

Wayne County Iowa

Countywide G.P.S. Survey Control Network

2007

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INTRODUCTION

In 2007, the Wayne County Secondary Road Department contracted with the team of DC Inc. and GB Consulting to complete a high accuracy GPS control survey in Wayne County, Iowa for the purpose of establishing a county-wide survey control system and for future use in a county-wide GIS system.

Thirty eight (38) new control stations were added within Wayne County along with, two (2) existing Appanoose County GPS control points and one (1) Monroe County GPS control points were recovered and tied into the GPS network. One (1) existing NSRS 2007 position with first order vertical control was utilized in the survey. One (1) existing NSRS 2007 position with a second order vertical position established by DC Inc. and GB Consulting from a second order bench mark very close to this position was utilized in the survey. Four (4) existing NSRS 2007 positions with no vertical control were utilized in the survey. Additionally seven (7) existing second order vertical control stations and two (2) third order vertical control stations were included in the survey along with six (6) section corner control stations. A total of sixty two (62) points were measured and included in the network.

PROJECT REQUIREMENTS

The purpose of this survey was to establish new state plane control based upon the National Spatial Reference System 2007 (NSRS 2007) coordinate system throughout the project area, utilizing the new horizontal and vertical control network with GPS survey equipment and techniques. Vertically the network was referenced to the North American Vertical Datum of 1988 (NAVD88). All new point locations for control were selected with the needs of future multiple uses and GPS survey requirements in mind. In some instances, it was necessary to adjust locations because of physical obstructions or existing land features. In these instances, the network was constructed with the coverage of the county held as primary and the GPS survey needs satisfied secondly. Because both of these philosophies support good geometry the network structure was not compromised.

MONUMENTATION

To perpetuate the GPS control measurements, 38 new permanent monuments were set in Wayne County for this survey by DC Inc. BERNTSEN driven aluminum rod monuments were selected for the permanent monuments. Each BERNTSEN station monument consists of one three-foot smooth rod section and one three-foot top security fluted rod section with a stamped cap fastened to the top, all constructed of aluminum material. There is a permanent magnet mounted on the underside of the monument cap for future recovery with a magnetic locator. These monuments were driven to approximately 6" below the existing ground surface. For easy access and protection, a 24" long 6" diameter PVC pipe was placed over each rod monument along with a pre-cast aluminum access cover and backfilled with sand to facilitate drainage and to minimize frost movement. A steel fence post with an orange sleeve were placed as witness markers at each new permanent monument position.

The County Engineer's office handled the One Call coordination for marking the various underground utility locations for each new permanent monument site.

RECONNAISSANCE

The most important criterion for GPS observations at any given location is a clear view to the sky. In terms of network design, it is desirable that the horizontal control be located near the perimeter and also throughout the project site if possible. The existing NSRS 2007 horizontal stations were recovered in and/or near Wayne County. All positions in and near the county were chosen to be included in the network.

Vertical control was selected to provide as much coverage as possible, both at the periphery and in the interior of the project area.

FIELD SURVEY

Five Trimble dual frequency Geodetic GPS receivers with Everest multi-path mitigation and high performance low elevation satellite tracking were used in this survey. GPS observations were made during daylight hours from Monday October 15, 2007, through Thursday October 18, 2007 with a pickup session for additional vectors measured in early December.

Rapid static GPS techniques were utilized to minimize the time and cost of the survey. The satellite “window”, where at least six satellites were observable, was open for much of the day with only a short period of unacceptable coverage because of the number of satellites or bad geometry. Each measurement period during which all receivers observe satellites simultaneously lasted from a minimum of 15 minutes to a maximum of 120 minutes, depending on the distance being measured and the geometry of the satellite constellation.

DATA ADJUSTMENT

A total of 213 vectors were observed and processed. Based on statistical indicators from the Trimble Geomatics Office processing software, there were no vectors flagged as outliers. After the removal of trivial vectors the final network is comprised of 62 stations and 149 baselines. All data adjustment was performed using the Trimble Geomatics Office least squares adjustment software. An initial free adjustment was performed in NAD 1983 (NSRS 2007) to check the overall quality of the GPS data and the nature of the control. The initial unconstrained (free) adjustment yielded baseline precisions which ranged from 1:157,089 to 1:4,176,122 with the 3 mile baselines falling in the 1:400,000 to 1:1,000,000 range. Once the horizontal and vertical control was verified, subsequent adjustments were performed to arrive at the optimal solutions for each datum.

NAD83 (NSRS2007)

The initial free adjustment was performed holding NSRS2007 point Osceola (6005) fixed horizontally with the vertical adjustment disabled. Coordinate values on the other NSRS2007 control stations were then checked against the published values. The network fit the published NSRS2007 values within a few hundredths of a foot. Because all of the horizontal data fit so well, the NSRS2007-referenced stations were added to the network and a new adjustment performed. After each adjustment a comparison of adjusted coordinates vs. published values was made. It was

found that PT01 (6001) did not fit the other NSRS 2007 published control values by 0.48' in easting. This was confirmed by comparison to a computed OPUS solution. This horizontal point was not held in the adjustment. By holding all of the remaining existing NSRS2007 stations fixed the precision of the adjustment degraded very little as compared to the unconstrained adjustment.

Once we were satisfied with the horizontal adjustment, we locked the horizontal positions and concentrated on the vertical adjustment. The Geoid 03 Conus was utilized to provide a model of the height of the Geoid. Adjustments were then performed locking on to the orthometric vertical control stations one at a time beginning with K 118 (5002). Vertical control was added station by station with the elevations on the benchmarks being then checked against the published values. All vertical control fit extremely well. New horizontal data is being published for the Appanoose and Monroe County control points.

A final adjustment of both horizontal and vertical was then performed. All of the horizontal control points were held fixed in x and y and all vertical control were held fixed in z. This fully constrained adjustment solved for scale and rotation. In the final adjusted network, 100% of the adjusted vectors have an estimated error of x, y and z baseline precision between 1:134,828 to 1:3,417,211, with the 3 mile baselines again falling in the 1:400,000 range or better. All of the processed data and error factors were computed using a 95% confidence level factor.

On line user positioning (OPUS) service was utilized to calculate solutions at 14 sites within the network. The final adjusted NSRS 2007 positions fit within a few hundredths of a foot in northing and easting and within 0.10' in elevation to these solutions. This result indicates a strong network adjustment and an excellent fit to CORS stations.

CONCLUSION

The results are well in excess of Order C class 1 (first-order precision) on short baselines (less than 3 miles) and between Order C class 1 and Order B on longer baselines (3 to 4 miles in length). The control point locations are within ± 0.04 ft horizontal position and within ± 0.08 ft. vertically for benchmark use.

Network Adjustment Report

Project : WayneCoFinal

User name	Gary Brown	Date & Time	1:42:44 PM 12/24/2007
Coordinate System	US State Plane 1983(NSRS2007)	Zone	Iowa South 1402
Project Datum	NAD 1983 (Conus)		
Vertical Datum	NAVD88	Geoid Model	GEOID03 (Conus)
Coordinate Units	US survey feet		
Distance Units	US survey feet		
Height Units	US survey feet		

Adjustment Style Settings - 95% Confidence Limits

Residual Tolerances

To End Iterations : 0.000033sft
Final Convergence Cutoff : 0.016404sft

Covariance Display

Horizontal

Propagated Linear Error [E] : U.S.
Constant Term [C] : 0.00000000sft
Scale on Linear Error [S] : 1.96

Three-Dimensional

Propagated Linear Error [E] : U.S.
Constant Term [C] : 0.00000000sft
Scale on Linear Error [S] : 1.96

Elevation Errors were used in the calculations.

Adjustment Controls

Compute Correlations for Geoid : True

Horizontal and Vertical adjustment performed

Set-up Errors

GPS

Error in Height of Antenna : 0.015sft
Centering Error : 0.015sft

Statistical Summary

Successful Adjustment in 1 iteration(s)

Network Reference Factor : 1.01

Chi Square Test ($\alpha=95\%$) : PASS

Degrees of Freedom : 280.00

GPS Observation Statistics

Reference Factor : 1.01

Redundancy Number (r) : 270.09

Geoid Model Statistics

Reference Factor : 1.00

Redundancy Number (r) : 9.91

Weighting Strategies

GPS Observations

User-defined Scalar Applied to All Observations

Scalar : 1.35

Geoid Observations

User-defined Scalar Applied to All Observations

Scalar : 1.25

Adjusted Coordinates

Adjustment performed in **NAD 1983 (NSRS2007) (Conus)**

Number of Points : 62

Number of Constrained Points : 17

Horizontal Only : 4

Elevation Only : 12

Horizontal and Elevation Only : 1

Adjusted Grid Coordinates

Errors are reported using 1.96 σ .

Point Name	Northing	N error	Easting	E error	Elevation	e error	Fix
14	326124.164sft	0.021sft	1656377.087sft	0.021sft	1091.695sft	0.330sft	
1009	322357.121sft	0.028sft	1640515.382sft	0.027sft	1087.046sft	0.000sft	e
5	327251.904sft	0.021sft	1624822.316sft	0.020sft	1096.299sft	0.370sft	
6005	364294.754sft	0.000sft	1565987.826sft	0.000sft	1150.014sft	0.853sft	N E
6006	371698.023sft	0.000sft	1677928.583sft	0.000sft	1044.287sft	0.534sft	N E
21	263520.893sft	0.024sft	1689841.466sft	0.024sft	1094.840sft	0.364sft	
25	248183.951sft	0.030sft	1704339.727sft	0.029sft	1095.577sft	0.393sft	
5005	248474.553sft	0.030sft	1746845.935sft	0.028sft	1070.900sft	0.000sft	e
34	250156.174sft	0.037sft	1736260.151sft	0.035sft	1074.885sft	0.168sft	
26	279947.962sft	0.029sft	1703605.233sft	0.029sft	1073.893sft	0.403sft	
35	280059.522sft	0.035sft	1737180.400sft	0.034sft	1030.859sft	0.402sft	
36	312138.329sft	0.037sft	1735903.483sft	0.036sft	1004.750sft	0.424sft	
27	310368.885sft	0.031sft	1705804.859sft	0.030sft	1031.772sft	0.412sft	
6010	328124.047sft	0.049sft	1751548.835sft	0.049sft	982.688sft	0.377sft	
9671	355245.511sft	0.057sft	1763592.945sft	0.057sft	871.950sft	0.000sft	e
23	326006.711sft	0.029sft	1686910.001sft	0.029sft	1042.957sft	0.365sft	
18	312906.397sft	0.028sft	1672436.509sft	0.028sft	1092.632sft	0.383sft	
9	311668.252sft	0.027sft	1639916.075sft	0.027sft	1106.334sft	0.286sft	
3	264412.819sft	0.022sft	1627345.494sft	0.021sft	1060.874sft	0.451sft	

6004	279840.172sft	0.000sft	1643959.186sft	0.000sft	1109.944sft	0.395sft	N E
22	293337.371sft	0.025sft	1689878.381sft	0.024sft	1056.826sft	0.387sft	
30	264015.788sft	0.030sft	1725666.342sft	0.029sft	1061.745sft	0.340sft	
31	295906.197sft	0.033sft	1720580.593sft	0.032sft	1030.507sft	0.434sft	
41	323183.040sft	0.042sft	1751689.512sft	0.041sft	951.867sft	0.383sft	
9869	308761.996sft	0.054sft	1778177.474sft	0.052sft	998.600sft	0.000sft	e
4	295917.210sft	0.022sft	1626738.327sft	0.021sft	1103.429sft	0.409sft	
12	263933.975sft	0.024sft	1655050.167sft	0.023sft	1105.449sft	0.368sft	
5002	274470.403sft	0.039sft	1671258.772sft	0.038sft	1021.550sft	0.000sft	e
20	232400.412sft	0.026sft	1687280.960sft	0.025sft	1061.156sft	0.451sft	
39	264979.713sft	0.033sft	1749397.568sft	0.032sft	1038.361sft	0.332sft	
63	264066.442sft	0.039sft	1704343.762sft	0.039sft	1013.486sft	0.389sft	
40	302067.073sft	0.035sft	1749276.626sft	0.034sft	1024.365sft	0.403sft	
32	325064.166sft	0.038sft	1722308.756sft	0.037sft	1040.175sft	0.392sft	
61	301153.386sft	0.028sft	1635262.346sft	0.027sft	1110.765sft	0.369sft	
17	279866.251sft	0.030sft	1672489.796sft	0.029sft	1078.722sft	0.216sft	
5004	248367.033sft	0.034sft	1732660.492sft	0.032sft	1071.320sft	0.000sft	e
66	327422.399sft	0.048sft	1730422.624sft	0.048sft	997.962sft	0.400sft	
13	295712.795sft	0.020sft	1657473.842sft	0.019sft	1096.866sft	0.356sft	
65	296058.986sft	0.045sft	1741307.764sft	0.044sft	1029.430sft	0.422sft	
5026	343016.706sft	0.044sft	1702314.849sft	0.043sft	994.900sft	0.000sft	e
7	250109.071sft	0.029sft	1638277.727sft	0.028sft	1071.528sft	0.452sft	
37	216808.312sft	0.026sft	1752272.356sft	0.025sft	1047.790sft	0.000sft	e
6001	146944.934sft	0.044sft	1761303.724sft	0.043sft	1058.000sft	0.000sft	e
24	221766.372sft	0.037sft	1704609.819sft	0.036sft	1096.479sft	0.448sft	
19	211673.190sft	0.033sft	1692474.255sft	0.033sft	1066.480sft	0.482sft	
10	212242.398sft	0.029sft	1656461.951sft	0.028sft	1087.602sft	0.443sft	
7420	188288.075sft	0.042sft	1631557.502sft	0.040sft	1079.570sft	0.000sft	e
2	235854.452sft	0.024sft	1626255.741sft	0.023sft	1053.267sft	0.462sft	
6003	226749.776sft	0.000sft	1571658.622sft	0.000sft	1087.173sft	0.518sft	N E
6	222070.635sft	0.031sft	1640789.431sft	0.030sft	1098.965sft	0.440sft	
15	221756.839sft	0.039sft	1672455.766sft	0.038sft	1070.133sft	0.469sft	

