

OPUS solution : 033845_14_247_A1.14O OP1409945194001

opus <opus@ngs.noaa.gov>

Fri 9/5/2014 1:29 PM

To: John Freetly <John.Freetly@neciusa.com>;

FILE: 033845_14_247_A1.14O OP1409945194001

NGS OPUS SOLUTION REPORT

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

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

USER: john.freetly@neciusa.com DATE: September 05, 2014
 RINEX FILE: 0338247o.14o TIME: 19:29:22 UTC

SOFTWARE: page5 1209.04 master91.pl 022814 START: 2014/09/04 14:14:00
 EPHEMERIS: igr18084.eph [rapid] STOP: 2014/09/04 16:39:00
 NAV FILE: brdc2470.14n OBS USED: 5048 / 6783 : 74%
 ANT NAME: CHCX90D-OPUS NONE # FIXED AMB: 50 / 57 : 88%
 ARP HEIGHT: 1.8000 OVERALL RMS: 0.023(m)

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.6757)

X: -1313182.124(m) 0.025(m) -1313182.988(m) 0.025(m)
 Y: -4221716.858(m) 0.110(m) -4221715.612(m) 0.110(m)
 Z: 4582950.990(m) 0.088(m) 4582950.958(m) 0.088(m)

LAT: 46 13 16.17316 0.021(m) 46 13 16.19427 0.021(m)
 E LON: 252 43 17.33719 0.009(m) 252 43 17.28144 0.009(m)
 W LON: 107 16 42.66281 0.009(m) 107 16 42.71856 0.009(m)
 EL HGT: 915.631(m) 0.141(m) 914.963(m) 0.141(m)
 ORTHO HGT: 930.517(m) 0.239(m) [NAVD88 (Computed using GEOID12A)]

UTM COORDINATES STATE PLANE COORDINATES

UTM (Zone 13) SPC (2500 MT)

Northing (Y) [meters] 5121143.709 221477.917
 Easting (X) [meters] 324275.284 771285.620
 Convergence [degrees] -1.64554479 1.62502383
 Point Scale 0.99997960 0.99948723
 Combined Factor 0.99983609 0.99934379

US NATIONAL GRID DESIGNATOR: 13TCM2427521143(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DI3425	P052 LRRNCHJRDNMT2006	CORS ARP	N472229.026 W1070107.185	129779.8
DG9745	MTEI ENGINC	CORS ARP	N454447.035 W1083600.736	115221.5
DM7161	WYSH SHERIDAN	CORS ARP	N444801.769 W1070035.715	159307.0

NEAREST NGS PUBLISHED CONTROL POINT

RU0437	A 555	N461253.	W1071509.	2128.2
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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.