Environmental results from supplementary soil study at Kvål, Sandnes

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ISSN: 1891-5450
ISBN: 978-82-8262-822-8

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Ecofact rapport: 823

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Referanse til rapporten:	Randulff, S. T. 2021. Environmental results from supplementary soil study at Kvål, Sandnes. Ecofact rapport 823.
Nøkkelord:	Contamination, soil
ISSN:	1891-5450
ISBN:	978-82-8262-822-8
Oppdragsgiver:	Teknaconsult
Prosjektleder hos Ecofact AS:	Sina Thu Randulff
Prosjektmedarbeidere:	
Kvalitetssikret av:	
Forside:	Drone photo, Teknaconsult

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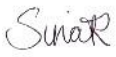
INNHOLD

PREFACE

As a part of an environmental due diligence Ecofact has been engaged by Teknaconsult to perform a supplementary environmental soil study at Kvål, in Sandnes municipality. The area under investigation is a part of Kvål Næringpark, and consists of subfields IL4a, IL4b, IL5, N4. Parts of the property has been investigated for soil contamination previously because of historical dumping of waste, with results showing that two of the 18 points contained high concentrations of benzene. To find out whether the surrounding areas were also contaminated, additional soil sampling was conducted. This report contains a description of the field work and the analytical results from the latest environmental soil study.

Sandnes
21.04.2021



Sina Thu Randulff

SUMMARY

Description of the study

A supplementary environmental soil study at Kvål, in Sandnes municipality has been performed due to suspected contaminated ground. Historical dumping of waste is known to have taken place on parts of the property, and a preliminary soil study showed high benzene concentrations in two of 18 investigated sample points.

Datagrunnlag

Soil sampling was carried out the 10-11.03.21, with soil being retrieved from 23 points with use of a drilling rig. Due to difficult terrain covered by numerous felled trees, and marsh area in the southern part of the property, certain areas had to be left out of the sampling. A total of 46 samples were taken from top soil (0-1 m) and deeper soil (1-2 m), and analysed for heavy metals, PAH16 (polycyclic aromatic hydrocarbons), PCB7 (polychlorinated biphenyls), BTEX (benzene, toluene, ethylbenzene and xylene), aliphatic hydrocarbons (C8-C35) and TOC (Total organic carbon). The results were classified in accordance with TA-2553 (2009).

Results

The analytical results showed contamination in Soil Quality Class (SQC) 2-4 in 3 sample points (4 of 6 samples) in the southwestern part of the property, on a hardfill dumpsite. Contamination of lead, copper, aliphatics >C12-C35 and sum 7 PCBs were detected in these samples, mainly in top soil (3 of 4 samples).

All other 42 samples had low to non-detectable concentrations of contaminants, which classifies the soil as SQC 1 “very good”.

Additional sampling in the marsh area in the property’s southern part should be carried out to define the full extent of the detected contamination.

An action plan must be made in accordance with TA-2553/2009. This plan should describe how the contaminated soil should be handled, and if parts of the investigated soil can be reused on site.

1 SITE LOCATION

Kvål Næringspark is currently under development. The area is located close to Ganddal and Vagle in Sandnes, which consists of farmland and an increasing amount of industry related to logistics and traffic. The areas that are included in this study consist of subfields IL4a, IL4b, IL5 and N4, and are shown in figure 1. An overview of the area and the waterways is shown in figure 2.

Figure 1. Kvål Næringspark consist of several subfields. It is subfield IL4a, IL4b, IL5 and the northern half of N4 that is included in this survey. The area that was investigated in the preliminary soil study (Samuelsen, 2020) is marked with a red circle. The figure is taken from Samuelsen, 2020.

1.1 Other environmental values

The biological values on the property are mainly trivial. *Fraxinus excelsior* (Ash tree) and *Ulmus glabra* (Wych elm tree) has been registered within the area. The trees are small and considered insignificant from a biodiversity perspective. It is likely that the trees have been taken down during the ongoing logging that has taken place on the property this past winter. The species are common in the region but are listed as *Vulnerable* due to ongoing negative population trends. There have been some registrations of other threatened species (*Crex crex*) outside of the property but based on the nature of these species they are not expected to be found within the site under investigation.

Several invasive species have been detected on the property, and details are given in drawing LC—001, 02.06.20 (Asplan Viak). These soil and plant variations may cause disposal to be more of a challenge, as clarification with landfills will be a likely requirement.

