



Matís ohf
Rannsóknarstofa
Skúlagata 4
101 Reykjavík
Sími: (354)-422 5000
Fax: (354)-422 5001



RANNSÓKNANÍÐURSTÖÐUR
Útgefnar af faggildri rannsóknastofu
Report issued by Accredited laboratory

Síða 1 af 1

Heilbrigðiseftirlit Vesturland
5503992299
Borgarbraut 13
Borgarnes

Sýni Nr. R10000780004
Vatn

Sýnatökudagsetning: 18/01/2010
Móttekið: 18/01/2010
Rannsakað: 18/01/2010

Tegund sýnis : Neysluvatn / Borholuvatn
Sýnatökustaður : Borgarbyggð
Auðkenni : 1650//OR-Geislahús Akranes
Tílefni sýnatöku : Reglubundið eftirlit
Aðrar upplýsingar : Hitastig við móttöku: 6°C
Ástand vatnsbóls: Góður
Frágangur vatnsbóls: Lokað

Skýringar : Hitastig við sýnatöku: 4,7°C

Örverurannsóknir

Gerlafjöldi við 22°C í 1 ml (ÖVA5)..... 0
Kóliógerlar í 100 ml síun (ÖVA2)..... 0

Eðlis- og Efnarannsóknir

**Sýrustig (pH) (EVA1)..... 7,25
**Ammoníak, NH₄-N (mg/l) (EVA6)..... <0,05 mg/L
**Grugg..... 0,24 NTU
**Leiðni (EVA3)..... 97 µS/cm

Mat sýnis

Stenst gæðakröfur skv. reglugerð 536/2001

Mótt / Skrá
22/110
EG

F.h. Rannsóknastofu

Reykjavík,

21. janúar, 2010

Sviðsstjóri

** Ekki faggildar niðurstöður

Niðurstöður má eingöngu nota í heild sinni, nema rannsóknastofa gefi skriflegt leyfi til annars.

Fyrir aftan rannsóknaliði eru auðkenni rannsókna aðferða og má fá upplýsingar um heimildir þeirra á heimasíðu Matís ohf (www.matis.is).

Niðurstöður gilda aðeins um það/pau sýni sem var/voru rannsakað/rannsökuð.



Matis ohf
Rannsóknarstofa
Vinlandsleið 12
113 Reykjavík
Sími: (354)-422 5000
Fax: (354)-422 5001



RANNSÓKNANIÐURSTÖÐUR
Útgefnar af faggildri rannsóknastofu
Report issued by Accredited laboratory

Síða 1 af 1

Heilbrigðiseftirlit Vesturland
5503992299
Borgarbraut 13
Borgarnes

Sýni Nr. R10009150005
Vatn

Sýnatökudagsetning: 04/05/2010
Móttekið: 04/05/2010
Rannsakað: 04/05/2010

Tegund sýnis : Neysluvatn / Geislað (u.v. Ljós) vatn
Sýnatökustaður : Akranes
Auðkenni : 1763/V-V/Jaðarbakkalaug
Tílefni sýnatöku : Reglubundið eftirlit
Aðrar upplýsingar : Hitastig við móttöku: 10°C
Ástand vatnsbóls: Ekki vitað
Frágangur vatnsbóls: Lokað

Skýringar : Hitastig við sýnatöku: 7,7°C

Örverurannsóknir

Gerlafjöldi við 22°C í 1 ml (ÖVA5)..... 0
Kóliógerlar í 100 ml síun (ÖVA2)..... 0

Eðlis- og Efnarannsóknir

**Sýrustig (pH) (EVA1)..... 7,55
**Ammoníak, NH₄-N (mg/l) (EVA6)..... <0,05 mg/L
**Grugg..... 0,40 NTU
**Leiðni (EVA3)..... 99 µS/cm

Mat sýnis

Stenst gæðakröfur skv. reglugerð 536/2001

mótt/afskráð
11. maí 2010
80

F.h. Rannsóknastofu

Reykjavík,

7. maí, 2010

Freddie George

Sviðsstjóri

** Ekki faggildar niðurstöður

Niðurstöður má eingöngu nota í heild sinni, nema rannsóknastofa gefi skriflegt leyfi til annars.

Fyrir aftan rannsóknaliði eru auðkenni rannsókna aðferða og má fá upplýsingar um heimildir þeirra á heimasíðu Matis ohf (www.matis.is).

Niðurstöður gilda aðeins um það/þau sýni sem var/voru rannsakað/rannsökuð.