29	232527.454sft	0.031sft	1720381.724sft	0.030sft	1060.702sft	0.360sft	
6002	229889.416sft	0.000sft	1801850.386sft	0.000sft	1032.060sft	0.000sft	N E e
1	211462.927sft	0.025sft	1625576.850sft	0.024sft	1065.404sft	0.398sft	
28	213866.389sft	0.034sft	1720275.270sft	0.033sft	1060.285sft	0.419sft	
64	227348.854sft	0.041sft	1746923.988sft	0.040sft	1085.422sft	0.226sft	
5025	266096.862sft	0.042sft	1571849.950sft	0.041sft	1022.640sft	0.000sft	e
11	232370.845sft	0.025sft	1655969.505sft	0.025sft	1107.777sft	0.454sft	
62	211724.556sft	0.040sft	1706963.528sft	0.040sft	1097.424sft	0.463sft	
38	232643.887sft	0.032sft	1753560.314sft	0.029sft	1056.920sft	0.000sft	e
33	222000.346sft	0.034sft	1733488.576sft	0.033sft	1034.820sft	0.332sft	
16	248156.089sft	0.038sft	1673935.130sft	0.037sft	1093.100sft	0.406sft	

Adjusted Geodetic Coordinates

Errors are reported using 1.96σ .

Point Name	Latitude	N error	Longitude	E error	Height	h error	Fix
14	40°53'42.42574"N	0.021sft	93°26'32.16717"W	0.021sft	988.529sft	1.027sft	
1009	40°53'05.25524"N	0.028sft	93°29'58.71475"W	0.027sft	983.902sft	1.045sft	e
5	40°53'53.57151"N	0.021sft	93°33'23.07549"W	0.020sft	993.287sft	1.092sft	
6005	40°59'58.50669"N	0.000sft	93°46'10.73270"W	0.000sft	1047.617sft	1.372sft	Lat Long
6006	41°01'12.50915"N	0.000sft	93°21'50.60150"W	0.000sft	941.201sft	1.158sft	Lat Long
21	40°43'23.38008"N	0.024sft	93°19'18.07388"W	0.024sft	991.203sft	0.892sft	
25	40°40'51.49529"N	0.030sft	93°16'10.29997"W	0.029sft	991.891sft	0.889sft	
5005	40°40'52.88389"N	0.030sft	93°06'58.57263"W	0.028sft	966.666sft	0.931sft	e
34	40°41'09.93884"N	0.037sft	93°09'15.88542"W	0.035sft	970.981sft	0.914sft	
26	40°46'05.38210"N	0.029sft	93°16'18.75214"W	0.029sft	970.266sft	0.904sft	
35	40°46'05.38319"N	0.035sft	93°09'02.38114"W	0.034sft	926.927sft	0.931sft	
36	40°51'22.40919"N	0.037sft	93°09'17.32228"W	0.036sft	900.950sft	0.986sft	
27	40°51'05.91925"N	0.031sft	93°15'49.08985"W	0.030sft	928.312sft	0.957sft	
6010	40°53'59.70166"N	0.049sft	93°05'52.75284"W	0.049sft	878.650sft	1.051sft	
9671	40°58'27.10929"N	0.057sft	93°03'14.09663"W	0.057sft	767.628sft	1.158sft	e
23	40°53'40.87339"N	0.029sft	93°19'54.57839"W	0.029sft	939.728sft	0.998sft	
18	40°51'31.66027"N	0.028sft	93°23'03.27441"W	0.028sft	989.341sft	0.975sft	
9	40°51'19.63638"N	0.027sft	93°30'06.51467"W	0.027sft	1003.167sft	1.022sft	
3	40°43'32.65901"N	0.022sft	93°32'49.77405"W	0.021sft	957.485sft	0.990sft	

6004	40°46'05.13319"N	0.000sft	93°29'13.95876"W	0.000sft	1006.559sft	0.962sft	Lat Long
22	40°48'18.00297"N	0.025sft	93°19'16.79899"W	0.024sft	953.318sft	0.924sft	
30	40°43'27.28156"N	0.030sft	93°11'32.76302"W	0.029sft	957.958sft	0.904sft	
31	40°48'42.56945"N	0.033sft	93°12'37.43805"W	0.032sft	926.822sft	0.936sft	
41	40°53'10.87278"N	0.042sft	93°05'51.21857"W	0.041sft	847.826sft	1.038sft	
9869	40°50'47.02284"N	0.054sft	93°00'07.42483"W	0.052sft	894.100sft	1.065sft	e
4	40°48'43.95852"N	0.022sft	93°32'57.89266"W	0.021sft	1000.234sft	1.023sft	
12	40°43'27.91856"N	0.024sft	93°26'49.93753"W	0.023sft	1001.937sft	0.930sft	
5002	40°45'11.88067"N	0.039sft	93°23'19.24236"W	0.038sft	917.940sft	0.915sft	e
20	40°38'15.92100"N	0.026sft	93°19'52.11412"W	0.025sft	957.481sft	0.900sft	
39	40°43'35.86171"N	0.033sft	93°06'24.48506"W	0.032sft	934.193sft	0.939sft	
63	40°43'28.43392"N	0.039sft	93°16'09.70098"W	0.039sft	909.817sft	0.891sft	
40	40°49'42.33283"N	0.035sft	93°06'23.87743"W	0.034sft	920.326sft	0.985sft	
32	40°53'30.62628"N	0.038sft	93°12'13.67150"W	0.037sft	936.626sft	1.003sft	
61	40°49'35.73132"N	0.028sft	93°31'07.04874"W	0.027sft	1007.570sft	1.011sft	
17	40°46'05.18251"N	0.030sft	93°23'03.15331"W	0.029sft	975.155sft	0.918sft	
5004	40°40'52.39862"N	0.034sft	93°10'02.69981"W	0.032sft	967.523sft	0.910sft	e
66	40°53'53.64170"N	0.048sft	93°10'27.90568"W	0.048sft	894.288sft	1.018sft	
13	40°48'41.91734"N	0.020sft	93°26'18.16603"W	0.019sft	993.506sft	0.959sft	
65	40°48'43.30914"N	0.045sft	93°08'07.86791"W	0.044sft	925.490sft	0.961sft	
5026	40°56'28.60823"N	0.044sft	93°16'33.41152"W	0.043sft	891.774sft	1.048sft	e
7	40°41'11.35382"N	0.029sft	93°30'27.76500"W	0.028sft	968.048sft	0.962sft	
37	40°35'39.74155"N	0.026sft	93°05'50.04309"W	0.025sft	943.458sft	0.965sft	e
6001	40°24'08.98230"N	0.044sft	93°03'57.49250"W	0.043sft	953.413sft	1.157sft	e
24	40°36'30.44953"N	0.037sft	93°16'07.70565"W	0.036sft	992.695sft	0.909sft	
19	40°34'51.00475"N	0.033sft	93°18'45.33033"W	0.033sft	962.710sft	0.925sft	
10	40°34'57.13076"N	0.029sft	93°26'32.04690"W	0.028sft	984.022sft	0.960sft	
7420	40°31'00.46810"N	0.042sft	93°31'54.70449"W	0.040sft	976.027sft	1.059sft	e
2	40°38'50.45978"N	0.024sft	93°33'03.71062"W	0.023sft	949.786sft	0.997sft	
6003	40°37'19.56761"N	0.000sft	93°44'51.66400"W	0.000sft	983.760sft	1.186sft	Lat Long
6	40°36'34.29897"N	0.031sft	93°29'55.16686"W	0.030sft	995.447sft	0.976sft	
15	40°36'30.98831"N	0.039sft	93°23'04.59746"W	0.038sft	966.497sft	0.924sft	
29	40°38'16.31715"N	0.031sft	93°12'42.75469"W	0.030sft	956.873sft	0.905sft	
6002	40°37'46.22568"N	0.000sft	92°55'06.25812"W	0.000sft	926.848sft	1.084sft	Lat Long e
1	40°34'49.43620"N	0.025sft	93°33'12.32357"W	0.024sft	961.898sft	1.027sft	
28	40°35'11.92634"N	0.034sft	93°12'44.93563"W	0.033sft	956.340sft	0.927sft	

64	40°37'24.13350"N	0.041sft	93°06'58.76902"W	0.040sft	981.191sft	0.944sft	
5025	40°43'48.37099"N	0.042sft	93°44'50.63412"W	0.041sft	919.448sft	1.173sft	e
11	40°38'16.02881"N	0.025sft	93°26'38.26113"W	0.025sft	1004.230sft	0.935sft	
62	40°34'51.16091"N	0.040sft	93°15'37.54745"W	0.040sft	993.575sft	0.925sft	
38	40°38'16.15639"N	0.032sft	93°05'32.38581"W	0.029sft	952.570sft	0.951sft	e
33	40°36'31.83241"N	0.034sft	93°09'53.27045"W	0.033sft	930.771sft	0.929sft	
16	40°40'51.82671"N	0.038sft	93°22'44.94127"W	0.037sft	989.497sft	0.902sft	

Control Coordinate Comparisons

Values shown are control coord minus adjusted coord.

Point Name	Δ Northing	Δ Easting	Δ Elevation	Δ Height
6001	0.054sft	0.476sft	N/A	N/A

Adjusted Observations

Adjustment performed in **NAD 1983 (NSRS2007) (Conus)**

GPS Observations

GPS Transformation Group: <GPS Default>

Deflection in Longitude : -0°00'00.1109" (1.96σ) : 0°00'01.2330"

Deflection in Latitude : 0°00'00.0270" (1.96σ) : 0°00'01.2740"

Azimuth Rotation : -0°00'00.0351" (1.96σ) : 0°00'00.0325"

Network Scale : 0.99999998 (1.96σ) : 0.00000016

Number of Observations : 149

Number of Outliers : 0

Observation Adjustment (Critical Tau = 3.85). Any outliers are in **red**.

Obs. ID	From Pt.	To Pt.		Observation	A-posteriori Error (1.96σ)	Residual	Stand. Residual
B152	21	12	Az.	270°47'50.2755"	0°00'00.1280"	0°00'00.0117"	0.10
			ΔHt.	10.716sft	0.027sft	-0.101sft	-3.78
			Dist.	34794.347sft	0.021sft	-0.011sft	-0.57
B28	30	21	Az.	269°24'38.6255"	0°00'00.1422"	0°00'00.0518"	0.46
			ΔHt.	33.225sft	0.027sft	-0.076sft	-3.61
			Dist.	35828.909sft	0.024sft	-0.003sft	-0.18
B170	21	20	Az.	184°49'15.4377"	0°00'00.1369"	-0°00'00.0776"	-0.61
			ΔHt.	-33.727sft	0.025sft	-0.091sft	-3.43
			Dist.	31225.968sft	0.022sft	-0.023sft	-1.11
B142	37	6001	Az.	172°53'58.3789"	0°00'00.1033"	-0°00'00.1191"	-3.36
			ΔHt.	9.950sft	0.042sft	0.032sft	3.04
			Dist.	70443.058sft	0.036sft	0.024sft	1.91
B25	3	6004	Az.	47°05'22.3789"	0°00'00.1934"	0°00'00.5704"	3.34
			ΔHt.	49.085sft	0.033sft	-0.017sft	-1.04
			Dist.	22672.427sft	0.022sft	-0.020sft	-1.05

