ZGING∃R.	CIRCA	/ A5 4	4860	/	St Avold	-		
BURGEAP		FICHE D'ECHANTILL	ANNO	GE DES	SOLS	- CESICE212052		
Sondage n° : S2 ntervenant BURGEA Date : 27/07/2021 Condition météorolog	Heure :	Sous-traitant : EM Forag Technique de forage : G Profondeur atteinte (m/so Diamètre de forage (mm)	éoprob I) : 2m		Confection d'échantillon Sous échantillons :	: BGP 105/10 moyen -		
Cocalisation du sondage C: 49°09.327' Y: 006°42.061' Projection: 0 Z (sol) - m NGF:		Analyses de terrain : PIE Réf. Matériel : 01172-00	0			Préparation de l'échantillon : homogénéisation		
		*mesure PID de l'air ambiant au poste d'échantillonnage : -			Méthode d'échantillonnage : truelle / pelle à main /autre			
	NS (m/sol) : 0	Doublons : non			Conditionnement des éc pot so	hantillons : I brut (PE / verre)		
	tillane tamaine : nan	Laborataira : DIOA						

Laboratoire : PICA

non

Sondage pour échantillons témoins :

Sondage po	our échantill	ons témoins : non	Laboratoire	: PICA			chantillone:	
Remarques	<u>3</u> :		Date d'envo	oi au laboratoire	Conservation des échantillor gla		glacière	
	T	COUPE GEOL	OGIOLIE		ORSE	RVATIONS ET M		
Prof. (m)	Lithologie	Description	OOIQUE	Venues d'eau / humidité des sols	Observations		Analyses de terrain	N°
0,00 0,10 0,20	* * * * * * * * * * * * * * * * * * *	terre végétale et machef	er					
0,30								
0,40								
0,50							0 ppm	S2(0-1m)
0,60								
0,70					Sable non induré, pr	ésence de racines		
0,80								
1,00								
1,10		Sable très peu argileux orangé/jaunâtre moyen						
1,20								
1,30								
1,40								
1,50					Fine couche de grès	(cailloux plate)	0 ppm	S2(1-2m
1,60					Humide vers 2m	(callioux plats)		
1,70								
1,80 1,90								
1,90								

ZGING∃ R	CIRCA	1	A54860	1	St Avold	-	
BURGEAP	F	FICHE D'ECHAN	TILLONNA	GE DES SOL	S	- CESICE212052	
Sondage n° : S9 Intervenant BURGE/ Date : 26/07/2021 Condition météorolog	Heure: 10h10	Sous-traitant : EM Technique de forage Profondeur atteinte Diamètre de forage	e : Géoprob (m/sol) : 2m		Confection d'échantillon : mo	BGP 105/10 Dyen -	
Localisation du sondage X: 49°09.325' Y: 006°42.165' Projection: 0		Analyses de terrain : PID Réf. Matériel : 01172-000			Préparation de l'échantillon : homogénéisation		
Z (sol) - m NGF :	d'un piézomètre proche	*mesure PID de l'air au poste d'échantill			Méthode d'échantillonnage : truelle / pelle	è à main /autre	
	NS (m/sol) : 0	Doublons : non			Conditionnement des échant pot sol bru	illons : t (PE / verre)	
Solidage pour echar	ntillons temoins : non	Laboratoire : PICA	A		Canagratian des échantilles	20.1	

Sondage po	our echantill	ons témoins : non	<u>Laboratoire</u>	: PICA		Conservation des é	chantillons ·	/
Remarques	:			i au laboratoire	e: 29/07/2021	o one of various according	glacière	
Prof.		COUPE GEOL	OGIQUE		OBSE	ERVATIONS ET M	ESURES	
(m)	Lithologie	Description		Venues d'eau / humidité des sols	Observations Corps étrangers		Analyses de terrain	N°
0,00		Enrobé			Terre végétale			
0,20							_	
0,40							0.000	S9(0-1m)
0,60						0 ppm S		39(0-1111)
0,70					Sable de couleur oc induré Quelques graviers e	re/beige/marron non		
0,80								
1,00								
1,10		Sable légèrement argileu	ıx					
1,20								
1,40								
1,50					Sable de couleur oc	re/heige/marron	0 ppm	S9(1-2m)
1,60					orangé, moyen Racines	. S. Joigo manon		
1,70								
1,90								

ZGING∃R	CIRCA	/ A	\54860	1	St Avold	-		
BURGEAP	F	ICHE D'ECHANTIL	LONNA	GE DES SOL	S	- CESICE212052		
Sondage n° : S1 ntervenant BURGEA Date : 28/07/2021 Condition météorolog	Heure: 9h45	Sous-traitant : EM For Technique de forage : Profondeur atteinte (m/s Diamètre de forage (mr	Tarière /sol) : 2m	:	Confection d'échantillon : mo	BGP 105/10 Dyen -		
Localisation du sonda C: 49°09.287' Y		Analyses de terrain : PID Réf. Matériel : 01172-000			Préparation de l'échantillon : homogénéisation			
Projection: 0 Z (sol) - m NGF : Niveau de la nappe d'un piézomètre proche		*mesure PID de l'air ambiant au poste d'échantillonnage : -			Méthode d'échantillonnage : truelle / pelle à main /autre			
Pz n°: 0	NS (m/sol) : 0	Doublons : non			Conditionnement des échant pot sol brui	illons : t (PE / verre)		
Sondage pour échan	tillons témoins : non	<u>Laboratoire</u> : PICA			Conservation des échantillon	ns ·		