Matís ohf
Rannsóknarstofa
Vínlandsleið 12
113 Reykjavík
Sími: (354)-422 5000
Fax: (354)-422 5001



RANNSÓKNANIÐURSTÖÐUR
Útgefnar af faggildri rannsóknastofu
Report issued by Accredited Laboratory

Síða 1 af 1

Heilbrigðiseftirlit Vesturland
5503992299
Borgarbraut 13
Borgarnes

Sýni Nr. R10012720003
Vatn

Sýnatökudagsetning: 15/06/2010
Móttekið: 15/06/2010
Rannsakað: 15/06/2010

Tegund sýnis : Neysluvatn / Geislað (u.v. Ljós) vatn
Sýnatökustaður : Akranes
Auðkenni : 1766/3Geislahús Akranesi
Tílefni sýnatöku : Reglubundið eftirlit
Aðrar upplýsingar : Hitastig við móttöku: 7°C
Ástand vatnsbóls: Ekki tilgreint
Frágangur vatnsbóls: Opið

Skýringar : Hitastig við sýnatöku: 7,3°C

Örverurannsóknir

Enterokokkar 100 ml síun (ÖVA12)..... 0
Gerlafjöldi við 22°C í 1 ml (ÖVA5)..... 0
Kólígerlar í 100 ml síun (ÖVA2)..... 0

Eðlis- og Efnarannsóknir

**Sýrustig (pH) (EVA1)..... 7,65
**Grugg..... 0,66 NTU
**Leiðni (EVA3)..... 99 µS/cm

Mat sýnis

Stenst gæðakröfur skv. reglugerð 536/2001

15. júní 2010

F.h. Rannsóknastofu

Reykjavík,

18. júní, 2010

Sviðsstjóri

** Ekki faggildar niðurstöður

Niðurstöður má eingöngu nota í heild sinni, nema rannsóknastofa gefi skriflegt leyfi til annars.

Fyrir aftan rannsóknaliði eru auðkenni rannsókna aðferða og má fá upplýsingar um heimilidir þeirra á heimasíðu Matís ohf (www.matis.is).
Niðurstöður gilda aðeins um það/pau sýni sem var/voru rannsakað/rannsókuð.



Matís ohf
Rannsóknarstofa
Vínlandsleið 12
113 Reykjavík
Sími: (354)-422 5000
Fax: (354)-422 5001



RANNSÓKNANIÐURSTÖÐUR
Útgefnar af faggildri rannsóknastofu
Report issued by Accredited laboratory

Síða 1 af 1

Heilbrigðiseftirlit Vesturland
5503992299
Borgarbraut 13
Borgarnes

Sýni Nr. R10018740002
Vatn

Sýnatökudagsetning: 25/08/2010
Móttekið: 25/08/2010
Rannsakað: 25/08/2010

Tegund sýnis : Neysluvatn / Geislað (u.v. Ljós) vatn
Sýnatökustaður : Sjá auðkenni
Auðkenni : 1285/II/Laugafiskur-kaffistofa
Tílefni sýnatöku : Reglubundið eftirlit
Aðrar upplýsingar : Hitastig við móttöku: 8°C
Ástand vatnsbóls: Ekki tilgreint
Frágangur vatnsbóls: Opið

Skýringar : Hitastig við sýnatöku: 9,8°C

Örverurannsóknir

Gerlafjöldi við 22°C í 1 ml (ÖVA5)..... 4
Kóliagerlar í 100 ml síun (ÖVA2)..... 0

Eðlis- og Efnarannsóknir

**Sýrustig (pH) (EVA1)..... 7,45
**Ammoníak, NH₄-N (mg/l) (EVA6)..... <0,05 mg/L
**Grugg..... 0,44 NTU
**Leiðni (EVA3)..... 100 µS/cm

Mat sýnis

Stenst gæðakröfur skv. reglugerð 536/2001

nnott/shia
24. sep. 2010
SD

F.h. Rannsóknastofu

Reykjavík,

30. ágúst, 2010

Franklin Georgsson
Sviðsstjóri

** Ekki faggildar niðurstöður

Niðurstöður má eingöngu nota í heild sinni, nema rannsóknastofa gefi skriflegt leyfi til annars.

Fyrir aftan rannsóknaliði eru auðkenni rannsókna aðferða og má fá upplýsingar um heimilidir þeirra á heimasíðu Matis ohf (www.matis.is).

Niðurstöður gilda aðeins um það/þau sýni sem var/voru rannsakað/rannsökuð.



Matís ohf
Rannsóknarstofa
Vínlandsleið 12
113 Reykjavík
Sími: (354)-422 5000
Fax:(354)-422 5001



RANNSÓKNANIÐURSTÖÐUR
Útgefnar af faggildri rannsóknastofu
Report issued by Accredited laboratory

Síða 1 af 1

Heilbrigðiseftirlit Vesturland
5503992299
Borgarbraut 13
Borgarnes

Sýni Nr. R10023060005
Vatn

Sýnatökudagsetning: 06/10/2010
Móttekið: 06/10/2010
Rannsakað: 06/10/2010

Tegund sýnis : Neysluvatn / Geislað (u.v. Ljós) vatn
Sýnatökustaður : Geislahús OR á Akranesi, Akranes
Auðkenni : 1771/V/Geislahús Akranesi
Tilefni sýnatöku : Reglubundið eftirlit
Aðrar upplýsingar : Hitastig við móttöku: 5°C
Ástand vatnsbóls: Góður
Frágangur vatnsbóls: Lokað

