Seismic Analysis
Velocity Waveform Analysis

Serial Number: 10636
Firmware Version: 0C-06.05
Event Date: 11/08/2017 11:34:47 (UTC -08:00)
Event number: 367
Recording Time: 5 s
Client: COUNTY OF MARIN
Operation: SAN RAFAEL ROCK QUARRY
Location: ON QUARRY PROPERTY
Distance:
Operator: VIBRA-TECH IP2
Comment:
Seismic Trigger: 0.03 in/s
Sound Trigger: OFF
Additional Info: j-GEO-01253
N37 59.481, W122 27.256

**Summary Data**

<table>
<thead>
<tr>
<th></th>
<th>L</th>
<th>T</th>
<th>V</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPV (in/s):</td>
<td>0.203</td>
<td>0.145</td>
<td>0.238</td>
</tr>
<tr>
<td>FREQ (HZ):</td>
<td>62.5</td>
<td>50</td>
<td>41.7</td>
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<tr>
<td>PD (.001&quot;) :</td>
<td>0.68</td>
<td>0.7</td>
<td>0.88</td>
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<td>PPA (g):</td>
<td>0.195</td>
<td>0.137</td>
<td>0.241</td>
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</table>

Peak Vector Sum: 0.303 in/s
Peak Air Pressure: 109 dB
Peak Air Pressure: 0.0008 psi @ 2.7 HZ

Shaketable Calibrated
On: 12/06/2016 (UTC -08:00)
By: Vibra-Tech, Inc.
2700 Holloway Road - Suite 113
Louisville, KY 40203 U.S.A.

**Waveform Graph Scale**

Time Scale: 0.1 s
Seismic Scale: +/- 0.357 in/s
Sound Scale: +/- 0.0023 psi

**Velocity Waveform**

SSN: 10636 Event: 367

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USBM Safe Blasting Levels
SSN: 10636 Event: 367

<table>
<thead>
<tr>
<th></th>
<th>Longitudinal</th>
<th>Transverse</th>
<th>Vertical</th>
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<tbody>
<tr>
<td>PPV (in/s):</td>
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<tr>
<td>Frequency (Hz)</td>
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Seismic Analysis
Velocity Waveform Analysis

Serial Number: 10640
Firmware Version: 0C-06.05
Event Date: 11/08/2017 11:34:36 (UTC -08:00)
Event number: 20
Recording Time: 5 s
Client: COUNTY OF MARIN
Operation: SAN RAFAEL ROCK QUARRY
Location: 16 MARIN BAY PARK CT.
Distance: 
Operator: VIBRA-TECH IP2
Comment: WILLIAM HOSKEN RES.
Seismic Trigger: 0.03 in/s
Sound Trigger: OFF
Additional Info: j-GEO-01252
N37 59.524, W122 27.373

Summary Data

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<tr>
<td>0.098</td>
<td>0.058</td>
<td>0.083</td>
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<td>41.7</td>
<td>27.8</td>
<td>55.6</td>
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<td>0.4</td>
<td>0.41</td>
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<tr>
<td>0.065</td>
<td>0.039</td>
<td>0.065</td>
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</tbody>
</table>

Peak Vector Sum: 0.108 in/s
Peak Air Pressure: 107 dB
Peak Air Pressure: 0.0006 psi @ 2.7 HZ

USBM Safe Blasting Levels
SSN: 10640 Event: 20

Time Scale: 0.1 s
Seismic Scale: +/- 0.16 in/s
Sound Scale: +/- 0.0023 psi

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