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U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

GEODETIC LEVELING DATA USED TO DEFINE HISTORICAL HEIGHT CHANGES
BETWEEN TONOPAH JUNCTION AND LAS VEGAS, NEVADA

By

Thomas D. Gilmore

Open-File Report 92-450

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Menlo Park, California
1992

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GEODETIC LEVELING DATA USED TO DEFINE HISTORICAL HEIGHT CHANGES BETWEEN TONOPAH JUNCTION AND LAS VEGAS, NEVADA

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ABSTRACT

This report documents geodetic leveling data for a survey route following U.S. Highway 95 from Tonopah Junction, approximately 50 km west of Tonopah, Nevada, to Las Vegas, Nevada. The survey route passes immediately south of the potential site for a high-level nuclear waste repository at Yucca Mountain in southern Nevada. Comparisons among the results of the several repeated levelings along this survey route provide a partial basis for evaluating contemporary crustal deformation patterns in the vicinity of the Yucca Mountain site and the relation between any such deformation and geologic structures known or suspected to have been active during Quaternary time.

INTRODUCTION

This report presents a compilation of historical geodetic leveling data for a survey route following U.S. Highway 95 from Tonopah Junction, approximately 50 km west of Tonopah, Nevada, to Las Vegas, Nevada (fig 1). Three separate surveys of this route were completed in 1907, 1915, and between 1980 and 1985 by the U.S. Geological Survey in the case of the 1907 leveling and the National Geodetic Survey in the case of the later relevelings. The survey route passes immediately south of the potential site for a high-level nuclear waste repository at Yucca Mountain in southern Nevada (fig. 2). This study is intended to assess the nature, magnitude, and timing of any height changes, of either local or regional extent, that may have occurred along the survey route during the twentieth century, particularly in the vicinity of the Yucca Mountain site. The results of the study provide a partial basis for evaluating contemporary crustal deformation patterns in the vicinity of the Yucca Mountain site and the relation between any such deformation and geologic structures known or suspected to have been active during Quaternary time. Geodetic data such as these provide a quantitative basis for assessing the nature, magnitude, and timing of contemporary tectonic activity in this region and, as such, could contribute to regulatory decisions and (or) the engineering design criteria for a repository. This study has been done as part of the Site Characterization Plan for the Yucca Mountain site (U.S. Department of Energy, 1988, p. 8.3.1.17-194 to 8.3.1.17-197).

The digital and archival geodetic data documented herein were initially compiled and analyzed between 1987 and 1990, while the author was employed by the U.S. Geological Survey. The present documentation of these data was compiled by the author in 1991 under contract to the U.S. Geological Survey (Contract No. 603847). Preliminary interpretations of the data were presented by Gilmore (1990). The purpose of the present report is to provide thorough documentation of the basic data used in the study, and the analysis thereof, in order to form a verifiable basis for further interpretation of the results. Consequently, the data are presented herein without extensive interpretation.

Generalized maps of the survey route are shown on figures 1 and 2. The principal results of the study are summarized as profiles of historical height changes based on comparisons of repeated geodetic levelings along the survey route (figs. 3 and 4). The basic geodetic leveling data used in constructing the height change profiles are summarized in tabular form in tables 1 to 17. In addition to section-by-section field elevation determinations, the tables contain all of the corrections applied to the raw field data for both the digital first-order data and the third-order data from archival summary books. Circuit misclosures for third-order levelings that include the 1907 survey segment used to construct the height change profile on figure 4 are shown on figure 5. This text describes principal aspects of the geodetic data and the procedures used in constructing the height change profiles.

Acknowledgements

The author gratefully acknowledges members of the U.S. Geological Survey who supported this study. M.K. Ko wrote the computer programs necessary to process and analyze the digital data supplied by the National Geodetic Survey. S.T. Arriola provided considerable help with managing the digital data files. G.C. Perasso recovered the summary books containing third-order leveling data from the U.S. Geological Survey National Mapping Division archives. Critical technical reviews by, and repeated discussions with, M.D. Carr, K.F. Fox, and R.K. Mark led to substantial improvements in the format of this report.

VERTICAL CONTROL DATA

Vertical control data used in this study are from two sources. In the case of first-order levelings, the original data were obtained as digital files from the National Geodetic Survey. In the case of third-order levelings, the data were compiled from handwritten summary books obtained from the U.S. Geological Survey National Mapping Division archives in Denver, Colorado. Data sources are referenced on the terrain and height change profiles (figs. 3 and 4) and in the tables either by the appropriate National Geodetic Survey line number or by the number of the U.S. Geological Survey archival summary book from which they were compiled.

National Geodetic Survey Digital Data

The first-order leveling data for the 11 National Geodetic Survey lines used in the present study were supplied by the National Geodetic Survey as two digital files, designated the observation and bench mark files. The observation files contain section-by-section elevation differences, corrections, distances, running directions, and sequence numbers. The bench mark files contain bench mark designations, approximate elevations, and bench mark positions by latitude and longitude. The two types of files are cross referenced by unique bench mark identification numbers (UID).

These digital data were combined, processed, and stored for the purposes of the present study in four types of derivative computer files, designated as: (1) *.pro, (2) *.ori, (3) *.dat, and (4) *.prn, where (*) represents the National Geodetic Survey line number in the individual file names. The data for each of the National Geodetic Survey lines are presented in tables 1 to 11. A description of each of the four types of data files follows below.

The *.pro files contain summary-sheet style abstract listings for each of the level lines (tables 1A to 11A). These files comprise the basic working data sets from which the height-change profiles have been constructed. The *.pro file for each National Geodetic Survey line contains the following data for each bench mark: (1) sequence number, (2) unique identification (UID) number, (3) bench mark designation (name), (4) spur code, (5) cumulative distance along the survey line in kilometers, (6) location of bench mark by latitude and longitude, (7) traditionally corrected observed elevation in meters, (8) observed-gravity orthometric height in meters, (9) cumulative refraction correction in millimeters, and (10) cumulative magnetic correction in millimeters. The *.pro files are the output of a data assembly program which combines data from the original observation and bench mark files supplied by the National Geodetic Survey.

The sequence numbers in the *.pro files are an arbitrarily assigned integer series used to determine line order and provide the principal basis for assembling data in the correct sequence. Except for post-1970 lines, sequence numbers usually are assigned in ascending order. Any integer series could have been assigned to the post-1970 lines, including random number series. An adaptable translation of the National Geodetic Survey line ordering program was not available for the present study; consequently, the method employed here to determine line order and assemble the data in proper sequence may differ from that of the National Geodetic Survey. The data assembly program used herein was developed by trial and error. Numerous comparisons were made between data sets produced by our developmental computer program and data sets produced by the National Geodetic Survey in order to ensure that consistent results were being obtained. The project was terminated, however, before documentation of our data assembly

program was completed, and no representation can be made that our results would, in all cases, be identical to data sets processed by the National Geodetic Survey method.

UID numbers are eight-digit numbers that uniquely identify each individual bench mark. A bench mark name is not necessarily a unique designation, but is the common or stamped designation of the bench mark. Bench marks in different areas may have identical name designations but are distinguished by different UID numbers. Reset bench marks, which may have the same name as the original mark, are given a different UID from that of the original mark. Aliases or alternative bench mark names may or may not be listed in the data base.

The spur code, which is entered manually into the data base, indicates those marks that comprise spurs off the main survey route or other spurs. Because of unresolved programming complexities, an adequate method never was devised to automatically encode this attribute. A spur off the main line is indicated by a single asterisk; a spur off a spur is indicated by a double asterisk. The bench mark immediately preceding any bench mark coded as a spur is the junction point from which the spur departs and from which the main line continues.

The distance values are cumulative distances measured along the length of the survey line. The distance values were derived by summing the individual section lengths listed in the National Geodetic Survey observation file. Distance values for each line always begin arbitrarily at 0.00. Distances along a spur continue to accumulate from the junction point; distances along the continuation of the main line also continue to accumulate from the junction point as if the spur did not exist.

Latitude and longitude positions for each bench mark are described in degrees, minutes, and seconds. They are read automatically from the digital bench mark source file supplied by National Geodetic Survey.

The observed elevation is accumulated on a section-by-section basis from the sum of the uncorrected field elevation difference averaged for of all runnings of a given section and the level, rod, temperature, and astronomic corrections for the section. All of the uncorrected field and correction values are supplied in the digital National Geodetic Survey observation file. The approximate elevation supplied in the National Geodetic Survey bench mark source file is used for the elevation of the initial bench mark in a given line; all other observed elevations are based on the algebraic sum of the initial elevation value and the averaged section-by-section corrected observed elevations differences.

Orthometric corrections are required to convert path-dependent observed elevations into uniquely defined true heights (independent of survey route). In the present study, the orthometric corrections are machine-integrated values, computed in all cases from observed or interpolated gravity values derived from the digital gravity data base of the U.S Geological Survey. The formulae used to compute the observed-gravity orthometric corrections, OC, are:

$$OC_{ij} = \Delta H_{ij}^D - \Delta l_{ij} + H_j \left\{ \frac{g_R - \bar{g}_j}{g_j} \right\} - H_i \left\{ \frac{g_R - \bar{g}_i}{g_i} \right\}, \text{ where}$$

$$\Delta H_{ij}^D = \frac{\Delta C_{ij}}{g_R},$$

$$\Delta C_{ij} = \sum_{k=i}^j \bar{g}_k dl_k, \text{ where } \bar{g}_k = \frac{(g_{k-1} + g_k)}{2},$$

$$dl_k = \Delta l_{ij} = H_j - H_i,$$

$$\bar{g}_{i,j} = g_{i,j} + 0.0424 (H_{ij}), \text{ and}$$

$$g_R = 0.9806294 \text{ gal}$$

Only heights, H_i and H_j , in meters, and observed or interpolated gravity values, g_i and g_j , in gals, for any two successive bench marks, i and j , are required as input values; all other variables then can be calculated. The individual orthometric section-by-section corrections are accumulated along the length of the line and added to the corrected observed elevations to produce the observed-gravity orthometric heights shown on tables 1a to 11a.

Cumulative modeled refraction corrections were separately accumulated from the averaged sum of section-by-section values listed in the National Geodetic Survey observation source file. Because refraction corrections are direction dependent, the sign of the forward direction of running is adopted and the numerical value is the arithmetic average of all corrections determined for all runnings of that section. Similarly, cumulative magnetic corrections were separately accumulated from the averaged sum of section-by-section values in the National Geodetic Survey observation source file. Magnetic corrections typically apply only to post-1970 lines utilizing certain automatic instruments, such as the Zeiss Ni1, that appear to be particularly susceptible to the accumulation of this error. Because none of the lines included in the present study involved such instruments, the values listed in the cumulative magnetic correction columns on tables 1a to 11a are always zero.

The *.ori files (tables 1b to 11b) are computer-generated, section-by-section listings of data from the National Geodetic Survey observation source files that were used to create the *.pro files (tables 1a to 11a). The *.ori files list: (1) to/from sequence numbers identical to those in the *.pro files, (2) uncorrected field elevation differences averaged for all runnings of the given section, (3) level corrections, (4) temperature corrections, (5) rod corrections, (6) astronomic corrections, (7) refraction corrections, (8) magnetic corrections, (9) traditionally corrected observed elevation differences, (10) cumulative observed elevations, (11) cumulative observed-gravity orthometric corrections, and (12) cumulative refraction corrections. Elevations and elevation differences are reported in meters, whereas corrections are reported in millimeters. The traditionally corrected observed elevation difference is the sum of the uncorrected field elevation difference and the level, temperature, rod, and astronomic corrections (Rappleye, 1948). The cumulative observed elevation for the first bench mark in each line is read directly from the *.pro file; all other values are accumulated by adding the successive corrected observed elevation differences along the length of the line.

Both the original National Geodetic Survey digital data files and the derivative *.pro files serve as input files to the computer program that creates the listings in the *.ori files. The *.pro file supplies the ordered to/from sequence numbers that dictate line order. The observed gravity orthometric corrections listed in the *.ori file are computed as the difference between the observed gravity orthometric height and the observed elevation values in the *.pro files. Other section-by-section values are derived, averaged, and accumulated from the original National Geodetic Survey data files. Although all section-by-section data listings for bench marks on the main survey route have been generated automatically, owing to unresolved programming problems, bench marks located on spurs from the main survey route could not be included in the input files used to generate the initial *.ori file listings. Consequently, values for all bench marks located on spurs have been separately computed. Most were computed by a series of automated computations for individual spurs or segments thereof. In a few cases, the values were generated by equivalent manual computations. The values then were manually entered into the main line master files in the appropriate location using a text editor.

The original observation files supplied in digital format by the National Geodetic Survey were available for the present study as series of computer files named *.dat. Because the format of these files is not conducive to producing manageable printed copy, the *.dat files were converted to *.pm files using a computer program that condenses the original 190-character wide *.dat files to print on standard 132-character wide computer paper without loss or alteration of any data. The *.pm provide exactly the same information, on two lines instead of one, as in the original *.dat files. The *.pm files are included herein as tables 1c to 11c to provide a written record of the original National Geodetic Survey data used for the study.

U.S. Geological Survey Archival Data

Tables 12 to 15 summarize archival third-order leveling data used for the study. They contain (1) the bench mark name (including aliases, where available), (2) distance along survey route in both miles and kilometers, (3) uncorrected field elevation in both feet and meters, (4) level and collimation corrections, in feet, either summed together or listed separately depending on the way in which they were listed in the original summary book (if available), (5) temperature correction in feet (if available), (6) rod correction in feet (if available), and (7) corrected observed elevation in feet and meters. The corrected observed elevation is computed as the sum of the uncorrected field elevation and the available corrections. If no corrections are available, then no corrected observed elevation value can be computed, and the uncorrected field elevation necessarily is used as the basis for constructing profiles of historical height changes.

The rod correction is computed by multiplying the rod excess value supplied in the summary book by the elevation of a given bench mark. The rod excess value is a dimensionless measure, typically in feet per foot. The rod excess values used for this study are specified and their source is referenced in the footnotes on the tables. In some cases, more than one rod excess value or computation method was used to compute rod corrections. The basis for each method of computation is described in the footnotes. In such cases, separate values of corrected observed elevations are listed on the table for each rod correction calculation method that is used. The specific rod correction and corrected observed elevation values used to construct the height change profiles also are specified. For example, detailed rod calibration information completed both before and after the survey run during the winter and spring of 1907 is included with U.S. Geological Survey Summary Book A-6668 and A-6667 (see table 16). Based on the author's examination of many turn-of-the-century U.S. Geological Survey summary books, the documentation of such specific quantitative rod calibration information is unusual. The availability of the information in this case is particularly fortuitous given the current importance of the 1907 survey in evaluating historical height changes in the Yucca Mountain area. Both rod corrections and corrected observed elevations for levelings based on this summary book have been computed using two (and, in one case, three) different methods. The first, and procedurally applicable (Rappleye, 1948), method is based on the average of the latest pre-survey calibrations for the rod pair (Method 1). The second method is based on the average of the post survey calibration values for the rod pair (Method 2). Because these two calibration values differ in both sign and magnitude, comparison of results from the two methods of computation provide an indication of the largest variability in corrected elevation values that may be expected. Only values computed by Method 1 have been used to construct the height-change profiles (fig. 4).

Uncorrected field elevations and level, collimation, and temperature corrections (where available) were read directly from listings in individual U.S. Geological Survey summary books and were compiled manually; rod corrections were manually computed as described above. In all cases, the uncorrected field elevations listed on the tables are the values originally recorded by the surveyor in the field prior to the application of any corrections or network adjustments. Original field elevations and corrections were listed in the summary books in feet, and distances were listed in miles. On the tables, the original values for all distances and elevations are listed in English units along with manually calculated equivalent metric values. The following conversion factors were used to convert from English to metric values:

1 foot = 0.30480061 meters, and
1 mile = 1.609 kilometers

The original field books containing detailed section-by-section information recorded during the 1907 third-order leveling could not be located and likely were discarded (G. Perasso, U.S. Geological Survey National Mapping Division, oral communication, 1991). Consequently, it is not possible to test for any of the following conditions, which otherwise might permit a more detailed and quantitative assessment of the potential contribution of various systematic error sources to the results of the third-order survey: 1) cumulative number of sections run in forward

versus backward directions, 2) cumulative setup imbalance in length of forward versus backward section runnings, (3) cumulative difference in the elevation difference of forward versus backward section runnings, 4) mean sight length, and 5) lowest rod readings made.

Reset Bench Marks

Established bench marks occasionally are moved or destroyed, often as a result of highway, railroad, and other types of construction or demolition projects. In many cases, a reset equivalent bench mark is established prior to the destruction of the original bench mark monument. It is then possible to measure directly the elevation difference between the reset and original marks. Alternatively, the elevation of a reset bench mark can be determined with respect to another nearby bench mark whose elevation was determined previously with respect to an original mark that no longer exists. This method requires an assumption of invariance for the time period between the respective levelings to the new and original bench marks. Such measurements provide a quantitative basis for directly relating previously determined elevations of an old mark to newly determined elevations of a reset mark. This provides a basis for including reset marks in comparisons between successive levelings. These procedures allow for greater historical continuity and consistency in comparing data from successive surveys, as well as for greater spatial and temporal detail.

The National Geodetic Survey maintains a record summarizing the measured elevation difference between original and reset bench marks along many of its primary routes. However, some of the information necessary to evaluate the quality of these measurements often is not recorded, such as the equipment and procedures used, standards of accuracy, and time elapsed between height determinations to the new and original marks.

Several reset bench marks exist along the Beatty to Las Vegas segment (fig. 2) of the survey route that is the focus of the present study. A number of the original bench marks established before the 1907 and/or 1915 surveys were reset prior to, and recovered during, the 1980/1984 relevelings. These marks provide the only basis for assessing short-wavelength, long-term historical height changes over the critical part of the survey route crossing the southward projection of active tectonic structures in Crater Flat/Yucca Mountain area. Table 17 lists height differences supplied by the National Geodetic Survey for reset bench marks that were used in constructing the height change profiles shown on figures 3 and 4.

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NOTE: Parenthesized numbers following each cited reference are for U.S. Office of Civilian Radioactive Waste Management Records Management purposes only and should not be used when ordering the publication.

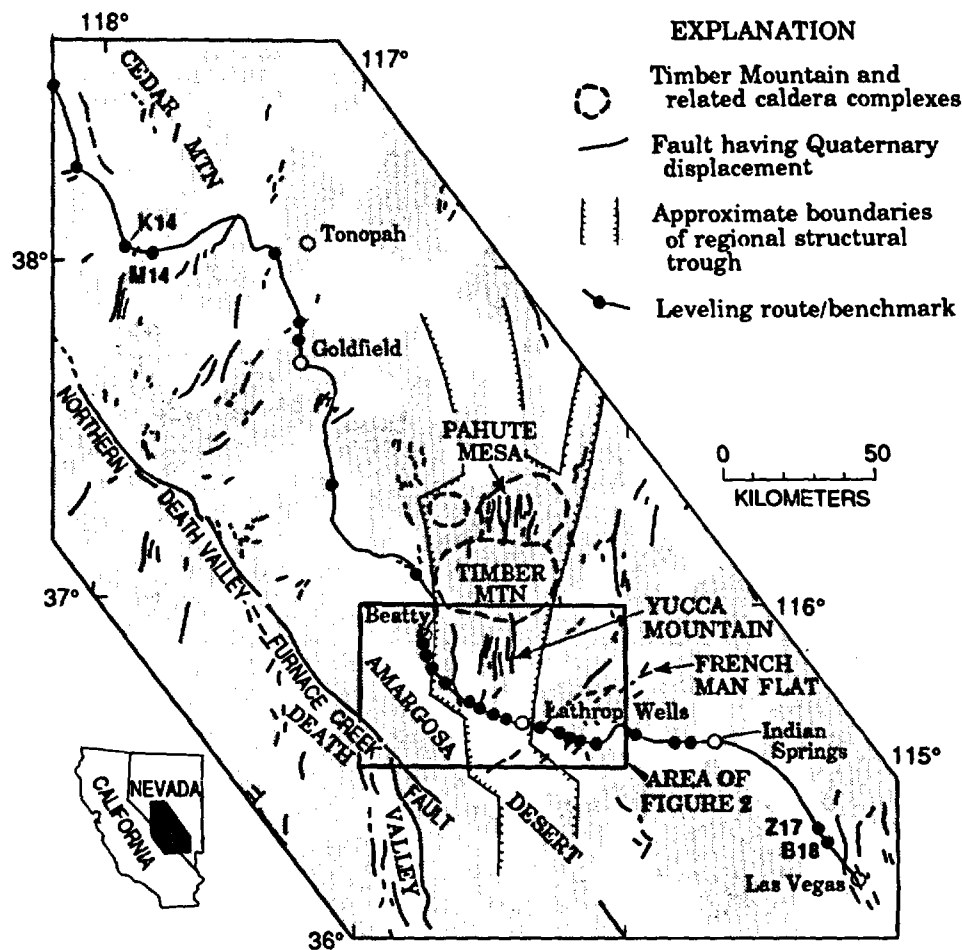


Figure 1. Generalized map showing faults with Quaternary rupture in southwestern Nevada and route of repeated geodetic levelings between Tonopah and Las Vegas. Bench marks used in 1915 to 1984 comparison (fig. 3) represented by dots along leveling route. Leveling route follows highway U.S. 95, shown as solid line connecting bench marks. Upland areas underlain by bedrock are shaded; Quaternary surficial deposits are unpatterned. Faults modified after Nakata and others (1982) and Reheis and Noller (1989).

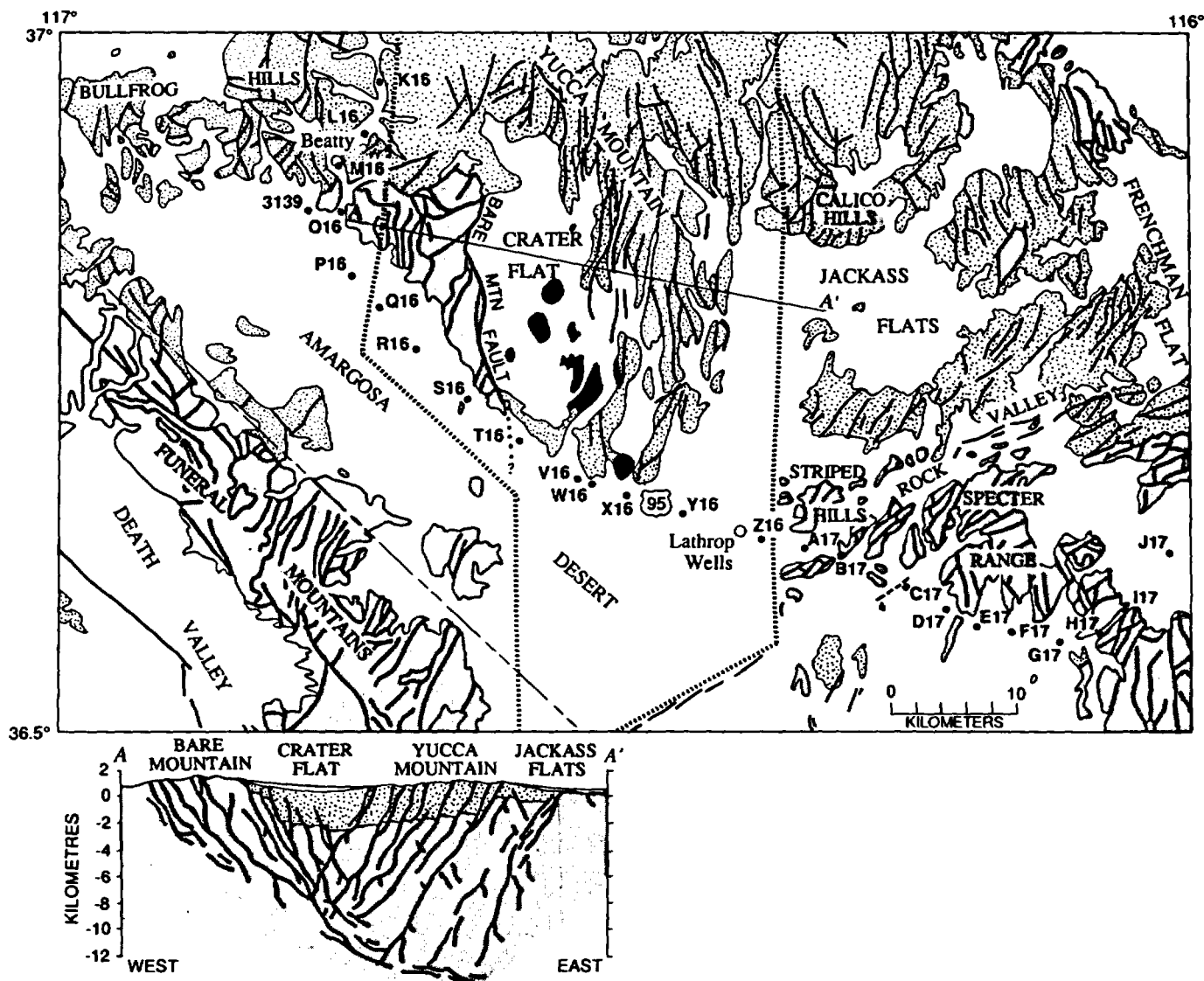


Figure 2. Generalized geologic map and section of Crater Flat/Yucca Mountain area and routes of repeated geodetic levelings in vicinity. Heavy dotted lines represent inferred boundaries of Crater Flat/Yucca Mountain structural depression. Bench marks represented by labeled dots (for example Y16) along Highway 95 leveling route. Southward projection of Bare Mountain fault represented by queried dotted line between bench marks S16 and T16. Patterns: Quaternary surficial deposits--unpatterned; Pleistocene and Pliocene basalt--black; Tertiary volcanic and sedimentary rocks--stippled; Paleozoic and Proterozoic sedimentary and metamorphic rocks--shaded. Generalized from Stewart and Carlson (1978).

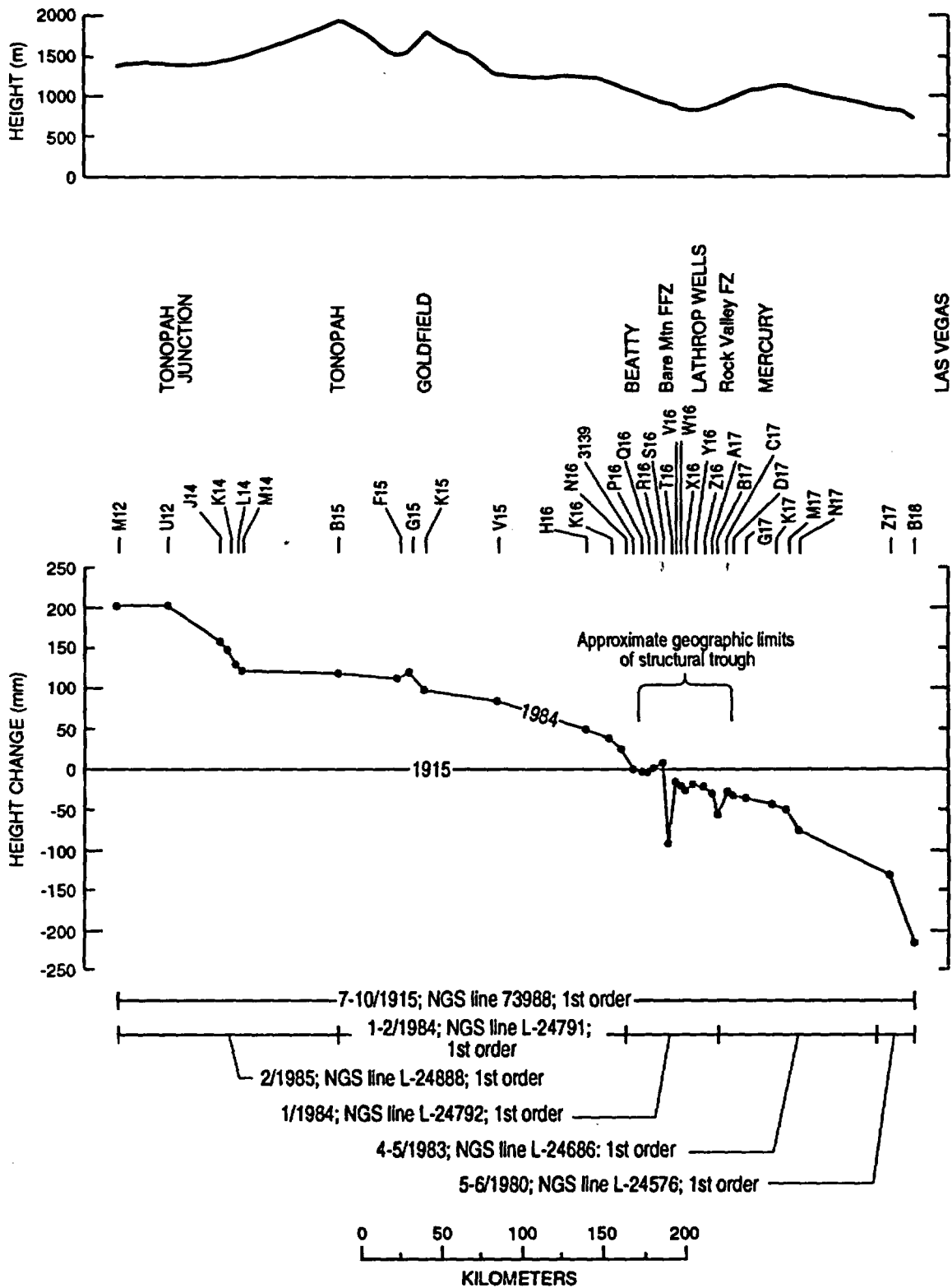


Figure 3. Profiles showing terrain and height changes with respect to 1915 baseline between Tonopah Junction and Las Vegas.

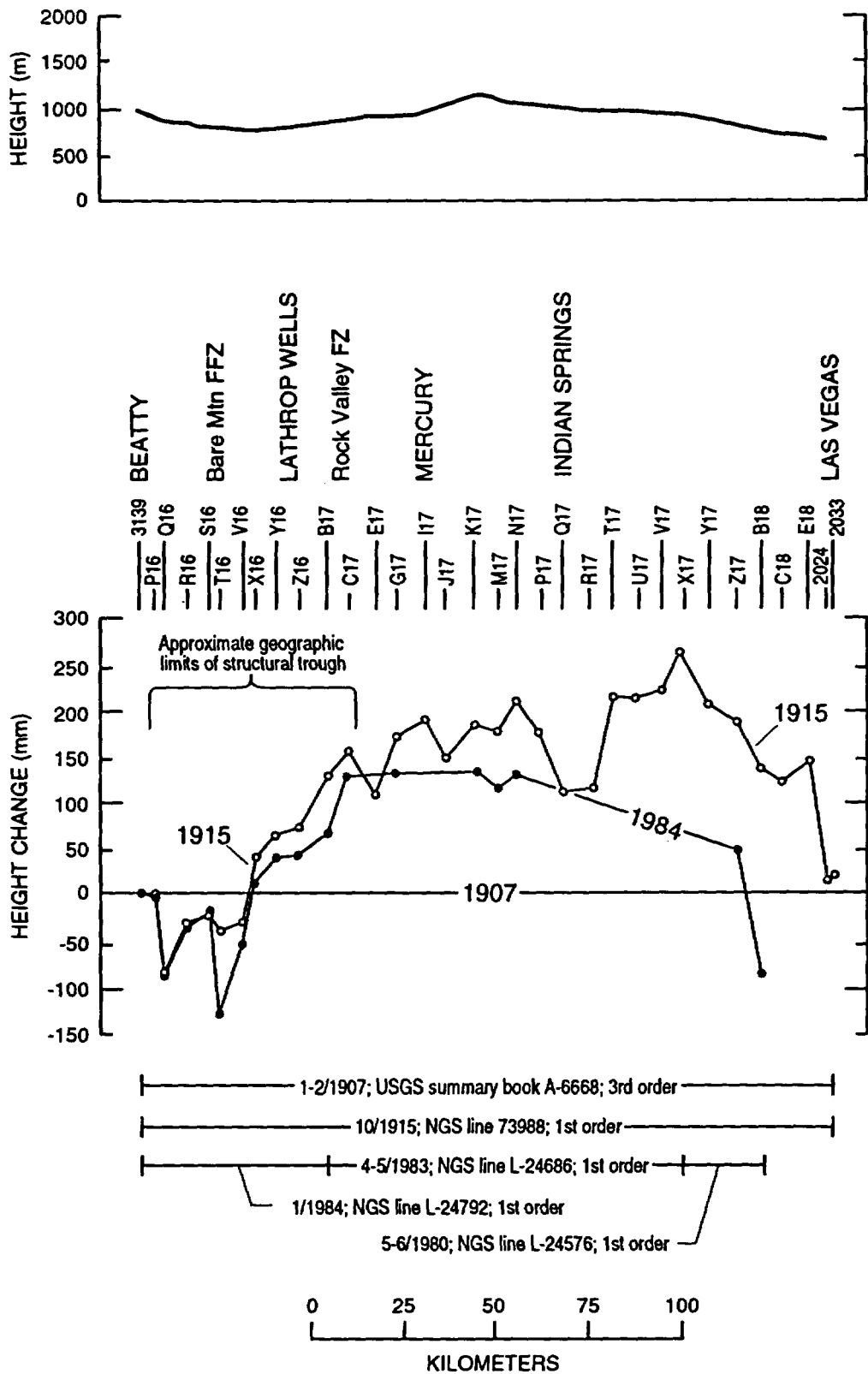


Figure 4. Profiles showing terrain and height changes with respect to 1907 baseline between Beatty and Las Vegas. Note that the horizontal scale of this figure is one half that of figure 3.

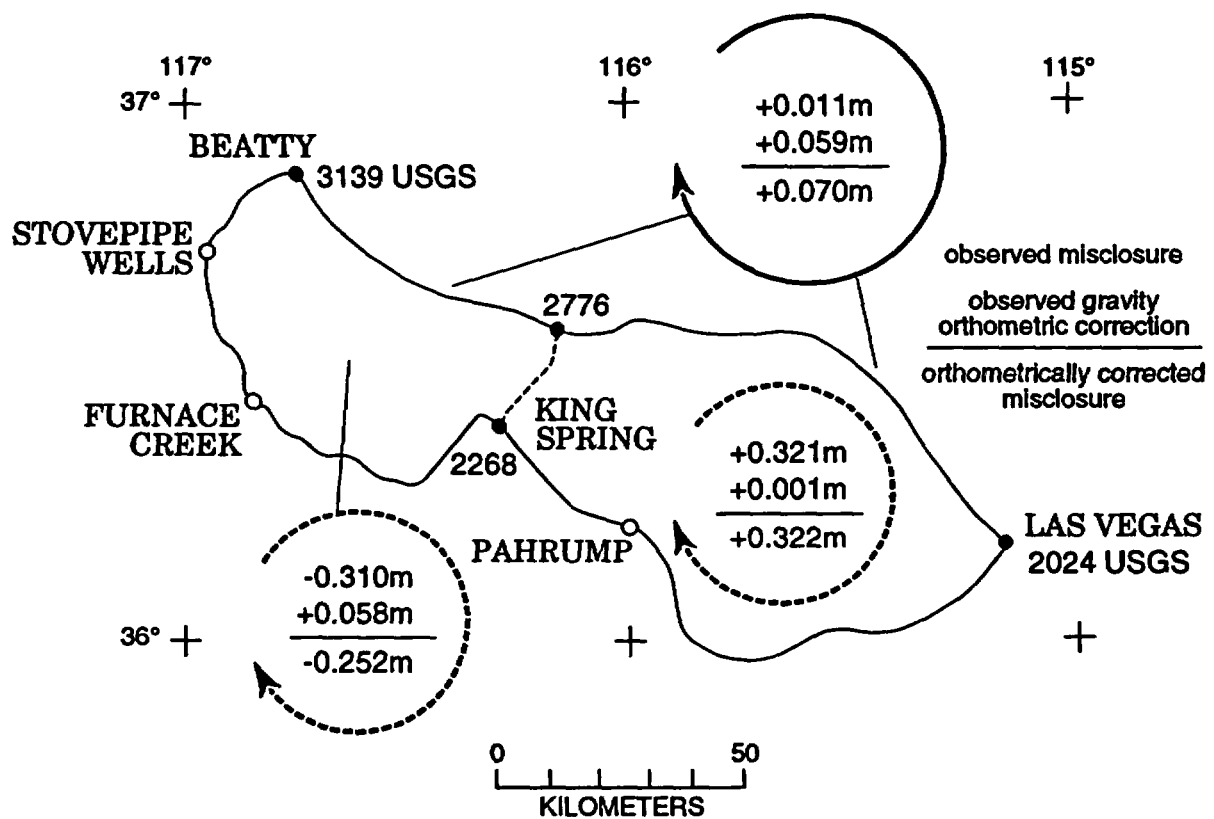


Figure 5. Misclosures around third-order 1907 circuits that include survey line between Beatty and Las Vegas. Solid-line misclosure is algebraic sum of the two adjoining dashed-line misclosures, each of which depends on the dashed-line survey segment common to both circuits. All misclosure summations are clockwise. Orthometric corrections based on observed or interpolated gravity.

TABLES 1-17

Table 1a. National Geodetic Survey Line 73988B: File 73988B.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
3	10339285	G 11		0.00	39 07 33	119 06 30	1313.32010	1313.32010	0.00	0.00
4	10849074	TBM 3		1.08	39 07 31	119 05 45	1314.86398	1314.86150	0.17	0.00
5	10849075	TBM 4		2.35	39 07 29	119 04 53	1313.99358	1313.98889	0.06	0.00
6	10849076	TBM 5		3.54	39 07 28	119 04 04	1314.85250	1314.84674	0.18	0.00
7	10849077	TBM 6		4.63	39 07 26	119 03 19	1317.83604	1317.83048	0.56	0.00
8	10849078	TBM 7		5.68	39 07 24	119 02 36	1316.17120	1316.16876	0.33	0.00
9	10849079	TBM 8		6.79	39 07 23	119 01 50	1315.03587	1315.03679	0.19	0.00
10	10849080	TBM 9		7.98	39 07 21	119 01 01	1313.95385	1313.95681	0.07	0.00
11	10337686	H 11		8.00	39 07 21	119 01 00	1313.95785	1313.96095	0.07	0.00
12	10849081	TBM 10		8.02	39 07 21	119 00 59	1313.90219	1313.90534	0.07	0.00
13	10849082	TBM 11		9.13	39 07 01	119 00 22	1315.70096	1315.71073	0.29	0.00
14	10849083	TBM 12		10.28	39 06 40	118 59 43	1305.20135	1305.21780	-0.96	0.00
15	10849084	TBM 13		11.35	39 06 21	118 59 07	1302.90225	1302.92587	-1.23	0.00
16	10328143	I 11		11.36	39 06 21	118 59 06	1302.92305	1302.94685	-1.23	0.00
17	10849085	TBM 14		11.38	39 06 21	118 59 06	1302.82743	1302.85119	-1.23	0.00
18	10849086	TBM 15		12.45	39 06 00	118 58 30	1302.86692	1302.89506	-1.23	0.00
19	10849087	TBM 16		13.55	39 05 39	118 57 53	1302.49384	1302.52245	-1.26	0.00
20	10849088	TBM 17		14.65	39 05 17	118 57 17	1302.34507	1302.37352	-1.28	0.00
21	10849089	TBM 18		15.72	39 04 57	118 56 41	1306.88835	1306.91704	-0.85	0.00
22	10849090	TBM 19		16.82	39 04 35	118 56 04	1309.29457	1309.32278	-0.59	0.00
23	10309585	J 11		16.83	39 04 35	118 56 04	1309.33694	1309.36519	-0.59	0.00
24	10849091	TBM 20		17.94	39 04 08	118 55 37	1317.90892	1317.93799	0.62	0.00
25	10849092	TBM 21		19.00	39 03 42	118 55 11	1324.24622	1324.27660	1.46	0.00
26	10849093	TBM 22		20.08	39 03 15	118 54 44	1332.83351	1332.86463	2.55	0.00
27	10849094	TBM 23		21.15	39 02 48	118 54 18	1336.64841	1336.68008	2.95	0.00
28	10285778	K 11		22.42	39 02 17	118 53 47	1332.21279	1332.24302	2.46	0.00
29	10849095	TBM 24		23.51	39 01 46	118 53 26	1331.52065	1331.55025	2.39	0.00
30	10849096	TBM 25		24.63	39 01 14	118 53 05	1346.23767	1347.39635	3.80	0.00
31	10849097	TBM 26		25.03	39 01 03	118 52 58	1347.12811	1348.28742	3.87	0.00
32	10849098	TBM 27		26.04	39 00 34	118 52 38	1331.32194	1332.48037	2.38	0.00
33	10264299	L 11		27.17	39 00 02	118 52 17	1318.75323	1319.91171	0.96	0.00
34	10849099	TBM 28		27.54	38 59 53	118 52 09	1313.20465	1313.25518	0.34	0.00
35	10849100	TBM 29		28.58	38 59 27	118 51 45	1298.21634	1298.26836	-1.24	0.00
36	10849101	TBM 30		29.71	38 58 59	118 51 20	1281.67927	1281.73474	-2.80	0.00
37	10849102	TBM 31		30.86	38 58 31	118 50 54	1263.29170	1263.34984	-4.80	0.00
38	10344169	M 11		31.96	38 58 04	118 50 29	1260.92716	1260.98821	-5.06	0.00
39	10849103	TBM 32		33.16	38 57 43	118 49 49	1258.78539	1258.84785	-5.36	0.00
40	10337646	N 11		34.24	38 57 24	118 49 12	1259.51976	1259.58303	-5.27	0.00
41	10332829	O 11 USGS		35.36	38 56 58	118 48 28	1256.68736	1256.75209	-5.51	0.00
42	10336119	P 11		36.30	38 57 19	118 49 03	1256.69453	1256.75774	-5.51	0.00

Table 1a-1

Table 1a. National Geodetic Survey Line 73988B: File 73988B.pro---Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
43	10332842	Q 11		35.47	38 56 58	118 48 30	1256.87536	1256.93999	-5.50	0.00
44	10331298	R 11		36.25	38 56 43	118 48 02	1255.74733	1255.81339	-5.59	0.00
45	10849104	TBM 33		37.33	38 56 22	118 47 24	1255.37889	1255.44856	-5.62	0.00
46	10849105	TBM 34		38.38	38 56 02	118 46 47	1254.58931	1254.66104	-5.69	0.00
48	10321333	S 11		39.18	38 55 47	118 46 19	1254.53495	1254.60839	-5.69	0.00
49	10849106	TBM 35		40.24	38 55 29	118 45 42	1252.83443	1252.91011	-5.85	0.00
50	10314692	T 11		41.52	38 55 07	118 44 57	1252.26857	1252.34554	-5.90	0.00
51	10849107	TBM 36		42.63	38 54 44	118 44 22	1252.56375	1252.64054	-5.87	0.00
52	10849108	TBM 37		43.80	38 54 20	118 43 46	1252.10393	1252.17933	-5.91	0.00
53	10302871	U 11 USGS		44.87	38 53 58	118 43 12	1251.76549	1251.83935	-5.95	0.00
54	10849109	TBM 38		45.67	38 53 33	118 43 08	1252.32703	1252.40406	-5.89	0.00
55	10849110	TBM 39		46.79	38 52 58	118 43 02	1251.87918	1251.95962	-5.95	0.00
56	10287387	V 11		47.91	38 52 23	118 42 56	1254.90994	1254.99465	-5.58	0.00
57	10849111	TBM 40		48.16	38 52 16	118 42 55	1257.90530	1257.99110	-5.31	0.00
58	10849112	TBM 41		49.57	38 51 38	118 42 52	1267.57245	1267.66231	-4.15	0.00
59	10849113	TBM 42		50.64	38 51 08	118 42 49	1268.93270	1269.02452	-3.98	0.00
60	10849114	TBM 43		51.72	38 50 39	118 42 46	1266.10132	1266.19334	-4.32	0.00
61	10264284	W 11 USGS		52.84	38 50 08	118 42 43	1270.79016	1270.88222	-3.78	0.00
62	10849115	TBM 44		53.91	38 49 39	118 42 20	1267.18674	1267.27828	-4.06	0.00
63	10849116	TBM 45		54.99	38 49 09	118 41 56	1268.79641	1268.88710	-3.94	0.00
64	10849117	TBM 46		56.12	38 48 38	118 41 32	1267.53236	1267.62147	-4.13	0.00
65	10344168	X 11		57.23	38 48 08	118 41 08	1268.95656	1269.04462	-3.99	0.00
66	10849118	TBM 47		58.32	38 47 36	118 40 51	1265.17240	1265.25880	-4.70	0.00
67	10849119	TBM 48		59.42	38 47 03	118 40 34	1270.38436	1270.46701	-4.06	0.00
68	10849120	TBM 49		60.49	38 46 31	118 40 17	1268.45105	1268.52905	-4.36	0.00
69	10328111	Y 11 USGS		60.81	38 46 21	118 40 12	1266.80631	1266.88347	-4.60	0.00
70	10849121	TBM 50		61.97	38 45 50	118 39 59	1258.13762	1258.21420	-5.86	0.00
71	10849122	TBM 51		63.09	38 45 21	118 39 46	1252.56468	1252.64195	-6.48	0.00
72	10849123	TBM 52		64.18	38 44 52	118 39 34	1252.60086	1252.68063	-6.47	0.00
73	10849124	TBM 53		65.27	38 44 23	118 39 22	1251.85422	1251.93799	-6.57	0.00
74	10849125	TBM 54		66.41	38 43 52	118 39 09	1252.35115	1252.43926	-6.52	0.00
75	10302881	Z 11		66.42	38 43 52	118 39 09	1252.11346	1252.20157	-6.52	0.00
76	10849126	TBM 55		66.43	38 43 52	118 39 09	1252.34984	1252.43796	-6.52	0.00
77	10849127	TBM 56		67.48	38 43 12	118 39 06	1252.01427	1252.10725	-6.55	0.00
78	10849128	TBM 57		67.64	38 43 06	118 39 06	1252.53970	1252.63289	-6.52	0.00
79	10287386	A 12 USGS		68.81	38 42 22	118 39 03	1251.85622	1251.95002	-6.60	0.00
80	10849129	TBM 58		69.34	38 42 06	118 39 04	1251.77188	1251.86653	-6.61	0.00
81	10849130	TBM 59		70.40	38 41 36	118 39 07	1252.39233	1252.48951	-6.53	0.00
82	10849131	TBM 60		71.48	38 41 04	118 39 09	1252.24169	1252.34323	-6.55	0.00
83	10269399	B 12		72.58	38 40 32	118 39 12	1252.30073	1252.40702	-6.54	0.00
84	10849132	TBM 61		73.23	38 40 15	118 39 08	1252.61655	1252.72523	-6.50	0.00
85	10849133	TBM 62		74.36	38 39 45	118 39 00	1252.32347	1252.43611	-6.54	0.00

Table 1a-2

Table 1a. National Geodetic Survey Line 73988B: File 73988B.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
86	10849134	TBM 63		75.49	38 39 15	118 38 52	1251.95812	1252.07298	-6.58	0.00
87	10350719	C 12 USGS		76.74	38 38 42	118 38 44	1252.90381	1253.02047	-6.48	0.00
88	10849135	TBM 64		77.90	38 38 13	118 38 14	1251.96224	1252.07935	-6.58	0.00
89	10849136	TBM 65		79.00	38 37 46	118 37 45	1252.33360	1252.45122	-6.54	0.00
90	10849137	TBM 66		80.17	38 37 17	118 37 15	1252.30496	1252.42305	-6.54	0.00
91	10331297	D 12		81.43	38 36 46	118 36 42	1259.22717	1259.34722	-5.62	0.00
92	10849138	TBM 67		82.45	38 36 32	118 36 04	1268.16507	1268.28653	-4.68	0.00
93	10849139	TBM 68		83.65	38 36 15	118 35 20	1279.76248	1279.88821	-3.65	0.00
94	10318074	E 12 USGS=4126.671 USGS		85.32	38 35 28	118 36 06	1257.80451	1257.93289	-4.78	0.00
95	10849140	TBM 69		84.76	38 36 00	118 34 39	1290.46259	1290.59172	-2.69	0.00
96	10849141	TBM 70		85.83	38 35 45	118 33 59	1301.57675	1301.70815	-1.40	0.00
97	10849142	TBM 71		86.92	38 35 29	118 33 18	1310.13786	1310.27146	-0.51	0.00
98	10849143	TBM 72		88.01	38 35 14	118 32 38	1318.21322	1318.34779	0.53	0.00
99	10849144	TBM 73		89.09	38 34 59	118 31 57	1325.86534	1326.00039	1.58	0.00
100	10849145	TBM 74		90.22	38 34 43	118 31 15	1337.71716	1337.85243	3.06	0.00
101	10307851	F 12		91.27	38 34 28	118 30 36	1348.67191	1348.80692	4.51	0.00
102	10849146	TBM 75		92.38	38 34 14	118 29 54	1360.46365	1360.59609	5.84	0.00
103	10849147	TBM 76		93.47	38 34 01	118 29 13	1362.72445	1362.85023	6.14	0.00
104	10849148	TBM 77		94.63	38 33 47	118 28 29	1358.60458	1358.72342	5.69	0.00
105	10849149	TBM 78		95.71	38 33 34	118 27 48	1362.27256	1362.39076	6.09	0.00
106	10849150	TBM 79		96.82	38 33 20	118 27 05	1362.54889	1362.66687	6.12	0.00
107	10295637	G 12 USGS		97.51	38 33 12	118 26 39	1363.12278	1363.24107	6.17	0.00
108	10849151	TBM 80		98.61	38 33 04	118 25 56	1372.84331	1372.96235	7.25	0.00
109	10849152	TBM 81		99.65	38 32 57	118 25 15	1379.54926	1379.66871	8.00	0.00
110	10849153	TBM 82		100.67	38 32 49	118 24 35	1366.34026	1366.45803	6.19	0.00
111	10849154	TBM 83		101.78	38 32 41	118 23 52	1346.91524	1347.03101	3.36	0.00
112	10288982	H 12 USGS		102.93	38 32 33	118 23 07	1334.02577	1334.14177	1.54	0.00
113	10849155	TBM 84		103.99	38 32 30	118 22 21	1333.95414	1334.07336	1.53	0.00
114	10287394	I 12		104.97	38 32 28	118 21 39	1334.68338	1334.80591	1.65	0.00
115	10849156	TBM 85		106.05	38 32 25	118 20 55	1336.55470	1336.68122	1.92	0.00
116	10287393	J 12 USGS		107.13	38 32 23	118 20 11	1338.88395	1339.01447	2.23	0.00
117	10849157	TBM 86		107.38	38 32 22	118 20 01	1339.45026	1339.58149	2.28	0.00
118	10849158	TBM 87		108.45	38 32 20	118 19 16	1344.02093	1344.15520	2.89	0.00
119	10849159	TBM 88		109.64	38 32 17	118 18 26	1348.69346	1348.82950	3.51	0.00
121	10849160	TBM 89		110.70	38 32 15	118 17 42	1351.15937	1351.29632	3.81	0.00
122	10285769	K 12		111.84	38 32 12	118 16 55	1358.51368	1358.65050	4.78	0.00
123	10849161	TBM 90		113.09	38 32 08	118 16 03	1366.79270	1366.93144	5.71	0.00
124	10849162	TBM 91		114.17	38 32 04	118 15 19	1371.38481	1371.52597	6.16	0.00
125	10849163	TBM 92		115.30	38 32 00	118 14 32	1380.54866	1380.69320	7.12	0.00
126	10849164	TBM 93		116.37	38 31 56	118 13 48	1386.85552	1387.00243	7.85	0.00
127	10282588	L 12 USGS		116.68	38 31 55	118 13 35	1388.22238	1388.36994	7.99	0.00
128	10849165	TBM 94		117.31	38 31 44	118 13 14	1388.73660	1388.88524	8.04	0.00

Table 1a-3

Table 1a. National Geodetic Survey Line 73988B: File 73988B.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
129	10849166	TBM 95		118.38	38 31 24	118 12 37	1383.46881	1383.61655	7.43	0.00
130	10849167	TBM 96		119.45	38 31 05	118 12 01	1375.66126	1375.80699	6.45	0.00
131	10849168	TBM 97		120.57	38 30 45	118 11 23	1368.64400	1368.78891	5.47	0.00
132	10267794	M 12		121.69	38 30 25	118 10 44	1360.68609	1360.83243	4.53	0.00
133	10849169	TBM 98		122.81	38 29 54	118 10 21	1355.86261	1356.00710	3.99	0.00
134	10849170	TBM 99		123.93	38 29 23	118 09 57	1352.95842	1353.10334	3.66	0.00
135	10849171	TBM 100		125.04	38 28 52	118 09 33	1353.59800	1353.74341	3.74	0.00
136	10345715	N 12 USGS		126.31	38 28 18	118 09 05	1358.81994	1358.96421	4.52	0.00

Table 1b. National Geodetic Survey Line 73988B: File 73988B.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
3										1313.32010	0.00	0.00
3	4	1.54360	0.00	0.03	0.24	0.01	0.17	0.00	1.54387	1314.86398	-2.48	0.17
4	5	-0.87015	-0.14	-0.01	-0.12	0.02	-0.11	0.00	-0.87040	1313.99358	-4.69	0.06
5	6	0.85880	0.00	0.01	0.12	-0.01	0.12	0.00	0.85892	1314.85250	-5.76	0.18
6	7	2.98310	0.00	0.05	0.41	-0.02	0.39	0.00	2.98354	1317.83604	-5.56	0.56
7	8	-1.66455	0.00	-0.03	-0.24	-0.02	-0.24	0.00	-1.66484	1316.17120	-2.44	0.33
8	9	-1.13285	0.00	-0.02	-0.16	0.00	-0.14	0.00	-1.13303	1315.03817	0.92	0.19
9	10	-1.08180	0.00	-0.02	-0.16	-0.04	-0.13	0.00	-1.08203	1313.95615	2.96	0.07
10	11	0.00400	0.00	0.00	0.00	0.00	0.00	0.00	0.00400	1313.96015	3.10	0.07
11	12	-0.05565	0.00	0.00	-0.01	0.00	0.00	0.00	-0.05566	1313.90449	3.15	0.07
12	13	1.79850	0.00	0.03	0.28	-0.03	0.22	0.00	1.79878	1315.70326	9.77	0.29
13	14	-10.49770	0.00	-0.17	-1.71	-0.03	-1.25	0.00	-10.49961	1305.20365	16.45	-0.96
14	15	-2.29865	-0.01	-0.04	-0.37	-0.03	-0.26	0.00	-2.29909	1302.90455	23.62	-1.23
15	16	0.02080	0.00	0.00	0.00	0.00	0.00	0.00	0.02080	1302.92535	23.80	-1.23
16	17	-0.09560	0.00	0.00	-0.02	0.00	0.00	0.00	-0.09562	1302.82973	23.76	-1.23
17	18	0.03950	0.00	0.00	0.01	-0.02	0.00	0.00	0.03949	1302.86922	28.14	-1.23
18	19	-0.37300	0.00	-0.01	-0.06	-0.01	-0.04	0.00	-0.37308	1302.49614	28.61	-1.26
19	20	-0.14875	0.00	0.00	-0.02	0.00	-0.02	0.00	-0.14877	1302.34736	28.45	-1.28
20	21	4.54250	0.00	0.08	0.70	0.01	0.44	0.00	4.54329	1306.89065	28.69	-0.85
21	22	2.40580	0.00	0.04	0.36	0.03	0.25	0.00	2.40622	1309.29687	28.21	-0.59
22	23	0.04235	0.00	0.00	0.01	0.00	0.00	0.00	0.04237	1309.33923	28.25	-0.59
23	24	8.57060	0.01	0.14	1.26	-0.03	1.21	0.00	8.57198	1317.91121	29.07	0.62
24	25	6.33630	0.00	0.11	0.93	-0.03	0.84	0.00	6.33731	1324.24852	30.38	1.46
25	26	8.58590	-0.02	0.14	1.32	-0.05	1.09	0.00	8.58729	1332.83580	31.12	2.55
26	27	3.81433	0.01	0.06	0.51	0.00	0.40	0.00	3.81491	1336.65071	31.67	2.95
27	28	-4.43475	-0.03	-0.07	-0.72	-0.06	-0.49	0.00	-4.43563	1332.21508	30.23	2.46
28	29	-0.69200	0.02	-0.01	-0.12	-0.03	-0.08	0.00	-0.69214	1331.52295	29.60	2.39
29	30	14.71445	0.02	0.24	2.31	0.00	1.42	0.00	14.71702	1346.23997	*****	3.80
30	31	0.89030	0.00	0.01	0.13	0.00	0.07	0.00	0.89044	1347.13040	*****	3.87
31	32	-15.80370	0.00	-0.26	-2.24	0.03	-1.49	0.00	-15.80617	1331.32423	*****	2.38
32	33	-12.56670	0.00	-0.21	-1.83	0.03	-1.42	0.00	-12.56871	1318.75552	*****	0.96
33	34	-5.54770	0.00	-0.09	-0.79	0.00	-0.63	0.00	-5.54858	1313.20694	50.53	0.34
34	35	-14.98600	0.01	-0.25	-2.09	0.02	-1.58	0.00	-14.98830	1298.21864	52.02	-1.24
35	36	-16.53450	0.00	-0.27	-2.32	0.01	-1.55	0.00	-16.53708	1281.68156	55.47	-2.80
36	37	-18.38480	0.00	-0.31	-2.47	0.00	-2.01	0.00	-18.38757	1263.29399	58.14	-4.80
37	38	-2.36420	0.00	-0.04	-0.30	0.00	-0.26	0.00	-2.36453	1260.92946	61.05	-5.06
38	39	-2.14145	-0.01	-0.04	-0.27	-0.01	-0.30	0.00	-2.14178	1258.78768	62.46	-5.36
39	40	0.73425	0.02	0.01	0.10	0.01	0.09	0.00	0.73438	1259.52206	63.27	-5.27
40	41	-2.83200	-0.02	-0.05	-0.35	0.02	-0.25	0.00	-2.83241	1256.68965	64.73	-5.51
41	42	0.00725	-0.01	0.00	0.00	-0.07	0.00	0.00	0.00717	1256.69682	63.21	-5.51
41	43	0.18800	-0.02	0.00	0.03	0.00	0.01	0.00	0.18801	1256.87766	64.63	-5.50
43	44	-1.12780	-0.02	-0.02	-0.16	-0.04	-0.09	0.00	-1.12804	1255.74962	66.06	-5.59
44	45	-0.36830	-0.01	-0.01	-0.06	-0.06	-0.03	0.00	-0.36844	1255.38119	69.67	-5.62
45	46	-0.78940	0.00	-0.01	-0.12	-0.06	-0.07	0.00	-0.78958	1254.59161	71.73	-5.69
46	48	-0.05430	0.00	0.00	-0.01	-0.06	0.00	0.00	-0.05437	1254.53724	73.44	-5.69
48	49	-1.70015	0.00	-0.03	-0.27	-0.07	-0.15	0.00	-1.70052	1252.83672	75.68	-5.85

Table 1b-1

Table 1b. National Geodetic Survey Line 73988B: File 73988B.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
49	50	-0.56570	0.00	-0.01	-0.09	-0.07	-0.06	0.00	-0.56586	1252.27086	76.97	-5.90
50	51	0.29513	0.00	0.00	0.04	0.02	0.03	0.00	0.29519	1252.56605	76.79	-5.87
51	52	-0.45975	-0.02	-0.01	-0.08	0.03	-0.04	0.00	-0.45983	1252.10622	75.40	-5.91
52	53	-0.33840	-0.03	-0.01	-0.05	0.06	-0.03	0.00	-0.33843	1251.76779	73.86	-5.95
53	54	0.56140	0.01	0.01	0.09	0.03	0.06	0.00	0.56153	1252.32932	77.03	-5.89
54	55	-0.44780	0.00	-0.01	-0.07	0.03	-0.06	0.00	-0.44785	1251.88147	80.44	-5.95
55	56	3.03025	-0.01	0.05	0.44	0.03	0.37	0.00	3.03076	1254.91224	84.71	-5.58
56	57	2.99485	0.00	0.05	0.44	0.01	0.27	0.00	2.99535	1257.90759	85.80	-5.31
57	58	9.66550	0.01	0.16	1.46	0.03	1.16	0.00	9.66715	1267.57475	89.86	-4.15
58	59	1.36000	0.00	0.02	0.21	0.02	0.17	0.00	1.36025	1268.93500	91.82	-3.98
59	60	-2.83085	-0.05	-0.05	-0.46	0.03	-0.34	0.00	-2.83138	1266.10362	92.02	-4.32
60	61	4.68800	0.00	0.08	0.73	0.03	0.54	0.00	4.68884	1270.79245	92.06	-3.78
61	62	-3.60285	-0.02	-0.06	-0.51	0.03	-0.28	0.00	-3.60342	1267.18904	91.54	-4.06
62	63	1.60940	-0.01	0.03	0.24	0.01	0.12	0.00	1.60966	1268.79870	90.69	-3.94
63	64	-1.26380	-0.05	-0.02	-0.18	0.00	-0.19	0.00	-1.26405	1267.53466	89.11	-4.13
64	65	1.42400	-0.02	0.02	0.21	0.00	0.14	0.00	1.42420	1268.95886	88.06	-3.99
65	66	-3.78365	-0.03	-0.06	-0.43	0.00	-0.71	0.00	-3.78416	1265.17470	86.40	-4.70
66	67	5.21120	-0.01	0.09	0.67	0.00	0.64	0.00	5.21196	1270.38665	82.65	-4.06
67	68	-1.93303	0.00	-0.03	-0.25	0.00	-0.30	0.00	-1.93330	1268.45335	78.00	-4.36
68	69	-1.64450	0.00	-0.03	-0.22	0.00	-0.24	0.00	-1.64475	1266.80861	77.16	-4.60
69	70	-8.66750	0.02	-0.14	-1.07	0.00	-1.27	0.00	-8.66869	1258.13992	76.58	-5.86
70	71	-5.57200	0.00	-0.09	-0.83	-0.02	-0.62	0.00	-5.57294	1252.56698	77.27	-6.48
71	72	0.03620	-0.01	0.00	0.00	-0.02	0.00	0.00	0.03618	1252.60316	79.77	-6.47
72	73	-0.74650	0.00	-0.01	-0.11	-0.02	-0.10	0.00	-0.74664	1251.85652	83.77	-6.57
73	74	0.49685	0.01	0.01	0.07	-0.02	0.06	0.00	0.49692	1252.35345	88.11	-6.52
74	75	-0.23765	0.00	0.00	-0.03	0.00	0.00	0.00	-0.23769	1252.11576	88.11	-6.52
75	76	0.23635	0.00	0.00	0.03	0.00	0.00	0.00	0.23638	1252.35214	88.12	-6.52
76	77	-0.33550	-0.02	-0.01	-0.05	0.00	-0.03	0.00	-0.33557	1252.01657	92.98	-6.55
77	78	0.52535	0.01	0.01	0.07	0.00	0.03	0.00	0.52543	1252.54200	93.19	-6.52
78	79	-0.68340	0.00	-0.01	-0.10	0.02	-0.08	0.00	-0.68349	1251.85852	93.80	-6.60
79	80	-0.08435	0.01	0.00	-0.01	0.01	-0.01	0.00	-0.08434	1251.77418	94.65	-6.61
80	81	0.62035	-0.02	0.01	0.09	0.03	0.08	0.00	0.62045	1252.39463	97.18	-6.53
81	82	-0.15065	0.00	0.00	-0.02	0.03	-0.02	0.00	-0.15065	1252.24399	101.54	-6.55
82	83	0.05900	0.01	0.00	0.01	0.03	0.01	0.00	0.05905	1252.30303	106.29	-6.54
83	84	0.31575	0.00	0.01	0.05	0.01	0.04	0.00	0.31581	1252.61884	108.68	-6.50
84	85	-0.29305	0.00	0.00	-0.04	0.01	-0.03	0.00	-0.29308	1252.32577	112.64	-6.54
85	86	-0.36530	0.00	-0.01	-0.06	0.02	-0.04	0.00	-0.36535	1251.96041	114.86	-6.58
86	87	0.94555	-0.01	0.02	0.12	0.01	0.10	0.00	0.94569	1252.90610	116.66	-6.48
87	88	-0.94140	0.02	-0.02	-0.14	-0.02	-0.11	0.00	-0.94156	1251.96454	117.11	-6.58
88	89	0.37130	0.02	0.01	0.05	-0.02	0.04	0.00	0.37136	1252.33590	117.62	-6.54
89	90	-0.02865	0.02	0.00	0.00	-0.01	0.00	0.00	-0.02864	1252.30726	118.09	-6.54
90	91	6.92110	0.01	0.11	0.99	0.00	0.93	0.00	6.92221	1259.22946	120.05	-5.62
91	92	8.93645	0.00	0.15	1.32	-0.01	0.94	0.00	8.93790	1268.16737	121.46	-4.68
92	93	11.59560	-0.01	0.19	1.59	0.04	1.02	0.00	11.59741	1279.76478	125.73	-3.65
93	94	-21.95470	0.01	-0.36	-2.79	-0.11	-1.12	0.00	-21.95907	1257.80571	128.38	-4.78
93	95	10.69850	-0.01	0.18	1.36	0.08	0.96	0.00	10.70011	1290.46488	129.13	-2.69

Table 1b-2

Table 1b. National Geodetic Survey Line 73988B: File 73988B.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
95	96	11.11255	-0.05	0.18	1.41	0.07	1.29	0.00	11.11416	1301.57905	131.40	-1.40
96	97	8.55985	-0.04	0.14	1.11	0.06	0.89	0.00	8.56112	1310.14016	133.60	-0.51
97	98	8.07400	-0.11	0.13	1.30	0.03	1.05	0.00	8.07536	1318.21552	134.57	0.53
98	99	7.65088	-0.04	0.13	1.11	0.06	1.04	0.00	7.65213	1325.86764	135.05	1.58
99	100	11.84965	-0.02	0.20	1.95	0.05	1.49	0.00	11.85182	1337.71946	135.27	3.06
100	101	10.95265	0.03	0.18	1.83	0.06	1.45	0.00	10.95474	1348.67421	135.01	4.51
101	102	11.78970	-0.12	0.20	1.93	0.03	1.33	0.00	11.79175	1360.46595	132.44	5.84
102	103	2.26035	0.00	0.04	0.39	0.03	0.30	0.00	2.26079	1362.72675	125.78	6.14
103	104	-4.11900	-0.13	-0.07	-0.70	0.03	-0.46	0.00	-4.11987	1358.60688	118.84	5.69
104	105	3.66725	0.05	0.06	0.61	0.01	0.40	0.00	3.66798	1362.27486	118.20	6.09
105	106	0.27630	-0.04	0.00	0.04	0.03	0.03	0.00	0.27633	1362.55119	117.98	6.12
106	107	0.57395	-0.16	0.01	0.10	0.00	0.05	0.00	0.57390	1363.12508	118.29	6.17
107	108	9.71890	-0.06	0.16	1.52	0.00	1.08	0.00	9.72053	1372.84561	119.04	7.25
108	109	6.70490	-0.05	0.11	0.99	-0.01	0.74	0.00	6.70595	1379.55156	119.45	8.00
109	110	-13.20688	-0.03	-0.22	-1.89	0.00	-1.81	0.00	-13.20900	1366.34256	117.77	6.19
110	111	-19.42155	-0.02	-0.32	-3.11	-0.03	-2.83	0.00	-19.42502	1346.91754	115.77	3.36
111	112	-12.88710	-0.05	-0.21	-2.09	-0.03	-1.82	0.00	-12.88947	1334.02807	116.00	1.54
112	113	-0.07160	0.01	0.00	-0.01	-0.03	-0.01	0.00	-0.07164	1333.95643	119.22	1.53
113	114	0.72920	-0.05	0.01	0.10	-0.03	0.12	0.00	0.72924	1334.68567	122.53	1.65
114	115	1.87095	-0.01	0.03	0.29	0.06	0.27	0.00	1.87132	1336.55699	126.52	1.92
115	116	2.32885	-0.07	0.04	0.37	0.06	0.31	0.00	2.32925	1338.88624	130.52	2.23
116	117	0.56620	0.00	0.01	0.09	0.02	0.05	0.00	0.56631	1339.45256	131.23	2.28
117	118	4.56980	0.00	0.08	0.73	0.07	0.61	0.00	4.57067	1344.02323	134.27	2.89
118	119	4.67165	-0.01	0.08	0.74	0.07	0.62	0.00	4.67253	1348.69576	136.04	3.51
119	121	2.46543	0.01	0.04	0.39	0.04	0.31	0.00	2.46591	1351.16166	136.95	3.81
121	122	7.35300	0.00	0.12	1.15	0.04	0.97	0.00	7.35431	1358.51598	136.82	4.78
122	123	8.27755	0.00	0.14	1.29	0.03	0.93	0.00	8.27902	1366.79499	138.74	5.71
123	124	4.59115	0.11	0.08	0.75	0.02	0.46	0.00	4.59212	1371.38711	141.16	6.16
124	125	9.16215	0.03	0.15	1.51	0.01	0.96	0.00	9.16385	1380.55095	144.54	7.12
125	126	6.30570	0.03	0.10	1.02	0.00	0.73	0.00	6.30686	1386.85781	146.91	7.85
126	127	1.36665	-0.03	0.02	0.22	0.00	0.14	0.00	1.36686	1388.22468	147.56	7.99
127	128	0.51400	0.11	0.01	0.08	0.02	0.06	0.00	0.51422	1388.73890	148.64	8.04
128	129	-5.26700	0.09	-0.09	-0.82	0.03	-0.62	0.00	-5.26780	1383.47110	147.74	7.43
129	130	-7.80615	-0.08	-0.13	-1.21	0.02	-0.98	0.00	-7.80755	1375.66356	145.73	6.45
130	131	-7.01600	-0.10	-0.12	-1.05	0.01	-0.99	0.00	-7.01726	1368.64630	144.91	5.47
131	132	-7.95665	0.00	-0.13	-1.14	0.00	-0.94	0.00	-7.95791	1360.68838	146.34	4.53
132	133	-4.82270	0.02	-0.08	-0.72	0.01	-0.54	0.00	-4.82347	1355.86491	144.49	3.99
133	134	-2.90368	-0.01	-0.05	-0.47	0.01	-0.33	0.00	-2.90420	1352.96071	144.92	3.66
134	135	0.63945	0.02	0.01	0.11	0.00	0.08	0.00	0.63959	1353.60030	145.41	3.74
135	136	5.22100	0.02	0.09	0.85	-0.02	0.78	0.00	5.22193	1358.82223	144.27	4.52

