

HANSON EPA LICENSE CONDITIONS - Blast Monitor Results



| Date       | Time  | Blast Location               | Blast # | Monitor Location      | Air Blast dBL    | Ground Vibration mm/sec | Comments  | EPA contact |
|------------|-------|------------------------------|---------|-----------------------|------------------|-------------------------|---|-------------|
| 9/01/2019  | 12:58 | East Pit South RL45          | 568     | Rangoon Ave Shellcove | 113.5dbl         | 0.286mm/s               | Overcast Wind S 20kph Gusting 29kph             | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 104.9dbl         | 0.463mm/s               |   | Matt Fuller |
| 11/01/2019 | 13:32 | West Pit RL18 Dropcut        | 573     | Rangoon Ave Shellcove | 108.4dbl         | 2.28mm/s                | Overcast Wind ENE 18kph Gusting 22kph           | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 104.9dbl         | 2.329mm/s               |   | Matt Fuller |
| 16/01/2019 | 12:58 | West Pit RL32 North          | 574     | Rangoon Ave Shellcove | 106.5dbl         | 1.750mm/s               | Sunny Wind NE 17kph Gusting 20kph               | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 100.0dbl         | 0.755mm/s               |   | Matt Fuller |
| 18/01/2019 | 13:01 | East Pit RL12 South          | 572     | Rangoon Ave Shellcove | 100.0dbl         | 0.627mm/s               | Sunny Wind ENE 26kph Gusting 32kph              | Matt Fuller |
|            |       |                              |         | Killalea State Park   | > 88dbl < 115dbl | 0.412mm/s               | Monitoring affected by environmental conditions | Matt Fuller |
| 23/01/2019 | 13:07 | West Pit RL18 Dropcut        | 576     | Rangoon Ave Shellcove | 110.2dbl         | 2.189mm/s               | Sunny Wind S 35kph Gusting 52kph                | Matt Fuller |
|            |       |                              |         | Killalea State Park   | > 88dbl < 115dbl | 0.808mm/s               | Monitoring affected by environmental conditions | Matt Fuller |
| 25/01/2019 | 13:00 | East Pit ramp trim shot RL45 | 575     | Rangoon Ave Shellcove | 98.84dbl         | 0.484mm/s               | Sunny Wind ENE 28kph Gusting 35kph              | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 113.3dbl         | 0.189mm/s               |   | Matt Fuller |
| 30/01/2019 | 13:05 | West Pit RL32 4T             | 578     | Rangoon Ave Shellcove | 108.8dbl         | 0.628mm/s               | Sunny Wind NE 17kph Gusting 20kph               | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 107.0dbl         | 0.714mm/s               |   | Matt Fuller |
| 1/02/2019  | 13:02 | West Pit RL32 North          | 577     | Rangoon Ave Shellcove | 108.4dbl         | 1.311mm/s               | Overcast Wind SSW 11kph                         | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 101.0dbl         | 0.796mm/s               |   | Matt Fuller |
| 6/02/2019  | 12:57 | West Pit RL18 Dropcut        | 579     | Rangoon Ave Shellcove | 112.6dbl         | 0.905mm/s               | Sunny Wind ENE 20kph Gusting 28kph              | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 110.6dbl         | 0.843mm/s               |   | Matt Fuller |
| 8/02/2019  | 13:01 | West Pit RL42 Development    | 580     | Rangoon Ave Shellcove | 106.0dbl         | 0.745mm/s               | Sunny Wind NE 19kph Gusting 24kph               | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 112.0dbl         | 0.198mm/s               |   | Matt Fuller |
| 13/02/2019 | 12:57 | West Pit RL18 Dropcut        | 582     | Rangoon Ave Shellcove | 109.9dbl         | 1.947mm/s               | Sunny Wind SE 24kph Gusting 33kph               | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 106.0dbl         | 1.088mm/s               |   | Matt Fuller |
| 15/02/2019 | 13:00 | West Pit RL18 Dropcut East   | 583     | Rangoon Ave Shellcove | 111.2dbl         | 0.716mm/s               | Sunny Wind ENE 22kph Gusting 28kph              | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 106.0dbl         | 0.786mm/s               |   | Matt Fuller |
