



# **Vibration Summary Report**

## **Second Quarter 2025**

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## Summary

- Results from the Envirohub vibration monitoring system for the second quarter of 2025 are reported for the Favona, Trio, Correnso, SUPA and Project Martha Underground Mines.
- Development and production blasting continued in the Martha Underground component of Project Martha. Development blasting continued in Correnso. Mining in Favona and Trio has ceased.
- Compliance for Project Martha/SUPA blasting was achieved during the quarter. The maximum vibration recorded during the quarter was 3.37 mm/s at the Rex West monitor.
- Compliance for Correnso blasting was achieved during the quarter. The maximum vibration recorded during the quarter was 1.40 mm/s at the Main Central monitor.
- During the quarter, there were no high-level blast events (>5 mm/s).
- The total number of blasts (1111) was higher than the previous quarter (1037). The number of blast events was also higher than the previous quarter (182, cf. 178 in the previous quarter).
- Six vibration-related complaints were received during the reporting period, more than the previous quarter (two).

## 1. Introduction

This report documents vibration measurements and assessments to meet the requirements of:

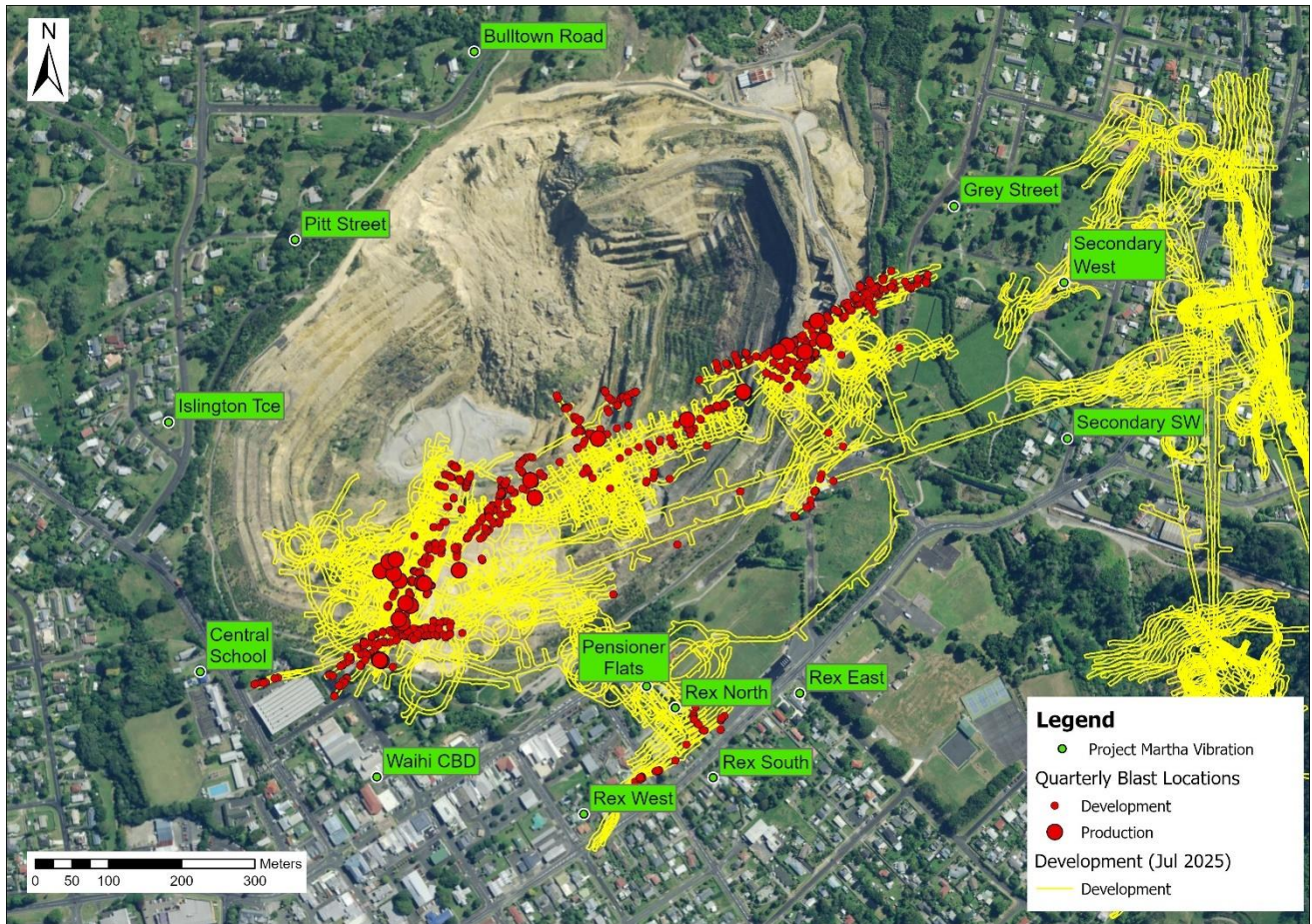
- a) HDC Land Use Consent 85.050.326E (Condition 24) for the Favona Underground Mine.
- b) HDC Land Use Consent RC - 15774 (Condition 9) for the Trio Underground Mine Project.
- c) HDC Land Use Consent RC – 202.2012 (Condition 22 (f)) for the Correnso Underground Mine.
- d) HDC Land Use Consent RC – 202.2016 (Condition 14 (f)) for the Slevin Underground Mine (SUPA).
- e) HDC Land Use Consent LUC – 202.2018.557 (Condition 53) for Project Martha. (Note: RC – 202.2017 (Condition 18 (f)) for the Martha Drill Drive Project (MDDP) has been subsumed by Project Martha.)

