Report on the Old Bor flotation tailing pond (Field I and Field II)

FUTURAM project secondary raw material case study on mine waste (Bor, Serbia)

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Ljubljana, April 2025

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1. INTRODUCTION

1.1. The importance of mining waste in the EU

Mining, mineral processing and metallurgical extraction generate solid, liquid and gaseous waste. Mining waste can be further subdivided into solid mining, processing and metallurgical waste and mine waters [1]. These are heterogeneous materials consisting of ore, gangue, industrial minerals, metals, coal, rock, loose sediment, mill tailings, metallurgical slag and waste, roasted ore, flue dust, ash, processing chemicals and liquids [2]. Mining waste often contains toxic elements and substances that can have a negative impact on the waters, soil, air, ecosystems and humans [3, 4, 5]. In order to prevent or minimise adverse environmental impacts and risks to human health an Extractive Waste Directive (2006/21/EC) [6] was implemented across Europe. However, due to advances in mining technologies and extraction methods, mining waste is being reevaluated as a potential source of valuable raw materials [7, 8, 9, 10]. In the Western Balkan region 42 sites (Figure 1) were recognised as the most promising for potential recovery [9], located in Serbia (n=13), Kosovo (n=11), North Macedonia (n=9), Albania (n=5), Bosnia and Herzegovina (n=3) and Montenegro (n=1). Most of the waste in these countries originate from mining and metallurgical activities of Pb-Zn (about 160 Mt), Cu (about 110 Mt) and Sb (about 1.1 Mt).

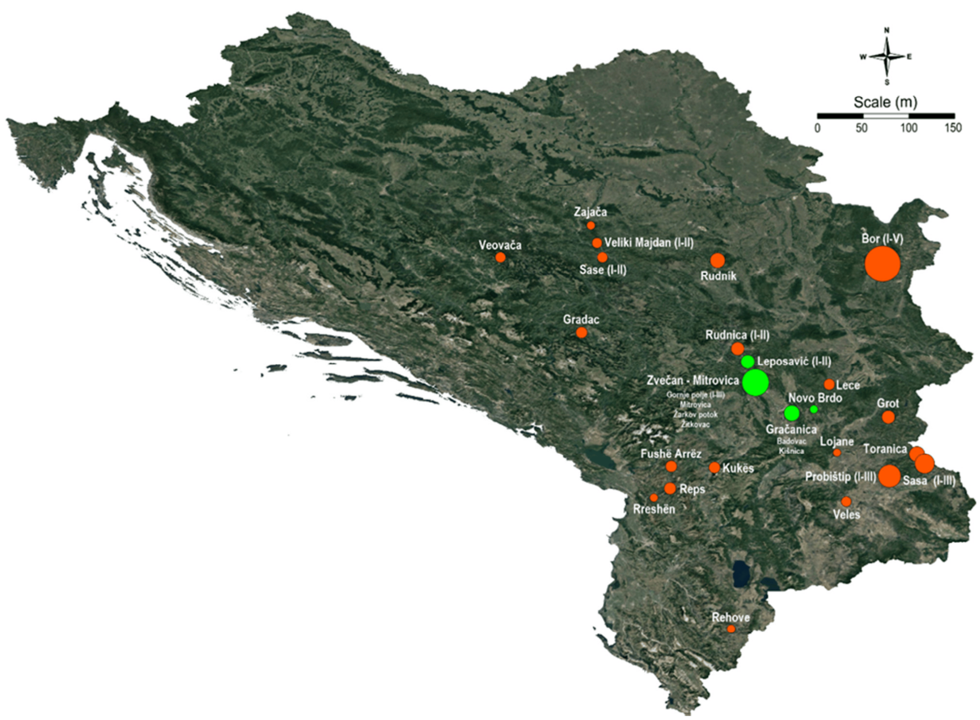

Figure 1: Locations of potentially prospective landfills (the size of the circle is proportional to the size of the SRM deposit; the locations in Kosovo that are the richest with valuable metals are shown in green) (Source: [9]).

Among the most promising are also the Old Flotation Tailings- OFTs (separated further on Field I and Field II) in Bor (Serbia), originating from copper ore processing. The OFTs pose a major ecological problem (acid mine drainage, soil, air and water pollution, etc.), but at the same time offer promising potential to recover Cu, Au and Ag and also S and Fe [11, 12, 13, 14, 15, 16, 17, 18]. The economic potential of OFTs, derived from the prices expressed in USD on the metal market at the time, was estimated [13] and the values were 125 M US$ for the Field I and 441 M US$ for the Field II (grand total of 566 M US$). Based on the assumption that the amount of 70% of copper is recoverable as well as 50 % of noble metals, approximately 163 M US$ for copper, 11 M US$ for silver and even 156 M US$ for gold could be retrieved – or in total, around 330 M US$. The geological reserves, grades and quantities of Cu, Au, Ag were calculated using computer-aided modelling [19] and are summarized in the Table 1.

Table 1: Geological reserves by category and total together with contents and quantities of copper, gold, and silver in the geological reserves of man-made deposit Old flotation tailing pit Bor using Russian-style classification system (Source [19]).

Reserves	Volume (m^2)	Mass (t/m^3)	Reserves (t)	Cu_{UK}, % (Copper)	Cu (t)	Au, g/t (Gold)	Au (kg)	Ag, g/t (Silver)
B	10.194.993	1,70	17.331.488	0,230	39.818,9	0,420	7.287,2	2,776
C1	4.385.845	1,70	7.455.937	0,205	15.257,0	0,286	2.133,1	1,102
B + C1	14.580.838	1,70	24.787.425	0,222	55.075,9	0,380	9.420,2	2,273

Taking into account the facts that Cu has been recognised by the EU as a Strategic Raw material, because it is used on a large scale (20 Mt in 2020) for the electrification accross all strategic technologies [20], and that even ore bodies with a copper grade of 0.36% (the New Cerovo site) [21] are being mined today, the OFTs could represent an important source of secondary raw material for copper production.

1.2. Aim and purpose of the report

The primary objective of this case study was to evaluate the potential for extracting copper, silver and gold remaining in the OFTs Bor and to classify the project according to the principles of the United Nations Framework Classification for Resources (UNFC). Given that the OFTs Bor are situated within the active Bor mining and smelting complex, a thorough review of existing data was essential to understand the current condition of the tailings and their recovery potential.

In addition, new applied geological research was carried out under the framework of the Futuram project to estimate the reserves and resources of Cu, Ag and Au that are still present in the tailings and improve the confidence in the geological understanding of the site and technical conditions for metal recovery.

The study also included an assessment of the legal, environmental, technical, and social frameworks, which are crucial for resource classification according to UNFC classification system. Furthermore, throughout this process, knowledge gaps were identified, and further research was recommended to comprehensively assess the full recovery potential of the OFTs Bor.

1.3. Content and division of the report

The order of the content was designed taking into account the provisions of the Articles 32, 33, 34 and 35 of the Rules on Classification and Categorization of Reserves and Resources of Solid Mineral Raw Materials [22] and the new UNFC classification forms established within FUTURAM project [23].

2. GENERAL AND BASIC INFORMATION ABOUT THE BOR TAILING

2.1. Geographical description, location and size of the deposit

The Old Bor flotation tailing pond (Field I and Field II) is situated in the Bor river valley (East Serbia) (Figure 2).

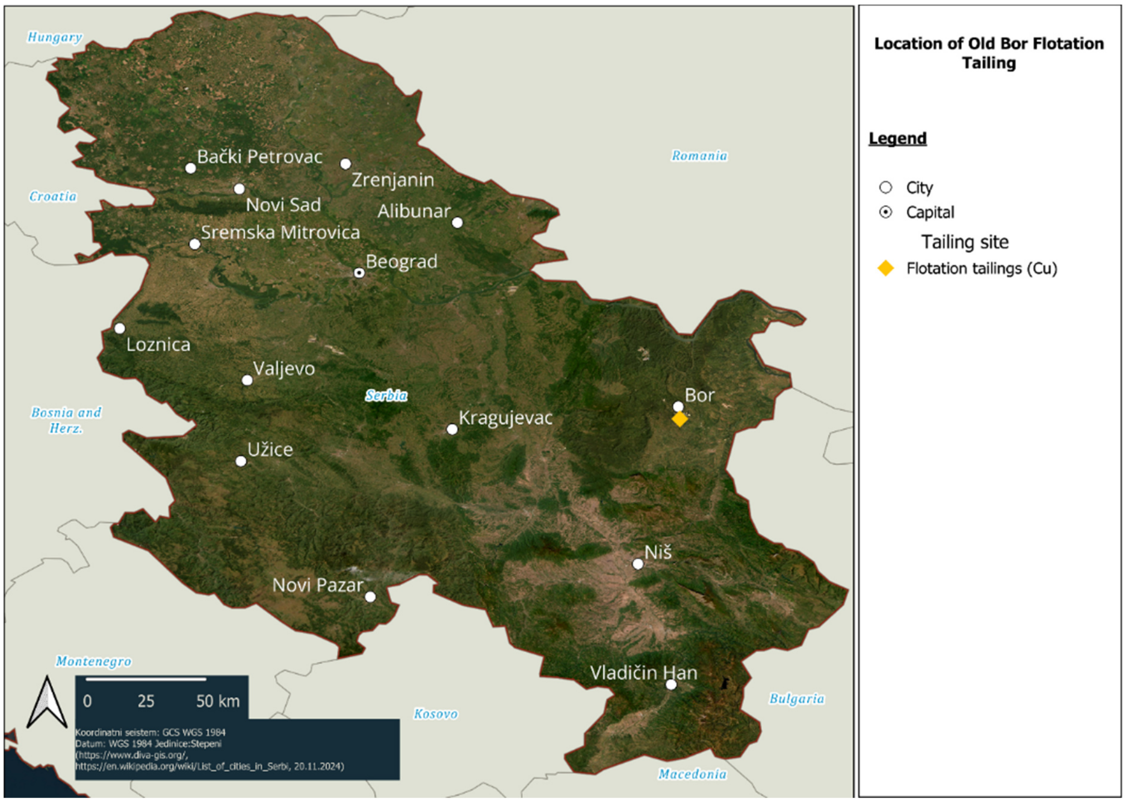

Figure 2: Location of the The Old Bor flotation tailing pond (Field I and Field II).

On the northern and eastern parts, the tailings border on the mining facilities of the Bor copper mine and on the western and southern parts on the Bor town residental area (Figure 3). The surface area of Old Bor flotation tailing pond (Field I and Field II) is 1,24 km^2 [24, 25, 26, 27, 28, 29].

The exploration area, within which the deposit The Old Bor flotation tailing pond (Field I and Field II) is outlined, is located on parts of sheets Bor 3-3 and Bor 3-4 of the Military Topographic Map (Figure 3), scale 1:25,000, or on parts of sheets Basic Geological Map L-34 – 141 Ca and L-34 – 141 Cc. The coordinates of the breakpoints of the approved exploration area are shown in the Table 2 [30, 31].

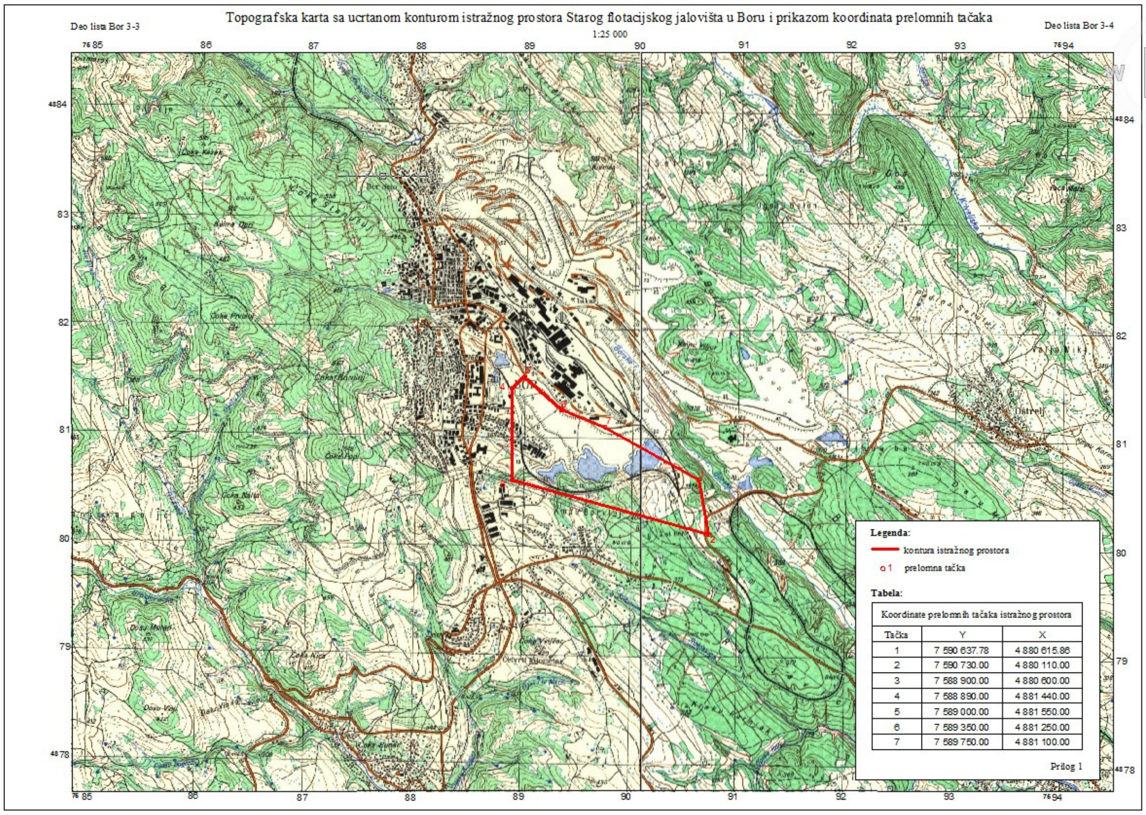

Figure 3: Topographic map of the research area, reduced map 1:25.000. The eploration area is marked with red polygon.

Table 2: Coordinates of the breakpoints of the investigation area Old flotation tailings pond in Bor (Field I and Field II).

Point	Coordinates (Gauss-Krüger coordinate system, zone 7)	
	X	Y
1	7,590,637.00	4,880,615.00
2	7,590,730.00	4,880,110.00
3	7,588,900.00	4,880,600.00
4	7,588,890.00	4,881,440.00
5	7,589,000.00	4,881,550.00
6	7,589,350.00	4,881,250.00
7	7,589,750.00	4,881, 100.00

The city of Bor, as a territorial unit of local self-government, together with the municipalities of Majdanpek, Negotin and Kladovo, has been part of the Bor Administrative District since February 2006. The area of the territory covered by the Bor District is 3,507 km^2, of which 33% belongs to the plain type, while 67% belongs to the hilly-mountainous type. The city of Bor covers an area of 856 km^2; it borders on the city of Zaječar and municipalities of Negotin, Majdanpek, Žagubica, Despotovac and Boljevac.

The town of Bor is a typical mining town. The infrastructure and economy of the town are based on and rely on copper ore, associated ores and their products, such as copper, gold, silver and sulfuric acid. Agriculture and some other branches of industry are not so developed. The road network in the Bor district is well developed, with local, regional, main roads, which means that it is connected to other parts of Serbia by road. Bor is 43 km away from the border crossings to Bulgaria (Vrška Čuka crossing), or 74 km (Mokranje). It is 69 km away from the border crossings on the Danube, Prahovo and Kladovo, towards Romania, or 117 km away. The area of the Majdanpek municipality is rich in forests, as much as 66,741 ha of forest, which represents the richest municipality in this resource in the Republic of Serbia. Also, the Danube River is very important for the Bor District, which is an international waterway along which the "Đerdap" National Park is located, the archaeological site of Lepenski Vir, the remains of Eneolithic mining in Rudna Glava, Rajkova Cave, Zlotske Caves, the canyon of the Zlotska (Lazareva) River, Brestovačka Banja, Bor Lake and Veliki Zaton Lake, terrains for skiing and other sports, for rest, recreation, hunting, etc. In the Bor District, there are hydroelectric power plants HE Đerdap I and HE Đerdap II, while in the town of Bor itself there is the "Transmission Plant - Bor", as part of the Public Electricity Transmission Company "Elektroistok" Belgrade, and the Network Regional Center. The population is supplied with drinking water from the water supply network, while for the needs of industry, the following reservoirs are used: Đerdap I and II, Bor Lake and Pustinjac [24, 25, 26, 27, 28, 29, 35].

2.2. Information on the research area

The research area is the Old Bor flotation tailing pond (Field I and Field II), which is located in the central part of Eastern Serbia on the territory of the city of Bor. Available information on the research area were summarised from previous studies [24, 25, 26, 27, 28, 29, 31, 32, 34].

The research area of the Old Flotation Tailings (Field 1 and Field 2) is specific in many ways. The geological characteristics of the deposit of secondary mineral raw materials of the Old flotation tailings (Field 1 and Field 2) are determined primarily by the immediate substrate on which they were deposited, as well as by the way the landfill was formed. The immediate substrate of the landfill is mostly geogenic formations (Bor conglomerates, volcaniclastic rocks and alluvial sediment).

The former bed of Borski Potok was used for depositing tailings from flotation, so today the entire bed is filled and the terrain levelled. The tailings pond is located directly next to the existing Bor flotation facilities. Based on the available documentation on previous research, it can be concluded that the former bed of the Borski Potok was significantly cut, and that the banks of the stream were steep. Based on the geological documentation, it is assumed that the apparent thickness of the material at the landfill ranges from 20 to 65 m.

The deposition of flotation tailings was carried out in such a way that an initial dam was formed on the downstream part of the stream from larger particles of sand and mine overburden, and then the disposal of flotation tailings was carried out along the entire length of the stream. The deposition of flotation tailings was started by the French (a so called French tailings), in the northern part of Borski potok, from 1934 to 1941, when the Germans continued to deposit flotation tailings. The Germans continued depositing tailings in the lower southern parts of Borski potok. After the war, the depositing of tailings continued, so that the entire bed was filled with flotation tailings, forming Field 1. The terrain was leveled at an approximate elevation of 360 m in Field 1. In plan, Field 1 has an oval shape. The dimension of the longer axis (NW - SE) is about 400 m, and the shorter (SW - NE) about 300 meters.

To the south of Field 1, downstream at about 600 m, a flotation sand Dam was formed. The width of Dam 1 is about 30 m. About 800 m from Dam 1, a second Dam was formed downstream. Between Dam 1 and Dam 2, flotation tailings were deposited so that the coarsest particles were separated and deposited on the banks of Borski Potok and the Dam, while the central part of the space between the Dams was filled with finer flotation tailings. The upstream Dam at the flotation facility was completed at an elevation of 372 m, while the downstream Dam 2 was completed at an elevation of 373 m. Field 2 was formed in the area between Dam 1 and Dam 2. The terrain on Field 2 is levelled at an approximate elevation of 368 m. In plan, Field 2 has an elliptical shape. The dimension of the longer axis (NW - SE) is about 800 m, and the shorter (SW - NE) about 600 meters. The entire area (Field 1 and Field 2) has an elliptical shape, covering an area of about 1 km^2.

The Old Flotation Tailings (Field 1 and Field 2), were created as a result of the enrichment of ore obtained from the exploitation at the Old open pit and underground exploitation. For many years, flotation tailings were disposed of in the form of sludge, dust and sand. By flotation concentration of the ore, due to the mineralogical and petrological characteristics of the ore and useful minerals, as well as due to the imperfection of the technological procedure, 85 % of the copper was separated into the concentrate, while the rest was separated into the flotation tailings. It is similar with other useful components. The percentage share of useful components separated into concentrate or flotation tailings depends on their utilization by the applied technological process of enrichment. Gold flotation recovery is between 20 and 30 %. The Old Flotation Tailings (OFT, Field 1 and Field 2) is located in the industrial area of the former RTB Bor. Mine complex is now under the ownership of Serbia ZiJin Copper, doo Bor, while OFTs were excluded in the ownership transfer of Bor complex. OFTs are owned by the state of Serbia, and managed by MMI Bor.

In Figure 4 and Figure 5 The Old Flotation Tailings (Field 1 and Field 2) are shown.

Figure 4: The Old Flotation Tailings (Field 1 and Field 2).

Figure 5: A panoramic view of the city of Bor with the Old Flotation Tailings (Field 1 and Field 2).

2.3. Information about the mining right and the mining project

The ownership of The Old Bor flotation tailings pond (Field I and Field II) is quite confusing. The tailings pond is located within the ZiJIn Copper Exploitation Field, however the exploration area belongs to The Mining and Metallurgy Institute Bor (MMI) and in the real estate cadastre MMI is registered as the manager.

2.4. Data on previous calculations of the reserves

Previous calculations of the raw material geological reserves, grades and quantities of Cu, Au, Ag were calculated using computer-aided modelling [19] and data are summarized in the Table 1 in the chapter 1.1.

2.5. Transport options

The transport network is well developed (Figure 6). There are local roads, regional roads and main roads. Of particular importance is the Belgrade - Požarevac - Majdanpek - Bor - Zaječar - Knjaževac - Niš railway, with a branch towards Prahovo on the Danube, which passes in the immediate vicinity of the Old Bor flotation tailings pond (Field I and Field II). Bor is connected to all parts of the country by road and rail, and the proximity of the Danube River also enables the use of water transport. The city of Bor is 43 km from the border with Bulgaria (Vrška Čuka crossing) and 74 km (Mokranja). It is 69 km and 117 km from the border crossings on the Danube, Prahovo and Kladovo, towards Romania. The city of Bor also has an airport with an asphalt runway of 1,080 m.

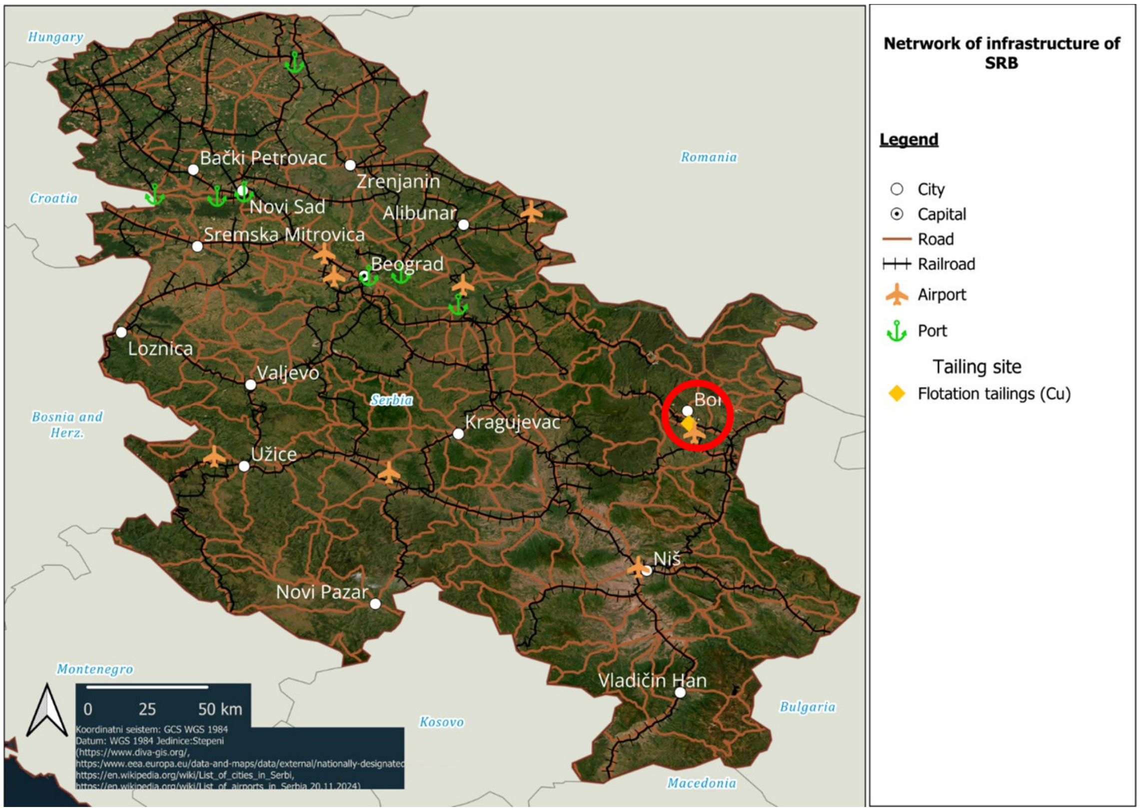

Figure 6: The Network of infrastructure of Serbia (Bor tailings are located in the town of Bor, which is located within the red circle marked on the map).

2.6. Geomorphological and hydrological conditions

Since the area of the Bor district, which is of a hilly-mountainous type, belongs to the Timok magmatic complex, it has significant deposits of non-ferrous and precious metals, as well as several deposits of non-metallic mineral raw materials. The morphology of the terrain affects the method and conditions of creation, research, exploitation, conditions of transport and disposal of technogenic material. Tectonic movements that took place at the end of the Mesozoic and during the Cenozoic had an impact on the formation of the geomorphological shape of the terrain (*Figure 7*), as well as the impact of economic activity in the mineral-raw material economic complex (ore exploitation, preparation and processing of ore).

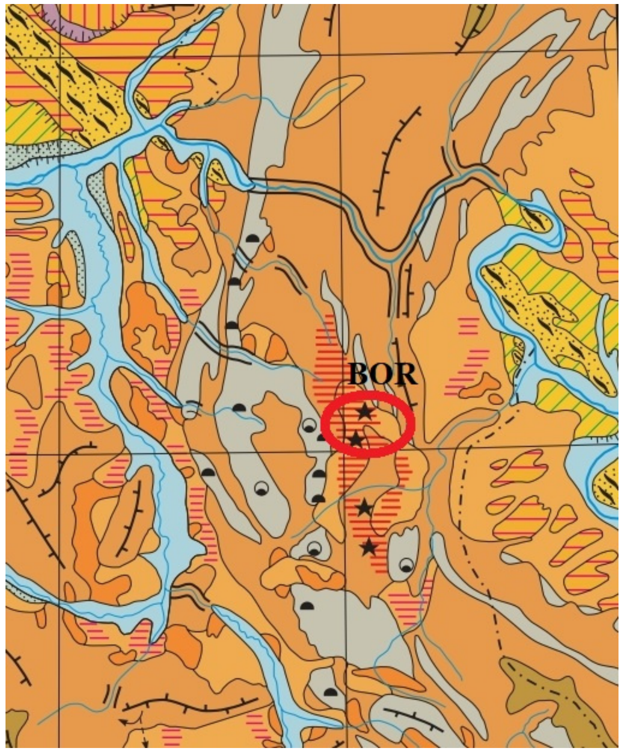

Figure 7: The geomorphological map of Serbia (source: [36]) (Bor tailings are located in the town of Bor, which is located within the red circle marked on the map).

Hydrogeological characteristics depend on the climate, vegetation and geological structure of the terrain. Watercourses from the area of the Timok magmatic complex and the surrounding terrain belong to the Timok basin, and generally belong to the Danube basin, or the Black Sea basin [37, 38]. The hydrographic network is dense and well developed, where the most significant basins in the wider Bor area are the Pek River basin, the Poreč River basin and the Timok basin (Figure 8). Natural streams in the Bor area are the Borska River, the Kriveljska River and the Ravna River with their permanent or occasional tributaries. River flows are rich in water, and in the rainy season they are torrential in nature.

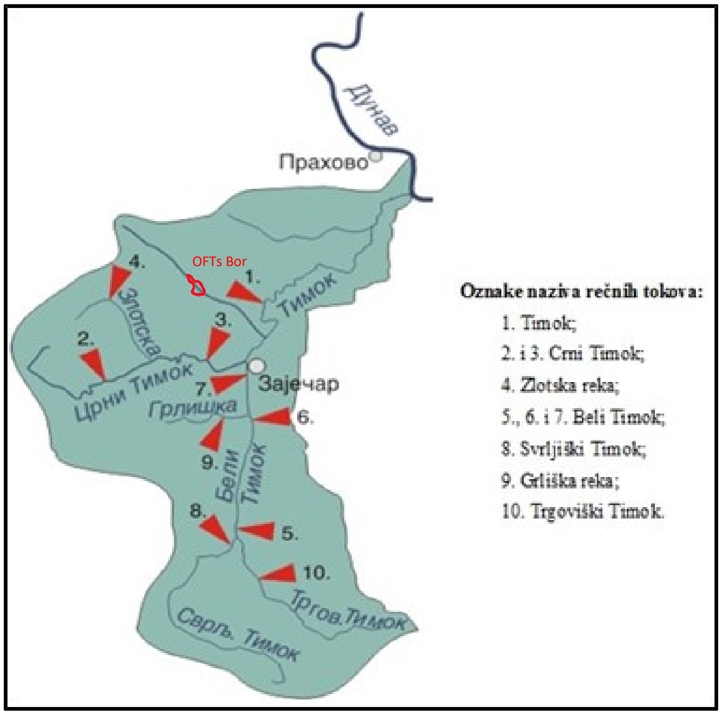

Figure 8: Hydrological network of the terrain (The location of OFTs Bor is marked with red polygon).

2.7. Climatic conditions

The climate in the city of Bor and its surroundings is moderately continental, with short warm summers and harsh winters. According to the data of the Department of Meteorological Measurements of the IRM Bor, it can be concluded that in the previous period the coldest months were December, January and February, while the warmest months were June, July, August and September. The coldest year was 2018. with an average daily (24-hour) temperature of +11.7^{0}C. In 2018., in January, February, March, November and December, the lowest minimum daily (24-hour) temperatures were recorded, which ranged from -4.4˚C to -10.5˚C. The lowest temperature in 2019. was recorded in January and February from -6.6 to -6.0˚C, while in 2020. the lowest temperature was in December at -6.3˚C. The warmest months are June, July, August and September, with average daily (24-hour) temperatures ranging from +19.4˚C to +23.7˚C. The highest average monthly relative humidity was in November 2018., at 94.0 %, while in the period from January to December 2018 it was 79.2 %. For 2019., the highest monthly humidity was in November, at 96.0 %, while in the period from January to December it was 74.5 %. The average relative humidity in 2020. was 71.3 %, while the highest was in January at 75.6 %. Annual precipitation has a great influence on the drainage of the tailings pond. According to meteorological observations of the Department of Environmental Protection and Climate Change, IMM Bor measuring site, the total precipitation in 2018. in the Bor area was 506.6 mm/m^2, while in 2019, for 11 months it was 489.2 mm/m^2. In 2020., the total precipitation for 6 months was 205.7 mm/m^2. The occurrence of snow cover is characteristic of the period from November to March, but snow can also be found in April and October. Generally, the most frequent and strongest winds are from the northeast, but winds from the northwest and southeast are not negligible either [24, 25, 26, 27, 28, 29].

3. GEOLOGICAL CHARACTERISTICS OF THE OLD BOR TAILINGS SURROUNDINGS

Geological characteristics were summaried from previous studies [24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 39, 40, 41, 42].

The former bed of Borski Potok, which was filled and leveled in the field, was used for depositing tailings. The tailings pond is located directly next to the existing facilities of Serbia ZiJin Copper, in the first row of the Bor flotation plant. The Old Bor flotation tailing pond (Field I and Field II) was created as a result of enrichment of ore obtained from exploitation at the old surface mine and underground exploitation. Decade-long disposal of flotation tailings in the form of sludge, dust and sand in the Borski Potok bed and over the paleo-relief formations was carried out. By flotation concentration of the ore, due to the mineralogical and petrological characteristics of the ore and useful minerals, as well as due to the imperfection of the technological procedure, 85% of the copper is separated into the concentrate, while the rest is separated into the flotation tailings. It is similar with other useful components. The percentage share of useful components separated into concentrate or flotation tailings depends on their utilization by the applied technological process of enrichment. Bor deposit and the flotation of different genetic and technological types of ore, with recoveries from 60 to 86 %, on copper and about 20-30 % on gold and silver, resulted in the tailings deposited in the bed Borski potok with increased content of useful components.

3.1. Geological structure of the Old Bor tailings substrate

The geological characteristics of secondary raw materials of the Old Flotation Tailings (Field 1 and Field 2) are determined primarily by the immediate substrate on which they were deposited, as well as the way the landfill was formed.

The immediate substrate of the landfill is mostly geogenic formations (boric conglomerates, volcaniclastic rocks and alluvial deposits). In the geological structure of the paleo-relief on which the flotation tailings pond is located, products of multi-phase Upper Cretaceous volcanism dominate. Pyroclastic rocks formed as a result of powerful volcanic eruptions during the Upper Cretaceous are the most widespread. Volcanic activity is associated with linear volcanoes of the stratiform type, where mounds of significant dimensions were formed. Since the volcanism is multiphase, previously created coupes were destroyed by subsequent volcanic explosions of younger volcanic phases. In addition to the dominant subaerial eruptions, there were also submarine eruptions, along with the deposition of clastic and marly rocks, which led to the creation of the volcanogenic series. Volcanic formations are built by andesite-dacite tuffs and tuffites, agglomerates, breccias, tuff lavas and thinner basins of andesite, rarely dacite. Among the pyroclastites, in addition to autochthonous fragments, allochthonous ones are also often found, which sometimes contain an andesitic component. Agglomerates and breccias consist of poorly sorted material with a smaller proportion of tuffs in the matrix. Volcanic breccias of nornblende-biotite composition have a wide distribution. In parallel with the formation of volcanics, the Turon-Senone sediments were formed, represented by conglomerates, marls and sandstones in which there is an abundance of fragments of volcanic rocks. Volcanic and sedimentary rocks of Turonian age, which lie transgressively over the Lower Cretaceous formations, are described as formations of the first volcanic phase. Concordantly over the (Turonian) rocks of the first volcanic phase lies a series of volcanogenic-sedimentary rocks represented by boron pelites and boron conglomerates. Bor pelites represent a lithostratigraphic unit that in the form of a narrow zone extends through the valley of the Brestovačka river, continues across Bor and disappears in the valley of the Kriveljska river. They lie concordantly over the formations of the first volcanic phase. They are built from calcareous pelites, and to a lesser extent from tuffs and tuffites, to a lesser extent from volcanic breccias and marls. In this series, the following can be distinguished: the lowest part made of thymocytic pyroclastites (breccia) and pelites, then in the central part calcareous and silicate pelites predominate, and the highest part of the series consisting of pelites with intercalations of pyroclastic rocks. Superpositionally, the Boric pelites lie at the same level as the Boric conglomerates, which indicates the temporal and spatial synchronicity of their formation. Considering the southwestern transport in the Bor conglomerates, it can be assumed that the pelites were formed from the finest fraction that was carried by the same flows to distant parts of the basin. The Bor conglomerates form a very striking belt in the area east and south of the Old Bor flotation tailings. They are represented by fine-graded, thick-layered conglomerates, microconglomerates, conglomeratic and fine-grained sandstones, and rarely siltstones. Sometimes large banks of block and unsorted conglomerates are also encountered. The presence of external and internal sedimentary textures was confirmed by field sedimentological tests. They show that the Bor conglomerates were partly created from incompletely differentiated turbidite flows. On the basis of polar and non-polar textures, it was established that the direction of paleotransport was oriented towards the southwest. This would mean that the source area of the parent material lay northeast of the place of deposition of the conglomerate. The products of the second volcanic phase lie concordantly over the boron conglomerates and pelites. They are represented by tuffs, tuffites, agglomerates and breccias of augite-hornblende andesite, as well as thinner basins of augite-hornblende andesite. Formations of the second volcanic phase have a thickness of several hundreds of meters. The youngest formations that make up the paleo-relief (floor) of the flotation tailings pond are the Quaternary alluvial deposits of the Bor River, composed of sand, gravel and limestone boulders.

3.2. Tectonics of the Old Bor tailing area surroundings

For the research area of the Old Flotation Tailings in Bor, tectonics is not significant because these are modern creations that have not been exposed to tectonic forces over time. The most pronounced structure, in the immediate vicinity of the research area, is the "Borski rased" which represents a fault zone 30-40 m wide, with a mylonitic zone 4 to 8 m thick. The fault separates the ore bodies of the Bor hydrothermal system from the Bor conglomerates. The main structural directions, from the Bor deposit towards the north, are represented by a system of smaller subparallel faults along the eastern edge of the Bor metallogenetic zone. Morphostructural analysis of the area determined that the large "Borski rased" can be traced all the way to the "Veliki Pek" fault. It represents a complex fracture zone formed in the post-war period. It dips steeply (75–80°), towards the southwest and has a left transcurrent to left reverse movement. Such structures indicate certain pre-ore movements and are spatially ascertained only in the eastern rim of the Timok magmatic complex. In the central part of the Bor copper deposit, there are several fault systems, mostly poststriding, and some of them have elements of the Bor fault, although they are spatially separated. Younger fault structures, trending E-W, are cut by faults trending generally NE-SW, including the Bor fault, Bor conglomerates and sandstones. Faults running E-W are particularly pronounced southwest of Bor, where they displaced Bor pelites with tuffs and tuffites. The wider area of the technogenic deposit of the The Old Bor flotation tailing pond (Field I and Field II), belongs to the geotectonic unit, the Timok synform (A) and its structural units: the Bor dislocation (15) and the Krivelj fault (16). In addition to these structural units, the following were distinguished: the Timočka trench-syncline (1), the Čoka Boruluj syncline (2), the Brestovac anticline (3), the Veliki and Mali Krš (5), the Golog Krša and Stola monoclines (6), the Bučja trench (8)), Ruđine Banjica anticline (9), Vidzurine syncline (10), Dosa syncline (11) and Bučjansko-Belorečki fault (17) (Figure 9).

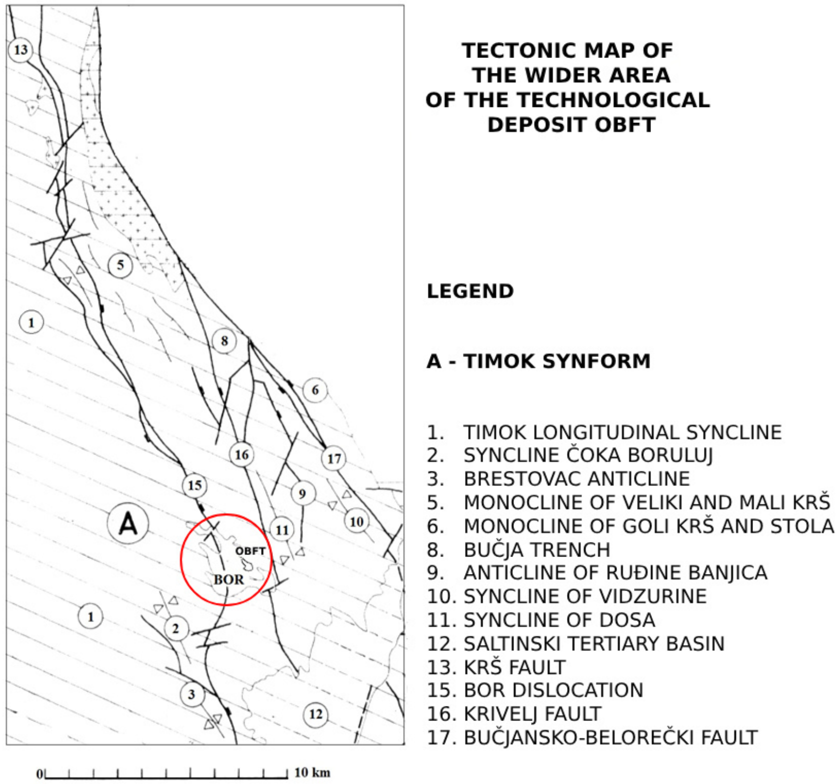

Figure 9: Tectonic map of the wider area of the Old Bor flotation tailing pond OBFT (Field I and Field II).

4. HYDROGEOLOGICAL CHARACTERISTICS OF THE DEPOSIT

Hydrogeological information was summarised from previous investigations [24, 25, 26, 27, 28, 29, 37]. The rock masses of the mapped area are classified according to their hydrogeological functions, according to the degree of water permeability of individual rock masses, regardless of age and genesis. So the rock masses are divided into four groups:

1. Good water permeability;
2. Weakly waterproof;
3. A complex of permeable and impermeable rocks;
4. Impermeable rocks.

Attention is paid to rock mass fracturing, porosity type and its evaluation, and source abundance. The well-permeable rocks are mainly represented by the limestones of Veliki Krš, where there are several hot springs, represented by conglomerates, bigrians, river alluvium and rubble, making up 13.2 % of the terrain. Weakly permeable rocks, which are represented by sandstones with conglomerates, varieties of andesites, silicified and pyritized andesites, volcanic agglomerates and breccias, diorites, quardiorites, granodiorites, are the most widespread and make up 77.5 % of the terrain. The complex of permeable rocks and impermeable rocks participates in the construction of the terrain with 14 % and is built by marls, sandstones and marly limestones (Figure 10). The impermeable rocks are formed by hydrothermally altered andesites, which are chloritized and epidotized. Hydrogeological research defined the conditions of irrigation. Structural-geological, hydrogeological, geomorphological, hydrometeorological and hydrogeographic-hydrological indicators were analyzed.

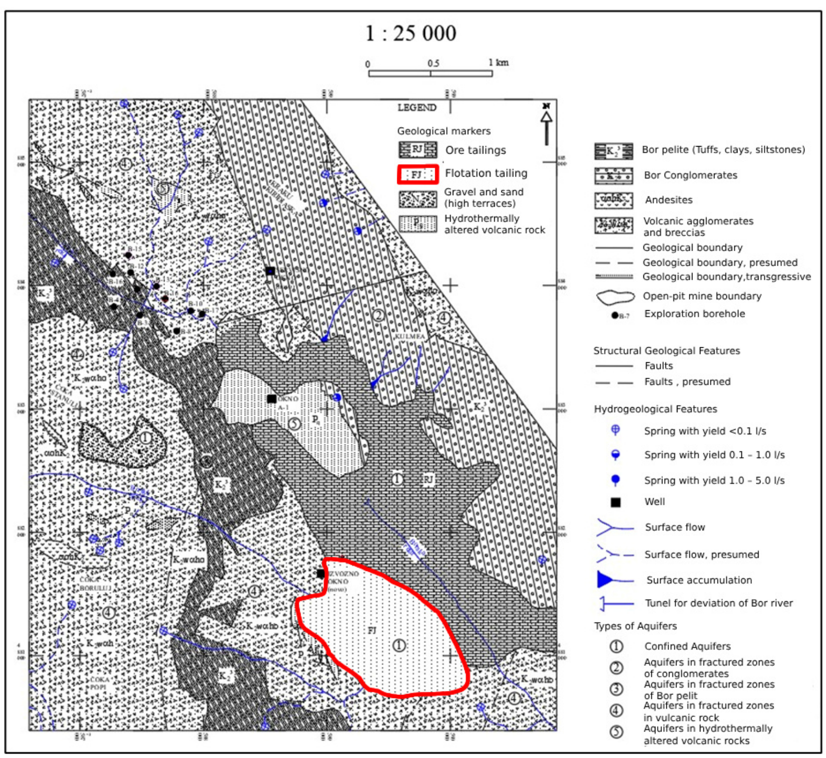

Figure 10: Hydrogeological map of the wider area of Old Bor flotation tailing pond (Field I and Field II) [24]. Bor tailings are marked with red polygon.

Atmospheric precipitation has the greatest influence on drainage, i.e. the creation of a water depression is influenced by the direct release of atmospheric sediment into the gravity area of the tailings pond.

5. ENGINEERING-GEOLOGICAL CHARACTERISTICS OF THE DEPOSIT

Exploratory drilling [24] revealed that the area of flotation tailings and degraded rock mass is 20 to 63 m thick. Flotation tailings are represented in the form of dusty flotation sand and silty dusty sand, which alternate with depth. Flotation tailings are predominantly gray, dark gray and brown in color. Dusty flotation sand has a uniform to moderately uneven composition with a filtration coefficient in the range Kf = $2,10\times10^{-3}$ - 9×10^{-5} cm/s. Silty sands have a moderately uneven to uneven composition with a filtration coefficient in the range $K_f = 3.40\times10^{-5}$ - 3.70×10^{-6} cm/s. The area is classified as inorganic dust with fine sand and well-granulated sand, while with a compressibility modulus for a load of 50-100 kN/m^2 they belong to exceptionally compressible to very compressible soils, while for loads of 100-200 kN/m^2 they are grouped into very to medium compressible soils. The immediate base of the tailings pit consists of degraded rocks of andesitic composition and conglomerates (the extreme southeastern part of the technogenic deposit), where the rock is predominantly kaolinized, highly fractured, schist, gray in color and of moderate strength.

