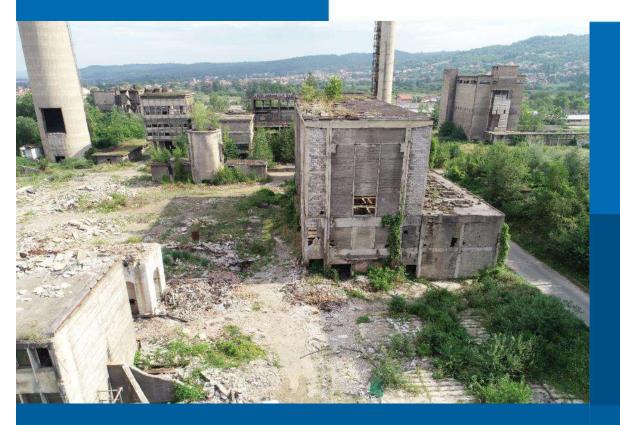


Contaminated Site Investigation & Remediation





Conducted Fieldwork Report

INCEL, Banja Luka, Republika Srpska, Bosnia and Hercegovina

25. 8. 2020

ISO 9001 ISO 14001 ISO 45001





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List of Abbreviations

a.s.l. Above mean sea levelb.g.l. Below ground level

BTEX Benzene, Toluene, Ethylbenzene and Xylene

BZ Business Zone INCEL

Cd Cadmium cm Centimeter

COC Contaminants of concern

CS2 Carbon Disulphide

Cu Copper

DKS (local geodetic system – MGI_1901_Balkans_6)

DNAPL Dense non-aqueous phase liquid GIS Geographic Information System

GWL Groundwater level

Hg Mercury HNO₃ Nitric acid

ICSM Initial Conceptual Site Model

INCEL INdustrija CELuloze (Industry of Cellulose)

kg Kilogram km Kilometer

LNAPL Light non-aqueous phase liquid

LV Limit value m Meter mg Milligram

m/s Meters per second
NaCl Sodium Chloride
NaOCl Sodium Hypochlorite
NaOH Sodium Hydroxide
Na₂S Sodium Sulphide
Na₂SO₄ Sodium Sulphate

Ni Nickel

Nm Newton meter

PAH Polycyclic Aromatic Hydrocarbons

Pb Lead

PCB Polychlorinated Biphenyls

PCDDs Polychlorinated Dibenzo-p-dioxins
PCDFs Polychlorinated dibenzofurans
POPs Persistent Organic Pollutants
PFAS Per- and Polyfluoroalkyl substances

PPE Personal Protective Equipment

S Sulphur

TPH Total Petroleum Hydrocarbons

UNDP United Nation Development Program

WGS84 World Geodetic System 1984



1 INTRODUCTION

1.1 General

With respect to Contractor's duties and deliverables specified in the Contract signed between the United Nations Development Programme and DEKONTA a.s. on July 1, 2020 and Contract's Amendment No. 1 signed on August 12, 2020, we present the first deliverable of the project.

This report on conducted fieldwork describes the implementation of the site investigation in the period from 28. 7. to 10. 8. 2020.

In the next sections of the report, more details of the field activities carried out during the fieldworks will be presented.

1.2 Objectives of the survey

The objectives of the proposed site survey is the exact identification of sources of the PCB pollution, determination of the vertical and horizontal extent of the PCB contaminated soil (unsaturated zone), verification of groundwater and surface water pollution, identification of potentially exposed groups of inhabitants and individual elements of the eco-system and the proposal of remediation/rehabilitation measures leading to the elimination of existing human health and/or environmental risks related to the PCB contamination in the soil.

The results of the survey will provide the following knowledge and information about the locality:

- Determination of basic geological and hydro-geological characteristics of the area;
- Identification of sources of PCB contamination;
- Information about the spatial distribution of the PCB contamination in soil on the INCEL site;
- Specification of the qualitative and quantitative characteristics of the contamination;
- Inputs for evaluation of risks resulting from the PCB contamination;
- Inputs for recommendation of corrective measures.

1.3 Tasks

The main tasks implemented during the field works were the following:

- Meeting with site owners, obtaining permits to perform field works;
- Verification of the existence of underground networks;
- Installation of boreholes and the description of the soil profiles on bore logs;
- Soil sampling;
- Installation of groundwater monitoring wells and recording the well specification on the bore logs;
- Groundwater sampling;
- Geodetic/drone survey and contaminated soil/area quantification.

1.4 Team structure

Project team involved in the fieldwork has comprised experts from DEKONTA, including its Bosnian branch, CETEOR and two local consultants. There are minor changes in the original team structure proposed in the technical offer, mainly caused by problematic mobilization of some Czech experts due to the COVID-19 pandemic. However, substitute experts possess the same experiences and knowledge necessary for proper performance of investigation work.



List of experts involved in fieldwork survey is presented below:

Table 1: Experts' involvement in the fieldwork survey

		No. o	f Days
Name	Position	In BiH	Home Based - Prague
Ondřej Urban	Team Leader	10	10
Vojtěch Musil	Environmental Expert / Deputy Team Leader		5
Maja Colovic-Daul	Environmental Expert / Liaison Officer	10	
Jan Kukačka	GIS Specialist		8
Fernando Rebelo	Soil Sampling Specialist	11	7
Jiří Kubricht	Site Manager and Drone Specialist	12	8
Martin Polák	Site Manager and GW Sampling Specialist	12	8
Eva Čechová	Construction Materials Sampling Specialist	9	7
Aleš Kulhánek	Risk Assessment Specialist		5
Jasmina Comic	Local Coordinator / Legislation Expert	10	
Denis Fontana	Local Coordinator	14	
Boris Legovic	External Consultant	5	

2 PERFORMED ACTIVITIES

2.1 Preparatory work

With regard to the restriction of entry into Bosnia due to the COVID-19 pandemic situation, the investigation and thus preparatory work was postponed to the second half of July (28. 7. 2020), approx. 3 weeks later compared to the original plan 2. 7. 2020.

As part of the preparatory works, a Geoprobe drilling rig and other technical equipment for sampling soil, sediment, building structures and groundwater were transported by truck to Bosnia on July 24. Mobilization of the experts and technicians took place on July 27 and 28.

In the period from signing of the contract (15. 6. 2020) to the commencement of field works (28. 7. 2020), a detailed review of previously conducted surveys and studies in INCEL took place. Based on this review, a detailed sampling plan was prepared and consulted with UNDP in advance (by e-mail on July 16) and subsequently presented to other members of the working group at a meeting on July 28.

2.2 Meetings and site reconnaissance

An <u>introductory working meeting</u> took place on July 28 and was attended by representatives of the working group and other stakeholders. The list of representatives is given in the Table 2 below. The minutes of the meeting prepared by UNDP can be found in Annex III (in Bosnian language).

Table 2: Introductory work meeting participants

No.	Name	Organisation
1	Vladimir Plavšić	Gradsta uprava Banja Luka / Odjeljenje za inspekcijske poslove City Administration of Banja Luka / Department for Inspection Affairs



Saša Vrućinić	Gradska uprava Banja Luka/ Odjeljenje za komunalne poslove Banja Luka City Administration / Department of Communal Affairs
Ana Štikić	Gradstka uprava Banja Luka / Odjeljenje za prostorno uređenje Banja Luka City Administration / Department of Physical Planning
Saša Panić	Poslovna zona Incel Business zone Incel
Svetlana Topić	Ministarstvo za prostorno uređenje, građevinarstvo i ekologiju RS RS Ministry of Physical Planning, Construction and Ecology
Marko Galić	Ministarstvo za prostorno uređenje, građevinarstvo i ekologiju RS RS Ministry of Physical Planning, Construction and Ecology
Ondrej Urban	DEKONTA
Jiří Kubricht	DEKONTA
Martin Polak	DEKONTA
Denis Fontana	DEKONTA
Boris Legovic	DEKONTA
Andrea Muharemović	UNDP
Mirnesa Bajramović	UNDP
Svjetlana Radusin	Ministarstvo za prostorno uređenje, građevinarstvo i ekologiju RS RS Ministry of Physical Planning, Construction and Ecology
Darko Antunic	RUIP
Dragan Mijović	Inspektorat RS RS Inspectorate
Dragan Uikolic	Inspektorat RS RS Inspectorate
	Ana Štikić Saša Panić Svetlana Topić Marko Galić Ondrej Urban Jiří Kubricht Martin Polak Denis Fontana Boris Legovic Andrea Muharemović Mirnesa Bajramović Svjetlana Radusin Darko Antunic Dragan Mijović



Figure 1: Site reconnaisance with Boris Legović and Petar Smitran, 29. 7. 2020



Figure 2: Site reconnaisance with Ermin Tajić, 3. 8. 2020

The <u>site reconnaissance</u> took place in the INCEL complex and its vicinity on July 28, 29 and August 3, and included the activities listed below:

- Delineation of hotspots identified by previous surveys;
- Verification of the existence of underground networks;
- Finding preferential migration routes, specifically sewerage system within INCEL;
- Specification of drilling sites and sampling locations of soil, sediment and building structures.



Apart from the DEKONTA project team, representatives of the INCEL Business zone (Mr. Ermin Tajić, Mr. Saša Panić), an expert involved in previous studies (Mr. Boris Legović) and owners/tenants of other properties (Mr. Petar Smitran) that are the subject of the investigation work took part in the site reconnaissance.

The <u>Field visit by RS Ministry of Physical Planning, Construction and Ecology</u> was conducted on August 7 (around 9.00 h) at the INCEL Business Zone, and was attended by five members of Ministry of Physical Planning, Construction and Ecology:

- Svjetlana Radusin
- Mišo Radaković
- Mirjana Kos
- Marija Nikolić
- Svetlana Topić

The first phase of the visit was conducted at the DEKONTA temporary field office inside the BZ administrative building, where the representatives were given a short presentation about DEKONTA, Sampling plan for the BZ, quick showcase regarding the equipment used (pumps, electrical meters, water analyzer, etc.) and a field safety briefing.

The second phase was conducted at one of the sampling sites (SHP Celex), where the representatives were shown the sampling process using the drilling rig. After the sampling was completed, photos and videos of the DEKONTA project team and ministry representatives were taken using the drone unit. All of the questions posed by the representatives were answered to the fullest extent by the DEKONTA project team.

2.3 Sampling work

2.3.1 Summary of sampling work

Between 28. 7. 2020 and 11. 8. 2020 project team was in BiH to carry out the sampling campaign as described in DEKONTA's Technical Proposal and updated in the latest version of the sampling plan.

The following samples were collected (a total of 204 samples):

- 67 samples of topsoil. 63 samples from known hotspots inside INCEL and 4 samples from outside INCEL;
- 3 samples of sediment from the Vrbas River. 1 at the sewage system outlet, 1 upstream of the outlet and 1 downstream of the outlet;
- 21 samples of construction materials (from walls and floors of building structures located on the site);
- 3 samples of groundwater from drinking wells located outside INCEL;
- 14 samples of groundwater from inside INCEL;
- 92 samples from soil probes at different depths from inside INCEL.

Out of the total of 207 samples, 200 samples were transported to ALS laboratories in Czech Republic in two batches for analyses. The first batch, consisting of 110 samples, was delivered to the laboratory for analyses on 6. 8. 2020 and the second batch, consisting of 90 samples, was delivered to the laboratory for analyses on 13. 8. 2020.



2.3.2 Soil probes

2.3.2.1 Methodology of sampling work

In order to carry out exploratory probes and soil sampling, a light mobile drilling rig GEOPROBE, model 7822DT, was used at the site. The GEOPROBE 7822DT drilling rig is a multifunctional device manufactured by the American company Geoprobe, offering a wide range of applications in the exploration-remediation sector and the construction industry. The drilling rig is equipped with a hydraulic hammer G63 with percussion energy of 701 Nm with a built-in rotation option and a separate rotary head for spiral drilling.

The use of a drilling rig enables to collect intact soil samples in a penetrating manner, perform spiral drilling, install hydrogeological boreholes and narrow-profile monitoring probes / piezometers, take groundwater and soil air samples, apply direct-push survey methods - MIP, CPT, as well as inject remediation solutions into the rock environment as part of in-situ remediation.



Figure 3: Drilling of probes for soil and groundwater sampling



Figure 4: Soil probe S-23 equiped with HDPE pipe

For the purposes of the project (soil sampling from a defined depth), the DUAL TUBE system was used. The DUAL TUBE system is based on the impact pushing of a double rig (drilling diameter 60 mm), during which the drilling core is taken into a plastic (PVC) tube (diameter 28 mm) installed in the inner sampling rod. The double equipment is always pushed in 1,2-meter sections, while after this section the inner plastic tube with the collected soil is always removed and replaced by a new empty tube. An additional section is then added to the outer steel gear and this repeated procedure continues into the required depth. The depth reach within the survey work was at maximum of 6 m b.g.l.

Plastic tubes were marked immediately after extraction from the outer steel equipment so that they cannot be confused. Due to the transparency of the tubes, a lithological description of the individual sections was made first. Subsequently, the tube was cut with a special knife and the required soil sample was poured into a pre-prepared sample box (200 ml sealable glass jar). The

depths and position of soil sampling was determined by the geological service on site and are given in the following chapter.

In total 30 probes were drilled. The position of individual probes was chosen on the basis of the previous survey work and is shown in Annex I.



During the drilling works, the probes S-1, S-4, S7, S-9, S-11, S-14, S-15, S-19, S-23 and S-29 were temporarily equipped with an HDPE pipe for the purpose of groundwater sampling. After groundwater sampling, these probes were removed.





Figure 5: Drilling core of S-4 soil probe

Figure 6: Collection of soil samples

2.3.2.2 Collected samples information

All soil samples were stored in a sealable glass jars immediately after collection. Each glass jar was provided with a unique identifier in order not to be confused. The glass jars were then placed in a portable cooling bag and stored in a dry and dark place until the samples were transported to the laboratory.

The following Table 3 shows the numbers of probes and soil samples taken from the defined depth levels.

Table 3: Number of probes and collected soil samples

					Depth		Sai	mple ID		Total		
No.	Probe	Date	(m)	0,0-0,2	0,2-0,8	0,8-2,0	GW	number of samples	Piezometr	Position		
1.	S-1	30.7.20	6,00	S1/TS	S1/1	S1/2	S1/GW	4	Х	Business zone (transformers of viscosis)		
2.	S-2	30.7.20	4,80	S2/TS	S2/1	S2/2*		3		Business zone (transformers of viscosis)		
3.	S-3	30.7.20	4,80	S3/TS	S3/1	S3/2*	S3/GW*	4		Business zone (transformers of viscosis)		
4.	S-4	31.7.20	6,00	S4/TS	S4/1	S4/2	S4/GW*	4	Х	Business zone (transformers of viscosis)		
5.	S-5	31.7.20	4,80	S5/TS	S/1	S5/2*		3		Business zone (transformers of viscosis)		
6.	S-6	31.7.20	4,80	S6/TS	S6/1	S6/2		3		Business zone (in front of BC Metal)		
7.	S-7	31.7.20	6,00	S7/TS	S7/1	S7/2	S7/GW	4	Х	Business zone (in front of BC Metal)		
8.	S-8	31.7.20	4,80	S8/TS	S8/1	S8/2		3		Business zone (in front of BC Metal)		
9.	S-9	1.8.20	6,00	S9/TS	S9/1	S9/2	S9/GW	4	Х	BC Metal		
10.	S-10	1.8.20	3,60	S10/TS	S10/1	S10/2		3		BC Metal		
11.	S-11	1.8.20	6,00	S11/TS	S11/1	S11/2	S11/GW	4	Х	Nova Banka		
12.	S-12	1.8.20	3,60		S12/1	S12/2	S12/GW*	3		Nova Banka		
13.	S-13	3.8.20	3,60	S13/TS	S13/1			2		Business zone (electrolysis)		
14.	S-14	3.8.20	6,00	S14/TS	S14/1	S14/2	S14/GW	4	Х	Business zone (electrolysis)		
15.	S-15	3.8.20	6,00	S15/TS	S15/1	S15/2	S15/GW	4	Х	Lukic Invest (former power plant)		
16.	S-16	3.8.20	4,80	S16/TS	S16/1	S16/2		3		Lukic Invest (former power plant)		



	Probe			Depth		Sa	mple ID		Total		
No.		Date	(m)	0,0-0,2	0,2-0,8	0,8-2,0	GW	number of samples	Piezometr	Position	
17.	S-17	3.8.20	4,80	S17/TS	S17/1	S17/2		3		Lukic Invest (former power plant)	
18.	S-18	3.8.20	4,80	S18/TS	S18/1	S18/2		3		Lukic Invest (former power plant)	
19.	S-19	4.8.20	6,00	S19/TS	S19/1	S19/2	S19/GW	4	Х	Lukic Invest (former power plant)	
20.	S-20	4.8.20	4,80	S20/TS	S20/1			2		Lukic Invest (former power plant)	
21.	S-21	4.8.20	4,80	S21/TS	S21/1	S21/2		3		Lukic Invest (former power plant)	
22.	S-22	4.8.20	3,60	S22/TS	S22/1			2		SHP Celex	
23.	S-23	7.8.20	6,00	S23/TS	S23/1	S23/2		3	Х	SHP Celex	
24.	S-24	7.8.20	4,80	S24/TS	S24/1	S24/2	S24/granulo	3		SHP Celex	
25.	S-25	6.8.20	4,80	S25/TS	S25/1	S25/2		3		Business zone (firefighting station)	
26.	S-26	6.8.20	3,60	S26/TS	S26/1	S26/2		3		TOP Metal	
27.	S-27	6.8.20	4,80	S27/TS	S27/1	S27/2	S27/3	4		Business zone (beside Eco-trade)	
28.	S-28	6.8.20	3,60	S28/TS	S28/1	S28/2		3		Business zone (production of CS2)	
29.	S-29	7.8.20	6,00	S29/TS	S29/1	S29/2	S29/GW	4	Х	Universum AD	
30.	S-30	7.8.20	3,60	S30/TS	S30/1	S30/GW		3		Universum AD	

^{*} Collected soil samples stored in archive without chemical analyses

2.3.3 Topsoil samples

2.3.3.1 Methodology of sampling work

The sampling of topsoil from inside of INCEL was carried out between 4. 8. and 7. 8. 2020. It is important to mention that between those dates there was heavy rain at the site and the sampling work had to be

stopped. The sampling of topsoil outside INCEL was carried out on 31. 7. 2020.

Prior to the activities, DEKONTA's team chose the location of the samples based on the previous information regarding the two sampling campaigns performed by the Inspectorate and the report prepared by TAUW. These locations were marked in a map and the sampling team collected the samples from the preselected spots making any necessary adjustments of the exact position upon visual inspection of the chosen area.

In order to collect the samples, DEKONTA's team followed the following methodology. The top layer of



Figure 7: Topsoil sampling

debris was removed in addition to organic matter like roots and leaves. A metal scoop was used to sample the soil and to transfer it directly to a 150-ml glass jar. The jar was immediately identified with the sample ID number and a sample protocol was filled with information like date, weather conditions, site description, required analyses, matrix type, sampling person and any important notes that could help to describe the sample, the procedure or the location. The collected sample was then stored in a cooling bag away from direct sunlight and the whole procedure was repeated for all topsoil samples.



2.3.3.2 Collected sample information

The samples were collected as follows:

Lukic Invest (former power plant), 4. 8. 2020

- Sample ID: TS-1 to TS-8 and L-3A
- Analyses: All samples were analyzed for PCBs. TS-4, in addition to PCBs, was analyzed for Heavy Metals, Dioxins, Dioxin like PCBs, TOC, TPH and PAH. L-3A was analyzed for Asbestos only.

Concrete platform next to SHP Celex, 4. 8. 2020

- Sample ID: TS-9 to TS-11
- Analyses: All samples were analyzed for PCBs.

East of Celex, 4. 8. 2020

- Sample ID: TS-12 to TS-16
- Analyses: All samples were analyzed for PCBs.

Business Zone in front of BC Metal, 6.8. 2020

- Sample ID: TS-17 to TS-22
- Analyses: All samples were analyzed for PCBs. TS-20, in addition to PCBs, was analyzed for TPH and Heavy Metals

Inside of BC Metal, 6.8.2020

- Sample ID: TS-23 to TS-26
- Analyses: All samples were analyzed for PCBs. TS-24, in addition to PCBs, was analyzed for Dioxins,
 PCBs like Dioxins, TOC, TPH and Heavy Metals

Valentino, 6. 8. 2020

- Sample ID: TS-27 and TS-28
- Analyses: All samples were analyzed for PCBs.

INCEL Trade, 6. 8. 2020

- Sample ID: TS-29 and TS-30
- Analyses: All samples were analyzed for PCBs.

Business Zone (transformers of Viscosis), 7. 8. 2020

- Sample ID: TS-31 to TS-34
- Analyses: All samples were analyzed for PCBs. TS-32, in addition to PCBs, was analyzed for granulometry

Business Zone (Electrolysis), 7. 8. 2020

- Sample ID: TS-35 to TS-38
- Analyses: All samples were analyzed for PCBs. TS-38, in addition to PCBs, was analyzed for Asbestos

Nova Banka, 7. 8. 2020

- Sample ID: TS-39 to TS-42
- Analyses: All samples were analyzed for PCBs.



Univerzum, 7. 8. 2020

- Sample ID: TS-43 to TS-46
- Analyses: All samples were analyzed for PCBs.TS-44, in addition to PCBs, was analyzed for Heavy Metals and TPH

Top Metal, 7. 8. 2020

- Sample ID: TS-47 to TS-50
- Analyses: All samples were analyzed for PCBs. TS-47, in addition to PCBs, was analyzed for Dioxins and Dioxins like PCBs

Business Zone (firefighting station), 7. 8. 2020

- Sample ID: TS-51 and TS-52
- Analyses: All samples were analyzed for PCBs.

Business Zone (next to Eco-trade), 6. 8. 2020

- Sample ID: TS-53 and TS-54
- Analyses: All samples were analyzed for PCBs.

Eco-trade, 6. 8. 2020

- Sample ID: TS-55 and TS-56
- Analyses: All samples were analyzed for PCBs.

Business Zone (production of CS₂), 6. 8. 2020

- Sample ID: TS-57 to TS-60
- Analyses: All samples were analyzed for PCBs.

DE-MI Promet, 7. 8. 2020

- Sample ID: TS-61 and TS-62
- Analyses: All samples were analyzed for PCBs.

Outside INCEL, 31. 7. 2020

- Sample ID: TS-E, TS-SE, TS-WEST1, TS-WEST2
- Analyses: All samples were analyzed for PCBs.

2.3.4 Construction material samples

2.3.4.1 Methodology of sampling work

Samples of construction materials (usually concrete, rarely plaster) possibly contaminated with PCBs were collected in the period 1.-5. 8. 2020 at areas identified as hotspots by previously conducted studies summarized in the TAUW's Phase 1 Report (1). Main focus was at the most contaminated sites, i.e. Lukic Invest (former power plant), area of Electrolyses or Nova Banka and their surroundings. In total 21 samples were collected and analyzed for PCBs. In addition to PCBs, laboratory analyses for presence of heavy metals and petroleum hydrocarbons (TPH) were carried out for selected 2 and 4 samples respectively.

Samples were collected manually by hammer and chisel from the surface into the depth of 0,5-3 cm and then homogenized to ensure an even distribution of a pollutant, if present. Samples were placed into a 150-ml glass jar and stored in a cooling bag covered from sunlight. For each sample a sampling record with



information such as site description, date, weather conditions, matrix type, required analyses, and any important notes that could help to describe the sample, the procedure or the location was prepared (please see Annex VI) and photographs of sampling locations and their surroundings were taken (see Annex IV).

2.3.4.2 Collected sample information

Collected samples are described in the Table 4 below. Location of collected samples is marked in a site plan attached in Annex I.

Table 4: Overview of construction materials samples

Position (hotspot)	No.	ID	Description
SHP Celex	1	CX-1	Concrete desk fragment from an open area between chimney and Celex factory. Sample taken from a lowered area where sediment accumulates.
	2	CX-2	Concrete desk fragment from an open area between chimney and Celex factory. Composite sample of four locations across the area.
Lukic Invest (former power	3	L-1	Small building with two transformer rooms. Samples taken from an inclined floor of transformer basin.
plant)	4	L-2	Small building with two transformer rooms. Samples taken from an inclined floor of transformer basin.
	5	L-3	Black sediment on concrete transformer basin. Transformers were being collected and dismantled here. Partially demolished room adjacent to a main building. Around piles of waste with fragments of asbestos roof.
	6	L-4	Mortar fragment from the floor 2m from location of transformer together with loose plaster fragments on the linoleum floor under metal structure transformers were fit on.
	7	L-5	Surface scratched from a wall with white lime paint behind location of transformers.
	8	L-6	Concrete floor of a warehouse in use (soil piles). Transformers removed from Lukic building across street were stored here before being dismantled at another location (L-3).
	9	L-7	Transformer room in a building in front of the main Lukic building. Plaster with black sediment from inclined floor. Concrete with pebbles.
Universum AD	10	UN-1	Concrete foundation below terrain level. Structure demolished, soil excavated from around there.
	11	UN-2	Concrete platform behind the storage containers with excavated soil.
Nova Banka	12	NB-1	Small room (former office) where fire took place. Composite sample of concrete floor and plaster of walls.
	13	NB-2	Open concrete area. Sample 0-0,2 m drilled by probe (S12/CM).
	14	NB-3	Blackened paint layer inside small room (former office) from under the window opening.
	15	NB-4	Surface scratched from an external wall of the small room (former office), building in front of the University building.
Top Metal	16	TM-CM	Composite sample (4 samples) from the concrete platform at Top Metal. Sampled manually. 0-0.1 cm of the surface.
Business zone (transformers	17	BZ-T-1	Elevated platform in front of transformer rooms. Flat concrete, oily stains, petroleum smell.
of Viscosis)	18	BZ-T-2	Floor from inside a transformer room (concrete).
Business zone	19	BZ-C-1	Inclined floor of a transformer basin. Front wall demolished.
(Electrolysis,	20	BZ-C-2	Concrete floor of a large hall. Composite sample of an oily stain at the entrance
center, close to			and two samples of floor and concrete column (30 cm height) in a corner area
I-9)			with black deposits.
	21	BZ-C-3	Surface scratched from a wall. Location same as BZ-C-2.



2.3.5 Groundwater samples

The sampling of groundwater from inside of INCEL was carried out between 8.-9. 8. 2020 while the samples of groundwater from outside were collected 8. 8. 2020. It is important to mention that between those dates there was heavy rain that could have influenced the groundwater level measurements.

Prior to the activities, DEKONTA's team chose the location of the samples based on the previous information regarding the two sampling campaigns performed by the Inspectorate and the report performed by TAUW (1). These locations were marked in a map and the sampling team collected the samples from the preselected spots making any necessary adjustments of the exact position upon visual inspection of the chosen area.

In order to collect the samples, DEKONTA's team followed the following methodology. For groundwater samples inside INCEL, the groundwater sampling was carried out from newly established probes (10 probes) which were temporary equipped with HDPE hoses of diameter of 25 mm (for scheme of the probe please see Appendix V) and from 4 previously established monitoring wells.

Before taking samples the ground water level (GWL) was measured. Measuring of GWL was performed by Solinst interface detector to check presence or absence of possible LNAPL/DNAPL (layer of organic non aqueous liquid lighter or heavier than water). Hose from peristaltic pump was put into the well to the depth of approximately 20 cm below the water table. The pumping volume was set to maintain GWL up to 10 cm below the state at T_{zero} (level of GW before pumping). Basic parameters were measured during the well purging. The sample of ground water was taken when the measured parameters stabilised or minimum of 3 volumes of borehole water were exchanged. Pumping volume variated around 3 litres/minute. Sampling protocols are attached as Annex VI of this report.

In the following Table 5 physio-chemical parameters obtained during sampling work are presented. Parameters were measured by WTW portable detector.

Table 5: Physio-chemical parameters

Well	Date of sampling		Phys	Groundwater level (m b.g.l)	Amount of pumped water			
		рН	Diss. O ₂ (mg/l)	Redox (mV)	Conductivity (μS/cm)	Temperature (°C)		(1)
S-1	08.08.2020	8.55	0.61	-68	1 351	15.9	2.64	72
S-4	08.08.2020	7.2	1.82	-152	3 042	14.1	2.16	42
S-7	08.08.2020	7.2	0.11	-77	940	15.4	1.25	96
S-9	08.08.2020	7.56	0.2	-24	1 440	15	2.42	54
S-11	08.08.2020	7.32	4.17	90	761	15.1	4	75
S-14	08.08.2020	11.1	0.77	-340	2 220	15.7	1.9	66
S-15	08.08.2020	6.8	0.51	20	2 620	15.2	1.67	48
S-19	08.08.2020	7.33	3.69	-17	1 499	16.3	2.5	75
S-23	08.08.2020	7.54	0.99	48	749	20.1	3.18	42
S-29	08.08.2020	7.53	0.18	-80	1135	16.1	2.2	39
P-1	09.08.2020	7.35	2.18	-216	1372	15.7	2.8	45
P-2	08.08.2020	7.48	2.1	79	565	20.4	1.34	105



Well	Date of sampling		Phys	Groundwater level (m b.g.l)	Amount of pumped water			
		рН	Diss. O ₂ (mg/l)	Redox (mV)	Conductivity (μS/cm)	Temperature (°C)	. 07	(1)
P-3	09.08.2020	7.1	1.3	-41	677	17.4	1.55	120
P-4	08.08.2020	7.1	0.33	60	718	18.8	2.25	42

In total 14 groundwater samples were collected.



Figure 8: New probe S-1 – measuring basic parameters with WTW instrument

For the groundwater samples outside INCEL, the samples were collected from private wells by tying a rope to the sampling bottle and submerging the bottle inside the well to collect the sample. The bottle was then cleaned and immediately identified with the sample ID number and a sample protocol was filled with information like date, weather conditions, site description, required analyses, matrix type, sampling person and any important notes that could help to describe the sample, the procedure or the location. The collected sample was then stored in a cooling bag away from direct sunlight. This procedure was repeated for all groundwater samples from outside INCEL.



2.3.6 Sediments samples



Figure 9: Sediment sampling upstream sewage channel

The sampling of sediments was carried out 31. 7. 2020. Prior to the activities, DEKONTA's team chose the location of the samples based on the location of the sewage system outlet. In total, three sediment samples were collected, two on the River Vrbas (upstream and downstream of the channel inlet) and one on the sewer channel 2 m upstream the channel.

Samples of sediment were collected by a metal scoop into a 150 ml glass jar. The jar was immediately identified with the sample ID number and a sample protocol was filled with information such as date, weather conditions, site description, required analyses, matrix type, and sampling person. The collected samples were then stored in a cooling bag away from a direct sunlight.

2.4 Geodetic work

Geodetic works were performed on 7. 8. 2020. Between 6. 8. and 9. 8. 2020, aerial photogrammetry of the area of interest took place using UAV (Unmanned Aerial Vehicle) DJI Phantom 4 PRO.

