CLASSIFICATION

COUNTRY USSR / Union REPORT NO.

SUBJECT Izmai-Tagil Metallurgical Combine

25X1A

EVALUATION [redacted]

25X1A

DATE OF CONT

DATE OBTAINED [redacted] EPARED

REFERENCES

25X1A

PAGES 3 ENCLOSURES (NO. & TYPE) 2 1

REMARKS

SOURCE [redacted]

25X1X

1. Location: The metallurgical combine and the coking plant are located east of Nizhni Tagil (59°58'E/57°56'N), Sverdlovsk Oblast.
See location sketch with legend, Annex 1.

2. Location:

The steel plant area extends from the Nizhni Tagil railroad station to the southeast and covers an area of about 5x2 km.

3. Plant layout:

A multi-track shunting station borders the western edge of the factory. A railroad line leads from the shunting station in the direction of the car factory. Source learned from conversations that the construction of the naphtha plant was started in 1943 and the construction of the not yet completed blast furnace installation started in 1946. The factory for fireproof stones was also a construction.
See layout sketch, Annex 2.

4. Work force:

About 20,000 workers, who worked on three shifts (estimate).

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5. Production:

Unknown

25X1A [redacted] Comment:

a. Until now little information was available on the location and layout of the Nizhni Tagil metallurgical combine. Annex 1 gives the first survey of this industrial area on the eastern outskirts of the town. The sketch is not to scale and not of equal angle. The outlines of the installations are too diagrammatic. The railroad line and railroad car factory, should form an angle of about 80°. The blast furnace installation, a conspicuous landmark, is missing. A comparison with Annex 2 shows that both sources agree on the direction of the different installations as seen from PW Camp 7153/2.
The relative locations of the plants are therefore considered correct.

b. The mistakes on the sketch are understandable in view of the multitude of installations in this ramified industrial area. A true picture may only be obtained from the evaluation of several more reports and sketches by different sources.

2 Annexes, Blueprints: Nizhni Tagil Metallurgical Combine.

AF

Legend to Annex 1:

1 [illegible] Carr. 7153/2

2 Shunting station, constructed from 1947 to 1949, 1 km long, 32 parallel tracks

a New workshop 300x80x18 meters. Iron narrow sides, long sides covered with black iron plates. Steel frame structure. Entirely empty as late as May 1949. Purpose unknown. Presumably part of the shunting station

b New water tower

3 Two new workshops, 200x80x10 meters, brick structure, purpose unknown. Presumably, part of the rolling mill

4 New workshops presumably belonging to the rolling mill, engineer buildings, 50x8 and 50x20 meters, 8 meters high. Machines are being installed

5 New open-hearth plant, 180x60x8 meters, red brick structure, completed in 1947. Six smokestacks, each 75 meters high on the longitudinal side. Not in operation in May 1949

6 Cooling shop for the open-hearth department, 150x 60x8 meters

7 Open-hearth plant with six casting furnaces and numerous crane installations, 150x60x8 meters, six smokestacks, constructed in 1953. Three tappings within 24 hours

8 Coking plant, brick structure, 200x60x15 meters, with a smokestack, 80 meters high, furnished with obstacle lights. Large coal and coke dumps on both sides of this building

9 Automobile spare parts plant, two red buildings, brick structures each 80x25x8 meters

10 Mold casting department, fenced-off, several railroad spur tracks, reconstructed since 1944, with

a Foundry, 80x25x8 meters

b Lathe shop, 80x25x8 meters

c Assembly shop like b

d Forge, 40x40x8 meters

11 Wood pattern shop, 80x30x6 meters, belongs to the mold casting department

12 Kuznavod workshop, red brick structure, 80x25x6 meters, for the processing of rails and production of railroad switches, equipped with railroad spur track

13 Cement plant, red brick building, 80x25x6 meters with administration building (a)

14 Old cement plant

15 Asphalt-boiling plant

16 Concrete plant

17 Iron yard, fenced-off open terrain, 500x250 meters, with several sheds and large stocks of tubing and rolled sections

18 Ammonia plant, brick building, 80x40x7 meters, no smokestacks

19 Spring well fountain, concrete water basin with numerous small fountains, two meters apart, which produce a twirling foam. This installation is connected with the ammonia plant

20 Semi-circular three-story clubhouse, not completed, located in a park

21 Sawmill with numerous workshops, warehouses and drying sheds

22 Street car depot

23 So-called black market

24 Bread factory

25 Barracks

26 Civilian cantonment buildings

27 Clothing factory

28 Railroad car repair shop

29 Fireclay factory

CONFIDENTIAL/CONTROL/

Legend to Annex 2:

1 Nizhni-Tagil railroad station

2 High buildings

3 Naphtha plant; trains of tank cars were frequently seen there

4 Coking plant with about 200 furnaces

5 Blast furnace plant with

a Two blast furnaces, each of about 1,300 ton capacity, completed in mid-1947; two more blast furnaces were under construction in the Spring of 1948

b New concrete smokestack, 80 meters high

6 Open-hearth plant, numerous smokestacks, each about 40 meters high

7 Railroad tracks at the smelting plant

8 PW Camp 7153/3

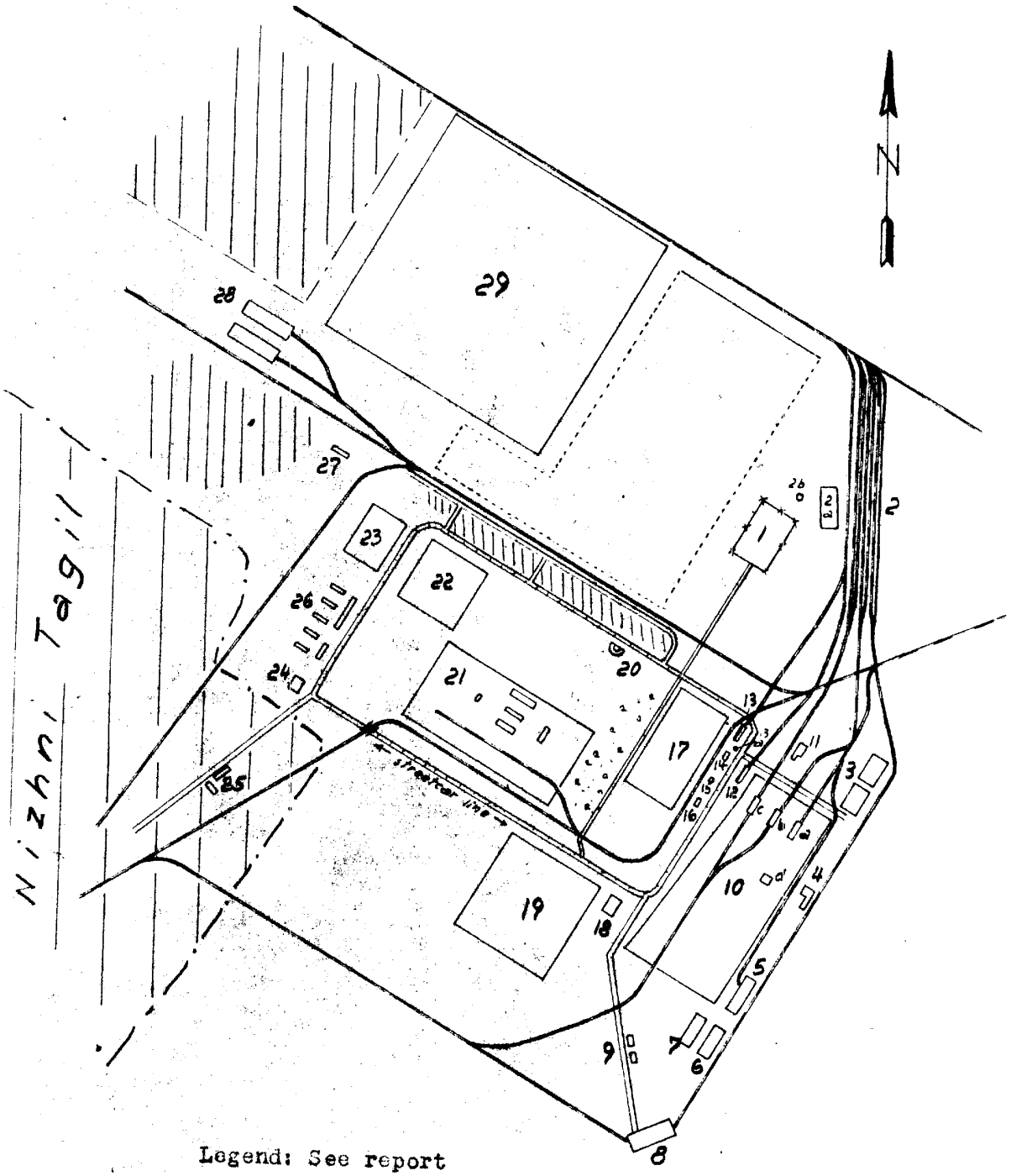
9 Remontezavod, about 250 meters long, with workshops

10 Track to the railroad car factory

11 PW Camp 7153/2

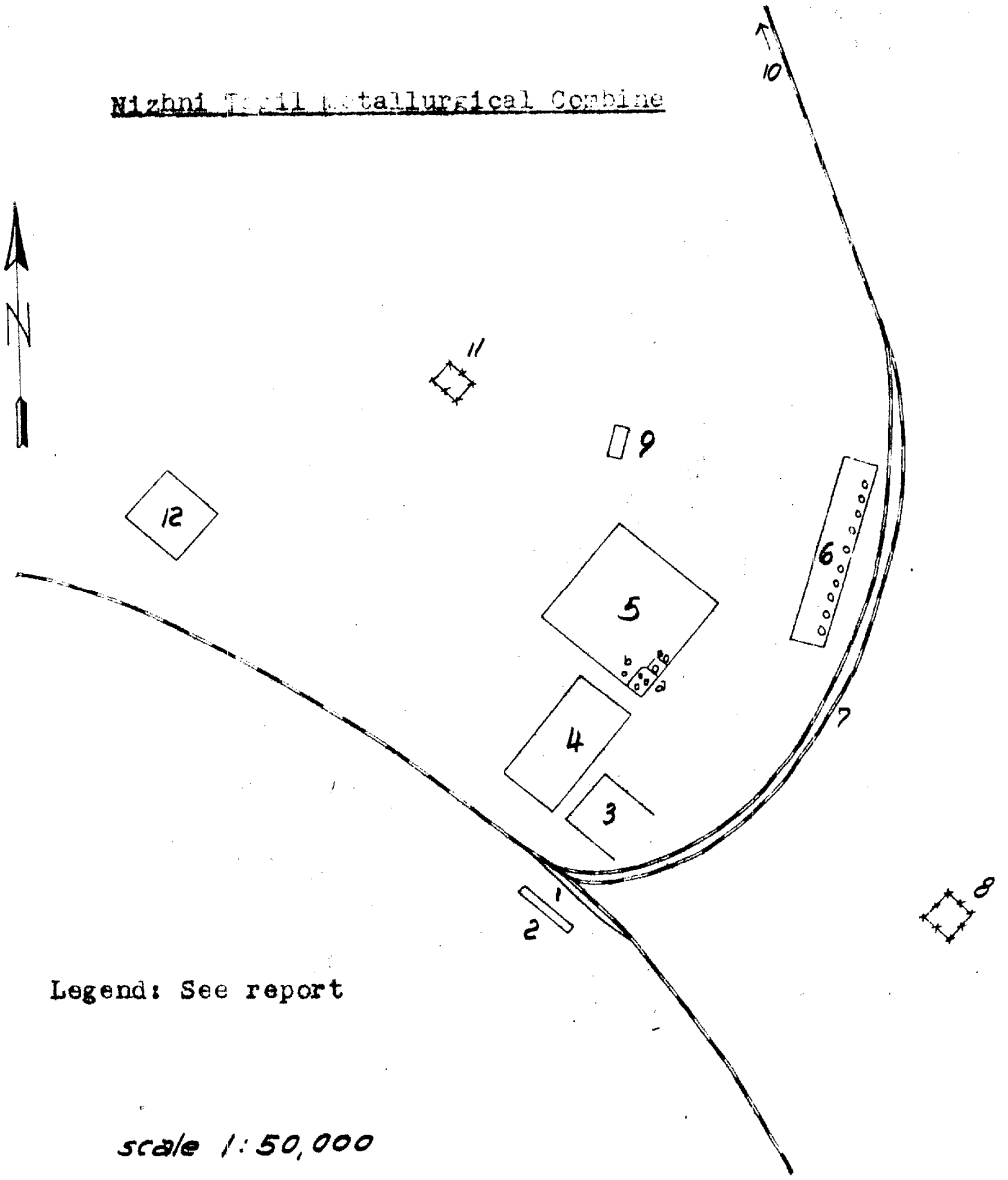
12 Fireclay factory

Nizhni Tagil Metallurgical Combine



ANNEX 2

Nizhni Tagil Metallurgical Combine



Legend: See report

scale 1:50,000

CLASSIFICATION SECRET-CONTROL/US OFFICIAL

COUNTRY Soviet Union REPORT NO.

TOPIC Railroad Car Factory No. 185 in NIZHNI-TAGIL-VAGONKA 25X1A

25X1A
EVALUATION [redacted] ACE OBTAINED [redacted]

DATE OF CONTE [redacted]

DATE OBTAINED [redacted] DATE PREPARED 20 December 1949

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 2 Blueprints

REMARKS

25X1X

[redacted]

1. Source submitted the two attached sketches on the railroad car factory in NIZHNI-TAGIL-VAGONKA (59°58'E/57°56'N), Sverdlovsk Oblast.

2. The following plant departments were remembered:

No. 84: Production of plexiglass and optical equipment
No. 110: Machining of armor plates
No. 119: Assembly of engines
No. 125: Automatic lathe department
No. 130: Assembly of tanks (assembly line system)
No. 630; Production of springs

25X1A [redacted] Comment:

a. This report in connection with previous information yields a clearer picture of this extensive plant.

b. The sketch of Annex 1 might lead to the mistaken assumption that the building described in detail in Annex 2 is the most important workshop of the plant. According to all previous reports, the most important plant department is the final assembly hall entered as item 1 on the sketch of Annex 1.
25X1X However, [redacted] stated that it is larger and more centrally located. From the often reported tunnel (item 2 of Annex 1) it is clear that the building described in Annex 2 is the chassis workshop, north of the main workshop. The entirely inadequate sketch of Annex 1 is forwarded only for the purpose of proving this fact.

2 Annexes: 1. Railroad car factory in NIZHNI-TAGIL-VAGONKA
2. Details on the chassis assembly hall of the NIZHNI-TAGIL-VAGONKA Railroad Car Factory

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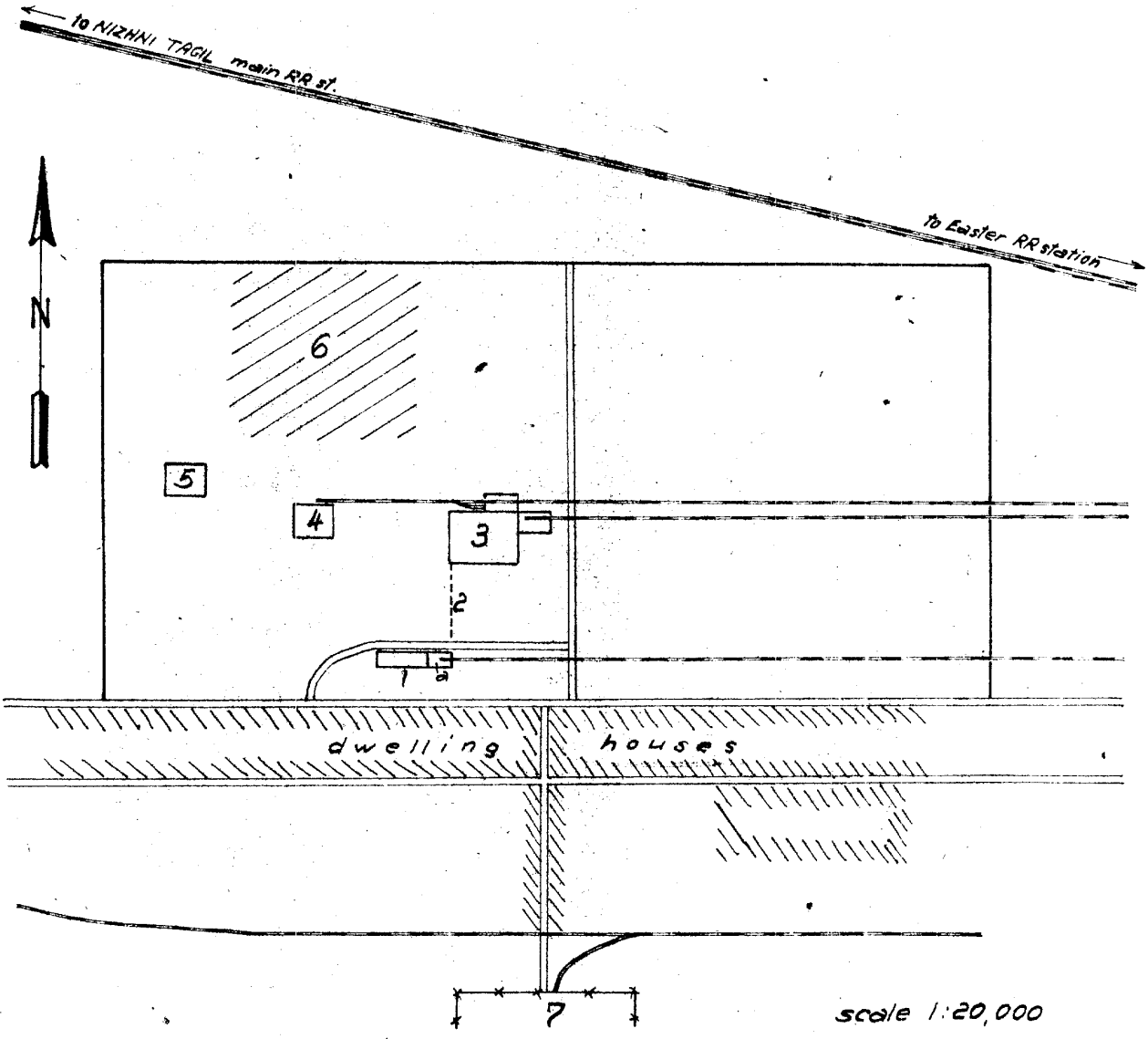
Annex 1

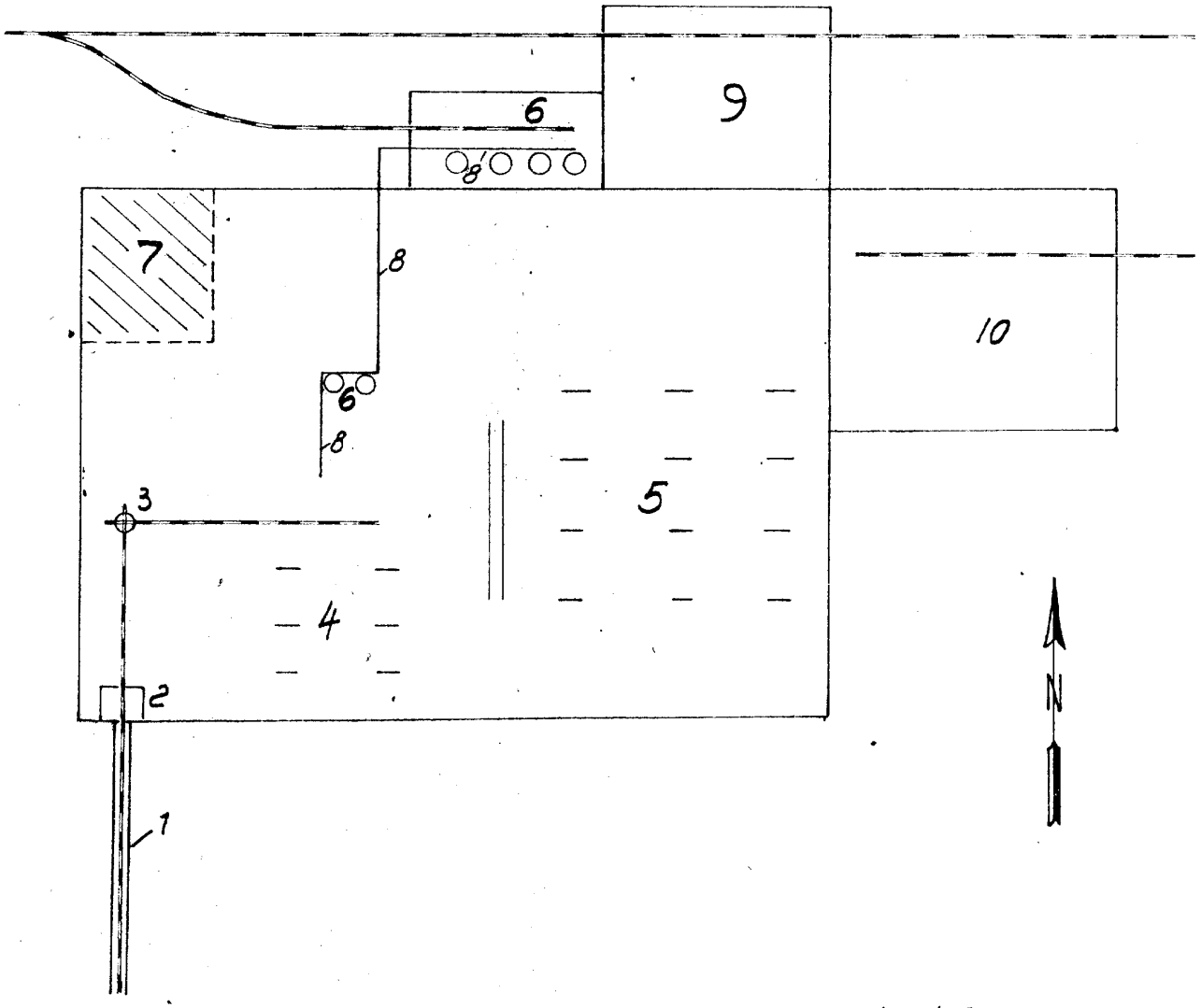
Railroad Car Factory in NIZHNI-TAGIL-VAGONKA



Legend:

1 Administration building, 750x150x45 feet with an assembly hall for freight car superstructures (a)
2 Tunnel, 900 feet long and 12 feet below the surface
3 Assembly hall for chassis, 750x540x36 feet with skylights and several annexes (see Annex 2)
4 Foundry
5 Welding shop
6 Materials dump
7 PW Camp No. 153/1

Details on the Chassis Assembly Hall of the NIZHNI-TAGIL-VAGONKA Railroad Car Plant



scale 1:2,000

Legend:

1 Tunnel
2 Lift
3 Turntable
4 Boring machines
5 Lathes
6 Vertical turning and boring machines
7 Spare parts dump
8 Assembly line
9 Coarse turning of wheels
10 Hardening shop and rolling mill

COUNTRY Soviet Union REPORT NO.

TOPIC R.R. Car Plant No 183, Nizhni-Tagil

25X1A

25X1A EVALUATION

DATE OF CONTEN

DATE OBTAINED 24 April 1950

25X1A

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Bluenrint

REMARKS

25X1X

SOURCE

1. Location :

Northwestern edge of the suburb of Vagonka, 3.8 km ENE of Nizhni-Tagil (59°58'E/57°56'N), Sverdlovsk Oblast.

2. Plant installations :

The plant covers an area of about 1800 x 675 meters. The newly-constructed assembly shop for tank-cars was the only new building. The exterior walls of this new building (still under construction) were 9 meters high when source arrived in September 1948. The workshop was completed by July 1949. A short time later, the tank car assembly shop was completely installed and ready for operation. A tunnel, 13 meters wide, electrically lighted, passes under the large workshop; it is used by motor vehicles. The power and heating installation is plant-owned.
For plant layout, see Annex.

3. Work force :

Three shifts, each with 5,000 to 6,000 laborers, 60 percent women; also 700 PWs, most of them doing outdoor work. It was known that the PW camp was to be closed in December 1949.

4. Production :

a. Open boxcars, flatcars, tank cars; 4-axle cars with a capacity of 60 tons, 12.6 meters long, all with the same chassis and type of springs.

b. The tank pilot section was operating. Source observed test runs. No further details available.

25X1A [redacted] Comment :

a. The plant location determined from previous information was confirmed by source.

b. Source worked in various places in the plant area, and furnished a good survey of the important plant departments. His statements agree in general with previous reports. The tunnel, passing under the main workshop was also mentioned in earlier reports.

c. Information on the construction of an assembly shop for tank cars is new.

d. The tank pilot section reported is confirmed by other records. It seems that this section, previously the most productive branch of the plant, was limited to developmental work.

1 Annex : Waggon Repair Plant No. 183 in Nizhni-Tagil.

Annex

CC

Legend to Annex

1 Garage, 90 x 27 meters

2 Mechanical department, 90 x 36 x 13.5 meters, manufacture and processing of small parts; most of the machinery American

3 Forge, 45 x 27 x 13.5 meters, cutting of section steel for chassis and springs for railroad cars

4 Large assembly shop, 360 x 90 x 13.5 meters

5 a Test plant for tanks

b Tunnel

5 Paint shop, 135 x 72 x 13,5 meters; painting of railroad cars

6 Foundry and polishing shop, 135 x 73 x 13.5 meters, with three gas-fueled furnaces. Manufacture of railroad car wheels and connecting parts

7 Forge for axles, 135 x 72 x 13.5 meters, with 6 to 8 annealing furnaces and 10 to 15 steam hammers

8 Drying chamber, 135 x 72 x 13.5 meters

9 Fitting shop, 90 x 22.5 x 13.5 meters, with all workshops necessary for the plant's requirements, including carpenter shop and glass shop, with two annealing furnaces for oil fueling

10 Small foundry, 90 x 45 x 13.5 meters, with molding shop; further details not available

11 Newly assembly shop for tank cars, concrete structure, 135 x 90 x 10.8 meters, for assembly of chassis and tanks, with 3 railroad tracks and 12 trolleys with a capacity of 12 tons each

12 Wheel shop, 90 x 72 x 13.5 meters, milling of wheels, installing of bearings and fitting to the axles

13 Power plant and heating installation, brick building, 90 x 22.5 x 16.5 meters, with 3 or 4 smokestacks. Uses coal and peat fuel; connected with the coal and peat dumps by special pipes.

14 Peat dump

15 Coal dump

16 Lumber dump, with about 1,000 pieces of lumber

17 Sawmill, 72 x 45 meters

18 Plant railroad station

19 Iron dump, with section iron, tank screens, casting waste, gun barrels and armor plates

20 Warehouse, 18 x 6.9 x 5.4 meters, with screws, bolts, nuts, springs, and other small parts.

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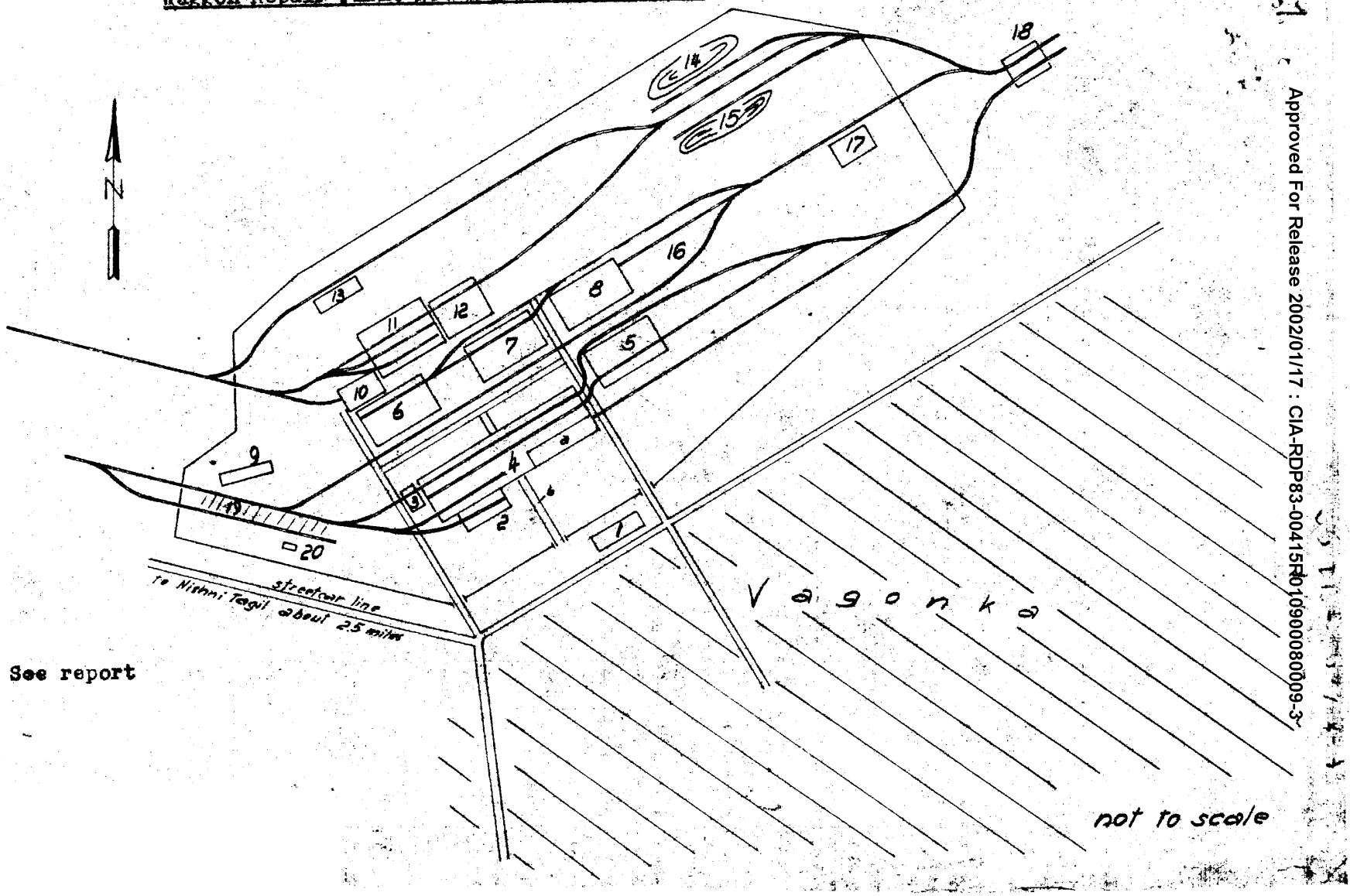
Annex

Waggon Repair Plant No. 183 in Nizhni-Tagil



Legend: See report

Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

CLASSIFICATION [redacted]

COUNTRY U.S.S.R. REPORT NO. 25X1A

25X1A TOPIC Pyshma Copper Plant

25X1A EVALUATION [redacted] OBTAINED Germany [redacted]

DATE OF CONT [redacted]

DATE OBTAINE [redacted] DATE PREPARED [redacted]

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 sketch on ditto

REMARKS

SOURCE [redacted] 25X1X

1. The Pyshma (56°56' N/60°35' E) Copper Plant is in the northwestern outskirts of Pyshma, north of Sverdlovsk (56°46' N/60°44' E). The railroad line to Sverdlovsk passed through the plant. The plant comprised a refinery department, an electrolyt department, another small electrolytic department with a vitriol-producing installation, a boilerhouse, a repair shop, a sawmill and a transformer station (1

2. Copper plates, 1 meter square and 20-mm to 30-mm thick, as well as copper bars, about 1 meter long, 300-mm to 400-mm wide, 100-mm thick and weighing 3-cwt to 6-cwt, were produced. About ten 20-ton carloads of copper plates and copper bars were shipped to Sverdlovsk daily. "Pure copper" was also produced. (2) The anode slimes produced during the electrolytic process were put into wooden barrels and shipped by rail. One 40-ton railroad car loaded with the slimes left the plant daily. Source was occasionally assigned to the loading of slimes. (3).

3. Power was supplied from the SUGRES. (4)

4. The total number of employees was about 700. Forty-five workers were employed in the refinery department and 30 PWs in the second electrolytic department. Work was done in three shifts (5).

25X1A [redacted] Comments.

(1) For further information on the organization and layout of the copper plant see Annex. According to the reference report, the second electrolytic workshop was still under construction in the fall of 1948 while this report states that this department was already in operation in June 1948. The reference report also stated that there were five furnaces in the refinery department. One furnace was apparently being reconstructed at the time of observation. The number of the electrolytic vats appears to be considerably underestimated.

(2) The daily output of about 200 tons agrees with information given in reference report. The plant had an annual capacity of 100,000 tons of electrolytic copper. The plates and bars, shipped from the plant were made of electrolytic copper and not of copper alloys or black copper as apparently assumed by source. The existence of ore dumps indicates that copper alloys were also produced as sideline production. However, source did not mention a roasting installation at the copper works which is required for ore smelting.

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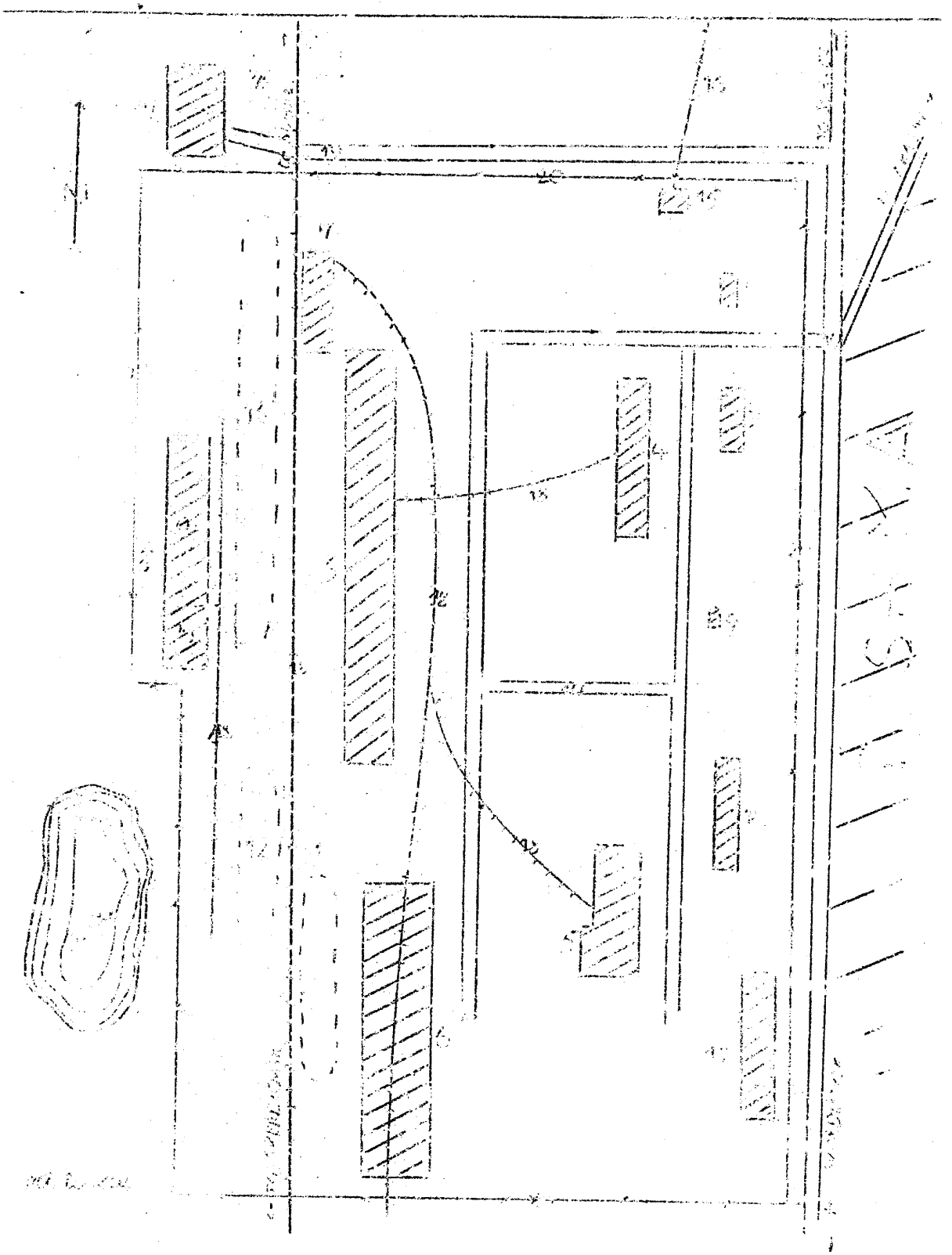
(3) This is anode slime containing gold and platinum which is sent from Pyshma to a refining installation.
(4) SUGRES means Srednc Uralskiy Gres (Central Ural Gres).
(5) Source presumably refers to the work force of one shift. The total number of workmen may exceed 2,000.

1 Annex : 1 sketch on ditto

DD



Legend:

1. Main entrance.

2. Administration building, about 30x10x8 meters.

3. Refinery department, about 200x100x18 meters, equipped with four furnaces and four cranes. Black copper shipments arrived via the plant railroad. The railroad line passed from the refinery department to the electrolytic department. Plates were cast in two of the furnaces and bars were cast in the other two furnaces. A molding shop was also housed in this building.

4. Electrolytic department, 100x80x10 meters, equipped with about 45 vats each 10 meters long, 5 meters wide, and 1.5 meters high. There are used for the further processing of refined copper. The plates, about 30-mm thick, were suspended into the bath by two traveling cranes. Source was employed as loading workman in this department on several occasions.

5. A second electrolytic department. This was smaller than the other electrolytic department, item No. 4. This building also housed an installation for the production of blue vitriol. The material for this production arrived by plant railroad from the other electrolytic department.

6. Warehouse with loading ramp. 160x40x6 meters. Copper plates and copper bars were stored in this warehouse.

7. Shipping department, 50x20x10 meters, with loading ramp for the main spur track.

8. Workshop, 50x20x10 meters. At its northwestern side was a brick smokestack which was about 25 meters high.

   a. Boiler house, equipped with three vertical, coal-fired, flue boilers which generated the steam supply for the plant.

   b. Repair shop, forge, fitting shop, and electrical workshop for the plant.

9. Warehouse for packing material, 20x8x4.5 meters.

10. Warehouse for logs, about 200x100 meters.

11. Sawmill.

12. Coal dump, 150x30 meters.

13. Ore dumps within the plant.

14. Ore dumps outside the plant. There was an estimated one-year stockpile of crude ores.

15. Transformer station for the plant and Pyshma. Power was supplied through a high-tension line from the SUGRES.

16. High-tension line to the SUGRES.

17. PW Camp.

18. Railroad tracks.

19. Roads.

20. Fence.

COUNTRY Soviet Union REPORT NO.

TOPIC Tube Rolling Mill in Pervouralsk

25X1A

25X1A EVALUATION [redacted] D

DATE OF CONT

DATE OBTAINED PREPAR [redacted]

REFERENCES

PAGES 3 ENCLOSURES (NO. & TYPE) 2 sketches on ditto

REMARKS

25X1X

SOURCES: [redacted]

1. Location

On the southeastern outskirts of Pervouralsk (59°57'E/56°54' N), Sverdlovsk Oblast, north of the road to Sverdlovsk.*

2. Plant Installations

The Novo Trubni Zavod covers about 1,000x800 meters. Enlargements were observed in the southeastern plant section. Power was supplied from the outside. The plant was fueled with peat. The machinery was of Soviet and German origin. A railroad connection was available. For plant layout see Annex 1.***

3. Work Force

An undetermined number of Soviets and 600 P/W on construction, working in three shifts.

4. Production

Seamless pipes, component parts for locomotives and railroad cars. Output unknown.

5. Plant Installations

The largest tube rolling mill in the Soviet Union according to Soviets, dated back to before the war. Three new buildings were not operational in May 1948. Wastes from a peat-gas generating plant north of the tube rolling mill were used as fuel. The average size of the plant buildings was 80x35 meters. They were equipped with machinery of Soviet, German and American origin. For plant layout see Annex 2.***

6. Work Force

Three shifts each with about 1,800 laborers, 40 percent women.**

7. Production

Seamless pipes, up to 50 cm in diameter, with different lengths and 10 mm thickness, sewage pipes, threads, socket tubes, iron beds, steel cylinders for peat gas.

8. Plant Installations

The plant buildings were steel frame structures with slag-stone fillings and ferro-concrete roofs. Two workshops were under construction in October 1948. The tube rolling mill had four drawing dies for seamless tubes, and the forge had four large hammers and several annealing furnaces. The workshops were heated by the peat gas generating plant via a pipe line system. A new building in the southeastern plant section had lathes and one annealing furnace. Tubes were presumably widened in socket-like fashion and provided with threads. ***

9. Production

Seamless tubes from 3 to 50 cm in diameter; daily shipments of 15 railroad cars of 50 to 60-ton capacity left the plant, often for Baku; tank wheels, 20 cm thick, 40 and 70 cm in diameter.**

25X1A

* [redacted] Comment: This report gives the first post-war information on the plant, which has an old branch plant according to war-time records. The location of both plants was not determined. The designation Novo Trubni Zavod indicated that this report covers the new and larger plant.

25X1A

** [redacted] Comment: With a workforce of 12,000 laborers in 1940, the number of workers stated by source II seems much too low, especially as enlargements and production increase of seamless tubes indicate that the work force must also have been increased since 1940. The output of seamless-type tubes (Source III) is, at least, equal to the total production of all type tubes in 1940 (168,000 tons according to old records).

25X1A

*** [redacted] Comment: Comparison with previous records shows that the report does not cover all plant installations. As the sketches agree only on some items, a clear picture of the present plant layout cannot be determined.

Legend to Annex 1

A Tube rolling mill

1 Magazine
2 Model-making carpenter shop
3 Molding shop
4 Saw mill
5 Hardening shop
6 Department No 12, no details available
7 Tube rolling mill
8 Unidentified workshop
9 Foundry
10 Forge
11 Two buildings under construction
12 Old carpenter shop
13 New carpenter shop
14 Timber and coal dump
15 Technical office
16 Department No 2, unidentified products were packed in boxes
17 Peat-gas generating plant
18 Janitor's house
19 Peat dump No 703

B Bread factory
C Quarters, cantonment buildings
D 300 meters to power plant

Legend to Annex 2

1 Administration

2 Apprentice school

3 Workshop with straightening machines

4 Department No 3 with two electric furnaces and acid bath

5 Tube cutting installation

6 Manufactury of iron beds

7 Two or three underground oiltanks, each with 10,000-liter capacity. Filled by railroad tank cars at intervals of 6 weeks

8 Boiler house with five boilers, pump station, smokestack, bath for workmen
a) Coal dump

9 Tube rolling mill

10 Sawmill

11 Carpenter shop

12 Foundry

13 Steel plate manufacture

14 Peat-gas generating plant, specially fenced-in and off-limits to PWs. Conveyer belts transported the peat from the dumps to lorries and to the plant where they were elevated and unloaded down into the installation

15 Peat dump with conveyer belts

16 Narrow-gauge railroad track

17 Iron dump

18 Dog cage

19 Unidentified building.

20 New buildings

21 Timber and coal dump

EE

Annex 1

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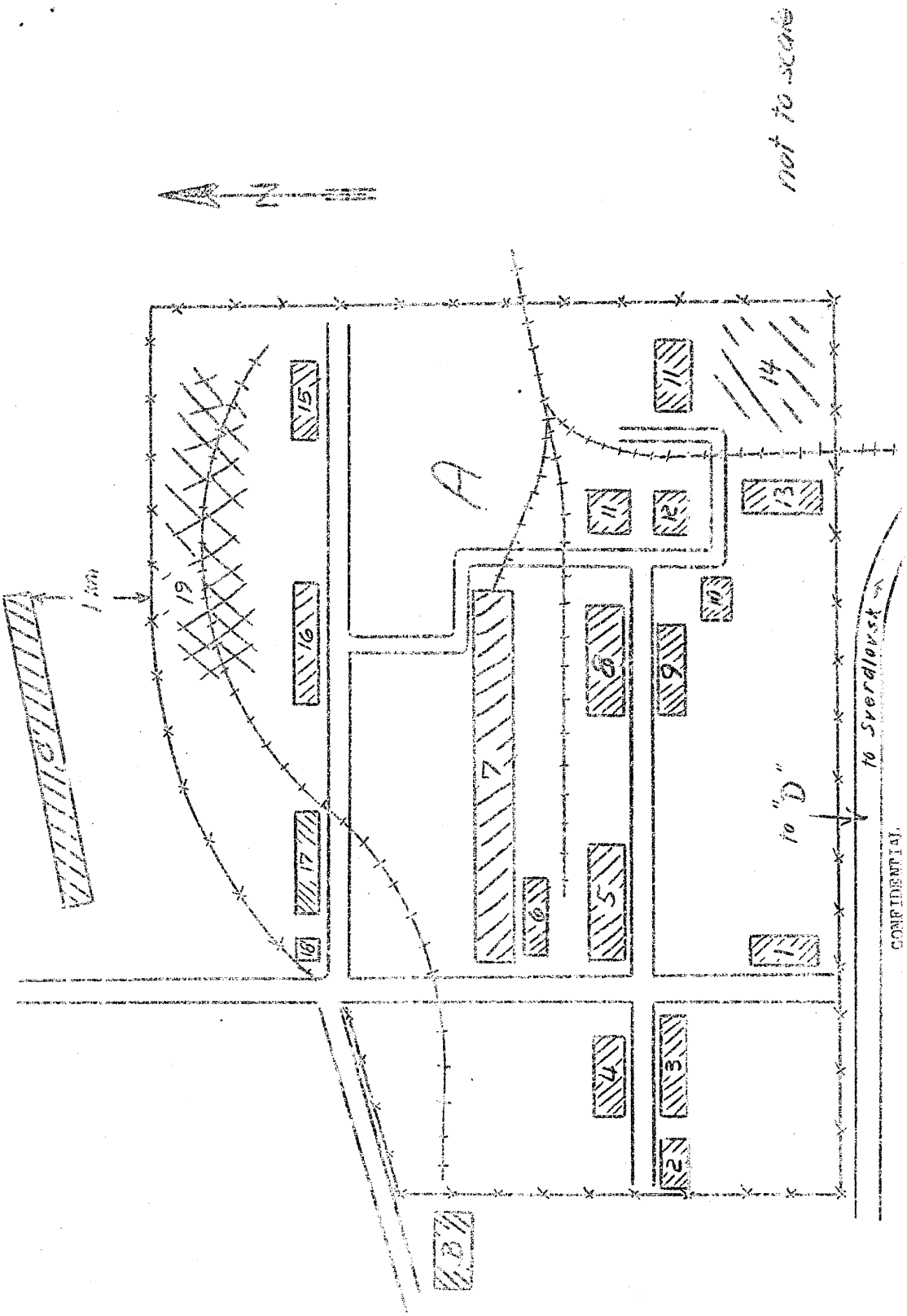


CONFIDENTIAL

COUNTRY Soviet Union REPORT

TOPIC SUGRES Power Plant near SVERDLOVSK [redacted] 25X1A

25X1A LOCATION [redacted] INED

DATE OF CONT

DATE OBTAINE [redacted] TE PREPARED 31 January 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) Blueprints

REMARKS

25X1X

SOURCE [redacted]

1. Location

The SUGRES power plant is about nine miles northwest of SVERDLOVSK (60°40'E/56°50'N) Sverdlovsk Oblast, not far from a lake.

2. Plant installations

The plant area is about 1,350 x 800 feet. The installations, though obsolescent, are in full operation. According to fellow PWs, expansion work has been under way since 1948. (Plant layout see annex 1.)

3. No information on work force and output.

25X1A [redacted] Comment:

a. The pin-point location and installations of the main power plants in the central Ural area were first described in a previous report[1]. This report fully confirms the previous information except for the size of the entire plant area, which is here stated to be considerably smaller. The previously reported dimension of 1,200 x 1,800 feet is considered to be more probable.

b. According to available maps, the so-called Sugres Power Plant is in SREDNEURALSK. As the previous report also stated SUGRES to be the designation of the entire locality it is assumed that the place was either officially named or that the local residents call it so after this large power plant. SREDNEURALSK (SUGRES?) is at the northeast corner of the Isetsk Lake, about five miles northwest of the outskirts of SVERDLOVSK.

c. The previous report* contained presumably correct statements on work force and output of the power plant.

2 Annexes: 1. Location of SUGRES Power Plant near SVERDLOVSK
2. SUGRES Power Plant near SVERDLOVSK

Legend to Annex 2

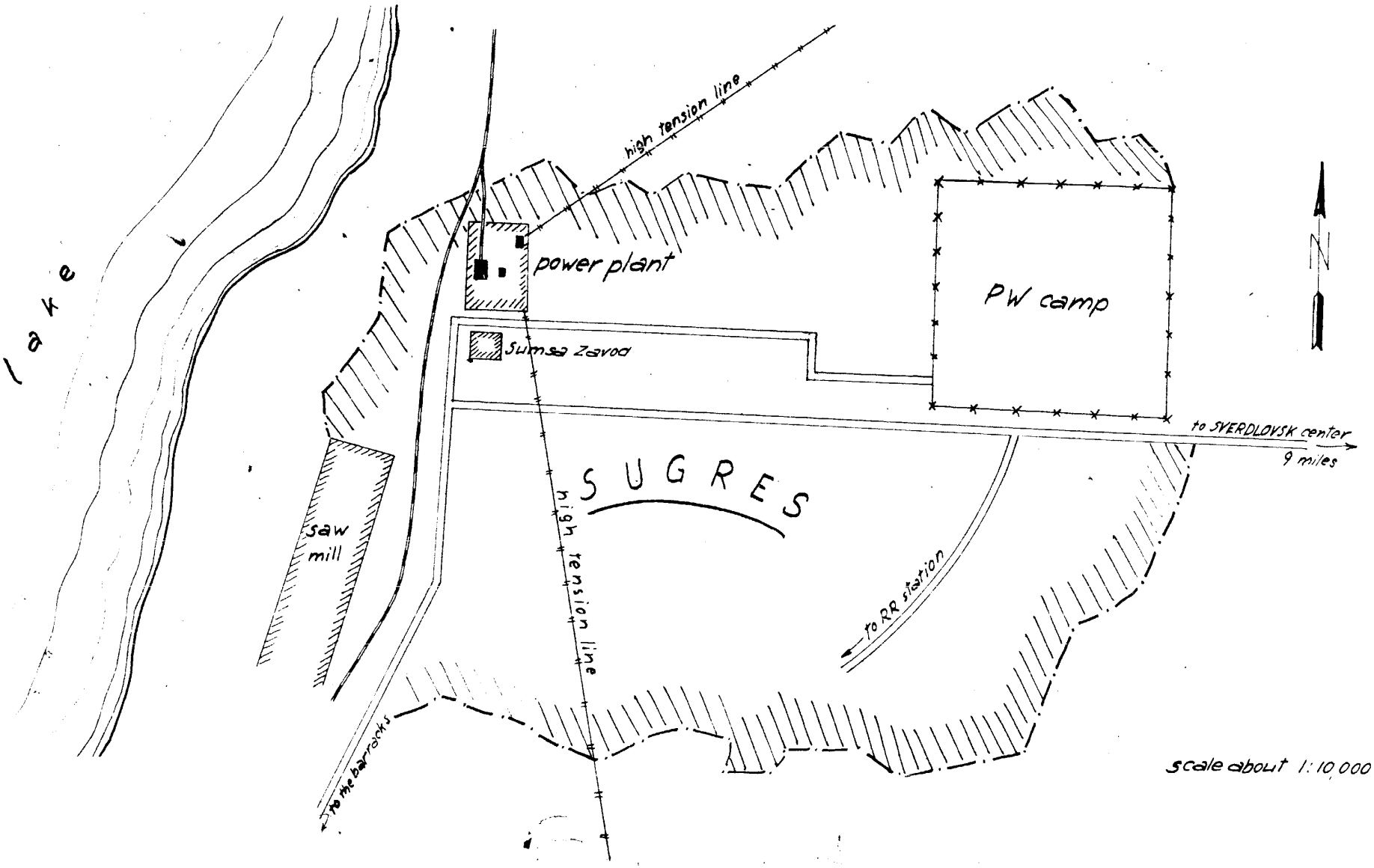
A Power plant

1 Guardhouse
2 Multiple-story brick building, 35 x 75 feet, with small windows. Several high tension lines and an underground concrete shaft from the main building leads into the building which is permanently guarded
3 Main building, brick structure, 90 x 180 feet, height of a five-story building with windows the full height and eight steel smokestacks, two of which were alternately without smoke development. A railroad spur track led into the building
4 Excavation, 60 x 60 feet, about 30 feet deep (working place of source)
5 New building, 75 x 90 feet, bare structure completed, without roof, somewhat lower than main building. The almost 30-foot excavation was filled with about 20-foot reinforced concrete
6 Open-air transformer station, 60 x 90 feet, about 12 transformers and excavations for several more transformers and cable trenches.
7 Coal dump
8 Stone wall
9 Barbed wire fence
10 High tension line

B Sumsa-Zevod (plant), about 180-foot square, with a small brick building and a brick bay open on one side. According to fellow PWs, steel structures for the expansion of the power plant were being made there.

Annex 1

Location of SUGRES Power Plant near SVERDLOVSK



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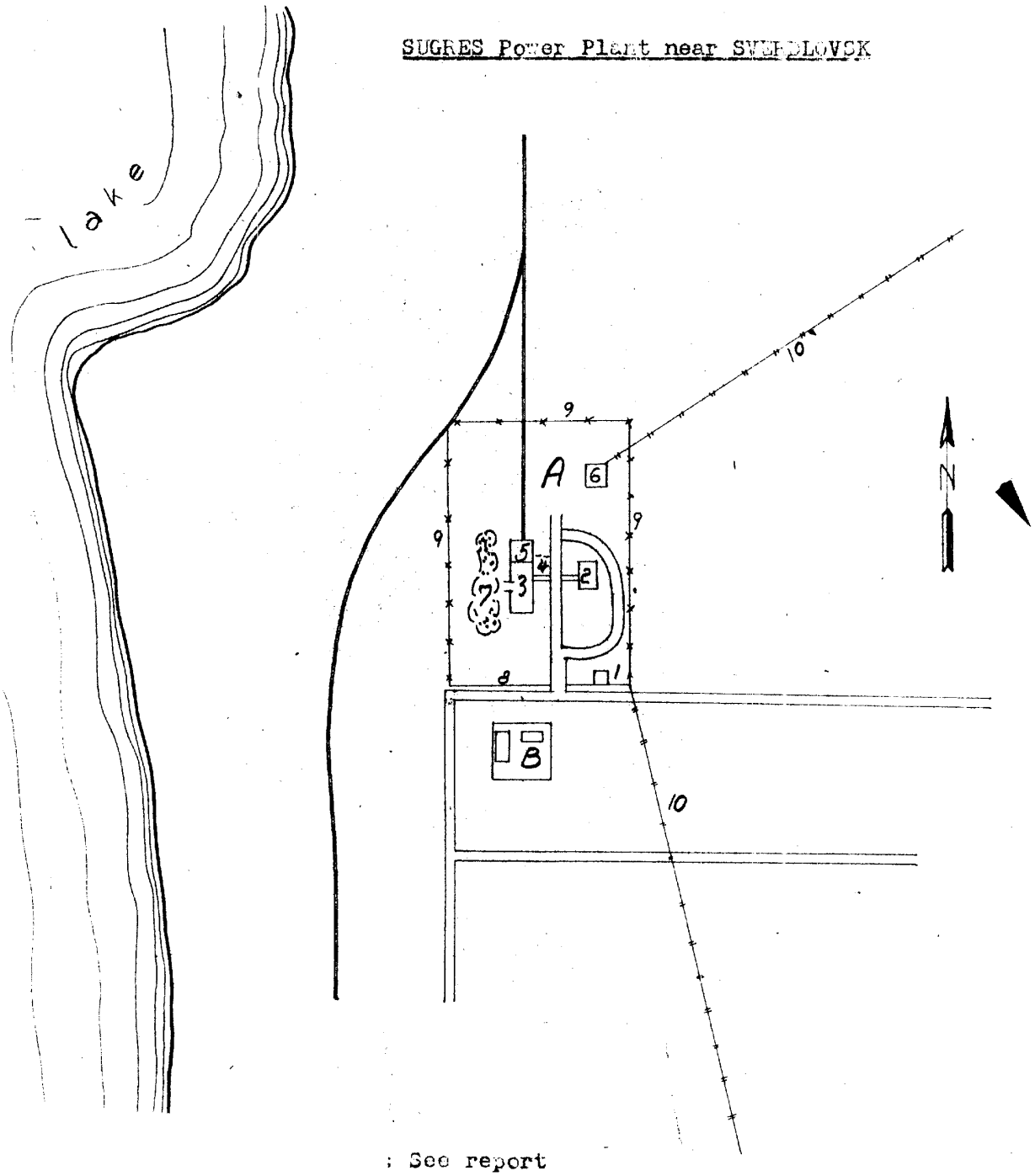
Annex 2

SUGRES Power Plant near SVERDLOVSK



: See report

not to scale

COUNTRY Soviet Union REPORT

TOPIC SUGRES Power Plant near SVERDLOVSK

25X1A

25X1A LOCATION [redacted] NED [redacted]

DATE OF CON

DATE OBTAINE TE PREPARED 31 January 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) Blueprints

REMARKS

25X1X

SOURCE [redacted]

1. Location

The SUGRES power plant is about nine miles northwest of SVERDLOVSK (60°40'E/56°50'N) Sverdlovsk Oblast, not far from a lake.

2. Plant installations

The plant area is about 1,200 x 800 feet. The installations, though obsolescent, are in full operation. According to fellow PWs, expansion work has been under way since 1948. (Plant layout see Annex 1.)

25X1A

3. No information on work force and output.

[redacted] Comment:

a. The pin-point location and installations of the main power plant in the central Ural area were first described in a previous report[1]. This report fully confirms the previous information except for the size of the entire plant area, which is here stated to be considerably smaller. The previously reported dimension of 1,200 x 800 feet is considered to be more probable.

b. According to available maps, the so-called Sugres Power Plant is in SREDNEURALSK. As the previous report also stated SUGRES to be the designation of the entire locality it is assumed that the place was either officially named or that the local residents call it so after this large power plant. SREDNEURALSK (SUGRES?) is at the northeast corner of the Isetsk Lake, about five miles northwest of the outskirts of SVERDLOVSK.

FF

c. The previous report* contained presumably correct statements on work force and output of the power plant.

2 Annexes: 1. Location of SUGRES Power Plant near SVERDLOVSK
2. SUGRES Power Plant near SVERDLOVSK

1 / Annex

Legend to Annex 2

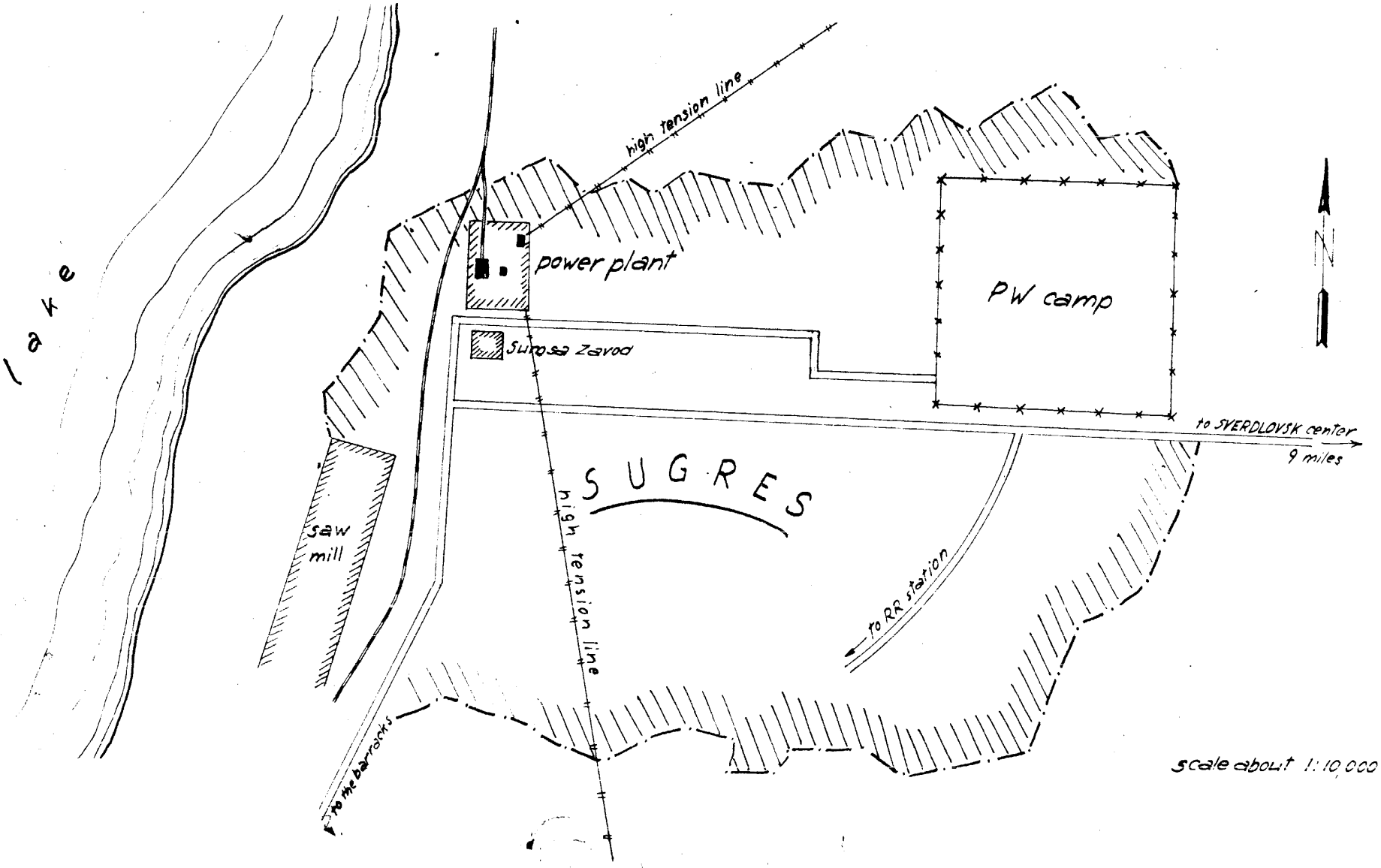
A Power plant

1 Guardhouse
2 Multiple-story brick building, 35 x 75 feet, with small windows. Several high tension lines and an underground concrete shaft from the main building leads into the building which is permanently guarded
3 Main building, brick structure, 90 x 180 feet, height of a five-story building with windows the full height and eight steel smokestacks, two of which were alternately without smoke development. A railroad spur track led into the building
4 Excavation, 30 x 60 feet, about 30 feet deep (working place of source)
5 New building, 75 x 90 feet, bare structure completed, without roof, somewhat lower than main building. The almost 30-foot excavation was filled with about 20-foot reinforced concrete
6 Open-air transformer station, 60 x 90 feet, about 12 transformers and excavations for several more transformers and cable trenches.
7 Coal dump
8 Stone wall
9 Barbed wire fence
10 High tension line

B Sumsa-Zavod (plant), about 180-foot square, with a small brick building and a brick bay open on one side. According to fellow PWs, steel structures for the expansion of the power plant were being made there.

