

OPUS-RS solution : 400422231T.14O OP1408628050767

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Thu 8/21/2014 7:39 AM

To:Chad Mozol <Chad.Mozol@neciusa.com>;

FILE: 400422231T.14O OP1408628050767

NGS OPUS-RS SOLUTION REPORT =====

All computed coordinate accuracies are listed as 1-sigma RMS values.
For additional information: <http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>

USER: cmozol@neciusa.com DATE: August 21, 2014
RINEX FILE: 4004231t.14o TIME: 13:39:04 UTC

SOFTWARE: rsgps 1.37 RS53.prl 1.99.2 START: 2014/08/19 19:55:20
EPHEMERIS: igr18062.eph [rapid] STOP: 2014/08/19 20:55:25
NAV FILE: brdc2310.14n OBS USED: 2630 / 3155 : 83%
ANT NAME: CHCX91B NONE QUALITY IND. 11.89/ 12.89
ARP HEIGHT: 1.8 NORMALIZED RMS: 0.461

REF FRAME: NAD_83(2011)(EPOCH:2010.0000) IGS08 (EPOCH:2014.63247)

X:	-1336557.134(m)	0.007(m)	-1336558.009(m)	0.007(m)
Y:	-4040326.540(m)	0.019(m)	-4040325.315(m)	0.019(m)
Z:	4735880.007(m)	0.021(m)	4735879.998(m)	0.021(m)

LAT:	48 14 54.23769	0.003(m)	48 14 54.25895	0.003(m)
E LON:	251 41 44.03732	0.003(m)	251 41 43.97841	0.003(m)
W LON:	108 18 15.96268	0.003(m)	108 18 16.02159	0.003(m)
EL HGT:	759.618(m)	0.028(m)	759.020(m)	0.028(m)
ORTHO HGT:	776.134(m)	0.030(m)	[NAVD88 (Computed using GEOID12A)]	

	UTM COORDINATES	STATE PLANE COORDINATES
	UTM (Zone 12)	SPC (2500 MT)
Northing (Y) [meters]	5347422.245	444981.958
Easting (X) [meters]	700101.654	688753.760
Convergence [degrees]	2.01166061	0.87456150
Point Scale	1.00009200	0.99962624
Combined Factor	0.99997295	0.99950725

US NATIONAL GRID DESIGNATOR: 12UYU0010147422(NAD 83)

BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DL7731	P053 WHITEWATERMT2007	CORS ARP	N484333.865 W1074331.456	68223.8
DG9749	MTMS MONTANA STATE UNI	CORS ARP	N483227.426 W1094111.858	107412.5
DI3425	P052 LRRNCHJRDNMT2006	CORS ARP	N472229.026 W1070107.185	136795.3
DM7133	MTLW LEWISTOWN	CORS ARP	N470314.929 W1092633.764	157952.9
DI2257	P049 ARMINGTON_MT2006	CORS ARP	N472059.850 W1105422.382	219025.6

NEAREST NGS PUBLISHED CONTROL POINT

Information on nearest mark is not available due to database connectivity issues or has restrictions on when or how it can be published.

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.