verder onderscheid worden gemaakt tussen de twee soorten. Voor deze toetsing wordt de eis van 36 mg/kg d.s. gehanteerd.*
<=AW	*Kleiner dan of gelijk aan de achtergrondwaarde*
WO	*Wonen*
IN	*Industrie*
>I	*Groter dan interventiewaarde*
>(ind)I	*INEV (Indicatieve interventiewaarde) wordt overschreden*
somIW>1	*Interventiewaarde wordt overschreden door som fractie interventiewaarde > 1 (interventie factor)*
^	*Enkele parameters ontbreken in de som*
NT>I	*Niet toepasbaar > interventiewaarde*
NT	*Niet toepasbaar*
BT/BC gem	*gemiddelde op basis van standaard bodemtype (humus 10% en lutum 25%)*

Kleur informatie

Rood	*> Interventiewaarde*
Oranje	*>= Tussenwaarde (BI ligt tussen 0.5 en 1)*
	Klasse wonen of klasse industrie (monsterniveau)
Blauw	*>= Achtergrond waarde, industrie of wonen op component niveau*

Normenblad
Toetskeuze: T.2: Beoordeling kwaliteit ontvangende landbodem

Analyse	Eenheid	AW	Wo	Ind	I
METALEN					
cadmium	mg/kg	0.6	1.2	4.3	13
kobalt	mg/kg	15	35	190	190
koper	mg/kg	40	54	190	190
kwik°	mg/kg	0.15	0.83	4.8	36
lood	mg/kg	50	210	530	530
molybdeen	mg/kg	1.5	88	190	190
nikkel	mg/kg	35	39	100	100
zink	mg/kg	140	200	720	720
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN					
pak-totaal (10 van VROM) (0.7 factor)	mg/kg	1.5	6.8	40	40
POLYCHLOORBIFENYLEN (PCB)					
som PCB (7) (0.7 factor)	ug/kg	20	40	500	1000
MINERALE OLIE					
totaal olie C10 - C40	mg/kg	190	190	500	5000

*	Indicatief niveau voor ernstige verontreiniging
Legenda normenblad	
AW	= Achtergrondwaarden
WO	= Maximale waarden bodemfunctieklasse wonen
IND	= Maximale waarden bodemfunctieklasse industrie
A	= Maximale waarden kwaliteitsklasse A
B	= Maximale waarden kwaliteitsklasse B
I	= Interventiewaarden
Normen en definities	http://www.rwsleefomgeving.nl/onderwerpen/bodem-ondergrond/bbk/instrumenten/botova/downloads

BIJLAGE 6

LABORATORIUMCERTIFICATEN

SYNLAB Analytics & Services B.V.
Correspondentieadres
Steenhouwerstraat 15 · 3194 AG Rotterdam
Tel.: +31 (0)10 231 47 00 · Fax: +31 (0)10 416 30 34
www.synlab.nl

Analyserapport

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan
Postbus 5049
6097 ZG HEEL

Uw projectnaam	: Schelkensbeek
Uw projectnummer	: 0303WAL/19
SYNLAB rapportnummer	: 13112281, versienummer: 1
Rapport-verificatienummer	: LG42WTIS

Rotterdam, 09-10-2019

Geachte heer/mevrouw,

Hierbij ontvangt u de analyse resultaten van het laboratoriumonderzoek ten behoeve van uw project 0303WAL/19. 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 23 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.

Hoogachtend,

Jaap-Willem Hutter
Technical Director

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	25-09-2019
Projectnummer	0303WAL/19	Startdatum	26-09-2019
Rapportnummer	13112281 - 1	Rapportagedatum	09-10-2019

Nummer	Monstersoort	Monsterspecificatie
001	Waterbodem (AS3000)	MM 1 W01 (15-65) W02 (15-65) W03 (15-65) W04 (15-65) W05 (15-65) W06 (20-70) W07 (20-70) W08 (20-70) W09 (20-70) W10 (20-70)
002	Waterbodem (AS3000)	MM 2 W51 (15-65) W52 (10-60) W53 (10-60) W54 (10-60) W55 (5-55) W56 (5-55) W57 (10-60) W58 (10-60) W59 (15-65) W60 (15-65)
003	Waterbodem (AS3000)	MM 3 W11 (20-70) W12 (20-70) W13 (20-70) W14 (20-70) W15 (20-70) W16 (20-70) W17 (20-70) W18 (20-70) W19 (20-70) W20 (20-70)
004	Waterbodem (AS3000)	MM 4 W21 (20-70) W22 (20-70) W23 (20-70) W24 (20-70) W25 (20-70) W26 (20-70) W27 (0-50) W28 (0-50) W29 (0-50) W30 (0-50)
005	Waterbodem (AS3000)	MM 5 W31 (0-50) W32 (10-60) W33 (40-90) W34 (50-100) W35 (40-90) W36 (50-100) W37 (50-100) W38 (50-100) W39 (50-100) W40 (30-80)

Analyse	Eenheid	Q	001	002	003	004	005
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage	zie bijlage	zie bijlage

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	25-09-2019
Projectnummer	0303WAL/19	Startdatum	26-09-2019
Rapportnummer	13112281 - 1	Rapportagedatum	09-10-2019

Monster beschrijvingen

001	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
002	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
003	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
004	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
005	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Paraaf :

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	25-09-2019
Projectnummer	0303WAL/19	Startdatum	26-09-2019
Rapportnummer	13112281 - 1	Rapportagedatum	09-10-2019

Nummer	Monstersoort	Monsterspecificatie
006	Waterbodem (AS3000)	MM 6 W41 (50-100) W42 (50-100) W43 (50-100) W44 (50-100) W45 (10-60) W46 (20-70) W47 (30-80) W48 (40-90) W49 (30-80) W50 (30-80)
007	Waterbodem (AS3000)	MM 7 W61 (30-80) W62 (40-90) W63 (30-80) W64 (40-90) W65 (40-90) W66 (40-90) W67 (50-100) W68 (40-90) W69 (40-90) W70 (30-80)
008	Waterbodem (AS3000)	MM 8 W71 (30-80) W72 (40-90) W73 (40-90) W74 (40-90) W75 (50-100) W76 (40-90) W77 (20-70) W78 (20-70) W79 (10-60) W80 (10-60)

Analyse	Eenheid	Q	006	007	008
ANALYSES UITGEVOERD DOOR DERDEN					
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	25-09-2019
Projectnummer	0303WAL/19	Startdatum	26-09-2019
Rapportnummer	13112281 - 1	Rapportagedatum	09-10-2019

Monster beschrijvingen

006	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
007	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
008	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	25-09-2019
Projectnummer	0303WAL/19	Startdatum	26-09-2019
Rapportnummer	13112281 - 1	Rapportagedatum	09-10-2019

Analyse	Monstersoort	Relatie tot norm
PFAS (30) en GENX	Waterbodem (AS3000)	Analyse uitbesteed

Monster	Barcode	Aanlevering	Monstername	Verpakking
001	U9068326	26-09-2019	24-09-2019	ALC382
001	U9068319	26-09-2019	24-09-2019	ALC382
001	U9068318	26-09-2019	24-09-2019	ALC382
001	U9068328	26-09-2019	24-09-2019	ALC382
001	U9068325	26-09-2019	24-09-2019	ALC382
001	U9068330	26-09-2019	24-09-2019	ALC382
001	U9068324	26-09-2019	24-09-2019	ALC382
001	U9068329	26-09-2019	24-09-2019	ALC382
001	U9068321	26-09-2019	24-09-2019	ALC382
001	U9068322	26-09-2019	24-09-2019	ALC382
002	U9068694	26-09-2019	24-09-2019	ALC382
002	U9068697	26-09-2019	24-09-2019	ALC382
002	U9069343	26-09-2019	24-09-2019	ALC382
002	U9069344	26-09-2019	24-09-2019	ALC382
002	U9068698	26-09-2019	24-09-2019	ALC382
002	U9068692	26-09-2019	24-09-2019	ALC382
002	U9068691	26-09-2019	24-09-2019	ALC382
002	U9068702	26-09-2019	24-09-2019	ALC382
002	U9069340	26-09-2019	24-09-2019	ALC382
002	U9069339	26-09-2019	24-09-2019	ALC382
003	U9068114	26-09-2019	24-09-2019	ALC382
003	U9068112	26-09-2019	24-09-2019	ALC382
003	U9068120	26-09-2019	24-09-2019	ALC382
003	U9068122	26-09-2019	24-09-2019	ALC382
003	U9068111	26-09-2019	24-09-2019	ALC382
003	U9068116	26-09-2019	24-09-2019	ALC382
003	U9068118	26-09-2019	24-09-2019	ALC382
003	U9068117	26-09-2019	24-09-2019	ALC382
003	U9068113	26-09-2019	24-09-2019	ALC382
003	U9068121	26-09-2019	24-09-2019	ALC382
004	U9068126	26-09-2019	24-09-2019	ALC382
004	U9068123	26-09-2019	24-09-2019	ALC382
004	U9068128	26-09-2019	24-09-2019	ALC382
004	U9068119	26-09-2019	24-09-2019	ALC382
004	U9068130	26-09-2019	24-09-2019	ALC382
004	U9068124	26-09-2019	24-09-2019	ALC382
004	U9068129	26-09-2019	24-09-2019	ALC382
004	U9068127	26-09-2019	24-09-2019	ALC382
004	U9068115	26-09-2019	24-09-2019	ALC382
004	U9068125	26-09-2019	24-09-2019	ALC382
005	U9068317	26-09-2019	24-09-2019	ALC382
005	U9068323	26-09-2019	24-09-2019	ALC382

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	25-09-2019
Projectnummer	0303WAL/19	Startdatum	26-09-2019
Rapportnummer	13112281 - 1	Rapportagedatum	09-10-2019

Monster	Barcode	Aanlevering	Monstername	Verpakking
005	U9068704	26-09-2019	24-09-2019	ALC382
005	U9068312	26-09-2019	24-09-2019	ALC382
005	U9068316	26-09-2019	24-09-2019	ALC382
005	U9068315	26-09-2019	24-09-2019	ALC382
005	U9068327	26-09-2019	24-09-2019	ALC382
005	U9068313	26-09-2019	24-09-2019	ALC382
005	U9068311	26-09-2019	24-09-2019	ALC382
005	U9068314	26-09-2019	24-09-2019	ALC382
006	U9068700	26-09-2019	24-09-2019	ALC382
006	U9068708	26-09-2019	24-09-2019	ALC382
006	U9068710	26-09-2019	24-09-2019	ALC382
006	U9068703	26-09-2019	24-09-2019	ALC382
006	U9068705	26-09-2019	24-09-2019	ALC382
006	U9068707	26-09-2019	24-09-2019	ALC382
006	U9068699	26-09-2019	24-09-2019	ALC382
006	U9068701	26-09-2019	24-09-2019	ALC382
006	U9068709	26-09-2019	24-09-2019	ALC382
006	U9068696	26-09-2019	24-09-2019	ALC382
007	U9068706	26-09-2019	24-09-2019	ALC382
007	U9069347	26-09-2019	24-09-2019	ALC382
007	U9069345	26-09-2019	24-09-2019	ALC382
007	U9069350	26-09-2019	24-09-2019	ALC382
007	U9068695	26-09-2019	24-09-2019	ALC382
007	U9068693	26-09-2019	24-09-2019	ALC382
007	U9069346	26-09-2019	24-09-2019	ALC382
007	U9069341	26-09-2019	24-09-2019	ALC382
007	U9069348	26-09-2019	24-09-2019	ALC382
007	U9069349	26-09-2019	24-09-2019	ALC382
008	U9068582	26-09-2019	24-09-2019	ALC382
008	U9069331	26-09-2019	24-09-2019	ALC382
008	U9069334	26-09-2019	24-09-2019	ALC382
008	U9069332	26-09-2019	24-09-2019	ALC382
008	U9069333	26-09-2019	24-09-2019	ALC382
008	U9069337	26-09-2019	24-09-2019	ALC382
008	U9069336	26-09-2019	24-09-2019	ALC382
008	U9069338	26-09-2019	24-09-2019	ALC382
008	U9069335	26-09-2019	24-09-2019	ALC382
008	U9069342	26-09-2019	24-09-2019	ALC382

Paraaf :

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413439

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-001) MM 1 W01 (15-65) W02 (15-65) W03 (15-65) W0
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002542

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 12880	Dry substance	92.9	± 9.29	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413439

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-001) MM 1 W01 (15-65) W02 (15-65) W03 (15-65) W0
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002542

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluordecanoicsulpho. PFDS	< 0.1		ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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 2019-10-08
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 6086 0951 6882 6452

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413440

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-002) MM 2 W51 (15-65) W52 (10-60) W53 (10-60) W5
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002508

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 12880	Dry substance	93.2	± 9.32	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.24	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413440

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-002) MM 2 W51 (15-65) W52 (10-60) W53 (10-60) W5
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002508

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOS, total	0.24	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluordecanoicsulpho. PFDS	< 0.1		ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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 2019-10-08
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 5988 0716 5089 6451

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413441

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-003) MM 3 W11 (20-70) W12 (20-70) W13 (20-70) W1
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002459