Annex 1

Location of SUGRES Power Plant near SVERDLOVSK



Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

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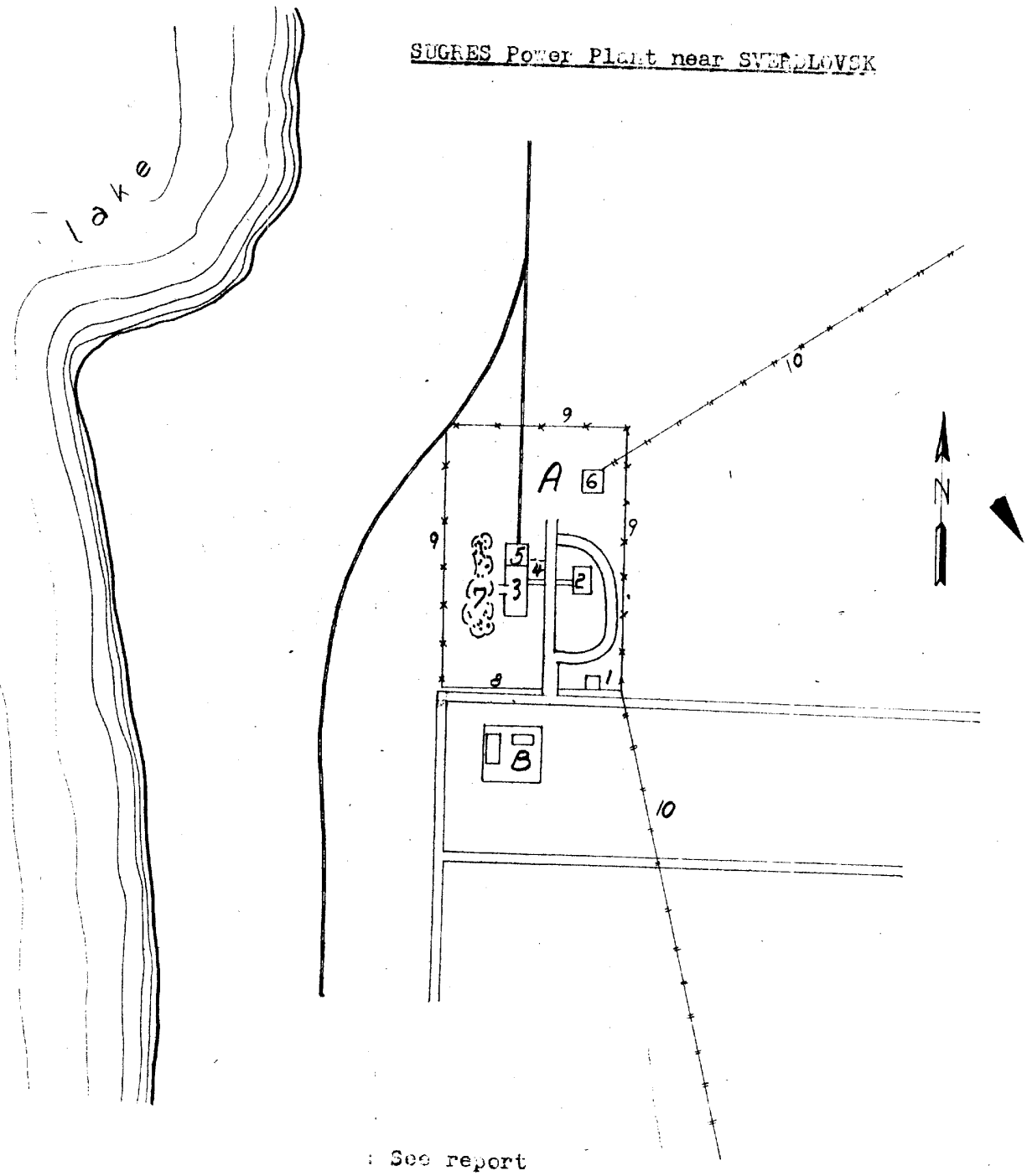
Annex 2

SUGRES Power Plant near SVERDLOVSK



: See report

not to scale

COUNTRY Soviet Union REPORT NO.

TOPIC Alleged Construction of Aircraft Engines in SVERDLOVSK 25X1A

25X1A

25X1A EVALUATION [redacted] TAINED [redacted]

DATE OF CONT

DATE OBTAINED DATE PREPARED 6 January 1949

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE)

REMARKS

25X1X

SOURCE [redacted]

SOURCE

SOURCE

SOURCE

SOURCE

SOURCE

At a sifting of 40 records on PW interrogations concerning the Uralmash ORDSHONIKIDSE Heavy Machinery Plant the following indications of the production of aircraft engines in SVERDLOVSK (62°5'E/56°44'N) were found:

1. August 1947

Source heard from workers of the Uralmash Plant that so-called casings were sent from the tank engine department of the plant to the Molotov Aircraft Plant.

2. September 1947

Department No. 2 of the Uralmash Plant among others produced aircraft engine parts.

3. May 1948

There was a plant about 1.5 miles west of the Uralmash Plant, where tank and aircraft engines were produced.

4. July 1948

The engine department of the Uralmash Plant produced tank

and aircraft engines, a total of abou. 150 units per day.

3. July 1948

Source heard that there was an aircraft engine plant in SVERDLOVSK, about 1.3 miles from the Uralmash Plant.

5. September 1948

According to source, an aircraft engine plant, on which no further details were available, was located about 4 miles south to south-southeast of the Uralmash Plant, slightly outside the perimeter of SVERDLOVSK.

25X1A [redacted] Comment:

a. The alleged aircraft engine plant located between the Uralmash Plant and SVERDLOVSK was previously mentioned in PW reports. This plant was allegedly built between 1945 and 1947. Its existence is not yet confirmed since the information supplied by the PWs is based on hearsay.

b. This report makes it probable that an aircraft engine plant or at least an aircraft engine repair plant is located in SVERDLOVSK.

c. Further and more accurate information on the plant is urgently required.

COUNTRY Soviet Union

TOPIC Ural-Khimmash Plant Near Sverdlovsk

25X1A [redacted] 25X1A

EVALUATION

DATE OF CONTE

DATE OBTAINED

PARED 17 February 1950 ANNEX IIH

REFERENCES

PAGES 6 ENCLOSURES (NO. & TYPE) 1 list of sources, 2 blueprints

REMARKS

25X1X

SOURCE [redacted]

1. Location, Designation and Traffic Facilities

The plant is in Nizhne Isetski about 10 km southeast of Sverdlovsk (56°48' N/60°36' E) in the area southeast of the Iset Lake (see Annex 3) (sources 1,4,5,9,10,12,13). It is designated Ural-khimmash (sources 12,13,14). Source 4 referred to "USHTM" (Uralski Zavod Khemiko Tekhnicheski Mashin) which is possibly a more complete designation. The plant has spur tracks to the Sverdlovsk-Kamensk (56°27' N/61°53' E) railroad line. An asphalt road leads from the plant to Sverdlovsk and to the center of Nizhne Isetsk

25X1X [redacted]

2. Plant Management: Chief engineer Lermann ([redacted] 25X1X

3. Plant History:

Construction of the plant was provided for in the Third Five-Year-Plan. The following installations were under construction at the beginning of the war:

	scheduled annual capacity
Forge and pressing department	10,500 tons of forgings
Grey cast iron foundry	8,500 tons of grey cast iron
Steel foundry	9,300 tons of steel castings
Copper foundry	300 tons of copper castings

In 1941 the installations of the Bolshevik Engineering Works in Kiev (50° 27' N/30° 32' E) were shifted to the Ural-Khim-Mash Plant, which was still under construction (sources 7,9, and 14), and the production of aircraft bombs (50 kg) and shells (including mortar shells) was started (sources 4,11,14,16). In 1945 the plant was converted to peace-time production and the old installations were returned. Considerable expansion work started in 1947 (enlargement of the foundry, construction of a new nickel bath, expansion of the old mechanical department, construction of a new boiler house etc.) (sources 2,3,4,5,6,7,8, 12,13,14,15,16). Building work was not completed in August 1949 (source 16). Full-scale production is under way in the old plant section and in the completed new workshops.

4. Work Force and Working Time:

According to sources 1,3,4,5,9, and 16 the work force numbered 2,000 Russians and 400 POWs per shift. However, the greater part of the POWs was assigned to building and transportation work. Work was generally done in three shifts of eight hours each. Building shifts lasted for 10 hours (sources 1,2,3,4,5,9, and 11). It appears that the third shift in the production departments is occasionally omitted. (Sources 11 and 16).

5. The Following Departments are Recorded:
(See Annex B)

a. Foundry (sources 1,3,4,5,6,8,10,11,13 and 15)

Installation: 1 furnace (sources 4,13), capacity of the furnace about 1 ton (source 13). Source 15 indicated two furnaces.

Molding shop (source 4,13)
Two travelling cranes 2 tons each
Two travelling cranes 30 tons each (source 13)
(The foundry is still under construction)
Production: Four tappings per shift (source 13)
Casting of gear wheels and machine parts (sources 6,13), steel plates (source 13).

b. Pattern-making shop: (sources 6,10,11,13,15)
Installation: modern woodworking machines (source 15)
Production: pattern for machine parts, boxes for shipment (source 6,15), furniture, building timber (source 15).

c. Mechanical department (sources 1,4,5,10,11,13,15)
Installation: horizontal drilling machines,
about 30 lathes (center distance 1 to 2 meters)
1 large vertical lathe
1 large lathe (center distance 12 meters)
5 or 6 large lathes (center distance 8 meters) (source 4)
Source 5 indicated the number of lathes at "about 20" and confirmed the large vertical lathes.

Production: No production details were recorded (see para 6)

d. Pressing shop, punching shop 1: (Sources 4,5,10,13,15)
Installation: about 20 punches (source 5)
several hydraulic presses (source 4)

Production: round and square holes were punched into plates of 250x125 cm (source 5)

e. Grinding shop (sources 3,5)
(Probably housed with the mechanical department in one building)

The installation is not recorded.

Production: grinding and polishing of punched plates (source 5)

f. Nickel bath (sources 3,5,6,8,10,11,13 and 15)
Installation: five baths each 2.6x1.3 meters (source 5)

A hardening shop is in the same workshop room according to sources 8 and 11.

Production: nickel plating and chrome plating of machines and apparatus parts (sources see above.)

g. Mechanical Department 2 (sources 3,5,6,8,10,11,13 and 15)
Installation: According to source 5: as in the Mechanical Department 1.
About 30 lathes as well as one large vertical lathe. In addition, source 13 indicated milling machines. There were turret lathes and vertical turning and boring machines as well as shaping machines according to source 15. Production: gear wheels, crankshafts and other small parts (sources 6,8).
Source 8 learned from Russian workmen that 20 crankshafts, 1.2 meters long, were produced weekly.

h. Pressing shop and punching shop 2: (Sources 3,4,5,8,10,13, and 15).
Installation: Three large plate shears, three large electric presses, two or three cranes 0.5 tons each, one annealing furnace (source 13).
Production: sheet metal containers for tar and gasoline as well as devices for boiler construction (sources 13 and 15).

i. Nickel bath 2: (sources 3,4,5,6,11,13 and 15)

The installation and production are not recorded. The workshop building was still under construction at the time of observation.

k. Boiler forge (sources 1,3,4,5,6,8,10,13 and 15)
Installation: Three medium-sized pneumatic hammers (sources 1,4,6,8 and 15)
1 large pneumatic hammer (source 15)
3 large punches (sources 4,13)
2 large annealing furnaces with oil firing (source 15)
3 small annealing furnaces with coal firing (sources 13,15)
3 field forges (source 15)
Traveling cranes

a 30-meter smokestack is at the eastern side of the [illegible]
(source 15)

Production: boilers of various sizes [illegible]
[illegible] (1.5x1.8 meters, [illegible])
[illegible] 2 and 4 meters long
[illegible]
(see also para 6 of report)

l. [illegible] shop and forge (sources [illegible] 8 [illegible] and 13)
Installation: [illegible] furnaces, three [illegible] hammers
(sources 4 and 8)
Production: tooling of large form pieces (source 4).

m. Welding shop (sources 8,10,13)
Installation: apparatuses for autogenous welding (source 13)
Production: assembly welding of plates: welding of boilers, repairs for plant requirements (source 13 and other sources see para 6 of report).

n. Old Boiler House (sources 1,3,4,5,10,11,15)
Installation: Four boilers with coal firing (source 4)
A 15-meter smokestack (source 4). Source 15 indicated eight boilers which is less probable.
Production: heating of the plant, warm water supply (source 15)

o. New Boiler House (sources 4,10,11,15)
Installation: source 15 indicated 10 to 15 boilers which may be exaggeration.
Production: heating of the plant and hot water supply (source 15)

p. Compressor station (sources 3,4,5,10,13,15)
Installation and production are not recorded. The station was still under construction at the time of observation.
A high smokestack was also under construction at the eastern side of the workshop building.

q. Transformer station (sources 4,6,10,11)
Power is supplied from Sverdlovsk.

r. Depots

s. Administration

t. Kitchen and mess hall

u. Factory for building materials (used for the supply for plant building projects)

v. Guard houses

w. Scrap dump

x. Coal dump.

6. Production:

The plant obviously did not reach its originally planned capacity (see para 3 of report). An increase will not be reached before the new construction projects (foundry, new nickel bath etc.) are completed. However, the capacity of the new foundry installations

cannot be ascertained. It can be inferred from the occasional omission of work shifts that the different plant departments (or the raw material supply) were not yet coordinated.

a. Kind of production:

(1) Boilers (sources 3,4,6,11,13,14,15)

Large boilers, 10 to 14 meters long, 2 meters in diameter, 10 to 14 mm thick, small boilers, 3 to 4 meters long, 2 meters in diameter, 10 to 14 mm thick with unscrewable lid.

The interior of the small boilers was lined with numerous nickel-plated pipes. The pipes were 5 cm in diameter and had a wall thickness of 10 mm (source 11).

(2) Punch-holed and nickel-plated steel plates (sources 3,4,7, 10,11,13, and 14).

The following plate sizes were indicated:

Source 3: 3x2.5 meters, designated by FMS "cathodes" and "anodes" (possible reference to nickel-plating process)

Source 4: 1.8x1.5 meters, 8 mm thick, designated "filter". One million pieces were allegedly ordered once in 1947

Source 7: 3x2 meters. 5 to 10 mm thick. Perforated with 10 mm diameter holes at 10 mm intervals.

Source 10: 2.5x1.5 meters. Two plates each were riveted with 20 mm intermediate space.

Source 11: 1.5x 1 meters, 5 mm thick. Three plates each were riveted with 30 to 50 mm intermediate space.

(3) Machine parts (sources 2,3,4,5,6,7,9,10,11,13,14,15) including gear wheels of different sizes (sources 11,13,14,15) Source 15 indicated diameter sizes ranging from 20 to 40 cm.

Transmission shafts (sources 4,10,14,15)
Crankshafts (sources 7,9,11,15). Source 9 indicated a length of 1.2 meters.
Pistons (sources 4,10)
Connecting rods (source 10)
Axles (sources 2,5,14, Source 3 indicated 1.5 meters long and 25 cm in diameter, source 5 indicated 3 and 4 meters long and 30 and 50 cm in diameter.

(4) Secondary products (sources 3,9,10,13)
iron bedsteads, gasoline and their containers, parts for plant construction work.

b. Amount: According to source 4 part of the plant capacity was required for the construction of the plant during the time of observation. Production proper therefore remained on a small scale.

HH

(1) Boiler production: Four units monthly according to source 6 and three large and two small units monthly according to source 11.

(2) Oil to production:

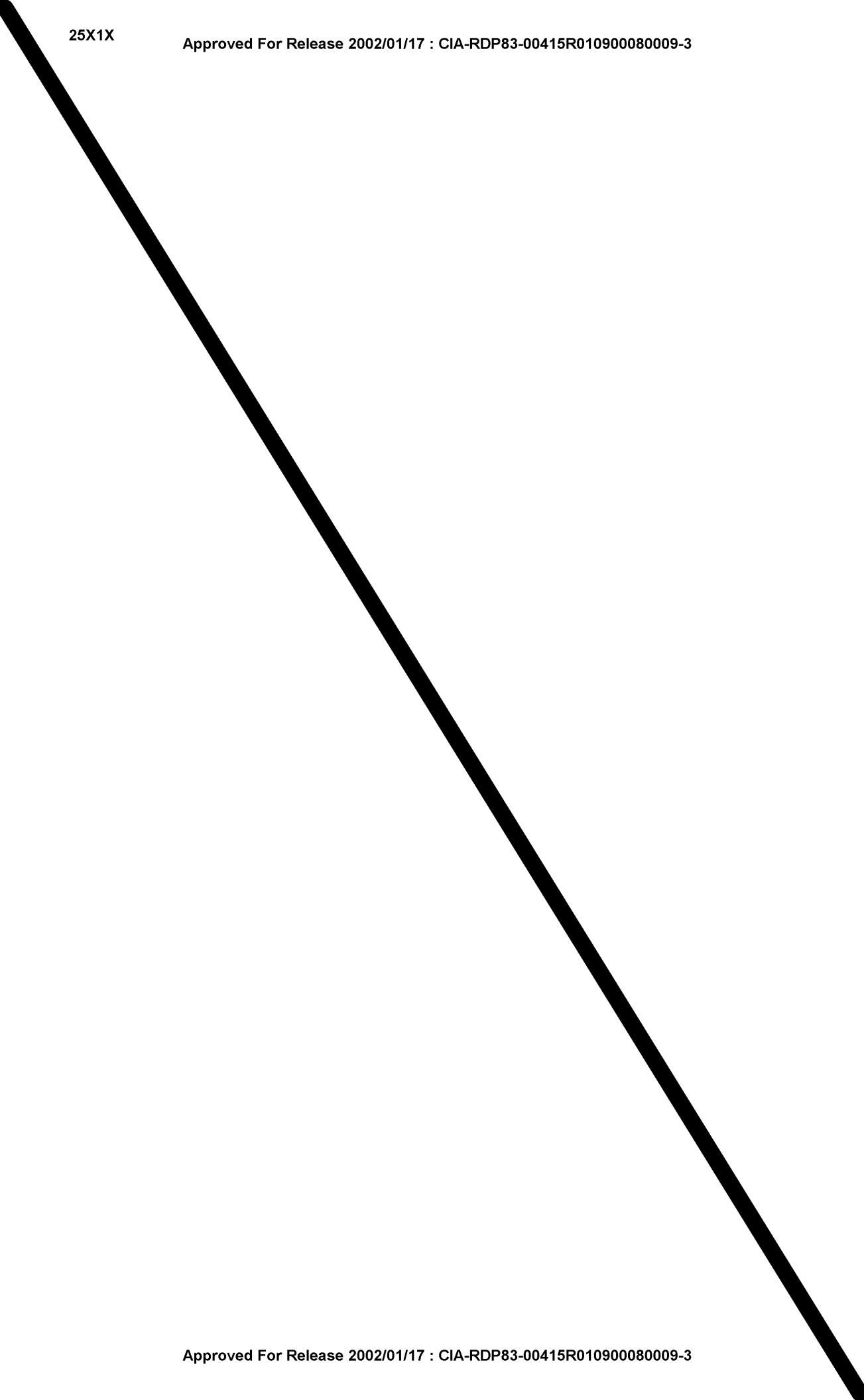
50 plates daily according to source 10,
25 plates per shift (with two daily shifts) according to source 11.

(3) Drumshifts:

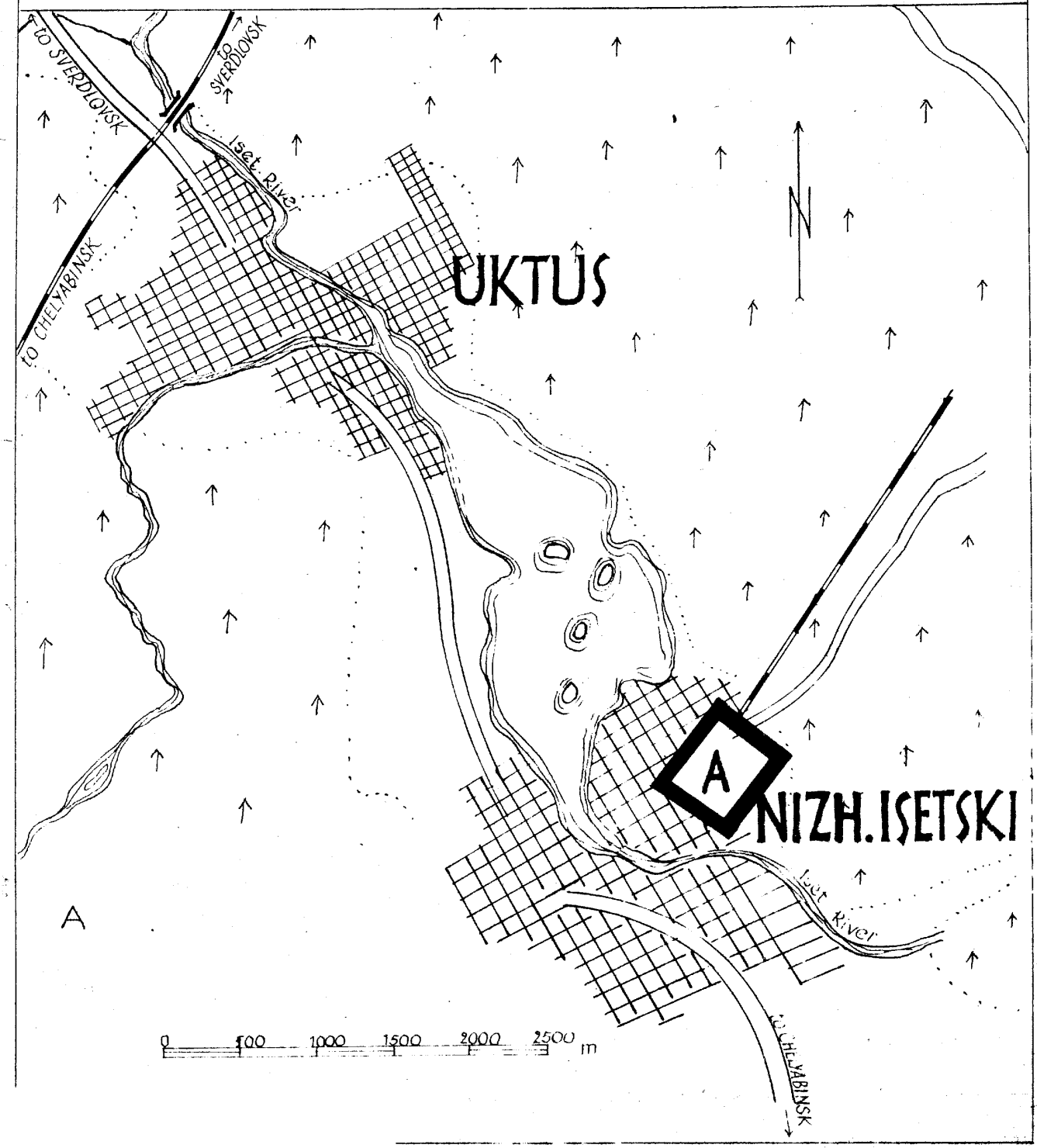
20 pieces weekly according to source 7
Source 10 indicated the waste percentage at 5 percent. The boilers were shipped to Leningrad according to sources 6 and 11.

7. Security:

The plant is surrounded by a high fence and watch towers (all sources). Guard duty is done by armed militia.

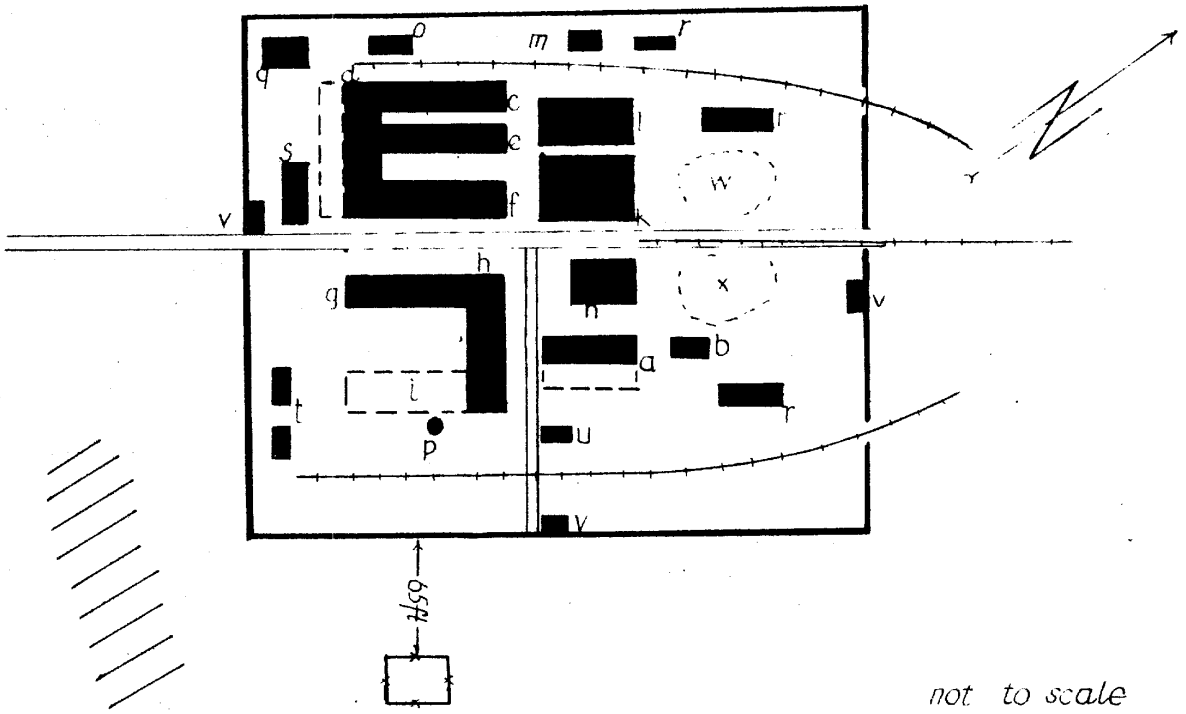


"Ural-Khim-mash" Plant near SVERDLOVSK



Annex 3

Layout Sketch of the "Ural-Khim-Mash" Plant near SVERDLOVSK



not to scale

Legend:

a Foundry
b Pattern-making shop
c Mechanical department
d Pressing shop, punching shop
e Grinding shop
f Nickel bath
g Mechanical department 2
h Pressing shop, punching shop
i Nickel bath
k Boiler forge
l Hardening shop and forge
m Welding shop
n Old boilerhouse
o New boiler house
p Compressor station
q Transformer station
r Depots
s Administration
t Kitchen and mess hall
u Factory for building materials
v Guard houses
w Scrap dump
x Coal dump

Housing blocks

PW Camp No. 7314/6

CLASSIFICATION

COUNTRY Soviet Union REPORT NO.

TOPIC Ural Mash, Ordzhonikidze Plant for Heavy Industrial Machinery in Sverdlovsk 25X1A

25X1A EVALUATION [redacted]

DATE OF CONT[redacted]

DATE OBTAINED [redacted] PREPARED 1 March 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint 25X1A

REMARKS

RETURN TO [redacted]

25X1X

SOURCE [redacted]

1. Location:

The plant is located in the northern section of Sverdlovsk (60°40' E/56°50' N).

2. Plant installations: Of the very extensive plant area, which was impossible to survey, source reported the following departments where he worked:

Department 31, press cutting shop
Department 53, polishing shop
Department 80, lathe shop

According to Soviet statements, the Sugres Power Plant to the northeast, supplied the current for the plant. For sketches of workshops see Annex.

3. Work force: No details available.

25X1A 4. Production: Casts of various kinds, driving wheels for V-belts, twin-cylinder blocks for pumps.

[redacted] Comment:

a. The Ural Mash Plant in Sverdlovsk was repeatedly reported. The location is sufficiently clarified.

b. This report and the sketch will be useful for the plant evaluation, considered with other information. A series of small reports will be required to obtain a final picture of this extensive plant.

1 Annex, Blueprint: Ural Mash, Ordzhonikidze Plant for Heavy Industrial Machinery in Sverdlovsk.

Legend to Annex:

A Department No. 53: 90 x 45 meters, four longitudinal sections;

polishing shop

1 Tools supply

2 Fitting shop with three traveling cranes

3 Six polishing drums

4 Polishing shops with three 30 ton traveling cranes each

5 Three sets with five to six sand blastings for polishing

6 Welding shop

7 Office, kitchen and messhall

B Department No. 80: Lathe shop, 90 x 30 meters, solidly constructed building

1 12 to 15 boring and turning mills, about 1.8 meters in diameter

2 Two rows with many lathes, drilling machines and milling machines

3 15 to 18 lathes

4 Office

5 Welding shop

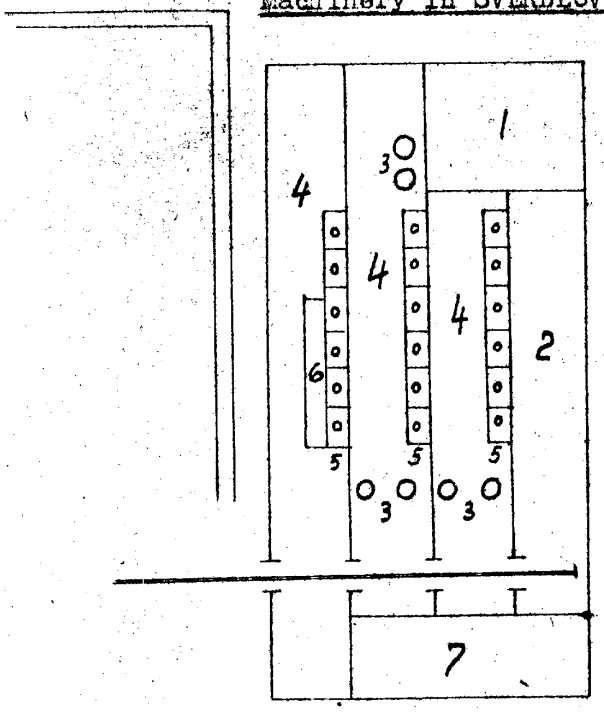
6 Carpenter shop

C Plant department No. 31: Press cutting shop, 58x30 meters, Annex of department No. 80, equipped with large press cutting machines and flywheels.

Annex

10

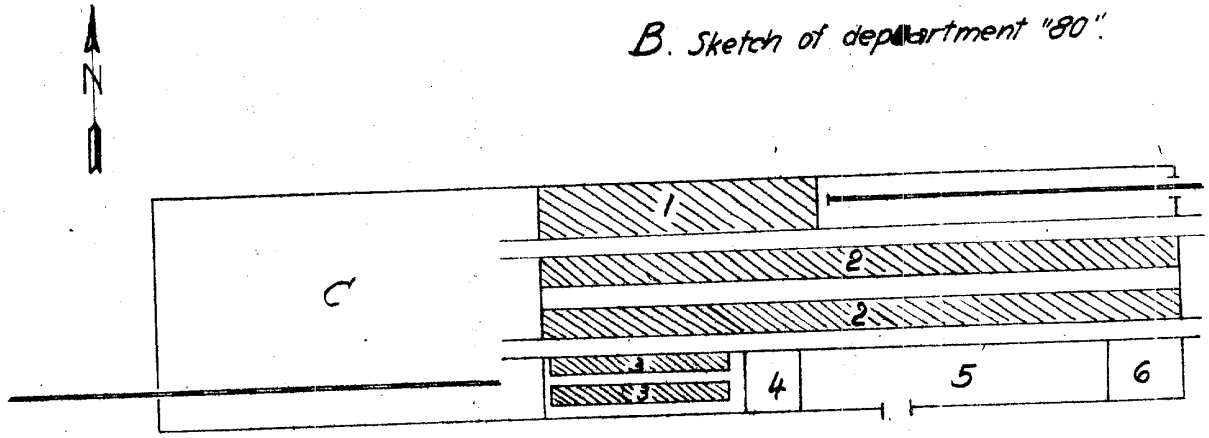
Ural Mash, Ordzhonikidze Plant for Heavy Industrial Machinery in SVERDLOVSK



Legend: See report.

A. Sketch of department "53".

B. Sketch of department "80".



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COUNTRY Soviet Union REPO

TOPIC Ural-Mash Heavy Industrial Equipment Plant Ordzonikidze No 2 25X1A

SVERDLOVSK

25X1A EVALUATION [redacted] NED [redacted]

DATE OF CONTENT [redacted]

DATE OBTAINED [redacted] E PREPARED 30 November 1949

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 blueprint

REMARKS

25X1X SOURCE [redacted]

1. The dates 1928-1930 are painted on the signboard placed over the entrance gate of the well-known Ural-Mash Plant in SVERDLOVSK, Sverdlovsk Oblast, (60°40'E/56°50'N).

2. Gun barrels, ship's shafts, and sections for tank tracks were cast in Department No 37; oil pumps were manufactured in Department No 80.

3. The construction of two workshops was begun in the southwest part of the plant in the Spring of 1948.

4. A work force of 10,000 to 15,000 men worked in each of the three shifts.

5. The production of tanks was discontinued in mid-1947. Production in June 1948: Gun barrels, ship's shafts, sections for tank tracks, oil pumps, small parts.

6. For plant layout, see Annex.

25X1A [redacted] Comment:

a. Several reports have been transmitted on the Ural-Mash Plant in SVERDLOVSK. This report is of particular value since it confirms previous information * on the location of the plant. It seems established that the plant, as seen from the Red Square, extends towards the west and not, as was assumed in previous reports, toward the east.

b. A comparison of the previously received data on the location of the plant with the German town sketch of SVERDLOVSK of January 1942 shows that the Ural-Mash Plant is identical to Object 4e of this sketch. Whether the data of this old German large sketch, according to which the part comprises four independent large blocks of workshops,

KK

is correct cannot be stated. However, the statement on the four blocks of independent workshops seems doubtful, since none of the returned German PWs mentioned the other sections of the plant. Possibly the PWs were restricted to one of the sections for certain reasons.

c. It will hardly be possible to obtain a clear picture of this important and large plant from PW reports alone. It will, however, be attempted to clarify this picture as far as possible through reports of a more recent date.

d. The attached sketch is only a schematic diagram. As regards the main production workshop, the power house, and the boiler house in addition to some other minor buildings it is, however, in agreement with almost all the previously received sketches.

1 Annex: Ural-Mash Plant in SVERDLOVSK.

Legend to annex:

1. Main gate and guardhouse
2. Administration building
3. Tank monument.
4. Workshop, 180 x 300 feet, no details available.
5. Same as 4.
6. Foundry, 180 x 300 feet (machine parts of brass, copper, and aluminum)
7. Steel foundry, casting and machining of ship's shafts; a mess hall is on the second floor.
8. Locksmith's shop and precision mechanical department, 30 x 150 feet.
9. Lathe department for small parts, 60 x 150 feet
10. Manufacture of tools, and tools store, 60 x 150 feet.
11. Six smokestacks.
12. Locomotive repair shop
13. Plasma Plant, production of hard rubber, baccalite, and of products made of these materials.
14. Department No 37, about 120 x 600 feet, with two sections; a furnace is in the southern section. Production of large parts.
15. Processing of unfinished products delivered from Department No 37.
16. Mechanical department No 80, 120 x 450 feet. Production of oil pumps and pump parts.
17. Assembly of oil pumps and paint shop, 60 x 150 feet.
18. Tank engine department, 90 x 360 feet.
19. and 20. 180 x 300 feet; new buildings begun in the Spring of 1948.
21. Motor vehicle repair shop
22. Boiler house
23. Two water towers, each about 100 feet high.
24. Power station.
25. Concrete plant, 60 x 150 feet.
26. Formerly tank assembly hall, about 300 x 1,000 feet; off-limits to PWs, now assembly hall for AT guns.
27. Fuel and oil dump consisting of several groups of two or three tanks each, partly dug into the earth.
28. Tank plates dump.
29. PW Camp No 7531/3.

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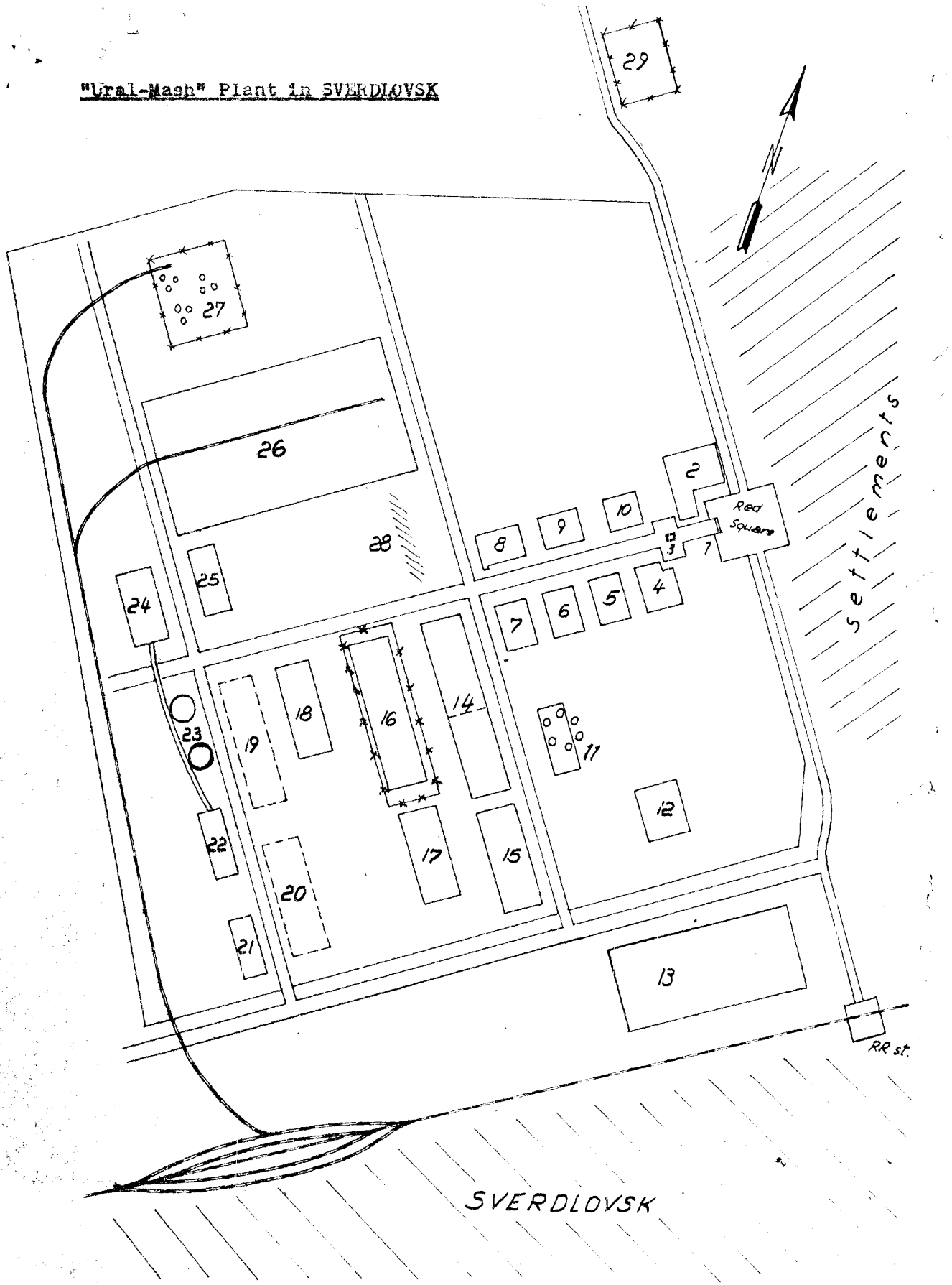
Annex

"Ural-Mash" Plant in SVERDLOVSK



Legend: See report

COUNTRY U.S.S.R. REPORT NO.

TOPIC Karpinsk Machine Repair Plant

25X1A EVALUATION [redacted] 25X1A

DATE OF CONTE

DATE OBTAINED

REFERENCES 25X1A

PAGES 2 ENCLOSURES (NO. & TYPE) 1-sketch on ditto ANNEX LL

REMARKS

25X1X

SOURCE [redacted]

1. The plant is in the northern part of Karpinsk (59°59'E/59°47'N), Sverdlovsk Oblast, between a motor plant and railroad car maintenance. *

2. A foundry and a forge were under construction in September 1949. The plant had a railroad connection. Power was supplied by the Turinsk Power Plant.

3. In August 1949 the work force consisted of 1,000 Soviets and 40 PW specialists.

4. The plant assembled large coal dredgers using American component parts up to 1947. When deliveries of these parts were stopped the plant repaired dredgers and farming machines and produced the required spare parts. The construction of the mentioned American dredgers was planned for 1950.

25X1A [redacted] Comment. The report is supplementary to previous information which had very incomplete location data. For location and plant layout see Annex. With the installations at both sides of the plant this report gives useful landmarks for the pinpointing of the plant and contains new details on the plant production. For the lack of maps of the Karpinsk area, the plant cannot be pinpointed.

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2

The attached plant layout widely differs from a reproduction in and cannot be clarified without further information.

1 Annex : Kayginsk Machine Repair Plant.

Annex

Legend :

A Machine Repair Plant

1 Kitchen and canteen

2 Area with many old dredgers and dismantled German machinery

3 Main gate

4 Paved plant road

5 Administration, long two-story brick building

6 Garage (new construction)

7 New forge, brick building with flat roof, with drop forge and steam hammers, not in operation in September 1949

8 New foundry, under construction, former hangar, the structural parts of which arrived by railroad and were fitted by PWs. Boxes containing these parts had the inscription of Berlin.

9 Old foundry with hand moulding shop and two cupola furnaces. Production of cog wheels and conical wheels.

10 Department No. 2, brick building with many metal-working machines

11 Department No. 5/7, plant repair shop

12 Locomotive repair shop, repairing Austrian 120-ton locomotives.
Nos 10 through 12 were one building 200 meters long and 8 meters high

13 Railroad connection

Annex

14 Boiler house with five American flue boilers, for steam generating for the plant

15 Department No. 1, lathe- and milling shop, 8 meters high brick building with flat roof

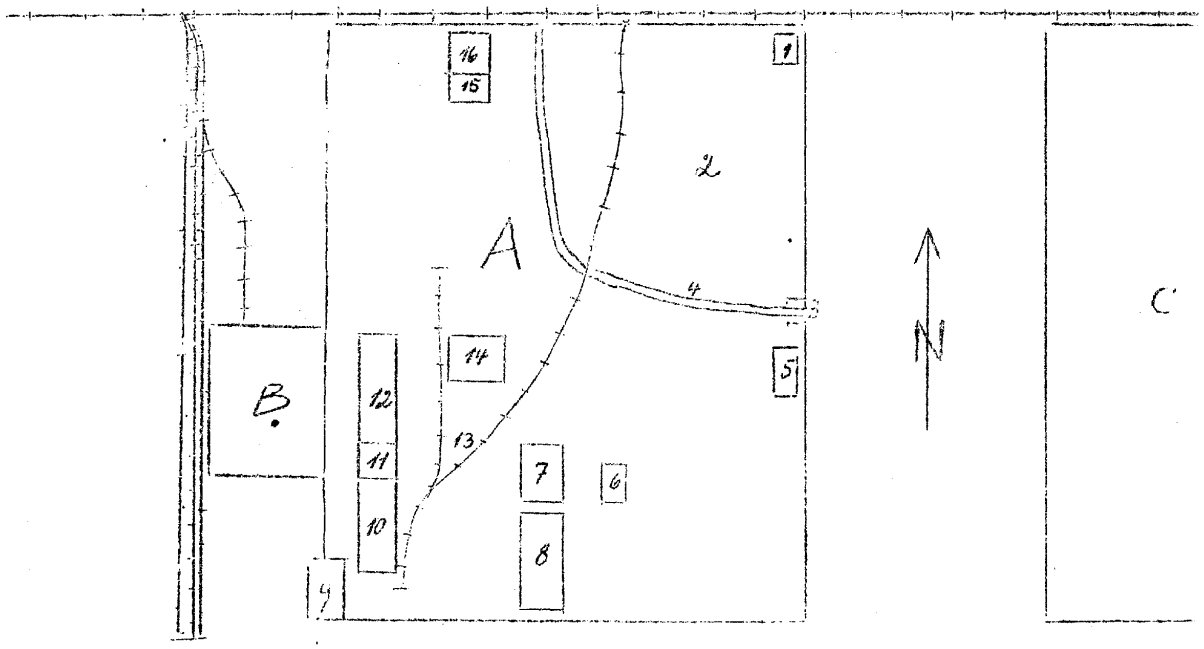
16 Forge

B Railroad car maintainance

C "Energo-Motortsekhna".

Annex

Karpinsk Machine Repair Plant



Legend: See report

25X1A

COUNTRY Soviet Union REPORT NO.

TOPIC [redacted]

25X1A EVALUATION [redacted] TAINED

DATE OF CONTE

DATE OBTAINED DATE PREPARED 1 Jan 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 2 blueprints

REMARKS

SOURCE [redacted] 25X1X

1. Details on the aluminum plant, about 3.5 km southeast of Kamensk Uralsk (61°54'E/56°26'N), Sverdlovsk Oblast, are given in the attached sketches.

2. Work force:

Three shifts with a total of about 30,000 laborers (Soviet statement).

25X1A [redacted] Comment:

The attached plant layout and legend give detailed information on the important aluminum plant in Kamensk Uralsk, and correspond to a previous sketch * (the first received) on several essential plant installations. Although they approximately agree on location and designation of the bauxite mills and washing plants (so-called "Klinarsong") and the new electrolysis shop, the sketches disagree on many small plant buildings. Therefore, the actual plant layout cannot be determined.
Although this partially confirmed report may give an approximately correct reproduction of the plant layout, additional information is required to obtain clarification.
The sketch of the tossing tub (Annex 2) is the first received on such an installation.
2 Annexes: Blueprints, Aluminum Plant UAS in Kamensk Uralsk.

CLASSIFICATION [redacted]

MM

Legend of Annex 1:

1 Main gate with two control buildings, total length 25 meters

a Gate for PWs and vehicles

b Gate for vehicles

2 New electrolysis shop, 90x40 meters, with six parallel workshops, connected by a middle section with crane installation. The crane rails branch off to two sides which are equipped with 10 to 12 tubs.

3 Old electrolysis shop, 80x25 meters, obsolete but still in operation

4 Stores with tubs, barrels and electrodes

5 One-story plant building, with gable roof, milk-glass windows and noise of motors heard from outside, purpose unknown

6 Stone building, 25x25 meters, four stories, stone mill, the stone dust being put into sacks and barrels and shipped to the old and new electrolysis shops

7 Bread magazine

8 "Klinarsong I", stone structure 40x40 meters with annex

a "White" side

b "Red" side, equipped with 20 to 25 tossing tubs (also see Annex 2)

9 Branch section of Klinarsong, 40x20 meters, equipped with several tubs

10 So-called "red earth shop" 40x12 meters, unloading station and presumably also underground conveying to Klinarsong I and II

11 Stone-cracking installation, 70x15 meters, products shipped away on conveyor belts

12 Office

13 Building under construction, bare structure completed and roofed, construction temporarily discontinued, purpose unknown

14 Old stone-cracking installation, not in operation

15 Storage shed

16 New foundry, 75x20 meters, still under construction, installations come from the old foundry

17 Closed wooden shed

18 Branch section of Klinarsong, like No. 3 above

19 Mess hall for civilian laborers

20 Klinarsong II with white and red workshop, same processing as Klinarsong I

21 Transformer station

22 Two closed storage sheds

23 Pile with aluminum bars

24 Food stores

25 Open storage shed with glass wool, bricks and construction materials

26 Old foundry, 50x25 meters, not in operation, installations being dismantled,

a Mechanical workshop

b Mess hall for Soviets

27 Small workshop

28 Black workshop, stone structure, 60x20 meters; coal similar to briquettes is unloaded and shipped to the building

29 Three wooden storage sheds

30 Carpenter shop and office

31 Tar machine

32 Two stone office buildings

A Area of power plant with six smokestacks, each 60 meters high

B Presumably post office

D Parking lot

a Small workshops

E Parking lot

F Bus stop with waiting room and photographic studio

G Gasoline station

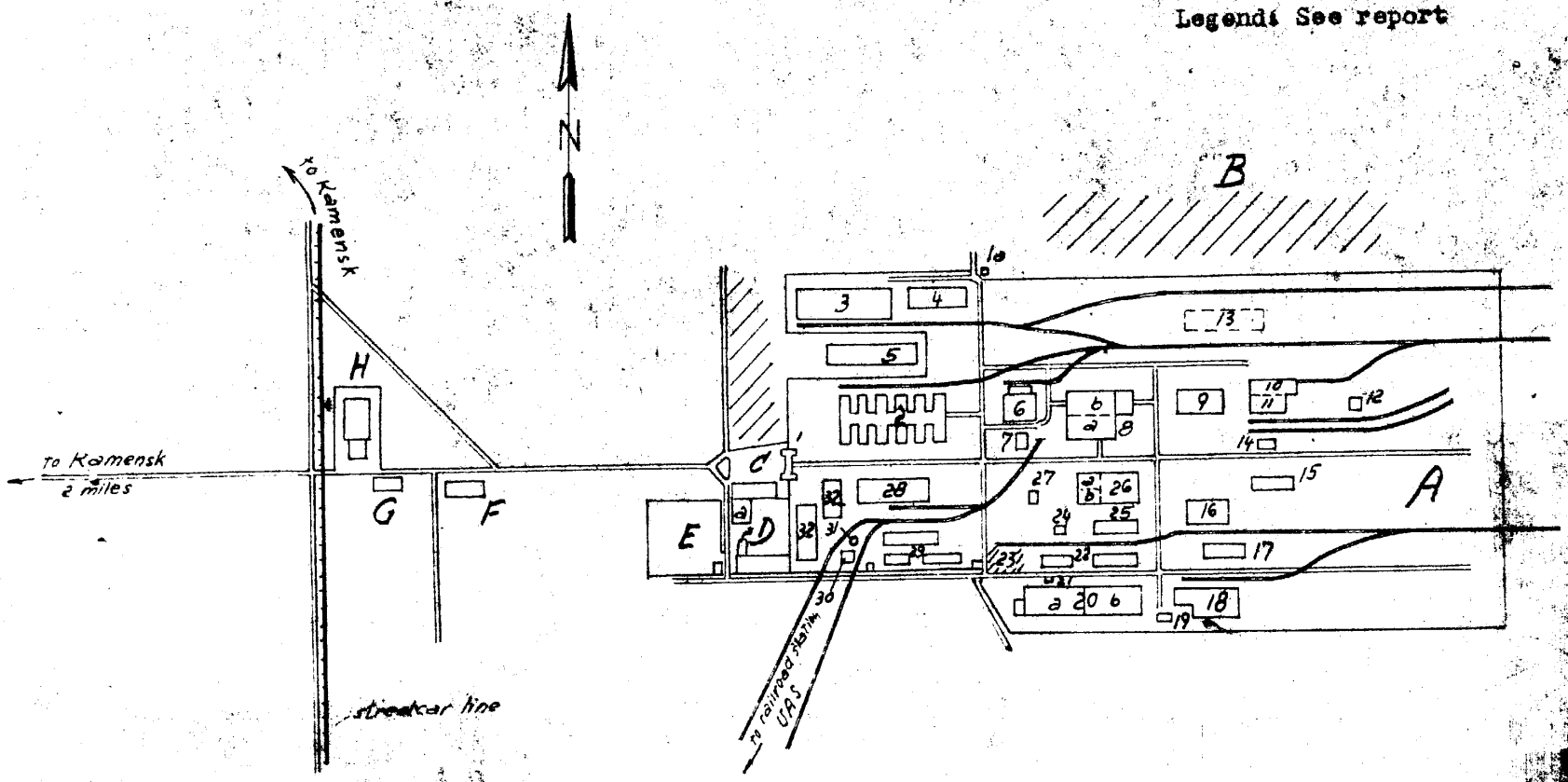
I. Motion picture theater, constructed in 1946/1948

CONTROLLED DISTRIBUTION

Annex I

Aluminum Plant UAS in Kamensk Uralsk

Legend: See report



scale 1:5,000

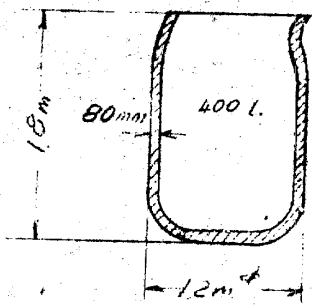
Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

Annex 2

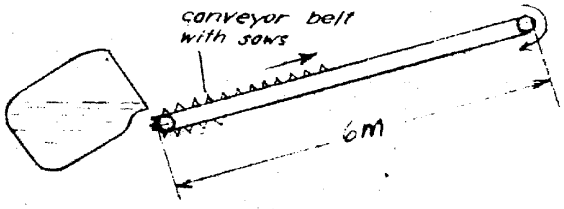
[redacted]

25X1A

Ladle for molten aluminum

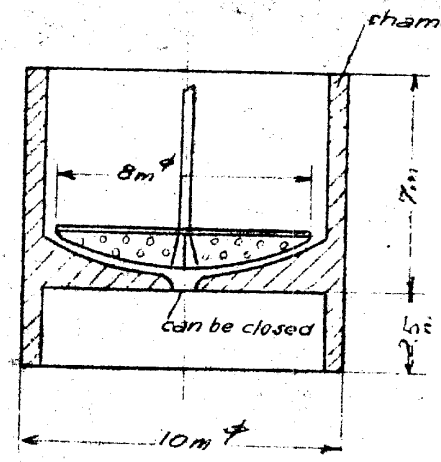


Pig machine

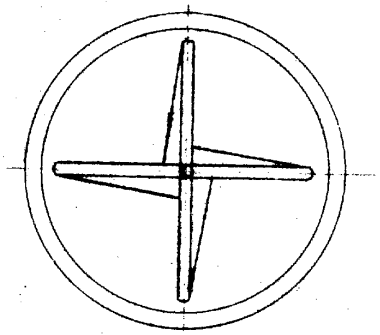


Tossing tub

cut-away view



top view



not to scale

25X1A

INTELLOFAX 5

COUNTRY Soviet Union REPORT NO.

TOPIC UAS Aluminum Plant in Kamensk Ural [redacted]

25X1A EVALUATION [redacted] TAINED [redacted]

DATE OF CONTENT [redacted]

DATE OBTAINED [redacted] DATE PREPARED 1 Jan 1950

REFERENCES

PAGES 3 ENCLOSURES (NO. & TYPE) 2 blueprints

REMARKS

SOURCE [redacted] 25X1X

1. Details on the aluminum plant, about 3.5 km southeast of Kamensk Uralsk (61°54'E/56°26'N), Sverdlovsk Oblast, are given in the attached sketches.

2. Work force:

Three shifts with a total of about 30,000 laborers (Soviet statement).

25X1A [redacted] Comment:

The attached plant layout and legend give detailed information on the important aluminum plant in Kamensk Uralsk, and correspond to a previous sketch * (the first received) on several essential plant installations. Although they approximately agree on location and designation of the bauxite mills and washing plants (so-called "Klinarsong") and the new electrolysis shop, the sketches disagree on many small plant buildings. Therefore, the actual plant layout cannot be determined.
Although this partially confirmed report may give an approximately correct reproduction of the plant layout, additional information is required to obtain clarification.
The sketch of the tossing tub (Annex 2) is the first received on such an installation.
2 Annexes: Blueprints, Aluminum Plant UAS in Kamensk Uralsk.

CLASSIFICATION CONFIDENTIAL/CONTROL/US OFFICIALS ONLY

Legend of Annex 1:

1 Main gate with two control buildings, total length 35 meters

a Gate for PWs and vehicles

b Gate for vehicles

2 New electrolysis shop, 90x40 meters, with six parallel workshops, connected by a middle section with crane installation. The crane rails branch off to two sides which are equipped with 10 to 12 tubs.

3 Old electrolysis shop, 80x25 meters, obsolete but still in operation

4 Stores with tubs, barrels and electrodes

5 One-story plant building, with gable roof, milk-glass windows and noise of motors heard from outside, purpose unknown

6 Stone building, 25x25 meters, four stories, stone mill, the stone dust being put into sacks and barrels and shipped to the old and new electrolysis shops

7 Bread magazine

8 "Klinarsong I", stone structure 40x40 meters with annex

a "White" side

b "Red" side, equipped with 20 to 25 tossing tubs (also see Annex 2)

9 Branch section of Klinarsong, 40x20 meters, equipped with several tubs

10 So-called "red earth shop" 40x12 meters, unloading station and presumably also underground conveying to Klinarsong I and II

11 Stone-cracking installation, 70x15 meters, products shipped away on conveyor belts

12 Office

13 Building under construction, bare structure completed and roofed, construction temporarily discontinued, purpose unknown

14 Old stone-cracking installation, not in operation

15 Storage shed

16 New foundry, 75x30 meters, still under construction, installations come from the old foundry

17 Closed wooden shed

19 Branch section of Klinarsong, like No. 7 above

20 Mess hall for civilian laborers

21 Klinarsong II with white and red workshop, same processing as Klinarsong I

22 Transformer station

23 Two closed storage sheds

24 Pile with aluminum bars

25 Food stores

26 Open storage shed with glass wool, bricks and construction materials

27 Old foundry, 50x25 meters, not in operation, installations being dismantled,

a Mechanical workshop

b Mess hall for Soviets

28 Small workshop

29 Black workshop, stone structure, 60x20 meters; coal similar to briquettes is unloaded and shipped to the building

30 Three wooden storage sheds

31 Carpenter shop and office

32 Tar machine

33 Two stone office buildings

A Area of power plant with six smokestacks, each 60 meters high

B Presumably post office

C Parking lot

a Small workshops

D Parking lot

E Bus stop with waiting room and photographic studio

G Gasoline station

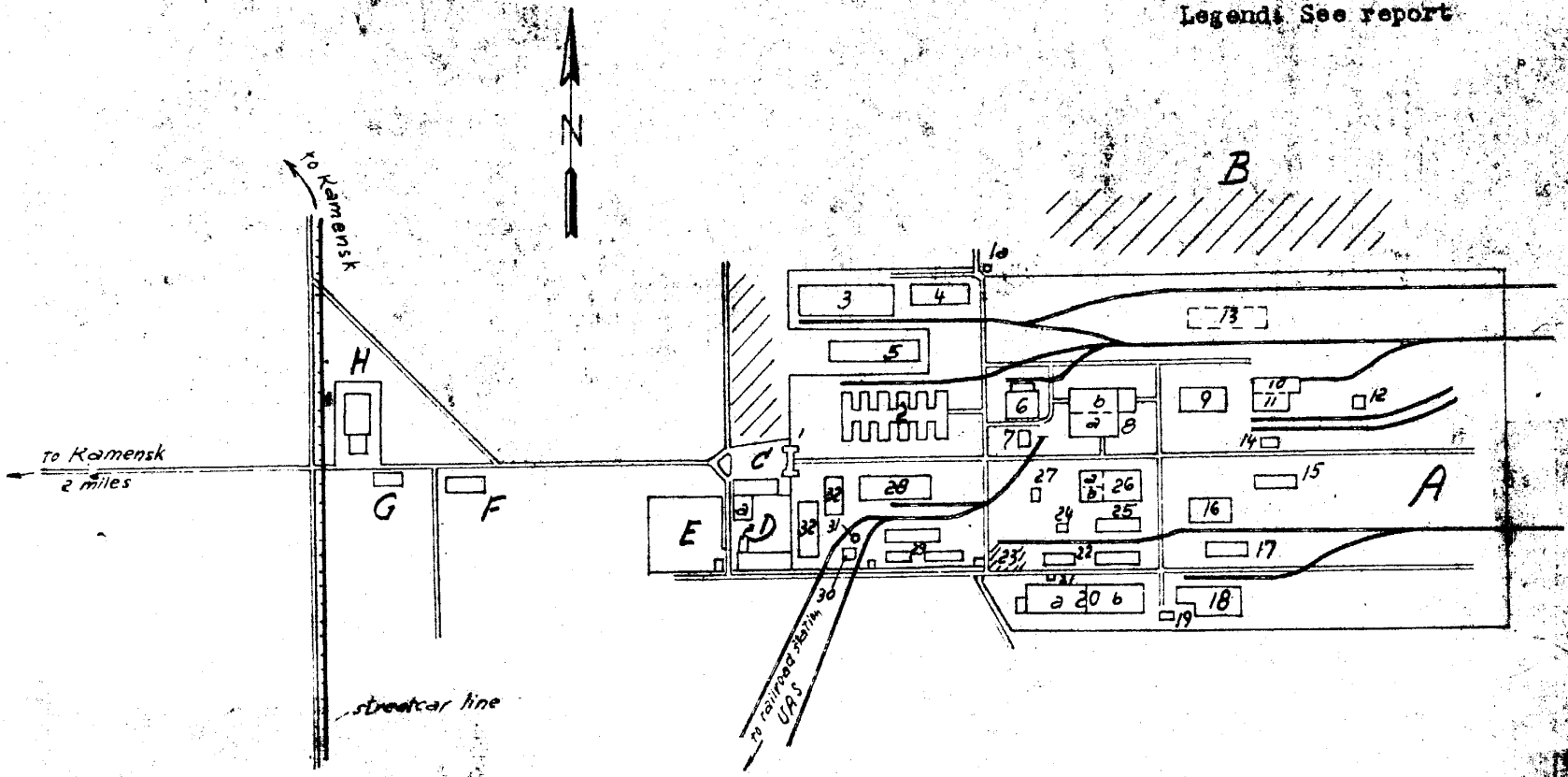
H Motion picture theater, constructed in 1948/1949

CONTROLLED DISTRIBUTION

Annex 1

Aluminum Plant UAS in Kamensk Uralsk

Legend: See report



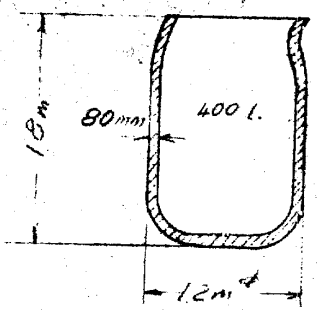
scale 1:5,000

Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

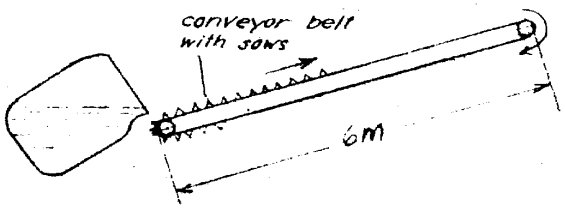
CONTROLLED DISTRIBUTION

Annex 2

Ladle for molten aluminum

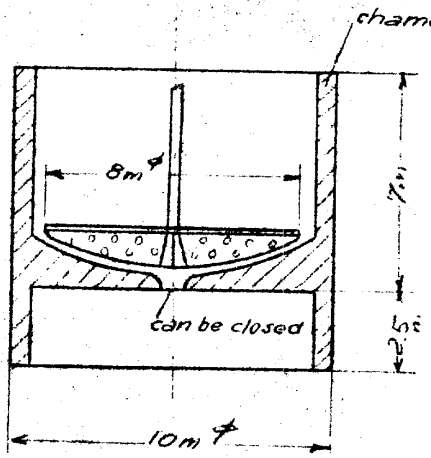


Pig machine

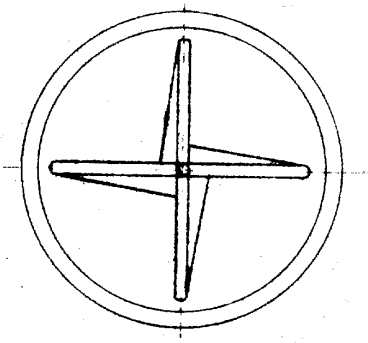


Tossing tub

cut-away view



top view



not to scale

COUNTRY Soviet Union REP

SUBJECT Uas Aluminum Plant near Kamensk-Uralsk

25X1A

INTELLOFAX 5

25X1A

EVALUATION [redacted] PLANNED [redacted]

DATE OF CON

DATE OBTAIN ATE PREPARED 2 May 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location

The Uas Aluminum Plant is about 4 km SE of Kamensk-Uralsk (61°54' E/56°56' N), Sverdlovsk Oblast, east of the railroad line going to Chelyabinsk, and SW of the Iset River and SE of the new town of Uas.

