INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

50X1-HUM

COUNTRY North Korea

SUBJECT Facilities of the Mannyŏn Tungsten Mine, Mannyŏn-gu, Sinp'yŏng-gun, Hwanghae-pukto, and Town Plan of the Adjacent Area

REPORT

DATE DISTR. 25 August 1960

NO. PAGES 1

50X1-HUM

REFERENCES RD

DATE OF INFO.

50X1-HUM

PLACE & DATE ACQ.

SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

Information on the facilities of the Mannyŏn Tungsten Mine, Mannyŏn-gu, Sinp'yŏng-gun, Hwanghae-pukto, and a town plan of the adjacent area

50X1-HUM

50X1-HUM

STATE #	X	ARMY #	X	NAVY #	X	AIR #	X	NSA	X	FBI					

INFORMATION REPORT INFORMATION REPORT

Sanitized Copy Approved for Release 2010/10/04 : CIA-RDP80T00246A055800340001-5

50X1-HUM

Sanitized Copy Approved for Release 2010/10/04 : CIA-RDP80T00246A055800340001-5

Most of the facilities of the Mannyon Tungsten Mine, Mannyon-gu (approximately N 38-55, E 126-57) (CU 2310), Sinp'yong-gun, Hwanghae-pukto, were reconstructed [redacted] New houses were to be constructed in the vicinity of the mine and in Wolch'on-dong, Koriso-ri (N 38-56, E 126-57) (CU 2211) [redacted] The mine offices, which were located within a one-kilometer radius of the underground ore dressing site, were to be moved to new buildings west of Songmun, Koriso-ri. The following paragraphs are keyed to the sketch of the Mannyon Mine appearing on page 15: 50X1-HUM 50X1-HUM

1. The Mannyon Mine Hospital was a single-story wooden building with five wards. Each ward was 3 meters high, 10 meters long and 5 meters wide with lime-coated mud walls and cement tile roofs.

2. The slaughterhouse of the mine's Labor Supply Department was a single-story wooden structure about 3 meters high, 6 meters long and 5 meters wide with lime-coated mud walls and a cement tile roof. The Labor Supply Department purchased, through the transfer account system, cattle and hogs from the Hwanghae-pukto People's Committee or the Sinp'yong-gun People's Committee.

3. A wooden bridge approximately 15 meters long, 5 meters wide and 2 meters above the water. The water was approximately 40 centimeters deep.

4. The twelve official residences of the Mannyon Mine were stone dwellings approximately 3 meters high, 10 meters long and 6 meters wide with cement tile roofs. Two families occupied each house.

5. A residential area of the Mannyŏn Mine consisted of seven two-family stone houses each about 3 meters high, 10 meters long and 6 meters wide, with a cement tile roof. NOFORN

6. A national store was a single-story brick structure approximately 3 meters high, 20 meters long and 8 meters wide, with a cement tile roof. It sold sundries and side dish items and also served as a grain distribution station for employees living in the official residences described above. Both the store and official residences were under the jurisdiction of Karak, Kŏriso-ri.

7. The warehouse of the mine's Business Department was a single-story wooden structure about 4 meters high, 25 meters long and 10 meters wide, with unpainted board walls and a cement tile roof. Stored here were all the machine parts, consumer goods, oil supplies for machines, and various tools and instruments required at the mine's Production Plant.

8. The office of the Business Department was a single-story wooden structure approximately 3.5 meters high, 15 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

9. The office and carpenter shop of the Construction Department of the Mannyŏn Mine were in a single-story wooden structure about 4 meters high, 25 meters long and 9 meters wide, with clay walls which were lime-coated inside and coated with boards outside, and a cement tile roof. The office occupied two-thirds of the structure, and the carpenter shop the remainder.

10. The main drift was an arch-shaped cement drift approximately 40 centimeters thick, 3 meters high and 4 meters wide, and led to a shaft leading to an underground pit. Ordinarily the drift was used as a passageway or for drainage but in the event of hostilities could be used to haul crude ore to the underground ore dressing site through the carriage drift described in No. 12 below.

11. The carriage drift, at the entrance of the underground ore dressing site, was an arch-shaped concrete drift about 40 centimeters thick, 3 meters high and 4 meters wide, and led to the carriage shaft of the underground ore dressing site described in No. 17 below.

12. The carriage drift of the underground ore dressing site was equipped with a mine tub track and was approximately 3 meters high and 4 meters wide.

13. The Labor Club of the Mannyŏn Mine was in a stone building, half of which was single-storied and about 5 meters high, and the other half two-storied and about 8 meters high. The building was about 70 meters long, and 20 meters wide, and was used by the employees for meetings, dramas, and motion pictures under the management and sponsorship of the Cultural Department, Mannyŏn Mine Trade League Committee.