B166	6001	28	Az.	328°46'24.2050"	0°00'00.0986"	0°00'00.0872"	1.97
			ΔHt.	2.914sft	0.052sft	0.089sft	2.83
			Dist.	78495.328sft	0.038sft	-0.053sft	-3.14
B212	12	11	Az.	178°21'59.0356"	0°00'00.1494"	0°00'00.1545"	1.27
			ΔHt.	2.289sft	0.028sft	-0.084sft	-3.11
			Dist.	31576.852sft	0.024sft	-0.015sft	-0.73
B15	21	25	Az.	136°43'40.0831"	0°00'00.2435"	0°00'00.0518"	0.28
			ΔHt.	0.694sft	0.028sft	0.056sft	2.78
			Dist.	21105.302sft	0.025sft	-0.008sft	-0.46
B53	20	21	Az.	4°48'53.2488"	0°00'00.1367"	0°00'00.1130"	0.88
			ΔHt.	33.727sft	0.025sft	-0.059sft	-2.74
			Dist.	31225.968sft	0.022sft	0.028sft	1.35
B147	12	7	Az.	230°32'13.4558"	0°00'00.2510"	0°00'00.2208"	1.33
			ΔHt.	-33.900sft	0.031sft	-0.058sft	-2.65
			Dist.	21736.061sft	0.027sft	0.000sft	-0.02
B99	13	6004	Az.	220°27'10.7937"	0°00'00.1931"	-0°00'00.4829"	-2.55
			ΔHt.	13.044sft	0.029sft	0.026sft	1.47
			Dist.	20847.271sft	0.020sft	0.028sft	1.46
B229	29	20	Az.	269°58'09.9600"	0°00'00.1687"	-0°00'00.0473"	-0.45
			ΔHt.	0.590sft	0.031sft	0.043sft	2.48
			Dist.	33101.128sft	0.027sft	-0.004sft	-0.26
B163	1	6003	Az.	285°47'35.0540"	0°00'00.0967"	0°00'00.1813"	2.45
			ΔHt.	21.835sft	0.044sft	0.008sft	0.33
			Dist.	56043.246sft	0.025sft	0.032sft	1.75
B173	1	6	Az.	55°04'37.2805"	0°00'00.2517"	-0°00'00.0582"	-0.25
			ΔHt.	33.558sft	0.029sft	0.092sft	2.36
			Dist.	18545.711sft	0.023sft	0.008sft	0.37
B63	6004	61	Az.	337°48'37.6286"	0°00'00.2457"	0°00'00.0207"	0.14
			ΔHt.	1.010sft	0.032sft	-0.016sft	-0.94
			Dist.	23019.919sft	0.027sft	0.038sft	2.24
B182	28	29	Az.	0°30'58.4219"	0°00'00.2908"	0°00'00.1361"	0.72

			ΔHt.	0.536sft	0.034sft	0.066sft	2.22
			Dist.	18661.353sft	0.026sft	-0.008sft	-0.48
B3	14	1009	Az.	256°40'41.0393"	0°00'00.3500"	-0°00'00.0312"	-0.15
			ΔHt.	-4.636sft	0.033sft	0.035sft	2.19
			Dist.	16303.495sft	0.027sft	-0.011sft	-0.66
B102	5004	25	Az.	269°50'53.9724"	0°00'00.2264"	-0°00'00.0745"	-0.55
			ΔHt.	24.353sft	0.034sft	-0.045sft	-2.17
			Dist.	28321.661sft	0.029sft	-0.008sft	-0.46
B155	6	10	Az.	122°05'34.5201"	0°00'00.2650"	0°00'00.1266"	0.54
			ΔHt.	-11.418sft	0.030sft	-0.069sft	-2.09
			Dist.	18499.178sft	0.023sft	-0.028sft	-1.43
B135	13	17	Az.	136°34'56.3931"	0°00'00.2565"	-0°00'00.0628"	-0.39
			ΔHt.	-18.345sft	0.032sft	-0.035sft	-2.05
			Dist.	21831.551sft	0.027sft	-0.014sft	-0.84
B122	13	4	Az.	270°25'16.8630"	0°00'00.1393"	-0°00'00.1471"	-1.05
			ΔHt.	6.711sft	0.025sft	0.053sft	2.03
			Dist.	30737.077sft	0.020sft	-0.002sft	-0.12
B127	39	40	Az.	0°04'19.7438"	0°00'00.1627"	-0°00'00.0626"	-0.68
			ΔHt.	-13.862sft	0.035sft	0.040sft	2.02
			Dist.	37088.460sft	0.030sft	-0.006sft	-0.35
B65	17	22	Az.	52°18'40.0087"	0°00'00.2474"	0°00'00.0855"	0.53
			ΔHt.	-21.825sft	0.032sft	-0.044sft	-2.01
			Dist.	21996.790sft	0.027sft	0.003sft	0.19
B145	2	6003	Az.	260°29'53.0190"	0°00'00.0950"	0°00'00.1316"	1.91
			ΔHt.	33.943sft	0.044sft	-0.003sft	-0.12
			Dist.	55351.238sft	0.026sft	0.010sft	0.54
B197	3	5025	Az.	271°42'23.1861"	0°00'00.1566"	0°00'00.1231"	1.88
			ΔHt.	-38.067sft	0.079sft	0.020sft	0.67
			Dist.	55522.075sft	0.040sft	0.008sft	0.48
B44	31	26	Az.	226°57'34.4007"	0°00'00.2425"	-0°00'00.1620"	-1.02
			ΔHt.	43.433sft	0.030sft	0.036sft	1.87

			Dist.	23299.278sft	0.027sft	0.005sft	0.28
B180	5005	6002	Az.	108°55'21.9138"	0°00'00.1129"	-0°00'00.0277"	-0.40
			ΔHt.	-39.792sft	0.043sft	0.042sft	1.86
			Dist.	58059.807sft	0.030sft	-0.006sft	-0.32
B221	5005	38	Az.	157°16'09.1817"	0°00'00.3910"	-0°00'00.0511"	-0.26
			ΔHt.	-14.095sft	0.043sft	0.042sft	1.85
			Dist.	17195.847sft	0.036sft	-0.003sft	-0.17
B74	14	5	Az.	272°05'04.6311"	0°00'00.1381"	-0°00'00.0236"	-0.18
			ΔHt.	4.741sft	0.026sft	-0.048sft	-1.83
			Dist.	31576.104sft	0.021sft	0.007sft	0.37
B154	3	2	Az.	182°09'15.0897"	0°00'00.1505"	-0°00'00.0646"	-0.47
			ΔHt.	-7.704sft	0.026sft	0.039sft	1.83
			Dist.	28579.480sft	0.021sft	-0.014sft	-0.70
B234	11	20	Az.	89°58'59.5853"	0°00'00.1521"	-0°00'00.0992"	-0.80
			ΔHt.	-46.733sft	0.026sft	-0.036sft	-1.81
			Dist.	31311.583sft	0.023sft	0.006sft	0.30
B190	5025	6003	Az.	180°06'56.2711"	0°00'00.2169"	0°00'00.0318"	0.29
			ΔHt.	64.307sft	0.082sft	0.022sft	0.46
			Dist.	39347.936sft	0.043sft	-0.039sft	-1.80
B50	3	4	Az.	358°51'53.3744"	0°00'00.1699"	0°00'00.0299"	0.24
			ΔHt.	42.752sft	0.034sft	0.011sft	0.43
			Dist.	31510.975sft	0.026sft	-0.036sft	-1.78
B91	40	35	Az.	209°03'14.1655"	0°00'00.2430"	0°00'00.1132"	0.77
			ΔHt.	6.592sft	0.035sft	-0.042sft	-1.71
			Dist.	25113.444sft	0.029sft	-0.008sft	-0.44
B153	3	2	Az.	182°09'15.0897"	0°00'00.1505"	0°00'00.1470"	1.04
			ΔHt.	-7.704sft	0.026sft	-0.011sft	-0.45
			Dist.	28579.480sft	0.021sft	-0.035sft	-1.71
B69	26	63	Az.	177°29'16.0356"	0°00'00.4231"	0°00'00.0800"	0.43
			ΔHt.	-60.450sft	0.034sft	0.025sft	1.69
			Dist.	15899.005sft	0.032sft	0.003sft	0.23

B56	21	63	Az.	87°57'47.7567"	0°00'00.4614"	-0°00'00.0487"	-0.24
			ΔHt.	-81.378sft	0.034sft	-0.025sft	-1.69
			Dist.	14512.803sft	0.033sft	0.006sft	0.42
B90	5005	5004	Az.	269°49'05.9091"	0°00'00.4312"	-0°00'00.0288"	-0.12
			ΔHt.	0.849sft	0.033sft	-0.030sft	-1.69
			Dist.	14186.003sft	0.028sft	-0.010sft	-0.62
B79	39	30	Az.	267°55'57.8474"	0°00'00.2300"	0°00'00.0489"	0.33
			ΔHt.	23.752sft	0.029sft	-0.028sft	-1.68
			Dist.	23751.207sft	0.026sft	0.004sft	0.24
B216	11	1	Az.	235°30'40.9062"	0°00'00.1085"	0°00'00.1858"	1.64
			ΔHt.	-42.351sft	0.023sft	0.008sft	0.33
			Dist.	36889.709sft	0.020sft	-0.004sft	-0.19
B237	20	16	Az.	319°50'41.3208"	0°00'00.3236"	-0°00'00.0630"	-0.44
			ΔHt.	32.011sft	0.035sft	0.025sft	1.63
			Dist.	20648.455sft	0.033sft	-0.007sft	-0.45
B236	11	16	Az.	48°44'00.3673"	0°00'00.2809"	-0°00'00.0481"	-0.39
			ΔHt.	-14.722sft	0.035sft	-0.024sft	-1.62
			Dist.	23915.391sft	0.032sft	0.006sft	0.44
B174	6	1	Az.	235°06'45.5719"	0°00'00.2518"	0°00'00.1359"	0.63
			ΔHt.	-33.558sft	0.029sft	0.035sft	1.61
			Dist.	18545.711sft	0.023sft	-0.003sft	-0.15
B160	6002	37	Az.	255°36'06.5544"	0°00'00.1093"	0°00'00.0053"	0.07
			ΔHt.	16.582sft	0.034sft	0.036sft	1.61
			Dist.	51274.670sft	0.025sft	0.004sft	0.21
B121	13	4	Az.	270°25'16.8630"	0°00'00.1393"	0°00'00.1255"	0.94
			ΔHt.	6.711sft	0.025sft	-0.037sft	-1.57
			Dist.	30737.077sft	0.020sft	0.000sft	0.01
B123	12	13	Az.	4°23'46.0534"	0°00'00.1504"	0°00'00.0771"	0.66
			ΔHt.	-8.426sft	0.028sft	0.017sft	0.94
			Dist.	31871.847sft	0.024sft	-0.029sft	-1.57
B6	14	5	Az.	272°05'04.6311"	0°00'00.1381"	-0°00'00.0896"	-0.70

			ΔHt.	4.741sft	0.026sft	0.031sft	1.56
			Dist.	31576.104sft	0.021sft	0.010sft	0.51
B185	1	10	Az.	88°31'10.3644"	0°00'00.1365"	-0°00'00.1089"	-0.77
			ΔHt.	22.141sft	0.025sft	0.019sft	0.57
			Dist.	30894.738sft	0.020sft	-0.033sft	-1.56
B51	12	3	Az.	271°01'28.7263"	0°00'00.1787"	-0°00'00.1146"	-0.80
			ΔHt.	-44.467sft	0.028sft	0.032sft	1.55
			Dist.	27709.292sft	0.023sft	-0.009sft	-0.49
B13	6006	1009	Az.	217°15'39.2375"	0°00'00.0921"	0°00'00.0010"	0.02
			ΔHt.	42.675sft	0.036sft	-0.032sft	-1.55
			Dist.	61924.103sft	0.028sft	0.007sft	0.41
B227	19	10	Az.	271°01'42.3982"	0°00'00.1743"	0°00'00.0353"	0.39
			ΔHt.	21.293sft	0.035sft	-0.026sft	-1.55
			Dist.	36016.572sft	0.030sft	-0.016sft	-1.04
B230	20	19	Az.	166°02'42.5585"	0°00'00.2678"	-0°00'00.0976"	-0.61
			ΔHt.	5.229sft	0.032sft	-0.026sft	-1.52
			Dist.	21367.892sft	0.028sft	-0.011sft	-0.65
B38	6004	4	Az.	313°02'27.0281"	0°00'00.1927"	0°00'00.0420"	0.22
			ΔHt.	-6.332sft	0.031sft	0.037sft	1.36
			Dist.	23559.670sft	0.021sft	0.031sft	1.51
B187	2	1	Az.	181°33'38.4238"	0°00'00.1746"	0°00'00.0431"	0.26
			ΔHt.	12.109sft	0.024sft	0.035sft	1.49
			Dist.	24400.956sft	0.021sft	-0.009sft	-0.46
B178	37	64	Az.	333°21'41.6272"	0°00'00.5889"	-0°00'00.3580"	-1.47
			ΔHt.	37.731sft	0.040sft	0.021sft	1.20
			Dist.	11819.800sft	0.035sft	-0.004sft	-0.26
B161	37	6002	Az.	75°29'07.4937"	0°00'00.1093"	-0°00'00.1216"	-1.45
			ΔHt.	-16.582sft	0.034sft	-0.020sft	-0.81
			Dist.	51274.670sft	0.025sft	-0.007sft	-0.39
B220	64	33	Az.	248°32'43.8304"	0°00'00.4921"	-0°00'00.0802"	-0.42
			ΔHt.	-50.428sft	0.038sft	0.016sft	1.21

