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area lying between Bukhovo (X.L. 55-60), Borcha, Gotch (X.L. 57-70), and Seslavtsi (X.L. 51-70). The mines are called the Bukhovo Mines, a designation which dates back to the initial German exploitation during 1942. The mines are composed of 55 shafts, divided into districts as follows:

Goten - located 1.5 kilometers from Bukhovo
Borcha - located 5 kilometers north of Bukhovo
Seslavtsi - located 8 kilometers northwest of Bukhovo
9 September - located 4 kilometers northwest of Bukhovo

The 9 September district was formerly a part of the Seslavtsi district, but due to expansion it was made into a separate district.

2. Each shaft of the Bukhovo Mines has a number and is assigned to the district which will handle the transportation of the ore. The shafts are numbered chronologically, regardless of district, beginning with number one, which was the first shaft, and going through 54 and 55, shafts which were opened in May 1952.

3. For production and planning purposes the Bukhovo Mines' month begins on the 25th. For example, the month of June would be from 25 May to 24 June, inclusive.

4. Each district has a gravel road leading from it to the processing plant in Bukhovo. The ore is transported in [illegible] 3-ton Molotov trucks and 4-ton ZIS trucks. These are automatic dump trucks. The number of trucks is not known. The trucks are covered with tarpaulins when loaded with ore, and are escorted with one armed soldier.

5. The ore is crushed in the Bukhovo plant to a sand or coarse powder, which is sacked and taken by truck to Gare Luna Station, located four kilometers south of Bukhovo, on the Poduene-Polno Kmurtsi line.

6. The ore is taken from each shaft by hand car or electric trains of many cars from the underground shaft to the outside depot. The mine cars are equipped with pivot buckets holding 750 kilograms each. From the shaft they are run onto a platform where they are dumped into the appropriate bins, depending on their classification. There are four bins at each depot; one each for "extra" first, second, and third quality ore. The quality of the ore is determined at the exit of each shaft by a Soviet technician who tests the ore with an instrument which he places near the ore, and the dial of which indicates the uranium content. The ore classified as "extra" is ore which the instrument hand swings all the way to the right. This "extra" ore has been produced in the Goten district only. Until 10 June 1951 the 9 September district had never produced ore above first-class. On 10 June, what appeared to be a large vein of "extra" type ore was uncovered and exploitation was begun immediately.

7. The 9 September district was composed of the following 14 shafts: Nos. 18, 19, 26, 33, 34, 35, 36, 37, 38, 41, 47, 49, 54, and 55. All shafts are presently active, with the exception of shafts No. 18 and No. 26. These two shafts are inactive due to lack of road facilities to haul the ore to the district depot. In many cases the different shafts are being connected and the ore from two or more shafts is being brought out through one shaft. The ore from all the shafts, except No. 19 and No. 33, is brought out in hand cars. Shafts No. 19 and No. 33 have an electric engine which pulls the cars.

8. Shafts No. 34, No. 35, and No. 47 all move their ore through Shaft 19 via purposely cut tunnels joining them. Each of the above three shafts is about 100 meters apart, and 150 meters from Shaft 19. They are also 50 to 150 meters nearer the earth's surface than Shaft 19.

9. All shafts, with the exception of 18 and 26, have dirt roads over which the ore can be trucked. These dirt roads converge at the district check point, from where the gravel road starts to Bukhovo. The check point, which is guarded by a soldier, is 1,300 meters from Shaft 19.

10. Shaft No. 33, which was 110 meters deeper and 800 meters away from Shaft No. 26, is being worked at an accelerated pace in order to connect the two shafts, and to bring out the good quality ore of Shaft No. 26 over the transportation facilities of Shaft No. 33.

11. Shaft No. 33 is made up of one straight shaft 2.4 meters wide and 2.4 meters high. During March 1951 this shaft had penetrated horizontally 350 meters. The shaft entrance faces west and the main tunnel runs in an easterly direction. The shaft is lighted by 20 electric lamps spaced about 16 to 18 meters apart. Until May 1951, Shaft No. 33 was being dug without hitting any ore veins and was being continued only in order to reach Shaft No. 26. In May 1951 a slight swing to the left was made in the main tunnel, after which uranium ore was struck and a cross tunnel at that point was made. Immediately after striking ore, a road was constructed to Shaft No. 33. The ore inside the mines is carted to the main tunnel, where it is loaded on the cars and hauled out by electric engine.