As agreed between OceanaGold and HDC these reports summarise vibration results and general performance of the monitoring system over calendar quarters rather than the dates set out in the consents.

## 2. Equipment

“Envirohub™”, the vibration monitoring system, has been used for reporting purposes, providing real-time monitoring, recording and review of results on a website. Access to the website is controlled, with permissions for review provided to HDC staff and OceanaGold users. The system is currently set with trigger levels at 0.75 mm/s for all operations.

The Project Martha vibration monitoring network comprises 13 monitors (two monitors are shared with the Correnso network). Blasts fired during the period (highlighted in red) and the monitor locations are shown in Figure 1. SUPA utilises some monitors from the Correnso network and some from the Project Martha network, with the data incorporated into a database shared with Project Martha.



**Figure 1. Vibration Monitor & Blast Locations – Project Martha / SUPA**

The Trio Underground Operations have five compliance monitoring locations situated at Boyd Rd, Clarke St, the Coreshed (Barry Rd), the Scout Hall (Baker St), and near the Trio vent shaft (Trio VS). As there is currently no mining being undertaken in the Trio Project area, vibration monitors are not installed at these locations, but the infrastructure remains so monitors can be reinstalled should work in the Trio area recommence.

The Correnso Underground monitoring network comprises seven permanent vibration monitors (previously 10). Approval from HDC was obtained to discontinue monitoring at three locations within the Correnso network in 2022. Blasts fired during the period (highlighted in red) and the monitor locations are shown in Figure 2.