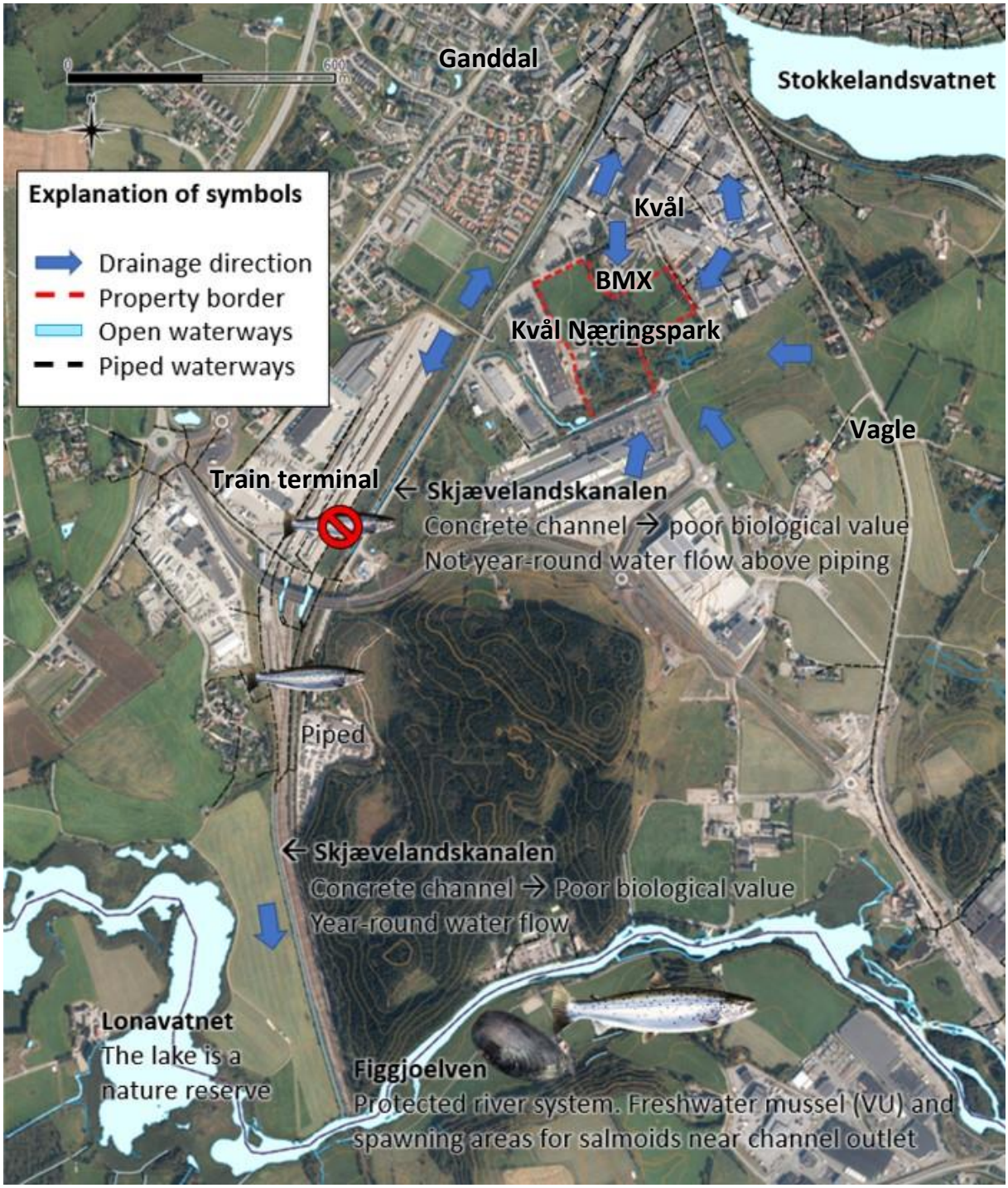


Figure 2. The location of the property in relation to the land use and the waterways.

The property is located on an area of glacial deposition. A belt of marsh and peat runs along the southern section of the property (NGU, løsmassekart).

A prehistoric burial site is registered northeast, along the border of the property. in the area, on property 48/116 (ASK 54403 in the national cultural heritage site database). The burial site, and

a zone of five meters surrounding the burial site itself, is automatically protected, according to the Cultural Heritage Act.

1.2 Historical use

The area has mainly been used for agriculture (figure 3). From old aerial photos three different houses are visible. Part of the property is an old land fill consisting of various forms of garbage and some polluted soil. Most signs of digging and dumping can be seen in the south east of the area. Remains from a fire that took place in a former bike factory that was located nearby may have been dumped on this property. In the Southwest, running along the existing building, a newer hardfill dumpsite can be found. Today much of the area appears to be overgrown, not being used for agricultural purposes, with an exception made for the fully cultivated land shown in figure 4.

