FILE: 100\_3221.19o OP1574349854291

 NGS OPUS SOLUTION REPORT

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All computed coordinate accuracies are listed as peak-to-peak values.

For additional information: <https://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

 USER: casey.wilson@tetratech.com DATE: November 21, 2019

RINEX FILE: 100\_322v.19o TIME: 15:25:49 UTC

 SOFTWARE: page5 1603.24 master99.pl 160321 START: 2019/11/18 21:10:00

 EPHEMERIS: igr20801.eph [rapid] STOP: 2019/11/19 01:15:00

 NAV FILE: brdc3220.19n OBS USED: 10063 / 11807 : 85%

 ANT NAME: LEIGS16 NONE # FIXED AMB: 77 / 87 : 89%

ARP HEIGHT: 1.557 OVERALL RMS: 0.017(m)

 REF FRAME: NAD\_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2019.8821)

 X: 523055.572(m) 0.006(m) 523054.657(m) 0.006(m)

 Y: -4742448.557(m) 0.016(m) -4742447.173(m) 0.016(m)

 Z: 4218810.499(m) 0.027(m) 4218810.436(m) 0.027(m)

 LAT: 41 40 29.66347 0.009(m) 41 40 29.69375 0.009(m)

 E LON: 276 17 37.84362 0.004(m) 276 17 37.81086 0.004(m)

 W LON: 83 42 22.15638 0.004(m) 83 42 22.18914 0.004(m)

 EL HGT: 163.431(m) 0.030(m) 162.286(m) 0.030(m)

 ORTHO HGT: 198.742(m) 0.048(m) [NAVD88 (Computed using GEOID12B)]

 UTM COORDINATES STATE PLANE COORDINATES

 UTM (Zone 17) SPC (3401 OH N)

Northing (Y) [meters] 4617221.022 223707.701

Easting (X) [meters] 274735.765 499565.836

Convergence [degrees] -1.80008611 -0.79238333

Point Scale 1.00022449 0.99999526

Combined Factor 1.00019885 0.99996963

US NATIONAL GRID DESIGNATOR: 17TKG7473517221(NAD 83)

 BASE STATIONS USED

PID DESIGNATION LATITUDE LONGITUDE DISTANCE(m)

DO4957 OHLC LUCAS COUNTY 2 CORS ARP N414316.405 W0833134.587 15832.9

DI2816 OHFN FULTON COUNTY CORS ARP N413329.790 W0840805.517 38008.1

DH3473 BGOH BOWLINGGREEN COOP CORS ARP N412248.595 W0833833.456 33162.7

 NEAREST NGS PUBLISHED CONTROL POINT

MC1799 MCCORD N414029.739 W0834211.922 236.7

This position and the above vector components were computed without any knowledge by the National Geodetic Survey regarding the equipment or field operating procedures used.