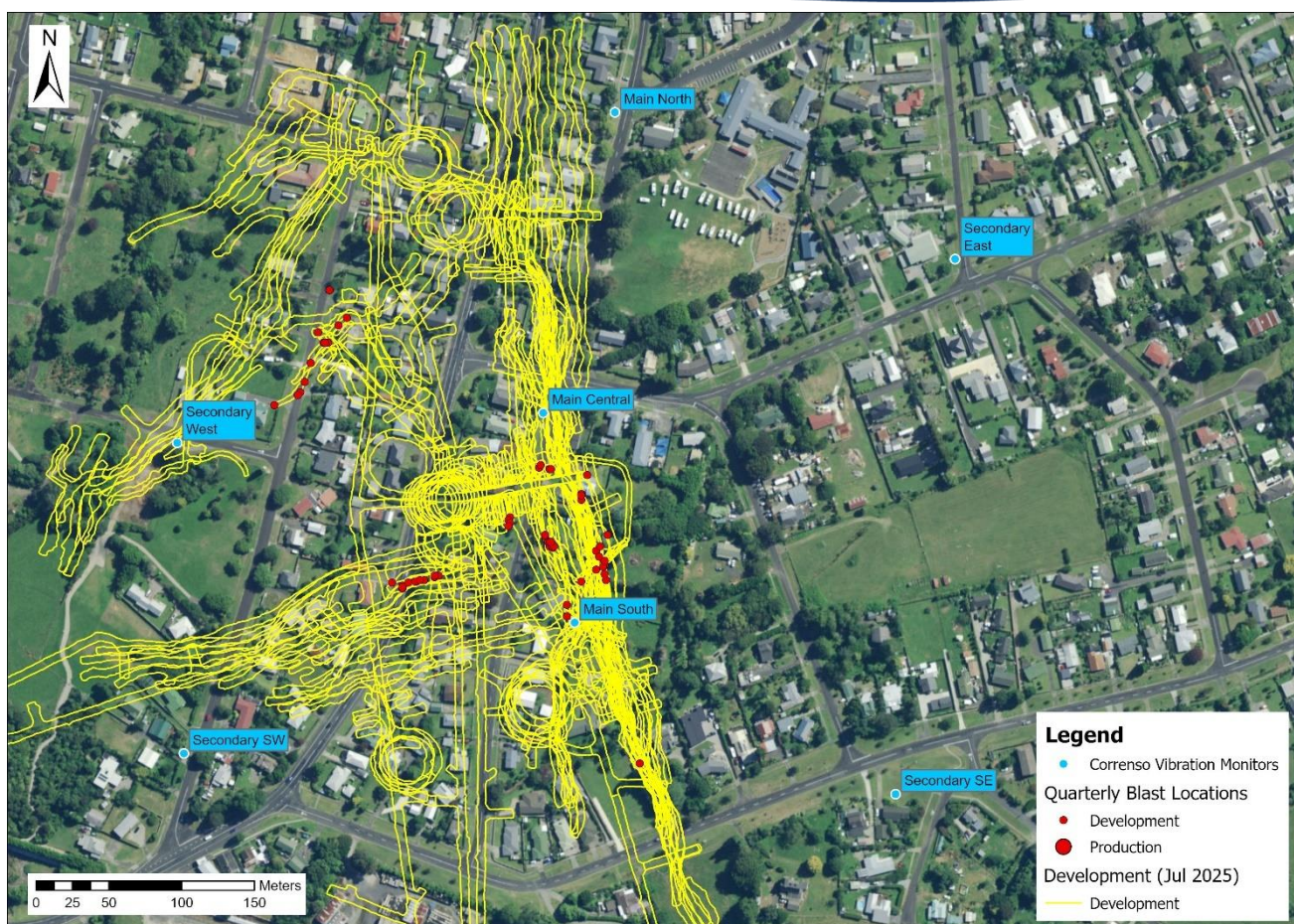


Figure 2. Vibration Monitor & Blast Locations – Correnso

### 3. Calibration

Calibration of monitoring equipment, including the roving monitors, is completed on a six-monthly rotation to allow enough coverage of vibration monitoring while calibrations take place. A six-monthly calibration run was last completed in Q3 2024. The calibrations were undertaken by the Saros Group Pty Ltd in Queensland and conducted in accordance with AS/NZS ISO9000-2000 and AS ISO/IEC17025-2005 quality standards. Calibration certificates can be viewed on Envirohub.

### 4. Compliance Assessment

Table 1 sets out the consented compliance limits for blast magnitude (peak particle velocity - vector sum) for Correnso and Martha Underground, and the corresponding vibration results, reported as of the last day of the quarter (30 June 2025). Compliance with all limits was met throughout the quarter.