Skýringar : Hitastig við sýnatöku: 5,8°C

Örverurannsóknir

Gerlafjöldi við 22°C í 1 ml (ÖVA5)..... 0
Kólígerlar í 100 ml síun (ÖVA2)..... 0

Eðlis- og Efnarannsóknir

**Sýrustig (pH) (EVA1)..... 7,45
**Ammoníak, NH₄-N (mg/l) (EVA6)..... <0,05 mg/L
**Grugg..... <0,10 NTU
**Leiðni (EVA3)..... 100 µS/cm

Mat sýnis

Stenst gæðakröfur skv. reglugerð 536/2001

matís/akr
2-4. OKT. 2010
80

F.h. Rannsóknastofu

Reykjavík,

11. október, 2010

Frentlin Georgsson
.....
Sviðsstjóri

** Ekki faggildar niðurstöður

Niðurstöður má eingöngu nota í heild sinni, nema rannsóknastofa gefi skriflegt leyfi til annars.

Fyrir aftan rannsóknaliði eru auðkenni rannsókna aðferða og má fá upplýsingar um heimilidir þeirra á heimasíðu Matís ohf (www.matis.is).

Niðurstöður gilda aðeins um það/pau sýni sem var/voru rannsakað/rannsökuð.



Matís ohf
Rannsóknarstofa
Vínlandsleið 12
113 Reykjavík
Sími: (354)-422 5000
Fax: (354)-422 5001



RANNSÓKNANÍÐURSTÖÐUR
Útgefnar af faggildri rannsóknastofu
Report issued by Accredited laboratory

Síða 1 af 1

Heilbrigðiseftirlit Vesturland
5503992299
Borgarbraut 13
Borgarnes

Sýni Nr. R10028220003
Vatn

Sýnatökudagsetning: 09/12/2010
Móttekið: 09/12/2010
Rannsakað: 09/12/2010

Tegund sýnis : Neysluvatn / Ótilgreind gerð/uppruni
Sýnatökustaður : Geislahús OR á Akranesi, Akranes
Auðkenni : 1715/Geislahús Akranesi
Tilefni sýnatöku : Reglubundið eftirlit
Aðrar upplýsingar : Hitastig við móttöku: 5°C
Ástand vatnsbóls: Ekki tilgreint
Frágangur vatnsbóls: Ekki tilgreint

Skýringar : Hitastig við sýnatöku: 1,8°C

Örverurannsóknir

Gerlafjöldi við 22°C í 1 ml (ÖVA5)..... 0
Kólígerlar í 100 ml síun (ÖVA2)..... 0

Eðlis- og Efnarannsóknir

**Sýrustig (pH) (EVA1)..... 7,45
**Ammoníak, NH₄-N (mg/l) (EVA6)..... <0,05 mg/L
**Grugg..... 0,43 NTU
**Leiðni (EVA3)..... 100 µS/cm

Mat sýnis

Stenst gæðakröfur skv. reglugerð 536/2001

*Matt/sýnis
20/12 '10
EG.*

F.h. Rannsóknastofu

Reykjavík,

13. desember, 2010

Frentlin Georgsson

Sviðsstjóri

** Ekki faggildar niðurstöður

Niðurstöður má eingöngu nota í heild sinni, nema rannsóknastofa gefi skriflegt leyfi til annars.

Fyrir aftan rannsóknaliði eru auðkenni rannsókna aðferða og má fá upplýsingar um heimildir þeirra á heimasíðu Matís ohf (www.matis.is).

Niðurstöður gilda aðeins um það/pau sýni sem var/voru rannsakað/rannsökuð.



Heilbrigðiseftirlit Vesturlands
Innrimel 3
301 Akranes

25.6.2010

Hérna eru niðurstöður efnagreininga á neysluvatnssýni skv. heildarúttekt reglugerðar nr. 536/2001
Sýnið var sent til ALS Scandinavia AB í Svíþjóð til mælinga.
Sýnin voru tekin 14.06.2010 á eftirfarndi stöðum og merkt:
R10012720001/Dæluhús Grundará, Grundafirði
R10012720002/Dæluhús Hamraenda, Stykkishólmi
R10012720003/Geislahús Akranesi

Niðurstöður:
(sjá einnig frá Svíþjóð, RAPPORT T1007838)