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 12880	Dry substance	90.3	± 9.03	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413441

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-003) MM 3 W11 (20-70) W12 (20-70) W13 (20-70) W1
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002459

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluordecanoicsulpho. PFDS	< 0.1		ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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 2019-10-08
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 5889 0916 5188 6251

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413442

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-004) MM 4 W21 (20-70) W22 (20-70) W23 (20-70) W2
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002446

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 12880	Dry substance	90.0	± 9.00	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413442

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-004) MM 4 W21 (20-70) W22 (20-70) W23 (20-70) W2
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002446

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluordecanoicsulpho. PFDS	< 0.1		ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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 2019-10-08
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 5780 0016 5487 6050

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413443

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-005) MM 5 W31 (0-50) W32 (10-60) W33 (40-90) W34
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002531

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 12880	Dry substance	91.1	± 9.11	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413443

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-005) MM 5 W31 (0-50) W32 (10-60) W33 (40-90) W34
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002531

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluordecanoicsulpho. PFDS	< 0.1		ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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 2019-10-08
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 5684 0616 5280 6957

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413444

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-006) MM 6 W41 (50-100) W42 (50-100) W43 (50-100)
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002491

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 12880	Dry substance	90.6	± 9.06	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413444

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-006) MM 6 W41 (50-100) W42 (50-100) W43 (50-100)
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002491

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluordecanoicsulpho. PFDS	< 0.1		ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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 2019-10-08
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 5582 0316 5480 6059

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413445

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-007) MM 7 W61 (30-80) W62 (40-90) W63 (30-80) W6
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002451

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 12880	Dry substance	73.9	± 7.39	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413445

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-007) MM 7 W61 (30-80) W62 (40-90) W63 (30-80) W6
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002451

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluordecanoicsulpho. PFDS	< 0.1		ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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 2019-10-08
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 5480 0816 5980 6550

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413446

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-008) MM 8 W71 (30-80) W72 (40-90) W73 (40-90) W7
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002326

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-EN 12880	Dry substance	77.8	± 7.78	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19413446

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Sediment

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-09-30
Time of Arrival	: 1140
Temperature at arrival	:

Sample name	: (13112281-008) MM 8 W71 (30-80) W72 (40-90) W73 (40-90) W7
Sampling date	: 2019-09-24
Sampling time	:
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88399
Label-id @mis	: 87002326

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluordecanoicsulpho. PFDS	< 0.1		ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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 2019-10-08
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 5387 0016 5285 6455

SYNLAB Analytics & Services B.V.
Correspondentieadres
Steenhouwerstraat 15 · 3194 AG Rotterdam
Tel.: +31 (0)10 231 47 00 · Fax: +31 (0)10 416 30 34
www.synlab.nl

Analyserapport

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan
Postbus 5049
6097 ZG HEEL

Uw projectnaam	: Schelkensbeek
Uw projectnummer	: 0303WAL-19_PFAS
SYNLAB rapportnummer	: 13114251, versienummer: 1
Rapport-verificatienummer	: IBYYQPZZ

Rotterdam, 21-10-2019

Geachte heer/mevrouw,

Hierbij ontvangt u de analyse resultaten van het laboratoriumonderzoek ten behoeve van uw project 0303WAL-19_PFAS. Het onderzoek werd uitgevoerd conform uw opdracht. De gerapporteerde resultaten hebben uitsluitend betrekking op de geteste monsters. De door u aangegeven monster- en projectomschrijvingen zijn overgenomen in dit analyse rapport. Dit geldt ook voor de door u aangegeven monsternamedatum, indien aangeleverd.

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 106 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.

Hoogachtend,

Jaap-Willem Hutter
Technical Director

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
001	Grond (AS3000)	MM D01 2001-1 (0-50) 2001-2 (0-50) 2001-3 (0-50)
002	Grond (AS3000)	MM D02 2001-3 (50-100)
003	Grond (AS3000)	MM D03 2002-1 (0-50) 2002-2 (0-50) 2002-3 (0-50)
004	Grond (AS3000)	MM D04 2002-3 (50-100)
005	Grond (AS3000)	MM D05 2007-1 (0-50) 2007-2 (0-50) 2007-3aangepast (0-50)

Analyse	Eenheid	Q	001	002	003	004	005
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage	zie bijlage	zie bijlage

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

001	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
002	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
003	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
004	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
005	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
006	Grond (AS3000)	MM D06 2007-3aangepast (50-100)
007	Grond (AS3000)	MM D07 2008-1 (0-50) 2008-2 (0-50) 2008-3aangepast (0-50)
008	Grond (AS3000)	MM D08 2008-3aangepast (50-100)
009	Grond (AS3000)	MM D11 2047-1 (0-50) 2047-2 (0-50) 2047-3 (0-50)
010	Grond (AS3000)	MM D12 2047-3 (50-100)

Analyse	Eenheid	Q	006	007	008	009	010
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage	zie bijlage	zie bijlage

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

006	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
007	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
008	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
009	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
010	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
011	Grond (AS3000)	MM D13 2048-1 (0-50) 2048-2 (0-50) 2048-3 (0-50)
012	Grond (AS3000)	MM D14 2048-3 (50-100)
013	Grond (AS3000)	MM D19 2923-1 (0-50) 2923-2 (0-50) 2923-3 (0-50)
014	Grond (AS3000)	MM D20 2923-3 (50-100)
015	Grond (AS3000)	MM D21 2003-1 (0-50) 2003-2 (0-50) 2003-3 (0-50)

Analyse	Eenheid	Q	011	012	013	014	015
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage	zie bijlage	zie bijlage

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

011	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
012	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
013	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
014	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
015	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
016	Grond (AS3000)	MM D22 2003-3 (50-100)
017	Grond (AS3000)	MM D23 2005-1 (0-50) 2005-2 (0-50) 2005-3 (0-50)
018	Grond (AS3000)	MM D24 2005-3 (50-100)
019	Grond (AS3000)	MM D25 2010-1aangepast (0-50) 2010-2aangepast (0-50) 2010-3 (0-50)
020	Grond (AS3000)	MM D26 2010-3 (50-100)

Analyse	Eenheid	Q	016	017	018	019	020
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage	zie bijlage	zie bijlage

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

016	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
017	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
018	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
019	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
020	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
021	Grond (AS3000)	MM D27 2081-1aangepast (0-50) 2081-2aangepast (0-50) 2081-3aangepast (0-50)
022	Grond (AS3000)	MM D28 2081-3aangepast (50-100)
023	Grond (AS3000)	MM D29 2909-1 (0-50) 2909-2aangepast (0-50)
024	Grond (AS3000)	MM D30 2909-3aangepast (8-50)
025	Grond (AS3000)	MM D31 2909-1 (50-100)

Analyse	Eenheid	Q	021	022	023	024	025
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage	zie bijlage	zie bijlage

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

021	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
022	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
023	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
024	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
025	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
026	Grond (AS3000)	MM D32 607-1aangepast (0-50) 607-2aangepast (0-50) 607-3 (0-50)
027	Grond (AS3000)	MM D34 607-3 (50-100)
028	Grond (AS3000)	MM D35 XXX-1 (0-50) XXX-2 (0-50)
029	Grond (AS3000)	MM D36 XXX-3 (0-50)
030	Grond (AS3000)	MM D37 XXX-3 (50-100)

Analyse	Eenheid	Q	026	027	028	029	030
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage	zie bijlage	zie bijlage

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

026	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
027	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
028	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
029	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
030	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
031	Grond (AS3000)	MM D38 2004-1 (0-50) 2004-2 (0-50)
032	Grond (AS3000)	MM D39 2004-3 (0-50)
033	Grond (AS3000)	MM D40 2004-3 (50-100)
034	Grond (AS3000)	MM D41 198-1 (0-50) 198-2 (0-50) 198-3 (0-50)
035	Grond (AS3000)	MM D41N 198-1 (0-50) 198-2 (0-50) 198-3 (0-50)

Analyse	Eenheid	Q	031	032	033	034	035
droge stof	gew.-%	S					91.5
gewicht artefacten	g	S					<1
aard van de artefacten	-	S					geen
organische stof (gloeiverlies)	% vd DS	S					3.3
KORRELGROOTTEVERDELING							
lutum (bodem)	% vd DS	S					5.1
METALEN							
barium	mg/kgds	S					24
cadmium	mg/kgds	S					0.28
kobalt	mg/kgds	S					<1.5
koper	mg/kgds	S					7.2
kwik	mg/kgds	S					<0.05
lood	mg/kgds	S					15
molybdeen	mg/kgds	S					<0.5
nikkel	mg/kgds	S					3.1
zink	mg/kgds	S					34
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN							
naftaleen	mg/kgds	S					<0.01
fenantreen	mg/kgds	S					0.15
antraceen	mg/kgds	S					0.02
fluoranteen	mg/kgds	S					0.37
benzo(a)antraceen	mg/kgds	S					0.18
chryseen	mg/kgds	S					0.18
benzo(k)fluoranteen	mg/kgds	S					0.16
benzo(a)pyreen	mg/kgds	S					0.20
benzo(ghi)peryleen	mg/kgds	S					0.18
indeno(1,2,3-cd)pyreen	mg/kgds	S					0.18
pak-totaal (10 van VROM) (0.7 factor)	mg/kgds	S					1.627 [1)]
POLYCHLOORBIFENYLEN (PCB)							
PCB 28	µg/kgds	S					<1
PCB 52	µg/kgds	S					<1
PCB 101	µg/kgds	S					<1
PCB 118	µg/kgds	S					<1
PCB 138	µg/kgds	S					1.0
PCB 153	µg/kgds	S					1.1
PCB 180	µg/kgds	S					<1

De met S gemerkte analyses zijn geaccrediteerd en vallen onder de AS3000-erkenning.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
031	Grond (AS3000)	MM D38 2004-1 (0-50) 2004-2 (0-50)
032	Grond (AS3000)	MM D39 2004-3 (0-50)
033	Grond (AS3000)	MM D40 2004-3 (50-100)
034	Grond (AS3000)	MM D41 198-1 (0-50) 198-2 (0-50) 198-3 (0-50)
035	Grond (AS3000)	MM D41N 198-1 (0-50) 198-2 (0-50) 198-3 (0-50)

Analyse	Eenheid	Q	031	032	033	034	035
som PCB (7) (0.7 factor)	µg/kgds	S					5.6 [1)]
MINERALE OLIE							
fractie C10-C12	mg/kgds						<5
fractie C12-C22	mg/kgds						<5
fractie C22-C30	mg/kgds						13
fractie C30-C40	mg/kgds						11
totaal olie C10 - C40	mg/kgds	S					20
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage	zie bijlage	zie bijlage	zie bijlage	

De met S gemerkte analyses zijn geaccrediteerd en vallen onder de AS3000-erkenning.

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

031	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
032	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
033	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
034	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
035	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Voetnoten

1 De sommatie na verrekening van de 0.7 factor voor <-waarden volgens BoToVa.

Paraaf :

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
036	Grond (AS3000)	MM D42 198-3 (50-100)
037	Grond (AS3000)	MM D42N 198-3 (50-100) 198-3 (100-150) 198-3 (150-200)
038	Grond (AS3000)	MM D43 59-1 (0-50) 59-2 (0-50) 59-3 (0-50)
039	Grond (AS3000)	MM D43N 59-1 (0-50) 59-2 (0-50) 59-3 (0-50)
040	Grond (AS3000)	MM D44 59-3 (50-100)

Analyse	Eenheid	Q	036	037	038	039	040
droge stof	gew.-%	S		92.5		93.5	
gewicht artefacten	g	S		<1		<1	
aard van de artefacten	-	S		geen		geen	
organische stof (gloeiverlies)	% vd DS	S		1.1		2.4	
KORRELGROOTTEVERDELING							
lutum (bodem)	% vd DS	S		2.6		6.6	
METALEN							
barium	mg/kgds	S		24		27	
cadmium	mg/kgds	S		<0.2		0.27	
kobalt	mg/kgds	S		<1.5		2.4	
koper	mg/kgds	S		<5		6.8	
kwik	mg/kgds	S		<0.05		<0.05	
lood	mg/kgds	S		<10		12	
molybdeen	mg/kgds	S		<0.5		<0.5	
nikkel	mg/kgds	S		4.1		4.0	
zink	mg/kgds	S		<20		34	
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN							
naftaleen	mg/kgds	S		<0.01		<0.01	
fenantreen	mg/kgds	S		<0.01		0.10	
antraceen	mg/kgds	S		<0.01		0.02	
fluoranteen	mg/kgds	S		<0.01		0.23	
benzo(a)antraceen	mg/kgds	S		<0.01		0.11	
chryseen	mg/kgds	S		<0.01		0.13	
benzo(k)fluoranteen	mg/kgds	S		<0.01		0.11	
benzo(a)pyreen	mg/kgds	S		<0.01		0.13	
benzo(ghi)peryleen	mg/kgds	S		<0.01		0.12	
indeno(1,2,3-cd)pyreen	mg/kgds	S		<0.01		0.12	
pak-totaal (10 van VROM) (0.7 factor)	mg/kgds	S		0.07 [1)]		1.077 [1)]	
POLYCHLOORBIFENYLEN (PCB)							
PCB 28	µg/kgds	S		<1		<1	
PCB 52	µg/kgds	S		<1		<1	
PCB 101	µg/kgds	S		<1		<1	
PCB 118	µg/kgds	S		<1		<1	
PCB 138	µg/kgds	S		<1		<1	
PCB 153	µg/kgds	S		<1		<1	
PCB 180	µg/kgds	S		<1		<1	

De met S gemerkte analyses zijn geaccrediteerd en vallen onder de AS3000-erkenning.