14. A residential area of the Mannyŏn Mine consisted of two-family single-story wooden structures each approximately 3 meters high, 10 meters long and 5 meters wide, with lime-coated clay walls and a cement tile roof. They were occupied by members of the Social Security Department of the Hwanghae-pukto Internal Affairs Department residing at the mine.

15. The conveyer cable of the underground ore dressing site was approximately 300 meters long with about a six-ton capacity, and was used for hauling machines, repair materials, instruments and tools to the underground ore dressing site.

16. The winch for the conveyer cable of the underground ore dressing site

CONFIDENTIAL

concrete head approximately 40 centimeters thick. Crude ores arriving at the carriage drift described under No. 12 above were hoisted up by a winch and hauled by a skip to the underground ore dressing site.

13. The cableway of the underground ore dressing site was of arch-shaped concrete about 40 centimeters thick and was 4.5 meters high, 1 meter wide and 40 meters long. The cableway bucket hauled crude ore from the combined ore house described under No. 58 below to the underground ore dressing site.

19. An aerial cableway to the underground ore dressing site was about 400 meters long with a hauling capacity of 400 tons per day. Hanging from the cable were buckets of 250-kilogram capacity containing crude ore from the combined ore house described under No. 58 below.

20. An aerial cableway to the underground ore dressing site was about 400 meters long with a hauling capacity of 600 tons per day. An iron bail attached to the cable, operated by a 100-hp and a 50-hp motor, could haul 10 tons of ore at a time.

21. The underground ore dressing site was planned [redacted] and built [redacted] As shown in the sketch, the underground ore dressing site had passage drifts which had been used when the site was being built, but which were currently used only for repairs of the site's machines. The main gate of the underground ore dressing site was used as a passageway by employees. 50X1-HUM 50X1-HUM

22. An outdoor stage was used during the summer for motion pictures and dramas.

23. The office of the underground ore dressing site was a single-story temporary wooden structure approximately 3 meters high, 15 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof.

24. The Power Department was in a two-story stone structure about 6 meters high, 15 meters long and 7 meters wide, with a cement tile roof. The first floor was used as a factory for the repair of motors and transformers and the second floor as the office of the Power Department.

25. The lathe factory of the Engineering Department was an angle-iron structure approximately 4 meters high, 30 meters long and 10 meters wide, with slate walls and roof. It manufactured and repaired various parts of machines used at the mine.

26. The casting plant of the Engineering Department was an angle-iron structure about 4 meters high, 14 meters long and 6 meters wide, with slate walls and roof. All castings for the Engineering Department were manufactured here.

27. The ironworks of the Engineering Department was an angle-iron structure approximately 4 meters high, 10 meters long and 7 meters wide, with slate walls and roof.

28. The office of the Engineering Department was a single-story wooden structure about 3 meters high, 20 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

wooden structure 3 meters high, 20 meters long and 8 meters wide, with lime-coated clay walls and a cement tile roof.

30. Another office of the Management Department was a single-story wooden structure about 3 meters high, 20 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

31. A third office of the Management Department was a single-story wooden structure approximately 3 meters high, 18 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

32. The official residence of the Chairman of the Mannyŏn Mine Korean Labor Party (KLP) Committee was a single-story wooden structure about 3 meters high, 10 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

33. The office of the mine's manager was a single-story wooden structure approximately 4 meters high, 20 meters long and 7 meters wide, with cement-coated walls and a cement tile roof. The insides of the walls were coated with lime.

34. The official residence of the chief engineer of the Mannyŏn Mine was a single-story wooden structure about 3 meters high, 10 meters long and 5 meters wide, with cement-coated walls and a cement tile roof. The insides of the walls were coated with lime.

35. The kindergarten was a single-story wooden structure approximately 3.5 meters high, 30 meters long and 9 meters wide, with lime-coated clay walls and a cement tile roof.

36. The passage drift entrance[2] was used by employees living in official residences located in Wŏn'gok, Kŏrigo-ri. It was built of concrete in an arch shape, and was approximately 40 centimeters thick, 2.5 meters high and 3 meters wide.

37. The passage drift was about 300 meters long.

38. The Mannyŏn Mine Democratic Youth League Committee building was a single-story wooden structure about 3 meters high, 12 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

39. The Mannyŏn Mine KLP Committee building was a single-story wooden structure approximately 3 meters high, 17 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof. As of February 1958, approximately 1,000 out of the total 4,000 mine employees were KLP members.

40. The Mannyŏn Mine Trade League Committee building was a single-story wooden structure about 3 meters high, 15 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

41. The day nursery of the Mannyŏn Mine was a single-story wooden structure approximately 3.5 meters high, 20 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof. It was staffed by a chief, 15 dry nurses, and three wet nurses. Children from 1-4 years of age of female employees were brought here and the mothers were allowed to nurse the children once every four hours. There were usually about 60 children, who were given snacks of milk, bread and boiled rice free of charge.

