CZECH REPUBLIC
DEVELOPMENT COOPERATION

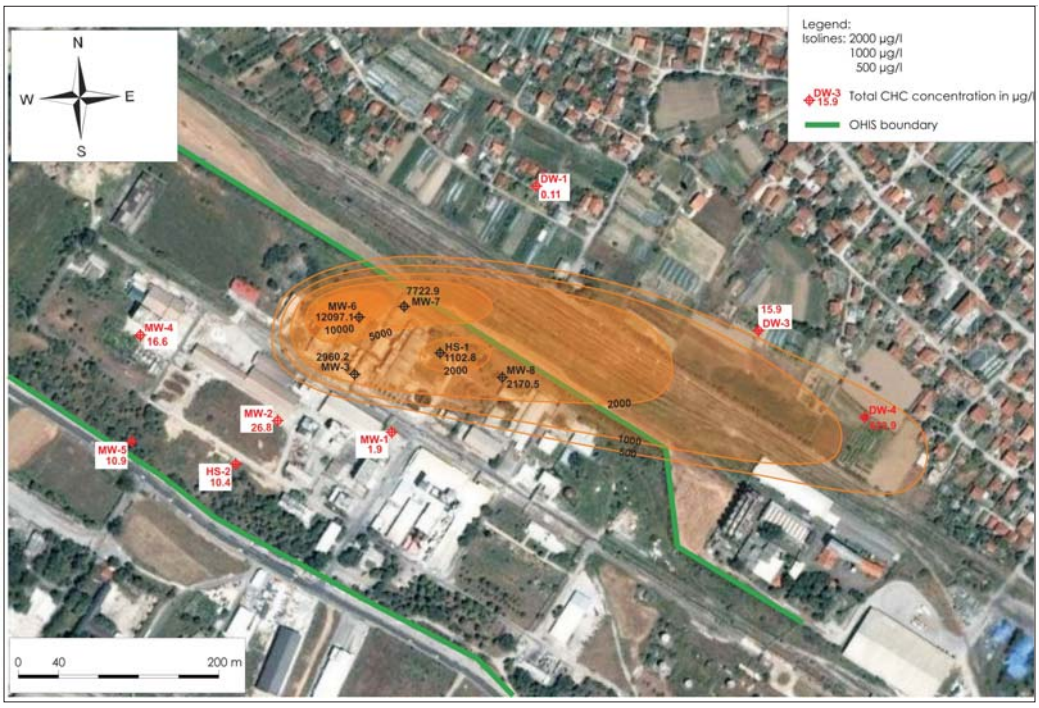
ENACON

PROJECT OF DEVELOPMENT COOPERATION OF THE CZECH REPUBLIC AND MACEDONIA

„OLD ENVIRONMENTAL BURDENS IN CHEMICAL PLANT OHIS, SKOPJE“

Updated Risk Assessment

Annexes



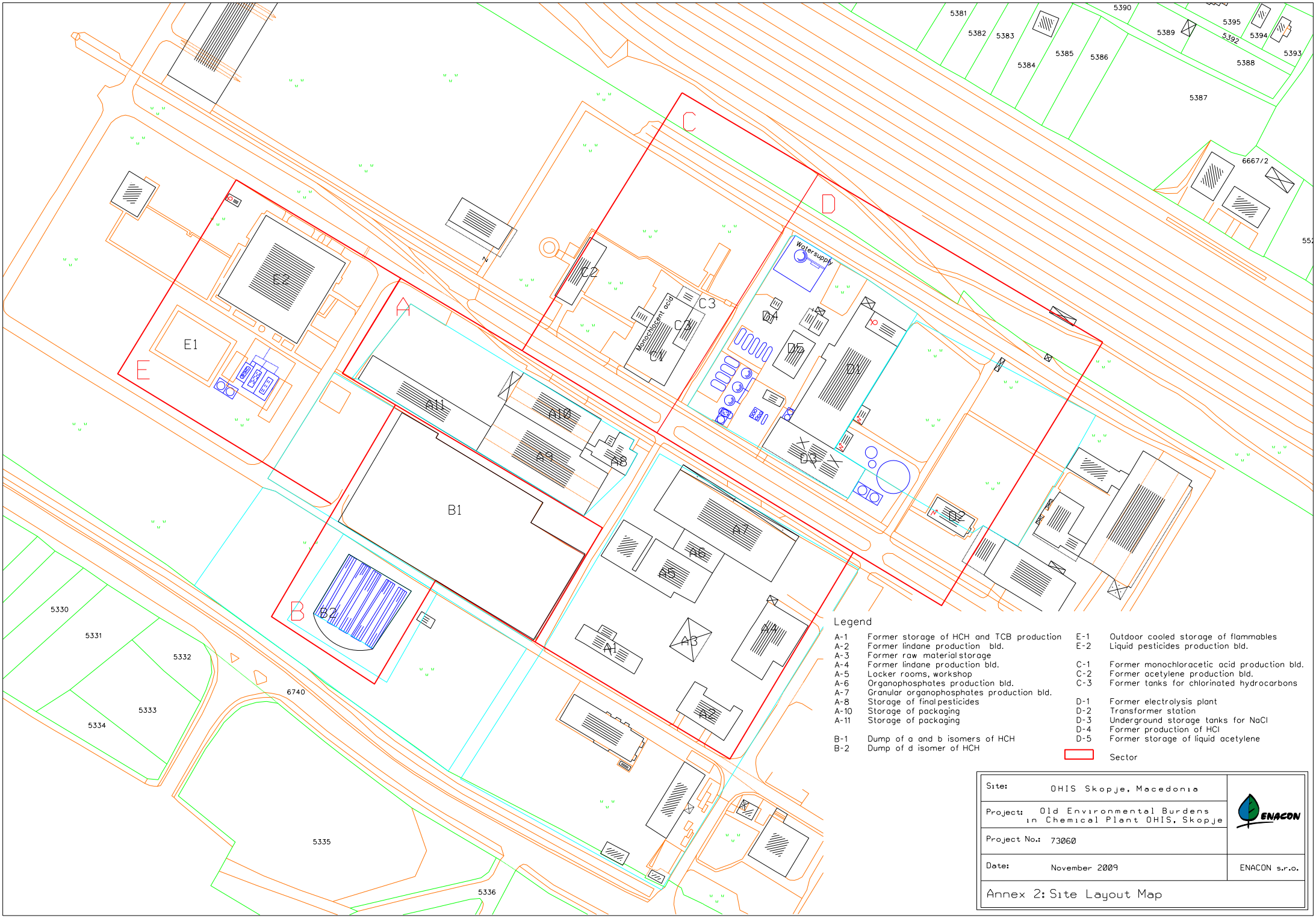
November 2009

Annex 1
Site Location Map

Site:	OHIS Skopje, Makedonia	ENACON
Project:	Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.:	73060	
Date:	November 2009	ENACON s.r.o.

Annex 1 : Site Location Map

Annex 2
Site Layout Map



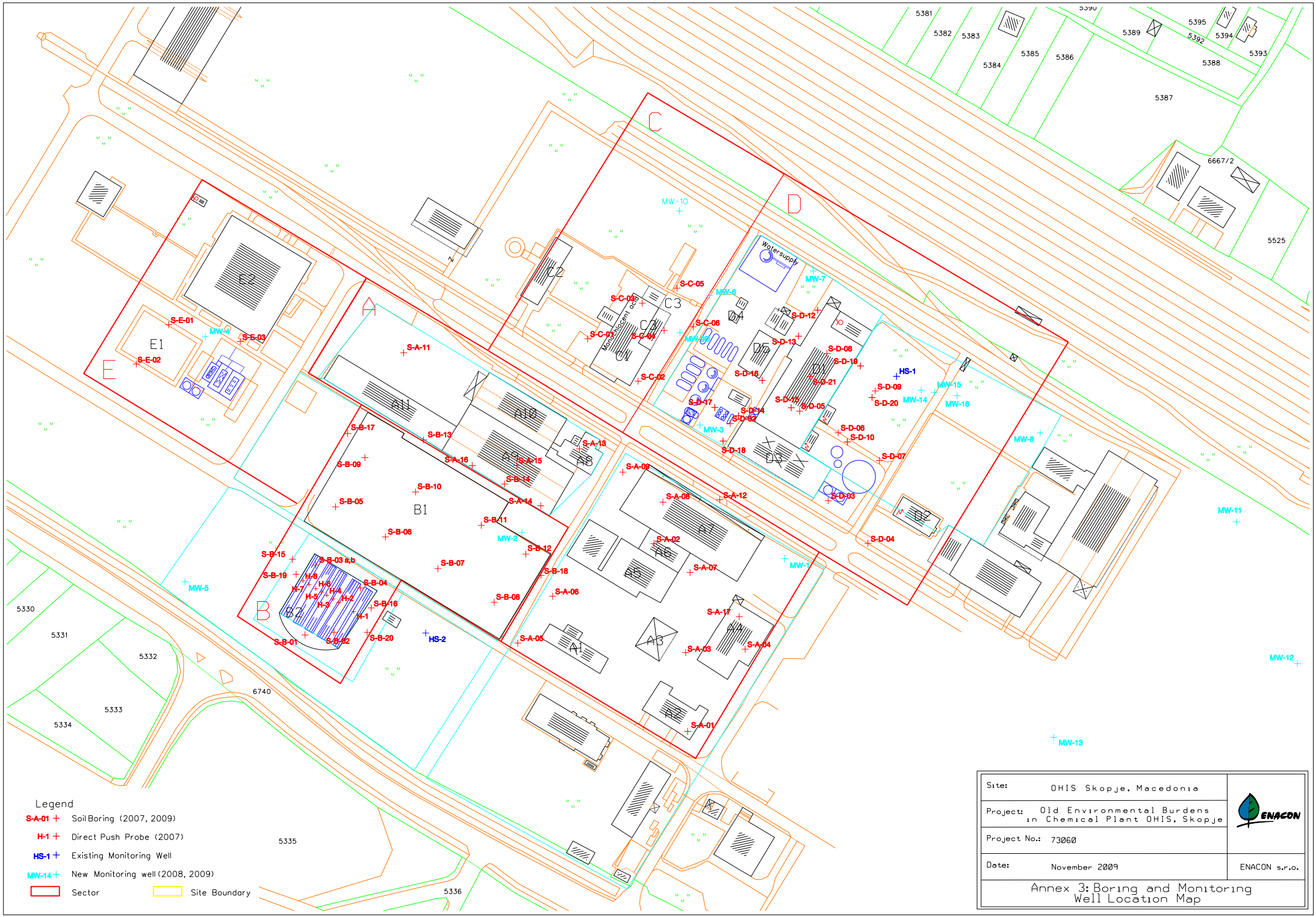
Legend

A-1	Former storage of HCH and TCB production	E-1	Outdoor cooled storage of flammables
A-2	Former lindane production bld.	E-2	Liquid pesticides production bld.
A-3	Former raw material storage		
A-4	Former lindane production bld.	C-1	Former monochloracetic acid production bld.
A-5	Locker rooms, workshop	C-2	Former acetylene production bld.
A-6	Organophosphates production bld.	C-3	Former tanks for chlorinated hydrocarbons
A-7	Granular organophosphates production bld.		
A-8	Storage of final pesticides	D-1	Former electrolysis plant
A-10	Storage of packaging	D-2	Transformer station
A-11	Storage of packaging	D-3	Underground storage tanks for NaCl
		D-4	Former production of HCl
B-1	Dump of a and b isomers of HCH	D-5	Former storage of liquid acetylene
B-2	Dump of d isomer of HCH		
			Sector

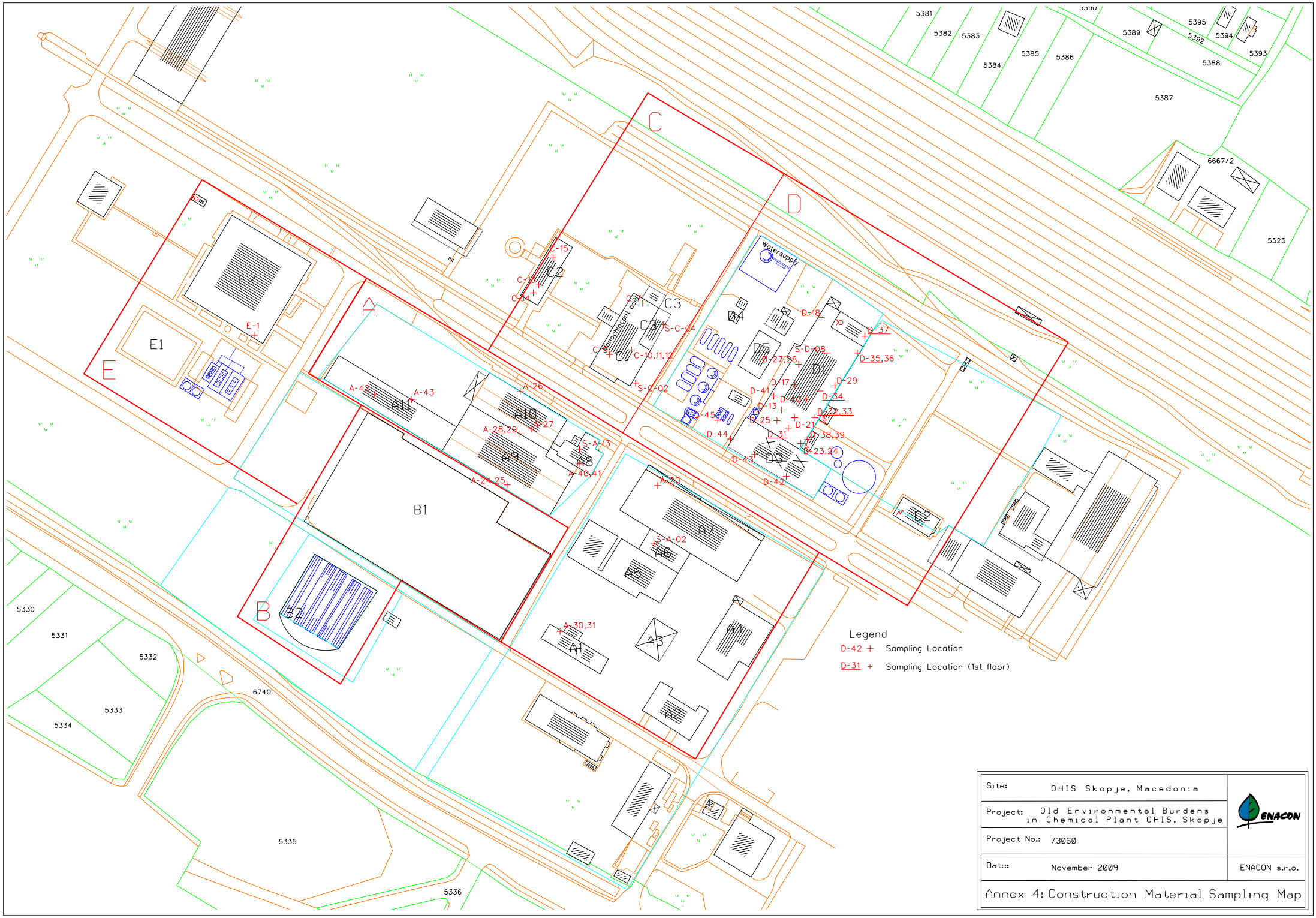
Site: OHIS Skopje, Macedonia	ENACON
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.: 73060	
Date: November 2009	ENACON s.r.o.
Annex 2: Site Layout Map	

Annex 3

Boring and Monitoring Well Location Map

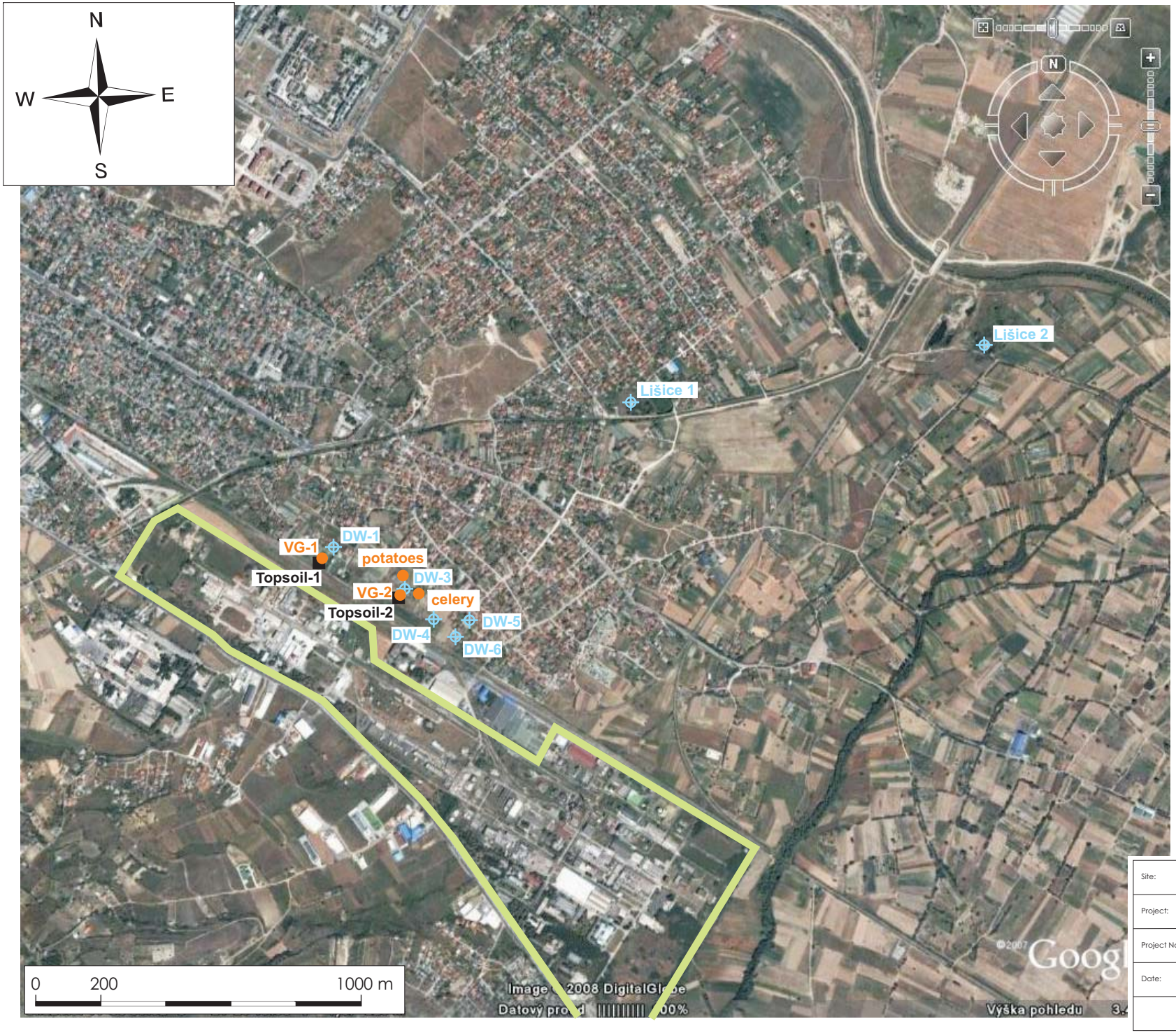

Legend
S-A-01 Soil Boring (2007, 2009)
H-1 Direct Push Probe (2007)
HS-1 Existing Monitoring Well
MW-14 New Monitoring well (2008, 2009)
Sector
Site Boundary
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON s.r.o.
Annex 3: Boring and Monitoring Well Location Map
Monochloracetic acid
Water supply

Annex 4
Construction Material Sampling Map


Legend
D-42 + Sampling Location
D-31 + Sampling Location (1st floor)
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON s.r.o.
Annex 4: Construction Material Sampling Map

Annex 5

Off-site Sampling Map



Legend:

- Groundwater sample
- Topsoil sample
- Vegetables sample
- OHIS boundary

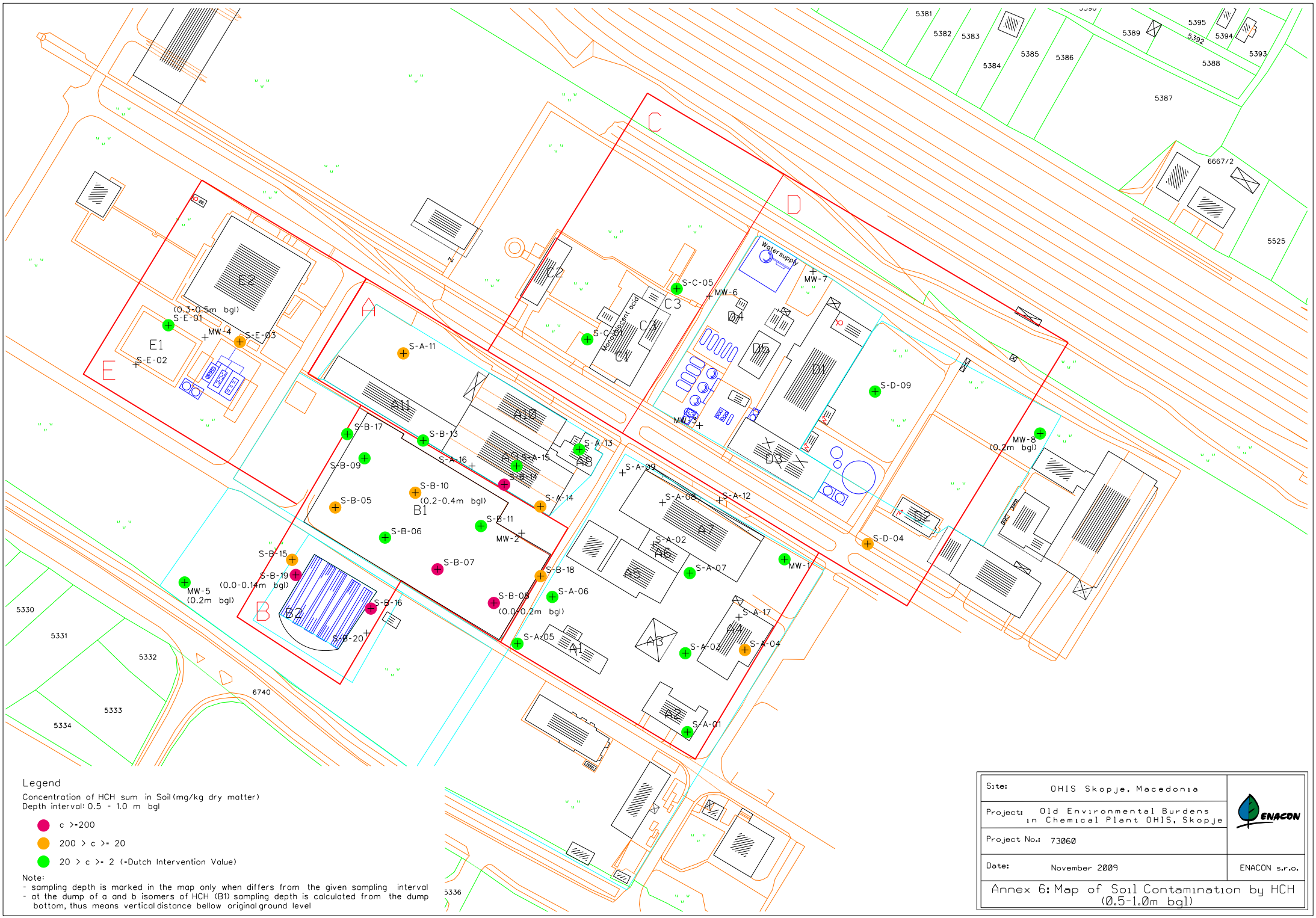
Site:	OHIS Skopje, Macedonia
Project:	Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.:	73060
Date:	November 2009

ENACON s.r.o.

Annex 5: Off-site Sampling Map

Annex 6

Map of Soil Contamination by HCH (0.5 - l .0 m bgl)


Legend
Concentration of HCH sum in Soil (mg/kg dry matter)
Depth interval: 0.5 - 1.0 m bgl
c >= 200
200 > c >= 20
20 > c >= 2 (=Dutch Intervention Value)
Note:
- sampling depth is marked in the map only when differs from the given sampling interval
- at the dump of a and b isomers of HCH (B1) sampling depth is calculated from the dump bottom, thus means vertical distance bellow original ground level
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON
ENACON s.r.o.
Annex 6: Map of Soil Contamination by HCH (0.5-1.0m bgl)
Water supply
Monodiacetonacial
S-E-01
(0.3-0.5m bgl)
MW-4
S-E-03
S-E-02
S-A-11
S-B-17
S-B-13
S-B-09
S-A-16
S-A-15
S-A-13
S-B-14
S-B-10
(0.2-0.4m bgl)
S-B-05
S-A-14
S-B-11
S-B-06
MW-2
S-B-15
S-B-07
S-B-19
(0.0-0.14m bgl)
MW-5
(0.2m bgl)
S-B-18
S-B-16
S-B-08
(0.0-0.2m bgl)
S-A-06
S-B-20
S-A-05
S-A-09
S-A-08
S-A-12
S-A-02
S-A-07
S-A-17
S-A-03
S-A-04
S-A-01
S-C-05
MW-6
MW-7
S-D-09
MW-8
(0.2m bgl)
S-D-04
MW-1
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
B1
B2
C1
C2
C3
D1
D2
D3
D4
D5
E1
E2
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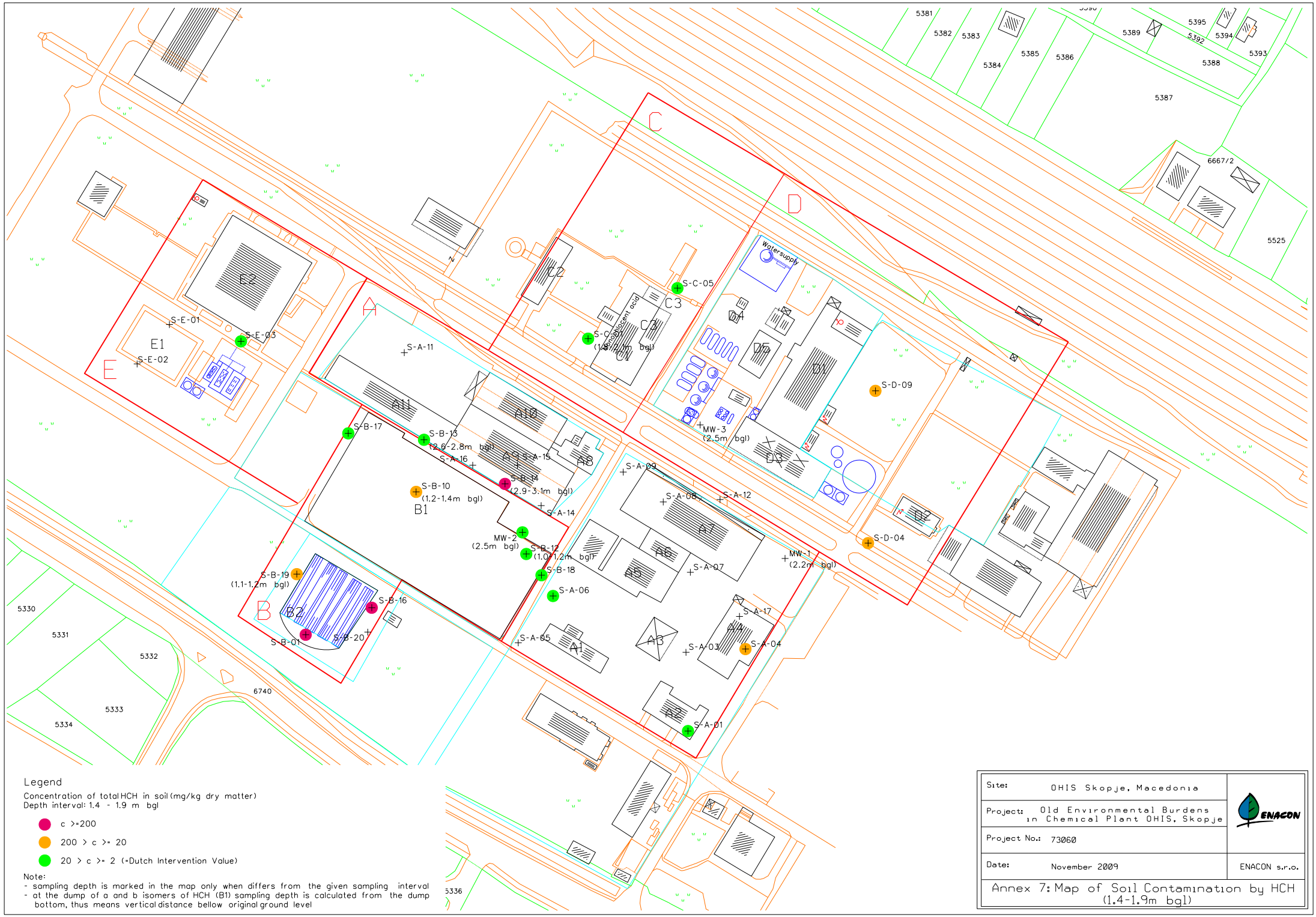
6667/2
5525

Annex 7

Map of Soil Contamination by HCH (l .4 - l .9 m bgl)


Legend
Concentration of total HCH in soil (mg/kg dry matter)
Depth interval: 1.4 - 1.9 m bgl
c >=200
200 > c >= 20
20 > c >= 2 (=Dutch Intervention Value)
Note:
- sampling depth is marked in the map only when differs from the given sampling interval
- at the dump of a and b isomers of HCH (B1) sampling depth is calculated from the dump bottom, thus means vertical distance bellow original ground level
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON s.r.o.
Annex 7: Map of Soil Contamination by HCH (1.4-1.9m bgl)
ENACON
Water supply
Monobrom acid
S-C-05
S-C-03 (1.8-2.2m bgl)
S-D-09
MW-3 (2.5m bgl)
S-D-04
MW-1 (2.2m bgl)
S-A-11
S-B-17
S-B-13 (2.6-2.8m bgl)
S-A-16
S-A-15
S-B-14 (2.9-3.1m bgl)
S-B-10 (1.2-1.4m bgl)
S-A-14
MW-2 (2.5m bgl)
S-B-12 (1.0-1.2m bgl)
S-B-18
S-A-06
S-A-09
S-A-08
S-A-12
S-A-07
S-A-17
S-A-04
S-A-03
S-A-05
S-A-01
S-B-19 (1.1-1.2m bgl)
S-B-16
S-B-01
S-B-20
S-E-01
S-E-02
S-E-03
A1
A2
A3
A4
A5
A6
A7
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A9
A10
A11
B1
B2
C1
C2
C3
D1
D2
D3
D4
D5
E1
E2
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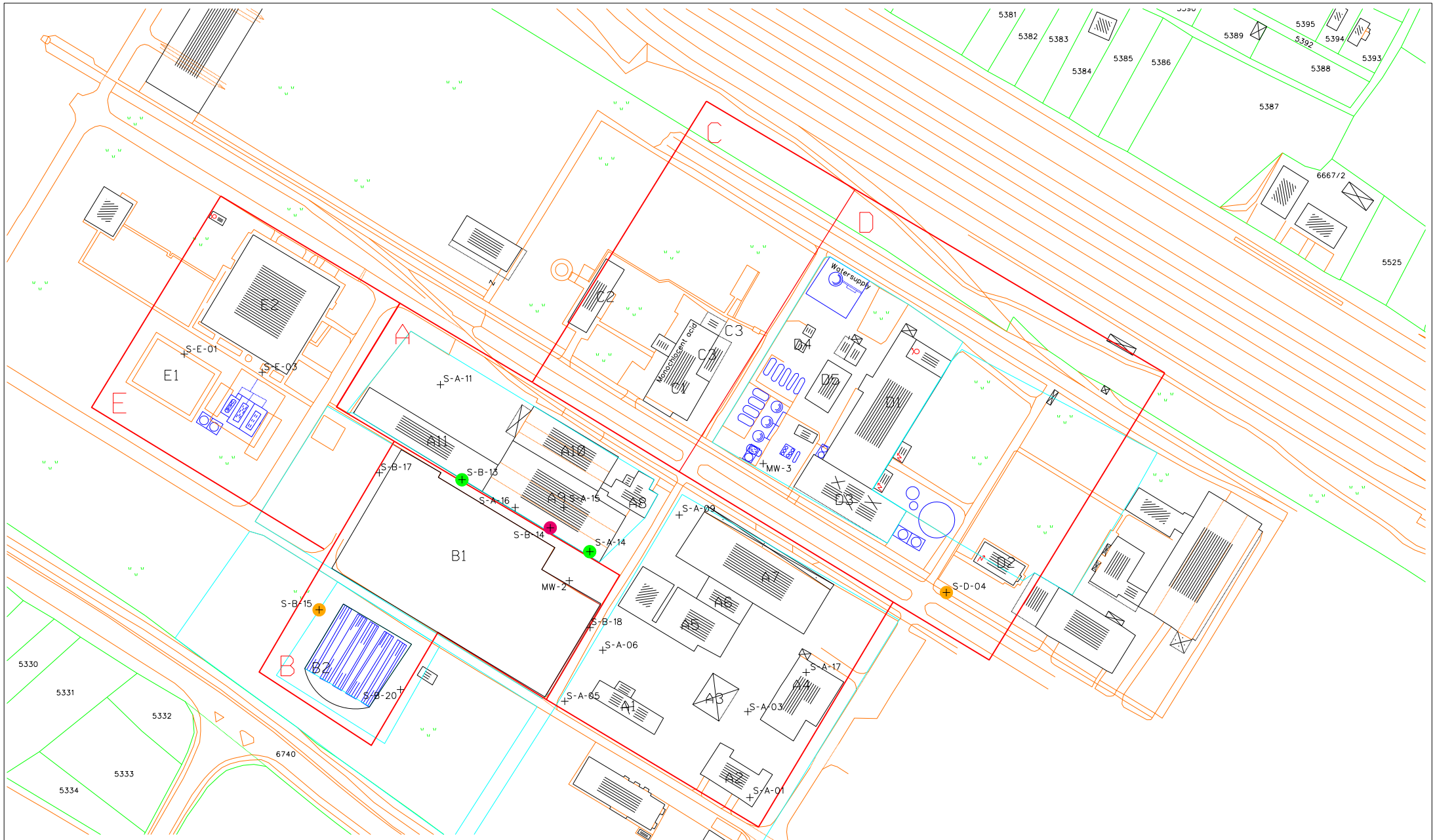
Annex 8

Map of Soil Contamination by HCH (4.6 - 4.8 m bgl)



Legend

Concentration of total HCH in soil (mg/kg dry matter)
Depth interval: 4.6 - 4.8 m bgl

- c >= 200
- 200 > c >= 20
- 20 > c >= 2 (=Dutch Intervention Value)

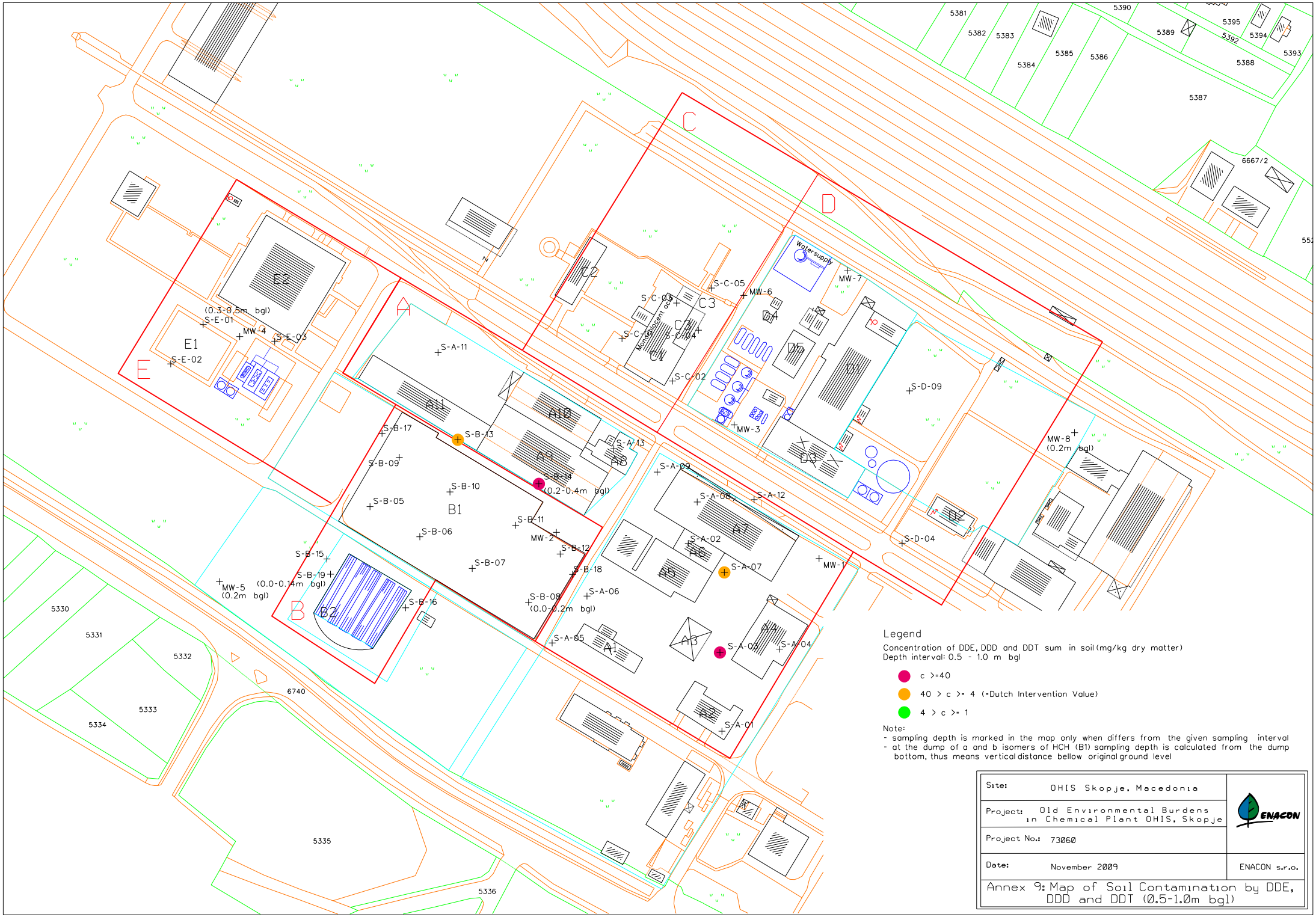
Note:
- sampling depth is marked in the map only when differs from the given sampling interval
- at the dump of a and b isomers of HCH (B1) sampling depth is calculated from the dump bottom, thus means vertical distance bellow original ground level

Site: OHIS Skopje, Macedonia	ENACON
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.: 73060	
Date: November 2009	ENACON s.r.o.

Annex 8: Map of Soil Contamination by HCH (4.6-4.8m bgl)

Annex 9

Map of Soil Contamination by DDE, DDD and DDT (0.5 - l .0 m bgl)


Legend
Concentration of DDE, DDD and DDT sum in soil (mg/kg dry matter)
Depth interval: 0.5 - 1.0 m bgl
c >=40
40 > c >= 4 (=Dutch Intervention Value)
4 > c >= 1
Note:
- sampling depth is marked in the map only when differs from the given sampling interval
- at the dump of a and b isomers of HCH (B1) sampling depth is calculated from the dump bottom, thus means vertical distance bellow original ground level
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON s.r.o.
Annex 9: Map of Soil Contamination by DDE, DDD and DDT (0.5-1.0m bgl)
ENACON
Water supply
Management office
S-C-05
MW-6
MW-7
S-C-01
S-C-03
S-C-04
S-C-02
MW-3
S-D-09
MW-8
(0.2m bgl)
S-D-04
MW-1
S-A-11
S-A-13
S-A-09
S-A-08
S-A-12
S-A-02
S-A-07
S-A-06
S-A-05
S-A-03
S-A-04
S-A-01
S-B-17
S-B-13
S-B-09
S-B-14
(0.2-0.4m bgl)
S-B-10
S-B-05
S-B-11
S-B-06
MW-2
S-B-12
S-B-15
S-B-07
S-B-19
S-B-18
MW-5
(0.2m bgl)
(0.0-0.14m bgl)
S-B-16
S-B-08
(0.0-0.2m bgl)
S-E-01
(0.3-0.5m bgl)
MW-4
S-E-03
S-E-02
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
B1
B2
C1
C2
C3
D1
D2
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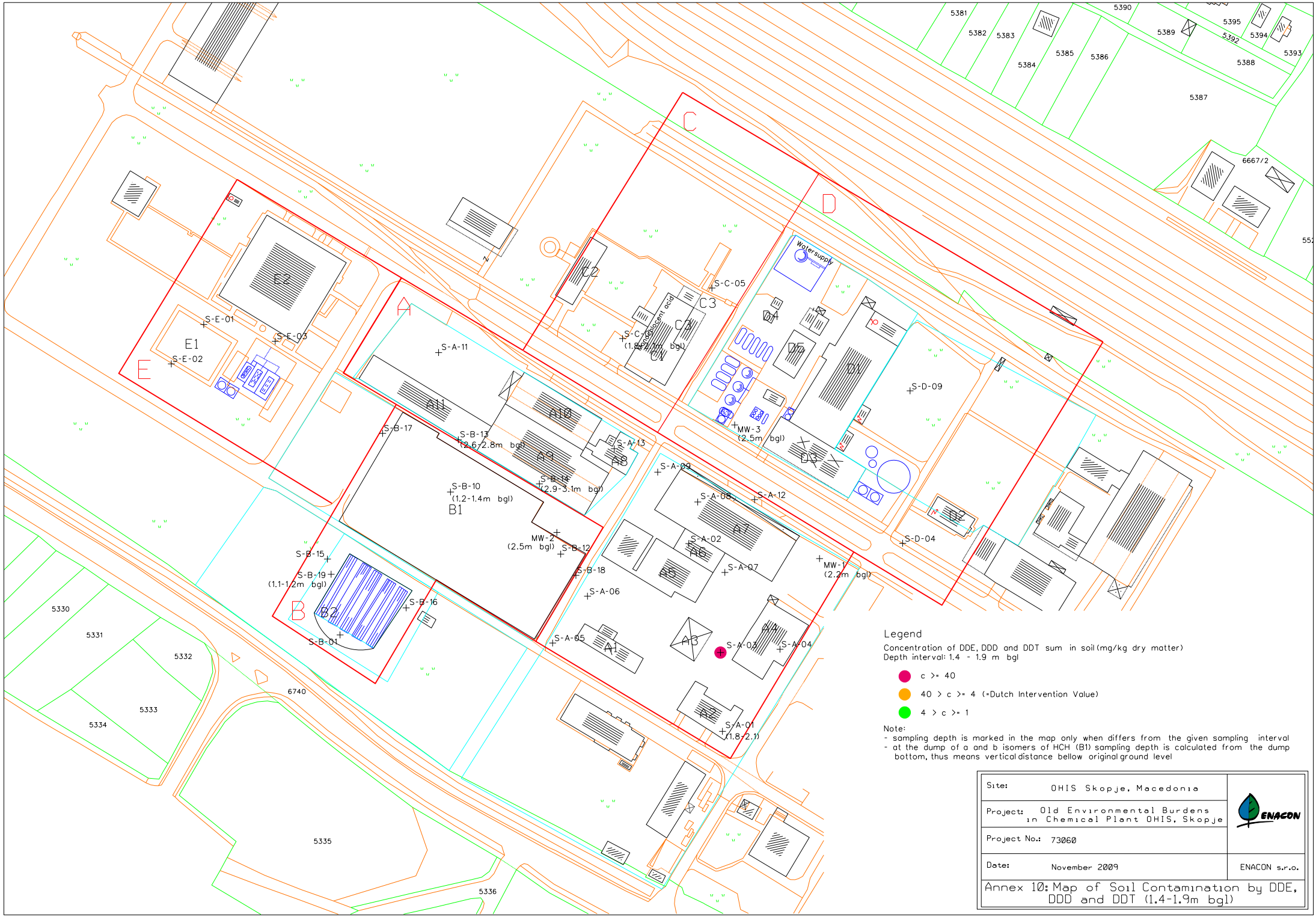
Annex 10

Map of Soil Contamination by DDE, DDD and DDT (l .4 - l .9 m bgl)


Legend
Concentration of DDE, DDD and DDT sum in soil (mg/kg dry matter)
Depth interval: 1.4 - 1.9 m bgl
c >= 40
40 > c >= 4 (=Dutch Intervention Value)
4 > c >= 1
Note:
- sampling depth is marked in the map only when differs from the given sampling interval
- at the dump of a and b isomers of HCH (B1) sampling depth is calculated from the dump bottom, thus means vertical distance bellow original ground level
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON s.r.o.
Annex 10: Map of Soil Contamination by DDE, DDD and DDT (1.4-1.9m bgl)
ENACON
Watersupply
Fungicant acid
S-C-05
S-C-06 (1.8-2.1m bgl)
S-A-11
S-B-17
S-B-13 (2.6-2.8m bgl)
S-B-14 (2.9-3.1m bgl)
S-A-13
S-B-10 (1.2-1.4m bgl)
MW-2 (2.5m bgl)
S-B-12
S-B-15
S-B-19 (1.1-1.2m bgl)
S-B-16
S-B-01
S-B-18
S-A-09
S-A-08
S-A-12
S-A-02
S-A-07
S-A-06
S-A-05
S-A-03
S-A-04
S-A-01 (1.8-2.1)
MW-1 (2.2m bgl)
MW-3 (2.5m bgl)
S-D-09
S-D-04
S-E-01
S-E-02
S-E-03
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
B1
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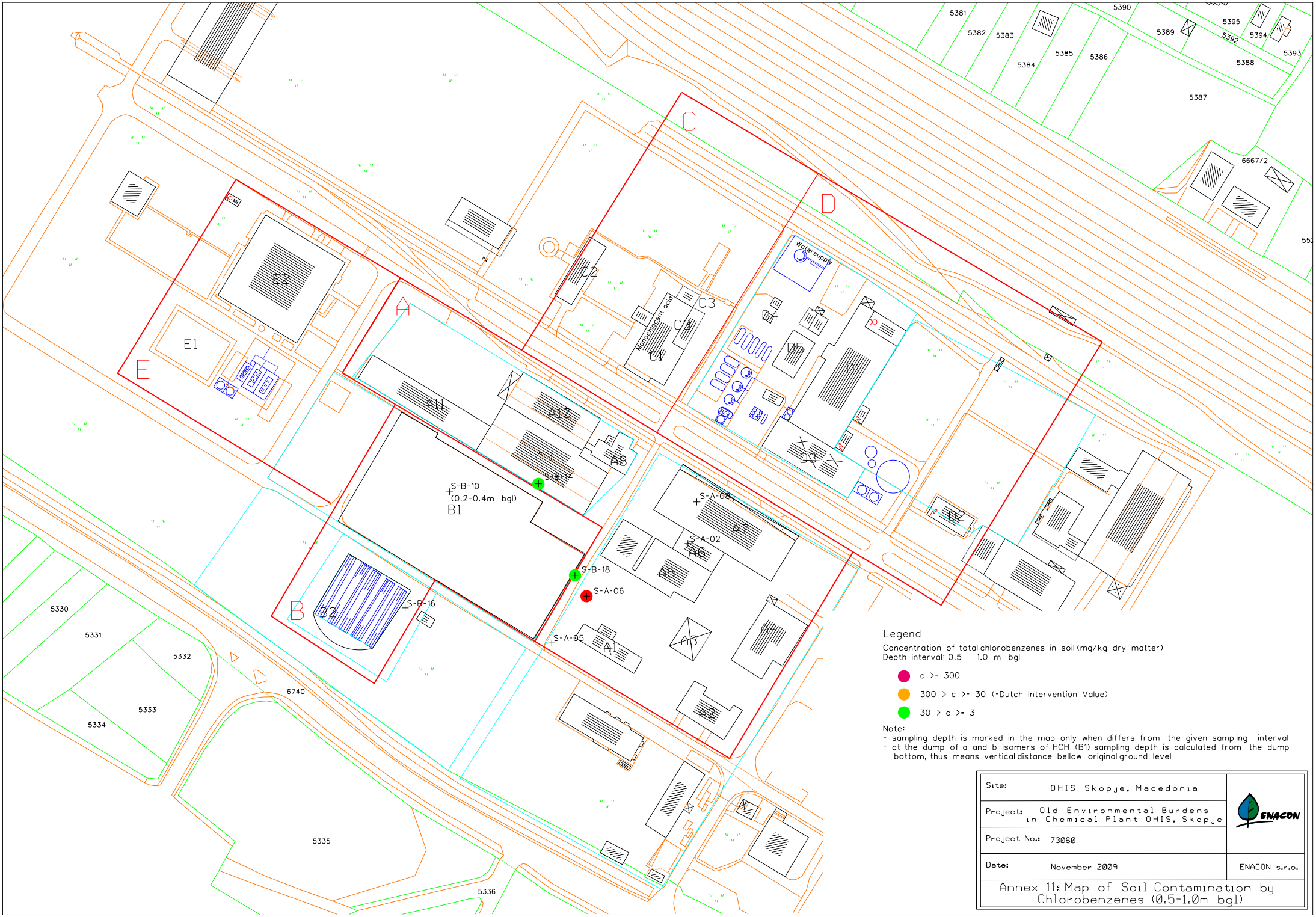
Annex 11

Map of Soil Contamination by Chlorobenzenes (0.5 - l .0 m bgl)


A
B
C
D
E
E1
E2
B1
B2
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
C1
C2
C3
D1
D2
D3
D4
D5
Monochlorpent acid
Watersupply
S-B-10
(0.2-0.4m bgl)
S-B-14
S-B-18
S-B-16
S-A-08
S-A-02
S-A-06
S-A-05
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5332
5333
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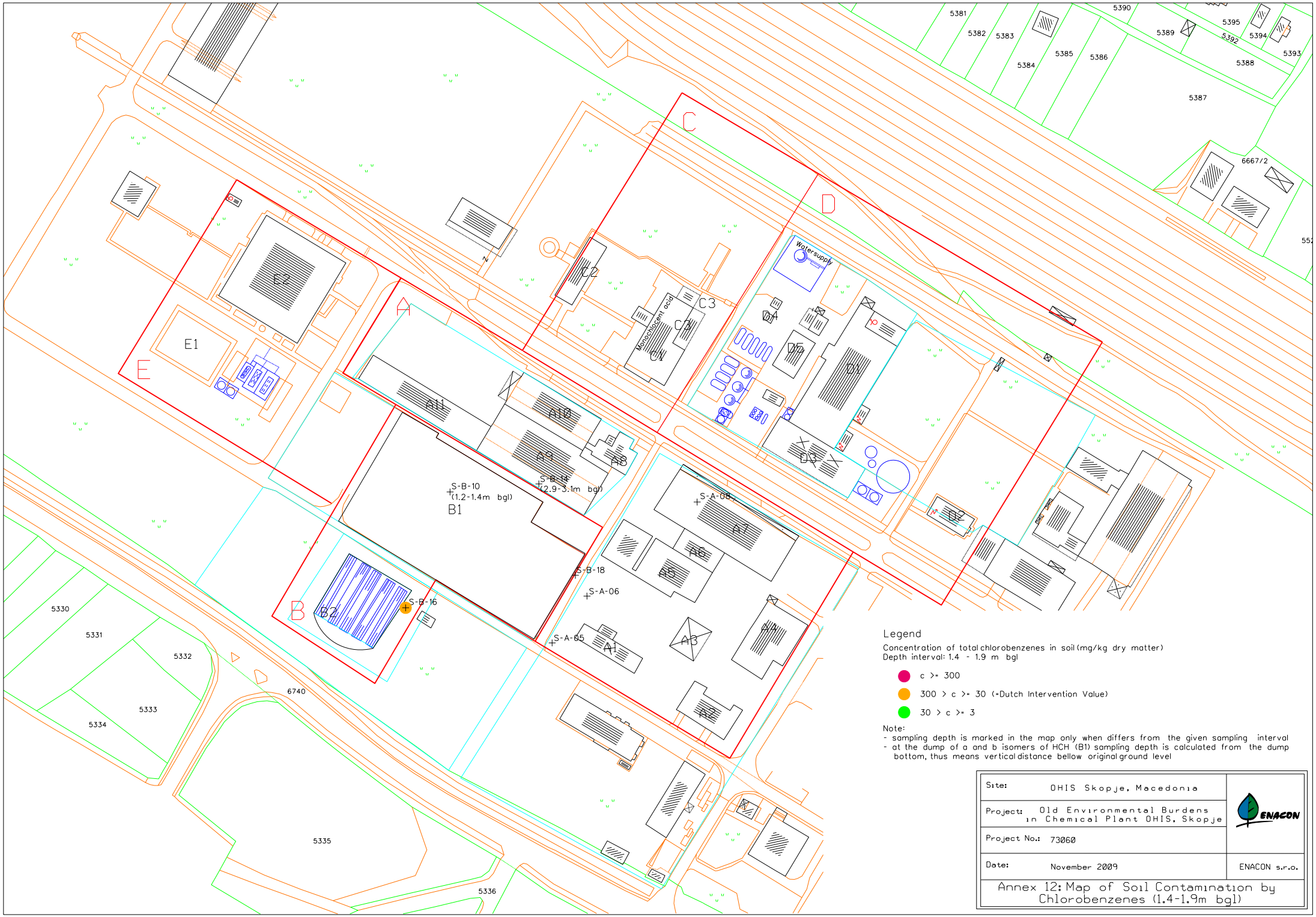
Legend
Concentration of total chlorobenzenes in soil (mg/kg dry matter)
Depth interval: 0.5 - 1.0 m bgl
c >= 300
300 > c >= 30 (=Dutch Intervention Value)
30 > c >= 3
Note:
- sampling depth is marked in the map only when differs from the given sampling interval
- at the dump of a and b isomers of HCH (B1) sampling depth is calculated from the dump bottom, thus means vertical distance bellow original ground level
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON s.r.o.
Annex 11: Map of Soil Contamination by Chlorobenzenes (0.5-1.0m bgl)

Annex 12

Map of Soil Contamination by Chlorobenzenes (l .4 - l .9 m bgl)



Legend

Concentration of total chlorobenzenes in soil (mg/kg dry matter)
Depth interval: 1.4 - 1.9 m bgl

- c >= 300
- 300 > c >= 30 (=Dutch Intervention Value)
- 30 > c >= 3

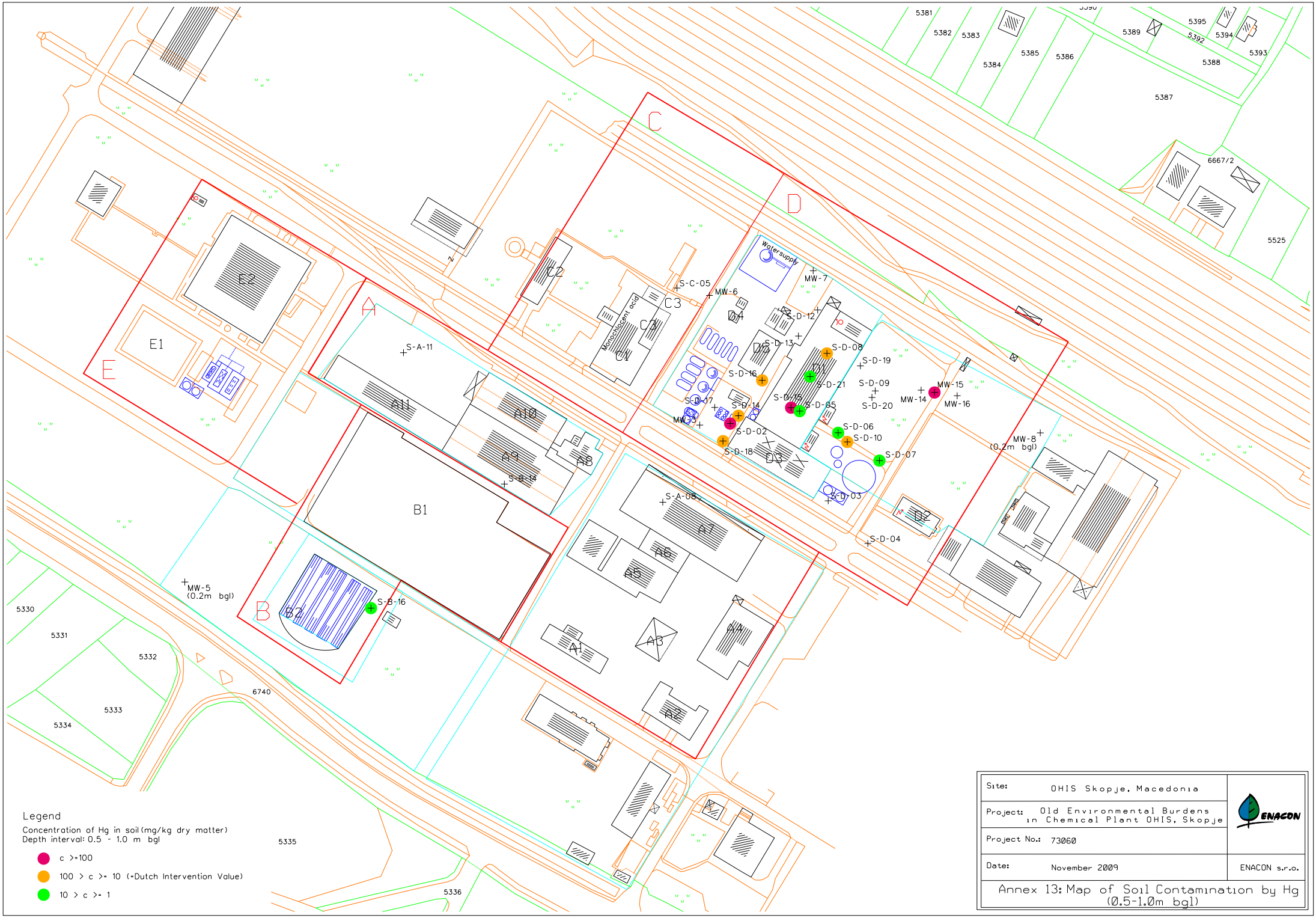
Note:
- sampling depth is marked in the map only when differs from the given sampling interval
- at the dump of a and b isomers of HCH (B1) sampling depth is calculated from the dump bottom, thus means vertical distance bellow original ground level

Site: OHIS Skopje, Macedonia	ENACON
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.: 73060	
Date: November 2009	ENACON s.r.o.