| 20/02/2019 | 13:00 | South Pit RL45               | 581     | Rangoon Ave Shellcove | 100.0dbl         | 0.422mm/s               | Overcast Wind SSE 11kph Gusting 19kph           | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 93.98dbl         | 0.321mm/s               |   | Matt Fuller |
| 22/02/2019 | 12:56 | West Pit RL32 4T             | 584     | Rangoon Ave Shellcove | > 88dbl < 115dbl | 0.367mm/s               | Sunny Wins S 28kph Gusting 39kph                | Matt Fuller |
|            |       |                              |         | Killalea State Park   | > 88dbl < 115dbl | 0.679mm/s               | Monitoring affected by environmental conditions | Matt Fuller |
| 27/02/2019 | 12:55 | West Pit RL18 Dropcut        | 585     | Rangoon Ave Shellcove | 114.6dbl         | 0.809mm/s               | Sunny Wind S 13kph Gusting 19kph                | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 111.8dbl         | 0.613mm/s               |   | Matt Fuller |
| 1/03/2019  | 13:00 | East Pit RL25 South          | 586     | Rangoon Ave Shellcove | 107.0dbl         | 0.431mm/s               | Sunny Wind ENE 24kph Gusting 30kph              | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 98.84dbl         | 0.272mm/s               |   | Matt Fuller |
| 6/03/2019  | 13:00 | West Pit RL32 North          | 587     | Rangoon Ave Shellcove | 106.0dbl         | 0.749mm/s               | Rain Wind NE 7kph Gusting 9kph                  | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 100.0dbl         | 0.406mm/s               |   | Matt Fuller |
| 11/03/2019 | 13:01 | West Pit RL18 Dropcut        | 588     | Rangoon Ave Shellcove | 110.2dbl         | 0.879mm/s               | Sunny Wind E 17kph Gusting 24kph                | Matt Fuller |
|            |       |                              |         | Killalea State Park   | > 88dbl < 115dbl | 1.080mm/s               | Monitoring affected by environmental conditions | Matt Fuller |
| 13/03/2019 | 13:30 | East Pit RL25 South          | 589     | Rangoon Ave Shellcove | 104.2dbl         | 0.384mm/s               | Overcast S 13kph                                | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 105.5dbl         | 0.355mm/s               |   | Matt Fuller |
| 15/03/2019 | 13:05 | West Pit RL32 North          | 590     | Rangoon Ave Shellcove | 114.6dbl         | 2.085mm/s               | Sunny Wind S 39kph Gusting 52kph                | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 105.5dbl         | 0.355mm/s               |   | Matt Fuller |
| 22/03/2019 | 14:55 | West Pit RL18 Dropcut        | 591     | Rangoon Ave Shellcove | 110.2dbl         | 1.542mm/s               | Sunny Wind E 17kph Gusting 22kph                | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 104.9dbl         | 1.549mm/s               |   | Matt Fuller |
| 3/04/2019  | 12:56 | East Pit RL12 South          | 593     | Rangoon Ave Shellcove | 115.0dbl         | 0.424mm/s               | Sunny wind NE 20kph                             | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 97.2dbl          | 0.57mm/s                |   | Matt Fuller |
| 5/04/2019  | 12:57 | West Pit RL18 Dropcut        | 592     | Rangoon Ave Shellcove | 114.0dbl         | 1.063mm/s               | Overcast/Rain Wind SE 11kph                     | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 112.0dbl         | 1.89mm/s                |   | Matt Fuller |
| 10/04/2019 | 15:02 | West Pit RL32 North          | 594     | Rangoon Ave Shellcove | 111.5dbl         | 1.311mm/s               | Sunny Wind SSE 20kph Gusting 32kph              | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 107.3dbl         | 0.70mm/s                |   | Matt Fuller |
| 12/04/2019 | 12:56 | East Pit RL12 South          | 595     | Rangoon Ave Shellcove | 100.0dbl         | 0.492mm/s               | Sunny Wind ENE 15kph Gusting 20kph              | Matt Fuller |
|            |       |                              |         | Killalea State Park   | 98.7dbl          | 0.49mm/s                |   | Matt Fuller |