2. Plant Installations

a. Soviet workers said that the plant was erected before the war and that the town of Uas, the workers' settlement, was established in 1940. All plant departments, with the exception of the foundry, were operating in 1945. The foundry was completed and equipped in 1946. Other new constructions were not observed.

b. The plant covers an area of about 1,200x1,000 meters.

c. To the east the plant adjoined a power station covering 540x270 meters. The power station, which is coal fueled, was built at the time the Aluminum Plant was erected. The water for the power plant was drawn from the Iset River. For this purpose a dam, 100 meters long, 7 meters wide and 6 meters high (above water level), was constructed. The river is very shallow.

d. A railroad connection for the individual plant departments was available. The terminus of a Kamensk-Uralsk streetcar line is west of the plant.

For plant layout see Annex.

NN

3. Work force

Soviet workers claimed that the plant, including the power station, employed 45,000 workers. Source could not estimate the number of laborers employed but reports that four Soviets worked on each of the 300 furnaces.

4. Production

Aluminum ingots of various sizes.

25X1A [redacted] Comment:

The location of the plant as shown on the attached sketch is confirmed by previous reports. The sketch on the plant layout, furnished by source, is the first received since the war end is therefore especially valuable. The observation that, contrary to other aluminum plants, no new construction work was done up to the middle of 1948 is considered to be of special interest.

1 Annex: Ural Aluminum plant near Kamensk-Uralsk.

N 5

Legend to Annex

a Aluminum plant

1 Repair shop for cranes used at the bauxite area, 10 x 50 meters

2 Welding shop, 50x10 meters

3 Bauxite unloading shop, 150x80 meters, with two railroad tracks and a parking area for 12 freight cars of 60 tons each; equipped with grabs, conveyor belts and rough stone crushers.

4 Bauxite mill, 150x90 meters, with numerous roller mills. The rocks are sorted and ground coarse and fine

5 Hall, designated "Red Hall", 150x120 meters, bauxite washing plant

a pipe lines to No 6. There were two cylindrical-shaped washing machines, 5 meters high and 10 meters in diameter, in this hall with stirring installation. The hot water came from building No 14.

A filtration plant was on the first floor.

6 Hall, designated "White Hall," 120x100 meters, bauxite processing, a flour-like binding agent is being added. An underground passage leads from the "White Hall" to the Korpusben, a Soviet designation for the electric furnaces.

The buildings 5 through 6 were designated by the Soviets as "Aluminsom"

7 Iron storage

8 New foundry, completed in the fall of 1946, 150x40 meters, with two electric smelting furnaces and two molding machines. Production of steel balls for the mills and of iron parts.

9 Repair department, 100x150 meters, with

a old foundry
b forge
c mechanical workshop
d electrical department
e mess hall

10 Storage shed, 70 meters long and 6 meters deep, according to Soviet statements used for the storage of "creolith"

11 Storage, 80 meters long, 10 meters deep, wooden barrels

[illegible]
S/ annex

NN

12 Storage, 150x20 meters; dextrine and a flour-like material packed in linen and paper bags are stored here

Protective suits were also stored here

13 Transformer station

14 Heating plant, 50x20 meters, with several heating furnaces for hot water to be used in the bauxite washing plant

15 Coke storage, 70x10 meters

16 Administration building, 70x50 meters, three-story, laboratory

17 Oil storage, six oil tanks, for the supply of the power plant. The tanks are 8 meters high and have a diameter of 10 meters.

18 Bauxite unloading station, 100x30 meters, with a [illegible] connection, equipped as No 3

19 Bauxite mill and washing plant, 100 meters square, with conveyor belts going to No 18. (Installations 18 and 19 were designated by the Soviets as "2 Kli-nnon".)

20 Workshop, 100x50 meters, with four furnaces and several mills where an unknown rock was being ground; fellow PWs claimed the rock was "creolith", to be further processed in the "Korpusse".

21 Same as No 20.

22 Eight "Korpusse", each 100x30 meters. Each "Korpus" is divided by a passage, on each side of which are 9 or 10 aluminum furnaces. In each shop are about 33 to 40 of these furnaces. The eight halls have a total of 280 to 320 furnaces. Each furnace is 3 meters long and 2 meters in diameter and extends 2 meters above the floor and down into the basement. The furnaces have pipe lines.

23 Two aluminum foundries each 100 meters square. The melted aluminum was hauled to the furnaces from the "Korpusse" in spoon-like containers on small carts. It was liquified again in heating furnaces and cast to ingots.

24 Workshop, 60x40 meters, with two kilns in which a very sparkling mineral was melted. Before and after this process the mineral was weighed. According to Soviets an admixture for the production of aluminum was processed.

NN

B Power Plant

1 Two boilers and turbine houses, each 150x70 meters each house having three smokestacks

2 Coal unloading hall, 140x20 meters, with two railroad tracks, parking area for 20 railroad cars, each 60 ton capacity; grabs and conveyor belts to transport the coal to building No 3

3 Coal grinding plant, 30x20 meters

4 Coal unloading hall, 140x7 meters with one railroad track, other equipment like No 2

5 Pump station

6 Several pipe lines, each 1 meter in diameter

7 Large coal storage

8 Dam, 100 meters long, 7 meters wide and 3 meters above the water level

9 Slag dump

C Movies and theater

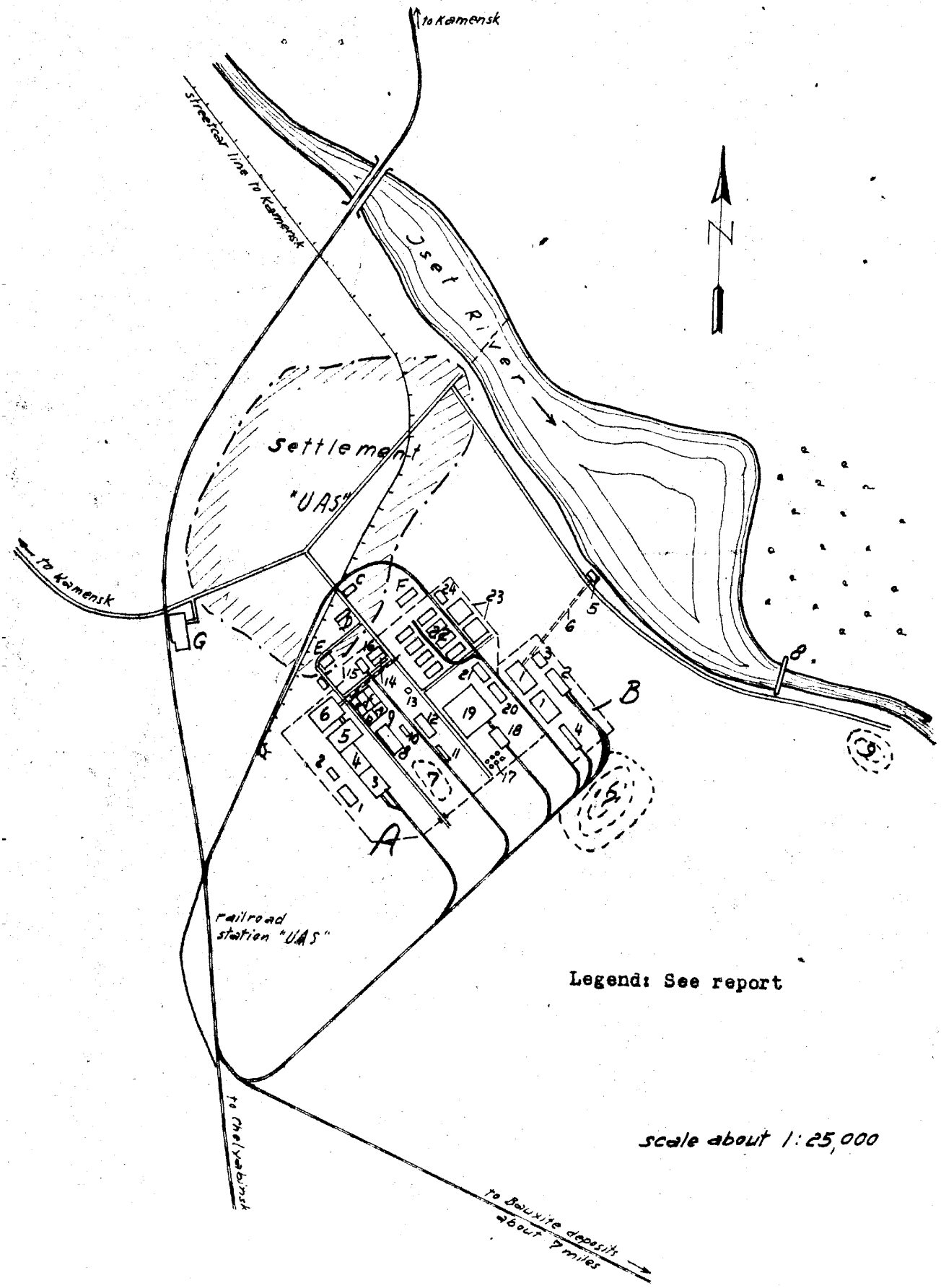
D Garage and Parking Lot

E Motor Vehicle Repair Shop

F Fire Department

G PW Camp No 7314/8.

"Uas" Aluminum Plant near Kamensk-Uralsk



CLASSIFICATION

COUNTRY Soviet Union REPORT

SUBJECT Uas Aluminum Plant near Kamensk-Uralsk 25X1A

EVALUATION [redacted] APPRAISED [redacted]

DATE OF CONTENT

DATE OBTAINED DATE PREPARED 2 May 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1A

25X1X

SOURCE [redacted]

1. Location

The Uas Aluminum Plant is about 4 km SE of Kamensk-Uralsk (61°54' E/56°56' N), Sverdlovsk Oblast, east of the railroad line going to Chelyabinsk, and W of the Iset River and SE of the new town of Uas.

2. Plant Installations

a. Soviet workers said that the plant was erected before the war and that the town of Uas, the workers' settlement, was established in 1940. All plant departments, with the exception of the foundry, were operating in 1945. The foundry was completed and equipped in 1946. Other new constructions were not observed.

b. The plant covers an area of about 1,200x1,000 meters.

c. To the east the plant adjoined a power station covering 540x270 meters. The power station, which is coal fueled, was built at the time the Aluminum Plant was erected. The water for the power plant was drawn from the Iset River. For this purpose a dam, 100 meters long, 7 meters wide and 6 meters high (above water level), was constructed. The river is very shallow.

d. A railroad connection for the individual plant departments was available. The terminus of a Kamensk-Uralsk streetcar line is west of the plant.

For plant layout see Annex.

NN

5. Work force

Soviet workers claimed that the plant, including the power station, employed 45,000 workers. Source could not estimate the number of laborers employed but reports that four Soviets worked on each of the 300 furnaces.

4. Production

Aluminum ingots of various sizes.

25X1A [redacted] Comment:

The location of the plant as shown on the attached sketch is confirmed by previous reports. The sketch on the plant layout, furnished by source, is the first received since the war and is therefore especially valuable. The observation that, contrary to other aluminum plants, no new construction work was done up to the middle of 1948 is considered to be of special interest.

1 Annex: Ural Aluminum plant near Kamensk-Uralsk.

N 4

Legend to Annex

a. Aluminum plant

1 Repair shop for cranes used at the bauxite area, 100x50 meters

2 Welding shop, 50x10 meters

3 Bauxite unloading shop, 150x80 meters, with two railroad tracks and a parking area for 12 freight cars of 60 tons each; equipped with grabs, conveyor belts and rough stone crushers.

4 Bauxite mill, 150x90 meters, with numerous roller mills. The rocks are sorted and ground course and fine

5 Hall, designated "Red Hall", 150x120 meters, bauxite washing plant

a pipe lines to No 6. There were two cylindrical-shaped washing machines, 5 meters high and 10 meters in diameter, in this hall with stirring installation. The hot water come from building No 14.

A filtration plant was on the first floor.

6 Hall, designated "White Hall," 120x100 meters, bauxite processing, a flour-like binding agent is being added. An underground passage leads from the "White Hall" to the Korpussen, a Soviet designation for the electric furnaces.

The buildings 5 through 6 were designated by the Soviets as "Aluminson"

7 Iron storage

8 New foundry, completed in the fall of 1946, 150x40 meters, with two electric smelting furnaces and two molding machines. Production of steel balls for the mills and of iron parts.

9 Repair department, 100x150 meters, with

a old foundry
b forge
c mechanical workshop
d electrical department
e. mess hall

10 Storage shed, 70 meters long and 6 meters deep, according to Soviet statements used for the storage of "creolith"

11 Storage, 80 meters long, 10 meters deep, wooden barrels

NN

12 Storage, 150x20 meters; dextrine and a flour-like material packed in linen and paper bags are stored here

Protective suits were also stored here

13 Transformer station

14 Heating plant, 50x30 meters, with several heating furnaces for hot water to be used in the bauxite washing plant

15 Coke storage, 70x10 meters

16 Administration building, 70x50 meters, three-story, laboratory

17 Oil storage, six oil tanks, for the supply of the power plant. The tanks are 8 meters high and have a diameter of 10 meters.

18 Bauxite unloading station, 100x30 meters, with a railroad connection, equipped as No 3

19 Bauxite mill and washing plant [illegible] meters square, with conveyor belts going to No 18. (Installations 18 and 19 were designated by the Soviets as "2 [illegible]".)

20 Workshop, 100x50 meters, with four furnaces and several mills where an unknown rock was being ground; [illegible] claimed the rock was "creolith", to be further processed in the "Korpusse".

21 Same as No 20.

22 Eight "Korpusse" each 100x50 meters. Each "Korpus" is divided by a passage, on each side of which are 9 or 10 aluminum furnaces. In each shop are about 35 to 40 of these furnaces. The eight halls have a total of 280 to 320 furnaces. Each furnace is 3 meters long and 2 meters in diameter and extends 2 meters above the floor and down into the basement. The furnaces have pipe lines.

23 Two aluminum foundries each 100 meters square. The melted aluminum was hauled to the furnaces from the "Korpusse" in spoon-like containers on small carts. It was liquified again in heating furnaces and cast to ingots.

24 Workshop, 60x40 meters, with two kilns in which a very sparkling mineral was melted. Before and after this process the mineral was weighed. According to Soviets an admixture for the production of aluminum was processed.

NW

F Power Plant

1 Two boilers and turbine houses, each 150x70 meters each house having three smokestacks

2 Coal unloading hall, 140x20 meters, with two railroad tracks, parking area for 20 railroad cars, each 60 ton capacity; grabs and conveyor belts to transport the coal to building No 3

3 Coal grinding plant, 30x20 meters

4 Coal unloading hall, 140x7 meters with one railroad track, other equipment like No 2

5 pump station

6 Sewer 3 pipe lines, each 1 meter in diameter

7 Large coal storage

8 Dam, 100 meters long, 7 meters wide and 6 meters above the water level

9 Slag dump

C Movies and theater

D Garage and Parking Lot

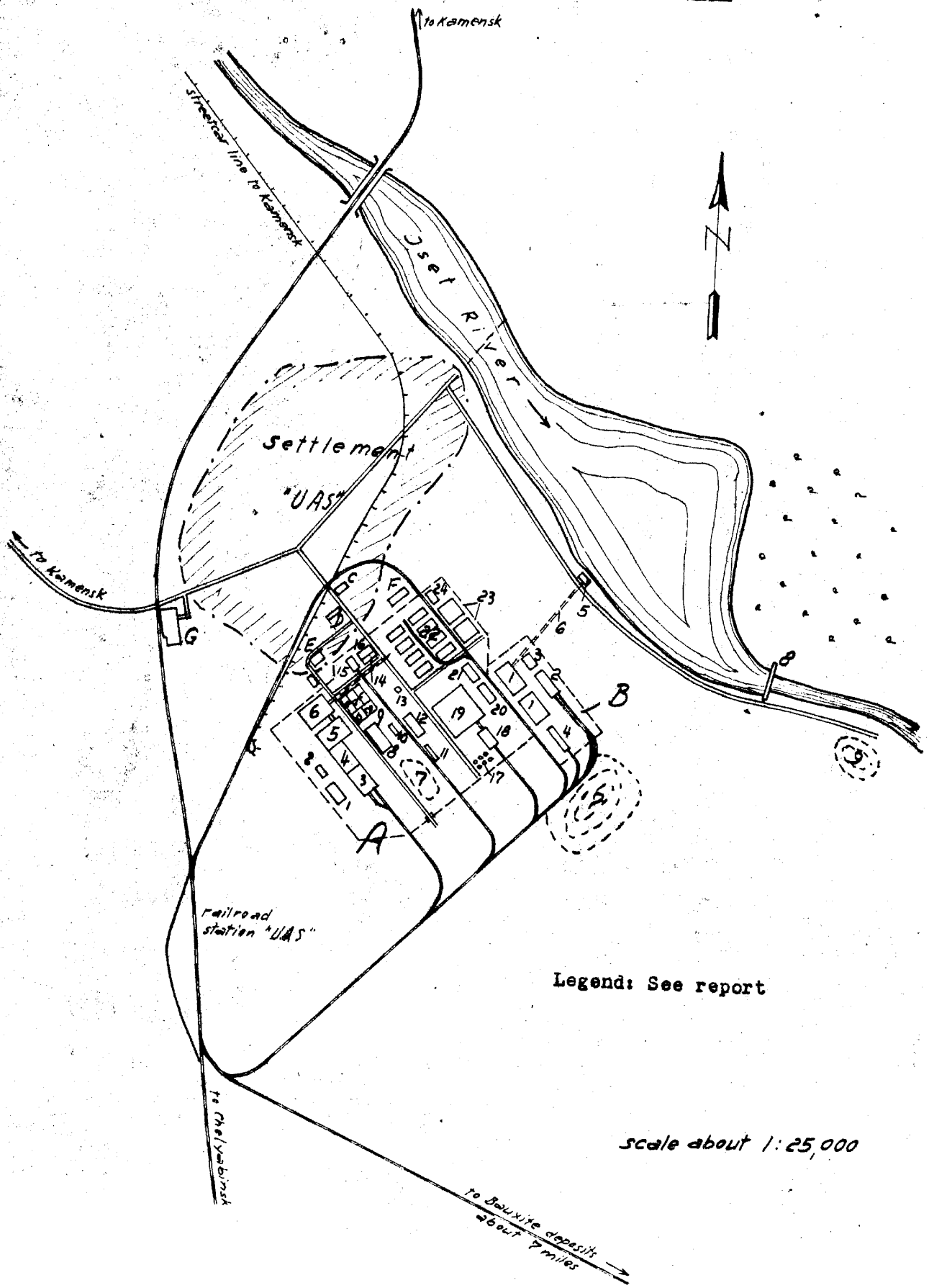
M Motor Vehicle Repair Shop

F Fire Department

G PX Camp No 7314/8.

Annex

"Uas" Aluminum Plant near Kamensk-Uralsk



Legend: See report

scale about 1:25,000

CLASSIFICATION SECRET-CONTROL/US OF

COUNTRY Soviet Union REPORT

TOPIC Iron Rolling Mill in ALAPAEVSK 25X1A

25X1A

EVALUATION [redacted]

DATE OF CONT

DATE OBTAINED PREPARED 20 December 1949

REFERENCES

PAGES 2 ENCLOSURES (NO.) 2 Blueprints

REMARKS

25X1X

SOURCE [redacted]

1. Location

The iron rolling mill of ALAPAEVSK (61°42'E/57°51'N), Sverdlovsk Oblast, is at the southeast town border, on the west bank of the Neyva River, about 900 feet west of a railroad bridge. For location see Annex 1.

2. Plant Installations

The plant covers an area of about 0.9x0.75 miles and is surrounded by river meadows. It was learned from Soviets that the plant is about 15 years old. During the war the plant produced tank parts and in 1946 or 1947 was converted to peacetime production and the enlargements started. The bare structures of four new buildings were completed by July 1948. For plant layout see Annex 2.

3. Work Force

Three to four thousand Soviets and 300 P/W's including 50 Japanese, working three shifts.

4. Production

During the war, tank parts; present production, metal sheets of various sizes and thickness, spades and shovels. Armor plates were not observed.

25X1A [redacted]omment:

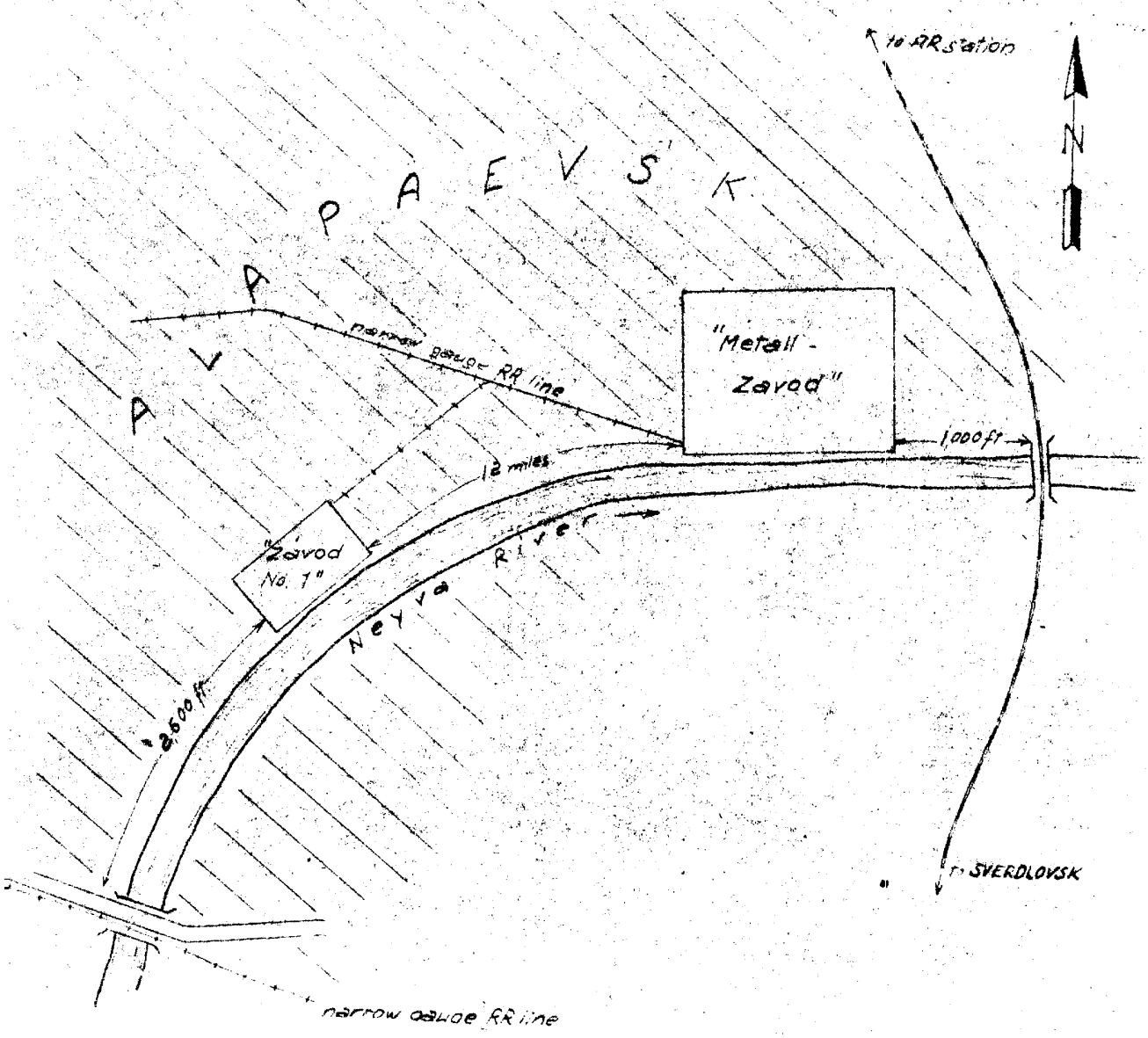
a. This plant was reported in two previous reports*. The following location can be assumed: On the north bank of the Neyva River, about 900 feet west of the large railroad bridge of the railroad line to SVERDLOVSK (also see a previous report** and the sketch to a report on the machine tool factory ***).

b. Annex 2 furnishes a rather diagramatical picture of the plant covering only the essential departments. The location of the open-hearth plant, the rolling mill and the power plant was likewise recorded by a previous report**. The reported location of the blast furnace is at variance with previous information.

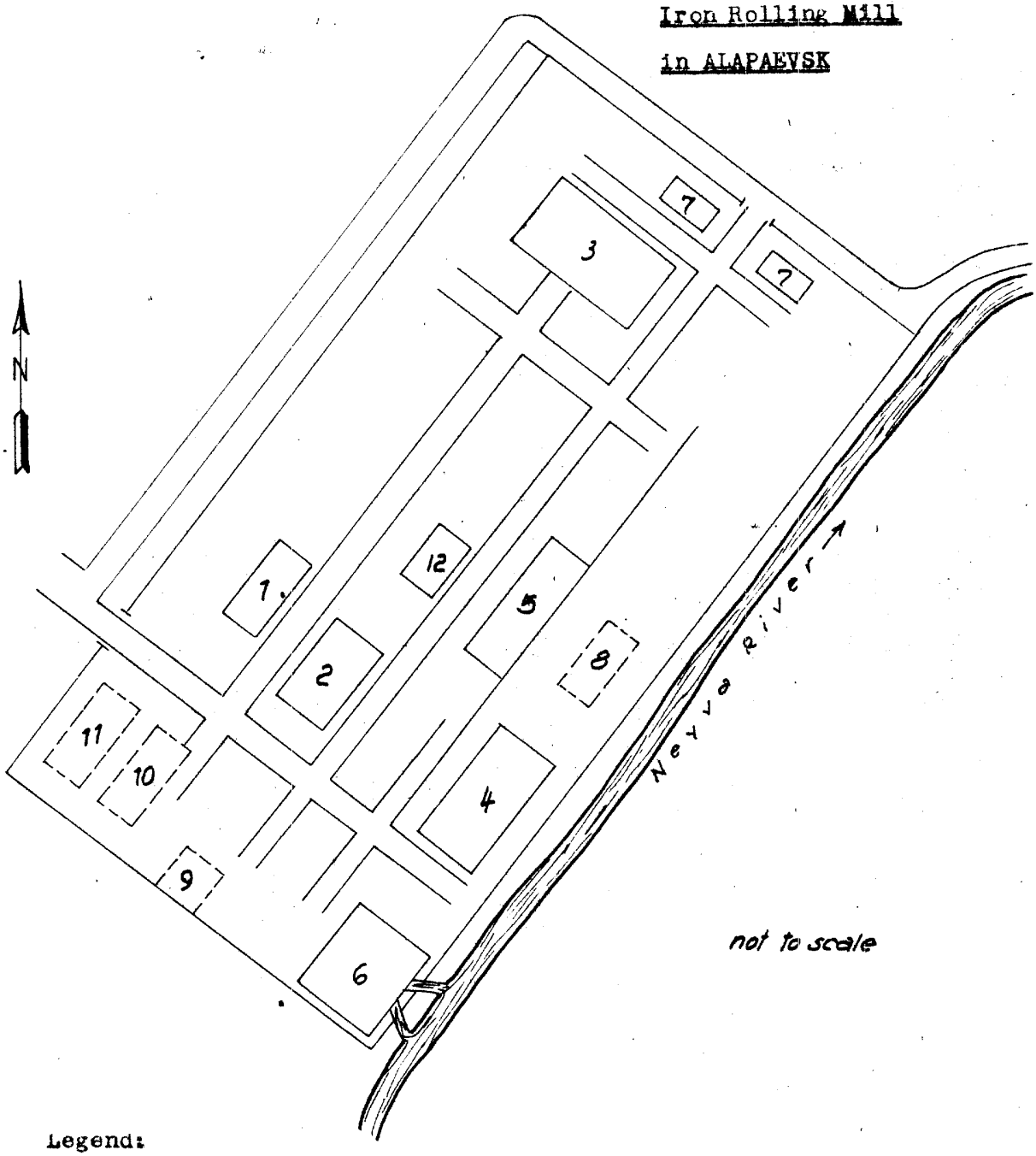
c. As the plant was still being enlarged, new information is needed to give a factual picture of the plant.

2 Annexes: 1. } Iron mill in ALAPAEVSK
2. }

Iron Rolling Mill in ALAPAEVSK



Iron Rolling Mill in ALAPAEVSK



Legend:

1 Repair department, two-story stone structure, 90x60 feet
2 Blast furnace, solid structure, 150x90 feet. The ore is shipped from the nearby mines via a narrow-gauge railroad
3 Two open-hearth furnaces
4 Rolling mill and forge, steel structure, 600x150 feet
5 Hardening shop, stone structure, 450x60 feet
6 Power plant, stone structure, 360x300 feet
7 Two administration buildings with drawing offices
8 through 11 Buildings under construction
12 Storage of tools and materials

COUNTRY Soviet Union REPORT NO. 25X1A

TOPIC Zavod No 1 in ALAPAEVSK

25X1A [redacted] PP

EVALUATION [redacted] D

DATE OF CONTENT

DATE OBTAINED [redacted] PREPARED 20 December 1949 25X1A

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 2 Blueprints

REMARKS

25X1X SOURCE [redacted]

1. Location:

Zavod No 1 is on the southern edge of ALAPAEVSK (61°42' E/ 57°51' N), Sverdlovsk Oblast, on the northwest bank of the Neyva River, and about one mile from the towncenter.

2. Plant Installations:

The plant covers an area of about 1,200x750 feet. Except in the southeast, it is bounded by workmen's settlements. From the pit in the vicinity of town the ore is shipped to the plant on a narrow-gauge railroad. For plant layout see Annex.

3. Work Force:

Three shifts with eight hundred Soviets, 40 percent of whom were women, and an additional 400 PWs. Half of the PWs were skilled laborers, the others were construction workers.

4. Production:

Brick moulding machines, stone crushers, concrete mixers, saw frames, and field lorries.

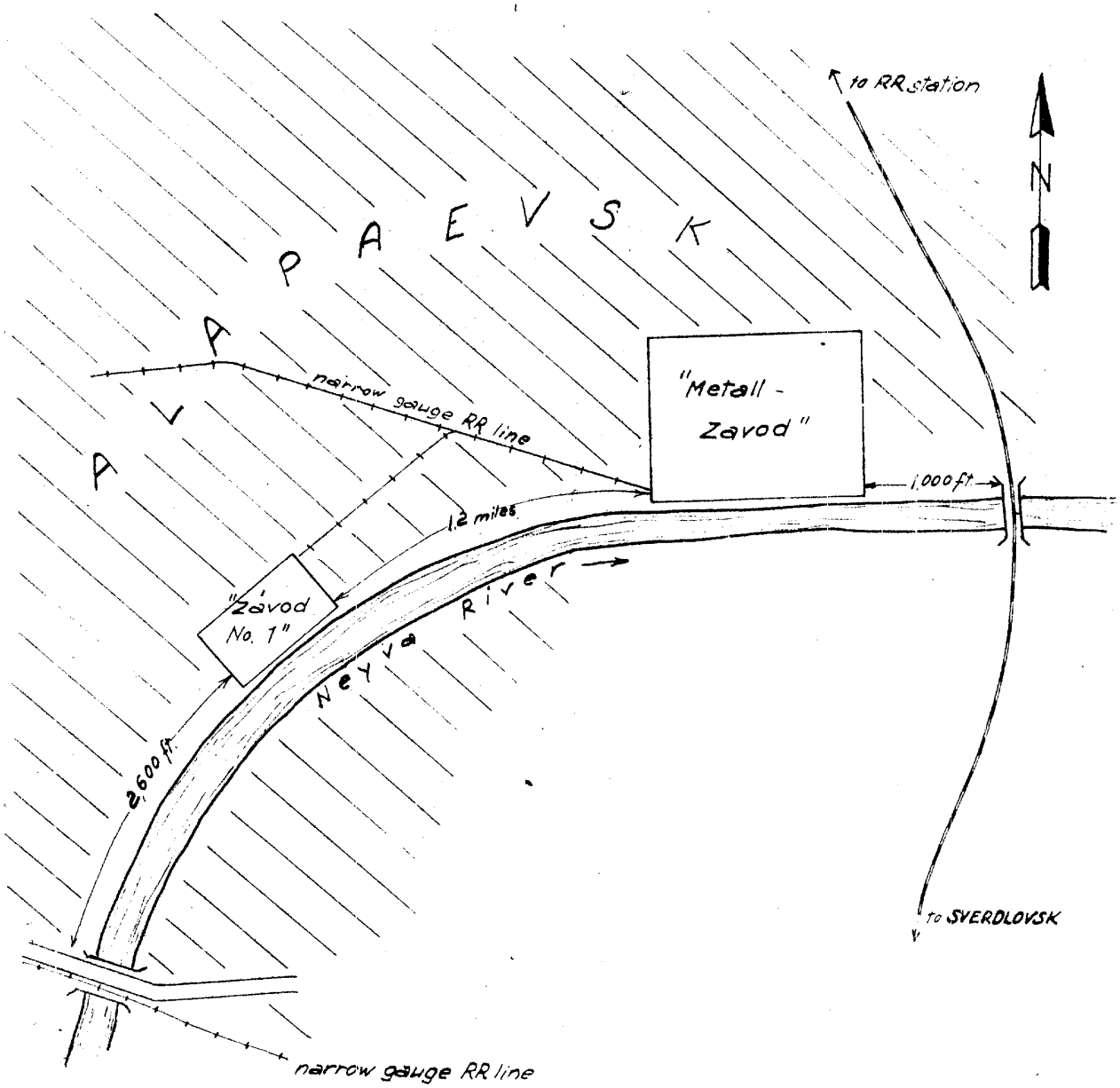
Field Comment:

a. The location of Zavod No 1 was also entered on a sketch supplied by another source on the machine tool plant south of the Neyva River. +

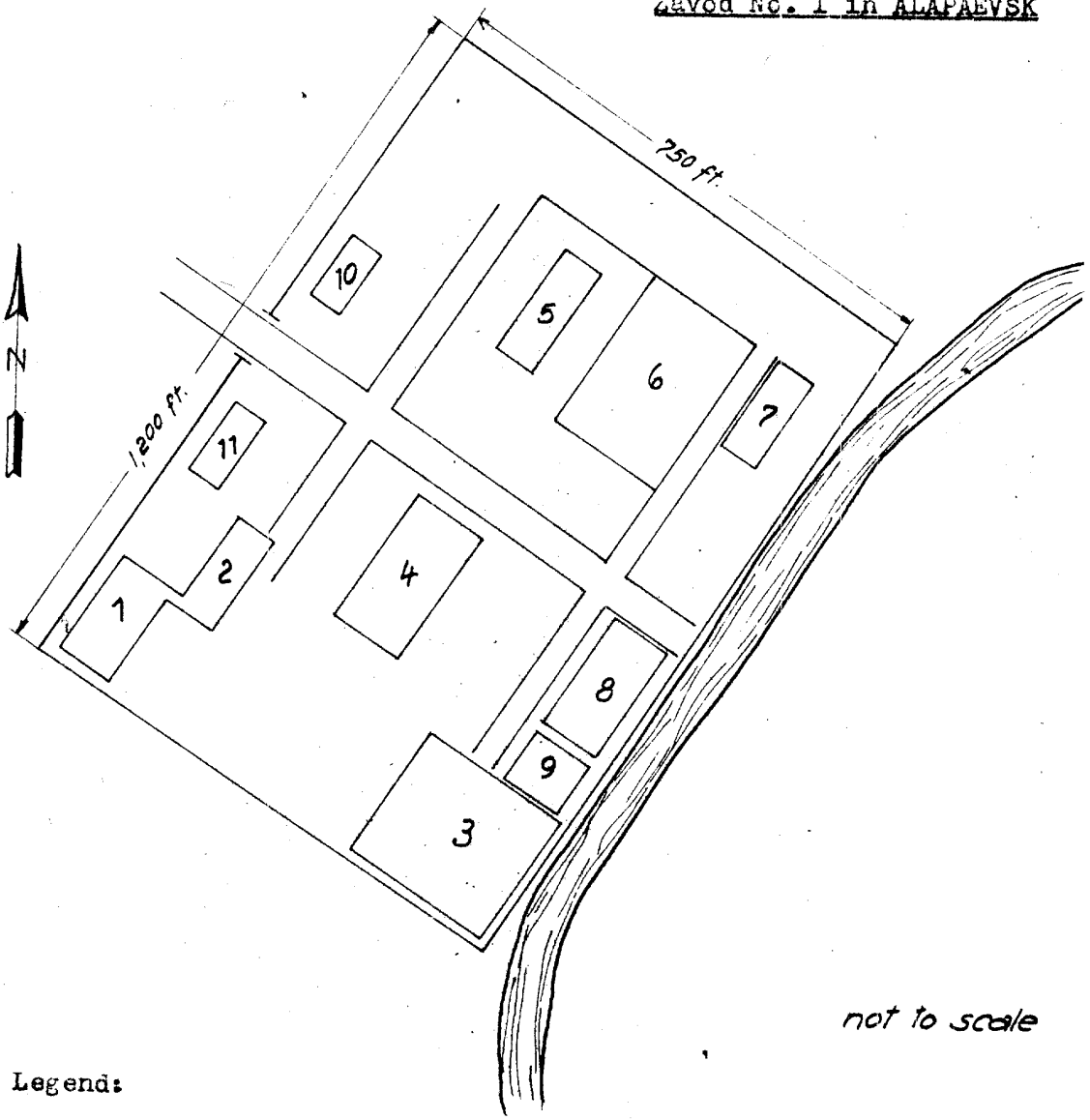
b. The attached plant layout needs confirmation by additional reports.

2 Annexes: (1) & (2) Zavod No 1 in ALAPAEVSK

Zavod No. 1 in ALAPAEVSK



Zavod No. 1 in ALAPAEVSK



not to scale

Legend:

1 Sawmill, wooden shed, 120x90 feet
2 Sawframe, wooden shed with flat roof
3 Lathe shop, two-story stone structure, 180x75 feet
4 Assembly hall, two-story stone structure, 150x45 feet
5 Storage for finished products
6 Foundry, stone structure, 300x120 feet, equipped with two modern electric smelting furnaces
7 Iron and steel dump
8 Central heating for all plant buildings
9 Repair shop and oil dump
10 Administration, three-story stone building
11 Designing office, three-story stone building

CLASSIFICATION SECRET-C NOFORN/US OFFICIAL

COUNTRY Soviet Union REPORT NO.

TOPIC ASBEST Novi-Mech-Zavod Machine Factory 25X1A

25X1A EVALUATION [redacted]

DATE OF CONTE[redacted]

DATE OBTAINED [redacted] REPARED 20 December 1949

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location:

The Novi-Mech-Zavod Machine Factory, about 3,000 feet southwest of ASBEST (61°30' E/57°00' N), Sverdlovsk Oblast, is surrounded by woods on all sides except the east. An adjacent and fenced-off section to the north was cleared in 1949, presumably for building purposes.

2. Plant Installations:

a. The plant was officially designated Novi-Mech-Zavod by the Soviets in 1947. The PWs and other workers always called it "locomotive factory" though no locomotives were manufactured there.

b. Construction work started in 1944 and the work was speeded by employing PWs. Production in the large workshop was started in 1947 and in the other departments in 1948. There is a spur track. For plant layout see Annex.

3. Work Force:

About 2,000 PWs up to the completion of the construction work (1948) and only some specialists since 1948. The number of Soviet workers could not be estimated.

4. Production:

Spare parts for machines of the ASBEST factory and for motor vehicles, as well as sheet metal troughs for dump trucks.

25X1A [redacted] Comment:

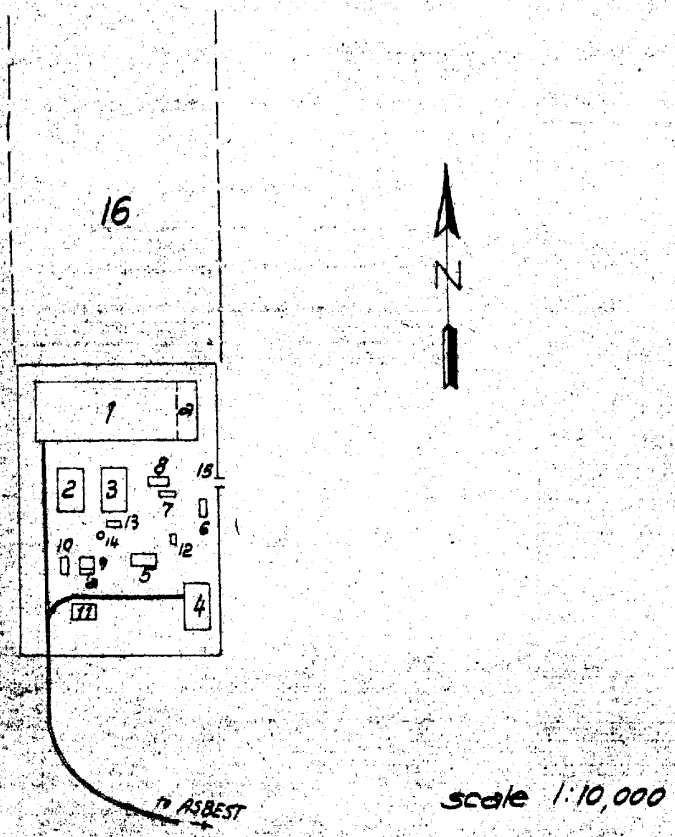
a. The data reported on the location of the Novi-Mech-Zavod Plant agree with a sketch on ASBEST previously supplied by another source. +

b. According to previous reports, a large locomotive factory has allegedly been under construction in ASBEST since the end of the war. The recorded designation as used by Soviet workers makes it possible that this locomotive factory is the Novi-Mech-Zavod Plant. The original production of locomotives has possibly not been resumed.

c. The attached sketch requires confirmation.

1 Annex: ASBEST Novi-Mech-Zavod Machine Factory.

ASBEST Novi-Mech-Zavod Machine Factory



Legend:

1 Concrete machine house, 230x950x2,450 feet, with wooden roof
1a Offices and drawing room
2 Forge and boiler forge, 400x660 feet.
Drawing room in northern section of workshop
3 Foundry, 400x660 feet
4 Locomotive department, 400x660 feet, under construction and without roof
5 Boilerhouse, 200x330 feet, with 300-foot smokestack and a boiler from basement to roof
6 and 7 Two garages, 100x250 feet
8 Warehouse, 150x300 feet
9 Workshop, 200x250 feet, utilization unknown
9a Solid building with concrete roof housing a model carpentry
10 Three-story building with oxygen installation, 100x250 feet
11 Machine house, 250x330 feet
12 Transformer station for seven or eight transformers, still under construction
13 Transformer station with three or four transformers
14 Water tower, a failure in construction, was to be torn down (Soviet statement)
15 Main entrance
16 Adjacent building site

COUNTRY Soviet Union REPORT NO.

TOPIC Aircraft Engine Plant No. 500 in MOSCOW-PUSHNO

25X1A EVALUATION [redacted] 25X1A

DATE OF CONT [redacted]

DATE OBTAINED DATE PREPARED 30 November 1949 Attachment

REFERENCES 25X1X

PAGES 3 ENCLOSURES (NO. & TYPE)

[redacted]

1. Location:

MOSCOW-PUSHNO (37°26'E, 55°50'N). The plant was bound on the north by the Khodnya Canal. And a road bridge crossed the canal near the northwest corner. A hydro power station was located about 500 feet west of the northwest corner of the plant.

2. Numerical designation of plant: No. 500 (according to Soviets).

3. Size: About 2,600 x 1,650 feet (rough estimate).

4. Railroad connection: Single-tracked siding.

5. Buildings: Brick structures. The workshops were covered with glass roofing, the administrative buildings with sheet metal roofs. No new constructions.

6. Work force:

a. Estimate according to fellow-PWs: a total of ten thousand working three eight-hour shifts.

b. Percentage of women: 30 per cent.

c. Age: Half of the personnel were 20 to 30 years old.

d. The workers were housed in the factory-owned settlements east of the plant and in the town of MOSCOW.

CLASSIFICATION SECRET/CONTROL/US OFFICIAL ONLY

e. German experts: About 70 to 30 German engineers and their families arrived in December 1947/January 1948. Source learned from a conversation with one of these engineers that they had come from the Junkers plant in DESSAU. Another engineer stated, in September 1948, that they were to soon move to OMSK.

7. Production:

a. Heavy aircraft radial engines. Source observed that the engines were taken from the test stand to a hall and packed in boxes. The shipping box was about 13 x 6 x 7 feet.
The shipping boxes did not occur regularly. Sometimes one box was loaded in the morning and two boxes in the afternoon and then only after half or a whole day's interval a new shipment was due.

b. Rusty engines were stored at a scrap dump.

c. Test stands were in operation day and night.

d. Supply of semi-finished goods was not observed nor could anything be learned about it. From the fact that metal borings (steel, copper and brass borings) were collected in the plant area and burnt by PWs and that electro smelting furnaces were installed and small gear wheels made at the plant, source inferred that all engine parts were produced in the plant.

e. By-products such as milk cans and cooking-pots of aluminium were produced in a workshop near the northwest corner of the factory.

8. "Huge" quantities of scrap consisting of engines, fuselages and other aircraft parts were stored over all the plant area.

9. An estimated 80 to 100 piles of aluminium bars of 20 to 30 bars each were distributed throughout the factory area.

10. A coal train of 15 to 20 cars (60 tons each) for the boilerhouse arrived every three or four days.

11. Security measures: High board fence with watchtowers at the corners; by day, patrols outside and inside the factory; armed civilian guards.

12. No air defense equipment or AAA emplacements.

13. Factory-owned vehicles were not at the disposal of the plant.

25X1A [redacted] Comment:

1. The factory designated as Aircraft Engine Plant No.500 is, no doubt, identical with the former engine plant No. 82 north of KUSMINO airfield. This plant was also designated as Plant No. 500 in former reports by repatriated PWs. * As plant number 82 became vacant after this factory had been transferred to the KAZAN

aircraft engine plant in the Fall of 1941, it is possible that a new plant number, i.e. No. 500, was assigned to the plant which was established on the premises of the former factory.

2. Before the plant was evacuated its work force numbered about five thousand workers. The number was indicated at about three thousand for the period between 1945 and the beginning of 1948. The reported number of ten thousand, therefore, appears greatly overestimated.

3. Plant No. 500 is the development and production plant for Diesel engines. The Diesel section of the Junkers plants, headed by GERLACH was transferred to this place. There, besides other projects, the development of the Jumo-224/26 plant is being done. Most of the former reports covering the same period of observation stated that 12-cylinder in-line engines, liquid-cooled, were produced. Only in one report mention was made of 14-cylinder radial engines. However, as the reported dimensions of the transport boxes for the 12-cylinder in-line engines were greatly exceeded by those stated for the radial engines it can be assumed that though the dimensions appear overestimated the engine in question may actually be a heavy type radial engine. A box 13 feet long appears rather high even for a jet plant furnished with complete mounting jig.

CLASSIFICATION [redacted]

COUNTRY Soviet Union REPORT NO

TOPIC Power Plant in ARTEMOVSKI near YEGORSHINA 25X1A

25X1A EVALUATION [redacted]

DATE OF CONTE [redacted]

DATE OBTAINED [redacted] D 22 November 1949

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) , Blueprints

REMARKS

25X1X

SOURCE [redacted]

1. Location:

The power plant of ARTEMOVSKI (61°55' E/57°21' N), Sverdlovsk Oblast, is located about 2½ miles southeast of YEGORSHINA, immediately north of a small river. This river is dammed to form a small lake southwest of the power plant.

2. Plant Installations:

The plant existed during World War I and had been enlarged by several annexes. In May 1948, the middle section was torn down as much as required for the projected installation of two new turbines. It was later reconstructed. Simultaneously, the coal conveyer installation from the unloading station to the power plant was renewed. As scheduled, the alterations of the middle section were completed by the beginning of September 1948. All other plant parts continued operation during the time of construction. Soviets stated that the capacity was to be increased by more than 100 percent by the installation of two new turbines. A railroad connection is available. The coal was shipped to the conveyor belts underground, and from there to the boilers.

3. Work Force:

Fifty percent were women, no details available on the total number.

4. Capacity:

No details available.

For location see Annex 1
For plant layout see Annex 2
For side view, as seen from the south, see Annex 3
For ground plan and elevation sketch of the new turbine hall see Annex 4.

25X1A [redacted] Comment:

a. The attached, very illustrative, sketches furnish new information on the power plant in ARTEMOVSKI.

RR

b. The reported location is the same as in previous information.

4 Annexes: Power Plant in ARMIZONKI Near YEGORSHIKA, Sverdlovsk Oblast.

Legend to Annex 2

1. New turbine hall
2. Bridge across the ditch, 12 feet wide and 15 feet deep
3. Unloading station for coal
4. Transport installation for coal, emerging 6 feet above ground with underground connection to the old boilerhouse
5. Conveyer, 3 feet wide runs as deep as the coal transport installation (No 4) (Objects No 5 and No 7 were not yet in operation).
6. Coal conveyer installation, underground connection with No 3
7. Conveyer belt, 3 feet wide, running to the roof of the new boiler house
8. Machine house of the coal transport installations
9. Building with unknown purpose, two rooms separated by wall. Room 9a was provided with a gangway, 9 feet high, passing several iron boxes about 25 feet high and 12 feet wide. Warm air was blowing out of these boxes, which were installed at some intervals.
10. New boilerhouse
11. Oldest part of the power plant, several floors, comprising the old boilerhouse, the old turbines, and the administration; five smokestacks, 25 feet high, ~~at irregular intervals~~ on top of this building.

Total dimensions of the main building: 550 feet long, the widest part was 250 feet wide, and the highest part 90 feet high.

Legend to annex 4

(Ground plan and elevation sketch of the new turbine hall).

1. Bases for two new turbines
2. Base with iron lid from under which roaring of water could be heard
3. Solid wall, 20 feet high and 6 feet wide
4. Outer wall
5. Bridge across a ditch
6. Ground level outside of the power plant, 25 feet above the floor of the turbinehall.
7. Two openings in the wall, 6x9 feet deep.
8. Passages for pipe into the adjacent building
9. Passages for pipes into the new boiler-house
10. Ditches, about 3 feet deep and 2 feet wide
11. Conical ditches, 2 feet deep and 1½ feet wide at the surface.

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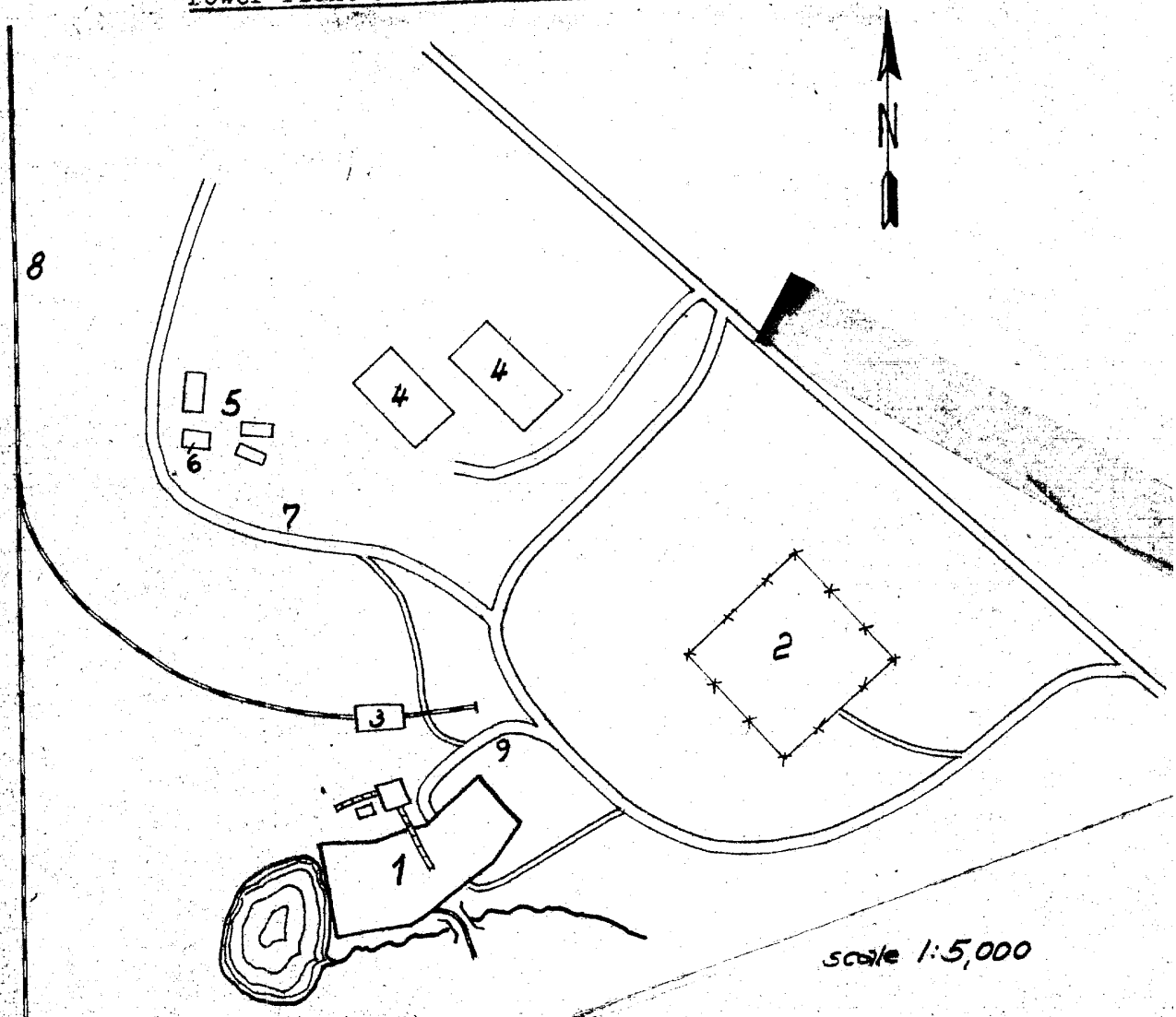
Annex 1

Power Plant in ARTEMOVSKI near YEGORSHINA, Sverdlovsk Obl.

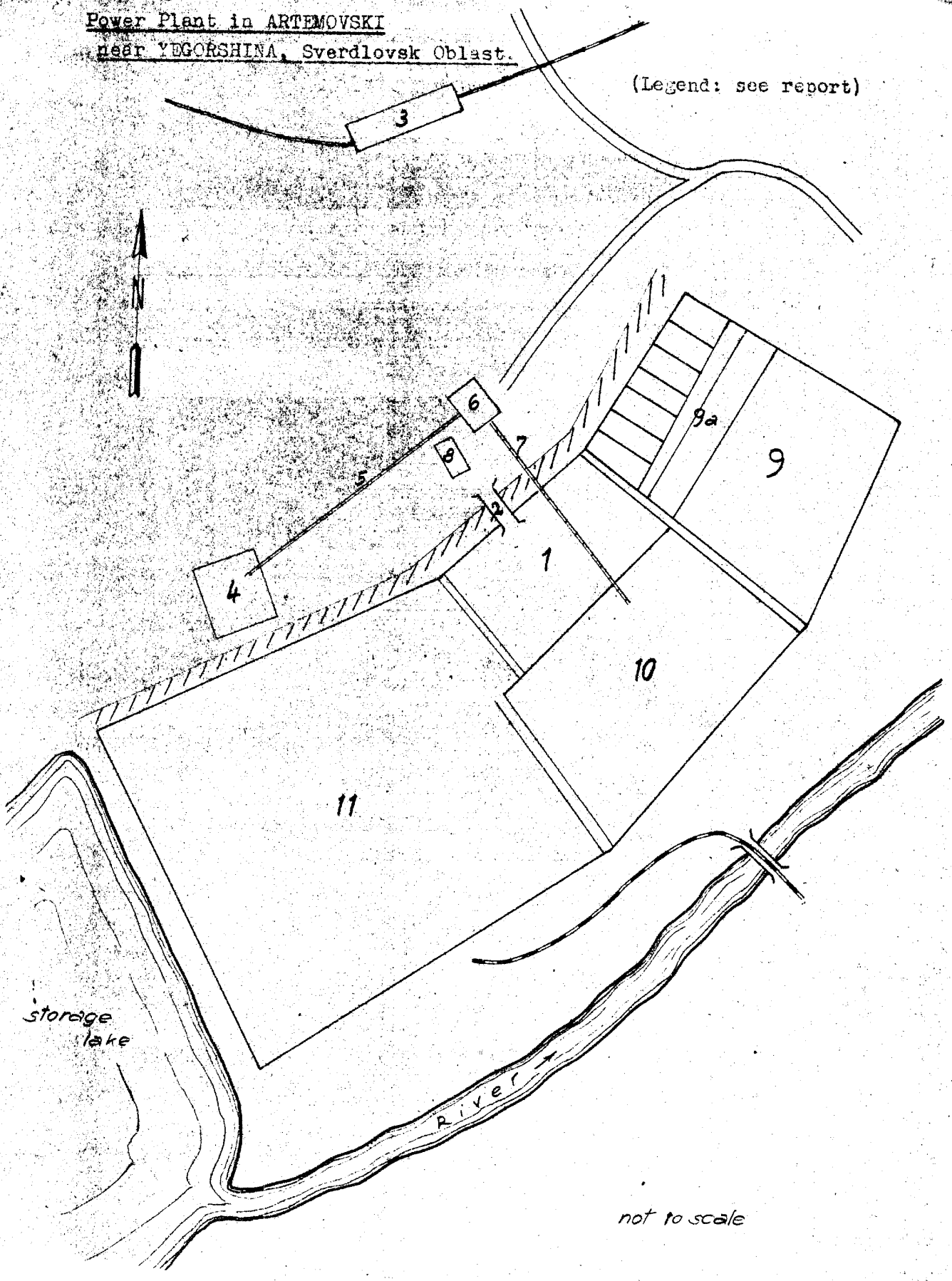


Legend:

1 Power plant
2 PW camp No. 7531/5
3 Unloading station
4 Workshops of the "Mash Zavod" Machine Factory
5 Settlement of the machine factory
6 New clubhouse
7 Road to YEGORSHINA
8 Railroad line to YEGORSHINA
9 Metalled road under construction since 1947

Power Plant in ARTEMOVSKI
near YEGORSHINA, Sverdlovsk Oblast.

(Legend: see report)



CONTROLLED DISTRIBUTION

Annex 3

Power Plant in ARTEMOVSKI near NEVYANSK, Sverdlovsk Oblast

not to scale

Legend: 1 Oldest plant part with old turbine- and boilerhouse, 5 smokestacks

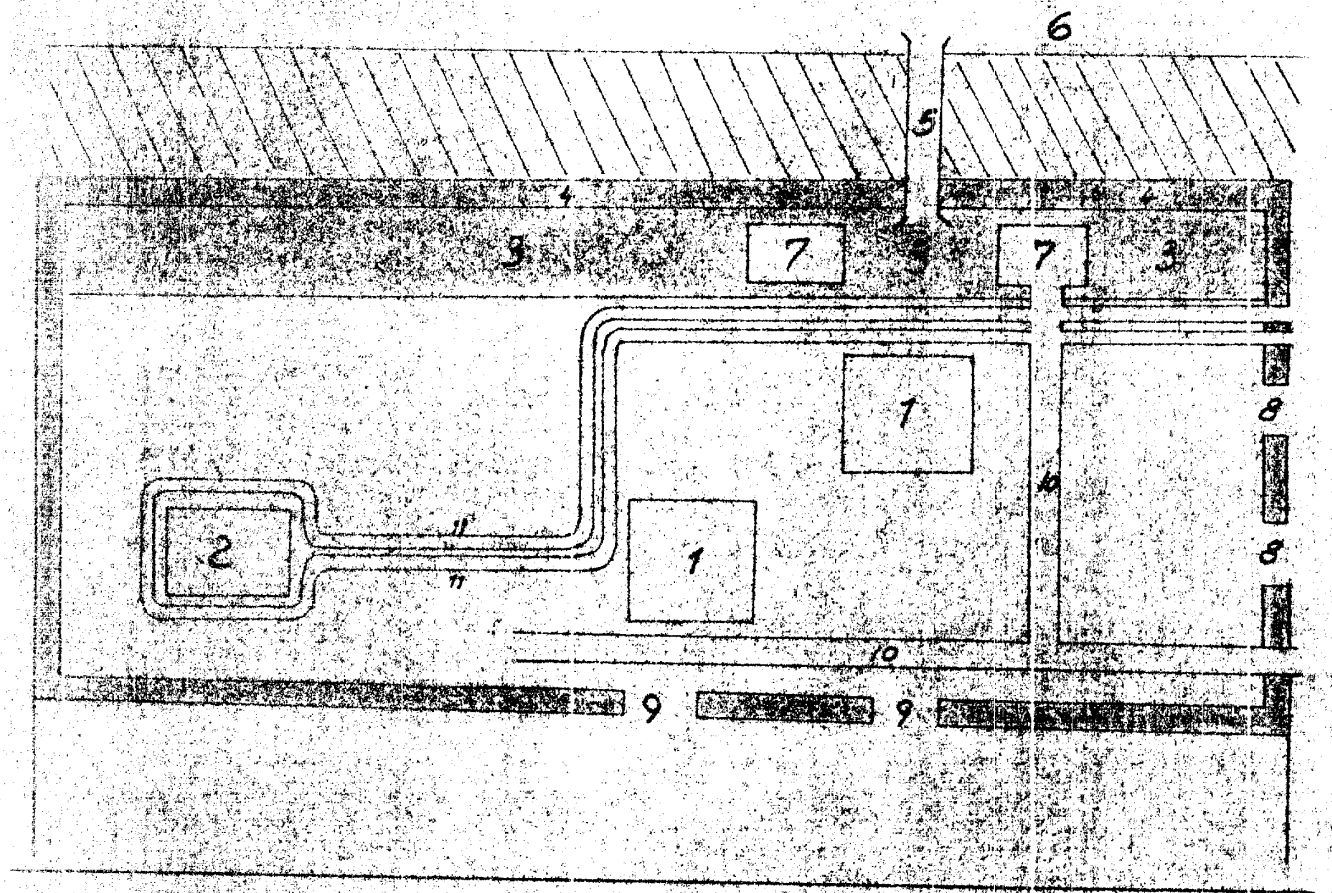
2 New turbinehall, the bottom of which was 25 feet underground (the turbinehall was hidden behind the new boilerhouse (No. 10 of Annex 2) and could not be seen from this side

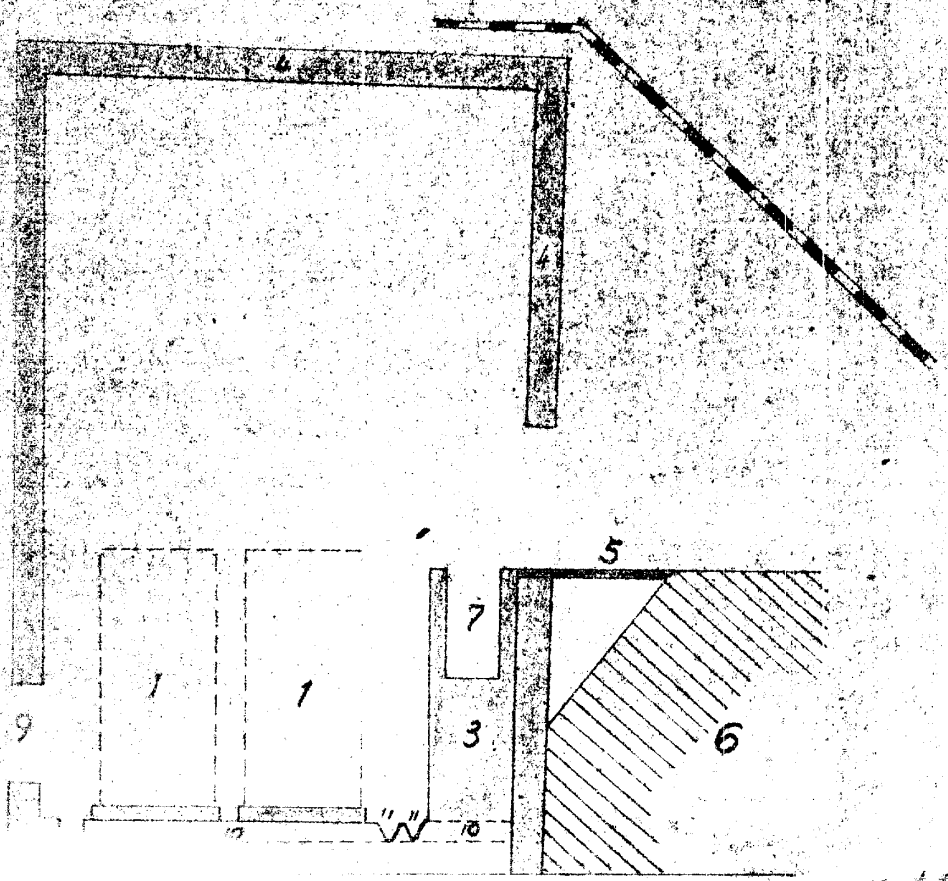
3 Plant part with unknown purpose (also see Item No. 9 of Annex No. 2).