Annex 12: Map of Soil Contamination by Chlorobenzenes (1.4-1.9m bgl)

Annex 13

Map of Soil Contamination by Mercury (0.5 - l .0 m bgl)



Legend

Concentration of Hg in soil (mg/kg dry matter)
Depth interval: 0.5 - 1.0 m bgl

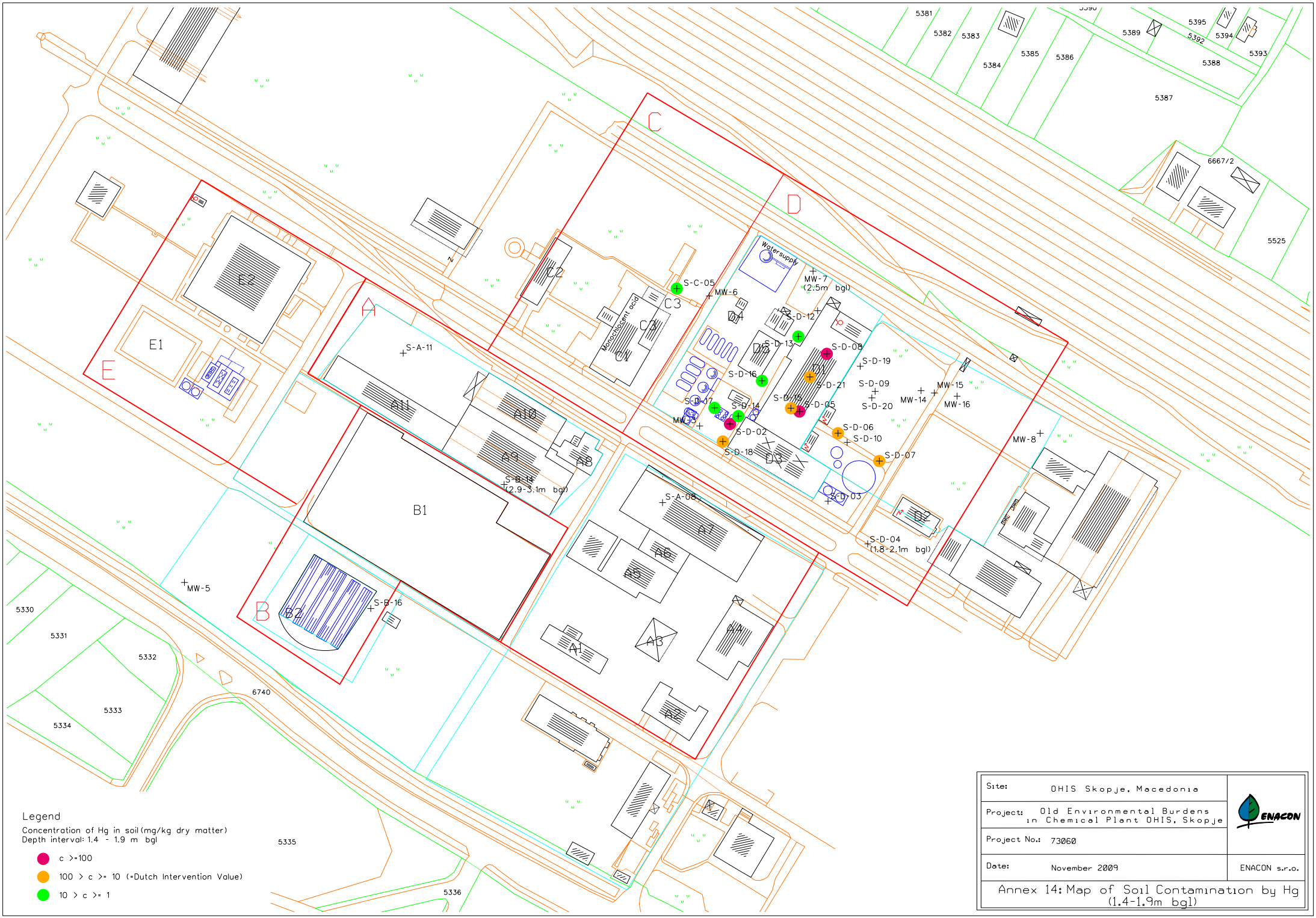
- c >= 100
- 100 > c >= 10 (=Dutch Intervention Value)
- 10 > c >= 1

Site:	OHIS Skopje, Macedonia	ENACON
Project:	Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.:	73060	
Date:	November 2009	ENACON s.r.o.

Annex 13: Map of Soil Contamination by Hg (0.5-1.0m bgl)

Annex 14

Map of Soil Contamination by Mercury (l .4 - l .9 m bgl)


Legend
Concentration of Hg in soil (mg/kg dry matter)
Depth interval: 1.4 - 1.9 m bgl
c >=100
100 > c >= 10 (=Dutch Intervention Value)
10 > c >= 1
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON s.r.o.
Annex 14: Map of Soil Contamination by Hg (1.4-1.9m bgl)
Water supply
Monochloroacetic acid
MW-7 (2.5m bgl)
S-D-04 (1.8-2.1m bgl)
S-B-14 (2.9-3.1m bgl)
S-A-08
S-A-11
S-B-16
S-C-05
MW-6
MW-5
MW-8
MW-14
MW-15
MW-16
MW-13
S-D-02
S-D-03
S-D-05
S-D-06
S-D-07
S-D-08
S-D-09
S-D-10
S-D-12
S-D-13
S-D-14
S-D-15
S-D-16
S-D-17
S-D-18
S-D-19
S-D-20
S-D-21
A1
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A9
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A11
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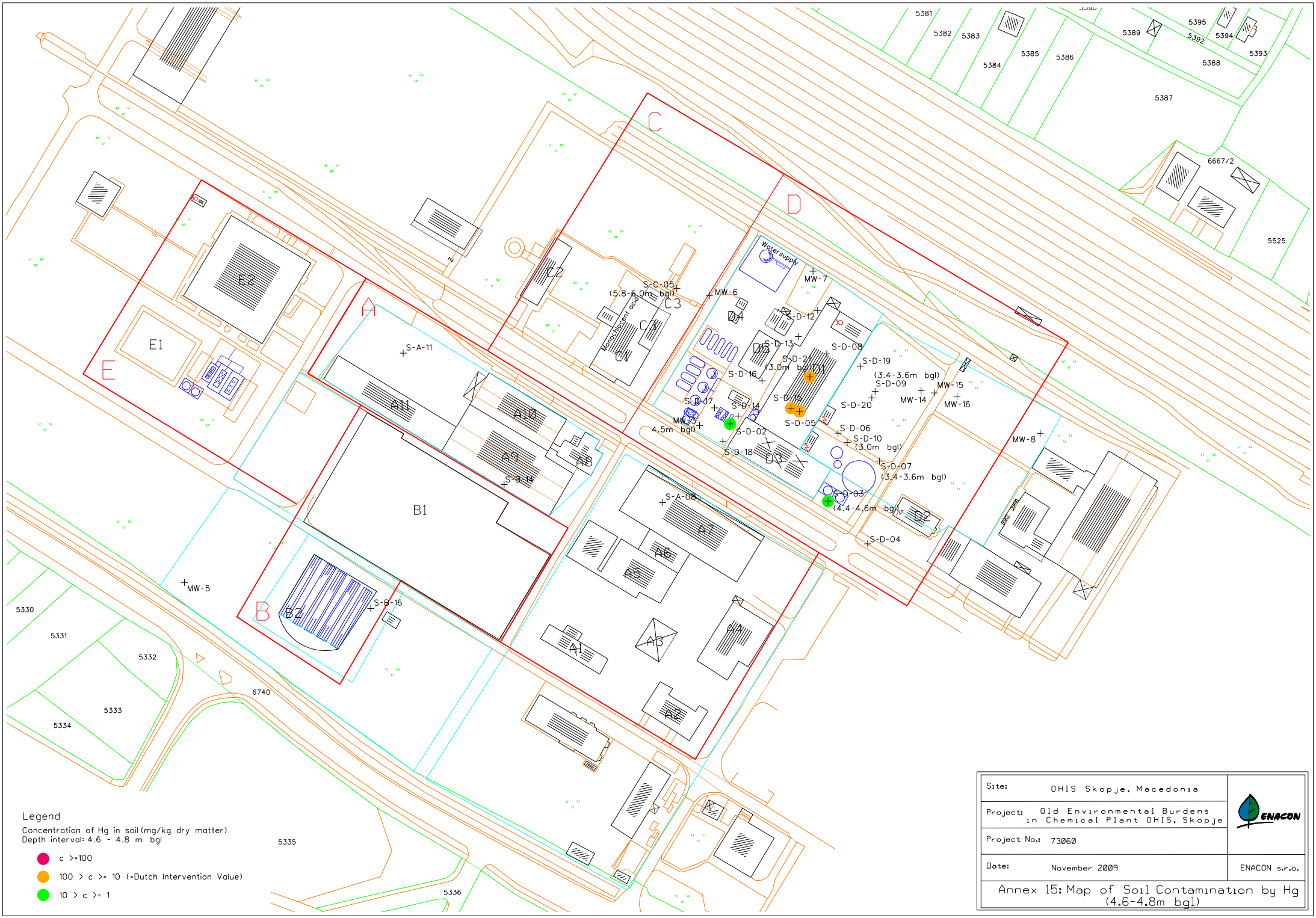
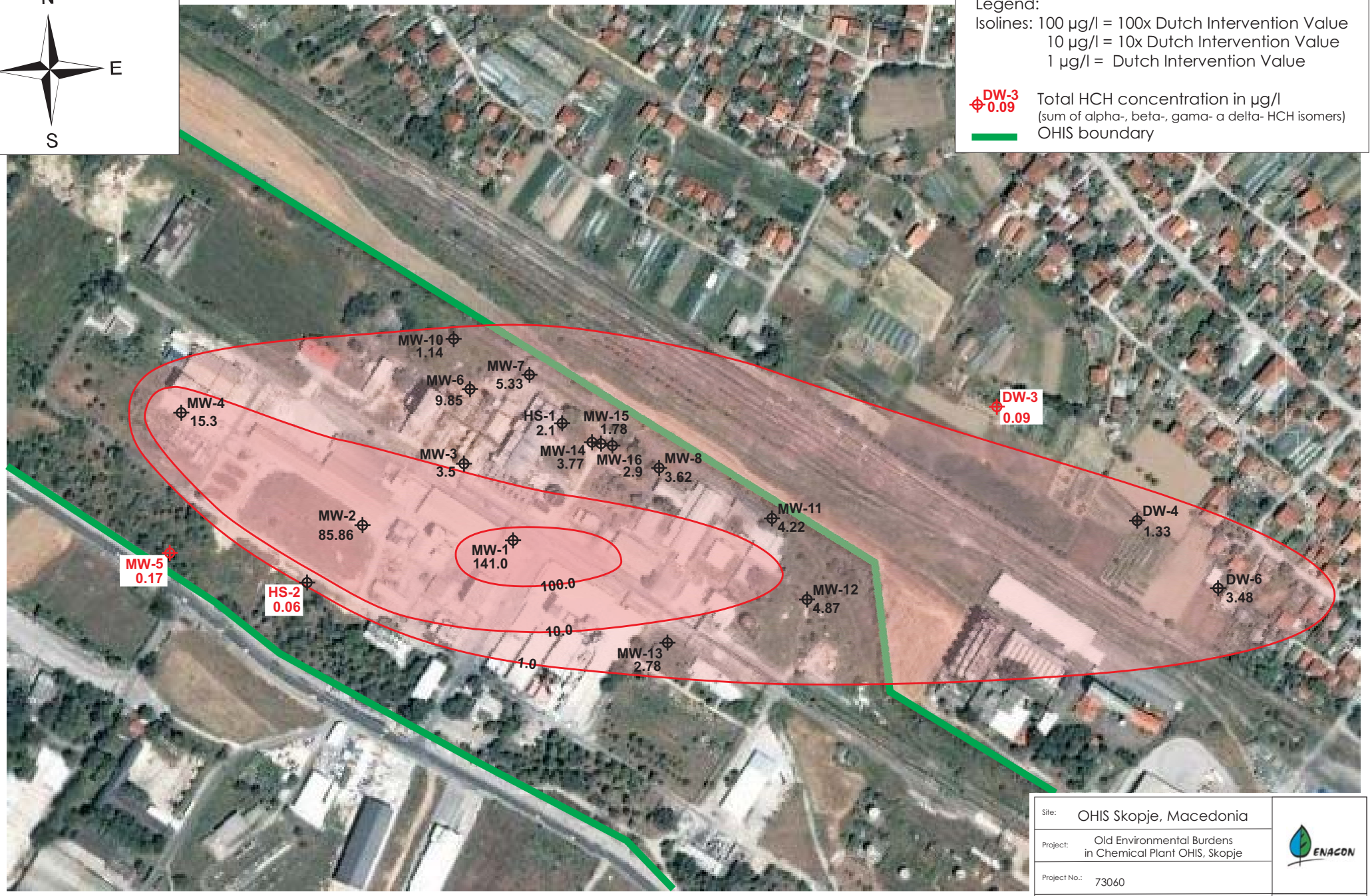
Annex 15

Map of Soil Contamination by Mercury (4.6 - 4.8 m bgl)


Legend
Concentration of Hg in soil (mg/kg dry matter)
Depth interval: 4.6 - 4.8 m bgl
c >=100
100 > c >= 10 (=Dutch Intervention Value)
10 > c >= 1
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: November 2009
ENACON s.r.o.
Annex 15: Map of Soil Contamination by Hg (4.6-4.8m bgl)
Water supply
Monochloroacetic acid
S-C-05 (5.8-6.0m bgl)
MW-6
MW-7
S-D-12
S-D-13
S-D-08
S-D-21 (3.0m bgl)
S-D-19 (3.4-3.6m bgl)
S-D-09
MW-15
MW-14
MW-16
S-D-16
S-D-17
S-D-14
S-D-15
S-D-20
S-D-05
MW-13 4.5m bgl
S-D-02
S-D-06
S-D-10 (3.0m bgl)
S-D-18
MW-8
S-D-07 (3.4-3.6m bgl)
S-D-03 (4.4-4.6m bgl)
S-D-04
S-A-11
S-B-14
S-A-08
S-B-16
MW-5
E1
E2
B1
B2
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
C2
C3
D2
D3
D4
5381
5382
5383
5384
5385
5386
5387
5388
5389
5390
5392
5393
5394
5395
6667/2
5525
5330
5331
5332
5333
5334
5335
5336
6740

Annex 16

Map of Groundwater Contamination by HCH isomers



Source of satellite image: Google Earth

0 40 200 m

Site:	OHIS Skopje, Macedonia
Project:	Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.:	73060
Date:	November 2009

ENACON

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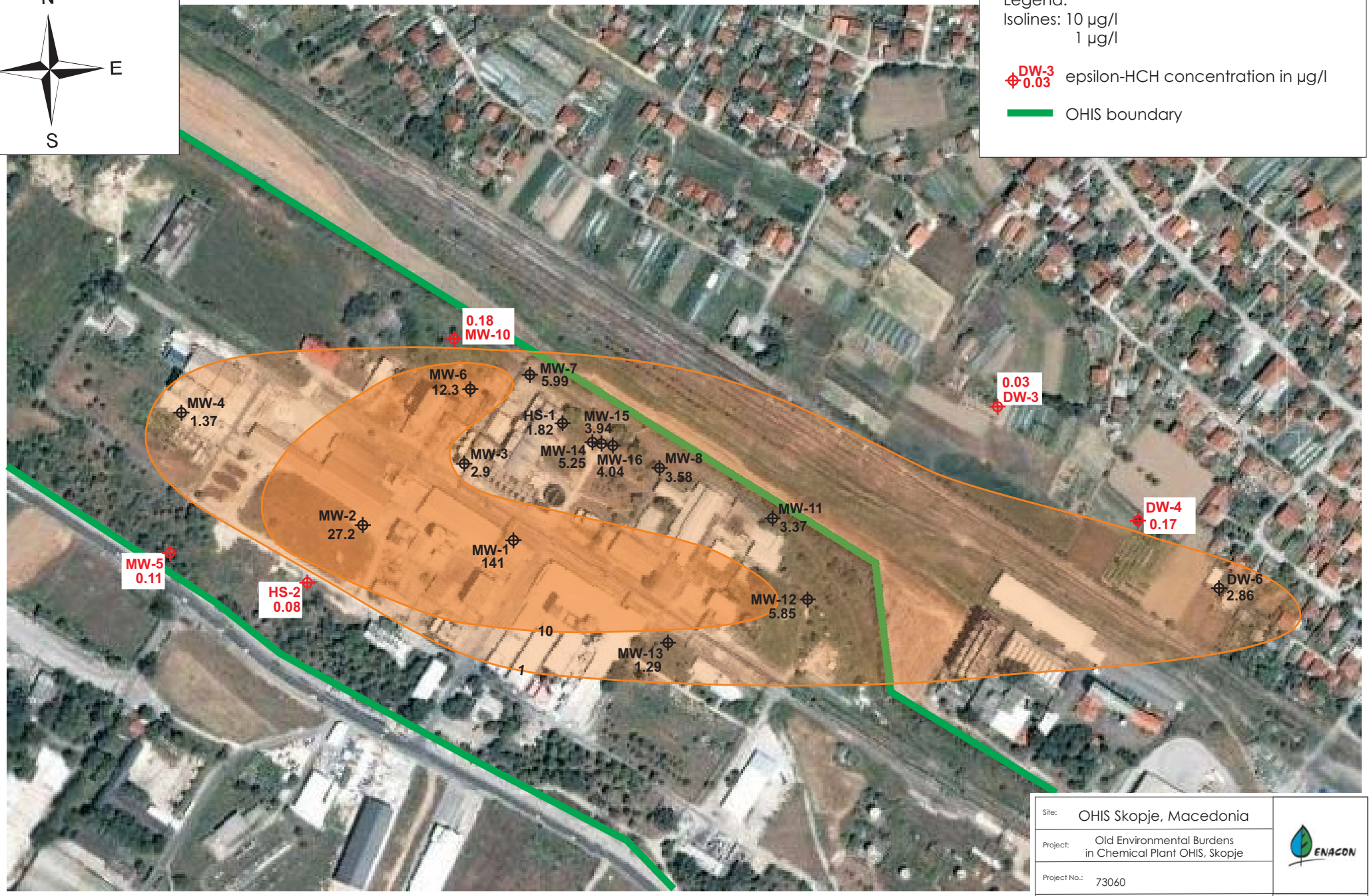
Annex16: Map of Groundwater Contamination by HCH isomers (September 2009)

Annex 17

Map of Groundwater Contamination by ε-HCH Isomer



Site: OHIS Skopje, Macedonia	ENACON
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.: 73060	
Date: November 2009	ENACON s.r.o.

Annex17: Map of Groundwater Contamination by epsilon-HCH (September 2009)

Annex 18

Map of Groundwater Contamination by TCE

Site:	OHIS Skopje, Macedonia
Project:	Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.:	73060
Date:	November 2009

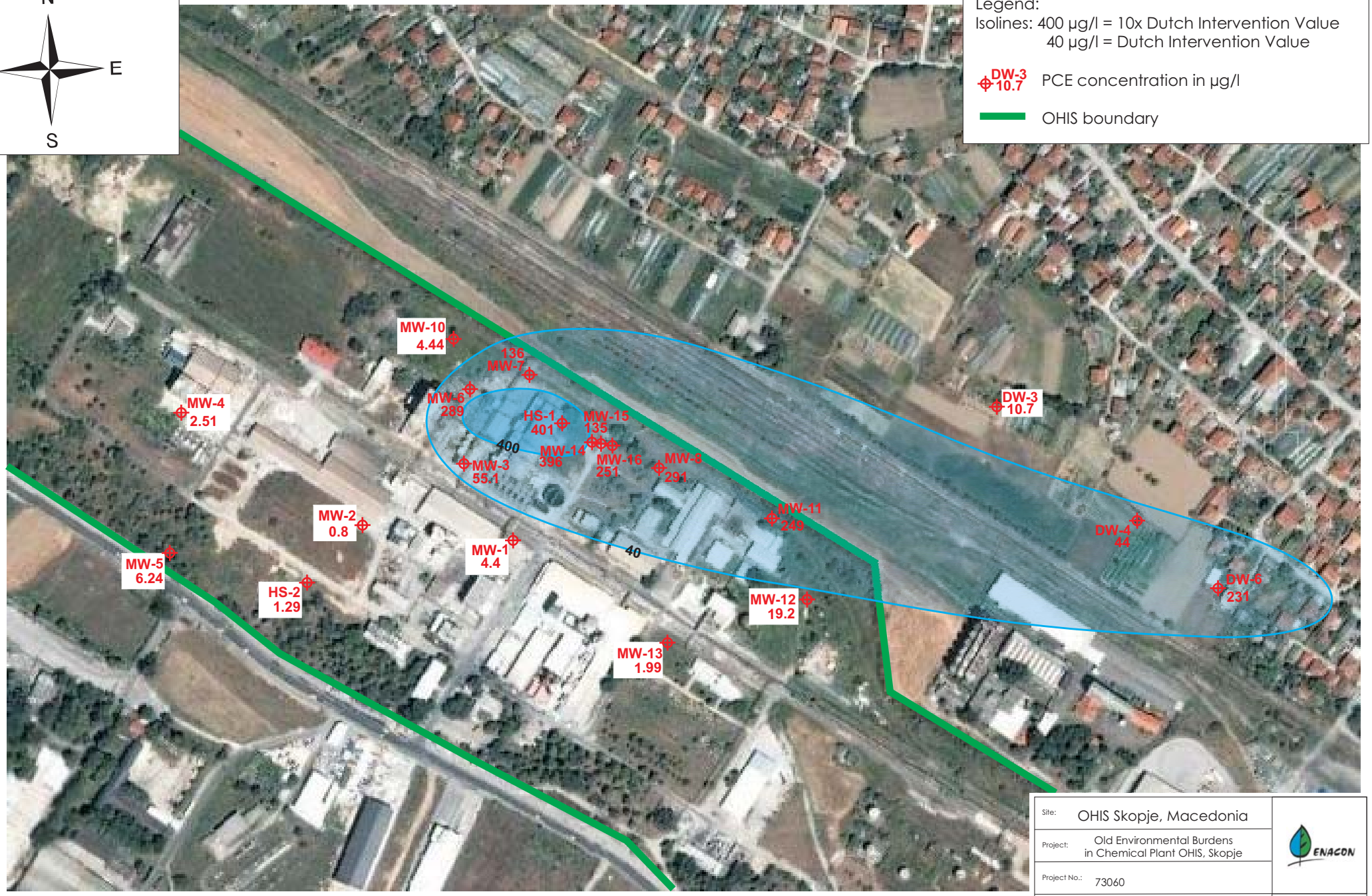
ENACON

ENACON s.r.o.

Annex 18:Map of Groundwater Contamination by TCE (September 2009)

Annex 19

Map of Groundwater Contamination by PCE



Site:	OHIS Skopje, Macedonia
Project:	Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.:	73060
Date:	November 2009

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Annex 19: Map of Groundwater Contamination by PCE (September 2009)

Annex 20

Map of Groundwater Contamination by TeCA

Site:	OHIS Skopje, Macedonia
Project:	Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.:	73060
Date:	November 2009

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Annex 20: Map of Groundwater Contamination by 1,1,2,2 TeCA (September 2009)

Annex 21

Results of Soil Analyses

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-A-1	S-A-1	S-A-1	S-A-2	S-A-3	S-A-3	S-A-3	S-A-4	S-A-4	S-A-5	S-A-5	S-A-5	S-A-6	S-A-6	S-A-6	S-A-7	S-A-7	S-A-7	S-A-7	S-A-8	S-A-8
Sampling Depth (m bgl)		0,6 - 0,9	1,8 - 2,1	4,6 - 4,8	0,7 - 0,9	0,5 - 0,7	1,7 - 1,9	4,6 - 4,8	0,7 - 0,9	1,7 - 1,9	0,5 - 0,7	1,7 - 1,9	4,6 - 4,8	0,5 - 0,8	1,7 - 1,9	4,6 - 4,8	0,5 - 0,7	1,7 - 1,9	2,9 - 3,1	5,8 - 6,0	0,8 - 1,0	1,6 - 1,8
Sample ID		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Note																						
Dry matter % wt.		80.9	83.4	91.6	95.2	83.2	80.2	94.1	80.7	78.6	89.2	82.3	95.6	79.6	83.5	94.2	88.1	84.8	94.7	95.2	81.3	83.2
Chlorinated pesticides mg/kg dry matter																						
α- HCH	ND	0.34	< 0.2	< 0.2	< 0.2	0.44	< 0.2	< 0.2	49.7	7.9	4.65	< 0.2	< 0.2	8.72	1.21	< 0.2	< 0.2	< 0.2	< 0.2	1.74	< 0.2	< 0.2
β - HCH	ND	10.5	1.96	< 0.2	0.42	1.2	0.3	< 0.2	11.7	3.89	6.61	< 0.2	< 0.2	1.58	0.87	< 0.2	0.69	< 0.2	< 0.2	0.72	< 0.2	< 0.2
γ - HCH (lindane)	ND	0.51	< 0.2	< 0.2	0.32	0.26	0.24	< 0.2	53.1	37.3	0.32	< 0.2	< 0.2	< 0.2	1.69	< 0.2	0.5	< 0.2	< 0.2	19.2	< 0.2	< 0.2
δ - HCH	ND	< 0.2	< 0.2	< 0.2	< 0.2	0.25	< 0.2	< 0.2	4.44	1.72	1.58	< 0.2	< 0.2	0.2	< 0.2	< 0.2	0.79	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
HCH (sum)[1]	2	11.45	2.26	0.4	0.94	2.15	0.74	0.4	118.94	50.81	13.16	0.4	0.4	10.6	3.77	0.4	2.08	0.4	0.4	21.76	0.4	0.4
HCB	ND	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	0.34	< 0.2	< 0.2	1.89	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Heptachlor	4	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Aldrin	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Heptachlorepoxid	4	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endosulfan	4	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Dieldrin	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endrin	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
drins (sum)[2]	4	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Σ DDE	ND	< 0.3	< 0.3	< 0.3	< 0.3	16.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	0.57	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Σ DDD	ND	< 0.3	< 0.3	< 0.3	< 0.3	0.9	2.97	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	2.36	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Σ DDT	ND	< 0.3	< 0.3	< 0.3	< 0.3	23.3	79.5	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	15.5	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Sum DDE, DDD, DDT	4	0.45	0.45	0.45	0.45	40.5	82.62	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	18.43	0.45	0.45	0.45	0.45	0.45
Methoxychlor	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Organophosphates mg/kg dry matter																						
dimethoate	ND				<0.1																<0.1	
fonofos	ND				<0.1																<0.1	
formothion	ND				<0.1																<0.1	
fenitrothion	ND				<0.1																<0.1	
malathion	ND				<0.1																<0.1	
phosmet	ND				<0.1																<0.1	
Thio- and dithiocarbamates mg/kg dry matter																						
EPTC	ND				< 0.025																< 0.025	
Butylate	ND				< 0.025																< 0.025	
Vernolate	ND				< 0.025																< 0.025	
Pebulate	ND				< 0.025																< 0.025	
Molinate	ND				< 0.025																< 0.025	
Cycloate	ND				< 0.025																< 0.025	
Prosulfocarb	ND				< 0.025																< 0.025	
Triazines mg/kg dry matter																						
Simazine	ND				< 0.025																< 0.025	< 0.025
Atrazine	6				< 0.025																< 0.025	< 0.025
Terbutylazine	ND				0.54																< 0.025	< 0.025
Desetylatrazine	ND				< 0.025																< 0.025	< 0.025
Propazine	ND				< 0.025																< 0.025	< 0.025
Terbutryne	ND				< 0.025																< 0.025	< 0.025
Prometryne	ND				< 0.025																< 0.025	< 0.025
Desisopropylatrazine	ND				< 0.025																< 0.025	< 0.025
Monochloracetic acid mg/kg dry matter																						
Chlorobenzenes mg/kg dry matter																						
chlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	0.08					< 0,01	< 0,01
1,3 dichlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01					< 0,01	< 0,01
1,4 dichlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	0.03					< 0,01	< 0,01
1,3 dichlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	0.02	0.03	0.16					0.04	0.07
1,3,5 trichlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	0.02	0.05	< 0,01					< 0,01	< 0,01
1,2,4 trlchlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	0.03	< 0,01	0.13					< 0,01	< 0,01
1,2,3 trichlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	0.02	< 0,01	0.03					< 0,01	< 0,01
Sum of 1,2,3,5 tetrachlorobenzene	ND																					
and 1,2,4,5 tetrachlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	0.04	< 0,01	0.02					< 0,01	< 0,01
1.2.3.4 tetrachlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	0.05	0.01	0.13					< 0,01	< 0,01
Pentachlorobenzene	ND				< 0,01						< 0,01	< 0,01	< 0,01	0.09	0.01	0.02					< 0,01	< 0,01

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-A-1	S-A-1	S-A-1	S-A-2	S-A-3	S-A-3	S-A-3	S-A-4	S-A-4	S-A-5	S-A-5	S-A-5	S-A-6	S-A-6	S-A-6	S-A-7	S-A-7	S-A-7	S-A-7	S-A-8	S-A-8
Sampling Depth (m bgl)		0,6 - 0,9	1,8 - 2,1	4,6 - 4,8	0,7 - 0,9	0,5 - 0,7	1,7 - 1,9	4,6 - 4,8	0,7 - 0,9	1,7 - 1,9	0,5 - 0,7	1,7 - 1,9	4,6 - 4,8	0,5 - 0,8	1,7 - 1,9	4,6 - 4,8	0,5 - 0,7	1,7 - 1,9	2,9 - 3,1	5,8 - 6,0	0,8 - 1,0	1,6 - 1,8
Sample ID		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Note																						
HCB	ND				< 0,01						< 0,01	< 0,01	< 0,01	0.92	0.11	0.01					< 0,01	< 0,01
chlorobenzenes (sum)[3]	30				0.05						0.05	0.05	0.05	1.165	0.24	0.60					0.09	0.12
Tetrachlorethane	ND																					
BTEX, n-alkanes, CHC mg/kg dry matter																						
1,1-DCE	0.3																					
1,2-c+t-DCE	1																					
1,2-DCA	4																					
TCE	60																					
PCE	4																					
Σ BTEX	ND																					
benzene	1																					
toluene	130																					
ethylbenzene	50																					
xylenes	25																					
P total mg/kg dry matter																					433	478
S total mg/kg dry matter					< 300																1820	620
Metals mg/kg dry matter																						
As	55																				15.6	18.7
Cd	12																				< 0,2	< 0,2
Cr (VI)	ND																				< 0,2	< 0,2
Cu	190																				24.2	24.1
Hg	10																				< 0,3	< 0,3
Pb	530																				10.9	11.4
Zn	720																				50.8	56.7
EOX mg/kg dry matter	ND																					
PCB mg/kg dry matter																						
k.28																						
k.52																						
k.101																						
k.118																						
k.138																						
k.153																						
k.180																						
Σ PCB	1																					

NA not applicable

[1] - sum of alfa, beta, gama a delta HCH isomers

[2] - sum of aldrin, dieldrin, and endrin

[3] - sum of all chlorobenzenes

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-A-8	S-A-9	S-A-9	S-A-9	S-A-11	S-A-11	S-A-11	S-A-12	S-A-12	S-A-12	S-A-13	S-A-13	S-A-14	S-A-14	S-A-14	S-A-14	S-A-15	S-A-15	S-A-15	S-A-16	S-A-16
Sampling Depth (m bgl)		3,4 - 3,6	0,5 - 0,7	1,7 - 1,9	4,6 - 4,8	0,5 - 0,7	1,7 - 1,9	4,6 - 4,8	0,5 - 0,7	1,7 - 1,9	3,4 - 3,6	0,9 - 1,0	2,4 - 2,6	0.7	1.8	3.0	4.0	0.6	1.8	3.0	0.6	1.8
Sample ID		22	23	24	25	26	27	28	29	30	31	32	33									
Note						1							2									
Dry matter % wt.		98.2	83.8	80.2	93.3	88.9	81.5	94.8	94.8	83.7	96.8	79.6	89.5	79.6	80	82.1	96.4	64.9	79.8	87.9	94.9	79.8
Chlorinated pesticides mg/kg dry matter																						
α- HCH	ND	0.32	< 0.2	0.4	< 0.2	15	0.38	< 0.2	0.2	< 0.2	1.13	1.56	14.1	17.1	<0.01	0.43	<0.01	3.74	<0.01	<0.01	0.23	0.17
β - HCH	ND	< 0.2	< 0.2	< 0.2	< 0.2	< 10	< 0.2	< 0.2	0.35	< 0.2	< 0.2	0.24	2.39	3.89	<0.01	0.12	<0.01	5.22	<0.01	<0.01	0.70	0.055
γ - HCH (lindane)	ND	2.52	< 0.2	0.29	0.26	< 10	0.5	< 0.2	0.89	< 0.2	0.49	0.94	2.66	0.18	<0.01	1.74	<0.01	0.38	<0.01	<0.01	0.020	0.12
δ - HCH	ND	0.28	0.96	< 0.2	< 0.2	55.8	0.46	< 0.2	0.27	< 0.2	0.51	1.17	0.89	0.17	<0.01	3.14	<0.01	0.26	<0.01	<0.01	0.020	0.069
HCH (sum)[1]	2	3.22	1.26	0.89	0.56	80.8	1.44	0.4	1.71	0.4	2.23	3.91	20.04	21.3	<0.1	5.43	<0.1	9.60	<0.1	<0.1	0.97	0.41
HCB	ND	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	<0.01	<0.01	<0.01	<0.01	0.088	<0.01	<0.01	<0.01	<0.01
Heptachlor	4	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Aldrin	ND	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Heptachlorepoxid	4	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endosulfan	4	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dieldrin	ND	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endrin	ND	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
drins (sum)[2]	4	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	<0.02	<0.02	<0.02	<0.02	0.19	<0.02	<0.02	<0.02	<0.02
Σ DDE	ND	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	0.051	<0.02	<0.02	<0.02	3.87	<0.02	<0.02	<0.02	<0.02
Σ DDD	ND	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	0.80	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.026	<0.02
Σ DDT	ND	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	80.3	< 0.30	< 0.30	< 0.30	< 0.30	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Sum DDE, DDD, DDT	4	0.45	0.45	0.45	0.45	0.45	0.45	0.45	80.6	0.45	0.45	0.45	0.45	0.85	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	ND	< 0.3	< 0.3	< 0.3	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Organophosphates mg/kg dry matter																						
dimethoate	ND					<0.1						0.3										
fonofos	ND					<0.1						<0.1										
formothion	ND					<0.1						<0.1										
fenitrothion	ND					<0.1						<0.1										
malathion	ND					<0.1						<0.1										
phosmet	ND					<0.1						<0.1										
Thio- and dithiocarbamates mg/kg dry matter																						
EPTC	ND					1.2						< 0.025	0.01									
Butylate	ND					< 0.025						< 0.025	< 0.025									
Vernolate	ND					0.25						< 0.025	< 0.025									
Pebulate	ND					0.04						< 0.025	< 0.025									
Molinate	ND					1.1						0.07	0.52									
Cycloate	ND					0.3						0.07	1.81									
Prosulfocarb	ND					< 0.025						< 0.025	< 0.025									
Triazines mg/kg dry matter																						
Simazine	ND	< 0.025				< 0.025	< 0.025	< 0.025				< 0.025	< 0.025									
Atrazine	6	< 0.025				< 0.025	< 0.025	< 0.025				< 0.025	< 0.025									
Terbutylazine	ND	< 0.025				< 0.025	< 0.025	< 0.025				0.33	0.66									
Desetylatrazine	ND	< 0.025				< 0.025	< 0.025	< 0.025				< 0.025	< 0.025									
Propazine	ND	< 0.025				< 0.025	< 0.025	< 0.025				< 0.025	< 0.025									
Terbutryne	ND	< 0.025				< 0.025	< 0.025	< 0.025				< 0.025	< 0.025									
Prometryne	ND	< 0.025				< 0.025	< 0.025	< 0.025				< 0.025	< 0.025									
Desisopropylatrazine	ND	< 0.025				< 0.025	< 0.025	< 0.025				< 0.025	< 0.025									
Monochloracetic acid mg/kg dry matter																						
Chlorobenzenes mg/kg dry matter																						
chlorobenzene	ND	< 0,01																				
1,3 dichlorobenzene	ND	< 0,01																				
1,4 dichlorobenzene	ND	< 0,01																				
1,3 dichlorobenzene	ND	0.20																				
1,3,5 trichlorobenzene	ND	< 0,01																				
1,2,4 trlchlorobenzene	ND	< 0,01																				
1,2,3 trichlorobenzene	ND	< 0,01																				
Sum of 1,2,3,5 tetrachlorobenzene	ND																					
and 1,2,4,5 tetrachlorobenzene	ND	< 0,01																				
1.2.3.4 tetrachlorobenzene	ND	< 0,01																				
Pentachlorobenzene	ND	< 0,01																				

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-A-8	S-A-9	S-A-9	S-A-9	S-A-11	S-A-11	S-A-11	S-A-12	S-A-12	S-A-12	S-A-13	S-A-13	S-A-14	S-A-14	S-A-14	S-A-14	S-A-15	S-A-15	S-A-15	S-A-16	S-A-16
Sampling Depth (m bgl)		3,4 - 3,6	0,5 - 0,7	1,7 - 1,9	4,6 - 4,8	0,5 - 0,7	1,7 - 1,9	4,6 - 4,8	0,5 - 0,7	1,7 - 1,9	3,4 - 3,6	0,9 - 1,0	2,4 - 2,6	0.7	1.8	3.0	4.0	0.6	1.8	3.0	0.6	1.8
Sample ID		22	23	24	25	26	27	28	29	30	31	32	33									
Note						1							2									
HCB	ND	< 0,01																				
chlorobenzenes (sum)[3]	30	0.25																				
Tetrachlorethane	ND																					
BTEX, n-alkanes, CHC mg/kg dry matter																						
1,1-DCE	0.3																					
1,2-c+t-DCE	1																					
1,2-DCA	4																					
TCE	60																					
PCE	4																					
Σ BTEX	ND																					
benzene	1																					
toluene	130																					
ethylbenzene	50																					
xylenes	25																					
P total mg/kg dry matter		188				390	489	392				402	446									
S total mg/kg dry matter		< 300				< 300	856	< 300				401	456									
Metals mg/kg dry matter																						
As	55					21.2	23.2															
Cd	12					< 0,2	< 0,2															
Cr (VI)	ND					< 0,2	< 0,2															
Cu	190					21.9	28.3															
Hg	10					< 0,3	0.47		< 0,3													
Pb	530					9.89	17.6															
Zn	720					45.1	64.6															
EOX mg/kg dry matter	ND																					
PCB mg/kg dry matter																						
k.28																						
k.52																						
k.101																						
k.118																						
k.138																						
k.153																						
k.180																						
Σ PCB	1																					

NA not applicable

[1] - sum of alfa, beta, gama a delta HCH isomers

[2] - sum of aldrin, dieldrin, and endrin

[3] - sum of all chlorobenzenes

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-A-16	S-A-16	S-A-17	S-A-17	S-A-17	S-B-1	S-B-1	S-B-1	S-B-2	S-B-2	S-B-3a	S-B-3a	S-B-3b	S-B-3b	S-B-4	S-B-5	S-B-5	S-B-6	S-B-6	S-B-7	S-B-8
Sampling Depth (m bgl)		3.0	4.6	0.8	1.8	3.0	0,5 - 0,7	1,7 - 1,9	3,4 - 3,6	0,6 - 0,8	2,0 - 2,2	0,6 - 0,8	2,2 - 2,4	0,6 - 0,8	2,2 - 2,4	0,6 - 0,9	3,2 - 3,5	5,8 - 6,0	0,6 - 0,8	5,8 - 6,0	5,8 - 6,0	4,6 - 4,8
Sample ID							34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Note												3	4									
Dry matter % wt.		82.9	97.4	79.6	78.7	84.9	92.9	84.9	82.9	84.1	94.2	82.6	81.5	80.2	85.8	90.8	93.1	77.8	91.9	80.9	79.1	79.1
Chlorinated pesticides mg/kg dry matter																						
α- HCH	ND	<0.01	<0.01	<0.01	<0.01	0.43	1320	20 500	4300	2360	129 300	3280	46.9	44 200	85 900	2820	čistý α-HCH	12.8	800	10.6	230	18 900
β - HCH	ND	<0.01	<0.01	<0.01	<0.01	0.12	360	680	170	1320	9 550	900	170	4050	4300	190		1.75	63.6	1.15	9.18	408
γ - HCH (lindane)	ND	<0.01	<0.01	<0.01	<0.01	1.74	3600	920	640	1300	355 500	1200	< 10	830	1810	88		3.66	28.7	0.92	5.73	209
δ - HCH	ND	<0.01	<0.01	<0.01	<0.01	3.14	6510	1570	960	6100	321 600	3100	11	5430	500	140		10.2	4.83	1.13	1.64	42.1
HCH (sum)[1]	2	<0.1	<0.1	<0.1	<0.1	<0.1	11790	23 670	6070	11080	815 950	8480	232.9	54 510	92 510	3238		28.41	897.13	13.8	246.55	19 559.1
HCB	ND	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Heptachlor	4	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Aldrin	ND	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Heptachlorepoxid	4	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endosulfan	4	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Dieldrin	ND	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endrin	ND	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
drins (sum)[2]	4	<0.02	<0.02	<0.02	<0.02	<0.02	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45		0.45	0.45	0.45	0.45	0.45
Σ DDE	ND	<0.02	<0.02	<0.02	<0.02	<0.02	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Σ DDD	ND	<0.02	<0.02	<0.02	<0.02	<0.02	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Σ DDT	ND	<0.02	<0.02	<0.02	<0.02	<0.02	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Sum DDE, DDD, DDT	4	<0.1	<0.1	<0.1	<0.1	<0.1	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45		0.45	0.45	0.45	0.45	0.45
Methoxychlor	ND	<0.01	<0.01	<0.01	<0.01	<0.01	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.30	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Organophosphates mg/kg dry matter																						
dimethoate	ND											<0.1										
fonofos	ND											<0.1										
formothion	ND											<0.1										
fenitrothion	ND											<0.1										
malathion	ND											<0.1										
phosmet	ND											<0.1										
Thio- and dithiocarbamates mg/kg dry matter																						
EPTC	ND											< 0.025										
Butylate	ND											< 0.025										
Vernolate	ND											0.01										
Pebulate	ND											0.04										
Molinate	ND											< 0.025										
Cycloate	ND											0.27										
Prosulfocarb	ND											< 0.025										
Triazines mg/kg dry matter																						
Simazine	ND											< 0.025	< 0.025									
Atrazine	6											< 0.025	< 0.025									
Terbutylazine	ND											< 0.025	< 0.025									
Desetylatrazine	ND											< 0.025	< 0.025									
Propazine	ND											< 0.025	< 0.025									
Terbutryne	ND											< 0.025	< 0.025									
Prometryne	ND											< 0.025	< 0.025									
Desisopropylatrazine	ND											< 0.025	< 0.025									
Monochloracetic acid mg/kg dry matter																						
Chlorobenzenes mg/kg dry matter																						
chlorobenzene	ND											0.13	0.04									
1,3 dichlorobenzene	ND											0.06	0.03									
1,4 dichlorobenzene	ND											0.06	0.04									
1,3 dichlorobenzene	ND											0.36	0.13									
1,3,5 trichlorobenzene	ND											0.04	0.33									
1,2,4 trlchlorobenzene	ND											2.88	0.66									
1,2,3 trichlorobenzene	ND											1.31	0.23									
Sum of 1,2,3,5 tetrachlorobenzene	ND																					
and 1,2,4,5 tetrachlorobenzene	ND											0.25	0.18									
1.2.3.4 tetrachlorobenzene	ND											1.88	0.40									
Pentachlorobenzene	ND											0.59	0.10									

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-A-16	S-A-16	S-A-17	S-A-17	S-A-17	S-B-1	S-B-1	S-B-1	S-B-2	S-B-2	S-B-3a	S-B-3a	S-B-3b	S-B-3b	S-B-4	S-B-5	S-B-5	S-B-6	S-B-6	S-B-7	S-B-8
Sampling Depth (m bgl)		3.0	4.6	0.8	1.8	3.0	0,5 - 0,7	1,7 - 1,9	3,4 - 3,6	0,6 - 0,8	2,0 - 2,2	0,6 - 0,8	2,2 - 2,4	0,6 - 0,8	2,2 - 2,4	0,6 - 0,9	3,2 - 3,5	5,8 - 6,0	0,6 - 0,8	5,8 - 6,0	5,8 - 6,0	4,6 - 4,8
Sample ID							34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49
Note												3	4									
HCB	ND											0.26	0.10									
chlorobenzenes (sum)[3]	30											7.57	2.06									
Tetrachlorethane	ND																					
BTEX, n-alkanes, CHC mg/kg dry matter																						
1,1-DCE	0.3																					
1,2-c+t-DCE	1																					
1,2-DCA	4																					
TCE	60																					
PCE	4																					
Σ BTEX	ND																					
benzene	1																					
toluene	130																					
ethylbenzene	50																					
xylenes	25																					
P total mg/kg dry matter												570	388									
S total mg/kg dry matter												467	467									
Metals mg/kg dry matter																						
As	55																					
Cd	12																					
Cr (VI)	ND																					
Cu	190																					
Hg	10																					
Pb	530																					
Zn	720																					
EOX mg/kg dry matter	ND																					
PCB mg/kg dry matter																						
k.28																						
k.52																						
k.101																						
k.118																						
k.138																						
k.153																						
k.180																						
Σ PCB	1																					

NA not applicable

[1] - sum of alfa, beta, gama a delta HCH isomers

[2] - sum of aldrin, dieldrin, and endrin

[3] - sum of all chlorobenzenes

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-B-9	S-B-10	S-B-10	S-B-11	S-B-11	S-B-12	S-B-13	S-B-13	S-B-13	S-B-14	S-B-14	S-B-14	S-B-15	S-B-15	S-B-15	S-B-16	S-B-16	S-B-16	S-B-16	S-B-16	S-B-17
Sampling Depth (m bgl)		5,8 - 6,0	5,8 - 6,0	6,8 - 7,0	1,8 - 2,0	5,8 - 6,0	5,8 - 6,0	0,5 - 0,7	2,6 - 2,8	4,6 - 4,8	0,6 - 0,8	2,9 - 3,1	4,6 - 4,8	0,5 - 0,7	2,9 - 3,1	4,6 - 4,8	0,0 - 0,3	0,3 - 0,7	1,4 - 1,7	2,9 - 3,1	4,1 - 4,3	0,5 - 0,6
Sample ID		50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Note											5		6				7	8	9			
Dry matter % wt.		79.6	78.3	81.6	92.6	80.1	81.4	80	89.3	96.7	91.9	84.3	96	83.1	97.3	95.7	88.3	84.1	80.7	90.8	98.1	93.1
Chlorinated pesticides mg/kg dry matter																						
α- HCH	ND	10	79	110	čistý α-HCH	10	14	0.57	1.81	0.43	150	35.1	510	79.6	17.9	20.5	39 100	94 300	9540	30.6	2.66	1.69
β - HCH	ND	< 0.2	4.97	6.68		0.86	1.52	0.33	0.28	0.49	12.6	2.73	12.8	5.63	0.75	1.2	1130	4850	12 080	1.3	0.23	0.95
γ - HCH (lindane)	ND	< 0.2	5.04	3.96		1.24	1.52	0.95	0.45	0.65	44.4	2.27	10	11.3	1.14	13.9	37 700	268 800	2340	2.22	0.47	0.32
δ - HCH	ND	< 0.2	1.57	2.6		1.26	1.95	2.35	0.47	3.48	10.3	2.46	3.68	13.9	1.03	27.3	30 700	16 400	2070	4.96	1.36	0.51
HCH (sum)[1]	2	10.3	90.58	123.24		13.36	18.99	4.2	3.01	5.05	217.3	42.56	536.48	110.43	20.82	62.9	108 630	384 350	26 030	39.08	4.72	3.47
HCB	ND	< 0.2	< 0.2	< 0.2		< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2
Heptachlor	4	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Aldrin	ND	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Heptachlorepoxid	4	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endosulfan	4	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Dieldrin	ND	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Endrin	ND	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
drins (sum)[2]	4	0.45	0.45	0.45		0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Σ DDE	ND	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	7.49	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Σ DDD	ND	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	0.33	< 0.3	< 0.3	114	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Σ DDT	ND	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	4.39	< 0.3	< 0.3	106	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Sum DDE, DDD, DDT	4	0.45	0.45	0.45		0.45	0.45	4.87	0.45	0.45	227.49	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45
Methoxychlor	ND	< 0.3	< 0.3	< 0.3		< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Organophosphates mg/kg dry matter																						
dimethoate	ND		<0.1								<0.1						<0.1					
fonofos	ND		<0.1								<0.1						<0.1					
formothion	ND		<0.1								<0.1						<0.1					
fenitrothion	ND		<0.1								<0.1						<0.1					
malathion	ND		<0.1								<0.1						<0.1					
phosmet	ND		<0.1								<0.1						<0.1					
Thio- and dithiocarbamates mg/kg dry matter																						
EPTC	ND		< 0.025								< 0.025						< 0.025	< 0.025				
Butylate	ND		< 0.025								< 0.025						< 0.025	< 0.025				
Vernolate	ND		< 0.025								< 0.025						< 0.025	< 0.025				
Pebulate	ND		< 0.025								< 0.025						< 0.025	< 0.025				
Molinate	ND		< 0.025								< 0.025						< 0.025	< 0.025				
Cycloate	ND		< 0.025								< 0.025						< 0.025	< 0.025				
Prosulfocarb	ND		< 0.025								< 0.025						< 0.025	< 0.025				
Triazines mg/kg dry matter																						
Simazine	ND		< 0.025	< 0.025							< 0.025	< 0.025	< 0.025				< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	
Atrazine	6		< 0.025	< 0.025							< 0.025	< 0.025	< 0.025				< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	
Terbutylazine	ND		< 0.025	< 0.025							< 0.025	< 0.025	< 0.025				< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	
Desetylatrazine	ND		< 0.025	< 0.025							< 0.025	< 0.025	< 0.025				< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	
Propazine	ND		< 0.025	< 0.025							< 0.025	< 0.025	< 0.025				< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	
Terbutryne	ND		< 0.025	< 0.025							< 0.025	< 0.025	< 0.025				< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	
Prometryne	ND		< 0.025	< 0.025							< 0.025	< 0.025	< 0.025				< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	
Desisopropylatrazine	ND		< 0.025	< 0.025							< 0.025	< 0.025	< 0.025				< 0.025	< 0.025	< 0.025	< 0.025	< 0.025	
Monochloracetic acid mg/kg dry matter																						
Chlorobenzenes mg/kg dry matter																						
chlorobenzene	ND		0.03	0.03							0.13	< 0,01	< 0,01				27.25	64.23	1.37	0.01	< 0,01	
1,3 dichlorobenzene	ND		< 0,01	< 0,01							0.04	< 0,01	0.01				17.61	25.10	0.20	< 0,01	< 0,01	
1,4 dichlorobenzene	ND		0.12	0.06							1.10	< 0,01	0.01				26.90	49.35	0.35	< 0,01	< 0,01	
1,3 dichlorobenzene	ND		0.25	0.13							0.79	0.01	0.02				110.2	16.59	0.74	0.08	0.03	
1,3,5 trichlorobenzene	ND		< 0,01	< 0,01							0.05	< 0,01	< 0,01				4.60	15.63	0.19	< 0,01	< 0,01	
1,2,4 trlchlorobenzene	ND		0.05	0.01							1.65	< 0,01	< 0,01				107.2	36.44	1.49	< 0,01	< 0,01	
1,2,3 trichlorobenzene	ND		< 0,01	< 0,01							0.22	< 0,01	< 0,01				25.85	52.74	0.50	< 0,01	< 0,01	
Sum of 1,2,3,5 tetrachlorobenzene	ND																					
and 1,2,4,5 tetrachlorobenzene	ND		< 0,01	< 0,01							0.10	< 0,01	< 0,01				4.80	12.94	1.21	< 0,01	< 0,01	
1.2.3.4 tetrachlorobenzene	ND		< 0,01	< 0,01							2.19	< 0,01	< 0,01				153.6	305.7	48.04	0.02	< 0,01	
Pentachlorobenzene	ND		< 0,01	< 0,01							0.13	< 0,01	< 0,01				32.68	56.99	3.85	0.01	< 0,01	