Table 1c. National Geodetic Survey Line 73988B: File 73988B.prn(=.dat)

112	73988/B	3	4191506191030	11 1	1.08	211G11	F
1.54430		MT	0.05 -0.08 0.03 0.25	0.00	0.17	0.001033928510849074	
412	73988/B	4	3191506191200	12 1	1.08	211G11	B
-1.54290		MT	-0.05 -0.08 -0.03 -0.22	-0.02	-0.16	0.001084907410339285	
212	73988/B	4	5191506191100	13 1	1.27	211G11	F
-0.87000		MT	0.06 -0.12 -0.01 -0.12	0.01	-0.10	0.001084907410849075	
312	73988/B	5	4191506191135	13 1	1.27	211G11	B
0.87030		MT	-0.06 0.15 0.01 0.12	-0.02	0.11	0.001084907510849074	
512	73988/B	5	619150621 905	10 1	1.19	211G11	F
0.85860		MT	0.06 0.01 0.01 0.11	-0.03	0.12	0.001084907510849076	
3912	73988/B	6	5191506221645	9 1	1.19	211G11	B
-0.85900		MT	-0.06 0.00 -0.01 -0.12	-0.01	-0.11	0.001084907610849075	
612	73988/B	6	719150621 935	10 1	1.09	211G11	F
2.98170		MT	0.05 0.00 0.05 0.40	-0.04	0.39	0.001084907610849077	
3812	73988/B	7	6191506221615	9 1	1.09	211G11	B
-2.98450		MT	-0.05 0.00 -0.05 -0.42	0.00	-0.39	0.001084907710849076	
712	73988/B	7	8191506211000	9 1	1.04	211G11	F
-1.66440		MT	0.05 0.00 -0.03 -0.23	-0.04	-0.26	0.001084907710849078	
3712	73988/B	8	7191506221550	9 1	1.05	211G11	B
1.66470		MT	-0.05 0.00 0.03 0.24	0.00	0.21	0.001084907810849077	
4012	73988/B	8	919150623 840	10 1	1.11	211G11	RF
-1.12600		MT	0.05 -0.01 -0.02 -0.13	0.02	-0.13	0.001084907810849079	
812	73988/B	8	9191506211025	10 1	1.11	211G11	F
-1.13130		MT	0.05 0.00 -0.02 -0.17	-0.04	-0.16	0.001084907810849079	
4112	73988/B	9	819150623 910	11 1	1.11	211G11	B
1.13770		MT	-0.05 -0.01 0.02 0.16	-0.01	0.12	0.001084907910849078	
3612	73988/B	9	8191506221525	10 1	1.11	211G11	B
1.13640		MT	-0.05 0.00 0.02 0.16	0.01	0.14	0.001084907910849078	
912	73988/B	9	10191506211050	12 1	1.19	211G11	F
-1.07960		MT	0.06 -0.01 -0.02 -0.16	-0.05	-0.13	0.001084907910849080	
3512	73988/B	10	9191506221445	12 1	1.19	211G11	B
1.08400		MT	-0.06 0.00 0.02 0.16	0.03	0.12	0.001084908010849079	
3112	73988/B	10	11191506221429	1 1	0.02	211G11	F
0.00400		MT	0.00 0.00 0.00 0.00	0.00	0.00	0.001084908010337686	
3312	73988/B	11	10191506221437	1 1	0.02	211G11	B
-0.00400		MT	0.00 0.00 0.00 0.00	0.00	0.00	0.001033768610849080	
3412	73988/B	11	12191506221440	1 1	0.02	211G11	F
-0.05530		MT	0.01 0.00 0.00 -0.01	0.00	0.00	0.001033768610849081	
3212	73988/B	12	11191506221435	1 1	0.02	211G11	B
0.05600		MT	-0.01 0.00 0.00 0.01	0.00	0.00	0.001084908110337686	
1012	73988/B	12	13191506211140	11 1	1.11	211G11	F
1.80060		MT	0.65 -0.01 0.03 0.28	-0.03	0.23	0.001084908110849082	
3012	73988/B	13	12191506221405	11 1	1.11	211G11	B
-1.79640		MT	-0.65 0.00 -0.03 -0.28	0.03	-0.21	0.001084908210849081	
1112	73988/B	13	14191506211310	12 1	1.16	211G11	F
-10.49770		MT	0.68 -0.01 -0.17 -1.72	-0.01	-1.23	0.001084908210849083	
2912	73988/B	14	13191506221230	12 1	1.16	211G11	B
10.49770		MT	-0.68 0.00 0.17 1.70	0.05	1.26	0.001084908310849082	
1212	73988/B	14	15191506211345	11 1	1.07	211G11	F
-2.29670		MT	0.62 -0.02 -0.04 -0.38	-0.01	-0.26	0.001084908310849084	
2812	73988/B	15	14191506221210	11 1	1.07	211G11	B
2.30060		MT	-0.62 0.00 0.04 0.36	0.04	0.27	0.001084908410849083	
2612	73988/B	15	16191506221204	1 1	0.01	211G11	F
0.02100		MT	0.01 0.00 0.00 0.00	0.00	0.00	0.001084908410328143	
2512	73988/B	16	15191506221202	1 1	0.01	211G11	B
-0.02060		MT	-0.01 0.00 0.00 0.00	0.00	0.00	0.001032814310849084	
2712	73988/B	16	17191506221205	1 1	0.01	211G11	F
-0.09560		MT	0.01 0.00 0.00 -0.02	0.00	0.00	0.001032814310849085	
2412	73988/B	17	16191506221200	1 1	0.01	211G11	B
0.09560		MT	-0.01 0.00 0.00 0.02	0.00	0.00	0.001084908510328143	
1312	73988/B	17	18191506211425	11 1	1.08	211G11	F
0.03870		MT	0.68 -0.01 0.00 0.01	0.01	0.00	0.001084908510849086	
2312	73988/B	18	17191506221130	11 1	1.08	211G11	B
-0.04030		MT	-0.68 0.00 0.00 -0.01	0.04	0.00	0.001084908610849085	
1412	73988/B	18	19191506211455	11 1	1.09	211G11	F
-0.37270		MT	0.69 -0.01 -0.01 -0.06	0.01	-0.04	0.001084908610849087	
2212	73988/B	19	18191506221100	11 1	1.09	211G11	B
0.37330		MT	-0.69 0.00 0.01 0.06	0.03	0.04	0.001084908710849086	
4212	73988/B	19	20191506231010	11 1	1.10	211G11	F
-0.14750		MT	0.70 0.00 0.00 -0.02	0.00	-0.02	0.001084908710849088	
1512	73988/B	19	20191506211525	11 1	1.10	211G11	F
-0.14680		MT	0.70 0.00 0.00 -0.02	0.02	-0.01	0.001084908710849088	
4312	73988/B	20	19191506231040	11 1	1.10	211G11	B
0.14910		MT	-0.70 0.00 0.00 0.02	0.01	0.02	0.001084908810849087	
2112	73988/B	20	19191506221025	11 1	1.10	211G11	B

Table 1c. National Geodetic Survey Line 73988B: File 73988B.prn(=.dat)--Continued

0.15160		MT	-0.70	0.00	0.00	0.02	0.02	0.02	0.001084908810849087	
1612	73988/B	20	21191506211555			11	1	1.07	211G11	F
4.54370		MT	0.68	0.00	0.08	0.74	0.03	0.39	0.001084908810849089	
2012	73988/B	21	20191506221000			11	1	1.07	211G11	B
-4.54130		MT	-0.68	0.00	-0.08	-0.65	0.01	-0.48	0.001084908910849088	
1712	73988/B	21	22191506211625			11	1	1.10	211G11	F
2.40560		MT	0.70	0.00	0.04	0.38	0.04	0.20	0.001084908910849090	
1912	73988/B	22	2119150622 925			10	1	1.11	211G11	B
-2.40600		MT	-0.70	0.00	-0.04	-0.33	-0.01	-0.31	0.001084909010849089	
4412	73988/B	22	23191506231120			1	1	0.01	211G11	F
0.04200		MT	0.01	0.01	0.00	0.01	0.00	0.00	0.001084909010309585	
1812	73988/B	23	2219150622 915			1	1	0.01	211G11	B
-0.04270		MT	-0.01	0.00	0.00	-0.01	0.00	0.00	0.001030958510849090	
4512	73988/B	23	24191506231125			11	1	1.11	211G11	F
8.56990		MT	0.90	0.04	0.14	1.29	-0.01	1.11	0.001030958510849091	
6712	73988/B	24	23191506241545			9	1	1.11	211G11	B
-8.57130		MT	-0.90	0.02	-0.14	-1.23	0.05	-1.31	0.001084909110309585	
4612	73988/B	24	25191506231155			11	1	1.05	211G11	F
6.33460		MT	0.86	0.01	0.11	0.96	-0.02	0.74	0.001084909110849092	
6612	73988/B	25	24191506241515			9	1	1.06	211G11	B
-6.33800		MT	-0.86	0.01	-0.11	-0.90	0.05	-0.94	0.001084909210849091	
4712	73988/B	25	26191506231340			11	1	1.08	211G11	F
8.58580		MT	0.89	-0.02	0.14	1.34	-0.04	1.03	0.001084909210849093	
6512	73988/B	26	25191506241445			10	1	1.08	211G11	B
-8.58600		MT	-0.89	0.02	-0.14	-1.29	0.06	-1.15	0.001084909310849092	
4812	73988/B	26	27191506231405			11	1	1.08	211G11	F
3.81130		MT	0.89	0.01	0.06	0.59	-0.04	0.43	0.001084909310849094	
6812	73988/B	26	27191506251020			12	1	1.07	211G11	F
3.81230		MT	0.89	0.00	0.06	0.45	0.05	0.37	0.001084909310849094	
5512	73988/B	27	2619150624 920			11	1	1.07	211G11	B
-3.81600		MT	-0.89	-0.01	-0.06	-0.41	-0.05	-0.39	0.001084909410849093	
6412	73988/B	27	26191506241410			11	1	1.08	211G11	B
-3.81770		MT	-0.89	-0.01	-0.06	-0.59	0.05	-0.43	0.001084909410849093	
4912	73988/B	27	28191506231440			13	1	1.27	211G11	F
-4.43700		MT	1.05	-0.06	-0.07	-0.75	-0.05	-0.46	0.001084909410285778	
6312	73988/B	28	27191506241330			13	1	1.27	211G11	B
4.43250		MT	-1.05	0.00	0.07	0.69	0.06	0.52	0.001028577810849094	
5012	73988/B	28	29191506231540			10	1	1.09	211G11	F
-0.69130		MT	1.03	0.04	-0.01	-0.12	-0.02	-0.08	0.001028577810849095	
6212	73988/B	29	28191506241300			12	1	1.09	211G11	B
0.69270		MT	-1.03	0.01	0.01	0.11	0.03	0.07	0.001084909510285778	
5112	73988/B	29	30191506231610			11	1	1.12	211G11	F
14.71640		MT	1.07	0.04	0.24	2.24	-0.01	1.44	0.001084909510849096	
6112	73988/B	30	29191506241130			13	1	1.12	211G11	B
-14.71250		MT	-1.07	0.00	-0.24	-2.38	-0.01	-1.39	0.001084909610849095	
6912	73988/B	30	31191506251055			5	1	0.40	211G11	F
0.88900		MT	0.38	-0.01	0.01	0.11	0.01	0.07	0.001084909610849097	
6012	73988/B	31	30191506241115			5	1	0.39	211G11	B
-0.89160		MT	-0.38	0.00	-0.01	-0.14	0.00	-0.07	0.001084909710849096	
7012	73988/B	31	32191506251115			12	1	1.01	211G11	F
-15.80350		MT	0.97	0.00	-0.26	-2.05	0.03	-1.55	0.001084909710849098	
5912	73988/B	32	31191506241035			12	1	1.01	211G11	B
15.80390		MT	-0.97	0.00	0.26	2.43	-0.03	1.43	0.001084909810849097	
7112	73988/B	32	33191506251145			13	1	1.13	211G11	F
-12.56890		MT	1.06	0.01	-0.21	-1.73	0.02	-1.26	0.001084909810264299	
5812	73988/B	33	32191506241010			11	1	1.13	211G11	B
12.56450		MT	-1.06	0.01	0.21	1.93	-0.04	1.58	0.001026429910849098	
7212	73988/B	33	34191506251330			4	1	0.37	211G11	F
-5.54870		MT	0.30	0.01	-0.09	-0.75	-0.01	-0.66	0.001026429910849099	
5712	73988/B	34	3319150624 955			4	1	0.37	211G11	B
5.54670		MT	-0.30	0.01	0.09	0.83	-0.01	0.59	0.001084909910264299	
8612	73988/B	34	35191506261105			12	1	1.04	211G11	F
-14.98420		MT	0.84	0.01	-0.25	-2.07	0.04	-1.50	0.001084909910849100	
7312	73988/B	34	35191506251345			12	1	1.04	211G11	F
-14.98860		MT	0.84	0.01	-0.25	-2.01	-0.04	-1.49	0.001084909910849100	
8512	73988/B	35	34191506261040			12	1	1.04	211G11	B
14.98730		MT	-0.84	-0.01	0.25	1.98	-0.05	1.47	0.001084910010849099	
5612	73988/B	35	3419150624 925			10	1	1.04	211G11	B
14.98390		MT	-0.84	0.00	0.25	2.28	-0.04	1.85	0.001084910010849099	
7412	73988/B	35	36191506251415			13	1	1.13	211G11	F
-16.53400		MT	0.90	0.01	-0.27	-2.25	-0.05	-1.59	0.001084910010849101	
5412	73988/B	36	3519150624 850			12	1	1.14	211G11	B
16.53500		MT	-0.90	0.00	0.27	2.38	-0.06	1.52	0.001084910110849100	
7512	73988/B	36	37191506251445			12	1	1.15	211G11	F
-18.38500		MT	0.90	0.01	-0.31	-2.54	-0.06	-2.09	0.001084910110849102	
5312	73988/B	37	3619150624 815			11	1	1.15	211G11	B
18.38460		MT	-0.90	0.00	0.31	2.39	-0.06	1.92	0.001084910210849101	

Table 1c. National Geodetic Survey Line 73988B: File 73988B.prn(=.dat)--Continued

7612	73988/B	37	38191506251520	11	1	1.10	211G11	F
-2.36250		MT	0.85 0.00 -0.04 -0.33 -0.06 -0.25	0.001084910210344169				
5212	73988/B	38	3719150624 750	9	1	1.10	211G11	B
2.36590		MT	-0.85 -0.01 0.04 0.27 -0.06 0.27	0.001034416910849102				
7712	73988/B	38	39191506251555	10	1	1.20	211G11	F
-2.14160		MT	0.66 0.02 -0.04 -0.27 -0.09 -0.29	0.001034416910849103				
8412	73988/B	39	38191506261000	11	1	1.20	211G11	B
2.14130		MT	-0.66 0.04 0.04 0.27 -0.08 0.30	0.001084910310344169				
7812	73988/B	39	40191506251630	9	1	1.08	211G11	F
0.73370		MT	0.60 0.00 0.01 0.10 -0.07 0.09	0.001084910310337646				
8312	73988/B	40	3919150626 935	10	1	1.08	211G11	B
-0.73480		MT	-0.60 -0.03 -0.01 -0.09 -0.08 -0.09	0.001033764610849103				
7912	73988/B	40	41191506251700	10	1	1.12	211G11	F
-2.83140		MT	0.82 0.01 -0.05 -0.36 -0.07 -0.24	0.001033764610332829				
8212	73988/B	41	4019150626 905	12	1	1.12	211G11	B
2.83260		MT	-0.82 0.05 0.05 0.34 -0.10 0.25	0.001033282910337646				
8012	73988/B	41	4219150626 730	10	1	0.94	211G11	F
0.00640		MT	-0.66 -0.01 0.00 0.00 -0.07 0.00	0.001033282910336119				
8712	73988/B	41	43191506261305	2	1	0.11	211G11	F
0.18800		MT	0.00 -0.04 0.00 0.03 0.00 0.01	0.001033282910332842				
8112	73988/B	42	4119150626 805	12	1	0.94	211G11	B
-0.00810		MT	0.66 -0.01 0.00 0.00 0.08 0.00	0.001033611910332829				
11112	73988/B	43	41191506281650	1	1	0.11	211G11	B
-0.18800		MT	0.00 0.00 0.00 -0.02 0.00 -0.01	0.001033284210332829				
8812	73988/B	43	44191506261315	9	1	0.78	211G11	F
-1.12800		MT	0.47 -0.02 -0.02 -0.16 -0.03 -0.11	0.001033284210331298				
11012	73988/B	44	43191506281630	6	1	0.78	211G11	B
1.12760		MT	-0.47 0.02 0.02 0.15 0.05 0.06	0.001033129810332842				
8912	73988/B	44	45191506261355	11	1	1.08	211G11	F
-0.36800		MT	0.65 -0.01 -0.01 -0.06 -0.06 -0.04	0.001033129810849104				
10912	73988/B	45	44191506281615	7	1	1.08	211G11	B
0.36860		MT	-0.65 0.01 0.01 0.05 0.06 0.03	0.001084910410331298				
9012	73988/B	45	46191506261425	12	1	1.05	211G11	F
-0.79130		MT	0.63 0.01 -0.01 -0.12 -0.07 -0.07	0.001084910410849105				
10812	73988/B	46	45191506281550	7	1	1.05	211G11	B
0.78750		MT	-0.63 0.00 0.01 0.11 0.05 0.07	0.001084910510849104				
9212	73988/B	46	48191506261550	9	1	0.80	211G11	F
-0.05430		MT	0.48 0.00 0.00 -0.01 -0.07 0.00	0.001084910510321333				
10712	73988/B	48	46191506281530	6	1	0.80	211G11	B
0.05430		MT	-0.48 0.00 0.00 0.01 0.04 0.00	0.001032133310849105				
9112	73988/B	48	49191506261530	10	1	1.05	211G11	F
-1.69890		MT	0.57 0.01 -0.03 -0.26 -0.09 -0.19	0.001032133310849106				
10612	73988/B	49	48191506281505	8	1	1.06	211G11	B
1.70140		MT	-0.57 0.02 0.03 0.28 0.04 0.12	0.001084910610321333				
9312	73988/B	49	50191506261600	12	1	1.29	211G11	F
-0.56700		MT	0.69 0.00 -0.01 -0.08 -0.11 -0.06	0.001084910610314692				
10512	73988/B	50	49191506281430	14	1	1.28	211G11	B
0.56440		MT	-0.69 -0.01 0.01 0.10 0.02 0.05	0.001031469210849106				
11212	73988/B	50	5119150629 755	11	1	1.11	211G11	F
0.29860		MT	0.72 0.00 0.00 0.04 0.03 0.02	0.001031469210849107				
12712	73988/B	50	5119150630 750	9	1	1.11	211G11	F
0.29390		MT	0.72 0.00 0.00 0.04 0.01 0.03	0.001031469210849107				
10412	73988/B	51	50191506281400	13	1	1.10	211G11	B
-0.29340		MT	-0.72 0.01 0.00 -0.05 -0.01 -0.02	0.001084910710314692				
12812	73988/B	51	5019150630 820	9	1	1.11	211G11	B
-0.29460		MT	-0.72 -0.01 0.00 -0.04 -0.02 -0.04	0.001084910710314692				
11312	73988/B	51	5219150629 825	11	1	1.17	211G11	F
-0.45960		MT	0.76 -0.03 -0.01 -0.07 0.04 -0.04	0.001084910710849108				
10312	73988/B	52	51191506281330	13	1	1.17	211G11	B
0.45990		MT	-0.76 0.01 0.01 0.08 -0.02 0.04	0.001084910810849107				
11412	73988/B	52	5319150629 900	10	1	1.07	211G11	F
-0.33710		MT	0.69 -0.05 -0.01 -0.05 0.05 -0.04	0.001084910810302871				
10212	73988/B	53	52191506281205	12	1	1.07	211G11	B
0.33970		MT	-0.69 0.01 0.01 0.05 -0.06 0.03	0.001030287110849108				
11512	73988/B	53	5419150629 930	8	1	0.80	211G11	F
0.56140		MT	0.79 0.02 0.01 0.09 0.01 0.06	0.001030287110849109				
10112	73988/B	54	53191506281145	9	1	0.80	211G11	B
-0.56140		MT	-0.79 0.00 -0.01 -0.09 -0.04 -0.06	0.001084910910302871				
11612	73988/B	54	5519150629 945	10	1	1.12	211G11	F
-0.44830		MT	1.10 0.01 -0.01 -0.07 0.02 -0.06	0.001084910910849110				
10012	73988/B	55	54191506281120	11	1	1.12	211G11	B
0.44730		MT	-1.10 0.02 0.01 0.07 -0.05 0.06	0.001084911010849109				
11712	73988/B	55	56191506291015	11	1	1.12	211G11	F
3.02980		MT	1.10 -0.02 0.05 0.44 0.02 0.36	0.001084911010287387				
9912	73988/B	56	55191506281045	11	1	1.12	211G11	B
-3.03070		MT	-1.10 0.00 -0.05 -0.45 -0.04 -0.37	0.001028738710849110				
11812	73988/B	56	57191506291045	3	1	0.25	211G11	F

Table 1c. National Geodetic Survey Line 73988B: File 73988B.prn(=.dat)--Continued

2.99510		MT	0.22	-0.01	0.05	0.43	0.01	0.27	0.001028738710849111		
9812	73988/B		57	56191506281035			3	1	0.25	211G11	B
-2.99460		MT	-0.22	-0.01	-0.05	-0.46	-0.01	-0.27	0.001084911110287387		
11912	73988/B		57	58191506291055			15	1	1.41	211G11	F
9.66530		MT	1.22	0.02	0.16	1.55	0.03	1.02	0.001084911110849112		
9712	73988/B		58	57191506281000			13	1	1.41	211G11	B
-9.66570		MT	-1.22	0.00	-0.16	-1.37	-0.02	-1.30	0.001084911210849111		
12012	73988/B		58	59191506291125			12	1	1.07	211G11	F
1.35900		MT	0.93	0.00	0.02	0.23	0.03	0.13	0.001084911210849113		
9612	73988/B		59	5819150628	935		9	1	1.07	211G11	B
-1.36100		MT	-0.93	0.00	-0.02	-0.19	-0.01	-0.21	0.001084911310849112		
12112	73988/B		59	60191506291255			12	1	1.08	211G11	F
-2.83040		MT	0.94	-0.05	-0.05	-0.55	0.04	-0.27	0.001084911310849114		
9512	73988/B		60	5919150628	910		9	1	1.08	211G11	B
2.83130		MT	-0.94	0.04	0.05	0.37	-0.01	0.41	0.001084911410849113		
12212	73988/B		60	61191506291345			13	1	1.12	211G11	F
4.68860		MT	0.98	0.00	0.08	0.84	0.05	0.40	0.001084911410264284		
9412	73988/B		61	6019150628	840		9	1	1.13	211G11	B
-4.68740		MT	-0.98	0.00	-0.08	-0.62	0.00	-0.68	0.001026428410849114		
12312	73988/B		61	62191506291420			12	1	1.07	211G11	F
-3.60260		MT	0.93	-0.03	-0.06	-0.63	0.04	-0.32	0.001026428410849115		
14212	73988/B		62	61191507061615			8	1	1.07	211G11	B
3.60310		MT	-0.93	0.00	0.06	0.40	-0.01	0.23	0.001084911510264284		
12412	73988/B		62	63191506291455			12	1	1.07	211G11	F
1.60770		MT	0.93	-0.02	0.03	0.29	0.02	0.13	0.001084911510849116		
14112	73988/B		63	62191507061550			8	1	1.08	211G11	B
-1.61110		MT	-0.93	0.00	-0.03	-0.18	0.00	-0.11	0.001084911610849115		
12512	73988/B		63	64191506291530			11	1	1.13	211G11	F
-1.26260		MT	0.98	-0.05	-0.02	-0.22	0.01	-0.12	0.001084911610849117		
14012	73988/B		64	63191507061525			8	1	1.13	211G11	B
1.26500		MT	-0.98	0.05	0.02	0.14	0.00	0.26	0.001084911710849116		
12612	73988/B		64	65191506291600			10	1	1.11	211G11	F
1.42260		MT	0.96	0.00	0.02	0.24	0.00	0.15	0.001084911710344168		
13912	73988/B		65	64191507061500			8	1	1.11	211G11	B
-1.42540		MT	-0.96	0.04	-0.02	-0.17	0.01	-0.12	0.001034416810849117		
12912	73988/B		65	66191507061000			10	1	1.09	211G11	F
-3.78200		MT	1.03	-0.02	-0.06	-0.37	0.01	-0.53	0.001034416810849118		
13612	73988/B		66	65191507061330			8	1	1.09	211G11	B
3.78530		MT	-1.03	0.03	0.06	0.48	0.01	0.89	0.001084911810344168		
13012	73988/B		66	67191507061025			12	1	1.10	211G11	F
5.21050		MT	1.04	-0.03	0.09	0.65	0.01	0.52	0.001084911810849119		
13812	73988/B		67	66191507061405			10	1	1.10	211G11	B
-5.21190		MT	-1.04	-0.02	-0.09	-0.69	0.01	-0.76	0.001084911910849118		
14412	73988/B		67	68191507071120			10	1	1.07	211G11	F
-1.93360		MT	1.02	0.01	-0.03	-0.23	0.00	-0.28	0.001084911910849120		
13112	73988/B		67	68191507061055			10	1	1.07	211G11	F
-1.93120		MT	1.02	-0.02	-0.03	-0.25	0.00	-0.27	0.001084911910849120		
14512	73988/B		68	67191507071150			10	1	1.07	211G11	B
1.93030		MT	-1.02	-0.01	0.03	0.24	0.00	0.29	0.001084912010849119		
13712	73988/B		68	67191507061335			9	1	1.08	211G11	B
1.93700		MT	-1.02	0.00	0.03	0.26	0.01	0.34	0.001084912010849119		
13212	73988/B		68	69191507061120			3	1	0.32	211G11	F
-1.64470		MT	0.31	0.01	-0.03	-0.21	0.00	-0.24	0.001084912010328111		
13512	73988/B		69	68191507061325			3	1	0.32	211G11	B
1.64430		MT	-0.31	0.01	0.03	0.22	0.00	0.24	0.001032811110849120		
13312	73988/B		69	70191507061130			11	1	1.16	211G11	F
-8.66730		MT	0.97	0.01	-0.14	-1.07	0.00	-1.26	0.001032811110849121		
13412	73988/B		70	69191507061300			11	1	1.16	211G11	B
8.66770		MT	-0.97	-0.03	0.14	1.06	0.01	1.27	0.001084912110328111		
14612	73988/B		70	71191507071250			11	1	1.12	211G11	F
-5.57130		MT	0.93	0.01	-0.09	-0.81	-0.01	-0.72	0.001084912110849122		
16912	73988/B		71	70191507081600			11	1	1.12	211G11	B
5.57270		MT	-0.93	0.02	0.09	0.85	0.02	0.51	0.001084912210849121		
14712	73988/B		71	72191507071325			10	1	1.09	211G11	F
0.03570		MT	0.90	-0.02	0.00	0.00	-0.01	0.01	0.001084912210849123		
16712	73988/B		72	71191507081535			10	1	1.09	211G11	B
-0.03670		MT	-0.90	0.00	0.00	-0.01	0.02	0.00	0.001084912310849122		
14812	73988/B		72	73191507071350			10	1	1.09	211G11	F
-0.74530		MT	0.91	-0.01	-0.01	-0.10	-0.01	-0.11	0.001084912310849124		
16612	73988/B		73	72191507081505			10	1	1.09	211G11	B
0.74770		MT	-0.91	0.00	0.01	0.11	0.02	0.09	0.001084912410849123		
14912	73988/B		73	74191507071420			11	1	1.14	211G11	F
0.49670		MT	0.95	0.02	0.01	0.07	-0.01	0.06	0.001084912410849125		
16812	73988/B		74	73191507081535			11	1	1.14	211G11	B
-0.49700		MT	-0.95	0.00	-0.01	-0.07	0.02	-0.05	0.001084912510849124		
16412	73988/B		74	75191507081428			1	1	0.01	211G11	F
-0.23760		MT	0.01	0.00	0.00	-0.04	0.00	0.00	0.001084912510302881		

Table 1c. National Geodetic Survey Line 73988B: File 73988B.prn(=.dat)--Continued

16312	73988/B	75	74191507081426	1	1	0.01		211G11	B
0.23770		MT	-0.01 0.00 0.00 0.03	0.00	0.00	0.00	0.001030288110849125		
16512	73988/B	75	76191507081429	1	1	0.01		211G11	F
0.23630		MT	0.02 0.00 0.00 0.03	0.00	0.00	0.00	0.001030288110849126		
16212	73988/B	76	75191507081425	1	1	0.01		211G11	B
-0.23640		MT	-0.02 0.00 0.00 -0.03	0.00	0.00	0.00	0.001084912610302881		
15012	73988/B	76	77191507071550	10	1	1.05		211G11	F
-0.33640		MT	1.24 -0.03 -0.01 -0.05	0.00	-0.03	0.00	0.001084912610849127		
16112	73988/B	77	76191507081355	11	1	1.05		211G11	B
0.33460		MT	-1.24 0.00 0.01 0.05	0.00	0.04	0.00	0.001084912710849126		
17012	73988/B	77	7819150709 820	2	1	0.16		211G11	F
0.52470		MT	0.19 0.02 0.01 0.05	0.00	0.03	0.00	0.001084912710849128		
16012	73988/B	78	77191507081345	2	1	0.16		211G11	B
-0.52600		MT	-0.19 0.00 -0.01 -0.08	0.00	-0.04	0.00	0.001084912810849127		
19612	73988/B	78	79191507101435	13	1	1.17		211G11	F
-0.68240		MT	1.37 0.02 -0.01 -0.11	0.00	-0.06	0.00	0.001084912810287386		
17412	73988/B	78	7919150709 940	11	1	1.17		211G11	F
-0.68540		MT	1.37 -0.01 -0.01 -0.09	0.04	-0.08	0.00	0.001084912810287386		
17112	73988/B	78	7919150709 830	9	1	1.17		211G11	F
-0.68130		MT	1.37 0.01 -0.01 -0.08	0.03	-0.10	0.00	0.001084912810287386		
15912	73988/B	79	78191507081310	11	1	1.17		211G11	B
0.68640		MT	-1.37 0.01 0.01 0.11	-0.01	0.09	0.00	0.001028738610849128		
17312	73988/B	79	7819150709 910	10	1	1.17		211G11	B
0.68050		MT	-1.37 0.01 0.01 0.08	-0.04	0.09	0.00	0.001028738610849128		
19512	73988/B	79	78191507101400	13	1	1.17		211G11	B
0.68440		MT	-1.37 0.00 0.01 0.11	-0.01	0.06	0.00	0.001028738610849128		
17212	73988/B	79	8019150709 850	5	1	0.53		211G11	F
-0.08470		MT	0.49 0.01 0.00 -0.01	0.01	-0.01	0.00	0.001028738610849129		
15812	73988/B	80	79191507081200	5	1	0.53		211G11	B
0.08400		MT	-0.49 -0.01 0.00 0.01	-0.01	0.01	0.00	0.001084912910287386		
17512	73988/B	80	81191507091005	10	1	1.05		211G11	F
0.62170		MT	0.96 -0.01 0.01 0.08	0.03	0.08	0.00	0.001084912910849130		
15712	73988/B	81	80191507081130	10	1	1.06		211G11	B
-0.61900		MT	-0.96 0.02 -0.01 -0.09	-0.02	-0.08	0.00	0.001084913010849129		
17612	73988/B	81	82191507091030	10	1	1.09		211G11	F
-0.14900		MT	0.99 0.00 0.00 -0.02	0.03	-0.02	0.00	0.001084913010849131		
15612	73988/B	82	81191507081105	10	1	1.08		211G11	B
0.15230		MT	-0.99 0.01 0.00 0.02	-0.03	0.02	0.00	0.001084913110849130		
14312	73988/B	82	83191507071100	10	1	1.10		211G11	F
0.05700		MT	1.00 0.03 0.00 0.01	0.02	0.01	0.00	0.001084913110269399		
15512	73988/B	83	82191507081030	10	1	1.10		211G11	B
-0.06100		MT	-1.00 0.01 0.00 -0.01	-0.03	-0.01	0.00	0.001026939910849131		
17712	73988/B	83	84191507091130	7	1	0.65		211G11	F
0.31910		MT	0.54 0.00 0.01 0.04	0.01	0.03	0.00	0.001026939910849132		
19312	73988/B	83	84191507101315	6	1	0.65		211G11	F
0.31490		MT	0.54 0.00 0.01 0.05	0.00	0.04	0.00	0.001026939910849132		
15412	73988/B	84	8319150708 930	6	1	0.65		211G11	B
-0.31470		MT	-0.54 0.00 -0.01 -0.04	-0.02	-0.04	0.00	0.001084913210269399		
19412	73988/B	84	83191507101330	6	1	0.65		211G11	B
-0.31430		MT	-0.54 0.00 -0.01 -0.05	0.00	-0.04	0.00	0.001084913210269399		
17912	73988/B	84	85191507091345	13	1	1.12		211G11	F
-0.29150		MT	0.93 0.02 0.00 -0.04	-0.01	-0.03	0.00	0.001084913210849133		
15312	73988/B	85	8419150708 905	10	1	1.13		211G11	B
0.29460		MT	-0.93 0.01 0.00 0.04	-0.03	0.04	0.00	0.001084913310849132		
17812	73988/B	85	86191507091320	13	1	1.13		211G11	F
-0.36430		MT	0.93 -0.01 -0.01 -0.06	0.00	-0.03	0.00	0.001084913310849134		
15212	73988/B	86	8519150708 840	9	1	1.13		211G11	B
0.36630		MT	-0.93 0.00 0.01 0.05	-0.03	0.05	0.00	0.001084913410849133		
18012	73988/B	86	87191507091400	14	1	1.25		211G11	F
0.94570		MT	1.04 0.00 0.02 0.14	-0.01	0.09	0.00	0.001084913410350719		
15112	73988/B	87	8619150708 800	10	1	1.26		211G11	B
-0.94540		MT	-1.04 0.02 -0.02 -0.10	-0.03	-0.11	0.00	0.001035071910849134		
18112	73988/B	87	88191507091438	13	1	1.16		211G11	F
-0.94180		MT	0.90 0.02 -0.02 -0.14	-0.05	-0.08	0.00	0.001035071910849135		
19212	73988/B	88	87191507101145	11	1	1.17		211G11	B
0.94100		MT	-0.90 -0.01 0.02 0.14	-0.01	0.13	0.00	0.001084913510350719		
18212	73988/B	88	89191507091515	12	1	1.10		211G11	F
0.37100		MT	0.85 0.01 0.01 0.05	-0.05	0.03	0.00	0.001084913510849136		
19112	73988/B	89	88191507101115	10	1	1.10		211G11	B
-0.37160		MT	-0.85 -0.02 -0.01 -0.05	-0.02	-0.05	0.00	0.001084913610849135		
18312	73988/B	89	90191507091540	11	1	1.16		211G11	F
-0.03000		MT	0.90 0.03 0.00 0.00	-0.05	0.00	0.00	0.001084913610849137		
19012	73988/B	90	89191507101050	11	1	1.16		211G11	B
0.02730		MT	-0.90 0.00 0.00 0.00	-0.04	0.00	0.00	0.001084913710849136		
18412	73988/B	90	91191507091610	10	1	1.27		211G11	F
6.92200		MT	0.99 0.02 0.11 1.04	-0.05	0.96	0.00	0.001084913710331297		
18912	73988/B	91	90191507101020	12	1	1.27		211G11	B

Table 1c. National Geodetic Survey Line 73988B: File 73988B.prn(=.dat)--Continued

-6.92020		MT	-0.99	0.00	-0.11	-0.93	-0.05	-0.89	0.001033129710849137	
19712	73988/B	91	92191507101555				10	1	211G11	F
8.93730		MT	0.45	-0.01	0.15	1.45	-0.06	0.84	0.001033129710849138	
18812	73988/B	92	9119150710 955				10	1	211G11	B
-8.93560		MT	-0.45	0.00	-0.15	-1.18	-0.05	-1.04	0.001084913810331297	
19812	73988/B	92	93191507101620				12	1	211G11	F
11.59930		MT	0.52	0.00	0.19	1.90	-0.07	1.09	0.001084913810849139	
20012	73988/B	92	9319150712 800				11	1	211G11	F
11.59700		MT	0.52	0.00	0.19	1.55	0.08	0.97	0.001084913810849139	
18712	73988/B	93	9219150710 925				11	1	211G11	B
-11.59210		MT	-0.52	0.00	-0.19	-1.48	-0.07	-1.38	0.001084913910849138	
19912	73988/B	93	9219150712 730				11	1	211G11	B
-11.59400		MT	-0.52	0.04	-0.19	-1.44	-0.07	-0.65	0.001084913910849138	
18512	73988/B	93	9419150710 730				19	1	211G11	F
-21.95240		MT	-0.47	0.02	-0.36	-2.72	-0.11	-0.84	0.001084913910318074	
20112	73988/B	93	9519150712 830				11	1	211G11	F
10.69800		MT	0.50	0.00	0.18	1.48	0.08	0.90	0.001084913910849140	
18612	73988/B	94	9319150710 825				19	1	211G11	B
21.95700		MT	0.47	0.00	0.36	2.90	0.11	1.41	0.001031807410849139	
23012	73988/B	95	9319150714 855				11	1	211G11	B
-10.69900		MT	-0.50	0.02	-0.18	-1.24	-0.07	-1.03	0.001084914010849139	
23112	73988/B	95	9619150714 940				10	1	211G11	F
11.11300		MT	0.49	-0.05	0.18	1.40	0.07	1.38	0.001084914010849141	
20212	73988/B	95	9619150712 900				10	1	211G11	F
11.11070		MT	0.49	-0.17	0.18	1.58	0.08	1.21	0.001084914010849141	
22912	73988/B	96	9519150714 830				10	1	211G11	B
-11.11660		MT	-0.49	-0.05	-0.18	-1.27	-0.05	-1.11	0.001084914110849140	
23212	73988/B	96	95191507141000				10	1	211G11	B
-11.10990		MT	-0.49	0.03	-0.18	-1.40	-0.08	-1.45	0.001084914110849140	
20312	73988/B	96	9719150712 925				10	1	211G11	F
8.55830		MT	0.50	-0.03	0.14	1.27	0.08	1.02	0.001084914110849142	
22812	73988/B	97	9619150714 800				10	1	211G11	B
-8.56140		MT	-0.50	0.05	-0.14	-0.94	-0.04	-0.76	0.001084914210849141	
20412	73988/B	97	9819150712 950				10	1	211G11	F
8.07200		MT	0.50	-0.23	0.13	1.24	0.08	1.00	0.001084914210849143	
22712	73988/B	98	97191507131350				10	1	211G11	B
-8.07600		MT	-0.50	-0.01	-0.13	-1.36	0.01	-1.09	0.001084914310849142	
20512	73988/B	98	99191507121015				10	1	211G11	F
7.64670		MT	0.50	-0.19	0.13	1.18	0.07	0.98	0.001084914310849144	
23312	73988/B	98	99191507141040				10	1	211G11	F
7.65140		MT	0.50	0.00	0.13	0.99	0.08	1.05	0.001084914310849144	
23412	73988/B	99	98191507141110				10	1	211G11	B
-7.65400		MT	-0.50	0.00	-0.13	-0.96	-0.08	-1.10	0.001084914410849143	
22612	73988/B	99	98191507131325				10	1	211G11	B
-7.65140		MT	-0.50	-0.02	-0.13	-1.29	0.00	-1.04	0.001084914410849143	
20612	73988/B	99	100191507121040				11	1	211G11	F
11.84930		MT	0.53	-0.03	0.20	1.85	0.07	1.46	0.001084914410849145	
22512	73988/B	100	99191507131255				11	1	211G11	B
-11.85000		MT	-0.53	0.01	-0.20	-2.04	-0.02	-1.51	0.001084914510849144	
20712	73988/B	100	101191507121105				10	1	211G11	F
10.95200		MT	0.50	0.05	0.18	1.84	0.05	1.43	0.001084914510307851	
22412	73988/B	101	100191507131130				10	1	211G11	B
-10.95330		MT	-0.50	-0.01	-0.18	-1.82	-0.06	-1.47	0.001030785110849145	
20812	73988/B	101	102191507121250				12	1	211G11	F
11.79010		MT	0.46	-0.22	0.20	1.93	0.00	1.23	0.001030785110849146	
22312	73988/B	102	101191507131110				11	1	211G11	B
-11.78930		MT	-0.46	0.02	-0.20	-1.93	-0.07	-1.43	0.001084914610307851	
20912	73988/B	102	103191507121325				10	1	211G11	F
2.26000		MT	0.45	-0.02	0.04	0.39	-0.03	0.30	0.001084914610849147	
22212	73988/B	103	102191507131045				10	1	211G11	B
-2.26070		MT	-0.45	-0.01	-0.04	-0.38	-0.08	-0.30	0.001084914710849146	
21012	73988/B	103	104191507121355				11	1	211G11	F
-4.11690		MT	0.48	-0.21	-0.07	-0.72	-0.04	-0.50	0.001084914710849148	
22112	73988/B	104	103191507131020				12	1	211G11	B
4.12110		MT	-0.48	0.05	0.07	0.67	-0.09	0.41	0.001084914810849147	
21112	73988/B	104	105191507121425				10	1	211G11	F
3.66630		MT	0.45	0.13	0.06	0.63	-0.06	0.45	0.001084914810849149	
22012	73988/B	105	10419150713 955				11	1	211G11	B
-3.66820		MT	-0.45	0.03	-0.06	-0.59	-0.08	-0.36	0.001084914910849148	
21212	73988/B	105	106191507121450				10	1	211G11	F
0.27410		MT	0.46	-0.19	0.00	0.05	-0.07	0.03	0.001084914910849150	
23512	73988/B	105	106191507141155				11	1	211G11	F
0.27510		MT	0.46	-0.01	0.00	0.04	0.06	0.03	0.001084914910849150	
23612	73988/B	106	105191507141225				11	1	211G11	B
-0.27630		MT	-0.46	-0.01	0.00	-0.04	-0.05	-0.03	0.001084915010849149	
21912	73988/B	106	10519150713 935				10	1	211G11	B
-0.27970		MT	-0.46	-0.02	0.00	-0.04	-0.08	-0.03	0.001084915010849149	

Table 1c. National Geodetic Survey Line 73988B: File 73988B.prn(=.dat)--Continued

21312	73988/B	106 107191507121515	7 1 0.69	211G11	F
0.57460		MT 0.29 -0.32 0.01 0.10 -0.05 0.05	0.001084915010295637		
21812	73988/B	107 10619150713 915	7 1 0.69	211G11	B
-0.57330		MT -0.29 0.00 -0.01 -0.09 -0.05 -0.05	0.001029563710849150		
21412	73988/B	107 108191507121535	10 1 1.10	211G11	F
9.72070		MT 0.27 -0.12 0.16 1.61 -0.08 1.11	0.001029563710849151		
21712	73988/B	108 10719150713 850	10 1 1.10	211G11	B
-9.71710		MT -0.27 -0.01 -0.16 -1.44 -0.08 -1.05	0.001084915110295637		
21512	73988/B	108 109191507121600	9 1 1.04	211G11	F
6.70670		MT 0.26 -0.10 0.11 1.10 -0.08 0.76	0.001084915110849152		
21612	73988/B	109 10819150713 825	9 1 1.04	211G11	B
-6.70310		MT -0.26 -0.01 -0.11 -0.88 -0.07 -0.73	0.001084915210849151		
25512	73988/B	109 11019150716 910	9 1 1.01	211G11	F
-13.20580		MT 0.25 -0.06 -0.22 -1.72 0.03 -1.75	0.001084915210849153		
23712	73988/B	109 110191507141420	9 1 1.01	211G11	F
-13.21030		MT 0.25 -0.01 -0.22 -1.80 -0.02 -2.02	0.001084915210849153		
25612	73988/B	110 10919150716 930	9 1 1.01	211G11	B
13.20600		MT -0.25 0.03 0.22 1.93 -0.03 1.80	0.001084915310849152		
25412	73988/B	110 109191507151525	9 1 1.01	211G11	B
13.20540		MT -0.25 0.00 0.22 2.09 0.03 1.67	0.001084915310849152		
23812	73988/B	110 111191507141445	10 1 1.11	211G11	F
-19.42340		MT 0.27 -0.02 -0.32 -3.03 -0.04 -2.89	0.001084915310849154		
25312	73988/B	111 110191507151455	10 1 1.11	211G11	B
19.41970		MT -0.27 0.01 0.32 3.18 0.02 2.77	0.001084915410849153		
23912	73988/B	111 112191507141515	10 1 1.15	211G11	F
-12.88800		MT 0.28 -0.02 -0.21 -2.09 -0.05 -1.71	0.001084915410288982		
25212	73988/B	112 111191507151420	10 1 1.15	211G11	B
12.88620		MT -0.28 0.07 0.21 2.09 0.00 1.93	0.001028898210849154		
24012	73988/B	112 113191507141600	8 1 1.07	211G11	F
-0.07300		MT 0.09 -0.02 0.00 -0.01 -0.07 -0.01	0.001028898210849155		
25112	73988/B	113 112191507151350	9 1 1.06	211G11	B
0.07020		MT -0.09 -0.03 0.00 0.01 -0.01 0.01	0.001084915510288982		
24112	73988/B	113 114191507141625	7 1 0.98	211G11	F
0.73000		MT 0.08 -0.05 0.01 0.10 -0.07 0.11	0.001084915510287394		
25012	73988/B	114 113191507151325	8 1 0.98	211G11	B
-0.72840		MT -0.08 0.04 -0.01 -0.10 -0.02 -0.13	0.001028739410849155		
25712	73988/B	114 115191507161015	9 1 1.08	211G11	F
1.86960		MT 0.08 0.02 0.03 0.28 0.05 0.29	0.001028739410849156		
24912	73988/B	115 114191507151200	10 1 1.08	211G11	B
-1.87230		MT -0.08 0.04 -0.03 -0.31 -0.06 -0.25	0.001084915610287394		
25812	73988/B	115 116191507161040	10 1 1.08	211G11	F
2.32960		MT 0.08 -0.10 0.04 0.37 0.05 0.30	0.001084915610287393		
24812	73988/B	116 115191507151130	10 1 1.08	211G11	B
-2.32810		MT -0.08 0.04 -0.04 -0.37 -0.07 -0.32	0.001028739310849156		
25912	73988/B	116 117191507161105	3 1 0.25	211G11	F
0.56570		MT 0.02 -0.04 0.01 0.09 0.01 0.05	0.001028739310849157		
24712	73988/B	117 116191507151120	3 1 0.25	211G11	B
-0.56670		MT -0.02 -0.04 -0.01 -0.09 -0.02 -0.05	0.001084915710287393		
26012	73988/B	117 118191507161115	10 1 1.07	211G11	F
4.56960		MT 0.08 -0.02 0.08 0.75 0.06 0.61	0.001084915710849158		
24612	73988/B	118 117191507151055	10 1 1.07	211G11	B
-4.57000		MT -0.08 -0.01 -0.08 -0.71 -0.07 -0.61	0.001084915810849157		
26112	73988/B	118 119191507161140	11 1 1.19	211G11	F
4.67310		MT 0.09 0.00 0.08 0.78 0.06 0.64	0.001084915810849159		
24512	73988/B	119 118191507151025	11 1 1.19	211G11	B
-4.67020		MT -0.09 0.02 -0.08 -0.70 -0.08 -0.60	0.001084915910849158		
26212	73988/B	119 121191507161210	10 1 1.06	211G11	F
2.46270		MT 0.08 0.04 0.04 0.42 0.05 0.32	0.001084915910849160		
27912	73988/B	119 121191507171420	10 1 1.06	211G11	F
2.46510		MT 0.08 0.03 0.04 0.39 0.02 0.30	0.001084915910849160		
24412	73988/B	121 119191507151000	10 1 1.06	211G11	B
-2.46720		MT -0.08 0.02 -0.04 -0.36 -0.07 -0.29	0.001084916010849159		
27812	73988/B	121 119191507171400	10 1 1.06	211G11	B
-2.46670		MT -0.08 0.01 -0.04 -0.38 -0.03 -0.31	0.001084916010849159		
26312	73988/B	121 122191507161350	12 1 1.14	211G11	F
7.35270		MT 0.09 -0.06 0.12 1.24 0.02 0.74	0.001084916010285769		
24312	73988/B	122 12119150715 930	9 1 1.14	211G11	B
-7.35330		MT -0.09 -0.06 -0.12 -1.07 -0.06 -1.19	0.001028576910849160		
26412	73988/B	122 123191507161420	14 1 1.25	211G11	F
8.27970		MT 0.15 -0.05 0.14 1.49 0.01 0.69	0.001028576910849161		
24212	73988/B	123 12219150715 850	10 1 1.25	211G11	B
-8.27540		MT -0.15 -0.05 -0.14 -1.09 -0.06 -1.17	0.001084916110285769		
26512	73988/B	123 124191507161450	12 1 1.08	211G11	F
4.59200		MT 0.13 0.01 0.08 0.82 0.00 0.37	0.001084916110849162		
27712	73988/B	124 123191507171210	11 1 1.08	211G11	B
-4.59030		MT -0.13 -0.22 -0.08 -0.68 -0.04 -0.54	0.001084916210849161		
26612	73988/B	124 125191507161525	12 1 1.13	211G11	F

Table 1c. National Geodetic Survey Line 73988B: File 73988B.prn(=.dat)--Continued

9.16180		MT	0.14	-0.01	0.15	1.59	-0.02	0.75	0.001084916210849163		
27612	73988/B		125	124191507171140			11	1	1.13	211G11	B
-9.16250		MT	-0.14	-0.06	-0.15	-1.43	-0.04	-1.16	0.001084916310849162		
26712	73988/B		125	126191507161555			10	1	1.07	211G11	F
6.30630		MT	0.13	0.08	0.10	1.08	-0.03	0.61	0.001084916310849164		
27512	73988/B		126	125191507171115			10	1	1.07	211G11	B
-6.30510		MT	-0.13	0.01	-0.10	-0.96	-0.04	-0.85	0.001084916410849163		
26812	73988/B		126	127191507161620			3	1	0.31	211G11	F
1.36700		MT	0.04	-0.09	0.02	0.23	-0.01	0.11	0.001084916410282588		
27412	73988/B		127	126191507171105			3	1	0.31	211G11	B
-1.36630		MT	-0.04	-0.04	-0.02	-0.21	-0.01	-0.17	0.001028258810849164		
28012	73988/B		127	128191507171505			6	1	0.63	211G11	F
0.51370		MT	0.39	0.10	0.01	0.08	0.02	0.05	0.001028258810849165		
27312	73988/B		128	127191507171050			6	1	0.63	211G11	B
-0.51430		MT	-0.39	-0.12	-0.01	-0.08	-0.02	-0.06	0.001084916510282588		
28112	73988/B		128	129191507171520			10	1	1.07	211G11	F
-5.26800		MT	0.66	0.07	-0.09	-0.87	0.03	-0.56	0.001084916510849166		
27212	73988/B		129	128191507171028			10	1	1.07	211G11	B
5.26600		MT	-0.66	-0.11	0.09	0.78	-0.03	0.67	0.001084916610849165		
28212	73988/B		129	130191507171550			10	1	1.06	211G11	F
-7.80500		MT	0.66	-0.05	-0.13	-1.28	0.02	-0.76	0.001084916610849167		
27112	73988/B		130	129191507171000			9	1	1.07	211G11	B
7.80730		MT	-0.66	0.10	0.13	1.14	-0.02	1.19	0.001084916710849166		
28312	73988/B		130	131191507171620			9	1	1.12	211G11	F
-7.01400		MT	0.69	-0.07	-0.12	-1.12	0.01	-0.84	0.001084916710849168		
27012	73988/B		131	13019150717 935			9	1	1.12	211G11	B
7.01800		MT	-0.69	0.13	0.12	0.98	-0.01	1.13	0.001084916810849167		
28412	73988/B		131	132191507171645			9	1	1.12	211G11	F
-7.95670		MT	0.69	0.01	-0.13	-1.23	0.00	-0.70	0.001084916810267794		
26912	73988/B		132	13119150717 900			9	1	1.12	211G11	B
7.95660		MT	-0.69	0.00	0.13	1.05	0.00	1.18	0.001026779410849168		
28512	73988/B		132	13319150719 810			9	1	1.12	211G11	F
-4.82440		MT	1.05	0.01	-0.08	-0.57	0.01	-0.57	0.001026779410849169		
29212	73988/B		133	132191507201420			11	1	1.12	211G11	B
4.82100		MT	-1.05	-0.02	0.08	0.87	-0.01	0.51	0.001084916910267794		
28612	73988/B		133	13419150719 835			9	1	1.12	211G11	F
-2.90030		MT	1.05	-0.02	-0.05	-0.42	0.00	-0.37	0.001084916910849170		
29312	73988/B		133	134191507201505			9	1	1.13	211G11	F
-2.90460		MT	1.05	-0.02	-0.05	-0.51	0.02	-0.43	0.001084916910849170		
29412	73988/B		134	133191507201530			8	1	1.13	211G11	B
2.90070		MT	-1.05	-0.01	0.05	0.43	-0.03	0.21	0.001084917010849169		
29112	73988/B		134	133191507201350			11	1	1.12	211G11	B
2.90910		MT	-1.05	0.00	0.05	0.54	0.00	0.32	0.001084917010849169		
28712	73988/B		134	13519150719 900			9	1	1.11	211G11	F
0.64100		MT	1.04	0.04	0.01	0.10	0.00	0.09	0.001084917010849171		
29012	73988/B		135	134191507201310			11	1	1.11	211G11	B
-0.63790		MT	-1.04	0.00	-0.01	-0.12	0.01	-0.07	0.001084917110849170		
28812	73988/B		135	136191507191025			11	1	1.27	211G11	F
5.22100		MT	1.19	0.01	0.09	0.80	-0.01	0.76	0.001084917110345715		
28912	73988/B		136	135191507201135			11	1	1.27	211G11	B
-5.22100		MT	-1.19	-0.02	-0.09	-0.89	0.02	-0.80	0.001034571510849171		

Table 2a. National Geodetic Survey Line 73988C: File 73988C.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
3	10345715	N 12 USGS		0.00	38 28 18	118 09 05	1358.98900	1358.98900	0.00	0.00
4	10848947	TBM 1		1.09	38 27 44	118 08 48	1358.84553	1358.84645	-0.02	0.00
5	10848948	TBM 2		2.18	38 27 10	118 08 32	1361.63866	1361.64400	0.38	0.00
6	10848949	TBM 3		3.40	38 26 33	118 08 14	1364.79690	1364.80525	0.81	0.00
7	10323121	O 12		4.62	38 25 56	118 07 55	1371.15941	1371.17027	1.65	0.00
8	10848950	TBM 4		5.75	38 25 22	118 07 35	1376.36731	1376.38234	2.29	0.00
9	10848951	TBM 5		6.84	38 24 48	118 07 15	1379.43220	1379.44912	2.69	0.00
10	10848952	TBM 6		7.89	38 24 16	118 06 56	1381.39189	1381.41078	2.91	0.00
11	10848953	TBM 7		8.96	38 23 44	118 06 37	1382.57703	1382.59787	3.03	0.00
12	10297539	P 12		9.61	38 23 24	118 06 25	1385.98704	1386.00818	3.19	0.00
13	10297538	Q 12		9.85	38 23 27	118 06 22	1385.67245	1385.69397	3.17	0.00
14	10297540	R 12		9.88	38 23 27	118 06 22	1386.68930	1386.71090	3.18	0.00
15	10848954	TBM 8		11.04	38 22 48	118 06 19	1395.05821	1395.07909	3.96	0.00
16	10848955	TBM 9		12.10	38 22 13	118 06 16	1397.12494	1397.14644	4.18	0.00
17	10848956	TBM 10		13.13	38 21 38	118 06 14	1395.53387	1395.55740	4.02	0.00
18	10848957	TBM 11		14.19	38 21 02	118 06 11	1393.56895	1393.59019	3.80	0.00
19	10272836	S 12		14.46	38 20 53	118 06 10	1396.66371	1396.68486	4.01	0.00
20	10848958	TBM 12		15.62	38 20 14	118 06 09	1394.41735	1394.43949	3.79	0.00
21	10848959	TBM 13		16.69	38 19 37	118 06 08	1384.14623	1384.17236	2.77	0.00
22	10848960	TBM 14		17.75	38 19 01	118 06 07	1367.71662	1367.74437	0.87	0.00
23	10848961	TBM 15		18.88	38 18 22	118 06 05	1353.89588	1353.92504	-1.11	0.00
24	10345714	T 12 USGS		19.17	38 18 12	118 06 05	1351.07452	1351.10445	-1.41	0.00
25	10848962	TBM 16		20.19	38 17 42	118 06 00	1338.45938	1338.49401	-3.30	0.00
26	10848963	TBM 17		21.23	38 17 12	118 05 56	1333.87254	1333.91306	-3.93	0.00
27	10848964	TBM 18		22.32	38 16 41	118 05 51	1333.85336	1333.89836	-3.93	0.00
28	10848965	TBM 19		23.40	38 16 09	118 05 46	1337.13264	1337.17866	-3.53	0.00
29	10321335	U 12		24.24	38 15 45	118 05 42	1343.90853	1343.95369	-2.83	0.00
30	10321350	V 12		24.31	38 15 43	118 05 39	1344.61654	1344.66188	-2.80	0.00
31	10321349	W 12 USGS		24.33	38 15 43	118 05 39	1344.88944	1344.93482	-2.80	0.00
32	10848966	TBM 20		25.40	38 15 29	118 05 07	1346.49978	1346.54643	-2.59	0.00
33	10848967	TBM 21		26.53	38 15 15	118 04 32	1351.06541	1351.11326	-1.94	0.00
34	10848968	TBM 22		27.67	38 15 00	118 03 58	1371.82852	1371.87887	0.86	0.00
35	10311340	X 12 USGS		28.92	38 14 44	118 03 20	1395.45837	1395.51127	4.12	0.00
36	10848969	TBM 23		30.01	38 14 21	118 02 45	1416.72545	1416.77848	6.47	0.00
37	10848970	TBM 24		31.14	38 13 58	118 02 08	1439.83762	1439.89185	9.15	0.00
38	10848971	TBM 25		32.21	38 13 35	118 01 33	1462.43950	1462.49684	11.30	0.00
39	10848972	TBM 26		33.40	38 13 10	118 00 54	1486.63637	1486.69751	13.77	0.00
40	10848973	TBM 27		34.53	38 12 47	118 00 17	1511.29122	1511.35466	15.90	0.00
41	10288731	Y 12		35.23	38 12 32	117 59 54	1522.19245	1522.25849	16.85	0.00
42	10848974	TBM 28		36.44	38 12 05	117 59 21	1511.10621	1511.16867	15.84	0.00

Table 2a-1

Table 2a. National Geodetic Survey Line 73988C: File 73988C.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
43	10848975	TBM 29		37.52	38 11 41	117 58 52	1500.94540	1501.00213	15.19	0.00
44	10848976	TBM 30		38.60	38 11 16	117 58 23	1492.18670	1492.23729	14.51	0.00
45	10848977	TBM 31		39.63	38 10 53	117 57 55	1472.10188	1472.14467	12.19	0.00
46	10267553	Z 12		40.81	38 10 27	117 57 23	1447.61026	1447.64794	9.59	0.00
47	10848978	TBM 32		41.89	38 09 54	117 57 07	1428.95026	1428.98736	7.51	0.00
48	10848979	TBM 33		42.97	38 09 21	117 56 52	1408.64584	1408.68257	5.11	0.00
49	10350485	A 13		44.09	38 08 46	117 56 41	1394.18944	1394.22612	3.42	0.00
50	10848980	TBM 34		45.17	38 08 14	117 56 21	1387.39505	1387.43415	2.56	0.00
51	10848981	TBM 35		46.25	38 07 41	117 56 05	1382.50244	1382.54748	2.00	0.00
52	10334313	B 13		47.36	38 07 08	117 55 50	1380.33941	1380.39123	1.78	0.00

Table 2b. National Geodetic Survey Line 73988C: File 73988C.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
3										1358.98900	0.00	0.00
3	4	-0.14345	0.00	0.00	-0.02	0.00	-0.02	0.00	-0.14347	1358.84553	0.92	-0.02
4	5	2.79260	0.03	0.05	0.45	0.00	0.40	0.00	2.79313	1361.63866	5.34	0.38
5	6	3.15765	0.00	0.05	0.53	0.00	0.43	0.00	3.15824	1364.79689	8.35	0.81
6	7	6.36130	0.02	0.11	1.09	0.00	0.84	0.00	6.36251	1371.15940	10.86	1.65
7	8	5.20695	0.05	0.09	0.81	0.01	0.63	0.00	5.20790	1376.36730	15.03	2.29
8	9	3.06435	-0.03	0.05	0.51	0.02	0.41	0.00	3.06489	1379.43219	16.92	2.69
9	10	1.95930	0.02	0.03	0.33	0.02	0.22	0.00	1.95970	1381.39189	18.89	2.91
10	11	1.18495	-0.05	0.02	0.19	0.03	0.12	0.00	1.18514	1382.57703	20.84	3.03
11	12	3.40940	0.00	0.06	0.53	0.02	0.15	0.00	3.41001	1385.98703	21.14	3.19
12	13	-0.31450	-0.03	-0.01	-0.05	0.00	-0.02	0.00	-0.31459	1385.67245	21.52	3.17
13	14	1.01670	0.01	0.02	0.12	0.00	0.01	0.00	1.01685	1386.68930	21.60	3.18
14	15	8.36750	-0.05	0.14	1.30	0.02	0.78	0.00	8.36891	1395.05820	20.88	3.96
15	16	2.06635	0.01	0.03	0.33	0.01	0.23	0.00	2.06673	1397.12493	21.50	4.18
16	17	-1.59085	0.06	-0.03	-0.25	0.01	-0.17	0.00	-1.59107	1395.53386	23.53	4.02
17	18	-1.96460	0.03	-0.03	-0.32	0.01	-0.23	0.00	-1.96492	1393.56894	21.24	3.80
18	19	3.09415	0.01	0.05	0.55	0.00	0.22	0.00	3.09476	1396.66371	21.15	4.01
19	20	-2.24595	0.03	-0.04	-0.42	0.02	-0.23	0.00	-2.24636	1394.41735	22.14	3.79
20	21	-10.26910	-0.03	-0.17	-1.84	0.02	-1.02	0.00	-10.27113	1384.14622	26.13	2.77
21	22	-16.42675	-0.04	-0.27	-2.57	0.02	-1.90	0.00	-16.42961	1367.71662	27.75	0.87
22	23	-13.81830	0.00	-0.23	-2.23	0.02	-1.98	0.00	-13.82074	1353.89587	29.16	-1.11
23	24	-2.82080	-0.03	-0.05	-0.49	0.00	-0.30	0.00	-2.82136	1351.07451	29.93	-1.41
24	25	-12.61285	0.04	-0.21	-2.12	0.01	-1.90	0.00	-12.61513	1338.45938	34.63	-3.30
25	26	-4.58600	-0.03	-0.08	-0.76	0.02	-0.63	0.00	-4.58684	1333.87254	40.52	-3.93
26	27	-0.01920	0.01	0.00	0.00	0.02	0.00	0.00	-0.01918	1333.85336	45.00	-3.93
27	28	3.27870	0.00	0.05	0.51	0.02	0.41	0.00	3.27928	1337.13264	46.02	-3.53
28	29	6.77480	-0.01	0.11	0.98	0.02	0.70	0.00	6.77589	1343.90853	45.16	-2.83
29	30	0.70800	-0.09	0.01	0.09	0.00	0.03	0.00	0.70801	1344.61654	45.34	-2.80
30	31	0.27285	0.00	0.00	0.04	0.00	0.00	0.00	0.27290	1344.88944	45.38	-2.80
31	32	1.61005	0.04	0.03	0.25	-0.03	0.21	0.00	1.61034	1346.49978	46.65	-2.59
32	33	4.56485	-0.01	0.08	0.74	-0.03	0.65	0.00	4.56562	1351.06541	47.85	-1.94
33	34	20.75935	0.02	0.34	3.45	-0.04	2.80	0.00	20.76311	1371.82852	50.35	0.86
34	35	23.62555	-0.03	0.39	4.00	-0.06	3.27	0.00	23.62984	1395.45836	52.90	4.12
35	36	21.26343	0.03	0.35	3.28	0.01	2.34	0.00	21.26709	1416.72545	53.03	6.47
36	37	23.10785	0.03	0.38	3.98	-0.07	2.68	0.00	23.11217	1439.83761	54.23	9.15
37	38	22.59780	0.01	0.38	3.68	0.02	2.16	0.00	22.60188	1462.43950	57.34	11.30
38	39	24.19245	0.01	0.40	4.04	-0.03	2.47	0.00	24.19686	1486.63637	61.14	13.77
39	40	24.65025	0.00	0.41	4.21	-0.02	2.13	0.00	24.65485	1511.29122	63.44	15.90
40	41	10.89915	0.03	0.18	1.88	-0.01	0.95	0.00	10.90123	1522.19245	66.04	16.85
41	42	-11.08435	0.04	-0.18	-1.76	0.01	-1.01	0.00	-11.08624	1511.10621	62.46	15.84
42	43	-10.15915	-0.02	-0.17	-1.45	-0.02	-0.65	0.00	-10.16081	1500.94540	56.73	15.19
43	44	-8.75730	-0.01	-0.15	-1.26	0.01	-0.68	0.00	-8.75870	1492.18670	50.59	14.51
44	45	-20.08118	-0.05	-0.33	-3.28	0.01	-2.32	0.00	-20.08482	1472.10188	42.79	12.19
45	46	-24.48720	0.00	-0.41	-4.09	0.08	-2.60	0.00	-24.49162	1447.61026	37.68	9.59
46	47	-18.65675	-0.01	-0.31	-2.99	0.06	-2.08	0.00	-18.66000	1428.95025	37.10	7.51

