

**Contaminated Site
Investigation
& Remediation**



Conducted Fieldwork Report

INCEL, Banja Luka, Republika Srpska, Bosnia and Hercegovina

25. 8. 2020

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**INCEL, Banja Luka, PCBs Detailed site assessment and
remediation assessment for the PCB contaminated spots**

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Contents

1	INTRODUCTION.....	6
1.1	<i>General</i>	6
1.2	<i>Objectives of the survey.....</i>	6
1.3	<i>Tasks.....</i>	6
1.4	<i>Team structure</i>	6
2	PERFORMED ACTIVITIES	7
2.1	<i>Preparatory work</i>	7
2.2	<i>Meetings and site reconnaissance</i>	7
2.3	<i>Sampling work</i>	9
2.3.1	<i>Summary of sampling work.....</i>	9
2.3.2	Soil probes	10
2.3.3	Topsoil samples	12
2.3.4	Construction material samples.....	14
2.3.5	Groundwater samples	16
2.3.6	Sediments samples.....	18
2.4	<i>Geodetic work</i>	18
2.4.1	Methodology	18
2.4.2	Results	19
3	CONCLUSION	20
4	REFERENCES.....	20

LIST OF ANNEXES

Annex I: GIS map with sampling locations

Annex II: Table with all collected samples

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

Annex IV: Photo-documentation of construction materials sampling

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

Annex VI: Sampling protocols

LIST OF TABLES

Table 1: Experts' involvement in the fieldwork survey	7
Table 2: Introductory work meeting participants	7
Table 3: Number of probes and collected soil samples	11
Table 4: Overview of construction materials samples	15
Table 5: Physio-chemical parameters	16
Table 6: Geodetic coordinates	19

LIST OF FIGURES

Figure 1: Site reconnaissance with Boris Legović and Petar Smitran, 29. 7. 2020	8
Figure 2: Site reconnaissance with Ermin Tajić, 3. 8. 2020	8
Figure 3: Drilling of probes for soil and groundwater sampling.....	10
Figure 4: Drilling core of S-4 soil probe	11
Figure 5: Collection of soil samples	11
Figure 6: Soil probe S-23 equiped with HDPE pipe.....	10
Figure 7: Topsoil sampling.....	12
Figure 8: New probe S-1 – measuring basic parameters with WTW instrument.....	17
Figure 9: Sediment sampling upstream of sewage channel.....	18
Figure 10: Geodetic survey of S-20 soil probe.....	18
Figure 11: Drone DJI Phantom 4 PRO in operation	19

List of Abbreviations

a.s.l.	Above mean sea level
b.g.l.	Below ground level
BTEX	Benzene, Toluene, Ethylbenzene and Xylene
BZ	Business Zone INCEL
Cd	Cadmium
cm	Centimeter
COC	Contaminants of concern
CS ₂	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
HNO ₃	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
Na ₂ S	Sodium Sulphide
Na ₂ SO ₄	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

Name	Position	No. of Days	
		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 Kulháněk	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 introductory working meeting 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

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



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



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

The site reconnaissance 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 Field visit by RS Ministry of Physical Planning, Construction and Ecology 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 equipped 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

No.	Probe	Date	Depth (m)	Sample ID				Total number of samples	Piezometr	Position
				0,0-0,2	0,2-0,8	0,8-2,0	GW			
1.	S-1	30.7.20	6,00	S1/TS	S1/1	S1/2	S1/GW	4	X	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	X	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	X	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	X	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	X	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	X	Business zone (electrolysis)
15.	S-15	3.8.20	6,00	S15/TS	S15/1	S15/2	S15/GW	4	X	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)

No.	Probe	Date	Depth (m)	Sample ID				Total number of samples	Piezometr	Position
				0,0-0,2	0,2-0,8	0,8-2,0	GW			
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	X	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	X	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	X	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 pre-selected 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 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.



Figure 7: Topsoil sampling

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 plant)	3	L-1	Small building with two transformer rooms. Samples taken from an inclined floor of transformer basin.
	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 of Viscosis)	17	BZ-T-1	Elevated platform in front of transformer rooms. Flat concrete, oily stains, petroleum smell.
	18	BZ-T-2	Floor from inside a transformer room (concrete).
Business zone (Electrolysis, center, close to I-9)	19	BZ-C-1	Inclined floor of a transformer basin. Front wall demolished.
	20	BZ-C-2	Concrete floor of a large hall. Composite sample of an oily stain at the entrance and two samples of floor and concrete column (30 cm height) in a corner area 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 pre-selected 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 varied 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	Physico-chemical parameters					Groundwater level (m b.g.l)	Amount of pumped water (l)
		pH	Diss. O ₂ (mg/l)	Redox (mV)	Conductivity (μS/cm)	Temperature (°C)		
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	Physico-chemical parameters					Groundwater level (m b.g.l)	Amount of pumped water (l)
		pH	Diss. O ₂ (mg/l)	Redox (mV)	Conductivity (μS/cm)	Temperature (°C)		
<i>P-3</i>	09.08.2020	7.1	1.3	-41	677	17.4	1.55	120
<i>P-4</i>	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 of 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.

2.4.1 Methodology

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 pre-programmed 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

Point marking	DKS SYSTEM			WGS84 SYSTEM	
	Y	X	H		
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

Point marking	DKS SYSTEM			WGS84 SYSTEM	
	Y	X	H		
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

No.	Name
1	Univerzum AD
2	Nova Banka
3	Lukic Invest (former power plant)
4	SHP Celox
5	Business zone (electrolysis)
6	Business zone (fire fighting station)
7	TOP Metal
8	Eco-Trade
9	Business zone (next to Eco-Trade)
10	Business zone (production of CS ₂)
11	Valentino
12	Business zone (in front of BC Metal)
13	Incel Trade
14	BC Metals
15	DE-MI promet
16	Business zone (transformers of viscous)

Client UNDP Bosnia and Herzegovina	
Project Incel: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots	
Subject Sampling work at INCEL - Hotspot delineation	Scale: 1:3 238 Format: A3

Legend

-  Hotspots delineation
-  Construction material (2020)
-  Top soil inside INCEL (2020)
-  Soil probes inside INCEL (2020)

Inspectorate sampling Nov-Dec 2019

PCB ppm (Inspectorate Nov-Dec 2019)

-  0,00 - 1,00
-  1,01 - 100,00
-  100,01 - 600,00


Inspectorate sampling Oct-Nov 2019

PCB ppm (Inspectorate Oct-Nov 2019)

-  0,01 - 0,10
-  0,11 - 1,00
-  1,01 - 100,00
-  100,01 - 600,00
-  600,01 - 4000,00

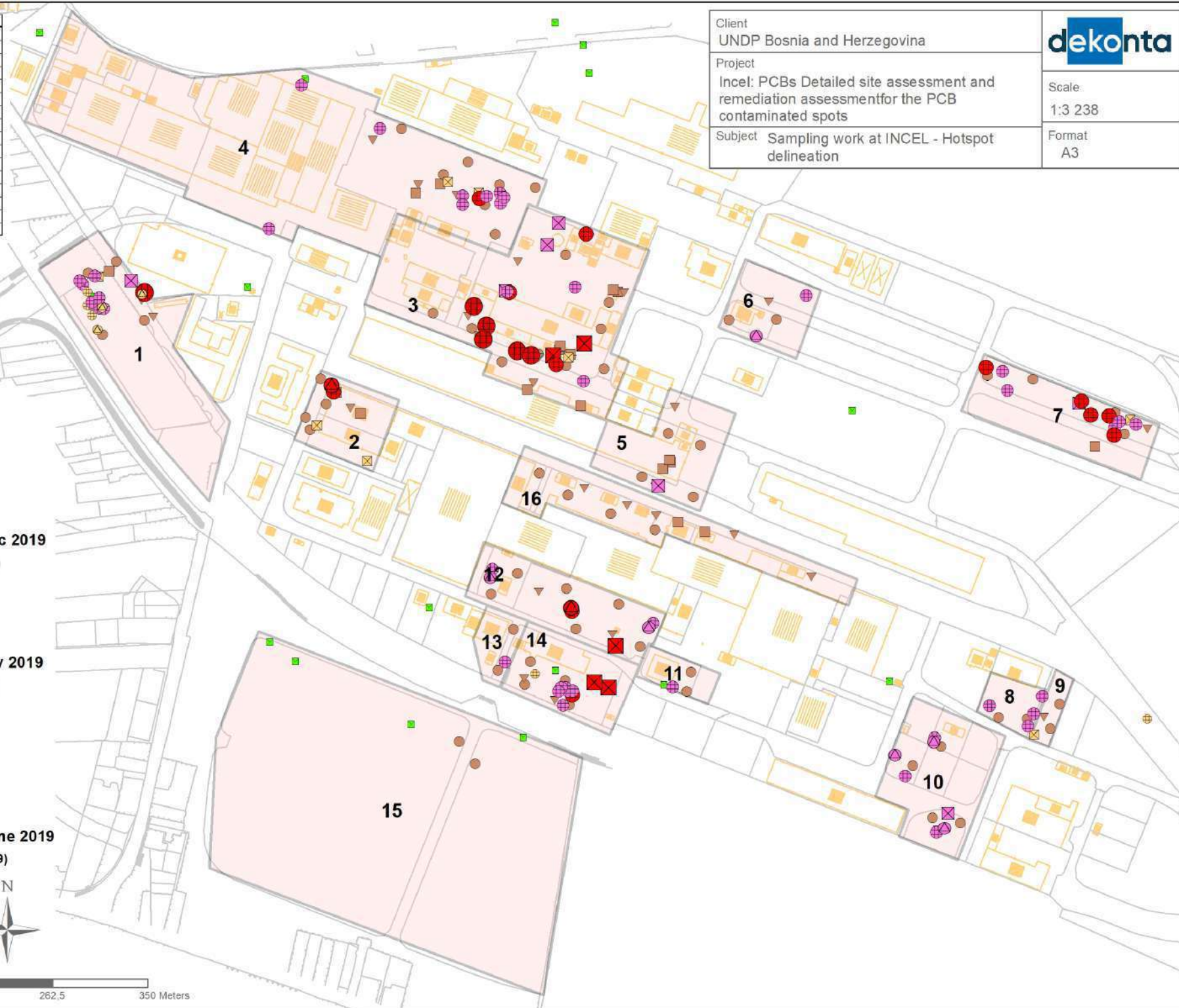
Inspectorate sampling May-June 2019


PCB ppm (Inspectorate May-June 2019)

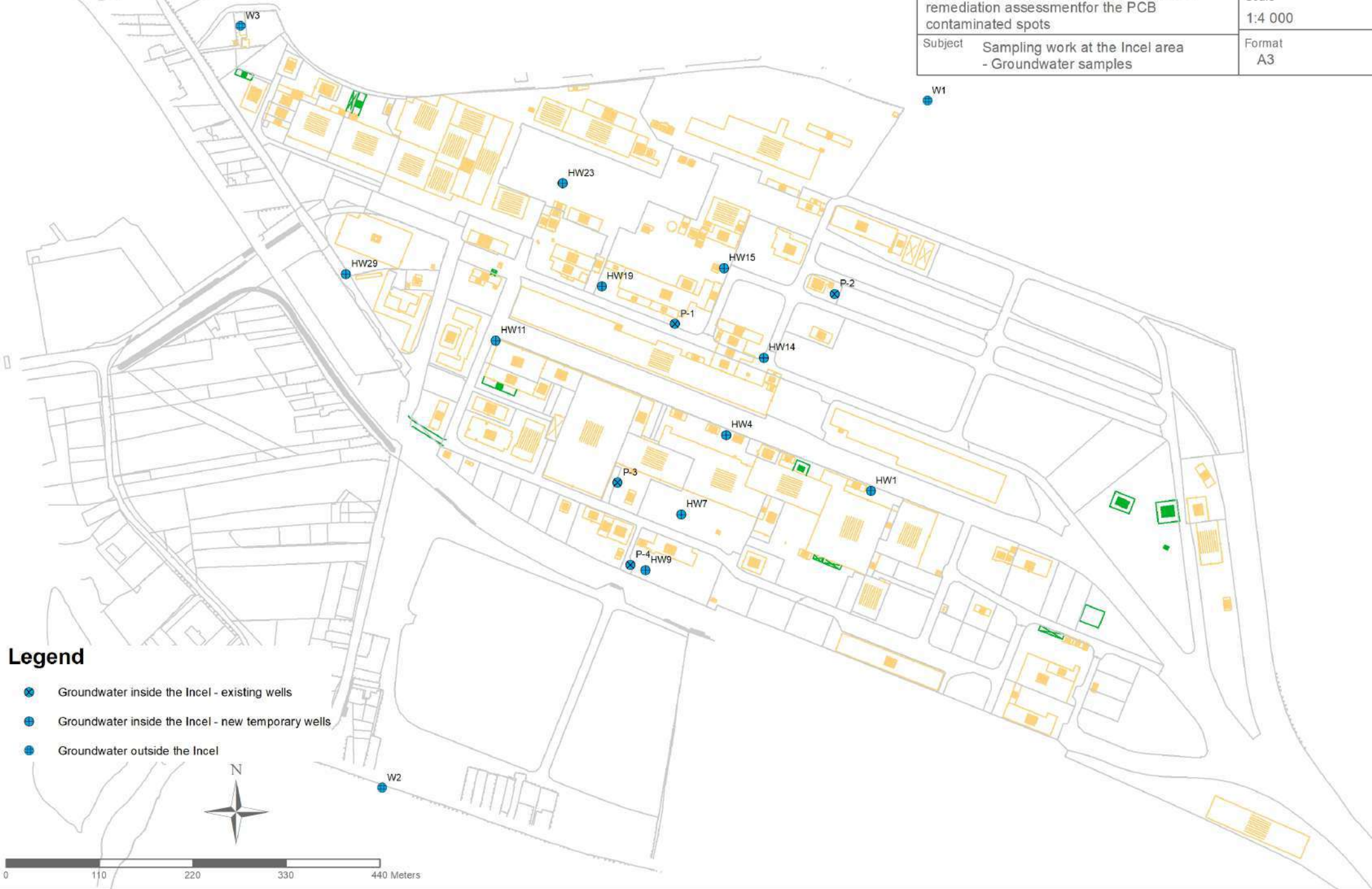
-  0,00 - 0,10
-  0,11 - 1,00
-  1,01 - 100,00
-  100,01 - 600,00



0 87,5 175 262,5 350 Meters



Client	UNDP Bosnia and Herzegovina	
Project	Incel: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots	
Subject	Sampling work at the Incel area - Groundwater samples	
		Scale 1:4 000
		Format A3



Client
UNDP Bosnia and Herzegovina



Project
Incel: PCBs Detailed site assessment and
remediation assessment for the PCB
contaminated spots

Scale
1:2 962

Subject Sampling work at INCEL - Soil probes,
top soil and construction material

Format
A3

Legend

- ▼ Soil probes inside INCEL
- Top soil inside INCEL
- Construction material



0 81.25 162.5 243.75 325 Meters



Client UNDP Bosnia and Herzegovina		
Project Incel: PCBs Detailed site assessment and remediation assessmentfor the PCB contaminated spots		
Subject Sampling work at the Incel area - Sediments and top soil outside the Incel		Scale 1:4 694
		Format A3



Annex II: Table with all collected samples

[illegible]

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 Antičić,	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 Republike, 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 Dekonta, 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 inspeksijske poslove Grada Banja Luku, po čijem inspeksijskom nalogu su rađene te analize da dostavi ove podatke Kompaniji Dekonta. Prisutni predstavnik, G. Plavšić iz GU Banja Luka- Odjeljenje za inspeksijske 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 predstavica 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 Inspekcije 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 2: Two transformer rooms at Lukic Invest (former power plant, samples L-1, L-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 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 containers)



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 (samples 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)

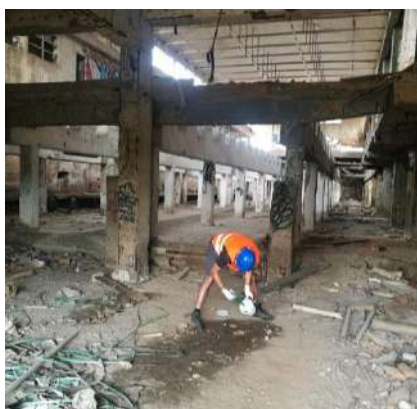


Figure 23: Business zone - Electrolysis, center (sample BZ-C-2)



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.

Operator: M. Beard

Date: 30.07.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4958885.98

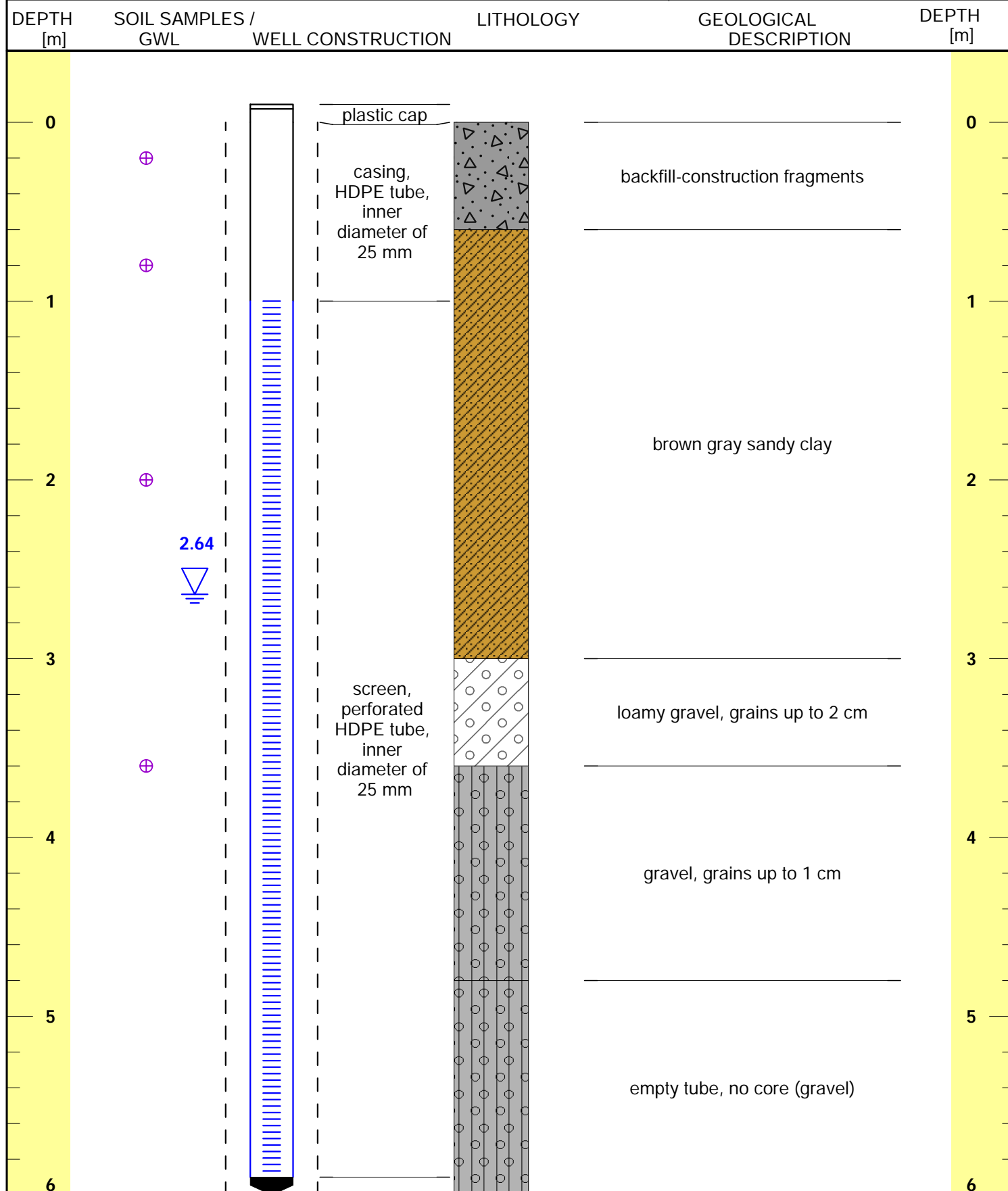
Y: 6439407.80

Z: 158.71

Drilling rig: Geoprobe

Probe depth: 6 m

GWL: 2.64 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

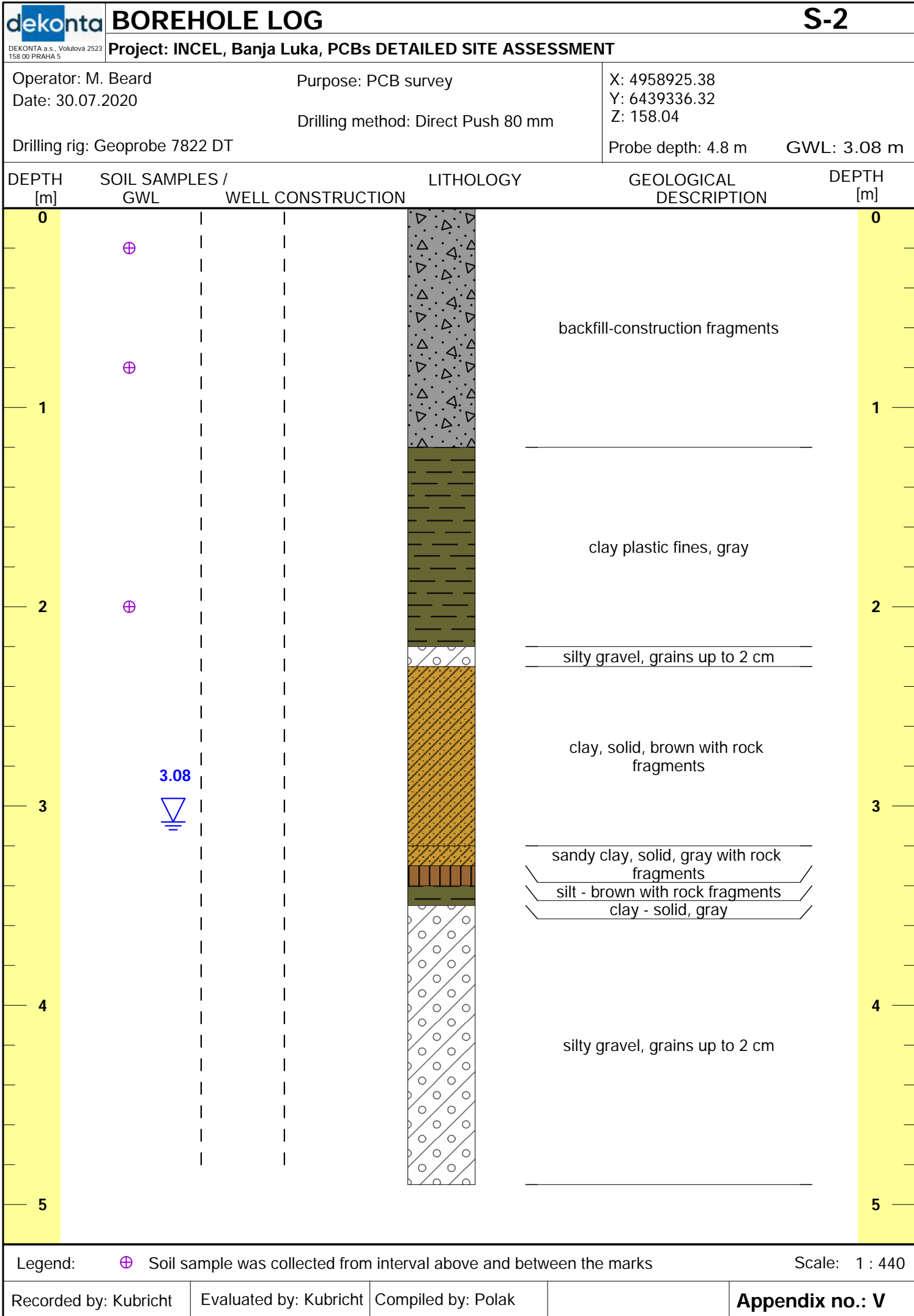
Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V