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-B-9	S-B-10	S-B-10	S-B-11	S-B-11	S-B-12	S-B-13	S-B-13	S-B-13	S-B-14	S-B-14	S-B-14	S-B-15	S-B-15	S-B-15	S-B-16	S-B-16	S-B-16	S-B-16	S-B-16	S-B-17
Sampling Depth (m bgl)		5,8 - 6,0	5,8 - 6,0	6,8 - 7,0	1,8 - 2,0	5,8 - 6,0	5,8 - 6,0	0,5 - 0,7	2,6 - 2,8	4,6 - 4,8	0,6 - 0,8	2,9 - 3,1	4,6 - 4,8	0,5 - 0,7	2,9 - 3,1	4,6 - 4,8	0,0 - 0,3	0,3 - 0,7	1,4 - 1,7	2,9 - 3,1	4,1 - 4,3	0,5 - 0,6
Sample ID		50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
Note											5		6				7	8	9			
HCB	ND		< 0,01	< 0,01							0.01	< 0,01	< 0,01				1.18	2.66	0.09	< 0,01	< 0,01	
chlorobenzenes (sum)[3]	30		0.48	0.26							6.31	0.06	0.08				507	625	57	0.15	0.08	
Tetrachlorethane	ND																					
BTEX, n-alkanes, CHC mg/kg dry matter																						
1,1-DCE	0.3																					
1,2-c+t-DCE	1																					
1,2-DCA	4																					
TCE	60																					
PCE	4																					
Σ BTEX	ND																					
benzene	1																					
toluene	130																					
ethylbenzene	50																					
xylenes	25																					
P total mg/kg dry matter			386	544							280	911	289				462	269	435	440	200	
S total mg/kg dry matter			< 300	302							399	< 300	< 300				1470	393	< 300	< 300	352	
Metals mg/kg dry matter																						
As	55										5.2	11.5	4.1				13.6	6.52	23.9			
Cd	12										< 0,2	< 0,2	< 0,2				0.32	< 0,2	0.38			
Cr (VI)	ND										< 0,2	< 0,2	< 0,2				< 0,2	< 0,2	< 0,2			
Cu	190										15.2	22.3	14.5				32.2	116	20.9			
Hg	10										< 0,3	< 0,3	< 0,3				1.31	< 0,3	< 0,3			
Pb	530										3.35	8.71	1.87				66.3	256	41.1			
Zn	720										28	54.8	26.8				75.1	39.9	46.4			
EOX mg/kg dry matter	ND																					
PCB mg/kg dry matter																						
k.28																						
k.52																						
k.101																						
k.118																						
k.138																						
k.153																						
k.180																						
Σ PCB	1																					

NA not applicable

[1] - sum of alfa, beta, gama a delta HCH isomers

[2] - sum of aldrin, dieldrin, and endrin

[3] - sum of all chlorobenzenes

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-B-17	S-B-17	S-B-18	S-B-18	S-B-18	S-B-19	S-B-19	S-B-19	S-B-20	S-B-20	S-B-20	S-B-20	S-C-1	S-C-1	S-C-1	S-C-2	S-C-2	S-C-2	S-C-3	S-C-3	S-C-3
Sampling Depth (m bgl)		1,5 - 1,7	4,6 - 4,8	0,5 - 0,7	1,7 - 1,9	5,6 - 5,8	0,0 - 0,2	1,5 - 1,7	4,6 - 4,8	0.5	1.8	3.0	4.7	0,6 - 0,8	1.8 - 2.1	3.4 - 3.6	1.5 - 1.8	4.2 - 4.4	5.8 - 6.0	0.7 - 0.9	1.5 - 1.8	2.7 - 2.9
Sample ID		71	72	73	74	75	76	77	78					79	80	81	82	83	84	85	86	87
Note																						
Dry matter % wt.		78.2	95.1	94.8	80.1	96.6	92	83.2	96.3	80.1	83.8	91.3	97.9	88.3	82.2	96.4	78.2	90.5	96.4	79.6	80.2	88.1
Chlorinated pesticides mg/kg dry matter																						
α- HCH	ND	3.19	0.32	12.3	10	< 0.2	37 300	66.1	3.63	<0.01	0.064	0.10	0.097	4.35	3.82	0.22						
β - HCH	ND	< 0.2	< 0.2	19.7	1.98	< 0.2	3 420	3.45	< 0.2	<0.01	0.019	0.031	0.022	0.31	0.23	< 0.2						
γ - HCH (lindane)	ND	0.33	0.25	1.35	1	< 0.2	97 600	22.7	1.52	<0.01	0.10	0.14	0.073	2.92	0.59	0.3						
δ - HCH	ND	0.61	0.48	1.72	0.86	< 0.2	137 800	37.1	4.35	<0.01	0.11	0.16	0.091	6.19	1.01	1.65						
HCH (sum)[1]	2	4.23	1.15	35.07	13.84	0.4	276 120	129.35	9.6	<0.1	0.29	0.28	0.28	13.77	5.65	2.27						
HCB	ND	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	<0.01	<0.01	<0.01	<0.01	< 0.2	< 0.2	< 0.2						
Heptachlor	4	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.01	<0.01	<0.01	<0.01	< 0.3	< 0.3	< 0.3						
Aldrin	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.01	<0.01	<0.01	<0.01	< 0.3	< 0.3	< 0.3						
Heptachlorepoxid	4	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.01	<0.01	<0.01	<0.01	< 0.3	< 0.3	< 0.3						
Endosulfan	4	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.01	<0.01	<0.01	<0.01	< 0.3	< 0.3	< 0.3						
Dieldrin	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.01	<0.01	<0.01	<0.01	< 0.3	< 0.3	< 0.3						
Endrin	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.01	<0.01	<0.01	<0.01	< 0.3	< 0.3	< 0.3						
drins (sum)[2]	4	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	<0.02	<0.02	<0.02	<0.02	0.45	0.45	0.45						
Σ DDE	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.02	<0.02	<0.02	<0.02	< 0.3	< 0.3	< 0.3						
Σ DDD	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.02	<0.02	<0.02	<0.02	< 0.3	< 0.3	< 0.3						
Σ DDT	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.02	<0.02	<0.02	<0.02	< 0.3	< 0.3	< 0.3						
Sum DDE, DDD, DDT	4	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	<0.1	<0.1	<0.1	<0.1	0.45	0.45	0.45						
Methoxychlor	ND	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	<0.01	<0.01	<0.01	<0.01	< 0.3	< 0.3	< 0.3						
Organophosphates mg/kg dry matter																						
dimethoate	ND			<0.1	<0.1																	
fonofos	ND			<0.1	0.15																	
formothion	ND			<0.1	<0.1																	
fenitrothion	ND			<0.1	<0.1																	
malathion	ND			<0.1	<0.1																	
phosmet	ND			<0.1	<0.1																	
Thio- and dithiocarbamates mg/kg dry matter																						
EPTC	ND			< 0.025																		
Butylate	ND			< 0.025																		
Vernolate	ND			< 0.025																		
Pebulate	ND			< 0.025																		
Molinate	ND			< 0.025																		
Cycloate	ND			< 0.025																		
Prosulfocarb	ND			< 0.025																		
Triazines mg/kg dry matter																						
Simazine	ND			< 0.025	< 0.025	< 0.025																
Atrazine	6			< 0.025	< 0.025	< 0.025																
Terbutylazine	ND			< 0.025	< 0.025	< 0.025																
Desetylatrazine	ND			< 0.025	< 0.025	< 0.025																
Propazine	ND			< 0.025	< 0.025	< 0.025																
Terbutryne	ND			< 0.025	< 0.025	< 0.025																
Prometryne	ND			< 0.025	< 0.025	< 0.025																
Desisopropylatrazine	ND			< 0.025	< 0.025	< 0.025																
Monochloracetic acid mg/kg dry matter														< 0,01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Chlorobenzenes mg/kg dry matter																						
chlorobenzene	ND			< 0,01	< 0,01	< 0,01																
1,3 dichlorobenzene	ND			0.02	0.03	< 0,01																
1,4 dichlorobenzene	ND			0.01	0.03	< 0,01																
1,3 dichlorobenzene	ND			0.02	0.08	0.02																
1,3,5 trichlorobenzene	ND			2.26	0.31	0.01																
1,2,4 trlchlorobenzene	ND			0.40	1.30	0.04																
1,2,3 trichlorobenzene	ND			0.79	0.67	0.02																
Sum of 1,2,3,5 tetrachlorobenzene	ND																					
and 1,2,4,5 tetrachlorobenzene	ND			0.04	0.01	< 0,01																
1.2.3.4 tetrachlorobenzene	ND			0.15	0.09	0.01																
Pentachlorobenzene	ND			0.07	< 0,01	0.01																

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-B-17	S-B-17	S-B-18	S-B-18	S-B-18	S-B-19	S-B-19	S-B-19	S-B-20	S-B-20	S-B-20	S-B-20	S-C-1	S-C-1	S-C-1	S-C-2	S-C-2	S-C-2	S-C-3	S-C-3	S-C-3
Sampling Depth (m bgl)		1,5 - 1,7	4,6 - 4,8	0,5 - 0,7	1,7 - 1,9	5,6 - 5,8	0,0 - 0,2	1,5 - 1,7	4,6 - 4,8	0.5	1.8	3.0	4.7	0,6 - 0,8	1.8 - 2.1	3.4 - 3.6	1.5 - 1.8	4.2 - 4.4	5.8 - 6.0	0.7 - 0.9	1.5 - 1.8	2.7 - 2.9
Sample ID		71	72	73	74	75	76	77	78					79	80	81	82	83	84	85	86	87
Note																						
HCB	ND			0.08	< 0,01	< 0,01																
chlorobenzenes (sum)[3]	30			3.805	2.525	0.13																
Tetrachlorethane	ND																					
BTEX, n-alkanes, CHC mg/kg dry matter																						
1,1-DCE	0.3													< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-c+t-DCE	1													< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-DCA	4													< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
TCE	60													< 0.05	< 0.05	< 0.05	0.1	< 0.05	< 0.05	0.2	0.17	< 0.05
PCE	4													< 0.05	< 0.05	< 0.05	0.083	0.19	< 0.05	< 0.05	< 0.05	< 0.05
Σ BTEX	ND													< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4
benzene	1													< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
toluene	130													< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ethylbenzene	50													< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
xylenes	25													< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
P total mg/kg dry matter				102	528	278																
S total mg/kg dry matter				401	1120	< 300																
Metals mg/kg dry matter																						
As	55																					
Cd	12																					
Cr (VI)	ND																					
Cu	190																					
Hg	10																					
Pb	530																					
Zn	720																					
EOX mg/kg dry matter	ND			20.9	7.37	< 1	43400	39.6	< 1													
PCB mg/kg dry matter																						
k.28																						
k.52																						
k.101																						
k.118																						
k.138																						
k.153																						
k.180																						
Σ PCB	1																					

NA not applicable

[1] - sum of alfa, beta, gama a delta HCH isomers

[2] - sum of aldrin, dieldrin, and endrin

[3] - sum of all chlorobenzenes

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-C-4	S-C-4	S-C-4	S-C-5	S-C-5	S-C-5	S-C-6	S-C-6	S-C-6	S-D-2	S-D-2	S-D-2	S-D-3	S-D-3	S-D-3	S-D-4	S-D-4	S-D-4	S-D-5	S-D-5	S-D-5
Sampling Depth (m bgl)		1.8 - 2.1	4.6 - 4.8	5.8 - 6.0	0.6 - 0.8	1.4 - 1.6	5.8 - 6.0	0.5 - 0.7	1.8 - 2.1	4.6 - 4.8	0.6 - 0.8	1.7 - 2.0	4.6 - 4.8	0.7 - 0.8	1.5 - 1.8	4.4 - 4.6	0.6 - 0.8	1.8 - 2.1	4.6 - 4.8	0.8 - 1.0	1.5 - 1.7	4.6 - 4.8
Sample ID		88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Note																						
Dry matter % wt.		81.9	94	96.2	81	72	94.7	89.3	77.4	92.9	85.1	77.5	97.1	83.8	79.1	69	82.3	79.2	93.5	80.1	78	96.2
Chlorinated pesticides mg/kg dry matter																						
α- HCH	ND				0.91	0.7	0.23										1.1	4.58	0.84			
β - HCH	ND				0.47	< 0.2	< 0.2										0.51	1.82	< 0.2			
γ - HCH (lindane)	ND				0.78	0.46	0.29										10	10	7.28			
δ - HCH	ND				1.92	1.14	0.62										14.6	51.7	12.6			
HCH (sum)[1]	2				4.08	2.4	1.24										26.21	68.1	20.82			
HCB	ND				< 0.2	< 0.2	< 0.2										< 0.2	< 0.2	< 0.2			
Heptachlor	4				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Aldrin	ND				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Heptachlorepoxid	4				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Endosulfan	4				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Dieldrin	ND				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Endrin	ND				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
drins (sum)[2]	4				0.45	0.45	0.45										0.45	0.45	0.45			
Σ DDE	ND				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Σ DDD	ND				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Σ DDT	ND				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Sum DDE, DDD, DDT	4				0.45	0.45	0.45										0.45	0.45	0.45			
Methoxychlor	ND				< 0.3	< 0.3	< 0.3										< 0.3	< 0.3	< 0.3			
Organophosphates mg/kg dry matter																						
dimethoate	ND																					
fonofos	ND																					
formothion	ND																					
fenitrothion	ND																					
malathion	ND																					
phosmet	ND																					
Thio- and dithiocarbamates mg/kg dry matter																						
EPTC	ND																					
Butylate	ND																					
Vernolate	ND																					
Pebulate	ND																					
Molinate	ND																					
Cycloate	ND																					
Prosulfocarb	ND																					
Triazines mg/kg dry matter																						
Simazine	ND																					
Atrazine	6																					
Terbutylazine	ND																					
Desetylatrazine	ND																					
Propazine	ND																					
Terbutryne	ND																					
Prometryne	ND																					
Desisopropylatrazine	ND																					
Monochloracetic acid mg/kg dry matter					< 0.01	< 0.01	< 0.01															
Chlorobenzenes mg/kg dry matter																						
chlorobenzene	ND																					
1,3 dichlorobenzene	ND																					
1,4 dichlorobenzene	ND																					
1,3 dichlorobenzene	ND																					
1,3,5 trichlorobenzene	ND																					
1,2,4 trlchlorobenzene	ND																					
1,2,3 trichlorobenzene	ND																					
Sum of 1,2,3,5 tetrachlorobenzene	ND																					
and 1,2,4,5 tetrachlorobenzene	ND																					
1.2.3.4 tetrachlorobenzene	ND																					
Pentachlorobenzene	ND																					

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-C-4	S-C-4	S-C-4	S-C-5	S-C-5	S-C-5	S-C-6	S-C-6	S-C-6	S-D-2	S-D-2	S-D-2	S-D-3	S-D-3	S-D-3	S-D-4	S-D-4	S-D-4	S-D-5	S-D-5	S-D-5
Sampling Depth (m bgl)		1.8 - 2.1	4.6 - 4.8	5.8 - 6.0	0.6 - 0.8	1.4 - 1.6	5.8 - 6.0	0.5 - 0.7	1.8 - 2.1	4.6 - 4.8	0.6 - 0.8	1.7 - 2.0	4.6 - 4.8	0.7 - 0.8	1.5 - 1.8	4.4 - 4.6	0.6 - 0.8	1.8 - 2.1	4.6 - 4.8	0.8 - 1.0	1.5 - 1.7	4.6 - 4.8
Sample ID		88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108
Note																						
HCB	ND																					
chlorobenzenes (sum)[3]	30																					
Tetrachlorethane	ND																					
BTEX, n-alkanes, CHC mg/kg dry matter																						
1,1-DCE	0.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1												
1,2-c+t-DCE	1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1												
1,2-DCA	4	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1												
TCE	60	0.26	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05												
PCE	4	0.09	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05												
Σ BTEX	ND	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4	< 0.4												
benzene	1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1												
toluene	130	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1												
ethylbenzene	50	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1												
xylenes	25	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1												
P total mg/kg dry matter																						
S total mg/kg dry matter																						
Metals mg/kg dry matter																						
As	55																					
Cd	12																					
Cr (VI)	ND																					
Cu	190																					
Hg	10				< 0.3	4.25	< 0.3				336	240	2.79	< 0.3	< 0.3	1.55	< 0.3	< 0.3	< 0.3	4.74	162	81.4
Pb	530																					
Zn	720																					
EOX mg/kg dry matter	ND																					
PCB mg/kg dry matter																						
k.28																						
k.52																						
k.101																						
k.118																						
k.138																						
k.153																						
k.180																						
Σ PCB	1																					

NA not applicable

[1] - sum of alfa, beta, gama a delta HCH isomers

[2] - sum of aldrin, dieldrin, and endrin

[3] - sum of all chlorobenzenes

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-D-6	S-D-6	S-D-6	S-D-7	S-D-7	S-D-7	S-D-8	S-D-8	S-D-9	S-D-9	S-D-9	S-D-10	S-D-10	S-D-10	S-D-12
Sampling Depth (m bgl)		0.6 - 0.8	1.8 - 2.1	4.6 - 4.8	0.6 - 0.8	1.7 - 2.1	3.4 - 3.6	0.7 - 0.9	1.8 - 2.0	0.5 - 0.7	1.5 - 1.7	3.4 - 3.6	0.6	1.8	3.0	1.8
Sample ID		109	110	111	112	113	114	115	116	117	118	119				
Note																
Dry matter % wt.		79.2	78.6	96.6	81.2	80	90.1	71.8	76.8	87.1	83.6	96.6	77.8	81.7	77.3	76.3
Chlorinated pesticides mg/kg dry matter																
α- HCH	ND									0.8	2.34	0.49				
β - HCH	ND									< 0.2	0.41	< 0.2				
γ - HCH (lindane)	ND									0.8	9.35	0.4				
δ - HCH	ND									1.29	10.6	0.63				
HCH (sum)[1]	2									2.99	22.7	1.62				
HCB	ND									< 0.2	< 0.2	< 0.2				
Heptachlor	4									< 0.3	< 0.3	< 0.3				
Aldrin	ND									< 0.3	< 0.3	< 0.3				
Heptachlorepoxid	4									< 0.3	< 0.3	< 0.3				
Endosulfan	4									< 0.3	< 0.3	< 0.3				
Dieldrin	ND									< 0.3	< 0.3	< 0.3				
Endrin	ND									< 0.3	< 0.3	< 0.3				
drins (sum)[2]	4									0.45	0.45	0.45				
Σ DDE	ND									< 0.3	< 0.3	< 0.3				
Σ DDD	ND									< 0.3	< 0.3	< 0.3				
Σ DDT	ND									< 0.3	< 0.3	< 0.3				
Sum DDE, DDD, DDT	4									0.45	0.45	0.45				
Methoxychlor	ND									< 0.3	< 0.3	< 0.3				
Organophosphates mg/kg dry matter																
dimethoate	ND															
fonofos	ND															
formothion	ND															
fenitrothion	ND															
malathion	ND															
phosmet	ND															
Thio- and dithiocarbamates mg/kg dry matter																
EPTC	ND															
Butylate	ND															
Vernolate	ND															
Pebulate	ND															
Molinate	ND															
Cycloate	ND															
Prosulfocarb	ND															
Triazines mg/kg dry matter																
Simazine	ND															
Atrazine	6															
Terbutylazine	ND															
Desetylatrazine	ND															
Propazine	ND															
Terbutryne	ND															
Prometryne	ND															
Desisopropylatrazine	ND															
Monochloracetic acid mg/kg dry matter																
Chlorobenzenes mg/kg dry matter																
chlorobenzene	ND															
1,3 dichlorobenzene	ND															
1,4 dichlorobenzene	ND															
1,3 dichlorobenzene	ND															
1,3,5 trichlorobenzene	ND															
1,2,4 trlchlorobenzene	ND															
1,2,3 trichlorobenzene	ND															
Sum of 1,2,3,5 tetrachlorobenzene	ND															
and 1,2,4,5 tetrachlorobenzene	ND															
1.2.3.4 tetrachlorobenzene	ND															
Pentachlorobenzene	ND															

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-D-6	S-D-6	S-D-6	S-D-7	S-D-7	S-D-7	S-D-8	S-D-8	S-D-9	S-D-9	S-D-9	S-D-10	S-D-10	S-D-10	S-D-12
Sampling Depth (m bgl)		0.6 - 0.8	1.8 - 2.1	4.6 - 4.8	0.6 - 0.8	1.7 - 2.1	3.4 - 3.6	0.7 - 0.9	1.8 - 2.0	0.5 - 0.7	1.5 - 1.7	3.4 - 3.6	0.6	1.8	3.0	1.8
Sample ID		109	110	111	112	113	114	115	116	117	118	119				
Note																
HCB	ND															
chlorobenzenes (sum)[3]	30															
Tetrachlorethane	ND															
BTEX, n-alkanes, CHC mg/kg dry matter																
1,1-DCE	0.3															
1,2-c+t-DCE	1															
1,2-DCA	4															
TCE	60															
PCE	4															
Σ BTEX	ND															
benzene	1															
toluene	130															
ethylbenzene	50															
xylenes	25															
P total mg/kg dry matter																
S total mg/kg dry matter																
Metals mg/kg dry matter																
As	55	27.5	22.5	8.58												
Cd	12	< 0.2	< 0.2	< 0.2												
Cr (VI)	ND	< 0.2	< 0.2	< 0.2												
Cu	190	26.6	28.5	10.6												
Hg	10	2.13	3.72	0.47	2.71	18.2	0.89	15.6	184	< 0.3	< 0.3	0.828	28.9	0.55	0.42	0.40
Pb	530	12.4	14	1.5												
Zn	720	49.1	67.7	24.2												
EOX mg/kg dry matter	ND															
PCB mg/kg dry matter																
k.28																
k.52																
k.101																
k.118																
k.138																
k.153																
k.180																
Σ PCB	1															

NA not applicable

[1] - sum of alfa, beta, gama a delta HCH isomers

[2] - sum of aldrin, dieldrin, and endrin

[3] - sum of all chlorobenzenes

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-D-13	S-D-13	S-D-14	S-D-14	S-D-15	S-D-15	S-D-15	S-D-15	S-D-16	S-D-17	S-D-18	S-D-18	S-D-19	S-D-19	S-D-21	S-D-21	S-D-21	MW-15
Sampling Depth (m bgl)		0.6	1.8	0.6	1.8	0.6	1.8	3	4.7	1.2	1.8	0.6	1.8	1.8	3.0	0.6	1.8	3.0	0.5
Sample ID																			
Note																			
Dry matter % wt.		77.1	76.7	79.1	78.0	91.7	77.1	83.1	93.1	71.9	74.9	92.9	80.8	75.7	77.3	80.3	77.1	74.3	89.5
Chlorinated pesticides mg/kg dry matter																			
α- HCH	ND																		
β - HCH	ND																		
γ - HCH (lindane)	ND																		
δ - HCH	ND																		
HCH (sum)[1]	2																		
HCB	ND																		
Heptachlor	4																		
Aldrin	ND																		
Heptachlorepoxid	4																		
Endosulfan	4																		
Dieldrin	ND																		
Endrin	ND																		
drins (sum)[2]	4																		
Σ DDE	ND																		
Σ DDD	ND																		
Σ DDT	ND																		
Sum DDE, DDD, DDT	4																		
Methoxychlor	ND																		
Organophosphates mg/kg dry matter																			
dimethoate	ND																		
fonofos	ND																		
formothion	ND																		
fenitrothion	ND																		
malathion	ND																		
phosmet	ND																		
Thio- and dithiocarbamates mg/kg dry matter																			
EPTC	ND																		
Butylate	ND																		
Vernolate	ND																		
Pebulate	ND																		
Molinate	ND																		
Cycloate	ND																		
Prosulfocarb	ND																		
Triazines mg/kg dry matter																			
Simazine	ND																		
Atrazine	6																		
Terbutylazine	ND																		
Desetylatrazine	ND																		
Propazine	ND																		
Terbutryne	ND																		
Prometryne	ND																		
Desisopropylatrazine	ND																		
Monochloracetic acid mg/kg dry matter																			
Chlorobenzenes mg/kg dry matter																			
chlorobenzene	ND																		
1,3 dichlorobenzene	ND																		
1,4 dichlorobenzene	ND																		
1,3 dichlorobenzene	ND																		
1,3,5 trichlorobenzene	ND																		
1,2,4 trlchlorobenzene	ND																		
1,2,3 trichlorobenzene	ND																		
Sum of 1,2,3,5 tetrachlorobenzene	ND																		
and 1,2,4,5 tetrachlorobenzene	ND																		
1.2.3.4 tetrachlorobenzene	ND																		
Pentachlorobenzene	ND																		

Results of Soil Analyses

Sampling Location	Dutch Intervention Values (Indicative Level)	S-D-13	S-D-13	S-D-14	S-D-14	S-D-15	S-D-15	S-D-15	S-D-15	S-D-16	S-D-17	S-D-18	S-D-18	S-D-19	S-D-19	S-D-21	S-D-21	S-D-21	MW-15
Sampling Depth (m bgl)		0.6	1.8	0.6	1.8	0.6	1.8	3	4.7	1.2	1.8	0.6	1.8	1.8	3.0	0.6	1.8	3.0	0.5
Sample ID																			
Note																			
HCB	ND																		
chlorobenzenes (sum)[3]	30																		
Tetrachlorethane	ND																		
BTEX, n-alkanes, CHC mg/kg dry matter																			
1,1-DCE	0.3																		
1,2-c+t-DCE	1																		
1,2-DCA	4																		
TCE	60																		
PCE	4																		
Σ BTEX	ND																		
benzene	1																		
toluene	130																		
ethylbenzene	50																		
xylenes	25																		
P total mg/kg dry matter																			
S total mg/kg dry matter																			
Metals mg/kg dry matter																			
As	55																		
Cd	12																		
Cr (VI)	ND																		
Cu	190																		
Hg	10	0.18	8.93	23.0	5.63	978	15.6	19.4	24.1	12.9	1.42	10.6	17.1	0.29	0.78	5.31	17.5	13.7	285
Pb	530																		
Zn	720																		
EOX mg/kg dry matter	ND																		
PCB mg/kg dry matter																			
k.28																			
k.52																			
k.101																			
k.118																			
k.138																			
k.153																			
k.180																			
Σ PCB	1																		

NA not applicable

[1] - sum of alfa, beta, gama a delta HCH isomers

[2] - sum of aldrin, dieldrin, and endrin

[3] - sum of all chlorobenzenes

Annex 22

Results of Soil Gas and Ambient Air Analyses

Sampling Location	S-A-5	S-A-6	S-C-1	S-C-2	S-C-3/A	S-C-4	S-C-5	S-C-6	S-E-1	S-E-2
Sampling Depth (m bgl)	2.20	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Sample ID	173	174	175	176	177	178	179	180	181	182
Σ BTEX **mg/m³**	< 1,5	< 1,5	< 1,5	< 1,5	< 1,5	< 1,5	< 1,5	< 1,5	< 1,5	< 1,5
benzene	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3
toluene	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3
ethylbenzene	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3
xylenes	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3
TCE	0.5	10.3	90	547	96.7	2940	193	640	0.767	0.867
PCE	0.333	0.4	9.67	56.7	1.43	100	19	43.3	0.567	0.667
pentane									< 0,3	< 0,3
hexane									< 0,3	< 0,3
heptane									< 0,3	< 0,3
oktane									< 0,3	< 0,3
nonane									< 0,3	< 0,3
dekane									< 0,3	< 0,3
undekane									< 0,3	< 0,3
dodekane									< 0,3	< 0,3

Shallow probe No.	**Hg concentration in soil vapors (μg/m³)**				**Date** (dd.m.yy)	**Measured by**
	Depth (m b.g.l.)					
	0.6	**1.8**	**3.0**	**4.8**		
S - D - 10	0.0	0.0	1.0	i.m.	21.3.09	L. Hulka, Geomin
S - D - 12	20.6	9.1	1.0	0.0	21.3.09	L. Hulka, Geomin
S - D - 13	36.1	22.0	3.6	0.0	21.3.09	L. Hulka, Geomin
S - D - 14	44.3	12.7	0.0	n.m.	22.3.09	L. Hulka, Geomin
S - D - 15	0.0	28.7	3.7	0.0	21.3.09	L. Hulka, Geomin
S - D - 16	i.m.	13.1	1.0	n.m.	21.3.09	L. Hulka, Geomin
S - D - 17	26.5	7.9	1.8	0.0	22.3.09	L. Hulka, Geomin
S - D - 18	8.5	29.5	0.0	0.0	22.3.09	L. Hulka, Geomin
S - D - 19	i.m.	23.0	12.0	21.0	21.3.09	L. Hulka, Geomin
S - D - 20	40.0	0.0	i.m.	0.0	21.3.09	L. Hulka, Geomin
S - D - 21	3.1	0.0	0.0	0.0	21.3.09	L. Hulka, Geomin

nm = not measured
i.m. = impossible to measure

Hg concentrations in ambient air	
Measurement Point	**Hg (µg/m^3)**
1	0.5
2	0.7
3	14.8
4	7.8
5	10.0
6	14.2
7	30.9
8	35.8
9	0.2
10	0.0
11	0.1
12	0.1
13	0.4
14	0.5
15	8.9
16	2.9
17	1.7
18	0.8
19	0.1
20	0.8
21	6.0
22	0.1
23	1.0
24	0.7
25	0.2

Annex 23

Results of Groundwater Analyses

1st campaign - September 2007

Sample Location	Dutch Intervention Values (Indicative Level)	HS-1	HS-2
Chlorinated pesticides µg/l			
α- HCH	ND	28.3	0.34
β - HCH	ND	4.9	1.1
γ - HCH (lindane)	ND	34.5	0.1
δ - HCH	ND	33.4	0.1
HCH (sum)[1]	1	101.1	1.64
HCB	ND	< 0,1	< 0,1
Heptachlor	0.3	< 0,1	< 0,1
Aldrin	ND	< 0,1	< 0,1
Heptachlorepoxid	3	< 0,1	< 0,1
Endosulfan	5	< 0,1	< 0,1
Dieldrin	ND	< 0,1	< 0,1
Endrin	ND	< 0,1	< 0,1
drins (sum)[2]	0.1	0.15	0.15
Σ DDE	ND	< 0,1	< 0,1
Σ DDD	ND	< 0,1	< 0,1
Σ DDT	ND	< 0,1	< 0,1
Sum DDE, DDD, DDT	0.01	0.15	0.15
Methoxychlor	ND	< 0,1	< 0,1
Organophosphates µg/l			
dimethoate	ND		<0,1
fonofos	ND		<0,1
formothion	ND		<0,1
fenitrothion	ND		<0,1
malathion	ND		<0,1
phosmet	ND		<0,1
Triazines µg/l			
Simazine	ND		< 0,025
Atrazine	6		< 0,025
Terbutylazine	ND		0.025
Desetylatrazine	ND		< 0,025
Propazine	ND		< 0,025
Terbutryne	ND		< 0,025
Prometryne	ND		< 0,025
Desisopropylatrazine	ND		< 0,025
Terbumeton	ND		0.06
Monochloracetic acid µg/l			< 0,01
BTEX, n-alkanes, CHC µg/l			
1,1-DCE	10	< 1	0.21
1,2-c+t-DCE	20	< 1	14.8
1,2-DCA	400	< 1	< 0,1
TCE	500	7.79	1340.00
PCE	40	1.3	416.00
Σ BTEX		< 50	< 5
benzene	30	< 20	< 2
toluene	1000	< 20	< 2
ethylbenzene	150	< 20	< 2
xylenes	70	< 20	< 2
chlorbenzene	180	< 20	< 2
dichlorbenzene	50	< 20	< 2
trichlorbenzene	10	< 20	< 2
Elements, ions mg/l			
As	0.02	0.001	< 0,001
Cd	0.06	< 0,004	< 0,004
Cr (VI)		< 0,01	0.02
Cu	0.075	< 0,02	< 0,02
Hg	0.0003	0.01	0.004
Pb	0.075	< 0,05	< 0,05
Zn	0.8	< 0,01	< 0,01
Na			52.4
K			3.92
Mn			< 0,02
Fe			0.06
Cl-			63
SO_4^{2-}			102
NH3			< 0,01
DOC			4.45

2nd campaign - March 2008

Sample Location	Dutch Intervention Values (Indicative Level)	HS-1	HS-2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	DW-1	DW-3	DW-4	Lišice 1	Lišice 2
Chlorinated pesticides µg/l																
α- HCH	ND	0.062	0.01	0.17	17.6	0.25	0.24	0.01	0.13	0.1	0.14	< 0,01	0.013	0.15	< 0,01	< 0,01
β - HCH	ND	0.28	0.03	0.32	6.03	1.69	2.34	0.03	1.29	1.44	0.075	< 0,01	0.063	0.68	< 0,01	< 0,01
γ - HCH (lindane)	ND	0.01	< 0,01	0.11	2.03	0.064	0.021	< 0,01	0.048	0.028	0.063	< 0,01	< 0,01	0.039	< 0,01	< 0,01
δ - HCH	ND	0.01	< 0,01	49.2	3.11	0.62	0.22	0.01	0.029	0.02	0.035	< 0,01	< 0,01	0.052	< 0,01	< 0,01
HCH (sum)[1]	1	0.362	0.05	49.8	28.77	2.624	2.821	0.055	1.497	1.588	0.313	0.02	0.086	0.921	0.02	0.02
HCB	ND	< 0,01	< 0,01	0.33	0.52	0.19	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Heptachlor	0.3	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Aldrin	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	0.075	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Heptachlorepoxid	3	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	0.074	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Endosulfan I.		< 0,01	< 0,01	0.05	0.47	< 0,01	0.11	< 0,01	< 0,01	< 0,01	0.079	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Endosulfan II.		< 0,01	< 0,01	0.042	0.15	< 0,01	0.15	< 0,01	< 0,01	< 0,01	0.067	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Dieldrin	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Endrin	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
drins (sum)[2]	0,1	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.085	0.015	0.015	0.015	0.015	0.015
Σ DDE	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	0.16	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Σ DDD	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	0.1	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Σ DDT	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	0.089	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Sum DDE, DDD, DDT	0,01	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.349	0.015	0.015	0.015	0.015	0.015
Methoxychlor	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	0.081	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Organophosphates µg/l																
dimethoate	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
fonofos	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
formothion	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
fenitrothion	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
malathion	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
phosmet	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
	ND															
Triazines µg/l	ND															
DEAtrazine	ND									< 0,010	< 0,010	< 0,010	< 0,010	< 0,010		
Simazine	ND									< 0,010	< 0,010	< 0,010	< 0,010	< 0,010		
Atrazine	6									< 0,010	< 0,010	0.013	0.022	0.026		
Propazine	ND									< 0,010	< 0,010	< 0,010	< 0,010	< 0,010		
Terbumeton	ND									< 0,010	< 0,010	< 0,010	< 0,010	< 0,010		
Terbutylazin	ND									0.175	0.098	0.03	0.027	0.183		
Sebutylazin	ND									< 0,010	< 0,010	< 0,010	< 0,010	< 0,010		
Terbutryn	ND									< 0,010	< 0,010	< 0,010	< 0,010	< 0,010		
Prometryn	ND									< 0,010	< 0,010	< 0,010	< 0,010	< 0,010		
DIPAtrazin	ND									< 0,010	< 0,010	< 0,010	< 0,010	< 0,010		
Monochloracetic acid µg/l		< 0,1				< 0,1				< 0,1	< 0,1	0.4	< 0,1	< 0,1		
BTEX, n-alkanes, CHC µg/l																
1,1-DCE	10	< 0,1	< 0,1	< 0,1	< 0,1	1.39	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1
1,2-c+t-DCE	20	13.3	< 0,1	< 0,1	2.18	8.23	< 0,1	< 0,1	102	96.2	12.8	< 0,1	0.45	8.41	< 0,1	< 0,1
1,2-DCA	400	1.93	0.16	< 0,1	7.31	2.54	0.32	1.15	2.13	3.73	3.55	0.62	0.68	2.03	8.17	1.23
TCE	500	659	3.56	0.55	8.5	2420	10.6	2.97	8150	3980	663	1.53	3.65	29.4	4.08	0.94
PCE	40	224	6.23	0.5	8.11	368	5.11	6.24	792	582	505	2.22	10	134	6.91	1.5
Σ BTEX	ND	< 5	< 5	9.44	23.5	8.49	< 5	< 5	< 5	< 5	< 5	< 5	7.26	< 5	< 5	29.6
benzene	30	< 2	< 2	6.56	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
toluene	1000	< 2	< 2	2.88	23.5	8.49	< 2	< 2	2.38	< 2	< 2	3.8	7.26	< 2	< 2	29.6
ethylbenzene	150	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
xylenes	70	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
chlorbenzene	180			49.4						< 2	< 2	< 2	< 2	< 2		
dichlorbenzene	50			40.5						< 2	< 2	< 2	< 2	< 2		
trichlorbenzene	10			29.5						< 2	< 2	< 2	< 2	< 2		
VC	5	< 0,1	< 0,1	0.639	< 0,1	< 0,1	< 0,1	< 0,1	0.937	0.493	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1	< 0,1
tetrachlorethane		4.50	0.34	0.11	0.62	160	0.39	0.34	3050	3060	986	< 0,1	0.97	450	0.38	< 0,1
Elements, ions mg/l																
As	0.02				0.006			0.007		0.012	0.013					
Cd	0.06				< 0,004			< 0,004		< 0,004	< 0,004					
Cr (VI)					< 0,01			< 0,01		< 0,01	0.01					
Cu	0.075				< 0,02			< 0,02		0.05	0.07					
Hg	0.0003	0.005	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001	< 0,001
Pb	0.075				< 0,05			< 0,05		< 0,05	< 0,05					
Zn	0.8				< 0,01			< 0,01		< 0,01	< 0,01					
Na					59.9			88		34	155					
K					5.14			8		4.57	5.14					
Mn					0.75			0.17		0.25	0.07					
Fe					0.14			0.14		< 0,05	0.14					
Cl-					82.5			84.1		78.4	85.2					
SO_4^{2-}					83			163		96.8	109					
NH_4^+					< 0,03			< 0,03		< 0,03	< 0,03					
NO_2^-					0.34			0.14		0.08	< 0,01					
NO_3^-					27.7			47.7		34.6	36.2					
DOC					1.1			1.8		2.7	1.9					

3rd campaign - July 2008

Sample Location	Dutch Intervention Values (Indicative Level)	HS-1	HS-2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	DW-1	DW-3	DW-4	DW-5	DW-6	Lišice 1	Lišice 2
chlorinated pesticides µg/l																		
α- HCH	ND	0.058	< 0,01	75	0.35	0.18	0.088	0.013	0.13	0.11	0.17	< 0,01	< 0,01	0.065	< 0,01	< 0,01	< 0,01	< 0,01
β - HCH	ND	0.45	< 0,01	9.78	0.7	1.35	3.71	0.012	1.3	1.22	0.73	< 0,01	< 0,01	0.2	< 0,01	< 0,01	< 0,01	< 0,01
γ - HCH (lindane)	ND	0.02	< 0,01	14.8	0.072	0.072	0.045	0.012	0.048	0.045	0.054	< 0,01	< 0,01	0.032	< 0,01	< 0,01	< 0,01	< 0,01
δ - HCH	ND	0.016	< 0,01	17.3	5.07	0.081	0.094	< 0,01	0.27	0.15	0.029	< 0,01	< 0,01	0.037	< 0,01	< 0,01	< 0,01	< 0,01
Σ HCH	1	0.544	0.02	116.88	6.192	1.683	3.937	0.042	1.748	1.525	0.983	0.02	0.02	0.334	0.02	0.02	0.02	0.02
HCB	ND	< 0,01	< 0,01	1.03	0.02	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
heptachlor	0.3	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
aldrin	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
heptachlorepoxid	3	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
endosulfan I.		< 0,01	< 0,01	0.23	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
endosulfan II.		< 0,01	< 0,01	0.098	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
dieldrin	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
endrin	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Σ drins	0,1	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Σ DDE	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Σ DDD	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Σ DDT	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
Σ DDE,DDD,DDT	0,01	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015	0.015
methoxychlor	ND	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01	< 0,01
organophosphate pesticides µg/l	ND																	
dimethoate	ND																	
fonofos	ND																	
formothion	ND																	
fenitrothion	ND																	
malathion	ND																	
phosmet	ND																	
	ND																	
triazine µg/l	ND																	
simazin	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
atrazin	6									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
terbutylazin	ND									< 0,025	0.069	< 0,025	< 0,025	0.111	< 0,025	0.031		
desetylatrazin	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
propazin	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
terbutryn	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
prometryn	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		
desisopropylatrazin	ND									< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025	< 0,025		

4th campaign - February 2009

Sample Location	Dutch Intervention Values (Intervention Value)	HS-1	MW-3	MW-6	MW-7	MW-8
chlorinated pesticides µg/l						
α- HCH	ND	0.052	0.160	0.110	0.250	0.160
β - HCH	ND	0.160	0.430	0.048	0.460	0.430
γ - HCH (lindane)	ND	0.015	0.061	0.011	0.042	0.012
δ - HCH	ND	0.013	0.024	0.015	0.030	0.017
Σ HCH	1	0.240	0.680	0.018	0.780	0.620
HCB	ND					
heptachlor	0.3	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
aldrin	ND	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
heptachlorepoxid	3	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
endosulfan I.	5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
endosulfan II.	5	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
dieldrin	ND	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
endrin	ND	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Σ drins	0.1	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Σ DDE	ND	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Σ DDD	ND	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Σ DDT	ND	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
Σ DDE,DDD,DDT	0.01	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
methoxychlor	ND	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
chloroacetic acid µg/l	ND	< 0.1	< 0.1			< 0.1
BTEX, ClU µg/l						
vinyl chloride	5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
chlorethane	ND					
1,1-DCE-en	10	0.23	1.18	< 0.1	0.71	< 0.1
1,2-c+t-DCE-en	20	7.13	31.20	< 0.1	11.00	6.47
1,1-DCE-an	900					
1,2-DCA	400	0.89	2.62	0.24	1.01	0.24
TCE	500	393.00	2 640	35.80	140.00	82.20
1,1,2-TCA	130	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,1,1-TCA	300	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
PCE	40	291	591	13.10	306	313
1,1,1,2 tetrachloroethane						
1,1,2,2 tetrachloroethane		212.00	75.90	21.00	1 220.00	515.00
Σ BTEX	ND	31.80	12.70	< 5	203.00	79.00
benzene	30	< 2	< 2	< 2	< 2	< 2
toluene	1000	< 2	< 2	< 2	< 2	< 2
ethylbenzene	150	< 2	< 2	< 2	< 2	< 2
xylenes	70	31.80	12.70	3.75	203	79
Chlorobenzenes						
chlorbenzene	180	< 2	< 2	< 2	< 2	< 2
dichlorbenzene	50	6.38	22.30	< 2	4.30	7.29
trichlorbenzene	10	< 2	< 2	< 2	< 2	< 2
tetrachlorobenzene		< 2	< 2	< 2	< 2	< 2
pentachlorbenzene		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
hexachlorbenzene		< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
ethene	ND					
methane	ND					
acetaldehyde	ND					
Elements, Ions mg/l						
Hg	0.0003	0.004	< 0.001			0.001
Na						
K						
Ca						
Mg						
Mn						
Fe						
Cl-						
SO_4^{2-}						
NO_3^-						
HCO3-						
TOC						

5th campaign - March 2009

Sample Location	Dutch Intervention Values	HS-1	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16
	(Intervention Value)									
chlorinated pesticides µg/l										
α- HCH	ND	0.210	< 0.01	0.035	0.180	0.340	0.330	0.150	0.009	0.011
β - HCH	ND	0.310	< 0.01	0.081	0.450	1.120	0.950	1.040	0.14	0.125
γ - HCH (lindane)	ND	0.084	< 0.01	< 0.01	0.036	0.990	0.890	0.043	< 0.005	< 0.005
δ - HCH	ND	0.038	< 0.01	< 0.01	0.019	0.035	0.130	0.110	< 0.005	< 0.005
ξ - HCH	ND								0.297	0.283
Σ HCH (excluding ξ -HCH)	1	0.640	< 0.1	0.12	0.69	2.49	2.30	1.34	0.15	0.14
HCB	ND									
heptachlor	0.3									
aldrin	ND									
heptachlorepoxid	3									
endosulfan I.	5									
endosulfan II.	5									
dieldrin	ND									
endrin	ND									
Σ drins	0.1									
Σ DDE	ND									
Σ DDD	ND									
Σ DDT	ND									
Σ DDE,DDD,DDT	0.01									
methoxychlor	ND									
chloroacetic acid µg/l	ND									
BTEX, ClU µg/l										
vinyl chloride	5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
chlorethane	ND	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,1-DCE-en	10	< 0.1	24.3	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-c+t-DCE-en	20	3.32	15.1	< 0.1	1.23	5.78	58.10	12.10	4.51	4.36
1,1-DCE-an	900	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-DCA	400	0.64	< 0.1	0.37	1.24	0.58	0.50	0.97	0.78	0.84
TCE	500	295.00	3 870	1.22	60.70	5.08	3.89	179.00	112.00	53.00
1,1,2-TCA	130	2.82	15.0	< 0.1	4.74	0.94	0.17	5.28	4.78	3.58
1,1,1-TCA	300	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
PCE	40	203.00	44.4	4.44	37.40	13.60	2.57	379.00	307.00	314.00
1,1,1,2 tetrachloroethane	ND	1.84	< 0.1	< 0.1	2.64	< 0.1	< 0.1	321.00	2.66	2.46
1,1,2,2 tetrachloroethane	ND	26.00	8.09	0.13	491.00	38.10	3.89	5 580.00	439.00	530.00
Σ BTEX	ND		< 5					91.70	76.50	84.40
benzene	30	< 2	< 2					< 2	< 2	< 2
toluene	1000	< 2	< 2					< 2	< 2	< 2
ethylbenzene	150	< 2	< 2					< 2	< 2	< 2
xylenes	70	13.10	< 2					91.70	76.50	84.40
Chlorobenzenes										
chlorbenzene	180	< 2						< 2	< 2	< 2
dichlorbenzene	50	6.12						13.10	7.87	8.31
trichlorbenzenes	10	< 2						< 2	< 2	< 2
Chloromethanes										
dichlormethane	1000									
chloroform	400									
tetrachlormethane	10									
ethene	ND	< 10						< 10	< 10	< 10
methane	ND	< 5						< 5	< 5	< 5
acetaldehyde	ND	0.96						1.35	1.01	< 0.6
Elements, Ions mg/l										
Hg	0.0003	0.005						< 0.001	< 0.001	< 0.001
Na	ND	415.00						183.00	269.00	55.70
K	ND	5.19						6.50	12.60	4.92
Ca	ND	8.36						78.60	207.00	106.00
Mg	ND	13.70						41.10	88.50	40.30
Mn	ND	< 0.02						0.40	0.11	0.07
Fe	ND	0.23						0.09	0.11	< 0.05
Cl-	ND	33.20						49.10	59.60	61.90
SO_4^{2-}	ND	63.40						90.20	110.00	113.00
NO_3^-	ND	33.40						0.17	37.00	40.40
HCO3-	ND	817.00						799.00	711.00	558.00
TOC	ND	4.40						7.80	2.10	1.60

6th campaign - April 2009

Sampling Location	Dutch Intervention Values	HS-1	MW-14	MW-15	MW-16	MW-14 without filtration
	(Intervention Value)					
chlorinated pesticides µg/l						
α- HCH	ND	0.028	0.076	0.054	0.066	0.082
β - HCH	ND	0.251	0.580	0.409	0.464	0.619
γ - HCH (lindane)	ND	0.019	0.046	0.023	0.030	0.047
δ - HCH	ND	<0.005	<0.005	0.026	0.026	<0.005
ξ - HCH	ND	0.431	1.280	1.110	1.210	1.360
Σ HCH (excluding ξ -HCH)	1	0.301	0.705	0.512	0.586	0.751
HCB	ND					
heptachlor	0.3					
aldrin	ND					
heptachlorepoxid	3					
endosulfan I.	5					
endosulfan II.	5					
dieldrin	ND					
endrin	ND					
Σ drins	0.1					
Σ DDE	ND					
Σ DDD	ND					
Σ DDT	ND					
Σ DDE,DDD,DDT	0.01					
methoxychlor	ND					
chloroacetic acid µg/l	ND					
BTEX, ClU µg/l						
vinyl chloride	5	<0.1	<0.1	1.04	0.41	
chlorethane	ND	<0.1	<0.1	<0.1	<0.1	
1,1-DCE-en	10	<0.1	<0.1	0.42	<0.1	
1,2-c+t-DCE-en	20	2.0	10.0	126.00	75.60	
1,1-DCE-an	900	<0.1	<0.1	<0.1	<0.1	
1,2-DCA	400	1.09	1.46	1.36	1.71	
TCE	500	257.00	59.30	12.60	24.10	
1,1,2-TCA	130	2.47	5.91	72.10	25.20	
1,1,1-TCA	300	<0.1	<0.1	<0.1	<0.1	
PCE	40	84.30	289.00	269.00	261.00	
1,1,1,2 tetrachloroethane		0.95	2.57	0.92	1.76	
1,1,2,2 tetrachloroethane		36.60	539.00	441.00	529.00	
Σ BTEX	ND					
benzene	30	<2	<2	<2	<2	
toluene	1000	<2	<2	<2	<2	
ethylbenzene	150	<2	<2	<2	<2	
xylenes	70	7.83	100.00	82.90	92.80	
Chlorobenzenes						
chlorbenzene	180	<2	<2	<2	<2	
dichlorbenzene	50	4.19	11.90	14.10	13.70	
trichlorbenzene	10	<2	<2	<2	<2	
Chloromethanes						
dichlormethane	1000	<0.1	<0.1	<0.1	<0.1	
chloroform	400	1.26	0.75	0.26	0.53	
tetrachlormethane	10	<0.05	<0.05	<0.05	<0.05	
ethene	ND	<10	<10	<10	<10	
ethane	ND	<10	<10	<10	<10	
methane	ND	<5	<5	<5	<5	
acetaldehyde	ND	10.1	10.2	10.8	10.5	
Elements, Ions mg/l						
Hg	0.0003					
Na						
K						
Ca						
Mg						
Mn						
Fe						
Cl-						
SO_4^{2-}						
NO_3						
HCO3-						
TOC		6.2	2.2	83.4	4.1	

7th campaign - June 2009

Sample Location	Dutch Intervention Values	HS-1	MW-8	MW-14	MW-15	MW-16
	(Intervention Value)					
chlorinated pesticides µg/l						
α- HCH	ND	0.079	0.049	0.054	0.018	0.045
β - HCH	ND	0.213	0.301	0.348	0.123	0.286
γ - HCH (lindane)	ND	0.025	0.022	0.024	0.009	0.019
δ - HCH	ND	0.018	0.013	0.011	0.007	0.011
ε - HCH	ND	0.273	0.616	0.911	0.600	0.803
Σ HCH (excluding ε -HCH)	1	0.335	0.385	0.437	0.157	0.361
HCB	ND					
heptachlor	0.3					
aldrin	ND					
heptachlorepoxid	3					
endosulfan I.	5					
endosulfan II.	5					
dieldrin	ND					
endrin	ND					
Σ drins	0.1					
Σ DDE	ND					
Σ DDD	ND					
Σ DDT	ND					
Σ DDE,DDD,DDT	0.01					
methoxychlor	ND					
chloroacetic acid µg/l	ND					
BTEX, ClU µg/l						
vinyl chloride	5	< 0.1	< 0.1	< 0.1	2.62	0.49
chlorethane	ND	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,1-DCE-en	10	0.46	< 0.1	0.15	0.39	< 0.1
1,2-c+t-DCE-en	20	20.40	9.43	17.8	263	65.2
1,1-DCE-an	900	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-DCA	400	< 0.1	1.63	0.60	0.23	0.30
TCE	500	1 030	57.5	338	23.3	37.9
1,1,2-TCA	130	2.99	5.63	3.64	33.4	35.9
1,1,1-TCA	300	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
PCE	40	285	108	258	151	168
1,1,1,2 tetrachloroethane		1.89	1.19	1.66	0.59	0.68
1,1,2,2 tetrachloroethane		1.11	663	375	117	381
Σ BTEX	ND	< 5	73.9	49.1	19.4	52.5
benzene	30	< 2	< 2	< 2	< 2	< 2
toluene	1000	< 2	< 2	< 2	< 2	< 2
ethylbenzene	150	< 2	< 2	< 2	< 2	< 2
xylenes	70	< 2	73.9	49.1	19.4	52.5
Chlorobenzenes						
chlorbenzene	180	< 2	< 2	< 2	< 2	< 2
dichlorbenzene	50	12.40	5.72	10.3	29.3	7.53
trichlorbenzenes	10	< 2	< 2	< 2	< 2	< 2
ethene	ND	< 10	< 10	< 10	< 10	< 10
ethane	ND	< 10	< 10	< 10	< 10	< 10
methane	ND	< 5	< 5	< 5	8.83	< 5
acetaldehyde	ND					
Elements, Ions mg/l						
Hg	0.0003	0.012	< 0.001	< 0.001	< 0.001	< 0.001
Na		437	63.8	197	103	82.3
K		6.08	6.01	5.49	13.3	7.57
Ca		14.1	154.0	76.6	144.0	154.0
Mg		11.4	50.4	31.6	60.4	60.2
Mn		< 0.02	< 0.02	< 0.02	7.17	2.67
Fe		0.07	0.05	< 0.05	0.85	0.14
Cl-		41.9	80.8	61.2	71.7	74.1
SO_4^{2-}		80.5	106	98.6	21.5	105
NO_3^-		32.5	40.5	33.6	< 0.04	6.20
HCO3-		1 070	549	628	884	634
TOC		4.0	2.10	1.50	67.4	2.70
Microbiological analyses CFU/ml						
thermophylic bacteria		6.40E+24	3.60E+03	1.70E+04	1.10E+03	2.50E+03
anaerobic bacteria		45	15	32	25	85
sulphate reducing bacteria		0	0	0	910	420

8th campaign - September 2009

Sample	Dutch Intervention Values (Intervention V	HS-1	HS-2	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-9
chlorinated pesticides µg/l												
α- HCH	ND	0.079	< 0.005	24.1	0.855	0.180	0.032	< 0.005	0.532	0.210	0.223	0.043
β - HCH	ND	1.98	0.059	45.3	9.02	3.05	15.2	0.152	8.88	4.83	3.23	0.097
γ - HCH (lindane)	ND	0.028	< 0.005	12.2	0.181	0.051	0.008	< 0.005	0.116	0.059	0.063	0.035
δ - HCH	ND	0.015	< 0.005	59.4	75.8	0.221	0.066	0.017	0.326	0.233	0.107	0.165
ε - HCH		1.82	0.084	43.8	27.2	2.90	1.37	0.105	12.3	5.99	3.58	0.114
Σ HCH (epsilon isomer excluded)	1	2.102	0.059	141.0	85.856	3.502	15.306	0.169	9.854	5.332	3.623	0.340
HCB	ND											
heptachlor	0.3											
aldrin	ND											
heptachlorepoxid	3											
endosulfan I.	5											
endosulfan II.	5											
dieldrin	ND											
endrin	ND											
Σ drins	0.1											
Σ DDE	ND											
Σ DDD	ND											
Σ DDT	ND											
Σ DDE,DDD,DDT	0.01											
methoxychlor	ND											
chloroacetic acid µg/l	ND											
BTEX, ClU µg/l												
vinyl chloride	5	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	1.00	< 0.1
chlorethane	ND	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,1-DCE-en	10	0.39	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.20	< 0.1	< 0.1	< 0.1
1,2-c+t-DCE-en	20	14.8	< 0.1	< 0.1	< 0.1	1.34	< 0.1	< 0.1	17.9	2.00	31.3	< 0.1
1,1-DCE-an	900	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-DCA	400	2	< 0.1	1.45	< 0.1	0.60	0.22	0.27	0.77	0.85	0.60	0.60
TCE	500	1.410	1.24	3.83	0.53	92.1	0.37	0.60	1.130	31.5	564	5.08
1,1,2-TCA	130	2.85	< 0.1	< 0.1	< 0.1	0.10	< 0.1	< 0.1	6.13	3.71	2.56	< 0.1
1,1,1-TCA	300	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
PCE	40	401	1.29	4.4	0.8	55.1	2.51	0.77	289	136	291	7.61
1,1,1,2 tetrachloroethane		1.67	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	1.35	0.67	0.46	< 0.1
1,1,2,2 tetrachloroethane		1.99	< 0.1	0.23	< 0.1	1.64	< 0.1	< 0.1	476	280	116	0.41
Σ BTEX	ND	< 5									74.0	
benzene	30	< 2									< 2	
toluene	1000	< 2									< 2	
ethylbenzene	150	< 2									< 2	
xylenes	70	< 2									74.0	
Chlorobenzenes												
chlorbenzene	180	< 2		< 2							< 2	
dichlorbenzene	50	19.2		58.5							16.10	
trichlorbenzenes	10	< 2		717							< 2	
ethene	ND	< 10	< 10								< 10	
ethane	ND	< 10	< 10								< 10	
methane	ND	< 5	< 5								7.64	
acetaldehyde	ND											
Elements, Ions mg/l												
Hg	0.0003	0.006									0.003	
Na		467									176	
K		3.56									5.42	
Ca		13.5									88.2	
Mg		6.76									36.4	
Mn		< 0.002									< 0.02	
Fe		< 0.005									< 0.05	
Cl-		112									119.0	
SO_4^{2-}		81.9									114	
NO_3^-		32.2									33.0	
HCO3-		702									610	
TOC		2.10									1.90	