42. An underground air compression site was a cave dug out of the rocks and was approximately 3.5 meters high, 20 meters long and 9 meters wide. It was equipped with two air compressors each with a 200-hp motor, and one air compressor with a 100-hp motor. The compressed air was used for drilling at ore excavation sites.

43. A conveyer track was used at underground ore excavation sites to transport materials and equipment in mine tubs which were pushed by hand.

44. The winch room was a single-story wooden structure about 4 meters high and 5 meters square, with clay walls which were lime-coated inside and coated with boards outside, and a cement tile roof. It was equipped with a 50-hp motor winch, which pulled the mine tubs and was located near an inclined part of the conveyer track described under No. 43 above.

45. The electric drying and packing site was a single-story wooden structure about 3 meters high, 15 meters long and 7 meters wide, with board walls and a tin roof. It was equipped with an electric hot floor and was used to dry and pack tungsten ore which was wrapped in cotton cloth and packed first in hemp and then in straw bags. The packed ore was shipped to the Yangdŏk Railroad Station (N 39-13, E 126-30) by truck, then by rail to the Sŏngjin Steel Mill (N 40-41, E 129-12), Kimch'aek-si, Hamgyŏng-namdo.

46. Water tank No. 3 of the underground ore dressing site was built of reinforced concrete, approximately 4 meters high, 20 meters long and 6 meters wide, with a 400-ton capacity. It was equipped with two 500-hp turbine pumps which pumped water from tank No. 2 to tank No. 3, continually supplying the underground ore dressing site. For dressing one ton of crude ore, 20 tons of water were needed.

47. The office of the Mining Department was a two-story stone building about 8 meters high, 15 meters long and 7 meters wide, with cement-coated walls and a cement tile roof.

48. The forging shop of the Mining Department was an angle iron structure approximately 4 meters high, 10 meters long and 7 meters wide, with slate walls and roof. The shop forged mainly drill bits.

49. Pit No. 0 was built of concrete in an arch shape about 40 centimeters thick, 4 meters high and 2.5 meters wide, and was connected with Shaft No. 1. Laid in the pit was the mine tub track, along which an electric car could pull about 20 mine tubs at one time, each carrying 0.9 tons of crude ore from the mining sites.

50. The temporary conference room of the Manyŏn Mine was a single-story wooden structure approximately 4 meters high, 30 meters long and 15 meters wide, with lime-coated clay walls and a tin roof. It was used for small conferences by production plants, and for workshop circle activities.

51. This is a river.[3]

52. The quarantine station of the Manyŏn Mine was a single-story wooden structure about 3 meters high, 10 meters long and 6 meters wide, with lime-coated clay walls and a slate roof. The station personnel consisted of a chief and six subordinates who received drug supplies and preventive disease instructions from the Public Health Department, Hwangjae-pukto People's Committee, and administered inoculations to

wooden structure approximately 3 meters high, 10 meters long and 6 meters wide, with a slate roof.

NOFORN

54. A residential area of the Mannyŏn Mine consisted of approximately 60 two-family houses, which were single-story wooden structures, each about 3 meters high, 10 meters long and 5 meters wide, with lime-coated clay walls and a slate roof.

55. The Midŏk branch school of the Paengnyŏn Primary School was a single-story wooden structure about 4 meters high, 7 meters wide and 20 meters long, with lime-coated clay walls and a cement tile roof. About 80 students were enrolled here.

56. A sentry post of the Mannyŏn Mine Self Defense Unit was a single-story wooden structure approximately 3 meters high, 10 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

57. The Iyŏng Transformer Station was a single-story brick building about 15 meters high, 20 meters long and 8 meters wide, with cement-coated walls and a cement tile roof. Through the Wŏnsan Power Transmission and Distribution Department, the station received 33,000 kilowatts in double lines and serviced the entire mine with the exception of the underground ore dressing site, which received its power from a transformer on the roof of the ore dressing site.

58. The mine's combined ore house was a single-story wooden structure approximately 3 meters above the ground, 6 meters deep in the ground, 50 meters long above and in the ground, 8 meters wide above the ground, and 6 meters wide in the ground, with walls coated with thick boards and a tin roof. Part of the underground structure was walled in by concrete about 40 centimeters thick, and was used to store 500 tons of crude ore hauled in by an electric car through Pit No. 0 described in No. 49 above, and the pit top described in No. 61 below, and finally to the ore house of the underground ore dressing site by the cableways described in Nos. 19 and 20 above.

59. The rock drilling workers' dining hall was a single-story wooden structure approximately 3 meters high, 15 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof. Free nutritious meals were served once a day to rock drilling and crude ore hauling workers who labored under noxious conditions.[4]

60. An underground air compression site was an underground cave about 4 meters high, 25 meters long and 10 meters wide. It was equipped with two Soviet-made 1,000-hp air compressors which sent compressed air to the underground ore dressing site and other areas of the mine where drills were employed.

