

per ton, for width of 56 in.; from 668 ft. to 740 ft., 10s. 3d. per ton for width of 60 in.; from 740 ft. to 764 ft., £5 9s. 4d. per ton, for a width of 55 in.; from 764 ft. to 786 ft., £6 5s. 3d. per ton for a width of 51 in. At 786 ft. the reef is cut off by the main fault. The following crosscuts exposed the full width of the lode: No. 3 crosscut (at 280 ft. east of main crosscut), 22 ft. wide; value, 10s. 1d.; No. 4 crosscut (at 370 ft. east of main crosscut), 18 ft. wide; value, 9s.; No. 5 crosscut (at 470 ft. east of main crosscut), 15 ft. wide; value, £1 8s. 9d.; No. 6 crosscut (at 565 ft. east of main crosscut), 12½ ft. wide; value, 11s. 6d.; No. 7 crosscut (at 680 ft. east of main crosscut), 21 ft. wide; value, 1s. Continuing the drive beyond the fault, the next 16 ft. is broken country. From 802 ft. to 809 ft. is disturbed quartz, assaying £3 2s. 6d. From 809 ft. to 856 ft. is disturbed country; from 856 ft. to 866 ft. is reef, assaying £1 15s. 9d.; from 866 ft. to 871 ft. is country rock; from 871 ft. to 874 ft. is reef, assaying £1 5s.; from 874 ft. to 880 ft. is country rock. Drives on the 856-866 vein and the 871-874 vein then advanced east to 920 ft., and also west until the fault was met. The two veins were broken out as one body a total length of 110 ft., the average width being 8 ft. and the average value £3 4s. 6d. per ton. From 920 ft. to 973 ft. east the main lode is disturbed, and low grade. At 920 ft. east a main crosscut to the Grace lode was started, and has advanced 165 ft. At 8 ft. cut 20 in. of quartz, assaying £1 10s.; at 15 ft., 36 in. of quartz, assaying £1 4s. 4d. The crosscut is in disturbed country to 70 ft. From 78 ft. to 124 ft. passed through a solid body of mixed quartz and country of low value. From 124 ft. to 165 ft. the country is disturbed. At 920 ft. east a main crosscut to the Royal lode was started, and has advanced through solid country to 213 ft. At 145 ft. it passed through a 42 in. seam of quartz of low value. No. 8 rise advanced 37 ft., making total 87 ft., and holed to winze from No. 5 level; the foot-wall was exposed, and the assays averaged £3 18s. 8d. for width of rise. No. 13 rise was put up 56 ft., and holed to winze from No. 5 level; the first 34 ft. assayed 18s. 11d. for 48 in. wide; the ore is narrow, and cuts out at 45 ft. above the level; foot-wall is exposed. No. 18 rise was put up 54 ft., and holed to winze from No. 5 level; the width of lode in rise is 41 in., and assays averaged £6 2s. 1d. per ton. No. 8 winze was sunk 50 ft.; assays averaged—From level to 14 ft., £1 17s., for width of 45 in.; from 14 ft. to 45 ft., £3 16s., for width of 35 in.; from 45 ft. to 50 ft., £1 11s., for width of 66 in. A crosscut at 50 ft. down exposed both walls. The reef was 25 ft. wide, and assays averaged £2 13s. 1d. No. 9 winze was sunk 37 ft.; assays averaged—From level to 26 ft., £2 8s. 6d., for a width of 38 in.; from 26 ft. to 30 ft., 8s. 11d., for a width of 39 in.: only the foot-wall being exposed. No. 11 winze was sunk 56 ft.; assays averaged—From level to 17 ft. down, no value; from 17 ft. to 48 ft. down, £1 3s. 4d. from width of 48 in.; from 48 ft. to 56 ft. down, £3 3s. 8d. from width of 40 in. The crosscut at 50 ft. down exposed lode of quartz, stringers, and country 10 ft. wide, which assayed £2 8s. per ton. At the west drive (west of south-east crosscut) the main drive advanced 128 ft., and reached the western boundary at 441 ft.; assays averaged—From 313 ft. to 365 ft., £2 7s. 7d., for 64 in. width; from 365 ft. to 441 ft., £1 10s. 7d., for 58 in. width. No. 4 crosscut (at 345 ft. west) proved the lode to be 10½ ft. wide, and assays averaged £1 2s. 10d. per ton. At No. 5 crosscut (at 420 ft. west) the lode proved to be 9 ft. wide, and assays averaged £2 6s. 6d. This crosscut was continued 26 ft. into the hanging-wall country, but did not disclose any further quartz. At 10 ft. west of No. 3 rise a crosscut was driven 21 ft. into the foot-wall country; no quartz was discovered. No. 4 rise was put up 35½ ft., and holed to the winze from No. 5 level. The walls were not exposed, and assays averaged 6s. 6d. for 48 in. width of rise. No. 4 winze was sunk 15 ft. in low-grade quartz; the walls were not exposed. No. 5 winze was sunk 12 ft. close to the foot-wall lode; from level to 7 ft. down assays averaged £2 19s. 4d. for 32 in.; and from 7 ft. to 12 ft., £1 18s. 8d. for 30 in. width. To effect a direct communication between the south-east crosscut and the Empire main lode west, 66 ft. was driven along the foot-wall of the lode. The average of assays along this drive was £1 1s. 5d. for a width of 77 in. Republic lode—No. 1 winze (60 ft. east of the south-east crosscut) was sunk 4 ft.