Paraaf :

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
036	Grond (AS3000)	MM D42 198-3 (50-100)
037	Grond (AS3000)	MM D42N 198-3 (50-100) 198-3 (100-150) 198-3 (150-200)
038	Grond (AS3000)	MM D43 59-1 (0-50) 59-2 (0-50) 59-3 (0-50)
039	Grond (AS3000)	MM D43N 59-1 (0-50) 59-2 (0-50) 59-3 (0-50)
040	Grond (AS3000)	MM D44 59-3 (50-100)

Analyse	Eenheid	Q	036	037	038	039	040
som PCB (7) (0.7 factor)	µg/kgds	S		4.9 [1)]		4.9 [1)]	
MINERALE OLIE							
fractie C10-C12	mg/kgds			<5		<5	
fractie C12-C22	mg/kgds			<5		6	
fractie C22-C30	mg/kgds			<5		9	
fractie C30-C40	mg/kgds			<5		7	
totaal olie C10 - C40	mg/kgds	S		<20		20	
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX			zie bijlage		zie bijlage		zie bijlage

De met S gemerkte analyses zijn geaccrediteerd en vallen onder de AS3000-erkenning.

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

036	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
037	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
038	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
039	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
040	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Voetnoten

1 De sommatie na verrekening van de 0.7 factor voor <-waarden volgens BoToVa.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
041	Grond (AS3000)	MM D44N 59-3 (50-100) 59-3 (100-150) 59-3 (150-200)
042	Grond (AS3000)	MM D45 87-1 (0-50) 87-2 (0-50) 87-3 (0-50)
043	Grond (AS3000)	MM D45N 87-1 (0-50) 87-2 (0-50) 87-3 (0-50)
044	Grond (AS3000)	MM D46 87-3 (50-100)
045	Grond (AS3000)	MM D46N 87-3 (50-100) 87-3 (100-150) 87-3 (150-200)

Analyse	Eenheid	Q	041	042	043	044	045
droge stof	gew.-%	S	88.8		90.0		91.7
gewicht artefacten	g	S	<1		<1		<1
aard van de artefacten	-	S	geen		geen		geen
organische stof (gloeiverlies)	% vd DS	S	<0.5		2.2		<0.5
KORRELGROOTTEVERDELING							
lutum (bodem)	% vd DS	S	4.9		3.4		3.4
METALEN							
barium	mg/kgds	S	23		41		<20
cadmium	mg/kgds	S	<0.2		0.25		<0.2
kobalt	mg/kgds	S	3.3		1.8		1.5
koper	mg/kgds	S	<5		5.7		<5
kwik	mg/kgds	S	<0.05		<0.05		<0.05
lood	mg/kgds	S	<10		13		<10
molybdeen	mg/kgds	S	1.3		<0.5		<0.5
nikkel	mg/kgds	S	12		3.8		4.5
zink	mg/kgds	S	<20		34		<20
POLYCYCLISCHE AROMATISCHE KOOLWATERSTOFFEN							
naftaleen	mg/kgds	S	<0.01		<0.01		<0.01
fenantreen	mg/kgds	S	<0.01		0.19		<0.01
antraceen	mg/kgds	S	<0.01		0.03		<0.01
fluoranteen	mg/kgds	S	<0.01		0.50		<0.01
benzo(a)antraceen	mg/kgds	S	<0.01		0.28		<0.01
chryseen	mg/kgds	S	<0.01		0.35		<0.01
benzo(k)fluoranteen	mg/kgds	S	<0.01		0.24		<0.01
benzo(a)pyreen	mg/kgds	S	<0.01		0.33		<0.01
benzo(ghi)peryleen	mg/kgds	S	<0.01		0.29		<0.01
indeno(1,2,3-cd)pyreen	mg/kgds	S	<0.01		0.29		<0.01
pak-totaal (10 van VROM) (0.7 factor)	mg/kgds	S	0.07 [1)]		2.507 [1)]		0.07 [1)]
POLYCHLOORBIFENYLEN (PCB)							
PCB 28	µg/kgds	S	<1		<1		<1
PCB 52	µg/kgds	S	<1		<1		<1
PCB 101	µg/kgds	S	<1		2.2		<1
PCB 118	µg/kgds	S	<1		1.9		<1
PCB 138	µg/kgds	S	<1		2.4		<1
PCB 153	µg/kgds	S	<1		1.9		<1
PCB 180	µg/kgds	S	<1		<1		<1

De met S gemerkte analyses zijn geaccrediteerd en vallen onder de AS3000-erkenning.

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Nummer	Monstersoort	Monsterspecificatie
041	Grond (AS3000)	MM D44N 59-3 (50-100) 59-3 (100-150) 59-3 (150-200)
042	Grond (AS3000)	MM D45 87-1 (0-50) 87-2 (0-50) 87-3 (0-50)
043	Grond (AS3000)	MM D45N 87-1 (0-50) 87-2 (0-50) 87-3 (0-50)
044	Grond (AS3000)	MM D46 87-3 (50-100)
045	Grond (AS3000)	MM D46N 87-3 (50-100) 87-3 (100-150) 87-3 (150-200)

Analyse	Eenheid	Q	041	042	043	044	045
som PCB (7) (0.7 factor)	µg/kgds	S	4.9 [1)]		10.5 [1)]		4.9 [1)]
MINERALE OLIE							
fractie C10-C12	mg/kgds		<5		<5		<5
fractie C12-C22	mg/kgds		<5		<5		<5
fractie C22-C30	mg/kgds		<5		14		<5
fractie C30-C40	mg/kgds		<5		10		<5
totaal olie C10 - C40	mg/kgds	S	<20		20		<20
ANALYSES UITGEVOERD DOOR DERDEN							
PFAS (30) en GENX				zie bijlage		zie bijlage	

De met S gemerkte analyses zijn geaccrediteerd en vallen onder de AS3000-erkenning.

Paraaf :

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster beschrijvingen

041	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
042	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
043	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
044	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.
045	*	De monstervoorbehandeling en analyses zijn uitgevoerd conform Accreditatieschema AS3000, dit geldt alleen voor de analyses die worden gerapporteerd met het "S" kenmerk.

Voetnoten

1 De sommatie na verrekening van de 0.7 factor voor <-waarden volgens BoToVa.

Paraaf :

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Analyse	Monstersoort	Relatie tot norm
PFAS (30) en GENX	Grond (AS3000)	Analyse uitbesteed
droge stof	Grond (AS3000)	Grond: Gelijkwaardig aan ISO 11465 en gelijkwaardig aan NEN-EN 15934 (monstervoorbehandeling conform NEN-EN 16179). Grond (AS3000): conform AS3010-2 en gelijkwaardig aan NEN-EN 15934
gewicht artefacten	Grond (AS3000)	Conform AS3000 en conform NEN-EN 16179
aard van de artefacten	Grond (AS3000)	Idem
organische stof (gloeiverlies)	Grond (AS3000)	Grond: gelijkwaardig aan NEN 5754. Grond (AS3000): conform AS3010-3
lutum (bodem)	Grond (AS3000)	Grond: eigen methode. Grond (AS3000): conform AS3010-4
barium	Grond (AS3000)	Conform AS3010-5 en conform NEN 6950 (ontsluiting conform NEN 6961, meting conform NEN-EN-ISO 17294-2)
cadmium	Grond (AS3000)	Idem
kobalt	Grond (AS3000)	Idem
koper	Grond (AS3000)	Idem
kwik	Grond (AS3000)	Idem
lood	Grond (AS3000)	Idem
molybdeen	Grond (AS3000)	Idem
nikkel	Grond (AS3000)	Idem
zink	Grond (AS3000)	Idem
naftaleen	Grond (AS3000)	Conform AS3010-6
fenantreen	Grond (AS3000)	Idem
antraceen	Grond (AS3000)	Idem
fluoranteen	Grond (AS3000)	Idem
benzo(a)antraceen	Grond (AS3000)	Idem
chryseen	Grond (AS3000)	Idem
benzo(k)fluoranteen	Grond (AS3000)	Idem
benzo(a)pyreen	Grond (AS3000)	Idem
benzo(ghi)peryleen	Grond (AS3000)	Idem
indeno(1,2,3-cd)pyreen	Grond (AS3000)	Idem
pak-totaal (10 van VROM) (0.7 factor)	Grond (AS3000)	Idem
PCB 28	Grond (AS3000)	Conform AS3010-8
PCB 52	Grond (AS3000)	Idem
PCB 101	Grond (AS3000)	Idem
PCB 118	Grond (AS3000)	Idem
PCB 138	Grond (AS3000)	Idem
PCB 153	Grond (AS3000)	Idem
PCB 180	Grond (AS3000)	Idem
som PCB (7) (0.7 factor)	Grond (AS3000)	Idem
totaal olie C10 - C40	Grond (AS3000)	Conform AS3010-7 en conform NEN-EN-ISO 16703

Monster	Barcode	Aanlevering	Monstername	Verpakking
001	0076494AD	27-09-2019	26-09-2019	ALC201
001	0076503AD	27-09-2019	26-09-2019	ALC201
001	0076498AD	27-09-2019	26-09-2019	ALC201
002	0076489AD	27-09-2019	26-09-2019	ALC201

Paraaf :

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster	Barcode	Aanlevering	Monstername	Verpakking
003	0177519AD	27-09-2019	26-09-2019	ALC201
003	0177504AD	27-09-2019	26-09-2019	ALC201
003	0177495AD	27-09-2019	26-09-2019	ALC201
004	0177510AD	27-09-2019	26-09-2019	ALC201
005	0076513AD	26-09-2019	25-09-2019	ALC201
005	0076508AD	26-09-2019	25-09-2019	ALC201
005	0076519AD	26-09-2019	25-09-2019	ALC201
006	0076517AD	26-09-2019	25-09-2019	ALC201
007	0076524AD	26-09-2019	25-09-2019	ALC201
007	0076515AD	26-09-2019	25-09-2019	ALC201
007	0076518AD	26-09-2019	25-09-2019	ALC201
008	0076514AD	26-09-2019	25-09-2019	ALC201
009	U9068575	26-09-2019	25-09-2019	ALC382
009	U9068579	26-09-2019	25-09-2019	ALC382
009	U9068571	26-09-2019	25-09-2019	ALC382
010	U9068572	26-09-2019	25-09-2019	ALC382
011	U9068578	26-09-2019	25-09-2019	ALC382
011	U9069011	26-09-2019	25-09-2019	ALC382
011	U9068573	26-09-2019	25-09-2019	ALC382
012	U9069022	26-09-2019	25-09-2019	ALC382
013	U9069026	26-09-2019	25-09-2019	ALC382
013	U9069014	26-09-2019	25-09-2019	ALC382
013	U9069030	26-09-2019	25-09-2019	ALC382
014	U9069013	26-09-2019	25-09-2019	ALC382
015	0177481AD	27-09-2019	26-09-2019	ALC201
015	0177500AD	27-09-2019	26-09-2019	ALC201
015	0177466AD	27-09-2019	26-09-2019	ALC201
016	0177462AD	27-09-2019	26-09-2019	ALC201
017	0177516AD	27-09-2019	26-09-2019	ALC201
017	0177515AD	27-09-2019	26-09-2019	ALC201
017	0177484AD	27-09-2019	26-09-2019	ALC201
018	0177483AD	27-09-2019	26-09-2019	ALC201
019	U9068590	26-09-2019	25-09-2019	ALC382
019	U9068586	26-09-2019	25-09-2019	ALC382
019	U9068585	26-09-2019	25-09-2019	ALC382
020	U9068588	26-09-2019	25-09-2019	ALC382
021	U9068587	26-09-2019	25-09-2019	ALC382
021	U9069688	26-09-2019	25-09-2019	ALC382
021	U9069684	26-09-2019	25-09-2019	ALC382
022	U9068583	26-09-2019	25-09-2019	ALC382
023	U9069027	26-09-2019	25-09-2019	ALC382
023	U9069016	26-09-2019	25-09-2019	ALC382
024	U9069012	26-09-2019	25-09-2019	ALC382
025	U9069023	26-09-2019	25-09-2019	ALC382
026	U9069025	26-09-2019	25-09-2019	ALC382
026	U9069021	26-09-2019	25-09-2019	ALC382

Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monster	Barcode	Aanlevering	Monstername	Verpakking
026	U9069020	26-09-2019	25-09-2019	ALC382
027	U9069024	26-09-2019	25-09-2019	ALC382
028	0177532AD	27-09-2019	26-09-2019	ALC201
028	0177522AD	27-09-2019	26-09-2019	ALC201
029	0177473AD	27-09-2019	26-09-2019	ALC201
030	0177501AD	27-09-2019	26-09-2019	ALC201
031	0177460AD	27-09-2019	26-09-2019	ALC201
031	0177459AD	27-09-2019	26-09-2019	ALC201
032	0177456AD	27-09-2019	26-09-2019	ALC201
033	0177474AD	27-09-2019	26-09-2019	ALC201
034	U9069673	26-09-2019	25-09-2019	ALC382
034	U9069690	26-09-2019	25-09-2019	ALC382
034	U9069687	26-09-2019	25-09-2019	ALC382
035	0537747236	26-09-2019	25-09-2019	ALC201
035	0537747053	26-09-2019	25-09-2019	ALC201
035	0537747060	26-09-2019	25-09-2019	ALC201
036	U9069683	26-09-2019	25-09-2019	ALC382
037	0537747187	26-09-2019	25-09-2019	ALC201
037	0537747232	26-09-2019	25-09-2019	ALC201
037	0537747237	26-09-2019	25-09-2019	ALC201
038	U9069671	26-09-2019	25-09-2019	ALC382
038	0076511AD	26-09-2019	25-09-2019	ALC201
038	U9069689	26-09-2019	25-09-2019	ALC382
039	0537747233	26-09-2019	25-09-2019	ALC201
039	0537746987	26-09-2019	25-09-2019	ALC201
039	0537747055	26-09-2019	25-09-2019	ALC201
040	U9069672	26-09-2019	25-09-2019	ALC382
041	0537747063	26-09-2019	25-09-2019	ALC201
041	0537747066	26-09-2019	25-09-2019	ALC201
041	0537747238	26-09-2019	25-09-2019	ALC201
042	U9069682	26-09-2019	25-09-2019	ALC382
042	U9069686	26-09-2019	25-09-2019	ALC382
042	U9069679	26-09-2019	25-09-2019	ALC382
043	0537747036	26-09-2019	25-09-2019	ALC201
043	0537588008	26-09-2019	25-09-2019	ALC201
043	0537747064	26-09-2019	25-09-2019	ALC201
044	U9069681	26-09-2019	25-09-2019	ALC382
045	0537746784	26-09-2019	25-09-2019	ALC201
045	0537746994	26-09-2019	25-09-2019	ALC201
045	0537747062	26-09-2019	25-09-2019	ALC201

Paraaf :

Analyserapport

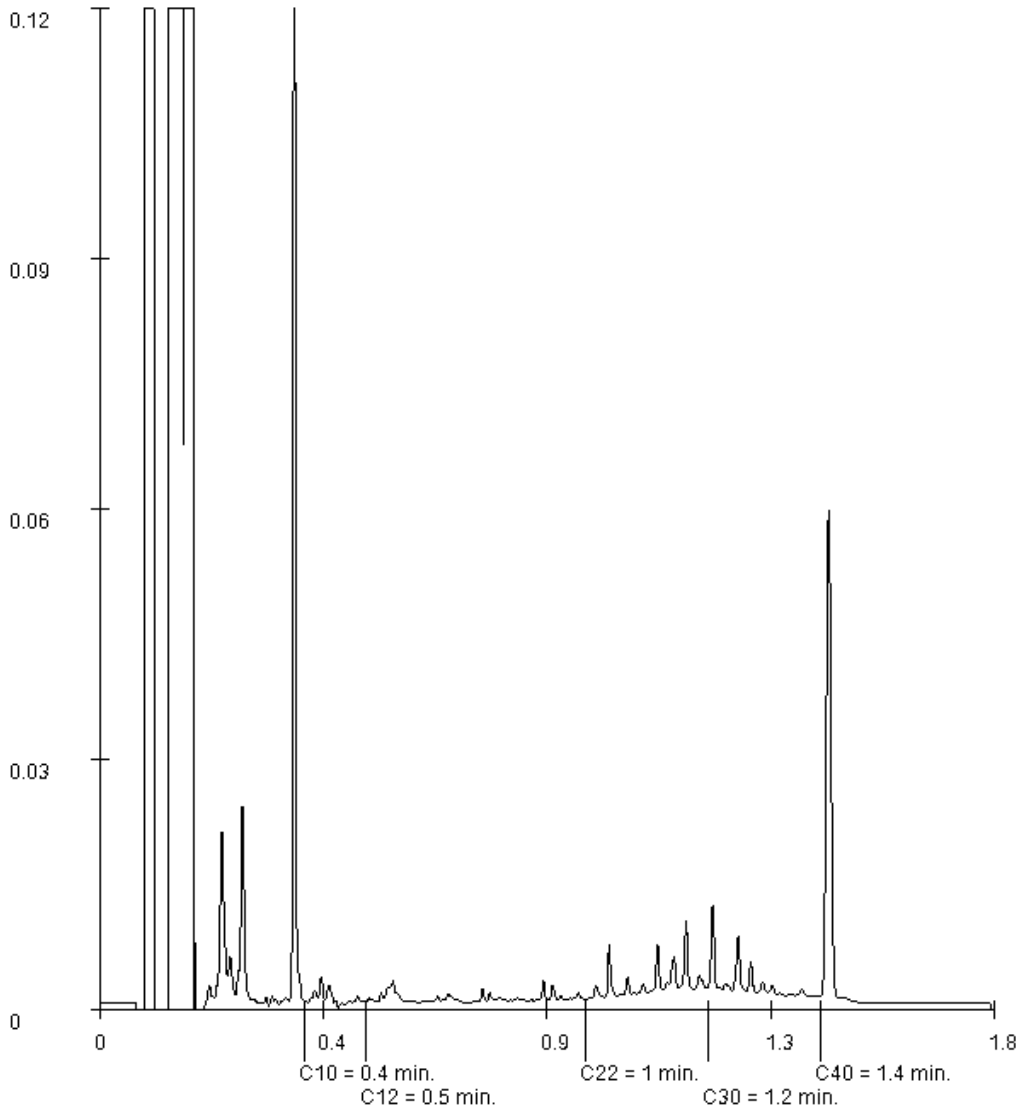
Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monsternummer:	035
Monster beschrijvingen	MM D41N198-1 (0-50) 198-2 (0-50) 198-3 (0-50)

Karakterisering naar alkaantraject

benzine	C9-C14
kerosine en petroleum	C10-C16
diesel en gasolie	C10-C28
motorolie	C20-C36
stookolie	C10-C36

De C10 en C40 pieken zijn toegevoegd door het laboratorium en worden gebruikt als interne standaard.



Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

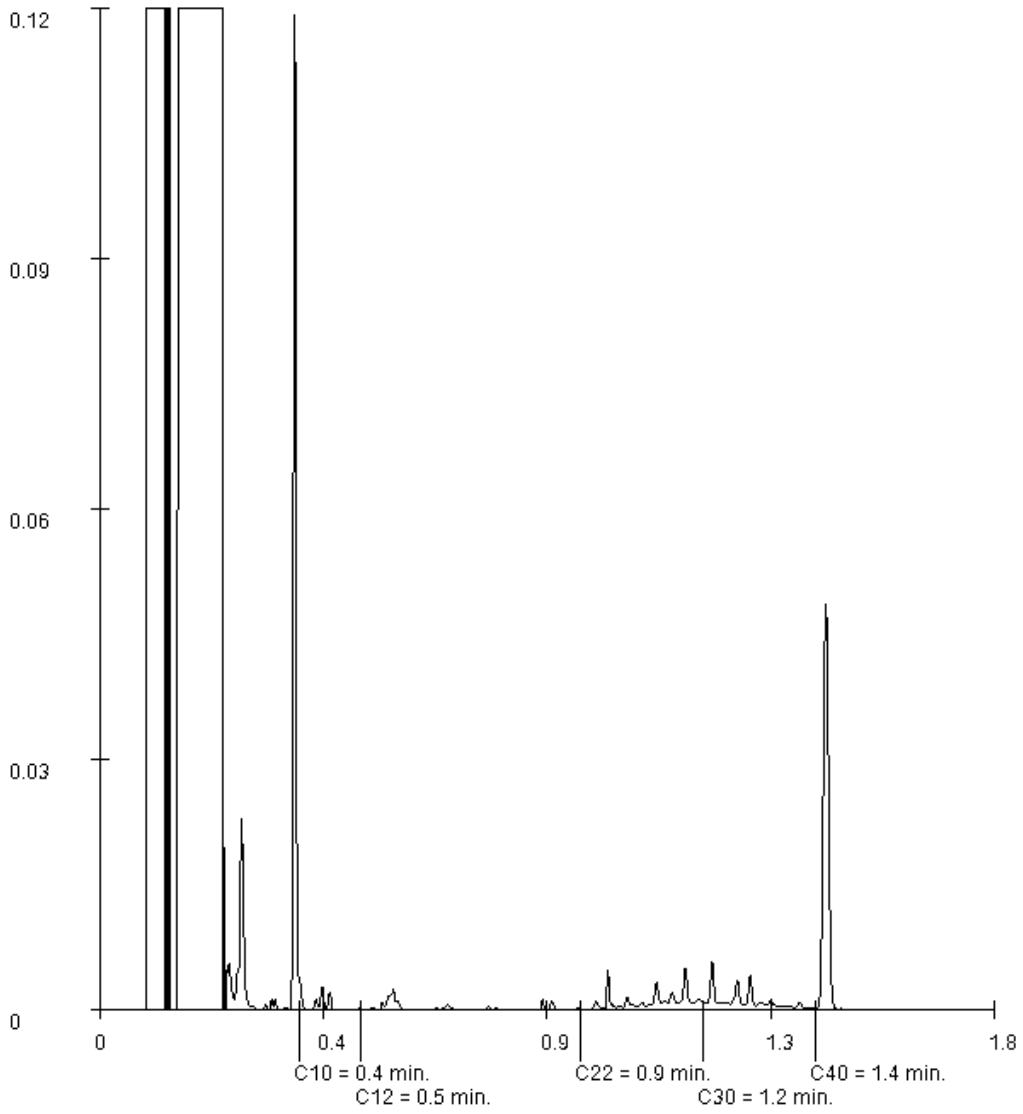
Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monsternummer:	039
Monster beschrijvingen	MM D43N59-1 (0-50) 59-2 (0-50) 59-3 (0-50)

Karakterisering naar alkaantraject

benzine	C9-C14
kerosine en petroleum	C10-C16
diesel en gasolie	C10-C28
motorolie	C20-C36
stookolie	C10-C36

De C10 en C40 pieken zijn toegevoegd door het laboratorium en worden gebruikt als interne standaard.



Paraaf :

MIL.TECH.ADV.BUREAU HEEL
Mike de Vaan

Analyserapport

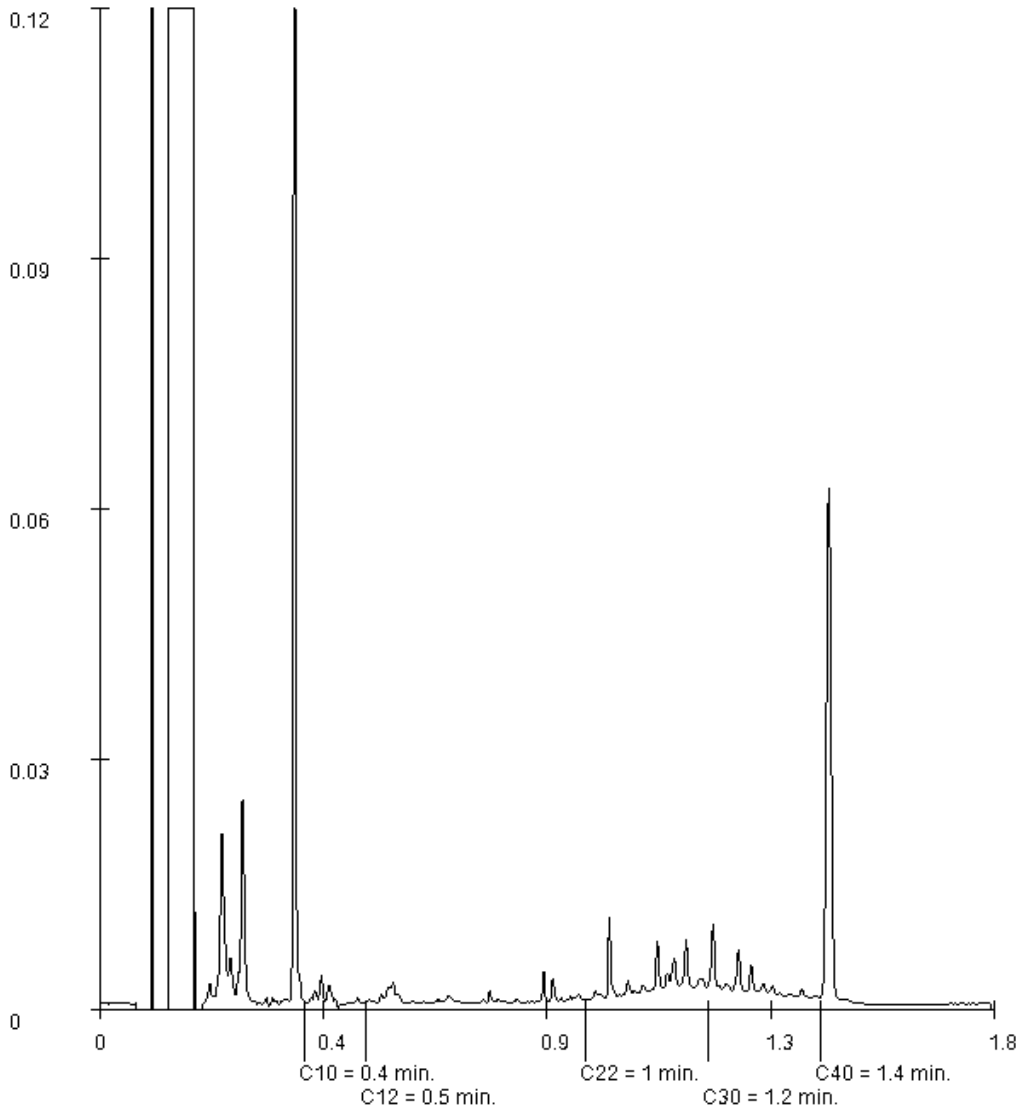
Projectnaam	Schelkensbeek	Orderdatum	27-09-2019
Projectnummer	0303WAL-19_PFAS	Startdatum	27-09-2019
Rapportnummer	13114251 - 1	Rapportagedatum	21-10-2019

Monsternummer:	043
Monster beschrijvingen	MM D45N87-1 (0-50) 87-2 (0-50) 87-3 (0-50)

Karakterisering naar alkaantraject

benzine	C9-C14
kerosine en petroleum	C10-C16
diesel en gasolie	C10-C28
motorolie	C20-C36
stookolie	C10-C36

De C10 en C40 pieken zijn toegevoegd door het laboratorium en worden gebruikt als interne standaard.