Table 2b-1

Table 2b. National Geodetic Survey Line 73988C: File 73988C.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
47	48	-20.30085	0.03	-0.34	-3.31	0.05	-2.40	0.00	-20.30442	1408.64584	36.73	5.11
48	49	-14.45385	0.03	-0.24	-2.37	0.04	-1.70	0.00	-14.45640	1394.18944	36.68	3.42
49	50	-6.79320	-0.01	-0.11	-1.10	0.03	-0.86	0.00	-6.79439	1387.39505	39.10	2.56
50	51	-4.89180	0.05	-0.08	-0.79	0.02	-0.57	0.00	-4.89260	1382.50245	45.04	2.00
51	52	-2.16265	-0.03	-0.04	-0.33	0.01	-0.22	0.00	-2.16303	1380.33942	51.82	1.78

Table 2c. National Geodetic Survey Line 73988C: File 73988C.prn(=.dat)

212	73988/C	3	419150719 955	9 1	1.09	211G11	F
-0.14190		MT	1.13 0.00 0.00 -0.02	0.00 -0.02	0.001034571510848947		
2012	73988/C	4	3191507201110	9 1	1.09	211G11	B
0.14500		MT	-1.13 -0.01 0.00 0.02	0.01 0.02	0.001084894710345715		
312	73988/C	4	5191507191020	10 1	1.09	211G11	F
2.79310		MT	1.13 0.04 0.05 0.46	0.00 0.35	0.001084894710848948		
1912	73988/C	5	4191507201045	9 1	1.09	211G11	B
-2.79210		MT	-1.13 -0.03 -0.05 -0.44	0.01 -0.45	0.001084894810848947		
112	73988/C	5	619150719 940	11 1	1.21	211G11	F
3.15700		MT	1.26 0.01 0.05 0.55	0.00 0.37	0.001084894810848949		
1812	73988/C	6	5191507201015	10 1	1.22	211G11	B
-3.15830		MT	-1.26 0.00 -0.05 -0.51	0.00 -0.49	0.001084894910848948		
412	73988/C	6	7191507191110	12 1	1.22	211G11	F
6.36130		MT	1.27 0.01 0.11 1.13	0.00 0.73	0.001084894910323121		
1712	73988/C	7	619150720 950	10 1	1.22	211G11	B
-6.36130		MT	-1.27 -0.02 -0.11 -1.04	0.00 -0.95	0.001032312110848949		
512	73988/C	7	8191507191250	11 1	1.13	211G11	F
5.20860		MT	1.18 0.01 0.09 0.79	0.02 0.65	0.001032312110848950		
1612	73988/C	8	719150720 920	10 1	1.13	211G11	B
-5.20530		MT	-1.18 -0.08 -0.09 -0.82	0.00 -0.62	0.001084895010323121		
612	73988/C	8	9191507191320	10 1	1.09	211G11	F
3.06270		MT	1.14 -0.04 0.05 0.54	0.02 0.41	0.001084895010848951		
1512	73988/C	9	819150720 900	9 1	1.09	211G11	B
-3.06600		MT	-1.14 0.02 -0.05 -0.47	-0.01 -0.40	0.001084895110848950		
712	73988/C	9	10191507191345	10 1	1.05	211G11	F
1.95830		MT	1.11 0.01 0.03 0.35	0.03 0.23	0.001084895110848952		
1412	73988/C	10	919150720 835	9 1	1.05	211G11	B
-1.96030		MT	-1.11 -0.03 -0.03 -0.30	-0.01 -0.21	0.001084895210848951		
812	73988/C	10	11191507191415	10 1	1.06	211G11	F
1.18290		MT	1.12 -0.10 0.02 0.20	0.04 0.14	0.001084895210848953		
1312	73988/C	11	1019150720 810	10 1	1.08	211G11	B
-1.18700		MT	-1.12 0.00 -0.02 -0.18	-0.02 -0.10	0.001084895310848952		
912	73988/C	11	12191507191440	10 1	0.65	211G11	F
3.40950		MT	0.68 -0.02 0.06 0.60	0.02 0.14	0.001084895310297539		
1212	73988/C	12	1119150720 750	7 1	0.66	211G11	B
-3.40930		MT	-0.68 -0.02 -0.06 -0.46	-0.01 -0.17	0.001029753910848953		
1012	73988/C	12	13191507191510	3 1	0.25	211G11	F
-0.31400		MT	-0.10 0.05 -0.01 -0.06	0.00 -0.02	0.001029753910297538		
1112	73988/C	13	1219150720 740	3 1	0.23	211G11	B
0.31500		MT	0.10 0.10 0.01 0.04	0.00 0.01	0.001029753810297539		
2212	73988/C	13	1419150721 755	1 1	0.03	211G11	F
1.01700		MT	0.00 0.01 0.02 0.12	0.00 0.01	0.001029753810297540		
2112	73988/C	14	1319150721 750	1 1	0.03	211G11	B
-1.01640		MT	0.00 -0.01 -0.02 -0.12	0.00 -0.01	0.001029754010297538		
2312	73988/C	14	1519150721 800	11 1	1.17	211G11	F
8.36830		MT	1.34 -0.06 0.14 1.14	0.04 0.66	0.001029754010848954		
5512	73988/C	15	14191507221450	11 1	1.15	211G11	B
-8.36670		MT	-1.34 0.04 -0.14 -1.46	0.01 -0.89	0.001084895410297540		
2412	73988/C	15	1619150721 840	9 1	1.06	211G11	F
2.06830		MT	1.24 0.00 0.03 0.30	0.03 0.23	0.001084895410848955		
5412	73988/C	16	15191507221425	10 1	1.06	211G11	B
-2.06440		MT	-1.24 -0.02 -0.03 -0.36	0.01 -0.23	0.001084895510848954		
2512	73988/C	16	1719150721 905	10 1	1.03	211G11	F
-1.59070		MT	1.21 0.02 -0.03 -0.24	0.03 -0.15	0.001084895510848956		
5312	73988/C	17	16191507221400	10 1	1.03	211G11	B
1.59100		MT	-1.21 -0.09 0.03 0.27	0.01 0.18	0.001084895610848955		
2612	73988/C	17	1819150721 925	10 1	1.06	211G11	F
-1.96560		MT	1.25 -0.02 -0.03 -0.31	0.03 -0.21	0.001084895610848957		
5212	73988/C	18	17191507221340	10 1	1.06	211G11	B
1.96360		MT	-1.25 -0.07 0.03 0.34	0.01 0.24	0.001084895710848956		
2712	73988/C	18	1919150721 955	3 1	0.27	211G11	F
3.09400		MT	0.32 0.00 0.05 0.55	0.01 0.26	0.001084895710272836		
5112	73988/C	19	18191507221330	4 1	0.27	211G11	B
-3.09430		MT	-0.32 -0.02 -0.05 -0.55	0.00 -0.17	0.001027283610848957		
2812	73988/C	19	20191507211040	11 1	1.15	211G11	F
-2.24690		MT	1.37 0.06 -0.04 -0.43	0.02 -0.25	0.001027283610848958		
5012	73988/C	20	19191507221150	13 1	1.16	211G11	B
2.24500		MT	-1.37 0.00 0.04 0.40	-0.01 0.20	0.001084895810272836		
2912	73988/C	20	21191507211110	11 1	1.07	211G11	F
-10.26960		MT	1.27 -0.05 -0.17 -1.89	0.01 -1.09	0.001084895810848959		
4912	73988/C	21	20191507221120	12 1	1.07	211G11	B
10.26860		MT	-1.27 0.01 0.17 1.79	-0.02 0.94	0.001084895910848958		
3012	73988/C	21	22191507211135	12 1	1.06	211G11	F
-16.42780		MT	1.24 0.00 -0.27 -2.96	0.01 -1.55	0.001084895910848960		
3812	73988/C	21	2219150722 750	9 1	1.07	211G11	F
-16.42910		MT	1.24 -0.07 -0.27 -2.07	0.03 -1.46	0.001084895910848960		
5812	73988/C	22	2119150723 905	9 1	1.07	211G11	B
16.42840		MT	-1.24 0.05 0.27 2.43	-0.03 2.35	0.001084896010848959		

Table 2c. National Geodetic Survey Line 73988C: File 73988C.prn(=.dat)--Continued

4812	73988/C	22	21191507221050	10	1	1.06	211G11	B
16.42170		MT	-1.24 0.04 0.27 2.82	-0.02	2.24	0.001084896010848959		
5612	73988/C	22	2319150723 820	9	1	1.13	211G11	F
-13.82030		MT	1.31 0.02 -0.23 -1.91	0.03	-1.79	0.001084896010848961		
3112	73988/C	22	23191507211310	11	1	1.13	211G11	F
-13.81930		MT	1.31 -0.08 -0.23 -2.63	0.00	-1.68	0.001084896010848961		
4712	73988/C	23	22191507221025	9	1	1.13	211G11	B
13.81230		MT	-1.31 -0.06 0.23 2.40	-0.03	2.49	0.001084896110848960		
5712	73988/C	23	2219150723 845	9	1	1.13	211G11	B
13.82130		MT	-1.31 0.01 0.23 1.99	-0.03	1.97	0.001084896110848960		
3212	73988/C	23	24191507211340	3	1	0.29	211G11	F
-2.82030		MT	0.34 -0.05 -0.05 -0.50	0.00	-0.30	0.001084896110345714		
4612	73988/C	24	23191507221015	3	1	0.29	211G11	B
2.82130		MT	-0.34 0.01 0.05 0.47	-0.01	0.29	0.001034571410848961		
3312	73988/C	24	25191507211350	10	1	1.02	211G11	F
-12.61470		MT	0.99 -0.04 -0.21 -2.14	0.00	-1.53	0.001034571410848962		
4512	73988/C	25	2419150722 955	8	1	1.02	211G11	B
12.61100		MT	-0.99 -0.11 0.21 2.09	-0.02	2.26	0.001084896210345714		
3412	73988/C	25	26191507211415	10	1	1.04	211G11	F
-4.58800		MT	1.01 -0.06 -0.08 -0.78	0.00	-0.52	0.001084896210848963		
4412	73988/C	26	2519150722 930	8	1	1.04	211G11	B
4.58400		MT	-1.01 -0.01 0.08 0.73	-0.03	0.74	0.001084896310848962		
3512	73988/C	26	27191507211440	10	1	1.09	211G11	F
-0.01880		MT	1.05 -0.04 0.00 0.00	0.00	0.00	0.001084896310848964		
4312	73988/C	27	2619150722 905	9	1	1.09	211G11	B
0.01960		MT	-1.05 -0.06 0.00 0.00	-0.03	0.00	0.001084896410848963		
3612	73988/C	27	28191507211515	9	1	1.08	211G11	F
3.27900		MT	1.04 0.01 0.05 0.53	0.01	0.44	0.001084896410848965		
4212	73988/C	28	2719150722 835	9	1	1.08	211G11	B
-3.27840		MT	-1.04 0.01 -0.05 -0.49	-0.03	-0.37	0.001084896510848964		
3712	73988/C	28	29191507211540	8	1	0.85	211G11	F
6.77460		MT	0.81 -0.05 0.11 1.06	0.01	0.68	0.001084896510321335		
4112	73988/C	29	2819150722 810	7	1	0.83	211G11	B
-6.77500		MT	-0.81 -0.03 -0.11 -0.89	-0.02	-0.71	0.001032133510848965		
3912	73988/C	29	3019150722 805	1	1	0.07	211G11	F
0.70800		MT	0.07 -0.09 0.01 0.09	0.00	0.03	0.001032133510321350		
4012	73988/C	30	2919150722 808	1	1	0.07	211G11	B
-0.70800		MT	-0.07 0.09 -0.01 -0.09	0.00	-0.03	0.001032135010321335		
5912	73988/C	30	31191507231000	1	1	0.02	211G11	F
0.27270		MT	0.00 0.01 0.00 0.04	0.00	0.00	0.001032135010321349		
8312	73988/C	31	30191507241620	1	1	0.02	211G11	B
-0.27300		MT	0.00 0.00 0.00 -0.04	0.00	0.00	0.001032134910321350		
6012	73988/C	31	32191507231005	9	1	1.07	211G11	F
1.60970		MT	0.46 0.03 0.03 0.24	0.01	0.23	0.001032134910848966		
8212	73988/C	32	31191507241550	9	1	1.07	211G11	B
-1.61040		MT	-0.46 -0.05 -0.03 -0.26	0.06	-0.19	0.001084896610321349		
4.56470	73988/C	32	33191507231030	9	1	1.13	211G11	F
8112		MT	0.49 -0.01 0.08 0.70	0.00	0.78	0.001084896610848967		
-4.56500	73988/C	33	32191507241525	10	1	1.13	211G11	B
6212		MT	-0.49 0.01 -0.08 -0.78	0.07	-0.52	0.001084896710848966		
20.75930	73988/C	33	34191507231055	10	1	1.13	211G11	F
8012		MT	0.49 0.01 0.34 3.28	-0.01	3.11	0.001084896710848968		
-20.75940	73988/C	34	33191507241455	11	1	1.14	211G11	B
6312		MT	-0.49 -0.02 -0.34 -3.61	0.07	-2.49	0.001084896810848967		
23.62600	73988/C	34	35191507231120	12	1	1.25	211G11	F
7912		MT	0.56 -0.03 0.39 3.83	-0.03	3.41	0.001084896810311340		
-23.62510	73988/C	35	34191507241420	12	1	1.25	211G11	B
6412		MT	-0.56 0.04 -0.39 -4.16	0.08	-3.12	0.001031134010848968		
21.26510	73988/C	35	36191507231255	10	1	1.09	211G11	F
8412		MT	0.80 0.04 0.35 3.36	-0.06	2.85	0.001031134010848969		
21.26570	73988/C	35	3619150726 825	10	1	1.09	211G11	F
7812		MT	0.80 0.01 0.35 2.81	0.08	1.83	0.001031134010848969		
-21.25960	73988/C	36	35191507241350	10	1	1.09	211G11	B
8512		MT	-0.80 -0.03 -0.35 -3.78	0.07	-2.64	0.001084896910311340		
-21.26330	73988/C	36	3519150726 855	10	1	1.09	211G11	B
6512		MT	-0.80 -0.02 -0.35 -3.15	-0.09	-2.05	0.001084896910311340		
23.11040	73988/C	36	37191507231325	12	1	1.13	211G11	F
7712		MT	0.84 0.02 0.38 3.93	-0.07	2.63	0.001084896910848970		
-23.10530	73988/C	37	36191507241325	11	1	1.13	211G11	B
6612		MT	-0.84 -0.03 -0.38 -4.02	0.06	-2.73	0.001084897010848969		
22.60170	73988/C	37	38191507231405	12	1	1.08	211G11	F
8612		MT	0.81 -0.02 0.38 3.93	-0.07	2.20	0.001084897010848971		
22.59570	73988/C	37	3819150726 930	11	1	1.07	211G11	F
8712		MT	0.81 -0.01 0.37 3.52	0.09	2.15	0.001084897010848971		
-22.59470	73988/C	38	37191507261000	11	1	1.07	211G11	B
7612		MT	-0.81 -0.06 -0.37 -3.57	-0.09	-2.31	0.001084897110848970		
-22.59910	73988/C	38	37191507241255	13	1	1.07	211G11	B
		MT	-0.81 -0.01 -0.38 -3.71	0.04	-1.97	0.001084897110848970		

Table 2c. National Geodetic Survey Line 73988C: File 73988C.prn(=.dat)--Continued

6712	73988/C	38	39191507231440	13	1	1.19	211G11	F
24.19200		MT	0.92 0.01 0.40 4.06	-0.08	2.32	0.001084897110848972		
7512	73988/C	39	38191507241120	13	1	1.20	211G11	B
-24.19290		MT	-0.92 -0.01 -0.40 -4.02	-0.01	-2.61	0.001084897210848971		
6812	73988/C	39	40191507231515	11	1	1.13	211G11	F
24.65230		MT	0.88 -0.01 0.41 4.24	-0.07	1.99	0.001084897210848973		
7412	73988/C	40	39191507241050	13	1	1.13	211G11	B
-24.64820		MT	-0.88 0.00 -0.41 -4.19	-0.03	-2.27	0.001084897310848972		
6912	73988/C	40	41191507231550	7	1	0.70	211G11	F
10.90040		MT	0.55 0.05 0.18 1.90	-0.04	0.97	0.001084897310288731		
7312	73988/C	41	40191507241030	8	1	0.70	211G11	B
-10.89790		MT	-0.55 -0.02 -0.18 -1.85	-0.02	-0.93	0.001028873110848973		
10812	73988/C	41	42191507271600	12	1	1.21	211G11	F
-11.08240		MT	1.02 0.03 -0.18 -1.71	-0.04	-0.90	0.001028873110848974		
7212	73988/C	42	4119150724 945	12	1	1.21	211G11	B
11.08630		MT	-1.02 -0.05 0.18 1.80	-0.06	1.11	0.001084897410288731		
11212	73988/C	42	43191507271740	9	1	1.08	211G11	F
-10.15900		MT	0.91 -0.07 -0.17 -1.36	-0.04	-0.16	0.001084897410848975		
10912	73988/C	42	43191507271630	9	1	1.08	211G11	F
-10.15700		MT	0.91 -0.02 -0.17 -1.52	-0.04	-1.01	0.001084897410848975		
7112	73988/C	43	4219150724 915	10	1	1.08	211G11	B
10.16230		MT	-0.91 0.04 0.17 1.50	-0.06	1.11	0.001084897510848974		
11112	73988/C	43	42191507271720	9	1	1.08	211G11	B
10.15830		MT	-0.91 -0.04 0.17 1.42	0.05	0.32	0.001084897510848974		
11012	73988/C	43	44191507271655	9	1	1.08	211G11	F
-8.75560		MT	0.90 -0.05 -0.15 -1.28	-0.05	-0.50	0.001084897510848976		
7012	73988/C	44	4319150724 845	10	1	1.08	211G11	B
8.75900		MT	-0.90 -0.04 0.15 1.23	-0.07	0.86	0.001084897610848975		
8812	73988/C	44	45191507261055	11	1	1.03	211G11	F
-20.07690		MT	0.85 -0.03 -0.33 -3.21	0.07	-2.21	0.001084897610848977		
10612	73988/C	44	45191507271450	10	1	1.03	211G11	F
-20.08400		MT	0.85 -0.05 -0.33 -3.29	-0.01	-2.36	0.001084897610848977		
10712	73988/C	45	44191507271515	10	1	1.02	211G11	B
20.08190		MT	-0.85 0.07 0.33 3.33	0.02	2.19	0.001084897710848976		
10512	73988/C	45	44191507271415	10	1	1.03	211G11	B
20.08190		MT	-0.85 0.03 0.33 3.29	0.00	2.53	0.001084897710848976		
8912	73988/C	45	46191507261125	13	1	1.18	211G11	F
-24.48700		MT	0.96 -0.01 -0.41 -4.16	0.07	-2.59	0.001084897710267553		
10212	73988/C	46	45191507271125	13	1	1.18	211G11	B
24.48740		MT	-0.96 -0.02 0.41 4.02	-0.08	2.61	0.001026755310848977		
10312	73988/C	46	47191507271305	12	1	1.08	211G11	F
-18.65700		MT	1.18 -0.10 -0.31 -2.87	0.06	-1.90	0.001026755310848978		
9012	73988/C	46	47191507261315	10	1	1.08	211G11	F
-18.65490		MT	1.18 -0.01 -0.31 -3.10	0.04	-2.79	0.001026755310848978		
10012	73988/C	47	46191507271055	12	1	1.08	211G11	B
18.66070		MT	-1.18 -0.06 0.31 3.02	-0.07	1.81	0.001084897810267553		
10412	73988/C	47	46191507271335	12	1	1.08	211G11	B
18.65440		MT	-1.18 -0.02 0.31 2.98	-0.05	1.83	0.001084897810267553		
9112	73988/C	47	48191507261345	10	1	1.07	211G11	F
-20.30040		MT	1.16 -0.02 -0.34 -3.41	0.02	-2.85	0.001084897810848979		
9912	73988/C	48	47191507271025	12	1	1.08	211G11	B
20.30130		MT	-1.16 -0.09 0.34 3.21	-0.07	1.94	0.001084897910848978		
9212	73988/C	48	49191507261415	11	1	1.11	211G11	F
-14.45500		MT	1.19 -0.01 -0.24 -2.46	0.01	-1.62	0.001084897910350485		
10112	73988/C	49	48191507271055	11	1	1.13	211G11	B
14.45270		MT	-1.19 -0.06 0.24 2.28	-0.07	1.77	0.001035048510848979		
9312	73988/C	49	50191507261445	10	1	1.08	211G11	F
-6.79310		MT	1.14 -0.05 -0.11 -1.17	0.00	-0.77	0.001035048510848980		
9812	73988/C	50	4919150727 930	9	1	1.08	211G11	B
6.79330		MT	-1.14 -0.03 0.11 1.02	-0.05	0.94	0.001084898010350485		
9412	73988/C	50	51191507261515	10	1	1.08	211G11	F
-4.89170		MT	1.13 0.07 -0.08 -0.86	-0.01	-0.51	0.001084898010848981		
9712	73988/C	51	5019150727 905	9	1	1.08	211G11	B
4.89190		MT	-1.13 -0.02 0.08 0.71	-0.04	0.62	0.001084898110848980		
9512	73988/C	51	52191507261545	10	1	1.09	211G11	F
-2.16320		MT	1.14 -0.07 -0.04 -0.37	-0.02	-0.21	0.001084898110334313		
9612	73988/C	52	5119150727 840	10	1	1.13	211G11	B
2.16210		MT	-1.14 -0.02 0.04 0.28	-0.04	0.22	0.001033431310848981		

Table 3a. National Geodetic Survey Line 73988D: File 73988D.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
3	10334313	B 13		0.00	38 07 08	117 55 50	1379.94880	1379.94880	0.00	0.00
4	10848638	TBM 28		1.07	38 06 35	117 55 35	1380.99692	1381.00129	0.11	0.00
5	10848639	TBM 29		2.15	38 06 03	117 55 19	1383.81766	1383.82675	0.38	0.00
6	10848640	TBM 30		3.18	38 05 31	117 55 05	1384.20927	1384.22112	0.41	0.00
7	10848641	TBM 31		4.32	38 04 57	117 54 48	1381.38914	1381.40022	0.14	0.00
8	10307593	H 14		5.50	38 04 22	117 54 32	1380.80380	1380.81290	0.07	0.00
9	10848642	TBM 32		5.99	38 04 08	117 54 23	1381.88062	1381.88835	0.18	0.00
10	10848643	TBM 33		7.02	38 03 38	117 54 05	1384.71591	1384.71987	0.49	0.00
11	10848644	TBM 34		8.10	38 03 07	117 53 46	1387.62553	1387.62658	0.83	0.00
12	10848645	TBM 35		9.24	38 02 34	117 53 26	1398.69739	1398.69751	1.97	0.00
13	10848646	TBM 36		10.23	38 02 04	117 53 43	1392.83052	1392.83218	1.58	0.00
14	10279076	I 14		11.09	38 01 38	117 53 58	1398.54007	1398.54641	1.91	0.00
15	10848647	TBM 37		9.52	38 02 26	117 53 21	1400.68295	1400.68256	2.13	0.00
16	10282381	J 14		10.72	38 01 52	117 53 01	1415.71025	1415.70884	3.82	0.00
17	10848648	TBM 38		11.80	38 01 41	117 52 19	1434.18406	1434.18460	5.69	0.00
18	10848649	TBM 39		12.88	38 01 31	117 51 37	1452.32094	1452.32295	7.35	0.00
19	10848650	TBM 40		13.97	38 01 20	117 50 55	1471.56174	1471.56661	8.90	0.00
20	10848651	TBM 41		15.06	38 01 09	117 50 13	1490.26400	1490.27415	10.70	0.00
21	10274249	K 14		15.51	38 01 06	117 49 57	1496.31681	1496.32944	11.30	0.00
22	10848652	TBM 42		16.59	38 00 58	117 49 13	1494.91907	1494.93701	11.19	0.00
23	10848653	TBM 43		17.73	38 00 50	117 48 27	1482.25134	1482.27492	9.64	0.00
24	10848654	TBM 44		18.81	38 00 43	117 47 45	1477.18360	1477.21293	9.07	0.00
25	10848655	TBM 45		19.89	38 00 36	117 47 02	1471.16885	1471.20367	8.38	0.00
26	10269213	L 14		20.39	38 00 33	117 46 44	1468.26193	1468.29849	8.10	0.00
27	10269215	M 14		20.91	38 00 30	117 46 21	1467.48487	1467.52313	8.02	0.00
28	10848656	TBM 46		22.00	38 00 30	117 45 36	1463.76729	1463.80637	7.62	0.00
29	10848657	TBM 47		23.08	38 00 30	117 44 52	1463.83187	1463.87066	7.63	0.00
30	10848658	TBM 48		24.16	38 00 31	117 44 08	1460.98459	1461.02207	7.35	0.00
31	10269216	N 14		25.18	38 00 31	117 43 26	1458.62700	1458.66351	7.13	0.00
32	10848659	TBM 49		26.25	38 00 48	117 42 49	1461.72984	1461.76749	7.37	0.00
33	10848660	TBM 50		27.33	38 01 06	117 42 12	1465.90169	1465.94145	7.60	0.00
34	10848661	TBM 51		28.41	38 01 23	117 41 34	1464.96245	1465.00294	7.52	0.00
35	10848662	TBM 52		28.95	38 01 32	117 41 15	1463.18492	1463.22479	7.42	0.00
36	10280753	O 14		30.03	38 01 49	117 40 38	1462.72044	1462.75925	7.38	0.00
37	10848663	TBM 53		30.46	38 01 58	117 40 25	1461.18234	1461.21980	7.29	0.00
38	10848664	TBM 54		31.54	38 02 20	117 39 51	1460.68842	1460.72104	7.27	0.00
39	10848665	TBM 55		32.62	38 02 43	117 39 18	1458.99277	1459.01857	7.15	0.00
40	10848666	TBM 56		33.75	38 03 06	117 38 42	1453.18130	1453.19868	6.77	0.00
41	10299008	P 14		34.89	38 03 30	117 38 07	1445.29182	1445.30095	6.16	0.00
42	10848667	TBM 57		35.64	38 03 43	117 37 41	1442.54118	1442.54761	5.96	0.00

Table 3a-1

Table 3a. National Geodetic Survey Line 73988D: File 73988D.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
43	10848668	TBM 58		36.77	38 04 03	117 37 02	1442.26734	1442.27219	5.95	0.00
44	10848669	TBM 59		37.85	38 04 22	117 36 25	1443.05157	1443.05742	6.03	0.00
45	10848670	TBM 60		38.87	38 04 40	117 35 50	1444.58176	1444.58717	6.21	0.00
46	10312795	Q 14		39.75	38 04 56	117 35 20	1445.56069	1445.56663	6.31	0.00
47	10848671	TBM 61		40.76	38 05 11	117 34 43	1448.17920	1448.18814	6.55	0.00
48	10848672	TBM 62		41.79	38 05 25	117 34 06	1450.48274	1450.49597	6.75	0.00
49	10848673	TBM 63		42.50	38 05 35	117 33 41	1450.78824	1450.80453	6.78	0.00
50	10848674	TBM 64		43.53	38 05 50	117 33 04	1451.99357	1452.01465	6.87	0.00
51	10324465	R 14		44.58	38 06 05	117 32 26	1452.66169	1452.68519	6.92	0.00
52	10848675	TBM 65		45.68	38 06 19	117 31 45	1453.60867	1453.63129	7.01	0.00
53	10848676	TBM 66		46.76	38 06 33	117 31 05	1455.38537	1455.40669	7.13	0.00
54	10848677	TBM 67		47.83	38 06 47	117 30 25	1456.29702	1456.31752	7.20	0.00
55	10848678	TBM 68		48.69	38 06 58	117 29 53	1456.88489	1456.90521	7.26	0.00
57	10848679	TBM 69		49.78	38 07 12	117 29 13	1460.07160	1460.09144	7.80	0.00
58	10848680	TBM 70		50.80	38 07 26	117 28 35	1464.59862	1464.61283	8.32	0.00
59	10848681	TBM 71		51.82	38 07 39	117 27 57	1475.27298	1475.28167	9.35	0.00
60	10340664	T 14		52.51	38 07 48	117 27 31	1479.34924	1479.35447	9.69	0.00
61	10848682	TBM 72		53.59	38 07 39	117 26 48	1484.31167	1484.31304	10.09	0.00
62	10848683	TBM 73		54.65	38 07 30	117 26 07	1496.12461	1496.12986	11.34	0.00
63	10848684	TBM 74		55.70	38 07 21	117 25 25	1501.19518	1501.21223	11.88	0.00
64	10848685	TBM 75		56.78	38 07 12	117 24 42	1508.97822	1509.00273	12.61	0.00
65	10334311	U 14		57.84	38 07 03	117 24 01	1515.80927	1515.84027	13.27	0.00
66	10848686	TBM 76		58.74	38 06 36	117 23 45	1525.28368	1525.31635	14.48	0.00
82	10848687	TBM 77		59.76	38 06 06	117 23 26	1534.35868	1534.39362	15.35	0.00
83	10848688	TBM 78		60.70	38 05 38	117 23 09	1543.92039	1543.95765	16.36	0.00
84	10848689	TBM 79		62.02	38 04 59	117 22 45	1558.65271	1558.69471	18.00	0.00
67	10307592	V 14		63.04	38 04 29	117 22 27	1570.64156	1570.68774	19.17	0.00
68	10848690	TBM 80		63.50	38 04 16	117 22 18	1575.84380	1575.89228	19.62	0.00
69	10848691	TBM 81		64.59	38 03 45	117 21 56	1587.77362	1587.82855	21.08	0.00
70	10848692	TBM 82		65.68	38 03 14	117 21 34	1598.59469	1598.65435	22.40	0.00
71	10848693	TBM 83		66.77	38 02 43	117 21 12	1606.48710	1606.54921	23.35	0.00
72	10848694	TBM 84		67.86	38 02 12	117 20 50	1613.91910	1613.98293	24.25	0.00
73	10280754	W 14		68.98	38 01 41	117 20 28	1613.44105	1613.50712	24.20	0.00
93	10848706	TBM 96		69.63	38 01 20	117 20 22	1617.72520	1617.79289	24.57	0.00
94	10848707	TBM 97		70.82	38 00 43	117 20 11	1615.44655	1615.51467	24.33	0.00
95	10848708	TBM 98		71.90	38 00 09	117 20 01	1610.39897	1610.46518	23.78	0.00
96	10848709	TBM 99		73.03	37 59 33	117 19 51	1600.90150	1600.96497	22.10	0.00
97	10848710	TBM 100		74.11	37 58 58	117 19 41	1588.06625	1588.12690	20.63	0.00
98	10347303	C 15		75.20	37 58 24	117 19 31	1573.58859	1573.64722	18.12	0.00
99	10848711	TBM 101		76.36	37 57 49	117 19 14	1557.94057	1557.99889	15.14	0.00
100	10848712	TBM 102		77.35	37 57 19	117 18 59	1546.69043	1546.75090	13.95	0.00

Table 3a-2

Table 3a. National Geodetic Survey Line 73988D: File 73988D.pro---Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
101	10331097	D 15		78.43	37 56 46	117 18 43	1532.18278	1532.24248	12.36	0.00
74	10848695	TBM 85		69.85	38 02 05	117 20 13	1614.75292	1614.81640	24.35	0.00
75	10848696	TBM 86		70.94	38 02 36	117 19 55	1616.52402	1616.58397	24.55	0.00
76	10848697	TBM 87		71.94	38 03 04	117 19 37	1623.17634	1623.23467	25.23	0.00
77	10848698	TBM 88		73.01	38 03 34	117 19 19	1631.51178	1631.56880	26.13	0.00
78	10300887	X 14		73.30	38 03 42	117 19 14	1634.58778	1634.64435	26.39	0.00
79	10848699	TBM 89		73.81	38 03 53	117 18 58	1641.73957	1641.79448	27.06	0.00
80	10848700	TBM 90		74.94	38 04 17	117 18 23	1655.43239	1655.48504	28.42	0.00
81	10848701	TBM 91		75.98	38 04 39	117 17 51	1669.27689	1669.32720	29.35	0.00
85	10314502	Y 14		77.12	38 05 03	117 17 16	1687.88453	1687.93742	30.68	0.00
86	10311112	Z 14		78.18	38 04 49	117 16 40	1712.71977	1712.77510	32.25	0.00
87	10848702	TBM 92		79.24	38 04 39	117 16 00	1740.42767	1740.48509	33.61	0.00
88	10848703	TBM 93		80.35	38 04 28	117 15 17	1770.30036	1770.36208	34.90	0.00
89	10848704	TBM 94		81.50	38 04 17	117 14 33	1802.66989	1802.74044	36.05	0.00
90	10848705	TBM 95		82.28	38 04 09	117 14 04	1822.11548	1822.19365	37.06	0.00
91	10304316	A 15		82.73	38 04 05	117 13 47	1836.72401	1836.80841	37.44	0.00
92	10299009	B 15 USGS		84.06	38 03 39	117 13 08	1873.75139	1873.85067	39.27	0.00

Table 3b. National Geodetic Survey Line 73988D: File 73988D.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
3										1379.94880	0.00	0.00
3	4	1.04785	0.00	0.02	0.17	0.07	0.11	0.00	1.04811	1380.99692	4.37	0.11
4	5	2.82015	0.00	0.05	0.48	0.06	0.27	0.00	2.82074	1383.81766	9.09	0.38
5	6	0.39150	0.00	0.01	0.07	0.05	0.03	0.00	0.39161	1384.20927	11.85	0.41
6	7	-2.81970	-0.03	-0.05	-0.38	0.04	-0.28	0.00	-2.82013	1381.38915	11.08	0.14
7	8	-0.58525	-0.02	-0.01	-0.09	0.03	-0.07	0.00	-0.58534	1380.80381	9.10	0.07
8	9	1.07660	-0.03	0.02	0.18	0.04	0.11	0.00	1.07681	1381.88062	7.73	0.18
9	10	2.83470	0.00	0.05	0.47	0.07	0.31	0.00	2.83529	1384.71590	3.96	0.49
10	11	2.90900	0.05	0.05	0.47	0.06	0.34	0.00	2.90962	1387.62552	1.05	0.83
11	12	11.06975	0.04	0.18	1.84	0.06	1.14	0.00	11.07187	1398.69739	0.12	1.97
12	13	-5.86610	0.02	-0.10	-0.75	0.06	-0.38	0.00	-5.86725	1392.83014	1.66	1.58
13	14	5.71068	0.03	0.09	0.74	0.03	0.38	0.00	5.71195	1398.54209	6.34	1.91
12	15	1.98515	0.03	0.03	0.35	0.00	0.16	0.00	1.98556	1400.68295	-0.39	2.13
15	16	15.02430	0.05	0.25	2.67	0.03	1.70	0.00	15.02730	1415.71024	-1.41	3.82
16	17	18.47045	-0.02	0.31	3.12	-0.05	1.87	0.00	18.47382	1434.18406	0.54	5.69
17	18	18.13350	0.03	0.30	3.09	-0.04	1.66	0.00	18.13688	1452.32094	2.01	7.35
18	19	19.23770	-0.09	0.32	2.85	0.03	1.55	0.00	19.24080	1471.56174	4.87	8.90
19	20	18.69910	-0.08	0.31	2.88	0.04	1.80	0.00	18.70226	1490.26399	10.15	10.70
20	21	6.05180	0.00	0.10	0.89	0.02	0.60	0.00	6.05281	1496.31680	12.63	11.30
21	22	-1.39755	-0.02	-0.02	-0.22	0.07	-0.11	0.00	-1.39774	1494.91907	17.94	11.19
22	23	-12.66560	-0.01	-0.21	-1.99	0.07	-1.55	0.00	-12.66773	1482.25133	23.58	9.64
23	24	-5.06685	-0.03	-0.08	-0.85	0.07	-0.57	0.00	-5.06774	1477.18360	29.33	9.07
24	25	-6.01375	-0.02	-0.10	-0.95	0.07	-0.69	0.00	-6.01475	1471.16885	34.82	8.38
25	26	-2.90650	0.05	-0.05	-0.45	0.03	-0.29	0.00	-2.90693	1468.26192	36.56	8.10
26	27	-0.77685	-0.09	-0.01	-0.13	0.03	-0.08	0.00	-0.77705	1467.48487	38.26	8.02
27	28	-3.71700	0.01	-0.06	-0.55	0.02	-0.40	0.00	-3.71759	1463.76728	39.08	7.62
28	29	0.06455	0.02	0.00	0.01	0.00	0.01	0.00	0.06459	1463.83187	38.79	7.63
29	30	-2.84675	0.00	-0.05	-0.47	-0.02	-0.27	0.00	-2.84728	1460.98459	37.48	7.35
30	31	-2.35715	0.03	-0.04	-0.41	-0.03	-0.22	0.00	-2.35759	1458.62700	36.51	7.13
31	32	3.10230	0.00	0.05	0.55	-0.06	0.24	0.00	3.10284	1461.72984	37.65	7.37
32	33	4.17105	0.05	0.07	0.74	-0.06	0.23	0.00	4.17185	1465.90169	39.76	7.60
33	34	-0.93905	0.03	-0.02	-0.16	-0.03	-0.08	0.00	-0.93924	1464.96245	40.49	7.52
34	35	-1.77723	-0.01	-0.03	-0.26	0.00	-0.10	0.00	-1.77753	1463.18492	39.87	7.42
35	36	-0.46440	0.01	-0.01	-0.08	0.00	-0.03	0.00	-0.46448	1462.72044	38.81	7.38
36	37	-1.53783	0.01	-0.03	-0.25	0.00	-0.09	0.00	-1.53810	1461.18234	37.46	7.29
37	38	-0.49383	0.00	-0.01	-0.08	0.00	-0.03	0.00	-0.49392	1460.68842	32.62	7.27
38	39	-1.69535	0.00	-0.03	-0.28	0.00	-0.11	0.00	-1.69565	1458.99277	25.80	7.15
39	40	-5.81045	0.02	-0.10	-0.93	0.00	-0.38	0.00	-5.81147	1453.18130	17.38	6.77
40	41	-7.88815	0.02	-0.13	-1.21	0.00	-0.62	0.00	-7.88948	1445.29181	9.13	6.16
41	42	-2.75015	0.00	-0.05	-0.44	0.00	-0.20	0.00	-2.75064	1442.54117	6.43	5.96
42	43	-0.27380	0.02	0.00	-0.04	-0.02	-0.02	0.00	-0.27384	1442.26733	4.85	5.95
43	44	0.78410	0.03	0.01	0.12	-0.03	0.08	0.00	0.78424	1443.05157	5.85	6.03
44	45	1.52995	0.01	0.03	0.23	-0.02	0.18	0.00	1.53019	1444.58176	5.41	6.21
45	46	0.97880	-0.01	0.02	0.14	-0.03	0.10	0.00	0.97893	1445.56069	5.94	6.31
46	47	2.61810	0.03	0.04	0.38	-0.03	0.25	0.00	2.61851	1448.17920	8.94	6.55
47	48	2.30320	0.00	0.04	0.33	-0.03	0.19	0.00	2.30353	1450.48274	13.23	6.75

Table 3b-1

Table 3b. National Geodetic Survey Line 73988D: File 73988D.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
48	49	0.30545	0.02	0.00	0.05	-0.02	0.03	0.00	0.30550	1450.78824	16.29	6.78
49	50	1.20515	0.02	0.02	0.17	-0.03	0.09	0.00	1.20533	1451.99357	21.08	6.87
50	51	0.66805	0.00	0.01	0.09	-0.03	0.05	0.00	0.66812	1452.66169	23.50	6.92
51	52	0.94685	0.00	0.02	0.14	-0.03	0.09	0.00	0.94698	1453.60867	22.62	7.01
52	53	1.77645	0.00	0.03	0.24	-0.03	0.13	0.00	1.77669	1455.38537	21.32	7.13
53	54	0.91155	0.00	0.02	0.11	-0.02	0.07	0.00	0.91165	1456.29702	20.50	7.20
54	55	0.58780	0.00	0.01	0.09	-0.03	0.06	0.00	0.58786	1456.88489	20.32	7.26
55	57	3.18625	0.00	0.05	0.44	-0.03	0.54	0.00	3.18671	1460.07160	19.84	7.80
57	58	4.52630	0.00	0.08	0.67	-0.03	0.53	0.00	4.52702	1464.59862	14.21	8.32
58	59	10.67255	0.01	0.18	1.65	-0.03	1.02	0.00	10.67436	1475.27298	8.69	9.35
59	60	4.07555	0.00	0.07	0.67	-0.03	0.34	0.00	4.07626	1479.34924	5.23	9.69
60	61	4.96160	0.02	0.08	0.76	-0.03	0.41	0.00	4.96243	1484.31167	1.37	10.09
61	62	11.81100	0.00	0.20	1.76	-0.03	1.24	0.00	11.81294	1496.12461	5.25	11.34
62	63	5.06980	0.00	0.08	0.71	-0.02	0.54	0.00	5.07057	1501.19518	17.05	11.88
63	64	7.78185	0.02	0.13	1.07	-0.02	0.73	0.00	7.78304	1508.97822	24.51	12.61
64	65	6.83013	0.00	0.11	0.83	-0.02	0.65	0.00	6.83105	1515.80927	31.00	13.27
65	66	9.47305	0.04	0.16	1.15	0.00	1.22	0.00	9.47441	1525.28368	32.67	14.48
66	82	9.07383	0.05	0.15	0.95	0.02	0.87	0.00	9.07499	1534.35867	34.94	15.35
82	83	9.56035	0.00	0.16	1.20	0.00	1.01	0.00	9.56171	1543.92038	37.26	16.36
83	84	14.73020	0.02	0.24	1.86	0.02	1.64	0.00	14.73232	1558.65271	42.00	18.00
84	67	11.98698	0.06	0.20	1.60	0.01	1.17	0.00	11.98885	1570.64155	46.18	19.17
67	68	5.20150	-0.03	0.09	0.68	0.00	0.46	0.00	5.20225	1575.84380	48.48	19.62
68	69	11.92805	0.03	0.20	1.54	0.00	1.45	0.00	11.92982	1587.77362	54.93	21.08
69	70	10.81950	0.00	0.18	1.39	0.00	1.33	0.00	10.82107	1598.59469	59.66	22.40
70	71	7.89125	0.02	0.13	1.01	0.00	0.95	0.00	7.89241	1606.48710	62.11	23.35
71	72	7.43090	0.00	0.12	0.98	0.00	0.91	0.00	7.43200	1613.91910	63.83	24.25
72	73	-0.47795	-0.03	-0.01	-0.06	0.00	-0.06	0.00	-0.47805	1613.44105	66.07	24.20
73	93	4.28355	-0.03	0.07	0.54	0.02	0.37	0.00	4.28415	1617.72520	67.69	24.57
93	94	-2.27830	-0.06	-0.04	-0.29	0.04	-0.24	0.00	-2.27865	1615.44654	68.12	24.33
94	95	-5.04680	-0.11	-0.08	-0.63	0.05	-0.56	0.00	-5.04758	1610.39896	66.21	23.78
95	96	-9.49605	-0.08	-0.16	-1.24	0.06	-1.68	0.00	-9.49747	1600.90150	63.47	22.10
96	97	-12.83350	0.10	-0.21	-1.70	0.06	-1.46	0.00	-12.83525	1588.06625	60.65	20.63
97	98	-14.47580	0.05	-0.24	-1.76	0.08	-2.52	0.00	-14.47767	1573.98858	58.63	18.12
98	99	-15.64575	0.03	-0.26	-2.14	0.10	-2.98	0.00	-15.64802	1557.94056	58.32	15.14
99	100	-11.24858	0.01	-0.19	-1.45	0.07	-1.19	0.00	-11.25014	1546.69043	60.47	13.95
100	101	-14.50545	-0.08	-0.24	-1.95	0.07	-1.59	0.00	-14.50765	1532.18278	59.70	12.36
73	74	1.31175	-0.04	0.02	0.17	-0.03	0.16	0.00	1.31187	1614.75292	63.48	24.35
74	75	1.77085	0.03	0.03	0.22	-0.03	0.19	0.00	1.77110	1616.52401	59.95	24.55
75	76	6.65125	0.01	0.11	1.01	-0.05	0.69	0.00	6.65233	1623.17634	58.33	25.23
76	77	8.33420	-0.05	0.14	1.20	-0.05	0.90	0.00	8.33544	1631.51178	57.02	26.13
77	78	3.07550	0.01	0.05	0.45	-0.02	0.26	0.00	3.07600	1634.58777	56.57	26.39
78	79	7.15065	0.04	0.12	1.02	-0.03	0.67	0.00	7.15179	1641.73956	54.91	27.06
79	80	13.69080	-0.05	0.23	1.90	-0.06	1.37	0.00	13.69282	1655.43238	52.65	28.42
80	81	13.84240	0.03	0.23	1.89	-0.04	0.93	0.00	13.84451	1669.27689	50.31	29.35
81	85	18.60502	-0.03	0.31	2.34	0.00	1.34	0.00	18.60764	1687.88453	52.89	30.68
85	86	24.83155	0.01	0.41	3.21	0.07	1.57	0.00	24.83524	1712.71977	55.33	32.25

Table 3b-2

Table 3b. National Geodetic Survey Line 73988D: File 73988D.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
86	87	27.70375	0.03	0.46	3.60	0.06	1.37	0.00	27.70789	1740.42767	57.42	33.61
87	88	29.86825	0.00	0.50	3.88	0.06	1.29	0.00	29.87269	1770.30036	61.72	34.90
88	89	32.36515	0.00	0.54	3.79	0.05	1.15	0.00	32.36953	1802.66989	70.55	36.05
89	90	19.44260	-0.01	0.32	2.71	-0.02	1.01	0.00	19.44559	1822.11548	78.17	37.06
90	91	14.60650	0.01	0.24	1.80	-0.02	0.39	0.00	14.60853	1836.72401	84.40	37.44
91	92	37.02165	0.01	0.61	5.15	-0.05	1.83	0.00	37.02738	1873.75139	99.28	39.27

Table 3c. National Geodetic Survey Line 73988D: File 73988D.prn(=.dat)

112	73988/D	3	4191508231130	12	1	1.07	211G11	F
1.04870		MT	1.12 -0.01 0.02 0.17	0.06	0.09	0.001033431310848638		
1112	73988/D	4	3191508241050	10	1	1.07	211G11	B
-1.04700		MT	-1.12 -0.02 -0.02 -0.17	-0.08	-0.12	0.001084863810334313		
212	73988/D	4	5191508231300	12	1	1.08	211G11	F
2.82030		MT	1.13 0.01 0.05 0.50	0.03	0.23	0.001084863810848639		
1012	73988/D	5	4191508241025	10	1	1.08	211G11	B
-2.82000		MT	-1.13 0.00 -0.05 -0.46	-0.08	-0.31	0.001084863910848638		
312	73988/D	5	6191508231345	12	1	1.03	211G11	F
0.39300		MT	1.08 0.01 0.01 0.07	0.01	0.03	0.001084863910848640		
912	73988/D	6	5191508241000	10	1	1.03	211G11	B
-0.39000		MT	-1.08 0.02 -0.01 -0.06	-0.08	-0.04	0.001084864010848639		
412	73988/D	6	7191508231415	11	1	1.13	211G11	F
-2.81800		MT	1.19 0.00 -0.05 -0.33	0.00	-0.30	0.001084864010848641		
812	73988/D	7	619150824 930	11	1	1.14	211G11	B
2.82140		MT	-1.19 0.07 0.05 0.43	-0.08	0.25	0.001084864110848640		
512	73988/D	7	8191508231445	9	1	1.13	211G11	F
-0.58590		MT	1.19 0.00 -0.01 -0.10	-0.01	-0.08	0.001084864110307593		
612	73988/D	8	719150824 850	12	1	1.24	211G11	B
0.58460		MT	-1.19 0.04 0.01 0.08	-0.07	0.05	0.001030759310848641		
2312	73988/D	8	9191508251155	5	1	0.49	211G11	F
1.07590		MT	0.49 0.01 0.02 0.18	0.04	0.11	0.001030759310848642		
2212	73988/D	9	8191508251140	5	1	0.49	211G11	B
-1.07730		MT	-0.49 0.07 -0.02 -0.18	-0.04	-0.11	0.001084864210307593		
2412	73988/D	9	10191508251315	10	1	1.03	211G11	F
2.83470		MT	1.02 0.04 0.05 0.48	0.05	0.31	0.001084864210848643		
2112	73988/D	10	9191508251115	10	1	1.03	211G11	B
-2.83470		MT	-1.02 0.03 -0.05 -0.46	-0.08	-0.31	0.001084864310848642		
2512	73988/D	10	11191508251340	10	1	1.08	211G11	F
2.90800		MT	1.07 0.07 0.05 0.48	0.04	0.34	0.001084864310848644		
2012	73988/D	11	10191508251045	10	1	1.08	211G11	B
-2.91000		MT	-1.07 -0.02 -0.05 -0.45	-0.08	-0.34	0.001084864410848643		
2612	73988/D	11	12191508251410	11	1	1.14	211G11	F
11.06820		MT	1.13 0.07 0.18 2.01	0.03	1.12	0.001084864410848645		
1912	73988/D	12	11191508251015	11	1	1.14	211G11	B
-11.07130		MT	-1.13 -0.01 -0.18 -1.66	-0.09	-1.15	0.001084864510848644		
1412	73988/D	12	13191508241340	10	1	0.99	211G11	F
-5.86590		MT	1.05 0.04 -0.10 -0.84	0.08	-0.60	0.001084864510848646		
2712	73988/D	12	15191508251505	3	1	0.28	211G11	F
1.98600		MT	0.28 0.06 0.03 0.37	0.00	0.14	0.001084864510848647		
1712	73988/D	13	12191508241605	9	1	0.99	211G11	B
5.86630		MT	-1.05 0.01 0.10 0.66	-0.04	0.17	0.001084864610848645		
1512	73988/D	13	14191508241415	12	1	1.15	211G11	RF
5.71660		MT	0.91 0.06 0.09 0.73	0.06	0.52	0.001084864610279076		
712	73988/D	13	1419150824 900	9	1	0.86	211G11	F
5.71020		MT	0.91 0.01 0.09 0.72	0.00	0.41	0.001084864610279076		
1612	73988/D	14	13191508241520	8	1	0.87	211G11	B
-5.70790		MT	-0.91 -0.01 -0.09 -0.66	-0.05	-0.23	0.001027907610848646		
1812	73988/D	14	1319150825 925	10	1	0.86	211G11	B
-5.70800		MT	-0.91 -0.01 -0.09 -0.83	0.00	-0.35	0.001027907610848646		
1312	73988/D	15	12191508241330	3	1	0.28	211G11	B
-1.98430		MT	-0.28 0.00 -0.03 -0.32	-0.01	-0.18	0.001084864710848645		
2812	73988/D	15	16191508251515	11	1	1.20	211G11	F
15.02500		MT	1.20 0.04 0.25 2.67	0.01	1.47	0.001084864710282381		
1212	73988/D	16	15191508241300	11	1	1.19	211G11	B
-15.02360		MT	-1.20 -0.05 -0.25 -2.67	-0.05	-1.92	0.001028238110848647		
2912	73988/D	16	17191508251540	10	1	1.08	211G11	F
18.47020		MT	0.37 0.02 0.31 3.03	-0.06	1.81	0.001028238110848648		
6112	73988/D	17	16191508271515	10	1	1.08	211G11	B
-18.47070		MT	-0.37 0.06 -0.31 -3.21	0.03	-1.92	0.001084864810282381		
3012	73988/D	17	18191508251610	10	1	1.08	211G11	F
18.13440		MT	0.38 0.04 0.30 2.94	-0.06	1.25	0.001084864810848649		
6012	73988/D	18	17191508271445	10	1	1.08	211G11	B
-18.13260		MT	-0.38 -0.03 -0.30 -3.23	0.02	-2.07	0.001084864910848648		
3112	73988/D	18	1919150826 835	10	1	1.09	211G11	F
19.23640		MT	0.39 -0.01 0.32 2.27	0.06	1.50	0.001084864910848650		
5912	73988/D	19	18191508271415	12	1	1.09	211G11	B
-19.23900		MT	-0.39 0.18 -0.32 -3.42	0.00	-1.60	0.001084865010848649		
3212	73988/D	19	2019150826 905	10	1	1.10	211G11	F
18.69770		MT	0.39 -0.05 0.31 2.58	0.07	1.94	0.001084865010848651		
5812	73988/D	20	19191508271340	12	1	1.09	211G11	B
-18.70050		MT	-0.39 0.10 -0.31 -3.18	-0.01	-1.66	0.001084865110848650		
3312	73988/D	20	2119150826 930	4	1	0.44	211G11	F
6.05160		MT	0.16 0.02 0.10 0.75	0.03	0.69	0.001084865110274249		
5712	73988/D	21	20191508271325	5	1	0.45	211G11	B
-6.05200		MT	-0.16 0.02 -0.10 -1.03	-0.01	-0.51	0.001027424910848651		
3412	73988/D	21	2219150826 940	11	1	1.09	211G11	F
-1.39710		MT	0.26 0.07 -0.02 -0.20	0.08	-0.12	0.001027424910848652		

Table 3c-1

Table 3c. National Geodetic Survey Line 73988D: File 73988D.prn(=.dat)--Continued

5612	73988/D	22	21191508271145	13	1	1.08		211G11	B
1.39800		MT	-0.26 0.10 0.02 0.23	-0.05	0.10	0.001084865210274249			
3512	73988/D	22	23191508261010	10	1	1.14		211G11	F
-12.66390		MT	0.28 0.04 -0.21 -1.92	0.08	-1.64	0.001084865210848653			
5512	73988/D	23	22191508271115	11	1	1.14		211G11	B
12.66730		MT	-0.28 0.06 0.21 2.05	-0.06	1.46	0.001084865310848652			
3612	73988/D	23	24191508261035	10	1	1.08		211G11	F
-5.06730		MT	0.26 0.05 -0.08 -0.87	0.07	-0.56	0.001084865310848654			
5412	73988/D	24	23191508271045	10	1	1.08		211G11	B
5.06640		MT	-0.26 0.10 0.08 0.82	-0.06	0.58	0.001084865410848653			
3712	73988/D	24	25191508261100	10	1	1.08		211G11	F
-6.01360		MT	0.26 0.11 -0.10 -0.96	0.07	-0.71	0.001084865410848655			
5312	73988/D	25	24191508271015	10	1	1.08		211G11	B
6.01390		MT	-0.26 0.15 0.10 0.93	-0.06	0.66	0.001084865510848654			
3812	73988/D	25	26191508261130	5	1	0.50		211G11	F
-2.90570		MT	0.12 0.02 -0.05 -0.48	0.03	-0.30	0.001084865510269213			
5212	73988/D	26	25191508271005	5	1	0.50		211G11	B
2.90730		MT	-0.12 -0.07 0.05 0.42	-0.03	0.27	0.001026921310848655			
3912	73988/D	26	27191508261200	5	1	0.52		211G11	F
-0.77570		MT	0.15 -0.07 -0.01 -0.14	0.02	-0.08	0.001026921310269215			
5112	73988/D	27	2619150827 950	5	1	0.52		211G11	B
0.77800		MT	-0.15 0.11 0.01 0.12	-0.03	0.07	0.001026921510269213			
4112	73988/D	27	28191508261315	10	1	1.09		211G11	F
-3.71630		MT	-0.02 0.00 -0.06 -0.54	-0.02	-0.46	0.001026921510848656			
5012	73988/D	28	2719150827 920	10	1	1.09		211G11	B
3.71770		MT	0.02 -0.02 0.06 0.56	-0.05	0.35	0.001084865610269215			
4212	73988/D	28	29191508261340	10	1	1.08		211G11	F
0.06610		MT	-0.02 0.09 0.00 0.01	-0.03	0.01	0.001084865610848657			
4912	73988/D	29	2819150827 855	9	1	1.08		211G11	B
-0.06300		MT	0.02 0.05 0.00 -0.01	-0.04	-0.01	0.001084865710848656			
7612	73988/D	29	30191508281455	10	1	1.08		211G11	F
-2.84430		MT	-0.02 0.00 -0.05 -0.50	-0.03	-0.27	0.001084865710848658			
4312	73988/D	29	30191508261405	10	1	1.08		211G11	F
-2.84400		MT	-0.02 0.08 -0.05 -0.48	-0.04	-0.31	0.001084865710848658			
7512	73988/D	30	29191508281430	10	1	1.08		211G11	B
2.84730		MT	0.02 0.00 0.05 0.49	0.02	0.29	0.001084865810848657			
4812	73988/D	30	2919150827 830	9	1	1.08		211G11	B
2.85140		MT	0.02 0.06 0.05 0.40	-0.03	0.22	0.001084865810848657			
4412	73988/D	30	31191508261430	10	1	1.03		211G11	F
-2.35500		MT	-0.02 0.05 -0.04 -0.40	-0.05	-0.22	0.001084865810269216			
7412	73988/D	31	30191508281410	10	1	1.02		211G11	B
2.35930		MT	0.02 -0.02 0.04 0.41	0.01	0.22	0.001026921610848658			
4512	73988/D	31	32191508261525	10	1	1.07		211G11	F
3.10430		MT	-0.63 0.01 0.05 0.56	-0.08	0.26	0.001026921610848659			
7712	73988/D	31	32191508281540	10	1	1.07		211G11	F
3.10410		MT	-0.63 0.00 0.05 0.54	-0.06	0.25	0.001026921610848659			
7312	73988/D	32	31191508281340	12	1	1.07		211G11	B
-3.09910		MT	0.63 0.00 -0.05 -0.55	0.04	-0.24	0.001084865910269216			
7812	73988/D	32	31191508281600	10	1	1.07		211G11	B
-3.10170		MT	0.63 0.00 -0.05 -0.53	0.06	-0.19	0.001084865910269216			
4712	73988/D	32	33191508261645	10	1	1.08		211G11	F
4.17310		MT	-0.63 0.09 0.07 0.72	-0.07	0.13	0.001084865910848660			
4012	73988/D	33	32191508261305	12	1	1.07		211G11	B
-4.16900		MT	0.63 -0.01 -0.07 -0.76	0.05	-0.33	0.001084866010848659			
4612	73988/D	33	34191508261610	10	1	1.07		211G11	F
-0.93810		MT	-0.63 0.03 -0.02 -0.16	-0.08	-0.05	0.001084866010848661			
7212	73988/D	34	33191508281130	10	1	1.08		211G11	B
0.94000		MT	0.63 -0.02 0.02 0.16	-0.01	0.11	0.001084866110848660			
8112	73988/D	34	3519150830 840	5	1	0.55		211G11	F
-1.77760		MT	-0.32 -0.01 -0.03 -0.26	-0.01	-0.06	0.001084866110848662			
6312	73988/D	34	3519150828 810	5	1	0.55		211G11	F
-1.77500		MT	-0.32 -0.01 -0.03 -0.22	0.00	-0.10	0.001084866110848662			
8012	73988/D	35	3419150830 830	5	1	0.54		211G11	B
1.77730		MT	0.32 0.02 0.03 0.25	0.01	0.04	0.001084866210848661			
7112	73988/D	35	34191508281120	5	1	0.54		211G11	B
1.77900		MT	0.32 0.01 0.03 0.31	0.00	0.21	0.001084866210848661			
8212	73988/D	35	3619150830 850	9	1	1.08		211G11	F
-0.46420		MT	-0.63 0.01 -0.01 -0.07	-0.02	-0.02	0.001084866210280753			
7012	73988/D	36	35191508281050	10	1	1.08		211G11	B
0.46460		MT	0.63 -0.01 0.01 0.08	-0.01	0.05	0.001028075310848662			
8312	73988/D	36	3719150830 915	4	1	0.43		211G11	F
-1.53630		MT	-0.33 0.01 -0.03 -0.24	-0.01	-0.06	0.001028075310848663			
8512	73988/D	36	3719150830 935	4	1	0.43		211G11	F
-1.53700		MT	-0.33 0.01 -0.03 -0.25	0.00	-0.06	0.001028075310848663			
8412	73988/D	37	3619150830 925	4	1	0.43		211G11	B
1.53770		MT	0.33 -0.01 0.03 0.25	0.01	0.06	0.001084866310280753			
6912	73988/D	37	36191508281040	4	1	0.43		211G11	B
1.54030		MT	0.33 -0.01 0.03 0.26	0.00	0.17	0.001084866310280753			

Table 3c. National Geodetic Survey Line 73988D: File 73988D.prn(=.dat)--Continued

8612	73988/D	37	3819150830	945	10	1	1.08	211G11	F
-0.49130		MT	-0.81	0.00	-0.01	-0.08	-0.01	-0.02	0.001084866310848664
8812	73988/D	37	38191508301035		10	1	1.08	211G11	F
-0.49340		MT	-0.81	0.00	-0.01	-0.08	-0.01	-0.02	0.001084866310848664
6812	73988/D	38	37191508281015		10	1	1.08	211G11	B
0.49730		MT	0.81	-0.01	0.01	0.08	-0.01	0.05	0.001084866410848663
8712	73988/D	38	37191508301015		10	1	1.08	211G11	B
0.49330		MT	0.81	0.00	0.01	0.08	0.01	0.02	0.001084866410848663
8912	73988/D	38	39191508301105		11	1	1.07	211G11	F
-1.69470		MT	-0.81	0.01	-0.03	-0.29	-0.01	-0.06	0.001084866410848665
6712	73988/D	39	3819150828	950	10	1	1.08	211G11	B
1.69600		MT	0.81	0.00	0.03	0.26	-0.01	0.17	0.001084866510848664
9012	73988/D	39	40191508301130		14	1	1.13	211G11	F
-5.81070		MT	-0.86	0.04	-0.10	-1.00	-0.01	-0.15	0.001084866510848666
6612	73988/D	40	3919150828	925	10	1	1.13	211G11	B
5.81020		MT	0.86	0.01	0.10	0.87	-0.01	0.61	0.001084866610848665
9112	73988/D	40	41191508301305		13	1	1.14	211G11	F
-7.88800		MT	-0.85	-0.01	-0.13	-1.28	-0.02	-0.25	0.001084866610299008
6512	73988/D	41	4019150828	905	9	1	1.14	211G11	B
7.88830		MT	0.85	-0.04	0.13	1.15	-0.01	0.98	0.001029900810848666
9212	73988/D	41	42191508301340		8	1	0.75	211G11	F
-2.75100		MT	-0.48	-0.01	-0.05	-0.48	-0.02	-0.09	0.001029900810848667
6412	73988/D	42	4119150828	845	6	1	0.75	211G11	B
2.74930		MT	0.48	-0.01	0.05	0.39	-0.01	0.30	0.001084866710299008
9312	73988/D	42	43191508301400		11	1	1.13	211G11	F
-0.27210		MT	-0.72	0.02	0.00	-0.05	-0.03	-0.01	0.001084866710848668
6212	73988/D	43	4219150828	805	9	1	1.13	211G11	B
0.27550		MT	0.72	-0.01	0.00	0.03	0.00	0.02	0.001084866810848667
9412	73988/D	43	44191508301430		8	1	1.08	211G11	F
0.78540		MT	-0.69	0.01	0.01	0.13	-0.03	0.05	0.001084866810848669
10512	73988/D	44	43191508311020		9	1	1.08	211G11	B
-0.78280		MT	0.69	-0.05	-0.01	-0.11	0.02	-0.11	0.001084866910848668
10612	73988/D	44	45191508311050		9	1	1.02	211G11	F
1.52930		MT	-0.65	0.02	0.03	0.23	-0.02	0.19	0.001084866910848670
9512	73988/D	44	45191508301450		7	1	1.02	211G11	F
1.53270		MT	-0.65	0.01	0.03	0.23	-0.03	0.11	0.001084866910848670
10712	73988/D	45	44191508311115		9	1	1.02	211G11	B
-1.53010		MT	0.65	0.03	-0.03	-0.24	0.02	-0.20	0.001084867010848669
10412	73988/D	45	44191508311000		8	1	1.02	211G11	B
-1.52770		MT	0.65	-0.03	-0.03	-0.21	0.02	-0.23	0.001084867010848669
9612	73988/D	45	46191508301510		6	1	0.88	211G11	F
0.97970		MT	-0.56	0.01	0.02	0.14	-0.03	0.07	0.001084867010312795
10312	73988/D	46	4519150831	935	7	1	0.88	211G11	B
-0.97790		MT	0.56	0.03	-0.02	-0.14	0.02	-0.13	0.001031279510848670
9712	73988/D	46	47191508301540		7	1	1.01	211G11	F
2.62010		MT	-0.52	0.02	0.04	0.38	-0.04	0.16	0.001031279510848671
10212	73988/D	47	4619150831	915	8	1	1.01	211G11	B
-2.61610		MT	0.52	-0.03	-0.04	-0.38	0.02	-0.33	0.001084867110312795
9812	73988/D	47	48191508301600		7	1	1.03	211G11	F
2.30330		MT	-0.53	0.02	0.04	0.33	-0.04	0.11	0.001084867110848672
10112	73988/D	48	4719150831	855	8	1	1.04	211G11	B
-2.30310		MT	0.53	0.01	-0.04	-0.32	0.03	-0.28	0.001084867210848671
10812	73988/D	48	49191508311300		7	1	0.71	211G11	F
0.30360		MT	-0.37	0.03	0.00	0.05	-0.01	0.03	0.001084867210848673
10012	73988/D	49	4819150831	840	5	1	0.71	211G11	B
-0.30730		MT	0.37	-0.01	0.00	-0.04	0.02	-0.04	0.001084867310848672
10912	73988/D	49	50191508311325		10	1	1.03	211G11	F
1.20660		MT	-0.53	0.05	0.02	0.20	-0.02	0.13	0.001084867310848674
9912	73988/D	50	4919150831	825	7	1	1.02	211G11	B
-1.20370		MT	0.53	0.01	-0.02	-0.14	0.03	-0.05	0.001084867410848673
11012	73988/D	50	51191508311350		10	1	1.05	211G11	F
0.66740		MT	-0.54	0.02	0.01	0.10	-0.02	0.07	0.001084867410324465
7912	73988/D	51	5019150830	800	8	1	1.05	211G11	B
-0.66870		MT	0.54	0.02	-0.01	-0.07	0.03	-0.02	0.001032446510848674
11112	73988/D	51	52191508311420		10	1	1.10	211G11	F
0.94770		MT	-0.52	0.01	0.02	0.14	-0.02	0.11	0.001032446510848675
12612	73988/D	52	5119150902	850	11	1	1.11	211G11	B
-0.94600		MT	0.52	0.01	-0.02	-0.13	0.03	-0.07	0.001084867510324465
11212	73988/D	52	53191508311445		7	1	1.08	211G11	F
1.77600		MT	-0.51	0.02	0.03	0.25	-0.02	0.15	0.001084867510848676
12512	73988/D	53	5219150902	825	10	1	1.08	211G11	B
-1.77690		MT	0.51	0.01	-0.03	-0.22	0.03	-0.10	0.001084867610848675
11312	73988/D	53	54191508311505		6	1	1.07	211G11	F
0.91000		MT	-0.51	0.02	0.01	0.13	-0.02	0.10	0.001084867610848677
12412	73988/D	54	5319150902	800	10	1	1.07	211G11	B
-0.91310		MT	0.51	0.02	-0.02	-0.09	0.02	-0.04	0.001084867710848676
12712	73988/D	54	5519150902	925	8	1	0.86	211G11	F
0.58700		MT	-0.40	-0.01	0.01	0.08	-0.03	0.05	0.001084867710848678

Table 3c. National Geodetic Survey Line 73988D: File 73988D.prn(=.dat)--Continued