8th campaign - September 2009

Sample	Dutch Interventi on Values (Intervention V.	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	DW-3	DW-4	DW-6
chlorinated pesticides µg/l											
α- HCH	ND	0.011	0.496	0.121	0.238	0.214	0.046	0.147	0.008	0.027	0.187
β - HCH	ND	1.11	3.35	4.50	1.97	3.44	1.67	2.65	0.075	0.273	2.98
γ - HCH (lindane)	ND	0.006	0.119	0.069	0.082	0.060	0.009	0.038	< 0.005	0.008	0.077
δ - HCH	ND	0.013	0.254	0.179	0.491	0.056	0.055	0.066	< 0.005	1.02	0.239
ε - HCH		0.176	3.37	5.85	1.29	5.25	3.94	4.04	0.025	0.174	2.86
Σ HCH (epsilon isomer excluded)	1	1.140	4.219	4.869	2.781	3.770	1.780	2.901	0.083	1.328	3.483
HCB	ND										
heptachlor	0.3										
aldrin	ND										
heptachlorepoxid	3										
endosulfan I.	5										
endosulfan II.	5										
dieldrin	ND										
endrin	ND										
Σ drins	0.1										
Σ DDE	ND										
Σ DDD	ND										
Σ DDT	ND										
Σ DDE,DDD,DDT	0.01										
methoxychlor	ND										
chloroacetic acid µg/l	ND										
BTEX, ClU µg/l											
vinyl chloride	5	< 0.1	0.50	< 0.1	< 0.1	< 0.1	15.50	2.72	< 0.1	< 0.1	< 0.1
chlorethane	ND	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,1-DCE-en	10	< 0.1	< 0.1	< 0.1	< 0.1	0.22	0.63	0.20	< 0.1	< 0.1	< 0.1
1,2-c+t-DCE-en	20	< 0.1	34	28	45	25.4	424	148.0	< 0.1	1.94	8.32
1,1-DCE-an	900	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2-DCA	400	0.54	1.43	1.60	0.39	1.39	1.47	1.16	0.67	0.75	2.93
TCE	500	1.48	258	9.45	2.95	519	63.9	112	3.33	9.98	50.8
1,1,2-TCA	130	< 0.1	4.20	0.73	< 0.1	4.00	41.9	14.7	< 0.1	0.88	4.21
1,1,1-TCA	300	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
PCE	40	4.44	249	19.2	1.99	386	135	251	10.7	44.0	231
1,1,1,2 tetrachloroethane		< 0.1	1.00	< 0.1	< 0.1	1.69	0.9	0.84	< 0.1	0.18	1.29
1,1,2,2 tetrachloroethane		< 0.1	214	21.5	0.16	383	79.9	247	0.48	34.7	255
Σ BTEX	ND		62.9	5.85		114.0	21.3	72.7		8.86	
benzene	30		< 2	< 2		< 2	< 2	< 2		< 2	
toluene	1000		< 2	< 2		< 2	< 2	< 2		< 2	
ethylbenzene	150		< 2	< 2		< 2	< 2	< 2		< 2	
xylenes	70		62.9	5.85		114	21.3	72.7		8.86	
Chlorobenzenes											
chlorbenzene	180		< 2	< 2		< 2	< 2	< 2		< 2	
dichlorbenzene	50		11.0	< 2		17.1	14.0	12.1		< 2	
trichlorbenzenes	10		< 2	< 2		< 2	< 2	< 2		< 2	
ethene	ND					< 10	< 10	< 10			
ethane	ND					< 10	< 10	< 10			
methane	ND					< 5	344	100			
acetaldehyde	ND										
Elements, Ions mg/l											
Hg	0.0003					< 0.001	< 0.001	< 0.001			
Na						91	90.1	90.1			
K						4.66	9.4	6.18			
Ca						80.7	103.0	114			
Mg						32.7	48.4	47.8			
Mn						< 0.02	2.25	1.07			
Fe						< 0.05	0.32	< 0.05			
Cl-						72.8	70.8	72.0			
SO_4^{2-}						92.8	24.3	95.8			
NO_3^-						24.7	0.01	16.7			
HCO3-						628	689	616			
TOC						2.10	17.6	2.50			

Annex 24

Results of Construction Material Analyses

Sampling Location	Directive 1999/31/EC			S-A-2	S-A-13	A-20	A-24	A-25	A-26	A-27	A-28	A-29	A-30	A-31	A-32	A-33	A-34	A-35	A-36	A-37	A-38	A-39	A-40	A-41	A-42	A-43	S-C-2	S-C-4	C-7	C-9	C-10	C-11	C-12	C-13	C-14	C-15	S-D-8	D-13	D-14
Sampling Depth (m bgl)	Criteria for inert waste	Criteria for non-hazardous waste	Criteria for hazardous waste	0,0 - 0,2	0,0 - 0,3		0,0 - 0,02	0,02 - 0,1	0,0 - 0,02		0,0 - 0,02	0,02 - 0,1	0,0 - 0,02	0,02 - 0,1													0,5 - 0,6	0,0 - 0,6	0,0 - 0,25			0,0 - 0,02	0,02 - 0,1				0,0 - 0,25		
Material				concrete floor	concrete floor	concrete floor	mortar	brick	mortar	concrete floor	mortar	brick	mortar	brick	concrete floor	mortar, bricks	mortar, bricks	ceiling	concrete floor	mortar, bricks	concrete wall	mortar, bricks	mortar	mortar	concrete	mortar	concrete paving	concrete paving	concrete with steel reinforcement	concrete - sewage	concrete beam	mortar	brick	mortar	concrete	mortar	concrete floor	sludge/sediment	sludge/sediment
Building Nr.				A6	A8	A7	A9	A9	A10	A10	A9	A9	A1	A1	A2	A2	A2 1st floor	A2	A4	A4	A4 2nd floor	A7	A8	A8	A11	A11	near C1	C3	C3	C1	C1	C1	C1	C2	C2	C2	D1	D1	not found
Sample ID	table 2.1.2.1	table 2.2.2.	table 2.4.1.	129	130	131	132	133	134	135	136	137	138	139	17 (2008)	18 (2008)	19 (2008)	20 (2008)	21 (2008)	22 (2008)	23 (2008)	24 (2008)	all under tar	wall (2m above floor)	floor	wall	140	141	142	143	144	145	146	wall	floor	wall	147	148	149
Note							12	13		14								17	17																				
Dry matter % wt.				95	93.9	97.5	99.2	99.6	99.8	97.9	98.9	99.6	99.4	97.7	96.2	98.6	98.8	99.1	96.7	88.5	98.6	96.6	98.8	98.5	97.3	99.5	81.5	80	93.8	89.3	92.2	97.4	99.7	89.2	95.9	87.1	92.4	64.3	97.6
Chlorinated pesticides mg/kg dry matter																																							
α- HCH	NA	NA	NA	1.35	1.16	1.49	2.95	0.96	78.3	3.88	3.49	9.51	98500	1130	14000	26.2	160	1.35	270	14.1	135	0.3	0.05	< 0,05	0.073	< 0,05								< 0,05	< 0,05	< 0,05			
β - HCH	NA	NA	NA	2.03	1.97	5.1	0.44	0.4	10	4.83	4.91	1.21	1400	63.9	2020	92.2	37.7	50	400	26.9	400	0.98	0.082	0.22	4.46	0.17								< 0,05	0.16	0.15			
γ - HCH (lindan)	NA	NA	NA	0.99	0.52	1.12	0.2	0.68	5.63	137	1	4.03	1750	32.3	1050	2.83	3.20	0.18	5.27	11.2	164	3.72	0.18	0.25	0.21	< 0,05								< 0,05	< 0,05	< 0,05			
δ - HCH	NA	NA	NA	0.6	0.45	0.49	0.3	0.22	2.85	0.39	0.73	0.65	1120	34.5	1890	2.45	2.00	0.55	0.90	3.56	82.6	0.095	0.05	< 0,05	0.054	< 0,05								< 0,05	< 0,05	< 0,05			
HCH (sum)[1]	NA	NA	NA	4.97	4.1	8.2	3.89	2.26	96.78	146.1	10.13	15.4	**102770**	1260.7	18960	123.68	202.9	52.08	676.17	55.76	781.6	5.095	0.36	0.47	4.8	< 0,3								< 0,3	< 0,3	< 0,3			
HCB	NA	NA	NA	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2	< 0,2	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05								< 0,05	< 0,05	< 0,05			
Heptachlor	NA	NA	NA	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05								< 0,05	< 0,05	< 0,05			
Aldrin	NA	NA	NA	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05								< 0,05	< 0,05	< 0,05			
Heptachlorepoxid	NA	NA	NA	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05								< 0,05	< 0,05	< 0,05			
Endosulfan	NA	NA	NA	0.4	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	2.3	< 0.01	< 0,01	0.22	< 0,01								< 0,01	< 0,01	< 0,01			
Dieldrin	NA	NA	NA	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05								< 0,05	< 0,05	< 0,05			
Endrin	NA	NA	NA	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05								< 0,05	< 0,05	< 0,05			
drins (sum)[2]	NA	NA	NA	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.075	0.075	0.075	0.075	0.075	0.075	0.075	0.075	< 0.3	< 0.3	< 0.3	< 0.3								< 0.3	< 0.3	< 0.3			
Σ DDE	NA	NA	NA	3.32	1.25	7.11	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	0.88	< 0,05	< 0,05	0.055	< 0,05								< 0,05	< 0,05	< 0,05			
Σ DDD	NA	NA	NA	0.48	1.2	0.93	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	0.61	< 0,05	< 0,05	< 0,05	< 0,05								< 0,05	< 0,05	< 0,05			
Σ DDT	NA	NA	NA	8.06	< 0,3	1.6	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	1.93	< 0,05	0.11	0.09	< 0,05								< 0,05	< 0,05	< 0,05			
Sum DDE, DDD, DDT	NA	NA	NA	11.86	2.6	9.64	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.45	0.075	0.075	0.075	0.075	0.075	0.075	0.075	3.42	< 0,3	< 0,3	< 0,3	< 0,3								< 0,3	< 0,3	< 0,3			
Methoxychlor	NA	NA	NA	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,3	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05	< 0,05								< 0,05	< 0,05	< 0,05			
Organophosphates mg/kg dry matter																																							
dimethoate	NA	NA	NA		<0,1		<0,1	<0,1		<0,1																													
fonofos	NA	NA	NA		1.60		<0,1	<0,1		**1350**																													
formothion	NA	NA	NA		<0,1		<0,1	<0,1		<0,1																													
fenitrothion	NA	NA	NA		0.10		<0,1	<0,1		<0,1																													
malathion	NA	NA	NA		<0,1		<0,1	<0,1		<0,1																													
phosmet	NA	NA	NA		<0,1		<0,1	<0,1		<0,1																													
Hg mg/kg dry matter																																					1380	1840	543
Water leachate mg/l																																							
DOC	50	80	100			117				49				9.45	40.0	10.3	11.2		23.0	214		97	25.2	40.8	49.9	40.6			7.0		460			8.17	145	1.95			
Phenol index	0.1	NA	NA			**0.11**				**0.14**				0.05	< 0,10	**0.24**	< 0,10		< 0,10	0.1		< 0,10	< 0,1	< 0,1	< 0,1	< 0,1			**0.16**		0.04			< 0,1	< 0,1	< 0,1			
Cl^-	80	1500	2500			19				**218**				**1310**	**409**	44.2	**336**		**108**	27.1		51.2	**179**	**172**	7.2	23.4			**134**		**803**			20.1	**278**	11.8			
F^-	1	15	50			0.46				0.94				26.40	0.93	0.31	< 0,2		0.44	**4.58**		0.22	0.13	0.83	0.4	0.41			0.63		44.30			0.06	< 0,01	0.31			
SO_4^{2-}	100	2000	5000			**257**				**223**				**507**	**115**	**1300**	**139**		**144**	2190		**1220**	1.760	1.530	74.7	6000			66		**1810**			**598**	**155**	**572**			
As	0.05	0.2	2.5			<0,001				0.006				0.009	< 0,005	< 0,005	< 0,005		0.019	1.38		0.026	0.005	< 0,005	0.008	< 0,005			0.008		0.044			< 0,005	< 0,005	< 0,005			
Ba	2	10	30			0.03				<0,01				**2.35**	< 0,01	0.02	0.02		< 0,01	< 0,01		0.06	0.03	0.03	< 0,01	0.02			1.49		0.35			0.02	0.04	0.02			
Cd	0.004	0.1	0.5			<0,004				<0,004				<0,004	< 0,004	< 0,004	< 0,004		< 0,004	< 0,004		< 0,004	< 0,004	< 0,004	< 0,004	< 0,004			<0,004		<0,004			< 0,004	< 0,004	< 0,004			
Cr total	0.05	1	7			<0,05				<0,05				<0,05	< 0,05	< 0,05	< 0,05		< 0,005	< 0,05		< 0,05	< 0,05	< 0,05	< 0,05	< 0,05			<0,05		**0.300**			< 0,05	< 0,05	< 0,05			
Cu	0.2	5	10			**0.50**				0.030				<0,02	0.16	0.02	< 0,01		0.02	**0.3**		< 0,05	< 0,02	< 0,02	0.1	0.01			0.03		28.90			< 0,02	0.06	< 0,02			
Hg	0.001	0.02	0.2			<0,002				<0,002				**0.003**	< 0,001	< 0,001	< 0,001		< 0,001	< 0,001		< 0,001	< 0,001	< 0,001	< 0,001	< 0,001			0.08		0.470			< 0,001	< 0,001	< 0,001			
Ni	0.04	1	4			<0,03				<0,03				<0,03	< 0,03	< 0,03	< 0,03		< 0,03	< 0,03		< 0,02	< 0,03	0.03	< 0,03	< 0,03			<0,03		135			< 0,03	< 0,03	< 0,03			
Pb	0.05	1	5			**0.07**				<0,05				<0,05	< 0,05	< 0,05	< 0,05		< 0,05	< 0,05		< 0,05	< 0,05	< 0,05	**0.14**	< 0,05			<0,05		**0.09**			< 0,05	< 0,05	< 0,05			
Sb	0.006	0.07	0.5			<0,005				<0,005				<0,005	< 0,005	< 0,005	< 0,005		< 0,005	**0.026**		< 0,005	< 0,005	< 0,005	< 0,005	< 0,005			<0,005		<0,005			< 0,005	< 0,005	< 0,005			
Se	0.01	0.05	0.7			<0,001				0.008				0.004	< 0,005	< 0,005	< 0,005		**0.018**	0.155		0.006	< 0,005	0.006	**0.02**	0.005			<0,001		<0,001			< 0,005	< 0,005	< 0,005			
Zn	0.4	5	20			**0.67**				0.01				<0,01	< 0,01	< 0,01	< 0,01		< 0,01	< 0,01		0.05	< 0,01	< 0,01	< 0,01	< 0,01			<0,01		**4.49**			< 0,01	< 0,01	< 0,01			
Mo	0.05	1	3			<0,03				<0,03				<0,03	< 0,05	< 0,05	< 0,05		< 0,05	< 0,05		< 0,05	< 0,05	< 0,05	< 0,05	< 0,05			0.04		<0,03			< 0,05	< 0,05	< 0,05			
dissolved solids (105°C)	4000	6000	10000			3070				1030				2790	1400	2330	1190		970	6900		2380	3360	2820	728	**8580**			662		**5090**			1190	1820	554			
pH						9.7				7.9				7.3	8.50	9.30	8.30		10.6	10.5		9.2	8.3	8.4	9.8	9.1			11.5		3.6			8.3	10.0	9.9			
EOX mg/kg dry matter														270													2.2	2.2	2.1	< 1	26.4	3.2	> 1						
TOC mg/kg dry matter	30000		60000												19000	4000	< 2000		8000	4500		2000							< 2000	4500	13600	4000	< 2000						
PCB mg/kg/dry matter																																							
k.28															0.65						1.09																		
k.52															0.8						1.42																		
k.101															0.82						1.28																		
k.118															0.77						1.18																		
k.138															1.58						3.2																		
k.153															1.29						2.55																		
k.180															1.06						2.44																		
Σ PCB	1														6.57						13.2																		

NA not applicable
[1] - sum of alfa, beta, gama a delta HCH isomers
[2] - sum of aldrin, dieldrin, and endrin
[3] - sum of all chlorobenzenes

Sampling Location	Directive 1999/31/EC			D-17	D-18	D-21	D-23	D-24	D-25	D-27	D-28	D-29	D-31	D-32	D-33	D-34	D-35	D-36	D-37	D-38	D-39	D-40	D-41	D-42	D-43	D-44	D-45	D-46	E-1
Sampling Depth (m bgl)	Criteria for inert waste	Criteria for non-hazardous waste	Criteria for hazardous waste	0,0 - 0,1	0,0 - 0,1	0,0 - 0,02	0,0 - 0,02	0,02 - 0,1	0,0 - 0,02	0,0 - 0,02	0,02 - 0,1	0,0 - 0,02			0,02 - 0,1		0,0 - 0,02	0,02 - 0,1		0,0 - 0,02	0,02 - 0,1								
Material				concrete	concrete	mortar	mortar	brick	mortar	mortar	brick	mortar	1st-storey, concrete wall	1st storey, mortar	1st storey, brick	1st storey, concrete	1st storey, mortar	1st storey, brick	1st storey, concrete	mortar	brick	concrete floor	concrete floor	concrete ramp	concrete ramp	sludge (sewage)	sludge (sewage)	sewage sed.	mortar
Building Nr.				D1	D1	D1	southern trafo D1	southern trafo D1	D1	D1	D1	D1	D1 1st floor	D1 1st floor	D1 1st floor	D1 1st floor	D1 1st floor	D1 1st floor	D1 1st floor	southern trafo D1	southern trafo D1	D1	D1	D3	D3	D3	NW from D3	not found	E2
Sample ID	table 2.1.2.1	table 2.2.2.	table 2.4.1.	150	151	152	153	154	155	156	157	158	159	186	160	161	162	163	164	165	166	167	168	169	170	171	172	25 (2008)	wall
Note																													
Dry matter % wt.				97.9	97.9	97.8	98.1	87	88.7	99	93.5	99.5	97.8	99.6	99.3	98.6	98.6	99.6	98.1	99.4	99.5	98	98	91.5	90.5	52.3	36.7	62.4	
Chlorinated pesticides mg/kg dry matter																													
α- HCH	NA	NA	NA																										
β - HCH	NA	NA	NA																										
γ - HCH (lindan)	NA	NA	NA																										
δ - HCH	NA	NA	NA																										
HCH (sum)[1]	NA	NA	NA																										
HCB	NA	NA	NA																										
Hleptachlor	NA	NA	NA																										
Aldrin	NA	NA	NA																										
Heptachlorepoxid	NA	NA	NA																										
Endosulfan	NA	NA	NA																										
Dieldrin	NA	NA	NA																										
Endrin	NA	NA	NA																										
drins (sum)[2]	NA	NA	NA																										
Σ DDE	NA	NA	NA																										
Σ DDD	NA	NA	NA																										
Σ DDT	NA	NA	NA																										
Sum DDE, DDD, DDT	NA	NA	NA																										
Methoxychlor	NA	NA	NA																										
Organophosphates mg/kg dry matter																													
dimethoate	NA	NA	NA																										
fonofos	NA	NA	NA																										
formothion	NA	NA	NA																										
fenitrothion	NA	NA	NA																										
malathion	NA	NA	NA																										
phosmet	NA	NA	NA																										
Hg mg/kg dry matter				80300	5030	240	12.0	5.85	145	195	2080	1700	143	3180	660	580	3480	4110	173	5.82	1.70	3060	20100	240	28.4	144.0	84.8	2.28	
Water leachate mg/l																													
DOC	50	80	100	6.2												2.65	45.40	5.55	5.90					2.5					29.4
Phenol index	0.1	NA	NA	0.08												<0,01	0.01	0.03	0.01					0.01					< 0,1
Cl^-	80	1500	2500	**93**												**486**	**882**	**266**	**403**					37					35
F^-	1	15	50	**1.18**												0.30	**1.56**	0.82	0.58					0.18					0.44
SO_4^{2-}	100	2000	5000	69												24	**456**	**251**	25					23					**196**
As	0.05	0.2	2.5	0.005												0.007	0.005	0.017	0.006					0.016					0.005
Ba	2	10	30	0.16												0.07	0.24	0.04	<0,01					<0,01					< 0,01
Cd	0.004	0.1	0.5	<0,004												<0,004	<0,004	<0,004	<0,004					<0,004					< 0,004
Cr total	0.05	1	7	<0,05												<0,05	<0,05	<0,05	<0,05					<0,05					< 0,05
Cu	0.2	5	10	0.04												<0,02	<0,02	<0,02	<0,02					<0,02					**0.3**
Hg	0.001	0.02	0.2	17.3												0.313	99.0	16.4	5.71					**0.004**					< 0,001
Ni	0.04	1	4	<0,03												<0,03	<0,03	<0,03	<0,03					<0,03					< 0,03
Pb	0.05	1	5	<0,05												<0,05	<0,05	<0,05	<0,05					<0,05					< 0,05
Sb	0.006	0.07	0.5	<0,005												<0,005	<0,005	<0,005	<0,005					<0,005					< 0,005
Se	0.01	0.05	0.7	<0,001												<0,001	<0,001	<0,001	0.002					**0.011**					0.009
Zn	0.4	5	20	<0,01												<0,01	0.04	<0,01	<0,01					0.11					< 0,01
Mo	0.05	1	3	<0,03												<0,03	<0,03	<0,03	<0,03					<0,03					< 0,05
dissolved solids (105°C)	4000	6000	10000	328												932	2290	840	786					162					590
pH				7.2												10.7	8.1	8.3	9.1					9.7					8.7
EOX mg/kg dry matter																													
TOC mg/kg dry matter	30000		60000											6000												8000	4600		
PCB mg/kg/dry matter																													
k.28																													
k.52																													
k.101																													
k.118																													
k.138																													
k.153																													
k.180																													
Σ PCB	1																												

NA not applicable
[1] - sum of alfa, beta, gama a delta HCH isomers
[2] - sum of aldrin, dieldrin, and endrin
[3] - sum of all chlorobenzenes

Annex 25

Results of Analyses of Vegetables

Results of Analyses of Vegetables

Sample	MRL Regulation (EC) No 396/2005	VG-1	VG-12	root celery	potatoe
dry matter % w.		7.63	5.96	-	-
Hg mg/kg		< 0,004	< 0,004	-	-
Chlorinated pesticides µg/kg					
α- HCH		3.96	4.53	< 5	< 5
β - HCH		1.11	0.82	< 5	25
γ - HCH (lindan)	10.00	0.13	0.27	< 5	< 5
δ - HCH		0.10	0.10	< 10	< 10
ε - HCH		-	-	< 10	< 10
sum of HCH (α-, β -, γ - and δ- isomers)	10.00	5.30	5.72	< 10	**25**
HCB		< 0,1	< 0,1	-	-
Heptachlor		< 0,1	< 0,1	-	-
Aldrin		< 0,1	< 0,1	-	-
Heptachlorepoxid		< 0,1	< 0,1	-	-
Endosulfan I.		0.11	0.10	-	-
Endosulfan II.		0.15	0.14	-	-
Dieldrin		< 0,1	< 0,1	-	-
Endrin		< 0,1	< 0,1	-	-
Σ DDE		0.11	0.10	-	-
Σ DDD		< 0,1	< 0,1	-	-
Σ DDT		< 0,1	< 0,1	-	-
sum of DDE, DDD, DDT	50.00	0.21	0.20	-	-
Methoxychlor		< 0,1	< 0,1	-	-
PCB µg/kg					
cong. 28		< 0,1	< 0,1	< 5	< 5
cong. 52		< 0,1	< 0,1	< 5	< 5
cong. 101		0.31	0.30	< 5	< 5
cong. 118		0.18	0.20	< 5	< 5
cong. 138		0.41	0.36	< 5	< 5
cong. 153		0.55	0.52	< 5	< 5
cong. 180		0.17	0.14	< 5	< 5
Σ 7 cong. PCB		1.62	1.52	< 5	< 5

Annex 26
Laboratory Protocols

Analytical Laboratories Plzen, co.

analytical, diagnostic and expert centre

Laboratory Report No. A 730/08

Determination of selected parametrs of contaminated water and vegetable

Customer
ENACON s.r.o.
Na holém vrchu 708/3
143 00, Praha 4
Czech Republic

Object of testing: samples of water no. HS1, HS2, MW1, MW2, MW3, MW4, MW5, MW6, MW7, MW8, DW1, DW3, DW4, Lišice1, Lišice2 and vegetable no.: V61, V62

Testing methods:

total solids	gravimetric method	SOP no.23
chlorinated pesticides	GC	SOP no. 54
organophosphate pesticides	GC MS	SOP 3119
triazine	GC MS	SOP 3119
chloroacetic acid	GC	SOP 169/50-00/HL
chlorobenzene	HR GC MS	SOP no.117
BTEX, ClH	GC	ISO 11423-2, ČSN 656150, ČSN EN ISO 10301
DOC	combustion method	SOP no. 62
anions	IC	SOP no. 15
metals	AA-spectrometry	SOP no. 51
mercury	AA-spectrometry - TMA	SOP no. 20

Analyzed by: Vajskébrová, Kellnerová, Plachá, Králová, Bernášková, Legner, Kislingerová, Polívková
Date of sample delivery: 1.4.2008
Date of determination start: 1.4.2008
Date of determination finishing: 22.4.2008
The Report printed: 23.4.2008

Testing laboratory authorized by Czech Bereau of Testing, Measurement and Metrology, cert.no.979/06/02.
The Report shall not be reproduced except without the writte approval of the testing laboratory.

Determination of organophospate pesticide and triazine provided by ZU Olomouc.
Determination of chloroacetic acide provided by ZU Plzeň, Lab. Centre Klatovy.

Analytické laboratoře Plzeň, a.s.
Pod Vrchem 51, 312 80 Plzeň
IČ: 25771761 DIČ: CZ25771761
tel: 377 260 251-3

Ing. Zdeněk Opl
Head of Testing Laboratories

Lab. Report no. 730/08, total pages: 3
Adress: Pod Vrchem 51, 312 80 Plzen

Analytické Laboratoře Plzeň, a.s.

analytické, diagnostické a expertní centrum

Protokol č. A 914/08

Stanovení vybraných parametrů znečištění zemin a stavebních konstrukcí z lokality OHIS

Zákazník:
ENACON s.r.o.
Na holém vrchu 708/3
143 00, Praha 4

Tento protokol obsahuje výsledky analýz vzorků: MW1 - MW8, Topsoil 1, Topsoil 2, A32 - A39, D46, SS1, DS2.

Použité zkušební metody:

sušina	vážková metoda	SOP č.23
chlorované pesticidy	GC	SOP č. 54
kyselina monochloroctová	GC	SOP 169/50-00/HL
ClU	GC	ISO 11423-2, ČSN 656150, ČSN EN ISO 10301
TOC	spalovací metoda	SOP č. 62
anionty	iontová chromatografie	SOP č. 15
kovy	AA-spektrometrie	SOP č. 51
rtuť	AA-spektrometrie - TMA	SOP č. 20
FNI	spektrofotometrie	ČSN ISO 6439
kovy	AA-spektrometrie	SOP č. 51
rozp.látky	vážková metoda	ČSN 757346
pH	elektroanalytická metoda	ČSN ISO 10523

Analýzu provedli: Vajskébrová, Kellnerová, Plachá, Králová, Bernášková, Legner, Kislingerová, Polívková
Vzorky převzaty: 22.4.2008
Zahájení zkoušek: 22.4.2008
Ukončení zkoušek: 30.4.2008
Datum vydání protokolu: 2.5.2008

Laboratoře autorizované ÚNMZ dle § 21 zákona č. 505/90Sb., o metrologii, ve znění zákona č. 119/2000Sb.; č.j. 979/06/02, vydáno 21.4.2006.

Stanovení kyseliny monochloroctové subdodávkou ZÚ Plzeň, Centrum laboratoří Klatovy.

Ing. Zdeněk Opl
vedoucí zkušební laboratoře

Analytické laboratoře Plzeň, a.s.
Pod Vrchem 51, 312 80 Plzeň
IČ: 25771761 DIČ: CZ25771761
tel: 377 260 251-3

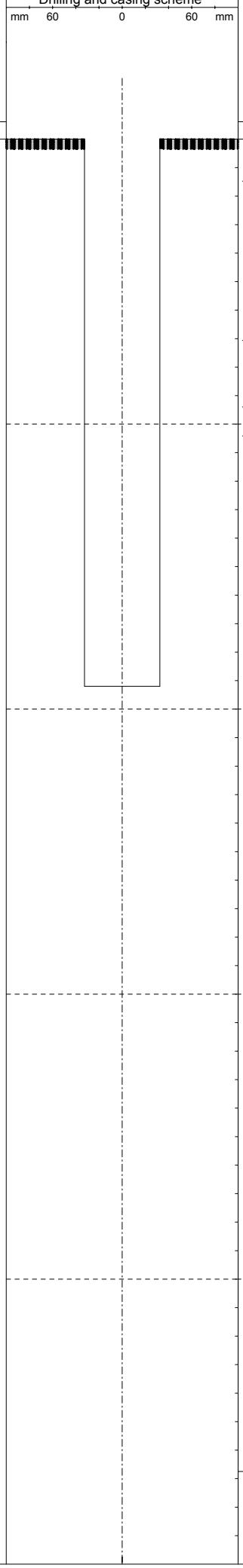
Annex 27
Boring Logs

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A16	0.00-0.40 : floor construction-concrete, backfill	Fill		
			0.40-3.10 : loamy clay, brown	Quaternary	soil	
					soil	
		Q41				
			3.10-4.70 : loamy clay, grey, organic smell		soil	
		Q68	4.70-4.80 : gravel with sand		soil	

Drilling and casing scheme



Object

S-A-01

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

8

DESCRIPTIVE DATA

Drilling Initiation	27.8.2007
Drilling Completion	27.8.2007
Drilling Technology	direct push technolo
Drilling Rig	AMS Power Probe 9631
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Polák
Well Type	soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

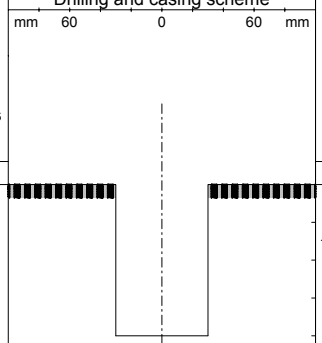
Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.20 : concrete (floor)		soil	
		A22	0.20-1.00 : gravel, medium, gray, sandy		soil	

Drilling and casing scheme



Object

S-A-02

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

8

DESCRIPTIVE DATA

Drilling Initiation	4.9.2007
Drilling Completion	4.9.2007
Drilling Technology	direct push technolo
Drilling Rig	MAKITA
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	1.0	60

LEGEND

Hole diameter
Blank casing
Screen

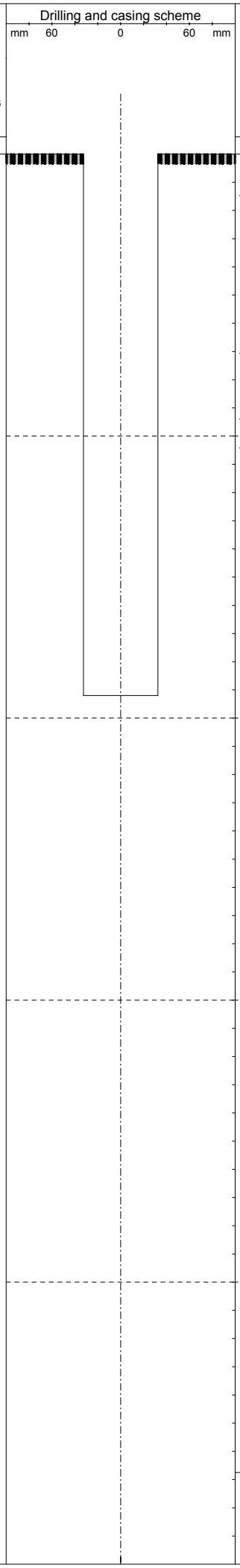
Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A26	0.00-0.60 : fill: sandy loam, brown, odourless	Fill		
				soil	
1	Q41	0.60-1.90 : loamy clay, stiff to soft, brown, odourless	Quaternary		
				soil	
2	Q43	1.90-3.10 : clay,sandy, loamy, soft, brown, odourless			
3				soil	
	Q55	3.10-3.40 : sand, loamy, moisty, brown, odourless			
	Q68	3.40-4.80 : gravel with sand, light brown, odourless			
				soil	
4					
5					
6					
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-A-03

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 25.8.2007
Drilling Completion 25.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

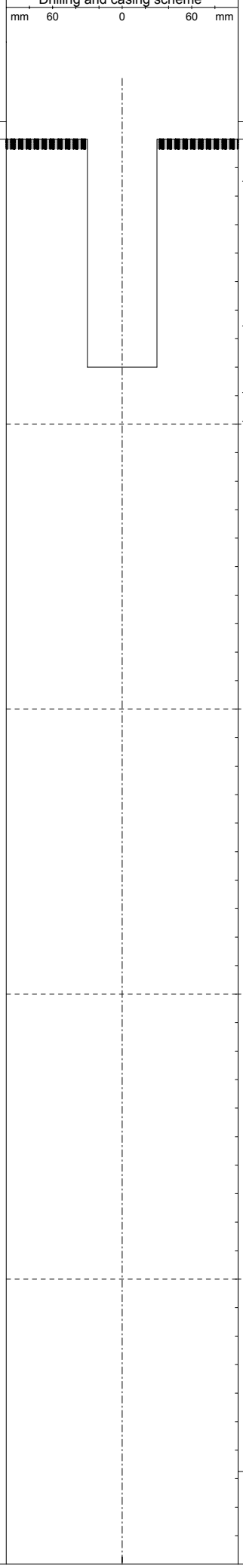
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.15 : concrete (floor)	F		
			0.15-2.00 : light brown clay (firm in the interval 0.15 - 1.0 m; wet plastic in the interval 1.0 - 2.0 m)	Quaternary	soil	
1		Q41			soil	
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-A-04

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 4.9.2007
Drilling Completion 4.9.2007
Drilling Technology direct push technolo
Drilling Rig MAKITA
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Váňa
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.0	60

LEGEND

Hole diameter
Blank casing
Screen

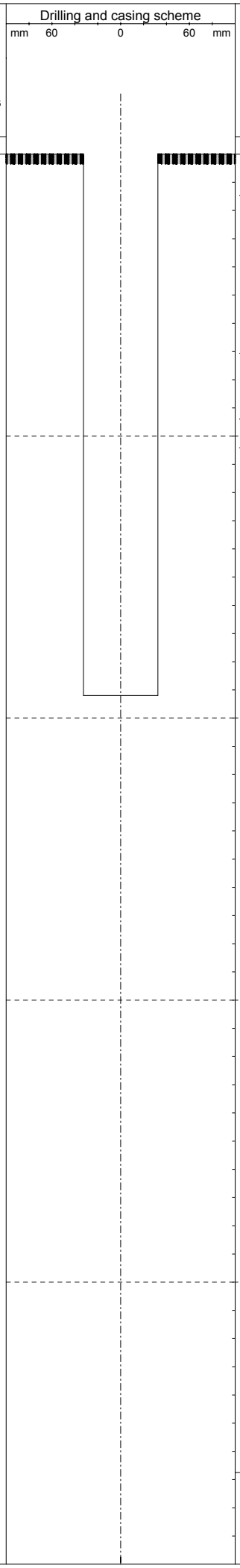
Scale : 1 : 50
Project :
Compiled by :
Date : 21.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	Q36	0.00-0.50 : silty loam, brown	Quaternary		
	Q41	0.50-2.50 : loamy clay,soft, brown, odourless		soil soil	
	Q55	2.50-3.40 : loamy sand finegrained, brown, wet		soil	
	Q61	3.40-4.80 : gravel, sandy, light brown, odourless		soil	

Drilling and casing scheme



Object

S-A-05

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 25.8.2007
Drilling Completion 25.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 4.8	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.20 : plate construction (concrete)	F		
			0.20-3.00 : loamy clay, brown	Quaternary	soil	
1						
					soil	
2		Q41				
3			3.00-3.90 : loamy clay, grey, organic odour		soil	
4			3.90-4.80 : gravel with sand			
		Q68			soil	
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme

mm 60 0 60 mm

Object

S-A-06

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 27.8.2007
Drilling Completion 27.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]			DIAM [mm]
0.0	-	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

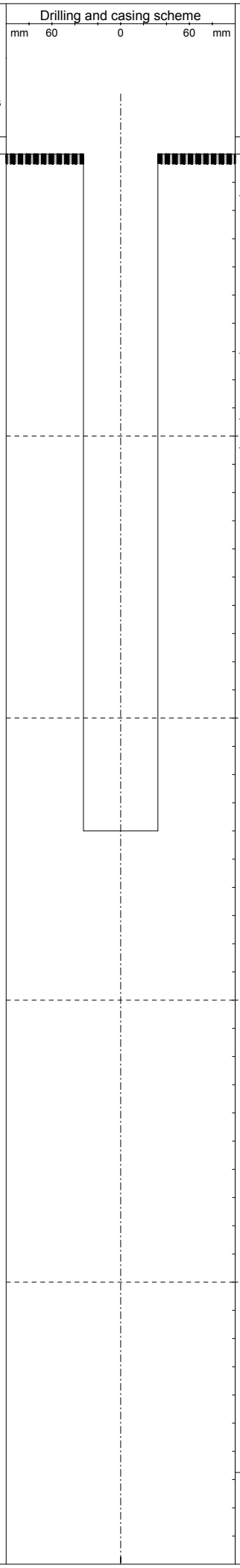
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A19	0.00-0.50 : fill: loamy sand with gravel, brown	Fill		
		Q41	0.50-2.20 : clay- brown to dark grey,stiff, soft, odourless, loamy	Quaternary	soil soil	
		Q55	2.20-2.60 : sand, loamy, brown, odourless			
		Q68	2.60-6.00 : gravel with sand, brown light, slight odour in upper part		soil soil soil	

Drilling and casing scheme



Object

S-A-07

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 25.8.2007
Drilling Completion 25.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

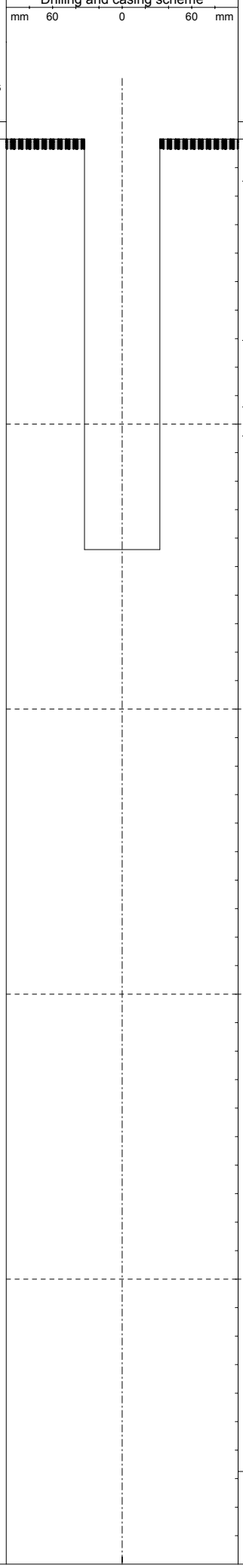
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.50 : floor construction, backfill	Fill		
	A20	0.50-0.80 : sand with black spots of organic odour			
	Q41	0.80-2.10 : loamy clay	Quaternary	soil	
				soil	
	Q43	2.10-2.50 : sandy clay			
	Q68	2.50-3.60 : gravel with sand		soil	

Drilling and casing scheme



Object

S-A-08

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 27.8.2007
Drilling Completion 27.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 3.6	65

LEGEND

Hole diameter
Blank casing
Screen

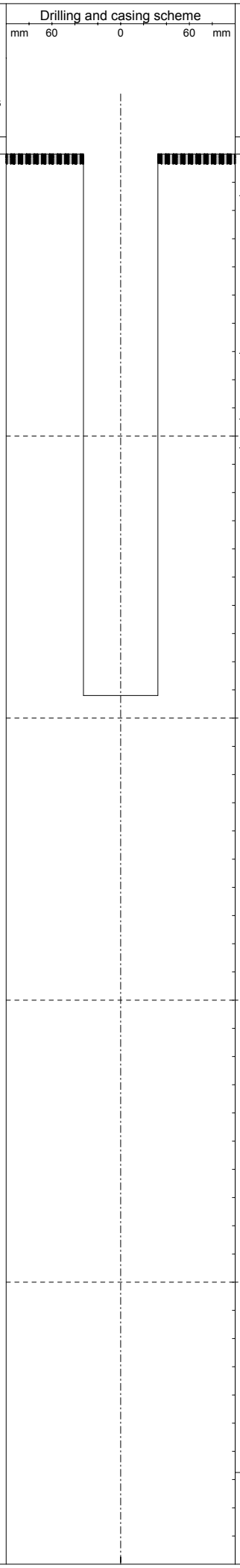
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.10 : concrete	Fill		
	A23	0.10-0.60 : fill: sand, gravel, slight HCH odour			
		0.60-1.60 : clay loamy, brown soft, odourless	Quaternary	soil	
1	Q33				
		1.60-4.20 : clay loamy, sandy, soft to stiff, odourless		soil	
2					
3	Q37			soil	
4					
	Q55	4.20-4.30 : sand, clayely, finegrained, moisty, odourless			
	Q51				
	Q60	4.30-4.50 : sand, moisty, slight HCH odour		soil	
5		4.50-4.80 : gravel			
6					
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-A-09

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

8

DESCRIPTIVE DATA

Drilling Initiation	25.8.2007
Drilling Completion	25.8.2007
Drilling Technology	direct push technolo
Drilling Rig	AMS Power Probe 9631
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Němeček
Well Type	soil boring

DRILLING INTERVALS [m]			DIAM [mm]
0.0	-	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

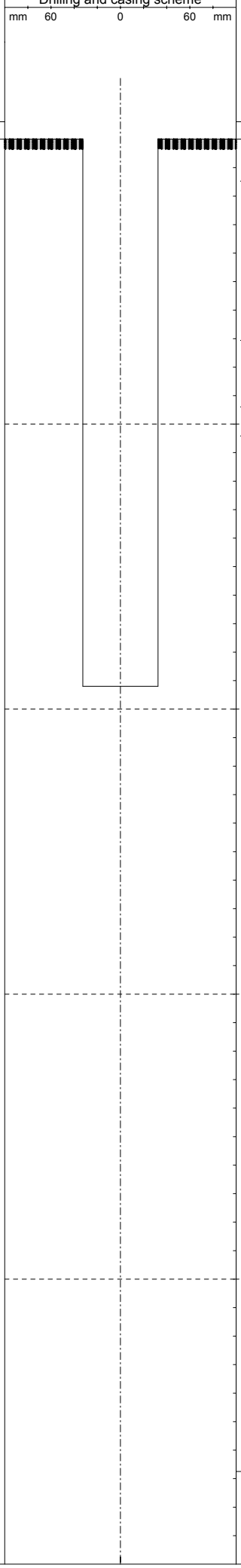
Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A18	0.00-0.60 : fill: loamy clay, sandy, with gravel, odour (HCH)	Fill		
		Q41	0.60-0.70 : clay, grey, stiff, odour (HCH)	Quaternary	soil	
1		Q33	0.70-1.80 : clay loamy, brown, odourless, stiff			
					soil	
2		Q37	1.80-2.20 : clay loamy, sandy, odourless, stiff, brown			
			2.20-2.60 : sand, loamy, finegrained, odourless, brown			
3		Q55	2.60-3.70 : sand loamy, mediumgrained, odourless, brown		soil	
4		Q54	3.70-4.80 : gravel sandy, lightbrown			
					soil	
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-A-11

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 25.8.2007
Drilling Completion 25.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A23	0.00-0.80 : fill: sand with gravel	Fill	soil	
1	Q33	0.80-1.80 : clay, loamy, soft to stiff, odourless, brown	Quaternary	soil	
2	Q37	1.80-2.40 : clay, loamy, sandy, soft, odourless, brown			
	Q55	2.40-2.60 : sand, loamy, moisty, odourless, brown			
3	Q54	2.60-3.60 : gravel sandy, light brown, odourless		soil	

Drilling and casing scheme

mm 60 0 60 mm

Object

S-A-12

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 25.8.2007
Drilling Completion 25.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	3.6	65

LEGEND

Hole diameter
Blank casing
Screen

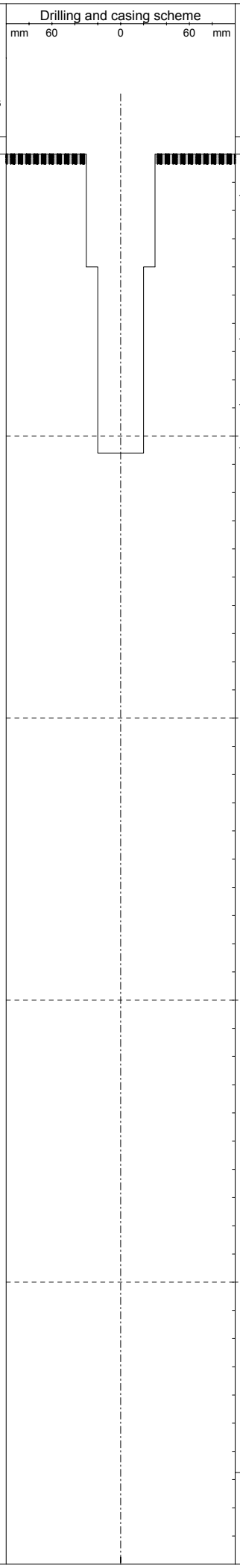
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.40 : concrete (floor construction)	Fill	soil	
1		Q41	0.40-1.50 : clay, brown	Quaternary	soil	
2		Q43	1.50-2.60 : sandy clay			
		Q68	2.60-2.65 : gravel, sand		soil	

Drilling and casing scheme



Object

S-A-13

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

8

DESCRIPTIVE DATA

Drilling Initiation	1.9.2007
Drilling Completion	1.9.2007
Drilling Technology	direct push technolo
Drilling Rig	MAKITA
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Polák
Well Type	soil boring

DRILLING INTERVALS [m]			DIAM [mm]
0.0	-	1.0	60
1.0	-	2.7	40

LEGEND

Hole diameter
Blank casing
Screen

Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.20 : concrete	Fill		
		A22	0.20-0.60 : fill - gravel, macadam			
			0.60-0.90 : clay - loamy, light brown, soft	Quaternary	soil	
1		Q41	0.90-1.80 : clay - stiff, grey		soil	
2		Q44	1.80-2.40 : silt - light brown			
3		Q41	2.40-3.30 : clay - grey to green, soft (wet)		soil	
		Q54	3.30-3.40 : sand - medium grained			
			3.40-3.50 : gravel - sandy silty			
4		Q62	3.50-4.80 : gravel - sandy silty		soil	
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme

mm 60 0 60 mm

Object

S-A-14

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 19.3.2009
Drilling Completion 19.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Dosoudil
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 4.8	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.20 : concrete	Fill		
		A22	0.20-0.50 : fill - gravel, macadam			
			0.50-0.80 : clay - loamy, soft, dark brown	Quaternary	soil	
1		Q41	0.80-2.20 : clay - dark brown		soil	
2		Q44	2.20-3.40 : silt - light brown, moisty		soil	
3		Q51	3.40-3.80 : sand - fine grained			
4		Q54	3.80-4.30 : sand - coarse grained			
		Q62	4.30-4.80 : gravel - sandy			
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme

mm 60 0 60 mm

Object

S-A-15

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 19.3.2009
Drilling Completion 19.3.2009
Drilling Technology direct push technolo
Drilling Rig MAKITA
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Dosoudil
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

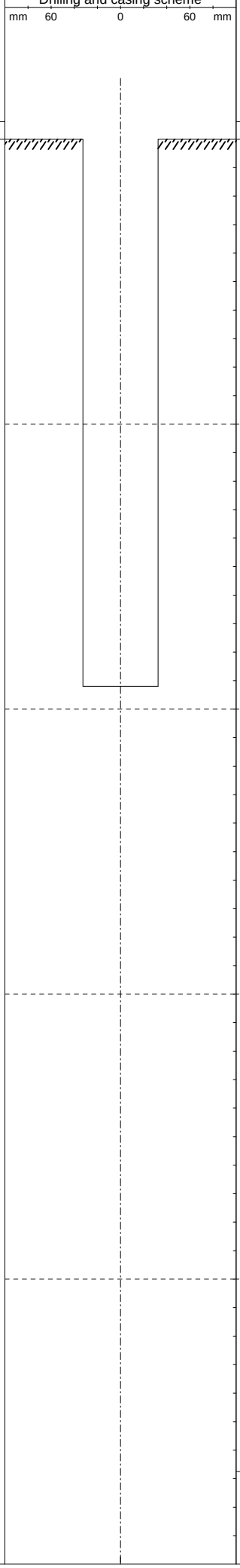
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.25 : concrete	Fill		
		A22	0.25-0.60 : fill - gravel, macadam		soil	
		Q33	0.60-0.70 : loam - clayey, light brown	Quaternary		
1			0.70-1.20 : clay - stiff, dark grey			
		Q41	1.20-2.10 : clay - stiff, dark brown		soil	
2		Q44	2.10-2.60 : silt - light brown			
		Q51	2.60-2.90 : sand - fine grained			
3		Q54	2.90-3.10 : sand - medium grained		soil	
		Q44	3.10-3.60 : silt - wet, light brown			
4		Q54	3.60-4.20 : sand - coarse grained, graines up to 3 mm diameter			
		Q62	4.20-4.80 : gravel - sandy, pebbles up to 3 cm diameter		soil	
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-A-16

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 19.3.2009
Drilling Completion 19.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Dosoudil
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

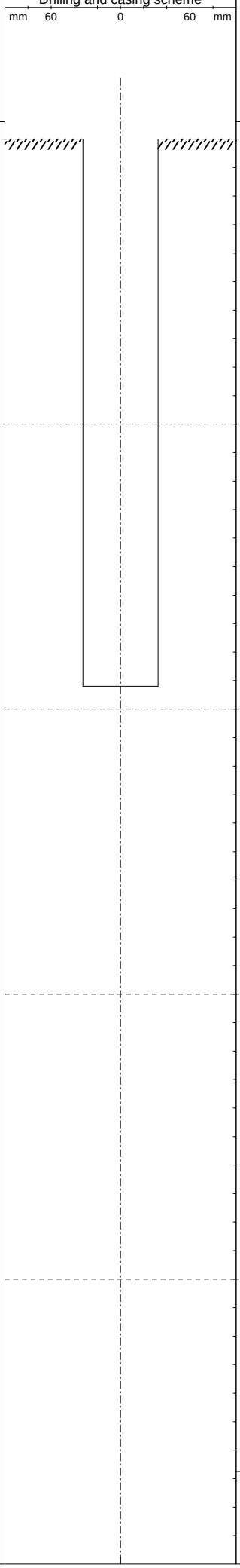
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.30 : concrete	Fill		
		A22	0.30-0.70 : fill - gravel, macadam, fragments of bricks			
1		Q33	0.70-1.20 : loam - clayey, light brown	Quaternary	soil	
		Q41	1.20-1.60 : clay - stiff, brown			
2		Q44	1.60-2.20 : silt - light brown		soil	
		Q54	2.20-2.70 : sand - medium grained			
3		Q51	2.70-3.40 : sand - fine grained, wet		soil	
4		Q62	3.40-4.80 : gravel - sandy, pebbels up to 5 cm diameter			
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-A-17

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 19.3.2009
Drilling Completion 19.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Dosoudil
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

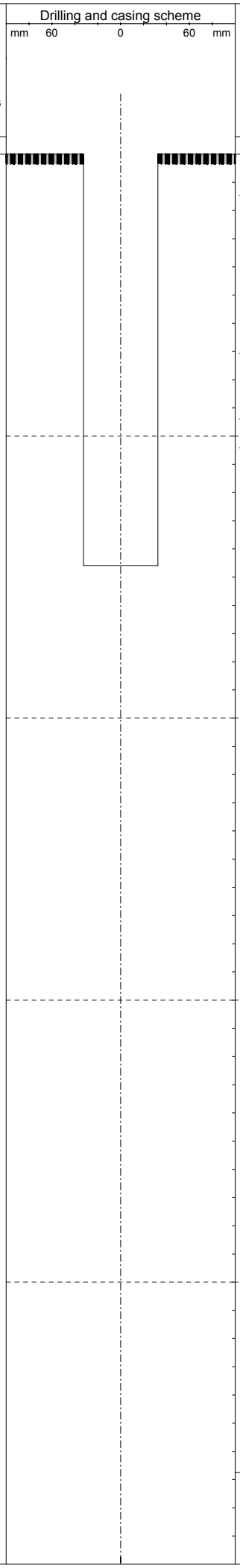
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A25	0.00-0.40 : humous loam, brown	Fill		
		A20	0.40-0.60 : white sandy layer, organic odour		soil	
			0.60-3.60 : loamy clay, brown, organic odour		soil	
		A18			soil	
		A25	3.60-3.65 : very hard soil, organic odour		soil	

Drilling and casing scheme



Object

S-B-01

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 30.8.2007
Drilling Completion 30.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]			DIAM [mm]
0.0	-	3.7	65

LEGEND

Hole diameter
Blank casing
Screen

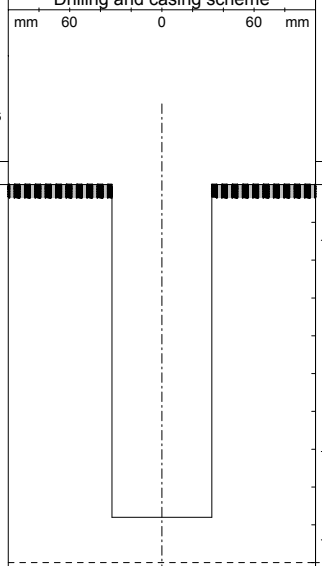
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A25	0.00-0.60 : humous loam	Fill		
		A20	0.60-0.80 : white sandy layer, odourless		soil	
		A18	0.80-1.00 : loamy clay, odourless			
1		A25	1.00-1.20 : black layer, odourless			
		A18	1.20-2.00 : loamy clay, organic odour (HCH)			
2		A12	2.00-2.20 : consist. glue yellow-brown, organic odour (HCH)		soil	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-B-02

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 30.8.2007
Drilling Completion 30.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.2	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

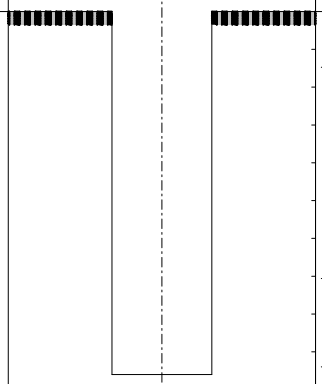
ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
0.00-2.40		A18	0.00-2.40 : loamy clay, brown, organic odour	Fill	soil soil	

Drilling and casing scheme

mm 60 0 60 mm



Object

S-B-03a

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 30.8.2007
Drilling Completion 30.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9632
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.4	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

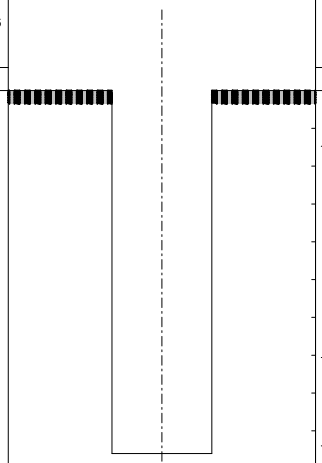
ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
1, 2		A18	0.00-2.40 : loamy clay, brown, organic odour	Fill	soil soil	