		10-1272-01	10-1272-02	10-1272-03
Ca	mg/l	2,09	2,53	5,75
Fe	mg/l	0,0047	0,0017	0,0026
K	mg/l	0,516	0,686	0,65
Mg	mg/l	1,09	1,69	1,88
Na	mg/l	4,8	5,42	9,49
Si	mg/l	4,06	6,51	6,94
Al	µg/l	1,03	3,26	6,61
As	µg/l	<0,05	<0,07	<0,1
Ba	µg/l	0,657	0,483	0,0509
Cd	µg/l	<0,002	0,0068	0,0031
Co	µg/l	0,025	0,0143	0,0228
Cr	µg/l	0,0291	0,228	0,58
Cu	µg/l	0,219	0,569	0,429
Hg	µg/l	<0,002	<0,002	<0,002
Mn	µg/l	0,37	<0,03	0,184
Mo	µg/l	0,169	0,367	0,054
Ni	µg/l	<0,05	<0,05	0,378
P	µg/l	7,08	46,1	16,9
Pb	µg/l	0,0466	0,0736	0,0462
Sr	µg/l	7,96	8,99	8,02
Zn	µg/l	0,617	11,6	1,25
Sb	µg/l	0,0119	0,014	<0,01
B	µg/l	<10	<10	<10
Se	µg/l	0,0588	0,0841	0,0597
ammonium	mg/l	<0,050	<0,050	<0,050
klorid	mg/l	6,68	7,52	13,4
sulfat	mg/l	1,9	1,67	2,67
TOC	mg/l	<0,50	<0,50	<0,50
fluorid	mg/l	<0,200	<0,200	<0,200
nitrat	mg/l	0,06	0,25	0,34
nitrit	mg/l	<0,01	<0,01	<0,01
colour	mgPt/l	<5	5	5
CN total	mg/l	<0,005	<0,005	<0,005

min/stað
15. júlí 2010
80



bensen	µg/l	<0,20	<0,20	<0,20
toluen	µg/l	<1,0	<1,0	<1,0
etylbenzen	µg/l	0,44	0,1	<0,10
summa xylener	µg/l	1,33	0,29	<0,150
diklormetan	µg/l	<2,0	<2,0	<2,0
1,1-dikloreten	µg/l	<0,10	<0,10	<0,10
1,2-dikloreten	µg/l	<1,0	<1,0	<1,0
trans-1,2-dikloreten	µg/l	<0,10	<0,10	<0,10
cis-1,2-dikloreten	µg/l	<0,10	<0,10	<0,10
1,2-diklorpropan	µg/l	<1,0	<1,0	<1,0
triklormetan	µg/l	<0,30	<0,30	<0,30
tetraklormetan	µg/l	<0,10	<0,10	<0,10
1,1,1-trikloreten	µg/l	<0,10	<0,10	<0,10
1,1,2-trikloreten	µg/l	<0,20	<0,20	<0,20
trikloreten	µg/l	<0,10	<0,10	<0,10
tetrakloreten	µg/l	<0,20	<0,20	<0,20
vinylklorid	µg/l	<0,50	<0,50	<0,50
naftalen	µg/l	<0,20	<0,20	<0,20
acenaftylen	µg/l	<0,10	<0,10	<0,10
acenaften	µg/l	<0,0070	<0,0070	<0,0070
fluoren	µg/l	<0,010	<0,010	<0,010
fenantren	µg/l	<0,040	<0,040	<0,040
antracen	µg/l	<0,0050	<0,0050	<0,0050
fluoranten	µg/l	<0,0050	<0,0050	<0,0050
pyren	µg/l	<0,0050	<0,0050	<0,0050
^bens(a)antracen	µg/l	<0,0030	<0,0030	<0,0030
^krysen	µg/l	<0,0070	<0,0070	<0,0070
^bens(b)fluoranten	µg/l	<0,0040	<0,0040	<0,0040
^bens(k)fluoranten	µg/l	<0,0020	<0,0020	<0,0020
^bens(a)pyren	µg/l	<0,0020	<0,0020	<0,0020
^dibens(ah)antracen	µg/l	<0,0020	<0,0020	<0,0020
benso(ghi)perylene	µg/l	<0,0030	<0,0030	<0,0030
^indeno(123cd)pyren	µg/l	<0,0030	<0,0030	<0,0030
PAH, summa 16	µg/l	<0,199	<0,199	<0,199
^PAH cancerogena	µg/l	<0,0115	<0,0115	<0,0115
PAH, summa övriga	µg/l	<0,188	<0,188	<0,188
tribrommetan	µg/l	<0,20	<0,20	<0,20
dibromklormetan	µg/l	<0,10	<0,10	<0,10
bromdiklormetan	µg/l	<0,10	<0,10	<0,10
summa trihalometaner	µg/l	<0,350	<0,350	<0,350

Hvað varðar áræðanleika, mælióvissu, mæliaðferðir og faggildingarstöðu einstakra mælinga í þessari skýrslu er vísað í meðfylgjandi frumgögn frá þeim rannsóknastofum sem mælingarnar gerðu.

fh. rannsóknastofu Matis ohf

Hrólfur Sigurðsson

Hrólfur Sigurðsson
Sérfræðingur

Franklín Georgsson

Franklín Georgsson
Sviðstjóri

Report

Page 3 (6)