Paraaf :

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418440

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-001) MM D01 2001-1 (0-50) 2001-2 (0-50) 2001-3 (
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047694

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	95.4	± 9.54	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.22	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.22	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.49	± 0.15	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	0.15	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418440

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-001) MM D01 2001-1 (0-50) 2001-2 (0-50) 2001-3 (
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047694

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.64	± 0.19	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 5987 0716 5889 1651

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418441

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-002) MM D02 2001-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047698

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	93.4	± 9.34	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418441

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-002) MM D02 2001-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047698

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07

The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer

Control numbers 5883 0216 5981 1352

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418442

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival : 2019-10-02
Time of Arrival : 1150
Temperature at arrival :

Sample name : (13114251-003) MM D03 2002-1 (0-50) 2002-2 (0-50) 2002-3 (
Sampling date : 2019-09-26
Sampler : -
Depth of sampling : -
Invoice reference : P88678
Label-id @mis : 87047835

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	95.4	± 9.54	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.23	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.23	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.38	± 0.11	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	0.14	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418442

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-003) MM D03 2002-1 (0-50) 2002-2 (0-50) 2002-3 (
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047835

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.52	± 0.16	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 5783 0216 5984 1958

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418443

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-004) MM D04 2002-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047699

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	97.7	± 9.77	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418443

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-004) MM D04 2002-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047699

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07

The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer

Control numbers 5685 0016 5289 1350

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418444

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-005) MM D05 2007-1 (0-50) 2007-2 (0-50) 2007-3aa
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047326

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	95.7	± 9.57	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.13	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.13	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.19	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418444

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-005) MM D05 2007-1 (0-50) 2007-2 (0-50) 2007-3aa
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047326

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.19	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 5584 0216 5286 1959

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418445

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-006) MM D06 2007-3aangepast (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047700

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	96.0	± 9.60	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.12	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.12	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418445

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-006) MM D06 2007-3aangepast (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047700

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 5488 0916 5386 1156

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418446

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-007) MM D07 2008-1 (0-50) 2008-2 (0-50) 2008-3aa
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047320

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	94.4	± 9.44	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.18	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.18	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.20	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418446

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-007) MM D07 2008-1 (0-50) 2008-2 (0-50) 2008-3aa
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047320

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.20	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 5380 0016 5082 1154

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418447

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-008) MM D08 2008-3aangepast (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047697

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	94.0	± 9.40	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418447

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-008) MM D08 2008-3aangepast (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047697

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.
Increased reporting limit for some PFAS due to disturbances from other substances in the sample.

Linköping 2019-10-07
The report has been reviewed and approved by

Emil Johansson
Responsible reviewer
Control numbers 5281 0816 5488 1455

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418448

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-009) MM D11 2047-1 (0-50) 2047-2 (0-50) 2047-3 (
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047308

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	92.1	± 9.21	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.28	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418448

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-009) MM D11 2047-1 (0-50) 2047-2 (0-50) 2047-3 (
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047308

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.28	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-08
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 5184 0816 5281 1157

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418449

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-010) MM D12 2047-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047715

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	80.4	± 8.04	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418449

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-010) MM D12 2047-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047715

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 5080 0616 5682 1854

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418450

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-011) MM D13 2048-1 (0-50) 2048-2 (0-50) 2048-3 (
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87049028

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	89.6	± 8.96	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	0.10	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.29	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.29	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.17	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418450

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-011) MM D13 2048-1 (0-50) 2048-2 (0-50) 2048-3 (
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87049028

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.17	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 4981 0165 5686 1457

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418451

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-012) MM D14 2048-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047710

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	79.7	± 7.97	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418451

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-012) MM D14 2048-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047710

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-08

The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer

Control numbers 4884 0168 5380 1953

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418452

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-013) MM D19 2923-1 (0-50) 2923-2 (0-50) 2923-3 (
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048624

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	93.5	± 9.35	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418452

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-013) MM D19 2923-1 (0-50) 2923-2 (0-50) 2923-3 (
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048624

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Increased reporting limit for N-MeFOSAA and N-EtFOSAA due to disturbances from other substances in the sample.

Linköping 2019-10-07
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 4780 0169 5184 1651

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418453

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-014) MM D20 2923-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047709

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	91.0	± 9.10	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418453

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-014) MM D20 2923-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047709

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Increased reporting limit for N-MeFOSAA and N-EtFOSAA due to disturbances from other substances in the sample.

Linköping 2019-10-07
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 4685 0163 5681 1954

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418454

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-015) MM D21 2003-1 (0-50) 2003-2 (0-50) 2003-3 (
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048846

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	89.7	± 8.97	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.15	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.15	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.29	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418454

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-015) MM D21 2003-1 (0-50) 2003-2 (0-50) 2003-3 (
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048846

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.29	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 4583 0169 5289 1454

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418455

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-016) MM D22 2003-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047696

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	95.7	± 9.57	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418455

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-016) MM D22 2003-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047696

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 4485 0161 5284 1852

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418456

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-017) MM D23 2005-1 (0-50) 2005-2 (0-50) 2005-3 (
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048433

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	90.5	± 9.05	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.29	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418456

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-017) MM D23 2005-1 (0-50) 2005-2 (0-50) 2005-3 (
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048433

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.29	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 4380 0166 5082 1151

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418457

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-018) MM D24 2005-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047702

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	94.3	± 9.43	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.10	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418457

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-018) MM D24 2005-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047702

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.10	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 4282 0168 5389 1055

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418458

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-019) MM D25 2010-1aangepast (0-50) 2010-2aangepa
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047076

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	91.7	± 9.17	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.28	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418458

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-019) MM D25 2010-1aangepast (0-50) 2010-2aangepa
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047076

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.28	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 4188 0162 5988 1053

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418459

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-020) MM D26 2010-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047718

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	90.2	± 9.02	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418459

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-020) MM D26 2010-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047718

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-08
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 4089 0163 5486 1652

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418460

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-16
Time of Arrival	: 1100
Temperature at arrival	:

Sample name	: (13114251-021) MM D27 2081-1aangepast (0-50) 2081-2aangepa
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047062

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	90.1	± 9.01	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.23	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418460

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-16
Time of Arrival	: 1100
Temperature at arrival	:

Sample name	: (13114251-021) MM D27 2081-1aangepast (0-50) 2081-2aangepa
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047062

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.23	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-21
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 3986 1600 5685 1357

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418461

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-022) MM D28 2081-3aangepast (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047765

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	94.6	± 9.46	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418461

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-022) MM D28 2081-3aangepast (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047765

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.
Increased reporting limit for some PFAS due to disturbances from other substances in the sample.

Linköping 2019-10-07
The report has been reviewed and approved by

Emil Johansson
Responsible reviewer
Control numbers 3881 1603 5681 1058

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418462

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-023) MM D29 2909-1 (0-50) 2909-2aangepast (0-50)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047015

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	90.6	± 9.06	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.10	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.10	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418462

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-023) MM D29 2909-1 (0-50) 2909-2aangepast (0-50)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047015

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07

The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer

Control numbers 3783 1605 5881 1855

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418463

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-024) MM D30 2909-3aangepast (8-50)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047750

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	89.4	± 8.94	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418463

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-024) MM D30 2909-3aangepast (8-50)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047750

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 3688 1601 5784 1754

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418464

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-025) MM D31 2909-1 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047783

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	91.0	± 9.10	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418464

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-025) MM D31 2909-1 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047783

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-08
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 3583 1602 5782 1059

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418465

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-026) MM D32 607-1aangepast (0-50) 607-2aangepast
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047038

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	90.5	± 9.05	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.31	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418465

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-026) MM D32 607-1aangepast (0-50) 607-2aangepast
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047038

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.31	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 3483 1603 5988 1754

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418466

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-027) MM D34 607-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047800

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	95.3	± 9.53	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.20	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418466

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-027) MM D34 607-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047800

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.20	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-08

The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer

Control numbers 3380 1607 5582 1256

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418467

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-028) MM D35 XXX-1 (0-50) XXX-2 (0-50)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048338

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	91.8	± 9.18	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.27	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418467

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-028) MM D35 XXX-1 (0-50) XXX-2 (0-50)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048338

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.27	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 3280 1609 5583 1056

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418468

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-029) MM D36 XXX-3 (0-50)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047705

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	92.5	± 9.25	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.17	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.17	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.32	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418468

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-029) MM D36 XXX-3 (0-50)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047705

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.32	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 3189 1604 5384 1250

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418469

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-030) MM D37 XXX-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047689

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	94.9	± 9.49	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.20	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.20	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.16	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418469

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-030) MM D37 XXX-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047689

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.16	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 3084 1600 5980 1257

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418470

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-031) MM D38 2004-1 (0-50) 2004-2 (0-50)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048942

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	95.0	± 9.50	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.12	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.12	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.21	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418470

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-031) MM D38 2004-1 (0-50) 2004-2 (0-50)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048942

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.21	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 2981 6406 5181 1852

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418471

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-032) MM D39 2004-3 (0-50)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048201

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	96.0	± 9.60	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418471

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-032) MM D39 2004-3 (0-50)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048201

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-08
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 2881 6005 5187 1858

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418472

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-033) MM D40 2004-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048281

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	95.5	± 9.55	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418472

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-033) MM D40 2004-3 (50-100)
Sampling date	: 2019-09-26
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048281

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-08
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 2781 6202 5484 1557

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418473

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-034) MM D41 198-1 (0-50) 198-2 (0-50) 198-3 (0-5
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048758

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	94.4	± 9.44	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	0.12	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.18	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.18	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.22	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418473

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-034) MM D41 198-1 (0-50) 198-2 (0-50) 198-3 (0-5
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048758

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.22	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 2681 6500 5082 1454

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418474

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-036) MM D42 198-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048123

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	95.5	± 9.55	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418474

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-036) MM D42 198-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048123

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 2581 6307 5380 1457

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418475

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-038) MM D43 59-1 (0-50) 59-2 (0-50) 59-3 (0-50)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048546

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	93.6	± 9.36	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	0.14	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.23	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.23	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.25	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418475

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-038) MM D43 59-1 (0-50) 59-2 (0-50) 59-3 (0-50)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048546

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.25	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 2481 6908 5383 1958

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418476

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-040) MM D44 59-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047747

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	92.2	± 9.22	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	0.11	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.13	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.13	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418476

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-040) MM D44 59-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87047747

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Increased reporting limit for N-MeFOSAA and N-EtFOSAA due to disturbances from other substances in the sample.