Sondage po	our échantill	ons témoins : non	<u>Laboratoire</u>	: PICA			ot soi biut (i E / i	70110)	
Remarques	<u>.</u> :				Conservation des échan bire : 29/07/2021			nantillons : glacière	
	1								
Prof.		COUPE GEOLO	OGIQUE	l., ",		RVATIONS ET M vations	Analyses	1	
(m)	Lithologie	Description		Venues d'eau / humidité des sols	Corps é	etrangers	de terrain	N°	
0,00 0,10 - 0,20 - 0,30 - 0,40 - 0,50 - 0,60 - 0,70 - 0,80 -		Sable marron moyen					0 ppm	S1(0-1m)	
1,00 — 1,10 — 1,20 — 1,30 — 1,40 — 1,50 — 1,60 — 1,70 — 1,80 —		Sable ocre moyen pas à argileux non induré	peu		Le sable devient ocr	e avec la profondeur	0 ppm	S1(1-2m)	



Annexe 2. Bordereaux d'analyse des sols

Cette annexe contient 60 pages.

 Réf : CESICE212052 / RESICE13224-01
 CYD / MBI / SPE
 22/09/2021
 Page 28/25



Circa Sustainable Chemicals SAS

Mr. Cyrille Dehlinger Place Simone Veil 3 54000 Nancy

Frankreich

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Project ReSolute

our sign:

21-C056-0003

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+49(0)30/2556600-1

e-Mail:

see project manager below test result

Berlin, 02.09.2021

Test Report 21-C056-0003

name and address of client:

see address

product type:

soil

delivery condition:

date of receipt:

09.08.2021

testing (start/end):

09.08.2021/02.09.2021

sample taken by:

taken by client

sample identification:

S1

Analysis of Soil samples, Ambient Air and Gases from Soil samples

Test Report: furfural

test method: LA-GC-011.03_6/18/2020 GC/MS after extraction and derivatization

test result

Test Report 21-C056-0003

sample identification: S1

S1

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL
furfural	98-01-1	<1	mg/kg	1

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

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Viemens Kirsc

e-mail Klemens.Kirsch@pica-berlin.de

The test results relate only to the items tested. The test report shall not be reproduced except in full without the written approval of the testing laboratory.

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BIC: BEVODEBB IBAN: DE71 1009 0000 7153 9090 02 CEO

Ph. D. Andreas Mattulat place of jurisdiction

Berlin Charlottenburg HRB 89890

page 1 of 4 21-C056-0003



test method: GC/MS after extraction_

test result

Test Report 21-C056-0003

sample identification: S1

Analysis of Soil samples, Ambient Air and Gases from

•					
parameter	CAS-No.	amount	results in	RL	
acetic acid	64-19-7	<50	mg/kg	50	

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

phone +49 30 255 66 00-312

e-mail Anja.Zimmermann@pica-berlin.de



test method: Outsourcing_ photometric measurement remarks: Dry matter 89,6%

test result

Test Report 21-C056-0003

sample identification: S1

Analysis of Soil samples, Ambient Air and Gases from

parameter	amount resu	ılts in R	L
Phosphat	430 mg/	kg ds 0	.01

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

*testing performed by an accredited partner lab

M.Sc. Pharmaceutical and Chemical Engineering

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e-mail Stefan.Kutschau@pica-berlin.de



test method: GC/MS after extraction_

test result

Test Report 21-C056-0003

sample	identification:	S1
Janipio	idoi idiiiodiioi ii	

Analysis of Soil samples, Ambient Air and Gases from

cample racinimodileri.		•			
parameter	CAS-No.	amount	results in	RL	
sulfolane	126-33-0	<1	mg/kg	1	
Levoglucosenon	37112-31-5	<20	mg/kg	20	
Cyrene	53716-82-8	<1	mg/kg	1	

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

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your sign:

Project ReSolute

our sign:

21-C056-0004

phone: telefax: see project manager below test result

+49(0)30/2556600-1

e-Mail:

see project manager below test result

Berlin, 02.09.2021

Test Report 21-C056-0004

name and address of client:

see address

product type:

soil

delivery condition:

date of receipt:

09.08.2021

testing (start/end):

09.08.2021/02.09.2021

sample taken by:

taken by client

sample identification:

Analysis of Soil samples, Ambient Air and Gases from Soil samples

Test Report: furfural

test method: LA-GC-011.03_6/18/2020 GC/MS after extraction and derivatization

test result

Test Report 21-C056-0004

sample identification: S2

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL	
furfural	98-01-1	<1	mg/kg	1	