			Dist.	14460.871sft	0.033sft	0.019sft	1.43
B186	1	2	Az.	1°33'32.8170"	0°00'00.1744"	0°00'00.0219"	0.14
			ΔHt.	-12.109sft	0.024sft	0.030sft	1.43
			Dist.	24400.956sft	0.021sft	0.007sft	0.39
B156	10	6	Az.	302°07'46.6946"	0°00'00.2649"	-0°00'00.0088"	-0.04
			ΔHt.	11.418sft	0.030sft	-0.031sft	-1.41
			Dist.	18499.178sft	0.023sft	0.014sft	0.72
B30	35	30	Az.	215°53'44.6299"	0°00'00.2826"	0°00'00.0670"	0.37
			ΔHt.	31.022sft	0.031sft	-0.027sft	-1.33
			Dist.	19748.184sft	0.027sft	-0.004sft	-0.24
B204	38	6002	Az.	93°32'01.6509"	0°00'00.1385"	-0°00'00.0710"	-0.83
			ΔHt.	-25.697sft	0.039sft	0.032sft	1.32
			Dist.	48368.708sft	0.030sft	-0.005sft	-0.26
B191	11	7	Az.	315°06'42.4397"	0°00'00.2133"	-0°00'00.0666"	-0.47
			ΔHt.	-36.190sft	0.029sft	0.015sft	0.86
			Dist.	25053.009sft	0.026sft	-0.023sft	-1.32
B81	40	31	Az.	258°08'30.1304"	0°00'00.1885"	-0°00'00.0850"	-0.68
			ΔHt.	6.479sft	0.031sft	0.028sft	1.31
			Dist.	29350.806sft	0.027sft	-0.004sft	-0.24
B199	15	20	Az.	54°24'00.6923"	0°00'00.3694"	-0°00'00.0267"	-0.17
			ΔHt.	-9.006sft	0.036sft	-0.019sft	-1.29
			Dist.	18250.281sft	0.033sft	-0.004sft	-0.28
B157	15	10	Az.	239°19'41.1350"	0°00'00.3627"	-0°00'00.0224"	-0.15
			ΔHt.	17.516sft	0.035sft	0.019sft	1.29
			Dist.	18609.784sft	0.033sft	-0.004sft	-0.29
B107	65	36	Az.	341°39'44.9487"	0°00'00.3985"	-0°00'00.0969"	-0.55
			ΔHt.	-24.540sft	0.035sft	0.011sft	0.68
			Dist.	16963.770sft	0.033sft	-0.018sft	-1.26
B37	4	9	Az.	39°53'03.5610"	0°00'00.2590"	-0°00'00.0303"	-0.17
			ΔHt.	2.942sft	0.034sft	0.029sft	1.25
			Dist.	20537.154sft	0.027sft	-0.001sft	-0.04

B92	21	22	Az.	0°11'18.1790"	0°00'00.1394"	-0°00'00.0296"	-0.21
			ΔHt.	-37.881sft	0.024sft	-0.026sft	-1.25
			Dist.	29817.176sft	0.020sft	0.008sft	0.41
B146	7	2	Az.	220°08'17.5138"	0°00'00.2847"	0°00'00.2247"	1.13
			ΔHt.	-18.270sft	0.030sft	-0.027sft	-1.25
			Dist.	18647.472sft	0.026sft	-0.003sft	-0.18
B16	5005	34	Az.	279°16'44.4463"	0°00'00.5804"	-0°00'00.1618"	-0.53
			ΔHt.	4.310sft	0.033sft	-0.020sft	-1.25
			Dist.	10718.639sft	0.029sft	-0.005sft	-0.34
B64	17	5002	Az.	192°55'40.4677"	0°00'01.2454"	0°00'00.4932"	1.01
			ΔHt.	-57.216sft	0.037sft	0.015sft	1.25
			Dist.	5534.614sft	0.034sft	-0.004sft	-0.29
B62	14	9	Az.	228°44'54.8996"	0°00'00.2387"	-0°00'00.0610"	-0.37
			ΔHt.	14.627sft	0.032sft	-0.026sft	-1.23
			Dist.	21908.272sft	0.027sft	0.009sft	0.48
B77	17	21	Az.	133°21'57.2399"	0°00'00.2310"	-0°00'00.0005"	0.00
			ΔHt.	16.055sft	0.033sft	-0.034sft	-1.23
			Dist.	23838.501sft	0.026sft	-0.006sft	-0.33
B120	13	22	Az.	94°14'00.4760"	0°00'00.1427"	-0°00'00.0111"	-0.09
			ΔHt.	-40.171sft	0.027sft	0.026sft	1.19
			Dist.	32492.406sft	0.022sft	-0.009sft	-0.48
B87	4	61	Az.	58°24'20.6581"	0°00'00.5639"	0°00'00.4021"	1.19
			ΔHt.	7.342sft	0.031sft	0.012sft	0.71
			Dist.	10004.117sft	0.028sft	-0.004sft	-0.23
B103	34	5004	Az.	243°47'55.6416"	0°00'01.5926"	-0°00'00.4001"	-0.49
			ΔHt.	-3.461sft	0.033sft	-0.020sft	-1.17
			Dist.	4019.817sft	0.030sft	-0.001sft	-0.04
B206	33	29	Az.	308°59'28.3123"	0°00'00.3695"	-0°00'00.2302"	-1.12
			ΔHt.	26.097sft	0.037sft	0.011sft	0.56
			Dist.	16811.014sft	0.030sft	-0.001sft	-0.08
B19	36	27	Az.	266°51'45.6262"	0°00'00.1964"	-0°00'00.0575"	-0.49

			ΔHt.	27.345sft	0.033sft	0.023sft	1.11
			Dist.	30151.597sft	0.028sft	0.002sft	0.10
B217	33	28	Az.	238°36'16.6703"	0°00'00.3982"	0°00'00.1276"	0.59
			ΔHt.	25.561sft	0.036sft	0.008sft	0.46
			Dist.	15516.155sft	0.030sft	0.018sft	1.10
B10	6006	14	Az.	205°23'54.5877"	0°00'00.0909"	-0°00'00.0558"	-0.72
			ΔHt.	47.311sft	0.032sft	0.020sft	1.04
			Dist.	50414.873sft	0.022sft	0.021sft	1.10
B18	26	21	Az.	220°06'31.6051"	0°00'00.2234"	-0°00'00.1155"	-0.61
			ΔHt.	20.927sft	0.026sft	0.022sft	1.06
			Dist.	21431.482sft	0.023sft	0.002sft	0.10
B144	10	7420	Az.	226°09'06.1825"	0°00'00.1986"	0°00'00.0973"	1.06
			ΔHt.	-8.012sft	0.040sft	-0.004sft	-0.20
			Dist.	34554.466sft	0.034sft	-0.004sft	-0.24
B24	9	5	Az.	315°54'48.8399"	0°00'00.2607"	-0°00'00.0357"	-0.19
			ΔHt.	-9.886sft	0.035sft	-0.028sft	-1.05
			Dist.	21695.746sft	0.026sft	0.005sft	0.28
B131	32	66	Az.	73°59'20.6142"	0°00'00.8911"	0°00'00.2702"	1.04
			ΔHt.	-42.333sft	0.038sft	0.000sft	0.03
			Dist.	8449.939sft	0.037sft	0.007sft	0.68
B211	11	2	Az.	276°43'23.7818"	0°00'00.1577"	-0°00'00.1394"	-1.03
			ΔHt.	-54.460sft	0.026sft	-0.010sft	-0.44
			Dist.	29917.407sft	0.022sft	-0.006sft	-0.31
B39	12	5002	Az.	57°00'32.4140"	0°00'00.3743"	0°00'00.1354"	0.80
			ΔHt.	-83.987sft	0.041sft	-0.021sft	-1.03
			Dist.	19332.605sft	0.035sft	0.008sft	0.53
B162	1	7420	Az.	165°29'40.1729"	0°00'00.2853"	-0°00'00.0428"	-0.33
			ΔHt.	14.129sft	0.040sft	0.001sft	0.07
			Dist.	23933.811sft	0.034sft	0.016sft	1.02
B130	65	40	Az.	53°13'33.0582"	0°00'00.6682"	-0°00'00.2890"	-1.02
			ΔHt.	-5.159sft	0.034sft	-0.009sft	-0.68

			Dist.	9980.269sft	0.033sft	0.012sft	0.89
B54	39	5005	Az.	189°02'49.5245"	0°00'00.3554"	-0°00'00.2293"	-1.02
			ΔHt.	32.469sft	0.036sft	0.002sft	0.09
			Dist.	16701.470sft	0.030sft	0.003sft	0.15
B43	30	26	Az.	306°02'18.7655"	0°00'00.1914"	-0°00'00.0020"	-0.02
			ΔHt.	12.298sft	0.028sft	0.020sft	1.02
			Dist.	27213.173sft	0.025sft	0.000sft	0.02
B183	10	1	Az.	268°35'30.7559"	0°00'00.1365"	0°00'00.1293"	0.99
			ΔHt.	-22.141sft	0.025sft	0.000sft	-0.01
			Dist.	30894.738sft	0.020sft	0.017sft	0.86
B198	11	6	Az.	235°52'42.3579"	0°00'00.2812"	0°00'00.2100"	0.98
			ΔHt.	-8.793sft	0.031sft	-0.007sft	-0.30
			Dist.	18344.747sft	0.025sft	0.010sft	0.54
B140	3	7	Az.	142°34'43.2417"	0°00'00.2968"	0°00'00.0206"	0.10
			ΔHt.	10.567sft	0.030sft	0.010sft	0.48
			Dist.	18003.342sft	0.026sft	-0.017sft	-0.96
B188	20	12	Az.	314°29'03.6023"	0°00'00.1045"	-0°00'00.0508"	-0.58
			ΔHt.	44.443sft	0.027sft	-0.022sft	-0.96
			Dist.	45091.383sft	0.023sft	-0.006sft	-0.30
B169	28	19	Az.	265°40'41.8690"	0°00'00.2199"	-0°00'00.1307"	-0.67
			ΔHt.	6.355sft	0.040sft	0.030sft	0.69
			Dist.	27887.223sft	0.030sft	-0.025sft	-0.94
B47	6010	41	Az.	178°38'02.2258"	0°00'01.5217"	-0°00'00.4101"	-0.92
			ΔHt.	-30.825sft	0.038sft	-0.001sft	-0.14
			Dist.	4943.194sft	0.037sft	0.009sft	0.83
B222	29	25	Az.	314°29'34.0926"	0°00'00.2672"	-0°00'00.1224"	-0.83
			ΔHt.	35.011sft	0.032sft	0.001sft	0.08
			Dist.	22416.040sft	0.029sft	-0.014sft	-0.92
B66	25	20	Az.	227°22'30.7046"	0°00'00.2263"	-0°00'00.0964"	-0.59
			ΔHt.	-34.422sft	0.029sft	0.006sft	0.28
			Dist.	23240.685sft	0.026sft	0.017sft	0.89

B45	36	31	Az.	223°34'36.2686"	0°00'00.2502"	-0°00'00.0852"	-0.54
			ΔHt.	25.861sft	0.030sft	0.017sft	0.89
			Dist.	22322.728sft	0.027sft	0.006sft	0.35
B49	5	4	Az.	176°27'49.5355"	0°00'00.1619"	-0°00'00.0515"	-0.40
			ΔHt.	6.944sft	0.036sft	0.002sft	0.08
			Dist.	31394.267sft	0.025sft	0.018sft	0.88
B7	5	6005	Az.	302°09'26.7518"	0°00'00.0722"	-0°00'00.0456"	-0.86
			ΔHt.	54.303sft	0.036sft	-0.007sft	-0.49
			Dist.	69527.510sft	0.024sft	0.012sft	0.64
B98	13	9	Az.	312°18'11.2441"	0°00'00.2286"	0°00'00.0823"	0.52
			ΔHt.	9.654sft	0.032sft	-0.018sft	-0.86
			Dist.	23725.237sft	0.025sft	0.008sft	0.43
B134	13	61	Az.	283°48'13.3035"	0°00'00.2461"	-0°00'00.1296"	-0.85
			ΔHt.	14.053sft	0.030sft	0.003sft	0.15
			Dist.	22868.789sft	0.027sft	-0.009sft	-0.54
B35	22	27	Az.	43°11'50.9774"	0°00'00.1950"	0°00'00.0216"	0.13
			ΔHt.	-24.996sft	0.025sft	-0.016sft	-0.83
			Dist.	23318.628sft	0.022sft	0.007sft	0.36
B46	41	36	Az.	235°17'10.8930"	0°00'00.3174"	-0°00'00.0313"	-0.19
			ΔHt.	53.114sft	0.033sft	0.014sft	0.82
			Dist.	19266.822sft	0.030sft	-0.002sft	-0.11
B9	5	1009	Az.	107°17'09.7191"	0°00'00.3449"	-0°00'00.0273"	-0.13
			ΔHt.	-9.377sft	0.034sft	-0.019sft	-0.78
			Dist.	16439.322sft	0.027sft	-0.007sft	-0.44
B41	30	25	Az.	233°36'50.2129"	0°00'00.2063"	0°00'00.0507"	0.38
			ΔHt.	33.920sft	0.029sft	-0.014sft	-0.77
			Dist.	26561.087sft	0.026sft	-0.001sft	-0.07
B52	21	12	Az.	270°47'50.2755"	0°00'00.1280"	-0°00'00.0358"	-0.29
			ΔHt.	10.716sft	0.027sft	0.023sft	0.76
			Dist.	34794.347sft	0.021sft	0.013sft	0.68
B48	23	22	Az.	174°55'08.6651"	0°00'00.1495"	0°00'00.0497"	0.45

