## **Detectability Report**

Sample Tested: EPDM-MXD (BLUE & GREY)

Date: 24-11-2017

**Where: Dynamic Inspections** 

Machine: Metal Detector, Ally Head, Stealth Unit with FM Technology (latest software)

**Aperture Size:** 600x350 (Meat Works spec)

This test was undertaken by Steve Atkins of Dynamic Inspections using one of their latest up-graded units with FM technology which enhances the unit's ability to detect down to very small particle sizes in "WET" mode.

As with all reports this was done in convenient & controlled climates. Individual analysis should always be undertaken for true in situ results.

With normal "PEAK" running the size of particle detection in both "WET" & "DRY" is no better than shown in photo 1.

**Photo 1** EPDM Grey particle size 7.8 x 6.7 x 4.4 roughly equal in surface area to a 8.50mm sphere. This is representative of the software technology run by the majority of detectors out in the market.

With the Dynamic Inspection "FM" new technology software up-grade this particle detection size is greatly increased as shown in both photos 2, 3 and 4.

**Photo 2** EPDM Grey particle size maxed out the unit (overloaded) due to the high detection ratio, particle size is  $4 \times 4.5 \times 7.8$  roughly equal in surface area to 6.70mm sphere. Registered well over 5,000, limit of detection is >100.

**Photo 3** EPDM Grey particle size of  $0.9 \times 2.3 \times 6.6$  roughly equal in surface area to a 2mm sphere. Registered just over 107, close to the limit of detection.

**Photo 4** shows the EPDM Blue particle size of  $2.3 \times 2.3 \times 1.2$  that can still be detected. This material was slightly better than the EPDM-MXD Black. Detected particle size roughly equal in surface area to a 1.5mm sphere. Registered just over 100, at the limit of detection.