Laboratory tests obtained the following geomechanical parameters [24]:

- Volumetric weight γ = 21.96 - 23 kN/m^3,

- Compressive strength σ_p = 41-45 MPa,

- Tensile strength σ_z = 4.28-4.63 MPa,

- Modulus of elasticity $E_{(50)}$= 12,600 – 13,360 MPa,

- Poisson's coefficient υ = 0.19-0.20,

- Cohesion c = 6.85 -7.26 MPa,

- Internal friction angle ϕ = 54-55°.

6. GEOLOGICAL INVESTIGATIONS OF THE OLD BOR TAILINGS

Research at the Old Bor flotation tailing pond (Field I and Field II) consisted of cabinet, field and laboratory work.

The **cabinet work** involved:

- the collection of data from earlier researches, i.e. existing archival and published documentation;
- planning for the field work, obtaining permits, implementing public procurement procedures for drilling etc.;
- after field work systematization of data and their interpretation in the form of graphic documentation and documentary material;
- managing sample analysis and outsourcing those which were not been performed in-house;
- quality control and quality assurance of outsourced analyses;
- interpretation of chemical in mineralogical analysis;
- reporting to FUTURAM project and other stakeholders.

The **field work** consisted of the realization of investigative works in the investigation area, which was aimed at a gradual, systematic and comprehensive investigation and examination of the area. It included:

- field surveys;
- drilling works;
- sampling and core logging.

The **laboratory work** included:

- sample preparation for the analyses (drying, homogenisation, sample reduction, archiving);
- multielemental analysis;
- X-Ray diffraction (XRD) analysis;
- scanning electron microscope and energy-dispersive X-ray spectroscopy (SEM-EDS) analysis.

6.1. Presentation of conducted cabinet, field and laboratory works

6.1.1. Determination of sampling locations and research plan

Evidence of mining activity in the Bor metallogenetic zone, i.e. Rudna Glava, dates back to 6 millennia ago, later to the ancient and Roman periods. The wider area of the Old Bor flotation tailing pond (Field I and Field II) (Figure 11) exploration area is the Bor area, i.e. the area that was previously mostly treated as the wider Bor area. Geological exploration of the wider Bor metallogenetic zone has enabled a century-long exploitation of copper ore, producing large quantities of copper metal and sulfur, which was processed into sulfuric acid, and significant quantities of gold and silver. This was followed by an increase in production until the 1980s, from exploitation, preparation, ore flotation, smelting and refining, sulfuric acid production, to final products in factories based on copper, silver and other primary production products. In the 1990s, due to various sanctions and crises, there was a gradual decline and reduction in production that continued until the beginning of this century [43]. Flotation tailings were disposed of in the area of the Old Flotation Tailings pond Bor until 1992, when exploitation of the old open pit Bor was suspended. Bor tailings site was then closed. However the mine is still active and the preparation of the low grade copper ore in the Flotation Plant Bor and Flotation Plant Veliki Pine Krivelj and concentrations of useful components in the form of copper concentrate provides large amounts of flotation tailings, which are disposed in the immediate vicinity of the OFTs Bor at the two additional active flotation tailing dumps (FTD RTH (located in the area of the previously excavated ore body H) and FTD Veliki Krivelj) [44]. Concentrate and tailings are obtained in the mixture with water in a form of pulp. Concentrate, as useful component, is dewatered and stored in bins in the plant for further processing in the Copper Smelter Bor, while tailing material is transported to the disposal place predominantly by hydraulic plastic pipes (FTD RTH) and gravity using the concrete channels (FTD V. Krivelj).

Figure 11: The Old Bor flotation tailing pond (in red) and other components of the mining complex (image from Google Earth).

Only at the beginning of this century, in conditions of decreasing mine production and decreasing quantities of domestic and imported concentrate, i.e. in conditions of a kind of "shortage" of materials for the operation of TIR (for smelting and refining), has greater attention been paid to tailings dumps as potential areas for the valorisation of economically interesting concentrations of copper and other useful components. This was also contributed to by the constant increase in the prices of copper and precious metals, as well as the increasing demand for critical mineral raw materials.

Geological exploration of secondary mineral raw materials has been carried out over a long period of time. Exploration related to the exploration of mining waste dumps began in the early 1960s and continues with interruptions to this day. Exploration in the post-war period was carried out by exploratory drilling in the area of the Old flotation tailings pond in Bor (Field I and Field II) (Figure 12, Figure 13, *Table 3*) and can be divided into several phases in time:

- The period after World War II from June 1961 to the end of January 1962,
- during 2007 and,
- the period from 2015 to 2023.

The period from 2015 to 2023 is the period that is important for the making of this study.

Institute for Mining and Metallurgy (IRM) Bor with the representatives of the Office for the Balkans of the Japan International Cooperation Agency (JICA), the Ministry of Mining and Energy, the Ministry of Agriculture and Environmental Protection and the Technical Faculty of Bor, signed a document in 21.11.2014, which officially enabled the start of the implementation of the Project "Research on the integration system of spatial environment analyses and advanced metal recovery to ensure sustainable resource development" between the Republic of Serbia and Japan. The project was prepared by the Bor Institute of Mining and Metallurgy in cooperation with Akita University from Japan. In 2015 and 2016, 8 wells (*Table 3*, Figure 12, Figure 13) [45] were drilled at the Old flotation tailings pond in Bor (Field I and Field II). These boreholes are named as »Japan boreholes« and are marked as OT. Part of the samples for laboratory research for the FutuRam project were used from these wells.

Table 3: The parameters of the existing exploratory wells on the JICA-Japan and RisCure projects: "Japanese" boreholes: OT 1-1, OT 1-2 OT 1-3, OT 1-4, OT 1-5, OT 1-6, OT 2-1, OT 2-2 and RIS-CuRE project boreholes: B-1, B-2, B-3, B-4.

No.	Well designation	Well coordinates (Gauss-Krüger coordinate system, zone 7)			Borehole length	Drilling period
		X	Y	Z	meters	
1	OT/1-1	7 588 975	4 881 417	357	10,50	2015/16
2	OT/1-2	7 589048	4 881 346	357	33,30	2015/16
3	OT/1-3	7 589 133	4 881 285	356	36,00	2015/16
4	OT/1-4	7 589 143	4 881 153	357	19,20	2015/16
5	OT/1-5	7 589 217	4 881 270	356	22,80	2015/16
6	OT/1-6	7 589 103	4 881 388	358	23,30	2015/16
7	OT/2-1	7 589 368	4 880 899	370	34,40	2015/16
8	OT/2-2	7 589 541	4 880 723	370	43,00	2015/16
9	B-1	7 589 041	4 881 466	356	21,50	2020
10	B-2	7 589 161	4 881 366	356	18,50	2020
11	B-3	7 589 477	4 881 121	368	30,00	2020
12	B-4	7 589 630	4 880 992	368	33,50	2020
		Total			326,00	

In the period from 10.08.2020 until 17.08.2020 exploratory drilling was performed at the Old Bor flotation tailing pond (Field I and Field II), within the project No. 18248 - KAVA5 project **RisCure** - Zero waste recovery of copper tailings in the ESEE region financed by EIT Raw Materials. Based on the Preliminary Sampling Plan at the Old Bor flotation tailing pond (Field I and Field II), geological research was carried out - exploratory drilling at the Old Bor flotation tailing pond (Field I and Field II). Drilling was carried out with the Mustang 4 F1 drilling rig, diameter PK3 (continuous core) using the wireline method in the period from 10.08.2020 until 17.08.2020. Four wells were drilled (*Table 3*, Figure 13), these boreholes are marked as »B«.

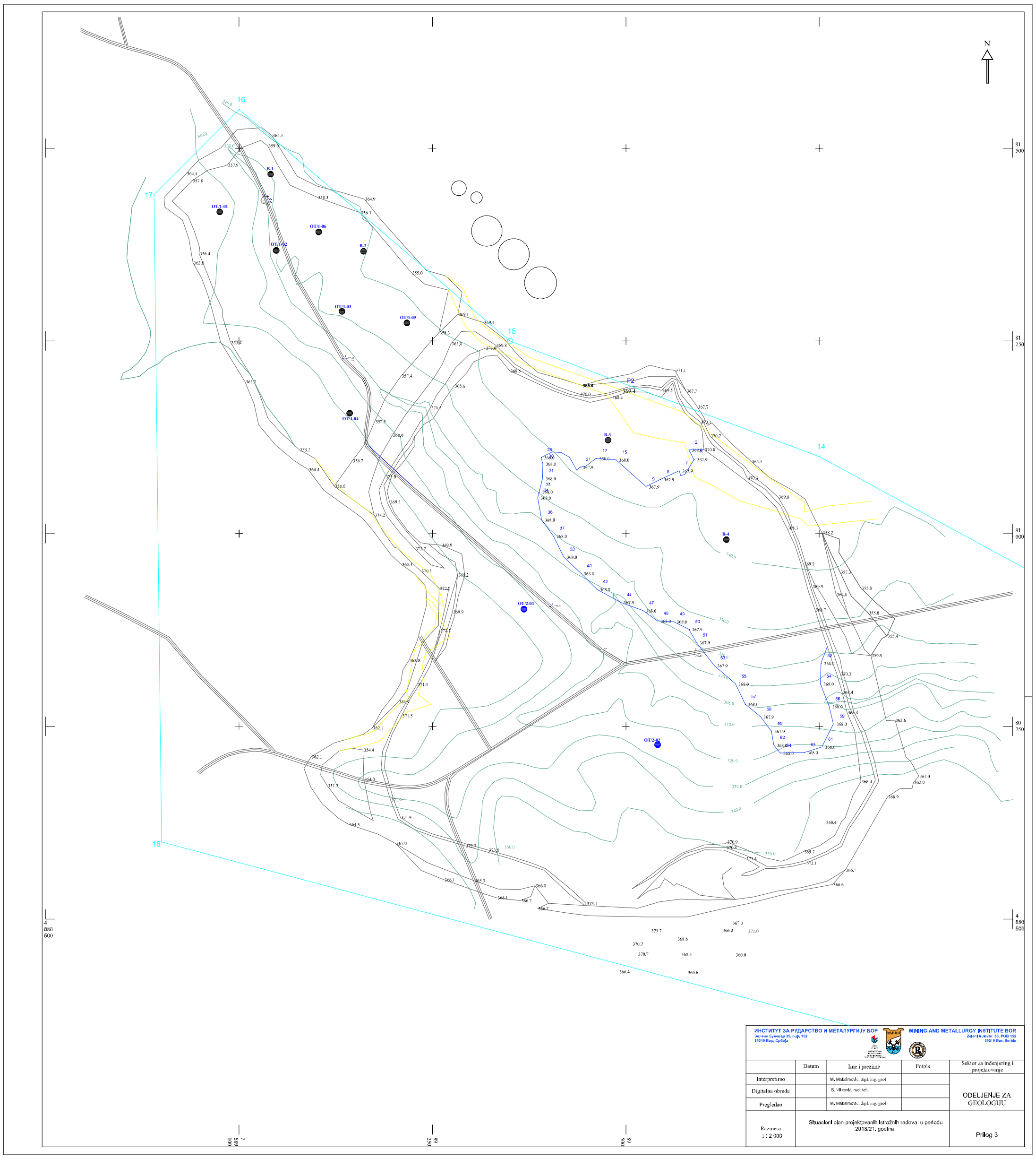

Figure 12: Geodetic measurements of the Bor flotation tailings, which were availabe for the purpose of preparing the current survey, showing contours of the surface (black) and basement (dark green) together with locations of existing borholes. Source: [45].

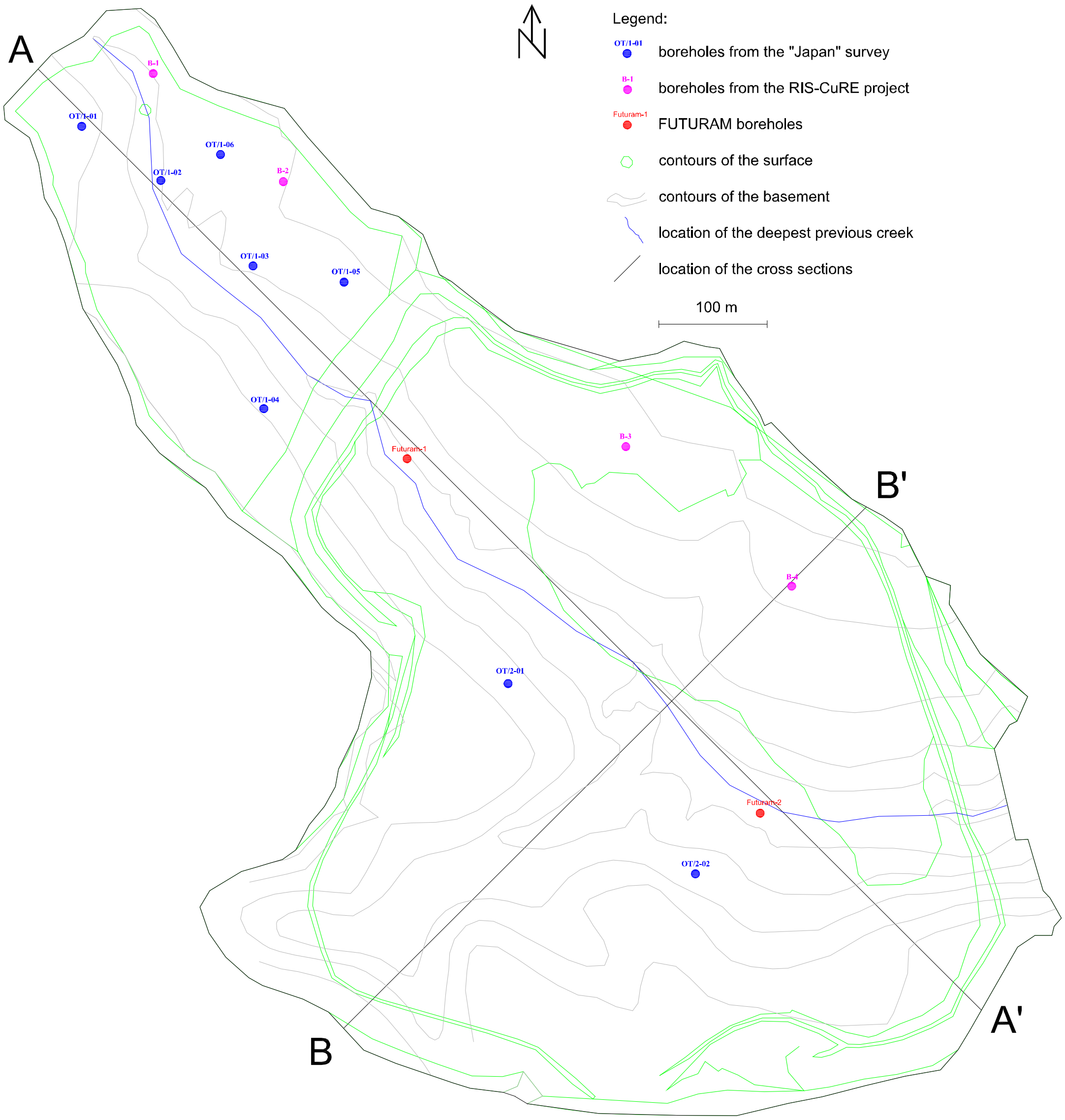

Figure 13: 3D elements extracted from the geodetic survey (Figure 12) and the location of the boreholes. Source: [45].

Applied geological research was also carried out with the aim of geological research of the Old Bor tailings area in order to develop the project FutuRam - Future Availability of Secondary Raw Materials. Geodetic works included locating boreholes and recording their coordinates. All boreholes have been geodetically recorded with precision and accuracy to meet the needs of reservoir interpretation and resource estimation. During the modelling of the reservoir and the calculation of reserves, all available measured values for all wells were taken into account and entered into the appropriate databases and thus represent part of the documentary material Report on the Old Bor flotation tailing pond (Field I and Field II). These includes:

- 211 analyses from the "Japanese" survey, 8 boreholes marked with "OT", including analyses of Ag, Al, As, Au, B, Ba, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Se, Sr, Te, Th, Ti, Tl, V, W, Zn, made by Activation Laboratories Ltd., method code 1DX Aqua Regia ICP/MS, time of analyses January 2016, report No. A15-11219.

- 51 analyses from the RIS-CuRE project, 4 boreholes marked with "B", including analyses of Ag, Al, As, Au, B, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, Hg, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pd, Pt, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr, made by Bureau Veritas Commodities Canada Ltd., methods Ultra-trace ICP-ES/MS (MA250) and Ultra-trace ICP-ES/MS (AQ250), time of analyses is unknown. Source: [46].

Old exploration drilling works did not reach the deepest parts of the flotation tailings deposits. Therefore two additional exploratory drillholes (FutuRam 1 and FutuRam 2) (Table 4) were drilled through whole column of the deposit for the purpose of this study. Available geodetic measurements, containing the topography of the basement, were used to define the location of both drillholes (Figure 14). Location of both drill holes were set up in the way to reach the deepest parts of the flotation pond, i.e. in the locations of former stream.

Table 4: Location of FUTURAM drill sites.

No.	**Well designation**	**Well coordinates**		**Borehole length**	**Drilling period**
		X	Y	m	
1	FutuRam-1	4.881.110	7.589.275	51.00	July 2023
2	FutuRam-1	4.880.782	7.589.601	65.00	July 2023
Total				116.00	

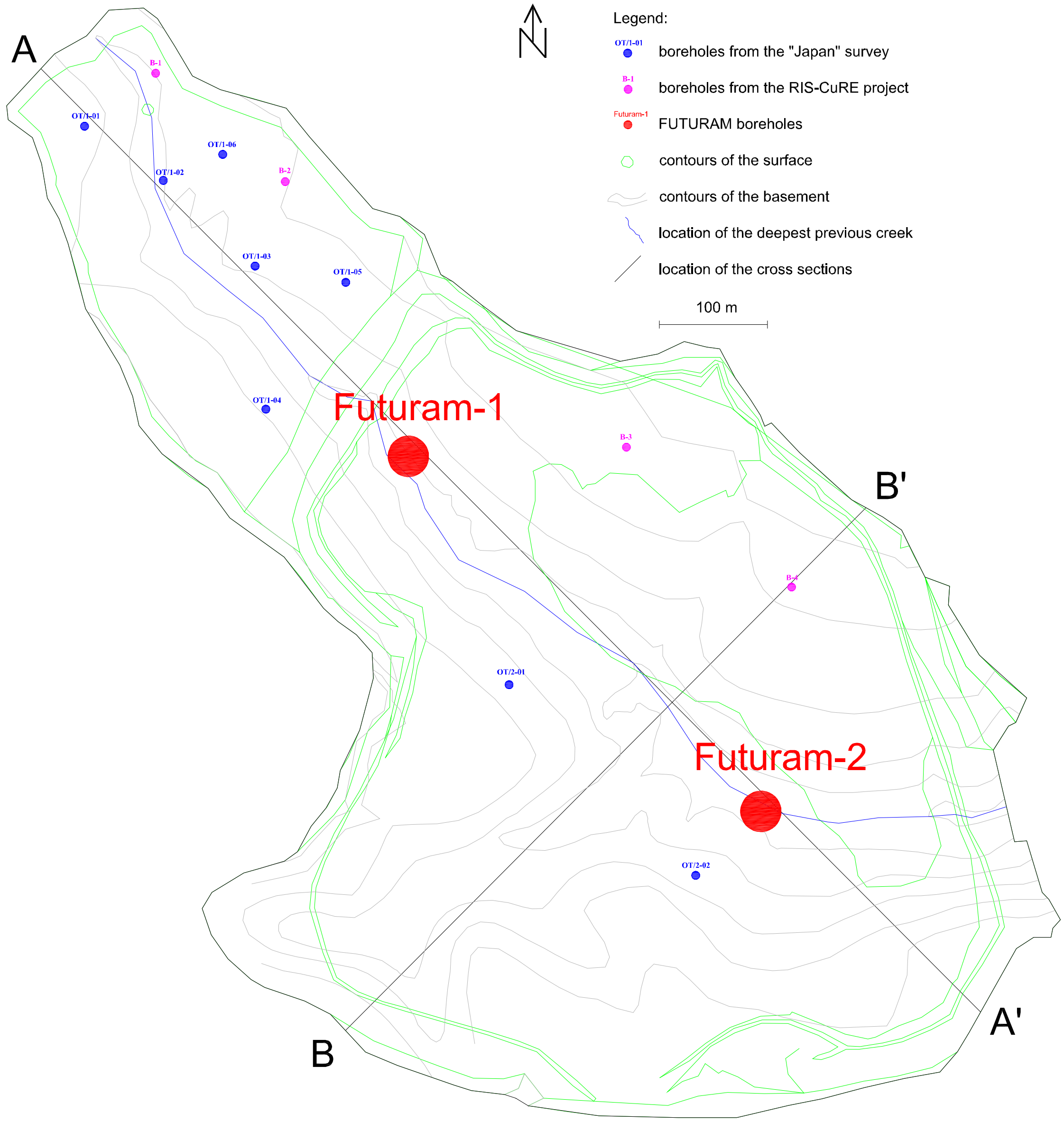

Figure 14: Position of the drillholes FutuRam 1 and FutuRam 2 on the situational plan of the Old flotation tailing pond in Bor [45] .

6.1.2. Descripton of the sampling method and field work

After defining the locations of designed drill holes in the field exploratory drilling at the Old Bor flotation tailing pond on Field 2 was carried out during the month of July of 2023. Drilling was carried out by the company GEOMAG - Belgrade, by the use of depth prospecting drill set CS - 14 by rotary drilling with a simple core tube without introduction of flush (on dry) or minimal amounts of water. Whole length was drilled by diameters of ϕ 85 (PQ diameter) [45].

Figure 15: Field work at the Old Bor flotation tailing pond (Field I and Field II).

Both drillholes were developed up to the paleorelief (original river valley). During development of drilling, a determination of extracted core and sampling at each length meter were carried out. Determination of extracted core is presented in the Drilling Survey Records [45].

During development of drilling, there were some “loss of core”, and percent of extracted core was from 93 % up to 99 % in the drill hole FutuRam 1. In the drill hole FutuRam 2 that percentage ranges from 92 % up to 100 %. Total number of drill holes is 2 with total length of 116.00 m [45].

The drilled core is arranged in crates 1 m long and 30 cm wide (Figure 16). The core data is also recorded in the mapping log, along with the number of the well, location, well coordinates, direction of the core, azimuth and drilling angle, length of the well and percent of the core. A macroscopic description of the core was carried out in the field with the determination of the type of flotation material, any visible mineralogy, visible changes in granulation and any other visible indicators. Mapping in the field was carried out by IRM Bor and GeoZS. Drilling survey records are shown in Table 5 and Table 6 [45].

Figure 16: Drilled cores lined up in boxes.

Table 5: Drilling survey record of borehole FUTURAM 1.

FUTURAM 1

Name of the hole: FUTURAM 1

Drill machine (Maker, Type)	CS -14
Set-up date	07.07.2023.
Date of the drilling started	07.07.2023.
Date of the drilling finished	8.07.2023.
Bit diameter (mm)	PQ (85 mm)
Type of core tube	Single core pipe
Casing depth (if any) (m)	/
Ground water level (if any) (m)	/

Depth (m)	Drilled length (m)	Ground material (tailings/soil)	Wet/Dry	Core length (m)	Core recovery (%)
0.0	1.4	Flotation tailings, light ocher-cream color, leached, slightly silty and sandy	Slightly moist	1.4	99
1.4	9.0	Flotation tailings, gray, clayey, fine-grained sand, visible pyrite and quartz.	moist	7.6	96
9.0	17.0	Flotation tailings, dark gray, fine-grained sand, clayey, visible pyrite and quartz	moist	8.0	99
17.0	18.1	Flotation tailings, brown color (level of field 1), sandy and clayey, locally noticeable pyrite and quartz	moist	1.1	98
18.1	21.0	Flotation tailings, gray, fine-grained sand, clayey, visible pyrite and quartz	moist	2.9	97
21.0	22.0	Flotation tailings, coarse-grained sand, gray, clayey, visible pyrite and quartz	moist	1.0	99
22.0	33.0	Flotation tailings, gray, fine-grained sand, clayey, visible pyrite and quartz	moist	11.0	99
33.0	42.0	Flotation tailings, gray, fine-grained sand, clayey, visible pyrite and quartz	moist	9.0	98
42.0	48.0	Flotation tailings, gray, fine-grained sand, clayey, visible pyrite and quartz	moist	6.0	98
48.0	50.9	Flotation tailings, gray, fine-grained sand, clayey, visible pyrite and quartz	moist	2.9	99
50.9	51.0	Bedrock built of grussified andesite	Slightly moist	0.1	93
Total				Total	Total average
51.0				51.0	97.72

Table 6: Drilling survey record of borehole FUTURAM 1.

FUTURAM 2

Name of the hole: FUTURAM 2

Drill machine (Maker, Type)	CS -14
Set-up date	06.07.2023.
Date of the drilling started	06.07.2023.
Date of the drilling finished	07.07.2023.
Bit diameter (mm)	PQ (85 mm)
Type of core tube	Single core pipe
Casing depth (if any) (m)	/
Ground water level (if any) (m)	/

Depth (m)	Drilled length (m)	Ground material (tailings/soil)	Wet/Dry	Core length (m)	Core recovery (%)
0.0	1.0	Flotation tailings, light ocher-cream color, leached, slightly silty and sandy	Slightly moist	1.0	99
1.0	1.5	Flotation tailings, lighter gray, dusty, very clayey, visible pyrite and quartz.	moist	0.5	99
1.5	2.5	Flotation tailings, lighter gray, dusty, very sandy, visible pyrite and quartz.	moist	1.0	99
2.5	3.9	Flotation tailings, gray, more clayey, visible pyrite and quartz	moist	1.4	99
3.9	4.2	Flotation tailings, gray, more sandy, clayey, visible pyrite and quartz	moist	0.3	99
4.2	5.7	Flotation tailings, gray, more sandy, clayey, visible pyrite and quartz	moist	1.5	99
5.7	15.0	Flotation tailings, gray, clayey, fine-grained sand, visible pyrite and quartz	moist	9.3	100
15.0	18.0	Flotation tailings, gray, clayey, fine-grained sand, visible pyrite and quartz	moist	3.0	98
18.0	18.5	Flotation tailings, brown color (level of field 1), sandy and clayey, locally noticeable pyrite and quartz	moist	0.5	96
18.5	22.2	Flotation tailings, gray, clayey, fine-grained sand, visible pyrite and quartz	moist	3.7	96
22.2	32.4	Flotation tailings, gray, clayey, fine-grained sand, visible pyrite and quartz	moist	10.2	97
32.4	35.3	Flotation tailings, gray, clayey, fine-grained sand, visible pyrite and quartz	moist	2.9	96
35.3	46.9	Flotation tailings, gray, clayey, fine-grained sand, visible pyrite and quartz	Slightly moist	11.6	95
46.9	50.3	Flotation tailings, gray, very silty	Very moist	3.4	97
50.3	57.0	Flotation tailings, compact, sandy, visible pyrite and quartz	moist	6.7	90
57.0	60.0	Flotation tailings, gray, very silty	Very moist	3.0	92
60.0	63.0	Flotation tailings, gray, clayey, fine-grained sand, visible pyrite and quartz	moist	3.0	92
63.0	64.8	Brown clay mixed with flotation tailings	moist	1.8	92
64.8	65	Bedrock built of grussified andesite		0.2	95
Total				Total	Total average
65.0				65.0	96.3

After mapping, each meter of core was split in two equal halves. Each of the half of core was then packed in a separate bag. The bags were marked with the name of the drill hole and length interval of core. Photos of all operations during development of drilling were taken, and photos are given in the material of this report. After finalization of drill holes, a location of drilling site was measured with GPS Garmin Vista Hsc, and the results of recorded drill holes are given in Table 4 and presented on Figure 14.

The samples were then transported (1/2 part of the samples) to the Geological survey of Slovenia, Ljubljana.

6.1.3. Sample preparation and chemical analysis

Pulps for analysis were prepared at the MMI Bor. This includes drying at 50°C until constant weight was achieved, crushing in a jaw crusher, grinding in the ring mill and quartering of the samples to reduce quantities. 2 x 200 g bags were prepared, one was kept for archives, another was shipped to Geological survey of Slovenia, where 5g pulps for the determination of elemental composition were prepared and shipped to Bureau Veritas Commodities Canada Ltd. where laboratory tests were performed. Laboratory analysis included determination of 65 chemical elements by the method of ICP-MS analysis prior digestion of 0.5 g of material with aqua-regia (analytical package AQ250+EXT+REE).

The precission, accuracy and bias of the chemical analyses was determined by double analysis (16 repetitions), analysis of standards (19 analysis, standards OREAS45h, OREAS45f, OREAS138, OREAS130, DS11 and OREAS262) and analysis of blanks (6 analysis), which were mixed randomly in the batch (Table 7).

Precission of the analytics is expressed as average relative percent difference between two measurements (AR%D). The value of A%R parameter of 0 means, that there are no deviations between two measurements, while values od A%R<10 means good precission of the laboratory, while values of 10<A%R<30 means satisfactory precission.

Accurracy of the analytics is expressed as average percent recovery (A%R) between measured and certified value. Value of A%R of 0 means that measured values match exactly the certified values. Negative values of A%R means that measured values are lower than certified values, while positive A%R values means, that measured values are higher than certified ones. Values of A%R in the interval of -10 to 10 means good accuracy, while values between -30 and -10 and between 10 and 30 means satisfactory accuracy of the laboratory.

Bias of the laboratory was expressed by the number of analysis of blank samples, which were below the detection linit. In the case when certain amount of element was measured in the blank sample and is a probable result of a contamination, bias was empirically expressed as the average bias value (AB), which was calculated as the average value of the 6 measurement, where values below the detection limit were assumed to be zero.

Table 7: Laboratory quality control parameters. MDL - minimum detection limit; A%R - accurracy of analysis measured by the average recovery rate; AR%D - precission of the analysis, measured by the average relative percent difference between double analysis; N - number of observations; B - number of blank samples, where measured values were below the detection limit; AB - average deviation for elements where amounts above the minimum detection limit for certain element was detected in blank samples.

Method	Analyte	Unit	MDL	A%R	N	AR%D	N	B	AB
AQ250	Al	%	0.01	-8	19	3	16	6	
AQ250	Ca	%	0.01	-6	19	2	16	6	
AQ250	Fe	%	0.01	-6	19	3	16	6	
AQ250	K	%	0.01	-8	19	5	16	6	
AQ250	Mg	%	0.01	-6	19	4	16	6	
AQ250	Na	%	0.001	-8	18	7	16	6	
AQ250	P	%	0.001	-6	19	1	16	6	
AQ250	S	%	0.02	-9	19	2	16	6	
AQ250	Ti	%	0.001	-17	19	10	16	6	
AQ250	As	mg/kg	0.1	-5	16	2	16	4	0.03
AQ250	B	mg/kg	20		0	0	16	6	
AQ250	Ba	mg/kg	0.5	-4	17	34	16	6	
AQ250	Be	mg/kg	0.1	-3	17	0	16	6	
AQ250	Bi	mg/kg	0.02	-10	19	4	16	6	
AQ250	Cd	mg/kg	0.01	-6	14	12	16	6	
AQ250	Ce	mg/kg	0.1	-10	19	3	16	6	
AQ250	Co	mg/kg	0.1	-6	19	3	16	6	
AQ250	Cr	mg/kg	0.5	-7	19	4	16	6	
AQ250	Cs	mg/kg	0.02	-10	19	5	16	6	
AQ250	Cu	mg/kg	0.01	-7	19	2	16	2	0.03

Method	Analyte	Unit	MDL	A%R	N	AR%D	N	B	AB
AQ250	Dy	mg/kg	0.02	-11	17	5	16	6	
AQ250	Er	mg/kg	0.02	-9	17	9	16	6	
AQ250	Eu	mg/kg	0.02	-16	17	4	16	6	
AQ250	Ga	mg/kg	0.1	-8	19	1	16	6	
AQ250	Gd	mg/kg	0.02	-10	19	7	16	6	
AQ250	Ge	mg/kg	0.1	-48	12	4	16	6	
AQ250	Hf	mg/kg	0.02	-17	19	8	16	6	
AQ250	Ho	mg/kg	0.02	-11	19	4	16	6	
AQ250	In	mg/kg	0.02	-8	19	6	16	6	
AQ250	La	mg/kg	0.5	-9	19	1	16	6	
AQ250	Li	mg/kg	0.1	-8	14	3	16	6	
AQ250	Lu	mg/kg	0.02	-13	19	0	16	6	
AQ250	Mn	mg/kg	1	-6	19	4	16	6	
AQ250	Mo	mg/kg	0.01	-22	19	5	16	6	
AQ250	Nb	mg/kg	0.02	-7	7	8	16	6	
AQ250	Nd	mg/kg	0.02	-11	17	4	16	6	
AQ250	Ni	mg/kg	0.1	-3	19	3	16	6	
AQ250	Pb	mg/kg	0.01	-5	18	4	16	6	
AQ250	Pr	mg/kg	0.02	-13	18	3	16	6	
AQ250	Rb	mg/kg	0.1	-7	19	5	16	6	
AQ250	Sb	mg/kg	0.02	-11	14	15	16	6	
AQ250	Sc	mg/kg	0.1	-11	19	4	16	6	
AQ250	Se	mg/kg	0.1	26	12	5	16	6	
AQ250	Sm	mg/kg	0.02	-9	18	6	16	6	
AQ250	Sn	mg/kg	0.1	-13	17	4	16	6	
AQ250	Sr	mg/kg	0.5	-9	19	5	16	6	
AQ250	Ta	mg/kg	0.05		0	0	16	6	
AQ250	Tb	mg/kg	0.02	-16	17	0	16	6	
AQ250	Te	mg/kg	0.02	0	14	4	16	6	
AQ250	Th	mg/kg	0.1	-7	19	7	16	6	
AQ250	Tl	mg/kg	0.02	-10	19	5	16	6	
AQ250	Tm	mg/kg	0.02	-10	17	0	16	6	
AQ250	U	mg/kg	0.1	-10	19	4	16	6	
AQ250	V	mg/kg	1	-9	19	3	16	6	
AQ250	W	mg/kg	0.1	-19	13	9	16	6	
AQ250	Y	mg/kg	0.01	-6	19	2	16	6	
AQ250	Yb	mg/kg	0.02	-11	17	7	16	6	
AQ250	Zn	mg/kg	0.1	-7	17	6	16	6	
AQ250	Zr	mg/kg	0.1	-10	19	3	16	6	
AQ250	Ag	ug/kg	2	-7	16	5	16	6	
AQ250	Au	ug/kg	0.2	5	17	4	16	6	
AQ250	Hg	ug/kg	5	16	19	5	16	3	6
AQ250	Pd	ug/kg	10	-6	12	0	16	6	
AQ250	Pt	ug/kg	2	-2	12	13	16	6	
AQ250	Re	ug/kg	1	-10	7	13	16	6	

6.1.4. Analysis and assessment of raw material quality according to all investigative parameters with a description of methods and standards on laboratory conditions

For the assessment of raw material quality the following data was used:

- 211 analyses from the "japan" exploration works (8 boreholes),
- 51 analyses from the RIS-CuRE project (4 boreholes),
- 115 analyses from the FUTURAM (this) study (2 boreholes).

First task was to assess comparability of the analyses. Especially problematic was the data from "japanese" exploration works, because these samples were analysed in different laboratory (ACTLABS) than samples from RIS-CuRE project and FUTURAM (current) project, which were analysed by Bureau Veritas laboratories, Vancouver, Canada. For the assessment of data comparability we took 20 random samples from the archives from "japanese" study, and shipped them for the repeated analysis with the FUTURAM batch. Results (Table 8) show good comparability of the analyses, because correlation coeifficient for the majority of elements (except for Ba, Na and Se) is statistically significant (critical value for the statistical significance of correlation on the level of 95% is 0.38 (t-value of 1.734)). Comparability of the results for the most important components in the tailings (Au, Ag and Cu, Fe and As) was further confirmed by linear regression method (Figure 17). Considering linear regression line coeifficient is very close to 1, it was decided that all three batches can be directly merged without a need for any transformation. Database of all analyses was constructed, containing total 377 analyses and is presented in Appendix 1.

Table 8: Correlation coeifficient between elemental analysis in ACTLABS and Bureau Veritas laboratories, showing comparability between chemical analyses made by "japanese study" and FUTURAM (this) study.

element	r^2	element	r^2	element	r^2
Ag	0.86	Fe	0.87	S	0.78
Al	0.56	Ga	0.82	Sb	0.68
As	0.96	Hg	0.72	Sc	0.62
Au	0.94	K	0.56	Se	0.03
Ba	0.28	Mg	0.85	Sr	0.49
Bi	0.92	Mn	0.96	Te	0.87
Ca	0.89	Mo	0.52	Th	0.72
Cd	0.92	Na	0.33	Tl	0.78
Co	0.92	Ni	0.90	V	0.59
Cr	0.95	P	0.51	W	0.78
Cu	0.93	Pb	0.87	Zn	0.84

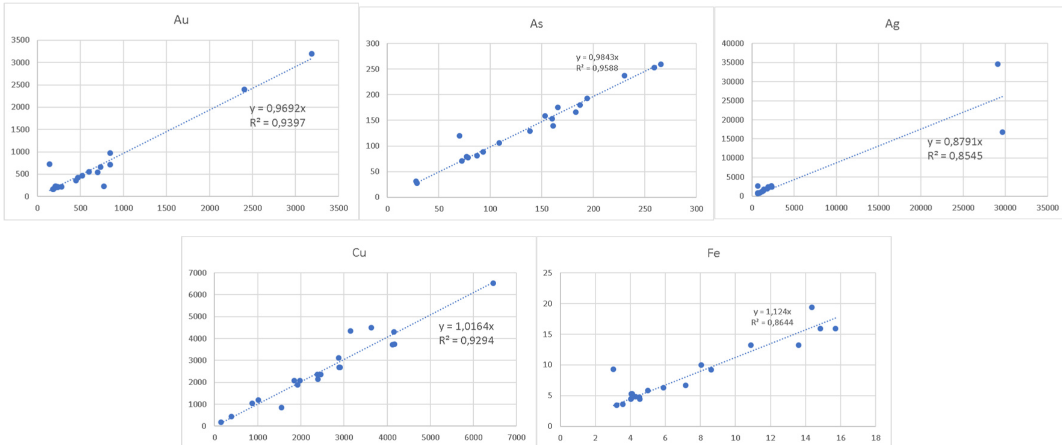

Figure 17: Linear regressions for elements Au, As, Ag, Fe, Cu between old and new analyses, showing comparability between historic and newly obtained datasets.

Based on the historical information of the Bor tailings, and available chemical analyses, the following model of the tailings dam was made. The first 10 m of the tailings (FIELD 2, between approximately +369 to +359) is low-grade material, followed by the remaining higher grade material, which strecthes approximately from the +359 to the basement (FIELD 1, between +330 in the NW part to the +299 on the SE part). The model is schematically presented on the Figure 18. Table 9 shows descriptive statistical parameters for the obtained dataset, separated for both fields. Please note that some measured Cu and Au levels were above maximum detection limit. From the Table 9 it is evident, that commodities which might be interested are Au, Cu and in some extent also Ag, potentially S and Fe. It is not unlikely to expect that any other commodities would be interesting for the extraction, because the measured grades are too low.

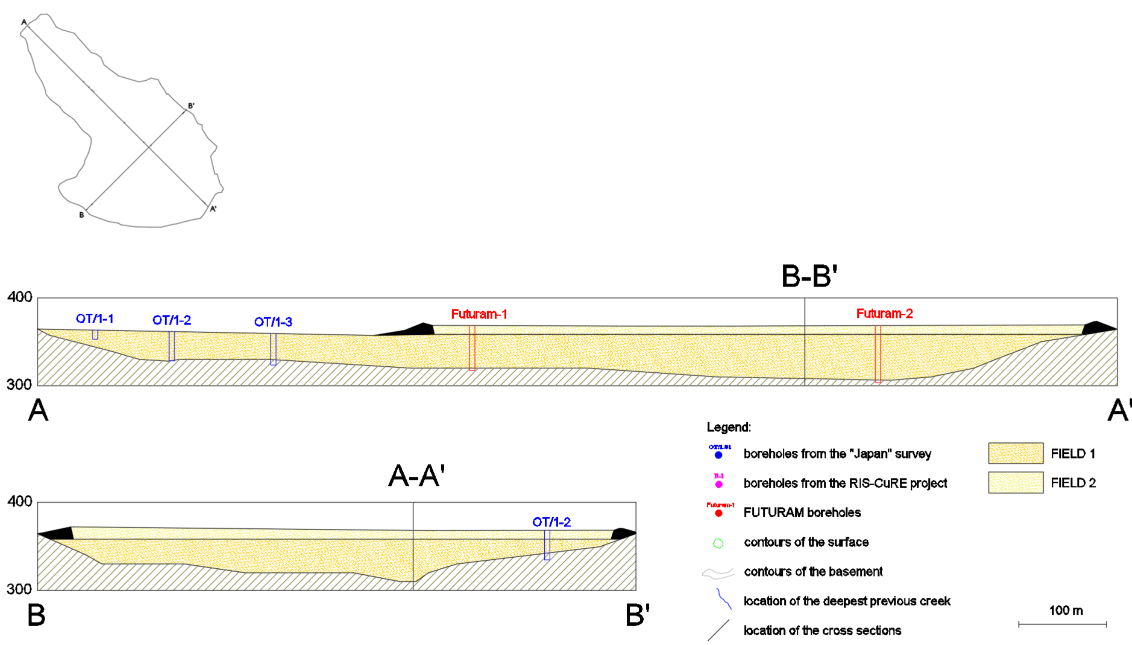

Figure 18: Geological model of the tailings dam, shown on two perpendicular cross sections. Higher grade material in Field 1, which outcrops on the NW part, is covered by the lower grade materials of Field 2. Descriptive statistical parameters of the chemical analyses are presented for both field separately in Table 9.

Table 9: Descriptive statistical parameters for FIELD 1 and FIELD 2. min - minimum value; P10 - 10th percentile value; Md - median value; P90 - 90th percentile value; max - maximum value; N - number of observations; BDL - below minimum detection limit; ADL - above maximum detection limit. Elements of interest are marked in bold.