Annex 4

Power Plant in ARTEMOVSKI near YEGORSHINA, Sverdlovsk Oblast.

(Legend: see report)





COUNTRY Soviet Union REPORT NO

25X1A

TOPIC Power Plant in ARTEMOVSKI near YEGORSHINA

25X1A EVALUATION [redacted]

DATE OF CONTE

DATE OBTAINED [redacted] RED 22 November 1949

25X1A

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) Blueprints

REMARKS

~~25X1X~~

SOURCE [redacted]

1. Location:

The power plant of ARTEMOVSKI (61°55' E/57°21' N), Sverdlovsk Oblast, is located about 2½ miles southeast of YEGORSHINA, immediately north of a small river. This river is dammed to form a small lake southwest of the power plant.

2. Plant Installations:

The plant existed during World War I and had been enlarged by several annexes. In May 1948, the middle section was torn down as much as required for the projected installation of two new turbines. It was later reconstructed. Simultaneously, the coal conveyer installation from the unloading station to the power plant was renewed. As scheduled, the alterations of the middle section were completed by the beginning of September 1948. All other plant parts continued operation during the time of construction. Soviets stated that the capacity was to be increased by more than 100 percent by the installation of two new turbines. A railroad connection is available. The coal was shipped to the conveyor belts underground, and from there to the boilers.

3. Work Force:

Fifty percent were women, no details available on the total number.

4. Capacity:

No details available.

For location see Annex 1
For plant layout see Annex 2
For side view, as seen from the south, see Annex 3
For ground plan and elevation sketch of the new turbine hall see Annex 4.

25X1A [redacted] Comment:

a. The attached, very illustrative, sketches furnish new information on the power plant in ARTEMOVSKI.

RR

b. The reported location is the same as in previous information.

4 Annexes: Power Plant in ARTEMOVSKI Near YEGORSHINA, Sverdlovsk Oblast.

Legend to Annex 2

1. New turbine hall
2. Bridge across the ditch, 12 feet wide and 15 feet deep
3. Unloading station for coal
4. Transport installation for coal, emerging 6 feet above ground with underground connection to the old boilerhouse
5. Conveyer, 3 feet wide runs as deep as the coal transport installation (No 4) (Objects No 5 and No 7 were not yet in operation).
6. Coal conveyer installation, underground connection with No 3
7. Conveyer belt, 3 feet wide, running to the roof of the new boiler house
8. Machine house of the coal transport installations
9. Building with unknown purpose, two rooms separated by a wall. Room 9a was provided with a gangway, 9 feet high, passing several iron boxes about 25 feet high and 12 feet wide. Warm air was blowing out of these boxes, which were installed at some intervals.
10. New boilerhouse
11. Oldest part of the power plant, several floors, comprising the old boilerhouse, the old turbines, and the administration; five smokestacks, 25 feet high, at irregular intervals on top of this building.

Total dimensions of the main building: 550 feet long, the widest part was 250 feet wide, and the highest part 90 feet high.

Legend to annex 4

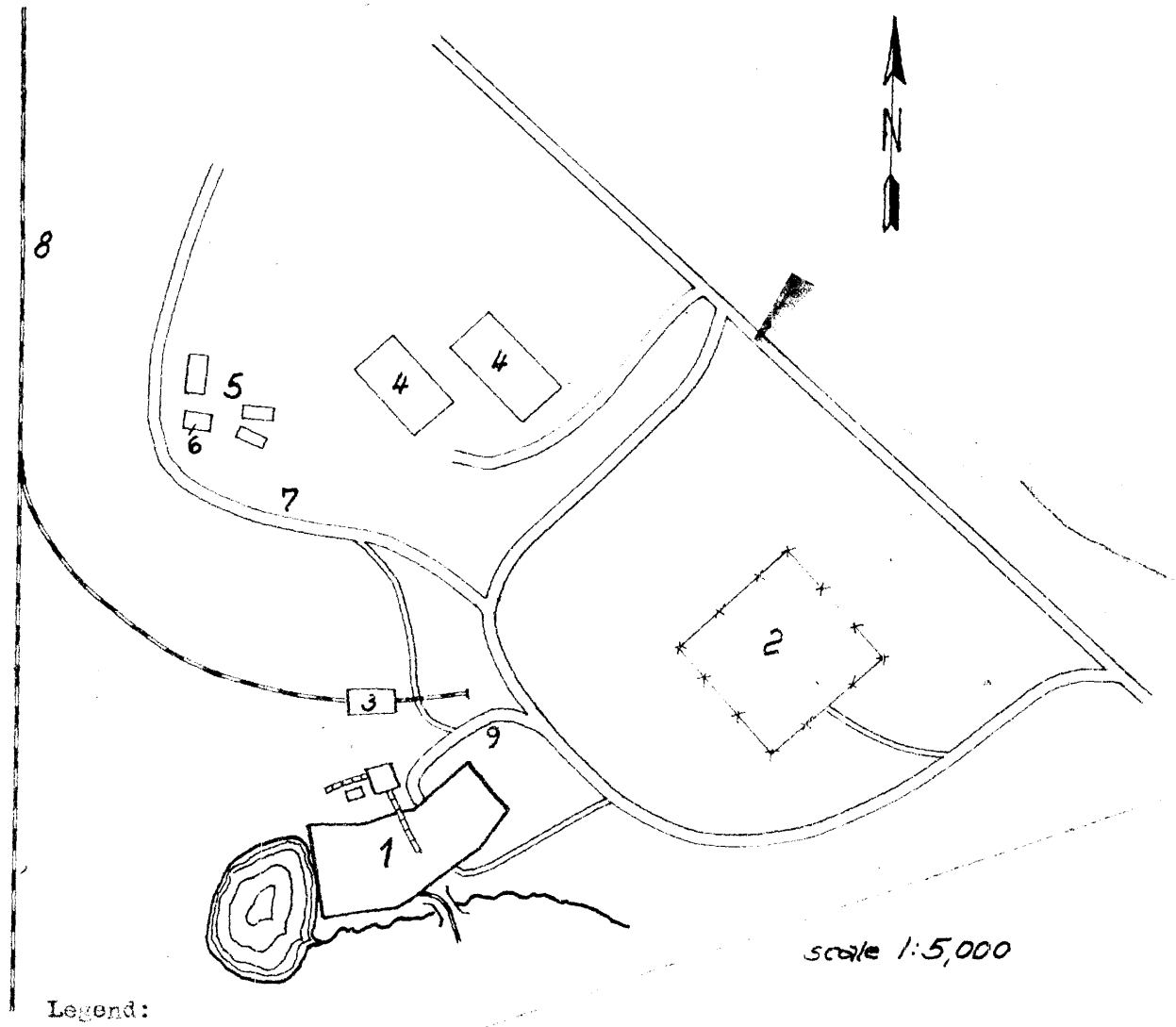
(Ground plan and elevation sketch of the new turbine hall).

1. Bases for two new turbines
2. Base with iron lid from under which roaring of water could be heard
3. Solid wall, 20 feet high and 6 feet wide
4. Outer wall
5. Bridge across a ditch
6. Ground level outside of the power plant, 25 feet above the floor of the turbinehall.
7. Two openings in the wall, 6x9 feet deep.
8. Passages for pipe into the adjacent building
9. Passages for pipes into the new boiler-house
10. Ditches, about 3 feet deep and 2 feet wide
11. Conical ditches, 2 feet deep and 1½ feet wide at the surface.

CONTROLLED DISTRIBUTION

Annex 1

Power Plant in ARTEMOVSKI near YEGORSHINA, Sverdlovsk Obl.

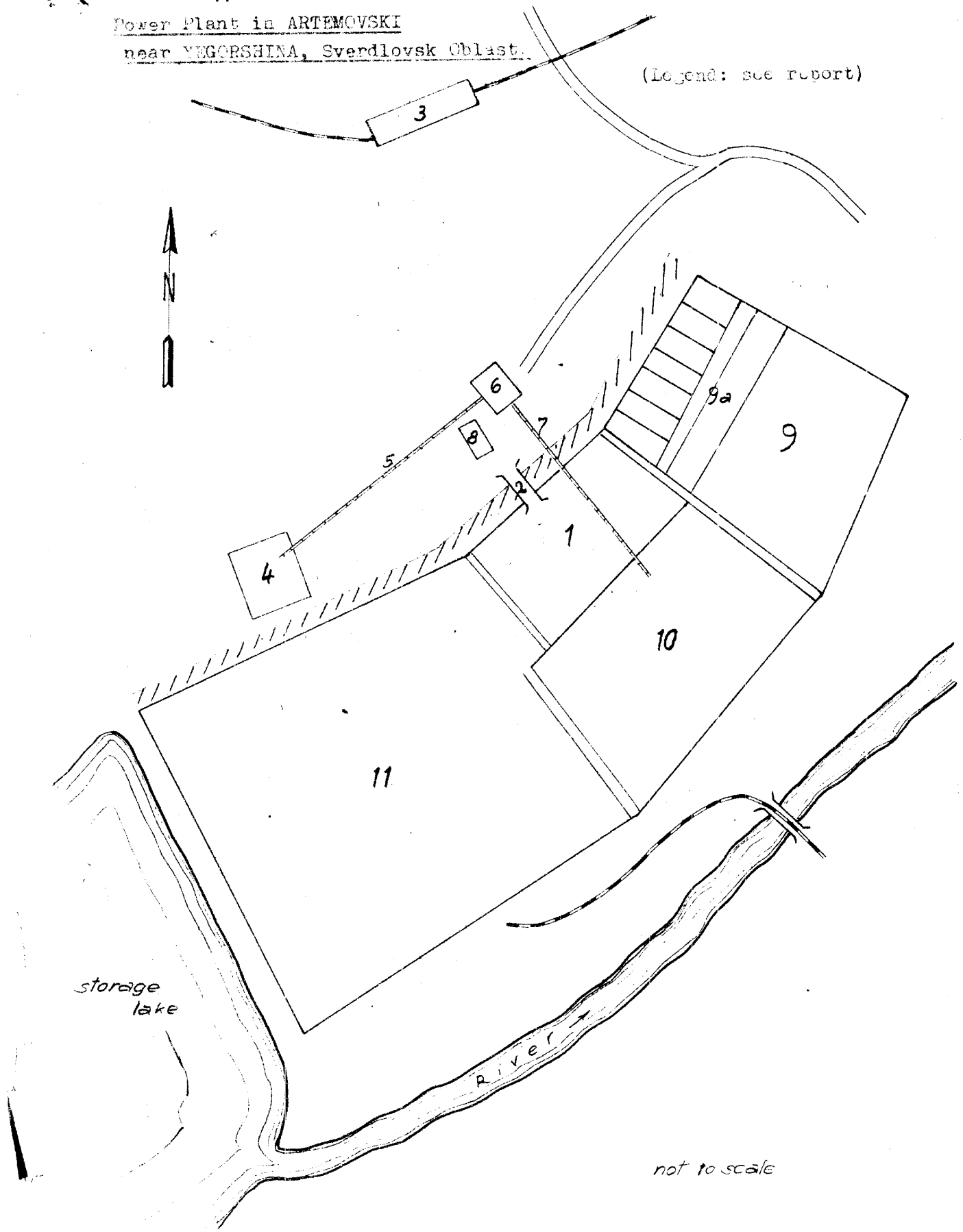


Legend:

1 Power plant
2 PW camp No. 7531/5
3 Unloading station
4 Workshops of the "Mash Zavod" Machine Factory
5 Settlement of the machine factory
6 New clubhouse
7 Road to YEGORSHINA
8 Railroad line to YEGORSHINA
9 Metalled road under construction since 1947

Power Plant in ARTEMOVSKI
near YEGORSHINA, Sverdlovsk Oblast

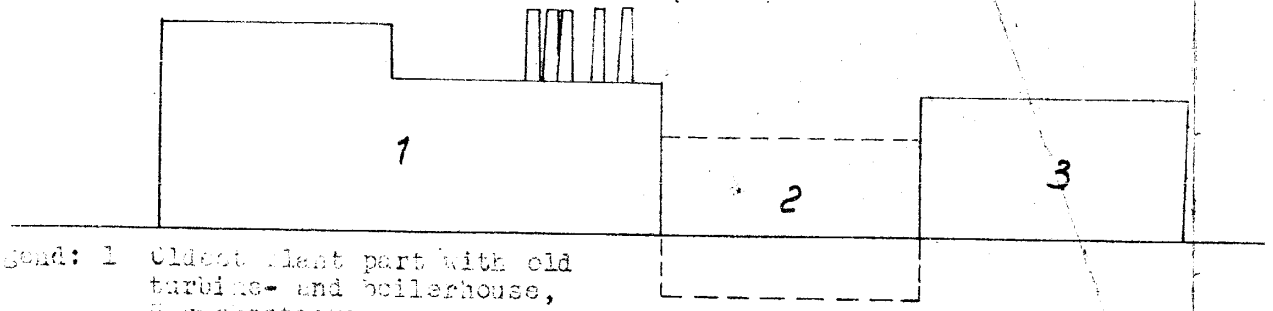
(Legend: see report)



CONTROLLED DISTRIBUTION

Annex 3

Power Plant in ARTEMOVSKI near YEGORSHINA, Sverdlovsk Oblast.



Legend: 1 Oldest plant part with old turbine- and boilerhouse, 8 smokestacks

2 New turbinehall, the bottom of which was 85 feet underground (the turbinehall was hidden behind the new boilerhouse (No. 10 of Annex 2) and could not be seen from this side

3 Plant part with unknown purpose (Also see Item No. 9 of Annex No. 2).

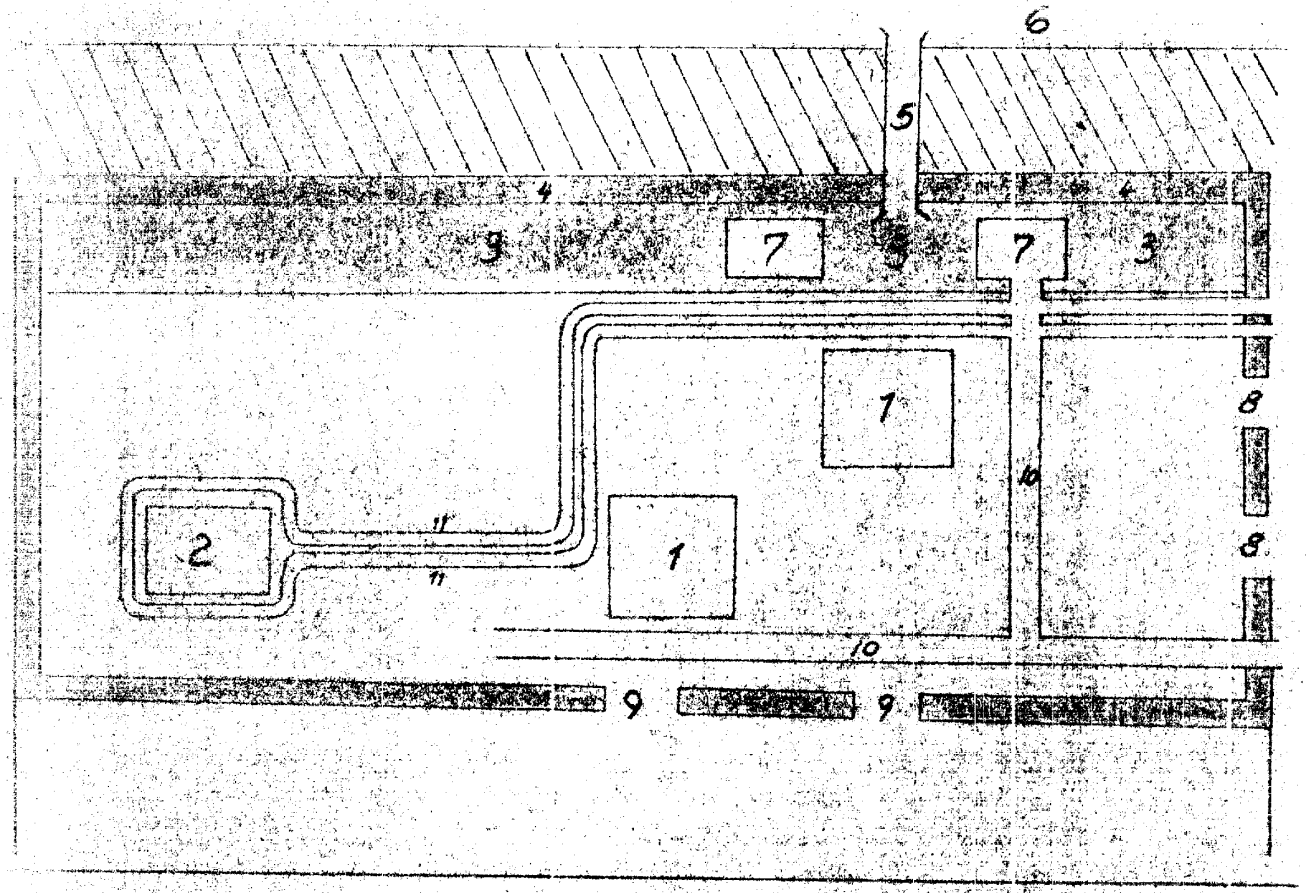
not to scale

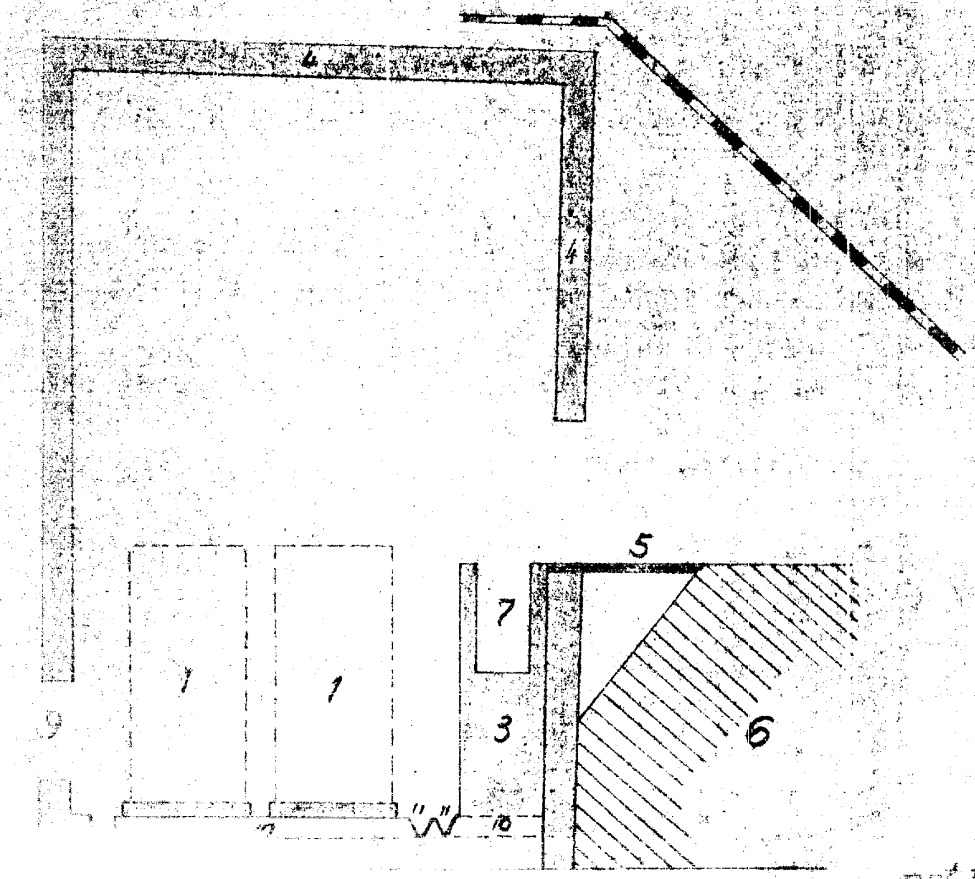
Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

Annex 4

Plant in ARTEMOVSKI near YEGORSHINA, Sverdlovsk Oblast.

(Legend: see report)





COUNTRY Soviet Union REPORT

TOPIC Turinski Aluminum Plant

25X1A EVALUATION [redacted] 25X1A

DATE OF CONTEN[redacted]

DATE OBTAINED [redacted] EPARED 4 May 1950 ANNEX NO

REFERENCES

PAGES 8 ENCLOSURES (NO. & TYPE) 2 Blueprints

REMARKS

SOURCE [redacted] 25X1X

1. Location: West of Turinski (60°12'E/59°46'N), Sverdlovsk Oblast, northwest of the railroad station, and northeast of a reservoir.
For location, see Annex 1.

2. Plant installations: The plant covers an area of about 1,350x720 meters. Source learned from Volga Germans that construction of the plant started in 1942. The new town of Sosgorod-Turinsk, the railroad bridge and the reservoir have been built since 1945. The "5 Series" plant to the east was also constructed during this period. The installations were still being enlarged during the time of observation. The steel frame of the new battery is the same size as the old installation. It was planned to double production with the operation of the new plant installations, some of which were under construction and some finished. Power is supplied by the plant-owned power plant, which covers a large part of the old plant area. There is a railroad connection. For plant layout, see Annex 2.

3. Work force: Source did not know the number of workers, which included 12,000 convicts from four large labor camps.

4. Production: Aluminum ingot molds of three types.

25X1A [redacted] Comment:

a. The location sketch is of value, and can be important in locating the aluminum industry installations in the Turinsk area. Pinpointing is impossible because of the lack of suitable maps (scale 1:100,000 and 1:50,000).

b. According to the above and two previous reports,* a rather new aluminum plant is just at the northwestern edge of Turinsk. This is believed to be correct. Location of the newest part of the plant, called "5 Series" by all

sources, also seems to be correct, indicated as east or northeast of this plant. It is certain, that the two parts of the plant are separated by the Turinsk-Karpinsk railroad line. No clarification could be obtained on the location of the oldest part of the plant. Construction of this section was started in 1939. According to clear records, it is located at some distance from Turinsk, in the direction of Nogoslovsk.
A factual picture, as to whether there are several aluminum plants in the Turinsk area and whether even the wartime records are incorrect, cannot be had without map material.

c. The sketches of the aluminum plant at the northwestern edge of Turinsk are very much at variance, although they correspond in certain details. Additional information is required for a clear picture.

2 Annexes: 2 Blueprints, Aluminum Plant in Turinski

Legend of Annex 2:

A Aluminum plant

1 Board fence

2 Small fitting shop

3 Four wooden cooling towers

4 Enlargement of the turbine house, with seven foundations for turbines in staggered position

5 Generator station in operation

6 Boiler house with attached parallel house and two smokestacks, railroad connection and slanting coal dumps. 20 railroad cars could be unloaded simultaneously

7 Kitchen and messhall

8 Storage shed with aluminum ingot molds

9 Large building belonging to the power plant, presumably boiler house

10 Small fitting shop, carpenter shop and storage of electrodes

SS

11 Small fitting shop

12 Furnace batteries in operation, separated into two sections by a wall and the office. Each section with two traveling cranes. Each crane operates two lines of furnaces. The building is a steel structure with brick lining, the walls and roof are widely glassed, dimensions 540x45 meters

13 Office

14 New office building with showers

15 New administration

16 Workshop, 180x90 meters

a Forge

b Mechanical department

c Foundry with two furnaces, working for plant requirements

17 Storage with molds and all types of tools

18 New electrolysis department under construction, same size as No. 12, steel frame and smokestack completed. Construction of furnaces started. The scheduled date for the completion is November 1949; presumably this date will not be met.

19 Soda stores

20 Bauxite depot

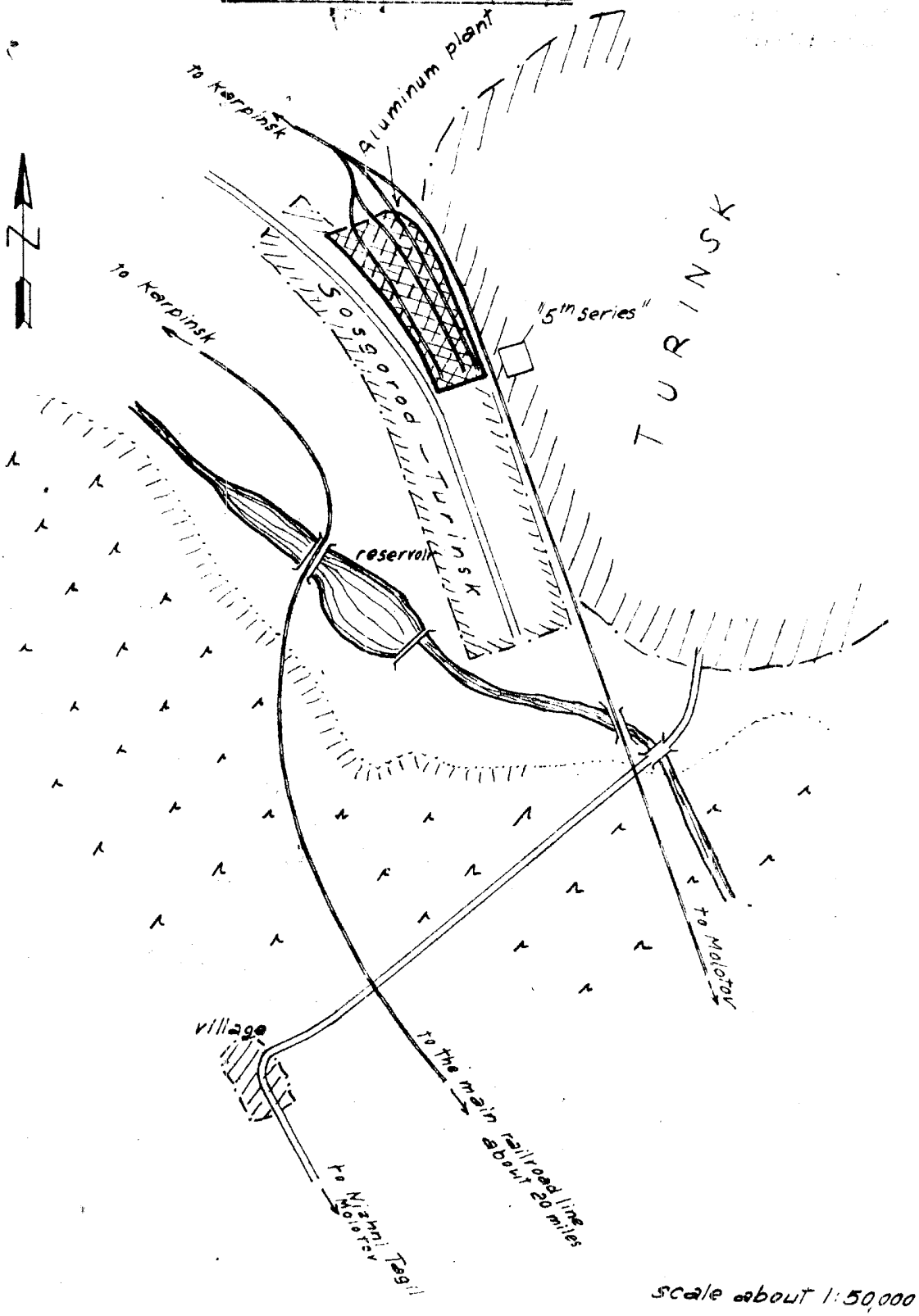
21 Machine shop, black walls, further details are not available

22 Two so-called washing plants, each with one drum of 9 meters diameter

23 Bridge for the wires loading from the power plant to "5. Series" Plant across the railroad tracks

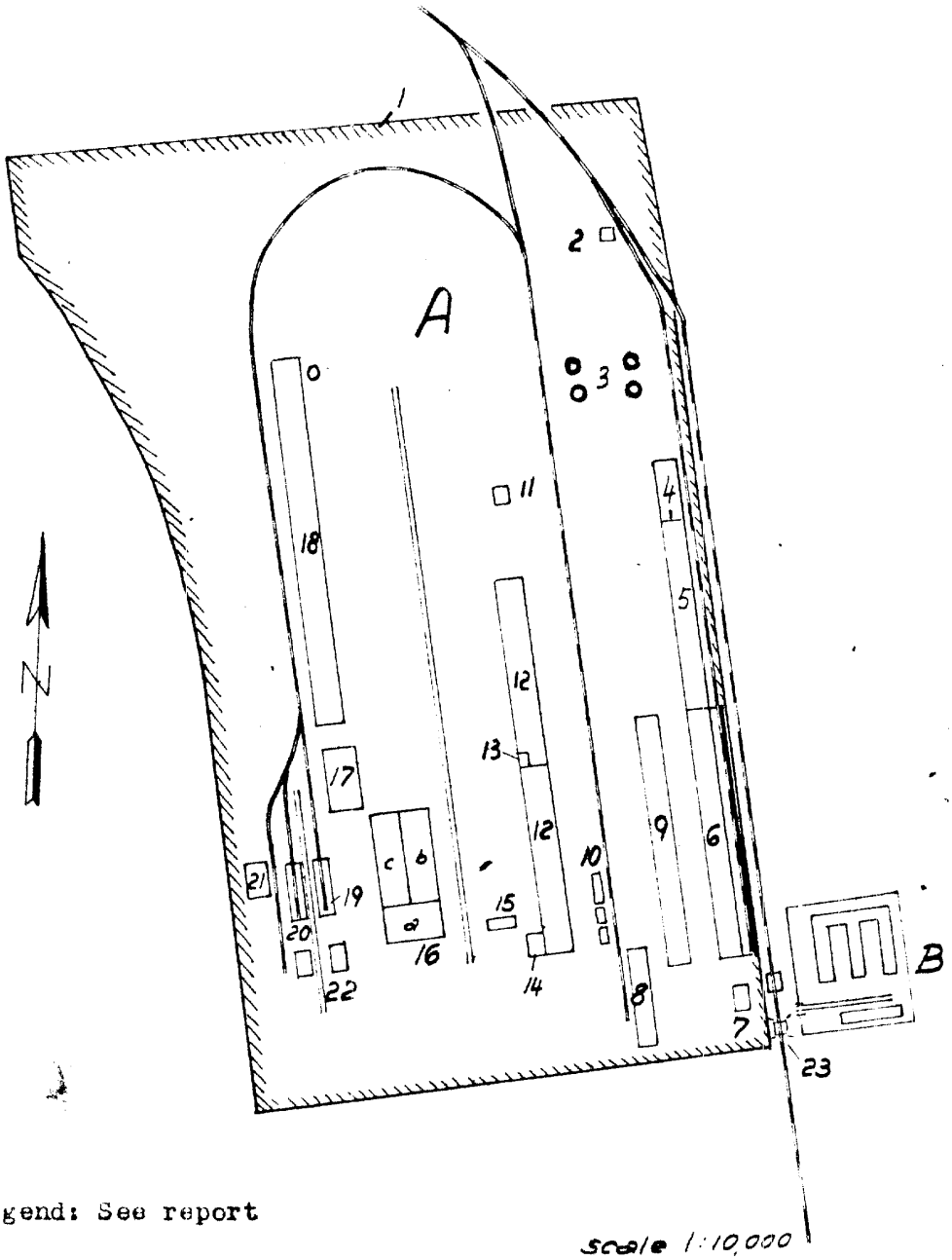
B "5.Series" Plant, about 180 meters square, with board fence, was said to be very secrete MG towers were located at each corner of the plant. Source never heard any noises nor learned anything about the production. No smoke-stacks were seen. Source observed from the higher located railroad station three side wings and the upper story of the front wing in the north. The shape of the building entered on sketch was his assumption. The buildings are white concrete structures with windows of milk glass.

Aluminum Plant in Turinski



scale about 1:50,000

Aluminum Plant in Turinski



Legend: See report

Scale 1:10,000

CLASSIFICATION SECRET CONTROL (US) OFFICIALS

COUNTRY Soviet Union REPORT

TOPIC ASBEST Asbestos Plant No III

25X1A

25X1A EVALUATION [redacted] NED [redacted]

DATE OF CONT Annex II

DATE OBTAINE E PREPARED 26 January 1950

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 1 blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location:

Asbestos Plant No III is northeast of ASBEST (61°30'E/57°00'N), Sverdlovsk Oblast, east of the southern section of the large asbestos pit. Asbestos Plant No II is farther to the north. The PW camp is between the plants. (See attached layout sketch).

2. Plant installations:

The asbestos pit and the remaining factory buildings are obsolescent. The main pit was being considerably expended during the period of observation. The railroad sidings and installations are, according to source, relatively new. (For plant layout see Annex.) There are railroad facilities.

3. Work force:

Three hundred Soviets and 150 PWs in each of the three shifts.

4. Production:

Asbestos, loose and packed in sacks; twelve to fourteen 60-ton railroad cars per day.

25X1A [redacted] Comment:

a. This is the first detailed information on the ASBEST Asbestos Plant No III. The statements on the location agree with a previous report on the ASBEST industrial installations except for the location of the Red October Plant (see sketch 1). As source also worked in the large asbestos pit, the reported location of the plant immediately beside the pit is considered correct.

b. The data on the plant and its installation require confirmation.

1 Annex: ASBEST Asbestos Plant No III.

Legend to Annex, Sketch No 1

Location of plants and asbestos pit.

Legend to Annex, Sketch No 2

Layout of Asbestos Plant No III

1 Crusher, 75 x 90 x 150 feet, where the dump cars arriving on a 35-foot high track are automatically tipped and their loads crushed.

2 Conveyor system, 60 feet long and covered with wood.

3 Workshop with two sections (a,b). Both sections can work separately. A 500-horse power AEG engine is in the cellar.

4 Pulverization department, 75 x 90 x 360 feet.

5 Storehouse, 75 x 90 x 360 feet

6 Conveyor belts for the loading of asbestos (loose asbestos coming from the pulverization department or asbestos packed in sacks coming from the storehouse.)

7 Forge

8 Fitting shop
9 Welding shop, wooden structure

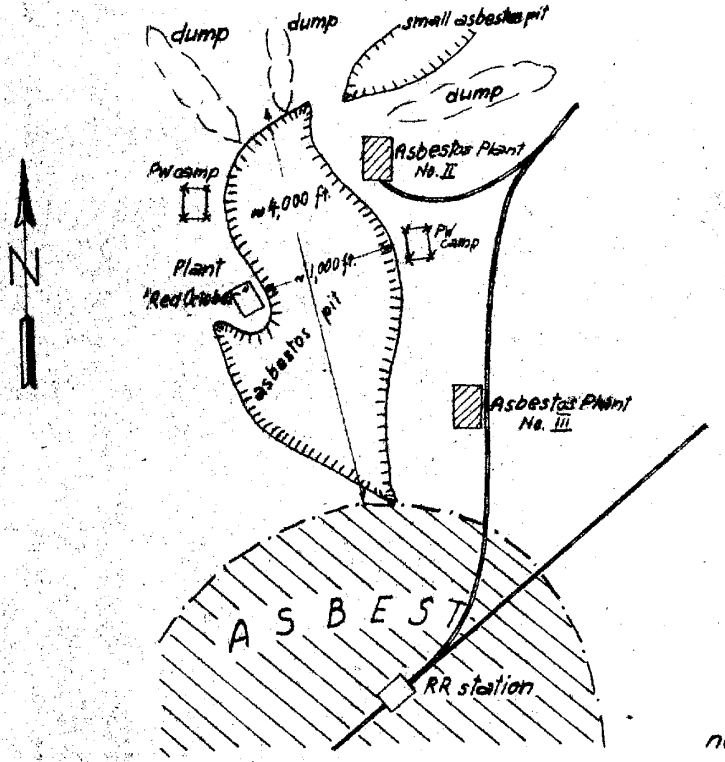
10 Administration and kitchen

11 Administration building

12 Rubbish dump

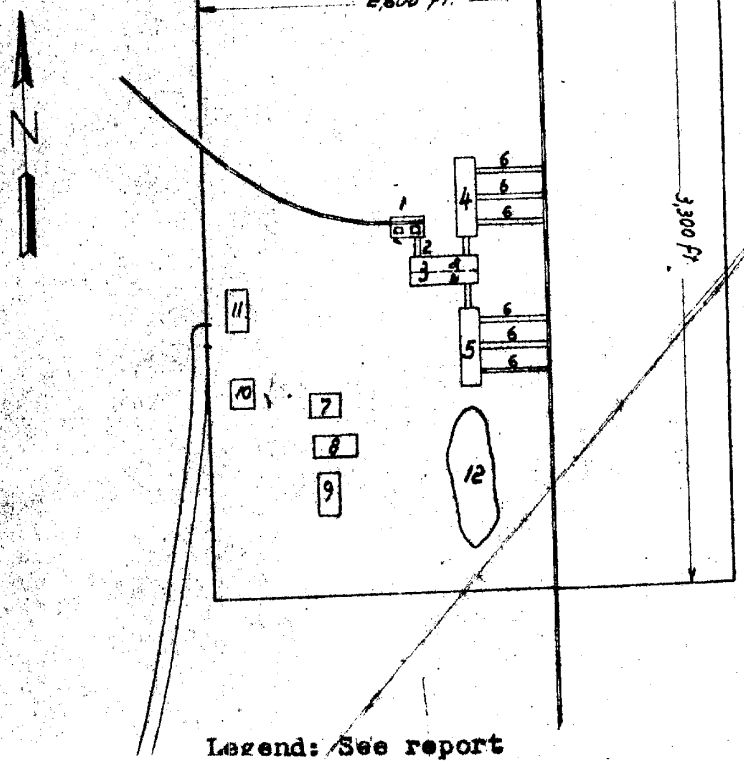
ASBEST Asbestos Plant No. III

Sketch No. 1



not to scale

Sketch No. 2



Legend: See report

not to scale

COUNTRY Soviet Union REPORT NO.

TOPIC Khimmash Machinery Plant in Sverdlovsk

25X1A [redacted] 25X1A

EVALUATION

DATE OF CONT

DATE OBTAINE D 18 April 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location:

The Khimmash Machinery Plant is about 13 km SSE of Sverdlovsk (60°40'E/56°50'N), Sverdlovsk Oblast, south of the southern edge of a lake.

2. Plant installations:

The plant is an old installation. German PWs erected two additional large work halls. One of these halls was completed in January 1949, but only the foundation for the second hall was laid at the end of the time of observation. A railroad connection is available. For plant layout see Annex.

3. Work force:

Three shifts of several thousand workers.

4. Production:

Source observed the production of pumps, crankshafts and cogwheels.

25X1A [redacted] Comment:

a. The Khimmash Plant was reported several times before*.

b. The accurate sketch on the location of the plant makes this report especially valuable. The saw mill east of the plant was previously reported but the machine plant to the south is mentioned for the first time.

c. Earlier reports listed a larger number of plant buildings which are not shown on the schematic sketch furnished by source. The reported location of the most essential plant buildings within the plant area appears to be correct. The dimensions given for the plant area do not correspond with the figures listed in

UU

previous reports according to which the plant area is considerably larger.

d. The information furnished with previous reports is not sufficient to clarify the details regarding the exact plant layout, the size and type of construction of the individual work halls.

1 Annex: Blueprint, "Khimmash" Machine Manufacturing Plant in Sverdlovsk

* (Air) IGL-2269

Legend of Annex:

1 Entrance and administration building, 70 x 15 x 15 meters

2 New construction, purpose not known, 100 x 100 x 15 meters

3 Work hall, 150 x 30 x 15 meters, Plant department No. 3

4 Lathe shop, 100 x 30 x 15 meters, Plant department No. 2

5 Kitchen

6 Plant department No. 1, 100 x 50 x 15 meters

7 Excavation for a new building, 100 x 50 meters

8 New boiler house, 30 x 20 x 15 meters

9 Plant department No. 6, forge, 100 x 50 x 15 meters, smokestack

10 Old boiler house, 15 x 8 x 7 meters, with six vertically installed boilers

11 Plant department No. 5, foundry, 100 x 50 x 15 meters

12 Plant department No. 22, L-shaped building, each wing 20 meters long, storage shed

13 Plant department No. 21, 20 x 8 meters

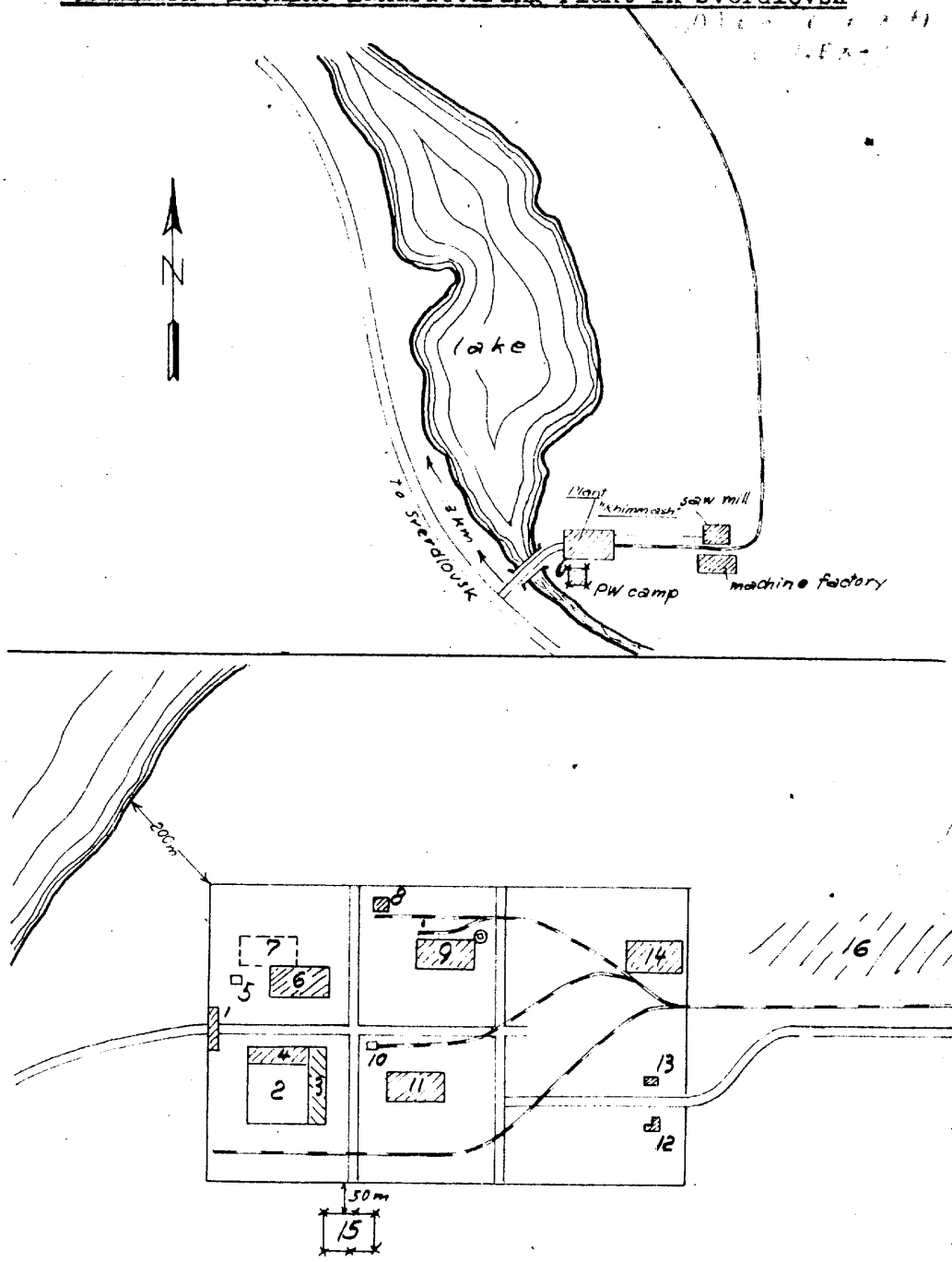
14 Plant department No.20, carpenter shop, 100 x 50 x 15 meters

15 PW Camp No. 7314/4

16 Coal storage

Note: Plant departments 1,5,6 and 20 are steel structures with masonry and flat roofs with sky lights.

"Khimmash" Machine Manufacturing Plant in Sverdlovsk



Legend: See report

not to scale

COUNTRY Soviet Union REPORT NO.

TOPIC Aircraft Engine Plant No. 19 in MOLOTOV 25X1A

25X1A

EVALUATION [redacted] D [redacted]

DATE OF CON [redacted] ANNEX VV

DATE OBTAINE [redacted] PREPARED 19 December 1949

25X1A

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE)

REMARKS

25X1X

SOURCE [redacted]

1. Location: See reference reports.

2. Work force: Twenty-two thousand, according to Soviets.

3. Plant installation: About 30 buildings.

4. Production: Double radial engines, slightly more than three feet in diameter, were occasionally seen.

25X1A [redacted] Comment:

a. The production of double radial engines (Shvetsov model) in Aircraft Engine Plant No. 19 has been confirmed.

b. A work force of 22,000 men is considered too great. Source learned this figure from hearsay.

COUNTRY Soviet Union REPORT NO. 25X1A

TOPIC Plants of the Air Armament Industry in MOLOTOV

25X1A EVALUATION [redacted] PLACE OBTAINED [redacted]

DATE OF CONTENT

DATE OBTAINED DATE PREPARED 11 January 1950

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE)

REMARKS

25X1X SOURCE [redacted]

1. Two other reports do not furnish any new information on the air armament plants in MOLOTOV.

2. [redacted] th 25X1X
war-time production of the MOLOTOV plants.

a. Since A.D. SHVETSOV is reported to be chief designer of Plant No. 19, the M-90 engine may also be built there as well as the M-82 engine. This assumption would explain the remark that the observed engines were bigger than the BMW-Hornet engine installed in the Ju-52. Whether the M-90 installed in the Tu-70 is a Soviet construction or only a copy of the R-3350 power plant cannot be determined.

3. The production of airframe parts in the Aircraft accessories Plant No. 33 seems improbable. It is assumed that this plant continues to deliver individual engine parts to Aircraft Engine Plant No. 19. The aircraft assembly plant mentioned in another report seems to be a repair plant of limited capacity since no test flying was observed there.

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COUNTRY Soviet Union REPORT NO. 25X1A

TOPIC Plant for the Processing of Petroleum Residues in Chkalov.

25X1A [redacted]

EVALUATION [redacted] OBTAINED Germany

DATE OF CON [redacted]

DATE OBTAIN [redacted] DATE PREPARED 2 March 1950

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 1 Sketch on Ditto

REMARKS

25X1X

SOURCE [redacted]

1. Location: Plant No. 39 for the utilization of petroleum residues is located about 1½ km ESE of Chkalov(55°08'E/51°46'N) Chkalov Oblast, north of the Ural river and a railroad line running north of the river.

2. Plant installations: The plant, covering an area of about 1½ x 1½ km, can easily be recognized by an about 30-meter smokestack towering above all other installations. There is a railroad connection. For plant layout see Annex.

3. Work force: About 1,000 workers, 400 of whom were PWs and 400 women.

4. Production: Petroleum from oil residues, natural gas from sludge containing natural gas.

25X1A [redacted] Comment:

This is the first information received on this plant. Additional information is required to clarify the dimensions and the construction type of the plant buildings.

1 Annex: Plant for the Processing of Petroleum Residues in Chkalov.

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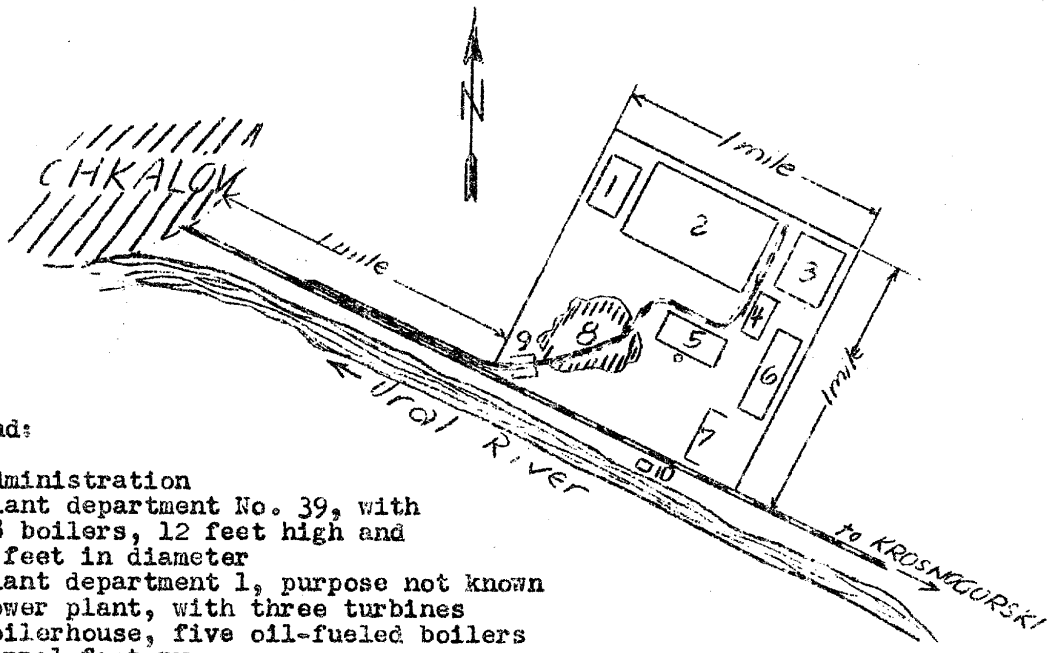
XX

Plant for the Processing of Petroleum Residues in CHKALOV



Legend:

1 Administration
2 Plant department No. 39, with 18 boilers, 12 feet high and 8 feet in diameter
3 Plant department 1, purpose not known
4 Power plant, with three turbines
5 Boilerhouse, five oil-fueled boilers
6 Barrel factory
7 Sawmill
8 Slag dump
9 Loading ramp
10 PW camp

not to scale

COUNTRY Soviet Union REPORT NO.

TOPIC "Bakalstroi" Metallurgical Plant in CHELYABINSK 25X1A

25X1A EVALUATION [redacted] CE OBTAINED [redacted]

DATE OF CONTENT

ANNEX YY

DATE OBTAINED [redacted] DATE PREPARED 14 November 1949

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X SOURCE [redacted]

1. Location: The "Bakalstroi" Metallurgical Plant is located about 12 miles north of CHELYABINSK (61°25'E/55°10'N), Chelyabinsk Oblast.

2. Layout: The entire installation is currently being expanded and will not be completed for several years. A railroad connection is available. Electric current is supplied by a factory power plant (see Annex).

3. Work force: Only Soviets worked in the production shops. Several detachments of convicts and PWs did construction work. Details on the strength of the work force were not available.

25X1A [redacted]omment:

a. The report confirms the current expansion of the plant, whose location was previously reported.

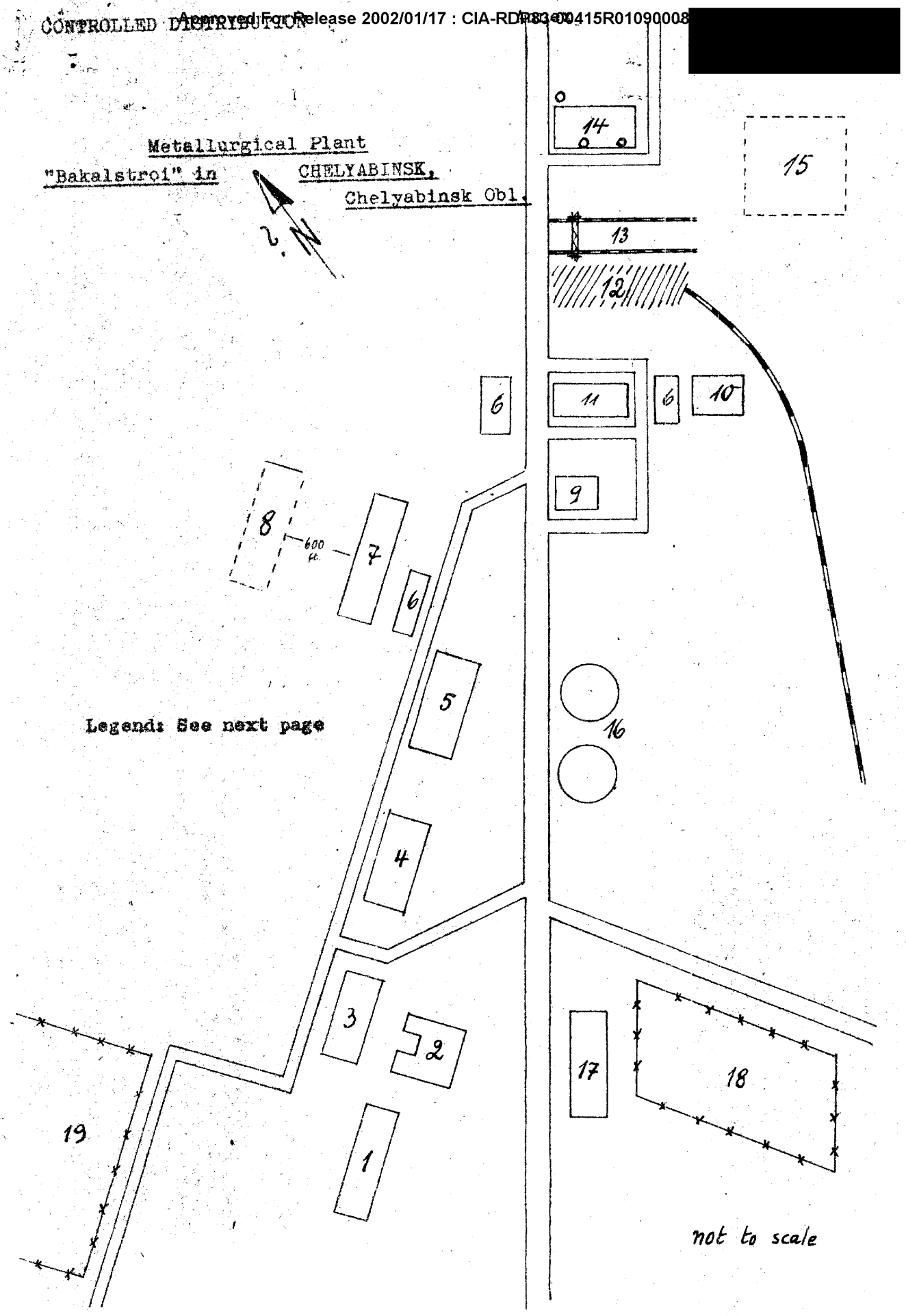
b. The attached sketch covers only the essential departments of this spread out plant. It is of value since it confirms the distribution of important departments as stated in two previous reports. The layout of the plant roads as represented on attached sketch is at variance with available information, and the information on the factory spur tracks is very incomplete.

c. Nothing is mentioned on the construction of a second rolling mill between the PW camp and the old rolling mill (Annex, No 1) as reported by another source. It may be that this construction, allegedly begun in 1948, was not seen.

d. It is doubtful whether the north direction is given correctly on the attached sketch. Further information is required for a clear picture of the actually available plant installations.

1 Annex: Metallurgical Plant "Bakalstroi" in CHELYABINSK.

[redacted]



Legend: See next page

Legend to Annex

1 Rolling mill, 300x120 feet, the installation of German machinery was under way in April 1948
2 Engineer school, 150x180 feet. The school was also attended by women
3 Foundry, 300x120 feet
4 Workshop of undetermined purpose, with offices in the annex
5 Pattern department
6 Administration building
7 Open hearth plant, 300x120 feet, under construction
8 Workshop same as 7, under construction
9 Power plant
10 Foundry
11 Two open hearth furnaces
12 Iron ore dump, with eight railroad tracks on 45-foot embankments
13 Traveling crane
14 Coking plant
15 Factory under construction, no details available
16 Two water tanks, 150 feet in diameter and 120 feet high, one of them under construction
17 Cement plant
18 Forced labor camp, formerly PW camp
19 PW camp

CLASSIFICATION CONFIDENTIAL/CONTROL/US O.

COUNTRY Soviet Union REPORT NO.

TOPIC Chelyabinsk Power Plant 25X1A

25X1A EVALUATION [redacted] ED [redacted] A

DATE OF CONTE ANNEX 22

DATE OBTAINED [redacted] PREPARED 2 May 1950

REFERENCES 25X1A

PAGES 1 ENCLOSURES (NO. & TYPE) 1 sketch on ditto

REMARKS

25X1X

SOURCE [redacted]

1. Location: North of the road to Koneysk, south of Plant No. 78, southeast of Chelyabinsk (61°25'E/55°10'N), Chelyabinsk Oblast.
For location see Annex.

2. Plant installations: The main building was a black structure with gable roof, 100x40 meters, and had eight high iron smokestacks and three large wooden cooling towers beside it. A railroad track entered the plant from the southeast.

25X1A [redacted] ornment:

a. The "Cheg res I" Power Plant is an important installation with a capacity of approximately 300,000 kws, and chiefly supplies power to the two plants in the north, "Kirov" and "Ordzhonikidze".

b. The attached sketch is the first received and shows, except for the route of the railroad line between power plant and railroad station, the correct location of important industrial installations in the eastern section of Chelyabinsk.

c. No details are available on size, plant layout and type of construction of the power plant.

1 Annex: 1 sketch on ditto, Power Plant in Chelyabinsk.

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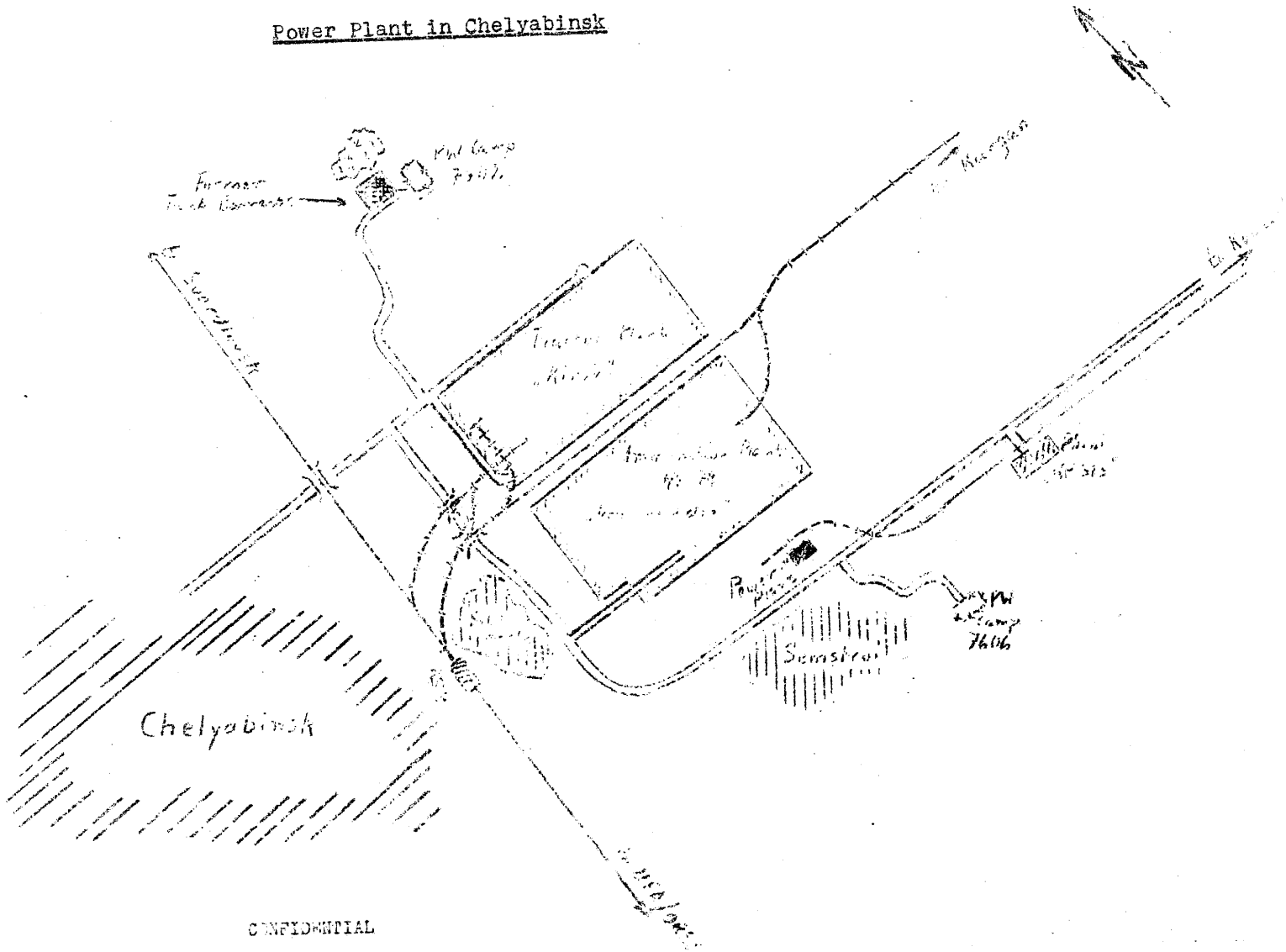
Annex

Power Plant in Chelyabinsk



Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

COUNTRY U.S.S.R. REPORT NO. 25X1A

TOPIC Orsk Refinery

25X1A EVALUATION [redacted]

DATE OF CONT [redacted]

25X1A DATE OBTAINED [redacted] DATE PREPARED 5 July 1950

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE)

REMARKS

SOURCE [redacted] 25X1X

1. The refinery is in the southeastern region of Orsk, Chkalov oblast, on a tributary of the Ural River. The plant covers an area of about 4 sq km and has many spur tracks.

2. The Orsk refinery was built shortly before the war, mainly by American engineers and oil experts. The installations were considerably increased during the war. In the Five-Year-Plan, the installations in operation were scheduled to be doubled. American engineers have allegedly been observed in the vicinity of the plant.

3. Towards the end of the period of observation, there were about eight large, silo-shaped furnaces with distilling and refining towers in the refinery. They were from 8 to 40 meters in height. The main oil pipe line from the various fields of the Emba district ends in the plant area. There is a large laboratory, a transformer station, a pump station and a large number of tank and boiler installations in the plant. Machinery and equipment from the Soviet Zone of Germany, obviously to be installed in the plant, were parked on sidings 4 km long in the vicinity of the plant.

4. About 20 tank cars of finished products, about 1,000 tons left the plant daily. The total work force in the refinery numbered about 1,800 working in two 12-hour shifts. *

25X1A * [redacted] Comment. At the end of the war the Orsk refinery had about five large refining installations and 10 small cracking installations. The total daily capacity was about 4,500 tons. The daily processing capacity of the cracking installations was about 3,500 tons. Aviation fuel, motor gasoline, kerosene, tractor fuel and lubricating oil were produced. The total work force was indicated at 2,000 workmen, working in three shifts.