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| 17/04/2016 | 13:01 | West Pit RL18 Dropcut     | 596     | Rangoon Ave Shellcove<br>Killalea State Park | 104.9dbl<br>108.0dbl         | 1.617mm/s<br>1.921mm/s  | Sunny Wind NNE 6kph  | Matt Fuller |
| 1/05/2019  | 12:56 | East Pit RL12 South       | 597     | Rangoon Ave Shellcove<br>Killalea State Park | 101.0dbl<br>97.50dbl         | 1.105mm/s<br>0.318mm/s  | Sunny Wind NNE 17kph   | Matt Fuller |
| 3/05/2019  | 11:35 | West Pit RL32 North       | 598     | Rangoon Ave Shellcove<br>Killalea State Park | 106.0dbl<br>97.50dbl         | 1.130mm/s<br>0.416mm/s  | Rain/Overcast Wind NE 7kph   | Matt Fuller |
| 8/05/2019  | 12:59 | East Pit RL12 South       | 599     | Rangoon Ave Shellcove<br>Killalea State Park | 97.50dbl<br>> 88dbl < 115dbl | 0.767mm/s<br>0.406mm/s  | Sunny / Windy WSW 28kph Gusting 50kph<br>Monitoring affected by environmental conditions | Matt Fuller |
| 10/05/2019 | 13:00 | Development New Primary   | 600     | Rangoon Ave Shellcove<br>Killalea State Park | DNR<br>91.48dbl              | DNR<br>0.223mm/s        | Overcast Wind W 9kph Gusting 15kph   | Matt Fuller |
| 15/05/2019 | 12:57 | West Pit RL18 Dropcut     | 601     | Rangoon Ave Shellcove<br>Killalea State Park | 114.0dbl<br>108.0dbl         | 1.587mm/s<br>1.441mm/s  | Sunny Wind SE 15kph Gusting 19kph  | Matt Fuller |
| 17/05/2019 | 12:57 | East Pit RL12 West        | 602     | Rangoon Ave Shellcove<br>Killalea State Park | 101.0dbl<br>97.50dbl         | 0.529mm/s<br>0.401mm/s  | Sunny Wind ESE 7kph Gusting 11kph  | Matt Fuller |
| 22/05/2019 | 13:02 | East Pit RL12 West        | 603     | Rangoon Ave Shellcove<br>Killalea State Park | 104.2dbl<br>> 88dbl < 115dbl | 0.297mm/s<br>0.286mm/s  | Sunny Wind SSE 22kph Gusting 30kph<br>Monitoring affected by environmental conditions    | Matt Fuller |
| 24/05/2019 | 12:58 | East Pit RL12 West        | 604     | Rangoon Ave Shellcove<br>Killalea State Park | 98.84dbl<br>97.50dbl         | 0.653mm/s<br>0.383mm/s  | Sunny Wind WNW 11kph gusting 17kph   | Matt Fuller |
| 29/05/2019 | 12:58 | East Pit RL25 South       | 605     | Rangoon Ave Shellcove<br>Killalea State Park | 105.5dbl<br>114.2dbl         | 0.621mm/s<br>0.352mm/s  | Sunny / Windy WNW 26kph Gusting 34kph  | Matt Fuller |
| 5/06/2019  | 11:59 | West Pit RL18 Dropcut     | 606     | Rangoon Ave Shellcove<br>Killalea State Park | 113.8dbl<br>107.0dbl         | 1.087mm/s<br>1.083mm/s  | Rain/Overcast Wind SSW 33kph Gusting 43kph   | Matt Fuller |
| 12/06/2019 | 12:57 | West Pit RL32 North       | 607     | Rangoon Ave Shellcove<br>Killalea State Park | 108.8dbl<br>101.9dbl         | 1.473mm/s<br>0.815mm/s  | Sunny Wind NNE 13kph Gusting 17kph   | Matt Fuller |
| 1/07/2019  | 12:54 | West Pit RL18 Dropcut     | 609     | Rangoon Ave Shellcove<br>Killalea State Park | 109.9dbl<br>104.2dbl         | 2.461mm/s<br>0.725mm/s  | Sunny Wind NNE 15kph Gusting 19kph   | Matt Fuller |
| 2/07/2019  | 15:07 | West Pit RL45 Development | 608     | Rangoon Ave Shellcove<br>Killalea State Park | 114.6dbl<br>106.0dbl         | 2.137mm/s<br>1.086mm/s  | Sunny Wind N 9kph Gusting 15kph  | Matt Fuller |
| 5/07/2019  | 10:57 | West Pit RL18 Dropcut     | 610     | Rangoon Ave Shellcove<br>Killalea State Park | 119.7dbl<br>112.0dbl         | 1.163mm/s<br>1.014mm/s  | Sunny Wind SSE 13kph Gusting 17kph   | Matt Fuller |
| 10/07/2109 | 12:59 | South Pit RL45 East       | 611     | Rangoon Ave Shellcove<br>Killalea State Park | 107.0dbl<br>101.0dbl         | 0.701mm/s<br>0.336mm/s  | Sunny Wind N 11kph Gusting 19kph   | Matt Fuller |
| 18/07/2019 | 13:00 | West Pit RL18 Dropcut     | 612     | Rangoon Ave Shellcove<br>Killalea State Park | 103.5dbl<br>103.5dbl         | 2.705mm/s<br>1.262mm/s  | Sunny Wind SW 17kph Gusting 24kph  | Matt Fuller |
| 24/07/2019 | 13:23 | West Pit RL18 Dropcut     | 613     | Rangoon Ave Shellcove<br>Killalea State Park | 112.8dbl<br>113.3dbl         | 1.593mm/s<br>0.924mm/s  | Sunny Wind SE 13kph gusting 17kph  | Matt Fuller |
| 31/07/2019 | 13:00 | West Pit RL32 North       | 614     | Rangoon Ave Shellcove<br>Killalea State Park | 109.5dbl<br>108.0dbl         | 2.090mm/s<br>0.576mm/s  | Sunny Wind S 26kph Gusting 37kph   | Matt Fuller |