Operator: M. Beard

Date: 30.07.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4958942.57

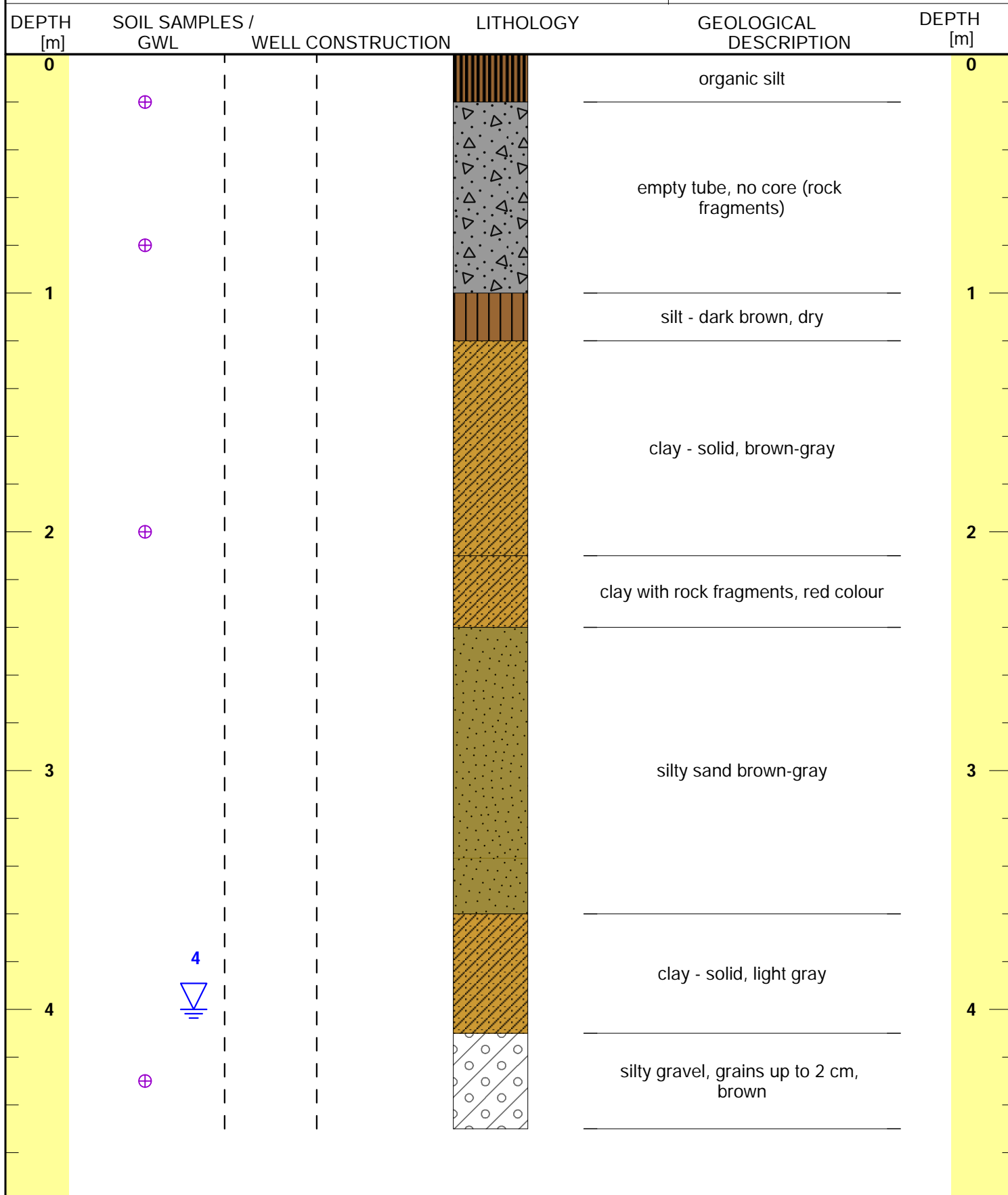
Y: 6439264.54

Z: 158.01

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.5 m

GWL: 4 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 31.07.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4958951.83

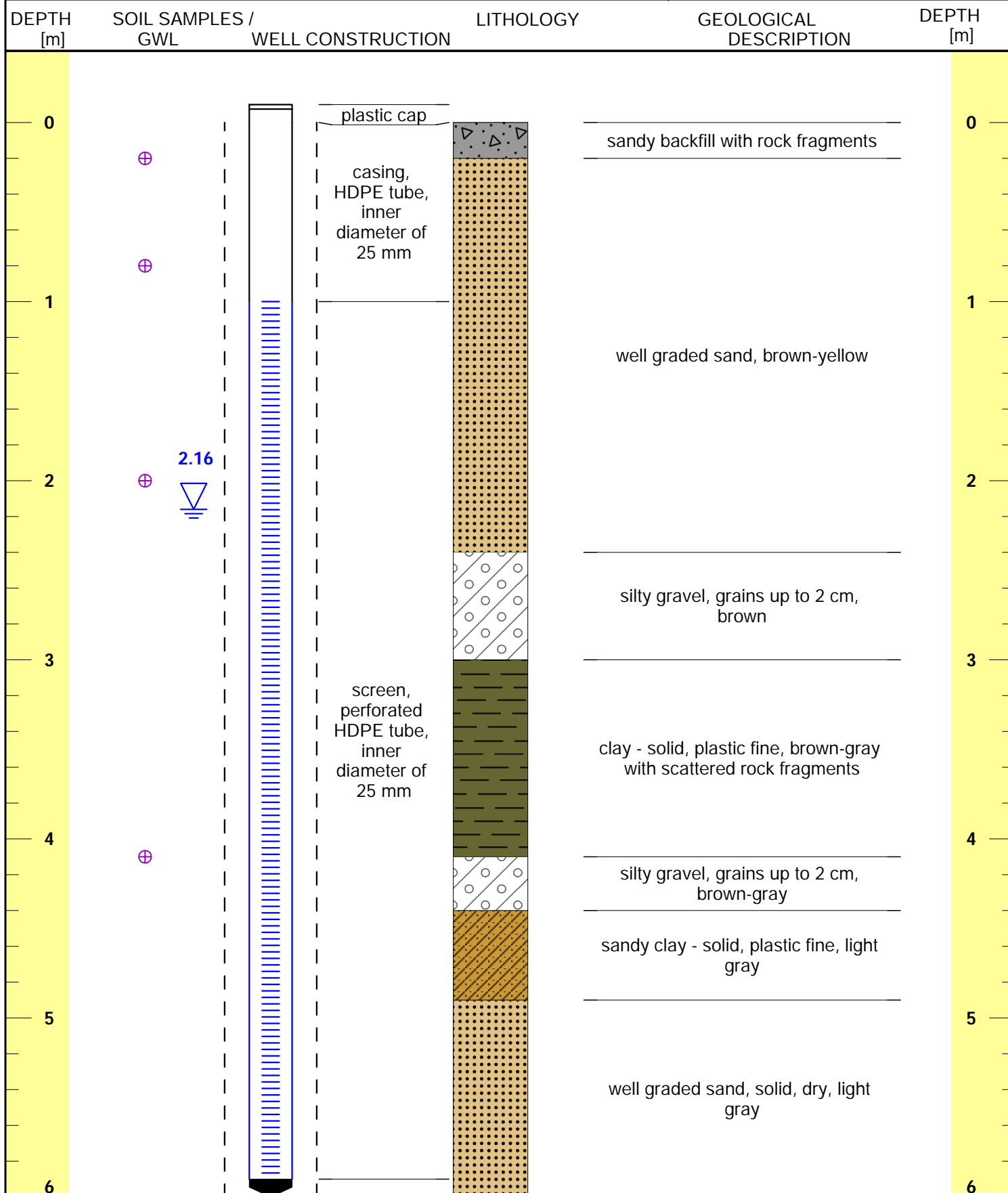
Y: 6439237.62

Z: 158.26

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 2.16 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

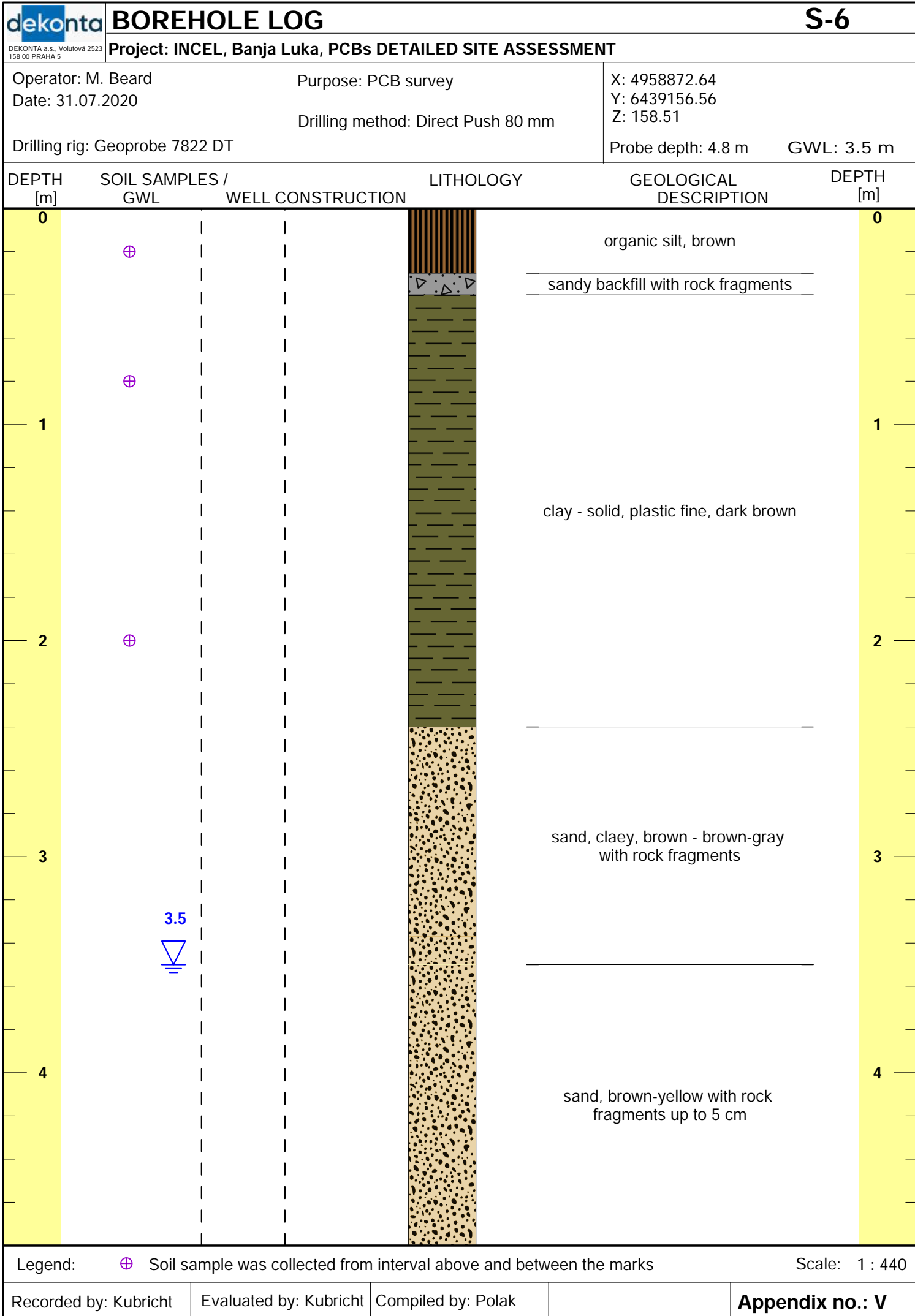
Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V



Operator: M. Beard
Date: 01.08.2020

Purpose: PCB survey

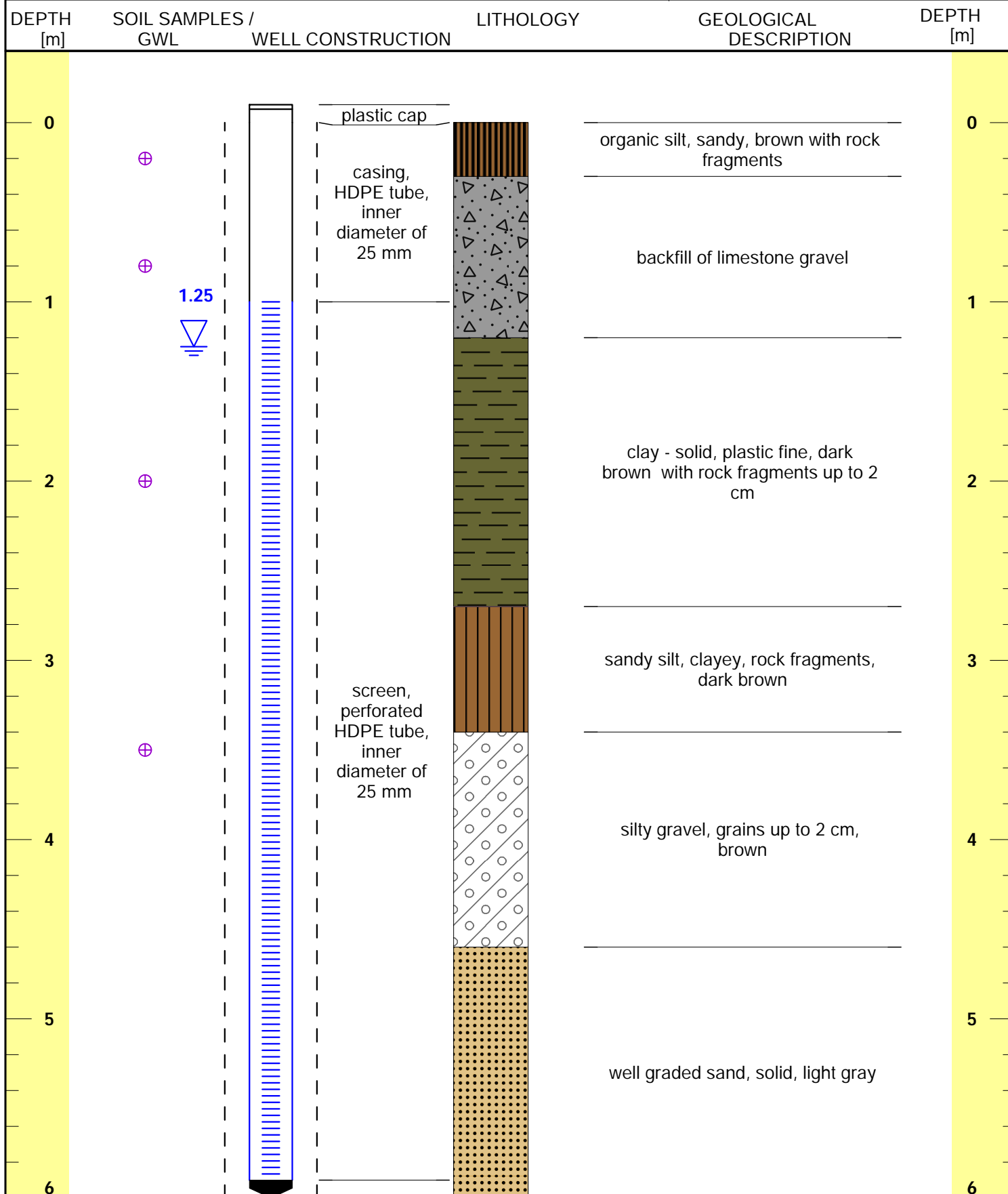
X: 4958858.24
Y: 6439184.89
Z: 158.23

Drilling method: Direct Push 80 mm

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 1.25 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 01.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4958792.49

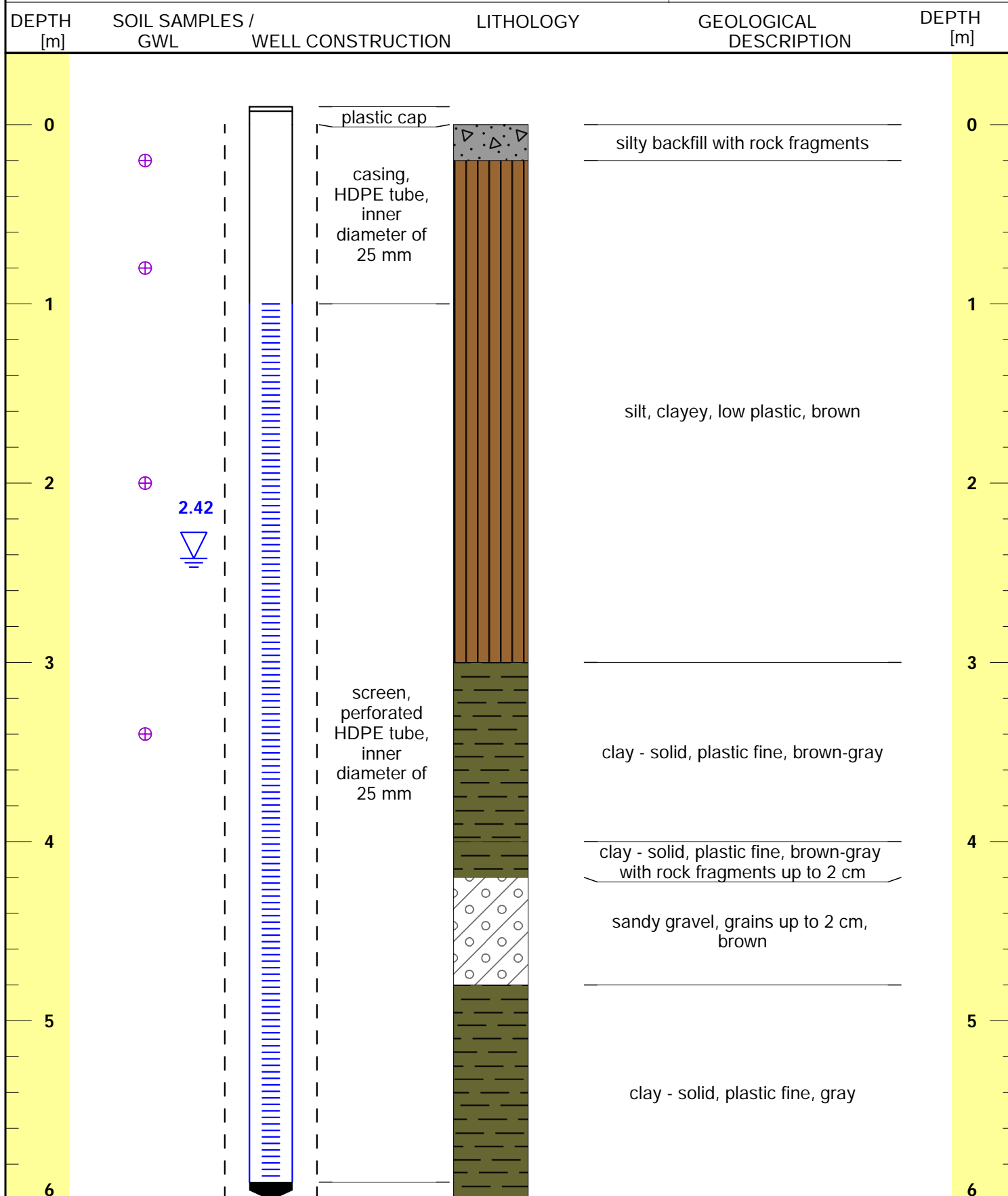
Y: 6439142.73

Z: 158.16

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 2.42 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard
Date: 01.08.2020

Purpose: PCB survey

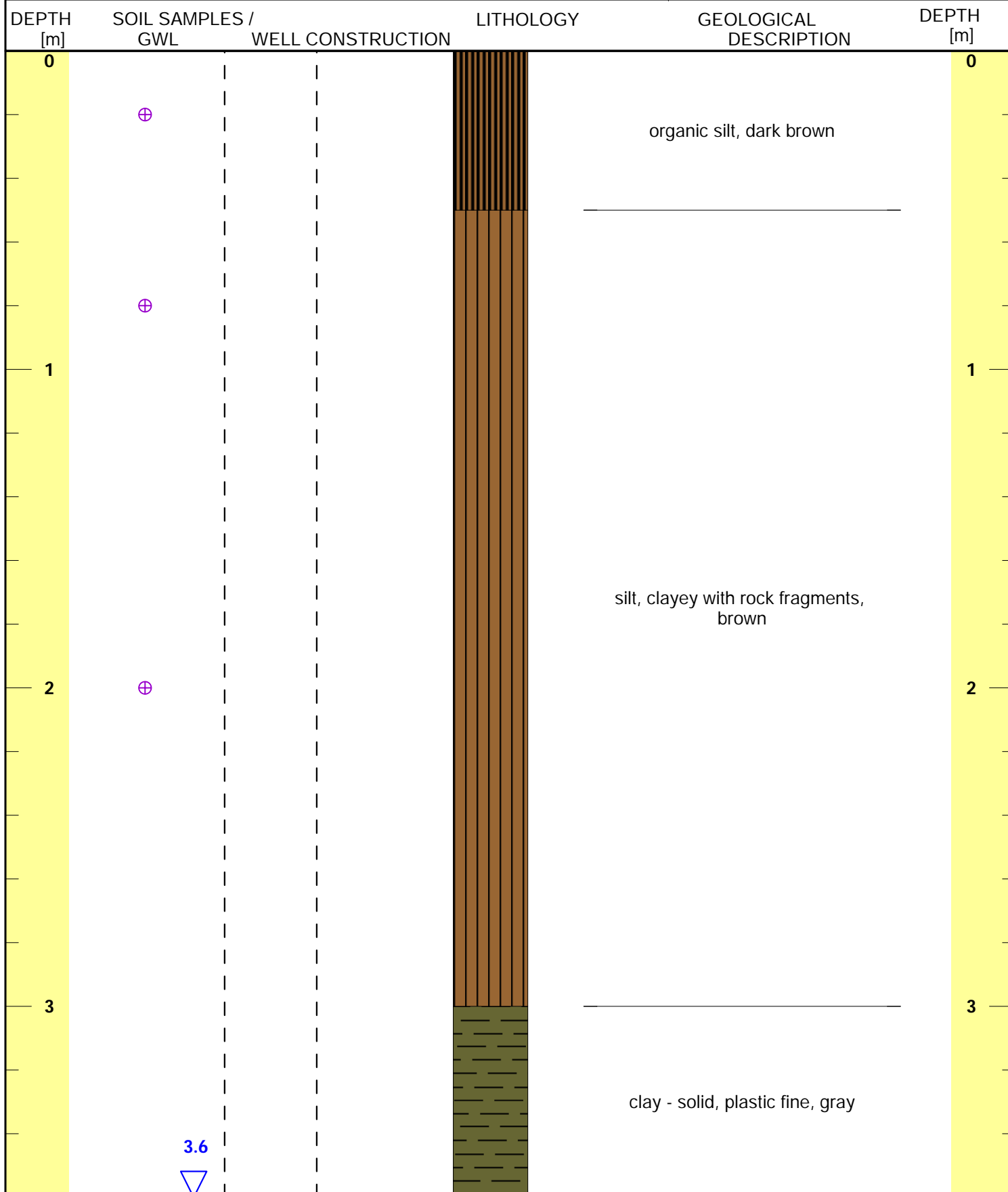
X: 4958772.39
Y: 6439171.18
Z: 158.47

Drilling method: Direct Push 80 mm

Drilling rig: Geoprobe 7822 DT

Probe depth: 3.6 m

GWL: 3.6 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 01.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4959063.01