Methodology 2.4.1

Geodetic measurement of the new S-probes and old wells coordinates were ensured by subcontracted surveyors, company GEOMARK Banja Luka, in the DKS and WGS84 system. Instrumentation: M109 - GPS Topcon Hiper for detailed measurements. Computational work was carried out in the Geus W 19.x. application. All the geodetic results were afterwards processed in the ArcGis software to obtain sampling point maps, compute surface areas and other operations.

Part of the INCEL site and its peripheral area was mapped using aerial photogrammetry. A portable light UAV (Unmanned Aerial Vehicle) DJI Phantom 4 PRO collected geodata using vertical photogrammetry images captured during a few-hours preprogrammed flight. This way obtained point cloud served for topographical output generation. Also an aerial high resolution image of the site was generated. These outputs will be used to generate the coordinates of the topsoil samples and others.



Figure 10: Geodetic survey of S-20 soil probe





Figure 11: Drone DJI Phantom 4 PRO in operation

2.4.2 Results

A total of 46 points were geodetically surveyed. VP points are used for subsequent evaluation of aerial photogrammetry.

The table below shows coordinates of the geodetic survey points.

Table 6: Geodetic coordinates

		DKS SYSTEM		0.40===4	
Point marking	Υ	х	Н	WG584	SYSTEM
S-1	6439407,8	4958885,98	158,71	17,22938	44,77184763
S-2	6439336,32	4958925,38	158,04	17,22847226	44,77219606
S-3	6439264,54	4958942,57	158,01	17,22756338	44,77234469
S-4	6439237,62	4958951,83	158,26	17,22722223	44,77242564
S-5	6439198,43	4958968,14	157,89	17,22672522	44,77256914
S-6	6439156,56	4958872,64	158,51	17,22620768	44,77170611
S-7	6439184,89	4958858,24	158,23	17,22656734	44,77157897
S-8	6439224,34	4958833,11	158,75	17,22706876	44,77135626
S-9	6439142,73	4958792,49	158,16	17,22604264	44,77098369
S-10	6439171,18	4958772,39	158,47	17,2264045	44,77080528
S-11	6438966,33	4959063,01	157,58	17,22378163	44,77340285
S-12	6438982,84	4959042,07	157,55	17,22399273	44,7732159
S-13	6439264,17	4958969,23	157,22	17,22755552	44,7725845
S-14	6439281,85	4959042,81	158,24	17,22777013	44,77324803
S-15	6439235,08	4959148,36	157,53	17,2271666	44,77419399
S-16	6439186,9	4959087,31	157,61	17,2265652	44,77364044
S-17	6439156,35	4959088,61	157,71	17,22617912	44,7736495
S-18	6439101,14	4959108,72	157,56	17,22547925	44,7738258
S-19	6439091,19	4959126,72	157,65	17,22535139	44,77398689
S-20	6439137,03	4959176,94	157,93	17,22592448	44,77444273



		DKS SYSTEM			
Point marking	Y	х	н	WGS84	SYSTEM
S-21	6439151,51	4959065,01	157,76	17,22612084	44,77343681
S-22	6439003,24	4959289,21	156,95	17,22422072	44,77544156
S-23	6439045,23	4959248,19	157,1	17,22475608	44,77507603
S-24	6439080,5	4959237,99	156,89	17,22520286	44,7749873
S-25	6439368,04	4959139,79	157,64	17,22884735	44,77412826
S-26	6439717,14	4959022,53	159,38	17,23327151	44,7731027
S-27	6439621,84	4958756,98	160,14	17,23209932	44,77070506
S-28	6439524,03	4958653,14	160,41	17,23087607	44,76976229
S-29	6438790,36	4959141,3	155,98	17,22154913	44,77409227
S-30	6438801,23	4959125,73	155,93	17,2216883	44,77395308
P1	6439177,45	4959082,54	158,33	17,22644637	44,77359678
P2	6439365,17	4959117,96	157,77	17,22881369	44,77393156
P3	6439109,57	4958895,72	158,10	17,22561131	44,77190983
P4	6439125,06	4958798,86	157,97	17,22581867	44,77103955
VP1	6439679,31	4958698,13	160,55	17,23283236	44,77018036
VP2	6439575,22	4958709,66	160,66	17,23151607	44,77027522
VP3	6438745,84	4959149,71	156,32	17,22098567	44,77416411
VP4	6438806,32	4959091,63	155,95	17,2217568	44,77364673
VP5	6438995,85	4959255,98	157,29	17,22413134	44,77514196

3 CONCLUSION

Fieldwork at INCEL was conducted in the period from 28.7. to 11.8.2020. Within this fieldwork the following number of samples were collected: 67 samples of topsoil, 99 samples from soil probes, 3 samples of sediment, 21 samples of construction materials, and 3 samples of groundwater from drinking wells located outside INCEL.

In general terms, despite the Covid-19 pandemic, the field activities were successful. All samples and other information necessary for the next steps of the project were collected. All samples were sent to ALS laboratories in Czech Republic for analyses. Results of the analyses and data evaluation will be part of the Site Assessment Report (Deliverable 2).

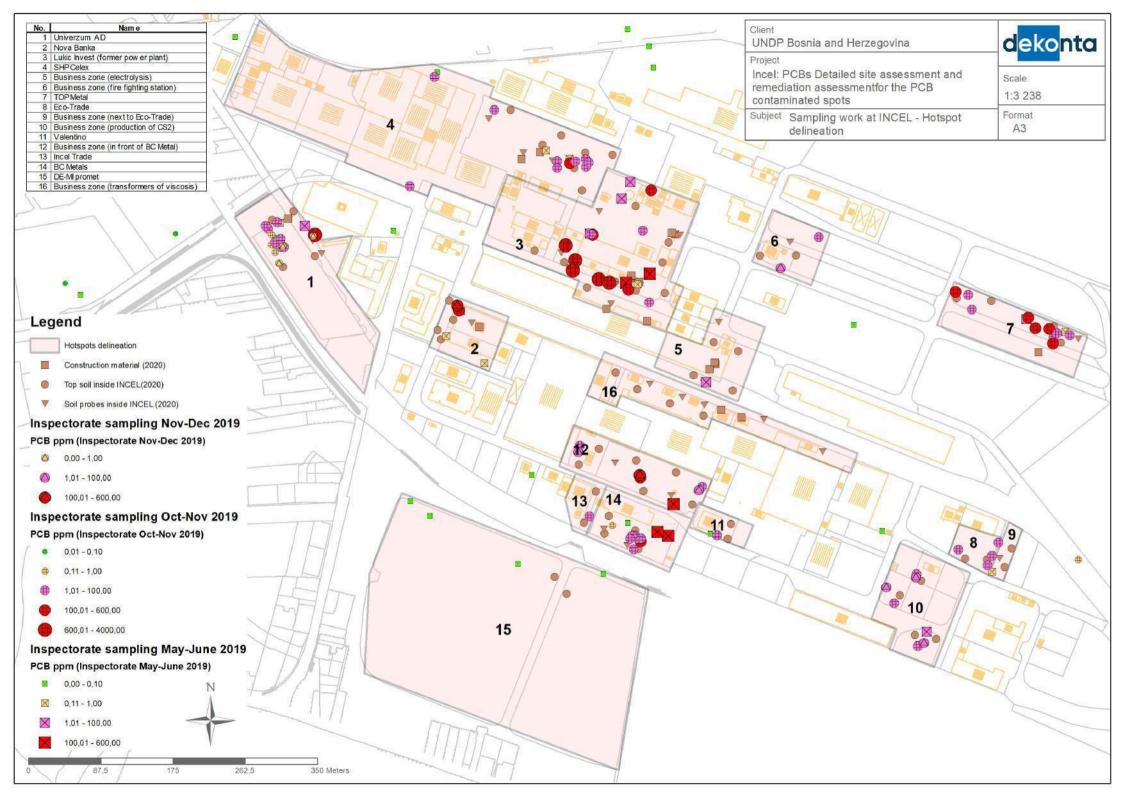
4 REFERENCES

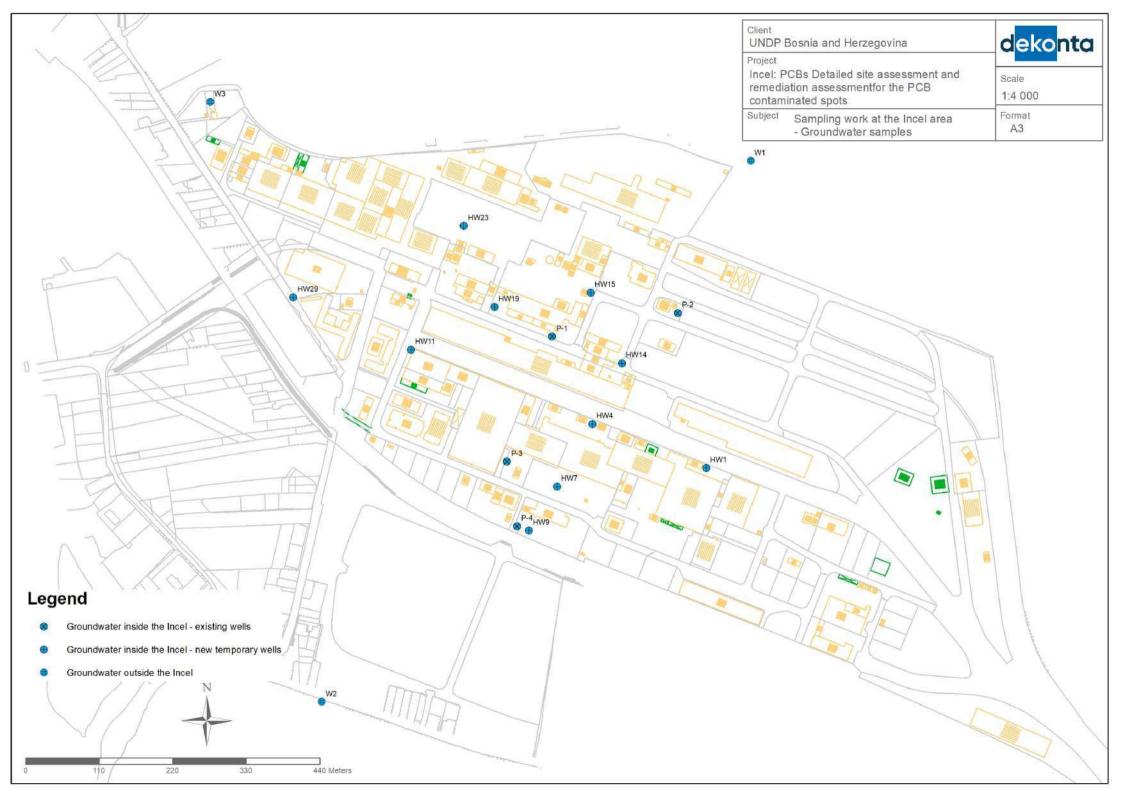
- (1) Final Report: Phase 1 of the sustainable management of the INCEL industrial zone, December 3, 2019, completed by Tauw by (authors: Boudewijn Fokke and Boris Legovic, project led by Bert Scheffer)
- (2) Record on chemical analysis of soil D. Trkulja S.P. Valentino, Public Research Institution Institute of Ecology of the Republika Srpska, December 2019 (Authors: P. Ilić, S. Račić-Milišić, N. Damjanović, S. Ilić)
- (3) Record on chemical analysis of soil Incel Trade doo, Public Research Institution Institute of Ecology of the Republika Srpska December 2019 (Authors: P. Ilić, S. Račić-Milišić, N. Damjanović, S. Ilić)
- (4) Record on chemical analysis of soil Poslovna zona ad, Public Research Institution Institute of Ecology of the Republika Srpska November 2019 (Authors: P. Ilić, S. Račić-Milišić, N. Damjanović, S. Ilić)



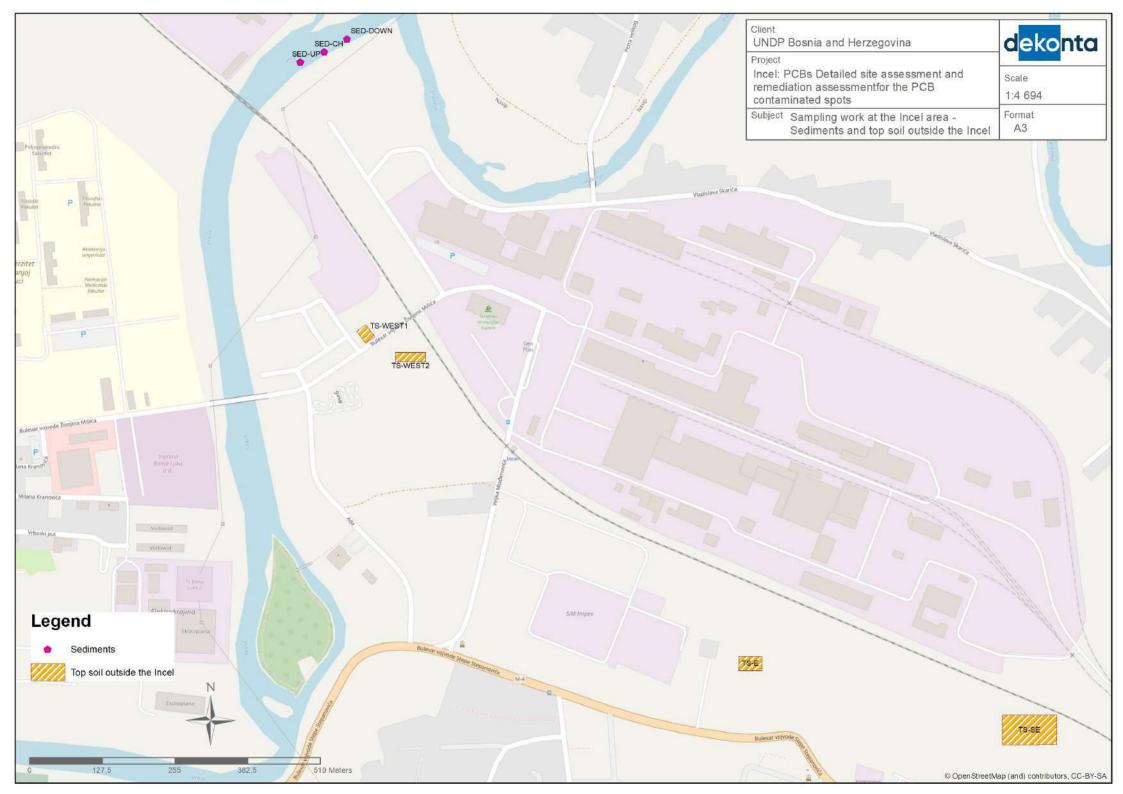
(5) Record on chemical analysis of soil - Ekvator, Hidro kop, Tempo gradnja, DE-MI promet, Public Research Institution Institute of Ecology of the Republika Srpska, December 2019 (Authors: P. Ilić, S. Račić-Milišić, N. Damjanović, S. Ilic)

Annex I: GIS map with sampling locations









Annex II: Table with all collected samples



Incel Industrial area - Final sampling plan

		Soil samples distribution (pre-selected hotspots by TAUW)												Soil samples distrib. (Inspectorate)				
Sampling matrix	Outside INCEL area	SHP Celex (inl. close vicinity)	Lukic Invest (former power plant)	Univerzum AD	Nova Banka	BC Metals	TOP Metal	Business zone (transformers of viscosis TS1-TS5)	Business zone (in front of BC Metal)	Business zone (production of CS2, dose to I-11)	Business zone (Electrolysis, dose to I-9)	Business zone (fire-fighting station close to P.2)	Business zone (beside Eco-trade)	Eco-Trade	Valentino	Incel Trade	DE-MI promet	Total
Topsoil 0-0,2 m b.g.l.		6	11	4	4	4	4	4	6	4	4	2	2	2	2	2	2	63
		TS11-TS16	TS1-TS10 and L-3A	TS43-TS46	TS39-TS42	TS23-TS26	TS47-TS50	TS31-TS34	TS17-TS22	TS57-TS60	TS35-TS38	TS51-TS52	TS53-TS54	TS55-TS56	TS27-TS28	TS29-TS30	TS61-TS62	63
Soil probes		3 S22, S23,	7	2	2	2	1	5	3	1	2	1	1					30
		S24	S15 - S21	S29, S30	S11 - S12	S9 - S10	S26	S1 - S5	S6 - S8	S28	S13, S14	S25	S27					30
0-0,2 m b.g.l. (topsoil from well/probe)		3 S22/TS,	7	2	1	2	1	5	3	1	2	1	1					29
		S23/TS, S24/TS	S15/TS - S21/TS	S29/TS, S30/TS	S11/TS	S9/TS, S10/TS	S26/TS	S1/TS - S5/TS	S6/TS - S8/TS	S28/TS	S13/TS, S14/TS	S25/TS	S27/TS					
0,2-0,8 m b.g.l.		3 S22/1,	7	2	2	2	1	5	3	1	2	1	1					20
		S23/1, S24/1	S15/1 - S21/1	S29/1, S30/1	S11/1, S12/1	S9/1, S10/1	S26/1		S6/1 - S8/1	S28/1	S13/1, S14/1	S25/1	S27/1					30
0,8-2 m b.g.l.		2 S23/2,	6 S15/2-	1	2 S11/2,	2	1	2	3	1	1	1	1					23
		S24/2	S19/2, S21/2	S29/2	S12/2	S9/2, S10/2	S26/2	S1/2, S4/2	S6/2 - S8/2	S28/2	S14/2	S25/2	S27/2					
Groundwater (collected from probes)			2 S15/GW, S19/GW	2 S29/GW, S30/GW	1 S11/GW	1 S9/GW		S1/GW	S7/GW		1 S14/GW		1 S27/3					10
Total soil/GW samples from soil probes		8	22	7	6	7	3	13	10	3	6	3	4					92
Well - Incel area (newly drilled wells)		1	2	1	1	1		2	1		1							10
		S-23	S-15, S-19 1	S-29	S-11	1		S-1, S-4	S-7		S-14	1						
Groundwater - Incel area (from existing wells/piezometers)			P1			P4			P3			P2						4
Groundwater - outside Incel area	3 W-1, W-2, W3																	3
Sediment from sewer channel	1 SED-CH																	1
River sediments (upstream and downstream)	2 SED-UP, SED- DOWN			_			_								_		_	2
Construction materials		2 CX1, CX2	7 L1 - L7	2 UN1, UN2	4 NB1 - NB4		1 TM/CM	BZT1, BZT2			BZC1 - BZC3							21
Topsoil from the agriculture land	2 TS-E, TS-SE										BLC3							2
Topsoil from the area of former WWTP (residential area)	2 TS-WEST1, TS-WEST2																	2
Total	13-WL312																	200

Annex III: Introductory working meeting minutes (prepared by UNDP)

Datum: 28 jula. 2020.godine

Mjesto: Banja Luka

Zapisnik sa sastanka u Poslovnoj zoni "Incel" sa predstavnicima kompanije "Dekonta"

Prisutni:

Vladimir Plavšić, Gradska uprava Banja Luka/Odjeljenje za inspekcijske poslove Saša Vrućinić, Gradska uprava Banja Luka/Odjeljenje za komunalne poslove Ana Štikić, Gradska uprava Banja Luka/Odjeljenje za prostorno uređenje

Dijana Pepić, Poslovna zona (PZ) Incel Banja Luka

Svjetlana Radusin, Ministarstvo za prostorno uređenje, građevinarstvo i ekologiju RS (MPUGE RS) Svetlana Topić, Ministarstvo za prostorno uređenje, građevinarstvo i ekologiju RS (MPUGE RS)

Darko Antonić, Republička uprava za inspekcijske poslove

Dragan Mijović, Inspektorat RS Dragan Nikolić, Inspektorat RS

Ondrej Urban, Dekonta
Martin Polak, Dekonta
Denis Fontana, Dekonta
Jiri Kubriht, Dekonta
Boris Legović, Dekonta
Andrea Muharemović, UNDP
Mirnesa Bajramović, UNDP

Dana 28. 07. 2020. god. u 13:00 sati, povodom nastavka realizacije aktivnosti na rješavanju problema piralena, na održiv i ekološki prihvatljiv način u poslovnoj zoni (PZ) "Incel" u Banja Luci je održan prvi radni sastanak predstavnika Gradske uprave Banja Luka, Ministarstva za prostorno uređenje, građevinarstvo i ekologiju RS, predstavnika Republičke inspekcije, Poslovne zone Incel, UNDP-a i međunarodne kompanije Dekonta.

Na početku sastanka gđa. Muharemović, UNDP projektni menadžer je dala kratki osvrt prethodnih aktivnosti izvršenih u prvoj fazi, u okviru koje je UNDP angažovao holandsku firmu "Tauw" koja je uradila preliminarnu procijenu rizika u PZ Incel, a uz to izradila i digitalnu mapu sa GSM lokacijama te dala određene preporuke. Po završetku prve faze je objavljen novi tender te je za drugu fazu projektnih aktivnosti, izabrana kompanija "Dekonta" iz Češke Republke, u kooperaciji sa lokalnom kompanijom "Ceteor". U okviru ove faze izvršiti će se detaljno uzimanje uzoraka sa većeg broja lokacija, kao i njihov transport i analiza u Češkoj Republici.

Gđa Radusin iz MPUGE RS se je ovom prilikom pozvala sve prisutne predstavnike institucija na maksimalnu saradnju sa predstavnicima Dekonte.

Nakon početnih komentara, uslijedila je prezentacija gosp. Ondrej Urbana, rukovodioca Odjela za istraživanje i remedijaciju kompanije Dekonte, koji je naveo da se početka radova planira za četvrtak, 30. 07.2020.god., a prije toga je planiran obilazak terena I prikupljanje podataka.

U pogledu PZ Incel g. Urban je naveo da postoje 2 glavna cilja ovog projekta, od kojih prvi cilj uključuje *Procjenu lokacije* gdje će se_detaljno izvršiti istraživanje glavnih 7 žarišnih tačaka "hotspot" koje su navedene u ranijem izvještaju koji je uradio "Tauw", uz dodatne četiri lokacije iz izvještaja Inspektorata. Cilj je utvrditi nivo PCB kontaminacije tla i podzemnih voda za ove hotspot tačke, a drugi cilj je odrediti prostornu distribuciju polutanata, tj. horizontalni i vertikalni pravac distribucije. Za početak će biti napravljena procjena sanacije uz procjenu svih relevantnih rizika. Specifični cilj ovog projekta je utvrditi porijeklo PCB, potom njihovu rasprostranjenost u vertikalnom i horizontalnom smislu. U ovom će procesu biti prikupljeno 200 uzoraka koji će svi biti testirani kako na PCB tako i na prisustvo nekih teških metala. Većina uzoraka će biti sa površinskog sloja zemljišta, potom će se uzeti jedan uzorak površinskih voda. Biće napravljena i Procjena rizika u sklopu Procjene lokacije, dakle prijedlog načina kako postupati sa lokacijom, tj. izvršiti će se analiza kombinacije rizika po ljude i okoliš.

U okviru drugog cilja koji obuhvata *Procjenu remedijacije (sanacije)* biće izrađena idejna rješenja za žarišne tačke ne samo na mjestima gdje koncentracija prelazi granične vrijednosti već tamo i gdje treba izvršiti procjenu rizika.

Pošto je Incel velika zona, postoje različiti receptori koji imaju drugačiji nivo osjetljivost, te se neće primjenjivati jedna granična vrijednost, već će se prema procjeni rizika receptora raditi preporuke za idejna rješenja za mjere sanacije tj. mjere skrojene po svrsi za svaku određenu lokaciju.

Dalje, g. Urban je naveo da su u sistem stavili sve okvirne informacije o zagađenosti tla (crvene zvijezde), koje označavaju hotspotove odnosno mjesta sa visokim koncentracijama PCB, ali da se ne zna njihova tačna i precizna lokacija (GPS pozicije) koje su potrebne za dalje radove u fazi dva. Dalje, g. Urban je pokazao plan uzorkovanja, koji će obuhvatiti 7 ranije identificiranih lokacija kao i dodatne 4 lokacije koje su navedene u izvještaju inspektorata.

Nakon završene prezentacije, G. Urban je zamolio prisutne predstavnike institucija za pomoć u pogledu slijedećeg:

- 1. GPS pozicije tačnih lokacija uzorkovanja tla, koje su identificirane tokom rada inspekcije u periodu od oktobra-novembra 2019. god.
- 2. Prijedlog pogodnih hidrogeoloških objekata za uzimanje uzoraka vode izvan PZ Incel
- 3. Podatke o kvalitetu zraka
- 4. Dozvole za obavljanje radova (bušenje tla)

U pogledu prve tačke tj. **GPS pozicija**, gđa Muharemović je dodala da je krajem godine došla informacija da postoje rezultati novih mjerenja, koji su distribuirani, ali da su potrebni podaci za precizne koordinate tačaka uzorkovanja koje Projekat ne posjeduje. U tom smislu zamoljeno je Odjeljenje za inspekcijske poslove Grada Banja Luku, po čijem inspekcijskom nalogu su rađene te analize da dostavi ove podatke Kompaniji Dekonta. Prisutni predstavnik, G. Plavšić iz GU Banja Luka- Odjeljenje za inspekcijske poslove je rekao da on lično ne posjeduje te podatke, jer je njegova kolegica-inspektor samostalno vodila postupak i ne vidi načina kako da dođe do njih, ali da Institut za ekologiju i zaštitu ima podatke. Nakon kraće diskusije u vezi ove tačke zaključeno je da se konsultanti pismeno obrate (putem e-maila) radnoj grupi u cilju dobivanja podataka. Gđa Muharemović je podsjetila na sporazum o saradnji sa Gradom Banja Luka u kome je navedeno da će predstavnici radne grupe pružiti svu potrebnu pomoć u okviru svojih nadležnosti na terenu, tj. da će radna grupa pomoći konsultantu da stupi u kontakt sa svim relevantnim učesnicima. G. **Muharemović je zaključila da se konsultanti trebaju obratiti pismeno**

Odjeljenju za inspekciju, a g. Legović je dodao da su podaci prikupljeni na osnovu naloga Inspekcije, odnosno da oni moraju biti negdje u posjedu inspekcije. Gđa. Radusin iz MPUGE RS je također navela da će pokušati dobiti nalaze od Instituta.

U pogledu druge tačke tj. prijedloga pogodnih hidrogeoloških objekata za uzimanje uzoraka , G. Urban je naveo da se u ovom period planira prikupiti 16 uzoraka podzemnih voda unutar PZ "Incel", plus uzimanje uzoraka sa tri dodatne lokacije izvan PZ Incela za koje je od prisutnih zatražen adekvatan prijedlog takvih pogodnih hidro-geološki objekata (privatni ili javni bunari). Nakon kraće diskusije, zaključeno je da prisutni nemaju konkretne prijedloge za ove objekte, već da konsultanti konsultuju hidrogeološke karte uz napomenu da je 2015. godine urađen Regulacioni Plan poslovne zone, u kome trebaju biti hidrogeološke karte.

U pogledu **treće tačke, tj. podataka o kvalitetu zraka**, **zaključeno** je da postojeće analize kvaliteta zraka koje se vrše na pet lokacija ne obuhvataju analizu na organske polutante niti teške metale, te da nije moguće obezbijediti takve podatke.

Kada je u pitanju posljednja, tj. četvrta tačka, konsultant je postavio pitanje da li je potrebno dobiti prethodne dozvole ili saglasnosti za radove (bušenje I sl,) koji moraju biti izvršeni u cilju prikupljanja uzoraka, obzirom da su neke hotspot lokacije u privatnom vlasništvu. Na ovo pitanje predstavnica Poslovne zone je odgovorila da su dozvoljavali u prethodnom periodu sve radove po nalogu inspektora ali da za privatne subjekte ne može ništa potvrditi sa sigurnošću. Predstavnici MPUGE RS, Republičke Inspkecije te UNDP su dali prijedlog da poslovna zona iskoristi svoj položaj i uticaj upravljača i urgira kod svih subjekata sa ciljem rješavanja ovog problema. Zaključeno je da će poslovna zona poslati službeni dopis (srijeda 29. 07.2020) svim privrednim subjektima gdje će tražiti postupanje odnosno dozvolu pristupa i uzimanja uzoraka na lokacijima. G. Urban je predložio da se u interesu vremena prve lokacije uzimanja uzoraka obuhvate javni dio poslovne zone, a potom da se proces proširi na druge.

Na kraju sastanka, G. Urban je pozvao prisutne ako su zainteresovani da budu prisutni poslovima uzorkovanja. Zaključeno je da kada bude poznato kad i kako će se vršiti uzorkovanje (dinamički plan), da će se takva informacija poslati predstavnicima radne grupe jer je u naredne tri sedmice ključna komunikacija između svih aktera.

