



Case Study

Proximate Pipeline

Improved time & safety by limiting time on the face.

The IGS PPV calculator was within 0.10 in/s (2.54 mm/s) of the actual reading.

Increased the lbs/delay from 28 to 227 and readings are below criteria.

The Blast - Before

- Shots averaged 10 holes, 85+ ft (26 m) deep, 1 row and multiple decks
- Timing was 8 ms between decks and 8 ms between holes
- 28 lbs/delay (12 kg)
- 8 decks/hole to maintain 2.0 in/sec (50 mm/sec) criteria

Areas of Concern

- <125 ft (38 m) from a high pressure pipeline

Our Service

- Installed one (1) Minimate Pro6 seismograph along the pipeline.
- Develop a more cost-effective blasting plan.
- Plot a regression analysis and establish a site specific PPV calculator.
- Overlay the timing on the waveform to track the use of explosive energy.

\$54,250

Total Project Savings

\$45,500:

Cost of detonators saved from removing five (5) decks.

\$8,750:

Cost of boosters saved from removing five (5) decks.

** Original design called for 28 lbs/delay 12 kg - 8 decks to maintain 2.0 in/sec (50 mm/sec) criteria. The signature hole and regression analysis performed by IGS increased that to 227 lbs/delay (102 kg) - 3 decks per hole. Readings are still below the 2.0 in/sec criteria, with average reading around 1.2 in/sec (30 mm/sec).