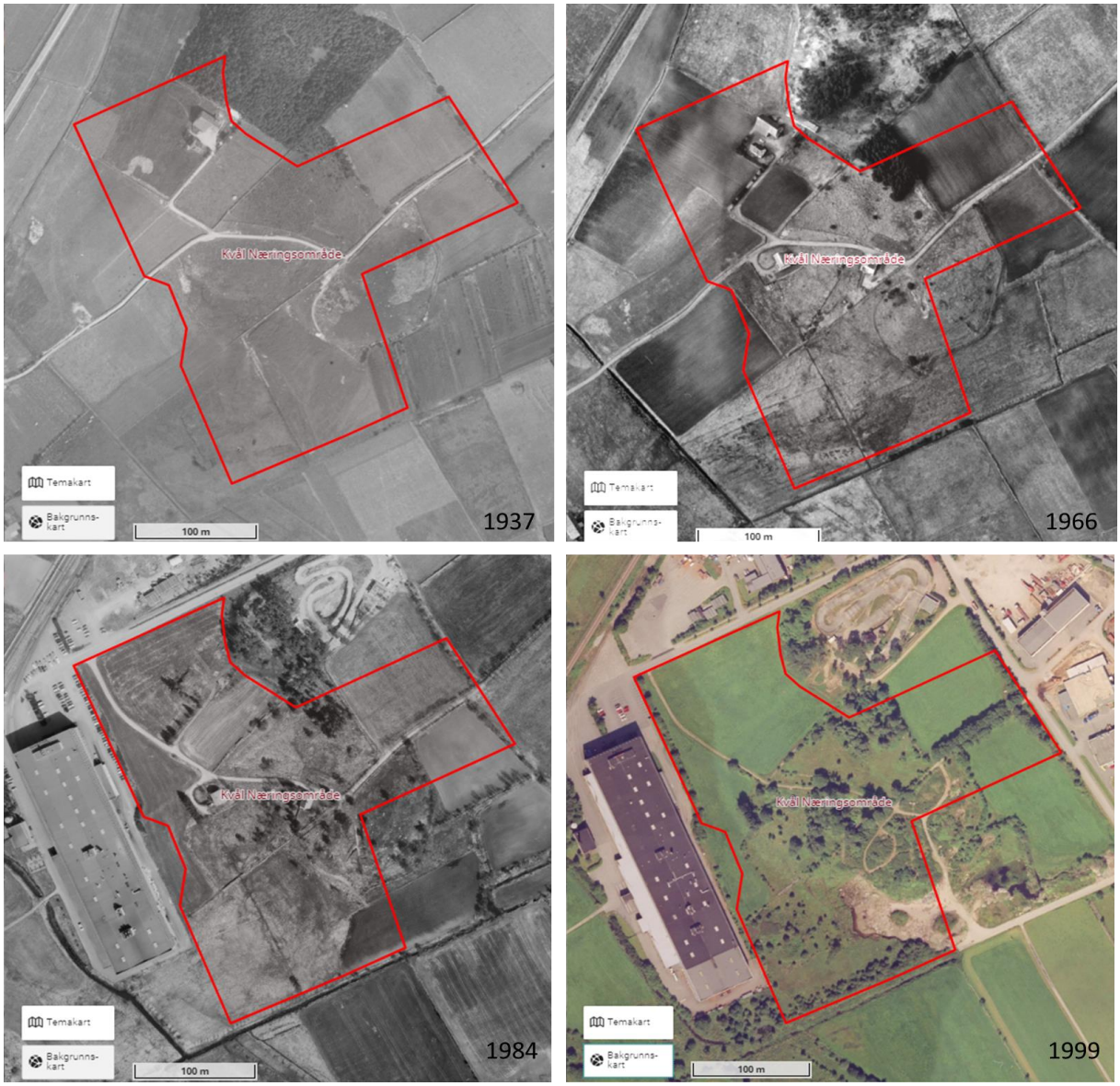


Figure 3. Historical development of the area. Source: Norgeibilder.no

2 SCOPE OF WORKS

Soil sampling has been conducted in parts of the site, revelling marginal pollution within the area that was suspected as most likely to be contaminated. Results are given in the report "Orienterende miljøtekniske grunnundersøkelser ved Kvål næringsområde», Asplan Viak, 25.11.2020.

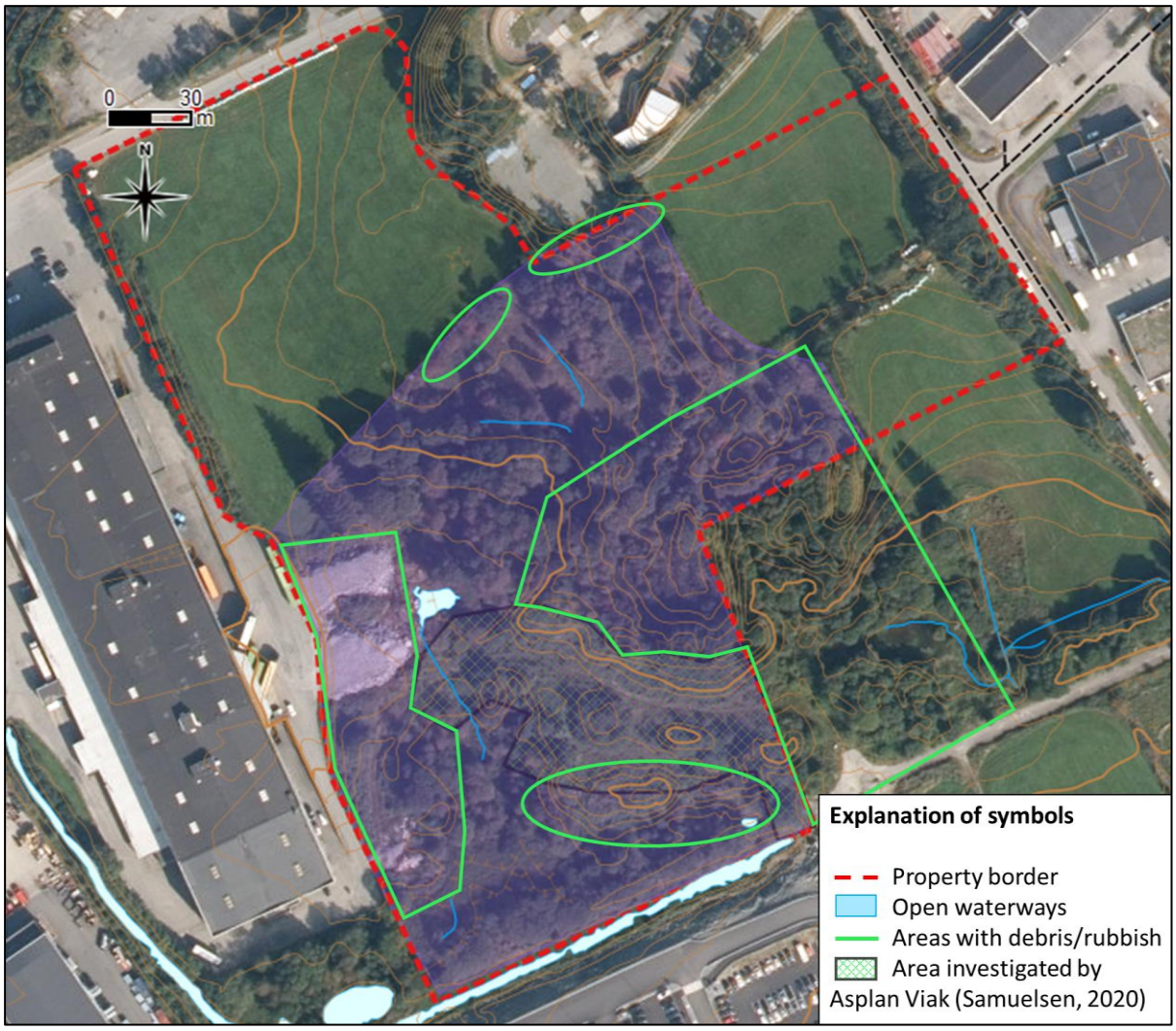


Figure 4. The properties area that was suspected to possibly be contaminated is marked in purple (rough delineation).

Additional soil sampling was conducted to ascertain whether other areas of the property contained polluted soil. Prior to soil sampling, the site was visited to assess for signs of littering, dumping and access for machinery during sampling.

The southernmost sample area consisted of a landfill with rocks and bricks. Unnatural elevations are found in the terrain, and the visible garbage indicated that contamination could be expected several places on the property. A total area of about 18 000 m^2 showed signs of unnatural mass deposition or littering, including the area Asplan Viak surveyed in 2020.