			ΔHt.	13.588sft	0.027sft	0.013sft	0.76
			Dist.	32804.996sft	0.024sft	-0.003sft	-0.19
B203	37	33	Az.	285°42'58.9802"	0°00'00.3123"	-0°00'00.0622"	-0.35
			ΔHt.	-12.697sft	0.035sft	-0.002sft	-0.13
			Dist.	19488.088sft	0.029sft	0.012sft	0.72
B27	21	22	Az.	0°11'18.1790"	0°00'00.1394"	0°00'00.0750"	0.56
			ΔHt.	-37.881sft	0.024sft	-0.009sft	-0.30
			Dist.	29817.176sft	0.020sft	-0.015sft	-0.71
B176	28	24	Az.	296°57'02.3795"	0°00'00.3130"	-0°00'00.0514"	-0.26
			ΔHt.	36.348sft	0.031sft	0.011sft	0.68
			Dist.	17544.628sft	0.027sft	-0.008sft	-0.49
B73	14	23	Az.	90°15'31.1112"	0°00'00.1839"	0°00'00.0119"	0.11
			ΔHt.	-48.785sft	0.032sft	0.012sft	0.65
			Dist.	30534.282sft	0.027sft	-0.001sft	-0.03
B58	40	9869	Az.	77°13'00.3216"	0°00'00.2786"	-0°00'00.0248"	-0.20
			ΔHt.	-26.210sft	0.061sft	0.018sft	0.64
			Dist.	29667.096sft	0.041sft	-0.008sft	-0.45
B11	6006	6005	Az.	266°18'18.9227"	0°00'00.0326"	-0°00'00.0219"	-0.59
			ΔHt.	106.356sft	0.037sft	0.008sft	0.51
			Dist.	112190.469sft	0.018sft	0.012sft	0.63
B33	41	9869	Az.	118°49'50.9546"	0°00'00.2921"	-0°00'00.0219"	-0.17
			ΔHt.	46.286sft	0.062sft	-0.019sft	-0.62
			Dist.	30160.266sft	0.038sft	0.008sft	0.49
B202	38	37	Az.	184°55'05.9420"	0°00'00.3984"	-0°00'00.0831"	-0.42
			ΔHt.	-9.115sft	0.037sft	0.006sft	0.39
			Dist.	15887.863sft	0.033sft	0.010sft	0.61
B116	31	22	Az.	265°24'27.7920"	0°00'00.1668"	-0°00'00.0357"	-0.30
			ΔHt.	26.480sft	0.028sft	0.011sft	0.60
			Dist.	30810.362sft	0.025sft	-0.004sft	-0.21
B82	41	40	Az.	186°47'01.9498"	0°00'00.2760"	-0°00'00.0219"	-0.14
			ΔHt.	72.496sft	0.032sft	-0.010sft	-0.59

			Dist.	21254.094sft	0.029sft	0.006sft	0.35
B97	13	18	Az.	41°04'19.2330"	0°00'00.2308"	-0°00'00.0328"	-0.21
			ΔHt.	-4.155sft	0.031sft	0.011sft	0.56
			Dist.	22793.286sft	0.026sft	-0.001sft	-0.03
B158	24	29	Az.	55°50'49.2010"	0°00'00.3153"	0°00'00.0936"	0.54
			ΔHt.	-35.812sft	0.034sft	0.007sft	0.43
			Dist.	19093.315sft	0.029sft	0.001sft	0.04
B209	10	11	Az.	358°38'11.6123"	0°00'00.2293"	0°00'00.0276"	0.14
			ΔHt.	20.211sft	0.027sft	0.004sft	0.16
			Dist.	20134.446sft	0.023sft	-0.011sft	-0.53
B143	24	19	Az.	230°24'06.1542"	0°00'00.4241"	-0°00'00.1674"	-0.51
			ΔHt.	-29.993sft	0.040sft	0.008sft	0.25
			Dist.	15784.240sft	0.029sft	0.001sft	0.07
B95	66	9671	Az.	50°13'29.6508"	0°00'00.1654"	0°00'00.0320"	0.50
			ΔHt.	-126.639sft	0.041sft	0.001sft	0.08
			Dist.	43296.064sft	0.036sft	0.001sft	0.04
B14	6006	5	Az.	230°09'44.4698"	0°00'00.0645"	-0°00'00.0260"	-0.47
			ΔHt.	52.052sft	0.031sft	-0.002sft	-0.10
			Dist.	69254.180sft	0.022sft	0.004sft	0.22
B21	6010	9671	Az.	24°12'35.8006"	0°00'00.2413"	-0°00'00.0438"	-0.47
			ΔHt.	-111.012sft	0.041sft	0.001sft	0.08
			Dist.	29676.701sft	0.036sft	0.002sft	0.17
B70	40	36	Az.	307°14'32.0369"	0°00'00.3049"	0°00'00.0323"	0.15
			ΔHt.	-19.382sft	0.027sft	0.008sft	0.45
			Dist.	16741.839sft	0.025sft	0.002sft	0.14
B215	11	1	Az.	235°30'40.9062"	0°00'00.1085"	0°00'00.0053"	0.05
			ΔHt.	-42.351sft	0.023sft	0.002sft	0.09
			Dist.	36889.709sft	0.020sft	0.009sft	0.43
B114	30	5004	Az.	156°07'14.1440"	0°00'00.3345"	0°00'00.0732"	0.37
			ΔHt.	9.567sft	0.032sft	0.008sft	0.43
			Dist.	17140.884sft	0.029sft	-0.002sft	-0.09

B194	62	19	Az.	269°57'16.0692"	0°00'00.4745"	0°00'00.1164"	0.34
			ΔHt.	-30.873sft	0.044sft	-0.014sft	-0.36
			Dist.	14489.269sft	0.034sft	0.010sft	0.43
B218	28	62	Az.	261°02'55.4800"	0°00'00.4605"	-0°00'00.0392"	-0.17
			ΔHt.	37.228sft	0.034sft	-0.006sft	-0.41
			Dist.	13482.868sft	0.030sft	0.002sft	0.12
B36	18	22	Az.	138°21'56.7754"	0°00'00.2056"	-0°00'00.0018"	-0.01
			ΔHt.	-36.016sft	0.032sft	0.004sft	0.17
			Dist.	26214.657sft	0.026sft	-0.007sft	-0.41
B172	3	1	Az.	181°52'55.1998"	0°00'00.0870"	-0°00'00.0297"	-0.41
			ΔHt.	4.405sft	0.027sft	0.003sft	0.13
			Dist.	52979.736sft	0.023sft	0.001sft	0.07
B108	66	6010	Az.	88°18'44.5845"	0°00'00.3173"	0°00'00.0444"	0.31
			ΔHt.	-15.627sft	0.036sft	-0.001sft	-0.04
			Dist.	21138.659sft	0.032sft	0.006sft	0.39
B61	14	18	Az.	129°29'39.6772"	0°00'00.2651"	-0°00'00.0664"	-0.38
			ΔHt.	0.819sft	0.032sft	-0.008sft	-0.38
			Dist.	20800.126sft	0.026sft	-0.001sft	-0.03
B17	26	35	Az.	89°57'36.8117"	0°00'00.1710"	0°00'00.0336"	0.33
			ΔHt.	-43.320sft	0.031sft	0.007sft	0.38
			Dist.	33576.134sft	0.028sft	0.006sft	0.37
B32	27	31	Az.	134°32'32.5967"	0°00'00.2576"	-0°00'00.0135"	-0.07
			ΔHt.	-1.484sft	0.030sft	0.009sft	0.37
			Dist.	20676.512sft	0.026sft	0.002sft	0.09
B133	14	13	Az.	177°58'21.3873"	0°00'00.1466"	-0°00'00.0215"	-0.17
			ΔHt.	4.974sft	0.027sft	-0.003sft	-0.17
			Dist.	30432.150sft	0.022sft	0.007sft	0.37
B200	24	62	Az.	166°57'39.0319"	0°00'00.5998"	0°00'00.0277"	0.09
			ΔHt.	0.880sft	0.034sft	0.004sft	0.29
			Dist.	10313.931sft	0.030sft	-0.006sft	-0.37
B72	23	32	Az.	91°38'10.5004"	0°00'00.1651"	0°00'00.0279"	0.28

			ΔHt.	-3.083sft	0.032sft	0.001sft	0.06
			Dist.	35412.621sft	0.028sft	0.006sft	0.36
B109	23	5026	Az.	42°16'33.4747"	0°00'00.3039"	0°00'00.0301"	0.24
			ΔHt.	-47.944sft	0.038sft	-0.005sft	-0.34
			Dist.	22949.746sft	0.034sft	0.004sft	0.28
B23	23	18	Az.	227°57'41.8903"	0°00'00.2879"	0°00'00.0215"	0.12
			ΔHt.	49.604sft	0.033sft	-0.001sft	-0.04
			Dist.	19522.484sft	0.028sft	0.005sft	0.31
B93	27	22	Az.	223°14'06.7766"	0°00'00.1951"	-0°00'00.0239"	-0.14
			ΔHt.	24.996sft	0.025sft	-0.006sft	-0.24
			Dist.	23318.628sft	0.022sft	-0.006sft	-0.30
B132	5026	32	Az.	132°04'06.2074"	0°00'00.2618"	-0°00'00.0293"	-0.27
			ΔHt.	44.861sft	0.039sft	-0.001sft	-0.03
			Dist.	26872.045sft	0.034sft	0.003sft	0.24
B55	39	35	Az.	321°14'44.1596"	0°00'00.2941"	-0°00'00.0055"	-0.03
			ΔHt.	-7.271sft	0.032sft	-0.005sft	-0.25
			Dist.	19408.123sft	0.028sft	0.002sft	0.09
B60	27	32	Az.	48°28'24.7357"	0°00'00.2760"	0°00'00.0319"	0.21
			ΔHt.	8.325sft	0.033sft	0.000sft	-0.02
			Dist.	22098.965sft	0.030sft	-0.003sft	-0.21
B22	23	27	Az.	129°43'22.3018"	0°00'00.2114"	-0°00'00.0227"	-0.15
			ΔHt.	-11.408sft	0.028sft	0.000sft	0.01
			Dist.	24527.530sft	0.025sft	0.001sft	0.04
B67	39	34	Az.	221°48'28.5261"	0°00'00.3218"	0°00'00.0193"	0.12
			ΔHt.	36.779sft	0.034sft	0.001sft	0.08
			Dist.	19807.586sft	0.030sft	-0.002sft	-0.12
B105	22	26	Az.	134°24'17.4358"	0°00'00.2562"	0°00'00.0178"	0.09
			ΔHt.	16.953sft	0.026sft	0.002sft	0.12
			Dist.	19176.067sft	0.024sft	0.002sft	0.08

Geoid Observations

Number of Observations : 62

Number of Outliers : 0

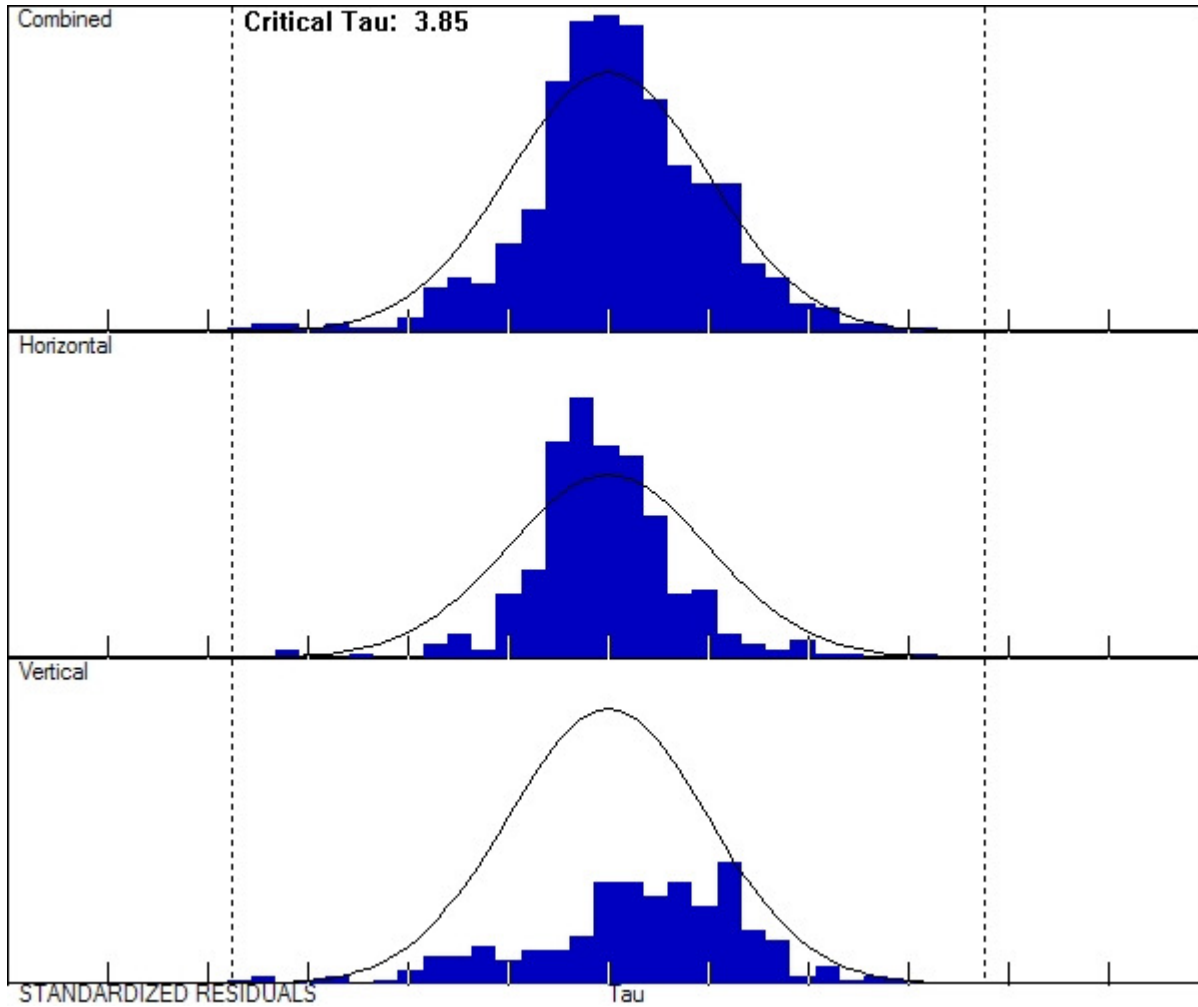
Observation Adjustment (Critical Tau = 3.85). Any outliers are in **red**.