		FIELD 1						FIELD2					
		min	**P10**	**Md**	**P90**	**max**	**N**	**min**	**P10**	**Md**	**P90**	**max**	**N**
Ag	**mg/kg**	**0.10**	**0.70**	**1.4**	**2.6**	**35**	**327**	**0.20**	**0.44**	**0.80**	**1.8**	**3.3**	**54**
Al	%	0.13	0.20	0.43	0.80	4.9	327	0.13	0.22	0.53	0.83	1.1	54
As	mg/kg	4.0	69	130	220	410	327	29	48	80	160	240	54
Au	**PPB**	**4.7**	**150**	**360**	**720**	**ADL**	**327**	**100**	**110**	**150**	**290**	**510**	**54**
B	mg/kg	BDL	BDL	BDL	BDL	BDL	327	BDL	BDL	BDL	BDL	BDL	54
Ba	mg/kg	0.80	1.8	5.4	21	220	327	1.3	4.9	17	240	420	54
Be	mg/kg	BDL	BDL	BDL	BDL	0.40	136	0.050	BDL	BDL	BDL	0.10	32
Bi	mg/kg	0.10	0.75	1.3	1.9	4.5	327	0.34	0.45	0.98	1.7	3.1	54
Ca	%	0.15	0.26	0.52	1.3	2.5	327	0.60	0.71	0.97	1.3	2.4	54
Cd	mg/kg	0.010	0.050	0.050	0.23	3.8	327	0.010	0.023	0.055	0.28	2.4	54
Ce	mg/kg	0.20	0.40	0.80	1.5	9.4	136	0.40	0.60	0.80	1.4	1.8	32
Co	mg/kg	2.3	5.5	10	17	97	327	0.20	1.7	5.6	9.0	19	54
Cr	mg/kg	BDL	7.1	38	72	270	327	2.9	5.1	40	65	89	54
Cs	mg/kg	0.030	0.070	0.15	0.25	0.61	136	0.090	0.13	0.19	0.27	0.37	32
Cu	**mg/kg**	**95**	**1000**	**2300**	**3800**	**ADL**	**327**	**72**	**300**	**900**	**1900**	**3000**	**54**
Dy	mg/kg	BDL	0.037	0.080	0.14	0.53	95	BDL	0.030	0.080	0.12	0.14	22
Er	mg/kg	BDL	0.012	0.050	0.080	0.28	95	BDL	BDL	0.040	0.070	0.080	22
Eu	mg/kg	BDL	BDL	0.030	0.050	0.21	95	BDL	BDL	0.030	0.049	0.060	22
Fe	**%**	**1.9**	**3.7**	**6.8**	**14**	**26**	**327**	**0.74**	**1.7**	**3.2**	**7.7**	**17**	**54**
Ga	mg/kg	0.50	1.0	2.0	4.0	10	327	0.30	0.80	1.5	2.0	5.0	54
Gd	mg/kg	0.020	0.050	0.10	0.16	0.64	95	0.020	0.040	0.088	0.14	0.17	22

		FIELD 1						FIELD2					
		min	P10	Md	P90	max	N	min	P10	Md	P90	max	N
Ge	mg/kg	BDL	BDL	0.10	0.40	1.0	136	BDL	BDL	0.050	0.10	0.10	32
Hf	mg/kg	BDL	BDL	0.020	0.040	0.10	136	BDL	BDL	0.020	0.030	0.050	32
Hg	mg/kg	0.0050	0.17	0.34	0.58	1.0	327	0.12	0.15	0.22	0.33	0.49	54
Ho	mg/kg	BDL	BDL	0.010	0.030	0.10	95	BDL	BDL	0.010	0.020	0.030	22
In	mg/kg	BDL	0.030	0.050	0.080	1.3	136	BDL	BDL	0.030	0.070	0.18	32
K	%	BDL	0.020	0.050	0.10	0.40	327	0.040	0.050	0.090	0.11	0.15	54
La	mg/kg	BDL	BDL	0.50	0.60	12	327	BDL	BDL	0.50	0.57	0.90	54
Li	mg/kg	0.60	0.90	1.6	3.2	7.3	136	0.70	0.90	1.5	4.1	4.9	32
Lu	mg/kg	BDL	BDL	BDL	BDL	0.040	95	BDL	BDL	BDL	BDL	BDL	22
Mg	%	BDL	0.020	0.050	0.14	0.93	327	BDL	0.020	0.060	0.12	0.16	54
Mn	mg/kg	4.0	19	59	130	1300	327	7.0	11	52	200	250	54
Mo	mg/kg	0.30	1.9	2.7	4.8	250	327	2.0	2.3	2.7	5.5	26	54
Na	%	0.0020	0.0070	0.017	0.036	0.17	327	0.0070	0.0093	0.032	0.045	0.052	54
Nb	mg/kg	BDL	BDL	0.010	0.015	0.32	136	BDL	BDL	BDL	BDL	BDL	32
Nd	mg/kg	0.13	0.21	0.44	0.70	3.8	95	0.17	0.31	0.42	0.65	0.73	22
Ni	mg/kg	1.1	2.9	4.5	6.7	20	327	0.20	0.99	3.2	5.4	7.3	54
P	%	BDL	BDL	0.0040	0.010	0.059	327	BDL	0.0020	0.0050	0.0080	0.018	54
Pb	mg/kg	9.8	26	53	80	390	327	12	16	26	53	130	54
Pd	PPB	BDL	BDL	BDL	BDL	26	136	BDL	BDL	BDL	BDL	21	32
Pr	mg/kg	BDL	0.040	0.090	0.15	0.99	95	0.040	0.070	0.085	0.14	0.16	22
Pt	ug/kg	BDL	BDL	1.0	2.0	3.0	136	BDL	BDL	BDL	BDL	3.0	32
Rb	mg/kg	0.20	0.50	1.0	2.0	5.3	136	BDL	1.1	1.3	2.1	3.1	32
Re	ug/kg	1.0	6.0	10	18	150	136	2.0	6.1	11	21	53	32
S	**%**	**0.50**	**3.4**	**6.6**	**ADL**	**ADL**	**327**	**0.86**	**1.3**	**4.0**	**7.4**	**ADL**	**54**
Sb	mg/kg	0.20	0.50	1.4	2.9	14	327	0.17	0.22	0.71	1.7	4.0	54

		FIELD 1						FIELD2					
		min	P10	Md	P90	max	N	min	P10	Md	P90	max	N
Sc	mg/kg	0.20	0.40	0.90	2.0	12	327	0.20	0.43	1.2	1.8	2.1	54
Se	mg/kg	0.25	1.6	3.1	5.8	11	327	1.1	1.6	2.4	5.3	6.3	54
Sm	mg/kg	0.030	0.050	0.10	0.17	0.71	95	0.030	0.060	0.093	0.15	0.18	22
Sn	mg/kg	0.40	1.2	2.3	5.2	11	136	0.70	0.80	1.1	2.4	4.1	32
Sr	mg/kg	13	20	36	64	300	327	34	48	58	93	110	54
Ta	mg/kg	BDL	BDL	BDL	BDL	BDL	136	BDL	BDL	BDL	BDL	BDL	32
Tb	mg/kg	BDL	BDL	BDL	BDL	0.090	95	BDL	BDL	BDL	BDL	BDL	22
Te	mg/kg	BDL	0.40	0.90	1.5	3.8	327	BDL	0.44	0.88	1.4	2.2	54
Th	mg/kg	BDL	0.10	0.20	0.40	3.1	327	0.10	0.20	0.20	0.37	0.70	54
Ti	%	BDL	BDL	0.0010	0.0040	0.27	327	BDL	0.0010	0.0020	0.0044	0.0060	54
Tl	mg/kg	0.15	0.42	1.1	2.6	8.8	136	0.18	0.25	0.34	1.1	2.2	32
Tm	mg/kg	BDL	BDL	BDL	BDL	0.040	95	BDL	BDL	BDL	BDL	BDL	22
U	mg/kg	BDL	BDL	0.50	2.2	4.6	327	BDL	BDL	0.10	1.5	3.5	54
V	mg/kg	8.0	17	25	38	320	327	7.0	12	23	30	36	54
W	mg/kg	0.10	1.0	2.3	4.6	33	327	0.60	0.76	1.9	6.1	8.9	54
Y	mg/kg	0.070	0.16	0.41	0.76	10	136	0.080	0.15	0.37	0.61	0.74	32
Yb	mg/kg	BDL	BDL	0.040	0.070	0.26	95	BDL	BDL	0.030	0.060	0.080	22
Zn	mg/kg	7.8	17	46	300	ADL	327	6.1	10	54	200	320	54
Zr	mg/kg	0.45	0.60	0.85	1.2	3.8	136	0.50	0.60	0.90	1.1	1.4	32

Figure 19 presents the content of Au, Ag and Cu in vertical profiles. It is evident that the tailing deposit is "homogeneously heterogeneous". Heterogenity is well visible in all drillholes. So it is reasonable to simplify the resources calculation process in a way to account the material in both field as "homogeneous" material and operating with median (or average) values for grades. Data from other boreholes shows similar patterns - large vertical and horizontal variations (Figure 20).

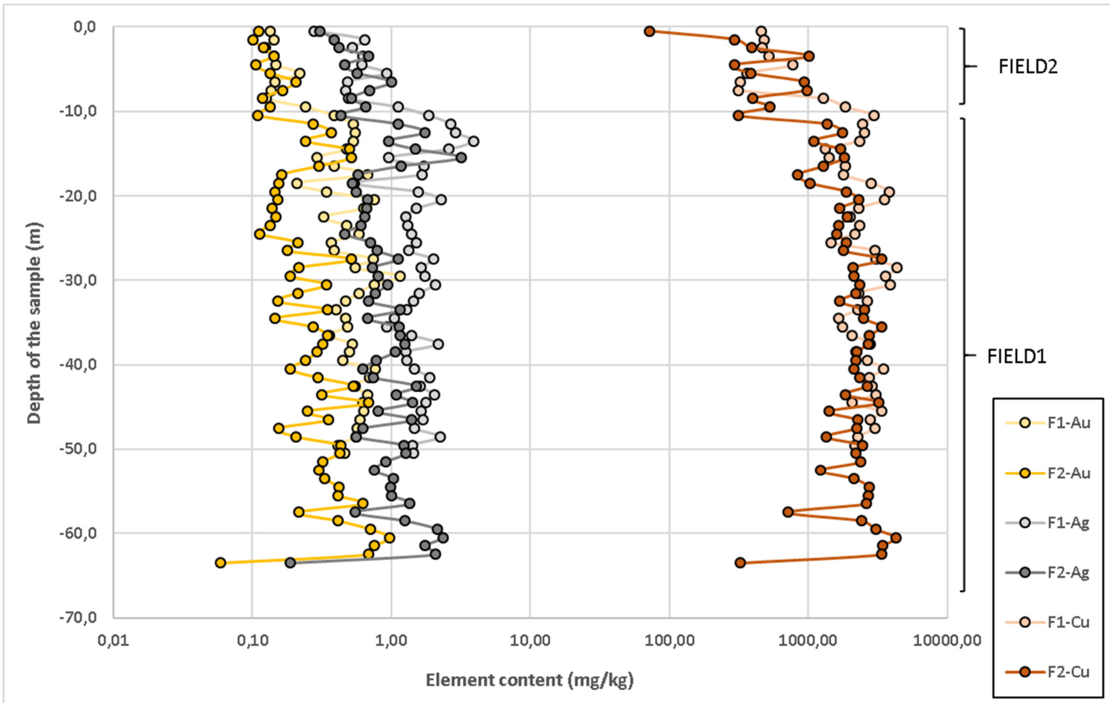

Figure 19: Distribution of Au, Ag and Cu through tailings (FUTURAM-1 (F1) and FUTURAM-2 (F2) boreholes).

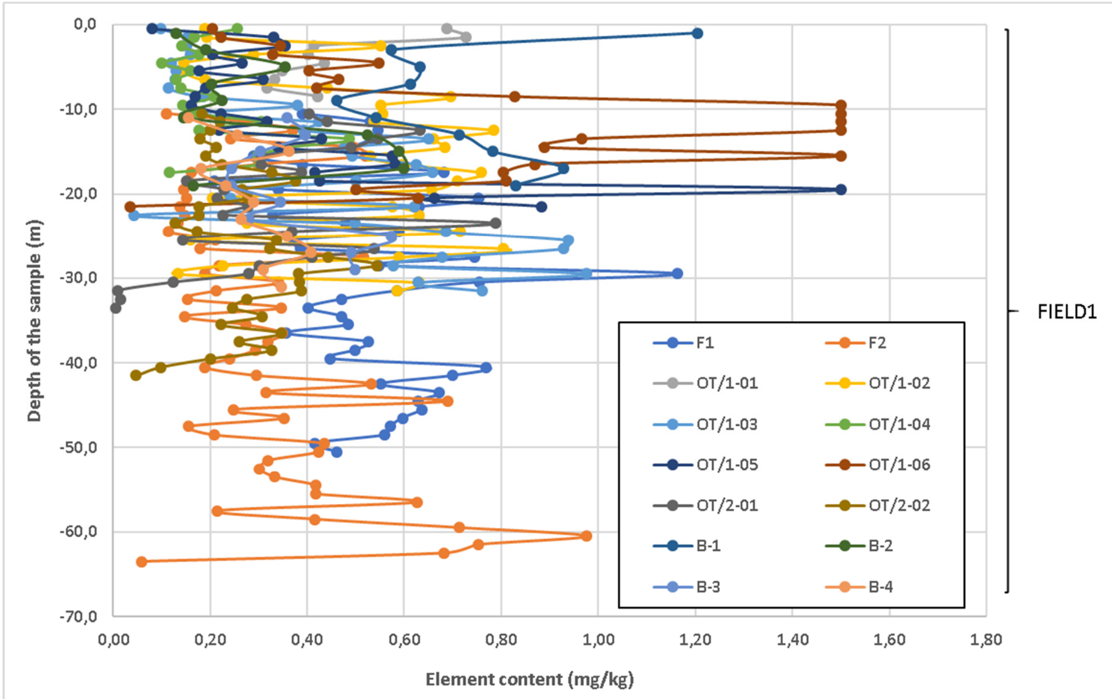

Figure 20: Vertical and horizontal variations in Au content in all boreholes through Field 1.

The results of granulometrical analysis are based on previous studies [18]. Composite sample from the FIELD 1 was assessed by its granulometric composition. The results show that 69.1% of the particles were smaller than 75 µm (Figure 21).

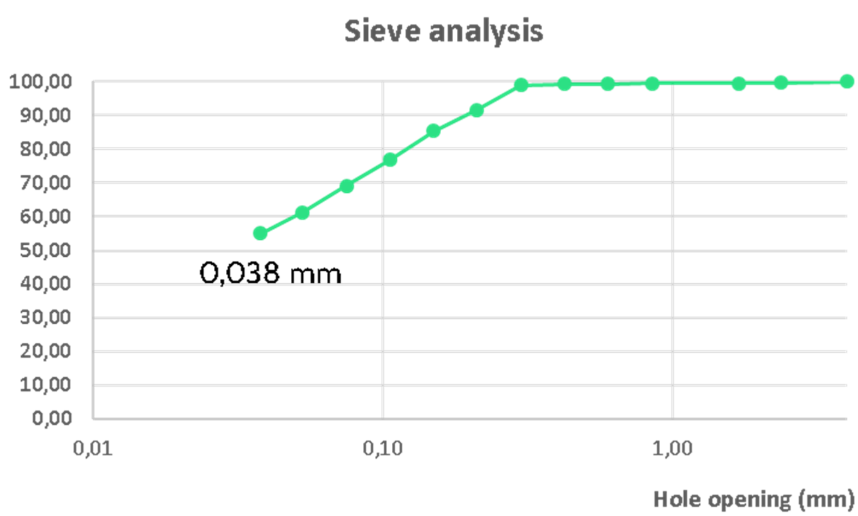

Figure 21: Sieve analysis of composite sample from Field 1 [18].

Mineralogical composition of the tailings was determined by the X-ray diffraction (XRD) on 4 selected samples from FUTURAM boreholes. Table 10 presents the identified mineral phases in samples, as well as the quantitative results of phase composition of samples obtained by standard Rietveld method.

Table 10: Identified mineral phases in samples and assessed quantitative composition.

Phases \ sample	F2 29-30	F2 60-61	F2 17-18	F1 26-27
Quartz (%)	62.5	67.9	56.0	66.2
Pyrite (%)	8.4	10.0	6.3	7.5
Kaolinite (Dickite) (%)	27.4	22.1	31.0	23.0
Gypsum (%)	1.7	-	5.2	3.3
Zeolite	-	-	1.5	-
goodness of fit	5.87	6.07	7.56	6.39
Cu (mg/kg)	2131	4293	840	1459
Au (µg/kg)	188	976	162	387

Figure 22 shows the obtained diffractogram, and identified peaks. The results show that main phases are quartz (between 56 and 67.9%), Kaolinite (probably Dickite; between 22.1-31%) and Pyrite (between 6.3 and 10%). Identified impurities are Gypsum and Zeolite minerals. Comparison of quantitative phase analysis revealed, that both, Au and Cu levels, could be positively correlated with quartz and Pyrite content, which might indicate, that both commodities are present in both mineral phases.

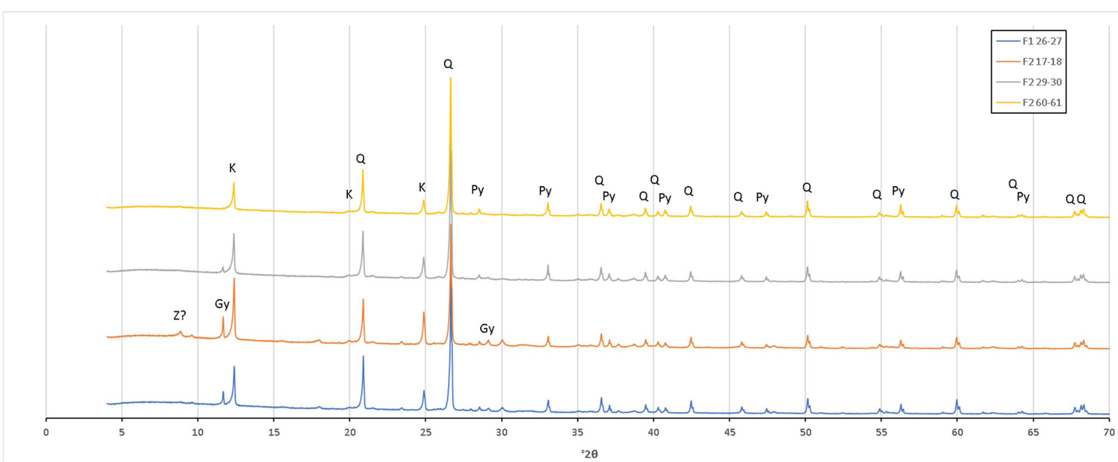

Figure 22: The results of X-ray diffraction measurements on 4 selected samples, and identified mineral phases. Q - quartz; Py - Pyrite; K - kaolinite minerals (probably Dickite); Gy - gypsum; Z? - probably zeolite peak.

Ore minerals from composite sample from the Field 1 was also inspected by polarisation optical microscope in a previous study [18]. The results from this assessment are: pyrite (approx. 20%), Culimonite (<1%), Rutile and Leucoxene (<1%) and traces of Enargite, Coveline, Digenite, Tetrahedrite, Chalcopyrite, Chalcocite, native Au, Magnetite, Hematite and Cassiterite.

Scanning electron microscope with energy dispersive spectroscopy (SEM/EDS) method was additionally applied to potentially detect the form of Au and Ag - whether they are contained within quartz or sulphides. Analysis was done by Barbara Čeplak at Geological survey of Slovenia. One sample from each FUTURAM borehole with the highest Au levels were selected: F1 (29-30 m) and F2 (60-61 m). The results show that Au and Ag are more or less evenly dispersed within observation fields, and it was impossible to precisely determine the sources of Au and Ag enrichments. The results of SEM/EDS observations are presented.

Sample F1 (29-30 m), Figure 23:

- no visible Au or Ag enriched particles, both elements seem to be evenly dispersed within the observation fields;
- Cu is predominantly contained within sulphides, as Covellite (CuS), Chalcopyrite ($CuFeS_2$) or as imputiry within Pyrite (FeS_2); minerals were identified solely on stoichiometry;
- detected impurities of Ti, Ba and As.

Sample F2 (60-61 m), Figure 24:

- no visible individual grains with Au or Ag enrichment, however it looks like that Au is more enriched in sulphides as within other types of grains;
- Cu is predominantly contained within sulphides, as Covellite (CuS), Chalcopyrite ($CuFeS_2$) or as impurity within Pyrite (FeS_2) and Baryte ($BaSO_4$); minerals were identified solely on stoichiometry;
- detected impurities of As, Pb, V.

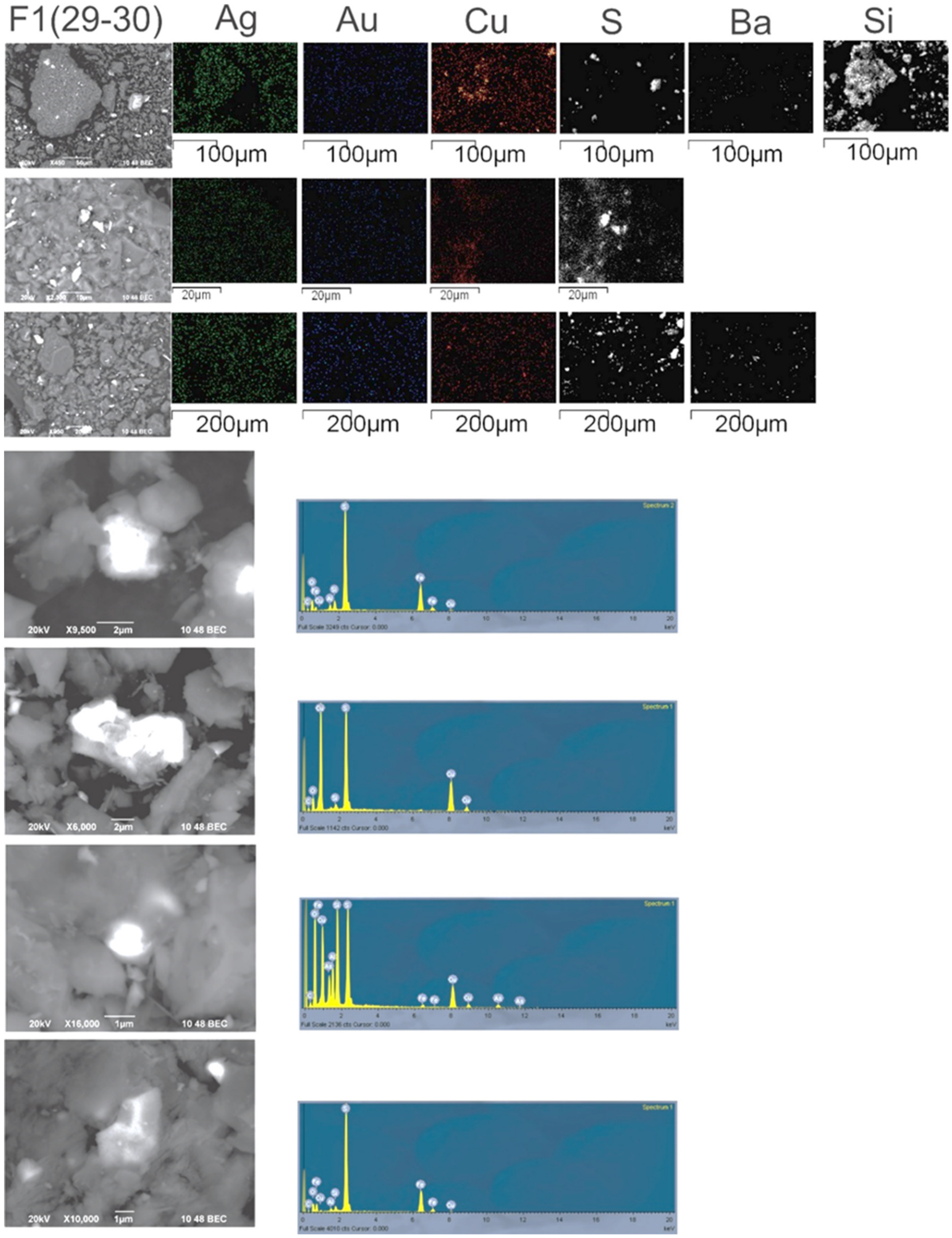

Figure 23: The characteristic results of SEM/EDS observation in sample F1 (29-30 m).

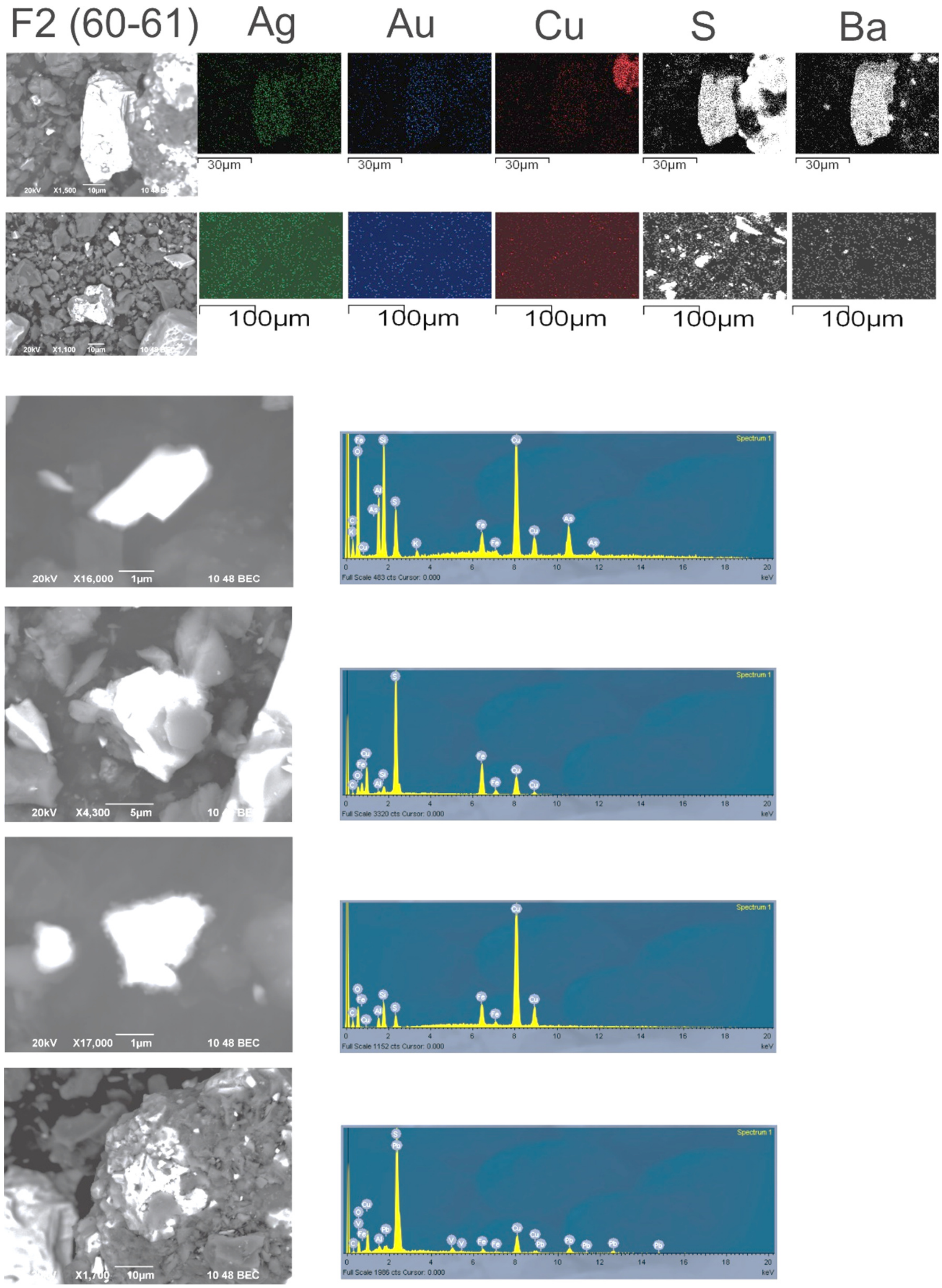

Figure 24: The characteristic results of SEM/EDS observation in sample F2 (60-61 m).

6.1.5. Description of the technological properties of the mineral raw material, assessment and analysis of possibilities and conditions for beneficiation and processing of mineral raw materials for semi-industrial and industrial investigations

The results shows that The Bor tailings (Filed 1 and 2) are fine-grained tailing deposit, composed of two different materials. The upper layer (upper 10 m) is low-grade tailings, which are under current level of prices on the global market and technological advancment not feasible for the extraction of metals. Lower horizon (below 10 m) is richer. Main identified commodities are Cu, Au and Ag, with average grades of 2,300, 0.36 and 1.4 mg/kg respectively. The results of the elemental determination from FUTURAM boreholes do not show any other significant enrichment.

The results of XRD and SEM/EDS analysis show, that Cu, Au and Ag occur in pyrite and quartz. Therefore additional milling would be required to release aforementioned commodities. After milling, there are two possible options: flotation, and/or hydrometallurgical extraction. Detailed assessment of potential metal extraction possibilities are outside the scope of this report.

Identified factors, which makes the extraction of this deposit favourable are:

- allready available infrastructure in the site, including new tailing deposit, flotation plant and hydrometallurgical plant;
- material is located on the surface, allowing cheap extraction using widely available machinery (excavator, dumper);
- material from the FIELD 1, which is relatively rich with metals, outcrops on NW side of the tailings, where extraction can begin and start bringing revenues, which can be used to remove materials from the FIELD 2 to unlock the majority of material from the FIELD 1;
- high quantities of the material;
- low investments needed;
- 3 commodities can be extracted;
- societal aspect – inhabitants of Bor are used to mining and ore benneficiation and smelting activities and they generally do not oppose it.

Identified factors, which makes the extraction of this deposit unfavourable are:

- unfavourable overbuden of material in FIELD 2, which needs to be removed and deposited, before unlocking majority of the deposit;
- additional grinding would be needed;
- requirement for deposition of the material after processing;
- Cu, Au and Ag grades are low by todays standards;
- recovery rate and cut-off grade still needs to be established by semi-industrial tests;
- economical simulations are needed to valorise, whether extraction of FIELD 1 in NW part will bring enough revenue to allow removal of the material in FIELD 2, to gain the access to the majority of the richer tailings.

7. OVERVIEW OF SOCIAL, ENVIRONMENTAL, LEGISLATIVE AND TECHNICAL ASPECTS

7.1. Environmental aspects

Protected areas are areas that have a pronounced geological, biological, ecosystem and/or landscape diversity and are therefore declared protected areas of general interest by a protection act. The evaluation, or determination of the value and significance of a protected area in the Republic of Serbia, is carried out according to the Regulation on Evaluation Criteria and the Procedure for Categorizing Protected Areas [47]. Accordingly, protected areas are classified into 3 categories: of exceptional (international, national), major (provincial/regional) and local importance.

Protected areas are classified into 7 types, namely: strict nature reserve, special nature reserve, national park, natural monument, protected habitat, landscape of exceptional features and nature park. An overview of the types of protected areas is given in the Law on Nature Protection [48].

More than 100 years of exploitation of mineral raw materials in the Bor region have produced about 1,000,000,000 tons of mining waste, which today represents a major problem both due to its negative impact on the environment and its negative impact on human health. Disposal of mining waste into the environment has a negative impact on all aspects of the environment, especially negative impacts on soil, water and air. In addition, the negative impact of disposed mining waste also has a major impact on protected areas in the Republic of Serbia.

In the Republic of Serbia, there are several Laws that are relevant to nature protection:

- Law on Nature Protection ("Official Gazette of the Republic of Serbia" No. 36/2009, 88/2010, 91/2010-amendment, 14/2016, 95/2018-other law and 71/2021) [48];
- Law on National Parks (“Official Gazette of the Republic of Serbia”, No. 84/2015 and 95/2018-other law) [49];
- Law on Environmental Protection (“Official Gazette of the Republic of Serbia ”, No. 135/2004, 36/2009, 36/2009-other law, 72/2009-other law, 43/2011-US, 14/2016, 76/2018 and 95/2018-other law) [50];
- Law on Protection and Sustainable Use of Fish Stock (“Official Gazette of the Republic of Serbia ”, No. 128/2014 and 95/2018-other law) [51];
- Law on Strategic Environmental Impact Assessment (“Official Gazette of the Republic of Serbia ”, No. 135/2004 and 88/2010) [52];
- Law on Environmental Impact Assessment ("Official Gazette of the Republic of Serbia", No. 135/2004 and 36/2009) [53].

Figure 25 shows protected natural areas in the Republic of Serbia in relation to the Old Bor flotation tailing pond.

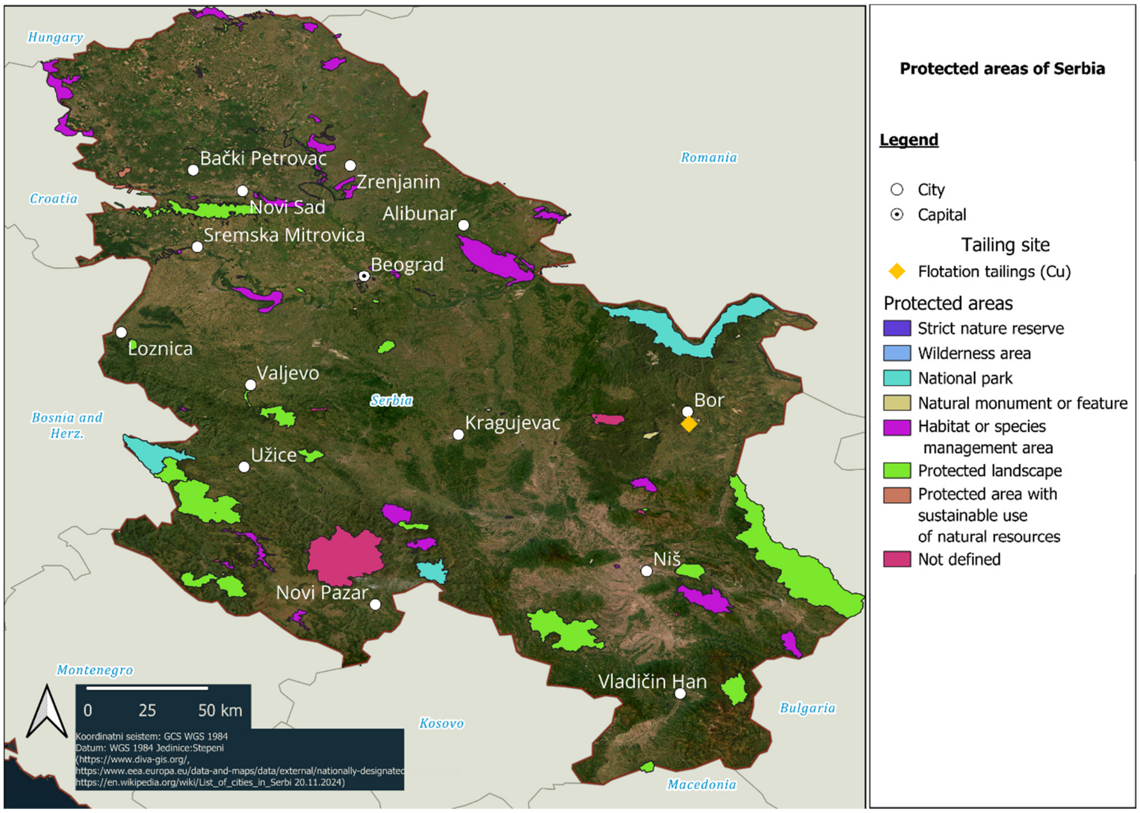

Figure 25: Protected areas of Serbia.

7.1.1. Air pollution

According to the *Report Environmental Situation In Bor – Serbia (2020)* [54], open-pit copper mining and pyrometallurgical copper production from sulfide concentrates are the primary sources of environmental pollution. Dust from tailings and flotation tailings causes soil pollution. Due to the operation of the Mining and Metallurgical Complex, Bor is one of the places with the highest air pollution in Serbia, as well as in the region. Air pollution is perceived as the main environmental problem in Bor. The copper smelter, a part of the Mining−metallurgical Complex Bor, represents a major source of air pollution with SO_2, heavy metals in particulate matter and aero sediments .

The ore melted in the copper smelter plant in Bor is of chalcopyrite-pyrite type with the increased contents of arsenic, which is found in the form of FeAsS and Cu_3AsS_4. Emissions from the smelting process are:

- exhaust gases from smelting and converter furnaces containing particulate matter, heavy metal oxides/sulphates, and sulfur dioxide,
- gas from the sulfuric acid plant, containing 0.12 % SO_2 plus 40-60 mg SO_3/m^3,
- exhaust gas from the anode furnace containing oil and particle combustion products and
- blown particles from external storage areas and dirty roads.

In addition to the concentration of pollutants, meteorological parameters also have a great influence on the air quality of an area: air temperature, air pressure, air humidity, wind direction and speed, absence of wind, amount of precipitation, presence of fog. To display the climate values, data from the Department of Meteorological Measurements of MMI Bor were used.

Figure 26 shows a graphical representation of the wind rose for the period January - December 2024.

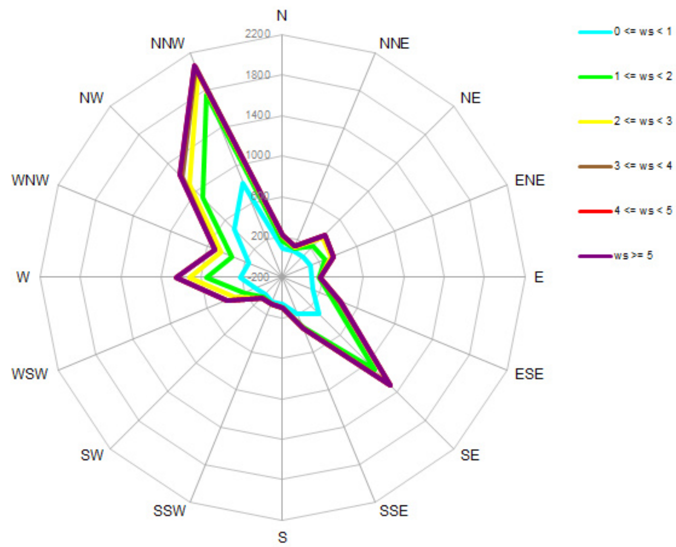

Figure 26: Graphical representation of the wind rose for the period January - December 2024 [55].

Figure 27 shows a graphical representation of the average wind speed from individual directions, for the period January - December 2024.

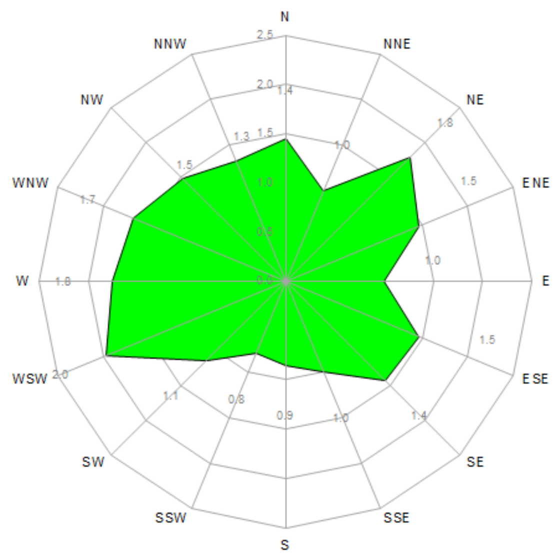

Figure 27: Graphical representation of the average wind speed from individual directions, for the period January - December 2024 [55].

Table 11 shows the weather conditions in Bor, in the period 01.01 - 31.12.2024.

Table 11: Weather forecast in Bor, in the period 01.01 - 31.12.2024 [55].

Moon	Maximum temperature (°C)	Minimum temperature (°C)	Average temperature (°C)	Relative humidity (%)	Pressure (hPa)	Precipitation[1)] (mm/m²)
January	15.7	-10.6	1.54	83.28	974.07	19.1
February	19.30	-1.83	7.89	75.17	971.99	0.4
March	26.06	-0.11	8.46	80.04	969.24	45.6
April	29.57	0.79	13.86	66.57	971.12	35.6
May	25.04	6.15	15.07	83.12	970.75	67.2
June	32.90	10.84	22.50	73.69	969.92	66.1[2)]
July	36.55	13.48	24.76	61.70	969.41	49.0
August	37.50	13.27	24.58	57.53	969.70	9.6
September	32.70	6.33	17.52	72.09	970.11	34.6
October	25.92	1.80	12.26	77.05	976.27	6.0
November	17.34	-5.23	4.63	82.38	977.78	38.6
December	16.53	-3.27	3.02	90.98	975.85	89.8[2)]
data downloaded: AWS Bor City Park [SEPA] [1)] ***data downloaded: meteorological station MMI Bor*** [2)] ***data downloaded: http://meteomanz.com/ (13289 Crni vrh)***						

The official Air Quality Status in Bor can be observed through the reports of the Environmental Protection Agency of the Republic of Serbia [56].

Based on statistical data on the concentration of pollutants during 2023 for the city of Bor, it can be concluded:

- The average annual value of SO_2 did not exceed the limit value of 50 μg/m³ at any measuring station in Bor. The permitted number of days with an exceedance during one calendar year is three. The hourly limit value of 350 μg/m³ was exceeded at the stations: Bor Gradski park for five hours and Bor Brezonik for one hour. The permitted number of hours with an exceedance in a calendar year is 24.
- During 2023, there was no exceedance of the annual NO_2 limit value (40 μg/m³) or the 19` value in the descending series of maximum hourly concentrations (150 μg/m³).
- During 2023, there was no exceedance of the annual PM_{10} limit value (40 μg/m³).
- Indicative measurements of suspended PM_{10} particles did not show, taking into account their average annual values, that there was pollution (the annual limit value is 40μg/m³), but the daily limit value (1 μg/m³) was exceeded at the Bor Jugopetrol for two days.

Heavy metals in the PM_{10} fraction of suspended particles - Fixed measurements, i.e. 50% of the time coverage during the year:

- Lead measurements showed that the annual limit value of 500 μg/m³ was not exceeded at any station. The daily limit value, 1000 μg/m³, was exceeded at the Bor-Jugopetrol station a total of two times during 2023, with the maximum measured value being 1275 μg/m³. At the Bor Gradski Park measuring point ten times, with the highest measured daily concentration being 6260 μg/m³.
- The highest arsenic concentrations in 2023, were measured in Bor, where arsenic exceeded the annual target value (6 μg/m³), and the following average annual concentrations were recorded: Jugopetrol 39.8 μg/m³, Bor Gradski park 24 μg/m³ and Brezonik 7.7 μg/m³.

- The average annual concentration of cadmium (5 μg/m^3) was exceeded at the measuring points Bor Jugopetrol (10 μg/m^3) and Bor Gradski park (9 μg/m^3).
- The average annual nickel concentration (20 μg/m^3) did not exceed the target value at any measuring point in Bor.

The graph shows the average annual values of arsenic, cadmium and nickel in Bor (Figure 28).

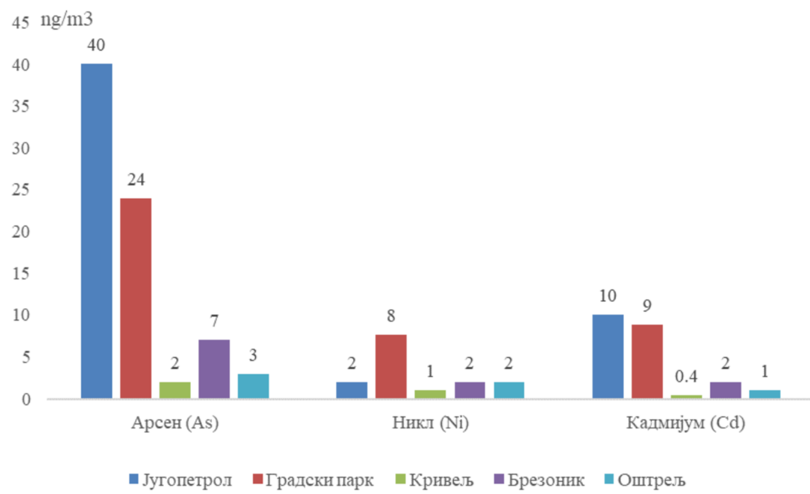

Figure 28: The average annual values of arsenic, cadmium and nickel in Bor [56].

The air quality assessment in the Republic of Serbia based on the 2023. report is as follows: In the Bor agglomeration, the air was in category III (excessively polluted air where limit values for one or more pollutants are exceeded), excessively polluted air, due to exceeding the limit value for suspended particles PM_{10} and lead [56].

7.1.2. *Soil pollution*

It was reported [11] that the town of Bor, which was built in the immediate vicinity of the mine, as well as the site of the copper smelting plant and two other mines nearby, which are comprised by RTB Bor (the Copper Mining and Smelting Complex Bor), the town itself represents a serious environmental hotspot in Serbia and Europe. According to 2002 data, 207 Mt of flotation tailings, 450 Mt of overburden and 23 Mt of slag were disposed of on the territory of Bor municipality. Over 68 % of the Bor mining area has been ruined by waste dumps and tailing ponds. In the Bor Copper mine, the dam slopes of the flotation tailings pond have been recultivated. However, the horizontal area, which is the source of mineral dust, has not been recultivated. Consequently, the dust is dispersed towards the urban area and the areas of fertile land depending on the wind rose and precipitation. In 1950s a municipal sewage collector, which was located underneath the Bor flotation tailing pond, was damaged causing the tailing spill, which was turned the banks of the Borska and Veliki Timok Rivers into a wasteland. On that occasion more than 2500 ha of the most fertile land were ruined. Apart from being the largest source of mineral dust, acid mine drainage (produced and maintained as a result of pyrite oxidation through bacteriochemical process) in the vicinity of boron tailings is a major problem, leading to the leaching of hazardous metals and metalloids (Cu, Fe, Zn, Cd, Pb, Ni, As, Mn, etc) out of the tailings and contaminate the surrounding ground and surface waters, sediments and soil [11, 13, 16]. It was found [11] that the surrounding soil is heavily contaminated with metallic elements, particularly Cu, Fe and As with the mean concentrations being 1585.6, 29,462.5 and 171.7 mg/kg, respectively. Native plants growing in these soils accumulated much higher concentrations of Cu, Fe and Zn a to a lesser extent Mn, Pb and As. In most of the investigated plants, the highest concentrations were found in the root. However, none of these plants had the suitable shoot metal concentrations to be classified into hyperaccumulators. Leaching (in accordance with SRPS EN 12457-2) and toxicity tests (EPA Test Method 1311 - TCLP) applied on Bor flotation tailings showed that it is a dangerous and toxic waste, particularly Cu and Zn, demonstrating it is a constant source of water, soil and air pollution [58]. The authors investigatied the drainage water of the Bor flotation tailings and found that Cu, Zn, Cd, Ni and Fe concentration values were above the above the permissible values according to the requirements of surface water Class IV of the applicable Rules on dangerous substances in water. Thus drainage water presents a pollution source of the Bor River [58].