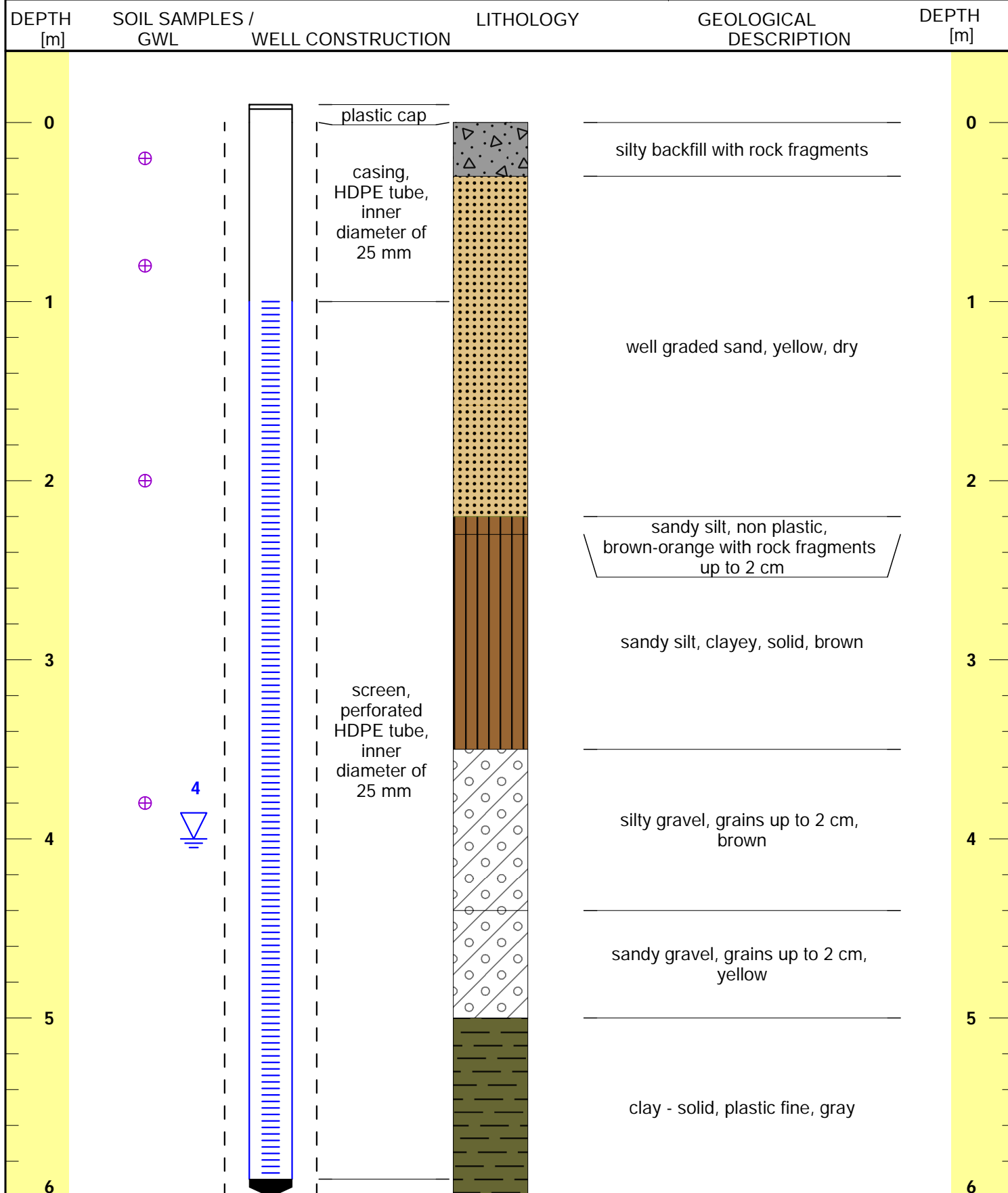
Y: 6438966.33

Z: 157.58

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 4 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Purpose: PCB survey

X: 4959042.07

Date: 02.08.2020

Y: 6438982.84

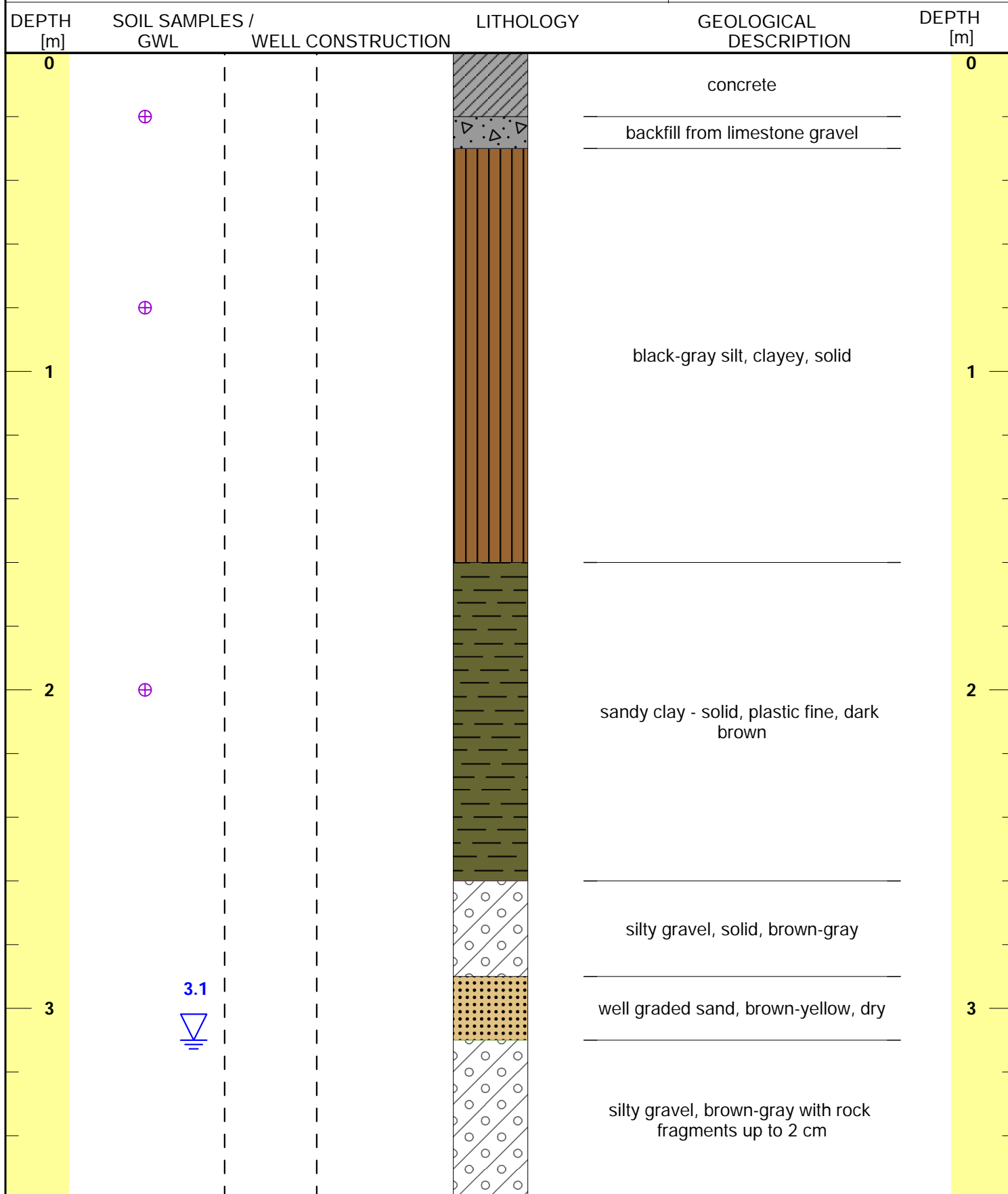
Drilling method: Direct Push 80 mm

Z: 157.55

Drilling rig: Geoprobe 7822 DT

Probe depth: 3.6 m

GWL: 3.1 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Purpose: PCB survey

X: 4958969.23

Date: 02.08.2020

Y: 6439264.17

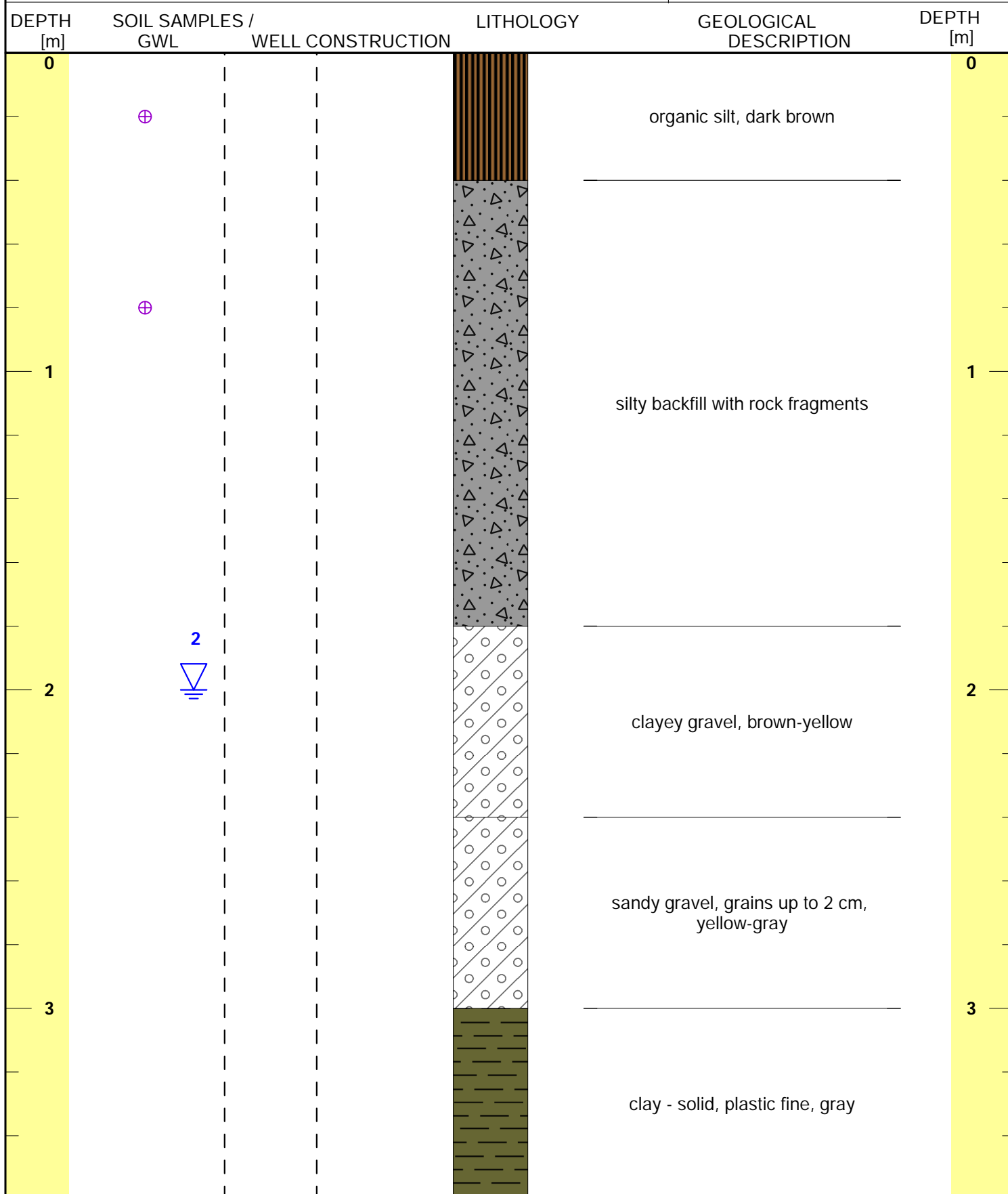
Drilling method: Direct Push 80 mm

Z: 157.22

Drilling rig: Geoprobe 7822 DT

Probe depth: 3.6 m

GWL: 2 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 03.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4959042.75

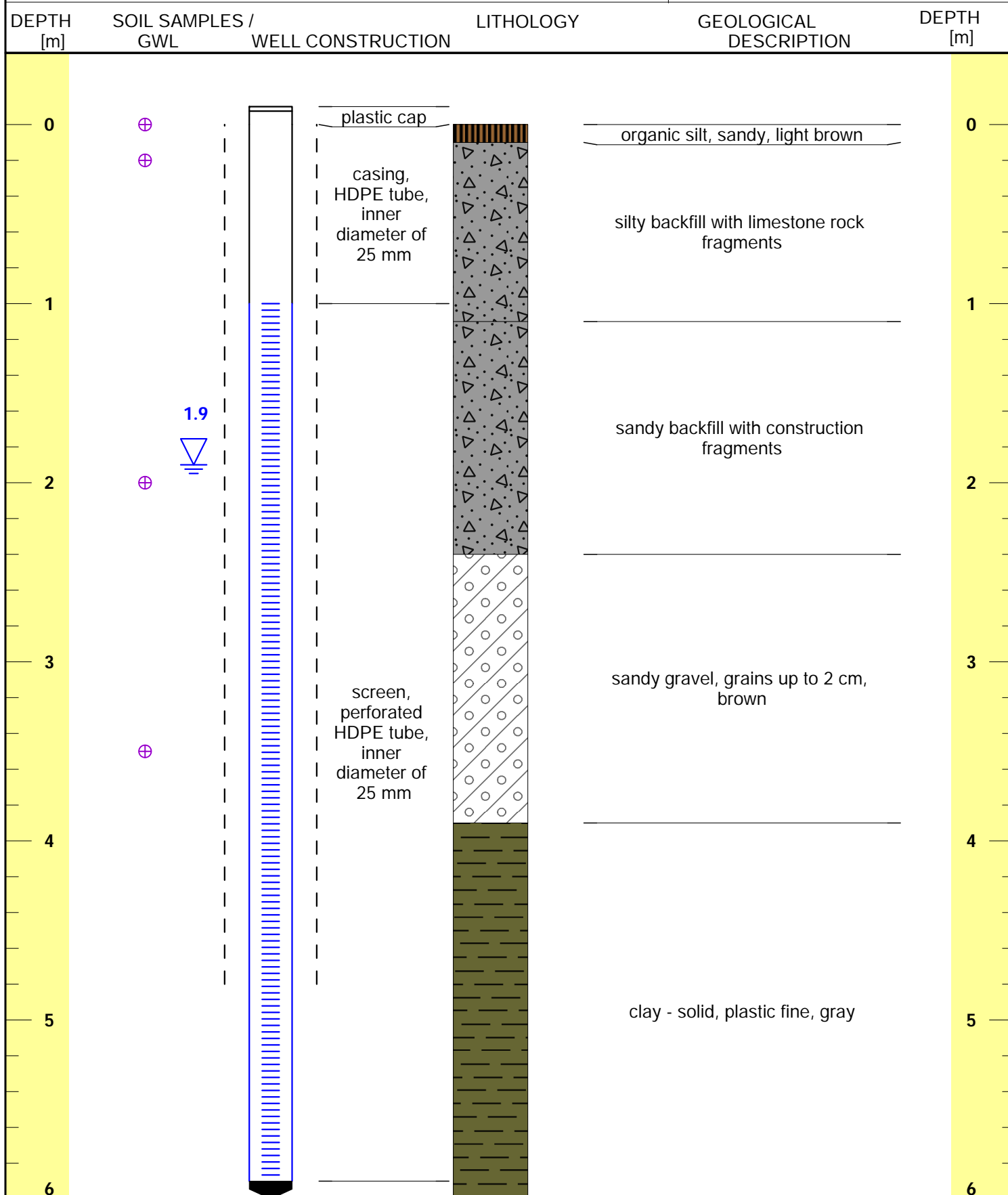
Y: 6439281.83

Z: 158.23

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 1.9 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Purpose: PCB survey

X: 4959148.36

Date: 03.08.2020

Y: 6439235.08

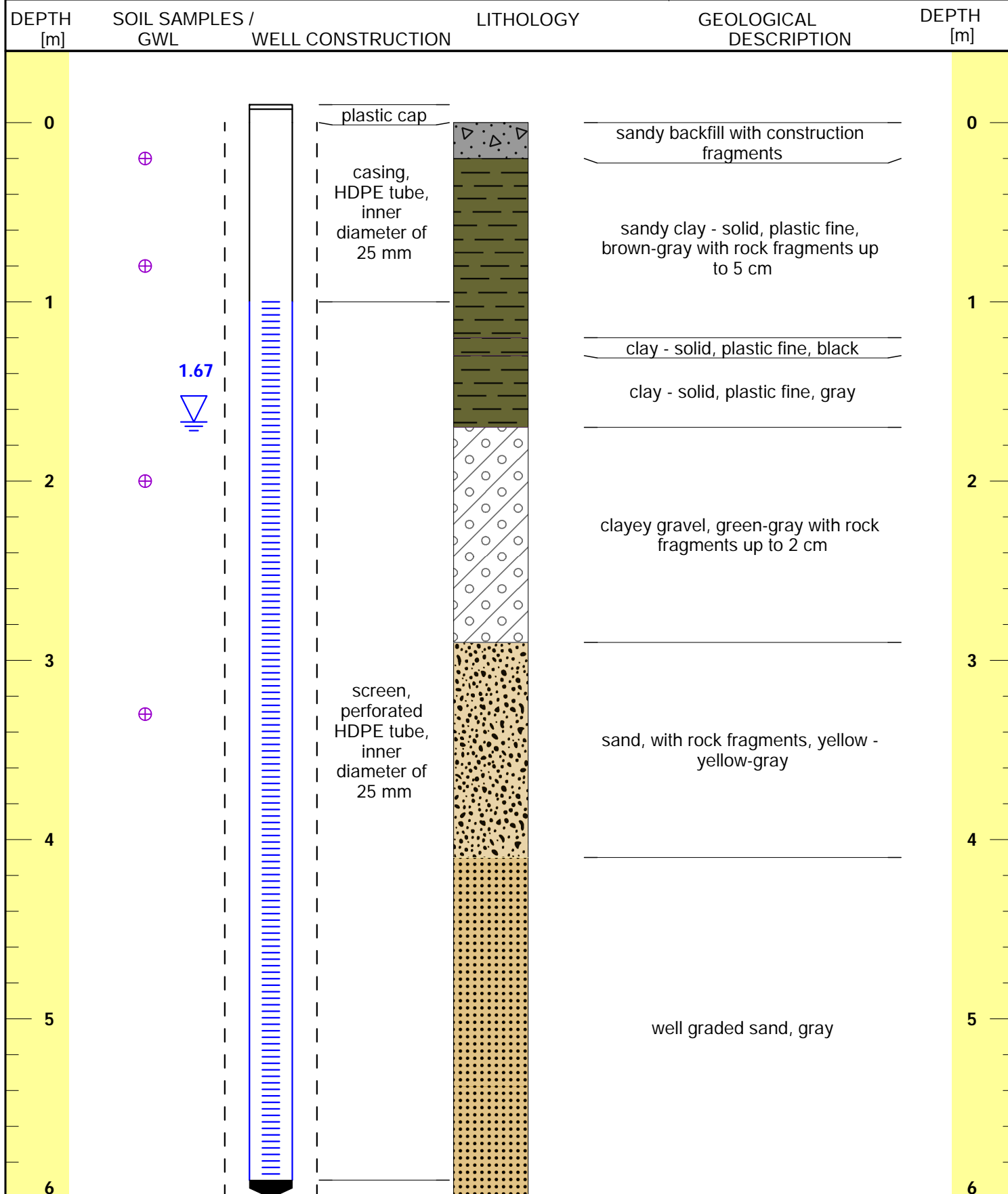
Drilling method: Direct Push 80 mm

Z: 157.53

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 1.67 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard
Date: 03.08.2020

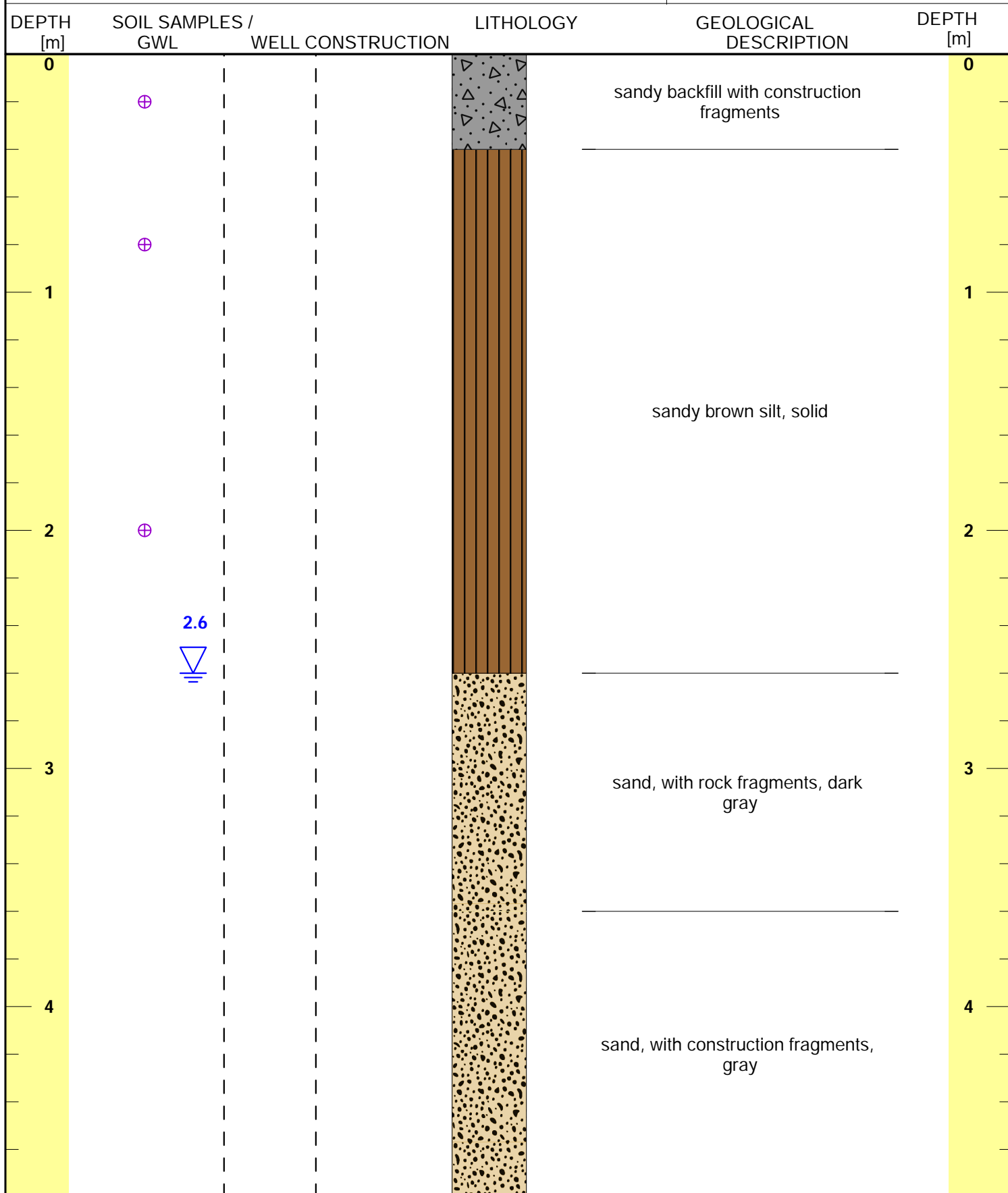
Purpose: PCB survey

X: 4959087.31
Y: 6439186.90
Z: 157.61

Drilling method: Direct Push 80 mm

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m GWL: 2.6 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard
Date: 04.08.2020