T0907658

1AUQKA0VKL4



Your ID	09-06-697/V-II Geislahús Akranesi				
LabID	O10267316				
Analysis	Results	Uncertainty (±)	Unit	Method	Perf
Ca	5.41	0.65	mg/l	1	E
Fe	0.0036	0.0008	mg/l	1	H
K	0.518	0.126	mg/l	1	E
Mg	2.14	0.26	mg/l	1	E
Na	10.7	1.4	mg/l	1	E
S	1.09	0.17	mg/l	1	E
Si	7.91	1.15	mg/l	1	E
Al	3.86	0.85	µg/l	1	H
As	<0.05		µg/l	1	H
Ba	0.0453	0.0149	µg/l	1	H
Cd	<0.002		µg/l	1	H
Co	0.0060	0.0111	µg/l	1	H
Cr	2.46	0.44	µg/l	1	H
Cu	0.851	0.149	µg/l	1	H
Hg	<0.002		µg/l	1	F
Mn	0.222	0.064	µg/l	1	H
Mo	<0.05		µg/l	1	H
Ni	0.529	0.110	µg/l	1	H
P	18.1	3.5	µg/l	1	H
Pb	0.154	0.026	µg/l	1	H
Sr	3.09	0.41	µg/l	1	E
Zn	4.59	0.84	µg/l	1	H
Se*	0.108		µg/l	2	G
Sb	<0.01		µg/l	2	H
B	<10		µg/l	2	E
benzene	<0.20		µg/l	3	1
toluene	<1.0		µg/l	3	1
ethylbenzene	<0.10		µg/l	3	1
sum xylenes	<0.15		µg/l	3	1
dichloromethane	<6.0		µg/l	4	1
1,1-dichloroethane	<0.10		µg/l	4	1
1,2-dichloroethane	<1.0		µg/l	4	1
trans-1,2-dichloroethene	<0.10		µg/l	4	1
cis-1,2-dichloroethene	<0.10		µg/l	4	1
1,2-dichloropropane	<1.0		µg/l	4	1
trichloromethane	<0.30		µg/l	4	1
tetrachloromethane	<0.10		µg/l	4	1
1,1,1-trichloroethane	<0.10		µg/l	4	1
1,1,2-trichloroethane	<0.20		µg/l	4	1
trichloroethene	<0.10		µg/l	4	1
tetrachloroethene	<0.20		µg/l	4	1
vinylchloride	<1.0		µg/l	4	1
tribromomethane	<0.20		µg/l	5	1
dibromochloromethane	<0.10		µg/l	5	1
bromdichloromethane	<0.10		µg/l	5	1
sum trihalomethanes	<0.35		µg/l	5	1
naftalen	<0.20		µg/l	6	1
acenaftylen	<0.10		µg/l	6	1
acenaften	<0.0070		µg/l	6	1
fluoren	<0.010		µg/l	6	1
fenantren	<0.040		µg/l	6	1
antracen	<0.0050		µg/l	6	1
fluoranten	<0.0050		µg/l	6	1

Report

Page 4 (6)



RAPPORT
utfärdad av ackrediterat laboratorium
REPORT issued by an Accredited Laboratory

T0907658

1AUQKA0VKL4



Your ID	09-06-697/V-II Geislahús Akranesi				
LabID	O10267316				
Analysis	Results	Uncertainty (±)	Unit	Method	Perf
pyren	<0.0050		µg/l	6	1
^bens(a)antracen	<0.0030		µg/l	6	1
^krysen	<0.0070		µg/l	6	1
^bens(b)fluoranten	<0.0040		µg/l	6	1
^bens(k)fluoranten	<0.0020		µg/l	6	1
^bens(a)pyren	<0.0020		µg/l	6	1
^dibens(ah)antracen	<0.0020		µg/l	6	1
benso(ghi)perylene	<0.0030		µg/l	6	1
^indeno(123cd)pyren	<0.0030		µg/l	6	1
PAH, sum16	<0.199		µg/l	6	1
^PAH cancerogena	<0.0115		µg/l	6	1
PAH, sum other	<0.188		µg/l	6	1
ammonium	<0.050		mg/l	7	1
chloride	13.0	2.61	mg/l	8	1
sulphate	2.42	0.484	mg/l	9	1
TOC	<0.50		mg/l	10	1
fluoride	0.042	0.008	mg/l	11	1
CN total	<0.0050		mg/l	12	1
nitrate	0.39		mg/l	13	2
colour	<5		mgPt/l	14	3
nitrite	<0.01		mg/l	15	3

mon/stad
18. aug. 2009
SO

Report

Page 5 (6)

T0907658

1AUQKA0VKL4



* indicates unaccredited analysis.