61. A pit top[2] connected with a shaft leading to the underground mining sites and was built of concrete about 40 centimeters thick, 2.5 meters high, 3.5 meters wide and 500 meters long in an arch shape. Installed in the pit was a mine tub track along which mine tubs loaded with crude ore were pulled by an electric car.

62. The mine tub track bridge was built of large angle irons and had concrete piers.

63. The passage pit had an entrance built of concrete in an arch shape and was approximately [illegible]00 meters long, 2.3 meters high and 2.5 meters wide. It connected [illegible] and Karak in [illegible]

single-story stone building about 3.5 meters high, 25 meters long and 7 meters wide, with cement tile roof. Five teachers taught approximately 150 children.

65 A. A residential area of the Mannyŏn Mine consisted of about 50 wooden and 80 stone two-family houses, each approximately 3 meters high, 10 meters long and 5 meters wide. The wooden houses had lime-coated clay walls and cement tile roofs.

65 B. Another residential area of the Mannyŏn Mine consisted of about 60 houses of the same structure and dimensions as those described under No. 65 A.

66. A national store was a single-story wooden structure about 3 meters high, 15 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof. It sold sundries and side dish items and served as a grain distribution station for employees living in the residences described under No. 65 A and 65 B.

67. A bridge built of wood was approximately 15 meters long, 3 meters wide and 3 meters above water which was about 50 centimeters deep.

68. A pit top[2] built of concrete in an arch shape was approximately 2.[illegible] meters high and 3 meters wide, and led to the Pultsag underground mining site.

69. The forging workshop of the Pultsag Branch Mine underground mining site, Mannyŏn Mine, was built above the ground and was a single-story wooden structure about 3.5 meters high, 10 meters long and 6 meters wide, with lime-coated clay walls and a wooden roof. Steel drill bits for the Pultsag underground mining site were forged here.

70. The air compression site of the Pultsag Branch Mine was an above-ground single-story wooden structure approximately 4 meters high, 20 meters long and 7 meters wide, with bonn-coated clay walls. It was equipped with one 200-hp and one 100-hp air compressor which supplied compressed air to rock drills at underground mining sites.

71. The ore hand picking site of the Pultsag Branch Mine was a single-story wooden structure about 4 meters high, 50 meters long and 15 meters wide, with wooden walls and a cement tile roof. It was equipped with one 20-inch roll crusher, five hand picking tables, one 15-inch break crusher, one flotation machine, and a hand picking place where dumpen-shaped containers made of bush clover were used for hand picking. About 300 laborers working three shifts a day were employed here.

72. A residential area of the Mannyŏn Mine consisted of approximately 10 two-family residences, each a single-story wooden structure about 3 meters high, 16 meters long and 4 meters wide, with lime-coated clay walls and a cement tile roof.

73 A. The barracks of the North Korean People's Army (NKPA) training regiment assigned to the Mannyŏn Mine was a single-story wooden structure about 3 meters high, 20 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof. Approximately 60 NKPA soldiers, commanded by a colonel, had been stationed at the mine [redacted] and conducted two-hour military training sessions for male personnel of the mine between the 20-40 age group. This training program was carried out on a plant-by-plant basis; after completing two years of training the employees were discharged under the same conditions as were applicable to military personnel.

50X1-HUM

assigned to the Nammyŏn Mine was a single-story wooden structure approximately 3 meters high, 15 meters long and 8 meters wide, with lime-coated clay walls and a cement tile roof. Half of the structure was utilized for the commander's office and half for his quarters.

74. A residential area of the Nammyŏn Mine consisted of single-story wooden structures about 3 meters high, 10 meters long and 5 meters wide, with lime-coated clay walls and a cement tile roof.

75. The entrance to the passage pit connecting Wŏn'gok and Kŭmsŏ-ri Kŏriso-ri was built of concrete approximately 40 centimeters thick, 3.5 meters wide and 2.3 meters high, in an arch shape.

76. A wooden bridge was about 15 meters long, 3 meters wide and 3.5 meters above the water, which was approximately 50 centimeters deep.

77. A residential area of the Nammyŏn Mine consisted of about 20 two-family, single-story wooden houses, each about 3 meters high, 10 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

78. A sentry post of the mine's Self Defense Unit, which was manned on a 24-hour basis, was similar to that described in No. 56 above.

79. A playground was about 150 meters long and 70 meters wide.

80. A residential area consisted of about 25 two-family structures like those described in No. 77.

81. A similar residential area had about 30 two-family structures of the same construction and dimensions.

82. Another residential area had about 100 similar houses.

83. This residential area had about 20 similar houses.

84. About 15 similar houses were located here.

85. This residential area had about 10 similar houses.

86. The Engineering Department and warehouse of a geological survey unit was in a single-story wooden structure approximately 3.5 meters high, 20 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof. The Engineering Department and warehouse each shared half of the structure. The geological survey unit, which came under the Geological Survey Management Bureau, Ministry of Metals Industry, was assigned to the mine permanently in 1954 for the purpose of prospecting for mineral veins, and had about 300 employees.