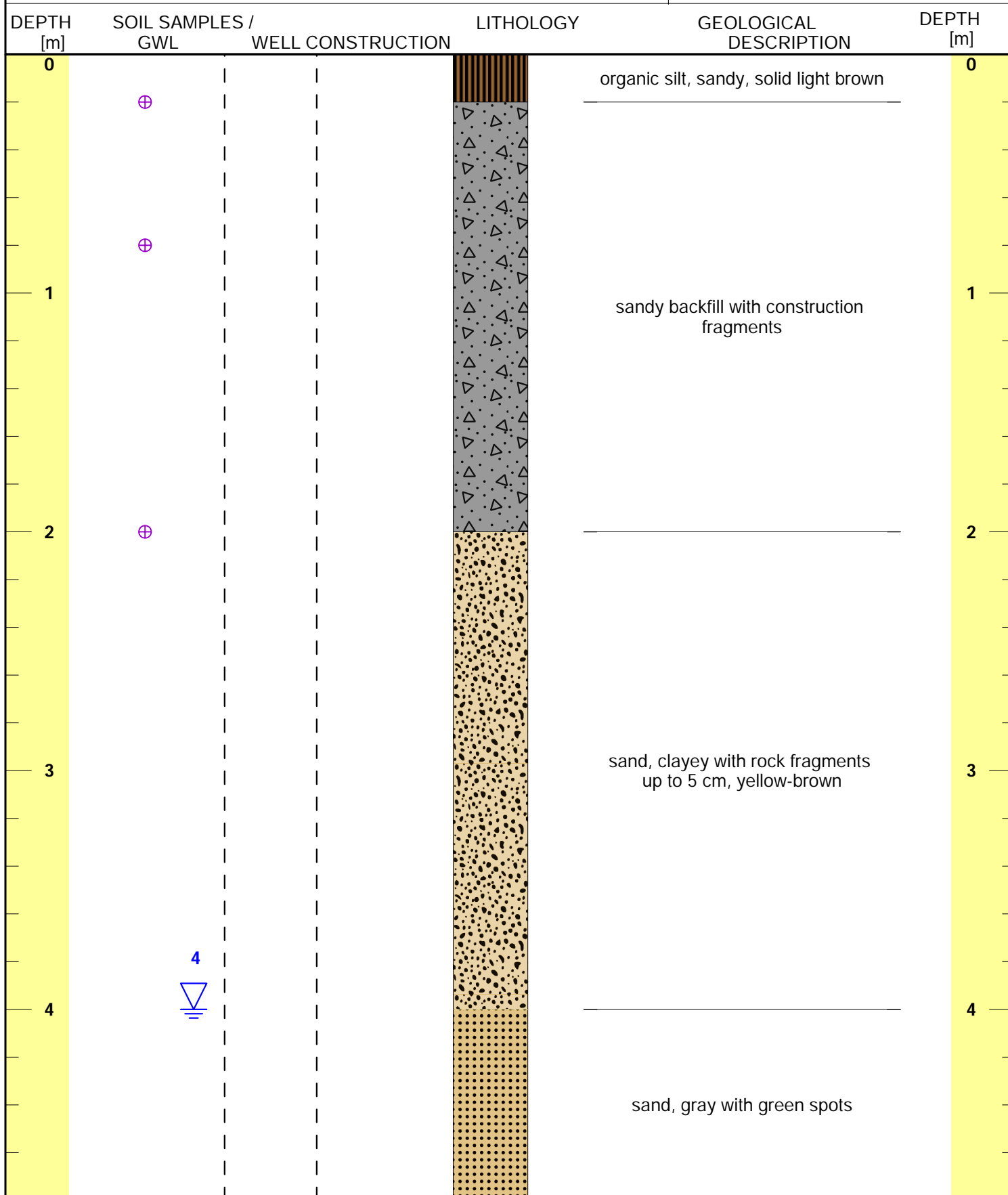
Purpose: PCB survey

X: 4959088.61
Y: 6439156.35
Z: 157.71

Drilling method: Direct Push 80 mm

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m GWL: 4 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 04.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4959108.72

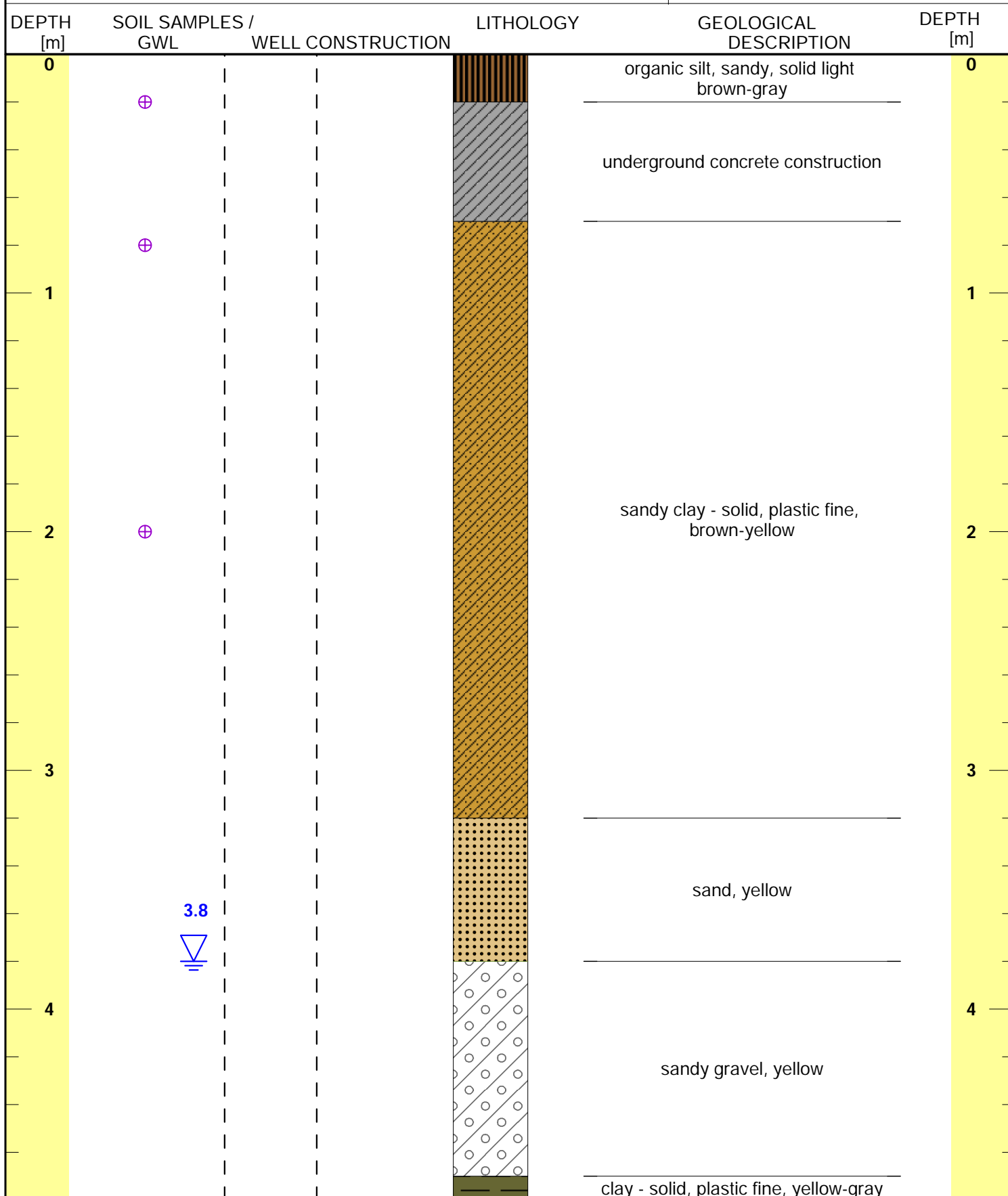
Y: 6439101.14

Z: 157.56

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m

GWL: 3.8 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 04.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4959126.72

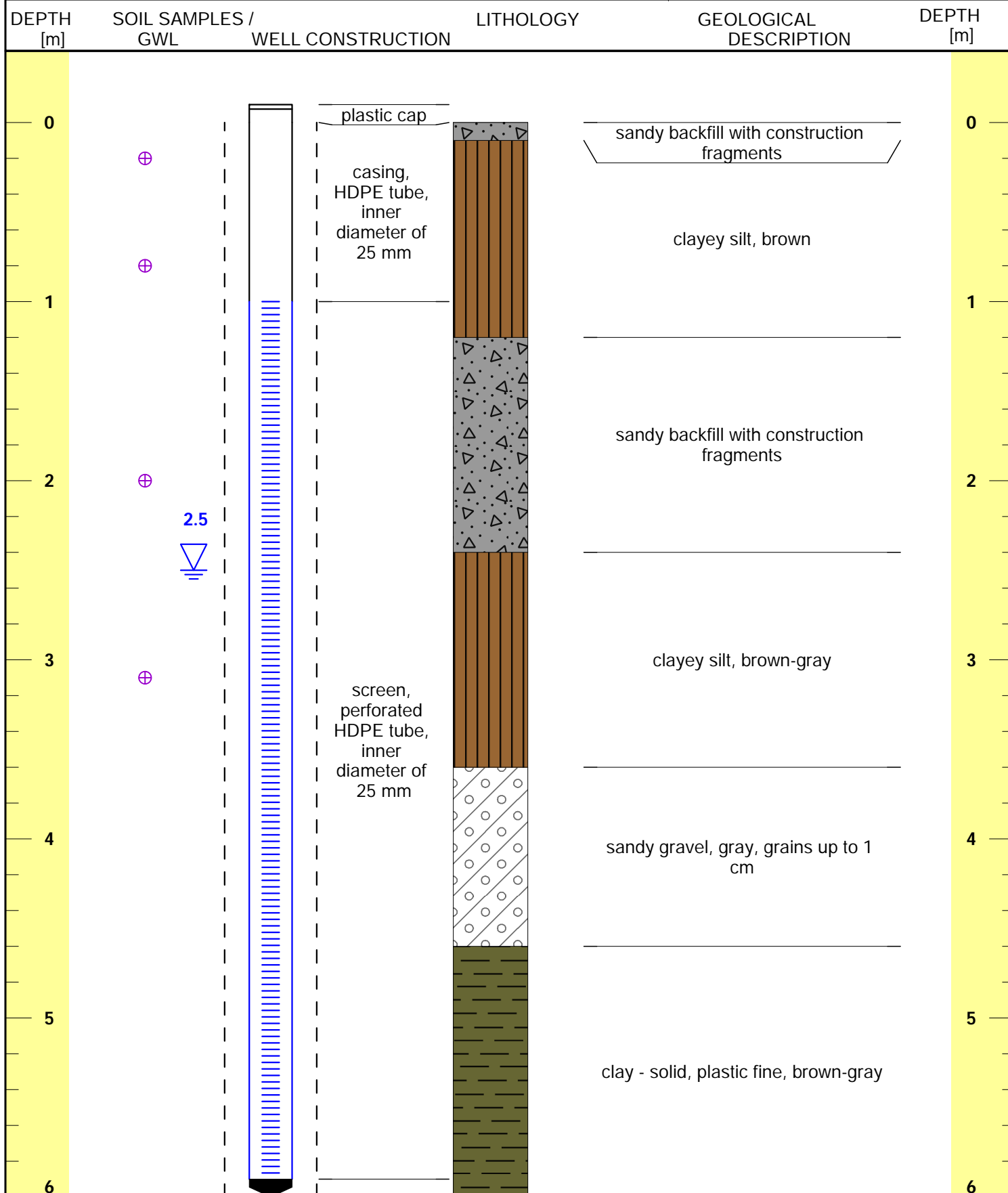
Y: 6439091.19

Z: 157.65

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 2.5 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Purpose: PCB survey

X: 4959176.94

Date: 04.08.2020

Y: 6439137.03

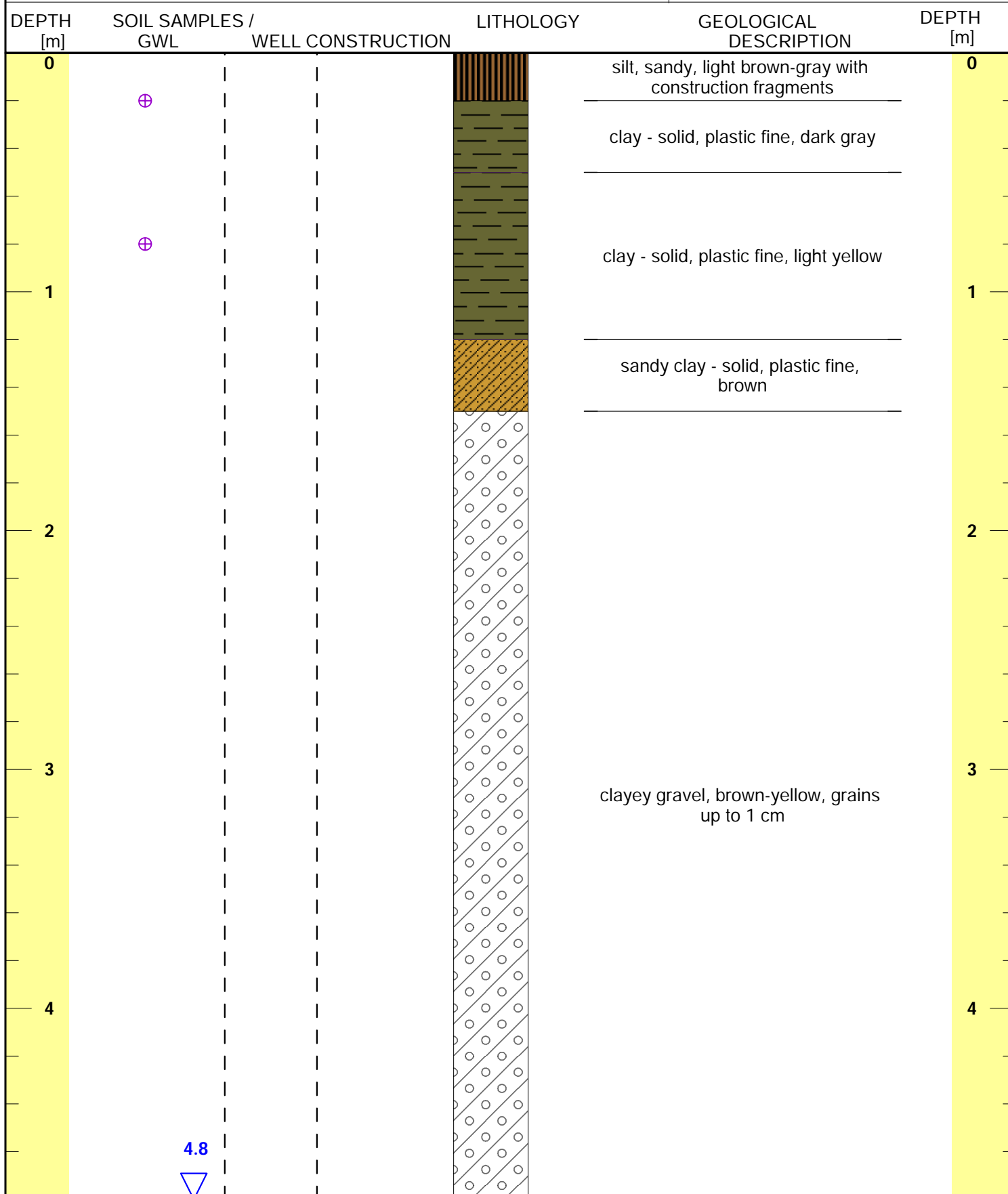
Drilling method: Direct Push 80 mm

Z: 157.93

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m

GWL: 4.8 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 05.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4959065.01

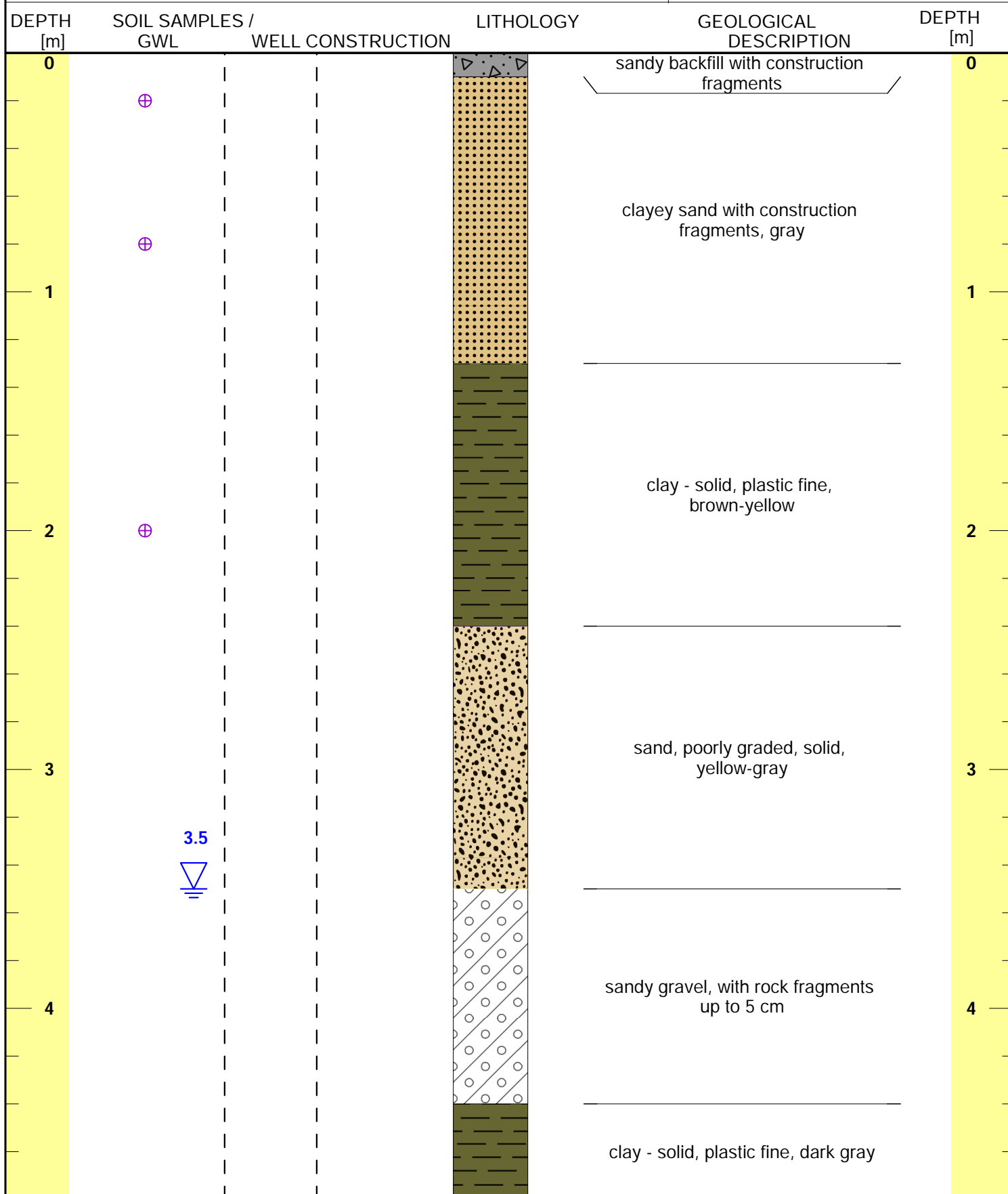
Y: 6439151.51

Z: 157.76

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m

GWL: 3.5 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 05.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4959289.21

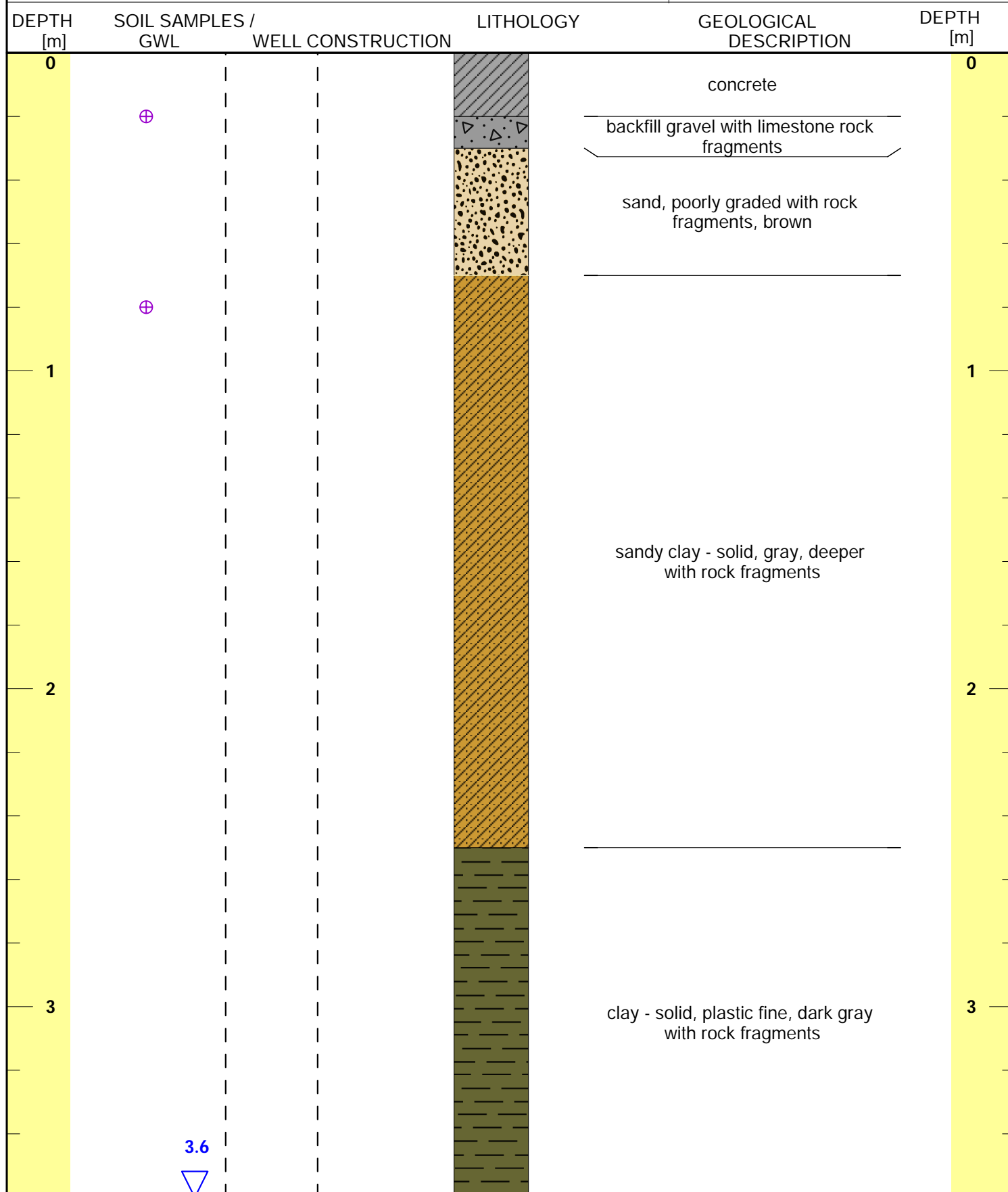
Y: 6439003.24

Z: 156.95

Drilling rig: Geoprobe 7822 DT

Probe depth: 3.6 m

GWL: 3.6 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 08.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4959248.19