Drilling and casing scheme

mm 60 0 60 mm



Object

S-B-03b

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

8

DESCRIPTIVE DATA

Drilling Initiation	30.8.2007
Drilling Completion	30.8.2007
Drilling Technology	direct push technolo
Drilling Rig	AMS Power Probe 9631
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Polák
Well Type	soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.4	65

LEGEND

Hole diameter
Blank casing
Screen

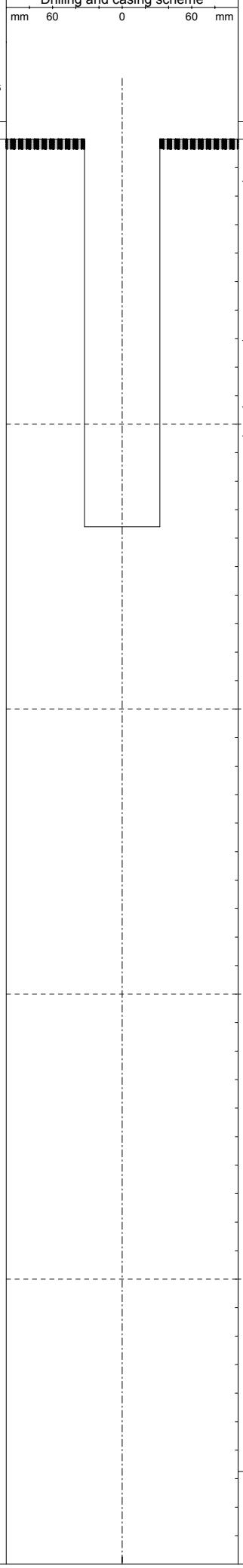
Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A25	0.00-0.60 : humous loam	Fill		
	A12	0.60-1.00 : white pasty to stiff waste (HCH waste)		soil	
1	A18	1.00-1.60 : loamy clay, brown, crystalic, strong odour (HCH)			
2	A12	1.60-3.40 : yellow- brown mud, strong odour (HCH waste)		soil	
3				soil	
4					
5					
6					
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-B-04

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 28.8.2007
Drilling Completion 28.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	3.4	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A25	0.00-1.40 : loam partly humous, brown, HCH odour	Fill		
	A12	1.40-5.00 : HCH waste, white	Fill	soil	
	Q41	5.00-6.00 : clay, well pressed	Quaternary	soil	

Drilling and casing scheme

mm 60 0 60 mm

Object

S-B-05

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 31.8.2007
Drilling Completion 31.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 6.0	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A25	0.00-1.40 : loam, HCH odour	Fill	soil	
	A12	1.40-5.00 : white pasty to stiff waste (HCH waste)			
	Q41	5.00-6.00 : clay, well pressed	Quaternary	soil	

Drilling and casing scheme

mm 60 0 60 mm

Object

S-B-06

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 31.8.2007
Drilling Completion 31.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

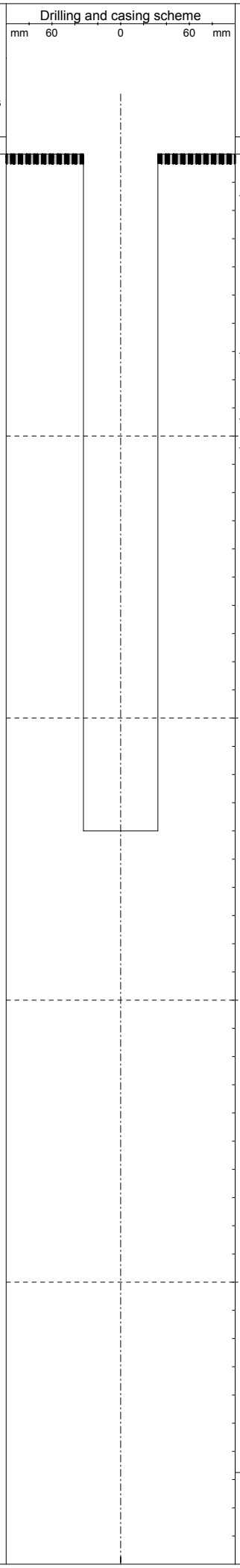
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A25	0.00-0.50 : loam, brown colour	Fill		
	A12	0.50-5.00 : HCH waste, white			
5	Q41	5.00-6.00 : clay, well pressed, browngrey	Quaternary	soil	

Drilling and casing scheme



Object

S-B-07

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 1.9.2007
Drilling Completion 1.9.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

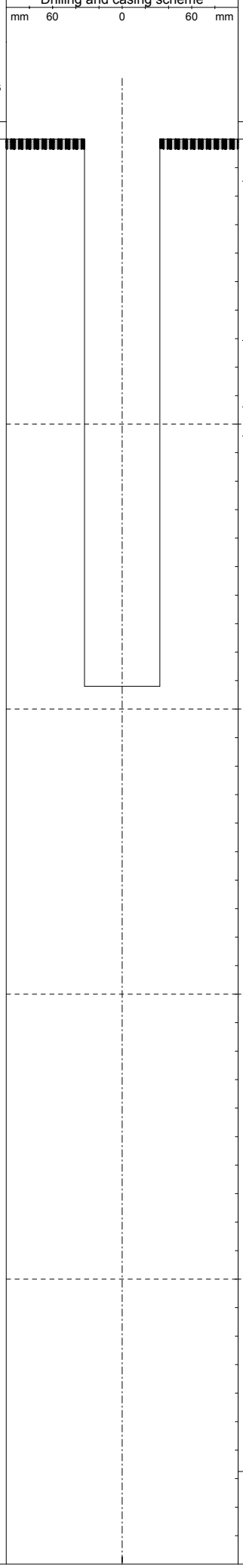
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A25	0.00-0.50 : loam, brown colour	Fill		
	A12	0.50-1.00 : HCH waste, white			
1	A25	1.00-1.60 : loam, brown colour			
2		1.60-4.60 : HCH waste, white			
3	A12				
4					
	Q41	4.60-4.80 : clay, dark grey, highly pressed	Q	soil	
5					
6					
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-B-08

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 1.9.2007
Drilling Completion 1.9.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

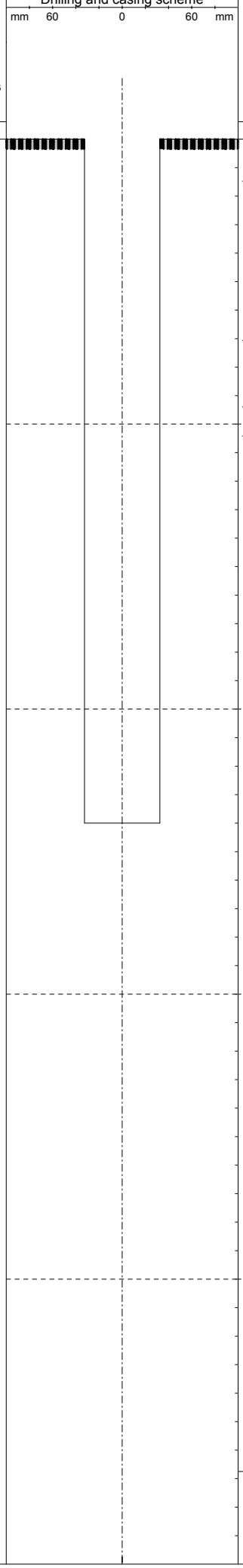
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A18	0.00-0.90 : loam, clayey, brown colour			
1		0.90-5.00 : HCH waste, white	Fill		
2					
3	A12				
4					
5		5.00-6.00 : clay, highly pressed	Quaternary		
	Q41			soil	
6					
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-B-09

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 31.8.2007
Drilling Completion 31.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9632
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

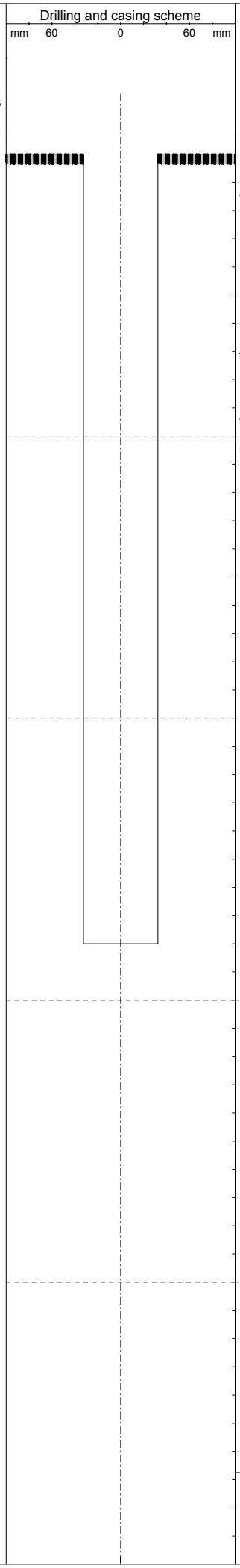
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A18	0.00-1.00 : loam, clayey, brown colour	Fill		
	A12	1.00-5.60 : HCH waste, white	Fill	soil	
	Q41	5.60-7.00 : clay, highly pressed	Quaternary	soil	
				soil	

Drilling and casing scheme



Object

S-B-10

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 31.8.2007
Drilling Completion 31.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9633
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	7.0	65

LEGEND

Hole diameter
Blank casing
Screen

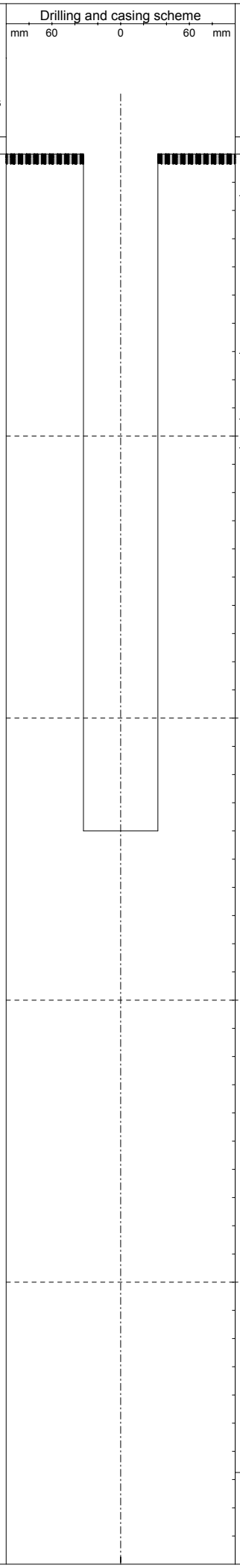
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A25	0.00-0.60 : humous loam	Fill		
	A12	0.60-2.60 : HCH waste, white	Fill	soil	
	A15	2.60-3.00 : mixture of backfill and HCH waste	Fill		
	A12	3.00-5.00 : HCH waste, white	Fill		
	Q41	5.00-6.00 : clay, brown	Quaternary	soil	

Drilling and casing scheme



Object

S-B-11

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 31.8.2007
Drilling Completion 31.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

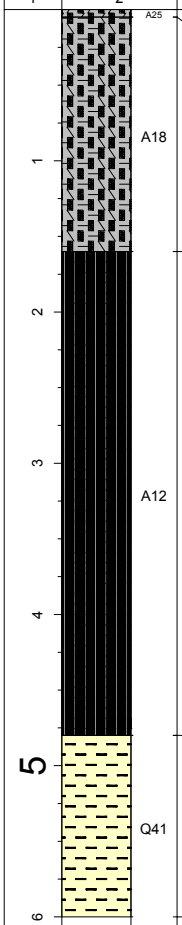
Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6



0.00-0.05 : humous loam

0.05-1.60 : loamy clay

1.60-4.80 : HCH waste, white

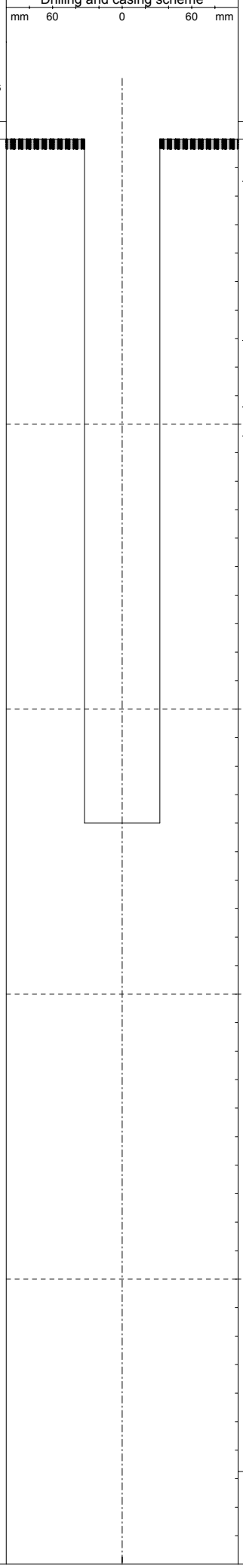
4.80-6.00 : clay, highly pressed

Fill

Quaternary

soil

Drilling and casing scheme



Object

S-B-12

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 31.8.2007
Drilling Completion 31.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9635
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

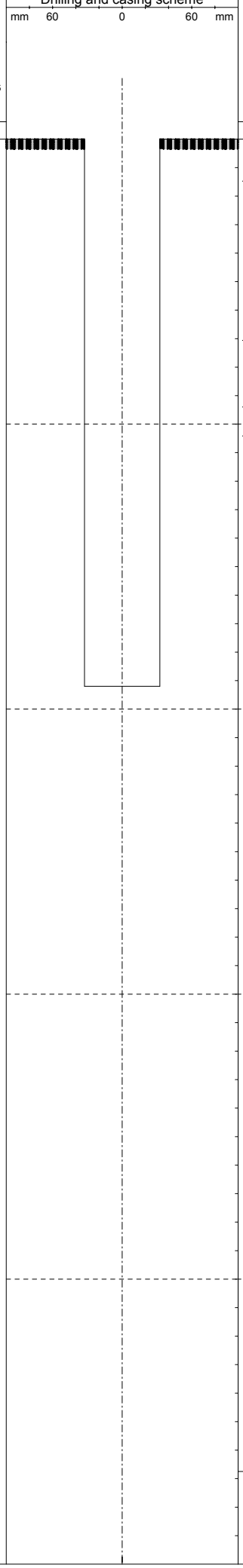
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.40 : road construction-concrete, backfill, odourless	Fill		
		Q41	0.40-2.00 : loamy clay, brown colour, odourless	Quaternary	soil soil	
		Q43	2.00-2.60 : sandy clay, brown colour, organic odour (HCH, TPH)			
		Q68	2.60-4.80 : gravel with sand,grey-brown, odourless		soil soil	

Drilling and casing scheme



Object

S-B-13

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 29.8.2007
Drilling Completion 29.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9636
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

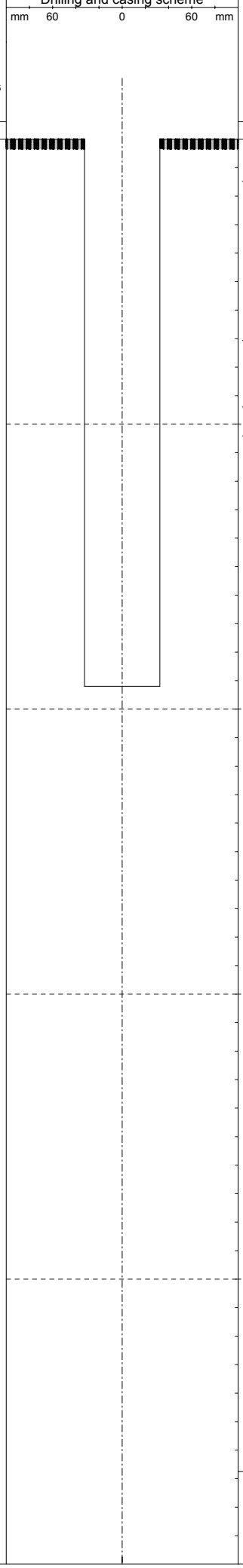
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : floor construction-concrete, backfill	Fill		
	Q41	0.60-2.40 : loamy clay, brown, organic odour	Quaternary	soil	
				soil	
	Q43	2.40-2.90 : sandy clay, grey-brown, organic odour			
	Q68	2.90-4.80 : gravel with sand, grey-brown, organic odour		soil	
				soil	

Drilling and casing scheme



Object

S-B-14

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

DESCRIPTIVE DATA

Drilling Initiation	29.8.2007
Drilling Completion	29.8.2007
Drilling Technology	direct push technolo
Drilling Rig	AMS Power Probe 9637
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Polák
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 4.8	65

LEGEND

Hole diameter
Blank casing
Screen

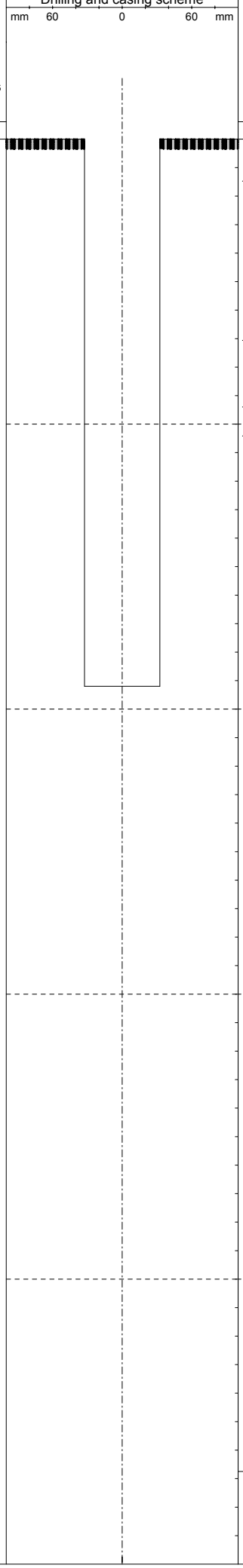
Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A16	0.00-0.50 : fill: loam with bricks and HCH waste	Fill		
		Q41	0.50-2.10 : loamy clay, brown	Quaternary	soil	
		Q34	2.10-2.60 : loamy sand, finegrained, brown		soil	
		Q61	2.60-4.80 : sandy gravel		soil	

Drilling and casing scheme



Object

S-B-15

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 24.8.2007
Drilling Completion 24.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9638
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

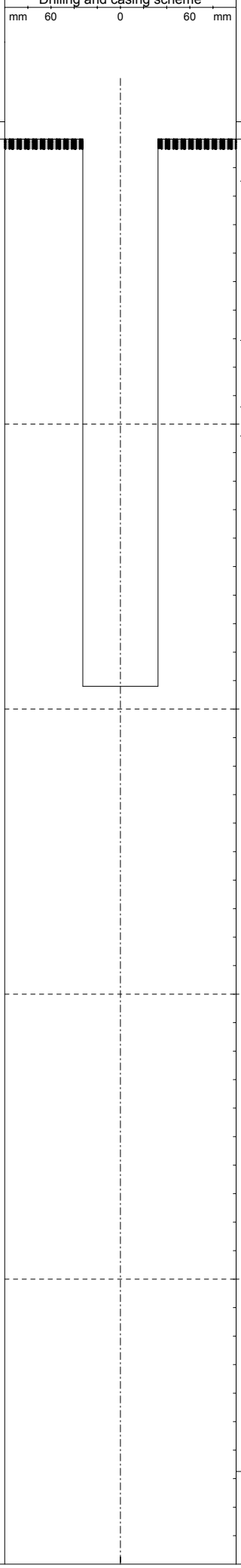
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		Q31	0.00-0.30 : loam, silty, brown	Quaternary	soil	
			0.30-0.40 : loam with organic odour, white		soil	
			0.40-0.70 : loamy clay, brown, soft, stiff			
1			0.70-1.40 : loamy clay, brown, soft, stiff		soil	
			1.40-1.60 : loamy clay with organic odour, white		soil	
2		Q41	1.60-2.50 : loamy clay, brown		soil	
			2.50-3.20 : loamy clay, sandy, wet			
3					soil	
			3.20-4.80 : gravel, sandy, clayely, brown		soil	
4		Q68			soil	
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-B-16

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 24.8.2007
Drilling Completion 24.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9639
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

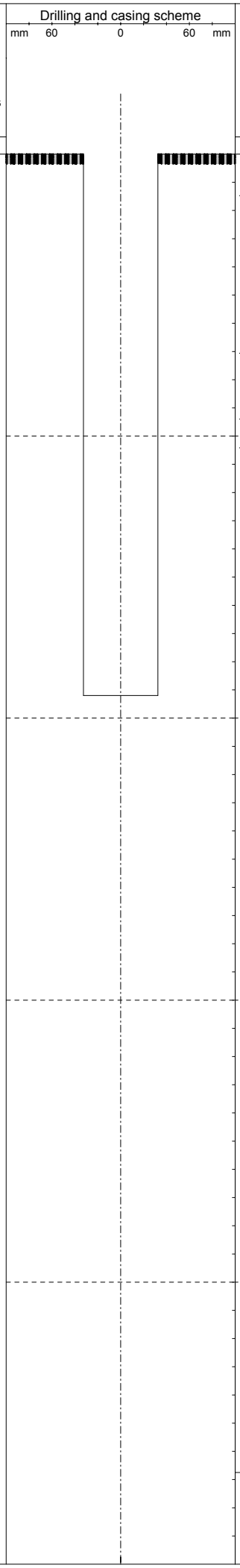
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : road construction, backfill	Fill	soil	
1	Q33	0.60-2.00 : clayely loam, brown, high plastic	Quaternary	soil	
2	Q51	2.00-3.00 : sand, brown		soil	
3	Q68	3.00-4.80 : gravel with sand		soil	
5					
10					

Drilling and casing scheme



Object

S-B-17

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 27.8.2007
Drilling Completion 27.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9640
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A23	0.00-0.70 : fill: sand and gravel, HCH odour, light brown	Fill	soil	
1		Q41	0.70-1.20 : clay, brown with black, strong petroleum? odour, soft	Quaternary		
			1.20-1.70 : clay, brown, soft, slight HCH odour			
2		Q43	1.70-2.20 : clay, sandy, brown, soft, slight HCH odour		soil	
			2.20-5.80 : finegrained sand, brown, slight HCH odour			
3					soil	
4		Q51				
5					soil	
6		Q68	5.80-6.00 : gravel with sand			
7						
8						
9						
10						
11						
12						

Drilling and casing scheme

mm 60 0 60 mm

Object

S-B-18

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 25.8.2007
Drilling Completion 25.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9641
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

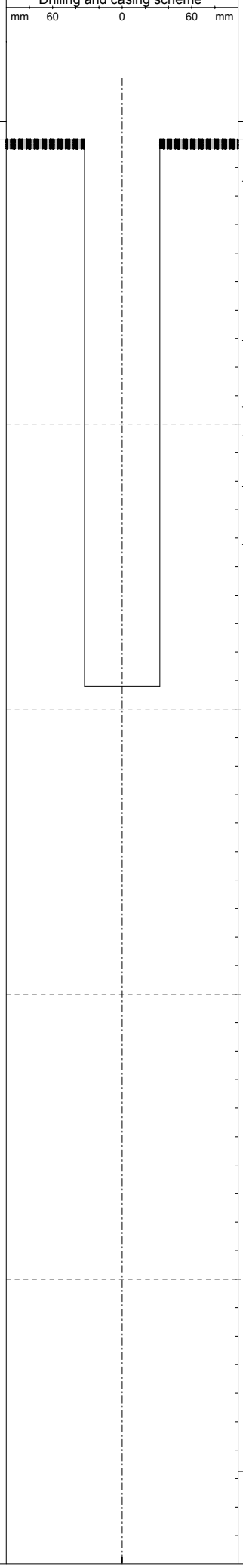
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A25	0.00-0.30 : silty soil, beige	Fill	soil	
	A20	0.30-2.40 : fine sand, clayely, light brown	Fill	soil	
	Q41	2.40-3.20 : clay, brown	Quaternary	soil	
	Q60	3.20-4.80 : pea gravel, grey	Quaternary	soil	

Drilling and casing scheme



Object

S-B-19

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 3.9.2007
Drilling Completion 3.9.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9642
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Váňa
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

COMMENT

Well inclined by 45°. Depth refers to length rather than to vertical distance.

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 21.11.2007
Appendix :

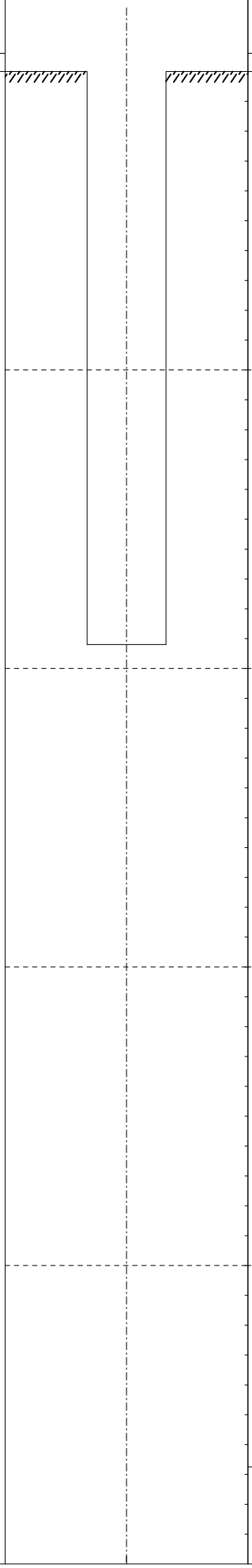
ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A25	0.00-0.10 : topsoil	Quaternary		
		Q33	0.10-0.60 : loam - clayey, light brown, soft		soil	
			0.60-1.20 : clay - soft, brown			
1		Q41	1.20-1.70 : clay - stiff, brown			
			1.70-3.00 : silt - light brown		soil	
2		Q44				
3		Q54	3.00-3.10 : sand - medium grained		soil	
			3.10-4.80 : gravel - sandy, pebbles up to 4 cm diameter			
4		Q62				
					soil	
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme

mm 60 0 60 mm



Object

S-B-20

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 20.3.2009
Drilling Completion 20.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Dosoudil
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

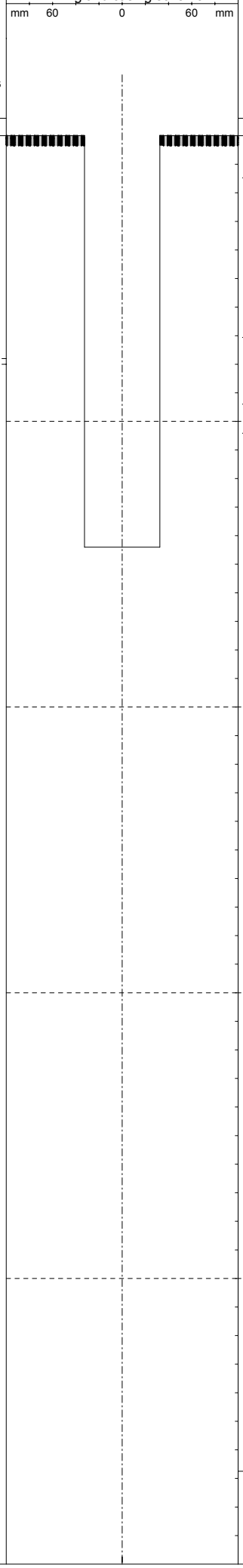
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : plate construction-concrete, backfill	Fill		
	Q41	0.60-1.20 : clay, brown	Quaternary	soil	
1					
	Q51	1.20-3.10 : sand, brown, odourless		soil	soil gas
2					
3	Q68	3.10-3.60 : gravel and sand, odourless		soil	
4					
5					
6					
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-C-01

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 28.8.2007
Drilling Completion 28.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9643
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	3.6	65

LEGEND

Hole diameter
Blank casing
Screen

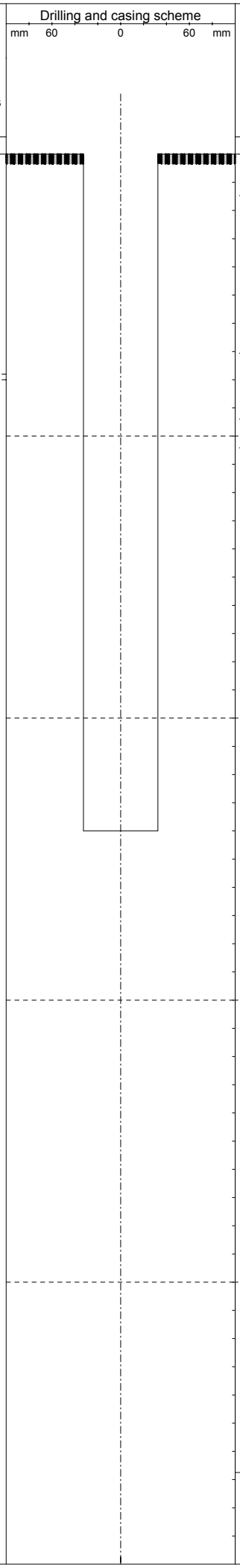
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : plate construction-concrete, backfill	Fill	soil	
1		0.60-3.20 : loamy clay, brown,from 2.9 m bgl wet with organic (CHC) odour	Quaternary	soil	
2	Q41			soil	soil gas
3				soil	
		3.20-5.50 : sand, CHC odour			
4	Q51			soil	
5					
	Q68	5.50-6.00 : gravel with sand, grey-brown, CHC odour		soil	
6					
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-C-02

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 28.8.2007
Drilling Completion 28.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9644
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

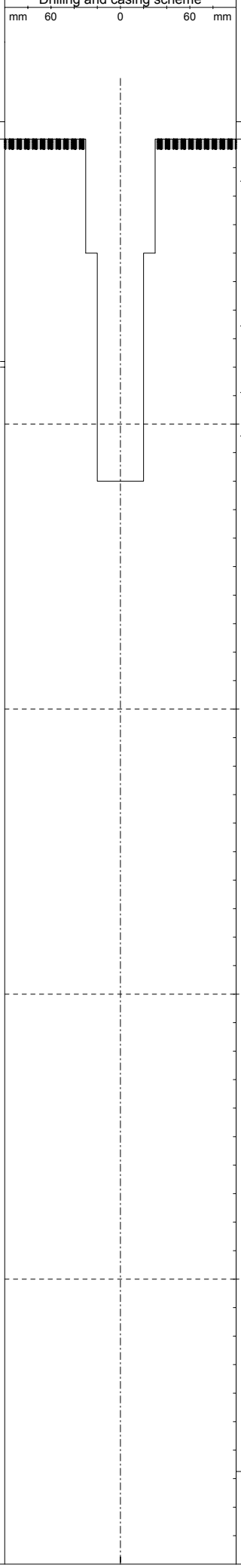
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.25 : concrete (floor)	Fill		
		A22	0.25-0.35 : clayely gravel, dark brown	Quaternary		
		Q42	0.35-1.00 : silty clay, firm, brown		soil	
1		Q41	1.00-2.00 : clay, plastic, moisty, brown		soil	
2		Q43	2.00-2.50 : sandy clay, plastic, grey			soil gas
		Q51	2.50-3.00 : fine sand, clayely, grey brown		soil	
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-C-03

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 3.9.2007
Drilling Completion 3.9.2007
Drilling Technology direct push technolo
Drilling Rig MAKITA
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Váňa
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	1.0	60
1.0 -	3.0	40

LEGEND

Hole diameter
Blank casing
Screen

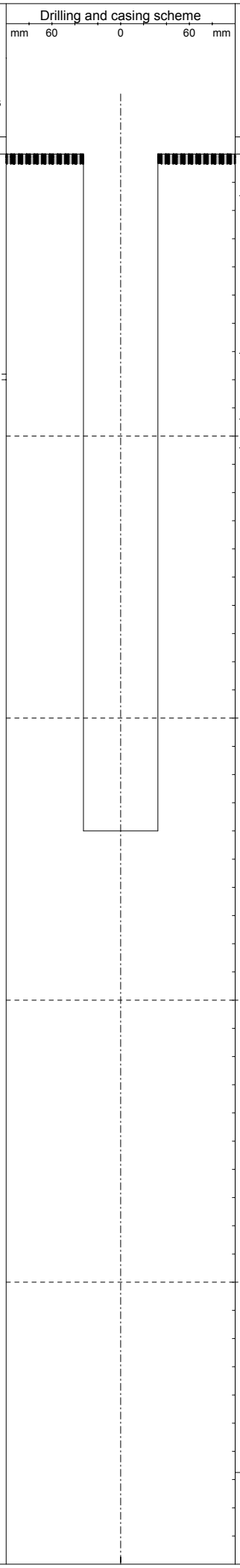
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : plate construction-concrete, backfill	Fill	soil	
1		0.60-3.00 : loamy clay, brown , odourless, from 2 m bgl strong CHC odour	Quaternary		
2	Q41			soil	soil gas
3		3.00-5.50 : sand, grey-brown, red layers, CHC odour			
4	Q51			soil	
5					
	Q68	5.50-6.00 : gravel and sand, CHC odour		soil	
6					
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-C-04

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 28.8.2007
Drilling Completion 28.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9644
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

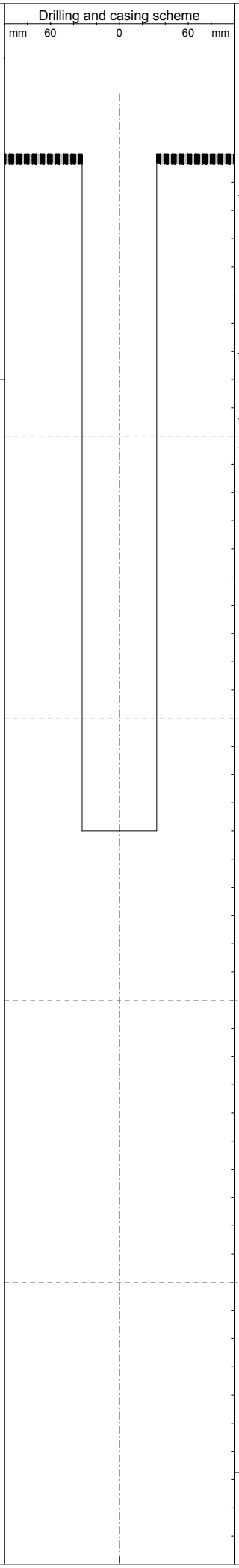
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : plate construction-concrete, backfill	Fill		
	A25	0.60-1.00 : loamy soil, sandy, brown, odourless		soil	
1		1.00-3.00 : clay, wet, brown, odourless	Quaternary		
				soil	
2	Q41				soil gas
3	Q43	3.00-3.80 : sandy clay, dry, pressed, odourless			
4		3.80-5.80 : sand, grey-brown with red spots, odourless			
				soil	
5	Q51				
6	Q68	5.80-6.00 : gravel with sand, grey-brown, odourless		soil	
7					
8					
9					
10					
11					
12					

Drilling and casing scheme



Object

S-C-05

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

DESCRIPTIVE DATA

Drilling Initiation	28.8.2007
Drilling Completion	28.8.2007
Drilling Technology	direct push technolo
Drilling Rig	AMS Power Probe 9645
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Polák
Well Type	soil boring

DRILLING INTERVALS [m]			DIAM [mm]
0.0	-	6.0	65

LEGEND

Hole diameter
Blank casing
Screen

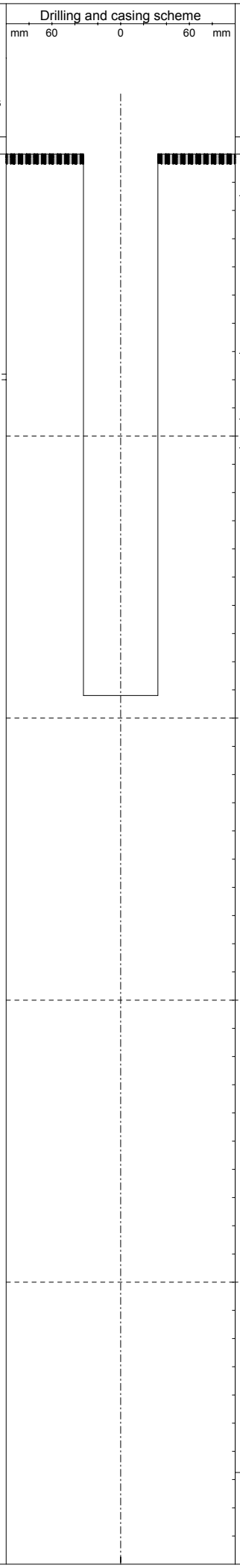
Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : road construction, concrete, asphalt, backfill, odourless	Fill		
		0.60-1.20 : loamy clay, brown, odourless	Quaternary	soil	
	Q41	1.20-3.00 : clay, brown, CHC odour		soil	soil gas
	Q51	3.00-4.80 : sand, grey-brown, CHC odour		soil	

Drilling and casing scheme



Object

S-C-06

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 28.8.2007
Drilling Completion 28.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9646
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.40 : plate construction, odourless	Fill		
		Q41	0.40-2.70 : loamy clay, wet, brown, odourless	Quaternary	soil soil	
		Q51	2.70-3.70 : sand, brown, red spots, odourless		soil	
		Q68	3.70-4.80 : gravel with sand, odourless		soil	

Drilling and casing scheme

mm 60 0 60 mm

Object

S-D-02

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 29.8.2007
Drilling Completion 29.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9647
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

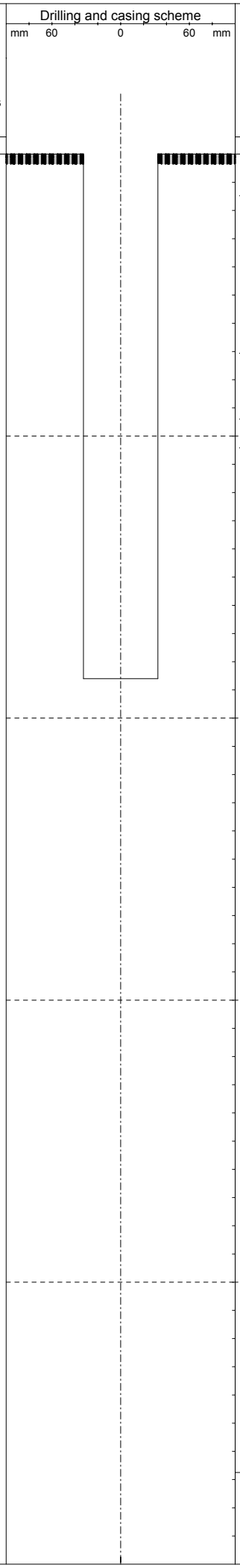
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : concrete panel	Fill		
	Q41	0.60-3.50 : loamy clay, brown, odourless	Quaternary	soil soil	
	Q43	3.50-4.60 : sandy clay, odourless		soil	
	Q54	4.60-4.65 : sand with pebbles			

Drilling and casing scheme



Object

S-D-03

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 30.8.2007
Drilling Completion 30.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9648
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.7	65

LEGEND

Hole diameter
Blank casing
Screen

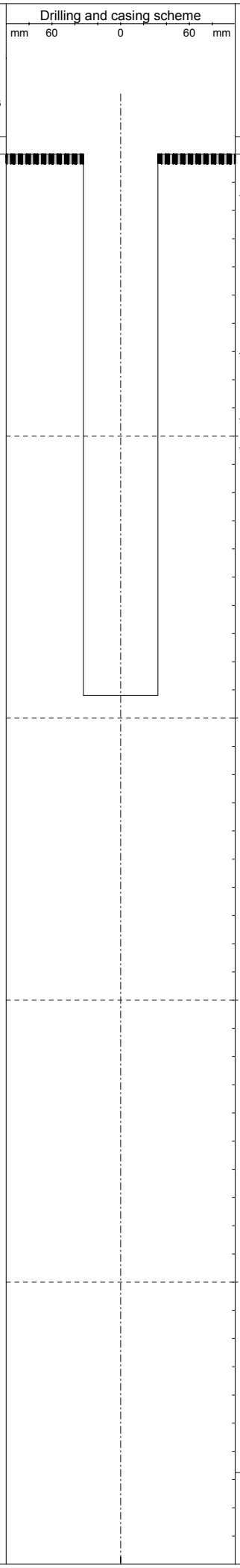
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A22	0.00-0.50 : road (railroad) construction	Fill		
		Q41	0.50-3.20 : loamy clay	Quaternary	soil soil soil	
		Q51	3.20-4.20 : sand			
		Q68	4.20-4.80 : gravel with sand		soil	

Drilling and casing scheme



Object

S-D-04

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 30.8.2007
Drilling Completion 30.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9649
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 4.8	65

LEGEND

Hole diameter
Blank casing
Screen

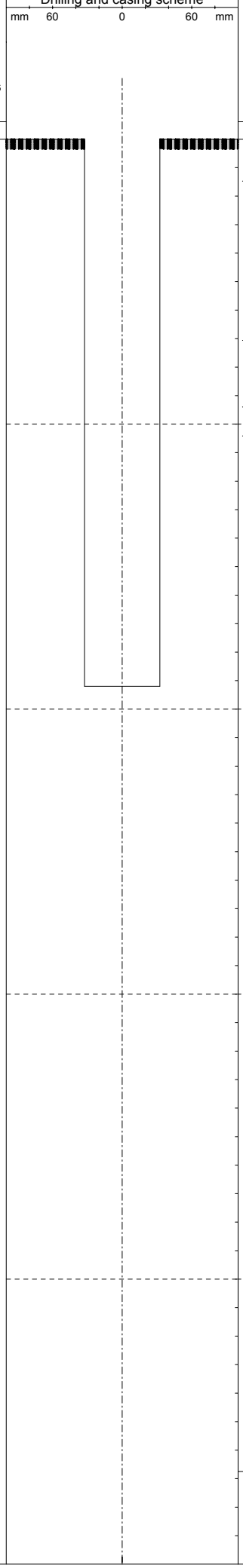
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.80 : floor construction, backfill, content of Hg	Fill		
1			0.80-2.60 : loamy clay, content of Hg	Quaternary	soil	
					soil	
2		Q41				
3			2.60-4.60 : sand		soil	
4		Q51				
		Q68	4.60-4.80 : gravel and sand		soil	
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-D-05

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 29.8.2007
Drilling Completion 29.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9650
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : road construction, asphalt, concrete, backfill	Fill		
	Q41	0.60-2.60 : loamy clay, brown, odourless	Quaternary	soil	
				soil	
	Q43	2.60-4.60 : sandy clay, brown, odourless		soil	
	Q54	4.60-4.80 : sand, gravel, grey-brown		soil	

Drilling and casing scheme

mm 60 0 60 mm

Object

S-D-06

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 30.8.2007
Drilling Completion 30.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9651
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

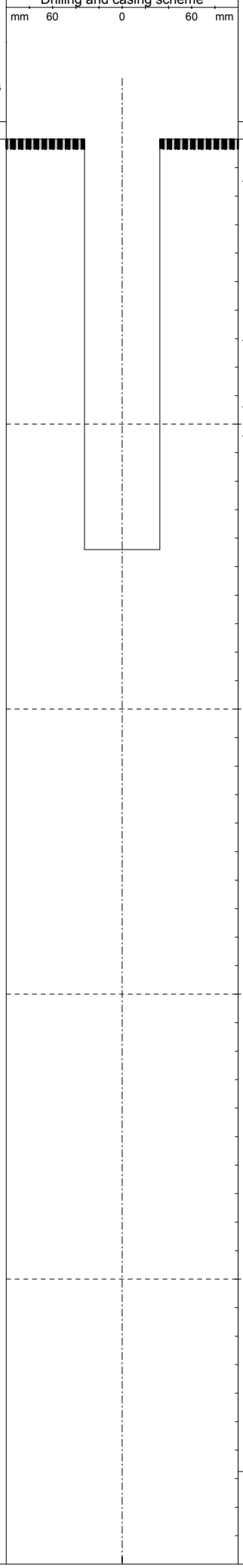
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.60 : road construction	Fill		
	Q41	0.60-2.60 : loamy clay, brown	Quaternary	soil soil	
	Q43	2.60-3.40 : sandy clay, brown			
	Q68	3.40-3.60 : gravel and sand		soil	

Drilling and casing scheme



Object

S-D-07

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 30.8.2007
Drilling Completion 30.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9652
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	3.6	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.25 : concrete	Fill	soil	
		A20	0.25-0.40 : fine sand, beige			
		Q43	0.40-1.00 : sandy clay, brown	Quaternary	soil	
1		Q60	1.00-1.50 : gravel ,grey			
		Q43	1.50-2.00 : sandy clay, light brown		soil	
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme

mm 60 0 60 mm

Object

S-D-08

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 3.9.2007
Drilling Completion 3.9.2007
Drilling Technology direct push technolo
Drilling Rig MAKITA
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Váňa
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	1.0	60
1.0 -	2.0	40

LEGEND

Hole diameter
Blank casing
Screen

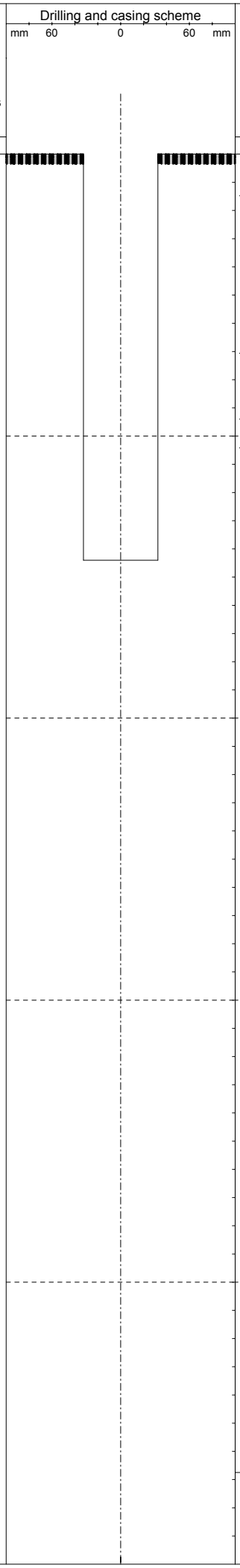
Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		Q32	0.00-0.20 : humous loam	Quaternary		
			0.20-2.90 : loamy clay, brown, odourless		soil	
		Q41			soil	
		Q51	2.90-3.40 : sand, odourless			
		Q68	3.40-3.60 : gravel with sand, grey-brown, odourless		soil	

Drilling and casing scheme



Object

S-D-09

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

8

DESCRIPTIVE DATA

Drilling Initiation	29.8.2007
Drilling Completion	29.8.2007
Drilling Technology	direct push technolo
Drilling Rig	AMS Power Probe 9652
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Polák
Well Type	soil boring

DRILLING INTERVALS [m]			DIAM [mm]
0.0	-	3.6	65

LEGEND

Hole diameter
Blank casing
Screen

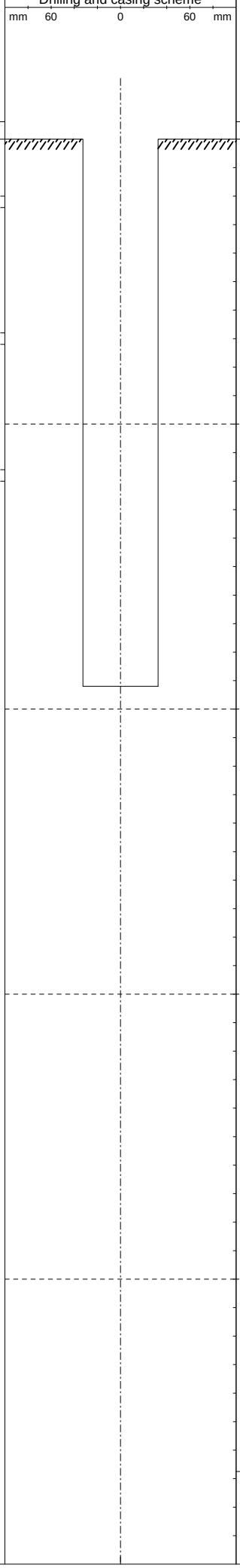
Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.20 : concrete	F		
		Q54	0.20-0.90 : sand - medium grained	Quaternary	soil	soil gas
1		Q41	0.90-2.25 : clay - dark brown, moisty, soft		soil	soil gas
2		Q51	2.25-2.40 : sand - fine grained			
		Q41	2.40-3.00 : clay - light brown, soft		soil	soil gas
3		Q44	3.00-4.40 : silt - wet, light brown			
4		Q62	4.40-4.80 : gravel - sandy, pebbles up to 3 cm diameter			
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-D-10

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 21.3.2009
Drilling Completion 21.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Dosoudil
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 4.8	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

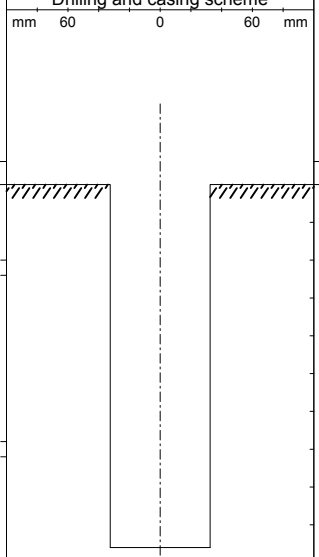
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
1		Q41	0.00-1.40 : clay - soft, brown	Quaternary		soil gas
2		Q44	1.40-2.40 : silt - soft, light brown		soil	soil gas

Drilling and casing scheme



Object

S-D-12

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 22.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9634
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.4	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

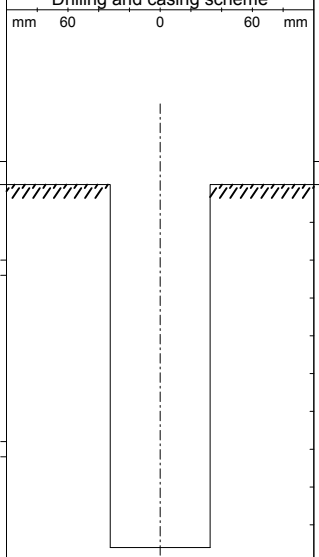
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		Q41	0.00-1.60 : clay - soft, brown	Quaternary	soil	soil gas
		Q44	1.60-2.00 : silt - light brown		soil	soil gas
		Q51	2.00-2.40 : sand - fine grained, yellow			

Drilling and casing scheme



Object

S-D-13

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 22.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.4	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

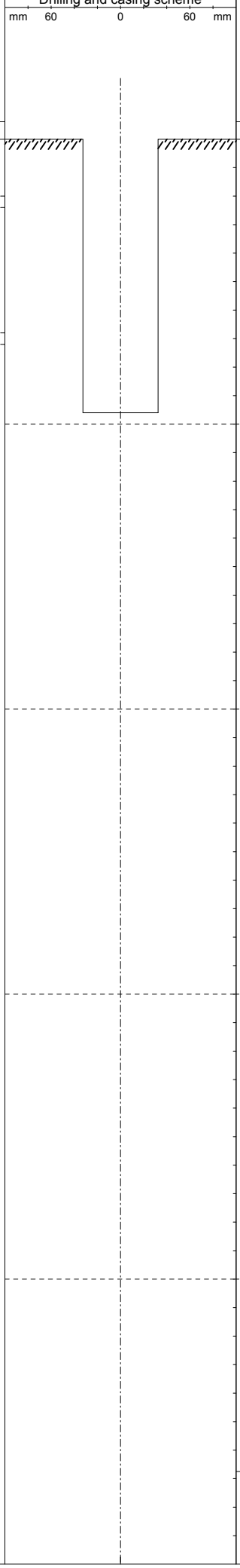
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A16	0.00-0.60 : fill - loam with fragments of concrete	Fill	soil	soil gas
1		Q41	0.60-1.60 : clay - loamy, brown	Quaternary		
		Q44	1.60-1.80 : silt - light brown		soil	soil gas
2		Q43	1.80-2.40 : silt - sandy, light brown			

Drilling and casing scheme



Object

S-D-14

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 22.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.4	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

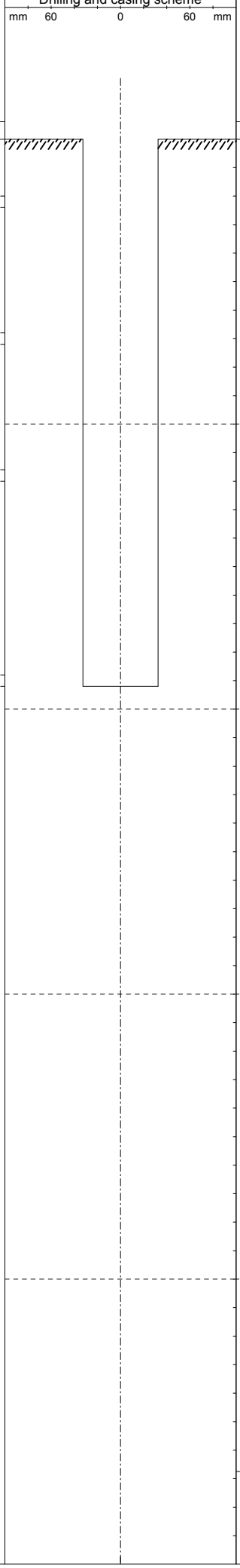
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.30 : concrete, bricks	Fill		
		Q41	0.30-1.40 : clay - soft, brown	Quaternary	soil	soil gas
		Q44	1.40-3.20 : silt		soil	soil gas
		Q51	3.20-3.40 : sand - finegrained		soil	soil gas
		Q44	3.40-4.70 : silt		soil	soil gas
		Q62	4.70-4.80 : gravel - sandy, pebbels up to 2 cm diameter			

Drilling and casing scheme



Object

S-D-15

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 22.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A19	0.00-1.20 : fill - silt, loamy with stones	Fill	soil	

Drilling and casing scheme

mm 60 0 60 mm

Object

S-D-16

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 22.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 1.2	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

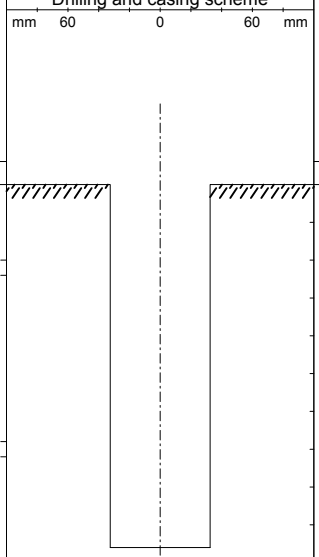
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-1.20 : bez výnosu jádra	Quaternary		soil gas
			1.20-1.60 : silt - loamy, soft, brown			
		Q44	1.60-2.40 : silt - soft, light brown		soil	soil gas

Drilling and casing scheme



Object

S-D-17

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 22.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.4	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

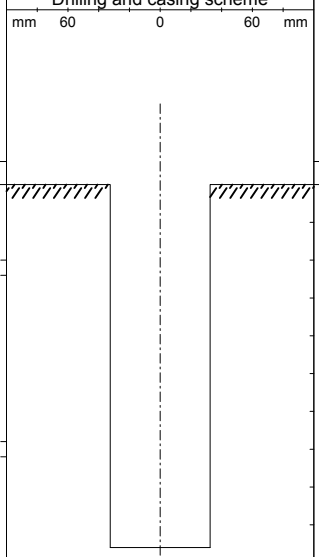
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A23	0.00-1.40 : fill - sand, loamy, brown	Fill	soil	soil gas
		Q41	1.40-2.00 : clay - loamy	Quaternary	soil	soil gas
		Q34	2.00-2.40 : sand - loamy, brown			

Drilling and casing scheme



Object

S-D-18

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 22.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	2.4	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