No. 5 level: Royal lode—No. 1 winze was sunk 73 ft.; assays averaged—From level to 32 ft., £2 1s. 6d., for 48 in. of width; from 32 ft. to 58 ft., 19s. 1d., for 47 in. of width; from 58 ft. to 73 ft., 15s., for 52 in. of width: the walls are not exposed. No. 8 winze was sunk 67½ ft.; assays averaged—From level to 21 ft., 9s., for 32 in. of width; from 21 ft. to 65 ft., £1 18s. 4d., for 40 in. of width: at 50 ft. down the lode is 5 ft. wide, with both walls exposed. Mary lode—No. 1 rise was started from the shrinkage stope at 70 ft. above No. 5 level. After 66 ft. of rising it holed to No. 1 winze from No. 4 level. Assays averaged, from stope to 15 ft. up, £1 7s. 6d., for 40 in. of width; 15 ft. to 66 ft. up, £1 12s. 8d., for 42 in. of width: the walls are not exposed.

No. 4 level: Mary lode—No. 1 winze was sunk 19 ft., and connected with No. 1 rise from No. 5 level; assays averaged £2 12s., for 40 in. of width: walls not exposed. No. 1 shaft (main) was sunk 77½ ft., making total of 1,167 ft. below the surface, and 85½ ft. below No. 6 level. Crossing the centre of the pump shaft is a reef striking north-east, and almost vertical. Assays taken 25 ft. below No. 6 level gave 8s. per ton, for 66 in. width; at 52 ft. down, 2 ft. on north-west side, gave a value of 13s. 7d.; the next 5 ft., 7s. 9d.; and next 6 ft. were valueless. At 55 ft. down, 5 ft. on south-east side assayed 7s. 9d. per ton; at 68 ft. down the reef was 10 ft. wide, and assayed £1 12s. 6d. across the centre of shaft and 18s. 8d. across the south end. At 73 ft. down the reef is worth 14s. for 9 ft. of width; and at 80 ft., 12s. 9d., for 8 ft. of width.

Milling results: 98,383 tons, of 2,000 lb. each, the average value of which was £2 1s. 7d. per ton, gave a gross value of £204,765 2s. 5d. Total value of bullion actually recovered, £180,019 19s. 9d. Extension of mill: Work in connection with the erection of another twenty head of heavy stamps was commenced in September. There is also included an ore-bin of 800 tons capacity, installation of a 150 horse-power motor with rope-drive, vanners, and other necessary appliances. Good progress is being made with this work, and it is anticipated that everything will be running by the end of April next.