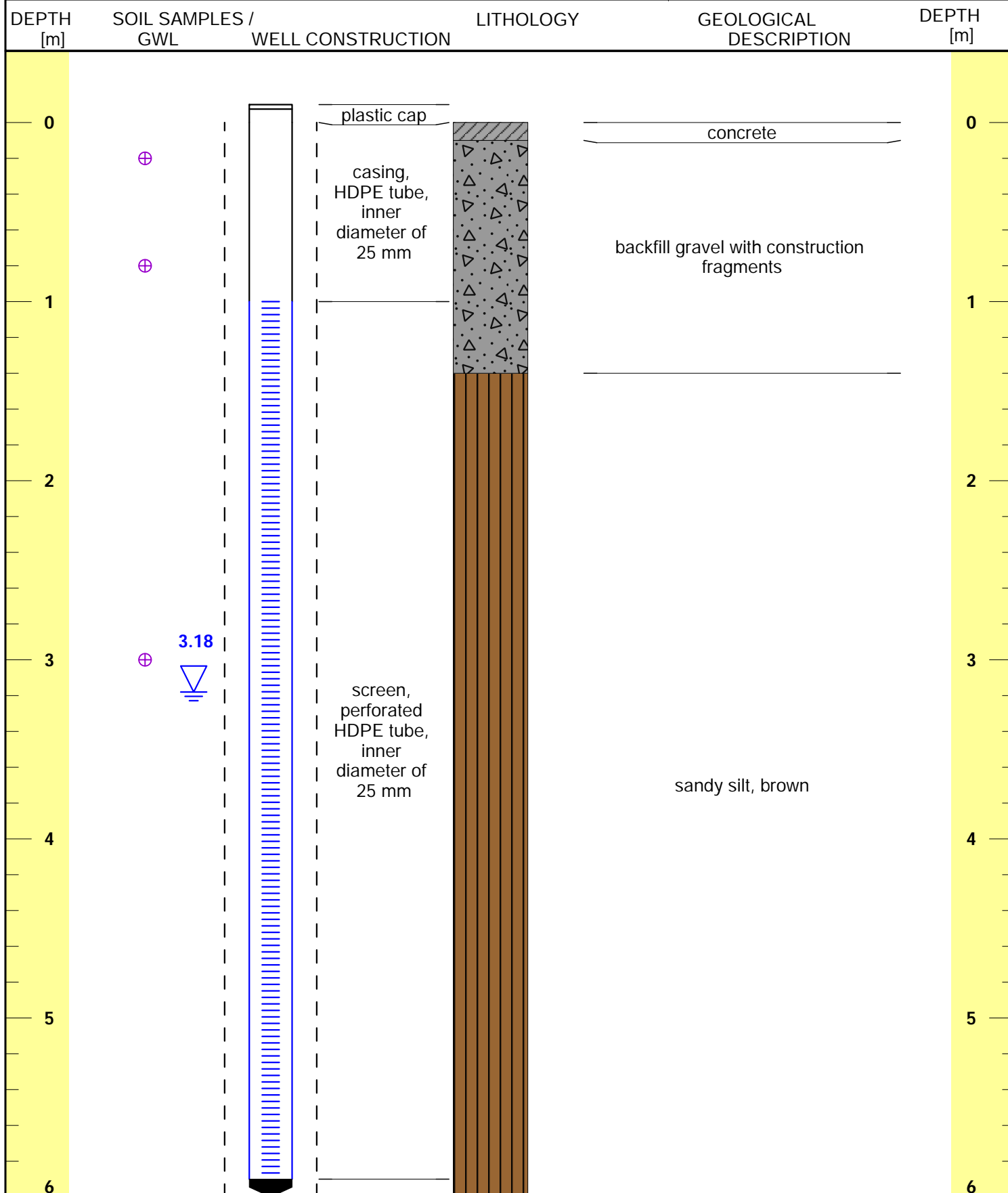
Y: 6439045.23

Z: 157.10

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 3.18 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard
Date: 08.08.2020

Purpose: PCB survey

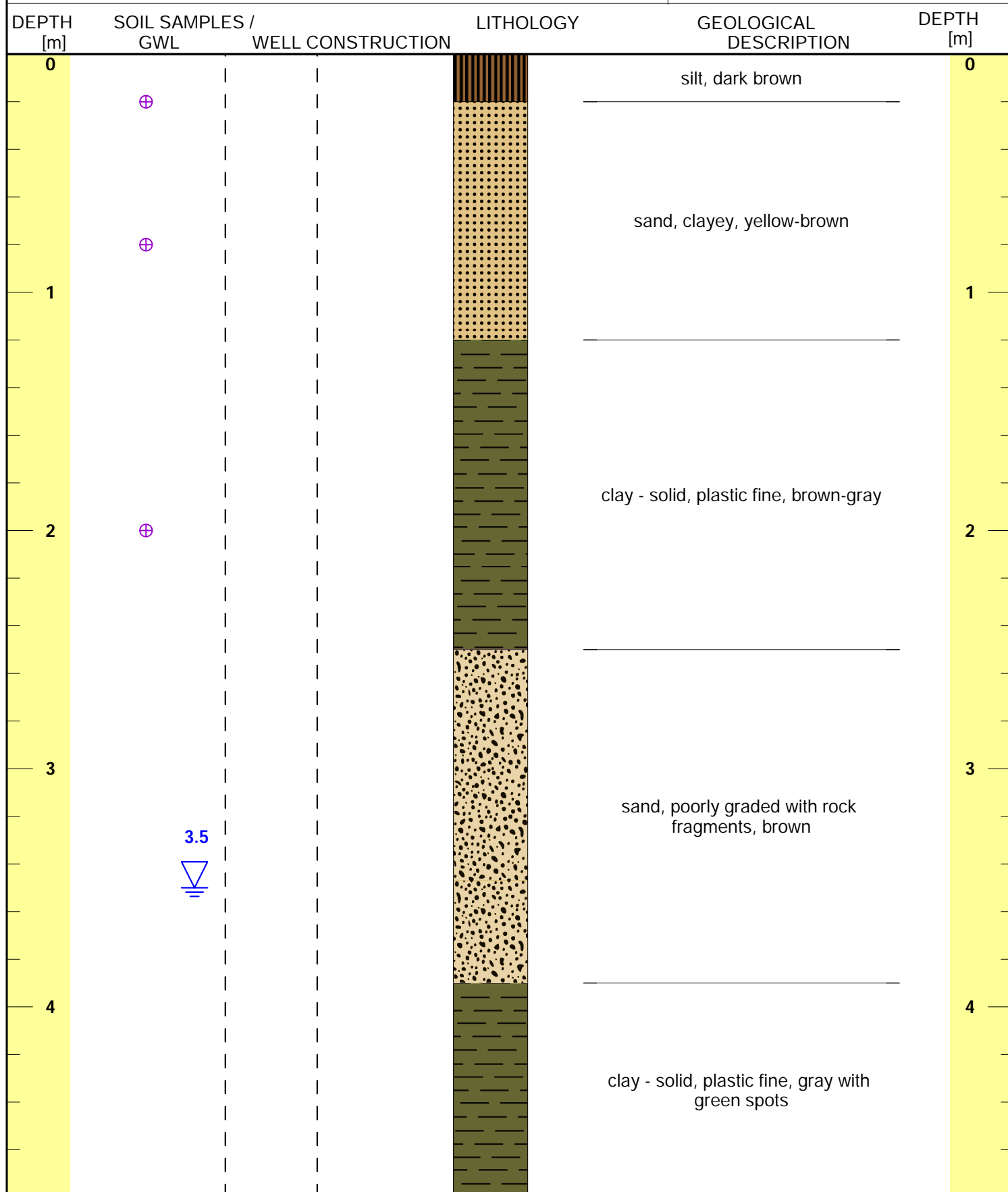
X: 4959237.99
Y: 6439080.50
Z: 156.89

Drilling method: Direct Push 80 mm

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m

GWL: 3.5 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

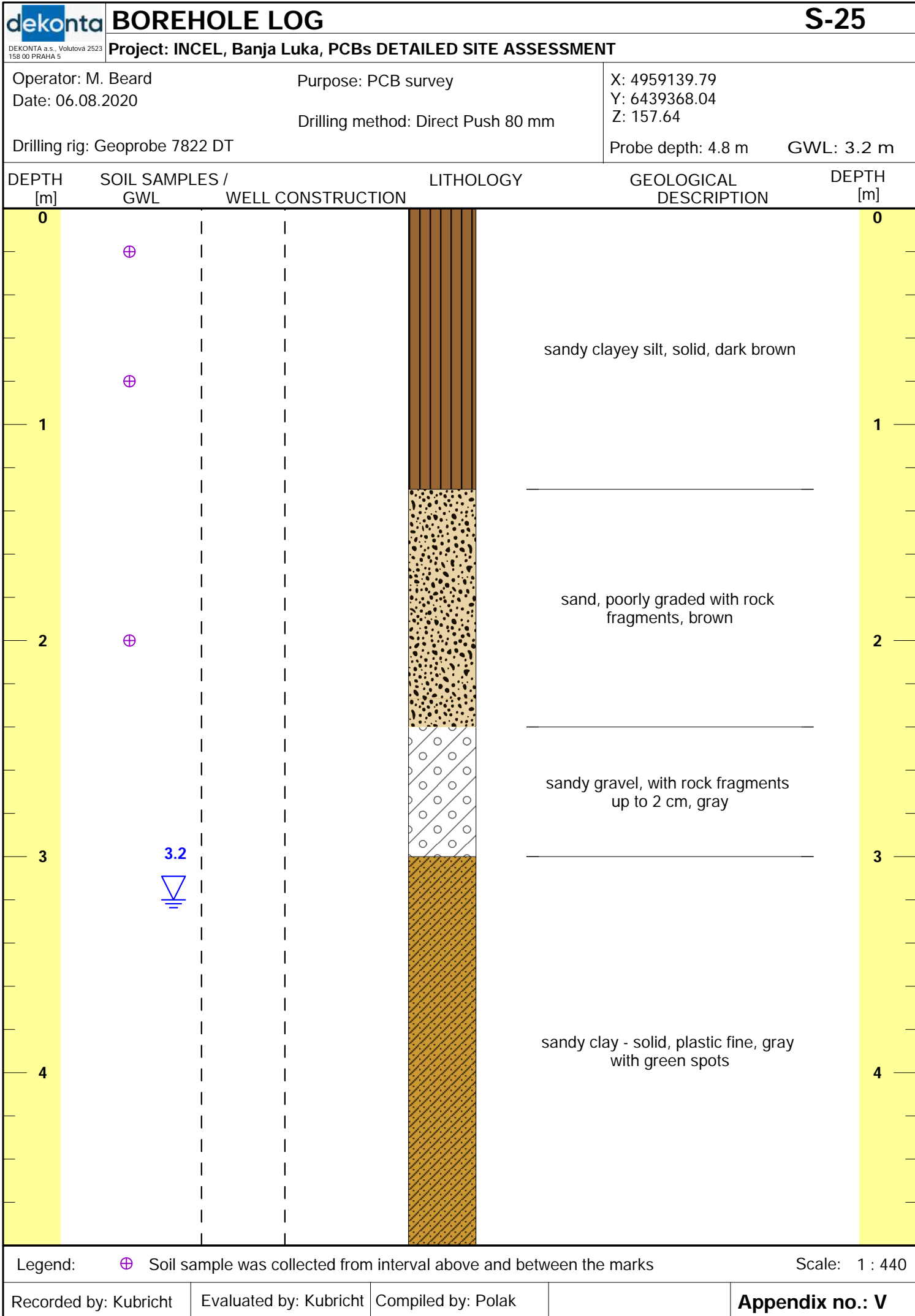
Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V



Operator: M. Beard

Purpose: PCB survey

X: 4959022.53

Date: 06.08.2020

Y: 6439717.14

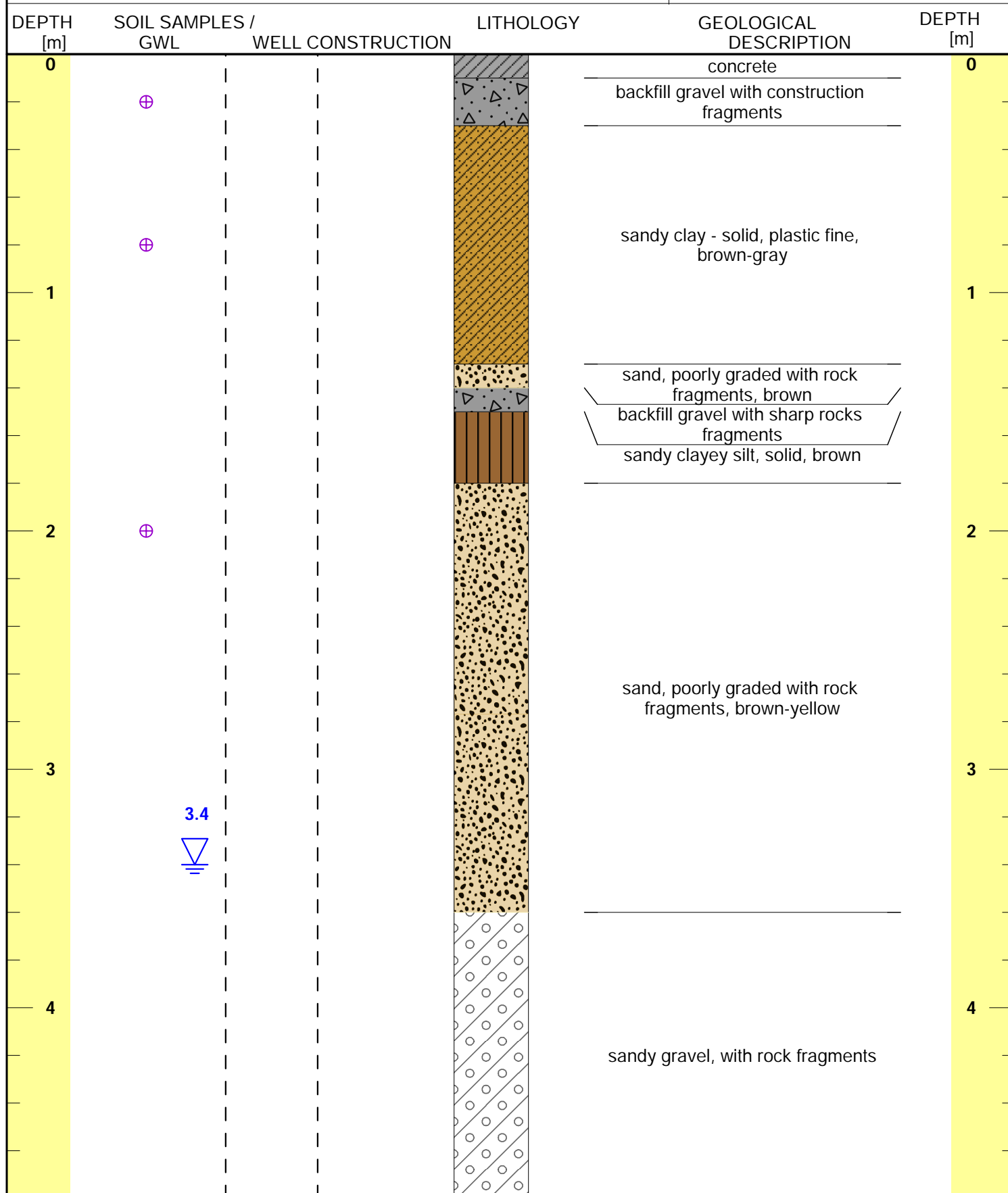
Drilling method: Direct Push 80 mm

Z: 159.38

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m

GWL: 3.4 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 06.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4958756.98

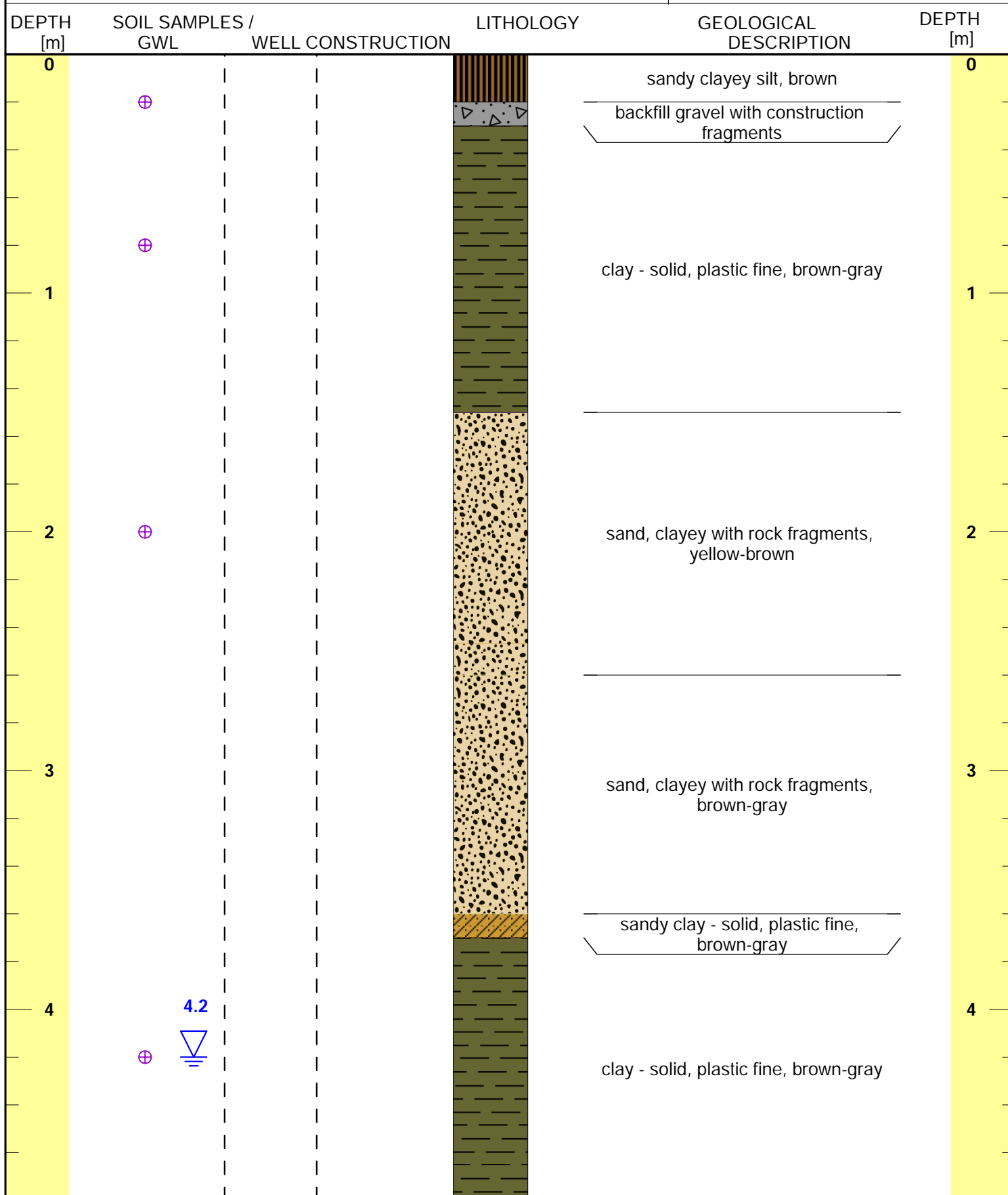
Y: 6439621.84

Z: 160.14

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m

GWL: 4.2 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 06.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4958653.14

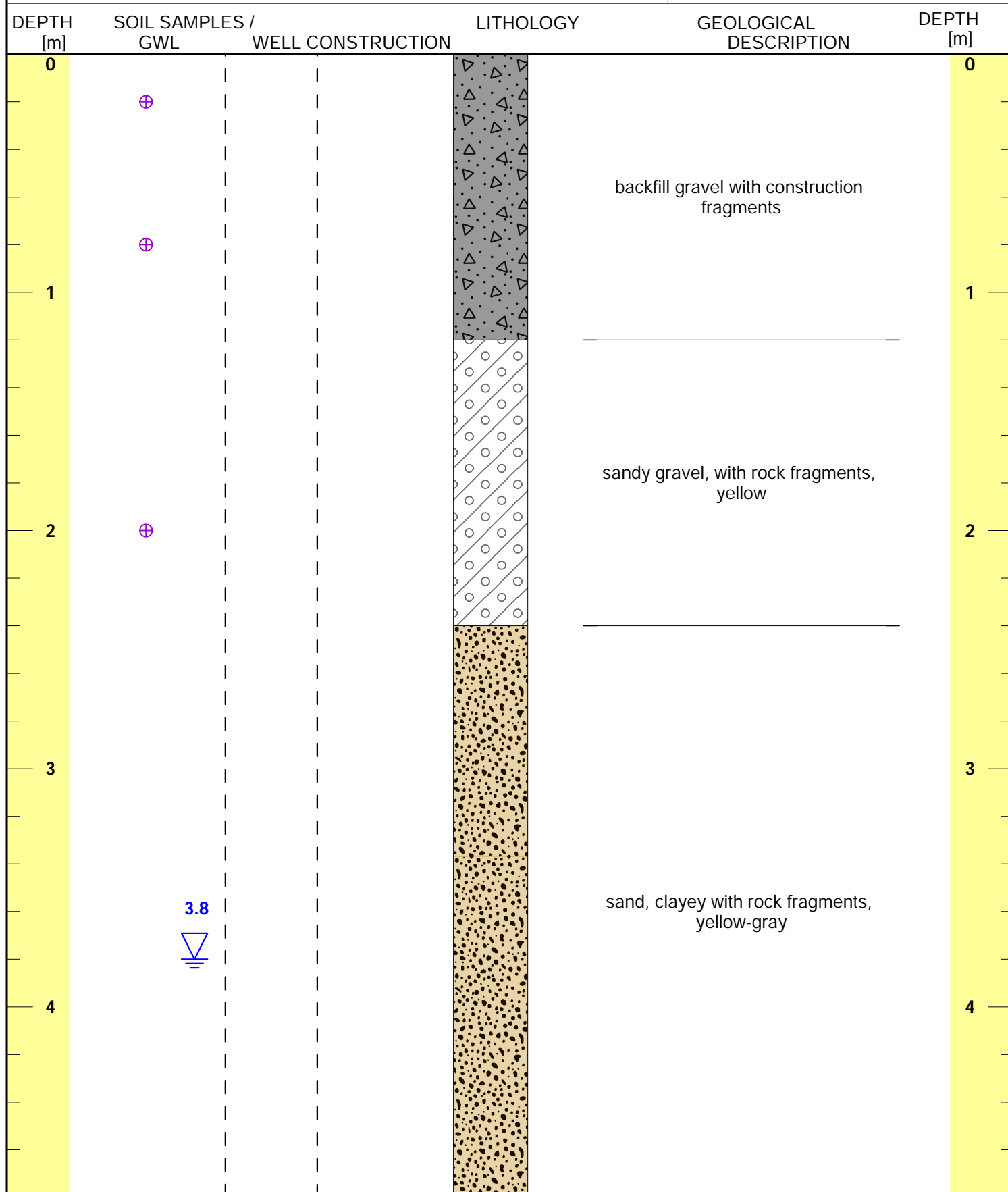
Y: 6439524.03

Z: 160.41

Drilling rig: Geoprobe 7822 DT

Probe depth: 4.8 m

GWL: 3.8 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Date: 07.08.2020

Purpose: PCB survey

Drilling method: Direct Push 80 mm

X: 4959141.30

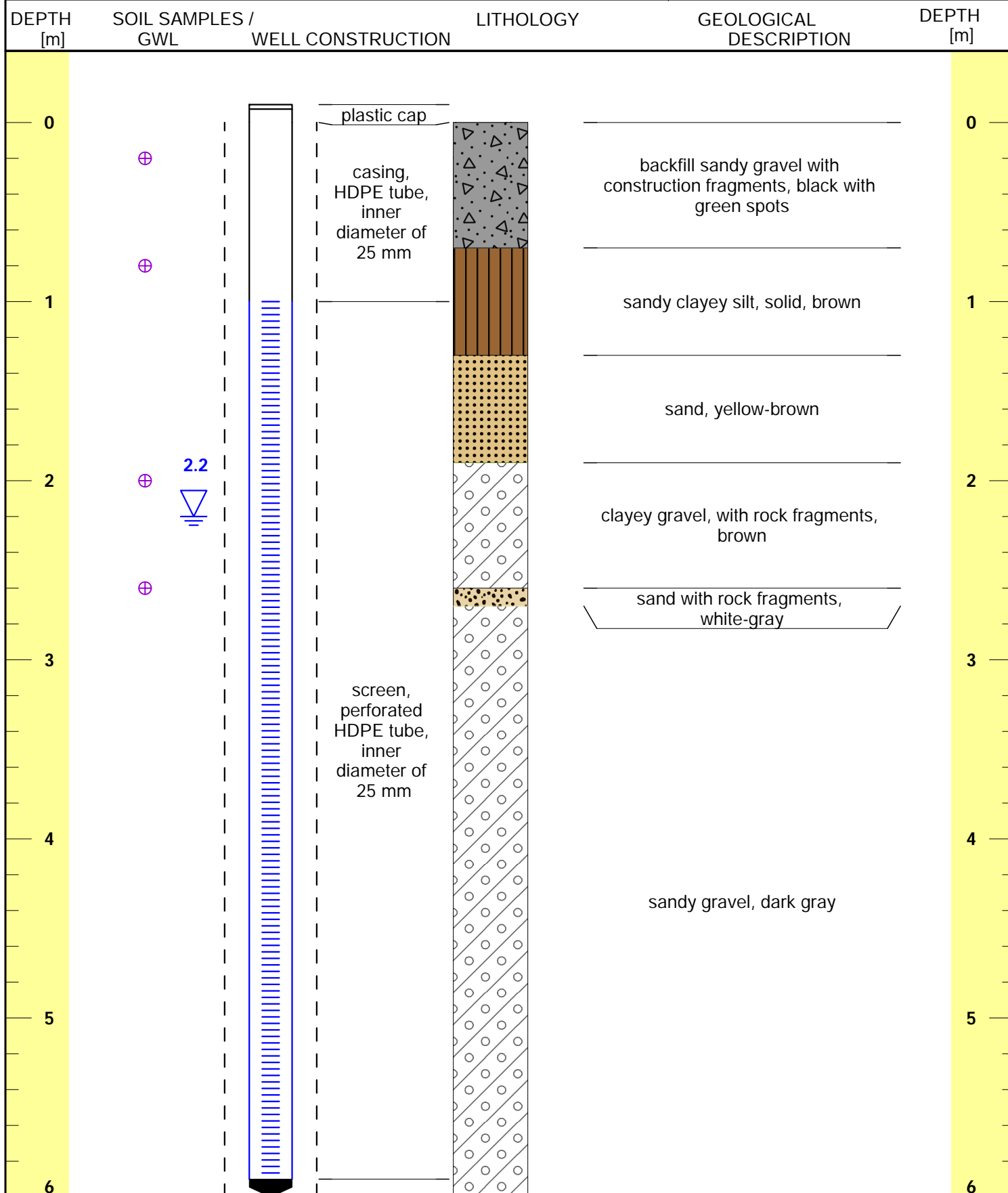
Y: 6438790.36

Z: 155.98

Drilling rig: Geoprobe 7822 DT

Probe depth: 6 m

GWL: 2.2 m



Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Operator: M. Beard

Purpose: PCB survey

X: 4959125.73

Date: 07.08.2020

Y: 6438801.23




Drilling method: Direct Push 80 mm

Z: 155.93

Drilling rig: Geoprobe 7822 DT

Probe depth: 3.6 m

GWL: 2.9 m

DEPTH [m]	SOIL SAMPLES / GWL	WELL CONSTRUCTION	LITHOLOGY	GEOLOGICAL DESCRIPTION	DEPTH [m]
0	⊕			backfill sandy gravel with construction fragments, black	0
1	⊕			clayey sand, yellow-brown	1
2	⊕				2
3	2.9 			sand with rock fragments, yellow-gray	3

