

No. Pages: 6

~~TOP SECRET~~ [REDACTED]

COPY NO.: 29

PHOTOGRAPHIC INTELLIGENCE MEMORANDUM

BALKHASH COPPER SMELTING PLANT
BALKHASH, USSR



HTA-M43-57

23 OCTOBER 1957

**CONTAINS SENSITIVE
COMPARTMENTED INFORMATION**

DOCUMENT NO. 7
NO CHANGE IN CLASS. []
[] DECLASSIFIED
CLASS. CHANGED TO: TS [S] C. 022 02
NEXT REVIEW DATE: _____
AUTH: HR 70-2
DATE: 070682 REVIEWER: 063911

WARNING: HANDLE VIA TALENT CONTROL CHANNELS ONLY

CENTRAL INTELLIGENCE AGENCY

OFFICE OF RESEARCH AND REPORTS

This document contains information usable only within the TALENT CONTROL SYSTEM. It is to be seen on a MUST-KNOW BASIS ONLY BY PERSONNEL ESPECIALLY INDOCTRINATED AND AUTHORIZED. Reproduction is prohibited unless approved by the originator.

Declass Review by
NIMA/DOD

~~TOP SECRET~~ [REDACTED]

T
A
L
E
N
T

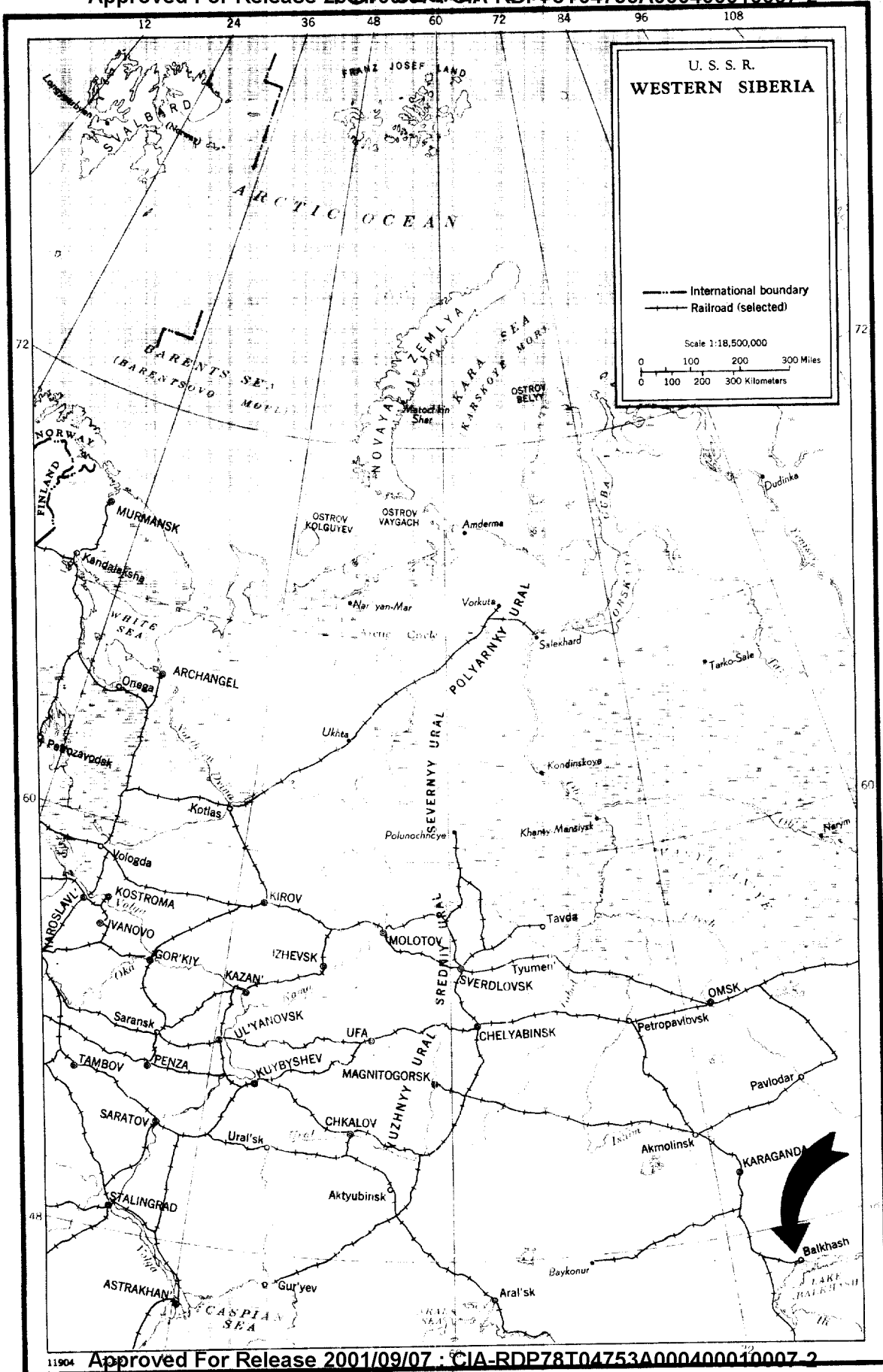
WARNING

This material contains information affecting the National Defense of the United States within the meaning of the espionage laws, Title 18, USC, Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