In somewhat more recent research [59] the results of the physicochemical characterization of soil samples from the coastal areas of the Bor River were presented. The authors analyzed the following parameters: moisture content, pH value, bulk density, specific gravity, grain size distribution, chemical composition, toxic characteristics -TCLP Method and leaching test - Method for characterizing waste leaching. Based on the obtained analyses, a large number of the examined elements represent major soil pollutants and play a decisive role in soil pollution in Bor, and ultimately a major negative impact on the environment in Bor. The authors conclude that the main sources of pollutants originate from the activities that occur in the copper production process at RTB Bor.

Industrial and mining waste is transported into the Bor River, and in this way these pollutants pollute both surface and groundwater in Bor. In addition to contamination from the air, precipitation causes flooding of rivers and contamination of the coast, which results in a high concentration of heavy metals and metalloids in the soil and even in the water.

7.1.1. ***Water pollution***

The main source of waste waters in Bor is waste water created in mining and metallurgical activities for copper production. Based on the measured concentraction of Fe, Pb, Zn, Cu, Cd, Ni, Cr and As in the Bor river and the conducted characterization of river sediment, the impact of the copper production industrial combine on the quality of the Bor river is provided. As it can be seen in Figure 29 there are 7 different places where wastewaters enter natural water streams of Krivelj and Bor Rivers. They are presented as:

1. Wastewater from open pit “Veliki Krivelj”,
2. Wastewater of Saraka stream,
3. Open pit Bor wastewater,
4. Wastewater of flotation dam 1A of flotation tailings pond “Veliki Krivelj”,
5. Wastewater of flotation dam 3A of flotation tailings pond “Veliki Krivelj”,
6. Wastewater from lake “Robule”,
7. Collective wastewater from open pit Bor and copper smelting and refinery plants.

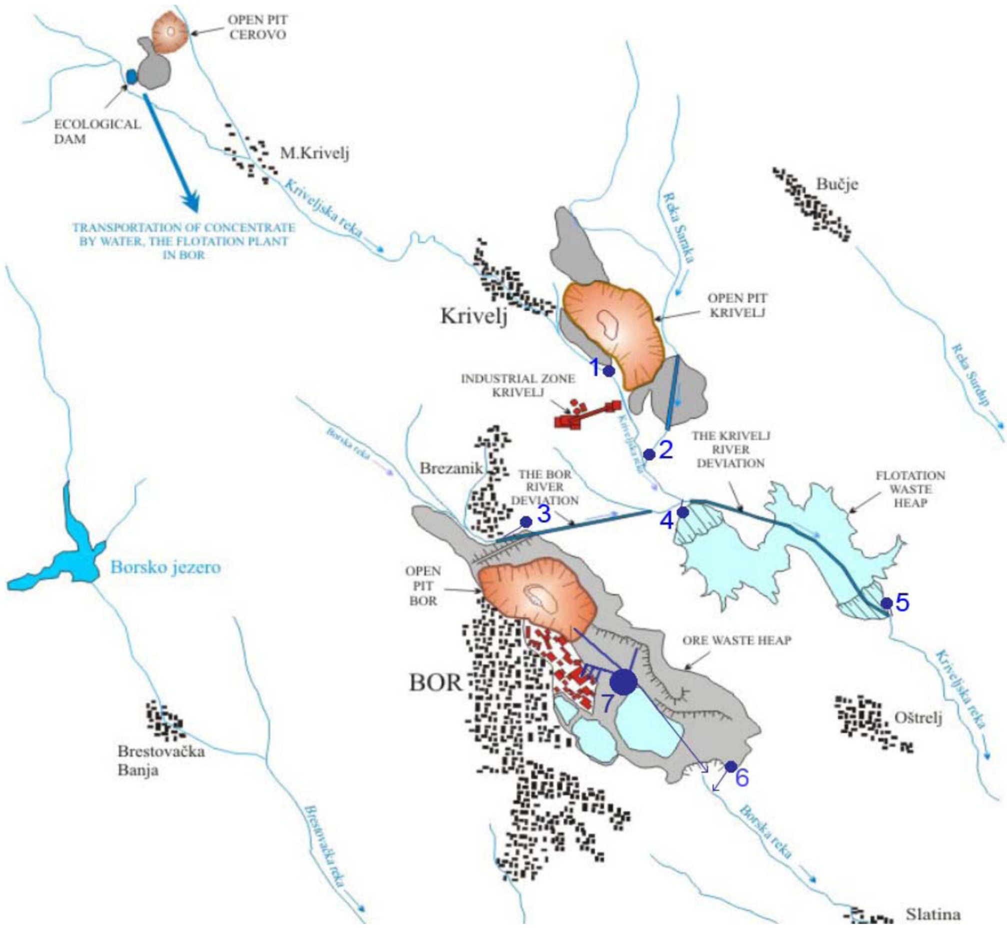

Figure 29: *Waste water generated in Bor mining complex* [60].

In the Republic of Serbia, surface water protection is in accordance with the legal regulation that has classified water into four classes according to the level of pollution and use. According to the previous research [60] surface waters within the Bor River cannot be classified (by their composition) even in class IV and belong to waters with high levels of potentially toxic elements (heavy metals) according to the maximum permitted concentration levels. Such pollution has a very significant negative impact on the health of the inhabitants of the town of Bor, and especially the village of Slatina, which is located downstream of the town of Bor and the industrial complexes that pollute the Bor River, which flows through the village itself. The level of pollution of the Bor River increases with increasing production, which is very critical at the current level of production in the ZI Jin company [60].

7.1. Social aspects

According to the Statistical Office of the Republic of Serbia the town of Bor is located near the Old Bor flotation tailings pond (Field I and Field II). According to the 2022. census, the town's administrative area has 40,845 inhabitants, while the Bor Administrative District has 115,905 inhabitants (Municipality/town of Bor, Majdanpek, Kladovo and Negotin). The Bor District covers an area of 3,507 km^2, while the Bor Municipality covers an area of 856 km^2. The population density of the municipality is 47.7 inhabitants per 1 km^2 in 14 settlements. In total there are 16,583 households, and households are averaged of 2.5 people [61].

Acoording to the contents described in the previous chapter (chapter 7.1 Environmental aspects) Old Bor flotation tailings represent highly toxic materials for both ecosystems and humans; for this reason, mine tailings must be handled carefully in a responsible and controlled manner to avoid socio-environmental impacts due to potential spills, leaks, or collapses of tailings storage facilities.

The City Assembly is a representative body that performs the basic functions of local government, established by the constitution, law and statute.

The City Council is a body that coordinates the exercise of the functions of the Mayor and the City Assembly and performs a control and supervisory function over the work of the city administration.

The City Administration is formed to perform administrative tasks within the rights and duties of the City and certain professional tasks for the needs of the City Assembly, the Mayor and the City Council.

The City Administration is headed by the Mayor.

The Mayor performs an executive function in the city. The Mayor is elected by the City Assembly from among the councilors.

Public enterprises operating within the city of Bor are: PE "Toplana"; PE "Vodovod"; PE "3. Oktobar"; PE for housing services; PE "Bogovina"; PE "Zoo"; PE "Business Incubator Center".

There are about 370 associations and other non-governmental organizations registered in the city of Bor.

They have Strategies and Plans, but most of the strategies and plans have gone beyond the time categories:

1. Local waste management plan of the city of Bor for the period 2023-2032. years, 2023., Bor; Local action plan for gender equality of the city of Bor for the period 2021-2024. years, 2021., Bor;
2. Short-term action plan for reducing air pollution in the city of Bor, 2021., Bor;
3. Strategic plan for social policy of the city of Bor for the period 2019 – 2023, Bor.

The social aspects of the Bor district and the city of Bor can be seen by looking at the reports of the Republic Institute for Statistics of the Republic of Serbia. The average net and gross wages for the year 2024. in the Republic of Serbia, the Region of Southern and Eastern Serbia, the Bor region and the city of Bor are given in the Table 12 [61].

Table 12: The average net and gross wages for the year 2024.

	Average net earnings [RSD]	Average gross earnings [RSD]
Republic of Serbia	98143	135403
Region of Southern and Eastern Serbia	84083	116330
Bor region	100654	139709
Bor	113893	158118

As can be seen from the report, the average net and gross earnings are the highest in the city of Bor thanks to the developed industry, a large number of employees in the mining sector, processing of mineral raw materials and related activities related to the mining industry.

By reviewing the "Analysis of the health status of the population of Bor District in the period from 2018 to 2022, issued by the Institute for Public Health "Timok" Zaječar, October-December 2023, almost all aspects of the impact of mining activities on the population of Bor can be seen [62].

In the territory of the municipality of Bor, the employment rate is constantly fluctuating, with an upward trend. The lowest employment rate was in 2018. (with a rate of 277.7‰), and the highest was in 2022. (396.4‰). Therefore, the average annual employment rate in the observed five-year period is higher in the municipality of Bor than in the district of Bor, with 320 employees per 1000 inhabitants, or 280.6‰. In the observed five-year period, there were an average of 488 employees per 1,000 working-age residents in the municipality of Bor [62].

The municipality of Bor has an average annual unemployment rate of the working population, in the period from 2018. to 2022., 135.5 ‰. The unemployment rate is constantly decreasing from 166.8 ‰ (2018) to 109.6 unemployed per 1000 working population in 2022. The level of the unemployment rate reached is slightly higher compared to the Bor district in the observed period. The share of the female population in the total number of unemployed in 2022. is 69.2 % [62].

The distribution of the population, according to gender and age, is graphically represented by the ***age pyramid (tree of life, arbor vitae)***. *Figure 30* shows the age pyramid of the population of the Bor district and the municipality of Bor in 2022., by gender. The shape of the pyramid has changed and it increasingly takes on the appearance of an "***urn***" or "***vase***", characteristic of the demographically ***old*** population [62].

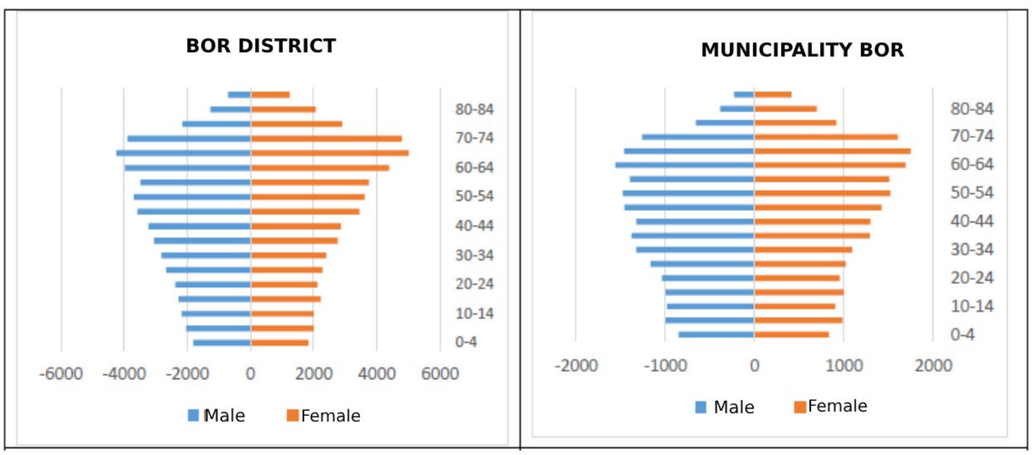

Figure 30: Age pyramid of the population of Bor District and Bor Municipality in 2022., by gender [62].

The population of the municipality of Bor has an average age of 44.8 years, which is lower than that of the Bor district, according to the data of the 2022. population census. By gender, the average age for men is 43.3 years, and for women 46.2 years. The share of the population aged 65 and over in the total population of Bor district (***maturity of the population***) shows that the population is very old, that is, the share of the defined age group of the population is greater than 10 % [62].

The rate of masculinity, i.e. the number of men per 1000 women in 2022., in the area of Bor District is 958. The rate of masculinity is negative in all municipalities of Bor District. In the municipality of Bor, there is a negative rate of masculinity, with a total of 956 men per 1000 women in 2022. The birth rate in the area of the municipality of Bor is extremely low in the observed five-year period, because the value is constant from 7.4 ‰ to 8.7 ‰. The municipality of Bor represents a low birth rate area. The general fertility rate of the female population of the municipality of Bor is constantly fluctuating from 44.2 ‰ in 2022. to 35.4 ‰ in 2020. The general mortality rates of the population of the municipality of Bor are very high, with a tendency to fluctuate slightly. From 16 to 24 people died per 1000 inhabitants.

In the territory of the municipality of Bor, in the period from 2018. to 2022., life expectancy at birth is on average around 74 years, with a decreasing trend to 72 years in the last two years of observation. During the observed five-year period, the group of diseases of the circulatory system has the largest share in the mortality of the population of the municipality of Bor, with a share ranging from 40.6 % (in 2021.) to 56.3 % (in 2019.). Tumors are the second leading cause of death, with around 20 % of all deaths. In third place in terms of frequency are diseases of the respiratory system or symptoms, signs and pathological clinical and laboratory findings, until 2020., when Covid-19 is third in terms of mortality until 2022., except for 2021., when it is second.

The conclusion of the "Analysis of the health status of the population of Bor District in the period from 2018. to 2022., issued by the Institute for Public Health "Timok" Zaječar, October-December 2023. in the light of vital demographic characteristics is [62]:

- Reduction of the total number of inhabitants.
- Demographically very old population.
- Negative rate of masculinity.
- Extremely low birth rate.
- Low overall fertility rate.
- Very high general mortality rates (over 15‰).
- Negative natural increase (white plague).
- Very low infant mortality rates (less than 10‰).
- The leading causes of death are CVD and tumors.
- Very unfavorable socio-economic indicators.

In 2020, the Republic of Serbia published the publication "Improving the management of contaminated sites in Serbia", which is the result of the project "Strengthening Serbian national capacities and inter-sectoral synergies for safe management of contaminated sites and related hazardous substances to prevent negative impact on human health and the environment"). This study was prepared by the Ministry of Health and the Ministry of Environmental Protection with the participation of the Environmental Protection Agency in 2018. and 2019. and with the financial and technical assistance of UNEP and WHO. The publication presents an assessment of exposure to industrial pollution on the health of the population in Bor. Perhaps the conclusion of this part of the Elaborate could be a quote of the most important results from this study [63]:

- For all malignant tumors except skin tumors, there is a significantly higher risk of disease in men and women. This pattern is observed for specific sites of cancer localization, including cancer of the colon and rectum, pancreas, kidney, bladder, thyroid gland, lymphopoietic tissue, Hodgkin's and non-Hodgkin's lymphoma, leukemia and mesothelioma, and a significantly higher risk of lung cancer was registered in both men and women in Bor.
- For all malignant tumors except skin tumors, a significantly higher risk of dying was observed in both men and women in Bor. As with disease, this pattern is observed for bronchial and lung cancers, as well as certain specific cancer sites including liver, pancreatic, melanoma, bladder, lymphopoietic tissue, non-Hodgkin's lymphoma, and myeloid leukemia. The same pattern was observed in deaths from cervical and ovarian cancer in women, as well as prostate and testicular cancer in men.
- Analysis of mortality for all causes of death due to diseases of the circulatory system, respiratory, digestive and urogenital diseases, it was observed that there is a higher risk of mortality in Bor in almost all groups in both men and women. A higher risk of dying in both sexes was registered for all diseases and disorders, diabetes mellitus, diseases of the circulatory

system, diseases of the respiratory system, as well as for congenital deformations, malformations and chromosomal aberrations.

7.2. Legal and regulatory framework

The ownership of The Old Bor flotation tailings pond (Field I and Field II) is quite confusing. The tailings pond is located within the ZiJIn Copper Exploitation Field, however the exploration area belongs to MMI and in the real estate cadastre MMI is registered as the manager.

In the Republic of Serbia, there are relevant laws of the exploitation and processing of mineral raw materials, which can be listed in the following order:

- Law on Mining and Geological Exploration ("Official Gazette of RS", no. 101/2015, 95/2018, 40/2021) [64];
- Law on Waste Management ("Official Gazette of RS", no. 36/2009, 88/2010, 14/2016, 95/2018) [65];
- Rulebook on classification and categorization of solid mineral resources and the way to keep the evidence, 1979. Official Gazette of SFRY 53/79 (in Serbian) [66];
- Rulebook on conditions, criteria and content of projects for all types of geological research (Official Gazette of RS", no. 45/2019, 72/2021) [67];
- Law on Environmental Protection ("Official Gazette of RS", No. 135/2004, 36/09 and 36/2009, 72/2009, 43/2011, 14/2016, 76/18 and 95/18) [50];
- Law on Nature Protection ("Official Gazette of RS", no. 36/2009, 88/2010, 91/2010, 14/2016, 95/18 and 71/21) [48];
- Law on Fire Protection ("Official Gazette of RS", No. 111/2009, 20/2015, 87/2018, 87/2018) [68];
- Law on Free Access to Information of Public Importance ("Official Gazette of RS", No. 120/2004, 54/2007, 104/2009 and 36/2010) [69];
- Law on Chemicals ("Official Gazette of RS", No. 36/2009, 88/2010, 92/2011, 93/2012 and 25/2015) [70];
- Law on Science and Research ("Official Gazette of RS", No. 49/19) [71].

Legal framework for drilling, drilling monitoring and sampling is defined by the "Law on Mining and Geological Exploration" [64], and for drilling within the exploitation field no permits are required. For all tests and analyses the most important laws are "Law on Environmental Protection" [50] and "Law on Waste Management" [65].

Mining waste management is based on "Law on Mining and Geological Exploration" [64]. The development of mining waste management is related to "Regulation on Conditions and Procedure for Permit of Waste Management, as well as criteria, characterization, classification and reporting on mining waste". The Regulation was published in the Official Gazette of RS No. 53/2017, and became valid on 01.01.2020. This regulation is compliant with the European Extractive waste "Directive 2006/21 / EC" [6] and Amending "Directive 2004/35/EC" [72].

These are the basic laws related to the exploitation and processing of mineral raw materials. However there are still a large number of laws, regulations, instructions and plans and strategies.

Development and adoption of a Strategy for the management of mineral and other geological resources of the Republic of Serbia for the period from 2025. to 2040., with a projection until 2050. is in progress. The strategy will be completed in 2025.

Government of the Republic of Serbia has adopted the Waste Prevention Plan in the Republic of Serbia, one of the strategic documents in this area, which aims to stimulate the development of green technologies, new industries and employment opportunities in the recycling, repair and sustainable product design sectors [73].

On 19 July 2024, in Belgrade, the EU and the Republic of Serbia signed a Memorandum of Understanding (MoU) launching a Strategic Partnership on Sustainable Raw Materials, Battery Value Chains and Electric Vehicles. The Partnership is based on the Stabilisation and Association Agreement (SAA), which entered into force on 1 September 2013, and is in line with the EU's New Growth Agenda for the Western Balkans [74].

Five areas of cooperation between the EU and Serbia have been defined [75]:

- Enhance the development of value chains for raw materials, batteries and EVs;
- Cooperation on research and innovation (R&I);
- Application of high environmental, social and governance standards and practices;
- Mobilisation of financial and investment instruments;
- Developing necessary skills for high-quality jobs in raw materials and battery sectors.

The signed agreement builds a partnership on raw materials, following the Action Plan on Critical Raw Materials [76] and the EU Law on Critical Raw Materials (CRM Act) [77].

7.3. Old

7.4. Procedures and technologies for the treatment and recycling of raw materials recovery

In a previous study [11] studies on valorisation of valuable components from the Bor waste dumps, which were carried out in the period from 1963 and 1987 were summarised, as follows. Copper and pyrite recovery were investigated by applying the flow sheet used at Bor flotation plant. However the results of Cu recovery were not satisfactory (leaching with sulfuric acid resulted in relativelly low copper dissolution values, which was a limiting factor for further treatment of tailings), but a pyrite concentrate of commercial value could be obtained. The process sheet was proposed, however the explorations have not been completed and were therefore only preliminary. After 1987 due to tough political situatuions the investigations on recovery stopped, which have been nowadays again under considerations due to environmental and economic benefits coupled with scientific and technological developments of processing techniques. In the Table 13 studies performed to improve knowledge on the Bor tailings raw materials potential recovery are summarized. An overview of some researched methodologies for extraction of useful elements (among others including also Cu, Fe and Au) from mining waste in general is also available in an open-source paper [9].

Table 13: An overview of previous studies targeting development of procedures and technologies for extraction of raw materials from the Bor tailings.

Sampled material and its chemical contents	Method	Results	Reference
A composite of the cores from all the boreholes in Fields I and II sampled at depth 16-40 m in 1998; Cu = 0.2 %, Fe = 8,96 %, Zn = 0.003 %, As = 0.014 %, S =	Laboratory scale: Leaching with sulphuric acid in the absence and presence of oxidants to determine kinetics in copper and iron dissolution affected by various factors: the pH value of the leach	average copper and iron recovery: from 60% to 70% and from 2% to 3%, respectively	[11]

Sampled material and its chemical contents	Method	Results	Reference
10.58 %, Au = 0.35 g/t, Ag = 3.0 g/t, SiO_2 = 53.34 % and Al_2O_3 = 8.52 %	solution, stirring speed, pulp density, particle size, concentration of ferric ions, temperature and time for leaching		
Bor tailing sample- the depth and location of sample not given; Cu = 0.24 %, Fe = 3.51 %, Al = 3.45 %	Laboratory scale: Mineral separation type flotation machine	Cu recovery of 60 %	[12]
104 samples collected from two depths (5m & 10 m) at Field I (19 places) and Field II (33 places) Cu = 0.112-0.25 %, S = 5.11-8 %, Au = 0.21-0-39 g/t, Ag = 1.28-1.57 g/t, SiO_2 = 60-69.3 % and Al_2O_3 = 11.3-14.4 %	Laboratory scale: Acid leaching followed by re-flotation of the solid leach residue - experimental conditions and the procedure	The total copper and sulfur recovery: 83-85 % and 77 %, respectively	[13]
sample obtained 14 m below the ground surface of the tailings dam Cu = 0.24 %, Fe = 3.51 %, 3.45 %, 4.88 %, SiO_2 = 61.7 %	Laboratory scale: a combination of high-pressure oxidative leaching (HPOL), solvent extraction (SX) and electrowinning (EW)	Cu recovery after HPOL = 94.4 %, after SX = 93.7%, after EW = 95 %	[14]
A 30 kg sample prepared from approximatelly 100 samples collected from drillholes obtained during RisCuRE project Cu = 0.4 %, Fe = 8 %	Laboratory scale: static and percolate bioleaching in alkaline and acidic environments	Recovery of Copper = 74 %	[16]
Composite sample I + III including old French tailings / Field 1 Cu = 0.25 % Fe = 7.62 %, Ca = 0.78 %, K = 0.54 %, Na = 0.23 %, S = 9.34 %, SiO_2 = 52,88 % and Al_2O_3 = 10.76 %, Au = 0.45 ppm, Ag = 1.4 ppm, Sr = 648 oom, As = 122 ppm, Zn = 23.6 ppm	Pilot plant scale: copper agitation acid leaching at atmospheric pressure for 4 hours, with a ratio of solid to liquid phase 1:4, and a concentration of sulfuric acid of 1.7% H_2SO_4 at ambient temperature	Final recovery: 75.67% Cu, 16.48% Fe, 4.76% Ag and 5.6 % Au recovery	[17]
About 230 kg of tailings from six drill holes (RIS-CuRE project drills); Cu = 0.241 %, Fe = 7.71 %, S = 7 %, Au = 0.41 %, Ag = 2.2 %, Sr = 0.09 %, As = 140 ppm, SiO_2 = 57,3 % and Al_2O_3 = 11.88 %	Laboratory scale: flotation test using a laboratory type Outotec GTK Lab Cell flotation machine	Final recovery: 85% of S, 80% of Cu, 49% of Au and 84% of Ag	[15]

8. CALCULATION OF RESERVES AND RESOURCES

The inputs for the calculation of resources and reserves are:

- established geological model of the deposit, containing FIELD 1 and FIELD 2;
- established average grades in both fields;
- obtained geodetic measurements, including measurements of the surface and topography of tailing basement, which was generally confirmed by drilling;
- physical characteristics of tailings, especially its specific density.

With this information high-resolution 3D digital elevation models (DEM) of the surface and basement were created. Both digital elevation models has 2 m spacing, while the size was 516 x 501 data points (in total 258,516 data points), covering little more than 1 km^2 of area. DEMs were created with GS Surfer application (V. 22.3.285) by using natural neighbour interpolation method. Data outside the tailing dam was precisely removed away. Figure 31 shows graphical representation of DEMs of the surface and DEM of the basement.

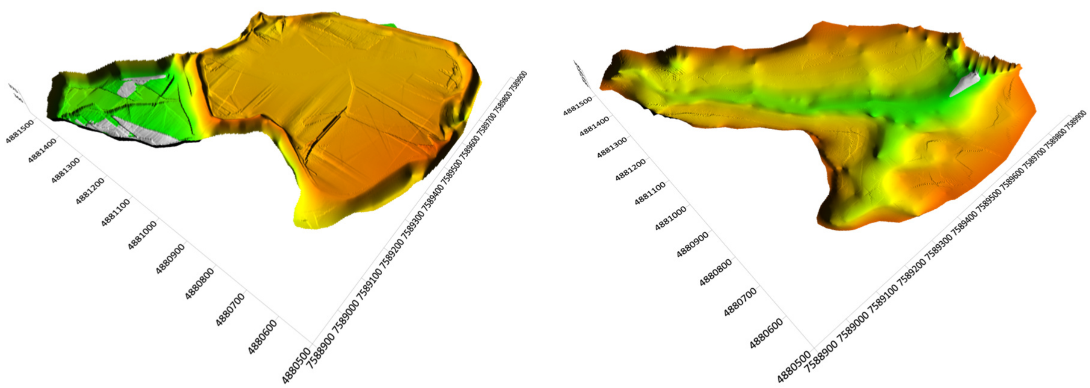

Figure 31: Graphical representation of the DEM of the surface (left) and basement (right).

Volumes of the material were calculated with GS Surfer application (trapezoidal rule), in the following way:

- FIELD 1: the volume between surface DEM and +358 m.a.s.l., including only "cut" volume in SE side, wile "fill" volume of the NW side is not accounted;
- FIELD 2: the volume between +358 m.a.s.l. and DEM of basement, including only "cut" volume, while "fill" volume is also not accounted.

Calculated volumes are as follows:

- FIELD 1: 10,60 million m^3 (23.8 Mt);
- FIELD 2: 4,43 million m^3 (9.97 Mt).

The resources and reserves of Cu, Au and Ag in the Bor tailings were assessed by using UNFC classification system. The following factors were considered.

G axis (degree of confidence):

- 2 separate independant estimated quantitives of materials exisit, one using GKZ classification system and is presented in Table 1, and the second one in this study; there is an excellent match between both calculations (roral of 14.58 Mm3 from GKZ classification and total Fields 1+2 of 15.03 Mm3 using computer trapesoidal rule in this calculation of volumes; approx. 3% of difference);

- according to GKZ classification system (Serbian version) resources were classified as B and C1 classes.

F axis (technical fesibility):

- recovery rates were established based on laboratory tests only, there is a lack of semi-industrial extraction and other tests

- limited amount of data considering technological feasibility

E axis (environmental-socio-economic viability):

- considering the deposit is within an existing mining area environmental monitoring systems are already established;

- compared to the large-scale extraction of primary raw materials currently ongoing near the site, the proposed recovery activities are not expected to pose important additional environmental risks. On the contrary, the recycling of tailings, which involves their removal and reprocessing, is anticipated to eliminate an existing source of atmospheric dust emissions, surface and underground water contamination and will restore original topography.

- Bor is a mining area with long mining tradition, public acceptance of mining is strongly present;

- economical feasibility needs to be determined in details.

Considering above mentioned factors, the Old Bor tailings in Field 1 can be classified as potentially viable project (E2, F3, G1+2). In order to classify the Old Bor tailings project into F2 category on F axis, more data related to its technical feasibility needs to be obtained. Table 14 summarizes the resources and reserves classification for old flotation tailings in Bor **considering 100% recovery rate.** The data shows, that Bor tailings in the FIELD 1 contains 102,173 t of Cu, 5.568 t of Au and 33.32 t of Ag.

Table 14: UNFC classification of resources and reserves in the old Bor tailing deposit (100% recovery rate).

Commodity	quantity of commodity (t)	UNFC category	UNFC class
Cu	102,173	231+2	potentially viable project
Au	5.568	231+2	potentially viable project
Ag	33.320	231+2	potentially viable project

Other potential commodities for the extraction are Fe and S, however, due to their low price and considering they are not critical raw materials for the EU their reserves were not estimated in this report.

To increase the class of the tailings into viable project, benneficiation and metal extraction tests needs to be performed to determine recovery rate, followed by the economical valorisation of the deposit. Reserves classified to the higher UNFC categoriess, considering also the recovery rate on industrial scale, are expected to be lower.

9. RECOMMENDATIONS FOR FUTURE STUDIES:

Based on the results obtained within FUTURAM and other past projects on the study area, recommendations for future work can be done:

- it needs to be established whether Au and Ag are contained within shulphides, quartz grains or as free Au flakes; this is important to establish whether additional grinding, and also the need for beneficiation process (i.e. flotation) and proper metal extraction process;
- semi-industrial tests for Cu, Au and Ag extraction needs to be performed to measure metal recovery rate; resource estimation in this report is based on 100 % recovery, which is never achieved in reality;
- assessment for the potentials to extract other useful commodities, like Ti, As, Fe, S etc.
- based on the results of semi-industrial tests detailed economic calculations are needed, to determine required cut-off grades and other parameters, as well as requirements for machinery, energy use, chemicals, water, personnel costs, investment costs and other required parameters. It might be also established whether the remaining material can be used as construction material.

Only after that the resources can be classified as reserves with higher UNFC category and class.

10. CONCLUSIONS

Geological research was carried out by exploratory drilling in the area of the Old Bor flotation tailing pond (Field I and Field II)- OFTs Bor. Exploratory drilling established that the site in question was built from flotation tailings (thickness 20 - 63 m) and degraded rock mass at the base of the landfill. Flotation tailings represent the most represented environment in the researched area, i.e. flotation material that was actively deposited in the tailings field. Based on the mapping of the core of the exploration wells, the flotation tailings are represented in the form of dusty flotation sand and silty dusty flotation sand, which alternate in depth. It is predominantly gray, dark gray and brown in color, with visible layers of sulphide minerals.

Geological works during exploration are mainly related to the direction of exploration works, and geological mapping of exploratory wells, samples collection, well testing and interpretation of the obtained results. Geological works also include the design of all investigative works, the preparation of reports and studies, and the synthesis of data on the basis of which geological profiles (sections) and geological maps were made. The entire geological research was subordinated and adjusted to the geological conditions of the terrain, the degree of its research, current problems and the aim of the research.

The results of the overview of historic and conducted research are: a high degree of knowledge of the geological structure of the Old Bor flotation tailing pond (Field I and Field II), knowledge of its shape, size, deposits, quality parameters, basic technological properties of mineral raw materials, as well as other characteristics important for the calculation of ore reserves and their classification into appropriate categories and classes for the assessment of materials recovery and recycling projects aligned with UNFC. However, technical and economic feasibility of the metal extraction from this deposit, was outside the scope of this report.

In addition the results summarise available information on environmental aspects as well as most recent information on social aspects and up-to date environmental and mining legislation framework, which must be considered in potential mining waste recovery projects aligned with UNFC.

The OFTs Bor are located within the active Bor mining and smelting complex in eastern Serbia. The environmental impacts of both historical and ongoing activities at the complex are addressed by many past studies. As the town of Bor developed in close proximity to the site, the area has become recognized as an environmental concern in Serbia.

Although the planned recovery targets only a relatively small tailings deposit and, on its own, cannot resolve the widespread environmental pollution in the area, it still represents a meaningful and positive step toward improving the environmental conditions. Since the OFTs are situated within the existing mining zone, environmental monitoring systems are already established. As this is a longstanding mining site with deep-rooted industrial traditions, a level of social acceptance for mining and related activities already exists in the local community, which supports the feasibility of future recovery efforts. Compared to the large-scale extraction of primary raw materials currently taking place at the site, the tailings recovery project is not expected to introduce additional environmental risks. On the contrary, the recycling of tailings—which involves the removal and reprocessing of the material—is expected to eliminate a localized source of pollution (dust emissions and emissions into surface and underground water). The project would contribute to reducing local levels of air, and water contamination in the immediate area. Following the recovery of waste materials, the affected land would be rehabilitated and restored as closely as possible to its original state, enhancing both the environmental and visual quality of the area.

The legislative procedures required to initiate tailings recovery are not yet fully defined, and the complex ownership structure of the OFTs adds to the challenge. Furthermore, Serbian national legislation currently lacks specific provisions for tailings recovery, underscoring the need for targeted legal and institutional efforts to clarify and facilitate such projects. Regulatory and legal uncertainties in this case remain.

In summary, while the recovery of the OFTs Bor presents a compelling opportunity from geological, infrastructural, and social standpoints, progress will depend on advancing technology readiness, economical calculations and resolving key legal and regulatory issues.

Importantly, an economic assessment to evaluate the cost-effectiveness and financial justification for recovering valuable materials from the OFTs has not yet been conducted. This analysis will be essential for determining the overall feasibility of the project and should be prioritized in the next stages of evaluation.

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12. ANNEXES

Annex 1: The results of elemental analysis of all samples. The locations of boreholes (coordinates) are presented in the text. Measurements which were below the lower detection limit are replaced by 50% of the corresponding minimum detection limit.

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
Borehole	depth	PPM	%	PPM	PPB	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM
F1	**-0.5**	**0.28**	**0.13**	**29.30**	**135**	**10**	**260**	**0.05**	**0.41**	**0.69**	**0.02**	**0.40**	**0.20**	**7.50**	**0.13**	**76**	**0.01**	**0.01**	**0.01**	**0.74**	**0.30**	**0.02**	**0.05**	**0.01**
F1	-1.5	0.64	0.28	69.50	143	10	18	0.05	0.78	0.87	0.03	0.70	3.80	55.90	0.17	455	0.04	0.01	0.01	2.44	1.30	0.05	0.05	0.01
F1	-2.5	0.53	0.30	37.10	125	10	19	0.05	0.68	0.84	0.03	0.70	4.50	38.30	0.20	481	0.03	0.01	0.01	2.53	1.10	0.04	0.05	0.01
F1	-3.5	0.62	0.31	45.10	144	10	19	0.05	0.78	0.92	0.04	0.60	4.40	40.30	0.18	463	0.04	0.02	0.01	2.68	0.80	0.05	0.05	0.01
F1	-4.5	0.61	0.26	63.70	148	10	17	0.05	0.65	0.90	0.07	0.80	5.20	51.80	0.18	517	0.08	0.05	0.03	3.25	0.90	0.10	0.05	0.02
F1	-5.5	0.92	0.31	82.60	219	10	15	0.05	1.02	0.99	0.09	0.90	5.65	56.10	0.20	775	0.11	0.06	0.04	4.05	1.10	0.13	0.05	0.02
F1	-6.5	0.48	0.22	48.40	147	10	25	0.05	0.64	0.82	0.02	0.80	4.20	60.10	0.16	363	0.03	0.01	0.01	2.65	0.90	0.05	0.05	0.02
F1	-7.5	0.47	0.21	45.40	137	10	20	0.05	0.59	0.80	0.02	0.70	4.00	66.40	0.14	322	0.03	0.01	0.01	2.50	0.80	0.04	0.05	0.02
F1	-8.5	0.49	0.21	49.20	127	10	24	0.05	0.56	0.79	0.03	0.70	3.80	55.30	0.13	314	0.03	0.01	0.01	2.36	0.80	0.04	0.05	0.01
F1	-9.5	1.12	0.33	121.90	241	10	8	0.05	1.16	0.95	0.13	0.90	7.60	42.20	0.17	1280	0.10	0.06	0.04	5.24	1.10	0.12	0.05	0.03
F1	-10.5	1.85	0.34	189.40	390	10	6	0.05	1.42	1.00	0.16	1.10	12.90	40.00	0.28	1848	0.12	0.07	0.05	8.57	1.50	0.15	0.10	0.03
F1	-11.5	2.69	0.29	389.50	530	10	3	0.05	2.24	0.76	0.43	0.90	17.10	48.20	0.22	2952	0.11	0.06	0.04	12.71	1.60	0.13	0.30	0.03
F1	-12.5	2.89	0.29	317.40	547	10	8	0.05	2.41	0.59	0.34	0.90	14.55	46.75	0.19	2432	0.10	0.06	0.04	10.56	1.65	0.12	0.50	0.03
F1	-13.5	3.90	0.23	353.00	533	10	7	0.05	2.96	0.43	0.29	0.70	14.00	54.60	0.13	2543	0.07	0.04	0.03	10.56	1.50	0.08	0.80	0.02
F1	-14.5	2.59	0.32	252.70	480	10	7	0.05	2.32	0.92	0.21	0.80	13.70	66.50	0.22	2328	0.10	0.06	0.04	9.89	1.40	0.12	0.30	0.03
F1	-15.5	0.96	0.34	68.40	290	10	9	0.05	0.87	0.88	0.15	0.90	16.70	56.00	0.17	1332	0.10	0.05	0.04	10.71	1.10	0.12	0.05	0.03
F1	-16.5	1.72	0.21	167.90	390	10	25	0.05	1.24	0.69	0.13	0.80	14.40	53.00	0.16	1414	0.07	0.04	0.03	9.36	1.10	0.09	0.30	0.02
F1	-17.5	1.66	0.47	222.30	681	10	7	0.05	0.86	0.97	0.08	1.10	11.50	58.40	0.15	1844	0.12	0.07	0.05	6.59	1.70	0.13	0.20	0.02
F1	-18.5	0.54	0.49	69.80	208	10	21	0.05	0.40	1.09	0.12	1.80	7.30	53.70	0.14	1772	0.24	0.13	0.09	3.83	1.00	0.27	0.05	0.02
F1	-19.5	1.55	0.39	146.20	341	10	5	0.05	1.03	0.70	0.26	1.40	16.70	61.40	0.15	2808	0.22	0.12	0.07	10.35	1.20	0.23	0.10	0.02
F1	-20.5	2.29	0.26	142.40	753	10	5	0.05	1.43	0.27	0.14	0.70	23.60	90.50	0.11	3800	0.08	0.05	0.03	16.37	1.00	0.09	0.20	0.01
F1	-21.5	1.52	0.20	91.20	631	10	7	0.05	1.05	0.23	0.10	0.60	21.95	44.05	0.07	3514	0.07	0.04	0.02	15.76	0.90	0.07	0.20	0.01

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
F1	-22.5	1.27	0.35	97.20	328	10	7	0.05	0.94	0.49	0.10	0.90	12.90	47.80	0.12	2285	0.10	0.06	0.04	8.79	1.50	0.12	0.05	0.02
F1	-23.5	1.32	0.27	107.30	478	10	11	0.05	1.29	0.42	0.09	0.70	11.40	32.10	0.09	1981	0.09	0.05	0.03	7.34	2.20	0.10	0.10	0.02
F1	-24.5	1.39	0.25	128.90	590	10	6	0.05	1.22	0.40	0.10	0.70	14.20	69.50	0.09	2352	0.08	0.05	0.03	9.49	1.90	0.09	0.20	0.02
F1	-25.5	1.52	0.23	123.80	373	10	7	0.05	1.11	0.38	0.11	0.70	13.70	50.80	0.11	2164	0.08	0.05	0.03	9.29	1.40	0.10	0.20	0.02
F1	-26.5	1.33	0.19	124.50	387	10	8	0.05	0.92	0.49	0.07	0.50	11.10	66.70	0.13	1459	0.05	0.03	0.01	7.33	1.40	0.06	0.20	0.01
F1	-27.5	2.00	0.13	253.80	745	10	11	0.05	1.38	0.38	0.08	0.30	16.40	41.70	0.14	3013	0.02	0.01	0.01	12.18	1.30	0.03	0.50	0.01
F1	-28.5	1.63	0.19	228.80	549	10	4	0.05	1.33	0.42	0.07	0.50	13.60	47.50	0.14	3039	0.04	0.01	0.01	9.85	3.10	0.05	0.20	0.02
F1	-29.5	1.75	0.31	248.70	1163	10	10	0.05	1.53	0.48	0.05	0.50	9.80	34.50	0.18	4308	0.05	0.03	0.02	6.66	2.30	0.06	0.20	0.01
F1	-30.5	2.06	0.24	195.70	755	10	17	0.05	1.50	0.40	0.06	0.50	12.90	75.70	0.24	3603	0.04	0.02	0.02	9.81	1.70	0.06	0.40	0.02
F1	-31.5	1.60	0.29	149.60	585	10	8	0.05	1.33	0.45	0.12	0.70	12.80	53.40	0.13	3862	0.08	0.05	0.03	7.59	2.10	0.11	0.20	0.01
F1	-32.5	1.44	0.24	100.90	470	10	11	0.05	1.72	0.37	0.11	0.40	7.20	35.30	0.12	2306	0.06	0.03	0.02	5.32	2.40	0.02	0.10	0.01
F1	-33.5	1.30	0.43	172.90	402	10	7	0.05	1.03	0.90	0.09	0.80	10.60	66.60	0.15	2638	0.09	0.05	0.03	6.94	1.40	0.10	0.10	0.02
F1	-34.5	1.05	0.30	119.70	471	10	10	0.05	1.05	0.51	0.10	0.60	4.90	55.10	0.15	2271	0.07	0.04	0.03	4.08	2.40	0.09	0.10	0.01
F1	-35.5	0.93	0.19	101.10	485	10	12	0.05	0.95	0.40	0.06	0.60	5.30	22.90	0.12	1661	0.06	0.03	0.03	4.23	1.50	0.08	0.10	0.01
F1	-36.5	1.39	0.28	121.30	357	10	19	0.05	1.12	0.38	0.08	0.70	3.90	47.70	0.15	1746	0.07	0.04	0.03	2.98	2.10	0.10	0.05	0.01
F1	-37.5	2.18	0.28	183.20	525	10	27	0.05	1.42	0.38	0.09	0.80	4.30	39.10	0.16	2063	0.08	0.04	0.03	3.21	2.50	0.10	0.20	0.02
F1	-38.5	1.27	0.17	141.50	499	10	10	0.05	1.45	0.29	0.08	0.40	6.90	36.90	0.08	2787	0.04	0.02	0.01	6.53	1.70	0.05	0.30	0.01
F1	-39.5	1.29	0.24	119.20	447	10	11	0.05	1.39	0.37	0.08	0.50	4.70	31.40	0.11	2186	0.05	0.03	0.02	4.16	2.00	0.06	0.20	0.01
F1	-40.5	1.46	0.19	154.80	769	10	6	0.05	1.22	0.33	0.09	0.40	8.50	21.75	0.09	2639	0.04	0.02	0.01	7.67	1.50	0.05	0.30	0.01
F1	-41.5	1.89	0.18	185.45	699	10	20	0.05	1.47	0.29	0.12	0.40	11.00	84.30	0.07	3494	0.04	0.02	0.01	9.98	1.50	0.05	0.70	0.01
F1	-42.5	1.61	0.26	147.70	552	10	6	0.05	1.31	0.43	0.10	0.70	9.60	38.50	0.10	2717	0.07	0.04	0.03	7.82	2.40	0.08	0.20	0.01
F1	-43.5	2.04	0.18	164.20	671	10	5	0.05	1.40	0.30	0.13	0.40	10.00	51.00	0.06	2871	0.02	0.01	0.01	8.91	2.20	0.03	0.50	0.01
F1	-44.5	1.76	0.18	165.20	628	10	5	0.05	1.36	0.34	0.11	0.40	11.60	64.60	0.08	3076	0.03	0.01	0.01	10.10	1.40	0.04	0.30	0.01
F1	-45.5	1.64	0.16	120.00	636	10	19	0.05	1.25	0.36	0.06	0.20	9.70	44.00	0.06	2055	0.01	0.01	0.01	9.51	1.10	0.03	0.30	0.01
F1	-46.5	1.69	0.20	141.00	596	10	11	0.05	1.18	0.35	0.23	0.20	11.50	18.10	0.04	3350	0.02	0.01	0.01	10.44	0.90	0.03	0.40	0.01
F1	-47.5	1.47	0.15	118.60	571	10	4	0.05	1.39	0.44	0.07	0.30	13.10	14.30	0.05	2762	0.03	0.01	0.01	11.67	1.60	0.05	0.20	0.01
F1	-48.5	2.25	0.13	110.10	560	10	5	0.05	1.50	0.25	0.05	0.20	13.40	18.00	0.03	3003	0.01	0.01	0.01	13.32	1.10	0.03	0.60	0.01