Observation ID	Point Name	Separation	A-posteriori Error (1.96 σ)	Residual	Standardized Residual
G211	5026	-103.126sft	1.048sft	0.687sft	2.17
G204	32	-103.549sft	1.107sft	0.477sft	1.84
G176	6006	-103.086sft	1.130sft	0.426sft	1.84
G208	66	-103.674sft	1.123sft	0.432sft	1.80
G187	23	-103.229sft	1.074sft	0.468sft	1.60
G184	27	-103.461sft	1.070sft	0.445sft	1.50
G183	36	-103.800sft	1.107sft	0.381sft	1.48
G218	7420	-103.543sft	1.059sft	0.423sft	1.38
G185	6010	-104.037sft	1.145sft	0.286sft	1.35
G194	31	-103.685sft	1.060sft	0.403sft	1.32
G207	5004	-103.797sft	0.910sft	0.541sft	1.31
G195	41	-104.041sft	1.136sft	0.291sft	1.30
G210	65	-103.940sft	1.079sft	0.349sft	1.21
G223	29	-103.828sft	0.984sft	0.440sft	1.20
G216	19	-103.770sft	1.064sft	0.361sft	1.20
G193	30	-103.787sft	0.978sft	0.441sft	1.19
G230	62	-103.849sft	1.052sft	0.372sft	1.19
G215	24	-103.784sft	1.032sft	0.387sft	1.17
G180	34	-103.903sft	0.930sft	0.466sft	1.16
G217	10	-103.579sft	1.085sft	0.328sft	1.16
G203	40	-104.039sft	1.095sft	0.314sft	1.16
G226	28	-103.945sft	1.033sft	0.376sft	1.14
G225	1	-103.506sft	1.113sft	0.286sft	1.14
G182	35	-103.932sft	1.036sft	0.369sft	1.13

G178	25	-103.686sft	0.986sft	0.399sft	1.10
G222	15	-103.637sft	1.063sft	0.321sft	1.06
G232	33	-104.049sft	0.995sft	0.378sft	1.05
G202	63	-103.669sft	0.986sft	0.373sft	1.02
G200	20	-103.675sft	1.029sft	0.339sft	1.02
G181	26	-103.627sft	1.008sft	0.354sft	1.02
G221	6	-103.518sft	1.099sft	0.267sft	1.00
G188	18	-103.291sft	1.062sft	0.290sft	0.96
G192	22	-103.507sft	1.021sft	0.307sft	0.91
G201	39	-104.167sft	1.007sft	0.306sft	0.88
G227	64	-104.232sft	0.970sft	0.319sft	0.85
G229	11	-103.546sft	1.070sft	0.251sft	0.85
G228	5025	-103.192sft	1.173sft	-0.138sft	-0.82
G213	37	-104.332sft	0.965sft	0.306sft	0.81
G177	21	-103.638sft	0.977sft	0.281sft	0.76
G172	14	-103.166sft	1.074sft	0.222sft	0.76
G219	2	-103.480sft	1.127sft	0.166sft	0.71
G233	16	-103.603sft	1.009sft	0.241sft	0.69
G231	38	-104.350sft	0.951sft	0.265sft	0.68
G179	5005	-104.234sft	0.931sft	0.256sft	0.64
G186	9671	-104.322sft	1.158sft	0.120sft	0.63
G196	9869	-104.500sft	1.065sft	0.182sft	0.61
G212	7	-103.480sft	1.093sft	0.134sft	0.49
G224	6002	-105.212sft	1.084sft	0.132sft	0.47
G209	13	-103.360sft	1.040sft	0.130sft	0.40
G206	17	-103.567sft	0.948sft	0.136sft	0.35
G198	12	-103.512sft	1.020sft	0.117sft	0.34
G220	6003	-103.413sft	1.187sft	0.038sft	0.27
G173	1009	-103.144sft	1.045sft	0.085sft	0.27
G199	5002	-103.610sft	0.915sft	0.105sft	0.26
G189	9	-103.167sft	1.069sft	0.076sft	0.26

G190	3	-103.388sft	1.118sft	0.060sft	0.24
G191	6004	-103.385sft	1.062sft	0.070sft	0.23
G214	6001	-104.587sft	1.157sft	0.043sft	0.22
G174	5	-103.012sft	1.100sft	0.059sft	0.22
G205	61	-103.195sft	1.088sft	0.051sft	0.18
G175	6005	-102.397sft	1.184sft	0.014sft	0.10
G197	4	-103.196sft	1.111sft	0.023sft	0.09

Histograms of Standardized Residuals



Point Error Ellipses

14	1009	5
72° 	80° 	60°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
6005	6006	21
0° 	0° 	84°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
25	5005	34
87° 	-81° 	-80°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
26	35	36
-80° 	-74° 	-73°
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

27	6010	9671
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
23	18	9
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
3	6004	22
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
30	31	41
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

9869	4	12
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
5002	20	39
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
63	40	32
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
61	17	5004
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

66	13	65
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
5026	7	37
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
6001	24	19
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
10	7420	2
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

6003	6	15
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
29	6002	1
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
28	64	5025
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		
11	62	38
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

33	16	
Tick Size: 0.0100sft Horizontal Bivariate Scalar: 2.45σ Vertical Univariate Scalar: 1.96σ		

Covariant Terms

Adjustment performed in **NAD 1983 (NSRS2007) (Conus)**

From Point	To Point		Components	A-posteriori Error (1.96σ)	Horiz. Precision (Ratio)	3D Precision (Ratio)
14	1009	Az.	256°40'41.0744"	0°00'00.3529"	1:589342	1:589342
		ΔHt.	-4.627sft	0.103sft		
		ΔElev.	-4.649sft	0.330sft		
		Dist.	16303.495sft	0.028sft		
14	5	Az.	272°05'04.6662"	0°00'00.1386"	1:1513437	1:1513437
		ΔHt.	4.758sft	0.190sft		
		ΔElev.	4.604sft	0.487sft		
		Dist.	31576.105sft	0.021sft		
14	6006	Az.	25°20'50.0561"	0°00'00.0838"	1:2403414	1:2403414
		ΔHt.	-47.328sft	0.313sft		
		ΔElev.	-47.408sft	0.577sft		
		Dist.	50414.874sft	0.021sft		
14	23	Az.	90°15'31.1463"	0°00'00.1853"	1:1117045	1:1117045
		ΔHt.	-48.801sft	0.185sft		
		ΔElev.	-48.738sft	0.403sft		
		Dist.	30534.283sft	0.027sft		
14	18	Az.	129°29'39.7122"	0°00'00.2637"	1:794982	1:794982

		ΔHt.	0.812sft	0.129sft		
		ΔElev.	0.937sft	0.379sft		
		Dist.	20800.127sft	0.026sft		
14	9	Az.	228°44'54.9347"	0°00'00.2385"	1:826133	1:826133
		ΔHt.	14.638sft	0.138sft		
		ΔElev.	14.639sft	0.409sft		
		Dist.	21908.273sft	0.027sft		
14	13	Az.	177°58'21.4222"	0°00'00.1431"	1:1430215	1:1430215
		ΔHt.	4.977sft	0.189sft		
		ΔElev.	5.172sft	0.430sft		
		Dist.	30432.151sft	0.021sft		
1009	5	Az.	287°19'23.5345"	0°00'00.3441"	1:606043	1:606043
		ΔHt.	9.385sft	0.104sft		
		ΔElev.	9.253sft	0.370sft		
		Dist.	16439.322sft	0.027sft		
1009	6006	Az.	37°10'19.3468"	0°00'00.0913"	1:2240161	1:2240161
		ΔHt.	-42.702sft	0.383sft		
		ΔElev.	-42.759sft	0.534sft		
		Dist.	61924.104sft	0.028sft		
5	6005	Az.	302°09'26.7870"	0°00'00.0615"	1:3417211	1:3417211
		ΔHt.	54.330sft	0.417sft		
		ΔElev.	53.716sft	0.800sft		
		Dist.	69527.511sft	0.020sft		
5	6006	Az.	50°02'10.5729"	0°00'00.0606"	1:3343523	1:3343523
		ΔHt.	-52.087sft	0.425sft		
		ΔElev.	-52.012sft	0.590sft		
		Dist.	69254.182sft	0.021sft		
5	9	Az.	135°52'40.2387"	0°00'00.2588"	1:844361	1:844361
		ΔHt.	9.880sft	0.135sft		
		ΔElev.	10.036sft	0.431sft		
		Dist.	21695.746sft	0.026sft		

5	4	Az.	176°27'49.5705"	0°00'00.1568"	1:1300144	1:1300144
		ΔHt.	6.947sft	0.197sft		
		ΔElev.	7.131sft	0.478sft		
		Dist.	31394.268sft	0.024sft		
6005	6006	Az.	86°02'20.8336"	0°00'00.0000"	1:0	1:0
		ΔHt.	-106.417sft	0.673sft		
		ΔElev.	-105.728sft	0.851sft		
		Dist.	112190.472sft	0.000sft		
21	25	Az.	136°43'40.1181"	0°00'00.2424"	1:855910	1:855910
		ΔHt.	0.689sft	0.130sft		
		ΔElev.	0.737sft	0.374sft		
		Dist.	21105.303sft	0.025sft		
21	26	Az.	40°04'34.5964"	0°00'00.2243"	1:924726	1:924726
		ΔHt.	-20.937sft	0.134sft		
		ΔElev.	-20.948sft	0.404sft		
		Dist.	21431.483sft	0.023sft		
21	22	Az.	0°11'18.2142"	0°00'00.1403"	1:1443553	1:1443553
		ΔHt.	-37.884sft	0.186sft		
		ΔElev.	-38.015sft	0.459sft		
		Dist.	29817.177sft	0.021sft		
21	30	Az.	89°19'35.0862"	0°00'00.1423"	1:1493074	1:1493074
		ΔHt.	-33.245sft	0.216sft		
		ΔElev.	-33.095sft	0.426sft		
		Dist.	35828.910sft	0.024sft		
21	12	Az.	270°47'50.3106"	0°00'00.1288"	1:1672511	1:1672511
		ΔHt.	10.735sft	0.209sft		
		ΔElev.	10.609sft	0.489sft		
		Dist.	34794.348sft	0.021sft		
21	20	Az.	184°49'15.4727"	0°00'00.1386"	1:1430486	1:1430486
		ΔHt.	-33.722sft	0.195sft		
		ΔElev.	-33.684sft	0.466sft		

		Dist.	31225.969sft	0.022sft		
21	63	Az.	87°57'47.7918"	0°00'00.4620"	1:444076	1:444076
		ΔHt.	-81.386sft	0.093sft		
		ΔElev.	-81.354sft	0.328sft		
		Dist.	14512.803sft	0.033sft		
21	17	Az.	313°24'24.1848"	0°00'00.2310"	1:907986	1:907986
		ΔHt.	-16.048sft	0.147sft		
		ΔElev.	-16.119sft	0.401sft		
		Dist.	23838.501sft	0.026sft		
25	30	Az.	53°33'49.2570"	0°00'00.2080"	1:1002270	1:1002270
		ΔHt.	-33.933sft	0.165sft		
		ΔElev.	-33.832sft	0.437sft		
		Dist.	26561.088sft	0.027sft		
25	20	Az.	227°22'30.7396"	0°00'00.2261"	1:906725	1:906725
		ΔHt.	-34.410sft	0.145sft		
		ΔElev.	-34.420sft	0.416sft		
		Dist.	23240.685sft	0.026sft		
25	5004	Az.	89°46'54.3880"	0°00'00.2254"	1:973015	1:973015
		ΔHt.	-24.368sft	0.172sft		
		ΔElev.	-24.257sft	0.393sft		
		Dist.	28321.662sft	0.029sft		
25	29	Az.	134°27'18.8992"	0°00'00.2674"	1:775042	1:775042
		ΔHt.	-35.018sft	0.138sft		
		ΔElev.	-34.875sft	0.398sft		
		Dist.	22416.041sft	0.029sft		
5005	34	Az.	279°16'44.4814"	0°00'00.5777"	1:366267	1:366267
		ΔHt.	4.315sft	0.072sft		
		ΔElev.	3.985sft	0.168sft		
		Dist.	10718.640sft	0.029sft		
5005	39	Az.	9°02'27.3292"	0°00'00.3555"	1:556125	1:556125
		ΔHt.	-32.473sft	0.109sft		