87. A combined national store and warehouse was a wooden structure about 15 meters long, 10 meters wide and 3 meters high. The warehouse used part of the building and the national store, which sold sundries and side dish items, used the rest.

88. A national restaurant was a single-story wooden structure approximately 3 meters high, 15 meters long and 8 meters wide, with lime-coated clay walls and a cement tile roof. It served all types of meals and alcoholic beverages.

about 3.5 meters high, 25 meters long and 8 meters wide, with lime-coated clay walls and a cement tile roof. It distributed grain to employees living in official residences in Hoegok, Komsan-ri.

90. A residential area of about 15 two-family houses similar to those described in No. 77 was located here.

91. This was another residential area of about 10 similar dwellings.

92. The office of the geological survey unit was a two-story adobe structure approximately 6 meters high, 30 meters long and 6 meters wide, with a cement tile roof.

93. The Manmyŏn Mine Technical Professional School was a single-story wooden structure about 3.5 meters high, 35 meters long, and 5 meters wide, with lime-coated clay walls and a cement tile roof. The school, with an enrollment of about 200 students as of February 1958, was established in 1950 and offered a four-year course in mining and ore dressing to junior middle school graduates who were employed at the mine and who passed the entrance examinations. It offered day and night classes of four or five hours' duration, and students attending classes after work were exempt from workshop meetings, although they had to attend KWP meetings once a month. Graduates were qualified as assistant engineers.

94. A residential area consisted of single-story wooden structures, each approximately 3.5 meters high, 12 meters long and 6 meters wide, with lime-coated clay walls and a slate roof.

95-96, and 98-101. These are residential areas of single-story wooden structures, each about 3 meters high, 10 meters long and 6 meters wide, with lime-coated clay walls and a slate roof. The areas consisted of approximately 10, 15, 6, 8, 15 and 15 houses, respectively.

97. A bridge, called Ssangdaei, was about 15 meters long, 4 meters wide and 2 meters above the water, which was approximately 50 centimeters deep.

102 A. The Manmyŏn Mine Hospital was a single-story brick building approximately 4 meters high, 45 meters long and 13 meters wide, with lime-coated walls and a tin roof. There were Internal Medicine, Surgery, Dental, Pediatrics, Obstetrics and Gynecology, and Tuberculosis Sections, and the hospital was staffed by about 15 doctors, two junior doctors and 20 nurses.

102 B. A building used for a ward, a kitchen and a warehouse of the Manmyŏn Mine Hospital was a two-story brick building approximately 7 meters high, 35 meters long and 13 meters wide, with cement-coated walls and a tin roof. The kitchen and warehouse shared the first floor, and the ward, with about a 50-bed capacity, comprised the upper floor.

103. A wooden bridge was about 12 meters long, 3 meters wide and 2 meters above the water, which was approximately 40 centimeters deep.

104. The boiler shop of the Paengmyŏn Primary School was a single-story brick structure about 4 meters high, 10 meters long and 10 meters wide, with cement-coated walls and a cement tile roof.

105 A, B. These two two-story stone buildings of the Paengmyŏn Primary School were each approximately 8 meters high, 11 meters wide and 60 meters long. The school had about [redacted]

50X1-HUM

106. A wooden bridge was approximately [illegible] 2 meters above the water, which was about 40 centimeters deep.

107. The auditorium of the Paengnyŏn Primary School was a single-story stone building about 4 meters high, 30 meters long and 10 meters wide, with a cement tile roof.

108. A building formerly used by the Mannyŏn Mine Construction Trust was a single-story wooden structure approximately 3 meters high, 10 meters long and 6 meters wide, with cement-coated walls and a cement tile roof; it still belonged to the Mannyŏn Mine.

109. The Kŏriso-ri People's Committee building was a single-story wooden structure about 3 meters high, 15 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof.

110. Water tank No. 2 of the underground ore dressing site was built of reinforced concrete approximately 4 meters high, 20 meters long and 6 meters wide, and had about a 400-ton capacity. Its two 500-hp turbines continually pumped water from tank No. 1 and a stream flowing from the direction of Wŏn'gok, Kŏriso-ri, to tank No. 3 through underground water pipes.

111. This was a Self Defense Unit sentry post, constructed like that described in No. 56 above and manned on a 24-hour basis.

112. The mine's Labor Supply Department was in a single-story wooden structure approximately 3 meters high, 20 meters long and 7 meters wide, with cement-coated clay walls and a cement tile roof.

113. A cement bridge was about 12 meters long, 4.5 meters wide and 1.5 meters above the water, which was approximately 50 centimeters deep.

