

recommended maximum particle velocity of 2 in/s, the above equation yields a scaled distance of 15.3. Thus, a 6,500-lb charge weight could be used at distances greater than 1,230 ft. When the blast area is nearer than 1,230 ft, the charge weight must be reduced (according to the above equation or the 15.3 minimum SD limit) to maintain a safe vibration level. The predicted vibration level should be calculated prior to each blast and charge weights should be reduced (if necessary) to make sure the vibration level is below the recommended 2-in/s limit. Additionally, AAI recommended that vibration data be measured at the rock art site to confirm that the above equation accurately predicts actual rock art site ground vibration.

Trapper proposes to use the above equation recommended by AAI for designing production blasts near the rock art site. Seismic vibration monitoring was conducted at this site from December 2015 to the end of 2024. No events were recorded near or above the threshold of 2 in/s. Only two recorded events broke 1 in/s during this time period. L-Pit mining continues to advance to the north and east of the site with any further blasts during the life of the mine occurring greater than the 1,230 ft reduced charge weight distance. No further seismic monitoring will occur at site 5MF948.

3.4.4 Records

The record will contain the following information (refer to Figures 3.4-2 and 3.4-3):

1. Name of operator conducting the blast.
2. Location, date and time of blast.
3. Name, signature, and license number of blaster and the names of blast helpers present.
4. Identification, direction, and distance, in feet, from the nearest blast hole to the nearest dwelling, school, church, or community or institutional building either, a) not located in the permit area, or b) not owned or leased by Trapper Mining Inc.
5. Weather conditions, including temperature, wind direction and approximate velocity.
6. Type of material blasted.
7. Number of holes and spacing.
8. Diameter and depth of holes.