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

project manage M. Sc. Environmental Science phone +49 30 255 66 00-63

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Ph. D. Andreas Mattulat

BIC: BEVODEBB

place of jurisdiction

IBAN: DE71 1009 0000 7153 9090 02

Berlin Charlottenburg HRB 89890

page 1 of 4



test method: GC/MS after extraction_

test result

Test Report 21-C056-0004

sample identification: S2

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL	
acetic acid	64-19-7	<50	mg/kg	50	

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

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Berlin Charlottenburg HRB 89890



test method: Outsourcing_photometric measurement remarks: Dry matter 86,8%

test result

Test Report 21-C056-0004

sample identification: S2

Analysis of Soil samples, Ambient Air and Gases from

parameter	amount results in RL
Phosphat	450 mg/kg ds 0.01

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

*testing performed by an accredited partner lab

M.Sc. Pharmacoutical and Chemical Engineering

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e-mail Stefan.Kutschau@pica-berlin.de



test method: GC/MS after extraction_

test result

Test Report 21-C056-0004

sample identification: S2

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL	the house
sulfolane	126-33-0	<1	mg/kg	1	
Levoglucosenon	37112-31-5	<20	mg/kg	20	
Cyrene	53716-82-8	<1	mg/kg	1	1 1 1 100 11 2

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

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Circa Sustainable Chemicals SAS

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21-C056-0005

phone: telefax: see project manager below test result

+49(0)30/2556600-1

e-Mail:

see project manager below test result

Berlin, 02.09.2021

Test Report 21-C056-0005

name and address of client:

see address

product type:

soil

delivery condition:

date of receipt:

09.08.2021

testing (start/end):

09.08.2021/02.09.2021

sample taken by:

taken by client

sample identification:

53

Analysis of Soil samples, Ambient Air and Gases from Soil samples

Test Report: furfural

test method: LA-GC-011.03_6/18/2020 GC/MS after extraction and derivatization

test result

Test Report 21-C056-0005

sample identification: S3

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL	
furfural	98-01-1	<1	ma/ka	1	

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

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lemens Kirsc

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page 1 of 4



test method: GC/MS after extraction_

test result

Test Report 21-C056-0005

sample identification: S3

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL	
acetic acid	64-19-7	<50	mg/kg	50	

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

phone +49 30 255 66 00-312

e-mail Anja.Zimmermann@pica-berlin.de



test method: Outsourcing_photometric measurement remarks: Dry matter 87,5%

test result

Test Report 21-C056-0005

sample identification: S3

Analysis of Soil samples, Ambient Air and Gases from

parameter	amount r	results in	RL
Phosphat	520 r	mg/kg ds	0.01

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

*testing performed by an accredited partner lab

M.Sc. Pharmaceutical and Chemical Engineering

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e-mail Stefan.Kutschau@pica-berlin.de



test method: GC/MS after extraction_

test result

Test Report 21-C056-0005

sample identification: S3

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL	
sulfolane	126-33-0	<1	mg/kg	1	
Levoglucosenon	37112-31-5	<20	mg/kg	20	
Cyrene	53716-82-8	<1	mg/kg	1	

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

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phone: telefax: e-Mail: see project manager below test result

+49(0)30/2556600-1

see project manager below test result

Berlin, 02.09.2021

Test Report 21-C056-0006

name and address of client:

see address

product type:

soil

delivery condition:

date of receipt:

09.08.2021

testing (start/end):

09.08.2021/02.09.2021

sample taken by:

taken by client

sample identification:

S4

Analysis of Soil samples, Ambient Air and Gases from Soil samples

Test Report: furfural

test method: LA-GC-011.03_6/18/2020 GC/MS after extraction and derivatization

test result

Test Report 21-C056-0006

sample identification: S4

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL
furfural	98-01-1	<1	mg/kg	1

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

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Klemens Kirsc

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page 1 of 4 21-C056-0006



test method: GC/MS after extraction_

test result

Test Report 21-C056-0006

sample identification: S4

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL	
acetic acid	64-19-7	<50	mg/kg	50	1 / 2

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

Chemlelaborant

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page 2 of 4



test method: Outsourcing_photometric measurement remarks: Dry matter 89,1%

test result

Test Report 21-C056-0006

sample identification: S4

Analysis of Soil samples, Ambient Air and Gases from

parameter	amount	results in	RL	100,000,000	
Phosphat	590	mg/kg ds	0.01		

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

*testing performed by an accredited partner lab

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The test results relate only to the items tested. The test report shall not be reproduced except in full without the written approval of the testing laboratory.

Berlin Charlottenburg HRB 89890



test method: GC/MS after extraction_

test result

Test Report 21-C056-0006

sample identification: S4

Analysis of Soil samples, Ambient Air and Gases from

parameter	CAS-No.	amount	results in	RL	Page 10 Process
sulfolane	126-33-0	<1	mg/kg	1	
Levoglucosenon	37112-31-5	<20	mg/kg	20	
Cyrene	53716-82-8	<1	mg/kg	1	

RL: reporting limit

The amount in [] is a semiquantitative valuation under reporting limit.

phone +49 30 255 66 00-312

e-mail Anja.Zimmermann@pica-berlin.de