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
F1	-49.5	1.42	0.19	124.80	415	10	7	0.05	1.16	0.42	0.05	0.40	12.10	19.20	0.04	2259	0.03	0.01	0.01	8.97	1.90	0.05	0.40	0.02
F1	-50.5	1.43	0.22	116.20	462	10	7	0.05	1.01	0.42	0.04	0.30	12.10	40.30	0.04	2142	0.03	0.01	0.01	8.77	2.00	0.05	0.30	0.02
F2	**-0.5**	**0.31**	**0.20**	**63.40**	**111**	**10**	**244**	**0.05**	**0.44**	**0.92**	**0.03**	**0.60**	**0.40**	**35.00**	**0.13**	**72**	**0.04**	**0.01**	**0.01**	**0.75**	**0.70**	**0.05**	**0.05**	**0.01**
F2	-1.5	0.39	0.23	62.30	102	10	21	0.05	0.34	1.17	0.01	0.60	4.50	45.50	0.15	294	0.06	0.03	0.03	2.54	0.80	0.08	0.05	0.02
F2	-2.5	0.42	0.28	120.00	120	10	17	0.05	0.45	1.29	0.03	0.80	5.60	41.90	0.19	393	0.10	0.05	0.04	2.87	1.40	0.12	0.05	0.03
F2	-3.5	0.69	0.48	102.50	143	10	67	0.05	0.78	1.24	0.09	1.40	5.90	49.90	0.22	1014	0.14	0.08	0.06	3.55	1.50	0.17	0.05	0.03
F2	-4.5	0.46	0.35	58.50	107	10	23	0.05	0.43	1.37	0.02	0.80	5.75	37.70	0.24	295	0.08	0.04	0.03	2.83	1.50	0.09	0.05	0.02
F2	-5.5	0.57	0.29	68.70	135	10	24	0.05	0.61	1.25	0.03	0.80	5.50	48.80	0.21	387	0.08	0.04	0.03	3.05	1.30	0.09	0.05	0.02
F2	-6.5	1.00	0.33	80.57	205	10	18	0.05	1.02	0.85	0.08	1.03	6.53	46.53	0.25	928	0.12	0.07	0.04	4.26	1.10	0.14	0.05	0.02
F2	-7.5	0.70	0.46	152.60	164	10	16	0.05	0.77	1.41	0.10	1.20	5.60	54.80	0.19	971	0.12	0.07	0.05	3.40	2.50	0.14	0.05	0.03
F2	-8.5	0.52	0.21	54.20	119	10	178	0.05	0.51	1.10	0.03	0.80	5.40	19.30	0.26	396	0.09	0.05	0.03	2.74	1.00	0.11	0.05	0.02
F2	-9.5	0.65	0.30	76.90	134	10	25	0.05	0.53	0.97	0.04	0.90	6.20	44.80	0.18	530	0.09	0.04	0.03	3.17	1.20	0.10	0.05	0.02
F2	-10.5	0.43	0.29	91.10	110	10	23	0.05	0.45	1.36	0.01	0.70	5.90	38.30	0.23	313	0.07	0.04	0.02	2.89	1.60	0.08	0.05	0.02
F2	-11.5	1.11	0.51	157.60	275	10	13	0.05	1.19	1.71	0.20	1.20	6.50	39.10	0.20	1363	0.14	0.08	0.06	3.99	2.00	0.17	0.10	0.03
F2	-12.5	1.76	0.54	192.00	370	10	14	0.05	1.60	1.51	0.43	1.20	7.70	33.00	0.39	1763	0.15	0.09	0.06	5.37	2.10	0.18	0.05	0.03
F2	-13.5	0.96	0.49	128.30	243	10	16	0.05	1.01	1.70	0.12	1.20	6.90	37.50	0.21	1092	0.13	0.08	0.06	4.06	2.10	0.16	0.05	0.03
F2	-14.5	1.50	0.44	113.70	497	10	17	0.05	1.32	1.74	0.17	1.00	12.00	28.30	0.21	1692	0.12	0.07	0.04	7.66	2.10	0.14	0.10	0.03
F2	-15.5	3.19	0.31	270.70	521	10	8	0.05	2.95	0.92	0.40	0.60	9.50	38.60	0.21	1808	0.07	0.04	0.03	7.72	1.50	0.09	0.30	0.02
F2	-16.5	1.18	0.42	111.00	300	10	13	0.05	1.46	1.40	0.20	1.00	9.50	46.90	0.38	1286	0.12	0.07	0.05	5.90	1.50	0.15	0.05	0.03
F2	-17.5	0.58	0.25	65.00	162	10	14	0.05	0.58	0.72	0.10	0.60	7.60	46.00	0.16	840	0.05	0.03	0.01	4.68	0.90	0.07	0.05	0.01
F2	-18.5	0.53	0.33	78.10	156	10	24	0.05	0.52	0.78	0.06	0.90	8.20	62.00	0.13	1026	0.10	0.06	0.03	4.97	1.00	0.12	0.05	0.01
F2	-19.5	0.56	0.76	90.25	146	10	28	0.05	0.53	1.43	0.05	1.35	7.45	50.75	0.27	1881	0.13	0.08	0.05	4.18	1.50	0.15	0.05	0.03
F2	-20.5	0.67	0.87	106.30	152	10	16	0.05	0.75	1.81	0.05	1.30	7.90	45.40	0.28	2283	0.14	0.08	0.05	4.01	1.50	0.16	0.05	0.03
F2	-21.5	0.67	0.69	111.40	138	10	12	0.05	0.82	1.85	0.06	1.00	8.80	41.80	0.18	1675	0.12	0.07	0.05	4.54	1.30	0.14	0.05	0.03
F2	-22.5	0.65	0.76	154.10	147	10	13	0.05	0.79	1.79	0.06	1.20	8.60	54.20	0.22	1915	0.14	0.07	0.05	4.51	2.50	0.16	0.05	0.03
F2	-23.5	0.61	0.66	131.10	134	10	12	0.05	0.78	1.62	0.05	1.10	8.90	44.70	0.18	1648	0.13	0.07	0.05	4.54	1.70	0.14	0.05	0.03
F2	-24.5	0.47	0.57	103.10	114	10	32	0.05	0.55	1.05	0.05	1.00	5.80	51.20	0.17	1610	0.10	0.06	0.04	3.20	1.40	0.12	0.05	0.02

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
F2	-25.5	0.71	0.49	106.20	212	10	16	0.05	1.00	1.16	0.08	1.00	7.10	52.30	0.23	1874	0.13	0.07	0.05	3.98	2.30	0.15	0.05	0.02
F2	-26.5	0.79	0.37	84.70	179	10	15	0.05	1.14	0.70	0.08	0.80	6.50	31.60	0.16	1785	0.09	0.05	0.04	3.92	2.70	0.11	0.05	0.02
F2	-27.5	1.12	0.34	123.30	517	10	10	0.05	1.76	0.87	0.09	0.80	9.70	34.10	0.17	3382	0.10	0.06	0.04	5.64	2.30	0.11	0.05	0.03
F2	-28.5	0.73	0.50	102.50	218	10	21	0.05	0.93	1.28	0.06	0.90	7.90	33.80	0.17	2088	0.10	0.06	0.04	4.49	2.10	0.11	0.05	0.03
F2	-29.5	0.81	0.53	130.00	188	10	31	0.05	1.20	1.24	0.06	1.00	9.70	57.40	0.20	2131	0.11	0.07	0.04	5.19	2.50	0.14	0.05	0.03
F2	-30.5	0.94	0.39	120.50	341	10	8	0.05	2.55	0.90	0.06	0.80	9.80	36.20	0.13	2336	0.09	0.05	0.04	6.15	2.00	0.11	0.05	0.02
F2	-31.5	0.77	0.44	100.05	213	10	12	0.05	1.05	0.97	0.07	0.75	8.75	38.45	0.15	2205	0.09	0.05	0.03	5.23	2.15	0.10	0.05	0.02
F2	-32.5	0.69	0.66	153.10	153	10	24	0.05	0.75	1.63	0.04	1.10	8.80	47.40	0.22	1680	0.12	0.07	0.05	4.60	2.10	0.14	0.05	0.03
F2	-33.5	1.17	0.53	170.50	347	10	11	0.05	1.05	1.11	0.09	0.90	10.10	63.40	0.17	2523	0.11	0.06	0.04	6.47	1.40	0.12	0.05	0.03
F2	-34.5	0.67	0.88	142.70	147	10	55	0.05	0.75	1.72	0.07	1.30	7.80	44.60	0.29	2484	0.13	0.08	0.05	4.11	1.60	0.16	0.05	0.03
F2	-35.5	1.14	0.31	110.70	273	10	15	0.05	1.76	0.78	0.09	0.60	7.40	23.80	0.14	3369	0.06	0.03	0.02	4.78	3.60	0.07	0.05	0.02
F2	-36.5	1.16	0.25	142.20	349	10	9	0.05	2.00	0.56	0.07	0.60	9.20	44.00	0.10	2733	0.06	0.03	0.02	5.69	3.30	0.07	0.10	0.03
F2	-37.5	1.26	0.27	147.50	320	10	8	0.05	1.66	0.64	0.08	0.70	11.00	46.00	0.12	2699	0.08	0.04	0.03	6.59	3.30	0.09	0.10	0.02
F2	-38.5	1.07	0.29	120.50	293	10	11	0.05	1.32	0.62	0.09	0.70	10.10	49.30	0.11	2226	0.08	0.04	0.03	5.96	2.40	0.10	0.10	0.02
F2	-39.5	0.78	0.27	118.00	240	10	56	0.05	0.94	0.70	0.07	0.80	7.20	48.10	0.11	2199	0.09	0.05	0.03	4.40	1.70	0.11	0.20	0.01
F2	-40.5	0.63	0.33	90.70	188	10	23	0.05	0.82	0.98	0.04	0.90	5.90	20.40	0.12	2132	0.11	0.06	0.04	3.69	1.90	0.12	0.05	0.01
F2	-41.5	0.74	0.32	117.20	296	10	14	0.05	0.93	0.79	0.05	1.00	7.40	13.20	0.17	2341	0.10	0.06	0.04	4.69	2.00	0.13	0.05	0.01
F2	-42.5	1.52	0.23	148.00	532	10	22	0.05	1.26	0.42	0.09	0.60	9.20	36.70	0.11	2636	0.06	0.04	0.02	7.86	2.20	0.08	0.30	0.01
F2	-43.5	1.08	0.32	174.40	314	10	17	0.05	0.96	0.56	0.08	0.90	8.50	38.40	0.12	1842	0.10	0.05	0.04	5.00	2.20	0.11	0.10	0.02
F2	-44.5	1.41	0.35	224.00	690	10	6	0.05	1.34	0.67	0.11	0.70	10.00	35.20	0.12	3226	0.08	0.04	0.03	6.04	2.90	0.10	0.20	0.02
F2	-45.5	0.80	0.32	106.00	248	10	24	0.05	0.75	0.72	0.05	1.50	9.70	53.20	0.12	1407	0.16	0.08	0.05	5.54	1.80	0.18	0.10	0.03
F2	-46.5	1.41	0.50	127.40	352	10	23	0.05	1.02	1.14	0.08	1.20	11.40	63.70	0.17	2252	0.14	0.08	0.05	7.90	1.90	0.16	0.10	0.03
F2	-47.5	0.63	0.83	305.70	155	10	21	0.05	0.61	1.67	0.05	1.60	6.70	64.10	0.29	2214	0.13	0.07	0.05	3.48	8.50	0.16	0.05	0.03
F2	-48.5	0.56	0.49	116.30	208	10	20	0.05	0.58	1.05	0.04	1.50	7.00	53.40	0.18	1341	0.14	0.08	0.05	3.72	1.20	0.17	0.05	0.03
F2	-49.5	1.24	0.46	126.30	435	10	5	0.05	0.98	0.82	0.06	1.00	15.00	60.40	0.17	2438	0.10	0.06	0.04	10.61	1.70	0.12	0.05	0.03
F2	-50.5	1.27	0.23	156.80	424	10	5	0.05	1.12	0.40	0.05	0.50	15.65	61.75	0.10	2200	0.06	0.03	0.02	10.97	2.00	0.07	0.20	0.01
F2	-51.5	0.91	0.25	143.50	320	10	9	0.05	1.08	0.52	0.05	0.60	7.90	41.20	0.10	2374	0.07	0.04	0.02	5.36	2.60	0.08	0.20	0.01

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
F2	-52.5	0.76	0.18	103.90	301	10	94	0.05	0.77	0.53	0.04	0.60	5.10	24.20	0.09	1217	0.07	0.04	0.03	3.55	1.60	0.09	0.10	0.01
F2	-53.5	1.04	0.23	134.90	333	10	9	0.05	1.00	0.37	0.05	0.70	9.80	42.30	0.12	2124	0.07	0.04	0.03	6.92	2.20	0.08	0.20	0.02
F2	-54.5	0.99	0.21	140.40	418	10	5	0.05	0.95	0.39	0.04	0.50	14.00	35.80	0.13	2722	0.05	0.03	0.02	9.96	1.20	0.07	0.20	0.01
F2	-55.5	1.01	0.28	128.30	417	10	10	0.05	1.13	0.58	0.09	0.80	7.90	36.80	0.25	2674	0.10	0.06	0.04	6.08	2.00	0.12	0.10	0.03
F2	-56.5	1.35	0.24	205.90	626	10	9	0.05	1.11	0.48	0.09	0.60	9.20	37.00	0.17	2619	0.08	0.05	0.03	6.82	1.80	0.10	0.20	0.02
F2	-57.5	0.55	0.23	63.80	215	10	26	0.05	0.60	1.11	0.04	0.70	5.10	44.80	0.19	715	0.07	0.04	0.03	2.95	1.10	0.08	0.05	0.02
F2	-58.5	1.26	0.26	183.00	416	10	7	0.05	0.80	0.63	0.09	0.50	8.20	44.00	0.16	2403	0.06	0.03	0.02	5.43	1.50	0.08	0.10	0.02
F2	-59.5	2.15	0.37	216.50	713	10	7	0.05	0.98	0.32	0.10	1.10	17.30	38.30	0.14	3058	0.11	0.06	0.04	11.52	1.60	0.13	0.40	0.04
F2	-60.5	2.35	0.16	279.20	976	10	9	0.05	1.38	0.18	0.14	0.60	16.20	43.30	0.15	4294	0.06	0.04	0.02	11.77	1.40	0.08	1.00	0.01
F2	-61.5	1.75	0.29	232.80	752	10	7	0.05	0.89	0.36	0.12	1.00	11.60	42.80	0.17	3397	0.10	0.06	0.04	7.74	1.60	0.12	0.30	0.03
F2	-62.5	2.08	0.28	296.40	682	10	7	0.05	1.17	0.24	0.15	0.80	10.65	47.05	0.12	3359	0.08	0.04	0.03	7.31	1.80	0.09	0.40	0.03
F2	-63.5	0.19	2.90	27.50	59	10	219	0.40	0.15	1.65	0.06	9.40	6.40	25.30	0.24	324	0.53	0.28	0.21	2.17	6.00	0.64	0.05	0.10
OT/1-01	**-0.5**	**3.9**	**0.23**	**88.5**	**688**	**10**	**1**		**1.5**	**0.67**	**0.05**		**20.1**	**99**		**887**				**15.4**	**0.5**			
OT/1-01	-1.5	2.75	0.275	119.5	727	10	3		1.1	0.585	0.05		11.35	87		860				9.32	1			
OT/1-01	-2.5	1.8	0.46	71.2	413	10	3		2	0.43	0.05		8.2	48		1810				6.09	2			
OT/1-01	-3.5	1.3	0.62	187	401	10	4		1.7	0.31	0.05		6.2	22		3570				4.13	10			
OT/1-01	-4.5	1.6	0.98	333	436	10	5		1.2	0.44	0.05		5.8	126		4200				4.47	3			
OT/1-01	-5.5	1.3	1.01	184	348	10	6		1.1	0.39	0.05		5	148		2880				3.85	5			
OT/1-01	-6.5	1.4	1.09	220	333	10	5		1.1	0.4	0.05		5.4	170		3050				3.91	5			
OT/1-01	-7.5	1.2	1.61	228	318	10	12		1	0.56	0.4		6.5	180		4080				4.45	5			
OT/1-01	-8.5	1.4	1.2	139	422	10	6		1.3	0.38	0.05		5.5	157		3750				4.43	4			
OT/1-02	**-0.5**	**1.6**	**0.28**	**18.4**	**188**	**10**	**7**		**0.9**	**0.4**	**0.05**		**4.1**	**51**		**196**				**3.11**	**0.5**			
OT/1-02	-1.5	1	0.34	89.5	192	10	3		1	0.84	0.05		10.6	55		951				7.32	3			
OT/1-02	-2.5	1.7	0.63	188	551	10	5		1.2	0.86	0.05		10.4	28		1850				5.99	3			
OT/1-02	-3.5	1.2	0.57	106	290	10	4		1	0.69	0.05		8.5	40		1710				5.62	2			
OT/1-02	-4.5	1	0.55	83.9	145	10	5		1	0.49	0.05		6.7	45		2330				4.19	2			
OT/1-02	-5.5	0.9	0.58	58.7	145	10	6		1	0.49	0.3		6.6	29		1360				2.9	2			

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
OT/1-02	-6.5	1	0.43	76.3	189	10	5		1.4	0.49	0.1		6.4	22		1530				3.57	3			
OT/1-02	-7.5	1.4	0.24	112	441	10	7		0.8	0.29	0.05		4.9	36		792				2.57	1			
OT/1-02	-8.5	2.9	0.36	171	695	10	2		2	0.55	0.05		11.8	63		2240				8.65	3			
OT/1-02	-9.5	2.3	0.26	180	551	10	4		1.5	0.46	0.05		9.3	7		2150				6.65	3			
OT/1-02	-10.5	2.4	0.41	277	556	10	3		1.6	0.42	0.05		10.7	108		3370				7.96	3			
OT/1-02	-11.5	2.4	0.24	169	538	10	2		1.5	0.26	0.05		10.2	26		3590				7.3	2			
OT/1-02	-12.5	2.4	0.22	189	785	10	1		1.6	0.21	0.05		13.2	32		3630				11.3	2			
OT/1-02	-13.5	2.1	0.16	139	661	10	3		1.3	0.25	0.05		11.2	5		2010				8.93	1			
OT/1-02	-14.5	2.1	0.18	143	684	10	2		1.3	0.21	0.05		12.1	12		2420				10	1			
OT/1-02	-15.5	2.2	0.24	179	530	10	4		1.6	0.22	0.05		13.3	70		3340				11.5	2			
OT/1-02	-16.5	1.9	0.28	160	596	10	4		1.3	0.36	0.05		10.8	14		2420				8.21	2			
OT/1-02	-17.5	2.4	0.41	191	759	10	1		1.5	0.42	0.3		14.1	32		3760				12.2	2			
OT/1-02	-18.5	2.8	0.2	162	709	10	2		2	0.33	0.1		16.5	22		3610				15.2	1			
OT/1-02	-19.5	2.6	0.18	142	656	10	6		1.7	0.25	0.05		14.2	15		3210				13.4	1			
OT/1-02	-20.5	2.7	0.2	166	204	10	1		1.6	0.31	0.05		15.7	38		3150				13.5	1			
OT/1-02	-21.5	2.55	0.18	170.5	576	10	4		1.6	0.385	0.075		14.8	14		3310				13.5	1			
OT/1-02	-22.5	2.8	0.175	197	630	10	3		1.75	0.28	0.05		15.65	6		3345				13.65	1			
OT/1-02	-23.5	2.6	0.21	170	275	10	2		1.6	0.37	0.05		13.6	4		3040				12.2	1			
OT/1-02	-24.5	2.6	0.28	153	715	10	2		1.4	0.51	0.2		13.6	8		2690				13.2	1			
OT/1-02	-25.5	2.4	0.2	151	159	10	2		1.6	0.24	0.05		12.4	5		3240				11.7	1			
OT/1-02	-26.5	2.8	0.16	161	804	10	2		2	0.19	0.05		16.1	8		3390				14.6	1			
OT/1-02	-27.5	2.4	0.18	162	589	10	1		1.6	0.23	0.05		14.4	11		3090				12.7	2			
OT/1-02	-28.5	2.5	0.21	178	227	10	2		1.6	0.18	0.05		14	45		3220				12.5	1			
OT/1-02	-29.5	2.8	0.14	180	134	10	2		1.9	0.24	0.05		16.7	11		3370				14.1	1			
OT/1-02	-30.5	2.4	0.25	189	631	10	2		1.6	0.28	0.05		15.9	63		3640				12.9	2			
OT/1-02	-31.5	2.1	0.31	193	586	10	1		1.5	0.32	0.05		13.7	26		3110				12	2			
OT/1-03	**-0.5**	**1.2**	**0.38**	**184**	**98**	**10**	**11**		**1.6**	**0.94**	**3**		**97**	**227**		**4850**				**25.4**	**4**			

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
OT/1-03	-1.5	0.7	0.23	29	154	10	4		0.4	0.76	0.05		7.8	10		415				4.6	0.5			
OT/1-03	-2.5	0.8	0.65	144	151	10	11		0.7	1	0.05		2.3	35		590				2.05	2			
OT/1-03	-3.5	0.8	0.63	76.7	159	10	5		0.8	0.79	0.05		6.9	51		1140				4.4	3			
OT/1-03	-4.5	0.6	0.61	63.6	119	10	4		0.7	0.48	0.05		5.8	82		2280				3.67	2			
OT/1-03	-5.5	0.7	0.63	65.8	130	10	4		0.9	0.47	0.05		7.4	67		1850				4.36	2			
OT/1-03	-6.5	0.7	0.69	68.4	127	10	6		1	0.46	0.2		10.3	90		2310				4.83	3			
OT/1-03	-7.5	0.7	0.7	66	113	10	5		0.9	0.45	0.05		7.3	68		2390				3.96	3			
OT/1-03	-8.5	0.8	0.67	77.4	184	10	4		1.1	0.49	0.5		10.2	64		2360				4.76	3			
OT/1-03	-9.5	1.6	0.39	93.2	380	10	7		1.1	0.43	0.05		7.7	47		1080				5.18	2			
OT/1-03	-10.5	0.9	0.69	74.9	174	10	4		1.2	0.45	0.2		9.9	58		2820				4.77	4			
OT/1-03	-11.5	1.7	0.35	113	424	10	3		1.1	0.44	0.05		8	45		1170				6.2	2			
OT/1-03	-12.5	1.6	0.29	122	393	10	3		1.4	0.42	0.05		7.05	12.5		1415				5.295	3			
OT/1-03	-13.5	1.9	0.27	170	651	10	3		1.3	0.33	0.05		8.5	11		1910				7.01	2			
OT/1-03	-14.5	1.8	0.38	166	476	10	5		1.3	0.31	0.05		4.9	79		2350				4.17	3			
OT/1-03	-15.5	1.8	0.37	148	492	10	3		1.4	0.42	0.05		5.6	85		2870				5.2	3			
OT/1-03	-16.5	1.9	0.3	164	624	10	2		1.5	0.29	0.05		9.7	50		3660				9.19	2			
OT/1-03	-17.5	2	0.2	166	658	10	1		1.3	0.26	0.05		10.2	8		3710				9.22	2			
OT/1-03	-18.5	2.2	0.22	173	500	10	1		1.4	0.35	0.05		13.7	45		3300				10.9	1			
OT/1-03	-19.5	2.7	0.23	253	230	10	3		1.6	0.29	0.05		21.5	67		6520				15.9	1			
OT/1-03	-20.5	2.5	0.28	212	242	10	2		1.7	0.27	0.1		18.5	43		4590				13.6	2			
OT/1-03	-21.5	2.3	0.21	183	621	10	1		1.6	0.21	0.05		15.2	18		3310				12.6	2			
OT/1-03	-22.5	2.3	0.14	130	42	10	1		1.5	0.16	0.05		14.9	6		2150				13.4	1			
OT/1-03	-23.5	2	0.32	168	499	10	2		1.4	0.23	0.05		13.5	37		3540				11.8	2			
OT/1-03	-24.5	2.3	0.26	228	686	10	2		1.6	0.22	0.05		15.1	14		3880				13.4	2			
OT/1-03	-25.5	2.5	0.2	195	939	10	1		1.8	0.2	0.05		15.8	12		3010				14.2	2			
OT/1-03	-26.5	2.2	0.19	177	928	10	2		1.6	0.25	0.05		15.3	6		2860				14.2	1			
OT/1-03	-27.5	2	0.245	160.5	679	10	1		1.45	0.335	0.05		13.25	47.5		2210				11.75	2			

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
OT/1-03	-28.5	2	0.28	143	577	10	2		1.6	0.36	0.05		11.8	38		2620				11.9	2			
OT/1-03	-29.5	2.75	0.18	237	977	10	2		2.15	0.245	0.05		18	16.5		4300				15.95	2			
OT/1-03	-30.5	2.4	0.21	163	629	10	1		1.8	0.23	0.05		16.4	48		3390				15.2	1			
OT/1-03	-31.5	2.55	0.19	192.5	762	10	1		1.95	0.26	0.05		17.15	10		3655				16	1.5			
OT/1-04	**-0.5**	**1.8**	**0.61**	**83.8**	**256**	**10**	**13**		**1.8**	**0.84**	**0.05**		**3.2**	**42**		**304**				**3.21**	**2**			
OT/1-04	-1.5	0.85	0.335	30.75	167	10	4		0.7	0.92	0.05		8.1	10		442				4.835	1			
OT/1-04	-2.5	0.7	0.52	143	142	10	7		0.7	0.88	0.05		5.1	26		502				2.97	4			
OT/1-04	-3.5	0.9	0.57	106	177	10	6		0.8	0.86	0.05		7	43		1470				3.94	3			
OT/1-04	-4.5	0.5	0.65	56.3	100	10	7		0.7	0.55	0.05		4.8	41		2020				2.87	2			
OT/1-04	-5.5	0.7	0.54	71.2	160	10	5		0.9	0.56	0.05		5.8	19		1890				3.45	3			
OT/1-04	-6.5	0.7	0.68	59	129	10	5		1.3	0.49	0.05		7.9	38		1880				3.27	4			
OT/1-04	-7.5	0.6	0.67	66.7	140	10	4		1	0.61	0.05		7.2	52		2010				3.99	3			
OT/1-04	-8.5	0.9	0.72	81.5	208	10	4		1.2	0.6	0.05		8.2	40		2360				4.52	3			
OT/1-04	-9.5	0.7	0.71	63.5	144	10	5		0.9	0.46	0.8		7.7	34		1840				3.21	3			
OT/1-04	-10.5	0.9	0.68	75.1	166	10	4		1	0.54	0.05		10.9	21		1800				4.61	3			
OT/1-04	-11.5	1.1	0.6	105	305	10	4		1.6	0.56	0.05		8.1	53		2100				4.86	4			
OT/1-04	-12.5	0.8	0.57	81.1	177	10	8		1	0.54	0.05		7.5	51		2070				4.31	3			
OT/1-04	-13.5	1.8	0.46	133	487	10	2		1.6	0.41	0.2		11.3	54		3080				8.32	3			
OT/1-04	-14.5	1.5	0.61	129	361	10	3		1.5	0.55	0.05		8.8	67		2690				6.33	3			
OT/1-04	-15.5	1.2	1.26	119	298	10	18		1.1	0.67	0.05		10.5	91		2200				6.54	5			
OT/1-04	-16.5	1.2	0.83	129	304	10	7		1.5	0.57	0.05		8	25		1960				5.37	4			
OT/1-04	-17.5	0.5	3.63	43.7	116	10	11		0.4	1.49	0.05		8.7	24		712				4.19	9			
OT/1-05	**-0.5**	**0.8**	**0.42**	**163**	**81**	**10**	**13**		**1.3**	**0.75**	**1.7**		**85.9**	**274**		**3500**				**25.9**	**4**			
OT/1-05	-1.5	1.1	0.24	106	330	10	3		0.9	0.57	0.05		16.4	44		952				9.26	0.5			
OT/1-05	-2.5	1.2	0.19	69.4	355	10	2		0.8	0.43	0.05		20.2	20		1110				12.8	0.5			
OT/1-05	-3.5	0.9	0.28	74.3	204	10	3		1.2	0.74	0.05		10.4	8		916				6.5	2			
OT/1-05	-4.5	1	0.46	194	265	10	4		0.9	0.71	0.1		9.7	42		1830				6.46	7			

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
OT/1-05	-5.5	0.7	0.41	80.2	178	10	3		0.8	0.52	0.05		9.1	46		1750				5.37	2			
OT/1-05	-6.5	0.8	0.52	79.7	310	10	5		1	0.57	0.05		7	36		2730				4.88	3			
OT/1-05	-7.5	0.7	0.51	75	190	10	4		0.8	0.47	0.05		7.1	48		2210				4.44	3			
OT/1-05	-8.5	0.6	0.44	70.8	170	10	3		1.2	0.42	0.05		6.9	29		2290				4.11	3			
OT/1-05	-9.5	0.7	0.52	106	161	10	3		1.2	0.56	0.05		8.7	38		2840				4.94	4			
OT/1-05	-10.5	0.7	0.45	84	223	10	3		0.8	0.43	0.05		7.9	35		2380				4.73	2			
OT/1-05	-11.5	1.1	0.55	138	318	10	1		1.2	0.33	0.05		15.3	62		3780				9.04	3			
OT/1-05	-12.5	0.9	0.79	97.2	218	10	3		1.1	0.52	0.5		12.4	29		2500				5.38	3			
OT/1-05	-13.5	1.4	0.6	177	429	10	4		1.4	0.54	0.2		11.1	63		2070				6.92	3			
OT/1-05	-14.5	1.2	0.47	132	340	10	2		1.3	0.41	0.1		12.3	77		2530				7.31	3			
OT/1-05	-15.5	1.9	0.44	212	576	10	2		1.5	0.34	0.1		12.5	69		4360				9.72	3			
OT/1-05	-16.5	1.9	0.37	195	582	10	2		1.5	0.35	0.2		9.9	42		4800				8	3			
OT/1-05	-17.5	1.6	0.41	158	415	10	4		1.3	0.35	0.1		12.2	29		3820				8.24	3			
OT/1-05	-18.5	1.6	0.38	148	426	10	3		1.5	0.35	0.3		11.8	33		3550				7.66	3			
OT/1-05	-19.5	1.9	0.52	171	1500	10	5		1.4	0.44	0.2		10.2	38		3670				7.59	3			
OT/1-05	-20.5	2.7	0.37	198	663	10	2		1.6	0.33	0.2		9.3	64		3020				6.54	3			
OT/1-05	-21.5	1.7	0.82	139	883	10	4		1.2	0.74	0.2		12.8	18		2020				7.52	4			
OT/1-06	**-0.5**	**1.3**	**0.29**	**45.5**	**205**	**10**	**11**		**1**	**0.52**	**0.05**		**2.4**	**17**		**194**				**2.91**	**1**			
OT/1-06	-1.5	1	0.24	27.5	222	10	5		1	0.55	0.05		5	24		173				3.62	0.5			
OT/1-06	-2.5	1.5	0.3	46.8	344	10	11		1.1	0.49	0.05		2.5	29		304				2.01	1			
OT/1-06	-3.5	1.4	0.38	77.7	329	10	7		1.4	0.43	0.05		3.7	76		500				3.01	2			
OT/1-06	-4.5	2.5	0.3	175	547	10	3		1.6	0.32	0.05		6.6	22		2080				5.84	2			
OT/1-06	-5.5	1.5	0.5	332	403	10	4		1.2	0.31	0.05		4.4	72		2750				3.88	10			
OT/1-06	-6.5	2.5	0.52	260	464	10	4		1.3	0.26	0.05		4.8	55		3110				4.44	4			
OT/1-06	-7.5	2.1	0.36	133	420	10	3		1.3	0.34	0.05		6.4	26		3560				6.28	2			
OT/1-06	-8.5	2	0.39	198	828	10	2		1.5	0.34	0.05		9.2	24		6010				12.6	2			
OT/1-06	-9.5	4	0.44	249	1500	10	2		1.65	0.225	0.125		12.65	88		7655				15.6	2			

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
OT/1-06	-10.5	3.7	0.42	186	1500	10	2		1.9	0.35	0.1		18.2	18		5050				19.4	2			
OT/1-06	-11.5	34.6	0.28	159	1500	10	1		2	0.28	0.05		18.8	39		4350				19.4	0.5			
OT/1-06	-12.5	7.2	0.34	216	1500	10	1		1.7	0.2	0.05		19.2	36		6650				18.5	1			
OT/1-06	-13.5	5	0.31	197	966	10	1		2	0.18	0.1		23.7	37		5870				20.3	1			
OT/1-06	-14.5	4.4	0.38	205	888	10	2		1.7	0.22	0.2		18.6	42		5680				17.4	2			
OT/1-06	-15.5	16.8	0.39	193	1500	10	3		1.6	0.25	0.05		13.4	73		4500				13.2	2			
OT/1-06	-16.5	4.9	0.39	169	869	10	2		1.8	0.26	0.1		20.5	29		5710				17.9	1			
OT/1-06	-17.5	3.5	0.61	165	804	10	3		1.5	0.29	0.05		18.4	31		4350				15.3	2			
OT/1-06	-18.5	3	0.3	180	810	10	2		1.7	0.31	0.05		16.9	18		4650				16.9	1			
OT/1-06	-19.5	2.2	0.37	137	500	10	2		1.3	0.49	0.05		12	15		2560				12.7	2			
OT/1-06	-20.5	5.5	1.04	149	628	10	2		1.3	0.58	0.05		14.4	26		3020				13.1	3			
OT/1-06	-21.5	1	4.47	19.3	35	10	38		0.2	1.98	0.05		5.1	8		442				3.82	8			
OT/2-01	**-0.5**	**0.9**	**0.86**	**116**	**198**	**10**	**10**		**0.8**	**1.19**	**0.05**		**3.8**	**87**		**568**				**3.19**	**2**			
OT/2-01	-1.5	0.9	1.13	74.6	146	10	8		1.1	1	0.05		6.5	64		1880				3.92	2			
OT/2-01	-2.5	2.8	0.62	244	505	10	3		2.8	0.61	0.5		12.5	16		2770				10.2	2			
OT/2-01	-3.5	2	0.64	168	300	10	3		1.5	0.76	0.2		12.1	55		1800				9.75	2			
OT/2-01	-4.5	1.8	0.85	79.5	228	10	6		1.1	1.24	0.1		6.1	24		1040				5.27	2			
OT/2-01	-5.5	1.1	0.95	75.5	191	10	7		1.1	1.23	0.1		5.5	84		993				4.88	2			
OT/2-01	-6.5	1.1	0.79	123	275	10	6		1.4	1.07	0.1		7	58		1460				5.31	2			
OT/2-01	-7.5	1.2	0.75	106	227	10	5		1.2	1.01	0.05		6.5	47		1190				5.29	2			
OT/2-01	-8.5	1.9	0.68	159	296	10	3		1.7	0.74	0.1		9.3	89		1730				8.85	2			
OT/2-01	-9.5	3.3	0.46	224	319	10	1		1.9	0.6	0.2		17.9	36		2960				16.6	1			
OT/2-01	-10.5	2.4	0.53	149	403	10	2		1.4	0.6	0.3		18.7	66		2650				15.8	2			
OT/2-01	-11.5	2.7	0.65	251	442	10	3		2	0.76	0.4		15.5	99		3220				13.6	2			
OT/2-01	-12.5	4.4	0.49	353	633	10	2		3.1	0.5	0.4		12.6	83		3500				12.8	2			
OT/2-01	-13.5	4.5	0.47	331	545	10	2		3.6	0.63	0.3		13.2	36		2750				12.8	2			
OT/2-01	-14.5	3.7	0.54	247	490	10	2		2.5	0.69	0.3		13.2	53		2490				11.7	2			

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
OT/2-01	-15.5	1.7	0.77	111	305	10	3		0.9	1.24	0.1		10.1	53		1740				8.25	2			
OT/2-01	-16.5	1.35	0.98	74.95	305	10	4		0.95	1.5	0.25		9.9	39		1965				8.645	2			
OT/2-01	-17.5	1.95	0.79	113.5	389	10	5		1.3	1.3	0.2		8.65	58		1860				8.055	2			
OT/2-01	-18.5	1	0.75	48.8	151	10	6		0.5	0.96	0.05		9.5	24		1710				6.43	2			
OT/2-01	-19.5	0.8	0.72	101	229	10	9		0.6	1.12	0.05		6.4	80		708				5.54	2			
OT/2-01	-20.5	0.9	0.72	88.7	214	10	3		0.6	0.67	0.05		12.6	75		2070				10	2			
OT/2-01	-21.5	1.1	0.71	86.4	277	10	4		0.9	0.69	0.1		8.6	45		2040				6.86	2			
OT/2-01	-22.5	1.2	0.57	106	226	10	4		2.3	0.65	0.05		8.4	24		2530				6.72	5			
OT/2-01	-23.5	1.7	0.49	132	789	10	2		1.5	0.41	0.05		13.3	59		3220				10.5	2			
OT/2-01	-24.5	1.5	0.52	107	369	10	3		1.7	0.54	0.05		11.5	51		2980				9.32	3			
OT/2-01	-25.5	0.8	0.76	63.1	144	10	5		0.5	0.81	0.05		10.5	57		1320				7.85	2			
OT/2-01	-26.5	1.9	0.39	139	538	10	2		2.2	0.38	0.05		15.5	43		3110				13.4	3			
OT/2-01	-27.5	1.8	0.38	126	409	10	2		1.6	0.36	0.05		14.9	77		3340				12.8	3			
OT/2-01	-28.5	1.5	0.47	104	301	10	8		1.5	0.4	0.05		10.8	72		3060				9.27	3			
OT/2-01	-29.5	1.4	0.49	87.5	280	10	3		1.5	0.37	0.05		9.9	52		3040				8.04	4			
OT/2-01	-30.5	0.9	2.19	109	124	10	7		1	0.91	0.05		9.7	30		2020				6.25	6			
OT/2-01	-31.5	0.5	4.45	22.2	10	10	121		0.2	1.7	0.05		11.4	32		294				5.65	10			
OT/2-01	-32.5	0.3	4.9	4.7	15	10	92		0.1	2.02	0.05		16.8	31		122				5.3	10			
OT/2-01	-33.5	0.1	4.82	4	5	10	84		0.1	2.46	0.05		10.9	17		95				3.53	9			
OT/2-02	**-0.5**	**0.2**	**0.45**	**70.4**	**113**	**10**	**18**		**0.4**	**0.89**	**0.05**		**1.7**	**63**		**202**				**1.75**	**0.5**			
OT/2-02	-1.5	0.6	0.59	190	136	10	9		0.8	1.38	0.05		8.2	16		1270				5.52	2			
OT/2-02	-2.5	0.5	0.99	53.2	129	10	9		0.6	0.92	0.2		8.1	23		1130				3.16	2			
OT/2-02	-3.5	0.8	0.72	66.2	190	10	6		1	0.97	0.2		6.9	34		845				5.55	2			
OT/2-02	-4.5	0.8	0.59	64.3	200	10	7		1	1.1	0.05		5.3	14		769				5.11	1			
OT/2-02	-5.5	1.05	0.63	80.1	206	10	8		0.95	0.86	0.05		5.15	41		961				4.995	2			
OT/2-02	-6.5	0.9	0.74	74.5	185	10	8		0.8	0.84	0.05		5.5	81		940				4.54	2			
OT/2-02	-7.5	1	0.56	90.8	243	10	6		1.1	0.84	0.05		5.4	25		1140				4.69	2			

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
OT/2-02	-8.5	1.1	0.65	94.5	223	10	7		1.1	0.78	0.1		6.1	59		1060				4.45	2			
OT/2-02	-9.5	0.9	0.65	60.9	173	10	7		0.8	0.78	0.05		5.6	25		863				4.02	2			
OT/2-02	-10.5	0.9	0.61	82.3	183	10	8		0.9	0.78	0.05		5.8	29		1020				4.27	2			
OT/2-02	-11.5	1.2	0.82	96	220	10	7		1.3	1.07	0.1		5.2	34		1100				4.49	2			
OT/2-02	-12.5	1.1	0.8	116	201	10	7		1.2	0.89	0.05		5.8	70		1040				4.59	2			
OT/2-02	-13.5	1.1	0.68	97.8	180	10	8		1.1	1.07	0.1		5.1	10		1050				4.3	2			
OT/2-02	-14.5	1.1	0.69	116	212	10	8		1.2	1.06	0.05		4.6	20		1090				3.83	2			
OT/2-02	-15.5	1	0.61	79.7	191	10	7		0.9	0.88	0.05		5.8	22		1030				4.4	2			
OT/2-02	-16.5	1.2	0.8	138	225	10	8		1.3	1.36	0.1		5.4	10		1220				4.47	2			
OT/2-02	-17.5	1.4	0.82	153	327	10	5		1.4	1.5	0.2		7.3	11		1590				6.09	2			
OT/2-02	-18.5	1.4	0.78	126	376	10	4		1.4	1.38	0.3		10.1	11		1940				9.31	2			
OT/2-02	-19.5	1	0.9	109	265	10	4		0.7	0.98	0.2		9.3	96		2170				7.04	2			
OT/2-02	-20.5	0.75	0.855	96	278	10	6		0.75	1.275	0.075		9.25	44		1550				5.655	2			
OT/2-02	-21.5	0.7	0.56	51.5	177	10	5		0.6	0.92	0.05		10.9	29		1060				8.98	2			
OT/2-02	-22.5	0.75	0.96	86.55	178	10	10		0.9	0.955	0.2		4.25	15.5		2750				3.48	4.5			
OT/2-02	-23.5	0.5	0.62	55.5	127	10	10		0.7	0.62	0.05		5.2	23		1270				3.54	3			
OT/2-02	-24.5	0.55	0.52	70.95	173	10	6		0.9	0.53	0.05		5.5	40		1345				4.485	2			
OT/2-02	-25.5	0.9	0.55	109	337	10	4		1	0.76	0.05		8	11		1860				5.93	2			
OT/2-02	-26.5	1.15	0.805	117.5	324	10	5		1.35	0.74	0.075		6.65	53.5		2450				4.96	3			
OT/2-02	-27.5	1.3	0.73	119	444	10	6		1.8	0.8	0.05		6.8	10		3790				5.37	4			
OT/2-02	-28.5	1.6	0.53	149	544	10	4		2.6	0.71	0.1		11	30		4220				9.24	4			
OT/2-02	-29.5	1.5	0.53	143	383	10	3		2	0.58	0.05		10.6	32		3570				8.72	3			
OT/2-02	-30.5	1.9	0.49	142	384	10	2		1.7	0.43	0.05		17	119		3490				13.4	3			
OT/2-02	-31.5	1.9	0.54	147	389	10	3		2.2	0.72	0.1		9.2	20		4160				8.01	4			
OT/2-02	-32.5	1.5	0.4	159	276	10	4		1.8	0.48	0.05		9.7	12		3410				8.1	2			
OT/2-02	-33.5	1.1	0.47	134	247	10	5		1.8	0.58	0.05		6.8	11		2850				5.11	3			
OT/2-02	-34.5	1.3	0.56	137	308	10	3		2	0.68	0.05		8.7	14		3240				6.9	3			