	Method
1	Determination of metals without digestion. The measurement was carried out according to EPA-methods 200.7 (ICP-AES) and 200.8 (ICP-SFMS).
2	Additional metals
3	Package OV-5 Determination of monocyclic aromatics (BTEX) by GC-MS
4	Package OV-6 Determination of chlorinated aliphates according to US EPA 624 & 610 The analysis was carried out with head-space GC-MS Not accredited for determination of 1,2-dichloropropane
5	Package OV-10. Determination of trihalomethanes according to a method based on EPA 601 and EPA 624 The measurement is performed with GC-MS
6	Package OV-1 Determination of polycyclic aromatic hydrocarbons, PAH (EPA-16) by HPLC with both UV and fluorescence detection
7	Determination of ammonium using FIA and spectrophotometric detector according to CSN ISO 11732 The method includes filtration of turbid samples.
8	Determination of chloride using ion chromatography according to CSN ISO 10304-1&2. The method includes filtration of turbid samples
9	Determination of sulphate using ion chromatography according to a method based on CSN ISO 10304-1&2. The method includes filtration of turbid samples
10	Determination of TOC according to method based on CSN EN 1484
11	Determination of fluoride using ion chromatography according to CSN ISO 10304-01 The method includes filtration of turbid samples.
12	Determination of total cyanide according to CSN ISO 6703-1
13	Determination of nitrate, NO ₃ , using ion chromatography. Method, SS-EN ISO 10304-1.
14	Determination of colour according to SS-EN ISO 7887:1988-4
15	Determination of NO ₂ -N, nitrite nitrogen according to SS-EN ISO 13395-1 (FIA)

18. aug. 2009



Perf ¹	
E	The determination is performed using ICP-AES The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
F	The determination is performed using AFS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
G	The determination is performed using AFS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
H	The determination is performed using ICP-SFMS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
1	The analysis is provided by ALS Laboratory Group, Na Harfê 9/336, 190 00, Prag 9, Czech Republic, which is a testing laboratory, accredited by the Czech accreditation body CAI (Reg No 1163). CAI is a signatory to a MLA within EA, the same LA to which the Swedish accreditation body SWEDAC is also a signatory The laboratories are located in; Prague, Na Harfê 9/336, 190 00, Praha 9, Česká Lípa, Bendlova 1687/7, 470 03 Česká Lípa, Pardubice, V Raji 906, 530 02 Pardubice. Contact the laboratory for further information
2	The analysis is provided by AK Lab AB, Getängsvägen 29, 504 68 Borås, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1790)
3	The analysis is provided by ALS Scandinavia AB, Box 511, 183 25 Täby, which is accredited by the Swedish accreditation body SWEDAC (Reg No 1087)

The uncertainty is given as extended uncertainty (according to the definition in "Guide to the Expression of Uncertainty in Measurement", ISO, Geneva, Switzerland 1993) calculated with a coverage factor of 2, which gives a confidence level of approximately 95%

The uncertainty from subcontractors is often given as extended uncertainty calculated with a coverage factor of 2
Contact the laboratory for further information

This report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.
The results apply only to the material that has been identified, received, and tested
Regarding the laboratory's liability in relation to assignment, please refer to our latest product catalogue or website <http://www.alsglobal.se>

18. JUN 2009

¹ Performing technical unit (within ALS Scandinavia) or laboratory (subcontractor).

Report

Page 5 (6)



T0907658

1AUQKA0VKL4



* indicates unaccredited analysis.

	Method
1	Determination of metals without digestion. The measurement was carried out according to EPA-methods 200.7 (ICP-AES) and 200.8 (ICP-SFMS).
2	Additional metals
3	Package OV-5 Determination of monocyclic aromatics (BTEX) by GC-MS
4	Package OV-6 Determination of chlorinated aliphates according to US EPA 624 & 610 The analysis was carried out with head-space GC-MS Not accredited for determination of 1,2-dichloropropane
5	Package OV-10. Determination of trihalomethanes according to a method based on EPA 601 and EPA 624 The measurement is performed with GC-MS
6	Package OV-1 Determination of polycyclic aromatic hydrocarbons, PAH (EPA-16) by HPLC with both UV and fluorescence detection
7	Determination of ammonium using FIA and spectrophotometric detector according to CSN ISO 11732 The method includes filtration of turbid samples.
8	Determination of chloride using ion chromatography according to CSN ISO 10304-1&2. The method includes filtration of turbid samples
9	Determination of sulphate using ion chromatography according to a method based on CSN ISO 10304-1&2. The method includes filtration of turbid samples
10	Determination of TOC according to method based on CSN EN 1484
11	Determination of fluoride using ion chromatography according to CSN ISO 10304-01 The method includes filtration of turbid samples.
12	Determination of total cyanide according to CSN ISO 6703-1
13	Determination of nitrate, NO ₃ , using ion chromatography. Method, SS-EN ISO 10304-1.
14	Determination of colour according to SS-EN ISO 7887:1988-4
15	Determination of NO ₂ -N, nitrite nitrogen according to SS-EN ISO 13395-1 (FIA)

18. aug. 2009



Perf ¹	
E	The determination is performed using ICP-AES The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
F	The determination is performed using AFS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
G	The determination is performed using AFS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No. 1087).
H	The determination is performed using ICP-SFMS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No. 1087).
1	The analysis is provided by ALS Laboratory Group, Na Harfê 9/336, 190 00, Prag 9, Czech Republic, which is a testing laboratory, accredited by the Czech accreditation body CAI (Reg.No 1163). CAI is a signatory to a MLA within EA, the same LA to which the Swedish accreditation body SWEDAC is also a signatory The laboratories are located in; Prague, Na Harfê 9/336, 190 00, Praha 9, Česka Lipa, Bendlova 1687/7, 470 03 Česka Lipa, Pardubice, V Raji 906, 530 02 Pardubice. Contact the laboratory for further information
2	The analysis is provided by AK Lab AB, Getängsvägen 29, 504 68 Borås, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No. 1790)
3	The analysis is provided by ALS Scandinavia AB, Box 511, 183 25 Täby, which is accredited by the Swedish accreditation body SWEDAC (Reg No. 1087).