An area of that size with expected diffuse, homogenous contamination requires a sample density of 30, according to the Norwegian Environmental agency guideline TA-2553/2009 “Classification of condition for contaminated sites".

3 METHOD

3.1 Sampling

Soil sampling was carried out the 10-11.03.21, and soil was retrieved from 24 points with help of a drilling rig (Romerike Grunnboring). Due to there being difficult terrain with numerous logged trees in the central part, and a marsh area in the southern part of the property, these areas had to be left out of the sampling.

The soil was evaluated based on texture, colour, and smell. All samples were taken out with a steel spoon. A total of 47 samples were taken from topsoil (0-1 m) and deeper soil (1-2 m) (wet terrain discontinued sampling of deeper soil from sample point 17). The sample density required in TA-2553/2009 for a possibly polluted area of about 18 000 m^2 is fulfilled with a total of 42 sample points (18 samples were taken during Asplan Viaks study in 2020). All sample point locations were measured using GPS. A description of the samples can be found in the appendix.

The soil samples were stored in diffusion-tight bags and sent to an accredited laboratory (Eurofins).

3.2 Analysis

46 soil samples were analysed for heavy metals, sum of 16 PAH (polycyclic aromatic hydrocarbons), sum of 7 PCBs (polychlorinated biphenyls), BTEX (benzene, toluene, ethylbenzene and xylene), aliphatic hydrocarbons (C8-C35) and TOC (total organic carbon), as shown in table 1. All analysis were conducted by the accredited laboratory Eurofins. One sample, 6d, got lost at the laboratory and was therefore not included.

Table 1. Parameters analysed in the risk assessment.

Groups	**Parameters**
Heavy metals	Mercury (Hg), cadmium (Cd), lead (Pb), copper (Cu), chromium (Cr), zink (Zn), nickel (Ni) and arsenic (As)
Unchlorinated organic compounds	Polycyclic aromatic hydrocarbons (PAH)
Chlorinated organic compounds	Polychlorinated biphenyls (PCB)
Oil compounds	Alifatics and aromatics
BTEX	Benzene, toulene, ethylbenzene and xoulene
Total organic carbon (TOC)	

3.3 Risk evaluation level 1

The concentrations of contaminants in the samples were classified in accordance with the national soil quality class values (SQC) given in the guideline *Classification of condition for contaminated sites, TA-2553* (Norwegian environmental agency, 2009). The screening value and the acceptance criteria values are based on health-based acceptance criteria and provide a basis for reading the toxicity to the soil, further described in table 2.

Table 2: National soil quality classes for contaminated soil. Description as defined by TA-2553/2009.

Soil quality classes (SQC)	I Background	II Good	III Moderate	IV Poor	V Very poor
Upper limit criteria decided by	NEA screening value	Health based acceptance criteria	Health based acceptance criteria	Health based acceptance criteria	-

3.4 Action plan

If contamination is detected in the soil, an action plan is required to describe the need and level of when a clean-up is necessary. The planned land use in an area is of importance when designing such an action plan. Less pollution is accepted in a residential area than in an industrial area. For the latter, figure 5 describes what SCQs that can be accepted in the ground.

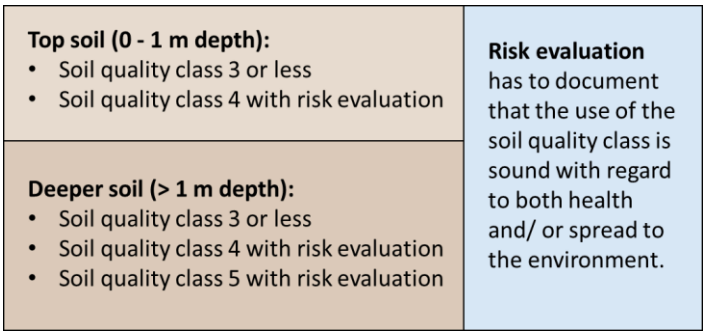


Figure 5. Criteria for use of contaminated soil at sites used for industry and traffic, as defined by TA-2553/2009.

4 RESULTS

The southernmost sample area (point 1 to 4) consisted of a hardfill property with rocks and bricks. 3 of the sample points and 4 of the samples were contaminated with heavy metals, PCB and/or oil compounds in the topsoil and/or deeper soil:

- Sample 1 t had levels of sum 7 PCB in SCQ 2 (good) in the top soil (0-1 m). In the deeper soil (1-2 m) 1 d had concentrations of lead and sum 7 PCB in SQC 4 (poor) and of copper in SQC 3 (moderate).
- Sample 2 t (0-1 m) had levels of alifatics >C12-C35 in SQC 3 (moderate)
- Sample 4 t (0-1 m) had levels of alifatics >C12-C35 in SQC 2 (good).

These samples were the only ones with concentrations that exceeded the naturally expected background level (SQC 1) of the environmental contaminants, as shown in figure 6. The concentrations of contaminants measured in these 4 samples are shown in table 3.