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
OT/2-02	-35.5	1.2	0.71	121	222	10	4		1.5	0.74	0.05		8.3	40		3340				6.89	4			
OT/2-02	-36.5	1.3	0.46	95.7	346	10	2		1.3	0.62	0.05		10.6	12		2420				9.3	2			
OT/2-02	-37.5	1.3	0.57	109	260	10	5		1.1	0.74	0.05		7.9	22		2200				5.96	3			
OT/2-02	-38.5	1.4	0.53	149	326	10	5		1.3	0.49	0.05		9.1	55		2850				7.38	2			
OT/2-02	-39.5	0.7	0.46	121	200	10	6		0.8	0.47	0.05		4.7	14		1800				3.87	3			
OT/2-02	-40.5	0.4	2.7	69.3	98	10	14		0.6	1.46	0.05		6	19		1300				3.65	6			
OT/2-02	-41.5	0.2	3.79	30.8	47	10	15		0.4	1.69	0.05		6.2	8		674				3.05	7			
B-1	**-1**	**6.401**	**0.38**	**68.3**	**1205**	**10**	**12**	**0.1**	**1.28**	**0.92**	**0.04**	**0.6**	**8.2**	**0.25**	**0.21**	**490**				**5.18**	**1.1**		**0.1**	**0.02**
B-1	-3	1.685	0.39	116.1	573	10	6	0.05	2.08	0.55	0.06	0.4	11	0.25	0.15	2052				7.38	1.9		0.3	0.01
B-1	-5	1.397	0.59	406.9	633	10	15	0.05	1.39	0.38	0.05	1	8	13.1	0.15	3134				5.13	5.9		0.2	0.03
B-1	-7	1.768	0.55	132.3	612	10	10	0.05	1.23	0.35	0.06	0.7	8.1	1.9	0.12	3438				5.98	2.5		0.2	0.02
B-1	-9	1.219	0.65	147.9	460	10	12	0.05	1.35	0.41	0.06	0.8	8.2	3.1	0.12	3569				4.75	3		0.2	0.01
B-1	-11	1.248	0.84	120.7	543	10	15	0.05	1.59	0.38	0.08	0.6	8.5	1.8	0.1	3340				4.4	2.5		0.2	0.01
B-1	-13	4.398	0.43	131.9	713	10	4	0.05	1.98	0.24	0.12	0.5	20.9	1.7	0.1	3148				13.75	1.6		0.4	0.04
B-1	-15	2.224	0.37	145.5	782	10	3	0.05	1.87	0.24	0.36	0.3	22.4	1.1	0.07	2819				15.16	1.1		0.5	0.01
B-1	-17	2.888	0.38	225.2	929	10	3	0.05	2.38	0.15	0.6	0.3	24.4	2.1	0.04	5515				18.72	1.3		0.8	0.01
B-1	-19	2.572	0.42	173	829	10	3	0.05	2.16	0.28	0.18	0.3	20	1.8	0.07	3693				16.33	1.8		0.3	0.01
B-2	**-1**	**0.858**	**0.77**	**94**	**130**	**10**	**181**	**0.2**	**1.03**	**0.6**	**0.1**	**3.1**	**4.5**	**10.8**	**0.23**	**411**				**3.38**	**2.5**		**0.05**	**0.02**
B-2	-3	0.729	0.38	34	191	10	26	0.05	0.7	0.95	0.02	0.5	7.2	1.8	0.17	227				3.91	0.9		0.05	0.04
B-2	-5	0.949	0.75	69.4	355	10	50	0.05	0.99	0.77	0.09	1.2	4.6	5.7	0.26	1962				1.92	2		0.05	0.02
B-2	-7	1.588	1.23	239.5	202	10	81	0.3	2.14	0.86	2.49	7.2	56.2	90.8	0.28	15000				15.27	4.6		0.2	0.09
B-2	-9	1.724	1.19	240.6	224	10	55	0.1	2.23	0.89	2.55	6.7	50.1	74.8	0.25	15000				14.04	4.3		0.2	0.1
B-2	-11	1.38	1.29	230.5	146	10	82	0.4	1.87	1.15	2.33	7.3	46.2	72.9	0.27	15000				12.39	4.3		0.3	0.1
B-2	-13	1.604	0.36	85.2	525	10	5	0.05	1.1	0.54	0.04	0.4	13.3	1	0.04	1177				10.69	1.1		0.6	0.02
B-2	-15	1.848	0.4	76.2	590	10	8	0.1	1.18	0.58	0.05	0.4	13.7	2.4	0.06	1151				8.51	1.4		0.4	0.03
B-2	-17	2.311	0.44	87.2	599	10	5	0.05	1.8	0.44	0.08	0.4	15.2	2.6	0.1	4503				11.42	2.9		0.3	0.03
B-2	-19	0.741	0.68	79.2	165	10	18	0.05	1.63	0.9	0.15	1	8.6	22.4	0.21	2186				4.81	5.3		0.05	0.02

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
B-3	**-1**	**0.868**	**0.45**	**47.8**	**207**	**10**	**237**	**0.05**	**1.17**	**0.69**	**0.05**	**0.7**	**1.7**	**5.2**	**0.12**	**358**				**1.61**	**1.1**		**0.1**	**0.02**
B-3	-3	0.775	0.37	40.9	212	10	219	0.05	1.22	0.68	0.07	0.6	1.2	4.1	0.09	219				1.12	0.5		0.05	0.01
B-3	-5	0.683	0.74	75.2	138	10	31	0.05	1.16	2.39	0.06	1.2	6.7	5.2	0.37	947				2.74	5		0.05	0.03
B-3	-7	0.471	0.69	129.6	118	10	47	0.05	0.66	1.63	0.07	0.8	5.4	5.3	0.28	341				2.53	1.5		0.05	0.03
B-3	-9	1.111	0.84	140.6	247	10	25	0.05	1.66	1.19	0.21	1	8.4	23.3	0.27	1292				3.81	2		0.1	0.03
B-3	-11	1.804	0.74	205.2	359	10	12	0.05	1.78	1.51	0.21	1.6	10.2	8.8	0.61	1679				6.68	2.1		0.1	0.04
B-3	-13	1.069	0.58	104.8	396	10	9	0.05	0.87	0.95	0.1	1.1	18	4.6	0.25	1374				9.19	1.8		0.1	0.04
B-3	-15	0.9	0.73	89.7	303	10	14	0.05	0.81	0.98	0.19	1.9	16.3	11.2	0.16	2076				6.9	1.9		0.1	0.04
B-3	-17	0.784	0.48	127.5	244	10	12	0.05	0.92	0.47	0.04	0.8	10.9	7.5	0.13	1984				5.65	2		0.1	0.02
B-3	-19	0.914	0.54	95.5	245	10	24	0.05	1.19	0.67	0.11	1.1	10.7	9.6	0.18	1217				4.44	2.1		0.1	0.02
B-3	-21	1.138	0.54	96.2	345	10	17	0.05	1.36	0.48	0.09	0.9	10.4	7.1	0.15	1595				5.2	2.8		0.1	0.01
B-3	-23	1.098	0.43	118.6	280	10	22	0.05	1.29	0.3	0.09	0.8	11.4	4.8	0.11	1336				6.84	1.6		0.2	0.04
B-3	-25	2.047	0.31	181.2	574	10	3	0.05	2.01	0.19	0.13	0.5	27.1	5.1	0.07	3578				16.63	1.9		0.3	0.04
B-3	-27	1.52	0.33	148.5	491	10	5	0.05	1.78	0.2	0.09	0.5	22.6	4.5	0.08	2382				14.44	1.6		0.4	0.02
B-3	-29	1.622	0.35	142.5	499	10	5	0.05	1.59	0.27	0.1	1	26	6.2	0.1	2784				15.48	1.6		0.4	0.04
B-4	**-1**	**0.88**	**0.57**	**131.8**	**134**	**10**	**205**	**0.05**	**2.31**	**0.98**	**1.07**	**1.4**	**2.2**	**4.9**	**0.21**	**1210**				**1.97**	**1.5**		**0.1**	**0.05**
B-4	-3	0.478	0.56	97.9	106	10	273	0.05	1.01	1.1	0.22	0.8	0.6	2.9	0.18	297				1.45	1.3		0.05	0.03
B-4	-5	0.578	0.52	103.6	117	10	236	0.05	1.25	1.12	0.4	0.9	1	3	0.17	421				1.43	1.3		0.05	0.03
B-4	-7	1.022	0.55	136.6	144	10	422	0.05	2.79	1.18	2.13	1.7	2.9	5	0.23	1901				1.87	1.4		0.1	0.04
B-4	-9	1.13	0.55	149.4	153	10	338	0.1	3.13	1.32	2.39	1.8	2.8	5.1	0.23	2064				1.86	1.5		0.1	0.04
B-4	-11	1.384	0.53	159.4	155	10	213	0.05	4.53	2.35	3.84	2.3	4.5	6.4	0.25	3145				2.01	1.3		0.1	0.03
B-4	-13	1.051	0.73	167.4	257	10	16	0.05	1.18	1.45	0.17	1.5	8	4.9	0.21	1503				4.05	2.2		0.1	0.03
B-4	-15	0.978	0.71	117.2	363	10	15	0.1	1.04	1.32	0.3	2	12	12.8	0.23	1665				5.92	2.4		0.05	0.03
B-4	-17	0.75	0.57	67.8	182	10	19	0.05	0.84	0.88	0.26	0.9	8.9	5.3	0.22	1169				4.4	1.6		0.05	0.03
B-4	-19	0.818	0.54	57.2	231	10	12	0.05	0.72	1.1	0.06	1.3	15.6	10.3	0.19	1031				8.99	1.7		0.1	0.03
B-4	-21	1.034	0.62	112.6	290	10	17	0.1	1.78	0.86	0.24	1.1	8.7	7.6	0.18	2138				4.8	3.2		0.05	0.03
B-4	-23	0.945	0.57	104.4	263	10	21	0.1	1.17	0.79	0.23	1.3	9.1	6.9	0.22	1485				4.69	1.9		0.05	0.04

		Ag	Al	As	Au	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Dy	Er	Eu	Fe	Ga	Gd	Ge	Hf
B-4	-25	1.235	0.49	121.4	359	10	8	0.05	1.54	0.63	0.23	1	12.5	6.2	0.15	1969				7.27	2.4		0.1	0.05
B-4	-27	1.451	0.47	159.1	407	10	8	0.05	1.82	0.55	0.14	0.8	14.4	6.9	0.13	2749				8.5	2.9		0.3	0.04
B-4	-29	1.071	0.47	142	308	10	12	0.05	1.62	0.56	0.08	0.8	12.6	7.3	0.12	2793				6.61	2.8		0.2	0.01
B-4	-31	1.227	0.47	141.5	347	10	12	0.05	1.59	0.7	0.09	1	13.2	6.8	0.16	2885				7.56	3.2		0.2	0.02

Annex 1 cont.

		Hg	Ho	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Nd	Ni	P	Pb	Pd	Pr	Pt	Rb	Re	S	Sb
Borehole	depth	PPM	PPM	PPM	%	PPM	PPM	PPM	%	PPM	PPM	%	PPM	PPM	PPM	%	PPM	PPB	PPM	PPB	PPM	PPB	%	PPM
F1	**-0.5**	**0.12**	**0.01**	**0.01**	**0.06**	**0.25**	**0.70**	**0.01**	**0.01**	**7.00**	**2.02**	**0.03**	**0.01**	**0.17**	**0.20**	**0.00**	**14.36**	**5.00**	**0.04**	**1.00**	**1.10**	**2.00**	**0.86**	**0.27**
F1	-1.5	0.21	0.01	0.05	0.05	0.25	1.40	0.01	0.04	18.00	2.64	0.02	0.01	0.31	1.70	0.01	17.63	5.00	0.07	1.00	1.20	9.00	3.24	0.25
F1	-2.5	0.18	0.01	0.03	0.05	0.25	1.70	0.01	0.03	16.00	3.10	0.01	0.01	0.33	1.80	0.00	16.15	5.00	0.08	1.00	1.20	9.00	3.41	0.18
F1	-3.5	0.22	0.01	0.03	0.05	0.25	1.50	0.01	0.03	17.00	2.75	0.01	0.01	0.31	1.80	0.00	18.78	5.00	0.07	1.00	1.30	10.00	3.62	0.25
F1	-4.5	0.23	0.01	0.03	0.05	0.25	1.20	0.01	0.05	74.00	2.60	0.01	0.01	0.48	2.30	0.00	17.94	5.00	0.10	1.00	1.30	14.00	4.05	0.36
F1	-5.5	0.27	0.02	0.05	0.05	0.25	1.45	0.01	0.07	126.50	2.48	0.01	0.01	0.54	3.20	0.01	25.47	5.00	0.12	1.00	1.30	13.00	4.73	0.50
F1	-6.5	0.19	0.01	0.02	0.05	0.25	1.00	0.01	0.03	21.00	3.18	0.01	0.01	0.40	1.70	0.00	14.35	5.00	0.08	1.00	1.10	16.00	3.53	0.32
F1	-7.5	0.18	0.01	0.01	0.04	0.25	0.90	0.01	0.02	15.00	2.89	0.01	0.01	0.34	1.50	0.00	12.57	5.00	0.08	2.00	1.00	13.00	3.33	0.27
F1	-8.5	0.17	0.01	0.01	0.04	0.25	0.80	0.01	0.02	14.00	2.98	0.01	0.01	0.34	1.40	0.00	11.89	5.00	0.07	1.00	0.90	12.00	3.23	0.32
F1	-9.5	0.32	0.02	0.05	0.05	0.25	1.40	0.01	0.08	144.00	2.54	0.01	0.01	0.50	4.40	0.00	28.63	5.00	0.11	1.00	1.10	10.00	5.74	0.64
F1	-10.5	0.42	0.02	0.07	0.05	0.25	1.60	0.01	0.16	109.00	3.42	0.01	0.01	0.65	5.30	0.01	44.17	5.00	0.14	1.00	1.20	10.00	9.23	1.18
F1	-11.5	0.71	0.02	0.20	0.05	0.25	1.30	0.01	0.10	125.00	4.58	0.01	0.01	0.56	6.50	0.01	59.68	5.00	0.11	1.00	1.20	12.00	15.00	3.11
F1	-12.5	0.67	0.01	0.17	0.05	0.25	1.05	0.01	0.07	92.00	4.72	0.01	0.03	0.52	6.50	0.01	62.42	5.00	0.11	1.00	0.95	12.00	15.00	4.18
F1	-13.5	0.65	0.01	0.18	0.04	0.25	0.90	0.01	0.05	65.00	4.90	0.01	0.01	0.37	6.70	0.00	59.04	5.00	0.07	1.00	0.70	15.00	15.00	4.12
F1	-14.5	0.57	0.01	0.13	0.06	0.25	1.30	0.01	0.07	83.00	3.91	0.01	0.01	0.50	5.90	0.00	49.83	5.00	0.10	1.00	1.20	13.00	15.00	1.67
F1	-15.5	0.22	0.01	0.04	0.07	0.25	1.00	0.01	0.08	72.00	2.41	0.01	0.01	0.53	6.90	0.00	19.72	5.00	0.11	3.00	1.00	10.00	15.00	0.36
F1	-16.5	0.33	0.01	0.07	0.04	0.25	0.90	0.01	0.07	60.00	4.80	0.01	0.04	0.44	5.20	0.00	38.73	5.00	0.10	1.00	1.00	11.00	9.68	2.27
F1	-17.5	0.68	0.02	0.05	0.05	0.50	1.60	0.01	0.14	68.00	8.96	0.01	0.01	0.65	5.20	0.01	44.28	5.00	0.14	1.00	1.10	8.00	7.50	0.67
F1	-18.5	0.19	0.05	0.03	0.04	0.70	2.00	0.01	0.14	78.00	2.41	0.01	0.01	1.15	4.20	0.01	18.28	5.00	0.25	1.00	0.90	10.00	4.68	0.35
F1	-19.5	0.29	0.04	0.07	0.04	0.60	1.40	0.01	0.13	123.00	2.94	0.01	0.01	0.88	6.50	0.01	24.73	5.00	0.18	2.00	1.00	12.00	15.00	0.71
F1	-20.5	0.29	0.01	0.07	0.03	0.25	0.90	0.01	0.08	91.00	2.90	0.01	0.01	0.43	8.80	0.00	29.77	5.00	0.08	2.00	0.70	14.00	15.00	1.16
F1	-21.5	0.18	0.01	0.05	0.02	0.25	0.60	0.01	0.08	71.50	2.38	0.01	0.01	0.35	5.95	0.00	23.91	5.00	0.07	1.50	0.50	12.00	15.00	0.81
F1	-22.5	0.23	0.01	0.04	0.04	0.25	1.50	0.01	0.11	110.00	2.20	0.01	0.01	0.50	5.30	0.00	26.39	5.00	0.10	1.00	0.80	11.00	9.57	0.84
F1	-23.5	0.26	0.01	0.05	0.03	0.25	1.60	0.01	0.07	70.00	2.94	0.01	0.01	0.45	4.10	0.00	34.03	5.00	0.09	1.00	0.60	10.00	7.91	1.72
F1	-24.5	0.24	0.01	0.04	0.03	0.25	1.30	0.01	0.07	75.00	3.01	0.01	0.01	0.42	5.10	0.00	31.47	5.00	0.08	1.00	0.60	12.00	15.00	1.65

F1	-25.5	0.28	0.01	0.05	0.03	0.25	1.10	0.01	0.06	76.00	2.71	0.01	0.01	0.43	5.30	0.00	33.82	5.00	0.08	3.00	0.70	12.00	15.00	1.31
F1	-26.5	0.37	0.01	0.03	0.03	0.25	0.90	0.01	0.04	44.00	4.18	0.01	0.01	0.28	4.00	0.00	44.38	5.00	0.06	1.00	0.70	18.00	8.35	1.20
F1	-27.5	0.75	0.01	0.04	0.03	0.25	0.60	0.01	0.01	14.00	3.72	0.01	0.01	0.16	4.40	0.00	54.03	5.00	0.03	3.00	0.70	19.00	15.00	1.28
F1	-28.5	0.54	0.01	0.07	0.03	0.25	1.00	0.01	0.02	23.00	2.82	0.01	0.01	0.26	4.30	0.00	59.55	5.00	0.05	1.00	0.80	12.00	15.00	0.84
F1	-29.5	0.80	0.01	0.05	0.04	0.25	1.50	0.01	0.02	16.00	2.00	0.01	0.01	0.38	3.80	0.00	65.07	5.00	0.07	1.00	0.80	11.00	7.59	1.35
F1	-30.5	0.61	0.01	0.05	0.03	0.25	1.10	0.01	0.02	21.00	2.57	0.01	0.01	0.31	4.60	0.00	61.00	5.00	0.06	1.00	0.90	13.00	9.93	2.05
F1	-31.5	0.59	0.01	0.05	0.04	0.25	1.40	0.01	0.03	26.00	2.01	0.01	0.01	0.38	5.90	0.00	59.64	5.00	0.08	1.00	0.80	9.00	8.49	0.66
F1	-32.5	0.49	0.01	0.06	0.03	0.25	1.60	0.01	0.03	70.00	2.25	0.01	0.01	0.27	3.50	0.00	69.97	5.00	0.05	1.00	0.60	8.00	5.77	0.66
F1	-33.5	0.39	0.01	0.05	0.05	0.25	2.60	0.01	0.06	47.00	2.05	0.01	0.01	0.43	4.40	0.01	34.84	5.00	0.09	1.00	1.00	8.00	8.08	0.57
F1	-34.5	0.55	0.01	0.06	0.03	0.25	2.50	0.01	0.04	91.00	1.28	0.01	0.01	0.38	2.90	0.00	90.86	5.00	0.08	1.00	0.70	4.00	4.24	0.49
F1	-35.5	0.52	0.01	0.05	0.03	0.25	1.20	0.01	0.04	72.00	1.05	0.01	0.01	0.34	2.70	0.00	74.89	5.00	0.07	1.00	0.60	4.00	4.66	0.65
F1	-36.5	0.48	0.01	0.05	0.04	0.25	1.80	0.01	0.05	75.00	1.23	0.01	0.01	0.42	2.60	0.00	68.21	5.00	0.08	1.00	0.90	4.00	3.09	0.75
F1	-37.5	0.64	0.01	0.06	0.04	0.25	1.70	0.01	0.06	69.00	1.86	0.01	0.01	0.46	2.60	0.00	101.98	5.00	0.09	2.00	0.90	5.00	3.36	1.32
F1	-38.5	0.41	0.01	0.04	0.02	0.25	1.20	0.01	0.02	57.00	2.01	0.01	0.01	0.21	3.50	0.00	53.94	5.00	0.04	1.00	0.50	10.00	7.15	1.06
F1	-39.5	0.47	0.01	0.05	0.03	0.25	1.80	0.01	0.04	55.00	2.02	0.01	0.01	0.31	2.80	0.00	81.88	5.00	0.06	1.00	0.60	6.00	4.49	0.82
F1	-40.5	0.56	0.01	0.05	0.02	0.25	1.30	0.01	0.03	50.00	2.16	0.01	0.01	0.22	3.30	0.00	59.93	5.00	0.04	1.00	0.45	8.00	8.43	0.93
F1	-41.5	0.57	0.01	0.06	0.02	0.25	1.20	0.01	0.03	64.00	2.81	0.01	0.01	0.21	4.80	0.00	111.35	5.00	0.04	1.00	0.40	10.00	9.88	2.14
F1	-42.5	0.47	0.01	0.05	0.03	0.25	1.40	0.01	0.05	65.00	2.95	0.01	0.01	0.37	4.10	0.00	81.56	5.00	0.08	2.00	0.60	11.00	8.34	1.12
F1	-43.5	0.51	0.01	0.05	0.02	0.25	1.20	0.01	0.02	57.00	2.16	0.01	0.01	0.19	4.00	0.00	94.73	5.00	0.04	1.00	0.40	6.00	9.60	1.16
F1	-44.5	0.37	0.01	0.07	0.03	0.25	1.30	0.01	0.02	45.00	2.61	0.00	0.01	0.21	4.50	0.00	52.20	5.00	0.04	3.00	0.50	10.00	15.00	1.13
F1	-45.5	0.30	0.01	0.04	0.02	0.25	1.00	0.01	0.01	13.00	2.14	0.00	0.01	0.13	3.60	0.00	48.05	5.00	0.02	2.00	0.40	7.00	15.00	1.28
F1	-46.5	0.28	0.01	0.05	0.02	0.25	2.30	0.01	0.01	22.00	2.19	0.00	0.01	0.13	5.60	0.00	41.70	5.00	0.01	1.00	0.30	8.00	15.00	1.49
F1	-47.5	0.30	0.01	0.04	0.02	0.25	0.90	0.01	0.02	54.00	2.41	0.00	0.01	0.19	5.00	0.00	38.31	5.00	0.03	2.00	0.30	11.00	15.00	1.03
F1	-48.5	0.39	0.01	0.05	0.01	0.25	0.80	0.01	0.01	42.00	3.38	0.00	0.01	0.13	5.90	0.00	36.75	5.00	0.01	2.00	0.20	11.00	15.00	1.25
F1	-49.5	0.38	0.01	0.04	0.01	0.25	1.10	0.01	0.02	52.00	2.85	0.00	0.01	0.24	4.80	0.00	65.84	5.00	0.04	1.00	0.30	8.00	9.57	1.20
F1	-50.5	0.39	0.01	0.04	0.02	0.25	1.40	0.01	0.02	61.00	4.44	0.00	0.01	0.21	5.40	0.00	55.35	5.00	0.04	1.00	0.30	12.00	9.44	1.01
F2	**-0.5**	**0.19**	**0.01**	**0.02**	**0.07**	**0.25**	**1.20**	**0.01**	**0.02**	**13.00**	**3.26**	**0.02**	**0.01**	**0.34**	**0.60**	**0.00**	**19.95**	**5.00**	**0.07**	**1.00**	**1.00**	**6.00**	**1.03**	**0.25**
F2	-1.5	0.20	0.01	0.01	0.05	0.25	0.90	0.01	0.02	9.00	2.42	0.01	0.01	0.36	1.50	0.00	15.55	5.00	0.07	1.00	1.10	8.00	3.74	0.20

F2	-2.5	0.21	0.01	0.03	0.06	0.25	1.10	0.01	0.03	19.00	2.43	0.01	0.01	0.55	2.10	0.01	17.43	5.00	0.11	1.00	1.20	10.00	4.22	0.20
F2	-3.5	0.26	0.03	0.04	0.05	0.60	1.50	0.01	0.08	104.00	2.41	0.01	0.01	0.73	4.20	0.01	25.88	5.00	0.16	1.00	1.20	17.00	4.22	0.78
F2	-4.5	0.25	0.01	0.01	0.07	0.25	1.50	0.01	0.03	17.00	2.87	0.01	0.01	0.43	1.85	0.00	13.94	5.00	0.09	1.00	1.60	7.50	4.20	0.18
F2	-5.5	0.25	0.01	0.01	0.06	0.25	1.10	0.01	0.03	39.00	2.97	0.01	0.01	0.41	2.30	0.00	19.64	5.00	0.08	1.00	1.30	10.00	4.23	0.28
F2	-6.5	0.24	0.02	0.04	0.06	0.25	1.10	0.01	0.08	121.00	2.85	0.01	0.01	0.60	4.20	0.01	21.45	5.00	0.12	1.00	1.40	11.00	5.07	0.49
F2	-7.5	0.27	0.02	0.07	0.08	0.60	1.60	0.01	0.09	82.00	2.28	0.02	0.01	0.65	2.80	0.01	34.00	5.00	0.14	1.00	1.30	6.00	4.54	0.35
F2	-8.5	0.22	0.01	0.01	0.05	0.25	0.90	0.01	0.03	37.00	2.48	0.01	0.01	0.44	2.10	0.00	16.63	5.00	0.10	1.00	1.30	6.00	3.77	0.57
F2	-9.5	0.20	0.01	0.03	0.05	0.25	1.20	0.01	0.05	51.00	2.49	0.01	0.01	0.47	2.90	0.00	16.73	5.00	0.10	1.00	1.10	7.00	4.24	0.36
F2	-10.5	0.26	0.01	0.03	0.06	0.25	1.20	0.01	0.02	11.00	3.10	0.01	0.01	0.35	1.70	0.01	17.39	5.00	0.08	1.00	1.50	7.00	4.31	0.20
F2	-11.5	0.33	0.03	0.06	0.07	0.60	2.00	0.01	0.12	115.00	2.24	0.02	0.01	0.75	3.60	0.01	54.55	5.00	0.16	1.00	1.20	4.00	5.29	0.48
F2	-12.5	0.57	0.03	0.08	0.09	0.60	2.00	0.01	0.09	110.00	3.17	0.02	0.01	0.73	4.10	0.01	65.23	5.00	0.16	1.00	2.00	5.00	6.40	0.48
F2	-13.5	0.34	0.03	0.05	0.07	0.60	1.80	0.01	0.10	95.00	2.35	0.02	0.01	0.70	3.20	0.01	49.36	5.00	0.15	1.00	1.30	6.00	5.23	0.42
F2	-14.5	0.29	0.02	0.05	0.05	0.25	1.20	0.01	0.10	89.00	2.52	0.01	0.02	0.62	4.70	0.01	50.07	5.00	0.13	1.00	1.20	9.00	9.02	1.09
F2	-15.5	0.58	0.01	0.25	0.06	0.25	1.00	0.01	0.05	61.00	3.12	0.01	0.01	0.36	4.60	0.00	73.00	5.00	0.07	1.00	1.40	10.00	8.67	1.66
F2	-16.5	0.34	0.02	0.09	0.08	0.25	1.30	0.01	0.08	98.00	2.88	0.01	0.01	0.62	4.20	0.00	37.14	5.00	0.13	1.00	1.80	10.00	7.46	0.51
F2	-17.5	0.20	0.01	0.03	0.05	0.25	1.00	0.01	0.04	34.00	3.22	0.01	0.01	0.33	3.20	0.00	19.58	5.00	0.06	1.00	1.10	10.00	5.97	0.45
F2	-18.5	0.17	0.01	0.03	0.05	0.25	1.20	0.01	0.08	116.00	2.97	0.01	0.01	0.52	3.70	0.01	15.69	5.00	0.10	1.00	1.00	10.00	6.20	0.33
F2	-19.5	0.29	0.02	0.04	0.09	0.75	3.85	0.01	0.12	65.50	2.28	0.02	0.01	0.68	4.50	0.01	21.22	5.00	0.16	1.00	1.90	10.50	5.69	0.28
F2	-20.5	0.35	0.03	0.05	0.10	0.70	7.30	0.01	0.10	48.00	1.90	0.02	0.01	0.66	4.70	0.01	25.87	5.00	0.15	1.00	1.80	7.00	5.79	0.24
F2	-21.5	0.30	0.02	0.05	0.07	0.25	4.40	0.01	0.09	42.00	1.84	0.01	0.01	0.56	4.10	0.01	17.45	5.00	0.12	1.00	1.30	8.00	6.57	0.34
F2	-22.5	0.28	0.02	0.07	0.08	0.60	3.50	0.01	0.11	46.00	2.19	0.02	0.01	0.69	4.30	0.01	20.67	5.00	0.14	1.00	1.60	9.00	6.52	0.33
F2	-23.5	0.26	0.02	0.05	0.07	0.50	4.20	0.01	0.09	43.00	1.60	0.01	0.01	0.66	3.90	0.02	16.58	5.00	0.13	1.00	1.30	5.00	6.31	0.31
F2	-24.5	0.25	0.01	0.04	0.06	0.50	2.90	0.01	0.09	52.00	1.59	0.01	0.01	0.57	3.60	0.01	18.50	5.00	0.12	1.00	1.20	6.00	4.08	0.36
F2	-25.5	0.28	0.02	0.05	0.07	0.50	2.60	0.01	0.11	84.00	1.96	0.02	0.01	0.61	3.60	0.01	40.76	5.00	0.13	1.00	1.40	7.00	4.89	0.67
F2	-26.5	0.26	0.01	0.04	0.05	0.25	1.90	0.01	0.09	71.00	1.94	0.01	0.01	0.48	3.10	0.00	36.79	5.00	0.10	1.00	1.10	7.00	4.49	0.96
F2	-27.5	0.30	0.01	0.04	0.05	0.25	2.10	0.01	0.10	73.00	3.38	0.01	0.01	0.48	4.40	0.00	39.24	5.00	0.10	1.00	0.90	11.00	6.27	1.87
F2	-28.5	0.27	0.01	0.04	0.07	0.25	2.30	0.01	0.08	46.00	2.01	0.01	0.01	0.46	3.60	0.01	28.27	5.00	0.11	1.00	1.30	10.00	5.87	0.58
F2	-29.5	0.32	0.02	0.05	0.06	0.50	2.50	0.01	0.10	59.00	1.93	0.01	0.01	0.60	4.50	0.01	34.82	5.00	0.13	1.00	1.40	6.00	6.49	0.96

F2	-30.5	0.28	0.01	0.04	0.05	0.25	1.50	0.01	0.08	58.00	2.39	0.01	0.01	0.49	4.00	0.01	30.44	5.00	0.10	1.00	0.90	7.00	7.57	1.10
F2	-31.5	0.26	0.01	0.05	0.06	0.25	2.25	0.01	0.07	52.00	1.91	0.01	0.01	0.44	3.75	0.01	32.65	5.00	0.10	1.00	1.05	8.00	6.41	0.80
F2	-32.5	0.28	0.02	0.06	0.07	0.60	3.60	0.01	0.08	41.00	1.85	0.01	0.01	0.61	3.90	0.02	19.71	5.00	0.14	1.00	1.50	7.00	6.40	0.38
F2	-33.5	0.42	0.01	0.05	0.06	0.25	2.50	0.01	0.07	48.00	1.99	0.01	0.01	0.51	4.30	0.01	32.39	5.00	0.10	1.00	1.20	8.00	8.25	0.59
F2	-34.5	0.32	0.03	0.05	0.08	0.70	2.60	0.01	0.14	62.00	2.12	0.01	0.01	0.71	4.20	0.01	22.05	5.00	0.15	1.00	1.90	9.00	5.74	1.24
F2	-35.5	0.46	0.01	0.05	0.05	0.25	1.20	0.01	0.04	60.00	1.93	0.02	0.01	0.33	4.40	0.00	52.93	5.00	0.06	1.00	0.80	7.00	5.39	1.70
F2	-36.5	0.41	0.01	0.06	0.03	0.25	1.20	0.01	0.03	52.00	2.45	0.01	0.01	0.33	4.20	0.00	61.00	5.00	0.07	1.00	0.60	6.00	6.25	2.76
F2	-37.5	0.39	0.01	0.05	0.03	0.25	1.30	0.01	0.05	61.00	3.17	0.01	0.01	0.42	4.40	0.00	61.54	5.00	0.09	1.00	0.80	10.00	7.11	1.42
F2	-38.5	0.35	0.01	0.04	0.04	0.25	1.20	0.01	0.05	56.00	3.21	0.01	0.01	0.42	4.20	0.00	47.35	5.00	0.08	1.00	0.70	12.00	6.90	1.37
F2	-39.5	0.37	0.01	0.03	0.03	0.25	1.20	0.01	0.07	68.00	2.29	0.01	0.01	0.48	4.30	0.00	42.92	5.00	0.10	1.00	0.60	8.00	4.85	1.60
F2	-40.5	0.42	0.01	0.03	0.04	0.25	1.20	0.01	0.08	70.00	2.46	0.01	0.01	0.52	3.20	0.00	59.41	5.00	0.10	1.00	0.80	10.00	4.28	0.77
F2	-41.5	0.50	0.01	0.05	0.04	0.25	1.20	0.01	0.07	65.00	4.21	0.01	0.01	0.56	3.50	0.00	62.20	5.00	0.12	1.00	0.90	23.00	5.55	0.72
F2	-42.5	0.50	0.01	0.05	0.03	0.25	1.20	0.01	0.05	67.00	3.63	0.01	0.01	0.35	3.80	0.00	81.75	5.00	0.08	1.00	0.60	17.00	8.33	1.87
F2	-43.5	0.75	0.01	0.06	0.04	0.25	1.60	0.01	0.07	69.00	2.88	0.01	0.01	0.53	4.10	0.00	49.40	5.00	0.11	1.00	0.70	13.00	5.54	1.62
F2	-44.5	0.93	0.01	0.06	0.04	0.25	1.50	0.01	0.07	61.00	3.84	0.01	0.01	0.41	4.00	0.00	58.89	5.00	0.08	1.00	0.70	16.00	6.90	1.06
F2	-45.5	0.32	0.03	0.03	0.04	0.70	1.30	0.01	0.11	188.00	5.17	0.01	0.01	0.84	7.30	0.01	28.59	5.00	0.18	1.00	0.90	18.00	5.28	0.94
F2	-46.5	0.48	0.03	0.05	0.05	0.60	1.60	0.01	0.09	180.00	4.78	0.01	0.04	0.70	8.10	0.01	36.21	5.00	0.15	1.00	1.10	15.00	7.72	1.31
F2	-47.5	0.39	0.02	0.22	0.10	0.90	2.90	0.01	0.09	44.00	2.23	0.02	0.01	0.74	3.90	0.04	28.04	5.00	0.16	1.00	2.00	8.00	5.07	0.23
F2	-48.5	0.24	0.03	0.05	0.06	0.80	2.70	0.01	0.09	68.00	2.38	0.01	0.01	0.81	4.00	0.01	17.89	5.00	0.18	1.00	1.30	8.00	4.49	0.43
F2	-49.5	0.37	0.01	0.05	0.05	0.50	1.60	0.01	0.07	64.00	2.89	0.01	0.01	0.56	5.60	0.01	33.83	5.00	0.13	1.00	1.20	17.00	15.00	0.49
F2	-50.5	0.44	0.01	0.04	0.04	0.25	0.90	0.01	0.03	36.00	5.36	0.00	0.01	0.30	4.80	0.00	51.40	5.00	0.06	1.50	0.60	25.00	15.00	0.74
F2	-51.5	0.43	0.01	0.03	0.04	0.25	1.10	0.01	0.04	43.00	5.81	0.01	0.01	0.36	3.50	0.00	51.97	5.00	0.06	1.00	0.70	27.00	6.14	0.78
F2	-52.5	0.42	0.01	0.02	0.03	0.25	0.80	0.01	0.04	45.00	3.39	0.01	0.01	0.34	2.60	0.00	39.04	5.00	0.06	1.00	0.60	15.00	3.89	1.18
F2	-53.5	0.43	0.01	0.04	0.04	0.25	0.90	0.01	0.04	122.00	3.77	0.01	0.01	0.39	5.80	0.00	47.56	5.00	0.08	1.00	0.70	14.00	7.20	0.88
F2	-54.5	0.36	0.01	0.05	0.03	0.25	0.80	0.01	0.04	39.00	2.65	0.01	0.01	0.29	4.40	0.00	32.70	5.00	0.06	1.00	0.60	11.00	15.00	0.67
F2	-55.5	0.44	0.01	0.04	0.06	0.25	1.10	0.01	0.05	49.00	2.20	0.01	0.01	0.51	3.40	0.00	43.74	5.00	0.10	2.00	1.10	11.00	6.92	0.54
F2	-56.5	0.58	0.01	0.05	0.03	0.25	1.30	0.01	0.05	96.00	3.17	0.01	0.01	0.37	3.70	0.00	55.55	5.00	0.07	1.00	0.80	13.00	7.41	0.76
F2	-57.5	0.31	0.01	0.01	0.05	0.25	0.90	0.01	0.03	35.00	2.62	0.01	0.01	0.37	2.20	0.00	23.04	5.00	0.08	1.00	1.20	9.00	4.10	0.32

F2	-58.5	0.51	0.01	0.04	0.04	0.25	1.20	0.01	0.04	74.00	2.45	0.01	0.01	0.33	3.50	0.00	40.93	5.00	0.06	1.00	1.00	10.00	6.73	0.61
F2	-59.5	0.62	0.01	0.05	0.04	0.50	1.40	0.01	0.05	91.00	2.74	0.01	0.03	0.66	6.80	0.01	44.99	5.00	0.14	2.00	1.00	15.00	15.00	1.29
F2	-60.5	0.74	0.01	0.07	0.03	0.25	0.70	0.01	0.04	85.00	2.74	0.00	0.02	0.34	5.00	0.00	60.35	5.00	0.06	1.00	0.80	13.00	15.00	2.15
F2	-61.5	0.54	0.01	0.06	0.04	0.25	0.90	0.01	0.07	120.00	2.82	0.01	0.01	0.52	4.60	0.01	43.65	5.00	0.12	2.00	1.00	16.00	8.49	0.87
F2	-62.5	1.05	0.01	0.06	0.04	0.25	1.40	0.01	0.05	94.00	2.17	0.01	0.01	0.45	4.35	0.00	64.56	5.00	0.10	1.00	0.80	8.00	7.81	1.46
F2	-63.5	0.10	0.10	0.01	0.16	4.70	6.40	0.04	0.29	249.00	0.33	0.05	0.32	3.80	4.70	0.03	10.47	5.00	0.99	1.00	4.00	1.00	0.69	0.21
OT/1-01	**-0.5**	**0.61**			**0.005**	**0.5**			**0.005**	**13**	**4.5**	**0.018**			**6.2**	**0.0005**	**75.5**						**14**	**5.2**
OT/1-01	-1.5	0.545			0.04	0.5			0.005	11	4.1	0.016			4.15	0.0005	63.3						9	1.6
OT/1-01	-2.5	0.38			0.04	0.5			0.005	6	3.1	0.019			3.6	0.001	66.9						6	0.8
OT/1-01	-3.5	0.31			0.07	0.5			0.02	9	1.9	0.018			3	0.007	58.7						4	0.9
OT/1-01	-4.5	0.37			0.11	0.5			0.04	20	2.1	0.022			3.9	0.008	76.4						5	1.5
OT/1-01	-5.5	0.3			0.09	0.5			0.04	23	1.9	0.021			3.9	0.006	67						4	1.3
OT/1-01	-6.5	0.36			0.09	0.5			0.04	24	2	0.022			4	0.007	70.2						4	1.4
OT/1-01	-7.5	0.31			0.12	0.5			0.11	112	1.7	0.034			5.5	0.014	64.8						4	1.3
OT/1-01	-8.5	0.38			0.08	0.5			0.05	31	2.3	0.027			4.5	0.006	72						4	1.6
OT/1-02	**-0.5**	**0.18**			**0.05**	**0.5**			**0.02**	**16**	**2.8**	**0.026**			**2.8**	**0.003**	**37.4**						**3**	**0.7**
OT/1-02	-1.5	0.17			0.05	0.5			0.04	13	4.2	0.02			4	0.005	39.2						7	0.5
OT/1-02	-2.5	0.36			0.05	0.5			0.12	64	3.8	0.021			3.8	0.012	82.2						6	1.2
OT/1-02	-3.5	0.19			0.05	0.5			0.1	52	3.6	0.023			3.4	0.008	43.2						5	1.5
OT/1-02	-4.5	0.22			0.05	0.5			0.04	21	2.2	0.021			3.7	0.005	44.9						4	2
OT/1-02	-5.5	0.27			0.05	0.5			0.03	23	2.1	0.02			4.3	0.004	41.1						3	1.7
OT/1-02	-6.5	0.28			0.04	0.5			0.03	53	2.2	0.019			3.7	0.004	57.5						4	2.1
OT/1-02	-7.5	0.84			0.03	0.5			0.01	19	2	0.014			4.1	0.002	63.1						3	1.5
OT/1-02	-8.5	0.49			0.04	0.5			0.03	32	3.2	0.016			4.8	0.005	75.8						8	1.6
OT/1-02	-9.5	0.51			0.03	0.5			0.03	32	2.7	0.017			4.1	0.004	67.1						6	1.6
OT/1-02	-10.5	0.4			0.04	0.5			0.03	30	3.2	0.019			5	0.006	59.6						7	1.7
OT/1-02	-11.5	0.43			0.03	0.5			0.02	33	2.6	0.014			4.6	0.002	57.9						7	1.3
OT/1-02	-12.5	0.46			0.005	0.5			0.02	44	2.5	0.014			4.7	0.002	66.4						10	1.5

OT/1-02	-13.5	0.41	0.02	0.5	0.02	35	2.2	0.014	3.7	0.001	61.8	8	1.2
OT/1-02	-14.5	0.38	0.02	0.5	0.02	34	2.1	0.013	4	0.002	56.4	9	1.2
OT/1-02	-15.5	0.43	0.02	0.5	0.02	40	1.7	0.013	5.4	0.002	52.7	10	1.5
OT/1-02	-16.5	0.48	0.03	0.5	0.02	33	2.5	0.014	4.5	0.002	55.1	7	1.5
OT/1-02	-17.5	0.47	0.005	0.5	0.03	44	2.4	0.012	7	0.002	56	11	2.3
OT/1-02	-18.5	0.6	0.005	0.5	0.02	81	2.5	0.013	7	0.001	71.7	13	1.9
OT/1-02	-19.5	0.57	0.02	0.5	0.03	91	2.3	0.015	4.8	0.001	57.6	11	1.7
OT/1-02	-20.5	0.55	0.02	0.5	0.03	59	1.7	0.014	5.5	0.001	60.1	11	1.4
OT/1-02	-21.5	0.58	0.025	0.5	0.02	74.5	3.55	0.014	5.5	0.002	77.65	11	1.75
OT/1-02	-22.5	0.585	0.02	0.5	0.02	96.5	3.05	0.0135	6.8	0.003	79.35	10.5	2.7
OT/1-02	-23.5	0.52	0.05	0.5	0.03	133	2.4	0.014	5.3	0.006	83.4	10	2.1
OT/1-02	-24.5	0.43	0.07	0.5	0.07	202	3.3	0.013	5	0.008	95.4	10	5
OT/1-02	-25.5	0.51	0.03	0.5	0.02	81	1.8	0.015	4.7	0.003	106	10	1.9
OT/1-02	-26.5	0.52	0.005	0.5	0.01	50	2.4	0.013	5.7	0.001	64.9	12	2.1
OT/1-02	-27.5	0.5	0.01	0.5	0.01	44	2.2	0.014	4.9	0.001	74	11	2
OT/1-02	-28.5	0.49	0.02	0.5	0.01	46	1.5	0.015	4.6	0.001	46.4	10	2.1
OT/1-02	-29.5	0.64	0.005	0.5	0.01	46	1.6	0.014	5.4	0.001	66.1	11	2.1
OT/1-02	-30.5	0.56	0.02	0.5	0.02	52	2.4	0.013	5.9	0.001	62.9	10	2.4
OT/1-02	-31.5	0.51	0.02	0.5	0.03	63	3.1	0.013	5.4	0.002	62.7	10	2.2
OT/1-03	**-0.5**	**0.06**	**0.1**	**3**	**0.28**	**359**	**245**	**0.057**	**19.5**	**0.01**	**390**	**2**	**13.6**
OT/1-03	-1.5	0.13	0.03	0.5	0.02	11	8	0.021	2.2	0.001	25.2	4	0.5
OT/1-03	-2.5	0.15	0.11	0.5	0.09	34	3.4	0.03	1.1	0.01	29.8	2	0.5
OT/1-03	-3.5	0.13	0.06	0.5	0.13	63	4.3	0.027	2.5	0.012	44.5	4	0.8
OT/1-03	-4.5	0.17	0.05	0.5	0.04	24	2.2	0.028	3.5	0.007	26.6	4	1.8
OT/1-03	-5.5	0.18	0.05	0.5	0.05	30	3.9	0.025	3.5	0.006	34	4	1.6
OT/1-03	-6.5	0.2	0.06	0.5	0.06	42	9.7	0.028	4.5	0.005	50.9	4	1.8
OT/1-03	-7.5	0.18	0.05	0.5	0.05	29	3	0.023	4.3	0.005	37.8	4	1.6
OT/1-03	-8.5	0.18	0.05	0.5	0.06	90	2.7	0.021	5.8	0.004	40.4	4	2.2