12. Shaft No. 19 was located under Shafts No. 34, No. 45, and No. 47. It is connected with the main road from the district of Dukhovo by a dirt road. The shaft's entrance faces west and it extends approximately one kilometer east. It also has two auxiliary tunnels, the first of which is located 250 meters inside the mouth of the shaft. This auxiliary tunnel is numbered "19½ / 10." It also is 30 meters higher than the main tunnel. There is a cross tunnel leading off 19½ / 10 which is 1.80 meters high and 1.50 meters wide, and approximately 60 meters long. This cross tunnel is presently being worked and is lighted by one electric bulb in the middle of the tunnel. Access to 19½ / 10 is gained through a narrow passageway with horn steps up to it, through which personnel pass. For the purpose of getting the ore out, there is a "slideway" from 19½ / 10 which leads directly to the cars in the main tunnel of Shaft No. 19. The 19½ / 10 is composed of eight cross tunnels, which are unnumbered. They are not supported with beams and are 1.20 meters wide and 1.40 meters high, each one being between 60 and 70 meters long. All lighting in these cross tunnels is furnished by carbide lamps, which vary in number from six to eight, depending on how many of these cross tunnels are being worked.

13. On the average, five cross tunnels of 19½ / 10 are worked daily, and the other three left idle. These cross tunnels are worked on an alternate plan, and the engineers designate each day which of the cross tunnels will be worked. Usually, ten men work these cross tunnels, with two men assigned to each one. One man loads wheelbarrows, and the other rolls the wheelbarrows to the chute or slide. In the event a pair are unable to unload all the ore blasted for their shift, they are forced to continue working through the entire next shift. The ore from 19½ / 10 comes down the slide on to a spur of the main tunnel called Cross Tunnel 19½. The cars in this particular cross tunnel carry 150 kilograms of ore and they are run out to the bins of Shaft No. 19. Tunnel 19½ is not exploited for ore, but is used as a car depot for cars when not in use. These cars, exclusively, carry ore from 19½ / 10.

14. A second auxiliary tunnel is 198 / 10, located 450 meters from the main entrance of Shaft 19. This auxiliary tunnel is entered by personnel through a small crosscut 550 meters on the lefthand side from the entrance of Shaft No. 19. This auxiliary tunnel has ten cross tunnels which are being presently exploited. Their dimensions are the same as those of 19½ / 10. The cross tunnels vary in length from 12 to 50 meters and are anywhere from one to ten meters apart. Auxiliary Shaft No. 198 / 10 is supported only in its weakest spots. The same methods of operation and the same number of laborers are used as in No. 19½ / 10. Shaft No. 198 / 10 also uses carbide lamps.

15. On the lefthand side of the main tunnel of Shaft No. 19 are the following cross tunnels: 19/16, 19/10, 1/s, and two other cross tunnels whose numbers are not known. Cross tunnel 22 has several spurs off of it as follows: 19/22, 19/18, 19/18 / 1, 19/12, and 196. These spurs are likewise 1.50 meters high and 1.80 meters wide. Their depth varies in accordance with the amount of digging that has been accomplished. Spur 19/16, which is located 150 meters from the entrance to the tunnel, is 40 meters long, and work in this spur has been temporarily suspended. Ten meters further inside was Spur 19/18, which likewise had been abandoned and is presently used as a storehouse for explosives and caps. Thirty meters further in from 19/10 there is a spur whose number is unknown and which is presently boarded up. Fifteen meters beyond the unnumbered spur is Spur 19/22, which has been penetrated up to 35 meters and is presently abandoned.

16. On the righthand side of the main tunnel and 15 meters from the entrance there is a new spur with unknown designation which was started 10 June 1951. This new spur is 2.40 meters high and 2.40 meters wide. Orders received indicate that during July this new spur would be exploited at an accelerated tempo. It was planned that an automatic shovel will be located in this spur which will load the ore into the cars, and seven men will work each shift in the spur. Also on the righthand side is Spur 19/18, which is presently boarded up, and 35 meters beyond 19/18 is Spur 19/14 / 1. Spur 19/12 is nine meters beyond Auxiliary Tunnel 194 / 10, and 40 meters beyond it is Spur 196. Neither one of these two spurs is presently being exploited. Besides the above mentioned spurs, on the righthand side of the main tunnel are Spurs 193, 109, 111, 19/17, 19/13, 107, 107-a, 25, and one whose number is unknown.

17. Spur 193 is located 180 meters form the entrance of the shaft and is 45 meters long. Fifteen meters beyond 193 is Spur 109, which is 50 meters long and is not being worked. Twelve meters beyond Spur 109 is Spur 111, which is 60 meters long, but is not in use. Seventeen meters beyond Spur 111 is Spur 19/17, which is likewise idle. Spur 25, which was recently started, has been abandoned. It is planned, however, to use Spur 25 as an annex to the main tunnel. At the end of the tunnel is a new spur which had just been opened up and in which work will be started during July 1951.