Annex IV: Photo-documentation of construction materials sampling

Annex IV: Photo-documentation of construction materials sampling



Figure 1: SHP Celex (samples CX-1, CX-2)



Figure 3: Lukic Invest (former power plant, sample L-1)



Figure 4: Lukic Invest (former power plant, samples L-3 from outside on the right, L-4 and L-5 from inside the building on the right side)



Figure 2: Two transformer rooms at Lukic Invest (former power plant, samples L-1, L-2)



Figure 5: Lukic Invest (former power plant, sample L-3)



Figure 6: Lukic Invest (former power plant, sample L-4 from under the metal transformers structure, L-5 from the wall behind it)



Figure 7: Lukic Invest (former power plant, sample L-5)



Figure 8: Lukic Invest (former power plant, sample L-6)



Figure 9: Lukic Invest (former power plant, sample L-6)



Figure 10: Lukic Invest (former power plant, sample L-7)



Figure 11: Universum (samples UN-1 on the left (out of picture) and UN-2 on the right behind the conteiners



Figure 12: Universum (sample UN-1)



Figure 13: Universum (sample UN-2)



Figure 14: Nova Banka (sample NB-1)



Figure 15: Nova Banka (sample NB-2)



Figure 16: Nova Banka (sample NB-3)



Figure 17: Nova Banka (NB-4)



Figure 18: Business zone - transformers of Viscosis (sample BZ-T-1)



Figure 19: Business zone - transformers of Viscosis (sample BZ-T-2)



Figure 20: Business zone - transformers of Viscosis (sample BZ-T-2)



Figure 21: Business zone - Electrolysis, center (sampes BZ-C-1 from inside a transformer room on the left and BZ-C-2,3 from inside the main hall with entrance on the right)



Figure 22: Business zone - Electrolysis, center (sample BZ-C-1)



Figure 23: Business zone - Electrolysis, center (sample BZ-C-2)



Figure 24: Business zone - Electrolysis, center (sample BZ-C-2)

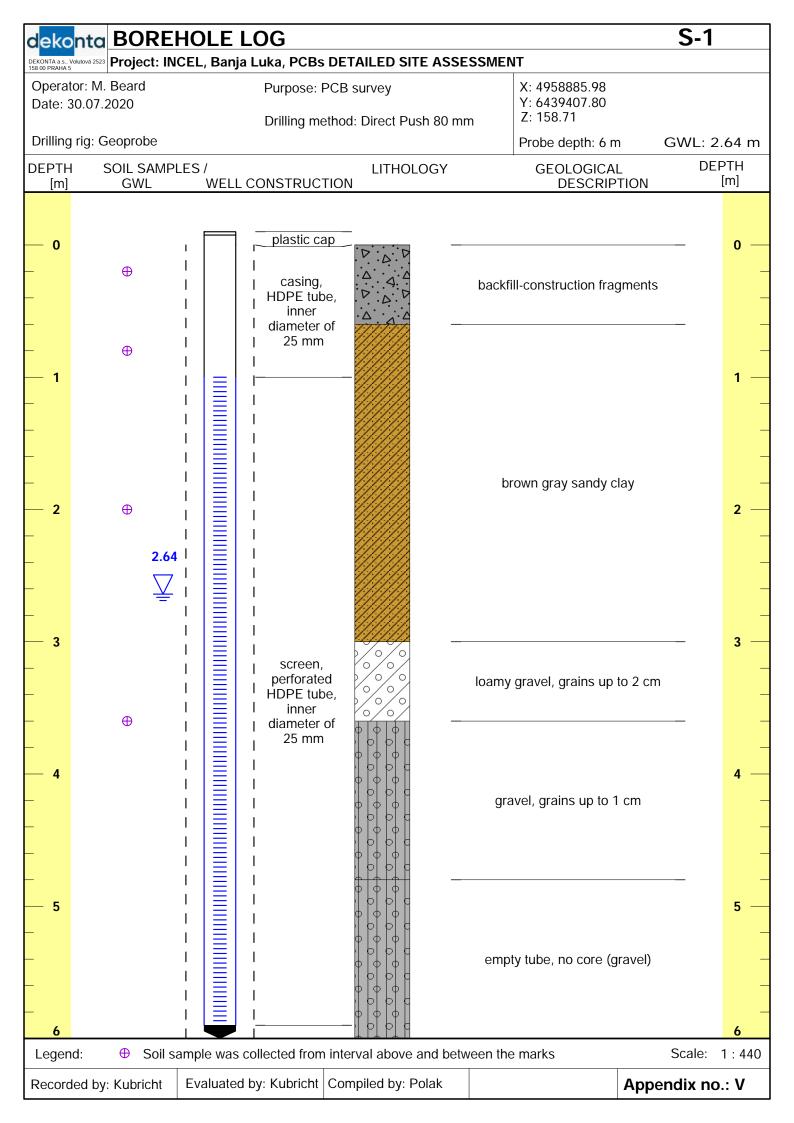


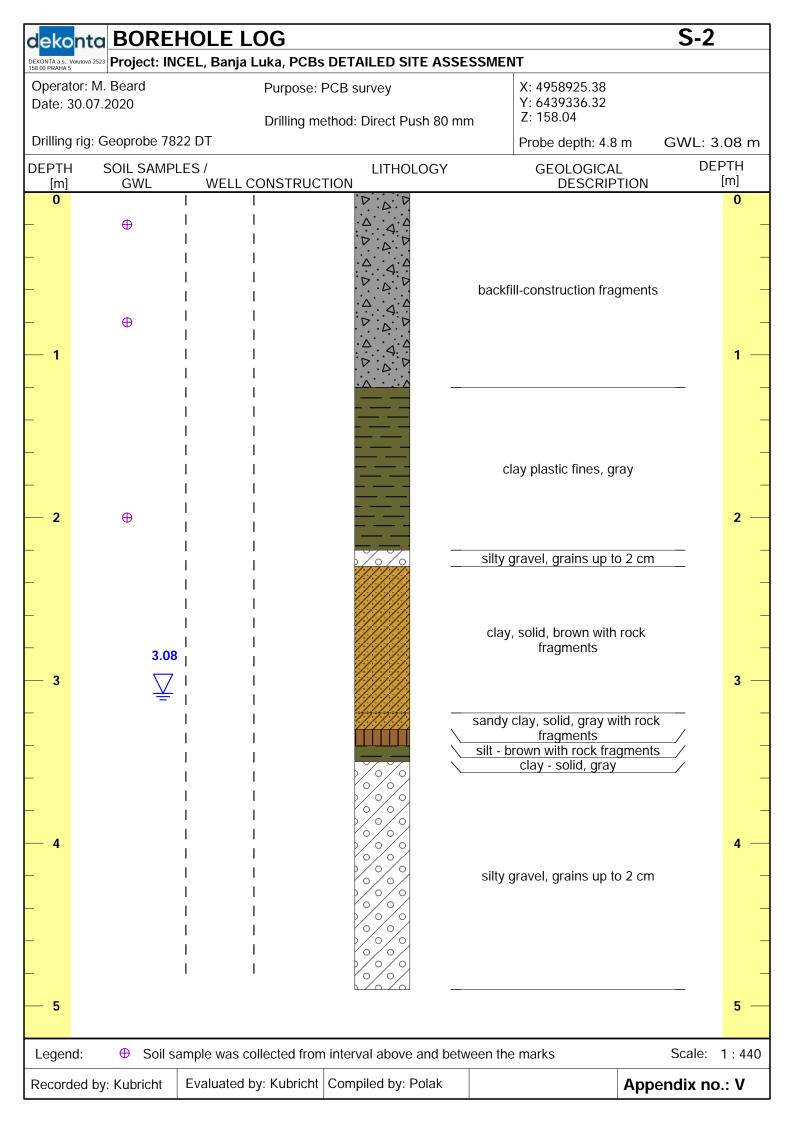
Figure 25: Business zone - Electrolysis, center (sample BZ-C-2)

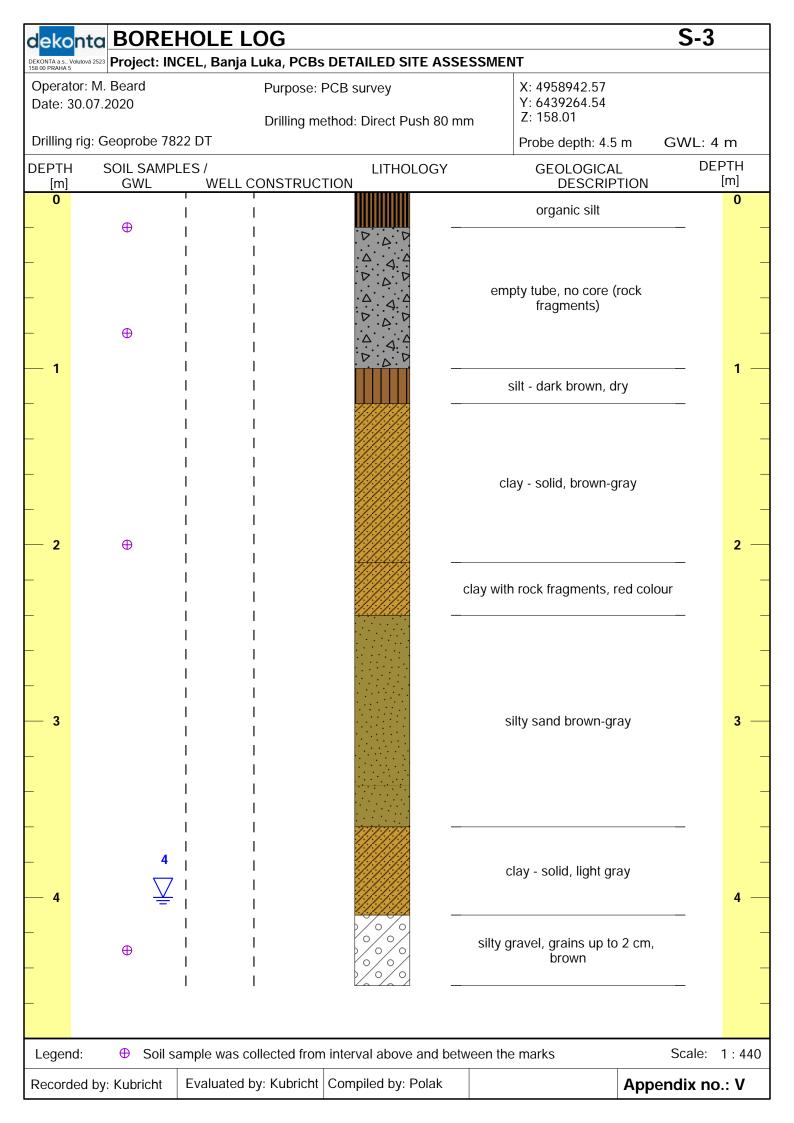


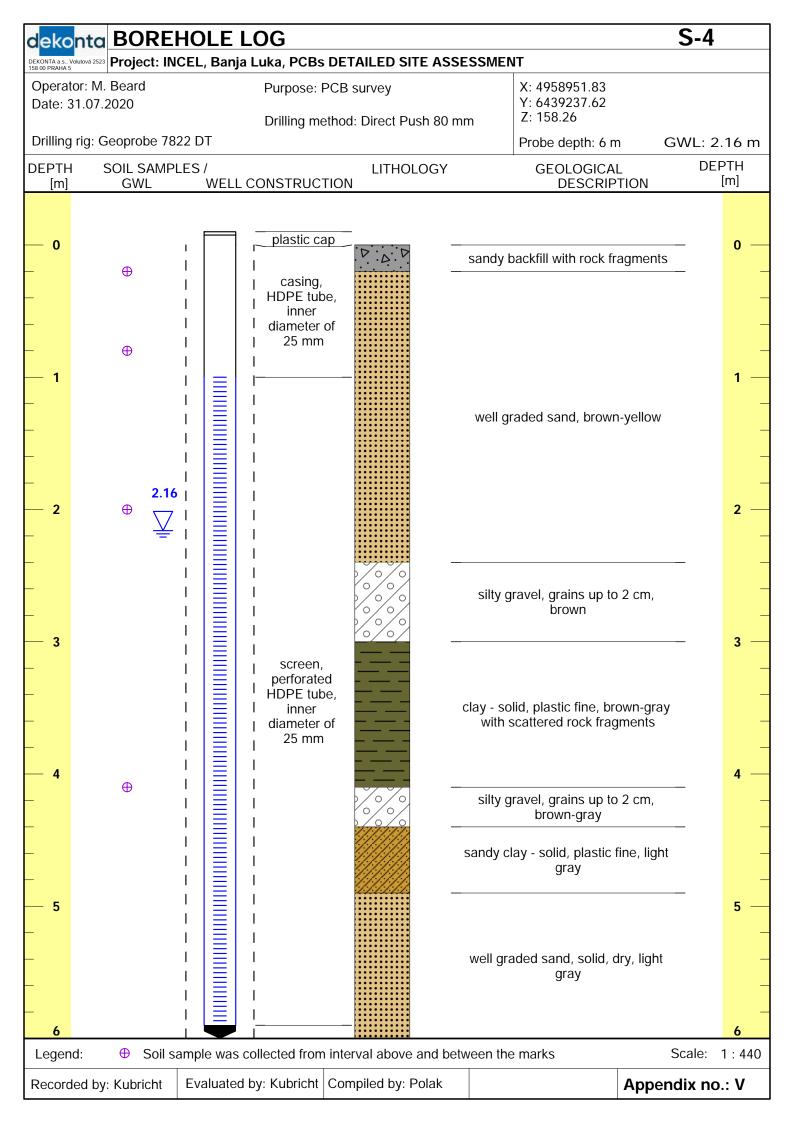
Figure 26: Business zone - Electrolysis, center (sample BZ-C-3)

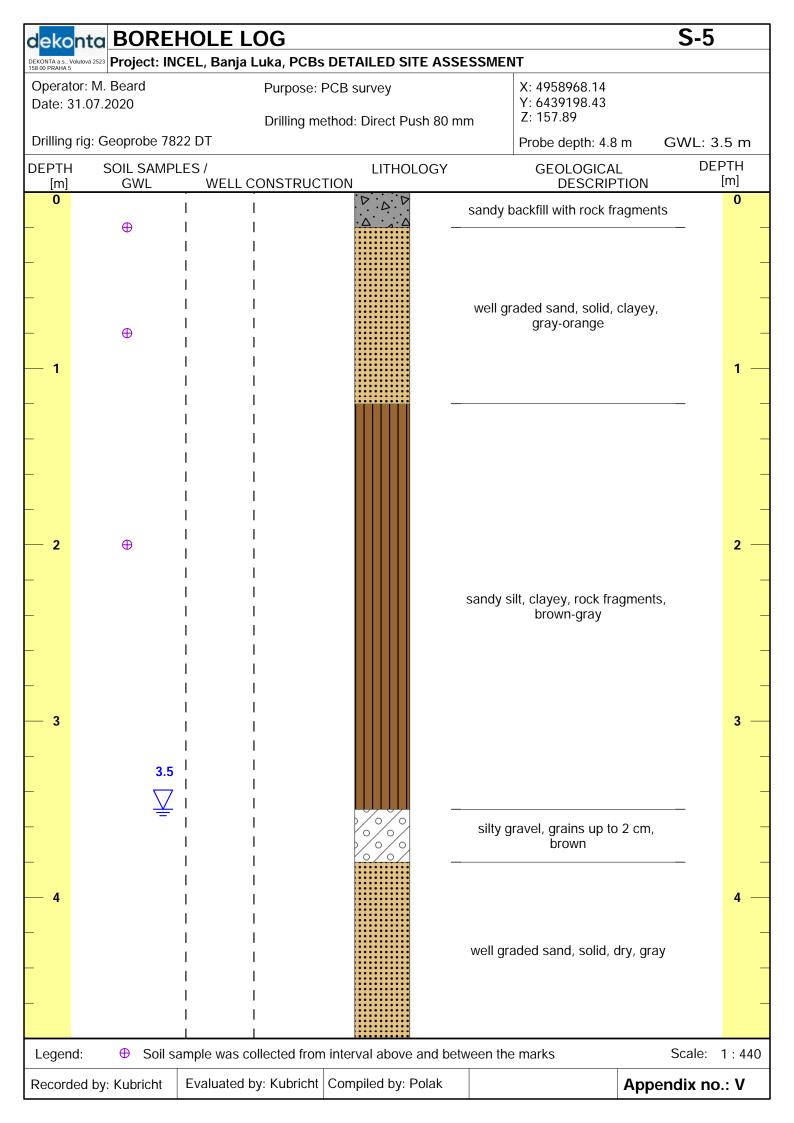
Annex V: Borelogs with indication of sampled horizon, the organoleptic observations, groundwater level, etc.