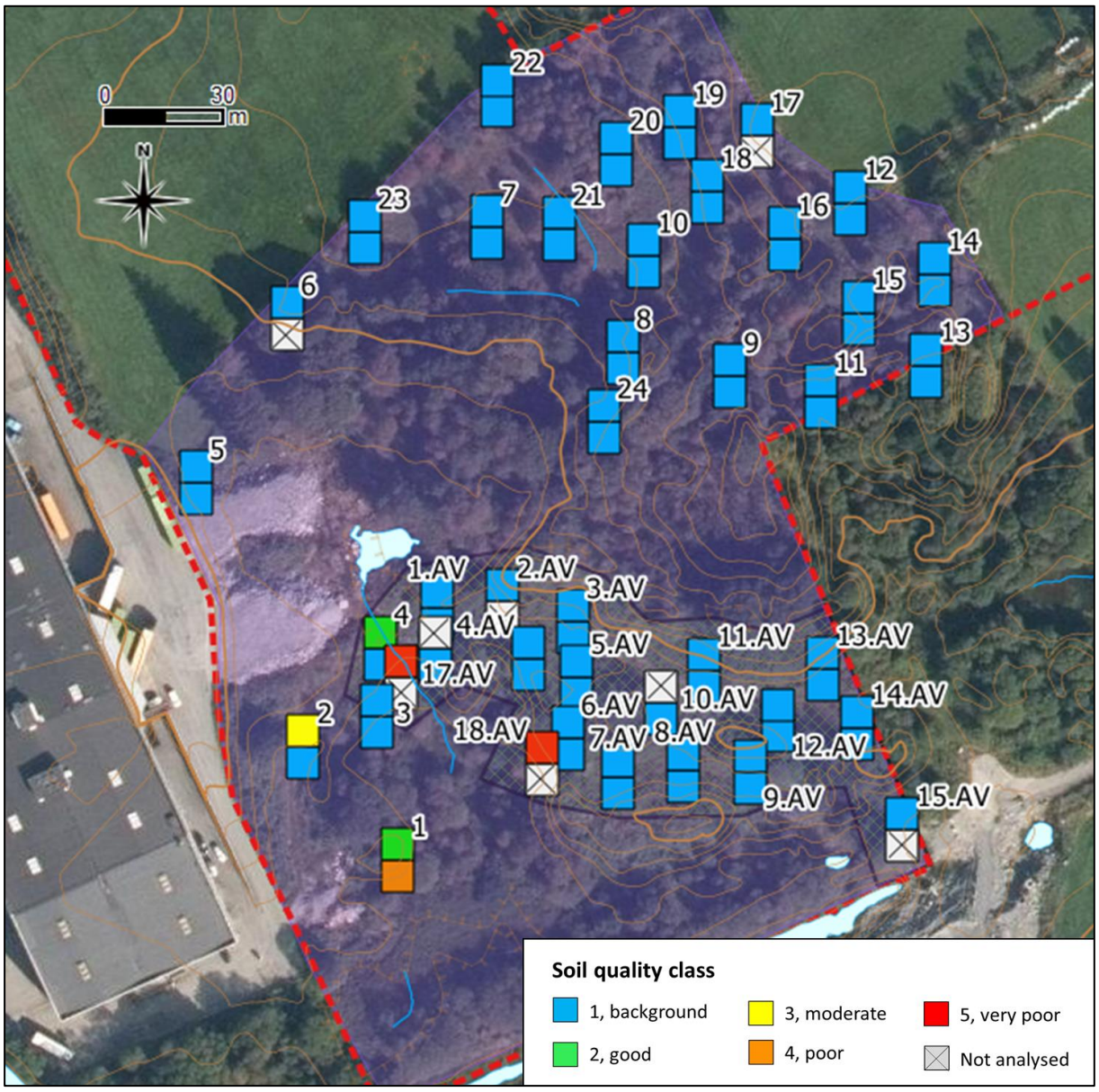


Figure 6. Sample locations showing maximum SQC in topsoil (upper square, 0-1 m) and deeper layer (bottom square, >1 m). The points named x.AV were sampled and analysed by Asplan Viak (Samuelsen, 2020).

Table 3: Concentrations of contaminated soil samples, given in mg/kg (unless % is specified), and classified as defined by TA-2553/2009. Blue = SQC 1, green = SQC 2, yellow = SQC 3, orange = SQC 4. < indicates concentrations below the limit of detection, nd = not detected.

Parameter	**Sample name**	**1 t**	**2 t**	**4 t**	**1 d**
	Depth (cm)	0-100	0-100	0-100	100-200
	Classification	Class 2	Class 3	Class 2	Class 4
Heavy metals	Arsenic (As)	1,9	1,0	2,4	5,8
	Lead (Pb)	9,9	7,8	9,9	330
	Cadmium (Cd)	< 0,20	< 0,20	< 0,20	0,26
	Mercury (Hg)	0,025	< 0,010	0,015	0,032
	Copper (Cu)	9,9	10	13	770
	Zink (Zn)	36	34	46	85
	Chromium (Cr)	7,0	9,5	13	16
	Nickel (Ni)	7,6	7,4	8,2	8,3
Alifatics and aromatics (oil compounds)	Alifatics C5-C6	< 7,0	< 7,0	< 7,0	< 7,0
	Alifatics >C6-C8	< 7,0	< 7,0	< 7,0	< 7,0
	Alifatics >C8-C10	< 3,0	< 3,0	< 3,0	< 3,0
	Alifatics >C10-C12	< 5,0	< 7,9	< 5,0	< 5,0
	Alifatics >C12-C16	< 5,0	12	< 5,0	< 5,0
	Alifatics >C12-C35	22	300	120	39
	Alifatics >C16-C35	22	290	120	39
	Alifatics C5-C35	22	300	120	39
	Aromatics >C8-C10	< 4,0	< 4,0	< 4,0	< 4,0
	Aromatics >C10-C16	< 0,90	< 1,6	< 0,90	< 0,90
	Aromatics >C16-C35	< 0,50	< 0,79	< 0,50	< 0,50
	Oil type	Unspecified			
Polychlorinated biphenyls	PCB 28	< 0,0020	< 0,0032	< 0,0020	0,11
	PCB 52	0,0048	< 0,0032	< 0,0020	0,14
	PCB 101	0,0026	< 0,0032	< 0,0020	0,41
	PCB 118	< 0,0020	< 0,0032	< 0,0020	0,13
	PCB 153	0,0041	< 0,0032	< 0,0020	0,74
	PCB 138	0,0046	< 0,0032	< 0,0020	0,61
	PCB 180	0,0023	< 0,0032	< 0,0020	0,43
	Sum 7 PCB	0,018	nd	nd	2,6
Polycyclic aromatic hydrocarbons	Naphthalene	< 0,030	< 0,053	< 0,030	< 0,030
	Acenaphthylene	< 0,030	< 0,053	< 0,030	< 0,030
	Acenaphtene	< 0,030	< 0,053	< 0,030	< 0,030
	Fluorene	< 0,030	< 0,053	< 0,030	< 0,030
	Phenanthrene	< 0,030	0,088	< 0,030	< 0,030
	Antracene	< 0,030	< 0,053	< 0,030	< 0,030
	Fluoranthene	< 0,030	0,097	0,031	0,031
	Pyrene	< 0,030	0,14	0,063	< 0,030
	Benzo[a]antracene	< 0,030	< 0,053	< 0,030	< 0,030
	Chrysene/triphenylene	< 0,030	0,061	< 0,030	< 0,030
	Benzo[a]pyrene	< 0,030	0,068	0,039	< 0,030
	Indeno[1,2,3-cd]pyrene	< 0,030	< 0,053	0,032	< 0,030
	Dibenzo[a,h]antracene	< 0,030	< 0,053	< 0,030	< 0,030
	Benzo[ghi]perylene	< 0,030	0,079	0,081	0,032
	Benzo(b,k)fluorantene	0,039	0,14	0,056	0,12
	Sum PAH(16) EPA	0,039	0,67	0,30	0,18
	Methylchrysene/benzo(a)anthracene	< 0,50	< 0,79	< 0,50	< 0,50
	Methylpyrene/fluoranthene	< 0,50	< 0,79	< 0,50	< 0,50
	Sum carsinogenic PAH	0,039	0,27	0,13	0,12
BTEX	Benzene	< 0,0035	< 0,0035	< 0,0035	< 0,0035
	Toluene	< 0,10	< 0,10	< 0,10	< 0,10
	Ethylbenzene	< 0,10	< 0,10	< 0,10	< 0,10
	m/p/o-Xylene	< 0,10	< 0,10	< 0,10	< 0,10
Dry matter (% DM)		76,4	91,2	90,5	50,0
Total organic carbon, calculated (% DM)		-	-	-	15,0
Total dry matter ignition loss (% DM)		-	-	-	26,4