BALKHASH COPPER SMELTING PLANT
BALKHASH, USSR

HTA/M-43/57

23 October 1957



11904

BALKHASH COPPER SMELTING PLANT
BALKHASH, USSR

The Balkhash Copper Smelting Plant, one of the largest copper smelters and refineries in the USSR, is located on the northern shore of Lake Balkhash in southeastern Kazakhstan. The plant crushes and concentrates copper ore, smelts and refines the copper concentrate, and rolls and possibly fabricates finished copper products. In addition, the plant reportedly processes molybdenum.

A single-track, electrified railroad connects the plant with the Kounradskiy mine, approximately nine rail miles to the north of Balkhash. This benched open pit mine, roughly 3,500' in diameter at its upper level, contains approximately 10 miles of rail tracks and 15 operating power shovels. Copper ore is also shipped to Balkhash from mines in the vicinity of Dzhezkazgan, approximately 350 rail miles to the west of Balkhash.

There is no evidence of any construction under way at the Copper Smelting Plant. An apparent break in the roof of the electrolysis building indicates the possibility that this building originally was approximately 500'x 400', and later enlarged to 780'x 500'.

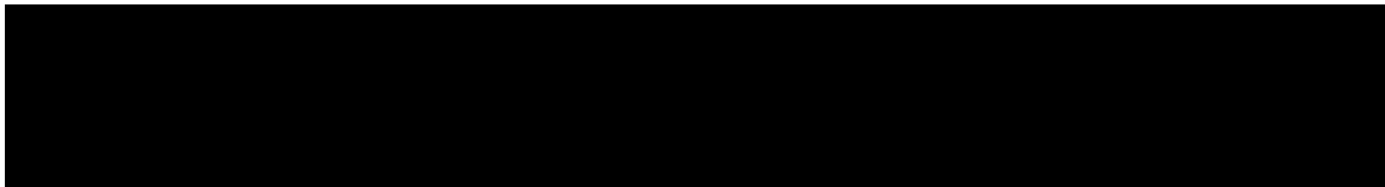
Major components of the Copper Smelting Plant are described on the following page and annotated on the accompanying photograph of the plant area. A second photograph shows the Kounradskiy open pit mine.

KEY TO ANNOTATIONS

1. Tailings pond.
2. Slag dump.
3. Pump house. Moves tailings launder from ore dressing plant to tailings pond.
4. Limestone kilns. Building, 130'x 70', connected by conveyor system with two kilns.
5. Unidentified installation. Building, 200'x 120', connected by pipe to adjacent tank or gas holder, 75' in diameter.
6. Probable chemical mixing and storage area. One storage-type building, 330'x 90', and two small buildings connected by pipeline or conveyor with flotation building (see annotation 9).
7. Ore crushing and screening facilities.
8. Ore unloading building, 170'x 90'. Reportedly houses two car tipples and a primary ore crusher.
9. Flotation building, 680'x 330'. Reportedly houses ball mills, classifiers, and flotation cells.
10. Ore concentration building, 700'x 145'. Reportedly houses three Dorr-type thickeners.
11. Reported molybdenum processing buildings, 210'x 135' and 250'x 90', connected by conveyor or pipeline with ore concentration building.
12. Steam plant, 100'x 65'.
13. Forge and locomotive repair shop, 300'x 210'.
14. Copper rolling mill and foundry, 520'x 280', with a wing 180'x 80'.
15. Machine shop, 450'x 150'.
16. By-products plant. Probably prepares construction materials from waste of copper smelting plant. Conveyor system services storage bins and probable crushing building.
17. Copper rolling mill and machine shop, 470'x 170', with a wing 190'x 110'.

18. Ore roasting building, 230'x 140'.
19. Ore and flux preparation area. Storage bin served by overhead conveyor. Complex conveyor system between this area and smelter suggests the presence of crushing and screening facilities.
20. Coal storage and pulverizing area. Coal yard approximately 1,100' long served by 350' bridge crane.
21. Pump house at water intake for thermal-electric plant.
22. Thermal-electric plant. Boilerhouse, 300'x 130', with two tall stacks; generator building, 500'x 100'.
23. Smelter building, approx. 430'x 410'; connects with two tall stacks. Possible casting building, located between the smelter and electrolysis buildings, appears to be T-shaped, approximately 340' by 260' over-all. Smoke precludes accurate measurements.
24. Electrolysis building, 780'x 500'.

REQUIREMENT: Prepared in answer to RR/HTA/E/R44/57, requesting de-
25X1D scription of Balkhash Copper Smelting Plant.