The uncertainty is given as extended uncertainty (according to the definition in "Guide to the Expression of Uncertainty in Measurement", ISO, Geneva, Switzerland 1993) calculated with a coverage factor of 2, which gives a confidence level of approximately 95%

The uncertainty from subcontractors is often given as extended uncertainty calculated with a coverage factor of 2
Contact the laboratory for further information

This report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.
The results apply only to the material that has been identified, received, and tested
Regarding the laboratory's liability in relation to assignment, please refer to our latest product catalogue or website <http://www.alsglobal.se>

18. Aug 2009

¹ Performing technical unit (within ALS Scandinavia) or laboratory (subcontractor).

Report

Page 9 (12)

RAPPORT
utfärdad av ackrediterat laboratorium
REPORT issued by an Accredited Laboratory
1087
ISO/IEC 17025

T0808827

FFS2E6K0ZP



Your ID	08-06-517/III/ Feislahús Akranesi				
LabID	O10211233				
Analysis	Results	Uncertainty (±)	Unit	Method	Perf
Ca	5.20	0.62	mg/l	1	E
Fe	0.0046	0.0010	mg/l	1	H
K	<0.4		mg/l	1	E
Mg	2.04	0.25	mg/l	1	E
Na	10.2	1.4	mg/l	1	E
S	0.921	0.118	mg/l	1	E
Si	6.78	0.98	mg/l	1	E
Al	3.72	0.83	µg/l	1	H
As	0.0675	0.0671	µg/l	1	H
Ba	0.0193	0.0128	µg/l	1	H
Cd	0.0049	0.0034	µg/l	1	H
Co	0.0094	0.0100	µg/l	1	H
Cr	0.401	0.167	µg/l	1	H
Cu	0.435	0.085	µg/l	1	H
Hg	<0.002		µg/l	1	F
Mn	0.274	0.087	µg/l	1	H
Mo	0.0630	0.0378	µg/l	1	H
Ni	<0.05		µg/l	1	H
P	16.1	3.0	µg/l	1	H
Pb	0.0756	0.0146	µg/l	1	H
Sr	3.09	0.41	µg/l	1	E
Zn	5.25	0.96	µg/l	1	H
Sb	0.0210	0.0053	µg/l	1	H
B	<10		µg/l	1	E
Se*	0.0688		µg/l	1	G
benzene	<0.2		µg/l	2	1
toluen	<1		µg/l	2	1
ethylbenzene	<0.1		µg/l	2	1
sum of xylenes	<0.15		µg/l	2	1
dichlormethane	<6		µg/l	3	1
1,1-dichlorethane	<0.1		µg/l	3	1
1,2-dichlorethane	<1		µg/l	3	1
trans-1,2-dichlorethane	<0.1		µg/l	3	1
cis-1,2-dichlorethane	<0.1		µg/l	3	1
1,2-dichloropropane	<1		µg/l	3	1
trichlormethane	<0.3		µg/l	3	1
tetrachlormethane	<0.1		µg/l	3	1
1,1,1-trichlorethane	<0.1		µg/l	3	1
1,1,2-trichlorethane	<0.2		µg/l	3	1
trichlorethane	<0.1		µg/l	3	1
tetrachlorethane	<0.2		µg/l	3	1
tribrommethane	<0.2		µg/l	4	1
dibromchlormethane	<0.1		µg/l	4	1
bromdichlormethane	<0.1		µg/l	4	1
naphthalene	<0.2		µg/l	5	1
acenaphthylene	<0.1		µg/l	5	1
acenaphtene	<0.007		µg/l	5	1
fluorene	<0.01		µg/l	5	1
phenanthrene	<0.04		µg/l	5	1
anthracene	<0.005		µg/l	5	1
fluoranthene	<0.005		µg/l	5	1
pyrene	<0.005		µg/l	5	1

ALS Scandinavia AB
Box 511
183 25 Täby
Sweden

Webb: www.alsglobal.se
E-post: info.ta@alsglobal.com
Tel: + 46 8 52 77 5200
Fax: + 46 8 768 3423

α. S.
Linda Söderberg
Chemist

möt / skad
28. jan 2008
80

Report

Page 10 (12)



RAPPORT
utfärdad av ackrediterat laboratorium
REPORT issued by an Accredited Laboratory