Legend: ⊕ Soil sample was collected from interval above and between the marks

Scale: 1 : 440

Recorded by: Kubricht

Evaluated by: Kubricht

Compiled by: Polak

Appendix no.: V

Annex VI: Sampling protocols

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:		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 glass jar							
Sample matrices type:		Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		<p>Soil.</p> <p>S1/TS (0,0-0,2 m)</p> <p>S1/1 (0,2-0,8 m)</p> <p>S1/2 (0,8-2,0 m)</p> <p>S1/GW (GW table)</p>					
Description of sampling place and its surroundings:		<p>Business zone (transformers of viscosis)</p>					
Weather:							
Notes:		<p>Soil probe depth: 6 m BGL</p> <p>Equipped with HDPE pipe.</p> <p>Drilling rig Geoprobe 7822 DT.</p>					
Laboratory (name):		ALS Czech Republic					
Day:							

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	S-2	Date and time of sampling:		30.7.2020			
		Sampled by:		Jiri Kubricht			
Number of subsamples:		3 - S2/TS, S2/1, S2/2					
Coordinates:		N		E			
WGS1984		see att. 1					
Sampling bottle:		Required analysis:					
200 mL glass jar							
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		<p>Soil.</p> <p>S2/TS (0,0-0,2m)</p> <p>S2/1 (0,2-0,8m)</p> <p>S2/2 (0,8-2,0m)</p>					
Description of sampling place and its surroundings:		<p>Business zone (transformers of viscosity)</p>					
Weather:							
Notes:		<p>Soil probe depth: 4,8 m BGL</p> <p>Drilling rig Geoprobe 7822 DT.</p>					
Laboratory (name):		ALS Czech Republic					
Day:							

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	S-3	Date and time of sampling:		30.7.2020			
		Sampled by:		Jiri Kubricht			
Number of subsamples:		4 - S3/TS, S3/1, S3/2, S3/GW					
Coordinates:		N		E			
WGS1984		see att. 1					
Sampling bottle:		Required analysis:					
200 mL glass jar							
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		Soil. S3/TS (0,0-0,2 m) S3/1 (0,2-0,8 m) S3/2 (0,8-2,0 m) S3/GW (4,0-4,3 m)					
Description of sampling place and its surroundings:		Business zone (transformers of viscosity)					
Weather:							
Notes:		Soil probe depth: 4,5 m BGL Drilling rig Geoprobe 7822 DT.					
Laboratory (name):		ALS Czech 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:	31.7.2020
		Sampled by:	Jiri Kubricht

Number of subsamples: 4 - S4/TS, S4/1, S4/2, S4/GW

Coordinates:	N	E
WGS1984	see att. 1	

Sampling bottle:	Required analysis:
200 mL glass jar	

Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
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Further sample description:

Soil.
 S4/TS (0,0-0,2m)
 S4/1 (0,2-0,8m)
 S4/2 (0,8-2,0m)
 S4/GW (4,0-4,20m - GW table)

Description of sampling place and its surroundings:

Business zone (transformers of viscous)

Weather:

Notes:

Soil probe depth: 6 m BGS
 Equipped with HDPE pipe.
 Drilling rig Geoprobe 7822 DT.

Laboratory (name):	ALS Czech Republic
Day:	

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-5	Date and time of sampling:	31.7.2020			
		Sampled by:	Jiri Kubricht			
Number of subsamples:		3 - SS/TS, SS/1, SS/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		Soil. SS/TS (0,0-0,2m) SS/1 (0,2-0,8m) SS/2 (0,8-2,0m)				
Description of sampling place and its surroundings:		Business zone (transformers of visegrads)				
Weather:						
Notes:		Soil probe depth: 4,8 m BGS Drilling rig Geoprobe 7882 DT GW table reached at 3,50 m BGS.				
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-6	Date and time of sampling:		31.7.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		3 - SG/TS, SG/1, SG/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil. SG/TS (0,0 - 0,2m) SG/1 (0,2 - 0,8m) SG/2 (0,8 - 2,0m)						
Description of sampling place and its surroundings:						
Business zone (in front of ABC Hotel)						
Weather:						
Notes:						
Soil probe depth: 4,8 m BGS Drilling by Geoprobe 7822JT.						
Laboratory (name):				ALS Czech Republic		
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-7	Date and time of sampling:		31.7.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		4 - S7/TS, S7/1, S7/2, S7/GW				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil S7/TS (0,0 - 0,2m) S7/1 (0,2 - 0,8m) S7/2 (0,8 - 2,0m) S7/GW (3,4 - 3,6m - GW table)						
Description of sampling place and its surroundings:						
Business zone (in front of BC Hotel)						
Weather:						
Notes:						
Soil probe depth: 6,0 m BGS. Equipped with HDPE pipe. Drilling Hs Geoprobe 7822 DT.						
Laboratory (name):				ALS Czech Republic		
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-8	Date and time of sampling:		31.7.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		3 - S8/TS, S8/1, S8/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil. S8/TS (0,0-0,2m) S8/1 (0,2-0,8m) S8/2 (0,8-2,0m)						
Description of sampling place and its surroundings:						
Business zone (in front of BG Hotel)						
Weather:						
Notes:						
Soil probe depth: 4,8 m BGS Drilling rig Geoprobe 7822 DT.						
Laboratory (name):				ALS Czech Republic		
Day:						

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:		1.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		4 - S9/TS, S9/1, S9/2, S9/GW				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		Soil S9/TS (0,0 - 0,2 m) S9/1 (0,2 - 0,8 m) S9/2 (0,8 - 2,0 m) S9/GW (3,3 - 3,5 m - GW table)				
Description of sampling place and its surroundings:		BC Metals				
Weather:						
Notes:		Soil probe depth: 6,0 m BGS Equipped with HDPE pipe. Drilling his Geoprobe 7322 DT. GW table reached at 3,4 m BGS.				
Laboratory (name):		ALS Czech Republic				
Day:						

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID:	S-10	Date and time of sampling:	1.8.2020
		Sampled by:	Jiri Kubricht

Number of subsamples: 3 - S10/TS, S10/1, S10/2

Coordinates:	N	E
WGS1984	see att. 1	

Sampling bottle:	Required analysis:
200 mL glass jar	

Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
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Further sample destription:

Soil.

S10/TS (0,0-0,2m)

S10/1 (0,2-0,8m)

S10/2 (0,8-4,0m)

Description of sampling place and its surroundings:

BC Metals

Weather:

Notes:

Soil probe depth: 3,6 m BGS

Drilling rig Geoprobe 7882AT

Laboratory (name):	ALS Czech Republic
Day:	

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-11	Date and time of sampling:		1.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		4 - S11/TS, S11/1, S11/2, S11/GW				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		<p>Soil.</p> <p>S11/TS (0,0-0,2m)</p> <p>S11/1 (0,2-0,8m)</p> <p>S11/2 (0,8-2,0m)</p> <p>S11/GW (4,3-4,5m - GW tank)</p>				
Description of sampling place and its surroundings:		<p>Nova Banja</p>				
Weather:						
Notes:		<p>Soil probe depth: 6,0m BGS</p> <p>Equipped with HDPE pipe.</p> <p>Drilling his Geoprobe 7822JT.</p> <p>GW tank reached at 4,4m BGS.</p>				
Laboratory (name):		ALS Czech Republic				
Day:						

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID:	S-12	Date and time of sampling:	1.8.2020
		Sampled by:	Jiri Kubricht

Number of subsamples: 3 - S12/1, S12/2, S12/GW

Coordinates:	N	E
WGS1984	see att. 1	

Sampling bottle:	Required analysis:
200 mL glass jar	

Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
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Further sample description:

Soil probe below concrete platform.

S12/1 (0,2 - 0,8 m)

S12/2 (0,8 - 2,0 m)

S12/GW (3,0 - 3,2 m - GW table)

Description of sampling place and its surroundings:

Nova Banja

Weather:

Notes:

Soil probe depth: 3,6 m BGS.

Drilling rig Geoprobe 7822DT

GW table reached at 3,1 m BGS.

Laboratory (name):	ALS Czech Republic
Day:	

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	S-13	Date and time of sampling:		3.8.2020			
		Sampled by:		Jiri Kubricht			
Number of subsamples:		2 - S13/TS, S13/1					
Coordinates:		N		E			
WGS1984		see att. 1					
Sampling bottle:		Required analysis:					
200 mL glass jar							
Sample matrices type:		Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		Soil. S13/TS (0,0-0,2 m) S13/1 (0,2-0,8 m)					
Description of sampling place and its surroundings:		Business zone (Electrolysis)					
Weather:							
Notes:		Soil probe depth: 3,6 m BGS. Drilling rig Geoprobe 7822 DT. GW table reached at 2 m BGS.					
Laboratory (name):		ALS Czech Republic					
Day:							

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-14	Date and time of sampling:		3.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		4 - S14/TS, S14/1, S14/2, S14/GW				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		<p>Soil.</p> <p>S14/TS (0,0-0,2m)</p> <p>S14/1 (0,2-0,8m)</p> <p>S14/2 (0,8-2,0m)</p> <p>S14/GW (3,4-3,6m - GW table)</p>				
Description of sampling place and its surroundings:		<p>Electrolysis.</p>				
Weather:						
Notes:		<p>Soil probe depth: 6,0 m BGS</p> <p>Equipped with HDPE pipe.</p> <p>Drilling rig Geoprobe 7822 DT.</p> <p>GW table reached at 3,5 m BGS.</p>				
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-15	Date and time of sampling:		3.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		4-S15/TS, S15/1, S15/2, S15/GW				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		Soil S15/TS (0,0-0,2m) S15/1 (0,2-0,8m) S15/2 (0,8-2,0m) S15/GW (3,2-3,4m - GW table)				
Description of sampling place and its surroundings:		Letic Invest				
Weather:						
Notes:		Soil probe depth : 60 m BGS Equipped with HDPE pipe. Drilling rig Geoprobe 7322 DT. GW table reached at 3,3 m BGS.				
Laboratory (name):		ALS Czech Republic				
Day:						

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID:	S-16	Date and time of sampling:	3.8.2020
		Sampled by:	Jiri Kubricht

Number of subsamples: 3 - S16/TS, S16/1, S16/2

Coordinates:	N	E
WGS1984	see att. 1	

Sampling bottle:	Required analysis:
200 mL glass jar	

Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
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Further sample destription:

Soil.
 S16/TS (0,0-0,2m)
 S16/1 (0,2-0,8m)
 S16/2 (0,8-2,0m)

Description of sampling place and its surroundings:

Lutic forest.

Weather:

Notes:

Soil probe depth: 4,8 m BGS
 Drilling rig Geoprobe 7822 DT.
 GW reached at 2,6 m BGS.

Laboratory (name):	ALS Czech Republic
Day:	

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-17	Date and time of sampling:		3.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		3 - S17/TS, S17/1, S17/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil S17/TS (0,0-0,2m) S17/1 (0,2-0,8m) S17/2 (0,8-2,0m)						
Description of sampling place and its surroundings:						
Lukic Invest.						
Weather:						
Notes:						
Soil probe depth: 4,8 m BGS Drilling is Geoprobe 7822 DT.						
Laboratory (name):				ALS Czech Republic		
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-18	Date and time of sampling:		3.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		3 - S18/TS, S18/1, S18/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil. S18/TS (0,0-0,2m) S18/1 (0,2-0,8m) S18/2 (0,8-2,0m)						
Description of sampling place and its surroundings:						
Lucic kvest.						
Weather:						
Notes:						
Soil probe depth: 4,8 m BGS. Drilling rig Geoprobe 7822 DT. GW reached at 3,8 m BGS.						
Laboratory (name):				ALS Czech Republic		
Day:						

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: S-19 **Date and time of sampling:** 4.8.2020
Sampled by: Jiri Kubricht

Number of subsamples: 4 - S19/TS, S19/1, S19/2, S19/GW

Coordinates: N E
WGS1984 see att. 1

Sampling bottle: 200 mL glass jar
Required analysis:

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:
 Soil.
 S19/TS (0,0-0,2m)
 S19/1 (0,2-0,8m)
 S19/2 (0,8-2,0m)
 S19/GW (3,0-3,2m - GW table)

Description of sampling place and its surroundings:
 Lukic Invest.

Weather:

Notes:
 Soil probe depth: 6,0 m BGS
 Equipped with HDPE pipe.
 Drilling his Geoprobe 7822DT.
 GW reached at 3,1 m BGS.

Laboratory (name): ALS Czech Republic

Day:

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:		4.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		2 - S20/TS, S20/1				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		Soil. S20/TS (0,0 - 0,2m) S20/1 (0,2 - 0,8m)				
Description of sampling place and its surroundings:		Lukic Invest.				
Weather:						
Notes:		Soil probe depth: 4,9 m BGS Drilling rig Geoprobe 7822 DT.				
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-21	Date and time of sampling:		4.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		3 - S21/TS, S21/1, S21/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil. S21/TS (0,0-0,2m) S21/1 (0,2-0,8m) S21/2 (0,8-2,0m)						
Description of sampling place and its surroundings:						
Lukic Invest - across the street close to S-17.						
Weather:						
Notes:						
Soil probe depth: 4,8 m BGS Drilling rig Geoprobe 7822 DT.						
Laboratory (name):				ALS Czech Republic		
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-22	Date and time of sampling:		4.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		2 - S22/TS, S22/1				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil. - 0,0 - 0,2 concrete platform S22/TS (0,0-0,2m) (0,2-0,4m) S22/1 (0,0-0,2m) (0,4-0,8m)						
Description of sampling place and its surroundings:						
SHP Celex						
Weather:						
Notes:						
Soil probe depth: 3,6 m 36S Drilling rig Geoprobe 7822 DT.						
Laboratory (name):				ALS Czech Republic		
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-23	Date and time of sampling:		7.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		3 - S23/TS, S23/1, S23/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil. - 0,0 - 0,1 m concrete platform. S23/TS (0,1 - 0,3 m) S23/1 (0,3 - 0,8 m) S23/2 (2,4 - 3,0 m)						
Description of sampling place and its surroundings:						
SHP Celex						
Weather:						
Notes:						
Soil probe depth: 6,0 m BGS Equipped with HDPE pipe. Drilling rig. Geoprobe 7822DT. GW reached at 2,4 m BGS.						
Laboratory (name):				ALS Czech Republic		
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots			
Probe ID:	S-24	Date and time of sampling:		7.8.2020	
		Sampled by:		Jiri Kubricht	
Number of subsamples:		4 - S24/TS, S24/1, S24/2, S24/granule			
Coordinates:		N		E	
WGS1984		see att. 1			
Sampling bottle:		Required analysis:			
200 mL glass jar					
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste
					Building structure
Further sample destription:					
<p>Soil.</p> <p>S24/TS (0,0-0,2m)</p> <p>S24/1 (0,2-0,8m)</p> <p>S24/2 (0,8-2,0m)</p> <p>S24/granule (full profile)</p>					
Description of sampling place and its surroundings:					
<p>SHP Celex</p>					
Weather:					
Notes:					
<p>Soil probe depth: 4,8 m BGS</p> <p>Drilling nis Geoprobe 7822 DT.</p>					
Laboratory (name):				ALS Czech Republic	
Day:					

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	S-25	Date and time of sampling:		6.8.2020		
		Sampled by:		Jiri Kubricht		
Number of subsamples:		3 - S25/TS, S25/1, S25/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Soil S25/TS (0,0-0,2m) S25/1 (0,2-0,8m) S25/2 (0,8-2,0m)						
Description of sampling place and its surroundings:						
Business zone (fire fighting station)						
Weather:						
Notes:						
Soil probe depth: 4,8m BGS Drilling rig Geoprobe 7822DT						
Laboratory (name):				ALS Czech Republic		
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots			
Probe ID:	S-26	Date and time of sampling:		6.8.2020	
		Sampled by:		Jiri Kubricht	
Number of subsamples:		3 - S26/TS, S26/1, S26/2			
Coordinates:		N		E	
WGS1984		see att. 1			
Sampling bottle:		Required analysis:			
200 mL glass jar					
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste
					Building structure
Further sample description:					
Soil. - 0,0-0,1 concrete platform S26/TS (0,0-0,3m) S26/1 (0,3-0,8m) S26/2 (0,8-2,0m)					
Description of sampling place and its surroundings:					
TOP Metal					
Weather:					
Notes:					
Soil probe depth: 3,6 m BGS Drilling rig Geoprobe 7822DT					
Laboratory (name):			ALS Czech Republic		
Day:					

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	S-27	Date and time of sampling:		6.8.2020			
		Sampled by:		Jiri Kubricht			
Number of subsamples:		4 - S27/TS, S27/1, S27/2, S27/3					
Coordinates:		N		E			
WGS1984		see att. 1					
Sampling bottle:		Required analysis:					
200 mL glass jar							
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		<p>Soil.</p> <p>S27/TS (0,0-0,2m)</p> <p>S27/1 (0,2-0,8m)</p> <p>S27/2 (0,8-2,0m)</p> <p>S27/3 (4,0-4,2m)</p>					
Description of sampling place and its surroundings:		Business zone (beside Eco-trade)					
Weather:							
Notes:		<p>Soil probe depth: 4,8m BGS</p> <p>Drilling rig Geoprobe 7822 DT.</p>					
Laboratory (name):		ALS Czech Republic					
Day:							

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	9-28	Date and time of sampling:	6.8.2020			
		Sampled by:	Jiri Kubricht			
Number of subsamples:		3 - S28/TS, S28/1, S28/2				
Coordinates:		N		E		
WGS1984		see att. 1				
Sampling bottle:		Required analysis:				
200 mL glass jar						
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		<p>Soil</p> <p>S28/TS (0,0-0,2m)</p> <p>S28/1 (0,2-0,8m)</p> <p>S28/2 (0,8-2,0m)</p>				
Description of sampling place and its surroundings:		<p>Business zone (production of CS2)</p>				
Weather:						
Notes:		<p>Soil probe depth: 3,6 m BGS</p> <p>Drilling rig Geoprobe 7822DT.</p>				
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	S-29	Date and time of sampling:		7.8.2020			
		Sampled by:		Jiri Kubricht			
Number of subsamples:		4 - S29/TS, S29/1, S29/2, S29/GW					
Coordinates:		N		E			
WGS1984		see att. 1					
Sampling bottle:		Required analysis:					
200 mL glass jar							
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		<p>Soil</p> <p>S29/TS (0,0-0,2m)</p> <p>S29/1 (0,2-0,8m)</p> <p>S29/2 (0,8-2,0m)</p> <p>S29/GW (2,5-2,7m) - GW bsk</p>					
Description of sampling place and its surroundings:		Universum AD					
Weather:							
Notes:		<p>Soil probe depth: 6,0 m BGS</p> <p>Equipped with HDPE pipe.</p> <p>Drilling his Geoprobe 7822 DT.</p> <p>GW reached at 2,6 m BGS.</p>					
Laboratory (name):		ALS Czech Republic					
Day:							

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	S-30	Date and time of sampling:		7.8.2020			
		Sampled by:		Jiri Kubricht			
Number of subsamples:		3 - S30/TS, S30/1, S30/GW					
Coordinates:		N		E			
WGS1984		see att. 1					
Sampling bottle:		Required analysis:					
200 mL glass jar							
Sample matrices type:		Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		Soil S30/TS (0,0 - 0,2 m) S30/1 (0,2 - 0,8 m) S30/GW (black sand - 2,9 - 3,1 m)					
Description of sampling place and its surroundings:		Universum AD.					
Weather:							
Notes:		Soil probe depth: 3,6 m SGS Drilling rig Geoprobe 7822DT.					
Laboratory (name):		ALS Czech Republic					
Day:							

GROUNDWATER SAMPLE - dynamic state

dekonta

Object: S1	Depth: 5.71	Screen: 5m	Diameter: 25mm	Casing: HDPE
Sampling equipment: S 410		House diameter: 10mm		Depth of GW: 2.64
Name:		Notes: 8.8.20		

Time	GWL	pH	T	MS/c	O2	Poznámky/změny
	2.64	8.53	16.8	2820		68 (ORP)
		8.84	16.6	2770		23
9:24		8.55	15.8	2000		-106
	3.04	8.55	15.9	1351	0.61	-68

Object: S4	Depth: 5.80	Screen: 5m	Diameter: 25mm	Casing: HDPE
Sampling equipment: Solinset 440		House diameter: 10mm		Depth of GW: 2.16
Name: S4		Notes:		

Time	GWL	pH	T	c	O2	Poznámky/změny
9.41	2.16	7.53	15.1	2758		-169 (ORP) PCB
		7.29	14.2	3120		-156
9.50		7.20	14.1	3042	1.82	-152