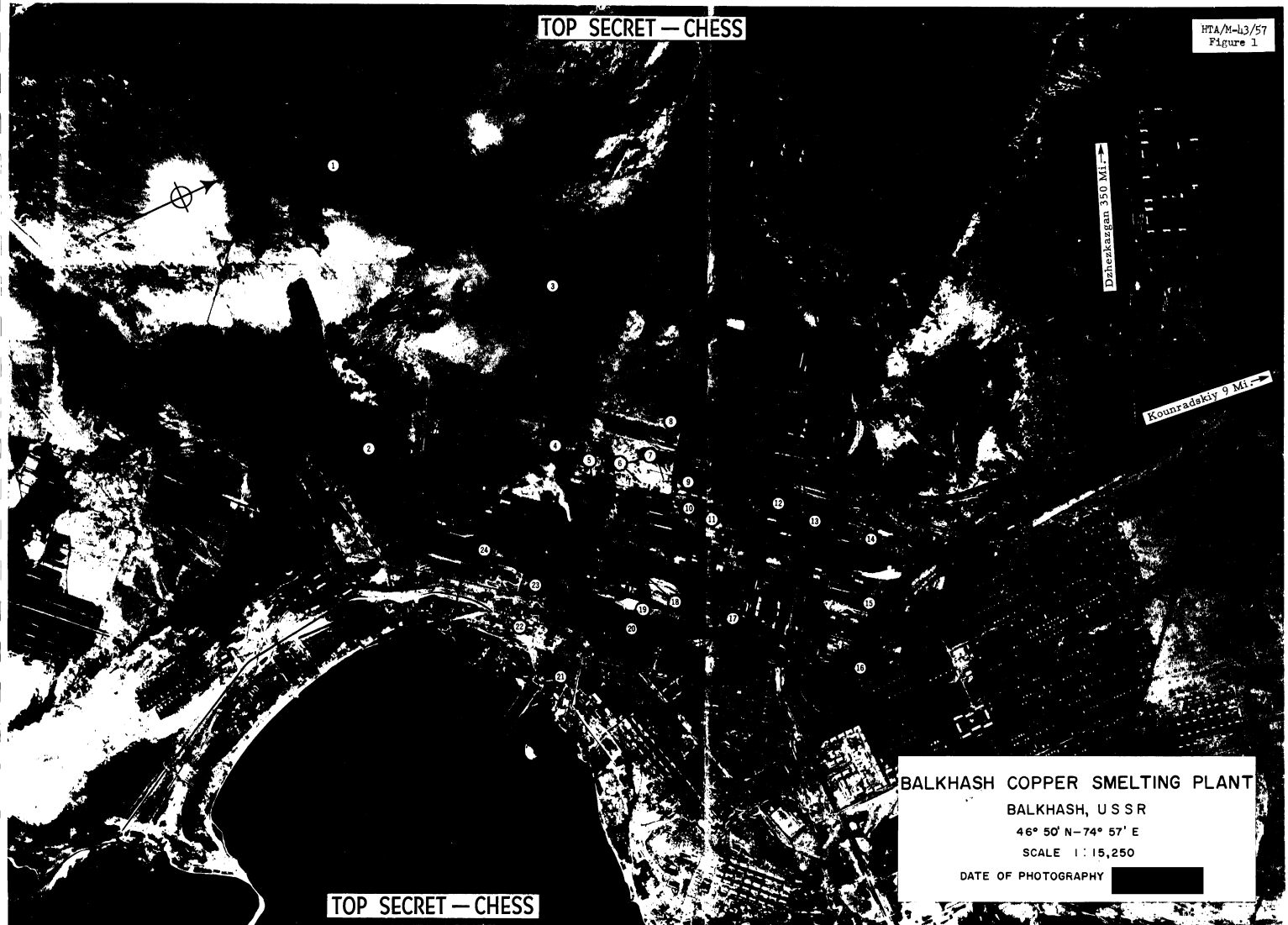


REFERENCES:

- 25X1A ATMP: 0244-9998-250, 2nd Ed., Jan 1956
0244 (0245)-9998-100A, 1st Interim Ed., Aug 1952
0244 (0245)-9998-0-25, 1st Ed. (Prov), Apr 1954
[redacted] 14 Mar 1952
- OTHER: Air. 6004th Air Intel Sv Sq, Report No. 2388-B, dated
6 July 1951
Air. 6004th Air Intel Sv Sq, Report No. 3480-C, dated
14 Feb 1952
Air. 6004th Air Intel Sv Sq, Report No. 3536-B, dated
11 Jan 1952
Air. 6004th Air Intel Sv Sq, Report No. [redacted] 4408-B, 25X1A
dated 7 May 1952
Air. 6004th Air Intel Sv Sq, Report No. [redacted] 5661,
dated 5 Feb 1953

COORDINATES: 46°50'N
74°57'E

25X1A B.E. NUMBER: [redacted]



25X1D



~~TOP SECRET~~ [REDACTED]

~~TOP SECRET~~ [REDACTED]