T0808827

FFS2E6K0ZP



Your ID	08-06-517/III/ Feislahús Akranesi				
LabID	O10211233				
Analysis	Results	Uncertainty (±)	Unit	Method	Perf
^benz(a)anthracene	<0.003		µg/l	5	1
^chrysene	<0.007		µg/l	5	1
^benz(b)fluoranthene	<0.004		µg/l	5	1
^benz(k)fluoranthene	<0.002		µg/l	5	1
^benz(a)pyrene	<0.002		µg/l	5	1
^dibenz(ah)anthracene	<0.002		µg/l	5	1
benzo(ghi)perylene	<0.003		µg/l	5	1
^indeno(123cd)pyrene	<0.003		µg/l	5	1
sum of 16 EPA-PAH	<0.199		µg/l	5	1
^PAH carcinogenic	<0.0115		µg/l	5	1
PAH non carcinogenic	<0.188		µg/l	5	1
ammonium	<0.050		mg/l	6	1
chloride	14.8	2.96	mg/l	7	1
sulphate	2.42	0.48	mg/l	8	1
TOC	<0.5		mg/l	9	1
fluoride	0.03	0.005	mg/l	10	1
nitrate	0.35		mg/l	11	2
CN total	<0.005		mg/l	12	1
colour	<5		mgPt/l	13	3
nitrite	<0.01		mg/l	14	3

ALS Scandinavia AB
Box 511
183 25 Täby
Sweden

Webb: www.alsglobal.se
E-post: info.ta@alsglobal.com
Tel: + 46 8 52 77 5200
Fax: + 46 8 768 3423

LS
Linda Söderberg
Chemist

mör/abrad
28. JUL 2008
80

Report

Page 11 (12)



T0808827

FFS2E6K0ZP



* indicates unaccredited analysis.

	Method
1	Determination of metals without digestion. The measurement was carried out according to EPA-methods 200 7 (ICP-AES) and 200 8 (ICP-SFMS)
2	Package OV-5 Determination of monocyclic aromatics (BTEX) by GC-MS
3	Package OV-6 Determination of chlorinated aliphates according to US EPA 624 & 610 The analysis was carried out with head-space GC-MS Not accredited for determination of 1,2-dichloropropane
4	Package OV-10. Determination of trihalomethanes according to a method based on EPA 601 and EPA 624 The measurement is performed with GC-MS
5	Package OV-1 Determination of polycyclic aromatic hydrocarbons, PAH (EPA-16) by HPLC with both UV and fluorescence detection
6	Determination of ammonium using FIA and spectrophotometric detector according to CSN ISO 11732 The method includes filtration of turbid samples
7	Determination of chloride using ion chromatography according to CSN ISO 10304-1&2 The method includes filtration of turbid samples
8	Determination of sulphate using ion chromatography according to a method based on CSN ISO 10304-1&2 The method includes filtration of turbid samples
9	Determination of TOC according to method based on CSN EN 1484
10	Determination of fluoride using ion chromatography according to CSN ISO 10304-01 The method includes filtration of turbid samples
11	Determination of nitrate, NO ₃ , using ion chromatography Method, SS-EN ISO 10304-1
12	Determination of total cyanide according to CSN ISO 6703-1
13	Determination of colour according to SS-EN ISO 7887:1988-4
14	Determination of NO ₂ -N, nitrite nitrogen according to SS-EN ISO 13395-1 (FIA)

	Perf ¹
E	The determination is performed using ICP-AES

¹ Performing technical unit (within ALS Scandinavia) or laboratory (subcontractor).

ALS Scandinavia AB
Box 511
183 25 Täby
Sweden

Webb: www.alsglobal.se
E-post: info.ta@alsglobal.com
Tel: + 46 8 52 77 5200
Fax: + 46 8 768 3423

α. J.
Linda Söderberg
Chemist

möj/skrid
28. juli 2008
so

Report

Page 12 (12)



T0808827

FFS2E6K0ZP



	The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
F	The determination is performed using AFS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
G	The determination is performed using AFS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
H	The determination is performed using ICP-SFMS The analysis is provided by ALS Scandinavia AB, Aurorum 10, 977 75 Luleå, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1087)
1	The analysis is provided by ALS Laboratory Group, Na Harfê 9/336, 190 00, Prag 9, Czech Republic, which is a testing laboratory, accredited by the Czech accreditation body CAI (Reg.No 1163) CAI is a signatory to a MLA within EA, the same LA to which the Swedish accreditation body SWEDAC is also a signatory
2	The analysis is provided by AK Lab AB, Getångsvägen 29, 504 68 Borås, Sweden, which is a testing laboratory, accredited by the Swedish accreditation body SWEDAC (Reg No 1790)
3	The analysis is provided by ALS Scandinavia AB, Box 511, 183 25 Täby, which is accredited by the Swedish accreditation body SWEDAC (Reg No 1087)

The uncertainty is given as extended uncertainty (according to the definition in "Guide to the Expression of Uncertainty in Measurement", ISO, Geneva, Switzerland 1993) calculated with a coverage factor of 2, which gives a confidence level of approximately 95%

The uncertainty from subcontractors is often given as extended uncertainty calculated with a coverage factor of 2
Contact the laboratory for further information

This report may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

About the responsibility of the laboratory, please refer to the current product catalogue or our website www.alsglobal.se

min/skad
28. juli 2008
80