114. A wooden bridge was about 25 meters long, 3 meters wide and 4 meters above the water, which was about 50 centimeters deep.

115 A. A part of the Taesŏng Dormitory of the Mannyŏn Mine was a quadrangular single-story wooden structure approximately 46 meters long and 18 meters wide, with lime-coated clay walls and a cement tile roof. Single employees of the mine were accommodated here.

115 B. The boiler shop and washroom of the Taesŏng Dormitory were in a single-story wooden structure about 4 meters high, 15 meters long and 10 meters wide, with cement-coated clay walls and a cement tile roof. The structure was shared equally by both units.

115 C. Another Taesŏng Dormitory was in a two-story stone building approximately 8 meters high, 40 meters long and 10 meters wide, with a cement tile roof. It too accommodated single employees of the mine, and approximately 400 could be accommodated in this dormitory and the one described in No. 115 A.

116. This was a stone cliff.

117. A warehouse of a national department store was a single-story stone building about 4.5 meters high, 20 meters long and 5 meters wide, with a cement tile roof.

118. A national store was a two-story stone structure approximately 8 meters high, 25 meters long and 10 meters wide, with a cement tile roof. It was staffed by about seven sales clerks who sold daily necessities, sundries and side dish items.

119. This was a residential area of about 20 houses, similar to those

mately 4 meters high, 15 meters long and 6 meters wide, with lime-coated walls and a slate roof. It came under the Commercial Management Station, Sinŭiyong-gun People's Committee, and sold various sundry dishes, with prices as follows: bowl of cold vermicelli, 40 wŏn; bowl of rice in soup, 30 wŏn; lunch, 60 wŏn; dish of fries, 40 wŏn; dish of bread, 40 wŏn; dish of relish, 50 wŏn; four hop, or 1.524 pints, of ginger wine, 250 wŏn. It was open from 0900 - 2300 hours daily.

121. This residential area had about 20 houses, similar to those described in No. 77.

122. The mine's Transportation Department was a single-story wooden structure approximately 4 meters high, 15 meters long and 6 meters wide, with cement-coated walls and a cement tile roof.

123. The Kŏrisŏ-ri Post Office was a single-story wooden structure about 3.5 meters high, 10 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof. An ordinary letter cost 10 wŏn to mail and a postal card, five wŏn. Mail between P'yŏngyang (N 39-01, E 125-45) and Kŏrisŏ-ri took three days for delivery.

124. The garage for the Transportation Department was a single-story wooden structure approximately 4 meters high, 40 meters long and 7 meters wide, with wooden-coated clay walls. It housed seven Soviet-made ZIS trucks and one Soviet-made jeep, which the mine manager used.

125. The sawmill for the Manyŏn Mine was a single-story wooden structure about 4.5 meters high, 13 meters long and 6 meters wide, with wooden walls and a tin roof. Under the management of the mine's Business Section, it was equipped with three sawing machines, of 40-hp, 20-hp, and 10-hp motors respectively.

126. Two explosives storage warehouses for the mining site were single-story wooden structures each approximately 3.5 meters high, 7 meters long and 6 meters wide, with wooden walls and a tin roof. Dynamite, detonators, and fuses, which were issued by certificate from the Mining Department to pit explosive storage areas at the mining sites, were stored here.

127. This was a river.[3]

128. This was another residential area, consisting of about 100 houses similar to those described in No. 77 above.[5]

129. A bathhouse was a single-story stone structure approximately 4 meters high, 20 meters long and 10 meters wide, with a cement tile roof.

130. The dining hall of the Females' dormitory at the Manyŏn Mine was a single-story wooden structure about 3 meters high, 15 meters long and 6 meters wide, with lime-coated clay walls and a slate roof.

131. The females' dormitory was a two-story stone structure approximately 7 meters high, 28 meters long and 9 meters wide, with a cement tile roof. About 50 single female employees of the mine were accommodated here.

132. Laborers' apartment houses of the Manyŏn Mine consisted of nine two-story stone structures, each about 7 meters high, 28 meters long and 9 meters wide, with a cement tile roof. Each one housed eight, usually large, families, who were allotted 60 square meters of space which included a wooden-floor room with a Manchu fan stove, a bot-

with a flat cement roof. It was adequate for 40 two-or-three-person families of mine employees.

134. The potable water distribution point at the Mannyŏn Mine was a reinforced concrete tank approximately 30 centimeters thick, 4.5 meters high, 10 meters long and 8 meters wide which was buried in the ground and had a 320-ton capacity. It distributed potable water from the tank described under No. 136 through water pipes to residences at the mine.

135. The potable water pipes were cast-iron pipes about six inches in diameter and installed approximately one meter deep in the ground in double lines.

136. The potable water tank was in two single-story wooden structures with cement walls and tin roofs and equipped with two 50-hp pumps inside and a reinforced concrete tank about 5 meters high and 7 meters in diameter, with an approximate 200-ton capacity, underground. It collected water flowing down hills and supplied it to the distribution point described under No. 134.

