Federal Aviation Administration – William J. Hughes Technical Center

National Airport Pavement Test Facility (NAPTF)

Contract No: DTFACT-15-D-00007

TO 003 Nondestructive Airport Pavement Testing Support

5.1.63 Continuation of NAPTF Construction Cycle Support – CC9 (4.1.10.19a)

CC9 NDT Survey Notes

Device: GPR – Cart

Survey: Weekly Trafficking 20210426

Date: 04/29/2021 – 04/30/2021

Operators: Christopher Mazzotta

Folder Name: 20210430 GPR NDT Van CC9 Weekly Raw Data

File Format: DZT

**General Notes**

* Data collected along the ten (10) Standard Transverse Test Lines at Stations.
* Cart is aligned with white transverse line and direction of travel is from Offset -26.66 ft. to +26.66 ft. (North to South).
* Survey starts and stops with the antenna centered on the yellow longitudinal edge of test area lines.
* Data collected with 900 MHz and 2.6 GHz ground-coupled antennas.
* Begin with air-coupled antenna centered on transverse blue line at Station 0+00.
* Calibration of DMI performed before data collection with each antenna and value recorded.

**Settings**

Parameter 900 MHz Antenna 2.6 GHz Antenna

Transmit Rate 100 kHz 100 KHz

Rate (Scans/Second) 100 (default) 100 (default)

Samples/Scan 512 512

Bits/Sample 16 16

Range 15 ns 8 ns

Scans/Unit 30 scans/ft. 90 scans/ft.

Gain Points 3 2

Dielectric 4.00 (default) 4.00 (default)

Vertical Low Pass – LPFIR 0 5000 MHz

Vertical High Pass – HPFIR 0 400 MHz

Vertical Low Pass – LPIIR 2500 MHz 0

Vertical High Pass – HPIIR 225 MHz 10 MHz

**DMI Calibration**

Distance 900 MHz Antenna 2.6 GHz Antenna

10.00 ft. -494.70 -494.70

**Data Collection File Numbers**

Location 900 MHz Antenna 2.6 GHz Antenna

Station 0+15 LFS-1 086 076

Station 0+30 LFS-1 087 077

Station 0+75 LFS-2 088 078

Station 0+90 LFS-2 089 079

Station 1+35 LFC-3 090 080

Station 1+50 LFC-3 091 081

Station 1+95 LFC-4 092 082

Station 2+10 LFC-4 093 083

Station 2+55 LFC-5 094 084

Station 2+70 LFC-5 095 085

**Survey Notes**

* 2.6 GHz antenna survey is very slow in comparison to the 900 MHz due to the higher frequency and higher number of scans per foot.