18. There was another spur at the end of the tunnel, the inside of which caved in during March 1951 and opened up underground water sources which started pouring into the mine. The water cause a work stoppage until it was drained off and canals built. At the present time a new spur is being built around the inundated spot and which eventually will be a continuation of the main tunnel. In these inside spurs each miner carries a carbide lamp. Water is continuing to drip constantly in front of Spur 19/25.

19. In Shaft No. 19 there were shifts averaging 45 to 50 men. These men were devided into classifications as follows:

Tunnelmen - loading and wheeling the ore out, drilling of holes for dynamite sticks, and the exploding of same.

Internal Maneuverers - to move the ore cars from the various spurs onto the tracks in the main tunnel and take them to the entrance of the shaft.

Outside Maneuverers - (laborers working outside of mines) to take the ore cars to the bins, dump them and bring the empty cars back.

One individual - from the Geological Section to test and classify the ore, prior to its being dumped into the bins.

An electrician - maintaining the electrical power.

A Mechanic - attached to each shift for maintenance of the compressor drills.

Special man - maintaining the batteries of the electric engine.

Dynamite man - places the charges.

Three individuals - maintaining of the protective shaft (wooden) and installing new ones, when necessary.

Diggers - to constantly keep the tunnel spurs dry with ditches.

Bin-men - to open and shut the bin traps (four) before and after the unloading of the ore from the cars.

20. The entire rail system is served by one electric engine, with two batteries, one of which is almost continously in the repair shop.

21. To date, the mine with all its spurs, has produced only ore of a dull black coloring. Sometimes this ore has a bluish tint, and whether wet or dry, it felt greasy. In some places the ore contains a very small amount of lead, but on the whole it is pure. The ore had a sulphur smell to it, and the main tunnel is always heavy with the odor of rotten eggs. The average production for shaft 19, for a 24-hour period (three shifts) is between 25 to 30 tons of ore. The ore is comparatively heavy.

22. The main tunnel of shaft No. 19 is not completely straight nor is it of uniform width, and very often ore cars jump the rails when being shifted along the line. The electric engine itself also jumps the line frequently. All the equipment including shovels, picks, compressor drills, etc., is inadequate, but despite the inadequacy of the equipment, each day the supervisors insist on more production.

23. The trudovaks' work clothes were composed of blue duck pants and jacket, a fiber cap, and second-hand boots.

24. No security measures are taken for the health or safety of the workers and very often the miners will dig in to eight meters without having any supports constructed. Likewise no measures have been taken to safeguard the laborers from the radiation. The entire shaft No. 19 is without ventilation, with the exception of Spur 19A, where a ventilation system was installed on 24 June 1951, and only because of constant fainting of the workers in this spur. Often the miners had to continue working amidst smoke and dust from blasting, because of the lack of ventilation.

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25. In the 9 September district there were approximately 650 trudovaks [redacted], and 200 civilian workers who are "free-laborers" who get paid. In the beginning of June 1951, the civilian laborers began to resign their jobs, because of dissatisfaction with the pay and the labor conditions within the mines. In shaft No. 19 there were approximately 130 to 150 miners, of which 30 were paid civilians, and the balance were trudovaks.

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26. The living conditions of the miners are extremely poor and the paid laborers preferred to be without work, rather than to continue in the mines. The trudovaks have no alternative but to continue working or desert. The civilian laborers from the surrounding villages are a little better off in that they are picked up from their homes by truck and taken to the mines, and after work are returned to their homes. The civilian workers from far-off villages are lodged in a barracks in Pukhovo.

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27. The trudovaks [redacted] are quartered in the Seslavski Monastery, which is located one kilometer north of Soslavtsi. The following buildings are used by the trudovaks: Two wooden barracks, 25 meters long, five meters wide, and 3½ meters high; one brick building, 20 meters long, 7 meters wide, and 5 meters high; and the monastery quarters, which is "L" shaped (main building); also 22 assorted monastery rooms of various proportions and locations, but generally connected one with the other by halls, stairs, and balconies, and form two groups. 50X1-HUM

28. The trudovak detachment used, as sleeping quarters, the two wooden barracks, the second storey of the brick building, and ten of the monastery rooms. The trudovaks sleep on boards placed on low wooden horses. Half of the lower floor of the brick building is used for the trudovak kitchen and mess hall. The other half, comprising four rooms, is used as an office for the detachment commander, officers' mess, general office of the unit, and armory which held 80 Manlicher rifles.