12312	73988/D	55	54191509011335	8	1	0.86		211G11	B
-0.58860		MT	0.40 0.00 -0.01 -0.09	0.02	-0.07	0.001084867810848677			
12812	73988/D	55	5719150902 945	7	1	1.10		211G11	F
3.18740		MT	-0.51 -0.01 0.05 0.46	-0.04	0.68	0.001084867810848679			
12212	73988/D	57	55191509011310	10	1	1.07		211G11	B
-3.18510		MT	0.51 0.00 -0.05 -0.43	0.02	-0.39	0.001084867910848678			
12912	73988/D	57	58191509021010	10	1	1.03		211G11	F
4.52700		MT	-0.49 0.01 0.08 0.66	-0.04	0.44	0.001084867910848680			
12112	73988/D	58	57191509011125	9	1	1.02		211G11	B
-4.52560		MT	0.49 0.00 -0.08 -0.68	0.03	-0.61	0.001084868010848679			
13012	73988/D	58	59191509021035	11	1	1.01		211G11	F
10.67280		MT	-0.48 0.02 0.18 1.62	-0.04	0.90	0.001084868010848681			
12012	73988/D	59	58191509011100	10	1	1.02		211G11	B
-10.67230		MT	0.48 0.00 -0.18 -1.69	0.03	-1.15	0.001084868110848680			
13112	73988/D	59	60191509021110	7	1	0.69		211G11	F
4.07540		MT	-0.33 0.00 0.07 0.66	-0.03	0.40	0.001084868110340664			
11912	73988/D	60	59191509011020	8	1	0.69		211G11	B
-4.07570		MT	0.33 0.00 -0.07 -0.67	0.02	-0.28	0.001034066410848681			
13212	73988/D	60	61191509021140	12	1	1.08		211G11	F
4.96190		MT	0.34 0.03 0.08 0.78	-0.03	0.41	0.001034066410848682			
11812	73988/D	61	6019150901 940	11	1	1.08		211G11	B
-4.96130		MT	-0.34 0.00 -0.08 -0.75	0.03	-0.40	0.001084868210340664			
13312	73988/D	61	62191509021325	10	1	1.06		211G11	F
11.81060		MT	0.33 0.01 0.20 1.82	-0.02	1.41	0.001084868210848683			
11712	73988/D	62	6119150901 915	10	1	1.06		211G11	B
-11.81140		MT	-0.33 0.00 -0.20 -1.70	0.03	-1.08	0.001084868310848682			
13412	73988/D	62	63191509021350	9	1	1.06		211G11	F
5.07140		MT	0.33 0.00 0.08 0.74	-0.02	0.69	0.001084868310848684			
11612	73988/D	63	6219150901 850	10	1	1.05		211G11	B
-5.06820		MT	-0.33 0.00 -0.08 -0.68	0.02	-0.40	0.001084868410848683			
13512	73988/D	63	64191509021415	10	1	1.08		211G11	F
7.78440		MT	0.34 0.04 0.13 1.17	-0.02	0.85	0.001084868410848685			
11512	73988/D	64	6319150901 830	9	1	1.08		211G11	B
-7.77930		MT	-0.34 0.00 -0.13 -0.96	0.02	-0.61	0.001084868510848684			
15412	73988/D	64	65191509031540	8	1	1.06		211G11	F
6.82940		MT	0.33 0.00 0.11 0.78	-0.01	0.88	0.001084868510334311			
13612	73988/D	64	65191509021445	8	1	1.06		211G11	F
6.83340		MT	0.33 0.02 0.11 0.89	-0.01	0.43	0.001084868510334311			
11412	73988/D	65	6419150901 800	9	1	1.05		211G11	B
-6.82670		MT	-0.33 0.00 -0.11 -0.79	0.02	-0.36	0.001033431110848685			
15312	73988/D	65	64191509031520	8	1	1.05		211G11	B
-6.83100		MT	-0.33 0.02 -0.11 -0.85	0.02	-0.94	0.001033431110848685			
13712	73988/D	65	66191509021510	7	1	0.90		211G11	F
9.47370		MT	1.01 0.00 0.16 1.12	0.01	1.39	0.001033431110848686			
15212	73988/D	66	65191509031500	8	1	0.90		211G11	B
-9.47240		MT	-1.01 -0.08 -0.16 -1.19	0.00	-1.04	0.001084868610334311			
13812	73988/D	66	82191509021535	7	1	1.02		211G11	F
9.07730		MT	1.15 0.01 0.15 0.91	0.02	0.62	0.001084868610848687			
15512	73988/D	66	8219150904 810	7	1	1.02		211G11	F
9.07460		MT	1.15 0.07 0.15 0.80	0.04	0.90	0.001084868610848687			
15912	73988/D	67	6819150904 955	5	1	0.45		211G11	F
5.20130		MT	0.51 0.02 0.09 0.64	0.01	0.40	0.001030759210848690			
14812	73988/D	67	84191509031315	10	1	1.02		211G11	B
-11.98370		MT	-1.17 0.00 -0.20 -1.77	0.01	-1.32	0.001030759210848689			
17112	73988/D	67	84191509041605	7	1	1.02		211G11	B
-11.98800		MT	-1.17 0.00 -0.20 -1.56	0.00	-1.33	0.001030759210848689			
14712	73988/D	68	67191509031155	5	1	0.47		211G11	B
-5.20170		MT	-0.51 0.07 -0.09 -0.71	0.00	-0.51	0.001084869010307592			
16012	73988/D	68	69191509041005	10	1	1.09		211G11	F
11.92900		MT	1.22 0.11 0.20 1.53	0.02	1.36	0.001084869010848691			
14612	73988/D	69	68191509031125	10	1	1.09		211G11	B
-11.92710		MT	-1.22 0.06 -0.20 -1.55	0.01	-1.55	0.001084869110848690			
16112	73988/D	69	70191509041030	10	1	1.09		211G11	F
10.81860		MT	1.23 0.02 0.18 1.43	0.01	1.28	0.001084869110848692			
14512	73988/D	70	69191509031100	10	1	1.09		211G11	B
-10.82040		MT	-1.23 0.02 -0.18 -1.34	0.00	-1.37	0.001084869210848691			
16212	73988/D	70	71191509041055	10	1	1.09		211G11	F
7.89290		MT	1.23 0.05 0.13 1.06	0.01	0.95	0.001084869210848693			
14412	73988/D	71	70191509031035	10	1	1.09		211G11	B
-7.88960		MT	-1.23 0.02 -0.13 -0.96	0.00	-0.94	0.001084869310848692			
17012	73988/D	71	72191509041535	8	1	1.09		211G11	F
7.42930		MT	1.24 -0.02 0.12 1.04	-0.01	0.99	0.001084869310848694			
16312	73988/D	71	72191509041115	10	1	1.09		211G11	F
7.43510		MT	1.24 0.05 0.12 1.01	0.00	0.92	0.001084869310848694			
16912	73988/D	72	71191509041510	9	1	1.09		211G11	B
-7.42950		MT	-1.24 -0.02 -0.12 -0.98	0.01	-0.87	0.001084869410848693			
14312	73988/D	72	71191509031010	10	1	1.09		211G11	B
-7.42970		MT	-1.24 0.03 -0.12 -0.89	0.00	-0.84	0.001084869410848693			

Table 3c. National Geodetic Survey Line 73988D: File 73988D.prn(=.dat)--Continued

16412	73988/D	72	73191509041145	10	1	1.09		211G11	F
-0.47830		MT	1.24 -0.02 -0.01 -0.06	-0.01	-0.06	0.001084869410280754		211G11	
14212	73988/D	73	7219150903 940	10	1	1.15		211G11	B
0.47760		MT	-1.24 0.04 0.01 0.06	-0.01	0.05	0.001028075410848694		211G11	
16512	73988/D	73	74191509041215	8	1	0.87		211G11	F
1.31240		MT	-0.98 -0.07 0.02 0.17	-0.03	0.16	0.001028075410848695		211G11	
21212	73988/D	73	9319150910 825	5	1	0.65		211G11	F
4.28380		MT	0.83 -0.01 0.07 0.44	0.02	0.35	0.001028075410848706		211G11	
14112	73988/D	74	7319150903 900	7	1	0.87		211G11	B
-1.31110		MT	0.98 0.01 -0.02 -0.16	0.02	-0.15	0.001084869510280754		211G11	
16612	73988/D	74	75191509041335	10	1	1.08		211G11	F
1.76970		MT	-1.22 0.05 0.03 0.25	-0.03	0.20	0.001084869510848696		211G11	
14012	73988/D	75	7419150903 835	8	1	1.09		211G11	B
-1.77200		MT	1.22 -0.01 -0.03 -0.18	0.03	-0.19	0.001084869610848695		211G11	
16712	73988/D	75	76191509041400	10	1	1.01		211G11	F
6.64730		MT	-1.13 0.03 0.11 0.93	-0.03	0.65	0.001084869610848697		211G11	
19412	73988/D	75	76191509081440	9	1	1.00		211G11	F
6.65230		MT	-1.13 0.04 0.11 1.05	-0.06	0.69	0.001084869610848697		211G11	
19312	73988/D	76	75191509081410	9	1	1.00		211G11	B
-6.65240		MT	1.13 0.00 -0.11 -1.04	0.07	-0.75	0.001084869710848696		211G11	
19512	73988/D	76	75191509081500	9	1	1.00		211G11	B
-6.65300		MT	1.13 0.02 -0.11 -1.00	0.05	-0.65	0.001084869710848696		211G11	
16812	73988/D	76	77191509041425	10	1	1.07		211G11	F
8.33370		MT	-1.21 -0.07 0.14 1.12	-0.02	0.88	0.001084869710848698		211G11	
19212	73988/D	77	76191509081345	10	1	1.07		211G11	B
-8.33470		MT	1.21 0.02 -0.14 -1.27	0.08	-0.91	0.001084869810848697		211G11	
19612	73988/D	77	78191509081530	3	1	0.29		211G11	F
3.07640		MT	-0.34 0.08 0.05 0.43	-0.01	0.22	0.001084869810300887		211G11	
19112	73988/D	78	77191509081335	3	1	0.29		211G11	B
-3.07460		MT	0.34 0.06 -0.05 -0.47	0.02	-0.30	0.001030088710848698		211G11	
19712	73988/D	78	79191509081540	5	1	0.51		211G11	F
7.15130		MT	-0.44 0.12 0.12 0.97	-0.03	0.54	0.001030088710848699		211G11	
19012	73988/D	79	78191509081300	5	1	0.51		211G11	B
-7.15000		MT	0.44 0.05 -0.12 -1.07	0.04	-0.80	0.001084869910300887		211G11	
19812	73988/D	79	80191509081555	9	1	1.13		211G11	F
13.69170		MT	-0.98 0.00 0.23 1.86	-0.06	1.17	0.001084869910848700		211G11	
18912	73988/D	80	79191509081135	11	1	1.13		211G11	B
-13.68990		MT	0.98 0.10 -0.23 -1.94	0.06	-1.56	0.001084870010848699		211G11	
19912	73988/D	80	81191509081620	10	1	1.04		211G11	F
13.84320		MT	-0.91 0.05 0.23 1.83	-0.04	0.54	0.001084870010848701		211G11	
18812	73988/D	81	80191509081105	11	1	1.04		211G11	B
-13.84160		MT	0.91 -0.01 -0.23 -1.94	0.04	-1.31	0.001084870110848700		211G11	
20012	73988/D	81	85191509081650	9	1	1.14		211G11	F
18.60940		MT	-1.01 -0.02 0.31 2.46	-0.03	0.48	0.001084870110314502		211G11	
20212	73988/D	81	8519150909 845	10	1	1.14		211G11	F
18.60540		MT	-1.01 0.00 0.31 2.34	0.03	1.56	0.001084870110314502		211G11	
15112	73988/D	82	66191509031435	10	1	1.02		211G11	B
-9.07270		MT	-1.15 0.03 -0.15 -1.16	0.00	-0.86	0.001084868710848686		211G11	
15612	73988/D	82	6619150904 830	7	1	1.02		211G11	B
-9.07070		MT	-1.15 -0.14 -0.15 -0.93	-0.03	-1.10	0.001084868710848686		211G11	
13912	73988/D	82	83191509021600	7	1	0.94		211G11	F
9.56240		MT	1.07 0.01 0.16 1.17	0.02	0.98	0.001084868710848688		211G11	
15012	73988/D	83	82191509031410	9	1	0.94		211G11	B
-9.55830		MT	-1.07 0.01 -0.16 -1.22	0.01	-1.04	0.001084868810848687		211G11	
15712	73988/D	83	8419150904 900	12	1	1.32		211G11	F
14.73180		MT	1.51 0.04 0.24 1.71	0.04	1.39	0.001084868810848689		211G11	
17212	73988/D	84	67191509041625	7	1	1.02		211G11	F
11.98820		MT	1.17 0.08 0.20 1.58	0.01	0.95	0.001084868910307592		211G11	
15812	73988/D	84	6719150904 930	10	1	1.03		211G11	F
11.98800		MT	1.17 0.17 0.20 1.49	0.03	1.09	0.001084868910307592		211G11	
14912	73988/D	84	83191509031340	12	1	1.33		211G11	B
-14.72860		MT	-1.51 0.01 -0.24 -2.00	0.01	-1.88	0.001084868910848688		211G11	
18712	73988/D	85	81191509081035	11	1	1.14		211G11	B
-18.60030		MT	1.01 0.04 -0.31 -2.53	0.03	-2.14	0.001031450210848701		211G11	
20112	73988/D	85	8119150909 815	10	1	1.14		211G11	B
-18.60500		MT	1.01 0.06 -0.31 -2.01	-0.04	-1.16	0.001031450210848701		211G11	
17312	73988/D	85	8619150907 930	11	1	1.05		211G11	F
24.83270		MT	0.59 0.00 0.41 3.23	0.06	1.47	0.001031450210311112		211G11	
18612	73988/D	86	85191509081005	11	1	1.06		211G11	B
-24.83040		MT	-0.59 -0.02 -0.41 -3.18	-0.07	-1.66	0.001031111210314502		211G11	
17412	73988/D	86	87191509071015	11	1	1.07		211G11	F
27.70490		MT	0.44 0.03 0.46 3.82	0.04	1.38	0.001031111210848702		211G11	
18512	73988/D	87	8619150908 935	12	1	1.06		211G11	B
-27.70260		MT	-0.44 -0.02 -0.46 -3.38	-0.08	-1.35	0.001084870210311112		211G11	
17512	73988/D	87	88191509071045	12	1	1.11		211G11	F
29.86900		MT	0.47 0.05 0.50 4.18	0.03	1.50	0.001084870210848703		211G11	
18412	73988/D	88	8719150908 900	12	1	1.11		211G11	B
-29.86750		MT	-0.47 0.05 -0.50 -3.58	-0.09	-1.08	0.001084870310848702		211G11	

Table 3c. National Geodetic Survey Line 73988D: File 73988D.prn(=.dat)--Continued

17612	73988/D	88	89191509071115	13	1	1.15		211G11	F
32.36470		MT	0.50 -0.01 0.54 4.60	0.01	1.54	0.001084870310848704			
18312	73988/D	89	8819150908 825	14	1	1.15		211G11	B
-32.36560		MT	-0.50 -0.02 -0.54 -2.98	-0.09	-0.76	0.001084870410848703			
17712	73988/D	89	90191509071145	10	1	0.78		211G11	F
19.44240		MT	0.34 0.06 0.32 2.84	-0.01	1.39	0.001084870410848705			
18212	73988/D	90	89191509071605	10	1	0.78		211G11	B
-19.44280		MT	-0.34 0.09 -0.32 -2.57	0.03	-0.62	0.001084870510848704			
17812	73988/D	90	91191509071313	8	1	0.46		211G11	F
14.60670		MT	0.19 0.14 0.24 1.72	-0.02	0.56	0.001084870510304316			
18112	73988/D	91	90191509071540	10	1	0.44		211G11	B
-14.60630		MT	-0.19 0.11 -0.24 -1.87	0.02	-0.21	0.001030431610848705			
17912	73988/D	91	92191509071340	18	1	1.33		211G11	F
37.02120		MT	1.20 0.17 0.61 5.18	-0.04	2.08	0.001030431610299009			
18012	73988/D	92	91191509071435	20	1	1.32		211G11	B
-37.02210		MT	-1.20 0.14 -0.61 -5.11	0.05	-1.57	0.001029900910304316			
21112	73988/D	93	73191509091545	5	1	0.65		211G11	B
-4.28330		MT	-0.83 0.04 -0.07 -0.64	-0.01	-0.39	0.001084870610280754			
21312	73988/D	93	9419150910 855	6	1	1.19		211G11	F
-2.27830		MT	1.50 -0.08 -0.04 -0.23	0.06	-0.25	0.001084870610848707			
21012	73988/D	94	93191509091515	10	1	1.18		211G11	B
2.27830		MT	-1.50 0.04 0.04 0.36	-0.02	0.22	0.001084870710848706			
21412	73988/D	94	9519150910 915	6	1	1.08		211G11	F
-5.04720		MT	1.37 -0.20 -0.08 -0.49	0.06	-0.52	0.001084870710848708			
20912	73988/D	95	94191509091445	9	1	1.08		211G11	B
5.04640		MT	-1.37 0.03 0.08 0.77	-0.03	0.59	0.001084870810848707			
21512	73988/D	95	9619150910 935	7	1	1.14		211G11	F
-9.49570		MT	1.44 -0.15 -0.16 -0.99	0.07	-2.28	0.001084870810848709			
20812	73988/D	96	95191509091420	10	1	1.13		211G11	B
9.49640		MT	-1.44 0.00 0.16 1.48	-0.04	1.08	0.001084870910848708			
21612	73988/D	96	9719150910 955	6	1	1.08		211G11	F
-12.83430		MT	1.36 0.15 -0.21 -1.36	0.07	-1.47	0.001084870910848710			
20712	73988/D	97	96191509091350	10	1	1.08		211G11	B
12.83270		MT	-1.36 -0.04 0.21 2.03	-0.05	1.46	0.001084871010848709			
21712	73988/D	97	98191509101015	7	1	1.09		211G11	F
-14.47630		MT	1.35 -0.07 -0.24 -1.56	0.08	-1.43	0.001084871010347303			
21912	73988/D	97	98191509101055	8	1	1.09		211G11	F
-14.47910		MT	1.35 0.22 -0.24 -1.65	0.09	-3.13	0.001084871010347303			
21812	73988/D	98	97191509101035	7	1	1.08		211G11	B
14.47780		MT	-1.35 -0.08 0.24 1.56	-0.09	3.71	0.001034730310848710			
20612	73988/D	98	97191509091320	10	1	1.08		211G11	B
14.47000		MT	-1.35 0.03 0.24 2.26	-0.07	1.79	0.001034730310848710			
22012	73988/D	98	99191509101120	8	1	1.16		211G11	F
-15.64760		MT	1.37 -0.01 -0.26 -1.78	0.10	-4.09	0.001034730310848711			
20512	73988/D	99	98191509091140	11	1	1.16		211G11	B
15.64390		MT	-1.37 -0.08 0.26 2.50	-0.09	1.87	0.001084871110347303			
22312	73988/D	99	100191509101355	10	1	0.99		211G11	F
-11.24860		MT	1.16 -0.04 -0.19 -1.37	0.05	-1.11	0.001084871110848712			
22112	73988/D	99	100191509101305	7	1	0.99		211G11	F
-11.25210		MT	1.16 0.11 -0.19 -1.28	0.07	-1.04	0.001084871110848712			
20412	73988/D	100	99191509091115	10	1	1.00		211G11	B
11.24600		MT	-1.16 0.08 0.19 1.80	-0.08	1.17	0.001084871210848711			
22212	73988/D	100	99191509101330	9	1	0.98		211G11	B
11.24760		MT	-1.16 -0.05 0.19 1.33	-0.06	1.44	0.001084871210848711			
22412	73988/D	100	10119150911 905	9	1	1.08		211G11	F
-14.50560		MT	1.26 -0.04 -0.24 -1.57	0.04	-1.73	0.001084871210331097			
20312	73988/D	101	100191509091055	11	1	1.08		211G11	B
14.50530		MT	-1.26 0.12 0.24 2.32	-0.09	1.44	0.001033109710848712			

Table 4a. National Geodetic Survey Line 73988E: File 73988E.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
3	10331097	D 15		0.00	37 56 46	117 18 43	1532.49140	1532.49140	0.00	0.00
4	10848541	TBM 3		0.80	37 56 25	117 18 23	1524.28122	1524.28005	-0.89	0.00
5	10848542	TBM 4		1.86	37 55 58	117 17 56	1511.41394	1511.40989	-2.35	0.00
6	10848543	TBM 5		2.93	37 55 30	117 17 29	1499.62655	1499.61924	-4.39	0.00
7	10848544	TBM 6		4.01	37 55 02	117 17 01	1494.61154	1494.60130	-5.22	0.00
8	10848545	TBM 7		5.15	37 54 33	117 16 32	1496.76477	1496.75124	-4.85	0.00
9	10304300	E 15		6.39	37 54 01	117 16 01	1501.64218	1501.62399	-4.23	0.00
10	10848546	TBM 8		7.47	37 53 28	117 15 48	1498.40387	1498.38068	-4.62	0.00
11	10848547	TBM 9		8.55	37 52 56	117 15 36	1503.10308	1503.07877	-3.95	0.00
12	10848548	TBM 10		9.68	37 52 22	117 15 23	1509.20278	1509.17998	-3.20	0.00
13	10848549	TBM 11		10.82	37 51 47	117 15 09	1518.13223	1518.11417	-2.39	0.00
14	10848550	TBM 12		11.85	37 51 16	117 14 57	1527.99935	1527.99239	-1.70	0.00
15	10270923	F 15		12.82	37 50 45	117 14 44	1538.30015	1538.29746	-1.05	0.00
16	10848551	TBM 13		13.84	37 50 13	117 14 45	1544.26011	1544.25945	-0.65	0.00
17	10848552	TBM 14		14.98	37 49 36	117 14 44	1559.46632	1559.46841	0.42	0.00
18	10848553	TBM 15		15.59	37 49 16	117 14 44	1562.81108	1562.81344	0.62	0.00
19	10848554	TBM 16		16.17	37 48 56	117 14 43	1571.18546	1571.18876	1.20	0.00
20	10848555	TBM 17		17.19	37 48 23	117 14 42	1585.44587	1585.45094	2.49	0.00
21	10848556	TBM 18		18.38	37 47 43	117 14 41	1599.49297	1599.50155	3.63	0.00
22	10848557	TBM 19		19.45	37 47 08	117 14 40	1615.24666	1615.25995	5.25	0.00
23	10848558	TBM 20		20.52	37 46 32	117 14 40	1629.43598	1629.45015	6.86	0.00
24	10329472	G 15 USGS		20.82	37 46 32	117 14 04	1627.53374	1627.54425	6.76	0.00
25	10848559	TBM 21		21.64	37 45 55	117 14 39	1646.35726	1646.37237	8.90	0.00
26	10848560	TBM 22		22.68	37 45 21	117 14 38	1661.27238	1661.28624	10.57	0.00
27	10848561	TBM 23		23.80	37 44 44	117 14 37	1676.96667	1676.98166	12.23	0.00
28	10848562	TBM 24		24.93	37 44 06	117 14 36	1691.51199	1691.52772	13.65	0.00
29	10298997	H 15		26.04	37 43 30	117 14 35	1693.41172	1693.43061	13.86	0.00
30	10848563	TBM 25		26.59	37 43 21	117 14 19	1694.77301	1694.79043	13.97	0.00
31	10848564	TBM 26		27.76	37 42 52	117 14 18	1711.57629	1711.59914	15.32	0.00
32	10288725	I 15		28.68	37 42 30	117 14 18	1730.14554	1730.17421	15.84	0.00
33	10287153	J 15		28.84	37 42 28	117 14 10	1730.67540	1730.70338	15.85	0.00
34	10288716	K 15		28.91	37 42 30	117 14 06	1734.10953	1734.13731	15.88	0.00
35	10287153	J 15		29.15	37 42 28	117 14 10	1737.71775	1737.74573	15.97	0.00
36	10848565	TBM 27		27.66	37 43 04	117 13 47	1713.68688	1713.70478	15.76	0.00
37	10848566	TBM 28		28.78	37 42 46	117 13 14	1738.60525	1738.62690	17.53	0.00
38	10848567	TBM 29		30.04	37 42 26	117 12 39	1766.12383	1766.15081	19.61	0.00
39	10848568	TBM 30		31.19	37 42 08	117 12 05	1778.33174	1778.36234	20.93	0.00
40	10282370	M 15 USGS		31.87	37 41 57	117 11 45	1768.89704	1768.92641	20.09	0.00
41	10848569	TBM 31		33.07	37 41 40	117 11 05	1753.43582	1753.46353	18.94	0.00
42	10848570	TBM 32		34.22	37 41 24	117 10 27	1737.25063	1737.27712	17.17	0.00

Table 4a-1

Table 4a. National Geodetic Survey Line 73988E: File 73988E.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
43	10848571	TBM 33		35.44	37 41 08	117 09 47	1719.40029	1719.42560	15.37	0.00
44	10848572	TBM 34		36.52	37 40 53	117 09 13	1699.32115	1699.34529	13.28	0.00
45	10848573	TBM 35		37.60	37 40 39	117 08 37	1676.60592	1676.62803	11.29	0.00
46	10267537	N 15		38.66	37 40 24	117 08 02	1655.10128	1655.12235	10.04	0.00
47	10848574	TBM 36		39.77	37 39 53	117 08 02	1633.65656	1633.68144	8.45	0.00
48	10848575	TBM 37		40.85	37 39 23	117 08 02	1613.48705	1613.51590	6.66	0.00
49	10848576	TBM 38		41.94	37 38 51	117 08 01	1594.22418	1594.25479	4.81	0.00
50	10848577	TBM 39		43.03	37 38 20	117 08 01	1570.41344	1570.44127	3.06	0.00
51	10340653	O 15		44.13	37 37 49	117 08 01	1547.29514	1547.31865	0.95	0.00
52	10848578	TBM 40		45.26	37 37 14	117 08 03	1527.97573	1527.99531	-0.86	0.00
53	10848579	TBM 41		46.27	37 36 43	117 08 04	1517.69497	1517.71158	-1.78	0.00
54	10848580	TBM 42		47.42	37 36 08	117 08 06	1503.81269	1503.82632	-2.94	0.00
55	10848581	TBM 43		48.53	37 35 34	117 08 08	1492.07925	1492.09094	-3.81	0.00
56	10316178	P 15		49.28	37 35 11	117 08 09	1482.65497	1482.66553	-4.86	0.00
57	10848582	TBM 44		50.34	37 34 41	117 08 25	1466.58557	1466.59479	-6.68	0.00
58	10848583	TBM 45		51.42	37 34 09	117 08 42	1454.39583	1454.40364	-8.03	0.00
59	10848584	TBM 46		52.51	37 33 37	117 08 59	1448.18912	1448.19580	-8.77	0.00
60	10297277	Q 15		52.97	37 33 23	117 09 06	1447.57837	1447.58485	-8.80	0.00
61	10848585	TBM 47		54.05	37 32 48	117 09 16	1444.55316	1444.55926	-9.05	0.00
62	10848586	TBM 48		55.14	37 32 13	117 09 26	1438.40769	1438.41085	-9.51	0.00
63	10848587	TBM 49		56.22	37 31 38	117 09 36	1435.45799	1435.46141	-9.81	0.00
64	10274242	R 15		57.28	37 31 04	117 09 46	1436.97298	1436.97947	-9.68	0.00
65	10848588	TBM 50		58.33	37 30 32	117 09 38	1431.35223	1431.35932	-10.24	0.00
66	10848589	TBM 51		59.42	37 29 58	117 09 29	1426.53247	1426.54013	-10.79	0.00
67	10848590	TBM 52		60.50	37 29 25	117 09 20	1423.72709	1423.73461	-11.16	0.00
68	10848591	TBM 53		61.59	37 28 51	117 09 12	1427.44764	1427.45616	-10.72	0.00
69	10345462	S 15		62.67	37 28 17	117 09 06	1427.47206	1427.48064	-10.72	0.00
70	10848592	TBM 54		63.76	37 27 46	117 08 43	1423.23601	1423.24526	-11.29	0.00
71	10848593	TBM 55		64.85	37 27 14	117 08 23	1418.11239	1418.12278	-11.94	0.00
72	10848594	TBM 56		65.94	37 26 43	117 08 03	1405.97836	1405.98569	-14.70	0.00
73	10326246	T 15		67.02	37 26 11	117 07 43	1399.95402	1399.95434	-15.90	0.00
74	10848595	TBM 57		68.06	37 25 38	117 07 36	1398.99593	1398.99791	-16.08	0.00
75	10848596	TBM 58		69.20	37 25 03	117 07 27	1399.95617	1399.96127	-15.87	0.00
76	10848597	TBM 59		70.29	37 24 28	117 07 20	1402.93377	1402.93897	-15.37	0.00
77	10848598	TBM 60		71.37	37 23 56	117 07 12	1396.15989	1396.15925	-15.83	0.00
78	10300877	U 15		71.80	37 23 42	117 07 09	1390.60477	1390.60279	-16.26	0.00
79	10848599	TBM 61		72.88	37 23 08	117 07 09	1374.18434	1374.18012	-17.58	0.00
80	10848600	TBM 62		73.93	37 22 35	117 07 08	1357.44477	1357.43984	-18.91	0.00
81	10848601	TBM 63		75.01	37 22 01	117 07 08	1341.54381	1341.53944	-19.96	0.00
82	10848602	TBM 64		75.98	37 21 31	117 07 07	1326.12855	1326.12356	-20.61	0.00
83	10272578	V 15 USGS		77.08	37 20 56	117 07 07	1324.28619	1324.28212	-20.80	0.00

Table 4a. National Geodetic Survey Line 73988E: File 73988E.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
84	10848603	TBM 65		78.39	37 20 17	117 06 55	1310.84936	1310.84543	-22.55	0.00
85	10848604	TBM 66		79.57	37 19 41	117 06 43	1300.10060	1300.09573	-24.03	0.00
86	10353745	W 15		80.64	37 19 09	117 06 33	1293.67451	1293.66830	-24.89	0.00
87	10848605	TBM 67		81.09	37 18 54	117 06 31	1288.22984	1288.22308	-25.59	0.00
88	10848606	TBM 68		82.13	37 18 21	117 06 27	1280.84270	1280.83733	-26.53	0.00
89	10848607	TBM 69		83.20	37 17 46	117 06 22	1266.59246	1266.58861	-28.31	0.00
90	10848608	TBM 70		84.27	37 17 12	117 06 18	1255.79664	1255.79353	-29.46	0.00
91	10848609	TBM 71		85.34	37 16 37	117 06 13	1245.04255	1245.03797	-30.40	0.00
92	10327892	X 15		85.60	37 16 29	117 06 12	1244.51707	1244.51224	-30.44	0.00
93	10848610	TBM 72		86.76	37 15 51	117 06 20	1228.60384	1228.59570	-31.59	0.00
94	10848611	TBM 73		87.90	37 15 14	117 06 29	1216.69189	1216.68261	-32.92	0.00
95	10848612	TBM 74		88.97	37 14 39	117 06 36	1208.22503	1208.21598	-34.02	0.00
96	10304298	Y 15 USGS		90.06	37 14 03	117 06 44	1205.18812	1205.17989	-34.38	0.00
97	10300881	Z 15 USGS		90.54	37 13 46	117 06 46	1206.68910	1206.67872	-34.24	0.00
98	10848613	TBM 75		91.58	37 13 18	117 06 22	1207.87279	1207.86555	-34.14	0.00
99	10848614	TBM 76		92.78	37 12 46	117 05 54	1203.36615	1203.36163	-34.46	0.00
100	10848615	TBM 77		93.84	37 12 18	117 05 29	1202.81192	1202.80944	-34.51	0.00
101	10280747	A 16 USGS		94.91	37 11 49	117 05 04	1205.47081	1205.46966	-34.24	0.00
102	10848616	TBM 78		95.39	37 11 39	117 04 51	1206.20073	1206.20016	-34.15	0.00
103	10848617	TBM 79		96.46	37 11 17	117 04 21	1209.70723	1209.70714	-33.77	0.00
104	10848618	TBM 80		97.53	37 10 54	117 03 51	1210.08445	1210.08518	-33.73	0.00
105	10848619	TBM 81		98.65	37 10 30	117 03 19	1210.03811	1210.03992	-33.74	0.00
106	10264049	B 16 USGS		99.77	37 10 07	117 02 48	1207.39743	1207.40096	-34.04	0.00
107	10848620	TBM 82		100.89	37 09 45	117 02 10	1205.70597	1205.71241	-34.26	0.00
108	10848621	TBM 83		101.95	37 09 25	117 01 34	1206.16856	1206.17874	-34.22	0.00
109	10848622	TBM 84		103.18	37 09 01	117 00 53	1207.15802	1207.17181	-34.06	0.00
110	10348939	C 16 USGS		104.52	37 08 35	117 00 08	1207.17678	1207.19207	-34.06	0.00
111	10848623	TBM 85		105.58	37 08 23	116 59 28	1206.73744	1206.75123	-34.12	0.00
112	10848624	TBM 86		106.65	37 08 12	116 58 48	1206.46621	1206.47774	-34.16	0.00
113	10848625	TBM 87		107.83	37 07 59	116 58 04	1209.05620	1209.06576	-33.77	0.00
114	10848626	TBM 88		108.95	37 07 47	116 57 22	1210.18928	1210.19734	-33.60	0.00
115	10340660	D 16		109.49	37 07 41	116 57 02	1211.25480	1211.26205	-33.43	0.00
116	10848627	TBM 89		110.70	37 07 36	116 56 15	1213.68145	1213.68576	-33.06	0.00
117	10848628	TBM 90		111.77	37 07 31	116 55 34	1216.44136	1216.44156	-32.69	0.00
118	10848629	TBM 91		112.83	37 07 26	116 54 53	1217.85515	1217.85206	-32.53	0.00
119	10337451	E 16		114.21	37 07 20	116 54 00	1218.95394	1218.95137	-32.35	0.00
120	10848630	TBM 92		115.18	37 07 24	116 53 22	1218.39250	1218.39064	-32.44	0.00
121	10848631	TBM 93		116.30	37 07 29	116 52 38	1224.04930	1224.04857	-31.50	0.00
122	10848632	TBM 94		117.42	37 07 33	116 51 55	1226.47960	1226.48299	-31.16	0.00
123	10848633	TBM 95		118.54	37 07 38	116 51 11	1225.18741	1225.19141	-31.35	0.00
124	10340659	F 16		119.02	37 07 40	116 50 52	1225.92560	1225.93076	-31.27	0.00

Table 4a. National Geodetic Survey Line 73988E: File 73988E.pro---Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
125	10848634	TBM 96		120.14	37 07 27	116 50 12	1226.65132	1226.65452	-31.16	0.00
126	10848635	TBM 97		121.26	37 07 14	116 49 32	1231.59120	1231.59293	-30.50	0.00
127	10848636	TBM 98		122.38	37 07 01	116 48 52	1227.93240	1227.93298	-30.89	0.00
128	10848637	TBM 99		122.75	37 06 57	116 48 38	1227.74336	1227.74334	-30.91	0.00
129	10331095	G 16		123.82	37 06 45	116 48 00	1227.39979	1227.39571	-30.94	0.00

Table 4b. National Geodetic Survey Line 73988E: File 73988E.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
3										1532.49140	0.00	0.00
3	4	-8.20890	-0.04	-0.14	-1.15	0.06	-0.89	0.00	-8.21018	1524.28123	-1.17	-0.89
4	5	-12.86540	0.01	-0.21	-1.77	0.08	-1.46	0.00	-12.86729	1511.41394	-4.05	-2.35
5	6	-11.78605	0.06	-0.20	-1.27	0.08	-2.03	0.00	-11.78739	1499.62655	-7.31	-4.39
6	7	-5.01455	0.09	-0.08	-0.53	0.06	-0.84	0.00	-5.01501	1494.61155	-10.24	-5.22
7	8	2.15285	0.03	0.04	0.24	0.06	0.37	0.00	2.15323	1496.76478	-13.53	-4.85
8	9	4.87665	0.05	0.08	0.57	0.06	0.62	0.00	4.87740	1501.64218	-18.19	-4.23
9	10	-3.23795	0.03	-0.05	-0.38	0.05	-0.39	0.00	-3.23830	1498.40388	-23.19	-4.62
10	11	4.69845	0.13	0.08	0.51	0.04	0.67	0.00	4.69921	1503.10309	-24.31	-3.95
11	12	6.09885	0.08	0.10	0.65	0.03	0.76	0.00	6.09970	1509.20279	-22.80	-3.20
12	13	8.92835	0.05	0.15	0.88	0.02	0.81	0.00	8.92945	1518.13223	-18.06	-2.39
13	14	9.86605	0.03	0.16	0.87	0.01	0.69	0.00	9.86712	1527.99935	-6.96	-1.70
14	15	10.29970	-0.06	0.17	0.94	0.06	0.65	0.00	10.30080	1538.30015	-2.69	-1.05
15	16	5.95925	0.00	0.10	0.54	0.07	0.41	0.00	5.95996	1544.26011	-0.66	-0.65
16	17	15.20455	0.00	0.25	1.34	0.07	1.07	0.00	15.20621	1559.46632	2.09	0.42
17	18	3.34435	0.03	0.06	0.28	0.04	0.20	0.00	3.34476	1562.81108	2.36	0.62
18	19	8.37365	-0.11	0.14	0.68	0.02	0.58	0.00	8.37438	1571.18546	3.30	1.20
19	20	14.25885	-0.02	0.24	1.31	0.03	1.29	0.00	14.26042	1585.44587	5.07	2.49
20	21	14.04535	0.01	0.23	1.48	0.03	1.14	0.00	14.04710	1599.49297	8.58	3.63
21	22	15.75195	-0.08	0.26	1.53	0.02	1.62	0.00	15.75369	1615.24666	13.29	5.25
22	23	14.18780	-0.11	0.24	1.38	0.02	1.61	0.00	14.18933	1629.43598	14.17	6.86
23	24	-1.90185	-0.18	-0.03	-0.20	-0.03	-0.10	0.00	-1.90229	1627.53369	14.17	6.76
23	25	16.91945	-0.10	0.28	1.64	0.01	2.04	0.00	16.92128	1646.35726	15.11	8.90
25	26	14.91335	0.03	0.25	1.48	0.01	1.67	0.00	14.91512	1661.27238	13.86	10.57
26	27	15.69240	0.05	0.26	1.57	0.01	1.66	0.00	15.69429	1676.96667	14.99	12.23
27	28	14.54365	-0.11	0.24	1.53	0.01	1.42	0.00	14.54532	1691.51199	15.73	13.65
28	29	1.89945	0.07	0.03	0.18	0.02	0.22	0.00	1.89974	1693.41172	18.89	13.86
29	30	1.36120	-0.04	0.02	0.11	0.00	0.11	0.00	1.36128	1694.77301	17.42	13.97
30	31	16.80100	0.10	0.28	1.89	0.02	1.36	0.00	16.80329	1711.57629	22.85	15.32
31	32	18.56660	0.09	0.31	2.24	0.01	0.52	0.00	18.56925	1730.14554	28.67	15.84
32	33	0.53000	-0.19	0.01	0.06	-0.01	0.00	0.00	0.52986	1730.67540	27.98	15.85
33	34	3.43385	-0.11	0.06	0.33	-0.01	0.03	0.00	3.43413	1734.10953	27.78	15.88
34	35	3.60775	0.04	0.06	0.37	0.01	0.09	0.00	3.60823	1737.71775	27.98	15.97
30	36	18.91080	0.15	0.31	2.63	0.00	1.80	0.00	18.91387	1713.68688	17.90	15.76
36	37	24.91440	0.03	0.41	3.54	0.00	1.77	0.00	24.91837	1738.60525	21.65	17.53
37	38	27.51405	0.13	0.46	3.93	0.00	2.08	0.00	27.51858	1766.12383	26.98	19.61
38	39	12.20590	0.09	0.20	1.74	-0.01	1.33	0.00	12.20792	1778.33174	30.60	20.93
39	40	-9.43330	0.05	-0.16	-1.29	0.00	-0.85	0.00	-9.43471	1768.89704	29.37	20.09
40	41	-15.45923	-0.02	-0.26	-1.76	0.04	-1.14	0.00	-15.46121	1753.43582	27.71	18.94
41	42	-16.18285	0.03	-0.27	-2.09	-0.01	-1.77	0.00	-16.18520	1737.25063	26.49	17.17
42	43	-17.84760	-0.02	-0.30	-2.41	-0.02	-1.80	0.00	-17.85034	1719.40029	25.31	15.37
43	44	-20.07610	0.10	-0.33	-2.79	-0.02	-2.09	0.00	-20.07914	1699.32115	24.14	13.28
44	45	-22.71170	0.00	-0.38	-3.13	-0.02	-1.99	0.00	-22.71523	1676.60592	22.11	11.29
45	46	-21.50135	0.06	-0.36	-2.97	-0.02	-1.25	0.00	-21.50464	1655.10128	21.07	10.04
46	47	-21.44125	0.00	-0.36	-3.13	0.02	-1.59	0.00	-21.44473	1633.65656	24.88	8.45
47	48	-20.16620	-0.07	-0.33	-2.92	0.02	-1.79	0.00	-20.16951	1613.48705	28.85	6.66

Table 4b-1

Table 4b. National Geodetic Survey Line 73988E: File 73988E.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
48	49	-19.25970	0.03	-0.32	-2.89	0.02	-1.86	0.00	-19.26287	1594.22418	30.61	4.81
49	50	-23.80697	0.00	-0.40	-3.41	0.04	-1.75	0.00	-23.81074	1570.41344	27.83	3.06
50	51	-23.11425	-0.02	-0.38	-3.67	0.02	-2.11	0.00	-23.11830	1547.29514	23.51	0.95
51	52	-19.31600	-0.03	-0.32	-3.09	0.03	-1.80	0.00	-19.31941	1527.97573	19.58	-0.86
52	53	-10.27900	-0.03	-0.17	-1.59	0.03	-0.92	0.00	-10.28076	1517.69497	16.61	-1.78
53	54	-13.87995	0.00	-0.23	-2.14	0.04	-1.17	0.00	-13.88227	1503.81269	13.63	-2.94
54	55	-11.73155	0.02	-0.19	-1.76	0.04	-0.87	0.00	-11.73344	1492.07925	11.69	-3.81
55	56	-9.42285	0.07	-0.16	-1.39	0.05	-1.05	0.00	-9.42428	1482.65497	10.56	-4.86
56	57	-16.06680	-0.03	-0.27	-2.36	0.07	-1.82	0.00	-16.06941	1466.58557	9.22	-6.68
57	58	-12.18780	-0.04	-0.20	-1.77	0.07	-1.35	0.00	-12.18973	1454.39583	7.81	-8.03
58	59	-6.20570	-0.06	-0.10	-0.93	0.07	-0.74	0.00	-6.20671	1448.18912	6.68	-8.77
59	60	-0.61080	0.14	-0.01	-0.09	0.02	-0.03	0.00	-0.61075	1447.57837	6.48	-8.80
60	61	-3.02470	-0.03	-0.05	-0.46	0.03	-0.25	0.00	-3.02521	1444.55316	6.10	-9.05
61	62	-6.14450	0.04	-0.10	-0.93	0.03	-0.46	0.00	-6.14546	1438.40769	3.16	-9.51
62	63	-2.94940	0.16	-0.05	-0.44	0.03	-0.30	0.00	-2.94970	1435.45799	3.42	-9.81
63	64	1.51470	0.00	0.03	0.22	0.03	0.13	0.00	1.51499	1436.97298	6.49	-9.68
64	65	-5.61985	0.00	-0.09	-0.86	0.05	-0.56	0.00	-5.62076	1431.35223	7.09	-10.24
65	66	-4.81900	0.00	-0.08	-0.73	0.05	-0.54	0.00	-4.81976	1426.53247	7.66	-10.79
66	67	-2.80495	-0.01	-0.05	-0.43	0.05	-0.38	0.00	-2.80539	1423.72709	7.52	-11.16
67	68	3.71985	0.03	0.06	0.57	0.06	0.44	0.00	3.72056	1427.44764	8.52	-10.72
68	69	0.02435	0.00	0.00	0.00	0.07	0.00	0.00	0.02442	1427.47206	8.58	-10.72
69	70	-4.23530	-0.01	-0.07	-0.71	0.03	-0.57	0.00	-4.23606	1423.23601	9.25	-11.29
70	71	-5.12315	0.07	-0.08	-0.53	0.08	-0.65	0.00	-5.12362	1418.11239	10.39	-11.94
71	72	-12.13270	0.06	-0.20	-1.26	0.08	-2.76	0.00	-12.13403	1405.97836	7.33	-14.70
72	73	-6.02370	0.04	-0.10	-0.64	0.06	-1.20	0.00	-6.02435	1399.95402	0.32	-15.90
73	74	-0.95808	0.04	-0.02	-0.09	0.06	-0.18	0.00	-0.95808	1398.99594	1.98	-16.08
74	75	0.96000	0.06	0.02	0.09	0.07	0.21	0.00	0.96024	1399.95617	5.10	-15.87
75	76	2.97720	0.01	0.05	0.30	0.04	0.51	0.00	2.97760	1402.93377	5.20	-15.37
76	77	-6.77315	0.05	-0.11	-0.69	0.03	-0.46	0.00	-6.77387	1396.15990	-0.64	-15.83
77	78	-5.55450	0.00	-0.09	-0.54	0.02	-0.43	0.00	-5.55512	1390.60478	-1.98	-16.26
78	79	-16.41860	-0.07	-0.27	-1.53	0.03	-1.33	0.00	-16.42043	1374.18435	-4.22	-17.58
79	80	-16.73785	0.00	-0.28	-1.48	0.03	-1.33	0.00	-16.73958	1357.44477	-4.93	-18.91
80	81	-15.89950	0.03	-0.26	-1.26	0.03	-1.05	0.00	-15.90096	1341.54381	-4.37	-19.96
81	82	-15.41390	-0.06	-0.26	-1.05	0.01	-0.65	0.00	-15.41525	1326.12856	-4.99	-20.61
82	83	-1.84215	-0.03	-0.03	-0.21	0.05	-0.19	0.00	-1.84237	1324.28619	-4.07	-20.80
83	84	-13.43500	-0.10	-0.22	-1.57	0.07	-1.76	0.00	-13.43683	1310.84936	-3.93	-22.55
84	85	-10.74730	-0.04	-0.18	-1.30	0.07	-1.48	0.00	-10.74876	1300.10060	-4.87	-24.03
85	86	-6.42530	0.03	-0.11	-0.77	0.07	-0.87	0.00	-6.42609	1293.67451	-6.21	-24.89
86	87	-5.44400	0.07	-0.09	-0.68	0.03	-0.70	0.00	-5.44468	1288.22984	-6.76	-25.59
87	88	-7.38613	-0.02	-0.12	-0.93	0.06	-0.94	0.00	-7.38714	1280.84270	-5.37	-26.53
88	89	-14.24835	-0.08	-0.24	-1.63	0.06	-1.78	0.00	-14.25024	1266.59246	-3.85	-28.31
89	90	-10.79460	0.08	-0.18	-1.17	0.06	-1.15	0.00	-10.79582	1255.79664	-3.11	-29.46
90	91	-10.75285	0.02	-0.18	-1.12	0.05	-0.94	0.00	-10.75409	1245.04255	-4.58	-30.40
91	92	-0.52535	-0.07	-0.01	-0.07	0.01	-0.04	0.00	-0.52548	1244.51707	-4.83	-30.44
92	93	-15.91105	0.00	-0.26	-1.98	0.06	-1.15	0.00	-15.91323	1228.60384	-8.14	-31.59
93	94	-11.91015	-0.04	-0.20	-1.62	0.06	-1.33	0.00	-11.91195	1216.69189	-9.28	-32.92

Table 4b-2

Table 4b. National Geodetic Survey Line 73988E: File 73988E.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
94	95	-8.46570	0.05	-0.14	-1.13	0.06	-1.11	0.00	-8.46686	1208.22503	-9.05	-34.02
95	96	-3.03650	-0.08	-0.05	-0.35	0.06	-0.36	0.00	-3.03691	1205.18812	-8.23	-34.38
96	97	1.50080	-0.05	0.02	0.19	0.02	0.14	0.00	1.50098	1206.68910	-10.38	-34.24
97	98	1.18340	0.09	0.02	0.15	0.03	0.10	0.00	1.18369	1207.87279	-7.24	-34.14
98	99	-4.50590	-0.15	-0.07	-0.55	0.03	-0.32	0.00	-4.50664	1203.36615	-4.52	-34.46
99	100	-0.55420	0.04	-0.01	-0.06	0.00	-0.05	0.00	-0.55423	1202.81192	-2.48	-34.51
100	101	2.65840	0.18	0.04	0.28	0.00	0.27	0.00	2.65890	1205.47081	-1.15	-34.24
101	102	0.72985	-0.02	0.01	0.08	0.00	0.09	0.00	0.72991	1206.20073	-0.57	-34.15
102	103	3.50610	-0.02	0.06	0.36	0.00	0.39	0.00	3.50650	1209.70723	-0.09	-33.77
103	104	0.37725	-0.08	0.01	0.04	0.00	0.03	0.00	0.37722	1210.08445	0.73	-33.73
104	105	-0.04620	-0.13	0.00	0.00	-0.01	0.00	0.00	-0.04634	1210.03811	1.81	-33.74
105	106	-2.64030	-0.04	-0.04	-0.29	0.00	-0.31	0.00	-2.64068	1207.39743	3.53	-34.04
106	107	-1.69115	-0.07	-0.03	-0.23	0.01	-0.22	0.00	-1.69147	1205.70597	6.44	-34.26
107	108	0.46255	-0.04	0.01	0.07	0.01	0.05	0.00	0.46260	1206.16856	10.18	-34.22
108	109	0.98930	-0.01	0.02	0.14	0.02	0.15	0.00	0.98946	1207.15802	13.79	-34.06
109	110	0.01875	0.01	0.00	0.00	0.00	0.00	0.00	0.01876	1207.17679	15.29	-34.06
110	111	-0.43915	-0.13	-0.01	-0.07	0.00	-0.06	0.00	-0.43935	1206.73744	13.79	-34.12
111	112	-0.27125	0.06	0.00	-0.04	0.00	-0.03	0.00	-0.27123	1206.46621	11.53	-34.16
112	113	2.58970	-0.11	0.04	0.37	0.00	0.39	0.00	2.58999	1209.05621	9.56	-33.77
113	114	1.13295	-0.06	0.02	0.17	0.00	0.17	0.00	1.13308	1210.18929	8.06	-33.60
114	115	1.06535	0.00	0.02	0.15	0.00	0.17	0.00	1.06552	1211.25480	7.25	-33.43
115	116	2.42630	-0.01	0.04	0.34	-0.03	0.37	0.00	2.42665	1213.68145	4.31	-33.06
116	117	2.75960	-0.12	0.05	0.39	-0.01	0.38	0.00	2.75991	1216.44136	0.20	-32.69
117	118	1.41355	0.04	0.02	0.19	-0.01	0.16	0.00	1.41379	1217.85515	-3.09	-32.53
118	119	1.09865	-0.01	0.02	0.16	-0.03	0.18	0.00	1.09879	1218.95394	-2.57	-32.35
119	120	-0.56135	0.04	-0.01	-0.09	-0.03	-0.09	0.00	-0.56144	1218.39250	-1.86	-32.44
120	121	5.65595	-0.03	0.09	0.82	-0.03	0.94	0.00	5.65680	1224.04930	-0.73	-31.50
121	122	2.42995	0.02	0.04	0.31	-0.03	0.34	0.00	2.43029	1226.47960	3.39	-31.16
122	123	-1.29200	0.04	-0.02	-0.19	-0.02	-0.19	0.00	-1.29219	1225.18741	4.00	-31.35
123	124	0.73815	-0.07	0.01	0.12	-0.01	0.08	0.00	0.73820	1225.92560	5.16	-31.27
124	125	0.72565	-0.05	0.01	0.12	0.00	0.11	0.00	0.72572	1226.65132	3.20	-31.16
125	126	4.93905	-0.02	0.08	0.77	0.00	0.67	0.00	4.93988	1231.59120	1.73	-30.50
126	127	-3.65815	-0.03	-0.06	-0.56	0.00	-0.40	0.00	-3.65880	1227.93240	0.58	-30.89
127	128	-0.18905	0.04	0.00	-0.03	0.00	-0.02	0.00	-0.18904	1227.74336	-0.02	-30.91
128	129	-0.34355	0.05	-0.01	-0.05	-0.01	-0.03	0.00	-0.34357	1227.39979	-4.08	-30.94

Table 4b-3

Table 4c. National Geodetic Survey Line 73988E: File 73988E.prn(=.dat)

312	73988/E	3	4191509110945	7	1	0.80		211G11	F
-8.20800		MT	0.79 -0.06 -0.14 -1.03	0.05	-0.98	0.001033109710848541			
212	73988/E	4	3191509091035	8	1	0.80		211G11	B
8.20980		MT	-0.79 0.02 0.14 1.28	-0.07	0.80	0.001084854110331097			
412	73988/E	4	5191509111005	9	1	1.06		211G11	F
-12.86050		MT	1.03 0.02 -0.21 -1.62	0.07	-1.76	0.001084854110848542			
612	73988/E	4	5191509111100	11	1	1.06		211G11	F
-12.86770		MT	1.03 0.08 -0.21 -1.75	0.09	-1.26	0.001084854110848542			
512	73988/E	5	4191509111030	10	1	1.06		211G11	B
12.86600		MT	-1.03 0.03 0.21 1.72	-0.08	1.46	0.001084854210848541			
112	73988/E	5	4191509091010	10	1	1.06		211G11	B
12.86740		MT	-1.03 0.03 0.21 1.98	-0.09	1.37	0.001084854210848541			
712	73988/E	5	6191509111125	10	1	1.07		211G11	F
-11.78670		MT	1.04 0.03 -0.20 -1.63	0.09	-1.46	0.001084854210848543			
2412	73988/E	6	5191509131210	8	1	1.07		211G11	B
11.78540		MT	-1.04 -0.08 0.20 0.90	-0.06	2.61	0.001084854310848542			
2512	73988/E	6	7191509131355	9	1	1.08		211G11	F
-5.01320		MT	1.04 0.00 -0.08 -0.56	0.06	-0.70	0.001084854310848544			
812	73988/E	6	7191509111300	10	1	1.08		211G11	F
-5.01810		MT	1.04 0.06 -0.08 -0.72	0.07	-0.59	0.001084854310848544			
2312	73988/E	7	6191509131145	7	1	1.08		211G11	B
5.01060		MT	-1.04 -0.06 0.08 0.39	-0.05	1.36	0.001084854410848543			
2612	73988/E	7	6191509131415	9	1	1.08		211G11	B
5.01630		MT	-1.04 -0.25 0.08 0.46	-0.06	0.69	0.001084854410848543			
912	73988/E	7	8191509111325	10	1	1.14		211G11	F
2.15070		MT	1.09 0.02 0.04 0.32	0.07	0.27	0.001084854410848545			
2212	73988/E	8	7191509131125	8	1	1.13		211G11	B
-2.15500		MT	-1.09 -0.05 -0.04 -0.17	-0.05	-0.47	0.001084854510848544			
1012	73988/E	8	9191509111350	11	1	1.25		211G11	F
4.87600		MT	1.19 -0.03 0.08 0.73	0.06	0.58	0.001084854510304300			
2112	73988/E	9	8191509131055	11	1	1.24		211G11	B
-4.87730		MT	-1.19 -0.14 -0.08 -0.40	-0.05	-0.66	0.001030430010848545			
1112	73988/E	9	10191509111425	9	1	1.08		211G11	F
-3.23790		MT	1.21 -0.02 -0.05 -0.48	0.06	-0.40	0.001030430010848546			
2012	73988/E	10	9191509131020	10	1	1.08		211G11	B
3.23800		MT	-1.21 -0.07 0.05 0.27	-0.03	0.37	0.001084854610304300			
1212	73988/E	10	11191509111450	8	1	1.08		211G11	F
4.69890		MT	1.22 0.15 0.08 0.65	0.06	0.70	0.001084854610848547			
1912	73988/E	11	1019150913 955	9	1	1.08		211G11	B
-4.69800		MT	-1.22 -0.11 -0.08 -0.37	-0.02	-0.63	0.001084854710848546			
1312	73988/E	11	12191509111520	9	1	1.13		211G11	F
6.09940		MT	1.28 0.11 0.10 0.84	0.05	0.70	0.001084854710848548			
1812	73988/E	12	1119150913 925	9	1	1.13		211G11	B
-6.09830		MT	-1.28 -0.04 -0.10 -0.45	-0.01	-0.81	0.001084854810848547			
1412	73988/E	12	13191509111545	9	1	1.14		211G11	F
8.92870		MT	1.29 0.09 0.15 1.14	0.04	0.78	0.001084854810848549			
1712	73988/E	13	1219150913 845	9	1	1.14		211G11	B
-8.92800		MT	-1.29 0.00 -0.15 -0.62	0.00	-0.84	0.001084854910848548			
1512	73988/E	13	14191509111610	8	1	1.03		211G11	F
9.86740		MT	1.17 0.06 0.16 1.20	0.03	0.63	0.001084854910848550			
1612	73988/E	14	1319150913 815	8	1	1.03		211G11	B
-9.86470		MT	-1.17 -0.01 -0.16 -0.53	0.01	-0.74	0.001084855010848549			
2712	73988/E	14	15191509131505	7	1	0.97		211G11	F
10.29770		MT	1.11 -0.08 0.17 0.80	0.06	0.69	0.001084855010270923			
4512	73988/E	15	14191509141550	9	1	0.97		211G11	B
-10.30170		MT	-1.11 0.04 -0.17 -1.07	-0.05	-0.61	0.001027092310848550			
2812	73988/E	15	16191509131530	7	1	1.02		211G11	F
5.95860		MT	1.29 0.04 0.10 0.44	0.07	0.37	0.001027092310848551			
4412	73988/E	16	15191509141525	10	1	1.02		211G11	B
-5.95990		MT	-1.29 0.03 -0.10 -0.63	-0.06	-0.44	0.001084855110270923			
2912	73988/E	16	17191509131550	8	1	1.14		211G11	F
15.20400		MT	1.45 0.01 0.25 1.03	0.07	0.75	0.001084855110848552			
4312	73988/E	17	16191509141455	11	1	1.13		211G11	B
-15.20510		MT	-1.45 0.00 -0.25 -1.64	-0.07	-1.39	0.001084855210848551			
3012	73988/E	17	18191509131615	4	1	0.61		211G11	F
3.34300		MT	0.78 0.06 0.06 0.21	0.04	0.11	0.001084855210848553			
4212	73988/E	18	17191509141440	6	1	0.61		211G11	B
-3.34570		MT	-0.78 0.00 -0.06 -0.35	-0.04	-0.29	0.001084855310848552			
4612	73988/E	18	1919150915 800	5	1	0.58		211G11	F
8.37470		MT	0.75 -0.21 0.14 0.49	0.01	0.41	0.001084855310848554			
4112	73988/E	19	18191509141425	6	1	0.58		211G11	B
-8.37260		MT	-0.75 0.01 -0.14 -0.87	-0.03	-0.75	0.001084855410848553			
4712	73988/E	19	2019150915 815	8	1	1.03		211G11	F
14.25870		MT	1.33 -0.05 0.24 1.11	0.01	1.06	0.001084855410848555			
4012	73988/E	20	19191509141400	10	1	1.02		211G11	B
-14.25900		MT	-1.33 -0.02 -0.24 -1.51	-0.05	-1.51	0.001084855510848554			
4812	73988/E	20	2119150915 840	10	1	1.19		211G11	F
14.04400		MT	1.55 -0.04 0.23 1.26	0.01	1.11	0.001084855510848556			

Table 4c. National Geodetic Survey Line 73988E: File 73988E.prn(=.dat)--Continued

3912	73988/E	21	20191509141330	13	1	1.18	211G11	B
-14.04670		MT	-1.55 -0.06 -0.23 -1.69	-0.06	-1.18	0.001084855610848555		
4912	73988/E	21	2219150915 905	9	1	1.08	211G11	F
15.75260		MT	1.42 -0.20 0.26 1.48	0.01	1.83	0.001084855610848557		
3812	73988/E	22	21191509141140	12	1	1.07	211G11	B
-15.75130		MT	-1.42 -0.05 -0.26 -1.58	-0.03	-1.41	0.001084855710848556		
5012	73988/E	22	2319150915 930	10	1	1.07	211G11	F
14.18660		MT	1.43 -0.22 0.24 1.42	0.01	1.41	0.001084855710848558		
3712	73988/E	23	22191509141100	10	1	1.07	211G11	B
-14.18900		MT	-1.43 -0.01 -0.24 -1.33	-0.02	-1.80	0.001084855810848557		
5112	73988/E	23	24191509151000	4	1	0.29	211G11	F
-1.90200		MT	0.01 -0.32 -0.03 -0.20	-0.03	-0.09	0.001084855810329472		
5312	73988/E	23	25191509151030	11	1	1.12	211G11	F
16.91930		MT	1.50 -0.18 0.28 1.86	0.01	1.78	0.001084855810848559		
5212	73988/E	24	23191509151015	4	1	0.31	211G11	B
1.90170		MT	-0.01 -0.05 0.03 0.20	0.03	0.11	0.001032947210848558		
3612	73988/E	25	23191509141030	10	1	1.12	211G11	B
-16.91960		MT	-1.50 0.02 -0.28 -1.42	-0.01	-2.31	0.001084855910848558		
5412	73988/E	25	26191509151105	10	1	1.04	211G11	F
14.91500		MT	1.41 0.08 0.25 1.73	0.01	1.74	0.001084855910848560		
3512	73988/E	26	25191509141005	10	1	1.04	211G11	B
-14.91170		MT	-1.41 0.02 -0.25 -1.22	-0.01	-1.60	0.001084856010848559		
5512	73988/E	26	27191509151135	12	1	1.12	211G11	F
15.69160		MT	1.54 0.02 0.26 1.88	0.01	1.48	0.001084856010848561		
3412	73988/E	27	2619150914 940	10	1	1.12	211G11	B
-15.69320		MT	-1.54 -0.08 -0.26 -1.26	-0.01	-1.84	0.001084856110848560		
5612	73988/E	27	28191509151235	11	1	1.13	211G11	F
14.54190		MT	1.56 -0.27 0.24 2.01	0.02	1.61	0.001084856110848562		
3212	73988/E	28	2719150914 830	9	1	1.13	211G11	B
-14.54540		MT	-1.56 -0.05 -0.24 -1.05	0.00	-1.22	0.001084856210848561		
5712	73988/E	28	29191509151300	10	1	1.11	211G11	F
1.89930		MT	1.53 0.11 0.03 0.24	0.03	0.23	0.001084856210298997		
3312	73988/E	29	2819150914 840	8	1	1.10	211G11	B
-1.89960		MT	-1.53 -0.02 -0.03 -0.11	0.00	-0.20	0.001029899710848562		
5812	73988/E	29	30191509151340	5	1	0.55	211G11	F
1.36200		MT	0.37 -0.04 0.02 0.17	0.01	0.15	0.001029899710848563		
3112	73988/E	30	2919150914 740	4	1	0.55	211G11	B
-1.36040		MT	-0.37 0.04 -0.02 -0.05	0.02	-0.06	0.001084856310298997		
5912	73988/E	30	3119150916 750	10	1	1.17	211G11	F
16.80170		MT	1.21 0.15 0.28 1.44	0.02	0.64	0.001084856310848564		
6912	73988/E	30	36191509161350	11	1	1.07	211G11	F
18.91130		MT	0.73 0.24 0.31 2.72	-0.01	1.82	0.001084856310848565		
6812	73988/E	31	30191509161200	11	1	1.18	211G11	B
-16.80030		MT	-1.21 -0.04 -0.28 -2.35	-0.01	-2.07	0.001084856410848563		
6012	73988/E	31	3219150916 825	14	1	0.93	211G11	F
18.56870		MT	0.96 0.13 0.31 2.04	0.01	0.36	0.001084856410288725		
6712	73988/E	32	31191509161100	15	1	0.91	211G11	B
-18.56450		MT	-0.96 -0.04 -0.31 -2.45	-0.01	-0.68	0.001028872510848564		
6112	73988/E	32	3319150916 900	4	1	0.15	211G11	F
0.53130		MT	0.09 0.07 0.01 0.06	-0.01	0.00	0.001028872510287153		
6612	73988/E	33	32191509161035	4	1	0.17	211G11	B
-0.52870		MT	-0.09 0.46 -0.01 -0.05	0.01	-0.01	0.001028715310288725		
6212	73988/E	33	3419150916 915	3	1	0.07	211G11	F
3.43400		MT	-0.09 -0.06 0.06 0.34	-0.01	0.02	0.001028715310288716		
6512	73988/E	34	3319150916 945	2	1	0.07	211G11	B
-3.43370		MT	0.09 0.15 -0.06 -0.32	0.01	-0.04	0.001028871610287153		
6312	73988/E	34	3519150916 920	5	1	0.24	211G11	F
3.60680		MT	0.09 0.11 0.06 0.36	0.01	0.07	0.001028871610287153		
6412	73988/E	35	3419150916 935	4	1	0.23	211G11	B
-3.60870		MT	-0.09 0.04 -0.06 -0.38	-0.01	-0.11	0.001028715310288716		
8412	73988/E	36	30191509171515	10	1	1.08	211G11	B
-18.91030		MT	-0.73 -0.05 -0.31 -2.53	0.00	-1.77	0.001084856510848563		
7012	73988/E	36	37191509161425	11	1	1.12	211G11	F
24.91500		MT	0.77 0.06 0.41 3.54	0.00	1.74	0.001084856510848566		
8312	73988/E	37	36191509171440	12	1	1.11	211G11	B
-24.91380		MT	-0.77 0.01 -0.41 -3.54	0.01	-1.79	0.001084856610848565		
7112	73988/E	37	38191509161455	13	1	1.21	211G11	F
27.51520		MT	0.85 0.25 0.46 3.80	0.01	1.80	0.001084856610848567		
8212	73988/E	38	37191509171410	13	1	1.31	211G11	B
-27.51290		MT	-0.85 -0.02 -0.46 -4.07	0.02	-2.36	0.001084856710848566		
7212	73988/E	38	39191509161530	10	1	1.15	211G11	F
12.20800		MT	0.82 0.20 0.20 1.66	0.02	1.10	0.001084856710848568		
8112	73988/E	39	38191509171340	10	1	1.16	211G11	B
-12.20380		MT	-0.82 0.03 -0.20 -1.81	0.03	-1.55	0.001084856810848567		
7312	73988/E	39	40191509161600	6	1	0.67	211G11	F
-9.43290		MT	0.48 0.07 -0.16 -1.26	0.01	-0.47	0.001084856810282370		
8012	73988/E	40	39191509171330	6	1	0.68	211G11	B

Table 4c-2

Table 4c. National Geodetic Survey Line 73988E: File 73988E.prn(=.dat)--Continued

