

## OPUS-RS solution : 018773\_14\_269\_A1.14O OP1411943758332

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Sun 9/28/2014 4:42 PM

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## NGS OPUS-RS SOLUTION REPORT

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All computed coordinate accuracies are listed as 1-sigma RMS values.

For additional information: <http://www.ngs.noaa.gov/OPUS/about.jsp#accuracy>USER: john.freetly@neciusa.com  
RINEX FILE: 0187269x.14oDATE: September 28, 2014  
TIME: 22:41:36 UTCSOFTWARE: rsgps 1.37 RS50.prl 1.99.2      START: 2014/09/26 23:58:30  
EPHEMERIS: igr18115.eph [rapid]      STOP: 2014/09/27 01:01:45  
NAV FILE: brdc2690.14n      OBS USED: 1692 / 2080 : 81%  
ANT NAME: CHCX90D-OPUS    NONE      QUALITY IND. 5.24/ 21.34  
ARP HEIGHT: 1.8000      NORMALIZED RMS:    0.543

REF FRAME: NAD\_83(2011)(EPOCH:2010.0000)      IGS08 (EPOCH:2014.73704)

X: -1317015.598(m) 0.006(m)      -1317016.458(m) 0.006(m)  
Y: -4299652.596(m) 0.014(m)      -4299651.341(m) 0.014(m)  
Z: 4509901.097(m) 0.019(m)      4509901.054(m) 0.019(m)LAT: 45 16 31.75163 0.009(m)      45 16 31.77246 0.009(m)  
E LON: 252 58 11.22103 0.005(m)      252 58 11.16645 0.005(m)  
W LON: 107 1 48.77897 0.005(m)      107 1 48.83355 0.005(m)  
EL HGT: 1345.532(m) 0.023(m)      1344.835(m) 0.023(m)  
ORTHO HGT: 1360.007(m) 0.024(m) [NAVD88 (Computed using GEOID12A)]

## UTM COORDINATES    STATE PLANE COORDINATES

UTM (Zone 13)      SPC (2500 MT )

Northing (Y) [meters]    5015559.162      117032.742  
Easting (X) [meters]    340756.803      793737.201  
Convergence [degrees]    -1.44276761      1.80665710  
Point Scale      0.99991180      0.99984581  
Combined Factor      0.99970091      0.99963493

US NATIONAL GRID DESIGNATOR: 13TCL4075615559(NAD 83)

## BASE STATIONS USED

PID	DESIGNATION	LATITUDE	LONGITUDE	DISTANCE(m)
DM7161	WYSH SHERIDAN CORS ARP	N444801.769	W1070035.715	52822.2
DG9745	MTEI ENGINC CORS ARP	N454447.035	W1083600.736	133400.2
DL7758	P722 YNPBASSRCHMT2005 CORS ARP	N452725.985	W1093415.586	200100.9
DI2260	P054 TEREKALAKAMT2006 CORS ARP	N455046.833	W1042629.062	211861.6

## NEAREST NGS PUBLISHED CONTROL POINT

QV0435	PASS	N451426.053	W1065553.281	8659.3
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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.