137. The Mannyŏn Mine Transformer Station was a single-story brick building about 4.5 meters high, 8 meters wide and 10 meters long, with cement-coated walls and a cement tile roof. It distributed power from the Iyŭng Transformer Station described under No. 57 to residences located in Chungp'yŏng-dong and Susu-dong, Kŏriso-ri, and water tanks Nos. 1 and 2 of the underground ore dressing site.

138. The Kŏriso-ri Internal Affairs Substation, Sinp'yŏng-gun, Hwanghae-pukto, was a single-story wooden structure approximately 3.5 meters high, 7 meters wide and 10 meters long, with clay walls and a cement tile roof. Its staff consisted of a chief with the rank of senior captain, one junior lieutenant, and three noncommissioned officers.

139. The Pyŏngyŏn Junior Middle School was a single-story wooden structure about 4 meters high, 40 meters long and 7 meters wide, with board-coated clay walls and a cement tile roof. Eight teachers taught 250 students.

140. A residential area of the Mannyŏn Mine consisted of approximately 40 single-story wooden structures, each about 3 meters high, 10 meters long and 6 meters wide, with lime-coated clay walls and a slate roof.

141. The field office of the mine's Construction Department was a single-story wooden structure approximately 3 meters high, 15 meters long and 5 meters wide, with lime-coated clay walls and a cement tile roof. Construction of residences at the mine was under the supervision of this office.

142. The field sawmill of the Construction Department was a single-story wooden structure about 4 meters high, 15 meters long and 5 meters wide, with board-coated walls and a slate roof. It was equipped with one sawing machine with a 40-hp motor, another with a 10-hp motor, and one five-hp pump.

143. The basic cement materials factory of the Construction Department was a single-story wooden structure approximately 4 meters high, 10 meters long and 5 meters wide, with board-coated walls and a cement tile roof. Beside the building was a concrete cement mixer about

3 meters high, 5 meters wide and 1[illegible] meters long. Additional equip-ment of the factory included a concrete mixer, a crane with a one and one-half ton capacity, a winch with a 10-hp motor, one five-hp pump, and one buzzer. Cement blocks and cement tiles were manufactured here.

144. A residential area of the Mannyŏn Mine consisted of approximately 40 two-family single-story stone houses, each about 3 meters high, 12 meters long and 6 meters wide.

145. Another residential area consisted of about 70 similar houses.

146. Kŏriso-ri market was open on Sundays and farmers in the Mannyŏn Mine area brought their chickens, honey, vegetables and eggs to sell; mobile sales units of the national stores also sold their commodities to mine employees and their families.

147. A national restaurant was a single-story wooden structure about 3 meters high, 8 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof.

148. A national store was a single-story wooden structure about 4 meters high, 15 meters long and 7 meters wide, with lime-coated clay walls and a cement tile roof. It sold sundries, side dish items, cement and hardware, and also served as a grain distribution station for mine employees.

149. This was a residential area of about 50 houses, similar to those described in No. 77 above.[6]

150. The office of the Self Defense Unit was a single-story wooden structure approximately 3 meters high, 10 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof. The office was responsible for the sentry posts described under Nos. 56, 78, and 111 above. Approximately 20 guards were employed to man the sentry posts; they carried Soviet rifles and PPSh submachine guns.

151. This residential area had about 30 houses similar to those described in No. 77.[6]

152. A lot was reserved for construction of more residences for the Mannyŏn Mine as part of the Five Year People's Economic Plan. The houses were expected to be built during 1960.

153. The water pipe lines to the underground ore dressing site were about 10 inches in diameter and were installed in double lines with one as reserve. The pipes from water tank No. 1 to No. 2 were buried approximately 1.5 meters in the ground, and those from water tank No. 2 to No. 3 were installed about 8 meters above the ground.

154. A residential area of the Mannyŏn Mine consisted of approximately 10 houses.

155. Another residential area consisted of about six houses.

156. Water tank No. 1 of the underground ore dressing site consisted of a pump house equipped with two 500-hp turbine pumps and an underground water tank below the house. The tank was built of reinforced concrete about 30 centimeters thick, 4 meters high, 20 meters long and 7 meters wide. The turbine pumps brought water from the river and supplied it to water tank No. 2, the capacity of which was about 400

and 2 meters above the water, which was about 80 centimeters deep, flowed from the Paengnyŏn-san Mountain Range and never dried up.

158. A national store was a single-story wooden structure about 3 meters high, 15 meters long and 6 meters wide, with lime-coated clay walls and a cement tile roof. Sundries, side dish items and school supplies were sold here.