Linköping 2019-10-07
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 2381 6903 5387 1156

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418477

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-042) MM D45 87-1 (0-50) 87-2 (0-50) 87-3 (0-50)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048441

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	92.8	± 9.28	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	0.10	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	0.10	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	0.18	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418477

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-042) MM D45 87-1 (0-50) 87-2 (0-50) 87-3 (0-50)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048441

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	0.18	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Linköping 2019-10-07
The report has been reviewed and approved by

Patric Eklundh
Responsible reviewer
Control numbers 2281 6800 5687 1953

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418478

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-044) MM D46 87-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048022

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
SS-ISO 11465	Dry substance	92.0	± 9.20	%
DIN 38414-14 mod.	Perfluorbutanoic acid, PFBA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoic acid,PFPeA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoic acid, PFHxA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoic acid,PFHpA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOA, branched	< 0.1	± 0.10	ug/kg TS
Calculated	PFOA, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluornonanoic acid, PFNA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoic acid, PFDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorundec. acid, PFUnDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordodec. acid, PFDoDA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Perfluortridec.acid, PFTrDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluortetradecacid, PFTeDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluorhexadec.acid, PFHxDA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	Perfluoroctadec.acid, PFODA	< 0.1		ug/kg TS
DIN 38414-14 mod.	Perfluorbutanoicsulphon.PFBS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorpentanoicsulph.PFPeS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorhexanoicsulpho.PFHxS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluorheptanoicsulph.PFHpS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, linear	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	PFOS, branched	< 0.1	± 0.10	ug/kg TS

(*) :Method not accredited by Swedac

PFOA = Perfluoroctane acid PFOS = Perfluoroctane sulfonate

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)

SYNLAB Analytics & Services Sweden AB
Box 1083, 581 10 Linköping, Sweden
Tel: + 46 13 254 900 · Fax: + 46 13 121 728
Registered 556152-0916 Registered office: Linköping, Sweden

Ackred. nr 1006
Provning
ISO/IEC 17025

REPORT

issued by an Accredited Laboratory

Report No. 19418478

Assigner

SYNLAB Analytics & Services BV
Rotterdam

Steenhouwerstraat 15
3194AG ROTTERDAM, NL

Applies to

Soil

Level 1 : Rotterdam Nautilus Order

Information about sample and sampling

Date of Arrival	: 2019-10-02
Time of Arrival	: 1150
Temperature at arrival	:

Sample name	: (13114251-044) MM D46 87-3 (50-100)
Sampling date	: 2019-09-25
Sampler	: -
Depth of sampling	: -
Invoice reference	: P88678
Label-id @mis	: 87048022

Results

Test method	*Analysis / Investigation of*	*Result*	*Uncertainty*	*Unit*
Calculated	PFOS, total	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Perfluordecanoicsulpho. PFDS	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (4:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (6:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod.	Fluortelomersulfo. (8:2 FTS)	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	Fluortelomersulf. (10:2 FTS)	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod. (*)	N-EtFOSAA	< 0.5		ug/kg TS
DIN 38414-14 mod.	Perfluorocta.sulp.amid,PFOSA	< 0.1	± 0.10	ug/kg TS
DIN 38414-14 mod. (*)	N-MeFOSA	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	8:2 diPAP	< 0.1		ug/kg TS
DIN 38414-14 mod. (*)	GenX (HFPO-DA/FRD-903)	< 0.1		ug/kg TS

(*) :Method not accredited by Swedac

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.

Comment

All results for PFAS, except for PFOS and PFOA, refer to linear isomers.

Increased reporting limit for N-MeFOSAA and N-EtFOSAA due to disturbances from other substances in the sample.

Linköping 2019-10-07
The report has been reviewed and approved by

Sofi Jonsson
Responsible reviewer
Control numbers 2181 6404 5987 1959

eurofins | analytico®

MAH BV
T.a.v. Mike de Vaan
St. Antoniusstraat 10
6097 ND HEEL
NETHERLANDS

Analysecertificaat

Datum: 30-Oct-2019

Hierbij ontvangt u de resultaten van het navolgende laboratoriumonderzoek.

Certificaatnummer/Versie	2019146586/1
Uw project/verslagnummer	0303WAL-19_PFAS
Uw projectnaam	Schelkensbeek
Uw ordernummer	
Monster(s) ontvangen	07-Oct-2019

Dit certificaat mag uitsluitend in zijn geheel worden gereproduceerd.
De analyse resultaten hebben alleen betrekking op het beproefde object.

De grondmonsters worden tot 4 weken na datum ontvangst bewaard en watermonsters tot 2 weken na datum ontvangst. Zonder tegenbericht worden de monsters nadien afgevoerd.
Indien de monsters langer bewaard dienen te blijven verzoeken wij U dit exemplaar uiterlijk 1 werkdag voor afloop van de standaardbewaarperiode ondertekend aan ons te retourneren. Voor de kosten van het langer bewaren van monsters verwijzen wij naar de prijslijst.

Bewaren tot:
Datum: Naam: Handtekening:

Wij vertrouwen erop uw opdracht hiermee naar verwachting te hebben uitgevoerd, mocht U naar aanleiding van dit analysecertificaat nog vragen hebben verzoeken wij U contact op te nemen met de afdeling Verkoop en Advies.

Met vriendelijke groet,

Eurofins Analytico B.V.

Ing. A. Veldhuizen
Technical Manager

Eurofins Analytico B.V.

Gildeweg 42-46
3771 NB Barneveld
P.O. Box 459
3770 AL Barneveld NL

Tel. +31 (0)34 242 63 00
Fax +31 (0)34 242 63 99
E-mail info-env@eurofins.nl
Site www.eurofins.nl

BNP Paribas S.A. 227 9245 25
IBAN: NL71BNPA0227924525
BIC: BNPANL2A
KvK/CoC No. 09088623
BTW/VAT No. NL 8043.14.883.B01

eurofins — analytico®

Analysecertificaat

Uw project/verslagnummer	0303WAL-19 PFAS	Certificaatnummer/Versie	2019146586/1
Uw projectnaam	Schelkensbeek	Startdatum	07-Oct-2019
Uw ordernummer		Rapportagedatum	30-Oct-2019/17:12
		Bijlage	A,B,C
Monsternemer		Pagina	1/4
Monstermatrix	Grond (AS3000)		

Analyse	Eenheid	1	2	3	4	5
Extern / Overig onderzoek						
GenX	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorbutaanzuur (PFBA)	µg/kg ds	<0.1 1)	1.2 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorpentaanzuur (PFPeA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorhexaanzuur (PFHxA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorheptaanzuur (PFHpA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluoroctaanzuur (PFOA) lineair	µg/kg ds	<0.1 1)	<0.1 1)	0.2 1)	<0.1 1)	0.1 1)
perfluoroctaanzuur (PFOA) vertakt	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluornonaanzuur (PFNA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluordecaanzuur (PFDeA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorundecaanzuur (PFUnDA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluordodecaanzuur (PFDoDA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluortridecaanzuur (PFTrDA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluortetradecaanzuur (PFTeDA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorhexadecaanzuur (PFHxDA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluoroctadecaanzuur (PFODA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorbutaansulfonzuur (PFBS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorpentaansulfonzuur (PFPeS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorhexaansulfonzuur (PFHxS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluorheptaansulfonzuur(PFHpS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluoroctaansulfonzuur (PFOS) lineair	µg/kg ds	0.1 1)	<0.1 1)	0.3 1)	<0.1 1)	0.2 1)
perfluoroctaansulfonzuur (PFOS) vertakt	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
perfluordecaansulfonzuur (PFDS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
4:2 fluortelomeer sulfonzuur (4:2 FTS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
6:2 fluortelomeer sulfonzuur (6:2 FTS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
8:2 fluortelomeer sulfonzuur (8:2 FTS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
10:2 fluortelomeer sulfonzuur (10:2 FTS)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
N-methylperfluoroctaansulfonamide acetaat (MeFOSAA	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
N-ethylperfluoroctaansulfonamide acetaat (EtFOSAA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)

Nr.	Monsteromschrijving	Datum monstername	Monster nr.
1	MM D09 2676-1 (0-50) 2676-2 (0-50) 2676-3 (0-50)	04-Oct-2019	10970656
2	MM D10 2676-3 (50-100) 2676-3 (100-150) 2676-3 (150-200)	04-Oct-2019	10970657
3	MM D15 2690-1 (0-50) 2690-2 (0-50) 2690-3 (0-50)	04-Oct-2019	10970658
4	MM D16 2690-3 (50-100) 2690-3 (100-150) 2690-3 (150-200)	04-Oct-2019	10970659
5	MM D17 2693-1 (0-50) 2693-2 (0-50) 2693-3 (0-50)	04-Oct-2019	10970660

Q: door RvA geaccrediteerde verrichting
A: AP04 erkende verrichting
S: AS SIKB erkende verrichting
V: VLAREL erkende verrichting

Eurofins Analytico B.V.

Gildeweg 42-46
3771 NB Barneveld
P.O. Box 459
3770 AL Barneveld NL

Tel. +31 (0)34 242 63 00
Fax +31 (0)34 242 63 99
E-mail info-env@eurofins.nl
Site www.eurofins.nl

BNP Paribas S.A. 227 9245 25
IBAN: NL71BNPA0227924525
BIC: BNPANL2A
KvK/CoC No. 09088623
BTW/VAT No. NL 8043.14.883.B01

eurofins — analytico®

Analysecertificaat

Uw project/verslagnummer	0303WAL-19 PFAS	Certificaatnummer/Versie	2019146586/1
Uw projectnaam	Schelkensbeek	Startdatum	07-Oct-2019
Uw ordernummer		Rapportagedatum	30-Oct-2019/17:12
		Bijlage	A,B,C
Monsternemer		Pagina	2/4
Monstermatrix	Grond (AS3000)		

Analyse	Eenheid	1	2	3	4	5
perfluoroctaansulfonamide (PFOSA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
N-methylperfluoroctaansulfonamide (MeFOSA)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
8:2 polyfluoralkyl fosfaat diester (8:2 diPAP)	µg/kg ds	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)	<0.1 1)
som PFOA	µg/kg ds	0.1 1)	0.1 1)	0.3 1)	0.1 1)	0.2 1)
som PFOS	µg/kg ds	0.2 1)	0.1 1)	0.4 1)	0.1 1)	0.3 1)

Nr.	Monsteromschrijving	Datum monstername	Monster nr.
1	MM D09 2676-1 (0-50) 2676-2 (0-50) 2676-3 (0-50)	04-Oct-2019	10970656
2	MM D10 2676-3 (50-100) 2676-3 (100-150) 2676-3 (150-200)	04-Oct-2019	10970657
3	MM D15 2690-1 (0-50) 2690-2 (0-50) 2690-3 (0-50)	04-Oct-2019	10970658
4	MM D16 2690-3 (50-100) 2690-3 (100-150) 2690-3 (150-200)	04-Oct-2019	10970659
5	MM D17 2693-1 (0-50) 2693-2 (0-50) 2693-3 (0-50)	04-Oct-2019	10970660

Q: door RvA geaccrediteerde verrichting
A: AP04 erkende verrichting
S: AS SIKB erkende verrichting
V: VLAREL erkende verrichting

Eurofins Analytico B.V.

Gildeweg 42-46
3771 NB Barneveld
P.O. Box 459
3770 AL Barneveld NL

Tel. +31 (0)34 242 63 00
Fax +31 (0)34 242 63 99
E-mail info-env@eurofins.nl
Site www.eurofins.nl

BNP Paribas S.A. 227 9245 25
IBAN: NL71BNPA0227924525
BIC: BNPANL2A
KvK/CoC No. 09088623
BTW/VAT No. NL 8043.14.883.B01

eurofins — analytico®

Analysecertificaat

Uw project/verslagnummer	0303WAL-19 PFAS	Certificaatnummer/Versie	2019146586/1
Uw projectnaam	Schelkensbeek	Startdatum	07-Oct-2019
Uw ordernummer		Rapportagedatum	30-Oct-2019/17:12
		Bijlage	A,B,C
Monsternemer		Pagina	3/4
Monstermatrix	Grond (AS3000)		

Analyse	Eenheid	6
Extern / Overig onderzoek		
GenX	µg/kg ds	<0.1 1)
perfluorbutaanzuur (PFBA)	µg/kg ds	<0.1 1)
perfluorpentaanzuur (PFPeA)	µg/kg ds	<0.1 1)
perfluorhexaanzuur (PFHxA)	µg/kg ds	<0.1 1)
perfluorheptaanzuur (PFHpA)	µg/kg ds	<0.1 1)
perfluoroctaanzuur (PFOA) lineair	µg/kg ds	<0.1 1)
perfluoroctaanzuur (PFOA) vertakt	µg/kg ds	<0.1 1)
perfluornonaanzuur (PFNA)	µg/kg ds	<0.1 1)
perfluordecaanzuur (PFDeA)	µg/kg ds	<0.1 1)
perfluorundecaanzuur (PFUnDA)	µg/kg ds	<0.1 1)
perfluordodecaanzuur (PFDoDA)	µg/kg ds	<0.1 1)
perfluortridecaanzuur (PFTrDA)	µg/kg ds	<0.1 1)
perfluortetradecaanzuur (PFTeDA)	µg/kg ds	<0.1 1)
perfluorhexadecaanzuur (PFHxDA)	µg/kg ds	<0.1 1)
perfluoroctadecaanzuur (PFODA)	µg/kg ds	<0.1 1)
perfluorbutaansulfonzuur (PFBS)	µg/kg ds	<0.1 1)
perfluorpentaansulfonzuur (PFPeS)	µg/kg ds	<0.1 1)
perfluorhexaansulfonzuur (PFHxS)	µg/kg ds	<0.1 1)
perfluorheptaansulfonzuur(PFHpS)	µg/kg ds	<0.1 1)
perfluoroctaansulfonzuur (PFOS) lineair	µg/kg ds	<0.1 1)
perfluoroctaansulfonzuur (PFOS) vertakt	µg/kg ds	<0.1 1)
perfluordecaansulfonzuur (PFDS)	µg/kg ds	<0.1 1)
4:2 fluortelomeer sulfonzuur (4:2 FTS)	µg/kg ds	<0.1 1)
6:2 fluortelomeer sulfonzuur (6:2 FTS)	µg/kg ds	<0.1 1)
8:2 fluortelomeer sulfonzuur (8:2 FTS)	µg/kg ds	<0.1 1)
10:2 fluortelomeer sulfonzuur (10:2 FTS)	µg/kg ds	<0.1 1)
N-methylperfluoroctaansulfonamide acetaat (MeFOSAA	µg/kg ds	<0.1 1)
N-ethylperfluoroctaansulfonamide acetaat (EtFOSAA)	µg/kg ds	<0.1 1)

Nr.	Monsteromschrijving	Datum monstername	Monster nr.
6	MM D18 2693-3 (50-100) 2693-3 (100-150) 2693-3 (150-200)	04-Oct-2019	10970661

Q: door RvA geaccrediteerde verrichting
A: AP04 erkende verrichting
S: AS SIKB erkende verrichting
V: VLAREL erkende verrichting

Eurofins Analytico B.V.