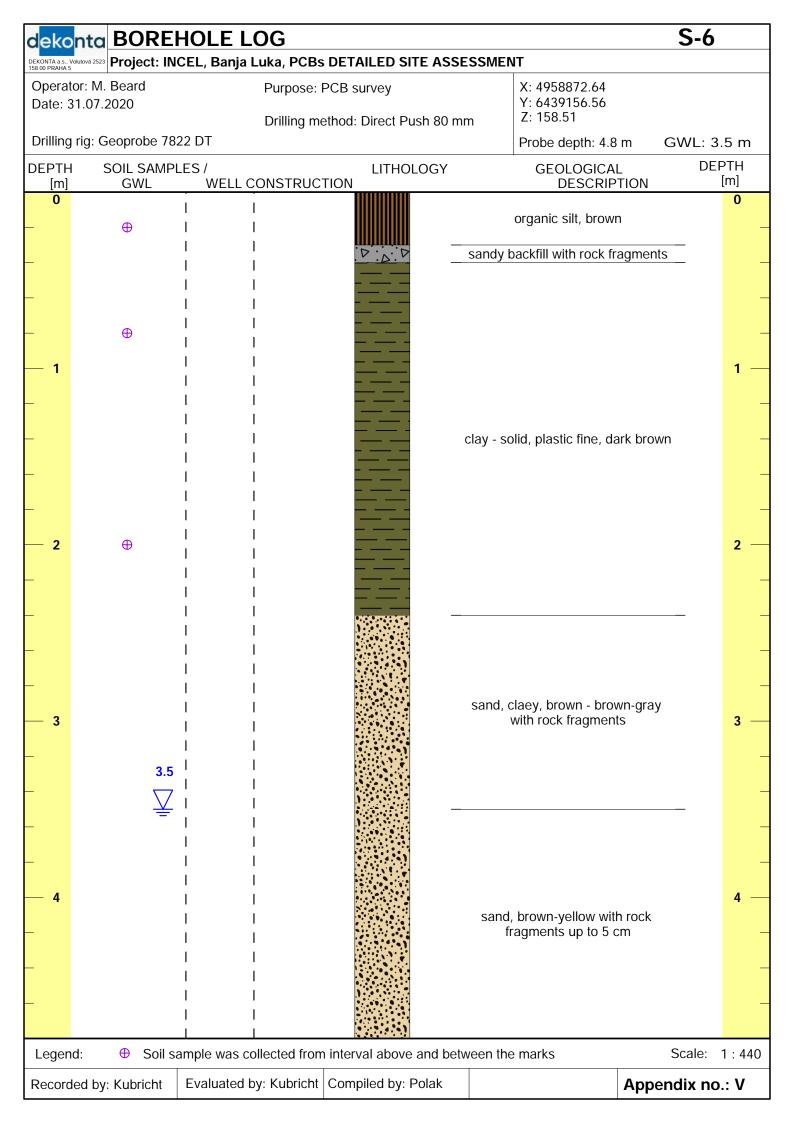


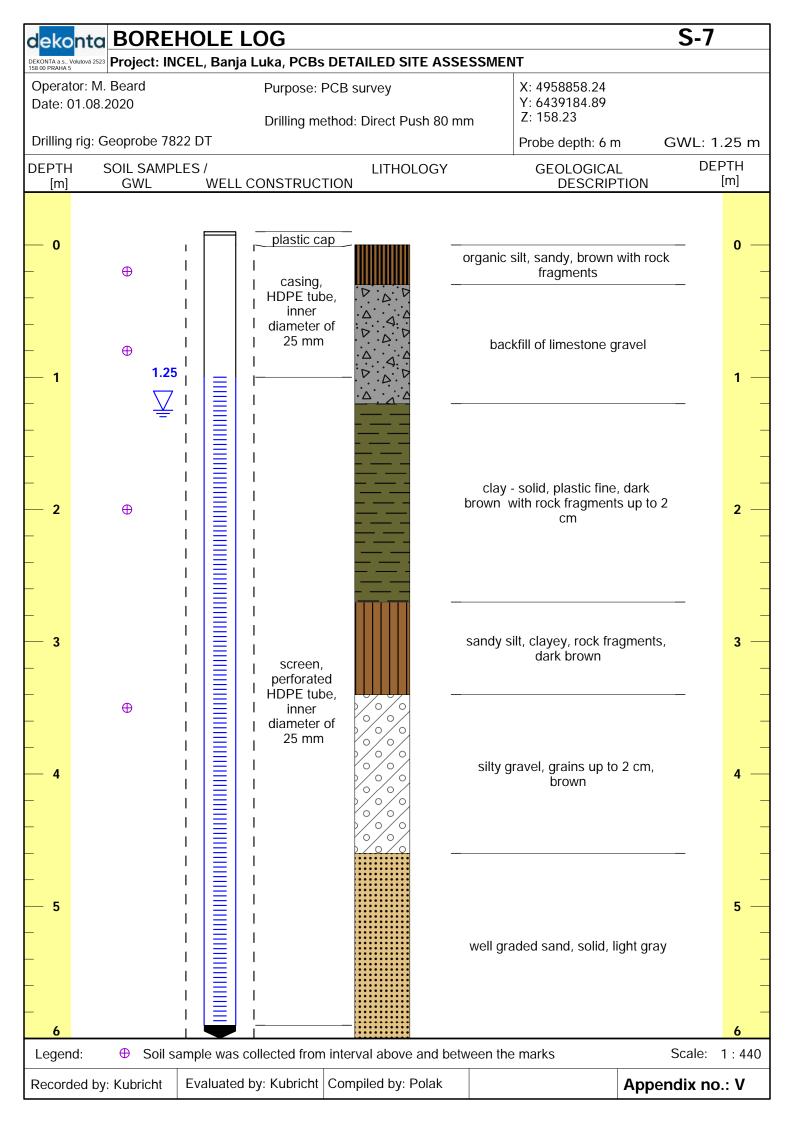


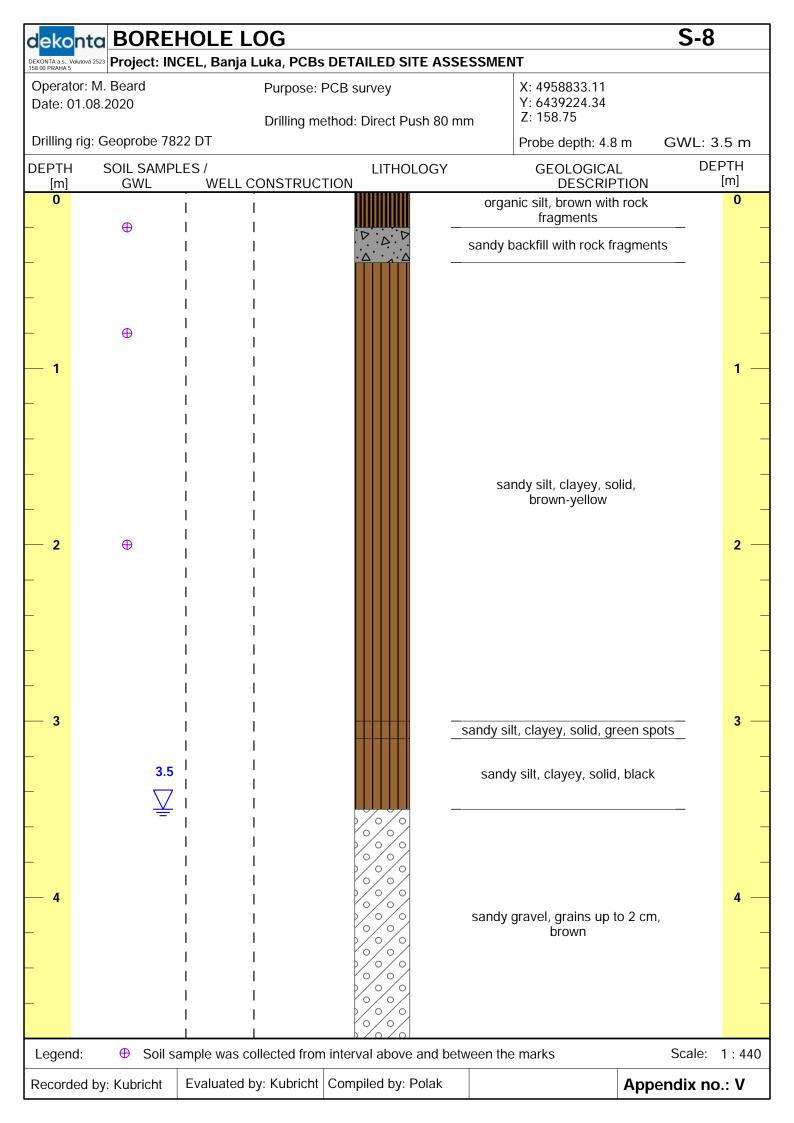


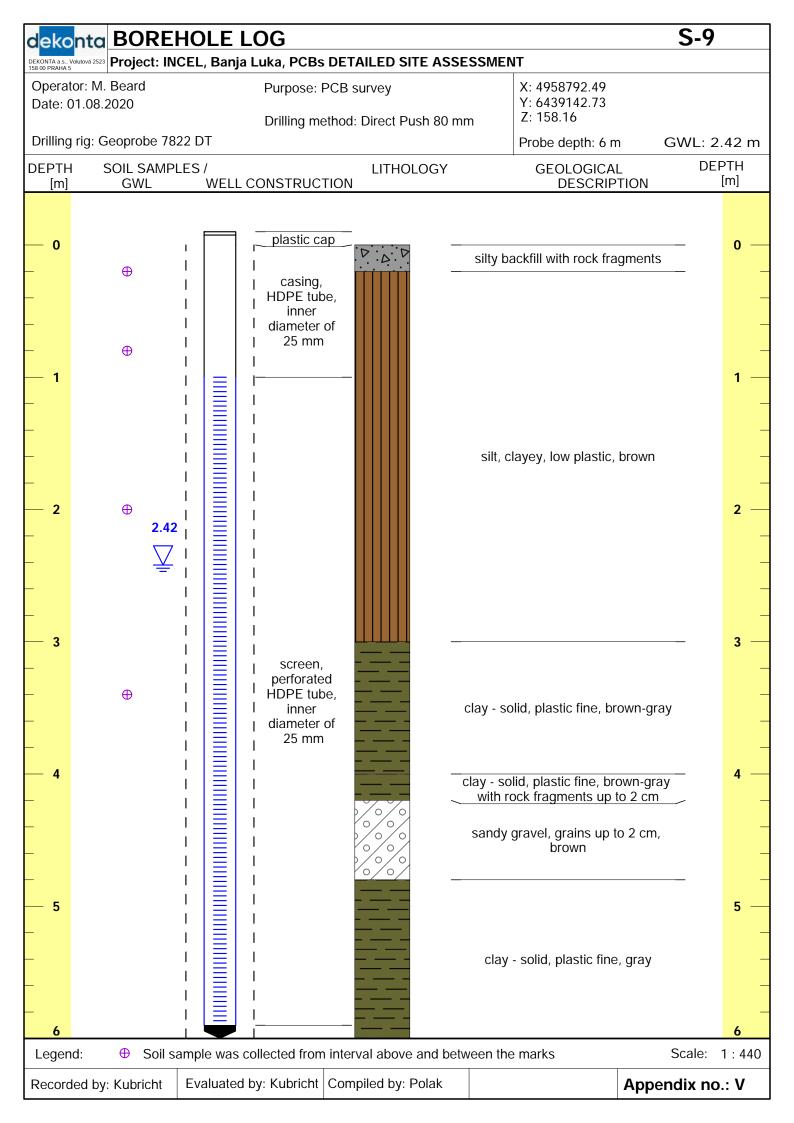


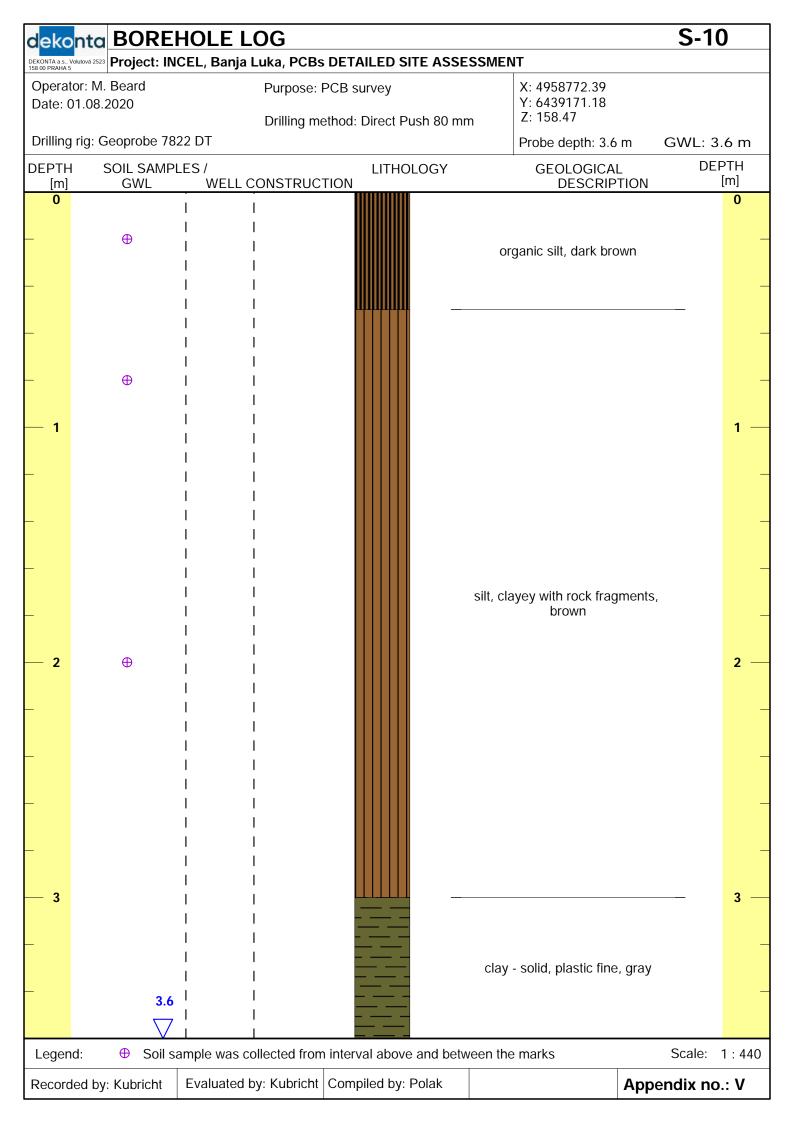


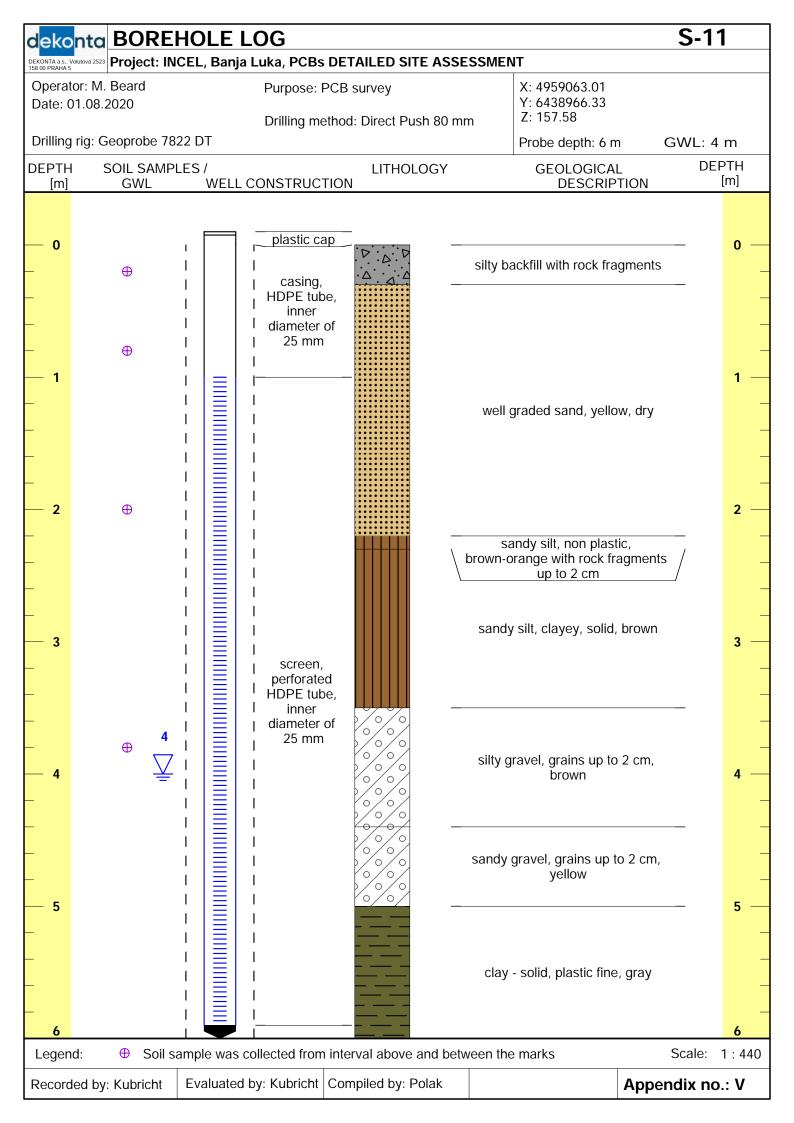


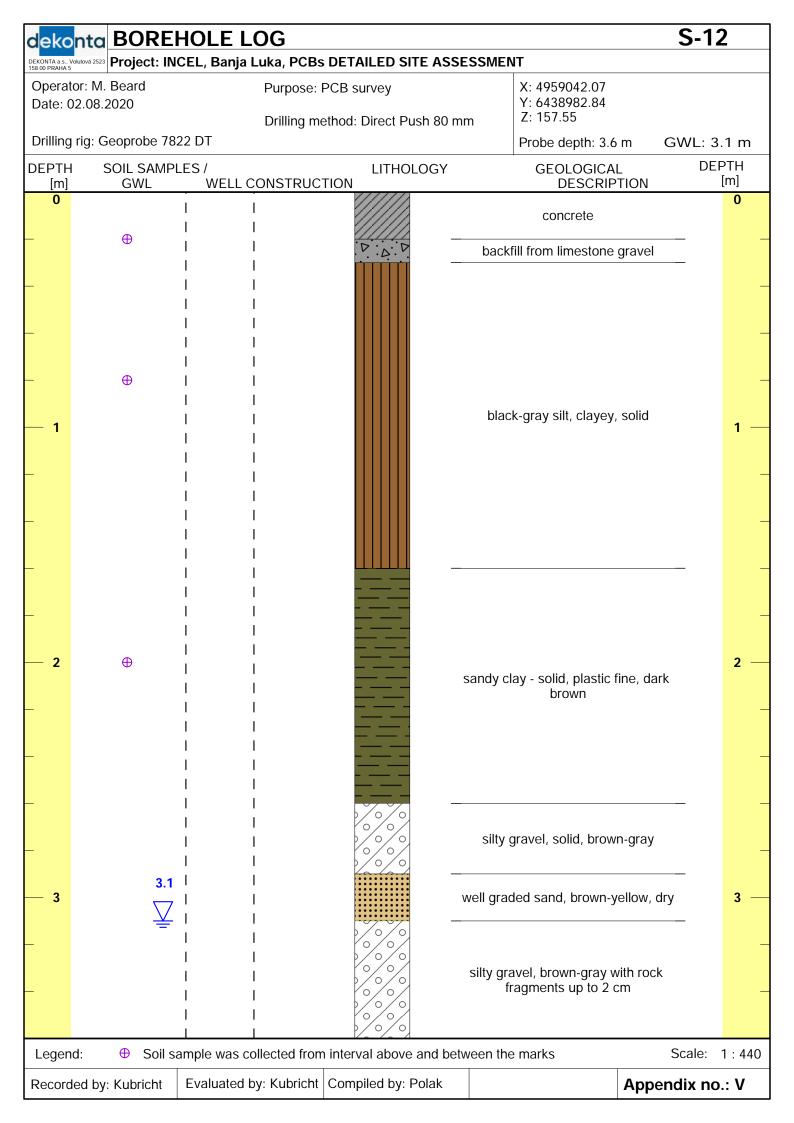


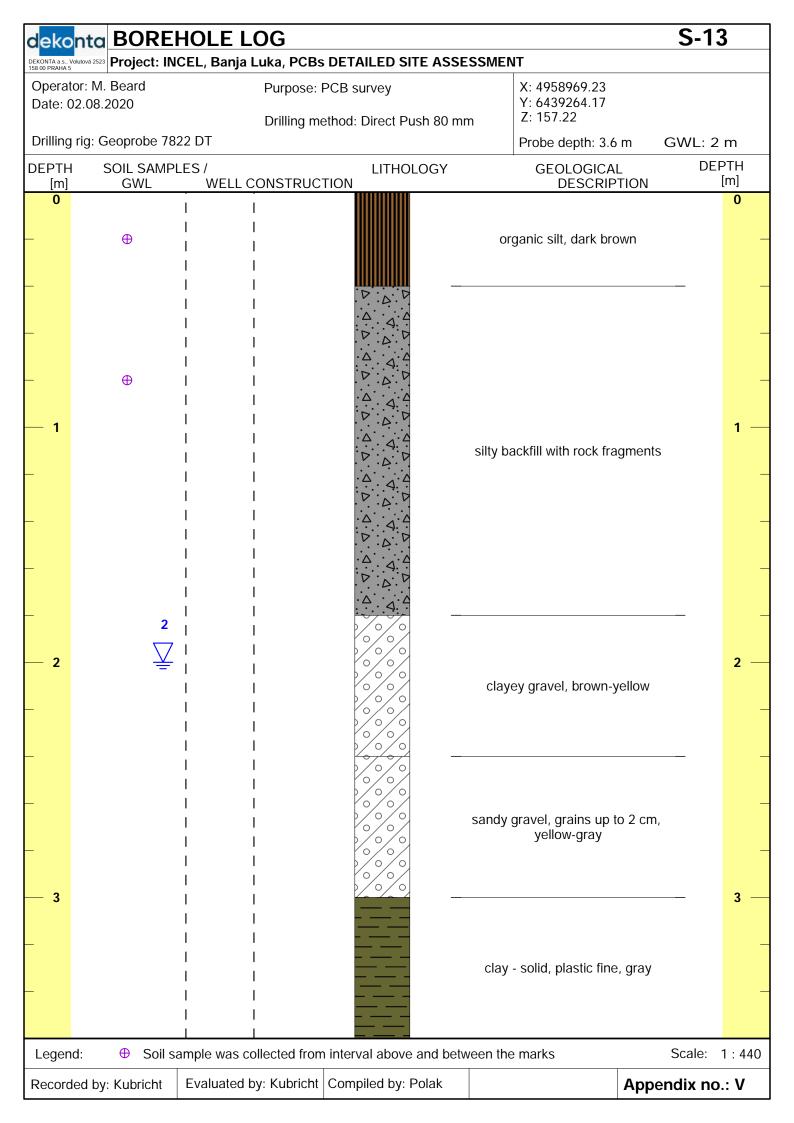


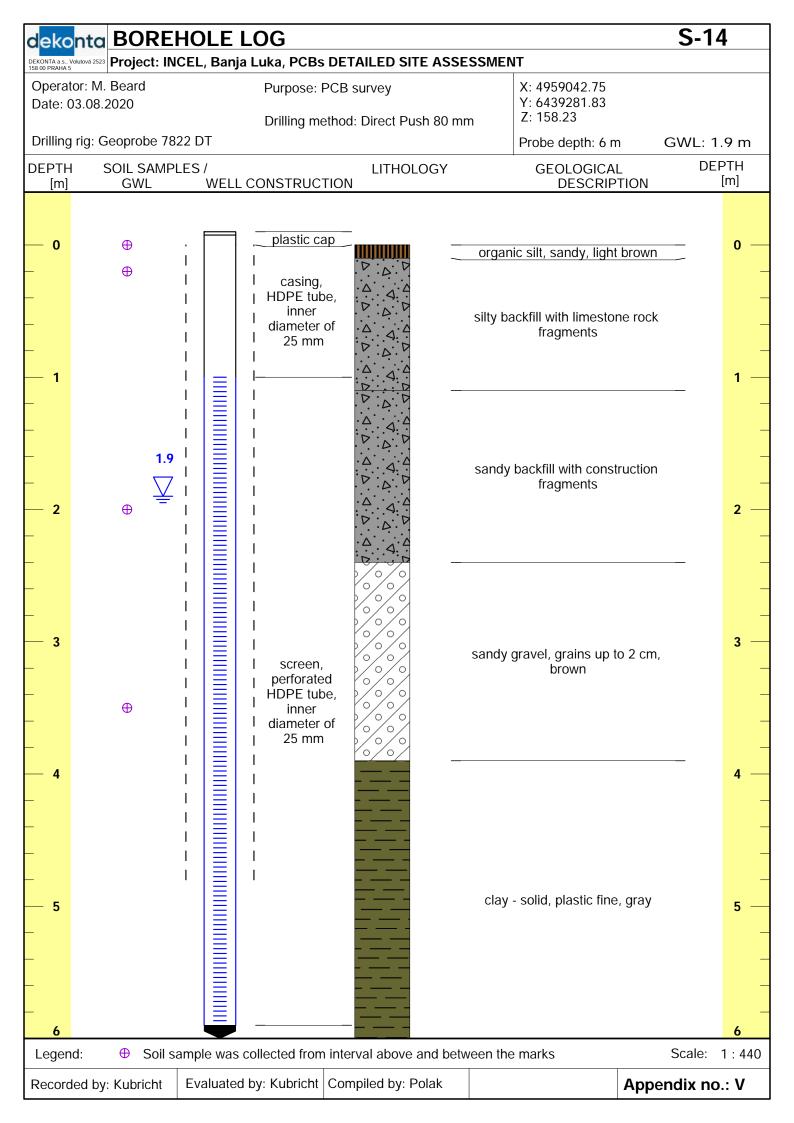


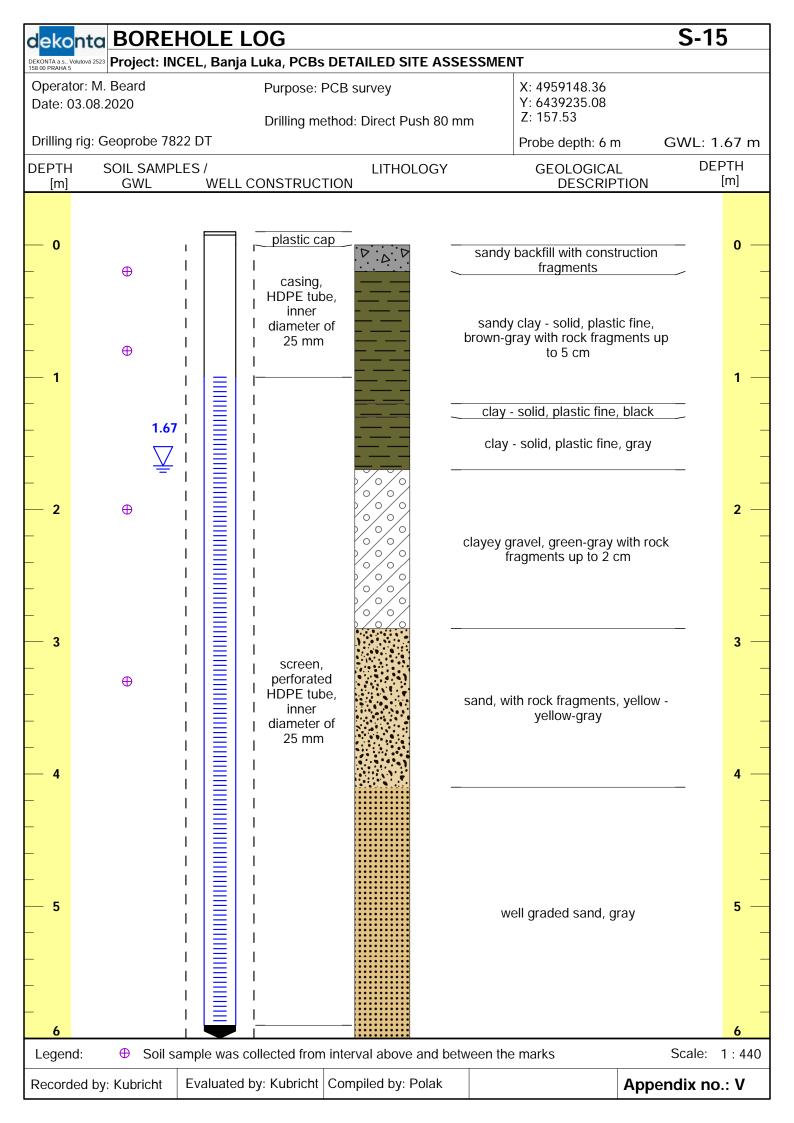


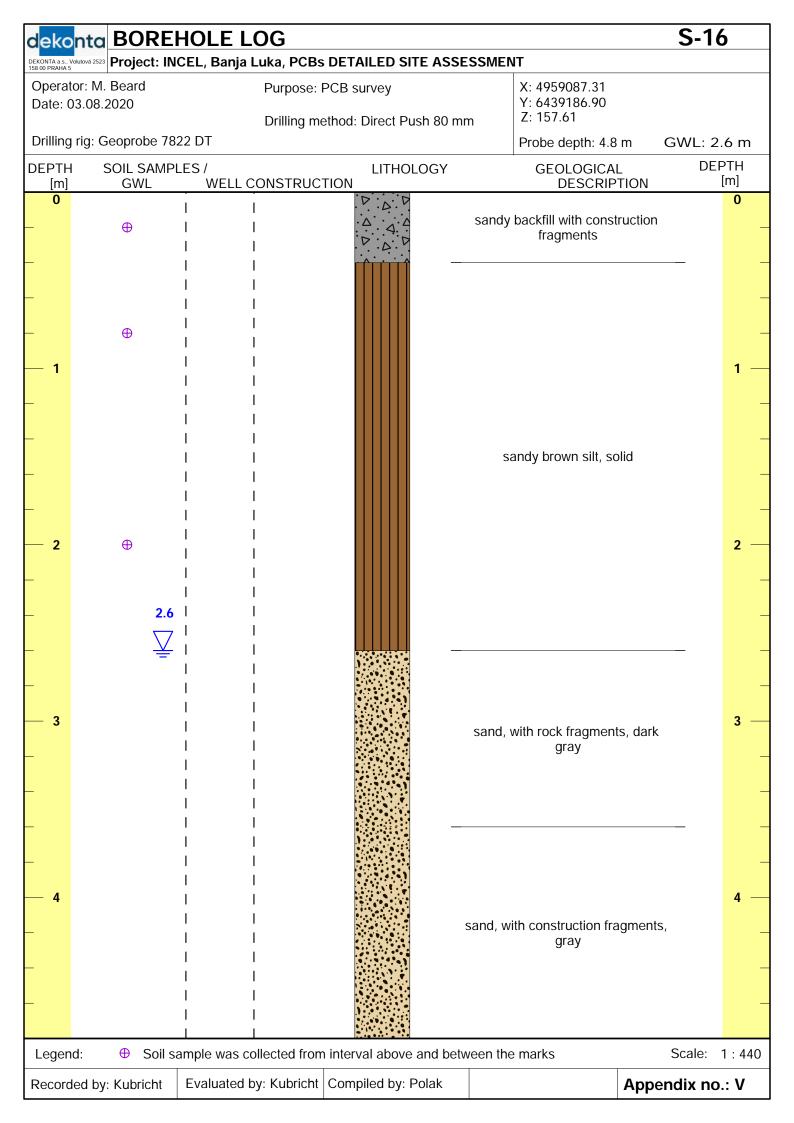


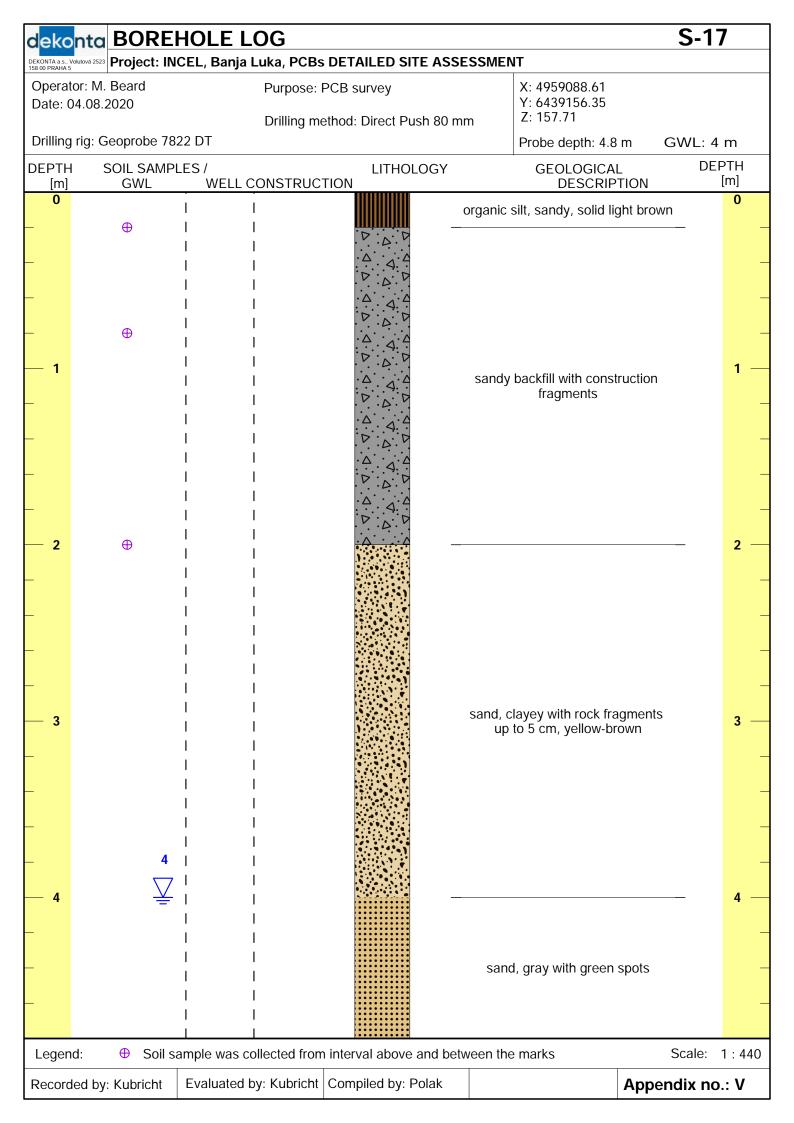


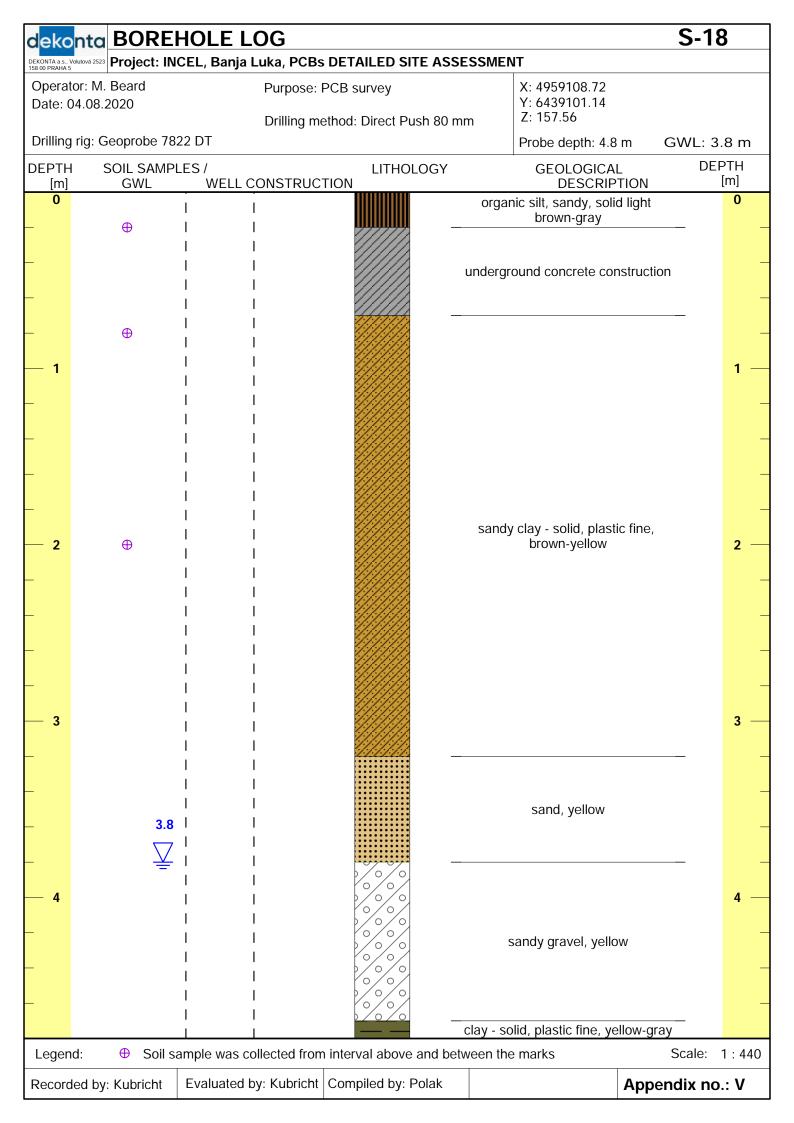


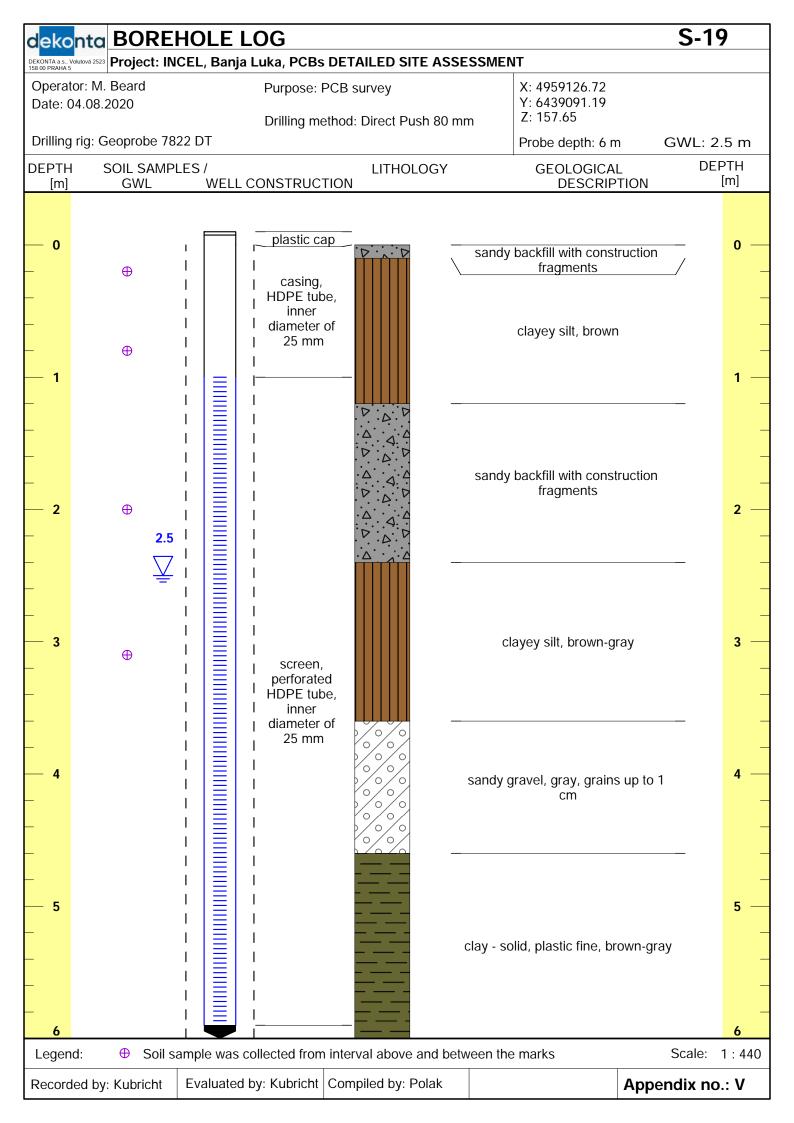




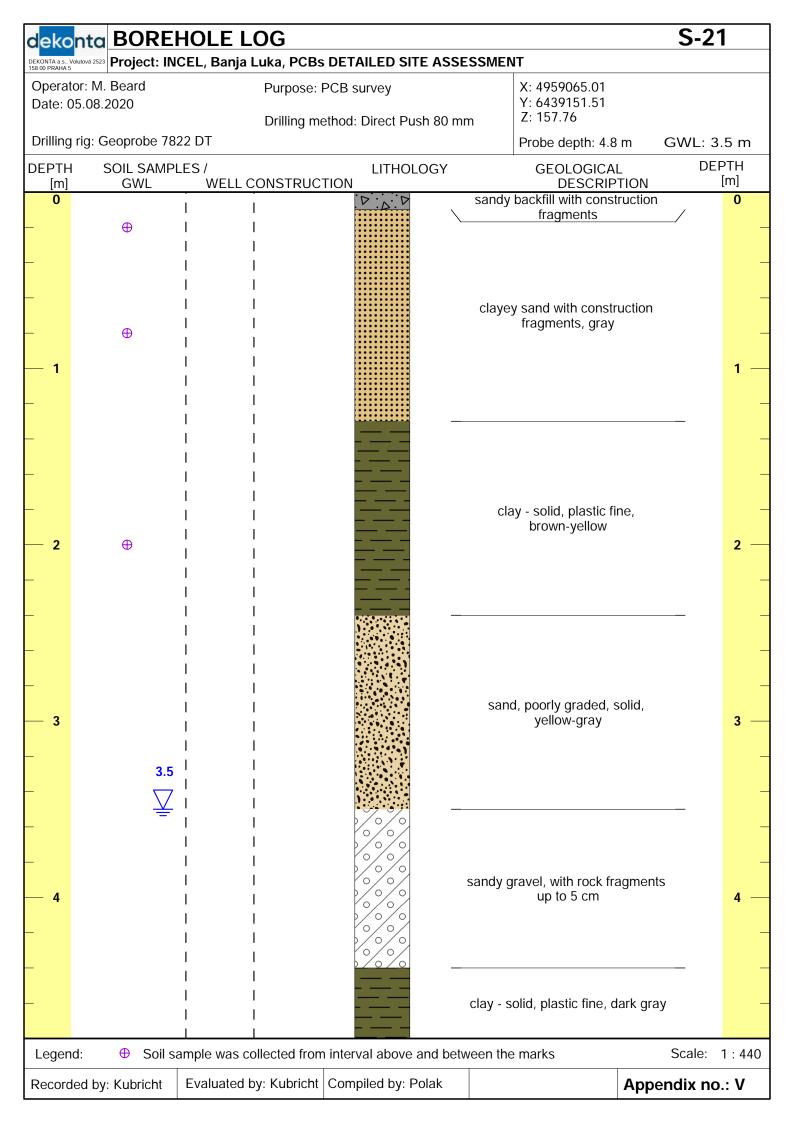


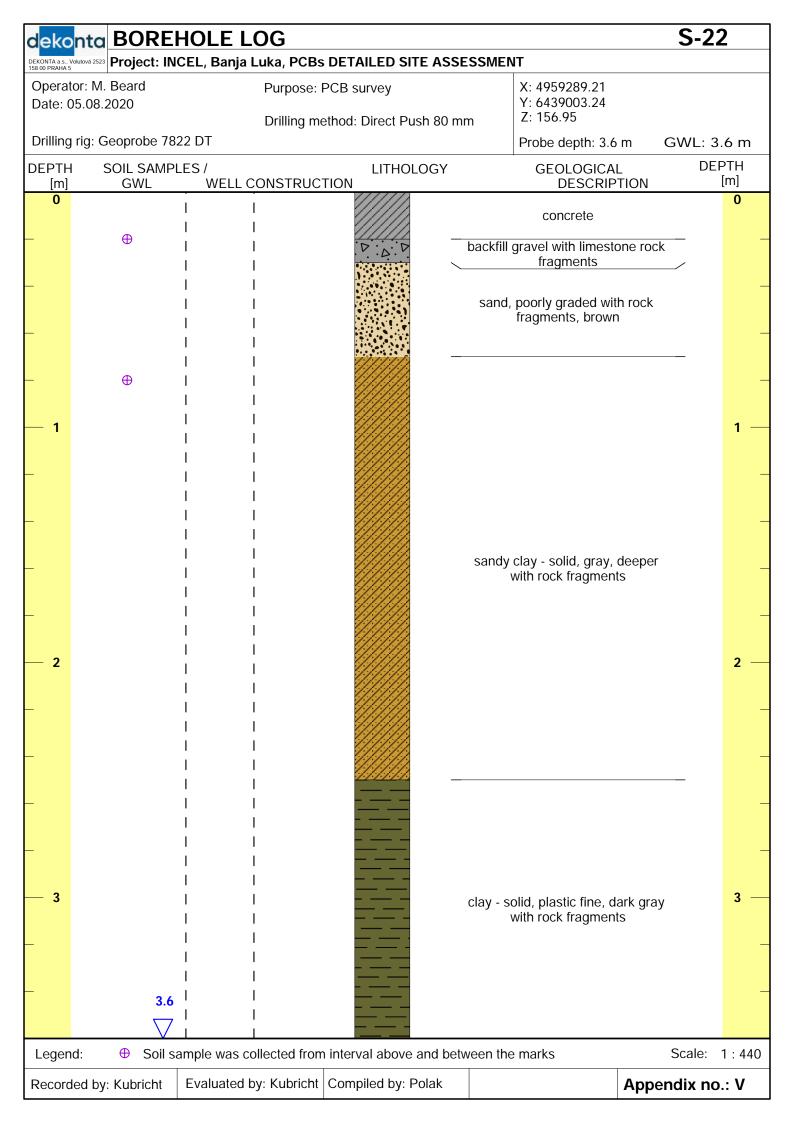


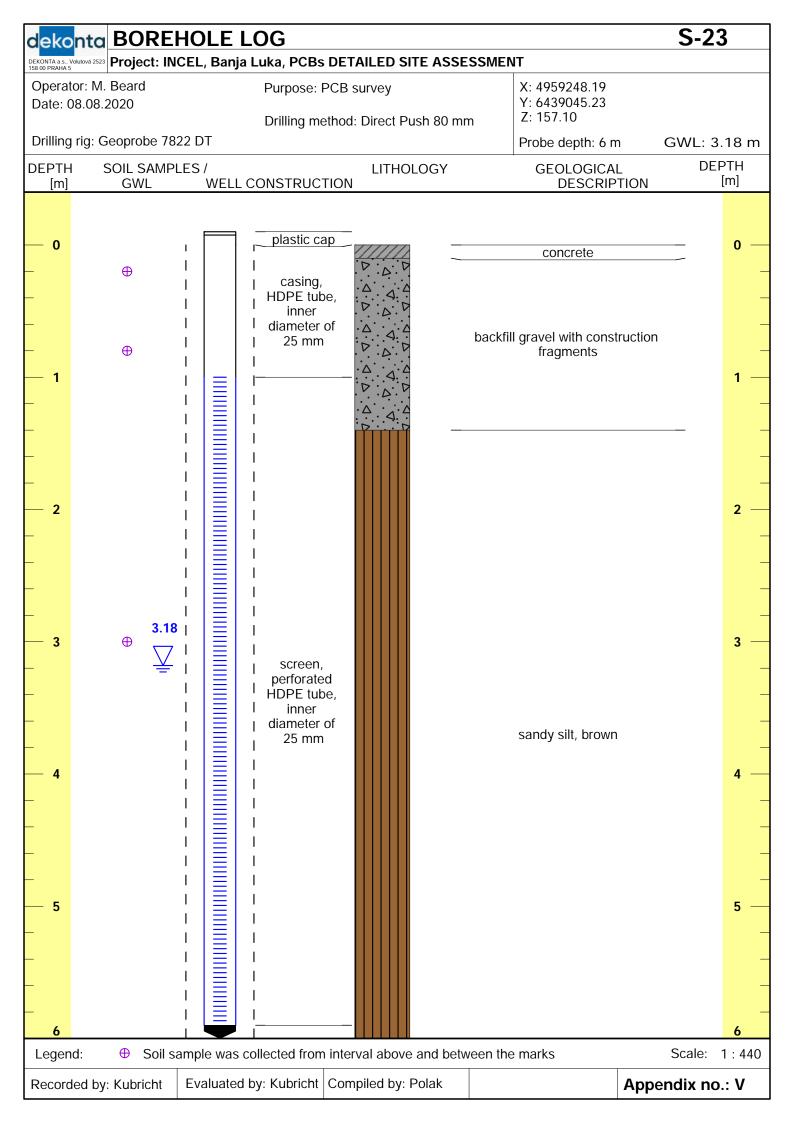


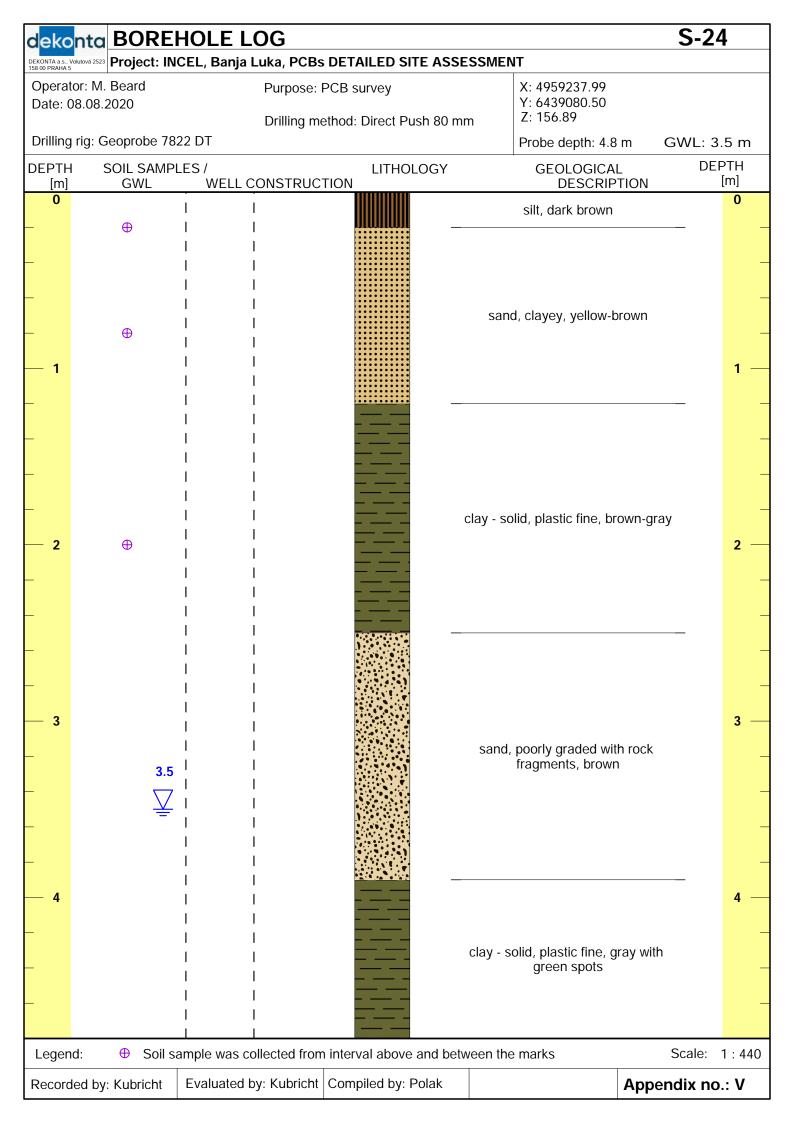


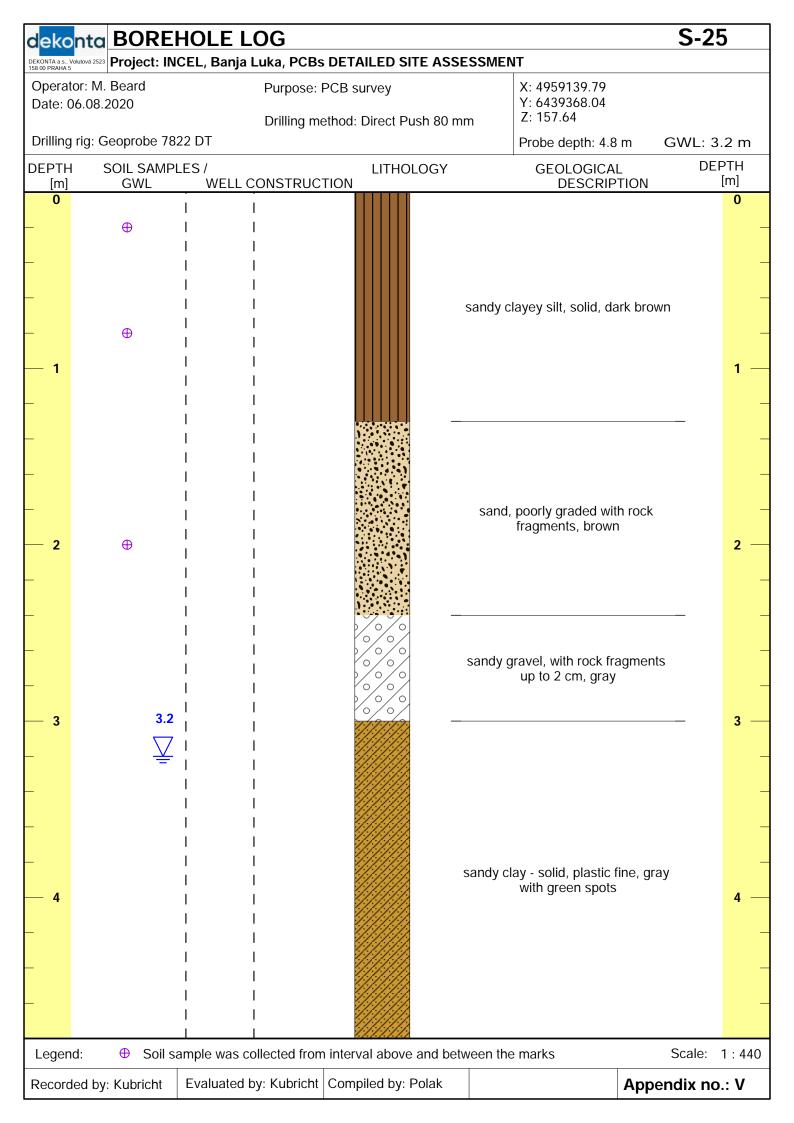
d <mark>eko</mark> nt	BORE	HOLE LOG	S-2	0	
		CEL, Banja Luka, PCBs DETAILED SITE ASSESSMENT			
Operator: Date: 04.0		Purpose: PCB survey X: 4959176.94 Y: 6439137.03			
		Drilling method: Direct Push 80 mm Z: 157.93			
Drilling rig	: Geoprobe 782	Probe depth: 4.8 m			
DEPTH [m]	SOIL SAMPL GWL	ES / LITHOLOGY GEOLOGICAL WELL CONSTRUCTION DESCRIPTION		PTH [m]	
0	\oplus	silt, sandy, light brown-gray construction fragments	with	0	
-		clay - solid, plastic fine, dark	gray		
_					
	\oplus	clay - solid, plastic fine, light	clay - solid, plastic fine, light yellow		
_ 1				1 -	
-		sandy clay - solid, plastic f	ine,		
- 2				2 -	
- - 3		I I I I I I I I I I I I I I I I I I I	grains	3 -	
– 4				4 -	
	4.8				
Legend:	⊕ Soil sa	imple was collected from interval above and between the marks	Scale:	1 : 44	
	by: Kubricht	Evaluated by: Kubricht Compiled by: Polak	ppendix no		

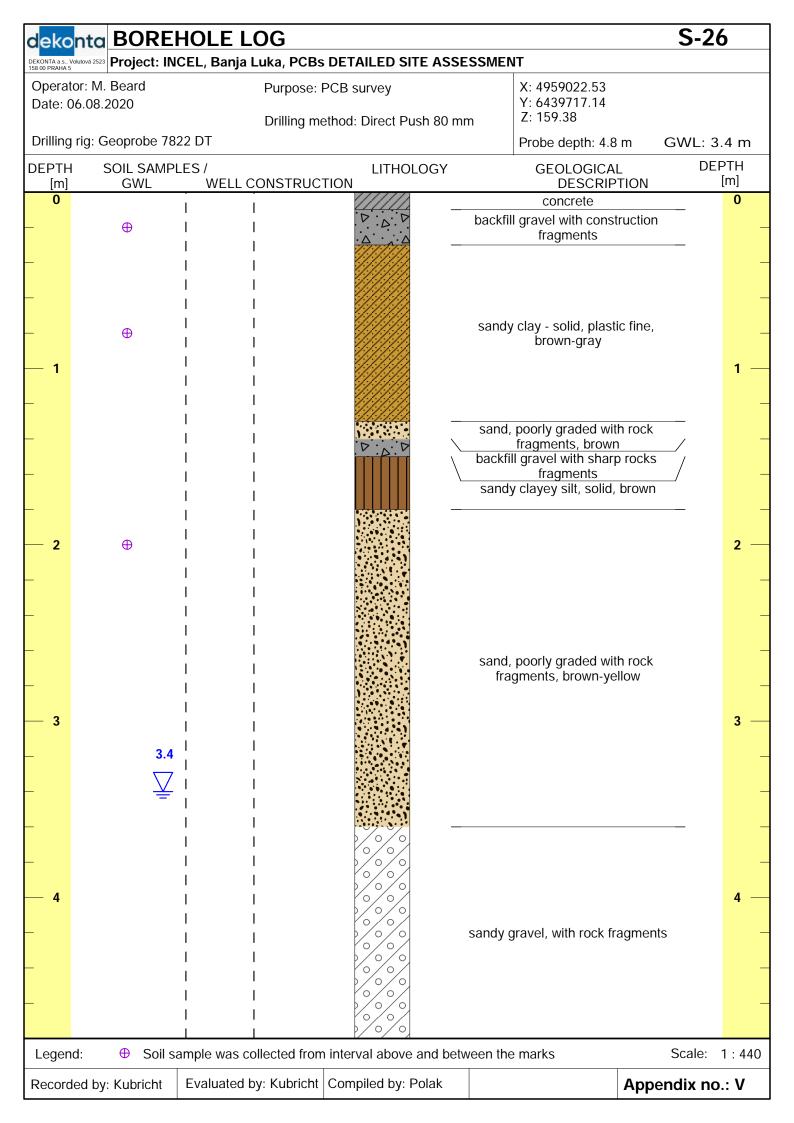


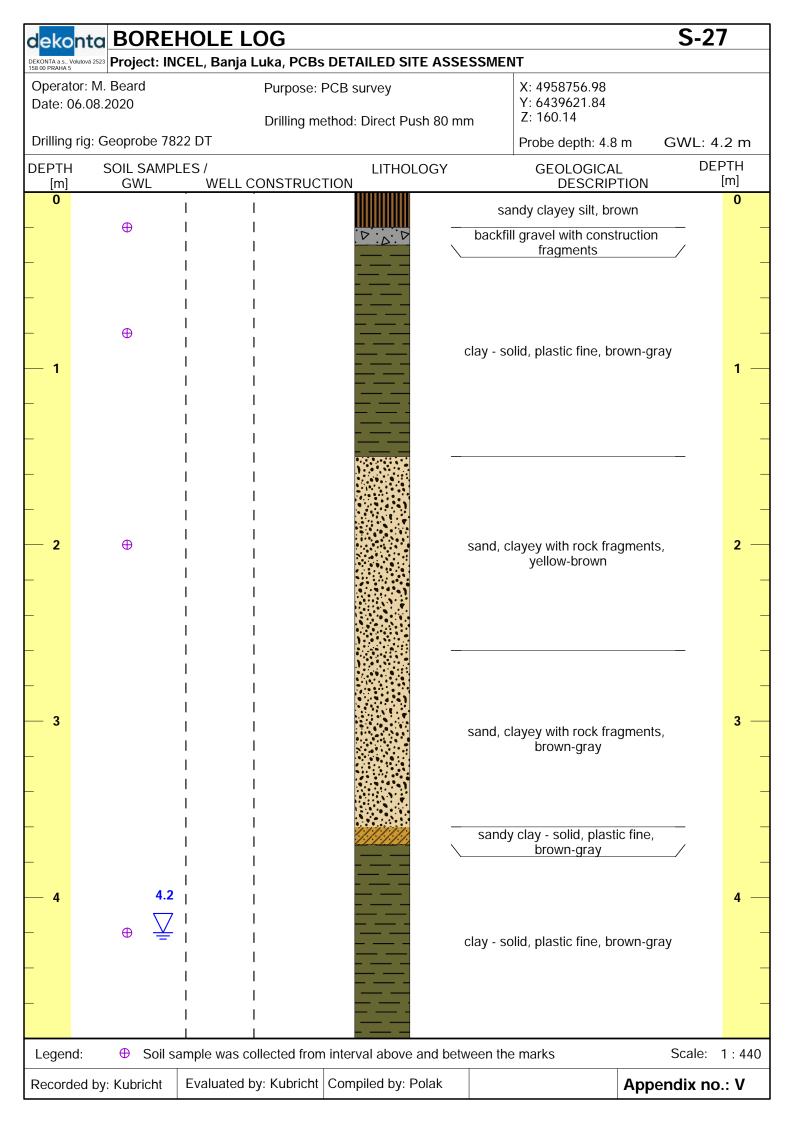


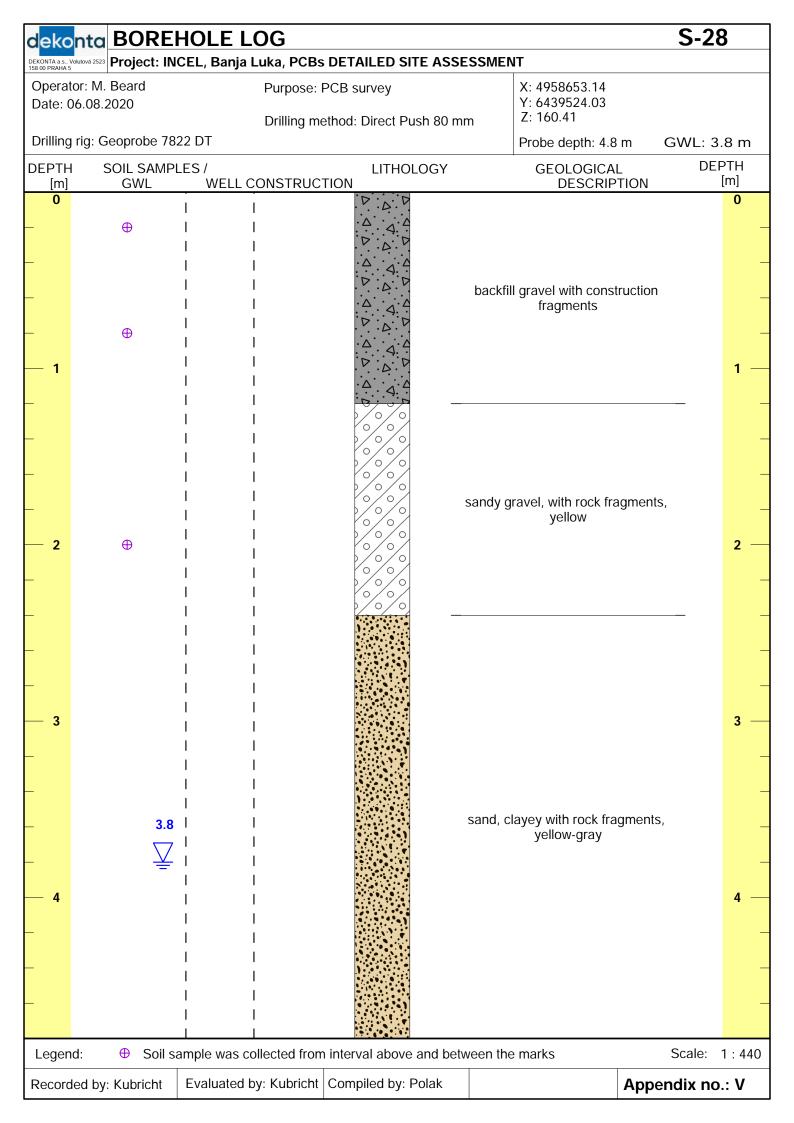


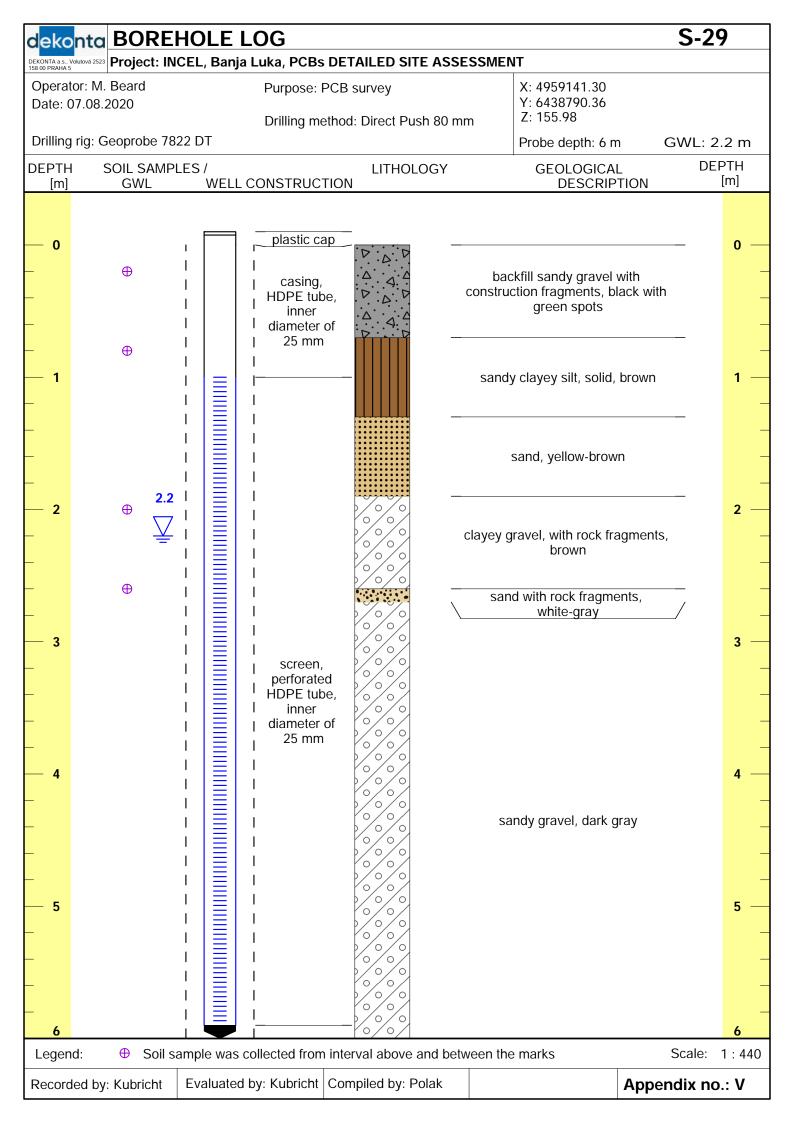


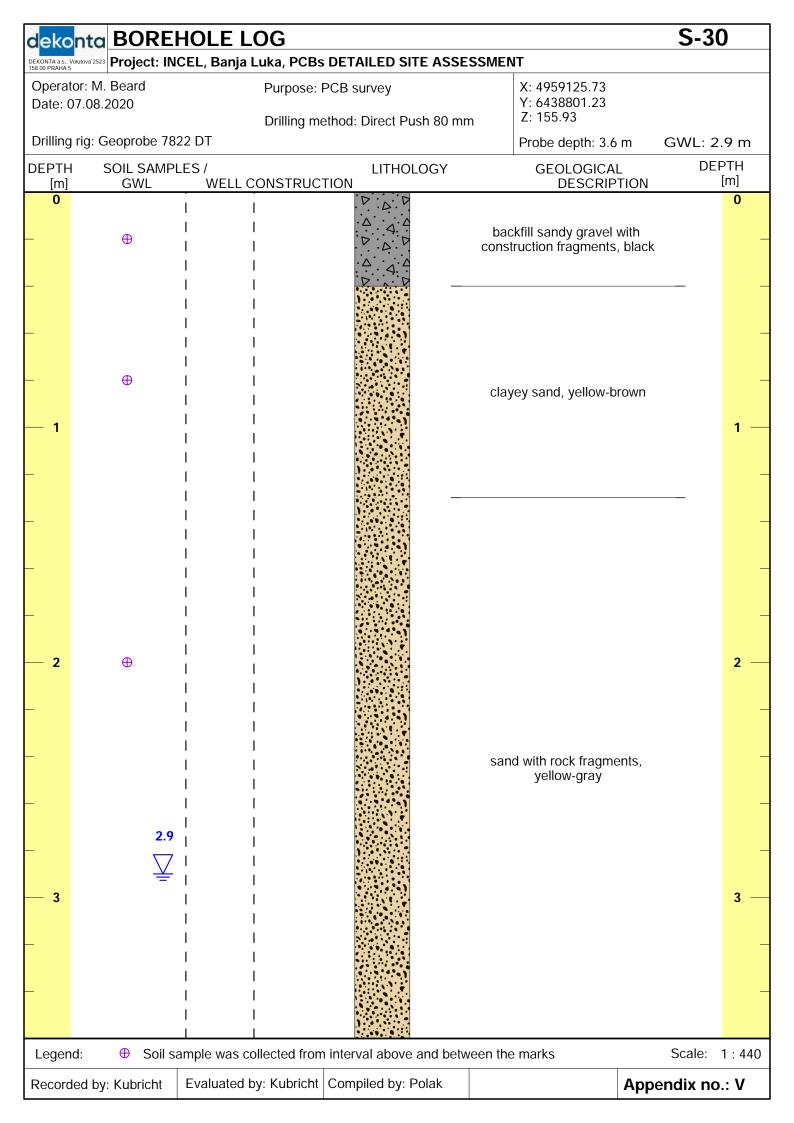












Annex VI: Sampling protocols



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:		1	Date and time	of sampling:	30.	7.2020		
			Sampled by			Jiri Kubricht		
Number of subsamples:		4 - S1/TS, S1/1, S1/2, S1/GW						
Coordinates:		N E						
WGS1984		see att. 1						
Sampling bottle:		Required analysis:						
200 mL gla	ss jar							
Sample matrices	type:	Soil	Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure	
Further sample de	estription:	 	otato)		V	<i>V</i>		
SI/TS SI/1 (SI/2 (SI/6W Description of sar Busice	0,2 - 0 0,9 - 2 (Gw	18m) 10m) ble) and its surr		to a-	visco sis)		
Weather:								
Soil pr Equipe Drilling	5 mg	eptl: HL HD Geoph	Gm3 PEpip She 78	CL e. 22 DT.	Al C Conn	h Danuklia		
renotatory (traine	P				ALS UZEC	h Republic		



Day:

Project:		Ince, Banj assessme	a Luka, PCE nt for the PC	s Detailed : CB contami	site assessi nated spots	nent and re	mediation	
Probe ID: S-2			Date and time of sampling:		30.7.2020			
			Sampled by		Jiri Kubricht			
Number of subs	amples:	3 -	S2/TS	, 52/1	S2/2			
Coordinates:		n is a thing in	N			E E		
WGS1984				see	att. 1			
Sampling bottle: 200 mL glass jar		Required analysis:						
Sample matrices		Soil	Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure	
S2/1 S2/2 Description of sa		20m)	•	ers of	bi scos	is)		
Weather:								
Soil Drilliu	probe o	Septo	: 4,8 m = 75	BOL BOLDT:				
Laboratory (name	e):				ALS Czec	h Republic		



Day:

Project:		nja Luka, PCBs Detaile ent for the PCB contai			nediation			
Probe ID:	3	Date and time of sampling:	30.	7 . とっとっ Jiri Kubricht				
Number of subservators	4 -		2012 521					
Number of subsamples:	4-	S3/TS, S3/1, S	5612,5510					
Coordinates:		N		E				
WGS1984	_	see att. 1						
Sampling bottle: 200 mL glass jar	Required	Required analysis:						
Sample matrices type:	Soil	Ground water Surfact (static water	e Bottom sealment	Waste	Building structure			
Further sample destription		state)						
	- 6/8 m - 2/0 m - 4/3 m ace and its su		of viscos	sis)				
Weather:								
	e olopt Gopn	4: 4,5 m 30 Le 7822 DT						
Laboratory (name):		A SECRETARY CONTRACTOR OF THE PARTY OF THE P	ALS Czec	h Republic				



Day:

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:	S-4	Date and time of sampling:	31.7.2520					
		Sampled by:	Jiri Kubricht					
Number of subsample	es: 4 -	S4/TS, S4/1, S	1/2, S4/GW					
Coordinates:		HIRISTON NOT A YEAR OF A SECTION	Establish College College					