COUNTRY Soviet Union REPORT NO.

TOPIC South Urals Machine Factory in Orsk 25X1A

25X1A EVALUATION [redacted]

DATE OF CO

DATE OBTAI DATE PREPARED 21 April 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 2 sketches on ditto

REMARKS

25X1A

[redacted]

1. Location:

The south Ural Machine Factory in Orsk (58°35' E/51°13' N) Chkalov Oblast is about 1½ km west of the Ural River and west of the Old-Orsk borough and 180 meters south of the power plant.

2. Plant Layout

a.

According to other Pys who had worked at the plant for a long time, construction work was started in 1943. After the completion of the steel structures for the workshops, the construction work was interrupted until the Spring of 1948. Construction then advanced quickly so that it may have been completed late in 1949.

b. A railroad spur track is available, connecting the plant with the railroad station of the nearby nickel plant.

c. Electricity is supplied by the power plant farther to the north.

d. The plant area is about 350x300 meters. For Plant Sketch see Annex.

3. Work Force

About 1,000 workers.

4. Production:

Railroad flatcars, roller frames, containers for an unknown purpose (maybe for coke-sorting).

B

25X1A

[redacted] comment:

a. The plant was reported everal times. Data lacking before are furnished by source, aespecially on the construction types of the plant buildings.

b. As to the location, source was wrong as the distance of the plant from the Ural River is much greater. According to conforming previous reports, the data of which were confirmed by available maps, the plant is about 8 km west of the Ural River. To delineate the location, a correct location sketch of a previous report is attached (Annex 2).

c. Except for the inaccurate location, the report is of value and represents the latest stage of construction at the plant.

With this report combined with previous ones, the above plant appears, as to the target location, sufficiently reconnoitered.

2 Annexes: South Urals' Machine Factory in Orsk.

B

Legend to Annex 1

1 Entrance and guardhouse, 9x4½x4½ meters

2 Plant Department 6, 120x27x23 meters, with flat roof, production of fittings and tin containers of unknown destination. Two paris of plate shears, one punching machine, 20 to 30 welding apparatures, 3 cranes up to 33-ton capacity.

3 Workshop, 90x35x9 meters, with arched roof, consisting of

a. Plant Department 1, speed-lathe shop
b. Tool department with numerous machine tools

4 Plant Department 2, size as item 3, large-scale lathing and drilling shop for large units

5 Plant Department 3, size as item 3, axle-lathing shop and manufacture of rolls.

6 Workshop, 90x25x9 meters, with flat roof, containing

a. Plant Department, 4, lathing shop for rolls and axles
b. Assembly of roller frames

7 Plant Department 5, size as item 6, repair shop of the factory; administration in the 1st floor

8 Hardening shop, 110x18x9 meters, with flat roof, furnished with four hardening furnaces only one of which is in operation. The shop was furnished and equipped as late as Spring of 1948.

9 Forge, 90x18x9 meters, with flat roof.

10 Workshop size as item 9, purpose unknown

11 Warehouse, 45x9x3½ meters, with saddle roof.

12 Wood pattern shop, 55x23x6 meters, with saddle roof

13 Building, 9x7½x4½ meters, with

a oxygen-producing station
b transformer station

14 Foundry and dressing shop, 90x27x9 meters, with flat roof; two casting-furnaces in the furnace shop (a), dressing shop (b) and administration in the upper story.

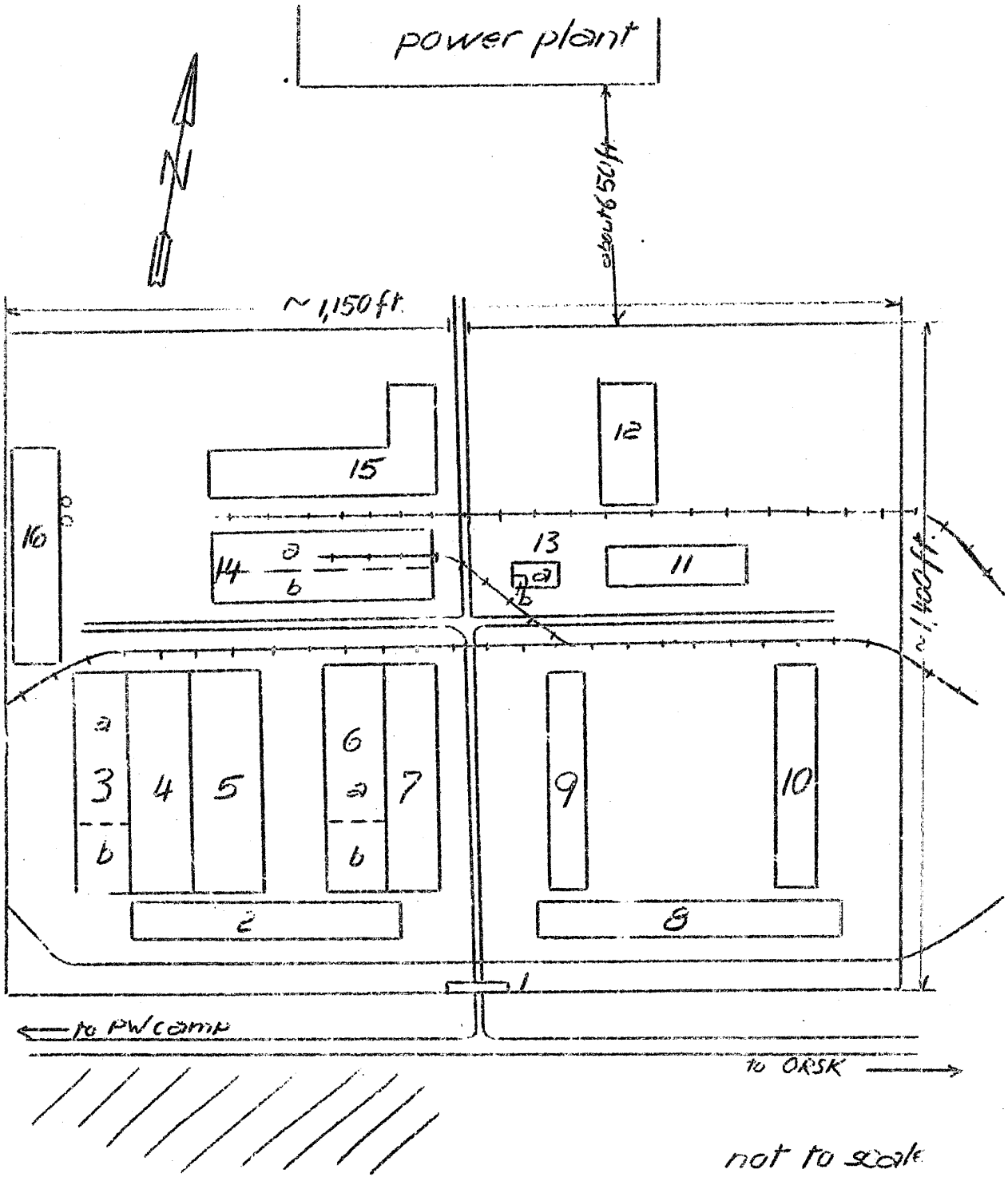
15 Open-hearth department, also called new foundry, with side-wing, 27x27x9 meters, and flat roof. According to Soviets, four German Siemens-Martin furnaces are being installed. It is unknown when they will be put in operation.

16 Rolling mill, 73x18x13½ meters, with flat roof and two brick smokestacks, each 23 meters high and 2.7 meters in diameter. The mill was not yet furnished and equipped.

B

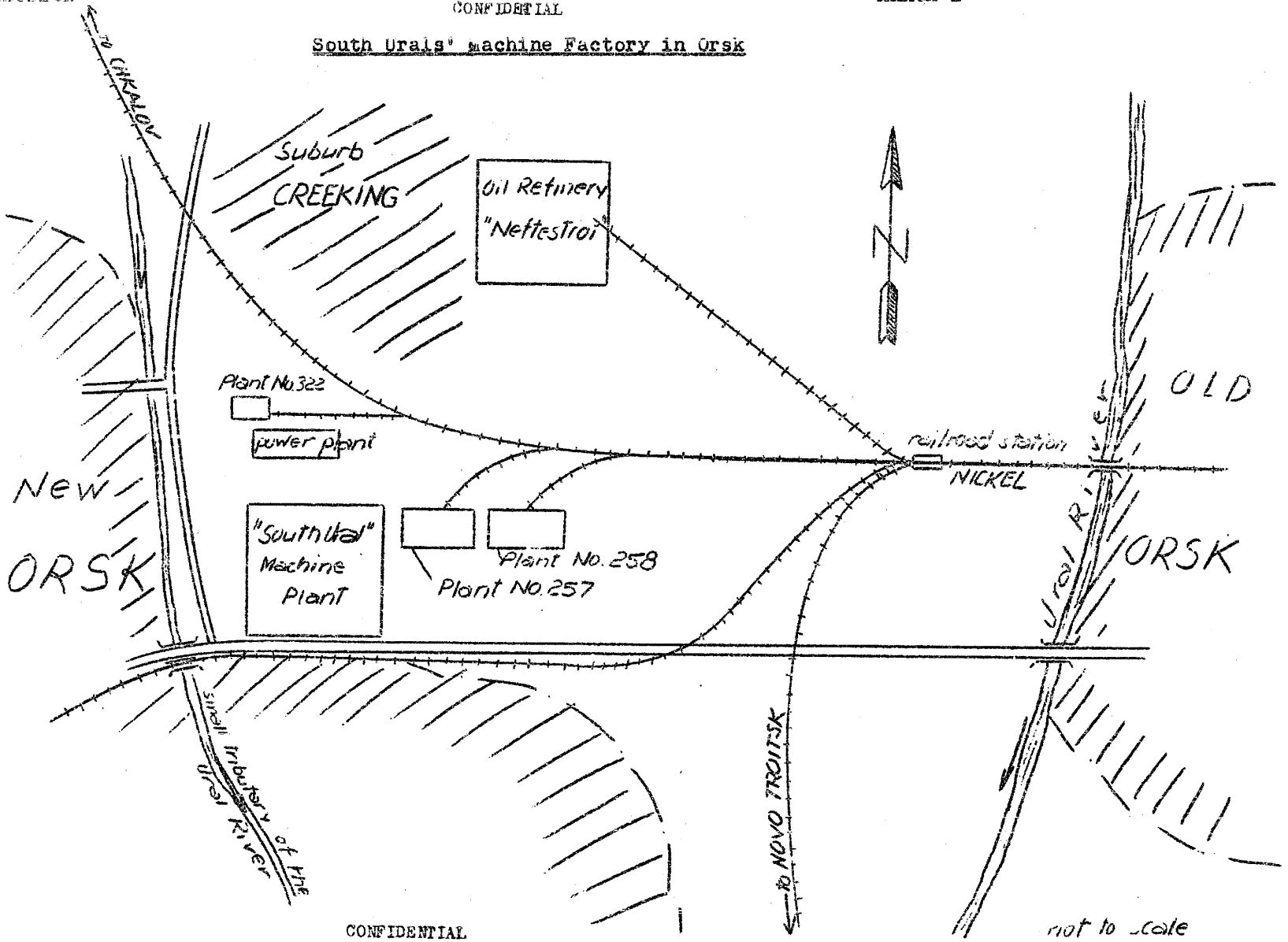
All the workshops are steel structures with brickwork. The flat roofs are covered with sheet metal and tarred boards, the saddle roofs with planks and tarred boards. The arched roof of one shop is made of thin convex concrete-slabs, perforated like sieves and covered with tarred boards.

South Urals' Machine Factory in Orsk



Legends: See report

South Urals' Machine Factory in Orsk



Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

COUNTRY Soviet Union REPORT NO.

TOPIC Combined Nickel Plants in Orsk 25X1A

25X1A EVALUATION [redacted] OBTAINED [redacted]

DATE OF CONT

DATE OBTAINE DATE PREPARED 25 May 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 sketch on dirto

REMARKS

SOURCE [redacted] 25X1X

1. Location:

The nickel combine of Orsk (58°35'E/51°31'N), Chkalov Oblast is several kilometers northwest of Old-Orsk, between the railroad line and the road to Chkalov north of it. Plant No 516, a former ammunition factory, was on the other side of the railroad line.

2. Plant installations:

The plant, about 2,000 x 800 meters, had 16 smokestacks and developed much smoke visible for a great distance. Soviet engineers stated that the plant had only one building in 1939, and that the construction of most of the buildings started in 1941. A new foundry and several small buildings were constructed during the period of observation. Most of the machinery was of American origin. A railroad connection was available. Power was supplied from the outside. Being in a poor condition, access roads were repaired and plant roads were paved in 1949. For plant layout see Annex.

3. Work force:

About 12,000 Soviets and 1,000 to[illegible],200 German internees working three shifts, except for the furnace department working four shifts.

4. Production:

Nickel dust, 16½ tons per day, and nickel plates, 80 x 60 x 5 cm.

25X1A

[redacted] Comment:

a. The plant, previously designated "Yushuranickel" was known from war-time records, according to which it had a work force of 5,000 laborers and an annual output of approximately 18,000 to 20,000 tons of nickel in 1941. Other information indicated that the plant was continuously being enlarged after 1941, and a new town section, called Nickel, was constructed near the plant.

b. The exact plant location could not be determined. Two women returnees reported the plant south of the railroad line to Chkalov, while the present information given the plant north of it. The road to Chkalov alleged to be north of the railroad line is entered on available maps far south of the railroad line. In spite of these divergencies the plant location is assumed north of the railroad line between the Ural River and the Areking Refinery. Clarification by additional sketches with landmarks is required.

c. The attached sketch, the best plant layout reproduction received, needs confirmation.

d. The brief data on production and output are valuable.

1 Annex: Combined Nickel Plants in Orsk.

Legend to Annex:

1 Two unloading shops each long enough to house one train, iron frames with brickwork and sheet-metal roofs. The nickel-earth is shipped by cranes from the bunkers to the conveyor belts and then to further processing. Soviets called the two shops Trabilna.

2 Melting shop, called Plavilna, same construction as No 1 above, has 11 melting furnaces on both sides of a railroad track. The electrically heated furnaces have a capacity of three to seven tons. The processed raw nickel is cast to plates.

3 Drop hammer crushing nickel plates

4 Same building as No 2, has eight melting furnaces for the crushed raw-nickel, also casting plates

Buildings No 2, 3 and 4 are connected by conveyor belts

5 Thirteen shunting tracks

6 Three large bunkers for coke, coal, nickel-earth with grab-cranes for transloading

7 Additional bunkers at the other side of the railroad track

8 Wooden tool shop

9 Mechanical department, 25 x 15 meters with many metal working machines producing spare parts for the plant.

10 Foundry, 20 x 15 meters, brick building with glass roof, the old cast furnace was replaced by a new one with a capacity of 5 tons in 1948/1949. Source worked as a molder in this section

11 Carpenter shop, 50 x 25 meters with a sawframe and wood working machines;for plant requirements.

a. Timber dump

12. Soda storage

13 Brick building, 15 x 10 meters, details not available.

14 Storage dump for wastes, partially in small sheds

15 Open place with Lenin monument

16 Guard and entrance

17 Director's office, 20 meters long, three stories

18 Fire department, red brick building

19 Garage, stone structure building constructed in 1949

20 Kitchen

21 Electric repair department, small wooden building

22 Stone building, 15 x 10 meters with wooden roof, brass rolling mill with one small electric furnace and three small rolls for brass sheets. Raw material is delivered from Plant No 516 beyond the railroad line. The roof was burned in August 1949.

23 Stores with protective clothing for furnace operators

24 Tools and machine parts store

25 Guard house and entrance

26 Three horse stables, most transports within the plant area are horse-drawn.

27 Melting shop, stone structure, 20 x 15 meters with three electric furnaces, final processing of nickel.

28 Transformer station, especially fenced in, with one building

29 Boiler house and heating plant

30 Locomotive shed

31 Main gate with three-story building, with arched passage, dwellings for guards

32 Forge, 15 x 15 meters with four steam hammers

33 Nickel mill, three-story building, 20 x 18 meters, nickel plates are crushed, ground to dust and packed into sacks.

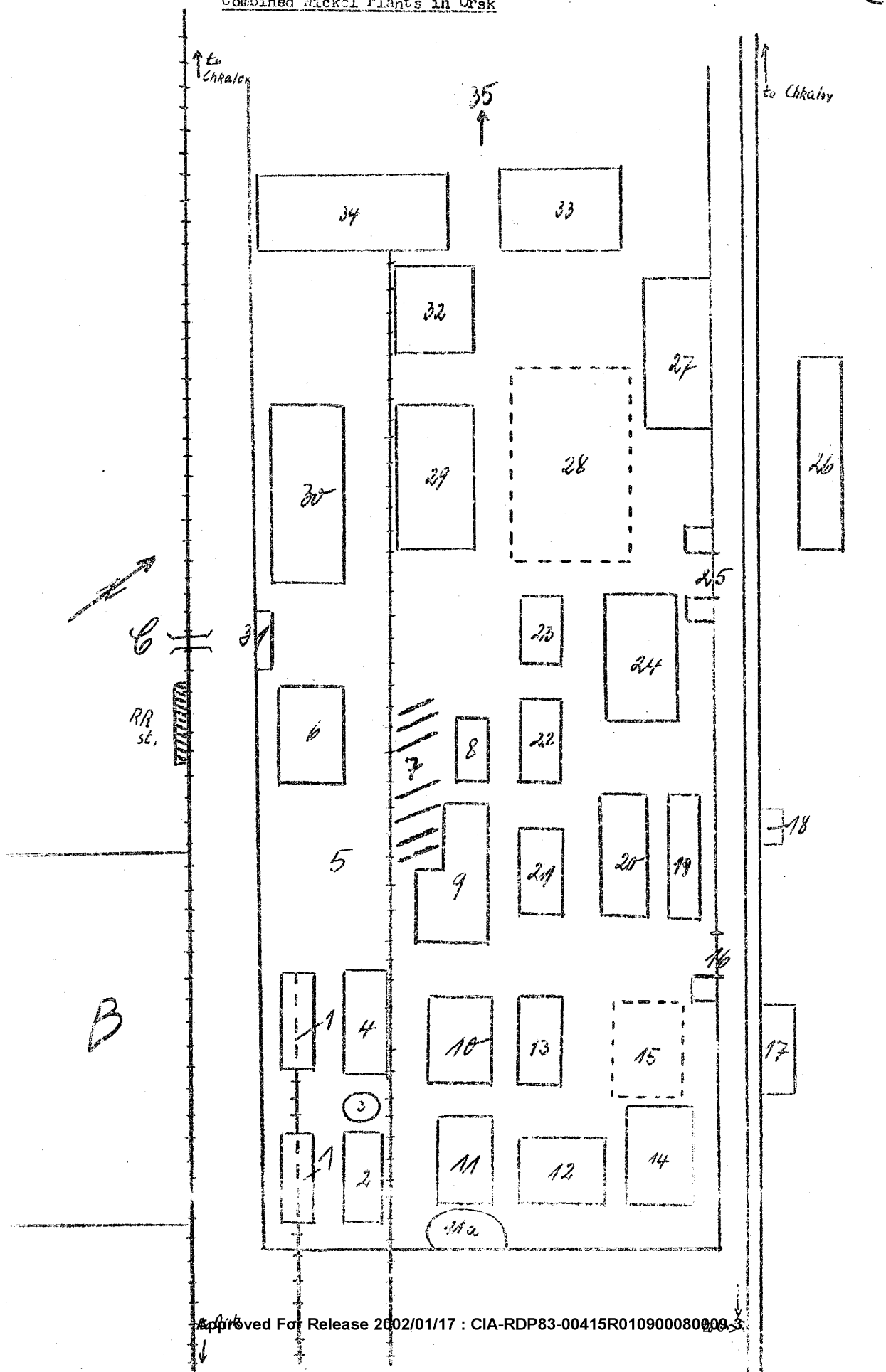
34 Loading shop, brick foundations and wooden superstructure, with loading ramp for four railroad cars

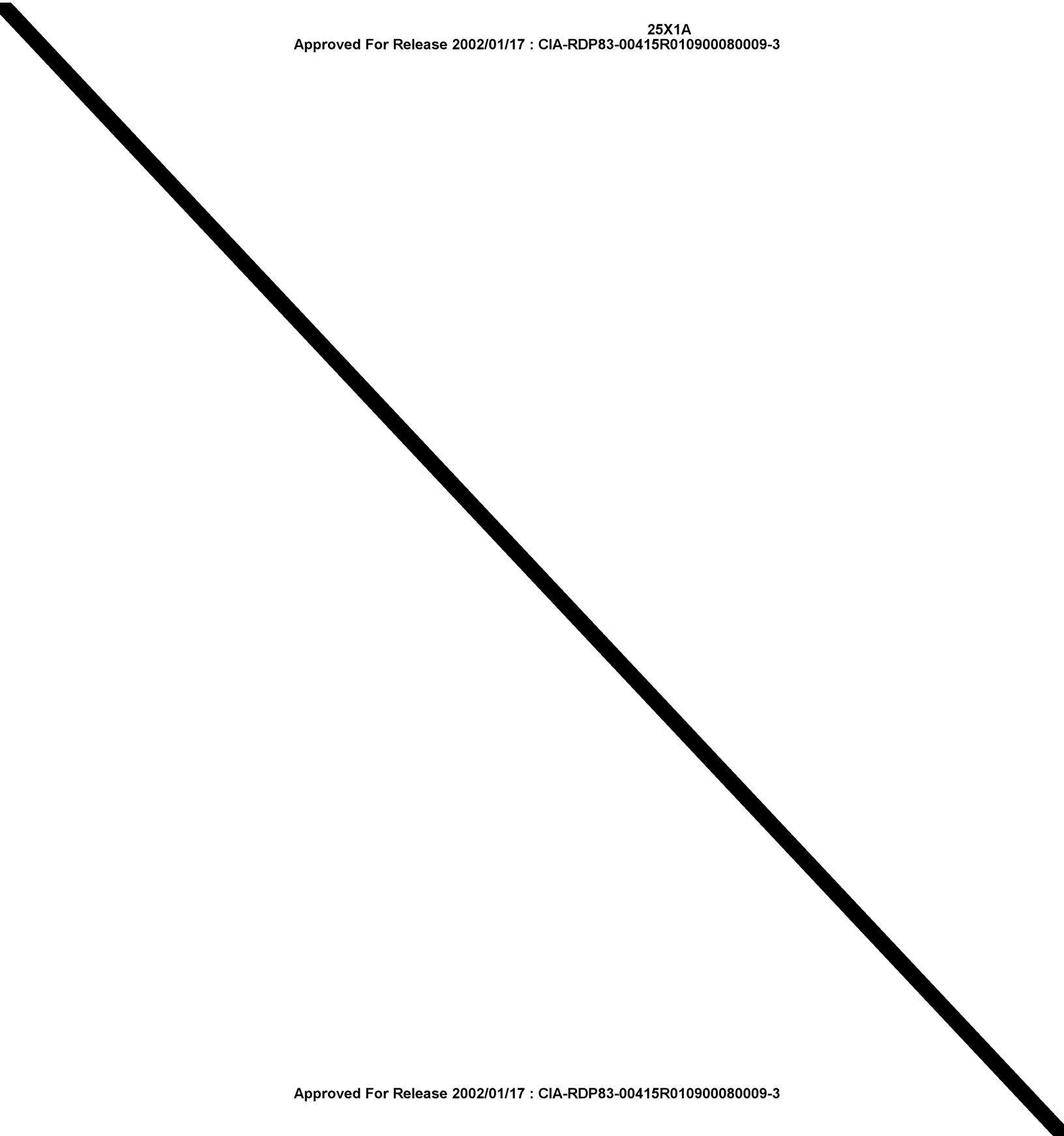
35 Shunting station

B Plant 516, former ammunition factory, about one-third the size of the nickel combine. Wartime production of shells for rifle ammunition and cartridges. Now brass rolling mill. It was said that the plant has a work-force of 2,000 laborers.

C Railroad overpass for pedestrians.

Combined Nickel Plants in Orsk





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INTELLOFAX 5

COUNTRY Soviet Union REPORT NO. [redacted] 25X1A

SUBJECT Factory for Tractor Parts in Chkalov

25X1A

25X1A

EVALUATION [redacted]

DATE OF CONTENT

DATE OBTAINED PREPARED 8 March 1950

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 1 sketch on ditto

REMARKS

25X1A

ANNEX B

SOURCE [redacted] 25X1X

1. Location: In the town center of Chkalov (55°08'E/51°46'N) Chkalov Oblast, near the railroad station.

2. Plant installations: Local residents said that the plant was constructed in 1941 and burned down in 1943. Reconstruction was started in 1945 and scheduled to be completed in 1948. The plant covers an area of 600 x 300 meters. Railroad connection and a plant owned power plant are available.

For plant layout see Annex.

3. Work force: More than 1,000 civilian laborers and 100 PWs. Work was done in three shifts.

4. Production: Ammunition during the war, and tractor radiators, bushings and other bearing parts since the war.

25X1A [redacted] Comment:

Reported plant presumably is the same as the Kirov Plant which was previously reported to be a factory for tractor parts, located in the immediate vicinity of the railroad station. The assumed identity is corroborated by the sketches attached to both reports. Additional information is required for final clarification, especially as to location.

1 Annex: Factory for Tractor Parts in Chkalov (1 sketch on ditto).

CLASSIFICATION SECRET/CONTROL/US OFFICIALS ONLY

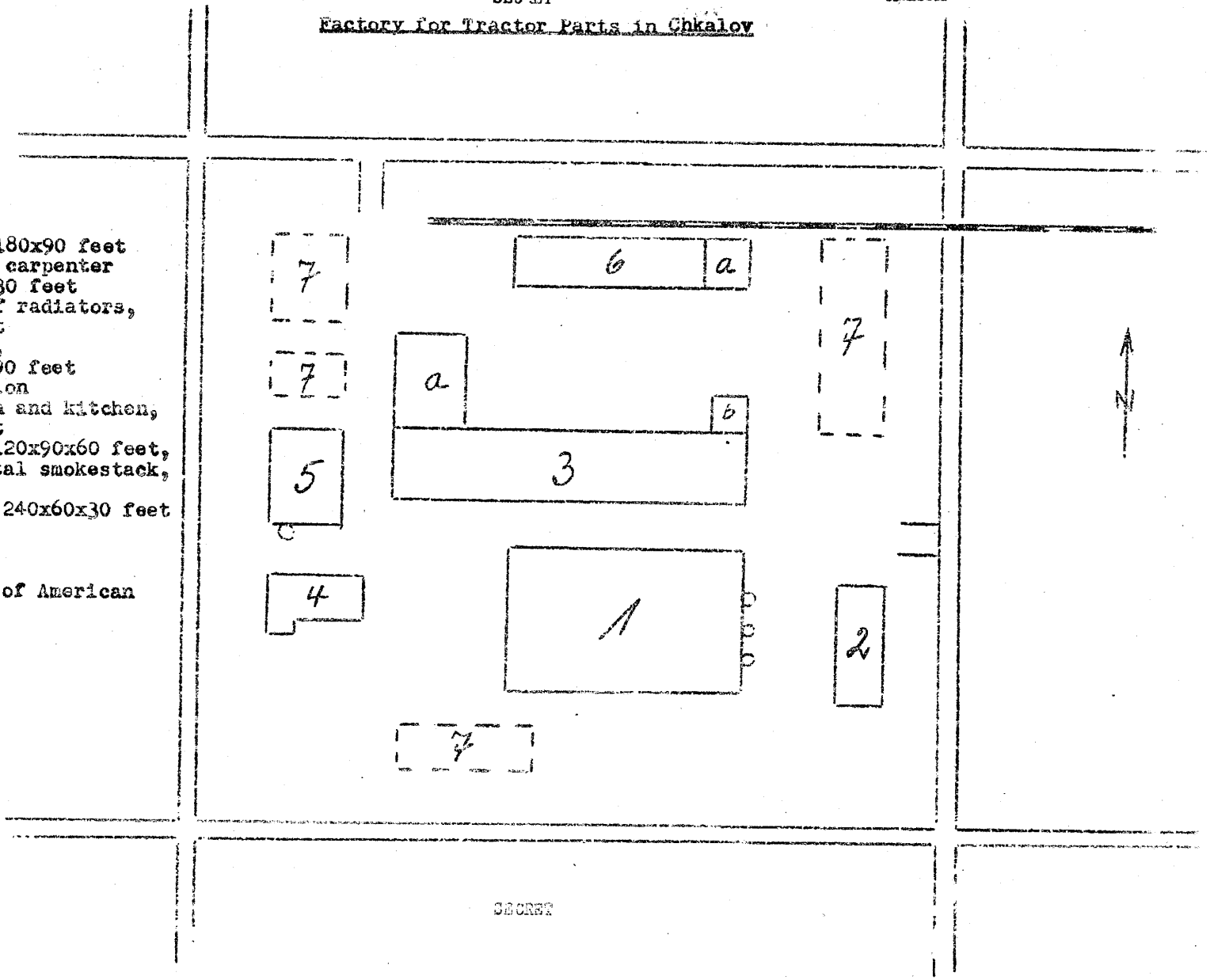
Annex

Factory for Tractor Parts in Chkalov

Legend:

Foundry, 300x180x90 feet
Warehouse and carpenter shop, 150x45x30 feet
Manufacture of radiators, 450x90x45 feet
a Lathe shop, annex 120x90 feet
b Power station
Administration and kitchen, 120x60x30 feet
Boilerhouse, 120x90x60 feet, with sheet metal smokestack, 100 feet high
Fitting shop, 240x60x30 feet
a Garage
Four ruins

The machinery is of American origin.



Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

COUNTRY Soviet Union REPORT NO.

TOPIC Factory for Boring and Milling Heads in Chkalov 25X1A

25X1A EVALUATION [redacted] NED [redacted] ANNEX G

DATE OF CONTENT

DATE OBTAINED E PREPARED 21 February 1950

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location

Between the Chkalov town border (55°08'E/51°46'N), Chkalov Oblast, and the Sakmara River, a tributary of the Ural River. The distance to the Sakmara River is about 600 to 750 meters.

2. Plant Installations

The plant covers an area of about 540 x 300 meters. The buildings are brick structures with sheet metal roofs. A new building was under construction from June 1948 until February 1949. The machinery from Germany was expected to arrive in April. Railroad connections were not available. For plant layout see Annex.

3. Work Force

350 Soviets and 60 PWs working in two shifts.

4. Production

Boring and milling heads in various sizes.

5. The plant location was confirmed by two additional PWs (F-3). Both returnees reported on a second boring machine factory under construction northeast of the town.

25X1A [redacted] Comment:

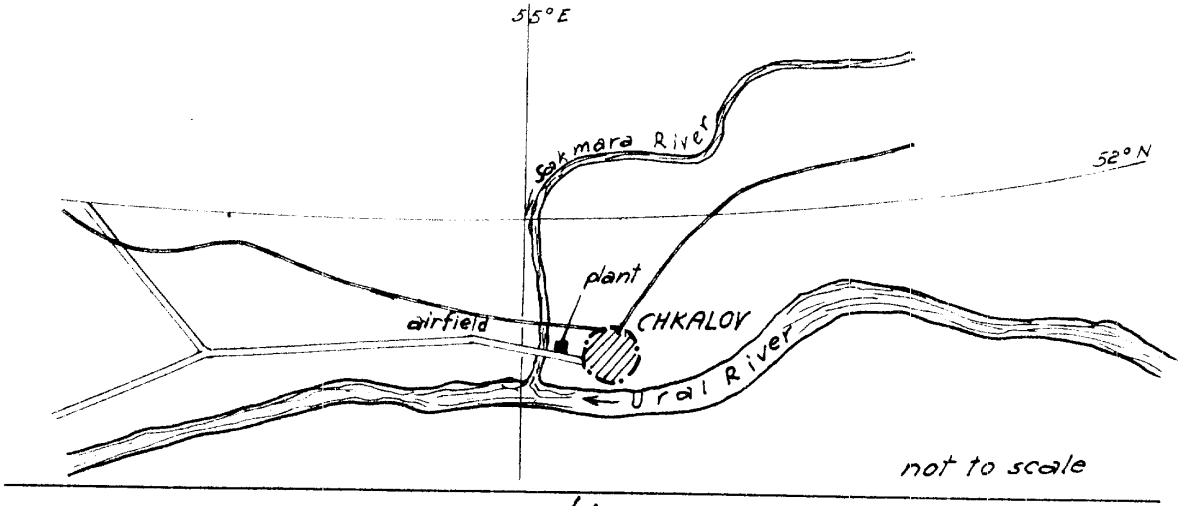
The plant is reported for the first time. No other records on the plant are available. Confirmed by two different sources, the plant location as shown in the attached sketch is assumed to be correct. Other data still require confirmation.

1 Annex: Factory for Boring and Milling Heads in Chkalov

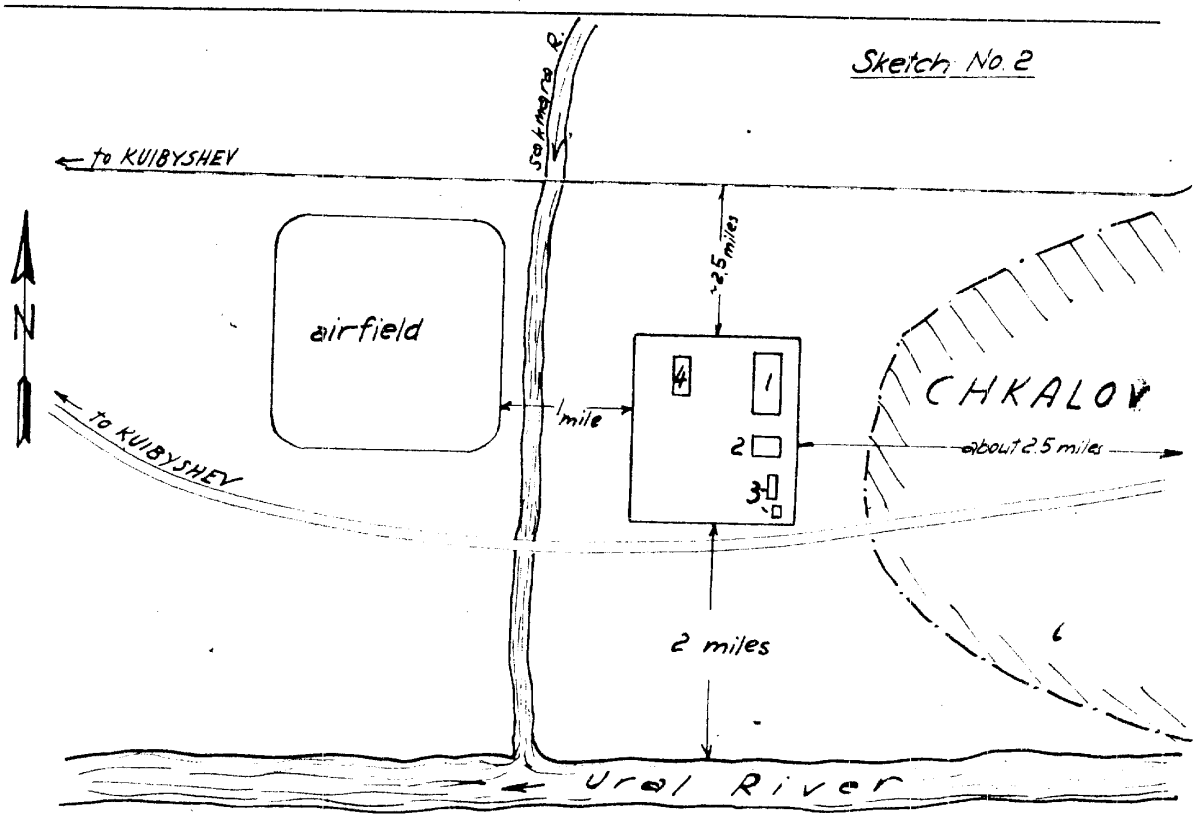
Annex

Factory for Boring and Milling Heads in CHKALOV

Sketch No. 1



Sketch No. 2



Legend:

not to scale

1 Main building, 240x180x50 feet, equipped with four electro annealing furnaces on the ground floor, two more electro annealing furnaces on the second floor and many metal processing machines. The administration was also installed in this building.
2 Lathe shop, 180x75x18 feet
3 Magazine with tools and spare parts
4 New building, 180x100x25 feet, purpose unknown

INTELLOFAX 5 CLASSIFICATION SECRET-CONTROL/US OFFICIALS ONLY

COUNTRY Soviet Union REPORT NO. 25X1A

TOPIC IZHEVSK Industrial Combine

25X1A EVALUATION [redacted] OBTAINED [redacted]

DATE OF CONTE [redacted]

DATE OBTAINED DATE PREPARED 22 December 1949

REFERENCES

PAGES 10 ENCLOSURES (NO. & TYPE) 4 blueprints

REMARKS

25X1A SOURCE [redacted]

1. Plant No 71: (Zavod 71)

a. Area: About 900 acres

b. Location and traffic facilities: West of IZHEVSK (53°10'E/56°50'N), Udmurt ASSR, south of the Lake (see Annex 2). A railroad net covers the entire area. Almost every building has spur tracks.

c. Plant history: According to an inscription, Workshop No 13 (see Annex 2) (Soviet Workshop No 38) was built in 1917. Workshop No 3 (see Annex 2) and the new motorcycle plant

(Soviet Workshop No 55) burned in October or November 1945 and were rebuilt in 1946/1947.

d. Plant installation: (the following enumeration corresponds to the numbers of Annex 2).

Installations recorded:

(1) Motorcycle plant (old workshop building). Five-story building about 650 x 100 feet. In 1947 source went several times to the front of the building for getting pistons for 350-cubic centimeter motorcycles.

(2) Six-story workshop building about 500 x 100 feet, under special guard. No details available.

(3) Motorcycle plant; new workshop building (Soviet Workshop No 55). About 100 x 500 feet, grey plastering, the upper third of the building and the roofing were glazed. Production was resumed in August 1947. Part of the machines allegedly came from the WERNER Plant in CHEMNITZ (N 51/A 6E). The installation of the machinery was done by 30 German engineers. New motorcycles with a piston displacement of 350 cubic centimeters were assembled on the assembly line. The single parts were manufactured in other subsidiary plants and workshops of the Plant No 71. Production on figures are not known.

(4) Rolling Mill: Installations: Gas-fueled annealing furnaces, rolling mill installation for round and square iron, crane installations and traveling cranes.

Production: Castings of about 3 feet 3 inches length and 5 inches square, cast in Workshop No 18 (see Annex 2) were heated in the annealing furnaces and rolled into round or square shapes. Round iron about 20 inches in diameter was generally manufactured. The products were cut to the desired lengths.

The finished products were examined for acceptance by Soviet testing foremen.

(5) Foundry (grey-casting bronze and aluminum foundry) (Soviet Workshop No 52). About 100x130 feet. Workshops housed in this building:

(a) Grinding shop

(b) Pattern molding shop and grey-casting shop

(c) Bronze and aluminum casting shop

(d) Testing acceptance.

Installations: A coke-fueled furnace for grey-casting, about 6½ feet in diameter, 26 feet high; a bronze smelting furnace (coke fueled); each about 6.5 feet square. Coarse emery wheels.

Work force: About 100 men per shift.

Production: Steel and grey-castings: Washing-basin-shaped products, wall thickness from 50 to 70 mm; cast slabs measuring about 63 x 16 x 3 inches, cast blocks 100 mm in diameter and of 70 mm square, all kinds of pulleys, foundation

slabs for engines, all kinds of levers, cylinders for motorcycles; cylinder bushings: 120 mm in diameter, 300 mm high, and 3 mm wall thickness; and allegedly grey cast pistons of about 100 mm in diameter.

Bronze castings: Round materials from 20 to 100 mm in diameter and 300 mm thick; motorcycle control levers.

Aluminum castings: Cylinder heads for motorcycles as well as kitchen pots. Aluminum bars which came by rail were processed and some stored in sheds. The stock was sufficient only for the daily consumption. The output went to the various departments of Plant No 71.

(6) Hardening shop for small parts of motor vehicles. About 500 x 100 feet.

Installation: About 150 gas-fueled annealing furnaces, about 10 x 10 feet and about 5 feet high, in five rows of 30 furnaces each. The gas was supplied by the Gas Work No 27 (see Annex 2). Fire-clay traveling grates passed through the furnace. The materials to be hardened were placed on these grates at one side of the furnace. The materials were heated to the required temperature in the furnace and after passage automatically dropped into the tempering bath.

Production: Screws, nuts, levers, spring parts and bolts were hardened. In a small annex at the eastern side of the workshop was a sand blast machine for outside cleaning of the motorcycle cylinders.

Work force: About 500 Soviet workers.

(7) Searchlight tower. A wooden tower consisting of four 50-foot poles. It had 12 searchlights on top illuminating the plant area at night.

(8) Probable AA gun emplacement: Under special guard and surrounded by an about three-foot wire fence.

(9) Test department.

Installations: Buildings with small partitioned rooms; special machines for all kinds of finishing tests. Testing of automobile parts for tensile, pressing, bending and twisting stress.

(10) Workshop for hardening of steel bands and wires (Soviet Workshop No 16)

Installation: Machines for rewinding and cutting of steel bands and wires as well as furnaces for hardening these materials.

Production: Wires and steel bands in coils about five feet in diameter came from Workshop No 26 (see Annex 2) and were rewound by machines to smaller coils about 20 inches in diameter. These small-size coils were annealed and dipped into a hardening bath. They were later greased.

Work force: Thirty Soviet workmen. The number of PWs was not known.

(11) Hardening shop for large parts. About 650 x 260 feet.

Installation: About 30 annealing furnaces of various design,

fueled with gas and wood. Base of furnaces: 16x26 feet; height: about 10 feet. Gas was supplied by the Gas Work No 27 (see Annex 2).

Production: Crankshafts, round steel and round iron in rolls were processed. Length of the crankshaft, about 5 feet; thickness: 80 mm. The materials to be hardened were trucked to the furnaces. After charging, the furnaces were walled up and heated. The materials remained in the furnaces for three to four days depending on their size. After this process the hardened pieces were not chilled but slowly air-cooled. After greasing, the hardened materials were packed and shipped by rail and truck.

Work force: Unknown.

(12) Workshop for processing submachine gun barrels. Barrel blanks of submachine guns came into the workshop.

(13) Repairshop (Soviet Workshop No 38): About 260 x 100 feet.

Installation: Fifteen lathes, distance between centers: Five feet, Soviet make. Four lathes, distance between centers: Twenty feet, Soviet make. Two vertical boring and turning machines. One lathe with oil pressure control; center distance about 16 feet; British make. One lathe; center distance about 13 feet; French make.

One turret (?) lathe with surface plate; 6½ feet in diameter; Soviet make.
Two iron planers with about eight square meters working surface, one with electric magnetic coupling; Soviet make.
Five shaping machines.
One vertical drilling machine; knee length: 6½ feet; German make.
One vertical drilling machine with push-button control; American make (Carlton).
Two magnetic grinding machines; usable working surface: Five square meters; make unknown.
One magnetic grinding machine; usable working surface: 1½ square meters; German make.
Two magnetic grinding machines; usable working surface: 1½ square meters; make unknown.
Three horizontal drilling machines for making drill holes up to 3 feet 7 inches in diameter; operator's stand about 6½x10 feet, working bench about 10 x 16 feet; height of the machines: 20 and 13 feet, American make.
One horizontal drilling machine, about 19 feet high, German make.
One horizontal drilling machine, about 6 feet high, German make.
One vertical keyway slotting machine, 20 feet high, Polish make.
One vertical keyway slotting machine, 5 feet high, Soviet make.
One milling machine, 5½ feet high, Czech make (Maas).
Two machines for milling cylindrical gear wheels, base of machines 6.5x10 feet; unknown make.
Two machines for milling conical gear wheels, base of machines 6.5x10 feet; unknown make.
One milling machine, base 6.5x6.5 feet, German make (Werner).
One iron planer with 6 square meters' working surface, German make.
One welding apparatus, German make Boersk.

One electric traveling crane, German make.
Various grinding wheels and boring machines.

Power was supplied by the Power Plant No 24 (see Annex 2).

Production: Repair work for the entire Plant No 71. The needed materials were delivered by other departments.

Work force: 150 Soviet workmen and 30 PWs per shift.

(14) Welding shop. It was part of workshop No 38 (see Annex 2). 100 x 65 feet (ground floor and first floor).

Installation: Two welding motor generators; ten welding transformers, 11 Kilowatt output each. One spot-welding machine.

Production: Special welding work was done on parts coming from Workshop No 13 (see Annex 2).

Work force: Ten Soviet workmen.

(15) Large kitchen. About 80 x 260 feet.

Installation: About 40 boilers of 200 gallons each, heated with gas, and German baking ovens.

(16) File factory. 100 x 160 feet.

Work force: About 450 Soviet workmen and 150 PWs per shift.

(17) Iron rolling mill. 650 x 330 feet.

Installation: Only Krupp-Gruson machines, three rolling trains, five gas-fueled annealing furnaces, about 20 x 35 feet.

Production: Iron ingots about 16 x 16 x 63 inches were rolled into four-square iron of 120x120 mm. Bars were cut into 3 to 10 feet lengths and sent in freight cars to the other departments of the Plants No 71. Gas was supplied by the Gas Works No 27 (see Annex 2).

(18) Large electric foundry. About 1,000 x 300 feet.

Installation: Only Krupp machines; the electrical installations were AEG products. The electric instruments had a current strength of 15,000 Amperes.

Production: Bars arriving by rail were recast into castings.

(19) Electro-repair department (Soviet Workshop No 45). About 100 x 100 feet.

Installation: Test stands for materials, armature winding machines and lathes.

Production: All repair work to be done on electrical instruments of Plant No 71.

Work force: Twenty Soviet workmen.

(20) Department for the construction of large iron parts. About 130 x 80 feet (1st and 2d floor).

Installation: On the first floor: Two forge fires, two

straightening plates of 13 x 6½ feet each, one plate and iron-cutting machine, twenty welding transformers, one corrugated plate machine; On the second floor: Six lathes with center distance ranging from 5 feet to 6½ feet; one shaping machine, one horizontal milling machine, two drilling machines, two emery wheels.

Production: Boilers, bridges and workshop roofs. The single parts were manufactured in the workshop; the assembly into large parts was done in the yard.

Work force: 100 Soviet workmen and 40 PWs, per shift.

(21) Workshop building.

Four cantonment buildings of 50 x 200 feet each.

Installation: punches, presses, rolls, grinding apparatuses and annealing furnaces.

Production: Saw blades, bicycle and motorcycle chains, but for the most part: feed belt links (disintegrating belts) for arms up to 20 mm caliber.

Work force: 300 Soviet workmen and 60 PWs, per shift.

(22) New building (Soviet Workshop No 52)
650 x 200 feet.

Installation: One electric smelting furnace and one coal-fueled smelting furnace; four grinding wheel stands with two wheels each. The machinery arrived during the time of observation.

Production: Grey-cast small parts are scheduled to be manufactured.

(23) Transformer station: About 330 x 80 feet.

(24) Power plant: About 500 x 260 x 65 feet.

Equipment and kilowatt output was not known.
The building had six sheet-iron smokestacks, about 30 feet high and about 2½ feet in diameter.

(25) Stone tower: About 50 x 30 feet; eight stories, surmounted by a platform on which rose a second tower, about 20 feet high.

The administration was housed in this structure.

(26) Wire drawing shop (Soviet Workshop No 10): About 650 x 160 feet.

(27) Gas works.

About 500 x 260 feet; the gasometer was not visible from outside.

(28) New building: About 260 x 80 feet; still under construction; scheduled use, unknown.

c. Work force and work time;

The total work force of the plant is not known. During the time of observation 30 German engineers who came from the

DKW and Wanderer Plants in Saxony were employed in the new motorcycle department. Work was done in three 8-hour shifts.

f. Security:

The plant was surrounded by an about 10-foot high wooden fence. Watchtowers with searchlights were at the four corners of the plant. A second about 5-foot high barbed-wire fence on the inside left a 160-foot wide restricted zone between the two fences.

2. BMK Iron Construction Plant No 8 (Annex 1 and Annex 3)

a. Area: 2,000 x 820 feet.

b. Location and traffic facilities: (see Annex 1). A spur track existed but no plant-owned locomotive.

c. Plant installations: (The following enumerations correspond to the numbers of Annex 3). Departments recorded:

(1) Welding shop: 50 x 16 feet
Installation: Autogenous welding installation.

(2) Boilerhouse: 33 x 16 feet.
Installation: Several boilers for heating purposes.

(3) Lathe shop: 500 x 250 feet.
Installation: Ten lathes; center distance 5 to 6½ feet. Two column drilling machines.

(4) Locksmith's shop: 500 x 250 feet.
Installation: One work bench with six vices, one forge fire and one emery wheel.

(5) Plate adjusting shop. Size unknown.

Installation:

One straightening plate of about 5 x 12 feet, one roll for adjusting plates about 10 feet wide and 20 inches long, cutting tools for sheet iron and iron bars.

Production: Square, round and angle iron.

(6) Riveting shop: 330 x 65 feet (wooden shed)

Installation: Three or four welding transformers and some field forges for annealing of rivets.

Production: Single parts manufactured in the workshops were joined into sectional or finished constructions.

d. Power and raw materials:

Power: Power was supplied by the power plant of Plant No 71 (No 24 in Annex 2).

Raw materials: Semi-finished goods such as plates and bars

F

came by rail or truck (presumably from the Plant No 71).

e. Work force and work time:

150 Soviet workmen and 100 PWs per shift. Work was done in three 8-hour shifts.

f. Production: Iron structures for bridges and workshops; the amount produced is unknown.

g. Security: The plant was surrounded by an about 10-foot high fence.
wire

3. Engine House No 83 and locomotive repair plant (No 12 of Annex 1, and Annex 4).

a. Location and traffic facilities: (See Annex 4). The plant had spur tracks to the KAZAN railroad station and track connections to the Plant No 71.

b. Plant installations (see Annex 4).

(1) New assembly shop (three-story building, 500 x 100 feet): It had direct spur tracks. The tracks ran over assembly pits through the entire workshop. No further machines and installations existed.

(2) Repair shops (three-story buildings)

On the ground floor: Assembly pits

On the first floor:

(a) Issue of tools and materials; only small stocks were stored for meeting current requirement.

(b) Electrical workshop

Installation: One test stand, three vices and one motor for test-driving the 5[illegible]-volt locomotive dynamos.

(c) Forge:

Installation: Two forge fires and one pneumatic hammer

(d) Welding shop:

Installation: One forge fire, one straightening plate, 6½ feet square, one autogenous welding installation.

(e) Lathe shop:

Installation: Six lathes, center distance five feet; one lathe, center distance 20 feet; three shaping machines, one vertical and one horizontal milling machine, one lathe for turning railroad wheel rims, one column-type drilling machine.

(f) Well of a staircase

c. Power and raw materials:

Power and raw materials were supplied by Plant No 71.

d. Work force and work time:

200 Soviet workmen and 35 PWs, per shift. Work was done in three 8-hour shifts.

e. Production: Locomotive repairs; output unknown.

f. Security: The plant was bounded on the north by a 10-foot high wire fence; on the east and west by a damaged lattice fence, and was open on the south.

25X1A [redacted] Comment:

The report supplements a previous report as well as confirms many of its indications. No conclusive comment on this combine can be given due to the variety of its production.

4 Annexes:

1 IZHEVSK Industrial Combine (4 sketches).

Legend to Annex 1

1 Radio station
2 Stadium
3 Officer candidate school
4 Rifle factory
5 Plant No 71
6 Sawmill
7 Railroad station and railroad car repair plant
8 BMK Plant
9 Warehouse
10 Water tower
11 Church
12 Locomotive repair plant
13 KAZAN railroad station
14 Fuel dump
15 Mill and bread factory
16 Pistol factory
17 Scrap dressing plant
18 Red brickwork building
19 Storage depot for fuel and foodstuffs
20 Large garage and repair shop
21 Paddle steamer line.

Legend to Annex 2

1 Motorcycle plant (old workshop)
2 Six-story workshop building
3 Motorcycle plant (new workshop buildings)
4 Rolling mill
5 Foundry
6 Hardening shop for small parts of motor vehicles
7 Searchlight tower
8 Probable antiaircraft gun emplacement
9 Test department

10 Workshop for hardening of steel bands and wires (Soviet Workshop No 16)

11 Hardening shop for large parts

12 Workshop for processing submachine-gun barrels

13 Repairshop (Soviet Workshop No 38)

14 Welding shop

15 Large kitchen

16 File factory

17 Iron rolling mill

18 Large electric foundry

19 Electrical repair department

20 Department for the construction of large iron parts

21 Workshop building

22 New building (Soviet Workshop No 52)

23 Transformer station

24 Power plant

25 Stone tower

26 Wiredrawing shop

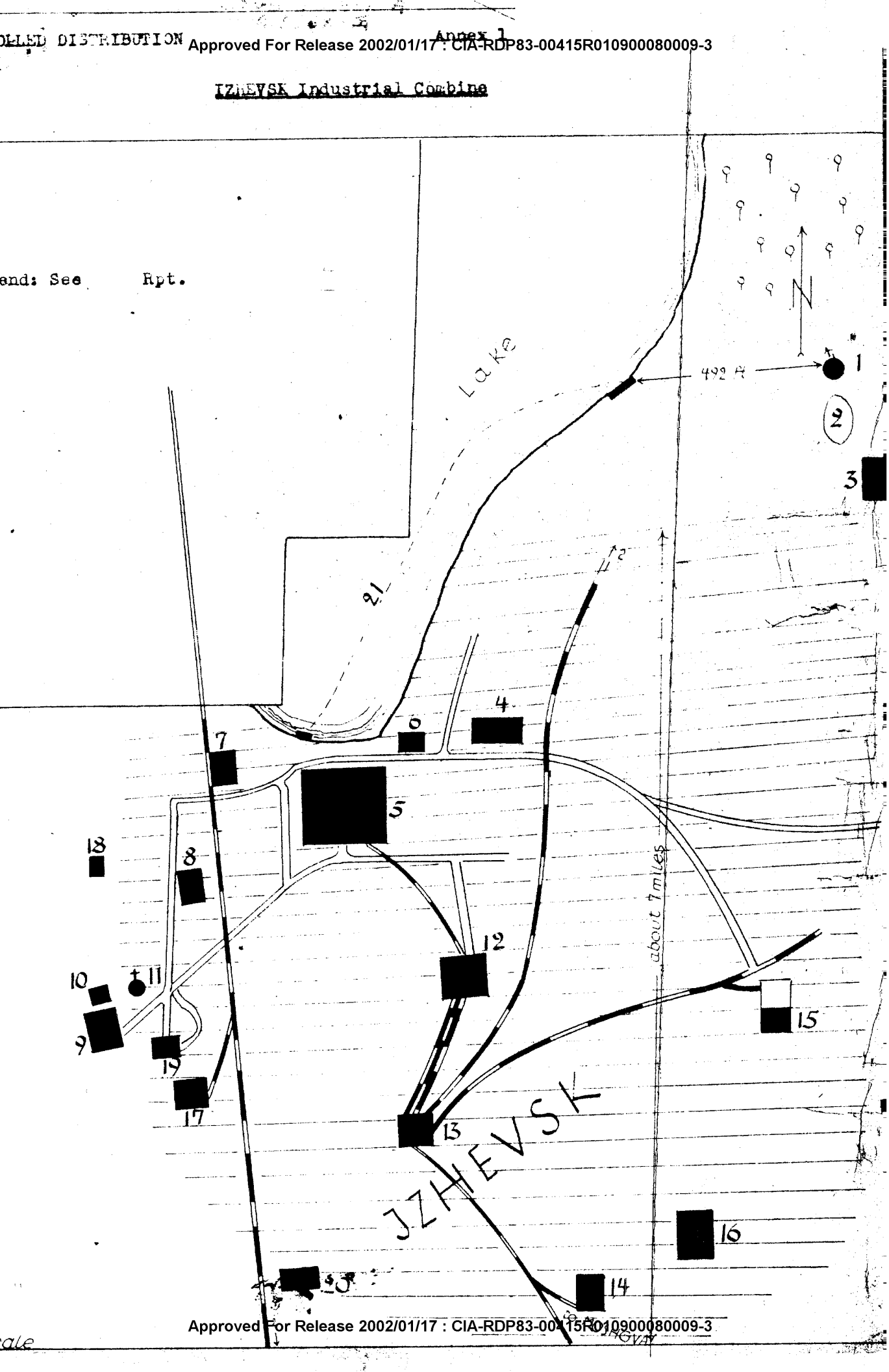
27 Gas works

28 New building

Annex 1

IZHEVSK Industrial Combine

end: See Rpt.



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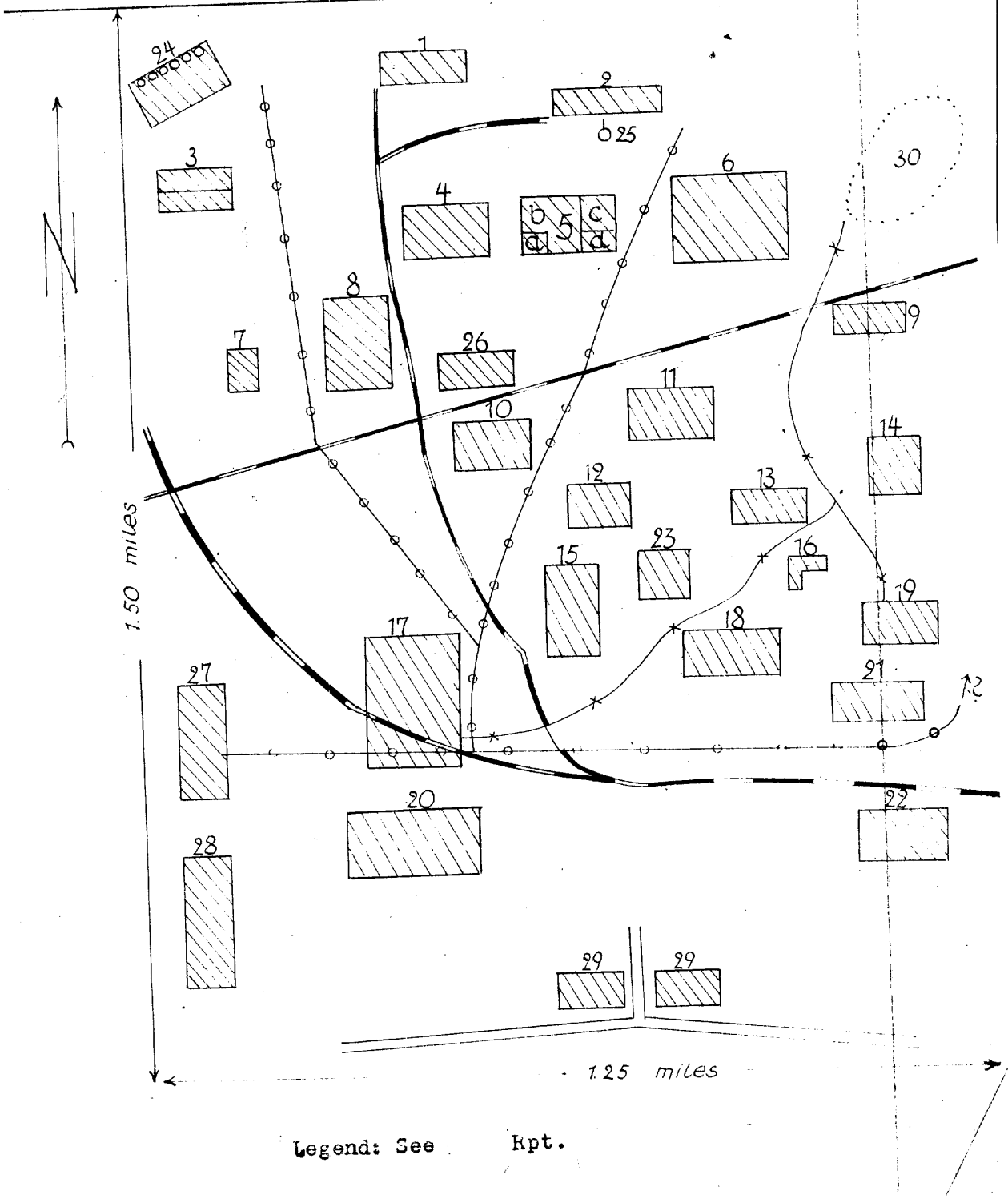
DISTRIBUTION

Annex 2

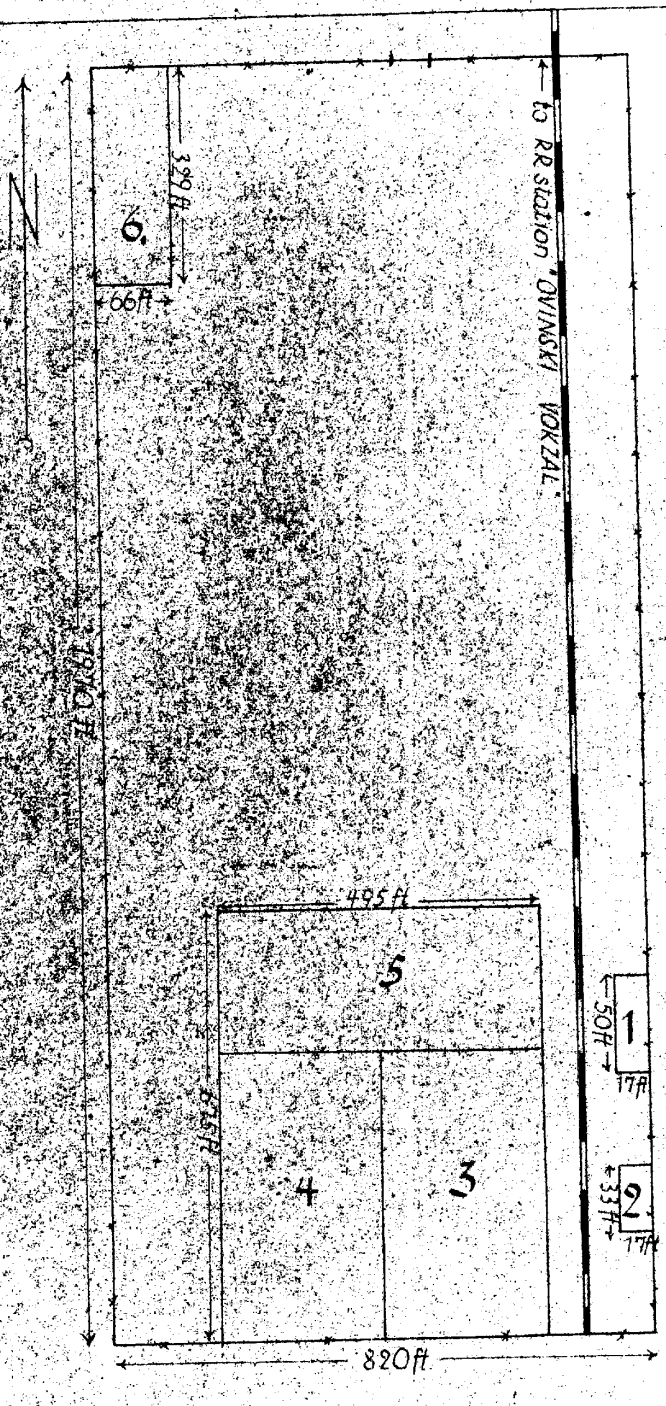
IZHEVSK Industrial Combine



Legend: See Rpt.