9.43370		MT	-0.48	-0.03	0.16	1.32	0.02	1.22	0.001028237010848568		
10012	73988/E	40	4119150920	810			10	1	1.20	211G11	F
-15.45910		MT	0.73	0.02	-0.26	-1.61	0.08	-0.84	0.001028237010848569		
8512	73988/E	40	4119150918	755			10	1	1.20	211G11	F
-15.46250		MT	0.73	-0.12	-0.26	-1.58	0.04	-0.69	0.001028237010848569		
11412	73988/E	41	4019150921	835			10	1	1.20	211G11	B
15.46040		MT	-0.73	-0.10	0.26	1.79	-0.09	1.11	0.001084856910282370		
7912	73988/E	41	4019150917	1300			11	1	1.20	211G11	B
15.45490		MT	-0.73	0.06	0.26	2.04	0.04	1.93	0.001084856910282370		
8612	73988/E	41	4219150918	845			10	1	1.15	211G11	F
-16.18330		MT	0.69	0.06	-0.27	-1.91	0.02	-1.24	0.001084856910848570		
7812	73988/E	42	4119150917	1125			10	1	1.15	211G11	B
16.18240		MT	-0.69	0.01	0.27	2.27	0.04	2.30	0.001084857010848569		
8712	73988/E	42	4319150918	910			11	1	1.25	211G11	F
-17.84590		MT	0.71	-0.02	-0.30	-2.32	0.01	-1.78	0.001084857010848571		
7712	73988/E	43	4219150917	1055			12	1	1.20	211G11	B
17.84930		MT	-0.71	0.01	0.30	2.50	0.04	1.83	0.001084857110848570		
8812	73988/E	43	4419150918	940			10	1	1.13	211G11	F
-20.07460		MT	0.60	0.21	-0.33	-2.77	0.00	-2.37	0.001084857110848572		
7612	73988/E	44	4319150917	1025			11	1	1.03	211G11	B
20.07760		MT	-0.60	0.01	0.33	2.81	0.03	1.80	0.001084857210848571		
8912	73988/E	44	4519150918	1000			11	1	1.08	211G11	F
-22.71280		MT	0.63	0.02	-0.38	-3.13	-0.01	-1.99	0.001084857210848573		
7512	73988/E	45	4419150917	1000			11	1	1.08	211G11	B
22.71060		MT	-0.63	0.02	0.38	3.13	0.03	2.00	0.001084857310848572		
9012	73988/E	45	4619150918	1025			11	1	1.07	211G11	F
-21.50210		MT	0.60	0.14	-0.36	-3.10	-0.02	-0.86	0.001084857310267537		
7412	73988/E	46	4519150917	915			10	1	1.05	211G11	B
21.50060		MT	-0.60	0.02	0.36	2.84	0.02	1.64	0.001026753710848573		
9112	73988/E	46	4719150918	1055			11	1	1.07	211G11	F
-21.44120		MT	1.24	0.02	-0.36	-3.17	0.03	-2.24	0.001026753710848574		
11312	73988/E	47	4619150920	1600			10	1	1.15	211G11	B
21.44130		MT	-1.24	0.02	0.36	3.09	0.00	0.94	0.001084857410267537		
9212	73988/E	47	4819150918	1125			11	1	1.08	211G11	F
-20.16530		MT	1.24	-0.17	-0.33	-2.98	0.03	-2.19	0.001084857410848575		
11212	73988/E	48	4719150920	1535			10	1	1.08	211G11	B
20.16710		MT	-1.24	-0.02	0.33	2.86	0.00	1.38	0.001084857510848574		
9312	73988/E	48	4919150918	1150			11	1	1.09	211G11	F
-19.25760		MT	1.24	0.06	-0.32	-2.89	0.02	-2.14	0.001084857510848576		
11112	73988/E	49	4819150920	1455			11	1	1.09	211G11	B
19.26180		MT	-1.24	0.01	0.32	2.89	-0.01	1.57	0.001084857610848575		
11512	73988/E	49	5019150921	930			10	1	1.09	211G11	F
-23.80760		MT	1.21	-0.08	-0.40	-3.05	0.06	-1.52	0.001084857610848577		
9412	73988/E	49	5019150918	1315			11	1	1.08	211G11	F
-23.80360		MT	1.21	0.03	-0.40	-3.67	0.01	-2.06	0.001084857610848577		
11612	73988/E	50	4919150921	955			10	1	1.09	211G11	B
23.80810		MT	-1.21	-0.06	0.40	3.24	-0.07	1.64	0.001084857710848576		
11012	73988/E	50	4919150920	1420			11	1	1.08	211G11	B
23.80860		MT	-1.21	0.00	0.40	3.67	-0.02	1.78	0.001084857710848576		
9512	73988/E	50	5119150918	1345			11	1	1.10	211G11	F
-23.11230		MT	1.21	-0.01	-0.38	-3.74	0.01	-2.12	0.001084857710340653		
10912	73988/E	51	5019150920	1350			11	1	1.10	211G11	B
23.11620		MT	-1.21	0.02	0.38	3.61	-0.03	2.10	0.001034065310848577		
9612	73988/E	51	5219150918	1435			11	1	1.13	211G11	F
-19.31520		MT	1.32	-0.05	-0.32	-3.21	0.01	-1.80	0.001034065310848578		
10812	73988/E	52	5119150920	1310			12	1	1.13	211G11	B
19.31680		MT	-1.32	0.00	0.32	2.97	-0.04	1.81	0.001084857810340653		
9712	73988/E	52	5319150918	1505			9	1	1.01	211G11	F
-10.27900		MT	1.17	-0.08	-0.17	-1.60	0.01	-0.96	0.001084857810848579		
10712	73988/E	53	5219150920	1145			11	1	1.01	211G11	B
10.27900		MT	-1.17	-0.01	0.17	1.58	-0.06	0.88	0.001084857910848578		
9812	73988/E	53	5419150918	1530			10	1	1.14	211G11	F
-13.87980		MT	1.31	0.00	-0.23	-2.08	0.01	-1.05	0.001084857910848580		
10612	73988/E	54	5319150920	1115			12	1	1.16	211G11	B
13.88010		MT	-1.31	0.00	0.23	2.19	-0.07	1.28	0.001084858010848579		
9912	73988/E	54	5519150918	1555			10	1	1.11	211G11	F
-11.73210		MT	1.27	0.01	-0.19	-1.67	0.01	-0.60	0.001084858010848581		
10512	73988/E	55	5419150920	1045			11	1	1.11	211G11	B
11.73100		MT	-1.27	-0.03	0.19	1.85	-0.07	1.14	0.001084858110848580		
11712	73988/E	55	5619150921	11040			7	1	0.75	211G11	F
-9.42300		MT	0.85	0.13	-0.16	-1.32	0.05	-1.07	0.001084858110316178		
10412	73988/E	56	5519150920	1030			7	1	0.75	211G11	B
9.42270		MT	-0.85	0.00	0.16	1.45	-0.05	1.03	0.001031617810848581		
11812	73988/E	56	5719150921	11100			11	1	1.11	211G11	F
-16.06490		MT	1.10	-0.06	-0.27	-2.35	0.07	-1.69	0.001031617810848582		
10312	73988/E	57	5619150920	1005			9	1	1.01	211G11	B
16.06870		MT	-1.10	0.01	0.27	2.38	-0.06	1.95	0.001084858210316178		

Table 4c. National Geodetic Survey Line 73988E: File 73988E.prn(=.dat)--Continued

11912	73988/E	57	58191509211135	11	1	1.09	211G11	F
-12.18770		MT	1.16 -0.09 -0.20 -1.80	0.08	-1.22	0.001084858210848583		
10212	73988/E	58	5719150920 940	9	1	1.08	211G11	B
12.18790		MT	-1.16 -0.01 0.20 1.73	-0.06	1.47	0.001084858310848582		
12012	73988/E	58	59191509211305	9	1	1.09	211G11	F
-6.20370		MT	1.16 -0.09 -0.10 -0.98	0.08	-0.87	0.001084858310848584		
10112	73988/E	59	5819150920 910	9	1	1.08	211G11	B
6.20770		MT	-1.16 0.02 0.10 0.87	-0.05	0.62	0.001084858410848583		
12112	73988/E	59	60191509211335	5	1	0.47	211G11	F
-0.61060		MT	0.49 0.11 -0.01 -0.09	0.03	-0.05	0.001084858410297277		
12812	73988/E	60	59191509211630	4	1	0.46	211G11	B
0.61100		MT	-0.49 -0.16 0.01 0.09	0.00	0.01	0.001029727710848584		
12212	73988/E	60	61191509211400	9	1	1.07	211G11	F
-3.02640		MT	1.24 -0.05 -0.05 -0.47	0.06	-0.37	0.001029727710848585		
12712	73988/E	61	60191509211605	9	1	1.08	211G11	B
3.02300		MT	-1.24 0.02 0.05 0.45	-0.01	0.13	0.001084858510297277		
12512	73988/E	61	62191509211525	9	1	1.09	211G11	F
-6.14340		MT	1.25 0.02 -0.10 -0.93	0.03	-0.49	0.001084858510848586		
12612	73988/E	62	61191509211540	9	1	1.09	211G11	B
6.14560		MT	-1.25 -0.06 0.10 0.93	-0.02	0.42	0.001084858610848585		
12312	73988/E	62	63191509211450	9	1	1.08	211G11	F
-2.94960		MT	1.24 0.11 -0.05 -0.44	0.04	-0.32	0.001084858610848587		
12412	73988/E	63	62191509211515	9	1	1.08	211G11	B
2.94920		MT	-1.24 -0.21 0.05 0.45	-0.03	0.28	0.001084858710848586		
12912	73988/E	63	6419150922 900	8	1	1.06	211G11	F
1.51570		MT	1.22 0.01 0.03 0.21	0.04	0.15	0.001084858710274242		
14212	73988/E	64	63191509221550	8	1	1.06	211G11	B
-1.51370		MT	-1.22 0.00 -0.03 -0.23	-0.03	-0.10	0.001027424210848587		
13012	73988/E	64	6519150922 945	9	1	1.05	211G11	F
-5.61770		MT	1.15 0.01 -0.09 -0.85	0.08	-0.60	0.001027424210848588		
14112	73988/E	65	64191509221525	8	1	1.05	211G11	B
5.62200		MT	-1.15 0.01 0.09 0.87	-0.01	0.52	0.001084858810274242		
13212	73988/E	65	66191509221005	9	1	1.09	211G11	F
-4.81730		MT	1.19 0.04 -0.08 -0.68	0.08	-0.60	0.001084858810848589		
14012	73988/E	66	65191509221505	9	1	1.09	211G11	B
4.82070		MT	-1.19 0.03 0.08 0.77	-0.01	0.49	0.001084858910848588		
13312	73988/E	66	67191509221030	9	1	1.08	211G11	F
-2.80510		MT	1.18 0.00 -0.05 -0.40	0.08	-0.36	0.001084858910848590		
13912	73988/E	67	66191509221440	8	1	1.08	211G11	B
2.80480		MT	-1.18 0.02 0.05 0.45	-0.02	0.39	0.001084859010848589		
13112	73988/E	67	6819150922 955	9	1	1.09	211G11	F
3.72000		MT	1.18 0.04 0.06 0.53	0.08	0.44	0.001084859010848591		
13812	73988/E	68	67191509221420	9	1	1.09	211G11	B
-3.71970		MT	-1.18 -0.01 -0.06 -0.60	-0.03	-0.44	0.001084859110848590		
13412	73988/E	68	69191509221120	9	1	1.08	211G11	F
0.02700		MT	1.17 0.02 0.00 0.00	0.08	0.00	0.001084859110345462		
14312	73988/E	68	69191509231030	9	1	1.08	211G11	F
0.02440		MT	1.17 0.02 0.00 0.00	0.08	0.00	0.001084859110345462		
14412	73988/E	69	68191509231100	10	1	1.09	211G11	B
-0.02430		MT	-1.17 0.04 0.00 0.00	-0.08	0.00	0.001034546210848591		
13712	73988/E	69	68191509221355	9	1	1.08	211G11	B
-0.02170		MT	-1.17 0.00 0.00 0.00	-0.04	0.00	0.001034546210848591		
13512	73988/E	69	70191509221300	9	1	1.09	211G11	F
-4.23700		MT	1.12 0.00 -0.07 -0.73	0.04	-0.58	0.001034546210848592		
13612	73988/E	70	69191509221330	9	1	1.09	211G11	B
4.23360		MT	-1.12 0.02 0.07 0.69	-0.03	0.56	0.001084859210345462		
14512	73988/E	70	71191509231145	9	1	1.09	211G11	F
-5.12200		MT	1.12 0.08 -0.08 -0.73	0.08	-0.75	0.001084859210848593		
15812	73988/E	71	70191509241200	7	1	1.09	211G11	B
5.12430		MT	-1.12 -0.05 0.08 0.33	-0.08	0.55	0.001084859310848592		
14612	73988/E	71	72191509231210	9	1	1.09	211G11	F
-12.13170		MT	1.11 0.07 -0.20 -1.77	0.07	-1.87	0.001084859310848594		
15712	73988/E	72	71191509241140	7	1	1.09	211G11	B
12.13370		MT	-1.11 -0.04 0.20 0.75	-0.08	3.65	0.001084859410848593		
14712	73988/E	72	73191509231330	9	1	1.08	211G11	F
-6.02300		MT	1.10 -0.06 -0.10 -0.93	0.04	-0.80	0.001084859410326246		
15612	73988/E	73	72191509241115	7	1	1.08	211G11	B
6.02440		MT	-1.10 -0.13 0.10 0.35	-0.08	1.59	0.001032624610848594		
15912	73988/E	73	74191509241330	7	1	1.04	211G11	F
-0.95890		MT	1.13 0.07 -0.02 -0.08	0.07	-0.21	0.001032624610848595		
14912	73988/E	73	74191509231420	8	1	1.04	211G11	F
-0.95430		MT	1.13 0.09 -0.02 -0.14	0.04	-0.13	0.001032624610848595		
15512	73988/E	74	73191509241050	6	1	1.04	211G11	B
0.95970		MT	-1.13 0.02 0.02 0.05	-0.08	0.30	0.001084859510326246		
16012	73988/E	74	73191509241355	7	1	1.04	211G11	B
0.95940		MT	-1.13 -0.01 0.02 0.08	-0.06	0.08	0.001084859510326246		
14812	73988/E	74	75191509231350	8	1	1.14	211G11	F

Table 4c-4

Table 4c. National Geodetic Survey Line 73988E: File 73988E.prn(=.dat)--Continued

0.96100		MT	1.24	-0.02	0.02	0.14	0.06	0.17	0.001084859510848596	
15412	73988/E	75	74191509241015				7 1	1.14	211G11	B
-0.95900		MT	-1.24	-0.13	-0.02	-0.05	-0.07	-0.24	0.001084859610848595	
15012	73988/E	75	76191509231520				7 1	1.09	211G11	F
2.97770		MT	1.18	-0.01	0.05	0.42	0.02	0.40	0.001084859610848597	
15312	73988/E	76	7519150924 940				7 1	1.09	211G11	B
-2.97670		MT	-1.18	-0.03	-0.05	-0.18	-0.06	-0.61	0.001084859710848596	
15112	73988/E	76	77191509231555				9 1	1.05	211G11	F
-6.77300		MT	1.13	0.05	-0.11	-0.92	0.01	-0.29	0.001084859710848598	
15212	73988/E	77	7619150924 900				9 1	1.12	211G11	B
6.77330		MT	-1.13	-0.04	0.11	0.46	-0.05	0.63	0.001084859810848597	
16112	73988/E	77	78191509241440				4 1	0.43	211G11	F
-5.55570		MT	0.47	0.02	-0.09	-0.39	0.02	-0.24	0.001084859810300877	
17912	73988/E	78	77191509271020				4 1	0.43	211G11	B
5.55330		MT	-0.47	0.02	0.09	0.70	-0.01	0.62	0.001030087710848598	
16212	73988/E	78	79191509241450				9 1	1.08	211G11	F
-16.41760		MT	1.16	-0.14	-0.27	-1.12	0.05	-0.90	0.001030087710848599	
17812	73988/E	79	7819150927 950				10 1	1.08	211G11	B
16.41960		MT	-1.16	-0.01	0.27	1.94	-0.02	1.75	0.001084859910300877	
16312	73988/E	79	80191509241520				9 1	1.05	211G11	F
-16.73740		MT	1.12	0.04	-0.28	-1.14	0.04	-0.67	0.001084859910848600	
17712	73988/E	80	7919150927 925				9 1	1.05	211G11	B
16.73830		MT	-1.12	0.03	0.28	1.81	-0.01	1.99	0.001084860010848599	
16412	73988/E	80	81191509241540				8 1	1.08	211G11	F
-15.90000		MT	1.13	0.08	-0.26	-0.95	0.04	-0.70	0.001084860010848601	
17612	73988/E	81	8019150927 855				9 1	1.07	211G11	B
15.89900		MT	-1.13	0.02	0.26	1.56	-0.01	1.40	0.001084860110848600	
16512	73988/E	81	82191509241610				7 1	0.97	211G11	F
-15.41400		MT	1.00	-0.17	-0.26	-0.86	0.02	-0.25	0.001084860110848602	
17512	73988/E	82	8119150927 825				8 1	0.97	211G11	B
15.41380		MT	-1.00	-0.05	0.26	1.23	0.00	1.05	0.001084860210848601	
18212	73988/E	82	83191509271135				10 1	1.10	211G11	F
-1.84130		MT	1.13	-0.08	-0.03	-0.24	0.05	-0.22	0.001084860210272578	
18012	73988/E	82	83191509271040				10 1	1.10	211G11	F
-1.83920		MT	1.13	-0.08	-0.03	-0.23	0.03	-0.21	0.001084860210272578	
17412	73988/E	83	82191509251455				8 1	1.11	211G11	B
1.84440		MT	-1.13	-0.11	0.03	0.12	-0.06	0.11	0.001027257810848602	
18112	73988/E	83	82191509271115				10 1	1.10	211G11	B
1.84370		MT	-1.13	0.05	0.03	0.24	-0.04	0.21	0.001027257810848602	
18312	73988/E	83	84191509271210				12 1	1.27	211G11	F
-13.43300		MT	1.26	-0.01	-0.22	-1.80	0.06	-1.58	0.001027257810848603	
17312	73988/E	84	83191509251405				11 1	1.34	211G11	B
13.43700		MT	-1.26	0.20	0.22	1.34	-0.07	1.93	0.001084860310272578	
18412	73988/E	84	85191509271335				10 1	1.18	211G11	F
-10.74590		MT	1.16	0.02	-0.18	-1.46	0.06	-1.44	0.001084860310848604	
17212	73988/E	85	84191509251335				10 1	1.18	211G11	B
10.74870		MT	-1.16	0.10	0.18	1.14	-0.07	1.51	0.001084860410848603	
18512	73988/E	85	86191509271400				9 1	1.07	211G11	F
-6.42600		MT	1.04	0.07	-0.11	-0.87	0.06	-0.80	0.001084860410353745	
17112	73988/E	86	85191509251305				9 1	1.07	211G11	B
6.42460		MT	-1.04	0.02	0.11	0.67	-0.07	0.93	0.001035374510848604	
18612	73988/E	86	87191509271420				4 1	0.45	211G11	F
-5.44330		MT	0.46	0.03	-0.09	-0.73	0.02	-0.62	0.001035374510848605	
17012	73988/E	87	86191509251150				4 1	0.45	211G11	B
5.44470		MT	-0.46	-0.10	0.09	0.62	-0.03	0.78	0.001084860510353745	
18912	73988/E	87	88191509271515				7 1	1.04	211G11	F
-7.38610		MT	1.07	-0.10	-0.12	-0.99	0.05	-0.97	0.001084860510848606	
18712	73988/E	87	88191509271430				9 1	1.04	211G11	F
-7.38770		MT	1.07	-0.03	-0.12	-0.98	0.06	-0.82	0.001084860510848606	
16912	73988/E	88	87191509251115				9 1	1.05	211G11	B
7.38270		MT	-1.07	0.04	0.12	0.77	-0.07	1.04	0.001084860610848605	
18812	73988/E	88	87191509271500				8 1	1.05	211G11	B
7.38800		MT	-1.07	-0.10	0.12	0.98	-0.05	0.93	0.001084860610848605	
19012	73988/E	88	89191509271535				8 1	1.07	211G11	F
-14.24810		MT	1.08	-0.03	-0.24	-1.85	0.05	-1.34	0.001084860610848607	
16812	73988/E	89	88191509251050				9 1	1.07	211G11	B
14.24860		MT	-1.08	0.13	0.24	1.40	-0.06	2.21	0.001084860710848606	
19112	73988/E	89	90191509271550				8 1	1.07	211G11	F
-10.79480		MT	1.07	0.00	-0.18	-1.36	0.05	-0.76	0.001084860710848608	
16712	73988/E	90	89191509251025				9 1	1.07	211G11	B
10.79440		MT	-1.07	-0.16	0.18	0.99	-0.06	1.54	0.001084860810848607	
19212	73988/E	90	91191509271610				8 1	1.07	211G11	F
-10.75330		MT	1.07	0.05	-0.18	-1.29	0.04	-0.49	0.001084860810848609	
16612	73988/E	91	9019150925 950				9 1	1.07	211G11	B
10.75240		MT	-1.07	0.02	0.18	0.95	-0.05	1.40	0.001084860910848608	
19312	73988/E	91	92191509271625				2 1	0.26	211G11	F
-0.52500		MT	0.26	-0.01	-0.01	-0.06	0.01	-0.01	0.001084860910327892	

Table 4c. National Geodetic Survey Line 73988E: File 73988E.prn(=.dat)--Continued

20912	73988/E	92	91191509281445	2	1	0.26		211G11	B
0.52570		MT	-0.26 0.12 0.01 0.07	-0.01	0.07	0.001032789210848609		211G11	F
19412	73988/E	92	93191509271635	8	1	1.16		211G11	B
-15.91240		MT	1.16 0.06 -0.26 -1.75	0.05	-0.35	0.001032789210848610		211G11	F
20812	73988/E	93	92191509281420	10	1	1.16		211G11	B
15.90970		MT	-1.16 0.06 0.26 2.20	-0.06	1.95	0.001084861010327892		211G11	F
21012	73988/E	93	94191509281455	10	1	1.14		211G11	B
-11.90830		MT	1.13 -0.04 -0.20 -1.62	0.06	-1.19	0.001084861010848611		211G11	F
20712	73988/E	94	93191509281355	10	1	1.14		211G11	B
11.91200		MT	-1.13 0.04 0.20 1.62	-0.06	1.46	0.001084861110848610		211G11	F
21112	73988/E	94	95191509281510	8	1	1.07		211G11	B
-8.46500		MT	1.04 0.05 -0.14 -1.08	0.06	-1.08	0.001084861110848612		211G11	F
20612	73988/E	95	94191509281335	9	1	1.07		211G11	B
8.46640		MT	-1.04 -0.05 0.14 1.17	-0.05	1.13	0.001084861210848611		211G11	F
21212	73988/E	95	96191509281535	8	1	1.09		211G11	B
-3.03600		MT	1.06 -0.11 -0.05 -0.37	0.06	-0.26	0.001084861210304298		211G11	F
20512	73988/E	96	95191509281310	9	1	1.09		211G11	B
3.03700		MT	-1.06 0.04 0.05 0.32	-0.05	0.45	0.001030429810848612		211G11	F
21312	73988/E	96	97191509281555	4	1	0.48		211G11	B
1.49990		MT	0.51 -0.06 0.02 0.18	0.02	0.07	0.001030429810300881		211G11	F
20412	73988/E	97	96191509281120	4	1	0.48		211G11	B
-1.50170		MT	-0.51 0.04 -0.02 -0.21	-0.01	-0.21	0.001030088110304298		211G11	F
21412	73988/E	97	98191509281610	8	1	1.04		211G11	B
1.18480		MT	0.83 -0.02 0.02 0.14	0.03	0.05	0.001030088110848613		211G11	F
20312	73988/E	98	97191509281100	9	1	1.04		211G11	B
-1.18200		MT	-0.83 -0.20 -0.02 -0.16	-0.03	-0.15	0.001084861310300881		211G11	F
21512	73988/E	98	99191509281640	8	1	1.20		211G11	B
-4.50660		MT	0.95 -0.09 -0.07 -0.50	0.03	-0.05	0.001084861310848614		211G11	F
20212	73988/E	99	98191509281035	10	1	1.20		211G11	B
4.50520		MT	-0.95 0.20 0.07 0.60	-0.02	0.59	0.001084861410848613		211G11	F
21612	73988/E	99	10019150929 755	7	1	1.06		211G11	B
-0.55370		MT	0.84 0.02 -0.01 -0.05	-0.02	-0.03	0.001084861410848615		211G11	F
20112	73988/E	100	99191509281015	9	1	1.06		211G11	B
0.55470		MT	-0.84 -0.06 0.01 0.07	-0.02	0.07	0.001084861510848614		211G11	F
21712	73988/E	100	10119150929 825	7	1	1.07		211G11	B
2.65960		MT	0.85 0.11 0.04 0.23	-0.01	0.23	0.001084861510280747		211G11	F
20012	73988/E	101	10019150928 955	9	1	1.07		211G11	B
-2.65720		MT	-0.85 -0.25 -0.04 -0.32	-0.01	-0.31	0.001028074710848615		211G11	F
21812	73988/E	101	10219150929 845	3	1	0.48		211G11	B
0.73000		MT	0.30 -0.01 0.01 0.07	-0.01	0.09	0.001028074710848616		211G11	F
19912	73988/E	102	10119150928 945	4	1	0.47		211G11	B
-0.72970		MT	-0.30 0.03 -0.01 -0.09	0.00	-0.08	0.001084861610280747		211G11	F
21912	73988/E	102	10319150929 850	7	1	1.07		211G11	B
3.50520		MT	0.67 0.10 0.06 0.34	-0.01	0.41	0.001084861610848617		211G11	F
19812	73988/E	103	10219150928 925	9	1	1.07		211G11	B
-3.50700		MT	-0.67 0.13 -0.06 -0.39	0.00	-0.36	0.001084861710848616		211G11	F
22012	73988/E	103	10419150929 910	8	1	1.07		211G11	B
0.37930		MT	0.67 -0.03 0.01 0.04	-0.01	0.04	0.001084861710848618		211G11	F
19712	73988/E	104	10319150928 905	9	1	1.07		211G11	B
-0.37520		MT	-0.67 0.13 -0.01 -0.04	0.00	-0.03	0.001084861810848617		211G11	F
22112	73988/E	104	10519150929 930	8	1	1.12		211G11	B
-0.04430		MT	0.70 -0.05 0.00 -0.01	-0.01	-0.01	0.001084861810848619		211G11	F
19612	73988/E	105	10419150928 845	8	1	1.12		211G11	B
0.04810		MT	-0.70 0.20 0.00 0.00	0.01	0.00	0.001084861910848618		211G11	F
22212	73988/E	105	10619150929 955	8	1	1.12		211G11	B
-2.64060		MT	0.70 -0.04 -0.04 -0.32	0.00	-0.43	0.001084861910264049		211G11	F
19512	73988/E	106	10519150928 820	8	1	1.12		211G11	B
2.64000		MT	-0.70 0.04 0.04 0.26	0.01	0.18	0.001026404910848619		211G11	F
22312	73988/E	106	107191509291015	8	1	1.12		211G11	B
-1.69070		MT	0.65 -0.08 -0.03 -0.21	0.00	-0.29	0.001026404910848620		211G11	F
24912	73988/E	107	106191509301530	8	1	1.12		211G11	B
1.69160		MT	-0.65 0.05 0.03 0.25	-0.02	0.15	0.001084862010264049		211G11	F
22412	73988/E	107	108191509291035	8	1	1.07		211G11	B
0.46280		MT	0.61 -0.01 0.01 0.06	0.00	0.07	0.001084862010848621		211G11	F
25012	73988/E	108	107191509301605	8	1	1.06		211G11	B
-0.46230		MT	-0.61 0.07 -0.01 -0.07	-0.02	-0.02	0.001084862110848620		211G11	F
22512	73988/E	108	109191509291055	9	1	1.23		211G11	B
0.98940		MT	0.71 -0.06 0.02 0.12	0.01	0.17	0.001084862110848622		211G11	F
24812	73988/E	109	108191509301440	9	1	1.23		211G11	B
-0.98920		MT	-0.71 -0.04 -0.02 -0.15	-0.02	-0.14	0.001084862210848621		211G11	F
22612	73988/E	109	110191509291120	10	1	1.34		211G11	B
0.02360		MT	0.77 -0.05 0.00 0.00	0.01	0.00	0.001084862210348939		211G11	F
25112	73988/E	109	11019151001 905	9	1	1.34		211G11	B
0.01880		MT	0.77 0.01 0.00 0.00	-0.02	0.00	0.001084862210348939		211G11	F
25212	73988/E	110	10919151001 930	9	1	1.34		211G11	B
-0.01590		MT	-0.77 0.06 0.00 0.00	0.02	0.00	0.001034893910848622		211G11	F
24712	73988/E	110	109191509301420	10	1	1.33		211G11	B

Table 4c-6

Table 4c. National Geodetic Survey Line 73988E: File 73988E.prn(=.dat)--Continued

-0.01670		MT	-0.77	-0.16	0.00	0.00	-0.02	0.00	0.001034893910848622		
22712	73988/E		110	111191509291315			9	1	1.06	211G11	F
-0.43900		MT	0.34	-0.13	-0.01	-0.06	0.01	-0.06	0.001034893910848623		
24612	73988/E		111	110191509301400			8	1	1.06	211G11	B
0.43930		MT	-0.34	0.12	0.01	0.07	0.00	0.06	0.001084862310348939		
22812	73988/E		111	112191509291340			9	1	1.07	211G11	F
-0.27050		MT	0.35	0.08	0.00	-0.04	0.01	-0.03	0.001084862310848624		
24512	73988/E		112	111191509301340			8	1	1.07	211G11	B
0.27200		MT	-0.35	-0.03	0.00	0.04	0.00	0.04	0.001084862410848623		
22912	73988/E		112	113191509291405			9	1	1.18	211G11	F
2.59100		MT	0.38	-0.17	0.04	0.36	0.01	0.37	0.001084862410848625		
24412	73988/E		113	112191509301315			9	1	1.18	211G11	B
-2.58840		MT	-0.38	0.06	-0.04	-0.37	0.00	-0.41	0.001084862510848624		
23012	73988/E		113	114191509291425			8	1	1.12	211G11	F
1.13190		MT	0.36	-0.05	0.02	0.16	0.01	0.17	0.001084862510848626		
24312	73988/E		114	113191509301150			9	1	1.12	211G11	B
-1.13400		MT	-0.36	0.06	-0.02	-0.17	0.01	-0.17	0.001084862610848625		
23112	73988/E		114	115191509291445			4	1	0.55	211G11	F
1.06530		MT	0.18	-0.09	0.02	0.14	0.00	0.15	0.001084862610340660		
24212	73988/E		115	114191509301140			4	1	0.54	211G11	B
-1.06540		MT	-0.18	-0.09	-0.02	-0.16	0.01	-0.19	0.001034066010848626		
25312	73988/E		115	116191510011020			8	1	1.21	211G11	F
2.42600		MT	0.16	0.03	0.04	0.32	-0.04	0.48	0.001034066010848627		
23212	73988/E		115	116191509291530			8	1	1.21	211G11	F
2.43010		MT	0.16	-0.02	0.04	0.34	0.00	0.26	0.001034066010848627		
25412	73988/E		116	115191510011040			9	1	1.21	211G11	B
-2.42540		MT	-0.16	0.02	-0.04	-0.35	0.04	-0.39	0.001084862710340660		
24112	73988/E		116	115191509301115			10	1	1.21	211G11	B
-2.42370		MT	-0.16	0.03	-0.04	-0.36	0.02	-0.33	0.001084862710340660		
23312	73988/E		116	117191509291550			6	1	1.07	211G11	F
2.76170		MT	0.14	-0.27	0.05	0.38	0.00	0.30	0.001084862710848628		
24012	73988/E		117	116191509301055			8	1	1.07	211G11	B
-2.75750		MT	-0.14	-0.03	-0.05	-0.40	0.02	-0.45	0.001084862810848627		
23412	73988/E		117	118191509291610			6	1	1.06	211G11	F
1.41480		MT	0.14	0.08	0.02	0.19	0.00	0.09	0.001084862810848629		
23912	73988/E		118	117191509301035			8	1	1.06	211G11	B
-1.41230		MT	-0.14	0.00	-0.02	-0.20	0.02	-0.22	0.001084862910848628		
25512	73988/E		118	119191510011115			10	1	1.38	211G11	F
1.09730		MT	0.18	0.00	0.02	0.16	-0.04	0.19	0.001084862910337451		
23812	73988/E		119	118191509301010			10	1	1.38	211G11	B
-1.10000		MT	-0.18	0.02	-0.02	-0.16	0.03	-0.17	0.001033745110848629		
25612	73988/E		119	120191510011140			7	1	0.96	211G11	F
-0.55940		MT	-0.12	0.03	-0.01	-0.09	-0.03	-0.10	0.001033745110848630		
23712	73988/E		120	11919150930	950		7	1	0.97	211G11	B
0.56330		MT	0.12	-0.05	0.01	0.08	0.03	0.08	0.001084863010337451		
25712	73988/E		120	121191510011205			8	1	1.12	211G11	F
5.65560		MT	-0.14	-0.05	0.09	0.88	-0.03	1.08	0.001084863010848631		
23612	73988/E		121	12019150930	925		8	1	1.12	211G11	B
-5.65630		MT	0.14	0.00	-0.09	-0.75	0.03	-0.80	0.001084863110848630		
25812	73988/E		121	122191510011330			8	1	1.12	211G11	F
2.42960		MT	-0.14	-0.03	0.04	0.34	-0.02	0.43	0.001084863110848632		
23512	73988/E		122	12119150930	900		8	1	1.12	211G11	B
-2.43030		MT	0.14	-0.07	-0.04	-0.28	0.03	-0.25	0.001084863210848631		
25912	73988/E		122	123191510011355			8	1	1.12	211G11	F
-1.29260		MT	-0.14	-0.06	-0.02	-0.19	-0.02	-0.21	0.001084863210848633		
27012	73988/E		123	122191510021450			8	1	1.13	211G11	B
1.29140		MT	0.14	-0.14	0.02	0.20	0.01	0.17	0.001084863310848632		
26012	73988/E		123	124191510011415			4	1	0.48	211G11	F
0.73960		MT	-0.06	0.02	0.01	0.11	-0.01	0.08	0.001084863310340659		
26912	73988/E		124	123191510021435			4	1	0.47	211G11	B
-0.73670		MT	0.06	0.16	-0.01	-0.12	0.01	-0.08	0.001034065910848633		
26112	73988/E		124	125191510011425			8	1	1.12	211G11	F
0.72590		MT	0.39	-0.07	0.01	0.11	0.00	0.11	0.001034065910848634		
26812	73988/E		125	124191510021410			8	1	1.12	211G11	B
-0.72540		MT	-0.39	0.03	-0.01	-0.12	0.01	-0.11	0.001084863410340659		
26212	73988/E		125	126191510011450			8	1	1.12	211G11	F
4.94040		MT	0.39	-0.02	0.08	0.74	0.01	0.69	0.001084863410848635		
26712	73988/E		126	125191510021350			9	1	1.12	211G11	B
-4.93770		MT	-0.39	0.01	-0.08	-0.80	0.02	-0.64	0.001084863510848634		
26312	73988/E		126	127191510011510			8	1	1.12	211G11	F
-3.65640		MT	0.39	0.00	-0.06	-0.54	0.01	-0.39	0.001084863510848636		
26612	73988/E		127	126191510021325			10	1	1.12	211G11	B
3.65990		MT	-0.39	0.05	0.06	0.58	0.02	0.40	0.001084863610848635		
27112	73988/E		127	128191510021530			3	1	0.37	211G11	F
-0.18870		MT	0.13	0.11	0.00	-0.03	0.00	-0.01	0.001084863610848637		
26512	73988/E		128	127191510021320			3	1	0.37	211G11	B
0.18940		MT	-0.13	0.03	0.00	0.03	0.01	0.03	0.001084863710848636		

Table 4c. National Geodetic Survey Line 73988E: File 73988E.prn(=.dat)--Continued

27212	73988/E	128 129191510021540	8 1 1.07	211G11	F
-0.34340		MT 0.37 0.01 -0.01 -0.05	0.01 -0.02	0.001084863710331095	
26412	73988/E	129 128191510021250	9 1 1.07	211G11	B
0.34370		MT -0.37 -0.09 0.01 0.05	0.03 0.04	0.001033109510848637	

Table 5a. National Geodetic Survey Line 73988F: File 73988F.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
3	10331095	G 16		0.00	37 06 45	116 48 00	1227.48550	1227.48550	0.00	0.00
4	10848440	TBM 100		0.59	37 06 27	116 47 52	1226.33440	1226.33288	-0.13	0.00
5	10848441	TBM 101		1.64	37 05 56	116 47 36	1229.39062	1229.38913	0.19	0.00
6	10848442	TBM 2		2.71	37 05 23	116 47 21	1231.75202	1231.74968	0.47	0.00
7	10848443	TBM 3		3.84	37 04 49	116 47 05	1221.98619	1221.98333	-0.89	0.00
1	10305985	H 16		4.95	37 04 16	116 46 49	1214.73408	1214.73310	-1.96	0.00
8	10848444	TBM 4		5.21	37 04 09	116 46 44	1210.98323	1210.98206	-2.22	0.00
9	10848445	TBM 5		6.33	37 03 38	116 46 21	1206.43248	1206.42882	-2.97	0.00
10	10848446	TBM 6		7.29	37 03 12	116 46 01	1197.81561	1197.80982	-3.91	0.00
11	10848447	TBM 7		8.41	37 02 41	116 45 39	1188.81472	1188.80801	-5.08	0.00
2	10283956	I 16		9.64	37 02 08	116 45 14	1176.64314	1176.63193	-6.89	0.00
12	10848448	TBM 8		10.75	37 01 44	116 44 46	1162.31669	1162.30189	-8.55	0.00
13	10848449	TBM 9		11.78	37 01 21	116 44 20	1145.93282	1145.91817	-10.47	0.00
14	10848450	TBM 10		12.91	37 00 56	116 43 52	1132.82788	1132.81083	-12.24	0.00
15	10848451	TBM 11		14.03	37 00 32	116 43 23	1124.93503	1124.91856	-13.26	0.00
16	10848452	TBM 12		14.46	37 00 22	116 43 12	1121.76723	1121.75250	-13.49	0.00
17	10267539	J 16		14.51	37 00 21	116 43 11	1121.61938	1121.60481	-13.49	0.00
18	10848453	TBM 13		14.56	37 00 19	116 43 11	1121.55659	1121.54205	-13.49	0.00
19	10848454	TBM 14		15.57	36 59 48	116 43 09	1107.14521	1107.12833	-14.72	0.00
20	10848455	TBM 15		16.58	36 59 17	116 43 08	1099.12762	1099.10937	-15.30	0.00
21	10848456	TBM 16		17.06	36 59 02	116 43 07	1096.43087	1096.41315	-15.62	0.00
22	10848457	TBM 17		18.18	36 58 28	116 43 06	1087.96217	1087.94587	-16.54	0.00
23	10342735	K 16		19.31	36 57 52	116 43 06	1075.43547	1075.42054	-18.57	0.00
24	10848458	TBM 18		19.68	36 57 43	116 43 09	1072.99328	1072.97862	-18.88	0.00
25	10848459	TBM 19		20.79	36 57 13	116 43 23	1060.17354	1060.15840	-20.87	0.00
26	10848460	TBM 20		21.89	36 56 43	116 43 37	1049.69647	1049.67951	-22.49	0.00
27	10848461	TBM 21		23.01	36 56 12	116 43 51	1043.36983	1043.35016	-23.34	0.00
28	10321566	L 16		24.13	36 55 42	116 44 05	1035.38567	1035.36121	-24.71	0.00
29	10848462	TBM 22		25.15	36 55 17	116 44 30	1022.87356	1022.84054	-26.28	0.00
30	10848463	TBM 23		26.21	36 54 52	116 44 55	1012.65033	1012.60779	-27.52	0.00
31	10308204	M 16		27.23	36 54 27	116 45 20	1001.04725	1001.00109	-28.79	0.00
32	10308203	N 16 USGS		27.61	36 54 22	116 45 37	1008.27644	1008.23368	-28.46	0.00
33	10848464	TBM 24		28.38	36 53 53	116 45 17	992.31894	992.27001	-29.21	0.00
34	10848465	TBM 25		29.66	36 53 15	116 45 13	977.38670	977.33376	-29.77	0.00
35	10848466	TBM 26		30.68	36 52 44	116 45 10	966.01200	965.95765	-30.41	0.00
36	10290869	O 16		30.72	36 52 43	116 45 10	965.63444	965.58010	-30.41	0.00
37	10848467	TBM 27		30.76	36 52 42	116 45 10	965.62261	965.56826	-30.41	0.00
38	10848468	TBM 28		31.85	36 52 05	116 45 04	955.65672	955.60158	-31.08	0.00
39	10848469	TBM 29		33.00	36 51 26	116 44 59	944.61958	944.56476	-32.45	0.00
40	10848470	TBM 30		34.09	36 50 50	116 44 54	935.49535	935.44054	-33.76	0.00

Table 5a-1

Table 5a. National Geodetic Survey Line 73988F: File 73988F.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
41	10848471	TBM 31		35.18	36 50 13	116 44 48	925.24345	925.18930	-35.37	0.00
42	10360824	B 86 USGS		36.26	36 49 41	116 44 44	914.65373	914.59951	-37.16	0.00
43	10848472	TBM 32		36.64	36 49 28	116 44 33	910.35049	910.29573	-37.84	0.00
44	10848473	TBM 33		37.73	36 49 01	116 44 04	900.82272	900.76610	-39.18	0.00
45	10848474	TBM 34		38.81	36 48 34	116 43 35	891.34571	891.28710	-40.55	0.00
46	10848475	TBM 35		39.90	36 48 08	116 43 06	881.29726	881.23779	-41.98	0.00
47	10341122	B 87 USGS		40.98	36 47 41	116 42 37	872.77617	872.71701	-43.24	0.00
48	10848476	TBM 36		41.43	36 47 30	116 42 24	869.01022	868.95064	-43.83	0.00
49	10848477	TBM 37		42.52	36 47 05	116 41 54	859.74662	859.68499	-45.18	0.00
50	10848478	TBM 38		43.61	36 46 39	116 41 24	852.28032	852.21754	-46.18	0.00
51	10848479	TBM 39		44.70	36 46 14	116 40 54	845.52670	845.46160	-47.17	0.00
52	10321565	B 88 USGS		45.79	36 45 48	116 40 24	839.14672	839.08015	-47.89	0.00
53	10848480	TBM 40		46.56	36 45 31	116 40 01	834.08492	834.01814	-48.42	0.00
54	10848481	TBM 41		47.71	36 45 05	116 39 28	826.36724	826.30090	-49.17	0.00
55	10848482	TBM 42		48.41	36 44 49	116 39 07	822.54520	822.47947	-49.38	0.00
56	10848483	TBM 43		49.50	36 44 24	116 38 36	818.15197	818.08825	-49.77	0.00
57	10304804	B 89 USGS		50.59	36 44 00	116 38 04	811.54446	811.48104	-50.53	0.00
58	10848484	TBM 44		51.04	36 43 51	116 37 50	810.97854	810.91516	-50.58	0.00
59	10848485	TBM 45		52.13	36 43 30	116 37 16	800.10119	800.03609	-52.27	0.00
60	10848486	TBM 46		53.22	36 43 09	116 36 42	792.30026	792.23480	-53.53	0.00
61	10848487	TBM 47		54.31	36 42 48	116 36 08	785.54570	785.48140	-54.66	0.00
62	10287639	B 90 USGS		55.39	36 42 27	116 35 34	784.52492	784.46503	-54.82	0.00
63	10848488	TBM 48		56.16	36 42 12	116 35 09	785.24093	785.18382	-54.72	0.00
64	10282818	U 16		57.20	36 41 52	116 34 34	789.30706	789.25188	-54.10	0.00
65	10848489	TBM 49		57.64	36 41 44	116 34 19	787.72048	787.66582	-54.37	0.00
66	10848490	TBM 50		58.66	36 41 26	116 33 44	791.94743	791.89601	-53.71	0.00
67	10848491	TBM 51		59.75	36 41 07	116 33 07	788.21307	788.16213	-54.13	0.00
68	10273094	B 91 USGS		60.26	36 40 58	116 32 50	787.96968	787.91867	-54.15	0.00
69	10848492	TBM 52		61.36	36 40 43	116 32 11	782.16812	782.11675	-54.86	0.00
70	10269707	W 16		61.86	36 40 36	116 31 53	782.08562	782.03389	-54.87	0.00
71	10848493	TBM 53		62.96	36 40 22	116 31 10	775.56083	775.50820	-55.87	0.00
72	10848494	TBM 54		64.05	36 40 09	116 30 28	779.83361	779.77995	-55.36	0.00
73	10362534	B 92 USGS		65.07	36 39 56	116 29 48	786.73348	786.67842	-54.58	0.00
74	10848495	TBM 55		66.16	36 39 47	116 29 06	793.22303	793.16755	-53.25	0.00
75	10848496	TBM 56		67.25	36 39 39	116 28 23	796.94802	796.89209	-52.54	0.00
76	10848497	TBM 57		68.34	36 39 30	116 27 41	801.18890	801.13412	-51.74	0.00
77	10848498	TBM 58		69.41	36 39 22	116 26 59	805.39896	805.34573	-51.11	0.00
78	10355754	B 93 USGS		69.87	36 39 18	116 26 41	806.60889	806.55638	-50.91	0.00
79	10848499	TBM 59		70.96	36 39 08	116 25 59	808.57368	808.52285	-50.54	0.00
80	10848500	TBM 60		72.05	36 38 58	116 25 18	811.44726	811.39866	-50.03	0.00
81	10848501	TBM 61		73.20	36 38 47	116 24 33	810.68854	810.64250	-50.15	0.00

Table 5a. National Geodetic Survey Line 73988F: File 73988F.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
82	10848502	TBM 62		74.29	36 38 37	116 23 52	810.16118	810.11627	-50.24	0.00
83	10848503	TBM 63		75.38	36 38 26	116 23 10	810.38641	810.33956	-50.21	0.00
84	10346005	B 94 USGS		76.16	36 38 19	116 22 40	809.85221	809.80260	-50.26	0.00
85	10848504	TBM 64		77.24	36 38 09	116 21 58	820.31821	820.26455	-49.42	0.00
86	10848505	TBM 65		78.33	36 37 59	116 21 15	835.99621	835.94034	-48.68	0.00
87	10341118	A 17		79.41	36 37 49	116 20 33	851.82527	851.77046	-47.03	0.00
88	10848506	TBM 66		80.50	36 37 44	116 19 51	865.29280	865.23843	-45.75	0.00
89	10848507	TBM 67		81.39	36 37 40	116 19 17	872.17594	872.12116	-44.76	0.00
90	10339504	B 95 USGS		82.52	36 37 35	116 18 34	866.32978	866.27655	-45.71	0.00
91	10848508	TBM 68		83.32	36 37 23	116 18 08	862.70852	862.65888	-46.20	0.00
92	10848509	TBM 69		84.46	36 37 05	116 17 30	860.62649	860.57623	-46.50	0.00
93	10848510	TBM 70		85.61	36 36 47	116 16 52	855.02136	854.96873	-47.21	0.00
94	10848511	TBM 71		86.76	36 36 29	116 16 14	846.81198	846.75777	-48.16	0.00
95	10848512	TBM 72		87.91	36 36 11	116 15 36	842.08501	842.03110	-47.37	0.00
96	10323333	B 96 2759.919=C 17		89.00	36 35 53	116 15 02	841.19162	841.13842	-47.48	0.00
97	10848513	TBM 73		89.97	36 35 41	116 14 23	841.59488	841.54236	-47.42	0.00
98	10848514	TBM 74		91.06	36 35 26	116 13 41	839.99042	839.93770	-47.81	0.00
99	10314951	D 17		92.26	36 35 09	116 12 55	840.29688	840.24425	-47.77	0.00
100	10848515	TBM 75		93.39	36 34 54	116 12 20	841.18046	841.12911	-47.63	0.00
101	10848516	TBM 76		94.40	36 34 41	116 11 50	842.56969	842.51999	-47.45	0.00
102	10308198	B 97 USGS		95.47	36 34 27	116 11 17	842.40675	842.35905	-47.47	0.00
103	10848517	TBM 77		95.73	36 34 26	116 11 06	842.35423	842.30682	-47.48	0.00
104	10848518	TBM 78		96.74	36 34 21	116 10 25	841.97357	841.92658	-47.53	0.00
105	10848519	TBM 79		97.97	36 34 16	116 09 34	844.57019	844.52246	-47.25	0.00
106	10306493	F 17		98.11	36 34 15	116 09 28	846.55960	846.51183	-46.99	0.00
107	10848520	TBM 80		99.25	36 34 07	116 08 43	848.93019	848.88099	-46.76	0.00
108	10848521	TBM 81		100.46	36 33 59	116 07 56	858.42531	858.37792	-45.66	0.00
109	10848522	TBM 82		101.55	36 33 52	116 07 13	865.09475	865.05056	-44.84	0.00
110	10301381	B 98 USGS		101.93	36 33 49	116 06 58	865.27191	865.22813	-44.82	0.00
111	10848523	TBM 83		103.01	36 33 50	116 06 16	862.04333	861.99817	-45.18	0.00
112	10848524	TBM 84		104.09	36 33 52	116 05 35	870.30711	870.26116	-44.27	0.00
113	10303128	H 17		105.12	36 33 53	116 04 55	882.96711	882.92240	-42.94	0.00
114	10848525	TBM 85		106.15	36 34 14	116 04 24	895.23219	895.18916	-41.66	0.00
115	10848526	TBM 86		107.34	36 34 37	116 03 50	910.19233	910.15142	-40.03	0.00
116	10314952	B 99 USGS		108.44	36 35 00	116 03 17	924.38320	924.34548	-38.68	0.00
117	10848527	TBM 87		109.39	36 35 23	116 02 58	935.30699	935.27138	-37.81	0.00
118	10848528	TBM 88		110.47	36 35 50	116 02 36	949.97627	949.94402	-36.15	0.00
119	10848529	TBM 89		111.63	36 36 18	116 02 13	963.61128	963.58254	-34.33	0.00
120	10848530	TBM 90		112.70	36 36 44	116 01 53	978.95180	978.92710	-32.11	0.00
121	10848531	TBM 91		113.79	36 37 10	116 01 31	995.16555	995.14413	-29.56	0.00
122	10339503	B 100 USGS		114.88	36 37 37	116 01 09	1011.50364	1011.48325	-26.85	0.00

Table 5a. National Geodetic Survey Line 73988F: File 73988F.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
123	10848532	TBM 92		116.04	36 37 19	116 00 32	1028.25914	1028.24171	-24.33	0.00
124	10848533	TBM 93		117.13	36 37 02	115 59 56	1043.57337	1043.55513	-22.31	0.00
125	10848534	TBM 94		118.18	36 36 45	115 59 21	1058.91833	1058.90099	-20.55	0.00
126	10848535	TBM 95		119.30	36 36 28	115 58 45	1075.80969	1075.79367	-19.49	0.00
127	10848536	TBM 96		120.43	36 36 09	115 58 07	1090.83537	1090.82028	-18.05	0.00
128	10323089	K 17 USGS		121.44	36 35 53	115 57 33	1105.59446	1105.58268	-16.53	0.00
129	10848537	TBM 97		122.53	36 35 42	115 56 52	1108.05948	1108.05226	-16.26	0.00
130	10848538	TBM 98		123.62	36 35 31	115 56 11	1103.71804	1103.71369	-16.78	0.00
131	10318061	L 17 USGS		124.64	36 35 20	115 55 32	1101.57336	1101.56902	-17.06	0.00
132	10848539	TBM 99		125.73	36 35 08	115 54 50	1100.41414	1100.40942	-17.17	0.00
133	10848540	TBM 100		126.81	36 34 57	115 54 08	1095.66004	1095.65403	-17.86	0.00
134	10311294	M 17 USGS		127.83	36 34 46	115 53 28	1089.67579	1089.66783	-18.69	0.00

Table 5b. National Geodetic Survey Line 73988F: File 73988F.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
3										1227.48550	0.00	0.00
3	4	-1.15100	0.05	-0.02	-0.14	0.02	-0.13	0.00	-1.15110	1226.33440	-1.52	-0.13
4	5	3.05580	-0.04	0.05	0.38	0.03	0.33	0.00	3.05622	1229.39061	-1.49	0.19
5	6	2.36100	0.03	0.04	0.30	0.03	0.28	0.00	2.36140	1231.75202	-2.34	0.47
6	7	-9.76440	-0.06	-0.16	-1.24	0.03	-1.37	0.00	-9.76583	1221.98619	-2.86	-0.89
7	1	-7.25115	0.08	-0.12	-0.94	0.03	-1.07	0.00	-7.25211	1214.73408	-0.98	-1.96
1	8	-3.75030	-0.02	-0.06	-0.48	0.00	-0.26	0.00	-3.75086	1210.98323	-1.17	-2.22
8	9	-4.55010	0.01	-0.08	-0.59	0.02	-0.76	0.00	-4.55075	1206.43248	-3.66	-2.97
9	10	-8.61560	-0.05	-0.14	-1.10	0.01	-0.94	0.00	-8.61688	1197.81561	-5.79	-3.91
10	11	-8.99965	0.03	-0.15	-1.13	0.01	-1.17	0.00	-9.00089	1188.81472	-6.71	-5.08
11	2	-12.16985	-0.06	-0.20	-1.48	0.01	-1.82	0.00	-12.17158	1176.64315	-11.21	-6.89
2	12	-14.32417	0.08	-0.24	-2.11	-0.02	-1.65	0.00	-14.32645	1162.31670	-14.80	-8.55
12	13	-16.38130	0.02	-0.27	-2.31	-0.02	-1.92	0.00	-16.38388	1145.93282	-14.65	-10.47
13	14	-13.10285	0.00	-0.22	-1.86	-0.01	-1.77	0.00	-13.10494	1132.82788	-17.05	-12.24
14	15	-7.89155	-0.04	-0.13	-1.12	-0.01	-1.02	0.00	-7.89285	1124.93503	-16.47	-13.26
15	16	-3.16725	-0.03	-0.05	-0.46	0.00	-0.24	0.00	-3.16780	1121.76723	-14.73	-13.49
16	17	-0.14780	-0.02	0.00	-0.03	0.00	0.00	0.00	-0.14785	1121.61939	-14.57	-13.49
17	18	-0.06280	0.02	0.00	-0.01	0.00	0.00	0.00	-0.06279	1121.55660	-14.54	-13.49
18	19	-14.40910	0.03	-0.24	-2.09	0.02	-1.23	0.00	-14.41138	1107.14522	-16.88	-14.72
19	20	-8.01630	-0.03	-0.13	-1.15	0.03	-0.58	0.00	-8.01759	1099.12762	-18.25	-15.30
20	21	-2.69635	-0.03	-0.04	-0.36	0.03	-0.32	0.00	-2.69675	1096.43087	-17.72	-15.62
21	22	-8.46740	-0.03	-0.14	-1.21	0.08	-0.92	0.00	-8.46870	1087.96217	-16.30	-16.54
22	23	-12.52480	-0.04	-0.21	-1.73	0.08	-2.03	0.00	-12.52670	1075.43547	-14.93	-18.57
23	24	-2.44185	0.02	-0.04	-0.34	0.03	-0.32	0.00	-2.44219	1072.99328	-14.66	-18.88
24	25	-12.81775	-0.02	-0.21	-1.83	0.07	-1.99	0.00	-12.81974	1060.17354	-15.14	-20.87
25	26	-10.47545	0.06	-0.17	-1.59	0.08	-1.61	0.00	-10.47708	1049.69647	-16.96	-22.49
26	27	-6.32565	-0.02	-0.10	-0.95	0.08	-0.86	0.00	-6.32664	1043.36983	-19.67	-23.34
27	28	-7.98295	-0.02	-0.13	-1.14	0.08	-1.37	0.00	-7.98416	1035.38567	-24.46	-24.71
28	29	-12.51020	-0.02	-0.21	-1.74	0.06	-1.58	0.00	-12.51212	1022.87356	-33.02	-26.28
29	30	-10.22170	-0.03	-0.17	-1.38	0.06	-1.24	0.00	-10.22323	1012.65033	-42.54	-27.52
30	31	-11.60135	-0.10	-0.19	-1.48	0.04	-1.27	0.00	-11.60308	1001.04725	-46.16	-28.79
31	32	7.22790	-0.01	0.12	1.13	0.03	0.32	0.00	7.22949	1008.27674	-45.84	-28.47
31	33	-8.72700	0.07	-0.14	-1.24	0.01	-0.43	0.00	-8.72831	992.31894	-48.93	-29.21
33	34	-14.93020	0.01	-0.25	-1.82	0.02	-0.54	0.00	-14.93224	977.38670	-52.94	-29.77
34	35	-11.37295	-0.09	-0.19	-1.50	0.03	-0.65	0.00	-11.37471	966.01200	-54.35	-30.41
35	36	-0.37750	0.00	-0.01	-0.05	0.00	0.00	0.00	-0.37756	965.63444	-54.34	-30.41
36	37	-0.01185	0.02	0.00	0.00	0.00	0.00	0.00	-0.01183	965.62261	-54.35	-30.41
37	38	-9.96467	0.07	-0.17	-1.14	0.04	-0.66	0.00	-9.96588	955.65672	-55.14	-31.08
38	39	-11.03550	0.10	-0.18	-1.62	0.05	-1.37	0.00	-11.03714	944.61958	-54.82	-32.45
39	40	-9.12280	0.03	-0.15	-1.37	0.06	-1.32	0.00	-9.12423	935.49535	-54.81	-33.76
40	41	-10.25030	0.09	-0.17	-1.58	0.06	-1.61	0.00	-10.25191	925.24345	-54.15	-35.37
41	42	-10.58785	-0.10	-0.18	-1.65	0.06	-1.79	0.00	-10.58972	914.65373	-54.22	-37.16
42	43	-4.30250	-0.01	-0.07	-0.67	0.01	-0.68	0.00	-4.30324	910.35049	-54.76	-37.84
43	44	-9.52615	-0.03	-0.16	-1.47	0.03	-1.34	0.00	-9.52778	900.82272	-56.62	-39.18
44	45	-9.47545	0.02	-0.16	-1.46	0.04	-1.37	0.00	-9.47701	891.34571	-58.61	-40.55
45	46	-10.04670	-0.02	-0.17	-1.58	0.03	-1.43	0.00	-10.04845	881.29726	-59.47	-41.98

Table 5b-1

Table 5b. National Geodetic Survey Line 73988F: File 73988F.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
46	47	-8.51985	-0.04	-0.14	-1.11	0.05	-1.26	0.00	-8.52109	872.77617	-59.16	-43.24
47	48	-3.76535	0.03	-0.06	-0.57	0.00	-0.60	0.00	-3.76596	869.01022	-59.58	-43.83
48	49	-9.26210	0.03	-0.15	-1.40	0.02	-1.35	0.00	-9.26360	859.74662	-61.63	-45.18
49	50	-7.46510	0.02	-0.12	-1.12	0.02	-1.01	0.00	-7.46630	852.28032	-62.78	-46.18
50	51	-6.75262	-0.03	-0.11	-0.91	0.06	-0.99	0.00	-6.75362	845.52670	-65.10	-47.17
51	52	-6.37895	-0.03	-0.11	-0.92	0.03	-0.72	0.00	-6.37998	839.14672	-66.57	-47.89
52	53	-5.06100	-0.03	-0.08	-0.71	0.02	-0.53	0.00	-5.06180	834.08492	-66.78	-48.42
53	54	-7.71655	-0.01	-0.13	-1.02	0.03	-0.75	0.00	-7.71768	826.36724	-66.34	-49.17
54	55	-3.82155	-0.02	-0.06	-0.40	0.00	-0.21	0.00	-3.82204	822.54520	-65.73	-49.38
55	56	-4.39270	0.02	-0.07	-0.48	0.00	-0.39	0.00	-4.39323	818.15197	-63.72	-49.77
56	57	-6.60675	0.08	-0.11	-0.75	0.01	-0.76	0.00	-6.60752	811.54446	-63.42	-50.53
57	58	-0.56580	-0.04	-0.01	-0.07	0.00	-0.05	0.00	-0.56592	810.97854	-63.38	-50.58
58	59	-10.87590	0.02	-0.18	-1.30	0.02	-1.70	0.00	-10.87735	800.10119	-65.10	-52.27
59	60	-7.79985	0.00	-0.13	-0.98	0.03	-1.26	0.00	-7.80094	792.30026	-65.46	-53.53
60	61	-6.75350	-0.07	-0.11	-0.92	0.03	-1.14	0.00	-6.75456	785.54570	-64.30	-54.66
61	62	-1.02070	0.03	-0.02	-0.14	0.04	-0.16	0.00	-1.02078	784.52492	-59.89	-54.82
62	63	0.71585	0.03	0.01	0.09	0.04	0.10	0.00	0.71601	785.24093	-57.11	-54.72
63	64	4.06550	-0.01	0.07	0.51	0.07	0.62	0.00	4.06613	789.30706	-55.18	-54.10
64	65	-1.58645	0.06	-0.03	-0.18	0.03	-0.27	0.00	-1.58658	787.72048	-54.66	-54.37
65	66	4.22620	0.11	0.07	0.51	0.06	0.66	0.00	4.22695	791.94743	-51.42	-53.71
66	67	-3.73385	-0.02	-0.06	-0.45	0.02	-0.42	0.00	-3.73436	788.21307	-50.94	-54.13
67	68	-0.24335	-0.02	0.00	-0.03	0.00	-0.02	0.00	-0.24339	787.96968	-51.01	-54.15
68	69	-5.80070	-0.02	-0.10	-0.75	0.00	-0.71	0.00	-5.80156	782.16812	-51.37	-54.86
69	70	-0.08250	0.01	0.00	-0.01	0.00	-0.01	0.00	-0.08250	782.08562	-51.73	-54.87
70	71	-6.52400	-0.01	-0.11	-0.70	0.02	-1.00	0.00	-6.52480	775.56083	-52.63	-55.87
71	72	4.27220	0.01	0.07	0.49	0.02	0.51	0.00	4.27279	779.83361	-53.66	-55.36
72	73	6.89890	0.01	0.11	0.83	0.02	0.79	0.00	6.89987	786.73348	-55.06	-54.58
73	74	6.48860	0.00	0.11	0.81	0.02	1.33	0.00	6.48955	793.22303	-55.48	-53.25
74	75	3.72445	0.00	0.06	0.46	0.02	0.71	0.00	3.72499	796.94802	-55.93	-52.54
75	76	4.24025	0.01	0.07	0.54	0.02	0.81	0.00	4.24089	801.18890	-54.78	-51.74
76	77	4.20945	0.01	0.07	0.52	0.01	0.63	0.00	4.21006	805.39896	-53.23	-51.11
77	78	1.20975	0.00	0.02	0.16	0.00	0.20	0.00	1.20993	806.60889	-52.51	-50.91
78	79	1.96450	0.00	0.03	0.25	0.00	0.38	0.00	1.96479	808.57368	-50.83	-50.54
79	80	2.87315	0.00	0.05	0.38	0.00	0.51	0.00	2.87358	811.44726	-48.60	-50.03
80	81	-0.75860	0.00	-0.01	-0.10	0.00	-0.12	0.00	-0.75872	810.68854	-46.04	-50.15
81	82	-0.52730	0.02	-0.01	-0.07	0.00	-0.09	0.00	-0.52737	810.16118	-44.91	-50.24
82	83	0.22520	0.02	0.00	0.03	-0.02	0.03	0.00	0.22524	810.38641	-46.85	-50.21
83	84	-0.53410	-0.02	-0.01	-0.07	-0.01	-0.05	0.00	-0.53420	809.85221	-49.61	-50.26
84	85	10.46460	0.00	0.17	1.24	-0.02	0.84	0.00	10.46600	820.31821	-53.66	-49.42
85	86	15.67615	0.00	0.26	1.62	-0.03	0.74	0.00	15.67800	835.99621	-55.87	-48.68
86	87	15.82705	0.00	0.26	1.74	0.01	1.65	0.00	15.82907	851.82527	-54.81	-47.03
87	88	13.46570	0.07	0.22	1.54	0.00	1.28	0.00	13.46752	865.29280	-54.37	-45.75
88	89	6.88220	-0.05	0.11	0.88	0.00	0.99	0.00	6.88315	872.17594	-54.78	-44.76
89	90	-5.84535	0.01	-0.10	-0.73	0.00	-0.95	0.00	-5.84617	866.32978	-53.23	-45.71
90	91	-3.62065	-0.08	-0.06	-0.48	0.01	-0.50	0.00	-3.62126	862.70852	-49.64	-46.20
91	92	-2.08170	-0.04	-0.03	-0.27	0.01	-0.29	0.00	-2.08203	860.62649	-50.26	-46.50

Table 5b-2

Table 5b. National Geodetic Survey Line 73988F: File 73988F.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
92	93	-5.60440	0.02	-0.09	-0.67	0.01	-0.72	0.00	-5.60513	855.02136	-52.63	-47.21
93	94	-8.20830	-0.01	-0.14	-0.93	0.01	-0.95	0.00	-8.20938	846.81198	-54.21	-48.16
94	95	-4.72635	0.00	-0.08	-0.54	0.01	-0.79	0.00	-4.72697	842.08501	-53.91	-47.37
95	96	-0.89325	-0.03	-0.01	-0.09	-0.03	-0.11	0.00	-0.89340	841.19162	-53.20	-47.48
96	97	0.40325	0.00	0.01	0.04	-0.03	0.06	0.00	0.40326	841.59488	-52.52	-47.42
97	98	-1.60425	0.02	-0.03	-0.15	-0.04	-0.39	0.00	-1.60446	839.99042	-52.72	-47.81
98	99	0.30650	-0.03	0.00	0.03	-0.04	0.05	0.00	0.30646	840.29688	-52.63	-47.77
99	100	0.88350	0.00	0.01	0.10	-0.03	0.13	0.00	0.88358	841.18046	-51.35	-47.63
100	101	1.38910	-0.01	0.02	0.15	-0.03	0.19	0.00	1.38922	842.56969	-49.70	-47.45
101	102	-0.16285	-0.04	0.00	-0.02	-0.03	-0.03	0.00	-0.16293	842.40675	-47.70	-47.47
102	103	-0.05250	0.00	0.00	0.00	-0.01	0.00	0.00	-0.05252	842.35423	-47.41	-47.48
103	104	-0.38055	-0.02	-0.01	-0.03	-0.05	-0.06	0.00	-0.38066	841.97357	-46.99	-47.53
104	105	2.59640	-0.01	0.04	0.24	-0.05	0.28	0.00	2.59662	844.57019	-47.73	-47.25
105	106	1.98900	0.15	0.03	0.23	0.00	0.18	0.00	1.98941	846.55960	-47.77	-46.99
106	107	2.37020	0.04	0.04	0.29	0.02	0.19	0.00	2.37059	848.93019	-49.20	-46.76
107	108	9.49385	0.00	0.16	1.10	0.02	1.10	0.00	9.49513	858.42531	-47.39	-45.66
108	109	6.66850	0.03	0.11	0.78	0.02	0.82	0.00	6.66944	865.09475	-44.19	-44.84
109	110	0.17715	-0.02	0.00	0.02	0.00	0.02	0.00	0.17716	865.27191	-43.78	-44.82
110	111	-3.22820	0.05	-0.05	-0.38	0.00	-0.36	0.00	-3.22858	862.04333	-45.16	-45.18
111	112	8.26265	0.01	0.14	0.98	0.01	0.91	0.00	8.26379	870.30711	-45.95	-44.27
112	113	12.65830	-0.03	0.21	1.51	0.00	1.33	0.00	12.66000	882.96711	-44.71	-42.94
113	114	12.26345	0.03	0.20	1.42	-0.02	1.28	0.00	12.26508	895.23219	-43.03	-41.66
114	115	14.95820	0.00	0.25	1.72	-0.03	1.63	0.00	14.96014	910.19233	-40.91	-40.03
115	116	14.18905	0.05	0.24	1.56	-0.03	1.35	0.00	14.19087	924.38320	-37.72	-38.68
116	117	10.92255	-0.01	0.18	1.10	-0.03	0.87	0.00	10.92380	935.30699	-35.61	-37.81
117	118	14.66735	-0.02	0.24	1.75	-0.04	1.66	0.00	14.66928	949.97627	-32.25	-36.15
118	119	13.63320	-0.03	0.23	1.67	-0.05	1.82	0.00	13.63501	963.61128	-28.74	-34.33
119	120	15.33845	-0.05	0.25	1.92	-0.05	2.22	0.00	15.34052	978.95180	-24.70	-32.11
120	121	16.21155	0.03	0.27	1.96	-0.06	2.55	0.00	16.21375	995.16555	-21.42	-29.56
121	122	16.33595	0.00	0.27	1.93	-0.06	2.71	0.00	16.33808	1011.50364	-20.39	-26.85
122	123	16.75330	-0.02	0.28	1.95	-0.01	2.52	0.00	16.75550	1028.25914	-17.43	-24.33
123	124	15.31220	0.00	0.25	1.80	-0.02	2.03	0.00	15.31424	1043.57337	-18.24	-22.31
124	125	15.34295	0.02	0.25	1.75	-0.01	1.76	0.00	15.34496	1058.91833	-17.34	-20.55
125	126	16.88885	0.00	0.28	2.23	0.01	1.07	0.00	16.89136	1075.80969	-16.02	-19.49
126	127	15.02350	0.00	0.25	1.94	-0.01	1.44	0.00	15.02568	1090.83537	-15.09	-18.05
127	128	14.75685	0.00	0.24	2.01	-0.01	1.52	0.00	14.75909	1105.59446	-11.78	-16.53
128	129	2.46465	0.00	0.04	0.35	-0.02	0.28	0.00	2.46502	1108.05948	-7.22	-16.26
129	130	-4.34078	0.00	-0.07	-0.58	-0.01	-0.52	0.00	-4.34144	1103.71804	-4.35	-16.78
130	131	-2.14430	-0.03	-0.04	-0.30	-0.01	-0.28	0.00	-2.14468	1101.57336	-4.34	-17.06
131	132	-1.15900	-0.02	-0.02	-0.17	-0.02	-0.11	0.00	-1.15922	1100.41414	-4.72	-17.17
132	133	-4.75330	0.00	-0.08	-0.70	-0.02	-0.70	0.00	-4.75410	1095.66004	-6.01	-17.86
133	134	-5.98320	-0.03	-0.10	-0.90	-0.03	-0.83	0.00	-5.98425	1089.67579	-7.96	-18.69