WGS1984		see att. 1						
Sampling bottle:	Require	Required analysis:						
200 mL glass ja	ar							
Sample matrices type	: <u>Soil</u>	Ground water Surface (static water state)	Bottom Waste Building structure					
Further sample destri	iption:	State)						
Soil. S4/TS (S4/1 (S4/2 S4/GW (010-012m 012-018m 018-210m (410-4,20m)) n - Gh talle)						
Description of sampli	ng place and its s	urroundings:						
Burine	s zone ()	trustormers of	hi scasis)					
Weather:								
Notes:								
Soil pr	ase clept	1: 6 m B65						
	al with H							
		obe 7882 DT.						
Laboratory (name):	144		ALS Czech Republic					



Project: Ince, Banja Luka, PCBs Detailed site assessment and remedia assessment for the PCB contaminated spots							
Probe ID:	S-5	Date and time of sampling:	31.7.2020	31.7.2020			
		Sampled by:	Jiri Kubricht				
Number of subsample	es: 3 -	S5/TS, ST/1	S5/2				
Coordinates:	druge of transport	N	E TO				
WGS1984		sec	e att. 1				
Sampling bottle:		analysis:		10.28			
200 mL glass ja							
Sample matrices type	: <u>Soil</u>	Ground water Surface (static water state)	Bottom Waste	Building structure			
Further sample destri	ption:	state)					
SS 11 (SS 12 (Description of sampling		m) m)	of viscosis)				
Notes:	1 -0 - 11	, Lo Ros	,				
		: 418 m BGS					
	· · · · · · · · · · · · · · · · · · ·	she 75 ez DT of at 3,50 m	365				
	- رحمن رود		, ,				
Laboratory (name):			ALS Czech Republic				
Day:							



Project:		•	uka, PCBs Detailed site assessment and remediation for the PCB contaminated spots					
Probe ID: S-(9	Date and time of sampling	34.	チ . といとい Jiri Kubricht				
Number of subsamples:	3 -	S6/TS, S6/1	56/2	On rabion				
Coordinates:		N N	13012	E CONTRACTOR				
WGS1984			see att. 1	E STATE OF STATE				
	Required							
Sampling bottle: 200 mL glass jar	Required	alialysis.						
Sample matrices type:	Soil	Ground water Surface (static water		Waste Building structure				
Further sample destription:	<u> </u>	state)						
Solt (0,0- Solt (0,2- Solt (0,8-	0,2m 0,8m 2,0 m							
Business 701			ARE TO	bl)				
Weather:								
Soil probe of Drilling his	depth Sespro	: 4,8 m BE Se 7872 ST.	S					
Laboratory (name):	aring and	55-7115-11-11-11	ALS 0764	ch Republic				



Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots							
Probe ID:	7	Date and time of	sampling:	31.	7.2020		
	•	Sampled by:	RIVE S		Jiri Kubricht		
Number of subsamples:	4 -	S7/TS, S7/	1 57/2	1 S7/CI	υ.		
Coordinates:		N			E	War Prije	
WGS1984			see	att. 1			
Sampling bottle:	Required	analysis:					
200 mL glass jar							
Sample matrices type: Further sample destription:	Soil	Ground water (static state)	Surface water	Bottom seeiment	Waste	Building structure	
Soil ST/TS (000 ST/1 (012 ST/2 (018- ST/GW (314) Description of sampling pla Business	-0_18m -2_10m -3_16m ce and its sur	roundings:		- Metel)		
Notes: Soil probe of Equiped wi	FC HODE	Eppe.		7			
Doilling His Laboratory (name):	, Geopr	- 782 	. TQ S	ALS Czeci	h Republic		



Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots							
Probe ID:	- 8	Date and time of samp	ling:	4.7.202	၁		
		Sampled by:		Jiri Kubricht			
Number of subsamples:	3-	152, ST/52	1, S8/2				
Coordinates:	41) <u>-</u> 48 n	N. S. Tari		E	An South		
WGS1984			see att. 1				
Sampling bottle:	Required	analysis:			7 - 7		
200 mL glass jar							
Sample matrices type:	Soil		face Botton	V/V/2851G	Building structure		
Further sample destription:							
Soil. S9/TS (0,0 S8/1 (0,2- S8/2 (0,8- Description of sampling pla	-0/8 L)	S					
Buriness 7			BG ITER				
Weather:							
Notes: Soil probe of Drilling his							
l aboratory (name):		W = 18 0 0 0 0	ALC C	zech Republic			



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:	S	9	Date and time	of sampling:	1.	8 , 202	0	
			Sampled by			Jiri Kubricht		
Number of subsa	mples:	4 - 8	2,2TE	9/1,59/	2,59/0	SW		
Coordinates:		医原理 医	N		181/m = 1	E		
WGS19	984			see	att. 1			
Sampling bottle:		Required analysis:						
200 mL gla	iss jar							
Sample matrices	type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure	
Further sample d	estription:							
53/1 53/2 99/64	(3,3-	0,8m) 2,0m) -3,5m	- Gle 2	asle)				
Description of sa	mpling place	and its surr	oundings:					
3C 1	Tetals	S						
			5					
Weather:								
Soil po Equipe Drilling GU be	d wit	L HOPE	Epsite		36S,			
Laboratory (name		tue V - dy - i	SULY BU			h Republic		