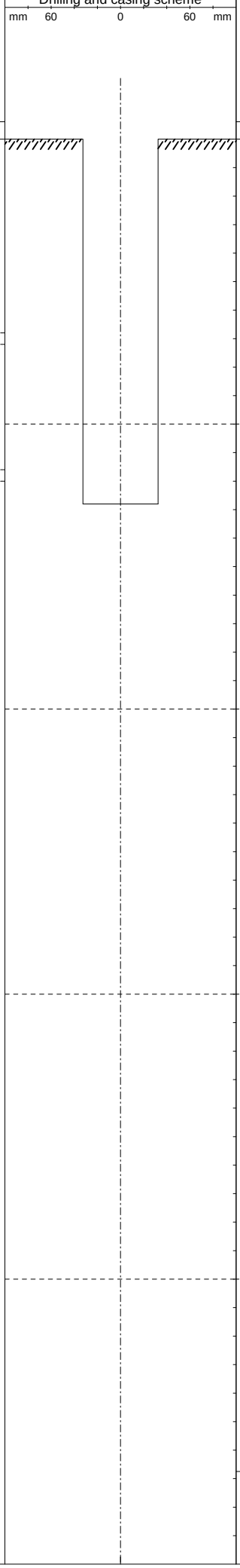
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
1		Q41	0.00-1.20 : clay - soft, brown	Quaternary		
2		Q44	1.20-2.60 : silt - stiff, brown		soil	soil gas
3		Q43	2.60-3.20 : sand - silty, brown		soil	soil gas

Drilling and casing scheme



Object

S-D-19

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 21.3.2009
Drilling Completion 21.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9631
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Dosoudil
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	3.2	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

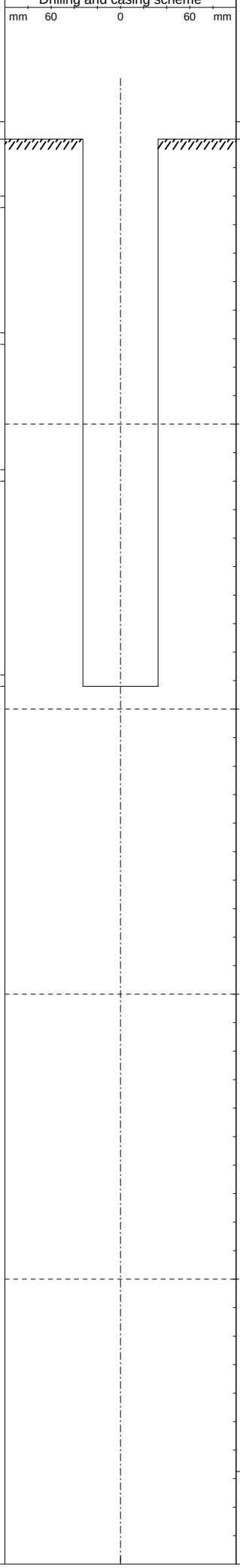
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.30 : concrete	Fill		
		A22	0.30-0.50 : fill - gravel, macadam		soil	soil gas
			0.50-3.10 : clay - soft, light brown	Quaternary		
1						
		Q41			soil	soil gas
2						
3					soil	soil gas
		Q51	3.10-3.20 : sand - fine grained			
		Q44	3.20-3.80 : silt - light brown			
4		Q41	3.80-4.30 : clay - soft, brown			
		Q44	4.30-4.80 : silt			
						soil gas
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-D-21

Coordinates X : 0.00
Y : 0.00
Z : 0.00

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 21.3.2009
Drilling Completion 21.3.2009
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9632
Drilling Company DEKONTA a.s.
Drilling Foreman Šesták
Geologist Dosoudil
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 4.8	65

EXPLANATIONS

Hole diameter
Blank casing
Screen

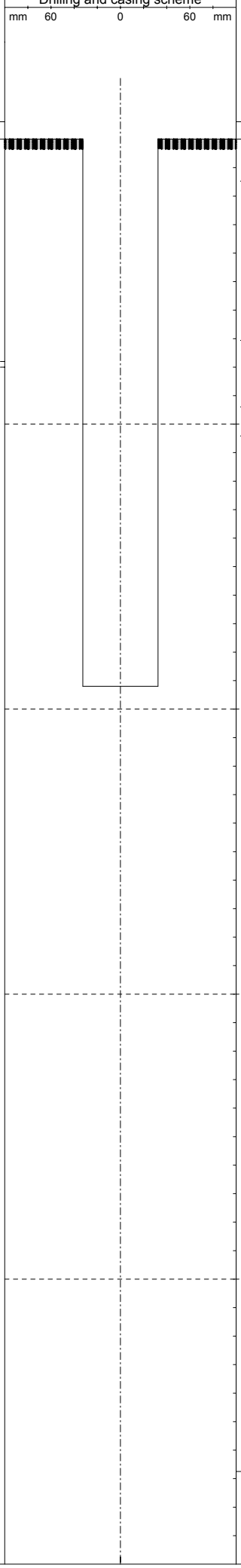
Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		Q32	0.00-0.30 : humous loam, light brown	Quaternary		
			0.30-2.50 : clayey loam, brown		soil	
1		Q33			soil	
2						soil gas
		Q43	2.50-3.10 : clay with sand, brown		soil	
3			3.10-4.80 : gravel with sand, grey-brown			
4		Q68			soil	
5						
6						
7						
8						
9						
10						
11						
12						

Drilling and casing scheme



Object

S-E-01

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 27.8.2007
Drilling Completion 27.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9653
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		Q32	0.00-0.20 : humous loam, light brown	Quaternary		
			0.20-1.30 : sandy loam, brown, odourless		soil	
		Q34				
		Q33	1.30-1.40 : clayey loam, brown, odourless		soil	
			1.40-3.60 : gravel with sand, odourless			soil gas
		Q68				
					soil	

Drilling and casing scheme

mm 60 0 60 mm

Object

S-E-02

Coordinates	X :	0.00
	Y :	0.00
Elevation	:	0.00
Site		Skopje
Map 1 : 25.000		

8

DESCRIPTIVE DATA

Drilling Initiation	27.8.2007
Drilling Completion	27.8.2007
Drilling Technology	direct push technolo
Drilling Rig	AMS Power Probe 9654
Drilling Company	DEKONTA a.s.
Drilling Foreman	Lindauer
Geologist	Polák
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 3.6	65

LEGEND

Hole diameter
Blank casing
Screen

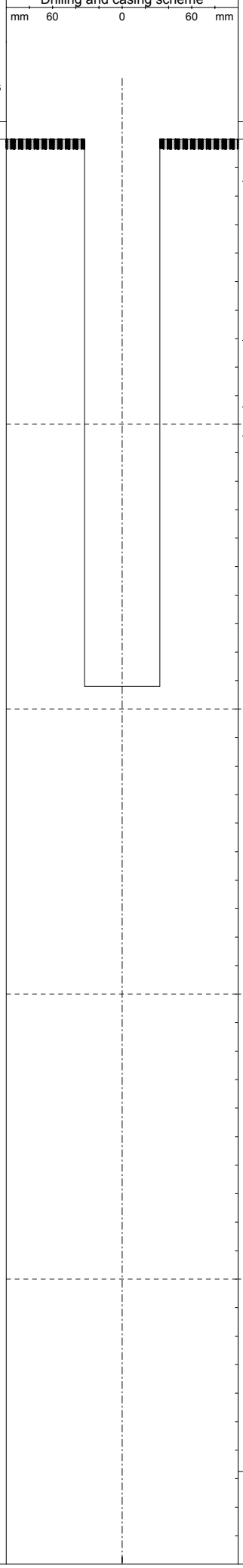
Scale	:	1 : 50
Project	:	
Compiled by	:	
Date	:	20.11.2007
Appendix	:	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.20 : concrete	F		
			0.20-2.20 : clayey loam, brown, black spots, organic odour	Quaternary	soil	
		Q33			soil	
		Q43	2.20-2.60 : clay with sand, grey-brown, organic odour			
			2.60-4.80 : gravel with sand, organic odour		soil	
		Q68			soil	

Drilling and casing scheme



Object

S-E-03

Coordinates X : 0.00
Y : 0.00
Elevation : 0.00
Site Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 27.8.2007
Drilling Completion 27.8.2007
Drilling Technology direct push technolo
Drilling Rig AMS Power Probe 9655
Drilling Company DEKONTA a.s.
Drilling Foreman Lindauer
Geologist Polák
Well Type soil boring

DRILLING INTERVALS [m]		DIAM [mm]
0.0 -	4.8	65

LEGEND

Hole diameter
Blank casing
Screen

Scale : 1 : 50
Project :
Compiled by :
Date : 20.11.2007
Appendix :

Annex 28

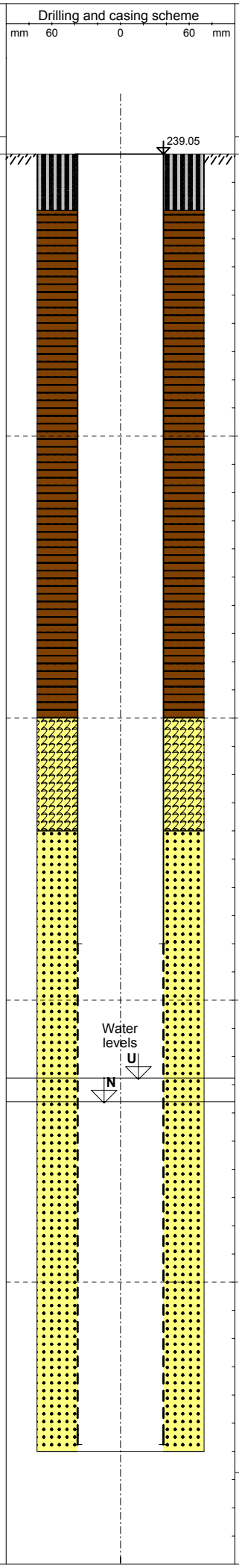
Monitoring Wells Logs

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A12	0.00-0.10 : asphalt	Fill		
	A22	0.10-0.40 : fill - crushed stone, odour (HCH)		soil	
	A21	0.40-0.50 : fill - light brown gravelly clay, odour (HCH)			
1	Q41	0.50-0.90 : brown clay, solid, odour (HCH)			
		0.90-2.10 : dark brown silt, solid, odour (HCH)			
2	Q44				
		2.10-3.00 : beige loamy gravel, semioval pebbles up to 5 cm diameter, odour (HCH)		soil	
	Q66				
3		3.00-3.70 : whitegrey silty sand gravel, pebbles ? 5 cm, odour (HCH)			
	Q62				
4		3.70-5.60 : beige loamy gravel, semioval pebbles up to 2 3 cm in diameter, odour (HCH)			
	Q66				
5					
	Q45	5.60-5.70 : sandy gravelly clay, solid, moist, gravel pebbles about 2 3 cm, odour (HCH)	Quaternary		
6		5.70-7.30 : light brown loamy gravel, pebbles up to 10 cm, odour (HCH)			
	Q66				
7					
	Q45	7.30-7.60 : sandy gravelly clay, solid, moist, gravel pebbles about 2 3 cm, odour (HCH)			
8		7.60-8.80 : whitegrey gravelly silty sand, groundwater tapped at 8.40 m b.g., odour (HCH)			
	Q55				
				soil	
9		8.80-9.20 : yellowish brown sandy clayey gravel, rigid, wet , odour (HCH)			
		9.20-10.80 : sandy gravel, with clay admixture, pebbles up to 10 cm diameter, weak odour (HCH)		soil	
10	Q62				
11		10.80-10.90 : sandy clayey gravel, pebbles up to 10 cm			
		10.90-11.50 : clayey gravel, with sand admixture, pebbles up to 10 cm diameter			
12					

Drilling and casing scheme



Object

MW-1

Coordinates X : 647008.99
Y : 539958.56
Z : 239.05

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	22.3.2008
Drilling Completion	23.3.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 11.5	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 11.4 P	75

GROUNDWATER TABLE

1st Water Strike	8.40 m
Groundwater Level	8.19 m
Date of Detection	25.3.2008

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 2/4
Bentonit
Quartz sand

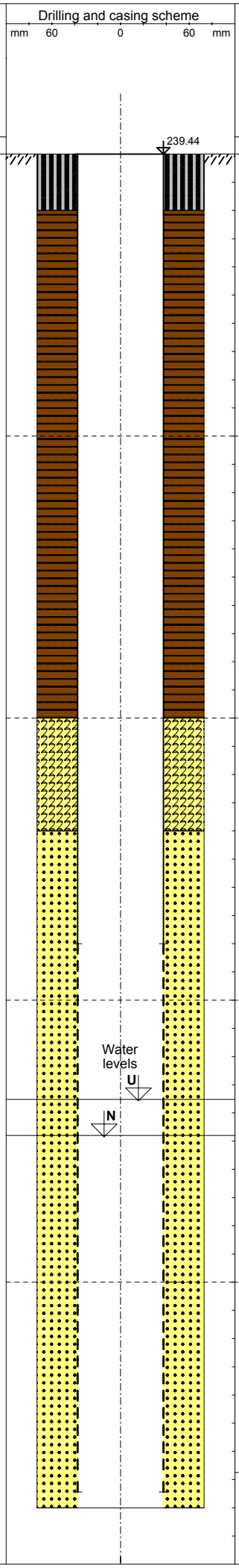
Scale :	1 : 50
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.30 : concrete	Fill		
	A23	0.30-0.50 : fill - sandy coarse gravel		soil	
1	Q44	0.50-1.80 : greenish light brown clayey silt, moist, solid, odour (HCH)			
2		1.80-2.40 : greenish silty clay, moist, plastic, odour (HCH)			
3	Q66	2.40-4.20 : coarse gravel, loamy, semioval pebbles up to diameter 10 cm, odour (HCH)		soil soil	
4	Q43	4.20-4.30 : gravely sandy clay, solid, odour (HCH)			
5	Q62	4.30-5.70 : silty sand gravel, pebbles about 3 4 cm, with sporadic pebbles approx 20 cm, odour (HCH)	Quaternary	soil	
6	Q45	5.70-5.80 : sandy gravely clay, solid, odour (HCH)			
7	Q62	5.80-9.00 : silty sandy gravel, from 8 m b.g. moist groundwater table tapped at 8.7 m b.g., odour (HCH)			
9	Q43	9.00-10.00 : greenish grey gravely sandy clay, solid, wet, odour (HCH)		soil	
10	Q62	10.00-10.70 : yellowish grey clayey sandy gravel, pebbles up to 7 cm, odour (HCH)			
11	Q45	10.70-11.40 : yellow sandy gravely clay, weak odour (HCH)			
12	Q43	11.40-12.00 : beige sandy clay with low admixture of coarse gravel, no odour (HCH)		soil	

Drilling and casing scheme



Object

MW-2

Coordinates X : 647020.44
Y : 539843.44
Z : 239.44

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	21.3.2008
Drilling Completion	22.3.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 11.9 P	75

GROUNDWATER TABLE

1st Water Strike	8.70 m
Groundwater Level	8.38 m
Date of Detection	22.3.2008

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 2/4
Bentonit
Quartz sand

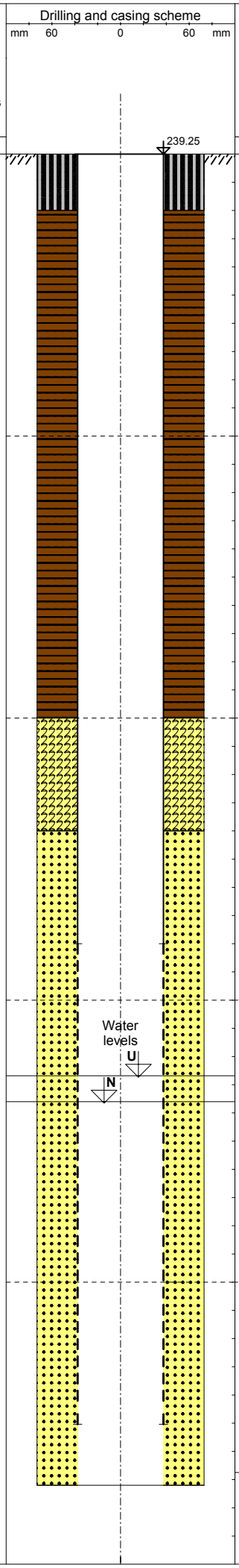
Scale :	1 : 50
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.30 : concrete	Fill	soil	
		A21	0.30-0.50 : fill - gravelly clay, rich Cl smell		soil	
		Q41	0.50-0.90 : brown clay, solid, rich Cl smell			
1		Q44	0.90-1.20 : yellowish brown silt, moist, plastic, rich Cl smell			
			1.20-4.20 : brown clay, plastic, moist, rich Cl smell			
2						
					soil	
		Q41				
3						
4			4.20-5.20 : yellowish brown silt, moist, solid, Cl smell		soil	
		Q44				
5		Q55	5.20-5.50 : yellowish brown fine silty sand, Cl smell			
			5.50-8.20 : yellowish grey silty sandy gravel, pebbles up to 5 cm, weak Cl smell	Quaternary		
6						
7		Q62				
					soil	
8		Q45	8.20-8.40 : yellow sandy silt with gravel admixture, solid			
		Q43	8.40-8.90 : coarse gravel with clay and sand admixture, GW tapped at 8.2 m b.g.			
9			8.90-9.00 : yellow sandy silt with gravel admixture, solid			
		Q62	9.00-9.90 : coarse gravel with clay and sand admixture,		soil	
10		Q43	9.90-10.10 : greenish grey sandy clay with gravel, solid, weak Cl smell			
		Q62	10.10-10.50 : sandy gravel with clay admixture, weak (HCH) smell			
		Q43	10.50-11.00 : yellowish brown sandy silt with gravel admixture solid, odour (HCH)			
11		Q44	11.00-11.10 : greyey yellow gravelly sandy silt			
		Q55	11.10-11.80 : greyey yellow sandy silt with gravel admixture			
12						

Drilling and casing scheme



Object

MW-3

Coordinates X : 647067.55
Y : 539921.35
Z : 239.25

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	24.8.2008
Drilling Completion	25.8.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 11.8	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 11.3 P	75

GROUNDWATER TABLE

1st Water Strike	8.40 m
Groundwater Level	8.17 m
Date of Detection	25.3.2008

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 2/4
Bentonit
Quartz sand

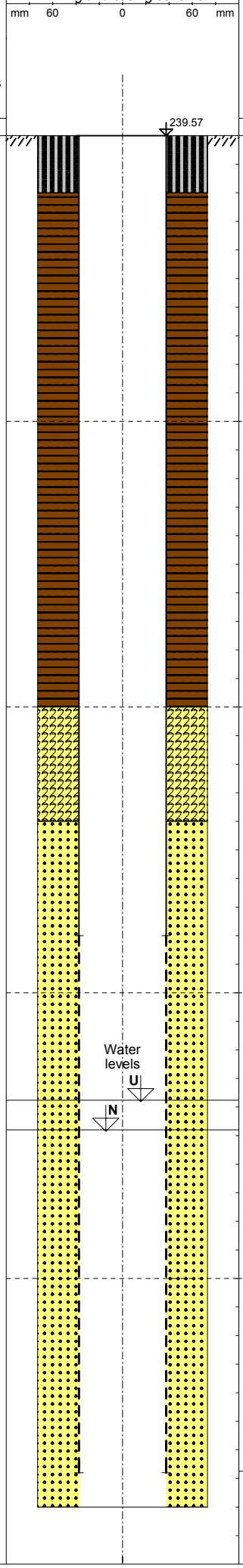
Scale :	1 : 50
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A11	0.00-0.10 : concrete	Fill		
		A22	0.10-0.20 : fill - crushed stone			
		A21	0.20-0.30 : fill - gravelly clay, beige			
			0.30-1.00 : greenish grey silty clay, solid, smell			
1		Q44	1.00-2.00 : yellowish brown clayey silt, plastic, smell			
2		Q62	2.00-2.20 : sandy clayey pea gravel			
			2.20-4.00 : grey sandy gravel, pebbles about 2 cm, with silt admixture, weak smell			
3		Q61				
4		Q43	4.00-4.10 : yellowish brown gravelly sandy clay, solid			
		Q62	4.10-4.60 : sandy clayey pea gravel			
		Q43	4.60-4.80 : yellowish brown gravelly sandy clay, solid			
5			4.80-7.00 : grey loamy coarse gravel, sporadic pebbles about 10 cm	Quaternary		
7			7.00-7.60 : yellow loamy gravel		soil	
		Q66	7.60-9.90 : grey loamy coarse gravel, sporadic pebbles about 10 cm, GW tapped at 8.8		soil	
10			9.90-10.20 : loamy medium gravel			
			10.20-12.00 : greenish yellow sandy gravelly clay, solid			
11		Q43				
12						

Drilling and casing scheme



Object

MW-4

Coordinates X : 647106.29
Y : 539704.70
Z : 239.57

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	24.8.2008
Drilling Completion	28.8.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 11.7 P	75

GROUNDWATER TABLE

1st Water Strike	8.70 m
Groundwater Level	8.44 m
Date of Detection	28.3.2008

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 2/4
Bentonit
Quartz sand

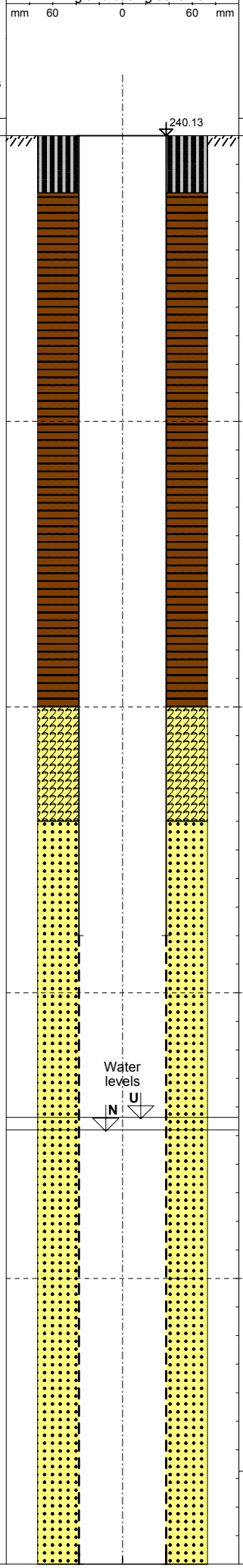
Scale :	1 : 50
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A18	0.00-0.20 : brown clayey topsoil	F		
			0.20-1.20 : light brown silty clay, solid			
		Q44	1.20-2.00 : light brown silty clay, weathered to sherds			
			2.00-2.60 : yellowish light brown clayey silt			
			2.60-2.80 : yellow sandy silt			
		Q66	2.80-9.50 : beige loamy gravel, semioval pebbles up to 10 cm, GW tapped at 8.7 m b.g.	Quaternary		
		Q62	9.50-10.00 : greenish beige sandy silty gravel, pebbles up to 12 cm			
		Q43	10.00-12.00 : beige sandy clay with gravel			
		Q54	12.00-12.40 : gravelly sand with sporadic pebbles to 15 cm			
		Q62				

Drilling and casing scheme



Object

MW-5

Coordinates X : 646998.82
Y : 539695.81
Z : 240.13

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	18.8.2008
Drilling Completion	21.8.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 15.0	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 14.9 P	75

GROUNDWATER TABLE

1st Water Strike	8.70 m
Groundwater Level	8.59 m
Date of Detection	21.3.2008

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 2/4
Bentonit
Quartz sand

Scale :	1 : 50
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

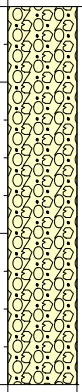
Object

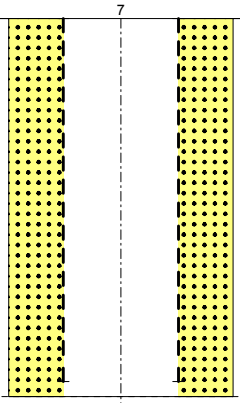
MW-5

Coordinates X : 646998.82
Y : 539695.81
Z : 240.13

Locality Skopje
Map 1 : 25.000

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples	Drilling and casing scheme (mm 60 0 60 mm)
1	2	3	4	5	6	7
13, 14, 15	Q62	12.40-15.00 : beige clayey gravel with sand	Quaternary			





DESCRIPTIVE DATA

Drilling Initiation	18.8.2008
Drilling Completion	21.8.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 15.0	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 14.9 P	75

GROUNDWATER TABLE

1st Water Strike	8.70 m
Groundwater Level	8.59 m
Date of Detection	21.3.2008

EXPLANATIONS

- Hole diameter
- Blank casing
- Screen
- Concrete
- Gravel pack fr. 2/4
- Bentonit
- Quartz sand

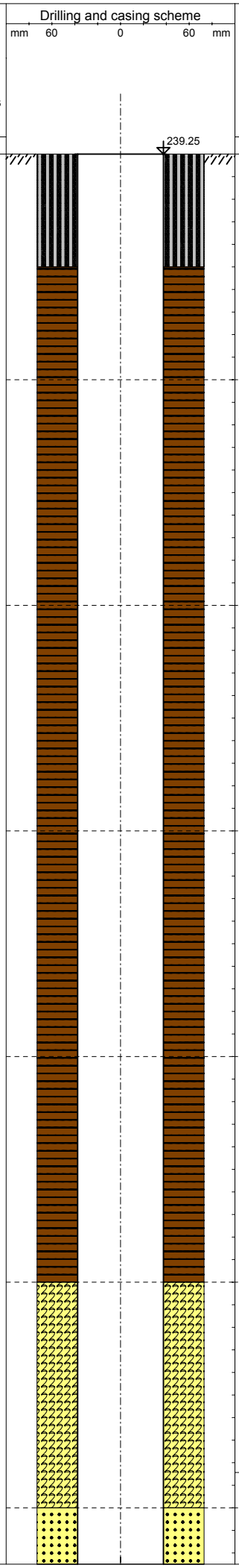
Scale	1 : 50
Project	
Compiled by	
Date	17.7.2008
Appendix	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.20 : concrete	Fill		
	A21	0.20-0.40 : fill - yellow clay with gravel			
		0.40-4.80 : brown clayey silt, moist, plastic	Quaternary	soil	
	Q44				
	Q43	4.80-5.10 : brownfine sand with clay and gravel admixture			
	Q54	5.10-5.50 : yellowish brown sand with gravel and silt			
	Q43	5.50-5.60 : yellowish brown silt, with sand and gravel admixture			
	Q66	5.60-6.00 : grey loamy coarse gravel			
	Q43	6.00-6.10 : yellowish brown silt, with sand and gravel admixture			
	Q66				

Drilling and casing scheme



Object

MW-6

Coordinates X : 647124.31
Y : 539925.59
Z : 239.25

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	26.8.2008
Drilling Completion	27.8.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 11.3 P	75

GROUNDWATER TABLE

1st Water Strike	8.20 m
Groundwater Level	8.04 m
Date of Detection	27.3.2008

EXPLANATIONS

- Hole diameter
- Blank casing
- Screen
- Concrete
- Gravel pack fr. 2/4
- Bentonit
- Quartz sand

Scale :	1 : 25
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

Object

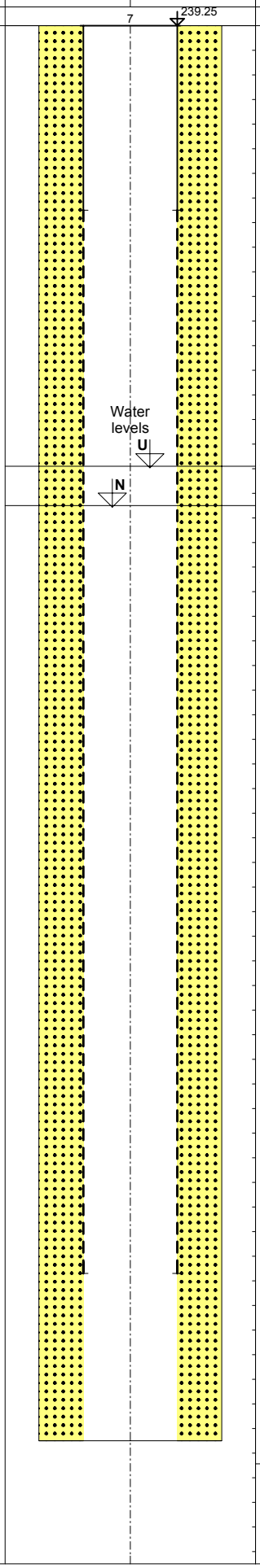
MW-6

Coordinates X : 647124.31
Y : 539925.59
Z : 239.25

Locality Skopje
Map 1 : 25.000

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		Q66	6.10-6.40 : grey loamy coarse gravel	Quaternary		
		Q43	6.40-6.50 : yellowish brown silt, with sand and gravel admixture			
		Q66	6.50-7.20 : light grey loamy coarse gravel, GW tapped at 7.7 m b.g.			
		Q44	7.20-7.40 : yellowish brown clayey silt, plastic			
		Q66	7.40-7.80 : brown coarse gravel,loamy			
		Q43	7.80-8.00 : yellowish brown sandy clay with admixture of pea gravel			
		Q62	8.00-8.40 : coarse gravel with admixture of clay and sand			
		Q45	8.40-8.50 : yellow sandy clay with admixture of gravel			
		Q52	8.50-8.70 : ligh brown pea gravel, sandy			
		Q43	8.70-8.90 : yellowish brown sandy clay, solid			
		Q62	8.90-9.00 : fine sand with low admixture of silt and medium gravel			
			9.00-9.30 : brown sandy gravel, with clay admixture			
		Q55	9.30-9.70 : clayey sand			
		Q61	9.70-9.90 : grey sandy gravel			
		Q55	9.90-10.00 : clayey sand			
		Q61	10.00-10.20 : grey sandy gravel			
		Q55	10.20-10.30 : clayey sand with gravel admixture			
		Q45	10.30-10.40 : yellow clay with gravel			
		Q52	10.40-10.60 : medium sand			
		Q62	10.60-11.00 : clayey sandy medium gravel			
			11.00-11.70 : sandy gravel with clay admixture			
		Q43	11.70-12.00 : clay with sand and pea gravel			

Drilling and casing scheme



DESCRIPTIVE DATA

Drilling Initiation	26.8.2008
Drilling Completion	27.8.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 11.3 P	75

GROUNDWATER TABLE

1st Water Strike	8.20 m
Groundwater Level	8.04 m
Date of Detection	27.3.2008

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 2/4
Bentonit
Quartz sand

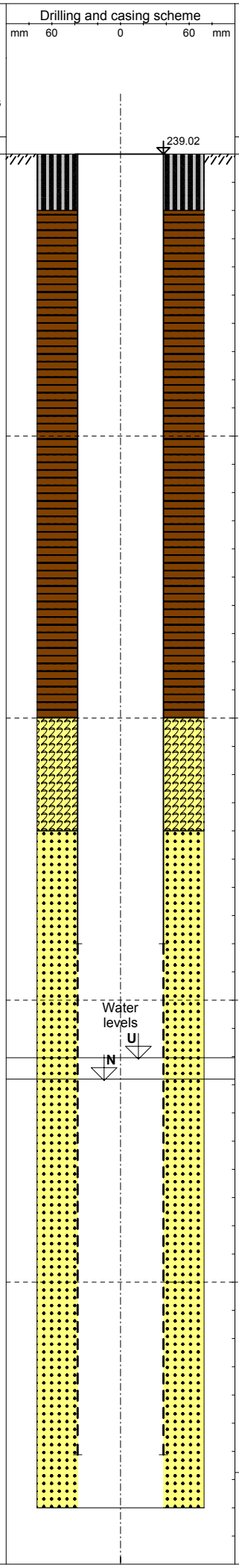
Scale :	1 : 25
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A11	0.00-0.10 : concrete	Fill		
	A22	0.10-0.25 : fill - gravel			
		0.25-2.40 : light brown silty clay, plastic		soil	
1					
	Q44				
2				soil	
				soil	
		2.40-3.30 : yellowish brown silt, solid			
3				soil	
	Q43	3.30-3.50 : brown gravelly sandy clay, solid			
		3.50-5.80 : beige loamy gravel, semioval pebbles to 5 cm			
4					
	Q66				
5					
	Q43	5.80-6.00 : brown gravelly sandy clay, solid	Quaternary	soil	
6		6.00-8.20 : beige loamy gravel, semioval pebbles to 5 cm GW tapped at 8.2 m b.g.			
7	Q66				
8					
	Q43	8.20-8.40 : yellowish brown sandy clay with gravel admixture, solid		soil	
	Q61	8.40-8.60 : sandy coarse gravel			
9	Q43	8.60-8.70 : yellowish sandy clay			
		8.70-9.60 : yellowish gravelly sandy silt			
		9.60-10.00 : yellow clayey sandy gravel, pebbles about 2 cm			
10		10.00-11.30 : yellowwhite silty sandy gravel			
	Q62			soil	
11		11.30-12.00 : greyey yellow gravelly sandy clay, solid		soil	
	Q43				
12					

Drilling and casing scheme



Object

MW-7

Coordinates X : 647135.13
Y : 539971.04
Z : 239.02

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation	22.3.2008
Drilling Completion	23.3.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 11.5 P	75

GROUNDWATER TABLE

1st Water Strike	8.20 m
Groundwater Level	8.01 m
Date of Detection	23.3.2008

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 2/4
Bentonit
Quartz sand

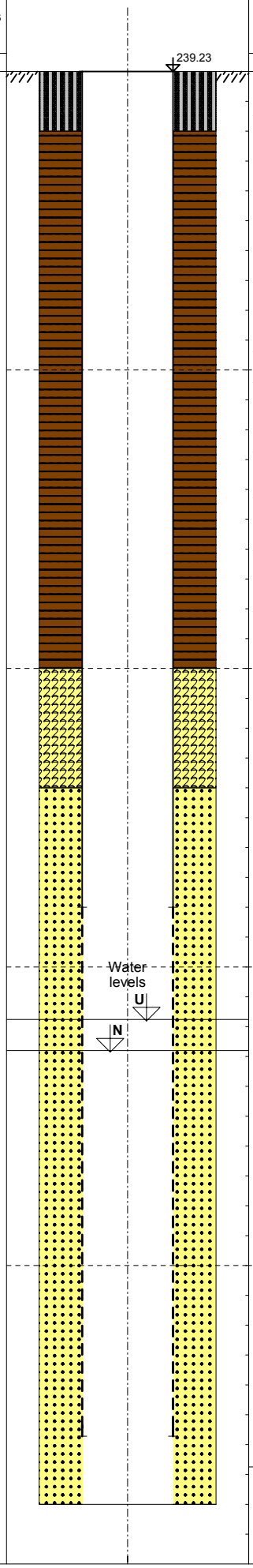
Scale :	1 : 50
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A18	0.00-0.20 : brown clayey topsoil	F		
		Q41	0.20-0.30 : loamy clay, brown			
		Q66	0.30-0.80 : silty loamy clay, brown			
1			0.80-2.50 : clayey silt, light brown			
2		Q44				
3			2.50-3.00 : sand, finegrained with sporadic pebbels up to 1 cm in diameter, light brown			
			3.00-3.40 : sand finegrained with pebbles up to 2 cm in diameter			
4			3.40-7.50 : gravel with medium to coarse grained sand, brown			
5		Q54		Quaternary		
6						
7						
			7.50-8.00 : gravel with silt , rusty, wet			
8		Q67	8.00-8.50 : gravel with small admixture of silt, ochreous, wet (GW tappaed at 8.2 m b.g.)			
9			8.50-10.50 : gravel with coarse grained sand, with silty lenses 10 cm thick, light brown to grey			
10		Q62				
11			10.50-12.00 : gravelly sandy clay, solid, light brown to grey			
		Q43				
12						

Drilling and casing scheme



Object

MW-8

Coordinates X : 647064.14
Y : 540070.51
Z : 239.23

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	18.8.2008
Drilling Completion	21.8.2008
Drilling Technology	direct push technolo
Drilling Rig	x
Drilling Company	AURA ProjectLtd. Skopje
Drilling Foreman	x
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	146

CASING INTERVALS [m]	DIAM [mm]
0.0 - 7.0	75
7.0 - 11.4 P	75

GROUNDWATER TABLE

1st Water Strike	8.20 m
Groundwater Level	7.94 m
Date of Detection	21.3.2008

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 2/4
Bentonit
Quartz sand

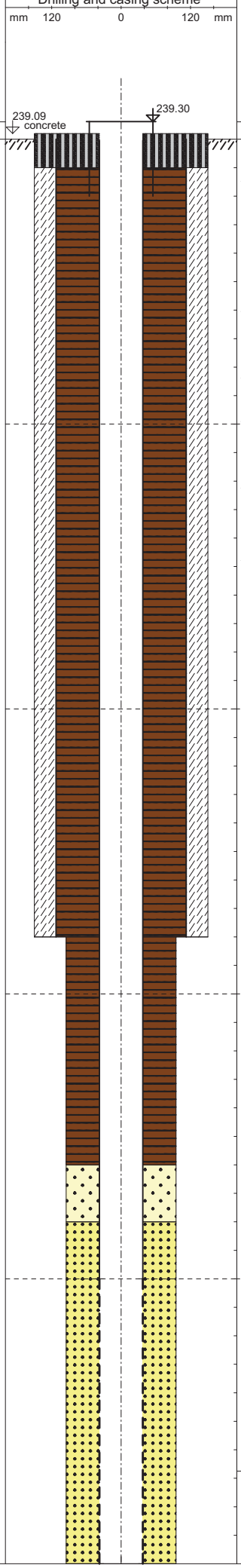
Scale :	1 : 50
Project :	
Compiled by :	
Date :	17.7.2008
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6

Drilling and casing scheme



Object

MW-9

Coordinates X : 647108.03
Y : 539912.63
Z : 238.99

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 23.3.2008
Drilling Technology polymer rotary drill
Drilling Company AURA ProjectLtd. Skopje
Geologist Váňa
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 14.0	300
14.0 - 30.0	190

CASING INTERVALS [m]	DIAM [mm]
-0.3 - 1.0	110
0.0 - 14.0	225
0.0 - 20.0	75
20.0 - 30.0 P	75

EXPLANATIONS

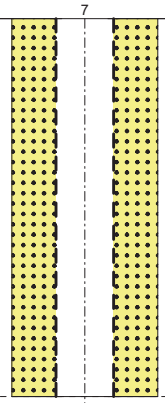
Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Cement
Sandy eluvium

Scale : 1 : 100
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples	Drilling and casing scheme (mm 120 0 120 mm)
1	2	3	4	5	6	7



Object

MW-9

Coordinates X : 647108.03
Y : 539912.63
Z : 238.99

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 22.3.2009
Drilling Completion 23.3.2008
Drilling Technology polymer rotary drill
Drilling Company AURA ProjectLtd. Skopje
Geologist Váňa
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 14.0	300
14.0 - 30.0	190

CASING INTERVALS [m]	DIAM [mm]
-0.3 - 1.0	110
0.0 - 14.0	225
0.0 - 20.0	75
20.0 - 30.0 P	75

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Cement
Sandy eluvium

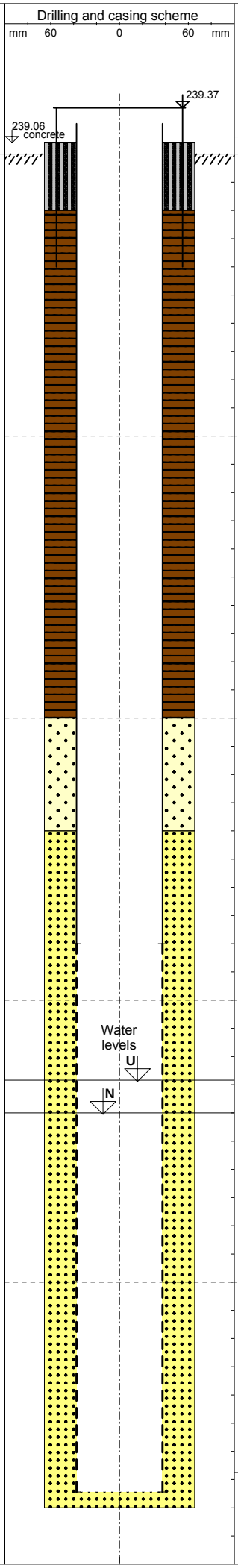
Scale : 1 : 100
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A25	0.00-0.30 : topsoil - humous	Fill		
		Q41	0.30-0.70 : clay - loamy, soft, light brown	Quaternary		
1		Q44	0.70-2.00 : silt - loamy, stiff, light brown			
2			2.00-2.60 : loam - silty, with pieces of crystalline rock, dark brown			
3		Q43	2.60-3.10 : silt - sandy, gravelly, pebbles up to 1 cm (10%)			
		Q54	3.10-3.50 : sand - gravelly, pebbels up to 3 cm diameter, light brown			
4			3.50-8.00 : gravel - with coarse grained admixture (40%), pebbles up to 8 cm diameter, light brown			
5						
6		Q64				
7						
8		Q54	8.00-8.40 : sand - coarse grained, with small pebbles up to 2 cm diameter (5%), rusty brown			
		Q44				
		Q54	8.40-8.50 : silt - loamy, stiff, with small pebbles up to 1 cm diameter (5%), brown			
9		Q43				
		Q54	8.50-8.90 : sand - coarse grained, gravelly, small pebbles up to 2 cm (10%), black to brown			
10			8.90-9.00 : silt - gravelly, sandy, pebbles up to 2 cm diameter (10%), compact, stiff			
			9.00-9.50 : sand - coarse grained, gravelly, pebbles up to 2 cm (10%), black to brown			
		Q62	9.50-10.40 : gravel - sandy (20%), pebbles up to 10 cm, brown			
11			10.40-11.60 : gravel - sandy (10%), pebbels up to 8 cm diameter, brown			
12		Q43	11.60-12.00 : silt - sandy (20%), gravelly (30%), pebbels up to 6 cm diameter, soft, light brown			

Drilling and casing scheme



Object

MW-10

Coordinates X : 647161.42
Y : 539912.52
Z : 238.96

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	20.3.2009
Drilling Completion	25.3.2009
Drilling Technology	core drilling
Drilling Company	AURA ProjectLtd. Skopje
Geologist	Němeček
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	131

CASING INTERVALS [m]	DIAM [mm]
-0.4 - 1.0	110
-0.3 - 7.0	75
7.0 - 11.9 P	75

GROUNDWATER TABLE

1st Water Strike	8.50 m
Groundwater Level	8.21 m
Date of Detection	28.3.2009

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Sandy eluvium

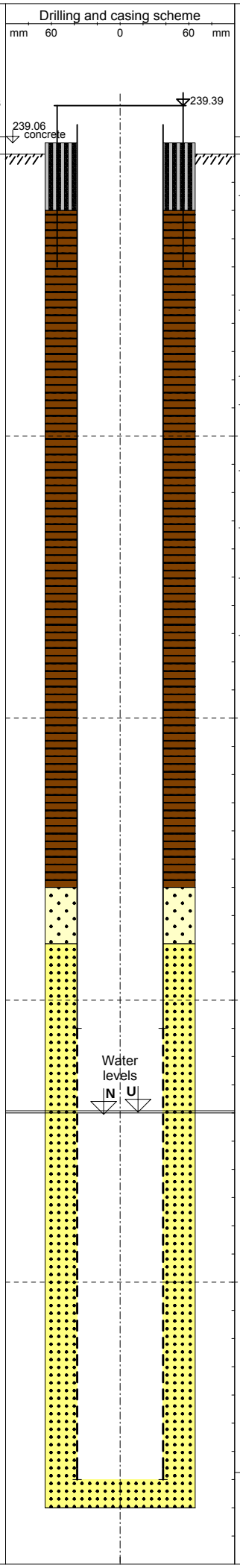
Scale :	1 : 50
Project :	
Compiled by :	
Date :	15.4.2009
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A18	0.00-0.90 : fill: loam, clayey, soft, brown	Fill		
1	A24	0.90-1.40 : fill: coal dust			
	Q41	1.40-1.60 : clay - loamy,soft, light brown	Quaternary		
2	Q44	1.60-3.00 : silt - loamy, soft, light brown			
3	Q43	3.00-3.50 : silt - sandy, light brown			
4	Q51	3.50-4.70 : sand - finegrained, silty, with pebbles up to 4 cm diameter (10%), light brown			
5	Q68	4.70-5.70 : gravel with finegrained sand, pebbles up to 8 cm, light brown			
6 7 8	Q62	5.70-9.00 : gravel - sandy (coarse grained), pebbles up to 8 cm diameter,brown			
9		9.00-9.40 : gravel - sandy (10%), clayey (10%), pebbles up to 6 cm, light brown			
10		9.40-9.60 : gravel - sandy (40%), clayey (10%), sand coarsegrained,black to brown, pebbels up to 6 cm			
		9.60-9.80 : gravel - sandy (10%), clayey (10%), pebbles up to 5 cm			
		9.80-10.00 : silt with coarse grained sand (40%) and pebbels (30%) up to 10 cm diameter, compact, plastic			
11	Q43	10.00-11.70 : gravel - silty (muddy), sandy, pebbles up to 6 cm diameter, light brown			
12		11.70-12.00 : silt with fine grained sand (20%) and pebbles up to 6 cm (40%) brown, compact, stiff			

Drilling and casing scheme



Object

MW-11

Coordinates X : 647025.16
Y : 540156.43
Z : 238.96

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation	18.3.2009
Drilling Completion	24.3.2009
Drilling Technology	core drilling
Drilling Company	AURA ProjectLtd. Skopje
Geologist	Němeček
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	131

CASING INTERVALS [m]	DIAM [mm]
-0.4 - 1.0	110
-0.3 - 7.8	75
7.8 - 11.8 P	75

GROUNDWATER TABLE

1st Water Strike	8.50 m
Groundwater Level	8.48 m
Date of Detection	24.3.2009

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Sandy eluvium

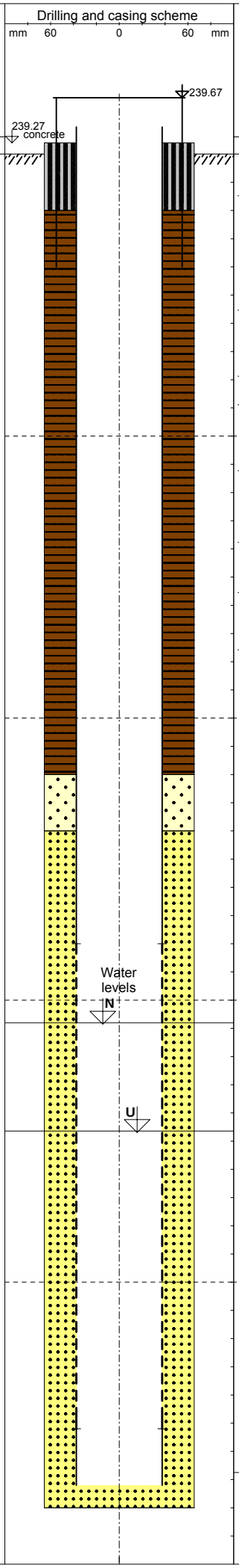
Scale :	1 : 50
Project :	
Compiled by :	
Date :	15.4.2009
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	A25, A20	0.00-0.05 : topsoil - humous, brown	Fill		
		0.05-0.40 : sand - beige, gravelly (fill?)	Quaternary		
	Q44	0.40-1.10 : silt - light brown			
1		1.10-2.40 : silt - with admixture of fine sand, light brown			
2	Q43				
	Q44	2.40-2.60 : silt - light brown			
	Q43	2.60-3.10 : silt - with admixture of fine sand, light brown			
3		3.10-6.00 : sand - gravelly, pebbles appr. 3 cm, max. 7 (rare), beige			
4	Q54				
5					
6		6.00-8.70 : gravel - loamy, pebbles appr. 5 cm, sporadically 12 cm, 8.0 - 8.7 m wet			
7	Q66				
8					
	Q62, Q43, Q66	8.70-8.80 : gravel - clayey, sandy, medium			
9		8.80-8.90 : clay - gravelly, sandy			
	Q43	8.90-9.00 : gravel - loamy, pebbles appr. 5 cm diameter			
		9.00-9.80 : clay - gravelly, sandy			
10	Q61	9.80-10.20 : gravel - coarse, sandy			
		10.20-10.40 : gravel - pea, sandy, clayey			
		10.40-11.00 : gravel - medium, sandy with clay admixture			
11	Q62	11.00-11.60 : gravel - medium, clayey with sand admixture			
	Q66	11.60-12.00 : gravel - loamy, medium to coarse			
12					

Drilling and casing scheme



Object

MW-12

Coordinates X : 646962.98
Y : 540183.11
Z : 239.17

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation	24.3.2009
Drilling Completion	27.3.2009
Drilling Technology	core drilling
Drilling Company	AURA ProjectLtd. Skopje
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	131

CASING INTERVALS [m]	DIAM [mm]
-0.5 - 1.0	110
-0.2 - 7.0	75
7.0 - 11.3 P	75
11.3 - 11.8	75

GROUNDWATER TABLE

1st Water Strike	7.70 m
Groundwater Level	8.66 m
Date of Detection	27.3.2009

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Sandy eluvium

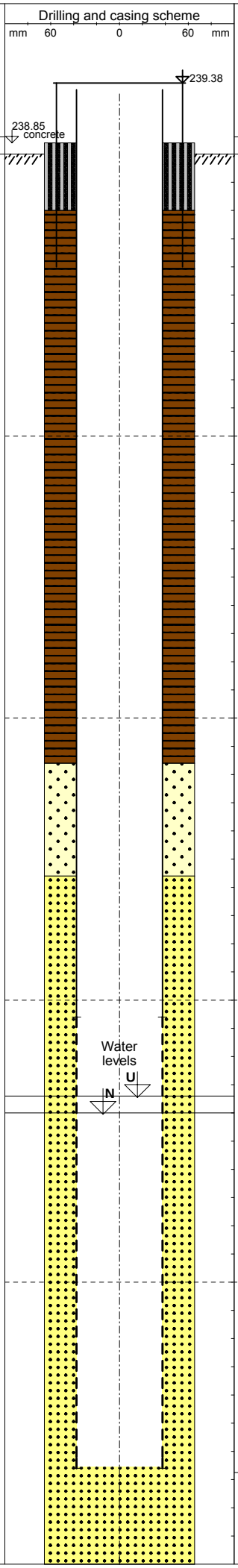
Scale :	1 : 50
Project :	
Compiled by :	
Date :	15.4.2009
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A25	0.00-0.20 : topsoil	F		
		Q35	0.20-0.40 : loam - with pebbles up to 8 cm diameter, soft, light brown	Quaternary		
		Q41	0.40-0.80 : clay - loamy, with pebbles up to 2 cm in diameter in upper part, soft, brown			
1			0.80-1.40 : silt - loamy, soft, brown			
			1.40-2.30 : silt - loamy, light brown			
2		Q44				
			2.30-2.60 : clay - silty, soft, brown			
			2.60-3.30 : silt - soft, light brown			
3						
		Q51	3.30-3.60 : sand - fine grained, light brown			
		Q44	3.60-3.80 : silt - loamy, sandy, light brown			
4		Q52	3.80-4.40 : sand - medium grained, with pebbles up to 4 cm diameter (15%), light brown			
			4.40-5.90 : gravel with sand, medium grained, pebbles up to 4 cm diameter			
5		Q68				
6		Q43	5.90-6.20 : silt - gravelly (pebbles up to 6 cm diameter)			
		Q68	6.20-6.90 : sand with gravel (pebbles up to 6 cm diamater, 20%), brown			
7		Q43	6.90-7.30 : silt - sandy, with pebbles up to 6 cm diameter (40%), compact, stiff,yellow to brown			
		Q62	7.30-8.10 : gravel - sandy (40%), pebbles up to 10 cm, light brown			
8		Q54	8.10-8.50 : sand -gravelly (pebbles up to 6 cm diamater, 25%), light brown			
		Q43	8.50-9.00 : sand - silty, coarse grained, black to brown			
9		Q62	9.00-9.60 : gravel - silty, sandy (coarse grained), pebles up to 6 cm diameter, light brown			
		Q43	9.60-10.00 : silt - sandy, gravelly (pebbles up to 10 cm diameter, 40%), stiff			
10			10.00-11.50 : gravel - silty, sandy (coarse grained), pebles up to 10 cm diameter, brown			
11		Q62				
			11.50-12.90 : silt - sandy, gravelly, pebbles sporadically up to 8 cm (30%), compact, stiff			
12		Q43				

Drilling and casing scheme



Object

MW-13

Coordinates X : 646930.62
Y : 540076.35
Z : 238.75

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation 18.3.2009
Drilling Completion 19.3.2009
Drilling Technology core drilling
Drilling Company AURA ProjectLtd. Skopje
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.9	131

CASING INTERVALS [m]	DIAM [mm]
-0.6 - 1.0	110
-0.6 - 7.7	75
7.7 - 11.6 P	75

GROUNDWATER TABLE

1st Water Strike 8.50 m
Groundwater Level 8.35 m
Date of Detection 19.3.2009

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Sandy eluvium

Scale : 1 : 50
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Object

MW-13

Coordinates X : 646930.62
Y : 540076.35
Z : 238.75

Locality Skopje
Map 1 : 25.000

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples	Drilling and casing scheme (mm 60 0 60 mm)
1	2		3	4	5	6	7
13		Q43	11.50-12.90 : silt - sandy, gravelly, pebbles sporadically up to 8 cm (30%), compact, stiff	Q			
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							

8

DESCRIPTIVE DATA

Drilling Initiation	18.3.2009
Drilling Completion	19.3.2009
Drilling Technology	core drilling
Drilling Company	AURA ProjectLtd. Skopje
Geologist	Němeček
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.9	131

CASING INTERVALS [m]	DIAM [mm]
-0.6 - 1.0	110
-0.6 - 7.7	75
7.7 - 11.6 P	75

GROUNDWATER TABLE

1st Water Strike	8.50 m
Groundwater Level	8.35 m
Date of Detection	19.3.2009

EXPLANATIONS

- Hole diameter
- Blank casing
- Screen
- Concrete
- Gravel pack fr. 1.6/4
- Bentonit
- Sandy eluvium

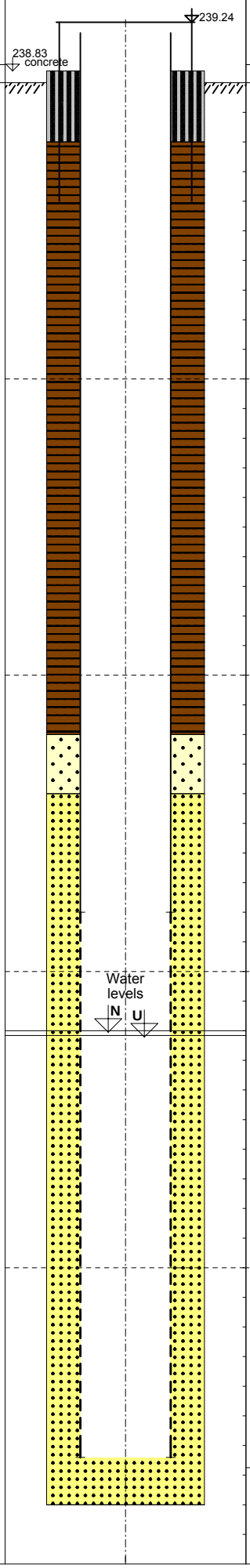
Scale :	1 : 50
Project :	
Compiled by :	
Date :	15.4.2009
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A18	0.00-0.10 : topsoil - clayey, light brown			
		Q43	0.10-0.60 : silt - sandy, gravelly, light brown			
			0.60-3.10 : silt - beige			
1						
2		Q44				
3			3.10-6.50 : gravel - sandy, with a weak admixture of silt and pea gravel, beige, dry			
4						
5		Q62		Quaternary		
6						
7		Q54	6.50-8.00 : sand - coarse, with a weak admixture of silt and pea gravel, beige to grey, 7.6 - 7.7 m - clay, sandy			
8		Q62	8.00-8.70 : gravel - medium,sandy, pebbles aprr. 3 - 4 cm diameter, clay admixture			
		Q43	8.70-8.90 : silt - sandy, stiff			
9		Q54 Q43	8.90-9.00 : sand - coarse, gravelly, grey			
			9.00-9.10 : silt - sandy (coarse), beige			
		Q54	9.10-10.00 : sand - gravelly (up to 7 cm diameter), beige, grey			
10		Q55	10.00-11.00 : sand - clayey, admixture of pea gravel, with rare pebbles 8 to 10 cm, light grey			
11		Q45	11.00-12.00 : clay - sandy, admixture of pea gravel, beige			
12						