Table 1. Compliance Assessment Table for Correnso and Martha Underground/SUPA Q2 2025

|                      | Consented Compliance Limit | Q2 Results - Correnso | Q2 Results - Martha Underground |
|----------------------|----------------------------|-----------------------|---------------------------------|
| Development 95%*     | 5 mm/s                     | 1.14 mm/s             | 2.06 mm/s                       |
| Development Average* | 2 mm/s                     | 0.74 mm/s             | 0.67 mm/s                       |
| Production 95%*      | 5 mm/s                     | No blasts             | 3.31 mm/s                       |
| Production Average*  | 3 mm/s                     | No blasts             | 1.23 mm/s                       |
| Maintenance/Safety   | 1 mm/s                     | No blasts             | No blasts                       |

\* Six month rolling limit; data is presented as at the end of the quarter

## 4.1 Martha Underground/SUPA

130 blast events occurred in Martha Underground during the reporting period (cf. 147 in the previous quarter), with 67 events triggering compliance monitors.

Of the 1028 individual blasts during the period:

- 998 were development blasts
- 30 were production blasts

The peak vibration levels for Martha Underground Operations (both production and development) during the quarter are shown in Figure 3 below.

Development:

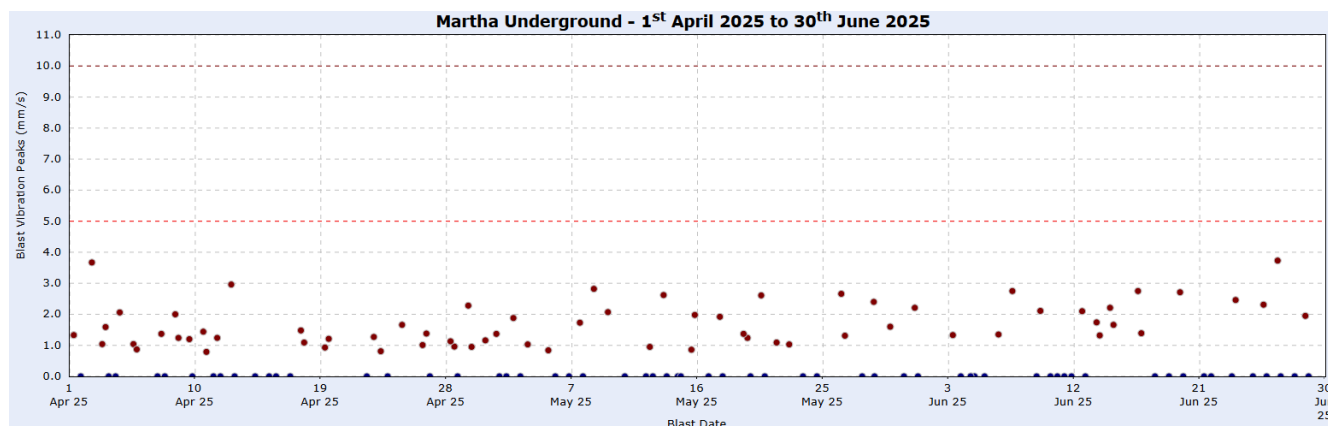
- The highest six-month average<sup>1</sup> for development blasting at a compliance monitor was assessed as 0.67 mm/s at the Pensioner Flats monitor, below the consent limit average of 2 mm/s.
- The development six month rolling 95 percentile<sup>1</sup> for all locations was assessed as 2.06 mm/s, below the 5mm/s limit.

Production:

- The highest six-month average<sup>1</sup> for production blasting at a compliance monitor was assessed as 1.23 mm/s at the Central School monitor, below the consent limit average of 3 mm/s.
- The production six-month rolling 95 percentile<sup>1</sup> for all locations was assessed as 3.31 mm/s, below the 5 mm/s limit.

No Martha Underground blast events recorded vibration above 5 mm/s during the period.

Seven blasts were fired outside of the preferred time windows specified in the Vibration Management Plan during the quarter. No maintenance/safety blasts were required in Martha Underground during the period and there were no blasts on Sundays or public holidays.



**Figure 3. Maximum Peak Vibration Levels (Production and Development) – Martha Underground/SUPA Operations**

## 4.2 Underground (Favona & Trio) Operations

Mining plans for Trio were exhausted in the first quarter of 2020, and no blasting occurred during the reporting period. No blasting was undertaken within Favona during the reporting period.