		ΔElev.	-32.539sft	0.332sft		
		Dist.	16701.470sft	0.030sft		
5005	5004	Az.	269°49'05.9442"	0°00'00.4276"	1:506580	1:506580
		ΔHt.	0.857sft	0.091sft		
		ΔElev.	0.420sft	0.000sft		
		Dist.	14186.003sft	0.028sft		
5005	6002	Az.	108°55'21.9488"	0°00'00.1055"	1:2064288	1:2064288
		ΔHt.	-39.819sft	0.348sft		
		ΔElev.	-38.840sft	0.000sft		
		Dist.	58059.808sft	0.028sft		
5005	38	Az.	157°16'09.2167"	0°00'00.3888"	1:481906	1:481906
		ΔHt.	-14.096sft	0.113sft		
		ΔElev.	-13.980sft	0.000sft		
		Dist.	17195.847sft	0.036sft		
34	39	Az.	41°46'36.7768"	0°00'00.3241"	1:650174	1:650174
		ΔHt.	-36.788sft	0.126sft		
		ΔElev.	-36.524sft	0.349sft		
		Dist.	19807.586sft	0.030sft		
34	5004	Az.	243°47'55.6767"	0°00'01.5920"	1:134828	1:134828
		ΔHt.	-3.458sft	0.041sft		
		ΔElev.	-3.565sft	0.168sft		
		Dist.	4019.817sft	0.030sft		
26	35	Az.	89°57'36.8467"	0°00'00.1724"	1:1202948	1:1202948
		ΔHt.	-43.338sft	0.203sft		
		ΔElev.	-43.033sft	0.455sft		
		Dist.	33576.135sft	0.028sft		
26	22	Az.	314°26'13.7787"	0°00'00.2554"	1:802209	1:802209
		ΔHt.	-16.948sft	0.118sft		
		ΔElev.	-17.067sft	0.379sft		
		Dist.	19176.068sft	0.024sft		
26	30	Az.	125°59'12.1328"	0°00'00.1918"	1:1072411	1:1072411

		ΔHt.	-12.308sft	0.165sft		
		ΔElev.	-12.148sft	0.403sft		
		Dist.	27213.174sft	0.025sft		
26	31	Az.	46°55'09.8538"	0°00'00.2441"	1:855309	1:855309
		ΔHt.	-43.444sft	0.146sft		
		ΔElev.	-43.386sft	0.409sft		
		Dist.	23299.279sft	0.027sft		
26	63	Az.	177°29'16.0706"	0°00'00.4242"	1:488787	1:488787
		ΔHt.	-60.449sft	0.104sft		
		ΔElev.	-60.407sft	0.357sft		
		Dist.	15899.005sft	0.033sft		
35	30	Az.	215°53'44.6649"	0°00'00.2841"	1:731287	1:731287
		ΔHt.	31.030sft	0.125sft		
		ΔElev.	30.886sft	0.377sft		
		Dist.	19748.185sft	0.027sft		
35	39	Az.	141°13'01.1319"	0°00'00.2938"	1:692265	1:692265
		ΔHt.	7.266sft	0.121sft		
		ΔElev.	7.502sft	0.376sft		
		Dist.	19408.123sft	0.028sft		
35	40	Az.	29°01'30.6345"	0°00'00.2446"	1:852901	1:852901
		ΔHt.	-6.601sft	0.159sft		
		ΔElev.	-6.494sft	0.405sft		
		Dist.	25113.444sft	0.029sft		
36	27	Az.	266°51'45.6613"	0°00'00.1979"	1:1055481	1:1055481
		ΔHt.	27.361sft	0.183sft		
		ΔElev.	27.022sft	0.447sft		
		Dist.	30151.598sft	0.029sft		
36	31	Az.	223°34'36.3036"	0°00'00.2521"	1:821632	1:821632
		ΔHt.	25.871sft	0.140sft		
		ΔElev.	25.756sft	0.403sft		
		Dist.	22322.729sft	0.027sft		

36	41	Az.	55°14'56.0616"	0°00'00.3188"	1:636788	1:636788
		ΔHt.	-53.124sft	0.122sft		
		ΔElev.	-52.883sft	0.378sft		
		Dist.	19266.822sft	0.030sft		
36	40	Az.	127°12'38.6426"	0°00'00.3054"	1:680795	1:680795
		ΔHt.	19.376sft	0.104sft		
		ΔElev.	19.615sft	0.356sft		
		Dist.	16741.839sft	0.025sft		
36	65	Az.	161°38'59.5696"	0°00'00.3996"	1:519027	1:519027
		ΔHt.	24.540sft	0.110sft		
		ΔElev.	24.679sft	0.361sft		
		Dist.	16963.770sft	0.033sft		
27	23	Az.	309°46'02.9813"	0°00'00.2118"	1:974712	1:974712
		ΔHt.	11.416sft	0.150sft		
		ΔElev.	11.184sft	0.425sft		
		Dist.	24527.531sft	0.025sft		
27	22	Az.	223°14'06.8116"	0°00'00.1972"	1:1051841	1:1051841
		ΔHt.	25.006sft	0.145sft		
		ΔElev.	25.053sft	0.394sft		
		Dist.	23318.628sft	0.022sft		
27	31	Az.	134°32'32.6317"	0°00'00.2582"	1:790219	1:790219
		ΔHt.	-1.490sft	0.128sft		
		ΔElev.	-1.266sft	0.388sft		
		Dist.	20676.512sft	0.026sft		
27	32	Az.	48°28'24.7708"	0°00'00.2775"	1:742906	1:742906
		ΔHt.	8.314sft	0.139sft		
		ΔElev.	8.402sft	0.404sft		
		Dist.	22098.965sft	0.030sft		
6010	9671	Az.	24°12'35.8357"	0°00'00.2434"	1:813444	1:813444
		ΔHt.	-111.022sft	0.188sft		
		ΔElev.	-110.738sft	0.377sft		

		Dist.	29676.702sft	0.036sft		
6010	41	Az.	178°38'02.2609"	0°00'01.5215"	1:135249	1:135249
		ΔHt.	-30.824sft	0.048sft		
		ΔElev.	-30.820sft	0.209sft		
		Dist.	4943.194sft	0.037sft		
6010	66	Az.	268°21'44.7700"	0°00'00.3186"	1:651713	1:651713
		ΔHt.	15.638sft	0.131sft		
		ΔElev.	15.275sft	0.381sft		
		Dist.	21138.659sft	0.032sft		
9671	66	Az.	230°18'13.9257"	0°00'00.1687"	1:1173129	1:1173129
		ΔHt.	126.660sft	0.268sft		
		ΔElev.	126.012sft	0.400sft		
		Dist.	43296.065sft	0.037sft		
23	18	Az.	227°57'41.9253"	0°00'00.2896"	1:701480	1:701480
		ΔHt.	49.613sft	0.124sft		
		ΔElev.	49.675sft	0.364sft		
		Dist.	19522.485sft	0.028sft		
23	22	Az.	174°55'08.7001"	0°00'00.1505"	1:1365140	1:1365140
		ΔHt.	13.590sft	0.204sft		
		ΔElev.	13.869sft	0.433sft		
		Dist.	32804.996sft	0.024sft		
23	32	Az.	91°38'10.5355"	0°00'00.1677"	1:1241326	1:1241326
		ΔHt.	-3.102sft	0.214sft		
		ΔElev.	-2.782sft	0.483sft		
		Dist.	35412.621sft	0.029sft		
23	5026	Az.	42°16'33.5098"	0°00'00.3058"	1:673120	1:673120
		ΔHt.	-47.954sft	0.146sft		
		ΔElev.	-48.057sft	0.365sft		
		Dist.	22949.747sft	0.034sft		
18	22	Az.	138°21'56.8104"	0°00'00.2052"	1:1019897	1:1019897
		ΔHt.	-36.023sft	0.161sft		

		ΔElev.	-35.806sft	0.421sft		
		Dist.	26214.657sft	0.026sft		
18	13	Az.	221°06'26.7050"	0°00'00.2315"	1:877602	1:877602
		ΔHt.	4.165sft	0.144sft		
		ΔElev.	4.235sft	0.406sft		
		Dist.	22793.287sft	0.026sft		
9	4	Az.	219°54'55.6546"	0°00'00.2584"	1:752407	1:752407
		ΔHt.	-2.933sft	0.131sft		
		ΔElev.	-2.905sft	0.382sft		
		Dist.	20537.154sft	0.027sft		
9	13	Az.	132°15'41.9703"	0°00'00.2282"	1:948620	1:948620
		ΔHt.	-9.661sft	0.146sft		
		ΔElev.	-9.468sft	0.369sft		
		Dist.	23725.237sft	0.025sft		
3	6004	Az.	47°05'22.4140"	0°00'00.1922"	1:1022384	1:1022384
		ΔHt.	49.074sft	0.143sft		
		ΔElev.	49.070sft	0.407sft		
		Dist.	22672.428sft	0.022sft		
3	4	Az.	358°51'53.4096"	0°00'00.1671"	1:1205510	1:1205510
		ΔHt.	42.748sft	0.197sft		
		ΔElev.	42.556sft	0.463sft		
		Dist.	31510.976sft	0.026sft		
3	12	Az.	90°57'33.9931"	0°00'00.1778"	1:1194589	1:1194589
		ΔHt.	44.452sft	0.168sft		
		ΔElev.	44.576sft	0.428sft		
		Dist.	27709.292sft	0.023sft		
3	7	Az.	142°34'43.2767"	0°00'00.2976"	1:700623	1:700623
		ΔHt.	10.563sft	0.113sft		
		ΔElev.	10.654sft	0.378sft		
		Dist.	18003.343sft	0.026sft		
3	2	Az.	182°09'15.1247"	0°00'00.1515"	1:1332909	1:1332909

		ΔHt.	-7.699sft	0.178sft		
		ΔElev.	-7.607sft	0.451sft		
		Dist.	28579.480sft	0.021sft		
3	1	Az.	181°52'55.2347"	0°00'00.0906"	1:2231666	1:2231666
		ΔHt.	4.413sft	0.328sft		
		ΔElev.	4.531sft	0.517sft		
		Dist.	52979.737sft	0.024sft		
3	5025	Az.	271°42'23.2212"	0°00'00.1564"	1:1376385	1:1376385
		ΔHt.	-38.037sft	0.338sft		
		ΔElev.	-38.234sft	0.451sft		
		Dist.	55522.076sft	0.040sft		
6004	4	Az.	313°02'27.0632"	0°00'00.1938"	1:1115151	1:1115151
		ΔHt.	-6.325sft	0.145sft		
		ΔElev.	-6.514sft	0.404sft		
		Dist.	23559.670sft	0.021sft		
6004	61	Az.	337°48'37.6637"	0°00'00.2466"	1:840209	1:840209
		ΔHt.	1.011sft	0.144sft		
		ΔElev.	0.821sft	0.389sft		
		Dist.	23019.919sft	0.027sft		
6004	13	Az.	40°25'15.9856"	0°00'00.1916"	1:1054665	1:1054665
		ΔHt.	-13.053sft	0.131sft		
		ΔElev.	-13.077sft	0.404sft		
		Dist.	20847.271sft	0.020sft		
22	31	Az.	85°20'06.8319"	0°00'00.1686"	1:1233663	1:1233663
		ΔHt.	-26.497sft	0.187sft		
		ΔElev.	-26.319sft	0.446sft		
		Dist.	30810.362sft	0.025sft		
22	17	Az.	232°21'07.9082"	0°00'00.2486"	1:825555	1:825555
		ΔHt.	21.837sft	0.138sft		
		ΔElev.	21.896sft	0.378sft		
		Dist.	21996.790sft	0.027sft		

22	13	Az.	274°18'35.8874"	0°00'00.1434"	1:1456490	1:1456490
		ΔHt.	40.188sft	0.196sft		
		ΔElev.	40.041sft	0.467sft		
		Dist.	32492.407sft	0.022sft		
30	39	Az.	87°52'36.7511"	0°00'00.2301"	1:913763	1:913763
		ΔHt.	-23.764sft	0.145sft		
		ΔElev.	-23.384sft	0.395sft		
		Dist.	23751.208sft	0.026sft		
30	5004	Az.	156°07'14.1790"	0°00'00.3336"	1:591742	1:591742
		ΔHt.	9.565sft	0.109sft		
		ΔElev.	9.575sft	0.340sft		
		Dist.	17140.884sft	0.029sft		
31	40	Az.	78°04'25.9739"	0°00'00.1901"	1:1097734	1:1097734
		ΔHt.	-6.495sft	0.179sft		
		ΔElev.	-6.141sft	0.438sft		
		Dist.	29350.807sft	0.027sft		
41	9869	Az.	118°49'50.9896"	0°00'00.2936"	1:783974	1:783974
		ΔHt.	46.274sft	0.190sft		
		ΔElev.	46.733sft	0.383sft		
		Dist.	30160.267sft	0.038sft		
41	40	Az.	186°47'01.9848"	0°00'00.2774"	1:731901	1:731901
		ΔHt.	72.500sft	0.135sft		
		ΔElev.	72.498sft	0.393sft		
		Dist.	21254.095sft	0.029sft		
9869	40	Az.	257°17'06.5247"	0°00'00.2807"	1:721393	1:721393
		ΔHt.	26.226sft	0.188sft		
		ΔElev.	25.765sft	0.403sft		
		Dist.	29667.097sft	0.041sft		
4	61	Az.	58°24'20.6932"	0°00'00.5653"	1:360560	1:360560
		ΔHt.	7.337sft	0.068sft		
		ΔElev.	7.336sft	0.289sft		