Object: S11	Depth: 5.78	Screen: 5m	Diameter: 25mm	Casing: HDPE
Sampling equipment: S 410		House diameter: 10mm		Depth of GW: 4.00
Name: S11		Notes:		

Time	GWL	pH	T	c	O2	Poznámky/změny
10:00	4.00	7.38	15.5	764		168 (ORP) PCB
		7.32	15.1	757		79
	4.42	7.32	15.1	761	4.17	90

GROUNDWATER SAMPLE - dynamic state

dekonta

Object: P4	Depth: 3.50	Screen: -	Diameter: Ø 80	Casing: PVC
Sampling equipment: Solinst 400		House diameter: 10		Depth of GW: 2.70 / 45 sol
Name: P4		Notes: 8.8.20		

Time	GWL	pH	T	c	O2	Poznámky/změny
14:40	2.70	7.09	21.5	743		58 (ORP) PCB
		7.1	19.5	720		60
	3.01	7.1	18.8	718	0.22	60

Object: S 14	Depth: 6m	Screen: 5m	Diameter: 25mm	Casing: HDPE
Sampling equipment: S 410		House diameter: 10mm		Depth of GW: 1.90
Name: S 14		Notes:		

Time	GWL	pH	T	c	O2	Poznámky/změny
15:03	1.90	10.8	17	2140		-327 (ORP) PCB
		11.0	15.9	2200		-36 HM
	2.05	11.0	15.7	2220	0.77	-30 TTH

Object: P2	Depth: 3.00	Screen: -	Diameter: Ø 80	Casing: PVC
Sampling equipment: Solinst 400		House diameter: 10mm		Depth of GW: 1.78 sol 45
Name: P2		Notes:		

Time	GWL	pH	T	c	O2	Poznámky/změny
15:30		7.60	20.6	584		+57 (ORP) PCB
		7.53	20.4	563		72
		7.48	20.4	565	2.10	79

GROUNDWATER SAMPLE - dynamic state

dekonta

Object: <u>S 15</u>	Depth: <u>580</u>	Screen: <u>5m</u>	Diameter: <u>25mm</u>	Casing: <u>HDPE</u>
Sampling equipment: <u>Solinst S 410</u>		House diameter: <u>10mm</u>		Depth of GW: <u>1.67</u>
Name: <u>S 15</u>		Notes: <u>28.2020</u>		

Time	GWL	pH	T	<u>xs/c</u>	O2	Poznámky/změny
<u>12:14</u>		<u>6.92</u>	<u>16.2</u>	<u>2510</u>		<u>48</u> (ORP) <u>PCR</u>
		<u>6.83</u>	<u>15.5</u>	<u>2600</u>		<u>29</u> <u>HM</u>
	<u>1.70</u>	<u>6.80</u>	<u>15.2</u>	<u>2620</u>	<u>0.51</u>	<u>80</u> <u>TPH</u>

Object: <u>ST 7</u>	Depth: <u>6.0</u>	Screen: <u>5m</u>	Diameter: <u>25mm</u>	Casing: <u>HDPE</u>
Sampling equipment: <u>S 410</u>		House diameter: <u>10mm</u>		Depth of GW: <u>1.25</u>
Name: <u>ST 7</u>		Notes:		

Time	GWL	pH	T	c	O2	Poznámky/změny
<u>12:33</u>	<u>1.25</u>	<u>7.28</u>	<u>16.0</u>	<u>852</u>		<u>-72</u> (ORP) <u>PCR</u>
		<u>7.22</u>	<u>15.5</u>	<u>920</u>		<u>-76</u>
	<u>1.30</u>	<u>7.20</u>	<u>15.4</u>	<u>940</u>	<u>0.11</u>	<u>-77</u>

Object: <u>89</u>	Depth: <u>6m</u>	Screen: <u>5m</u>	Diameter: <u>25mm</u>	Casing: <u>HDPE</u>
Sampling equipment: <u>S 410</u>		House diameter: <u>10mm</u>		Depth of GW: <u>2.42</u>
Name: <u>89</u>		Notes:		

Time	GWL	pH	T	c	O2	Poznámky/změny
<u>14:36</u>		<u>7.52</u>	<u>20.5</u>	<u>1406</u>		<u>0</u> (ORP) <u>PCR</u>
		<u>7.59</u>	<u>16.5</u>	<u>1420</u>		<u>-21</u> <u>HM</u>
		<u>7.56</u>	<u>15.7</u>	<u>1460</u>	<u>0.80</u>	<u>-27</u> <u>TPH</u>
	<u>2.54</u>		<u>15.0</u>			

GROUNDWATER SAMPLE - dynamic state

dekonta

Object: S 29	Depth: 6.0	Screen: 5m	Diameter: 25mm	Casing: HDPE
Sampling equipment: Salinet S410		House diameter: 10mm		Depth of GW: 2.20
Name: S 29		Notes: 8.820		

Time	GWL	pH	T	c	O2	Poznámky/změny
10:57	2.20	7.53	16.6	1124		-3.6 (ORP) PCB
		7.52	16.2	1144		-58
		7.53	16.1	1135		-76
	2.34	7.50	16.1	1135	0.18	-80

Object: S 23	Depth: 6.0	Screen: 5m	Diameter: 25mm	Casing: HDPE
Sampling equipment: S410		House diameter: 10mm		Depth of GW: 3.18
Name: S 23		Notes:		

Time	GWL	pH	T	c	O2	Poznámky/změny
11:16		8.06	20.5	696		40 (ORP) PCB
24		7.63	20.1	733		49 HM
	3.18	7.54	20.1	719	0.99	44 TPH

Object: S 19	Depth: 5.60	Screen: 5m	Diameter: 25mm	Casing: HDPE
Sampling equipment: Salinet 410		House diameter: 10mm		Depth of GW: 2.50
Name: S 19		Notes:		

Time	GWL	pH	T	c	O2	Poznámky/změny
11:33		7.45	16.6	1410		-67 (ORP) PCB
		7.39	15.5	1457		-145
	4.50	7.33	16.3	1499	3.69	-17

GEROUNDWATER SAMPLE - dynamic state**dekonta**

Object: P1	Depth: 3.90	Screening:	Well diameter: 80 mm	Casing: PVC
Sampling equipment: Solinst 410	House diameter: 10 mm	Depth of GWL: 3.20		
Sampling point: P1	Notes: 9.8.2020			

Time	GWL	pH	T	conductivity	O2	Poznámky/změny
10:30	3.20	7.50	16.9	1055		-222 (ORP) PCB
		7.02	15.6	1070		-218 HM
	3:45	7.35	15.7	1072	2.18	-216 TPH

Object: P3	Depth: 4.20	Screening:	Well diameter: 80 mm	Casing: PVC
Sampling equipment: Solinst 410	House diameter: 10 mm	Depth of GWL: 1.95 (40)		
Sampling point: P3	Notes: PCBs			

Time	GWL	pH	T	conductivity	O2	Poznámky/změny
10:50	1.95	7.30	17.7	688		-72
		7.16	17.4	677		-42
		7.10	17.4	678		-40
	2.16	7.10	17.4	677	1.30	-41

Object:	Depth:	Screening:	Well diameter:	Casing:
Sampling equipment:	House diameter:	Depth of GWL:		
Sampling point:	Notes:			

Time	GWL	pH	T	conductivity	O2	Poznámky/změny

SAMPLING RECORD

Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Samle ID:	ex-1	Date and time of sampling:		05.08.2020		
		Sampled by:		Eva Čechová, Fernando Rebelo, Denis		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ml glass jars		PCB				
Sample matrices type:	<u>Building structure</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		Concrete desk fragment. < 3cm pebbles.				
Description of sampling place and its surroundings:		Open area between chimney and CELEX factory. Sample taken from a lower area where rainwater accumulates. 44, 275082N 17, 224752E				
Weather:		Rain, storms, sometimes sunny, 100% RH, N - 12-28 km/h				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:

INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Sample ID:

EX-2

Date and time of sampling:

04.08.2020

Sampled by:

Eva Čechová, Fernando Rebelo, Denis

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

150 ml glass jars

Required analysis:

PCB

Sample matrices type:

Building structure

Ground water (static state)

Surface water

Bottom sediment

Waste

Soil

Further sample description:

- same as EX-1

Description of sampling place and its surroundings:

- homogenized from 4 sampling spots in the centre of the area

44, 775082N 17, 224752E (10m)

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					
Sample ID:	L-1 L-2	Date and time of sampling:	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		- PCP - needs to be homogenized					
Sample matrices type:		Building structure	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		<ul style="list-style-type: none"> - dark-stained slopy area at the back of the transformer rooms - 2mm powdery layer, etcetera plaster under into 1m depth 					
Description of sampling place and its surroundings:		<ul style="list-style-type: none"> - Free standing small building with 2 transformer rooms <p> 44,774 44,774²⁶⁰ N 17,227370 E 44,774²⁶⁰ N 17,227⁸²¹ (5m) </p>					
Weather:		Sunny, 28°C, 73% RH, NE wind, <12km/h					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project: INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Sample ID: L-3 **Date and time of sampling:** 4.8.2020, 12:00 - 15:00 **Sampled by:** Eva Čechová, Fernando Rebelo

Number of subsamples: 1 - L-3A

Coordinates: N E

Sampling bottle: 150 ml glass jars **Required analysis:** PCB, TPH, heavy metals, asbestos (CSA)

Sample matrices type: Building structure, Ground water (static state), Surface water, Bottom sediment, Waste, Soil

Further sample description: Black oily sediment on concrete. Edge of the transformer basin.

Description of sampling place and its surroundings: 44, 773584N 17,226651E (10m). Demolished side of the main building, visible oily spills/stains. Around piles of waste with fragments of asbestos roof.

Weather: Sunny, 28°C, 73% RH, NE wind, <12km/h

Notes: Transformers were being dismantled here. Additional sample of soil with asbestos fragment taken. L-3A.

Laboratory (name): ALS Czech Republic **Day:**

SAMPLING RECORD

Project:

INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Sample ID:

2-4

Date and time of sampling:

4.8. 2020, 12:00 - 15:00

Sampled by:

Eva Čechová, Fernando Rebelo

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

150 ml glass jars

Required analysis:

PCB

Sample matrices type:

Building structure

Ground water (static state)

Surface water

Bottom sediment

Waste

Soil

Further sample description:

Dust + mortar

Description of sampling place and its surroundings:

Composite of dust from floor (limestone) just under the metal structure transformers hanging on, together with mortar fragment from the floor.

Open room with no roof (i.e. "unprotected" area) - first floor.

44,773374N 17,226052E (30m)

Weather:

Sunny, 28°C, 73% RH, NE wind, <12km/h

Notes:

Laboratory (name):

ALS Czech Republic

Day:

SAMPLING RECORD

Project:

INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Samle ID:

~~L-4~~ L-5

Date and time of sampling:

4 8. 2020, 12:00 - 15:00

Sampled by:

Eva Čechová, Fernando Rebelo

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

150 ml glass jars

Required analysis:

dnal-PCB

Sample matrices type:

Building structure

Ground water (static state)

Surface water

Bottom sediment

Waste

Soil

Further sample destription:

- dist from 0,5 x 0,5 m behind transformers + white print

Description of sampling place and its surroundings:

- same as L-4

Weather:

Sunny, 28°C, 73% RH, NE wind, <12km/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					
Sample ID:	2-6	Date and time of sampling:		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		PCB					
		H4					
Sample matrices type:		Building structure	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		concrete floor					
Description of sampling place and its surroundings:							
<p>Large storage hall, concrete floor with 0,5-2cm pebbles. Soil stored here.</p> <p>Rainbow prints.</p> <p>44,773504N 17,226345E (30m)</p>							
Weather:							
Sunny, 28°C, 73% RH, NE wind, <12km/h							
Notes:							
<p>(L4)</p> <p>Transformers removed from Lubie building across street were stored here before dismantling at 2-3 ^{at} for the side of the building. (Ervin)</p> <p>Rainbow only maps at water puddle after rain.</p>							
Laboratory (name):				ALS Czech Republic			
Day:							


Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Sample ID:	L-7	Date and time of sampling:		18. 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		PCB				
Sample matrices type:	<u>Building structure</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:						
Mortar, black sediment, concrete with pebbles - scratched 0-0,5m surface - black/brown sediment.						
Description of sampling place and its surroundings:						
Transformer room (2nd from left) 44,775343N 17,226832E (30m) Upper edge.						
Weather:						
Sunny, 28°C, 73% RH, NE wind, <12km/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:	UN- 24 1	Date and time of sampling:		05.08.2020			
		Sampled by:		Eva Čechová, Fernando Rebelo Denis			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 ml glass jars		PCB					
Sample matrices type:		Building structure	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample destription:		- Foundation, lowered concrete platform					
Description of sampling place and its surroundings:		44,7741P2N 17,221080E (10m)					
Weather:		Rain, storms, sometimes sunny, 100% RH, N - 12-28 km/h					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

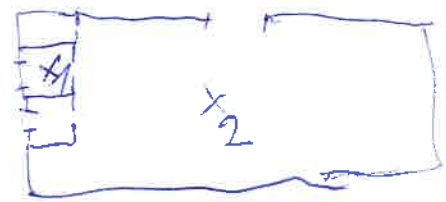
SAMPLING RECORD

Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Sample ID:	UN-# 2	Date and time of sampling:	04.08.2020			
		Sampled by:	Eva Čechová, Fernando Rebelo, Denis			
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ml glass jars		PCB				
		HM				
Sample matrices type:	<u>Building structure</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:						
Description of sampling place and its surroundings:		<p>Concrete area, behind the storage contains with excavated soil.</p> <p>44,74182N 17,221080E (10m)</p>				
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-T-1	Date and time of sampling:		1. 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		PCB				
Sample matrices type:	<u>Building structure</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		<p>Concrete, oil-like stain, petroleum smell 0-2m. - homogenised 3 gels/2m²</p>				
Description of sampling place and its surroundings:		<p>Plot Elevated platform in front of the transformers rooms. 44°46'18"N 17°13'44"E 44,772263 17,229078E (10m) 44,772212N 17,229688E altitude 205m</p>				
Weather:		Sunny, 28°C, 73% RH, NE wind, <12km/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				
Sample ID:	B2-T-2	Date and time of sampling:		1. 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		PCB				
						
Sample matrices type:	<u>Building structure</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:						
Description of sampling place and its surroundings:						
		<p>- Floor (concrete + plaster pavement) inside transformer room. Nearby St., first room on the left building</p> <p>44, 772 176 17, 228 020 (10m)</p> <p>44° 46' 15"N 17° 13' 41"E</p> <p>3,32 x 2,64 m</p>				
Weather:						
		Sunny, 28°C, 73% RH, NE wind, <12km/h				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Sample ID:	NB-1	Date and time of sampling:		1. 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		PCB					
Sample matrices type:		Building structure	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		Composite sample, concrete floor, plaster walls with traces of paint.					
Description of sampling place and its surroundings:		<p>Inside a small room ^{module} room, floor</p>  <p>Lat: 44,773078 Long: 17,223708 N: 44° 46' 23" E: 17° 15' 25" 44,773320 17,223872</p>					
Weather:		Sunny, 28°C, 73% RH, NE wind, <12km/h					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project: INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Sample ID: NB-2 (S12/CH) **Date and time of sampling:** 1. 8. 2020, 12:00 - 15:00 **Sampled by:** Eva Čechová, Fernando Rebelo

Number of subsamples: Martin Polak, Martin Fousek

Coordinates: N E

Sampling bottle: 150 ml glass jars **Required analysis:** PCO

Sample matrices type: Building structure Ground water (static state) Surface water Bottom sediment Waste Soil

Further sample description: concrete panel 0-0,20m, drilled by probe 54,9m x 27,8m

Description of sampling place and its surroundings:

open space, perimeter walls 54,9m x 27,8m

Weather: Sunny, 28°C, 73% RH, NE wind, <12km/h

Notes:

Laboratory (name): ALS Czech Republic

Day:

SAMPLING RECORD

Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Sample ID:	NB-3	Date and time of sampling:		1. 8. 2020, 12:00 - 15:00			
		Sampled by:		Eva Čechová, Fernando Rebelo			
Number of subsamples:							
Coordinates:		N		E			
		same as NB-1					
Sampling bottle:		Required analysis:					
150 ml glass jars		PCB					
Sample matrices type:		<u>Building structure</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		- black paint from under the window					
Description of sampling place and its surroundings:		- same as NB-1					
Weather:		Sunny, 28°C, 73% RH, NE wind, <12km/h					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Sample ID:	NB- 3 4	Date and time of sampling:		08.08.2020		
		Sampled by:		Eva Čechová, Fernando Rebelo		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ml glass jars		Dust - PCB				
Sample matrices type:	<u>Building structure</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		Surface scratched under the left window				
Description of sampling place 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					
Sample ID:	B2-C-1	Date and time of sampling:		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		PCB					
Sample matrices type:		Building structure	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		<ul style="list-style-type: none"> - greasy 2-mm layer (loose sediment/dust) at the entrance - 2cm depth from the rear inclined part (plaster + concrete) 					
Description of sampling place and its surroundings:		<ul style="list-style-type: none"> - transformer room 3,24x2,43m 44,772885 17,227807 (30m) 44° 46' 22" N 17° 13' 40" E 44,771999 N 17,228570 E 					
Weather:		Sunny 28°C, 73% RH, NE wind, <12km/h					
Notes:		<i>partially cloudy</i>					
Laboratory (name):		ALS Czech Republic					
Day:							

Project:		INCEL, Banja Luka, BiH: PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Sample ID:	B2-C-2	Date and time of sampling:		3 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		PCB					
		TPH					
		heavy metals					
Sample matrices type:		Building structure	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		<p>- only skin at the entrance</p> <p>+ 2 glass sample at the fire place - 2cm of dust removed, concrete taken into 1cm depth</p> <p>- concrete corner of a column by the place of fire (5x5x5cm, 12cm pebbles removed, only binder removed)</p>					
Description of sampling place and its surroundings:		<p>- right corner in front part of the hall, at the place of the fire</p> <p>44, 773224 17,232632E</p> <p>767793N</p> <p>44°46'27" 17°13'29E</p>					
Weather:							
Sunny, 28°C, 73% RH, NE wind, <12km/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					
Sample ID:	BZ-L-3	Date and time of sampling:		1. 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					
Sample matrices type:		<u>Building structure</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Soil
Further sample description:		<ul style="list-style-type: none"> 3 5cm strips taken on the area 1x1 m², 1m from the surface grey-yellow-orange loose layer on the surface 					
Description of sampling place and its surroundings:		same as BZ-L-2					
Weather:		Sunny, 28°C, 73% RH, NE wind, <12km/h					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: W-1

Date and time of sampling: 08/08/20

Sampled by: F. REBELD

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

Required analysis:

500mL GLASS,
DARK COLOUR

PCBs

Sample matrices type:

Soil

Ground
water
(static
state)

Surface
water

Bottom
sediment

Waste

Building
structure

Further sample description:

GW at 3,5 m Bellow GROUND.

Description of sampling place and its surroundings:

SAMPLE TAKEN FROM A PRIVATE WATER WELL LOCATED OUTSIDE INCEL AREA.
HOUSE LOCATED NORTH OF INCEL. PROBABLY DOWNSTREAM OF GROUNDWATER
DIRECTION. APP. 400 m FROM VRBAS RIVER. 1500 m FROM
THE UNIVERSITY

Weather:

SUNNY

Notes:

- SAMPLE COLLECTED AFTER 3 DAYS OF HEAVY RAIN
- OWNERS MENTIONED THAT THEY NEVER USE THE WATER FROM THE WELL.

Laboratory (name):

Day:

ALS Czech Republic

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	W-2	Date and time of sampling:	08/08/20			
		Sampled by:	F. REBELO			
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
500 mL GLASS, DARK COLOUR		PCBS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		GW at 10,5 m Below Ground. BOTTOM OF THE WELL AT 3,5 m				
Description of sampling place and its surroundings:		<p>SAMPLE TAKEN FROM A PRIVATE WATER WELL WATER WELL LOCATED OUTSIDE INCEL AREA INCEL AREA.</p> <p>HOUSE LOCATED SOUTH WEST OF INCEL. PROBABLY UPSTREAM OF GROUND WATER DIRECTION. 200 m FROM VABAS RIVER. 500m FROM THE UNIVERSITY.</p>				
Weather:		SUNNY				
Notes:		<p>• SAMPLE COLLECTED AFTER 3 DAYS OF HEAVY RAINS.</p> <p>• OWNERS MENTIONED THAT THEY NEVER USE THE WATER FROM THE WELL.</p>				
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	W-3	Date and time of sampling:		08/08/20		
		Sampled by:		F. REBELD		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
500 ml, GLASS, DARK COLOUR		PCBS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
<p>GW AT 2,9 m BELOW GROUND.</p> <p>BOTTOM OF THE WELL AT 3,10 m BELOW GROUND.</p>						
Description of sampling place and its surroundings:						
<p>SAMPLE TAKEN FROM A PRIVATE WATER WELL LOCATED OUTSIDE INCEL AREA. HOUSE LOCATED NORTH WEST OF INCEL. PROBABLY DOWNSTREAM OF GROUNDWATER DIRECTION(?).</p> <p>APPROXIMATELY 40m FROM THE RIVER VA'BAS, CLOSE TO THE CONNECTION OF BOTH ARMS OF THE RIVER. 400m FROM THE UNIVERSITY</p>						
Weather:						
SUNNY						
Notes:						
<p>• SAMPLE COLLECTED AFTER 3 DAYS OF HEAVY RAIN</p> <p>• OWNERS MENTIONED THAT THEY NEVER USE THE WATER FROM THE WELL.</p>						
Laboratory (name):			ALS Czech Republic			
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-1	Date and time of sampling:	04/08/2020				
		Sampled by:	O. URBAN, M. POLAK				
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, Glass, wide opening		PCBs					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
		COLLECTED IN ON THE GRASS. SOIL AROUND LUKIC INVEST.					
Weather:							
		SOFT RAIN					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-2	Date and time of sampling:		04/08/2020			
		Sampled by:		O. URBAN, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, GLASS, WIDE OPENING		PCBS					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
		COLLECTED ON THE GRASS - SOIL AROUND LUKIC INVEST					
Weather:							
SOFT RAIN							
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-3 **Date and time of sampling:** 04/05/2020
Sampled by: D. URBAN, M. POLAK

Number of subsamples:

Coordinates: N E

Sampling bottle: 150 mL, GLASS, WIDE OPENING
Required analysis: PCBs

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:

Description of sampling place and its surroundings:
 COLLECTED ON THE GRASS. SOIL AROUND ZUKIC INVEST.

Weather: SOFT RAIN

Notes:

Laboratory (name): ALS Czech Republic
Day:

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-4	Date and time of sampling:		04/08/2020			
		Sampled by:		O. URBAN, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, GLASS, WIDE OPENING		PCBs, Heavy METALS, Dioxin, Dioxin like PCBs, TOC, TPH, PAH					
(3X)							
Sample matrices type:		Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:		COLLECTED ON THE GRASS. SOIL AROUND LUKIC INVEST.					
Weather:		SOFT RAIN					
Notes:		THIS SAMPLE IS CONTAINED IN 3 PLASTIC GLASS CONTAINERS					
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

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:	04/08/2020			
		Sampled by:	O. URBAN, M. POLAK			
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBs				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		COLLECTED ON THE GRASS. SOIL AROUND LUKIC INVEŠI.				
Weather:						
		SOFT RAIN				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-6	Date and time of sampling:		04/08/2020			
		Sampled by:		O. URBAN, M. POLAN			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, GLASS, WIDE OPENING		PCBs					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:		COLLECTED ON THE GRASS. SOIL AROUND LUKIC INVEST.					
Weather:		SOFT RAIN					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID:	TS-7	Date and time of sampling:	04/08/2020
		Sampled by:	O. URBAN, M. POLAK

Number of subsamples:

Coordinates:	N	E
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Sampling bottle:	Required analysis:
150 ml, GLASS, WIDE OPENING	PCBs

Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
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Further sample description:

Description of sampling place and its surroundings:

SOIL WITHOUT GRASS. ~~GROUND~~ SITE WITH MANY DEBRIS. AROUND LUKIC INVEST.