Table 5b-3

Table 5c. National Geodetic Survey Line 73988F: File 73988F.prn(=.dat)

512	73988/F	1	7191510021010	9 1	1.11	211G11	B
7.2524		MT	-1.00 -0.13 0.12 1.07	-0.01	0.92	0.001030598510848443	
1612	73988/F	1	8191510041030	3 1	0.26	211G11	F
-3.7493		MT	0.21 -0.05 -0.06 -0.43	0.01	-0.27	0.001030598510848444	
2112	73988/F	2	11191510041335	9 1	1.23	211G11	B
12.1694		MT	-0.97 0.01 0.20 1.58	0.01	2.18	0.001028395610848447	
1012	73988/F	2	1119151004 830	8 1	1.23	211G11	B
12.1723		MT	-0.97 0.05 0.20 1.29	-0.06	1.18	0.001028395610848447	
2312	73988/F	2	12191510041425	8 1	1.11	211G11	F
-14.3243		MT	0.70 0.11 -0.24 -1.89	-0.02	-2.44	0.001028395610848448	
7212	73988/F	2	12191510061550	7 1	1.11	211G11	F
-14.32430		MT	0.70 0.10 -0.24 -2.21	-0.01	-1.04	0.001028395610848448	
1112	73988/F	3	419151004 840	4 1	0.59	211G11	F
-1.14970		MT	0.54 0.01 -0.02 -0.10	0.03	-0.11	0.001033109510848440	
912	73988/F	4	3191510021140	5 1	0.59	211G11	B
1.15230		MT	-0.54 -0.08 0.02 0.18	0.00	0.15	0.001084844010331095	
1212	73988/F	4	519151004 855	8 1	1.05	211G11	F
3.05560		MT	0.96 -0.01 0.05 0.29	0.05	0.26	0.001084844010848441	
812	73988/F	5	4191510021125	9 1	1.05	211G11	B
-3.05600		MT	-0.96 0.07 -0.05 -0.47	0.00	-0.39	0.001084844110848440	
1312	73988/F	5	619151004 920	8 1	1.07	211G11	F
2.36000		MT	0.98 0.04 0.04 0.24	0.05	0.26	0.001084844110848442	
712	73988/F	6	5191510021100	9 1	1.07	211G11	B
-2.36200		MT	-0.98 -0.03 -0.04 -0.36	-0.01	-0.30	0.001084844210848441	
1412	73988/F	6	719151004 940	8 1	1.13	211G11	F
-9.76570		MT	1.03 0.05 -0.16 -1.02	0.05	-1.60	0.001084844210848443	
1512	73988/F	7	1191510041005	8 1	1.11	211G11	F
-7.2499		MT	1.00 0.02 -0.12 -0.80	0.04	-1.21	0.001084844310305985	
612	73988/F	7	6191510021040	10 1	1.13	211G11	B
9.76310		MT	-1.03 0.17 0.16 1.46	-0.01	1.13	0.001084844310848442	
412	73988/F	8	1191510021005	3 1	0.26	211G11	B
3.7513		MT	-0.21 -0.01 0.06 0.53	0.00	0.25	0.001084844410305985	
1712	73988/F	8	9191510041045	8 1	1.12	211G11	F
-4.55030		MT	0.91 0.02 -0.08 -0.54	0.02	-0.84	0.001084844410848445	
312	73988/F	9	819151002 940	8 1	1.12	211G11	B
4.54990		MT	-0.91 0.00 0.08 0.64	-0.01	0.67	0.001084844510848444	
1812	73988/F	9	10191510041105	9 1	0.96	211G11	F
-8.61430		MT	0.78 -0.09 -0.14 -1.05	0.01	-0.97	0.001084844510848446	
212	73988/F	10	919151002 920	8 1	0.96	211G11	B
8.61690		MT	-0.78 0.01 0.14 1.14	-0.01	0.91	0.001084844610848445	
1912	73988/F	10	11191510041135	10 1	1.12	211G11	F
-8.99830		MT	0.90 -0.01 -0.15 -1.12	0.01	-1.13	0.001084844610848447	
2212	73988/F	11	2191510041400	9 1	1.23	211G11	F
-12.1713		MT	0.97 -0.02 -0.20 -1.56	-0.01	-2.06	0.001084844710283956	
2012	73988/F	11	2191510041305	10 1	1.22	211G11	F
-12.1664		MT	0.97 -0.14 -0.20 -1.48	-0.01	-1.85	0.001084844710283956	
112	73988/F	11	1019151002 855	7 1	1.12	211G11	B
9.00100		MT	-0.90 -0.06 0.15 1.13	-0.01	1.20	0.001084844710848446	
7112	73988/F	12	2191510061515	8 1	1.11	211G11	B
14.3239		MT	-0.70 -0.04 0.24 2.23	0.02	1.48	0.001084844810283956	
2412	73988/F	12	13191510041450	8 1	1.04	211G11	F
-16.38090		MT	0.64 -0.01 -0.27 -2.06	-0.01	-2.16	0.001084844810848449	
7012	73988/F	13	12191510061455	8 1	1.03	211G11	B
16.38170		MT	-0.64 -0.05 0.27 2.56	0.02	1.68	0.001084844910848448	
2512	73988/F	13	14191510041515	8 1	1.13	211G11	F
-13.10400		MT	0.69 -0.02 -0.22 -1.62	0.00	-1.49	0.001084844910848450	
6912	73988/F	14	13191510061435	8 1	1.13	211G11	B
13.10170		MT	-0.69 -0.02 0.22 2.10	0.02	2.06	0.001084845010848449	
2612	73988/F	14	15191510041535	7 1	1.12	211G11	F
-7.89140		MT	0.68 -0.12 -0.13 -0.96	0.00	-0.83	0.001084845010848451	
6812	73988/F	15	14191510061420	8 1	1.12	211G11	B
7.89170		MT	-0.68 -0.04 0.13 1.28	0.02	1.20	0.001084845110848450	
2712	73988/F	15	16191510041555	3 1	0.43	211G11	F
-3.16760		MT	0.26 0.01 -0.05 -0.39	0.00	-0.18	0.001084845110848452	
6712	73988/F	16	15191510061410	4 1	0.43	211G11	B
3.16690		MT	-0.26 0.08 0.05 0.53	0.01	0.29	0.001084845210848451	
6512	73988/F	16	17191510061404	1 1	0.05	211G11	F
-0.1473		MT	0.03 -0.02 0.00 -0.02	0.00	0.00	0.001084845210267539	
6412	73988/F	17	16191510061402	1 1	0.05	211G11	B
0.14830		MT	-0.03 0.02 0.00 0.03	0.00	0.00	0.001026753910848452	
6612	73988/F	17	18191510061405	1 1	0.05	211G11	F
-0.0633		MT	0.05 0.02 0.00 -0.01	0.00	0.00	0.001026753910848453	
6312	73988/F	18	17191510061400	1 1	0.05	211G11	B
0.06230		MT	-0.05 -0.02 0.00 0.01	0.00	0.00	0.001084845310267539	
2812	73988/F	18	19191510041603	7 1	1.01	211G11	F
-14.40860		MT	0.86 -0.04 -0.24 -1.73	0.01	-0.73	0.001084845310848454	
6212	73988/F	19	18191510061335	9 1	1.01	211G11	B
14.40960		MT	-0.86 -0.10 0.24 2.45	-0.03	1.72	0.001084845410848453	

Table 5c-1

Table 5c. National Geodetic Survey Line 73988F: File 73988F.prn(=.dat)--Continued

3012	73988/F	19	20191510041620	6	1	1.01		211G11	F
-8.01760		MT	0.84 0.00 -0.13 -0.98	0.01	-0.27	0.001084845410848455			
6112	73988/F	20	19191510061315	9	1	1.00		211G11	B
8.01500		MT	-0.84 0.06 0.13 1.33	-0.04	0.90	0.001084845510848454			
5012	73988/F	20	2119151006 835	3	1	0.48		211G11	F
-2.69670		MT	0.40 0.01 -0.04 -0.24	0.03	-0.28	0.001084845510848456			
6012	73988/F	21	20191510061305	4	1	0.48		211G11	B
2.69600		MT	-0.40 0.07 0.04 0.47	-0.02	0.35	0.001084845610848455			
7312	73988/F	21	2219151007 850	9	1	1.12		211G11	F
-8.46880		MT	0.93 -0.05 -0.14 -1.03	0.07	-0.60	0.001084845610848457			
5912	73988/F	22	21191510061135	9	1	1.12		211G11	B
8.46600		MT	-0.93 0.01 0.14 1.39	-0.08	1.24	0.001084845710848456			
7412	73988/F	22	2319151007 910	8	1	1.13		211G11	F
-12.52530		MT	0.93 0.04 -0.21 -1.48	0.08	-1.53	0.001084845710342735			
5812	73988/F	23	22191510061110	8	1	1.13		211G11	B
12.52430		MT	-0.93 0.11 0.21 1.98	-0.08	2.53	0.001034273510848457			
7512	73988/F	23	2419151007 930	3	1	0.37		211G11	F
-2.44130		MT	0.27 0.00 -0.04 -0.31	0.02	-0.28	0.001034273510848458			
5712	73988/F	24	23191510061100	3	1	0.37		211G11	B
2.44240		MT	-0.27 -0.03 0.04 0.37	-0.03	0.35	0.001084845810342735			
7812	73988/F	24	25191510071020	9	1	1.11		211G11	F
-12.81670		MT	0.79 -0.06 -0.21 -1.92	0.08	-1.78	0.001084845810848459			
7612	73988/F	24	2519151007 940	8	1	1.11		211G11	F
-12.81530		MT	0.79 -0.01 -0.21 -1.69	0.06	-2.06	0.001084845810848459			
7712	73988/F	25	24191510071000	9	1	1.11		211G11	B
12.81770		MT	-0.79 0.03 0.21 1.79	-0.07	1.70	0.001084845910848458			
5612	73988/F	25	24191510061040	8	1	1.11		211G11	B
12.82130		MT	-0.79 -0.01 0.21 1.92	-0.08	2.43	0.001084845910848458			
7912	73988/F	25	26191510071045	9	1	1.11		211G11	F
-10.47550		MT	0.78 0.03 -0.17 -1.63	0.08	-1.46	0.001084845910848460			
5512	73988/F	26	25191510061015	8	1	1.10		211G11	B
10.47540		MT	-0.78 -0.09 0.17 1.55	-0.07	1.77	0.001084846010848459			
8012	73988/F	26	27191510071105	10	1	1.12		211G11	F
-6.32530		MT	0.78 0.01 -0.10 -1.04	0.09	-0.72	0.001084846010848461			
5412	73988/F	27	2619151006 950	8	1	1.12		211G11	B
6.32600		MT	-0.78 0.05 0.10 0.85	-0.07	0.99	0.001084846110848460			
8112	73988/F	27	28191510071135	9	1	1.12		211G11	F
-7.98190		MT	0.77 -0.03 -0.13 -1.31	0.09	-1.17	0.001084846110321566			
5312	73988/F	28	2719151006 930	7	1	1.12		211G11	B
7.98400		MT	-0.77 0.00 0.13 0.97	-0.06	1.56	0.001032156610848461			
8212	73988/F	28	29191510071310	9	1	1.01		211G11	F
-12.50940		MT	0.62 -0.03 -0.21 -2.03	0.08	-1.55	0.001032156610848462			
5212	73988/F	29	2819151006 905	7	1	1.02		211G11	B
12.51100		MT	-0.62 0.01 0.21 1.45	-0.03	1.60	0.001084846210321566			
8312	73988/F	29	30191510071335	9	1	1.06		211G11	F
-10.22230		MT	0.65 -0.07 -0.17 -1.62	0.08	-1.30	0.001084846210848463			
5112	73988/F	30	2919151006 850	7	1	1.06		211G11	B
10.22110		MT	-0.65 0.00 0.17 1.14	-0.03	1.17	0.001084846310848462			
8412	73988/F	30	31191510071400	8	1	1.02		211G11	F
-11.60230		MT	0.61 -0.13 -0.19 -1.81	0.07	-1.70	0.001084846310308204			
4912	73988/F	31	3019151006 820	7	1	1.02		211G11	B
11.60040		MT	-0.61 0.07 0.19 1.14	-0.01	0.84	0.001030820410848463			
8512	73988/F	31	32191510071430	5	1	0.38		211G11	F
7.22860		MT	0.12 0.03 0.12 1.13	0.03	0.34	0.001030820410308203			
8712	73988/F	31	33191510071500	9	1	1.15		211G11	F
-8.72690		MT	0.84 0.11 -0.14 -1.36	0.02	-0.80	0.001030820410848464			
8612	73988/F	32	31191510071445	5	1	0.38		211G11	B
-7.22720		MT	-0.12 0.02 -0.12 -1.13	-0.03	-0.31	0.001030820310308204			
9012	73988/F	33	31191510071630	9	1	1.16		211G11	B
8.72710		MT	-0.84 -0.02 0.14 1.13	0.00	0.05	0.001084846410308204			
8812	73988/F	33	34191510071525	9	1	1.27		211G11	F
-14.92600		MT	0.92 0.10 -0.25 -2.24	0.01	-1.44	0.001084846410848465			
9112	73988/F	33	3419151008 745	9	1	1.27		211G11	F
-14.92870		MT	0.92 -0.01 -0.25 -1.40	0.04	-0.44	0.001084846410848465			
8912	73988/F	34	33191510071600	9	1	1.28		211G11	B
14.93180		MT	-0.92 -0.01 0.25 1.79	-0.01	0.30	0.001084846510848464			
4812	73988/F	34	33191510051640	7	1	1.28		211G11	B
14.93430		MT	-0.92 0.06 0.25 1.85	-0.01	-0.04	0.001084846510848464			
9212	73988/F	34	3519151008 825	7	1	1.02		211G11	F
-11.37330		MT	0.73 -0.05 -0.19 -1.36	0.05	-0.86	0.001084846510848466			
2912	73988/F	35	34191510041620	6	1	1.02		211G11	B
11.37260		MT	-0.73 0.14 0.19 1.64	-0.01	0.43	0.001084846610848465			
9312	73988/F	35	3619151008 845	1	1	0.04		211G11	F
-0.37730		MT	0.03 0.03 -0.01 -0.05	0.00	0.00	0.001084846610290869			
9612	73988/F	36	3519151008 850	1	1	0.04		211G11	B
0.37770		MT	-0.03 0.03 0.01 0.05	0.00	0.00	0.001029086910848466			
9412	73988/F	36	3719151008 847	1	1	0.04		211G11	F
-0.01170		MT	0.03 0.02 0.00 0.00	0.00	0.00	0.001029086910848467			

Table 5c. National Geodetic Survey Line 73988F: File 73988F.prn(=.dat)--Continued

9512	73988/F	37	3619151008	848	1	1	0.04		211G11	B
0.01200		MT	-0.03	-0.02	0.00	0.00	0.00	0.001084846710290869		
11412	73988/F	37	3819151009	740	8	1	1.09		211G11	F
-9.96600		MT	0.87	0.06	-0.17	-0.78	0.02	-0.20	0.001084846710848468	
9712	73988/F	37	3819151008	855	8	1	1.10		211G11	F
-9.96100		MT	0.87	0.06	-0.17	-1.29	0.08	-0.92	0.001084846710848468	
11512	73988/F	38	3719151009	805	8	1	1.09		211G11	B
9.96460		MT	-0.87	-0.14	0.17	1.00	-0.04	0.44	0.001084846810848467	
4712	73988/F	38	37191510051530		7	1	1.10		211G11	B
9.96710		MT	-0.87	0.00	0.17	1.49	-0.01	1.09	0.001084846810848467	
9812	73988/F	38	3919151008	925	8	1	1.15		211G11	F
-11.03470		MT	0.90	0.17	-0.18	-1.52	0.09	-1.71	0.001084846810848469	
4612	73988/F	39	38191510051505		9	1	1.15		211G11	B
11.03630		MT	-0.90	-0.04	0.18	1.72	-0.01	1.03	0.001084846910848468	
9912	73988/F	39	4019151008	950	8	1	1.09		211G11	F
-9.12300		MT	0.84	-0.02	-0.15	-1.31	0.10	-1.36	0.001084846910848470	
4512	73988/F	40	39191510051440		8	1	1.08		211G11	B
9.12260		MT	-0.84	-0.09	0.15	1.42	-0.01	1.27	0.001084847010848469	
10012	73988/F	40	41191510081010		8	1	1.09		211G11	F
-10.25170		MT	0.83	0.19	-0.17	-1.54	0.10	-1.65	0.001084847010848471	
4412	73988/F	41	40191510051420		8	1	1.09		211G11	B
10.24890		MT	-0.83	0.01	0.17	1.62	-0.01	1.57	0.001084847110848470	
10112	73988/F	41	42191510081035		8	1	1.08		211G11	F
-10.58700		MT	0.82	-0.20	-0.18	-1.65	0.10	-1.81	0.001084847110360824	
4312	73988/F	42	41191510051355		8	1	1.09		211G11	B
10.58870		MT	-0.82	0.00	0.18	1.65	-0.02	1.77	0.001036082410848471	
10212	73988/F	42	43191510081100		3	1	0.38		211G11	F
-4.30230		MT	0.21	0.03	-0.07	-0.67	0.03	-0.70	0.001036082410848472	
4212	73988/F	43	42191510051345		3	1	0.38		211G11	B
4.30270		MT	-0.21	0.05	0.07	0.66	0.01	0.66	0.001084847210360824	
10312	73988/F	43	44191510081115		9	1	1.09		211G11	F
-9.52630		MT	0.59	-0.04	-0.16	-1.51	0.08	-1.35	0.001084847210848473	
4112	73988/F	44	43191510051320		9	1	1.09		211G11	B
9.52600		MT	-0.59	0.01	0.16	1.43	0.02	1.33	0.001084847310848472	
10412	73988/F	44	45191510081135		9	1	1.08		211G11	F
-9.47460		MT	0.59	0.00	-0.16	-1.50	0.07	-1.35	0.001084847310848474	
4012	73988/F	45	44191510051140		9	1	1.08		211G11	B
9.47630		MT	-0.59	-0.04	0.16	1.42	-0.01	1.39	0.001084847410848473	
10512	73988/F	45	46191510081300		9	1	1.08		211G11	F
-10.04510		MT	0.58	-0.04	-0.17	-1.65	0.03	-1.40	0.001084847410848475	
3912	73988/F	46	45191510051115		9	1	1.09		211G11	B
10.04830		MT	-0.58	0.00	0.17	1.51	-0.02	1.46	0.001084847510848474	
10612	73988/F	46	47191510081335		8	1	1.08		211G11	F
-8.51900		MT	0.57	-0.01	-0.14	-1.40	0.01	-1.40	0.001084847510341122	
11612	73988/F	46	4719151009	845	7	1	1.08		211G11	F
-8.51860		MT	0.57	-0.14	-0.14	-0.90	0.07	-0.94	0.001084847510341122	
3812	73988/F	47	46191510051055		8	1	1.08		211G11	B
8.52360		MT	-0.57	0.03	0.14	1.21	-0.03	1.52	0.001034112210848475	
11712	73988/F	47	4619151009	905	7	1	1.09		211G11	B
8.51820		MT	-0.57	-0.03	0.14	0.94	-0.08	1.16	0.001034112210848475	
10712	73988/F	47	48191510081355		3	1	0.45		211G11	F
-3.76500		MT	0.23	-0.05	-0.06	-0.62	0.00	-0.74	0.001034112210848476	
3712	73988/F	48	47191510051045		4	1	0.45		211G11	B
3.76570		MT	-0.23	-0.10	0.06	0.53	-0.01	0.45	0.001084847610341122	
10812	73988/F	48	49191510081400		8	1	1.09		211G11	F
-9.26060		MT	0.54	0.04	-0.15	-1.50	0.00	-1.47	0.001084847610848477	
3612	73988/F	49	48191510051020		9	1	1.09		211G11	B
9.26360		MT	-0.54	-0.02	0.15	1.30	-0.04	1.22	0.001084847710848476	
10912	73988/F	49	50191510081420		8	1	1.09		211G11	F
-7.46450		MT	0.54	0.04	-0.12	-1.21	-0.01	-1.09	0.001084847710848478	
3512	73988/F	50	49191510051000		9	1	1.09		211G11	B
7.46570		MT	-0.54	0.00	0.12	1.03	-0.05	0.92	0.001084847810848477	
11012	73988/F	50	51191510081440		7	1	1.09		211G11	F
-6.75640		MT	0.53	0.00	-0.11	-1.09	-0.01	-1.19	0.001084847810848479	
11812	73988/F	50	5119151009	940	8	1	1.09		211G11	F
-6.75200		MT	0.53	-0.11	-0.11	-0.81	0.09	-0.98	0.001084847810848479	
11912	73988/F	51	50191510091000		8	1	1.09		211G11	B
6.75020		MT	-0.53	0.00	0.11	0.84	-0.09	1.05	0.001084847910848478	
3412	73988/F	51	5019151005	935	9	1	1.09		211G11	B
6.75190		MT	-0.53	0.01	0.11	0.90	-0.06	0.75	0.001084847910848478	
11112	73988/F	51	52191510081455		7	1	1.09		211G11	F
-6.37720		MT	0.53	-0.01	-0.11	-1.01	-0.01	-0.88	0.001084847910321565	
3312	73988/F	52	5119151005	915	9	1	1.09		211G11	B
6.38070		MT	-0.53	0.04	0.11	0.83	-0.06	0.55	0.001032156510848479	
11212	73988/F	52	53191510081510		5	1	0.77		211G11	F
-5.06200		MT	0.36	-0.07	-0.08	-0.79	-0.01	-0.62	0.001032156510848480	
3212	73988/F	53	5219151005	900	6	1	0.77		211G11	B
5.06000		MT	-0.36	-0.01	0.08	0.63	-0.05	0.44	0.001084848010321565	

Table 5c-3

Table 5c. National Geodetic Survey Line 73988F: File 73988F.prn(=.dat)---Continued

11312	73988/F	53	54191510081520	7	1	1.15		211G11	F
-7.71770		MT	0.53 -0.01 -0.13 -1.19	-0.02	-0.97	0.001084848010848481		211G11	B
3112	73988/F	54	5319151005 820	8	1	1.15		211G11	F
7.71540		MT	-0.53 0.01 0.13 0.85	-0.08	0.53	0.001084848110848480		211G11	B
13212	73988/F	54	5519151011 820	5	1	0.70		211G11	F
-3.82240		MT	0.32 0.05 -0.06 -0.28	0.00	-0.24	0.001084848110848482		211G11	B
13112	73988/F	55	54191510091555	5	1	0.70		211G11	F
3.82070		MT	-0.32 0.09 0.06 0.53	0.01	0.18	0.001084848210848481		211G11	B
13312	73988/F	55	5619151011 850	7	1	1.09		211G11	F
-4.39240		MT	0.49 0.02 -0.07 -0.34	0.02	-0.45	0.001084848210848483		211G11	B
13012	73988/F	56	55191510091540	7	1	1.09		211G11	F
4.39300		MT	-0.49 -0.02 0.07 0.62	0.01	0.34	0.001084848310848482		211G11	B
13412	73988/F	56	5719151011 915	8	1	1.09		211G11	F
-6.60690		MT	0.49 0.01 -0.11 -0.54	0.03	-0.73	0.001084848310304804		211G11	B
12912	73988/F	57	56191510091515	7	1	1.09		211G11	F
6.60660		MT	-0.49 -0.16 0.11 0.96	0.01	0.78	0.001030480410848483		211G11	B
13512	73988/F	57	5819151011 945	4	1	0.45		211G11	F
-0.56570		MT	0.17 -0.01 -0.01 -0.05	0.02	-0.06	0.001030480410848484		211G11	B
12812	73988/F	58	57191510091500	4	1	0.45		211G11	F
0.56590		MT	-0.17 0.07 0.01 0.09	0.01	0.04	0.001084848410304804		211G11	B
13612	73988/F	58	5919151011 955	8	1	1.09		211G11	F
-10.87520		MT	0.42 0.04 -0.18 -1.00	0.04	-1.84	0.001084848410848485		211G11	B
12712	73988/F	59	58191510091440	8	1	1.09		211G11	F
10.87660		MT	-0.42 0.00 0.18 1.61	0.01	1.55	0.001084848510848484		211G11	B
13712	73988/F	59	60191510111020	8	1	1.09		211G11	F
-7.79900		MT	0.41 0.01 -0.13 -0.76	0.05	-1.35	0.001084848510848486		211G11	B
12612	73988/F	60	59191510091415	8	1	1.08		211G11	F
7.80070		MT	-0.41 0.01 0.13 1.20	0.00	1.16	0.001084848610848485		211G11	B
13812	73988/F	60	61191510111045	8	1	1.09		211G11	F
-6.75460		MT	0.41 -0.02 -0.11 -0.66	0.06	-1.24	0.001084848610848487		211G11	B
12512	73988/F	61	60191510091355	8	1	1.09		211G11	F
6.75240		MT	-0.41 0.11 0.11 1.17	-0.01	1.03	0.001084848710848486		211G11	B
13912	73988/F	61	62191510111105	8	1	1.08		211G11	F
-1.02000		MT	0.40 0.00 -0.02 -0.11	0.06	-0.18	0.001084848710287639		211G11	B
12412	73988/F	62	61191510091330	9	1	1.08		211G11	F
1.02140		MT	-0.40 -0.06 0.02 0.16	-0.02	0.13	0.001028763910848487		211G11	B
14012	73988/F	62	63191510111125	6	1	0.77		211G11	F
0.71600		MT	0.29 -0.02 0.01 0.08	0.04	0.12	0.001028763910848488		211G11	B
12312	73988/F	63	62191510091210	7	1	0.77		211G11	F
-0.71570		MT	-0.29 -0.07 -0.01 -0.10	-0.04	-0.08	0.001084848810287639		211G11	B
14112	73988/F	63	64191510111145	8	1	1.04		211G11	F
4.06600		MT	0.39 -0.02 0.07 0.44	0.06	0.71	0.001084848810282818		211G11	B
12212	73988/F	64	63191510091140	9	1	1.04		211G11	F
-4.06500		MT	-0.39 0.00 -0.07 -0.57	-0.07	-0.53	0.001028281810848488		211G11	B
14212	73988/F	64	65191510111305	3	1	0.44		211G11	F
-1.58730		MT	0.15 0.01 -0.03 -0.14	0.02	-0.35	0.001028281810848489		211G11	B
12112	73988/F	65	64191510091130	4	1	0.44		211G11	F
1.58560		MT	-0.15 -0.10 0.03 0.22	-0.03	0.19	0.001084848910282818		211G11	B
14312	73988/F	65	66191510111315	8	1	1.02		211G11	F
4.22800		MT	0.35 0.04 0.07 0.47	0.04	0.67	0.001084848910848490		211G11	B
12012	73988/F	66	65191510091105	8	1	1.02		211G11	F
-4.22440		MT	-0.35 -0.18 -0.07 -0.56	-0.07	-0.65	0.001084849010848489		211G11	B
14412	73988/F	66	67191510111340	8	1	1.09		211G11	F
-3.73260		MT	0.37 -0.02 -0.06 -0.46	0.04	-0.62	0.001084849010848491		211G11	B
15112	73988/F	67	66191510111550	7	1	1.09		211G11	F
3.73510		MT	-0.37 0.02 0.06 0.44	0.00	0.23	0.001084849110848490		211G11	B
14512	73988/F	67	68191510111405	4	1	0.51		211G11	F
-0.24300		MT	0.17 -0.01 0.00 -0.03	0.01	-0.03	0.001084849110273094		211G11	B
15012	73988/F	68	67191510111540	4	1	0.51		211G11	F
0.24370		MT	-0.17 0.02 0.00 0.03	0.00	0.01	0.001027309410848491		211G11	B
14612	73988/F	68	69191510111415	8	1	1.10		211G11	F
-5.80040		MT	0.29 0.02 -0.10 -0.71	0.01	-0.90	0.001027309410848492		211G11	B
14912	73988/F	69	68191510111515	8	1	1.10		211G11	F
5.80100		MT	-0.29 0.06 0.10 0.78	0.00	0.52	0.001084849210273094		211G11	B
14712	73988/F	69	70191510111435	4	1	0.50		211G11	F
-0.08130		MT	0.13 0.00 0.00 -0.01	0.00	-0.01	0.001084849210269707		211G11	B
14812	73988/F	70	69191510111505	4	1	0.50		211G11	F
0.08370		MT	-0.13 -0.02 0.00 0.01	0.00	0.01	0.001026970710848492		211G11	B
15212	73988/F	70	7119151012 920	8	1	1.10		211G11	F
-6.52200		MT	0.26 0.02 -0.11 -0.70	0.00	-0.76	0.001026970710848493		211G11	B
18512	73988/F	70	71191510131415	7	1	1.10		211G11	F
-6.52230		MT	0.26 -0.03 -0.11 -0.68	0.03	-1.37	0.001026970710848493		211G11	B
18412	73988/F	71	70191510131350	7	1	1.10		211G11	F
6.52770		MT	-0.26 0.01 0.11 0.67	-0.03	0.59	0.001084849310269707		211G11	B
18612	73988/F	71	70191510131430	7	1	1.10		211G11	F
6.52400		MT	-0.26 0.01 0.11 0.74	-0.02	1.28	0.001084849310269707		211G11	B
15312	73988/F	71	7219151012 955	8	1	1.09		211G11	F
4.27070		MT	0.26 0.02 0.07 0.52	0.01	0.63	0.001084849310848494		211G11	B

Table 5c. National Geodetic Survey Line 73988F: File 73988F.prn(=.dat)--Continued

18312	73988/F	72	71191510131335	7	1	1.09	211G11	B
-4.27370		MT	-0.26 0.00 -0.07 -0.45	-0.03	-0.39	0.001084849410848493		
15412	73988/F	72	73191510121020	8	1	1.03	211G11	F
6.89950		MT	0.24 0.02 0.11 0.86	0.02	1.00	0.001084849410362534		
18212	73988/F	73	72191510131320	7	1	1.02	211G11	B
-6.89830		MT	-0.24 0.00 -0.11 -0.80	-0.02	-0.57	0.001036253410848494		
15512	73988/F	73	74191510121040	8	1	1.09	211G11	F
6.48760		MT	0.17 0.00 0.11 0.80	0.02	1.11	0.001036253410848495		
18112	73988/F	74	73191510131300	7	1	1.09	211G11	B
-6.48960		MT	-0.17 -0.01 -0.11 -0.82	-0.02	-1.55	0.001084849510362534		
15612	73988/F	74	75191510121100	9	1	1.09	211G11	F
3.72600		MT	0.17 -0.01 0.06 0.47	0.03	0.51	0.001084849510848496		
18012	73988/F	75	74191510131140	7	1	1.09	211G11	B
-3.72290		MT	-0.17 -0.01 -0.06 -0.45	-0.01	-0.90	0.001084849610848495		
15712	73988/F	75	76191510121130	9	1	1.09	211G11	F
4.24070		MT	0.17 0.02 0.07 0.56	0.03	0.60	0.001084849610848497		
17912	73988/F	76	75191510131125	7	1	1.09	211G11	B
-4.23980		MT	-0.17 0.00 -0.07 -0.51	-0.01	-1.01	0.001084849710848496		
15812	73988/F	76	77191510121310	9	1	1.07	211G11	F
4.21180		MT	0.17 0.03 0.07 0.61	0.02	0.55	0.001084849710848498		
18712	73988/F	76	77191510131500	7	1	1.08	211G11	F
4.20970		MT	0.17 0.00 0.07 0.49	0.01	0.55	0.001084849710848498		
18812	73988/F	77	76191510131520	7	1	1.08	211G11	B
-4.21100		MT	-0.17 0.01 -0.07 -0.49	-0.01	-0.44	0.001084849810848497		
17812	73988/F	77	76191510131105	7	1	1.07	211G11	B
-4.20530		MT	-0.17 0.00 -0.07 -0.50	0.00	-0.96	0.001084849810848497		
15912	73988/F	77	78191510121330	4	1	0.46	211G11	F
1.21120		MT	0.07 -0.02 0.02 0.16	0.01	0.14	0.001084849810355754		
17712	73988/F	78	77191510131055	3	1	0.46	211G11	B
-1.20830		MT	-0.07 -0.01 -0.02 -0.15	0.00	-0.26	0.001035575410848498		
16012	73988/F	78	79191510121340	8	1	1.09	211G11	F
1.96410		MT	0.20 0.00 0.03 0.27	0.02	0.32	0.001035575410848499		
17612	73988/F	79	78191510131035	7	1	1.09	211G11	B
-1.96490		MT	-0.20 0.00 -0.03 -0.24	0.01	-0.43	0.001084849910355754		
16112	73988/F	79	80191510121405	8	1	1.09	211G11	F
2.87340		MT	0.20 -0.02 0.05 0.39	0.02	0.43	0.001084849910848500		
17512	73988/F	80	79191510131020	7	1	1.09	211G11	B
-2.87290		MT	-0.20 -0.01 -0.05 -0.37	0.01	-0.59	0.001084850010848499		
16312	73988/F	80	81191510121425	8	1	1.15	211G11	F
-0.75720		MT	0.21 0.00 -0.01 -0.10	0.01	-0.12	0.001084850010848501		
17412	73988/F	81	80191510131000	8	1	1.15	211G11	B
0.76000		MT	-0.21 0.00 0.01 0.10	0.02	0.12	0.001084850110848500		
16412	73988/F	81	82191510121445	7	1	1.09	211G11	F
-0.52800		MT	0.20 0.04 -0.01 -0.07	0.01	-0.08	0.001084850110848502		
17312	73988/F	82	8119151013 945	7	1	1.09	211G11	B
0.52660		MT	-0.20 0.00 0.01 0.07	0.02	0.10	0.001084850210848501		
16512	73988/F	82	83191510121505	7	1	1.09	211G11	F
0.22460		MT	0.20 0.04 0.00 0.03	0.00	0.03	0.001084850210848503		
17212	73988/F	83	8219151013 925	7	1	1.08	211G11	B
-0.22580		MT	-0.20 0.00 0.00 -0.03	0.03	-0.03	0.001084850310848502		
16612	73988/F	83	84191510121525	5	1	0.78	211G11	F
-0.53490		MT	0.15 -0.04 -0.01 -0.07	0.00	-0.05	0.001084850310346005		
17112	73988/F	84	8319151013 910	6	1	0.78	211G11	B
0.53330		MT	-0.15 0.00 0.01 0.06	0.02	0.05	0.001034600510848503		
16712	73988/F	84	85191510121540	7	1	1.08	211G11	F
10.46440		MT	0.20 0.01 0.17 1.30	0.00	0.84	0.001034600510848504		
17012	73988/F	85	8419151013 850	8	1	1.08	211G11	B
-10.46480		MT	-0.20 0.00 -0.17 -1.19	0.04	-0.84	0.001084850410346005		
16812	73988/F	85	86191510121605	7	1	1.09	211G11	F
15.67800		MT	0.20 0.01 0.26 1.85	-0.01	0.49	0.001084850410848505		
16912	73988/F	86	8519151013 825	8	1	1.09	211G11	B
-15.67430		MT	-0.20 0.01 -0.26 -1.38	0.04	-0.99	0.001084850510848504		
18912	73988/F	86	87191510131600	7	1	1.08	211G11	F
15.82640		MT	0.21 -0.01 0.26 1.55	0.01	0.58	0.001084850510341118		
16212	73988/F	87	86191510121420	8	1	1.08	211G11	B
-15.82770		MT	-0.21 -0.02 -0.26 -1.93	-0.01	-2.72	0.001034111810848505		
19012	73988/F	87	88191510131620	7	1	1.09	211G11	F
13.46770		MT	0.10 0.02 0.22 1.32	0.00	0.21	0.001034111810848506		
20812	73988/F	88	87191510141355	8	1	1.09	211G11	B
-13.46370		MT	-0.10 -0.11 -0.22 -1.75	-0.01	-2.34	0.001084850610341118		
20912	73988/F	88	89191510141445	6	1	0.89	211G11	F
6.88270		MT	0.09 -0.06 0.11 0.83	0.01	0.96	0.001084850610848507		
20712	73988/F	89	88191510141335	7	1	0.90	211G11	B
-6.88170		MT	-0.09 0.03 -0.11 -0.92	0.00	-1.02	0.001084850710848506		
21012	73988/F	89	90191510141500	7	1	1.13	211G11	F
-5.84500		MT	0.11 0.00 -0.10 -0.72	0.01	-0.80	0.001084850710339504		
20612	73988/F	90	89191510141310	8	1	1.13	211G11	B
5.84570		MT	-0.11 -0.02 0.10 0.74	0.00	1.09	0.001033950410848507		

Table 5c-5

Table 5c. National Geodetic Survey Line 73988F: File 73988F.prn(=.dat)--Continued

21112	73988/F	90	91191510141520	5	1	0.80	211G11	F
-3.62060		MT	0.26 -0.09 -0.06 -0.45	0.02	-0.38	0.001033950410848508		
20512	73988/F	91	90191510141145	6	1	0.79	211G11	B
3.62070		MT	-0.26 0.07 0.06 0.51	0.00	0.61	0.001084850810339504		
21212	73988/F	91	92191510141530	7	1	1.15	211G11	F
-2.08100		MT	0.38 0.02 -0.03 -0.25	0.03	-0.19	0.001084850810848509		
20412	73988/F	92	91191510141125	8	1	1.14	211G11	B
2.08240		MT	-0.38 0.10 0.03 0.29	0.01	0.40	0.001084850910848508		
21312	73988/F	92	93191510141550	7	1	1.15	211G11	F
-5.60400		MT	0.38 0.06 -0.09 -0.63	0.03	-0.33	0.001084850910848510		
20312	73988/F	93	92191510141110	8	1	1.15	211G11	B
5.60480		MT	-0.38 0.02 0.09 0.71	0.01	1.10	0.001084851010848509		
21412	73988/F	93	94191510141605	7	1	1.15	211G11	F
-8.20900		MT	0.37 0.00 -0.14 -0.95	0.03	-0.27	0.001084851010848511		
20212	73988/F	94	93191510141050	8	1	1.15	211G11	B
8.20760		MT	-0.37 0.02 0.14 0.92	0.02	1.63	0.001084851110848510		
21512	73988/F	94	95191510141625	7	1	1.15	211G11	F
-4.72600		MT	0.37 0.02 -0.08 -0.55	0.03	0.00	0.001084851110848512		
20112	73988/F	95	94191510141030	6	1	1.15	211G11	B
4.72670		MT	-0.37 0.02 0.08 0.53	0.02	1.59	0.001084851210848511		
21612	73988/F	95	9619151015 805	6	1	1.09	211G11	F
-0.89300		MT	0.35 0.00 -0.01 -0.07	-0.02	-0.05	0.001084851210323333		
20012	73988/F	96	95191510141015	7	1	1.09	211G11	B
0.89350		MT	-0.35 0.05 0.01 0.10	0.03	0.18	0.001032333310848512		
22012	73988/F	96	9719151015 920	6	1	0.97	211G11	F
0.40130		MT	0.28 -0.01 0.01 0.04	-0.03	0.06	0.001032333310848513		
21712	73988/F	96	9719151015 830	5	1	0.97	211G11	F
0.40140		MT	0.28 0.03 0.01 0.03	-0.03	0.04	0.001032333310848513		
21912	73988/F	97	9619151015 905	6	1	0.97	211G11	B
-0.40400		MT	-0.28 0.01 -0.01 -0.04	0.03	-0.05	0.001084851310323333		
19912	73988/F	97	96191510141000	6	1	0.96	211G11	B
-0.40630		MT	-0.28 0.02 -0.01 -0.04	0.03	-0.09	0.001084851310323333		
21812	73988/F	97	9819151015 845	6	1	1.09	211G11	F
-1.60400		MT	0.31 0.02 -0.03 -0.14	-0.04	-0.19	0.001084851310848514		
19812	73988/F	98	9719151014 945	5	1	1.09	211G11	B
1.60450		MT	-0.31 -0.01 0.03 0.17	0.04	0.59	0.001084851410848513		
22112	73988/F	98	9919151015 945	8	1	1.20	211G11	F
0.30500		MT	0.34 0.00 0.00 0.03	-0.04	0.05	0.001084851410314951		
19712	73988/F	99	9819151014 920	8	1	1.20	211G11	B
-0.30800		MT	-0.34 0.06 0.00 -0.03	0.04	-0.04	0.001031495110848514		
22212	73988/F	99	100191510151010	7	1	1.13	211G11	F
0.88300		MT	0.30 -0.01 0.01 0.09	-0.03	0.19	0.001031495110848515		
19612	73988/F	100	9919151014 900	8	1	1.13	211G11	B
-0.88400		MT	-0.30 -0.02 -0.01 -0.10	0.03	-0.08	0.001084851510314951		
22312	73988/F	100	101191510151030	7	1	1.01	211G11	F
1.39000		MT	0.27 0.00 0.02 0.15	-0.03	0.26	0.001084851510848516		
19512	73988/F	101	10019151014 840	7	1	1.01	211G11	B
-1.38820		MT	-0.27 0.02 -0.02 -0.14	0.03	-0.11	0.001084851610848515		
22412	73988/F	101	102191510151055	7	1	1.07	211G11	F
-0.16340		MT	0.29 -0.01 0.00 -0.02	-0.03	-0.04	0.001084851610308198		
19412	73988/F	102	10119151014 820	7	1	1.07	211G11	B
0.16230		MT	-0.29 0.07 0.00 0.01	0.03	0.01	0.001030819810848516		
22512	73988/F	102	103191510151115	2	1	0.26	211G11	F
-0.05300		MT	0.02 0.01 0.00 -0.01	-0.01	-0.01	0.001030819810848517		
19312	73988/F	103	10219151014 815	2	1	0.26	211G11	B
0.05200		MT	-0.02 0.02 0.00 0.00	0.01	0.00	0.001084851710308198		
22612	73988/F	103	104191510151120	7	1	1.01	211G11	F
-0.38020		MT	0.09 0.00 -0.01 -0.04	-0.04	-0.08	0.001084851710848518		
19212	73988/F	104	10319151014 800	5	1	1.01	211G11	B
0.38090		MT	-0.09 0.04 0.01 0.03	0.05	0.03	0.001084851810848517		
22712	73988/F	104	105191510151145	9	1	1.23	211G11	F
2.59580		MT	0.12 -0.03 0.04 0.29	-0.04	0.47	0.001084851810848519		
19112	73988/F	105	10419151014 735	5	1	1.23	211G11	B
-2.59700		MT	-0.12 -0.02 -0.04 -0.18	0.06	-0.09	0.001084851910848518		
22812	73988/F	105	106191510151320	1	1	0.14	211G11	F
1.98900		MT	0.01 0.00 0.03 0.25	0.00	0.44	0.001084851910306493		
25812	73988/F	106	105191510161645	1	1	0.14	211G11	B
-1.98900		MT	-0.01 -0.30 -0.03 -0.21	0.00	0.09	0.001030649310848519		
22912	73988/F	106	107191510151325	8	1	1.13	211G11	F
2.36900		MT	0.16 0.00 0.04 0.32	-0.01	0.42	0.001030649310848520		
25712	73988/F	107	106191510161630	6	1	1.14	211G11	B
-2.37140		MT	-0.16 -0.08 -0.04 -0.26	-0.04	0.03	0.001084852010306493		
23012	73988/F	107	108191510151345	8	1	1.21	211G11	F
9.49470		MT	0.17 0.01 0.16 1.08	0.00	1.98	0.001084852010848521		
25612	73988/F	108	107191510161615	6	1	1.21	211G11	B
-9.49300		MT	-0.17 0.02 -0.16 -1.12	-0.04	-0.22	0.001084852110848520		
23112	73988/F	108	109191510151410	7	1	1.09	211G11	F
6.66860		MT	0.16 0.00 0.11 0.76	0.00	1.33	0.001084852110848522		

Table 5c. National Geodetic Survey Line 73988F: File 73988F.prn(=.dat)--Continued

25512	73988/F	109 108191510161600	6 1 1.09	211G11	B
-6.66840		MT -0.16 -0.06 -0.11 -0.80	-0.03 -0.32	0.001084852210848521	
23212	73988/F	109 110191510151430	3 1 0.38	211G11	F
0.17700		MT 0.06 0.01 0.00 0.02	0.00 0.02	0.001084852210301381	
25412	73988/F	110 109191510161550	3 1 0.38	211G11	B
-0.17730		MT -0.06 0.04 0.00 -0.02	-0.01 -0.01	0.001030138110848522	
23312	73988/F	110 111191510151435	7 1 1.08	211G11	F
-3.22870		MT -0.03 0.00 -0.05 -0.36	0.00 -0.48	0.001030138110848523	
25312	73988/F	111 110191510161530	7 1 1.08	211G11	B
3.22770		MT 0.03 -0.09 0.05 0.40	-0.01 0.24	0.001084852310301381	
23412	73988/F	111 112191510151500	7 1 1.08	211G11	F
8.26360		MT -0.03 0.00 0.14 0.89	0.01 1.11	0.001084852310848524	
25212	73988/F	112 111191510161510	8 1 1.08	211G11	B
-8.26170		MT 0.03 -0.02 -0.14 -1.06	-0.01 -0.72	0.001084852410848523	
23512	73988/F	112 113191510151520	7 1 1.03	211G11	F
12.65930		MT -0.03 0.01 0.21 1.34	0.01 1.33	0.001084852410303128	
25112	73988/F	113 112191510161445	8 1 1.03	211G11	B
-12.65730		MT 0.03 0.06 -0.21 -1.67	0.00 -1.33	0.001030312810848524	
23612	73988/F	113 114191510151540	7 1 1.03	211G11	F
12.26530		MT -0.46 0.03 0.20 1.25	-0.02 0.87	0.001030312810848525	
25012	73988/F	114 113191510161420	8 1 1.03	211G11	B
-12.26160		MT 0.46 -0.03 -0.20 -1.59	0.02 -1.69	0.001084852510303128	
23712	73988/F	114 115191510151600	8 1 1.12	211G11	F
14.96000		MT -0.51 0.01 0.25 1.47	-0.02 0.55	0.001084852510848526	
24912	73988/F	115 114191510161355	9 1 1.26	211G11	B
-14.95640		MT 0.51 0.02 -0.25 -1.97	0.03 -2.71	0.001084852610848525	
23812	73988/F	115 116191510151625	7 1 1.11	211G11	F
14.19000		MT -0.51 -0.01 0.24 1.28	-0.02 0.01	0.001084852610314952	
24812	73988/F	116 115191510161330	8 1 1.10	211G11	B
-14.18810		MT 0.51 -0.10 -0.24 -1.84	0.03 -2.69	0.001031495210848526	
27812	73988/F	116 11719151019 815	6 1 0.95	211G11	F
10.92490		MT -0.53 -0.11 0.18 0.98	-0.03 0.71	0.001031495210848527	
25912	73988/F	116 11719151018 750	7 1 0.95	211G11	F
10.92570		MT -0.53 0.00 0.18 0.90	-0.03 0.24	0.001031495210848527	
24712	73988/F	117 116191510161310	8 1 0.95	211G11	B
-10.91900		MT 0.53 -0.08 -0.18 -1.42	0.03 -1.51	0.001084852710314952	
27912	73988/F	117 11619151019 835	6 1 0.95	211G11	B
-10.92060		MT 0.53 0.00 -0.18 -1.11	0.03 -1.02	0.001084852710314952	
26012	73988/F	117 11819151018 830	7 1 1.08	211G11	F
14.66820		MT -0.61 0.00 0.24 1.47	-0.04 1.09	0.001084852710848528	
24612	73988/F	118 117191510161150	9 1 1.08	211G11	B
-14.66650		MT 0.61 0.04 -0.24 -2.02	0.04 -2.23	0.001084852810848527	
26112	73988/F	118 11919151018 855	8 1 1.16	211G11	F
13.63240		MT -0.67 0.00 0.23 1.53	-0.05 1.34	0.001084852810848529	
24512	73988/F	119 118191510161125	9 1 1.16	211G11	B
-13.63400		MT 0.67 0.06 -0.23 -1.80	0.05 -2.30	0.001084852910848528	
26212	73988/F	119 12019151018 915	8 1 1.10	211G11	F
15.33980		MT -0.60 0.00 0.25 1.84	-0.05 1.74	0.001084852910848530	
24412	73988/F	120 119191510161100	8 1 1.03	211G11	B
-15.33710		MT 0.60 0.10 -0.25 -1.99	0.05 -2.70	0.001084853010848529	
26312	73988/F	120 12119151018 935	8 1 1.09	211G11	F
16.21100		MT -0.65 0.00 0.27 2.01	-0.06 2.06	0.001084853010848531	
24312	73988/F	121 120191510161035	8 1 1.09	211G11	B
-16.21210		MT 0.65 -0.06 -0.27 -1.91	0.05 -3.03	0.001084853110848530	
26412	73988/F	121 122191510181000	8 1 1.09	211G11	F
16.33420		MT -0.66 0.00 0.27 2.06	-0.07 2.60	0.001084853110339503	
24212	73988/F	122 121191510161015	8 1 1.09	211G11	B
-16.33770		MT 0.66 0.01 -0.27 -1.80	0.05 -2.82	0.001033950310848531	
26512	73988/F	122 123191510181025	9 1 1.09	211G11	F
16.75420		MT 0.44 0.00 0.28 2.11	0.00 2.33	0.001033950310848532	
24112	73988/F	123 12219151016 950	9 1 1.23	211G11	B
-16.75240		MT -0.44 0.03 -0.28 -1.78	0.02 -2.71	0.001084853210339503	
26612	73988/F	123 124191510181045	9 1 1.09	211G11	F
15.31270		MT 0.45 0.00 0.25 1.99	-0.01 2.15	0.001084853210848533	
24012	73988/F	124 12319151016 930	8 1 1.09	211G11	B
-15.31170		MT -0.45 0.01 -0.25 -1.62	0.02 -1.90	0.001084853310848532	
26712	73988/F	124 125191510181110	9 1 1.07	211G11	F
15.34220		MT 0.43 0.00 0.25 2.06	-0.01 2.14	0.001084853310848534	
23912	73988/F	125 12419151016 905	8 1 1.03	211G11	B
-15.34370		MT -0.43 -0.04 -0.25 -1.44	0.01 -1.37	0.001084853410848533	
26812	73988/F	125 126191510181140	10 1 1.09	211G11	F
16.88870		MT 0.46 0.00 0.28 2.36	-0.02 2.02	0.001084853410848535	
27712	73988/F	126 125191510181615	9 1 1.15	211G11	B
-16.88900		MT -0.46 0.00 -0.28 -2.09	-0.03 -0.11	0.001084853510848534	
26912	73988/F	126 127191510181320	9 1 1.13	211G11	F
15.02170		MT 0.48 0.00 0.25 1.95	-0.03 2.26	0.001084853510848536	
27612	73988/F	127 126191510181550	8 1 1.13	211G11	B
-15.02530		MT -0.48 0.00 -0.25 -1.92	-0.02 -0.62	0.001084853610848535	

Table 5c-7

Table 5c. National Geodetic Survey Line 73988F: File 73988F.prn(=.dat)--Continued

27012	73988/F	127 128191510181345	8 1 1.02	211G11	F
14.75640		MT 0.44 0.00 0.24 2.10 -0.03 2.18	0.001084853610323089		
27512	73988/F	128 127191510181535	7 1 1.01	211G11	B
-14.75730		MT -0.44 0.00 -0.24 -1.92 -0.01 -0.85	0.001032308910848536		
27112	73988/F	128 129191510181410	8 1 1.09	211G11	F
2.46500		MT 0.30 0.00 0.04 0.35 -0.03 0.33	0.001032308910848537		
27412	73988/F	129 128191510181515	7 1 1.09	211G11	B
-2.46430		MT -0.30 0.00 -0.04 -0.34 0.00 -0.22	0.001084853710323089		
27212	73988/F	129 130191510181435	7 1 1.09	211G11	F
-4.34410		MT 0.30 0.00 -0.07 -0.61 -0.02 -0.59	0.001084853710848538		
28012	73988/F	129 13019151019 930	8 1 1.09	211G11	F
-4.33930		MT 0.30 -0.02 -0.07 -0.47 0.03 -0.46	0.001084853710848538		
27312	73988/F	130 129191510181455	7 1 1.09	211G11	B
4.33900		MT -0.30 0.00 0.07 0.59 0.01 0.50	0.001084853810848537		
28912	73988/F	130 129191510201440	7 1 1.09	211G11	B
4.34070		MT -0.30 0.00 0.07 0.66 0.03 0.54	0.001084853810848537		
28112	73988/F	130 13119151019 950	8 1 1.02	211G11	F
-2.14370		MT 0.28 -0.05 -0.04 -0.27 0.02 -0.25	0.001084853810318061		
28812	73988/F	131 130191510201420	7 1 1.02	211G11	B
2.14490		MT -0.28 0.01 0.04 0.33 0.04 0.30	0.001031806110848538		
28212	73988/F	131 132191510191010	8 1 1.09	211G11	F
-1.15630		MT 0.31 -0.08 -0.02 -0.16 0.01 -0.16	0.001031806110848539		
29012	73988/F	131 132191510201505	7 1 1.09	211G11	F
-1.16060		MT 0.31 0.00 -0.02 -0.16 -0.03 -0.05	0.001031806110848539		
28712	73988/F	132 131191510201400	8 1 1.09	211G11	B
1.16100		MT -0.31 -0.02 0.02 0.18 0.04 0.16	0.001084853910318061		
29112	73988/F	132 131191510201525	7 1 1.09	211G11	B
1.15810		MT -0.31 0.00 0.02 0.16 0.02 0.08	0.001084853910318061		
28312	73988/F	132 133191510191030	8 1 1.08	211G11	F
-4.75270		MT 0.31 0.00 -0.08 -0.64 0.00 -0.72	0.001084853910848540		
28612	73988/F	133 132191510201340	8 1 1.08	211G11	B
4.75390		MT -0.31 0.00 0.08 0.76 0.04 0.67	0.001084854010848539		
28412	73988/F	133 134191510191055	8 1 1.02	211G11	F
-5.98310		MT 0.29 0.00 -0.10 -0.81 -0.01 -0.86	0.001084854010311294		
28512	73988/F	134 133191510201315	8 1 1.02	211G11	B
5.98330		MT -0.29 0.05 0.10 0.99 0.04 0.80	0.001031129410848540		

Table 6a. National Geodetic Survey Line 73988G: File 73988G.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
3	10311294	M 17 USGS		0.00	36 34 46	115 53 28	1089.67450	1089.67450	0.00	0.00
4	10848375	TBM 101		1.09	36 34 38	115 52 45	1083.32328	1083.32030	-1.05	0.00
5	10848376	TBM 102		2.18	36 34 31	115 52 01	1078.50398	1078.49774	-1.85	0.00
6	10848377	TBM 3		3.27	36 34 23	115 51 18	1073.46054	1073.45381	-2.67	0.00
7	10848378	TBM 4		4.35	36 34 16	115 50 35	1066.09821	1066.09063	-3.82	0.00
8	10848379	TBM 5		5.43	36 34 08	115 49 52	1055.20633	1055.20078	-5.77	0.00
9	10304489	N 17 USGS		6.45	36 34 01	115 49 11	1045.46461	1045.46301	-7.20	0.00
10	10848380	TBM 6		7.50	36 34 06	115 48 28	1035.12421	1035.12328	-8.65	0.00
11	10848381	TBM 7		8.62	36 34 11	115 47 42	1023.79235	1023.79188	-10.02	0.00
12	10306173	O 17 USGS		9.64	36 34 15	115 47 00	1015.99093	1015.98844	-10.82	0.00
13	10848382	TBM 8		10.66	36 34 20	115 46 21	1008.62052	1008.61590	-11.16	0.00
14	10848383	TBM 9		11.81	36 34 26	115 45 37	1002.47407	1002.46713	-11.49	0.00
15	10309539	P 17 USGS		12.90	36 34 31	115 44 56	999.25428	999.24618	-11.59	0.00
16	10848384	TBM 10		13.93	36 34 33	115 44 15	993.07373	993.06490	-12.11	0.00
17	10848385	TBM 11		14.96	36 34 35	115 43 34	984.35242	984.34277	-12.96	0.00
18	10848386	TBM 12		16.04	36 34 37	115 42 50	974.36514	974.35553	-13.68	0.00
19	10848387	TBM 13		17.12	36 34 39	115 42 07	963.39141	963.38207	-14.71	0.00
20	10848388	TBM 14		18.21	36 34 41	115 41 24	953.66270	953.65334	-15.96	0.00
21	10311296	Q 17		19.30	36 34 43	115 40 40	955.41514	955.40636	-15.70	0.00
22	10848389	TBM 15		20.39	36 34 38	115 39 57	948.67964	948.67057	-16.89	0.00
23	10848390	TBM 16		21.47	36 34 34	115 39 14	952.71803	952.70976	-16.21	0.00
24	10848391	TBM 17		22.56	36 34 29	115 38 31	957.05298	957.04497	-15.44	0.00
25	10848392	TBM 18		23.65	36 34 25	115 37 48	958.50236	958.49424	-15.15	0.00
26	10848393	TBM 19		24.73	36 34 20	115 37 06	958.45601	958.44790	-15.16	0.00
27	10306166	R 17		25.81	36 34 16	115 36 23	959.03333	959.02597	-15.03	0.00
28	10848394	TBM 20		26.71	36 34 04	115 35 50	957.83190	957.82663	-15.20	0.00
29	10848395	TBM 21		27.86	36 33 48	115 35 08	951.88943	951.88986	-16.82	0.00
30	10299243	S 17 USGS		29.00	36 33 32	115 34 26	944.76337	944.76730	-18.76	0.00
31	10848396	TBM 22		29.96	36 33 17	115 33 52	940.64793	940.65297	-19.75	0.00
32	10848397	TBM 23		31.11	36 32 59	115 33 11	938.21404	938.22019	-20.28	0.00
33	10290563	T 17		32.20	36 32 42	115 32 33	936.78208	936.78906	-20.50	0.00
34	10848398	TBM 24		33.16	36 32 26	115 31 59	935.41145	935.41914	-20.75	0.00
35	10848399	TBM 25		34.25	36 32 08	115 31 22	934.66504	934.67421	-20.87	0.00
36	10848400	TBM 26		35.40	36 31 49	115 30 41	933.65013	933.66015	-21.07	0.00
37	10848401	TBM 27		36.43	36 31 32	115 30 06	932.89944	932.90997	-21.10	0.00
38	10848402	TBM 28		37.52	36 31 14	115 29 28	932.30298	932.31530	-21.16	0.00
39	10272793	U 17		38.61	36 30 56	115 28 50	932.98807	933.00268	-21.07	0.00
40	10848403	TBM 29		39.64	36 30 33	115 28 21	933.23226	933.24734	-21.04	0.00
41	10848404	TBM 30		40.73	36 30 09	115 27 50	934.21874	934.23344	-20.87	0.00
42	10848405	TBM 31		41.82	36 29 44	115 27 19	933.41861	933.43293	-21.04	0.00
43	10848406	TBM 32		42.85	36 29 21	115 26 50	931.40116	931.41486	-21.48	0.00
44	10848407	TBM 33		44.00	36 28 56	115 26 17	928.32624	928.33889	-22.14	0.00
45	10349108	V 17		45.06	36 28 32	115 25 47	923.03931	923.05111	-22.74	0.00

Table 6a-1

Table 6a. National Geodetic Survey Line 73988G: File 73988G.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
46	10848408	TBM 34		46.08	36 28 05	115 25 23	916.88760	916.89845	-23.92	0.00
47	10848409	TBM 35		47.17	36 27 37	115 24 57	908.65044	908.66220	-25.79	0.00
48	10334501	W 17		48.26	36 27 08	115 24 31	897.55753	897.56968	-27.64	0.00
49	10848410	TBM 36		49.29	36 26 41	115 24 06	890.38627	890.39840	-29.06	0.00
50	10848411	TBM 37		50.36	36 26 13	115 23 41	883.60529	883.61470	-30.69	0.00
51	10321314	X 17		51.38	36 25 46	115 23 16	876.37041	876.37646	-32.23	0.00
52	10848412	TBM 38		52.54	36 25 16	115 22 48	868.55895	868.56161	-33.93	0.00
53	10848413	TBM 39		53.57	36 24 50	115 22 23	861.28826	861.28916	-35.19	0.00
54	10848414	TBM 40		54.66	36 24 22	115 21 56	854.91421	854.91376	-36.04	0.00
55	10848415	TBM 41		55.68	36 23 56	115 21 31	849.57414	849.57326	-36.34	0.00
56	10848416	TBM 42		56.68	36 23 31	115 21 06	847.84801	847.84751	-36.52	0.00
57	10293833	111 USGS		57.84	36 23 01	115 20 38	846.90742	846.90755	-36.63	0.00
58	10848417	TBM 43		58.93	36 22 35	115 20 08	844.02470	844.02503	-37.10	0.00
59	10848418	TBM 44		60.09	36 22 07	115 19 37	838.73275	838.73337	-38.05	0.00
60	10848419	TBM 45		61.25	36 21 39	115 19 05	831.83730	831.83823	-39.50	0.00
61	10848420	TBM 46		62.41	36 21 12	115 18 34	823.17944	823.18027	-41.52	0.00
62	10848421	TBM 47		63.55	36 20 44	115 18 03	812.93484	812.93549	-43.55	0.00
63	10267750	112 USGS		64.32	36 20 26	115 17 42	805.98416	805.98466	-44.85	0.00
64	10848422	TBM 48		65.41	36 19 54	115 17 23	795.10140	795.10169	-47.04	0.00
65	10848423	TBM 49		66.56	36 19 21	115 17 03	783.65669	783.65613	-49.56	0.00
66	10352350	A 18		67.58	36 18 51	115 16 45	775.32178	775.32183	-51.11	0.00
67	10848424	TBM 50		68.73	36 18 17	115 16 29	766.42533	766.42637	-52.69	0.00
68	10848425	TBM 51		70.03	36 17 40	115 16 12	753.90169	753.90382	-54.74	0.00
69	10336093	113 USGS		70.86	36 17 15	115 16 01	747.59180	747.59420	-55.57	0.00
70	10848426	TBM 52		72.09	36 16 43	115 15 37	734.52279	734.52435	-56.99	0.00
71	10848427	TBM 53		73.18	36 16 13	115 15 15	724.76411	724.76241	-57.90	0.00
72	10848428	TBM 54		74.26	36 15 44	115 14 54	717.11465	717.11040	-58.36	0.00
73	10848429	TBM 55		75.41	36 15 14	115 14 31	708.75475	708.74873	-59.76	0.00
74	10848430	TBM 56		76.44	36 14 46	115 14 10	706.27896	706.27135	-60.18	0.00
75	10306163	114 USGS		77.46	36 14 19	115 13 50	698.85565	698.84651	-61.47	0.00
76	10848431	TBM 57		78.61	36 13 49	115 13 22	690.24593	690.23632	-63.08	0.00
77	10848432	TBM 58		79.76	36 13 20	115 12 54	686.58855	686.57948	-63.73	0.00
78	10293836	D 18 USGS		80.48	36 13 01	115 12 37	680.90024	680.89142	-64.60	0.00
79	10848433	TBM 59		81.63	36 12 31	115 12 09	671.45968	671.45065	-66.42	0.00
80	10848434	TBM 60		82.65	36 12 03	115 11 44	664.54221	664.53236	-67.72	0.00
81	10279324	115 USGS		83.80	36 11 33	115 11 16	651.52592	651.51454	-70.00	0.00
82	10848435	TBM 61		85.02	36 11 11	115 10 47	641.17872	641.16601	-71.35	0.00
83	10848436	TBM 62		86.11	36 10 51	115 10 22	634.90415	634.89047	-72.01	0.00
84	10848437	TBM 63		87.00	36 10 35	115 10 01	630.14860	630.13380	-72.56	0.00
85	10848438	TBM 64		87.30	36 10 30	115 09 54	626.97147	626.95620	-72.89	0.00
86	10848439	TBM 65		88.35	36 10 11	115 09 30	622.17804	622.16167	-73.26	0.00

Table 6a. National Geodetic Survey Line 73988G: File 73988G.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
87	10362254	O		89.44	36 09 51	115 09 04	618.31939	618.30202	-73.16	0.00
88	10264260	F 18		90.25	36 10 05	115 08 36	615.96121	615.94386	-73.13	0.00
89	10265994	2024 B		90.59	36 10 17	115 08 38	616.41784	616.40066	-73.13	0.00
90	10267749	P		90.94	36 10 24	115 08 31	615.32962	615.31239	-73.15	0.00
91	10266006	2033 B=116 USGS		91.41	36 10 18	115 08 46	619.14257	619.12564	-73.08	0.00