<sup>1</sup> Data is presented as at the end of the quarter

### 4.3 Correnso

52 development blast events occurred in Correnso during the reporting period (cf. 31 in the previous quarter), with 7 events triggering compliance monitors. All of the 79 individual blasts were development blasts. There were no production blasts.

The peak vibration levels for Correnso during the quarter are shown in Figure 4 below.

Development:

- The highest six-month average<sup>2</sup> for development blasting at a compliance monitor was assessed as 0.74 mm/s at both the Main Central monitor, below the consent limit average of 2mm/s.
- The development six month rolling 95 percentile<sup>1</sup> for all locations was assessed as 1.14 mm/s, below the 5mm/s limit.
- No Correnso blast events recorded vibration levels above 5 mm/s during the period.
- Three blasts were fired outside of the preferred time windows specified in the Vibration Management Plan during the quarter. No maintenance/safety blasts were required in Correnso during the period and there were no blasts on Sundays or public holidays.

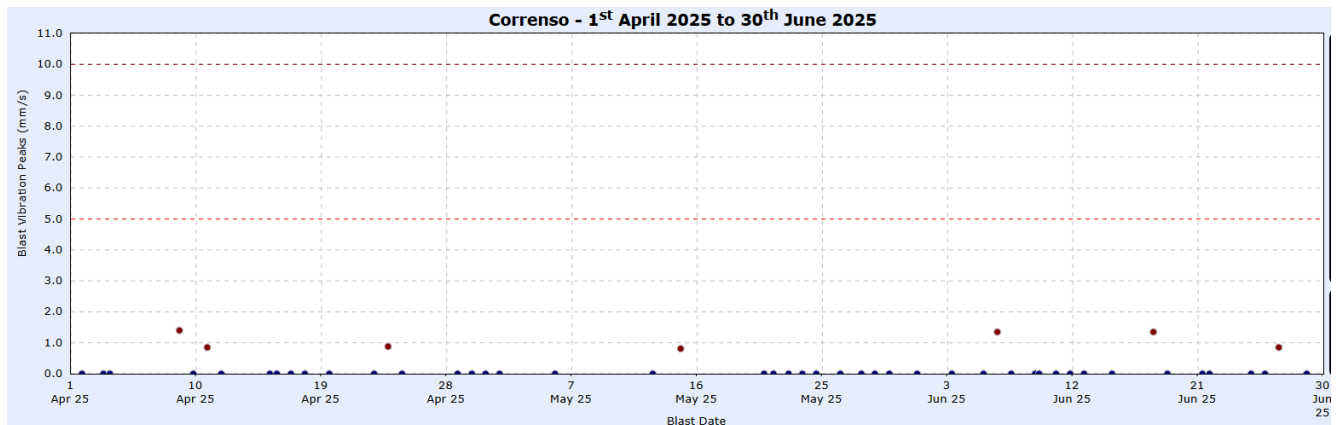


Figure 4. Maximum Peak Vibration Levels (Development) – Correnso Operations

## 5. Blasting

The 182 blast events during this period is an increase in blast events compared to the previous quarter (Table 2).

Table 2. Quarterly Blast Events

| Operation               | 3 <sup>rd</sup> Quarter 2024 | 4 <sup>th</sup> Quarter 2024 | 1st Quarter 2025 | 2 <sup>nd</sup> Quarter 2025 |
|-------------------------|------------------------------|------------------------------|------------------|------------------------------|
| Martha Underground/SUPA | 155                          | 124                          | 147              | 130                          |
| Underground (Trio)      | 0                            | 0                            | 0                | 0                            |
| Correnso                | 0                            | 27                           | 31               | 52                           |
| <b>Total</b>            | <b>155</b>                   | <b>151</b>                   | <b>178</b>       | <b>182</b>                   |

*\*Some blasts have in the past occurred simultaneously with blasting in other operational areas and do not contribute to the total number of blast events. Trio and Correnso events would only contribute to the total when they are independent of Martha Underground.*

Multiple blasts are often fired during the one blast event. There were 1111 sub-blasts initiated within the 182 blast events during the reporting period (Figure 5).

