

Rio Tinto Responses to Questions on Notice

Questions on Notice (from Juukan Gorge site visit on 3 November 2020)

Question no	Questions from site visit on 3 November 2020	Response
1.	<i>We were given a map of the current moratorium area but were wondering if it was possible to get an overlay of the section 18s covering that area.</i>	Four maps were prepared for the site visit. We enclose a copy of each of those maps with the section 18 consents held by Rio Tinto entities overlaid and their purpose listed. The map which was focused on during the site visit was “Rio Tinto Interests within the Current Moratorium Area”.
2.	<i>In addition, there was discussion of vibration monitoring at the site, and we were wondering if we could get information about that—what’s being done, reported results, anticipated outcomes.</i>	<p>Blast vibration monitoring is routinely conducted for any blast where we plan to protect any heritage and/or environmental structures.</p> <p>Examples of blast vibration monitoring at Brockman 4 in 2020</p> <p>At the time of a recent blast to the south of Juukan (P1S3/550/507, blasted on 10 May 2020), we had active blast vibration monitoring in place for site B4W14_19, as indicated as Site 1 on map below; and have done for all blasts within 350m of this site as part of the sites management plan.</p> <p>By way of a second example, at the time of a recent blast to the north of Juukan (P1S3/570/501, blasted on 18 March 2020), we had active blast vibration monitoring in place for site B4W13_005, as indicated as Site 2 on the map below; and have done for all blasts within 350m of this site as part of the sites management plan.</p> <p>On the image below, the pink dotted line indicates the boundary of 350m from each site. The green highlight indicates the two blast areas.</p>

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		<p>The map displays a topographic site with various features and monitoring points. Key elements include:</p> <ul style="list-style-type: none"> Monitoring Point BW13_006: A red octagonal symbol located in the upper left quadrant. Monitoring Point: A blue cross symbol located below BW13_006. Area 2: A green shaded area labeled "P1S3/570/501" with a red "2" above it, situated in the upper middle section. Area 1: A green shaded area labeled "P1S3/550/507" with a red "1" below it, situated in the lower middle section. Structures: A central area labeled "JOUKAN - WALLEDNICH" and "JOUKAN - RSARTFCT" containing several circular structures. Monitoring Point: A green cross symbol located at the bottom center. Monitoring Point: A blue cross symbol located at the bottom right. Area B4W14_19: A grey shaded area located at the bottom right. <p>The map also features contour lines in red and cyan, and various dashed lines in blue and magenta.</p>

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		<p>1 P1S3/550/507 Date Blasted: 10/05/20 Distance from monitoring Point(B4W14_19): 240m and 238m PPV Limit: 50mm/s PPV Recorded: 6.919mm/s and 9.085mm/s</p> <p>2 P1S3/570/501 Date Blasted: 18/03/20 Distance from monitoring Point(B4W13_005): 275m PPV Limit: 50mm/s PPV Recorded: 3.868mm/s</p> <p>For each of the two blasts above, the PPV (peak particle velocity) was well within the acceptable limit. This confirms there has been no impact to the sites from the blasts.</p> <p>Blast vibration monitoring at Juukan rockshelters</p> <p>Prior to the issues being raised by the PKKP around the Juukan sites in May 2020, it was not planned for the Juukan rockshelters to be protected because the section 18 consent had been obtained and the relevant salvage work completed. Therefore, the Juukan rockshelters were not monitored for blast vibrations.</p> <p>However, at the time of the blast affecting Juukan Gorge (Shot P1S3/560/507) that took place on Sunday 24 May, we put blast monitoring in place in order to record the vibration that may have affected the three potential new sites in the vicinity of Snake Pool. Two monitors were set up for the purposes of this blast (it is standard practice to have two monitors). One of those blast monitors was damaged by flyrock during the blast due to sub-optimal positioning (as a consequence of terrain and safety of accessibility concerns). The other, undamaged, blast monitor recorded a result of 43.8mm/s, vs a forecast of 37.2mm/s, and an aim of less than 50mm/s. There was no damage or impact to the three potential new sites as a result of the blast.</p> <p>On the image below, we note that the circles around each site illustrate the distance of 25 metres from the site itself.</p>

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		<p>Closest loaded hole was 56m away from additional sites</p> <p>Holes unloaded for blast Closest distance to nearest additional site was 55m</p> <p>VP DELTA</p> <p>Vibration Point #2 31m away from closest hole Hit by Rock, no reading</p> <p>Juukan Juukan Wallniche rockhole +2</p> <p>+3 Juukan rsartfct</p> <p>+1 J1 27m Away</p> <p>+2 J2 34m away</p> <p>VP CHARLIE</p> <p>Vibration Point 1 56m from closest hole - 42.83mm/s</p> <p>The diagram is a site plan on a black background. It features a grid of small white circles representing holes, with some marked with blue 'x's. Two large, irregular white shapes represent vibration points: 'VP DELTA' at the top and 'VP CHARLIE' at the bottom. Several red circles represent specific holes, labeled with red text: 'Juukan Juukan Wallniche rockhole +2', '+3 Juukan rsartfct', '+1 J1 27m Away', and '+2 J2 34m away'. A red dashed circle highlights a hole near VP DELTA, with text indicating it was 'Hit by Rock, no reading'. A red arrow points from this hole towards the 'Juukan' holes. Text annotations provide distances from holes to vibration points and between sites.</p>