Table 6b. National Geodetic Survey Line 73988G: File 73988G.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
3										1089.67450	0.00	0.00
3	4	-6.35015	-0.01	-0.11	-0.92	-0.03	-1.05	0.00	-6.35121	1083.32328	-2.98	-1.05
4	5	-4.81850	-0.01	-0.08	-0.70	-0.03	-0.79	0.00	-4.81930	1078.50398	-6.24	-1.85
5	6	-5.04265	-0.01	-0.08	-0.67	-0.03	-0.82	0.00	-5.04344	1073.46054	-6.73	-2.67
6	7	-7.36115	-0.02	-0.12	-1.02	-0.03	-1.15	0.00	-7.36233	1066.09822	-7.58	-3.82
7	8	-10.89015	-0.02	-0.18	-1.53	-0.02	-1.95	0.00	-10.89189	1055.20633	-5.55	-5.77
8	9	-9.74020	0.01	-0.16	-1.35	-0.01	-1.43	0.00	-9.74171	1045.46462	-1.60	-7.20
9	10	-10.33885	0.03	-0.17	-1.40	-0.02	-1.46	0.00	-10.34041	1035.12421	-0.93	-8.65
10	11	-11.33020	0.00	-0.19	-1.46	-0.01	-1.37	0.00	-11.33186	1023.79235	-0.47	-10.02
11	12	-7.80030	0.02	-0.13	-1.00	0.00	-0.80	0.00	-7.80141	1015.99093	-2.49	-10.82
12	13	-7.36943	-0.01	-0.12	-0.86	0.01	-0.25	0.00	-7.37041	1008.62052	-4.62	-11.16
13	14	-6.14565	-0.01	-0.10	-0.72	0.02	-0.33	0.00	-6.14646	1002.47407	-6.94	-11.49
14	15	-3.21945	0.04	-0.05	-0.36	0.03	-0.10	0.00	-3.21979	999.25428	-8.10	-11.59
15	16	-6.17950	-0.02	-0.10	-0.90	-0.03	-0.52	0.00	-6.18054	993.07373	-8.83	-12.11
16	17	-8.71990	0.02	-0.14	-1.26	-0.03	-0.85	0.00	-8.72131	984.35242	-9.65	-12.96
17	18	-9.98565	-0.03	-0.17	-1.40	-0.03	-0.73	0.00	-9.98729	974.36514	-9.61	-13.68
18	19	-10.97215	0.00	-0.18	-1.39	0.00	-1.03	0.00	-10.97373	963.39141	-9.34	-14.71
19	20	-9.72735	0.03	-0.16	-1.23	-0.01	-1.25	0.00	-9.72872	953.66270	-9.36	-15.96
20	21	1.75215	0.04	0.03	0.22	-0.01	0.26	0.00	1.75244	955.41514	-8.78	-15.70
21	22	-6.73455	0.03	-0.11	-0.87	0.01	-1.18	0.00	-6.73550	948.67964	-9.07	-16.89
22	23	4.03780	0.00	0.07	0.51	0.02	0.68	0.00	4.03840	952.71803	-8.27	-16.21
23	24	4.33430	-0.01	0.07	0.56	0.02	0.78	0.00	4.33495	957.05298	-8.01	-15.44
24	25	1.44915	0.00	0.02	0.19	0.03	0.29	0.00	1.44939	958.50236	-8.12	-15.15
25	26	-0.04635	-0.02	0.00	-0.01	0.02	-0.01	0.00	-0.04636	958.45601	-8.11	-15.16
26	27	0.57720	0.02	0.01	0.08	0.02	0.13	0.00	0.57733	959.03333	-7.36	-15.03
27	28	-1.20128	0.00	-0.02	-0.16	0.01	-0.16	0.00	-1.20144	957.83190	-5.27	-15.20
28	29	-5.94165	-0.02	-0.10	-0.76	0.05	-1.63	0.00	-5.94247	951.88943	0.43	-16.82
29	30	-7.12505	-0.03	-0.12	-0.90	0.05	-1.94	0.00	-7.12606	944.76337	3.93	-18.76
30	31	-4.11490	0.01	-0.07	-0.51	0.03	-0.99	0.00	-4.11544	940.64793	5.04	-19.75
31	32	-2.43355	-0.03	-0.04	-0.29	0.03	-0.53	0.00	-2.43388	938.21404	6.15	-20.28
32	33	-1.43178	0.00	-0.02	-0.18	0.00	-0.23	0.00	-1.43197	936.78208	6.98	-20.50
33	34	-1.37050	0.02	-0.02	-0.16	0.03	-0.25	0.00	-1.37063	935.41145	7.69	-20.75
34	35	-0.74635	-0.01	-0.01	-0.08	0.03	-0.11	0.00	-0.74641	934.66504	9.17	-20.87
35	36	-1.01470	-0.03	-0.02	-0.13	-0.02	-0.20	0.00	-1.01491	933.65013	10.02	-21.07
36	37	-0.75065	0.03	-0.01	-0.08	0.02	-0.03	0.00	-0.75070	932.89944	10.53	-21.10
37	38	-0.59635	-0.03	-0.01	-0.07	0.00	-0.06	0.00	-0.59645	932.30298	12.32	-21.16
38	39	0.68500	0.00	0.01	0.08	0.01	0.09	0.00	0.68509	932.98807	14.61	-21.07
39	40	0.24415	0.00	0.00	0.03	0.02	0.03	0.00	0.24419	933.23226	15.08	-21.04
40	41	0.98635	-0.03	0.02	0.12	0.02	0.17	0.00	0.98648	934.21874	14.70	-20.87
41	42	-0.80005	0.01	-0.01	-0.11	0.03	-0.17	0.00	-0.80013	933.41861	14.32	-21.04
42	43	-2.01720	0.01	-0.03	-0.25	0.03	-0.44	0.00	-2.01745	931.40116	13.70	-21.48
43	44	-3.07455	0.03	-0.05	-0.38	0.03	-0.66	0.00	-3.07492	928.32624	12.65	-22.14
44	45	-5.28623	0.03	-0.09	-0.68	0.03	-0.60	0.00	-5.28694	923.03931	11.80	-22.74
45	46	-6.15090	0.02	-0.10	-0.79	0.06	-1.18	0.00	-6.15171	916.88760	10.85	-23.92
46	47	-8.23600	-0.01	-0.14	-1.07	0.07	-1.87	0.00	-8.23716	908.65044	11.76	-25.79
47	48	-11.09122	-0.03	-0.18	-1.52	0.04	-1.85	0.00	-11.09291	897.55753	12.15	-27.64

Table 6b-1

Table 6b. National Geodetic Survey Line 73988G: File 73988G.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
48	49	-7.17030	0.02	-0.12	-0.93	0.07	-1.42	0.00	-7.17126	890.38627	12.13	-29.06
49	50	-6.78005	0.05	-0.11	-0.93	0.07	-1.64	0.00	-6.78099	883.60529	9.41	-30.69
50	51	-7.23385	0.04	-0.12	-1.00	0.06	-1.54	0.00	-7.23488	876.37041	6.05	-32.23
51	52	-7.81030	-0.03	-0.13	-1.06	0.06	-1.71	0.00	-7.81146	868.55895	2.66	-33.93
52	53	-7.26970	0.05	-0.12	-0.97	0.05	-1.26	0.00	-7.27070	861.28826	0.90	-35.19
53	54	-6.37320	0.01	-0.11	-0.79	0.05	-0.85	0.00	-6.37404	854.91421	-0.45	-36.04
54	55	-5.33935	0.03	-0.09	-0.68	0.02	-0.31	0.00	-5.34008	849.57414	-0.88	-36.34
55	56	-1.72587	-0.03	-0.03	-0.21	0.01	-0.18	0.00	-1.72613	847.84801	-0.50	-36.52
56	57	-0.94050	0.03	-0.02	-0.13	0.03	-0.12	0.00	-0.94059	846.90742	0.13	-36.63
57	58	-2.88230	-0.02	-0.05	-0.39	0.03	-0.46	0.00	-2.88272	844.02470	0.33	-37.10
58	59	-5.29120	0.04	-0.09	-0.74	0.04	-0.96	0.00	-5.29195	838.73275	0.62	-38.05
59	60	-6.89448	0.03	-0.11	-0.92	0.03	-1.45	0.00	-6.89545	831.83730	0.93	-39.50
60	61	-8.65650	-0.08	-0.14	-1.20	0.05	-2.02	0.00	-8.65787	823.17944	0.83	-41.52
61	62	-10.24310	0.05	-0.17	-1.42	0.05	-2.03	0.00	-10.24460	812.93484	0.65	-43.55
62	63	-6.94975	0.12	-0.12	-0.97	0.03	-1.30	0.00	-6.95068	805.98416	0.50	-44.85
63	64	-10.88110	-0.01	-0.18	-1.52	0.06	-2.19	0.00	-10.88276	795.10140	0.29	-47.04
64	65	-11.44295	-0.01	-0.19	-1.63	0.06	-2.52	0.00	-11.44472	783.65669	-0.56	-49.56
65	66	-8.33363	-0.02	-0.14	-1.15	0.03	-1.55	0.00	-8.33491	775.32178	0.05	-51.11
66	67	-8.89515	0.03	-0.15	-1.23	0.05	-1.58	0.00	-8.89646	766.42533	1.04	-52.69
67	68	-12.52175	-0.07	-0.21	-1.65	0.04	-2.05	0.00	-12.52364	753.90169	2.13	-54.74
68	69	-6.30900	0.01	-0.10	-0.82	0.03	-0.84	0.00	-6.30989	747.59180	2.40	-55.57
69	70	-13.06725	0.10	-0.22	-1.67	0.03	-1.42	0.00	-13.06901	734.52279	1.56	-56.99
70	71	-9.75730	-0.03	-0.16	-1.20	0.02	-0.90	0.00	-9.75868	724.76411	-1.70	-57.90
71	72	-7.64855	0.09	-0.13	-0.88	0.01	-0.46	0.00	-7.64947	717.11465	-4.25	-58.36
72	73	-8.35860	0.07	-0.14	-1.26	0.04	-1.40	0.00	-8.35990	708.75475	-6.02	-59.76
73	74	-2.47545	0.04	-0.04	-0.38	0.03	-0.42	0.00	-2.47579	706.27896	-7.61	-60.18
74	75	-7.42215	0.09	-0.12	-1.17	0.03	-1.29	0.00	-7.42331	698.85565	-9.14	-61.47
75	76	-8.60842	0.09	-0.14	-1.28	0.04	-1.61	0.00	-8.60972	690.24593	-9.61	-63.08
76	77	-3.65680	0.02	-0.06	-0.58	0.04	-0.65	0.00	-3.65738	686.58855	-9.07	-63.73
77	78	-5.68745	0.04	-0.09	-0.83	0.02	-0.87	0.00	-5.68831	680.90024	-8.82	-64.60
78	79	-9.43895	-0.12	-0.16	-1.36	0.03	-1.83	0.00	-9.44056	671.45968	-9.03	-66.42
79	80	-6.91640	-0.03	-0.11	-0.96	0.03	-1.30	0.00	-6.91747	664.54221	-9.85	-67.72
80	81	-13.01420	-0.12	-0.22	-1.77	0.03	-2.28	0.00	-13.01629	651.52592	-11.38	-70.00
81	82	-10.34565	0.00	-0.17	-1.40	0.02	-1.36	0.00	-10.34720	641.17872	-12.71	-71.35
82	83	-6.27370	0.08	-0.10	-0.87	0.01	-0.65	0.00	-6.27458	634.90415	-13.68	-72.01
83	84	-4.75695	-0.05	-0.08	-0.60	0.02	-0.40	0.00	-4.75766	630.14649	-14.80	-72.56
84	85	-3.17665	-0.02	-0.05	-0.42	0.00	-0.33	0.00	-3.17714	626.96935	-15.27	-72.89
85	86	-4.79290	0.16	-0.08	-0.62	0.01	-0.37	0.00	-4.79343	622.17592	-16.37	-73.26
86	87	-3.85820	0.07	-0.06	-0.46	0.01	-0.06	0.00	-3.85864	618.31728	-17.37	-73.16
87	88	-2.35790	-0.01	-0.04	-0.21	-0.03	0.02	0.00	-2.35818	615.95910	-17.35	-73.13
88	89	0.45630	0.29	0.01	0.04	0.00	0.00	0.00	0.45663	616.41573	-17.18	-73.13
89	90	-1.08815	0.06	-0.02	-0.10	-0.01	-0.03	0.00	-1.08822	615.32751	-17.23	-73.15
90	91	3.81250	0.03	0.06	0.33	0.02	0.07	0.00	3.81295	619.14046	-16.93	-73.08

Table 6b-2

Table 6c. National Geodetic Survey Line 73988G: File 73988G.prn(=.dat)

112	73988/G	3	4191510191110	8	1	1.09	211G11	F
-6.34900		MT	0.20 0.00 -0.11 -0.89 -0.03 -1.05	0.001031129410848375				
2412	73988/G	4	3191510201145	8	1	1.09	211G11	B
6.35130		MT	-0.20 0.02 0.11 0.95 0.02 1.06	0.001084837510311294				
212	73988/G	4	5191510191130	8	1	1.09	211G11	F
-4.81970		MT	0.20 -0.05 -0.08 -0.69 -0.03 -0.80	0.001084837510848376				
2312	73988/G	5	4191510201125	8	1	1.09	211G11	B
4.81730		MT	-0.20 -0.04 0.08 0.70 0.02 0.79	0.001084837610848375				
312	73988/G	5	6191510191305	8	1	1.09	211G11	F
-5.04370		MT	0.20 0.00 -0.08 -0.61 -0.05 -0.83	0.001084837610848377				
2212	73988/G	6	5191510201105	8	1	1.08	211G11	B
5.04160		MT	-0.20 0.02 0.08 0.73 0.01 0.81	0.001084837710848376				
412	73988/G	6	7191510191330	8	1	1.08	211G11	F
-7.36060		MT	0.20 0.00 -0.12 -1.00 -0.05 -1.14	0.001084837710848378				
2112	73988/G	7	6191510201045	8	1	1.08	211G11	B
7.36170		MT	-0.20 0.03 0.12 1.03 0.00 1.16	0.001084837810848377				
512	73988/G	7	8191510191350	7	1	1.08	211G11	F
-10.89030		MT	0.20 0.00 -0.18 -1.57 -0.05 -2.20	0.001084837810848379				
2012	73988/G	8	7191510201020	8	1	1.08	211G11	B
10.89000		MT	-0.20 0.03 0.18 1.48 -0.02 1.70	0.001084837910848378				
612	73988/G	8	9191510191410	7	1	1.02	211G11	F
-9.74200		MT	0.18 0.03 -0.16 -1.40 -0.04 -1.60	0.001084837910304489				
1912	73988/G	9	8191510201000	8	1	1.02	211G11	B
9.73840		MT	-0.18 0.02 0.16 1.30 -0.02 1.25	0.001030448910848379				
712	73988/G	9	10191510191430	7	1	1.05	211G11	F
-10.33670		MT	-0.12 0.04 -0.17 -1.49 -0.04 -1.40	0.001030448910848380				
1812	73988/G	10	919151020 940	7	1	1.05	211G11	B
10.34100		MT	0.12 -0.03 0.17 1.32 -0.01 1.51	0.001084838010304489				
812	73988/G	10	11191510191455	7	1	1.12	211G11	F
-11.33100		MT	-0.12 0.01 -0.19 -1.54 -0.03 -1.49	0.001084838010848381				
1712	73988/G	11	1019151020 920	8	1	1.12	211G11	B
11.32940		MT	0.12 0.02 0.19 1.38 -0.02 1.25	0.001084838110848380				
912	73988/G	11	12191510191515	6	1	1.02	211G11	F
-7.80100		MT	-0.11 0.03 -0.13 -1.06 -0.02 -0.86	0.001084838110306173				
1612	73988/G	12	1119151020 900	7	1	1.02	211G11	B
7.79960		MT	0.11 0.00 0.13 0.94 -0.02 0.74	0.001030617310848381				
2512	73988/G	12	13191510201610	5	1	1.02	211G11	F
-7.37030		MT	-0.12 -0.04 -0.12 -0.83 0.00 -0.09	0.001030617310848382				
1012	73988/G	12	13191510191535	6	1	1.02	211G11	F
-7.36660		MT	-0.12 0.04 -0.12 -0.97 -0.01 -0.53	0.001030617310848382				
2612	73988/G	13	12191510201625	5	1	1.02	211G11	B
7.36970		MT	0.12 0.01 0.12 0.83 -0.01 -0.18	0.001084838210306173				
1512	73988/G	13	1219151020 840	7	1	1.02	211G11	B
7.37110		MT	0.12 0.04 0.12 0.81 -0.03 0.55	0.001084838210306173				
1112	73988/G	13	14191510191550	6	1	1.15	211G11	F
-6.14430		MT	-0.14 0.00 -0.10 -0.80 0.00 -0.35	0.001084838210848383				
1412	73988/G	14	1319151020 820	8	1	1.15	211G11	B
6.14700		MT	0.14 0.02 0.10 0.63 -0.04 0.31	0.001084838310848382				
1212	73988/G	14	15191510191605	6	1	1.09	211G11	F
-3.22000		MT	-0.13 0.06 -0.05 -0.41 0.01 -0.07	0.001084838310309539				
1312	73988/G	15	1419151020 755	6	1	1.09	211G11	B
3.21890		MT	0.13 -0.02 0.05 0.30 -0.04 0.13	0.001030953910848383				
4712	73988/G	15	16191510211535	6	1	1.03	211G11	F
-6.17940		MT	-0.05 -0.02 -0.10 -0.88 -0.02 -0.41	0.001030953910848384				
4612	73988/G	16	15191510211515	6	1	1.03	211G11	B
6.17960		MT	0.05 0.01 0.10 0.93 0.03 0.63	0.001084838410309539				
4812	73988/G	16	17191510211550	5	1	1.03	211G11	F
-8.72070		MT	-0.05 0.00 -0.14 -1.20 -0.02 -0.54	0.001084838410848385				
4512	73988/G	17	16191510211500	6	1	1.03	211G11	B
8.71910		MT	0.05 -0.03 0.14 1.31 0.04 1.16	0.001084838510848384				
4912	73988/G	17	18191510211605	6	1	1.08	211G11	F
-9.98600		MT	-0.05 -0.02 -0.17 -1.30 -0.01 -0.16	0.001084838510848386				
4412	73988/G	18	17191510211440	7	1	1.08	211G11	B
9.98530		MT	0.05 0.05 0.17 1.50 0.05 1.29	0.001084838610848385				
5012	73988/G	18	1919151022 800	7	1	1.08	211G11	F
-10.97330		MT	-0.05 0.00 -0.18 -1.08 0.05 -0.41	0.001084838610848387				
4312	73988/G	19	18191510211420	7	1	1.08	211G11	B
10.97100		MT	0.05 0.00 0.18 1.71 0.05 1.65	0.001084838710848386				
5112	73988/G	19	2019151022 825	7	1	1.09	211G11	F
-9.72730		MT	-0.05 0.05 -0.16 -0.95 0.05 -0.67	0.001084838710848388				
4212	73988/G	20	19191510211400	7	1	1.09	211G11	B
9.72740		MT	0.05 0.00 0.16 1.50 0.06 1.83	0.001084838810848387				
5212	73988/G	20	2119151022 840	6	1	1.09	211G11	F
1.75100		MT	-0.05 0.07 0.03 0.17 0.05 0.19	0.001084838810311296				
4112	73988/G	21	20191510211340	7	1	1.09	211G11	B
-1.75330		MT	0.05 -0.01 -0.03 -0.28 0.06 -0.33	0.001031129610848388				
5312	73988/G	21	2219151022 900	6	1	1.09	211G11	F
-6.73240		MT	0.11 0.06 -0.11 -0.66 0.06 -1.01	0.001031129610848389				

Table 6c-1

Table 6c. National Geodetic Survey Line 73988G: File 73988G.prn(=.dat)--Continued

4012	73988/G	22	21191510211315	7	1	1.09		211G11	B
6.73670		MT	-0.11 0.01 0.11 1.08	0.05	1.36	0.001084838910311296			
5412	73988/G	22	2319151022 915	7	1	1.09		211G11	F
4.03830		MT	0.10 0.01 0.07 0.42	0.05	0.48	0.001084838910848390			
3912	73988/G	23	22191510211155	7	1	1.08		211G11	B
-4.03730		MT	-0.10 0.02 -0.07 -0.61	0.02	-0.87	0.001084839010848389			
5512	73988/G	23	2419151022 935	7	1	1.09		211G11	F
4.33500		MT	0.11 -0.03 0.07 0.49	0.05	0.61	0.001084839010848391			
3812	73988/G	24	23191510211135	7	1	1.09		211G11	B
-4.33360		MT	-0.11 -0.02 -0.07 -0.63	0.01	-0.94	0.001084839110848390			
5612	73988/G	24	2519151022 950	7	1	1.09		211G11	F
1.44860		MT	0.11 0.00 0.02 0.16	0.05	0.26	0.001084839110848392			
3712	73988/G	25	24191510211120	7	1	1.09		211G11	B
-1.44970		MT	-0.11 -0.01 -0.02 -0.21	0.00	-0.31	0.001084839210848391			
5712	73988/G	25	26191510221010	6	1	1.08		211G11	F
-0.04800		MT	0.11 -0.02 0.00 -0.01	0.04	-0.01	0.001084839210848393			
3612	73988/G	26	25191510211100	7	1	1.08		211G11	B
0.04470		MT	-0.11 0.01 0.00 0.01	0.00	0.01	0.001084839310848392			
5812	73988/G	26	27191510221030	6	1	1.08		211G11	F
0.57710		MT	0.11 0.03 0.01 0.07	0.03	0.15	0.001084839310306166			
3512	73988/G	27	26191510211045	7	1	1.08		211G11	B
-0.57730		MT	-0.11 -0.01 -0.01 -0.08	-0.01	-0.11	0.001030616610848393			
5912	73988/G	27	28191510221055	5	1	0.90		211G11	F
-1.19970		MT	0.29 0.05 -0.02 -0.16	0.04	-0.33	0.001030616610848394			
7212	73988/G	27	28191510221555	4	1	0.90		211G11	F
-1.19930		MT	0.29 -0.01 -0.02 -0.15	-0.01	-0.04	0.001030616610848394			
7112	73988/G	28	27191510221545	4	1	0.90		211G11	B
1.20000		MT	-0.29 -0.01 0.02 0.15	0.02	0.07	0.001084839410306166			
3412	73988/G	28	27191510211025	6	1	0.89		211G11	B
1.20610		MT	-0.29 0.04 0.02 0.16	-0.04	0.21	0.001084839410306166			
6012	73988/G	28	29191510221110	6	1	1.15		211G11	F
-5.94100		MT	0.37 -0.02 -0.10 -0.75	0.04	-2.00	0.001084839410848395			
3312	73988/G	29	28191510211005	7	1	1.15		211G11	B
5.94230		MT	-0.37 0.01 0.10 0.76	-0.06	1.25	0.001084839510848394			
6112	73988/G	29	30191510221130	6	1	1.14		211G11	F
-7.12370		MT	0.37 -0.04 -0.12 -0.93	0.03	-2.46	0.001084839510299243			
3212	73988/G	30	2919151021 945	7	1	1.14		211G11	B
7.12640		MT	-0.37 0.02 0.12 0.88	-0.06	1.41	0.001029924310848395			
6212	73988/G	30	31191510221300	5	1	0.96		211G11	F
-4.11620		MT	0.35 0.05 -0.07 -0.53	0.00	-1.37	0.001029924310848396			
3112	73988/G	31	3019151021 930	6	1	0.96		211G11	B
4.11360		MT	-0.35 0.03 0.07 0.49	-0.06	0.61	0.001084839610299243			
6312	73988/G	31	32191510221320	6	1	1.15		211G11	F
-2.43170		MT	0.41 -0.05 -0.04 -0.32	-0.01	-0.75	0.001084839610848397			
3012	73988/G	32	3119151021 910	7	1	1.15		211G11	B
2.43540		MT	-0.41 0.02 0.04 0.27	-0.08	0.31	0.001084839710848396			
6412	73988/G	32	33191510221335	6	1	1.09		211G11	F
-1.42860		MT	0.39 0.05 -0.02 -0.19	-0.01	-0.38	0.001084839710290563			
7012	73988/G	32	33191510221515	6	1	1.09		211G11	F
-1.43210		MT	0.39 -0.04 -0.02 -0.19	-0.02	-0.14	0.001084839710290563			
2912	73988/G	33	3219151021 855	6	1	1.09		211G11	B
1.43330		MT	-0.39 -0.01 0.02 0.15	-0.07	0.19	0.001029056310848397			
6912	73988/G	33	32191510221500	6	1	1.09		211G11	B
1.43310		MT	-0.39 0.01 0.02 0.18	0.02	0.19	0.001029056310848397			
6512	73988/G	33	34191510221355	5	1	0.96		211G11	F
-1.37230		MT	0.37 0.03 -0.02 -0.18	-0.01	-0.39	0.001029056310848398			
2812	73988/G	34	3319151021 835	6	1	0.96		211G11	B
1.36870		MT	-0.37 0.00 0.02 0.13	-0.07	0.11	0.001084839810290563			
6612	73988/G	34	35191510221405	6	1	1.09		211G11	F
-0.74540		MT	0.41 0.02 -0.01 -0.09	-0.02	-0.18	0.001084839810848399			
2712	73988/G	35	3419151021 810	6	1	1.09		211G11	B
0.74730		MT	-0.41 0.03 0.01 0.06	-0.08	0.05	0.001084839910848398			
6712	73988/G	35	36191510221425	6	1	1.15		211G11	F
-1.01340		MT	0.44 -0.02 -0.02 -0.13	-0.02	-0.21	0.001084839910848400			
6812	73988/G	36	35191510221440	6	1	1.16		211G11	B
1.01600		MT	-0.44 0.05 0.02 0.13	0.02	0.19	0.001084840010848399			
7312	73988/G	36	3719151023 805	6	1	1.02		211G11	F
-0.75160		MT	0.39 0.02 -0.01 -0.06	0.05	-0.03	0.001084840010848401			
9112	73988/G	37	36191510231530	6	1	1.03		211G11	B
0.74970		MT	-0.39 -0.04 0.01 0.10	0.02	0.04	0.001084840110848400			
9212	73988/G	37	3819151025 830	6	1	1.09		211G11	F
-0.59600		MT	0.41 -0.09 -0.01 -0.05	0.02	-0.05	0.001084840110848402			
9012	73988/G	38	37191510231510	6	1	1.09		211G11	B
0.59670		MT	-0.41 -0.03 0.01 0.08	0.02	0.06	0.001084840210848401			
9312	73988/G	38	3919151025 850	6	1	1.09		211G11	F
0.68500		MT	0.41 -0.02 0.01 0.07	0.03	0.08	0.001084840210272793			
8912	73988/G	39	38191510231455	6	1	1.09		211G11	B
-0.68500		MT	-0.41 -0.01 -0.01 -0.09	0.02	-0.09	0.001027279310848402			

Table 6c. National Geodetic Survey Line 73988G: File 73988G.prn(=.dat)--Continued

9412	73988/G	39	4019151025	905	6	1	1.03	211G11	F
0.24400		MT	0.52	-0.01	0.00	0.02	0.03	0.03	0.001027279310848403
8812	73988/G	40	39191510231440		6	1	1.03	211G11	B
-0.24430		MT	-0.52	0.00	0.00	-0.03	0.00	-0.03	0.001084840310272793
9512	73988/G	40	4119151025	920	6	1	1.09	211G11	F
0.98700		MT	0.56	-0.09	0.02	0.10	0.04	0.16	0.001084840310848404
8712	73988/G	41	40191510231425		6	1	1.09	211G11	B
-0.98570		MT	-0.56	-0.03	-0.02	-0.14	0.00	-0.18	0.001084840410848403
9612	73988/G	41	4219151025	935	6	1	1.09	211G11	F
-0.80000		MT	0.56	0.01	-0.01	-0.09	0.04	-0.15	0.001084840410848405
8612	73988/G	42	41191510231410		6	1	1.09	211G11	B
0.80010		MT	-0.56	-0.01	0.01	0.12	-0.01	0.18	0.001084840510848404
9712	73988/G	42	4319151025	950	6	1	1.03	211G11	F
-2.01660		MT	0.52	0.01	-0.03	-0.23	0.04	-0.43	0.001084840510848406
8512	73988/G	43	42191510231350		6	1	1.03	211G11	B
2.01780		MT	-0.52	-0.01	0.03	0.28	-0.01	0.45	0.001084840610848405
9812	73988/G	43	44191510251005		7	1	1.15	211G11	F
-3.07500		MT	0.59	0.06	-0.05	-0.35	0.05	-0.64	0.001084840610848407
8412	73988/G	44	43191510231330		7	1	1.15	211G11	B
3.07410		MT	-0.59	0.00	0.05	0.41	-0.02	0.68	0.001084840710848406
11212	73988/G	44	45191510251600		6	1	1.06	211G11	F
-5.28600		MT	0.53	0.06	-0.09	-0.69	0.00	-0.08	0.001084840710349108
9912	73988/G	44	45191510251025		7	1	1.06	211G11	F
-5.28470		MT	0.53	0.05	-0.09	-0.63	0.05	-1.00	0.001084840710349108
8312	73988/G	45	44191510231205		7	1	1.06	211G11	B
5.28710		MT	-0.53	0.00	0.09	0.70	-0.05	1.11	0.001034910810848407
11112	73988/G	45	44191510251545		6	1	1.06	211G11	B
5.28710		MT	-0.53	-0.02	0.09	0.69	0.00	0.23	0.001034910810848407
10012	73988/G	45	46191510251045		7	1	1.02	211G11	F
-6.14910		MT	0.60	-0.01	-0.10	-0.75	0.06	-1.14	0.001034910810848408
8212	73988/G	46	45191510231145		7	1	1.02	211G11	B
6.15270		MT	-0.60	-0.04	0.10	0.82	-0.06	1.21	0.001084840810349108
10112	73988/G	46	47191510251100		7	1	1.09	211G11	F
-8.23570		MT	0.64	-0.03	-0.14	-1.04	0.06	-1.85	0.001084840810848409
8112	73988/G	47	46191510231125		7	1	1.09	211G11	B
8.23630		MT	-0.64	-0.01	0.14	1.10	-0.07	1.89	0.001084840910848408
10212	73988/G	47	48191510251120		7	1	1.09	211G11	F
-11.08730		MT	0.63	-0.01	-0.18	-1.40	0.06	-2.67	0.001084840910334501
11012	73988/G	47	48191510251515		7	1	1.09	211G11	F
-11.09200		MT	0.63	-0.02	-0.18	-1.62	0.02	-0.91	0.001084840910334501
8012	73988/G	48	47191510231110		7	1	1.09	211G11	B
11.09330		MT	-0.63	-0.01	0.18	1.46	-0.07	2.64	0.001033450110848409
10912	73988/G	48	47191510251500		7	1	1.09	211G11	B
11.09230		MT	-0.63	0.08	0.18	1.62	-0.02	1.18	0.001033450110848409
10312	73988/G	48	49191510251135		7	1	1.03	211G11	F
-7.17030		MT	0.59	0.01	-0.12	-0.92	0.06	-1.46	0.001033450110848410
7912	73988/G	49	48191510231050		7	1	1.03	211G11	B
7.17030		MT	-0.59	-0.03	0.12	0.93	-0.07	1.38	0.001084841010334501
10412	73988/G	49	50191510251300		7	1	1.07	211G11	F
-6.78180		MT	0.61	0.05	-0.11	-1.00	0.05	-1.39	0.001084841010848411
7812	73988/G	50	49191510231030		6	1	1.07	211G11	B
6.77830		MT	-0.61	-0.04	0.11	0.87	-0.08	1.88	0.001084841110848410
10512	73988/G	50	51191510251320		7	1	1.03	211G11	F
-7.23500		MT	0.58	0.06	-0.12	-1.09	0.04	-1.30	0.001084841110321314
7712	73988/G	51	50191510231015		6	1	1.02	211G11	B
7.23270		MT	-0.58	-0.02	0.12	0.91	-0.07	1.77	0.001032131410848411
10612	73988/G	51	52191510251335		7	1	1.16	211G11	F
-7.81130		MT	0.63	-0.10	-0.13	-1.14	0.04	-1.75	0.001032131410848412
7612	73988/G	52	5119151023	955	7	1	1.16	211G11	B
7.80930		MT	-0.63	-0.03	0.13	0.97	-0.08	1.66	0.001084841210321314
10712	73988/G	52	53191510251355		7	1	1.03	211G11	F
-7.27000		MT	0.56	0.09	-0.12	-1.05	0.03	-1.21	0.001084841210848413
7512	73988/G	53	5219151023	935	6	1	1.03	211G11	B
7.26940		MT	-0.56	0.00	0.12	0.89	-0.07	1.30	0.001084841310848412
10812	73988/G	53	54191510251415		7	1	1.09	211G11	F
-6.37340		MT	0.59	0.03	-0.11	-0.90	0.03	-0.94	0.001084841310848414
7412	73988/G	54	5319151023	910	7	1	1.09	211G11	B
6.37300		MT	-0.59	0.01	0.11	0.69	-0.07	0.76	0.001084841410848413
11312	73988/G	54	5519151026	850	7	1	1.02	211G11	F
-5.33900		MT	0.55	0.01	-0.09	-0.60	0.01	-0.42	0.001084841410848415
14812	73988/G	55	54191510271545		6	1	1.02	211G11	B
5.33970		MT	-0.55	-0.04	0.09	0.76	-0.03	0.19	0.001084841510848414
11412	73988/G	55	5619151026	930	7	1	0.99	211G11	F
-1.72360		MT	0.53	-0.03	-0.03	-0.22	0.02	-0.18	0.001084841510848416
15012	73988/G	55	5619151028	935	6	1	1.00	211G11	F
-1.72600		MT	0.53	0.01	-0.03	-0.19	0.00	-0.26	0.001084841510848416
14912	73988/G	56	5519151028	850	6	1	1.00	211G11	B
1.72590		MT	-0.53	0.03	0.03	0.18	0.01	0.17	0.001084841610848415

Table 6c. National Geodetic Survey Line 73988G: File 73988G.prn(=.dat)--Continued

14712	73988/G	56	55191510271530	6	1	1.00	211G11	B
1.72800		MT	-0.53 0.05 0.03 0.25	-0.03	0.10	0.001084841610848415	211G11	
11512	73988/G	56	5719151026 945	7	1	1.16	211G11	F
-0.94000		MT	0.61 -0.03 -0.02 -0.12	0.03	-0.15	0.001084841610293833	211G11	
14612	73988/G	57	56191510271510	7	1	1.16	211G11	B
0.94100		MT	-0.61 -0.09 0.02 0.14	-0.03	0.08	0.001029383310848416	211G11	
11612	73988/G	57	58191510261005	7	1	1.09	211G11	F
-2.88190		MT	0.54 0.00 -0.05 -0.34	0.04	-0.54	0.001029383310848417	211G11	
14512	73988/G	58	57191510271455	6	1	1.09	211G11	B
2.88270		MT	-0.54 0.03 0.05 0.43	-0.03	0.39	0.001084841710293833	211G11	
11712	73988/G	58	59191510261020	7	1	1.16	211G11	F
-5.29100		MT	0.57 -0.05 -0.09 -0.66	0.04	-1.19	0.001084841710848418	211G11	
14412	73988/G	59	58191510271435	7	1	1.16	211G11	B
5.29140		MT	-0.57 -0.12 0.09 0.81	-0.04	0.72	0.001084841810848417	211G11	
15112	73988/G	59	60191510281005	7	1	1.16	211G11	F
-6.89470		MT	0.57 0.02 -0.11 -0.85	0.01	-1.47	0.001084841810848419	211G11	
11812	73988/G	59	60191510261045	7	1	1.16	211G11	F
-6.89760		MT	0.57 0.01 -0.11 -0.87	0.05	-1.65	0.001084841810848419	211G11	
15212	73988/G	60	59191510281025	7	1	1.16	211G11	B
6.89500		MT	-0.57 -0.07 0.11 0.88	-0.01	1.56	0.001084841910848418	211G11	
14312	73988/G	60	59191510271410	7	1	1.16	211G11	B
6.89060		MT	-0.57 -0.03 0.11 1.09	-0.04	1.12	0.001084841910848418	211G11	
11912	73988/G	60	61191510261105	7	1	1.15	211G11	F
-8.65630		MT	0.56 -0.09 -0.14 -1.07	0.05	-2.20	0.001084841910848420	211G11	
14212	73988/G	61	60191510271350	7	1	1.16	211G11	B
8.65670		MT	-0.56 0.06 0.14 1.32	-0.04	1.83	0.001084842010848419	211G11	
12012	73988/G	61	62191510261125	7	1	1.14	211G11	F
-10.24270		MT	0.55 -0.01 -0.17 -1.31	0.05	-2.67	0.001084842010848421	211G11	
14112	73988/G	62	61191510271325	9	1	1.15	211G11	B
10.24350		MT	-0.55 -0.10 0.17 1.52	-0.04	1.39	0.001084842110848420	211G11	
12112	73988/G	62	63191510261145	5	1	0.77	211G11	F
-6.95070		MT	0.36 -0.01 -0.12 -0.92	0.04	-1.60	0.001084842110267750	211G11	
14012	73988/G	63	62191510271305	6	1	0.77	211G11	B
6.94880		MT	-0.36 -0.25 0.12 1.01	-0.03	1.00	0.001026775010848421	211G11	
12212	73988/G	63	64191510261310	7	1	1.09	211G11	F
-10.88130		MT	0.62 0.04 -0.18 -1.44	0.06	-2.47	0.001026775010848422	211G11	
13912	73988/G	64	63191510271150	8	1	1.09	211G11	B
10.88090		MT	-0.62 0.06 0.18 1.61	-0.05	1.91	0.001084842210267750	211G11	
12312	73988/G	64	65191510261330	7	1	1.15	211G11	F
-11.44470		MT	0.65 -0.03 -0.19 -1.56	0.06	-2.79	0.001084842210848423	211G11	
13812	73988/G	65	64191510271130	8	1	1.15	211G11	B
11.44120		MT	-0.65 -0.02 0.19 1.69	-0.05	2.25	0.001084842310848422	211G11	
15312	73988/G	65	66191510281105	7	1	1.02	211G11	F
-8.33290		MT	0.56 -0.01 -0.14 -1.08	0.02	-1.62	0.001084842310352350	211G11	
12412	73988/G	65	66191510261355	7	1	1.02	211G11	F
-8.33500		MT	0.56 0.00 -0.14 -1.08	0.05	-1.40	0.001084842310352350	211G11	
13712	73988/G	66	65191510271110	7	1	1.01	211G11	B
8.33030		MT	-0.56 0.08 0.14 1.23	-0.04	1.58	0.001035235010848423	211G11	
15412	73988/G	66	65191510281125	7	1	1.02	211G11	B
8.33630		MT	-0.56 0.00 0.14 1.22	-0.03	1.62	0.001035235010848423	211G11	
12512	73988/G	66	67191510261415	7	1	1.15	211G11	F
-8.89670		MT	0.64 0.03 -0.15 -1.17	0.05	-1.53	0.001035235010848424	211G11	
13612	73988/G	67	66191510271050	8	1	1.15	211G11	B
8.89360		MT	-0.64 -0.02 0.15 1.28	-0.04	1.62	0.001084842410352350	211G11	
12612	73988/G	67	68191510261440	8	1	1.34	211G11	F
-12.52160		MT	0.69 -0.03 -0.21 -1.60	0.05	-1.94	0.001084842410848425	211G11	
13512	73988/G	68	67191510271030	9	1	1.26	211G11	B
12.52190		MT	-0.69 0.10 0.21 1.70	-0.03	2.16	0.001084842510848424	211G11	
12712	73988/G	68	69191510261505	5	1	0.83	211G11	F
-6.30930		MT	0.45 0.05 -0.10 -0.81	0.03	-0.70	0.001084842510336093	211G11	
13412	73988/G	69	68191510271010	6	1	0.83	211G11	B
6.30870		MT	-0.45 0.04 0.10 0.83	-0.02	0.97	0.001033609310848425	211G11	
12812	73988/G	69	70191510261520	8	1	1.25	211G11	F
-13.06680		MT	0.58 0.02 -0.22 -1.67	0.03	-1.00	0.001033609310848426	211G11	
13312	73988/G	70	6919151027 950	9	1	1.21	211G11	B
13.06770		MT	-0.58 -0.19 0.22 1.67	-0.02	1.84	0.001084842610336093	211G11	
12912	73988/G	70	71191510261540	7	1	1.09	211G11	F
-9.75800		MT	0.52 0.02 -0.16 -1.21	0.02	-0.41	0.001084842610848427	211G11	
13212	73988/G	71	7019151027 930	7	1	1.09	211G11	B
9.75660		MT	-0.52 0.09 0.16 1.19	-0.01	1.40	0.001084842710848426	211G11	
13012	73988/G	71	72191510261600	7	1	1.09	211G11	F
-7.64970		MT	0.51 0.04 -0.13 -0.93	0.02	-0.08	0.001084842710848428	211G11	
13112	73988/G	72	7119151027 905	7	1	1.08	211G11	B
7.64740		MT	-0.51 -0.14 0.13 0.84	0.00	0.84	0.001084842810848427	211G11	
15512	73988/G	72	73191510281300	8	1	1.15	211G11	F
-8.35940		MT	0.53 0.02 -0.14 -1.25	0.04	-1.50	0.001084842810848429	211G11	
18412	73988/G	73	72191510291350	8	1	1.15	211G11	B
8.35780		MT	-0.53 -0.11 0.14 1.27	-0.04	1.31	0.001084842910848428	211G11	

Table 6c. National Geodetic Survey Line 73988G: File 73988G.prn(=.dat)--Continued

15612	73988/G	73	74191510281320	7	1	1.02	211G11	F
-2.47460		MT	0.47 -0.07 -0.04 -0.37	0.04	-0.43	0.001084842910848430		
18212	73988/G	74	73191510291330	7	1	1.03	211G11	B
2.47630		MT	-0.47 -0.15 0.04 0.38	-0.03	0.41	0.001084843010848429		
15712	73988/G	74	75191510281335	7	1	1.02	211G11	F
-7.42360		MT	0.47 -0.02 -0.12 -1.14	0.04	-1.26	0.001084843010306163		
18112	73988/G	75	74191510291315	7	1	1.02	211G11	B
7.42070		MT	-0.47 -0.20 0.12 1.19	-0.03	1.32	0.001030616310848430		
18512	73988/G	75	76191510291415	7	1	1.15	211G11	F
-8.60970		MT	0.50 0.06 -0.14 -1.21	0.04	-1.41	0.001030616310848431		
15812	73988/G	75	76191510281355	7	1	1.15	211G11	F
-8.60910		MT	0.50 -0.01 -0.14 -1.33	0.04	-1.79	0.001030616310848431		
18612	73988/G	76	75191510291435	7	1	1.15	211G11	B
8.61100		MT	-0.50 -0.30 0.14 1.19	-0.04	1.22	0.001084843110306163		
18012	73988/G	76	75191510291300	7	1	1.15	211G11	B
8.60390		MT	-0.50 0.01 0.14 1.38	-0.03	2.02	0.001084843110306163		
15912	73988/G	76	77191510281415	7	1	1.15	211G11	F
-3.65790		MT	0.50 0.02 -0.06 -0.56	0.04	-0.56	0.001084843110848432		
18312	73988/G	77	76191510291340	7	1	1.15	211G11	B
3.65570		MT	-0.50 -0.01 0.06 0.60	-0.04	0.74	0.001084843210848431		
16012	73988/G	77	78191510281435	5	1	0.73	211G11	F
-5.68800		MT	0.31 0.01 -0.09 -0.85	0.03	-0.63	0.001084843210293836		
17912	73988/G	78	77191510291140	5	1	0.72	211G11	B
5.68690		MT	-0.31 -0.07 0.09 0.81	-0.01	1.10	0.001029383610848432		
16112	73988/G	78	79191510281445	7	1	1.15	211G11	F
-9.44030		MT	0.50 0.02 -0.16 -1.43	0.04	-1.22	0.001029383610848433		
17812	73988/G	79	78191510291125	7	1	1.15	211G11	B
9.43760		MT	-0.50 0.26 0.16 1.28	-0.02	2.43	0.001084843310293836		
16212	73988/G	79	80191510281505	6	1	1.02	211G11	F
-6.91750		MT	0.44 0.00 -0.11 -1.02	0.04	-0.73	0.001084843310848434		
17712	73988/G	80	79191510291110	6	1	1.02	211G11	B
6.91530		MT	-0.44 0.06 0.11 0.89	-0.01	1.87	0.001084843410848433		
16312	73988/G	80	81191510281520	7	1	1.15	211G11	F
-13.01640		MT	0.49 0.02 -0.22 -1.85	0.04	-1.06	0.001084843410279324		
17612	73988/G	81	80191510291050	7	1	1.15	211G11	B
13.01200		MT	-0.49 0.27 0.22 1.69	-0.01	3.49	0.001027932410848434		
16412	73988/G	81	82191510281535	7	1	1.22	211G11	F
-10.34570		MT	0.35 0.03 -0.17 -1.47	0.03	-0.57	0.001027932410848435		
17512	73988/G	82	81191510291035	8	1	1.22	211G11	B
10.34560		MT	-0.35 0.03 0.17 1.32	0.00	2.14	0.001084843510279324		
16512	73988/G	82	83191510281555	6	1	1.09	211G11	F
-6.27510		MT	0.31 0.00 -0.10 -0.84	0.02	-0.12	0.001084843510848436		
17412	73988/G	83	82191510291015	7	1	1.09	211G11	B
6.27230		MT	-0.31 -0.17 0.10 0.90	0.00	1.19	0.001084843610848435		
16612	73988/G	83	84191510281610	5	1	0.89	211G11	RF
-4.76330		MT	0.25 -0.06 -0.08 -0.58	0.02	0.04	0.001084843610848437		
18712	73988/G	83	84191510291510	5	1	0.89	211G11	F
-4.75510		MT	0.25 -0.12 -0.08 -0.57	0.02	-0.51	0.001084843610848437		
17312	73988/G	84	83191510291000	6	1	0.89	211G11	B
4.75340		MT	-0.25 0.08 0.08 0.64	0.00	0.79	0.001084843710848436		
18812	73988/G	84	83191510291525	5	1	0.89	211G11	B
4.75600		MT	-0.25 -0.08 0.08 0.61	-0.02	0.36	0.001084843710848436		
19012	73988/G	84	85191510291545	2	1	0.29	211G11	F
-3.17630		MT	0.08 -0.23 -0.05 -0.42	0.01	-0.08	0.001084843710848438		
17212	73988/G	85	8419151029 955	2	1	0.30	211G11	B
3.17700		MT	-0.08 -0.18 0.05 0.41	0.00	0.58	0.001084843810848437		
18912	73988/G	85	86191510291545	6	1	1.05	211G11	F
-4.79440		MT	0.29 0.14 -0.08 -0.58	0.03	-0.16	0.001084843810848439		
17112	73988/G	86	8519151029 930	7	1	1.05	211G11	B
4.79140		MT	-0.29 -0.18 0.08 0.66	0.01	0.57	0.001084843910848438		
19112	73988/G	86	87191510291610	6	1	1.09	211G11	F
-3.86030		MT	0.30 0.12 -0.06 -0.46	0.03	0.04	0.001084843910362254		
17012	73988/G	87	8619151029 835	9	1	1.10	211G11	B
3.85610		MT	-0.30 -0.01 0.06 0.46	0.01	0.16	0.001036225410848439		
19212	73988/G	87	88191510291630	9	1	0.80	211G11	F
-2.35820		MT	-0.21 -0.10 -0.04 -0.24	-0.02	0.04	0.001036225410264260		
19312	73988/G	88	8719151030 740	6	1	0.81	211G11	B
2.35760		MT	0.21 -0.09 0.04 0.18	0.03	0.01	0.001026426010362254		
19412	73988/G	88	8919151030 815	3	1	0.34	211G11	F
0.45700		MT	-0.18 0.33 0.01 0.04	-0.01	0.01	0.001026426010265994		
16912	73988/G	89	8819151029 800	4	1	0.35	211G11	B
-0.45560		MT	0.18 -0.24 -0.01 -0.04	0.00	0.00	0.001026599410264260		
19512	73988/G	89	9019151030 830	3	1	0.36	211G11	F
-1.08830		MT	-0.11 0.08 -0.02 -0.11	-0.01	-0.04	0.001026599410267749		
16812	73988/G	90	8919151029 750	3	1	0.33	211G11	B
1.08800		MT	0.11 -0.03 0.02 0.08	0.01	0.01	0.001026774910265994		
19612	73988/G	90	9119151030 835	4	1	0.46	211G11	F
3.81300		MT	0.09 0.07 0.06 0.43	0.02	0.14	0.001026774910266006		

Table 6c. National Geodetic Survey Line 73988G: File 73988G.prn(=.dat)--Continued

16712	73988/G	91	9019151029	735	4	1	0.49	211G11	B
-3.81200		MT	-0.09	0.00	-0.06	-0.24	-0.02	0.00	0.001026600610267749

Table 7a. National Geodetic Survey Line L24888: File L24888.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
9946	10297286	C 410		0.00	38 03 22	117 12 57	1895.62490	1895.62490	0.00	0.00
9945	10299012	B 410		0.71	38 03 38	117 13 10	1876.37913	1876.37249	-0.11	0.00
9944	10302637	A 410		1.25	38 03 50	117 13 21	1865.08145	1865.07020	-0.20	0.00
601	10304317	H 128		2.17	38 04 05	117 13 48	1837.86958	1837.84746	-0.27	0.00
602	10305998	C 349		2.96	38 04 19	117 14 10	1815.17256	1815.13843	-0.05	0.00
603	10309375	S 429		4.20	38 04 39	117 14 52	1781.60803	1781.56662	-0.14	0.00
604	10311108	TONOPAH RM 3		5.34	38 04 49	117 15 36	1758.07209	1758.02921	-0.24	0.00
605	10312796	P 348		6.39	38 04 50	117 16 10	1727.78870	1727.73918	-1.12	0.00
606	10316191	T 429		8.22	38 05 12	117 17 14	1689.54318	1689.48957	-1.92	0.00
607	10319510	U 429		10.27	38 05 38	117 18 28	1644.51813	1644.45922	-3.73	0.00
608	10324471	V 429		12.41	38 06 02	117 19 50	1602.13392	1602.07205	-5.37	0.00
609	10327901	W 429		14.42	38 06 27	117 21 06	1563.12056	1563.05419	-5.83	0.00
610	10332636	X 429		16.53	38 06 52	117 22 26	1532.65769	1532.58725	-7.60	0.00
611	10335930	Y 429		18.57	38 07 16	117 23 43	1514.26961	1514.19641	-7.60	0.00
612	10340672	Z 429		20.86	38 07 43	117 25 07	1495.75214	1495.66718	-7.70	0.00
613	10345472	A 433		23.13	38 08 10	117 26 32	1475.39072	1475.28937	-7.90	0.00
614	10347324	A 432		24.35	38 08 28	117 27 12	1468.23602	1468.13310	-8.27	0.00
615	10347317	G 349		24.62	38 08 27	117 27 23	1468.05028	1467.94793	-8.28	0.00
616	10348946	1 NVDH		25.11	38 08 33	117 27 41	1466.55132	1466.45081	-8.26	0.00
617	10348945	2 NVDH		25.88	38 08 33	117 28 12	1465.14528	1465.04750	-8.36	0.00
618	10347316	MILLERS AZ MK		26.71	38 08 29	117 28 43	1463.90295	1463.80785	-8.38	0.00
619	10347314	91 NVDH		27.34	38 08 26	117 29 06	1462.09737	1462.00398	-8.43	0.00
620	10347313	4 NVDH		27.60	38 08 25	117 29 16	1461.92594	1461.83321	-8.42	0.00
621	10347312	7 K NVDH		28.14	38 08 21	117 29 37	1461.54053	1461.44900	-8.42	0.00
622	10347309	MILLERS		28.24	38 08 21	117 29 44	1461.86359	1461.77253	-8.43	0.00
623	10345470	5 NVDH		29.18	38 08 14	117 30 23	1460.09947	1460.01015	-8.40	0.00
624	10345469	6 NVDH		29.77	38 08 11	117 30 47	1459.31463	1459.22590	-8.35	0.00
625	10343993	93 NVDH		30.09	38 08 09	117 31 00	1458.88914	1458.80064	-8.32	0.00
626	10343992	7 NVDH		30.58	38 08 06	117 31 20	1458.31650	1458.22833	-8.24	0.00
627	10343991	H 349		30.86	38 08 05	117 31 31	1457.48416	1457.39591	-8.21	0.00
628	10343990	8 NVDH		31.13	38 08 04	117 31 41	1457.53311	1457.44483	-8.21	0.00
629	10343989	18 NVDH		31.40	38 08 02	117 31 52	1457.09095	1457.00252	-8.21	0.00
630	10342326	9 NVDH		32.02	38 07 58	117 32 17	1456.09694	1456.00717	-8.24	0.00
631	10340667	J 349		33.31	38 07 48	117 33 07	1455.05409	1454.96216	-8.22	0.00
632	10340666	K 349		35.00	38 07 41	117 34 14	1454.36842	1454.27157	-8.22	0.00
633	10337453	Z 349		36.44	38 07 21	117 35 07	1456.32739	1456.22394	-8.20	0.00
634	10334314	L 349		37.23	38 07 04	117 35 32	1458.15052	1458.03987	-8.21	0.00
635	10327902	B 433		39.01	38 06 20	117 36 18	1456.65095	1456.53657	-8.19	0.00
636	10321079	N 349		40.51	38 05 42	117 36 55	1456.24725	1456.13188	-8.19	0.00
637	10314503	P 349		42.07	38 05 02	117 37 32	1463.70381	1463.59028	-7.88	0.00

Table 7a-1

Table 7a. National Geodetic Survey Line L24888: File L24888.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
638	10307595	MCLEANS RM 2		43.32	38 04 29	117 37 58	1468.91534	1468.80567	-7.93	0.00
639	10304319	MCLEANS AZ MK		44.62	38 04 00	117 38 33	1454.80869	1454.70035	-7.99	0.00
640	10297285	Q 349		46.16	38 03 20	117 39 11	1468.48569	1468.39440	-7.69	0.00
641	10288736	R 349		47.78	38 02 38	117 39 51	1469.12895	1469.05121	-7.70	0.00
642	10285569	S 349		49.36	38 02 14	117 40 48	1479.01954	1478.95048	-7.44	0.00
643	10283965	T 349		50.95	38 02 01	117 41 50	1499.53662	1499.47232	-7.16	0.00
644	10280755	U 349		52.59	38 01 47	117 42 54	1505.41326	1505.34843	-7.25	0.00
645	10279077	V 349		54.01	38 01 36	117 43 50	1505.12736	1505.06137	-7.32	0.00
646	10277404	X 349		55.68	38 01 24	117 44 56	1500.56342	1500.49735	-7.60	0.00
647	10275833	Y 349		57.33	38 01 12	117 46 01	1491.20103	1491.13259	-8.65	0.00
648	10274251	BLAIR AZ MK		58.13	38 01 08	117 46 32	1489.14936	1489.07958	-8.75	0.00
649	10274254	B 432		58.32	38 01 03	117 46 30	1485.72695	1485.65731	-8.82	0.00
650	10269215	M 14		59.42	38 00 30	117 46 21	1467.71049	1467.64208	-9.69	0.00
651	10269213	L 14		59.97	38 00 33	117 46 41	1468.49592	1468.42613	-9.63	0.00
687	10358650	A 181		61.06	37 59 38	117 46 10	1454.05626	1453.98899	-9.39	0.00
652	10274250	A 350		59.74	38 01 05	117 47 38	1490.65800	1490.58099	-8.77	0.00
653	10272587	B 350		61.32	38 00 58	117 48 41	1489.56163	1489.47666	-8.79	0.00
654	10272586	C 350		62.17	38 00 58	117 49 16	1495.43669	1495.34748	-8.46	0.00
655	10274249	K 14		63.26	38 01 06	117 49 57	1496.56830	1496.47413	-8.37	0.00
656	10275832	D 350		64.93	38 01 11	117 51 03	1472.48556	1472.38396	-9.45	0.00
657	10277403	E 350		66.67	38 01 26	117 52 12	1441.51149	1441.40630	-10.84	0.00
659	10282379	COALDALE		68.29	38 01 51	117 53 09	1412.78695	1412.67908	-13.01	0.00
658	10282381	J 14		68.50	38 01 52	117 53 01	1415.97331	1415.86512	-12.67	0.00
660	10285572	C 432		69.00	38 02 10	117 53 22	1402.93667	1402.82961	-13.82	0.00
661	10288735	COALDALE AZ MK		69.73	38 02 32	117 53 33	1397.91412	1397.80816	-14.22	0.00
662	10288734	F 350		69.95	38 02 33	117 53 40	1393.58377	1393.47800	-14.47	0.00
663	10295385	H 350		71.37	38 03 15	117 54 01	1385.71452	1385.60789	-15.11	0.00
664	10304322	C 433		72.98	38 04 02	117 54 28	1380.63491	1380.53609	-15.42	0.00
665	10312798	K 350		74.57	38 04 50	117 54 47	1380.68060	1380.58491	-15.40	0.00
666	10319506	L 350		76.13	38 05 37	117 55 09	1383.87821	1383.78325	-15.16	0.00
667	10327897	M 350		77.71	38 06 25	117 55 32	1381.52959	1381.42837	-15.29	0.00
668	10335925	N 350		79.24	38 07 12	117 55 55	1379.90815	1379.80066	-15.41	0.00
669	10342325	P 350		80.78	38 07 59	117 56 16	1383.55837	1383.44093	-15.29	0.00
670	10350491	D 433		82.28	38 08 45	117 56 36	1393.64656	1393.52484	-14.78	0.00
671	10350484	ROCKHILL		82.37	38 08 47	117 56 38	1393.70923	1393.58737	-14.78	0.00
672	10358661	ROCKHILL AZ MK		83.93	38 09 33	117 57 02	1427.69104	1427.57078	-13.11	0.00
673	10265797	Q 350 RESET 1972		85.35	38 10 16	117 57 22	1441.55750	1441.43574	-12.30	0.00
674	10272585	R 350 RESET 1972		86.88	38 10 50	117 58 03	1489.57395	1489.46051	-10.77	0.00
675	10275835	E 433		88.24	38 11 16	117 58 47	1539.70336	1539.60452	-9.50	0.00
676	10282377	T 350 RESET 1972		89.84	38 11 54	117 59 25	1510.41911	1510.32167	-10.67	0.00
677	10288733	U 350 RESET 1972		91.36	38 12 33	117 59 55	1522.97487	1522.88271	-10.04	0.00

Table 7a-2

Table 7a. National Geodetic Survey Line L24888: File L24888.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
678	10292352	REDLICK AZ MK 1952 1972		92.07	38 12 50	118 00 12	1515.33314	1515.23889	-10.52	0.00
679	10295638	V 350 RESET 1972		93.17	38 13 18	118 00 31	1488.59760	1488.49863	-11.52	0.00
680	10302883	F 433		94.89	38 13 56	118 01 16	1456.99375	1456.89128	-14.28	0.00
681	10307870	X 350 RESET 1972		96.68	38 14 25	118 02 16	1420.67390	1420.56872	-17.22	0.00
682	10311335	F 359		98.27	38 14 42	118 03 16	1405.49719	1405.39291	-18.02	0.00
683	10314708	G 359 RESET 1972		99.87	38 15 03	118 04 13	1363.16173	1363.05210	-19.73	0.00
684	10316392	H 359 RESET 1982		100.91	38 15 18	118 04 51	1347.39255	1347.28051	-19.40	0.00
685	10321335	U 12		102.56	38 15 45	118 05 42	1343.82369	1343.71043	-19.39	0.00
9953	10326461	G 433		103.66	38 16 13	118 05 49	1337.10527	1336.99284	-19.29	0.00
9954	10331311	H 433		104.66	38 16 44	118 05 53	1334.48462	1334.37091	-19.49	0.00
686	10331300	P 359		104.90	38 16 45	118 06 02	1335.67027	1335.55567	-19.43	0.00
9955	10336120	J 433		105.94	38 17 16	118 06 06	1336.31003	1336.19064	-19.41	0.00

Table 7b. National Geodetic Survey Line L24888: File L24888.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
9946										1895.62490	0.00	0.00
9946	9945	-19.24600	-0.01	-0.79	1.07	-0.04	-0.11	0.00	-19.24577	1876.37913	-6.64	-0.11
9945	9944	-11.29787	-0.01	-0.38	0.62	-0.04	-0.09	0.00	-11.29768	1865.08145	-11.25	-0.20
9944	601	-27.21201	0.00	-0.91	1.08	-0.03	-0.07	0.00	-27.21188	1837.86957	-22.12	-0.27
601	602	-22.69742	0.00	-0.70	1.12	-0.02	0.22	0.00	-22.69702	1815.17255	-34.13	-0.05
602	603	-33.56497	0.00	-1.12	1.57	-0.01	-0.09	0.00	-33.56453	1781.60802	-41.41	-0.14
603	604	-23.53620	0.00	-0.82	1.05	0.03	-0.10	0.00	-23.53594	1758.07208	-42.88	-0.24
604	605	-30.28377	0.00	-1.13	1.48	0.03	-0.88	0.00	-30.28339	1727.78869	-49.52	-1.12
605	606	-38.24605	0.01	-1.33	1.87	-0.02	-0.80	0.00	-38.24552	1689.54317	-53.61	-1.92
606	607	-45.02530	0.00	-1.82	2.16	-0.09	-1.81	0.00	-45.02505	1644.51812	-58.91	-3.73
607	608	-42.38452	0.00	-1.57	2.03	-0.15	-1.64	0.00	-42.38421	1602.13392	-61.87	-5.37
608	609	-39.01395	0.00	-1.43	2.12	-0.10	-0.46	0.00	-39.01336	1563.12055	-66.37	-5.83
609	610	-30.46350	0.00	-1.09	1.76	-0.04	-1.77	0.00	-30.46287	1532.65768	-70.44	-7.60
610	611	-18.38800	-0.01	-0.99	0.93	-0.01	0.00	0.00	-18.38808	1514.26960	-73.20	-7.60
611	612	-18.51727	0.00	-0.95	0.87	-0.12	-0.10	0.00	-18.51747	1495.75213	-84.96	-7.70
612	613	-20.36095	0.00	-1.14	0.83	-0.16	-0.20	0.00	-20.36142	1475.39071	*****	-7.90
613	614	-7.15447	0.01	-0.45	0.28	-0.07	-0.37	0.00	-7.15470	1468.23601	*****	-8.27
614	615	-0.18580	0.00	0.05	0.01	0.00	-0.01	0.00	-0.18574	1468.05027	*****	-8.28
615	616	-1.49892	0.00	-0.08	0.06	-0.02	0.02	0.00	-1.49896	1466.55131	*****	-8.26
616	617	-1.40612	0.00	0.02	0.05	0.01	-0.10	0.00	-1.40604	1465.14527	-97.78	-8.36
617	618	-1.24235	0.00	0.00	0.05	-0.03	-0.02	0.00	-1.24233	1463.90294	-95.10	-8.38
618	619	-1.80557	0.00	-0.08	0.09	-0.02	-0.05	0.00	-1.80558	1462.09736	-93.39	-8.43
619	620	-0.17138	0.00	-0.05	0.01	-0.01	0.01	0.00	-0.17143	1461.92593	-92.73	-8.42
620	621	-0.38540	0.00	-0.02	0.02	-0.01	0.00	0.00	-0.38541	1461.54052	-91.53	-8.42
621	622	0.32312	0.00	-0.04	-0.02	0.00	-0.01	0.00	0.32306	1461.86358	-91.06	-8.43
622	623	-1.76412	0.00	-0.09	0.09	0.00	0.03	0.00	-1.76412	1460.09946	-89.32	-8.40
623	624	-0.78477	0.00	-0.11	0.04	0.00	0.05	0.00	-0.78484	1459.31462	-88.73	-8.35
624	625	-0.42542	0.00	-0.09	0.02	0.00	0.03	0.00	-0.42549	1458.88913	-88.50	-8.32
625	626	-0.57260	0.00	-0.08	0.03	0.01	0.08	0.00	-0.57264	1458.31649	-88.17	-8.24
626	627	-0.83230	0.00	-0.09	0.05	0.00	0.03	0.00	-0.83234	1457.48415	-88.25	-8.21
627	628	0.04900	0.00	-0.05	0.00	0.00	0.00	0.00	0.04895	1457.53310	-88.28	-8.21
628	629	-0.44210	0.00	-0.10	0.03	0.01	0.00	0.00	-0.44216	1457.09094	-88.43	-8.21
629	630	-0.99402	-0.01	-0.06	0.06	0.02	-0.03	0.00	-0.99401	1456.09693	-89.77	-8.24
630	631	-1.04287	0.00	-0.06	0.05	0.03	0.02	0.00	-1.04285	1455.05408	-91.93	-8.22
631	632	-0.68573	0.00	0.00	0.03	0.03	0.00	0.00	-0.68567	1454.36841	-96.85	-8.22
632	633	1.95887	0.01	0.14	-0.08	0.03	0.02	0.00	1.95897	1456.32738	*****	-8.20
633	634	1.82305	0.01	0.12	-0.07	0.02	-0.01	0.00	1.82313	1458.15051	*****	-8.21
634	635	-1.49957	-0.01	-0.07	0.05	0.03	0.02	0.00	-1.49957	1456.65094	*****	-8.19
635	636	-0.40362	0.00	-0.11	0.01	0.02	0.00	0.00	-0.40370	1456.24724	*****	-8.19
636	637	7.45645	0.00	0.33	-0.21	-0.01	0.31	0.00	7.45656	1463.70380	*****	-7.88
637	638	5.21135	0.01	0.32	-0.14	-0.01	-0.05	0.00	5.21153	1468.91533	*****	-7.93
638	639	-14.10645	0.01	-0.54	0.35	-0.02	-0.06	0.00	-14.10665	1454.80868	*****	-7.99
639	640	13.67672	0.01	0.62	-0.33	-0.02	0.30	0.00	13.67700	1468.48568	-91.29	-7.69
640	641	0.64315	0.00	0.08	-0.02	0.05	-0.01	0.00	0.64326	1469.12894	-77.74	-7.70
641	642	9.89052	0.01	0.37	-0.35	0.04	0.26	0.00	9.89059	1479.01953	-69.06	-7.44
642	643	20.51725	0.00	0.61	-0.81	0.03	0.28	0.00	20.51708	1499.53661	-64.30	-7.16

Table 7b-1

Table 7b. National Geodetic Survey Line L24888: File L24888.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
643	644	5.87662	0.01	0.23	-0.25	0.03	-0.09	0.00	5.87664	1505.41325	-64.83	-7.25
644	645	-0.28585	0.00	-0.03	0.01	-0.03	-0.07	0.00	-0.28590	1505.12735	-65.99	-7.32
645	646	-4.56387	0.02	-0.18	0.12	-0.03	-0.28	0.00	-4.56394	1500.56341	-66.07	-7.60
646	647	-9.36215	0.03	-0.51	0.25	-0.01	-1.05	0.00	-9.36239	1491.20102	-68.44	-8.65
647	648	-2.05175	0.01	-0.01	0.07	0.01	-0.10	0.00	-2.05167	1489.14935	-69.78	-8.75
648	649	-3.42240	0.00	-0.10	0.10	0.00	-0.07	0.00	-3.42240	1485.72695	-69.64	-8.82
649	650	-18.01639	0.02	-0.59	0.47	0.03	-0.87	0.00	-18.01647	1467.71048	-68.41	-9.69
650	687	-13.65444	0.00	-0.52	0.63	0.10	-0.05	0.00	-13.65423	1454.05626	-67.27	-9.39
650	651	0.78545	0.00	0.01	-0.02	0.00	0.06	0.00	0.78543	1468.49591	-69.79	-9.63
648	652	1.50857	0.00	0.13	-0.06	0.00	-0.02	0.00	1.50864	1490.65799	-77.01	-8.77
652	653	-1.09627	0.01	-0.17	0.04	0.02	-0.02	0.00	-1.09637	1489.56162	-84.97	-8.79
653	654	5.87495	0.00	0.28	-0.18	0.01	0.33	0.00	5.87506	1495.43668	-89.21	-8.46
654	655	1.13170	0.00	0.00	-0.04	-0.05	0.09	0.00	1.13161	1496.56829	-94.17	-8.37
655	656	-24.08255	0.00	-1.06	0.94	-0.07	-1.08	0.00	-24.08274	1472.48555	*****	-9.45
656	657	-30.97390	0.00	-1.00	0.92	-0.09	-1.39	0.00	-30.97407	1441.51148	*****	-10.84
657	659	-28.72437	0.00	-0.84	0.76	-0.09	-2.17	0.00	-28.72454	1412.78694	*****	-13.01
659	658	3.18628	0.00	0.16	-0.08	0.00	0.34	0.00	3.18636	1415.97330	*****	-12.67
659	660	-9.84997	0.00	-0.45	0.17	-0.03	-0.81	0.00	-9.85028	1402.93666	*****	-13.82
660	661	-5.02248	0.00	-0.12	0.09	-0.04	-0.40	0.00	-5.02255	1397.91411	*****	-14.22
661	662	-4.33035	0.00	-0.07	0.07	0.00	-0.25	0.00	-4.33035	1393.58376	*****	-14.47
662	663	-7.86905	0.00	-0.26	0.12	-0.06	-0.64	0.00	-7.86925	1385.71451	*****	-15.11
663	664	-5.07947	0.01	-0.19	0.08	-0.04	-0.31	0.00	-5.07961	1380.63490	-98.82	-15.42
664	665	0.04567	0.01	0.04	0.00	-0.03	0.02	0.00	0.04569	1380.68059	-95.69	-15.40
665	666	3.19765	0.00	0.13	-0.09	-0.08	0.24	0.00	3.19761	1383.87820	-94.96	-15.16
666	667	-2.34847	0.00	-0.16	0.07	-0.06	-0.13	0.00	-2.34862	1381.52958	*****	-15.29
667	668	-1.62136	0.00	-0.06	0.05	-0.07	-0.12	0.00	-1.62144	1379.90814	*****	-15.41
668	669	3.65027	0.01	0.09	-0.08	-0.07	0.12	0.00	3.65022	1383.55836	*****	-15.29
669	670	10.08805	0.01	0.43	-0.21	-0.09	0.51	0.00	10.08819	1393.64655	*****	-14.78
670	671	0.06270	0.00	-0.03	0.00	0.00	0.00	0.00	0.06267	1393.70922	*****	-14.78
671	672	33.98142	0.01	1.29	-0.80	-0.11	1.67	0.00	33.98181	1427.69103	*****	-13.11
672	673	13.86650	0.00	0.31	-0.32	-0.03	0.81	0.00	13.86646	1441.55749	*****	-12.30
673	674	48.01620	-0.01	1.30	-0.98	-0.05	1.53	0.00	48.01646	1489.57395	*****	-10.77
674	675	50.12922	-0.01	1.19	-0.94	-0.06	1.27	0.00	50.12940	1539.70335	-98.84	-9.50
675	676	-29.28422	0.00	-0.78	0.79	-0.04	-1.17	0.00	-29.28425	1510.41910	-97.44	-10.67
676	677	12.55572	0.00	0.41	-0.33	-0.04	0.63	0.00	12.55576	1522.97486	-92.16	-10.04
677	678	-7.64177	0.00	-0.13	0.19	-0.02	-0.48	0.00	-7.64173	1515.33313	-94.25	-10.52
678	679	-26.73527	0.02	-0.70	0.45	-0.04	-1.00	0.00	-26.73554	1488.59759	-98.97	-11.52
679	680	-31.60355	-0.01	-0.74	0.53	-0.08	-2.76	0.00	-31.60385	1456.99374	*****	-14.28
680	681	-36.31957	0.00	-0.77	0.57	-0.08	-2.94	0.00	-36.31985	1420.67389	*****	-17.22
681	682	-15.17687	0.00	-0.07	0.29	-0.06	-0.80	0.00	-15.17671	1405.49718	*****	-18.02
682	683	-42.33515	0.01	-1.14	0.88	-0.05	-1.71	0.00	-42.33545	1363.16173	*****	-19.73
683	684	-15.76915	-0.01	-0.40	0.41	-0.03	0.33	0.00	-15.76918	1347.39255	*****	-19.40
684	685	-3.56872	-0.01	-0.20	0.10	-0.03	0.01	0.00	-3.56886	1343.82369	*****	-19.39
685	9953	-6.71837	-0.01	-0.26	0.23	-0.02	0.10	0.00	-6.71843	1337.10526	*****	-19.29
9953	9954	-2.62067	0.00	0.03	0.04	-0.05	-0.20	0.00	-2.62065	1334.48461	*****	-19.49
9954	686	1.18560	0.01	0.07	-0.02	-0.01	0.06	0.00	1.18565	1335.67026	*****	-19.43