Annex 3

IZHEVSK Industrial Combine



Legend:

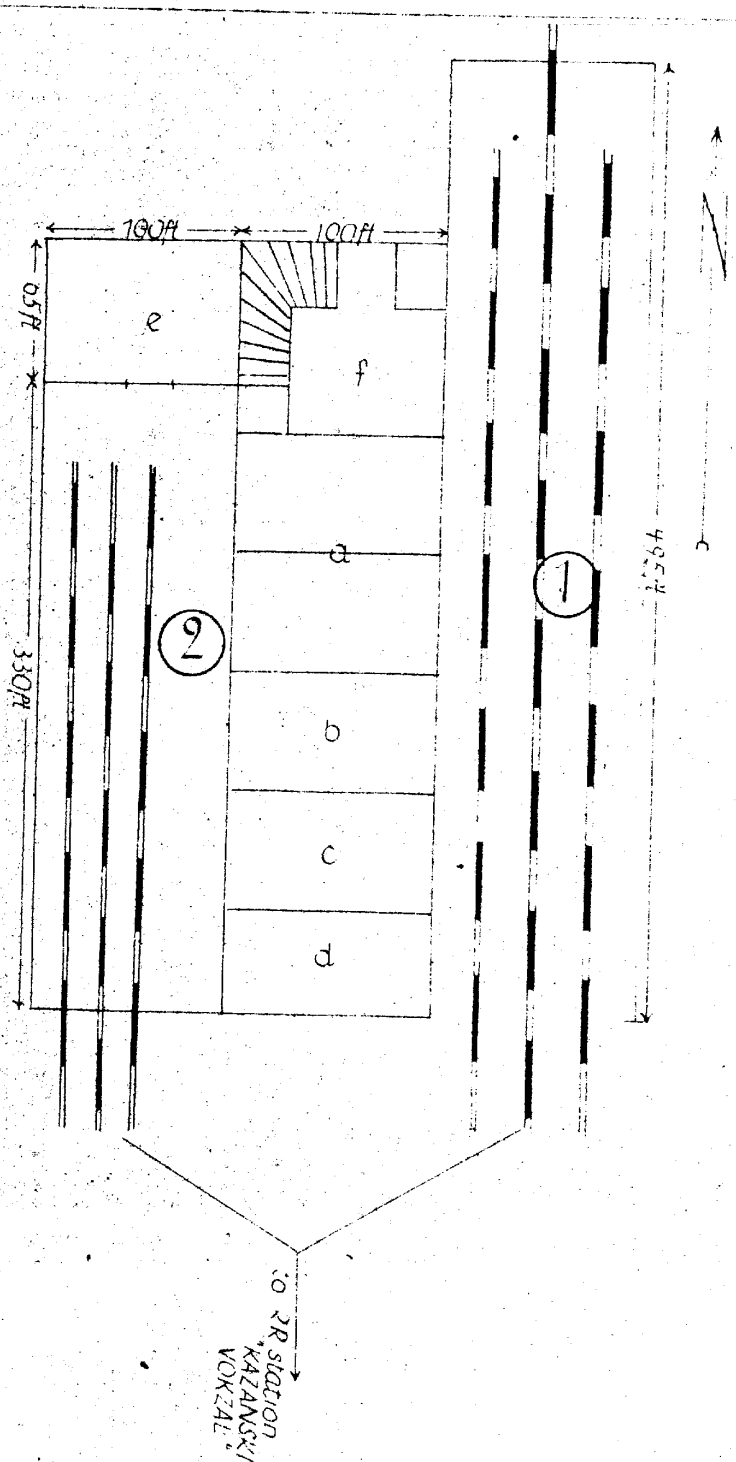
1 Welding shop
2 Boilerhouse
3 Lathe shop
4 Locksmith shop
5 Plate adjusting shop
6 Riveting shop

not to scale

 Annex 4

IZHEVSK Industrial Combine

[redacted]



Legend:

1 New assembly shop
2 Repair shops

ppl to scale

COUNTRY Soviet Union REPORT NO.

TOPIC Motor Vehicle Repair Shop and Spare Parts Plant in Chkalov. 25X1A

25X1A [redacted]
EVALUATION
DATE OF CONTE
DATE OBTAINED EPARED 22 March 195[illegible]
REFERENCES
PAGES 1 ENCLOSURES (NO. & TYPE) 1 sketch on ditto
REMARKS

[redacted]

25X1X

SOURCE [redacted]

1. Location:

In the sector of Chkalov (55°08'E/51°46'N), Chkalov Oblast, near the railroad station (see Annex).

2. Installations:

The plant is the central repair shop for a number of smaller municipal repair installations which use the foundry of this plant. The installation was built before the war. Nearly all the buildings are steel skeleton structures with sheet-metal roofs and concrete floors. The foundry is the biggest building. The plant has a railroad connection; power is supplied from without.

3. Work force:

Three shifts of 300 workers each.

4. Production:

Manufacture of spare parts of all kinds and repair of motor vehicles, chiefly trucks.

25X1A [redacted] Comment:

a. Reports in which the plant was called a "tractor spare parts plant" were previously submitted.*

b. The location of the plant, which was also previously given as being "near the railroad station", is shown more accurately in the attached sketch. It is only because of this presumably correct data on the location of the plant that the present report is forwarded.
The value of the other data seems doubtful.

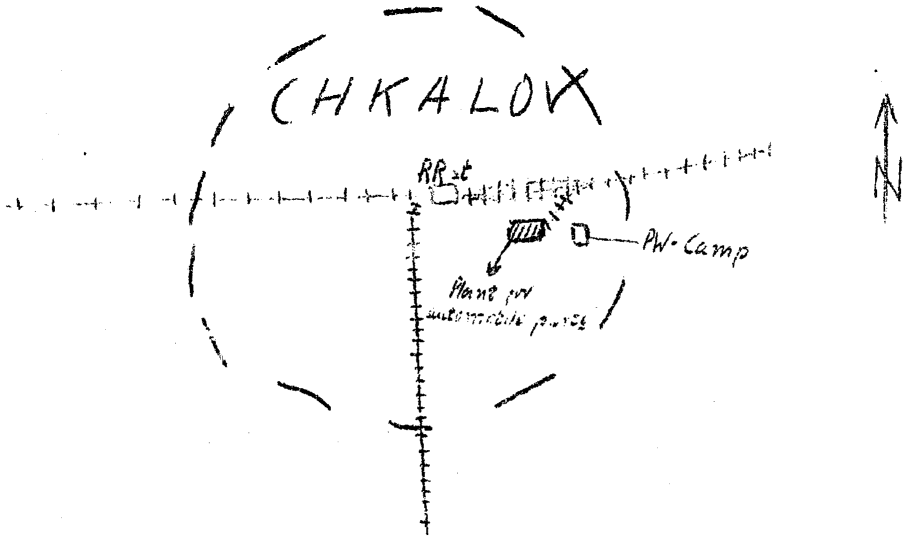
1 Annex: Location Sketch of the Motor Vehicle Repair Shop and Spare Parts Plant in Chkalov.

CLASSIFICATION [redacted]

CONTROLLED DISTRIBUTION

Annex

Location Sketch of the Motor Vehicle Repair Shop and Spare Parts Plant in Chkalov.



COUNTRY U.S.S.R. REPORT NO.

TOPIC Mechanical Plant in Kyshtym 25X1A

25X1A EVALUATION [redacted]

DATE OF CONTEN [redacted]

DATE OBTAINED [redacted] 21 June 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 2 ea, 3 sketches on 2 dittoes

REMARKS

25X1X SOURCE [redacted]

1. Location: In the southwestern sector of Kyshtym (60°34' E/55°42' N) Chelyabinsk Oblast, on the northern tip of Southern Lake. See Annex 1.*

2. Plant layout: The factory area is about 800x400 meters, half of which is built up. The date 1911 inscribed on one of the buildings indicated that a section of the plant was built before WW I. Power is supplied by the municipal power plant. A spur track branching off from the narrow-gauge railroad line to Karabash enters the factory from the northwest. The factory approach road is in good condition. A new building is being constructed on the northwest side of the plant. The steel foundry has three open-hearth furnaces; the other foundry produces brass and bronze castings. For plant layout see sketch 1 of Annex 2.**

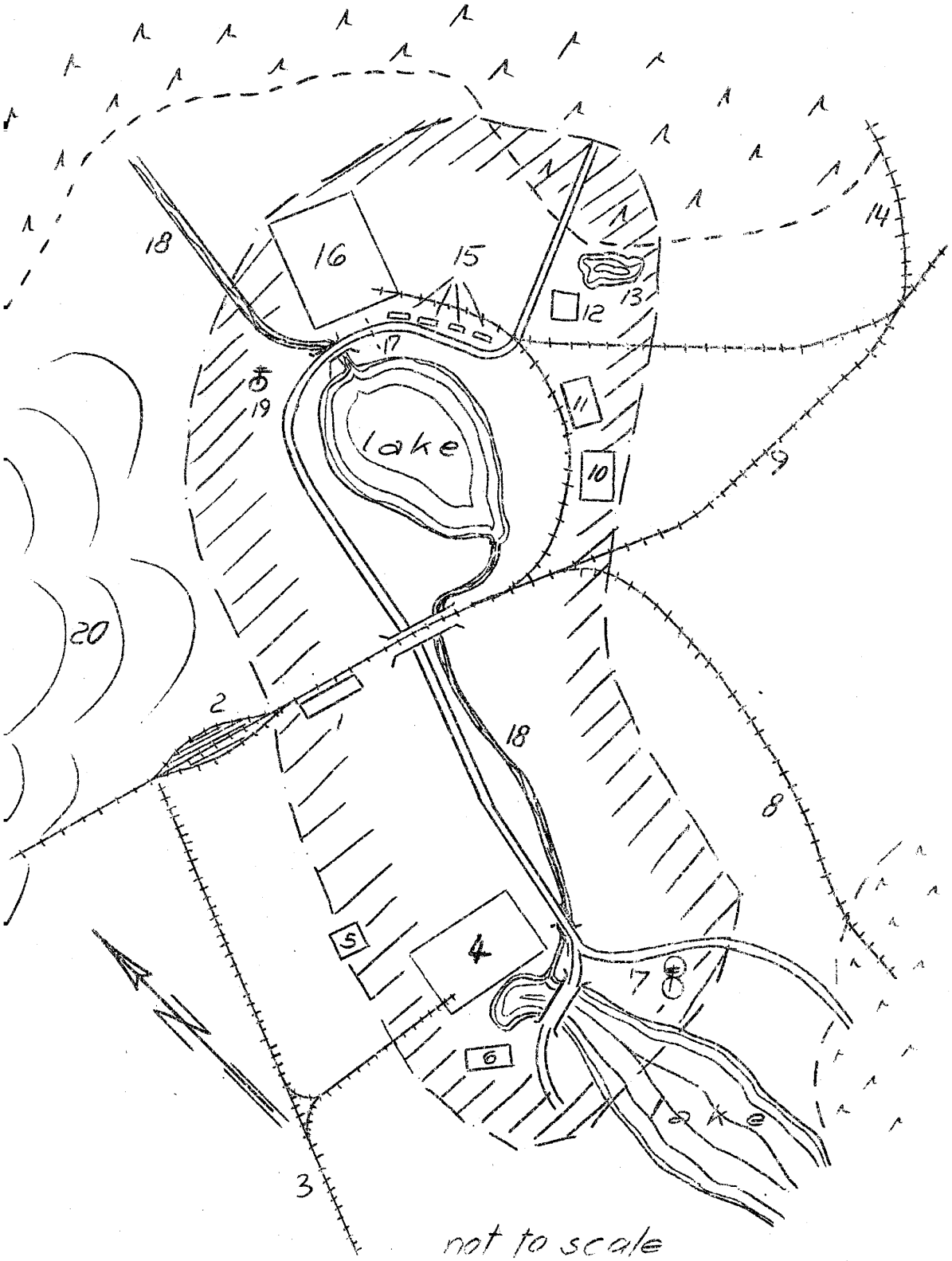
3. Work force: More than 5,000 working three shifts in addition to about 300 PWs working two shifts. **2

4. Production: Locomotives, railroad cars and lorries for narrow-gauge railroad lines and general repair of such equipment.

Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

J

Mechanical Plant in Kyshtym



Legend: See report

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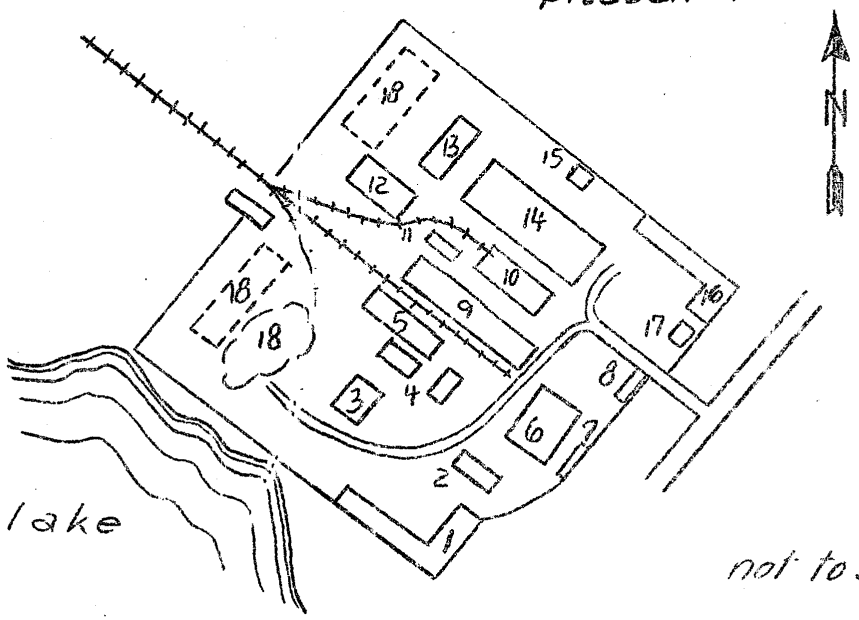
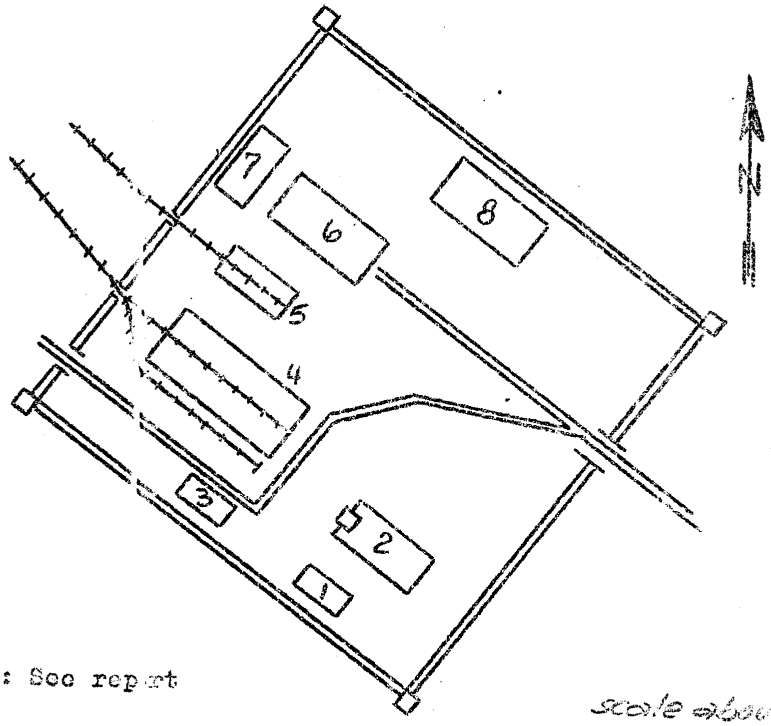
Mechanical Plant in Kyshtym

Sketch 1.



Sketch 2.



COUNTRY USSR REPORT NO.

TOPIC Factory under Construction near Kyshtym 25X1A

25X1A EVALUATION [redacted]

DATE OF CONTE

DATE OBTAINED PARED 12 July 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 2-sketches on ditto

REMARKS

25X1X

SOURCE [redacted]

25X1X 1. [redacted] the factory is about 2 km northeast of the PW camp of Kyshtym (60°34'E/55°24'N), Chelyabinsk Oblast, in a forest. * Soviet laborers called the factory "new ammunition and armament plant", and said that the construction started in 1946. At first only Soviet convicts, were working but they were later reenforced by strong army units working on the many underground installations. The entire area of this alleged modern armament plant under construction was restricted. A railroad connection to the plant area was constructed in 1946. Railroad shipments for the construction site were observed leaving the marshalin, yard about 800 meters from the PW camp. It was learned from the local population that many politically unreliable civilians have been expelled from Kyshtym since the construction started. **

25X1A * [redacted] Comment. For location see Annex 1. Source 2 furnished only the information as shown in Annex 2 with its legend.

25X1A ** [redacted] Comment. As only little information on the alleged large armament plant under construction was given in a 1948 report and another report on the Kyshtym mechanical factory, the present report is forwarded although the period of observation dates back to June 1948.

In spite of some contrasts regarding the location of various installations, the attached sketches and the annex of

K

a previous report definitely locate the new plant as in a forest east of the Chelyabinsk - Sverdlovsk railroad line. . Because the purpose of the plant cannot be determined from the indefinite information, additional data are required.

2 Annexes : 1. Factory under Construction near Kyshtym.
2. Factory under Construction near Kyshtym.

Annex

Legend to Annex 1

1 New modern armament plant under construction
2 Railroad connection to the construction site
3 PW camp
4 Apartment houses
5 Copper foundry, 300 x 300 meters
6 Graphite plant
7 Factory manufacturing sand for grind stones
8 Iron foundry.

K

Annex

Legend to Annex 2

1 New plant under construction, about three or four kilometers square
2 Cemetery
3 PW camp
4 Mechanical factory
5 Fire clay plant
6 Copper smelting plant
7 Bazaar
8 Graphite plant
9 Kaolin plant.

JJJJJJJJJJJJJJJJJJJJJJ

Annex 1

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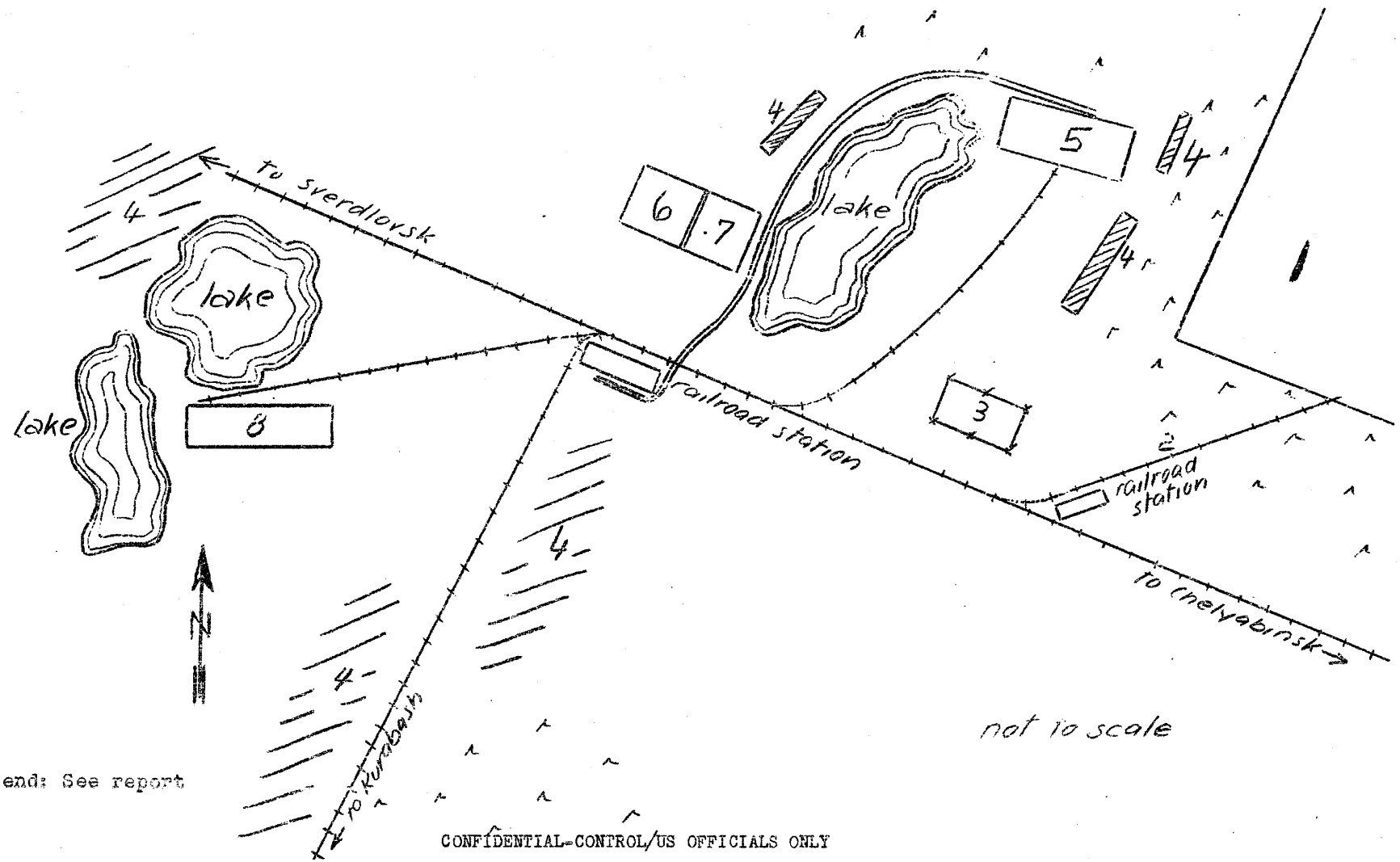
Factory under Construction near Kyshtym



Legend: See report

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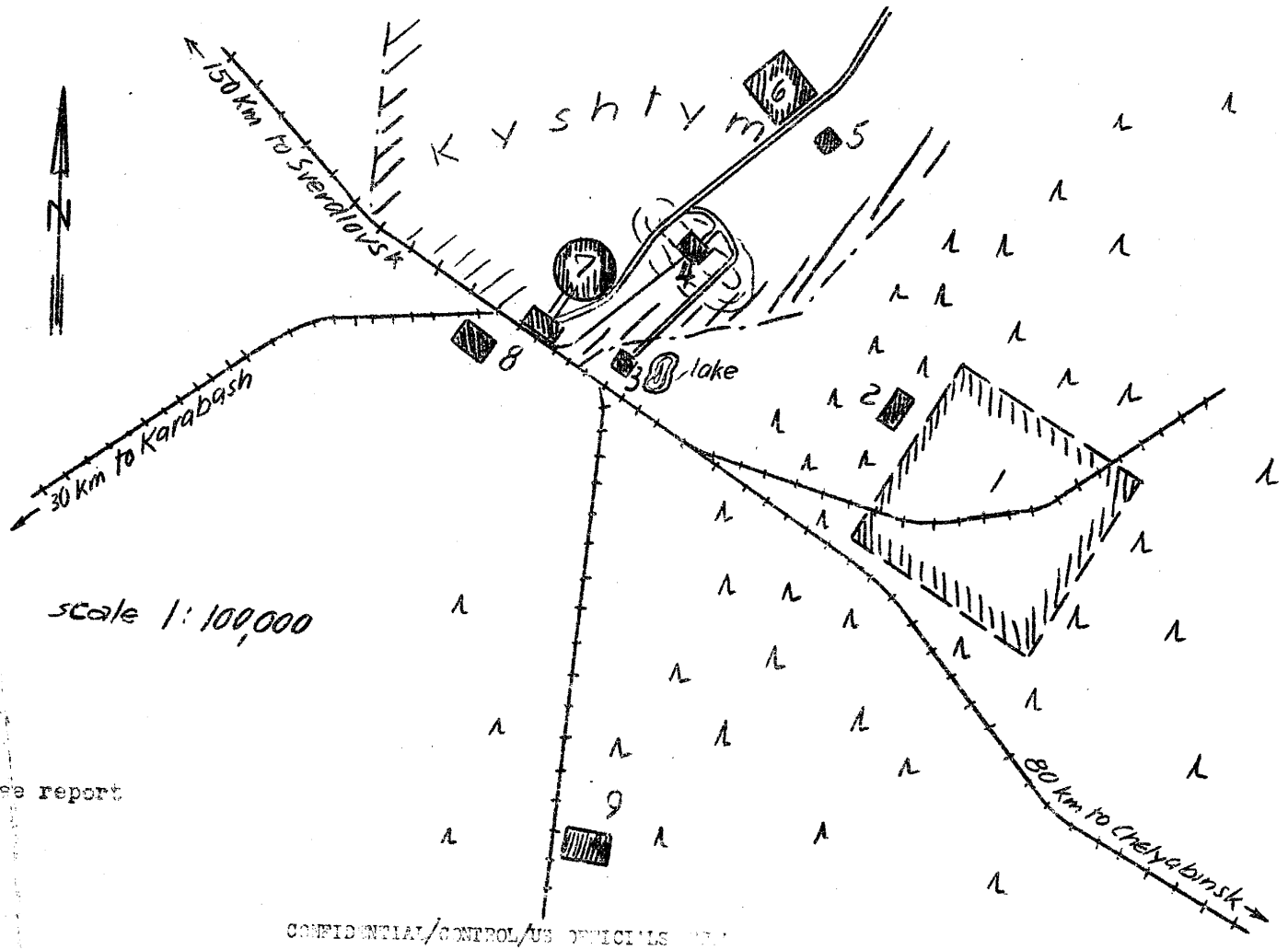
Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

Annex 2

Factory under Construction near Kyshtym



Legend: See report

Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

COUNTRY INTELLOFAX 5 REPORT NO.

TOPIC Ural SIS Motor Vehicle Plant in Miass 25X1A

25X1A EVALUATION [redacted] [redacted]

DATE OF CONT ANNEX 1

DATE OBTAINE EPARED 21 March 1950

REFERENCES

PAGES 4 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location: North of Miass (60°07'E/55°02'N) Chelyabinsk Oblast at the northern end of a spur track.

2. Plant installations: According to Soviet statements the plant was constructed in 1941. By now it has reached the dimensions of the Stuttgart Daimler-Benz Plant. A new boiler house was completed by the end of 1946 and started operation in 1947. The new locomotive barn was put in operation in 1946. Power was supplied from the outside. For plant layout see Annex.

3. Work force: Far more than 10,000, the exact number could not be estimated.

4. Production: Three-ton trucks.

25X1A 25X1A [redacted] Comment:

a. The automobile plant in Miass has been repeatedly reported on. For details on the technical installations of the different workshops see a previous report*.

b. The attached plant layout is assumed to be correct. Since the report does not contain data on size and type of construction of the buildings, it is not very valuable as target information.

1 Annex: Blueprint, Ural SIS Motor Vehicle Plant in Miass.

Legend to Annex.

1 Gate No. 1

2 Clothing supply

3 Office and shed

4 Gate No. 2

5 Workshop under construction, assembly shop for automobiles

6 Final assembly of 3-ton trucks

7 Manufacture of chassis

8 Parking lot

9 Street lamps

10 Transformer station

11 Guard towers, posted in equal intervals around the plant

12 Mess hall No. 1

13 Precision mechanical department

14 Manufacture of engines, No. 2

15 Manufacture of engines, No. 1, equipped with production line

16 Offices

17 Laboratory

18 Hardening shop

19 Loading ramp

20 Pattern making carpenter shop

21 Foundry

22 Foundry

23 Offices

24 Presumably power station

25 Foundry

26 New boiler house with modern coal dust fueling, operating since mid-1947

27 Old boiler house

28 Smokestack

29 Gate No. 6

30 Coal dumps

31 Two sheds

32 Dump of foundry sand

33 Dump of light metal plates

34 Office building

35 Milling shop

36 Drawing shop and press cutting shop

37 Lathe shop

38 Store of fire-clay bricks

39 Brick yard

40 Storage dump of boards and planks

41 Storage dump for timber

42 Projected railroad track

43 Coke dump

44 Scrap dump

45 Storage dump of facings for shipments

46 Storage dump of pig iron

47 Metal store and storage dump of dismantled machines to be installed in workshop No. 5

48 Loading ramp for motors, here and at the storage dump of dismantled machines, source identified machines from the Stoever Plant.

49 Filling station for oxygen cylinders

50 Locomotive barn, operated since 1 May 1946

51 Pigsty

52 Gate No. 5

53 Welding shop

54 Cement shed

55 Loading ramp

56 Loading ramp

57 Railroad administration

58 Mess hall

59 Sawmill

60 Gate No. 4

61 Boiler house of the sawmill

62 Water station

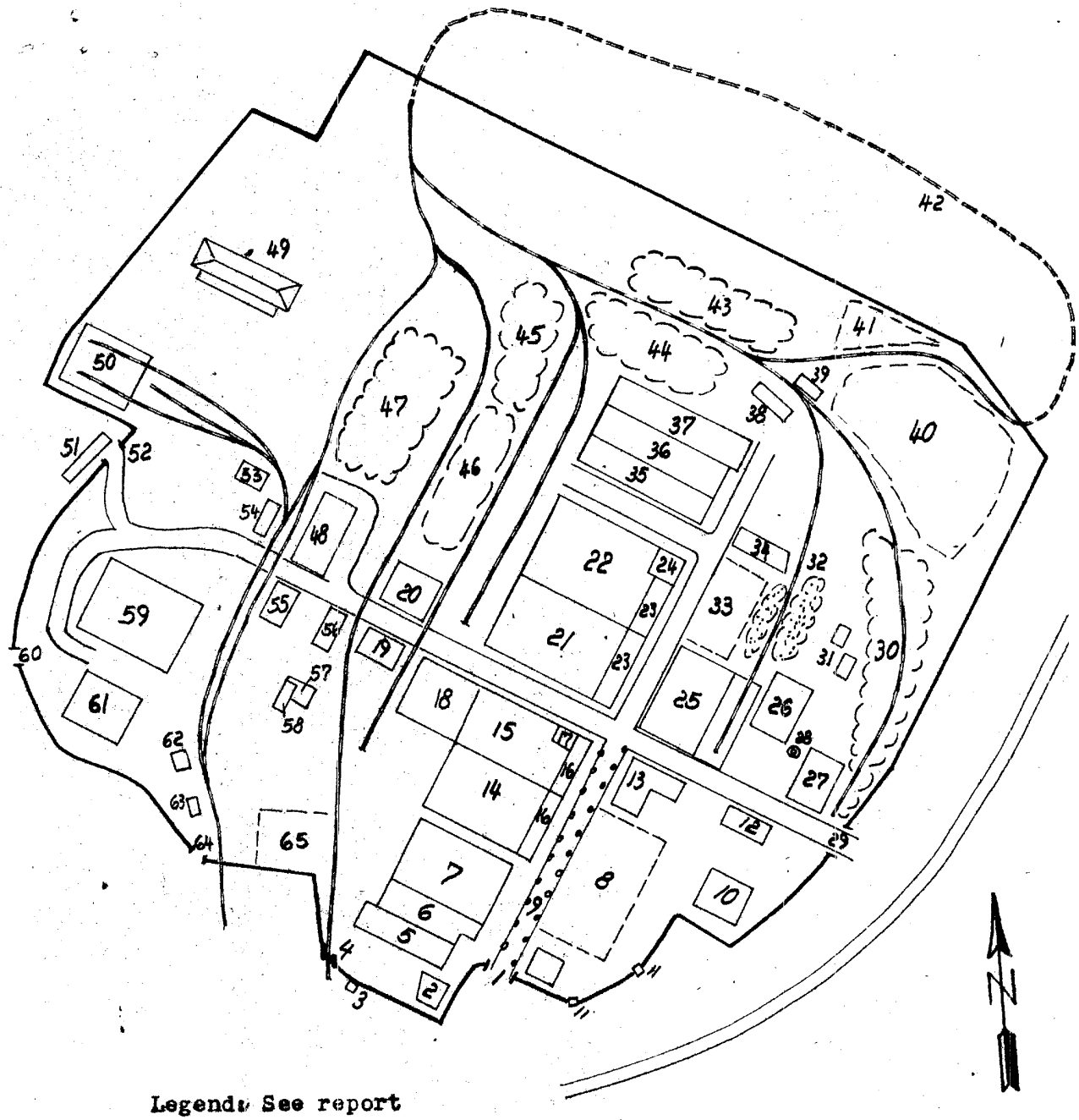
63 Administration of plant railroad

64 Gate No. 3

65 Pile of automobile tires

Annex

Ural SIS Motor Vehicle Plant in MIASS



Legend: See report

not to scale

COUNTRY U.S.S.R. REPORT NO.

TOPIC Kirov Tractor and Tank Plant in Chelyabinsk 25X1A

25X1A [redacted]

EVALUATION [redacted]

DATE OF CONT [redacted]

DATE OBTAINED [redacted] RED 12 July 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1-Blueprint

REMARKS

25X1X

SOURCES [redacted]

1. The Kirov Tractor and Tank Plant, also called "4TC", was east of Chelyabinsk (61°25'E/55°10'N), Chelyabinsk Oblast, north of the Omsk railroad line. The terminal point of a double-track streetcar line was at the northern plant entrance. Almost every workshop has a connection to the wide spread railroad net in the plant. The plant roads were well preserved, some having been recently repaired by PWs. The plant designation was in three large luminous letters over the entrance.

2. According to Soviet laborers more than 60,000 people worked in the plant and the many subsidiary installations in the city. The exact number was not determined. Each day seventy-five Kirov S80 tractors, tractor spare parts, and tanks were produced. The 4-cylinder diesel tractors, with an engine capacity of 80 hp, caterpillar drive, and a cruising speed of 9 kmh, were also produced with a snow plough and a planing device. The output of tanks and tractor spare parts was not determined.

3. The plant which, according to Soviet laborers, was constructed in 1933, was enlarged by one new workshop installed during October 1949. The construction of two steel structure workshops started in the summer of 1949. Soviets said they were

43

for the production of tanks. A Soviet foreman said that 23,000 laborers worked three and two shifts. General Salzmann, (fnu), was plant manager.

4. Sixty to seventy-five tractors per day have left the production line since the end of the war. The Kirov tractors had 4-cylinder engines with 35 hp. From October 1948 to October 1949, 16,500 tractors were produced. The wartime production of tanks was resumed in May 1949. The type was not identified but the gun had a caliber of about 122 mm, and the engine had six cylinders. The output was not determined.

25X1A

[redacted] Comment. The report gives the newest and best information received on the tractor and tank plant in Chelyabinsk. The attached sketch is considered to be correct as to the essential plant buildings. However, the second source also mentioned two steel structure workshops under construction south of the tank manufacturing shop, for tank production purposes, and a heating plant in the southern plant area. If the statements of the second source are correct, the output of the last year went far beyond the 1948 production schedule of 10,000 tractors. The annual output of 16,500 tractors seems possible but a daily output of 75 tractors is considered too high. Other records indicated a weekly output of only 60 tractors prior to June 1948, presumably because the plant was being converted from tank to tractor production. It is believed that difficulties in the plant alteration were overcome by the end of 1948 or in early 1949. No details are available on the present tank production, but one report indicated that this production was resumed and that new buildings were under construction in order that the two production branches in the plant would be completely separated.

1 Annex : Kirov Tractor and Tank Plant in Chelyabinsk.

Annex

Legend to Annex

A Kirov Tractor and Tank Plant

1 Entrance for PWs
1a Road from PW camp 7602 to the plant
2 Small production shop for liquid ammonia, with two 20,000 liter containers.
3 Power station, especially fenced in with barbed wire.
4 Test station for materials, three-story building, 50 x 20 meters, with German and American machinery.
5 Administration
6 Entrance for civilians
7 Management building, 60 meters long, four stories
8 Bare structure of a new workshop, 200 x 80 meters. Rails for traveling cranes were fitted, the iron structure of the roof in the west part of the building was still under construction. No machinery had arrived. Soviets said that the departments No. 100 and 700 will be moved into this building, which was called "new tank building" by the PWs.
9 Oil dump
10 Full automatic turret machine department processing large steel pieces, crank shafts, and armored plates. This department was considered a convenient work place.
11 Repair shop, high building visible from a great distance.
12 Model-making carpenter shop
13 Sawmill with vertical saw-frame and drying installation.
14 Two fuel oil containers, 7 meters in diameter and 7 meters high, with an above-ground pipe connection to the forge.
15 Railroad sidings with Soviet and German locomotives rusting in the open
16 Foundry, about 320 meters long, presumably with four spans. The furnaces were charged through funnels in the roof, from which light flames sometimes emerged. Production of motor blocks, gear casings and other castings. As the workshop being off limits for PWs, the installations were not familiar. Production data were obtained from transports leaving the workshop.
17 Forge No. 1 through 3, about 30 meters long
17a Annealing furnaces
18 Department No. MK 10, equipped with machines for the production of pivots for tanks. The department was not in operation for a long period
19 So-called Korpus Noi, production of casings for clutches, gear and stearing gears, with eight Soviet welding apparatus, three or four very large American milling machines, five meters high, and three smaller Soviet milling machines of the same type, eight conventional milling machines, boring machines and thread cutting machines.

Annex

20 Department No. 700, production of tractor and tank springs, with women laborers, processing of cylinder bushes, valve heads, bearing bushes, and, at the last, annealing of crank shafts. The department has nine electric annealing furnaces, six hardening bathes of various types, and three sand blasts.

21 Department No. 100, processing of crank shafts for tractors, manufacture of connecting rods for tractors and tanks, with four automatic machines, four lathes, two special presses, five grinding machines and several polishing machines. Output per shift : 35 crank shafts for tractors, 5 crank shafts for tanks, 10 crank shafts for an older type tractor, 60 connecting rods. Source worked as a lathe operator and later as a clerk in the paymaster's office for this department.

22 Department No. 200

23 Tractor assembly department with two production lines, a small one for the manufacture of single parts such as rollers, springs etc., and a large one for the assembly of tractors. The so-called Skolotno - Stampo 1 and Skolotno Stampo 2 cutting body parts are also in this department.

24 Hardening shop with two large and six small annealing furnaces, 20 circular annealing furnaces with a diameter of 1½ meters and a sand blast. Hardening of links for chains, chain bolts, cog wheels and tubes.

25 Chassis department

26 Diesel engine department, assembled engines were put on a metal plate and tested for a period of 50 minutes before fitted into the tractors. Heavy engines had a two-cylinder auxiliary gasoline motor to start.

27 Preparation installation for materials to be cut No. 18 through 27 are in one large building, about 400 x 150 meters large.

28 Tool department with several metal processing machines. Manufacture of measuring instruments and gauges. The upper floor houses a canteen.

29 Administration for the plant departments and for the shipping department

30 Cold processing rolling mill, no details available

31 Cooling water installation with large concrete basin. The water is tossed up in the air for cooling.

32 Material depot with railroad sidings

33 Raw material depot, mostly for the forge

34 Main shipping department for spare parts, 120 x 55 meters

35 Dump with section iron

36 Tank production shop, 700 x 150 meters with three spans and a black sheet-metal roof, and three gates at one small side. No details available.

37 Presumably the construction department

38 Garage

39 Exit gate for tractors; other tractors leave the plant by rail.

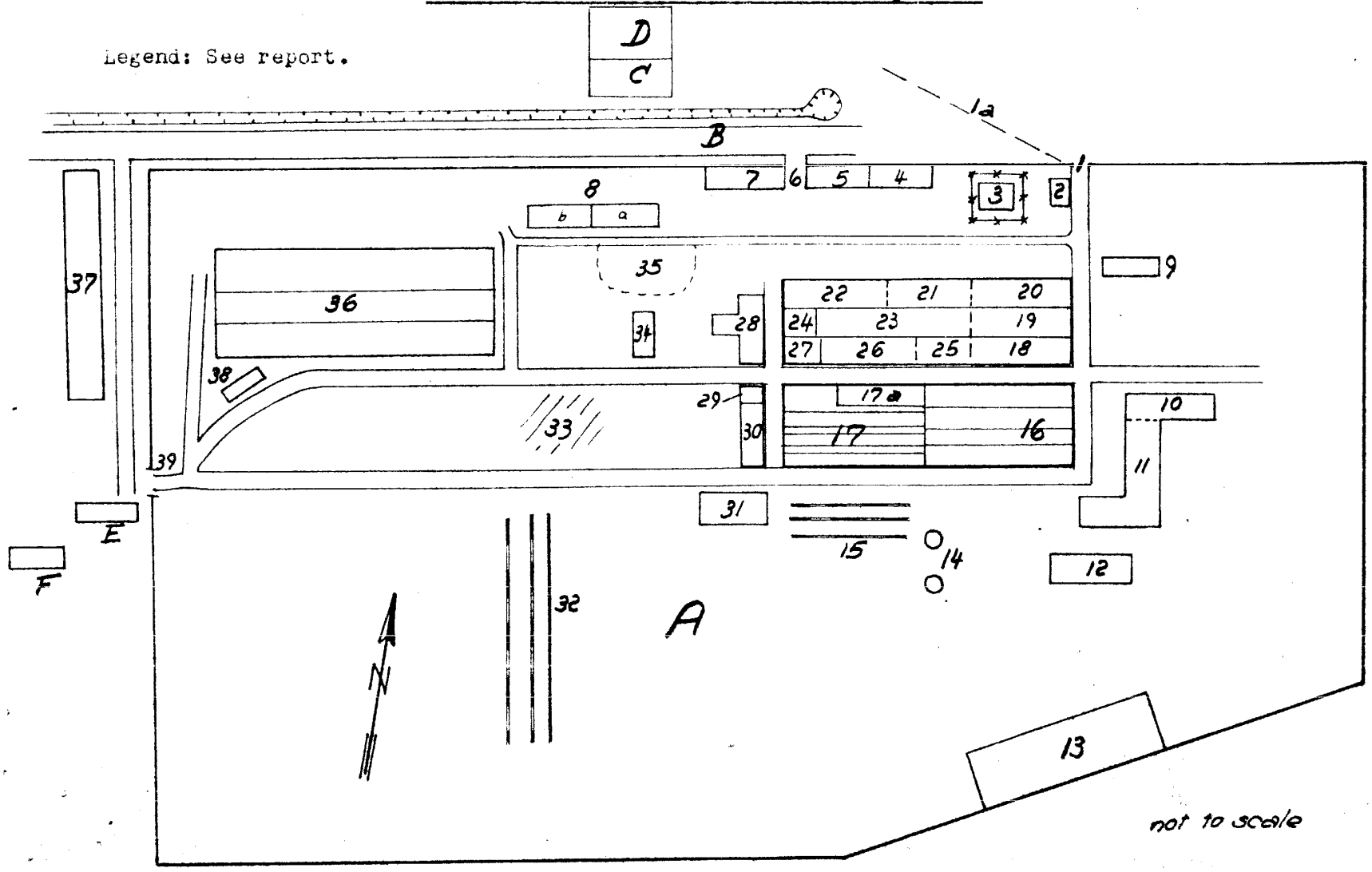
Annex

B Main street, called Spartak, from the Red Square in Chelyabinsk in a northeastern direction to the main gate of the plant, 11 meters wide, modern construction with wide sidewalks. A trolley bus line was in the street and a double-track streetcar line beside the street. Both had their terminal points at the main gate.
C Auto bazaar
D Workshop manufacturing driver's cabins for tractors
E Wooden houses, quarters of guards
F Die manufacturing shop.

Annex

Kirov Tractor and Tank Plant in Chelyabinsk

Legend: See report.



Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

CLASSIFICATION CONFIDENTIAL/CONTROL/US OFFICIALS ONLY

COUNTRY Soviet Union REPORT NO.

TOPIC Tractor Plant in Chelyabinsk 25X1A

25X1A EVALUATION [redacted] OBTAINED [redacted]

DATE OF CONT

DATE OBTAINED [redacted] DATE PREPARED 23 May 1950

REFERENCES

PAGES 3 ENCLOSURES (NO. & TYPE) 1 blueprint

REMARKS

SOURCE [redacted] 25X1X

1. Location:

The tank and tractor plant Kirov is about 3 to 4 km east of the center of the town of Chelyabinsk (61°25'E/55°10N), at the end of a large asphalt road and a double-track streetcar line which terminates in a return bend in front of the main entrance to the plant.

2. History and organization:

a. The Stalina tank or tractor plant was converted to tractor construction in 1945. Tank construction was no longer observed. The old Stalina tractor was first produced, then the production of new S 80 series was started.

b. The history of the construction of the plant up to 1945 is unknown. Since that time shop (3) has been under construction but is not finished and its purpose was unknown.

3. Layout:

a. Surroundings: Flat, treeless terrain, partially built-up with widely dispersed buildings. From the east, a high-tension line goes to the transformer station. There is a lake 5 km east of the plant.

b. Size, about 6 square km. The layout was dominated by the tract (3)-(2)-(9). (9) was the engine shop, (2) was a multi-sectional shop, 200 x 700 meters, with a belt conveyor for final assembly. Piece parts were also made on the benches along the inner walls of the shop. Most noticeable was the administration building (1) which was 400 to 500 meters long and had four stories and a tower (1a). The main approach road ran through (13) to (2) and centrally led to all parts of the plant. At the eastern side of (2) was the end of the belt conveyor for the final assembly. The tractors were parked there on a large side-street, ready for sale.

c. The mechanical equipment was chiefly of American or German origin (prewar deliveries). Only a few machines were dismantled in Germany.

4. Labor:

An estimated 50,000 to 70,000 laborers for all shifts, including 50 percent women, many compulsorily drafted juveniles, and 3,000 to 4,000 convicts.

5. Production and capacity:

a. Power supply from outside.

b. Delivery of raw-steel bars at (5). Except for precision parts, e.g. plugs, pumps etc., the tractors, including the engine, were finished there.

c. In most sections two 10-hour shifts, furnace operation three 8-hour shifts. Thirty percent waste (could easily be made out as it was painted red), remarkably low efficiency.

d. Casting and pre-processing in (5). In (9) final treatment and completion of engines. In (2) final treatment and completion of tractor chassis and building-in of engines.

e. Exclusively construction of tractor S 80. Weekly output 50 to 60 pieces (information from many fellow prisoners and source's own knowledge of belt-conveyor work in (2)).

f. The capacity obviously was not fully used due to the slow change to the new series. Tanks were allegedly produced up to 1945; in November 1945 , when source arrived, old-type Stalin tractors were built; the output at that time was hardly more than 10 pieces per week. At the same time the production of the new tractor was started. The production of S 80 was raised from 50 to 60 pieces per week during the period from early 1946 to July 1948.

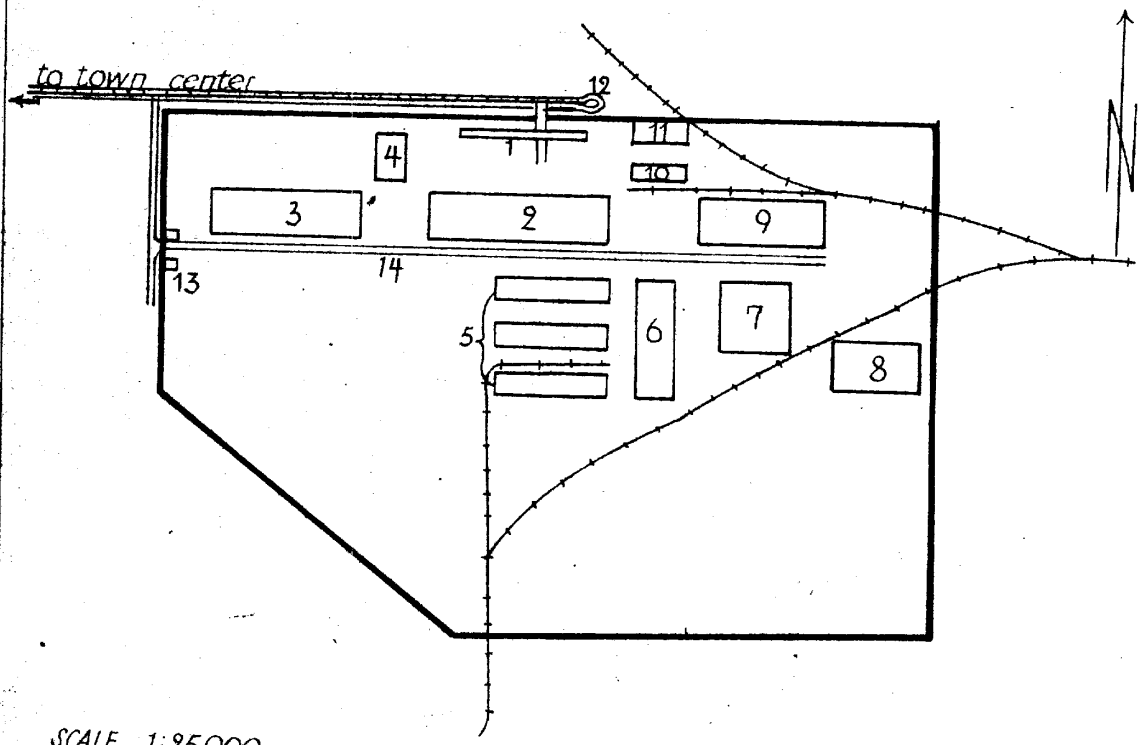
g. A conversion to tank construction will be possible at any time.

1 Annex: Tractor Plant in Chelyabinsk.

Annex

[redacted]

Tractor Plant in Chelyabinsk



SCALE 1:25000

Legend:

1 Four-story administration building, 1,500x60 feet with an eight-story tower
2 Workshop for the production of tractors, assembly line system, 2,000x600 feet
3 Building under construction
4 Garage with filling station
5 Three forges, presumably also mechanical shop. Raw steel was stored between the workshops
6 Foundry, off limits to PWs
7 Repair of machine tools
8 Sawmill
9 Production of engines and assembly
10 Lubricants dump
11 Transformer plant
12 Main entrance with terminal of streetcar line
13 Main entrance with two guardhouses
14 Factory road

COUNTRY Soviet Union REPORT NO.

TOPIC Kirov Tank and Tractor Plant, Chelyabinsk 25X1A

25X1A EVALUATION [redacted] OBTAINED [redacted]

DATE OF CONT

DATE OBTAINE [redacted] DATE PREPARED 9 May 1950

REFERENCES

PAGES 5 ENCLOSURES (NO. & TYPE) 2 sketches on ditto

REMARKS

25X1X SOURCE [redacted]

1. The Kirov tank and tractor plant is about six kilometers from the center of the city of Chelyabinsk (61°25'E/55°10'N), in the middle of the industrial district. The plant is estimated to be between 25 and 30 years old. According to statements by Soviet workmen, the plant was considerably enlarged by the evacuation of other plants, said expansion work being done by PWs since 1944. For sketches of the plant, see Annexes 1 and 2*.

2. The tractor shop was estimated, by pacing, to be 1,000 meters long and 80 meters wide. The Korpus NOI section occupied one-third of the shop area, and was estimated to be 50 meters long and 80 meters wide. It contained about 25-30 milling machines, as well as six to eight welding apparatus for the production of tractor gear boxes and chain-driven tractor wheels. The remainder of the tractor shop was devoted to the assembly line production of tractors. The shop was subdivided into many sections, without partitions.

3. The foundry and forge shop contained six 3-ton, and three 1½-ton steam hammers. It also accomodated a tank assembly shop.**

4. The total labor force was estimated to be between 56,000 and 70,000 persons, working in three shifts. In cases where the fulfillment of prescribed output quotas were doubtful, additional shifts were ordered to work, including Sunday shifts. The tractor shop employed approximately 5,100 Soviets on three shifts, 660 of them worked in the Korpus NOI section of that shop.

5. The manager of the plant, until the Summer of 1948, was General Salzmann, a member of the Supreme Soviet, and at the time city commandant of Chelyabinsk. He was relieved by another general for reasons of corruption. The engineers and nachalniks (leading persons) were civilians.

6. The plant was surrounded by a high board fence topped with wire. Watchtowers were erected at intervals of 200-400 meters. Uniformed plant police occupied the watchtowers, and were posted at the entrance to the tank shop.

7. The tractors produced at the plant were of the S-80 caterpiller type. Daily production of these tractors was estimated at 40-60. In February 1948, the monthly total was estimated at 500-600 tractors, while in September and October 1948 the total was estimated at 3,600. These tractors were four meters long and 2.5 meters wide, and bore the letter "K" on the upper portion of the radiator casing. The prescribed monthly production quota of 3,600 gear boxes in the Korpus NOI section was fulfilled. The gear boxes were made of gray casting, ground inside. These boxes were one meter high, one-half meter wide, 25 millimeters thick (thinner where pressed out), and pear-shaped. In the center of the gear box was a 200 millimeter opening to accomodate a gear shaft. In the pointed end of the box was an opening 100 millimeters in diameter and 100 millimeters in depth. The outer wall of the gear box was threaded at 100 millimeter intervals. The chain-driven wheels produced were approximately 80 centimeters in diameter, and the tooth rim was 100 millimeters in width, with teeth spaced every 80 millimeters. The wheels themselves had eight spokes which were approximately 60 millimeters thick. The bore of the hub of the wheel was 100 millimeters in diameter. Monthly quotas of 3,600 wheels were met.

8. One source was told at Sinsifa school that the daily production of tanks was sixty. Repairs were made on an unknown quantity of T-34 and JS tanks.*** The tanks observed had six small rollers. All edges of the superstructure were rounded off. The tanks mounted an AA machine gun of approximately 20 millimeters and a long-barrelled gun of unknown caliber and carried a crew of four. The tanks were larger than T-34s.

25X1A

* [redacted] Comment:

Two seperate sketches of the plant are submitted because of conflicting information provided by sources.

25X1A ** [redacted] Comment:

The actual functions of the tank assembly shop as compared with those of the main tank shop were not available.

25X1A *** [redacted] Comment:

One source stated that, in his opinion, the Soviets exaggerated the tank production figures. He believed that fifty percent of the tanks at the plant were under repair for he remembers having seen tank transports entering the plant.

2 Annexes: 1.) Kirov Tank and Tractor
2.) Plant, Chelyabinsk

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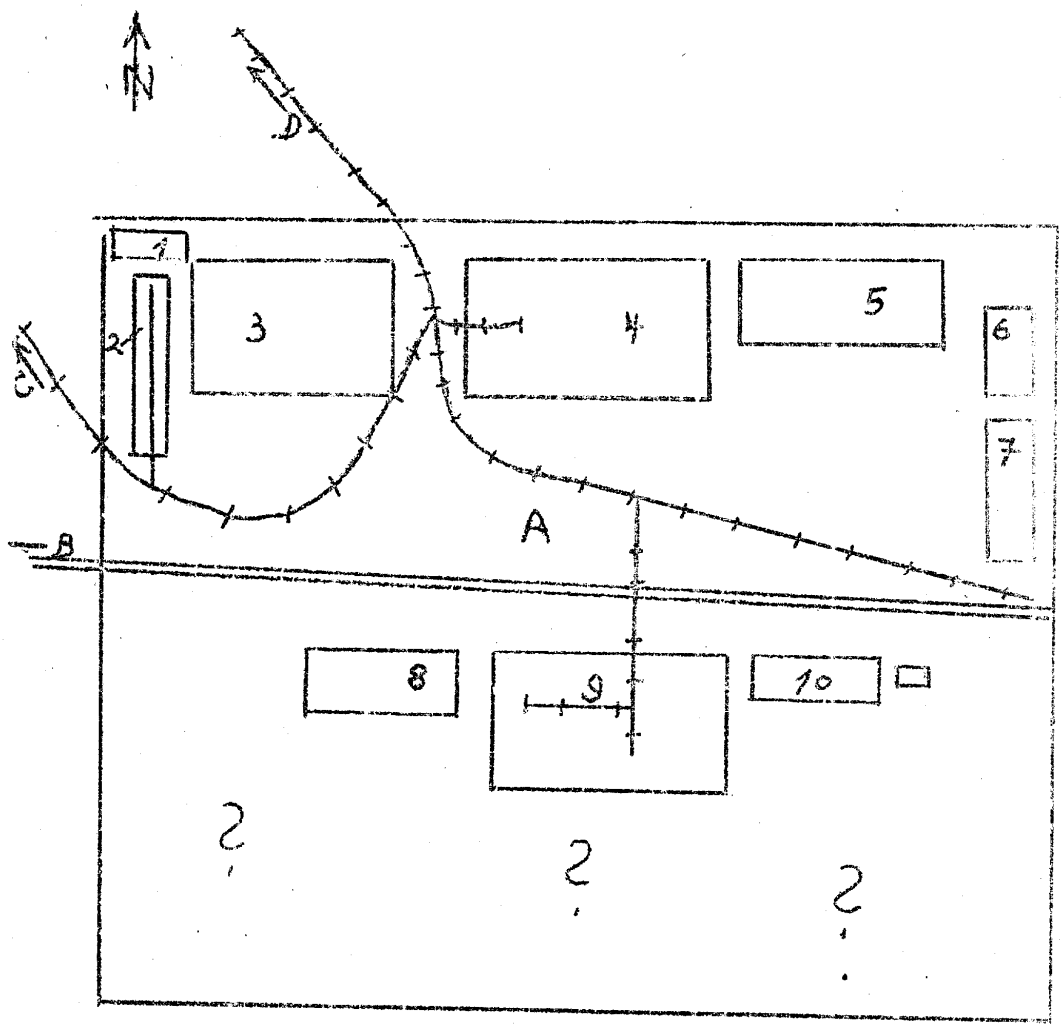
Kirov Tank and Tractor Plant, Chelyabinsk



Legend:

A Kirov Plant
- 1 Garage for motor vehicles, 150x60 meters
- 2 Material depot, 300x60 meters, tractor and tank components
- 3 Tank workshop, 500x100 meters
- 4 Tractor workshop, 600x100 meters
- 5 Foundry, 400x80 meters
- 6 Sawmill
- 7 Sawmill
- 8 Material depot
- 9 Open-hearth plant
- 10 Administration

B Road to Chelyabinsk
C Double-track railroad line to Chelyabinsk station
D Single-track railroad line to Chelyabinsk station

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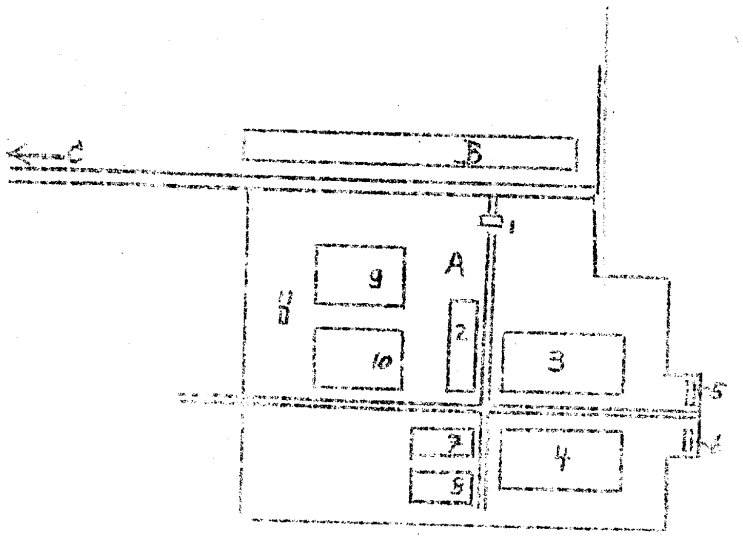
Annex 2

CONFIDENTIAL

Kirov Tank and Tractor Plant, Chelyabinsk



Legend:

A Kirov Plant
1 Administration
2 Lathe shop
3 Workshop for tractor building
4 Foundry
5) 6) Motor vehicle garages
7) 8) Carpentry
9) 10) Workshops for tank repair
11 Lifting platform
B Settlement
C Road to Chelyabinsk
D To power station, about 1 km

CONFIDENTIAL

CLASSIFICATION SECRET-CONTROL/US OFFICIALS ONLY

COUNTRY Soviet Union REPORT NO.

TOPIC CHELYABINSK "KPSIS" Motor Vehicle Spare Parts Plant 25X1A

25X1A EVALUATION [redacted] OBTAINED [redacted]

ANNEX P

DATE OF CONTEN [redacted]

DATE OBTAINED [redacted] DATE PREPARED 10 February 1950

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 1 blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location:

The "KPSIS" plant is about 4 miles southeast of the town center of CHELYABINSK, in the suburb of SETSTROI, close to and south of the railroad line to KOPEYSK (61°25'E/55°10'N), Chelyabinsk Oblast.

2. Plant installations:

"KPSIS" is an abbreviation for Kusnetshni-Presovi Zeck, Zavod Imeni Stalina. The plant area is about 1,500 x 4,500 feet. According to plant employees, the construction of the plant started in the winter of 1939/1940. The concrete factory which supplied the construction materia was built at the same time.

Construction and expansion work was stopped at the end of the war and only repair and improvement work on the buildings has been done since then. The foundations of two workshops, the construction of which had been stopped in 1945, still existed in the last period of observation. Electric power is supplied from the power plant 1.2 miles west of the factory. There are railroad spur tracks. For plant layout see Annex.

3. Work force: 1,000 men working in two, sometimes three shifts. (Source stressed that it was very difficult to estimate the exact number of laborers.)

4. Production: Chassis frames, rims, springs, ground plates for airfields.

25X1A [redacted] Comment:

a. This report, covering a relatively recent period, is the best survey so far received on the layout and the installations of the frequently reported plant southeast of CHELYABINSK.

b. The attached sketch and its legend agree with previous partial sketches and are considered correct.

c. The entire report is considered valuable.

1 Annex: CHELYABINSK "KPSIS" Motor Vehicle Spare Parts Plant

P

Legend to Annex:

1 Pressing section and forge, 200 x 600 feet and very high, steel structure walled up with slag stones.

2 Main administration building

3 Rim section, 75 x240 x 600 feet, same type of structure as No 1, also production of gas generators

4 Oil bunker

5 Foundations for additions, construction work was stopped in 1945.

6 Spring section, 60 x 120 x 300 feet, same type of structure as No 1

7 Garage, 90 x 200 feet

8 Various workshops, 20 x 120 x 300 feet, same type of structure as No 1

9 Storage sites

10 Storage shed

11 Foundations for additions, construction work was stopped in 1945

12 Concrete factory (working place of source)

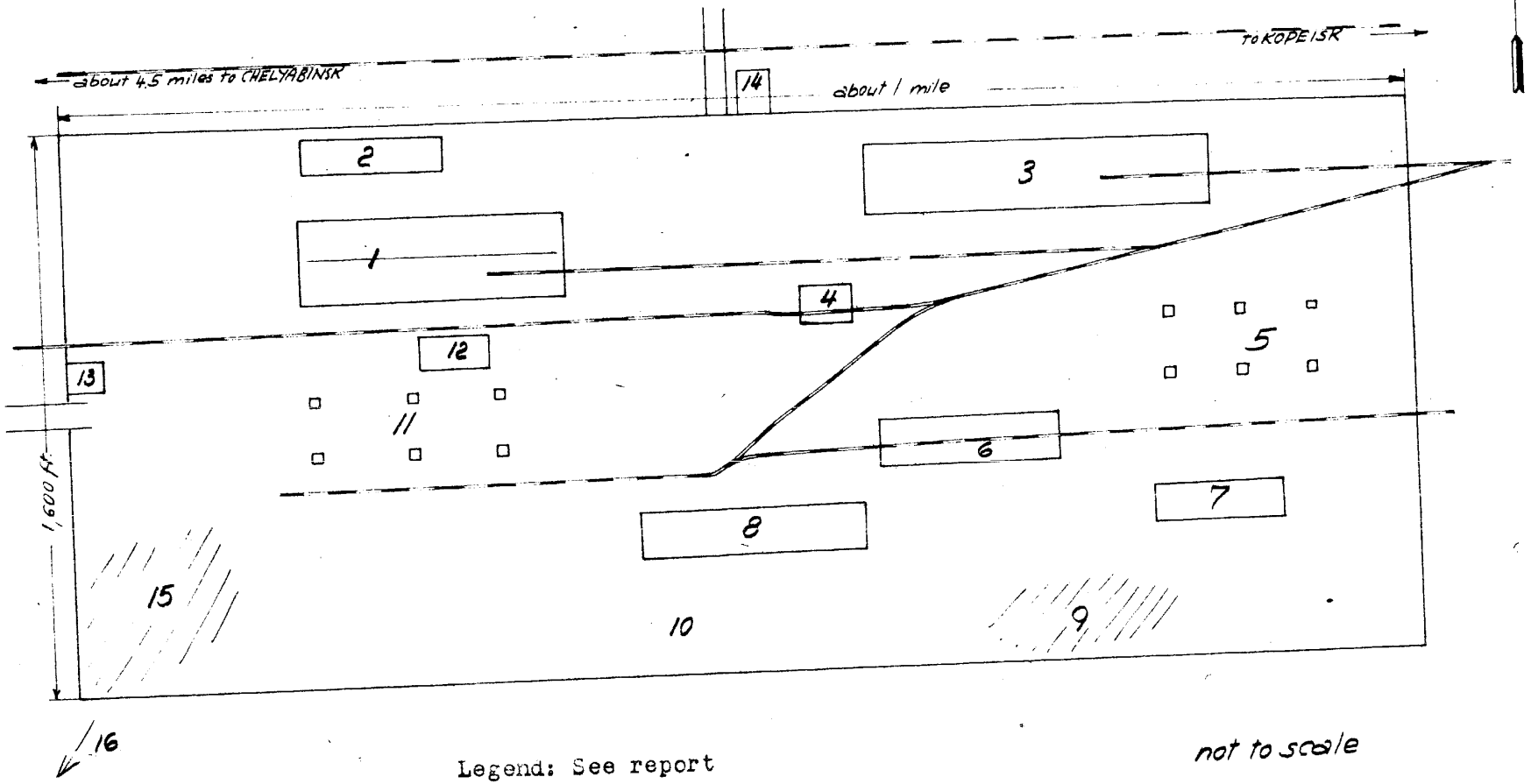
13 and 14 Guardhouses

15 Sheds, cantonment buildings and cabbage cellar

16 Direction of PW Camp No 7606, which is 1,500 feet apart.

Annex

CHELYABINSK "KPSIS" Motor Vehicle Spare Parts Plant



Legend: See report

not to scale

Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

COUNTRY Soviet Union REPORT NO.