		Dist.	10004.117sft	0.028sft		
4	13	Az.	90°20'55.6455"	0°00'00.1416"	1:1483810	1:1483810
		ΔHt.	-6.728sft	0.185sft		
		ΔElev.	-6.563sft	0.458sft		
		Dist.	30737.078sft	0.021sft		
12	5002	Az.	57°00'32.4491"	0°00'00.3748"	1:555148	1:555148
		ΔHt.	-83.997sft	0.124sft		
		ΔElev.	-83.899sft	0.368sft		
		Dist.	19332.605sft	0.035sft		
12	20	Az.	134°24'31.2799"	0°00'00.1067"	1:1957646	1:1957646
		ΔHt.	-44.457sft	0.272sft		
		ΔElev.	-44.293sft	0.519sft		
		Dist.	45091.384sft	0.023sft		
12	13	Az.	4°23'46.0886"	0°00'00.1491"	1:1347828	1:1347828
		ΔHt.	-8.431sft	0.199sft		
		ΔElev.	-8.583sft	0.462sft		
		Dist.	31871.848sft	0.024sft		
12	7	Az.	230°32'13.4908"	0°00'00.2501"	1:818228	1:818228
		ΔHt.	-33.890sft	0.137sft		
		ΔElev.	-33.922sft	0.393sft		
		Dist.	21736.062sft	0.027sft		
12	11	Az.	178°21'59.0706"	0°00'00.1505"	1:1330346	1:1330346
		ΔHt.	2.293sft	0.197sft		
		ΔElev.	2.327sft	0.453sft		
		Dist.	31576.852sft	0.024sft		
5002	17	Az.	12°55'29.9982"	0°00'01.2447"	1:161173	1:161173
		ΔHt.	57.215sft	0.050sft		
		ΔElev.	57.172sft	0.216sft		
		Dist.	5534.614sft	0.034sft		
20	19	Az.	166°02'42.5935"	0°00'00.2680"	1:760241	1:760241
		ΔHt.	5.229sft	0.135sft		

		ΔElev.	5.324sft	0.407sft		
		Dist.	21367.892sft	0.028sft		
20	15	Az.	234°26'06.0498"	0°00'00.3693"	1:550500	1:550500
		ΔHt.	9.016sft	0.117sft		
		ΔElev.	8.977sft	0.376sft		
		Dist.	18250.281sft	0.033sft		
20	29	Az.	89°53'30.3639"	0°00'00.1669"	1:1248566	1:1248566
		ΔHt.	-0.608sft	0.200sft		
		ΔElev.	-0.455sft	0.452sft		
		Dist.	33101.129sft	0.027sft		
20	11	Az.	270°03'24.1337"	0°00'00.1507"	1:1386222	1:1386222
		ΔHt.	46.749sft	0.189sft		
		ΔElev.	46.620sft	0.470sft		
		Dist.	31311.584sft	0.023sft		
20	16	Az.	319°50'41.3559"	0°00'00.3243"	1:630137	1:630137
		ΔHt.	32.016sft	0.129sft		
		ΔElev.	31.943sft	0.391sft		
		Dist.	20648.456sft	0.033sft		
39	40	Az.	0°04'19.7790"	0°00'00.1641"	1:1240009	1:1240009
		ΔHt.	-13.867sft	0.231sft		
		ΔElev.	-13.996sft	0.440sft		
		Dist.	37088.461sft	0.030sft		
40	65	Az.	233°14'41.0705"	0°00'00.6690"	1:305536	1:305536
		ΔHt.	5.164sft	0.070sft		
		ΔElev.	5.065sft	0.286sft		
		Dist.	9980.270sft	0.033sft		
32	66	Az.	73°59'20.6493"	0°00'00.8914"	1:231163	1:231163
		ΔHt.	-42.337sft	0.063sft		
		ΔElev.	-42.213sft	0.266sft		
		Dist.	8449.939sft	0.037sft		
32	5026	Az.	312°06'56.3615"	0°00'00.2632"	1:785537	1:785537

		ΔHt.	-44.852sft	0.166sft		
		ΔElev.	-45.275sft	0.392sft		
		Dist.	26872.045sft	0.034sft		
61	13	Az.	103°45'04.5037"	0°00'00.2475"	1:845744	1:845744
		ΔHt.	-14.064sft	0.140sft		
		ΔElev.	-13.899sft	0.400sft		
		Dist.	22868.789sft	0.027sft		
17	13	Az.	316°37'03.8274"	0°00'00.2559"	1:813120	1:813120
		ΔHt.	18.351sft	0.135sft		
		ΔElev.	18.145sft	0.360sft		
		Dist.	21831.552sft	0.027sft		
7	2	Az.	220°08'17.5488"	0°00'00.2837"	1:712163	1:712163
		ΔHt.	-18.262sft	0.119sft		
		ΔElev.	-18.261sft	0.378sft		
		Dist.	18647.473sft	0.026sft		
7	11	Az.	135°04'12.9307"	0°00'00.2150"	1:969549	1:969549
		ΔHt.	36.182sft	0.153sft		
		ΔElev.	36.249sft	0.438sft		
		Dist.	25053.010sft	0.026sft		
37	6001	Az.	172°53'58.4137"	0°00'00.1095"	1:1851492	1:1851492
		ΔHt.	9.955sft	0.435sft		
		ΔElev.	10.210sft	0.000sft		
		Dist.	70443.060sft	0.038sft		
37	6002	Az.	75°29'07.5287"	0°00'00.1066"	1:2072683	1:2072683
		ΔHt.	-16.611sft	0.310sft		
		ΔElev.	-15.730sft	0.000sft		
		Dist.	51274.671sft	0.025sft		
37	64	Az.	333°21'41.6623"	0°00'00.5880"	1:336685	1:336685
		ΔHt.	37.732sft	0.082sft		
		ΔElev.	37.632sft	0.226sft		
		Dist.	11819.800sft	0.035sft		

37	38	Az.	4°54'54.4824"	0°00'00.3993"	1:483665	1:483665
		ΔHt.	9.112sft	0.105sft		
		ΔElev.	9.130sft	0.000sft		
		Dist.	15887.863sft	0.033sft		
37	33	Az.	285°42'59.0153"	0°00'00.3076"	1:677641	1:677641
		ΔHt.	-12.688sft	0.121sft		
		ΔElev.	-12.970sft	0.332sft		
		Dist.	19488.088sft	0.029sft		
6001	28	Az.	328°46'24.2403"	0°00'00.1007"	1:2016034	1:2016034
		ΔHt.	2.927sft	0.478sft		
		ΔElev.	2.285sft	0.419sft		
		Dist.	78495.330sft	0.039sft		
24	19	Az.	230°24'06.1893"	0°00'00.4233"	1:548453	1:548453
		ΔHt.	-29.986sft	0.104sft		
		ΔElev.	-29.999sft	0.355sft		
		Dist.	15784.241sft	0.029sft		
24	29	Az.	55°50'49.2361"	0°00'00.3166"	1:662566	1:662566
		ΔHt.	-35.822sft	0.121sft		
		ΔElev.	-35.777sft	0.379sft		
		Dist.	19093.315sft	0.029sft		
24	28	Az.	116°54'50.4637"	0°00'00.3130"	1:645075	1:645075
		ΔHt.	-36.355sft	0.109sft		
		ΔElev.	-36.194sft	0.368sft		
		Dist.	17544.628sft	0.027sft		
24	62	Az.	166°57'39.0669"	0°00'00.6007"	1:339467	1:339467
		ΔHt.	0.880sft	0.072sft		
		ΔElev.	0.945sft	0.296sft		
		Dist.	10313.932sft	0.030sft		
19	10	Az.	271°01'42.4333"	0°00'00.1723"	1:1206981	1:1206981
		ΔHt.	21.313sft	0.217sft		
		ΔElev.	21.122sft	0.487sft		

		Dist.	36016.573sft	0.030sft		
19	28	Az.	85°36'47.4462"	0°00'00.2179"	1:949603	1:949603
		ΔHt.	-6.370sft	0.171sft		
		ΔElev.	-6.195sft	0.441sft		
		Dist.	27887.223sft	0.029sft		
19	62	Az.	89°55'13.9477"	0°00'00.4732"	1:430823	1:430823
		ΔHt.	30.865sft	0.097sft		
		ΔElev.	30.944sft	0.343sft		
		Dist.	14489.269sft	0.034sft		
10	7420	Az.	226°09'06.2175"	0°00'00.2004"	1:1020345	1:1020345
		ΔHt.	-7.996sft	0.215sft		
		ΔElev.	-8.032sft	0.443sft		
		Dist.	34554.467sft	0.034sft		
10	6	Az.	302°07'46.7297"	0°00'00.2659"	1:802541	1:802541
		ΔHt.	11.425sft	0.114sft		
		ΔElev.	11.363sft	0.391sft		
		Dist.	18499.178sft	0.023sft		
10	15	Az.	59°17'26.1794"	0°00'00.3623"	1:562284	1:562284
		ΔHt.	-17.526sft	0.118sft		
		ΔElev.	-17.468sft	0.376sft		
		Dist.	18609.785sft	0.033sft		
10	1	Az.	268°35'30.7910"	0°00'00.1371"	1:1523959	1:1523959
		ΔHt.	-22.124sft	0.186sft		
		ΔElev.	-22.197sft	0.482sft		
		Dist.	30894.738sft	0.020sft		
10	11	Az.	358°38'11.6474"	0°00'00.2309"	1:877350	1:877350
		ΔHt.	20.208sft	0.127sft		
		ΔElev.	20.175sft	0.388sft		
		Dist.	20134.446sft	0.023sft		
7420	1	Az.	345°30'30.6675"	0°00'00.2868"	1:707043	1:707043
		ΔHt.	-14.128sft	0.152sft		

		ΔElev.	-14.166sft	0.398sft		
		Dist.	23933.812sft	0.034sft		
2	6003	Az.	260°29'53.0541"	0°00'00.0884"	1:2352020	1:2352020
		ΔHt.	33.974sft	0.335sft		
		ΔElev.	33.906sft	0.625sft		
		Dist.	55351.240sft	0.024sft		
2	1	Az.	181°33'38.4588"	0°00'00.1775"	1:1141101	1:1141101
		ΔHt.	12.112sft	0.153sft		
		ΔElev.	12.138sft	0.412sft		
		Dist.	24400.957sft	0.021sft		
2	11	Az.	96°39'12.7589"	0°00'00.1576"	1:1342398	1:1342398
		ΔHt.	54.444sft	0.180sft		
		ΔElev.	54.510sft	0.470sft		
		Dist.	29917.407sft	0.022sft		
6003	1	Az.	105°39'59.9645"	0°00'00.0922"	1:2354635	1:2354635
		ΔHt.	-21.862sft	0.336sft		
		ΔElev.	-21.769sft	0.580sft		
		Dist.	56043.248sft	0.024sft		
6003	5025	Az.	0°06'55.6349"	0°00'00.2165"	1:925523	1:925523
		ΔHt.	-64.312sft	0.256sft		
		ΔElev.	-64.533sft	0.518sft		
		Dist.	39347.937sft	0.043sft		
6	1	Az.	235°06'45.6069"	0°00'00.2523"	1:796974	1:796974
		ΔHt.	-33.549sft	0.117sft		
		ΔElev.	-33.561sft	0.383sft		
		Dist.	18545.711sft	0.023sft		
6	11	Az.	55°50'34.1901"	0°00'00.2820"	1:720480	1:720480
		ΔHt.	8.783sft	0.116sft		
		ΔElev.	8.812sft	0.374sft		
		Dist.	18344.748sft	0.025sft		
29	28	Az.	180°30'59.8767"	0°00'00.2922"	1:707343	1:707343

		ΔHt.	-0.533sft	0.120sft		
		ΔElev.	-0.417sft	0.371sft		
		Dist.	18661.353sft	0.026sft		
29	33	Az.	128°57'37.9990"	0°00'00.3661"	1:562648	1:562648
		ΔHt.	-26.103sft	0.107sft		
		ΔElev.	-25.882sft	0.342sft		
		Dist.	16811.014sft	0.030sft		
6002	38	Az.	273°38'49.4331"	0°00'00.1362"	1:1655654	1:1655654
		ΔHt.	25.723sft	0.291sft		
		ΔElev.	24.860sft	0.000sft		
		Dist.	48368.709sft	0.029sft		
1	11	Az.	55°26'24.4480"	0°00'00.1101"	1:1854669	1:1854669
		ΔHt.	42.332sft	0.226sft		
		ΔElev.	42.373sft	0.485sft		
		Dist.	36889.710sft	0.020sft		
28	62	Az.	261°02'55.5151"	0°00'00.4600"	1:451913	1:451913
		ΔHt.	37.235sft	0.088sft		
		ΔElev.	37.139sft	0.331sft		
		Dist.	13482.869sft	0.030sft		
28	33	Az.	58°34'24.9952"	0°00'00.3967"	1:523837	1:523837
		ΔHt.	-25.569sft	0.101sft		
		ΔElev.	-25.465sft	0.350sft		
		Dist.	15516.156sft	0.030sft		
64	33	Az.	248°32'43.8654"	0°00'00.4911"	1:433626	1:433626
		ΔHt.	-50.420sft	0.095sft		
		ΔElev.	-50.603sft	0.326sft		
		Dist.	14460.872sft	0.033sft		
11	16	Az.	48°44'00.4024"	0°00'00.2813"	1:739294	1:739294
		ΔHt.	-14.733sft	0.151sft		
		ΔElev.	-14.677sft	0.414sft		
		Dist.	23915.391sft	0.032sft		