<sup>2</sup> Data is presented as at the end of the quarter

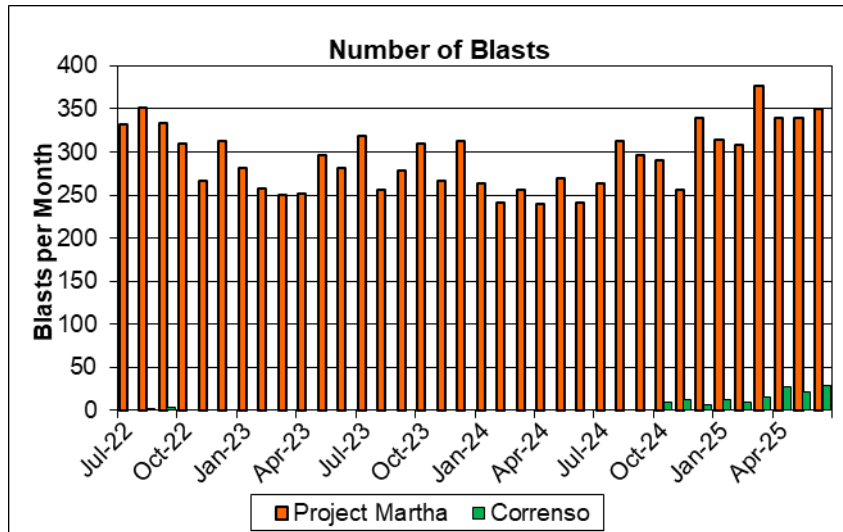


Figure 5. Number of Blasts (Project Martha and Correnso)

## 6. Complaints

Six complaints were received in Q2 2025, which is more than in Q1 2025 (three). All of the complainants contacted OceanaGold to advise that they had felt a blast. Some of them advised that it shook their house. Figures 6 and 7 below show complaints over the previous 12 months.

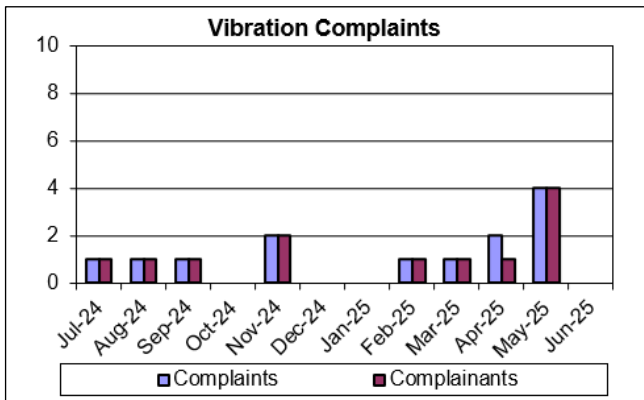


Figure 6. Number of Complaints & Complainants

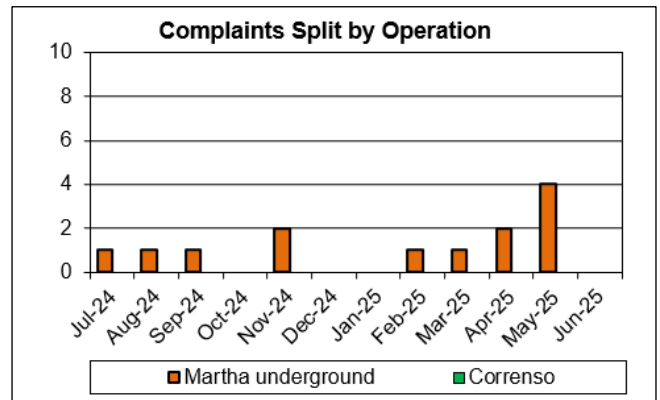


Figure 7. Complaints by Operation

## 7. Vibration and Complaint Management

### 7.1 Roving Monitoring

No roving monitoring was conducted in response to complaints or at the request of concerned residents during the quarter.

### 7.2 Mitigation Actions

Mitigation actions were not necessary as there were no high-level blast events during the quarter.