Weather:

SOFT RAIN

Notes:

Laboratory (name):	ALS Czech Republic
Day:	

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS - 8	Date and time of sampling:	04/08/2020			
		Sampled by:	D. URBAN, M. POLAK			
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBs + TPH + HEAVY METALS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		SOIL WITHOUT GRASS. SITE WITH MANY DEBRIS. AROUND LURIC INVEST				
Weather:						
SOFT RAIN						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-9	Date and time of sampling:		04/08/2020		
		Sampled by:		D. URBAN, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, Glass, wide opening		PCBs				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		MIXTURE OF SOIL AND RUBBLE				
Weather:						
		SOFT RAIN				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-10	Date and time of sampling:		04/08/2020			
		Sampled by:		O. URBAN, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, GLASS, WIDE OPENING		PCBs					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
		SOIL COLLECTED FROM THE JOINTS BETWEEN THE CONCRETE					
Weather:							
		SOFT RAIN					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS - 11	Date and time of sampling:		04/08/2020		
		Sampled by:		D. URBAN, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		COLLECTED FROM THE WHOLE IN THE CONCRETE PLATFORM NEXT TO CELEX				
Weather:						
SOFT RAIN						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-12	Date and time of sampling:		04/08/2020		
		Sampled by:		O. URBAN, M. POLAVE		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ml, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		COLLECTED SOIL FROM THE EAST AREA OF CELEX				
Weather:		SOFT RAIN				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-13	Date and time of sampling:		04/08/2020		
		Sampled by:		D. VRBAN, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
50 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		COLLECTED SOIL FROM THE EAST AREA OF CELEX				
Weather:						
SOFT RAIN						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-14	Date and time of sampling:		04/08/2020		
		Sampled by:		D. URBAN, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150ML, GLASS, WIDE OPENING		PCBs				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		COLLECT SOIL FROM THE EAST AREA OF CELGX				
Weather:						
SOFT RAIN						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-15	Date and time of sampling:		04/08/2020		
		Sampled by:		D. URBAN, M. Poljan		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBs				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		COLLECTED SOIL FROM THE EAST AREA OF CELEX				
Weather:						
SOFT RAIN						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

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		
		Sampled by:		O. JEBAN, M. Poljan		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		COLLECTED SOIL FROM THE EAST AREA OF CELEX				
Weather:						
		SOFT RAIN				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-17	Date and time of sampling:		06/08/2020			
		Sampled by:		F. REBERO, M. POLAN			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 ML, GLASS, WIDE OPENING		PCBs					
Sample matrices type:		Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
		BUSINESS ZONE IN FRONT OF BC METAL. SAMPLE COLLECTED NEXT TO THE WORKERS' BUILDING. GRASS PATCH.					
Weather:							
CLOUDY							
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-18	Date and time of sampling:		06/08/2020		
		Sampled by:		F. REBELO, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:						
Description of sampling place and its surroundings:		BUSINESS ZONE IN FRONT OF BC METAL. SAMPLE COLLECTED NEXT TO THE WORKERS' BUILDING. GRASS PATCH.				
Weather:		CLOUDY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-19	Date and time of sampling:		06/08/2020		
		Sampled by:		F. REBELO, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		BUSINESS ZONE IN FRONT OF BC METAL. GRASS AREA.				
Weather:		CLOUDY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-20	Date and time of sampling:		06/08/20		
		Sampled by:		F. REBELO, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBs + TPH + HEAVY METALS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:						
Description of sampling place and its surroundings:						
		BUSINESS ZONE IN FRONT OF BC METAL. GRASS AREA.				
Weather:						
CLOUDY						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-21	Date and time of sampling:		06/08/20			
		Sampled by:		F. REBELO, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, GLASS, WIDE OPENING		PCBs					
Sample matrices type:		Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
BUSINESS ZONE IN FRONT OF BC METAL.							
GRASS AREA							
Weather:							
CLOUDY							
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-22	Date and time of sampling:		06/08/20			
		Sampled by:		F. REBELD, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150ml, GLASS, WIDE OPENING		PCBS					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
		BUSINESS ZONE IN FRONT OF BC METAL GRASS AREA.					
Weather:							
		CLOUDY					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-2#3	Date and time of sampling:		06/08/20			
		Sampled by:		F. REBELO, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 ML, GLASS, WIDE OPENING		PCBS					
Sample matrices type:		Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
		COLLECTED FROM BC METAL ZONE. THE SAMPLING AREA HAD SEVERAL SMALL PILES OF SOIL WHERE THE GRASS GREW. IT SEEMS THAT THE SOIL WAS PLACED THERE OR WAS EXCAVATED.					
Weather:							
cloudy							
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project:

Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID:

~~TS-24~~ TS-24

Date and time of sampling:

06/08/20

Sampled by:

F. REBELO, M. POLAK

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

Required analysis:

150 ML GLASS WIDE
OPENING

PCBS + ~~PCB~~ DIOXINS + PCB LIKE DIOXINS + TOC + TPH
+ HEAVY METALS

4X

Sample matrices type:

Soil

Ground
water
(static
state)

Surface
water

Bottom
sediment

Waste

Building
structure

Further sample description:

Description of sampling place and its surroundings:

COLLECTED FROM BC METAL ZONE.

THE SAMPLING AREA HAD SEVERAL SMALL PILES OF SOIL WHERE THE GRASS
GREW. IT SEEMS THAT THE SOIL WAS PLACED THERE OR EXCAVATED.

Weather:

CLOUDY

Notes:

THIS SAMPLE IS CONTAINED IN 4 GLASS CONTAINER DUE TO THE
LARGER QUANTITIES REQUIRED FOR TOC.

Laboratory (name):

ALS Czech Republic

Day:

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-25 **Date and time of sampling:** 06/08/20
Sampled by: F. REBELD, M. POLAN

Number of subsamples:

Coordinates: N E

Sampling bottle: 150 mL, GLASS, WIDE OPENING
Required analysis: PCBs + TPH + HEAVY METALS

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:

Description of sampling place and its surroundings:
 COLLECTED FROM BC METAL ZONE.
 THE SAMPLING AREA HAD SEVERAL SMALL PILES OF SOIL WHERE THE GRASS GREW.
 IT SEEMS THAT THE SOIL WAS PLACED THERE OR WAS EXCAVATED.

Weather: CLOUDY

Notes:

Laboratory (name): ALS Czech Republic
Day:

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-26

Date and time of sampling: 06/08/20

Sampled by: F. REBELO, M. POLAK

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

Required analysis:

150 ML, GLASS, WIDE
OPENING

PCBS

Sample matrices type:

Soil

Ground
water
(static
state)

Surface
water

Bottom
sediment

Waste

Building
structure

Further sample description:

Description of sampling place and its surroundings:

COLLECTED FROM BC METAL ZONE.

THE SAMPLING AREA HAD SEVERAL SMALL PILES OF SOIL WHERE THE GRASS GREW.
IT SEEMS THAT THE SOIL WAS PLACED THERE OR WAS EXCAVATED.

Weather:

CLOUDY

Notes:

Laboratory (name):

ALS Czech Republic

Day:

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-27	Date and time of sampling:		06/08/20			
		Sampled by:		F. REBELO, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 ML, GLASS, WIDE OPENING		PCBS					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
		SAMPLES COLLECTED FROM A PATCH OF GRASS IN VALENTINO AREA.					
Weather:							
CLOUDY							
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-28	Date and time of sampling:		06/08/20		
		Sampled by:		F. REBELD, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:						
Description of sampling place and its surroundings:		SAMPLE COLLECTED FROM A PATCH OF GRASS IN VALENTINO AREA.				
Weather:		CLOUDY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-29	Date and time of sampling:		06/08/20		
		Sampled by:		F. REBELO, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:						
Description of sampling place and its surroundings:		SAMPLE COLLECTED FROM A PATCH OF GRASS IN INCEL TRADE AREA				
Weather:						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-30	Date and time of sampling:		06/08/20		
		Sampled by:		F. REBELO, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		SAMPLE COLLECTED FROM A PATCH OF GRASS IN INCEL TRADE AREA				
Weather:		CLOUDY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-31	Date and time of sampling:		07/08/20		
		Sampled by:		F. REBEC, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		SAMPLE COLLECTED FROM TRANSFORMERS AREA. ROCKY SOIL WITH STONES AND DEBRIS.				
Weather:						
SUNNY						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-32 Date and time of sampling: 07/08/20
Sampled by: F. REBELD, M. POLAK

Number of subsamples:

Coordinates: N E

Sampling bottle: 150ML, GLASS, WIDE OPENING
Required analysis: PCBs + GRANULOMETRY

2X

Sample matrices type:

Soil

Ground water (static state)

Surface water

Bottom sediment

Waste

Building structure

Further sample description:

FOR THE SAMPLE FOR PCBs ANALYSES ~~WAS~~ HAD THE LARGE ROCKS/STONES REMOVED.

THE SAMPLE FOR GRANULOMETRY HAS ALL ROCKS/STONES FOUND WHEN THE SAMPLE WAS TAKEN.

Description of sampling place and its surroundings:

SAMPLE COLLECTED FROM TRANSFORMERS AREA. ROCKY SOIL WITH STONES AND DEBRIS

Weather:

SUNNY

Notes:

- 1 SAMPLE FOR PCBs ANALYSES
- 1 SAMPLE FOR GRANULOMETRY } BOTH SAMPLES COLLECTED FROM THE EXACT SAME PLACE.

Laboratory (name):

ALS Czech Republic

Day:

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS - 33 Date and time of sampling: 07/08/20
Sampled by: F. REBELS, M. POLAN

Number of subsamples:

Coordinates: N E

Sampling bottle: Required analysis:
150 ML, GLASS, WIDE OPENING PCBs

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:

Description of sampling place and its surroundings:
SAMPLE COLLECTED FROM TRANSFORMERS AREA. ROCKY SOIL WITH STONES AND DEBRIS

Weather: SUNNY

Notes:

Laboratory (name): ALS Czech Republic
Day:

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-34 Date and time of sampling: 07/08/20
Sampled by: F. REBELD, M. POLAK

Number of subsamples:

Coordinates: N E

Sampling bottle: Required analysis:
150 mL GLASS, WIDE OPENING PCBs

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:

Description of sampling place and its surroundings:
SAMPLE COLLECTED FROM TRANSFORMERS AREA. ROCKY SOIL WITH STONES AND DEBRIS. A LOT OF CONSTRUCTION WASTE AROUND THE AREA.

Weather: SUNNY

Notes:

Laboratory (name): ALS Czech Republic
Day:

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-35	Date and time of sampling:		07/08/20			
		Sampled by:		F. REBEL / M. POLAN			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, GLASS, WIDE OPENING		PCBS					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:							
Description of sampling place and its surroundings:		COLLECTED FROM THE ELECTROLYSIS AREA (OPPOSITE TO THE TRANSFORMER AREA). PATCH OF GRASS WITH A LAYER OF ANTHROPOGENIC MATERIAL (BRICKS, ASBESTOS, WIRES).					
Weather:		SUNNY					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-36

Date and time of sampling: 07/08/20

Sampled by: F. REBELO, M. POLAN

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

Required analysis:

150 mL, GLASS, WIDE
OPENING

PCBS

Sample matrices type:

Soil

Ground
water
(static
state)

Surface
water

Bottom
sediment

Waste

Building
structure

Further sample description:

Description of sampling place and its surroundings:

COLLECTED FROM THE ELECTROLISIS AREA (OPPOSITE TO THE TRANSFORMERS AREA). PATCH OF GRASS WITH A LAYER OF ANTHROPOGENIC MATERIAL (BRICKS, ASBESTOS, WIRES).

Weather:

SUNNY

Notes:

Laboratory (name):

ALS Czech Republic

Day:

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS - 37	Date and time of sampling:		07/08/20		
		Sampled by:		F. REBELO, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBs				
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 FROM THE ELECTROLISIS AREA (OPPOSITE TO THE TRANSFORMERS) PATCH OF GRASS WITH A LAYER OF ANTHROPOGENIC MATERIAL (BRICKS, ASBESTOS, WIRES).						
Weather:		SUNNY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS - 38	Date and time of sampling:		09/08/20			
		Sampled by:		F. REBELO, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 ML, GLASS, WIDE OPENING		PCBs + ASBESTOS					
(2X)							
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destruction:							
Description of sampling place and its surroundings:		COLLECTED FROM THE ELECTROLYSIS AREA (OPPOSITE TO THE TRANSFORMER AREA). PATCH OF GRASS WITH A LAYER OF ANTHROPOGENIC MATERIAL (BRICKS, ASBESTOS, WIRES).					
Weather:		SUNNY					
Notes:		<ul style="list-style-type: none"> - 1 SAMPLE FOR PCBs ANALYSES - 1 SAMPLE FOR OPTICAL MICROSCOPY ASBESTOS (QUALITATIVE) 					
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-39 Date and time of sampling: 07/08/20
Sampled by: F. REBEL, M. POČIN

Number of subsamples:

Coordinates: N E

Sampling bottle: 150 ML, GLASS, WIDE OPENING
Required analysis: PCBs

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:

Description of sampling place and its surroundings:
SAMPLE COLLECTED IN THE AREA SURROUNDING NOVA BANKA BUILDING.
PATCH OF GRASS LOCATED OPPOSITE TO ABANDONED BUILDING.

Weather: SUNNY

Notes:

Laboratory (name): ALS Czech Republic
Day:

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-40	Date and time of sampling:		07/08/20		
		Sampled by:		F. REBELD, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL GLASS, WIDE OPENING		PCBs				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		SAMPLE COLLECTED IN THE AREA SURROUNDING NOVIA BANKA BUILDING PATCH OF GRASS LOCATED OPPOSITE TO ABANDONED BUILDING.				
Weather:		SUNNY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-41	Date and time of sampling:		07/08/20		
		Sampled by:		F. REBELO, M. Poltaz		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ml, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:						
Description of sampling place and its surroundings:						
SAMPLE COLLECTED IN THE AREA SURROUNDING NOVA BANJA BUILDING. PATCH OF GRASS LOCATED OPPOSITE TO ABANDONED BUILDING.						
Weather:						
SUNNY						
Notes:						
Laboratory (name):				ALS Czech Republic		
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-42	Date and time of sampling:		02/08/20		
		Sampled by:		F. REBELO, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBs				
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:						
SAMPLE COLLECTED IN THE AREA SURROUNDING NOKIA BANKA BUILDING. PATCH OF GRASS LOCATED OPPOSITE TO ABANDONED BUILDING.						
Weather:						
SUNNY						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID:

TS -43

Date and time of sampling:

07/08/2020

Sampled by:

F. REBEW, M. POLAN

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

Required analysis:

150 ml, glass, wide opening

PCBS

Sample matrices type:

Soil

Ground water (static state)

Surface water

Bottom sediment

Waste

Building structure

Further sample description:

Rocky soil.

Description of sampling place and its surroundings:

SAMPLES COLLECTED INSIDE UNIVERZUM AREA. GRASS PATCH. MANY OLD AND RUSTY PIECES OF METAL AND METAL WIRES LAYING AROUND (OPEN SKY).

Weather:

SUNNY

Notes:

Laboratory (name):

ALS Czech Republic

Day:

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-44	Date and time of sampling:		07/08/2020		
		Sampled by:		F. REBELD, M. POLAN		
Number of subsamples:						
Coordinates:		N			E	
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBs + Heavy METALS + TPH				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		SAND SOIL WITH ROCKS				
Description of sampling place and its surroundings:		<p>SAMPLES COLLECTED INSIDE UNIVERZUM AREA. GRASS PATCH.</p> <p>MANY OLD AND RUSTY PIECES OF METAL AND METAL WIRES LAYING AROUND (OPEN SKY).</p>				
Weather:		SUNNY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-45	Date and time of sampling:		07/08/2020		
		Sampled by:		F. REBELO, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
<p>SAMPLES COLLECTED INSIDE UNIVERZUM AREA. GRASS PATCH. MANY OLD AND RUSTY METAL PIECES STOR AND METAL WIRES LAYING AROUND (OPEN SKY).</p>						
Weather:		SUNNY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-46	Date and time of sampling:		09/06/2020			
		Sampled by:		F. REBEL, M. POLAK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, GLASS, WIDE OPENING		PCBS					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample destription:							
Description of sampling place and its surroundings:		SAMPLE COLLECTED INSIDE UNIVERZUM AREA. GRASS PATCH. MANY OLD AND RUSTY PIECES OF METAL AND METAL WIRES LAYING AROUND (OPEN SKY).					
Weather:		SUNNY					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-47	Date and time of sampling:		07/08/2020			
		Sampled by:		P. REBEC, M. POUK			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 mL, GLASS, WIDE OPENING		PCBS + DIOXINS + DIOXIN LIKE PCBs					
(2X)							
Sample matrices type:		Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:		2 samples collected in the same spot.					
Description of sampling place and its surroundings:		COLLECTED IN TOP METAL AREA. VERY ROCKY SOIL. SAMPLE COLLECTED FROM THE RAILWAY. WHOLE AREA (EXCEPT OF RAILWAY) COVERED WITH A LAYER OF CONCRETE.					
Weather:		SUNNY					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-48 **Date and time of sampling:** 07/08/2020
Sampled by: P. REBEL, M. POLAK

Number of subsamples:

Coordinates: N E

Sampling bottle: 150 mL, Glass, Wide opening
Required analysis: PCBs

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:

Description of sampling place and its surroundings:
 PATCH OF GRASS ~~TEXT~~ OUTSIDE TOP METAL (SAMPLE MOVED APP. 100 M TOWARDS THE INSIDE OF THE WOOD STORING COMPANY AREA)

Weather: SUNNY

Notes:
 MOVED THE LOCATION TO OUTSIDE TOP METAL DUE TO THE CONCRETE LAYER COVERING THE WHOLE SITE

Laboratory (name): ALS Czech Republic
Day:

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS- 49	Date and time of sampling:	03/08/2020			
		Sampled by:	F. REBELO, M. POLAK			
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		<p>COLLECTED IN TOP METAL AREA - VERY ROCKY SOIL.</p> <p>SAMPLE COLLECTED FROM THE RAIL WAY.</p> <p>WHOLE AREA (EXCEPT OF RAIL WAY) COVERED WITH CONCRET.</p>				
Weather:		SUNNY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-50	Date and time of sampling:	02/08/2020			
		Sampled by:	F. REBEL, M. POLAK			
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
PATCH OF GRASS NEXT TO THE FENCE OF TOP METAL						
Weather:		SUNNY				
Notes:		MOVED THE LOCATION OUTSIDE TOP METAL DUE TO THE CONCRETE LAYER COVERING THE WHOLE SITE.				
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-51	Date and time of sampling:		09/08/2020		
		Sampled by:		F. REBELO, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		COLLECTED FROM A GRASS AREA SURROUNDING SURROUNDING THE FIRE FIGHTERS STATION				
Weather:		SUNNY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-52	Date and time of sampling:		07/08/2020		
		Sampled by:		F. REBELO, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		COLLECTED FROM A GRASS AREA SURROUNDING THE FIRE FIGHTERS STATION				
Weather:						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-53	Date and time of sampling:		06/05/20			
		Sampled by:		F. REBELO, M. POLAN			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 ML, GLASS, WIDE OPENING		PCBS					
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:		SAMPLE COLLECTED FROM A PATCH OF GRASS LOCATED IN THE BUSINESS ZONE BESIDE ECOTRADE AREA					
Weather:		SUNNY CLOUDY					
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							

SAMPLING RECORD

Project:

Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID:

TS-54

Date and time of sampling:

06/08/20

Sampled by:

F. REBELO, M. POLAK

Number of subsamples:

Coordinates:

N

E

Sampling bottle:

Required analysis:

150 ML GLASS, WIDE
OPENING

PCBS

Sample matrices type:

Soil

Ground
water
(static
state)

Surface
water

Bottom
sediment

Waste

Building
structure

Further sample description:

Description of sampling place and its surroundings:

SAMPLE COLLECTED FROM A PATCH OF GRASS LOCATED IN THE
BUSINESS ZONE BESIDE ECOTRADE AREA.

Weather:

SUNNY CLOUDY

Notes:

Laboratory (name):

ALS Czech Republic

Day:

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-55	Date and time of sampling:		06/08/20		
		Sampled by:		F. REBELO, M. POLAN		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBs				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		SAMPLE COLLECTED FROM 1 PATCH OF GRASS LOCATED IN ECOTRADE AREA.				
Weather:		SUNNY CLOUDY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-56	Date and time of sampling:		06/08/20		
		Sampled by:		F. REBELO, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 ML, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	Soil	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		SAMPLE COLLECTED FROM A PATCH OF GRASS LOCATED IN ECOTRIDE AREA.				
Weather:		SUNNY CLOUDY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-57	Date and time of sampling:		08/08/20		
		Sampled by:		F. REBELO, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		SAMPLE COLLECTED IN THE AREA OF PRODUCTION OF CS ₂ .				
Weather:						
		SUNNY CLOUDY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: TS-58 **Date and time of sampling:** 06/08/20
Sampled by: F. REBELO, M. POLAK

Number of subsamples:

Coordinates: N E

Sampling bottle: 150 mL, GLASS, WIDE OPENING
Required analysis: PCBs

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:

Description of sampling place and its surroundings:
 SAMPLE COLLECTED IN THE AREA OF PRODUCTION OF CS₂.

Weather: ~~Sunny~~ CLOUDY

Notes:

Laboratory (name): ALS Czech Republic
Day:

SAMPLING RECORD

Project: Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots

Probe ID: B-59 Date and time of sampling: 06/05/20
Sampled by: F. REBEL, M. POLAK

Number of subsamples:

Coordinates: N E

Sampling bottle: 150 ML, GLASS, WIDE OPENING
Required analysis: PCBs

Sample matrices type: Soil Ground water (static state) Surface water Bottom sediment Waste Building structure

Further sample description:

Description of sampling place and its surroundings:
SAMPLE COLLECTED IN THE AREA OF PRODUCTION OF CS₂.

Weather: SUNNY CLOUDY

Notes:

Laboratory (name): ALS Czech Republic
Day:

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-60	Date and time of sampling:		05/06/20		
		Sampled by:		F. REBELO, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBS				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:		SAMPLE COLLECTED IN THE AREA OF PRODUCTION OF CS ₂ .				
Weather:		SUNNY & CLOUDY				
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots				
Probe ID:	TS-61	Date and time of sampling:		07/08/20		
		Sampled by:		F. REBEL, M. POLAK		
Number of subsamples:						
Coordinates:		N		E		
Sampling bottle:		Required analysis:				
150 mL, GLASS, WIDE OPENING		PCBs				
Sample matrices type:	<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:						
Description of sampling place and its surroundings:						
		SAMPLE COLLECTED FROM THE AREA OF DE-MI PROMET.				
Weather:						
SUNNY						
Notes:						
Laboratory (name):		ALS Czech Republic				
Day:						

SAMPLING RECORD

Project:		Ince, Banja Luka, PCBs Detailed site assessment and remediation assessment for the PCB contaminated spots					
Probe ID:	TS-62	Date and time of sampling:		07/08/20			
		Sampled by:		F. ROBELLO, M. POLAN			
Number of subsamples:							
Coordinates:		N		E			
Sampling bottle:		Required analysis:					
150 ML GLASS, WIDE OPENING		PCBS					
Sample matrices type:		<u>Soil</u>	Ground water (static state)	Surface water	Bottom sediment	Waste	Building structure
Further sample description:							
Description of sampling place and its surroundings:							
		SAMPLE COLLECTED FROM THE AREA OF DE-MI PROMET.					
Weather:							
SUNNY							
Notes:							
Laboratory (name):		ALS Czech Republic					
Day:							