Project:			a Luka, PCB nt for the PC		site assessn nated spots	nent and re	mediation
Probe ID:		Date and time of Sampled by:			1.8	3. 2020 Jiri Kubricht	
Number of subsa	mples	3 -			Ct la	JIII KUDIIÇIIL	
	imples.	3 -	S10/TS,	SIDIT	S10/2		
Coordinates: WGS19	204		N	500	att. 1	E	411.114.11
	704			566	au. r		
Sampling bottle: 200 mL glass jar		Required a	nalysis:			96	
Sample matrices	type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample d	estription:						*
Soil.							
S10/TS	(0,0-	-0124					
510/1							
510/2							
Description of sa	mpling place	and its surr	oundings:	75 1			
BC M	etals						
Weather:							
Notes:							
soil pa	de des	sth:	3,6 m 3	22			
Soil pr Drilling	Sic C	e-nm	· · 799	TAS			
-0111100	4.2	حدالها ٥٠٠	,	<u> </u>			
_aboratory (name)):				ALS Czeci	h Republic	



Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots							
Probe ID:	S-11	Date and time of	of sampling: 1.8.2020				
		Sampled by:			Jiri Kubricht		
Number of subsamp	les: 4 -	SH/TS, S	31/1, S	11/2,511	16W		
Coordinates:		N N			E	71	
WGS1984			see	att. 1			
Sampling bottle:	Requir	red analysis:			177 18 17		
200 mL glass	jar						
Sample matrices typ	e: <u>So</u>	il Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure	
Further sample dest	ription:						
Soil.							
SH/TS ((0,0-0,26	_>					
S11/1 (S11/2 (S11/6w (012-018 W 018-210 W	6 W = 2	ste)				
Description of samp	ling place and its	surroundings:					
Nova 3	Banka			-			
Weather:							
Notes:							
Igniped Drilling +	is Geofore	OPEPPE DPEPPE Se 75000000000000000000000000000000000000	T.	Z3S.			
Laboratory (name):				ALS Czec	h Republic		
Day:		A POST OF			·		



Project:	Author.	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:	S-/	<u> </u>	Date and time of sampling:		٦.	1.8,2020		
		To c	Sampled by:		(0)	Jiri Kubricht		
Number of subsa	mples:	3- S12/1, S12/2, S12/GW						
Coordinates:			N			E		
WGS19	984	\$6		see	att. 1			
Sampling bottle: 200 mL gla	ess jar	Required a	analysis:					
Sample matrices	type:	Soil	Ground water (static state)	Surface water	Bottom seetiment	Waste	Building structure	
S(2/1 S12/2 (Probe (0/2 - 6 (0/8 - 6 (3/0) mpling place	2,0 m) - 3,2 m e and its sur	concred - Glo tel		+ torn			
Notes: Soil pr Atilling	FIS E	coptobe	316 m = 75827 a± 311	1				
Laboratory (name):	17.5			ALS Czec	h Republic		



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:	S-1	<u> </u>	Date and time of	of sampling:	3.8	2020		
			Sampled by:			Jiri Kubricht		
Number of subsa	amples:	2 - 3	STI ENE	513/1				
Coordinates:			N			E		
WGS1	984			see	att. 1			
Sampling bottle: 200 mL gla								
Sample matrices	type:	Soil	Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure	
Further sample o	lestription:	İ						
	(0/2-							
Bescription of sa			roundings:	yais)				
Weather:								
			3,6 m					
Chb	whe te		lat s		2			
Laboratory (name	6).		200 1 7 7 7		ALS Czeci	h Republic		



Project: Ince, Banja Luka, PCBs Detailed site assessment and ren							mediation
Probe ID:	S-1	4	Date and time o		3.8	3 , 2o2o Jiri Kubricht	
Number of subsa	mnlee:	4- 8					
	ilipies.			MI ST	1/2, 5/9/		
Coordinates: WGS19	284	etala wil id 7%	N	599	att. 1	E	- A. Berthreim
		Orași a d		300	au. I		
Sampling bottle: 200 mL gla	iss jar	Required a	ialysis:	, i Selitor	,		
Sample matrices	type:	Soil	Ground water (static	Surface	Bottom segiment	Waste	Building structure
Further sample d			state)				
SylTs Syl1 Syl2 SylGu Description of sa	(0 2-0) $(0 8-2)$ $(3 4-2)$ mpling place	2,6 L. and its surro		دای			
Weather:							
Natas. T							
Soil po Famipe Drilling	col with sole techniques	C HDPI	= pipe >e 78?2	DT.	6S,		
Laboratory (name	e):				ALS Czecl	h Republic	



Project:	site assessment and remediation nated spots					
Probe ID: S-A	15	Date and time of sa	ampling:	3.	8,240	
PHONE CONTRACTOR		Sampled by:			Jiri Kubricht	
Number of subsamples:	4-842	TS, SN5/1,	512/5	15/16	le ·	
Coordinates:	11-32-3	N		N. AVE	E	North Alle An
WGS1984			see	att. 1		
Sampling bottle:	Required analysis:					
200 mL glass jar						
		Ground				1 /
Sample matrices type:	<u>Soil</u>		Surface water	Bottom seaiment	Waste	Building structure
Further sample destription:						
Soil SIS/TS (0,0-0 SIS/1 (0,2-0 SIS/2 (0,8- SIS/GW (3,2) Description of sampling place	0,8 m) 2,0 m) - 3,4 m	- 6w L	SIE)			
Lucic Inve	2					
Weather:						
Notes:						
Soil phale de	epth:	60 L B	23			
Egriped with Atillians tis Ger Lesse te	of LOVE	27882 I	5T	265		
Laboratory (name):	درودار	WE 3/1	- 0-1	ALS Czecl	h Danublia	



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:	S-1	Date and time of sampling		of sampling:	3.8.2020			
			Sampled by:			Jiri Kubricht		
Number of subsa	mples:	3 -	S16/TS,	S16/1, 9	516/2			
Coordinates:			N			E.		
WGS19	84			see	att. 1			
Sampling bottle:		Required analysis:						
200 mL gla	ss jar							
Sample matrices	type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure	
Further sample d	estription:		State)				V	
Soil		•.01						
S(6/TS	(mn-	02.	V.					
516/13	(60	ردد	(1)					
S16/1 S16/2	(015-	0180	у.					
310/2	(018-	2,0 m						
Description of sa	mpling place	and its sur	roundings:					
Luei	c hu	est.						
Weather:								
weather.								
Notes:								
Soil p	rate d	epstl	: 48 %	, BGS				
Drilling	>it ?	Geoph	nose 78	70 SS8				
GW te	ached	at	2,6 m	365.				
Laboratory (name		144			ALS Czeci	h Republic		



Probe ID: S - 1	7	Date and time of sampled by: N		-40-	3 . Loec Jiri Kubricht	
		HTS, SA	/1, S17	1/2	JITI KUDITCHI	
	3 - SI		11, 517	-1 7		
		N.		12		
Coordinates:				guzh-213, Siz	E	
WGS1984			see at	tta 1		
Sampling bottle: 200 mL glass jar	Required an	alysis:				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom seetiment	Waste	Building structure
Further sample destription:						
S611 S77/TS (0 ₁ 0- S7/1 (0 ₁ 2- S17/2 (0 ₁ 8- Description of sampling place	0,8m)				
Lukic In	vest :					
Weather:						
Notes: Soil probe of Drillingtis (Laboratory (name):	epth: beopro	418 m Se 782	365 2 DT,	ALS Czecl	Domitic	



Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots							mediation		
Probe ID:	S-1		Date and time o	of sampling:	3.8.2020				
TODE ID.	5-7	(0	Sampled by:			Jiri Kubricht			
Number of subsa	mples:	3- S	18/TS, S	3(8/1, S	13/2				
Coordinates:			N			E			
WGS19	84			see a	att. 1				
Sampling bottle:		Required as	nalysis:						
200 mL gla	ess jar								
Sample matrices	type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom seament	Waste	Building structure		
Further sample d	estription:	i	otato)						
Soil	X.								
S18/TS	(0.0-	62,							
518/1	(02	78							
5/8/2									
			A Production						
Description of sa			oundings:						
Lue	ic h	vest.							
Weather:									
Notes:		.) /	, -	700					
Soil p	Soil probe clepth: 4,8 m Bes.								
Drillie									
Ell to	cache	d at	3,8 12	, RES .					
Laboratory (name	e):				ALS Czec	h Republic			



Project:					site assessn nated spots	nent and re	mediation	
Probe ID:	S-1	9	Date and time		4.	පි. <i>2</i> ්2ර Jiri Kubricht		
Number of subsa	mnlee:	4 - 9			16 la C 1			
Coordinates:	miproo:			21.711	15/2, 51			
WGS19	184		N	500	att. 1	(E		
	104			SEE	all. I			
Sampling bottle: 200 mL gla	iss jar	Required analysis:						
	,							
Sample matrices	type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom segiment	Waste	Building structure	
Further sample d	estription:		()					
Soil. S19/TS (0,0-0,2m) S19/1 (0,2-0,8m) S19/2 (0,8-2,0m) S19/6W (3,0-3,2m-Cw #sle) Description of sampling place and its surroundings: Lukic Invest.								
			ä,					
Weather:								
Notes:				0 4=				
Soil pi	rate de	ATT !	610 W	TREE				
Fquiper Drilling	ol witz shis Ge ached	- HDPE	pipe.	TT.				
Laboratory (name):		17.00		ALS Czecl	n Republic		



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:	S-	20	Date and time of	sampling:	4.9	3 - 202		
			Sampled by:	URE A SHE		Jiri Kubricht		
Number of subsa	mples:	2 - 8	520/75,5	20/1				
Coordinates:			N			E		
WGS19	84			see	att. 1			
Sampling bottle:		Required a	analysis:					
200 mL gla	ss jar							
Sample matrices Further sample de		<u>Soil</u>	Ground water (static state)	Surface	Bottom sealment	Waste	Building structure	
Soil, S20/T S20/1 Description of sai	S (O ₁	and its sur	roundings:					
Weather:								
Notes: Soil p	hobe o	depth Geor	1 418 m shote 78	ZCS Z S DT	•			
Laboratory (name):		1107575		ALS Czec	h Republic		



Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots								
Probe ID:	S-2	 Л	Date and time	of sampling:	4.	4.8.2020		
			Sampled by		4	Jiri Kubricht		
Number of subs	amples:	3- 5	S21/TS	S21/1, S	21/2			
Coordinates:	AW THE		N			E		
WGS1	1984			see	att. 1			
Sampling bottle		Required a	nalysis:					
200 mL g	lass jar							
			Ground	7	1	1 /	1	
Sample matrices	s type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom seeiment	Waste	Building structure	
Further sample	destription:		- Mi			-W		
S21/1 S21/2	(0 ₁ 0) 2 -8 ₁ 0)	0,8-	>					
Description of s	ampling place	and its sur	roundings:					
يكلالان	c luc	est-		ss the S-17.	Street	e close	?	
Weather:								
	•							
Notes: Soil po	5 413							
Laboratory (nam	ie):				ALS Czec	h Republic		



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remeassessment for the PCB contaminated spots						
Probe ID:	S-	22	Date and time	of sampling:	4.8	3.202	0	
			Sampled by			Jiri Kubricht		
Number of subsa	amples:	2 - 9	S22/TS,	52/1				
Coordinates:			N			E		
WGS1	984			see	att. 1			
Sampling bottle:		Required a	analysis:			K.S.		
200 mL gla	ass jar							
			Ground				1 /	
Sample matrices	type:	Soil	water (static state)	Surface water	Bottom seeiment	Waste	Building structure	
Further sample o	lestription:		0.0.0)					
Soil.	- 0,0	~ 0,2	coucret	e plate	rot-m			
SEZITS	s (what	speci)	(0,2-0)	, 4 m				
Description of sa		and its sur	roundings:		<u> </u>			
SHP	celex							
Weather:							*	
Notes:		. 1 .	2 .	200				
Soil r	share a	cet	6 516 m	, 406>				
Drilling	Soil phase depth: 316 m 368 Drilling his Geophose 7882 DT.							
Laboratory (name	e):				ALS Czec	h Republic		



Project:		_	a Luka, PCB nt for the PC			nent and re	mediation
Probe ID:	S	23	Date and time	of sampling:	7.8	, ව්යව්ය	
			Sampled by			Jiri Kubricht	
Number of subsa	imples:	3-5	23/75,5	23/1, S2	23/2		
Coordinates:			N			E	
WGS19	984			see	att. 1		
Sampling bottle:		Required a	ınalysis:				(A) (C) (A) (A)
200 mL gla	ass jar						
						4	
Sample matrices	type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
Further sample d]					
Soil.	- 00	- 011 m	concre	te pla	typhon.		
S23/T	2 (0)	1 - 0.3	(22)				
	(013	•					
	_ (2,4	· .					
Description of sa	mpling place	and its sur	roundings:				
SHP	Celex						
Weather:							
Notes:							*
Soil pr	obe a	epth:	6,0m	BGS			
Equipe Drilling	ed with	- HDPE	bilse.				
GW re	دحمامور	ol at	2,4 00	365.			
Laboratory (name	e):	LIGHT & V			ALS Czec	h Republic	



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:	-24	Date and time of sampling:	7.8.20	20				
	,	Sampled by:	Jiri Kubr	richt				
Number of subsamples:	4-	S24/TS, S21/1, S	24/2, 524/g/21	nula				
Coordinates:		N	E					
WGS1984		see	e att. 1					
Sampling bottle: 200 mL glass jar	Require	d analysis:						
		Cround 1						
Sample matrices type:	Soil	Ground water Surface (static water state)	Bottom seement Waste	e Building structure				
Further sample destription	on:							
Soil. S24/TS (0) S24/1 (0) S24/2 (0)	10-0/26	->						
524/ganulo	8-210m	5 5-1-1-1						
Description of sampling			6					
SHP Cel	2*		_					
Weather:								
Notes:								
Soil probe	depth	.: 418 m 36S	,					
Dillias ni	s Geop	L: 418 m BGS nbe 7882 DT	-					
Laboratory (name):			ALS Czech Republi	c 1				



Project:			Luka, PCB nt for the PC		site assessn nated spots	nent and re	mediation
Probe ID:	S-2	5	Date and time of		6.8	8.2020	
		r .	Sampled by			Jiri Kubricht	
Number of subsa	amples:	3 - 9	525/75,	S25/1	525/2		
Coordinates:			N			E	
WGS1	984			see	att. 1		
Sampling bottle: 200 mL gla		Required a	nalysis:) mede			
Sample matrices Further sample c		<u>Soil</u>	Ground water (static state)	Surface water	Bottom seeilment	Waste	Building structure
Soil S25/TS S25/1 S25/2	(0 ₁ 2 - (0 ₁ 9 -	200))				
Business Superior Sup	uess 7			shting	statio	on)	
Weather:							
Notes: Soil po		cp£L: Geopr	4,8 m	, BCS 822D			
Laboratory (nam	e):		14 30 18		ALS Czec	h Republic	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID: S-2	<u></u> 6	Date and time		6.	8, <u>2</u> 520		
		Sampled by			Jiri Kubricht		
Number of subsamples:	3 - 5	526/TS,	526/1, 5	26/2			
Coordinates:	#51E #F0	N			Е		
WGS1984			see	att. 1			
Sampling bottle:	Required ar	nalysis:					
200 mL glass jar							
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom segiment	Waste	Building structure	
Further sample destription:							
Soil - 010	5-011 c	concret	e polit	torran			
SeG/TS (010-							
S26/1 (0,3-							
S26/2 (0,8-	2,00)					
Description of sampling place	and its surre	oundings:		1			
TOP Met	۷(
Weather:							
Notes:							
Soil probe d	estl:	3,6 r	n Bes				
Soil probe of Drilling his	Seoph	Je 78	TUSS	ĸ			
Laboratory (name):	F (5) 200			ALS Czec	h Republic		



Project:		ja Luka, PCBs Detaile ent for the PCB conta		ent and remediation				
Probe ID: S-	27	Date and time of sampling		8 - 2020 Jiri Kubricht				
Number of subsamples:	14 - S	27/TS, S27/1, S2	7/2,527/3					
Coordinates:		N SAME		E A SECTION				
WGS1984			see att. 1					
Sampling bottle:	Required	analysis:						
200 mL glass jar								
				•				
Sample matrices type:	Soil	Ground water Surfact (static water state)		Waste Building structure				
Further sample destription:								
Soil. S27/TS (90-0,2L) S27/1 (0,2-0,8L) S27/2 (0,8-2,0L) S27/2 (4,0-4,2L) Description of sampling place and its surroundings: Business Folia (beside Fco-trade)								
Weather:								
Notari								
Notes: Soil probe of Drilling tis	Geo;	: 4,8m Be prode 7882	2. DT.					
Laboratory (name):			ALS Czech	Republic				



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots						
Probe ID:	9-:	28	Date and time of		6.	8 , 202 Jiri Kubricht		
Number of subsa	mnles:	3- 9			008/0	OIII TABIICITA		
Coordinates:	inpico.		128/TS,	520/1	2012	W.E.	Rine, ive and	
WGS19	184		N	see	att. 1			
Sampling bottle:		Required a	nalveie:			· MARCONS AN		
200 mL gla	ıss jar	required a	ilaly 313.		The state of the			
Sample matrices	type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom seeilment	Waste	Building structure	
Further sample d	estription:		/					
S23/1	5 (010 (012 - (018	-0,8v	->					
Description of sa				on of	CS2)			
Weather:								
Notes: Soil F	onale c g tis (depti	.: 316 obe 78	m BG 3 22 DT	S.			
Laboratory (name):				ALS Czec	h Republic		



Project: Ince, Banja Luka, PCBs Detailed site assessment and remedia assessment for the PCB contaminated spots						mediation
Probe ID: S-	29	Date and time of	10 11 11 23	7.8	3.202c	
		Sampled by:		<u></u>	Jirí Kubricht	
Number of subsamples:	4 - :	S29/TS,	S29/1, S	29/2, S	25/GW	
Coordinates:		N			E	
WGS1984			see	att. 1		
Sampling bottle:	Required	analysis:		Y-4 1 EX		
200 mL glass jar						
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom seeiment	Waste	Building structure
Further sample destription:		state)				
Soil S25/TS (0) S25/TS (0) S25/1 (0) S25/2 (0) S25/GW (2 Description of sampling place Universum	2 - 0,80 3 - 2,0 3 - 2,7 ce and its sui	-) -) -)- Ch	, bulle	}		
Weather:						
Filling his GW reached Laboratory (name):	Geoph	DE pipo	- 7 <u>Z</u>		h Republic	
Laboratory (name).				ALS CZEC	ii Kepublic	



Project:		nja Luka, PCBs Detailed site assessment and remediation ent for the PCB contaminated spots							
Probe ID:	30	Date and time of		子. 8 . 2020 Jiri Kubricht					
Number of subsamples:	13-5	330/TS,		S00/CH					
Coordinates:	I PURENCIA	N	335/1	300 / EN	E				
WGS1984			see	att. 1	IN COLUMN				
Sampling bottle:	Required	analysis:				val 28%			
200 mL glass jar									
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom seeilment	Waste	Building structure			
Further sample destription:		000.10							
Soil									
S30/TS (0,0 S30/1 (0,2 S30/GW (510	-0,8m	- >	3-3/1 m	~>					
Description of sampling place	e and its sur	roundings:							
Universion	AD,								
Weather:									
Motes: Socil phose of Drilling tis	lepth: Scopro	3,6 m	365 2DT.						
Laboratory (name):		115 h. 1		ALS Czec	h Republic				

GROUNDWATER SAMPLE - dynamic state d<mark>eko</mark>nta Diameter: Object: Depth: Screen: Casing: 5 7 5m Sampling equipment: Depth of GW: House diameter: 410 10mm Notes: Name: 88.20 19/c 02 Time **GWL** pН Poznámky/změny 16.8 2820 2.64 8.53 23 (ORP) 16.6 8.87 2770 8.55 2000 -106 9.29 15.8 3.61 3-04 72.8 1351 - 68 15.9 Diameter: Casing: Depth: Object: Screen: 5.80 HOPE 5 m Depth of GW: Sampling equipment: House diameter: Solinest 440 2.16 10 mm Notes: Name: Time GWL \mathbf{T} Poznámky/změny pН 02 9.41 7.53 Stf b -169 PUR 2.16 (ORP) 151 14.2 7.29 3120 -156 9.50 14.1 1.82 7.20 3042 -152 Object: Depth: Screen: Diameter: Casing: 5.78 HDPE 5m Sampling equipment: House diameter: Depth of GW: 0142 10 m 4.00 Notes: Name: Time **GWL** 02 Poznámky/změny pН 15.5 (ORP) 7.38 10:00 Pcil 4.00 15.1 7.32 41M 4.42 7.32 4.17 15.1 761

.

GROUNDWATER SAMPLE - dynamic state dekonta Diameter: 80 Object: Depth: Casing: Screen: 3.00 House diameter: 10 Depth of GW: Sampling equipment: Name: Notes: 8.8.20 Time Poznámky/změny **GWL** pН 02 14:40 270 14 21.5 743 (ORP) 19.5 720 60 3.01 7.1 18.8 7-18 0.17 60 Diameter: 2 mm Depth: Screen: Casing: Object: 6 <u>m</u> 5m HIPE House diameter: Sampling equipment: Depth of GW: \$ 410 1.90 Notes: Name: 2 14 Time **GWL** Poznámky/změny рH T O2c 10.8 15:03 1,90 A7 2140 -307 (ORP) PCK 11.0 **159** 2200 -36 HM MOI 157 Q.05 0.77 -340 2000 Object: Depth: Screen: Diameter: Casing: 7.00 アレン Depth of GW: House diameter: Sampling equipment: Solinet 10mm 400 Notes: Name: P2 Time **GWL** pН T Poznámky/změny 02 7.60 +57 (ORP) 7CR 15:30 284 20.G 20.4 7.53 72 7 48 565 210 20.5

GROUNDWATER SAMPLE - dynamic state dekonta Object: Q 15 Diameter: Screen: Depth: Casing: ↑DPE (80 Drun Sampling equipment: Solingt 5 410 House diameter: Depth of GW: Name: 3 15 Notes: 28.2020 Jes/ca Time **GWL** 02 pН Poznámky/změny 12:14 16.2 6.92 2510 (ORP) PCR 2600 6.87 15.5 29 MH 1.90 6.20 15.2 2620 0.51 80 TPH Object: ST Depth: Diameter: Screen: Casing: 6.0 Im Don +DPE Depth of GW: House diameter: Sampling equipment: 10 thm 2 410 1.25 Name: ST 7 Notes: T Time **GWL** pН c 02 Poznámky/změny 7.28 -72 12:37 1.25 252 16.0 (ORP) PCB 920 7.22 15.5 -76 130 0.11 940 2.4 720 Object: 89 Diameter: Depth: Screen: Casing: 6~ 5mm de man Sampling equipment: Depth of GW: House diameter: 9410 2.42 10 mm Name: Notes: 39 Time **GWL** pН T 02 Poznámky/změny c 14.36 1406 20.5 7.52 (ORP) / PCR 1920 7.59 16.5 -21 HH 7.56 15.7 1940 0,00 24 2.54 15.0

GROUNDWATER SAMPLE - dynamic state dekonta Casing: Object: Q 29 Screen: Diameter: Depth: 6.0 House diameter: Sampling equipment: Showed S40 Depth of GW: Name: 9 29 Notes: 8.820 Poznámky/změny Time **GWL** pН 02 10:57 A.Lo 16.6 7.53 -3.6 (ORP) 1124 7.52 16.2 1144 -68 7.83 16.1 -76 TOM 2.34 7.50 1105 -40 16.1 0.18 Screen: Object: Casing: Depth: Diameter: 6.0 5_{cc} House diameter: HOPE STMM Sampling equipment: Depth of GW: 0142 SIP 10 mm Name: 327 Notes: **GWL** Time pН T Poznámky/změny 02 M:16 696 8.06 20.5 PCR 40 (ORP) 733 7.63 20.1 24 HM J.18 7.54 0.99 20.1 TPH Object: 919 Screen: Casing: Depth: Diameter: 5.60 5m 25 mm Sampling equipment: House diameter: Depth of GW: 410 Solivet 10mm 2.50 Name: 19 Notes: Time **GWL** T pН 02 Poznámky/změny 11:33 7.42 16.6 1910 (ORP) RCR 7.39 小厂 1757 -147 4.50 16.3 1499 169 7.33 -17-

GEROUNDWATER SAMPLE - dynamic state d<mark>eko</mark>nta Casing: PVC Object: Screening: Well diameter: Depth: 3.90 House diameter: Depth of GWL: Sampling equipment: 410 3.20 10 mm Sampling point: 🚗 Notes: 9. R. 2020 40c Time **GWL** рH conductivity 02 Poznámky/změny T 16.9 3.20 1055 10:20 7.50 -222 (ORP) PCR 7.00 15.6 OF CD -218 MH Q.18 7.35 1772 -216 HPI 11.7 3145 Casing Object: Depth: Screening: Well diameter: 420 Rom Sampling equipment: House diameter: Depth of GWL: li met 410 1.95 Sampling point: Notes: PCR Time conductivity **O2 GWL** pН \mathbf{T} Poznámky/změny 1.95 7.30 GPX 10:50 7.16 7.10 2.16 1.20 10 Object: Depth: Well diameter: Screening: Casing: Sampling equipment: House diameter: Depth of GWL: Sampling point: Notes: Time **GWL** pН T conductivity O2Poznámky/změny



Project:	INCEL, Banja Luka, Bi remediation assessme					
Samle ID: CX-1	Date and time of		05.08.2020 Eva Čechová, Fernando Rebelo, Dec.3			
Number of subsamples:	Sampled by		Eva Cecnova	, Fernando Re	olede, veris	
Coordinates:	N			E		
Sampling bottle: 150 ml glass jars	Required analysis:	inalysis:				
100 mi glass jars	1900					
		-				
	1		A	20		
Sample matrices type:	Building Ground water structure state)	Surface water	Bottom segiment	Waste	Soll	
Further sample destription:						
Concrete dest po		*				
Description of sampling place						
Open was between lover aren where 24 44, 275082N 17,	unworker accounts	fectory les.	. Yangle.	Salar fro	in a	
Weather:						
Rain, storms, sometimes sunny, 100% RH, N - 12-28 km/h						
Notes:						
Laboratory (name):			ALS Czech	Republic		



Project:		INCEL, Ba	anja Luka, BiH: PCBs on assessment for the	Detailed site a	issessment and
Samle ID:	CX-2		Date and time of sampling:		mateu spots
			Sampled by:	Eva Čechová	á, Fernando Rebelo Dein
Number of subs	amples:				
Coordinates:			N		E
Sampling bottle:		Required a	mohada.		
150 ml gla		PCP	inalysis:		
		100			
Sample matrices		Building structure	Ground water state) Ground Surface water	Bottom seeiment	Waste Soil
urther sample d	estription:		State)		
escription of sar				4.0	4
area	red from	4 Samp	ling spots in	the centre	of the
lik meny	22 14 12	10112	to Elan		
47, 74508	1/210 7	7, 624 73	52 € (10m)		
eather:					
ain, storms, some	times sunny, 1	100% RH, N -	12-28 km/h		
otes:					
boratory (name):				ALS Czech F	Republic
y:				020011	Сриыс



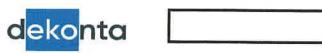
Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Samle ID:	Date and time of s		§ 8. 2020, 12:00 - 15:00 Eva Čechová, Fernando Rebelo			
Number of subsamples:	Campica Cy.		a occitova,	T CITICATION TO	55010	
Coordinates:	N			E		
Sampling bottle:	Required analysis:					
150 ml glass jars	- PCG					
	- meets to be horogenized					
Sample matrices type:	Building water (static state)	Surface water s	Bottom segiment	Waste	Soll	
Further sample destription:	/ 40 A 0	1 40 0				
- dark-stained steppe -2 m powdery layer,		1 on dept	ξ .			
Description of sampling place	and its surroundings:					
- Free shorting smell !	brushing with I Dransfe	not how	ms (
14, 56029 44, 7749	1227370E					
- Enel slavling smell 1 14, 7509 44, 7743 44, 7748	62N 17, 227 16 (S	(M)				
Weather:						
Sunny, 28°C, 73% RH, NE wind, <12km/h						
Notes:						
Laboratory (name):			ALS Czech	Republic		



Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				and s			
Samie ID:	1-3	Date and time			48. 2020, 1	48. 2020, 12:00 - 15:00			
			Sampled by	*	Eva Čechova	á, Fernando F	Rebelo		
Number of subs	amples:	1-L-3A							
Coordinates:			N			E			
Sampling bottle:		Required a	nalysis:						
150 ml gla	iss jars	peg							
		TPH							
		heavy m	5-5-C-1-3-C-1-5-C-1						
		asterlas	(ESA)						
Sample matrices		Building structure	Ground water (static state)	Surface water	Bottom segiment	Waste	Soil		
Description of sa 44, 77358 Demolished Quond mi	side of All los of war	226651E e main h he mill f	(10m) inldry, M	sible orly	g spills	Shins.			
Sunny, 28°C, 73% Notes:	RH, NE wind,	<12km/h							
Transformers					1 4 0	i = 0 . I			
Idditional.	Sample of	sol hu	ik askerli	s fragre	" Maler	, CTSA,			
_aboratory (name	»):				ALS Częci	n Republic			
Day:				i.					