OT/1-03	-9.5	0.31	0.05	0.5	0.07	97	3.4	0.021	3.6	0.003	49.8	4	1.5
OT/1-03	-10.5	0.2	0.05	0.5	0.05	58	3	0.024	5.5	0.004	53.9	4	2
OT/1-03	-11.5	0.35	0.04	0.5	0.05	70	3.3	0.02	3.5	0.002	57.6	5	1.4
OT/1-03	-12.5	0.3	0.03	0.5	0.03	31	2.9	0.0175	3.05	0.003	66.5	5	1.35
OT/1-03	-13.5	0.33	0.03	0.5	0.03	37	3	0.016	3.1	0.004	58.7	6	1.3
OT/1-03	-14.5	0.28	0.04	0.5	0.05	60	2.4	0.02	2.4	0.006	57.4	4	1.4
OT/1-03	-15.5	0.37	0.04	0.5	0.05	54	3.2	0.018	2.4	0.005	69.6	4	1.6
OT/1-03	-16.5	0.3	0.04	0.5	0.04	44	3.3	0.016	3.7	0.003	60.3	7	1.9
OT/1-03	-17.5	0.31	0.03	0.5	0.03	39	2.8	0.014	3.1	0.003	60.5	7	1.6
OT/1-03	-18.5	0.48	0.03	0.5	0.04	48	2.5	0.016	4.8	0.002	60.9	9	1.7
OT/1-03	-19.5	0.45	0.01	0.5	0.03	49	2.2	0.015	6.9	0.002	89.4	12	2.3
OT/1-03	-20.5	0.55	0.02	0.5	0.03	58	2.3	0.016	6.2	0.002	78.6	10	1.9
OT/1-03	-21.5	0.56	0.02	0.5	0.02	53	2.5	0.016	5.3	0.002	96.4	10	1.5
OT/1-03	-22.5	0.48	0.01	0.5	0.02	18	1.8	0.014	4.8	0.0005	55.5	10	1
OT/1-03	-23.5	0.41	0.03	0.5	0.03	48	2.1	0.016	6.3	0.001	65.2	9	1.3
OT/1-03	-24.5	0.44	0.02	0.5	0.03	44	2.1	0.015	6.1	0.001	74.2	10	1.7
OT/1-03	-25.5	0.47	0.02	0.5	0.02	68	3.6	0.017	5.4	0.001	65.7	11	2
OT/1-03	-26.5	0.46	0.02	0.5	0.01	58	2.2	0.016	5.9	0.001	60.4	11	2
OT/1-03	-27.5	0.38	0.02	0.5	0.01	44	4.05	0.0175	5.15	0.001	47.8	9	1.6
OT/1-03	-28.5	0.32	0.02	0.5	0.02	51	3	0.016	4.9	0.002	47.2	9	1.6
OT/1-03	-29.5	0.625	0.0075	0.5	0.02	65	2.7	0.0135	5.7	0.001	58.65	12	2.3
OT/1-03	-30.5	0.49	0.01	0.5	0.02	58	2	0.014	5.5	0.001	59.9	11	1.7
OT/1-03	-31.5	0.525	0.015	0.5	0.02	57	2.5	0.0145	5.6	0.001	59.75	12	1.95
OT/1-04	**-0.5**	**0.33**	**0.16**	**1**	**0.13**	**39**	**11.8**	**0.052**	**1.6**	**0.011**	**82**	**1**	**1.7**
OT/1-04	-1.5	0.17	0.04	0.5	0.02	7	5.15	0.022	2.7	0.001	18.65	4	0.35
OT/1-04	-2.5	0.18	0.07	0.5	0.09	30	5.3	0.025	2	0.006	38.2	3	0.6
OT/1-04	-3.5	0.16	0.05	0.5	0.14	67	4.3	0.023	2.6	0.015	52.5	4	0.8
OT/1-04	-4.5	0.16	0.05	0.5	0.04	23	2	0.025	2.6	0.004	28.5	3	1.7

OT/1-04	-5.5	0.21	0.05	0.5	0.06	28	2.4	0.022	2.9	0.005	45.5	3	1.6
OT/1-04	-6.5	0.2	0.04	0.5	0.04	19	2.2	0.027	4.4	0.004	53.6	3	1.4
OT/1-04	-7.5	0.18	0.05	0.5	0.05	25	3.2	0.023	3.9	0.004	44.9	4	1.4
OT/1-04	-8.5	0.2	0.06	0.5	0.06	26	3.4	0.021	4.9	0.004	42.2	4	2.4
OT/1-04	-9.5	0.17	0.05	0.5	0.05	22	2.6	0.022	4.3	0.004	36.3	3	1.5
OT/1-04	-10.5	0.17	0.05	0.5	0.09	107	2.8	0.025	6.9	0.005	49.6	4	1.4
OT/1-04	-11.5	0.26	0.05	0.5	0.07	110	3.5	0.022	4.6	0.005	48.9	4	2.7
OT/1-04	-12.5	0.25	0.05	0.5	0.06	34	6.9	0.023	3.6	0.004	50	4	1.8
OT/1-04	-13.5	0.41	0.04	0.5	0.04	70	3.6	0.017	5.1	0.003	69.9	6	1.4
OT/1-04	-14.5	0.48	0.04	0.5	0.05	110	2.7	0.021	5.7	0.004	79	5	1.2
OT/1-04	-15.5	0.26	0.09	1	0.14	125	5.5	0.033	5.3	0.011	50.7	5	1.5
OT/1-04	-16.5	0.4	0.06	0.5	0.11	235	2.5	0.024	5.7	0.008	77.2	4	1.1
OT/1-04	-17.5	0.11	0.26	5	0.41	315	1.7	0.063	4.9	0.039	21.4	2	0.3
OT/1-05	**-0.5**	**0.03**	**0.1**	**2**	**0.31**	**321**	**211**	**0.07**	**13.5**	**0.008**	**306**	**2**	**10.5**
OT/1-05	-1.5	0.16	0.04	0.5	0.03	22	11.4	0.026	4.2	0.002	33.5	7	1.6
OT/1-05	-2.5	0.15	0.03	0.5	0.03	22	11.5	0.02	5.2	0.001	34.5	9	1.1
OT/1-05	-3.5	0.18	0.04	0.5	0.03	16	4.6	0.021	3.2	0.002	43.4	5	0.6
OT/1-05	-4.5	0.18	0.07	0.5	0.1	52	3.4	0.023	3.5	0.015	37.5	5	0.8
OT/1-05	-5.5	0.13	0.05	0.5	0.04	24	5.5	0.026	3.3	0.006	30.4	4	1
OT/1-05	-6.5	0.2	0.06	0.5	0.04	22	2.4	0.022	3.2	0.007	43.1	4	1.2
OT/1-05	-7.5	0.17	0.05	0.5	0.05	22	2.4	0.025	2.9	0.007	35.3	4	1.2
OT/1-05	-8.5	0.19	0.05	0.5	0.03	19	2.6	0.022	2.8	0.005	46.7	3	1.5
OT/1-05	-9.5	0.21	0.04	0.5	0.05	25	4.8	0.025	3.6	0.005	52	4	1.7
OT/1-05	-10.5	0.18	0.05	0.5	0.04	21	2.6	0.022	3.3	0.005	34.7	4	1.3
OT/1-05	-11.5	0.26	0.05	0.5	0.05	29	3.7	0.023	5.3	0.003	42.9	7	3.1
OT/1-05	-12.5	0.22	0.05	0.5	0.09	54	3.3	0.023	6.8	0.004	40.8	4	2.4
OT/1-05	-13.5	0.44	0.05	0.5	0.06	39	3.1	0.022	4.7	0.005	67.8	5	1.6
OT/1-05	-14.5	0.27	0.05	0.5	0.05	35	6.6	0.023	4.2	0.004	57.9	5	1.9

OT/1-05	-15.5	0.59	0.04	0.5	0.04	38	3.4	0.02	4.7	0.003	67.7	7	1.9
OT/1-05	-16.5	0.54	0.04	0.5	0.06	49	2.6	0.022	4	0.004	59.9	6	1.7
OT/1-05	-17.5	0.37	0.04	0.5	0.05	49	4.6	0.023	4.3	0.004	56.5	6	1.7
OT/1-05	-18.5	0.36	0.04	0.5	0.05	62	3	0.021	5.2	0.003	56.5	6	1.7
OT/1-05	-19.5	0.35	0.05	0.5	0.06	67	2.6	0.022	3.9	0.007	63.6	5	1.8
OT/1-05	-20.5	0.39	0.04	0.5	0.05	88	3.2	0.019	4.2	0.004	80.6	5	2.7
OT/1-05	-21.5	0.31	0.08	1	0.12	173	3.7	0.031	13.6	0.012	49.8	5	8.5
OT/1-06	**-0.5**	**0.19**	**0.13**	**0.5**	**0.04**	**21**	**5.7**	**0.07**	**1.4**	**0.004**	**42.9**	**2**	**0.6**
OT/1-06	-1.5	0.19	0.05	0.5	0.005	4	3.2	0.027	1.5	0.001	37.7	3	0.4
OT/1-06	-2.5	0.3	0.06	0.5	0.01	11	3	0.028	1.2	0.002	57.4	2	0.8
OT/1-06	-3.5	0.33	0.05	0.5	0.02	10	2.2	0.022	1.7	0.002	85.7	3	1.1
OT/1-06	-4.5	0.41	0.04	0.5	0.02	10	2.4	0.019	2.7	0.001	85.5	5	1.8
OT/1-06	-5.5	0.38	0.05	0.5	0.03	19	2	0.021	2.7	0.005	74.7	3	1.4
OT/1-06	-6.5	0.4	0.04	0.5	0.03	19	2.1	0.017	2.7	0.005	69.2	3	1.5
OT/1-06	-7.5	0.34	0.05	0.5	0.03	17	2.1	0.017	2.5	0.009	69.3	5	1.6
OT/1-06	-8.5	0.4	0.05	0.5	0.03	26	4	0.019	3.7	0.007	82.3	11	2.4
OT/1-06	-9.5	0.5	0.04	0.5	0.025	33	4	0.022	5.15	0.0035	69.9	14	4.05
OT/1-06	-10.5	0.55	0.04	0.5	0.02	24	2.8	0.022	6	0.002	75.5	17	2.1
OT/1-06	-11.5	0.5	0.03	0.5	0.03	24	2.5	0.018	5.3	0.002	73.7	17	1.9
OT/1-06	-12.5	0.68	0.03	0.5	0.03	23	2.6	0.02	5.9	0.002	85.7	16	2.3
OT/1-06	-13.5	0.81	0.03	0.5	0.02	19	2.7	0.02	7.7	0.001	95.7	18	2.1
OT/1-06	-14.5	0.63	0.04	0.5	0.02	21	2.8	0.019	6.7	0.002	84.2	15	2.1
OT/1-06	-15.5	0.5	0.05	0.5	0.02	21	3	0.02	5.3	0.002	79.8	12	2
OT/1-06	-16.5	0.62	0.03	0.5	0.02	19	2.4	0.02	8	0.002	75.9	16	2.1
OT/1-06	-17.5	0.58	0.02	0.5	0.02	25	2.2	0.022	8	0.002	65.3	14	2.5
OT/1-06	-18.5	0.53	0.005	0.5	0.02	74	2.3	0.019	7.5	0.001	80	15	2.3
OT/1-06	-19.5	0.32	0.04	0.5	0.04	112	3.4	0.021	5.5	0.002	48.7	11	1.8
OT/1-06	-20.5	0.38	0.08	0.5	0.09	119	2.5	0.027	6.5	0.007	53.3	11	1.8

OT/1-06	-21.5	0.03			0.4	5			0.5	315	0.6	0.051			4.7	0.038	10.5					1	0.2
OT/2-01	**-0.5**	**0.22**			**0.11**	**0.5**			**0.06**	**32**	**2.5**	**0.052**			**2.3**	**0.011**	**34.8**					**3**	**0.8**
OT/2-01	-1.5	0.22			0.1	0.5			0.1	53	2	0.044			5.3	0.008	29.2					4	1.1
OT/2-01	-2.5	0.49			0.07	0.5			0.06	75	3.8	0.034			7.3	0.005	63.8					10	3.5
OT/2-01	-3.5	0.45			0.11	0.5			0.1	254	3.9	0.038			5.5	0.008	40.3					9	2.5
OT/2-01	-4.5	0.27			0.12	0.5			0.12	202	2.3	0.038			5	0.007	37.9					5	1.4
OT/2-01	-5.5	0.22			0.13	0.5			0.14	176	2.3	0.04			5.3	0.007	34					4	1.2
OT/2-01	-6.5	0.33			0.11	0.5			0.15	141	3.3	0.038			5.6	0.007	35.1					5	1.7
OT/2-01	-7.5	0.25			0.1	0.5			0.12	128	2.5	0.038			4.7	0.007	33.5					5	1.3
OT/2-01	-8.5	0.29			0.09	0.5			0.12	127	2.9	0.041			4.9	0.006	54.4					8	2.3
OT/2-01	-9.5	0.48			0.07	0.5			0.08	126	4.3	0.032			7.1	0.005	66.3					14	4
OT/2-01	-10.5	0.32			0.09	0.5			0.09	166	3.5	0.031			7	0.007	46					14	2.8
OT/2-01	-11.5	0.49			0.1	0.5			0.08	126	5	0.033			6.7	0.006	70.2					12	5.3
OT/2-01	-12.5	0.6			0.07	0.5			0.05	89	5.8	0.032			7.1	0.004	83.9					11	7.5
OT/2-01	-13.5	0.55			0.08	0.5			0.04	89	3.9	0.027			6.3	0.003	77.7					11	5.8
OT/2-01	-14.5	0.49			0.08	0.5			0.05	72	4.4	0.03			6.1	0.004	69.8					10	4.4
OT/2-01	-15.5	0.28			0.12	0.5			0.09	122	3.4	0.035			5.8	0.005	35.1					8	1.6
OT/2-01	-16.5	0.19			0.155	0.5			0.11	134	3.55	0.041			8.35	0.007	29.5					8	1
OT/2-01	-17.5	0.3			0.14	0.5			0.08	108	6.15	0.0385			5.55	0.0055	48.3					7	1.75
OT/2-01	-18.5	0.11			0.07	0.5			0.2	99	3.1	0.034			5.1	0.007	17.1					6	0.5
OT/2-01	-19.5	0.17			0.12	0.5			0.2	77	4.1	0.042			3	0.009	34.6					5	0.8
OT/2-01	-20.5	0.14			0.09	0.5			0.26	271	2.8	0.033			5.7	0.008	21.7					9	0.9
OT/2-01	-21.5	0.18			0.09	0.5			0.09	134	2.6	0.035			4.7	0.005	41.6					6	1.3
OT/2-01	-22.5	0.28			0.07	0.5			0.08	112	2.4	0.033			4.3	0.004	69.3					6	3.4
OT/2-01	-23.5	0.27			0.06	0.5			0.08	84	3.5	0.029			5.5	0.004	43.4					10	3.9
OT/2-01	-24.5	0.31			0.07	0.5			0.08	107	2.1	0.032			5.3	0.004	54.7					8	2.9
OT/2-01	-25.5	0.14			0.08	0.5			0.27	354	2.2	0.031			5.6	0.008	19.6					7	0.8
OT/2-01	-26.5	0.33			0.05	0.5			0.06	68	3	0.027			6	0.003	54					12	4.5

OT/2-01	-27.5	0.3	0.06	0.5	0.04	60	2.2	0.027	6.2	0.003	54.5	11	3
OT/2-01	-28.5	0.27	0.06	0.5	0.05	68	2.2	0.028	5.9	0.004	53.6	8	2.5
OT/2-01	-29.5	0.27	0.06	0.5	0.05	75	1.9	0.028	5.7	0.003	51.3	7	1.3
OT/2-01	-30.5	0.26	0.17	4	0.37	545	2	0.055	9.6	0.015	39.1	4	3.2
OT/2-01	-31.5	0.01	0.3	11	0.69	973	0.4	0.093	11.9	0.037	13.9	0.5	0.3
OT/2-01	-32.5	0.01	0.27	12	0.82	1340	0.3	0.137	13.8	0.047	11.9	0.5	0.2
OT/2-01	-33.5	0.005	0.28	10	0.93	1030	0.3	0.172	10.3	0.059	9.8	0.5	0.2
OT/2-02	**-0.5**	**0.12**	**0.1**	**0.5**	**0.02**	**13**	**2**	**0.041**	**1.2**	**0.002**	**17.4**	**2**	**0.6**
OT/2-02	-1.5	0.21	0.09	0.5	0.07	35	3.1	0.031	3.2	0.018	25.7	6	1.3
OT/2-02	-2.5	0.15	0.09	0.5	0.08	70	2.5	0.046	7.2	0.008	21.1	3	0.7
OT/2-02	-3.5	0.23	0.09	0.5	0.09	209	2.7	0.036	5.3	0.006	27.9	5	1
OT/2-02	-4.5	0.19	0.09	0.5	0.09	197	2.3	0.036	4	0.007	25.9	5	1
OT/2-02	-5.5	0.2	0.09	0.5	0.095	202	2.65	0.042	4.3	0.0065	24.65	4.5	1.45
OT/2-02	-6.5	0.22	0.11	0.5	0.11	211	2.9	0.036	4.6	0.006	22	4	1.2
OT/2-02	-7.5	0.26	0.09	0.5	0.1	192	2.7	0.034	4.8	0.007	27.1	4	1.6
OT/2-02	-8.5	0.25	0.09	0.5	0.1	174	2.5	0.034	4.6	0.006	28	4	1.4
OT/2-02	-9.5	0.18	0.08	0.5	0.13	120	2.5	0.038	4	0.006	21	4	1
OT/2-02	-10.5	0.2	0.08	0.5	0.12	149	2.5	0.034	4.4	0.006	23.3	4	1.2
OT/2-02	-11.5	0.21	0.11	0.5	0.22	132	2.1	0.04	4.1	0.008	37.8	4	1.4
OT/2-02	-12.5	0.28	0.1	0.5	0.12	135	2.1	0.042	4.2	0.006	35.5	4	1.4
OT/2-02	-13.5	0.21	0.09	0.5	0.19	122	2.1	0.039	3.7	0.007	37.7	4	1.2
OT/2-02	-14.5	0.25	0.1	0.5	0.12	139	2.3	0.045	3.4	0.007	47.7	4	1.4
OT/2-02	-15.5	0.21	0.08	0.5	0.16	131	2.3	0.036	4.1	0.007	26.9	4	1.2
OT/2-02	-16.5	0.3	0.1	0.5	0.14	133	2.1	0.046	3.7	0.007	58.5	4	1.5
OT/2-02	-17.5	0.3	0.1	0.5	0.12	125	2.8	0.044	4.8	0.007	60.4	6	2.1
OT/2-02	-18.5	0.29	0.11	0.5	0.09	144	3.5	0.038	5.3	0.006	53.2	9	2.2
OT/2-02	-19.5	0.22	0.09	0.5	0.14	88	3.9	0.04	4.8	0.008	46.8	7	0.8
OT/2-02	-20.5	0.215	0.11	0.5	0.235	354	2.85	0.039	7.45	0.0085	46.15	5	0.8

OT/2-02	-21.5	0.13			0.07	0.5			0.23	191	2.1	0.031			4.2	0.006	26.1						8	0.5
OT/2-02	-22.5	0.26			0.115	0.5			0.24	85.5	2.4	0.038			2.55	0.01	66.4						3.5	0.65
OT/2-02	-23.5	0.17			0.07	0.5			0.1	185	1.7	0.036			4.3	0.005	46.1						3	1.2
OT/2-02	-24.5	0.135			0.07	0.5			0.09	90.5	2.3	0.0335			3.3	0.004	29.55						4	1.75
OT/2-02	-25.5	0.18			0.08	0.5			0.11	98	2.5	0.034			3.9	0.005	43.3						6	2.8
OT/2-02	-26.5	0.24			0.1	0.5			0.105	88	2.75	0.0385			4.15	0.006	48.05						4.5	3.25
OT/2-02	-27.5	0.35			0.08	0.5			0.09	77	2.6	0.041			4	0.005	58.2						5	3.5
OT/2-02	-28.5	0.42			0.07	0.5			0.07	80	2.9	0.032			5.3	0.004	63.2						8	5.2
OT/2-02	-29.5	0.36			0.07	0.5			0.05	71	2.5	0.034			4.9	0.004	61.1						8	4.5
OT/2-02	-30.5	0.34			0.06	0.5			0.03	58	2.3	0.033			6.7	0.003	58.9						12	2.5
OT/2-02	-31.5	0.4			0.06	0.5			0.05	84	2.5	0.031			5.7	0.005	67.2						7	4.7
OT/2-02	-32.5	0.41			0.05	0.5			0.04	69	2.3	0.03			7.5	0.003	52						7	8.2
OT/2-02	-33.5	0.41			0.06	0.5			0.05	71	2.4	0.035			4.4	0.004	59.5						4	7.6
OT/2-02	-34.5	0.48			0.06	0.5			0.05	69	2.9	0.031			4.7	0.004	61.4						6	4.2
OT/2-02	-35.5	0.4			0.08	0.5			0.11	104	3.3	0.03			4.8	0.007	74.6						6	1.6
OT/2-02	-36.5	0.42			0.06	0.5			0.06	64	3.4	0.027			4.4	0.004	50						8	1.2
OT/2-02	-37.5	0.37			0.06	0.5			0.08	68	3.3	0.029			4	0.005	58.9						6	1.5
OT/2-02	-38.5	0.45			0.05	0.5			0.05	57	1.7	0.027			6.3	0.004	45.6						7	1.7
OT/2-02	-39.5	0.29			0.05	0.5			0.04	55	2	0.027			3.8	0.003	41.6						4	1.4
OT/2-02	-40.5	0.17			0.24	3			0.33	265	5.1	0.069			5.2	0.017	38.5						2	0.9
OT/2-02	-41.5	0.08			0.3	4			0.39	303	1.2	0.08			4.7	0.021	21.7						1	0.4
B-1	**-1**	**0.776**		**0.02**	**0.06**	**0.25**	**2.4**		**0.005**	**8**	**1.84**	**0.01**	**0.01**		**2**	**0.0005**	**88.78**	**5**		**3**	**1.1**	**8**	**6.75**	**0.92**
B-1	-3	0.409		0.03	0.04	0.25	2.7		0.005	7	2.36	0.007	0.01		3.4	0.0005	64.74	5		1	0.9	13	8.65	0.72
B-1	-5	0.561		0.13	0.06	0.25	3.8		0.02	14	1.8	0.008	0.01		2.9	0.008	71.56	5		2	1.1	10	6.23	0.84
B-1	-7	0.435		0.06	0.05	0.25	3.1		0.03	16	2.08	0.007	0.01		2.8	0.003	55.62	5		2	1.1	8	7.13	0.95
B-1	-9	0.412		0.06	0.06	0.25	4.5		0.03	16	3.01	0.007	0.01		3.2	0.004	100.7	5		1	1.1	7	5.34	0.83
B-1	-11	0.547		0.04	0.04	0.25	5.4		0.02	11	1.86	0.007	0.01		4.2	0.003	62.34	5		1	0.8	8	5.42	1.48
B-1	-13	0.942		0.06	0.04	0.25	2.8		0.01	11	3.66	0.004	0.04		5.9	0.001	132.53	12		3	0.7	25	15	1.99

B-1	-15	0.616	0.04	0.03	0.25	2.3	0.005	9	1.83	0.004	0.01	5.5	0.0005	63.23	5	2	0.5	5	15	1.12
B-1	-17	0.687	0.04	0.03	0.25	2.4	0.005	11	2.37	0.004	0.01	7.9	0.002	67.14	5	3	0.4	8	15	1.69
B-1	-19	0.796	0.06	0.06	0.25	3.1	0.02	62	2.09	0.005	0.01	6.5	0.001	70.35	5	2	0.8	6	15	1.21
B-2	**-1**	**0.16**	**0.1**	**0.21**	**1.6**	**2.2**	**0.25**	**58**	**10.1**	**0.036**	**0.01**	**2**	**0.013**	**49.82**	**5**	**2**	**5.3**	**29**	**1.63**	**1.06**
B-2	-3	0.18	0.02	0.07	0.25	1.9	0.01	5	5.19	0.015	0.01	1.6	0.001	26.86	5	1	1.4	12	4.96	0.27
B-2	-5	0.413	0.04	0.07	0.5	3.5	0.06	23	4.25	0.012	0.01	2.2	0.004	53.52	5	1	1.8	10	2.3	1.23
B-2	-7	0.153	1.33	0.17	3.3	3.1	0.66	237	160.69	0.059	0.03	15.5	0.024	222.89	21	2	4.9	103	3.91	7.56
B-2	-9	0.198	1.13	0.16	3	2.8	0.63	219	161.58	0.055	0.03	15.2	0.023	219.46	18	2	4.4	96	4.11	7.77
B-2	-11	0.168	0.98	0.17	3.3	2.9	0.64	240	129.23	0.069	0.03	14.4	0.028	177.12	26	2	4.6	147	4.01	6.73
B-2	-13	0.283	0.03	0.02	0.25	2.5	0.005	9	3.55	0.002	0.01	4.3	0.0005	31.71	5	1	0.3	7	10	1.03
B-2	-15	0.37	0.04	0.03	0.25	2.8	0.01	12	4.84	0.005	0.01	3.7	0.001	34.32	5	1	0.5	10	9.74	1.09
B-2	-17	0.307	0.06	0.03	0.25	2.4	0.01	11	3.15	0.005	0.01	6	0.001	55.09	5	1	0.6	9	10	1.01
B-2	-19	0.343	0.06	0.08	0.25	2.5	0.11	91	2.13	0.016	0.01	4.9	0.005	72.89	5	1	1.5	15	5.39	0.71
B-3	**-1**	**0.198**	**0.04**	**0.1**	**0.25**	**2**	**0.02**	**8**	**5.11**	**0.035**	**0.01**	**0.6**	**0.003**	**33.95**	**5**	**1**	**1.6**	**14**	**1.91**	**0.71**
B-3	-3	0.184	0.03	0.1	0.25	1.7	0.005	7	5.63	0.034	0.01	0.6	0.002	39.55	5	1	1.4	14	1.37	0.64
B-3	-5	0.317	0.04	0.15	0.6	3	0.03	9	2.05	0.019	0.01	3.2	0.003	32.16	5	1	3.1	15	4.94	0.29
B-3	-7	0.33	0.03	0.13	0.25	3.2	0.03	14	2.15	0.019	0.01	2.1	0.005	16.1	5	1	2.7	12	3.88	0.17
B-3	-9	0.482	0.05	0.09	0.25	4.9	0.11	145	3.15	0.015	0.01	5.1	0.004	29.33	5	3	1.9	11	4.35	0.65
B-3	-11	0.54	0.08	0.14	0.7	3.2	0.17	186	3.17	0.018	0.01	5.1	0.008	57.71	5	1	3.1	7	7.59	1.18
B-3	-13	0.223	0.04	0.09	0.5	2.2	0.1	85	6.19	0.018	0.01	4.5	0.006	24.21	5	2	2	16	9.87	0.52
B-3	-15	0.216	0.08	0.07	0.8	2.9	0.15	125	3.65	0.019	0.01	6.2	0.007	26.94	5	2	1.5	18	7.56	0.48
B-3	-17	0.195	0.05	0.08	0.25	2.6	0.05	28	2.59	0.013	0.01	3	0.005	25.89	5	1	1.4	11	6.68	1.08
B-3	-19	0.261	0.05	0.07	0.25	2.6	0.07	66	3.6	0.016	0.01	3.8	0.005	35.43	5	1	1.4	18	5.03	1.04
B-3	-21	0.208	0.04	0.07	0.25	2.6	0.05	80	2.84	0.014	0.01	3.3	0.005	44.9	5	1	1.2	11	5.93	1.03
B-3	-23	0.219	0.05	0.06	0.25	2.3	0.04	35	4.06	0.017	0.01	3.7	0.004	36.98	5	3	1.2	11	7.25	1.66
B-3	-25	0.379	0.07	0.04	0.25	1.2	0.02	32	2.59	0.007	0.01	7.6	0.002	49.47	5	1	0.6	9	15	4.53
B-3	-27	0.316	0.04	0.04	0.25	1.7	0.02	36	2.85	0.006	0.01	6.1	0.002	40.6	5	3	0.7	12	15	3.63
B-3	-29	0.286	0.04	0.04	0.25	1.2	0.04	45	3.16	0.006	0.04	6.7	0.004	38.37	10	2	0.9	11	15	3.07

B-4	**-1**	**0.127**	**0.13**	**0.09**	**0.7**	**4.2**	**0.03**	**21**	**26.36**	**0.047**	**0.01**	**2.4**	**0.004**	**88.84**	**5**	**1**	**2**	**48**	**1.31**	**1.16**
B-4	-3	0.139	0.05	0.09	0.25	4.1	0.02	12	14.51	0.045	0.01	0.7	0.003	40.5	5	1	1.6	14	1.26	0.6
B-4	-5	0.16	0.07	0.09	0.25	3.7	0.02	14	16.58	0.044	0.01	0.9	0.003	50.23	5	1	1.7	21	1.29	0.74
B-4	-7	0.151	0.18	0.1	0.8	3.8	0.03	26	20.04	0.05	0.01	3.6	0.005	104.8	18	3	2.1	45	1.12	1.53
B-4	-9	0.164	0.18	0.1	0.9	4.4	0.03	26	20.44	0.052	0.01	3.6	0.005	127.18	21	1	2.1	53	1.08	1.48
B-4	-11	0.159	0.24	0.1	1.2	3.7	0.04	34	19.25	0.049	0.05	5.2	0.006	171.92	20	2	2.3	58	1.39	2
B-4	-13	0.331	0.05	0.11	0.7	2.9	0.14	136	2.27	0.023	0.02	3.5	0.009	49.39	5	1	2	8	4.89	0.77
B-4	-15	0.326	0.06	0.11	0.8	2.6	0.16	205	4.6	0.019	0.01	5.5	0.009	41.02	5	1	2.5	17	6.61	0.42
B-4	-17	0.19	0.04	0.1	0.25	2.6	0.07	54	3.07	0.013	0.01	4.7	0.005	59.18	5	2	2.2	11	5.26	0.98
B-4	-19	0.197	0.05	0.08	0.6	1.8	0.17	174	2.34	0.014	0.01	5.1	0.008	22.46	5	2	2	14	9.85	0.3
B-4	-21	0.339	0.07	0.07	0.25	3	0.09	70	3.77	0.021	0.01	4	0.005	59.51	5	2	1.4	13	5.27	1.4
B-4	-23	0.243	0.06	0.07	0.6	3.3	0.1	81	3.54	0.017	0.01	4.1	0.006	38.68	5	1	1.6	10	5.49	1.16
B-4	-25	0.257	0.06	0.06	0.25	2.2	0.06	64	4.05	0.019	0.01	4.2	0.005	45.13	5	1	1.2	11	7.56	1.73
B-4	-27	0.437	0.07	0.06	0.25	2.5	0.05	59	2.98	0.018	0.01	5	0.003	51.94	5	1	1	12	8.67	2.71
B-4	-29	0.379	0.04	0.05	0.25	2.5	0.05	54	3.27	0.013	0.01	4.1	0.004	57.01	5	1	0.9	10	7.68	1.6
B-4	-31	0.442	0.06	0.06	0.25	2.1	0.08	68	3.31	0.013	0.01	4.3	0.005	70.25	5	1	1.1	16	8.64	1.05

Annex 1 cont.

		Sc	Se	Sm	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	Tm	U	V	W	Y	Yb	Zn	Zr
Borehole	depth	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	%	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM	PPM
F1	**-0.5**	**0.20**	**1.30**	**0.03**	**1.10**	**48.10**	**0.03**	**0.01**	**0.13**	**0.10**	**0.003**	**0.20**	**0.01**	**0.05**	**7.00**	**0.60**	**0.08**	**0.01**	**13.90**	**0.60**
F1	-1.5	0.80	1.90	0.06	0.80	52.10	0.03	0.01	0.62	0.30	0.001	0.43	0.01	0.05	15.00	1.40	0.17	0.01	160.10	0.60
F1	-2.5	0.60	2.10	0.05	0.70	54.60	0.03	0.01	0.71	0.10	0.001	0.34	0.01	0.05	16.00	1.60	0.16	0.01	122.10	0.60
F1	-3.5	0.50	2.20	0.06	0.90	58.00	0.03	0.01	0.71	0.20	0.001	0.39	0.01	0.05	13.00	1.80	0.19	0.01	162.40	0.70
F1	-4.5	0.60	2.40	0.10	0.90	54.00	0.03	0.01	0.88	0.20	0.001	0.56	0.01	0.05	13.00	2.50	0.53	0.04	19.50	0.80
F1	-5.5	0.80	2.40	0.12	1.10	54.80	0.03	0.01	1.13	0.20	0.001	1.07	0.01	0.08	16.50	2.95	0.61	0.06	27.95	0.80
F1	-6.5	0.40	2.50	0.07	0.90	60.00	0.03	0.01	0.96	0.20	0.001	0.32	0.01	0.05	13.00	1.50	0.17	0.01	9.70	0.70
F1	-7.5	0.40	2.40	0.06	0.80	56.30	0.03	0.01	1.01	0.20	0.001	0.28	0.01	0.05	12.00	1.20	0.14	0.01	250.80	0.70
F1	-8.5	0.30	2.40	0.06	0.80	57.10	0.03	0.01	1.00	0.20	0.001	0.27	0.01	0.05	12.00	1.10	0.12	0.01	11.90	0.70
F1	-9.5	0.90	2.80	0.12	1.70	49.40	0.03	0.01	1.31	0.20	0.002	1.29	0.01	0.05	18.00	4.10	0.57	0.05	76.80	0.90
F1	-10.5	1.00	5.50	0.15	2.40	38.50	0.03	0.01	1.57	0.20	0.002	2.17	0.01	0.10	20.00	4.10	0.65	0.07	42.00	1.00
F1	-11.5	0.90	6.70	0.13	3.30	26.60	0.03	0.01	2.78	0.20	0.003	2.96	0.01	0.10	25.00	4.50	0.58	0.06	177.90	1.00
F1	-12.5	0.70	5.40	0.12	2.75	32.50	0.03	0.01	2.40	0.20	0.003	3.78	0.01	0.10	23.50	10.10	0.49	0.05	97.75	1.00
F1	-13.5	0.60	5.80	0.08	3.30	29.60	0.03	0.01	2.82	0.10	0.002	2.88	0.01	0.05	21.00	24.70	0.34	0.04	99.30	0.80
F1	-14.5	0.90	5.50	0.12	2.80	28.80	0.03	0.01	2.27	0.20	0.002	2.26	0.01	0.05	22.00	9.20	0.47	0.05	48.60	0.90
F1	-15.5	0.90	4.70	0.12	1.60	24.50	0.03	0.01	0.74	0.20	0.002	0.56	0.01	0.05	19.00	2.50	0.49	0.05	22.20	0.80
F1	-16.5	0.70	5.30	0.09	2.00	33.50	0.03	0.01	1.20	0.10	0.002	1.50	0.01	0.05	21.00	11.90	0.34	0.03	42.30	0.80
F1	-17.5	1.40	4.00	0.16	1.50	44.70	0.03	0.01	0.83	0.20	0.002	4.03	0.01	0.10	26.00	14.90	0.53	0.09	55.90	0.90
F1	-18.5	1.20	1.90	0.27	1.10	41.00	0.03	0.03	0.37	0.20	0.002	0.82	0.01	0.10	19.00	2.70	1.24	0.13	81.30	0.90
F1	-19.5	1.10	4.70	0.22	2.00	27.50	0.03	0.02	1.00	0.20	0.001	1.13	0.01	0.10	24.00	11.70	1.18	0.13	43.20	0.80
F1	-20.5	0.70	6.90	0.09	2.30	17.90	0.03	0.01	1.17	0.10	0.002	1.54	0.01	0.05	21.00	29.70	0.41	0.04	103.50	0.60
F1	-21.5	0.50	6.20	0.08	1.80	13.50	0.03	0.01	0.86	0.10	0.001	1.11	0.01	0.05	19.00	7.00	0.34	0.04	26.65	0.45
F1	-22.5	0.80	3.50	0.12	1.90	27.20	0.03	0.01	0.78	0.20	0.001	0.96	0.01	0.05	19.00	8.50	0.54	0.05	24.60	0.80
F1	-23.5	0.70	3.00	0.10	2.10	28.90	0.03	0.01	0.74	0.10	0.001	2.03	0.01	0.10	20.00	4.70	0.46	0.04	177.80	0.80
F1	-24.5	0.60	3.80	0.10	2.20	22.90	0.03	0.01	0.79	0.10	0.001	1.98	0.01	0.05	21.00	6.00	0.42	0.04	24.30	0.70

F1	-25.5	0.60	4.00	0.10	2.10	21.10	0.03	0.01	0.74	0.10	0.001	1.46	0.01	0.05	20.00	12.30	0.41	0.04	25.00	0.70
F1	-26.5	0.40	7.50	0.06	2.20	26.40	0.03	0.01	0.64	0.10	0.001	1.40	0.01	0.05	17.00	8.10	0.24	0.03	20.40	0.60
F1	-27.5	0.40	10.40	0.04	4.40	18.30	0.03	0.01	1.96	0.05	0.001	3.01	0.01	0.05	27.00	4.40	0.10	0.01	15.20	0.50
F1	-28.5	0.90	6.80	0.06	3.30	21.80	0.03	0.01	1.33	0.30	0.001	2.52	0.01	0.05	22.00	4.20	0.17	0.01	26.30	0.80
F1	-29.5	0.90	5.40	0.08	3.20	28.50	0.03	0.01	1.43	0.10	0.001	3.35	0.01	0.05	22.00	3.40	0.18	0.03	27.80	0.70
F1	-30.5	0.80	5.80	0.07	3.90	21.00	0.03	0.01	1.53	0.10	0.001	2.32	0.01	0.05	22.00	4.50	0.19	0.02	65.10	0.70
F1	-31.5	1.00	4.10	0.09	3.20	30.50	0.03	0.01	1.05	0.10	0.001	2.07	0.01	0.05	23.00	2.80	0.48	0.04	25.80	0.70
F1	-32.5	0.80	3.30	0.07	2.90	34.50	0.03	0.01	1.41	0.10	0.001	0.83	0.01	0.05	17.00	2.10	0.28	0.03	28.50	0.60
F1	-33.5	0.80	3.90	0.11	2.20	45.60	0.03	0.01	0.94	0.20	0.001	1.06	0.01	0.05	32.00	2.30	0.40	0.05	48.00	0.90
F1	-34.5	0.90	2.10	0.09	2.60	44.20	0.03	0.01	1.25	0.10	0.001	1.17	0.01	0.05	20.00	1.90	0.32	0.04	42.50	0.60
F1	-35.5	0.60	2.00	0.08	2.70	35.90	0.03	0.01	1.06	0.10	0.001	1.05	0.01	0.05	17.00	2.40	0.29	0.03	16.00	0.50
F1	-36.5	0.90	2.30	0.11	4.10	44.90	0.03	0.01	1.05	0.20	0.001	0.67	0.01	0.05	17.00	2.10	0.36	0.04	28.40	0.70
F1	-37.5	1.00	4.00	0.11	6.30	55.90	0.03	0.01	1.27	0.20	0.001	0.97	0.01	0.05	23.00	2.90	0.37	0.04	22.00	0.80
F1	-38.5	0.40	3.40	0.05	4.20	25.90	0.03	0.01	1.49	0.10	0.001	1.00	0.01	0.05	15.00	2.20	0.21	0.02	77.70	0.50
F1	-39.5	0.70	2.40	0.07	3.80	37.00	0.03	0.01	1.33	0.10	0.001	0.92	0.01	0.10	16.00	1.90	0.24	0.03	38.00	0.70
F1	-40.5	0.50	3.85	0.05	3.45	24.70	0.03	0.01	1.32	0.10	0.001	2.66	0.01	0.05	18.50	2.65	0.17	0.01	36.80	0.60
F1	-41.5	0.45	4.70	0.05	4.60	18.45	0.03	0.01	1.47	0.08	0.001	1.67	0.01	0.05	24.00	3.90	0.17	0.02	70.90	0.50
F1	-42.5	0.60	4.40	0.09	3.60	26.50	0.03	0.01	1.44	0.20	0.001	1.48	0.01	0.05	21.00	2.00	0.35	0.03	58.70	0.70
F1	-43.5	0.40	4.20	0.04	4.20	22.50	0.03	0.01	1.21	0.10	0.001	2.07	0.01	0.05	24.00	2.70	0.12	0.01	19.70	0.60
F1	-44.5	0.40	4.50	0.05	4.10	24.30	0.03	0.01	1.15	0.10	0.001	1.45	0.01	0.05	25.00	4.30	0.16	0.01	39.90	0.60
F1	-45.5	0.40	4.00	0.03	4.60	26.40	0.03	0.01	0.96	0.10	0.001	0.88	0.01	0.05	16.00	1.20	0.08	0.01	10.20	0.60
F1	-46.5	1.30	4.40	0.03	5.10	26.00	0.03	0.01	1.00	0.10	0.001	0.90	0.01	0.10	22.00	1.10	0.13	0.01	13.00	0.60
F1	-47.5	0.50	5.80	0.05	5.30	22.20	0.03	0.01	1.09	0.20	0.001	0.84	0.01	0.05	30.00	1.90	0.20	0.01	47.80	0.50
F1	-48.5	0.40	5.90	0.03	5.00	19.30	0.03	0.01	0.94	0.10	0.001	0.70	0.01	0.05	29.00	1.10	0.07	0.01	20.80	0.50
F1	-49.5	0.50	3.50	0.05	3.80	33.30	0.03	0.01	0.79	0.20	0.001	0.64	0.01	0.05	26.00	1.40	0.15	0.01	75.30	0.70
F1	-50.5	0.60	3.40	0.05	3.50	34.90	0.03	0.01	0.82	0.20	0.001	0.62	0.01	0.05	28.00	1.40	0.16	0.01	10.30	0.70
F2	**-0.5**	**0.40**	**1.60**	**0.07**	**1.00**	**52.80**	**0.03**	**0.01**	**0.18**	**0.20**	**0.002**	**0.18**	**0.01**	**0.05**	**12.00**	**0.60**	**0.17**	**0.01**	**16.30**	**0.60**
F2	-1.5	0.40	2.80	0.09	0.70	48.60	0.03	0.01	0.44	0.10	0.002	0.26	0.01	0.05	13.00	0.70	0.26	0.02	6.10	0.70