29. The command cadre of the unit is composed of a company commander, who is a first lieutenant; commander of the Podelenie (deputy company commander), a political commander of the unit (lieutenant), four platoon leaders, company sergeant major, three senior sergeants (platoon sergeants), and four sergeants. The whole company was divided into five platoons of between 120 to 150 men each. After completing a shift in the mines, the trudovaks then have two hours of close-order drill, with rifles.

30. The food of the trudovaks consisted mainly of beans and spinach, without fats. Breakfast is composed of tea, sweetened with marmalade because of the lack of sugar. The working conditions of the trudovaks are equally as hard as those of the civilian workers, but in addition, they have the moral torment imposed by the officers since they, the trudovaks, were considered unreadening and unreliable from the Communist point of view. The trudovaks have no recourse for complaints of their living or working conditions, whereas the civilians, if they do not like the work, could simply quit. The trudovaks are ordered to work silently and without objection and are continuously pressured to increase their daily output of work for the building of a better socialist state.

31. A trudovak or a civilian miner who is sick or who faints in the mines receives no medical aid, and only receives aid after he has arrived at the point of complete exhaustion.

32. Recently one platoon of 100 men [redacted] was transferred to shaft No. 18 and the men were quartered in a wooden barracks 60 meters from the shaft entrance. The shaft was located two and one-half kilometers from northeast of the monastery. Food, clothing, and equipment was furnished to the trudovaks at the monastery. 50X1-HUM

33. Each mine district was attached to it a special military unit under the jurisdiction of the Ministry of the Interior, for security purposes. The exact designation of these troops is unknown, but they are popularly called the "VP" or the MVD. Their uniforms are identical with those of ordinary troops with the exception that they wear blue caps. Their summer uniform differs from the ordinary troops only in that their caps are similar to those of the border troops.

34. The security unit attached to the 9 September district is composed of 30 men equipped with Soviet sub-machineguns and German Parabelum pistols. This unit is located 200 meters north of the monastery and maintains a commissary warehouse located ten meters west of their barracks. They maintain guard posts at this warehouse, at the compressor of shaft 19, and at the main gate of the district. Other posts are maintained, but their exact location is not known. The air compressor, guarded by them, furnishes air for the drills of all shafts in the district. The main gate post is composed of six soldiers, one of whom checks all vehicles passing in and out, and the others act as guards for the trucks.

35. Outside of the main guard post, the district area is not protected and there are no patrols, wire fences, or other security measures.

36. Each evening at roll call, in the morning before going to work, when on leave, and at production pep talks, the trudovaks are lectured by their chiefs on the importance of security and the fact that their activities must be kept in strict secrecy, and no one, including their families, must be told of what they do. They are reminded that the ore which is extracted is an extremely important strategic material, and its existence must not be known. The trudovaks are constantly reminded that anybody who disobeys these regulations or who takes out a piece of ore will be considered a spy, traitor, and criminal against his country, and will be sentenced by a military court for giving out government secrets. The punishment for such an offense is a sentence up to 12 years in solitary confinement.

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[redacted]

35. As a punishment for all groups who fail to meet their daily penetration quotas of 50 centimeters per miner, they are forced to work without rest for an additional shift. The group, whoever, which surpasses its quota and comes out first in the company, is awarded a flag of red cloth, and the individuals who helped accomplish the production are read off on a commendation list. Those who have failed to meet their quota are read off on a list as being saboteurs of the state.

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[redacted]

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[redacted]

42. The Goten district produced the largest amount of ore. This district was exploited by the Germans, who especially concentrated their work on Shafts No. 3 and No. 5, both of which begin in Goten and are presently excavated to the vicinity of Dorcha. The main tunnels of Shafts No. 3 and No. 5 extend from three and one-half to four meters underground. These two shafts are the longest shafts in the uranium mines.

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[redacted]

43. From time to time one or two members of the geological service come to the various shafts and go into the spurs being exploited, carrying little bags. They take samples of the ore for analysis. Each bag is tagged with a ticket giving the exact location in the spur, spur number, shaft number, and district. It is not known what becomes of these bags or where the analysis takes place.

44. It is known that some of the shafts within the 9 September district, as well as shafts of other districts, produce an ore that is brownish-red and also ore that is grayish-blue in color. Specifically, the Goten district produces a dull reddish ore and the Senlavtsi district produces a black ores. The bluish-gray ore comes from unknown shafts. The average estimated production of the 9 September district is 120 tons daily. The total Sukhovo output is roughly estimated at 250 tons daily.