TOPIC "KPSIS" Motor Vehicle Parts Plant in CHELYABINSK 25X1A

25X1A EVALUATION [redacted]

ANNEX 2

DATE OF CONTEN

DATE OBTAINED [redacted] EPARED 9 February 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location: Southeast of CHELYABINSK (61°25'E/55°10'N), Chelyabinsk Oblast, near a lake.

2. Plant installations: Source knew only the 600x300-foot metal-working department which is composed of the following sub-departments: Sizing section, pressing department, forge, hardening section, punching section, and subsidiary departments. The shop had three house tracks and three mobile cranes with a hoisting capacity of 25 tons each (for sketch of this workshop see Annex, sketch No. 1).

3. Work force: A total of 2,000 Soviets and 300 PWs.

4. Production: Chassis frames, front axles, crankshafts, camshafts, valves, oilpans, cans, special plates for airfields. The production of such plates was increased until it accounted for about half of the plant output toward the end of the reporting period. For sketch of a plate, see Annex, sketch No. 2.

25X1A [redacted] Comment:

a. The existence of the plant was reported several times. It was called both a "Runway Matting Plant", and an "Automobile Accessories Plant".

b. The workshop described in detail by source of this report is the plant main production shop.

c. The report is valuable for comparison with previous information. Of special interest is the form of the "special plates for runways" as reproduced in sketch No. 2. These plates, the production of which was increased recently, are used for the construction of special runways.

1 Annex: "KPSIS" Motor Vehicle Parts Plant in CHELYABINSK.

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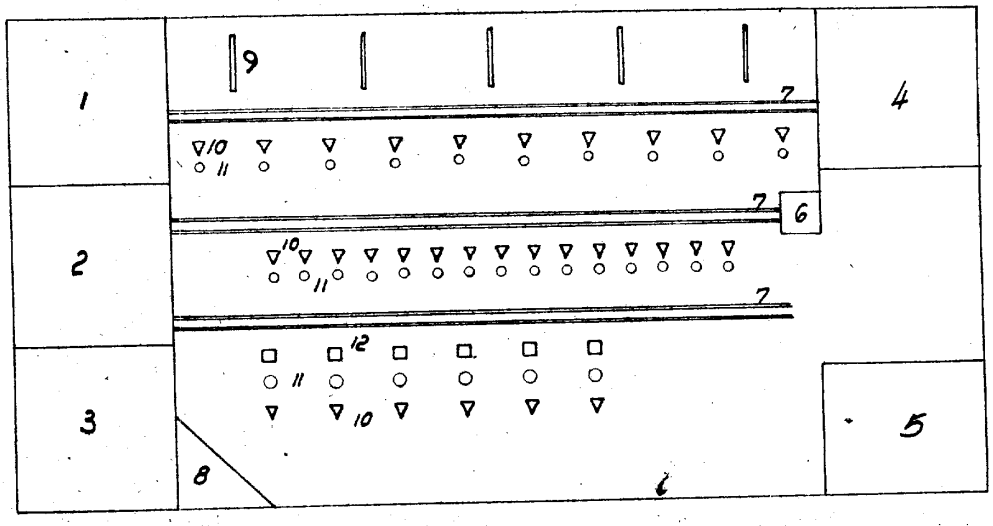
Legend to Annex:

1. Can shop
2. Test department
3. Washing room
4. Section equipped with "Cincinnati" shears
5. Sizing section
6. Large hydraulic hammer for the treating of crankshafts
7. Craneways
8. Test station, testing of Brinell hardness
9. Toledo presses
10. Annealing furnaces
11. Steam hammers
12. Jolting machines.

"KPSIS" Motor Vehicle Parts Plant in CHELYABINSK

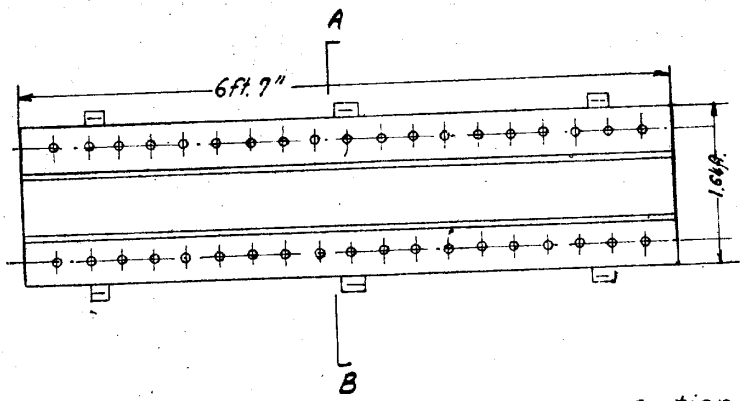
Sketch No. 1



scale 1:12,500

Legend: See report

Sketch No. 2



Section A-B

scale 1:20

CLASSIFICATION

COUNTRY U.S.S.R. REPORT NO.

25X1A

TOPIC Iron and Steelwork in Asha

25X1A EVALUATION [redacted] OBTAINED [redacted]

DATE OF CONT [redacted]

DATE OBTAINED DATE PREPARED 1 November 1951

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 2 - Two sketches on ditto

REMARKS

SOURCE [redacted] 25X1X

1. The Iron and Steelworks were in the southwestern part of Asha (55°00'N/57°18'E) Chelyabinsk Oblast, north of the railroad station of the main railroad line. There were spur tracks leading to the main railroad line. This was an old plant which had some extremely old installations. The date 1916 was inscribed on one smoke stack. Only the rolling mill and a slag concrete factory were new structures. The construction of the rolling mill allegedly started in 1940 but work on this project was suspended during the war and was not completed until 1948. *

2. The plant comprised a blast furnace department, an open-hearth steel department, a rolling mill department, a gas producer installation, a power plant, and several auxiliary and secondary departments. The plant was about 2 km long. Power was supplied by a plant-owned power station. **

3. The plant produced about 90,000 tons of pig iron and 70,000 tons of open-hearth steel annually. The plant has also presumably produced rolled material since the completion of the rolling mill in 1948. However, since sources left the plant in 1948, no information was available as to the amount and type of rolled materials produced. ***

4. The number of workers per shift was reported to be 800 to 1,000. Work was done in three 8-hour shifts. In 1948, the following number of PWs worked in this plant: 120 in coal unloading and in the gas producer department, 27 in the open-hearth steel department, 45 in the blast furnace department and 12 specialists assigned to the construction of the rolling mill. The PWs worked in one shift only. The plant was surrounded by a wooden fence on the north, west and east sides and was guarded by civilian plant police.

25X1A * [redacted] Comment. For location sketch of the plant, see Annex 1. This sketch is based on a map of October 1940, scale 1:1,00,000, and on information from sources. A Soviet source stated that the plant was on the Asha River. 425 meters above the junction of the Sim River.

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25X1A

** [redacted] Comment. For details on the layout and equipment of the plant, see Annex 2, based on information from sources.

25X1A

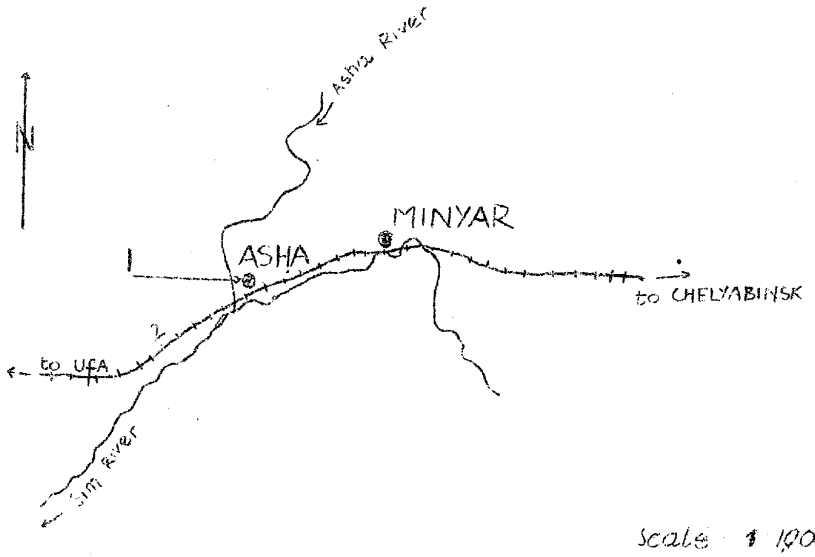
*** [redacted] Comment. According to previous information, the plant was built between 1896 and 1900 as a pig iron producing plant. The rich wood reserves near the Asha River and the pig iron deposits of the Bakal district provided the raw materials. Before World War I there were two blast furnaces with an annual capacity of 30,000 tons of pig iron each, and three open-hearth furnaces with a total annual capacity of about 40,000 tons. A large percentage of the pig iron and steel was shipped in ingots and as castings to the Minyar (55°04'N/57°34'E) Steelworks for further processing.

25X1X

[redacted] the plant was recently modernized and in the future will further process the pig iron and steel it produces.

Annex 1

Location Sketch of the Asha Iron and Steelworks



Scale 1 1,000,000

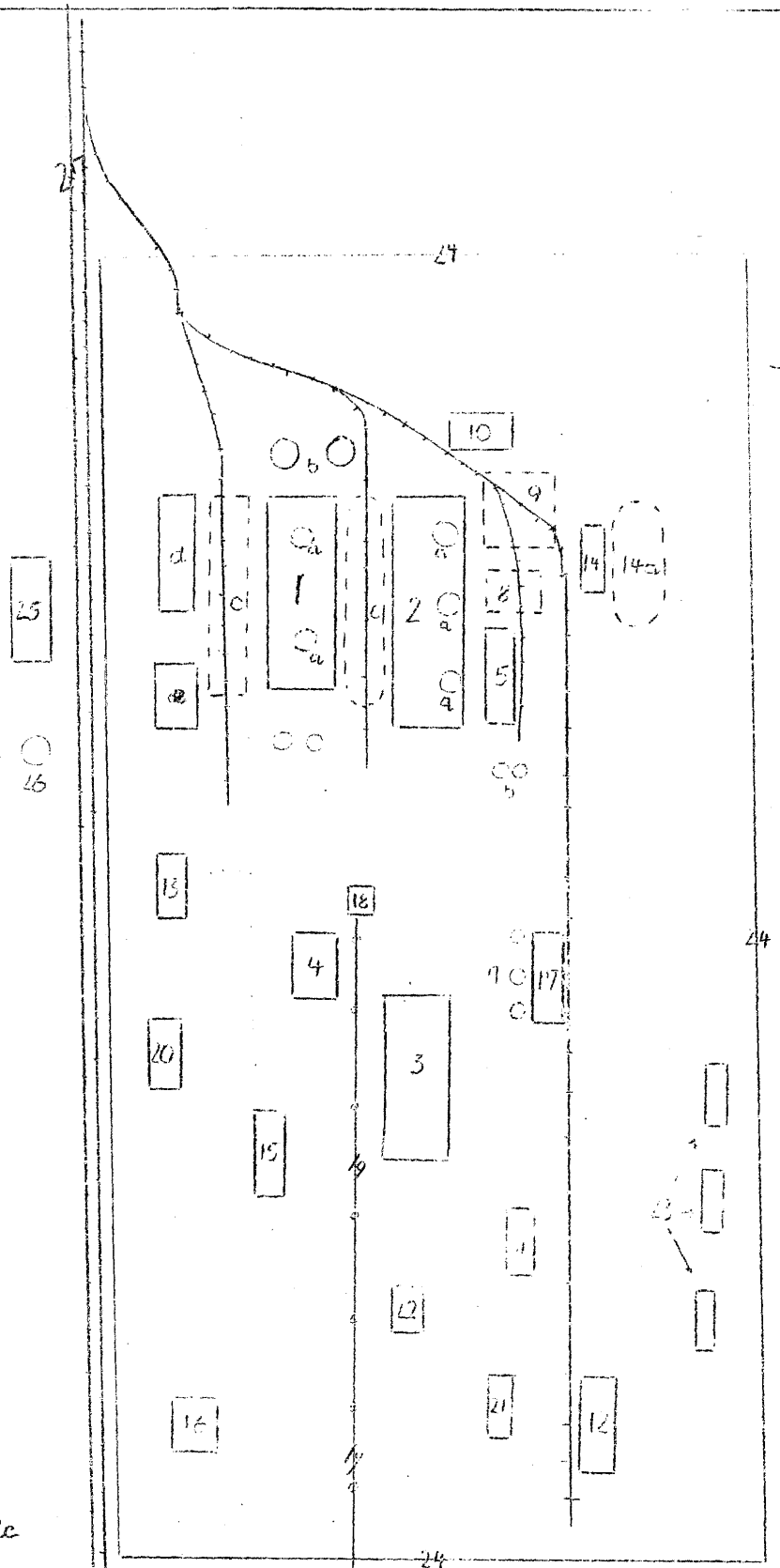
Legend:

1. Asha Iron and Steelworks.
2. Double-track main railroad line.

CONFIDENTIAL/CONTROL/US OFFICIALS ONLY

Annex 2
- 1 -

Location Sketch of the Asha Iron and Steelworks



Legend: See next page.

Legend:

1. Blast furnace department.

   a. Two charcoal-fired blast furnaces with a total capacity of 300 to 350 cubic meters and an annual output of 80,000 to 90,000 tons of pig iron at a utilization degree (Ausnutzungsgrad) of 1.20. The furnaces were charged every four hours by a cable railway (Seilbahn). The charge consisted of charcoal, supplied by the local charcoal plant; iron ore, from the Bakal district, lime from nearby quarries; scrap; limestone; and manganese. According to one source, 16 trucks of ore, 4 trucks of scrap, 2 trucks of limestone, and 18 trucks of coke were used for one charge. In addition to charcoal, coke was allegedly also used for charging the blast furnaces. The furnaces were tapped three times a day. About one third of the pig iron produced was processed in the plant-owned steelworks, and two thirds were shipped in ingot form to outside plants.

   b. Hotblast stoves.

   c. Ore dump.

   d. Pig iron foundry.

   e. Compressor installation, used in connection with the hotblast stoves.

2. Open-hearth steel department equipped with 3 open-hearth furnaces (a) having capacities of 25 tons, 35 tons, and 45 to 50 tons respectively. They were fired with coal-gas and also with mazut. Manganese was added to the liquid iron and, according to one source, nickel was also added. The annual output was 65,000 to 70,000 tons in 1948. Ingot steel and steel castings were produced.

3. Rolling mill.

4. Power plant, equipped with four coal-fired boilers and 4 turbines, operated by water from the Sim River through an underground canal. The power plant supplied to town as well as the metallurgical plant.

5. Gas producer installation, equipped with 12 furnaces to produce coal-gas. Ten of these furnaces were constantly in operation, in rotation, while slack was being cleaned from the other two. Each furnace was refilled by a coal lift every 15 minutes. On top of the furnaces there was a pipeline, 60 to 70 cm in diameter, leading to the open-hearth steel department. When there was not sufficient gas pressure to fire the open-hearth furnaces, mazut was used as additional fuel. Part of the produced gas was piped into gas tanks through pipelines 30 cm in diameter. According to one source, each furnace consumed 6 to 8 cubic meters of coal in one 8-hour shift.

6. Two gas tanks.

7. Oil tanks.

8. Coal dump.

9. Scrap dump.

10. Manganese ore dump.

11. Spare parts warehouse.

12. Mechanical repair department, equipped with 15 ordinary lathes, 3 turret lathes, 2 milling machines, 8 multiple spindle drilling machines, and 2 shaping machines. This department did plant repair work only.

13. Fitting shop (Schlosserei) and forge. One source, a blacksmith by profession, who worked in the forge for 8 months, stated that it was a boiler forge. A welding shop was housed in the same building.

14. Sawmill. According to one source it had only one saw frame. The mill produced for plant requirements.

14a. Wood dump.

15. Pattern making shop. This installation was reported by only one source, a carpenter, who was employed in this shop.

16. Slag block factory, operated for plant requirements.

17. Brickyard.

18. Limestone crushing plant.

19. Cable railway used to convoy material to the crushing plant.

20. Administration building.

21. Ration supply depot.

22. Kitchen.

23. Warehouses.

24. Fence.

25. Railroad station.

26. Water tower.

27. Double-track main railroad line.

COUNTRY U.S.S.R. REPORT NO.

TOPIC Metallurgical Plant in Chelyabinsk 25X1A

25X1A

EVALUATION [redacted] OBTAINED [redacted]

DATE OF CONTEN

DATE OBTAINED DATE PREPARED 16 August 1951

REFERENCES

PAGES 4 ENCLOSURES (NO. & TYPE) 5 - Five sketches on ditto

REMARKS

SOURCE [redacted] 25X1X

1. The Metallurgical Plant in Chelyabinsk (55°10'N/61°25'E), Chelyabinsk Oblast, was 16 to 18 km northeast of the town on the eastern bank of the Mias River. The large Ssozgorod residential settlement was built about 1,200 to 1,500 meters west or southwest of the plant. According to Soviet workers, it was planned to develop this settlement into a completely new suburb. The entire industrial complex of this area was called "Bakal". The metallurgical plant was generally called "Metalzavod". The number of this plant was not known. The administration building and certain railroad cars displayed the firm's mark which consisted of the three letters PMZ within a black circle. (1)

2. One source stated that in 1946, the coking plant consisted of two batteries of 60 to 62 ovens each, which were housed in two wings adjoining the central building housing the coal distributing installation. There were two smokestacks nearby. The plant was said to be a modern American type plant. The incoming coal shipments were about 5,000 tons daily. Overhead gas pipes, 1.5 to 2 meters (sic) in diameter, led from the coking plant to the various installations of the plant. There were two large and several small gas and oil tanks southeast of the coking plant. Another source reported that a third batterye with 60 to 62 ovens was completed in 1948 and was put into operation on 1 May 1949. The third smokestack was built by a new method. (2)

3. According to Soviet civilian workers, the blast furnace plant was built during the war. There were two blast furnaces, each about 20 meters high and 6 to 7 meters in diameter. Each blast furnace was charged 28 times during an eight-hour shift. Two tappings were made at irregular intervals during the same period. The molten iron was collected in special buckets. Two buckets were used for each furnace during each tapping. In the foundry, the molten iron was poured into molds, 400 x 200 x 200 mm, which were rigidly fixed on a conveyor belt. The glowing ingots were loaded on railroad cars at the end of the conveyor belt and were cooled in a large shower installation. The blast furnaces were reportedly equipped with inclined electric hoists. No preparations for the construction of an additional blast furnace were observed. (3)

4. The plant-owned electric power station covered an area of about 250 x 100 meters and was surrounded by a fence. It comprised a new boiler house, an old boiler house, a compressor station, a coal-dump and some subsidiary buildings. The old

boiler house was equipped with four coal-fired horizontal boilers. Boiler No 4 was put into operation in January 1949. The new boiler house, equipped with three vertical-tube boilers, was not in operation as of the end of 1949. The electric power station was equipped with three turbines, including one modern American steam turbine which was installed in the winter of 1948 and 1949. There were high-voltage lines carried on wooden poles within the metallurgical plant. One source reported that a long-distance transmission line, which was carried on wooden poles within the plant and on steel towers outside the plant, came from Chelyabinsk to the electric power plant, although this same source stated that the plant-owned power station supplied the entire metallurgical plant with current and steam. The capacity of the power plant was not known but it was reported that power failures were very rare. There were four large sheet-metal smokestacks on the roof of the boiler house which were visible at a great distance. (4)

5. According to one source, the open-hearth department covered an area of 300 x 150 meters. Another source estimated that the plant area was only 150 x 50 meters. The main building of the open-hearth department, which was said to have been the largest building in the entire plant prior to the construction of the new rolling mill, was equipped with 5 or 6 open-hearth furnaces as of October 1949. One source stated that a total of ten furnaces were scheduled to be installed in this building. Two sources reported that there were only two furnaces in operation as of April 1948 but that by November 1949, five furnaces were in operation. On the west side of the main building were five smokestacks which were 60 to 80 meters high.

6. One source reported that there was an electric steel department housed in a square building about 100 x 100 x 20 meters and equipped with five spur tracks. This department cast steel ingots which were about 1 meter long, 350 sq mm on top and 200 sq mm at the base. A gas line, 4 meters above the ground, led to this department. Another source reported that there was a steel foundry, 125 x 60 meters, equipped with four electric furnaces and several sidings. (5)

7. One source, who worked in the plant as a construction worker in 1949, stated the the old rolling mill was built in 1943. This date was engraved on a stone over the entrance. This rolling mill was housed in a steel and brick structure, about 200 x 40 x 20 meters, with a steel roof and with skylights. There was a brick smokestack, about 60 meters high, on the eastern side of the building. Source had no information as to the equipment of this rolling mill. A gas pipe, 4 meters above ground, led to this building. Source frequently observed railroad cars leaving the mill loaded with round iron and double-T girders of various sizes. (6)

8. According to one source, the new rolling mill was built on a fenced-in area of about 1,000 x 200 meters. This was a steel structure, completed in October 1949, with two workshop sections arranged at right angles. The north-south section was about 500 meters long and the east-west section was 200 meters long. This was the largest building of the plant. Another source stated that the new rolling mill was about 1,500 meters long and 300 meters wide and was still under construction in November 1949. A third source reported that, according to Soviet foremen, the new rolling mill was to be equipped with a rolling mill train 750 meters long and that machinery from a German rolling mill was to be installed. According to this source, the building was a steel structure and was still under construction in August 1949. (7)

9. One source estimated that the plant employed 3,000 to 4,000 workers per shift. Near the plant were two male convict camps and one female convict camp with a total of about 4,000 convicts in the three camps. Part of these convicts worked in the metallurgical plant. Another source stated that all the 1,300 inmates of PW camp 7623/29 worked on the reconstruction of the plant as well as on the construction of the settlement and on road building. Work was done in three shifts. No information was available as to the production figures for this plant. (8)

25X1A [redacted] Comments.

(1) For location sketch of this plant, see Annex 1. This location agrees with previous information and is believed to be correct. Ssozgorod is an abbreviation of Ssotsialicheski Gorod (Socialist Town). The name "Bakal" refers to the town of Bakal, Chelyabinsk Oblast. The ores treated in the metallurgical plant were supplied from Bakal. For layout sketches of the plant, see Annexes 2, 3, 4 and 5. Annex 2 is based on information supplied by one PW who was a mechanical engineer and who worked in this plant as a construction worker from 1945 until October 1949 and later worked as an engineer in the power plant and other installations of this plant as well as working in the Typloppribor Plant. [redacted] the plant 25X1X as a construction worker. This source apparently left the plant prior to the alleged construction of the third battery of ovens in the coking plant. A [redacted] who worked in 25X1X the plant as a laborer between February 1947 and June 1948. Annex 5 is based on information provided by a PW who worked in the plant as a laborer from 1946 to June 1948 and later worked on road construction within the plant until November 1949.

(2) The daily consumption of 5,000 tons of coal by only the two batteries of ovens in the coking plant appears to be exaggerated. However, with three batteries of ovens in operation, the coking plant would probably consume more than 5,000 tons of coal.

(3) It is known from previous reports and from Soviet press reports that two blast furnaces with a capacity of 1,300 cubic meters each were installed in this plant during the war. A third blast furnace was scheduled to be put into operation by the end of 1950. No information as to the capacity of this furnace has been obtained. A Soviet press report stated that, in the early part of 1949, the output of the two blast furnaces reached a utilization coefficient of 1.10 at a standard of 1.24, which meant that each 1.10 cubic meter of furnace capacity yielded 1 metric ton of pig iron within 24 hours.

(4) No definite information has yet been obtained as to the equipment of the two boiler houses. It is possible that in the future the new boilerhouse will be used to produce electricity and the old boilerhouse to supply hot steam for the plant.

(5) According to previous reports, the capacity of the electric steel furnaces is 30 metric tons each, and the total annual production is 150,000 tons. All four furnaces were put into operation during the war, after having been moved from the electric steel plant in Noginsk (55°50'N/38°28'E), district of Moscow.

(6) According to previous information, this mill was equipped with three mill trains with rollers having diameters of 800 mm, 450 mm and 300 mm respectively. The annual output of this rolling mill was reported to be 100,000 tons of rolled products.

(7) From the descriptions given by sources, it appears that the new rolling mill is the blooming mill which was scheduled to be built under the original plant of this plant.

(8) Based on available information, it is estimated that the entire metallurgical plant would produce annually 650,000 tons of pig iron with two

S

blast furnaces, 700,000 tons of open-hearth steel with five open-hearth furnaces, 150,000 tons of electric steel, 100,000 tons of rolled products in the old rolling mill only, and 1,000,000 tons of coke.

5 Annexes: Five sketches on ditto.

S

Legend:

A. Metallurgical plant at Chelyabinsk.

1. Coking plant with three batteries of ovens.

2. Blast-furnace department with two blast furnaces.

3. Plant-owned electric power station, 250 x 100 meters surrounded by a fence.

a. New boilerhouse, not yet in operation.

b. Old boilerhouse, in operation.

c. Compressor station.

d. Coal dump.

4. Open-hearth plant with 5 or 6 open-hearth furnaces.

5. Concrete and asphalt plant roads, 6 to 8 meters wide.

6. Old rolling mill.

7. New rolling mill under construction, building site 1,000 x 200 meters.

8. Lime processing department.

9. Track system with about 10 railroad tracks.

10. Railroad for slag removal. The tracks were on an embankment.

B. PW Camp 102/29, number later changed to 7623/29.

C. Former PW Camp 68/1, now a civilian camp.

D. Soviet convict camp.

E. Typlopribor plant.

F. PTU-Fabrichno Savodskoye Uchilishche (Plant trade school).

G. Brickfactory, Ogne Upory.

H. Streetcar line from Chelyabinsk.

Legend:

1. Coking plant:
   a. Central building with coal distribution installation.
   b. Two smokestacks.
   c. Two batteries of ovens.
   d. Two large and some small gas and oil tanks.
   e. Coal dump.
   f. Coal conveying machinery.
2. Blast-furnace plant with two blast furnaces.
3. Crane installation with American made traveling crane.
4. Electric power plant.
5. Refrigerating plant.
6. Two cooling towers.
7. Brick factory.
8. Spur tracks.

S

Legend:

1. Coking plant with three smokestacks.
2. Bunker area, about 1 km long with twelve pocketshaped bunkers which were 5 meters deep.
3. Two blast furnaces.
4. Two stone buildings, two-story structures.
5. New four-story workshop, not yet in operation.
6. Administration building.
7. Warehouse.
8. Kitchen.
9. Cooling installation, also swimming pool.
10. Foundry.
11. Railroad sidings.

Legend:

A. Metallurgical Plant at Chelyabinsk.

1. Ore dump.

2. Blast furnace plant with (a) two blast furnaces.

3. Electric power plant.

4. Open-hearth plant, the skeleton of which was completed in 1946. Five furnaces were in operation by the end of 1949.

   a. Five smokestacks.

   b. Five furnaces.

5. Warehouse.

6. Iron foundry, 150 x 65 meters, with (a) two cupola furnaces and one small furnace for non-ferrous metal casting.

7. Machine shop, 150 x 65 x 25 meters, equipped with numerous metal-working machines, including turning and boring machines.

8. Administration building, 20 x 10 x 25 meters, adjoining the machine shop.

9. Electrical department, 70 x 25 x 20 meters, building completed but machinery not yet installed. (Probably a department for the installation and maintenance of the electrical equipment of the plant.)

10. Forge, 70 x 25 x 20 meters.

11. Steel foundry, 125 x 60 meters, with four electric furnaces and several sidings.

12. Heating plant (Thermische Abteilung), 50 x 25 meters, equipment not known.

13. Old rolling mill, 70 x 25 meters, equipment not known.

14. New rolling mill under construction, building site 1,500 x 300 meters.

15. Lime processing plant with three lime kilns.

16. Gas mains.

17. Steam pipeline.

18. Sentry.

B. Ssozgorod residential settlement.

C. Soviet convict camp.

D. Civilian settlement.

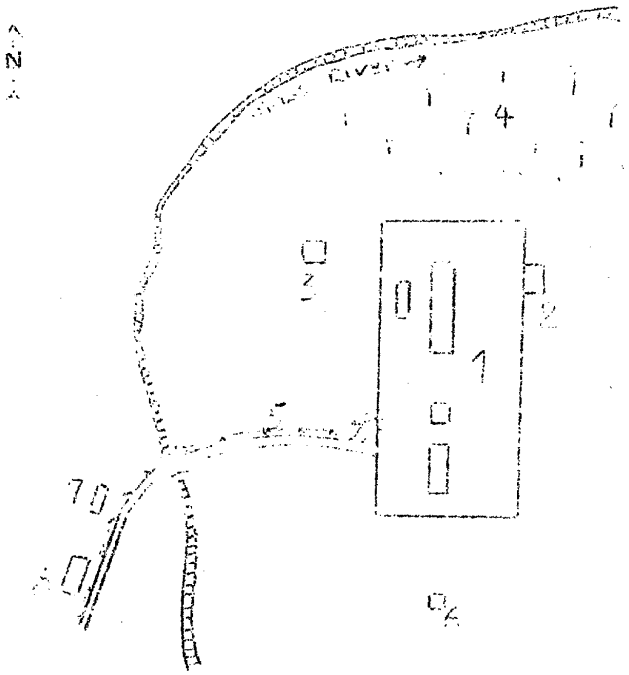
E. PW Camp 7623 with 13 huts.

Annex 1

Location Sketch of the

Metallurgical Plant at Chelyabinsk

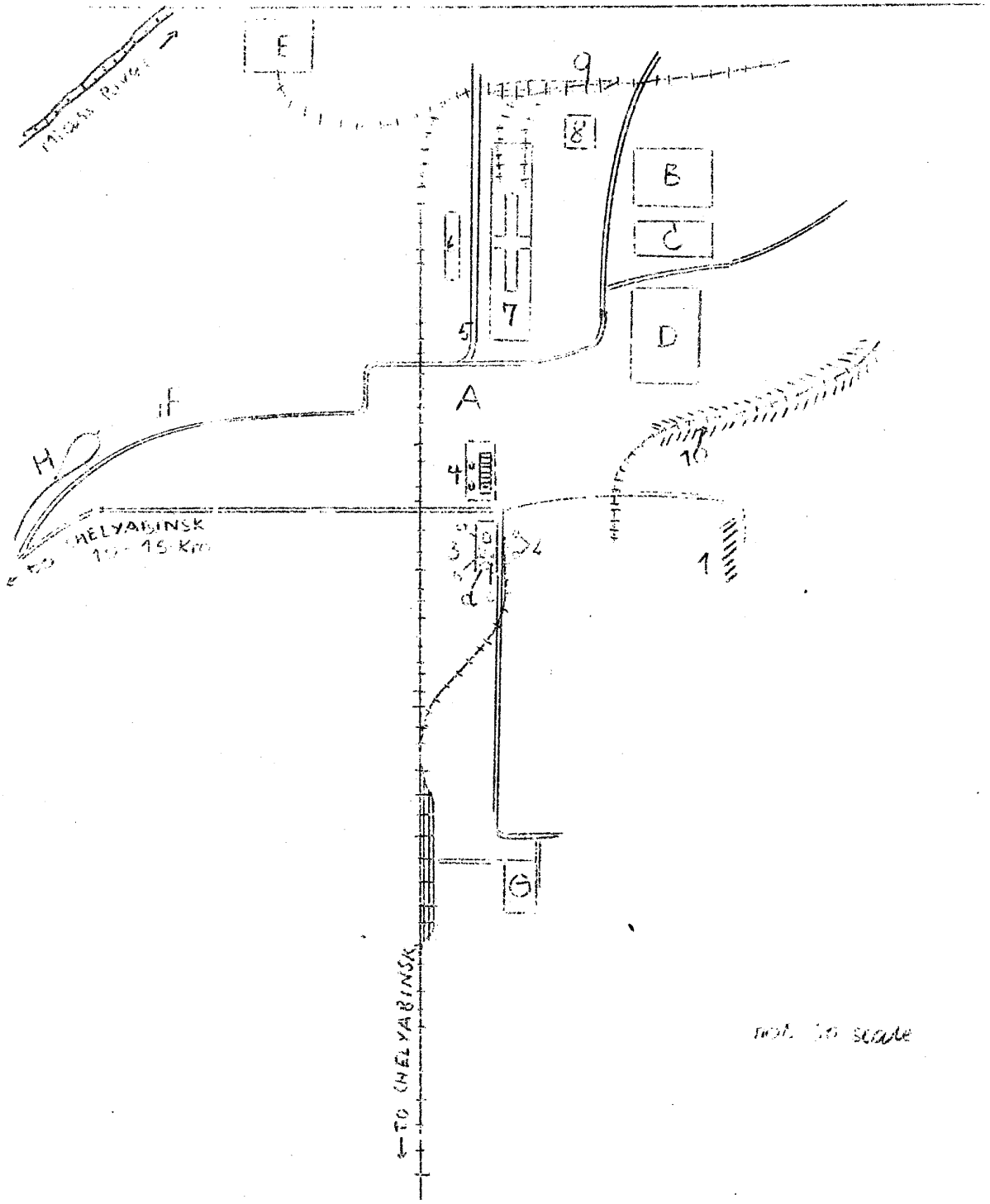
S



Legend:

1. Metallurgical Plant.
2. PW Camp 102/29, later renumbered 7623/29.
3. Teplopribor Plant.
4. Wooded range of hills.
5. Road and streetcar track to Chelyabinsk.
6. Brick factory which produces refractory brick.
7. Galvanizing plant.
8. Paint shop.
9. Airfield, situated on hill.

Layout Sketch of the
Metallurgical Plant at Chelyabinsk, as of October 1949.

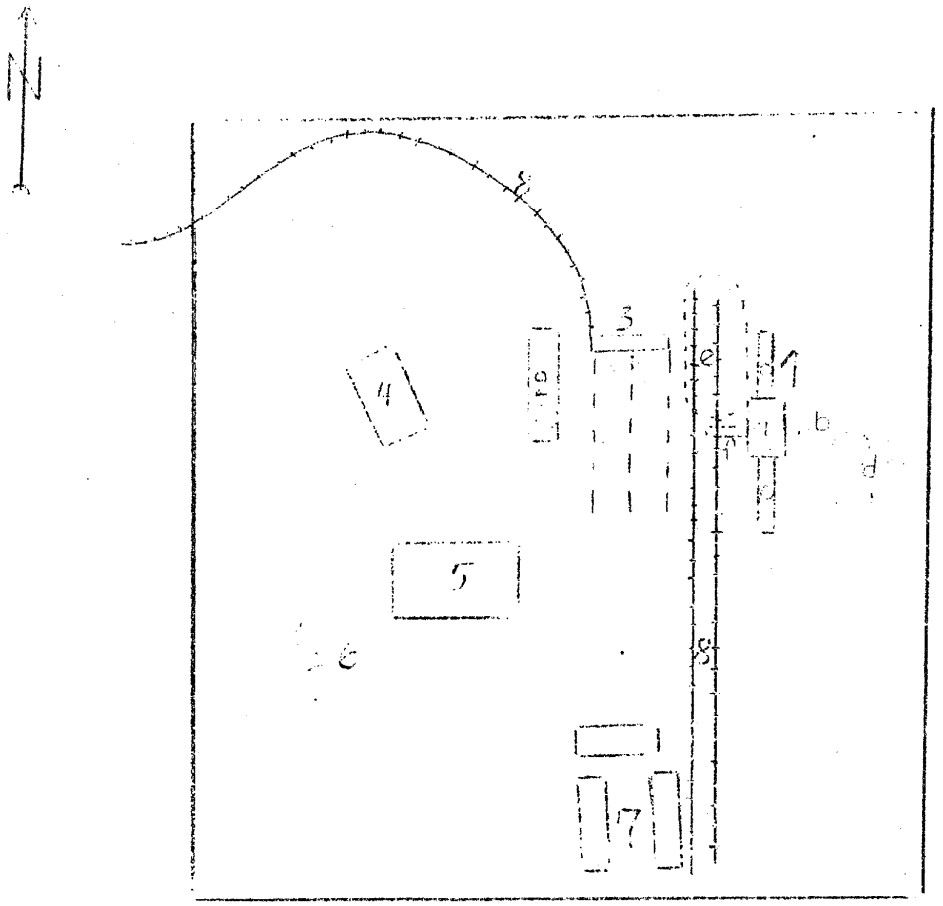


not to scale

SECRET/CONTROL/US OFFICIALS ONLY

For legend, see next page.

Layout Sketch of the Southern Section of the Metallurgical Plant at Chelyabinsk

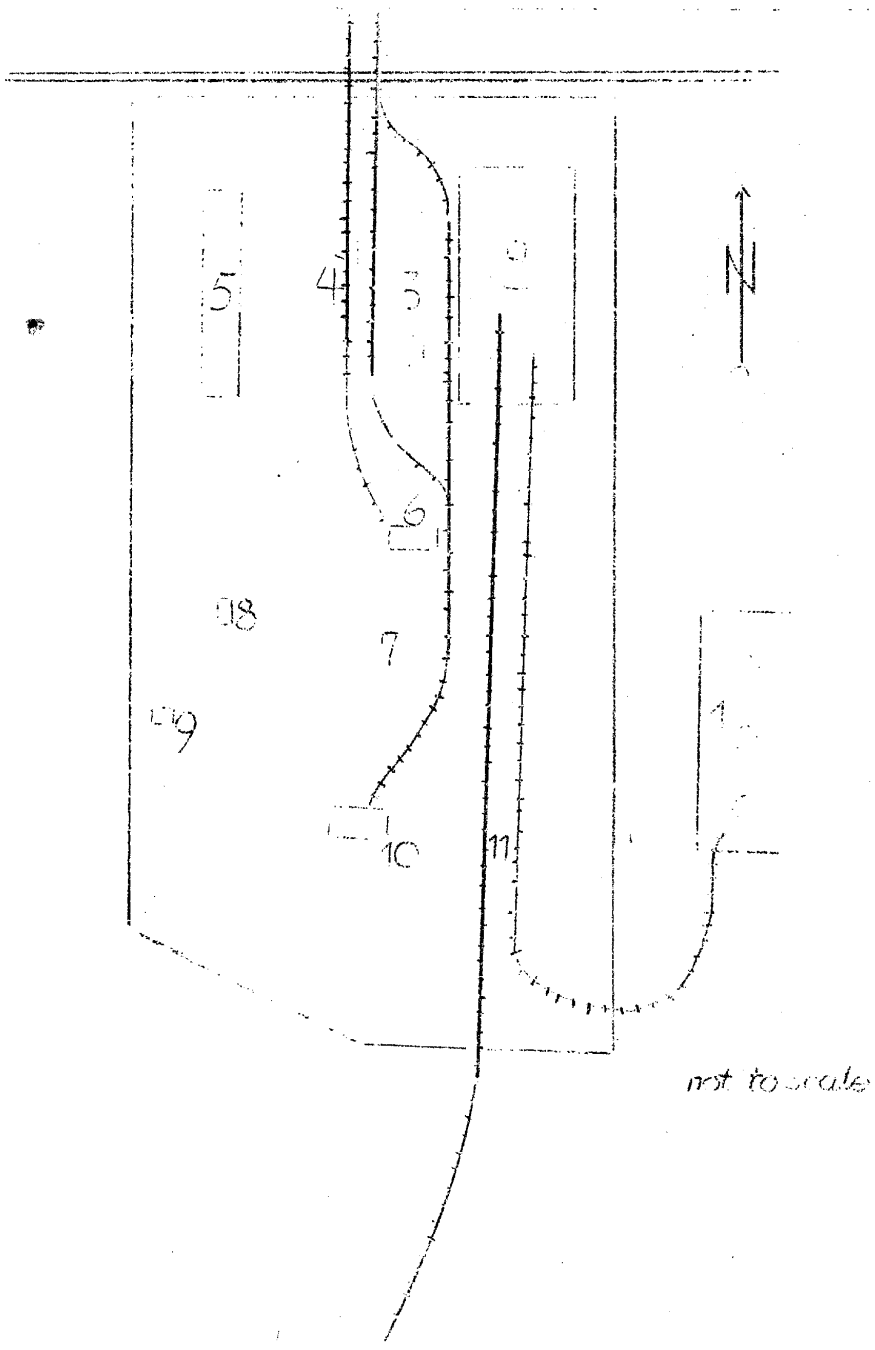


not to scale

Legend: See next page

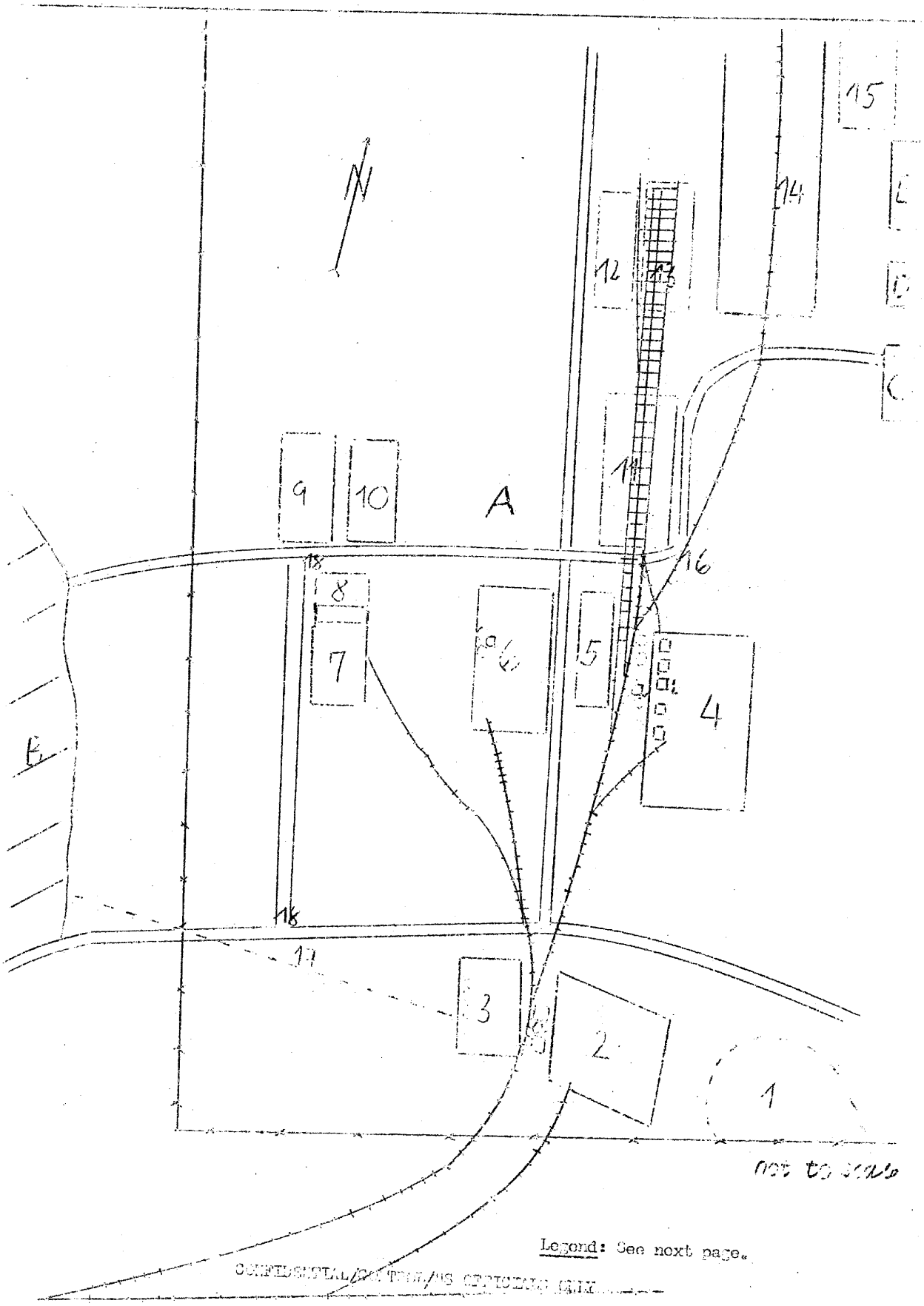
Annex 4

Layout Sketch of the
Southern Section of the Metallurgical Plant at Chelyabinsk
as of June 1948.



Legend: See next page.

Legend Sketch of the
Northern Section of the Metallurgical Plant at Chelyabinsk
as of November 1949.



Legend: See next page.

CLASSIFICATION CONFIDENTIAL/CONTROL/US OFFICIALS ONLY

COUNTRY Soviet Union REPORT NO.

25X1A

TOPIC Expansion of Power Plant in Kizel

25X1A EVALUATION [redacted]

ANNEX T

DATE OF CONT

DATE OBTAINED [redacted] ARED 24 March 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Sketch on Ditto

REMARKS

25X1X

SOURCE [redacted]

1. Location :

The expansion to the power plant in Kizel (57°38'E/59°04'N), Molotov Oblast, is southwest of the main railroad station, east of the railroad line to Beretsniki.

2. Installations :

The plant covers an area of about 225 x 103 meters. The power plant has existed for a long time but has been expanded since the Spring of 1947. This work was not completed in March 1949. The buildings are in a good condition. The plant did not have railroad connection but was to get one in 1949. The approach road is paved. The new machinery which was scheduled to be installed in the turbine house in 1949 was expected to arrive from Germany (Soviet statement). The equipment for the transformer station was also of German origin (see Annex).

3. Work force :

One hundred PWs and 15 civilians were assigned to construction work.

4. Capacity :

Unknown.

25X1A [redacted] Comment :

a. The new section of the power plant in Kizel, bordering on the old power plant on the north, was mentioned for the first time in the town sketch furnished by another source. *
The data on the location of the plant as contained in this report

is in agreement with the town sketch. In order to eliminate mistakes relative to the statement "east of the railroad line to Beretsniki" reference is made to the fact that this line, when leaving the main railroad station of Kizel, at first runs in a southern direction then turns north after a loop to the west.

b. The new section apparently is a considerable expansion of the power plant. When it starts production the capacity of the power plant will be greatly increased. The old power plant had a capacity of 100,000 kw/h.

c. The reported expansion of the plant requires confirmation.

1 Annex : Layout Sketch of the Kizel Power Plant.

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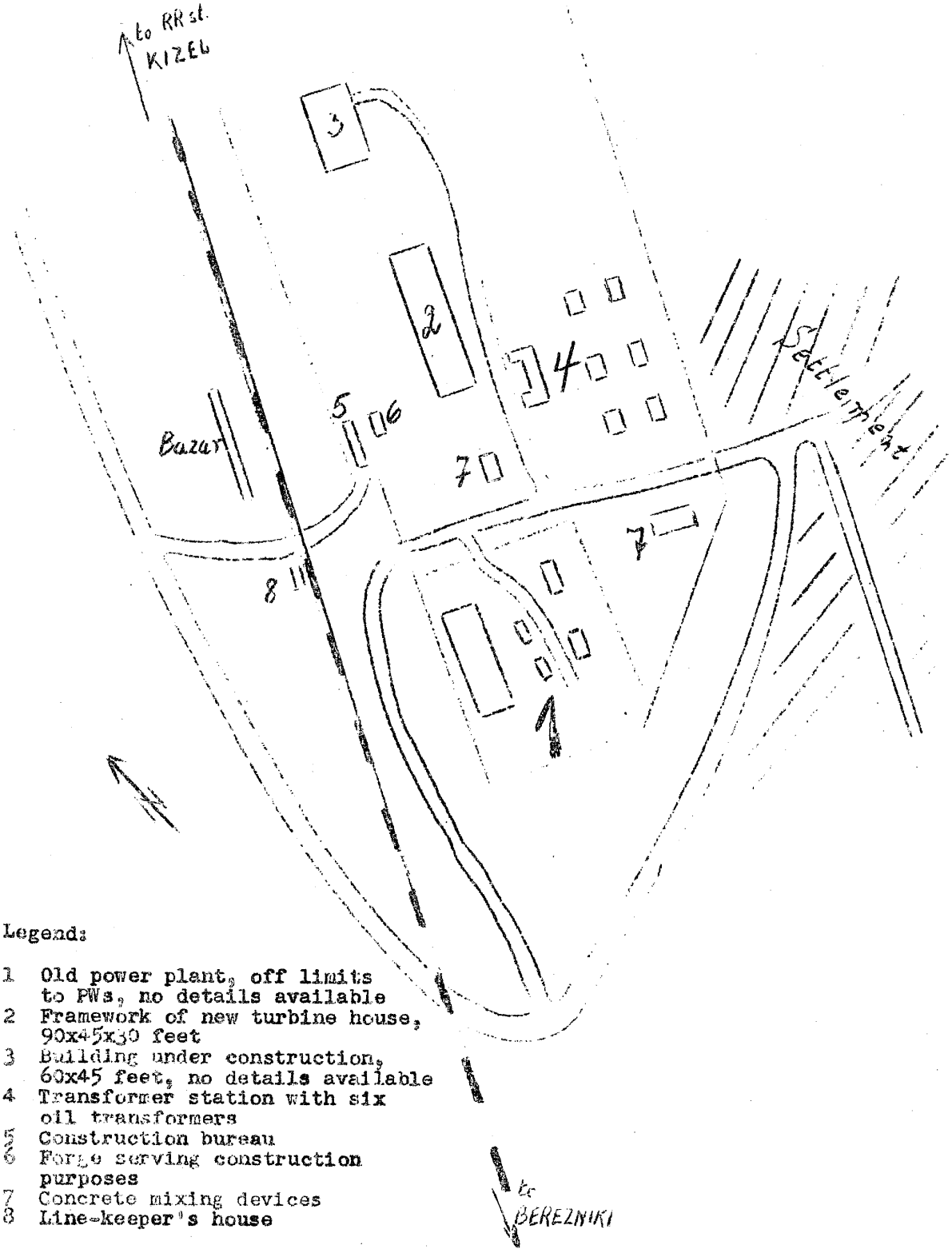
Layout Sketch of the Kizel Power Plant



Legend:

1 Old power plant, off limits to PWs, no details available
2 Framework of new turbine house, 90x45x30 feet
3 Building under construction, 60x45 feet, no details available
4 Transformer station with six oil transformers
5 Construction bureau
6 Forge serving construction purposes
7 Concrete mixing devices
8 Line-keeper's house

CLASSIFICATION

COUNTRY Soviet Union REPORT NO.

TOPIC New Transformer Plant Under Construction at Power Plant of Kizel

25X1A

EVALUATION [redacted]

DATE OF [redacted]

25X1A DATE OBTAINED [redacted] DATE PREPARED 2 May 1950

REFERENCES

PAGES 1 ENCLOSURES (NO. & TYPE) 1 Sketch on Ditto

REMARKS

25X1X

SOURCE [redacted]

1. Location :

One and a half km southwest of the town center of Kizel (57°38'E/59°04'N), Molotov Oblast, northeast of the old power plant and east of the railroad line to Solikamsk.

2. Plant Installations :

Start of construction : Fall of 1948. For status in November 1949 see legend on the attached sketch.

3. Work force :

One hundred and twenty PWs and 10 to 20 Soviets working on the construction.

25X1A [redacted] Comment :

a. Previously reported to be a power plant * rather than a transformer station; the new installation under construction needs clarification.

b. This report gives a good survey on the present stage of construction. Although agreeing with previous information ** on the two large buildings under construction, the actual plant layout cannot be determined unless further information is received.

1 Annex : New Transformer Plant under Construction at the Power Plant of Kizel.

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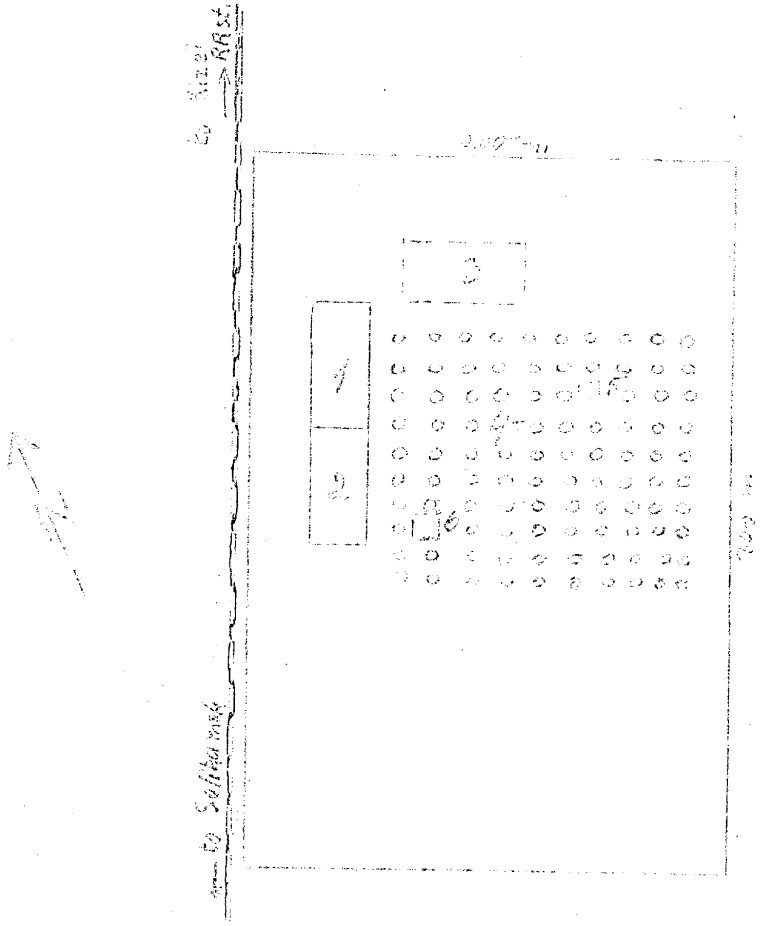
U

New Transformer Plant Under Construction at the Power Plant of Kizel



Legend:

Plant area about 200x300 meters

1. New building, 50x25x16 meters, brick building with flat steel structure roof covered with concrete slabs without equipment
2. Building same as No. 1 above, still without roof
3. Excavations for a third building of presumably the same size
4. Transformer station, outdoors installation, 100x100 meters, with steel masts, 12 meters high, with two arms, placed at 40 meters distance
5. Transformer chamber in operation, constructed of steel plates 1.5x1.5x2 meters
6. Transformer chamber under construction

CLASSIFICATION SECRET-CONTROL/US OFFICIALS ONLY

COUNTRY Soviet Union REPORT NO.

TOPIC KRASNOKAMSK Paper Mill and Bank-note Printing House 25X1A

EVALUATION [redacted]

DATE OF CON [redacted]

25X1A DATE OBTAINED [redacted] DATE PREPARED 10 February 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 blueprint

REMARKS

SOURCE [redacted] 25X1X

1. Location:

The paper mill and bank-note printing house are located in the southern section of KRASNOKAMSK (55°45'E/58°08'N), Molotov Oblast, on the northern bank of the Kama River.

2. Plant installations:

The factory was constructed in approximately the early nineteen-thirties. A new settlement northwest of the plant was under construction during the period of observation. The plant consists of two separate sections, the paper mill and the bank-note printing shop, the latter also being surrounded by a high wall. All machinery was of German origin. Electric power is supplied by the power plant north of the factory. Both plant sections have railroad spur tracks. For plant layout see Annex.

3. Work force:

About 3,000, mostly women. An increasing number of workers have been employed since 1947.

4. Production:

50 percent of production was paper for the bank-note printing house, the remainder copy-books, pads and writing paper, so far as could be observed by source.

25X1A [redacted] Comment:

a. The plant layout of the KRASNOKAMSK Paper Combine reproduced on the attached sketch is considered to be probably true. The two reports on this object previously transmitted were regarded as very incomplete.

b. The cellulose and paper combine on the southeastern town border of KRASNOKAMSK, which has been known under the name of "Kama" since 1941, is clearly seen as being located between the town border and a large shunting station, south of a large power station.

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c. The so-called bank-note printing house was also reported by previous sources to be just west of the paper mill. No details on this factory have been received, however, as the factory area has been specially guarded and blocked.

1 Annex: KRASNOKAMSK Paper Mill and Bank-note Printing House.

Y

Legend to Annex:

A Paper Mill

1 Wooden ore shed, 60 feet wide, with a capacity of seven to eight 60-ton carloads on the longitudinal sides. Storage of sulphur and iron ore. Crushing of sulphur and conveyance of sulphur and iron on an underground conveyor belt to the processing department.

2 Processing department, 70-foot wide brick building, vaulted roof, somewhat longer than the ore shed with two sulphur calcining furnaces (a).

3 Limekiln, about 120 feet high.

4 Conveyor gangway to the large workshop

5 Large paper processing department, three-story brick building 60 x 240 x 240 feet, with flat concrete roof and some skylights.

6 Cellulose chambers, each 15 x 20 feet, separated by thick concrete walls.

7 Bank-note storeroom

8 Administration building, three-story brick building

9 Wood washing plant (on the bank of the river), three story brick building, 120 feet long, large water basin for the washing up of the wood on ground floor.

10 Railroad spur tracks

B Bank-note printing house:

Source saw from outside only three large, white coated, three-story brick buildings, each several hundred feet long, with sentries posted on the roofs. Some cantonment buildings were also located in the area.

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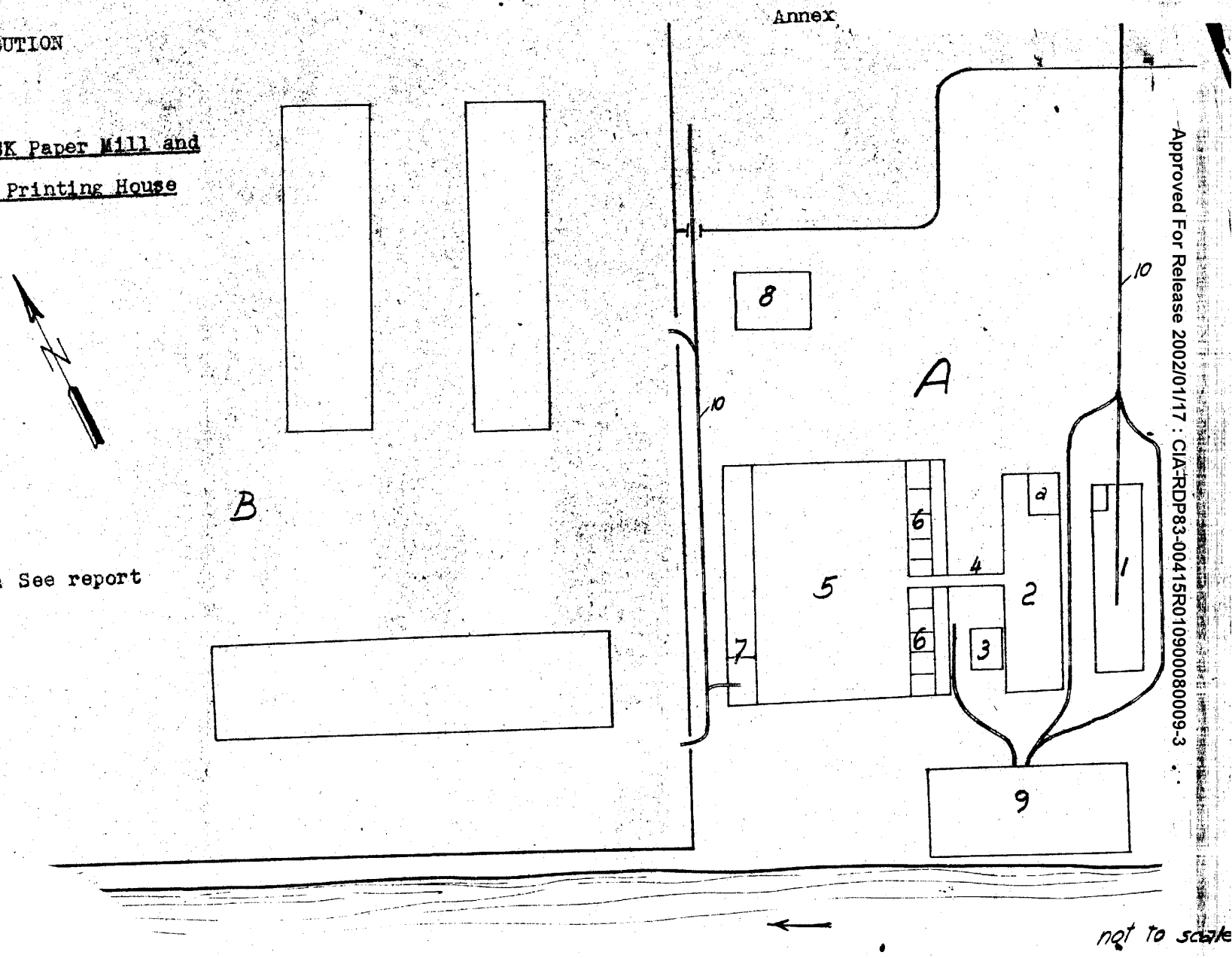
KRASNOKAMSK Paper Mill and Bank-note Printing House



Legend: See report

A-1

Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

COUNTRY Soviet Union REPORT NO.

TOPIC Rulon Chemical plant in Dzerzhinsk-Igumnovo 25X1A

INTELDEX

EVALUATION [redacted]

DATE OF CON

25X1A

DATE OBTAINED [redacted] DATE PREPARED 3 April 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 2 Blueprints

REMARKS

25X1X

SOURCE [redacted]

1. Location:

Northeast of Igumnovo (43°38' E/56°14' N), Gorki Oblast, about 30 km west of Gorki, north of railroad line and road Gorki-Moscow.