Drilling and casing scheme



Object

MW-14

Coordinates X : 647082.76
Y : 540018.41
Z : 238.73

Locality Skopje
Map 1 : 25.000

8

DESCRIPTIVE DATA

Drilling Initiation	26.3.2009
Drilling Completion	27.3.2009
Drilling Technology	core drilling
Drilling Company	AURA ProjectLtd. Skopje
Geologist	Váňa
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	131

CASING INTERVALS [m]	DIAM [mm]
-0.5 - 1.0	110
-0.4 - 7.0	75
7.0 - 11.6 P	75

GROUNDWATER TABLE

1st Water Strike	8.00 m
Groundwater Level	8.04 m
Date of Detection	27.3.2009

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Sandy eluvium

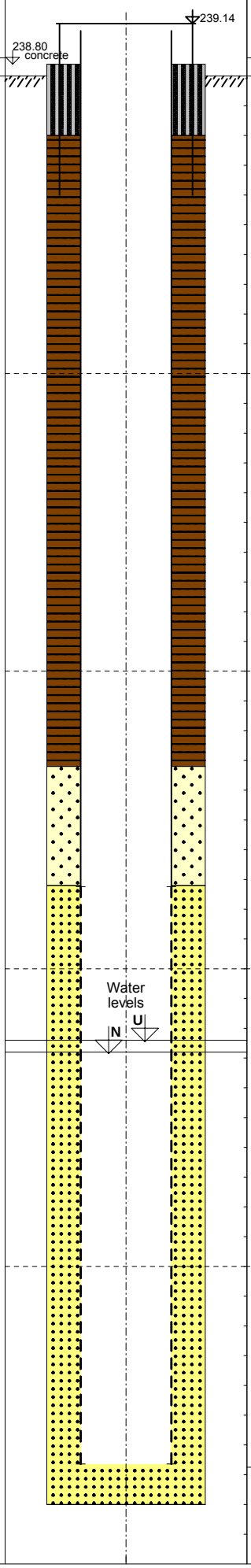
Scale :	1 : 50
Project :	
Compiled by :	
Date :	15.4.2009
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A19	0.00-0.80 : fill - loam, silty, pebbels up to 5 cm diameter, light brown	Fill		
1			0.80-3.10 : silt - loamy, ligh brown	Quaternary		
2		Q44				
3		Q51	3.10-3.20 : sand - finegrained, light brown			
4			3.20-7.70 : sand - medium grained with gravel, pebbles up to 8 cm diameter (30%), light brown			
5						
6		Q54				
7						
8			7.70-8.70 : sand - coarse grained with gravel, pebbels up to 5 cm diameter (25%), grey to brown			
9		Q43	8.70-8.90 : silt - sandy, light brown, pebbles up to 5 cm (20%), stiff, brown			
		Q62	8.90-10.00 : gravel - sandy, pebbles up to 8 cm diameter black to brown			
10		Q43	10.00-10.20 : silt - sandy, pebbles up to 3 cm (15%), stiff, brown			
		Q68	10.20-11.00 : gravel with coarse grained sand, pebbels up to 3 cm, black to brown			
11		Q62	11.00-11.60 : gravel - sandy, silty (10%), pebbles up to 10 cm diameter, brown to ochre			
12		Q43	11.60-12.00 : silt - sandy, gravelly, pebbles up to 3 cm, soft			

Drilling and casing scheme



Object

MW-15

Coordinates X : 647081.74
Y : 540024.27
Z : 238.70

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation	16.3.2009
Drilling Completion	17.3.2009
Drilling Technology	core drilling
Drilling Company	AURA ProjectLtd. Skopje
Geologist	Němeček
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.0	131

CASING INTERVALS [m]	DIAM [mm]
-0.4 - 1.0	110
-0.4 - 6.8	75
6.8 - 11.7 P	75

GROUNDWATER TABLE

2nd Water Strike	8.20 m
Groundwater Level	8.10 m
Date of Detection	18.3.2009

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Sandy eluvium

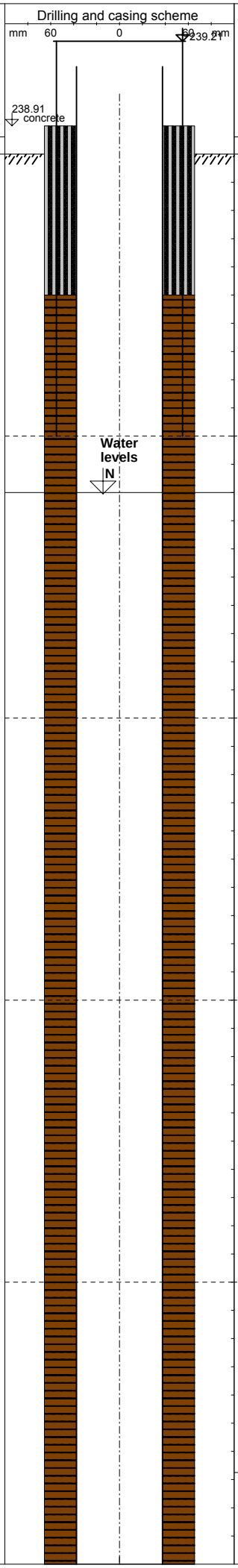
Scale :	1 : 50
Project :	
Compiled by :	
Date :	15.4.2009
Appendix :	

ENACON s.r.o. Prague

Boring Log

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
		A18	0.00-0.10 : topsoil, clayey	F		
		Q41	0.10-0.70 : clay - loamy, brown	Quaternary		
		Q55	0.70-0.90 : sand - loamy, coarse grained, pebbles up to 3 cm, brown			
		Q44	0.90-1.00 : silt - loamy, with pebbles up to 2 cm, brown			
		Q54	1.00-1.40 : sand - coarse grained, loamy, brown			
		Q44	1.40-3.60 : silt - light brown			
		Q54	3.60-5.90 : sand - medium grained with gravel, pebbles up to 6 cm diameter (30%), light brown			

Drilling and casing scheme



Object

MW-16

Coordinates X : 647080.34
Y : 540034.21
Z : 238.81

Locality Skopje
Map 1 : 25.000

DESCRIPTIVE DATA

Drilling Initiation 16.3.2009
Drilling Completion 18.3.2009
Drilling Technology core drilling
Drilling Company AURA ProjectLtd. Skopje
Geologist Němeček
Well Type soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.2	131

CASING INTERVALS [m]	DIAM [mm]
-0.4 - 1.0	110
-0.3 - 6.9	75
6.9 - 11.8 P	75

GROUNDWATER TABLE

1st Water Strike 1.20 m
2nd Water Strike 8.00 m
Groundwater Level 8.27 m
Date of Detection 18.3.2009

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Sandy eluvium

Scale : 1 : 20
Project :
Compiled by :
Date : 15.4.2009
Appendix :

ENACON s.r.o. Prague

Boring Log

Object

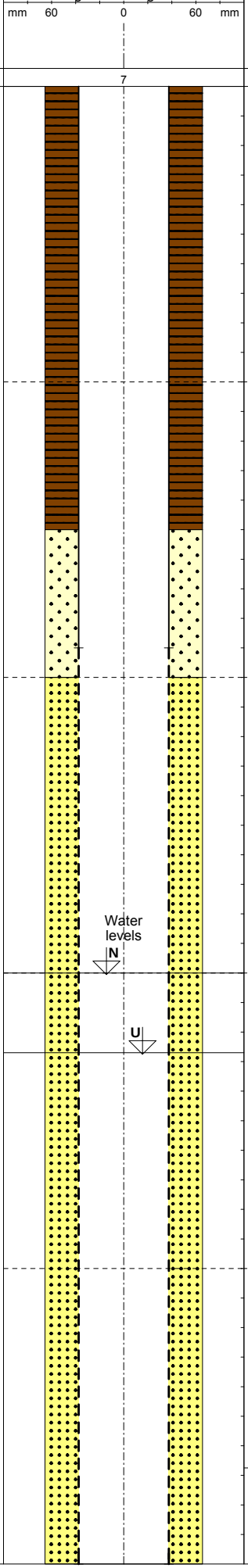
MW-16

Coordinates X : 647080.34
Y : 540034.21
Z : 238.81

Locality Skopje
Map 1 : 25.000

Depth [m]	Geological profile	Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2	3	4	5	6
	Q54	3.60-5.90 : sand - medium grained with gravel, pebbles up to 6 cm diameter (30%), light brown	Quaternary		
6	Q41	5.90-6.00 : clay with pebbles up to 2 m diameter, rusty			
	Q54	6.00-6.30 : sand - medium grained , with pebbles up to 2 cm (20%), yellow			
	Q51	6.30-6.60 : sand - fine grained silty, gravelly, light brown,			
	Q62	6.60-7.00 : gravel - sandy, pebbles up to 4 cm, light brown			
7	Q68	7.00-8.00 : sand with gravel, pebbles up to 6 cm (30%), light brown			
8	Q43	8.00-8.40 : silt - sandy, with pebbels up to 6 cm, stiff, light brown			
	Q62	8.40-8.80 : gravel - sandy, silty, pebbles up to 5 cm			
	Q43	8.80-9.00 : silt - sandy, with pebbles up to 6 cm (30%), stiff, light brown			
9	Q62	9.00-9.30 : gravel - sandy, pebbels up to 6 cm, brown to grey			
	Q43	9.30-9.80 : silt - sandy, with pebbels up to 6 cm (30%), light brown, stiff			
	Q54	9.80-9.90 : sand - coarse grained, silty, grey to brown			
	Q43	9.90-10.40 : silt - sandy, with			

Drilling and casing scheme



DESCRIPTIVE DATA

Drilling Initiation	16.3.2009
Drilling Completion	18.3.2009
Drilling Technology	core drilling
Drilling Company	AURA ProjectLtd. Skopje
Geologist	Němeček
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.2	131

CASING INTERVALS [m]	DIAM [mm]
-0.4 - 1.0	110
-0.3 - 6.9	75
6.9 - 11.8 P	75

GROUNDWATER TABLE

1st Water Strike	1.20 m
2nd Water Strike	8.00 m
Groundwater Level	8.27 m
Date of Detection	18.3.2009

EXPLANATIONS

Hole diameter
Blank casing
Screen
Concrete
Gravel pack fr. 1.6/4
Bentonit
Sandy eluvium

Scale :	1 : 20
Project :	
Compiled by :	
Date :	15.4.2009
Appendix :	

ENACON s.r.o. Prague

Boring Log

Object

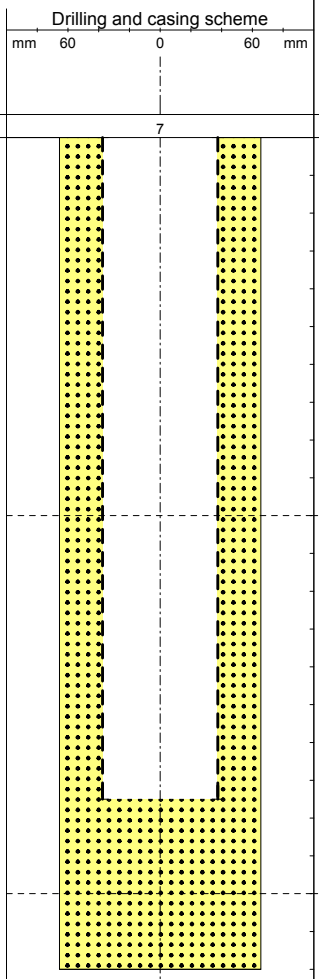
MW-16

Coordinates X : 647080.34
Y : 540034.21
Z : 238.81

Locality Skopje
Map 1 : 25.000

Depth [m]	Geological profile		Layer Description	Stratigr. classif.	Soil Samples	Gas Samples
1	2		3	4	5	6
11		Q43	9.90-10.40 : silt - sandy, with pebbles up to 5 cm (20%), light brown, stiff	Quaternary		
		Q54	10.40-11.00 : sand - coarse grained, silty, gravelly (pebbels up to 4 cm (25%), brown			
		Q43	11.00-11.50 : silt - sandy, with pebbles up to 6 cm (25%), stiff, light brown			
		Q54	11.50-11.80 : sand - medium grained, silty, gravelly, with pebbles up to 6 cm (25%), grey to brown			
12		Q43	11.80-12.00 : silt - sandy, gravelly, pebbels up to 6 cm (20%)			
		Q62	12.00-12.20 : gravel - sandy, silty, pebbles up to 6 cm			
13						
14						

Drilling and casing scheme



DESCRIPTIVE DATA

Drilling Initiation	16.3.2009
Drilling Completion	18.3.2009
Drilling Technology	core drilling
Drilling Company	AURA ProjectLtd. Skopje
Geologist	Němeček
Well Type	soil boring

DRILLING INTERVALS [m]	DIAM [mm]
0.0 - 12.2	131

CASING INTERVALS [m]	DIAM [mm]
-0.4 - 1.0	110
-0.3 - 6.9	75
6.9 - 11.8 P	75

GROUNDWATER TABLE

1st Water Strike	1.20 m
2nd Water Strike	8.00 m
Groundwater Level	8.27 m
Date of Detection	18.3.2009

EXPLANATIONS

- Hole diameter
- Blank casing
- Screen
- Concrete
- Gravel pack fr. 1.6/4
- Bentonit
- Sandy eluvium

Scale :	1 : 20
Project :	
Compiled by :	
Date :	15.4.2009
Appendix :	

Annex 29

Direct Push Probes Documentation

Annex 29

Direct Push Probes Documentation

Probe ID	Depth to Impermeable Bottom (m bgl)	Depth Interval of Deposited Waste (m bgl)*	Note
H-1	3	1.5-3.0	
H-2	3	1.5-3.0	
H-3	3.4	1.8-3.4	
H-4	3.4	1.4-3.4	grey to green colour, sample taken at 2.2 - 2.4
H-5	3.4	none (soil only)	
H-6	3.4	none (soil only)	
H-7	1.8	none (soil only)	
H-8	3.4	none (soil only)	

* - visually detected

Annex 30

Groundwater Sampling Protocols

Groundwater Sampling Record

Facility:		**Date:23.9.09**
Well No.: MW 1	**Well depth:**	**Well ø:** mm
Casing:	**Pump:** GIGANT	**Tubing:** PE ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		**Sample collector:**

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
8:38	8.13						15.51	7.36	55.1	1.91	1225
8:41	8.14						15.41	7.02	87.2	0.37	1190
8:45	8.135						15.42	6.95	105.9	0	1174
8:50	8.135						15.41	6.94	114.7	0	1165
8:55	8.135						15.41	6.94	121.8	0	1159
9:00	8.135						15.41	6.94	126.90	0	1155
9:05	8.135						15.41	6.94	131.5	0	1152

Sample delivered to: By:

Notes: 0,05 - výška chráničky

Groundwater Sampling Record

Facility:			Date:23.9.09
Well No.: MW 2	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
9:18	8.35						15.07		-122.7	0	1049
9:20	8.385						15.06	7.13	-70	0	1018
9:25	8.385						15.12	6.95	-62.9	0	1383
9:30	8.385						15.16	6.94	-60.6	0	1368
9:32	8.385						15.18	6.93	-60.4	0	1360
9:40	8.385						15.26	6.94	-58.90	0	1324
9:45	8.385						15.28	6.94	-58.4	0	1313

Sample delivered to: By:

Notes: 0,05 - výška chráničky

Groundwater Sampling Record

Facility:			Date:22.9.09
Well No.: MW 3	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
16:00	8.13						15.41	7.17	133.9	1.6	816
16:05	8.13						15.41	7.13	156.7	1.44	821
16:08	8.13						15.53	7.12	164.5	1.29	821
16:15	8.13						15.57	7.12	181.9	1.17	822

Sample delivered to: By:

Notes: 0,05 - výška chráničky

Groundwater Sampling Record

Facility:			Date:22.9.09
Well No.: MW 4	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
13:08	8.37						17.85	6.94	172.5	0.17	915
13:11	8.38						17.11	6.91	172.4	0	924
13:15	8.38						17.21	6.85	171.2	0	926
13:20	8.38						17.15	6.83	171.4	0	928
13:25	8.38						17.02	6.82	172.7	0	928

Sample delivered to: By:

Notes: 0,05 - výška chráničky

Groundwater Sampling Record

Facility:			Date:22.9.09
Well No.: MW 5	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
10:45	8.89						14.74	7.05	155	3.7	572
10:50	8.9						14.77	7.02	159.3	3.35	624
10:53	8.9						14.76	7.00	162.1	3.32	658
11:00	8.9						14.77	6.98	166.7	2.94	685
11:07	8.9						14.78	6.97	171.7	2.87	700

Sample delivered to: By:

Notes: 0,34 - výška chráničky

Groundwater Sampling Record

Facility:			Date:23.9.09
Well No.: MW 6	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
11:18	8.2						15.96	7.72	-25.1	0.24	1107
11:21	8.21						15.98	7.20	10.6	0	1100
11:25	8.21						16.07	7.06	34.3	0	1099
11:28	8.21						16.21	7.00	54	0	1099
11:33	8.21						16.3	6.97	70.3	0	1098

Sample delivered to: By:

Notes: 0,32 - výška chráničky

Groundwater Sampling Record

Facility:			Date:22.9.09
Well No.: MW 7	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
12:10	7.95						15.35	7.90	1.4	1.76	1011
12:12	7.965						15.31	7.29	60	1.66	1012
12:15	7.965						15.29	7.10	93.8	1.65	1015
12:20	7.965						15.42	7.04	126.7	1.37	1018
12:25	7.965						15.43	7.02	138.7	1.52	1021
										1.25	

Sample delivered to: By:

Notes: 0,32 - výška chráničky

Groundwater Sampling Record

Facility:			Date:21.9.09
Well No.: MW 8	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
15:52	8.31						14.77	9.25	-85.5	1.6	1442
15:55	8.32						14.77	8.13	-34.9	1.45	1447
15:59	8.32						14.76	7.23	15.5	1.29	1451
16:04	8.32						14.74	7.41	42.8	1.16	1450
16:10	8.32						14.72	7.38	54	1.21	1447
16:15	8.32						14.73	7.36	61.40	1.25	1445

Sample delivered to: By:

Notes: 0,32 - výška chráničky

Groundwater Sampling Record

Facility:			Date:23.9.09
Well No.: MW 9	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
12:12	8.26						15.31	8.60	-22.3	1.55	1229
12:15	8.26						15.14	7.40	-28.3	1.69	1249
12:18	8.26						15.11	7.25	38.5	1.69	1252
12:21	8.26						15.1	7.17	50.5	1.73	1253
12:26	8.26						15.06	7.70	63.9	1.75	1259
12:32	8.26						15.05	7.1	85.40	1.8	1267
12:38	8.26						15.03	7.09	104.8	1.85	1269

Sample delivered to: By:

Notes: 0,2 - výška chráničky

Groundwater Sampling Record

Facility:			Date:22.9.09
Well No.: MW 10	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
11:37	8.3						15.43	7.33	113.2	4.55	490
11:40	8.3						15.44	7.25	134	4.07	492
11:45	8.3						15.61	7.19	160.5	3.86	495
11:50	8.3						15.65	7.17	169.2	3.82	496

Sample delivered to: By:

Notes: 0,32 - výška chráničky

Groundwater Sampling Record

Facility:			Date:22.9.09
Well No.: MW 11	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
15:31	8,58						14.69	7.69	34	0.58	1451
15:33	8,59						14.74	7.41	69.5	0.46	1452
15:40	8,59						14.73	7.24	107.3	0.28	1451
15:42	8,59						14.72	7.22	113.9	0.26	1451

Sample delivered to: By:

Notes: 0,22 - výška chráničky, mierne zakalené

Groundwater Sampling Record

Facility:			Date:23.9.09
Well No.: MW 12	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
10:40	8,87						15.28	8.30	-66.4	0.21	1058
10:42	8,88						15.25	7.45	-5	0.17	1058
10:46	8,88						15.36	7.12	55.3	0.12	1075
10:51	8,88						15.41	7.07	76.2	0.12	1078
10:56	8,88						15.47	7.04	92.6	0.14	1149
10:58	8,88						15.47	7.03	99.30	0.17	1150
11:03	8,88						15.46	7.03	108.3	0.21	1152

Sample delivered to: By:

Notes: 0,4 - výška chráničky, mierne zakalené

Groundwater Sampling Record

Facility:			Date:27.9.09
Well No.: MW 13	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
10:00	8,5						15.23	7.78	-14.1	0	981
10:03	8,51						15.24	7.14	32.3	0	995
10:06	8,51						15.31	7.06	50.6	0	1006
10:11	8,51						15.41	7.01	69.8	0	1005
10:16	8,515						15.46	7.00	78.1	0	1003

Sample delivered to: By:

Notes: 0,38 - výška chráničky

Groundwater Sampling Record

Facility:			Date:21.9.09
Well No.: MW 14	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
10:23	8,26						14.73	8.10	8	1.44	1230
10:27	8,27						14.71	7.64	55	1.12	996
10:33	8,29						14.66	7.58	54.4	1	1248
10:39	8,28						14.66	7.60	-15.9	0.99	1258
10:49	8,29						14.66	7.63	-22	0.99	1270

Sample delivered to: By:

Notes: 0,3 - výška chráničky

dekonta

Groundwater Sampling Record

Facility:			**Date:21.9.09**
Well No.: MW 15	**Well depth:**	**Well ø:**	**mm**
Casing:	**Pump:** GIGANT	**Tubing:** PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	**Sample collector:**	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
12:00	8,17						14.86	7.42	-129.5	0	1226
12:03	8,19						14.88	7.42	-137.6	0	1222
12:06	8,19						14.97	7.40	-151.4	0	1217
12:12	8,19						15.11	7.33	-168.8	0.22	1211
12:18	8,19						15.09	7.31	-182.9	0.5	1208
12:28	8,2						14.98	7.3	-194.30	1.08	1197

Sample delivered to: By:

Notes: 0,23 - výška chráničky

Groundwater Sampling Record

Facility:			Date:.9.09
Well No.: MW 16	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
15:14	8,24						14.88	8.55	-117.2	0.26	1297
15:17	8,26						14.89	7.49	-101.3	0.37	1280
15:23	8,26						14.93	7.24	-97.8	0	1252
15:33	8,26						14.91	7.22	-97.7	0	1238
15:36	8,26						14.89	7.22	-98.1	0	1234

Sample delivered to: By:

Notes: 0,29 - výška chráničky

Groundwater Sampling Record

Facility:			Date:.9.09
Well No.: HS 1	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
14:35	8,24						15,08	10,72	-145.20	2.74	1659
14:38	8,265						14,91	10,53	-115.50	2.23	1644
14:41	8,27						14,83	10,42	-93.20	2.12	1631
14:45	8,265						14,89	10,33	-68.60	2.08	1618
14:51	8,265						14,89	10,28	-54.10	2.02	1603
15:00							15,01	10,24	-34.00	1.61	1589

Sample delivered to: By:

Notes: 0,3 - výška chráničky

Groundwater Sampling Record

Facility:			Date:21.9.09
Well No.: HS 2	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by: DEKONTA a.s.		Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (µScm^{-1})
16:37	8,59						14,73	7,44	46,7	3,46	826
16:39	8,6						14,63	7,21	81,2	3,37	825
16:45	8,6						14,62	7,11	120,9	3,3	826
16:50	8,6						14,62	7,09	134	3,13	826

Sample delivered to: By:

Notes: 0,28 - výška chráničky

Groundwater Sampling Record

Facility:			Date:23.9.09
Well No.: DW 3	Well depth:	Well ø:	mm
Casing:	Pump:	Tubing: PE	
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
15:57							17.01	7.53	163.2	3.42	1076

Sample delivered to: By:

Notes: 0,05 - výška chráničky

Groundwater Sampling Record

Facility:			Date:23.9.09
Well No.: DW 4	Well depth:	Well ø:	mm
Casing:	Pump: GIGANT	Tubing: PE	ø 12/10 mm
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
16:24							16.53	7.67	51.8	2.48	1163

Sample delivered to: By:

Notes: 0,05 - výška chráničky

Groundwater Sampling Record

Facility:			Date:23.9.09
Well No.: DW 6	Well depth:	Well ø:	mm
Casing:	Pump:	Tubing: PE	
Sampling carried out by:	DEKONTA a.s.	Sample collector:	

Time	GW level (m.b.w.h.)	Pump on	Volume pumped off	Pumping rate	Sampling		GW physico-chemical parameters				
					start	end	Temp (°C)	pH	redox (mV)	O_2 (mgL^{-1})	Conductivity (μScm^{-1})
							15.85	7.61	32.3	1.97	1628

Sample delivered to: By:

Notes: 0,05 - výška chráničky

Annex 31
Surveying Data

MEASURED POINTS - LANDFILLS 1 and 2

Point	y (m)	x (m)	z (m)	
1	539752.833	647010.999	239.719	
2	539745.329	647005.248	239.830	
3	539737.285	646994.356	239.993	
4	539732.048	646986.035	239.941	
5	539731.285	646977.483	240.095	
6	539739.718	646966.742	240.226	
7	539743.027	646964.677	240.194	
8	539748.816	646963.547	240.152	
9	539753.999	646963.807	240.058	
10	539757.485	646965.533	239.984	
11	539763.214	646969.458	239.839	
12	539778.714	646995.421	239.733	LANDFILL 1
13	539753.170	647007.996	241.219	
14	539743.883	646998.805	241.412	
15	539736.959	646990.178	240.951	
16	539736.590	646984.198	240.584	
17	539736.225	646975.018	240.816	
18	539740.488	646969.942	241.221	
19	539746.922	646965.963	241.205	
20	539754.354	646967.550	241.190	
21	539763.087	646974.156	241.202	
22	539771.243	646986.551	240.962	
23	539774.894	646994.723	241.176	
24	539765.561	647000.710	241.209	
25	539760.179	646993.043	241.259	
26	539750.703	646980.134	241.064	

27	539754.245	647021.348	239.498	
28	539754.202	647021.385	240.499	
29	539750.128	647027.575	239.477	
30	539750.142	647027.687	240.463	
31	539751.078	647033.903	239.491	
32	539751.171	647033.865	240.451	
33	539772.884	647069.267	239.371	
34	539772.922	647069.217	240.327	
35	539779.203	647069.178	239.319	
36	539779.218	647069.112	240.352	
37	539837.546	647033.952	239.255	
38	539856.737	647009.323	239.294	
39	539856.635	647009.351	240.310	
40	539844.077	646975.751	239.385	
41	539843.957	646975.818	240.379	
42	539841.205	646976.876	239.506	
43	539841.136	646976.781	240.356	
44	539837.806	646971.027	239.469	
45	539837.725	646971.217	240.345	
46	539834.765	646971.991	239.483	
47	539834.785	646972.062	240.627	
48	539836.265	646973.095	240.484	
49	539816.439	646984.750	240.767	
50	539802.523	646993.073	240.663	
51	539786.162	647005.383	240.624	
52	539768.760	647017.050	240.718	
53	539757.195	647023.422	240.327	
54	539754.152	647030.895	240.210	
55	539757.688	647041.805	240.443	
56	539764.696	647053.651	240.542	
57	539772.554	647065.658	240.341	LANDFILL 2
58	539780.945	647064.230	240.101	
59	539789.594	647061.404	240.527	
60	539795.299	647059.354	242.256	
61	539795.108	647056.104	243.514	
62	539810.264	647046.361	243.657	
63	539823.351	647038.727	243.536	
64	539832.659	647032.880	243.293	
65	539837.212	647033.892	242.270	
66	539832.203	647025.011	242.237	
67	539829.231	647026.020	243.510	
68	539829.855	647022.044	243.646	
69	539837.827	647016.205	243.501	
70	539845.718	647007.293	243.482	
71	539843.531	646999.087	243.463	
72	539841.069	646990.528	243.322	
73	539834.121	646978.821	243.046	
74	539822.164	646986.840	243.317	
75	539808.832	646996.895	243.634	
76	539793.131	647008.107	243.791	
77	539780.550	647016.958	243.590	
78	539765.952	647024.893	243.654	
79	539761.696	647028.503	243.547	
80	539760.374	647032.266	243.532	
81	539764.651	647042.386	243.556	
82	539774.783	647054.259	243.421	
83	539780.054	647058.485	243.360	
84	539787.187	647039.424	244.207	
85	539800.966	647024.493	244.354	
86	539818.261	647012.426	244.180	
87	539832.213	647001.155	243.755	
88	539840.815	646977.620	240.410	
89	539847.778	646989.552	240.340	
90	539851.596	647007.603	240.466	
91	539833.060	647025.255	239.541	

	MEASURED POINTS - MONITORING WELLS				
92	539843.445	647020.449	239.440		MW2
93	539843.471	647020.487	239.371	Ground level	MW2A
94	539695.810	646998.825	240.137		MW5
95	539695.876	646999.146	239.683	Ground level	MW5A
96	539921.350	647067.554	239.250		MW3
97	539921.512	647067.525	239.146	Ground level	MW3A
98	539925.598	647124.315	239.255		MW6
99			238.937	Ground level	
100	539971.044	647135.139	239.020		MW7
101	539971.083	647135.187	238.966	Ground level	MW7A
102	540070.518	647064.150	239.232		MW8
103	540070.783	647064.490	238.769	Ground level	MW8A
104	539958.568	647008.993	239.104		MW1
105	539958.692	647009.081	239.056	Ground level	MW1A
106	539704.704	647106.296	239.571		MW4
107	539704.684	647106.271	239.498	Ground level	MW4A
108	540007.257	647088.943	239.221		HS-1
			238.866	Ground level	
109	539801.236	646976.361	239.861		HS-2
			239.464	Ground level	
110	541547.004	646258.410	236.355	GWL	Markova River (100 m SE of the corner of OHIS area)
111	541982.441	648193.583	230.513	GWL	Vardar River (upstream point)
112	542910.606	647925.791	229.738	GWL	Vardar River (downstream point-inflow of Markova

MEASURED POINTS - NEW MONITORING WELLS

113	539912.67	647108.05	239.30	MW9
114	539912.67	647108.05	238.97	MW9/P
115	539912.63	647108.03	239.09	MW9/C
116	539912.63	647108.03	238.99	MW9/G
117	539912.44	647161.46	239.37	MW10
118	539912.44	647161.46	239.23	MW10/P
119	539912.52	647161.42	239.06	MW10/C
120	539912.52	647161.42	238.96	MW10/G
121	540156.51	647025.10	239.39	MW11
122	540156.51	647025.10	239.22	MW11/P
123	540156.43	647025.16	239.06	MW11/C
124	540156.43	647025.16	238.96	MW11/G
125	540183.17	646963.00	239.67	MW12
126	540183.17	646963.00	239.41	MW12/P
127	540183.11	646962.98	239.27	MW12/C
128	540183.11	646962.98	239.17	MW12/G
129	540076.39	646930.63	239.38	MW13
130	540076.39	646930.63	239.32	MW13/P
131	540076.35	646930.62	238.85	MW13/C
132	540076.35	646930.62	238.75	MW13/G
133	540018.33	647082.85	239.24	MW14
134	540018.33	647082.85	239.15	MW14/P
135	540018.41	647082.76	238.83	MW14/C
136	540018.41	647082.76	238.73	MW14/G
137	540024.18	647081.83	239.14	MW15
138	540024.18	647081.83	239.08	MW15/P
139	540024.27	647081.74	238.80	MW15/C
140	540024.27	647081.74	238.70	MW15/C
141	540034.11	647080.40	239.21	MW16
142	540034.11	647080.40	239.12	MW16/P
143	540034.21	647080.34	238.91	MW16/C
144	540034.21	647080.34	238.81	MW16/C

LEGEND:

MW 11/P - PVC pipe f 75 mm
MW 11 - Protection PVC pipe f 110 mm
MW11/C - Concrete seal
MW11/G - Ground level (calculated as M11/C - 10 cm)

Annex 32

Mathematical Modelling of Groundwater Flow and Contaminant Transport

Annex 33

Human Health Risk Calculations

Exposure scenario 1			
Outdoor On-site Worker - Inhalation of dust- Daily doses			
	Chronic daily intake (CDI) (mg/kg-day)		
	Soil concentration (mg/kg)	ADD	LADD
Compound	Average	MLE	
α- HCH	7255,49	1,17E-05	5,02E-06
β - HCH	617,60	9,97E-07	4,27E-07
γ - HCH (lindane)	11794,12	1,90E-05	8,16E-06
δ - HCH	15364,25	2,48E-05	1,06E-05
Σ DDT	6,81	1,10E-08	4,71E-09
chlorobenzene	9,13	1,47E-08	6,32E-09
1,2 dichlorobenzene	5,89	9,51E-09	4,08E-09
1,4 dichlorobenzene	8,99	1,45E-08	6,22E-09
1,3 dichlorobenzene	36,86	5,95E-08	2,55E-08
1,3,5 trichlorobenzene	1,55	2,50E-09	1,07E-09
1,2,4 trlchlorobenzene	36,70	5,92E-08	2,54E-08
1,2,3 trichlorobenzene	9,06	1,46E-08	6,27E-09
1,2,3,4 tetrachlorobenzene	51,83	8,37E-08	3,59E-08
Pentachlorobenzene	11,09	1,79E-08	7,67E-09
HCB	0,48	7,78E-10	3,33E-10

Exposure scenario 2			
Indoor On-site Worker - Inhalation of dust- Daily doses			
Chronic daily intake (CDI) (mg/kg-day)			
	Soil concentration (mg/kg)	ADD	LADD
Compound	Average	MLE	
α- HCH	6 017,90	3,89E-05	1,67E-05
β - HCH	238,0	1,54E-06	6,59E-07
γ - HCH (lindane)	167,0	1,08E-06	4,62E-07
δ - HCH	165,4	1,07E-06	4,58E-07
Endosulfan	0,23	1,49E-09	6,37E-10
Σ DDE	0,73	4,74E-09	2,03E-09
Σ DDD	0,24	1,56E-09	6,69E-10
Σ DDT	0,69	4,46E-09	1,91E-09
mercury	4 794,87	3,10E-05	1,33E-05

Exposure scenario 4.1			
Excavation worker - Inhalation of dust/fine particles - Daily doses			
Chronic daily intake (CDI) (mg/kg-day)			
	Soil concentration (mg/kg)	ADD	LADD
Compound	Average	MLE	
α- HCH	4157,49	1,12E-05	8,78E-09
β - HCH	530,97	1,43E-06	1,12E-09
γ - HCH (lindane)	8974,83	2,41E-05	1,89E-08
δ - HCH	4412,21	1,19E-05	9,31E-09
Σ DDE	0,65	1,75E-09	1,37E-12
Σ DDD	2,74	7,35E-09	5,78E-12
Σ DDT	6,83	1,83E-08	1,44E-11
chlorobenzene	6,65	1,79E-08	1,40E-11
1,2 dichlorobenzene	3,08	8,27E-09	6,50E-12
1,4 dichlorobenzene	5,56	1,49E-08	1,17E-11
1,3 dichlorobenzene	9,21	2,47E-08	1,94E-11
1,3,5 trichlorobenzene	1,66	4,45E-09	3,49E-12
1,2,4 trlchlorobenzene	10,82	2,91E-08	2,28E-11
1,2,3 trichlorobenzene	5,87	1,58E-08	1,24E-11
1,2,3,4 tetrachlorobenzene	36,55	9,82E-08	7,72E-11
Pentachlorobenzene	6,75	1,81E-08	1,42E-11
HCB	0,38	1,02E-09	8,05E-13
mercury	36,57	9,83E-08	7,72E-11

Exposure scenario 4.2			
Excavation Worker - Inhalation of vapors of VOCs - Daily doses			
Chronic daily intake (CDI) (mg/kg-day)			
	Soil gas concentration (mg/m3)	ADD	LADD
Compound	Average	MLE	
TCE	451,91	1,10E+00	8,67E-04
PCE	23,2	5,67E-02	4,45E-05

Exposure scenario 4.3				
Excavation Worker - Accidental Ingestion - Daily doses				
Chronic daily intake (CDI) (mg/kg-day)				
	Soil concentration (mg/kg)		ADD	LADD
Compound	Average	GI*	MLE	
a- HCH	4157,49	0,97	3,16E-04	2,48E-07
β - HCH	530,97	0,91	3,78E-05	2,97E-08
γ - HCH (lindane)	8974,83	0,97	6,81E-04	5,35E-07
δ - HCH	4412,21	0,50	1,73E-04	1,36E-07
Σ DDE	0,65	0,70	3,57E-08	2,80E-11
Σ DDD	2,74	0,70	1,50E-07	1,18E-10
Σ DDT	6,83	0,7	3,74E-07	2,94E-10
chlorobenzene	6,65	0,31	1,61E-07	1,27E-10
1,2 dichlorobenzene	3,08	0,80	1,93E-07	1,51E-10
1,4 dichlorobenzene	5,56	0,80	3,48E-07	2,74E-10
1,3 dichlorobenzene	9,21	0,80	5,77E-07	4,53E-10
1,3,5 trichlorobenzene	1,66	0,97	1,26E-07	9,88E-11
1,2,4 trlchlorobenzene	10,82	0,97	8,21E-07	6,45E-10
1,2,3 trichlorobenzene	5,87	0,97	4,45E-07	3,50E-10
1,2,3,4 tetrachlorobenzene	36,55	0,80	2,29E-06	1,80E-09
Pentachlorobenzene	6,75	0,80	4,22E-07	3,32E-10
HCB	0,38	0,50	1,49E-08	1,17E-11
mercury	36,57	0,001	2,86E-09	2,25E-12

GI factor - gastrointestinal factor (database RAIS - July 2008)

Exposure scenario 4.4				
Excavation Worker - Dermal contact - Daily doses				
Chronic daily intake (CDI) (mg/kg-day)				
	Soil concentration (mg/kg)		ADD	LADD
Compound	Average	ABS*	MLE	
a- HCH	4157,49	0,01	3,87E-05	3,04E-08
β - HCH	530,97	0,01	4,94E-06	3,88E-09
γ - HCH (lindane)	8974,83	0,04	3,34E-04	2,63E-07
δ - HCH	4412,21	0,01	4,11E-05	3,23E-08
Σ DDE	0,65	0,01	6,06E-09	4,76E-12
Σ DDD	2,74	0,01	2,55E-08	2,00E-11
Σ DDT	6,83	0,01	6,36E-08	4,99E-11
chlorobenzene	6,65	0,01	6,19E-08	4,87E-11
1,2 dichlorobenzene	3,08	0,01	2,86E-08	2,25E-11
1,4 dichlorobenzene	5,56	0,01	5,17E-08	4,07E-11
1,3 dichlorobenzene	9,21	0,01	8,57E-08	6,74E-11
1,3,5 trichlorobenzene	1,66	0,01	1,54E-08	1,21E-11
1,2,4 trichlorobenzene	10,82	0,01	1,01E-07	7,91E-11
1,2,3 trichlorobenzene	5,87	0,01	5,46E-08	4,29E-11
1,2,3,4 tetrachlorobenzene	36,55	0,01	3,40E-07	2,67E-10
Pentachlorobenzene	6,75	0,01	6,28E-08	4,93E-11
HCB	0,38	0,01	3,55E-09	2,79E-12
mercury	36,57	0,001	3,40E-08	2,67E-11

ABS - absorption factor (database RAIS - July 2008)

Exposure scenario 5				
Resident - Dermal contact with soil during gardening - Daily doses				
Chronic daily intake (CDI) (mg/kg-day)				
	Soil concentration (mg/kg)		ADD	LADD
Compound	Average	ABS*	MLE	
a- HCH	1,24	0,01	5,17E-08	2,22E-08
β - HCH	0,23	0,01	9,63E-09	4,13E-09
γ - HCH (lindane)	0,04	0,04	6,28E-09	2,69E-09
mercury	0,13	0,001	5,24E-10	2,24E-10

ABS - absorption factor (database RAIS - July 2008)

Exposure scenario 6.1			
Resident - Inhalation during Irrigation - Daily doses			
Chronic daily intake (CDI) (mg/kg-day)			
	Groundwater concentration (mg/l)	ADD	LADD
Compound	**Average**	**MLE**	
α- HCH	7,40E-05	1,38E-08	1,78E-08
β - HCH	1,11E-03	2,07E-07	2,67E-07
γ - HCH (lindane)	4,25E-05	7,95E-09	1,02E-08
δ - HCH	6,30E-04	1,18E-07	1,51E-07
TCE	2,14E-02	4,00E-06	5,14E-06
PCE	9,52E-02	1,78E-05	2,29E-05
tetrachlorethane	9,67E-02	1,81E-05	2,33E-05

Exposure scenario 6.2				
Resident - Dermal contact with groundwater during irrigation - Daily doses				
Chronic daily intake (CDI) (mg/kg-day)				
	Groundwater concentration (mg/l)	Kp*	ADD	LADD
Compound	Average	cm/hod	MLE	
α- HCH	7,40E-05	0,0279	1,19E-11	5,11E-12
β - HCH	1,11E-03	0,0279	1,21E-10	1,73E-12
γ - HCH (lindane)	4,25E-05	0,0279	4,64E-12	6,62E-14
δ - HCH	6,30E-04	0,0279	6,87E-11	9,81E-13
TCE	2,14E-02	0,0157	1,31E-09	1,87E-11
PCE	9,52E-02	0,0481	1,79E-08	2,56E-10
tetrachlorethane	9,67E-02	0,0090	3,39E-09	4,85E-11

Kp - skin permeability coefficient (database RAIS - July 2008)

Exposure scenario 7.1					
Resident - Consumption of vegetables (transfer from soil) - Daily doses					
Chronic daily intake (CDI) (mg/kg-day)					
	Soil concentration (mg/kg)	Recalculated concentration in vegetables (mg/kg)		ADD	LADD
Compound	Average		GI*	MLE	
α- HCH	1,24	0,35	0,97	1,68E-04	7,21E-05
β - HCH	0,23	0,064	0,91	2,94E-05	1,26E-05
γ - HCH (lindane)	0,038	0,011	0,97	5,11E-06	2,19E-06
mercury	0,13	0,0022	0,001	1,10E-09	4,70E-10

GI - gastrointestinal factor (database RAIS - July 2008)

Exposure scenario 7.2					
Resident - Consumption of vegetables (transfer from water) - Daily doses					
Chronic daily intake (CDI) (mg/kg-day)					
	Groundwater concentration (mg/l)	Recalculated concentration in vegetables (mg/kg)		ADD	LADD
Compound	Average	Average	GI*	MLE	
α- HCH	7,40E-05	3,50E-03	0,970	1,70E-06	7,30E-07
β - HCH	1,11E-03	5,25E-02	0,91	2,40E-05	1,03E-05
γ - HCH (lindane)	4,25E-05	2,01E-03	0,97	9,78E-07	4,19E-07
δ - HCH	6,30E-04	2,98E-02	0,50	7,47E-06	3,20E-06
TCE	2,14E-02	6,45E-02	0,15	4,85E-06	2,08E-06
PCE	9,52E-02	1,27E+00	1,00	6,37E-04	2,73E-04
tetrachlorethane	9,67E-02	2,81E-01	0,70	9,87E-05	4,23E-05

GI - gastrointestinal factor (database RAIS - July 2008)

Exposure scenario 7.3				
Resident - Consumption of vegetables (lettuce) - Daily doses				
Chronic daily intake (CDI) (mg/kg-day)				
Compound	Measured vegetables concentration (mg/kg)	GI*	ADD	LADD
			MLE	
α- HCH	4,25E-03	0,970	2,06E-06	8,84E-07
β - HCH	9,65E-04	0,91	4,40E-07	1,89E-07
γ - HCH (lindane)	2,00E-04	0,97	9,72E-08	4,17E-08
δ - HCH	1,00E-04	0,50	2,50E-08	1,07E-08
Endosulfan	1,45E-04	0,50	3,63E-08	1,56E-08
Σ DDE	1,05E-04	0,70	3,68E-08	1,58E-08
PCBs	1,57E-03	0,80	6,29E-07	2,70E-07

GI - gastrointestinal factor (database RAIS - July 2008)

Exposure scenario 1						
Outdoor On-site Worker - Inhalation of dust/fine particles - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	1,17E-05	5,02E-06	NA		6,30E+00	**3,16E-05**
β - HCH	9,97E-07	4,27E-07	NA		1,86E+00	7,95E-07
γ - HCH (lindane)	1,90E-05	8,16E-06	NA		NA	
δ - HCH	2,48E-05	1,06E-05	NA		NA	
Σ DDT	1,10E-08	4,71E-09	NA		3,40E-01	1,60E-09
chlorobenzene	1,47E-08	6,32E-09	1,43E-02	1,03E-06	NA	
1,2 dichlorobenzene	9,51E-09	4,08E-09	5,70E-02	1,67E-07	NA	
1,4 dichlorobenzene	1,45E-08	6,22E-09	2,29E-01	6,34E-08	NA	
1,3 dichlorobenzene	5,95E-08	2,55E-08	NA		NA	
1,3,5 trichlorobenzene	2,50E-09	1,07E-09	1,14E-03	2,19E-06	NA	
1,2,4 trlchlorobenzene	5,92E-08	2,54E-08	1,14E-03	5,20E-05	NA	
1,2,3 trichlorobenzene	1,46E-08	6,27E-09	1,14E-03	1,28E-05	NA	
1,2,3,4 tetrachlorobenzene	8,37E-08	3,59E-08	NA		NA	
Pentachlorobenzene	1,79E-08	7,67E-09	NA		NA	
HCB	7,78E-10	3,33E-10	NA		1,61E+00	5,37E-10

NA - not available

Exposure scenario 2						
Indoor On-site Worker - Inhalation of dust/fine particles - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	3,89E-05	1,67E-05	NA		6,30E+00	**1,05E-04**
β - HCH	1,54E-06	6,59E-07	NA		1,86E+00	1,23E-06
γ - HCH (lindane)	1,08E-06	4,62E-07	NA		NA	
δ - HCH	1,07E-06	4,58E-07	NA		NA	
Endosulfan	1,49E-09	6,37E-10	NA		NA	
Σ DDE	4,74E-09	2,03E-09	NA		NA	
Σ DDD	1,56E-09	6,69E-10	NA		NA	
Σ DDT	4,46E-09	1,91E-09	NA		3,40E-01	6,50E-10
mercury	3,10E-05	1,33E-05	8,57E-05	3,61E-01	NA	

NA - not available

Exposure scenario 3					
On-site Worker - Intrusion of Vapors - Inhalation - Risk ***Vapor Intrusion Model used for risk estimation***					
Average exposure (MLE)					
		Non-carcinogenic risks		**Carcinogenic risks**	
Compound	**Soil gas concentration (mg/m3)**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
TCE	4,52E+02	1,14E-02	7,10E-02	4,00E-01	**1,30E-04**
PCE	2,32E+01	1,71E-01	2,40E-04	2,07E-02	3,70E-07

Exposure scenario 4.1						
Excavation worker - Inhalation of dust/fine particles - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	1,12E-05	8,78E-09	NA		6,30E+00	5,53E-08
β - HCH	1,43E-06	1,12E-09	NA		1,86E+00	2,08E-09
γ - HCH (lindane)	2,41E-05	1,89E-08	NA		NA	
δ - HCH	1,19E-05	9,31E-09	NA		NA	
Σ DDE	1,75E-09	1,37E-12	NA		NA	
Σ DDD	7,35E-09	5,78E-12	NA		NA	
Σ DDT	1,83E-08	1,44E-11	NA		3,40E-01	4,90E-12
chlorobenzene	1,79E-08	1,40E-11	1,43E-02	1,25E-06	NA	
1,3 dichlorobenzene	8,27E-09	6,50E-12	5,70E-02	1,45E-07	NA	
1,4 dichlorobenzene	1,49E-08	1,17E-11	2,29E-01	6,52E-08	NA	
1,3 dichlorobenzene	2,47E-08	1,94E-11	NA		NA	
1,3,5 trichlorobenzene	4,45E-09	3,49E-12	1,14E-03	3,90E-06	NA	
1,2,4 trlchlorobenzene	2,91E-08	2,28E-11	1,14E-03	2,55E-05	NA	
1,2,3 trichlorobenzene	1,58E-08	1,24E-11	1,14E-03	1,38E-05	NA	
1,2,3,4 tetrachlorobenzene	9,82E-08	7,72E-11	NA		NA	
Pentachlorobenzene	1,81E-08	1,42E-11	NA		NA	
HCB	1,02E-09	8,05E-13	NA		1,61E+00	1,30E-12
mercury	9,83E-08	7,72E-11	8,57E-05	1,15E-03	NA	

NA - not available

Exposure scenario 4.2						
Excavation Worker - Inhalation of VOC vapors - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
TCE	1,10E+00	8,67E-04	1,14E-02	**96,82**	4,00E-01	**3,47E-04**
PCE	5,67E-02	4,45E-05	1,71E-01	3,31E-01	2,07E-02	9,22E-07

Exposure scenario 4.3						
Excavation Worker - Accidental Ingestion - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	3,16E-04	2,48E-07	NA		6,30E+00	1,56E-06
β - HCH	3,78E-05	2,97E-08	NA		1,80E+00	5,35E-08
γ - HCH (lindane)	6,81E-04	5,35E-07	3,00E-04	**2,27**	1,30E+00	6,96E-07
δ - HCH	1,73E-04	1,36E-07	NA		NA	
Σ DDE	3,57E-08	2,80E-11	2,00E-03	1,78E-05	2,40E-01	6,73E-12
Σ DDD	1,50E-07	1,18E-10	NA		3,40E-01	4,01E-11
Σ DDT	3,74E-07	2,94E-10	5,00E-04	7,48E-04	3,40E-01	1,00E-10
chlorobenzene	1,61E-07	1,27E-10	2,00E-02	8,07E-06	NA	
1,2 dichlorobenzene	1,93E-07	1,51E-10	9,00E-02	2,14E-06	NA	
1,4 dichlorobenzene	3,48E-07	2,74E-10	NA		2,40E-02	6,57E-12
1,3 dichlorobenzene	5,77E-07	4,53E-10	NA		NA	
1,3,5 trichlorobenzene	1,26E-07	9,88E-11	1,00E-02	1,26E-05	NA	
1,2,4 trichlorobenzene	8,21E-07	6,45E-10	1,00E-02	8,21E-05	NA	
1,2,3 trichlorobenzene	4,45E-07	3,50E-10	1,00E-02	4,45E-05	NA	
1,2,3,4 tetrachlorobenzene	2,29E-06	1,80E-09	NA		NA	
Pentachlorobenzene	4,22E-07	3,32E-10	8,00E-04	5,28E-04	NA	
HCB	1,49E-08	1,17E-11	8,00E-04	1,87E-05	1,60E+00	1,88E-11
mercury	2,86E-09	2,25E-12	3,00E-04	9,54E-06	NA	

NA - not available

Exposure scenario 4.4						
Excavation Worker - Dermal contact - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	3,87E-05	3,04E-08	NA		6,49E+00	1,97E-07
β - HCH	4,94E-06	3,88E-09	NA		1,98E+00	7,69E-09
γ - HCH (lindane)	3,34E-04	2,63E-07	2,91E-04	**1,15**	1,34E+00	3,52E-07
δ - HCH	4,11E-05	3,23E-08	NA		NA	
Σ DDE	6,06E-09	4,76E-12	NA		4,86E-01	2,31E-12
Σ DDD	2,55E-08	2,00E-11	1,40E-03	1,82E-05	3,43E-01	6,86E-12
Σ DDT	6,36E-08	4,99E-11	3,50E-04	1,82E-04	4,86E-01	2,43E-11
chlorobenzene	6,19E-08	4,87E-11	6,20E-03	9,99E-06	NA	
1,2 dichlorobenzene	2,86E-08	2,25E-11	7,20E-01	3,98E-08	NA	
1,4 dichlorobenzene	5,17E-08	4,07E-11	NA		2,67E-02	1,09E-12
1,3 dichlorobenzene	8,57E-08	6,74E-11	NA		NA	
1,3,5 trichlorobenzene	1,54E-08	1,21E-11	9,70E-03	1,59E-06	NA	
1,2,4 trichlorobenzene	1,01E-07	7,91E-11	9,70E-03	1,04E-05	NA	
1,2,3 trichlorobenzene	5,46E-08	4,29E-11	9,70E-03	5,63E-06	NA	
1,2,3,4 tetrachlorobenzene	3,40E-07	2,67E-10	NA		NA	
Pentachlorobenzene	6,28E-08	4,93E-11	6,40E-04	9,81E-05	NA	
HCB	3,55E-09	2,79E-12	4,00E-04	8,88E-06	3,20E+00	8,93E-12
mercury	3,40E-08	2,67E-11	2,00E-05	1,70E-03	NA	

NA - not available

Exposure scenario 5						
Resident - Dermal contact with soil during gardening - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	5,17E-08	2,22E-08	NA		6,49E+00	1,44E-07
β - HCH	9,63E-09	4,13E-09	NA		1,98E+00	8,17E-09
γ - HCH (lindane)	6,28E-09	2,69E-09	2,91E-04	2,16E-05	1,34E+00	3,61E-09
mercury	5,24E-10	2,24E-10	2,00E-05	2,62E-05	NA	

NA - not available

Exposure scenario 6.1						
Resident - Inhalation of Vapours during Irrigation - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	1,38E-08	1,78E-08	NA		6,30E+00	1,12E-07
β - HCH	2,07E-07	2,67E-07	NA		1,86E+00	4,96E-07
γ - HCH (lindan)	7,95E-09	1,02E-08	NA		NA	
δ - HCH	1,18E-07	1,51E-07	NA		NA	
TCE	4,00E-06	5,14E-06	1,14E-02	3,51E-04	4,00E-01	2,06E-06
PCE	1,78E-05	2,29E-05	1,71E-01	1,04E-04	2,07E-02	4,74E-07
tetrachlorethane	1,81E-05	2,33E-05	NA		2,03E-01	4,72E-06

NA - not available

Exposure scenario 6.2						
Resident - Dermal contact with Water during Irrigation - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	1,19E-11	5,11E-12	NA		6,49E+00	3,32E-11
β - HCH	1,21E-10	1,73E-12	NA		1,98E+00	3,42E-12
γ - HCH (lindane)	4,64E-12	6,62E-14	2,91E-04	1,59E-08	1,34E+00	8,87E-14
δ - HCH	6,87E-11	9,81E-13	NA		NA	
TCE	1,31E-09	1,87E-11	4,50E-05	2,91E-05	2,67E+00	5,00E-11
PCE	1,79E-08	2,56E-10	1,00E-02	1,79E-06	5,40E-01	1,38E-10
tetrachlorethane	3,39E-09	4,85E-11	4,20E-02	8,08E-08	2,86E-01	1,39E-11

NA - not available

Exposure scenario 7.1						
Resident - Consumption of Homegrown Vegetables (transfer from soil) - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		**Non-carcinogenic risks**		**Carcinogenic risks**	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	1,68E-04	7,21E-05	NA		6,30E+00	**4,54E-04**
β - HCH	2,94E-05	1,26E-05	NA		1,80E+00	**2,27E-05**
γ - HCH (lindane)	5,11E-06	2,19E-06	3,00E-04	1,70E-02	1,30E+00	2,85E-06
mercury	1,10E-09	4,70E-10	3,00E-04	3,65E-06	NA	

NA - not available

Exposure scenario 7.2						
Resident - Consumption of Homegrown Vegetables (transfer from water) - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		**Non-carcinogenic risks**		**Carcinogenic risks**	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	1,70E-06	7,30E-07	NA		6,30E+00	4,60E-06
β - HCH	2,40E-05	1,03E-05	NA		1,80E+00	**1,85E-05**
γ - HCH (lindane)	9,78E-07	4,19E-07	3,00E-04	3,26E-03	1,30E+00	5,45E-07
δ - HCH	7,47E-06	3,20E-06	NA		NA	
TCE	4,85E-06	2,08E-06	3,00E-04	1,62E-02	4,00E-01	8,31E-07
PCE	6,37E-04	2,73E-04	1,00E-02	6,37E-02	5,40E-01	**1,47E-04**
tetrachlorethane	9,87E-05	4,23E-05	6,00E-02	1,65E-03	2,00E-01	8,46E-06