Gildeweg 42-46
3771 NB Barneveld
P.O. Box 459
3770 AL Barneveld NL

Tel. +31 (0)34 242 63 00
Fax +31 (0)34 242 63 99
E-mail info-env@eurofins.nl
Site www.eurofins.nl

BNP Paribas S.A. 227 9245 25
IBAN: NL71BNPA0227924525
BIC: BNPANL2A
KvK/CoC No. 09088623
BTW/VAT No. NL 8043.14.883.B01

eurofins — analytico®

Analysecertificaat

Uw project/verslagnummer	0303WAL-19 PFAS	Certificaatnummer/Versie	2019146586/1
Uw projectnaam	Schelkensbeek	Startdatum	07-Oct-2019
Uw ordernummer		Rapportagedatum	30-Oct-2019/17:12
		Bijlage	A,B,C
Monsternemer		Pagina	4/4
Monstermatrix	Grond (AS3000)		

Analyse	Eenheid	6
perfluoroctaansulfonamide (PFOSA)	µg/kg ds	<0.1 [1)]
N-methylperfluoroctaansulfonamide (MeFOSA)	µg/kg ds	<0.1 [1)]
8:2 polyfluoralkyl fosfaat diester (8:2 diPAP)	µg/kg ds	<0.1 [1)]
som PFOA	µg/kg ds	0.1 [1)]
som PFOS	µg/kg ds	0.1 [1)]

Nr.	Monsteromschrijving	Datum monstername	Monster nr.
6	MM D18 2693-3 (50-100) 2693-3 (100-150) 2693-3 (150-200)	04-Oct-2019	10970661

Q: door RvA geaccrediteerde verrichting
A: AP04 erkende verrichting
S: AS SIKB erkende verrichting
V: VLAREL erkende verrichting

Akkoord
Pr.coörd.
MP

Eurofins Analytico B.V.

Gildeweg 42-46
3771 NB Barneveld
P.O. Box 459
3770 AL Barneveld NL

Tel. +31 (0)34 242 63 00
Fax +31 (0)34 242 63 99
E-mail info-env@eurofins.nl
Site www.eurofins.nl

BNP Paribas S.A. 227 9245 25
IBAN: NL71BNPA0227924525
BIC: BNPANL2A
KvK/CoC No. 09088623
BTW/VAT No. NL 8043.14.883.B01

eurofins — analytico®

Bijlage (A) met deelmonsterinformatie behorende bij analysecertificaat 2019146586/1

Monster nr.	Boornr	Omschrijving	Van	Tot	Barcode	Monstername ID/Monsteromsch.
10970656	2676-1	1	0	50	0168440AD	MM D09 2676-1 (0-50) 2676-2 (
10970656	2676-2	1	0	50	0168436AD	MM D09 2676-1 (0-50) 2676-2 (
10970656	2676-3	1	0	50	0168437AD	MM D09 2676-1 (0-50) 2676-2 (
10970657	2676-3	2	50	100	0168438AD	MM D10 2676-3 (50-100) 2676-
10970657	2676-3	3	100	150	0168434AD	MM D10 2676-3 (50-100) 2676-
10970657	2676-3	4	150	200	0168435AD	MM D10 2676-3 (50-100) 2676-
10970658	2690-1	1	0	50	0168451AD	MM D15 2690-1 (0-50) 2690-2 (
10970658	2690-2	1	0	50	0168450AD	MM D15 2690-1 (0-50) 2690-2 (
10970658	2690-3	1	0	50	0168449AD	MM D15 2690-1 (0-50) 2690-2 (
10970659	2690-3	2	50	100	0168448AD	MM D16 2690-3 (50-100) 2690-
10970659	2690-3	3	100	150	0168444AD	MM D16 2690-3 (50-100) 2690-
10970659	2690-3	4	150	200	0168445AD	MM D16 2690-3 (50-100) 2690-
10970660	2693-1	1	0	50	0168446AD	MM D17 2693-1 (0-50) 2693-2 (
10970660	2693-2	1	0	50	0168447AD	MM D17 2693-1 (0-50) 2693-2 (
10970660	2693-3	1	0	50	0168443AD	MM D17 2693-1 (0-50) 2693-2 (
10970661	2693-3	2	50	100	0168442AD	MM D18 2693-3 (50-100) 2693-
10970661	2693-3	3	100	150	0168439AD	MM D18 2693-3 (50-100) 2693-
10970661	2693-3	4	150	200	0168441AD	MM D18 2693-3 (50-100) 2693-

Eurofins Analytico B.V.

Gildeweg 42-46
3771 NB Barneveld
P.O. Box 459
3770 AL Barneveld NL

Tel. +31 (0)34 242 63 00
Fax +31 (0)34 242 63 99
E-mail info-env@eurofins.nl
Site www.eurofins.nl

BNP Paribas S.A. 227 9245 25
IBAN: NL71BNPA0227924525
BIC: BNPANL2A
KvK/CoC No. 09088623
BTW/VAT No. NL 8043.14.883.B01

Bijlage (B) met opmerkingen behorende bij analysecertificaat 2019146586/1

Opmerking 1)

Deze bepaling is uitgevoerd bij Eurofins Omegam (L086).

Eurofins Analytico B.V.

Gildeweg 42-46
3771 NB Barneveld
P.O. Box 459
3770 AL Barneveld NL

Tel. +31 (0)34 242 63 00
Fax +31 (0)34 242 63 99
E-mail info-env@eurofins.nl
Site www.eurofins.nl

BNP Paribas S.A. 227 9245 25
IBAN: NL71BNPA0227924525
BIC: BNPANL2A
KvK/CoC No. 09088623
BTW/VAT No. NL 8043.14.883.B01

Bijlage (C) met methodeverwijzingen behorende bij analysecertificaat 2019146586/1

Analyse	Methode	Techniek	Methode referentie
GenX Grond	W0004	Extern	Uitbesteding
Som lineair en vertakte PFOA grond	W0004	Extern	Uitbesteding
Som lineair en vertakte PFOS grond	W0004	Extern	Uitbesteding
PFAS (28) Handelingskader	W0004	Extern	Uitbesteding

Nadere informatie over de toegepaste onderzoeksmethoden alsmede een classificatie van de meetonzekerheid staan vermeld in ons overzicht "Specificaties analysemethoden", versie juni 2019.

Eurofins Analytico B.V.

Gildeweg 42-46
3771 NB Barneveld
P.O. Box 459
3770 AL Barneveld NL

Tel. +31 (0)34 242 63 00
Fax +31 (0)34 242 63 99
E-mail info-env@eurofins.nl
Site www.eurofins.nl

BNP Paribas S.A. 227 9245 25
IBAN: NL71BNPA0227924525
BIC: BNPANL2A
KvK/CoC No. 09088623
BTW/VAT No. NL 8043.14.883.B01

eurofins | Omegam

Eurofins Analytico B.V.
T.a.v. mevrouw M. van de Coterlet
Gildeweg 42-48
3771 NB BARNEVELD

Uw kenmerk	:	2019146586-0303WAL-19_PFAS
Ons kenmerk	:	Project 951745
Validatieref.	:	951745_certificaat_v1
Opdrachtverificatiecode	:	HXZX-VLIQ-DIYR-SGJB
Bijlage(n)	:	7 tabel(len) + 2 bijlage(n) (factuur wordt separaat verstuurd naar de financiële administratie)

Amsterdam, 30 oktober 2019

Hierbij zend ik u de resultaten van het laboratoriumonderzoek dat op uw verzoek is uitgevoerd in de door u aangeboden monsters.

De resultaten hebben uitsluitend betrekking op de monsters, zoals die door u voor analyse ter beschikking werden gesteld.

Het onderzoek is, met uitzondering van eventueel uitbesteed onderzoek, uitgevoerd door Eurofins Omegam volgens de methoden zoals ze zijn vastgelegd in het geldende accreditatie-certificaat L086 en/of in de bundel "Analysevoorschriften Eurofins Omegam". De in dit onderzoek uitgevoerde onderzoeksmethoden van de geaccrediteerde analyses zijn in een aparte bijlage als onderdeel van dit analyse-certificaat opgenomen. De methoden zijn, voor zover mogelijk, ontleend aan de accreditatieprogramma's/schema's en NEN- EN- en/of ISO-voorschriften.

Ik wijs u erop dat het analyse-certificaat alleen in zijn geheel mag worden gereproduceerd. Ik vertrouw erop uw opdracht volledig en naar tevredenheid te hebben uitgevoerd. Heeft u naar aanleiding van deze rapportage nog vragen, dan verzoek ik u contact op te nemen met onze klantenservice.

Hoogachtend,
namens Eurofins Omegam,

Ing. J. Tukker
Manager productie

Eurofins Omegam B.V.
H.J.E. Wenckbachweg 120
NL-1114 AD Amsterdam-Duivendrecht
Nederland

T +31-(0)20-597 66 80

CSOmegam@eurofins.com
www.eurofins.nl

IBAN NL 16 BNPA 0227667980
BIC BNPANL2A
BTW nr. NL8139.67.132.B01
KvK nr. 34215654

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Monsterreferenties
6112129 = MM D09 2676-1 (0-50) 2676-2 (0-50) 2676-3 (0-50)
6112130 = MM D10 2676-3 (50-100) 2676-3 (100-150) 2676-3 (15
6112131 = MM D15 2690-1 (0-50) 2690-2 (0-50) 2690-3 (0-50)

Opgegeven bemonsteringsdatum	:	**04/10/2019**	**04/10/2019**	**04/10/2019**
Ontvangstdatum opdracht	:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Startdatum	:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Monstercode	:	**6112129**	**6112130**	**6112131**
Matrix	:	**Grond**	**Grond**	**Grond**
Algemeen onderzoek - fysisch				
Q droge stof	%	**95,3**	**92,0**	**88,0**

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Monsterreferenties
6112129 = MM D09 2676-1 (0-50) 2676-2 (0-50) 2676-3 (0-50)
6112130 = MM D10 2676-3 (50-100) 2676-3 (100-150) 2676-3 (15
6112131 = MM D15 2690-1 (0-50) 2690-2 (0-50) 2690-3 (0-50)

Opgegeven bemonsteringsdatum		:	**04/10/2019**	**04/10/2019**	**04/10/2019**
Ontvangstdatum opdracht		:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Startdatum		:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Monstercode		:	**6112129**	**6112130**	**6112131**
Matrix		:	**Grond**	**Grond**	**Grond**
Organische parameters - gehalogeneerd					
Perfluorcarbonzuren:					
perfluorbutaanzuur (PFBA)	µg/kg ds		**< 0,1**	**1,2**	**< 0,1**
perfluorpentaanzuur (PFPeA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluorhexaanzuur (PFHxA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluorheptaanzuur (PFHpA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluoroctaanzuur (PFOA) lineair	µg/kg ds		**< 0,1**	**< 0,1**	**0,2**
perfluoroctaanzuur (PFOA) vertakt	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluornonaanzuur (PFNA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluordecaanzuur (PFDeA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluorundecaanzuur (PFUnDA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluordodecaanzuur (PFDoDA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluortridecaanzuur (PFTrDA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluortetradecaanzuur (PFTeDA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluorhexadecaanzuur (PFHxDA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluoroctadecaanzuur (PFODA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
Perfluorsulfonzuren:					
perfluorbutaansulfonzuur (PFBS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluorpentaansulfonzuur (PFPeS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluorhexaansulfonzuur (PFHxS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluorheptaansulfonzuur(PFHpS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluoroctaansulfonzuur (PFOS) lineair	µg/kg ds		**0,1**	**< 0,1**	**0,3**
perfluoroctaansulfonzuur (PFOS) vertakt	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluordecaansulfonzuur (PFDS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
Perfluorverbindingen - precursors:					
4:2 fluortelomeer sulfonzuur (4:2 FTS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
6:2 fluortelomeer sulfonzuur (6:2 FTS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
8:2 fluortelomeer sulfonzuur (8:2 FTS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
10:2 fluortelomeer sulfonzuur (10:2 FTS)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Monsterreferenties
6112129 = MM D09 2676-1 (0-50) 2676-2 (0-50) 2676-3 (0-50)
6112130 = MM D10 2676-3 (50-100) 2676-3 (100-150) 2676-3 (15
6112131 = MM D15 2690-1 (0-50) 2690-2 (0-50) 2690-3 (0-50)