2. Plant Installations:

a. The Rulon Chemical Plant is comprised of two sections, the eastern one of which existed before 1939 and produces plexiglass.

b. The construction of the western section started in September 1947. Boilers from the Leuna plant in Merseburg were installed here. The essential parts of this section were completed by the middle of 1949. After the first scheduled deadline on 1 May 1949 was not met for unknown reasons, operation was planned for late 1949.

c. The total length of the plant is about 3½ km. Source did not obtain details on the eastern section. A railroad connection is available. Power was supplied through underground transmission lines by the power plant, located on the other side of the railroad line.
For plant layout see Annex.

3. Work force:

600 to 800 PWs and several hundred Soviet laborers working on the construction. Labor for the production had not arrived in July 1949 only a few, presumably foremen, were appointed to their future jobs.

4. Production:

The eastern plant section produces plexiglass. Source did not know any details on the intended production of the western section which

was under construction. According to P/s statements, it was gasoline.

25X1A [redacted] Comment:

a. The combined chemical plants in Dzerzhinsk are known from prewar times. They are east of town, on both sides of the railroad line to Gorki. The limits of the individual plants were not definitely determined at the end of the war.
To indicate the location, the sketch supplied by a previous source is transmitted as Annex 2. This source reported on the power plant and also furnished a presumably correct diagrammatic survey of the arrangement of the individual installations.

Both sketches agree on the location of the Rulon plant.

b. The fact that, in recent years, the plant was modernized by the installation of machinery from the German Leuna Plants, was known. New constructions are reported for the first time, a fact which makes report particularly valuable.

c. The "old" plant section which source could not examine is reproduced on a German aerial photograph, dated July 1942. At that time the plant was designated No 148.

d. The very detailed data on the new plant section are still to be confirmed.

e. A Pravda issue of the Summer of 1949 stating that the plant mainly produced bulletproof safety glass for the air armament industry confirms the reported production of the old factory.

2 Annexes: (1) Rulon Chemical Plant in Dzerzhinsk-Igumnovo
(2) Chemical Combine Dzerzhinsk.

Legend to Annex

Rulon Chemical Plant

1 Department No 108, 60x27 meters, equipped with two large boilers

2 Department No 112, 54x18 meters, distributor system for the steam pipeline from the power plant

3 Department No 105, 54x18 meters, power station with transformers, compressors and switchboards. Stirring plant with square basins, insulated with asbestos and peat slabs.

4 Department No 104, 36x13½ meters with 30 meter high smoke-stack, probably boiler house; three furnaces were constructed here

5 Department No 102, 54x18x30 meters, equipped with four steel boilers in vertical position, purpose unknown

6 Department No 101, 72x36x37½ meters, six stories. The middle section is not roofed, the workshop is equipped with various kinds of boilers.

7 pumping station, connected to department No 101 and the boilers north of the pumping station by above ground pipelines.

8 Four outdoor boilers, 4½ meters, 7 meters in diameter. Two boilers are brick lined, all four boilers are separately forced in and surrounded by 1½ meter earthen wall.

9 Twenty pumping points in a shed with railroad tracks going through. Twenty additional pumping points are on both sides of another railroad line outdoors. Both spur tracks end shortly beyond the pumping points.

10 Building, purpose unknown

11 Four boilers in vertical position, 4½ meters high, 10 to 12 meters in diameter, constructed of five mm thick sheet metal, insulated with glass wool, on stout concrete foundations. The area is surrounded by an earth wall, 1.8 meters high. Three parallel underground pipelines lead to No 13

12 pumping station with several electric motors, presumably pumping station of No 9 above

13 About 16 boilers (source did not remember the exact number), each 3½ meters high and 3½ meters in diameter. The area was surrounded by a six feet high earth wall.

14 Department No 103, 72x27x36 meters, five stories. All stories house various boilers

15 Department No 106, 54x18 meters, equipped with three large boilers, 13½ meters high and 6 meters in diameter (source worked on the construction). A surface pipeline leads from here to No 17.

16 Department No 118, 36x13.5 meters, pumping station for cooling water, equipped with several rotary pumps and on either side of the station one concreted basin, each 12x4½x4½ to 5 meters.

17 Department No 119, cooling tower, about 36 meters high and 13½ meters in diameter with pipeline connection to department No 105 (item No 3), department No 106 (item No 15) and department No 118 (item No 16).

All plant departments are interconnected by underground pipelines, 3 to 13½ cm in diameter. The above ground pipelines rest on iron pillars and are recorded on sketch (as far as source was able to recall them.)

18 Area of the old plant

19 P/W Camp No 7117/7

B power plant

C Yava Chemical Plant.

Legend to Annex

1 Kalinin Chemical Plant

2 Stroi Chemical Plant

3 Oka Chemical Plant

4 power plant

5 Stalmost Plant (presumably mechanical department of the power plant)

6 Yava Chemical Plant

7 Rulon Chemical Plant and PW camp

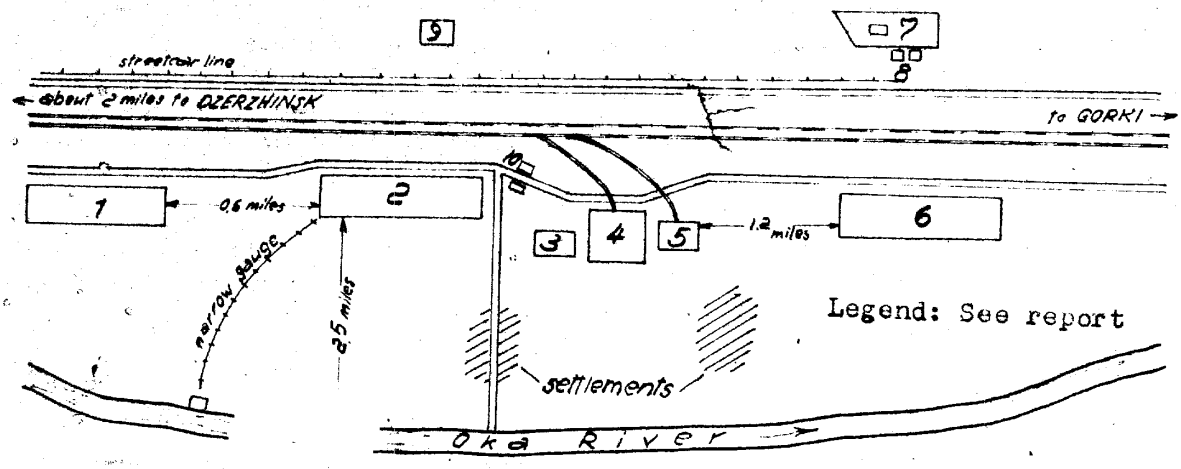
8 Sky scrapers

9 Large bakery

10 PW camp.

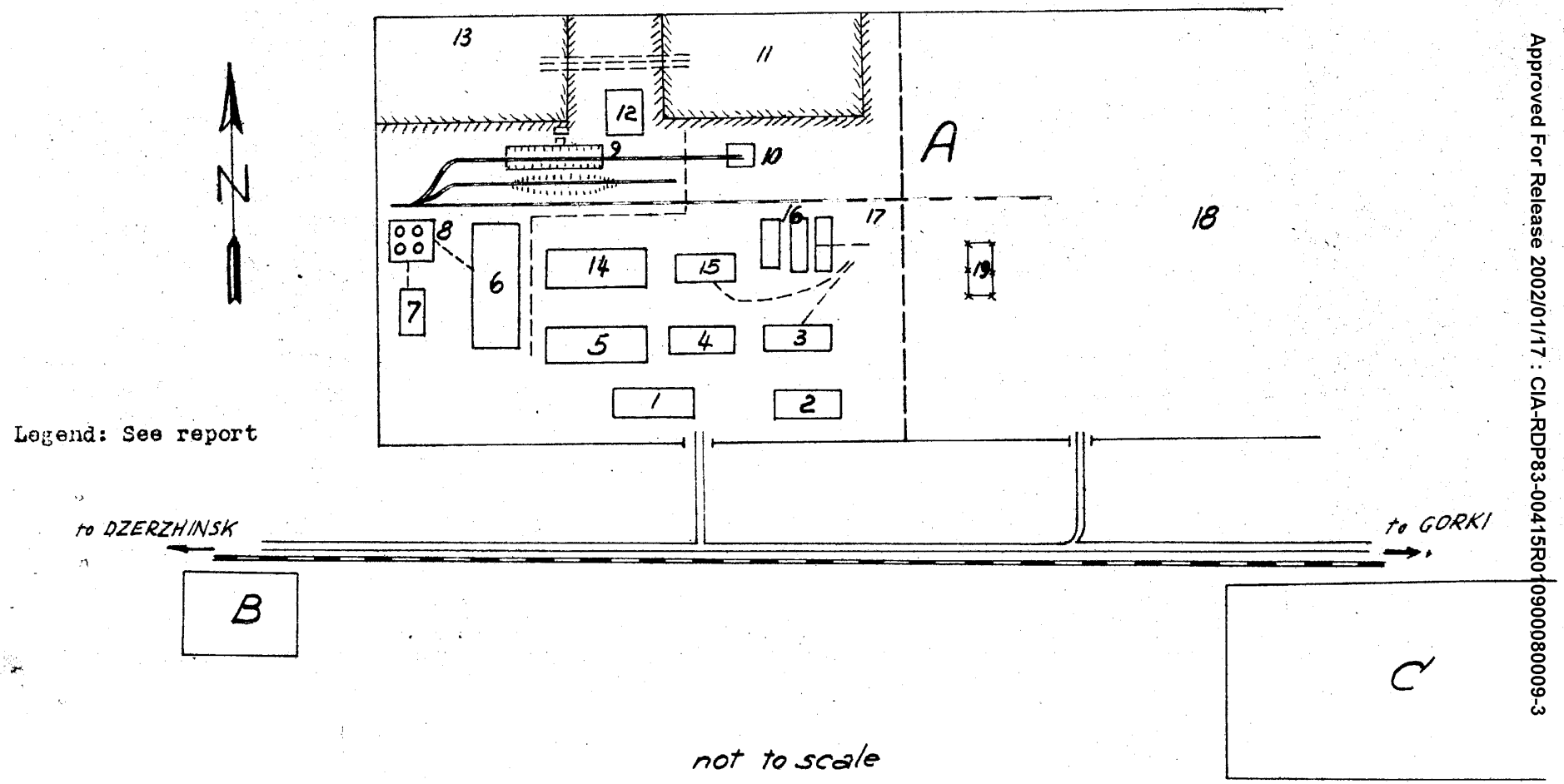
Annex 2 t

Chemical Combine DZERZHINSK



Annex 1 to

"Rulon" Chemical Plant in DZERZHINSK-IGUMNOVO



Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

COUNTRY U.S.S.R REPORT NO.

TOPIC Krasnokamsk Oil Field and Refinery 25X1A

EVALUATION [redacted]

DATE OF C[redacted]

25X1A DATE OBTAINED [redacted] DATE PREPARED 3 July 1950

REFERENCES

PAGES 3 ENCLOSURES (NO. & TYPE)

REMARKS

25X1X

SOURCE [redacted]

Krasnokamsk Oil Field: (58°05'N/55°36'E)

1. The Krasnokamsk (Molotov Oblast) oil field surrounds the entire town. There are oil derricks on open lots in the city area itself.

2. As the result of random drillings this district was opened in 1934. It was discovered before the war that this district had one of the richest deposits in the Ural area. The oil strata are very productive. Production is accomplished exclusively by pumping. Gushers were not tapped. Drillings and production are complicated by the great depth of the oil strata, which is 3,400 meters below the ground. Only about one hundred derricks are said to have existed before the war. During the time of observation the number increased from about 800 to almost 1,500. Early in 1949 50 additional drilling and producing derricks were under construction in the section close to the Kama River. Most of the derricks are wooden structures but the drilling implements are mainly modern rotary drilling units of American make. The quality of the crude oil is said to be excellent and to contain more than 40 percent light fractions. The district is developing rapidly. Promising oil fields have been discovered as far as the region around Severokamsk, also located on the Kama River. Pipe lines, about 30 cm in diameter, lead from the drilling sites to the refinery.

Krasnokamsk Refinery

3. The oil refinery is north of the town, close to the Kama River. It is a small refinery, operated on the principle of tube distillation. No details were available on the number of columns. No special gasoline refining or cracking installations were observed. A large number of tanks, for collecting the crude oil pumped through the main pipe lines to the refinery, and for storing the finished products, are in the refinery area. The tanks for finished products are about 8 to 10 meters

in diameter and somewhat smaller in height.

4. The refinery has no power station, only a transformer station. Power is supplied from a plant south of the freight station. This power plant is equipped with machine installations, including several large crude oil turbines, which were dismantled in the Soviet Zone of Germany. The refinery has a large pump work station with several intermediary stations, and a large pipe line to the freight station through which the finished products are pumped. Tanks and filling installations are also at the freight station. Only a part of the crude oil output is processed in the refinery. The remainder, as well as the finished products, are shipped away in oil tankers, and in tank cars. River landing sites and spur tracks, with adjacent tanks and filling equipment, were provided for such shipping. A great number of tank cars were always seen at the railroad station. *

25X1A

* [redacted] Comment. The Krasnokamsk refinery is known to be the refinery evacuated from Grozny during the war. The total annual capacity was about 180,000 tons. There have been no reports on special installations such as gasoline purifying, lubricating-oil refining, or cracking. This is believed to be a simple distillation plant, where crude oil is only topped and fractionated before shipment.

25X1A

COUNTRY Soviet Union REPORT NO. [redacted]

TOPIC Power Plant in KRASNOKAMSK

25X1A EVALUATION [redacted]

DATE OF CON

DATE OBTAIN December 1949

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

RETURN TO CIA LIBRARY

25X1X

SOURCE [redacted]

1. Location:

On the northwestern border of KRASNOKAMSK (55°45' E/58°09'N), Molotov Oblast.

2. Installations:

The power plant covers an area of 1,200x750 feet and is surrounded by a board fence. Its expansion was begun in 1946. A fifth boiler was installed in February 1947 and placed in operation in July 1948. Excavation work was under way in August 1948, and the foundations for a sixth boiler (a reserve boiler) were laid. A fifth turbine was installed at the same time. The plant has a spur track, its buildings are in a good condition.(see Annex).

3. Work Force: In 1948, 300 Soviets and 30 PWs.

4. Output:

According to Soviets, the expansion of the power plant was to raise its power output to 100,000 kilowatts.

25X1A [redacted] Comment:

a. Report fully confirmed and supplemented two previous reports on the important KRASNOKAMSK power plant.

b. The attached sketch furnished a good survey of the power plant and the surrounding industrial objects. Report, which agrees with the essential data of previous reports, is the best yet received, and its sketch can be considered factual.

1 Annex: Power Plant in KRASNOKAMSK

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Legend to Annex:

A Power Plant

1. Boiler house, 600x150x120 feet. Five coal crushing plants, two brick smoke stacks, 200 and 350 feet high

2 Coal hoist and coal crushing plant

3 Coal conveyer plant

4 Coal bins

5 Turbine house, 480x90x90 feet

6 Transformer station

7 Mechanic' shop for repair work

8 Garage

9 Spare parts magazine

10 Forge

11 Mechanical workshop

12 Oil pump with underground boilers, operating for the power plant

13 and 14 Pipe lines from the Kama River to the power plant

B PW Camps:

1 7207/8

2 7207/1

C Dwelling blocks

D Oil dump

E Harbor of KRASNOKAMSK

F Paper mill

G Railroad station of KRASNOKAMSK

H Sieve and riddle factory

I Bread factory

K Road overpass

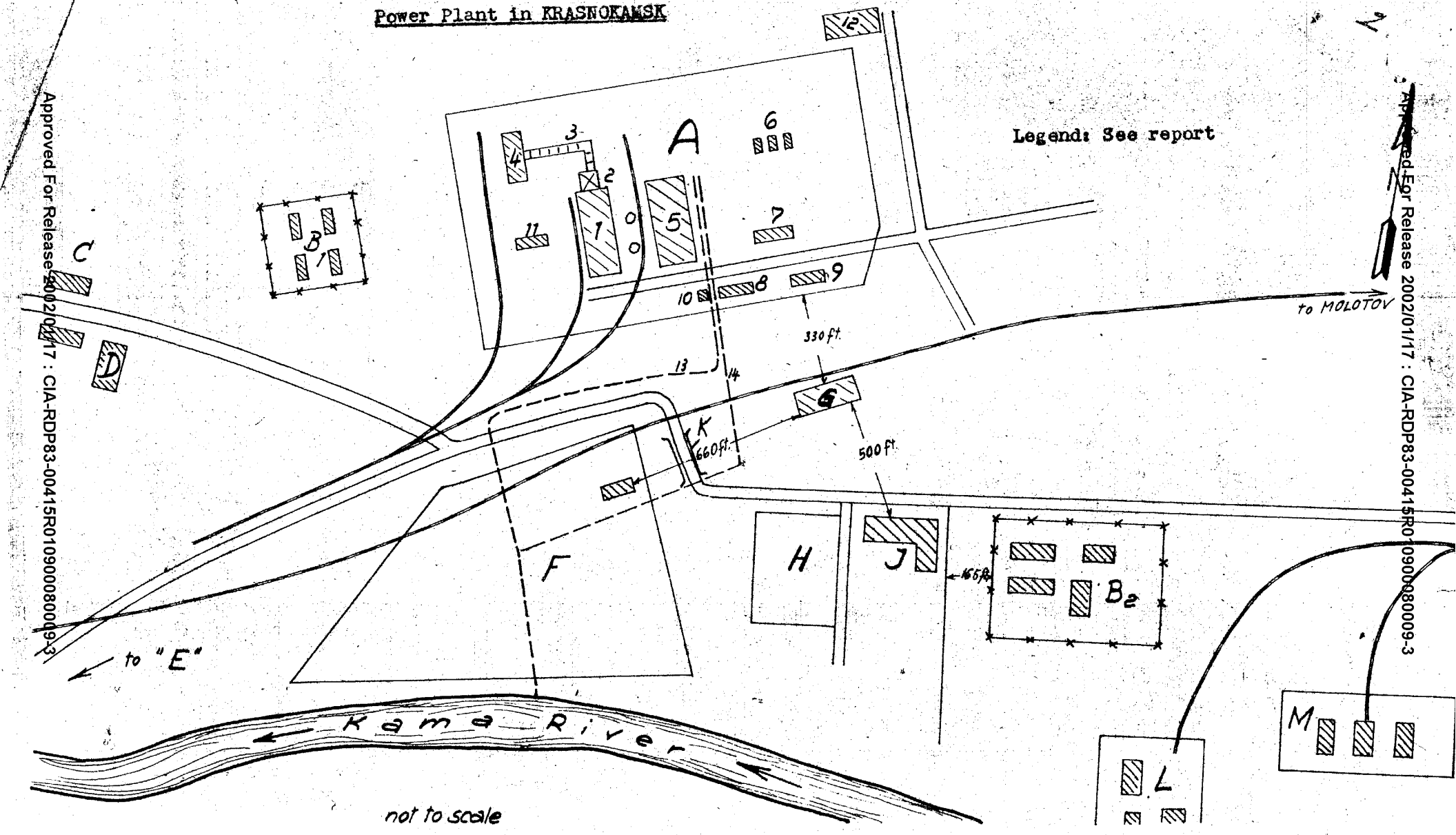
L Sawmill

M Lime kiln

CONTROLLED DISTRIBUTION

Annex

Power Plant in KRASNOKAMSK



Approved For Release 2002/01/17 : CIA-RDP83-00415R010900080009-3

COUNTRY Soviet Union REPORT NO.

TOPIC Telephone Manufacturing Plant No 629 in MOLOTOV 25X1A

EVALUATION [redacted]

DATE OF CO [redacted]

25X1A

DATE OBTAIN [redacted] DATE PREPARED 30 November 1949

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location:

The telephone manufacturing plant, designated Zavod No 629 is located in the northwestern part of MOLOTOV, Molotov Oblast (55°15' E/58°01' N), about 600 feet from the Kama River. The railroad line to KIROV is between the plant and the Kama River.

2. Plant Installations:

The plant consists of brick buildings of which two were still under construction.

A Railroad connection was available. Power was supplied by a power station located outside the plant. For plant layout see Annex.

3. Work Force:

About 1,000 Soviets and 90 PWs.

4. Production:

Field telephones, occasionally regular telephones.

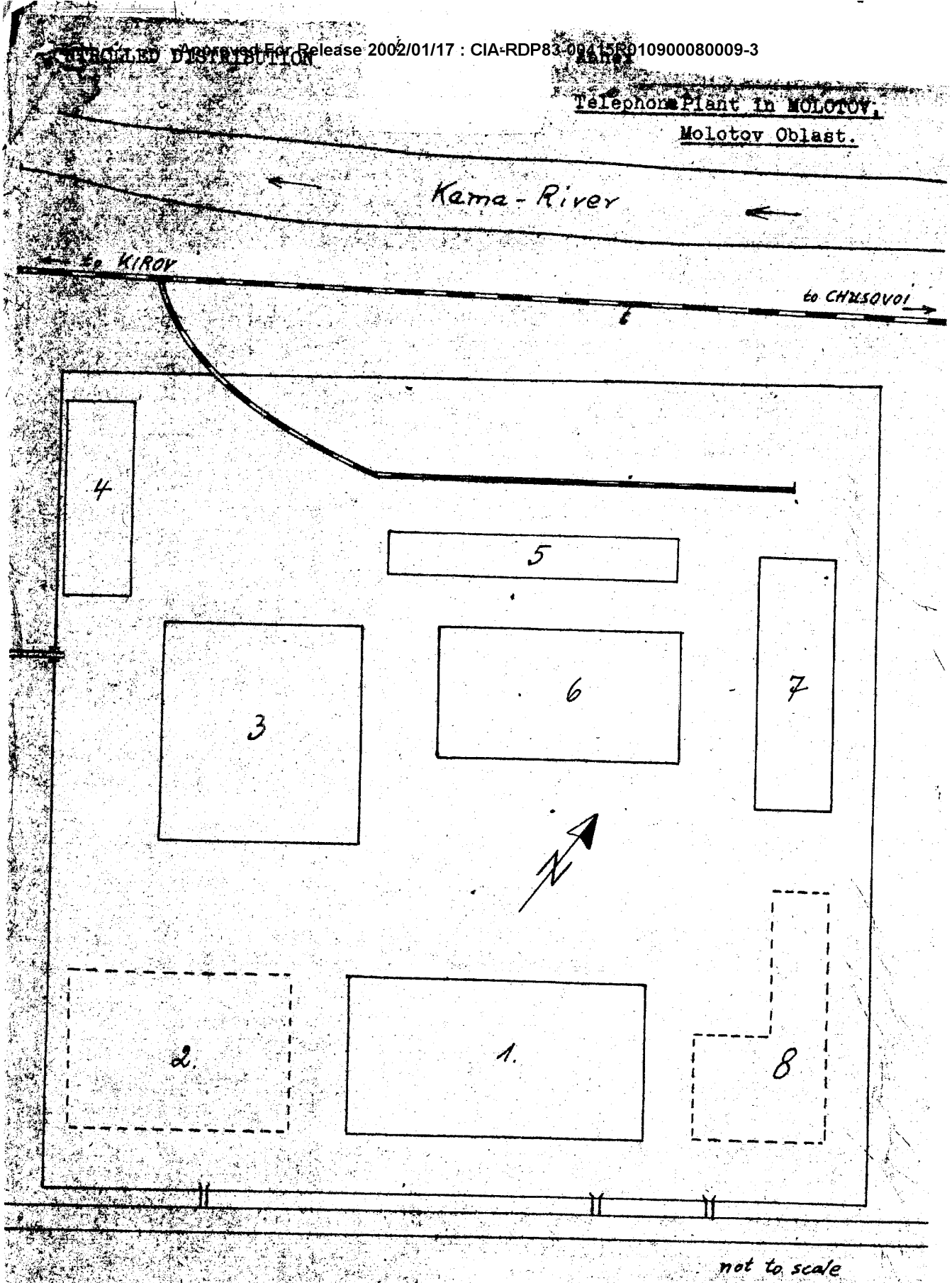
25X1A [redacted] Comment:

a. The plant was described in two previous reports. A sketch attached to one of these gave the location in detail.

b. The plant layout as shown on the attached sketch corresponds with the information forwarded with the sketch of an earlier report. The legend to the attached sketch furnishes specific details on the size and type of construction of the plant building.

CONTROLLED DISTRIBUTION

Telephone Plant in MOLOTOV,
Molotov Oblast.



Legend: See report.

CLASSIFICATION

COUNTRY USSR REPORT NO.

TOPIC Uralvagonzavod in Nizhniy Tagil 25X1A

EVALUATION [redacted]

DATE OF CONTE [redacted]

DATE OBTAINED DATE PREPARED 5 September 1951

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 2 - Two sketches on dittо

REMARKS

25X1X

SOURCE [redacted]

1. The Uralvagonzavod was on the Nizhniy Tagil (57°50'N/59°55'E) - Nizhnyaya Salda (58°00'N/60°41'E) railroad line, south of the Vagonzavod railroad station and east of Nizhniy Tagil. The plant included three foundries, two lathe shops, one forge, one welding shop, one spring department, one punching shop, one assembly shop, one department for bogie wheels for tanks, two sawmills, one wood drying installation, and one plant-owned power station. There were spur tracks to the main railroad line at the Vagonzavod railroad station. *

2. The Uralvagonzavod produced about six passenger cars per day in 1947 and early 1948. The initial output of "dump cars" was ten cars per day but by 1948 and 1949, the plant produced 55 to 60 of these cars daily. These "dump cars", which were used for ore shipment, were four-axle 60-ton freight cars, 12 meters long and 2.3 meters high on the inside, with side flaps. The plant also produced open, tiltable freight cars for coal shipment, called "Hopper" cars; gondola cars with high sideboards, called "Gondeln" cars; 60-ton flat cars with and without special equipment for carrying tanks; and, in early 1947 only, the plant produced tank cars. The plant produced T-34 tanks until early 1946, at which time the production shifted to railroad car construction. In March 1948 tank construction was resumed when a new model was put into production and mass production of this new model, which resembled the T-34 model, was started early in 1949. The monthly output of the new model tank early in 1949 was allegedly 50 tanks. All parts required for tank construction except the engines, were produced in the plant itself. The ingot steel was supplied by the Nizhniy Tagil Ironworks. **

3. Reports as to the number of employees varied between 30,000 and 60,000. Work was done in three shifts. The plant was surrounded partly by a wall and partly by a wooden fence and watchtowers. The power plant and the steel foundries were guarded by special sentries. The plant was guarded by plant police. ***

25X1A

* [redacted] Comment. According to previous information this plant was number 183 and was called "Dzerzhinski" Plant. For location sketch of the plant, see Annex 1.

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For layout sketch of the plant, see Annex 2, based on information from all sources.

25X1A

** [redacted] Comment. This plant, which is the largest railroad car plant in the U.S.S.R., was scheduled to have an annual output of 60,000 railroad cars. The production figures indicated by sources are therefore credible. Flatcar production had already reached the prewar volume by 1947. However, an increasing amount of the available capacity is probably being utilized for tank construction which has gained momentum since 1949. According to the Soviet press, the construction of covered 50-ton freight cars was resumed in July 1948. A new all-metal tank car made of alloy-treated steel was being developed. It is possible that a new model of the T-34 tank was being built as indicated by sources. According to previous reports, T-34 tanks were produced in this plant during the entire war and the annual output then exceeded 10,000 tanks. The monthly production of only 50 units, indicated by sources, for the beginning of 1949, appears to be extraordinarily low.

25X1A

** [redacted] Comment. According to previous reports the total number of employees was 40,000 in 1944. The number of employees reported by sources therefore appears to be credible. According to a Soviet press report of November 1947 one Skachkov, (fnu), was manager of the plant.

2 Annexes: Two sketches on ditto.

Annex 1

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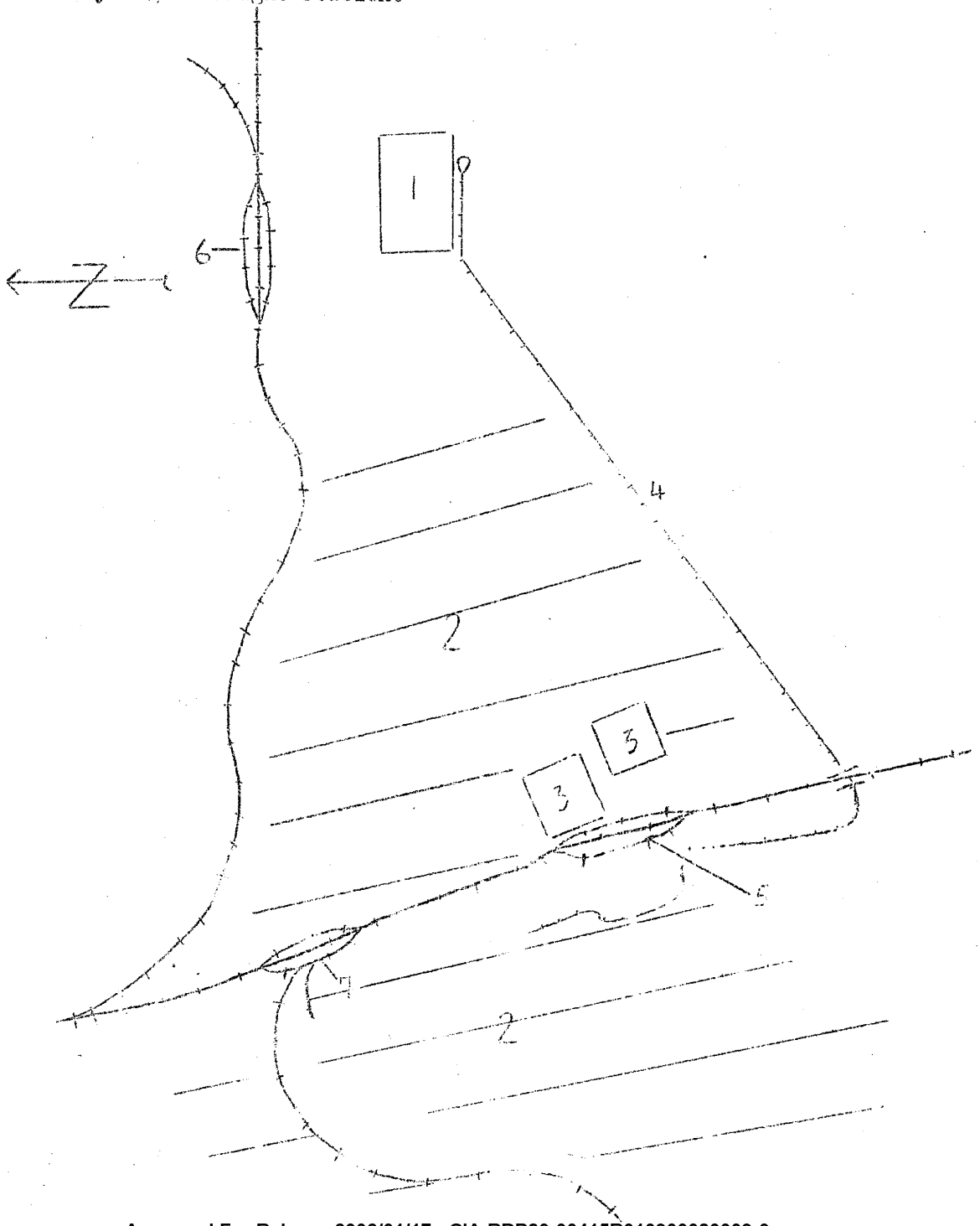
Location Sketch of the Uralvagonzavod in Nizhniy Tagil

Legend:

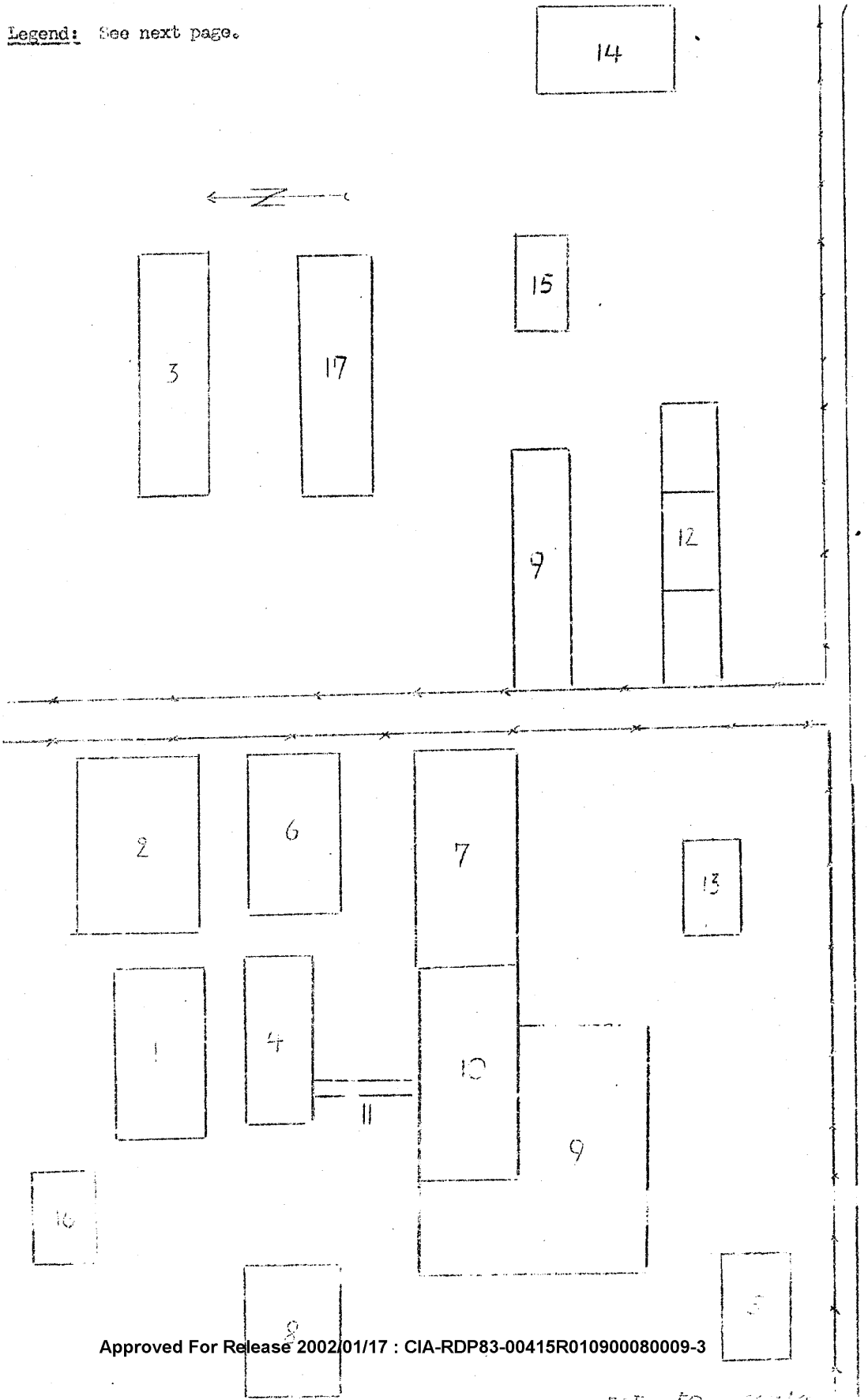
1. Uralvagonzavod.
2. Nizhniy Tagil.
3. New metallurgical plant.
4. Streetcar line.
5. Nizhniy Tagil railroad station.
6. Vagonzavod railroad station.
7. Nizhniy Tagil freight station.



Annex 2

Layout Sketch of the Uralvagonzavod.

Legend: See next page.



Legend to Annex 2:

1. Small steel foundry, Department No 550, equipped with six electric steel furnaces with carbon electrodes. Four furnaces were kept in operation while the other two were being repaired. The daily output was approximately 540 tons of castings, mainly wheels and bearings for tanks. The foundry was also equipped with a six-ton crane and six traveling cranes.

2. Large steel foundry, Departments No 563 and 507, equipped with ten open-hearth furnaces. Armor plates, axle blanks, bogie wheels for tanks and railroad car wheels were cast in this foundry. Also, railroad car wheels were ground and axles and wheels were assembled in this foundry.

3. Foundry for railroad car wheels, Department No 590.

4. Axle latheshop, equipped with about 90 lathes. One source, who was employed as lathe operator in this shop in 1948, reported that three lathes produced 45 bogie wheels per shift. Axles and wheels for railroad cars were also produced in this shop.

5. Latheshop.

6. Forge and pressing department, equipped with several punches, ten to fifteen steam hammers, five hydraulic presses, drop forges, and six to eight annealing furnaces. The forge allegedly had an annual capacity of 247,000 axles.

7. Welding shop, equipped with electric welding apparatus.

8. Spring section, Department No 630, equipped with 25 presses, ranging from 60 to 400 tons, 25 pneumatic hammers of six tons each, and eight forging machines. Plate and spiral springs as well as small parts such as bushing caps (Buechsen-Deckel), flaps (Klappen), etc. were produced. Structural steel parts for chassis were also cut in this department.

9. Two punching shops, each equipped with four large punches.

10. Assembly department, composed of various sections connected by conveyor belts. The equipment included Russian, American and, since summer 1946, German machinery. Railroad cars and tanks were assembled here. Administrative offices and a precision machine shop were on the upper floors.

11. Underground tunnel, leading from workshop building No 4 to the large assembly shop. The tunnel was allegedly 10 meters wide and was used to deliver component parts.

12. Department for bogie wheels, comprising a latheshop for preliminary work, a latheshop for precision work, a department for fitting the rubber on the wheels and a rubber department.

13. Small sawmill.

14. Large sawmill.

15. Wood drying installation.

16. Power plant, coal- and peat-fired. The UETS station was allegedly outside the plant fence, about 2 km northwest of the plant near the Vagonzavod railroad station. It had six iron smokestacks and a large coal elevator. This plant also supplied the bakelite factory and the Vagonzavod settlement.

17. Workshop building, use unknown.

CLASSIFICATION SECRET/CONTROL/US OFFICIALS ONLY 25X1A

COUNTRY Soviet Union REPORT NO. [redacted]

TOPIC Kirova Machine Factory No. 25, Kopeysk

25X1A EVALUAT [redacted]

DATE O[redacted]

25X1A DATE OBTAINED [redacted] DATE PREPARED 20 March 1950

REFERENCES

PAGES 4 ENCLOSURES (NO. & TYPE) 2 Blueprints

REMARKS

SOURCE [redacted] 25X1X

1. Location: The Kirova Machine Plant is located on the northwestern border of Kopeysk (61°38'E/55°06'N) Chelyabinsk Oblast. (For location see Annex 1).

2. Plant installations: The plant has been in the process of enlargement since construction. According to Soviet statements the production is very important for the coal mining of the entire district. For this reason it continued the same type production as during the war. Source observed the construction of a new foundry, scheduled to be completed by 1 May 1949. But even the basic framework of this project was not completed by August 1949. There was a railroad connection. Details on power source were unknown. (For plant layout see Annex 2).

3. Work force: Several thousand Soviets and 250 PWs. Work was done in three shifts.

4. Production: Mining machines, conveyor machines, water pumps, ventilators, dredgers and small implements.

25X1A [redacted] Comment:

a. The Kopeysk mining machinery plant has been frequently reported. According to statements by various sources, the plant was given the number 25. It was transferred from Gorlovka/Ukraine to Kopeysk in 1941, and its previous designation "Kirov No. 258" was changed to the new number.

Source was mistaken when he stated that peacetime production continued during the war because of its importance for the mining district. It is known from credible reports, that the plant produced bombs, mortar barrels, and artillery shells in 1941. It seems possible that the present value of the plant [illegible]

COUNTRY Soviet Union REPORT NO. [redacted]

TOPIC Kirova Machine Factory No. 25, Kopeysk

25X1A EVALUATION [redacted]

DATE OF CONTENT [redacted] ANNEX AAA

25X1A DATE OBTAINED [redacted] DATE PREPARED 20 March 1950

REFERENCES

PAGES 4 ENCLOSURES (NO. & TYPE) 2 Blueprints

REMARKS

25X1X

SOURCE [redacted]

1. Location: The Kirova Machine Plant is located on the northwestern border of Kopeysk (61°38'E/55°06'N) Chelyabinsk Oblast. (For location see Annex 1).

2. Plant installations: The plant has been in the process of enlargement since construction. According to Soviet statements the production is very important for the coal mining of the entire district. For this reason it continued the same type production as during the war. Source observed the construction of a new foundry, scheduled to be completed by 1 May 1949. But even the basic framework of this project was not completed by August 1949. There was a railroad connection. Details on power source were unknown. (For plant layout see Annex 2).

3. Work force: Several thousand Soviets and 250 PWs. Work was done in three shifts.

4. Production: Mining machines, conveyor machines, water pumps, ventilators, dredgers and small implements.

25X1A [redacted] Comment:

a. The Kopeysk mining machinery plant has been frequently reported. According to statements by various sources, the plant was given the number 25. It was transferred from Gorlovka/Ukraine to Kopeysk in 1941, and its previous designation "Kirov No. 258" was changed to the new number.

Source was mistaken when he stated that peacetime production continued during the war because of its importance for the mining district. It is known from credible reports, that the plant produced bombs, mortar barrels, and artillery shells in 1941. It seems possible that the present value of the plant [illegible]

b. The attached sketches give the best description received thus far of location and plant layout. The building block in the northwestern corner of the plant on attached sketch seems more credible than on previous sketches.

As to the new foundry under construction, another source reported the same location (outside of the plant area). It can be assumed that the production of this foundry will be considerably increased.

2 Annexes: 1.) "Kirova" Machine Factory No.25 in
2.) Kopeysk.

Legend to Annex 2:

1 Pattern making carpenter shop

2 Lathe shop producing locks for oxygen cylinders

3 Filling station for oxygen cylinders

4 Dispensary

5 Assembly site for monthly overhaul of large dredge

6 Boiler house

7 Smokestack of boiler house

8 Metal dump

9 Metal-cutting shop, sawing

10 Department No. 5, manufacture of large ventilators

a. Office (total length about 54 meters)

11 Test stand

12 Forge, 54 meters long

a. Office

13 Bathing establishment

14 Small shop

15 Carpenter shop

16 Bakery and two warehouses

to a dredge, which
showing the material

19 Department No. 1, same as item No. 18 above

20 Department No. 3

a. Lathe shop

21 Department No. 3, manufacture of water pumps and ventilators

a. Office

b. Milling shop

22 Small molding shop

23 Bronze furnace

24 Large molding shop

25 Two smelting furnaces

26 Bessemer converters

27 Aluminum furnace

28 Brass furnace

29 Two electric furnaces for smelting steel

30 Technical Office and laboratory of foundry

31 Place where molds are broken from the casts

a. Transport line

32 Drying and hardening furnace

33 Drying furnace

34 Small molding shop

35 Mechanical workshop

36 Core making shop

37 Office of foundry

38 Sand grinding shop

39 Old sand dump

40 New sand dump

41 Metal waste dump

43 Machine tool department with drafting office on the second floor

44 Department No. 2, manufacture of small mining implements

45 Annexes of department No. 2

46 Sawmill

47 Plant fire department

48 Toilets

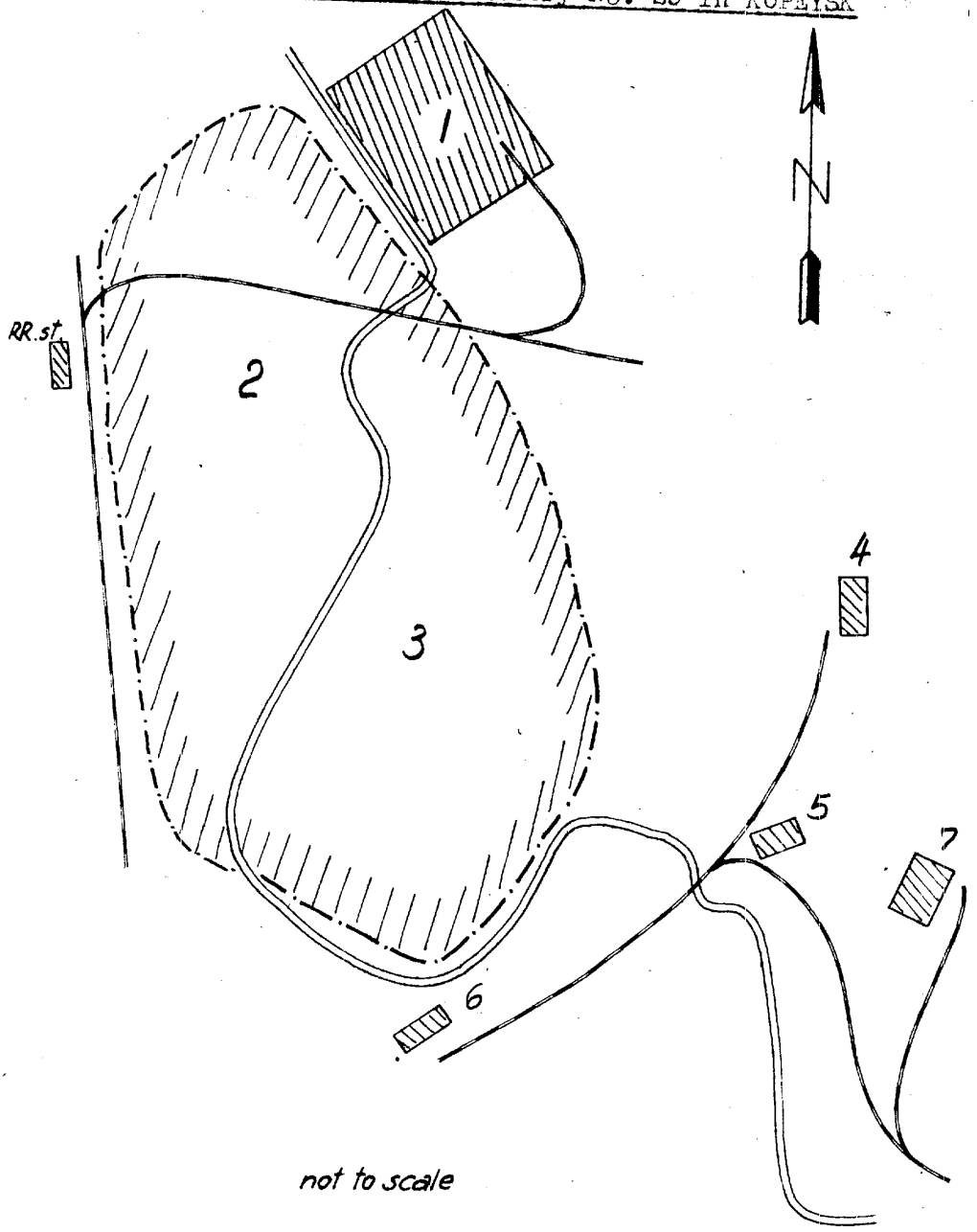
49 Storage of facings

50 Large storage site

51 Hardening shop

52 Mechanical department (Building 51 and 52 together 54 meters long).

"Kirova" Machine Factory No. 25 in KOPEYSK



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Legend:
1 "Kirova" Machine Factory
2 KOPEYSK, "Lower Part"
3 KOPEYSK, "Upper Part"
4 Mine No. 201
5 Mine No. 204
6 Loading station
7 Mine No. 43

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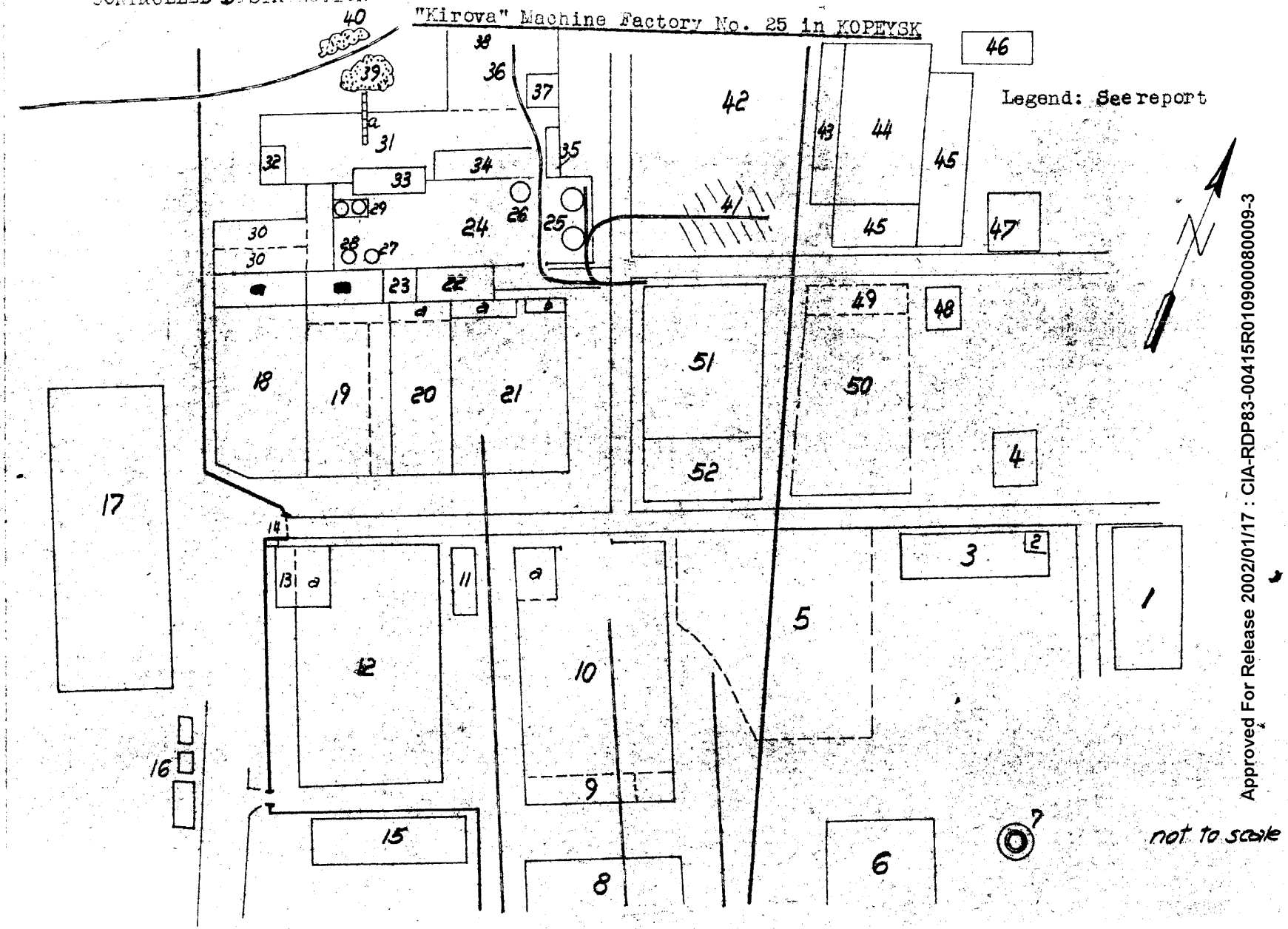
Annex 2

"Kirova" Machine Factory No. 25 in KOPEYSK



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COUNTRY Soviet Union REPORT NO.

TOPIC SM-Kirovka Machine Factory in KOPEYSK

EVALUATION [redacted] 25X1A

DATE OF CONTE

25X1A

DATE OBTAINED [redacted] DATE PREPARED 3 January 1950

REFERENCES

PAGES 3 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1X

SOURCE [redacted]

1. Location:

The SM Kirovka Plant in KOPEYSK (61°38'E/55°6' N) Chelyabinsk Oblast, is on the eastern edge of the town, about 900 feet from the Azitilenina main street. The official plant designation is SM-Kirovka Machine Factory, but local residents call the plant Factory No 25.

2. Plant Installations:

a.
Soviet workers stated that the plant was constructed during World War II and equipped with machinery transferred from a plant in the Ukrainian SSR. The first enlargement, including the tool fitting shop, was completed by early 1946. The construction of a new foundry started in late 1947 although the old foundry was capable of fullfilling the requirements of that time. The production of the new foundry will about triple the present plant output.

b. The older buildings are brick structures with flat wooden roofs covered with roofing paper. The new buildings are iron structures lined with masonry and but with the same type roofs as the old buildings. An old coal shaft, about 74 feet deep, which was east of the plant, was no longer in operation. A large industrial plant was to the south.

c. The machine factory had the following departments:

Department No 1: Manufacture of coal cutters
Department No 2: Manufacture of chain links for coal cutters and single parts
Department No 3: Assembly of centrifugal pumps and processing of single parts for ventilators
Department No 4: Assembly of ventilators, and electric welding shop
Department No 5: Processing of iron parts
Department No 6: Manufacture of coal cutters

BBB

3. Work Force:

About 3,500 laborers and 200 PWs working in three shifts of varying strength.

4. Production:

Coal cutters, ventilators, centrifugal pumps, and rolls for conveyers.

25X1A [redacted] Comment:

a. This information confirms and supplements two former reports. The assumption advanced in previous comments that this plant was formerly designated Kirov No 258 is confirmed.

b. Contradicting other records, source located the new foundry outside the plant area, and reported the plant departments in the northwest plant section to be detached individual buildings. In spite of these variances the purpose of the workshops generally agrees with all information. The significant asymmetrical shape of the old foundry was also reported by all other sources. Further information is required to obtain a clear picture on the actual plant layout.

1 Annex: "SM-Kirovka" Machine Factory in KOPEYSK

BBB

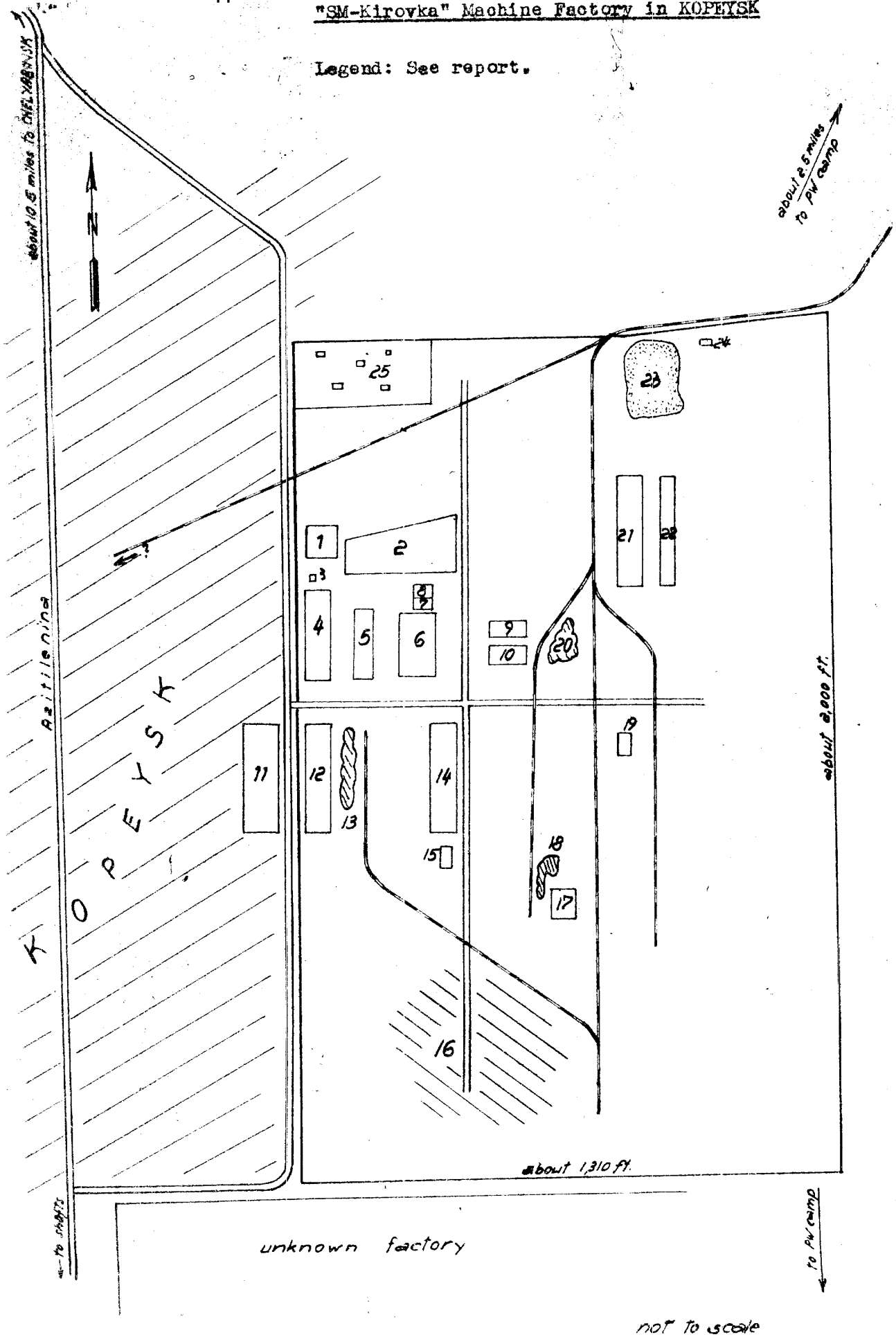
Legend to Annex

1 Main office, 60x60x40 feet, white building with slanting tile roof
2 Old foundry, 240x60 feet
3 Transformer station
4 Department No 5, 150x45x45 feet
5 Department No 1, 150x25x25 feet
6 Department No 3, 135x60x45 feet
7 Electrical repair shop, 35x35x25 feet
8 Compressor shop
9 Hardening shop, 75x30x25 feet
10 Repair shop, 75x30x45 feet
11 New foundry, 240x60x75 feet, with one main department and two branch departments, still without roof and installations
12 Forge, 240x45x45 feet
13 Coal dump
14 Department No 4,: 240x45x45 feet
15 Department No 5, 45x20x45 feet
16 Storage for iron, oil, and gasoline
17 Boiler house with slanting tile roof, 60x45x50 feet
18 Coal dump
19 Carpenter shop, with slanting tile roof, 45x25x15 feet
20 Coal dump
21 Tool shop, 240x45x45 feet
22 Department No 2, 240x25x36 feet
23 Lumber storage
24 Sawmill
25 Wooden sheds, garages and warehouses.

Annex

"SM-Kirovka" Machine Factory in KOPEYSK

Legend: See report.



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CLASSIFICATION

COUNTRY: Soviet Union REPORT NO.

TOPIC Ural Mash, Ordzhonikidze Plant for Heavy Industrial Machinery in Sverdlovsk 25X1A

EVALUATION [redacted]

DATE OF CONTENT [redacted]

25X1A DATE OBTAINED [redacted] DATE PREPARED 1 March 1950

REFERENCES

PAGES 2 ENCLOSURES (NO. & TYPE) 1 Blueprint

REMARKS

25X1A

SOURCE [redacted]

1. Location:

The plant is located in the northern section of Sverdlovsk (60°40' E/56°50' N).

2. Plant installations: Of the very extensive plant area, which was impossible to survey, source reported the following departments where he worked:

Department 31, press cutting shop
Department 53, polishing shop
Department 80, lathe shop

According to Soviet statements, the Sugres Power Plant to the northeast, supplied the current for the plant. For sketches of workshops see Annex.

3. Work force: No details available.

4. Production: Casts of various kinds, driving wheels for V-belts, twin-cylinder blocks for pumps.

25X1A [redacted] Comment:

a. The Ural Mash Plant in Sverdlovsk was repeatedly reported. The location is sufficiently clarified.

b. This report and the sketch will be useful for the plant evaluation, considered with other information. A series of small reports will be required to obtain a final picture of this extensive plant.

1 Annex, Blueprint: Ural Mash, Ordzhonikidze Plant for Heavy Industrial Machinery in Sverdlovsk.

Legend to Annex:

A Department No. 53: 90 x 45 meters, four longitudinal sections;

polishing shop

1 Tools supply

2 Fitting shop with three traveling cranes

3 Six polishing drums

4 Polishing shops with three 30 ton traveling cranes each

5 Three sets with five to six sand blastings for polishing

6 Welding shop

7 Office, kitchen and messhall

B Department No. 80: Lathe shop, 90 x 30 meters, solidly constructed building

1 12 to 15 boring and turning mills, about 1.8 meters in diameter

2 Two rows with many lathes, drilling machines and milling machines

3 15 to 18 lathes

4 Office

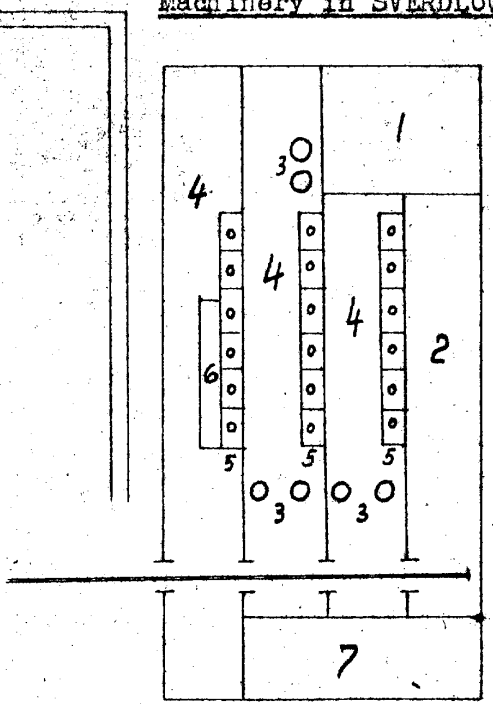
5 Welding shop

6 Carpenter shop

C Plant department No. 31: Press cutting shop, 58x30 meters, Annex of department No. 80, equipped with large press cutting machines and flywheels.

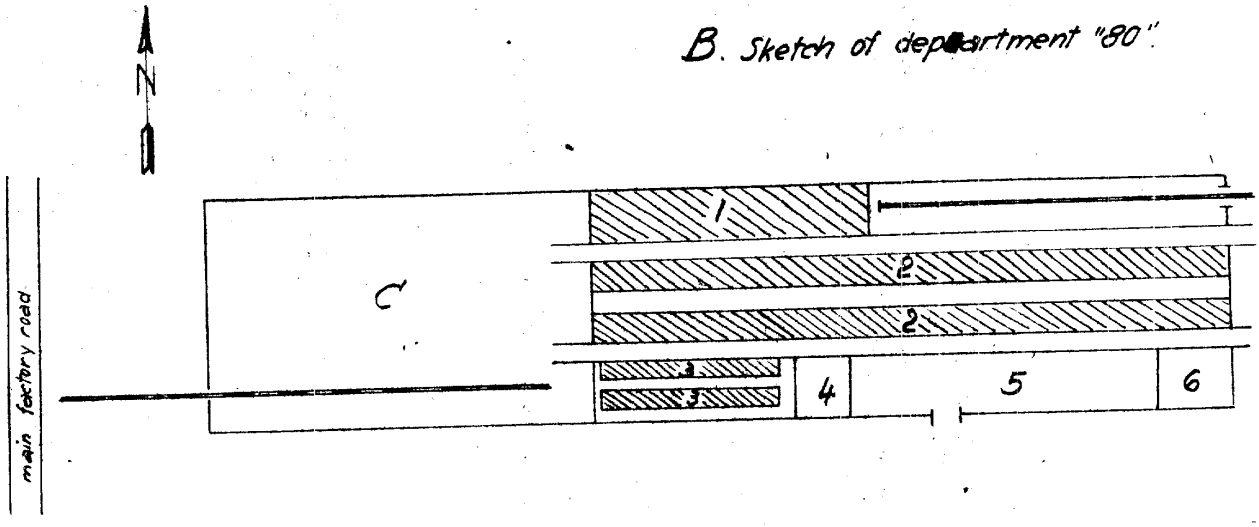
10 -

Ural Mash, Ordzhonikidze Plant for Heavy Industrial Machinery in SVERDLOVSK



Legend: See report.

A. Sketch of department "53".



B. Sketch of department "80".

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