Comments

1. the Mannyŏn Mine produced tungsten and ferrotungsten, and had been known as the Paeknyŏn Mine

the Mannyŏn Mine was in Koksan-gun, Hwanghae-pukto, prior to 15 August 1945 it was operated by a Japanese, KOBAYASHI (fnu), and was named the Paengnyŏn Mine. it was a Grade II enterprise and had such rich tungsten reserves that it was named the Mannyŏn Mine, mannyŏn meaning 10,000 years, the projected duration of the reserves.

Tungsten Mine in Hwanghae-pukto was a Class I enterprise.

2. Not all drift entrances and pit tops are covered in the sketch

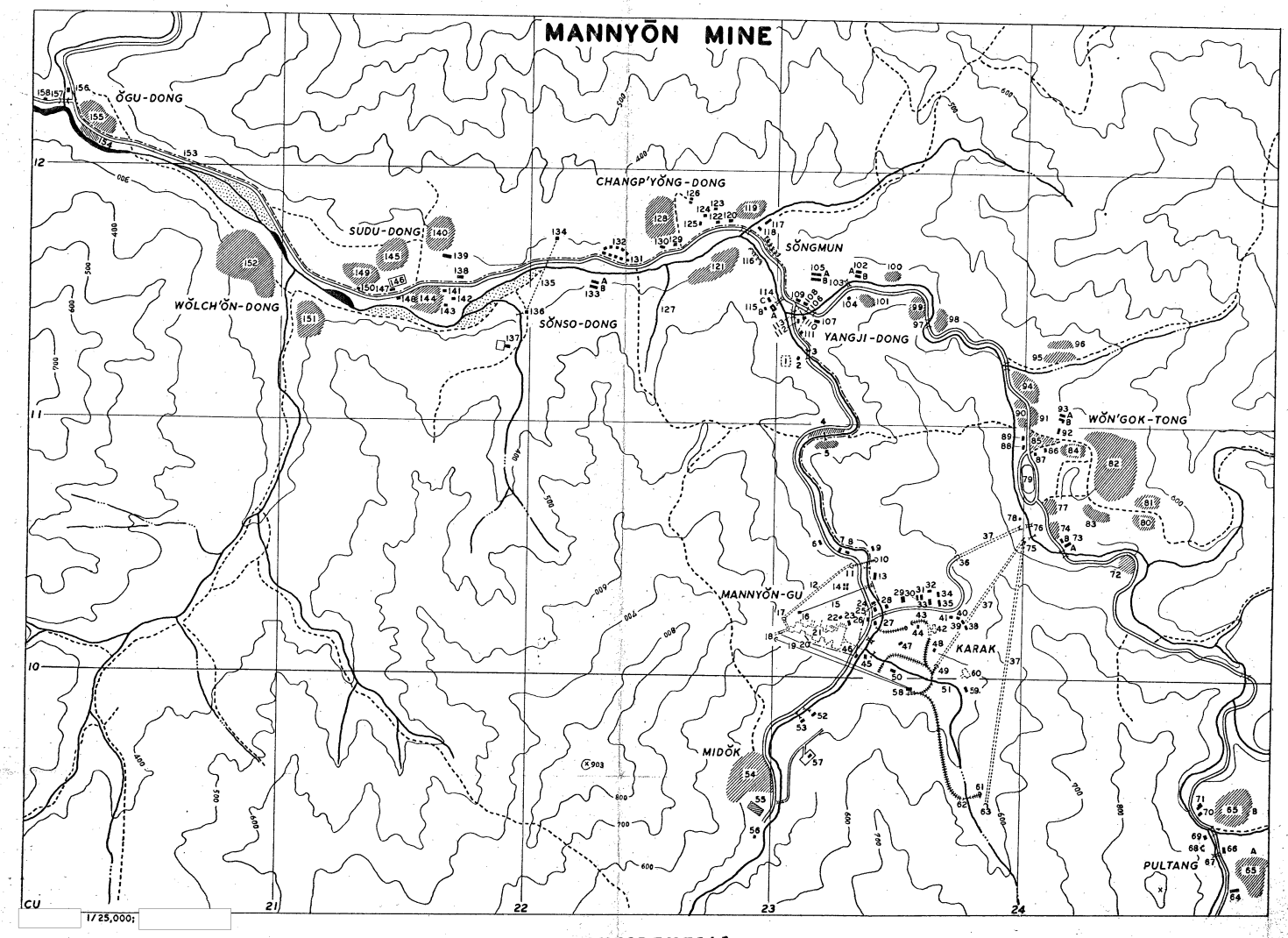
3. This is not shown on the 1:50,000 maps

4. Comment. Among the employees at the mine were about 30 tuberculosis patients who had long been engaged in underground mining. The tuberculosis was caused mainly by the dusty air which arose during mining, and as a precaution, water was spread to cut down on the dust. After five or six years' service, rock drilling workers were transferred to other jobs, as too long in the original job might affect their lungs.

Comments

5.

6. These houses were not described as two-family houses



CU

1/25,000;