Opgegeven bemonsteringsdatum		:	**04/10/2019**	**04/10/2019**	**04/10/2019**
Ontvangstdatum opdracht		:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Startdatum		:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Monstercode		:	**6112129**	**6112130**	**6112131**
Matrix		:	**Grond**	**Grond**	**Grond**
Perfluorverbindingen - overig:					
N-methylperfluoroctaansulfonamide acetaat (MeFOSAA	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
N-ethylperfluoroctaansulfonamide acetaat (EtFOSAA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
perfluoroctaansulfonamide (PFOSA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
N-methylperfluoroctaansulfonamide (MeFOSA)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
8:2 polyfluoralkyl fosfaat diester (8:2 diPAP)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
HFPO-DA (GenX)	µg/kg ds		**< 0,1**	**< 0,1**	**< 0,1**
som PFOA	µg/kg ds		**0,1**	**0,1**	**0,3**
som PFOS	µg/kg ds		**0,2**	**0,1**	**0,4**

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Monsterreferenties
6112132 = MM D16 2690-3 (50-100) 2690-3 (100-150) 2690-3 (15
6112133 = MM D17 2693-1 (0-50) 2693-2 (0-50) 2693-3 (0-50)
6112134 = MM D18 2693-3 (50-100) 2693-3 (100-150) 2693-3 (15

Opgegeven bemonsteringsdatum	:	**04/10/2019**	**04/10/2019**	**04/10/2019**
Ontvangstdatum opdracht	:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Startdatum	:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Monstercode	:	**6112132**	**6112133**	**6112134**
Matrix	:	**Grond**	**Grond**	**Grond**
Algemeen onderzoek - fysisch				
Q droge stof	%	**93,9**	**89,1**	**93,3**

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Monsterreferenties
6112132 = MM D16 2690-3 (50-100) 2690-3 (100-150) 2690-3 (15
6112133 = MM D17 2693-1 (0-50) 2693-2 (0-50) 2693-3 (0-50)
6112134 = MM D18 2693-3 (50-100) 2693-3 (100-150) 2693-3 (15

Opgegeven bemonsteringsdatum	:	**04/10/2019**	**04/10/2019**	**04/10/2019**
Ontvangstdatum opdracht	:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Startdatum	:	**10/10/2019**	**10/10/2019**	**10/10/2019**
Monstercode	:	**6112132**	**6112133**	**6112134**
Matrix	:	**Grond**	**Grond**	**Grond**

Organische parameters - gehalogeneerd

Perfluorcarbonzuren:				
perfluorbutaanzuur (PFBA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluorpentaanzuur (PFPeA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluorhexaanzuur (PFHxA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluorheptaanzuur (PFHpA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluoroctaanzuur (PFOA) lineair	µg/kg ds	**< 0,1**	**0,1**	**< 0,1**
perfluoroctaanzuur (PFOA) vertakt	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluornonaanzuur (PFNA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluordecaanzuur (PFDeA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluorundecaanzuur (PFUnDA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluordodecaanzuur (PFDoDA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluortridecaanzuur (PFTrDA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluortetradecaanzuur (PFTeDA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluorhexadecaanzuur (PFHxDA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluoroctadecaanzuur (PFODA)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
Perfluorsulfonzuren:				
perfluorbutaansulfonzuur (PFBS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluorpentaansulfonzuur (PFPeS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluorhexaansulfonzuur (PFHxS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluorheptaansulfonzuur(PFHpS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluoroctaansulfonzuur (PFOS) lineair	µg/kg ds	**< 0,1**	**0,2**	**< 0,1**
perfluoroctaansulfonzuur (PFOS) vertakt	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluordecaansulfonzuur (PFDS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
Perfluorverbindingen - precursors:				
4:2 fluortelomeer sulfonzuur (4:2 FTS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
6:2 fluortelomeer sulfonzuur (6:2 FTS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
8:2 fluortelomeer sulfonzuur (8:2 FTS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
10:2 fluortelomeer sulfonzuur (10:2 FTS)	µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Monsterreferenties
6112132 = MM D16 2690-3 (50-100) 2690-3 (100-150) 2690-3 (15
6112133 = MM D17 2693-1 (0-50) 2693-2 (0-50) 2693-3 (0-50)
6112134 = MM D18 2693-3 (50-100) 2693-3 (100-150) 2693-3 (15

Opgegeven bemonsteringsdatum	:		**04/10/2019**	**04/10/2019**	**04/10/2019**
Ontvangstdatum opdracht	:		**10/10/2019**	**10/10/2019**	**10/10/2019**
Startdatum	:		**10/10/2019**	**10/10/2019**	**10/10/2019**
Monstercode	:		**6112132**	**6112133**	**6112134**
Matrix	:		**Grond**	**Grond**	**Grond**
Perfluorverbindingen - overig:					
N-methylperfluoroctaansulfonamide acetaat (MeFOSAA		µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
N-ethylperfluoroctaansulfonamide acetaat (EtFOSAA)		µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
perfluoroctaansulfonamide (PFOSA)		µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
N-methylperfluoroctaansulfonamide (MeFOSA)		µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
8:2 polyfluoralkyl fosfaat diester (8:2 diPAP)		µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
HFPO-DA (GenX)		µg/kg ds	**< 0,1**	**< 0,1**	**< 0,1**
som PFOA		µg/kg ds	**0,1**	**0,2**	**0,1**
som PFOS		µg/kg ds	**0,1**	**0,3**	**0,1**

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Opmerkingen m.b.t. analyses

Opmerking(en) algemeen

Kwantificering van vertakte PFOS/PFOA is gebaseerd op DIN 38414-14.

Sommatie van concentraties voor groepsparameters
De sommatie is uitgevoerd volgens AS3000 paragraaf 2.5.2 en bijlage 3.

Opmerking bij project:

- Kwantificatie van HFPO-DA (GenX) is op basis van 2,3,3,3-tetrafluor-2-(1,1,2,2,3,3,3-heptafluorpropoxy)-propaanzuur (CAS nr. 13252-13-6). Een andere naam van GenX is perfluor-2-propoxypropaanzuur (PFPrOPrA).

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Barcodeschema's

Monstercode	*Uw referentie*	*monster*	*diepte*	*barcode*
6112129	MM D09 2676-1 (0-50) 2676-2 (0-50) 2676-3 (0-50)	2676-2	0-.5	0168436AD
		2676-1	0-.5	0168440AD
		2676-3	0-.5	0168437AD
6112130	MM D10 2676-3 (50-100) 2676-3 (100-150) 2676-3 (15	2676-3	1-1.5	0168434AD
		2676-3	.5-1	0168438AD
6112131	MM D15 2690-1 (0-50) 2690-2 (0-50) 2690-3 (0-50)	2690-3	0-.5	0168449AD
		2690-1	0-.5	0168451AD
		2690-2	0-.5	0168450AD
6112132	MM D16 2690-3 (50-100) 2690-3 (100-150) 2690-3 (15	2690-3	.5-1	0168448AD
		2690-3	1.5-2	0168445AD
		2690-3	1-1.5	0168444AD
6112133	MM D17 2693-1 (0-50) 2693-2 (0-50) 2693-3 (0-50)	2693-1	0-.5	0168446AD
		2693-3	0-.5	0168443AD
6112134	MM D18 2693-3 (50-100) 2693-3 (100-150) 2693-3 (15	2693-3	1-1.5	0168439AD
		2693-3	1.5-2	0168441AD
		2693-3	.5-1	0168442AD

A N A L Y S E C E R T I F I C A A T

Project code	:	**951745**
Project omschrijving	:	**2019146586-0303WAL-19_PFAS**
Opdrachtgever	:	**Eurofins Analytico B.V.**

Analysemethoden in Grond

In dit analysecertificaat zijn de met 'Q' gemerkte analyses uitgevoerd volgens de onderstaande analysemethoden. Deze analyses zijn vastgelegd in het geldende accreditatie-certificaat met bijbehorende verrichtingenlijst L086 van Eurofins Omegam BV.

Droge stof : Eigen methode

BIJLAGE 7

FOTO'S LOCATIE EN PROEFGATEN

Duiker 2690

Duiker 2690

Duiker 2693

Duiker 2693 PV 1

Duiker 2693 PV 2

Duiker 2693 PV 2

Duiker 2923

Duiker 2048

Duiker 2047


Duiker 2005 PV 1


Duiker 2005 PV 2


Duiker 2005 PV 3

Duiker 2003 PV 1

Duiker 2003 PV 2

Duiker 2003 PV 3


Duiker 2081 PV 1


Duiker 2081 PV 2


Duiker 2081 PV 3


Duiker 2010 PV 1


Duiker 2010 PV 2


Duiker 2010 PV 3


Duiker 607 PV 1


Duiker 607 PV 2


Duiker 607 PV 3

Duiker 2909


Duiker 2909 PV 1


Duiker 2909 PV 2


Duiker 2909 PV 3

Duiker 2001

Duiker 2002

Duiker 2007

Duiker 2007 PV 1

Duiker 2007 PV 2

Duiker 2008

Duiker 2676


Duiker 2242


Duiker 2242 PV 1


Duiker 2242 PV 1


Duiker 2242 PV 2

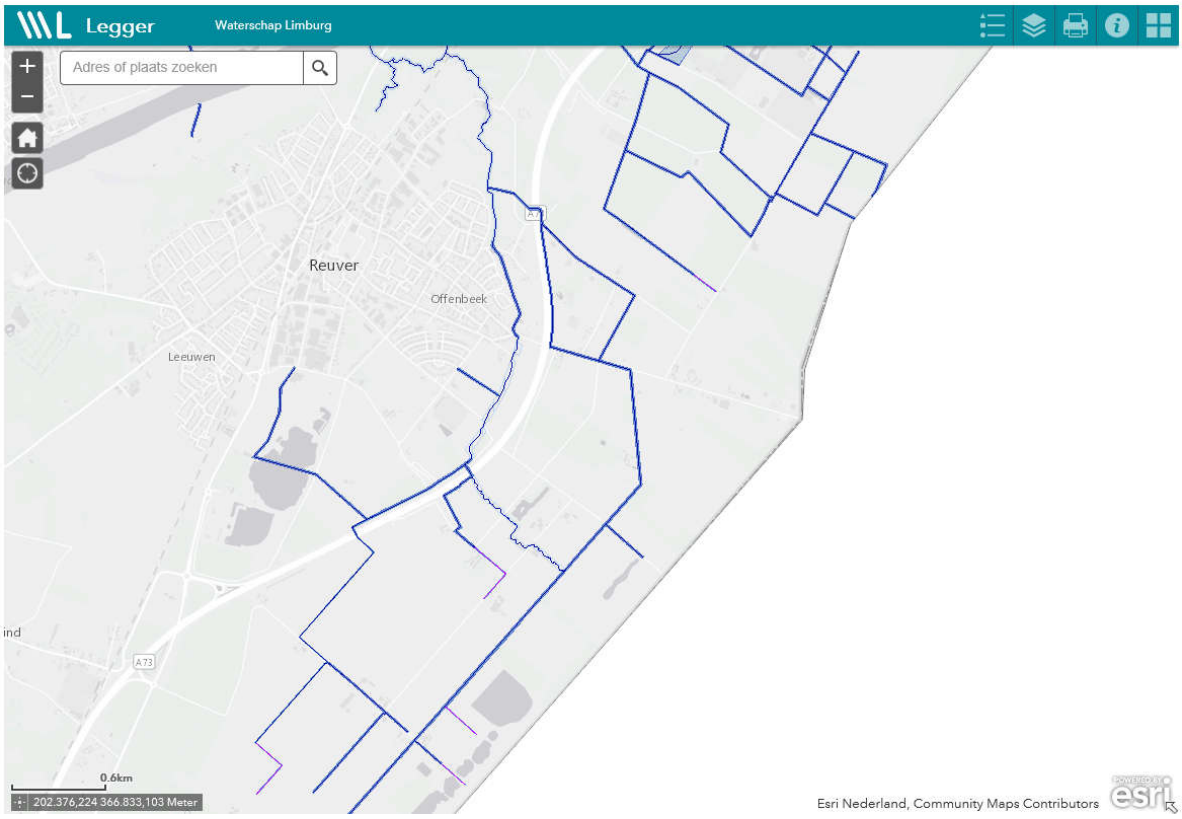

Duiker 2242 PV 2


Duiker 2242 PV 3


Duiker 2242 PV 3

BIJLAGE 8

LEGGER WATERSCHAP LIMBURG


Legger
Waterschap Limburg
Adres of plaats zoeken
Reuver
Offenbeek
Leeuwen
A73
0.6km
202.376,224 366.833,103 Meter
Esri Nederland, Community Maps Contributors