No contamination was detected at point 3 and points 5 to 23, or in the deeper soil of point 2 and 4. The soil taken from point 5 to 7 and 16 to 23 consisted of natural silt and/or peat, with few signs of human influence. The soil found on the unnatural elevations in the terrain, and/or next to visible debris (point 8 to 15) were also dominated by natural silt.

Concentrations of contaminants found in the 42 samples in SQC 1 are presented in the appendix, along with the full analysis report of all samples.

5 ASSESSMENT OF THE CONTAMINATION SITUATION

Contamination has been detected in the southernmost sample area (point 1 to 4), related to a landfill. In Asplan Viaks survey (Samuelsen, 2020) two samples (here named 17.AV and 18.AV) had high concentrations of benzene (SQC 5, very poor). No samples have been taken south of these points, due to difficulties with access of heavy machine. To clarify the extent of the pollution towards the marsh areas south, east and north of the polluted points (1, 2, 4, 17.AV and 18.AV), further sampling is recommended. This can be performed with use of a shovel, and soil samples can be taken from the topsoil. Otherwise, final sampling will have to be conducted once construction begins, but before the soil is being removed from the property.

North and east of the polluted area there was a high extent of natural silt and peat with no or few signs of human influence. The concentrations of contaminants in sample point 1.AV to 16.AV (Samuelsen, 2020) and in point 5 to 23 were low to non-detectable. This gives a clear indication that the soil is clean. The central area that had to be left out of the sampling due to restricted access (high extent of felled trees) is considered unlikely to be contaminated, and it should not be necessary to continue with further sampling in this area.

One should expect to find rubbish in the ground under the unnatural elevations in the terrain, and/or next to visible rubbish (point 8 to 15, and areas marked in figure 4). Rubbish needs to be taken care of, sorted, and delivered to a waste disposal if needed. Also, if hazardous waste, or shiny, smelly soil is found, an environmental consultant must be contacted, in order to test and clarify whether the soil is contaminated.

Furthermore, an action plan is then required to describe the need and level of a clean-up. Since the investigated area will be used for industrial purposes, there is room for reusing most of the soil (with SQC ≤ 3) on property if that is practically possible. An action plan for the polluted soil needs to be approved by Sandnes municipality before construction work can be started.

6 REFERENCES

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APPENDIX – SAMPLE DESCRIPTION

APPENDIX – RESULTS

Concentrations of contaminants in top soil samples (0-1 m), given in mg/kg (unless % is specified), and classified as defined by TA-2553/2009. Blue = SQC 1, green = SQC 2, yellow = SQC 3, orange = SQC 4. < indicates concentrations below the limit of detection, nd = not detected.

Parameter/Sample	3 t	5 t	6 t	7 t	8 t	9 t	10 t	11 t	12 t	13 t
Soil quality classification	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Arsenic (As)	2,7	1,2	1,3	4,3	1,9	1,1	1,2	< 1,0	1,6	< 1,0
Lead (Pb)	18	7,4	9,1	25	8,0	7,6	9,2	4,4	9,6	4,2
Cadmium (Cd)	0,27	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20
Mercury (Hg)	0,084	0,018	0,025	0,067	< 0,010	< 0,010	0,029	< 0,010	0,020	< 0,010
Copper (Cu)	5,5	4,0	3,1	7,6	7,2	6,1	2,4	4,0	7,7	4,5
Zink (Zn)	22	21	24	40	26	22	11	15	29	18
Chromium (Cr)	14	6,9	7,8	20	8,0	6,1	5,3	4,1	6,5	7,0
Nickel (Ni)	5,9	3,8	3,4	7,8	6,4	5,1	1,7	2,9	2,8	4,6
Alifatics C5-C6	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0
Alifatics >C6-C8	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0
Alifatics >C8-C10	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0
Alifatics >C10-C12	< 6,6	< 5,0	< 5,0	< 6,4	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0
Alifatics >C12-C16	< 6,6	< 5,0	< 5,0	< 6,4	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0
Alifatics >C12-C35	57	11	nd	19	nd	nd	nd	nd	nd	nd
Alifatics >C16-C35	57	11	< 10	19	< 10	< 10	< 10	< 10	< 10	< 10
Alifatics C5-C35	57	11	nd	19	nd	nd	nd	nd	nd	nd
Aromatics >C8-C10	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0
Aromatics >C10-C16	< 1,2	< 0,90	< 0,90	< 1,2	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90
Aromatics >C16-C35	< 0,66	< 0,50	< 0,50	< 0,64	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Oil type	-	-	-	-	-	-	-	-	-	-
PCB 28	< 0,0026	< 0,0020	< 0,0020	< 0,0026	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 52	< 0,0026	< 0,0020	< 0,0020	< 0,0026	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 101	< 0,0026	< 0,0020	< 0,0020	< 0,0026	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 118	< 0,0026	< 0,0020	< 0,0020	< 0,0026	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 153	< 0,0026	< 0,0020	< 0,0020	< 0,0026	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020