Project:		INCEL, Banja Luka, E remediation assessn	BiH: PCBs De	etailed site a	ssessment	and	
Samle ID:	2-4	And the second	Date and time of sampling:		2 -8. 2020, 12200 - 15:00		
		Sampled b	y:	Eva Čechová	á, Fernando R	ebelo	
Number of subs	amples:						
Coordinates:		N			E		
Sampling bottle:		Required analysis:					
150 ml gla	ss jars	Pro				***************************************	
		11					
Sample matrices Further sample d		Building water (static state)	Surface water	Bottom seatment	Waste	Soil	
Description of sa	mpling place	and its surroundings:					
Comparile of	about from.	floor (linder) ju	of moder	The nepl	structure	Laugh-	
new hong or	, Signiller	with mother frage	ent. I ron	the liner			
*	210 - 1	Alluctor	in line	1 0100			
		of (of expidalism" s	uspe) - Assor	r proof.			
44, 773374	N 17,22	26052 € (30m)					
Weather:							
Sunny, 29°C, 78%	RH, NE wind,	<12km/h					
Notes:							
aboratory (name):			ALS Czech	Republic		



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID:			4 8. 2020, 12:00 - 15:00		
	Sampled by	' :	Eva Čechová, Fernando Rebelo		
Number of subsamples:					
Coordinates:	N		E		
Sampling bottle:	Required analysis:				
150 ml glass jars	dust-pas				
Sample matrices type:	Building Ground water structure state)	Surface water	Bottom segiment Waste Soil		
- dust from 0,5 x 0,5 h behind Arresformers. + white print					
Description of sampling place	and its surroundings:				
- sure as L-4					
Weather:					
Sunny, 28°C, 73% RH, NE wind, <12km/h					
Notes:					
Laboratory (name):	V. III.		ALS Czech Republic		



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID: 2-6	Date and time	of sampling:	1 8. 2020, 12:00 - 15:00		
	Sampled by	<i>y</i> :	Eva Čechova	á, Fernando F	₹ebelo
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ml glass jars	PCB				
	Hilly				
Sample matrices type: Further sample destription:	Building Ground structure (static state)	Surface water	Bottom sealment	Waste	Soil
Description of the latest the lat		-ii			
Description of sampling place and its surroundings: Large storage hall, wherebe from with 0,5-7 cm febbles. Loil stored here					
Painball frints. 44,773504N 17,	226 345 E (30m)).			
Weather: Sunny, 28°C, 73% RH, NE wind, <12km/h					
Notes:					
Transformer heart	from Lulie hild	igacuss	street	were st	ored here
before distanting at L-3 for the side of the brilling. (Ermin)					
Frainbow viely maps at maker public after sain.					
aboratory (name):			ALS Czech	h Republic	



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Samle ID:)_	Date and time of sampling:	1 48. 2020, 12:00 - 15:00			
		Sampled by:	Eva Čechová, Fernando Rebelo			
Number of subsamples:						
Coordinates:		N	E			
Sampling bottle:	Required	analysis:				
150 ml glass jars	PPG					
Sample matrices type:	Building structure		Bottom sealment Waste Soil			
Further sample destription:						
motor, black sediment, exerche vis publics - scratched 0-0,5 m servere. Under born sediment.						
Description of sampling	place and its sur	roundings:				
Fransformer room	U	1 7				
44,7753440	17,226	8528 (30~)				
Upper edge.						
Weather:						
Sunny, 28°C, 73% RH, NE wind, <12km/h						
Notes:						
			1			
Laboratory (name):			ALS Czech Republic			



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID:	1	Date and time of sampling:	05.08.2020 Eva Čechová, Fernando Rebelo		
Number of subsamples:		journpled 23.			
Coordinates:		N			
Sampling bottle:	Required a	nalysis:			
150 ml glass jars	PCR				
Sample matrices type:	Building structure	Ground water Surface (static water state)	Bottom segiment Waste Soil		
Further sample destription:					
-Boundation, lowered concrete platform					
Description of sampling place and its surroundings:					
44,7741P2N 12,221080E (10h)					
Weather:					
Rain, storms, sometimes sunny, 100% RH, N - 12-28 km/h					
Notes:					
Laboratory (name):			ALS Czech Republic		



Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Samle ID:	V - 4 L		of sampling:	02.08.2020			
No.		Sampled by	;	Eva Cechova	i, Fernando R	ebelo Denia	
Number of subsa	mpies:						
Coordinates:		N			Ε		
0							
Sampling bottle: 150 ml glas	e iare	Required analysis:					
130 mi gias	ss jais	PC8					
		1417					
*							
Sample matrices	type:	Building water structure (static state)	Surface water	Bottom sealment	Waste	Soil	
Further sample d	estription:						
				3			
		and its surroundings:		di.	4 .		
concrete.	area, be	hind the storage	enlanus	mel ex	enally o	vil.	
W4,711.	82N 1	7,221080E (10) ~.)				
Weather:							
Rain, storms, sometimes sunny, 100% RH, N - 12-28 km/h							
Notes:							
· · · · · · · · · · · · · · · · · · ·							
Laboratory (name):			ALS Czec	h Republic		



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID: B2-T-1	Date and time of	sampling;	1. 8. 2020, 12:00 - 15:00		
	Sampled by:		Eva Čechová	i, Fernando R	ebelo
Number of subsamples:					
Coordinates:	N			E	
	*				
Sampling bottle:	Required analysis:				
150 ml glass jars	PCQ				
		2			
Sample matrices type:	Building water structure (static state)	Surface water	Bottom seatment	Waste	Soll
Further sample destription:					
Concrete, oil-live se	dis, falidem smell	0-22	ě		
- homogenized 3 god					
III III					
December of committee of commit	300				
Description of sampling place		1-20			
Blod Elevater philips	m in front of the	wange on		2.5	
44°46'18"N 17°1314					
44, 772263 17,2296	78 € (10 m)	- 1			
44,7722160 17, 2296	886				
ülhinde 205 n					
Weather:	4	F 1			
Sunny, 28°C, 73% RH, NE wind, <12km/h					
Notes:					
25	N 1				
Laboratory (name):			ALS Czec	h Republic	



Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samte ID:	B2-T-2	Date and time		1. 8. 2020, 12		
		Sampled by		Eva Cechová,	Fernando Rebelo	
Number of subs	amples:					
Coordinates:		N			E	
Sampling bottle: 150 ml gla		Required analysis:				
150 mi gia	35 Jai 5	b(8				
Sample matrices	type:	Building Ground water structure state)	Surface water	Bottom segiment	Waste Soil	
Further sample of	Further sample destription:					
		52				
		and its surroundings:			and the same of the	
- Elon (em	rele+ place	in froment) insido	Landon	er icom.	hearly St, first	
noon on A	and the second s		ě.		·	
44,772176	•	200 / C				
440 461 11911						
3.32 × 2,66 m						
Weather:						
Sunny, 28°C, 73% RH, NE wind, <12km/h						
Notes:						
Laboratory (nam	e):			ALS Czech	n Republic	



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID: NG-1		nd time of sampling:	1. 8. 2020, 12:00 - 15:00		
Number of subsamples:	Samp	oled by:	Eva Cechova	, Fernando Rebelo	
Coordinates:		N		E	
Sampling bottle:	Required analysis	_			
150 ml glass jars	PCB	•			
To a min grade jane	1.00				
Sample matrices type:	Building was	ound ater Surface atic water ate)	Bottom seeilment	Waste Soil	
Further sample destription:					
Description of sampling place		igs:			
Draide a smell	room, floor			Long: 17,223708 E: 17°13'25" 17,223872	
	2		P + > > 20	74, 665872	
Weather:					
Sunny, 28°C, 73% RH, NE wind, <12km/h					
Notes:		2			
Laboratory (name):			ALS Czech	n Republic	



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID: N8-2	Date and time		1. 8. 2020, 12:00 - 15:00		
(\$12/CH	Sampled by		Eva Čechov	á, Fernando F	Rebelo
Number of subsamples:			Martin Polel	k, Mautin Fo	usek
Coordinates:	N			E	
Sampling bottle:	Required analysis:	-			
150 ml glass jars	Peo				
Sample matrices type: Further sam ple destription:	Building water (static state)	Surface water	Bottom seeiment	Waste	Søil 1
	9-0,20 m, drilled				
Spen spen, perinder walls 54, Rm × 27, Rm					
Veather: Sunny, 28°C, 73% RH, NE wind lotes:	ว่, <12km/h				
aboratory (name):			ALS Czech	Republic	



Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Samle ID:	NB-3		Date and time o	of sampling:	1. 8. 2020, 12:00 - 15:00		
1			Sampled by:		Eva Čechová	, Fernando R	ebelo
Number of subsa	mples:						
Coordinates:			N			E	
		sme as his	-1		<u>** </u>		
Sampling bottle:		Required analysis:					
150 ml glas	s jars	PCR			*******		
	-						
Sample matrices	type:	Building structure	Ground water (static state)	Surface water	Bottom seatment	Waste	Soli
Further sample destription:							
- black paint four under Ale mindon							
Description of sa		and its surro	oundings:				
- Arme as NB-1							
Weather:							
Sunny, 28°C, 73% RH, NE wind, <12km/h							
Notes:							
Laboratory (name):				ALS Czeci	n Republic	



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID: NB-%	Date and time o	f sampling:	1 ,08.2020		
100 5 4	Sampled by:		Eva Čechová, Fernando Rebelo		
Number of subsamples:					
Coordinates:	N		E E E		
Sampling bottle:	Required analysis:				
150 ml glass jars	aust -818				
		- 7			
Sample matrices type:	Building Ground water structure (static state)	Surface water	Bottom segiment Waste Soil		
Jufue scrabbed under the feft minder					
Description of sampling place	e and its surroundings:				
Weather:					
Rain, storms, sometimes sunny, 100% RH, N - 12-28 km/h					
Notes:					
Laboratory (name):			ALS Czech Republic		
Day:					



Project:	INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID; B2-C-1	Date and time of sampl				
	Sampled by:	Eva Čechová, Fernando Rebelo			
Number of subsamples:					
Coordinates:	N	E			
Sampling bottle:	Required analysis:				
150 ml glass jars	P(10				
Sample matrices type:		ace Bottom Waste Soil			
Further sample destription:		14			
- greesy 2-mi hyur	(love reduced (dest)	ul (plaster + encerte)			
Description of sampling place					
- Sometomer room	3,24× 2,43 M				
44,7728855 17,7	(27807 (30m)				
44° 461 22"N 17°					
44, 77-1989 N 17, 228570E					
Weather:					
Sunny 28°C, 73% RH, NE wind	, <12km/h				
Notes:					
		-			
Laboratory (name):		ALS Czach Panublic			



Project:			etailed site assessment and PCB contaminated spots
Samle ID: BZ-C	-2	Date and time of sampling:	<u>1</u> , 8. 2020, 12:00 - 15:00
		Sampled by:	Eva Čechová, Fernando Rebelo
Number of subsamples:			
Coordinates:		N	Ε
Sampling bottle:	Required a	nalysis:	
150 ml glass jars	Peg		
	TPH	. X. D.	
	henry m	ences	
Sample matrices type:	Building structure	Ground Surface (static water state)	Bottom segiment Waste Soil
Further sample destription:			
concrete comes of a	I the feelph solm by	he place - Zen of Ale place of fie (5	that removed, emergle return 5×5-5 on 1-2 on topples served,
Description of sampling place	and its sur	oundings:	
- left right cons			hel, at he plue of the fir
44, 775224A	17	232632€	
44-46127"	17	°13'79E	
Weather:		2	
Sunny, 28°C, 73% RH, NE wind,	<12km/h	* \$4	
Notes:			3
aboratory (name):			ALC Creek Republic



Project:		nja Luka, BiH: on assessmen			ssessment and nated spots	
Samle ID: 02-C-	3 2	Date and time of	sampling:	3 , 8. 2020, 12	2:00 - 15:00	
		Sampled by:		Eva Čechová	, Fernando Rebe	lo
Number of subsamples:						
Coordinates:		N			E	
Sampling bottle:	Required a	nalysis:				
150 ml glass jars	drass					
	-		-			
Sample matrices type:	Building structure		Surface water	Bottom segiment	Waste	SOII
Further sample destription:				Λ	. 1	
· 3 5 on ships Anda	n on the	area 1x1 m	n^2 , Am	from the	anjer p	
- grey- yellow on	ng love	layer on the	Le sufer	L		
		andings.				
Description of sampling place	e and its sur	rounaings.				
. one as 82-C-2						
Weather:						
Sunny, 28°C, 73% RH, NE wii	nd, <12km/h					
Notes:						
Laboratory (name):				ALS Cze	ch Republic	

d <mark>eko</mark> nta		SAMPLING	RECORD	
Project:	Ince, Banja Luka, Po assessment for the	CRe Detailed to		remediatio
Probe ID: W-1	Date and tim	ne of sampling:	08/08/20	
Number of subsamples:	Sampled I	by:	F.REBELD	
Coordinates:	N			
			E	
Sampling bottle:	Required analysis:			
some 1 GLASS	PCBS			
DARK COLOUR				
	Ground			
ample matrices type:	Soil Water	Surface B	ottom	
	(static		iment Waste	Building
urther sample destription:	state)		annent /	structure
6W at 3,5 m				
scription of sampling plac	e and its surroundings:			
tuple taken from	A PRIVATE WATER	01511 (55)		
0.10 = 400.	William William	well cochie	D DUTSIDE TAVE	1 4000
puse actied Nov	TH OF INCEL 200	nn	4000	~ MLEA.
RECTION APP (TH OF INCEL PRODUCED	DOWN DOWN	USTREAM OF GI	ใกรบาง
IE UNIVERSITY	100 m FROM VRB	AS RIVER	1500 m =	THU WOOD
ic on locksity			1300 MI FRO.	u
				1
ther:				
INNY				
s:				
AMPLE COLLECTED	AFTER 3 DAYS OF			
1	MICK ODAYS OF	HEAVY RAIN		1
WINEAS MENTIONED	THAT THEY MELLEN	1)0-5	_	- 1
	THAT THEY NEVER	USE THE WAT	ER FROM THE	WELL.
				.= 000
atory (name):				
		ALS	Zech Republic	
		ALS (Czech Republic	



Project:	Ince, Banja Luka, PCBs assessment for the PC		site assessment and remediation nated spots
Probe ID: W-2	Date and time o	f sampling:	08/08/20
	Sampled by:		F. ZEBELO
Number of subsamples:			
Coordinates:	N		E
Sampling bottle:	Required analysis:		
500 ml, GLASS,	PCBS		
DARK COLOUR		* 1 1 -	
	Ground		1 1 1
Sample matrices type:	water	Surface	Bottom Waste Building
oumpio municoo typo.	(static	water	seament structure
Further sample destription:	state)		
6W at 13,5 m F	sellow Ground. BOT	TOM OF T	THE WELL AT 3,5 m
	, - , , -		
Description of sampling pla	ce and its surroundings:		
SAMPLE TAKEN S	FRAM A CALLATE M		WATER WELL
	INCEL		which work
			15.0
HOUSE LOCATED SO	ivity west of ince	L. TROB	ABLY UPSTREAM OF
		FROM VI	ABAS RIVER SOOM FROM
THE UNIVERSITY.			
Weather:			
SUNNY			
Notes:			
, Stude collected	after 3 days of Hi	EANY RAINS	\$.
, OWNERS MENTIONE	D THAT THEY NEVE	n Use T	HE WHTER FROM THE WELL
	,		
Laboratory (name):			ALS Czech Republic
Day:			



Project:	Ince, Banja Luka, PCB assessment for the PC			ent and ren	nediation
Probe ID: W-3	Date and time (of sampling:	08/08/20		
Probe ib.	Sampled by		F.REBEL	٥	
Number of subsamples:					
Coordinates:	N			E	15-7
Sampling bottle:	Required analysis:				
500 ML, 6LASS,	PCBS				
DARK COLOUR					
	4 0				1 -
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:					
GWAT 2,9 M BELL	cow esound.				
BUTTOM OF THE WE		ELLOW BA	COUND.		
	114				
Description of sampling place			<u>l</u>		
SAUPLE TAKEN FROM	u A PRIVATE WATER	z WELL C	OCATED &	itside In	ICEL AREA.
HOUSE COCATED NE	peth West of Inc	el. Pron	34 BLY DOL	UNSTREAM	CF
GROUND WATER DIRE	CTION (?).				
APPROXIMATELY 40	m from THE RI	VER VAT	345, CU	ose to t	THE
countation of Bo	TH ARMS OF THERE	VER. 400	OM FROM	u THE U	Niversity
Weather:					
SUNNY					
Notes:					
-SAMPLE COLLECTED	AFTER 3 DAYS OF	HEAVY RA	1ïN		
, OWNERS MENTION	ED THAT THEY NEV	ien Use	THE WA	ER PROP	n the
WELL.	•				
Laboratory (name):		1	ALS Czec	ch Republic	



roject:	T	assessment for the PCB contami		04/08/2020		
robe ID: T5-				O. URBAN, M. POL	hvr .	
			Sampled by:	U. UKOMIO , WILLOW		
umber of sul	osamples:			E		
oordinates:			N			
ampling bott	ile:	Required	analysis:			
150 ml, 6	lass, WIDE	PCBs				
OPENING		-				
				4 4 4		
			Ground water Surface	Bottom Waste	Building	
Sample matri	ces type:	<u>Soil</u>	static water	seament	structure	
	_ N X		state)			
urther samp	le destription:					
Description	of sampling place	e and its si	urroundings:			
			. Soil Around Luki	l'Invest.		
Contecte	y 4500 074	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	The files of the control of the cont			
Weather:						
weather.	SOFT RAIN					
Notes:						
1						
Laboratory	(name):			ALS Czech Republic		



Project:	Ince, Banja Luka, PCBs assessment for the PCE	d remediation		
Probe ID: TS-Z	Date and time of	sampling:	04/08/2020	
Probe ib.	Sampled by:		O. URBAN, M. POI	C4K
Number of subsamples:				
Coordinates:	N		E	
Sampling bottle:	Required analysis:			
opening wide	PCBs			
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sediment Wat	ste Building structure
Further sample destription:	D otate)			
Description of sampling pla	ce and its surroundings:	KIC INVE	ST	
Weather: 50FT RAIN Notes:				
Laboratory (name):	2 17 17 2 1 1 1 1		ALS Czech Rep	ublic
Day:				



roject:	assessment for the PCB contam						
robe ID: TS-3			Date and time of sampling:		04/08/2020		
robe ID:	13-3	Sampled by:			D. URBAN	M. POLAK	
umber of subs	amples:						
oordinates:			N			E	
						-	
150 mt, 6	LASS, Wide	Required a	anaiysis.				
Sample matric e	es tyne:	Soil	Ground water	Surface	Bottom seaiment	Waste	Building structure
urther sample		<u> </u>	(static state)	Water	seament	<u>/</u>	
Further sample		<u> </u>		water	seament	<u> </u>	
Further sample	destription:		state)	water	seament		
Description of	destription:	ce and its su	state)				
Description of	destription:	ce and its su	state)				
Description of	destription:	ce and its su	state)				
Description of	destription:	ce and its su	state)				
Description of	sampling place	ce and its su	state)				
Description of ८०६६८२६०	sampling place	ce and its su	state)				
Description of COLOCTED Weather:	sampling place	ce and its su	state)				
Description of COLOCTED Weather:	sampling place	ce and its su	state)				
Description of COLOCTED Weather:	sampling place	ce and its su	state)				



Project:	Ince, Banja Luka, PCB assessment for the PC			ent and ren	nediation
Probe ID: TS - 4	Date and time of sampling:		04/08/2020		
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Sampled by:		O. URBAN	M. POLA	K
Number of subsamples:					
Coordinates:	N			E	Hermon
Sampling bottle:	Required analysis:	4			
150 ml GLASS WIDE		NETALS, D	lioxin, D	DIOXIN LIN	CE PCBS,
OPENING	TOG TOH, PAH				
(3x)					
Sample matrices type:	Soit Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Description of sampling place	and its surroundings:				
COLLECTED ON THE GRA	45 . Soil AdoUND 1.	UKIC TUVE	₹ 8 1.		
Weather:					
SOFT RAIN					
Notes:					
THIS SAMPLE I	S CONTAINED I	N 3 %	6	loss co.	NTAINERS
. ,2 - ,	•				
Laboratory (name):			ALS Czec	h Republic	



Project:	Ince, Banja Luka, PCBs assessment for the PC			nent and ren	nediation
Probe ID: TS-5	Date and time o	f sampling:		08/2020	
	Sampled by:		O.ULBAN	, M. 70241	4
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ML, GLASS, WIDE	PCBs				
OPEN NE					
				Ви	
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample destription:	2 3.0.07				
Description of sampling place	and its surroundings:				
COLLECTED AN ONE A	6 57 20	N	· Lheati		
Collected on the Go	CASS. SOIL AROUNS) WIKIC	Threst.		
Weather:	0 - 1000				
SOFT RAIN					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



Project:	Ince, Banja Luka, PCBs assessment for the PCB	Detailed site a contaminate	assessment and rened spots	nediation
TC C	Date and time of	sampling: 04/08/2020		
Probe ID: TS-6	Sampled by:	0	.URBAN, M. POLA	u
Num ber of subsam ples:				
Coordinates:	N		E	
Sampling bottle:	Required analysis:			
OPENING	PCBI			
Sample matrices type:	Soil Ground water (static state)		Bottom Bediment Waste	Building structure
Description of sampling plac		WAIC IN	UV65T.	
Weather: SOFT RAIN				
Notes:				
Laboratory (name):			ALS Czech Republic	
Day:				



umber of subsamples: coordinates: ampling bottle: ISO ML, GLASS, WIDE OPENING	Date and time of Sampled by: N Required analysis:	sampling:	O.URBAH, M. POLAKE
umber of subsamples: oordinates: ampling bottle:	N Required analysis:		
ampling bottle:	Required analysis:		E
ampling bottle:	Required analysis:		E CONTRACTOR DE LA CONT
150 ml, GLASS, WIDE			
150 ml, GLASS, WIDE			
/ / //	PCBs		
Sample matrices type :	Soil Ground water (static state)	Surface water	Bottom Waste Building structure
Description of sampling pl Soil Without Ela INVEST.		WITH M.	ANY DEBRIS . AROUND LUKIO
Weather:			
SOFT RAIN Notes:			
Laboratory (name):			ALS Czech Republic
Laboratory (name): Day:			



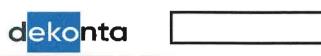
	I ^	Date and time of sampling:		04/08/2020		
Probe ID: TS - 8 Sampled by:			Sampled by:	O. URBAN, M. POLAR		
umber of sub	osamples:					
oordinates:			N			
ampling bott	le:	Required	analysis:			
A STATE OF THE PARTY OF THE PAR	USS, WIDE	PCB	s + TPH + HEAV	YMETALS		
Sample matri	ces type:	Soil	Ground water Surfa (static water state)			
urmer samp	le destription:					
urther samp	AC CONTINUE OF THE PROPERTY OF			20		
urther samp	ic destribution	-	,	<u>*</u> 1		
			,			
Description c	of sampling plac			The same of the sa		
Description c	of sampling plac			IS. AROUND LURIC INVEST		
Description c	of sampling plac			IS. AROUND LURIC INVEST		
Description c	of sampling plac			IS. AROUND LURIC INVEST		
Description c	of sampling plac			IS. AROUND LURIC INVEST		
Description o	of sampling place			IS. AROUND LURIC INVEST		
Description o	of sampling place			IS. AROUND LURIC INVEST		
Description of Soil Williams Weather:	of sampling place			IS. AROUND LURIC INVEST		
Description of Soil Williams Weather:	of sampling place			IS. AROUND LURIC INVEST		



Project:	Ince, Banja Łuka, PCBs Detailed site assessment and remediati assessment for the PCB contaminated spots				
Probe ID: TS-9	Date and time of	sampling:	ng: 04/08/2010		
1,5 1	Sampled by:		O. URBAN,	M. POLAV	1
Number of subsamples:					
Coordinates:	N E				
Sampling bottle:	Required analysis:				
150 ML, Glass, WIDE	PCB5				
OPENING .					
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample destription:	state)				
Description of sampling place MIXTURE OF SOIL AN			J		
Weather: Soft RaiN Notes:					
Laboratory (name):			ALS Cze	ch Republic	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: 75-10	Date and time o	f sampling:	04/08/2020		
15" 10	Sampled by:		O. URBAN	, M. POLAM	
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
OFFINE WIDE	PCBs				
	Ground				
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample destription:		***************************************			
	Ŷ				
Description of sampling place	and its surroundings:				
Soil Collected From	THE JOINTS BETU	VEEN THE	E CONCRET	TE :	
Weather:					
SOFT RAIN					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: TS - 1)	Date and time o	f sampling:	04/08/2020		
10 11	Sampled by:		O. URBAN,	M. POLAV	ι
Number of subsamples:					
Coordinates:	N E				
Sampling bottle:	Required analysis:				
150 mL, class, WIDE	PCBS				
OREMNE					
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:	State)				
Description of sampling place	and its surroundings.				
COLLECTED FROM T		HE COU	CKETE PL	ATFORM	
" HENT TO CELEX					
Weather:					
SOFT RAIN					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: TS - 12	Date and time o	f sampling:	04/08/2020		
10.12	Sampled by:		O.URBAN, A	U. POLANZ	
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ml, Class, WIDE OFFINING	PCBs				
Sample matrices type: Further sample destription:	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Description of sampling place	and its surroundings:		1		-
COLLECTD SOIL FRON	I THE EAST AREA	OF CELE	<		
Weather: SOFT RAIN Notes:					
Laboratory (name):			ALS Czech	Republic	
Dav:					



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID: TS - 13	Date and time	e of sampling:	04/08/24	04/08/2023		
	Sampled b	y:	D. URBAN,	M.Pozan		
Number of subsamples:						
Coordinates:	N	N E				
Sampling bottle:	Required analysis:					
50 ml, GLASS, WIDE						
OPENING						
	Ground	7	1 /			
Sample matrices type:	Soil water (static state)	Surface water	Bottom seeilment	Waste	Building structure	
Description of sampling pla		of CELEX				
Weather: SOFT Rain Notes:						
Laboratory (name):			ALS Czec	h Republic		



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediat assessment for the PCB contaminated spots				
Probe ID: TS-14	Date and time o	of sampling:	04/08/20	020	
13 19	Sampled by		O. URBAN	, M. POLA	n
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
DRENING WIDE	PCB1		,		
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Description of sampling place	e and its surroundings:				
COLLECT SOIL FROM	THE EAST AREA OF	-CELGX			
			٥		
Weather:					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



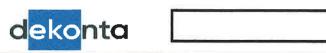
Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediat assessment for the PCB contaminated spots				
Probe ID: TS - 15	Date and time of sampling:		04/08/2020		
10 13	Sampled by:		O. URBAN,	M. Poyn	
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ML GUES, WIDE	PCBs				
OPENING					
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
Further sample destription:					
Description of sampling place COLLECTED Soil Fro		EA OF (CELOX		
Weather: SOFT PAIN Notes:					
Laboratory (name):			ALS Czec	h Republic	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots							
Probe ID: TS 16	Date and time of sampling:		04/08/2020					
Probe ID: TS - 16	Sampled by:	Sampled by:			n			
Number of subsamples:								
Coordinates:	N			E				
Sampling bottle:	Required analysis:							
6PENING	POBS							
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure			
Further sample destription:								
	Description of sampling place and its surroundings: COLLECTED Soil FROM THE EAST HEBY OF CELEX							
Weather: SOPT RAIN Notes:								
				_				
Laboratory (name):			ALS Czec	ch Republic				
Day:								



Project:	V V.	ince, Bar assessm	ice, Banja Luka, PCBs Detailed site assessment and remediations seessment for the PCB contaminated spots				mediation
Probe ID:	ガータ		Date and time o		la classic		
			Sampled by:		F. REBER	D, M. POL	An
Number of sub	samples:						
Coordinates:			N			E	
Sampling bottle		Required	analysis:				
150 ml, 66	ASS, WIDE	PCBs					
DRENING							
Sample matri ce Further sample		<u>Soil</u>	Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
Description of s	ampling place	and its eur	Oundings				
DUSIN633	ZUNE IP	- ENOVE	of BC ME	TAL.			
SAMPLE COL	lected ne	5XT TO	THE WORKE	es Bull	DING. GR	thes part	en.
Veather:							
GLOUDY							
otes:							
aboratory (name	alı						
ay:	7).				ALS Czech	Republic	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: T5-18	Date and time o	f sampling:	06/08/2020		
	Sampled by:		F. REBELO	, M. POLAN	
Number of subsamples:					
Coordinates:	N	N E			
Sampling bottle:	Required analysis:			MIN STATE	
150 ml, GLASS, WIDE	PCBS				
OPENING					
		-			
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample destription:	o tato)				
Description of sampling place BUSINESS ZONE IN F SAMPLE COLLECTED A	RONT OF BC METAL	((=n s) BU(_	DING GR	ACG DATAL	
Weather: COUDY					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



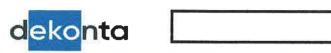
Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: TS-19	Date and time o	f sampling:	06/08/2020		
	Sampled by:		F. REBELO	, M. POLAN	L
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
SO ML, BLASS, WIDE ORENING	PCBS		· · · · · · · · · · · · · · · · · · ·		
Sample matrices type:	Ground water Soil (static	Surface	Bottom segiment	Waste	Building structure
Further sample destription:	state)				
Description of sampling place BUSINGS 20NE IN		METAL.	I		
GRASS AREA.					
Weather:					=======================================
CLOUDY					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



Project: assessment for the PCB contaminated spots		ent and ren	legiation				
Probe ID:	TS-20		Date and time o	f sampling:	06/08/20		
			Sampled by:		F.REBELO, M. POLAN		
Number of sub	samples:						
Coordinates:			N			E	
Sampling bottl		Required ar					
ope NING	ss, Wide	PCBs + TPH + HEAVY METALS					
Sample matric	es type:	Soil	Ground water	Surface	Bottom	Waste	Building
Campie maure		3011	(static state)	water	sediment		structure
Further sample	e destription:		J State)				
Description of	sampling plac	e and its surr	oundings:				
BUSINESS	ZONE IN			۲.			į
GRASS ARE	₽ A ÷						
Weather:							
CLOUDY Notes:							
Notes.							
Laboratory (n	ame):				ALS Cze	ech Republic	



Project: Ince, Banja Luka, PCBs Detailed site assessment and reme assessment for the PCB contaminated spots						
TS-21	Dat	Date and time of sampling: Sampled by:		06/08/20		
Probe ID:	Sa			M. POLAK		
umber of subsamples:						
oordinates:		N		E		
ampling bottle:	Required anal	ysis:				
50 ml, GLASS, WIDE	PCBs					
PENING						
Sample matrices type:	Soil	Ground water Surface (static water state)	Bottom seatment	Waste Building		
Description of sam pling pl	ace and its surrou	ndings:				
Business zone In	FRONT OF B	IC METAL.				
GRASS AREA						
Weather:						
CLOUDY						
Notes:						
Laboratory (name):			ALS Czec	h Republic		
Tabolatory (Haziro).						



roject: Ince, Banja Luka, PCBs Detailed site assessment and remed assessment for the PCB contaminated spots					mediation
Probe ID: 75 - 22	Date and time	of sampling:	06/08/20		
	Sampled by	*	F. REBEL	0, M.90L	tr
Number of subsamples:					
Coordinates:	N			Е	
Sampling bottle:	Required analysis:				
150mt GLASS WIDE OPENING	POBS				
Sample matrices type: Further sample destription:	Ground water (static state)	Surface water	Bottom sealment	Warste	Building structure
Description of sampling place	and its surroundings:		T		
Business zone In	FRONT OF BC ME	TAL.	-		
GRASS AREA					
Weather:					
CLOUDY					
Notes:					
Laboratory (name):			ALS Czec	h Republic	
Day:					



TS-24	3	Date and time of sampling:	06/08/20
robe ID:		Sampled by:	F. REBELD, M. POLAK
umber of subsamples:			
oordinates:		N	E
m I -Max	Peguired	analysis:	
ampling bottle: 50 ML, GLASS, WIDE OPE NING			
Sample matrices type:	Soil	Ground water Surface (static water state)	Bottom Waste Building structur
	n:		
Description of sampling	place and its s		
CHINESS COOK S	place and its s	FONE.	piles of soil where th
COLLECTED FROM S	place and its s BC METAL REA HAD	Zone. Several small 9	VILES OF SOIL WHERE TH WAS PLACED THERE OR W
COLLECTED FROM S THE SAMPLING M GRASS GREW: T EXCAVATED: Weather:	place and its s BC METAL REA HAD	Zone. Several small 9	PILES OF SOIL WHERE TH WAS PLACED THERE OR W
COLLECTED FROM S THE SAMPLING M GRASS GREW: I EXCAVATED:	place and its s BC METAL REA HAD	Zone. Several small 9	PILES OF SOIL WHERE TH WAS PLACED THERE OR W
COLLECTED FROM S THE SAMPLING M GRASS GREW. T EXCAVATED. Weather: CLOUDY	place and its s BC METAL REA HAD	Zone. Several small 9	WAS PLACED THERE OX W