F2	-2.5	0.80	3.60	0.14	0.80	53.40	0.03	0.01	0.52	0.30	0.001	0.33	0.01	0.05	15.00	1.10	0.38	0.04	10.60	0.90
F2	-3.5	1.20	2.10	0.18	1.00	66.30	0.03	0.01	0.69	0.30	0.002	0.46	0.01	0.10	22.00	4.20	0.68	0.08	35.60	1.10
F2	-4.5	0.65	5.05	0.10	0.75	63.90	0.03	0.01	0.91	0.30	0.001	0.32	0.01	0.05	14.00	1.05	0.38	0.04	12.50	0.90
F2	-5.5	0.70	4.30	0.09	0.90	60.30	0.03	0.01	0.90	0.20	0.001	0.47	0.01	0.05	15.00	1.70	0.36	0.03	9.40	0.90
F2	-6.5	0.90	2.80	0.15	1.40	48.00	0.03	0.01	0.99	0.20	0.002	1.05	0.01	0.05	18.67	6.37	0.60	0.06	22.73	0.90
F2	-7.5	1.50	3.00	0.15	1.30	66.00	0.03	0.01	1.02	0.30	0.002	0.78	0.01	0.05	24.00	3.10	0.59	0.06	21.40	1.10
F2	-8.5	0.60	4.20	0.10	0.80	50.10	0.03	0.01	0.92	0.20	0.001	0.40	0.01	0.05	13.00	2.90	0.42	0.03	9.70	0.80
F2	-9.5	0.80	3.50	0.11	1.00	53.60	0.03	0.01	0.81	0.30	0.002	0.55	0.01	0.05	16.00	3.70	0.41	0.04	54.40	0.90
F2	-10.5	0.80	5.80	0.08	0.80	63.80	0.03	0.01	1.05	0.40	0.001	0.30	0.01	0.05	15.00	0.90	0.31	0.03	24.00	0.90
F2	-11.5	1.30	2.10	0.18	1.80	58.20	0.03	0.01	1.25	0.20	0.002	1.63	0.01	0.20	23.00	4.00	0.72	0.08	37.50	1.20
F2	-12.5	1.50	2.90	0.18	2.30	53.00	0.03	0.02	2.05	0.20	0.001	2.33	0.01	0.20	21.00	2.80	0.76	0.08	51.90	1.20
F2	-13.5	1.30	2.80	0.17	1.50	58.70	0.03	0.01	1.07	0.20	0.002	1.03	0.01	0.10	21.00	2.90	0.67	0.07	27.50	1.10
F2	-14.5	1.10	3.30	0.15	1.70	37.40	0.03	0.01	0.97	0.20	0.002	1.37	0.01	0.10	24.00	1.90	0.58	0.07	31.20	1.00
F2	-15.5	0.70	4.40	0.09	2.80	44.40	0.03	0.01	3.28	0.10	0.001	2.96	0.01	0.10	16.00	3.60	0.34	0.04	46.40	0.80
F2	-16.5	1.20	3.40	0.15	1.80	40.30	0.03	0.01	1.17	0.20	0.001	1.06	0.01	0.10	19.00	2.20	0.60	0.07	57.60	1.00
F2	-17.5	0.50	2.60	0.07	1.90	28.90	0.03	0.01	0.59	0.20	0.001	0.43	0.01	0.05	16.00	1.60	0.25	0.03	63.00	0.70
F2	-18.5	0.80	2.70	0.12	1.60	31.10	0.03	0.01	0.47	0.20	0.001	0.46	0.01	0.05	21.00	1.20	0.52	0.05	129.10	0.80
F2	-19.5	1.35	2.50	0.16	0.95	71.50	0.03	0.01	0.51	0.25	0.001	0.45	0.01	0.05	37.00	0.80	0.58	0.07	38.45	1.15
F2	-20.5	1.60	2.90	0.15	1.00	92.60	0.03	0.01	0.65	0.30	0.001	0.49	0.01	0.05	50.00	0.90	0.60	0.07	40.70	1.20
F2	-21.5	1.10	3.20	0.14	1.00	78.80	0.03	0.01	0.73	0.30	0.001	0.38	0.01	0.05	39.00	1.00	0.51	0.06	61.60	1.00
F2	-22.5	1.60	3.40	0.18	1.00	80.70	0.03	0.01	0.68	0.30	0.001	0.39	0.01	0.05	42.00	1.20	0.59	0.07	25.40	1.20
F2	-23.5	1.40	3.20	0.15	1.00	74.10	0.03	0.01	0.60	0.30	0.001	0.38	0.01	0.05	38.00	0.90	0.53	0.06	21.00	1.00
F2	-24.5	1.00	2.00	0.13	0.90	65.10	0.03	0.01	0.44	0.20	0.001	0.33	0.01	0.05	27.00	0.90	0.44	0.05	26.70	1.00
F2	-25.5	1.20	2.40	0.16	1.30	52.00	0.03	0.01	0.73	0.20	0.001	0.85	0.01	0.10	23.00	0.90	0.61	0.07	32.10	1.00
F2	-26.5	0.90	2.20	0.12	1.50	36.30	0.03	0.01	0.73	0.20	0.001	0.72	0.01	0.10	16.00	0.90	0.48	0.05	18.10	0.90
F2	-27.5	0.90	3.50	0.11	2.50	29.30	0.03	0.01	1.85	0.20	0.001	1.11	0.01	0.10	19.00	1.00	0.49	0.05	16.40	1.10
F2	-28.5	1.00	3.20	0.12	1.20	50.00	0.03	0.01	0.86	0.20	0.001	0.60	0.01	0.05	26.00	0.90	0.45	0.05	16.20	1.00
F2	-29.5	1.10	2.80	0.14	1.40	55.70	0.03	0.01	0.75	0.20	0.001	0.61	0.01	0.05	28.00	0.90	0.53	0.06	33.50	1.00

F2	-30.5	0.80	3.20	0.11	1.60	36.80	0.03	0.01	0.94	0.20	0.001	0.77	0.01	0.05	24.00	1.10	0.45	0.05	28.60	0.90
F2	-31.5	0.90	3.00	0.11	1.20	42.95	0.03	0.01	0.88	0.20	0.001	0.58	0.01	0.05	22.50	0.95	0.38	0.05	26.50	0.90
F2	-32.5	1.50	3.20	0.14	1.00	74.90	0.03	0.01	0.63	0.30	0.001	0.42	0.01	0.05	34.00	1.10	0.52	0.06	79.30	1.10
F2	-33.5	0.90	4.00	0.13	2.00	57.20	0.03	0.01	0.87	0.20	0.001	0.95	0.01	0.05	35.00	2.10	0.45	0.05	52.20	0.90
F2	-34.5	1.30	2.80	0.17	1.20	78.00	0.03	0.01	0.74	0.20	0.001	0.42	0.01	0.05	42.00	0.90	0.61	0.08	31.80	1.30
F2	-35.5	0.70	2.60	0.07	2.10	36.20	0.03	0.01	1.46	0.20	0.001	0.58	0.01	0.10	18.00	1.10	0.31	0.03	17.90	0.80
F2	-36.5	0.60	3.10	0.07	2.00	30.60	0.03	0.01	1.33	0.20	0.002	0.92	0.01	0.10	21.00	2.10	0.27	0.03	15.50	0.90
F2	-37.5	0.70	3.40	0.09	2.00	31.60	0.03	0.01	1.38	0.20	0.001	0.74	0.01	0.05	21.00	2.50	0.39	0.04	16.50	0.90
F2	-38.5	0.60	2.90	0.10	1.90	30.80	0.03	0.01	0.99	0.20	0.001	0.84	0.01	0.05	21.00	2.90	0.39	0.04	17.10	0.80
F2	-39.5	0.60	3.00	0.12	1.50	33.90	0.03	0.01	0.91	0.20	0.001	0.60	0.01	0.05	19.00	5.60	0.48	0.05	15.80	0.70
F2	-40.5	0.70	1.90	0.13	1.60	45.70	0.03	0.01	1.56	0.20	0.001	0.54	0.01	0.05	15.00	1.90	0.52	0.05	12.90	0.70
F2	-41.5	0.80	3.00	0.13	1.90	44.70	0.03	0.01	1.95	0.20	0.001	1.41	0.01	0.05	15.00	1.30	0.51	0.05	11.30	0.70
F2	-42.5	0.70	4.20	0.09	3.30	24.30	0.03	0.01	1.50	0.20	0.001	1.46	0.01	0.05	20.00	2.20	0.32	0.03	56.50	0.60
F2	-43.5	0.70	2.20	0.12	1.70	35.40	0.03	0.01	0.96	0.20	0.001	2.40	0.01	0.05	19.00	8.60	0.48	0.05	17.50	0.70
F2	-44.5	0.70	4.30	0.10	2.30	34.10	0.03	0.01	1.19	0.20	0.001	2.14	0.01	0.05	22.00	2.30	0.41	0.04	18.90	0.70
F2	-45.5	0.70	4.10	0.19	1.60	41.90	0.03	0.01	0.63	0.30	0.003	0.74	0.01	0.05	25.00	6.10	0.75	0.07	18.70	1.00
F2	-46.5	0.90	4.70	0.17	1.80	53.40	0.03	0.01	1.24	0.20	0.002	0.95	0.01	0.05	31.00	8.50	0.68	0.07	24.40	1.10
F2	-47.5	4.90	2.30	0.17	0.90	113.70	0.03	0.01	0.62	0.30	0.001	0.48	0.01	0.10	41.00	0.90	0.58	0.06	23.20	1.10
F2	-48.5	1.10	2.40	0.18	1.00	65.90	0.03	0.01	0.49	0.30	0.002	0.50	0.01	0.05	29.00	1.70	0.66	0.07	19.40	1.10
F2	-49.5	0.80	11.20	0.13	1.90	42.10	0.03	0.01	1.02	0.20	0.001	1.07	0.01	0.05	27.00	3.80	0.50	0.05	28.50	1.00
F2	-50.5	0.40	11.15	0.08	2.10	22.80	0.03	0.01	1.11	0.10	0.001	1.43	0.01	0.05	18.00	2.05	0.29	0.03	23.90	0.60
F2	-51.5	0.50	5.90	0.09	2.30	36.00	0.03	0.01	1.50	0.20	0.001	1.01	0.01	0.05	17.00	3.20	0.33	0.03	13.80	0.70
F2	-52.5	0.40	5.40	0.09	2.70	29.70	0.03	0.01	0.71	0.10	0.001	0.36	0.01	0.05	17.00	2.20	0.35	0.03	11.10	0.60
F2	-53.5	0.50	5.90	0.09	2.60	30.20	0.03	0.01	1.88	0.10	0.001	1.26	0.01	0.05	23.00	7.10	0.36	0.04	14.20	0.70
F2	-54.5	0.50	7.00	0.07	2.50	23.10	0.03	0.01	1.77	0.10	0.001	1.22	0.01	0.05	17.00	2.20	0.28	0.03	14.70	0.60
F2	-55.5	0.90	6.20	0.12	2.60	28.20	0.03	0.01	2.06	0.10	0.001	1.06	0.01	0.05	18.00	2.20	0.45	0.05	16.80	0.90
F2	-56.5	0.80	6.90	0.09	3.00	31.80	0.03	0.01	0.99	0.10	0.001	2.69	0.01	0.05	22.00	2.80	0.39	0.04	24.60	0.70
F2	-57.5	0.50	3.50	0.08	1.10	52.10	0.03	0.01	0.63	0.10	0.002	0.55	0.01	0.05	13.00	2.20	0.32	0.03	75.50	0.80

F2	-58.5	0.60	4.60	0.08	2.50	35.50	0.03	0.01	0.93	0.10	0.001	2.51	0.01	0.05	19.00	6.80	0.30	0.03	20.30	0.80
F2	-59.5	0.70	8.40	0.15	2.60	34.90	0.03	0.01	1.58	0.20	0.005	4.50	0.01	0.05	30.00	33.00	0.48	0.06	93.10	1.20
F2	-60.5	0.60	7.50	0.08	4.10	18.20	0.03	0.01	1.55	0.05	0.002	4.45	0.01	0.05	30.00	3.90	0.32	0.03	27.80	0.60
F2	-61.5	0.80	5.70	0.13	2.70	28.10	0.03	0.01	1.23	0.10	0.003	3.27	0.01	0.05	30.00	12.10	0.48	0.05	32.50	0.90
F2	-62.5	0.65	4.20	0.10	3.50	35.45	0.03	0.01	1.23	0.10	0.004	8.84	0.01	0.05	27.00	10.45	0.37	0.04	35.10	0.90
F2	-63.5	3.10	0.60	0.71	0.40	169.20	0.03	0.09	0.12	0.90	0.063	0.52	0.04	0.30	89.00	0.30	2.75	0.26	32.00	3.60
OT/1-01	**-0.5**	**0.3**	**8.3**			**24**			**0.7**	**0.05**	**0.002**			**1.4**	**12**	**3.7**			**382**	
OT/1-01	-1.5	0.45	7.9			31			0.7	0.05	0.001			1.8	17	4.3			308	
OT/1-01	-2.5	0.7	3.4			34			3.8	0.05	0.001			1.3	19	2.8			363	
OT/1-01	-3.5	3.1	2.1			49			0.8	0.4	0.001			1.6	43	2.2			35	
OT/1-01	-4.5	1.8	2.6			52			1	0.1	0.001			1.8	51	2.6			33	
OT/1-01	-5.5	2.2	1.8			51			0.9	0.2	0.001			1.3	38	2.4			307	
OT/1-01	-6.5	2.7	1.9			57			0.9	0.2	0.001			1.4	42	2.6			336	
OT/1-01	-7.5	4.3	1.8			64			0.8	0.5	0.054			1.5	79	2.2			42	
OT/1-01	-8.5	2.1	2.1			51			1.1	0.2	0.003			1.6	36	2.8			488	
OT/1-02	**-0.5**	**0.4**	**1.9**			**27**			**0.3**	**0.1**	**0.003**			**0.4**	**8**	**1.5**			**186**	
OT/1-02	-1.5	1.7	4			27			1	0.3	0.002			0.8	19	1.3			98	
OT/1-02	-2.5	1.5	3.4			42			0.5	0.3	0.003			2.7	45	3			144	
OT/1-02	-3.5	1.1	2.7			40			0.5	0.2	0.003			1.2	32	2.3			239	
OT/1-02	-4.5	0.9	1.9			36			0.5	0.2	0.001			0.7	19	1.6			10	
OT/1-02	-5.5	0.9	1.9			42			0.4	0.2	0.002			0.9	16	1.5			161	
OT/1-02	-6.5	0.8	1.8			37			0.4	0.2	0.002			1	16	1.8			108	
OT/1-02	-7.5	0.5	2.3			32			0.4	0.05	0.002			4.1	14	3.6			42	
OT/1-02	-8.5	1.1	6.1			34			1.5	0.2	0.001			2.6	26	2.7			19	
OT/1-02	-9.5	0.9	4.2			27			1.1	0.2	0.002			2.7	25	2.7			181	
OT/1-02	-10.5	1	4.9			34			1	0.2	0.001			2.3	36	2.5			20	
OT/1-02	-11.5	0.5	4.4			22			0.9	0.1	0.001			2.3	29	2.9			29	
OT/1-02	-12.5	0.6	4.8			21			1	0.1	0.001			3.1	26	3.3			25	

OT/1-02	-13.5	0.3	4.1	16	0.8	0.05	0.001	2.3	20	2.7	420
OT/1-02	-14.5	0.4	4.2	15	1	0.05	0.001	2.6	19	2.8	175
OT/1-02	-15.5	0.5	2.5	19	1	0.1	0.001	2.6	18	2.7	13
OT/1-02	-16.5	0.6	3.5	22	0.8	0.1	0.001	2.8	20	2.6	212
OT/1-02	-17.5	0.7	3.8	19	1	0.1	0.001	2.6	21	3.3	198
OT/1-02	-18.5	0.4	3.8	18	1	0.05	0.001	1.9	17	2.5	32
OT/1-02	-19.5	0.3	3.1	18	0.9	0.05	0.001	1.5	14	2.4	33
OT/1-02	-20.5	0.3	0.25	19	0.9	0.05	0.001	1.4	13	2.6	59
OT/1-02	-21.5	0.45	3.35	21.5	0.95	0.05	0.001	1.6	14	5.35	55
OT/1-02	-22.5	0.45	3.5	20.5	1	0.05	0.001	2.3	18.5	4.9	27.5
OT/1-02	-23.5	0.5	1.4	20	1	0.1	0.001	2.1	18	3.4	24
OT/1-02	-24.5	0.9	2.9	18	1	0.1	0.001	2	18	2.1	69
OT/1-02	-25.5	0.5	0.25	21	1	0.1	0.001	2.2	16	2.7	41
OT/1-02	-26.5	0.3	3.7	17	1	0.05	0.001	1.9	16	2.3	14
OT/1-02	-27.5	0.3	3.7	17	0.9	0.05	0.001	1.5	19	2.2	33
OT/1-02	-28.5	0.4	0.25	16	1	0.1	0.001	1.2	19	2.4	55
OT/1-02	-29.5	0.4	0.25	13	1.1	0.05	0.001	1.5	17	3.2	68
OT/1-02	-30.5	0.4	4.5	25	1.1	0.1	0.001	1.7	21	2.6	90
OT/1-02	-31.5	0.5	4.1	27	1	0.2	0.005	1.6	24	3.1	33
OT/1-03	**-0.5**	**2**	**6.3**	**41**	**0.3**	**1**	**0.091**	**0.2**	**109**	**1.8**	**7500**
OT/1-03	-1.5	0.4	3.8	26	0.5	0.2	0.003	0.3	12	1.3	79
OT/1-03	-2.5	2.2	1.4	70	0.4	0.3	0.001	0.6	36	1	74
OT/1-03	-3.5	1.7	2	56	0.5	0.4	0.003	0.6	43	1.2	175
OT/1-03	-4.5	0.9	1.5	39	0.4	0.3	0.002	0.5	27	1.2	49
OT/1-03	-5.5	0.9	1.8	31	0.5	0.3	0.001	0.5	30	1.4	534
OT/1-03	-6.5	1	1.8	38	0.4	0.2	0.003	0.5	27	1.1	177
OT/1-03	-7.5	0.9	1.6	33	0.4	0.2	0.002	0.5	24	1.1	29
OT/1-03	-8.5	1.1	1.8	29	0.5	0.2	0.001	0.8	20	1.1	57

OT/1-03	-9.5	0.9	2.2	32	0.4	0.2	0.001	1.2	17	2.1	247
OT/1-03	-10.5	0.9	1.8	34	0.4	0.2	0.001	0.7	20	1.2	46
OT/1-03	-11.5	0.6	2.7	29	0.4	0.2	0.001	1.4	18	2.7	255
OT/1-03	-12.5	0.65	3	26	0.8	0.2	0.001	1.15	23	2.8	238
OT/1-03	-13.5	0.7	3.6	24	1	0.1	0.001	1.7	27	3.2	279
OT/1-03	-14.5	0.9	2.1	46	0.9	0.2	0.001	1.2	37	2.8	500
OT/1-03	-15.5	0.9	2.7	40	1.1	0.1	0.001	1.6	31	3.4	53
OT/1-03	-16.5	0.6	4	26	1.2	0.1	0.001	2.1	28	2.9	447
OT/1-03	-17.5	0.5	3.7	18	1.1	0.1	0.001	2.3	28	3	322
OT/1-03	-18.5	0.5	2.6	20	1	0.1	0.002	1.5	18	2.8	327
OT/1-03	-19.5	0.6	0.7	20	1.1	0.05	0.002	1.7	20	3.1	31
OT/1-03	-20.5	0.5	2.9	20	1	0.05	0.001	1.4	20	3	32
OT/1-03	-21.5	0.4	3.1	16	0.8	0.05	0.001	1.8	22	3.5	131
OT/1-03	-22.5	0.2	0.25	16	0.9	0.05	0.001	1.1	14	3	178
OT/1-03	-23.5	0.6	2.9	22	0.9	0.1	0.001	1.4	20	2.4	22
OT/1-03	-24.5	0.5	3.2	18	1	0.1	0.001	2.3	20	2.6	56
OT/1-03	-25.5	0.4	3.3	16	0.9	0.1	0.001	3	19	2.5	90
OT/1-03	-26.5	0.4	3.1	17	0.8	0.05	0.001	3	17	3	25
OT/1-03	-27.5	0.4	3.1	23	0.75	0.1	0.001	1.9	21	2.4	74.5
OT/1-03	-28.5	0.5	3.2	24	0.8	0.1	0.001	1.2	23	2.8	62
OT/1-03	-29.5	0.45	3.75	16	1.1	0.05	0.001	1.85	18.5	2.7	44
OT/1-03	-30.5	0.4	3.6	14	0.9	0.05	0.001	1.7	16	2.4	48
OT/1-03	-31.5	0.4	3.75	13	1.05	0.075	0.001	1.7	18.5	2.6	94
OT/1-04	**-0.5**	**1.2**	**2.5**	**62**	**0.4**	**0.3**	**0.005**	**1.2**	**37**	**1.7**	**152**
OT/1-04	-1.5	0.4	3	25	0.6	0.3	0.002	0.4	13	1.2	132
OT/1-04	-2.5	1.8	1.7	48	0.5	0.4	0.002	0.9	22	1.1	165
OT/1-04	-3.5	2	1.5	41	0.5	0.3	0.002	0.6	38	1.1	120
OT/1-04	-4.5	0.8	0.9	48	0.3	0.3	0.002	0.3	29	1	161

OT/1-04	-5.5	0.8	1.4	39	0.5	0.3	0.002	0.5	28	1.1	158
OT/1-04	-6.5	0.7	1.1	47	0.3	0.2	0.001	0.4	19	0.9	89
OT/1-04	-7.5	0.9	1.6	36	0.4	0.3	0.002	0.5	23	0.9	161
OT/1-04	-8.5	1.5	2.1	28	0.6	0.3	0.001	1.2	25	1	138
OT/1-04	-9.5	1.3	1.3	29	0.4	0.3	0.001	0.7	23	1	115
OT/1-04	-10.5	1.2	1.6	33	0.6	0.3	0.001	0.9	26	1.1	141
OT/1-04	-11.5	1.1	1.9	33	0.7	0.2	0.001	1.7	26	1.8	134
OT/1-04	-12.5	0.9	1.8	41	0.5	0.3	0.003	0.8	30	1.2	200
OT/1-04	-13.5	1	3.6	29	0.9	0.2	0.002	2.1	33	2.6	222
OT/1-04	-14.5	1.3	2.1	37	0.8	0.2	0.001	1.7	30	2.3	147
OT/1-04	-15.5	2.2	2.6	77	0.6	0.5	0.030	1.2	54	1.7	72
OT/1-04	-16.5	1.6	2.3	53	0.8	0.3	0.010	1.1	37	2.1	126
OT/1-04	-17.5	4.8	0.8	220	0.2	1.2	0.114	0.5	112	0.5	64
OT/1-05	**-0.5**	**2**	**5.7**	**34**	**0.3**	**0.8**	**0.099**	**0.1**	**124**	**1.3**	**4190**
OT/1-05	-1.5	0.3	5.8	25	0.6	0.3	0.005	0.4	27	1.6	214
OT/1-05	-2.5	0.2	5.4	16	0.6	0.2	0.004	0.5	17	1.7	292
OT/1-05	-3.5	0.4	3.5	29	0.8	0.3	0.002	0.5	16	1.4	158
OT/1-05	-4.5	2.9	2.6	55	0.7	0.4	0.003	1	36	1	102
OT/1-05	-5.5	1.1	2.3	44	0.5	0.3	0.003	0.5	29	1.4	140
OT/1-05	-6.5	1	1.9	36	0.6	0.3	0.002	0.7	45	1.2	41
OT/1-05	-7.5	1.3	1.9	40	0.4	0.3	0.002	0.5	34	1	85
OT/1-05	-8.5	0.8	1.6	32	0.4	0.2	0.001	0.5	33	1.1	83
OT/1-05	-9.5	0.8	1.7	33	0.4	0.3	0.002	0.4	31	1.2	71
OT/1-05	-10.5	0.8	1.9	32	0.4	0.2	0.001	0.6	35	1.2	81
OT/1-05	-11.5	0.8	4.7	20	0.7	0.2	0.002	1.7	33	1.5	687
OT/1-05	-12.5	1.4	2	29	0.5	0.3	0.002	1.2	28	1.2	397
OT/1-05	-13.5	1.4	3.7	35	0.9	0.2	0.003	2.7	31	2.6	38
OT/1-05	-14.5	0.8	3.1	29	0.6	0.2	0.003	1.4	32	1.8	386

OT/1-05	-15.5	0.9	3.6	26	0.9	0.2	0.002	3.1	36	4	326
OT/1-05	-16.5	0.9	3.1	23	0.9	0.2	0.001	2.6	34	2.7	306
OT/1-05	-17.5	0.9	3.4	22	0.7	0.2	0.002	1.8	34	2.8	375
OT/1-05	-18.5	0.7	3.3	22	0.8	0.2	0.001	2.1	33	2.8	64
OT/1-05	-19.5	1.1	3.3	32	0.9	0.2	0.005	2.2	42	3	359
OT/1-05	-20.5	0.9	3.2	31	1	0.2	0.002	1.9	36	3.1	197
OT/1-05	-21.5	1.2	2	63	0.5	0.3	0.041	1	64	2	123
OT/1-06	**-0.5**	**0.5**	**2**	**46**	**0.2**	**0.2**	**0.008**	**0.5**	**22**	**1.2**	**196**
OT/1-06	-1.5	0.2	2.6	28	0.2	0.1	0.002	0.9	9	2	151
OT/1-06	-2.5	0.5	1	44	0.3	0.2	0.002	0.7	13	2.2	276
OT/1-06	-3.5	0.5	3.1	43	0.5	0.1	0.001	0.8	19	2.5	189
OT/1-06	-4.5	0.5	2.5	32	1.7	0.6	0.001	1.9	22	4.2	562
OT/1-06	-5.5	4.2	1.3	51	0.9	0.5	0.002	1.3	30	3.1	213
OT/1-06	-6.5	1.1	1.6	44	0.9	0.2	0.001	1.4	30	3.2	145
OT/1-06	-7.5	0.7	2.1	32	1	0.1	0.001	2.2	35	2.9	315
OT/1-06	-8.5	1.1	4	43	1.7	0.2	0.001	2.4	32	3.6	707
OT/1-06	-9.5	0.9	4.9	41	2.25	0.1	0.002	2.85	35.5	5.15	1012
OT/1-06	-10.5	1.1	4.6	27	1.6	0.1	0.002	2.8	27	4.1	539
OT/1-06	-11.5	0.8	3.7	23	3.3	0.05	0.002	1.8	21	4	34
OT/1-06	-12.5	0.9	3.5	27	1.3	0.1	0.002	2.3	24	4.7	34
OT/1-06	-13.5	0.8	4.3	27	1.3	0.05	0.001	2	20	4.6	30
OT/1-06	-14.5	0.9	4	28	1.3	0.1	0.001	2.5	26	4.5	29
OT/1-06	-15.5	1	3.9	31	2.5	0.2	0.002	2.4	26	4.3	513
OT/1-06	-16.5	0.8	4.1	24	1.3	0.1	0.001	2	24	4.1	28
OT/1-06	-17.5	0.8	4.1	26	1.2	0.1	0.001	1.9	27	3.7	429
OT/1-06	-18.5	0.6	3.7	24	1.1	0.1	0.001	1.9	25	3.4	79
OT/1-06	-19.5	0.9	3.3	30	0.9	0.2	0.001	1	32	2.4	590
OT/1-06	-20.5	1.9	3.4	42	1	0.3	0.026	1	54	3.6	429

OT/1-06	-21.5	6.6	0.25	108	0.1	1.1	0.105	0.2	118	0.2	41
OT/2-01	**-0.5**	**1.8**	**2.4**	**81**	**0.7**	**0.3**	**0.005**	**0.5**	**31**	**1.9**	**79**
OT/2-01	-1.5	2.1	1.4	88	0.7	0.2	0.004	0.5	35	2.9	35
OT/2-01	-2.5	1.3	4	49	2.2	0.2	0.002	2.8	29	8.6	145
OT/2-01	-3.5	1.8	4.3	54	1.7	0.2	0.003	2.2	30	8.9	80
OT/2-01	-4.5	1.8	2.3	78	1.2	0.3	0.003	1.1	31	5.2	43
OT/2-01	-5.5	2	1.7	80	1.1	0.3	0.003	0.9	30	4.5	65
OT/2-01	-6.5	1.9	2.2	81	1.2	0.3	0.003	1.2	30	4.5	40
OT/2-01	-7.5	1.7	2.1	70	1	0.2	0.004	1	30	3.8	63
OT/2-01	-8.5	1.6	2.8	49	1.5	0.2	0.004	2.3	28	5.9	58
OT/2-01	-9.5	1.2	4.9	34	2.1	0.2	0.005	3.5	28	3.6	65
OT/2-01	-10.5	1.6	5.4	38	1.2	0.2	0.004	2	32	2.6	199
OT/2-01	-11.5	1.7	5.1	48	1.7	0.2	0.005	2.8	33	3.6	304
OT/2-01	-12.5	1.1	5	52	2.8	0.2	0.004	4.6	29	5.9	136
OT/2-01	-13.5	1	5.2	45	3	0.2	0.001	3.6	27	7.9	59
OT/2-01	-14.5	1.2	4.9	42	2.5	0.2	0.002	3.7	28	4.6	109
OT/2-01	-15.5	2	3.6	40	1.2	0.3	0.002	1.2	32	2.1	31
OT/2-01	-16.5	2.15	3.2	46.5	1	0.3	0.002	0.6	34.5	1.2	36.5
OT/2-01	-17.5	1.85	3.2	59	1.2	0.2	0.003	1.4	29.5	2.55	40
OT/2-01	-18.5	1.8	2.2	41	0.4	0.3	0.002	0.4	31	1.4	31
OT/2-01	-19.5	1.7	2.3	70	0.5	0.3	0.004	1.4	31	1.7	33
OT/2-01	-20.5	1.8	3.1	37	0.7	0.2	0.002	0.6	32	1.8	38
OT/2-01	-21.5	1.5	2.3	40	0.8	0.2	0.002	1.1	27	1.8	29
OT/2-01	-22.5	1.2	2	41	0.8	0.2	0.003	0.9	23	1.2	19
OT/2-01	-23.5	1.1	4	31	1.4	0.2	0.002	2.7	30	1.9	23
OT/2-01	-24.5	1.1	3.1	40	1.1	0.2	0.003	1.1	24	1.5	17
OT/2-01	-25.5	1.8	2.3	41	0.5	0.3	0.002	0.4	29	1.3	33
OT/2-01	-26.5	0.8	5.8	28	1.8	0.2	0.003	1.4	28	2.6	31

OT/2-01	-27.5	0.8	3.3	33	1.3	0.2	0.001	1	23	1.7	17
OT/2-01	-28.5	0.9	2.5	43	1.1	0.2	0.002	0.8	22	1.5	89
OT/2-01	-29.5	0.9	2.5	41	0.9	0.2	0.002	0.6	27	1.5	20
OT/2-01	-30.5	5.4	1.6	132	0.6	1.3	0.110	0.5	138	1.5	46
OT/2-01	-31.5	10.2	0.25	251	0.1	2.7	0.270	0.2	317	0.1	88
OT/2-01	-32.5	12.4	0.7	301	0.1	3.1	0.245	0.2	249	0.1	81
OT/2-01	-33.5	9.5	0.25	287	0.1	2.3	0.173	0.1	166	0.1	62
OT/2-02	**-0.5**	**0.8**	**1.1**	**55**	**0.1**	**0.2**	**0.003**	**0.3**	**15**	**1.5**	**69**
OT/2-02	-1.5	1.7	3.7	96	0.8	0.3	0.002	0.5	36	1.7	175
OT/2-02	-2.5	1.9	1.3	99	0.5	0.3	0.004	0.4	28	1.6	321
OT/2-02	-3.5	1.7	1.9	64	0.8	0.3	0.002	1.1	26	6.2	200
OT/2-02	-4.5	1.5	1.7	64	0.9	0.2	0.002	0.9	24	4.2	145
OT/2-02	-5.5	1.5	1.7	57.5	0.9	0.2	0.005	1	27	6.85	231.5
OT/2-02	-6.5	1.8	1.6	52	0.8	0.3	0.003	1.3	27	6.4	302
OT/2-02	-7.5	1.5	1.7	54	1.1	0.2	0.003	1.5	25	5.5	170
OT/2-02	-8.5	1.8	1.8	55	1.1	0.2	0.003	1.4	26	5.7	140
OT/2-02	-9.5	1.6	1.5	58	0.8	0.3	0.005	0.9	28	1.8	54
OT/2-02	-10.5	1.6	1.6	55	0.8	0.3	0.004	1.1	27	5.1	87
OT/2-02	-11.5	1.9	1.6	67	1	0.3	0.005	1	30	3.2	59
OT/2-02	-12.5	1.8	1.6	65	1	0.2	0.003	1.2	27	4	68
OT/2-02	-13.5	1.8	1.5	62	0.9	0.3	0.004	0.9	26	2.3	45
OT/2-02	-14.5	1.8	1.5	65	1.1	0.3	0.003	1.4	27	4.7	30
OT/2-02	-15.5	1.7	1.6	56	0.8	0.3	0.004	1	27	2.2	77
OT/2-02	-16.5	2.1	1.6	70	1.1	0.3	0.004	1.3	29	4.6	40
OT/2-02	-17.5	2.1	2.2	58	1.3	0.3	0.003	1.8	31	3.5	50
OT/2-02	-18.5	1.9	3.2	56	1.3	0.3	0.003	1.4	30	2.8	86
OT/2-02	-19.5	2	2.5	55	0.6	0.3	0.004	1.1	33	2.2	88
OT/2-02	-20.5	2.1	1.8	55.5	0.55	0.3	0.002	1.35	31.5	2.25	94

OT/2-02	-21.5	1.4	2.5		38		0.5	0.2	0.002		0.5	26	2.1		18	
OT/2-02	-22.5	2.3	1.3		63.5		0.6	0.3	0.002		0.6	35	1.65		24	
OT/2-02	-23.5	1.2	1		49		0.5	0.3	0.003		0.4	20	1.2		164	
OT/2-02	-24.5	1.2	1.55		36.5		0.4	0.2	0.002		0.5	22	1.15		16.5	
OT/2-02	-25.5	1.5	2.2		39		0.6	0.2	0.002		2.9	29	1.6		269	
OT/2-02	-26.5	1.8	2.1		47.5		1	0.3	0.002		1.75	29	1.6		30.5	
OT/2-02	-27.5	1.6	2.4		48		1.4	0.3	0.002		1.3	28	1.7		18	
OT/2-02	-28.5	1.4	4.1		38		2.2	0.2	0.002		1.3	25	2.2		48	
OT/2-02	-29.5	1.1	3		38		1.6	0.2	0.002		1.1	27	1.8		28	
OT/2-02	-30.5	0.8	3.9		35		1.2	0.2	0.003		1.1	30	2.5		56	
OT/2-02	-31.5	1.1	2.6		43		1.4	0.2	0.002		0.8	26	2		25	
OT/2-02	-32.5	0.9	3		41		0.9	0.2	0.002		0.7	26	1.8		50	
OT/2-02	-33.5	1	2.4		47		1	0.2	0.003		0.8	26	2.1		75	
OT/2-02	-34.5	1.1	3.1		43		1.5	0.3	0.002		1	26	2.4		21	
OT/2-02	-35.5	1.5	2.2		51		1.2	0.4	0.006		0.7	29	2.7		55	
OT/2-02	-36.5	1.1	2.3		40		1.1	0.2	0.002		0.8	22	2		63	
OT/2-02	-37.5	1.1	2		44		1	0.3	0.002		0.8	25	1.6		28	
OT/2-02	-38.5	1	2.3		46		1	0.2	0.003		0.9	24	2.6		17	
OT/2-02	-39.5	0.9	1.7		46		0.6	0.2	0.002		0.8	24	1.7		27	
OT/2-02	-40.5	3.8	2.1		141		0.5	0.6	0.071		0.3	94	3.7		33	
OT/2-02	-41.5	4.7	0.8		180		0.3	0.7	0.100		0.2	117	0.7		35	
B-1	**-1**	**0.8**	**2.7**	**5.8**	**45.9**	**0.025**	**0.45**	**0.1**	**0.002**	**0.99**	**0.05**	**11**	**1.4**	**0.18**	**7.8**	**0.8**
B-1	-3	0.8	3.9	3.9	34.3	0.025	1.7	0.2	0.001	1.56	0.05	25	2.7	0.12	9.3	1.1
B-1	-5	2.7	2.9	3.7	51.6	0.025	1.05	0.7	0.001	2.66	0.1	39	2.3	0.18	11.9	0.8
B-1	-7	1.1	2.7	5.2	40.9	0.025	1.09	0.2	0.001	1.46	0.05	25	2	0.17	14.2	0.8
B-1	-9	1.1	2.2	4	44.4	0.025	1.18	0.2	0.001	1.68	0.1	27	3.4	0.18	13.1	0.8
B-1	-11	1.1	2.4	4.5	45.9	0.025	1.26	0.2	0.001	1.51	0.05	19	1.9	0.16	9.3	0.6
B-1	-13	0.8	8.2	7.6	24.7	0.025	1.12	0.2	0.001	1.53	0.05	17	2.9	0.16	13.4	0.9

B-1	-15	0.7	3.5	3.8	22.1	0.025	1.18	0.05	0.001	1.56	0.05	14	4.1	0.11	13.1	0.5
B-1	-17	0.8	4.9	5.4	14.8	0.025	1.3	0.1	0.001	2.09	0.1	20	3	0.15	21	0.5
B-1	-19	0.7	3.8	5	21.1	0.025	1.22	0.1	0.001	1.57	0.05	19	2.8	0.17	29.5	0.6
B-2	**-1**	**2**	**3.6**	**5**	**71**	**0.025**	**0.45**	**0.7**	**0.006**	**0.23**	**0.05**	**49**	**0.6**	**1.72**	**109.8**	**0.9**
B-2	-3	0.6	4.7	1.7	39.8	0.025	0.45	0.2	0.002	0.33	0.05	10	1.3	0.14	16.9	1.1
B-2	-5	1.5	1.2	3.4	59.2	0.025	0.4	0.3	0.002	1.44	0.1	18	1.3	0.64	49.7	0.8
B-2	-7	4.5	10.7	10.6	75.3	0.025	0.93	1.2	0.049	0.15	0.3	108	0.7	9.56	2231.7	3.8
B-2	-9	4.1	9.9	10.5	70.8	0.025	0.91	1.1	0.044	0.21	0.4	99	0.8	8.68	2007.9	3.7
B-2	-11	4.5	9	9	78.8	0.025	0.87	1.1	0.039	0.16	0.3	102	0.7	10.12	1776.9	3.1
B-2	-13	0.6	4.6	6.6	29	0.025	0.7	0.2	0.001	0.93	0.05	23	1.7	0.16	15.9	0.6
B-2	-15	0.7	5.8	7.2	34.7	0.025	0.52	0.2	0.001	1	0.05	22	5.5	0.13	31.8	0.7
B-2	-17	1.1	3.8	6.5	28.4	0.025	1.07	0.4	0.001	1.13	0.1	28	1.5	0.16	22	1.4
B-2	-19	1.4	1.9	2.3	47.8	0.025	0.8	0.3	0.002	0.52	0.2	17	1.1	0.61	23.2	1
B-3	**-1**	**1.1**	**2**	**1.6**	**58.8**	**0.025**	**0.26**	**0.2**	**0.002**	**0.31**	**0.05**	**12**	**1.4**	**0.17**	**8.7**	**0.6**
B-3	-3	0.6	1.9	1.5	47.8	0.025	0.19	0.2	0.001	0.28	0.05	9	1.2	0.15	8.4	0.5
B-3	-5	1.4	1.8	1.2	95.7	0.025	0.88	0.7	0.001	0.39	0.05	17	1	0.49	10.6	1
B-3	-7	1.2	2.4	1.1	64.6	0.025	0.56	0.4	0.001	0.35	0.05	15	0.7	0.25	15.6	0.9
B-3	-9	1.9	2.6	1.9	65.6	0.025	1.51	0.3	0.002	1.24	0.2	25	1.9	0.74	27.9	1
B-3	-11	2.1	3.1	2.5	53.1	0.025	1.91	0.3	0.002	2.24	0.2	25	3.2	1	47.1	1.4
B-3	-13	1.5	5.3	2.4	39.8	0.025	0.86	0.4	0.003	0.87	0.1	27	4.6	0.51	21.9	1
B-3	-15	1.9	3.3	2.6	44.7	0.025	0.62	0.3	0.002	1.11	0.2	28	2.9	1.06	54.6	1.1
B-3	-17	1.2	2.7	2.1	38.7	0.025	0.56	0.2	0.001	0.83	0.05	26	2.2	0.3	12.2	0.8
B-3	-19	1.3	2.4	2.2	51.2	0.025	0.71	0.3	0.002	0.87	0.1	22	5.8	0.56	24.1	0.9
B-3	-21	1.4	2.4	2.4	41.8	0.025	0.64	0.5	0.002	1.28	0.1	28	2.2	0.57	18.1	0.9
B-3	-23	0.9	3.2	2.1	34.1	0.025	0.65	0.3	0.002	1.06	0.05	20	2.5	0.37	21.9	1.2
B-3	-25	0.7	7.2	2.8	21	0.025	1.5	0.2	0.002	1.62	0.05	25	2.9	0.22	19.9	1
B-3	-27	0.6	5.3	2.3	21.6	0.025	1.18	0.2	0.001	1.37	0.05	22	3.4	0.21	17.4	0.8
B-3	-29	0.7	6.2	2.3	22.6	0.025	1.18	0.2	0.006	1.3	0.05	27	4.9	0.42	22.2	1.3

B-4	**-1**	**1**	**5.7**	**3.4**	**94.5**	**0.025**	**0.78**	**0.4**	**0.004**	**0.31**	**0.2**	**27**	**1.1**	**0.41**	**109.2**	**1.4**
B-4	-3	0.9	3.4	1.9	81	0.025	0.45	0.3	0.003	0.25	0.05	24	0.6	0.2	30.5	1.1
B-4	-5	0.9	3.7	2	81.7	0.025	0.47	0.3	0.004	0.25	0.05	23	0.7	0.22	44.2	1
B-4	-7	1.2	6.1	4.1	106.4	0.025	0.74	0.4	0.006	0.32	0.3	25	1	0.59	183.1	1.3
B-4	-9	1.1	6.3	4.1	106	0.025	0.8	0.4	0.006	0.34	0.3	23	1	0.61	191.7	1.3
B-4	-11	1.2	7.1	5.7	126.6	0.025	0.94	0.5	0.007	0.39	0.4	21	1.1	0.82	280.8	1.4
B-4	-13	2.1	1.9	2.3	63.2	0.025	1.05	0.8	0.003	1.31	0.2	26	3	0.87	39.4	1.3
B-4	-15	2	4	1.8	52	0.025	0.63	0.4	0.002	1.49	0.2	28	1.5	1.32	48.1	1.2
B-4	-17	1.4	2.4	6.4	41.1	0.025	0.56	0.4	0.001	0.4	0.1	21	1.1	0.54	121.3	1
B-4	-19	1.5	4.5	1.5	37.9	0.025	0.7	0.3	0.001	0.48	0.05	22	1	0.8	16.6	1
B-4	-21	1.3	2.9	2.1	50.9	0.025	0.97	0.3	0.002	0.98	0.2	21	1.4	0.53	31.9	1.1
B-4	-23	1.4	2.7	2.3	51.2	0.025	0.75	0.3	0.002	1.45	0.2	23	2.2	0.62	39.2	1.1
B-4	-25	1.3	3.7	2.1	41.4	0.025	1.14	0.8	0.002	1.11	0.1	24	1.4	0.5	33.6	2.2
B-4	-27	1	4.1	2.5	36.1	0.025	1.42	0.3	0.002	1.42	0.1	24	1.6	0.4	24.5	1.3
B-4	-29	1	2.8	2.3	38.1	0.025	1.01	0.3	0.001	1.02	0.1	20	1.8	0.41	17.1	0.9
B-4	-31	1.1	2.6	2.2	37.8	0.025	1.11	0.3	0.002	0.87	0.1	22	2.2	0.61	17.7	0.7