Parameter/Sample	3 t	5 t	6 t	7 t	8 t	9 t	10 t	11 t	12 t	13 t
PCB 138	< 0,0026	< 0,0020	< 0,0020	< 0,0026	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 180	< 0,0026	< 0,0020	< 0,0020	< 0,0026	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
Sum 7 PCB	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Acenaphthylene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Acenaphtene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Fluorene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Phenanthrene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Antracene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Fluoranthene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Pyrene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[a]antracene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Chrysene/triphenylene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[a]pyrene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Indeno[1,2,3-cd]pyrene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Dibenzo[a,h]antracene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[ghi]perylene	< 0,039	< 0,030	< 0,030	< 0,039	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo(b,k)fluorantene	< 0,039	< 0,030	< 0,030	0,042	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Sum PAH(16) EPA	nd	nd	nd	0,042	nd	nd	nd	nd	nd	nd
Methylchrysene/benzo(a)anthracene	< 0,66	< 0,50	< 0,50	< 0,64	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Methylpyrene/fluoranthene	< 0,66	< 0,50	< 0,50	< 0,64	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Sum carsinogenic PAH	nd	nd	nd	0,042	nd	nd	nd	nd	nd	nd
Benzene	< 0,0046	< 0,0035	< 0,0035	< 0,0045	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035
Toluene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
Ethylbenzene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
m/p/o-Xylene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
Dry matter (% DM)	30,4	82,0	79,3	31,1	89,1	95,1	85,0	88,1	86,1	84,8
Total organic carbon, calculated (% DM)	-	-	-	-	0,5	-	-	-	-	-
Total dry matter ignition loss (% DM)	-	-	-	-	0,8	-	-	-	-	-

Concentrations of contaminants in top soil samples (0-1 m), given in mg/kg (unless % is specified), and classified as defined by TA-2553/2009. Blue = SQC 1, green = SQC 2, yellow = SQC 3, orange = SQC 4. < indicates concentrations below the limit of detection, nd = not detected.

Parameter/Sample	14 t	15 t	16 t	17 t	18 t	19 t	20 t	21 t	22 t	23 t	24 t
Soil quality classification	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	1
Arsenic (As)	1,4	1,5	1,5	1,3	1,4	1,5	1,0	< 1,0	1,4	1,5	1,6
Lead (Pb)	8,5	7,8	7,5	7,1	9,8	10	7,3	7,8	18	8,9	15
Cadmium (Cd)	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20
Mercury (Hg)	< 0,010	0,021	0,021	0,012	0,039	0,025	< 0,010	0,033	0,058	0,039	0,034
Copper (Cu)	4,5	3,2	3,6	4,0	1,3	2,1	3,2	2,0	5,9	2,8	4,1
Zink (Zn)	19	17	22	18	8,2	21	19	12	36	14	72
Chromium (Cr)	5,1	5,0	7,8	3,9	5,9	5,2	8,2	6,2	8,4	4,7	7,1
Nickel (Ni)	4,7	2,9	4,9	3,5	0,87	2,5	4,6	2,1	5,6	2,4	3,5
Alifatics C5-C6	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0
Alifatics >C6-C8	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0
Alifatics >C8-C10	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0
Alifatics >C10-C12	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0
Alifatics >C12-C16	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0
Alifatics >C12-C35	nd	nd	nd	nd	nd	12	nd	32	50	nd	12
Alifatics >C16-C35	< 10	< 10	< 10	< 10	< 10	12	< 10	32	50	< 10	12
Alifatics C5-C35	nd	nd	nd	nd	nd	12	nd	32	50	nd	12
Aromatics >C8-C10	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0
Aromatics >C10-C16	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90
Aromatics >C16-C35	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Oil type	-	-	-	-	-	-	-	-	-	-	-
PCB 28	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 52	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 101	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 118	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 153	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020

Parameter/Sample	14 t	15 t	16 t	17 t	18 t	19 t	20 t	21 t	22 t	23 t	24 t
PCB 138	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 180	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
Sum 7 PCB	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Acenaphthylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Acenaphtene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Fluorene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Phenanthrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Fluoranthene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[a]antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Chrysene/triphenylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[a]pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Indeno[1,2,3-cd]pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Dibenzo[a,h]antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[ghi]perylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo(b,k)fluorantene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Sum PAH(16) EPA	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Methylchrysene/benzo(a)anthracene	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Methylpyrene/fluoranthene	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Sum carsinogenic PAH	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzene	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035
Toluene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
Ethylbenzene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
m/p/o-Xylene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
Dry matter (% DM)	86,0	81,2	81,4	87,7	65,7	51,3	80,2	49,9	49,7	86,4	70,4
Total organic carbon, calculated (% DM)	1,1	2,5	-	-	-	-	-	-	-	1,7	-
Total dry matter ignition loss (% DM)	1,9	4,3	-	-	-	-	-	-	-	3,0	-

Concentrations of contaminants in deeper soil samples (1-2 m), given in mg/kg (unless % is specified), and classified as defined by TA-2553/2009. Blue = SQC 1, green = SQC 2, yellow = SQC 3, orange = SQC 4. < indicates concentrations below the limit of detection, nd = not detected.