Project:		Ince, Banja Luka, PCBs Detailed sassessment for the PCB contamin		site assessment and remediation			a Luka, PCBs Detailed site assessment and remediation not for the PCB contaminated spots		
Probe ID:	MENANDO		Date and time of sampling:						
Number of sub	samnles.	1	Sampled by:	F. REBELO, M. POLIK					
Coordinates:	cumples.								
Coordinates.			N	E					
Sampling bottl	0 :	Required :	makes in						
150 ML GLA									
OPENING	1	+ HEAVY	METALL	B LINE DIOXINS + TOC +TPH					
(4x	}								
			Ground	1					
Sample matrice	s type:	<u>Soil</u>	water Surface	Bottom Wate Building					
			(static water	segment Waste structure					
urther sample	destription:		state)						
escription of sa	ampling place	and ite ours							
Collected &	LLOW BO M	ETAL ZON	<i>1€</i> .						
THE SAMPLIA	is area h	AD SEVER	LAL SMALL PILES IN	OF SOIL WHERE THE GRASS					
GREW. I	i seems	THAT TH	le soir was one	THE GRASS					
			COLO CONS PUNC	ed there or excavated.					
eather:									
CLOUDY									
otes:									
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,									
THIS SAME	PLE IS CO	NTAINED	IN 4 GLASS CON	MINER DUE TO THE					
LARGED TO	Utarini-		iana ann =	०० १० । तर					
	7-31-VII (16)	rewu	ined for toc.	i i					
no material di									
boratory (name) <u>. </u>		V	ALS Czech Republic					
y:									



Project: Ince, Banja Luka, PCBs Detailed site assessment and reme assessment for the PCB contaminated spots					
Probe ID: 75 - 25		Date and time of sampling:		06/08/20	
Tobe ID.	Sampled by:		F. REBELD, M. POLAV		
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:	11 1			
150 ml, GLASS, WIDE	PCBS + TPH + HE	AVY MET	* ls		
DRE NINE					
Sample matrices type:	Ground water Soil (static	Surface water	Bottom seaiment	Waste Buildi	
	state)	Water	Scannerk		
Further sample destription:					
				9	
Description of sampling pla	ce and its surroundings:				
COLLECTED FROM B	. Metal ZONE .				
The supplied Aron A	HAD SEVERAL SMAL	LPILES	of Soil	WHERE THE G	
THE SHOPE THE	4011)				
1.0-11					
GREW. IT SEEMS THAT TH	e soil was place!				
IT SEEMS THAT TH	e soil was place!				
GREW. IT SEEMS THAT THE	e soil was place!				
IT SEEMS THAT THE Weather:	e soil was place!				
IT SEEMS THAT TH	e soil Was Place!				
IT SEEMS THAT THE Weather:	e soil Was Place!				
IT SEEMS THAT THE Weather:	e soil was place!				
IT SEEMS THAT THE Weather:	e soil was place!				
IT SEEMS THAT THE Weather:	e soil was place!		OR WA		



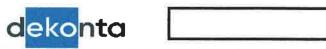
Project:	Project:		Ince, Banja Luka, PCBs Detailed s assessment for the PCB contamin		site assessment and remediation		
Probe ID:	75-26	Date and	time of sampling:	06/08/2	0		
Number of subs	amples:	Sample	ed by:	I F. REBE	10, M. PI	OLAN	
Coordinates:		N					
			والمراجعين		Е		
Sampling bottle:		Required analysis:					
Spening	s, wide	PCBs					
Sample matrices Further sample d		Grou Wate Soil State state	Surface ic water	Bottom seaiment	Waste	Building structure	
		and its surroundings					
COLLECTED FR	ow Be w	etal Zove					
THE SHUPLING	APPA HAD HAT THE E) SEVERAL SMALL 30°IL WAS PUACE	Piles of Soil DitHere of	. Where s	THE GRASS	Grew.	
leather:	. 1						
otes:				9			
boratory (name):				ALS Czech	Republic		
ıy:				020011	· · · · · · · · · · · · · · · · · · · ·		



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: TS-27	Date and time of	of sampling:	06/08/20	06/08/20	
	Sampled by:		F. REBEL	0 , M. POL	Avc
Number of subsamples:					
Coordinates:	N E			E	
Sampling bottle:	Required analysis:				
150 ML GLASS, WIDE	POBS				
OPENING					
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
Further sample destription:					
e e					
Description of sampling place	and its surroundings:		<u> </u>		
SAMPLES CONTRACTOR	30 . 210		5.		
SAMPLES GOLLECTED	trom it thich be	GRASS DE	& IN VA	LONTINO	AREA.
Weather:					
CLOUDY					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	t5-28	Date and time	of sampling:	06/08/23	>	
		Sampled by		F. REBE	LO, M.P	OUR
Number of subs	amples:					
Coordinates:		N			E	
Sampling bottle		Required analysis:				
ISO MIL, GLAS OPENING	s, wide	PCBS				
Ofeioniae						
Sample matrices	s type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample	destription:	State)				
Description of s	ampling place	and its surroundings:				
SAMPLE CO	llected f	PROM A PATCH OF	GRASS II	, JALENT	ino hre,	4.
Weather:						
Cloudy	II.					
Notes:						
Laboratory (nam	e):			ALS Czec	h Republic	
Day:						



Project:		Ince, Banja Luka, PCE assessment for the P	site assessment and remediation nated spots			
Probe ID:	TS-29	Date and time	of sampling:	06/08/20		
	,	Sampled by	6	F. REBEL	O. M.PC	DLan
Number of subs	amples:					
Coordinates:		N			E	
Sampling bottle		Required analysis:				
150 ML, GLAS	S, WIDE	PCBs				
OPENING						
Sample matrices	s type:	Soil Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
Further sample	destription:	state)		V		
Description of s	ampling place	e and Its surroundings:				
Staple co	llected	from A Patch of	= 60 as I	V INCEL I	îrade h	rea
Weather:						
Notes:						
Laboratory (nam	ie):		T	ALS Czech	Republic	
Day:						

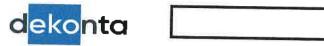


Project:	nce, Banja Luka, PCBs Detailed site assessment and remediations assessment for the PCB contaminated spots				nediation
Probe ID: 75 - 30	Date and time	of sampling:	06/08/20		
	Sampled by		F. REBEL	D, M. PC	CAU
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
SOML, GLASS, WIDE	POBS				
opening .					
				+	
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample destription:	State)	<u> </u>			
					_
Description of sampling place	and its surroundings:				
SAMPLE COLLECTED	FROM A PATCH	of Grass	TN THE	el Trade	A REA
Weather:	1000		×		
CLOUPM					
Notes:					
Laboratory (name):			ALS Czech	Republic	

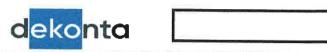


Project: Ince, Banja Luka, PCBs Detailed site assessment and remedi assessment for the PCB contaminated spots					mediation
Probe ID: TS - 3)	Date and time o	f sampling:	07/08/20		
	Sampled by:		F.REBEW	M. POLAN	
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ml, GLAS, WIDE OPENING	PCBs				· · · · · · · · · · · · · · · · · · ·
Sample matrices type:	Soil Ground water (static state)	Surface	Bottom sediment	Waste	Building structure
Further sample destription:	•				
Description of sampling place SAMPLE COLLECTED F		leas Ao		201 50	الم المستري والمراجع
STONES AND DEBRI		10kg //kc	оң , кос	<i></i>	L. WITH
Weather: SปNNY					
Notes:					
Laboratory (name):			ALS Czec	ch Republic	
Dav					

Project:		Ince, Banja L assessment	anja Luka, PCBs Detailed site assessment and remediation ment for the PCB contaminated spots				mediation
Probe ID:	ts - 37	D	Date and time of sampling:		07/08/	20	
Number of subs	amples:		проса Б	<i>I</i> .	1	ELD, M	Pour
Coordinates:			N			E	
Sampling bottle:		Required anal	ysis:				
150ML, GLA	ss, Wide	PCBS + 61		METRY			
OFE VINC							
ZX)						
Sample matrices		Soil	Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
Further sample d	estription:		State)				/
THE SAM FOUND WE Description of san SAMPLE COL STONES AND	PLE FOI HEN THE opling place a	and its surround	ings:	TRY HA	S ALL P	Zocies/	stones
Jeather: SUNNY otes:							
- I SAMPLE - I SAMPLE	For f	CBS ANA GRANULOM	Lyses Etry	1 -	TH SAMF THE E		
boratory (name):					ALS Czech	Republic	
ıy:						· · · · · · · · · · · · · · · · · · ·	



Project: Ince, Banja Luka, PCBs Detailed site assessment and remed assessment for the PCB contaminated spots					mediation		
Probe ID:	13 - 33	I	Date and time	of sampling:	07/08/20		
			Sampled by	:	F. REBE	is, M. Po	LAIR
Number of subs	amples:						
Coordinates:			N			E	
Sampling bottle		Required ana	ılysis:				
150 ml, 60	LASS, WIDE	PCBs					
OPENING							
						=	
Sample matrices		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample of	destription:		State)		<i>V</i>		
Description of sa					Γ		
SAMPLE CE WITH STOM	icected Vos AND I	FROM TR DEBRIS	ans for	MERS.	AREA.	Rocky:	Soic
Veather:							
SUNN	1						
lotes:							
aboratory (name):		21		ALS Czech	Republic	
av:			-		3.30 320011	- TOPODIO	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				mediation
Probe ID: TS - 34	Date and time	of sampling:	07/08	/20	
	Sampled by	/ :	F. REBEL	10/M. PO	LAVE
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
Soul Glass wide	PCBs				
ACMIND					
				-	
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom seatment	Waste	Building structure
Further sample destription:	State)				
Description of sampling place	and its surroundings:				
SAMPLE COLLECTE	D FROM TRANS	formers	AREA.	POCKY.	Soil
WITH OTONE - MA	D DEBRIS, A	LOT OF	CONSTRU	ction i	WASTE
KROUND THE AR	26A -				
Weather:					
SUNNY					i
Notes:					
Laboratory (name):			ALS Czech	n Republic	
Dave					



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: 75~35	Date and time	of sampling:	07/08/2	.0		
	Sampled by	:	F. REBELL	0 / M. 70L	4in	
Number of subsamples:						
Coordinates:	N			E		
Sampling bottle:	Required analysis:			-25		
150 ML, GLASS, WIDE						
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure	
Description of sampling pla (OLLECTED FROM THE AREX), PATICH OF (BRICKS, ASBESTOS, Weather: SUNNY Notes:	HE ELECTROLISIS AT	REA (OF	POSITE TO ANTHIZOPO	THE TRA	NATERIAL	
Laboratory (name):			Al S Czec	h Republic		
Dav			ALS UZEC	n republic		



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remed assessment for the PCB contaminated spots				mediation		
Probe ID:	75-36	Date and time of sampling: 0 7/08/20					
Number of subs	amples:		Sampled by	/	T. KEBEL	DIM. POLA	in .
Coordinates:							
			N			E	
Sampling bottle		Required a	mahmin				
OPENING		PCBS	aranyoro.				
Sample matrices Further sample o		<u>Soil</u>	Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
Description of sa	mpling place :	and its sur-	nundinger				
COLLECTED F AREA). PA CBRICKS, A	rom the TCH of ba	ELECTROL ASS WIT	7656 40	Cobsite c of Au	: 10 7HE 1 THROPOGEA	TRANSFOR	MERS 21AL
SUNNY							,
otes:							
aboratory (name)					ALS Czech	Republic	
ay:						1	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				mediation
Probe ID: TS - 3	Date and time	e of sampling: 07/08/20 y: F. REBELO , M. POLAK			Aire
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ML, GLASS, WIDE OPENING					
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Description of sampling plac	e and its surroundings:				
COLLECTED FROM T PATCH OF GRASS &	HE CLECUMOUSIS	area (or	धोह १०	THE TRAI	voporma
(BRICKS, ASBESTOS	wines)	**************************************	Po 60Ni	l' Mater	RIAL
Weather:					
SUNNY					
Notes:					
Laboratory (name):			ALS Czech	Republic	



Day:

Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediassessment for the PCB contaminated spots					mediation
Probe ID:	TS -38	Date and time	of sampling:	09/08/20)	
		Sampled by	y:	F. REBELO	, M. POU	AK
Number of subsa	mples:					
Coordinates:		N			E	
Sampling bottle:		Required analysis:				
150 ML GLASS	WIPE	PUBS + ASBEST	ðS.			
OPENING.						
(2x)						
Sample matrices	type:	Soil Ground Soil Water Static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample de	estription:					
	FROU TI	and its surroundings: THE ELECTROLIST PRASS WITH A LAYER WIRES).	s area (Coposite to i	THE TRAI BNIC A	NSPORMER MTERIAL
Weather:						***
		PCBs ANALYSE OPTICAL MICA		ASSESTOS	(QUA	Litative)
Laboratory (name			T .	ALS Czech		



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediat assessment for the PCB contaminated spots				
Probe ID: 15 - 39	Date and time	and time of sampling: 0+/08/20			
	Sampled b	y:	F-REBELL	M. POCA	п
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ML, GLASS, WIDE	PCRS				
Prening					
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
Further sample destription:	state)				
Description of the state of					
Description of sampling place					
SAMPLE COLLECTED IN PATCH OF GRASS 2	THE MEA SULLOW OCATED EPOSITE	NDING NE TO ABAND	oved Bi	i Buildi Pilding.	N6.
Veather:					
SUNNY Notes:					
Notes:					
aboratory (name):			ALS Czech	Republic	



Project: Ince, Banja Luka, PCBs Detailed site assessment and remediassessment for the PCB contaminated spots						
Probe ID: TS-40	Date and time of	Date and time of sampling: 07/01/29		: 07/08/20		
	Sampled by:		F. REBEL	D, M. PC	cm	
Number of subsamples:						
Coordinates:	N			E		
Sampling bottle:	Required analysis:					
BOML GUSS, WIDE OPENING	PCBs					
Sample matrices type:	Ground water	Surface	Bottom	Waste	Building	
oumpro maarooo cype.	Blatic	water	sediment	VVaste	structure	
Further sample destription:	state)				<u> </u>	
Description of sampling place SAMPLE COLLECTED		verouvs	J SING NOU	ut Banki	4 BU!4D]1	
SAMPLE COLLECTED PATCH OF GRASS L	ocated profite t	e Aban	DONE'D	BUNDIN	16.	
Weather: SUNNY Notes:						
Laboratory (name):			ALS Czec	h Republic		



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remedia assessment for the PCB contaminated spots				
Probe ID: TS-4]	Date and time	of sampling:	07/08/20		
	Sampled by		F. REBELD , M. P.	OLAR	
Number of subsamples:					
Coordinates:	N		E		
Sampling bottle:	Required analysis:				
150 ml, GUASS, WIDE OPENING	<u>PCBS</u>				
	Ground/		1 /	1 2	
Sample matrices type: Further sample destription:	Soil water (static state)	Surface water	Bottom sediment Wast	e Building structure	
Description of sampling place	and its automatical				
Sample collected that he located oposite to Ab	treat sufferential in	DUA BAUKA	BUILDING. PAT	ch of Genss	
Weather: SUNNY Notes:					
Laboratory (name):			ALS Czech Republi	c	



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remedia				
Probe ID:	TS-42	Date and time of sampling: 02/68/20				
		Sampled b	y:	F. REBELO	M. POLAN	L
Number of subs	amples:					
Coordinates:		N			E	
				-		
Sampling bottle:		Required analysis:				
OPENING	Wipe	PCBs				
Sample matrices		Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Description of sa	mpling place	and its surroundings:				
Sauple coile Of Gaass C	CTED IN T COCATED (HE AREA SURROUN SPOSTTE TO ABAN	ding Now Doved E	t banka i Building	BUILDING	б. Рапсн
Weather: SUNNY Notes:						
aboratory (name):			ALS Czech	Republic	
Jav.	,					



Project:		Ince, Banja assessme	a Luka, PC nt for the F	a, PCBs Detailed site assessment and remediation the PCB contaminated spots			
Probe ID:	TS -43)		of sampling:	07/08/	row	
Number of subs	amulaa.		Sampled b	y:	F. REBEU	O, M. POLA	И
	ampies:						
Coordinates:			N			E	
Sampling bottle		Description					
The same of the sa		Required a	nalysis:				
THENING	ss, wide	PCBS					
Sample matrices		Soil	Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample of	estription:						
ROCKY Soil							
707	•						
Description of sa	mpling place	and its surro	undinas:				
					0		n i
SAMPLES CO	IVOUDO J	TNDIDE (IN VERZU	M AKEA	, GRASS	PATCH.	
MANY OLD	and Rusing	1 976CES	of metal	- AND Me	TAL WIR	ies Wyi	NG
AROUND (OPEN Smy	<i>)</i> .					
Veather:							
SUMY							
lotes:							
							1
aboratory (name							
av.					ALS Czech	Republic	



		Ince, Banja Luka, PCBs Detailed assessment for the PCB contant	I site assessment and remediation innated spots
robe ID:	TS-44	Date and time of sampling:	07/08/2020 F. REBELD, M. POLAN
lumber of subs	samples:		
coordinates:		N	Е
Sampling bottle	A:	Required analysis:	
	ASS WIDE	PCBs + Heavy METALS +T	PY
Sample matrice	es type:	Soil Ground water Surface (static state)	/ VVasie
Description of	sampling place	e and its surroundings:	
SAMPLES O	collected 1	INSIDE UNIVERZUM AREA. 6TY PIECES OF MOTAL AN	
SAMPLES O	COLLECTED (D AND RU (6 PEN SM	INSIDE UNIVERZUM AREA. 6TY PIECES OF MOTAL AN	



Project: Ince, Banja Luka, PCBs Detailed site assessment and remedia					
Probe ID: TS-45	Date and time	of sampling;	07/08/20	020	
	Sampled b	y:	FREBER	M. POLA	и
Number of subsamples:			-0		
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ml, GLASS, WIDE	PCB5				
OPENING					
Sample matrices type:	Soil Ground Soil (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample destription:	/ state)				<u> </u>
Description of sampling place	and the				
				Cammid	
SAMPLES COLLECTED					
MANY OCD AND RUST	M METAL PIECES	SHURED	AND ME	TAL WIR	Ej
CAYING AROUND COP	ELL SKV)	F4			
() ()	000017)				
Weather:					
SUNNY					
Notes:					
					Į.
aboratory (name):			ALS Czech	Republic	
lav:			, , 02601	· · · · · · · · · · · · · · · · · · ·	



Project:					site assessment and remediation inated spots			
Probe ID:	TS-46		Date and time	of sampling:	03/08/20	000		
			Sampled by		F.REBEW	, M. POLA	٨ .	
Number of subs	amples:							
Coordinates:	NEC IN		N			E		
Sampling bottle:		Required an	alvsis:					
150 ml, Gla		PCBs						
OPENING								
Sample matrices		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure	
Further sample of	destription:							
Description of sa	ampling place	and ite curro	undinger		r	5		
						DATEL		
SAMPLE C								
around (o	and Rus Pen Sky)	ty Pieces	of Netai	(AV) MB	tal Wir	es Cayin	6	
Weather:								
SUNNY								
Notes:								
Laboratory (nam	e):				ALS Czec	h Republic		
Dave								



Project:		Ince, Banja assessme	Banja Luka, PCBs Detailed site assessment and remediation sment for the PCB contaminated spots					
Probe ID:	TS- 47			e of sampling:	07/08/			
Number of subs	amples		Sampled I	oy:	F. REBE	w, M.Poz	чк	
Coordinates:	amples.							
Coordinates:			N			E		
Sampling bottle:		Required as	nohiolo:					
150 ML, 664		PCBS + DioxINS + DIOXIN CIKE PCBS						
OPENING	1		3,0,1,03	1 - 10 1110	0126 10	03		
(2)								
CA								
			Ground	1	1	1	1	
Sample matrices		<u>Soil</u>	water (static state)	Surface water	Bottom seaiment	Waste	Building structure	
Further sample d	estription:		State)	V			/	
Description of sa	mpling place	and its surro	undings:					
COLLECTED				AV Dave.	0.001			
SAUPLE COIL	ECTEN SO		, e, j , v c	my Rocky	301 C.			
in 1112 is a second	COLLED 17	M THE	RAIL MUD	7 •				
WHOLE ARE CONCRETE	54 (E×Ce	ips of R	Ail WAY)	Covered	WITH A	LAYEN	OF	
Veather:								
SUNNY								
otes:								
aboratory (name)					ALS Cass	Danublis		
ay:					ALS Czech	Republic		



Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
	TS - 48	Date and time of a	sampling:	07/08/2020	
Probe ID:		Sampled by:		P, REBELO, M.P	OLAN
Number of subs	amples:				
Coordinates:		N		E	
Sampling bottle	: -	Required analysis:			
OPENING	, Wide	PCBS			e 1
Sample matrice	s type:	Soil Ground water (static state)	Surface water	Bottom seaiment Waste	Building structure
Further sample	destription:	J. G.G.CO/			
Description of	sampling place	e and its surroundings: OUTSIDE TO OUTSIDE OF	op MET	ial (Sample Mo	OVED
APP. 100	M TOWAR	DS THE INSIDE OF	THE W	dod Storing Con	LPANY PREM
Weather:					
Notes:	J He Cocation Sovering	IN TO OUTSIDE TO	4 Meta	IL DUE TO THE	CONCRETE"
Laboratory (na	me)·			ALS Czech Republ	ic
Day:	inie).				



Project:		nja Luka, PCBs Detailed site assessment and remediation nent for the PCB contaminated spots					
Probe ID: T5 - 49	Date and time o	of sampling:	03/08/20	020			
	Sampled by:		F. REBEL	O, M.POL	tu		
Number of subsamples:							
Coordinates:	N			E			
Sampling bottle:	Required analysis:						
150 ML, GLASS, WIDE	PCBS						
PRENING							
Sample matrices type:	Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure		
Further sample destription:	State)						
Description of sampling place	and its surroundings.	,					
COLLECTED IN TOP ME		Ten Sale					
SAMPLE COLLECTED FI							
WHOLE ALEA (EXC	EPT OF RAIL WHY)	COVERED	, with &	on Cret "			
Weather: SUNNY							
Notes:							
Laboratory (name):			ALS Czeci	n Republic			
Davi							



Day:

Project:		Ince, Banja Luka, PCBs De assessment for the PCB c	etailed s ontamin	ite assessme ated spots	nt and rem	ediation
	~(~()	Date and time of sar	npling:	01/08/202	0	
Probe ID:	75-50	Sampled by:		F. REBELD,	M. POLAN	۲.
Number of subs	amples:					
Coordi nates:		N			E	
Sampling bottle		Required analysis:				
150 mL, GL OPENING	ASS, WIDE	FCB5				
Sample matrice	s type:	Soil Ground water (static state)	Surface	Bottom sealment	Waste	Building structure
PATCH OF	sampling place	e and its surroundings:	ce of	TOP MET	î A C	
Weather: SUNNY Notes: ALOUED T	YIS LOCAT LOVERING	ION OUTSIDE TOP MA	eta ()	PUE TO T	ME CONO	OKETE
Laboratory (na	ama):			ALS Cze	ch Republic	



Project:		Ince, Banja assessment	Luka, PCB t for the PC	CBs Detailed site assessment and remediation PCB contaminated spots				
Probe ID:	TS-51		Date and time		04/08/20.	10		
			Sampled by		F. REBELO	, M, POLAN	ı	
Number of subs	amples:							
Coordinates:			N			E		
Sampling bottle		Required and	alysis:					
150 ML, GLASS, WIDE PCBS								
OPENING	100							
Sample matrices	type:	<u>Soil</u>	Ground water (static	Surface water	Bottom seatiment	Waste	Building structure	
Further sample of	destription:	<u> </u>	state)	/		/		
Description of a								
Description of sa					Succount	D'NG Y	-رايا	
Collecter			ZEA OUT	THE OWN	OU FFOO!	-1,00	, , , ,	
FIRE FIGHT	ers sta	ioN					İ	
							i	
						55 01		
Weather:								
SUNNY								
Notes:	0							
							l	
					WINDOWS			
Laboratory (name	e):				ALS Czeci	n Republic		



Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					mediation
Probe ID: TS-52	Date and time	of sampling:	07/08/2		
	Sampled by	/:	FREBEU	D, M.POL,	9K
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
DPENING	PCRS				
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom segiment	Waste	Building structure
					c =
Description of sampling place COULECTED FROM A STATION		RON DINE	THE FI	ire fier	etens
Weather:					
Laboratory (name):			ALS Czecł	n Republic	



Project:		Luka, PCBs Detailed site assessment and remediation for the PCB contaminated spots				
Probe ID: TS-53	Date and time o	f sampling:	06/08/2º			
	Sampled by:		F. REBELL	M. POLAN		
Number of subsamples:						
Coordinates:	N			E		
Sampling bottle:	Required analysis:					
OPENING WIDE	PCBS					
Sample matrices type:	Soil Ground water (static state)	Surface	Bottom sealment	Waste Building structure		
Further sample destription:						
		~				
Description of sampling place						
Shulle collected fr	om a Patien of Gras	LOCATE	DINTH	E BUSINESS		
BONE BESTDE E	COTRADE TREA					
Weather:						
Notes:						
,						
Laboratory (name):			ALS Czech	Republic		
Day:						



Project: Ince, Banja Luka, PCBs Detailed site assessment and remed assessment for the PCB contaminated spots			emediation				
Probe ID:	TS-54		Date and tim	e of sampling:	06/08/20		
Number of subs	amnlee:	Sampled by:		FREB	Elo M.F	OLAR	
	amples.						
Coordinates:			N			E	
Sampling bottle		Required a	nalveis.				
DPENING		PCRS	mulysis.				
Sample matrices		<u>Soil</u>	Ground water (static	Surface water	Bottom sediment	Waste	Building structure
Further sample of	lestription:		state)				
Description of sa SAMPLE COL BUSINESS	LECTED F	ROM A	PATCH &	of GRASS AREA.	COCATE	D 'IN TI	1E ·
Veather:	OUOU						
otes:	77						
aboratory (name)					ALS Czech	Republic	
ay:						- F =====	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: TS-55	Date and time of sam	opling: 0608/23	0908/23		
	Sampled by:	F.ZEBELO.	M. POLAN		
Number of subsamples:		/			
Coordinates:	N		E		
Sampling bottle:	Required analysis:				
150 ml, GLASS WIDE	PCBs				
opening '					
Sample matrices type:	. 3011 / / 1	urface Bottom vo	Vaste Building structure		
Further sample destription:	State)				
Description of sampling place	and its surroundings:	MACS INCUSED TA	I ECOTIVADE		
ARCA.		NOTE OF THE PROPERTY OF THE PR			
Weather: SUNNY CLOUDY Notes:		-			
Laboratory (name):		ALS Czech Rep	public		
Dav:					



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots			mediation		
Probe ID:	75-56	Date and time of sampling:		06/08/20			
			Sampled by	<i>/</i> :	FREBE	10 , M.PC	LAva
Number of subs	amples:						
Coordinates:		6 Kalence	N			Ε	
Sampling bottle:		Required a	nalysis:				
OPENING	, WIDE	PCBS					
CICNING							
			I O	*			
Sample matrices	type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample d	estription:		State)				
Description of sa				GRASS LE	CHTED 1	N ECOTE	+DE
ARE4.							
	ouzy						
Notes:							
aboratory (name)):				ALS Czech	n Republic	
ay:							



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots			
Probe ID: TS-5	Date	and time of sampling:	05/8/20	
	-	npled by:	F. REBELO, M.P	OLAK
Number of subsamples:				
Coordinates:		N	E	
Sampling bottle:	Required analys	sis:		
OPENING	9CB5			
Sample matrices type: Further sample destription	Soil	Ground Water Surface (static water state)	Bottom sediment Waste	Building structure
Description of sampling pl	ace and its surround	lings:	1 00	
SAMPLE COLLECTED	IN THE AREA	of Productio	NOF CSZ.	
Weather:				
Notes:				
Laboratory (name):	0		ALS Czech Republic	
Day:				



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				mediation
Probe ID: TS -58	Date and time	of sampling:	0.6/08/2	0	
	Sampled by	<i>(</i> :		10, M.P	POLAN
Number of subsamples:					0-11-
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
150 ML, GLAS, WITE	PCBs				THE RESERVE OF
previou					
	Ground	1 /			1
Sample matrices type:	Soil water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:	State)	V			
Description of sampling place		of Produ	OCTION O	of CS ₂	-
Weather: CLOUDY					
Notes:					
Laboratory (name):			ALS Czech	n Republic	
Day:					



Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots			mediation	
Probe ID:	15-59	Date and time of sampling: Sampled by:		06/08/20		
Number of sub	samples:		,,	I F. KEKT	6, M.PC	lose
Coordinates:		N				
					E	
Sampling bottle	٥٠	Required analysis:				
150 ML, GL OPENING		PCBs				
	-					
Sample matrice		Soil Ground water (static state)	Surface water	Bottom seaiment	Waste	Building structure
		and its surroundings: TN THE AREA	ec Pan		<i>a c c c</i>	
			01 120	POCHON	orus;	2 -
Neather:	cudy					
Notes:						
aboratory (nam	e):			ALS Czech	Republic	
av.						



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: T5-60	Date and time of sampling: 0.6/01/20		O		
	Sampled by	F. REBELO, M. POLYK		tic	
Number of subsamples:					
Coordinates:	N			E	
is .					
Sampling bottle:	Required analysis:				
OPENING WIDE	PC'BS			- 11 - 11 - 1	
	Ground		1 /		
Sample matrices type:	Soil water (static state)	Surface water	Bottom sealment	Waste	Building structure
Description of sampling place SAMPLE COLLECTED	e and its surroundings:	PRODUCTI	0.N DF	CS ₂ .	_
Weather:					
00.57					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID: TS - 61	Date and time o	f sampling:	0H08/2	,o	
Frode id.	Sampled by:		F REBELO	, M. Polan	
Number of subsamples:					
Coordinates:	N			E	
Sampling bottle:	Required analysis:				
opening wide	PCRs				
Sample matrices type:	Soil Ground water (static state)	Surface water	Bottom sealment	Waste	Building structure
Further sample destription:	State)			<u> </u>	
Description of sampling place	and its surroundings:				
Stutue collecter F	FROM THE AREA	of De-	мі Ркоме	P 7 .	
Weather:					
Notes:					
Laboratory (name):			ALS Czec	h Republic	



Project:	Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots			
Probe ID: TS-62		04/08/20		
	Sampled by:	F. REBELO, M. POLAN		
Number of subsamples:				
Coordinates:	N	E		
Sampling bottle:	Required analysis:			
150 ML GLASS, LUIDE OPENING	PCB4			
Sample matrices type:	Soil Ground Water Surface water state)	Bottom Waste Building structure		
Description of sampling place SAMPLE COLLEGES	e and its surroundings: FROM THE AREA OF DE-	-Mi PROMET.		
Weather: SUNNY Notes:				