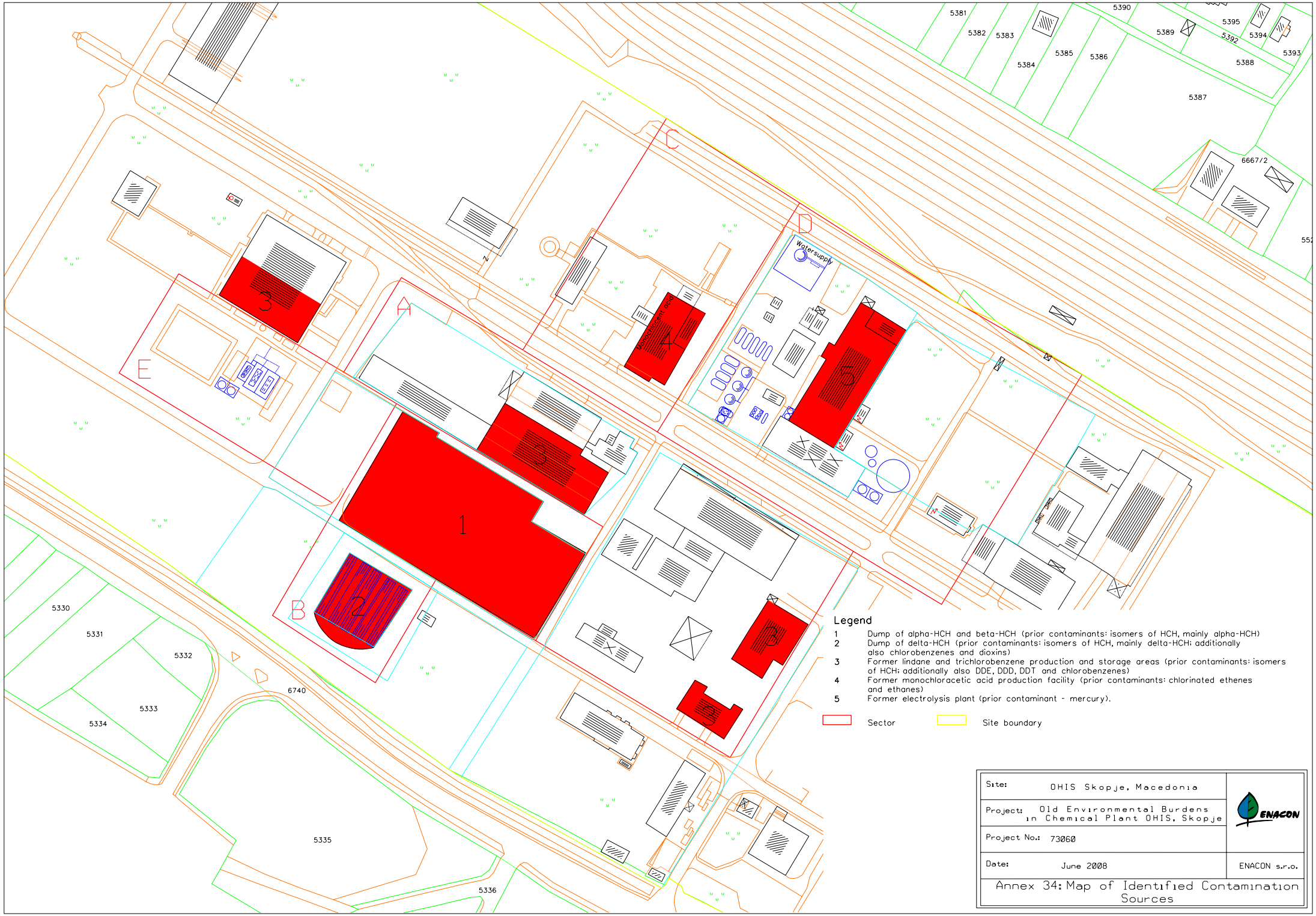
NA - not available

Exposure scenario 7.3						
Resident - Consumption of Homegrown Vegetables (lettuce - measured) - Risk						
Average exposure (MLE)						
	Chronic daily intake (CDI) (mg/kg day)		Non-carcinogenic risks		Carcinogenic risks	
Compound	**ADD**	**LADD**	**Reference dose RfD (mg/kg-day)**	**Hazard index**	**Slope factor (mg/kg-den)**-1	**Risk**
α- HCH	2,06E-06	8,84E-07	NA		6,30E+00	5,57E-06
β - HCH	4,40E-07	1,89E-07	NA		1,80E+00	3,39E-07
γ - HCH (lindane)	9,72E-08	4,17E-08	3,00E-04	3,24E-04	1,30E+00	5,41E-08
δ - HCH	2,50E-08	1,07E-08	NA		NA	
Endosulfan	3,63E-08	1,56E-08	6,00E-03	6,05E-06	NA	
Σ DDE	3,68E-08	1,58E-08	NA		3,40E-01	5,37E-09
PCBs	6,29E-07	2,70E-07	NA		2,00E+00	5,39E-07

NA - not available

Annex 34

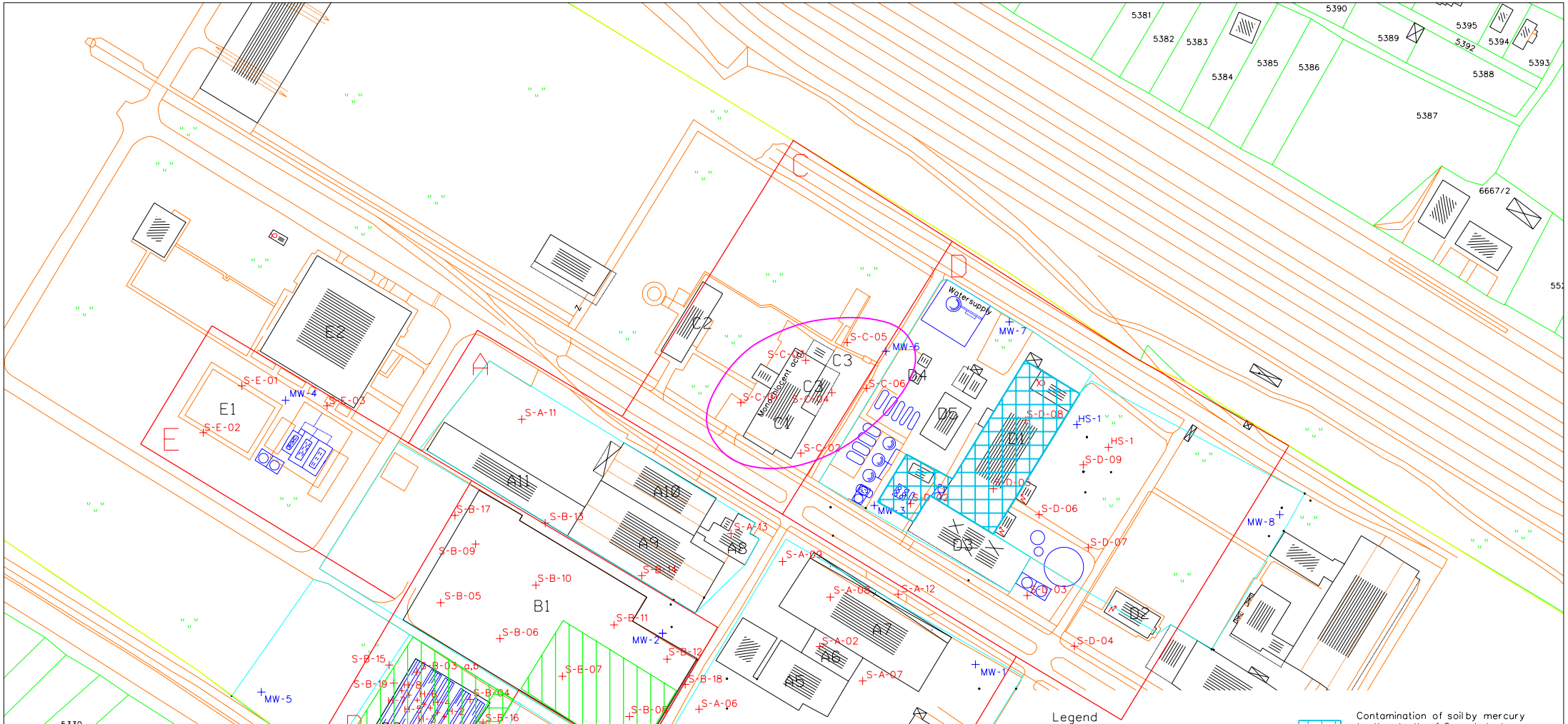
Map of Identified Contamination Sources



Site: OHIS Skopje, Macedonia	ENACON
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.: 73060	
Date: June 2008	ENACON s.r.o.
Annex 34: Map of Identified Contamination Sources	

Annex 35

Preliminary Extent of Soil and Soil Gas Remediation


E
E1
E2
E3
E4
C
C1
C2
C3
C4
Monochloroacetic acid
Watersupply
D1
D2
D3
D4
D5
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
A11
B1
B2
S-A-01
S-A-02
S-A-03
S-A-04
S-A-05
S-A-06
S-A-07
S-A-08
S-A-09
S-A-10
S-A-11
S-A-12
S-A-13
S-B-01
S-B-02
S-B-03 a,b
S-B-04
S-B-05
S-B-06
S-B-07
S-B-08
S-B-09
S-B-10
S-B-11
S-B-12
S-B-13
S-B-14
S-B-15
S-B-16
S-B-17
S-B-18
S-B-19
S-C-01
S-C-02
S-C-03
S-C-04
S-C-05
S-C-06
S-D-01
S-D-02
S-D-03
S-D-04
S-D-06
S-D-07
S-D-08
S-D-09
S-E-01
S-E-02
S-E-03
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8
HS-1
HS-2
5330
5331
5332
5333
5334
5335
5336
6740
5381
5382
5383
5384
5385
5386
5387
5388
5389
5390
5392
5393
5394
5395
6667/2
Legend
S-A-01 Soil Boring (2007)
H-1 Direct Push Probe (2007)
HS-1 Existing Monitoring Well
MW-1 New Monitoring Well (2008)
Sector
Site Boundary
Contamination of soil by mercury to the depth of 2 m bgl. above the target concentration
Contamination of superficial soil (< 1.0 m bgl.) by HCH isomers above the target concentration
Contamination of soil by gamma-HCH to the depth of 2 m bgl. above the target concentration
Soil gas contaminated by TCE above the target concentration
Note: delineated lateral extent of soil/soil gas contaminated above the target limit must be considered as a rough estimate and should be further assessed within the scope of remedial investigation
Site: OHIS Skopje, Macedonia
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.: 73060
Date: June 2008
ENACON s.r.o.
Annex 35: Preliminary Extent of Soil and Soil Gas Remediation

Annex 36

Toxicological Characteristics of Priority Pollutants

ANNEX 36
TOXICOLOGICAL CHARACTERISTICS OF PRIORITY CONTAMINANTS
Source: *http://www.atsdr.cdc.gov/toxfaq.html*

Hexachlorocyclohexane

Hexachlorocyclohexane (HCH) is a manufactured chemical that exists in eight chemical forms called isomers. One of these forms, gamma-HCH (or γ-HCH, commonly called lindane) is produced and used as an insecticide on fruit, vegetables, and forest crops. It is a white solid that may evaporate into the air as a colorless vapor with a slightly musty odor. It is also available as a prescription (lotion, cream, or shampoo) to treat head and body lice, and scabies. Lindane has not been produced in the United States since 1976, but is imported for insecticide use.

Technical-grade HCH was used as an insecticide in the United States and typically contained 10-15% γ-HCH as well as the alpha (α), beta (β), delta (δ), and epsilon (ε) forms of HCH. Virtually all the insecticidal properties resided in γ-HCH. Technical-grade HCH has not been produced or used in the United States in over 20 years.

- The components of technical-grade HCH have been found in soil and surface waters near hazardous waste sites.
- In the air, the different forms of HCH can exist as a vapor or attached to small particles such as soil and dust. The particles may be removed from the air by rain or degraded by other compounds in the atmosphere.
- HCH can remain in the air for long periods of time and travel great distances.
- In soil, sediments, and water, HCH is broken down to less toxic substances by algae, fungi, and bacteria, but this process can take a long time.
- HCH can accumulate in the fatty tissue of fish.

Some people who breathed contaminated workplace air during manufacturing of pesticides, including γ-HCH, had blood disorders, dizziness, headaches, and changes in the levels of sex hormones. Some people who swallowed large amounts had seizures and sometimes died.

Animals fed γ- and α-HCH have had convulsions, and animals fed β-HCH have become comatose. All isomers can produce liver and kidney effects. Reduced ability to fight infection was reported in animals fed γ-HCH, and injury to the ovaries and testes was reported in animals given γ-HCH or β-HCH.

Long-term oral administration of α-HCH, β-HCH, γ-HCH, or technical-grade HCH to laboratory rodents produced liver cancer. The Department of Health and Human Services (DHHS) has determined that HCH (all isomers) may reasonably be anticipated to cause cancer in humans. The International Agency for Research on Cancer (IARC) has classified HCH (all isomers) as possibly carcinogenic to humans. The EPA has determined that there is suggestive evidence that lindane (γ-HCH) is carcinogenic, but the evidence is not sufficient to assess its human carcinogenic potential. The EPA has additionally classified technical HCH and α-HCH as probable human carcinogens, β-HCH as a possible human carcinogen, and δ- and ε-HCH as not classifiable as to human carcinogenicity.

The EPA recommends that drinking water that children consume for up to 10 days should not contain more than 1.2 mg of γ-HCH per liter of water (1 mg/L) and that drinking water for children consumed for lifetime should not contain more than 0.0002 mg/L.

The Occupational Safety and Health Administration (OSHA) has set a limit for γ-HCH in the workplace air of 0.5 mg per cubic meter of air (0.5 mg/m^3) during an 8-hour workday, 40-hour workweek.

DDT, DDE, DDD

DDT (dichlorodiphenyltrichloroethane) is a pesticide once widely used to control insects in agriculture and insects that carry diseases such as malaria. DDT is a white, crystalline solid with no odor or taste. Its use in the U.S. was banned in 1972 because of damage to wildlife, but is still used in some countries.

DDE (dichlorodiphenyldichloroethylene) and DDD (dichlorodiphenyldichloroethane) are chemicals similar to DDT that contaminate commercial DDT preparations. DDE has no commercial use. DDD was also used to kill pests, but its use has also been banned. One form of DDD has been used medically to treat cancer of the adrenal gland.

- DDT entered the environment when it was used as a pesticide; it still enters the environment due to current use in other countries.
- DDE enters the environment as contaminant or breakdown product of DDT; DDD also enters the environment as a breakdown product of DDT.
- DDT, DDE, and DDD in air are rapidly broken down by sunlight. Half of what's in air breaks down within 2 days.
- They stick strongly to soil; most DDT in soil is broken down slowly to DDE and DDD by microorganisms; half the DDT in soil will break down in 2-15 years, depending on the type of soil.
- Only a small amount will go through the soil into groundwater; they do not dissolve easily in water.
- DDT, and especially DDE, build up in plants and in fatty tissues of fish, birds, and other animals.

DDT affects the nervous system. People who accidentally swallowed large amounts of DDT became excitable and had tremors and seizures. These effects went away after the exposure stopped. No effects were seen in people who took small daily doses of DDT by capsule for 18 months.

A study in humans showed that women who had high amounts of a form of DDE in their breast milk were unable to breast feed their babies for as long as women who had little DDE in the breast milk. Another study in humans showed that women who had high amounts of DDE in breast milk had an increased chance of having premature babies.

In animals, short-term exposure to large amounts of DDT in food affected the nervous system, while long-term exposure to smaller amounts affected the liver. Also in animals, short-term oral exposure to small amounts of DDT or its breakdown products may also have harmful effects on reproduction.

Studies in DDT-exposed workers did not show increases in cancer. Studies in animals given DDT with the food have shown that DDT can cause liver cancer.

The Department of Health and Human Services (DHHS) determined that DDT may reasonable be anticipated to be a human carcinogen. The International Agency for Research on Cancer (IARC) determined that DDT may possibly cause cancer in humans. The EPA determined that DDT, DDE, and DDD are probable human carcinogens.

The Occupational Safety and Health Administration (OSHA) sets a limit of 1 milligram of DDT per cubic meter of air (1 mg/m^3) in the workplace for an 8-hour shift, 40-hour workweek.

The Food and Drug Administration (FDA) has set limits for DDT, DDE, and DDD in foodstuff at or above which the agency will take legal action to remove the products from the market.

Chlorobenzene

Chlorobenzene is a colorless, flammable liquid with an aromatic, almond-like odor. Some of it will dissolve in water, but it readily evaporates into air. It does not occur naturally in the environment.

Chlorobenzene production in the United States has declined by more than 60% from its peak in 1960. It was used in the past to make other chemicals, such as phenol and DDT. Now chlorobenzene is used as a solvent for some pesticide formulations, to degrease automobile parts, and as a chemical intermediate to make several other chemicals.

What happens to chlorobenzene when it enters the environment?

- Chlorobenzene released to air is slowly broken down by reactions with other chemicals and sunlight or can be removed by rain.
- In water, chlorobenzene will rapidly evaporate to the air and/or be broken down by bacteria.
- When released to soil, it is broken down rapidly by bacteria, but some will evaporate to the air and some may filter into the groundwater.
- Chlorobenzene does not build up in the food chain.

Workers exposed to high levels of chlorobenzene in the air complained of headaches, nausea, sleepiness, numbness, and vomiting. We cannot be certain that all of these effects were due to chlorobenzene exposure because the workers may have been exposed to other chemicals.

Animal studies indicate that the liver, kidney, and central nervous system are affected by exposure to chlorobenzene. Effects on the central nervous system from breathing chlorobenzene include unconsciousness, tremors, restlessness, and death. Longer exposure has caused liver and kidney damage. The limited data available indicate that chlorobenzene does not cause birth defects or infertility.

It is not known whether chlorobenzene causes cancer in people. Although chlorobenzene did not produce cancer in animal studies with rats and mice, liver nodules which can lead to cancer were produced in male rats. The EPA has determined that chlorobenzene is not classifiable as to human carcinogenicity based on inadequate evidence in both humans and animals.

The EPA has set a Maximum Contaminant Level (MCL) of 0.1 parts per million (0.1 ppm) for chlorobenzene in drinking water. Concentrations in drinking water for short-term exposures (up to 10 days) should not exceed 2 ppm. The EPA recommends that levels of chlorinated benzenes (a group of chemicals that includes chlorobenzene) in lakes and streams should be limited to 0.488 ppm to prevent possible health effects from drinking water or eating fish contaminated with this group of chemicals. Any release to the environment greater than 100 pounds of chlorobenzene must be reported to the EPA.

The Occupational Safety and Health Administration (OSHA) has set a workplace air concentration limit of 75 ppm over an 8-hour workday, 40-hour workweek.

There are three dichlorobenzene isomers- 1,2-dichlorobenzene, 1,3-dichlorobenzene, and 1,4-dichlorobenzene. Dichlorobenzenes do not occur naturally. 1,2-Dichlorobenzene is a colorless to pale yellow liquid used to make herbicides. 1,3- Dichlorobenzene is a colorless liquid used to make herbicides, insecticides, medicine, and dyes. 1,4-Dichlorobenzene, the most important of the three chemicals, is a colorless to white solid with a strong, pungent odor. When exposed to air, it slowly changes from a solid to a vapor. Most people can smell 1,4- dichlorobenzene in the air at very low levels.

- 1,4-Dichlorobenzene enters the environment when it is used in mothballs and in toilet-deodorizer blocks. Very little enters the environment from hazardous waste sites.
- Some 1,2- and 1,3-dichlorobenzenes are released into the environment when used to make herbicides and when people use products that contain these chemicals
- Dichlorobenzenes do not dissolve easily in water, the small amounts that enter water quickly evaporate into the air.
- Sometimes, dichlorobenzenes bind to soil and sediment. Dichlorobenzenes in soil usually are not easily broken down by soil organisms. Evidence suggests that plants and fish absorb dichlorobenzenes.

Very little is known about the health effects of 1,3- dichlorobenzene, especially in humans, but they are likely to be similar to those of 1,2- and 1,4-dichlorobenzene. Inhaling the vapor or dusts of 1,2-dichlorobenzene and 1,4- dichlorobenzene at very high concentrations could be very irritating to your eyes and nose and cause burning and tearing of the eyes, coughing, difficult breathing, and an upset stomach. Dizziness, headaches, and liver problems have also been observed in people exposed to very high levels of 1,4-dichlorobenzene. There is limited evidence that inhaling 1,4-dichlorobenzene may decrease lung function.

People who have eaten 1,4-dichlorobenzene products regularly for long periods (months to years) developed skin blotches and anemia. 1,4-Dichlorobenzene might cause a burning feeling in your skin if you hold mothballs or toilet-deodorizer blocks against your skin for a long time.

Breathing or eating any of the dichlorobenzenes caused harmful effects in the liver of laboratory animals. Animal studies also found that 1,2- and 1,4-dichlorobenzene caused effects in the kidneys and blood, and that 1,3-dichlorobenzene caused thyroid and pituitary effects.

The Department of Health and Human Services (DHHS) has determined that 1,4-dichlorobenzene may reasonably be anticipated to be a carcinogen. There is no direct evidence that 1,4-dichlorobenzene can cause cancer in humans. However, animals given very high levels in water developed liver tumors. 1,2-Dichlorobenzene was not carcinogenic in laboratory animals and 1,3-dichlorobenzene has not been tested for its potential to cause cancer. Both the International Agency for Research on Cancer (IARC) and the EPA concluded that 1,2- and 1,3- dichlorobenzene are not classifiable as to human carcinogenicity.

EPA regulates the levels of dichlorobenzenes that are allowable in drinking water. The highest level of 1,4-dichlorobenzene allowed in drinking water is 0.075 parts 1,4-dichlorobenzene per 1 million parts of water (0.075 ppm).

The Occupational Safety and Health Administration (OSHA) has set a limit for 1,4-dichlorobenzene of 75 parts 1,4-dichlorobenzene per 1 million parts of air (75 ppm) in the workplace.

HCB

Hexachlorobenzene was widely used as a pesticide to protect the seeds of onions and sorghum, wheat, and other grains against fungus until 1965. It was also used to make fireworks, ammunition, and synthetic rubber. Currently, there are no commercial uses of hexachlorobenzene in the United States.

Hexachlorobenzene is a white crystalline solid that is not very soluble in water. It does not occur naturally in the environment. It is formed as a by-product while making other chemicals, in the waste streams of chloralkali and wood-preserving plants, and when burning municipal waste.

- Hexachlorobenzene can remain in the environment for a long time.
- It breaks down very slowly.
- It does not dissolve in water very well, so most of it will remain in particles on the bottom of lakes and rivers.
- Hexachlorobenzene sticks strongly to soil.
- High levels can build up in fish, marine mammals, birds, lichens, and animals that eat lichens (like caribou) or fish.
- It can also build up in wheat, grasses, some vegetables, and other plants.

A study of people in Turkey who ate bread accidentally contaminated with hexachlorobenzene showed that the young children of mothers who it ate it or young children who ate it themselves can have lower survival rates. Nursing infants can be exposed to hexachlorobenzene through breast milk if their mothers have been exposed. Unborn children may also be affected if their mother have been exposed.

The people in Turkey who ate the contaminated bread suffered from a liver disease called porphyria cutanea tarda. This disease can cause red-colored urine, skin sores, change in skin color, arthritis, and problems of the liver, nervous system, and stomach.

Studies in animals show that eating hexachlorobenzene for a long time can damage the liver, thyroid, nervous system, bones, kidneys, blood, and immune and endocrine systems.

The immune system of rats that breathed hexachlorobenzene for a few weeks was harmed.

The U.S. Department of Health and Human Services (DHHS) has determined that hexachlorobenzene may reasonably be expected to be a carcinogen.

Animals that ate hexachlorobenzene for months or years developed cancer of the liver, kidneys, and thyroid. There is no strong evidence that it causes cancer in people.

A factory worker who breathed air for several years that contained many chemicals, but mostly hexachlorobenzene, developed liver cancer. However, because the factory worker breathed other chemicals at the same time that could cause cancer, it is not known if the liver cancer was caused by hexachlorobenzene alone or by a mixture of chemicals.

The EPA has recommended that drinking water should not contain more than 0.05 milligrams of hexachlorobenzene per liter of water (0.05 mg/L) in water that children drink, and should not contain more than 0.2 mg/L in water that adults drink for longer periods (about 7 years). The EPA has set a maximum contaminant level of 0.001 mg/L in drinking water.

The EPA requires that spills or accidental releases into the environment of 10pounds or more of hexachlorobenzene be reported to the EPA.

Endosulfan

Endosulfan is a pesticide. It is a cream- to brown-colored solid that may appear in the form of crystals or flakes. It has a smell like turpentine, but does not burn. It does not occur naturally in the environment.

Endosulfan is used to control insects on food and non-food crops and also as a wood preservative.

- Endosulfan enters the air, water, and soil during its manufacture and use. It is often sprayed onto crops and the spray may travel long distances before it lands on crops, soil, or water.
- Endosulfan on crops usually breaks down in a few weeks, but endosulfan sticks to soil particles and may take years to completely break down.
- Endosulfan does not dissolve easily in water. Endosulfan in surface water is attached to soil particles floating in water or attached to soil at the bottom.
- Endosulfan can build up in the bodies of animals that live in endosulfan-contaminated water.

Endosulfan affects the central nervous system and prevents it from working properly. Hyperactivity, nausea, dizziness, headache, or convulsions have been observed in adults exposed to high doses. Severe poisoning may result in death.

Studies of the effects of endosulfan on animals suggest that long-term exposure to endosulfan can also damage the kidneys, testes, and liver and may possibly affect the body's ability to fight infection. However, it is not known if these effects also occur in humans.

High levels of toluene may affect your kidneys.

We do not know if endosulfan can cause cancer in humans. Studies in animals have provided inconclusive results.

The EPA recommends that the amount of endosulfan in rivers, lakes, and streams should not be more than 74 parts per billion (74 ppb).

The Food and Drug Administration (FDA) allows no more than 24 parts per million (24 ppm) endosulfan on dried tea.

EPA allows no more than 0.1 to 2 ppm endosulfan on other raw agricultural products.

PCE

Tetrachloroethylene is a manufactured chemical that is widely used for dry cleaning of fabrics and for metal-degreasing. It is also used to make other chemicals and is used in some consumer products.

Other names for tetrachloroethylene include perchloroethylene, PCE, and tetrachloroethene. It is a nonflammable liquid at room temperature. It evaporates easily into the air and has a sharp, sweet odor. Most people can smell tetrachloroethylene when it is present in the air at a level of 1 part tetrachloroethylene per million parts of air (1 ppm) or more, although some can smell it at even lower levels.

- Much of the tetrachloroethylene that gets into water or soil evaporates into the air.
- Microorganisms can break down some of the tetrachloroethylene in soil or underground water.
- In the air, it is broken down by sunlight into other chemicals or brought back to the soil and water by rain.
- It does not appear to collect in fish or other animals that live in water.

High concentrations of tetrachloroethylene (particularly in closed, poorly ventilated areas) can cause dizziness, headache, sleepiness, confusion, nausea, difficulty in speaking and walking, unconsciousness, and death.

Irritation may result from repeated or extended skin contact with it. These symptoms occur almost entirely in work (or hobby) environments when people have been

accidentally exposed to high concentrations or have intentionally used tetrachloroethylene to get a "high."

In industry, most workers are exposed to levels lower than those causing obvious nervous system effects. The health effects of breathing in air or drinking water with low levels of tetrachloroethylene are not known.

Results from some studies suggest that women who work in dry cleaning industries where exposures to tetrachloroethylene can be quite high may have more menstrual problems and spontaneous abortions than women who are not exposed. However, it is not known if tetrachloroethylene was responsible for these problems because other possible causes were not considered.

Results of animal studies, conducted with amounts much higher than those that most people are exposed to, show that tetrachloroethylene can cause liver and kidney damage. Exposure to very high levels of tetrachloroethylene can be toxic to the unborn pups of pregnant rats and mice. Changes in behavior were observed in the offspring of rats that breathed high levels of the chemical while they were pregnant.

The Department of Health and Human Services (DHHS) has determined that tetrachloroethylene may reasonably be anticipated to be a carcinogen. Tetrachloroethylene has been shown to cause liver tumors in mice and kidney tumors in male rats.

The EPA maximum contaminant level for the amount of tetrachloroethylene that can be in drinking water is 0.005 milligrams tetrachloroethylene per liter of water (0.005 mg/L).

The Occupational Safety and Health Administration (OSHA) has set a limit of 100 ppm for an 8-hour workday over a 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) recommends that tetrachloroethylene be handled as a potential carcinogen and recommends that levels in workplace air should be as low as possible.

TCE

Trichloroethylene (TCE) is a nonflammable, colorless liquid with a somewhat sweet odor and a sweet, burning taste. It is used mainly as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, typewriter correction fluids, and spot removers.

Trichloroethylene is not thought to occur naturally in the environment. However, it has been found in underground water sources and many surface waters as a result of the manufacture, use, and disposal of the chemical.

- Trichloroethylene dissolves a little in water, but it can remain in ground water for a long time.

- Trichloroethylene quickly evaporates from surface water, so it is commonly found as a vapor in the air.
- Trichloroethylene evaporates less easily from the soil than from surface water. It may stick to particles and remain for a long time.
- Trichloroethylene may stick to particles in water, which will cause it to eventually settle to the bottom sediment.
- Trichloroethylene does not build up significantly in plants and animals.

Breathing small amounts may cause headaches, lung irritation, dizziness, poor coordination, and difficulty concentrating.

Breathing large amounts of trichloroethylene may cause impaired heart function, unconsciousness, and death. Breathing it for long periods may cause nerve, kidney, and liver damage.

Drinking large amounts of trichloroethylene may cause nausea, liver damage, unconsciousness, impaired heart function, or death.

Drinking small amounts of trichloroethylene for long periods may cause liver and kidney damage, impaired immune system function, and impaired fetal development in pregnant women, although the extent of some of these effects is not yet clear.

Skin contact with trichloroethylene for short periods may cause skin rashes.

Some studies with mice and rats have suggested that high levels of trichloroethylene may cause liver, kidney, or lung cancer. Some studies of people exposed over long periods to high levels of trichloroethylene in drinking water or in workplace air have found evidence of increased cancer. Although, there are some concerns about the studies of people who were exposed to trichloroethylene, some of the effects found in people were similar to effects in animals.

In its 9th Report on Carcinogens, the National Toxicology Program (NTP) determined that trichloroethylene is "reasonably anticipated to be a human carcinogen." The International Agency for Research on Cancer (IARC) has determined that trichloroethylene is "probably carcinogenic to humans."

The EPA has set a maximum contaminant level for trichloroethylene in drinking water at 0.005 milligrams per liter (0.005 mg/L) or 5 parts of TCE per billion parts water.

The EPA has also developed regulations for the handling and disposal of trichloroethylene.

The Occupational Safety and Health Administration (OSHA) has set an exposure limit of 100 parts of trichloroethylene per million parts of air (100 ppm) for an 8-hour workday, 40-hour workweek.

Tetrachloroethane

1,1,2,2-Tetrachloroethane is a manufactured, colorless, dense liquid that does not burn easily. It is volatile and has a sweet odor.

In the past, it was used in large amounts to produce other chemicals, as an industrial solvent to clean and degrease metals, and as an ingredient in paints and pesticides.

Commercial production of 1,1,2,2-tetrachloroethane for these uses has stopped in the United States. It presently is used only as a chemical intermediate in the production of other chemicals.

- Most 1,1,2,2-tetrachloroethane released to the environment eventually moves to the air or ground water.
- It does not attach to soil particles when released to land.
- When released to surface water, much of it will evaporate to the air while the rest may break down in the water.
- Breakdown of the chemical in the environment is slow; it takes about 1 year for half of the chemical to disappear from groundwater and 2 months in air.
- 1,1,2,2-Tetrachloroethane does not build up significantly in the bodies of fish or other organisms.

1,1,2,2-Tetrachloroethane is not life-threatening unless you intentionally or accidentally drink more than a few spoonfuls at one time or spill a large amount so that you breathe it and get it on your skin. Breathing high levels in a closed room can cause fatigue, vomiting, dizziness, and possibly unconsciousness. However, most people recover from these effects once they are in fresh air. Breathing, drinking, or touching large amounts of 1,1,2,2-tetra-chloroethane for a long period of time can cause liver damage, stomachaches, or dizziness.

The health effects of long-term (365 days or longer) exposure to low levels of 1,1,2,2-tetrachloroethane are not known. It is also not known whether 1,1,2,2-tetra-chloroethane will cause reproductive effects in people.

It is not known whether 1,1,2,2-tetrachloroethane causes cancer in humans. In a long-term study, 1,1,2,2-tetrachloroethane caused an increase in liver tumors in mice, but not in rats.

The International Agency for Research on Cancer (IARC) has determined that 1,1,2,2-tetrachloroethane cannot be classified as to its ability to cause cancer in humans, while the EPA has determined that it is a possible human carcinogen.

The EPA has decided that not more than 0.17 micrograms of 1,1,2,2-tetrachloroethane per liter of water (0.16 parts per billion [ppb] or about 1 drop in an above-ground pool) should be in lakes and streams, although no national drinking water standards have been set. EPA recommends that children do not drink water with more than 0.04 milligrams per liter (mg/L) of 1,1,2,2-tetrachloroethane for a period exceeding 10 days. EPA also requires that spills of 100 pounds or more of 1,1,2,2-tetrachloroethane to the environment be reported to the Agency.

The Occupational Safety and Health Administration (OSHA) has set a limit of 5 parts per million (ppm) in air to protect workers during an 8-hour workday, 40-hour workweek.

The National Institute for Occupational Safety and Health (NIOSH) recommends a limit of 1 ppm for 1,1,2,2-tetra-chloroethane in workroom air over an 8- to 10-hour workday.

PCBs

Polychlorinated biphenyls are mixtures of up to 209 individual chlorinated compounds (known as congeners). There are no known natural sources of PCBs. PCBs are either oily liquids or solids that are colorless to light yellow. Some PCBs can exist as a vapor in air. PCBs have no known smell or taste. Many commercial PCB mixtures are known in the U.S. by the trade name Aroclor.

PCBs have been used as coolants and lubricants in transformers, capacitors, and other electrical equipment because they don't burn easily and are good insulators. The manufacture of PCBs was stopped in the U.S. in 1977 because of evidence they build up in the environment and can cause harmful health effects. Products made before 1977 that may contain PCBs include old fluorescent lighting fixtures and electrical devices containing PCB capacitors, and old microscope and hydraulic oils.

- PCBs entered the air, water, and soil during their manufacture, use, and disposal; from accidental spills and leaks during their transport; and from leaks or fires in products containing PCBs.
- PCBs can still be released to the environment from hazardous waste sites; illegal or improper disposal of industrial wastes and consumer products; leaks from old electrical transformers containing PCBs; and burning of some wastes in incinerators.
- PCBs do not readily break down in the environment and thus may remain there for very long periods of time. PCBs can travel long distances in the air and be deposited in areas far away from where they were released. In water, a small amount of PCBs may remain dissolved, but most stick to organic particles and bottom sediments. PCBs also bind strongly to soil.
- PCBs are taken up by small organisms and fish in water. They are also taken up by other animals that eat these aquatic animals as food. PCBs accumulate in fish and marine mammals, reaching levels that may be many thousands of times higher than in water.

The most commonly observed health effects in people exposed to large amounts of PCBs are skin conditions such as acne and rashes. Studies in exposed workers have shown changes in blood and urine that may indicate liver damage. PCB exposures in the general population are not likely to result in skin and liver effects. Most of the studies of health effects of PCBs in the general population examined children of mothers who were exposed to PCBs.

Animals that ate food containing large amounts of PCBs for short periods of time had mild liver damage and some died. Animals that ate smaller amounts of PCBs in food over several weeks or months developed various kinds of health effects, including anemia;

acne-like skin conditions; and liver, stomach, and thyroid gland injuries. Other effects of PCBs in animals include changes in the immune system, behavioral alterations, and impaired reproduction. PCBs are not known to cause birth defects.

Few studies of workers indicate that PCBs were associated with certain kinds of cancer in humans, such as cancer of the liver and biliary tract. Rats that ate food containing high levels of PCBs for two years developed liver cancer. The Department of Health and Human Services (DHHS) has concluded that PCBs may reasonably be anticipated to be carcinogens. The EPA and the International Agency for Research on Cancer (IARC) have determined that PCBs are probably carcinogenic to humans.

The EPA has set a limit of 0.0005 milligrams of PCBs per liter of drinking water (0.0005 mg/L). Discharges, spills or accidental releases of 1 pound or more of PCBs into the environment must be reported to the EPA. The Food and Drug Administration (FDA) requires that infant foods, eggs, milk and other dairy products, fish and shellfish, poultry and red meat contain no more than 0.2-3 parts of PCBs per million parts (0.2-3 ppm) of food. Many states have established fish and wildlife consumption advisories for PCBs.

Mercury Hg

Mercury is a naturally occurring metal which has several forms. The metallic mercury is a shiny, silver-white, odorless liquid. If heated, it is a colorless, odorless gas.

Mercury combines with other elements, such as chlorine, sulfur, or oxygen, to form inorganic mercury compounds or "salts," which are usually white powders or crystals. Mercury also combines with carbon to make organic mercury compounds. The most common one, methylmercury, is produced mainly by microscopic organisms in the water and soil. More mercury in the environment can increase the amounts of methylmercury that these small organisms make.

Metallic mercury is used to produce chlorine gas and caustic soda, and is also used in thermometers, dental fillings, and batteries. Mercury salts are sometimes used in skin lightening creams and as antiseptic creams and ointments.

- Inorganic mercury (metallic mercury and inorganic mercury compounds) enters the air from mining ore deposits, burning coal and waste, and from manufacturing plants.
- It enters the water or soil from natural deposits, disposal of wastes, and volcanic activity.
- Methylmercury may be formed in water and soil by small organisms called bacteria.
- Methylmercury builds up in the tissues of fish. Larger and older fish tend to have the highest levels of mercury.

The nervous system is very sensitive to all forms of mercury. Methylmercury and metallic mercury vapors are more harmful than other forms, because more mercury in these forms reaches the brain. Exposure to high levels of metallic, inorganic, or organic mercury can permanently damage the brain, kidneys, and developing fetus. Effects on brain

functioning may result in irritability, shyness, tremors, changes in vision or hearing, and memory problems.

Short-term exposure to high levels of metallic mercury vapors may cause effects including lung damage, nausea, vomiting, diarrhea, increases in blood pressure or heart rate, skin rashes, and eye irritation.

There are inadequate human cancer data available for all forms of mercury. Mercuric chloride has caused increases in several types of tumors in rats and mice, and methylmercury has caused kidney tumors in male mice. The EPA has determined that mercuric chloride and methylmercury are possible human carcinogens.

The EPA has set a limit of 2 parts of mercury per billion parts of drinking water (2 ppb).

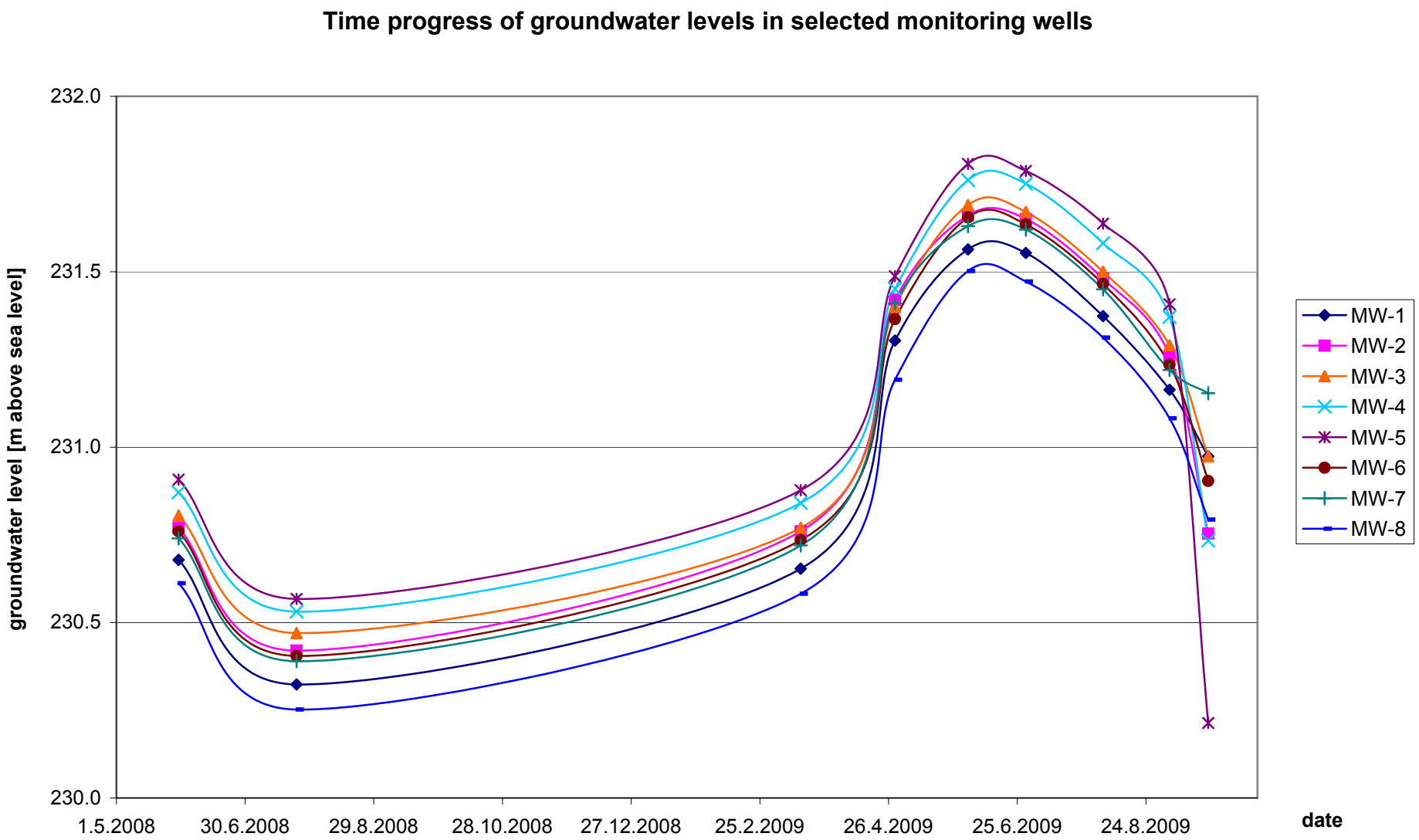
The Food and Drug Administration (FDA) has set a maximum permissible level of 1 part of methylmercury in a million parts of seafood (1 ppm).

The Occupational Safety and Health Administration (OSHA) has set limits of 0.1 milligram of organic mercury per cubic meter of workplace air (0.1 mg/m^3) and 0.05 mg/m^3 of metallic mercury vapor for 8-hour shifts and 40-hour work weeks.

Annex 37
Groundwater Level Measurements

Date		30.5.2008		24.7.2008		16.3.2009		28.-30.4.2009		2.6.2009		29.6.2009		4.8.2009		4.9.2009		22.9.2009	
Monitoring Well	reference point asl ** [m]	GWL brp * [m]	GWL asl ** [m]	GWL brp * [m]	GWL asl ** [m]	GWL brp * [m]	GWL asl ** [m]	GWL brp * [m]	GWL asl ** [m]	GWL brp * [m]	GWL asl ** [m]	GWL brp * [m]	GWL asl ** [m]	GWL brp * [m]	GWL asl ** [m]	GWL brp * [m]	GWL asl ** [m]	GWL brp * [m]	GWL asl ** [m]
MW-1	239.104	8.43	230.68	8.78	230.32	8.45	230.65	7.80	231.30	7.54	231.56	7.55	231.55	7.73	231.37	7.94	231.16	8.13	230.97
MW-2	239.440	8.67	230.77	9.02	230.42	8.68	230.76	8.02	231.42	7.78	231.66	7.79	231.65	7.96	231.48	8.18	231.26	8.35	230.75
MW-3	239.250	8.45	230.81	8.78	230.47	8.48	230.77	7.85	231.40	7.56	231.69	7.58	231.67	7.75	231.50	7.96	231.29	8.13	230.97
MW-4	239.571	8.70	230.87	9.04	230.53	8.73	230.84	8.12	231.45	7.81	231.76	7.82	231.75	7.99	231.58	8.2	231.37	8.37	230.73
MW-5	240.137	9.23	230.91	9.57	230.57	9.26	230.88	8.65	231.49	8.33	231.81	8.35	231.79	8.5	231.64	8.73	231.41	8.89	230.21
MW-6	239.255	8.50	230.76	8.85	230.41	8.52	230.74	7.89	231.37	7.60	231.66	7.62	231.64	7.79	231.47	8.02	231.24	8.2	230.90
MW-7	239.020	8.28	230.74	8.63	230.39	8.30	230.72	7.61	231.41	7.39	231.63	7.40	231.62	7.57	231.45	7.8	231.22	7.95	231.15
MW-8	239.232	8.62	230.61	8.98	230.25	8.65	230.58	8.04	231.19	7.73	231.50	7.76	231.47	7.92	231.31	8.15	231.08	8.31	230.79
MW-9	239.300				-	-	-	7.97	231.33	7.65	231.65	7.67	231.63	7.84	231.46	8.06	231.24	8.26	230.84
MW-10	239.370				-	-	-	8.03	231.34	7.71	231.66	7.73	231.64	7.89	231.48	8.12	231.25	8.3	230.80
MW-11	239.390				-	-	-	8.30	231.09	7.99	231.40	8.02	231.37	8.2	231.19	8.42	230.97	8.58	230.52
MW-12	239.670				-	-	-	8.58	231.09	8.27	231.40	8.29	231.38	8.47	231.20	8.69	230.98	8.87	230.23
MW-13	239.380				-	-	-	8.14	231.24	7.91	231.47	7.93	231.45	8.1	231.28	8.32	231.06	8.5	230.60
MW-14	239.240				-	-	-	8.00	231.24	7.67	231.57	7.71	231.53	7.87	231.37	8.09	231.15	8.26	230.84
MW-15	239.140				-	-	-	7.91	231.23	7.59	231.55	7.62	231.52	7.79	231.35	8.02	231.12	8.17	230.93
MW-16	239.210				-	-	-	7.98	231.23	7.66	231.55	7.69	231.52	7.86	231.35	8.08	231.13	8.24	230.86
HS-1	239.221	8.56	230.66	8.92	230.30	8.58	-	7.99	231.23	7.67	231.55	7.70	231.52	7.86	231.36	8.08	231.14	8.24	230.86
HS-2	239.861	9.02	230.84	9.37	230.49	9.06	-	8.44	231.42	8.14	231.72	8.16	231.70	8.3	231.56	8.52	231.34	8.59	230.51

GWL….groundwater level
* - below reference point
** - above sea level


Time progress of groundwater levels in selected monitoring wells
groundwater level [m above sea level]
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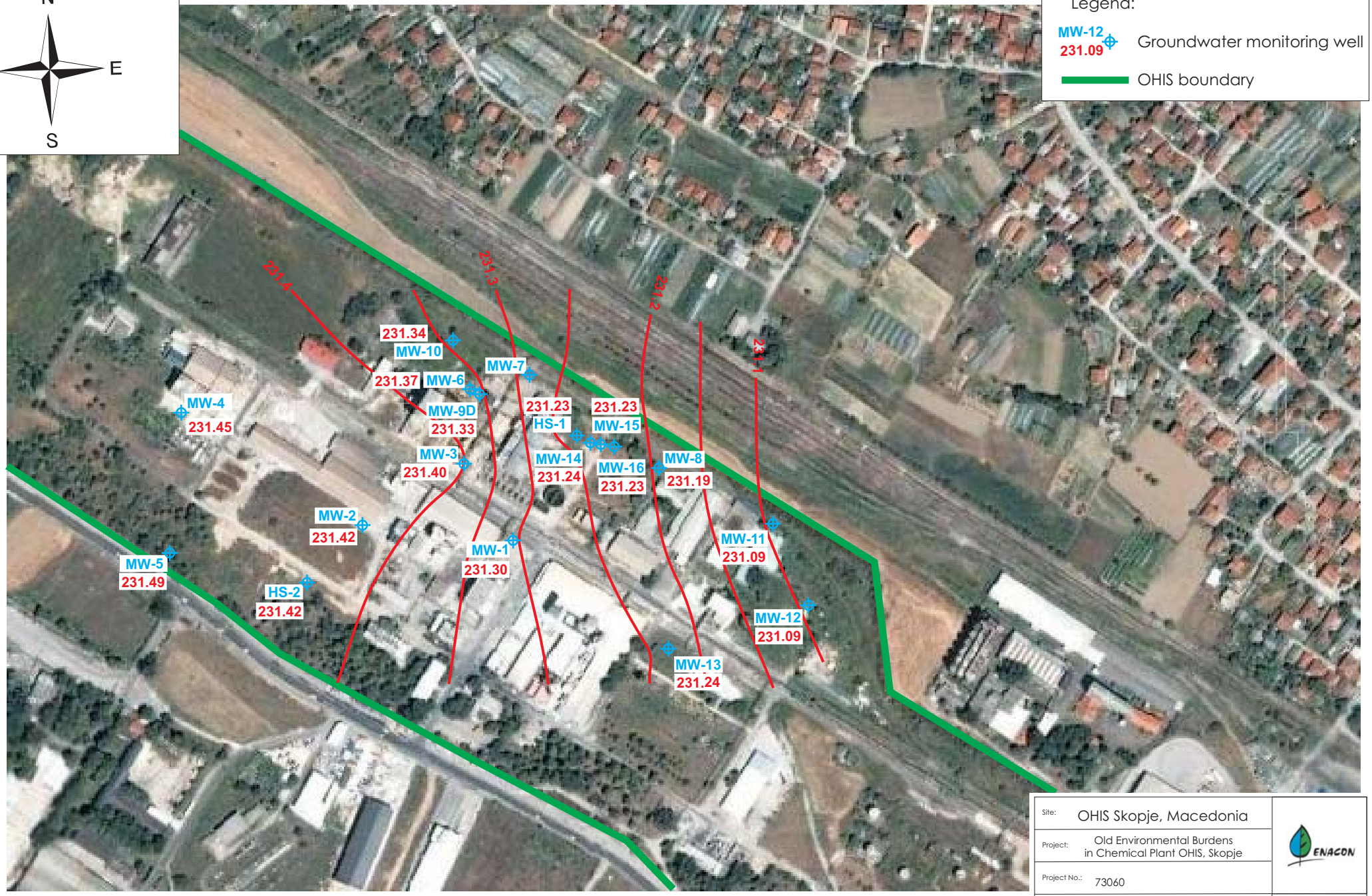
231.5
231.0
230.5
230.0
1.5.2008
30.6.2008
29.8.2008
28.10.2008
27.12.2008
25.2.2009
26.4.2009
25.6.2009
24.8.2009
date
MW-1
MW-2
MW-3
MW-4
MW-5
MW-6
MW-7
MW-8

Annex 38
Groundwater Contour Maps

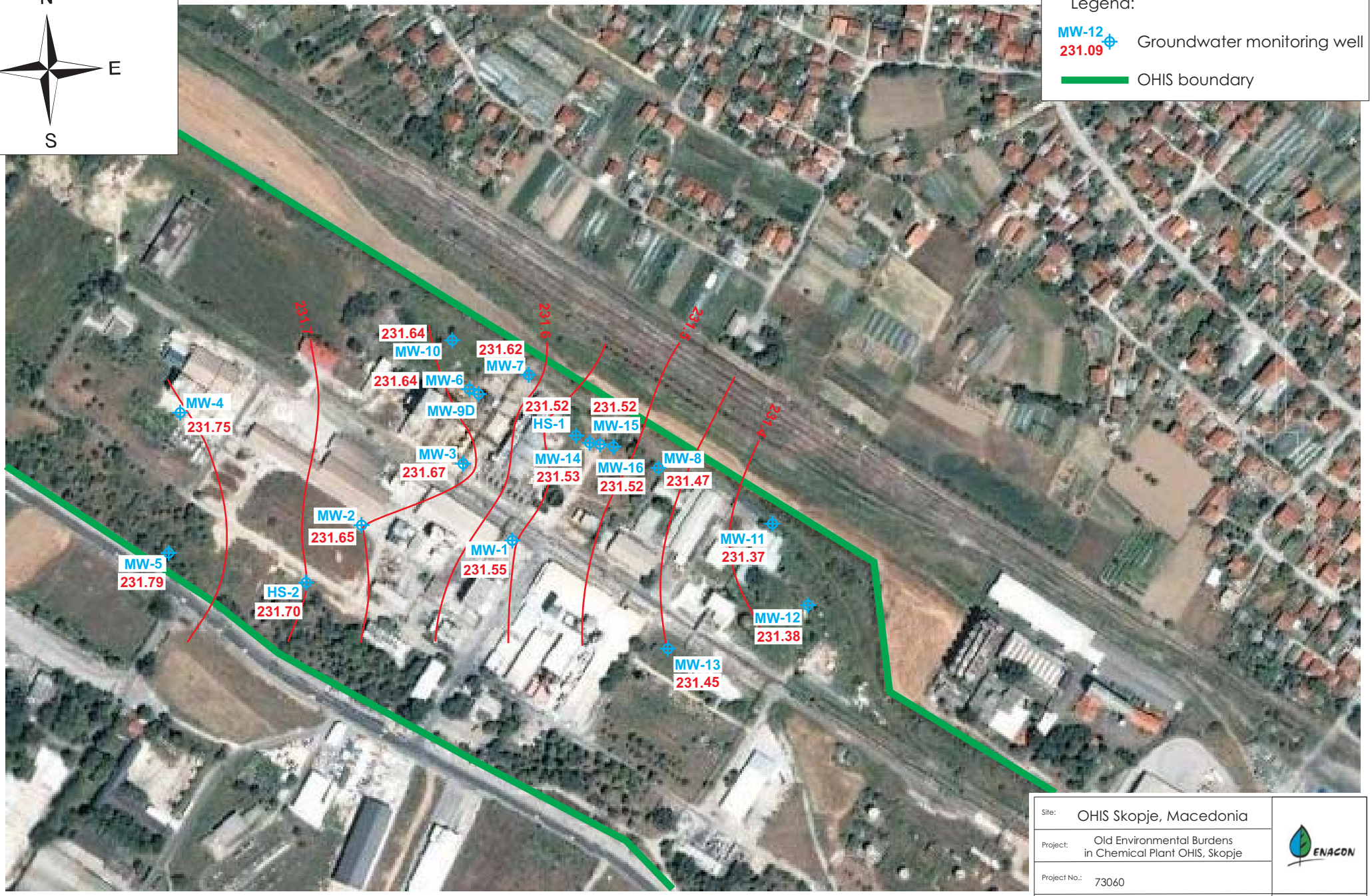


Source of satellite image: Google Earth

0 40 200 m

Site: OHIS Skopje, Macedonia	ENACON
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.: 73060	
Date: November 2009	ENACON s.r.o.

Annex 38.1: Groundwater contour map (28.-30.4.2009)



Source of satellite image: Google Earth

0 40 200 m

Site:	OHIS Skopje, Macedonia
Project:	Old Environmental Burdens in Chemical Plant OHIS, Skopje
Project No.:	73060
Date:	November 2009

ENACON

ENACON s.r.o.

Annex 38.2: Groundwater contour map (29.6.2009)

Source of satellite image: Google Earth

0 40 200 m

Site: OHIS Skopje, Macedonia	ENACON
Project: Old Environmental Burdens in Chemical Plant OHIS, Skopje	
Project No.: 73060	
Date: November 2009	ENACON s.r.o.

Annex 38.3: Groundwater contour map (4.8.2009)