Parameter/Sample	2 d	3 d	4 d	5 d	7 d	8 d	9 d	10 d	11 d	12 d
Soil quality classification	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Arsenic (As)	< 1,0	1,0	2,0	< 1,0	1,6	1,3	1,4	1,6	< 1,0	< 1,0
Lead (Pb)	4,3	6,1	6,0	2,6	8,9	7,2	8,3	8,6	4,6	4,2
Cadmium (Cd)	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20
Mercury (Hg)	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010
Copper (Cu)	4,1	5,5	6,1	3,4	6,6	5,1	6,1	6,6	4,3	3,6
Zink (Zn)	14	23	32	11	24	22	24	21	13	14
Chromium (Cr)	7,4	10	7,9	6,0	7,8	6,0	6,0	9,7	8,5	3,6
Nickel (Ni)	3,6	5,5	4,6	2,6	5,7	5,4	5,4	5,2	3,0	3,2
Alifatics C5-C6	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0
Alifatics >C6-C8	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0
Alifatics >C8-C10	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0
Alifatics >C10-C12	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0
Alifatics >C12-C16	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0
Alifatics >C12-C35	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Alifatics >C16-C35	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Alifatics C5-C35	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Aromatics >C8-C10	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0
Aromatics >C10-C16	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90
Aromatics >C16-C35	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Oil type	-	-	-	-	-	-	-	-	-	-
PCB 28	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 52	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 101	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 118	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 153	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020

Parameter/Sample	2 d	3 d	4 d	5 d	7 d	8 d	9 d	10 d	11 d	12 d
PCB 138	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 180	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
Sum 7 PCB	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Acenaphthylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Acenaphtene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Fluorene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Phenanthrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Fluoranthene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[a]antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Chrysene/triphenylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[a]pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Indeno[1,2,3-cd]pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Dibenzo[a,h]antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[ghi]perylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo(b,k)fluorantene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Sum PAH(16) EPA	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Methylchrysene/benzo(a)anthracene	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Methylpyrene/fluoranthene	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Sum carsinogenic PAH	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzene	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035
Toluene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
Ethylbenzene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
m/p/o-Xylene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
Dry matter (% DM)	86,4	87,8	84,8	81,6	89,0	88,7	91,0	87,1	87,1	87,8
Total organic carbon, calculated (% DM)	-	-	-	-	-	-	-	-	-	-
Total dry matter ignition loss (% DM)	-	-	-	-	-	-	-	-	-	-

Concentrations of contaminants in deeper soil samples (1-2 m), given in mg/kg (unless % is specified), and classified as defined by TA-2553/2009. Blue = SQC 1, green = SQC 2, yellow = SQC 3, orange = SQC 4. < indicates concentrations below the limit of detection, nd = not detected.

Parameter/Sample	13 d	14 d	15 d	16 d	18 d	19 d	20 d	21 d	22 d	23 d	24 d
Soil quality classification	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Arsenic (As)	< 1,0	< 1,0	1,7	< 1,0	1,3	< 1,0	1,5	< 1,0	2,7	1,6	1,5
Lead (Pb)	4,2	4,6	7,5	4,0	5,8	4,7	8,4	3,5	17	7,6	9,8
Cadmium (Cd)	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20	< 0,20
Mercury (Hg)	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010	< 0,010
Copper (Cu)	3,5	6,1	6,2	4,0	4,2	3,4	5,1	5,3	18	5,0	4,4
Zink (Zn)	14	15	37	16	16	14	23	15	47	41	51
Chromium (Cr)	4,9	9,7	8,8	5,4	5,9	5,3	15	7,1	16	7,0	9,7
Nickel (Ni)	3,2	4,5	6,7	3,8	4,2	3,4	4,9	4,4	11	5,3	5,4
Alifatics C5-C6	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0
Alifatics >C6-C8	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0	< 7,0
Alifatics >C8-C10	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0	< 3,0
Alifatics >C10-C12	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0
Alifatics >C12-C16	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0	< 5,0
Alifatics >C12-C35	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Alifatics >C16-C35	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10	< 10
Alifatics C5-C35	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Aromatics >C8-C10	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0	< 4,0
Aromatics >C10-C16	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90	< 0,90
Aromatics >C16-C35	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Oil type	-	-	-	-	-	-	-	-	-	-	-
PCB 28	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 52	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 101	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 118	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 153	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020

Parameter/Sample	13 d	14 d	15 d	16 d	18 d	19 d	20 d	21 d	22 d	23 d	24 d
PCB 138	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
PCB 180	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020	< 0,0020
Sum 7 PCB	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Naphthalene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Acenaphthylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Acenaphtene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Fluorene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Phenanthrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Fluoranthene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[a]antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Chrysene/triphenylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[a]pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Indeno[1,2,3-cd]pyrene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Dibenzo[a,h]antracene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo[ghi]perylene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Benzo(b,k)fluorantene	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030	< 0,030
Sum PAH(16) EPA	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Methylchrysene/benzo(a)anthracene	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Methylpyrene/fluoranthene	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50	< 0,50
Sum carsinogenic PAH	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd	nd
Benzene	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035	< 0,0035
Toluene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
Ethylbenzene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
m/p/o-Xylene	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10	< 0,10
Dry matter (% DM)	87,7	86,3	87,0	90,0	88,0	88,1	84,2	88,6	85,9	86,3	88,0
Total organic carbon, calculated (% DM)	-	-	-	-	-	0,4	-	-	-	-	-
Total dry matter ignition loss (% DM)	-	-	-	-	-	0,7	-	-	-	-	-

APPENDIX – ANALYSIS REPORTS