Table 7b-2

Table 7b. National Geodetic Survey Line L24888: File L24888.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
686	9955	0.63977	0.00	0.04	-0.01	-0.04	0.02	0.00	0.63976	1336.31002	*****	-19.41

Table 7c. National Geodetic Survey Line L24888: File L24888.prn(=.dat)

112	L24888	9946994519850206 9451023U 14 1 0.71	233456579	F
-19.24600		MT -0.75 -0.01 -0.79 1.07 -0.04 -0.11 0.001029728610299012		
212	L24888	994599441985020610241058U 8 1 0.54	233456579	F
-11.29787		MT -0.56 -0.01 -0.38 0.62 -0.04 -0.09 0.001029901210302637		
312	L24888	9944 6011985020611001200U 18 1 0.94	233456579	F
-27.21130		MT -0.69 0.00 -0.83 1.42 -0.06 -0.09 0.001030263710304317		
412	L24888	601 6021985020613251410U 14 1 0.79	233456579	F
-22.69742		MT -0.64 0.00 -0.70 1.12 -0.02 0.22 0.001030431710305998		
512	L24888	602 6031985020614121455U 20 1 1.23	233456579	F
-33.56497		MT -0.89 0.00 -1.12 1.57 -0.01 -0.09 0.001030599810309375		
612	L24888	603 6041985020615001550U 17 1 1.14	233456579	F
-23.53620		MT -0.44 0.00 -0.82 1.05 0.03 -0.10 0.001030937510311108		
912	L24888	608 6071985020710281125U 23 1 2.14	233456579	B
42.38452		MT 0.97 0.00 1.57 -2.03 0.15 1.64 0.001032447110319510		
812	L24888	609 60819850207 9051005U 22 1 2.01	233456579	B
39.01395		MT 0.98 0.00 1.43 -2.12 0.10 0.46 0.001032790110324471		
712	L24888	610 60919850207 8030855U 20 1 2.11	233456579	B
30.46350		MT 0.96 0.00 1.09 -1.76 0.04 1.77 0.001033263610327901		
1212	L24888	605 6041985020715111600U 18 1 1.05	233456579	B
30.28377		MT 0.04 0.00 1.13 -1.48 -0.03 0.88 0.001031279610311108		
1112	L24888	606 6051985020713581510U 29 1 1.83	233456579	B
38.24605		MT 0.94 -0.01 1.33 -1.87 0.02 0.80 0.001031619110312796		
1012	L24888	607 6061985020712521345U 29 1 2.05	233456579	B
45.02530		MT 1.08 0.00 1.82 -2.16 0.09 1.81 0.001031951010316191		
1312	L24888	610 61119850208 8000902U 29 1 2.04	233456579	F
-18.38800		MT -0.91 -0.01 -0.99 0.93 -0.01 0.00 0.001033263610335930		
1412	L24888	611 61219850208 9451050U 33 1 2.29	233456579	F
-18.51727		MT -1.01 0.00 -0.95 0.87 -0.12 -0.10 0.001033593010340672		
1512	L24888	612 6131985020811111205U 25 1 2.27	233456579	F
-20.36095		MT -1.00 0.00 -1.14 0.83 -0.16 -0.20 0.001034067210345472		
1712	L24888	615 6161985020813571423U 5 1 0.49	233456579	F
-1.49892		MT -0.22 0.00 -0.08 0.06 -0.02 0.02 0.001034731710348946		
1612	L24888	614 6151985020813381355U 3 1 0.27	233456579	F
-0.18580		MT 0.04 0.00 0.05 0.01 0.00 -0.01 0.001034732410347317		
1812	L24888	616 6171985020814251458U 9 1 0.77	233456579	F
-1.40612		MT 0.00 0.00 0.02 0.05 0.01 -0.10 0.001034894610348945		
1912	L24888	630 62919850211 8040827U 6 1 0.62	233456579	B
0.99402		MT -0.14 0.01 0.06 -0.06 -0.02 0.03 0.001034232610343989		
2012	L24888	629 62819850211 8290837U 3 1 0.27	233456579	B
0.44210		MT -0.07 0.00 0.10 -0.03 -0.01 0.00 0.001034398910343990		
2112	L24888	628 62719850211 8380848U 3 1 0.27	233456579	B
-0.04900		MT -0.04 0.00 0.05 0.00 0.00 0.00 0.001034399010343991		
2212	L24888	627 62619850211 8490857U 3 1 0.28	233456579	B
0.83230		MT -0.04 0.00 0.09 -0.05 0.00 -0.03 0.001034399110343992		
2312	L24888	626 62519850211 9000911U 5 1 0.49	233456579	B
0.57260		MT -0.11 0.00 0.08 -0.03 -0.01 -0.08 0.001034399210343993		
2412	L24888	625 62419850211 9250941U 3 1 0.32	233456579	B
0.42542		MT -0.07 0.00 0.09 -0.02 0.00 -0.03 0.001034399310345469		
2512	L24888	624 62319850211 9421001U 5 1 0.59	233456579	B
0.78477		MT -0.11 0.00 0.11 -0.04 0.00 -0.05 0.001034546910345470		
2612	L24888	623 6221985021110021023U 8 1 0.94	233456579	B
1.76412		MT -0.25 0.00 0.09 -0.09 0.00 -0.03 0.001034547010347309		
2712	L24888	622 6211985021110341040U 1 1 0.10	233456579	B
-0.32312		MT 0.00 0.00 0.04 0.02 0.00 0.01 0.001034730910347312		
2812	L24888	621 6201985021110421058U 5 1 0.54	233456579	B
0.38540		MT -0.15 0.00 0.02 -0.02 0.01 0.00 0.001034731210347313		
2912	L24888	620 6191985021111001114U 3 1 0.26	233456579	B
0.17138		MT -0.04 0.00 0.05 -0.01 0.01 -0.01 0.001034731310347314		
3012	L24888	619 6181985021111161133U 6 1 0.63	233456579	B
1.80557		MT -0.11 0.00 0.08 -0.09 0.02 0.05 0.001034731410347316		
3112	L24888	618 6171985021112431325U 10 1 0.83	216202310	B
1.24235		MT -0.15 0.00 0.00 -0.05 0.03 0.02 0.001034731610348945		
3212	L24888	614 6131985021113301425U 13 1 1.22	216202310	B
7.15447		MT 0.66 -0.01 0.45 -0.28 0.07 0.37 0.001034732410345472		
3812	L24888	635 6361985021210491120U 14 1 1.50	233456579	F
-0.40362		MT 1.38 0.00 -0.11 0.01 0.02 0.00 0.001032790210321079		
3712	L24888	634 6351985021210171047U 16 1 1.78	233456579	F
-1.49957		MT 1.60 -0.01 -0.07 0.05 0.03 0.02 0.001033431410327902		
3612	L24888	633 6341985021210001015U 7 1 0.79	233456579	F
1.82305		MT 0.62 0.01 0.12 -0.07 0.02 -0.01 0.001033745310334314		
3512	L24888	632 63319850212 9160940U 13 1 1.44	233456579	F
1.95887		MT 0.72 0.01 0.14 -0.08 0.03 0.02 0.001034066610337453		
3412	L24888	631 63219850212 8460914U 15 1 1.69	233456579	F
-0.68573		MT 0.25 0.00 0.00 0.03 0.03 0.00 0.001034066710340666		
3312	L24888	630 63119850212 8170844U 12 1 1.29	233456579	F
-1.04287		MT 0.36 0.00 -0.06 0.05 0.03 0.02 0.001034232610340667		
4212	L24888	639 6401985021214401515U 16 1 1.54	233456579	F
13.67672		MT 1.45 0.01 0.62 -0.33 -0.02 0.30 0.001030431910297285		

Table 7c-1

Table 7c. National Geodetic Survey Line L24888: File L24888.prn(=.dat)--Continued

4112	L24888	638 6391985021213431424U	17 1 1.30	233456579	F
-14.10645		MT 1.05 0.01 -0.54 0.35 -0.02 -0.06	0.001030759510304319		
4012	L24888	637 6381985021213021342U	16 1 1.25	233456579	F
5.21135		MT 1.20 0.01 0.32 -0.14 -0.01 -0.05	0.001031450310307595		
3912	L24888	636 6371985021212251300U	16 1 1.56	233456579	F
7.45645		MT 1.45 0.00 0.33 -0.21 -0.01 0.31	0.001032107910314503		
4312	L24888	644 64319850213 8250855U	16 1 1.64	233456579	B
-5.87662		MT -0.52 -0.01 -0.23 0.25 -0.03 0.09	0.001028075510283965		
4412	L24888	643 64219850213 9000930U	16 1 1.59	233456579	B
-20.51725		MT -0.48 0.00 -0.61 0.81 -0.03 -0.28	0.001028396510285569		
4512	L24888	642 64119850213 9451020U	15 1 1.58	233456579	B
-9.89052		MT -0.88 -0.01 -0.37 0.35 -0.04 -0.26	0.001028556910288736		
4612	L24888	641 6401985021310221100U	16 1 1.62	233456579	B
-0.64315		MT -1.53 0.00 -0.08 0.02 -0.05 0.01	0.001028873610297285		
4712	L24888	647 6461985021312101245U	17 1 1.65	233456579	B
9.36215		MT -0.45 -0.03 0.51 -0.25 0.01 1.05	0.001027583310277404		
4812	L24888	646 6451985021312471322U	18 1 1.67	233456579	B
4.56387		MT -0.45 -0.02 0.18 -0.12 0.03 0.28	0.001027740410279077		
4912	L24888	645 6441985021313241401U	15 1 1.42	233456579	B
0.28585		MT -0.41 0.00 0.03 -0.01 0.03 0.07	0.001027907710280755		
5412	L24888	651 6501985021413451415U	7 1 0.56	233456579	B
-0.78520		MT 0.11 0.01 0.00 0.02 0.01 -0.02	0.001026921310269215		
5312	L24888	650 6511985021412151245U	6 1 0.54	233456579	F
0.78570		MT -0.11 0.00 0.02 -0.02 0.00 0.10	0.001026921510269213		
5512	L24888	650 6491985021414171500U	11 1 1.09	233456579	B
18.01587		MT -1.21 -0.02 0.61 -0.39 -0.01 1.43	0.001026921510274254		
5112	L24888	648 6491985021411041118U	3 1 0.22	233456579	F
-3.42225		MT 0.18 -0.02 -0.09 0.11 0.01 -0.02	0.001027425110274254		
5212	L24888	649 6501985021411121210U	12 1 1.10	233456579	F
-18.01690		MT 1.21 0.01 -0.57 0.55 0.04 -0.30	0.001027425410269215		
5612	L24888	649 6481985021415051520U	2 1 0.17	233456579	B
3.42255		MT -0.18 -0.01 0.11 -0.08 0.00 0.12	0.001027425410274251		
5012	L24888	647 6481985021410241100U	9 1 0.80	233456579	F
-2.05175		MT 0.15 0.01 -0.01 0.07 0.01 -0.10	0.001027583310274251		
5712	L24888	650 68719850215 8210858U	17 1 1.65	233456579	F
-13.65490		MT 1.89 0.00 -0.46 0.66 0.09 0.25	0.001026921510358650		
6112	L24888	653 6541985021511011120U	9 1 0.85	233456579	F
5.87495		MT 0.00 0.00 0.28 -0.18 0.01 0.33	0.001027258710272586		
6012	L24888	652 6531985021510251100U	16 1 1.58	233456579	F
-1.09627		MT 0.26 0.01 -0.17 0.04 0.02 -0.02	0.001027425010272587		
5912	L24888	648 65219850215 9511024U	17 1 1.61	233456579	F
1.50857		MT 0.11 0.00 0.13 -0.06 0.00 -0.02	0.001027425110274250		
6212	L24888	60199441985021512301319U	19 1 0.91	233456579	B
27.21272		MT 0.69 -0.01 0.99 -0.73 0.01 0.05	0.001030431710302637		
5812	L24888	687 65019850215 9000933U	16 1 1.64	233456579	B
13.65397		MT -1.89 -0.01 0.58 -0.60 -0.10 0.35	0.001035865010269215		
6412	L24888	655 65419850219 9150940U	11 1 1.09	233456579	B
-1.13170		MT 0.30 0.00 0.00 0.04 0.05 -0.09	0.001027424910272586		
6312	L24888	656 65519850219 8250913U	21 1 1.67	233456579	B
24.08255		MT 0.18 0.00 1.06 -0.94 0.07 1.08	0.001027583210274249		
6512	L24888	656 6571985021910071045U	21 1 1.74	233456579	F
-30.97390		MT -0.54 0.00 -1.00 0.92 -0.09 -1.39	0.001027583210277403		
6612	L24888	657 6591985021910471129U	18 1 1.62	233456579	F
-28.72437		MT -0.92 0.00 -0.84 0.76 -0.09 -2.17	0.001027740310282379		
6712	L24888	659 6581985021911311138U	2 1 0.21	233456579	F
3.18635		MT 0.00 0.00 0.15 -0.08 0.00 0.34	0.001028237910282381		
6812	L24888	658 6591985021911401150U	2 1 0.21	233456579	B
-3.18620		MT 0.00 -0.01 -0.16 0.07 0.00 -0.34	0.001028238110282379		
6912	L24888	659 6601985021913101330U	8 1 0.71	233456579	F
-9.84997		MT -0.63 0.00 -0.45 0.17 -0.03 -0.81	0.001028237910285572		
7012	L24888	660 6611985021913321345U	8 1 0.73	233456579	F
-5.02248		MT -0.77 0.00 -0.12 0.09 -0.04 -0.40	0.001028557210288735		
7212	L24888	662 6631985021913581427U	15 1 1.42	233456579	F
-7.86905		MT -1.45 0.00 -0.26 0.12 -0.06 -0.64	0.001028873410295385		
7112	L24888	661 6621985021913481356U	3 1 0.22	233456579	F
-4.33035		MT -0.03 0.00 -0.07 0.07 0.00 -0.25	0.001028873510288734		
7312	L24888	663 6641985021914401510U	17 1 1.61	233456579	F
-5.07947		MT -1.62 0.01 -0.19 0.08 -0.04 -0.31	0.001029538510304322		
7412	L24888	664 6651985021915121540U	15 1 1.59	233456579	F
0.04567		MT -1.65 0.01 0.04 0.00 -0.03 0.02	0.001030432210312798		
7712	L24888	666 6651985022210101050U	15 1 1.56	233456579	B
-3.19765		MT 1.62 0.00 -0.13 0.09 0.08 -0.24	0.001031950610312798		
7612	L24888	667 66619850222 9220955U	15 1 1.59	233456579	B
2.34847		MT 1.65 0.00 0.16 -0.07 0.06 0.13	0.001032789710319506		
7812	L24888	667 6681985022210561133U	15 1 1.53	233456579	F
-1.62155		MT -1.61 0.00 0.00 0.05 -0.10 -0.16	0.001032789710335925		
7512	L24888	668 66719850222 8500920U	13 1 1.52	233456579	B
1.62117		MT 1.61 0.00 0.12 -0.05 0.04 0.08	0.001033592510327897		

Table 7c. National Geodetic Survey Line L24888: File L24888.prn(=.dat)--Continued

8212	L24888	669 6681985022214481526U	16 1 1.54	233456579	B
-3.65027		MT 1.62 -0.01 -0.09 0.08 0.07 -0.12	0.001034232510335925		
8012	L24888	671 6701985022213511355U	1 1 0.09	233456579	B
-0.06270		MT 0.07 0.00 0.03 0.00 0.00 0.00	0.001035048410350491		
8112	L24888	670 6691985022213561433U	16 1 1.50	233456579	B
-10.08805		MT 1.59 -0.01 -0.43 0.21 0.09 -0.51	0.001035049110342325		
7912	L24888	672 6711985022212551350U	24 1 1.56	233456579	B
-33.98142		MT 1.62 -0.01 -1.29 0.80 0.11 -1.67	0.001035866110350484		
8412	L24888	673 67419850225 9301030U	28 1 1.53	233430028	F
48.01620		MT -1.24 -0.01 1.30 -0.98 -0.05 1.53	0.001026579710272585		
8512	L24888	674 6751985022510481142U	29 1 1.36	233430028	F
50.12922		MT -0.98 -0.01 1.19 -0.94 -0.06 1.27	0.001027258510275835		
8312	L24888	672 67319850225 8520929U	18 1 1.42	233430028	F
13.86650		MT -1.54 0.00 0.31 -0.32 -0.03 0.81	0.001035866110265797		
8612	L24888	995399541985022513351430U	13 1 1.00	233430028	F
-2.62067		MT -1.03 0.00 0.03 0.04 -0.05 -0.20	0.001032646110331311		
8812	L24888	68699551985022515021544U	11 1 1.04	233430028	F
0.63977		MT -1.03 0.00 0.04 -0.01 -0.04 0.02	0.001033130010336120		
8712	L24888	9954 6861985022514321444U	3 1 0.24	233430028	F
1.18560		MT -0.03 0.01 0.07 -0.02 -0.01 0.06	0.001033131110331300		
9312	L24888	682 6811985022611141148U	18 1 1.59	233430028	B
15.17687		MT 0.60 0.00 0.07 -0.29 0.06 0.80	0.001031133510307870		
9212	L24888	683 6821985022610291113U	22 1 1.60	233430028	B
42.33515		MT 0.72 -0.01 1.14 -0.88 0.05 1.71	0.001031470810311335		
9112	L24888	684 6831985022610051027U	11 1 1.04	233430028	B
15.76915		MT 0.51 0.01 0.40 -0.41 0.03 -0.33	0.001031639210314708		
9012	L24888	685 68419850226 9150950U	17 1 1.65	233430028	B
3.56872		MT 0.91 0.01 0.20 -0.10 0.03 -0.01	0.001032133510316392		
8912	L24888	9953 68519850226 8340913U	10 1 1.10	233430028	B
6.71837		MT 0.94 0.01 0.26 -0.23 0.02 -0.10	0.001032646110321335		
9612	L24888	679 6781985022614451520U	17 1 1.10	233430028	B
26.73527		MT 1.05 -0.02 0.70 -0.45 0.04 1.00	0.001029563810292352		
9512	L24888	680 6791985022613531427U	20 1 1.72	233430028	B
31.60355		MT 1.39 0.01 0.74 -0.53 0.08 2.76	0.001030288310295638		
9412	L24888	681 6801985022613171352U	22 1 1.79	233430028	B
36.31957		MT 1.04 0.00 0.77 -0.57 0.08 2.94	0.001030787010302883		
9712	L24888	675 67619850227 8480930U	20 1 1.60	233430028	F
-29.28422		MT -1.44 0.00 -0.78 0.79 -0.04 -1.17	0.001027583510282377		
9812	L24888	676 67719850227 9311005U	17 1 1.52	233430028	F
12.55572		MT -1.47 0.00 0.41 -0.33 -0.04 0.63	0.001028237710288733		
9912	L24888	677 6781985022710241050U	9 1 0.71	233430028	F
-7.64177		MT -0.64 0.00 -0.13 0.19 -0.02 -0.48	0.001028873310292352		

Table 8a. National Geodetic Survey Line L24791: File L24791.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
9941	10303136	Q 408		0.00	36 53 59	116 47 30	1096.88280	1096.88280	0.00	0.00
9942	10306501	R 408		0.77	36 54 11	116 47 07	1084.54450	1084.54346	-0.13	0.00
9943	10306500	S 408		2.14	36 54 10	116 46 17	1042.71916	1042.71451	-0.25	0.00
5301	10308203	N 16 USGS		3.27	36 54 22	116 45 37	1008.27623	1008.26875	-0.70	0.00
5401	10316617	J 409		5.46	36 55 15	116 44 44	1020.79572	1020.79809	-0.63	0.00
5402	10323337	K 409		7.34	36 55 54	116 43 52	1040.72846	1040.74301	0.01	0.00
5403	10331535	L 409		9.39	36 56 48	116 42 56	1054.42122	1054.43937	0.20	0.00
5404	10342741	M 409		11.47	36 57 53	116 43 04	1075.03011	1075.05036	2.01	0.00
5405	10342735	K 16		11.47	36 57 52	116 43 03	1075.44393	1075.46433	2.01	0.00
5406	10342742	HOT SPRING		11.57	36 57 55	116 43 05	1076.44080	1076.46105	2.03	0.00
5407	10350998	N 409		13.23	36 58 48	116 43 23	1094.28801	1094.30605	3.04	0.00
5408	10359215	P 409		14.79	36 59 39	116 43 25	1104.86802	1104.88545	3.44	0.00
5409	10270928	Q 409		16.75	37 00 40	116 43 38	1130.34298	1130.36035	4.10	0.00
5410	10277394	R 409		18.54	37 01 20	116 44 33	1153.11137	1153.13253	4.63	0.00
5411	10280749	S 409		20.09	37 01 46	116 45 21	1173.86974	1173.89159	5.03	0.00
5412	10287155	T 409		21.39	37 02 21	116 45 44	1183.67495	1183.70061	5.37	0.00
5413	10292106	U 409		23.06	37 02 58	116 46 19	1199.80041	1199.83049	5.83	0.00
5414	10297283	7 RBR USGS		23.87	37 03 23	116 46 28	1202.53110	1202.56175	5.94	0.00
5415	10305985	H 16		25.63	37 04 16	116 46 49	1214.75628	1214.79108	6.37	0.00
5416	10314493	X 330 RESET 1962		27.37	37 05 06	116 47 17	1235.94316	1235.97656	8.56	0.00
5417	10322869	W 330 RESET 1962		28.99	37 05 55	116 47 44	1235.34122	1235.37564	8.54	0.00
5418	10327894	V 409		30.02	37 06 24	116 48 02	1234.08366	1234.11921	8.52	0.00
5419	10334305	W 409		31.78	37 07 01	116 48 53	1233.80101	1233.84206	8.52	0.00
5420	10337444	U 330 RESET 1962		32.89	37 07 21	116 49 31	1230.34898	1230.39159	8.39	0.00
5421	10342318	N 412		34.67	37 07 54	116 50 31	1220.67067	1220.71688	8.39	0.00
5422	10347301	S 330		35.77	37 08 28	116 50 12	1222.29413	1222.34303	8.47	0.00
5424	10347305	X 409		36.12	37 08 20	116 51 16	1218.02077	1218.06474	8.28	0.00
5425	10352152	Y 409		38.36	37 08 56	116 52 32	1213.48945	1213.53277	8.18	0.00
5426	10358657	Z 409		40.05	37 09 30	116 53 25	1218.63778	1218.68218	8.15	0.00
5427	10362092	A 412		41.62	37 09 58	116 54 16	1226.23730	1226.28184	8.07	0.00
5428	10269208	B 412		43.47	37 10 33	116 55 16	1231.35600	1231.40044	7.96	0.00
5429	10274246	C 412		45.11	37 11 05	116 56 05	1235.42450	1235.46612	7.96	0.00
5430	10279072	D 412		46.46	37 11 37	116 56 42	1242.71687	1242.75694	8.85	0.00
5431	10285559	E 412		48.29	37 12 19	116 57 28	1261.46552	1261.50827	9.68	0.00
5432	10290362	GAP		49.42	37 12 48	116 57 55	1266.70899	1266.75017	10.17	0.00
5433	10293631	F 412		50.02	37 13 02	116 58 12	1261.37699	1261.41927	9.74	0.00
5434	10300883	G 412		51.66	37 13 40	116 58 50	1242.55483	1242.60107	7.97	0.00
5435	10305987	H 412		53.18	37 14 19	116 59 31	1222.87601	1222.92333	7.08	0.00
5436	10312790	J 412		54.81	37 14 58	117 00 09	1206.95648	1207.00352	6.93	0.00
5437	10321076	K 412		56.55	37 15 40	117 00 53	1210.91588	1210.96335	7.10	0.00

Table 8a-1

Table 8a. National Geodetic Survey Line L24791: File L24791.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
5438	10327895	L 412		58.34	37 16 24	117 01 37	1218.93220	1218.97751	7.74	0.00
5453	10327896	SARCOBATUS		58.46	37 16 27	117 01 36	1219.42652	1219.47158	7.74	0.00
5439	10335918	M 412		60.41	37 17 14	117 02 27	1228.55646	1228.60086	8.21	0.00
5440	10342319	P 412		62.03	37 17 55	117 03 09	1236.85269	1236.89464	8.37	0.00
5441	10348940	Q 412		63.50	37 18 32	117 03 41	1246.30778	1246.34585	8.45	0.00
5442	10356980	R 412		65.59	37 19 22	117 04 37	1255.63882	1255.67205	8.73	0.00
5443	10362093	SARCO		66.84	37 19 53	117 05 05	1268.97778	1269.00959	9.30	0.00
5444	10264074	S 412		67.29	37 20 05	117 05 17	1273.31572	1273.34715	9.64	0.00
5445	10270929	T 412		69.03	37 20 47	117 06 00	1294.85256	1294.88481	13.05	0.00
5446	10277395	U 412		70.61	37 21 25	117 06 40	1319.59696	1319.63101	14.59	0.00
5449	10272578	V 15 USGS		71.79	37 20 56	117 07 07	1324.42636	1324.46211	14.74	0.00
5448	10277389	T 133		72.78	37 21 27	117 07 06	1324.44110	1324.47570	14.77	0.00
5447	10282369	S 133		73.80	37 21 59	117 07 16	1341.26292	1341.29826	16.41	0.00
5450	10288726	V 412		75.36	37 22 39	117 07 55	1373.49915	1373.53653	16.94	0.00
5451	10295379	W 412		76.79	37 23 14	117 08 32	1424.52655	1424.57568	17.25	0.00
5452	10295380	PASS		77.07	37 23 13	117 08 25	1445.27982	1445.33223	17.32	0.00
5454	10305988	X 412		78.66	37 24 12	117 08 53	1418.68428	1418.73681	16.71	0.00
5455	10314499	Y 412		80.52	37 25 06	117 09 20	1412.33052	1412.38290	16.38	0.00
5456	10324458	Z 412		82.26	37 26 01	117 09 35	1403.92802	1403.97851	16.09	0.00
5457	10329484	COLINE		83.53	37 26 38	117 09 52	1404.39296	1404.44239	16.14	0.00
5458	10334306	A 413		84.31	37 27 03	117 10 04	1406.60666	1406.65160	16.19	0.00
5459	10342320	B 413		85.82	37 27 50	117 10 19	1407.43207	1407.47580	16.23	0.00
5460	10348941	C 413		87.32	37 28 34	117 10 38	1409.29243	1409.33645	16.45	0.00
5461	10356981	D 413		88.83	37 29 24	117 10 48	1414.50567	1414.55030	16.69	0.00
5653	10264045	LIDA		90.35	37 30 08	117 11 00	1431.50330	1431.54915	17.01	0.00
5654	10265792	T 410		90.42	37 30 10	117 11 01	1431.90633	1431.95216	17.03	0.00
5655	10275829	J 411		92.39	37 31 14	117 11 22	1460.42068	1460.46746	17.85	0.00
5656	10285560	H 411		94.32	37 32 17	117 11 35	1492.71857	1492.76542	18.85	0.00
5657	10295381	G 411		96.02	37 33 12	117 11 56	1515.84027	1515.89062	20.10	0.00
5658	10305989	F 411		97.90	37 34 12	117 12 04	1544.28995	1544.34626	21.21	0.00
5659	10316183	E 411		99.83	37 35 15	117 12 24	1586.84462	1586.90949	23.90	0.00
5660	10326247	D 411		101.69	37 36 14	117 12 46	1618.70458	1618.76994	26.24	0.00
5661	10335919	C 411		103.51	37 37 10	117 13 06	1647.49282	1647.55745	28.68	0.00
5662	10340661	B 411		104.57	37 37 46	117 13 00	1649.43870	1649.50573	28.97	0.00
5663	10347306	A 411		105.76	37 38 26	117 13 02	1672.03559	1672.10918	30.81	0.00
5664	10356982	Z 410		107.61	37 39 26	117 12 56	1716.91861	1716.99648	33.97	0.00
5665	10267546	Y 410		109.49	37 40 26	117 13 13	1782.63243	1782.72323	35.79	0.00
5666	10274247	X 410		111.05	37 41 03	117 13 50	1829.41335	1829.51171	36.56	0.00
5667	10280750	W 410		112.51	37 41 46	117 14 06	1779.38376	1779.46681	35.65	0.00
5668	10287147	T 134		114.15	37 42 28	117 13 54	1737.51492	1737.58182	35.03	0.00
5669	10288716	K 15		114.40	37 42 30	117 14 06	1734.25920	1734.32662	35.02	0.00

Table 8a-2

Table 8a. National Geodetic Survey Line L24791: File L24791.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
5670	10293632	S 134 RESET 1979		115.83	37 43 06	117 14 32	1718.14676	1718.21119	34.81	0.00
5671	10304309	R 134 RESET 1979		117.58	37 44 06	117 14 36	1699.57579	1699.63262	33.48	0.00
5672	10312783	12 NVDR		119.17	37 44 58	117 14 32	1681.84603	1681.90115	32.19	0.00
5673	10319504	K 411		120.41	37 45 34	117 14 28	1660.91528	1660.96848	30.99	0.00
5674	10321077	Q 134 RESET 1979		120.75	37 45 44	117 14 26	1657.76265	1657.81625	30.99	0.00
5675	10329473	P 134		122.28	37 46 32	117 14 12	1630.69452	1630.74586	30.26	0.00
5676	10329472	G 15 USGS		122.58	37 46 32	117 14 04	1627.70236	1627.75247	30.04	0.00
5677	10337442	N 134		123.88	37 47 20	117 14 14	1607.80857	1607.85757	29.38	0.00
5678	10347307	M 134 RESET 1979		125.71	37 48 20	117 14 20	1581.85233	1581.89426	28.22	0.00
5679	10356975	24 NVDR		127.51	37 49 23	117 14 20	1564.70999	1564.74915	27.57	0.00
5680	10264075	L 134 RESET 1979		128.92	37 50 02	117 14 24	1543.93612	1543.97159	26.96	0.00
5684	10270930	S 410		130.21	37 50 44	117 14 24	1538.49072	1538.52450	26.77	0.00
5682	10270923	F 15		130.72	37 50 45	117 14 44	1538.46163	1538.49838	26.76	0.00
5683	10270922	FAYET		130.73	37 50 45	117 14 45	1538.16487	1538.20169	26.76	0.00
5681	10270925	A 179		131.14	37 50 47	117 15 00	1529.81921	1529.85583	26.64	0.00
5685	10283957	V 410		132.58	37 52 00	117 14 30	1520.05164	1520.06459	26.30	0.00
5686	10295382	U 410		134.92	37 53 14	117 14 26	1525.36841	1525.37732	26.43	0.00
5687	10307585	R 410		137.03	37 54 24	117 14 30	1544.96246	1544.97256	27.79	0.00
5688	10316184	Q 410		138.87	37 55 18	117 15 00	1566.77038	1566.80128	28.91	0.00
5689	10324459	P 410		140.29	37 56 08	117 15 18	1571.69678	1571.74079	29.09	0.00
5690	10334307	N 410		142.44	37 57 09	117 15 58	1593.93849	1593.98218	31.58	0.00
5691	10348942	M 410		144.84	37 58 30	117 16 18	1638.46538	1638.50921	37.10	0.00
5692	10353746	L 410		145.93	37 59 08	117 16 20	1659.19218	1659.23314	37.39	0.00
5693	10358658	K 410		147.25	37 59 39	117 16 14	1696.47899	1696.52142	37.72	0.00
5694	10265800	J 410		148.63	38 00 12	117 15 56	1734.62990	1734.68416	37.90	0.00
5695	10275834	H 410		150.78	38 01 18	117 14 59	1778.75403	1778.80751	38.33	0.00
5696	10280758	G 410		152.15	38 01 48	117 14 14	1812.19559	1812.25962	38.85	0.00
5697	10283967	F 410		153.21	38 02 08	117 13 37	1837.54672	1837.61978	39.13	0.00
5698	10290372	E 410		154.54	38 02 45	117 13 02	1894.42718	1894.51628	40.82	0.00
5699	10293638	D 410		155.12	38 03 00	117 12 53	1904.37402	1904.46501	41.44	0.00
9946	10297286	C 410		155.83	38 03 22	117 12 57	1895.88705	1895.97268	41.42	0.00
9945	10299012	B 410		156.52	38 03 38	117 13 10	1876.63988	1876.71887	41.46	0.00
5700	10299009	B 15 USGS		156.59	38 03 39	117 13 08	1874.22873	1874.30706	41.46	0.00
9944	10302637	A 410		157.00	38 03 50	117 13 21	1865.34081	1865.41519	41.51	0.00

Table 8b. National Geodetic Survey Line L24791: File L24791.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
9941										1096.88280	0.00	0.00
9941	9942	-12.33830	-0.01	-0.31	0.35	-0.03	-0.13	0.00	-12.33830	1084.54450	-1.04	-0.13
9942	9943	-41.82527	0.00	-1.19	1.13	-0.01	-0.12	0.00	-41.82534	1042.71916	-4.65	-0.25
9943	5301	-34.44267	0.01	-0.98	0.76	-0.05	-0.45	0.00	-34.44293	1008.27623	-7.48	-0.70
5301	5401	12.51962	0.00	0.22	-0.27	-0.08	0.07	0.00	12.51949	1020.79572	2.37	-0.63
5401	5402	19.93280	0.01	0.39	-0.43	-0.03	0.64	0.00	19.93274	1040.72846	14.55	0.01
5402	5403	13.69262	0.00	0.44	-0.31	0.01	0.19	0.00	13.69276	1054.42122	18.15	0.20
5403	5404	20.60915	0.00	0.44	-0.55	-0.15	1.81	0.00	20.60889	1075.03011	20.25	2.01
5404	5405	0.41385	0.00	-0.02	-0.01	0.00	0.00	0.00	0.41382	1075.44393	20.40	2.01
5405	5406	0.99690	0.00	0.01	-0.03	-0.01	0.02	0.00	0.99687	1076.44080	20.25	2.03
5406	5407	17.84742	0.00	0.43	-0.51	-0.13	1.01	0.00	17.84721	1094.28801	18.04	3.04
5407	5408	10.58017	0.00	0.27	-0.34	-0.09	0.40	0.00	10.58001	1104.86802	17.43	3.44
5408	5409	25.47550	0.01	0.41	-0.87	-0.09	0.66	0.00	25.47496	1130.34298	17.37	4.10
5409	5410	22.76887	0.00	0.53	-0.94	-0.07	0.53	0.00	22.76839	1153.11137	21.16	4.63
5410	5411	20.75887	0.00	0.41	-0.83	-0.08	0.40	0.00	20.75837	1173.86974	21.85	5.03
5411	5412	9.80555	0.00	0.12	-0.38	-0.08	0.34	0.00	9.80521	1183.67495	25.66	5.37
5412	5413	16.12585	0.00	0.33	-0.61	-0.11	0.46	0.00	16.12546	1199.80041	30.08	5.83
5413	5414	2.73062	0.00	0.23	-0.10	-0.06	0.11	0.00	2.73069	1202.53110	30.65	5.94
5414	5415	12.22522	0.00	0.53	-0.43	-0.14	0.43	0.00	12.22518	1214.75628	34.80	6.37
5415	5416	21.18730	0.00	0.43	-0.72	-0.13	2.19	0.00	21.18688	1235.94316	33.40	8.56
5416	5417	-0.60193	0.00	0.05	0.02	-0.08	-0.02	0.00	-0.60194	1235.34122	34.42	8.54
5417	5418	-1.25743	0.00	-0.13	0.04	-0.04	-0.02	0.00	-1.25756	1234.08366	35.55	8.52
5418	5419	-0.28243	-0.01	-0.22	0.01	0.00	0.00	0.00	-0.28265	1233.80101	41.05	8.52
5419	5420	-3.45185	0.00	-0.29	0.10	0.01	-0.13	0.00	-3.45203	1230.34898	42.61	8.39
5420	5421	-9.67825	0.00	-0.37	0.29	0.02	0.00	0.00	-9.67831	1220.67067	46.21	8.39
5421	5424	-2.64987	0.00	-0.01	0.07	-0.09	-0.11	0.00	-2.64990	1218.02077	43.97	8.28
5424	5425	-4.53120	0.00	-0.11	0.13	-0.14	-0.10	0.00	-4.53132	1213.48945	43.32	8.18
5425	5426	5.14867	0.00	-0.06	-0.16	-0.12	-0.03	0.00	5.14833	1218.63778	44.40	8.15
5426	5427	7.59962	0.00	0.26	-0.27	-0.09	-0.08	0.00	7.59952	1226.23730	44.54	8.07
5427	5428	5.11898	0.00	0.00	-0.19	-0.09	-0.11	0.00	5.11870	1231.35600	44.44	7.96
5428	5429	4.06852	0.00	0.20	-0.17	-0.05	0.00	0.00	4.06850	1235.42450	41.62	7.96
5429	5430	7.29270	0.00	-0.03	-0.20	-0.10	0.89	0.00	7.29237	1242.71687	40.07	8.85
5430	5431	18.74920	0.00	0.11	-0.54	-0.12	0.83	0.00	18.74865	1261.46552	42.75	9.68
5431	5432	5.24350	0.00	0.20	-0.17	-0.06	0.49	0.00	5.24347	1266.70899	41.18	10.17
5432	5433	-5.33192	0.00	-0.23	0.18	-0.03	-0.43	0.00	-5.33200	1261.37699	42.28	9.74
5433	5434	-18.82245	0.00	-0.30	0.64	-0.05	-1.77	0.00	-18.82216	1242.55483	46.24	7.97
5434	5435	-19.67895	0.00	-0.52	0.68	-0.03	-0.89	0.00	-19.67882	1222.87601	47.32	7.08
5435	5436	-15.91960	0.00	-0.49	0.57	-0.01	-0.15	0.00	-15.91953	1206.95648	47.04	6.93
5436	5437	3.95927	0.00	0.28	-0.10	-0.05	0.17	0.00	3.95940	1210.91588	47.47	7.10
5437	5438	8.01587	0.01	0.72	-0.20	-0.08	0.64	0.00	8.01632	1218.93220	45.31	7.74
5438	5453	0.49435	-0.01	0.00	-0.01	-0.01	0.00	0.00	0.49432	1219.42652	45.06	7.74
5453	5439	9.12940	0.01	0.87	-0.22	-0.12	0.47	0.00	9.12994	1228.55646	44.40	8.21
5439	5440	8.29627	0.00	0.28	-0.20	-0.12	0.16	0.00	8.29623	1236.85269	41.95	8.37
5440	5441	9.45510	0.00	0.27	-0.27	-0.01	0.08	0.00	9.45509	1246.30778	38.07	8.45
5441	5442	9.33092	0.00	0.39	-0.25	-0.02	0.28	0.00	9.33104	1255.63882	33.23	8.73
5442	5443	13.33905	0.00	0.28	-0.35	-0.02	0.57	0.00	13.33896	1268.97778	31.81	9.30

Table 8b-1

Table 8b. National Geodetic Survey Line L24791: File L24791.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
5443	5444	4.33797	0.00	0.09	-0.11	-0.01	0.34	0.00	4.33794	1273.31572	31.43	9.64
5444	5445	21.53710	0.01	0.31	-0.53	-0.05	3.41	0.00	21.53684	1294.85256	32.25	13.05
5445	5446	24.74465	0.00	0.42	-0.61	-0.06	1.54	0.00	24.74440	1319.59696	34.05	14.59
5446	5449	4.82920	0.00	0.25	-0.05	0.00	0.15	0.00	4.82940	1324.42636	35.75	14.74
5449	5448	0.01477	0.00	0.00	0.00	-0.03	0.03	0.00	0.01474	1324.44110	34.60	14.77
5448	5447	16.82170	0.00	0.39	-0.24	-0.03	1.64	0.00	16.82182	1341.26292	35.34	16.41
5447	5450	32.23612	0.00	0.65	-0.51	-0.03	0.53	0.00	32.23623	1373.49915	37.38	16.94
5450	5451	51.02682	0.00	1.56	-0.96	-0.02	0.31	0.00	51.02740	1424.52655	49.13	17.25
5451	5454	-5.84190	0.00	-0.45	0.15	-0.07	-0.54	0.00	-5.84227	1418.68428	52.53	16.71
5454	5455	-6.35342	0.00	-0.44	0.15	-0.05	-0.33	0.00	-6.35376	1412.33052	52.38	16.38
5455	5456	-8.40200	0.00	-0.63	0.19	-0.06	-0.29	0.00	-8.40250	1403.92802	50.49	16.09
5456	5457	0.46485	0.00	0.13	-0.01	-0.03	0.05	0.00	0.46494	1404.39296	49.43	16.14
5457	5458	2.21360	0.00	0.16	-0.04	-0.02	0.05	0.00	2.21370	1406.60666	44.94	16.19
5458	5459	0.82533	0.00	0.13	-0.01	-0.04	0.04	0.00	0.82541	1407.43207	43.73	16.23
5459	5460	1.86032	0.01	0.10	-0.03	-0.04	0.22	0.00	1.86036	1409.29243	44.02	16.45
5460	5461	5.21295	0.00	0.40	-0.07	-0.04	0.24	0.00	5.21324	1414.50567	44.63	16.69
5461	5653	16.99745	0.00	0.43	-0.21	-0.04	0.32	0.00	16.99763	1431.50330	45.85	17.01
5653	5654	0.40297	0.00	0.07	-0.01	0.00	0.02	0.00	0.40303	1431.90633	45.83	17.03
5654	5655	28.51442	0.00	0.34	-0.34	-0.07	0.82	0.00	28.51435	1460.42068	46.78	17.85
5655	5656	32.29787	0.01	0.49	-0.41	-0.07	1.00	0.00	32.29789	1492.71857	46.85	18.85
5656	5657	23.12194	0.00	0.38	-0.55	-0.06	1.26	0.00	23.12170	1515.84027	50.35	20.10
5657	5658	28.45007	0.00	0.68	-1.02	-0.05	1.11	0.00	28.44968	1544.28995	56.31	21.21
5658	5659	42.55472	0.00	1.08	-1.06	-0.07	2.69	0.00	42.55467	1586.84462	64.87	23.90
5659	5660	31.86020	0.01	0.66	-0.86	-0.05	2.34	0.00	31.85996	1618.70458	65.36	26.24
5660	5661	28.78852	0.00	0.59	-0.83	-0.04	2.44	0.00	28.78824	1647.49282	64.63	28.68
5661	5662	1.94607	-0.01	-0.09	-0.05	-0.04	0.29	0.00	1.94588	1649.43870	67.03	28.97
5662	5663	22.59717	-0.01	0.45	-0.67	-0.05	1.84	0.00	22.59689	1672.03559	73.59	30.81
5663	5664	44.88317	0.01	1.28	-1.37	-0.07	3.16	0.00	44.88302	1716.91861	77.87	33.97
5664	5665	65.71420	0.00	1.71	-2.01	-0.08	1.82	0.00	65.71382	1782.63243	90.80	35.79
5665	5666	46.78075	0.00	1.80	-1.55	-0.08	0.77	0.00	46.78092	1829.41335	98.36	36.56
5666	5667	-50.02975	0.00	-1.64	1.84	-0.04	-0.92	0.00	-50.02959	1779.38376	83.05	35.65
5667	5668	-41.86937	0.00	-1.08	1.66	-0.05	-0.62	0.00	-41.86884	1737.51492	66.90	35.03
5668	5669	-3.25582	-0.02	0.00	0.12	0.00	-0.01	0.00	-3.25572	1734.25920	67.42	35.02
5669	5670	-16.11240	-0.01	-0.58	0.58	-0.03	-0.21	0.00	-16.11244	1718.14676	64.43	34.81
5670	5671	-18.57107	-0.02	-0.47	0.64	-0.05	-1.33	0.00	-18.57097	1699.57579	56.83	33.48
5671	5672	-17.73012	0.04	-0.22	0.58	-0.04	-1.29	0.00	-17.72976	1681.84603	55.12	32.19
5672	5673	-20.93095	-0.03	-0.38	0.63	-0.02	-1.20	0.00	-20.93075	1660.91528	53.20	30.99
5673	5674	-3.15267	0.00	-0.04	0.09	-0.01	0.00	0.00	-3.15263	1657.76265	53.60	30.99
5674	5675	-27.06840	0.00	-0.47	0.76	-0.02	-0.73	0.00	-27.06813	1630.69452	51.34	30.26
5675	5676	-2.99238	0.00	0.02	0.07	0.01	-0.22	0.00	-2.99238	1627.70214	50.11	30.04
5675	5676	-2.99225	0.00	0.02	0.07	0.01	-0.22	0.00	-2.99216	1627.70237	50.11	30.04
5675	5677	-22.88632	-0.01	-0.08	0.49	-0.03	-0.88	0.00	-22.88595	1607.80857	49.00	29.38
5677	5678	-25.95645	0.00	-0.28	0.54	-0.05	-1.16	0.00	-25.95624	1581.85233	41.93	28.22
5678	5679	-17.14222	0.01	-0.43	0.35	-0.05	-0.65	0.00	-17.14234	1564.70999	39.16	27.57
5679	5680	-20.77385	0.00	-0.41	0.42	-0.03	-0.61	0.00	-20.77387	1543.93612	35.47	26.96
5680	5684	-5.44530	0.00	-0.18	0.11	-0.03	-0.19	0.00	-5.44540	1538.49072	33.78	26.77

Table 8b-2

Table 8b. National Geodetic Survey Line L24791: File L24791.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
5684	5682	-0.02914	0.01	0.04	0.00	0.00	0.00	0.00	-0.02909	1538.46163	36.75	26.76
5682	5683	-0.29676	0.00	-0.01	0.01	0.00	0.00	0.00	-0.29676	1538.16487	36.82	26.76
5683	5681	-8.34567	0.00	-0.24	0.25	0.00	-0.11	0.00	-8.34566	1529.81921	36.62	26.64
5684	5685	-18.43887	0.01	-0.53	0.38	-0.07	-0.47	0.00	-18.43908	1520.05164	12.95	26.30
5685	5686	5.31660	0.00	0.34	-0.11	-0.06	0.13	0.00	5.31677	1525.36841	8.91	26.43
5686	5687	19.59420	-0.01	0.50	-0.51	-0.13	1.36	0.00	19.59405	1544.96246	10.10	27.79
5687	5688	21.80830	-0.01	0.35	-0.61	-0.11	1.12	0.00	21.80792	1566.77038	30.90	28.91
5688	5689	4.92645	0.00	0.20	-0.15	-0.10	0.18	0.00	4.92640	1571.69678	44.01	29.09
5689	5690	22.24175	-0.01	0.80	-0.74	-0.09	2.49	0.00	22.24171	1593.93849	43.69	31.58
5690	5691	44.52747	0.00	1.23	-1.66	-0.15	5.52	0.00	44.52689	1638.46538	43.83	37.10
5691	5692	20.72662	0.00	0.59	-0.41	0.00	0.29	0.00	20.72680	1659.19218	40.96	37.39
5692	5693	37.28677	0.00	0.83	-0.78	-0.01	0.33	0.00	37.28681	1696.47899	42.43	37.72
5693	5694	38.15062	0.00	1.09	-0.78	-0.02	0.18	0.00	38.15091	1734.62990	54.26	37.90
5694	5695	44.12422	0.00	0.96	-0.97	-0.08	0.43	0.00	44.12413	1778.75403	53.48	38.33
5695	5696	33.44150	0.00	0.92	-0.81	-0.05	0.52	0.00	33.44156	1812.19559	64.03	38.85
5696	5697	25.35120	0.00	0.59	-0.62	-0.04	0.28	0.00	25.35113	1837.54672	73.06	39.13
5697	5698	56.87992	0.00	1.67	-1.14	0.01	1.69	0.00	56.88046	1894.42718	89.10	40.82
5698	5699	9.94670	0.00	0.34	-0.20	0.00	0.62	0.00	9.94684	1904.37402	90.99	41.44
5699	9946	-8.48702	0.00	-0.20	0.28	-0.03	-0.02	0.00	-8.48697	1895.88705	85.63	41.42
9946	9945	-19.24715	0.00	-0.61	0.62	-0.03	0.04	0.00	-19.24717	1876.63988	78.99	41.46
9945	5700	-2.41120	0.00	-0.03	0.08	0.00	0.00	0.00	-2.41115	1874.22873	78.33	41.46

Table 8c. National Geodetic Survey Line L24791: File L24791.prn(=.dat)

112	L24791	994199421984011610261053U	12	1	0.77		233456615	F
-12.33830		MT -0.32 -0.01 -0.31 0.35 -0.03	-0.13		0.001030313610306501			
212	L24791	994299431984011610551149U	26	1	1.37		233456615	F
-41.82527		MT 0.03 0.00 -1.19 1.13 -0.01	-0.12		0.001030650110306500			
312	L24791	994353011984011613041337U	17	1	1.13		233456615	F
-34.44267		MT -0.30 0.01 -0.98 0.76 -0.05	-0.45		0.001030650010308203			
412	L24791	530154011984011613431433U	24	1	2.19		233456615	F
12.51962		MT -1.32 0.00 0.22 -0.27 -0.08	0.07		0.001030820310316617			
512	L24791	540154021984011614451520U	18	1	1.88		233456615	F
19.93280		MT -0.99 0.01 0.39 -0.43 -0.03	0.64		0.001031661710323337			
612	L24791	540254031984011615221558U	19	1	2.05		233456615	F
13.69262		MT -1.39 0.00 0.44 -0.31 0.01	0.19		0.001032333710331535			
712	L24791	5409540819840117 8050847U	19	1	1.96		233456615	B
-25.47550		MT 1.68 -0.01 -0.41 0.87 0.09	-0.66		0.001027092810359215			
1112	L24791	540554041984011711521154U	1	1	0.00		233456615	B
-0.41385		MT 0.00 0.00 0.02 0.01 0.00	0.00		0.001034273510342741			
1212	L24791	540454031984011711561248U	24	1	2.08		233456615	B
-20.60915		MT 1.70 0.00 -0.44 0.55 0.15	-1.81		0.001034274110331535			
1012	L24791	540654051984011711421150U	2	1	0.10		233456615	B
-0.99690		MT 0.08 0.00 -0.01 0.03 0.01	-0.02		0.001034274210342735			
912	L24791	540754061984011711011140U	19	1	1.66		233456615	B
-17.84742		MT 1.39 0.00 -0.43 0.51 0.13	-1.01		0.001035099810342742			
812	L24791	5408540719840117 9000932U	14	1	1.56		233456615	B
-10.58017		MT 1.38 0.00 -0.27 0.34 0.09	-0.40		0.001035921510350998			
1312	L24791	5409541019840118 8100850U	19	1	1.79		233456615	F
22.76887		MT -1.12 0.00 0.53 -0.94 -0.07	0.53		0.001027092810277394			
1412	L24791	5410541119840118 8520920U	16	1	1.55		233456615	F
20.75887		MT -0.75 0.00 0.41 -0.83 -0.08	0.40		0.001027739410280749			
1512	L24791	5411541219840118 9220949U	14	1	1.30		233456615	F
9.80555		MT -1.02 0.00 0.12 -0.38 -0.08	0.34		0.001028074910287155			
1612	L24791	541254131984011810021045U	16	1	1.67		233456615	F
16.12585		MT -1.09 0.00 0.33 -0.61 -0.11	0.46		0.001028715510292106			
1712	L24791	541354141984011810471100U	8	1	0.81		233456615	F
2.73062		MT -0.74 0.00 0.23 -0.10 -0.06	0.11		0.001029210610297283			
1812	L24791	541454151984011811021132U	16	1	1.76		233456615	F
12.22522		MT -1.58 0.00 0.53 -0.43 -0.14	0.43		0.001029728310305985			
1912	L24791	541554161984011811331215U	18	1	1.74		233456615	F
21.18730		MT -1.51 0.00 0.43 -0.72 -0.13	2.19		0.001030598510314493			
2012	L24791	541654171984011813301409U	18	1	1.62		233456615	F
-0.60193		MT -1.49 0.00 0.05 0.02 -0.08	-0.02		0.001031449310322869			
2112	L24791	541754181984011814111434U	11	1	1.03		233456615	F
-1.25743		MT -0.88 0.00 -0.13 0.04 -0.04	-0.02		0.001032286910327894			
2212	L24791	541854191984011814361520U	19	1	1.76		233456615	F
-0.28243		MT -1.13 -0.01 -0.22 0.01 0.00	0.00		0.001032789410334305			
2312	L24791	541954201984011815231540U	10	1	1.11		233456615	F
-3.45185		MT -0.61 0.00 -0.29 0.10 0.01	-0.13		0.001033430510337444			
2412	L24791	542054211984011815421611U	16	1	1.78		233456615	F
-9.67825		MT -1.00 0.00 -0.37 0.29 0.02	0.00		0.001033744410342318			
2612	L24791	5428542719840119 9070940U	17	1	1.85		233456615	B
-5.11898		MT 1.06 0.00 0.00 0.19 0.09	0.11		0.001026920810362092			
2512	L24791	5429542819840119 8210905U	17	1	1.64		233456615	B
-4.06852		MT 0.97 0.00 -0.20 0.17 0.05	0.00		0.001027424610269208			
3012	L24791	542454211984011911441212U	16	1	1.45		233456615	B
2.64987		MT 0.78 0.00 0.01 -0.07 0.09	0.11		0.001034730510342318			
2912	L24791	542554241984011911011142U	24	1	2.24		233456615	B
4.53120		MT 1.08 0.00 0.11 -0.13 0.14	0.10		0.001035215210347305			
2812	L24791	542654251984011910251058U	18	1	1.69		233456615	B
-5.14867		MT 1.02 0.00 0.06 0.16 0.12	0.03		0.001035865710352152			
2712	L24791	5427542619840119 9421011U	17	1	1.57		233456615	B
-7.59962		MT 0.84 0.00 -0.26 0.27 0.09	0.08		0.001036209210358657			
3112	L24791	542154221984011913121337U	11	1	1.10		233456615	F
1.62328		MT -1.02 0.00 0.18 -0.03 -0.10	0.07		0.001034231810347301			
3212	L24791	542254211984011913521415U	11	1	1.10		233456615	B
-1.62360		MT 1.02 0.00 -0.13 0.03 0.10	-0.10		0.001034730110342318			
3912	L24791	543054291984012011061140U	18	1	1.35		233456615	B
-7.29270		MT 0.98 0.00 0.03 0.20 0.10	-0.89		0.001027907210274246			
3812	L24791	543154301984012010331105U	18	1	1.83		233456615	B
-18.74920		MT 1.30 0.00 -0.11 0.54 0.12	-0.83		0.001028555910279072			
3712	L24791	543254311984012010091031U	10	1	1.13		233456615	B
-5.24350		MT 0.90 0.00 -0.20 0.17 0.06	-0.49		0.001029036210285559			
3612	L24791	5433543219840120 9370953U	6	1	0.60		233456615	B
5.33192		MT 0.44 0.00 0.23 -0.18 0.03	0.43		0.001029363110290362			
3512	L24791	5434543319840120 9130935U	14	1	1.64		233456615	B
18.82245		MT 1.17 0.00 0.30 -0.64 0.05	1.77		0.001030088310293631			
3412	L24791	5435543419840120 8520911U	13	1	1.52		233456615	B
19.67895		MT 1.19 0.00 0.52 -0.68 0.03	0.89		0.001030598710300883			
3312	L24791	5436543519840120 8240850U	14	1	1.63		233456615	B
15.91960		MT 1.17 0.00 0.49 -0.57 0.01	0.15		0.001031279010305987			

Table 8c-1

Table 8c. National Geodetic Survey Line L24791: File L24791.prn(=.dat)--Continued

4412	L24791	543754361984012015141541U	15	1	1.74			233456615	B
-3.95927		MT 1.25 0.00 -0.28 0.10 0.05 -0.17	0.001032107610312790						
4312	L24791	543854371984012014241512U	16	1	1.79			233456615	B
-8.01587		MT 1.32 -0.01 -0.72 0.20 0.08 -0.64	0.001032789510321076						
4212	L24791	545354381984012014111415U	2	1	0.12			233456615	B
-0.49435		MT 0.12 0.01 0.00 0.01 0.01 0.00	0.001032789610327895						
4112	L24791	543954531984012013301409U	21	1	1.95			233456615	B
-9.12940		MT 1.39 -0.01 -0.87 0.22 0.12 -0.47	0.001033591810327896						
4012	L24791	544054391984012012501327U	18	1	1.62			233456615	B
-8.29627		MT 1.25 0.00 -0.28 0.20 0.12 -0.16	0.001034231910335918						
4912	L24791	544454451984012310351100U	15	1	1.74			233456615	F
21.53710		MT -1.33 0.01 0.31 -0.53 -0.05 3.41	0.001026407410270929						
5012	L24791	544554461984012311021134U	18	1	1.58			233456615	F
24.74465		MT -1.23 0.00 0.42 -0.61 -0.06 1.54	0.001027092910277395						
4512	L24791	5440544119840123 8500918U	13	1	1.47			233456615	F
9.45510		MT -1.13 0.00 0.27 -0.27 -0.01 0.08	0.001034231910348940						
4612	L24791	5441544219840123 9200954U	19	1	2.09			233456615	F
9.33092		MT -1.55 0.00 0.39 -0.25 -0.02 0.28	0.001034894010356980						
4712	L24791	544254431984012310041021U	11	1	1.25			233456615	F
13.33905		MT -1.00 0.00 0.28 -0.35 -0.02 0.57	0.001035698010362093						
4812	L24791	544354441984012310221033U	4	1	0.45			233456615	F
4.33797		MT -0.35 0.00 0.09 -0.11 -0.01 0.34	0.001036209310264074						
5112	L24791	5451545419840125 8500919U	17	1	1.87			233456615	F
-5.84190		MT -2.04 0.00 -0.45 0.15 -0.07 -0.54	0.001029537910305988						
5212	L24791	5454545519840125 9210945U	16	1	1.86			233456615	F
-6.35342		MT -1.89 0.00 -0.44 0.15 -0.05 -0.33	0.001030598810314499						
5312	L24791	5455545619840125 9471008U	15	1	1.74			233456615	F
-8.40200		MT -1.92 0.00 -0.63 0.19 -0.06 -0.29	0.001031449910324458						
5412	L24791	545654571984012510181038U	11	1	1.27			233456615	F
0.46485		MT -1.28 0.00 0.13 -0.01 -0.03 0.05	0.001032445810329484						
5512	L24791	545754581984012510401052U	7	1	0.78			233456615	F
2.21360		MT -0.87 0.00 0.16 -0.04 -0.02 0.05	0.001032948410334306						
5612	L24791	545854591984012510541114U	13	1	1.51			233456615	F
0.82533		MT -1.64 0.00 0.13 -0.01 -0.04 0.04	0.001033430610342320						
5712	L24791	545954601984012511161136U	13	1	1.50			233456615	F
1.86032		MT -1.53 0.01 0.10 -0.03 -0.04 0.22	0.001034232010348941						
6012	L24791	565356541984012513451346U	1	1	0.07			233456615	F
0.40297		MT -0.04 0.00 0.07 -0.01 0.00 0.02	0.001026404510265792						
6112	L24791	565456551984012513481422U	21	1	1.97			233456615	F
28.51442		MT -2.29 0.00 0.34 -0.34 -0.07 0.82	0.001026579210275829						
6212	L24791	565556561984012514301513U	20	1	1.93			233456615	F
32.29787		MT -2.30 0.01 0.49 -0.41 -0.07 1.00	0.001027582910285560						
6312	L24791	565656571984012515181600U	18	1	1.71			233456615	F
23.12140		MT -2.05 0.00 0.36 -0.32 -0.07 0.85	0.001028556010295381						
5812	L24791	546054611984012512371306U	15	1	1.51			233456615	F
5.21295		MT -1.75 0.00 0.40 -0.07 -0.04 0.24	0.001034894110356981						
5912	L24791	546156531984012513081343U	16	1	1.52			233456615	F
16.99745		MT -1.58 0.00 0.43 -0.21 -0.04 0.32	0.001035698110264045						
6712	L24791	545054471984012410301101U	20	1	1.56			233456615	B
-32.23612		MT 1.34 0.00 -0.65 0.51 0.03 -0.53	0.001028872610282369						
6612	L24791	5451545019840124 9401025U	25	1	1.43			233456615	B
-51.02682		MT 1.21 0.00 -1.56 0.96 0.02 -0.31	0.001029537910288726						
6412	L24791	5451545219840124 8370908U	12	1	0.28			233456615	F
20.75292		MT 0.04 0.00 0.69 -0.48 0.00 0.08	0.001029537910295380						
6512	L24791	5452545119840124 9100933U	12	1	0.28			233456615	B
-20.75315		MT -0.04 0.00 -0.72 0.45 0.00 -0.07	0.001029538010295379						
7012	L24791	544954461984012413201350U	14	1	1.18			233456615	B
-4.82920		MT -0.95 0.00 -0.25 0.05 0.00 -0.15	0.001027257810277395						
6912	L24791	544854491984012412301302U	11	1	0.99			233456615	B
-0.01477		MT 1.01 0.00 0.00 0.00 0.03 -0.03	0.001027738910272578						
6812	L24791	544754481984012412021227U	10	1	1.02			233456615	B
-16.82170		MT 1.05 0.00 -0.39 0.24 0.03 -1.64	0.001028236910277389						
7312	L24791	565956581984022110311110U	23	1	1.93			233456615	B
-42.55472		MT 2.44 0.00 -1.08 1.06 0.07 -2.69	0.001031618310305989						
7212	L24791	5660565919840221 9541028U	19	1	1.86			233456615	B
-31.86020		MT 2.34 -0.01 -0.66 0.86 0.05 -2.34	0.001032624710316183						
7112	L24791	5661566019840221 9260950U	19	1	1.82			233456615	B
-28.78852		MT 2.27 0.00 -0.59 0.83 0.04 -2.44	0.001033591910326247						
7612	L24791	56675666198402210351130U	27	1	1.46			233456615	B
50.02975		MT 1.92 0.00 1.64 -1.84 0.04 0.92	0.001028075010274247						
7512	L24791	5657565619840222 9301007U	18	1	1.70			233456615	B
-23.12247		MT 2.05 0.00 -0.39 0.79 0.04 -1.66	0.001029538110285560						
7412	L24791	5658565719840222 8270915U	20	1	1.88			233456615	B
-28.45007		MT 2.27 0.00 -0.68 1.02 0.05 -1.11	0.001030598910295381						
7812	L24791	56655664198402213331422U	34	1	1.88			233456615	B
-65.71420		MT 2.60 0.00 -1.71 2.01 0.08 -1.82	0.001026754610356982						
7712	L24791	56665665198402212351330U	29	1	1.56			233456615	B
-46.78075		MT 1.66 0.00 -1.80 1.55 0.08 -0.77	0.001027424710267546						

Table 8c. National Geodetic Survey Line L24791: File L24791.prn(=.dat)--Continued

8112	L24791	566256611984022215251538U	11	1	1.06				233456615	B
-1.94607		MT 1.47 0.01 0.09 0.05 0.04 -0.29	0.001034066110335919							
8012	L24791	566356621984022215031523U	13	1	1.19				233456615	B
-22.59717		MT 1.65 0.01 -0.45 0.67 0.05 -1.84	0.001034730610340661							
7912	L24791	566456631984022214321500U	23	1	1.85				233456615	B
-44.88317		MT 2.52 -0.01 -1.28 1.37 0.07 -3.16	0.001035698210347306							
8212	L24791	5667566819840223 8200911U	26	1	1.64				233456615	F
-41.86937		MT -1.83 0.00 -1.08 1.66 -0.05 -0.62	0.001028075010287147							
8312	L24791	5668566919840223 9130929U	6	1	0.25				233456615	F
-3.25582		MT -0.09 -0.02 0.00 0.12 0.00 -0.01	0.001028714710288716							
8412	L24791	5669567019840223 9311008U	19	1	1.43				233456615	F
-16.11240		MT -1.54 -0.01 -0.58 0.58 -0.03 -0.21	0.001028871610293632							
8512	L24791	567056711984022310171041U	16	1	1.75				233456615	F
-18.57107		MT -2.54 -0.02 -0.47 0.64 -0.05 -1.33	0.001029363210304309							
8612	L24791	567156721984022310431107U	16	1	1.59				233456615	F
-17.73012		MT -2.18 0.04 -0.22 0.58 -0.04 -1.29	0.001030430910312783							
8712	L24791	567256731984022311101126U	13	1	1.24				233456615	F
-20.93095		MT -1.49 -0.03 -0.38 0.63 -0.02 -1.20	0.001031278310319504							
8812	L24791	567356741984022311271136U	4	1	0.34				233456615	F
-3.15267		MT -0.41 0.00 -0.04 0.09 -0.01 0.00	0.001031950410321077							
8912	L24791	567456751984022311381203U	17	1	1.53				233456615	F
-27.06840		MT -1.96 0.00 -0.47 0.76 -0.02 -0.73	0.001032107710329473							
9112	L24791	567656751984022313181327U	4	1	0.30				233456615	B
2.99210		MT 0.00 0.00 -0.01 -0.07 -0.01 0.24	0.001032947210329473							
9012	L24791	567556761984022313041316U	4	1	0.30				233456615	F
-2.99240		MT 0.00 0.00 0.02 0.07 0.01 -0.20	0.001032947310329472							
9212	L24791	567556771984022313311358U	17	1	1.60				233456615	F
-22.88632		MT -1.93 -0.01 -0.08 0.49 -0.03 -0.88	0.001032947310337442							
9312	L24791	567756781984022314001428U	19	1	1.83				233456615	F
-25.95645		MT -2.37 0.00 -0.28 0.54 -0.05 -1.16	0.001033744210347307							
9412	L24791	567856791984022314301459U	19	1	1.80				233456615	F
-17.14222		MT -2.46 0.01 -0.43 0.35 -0.05 -0.65	0.001034730710356975							
9612	L24791	568056841984022315311549U	12	1	1.29				233456615	F
-5.44530		MT -1.61 0.00 -0.18 0.11 -0.03 -0.19	0.001026407510270930							
9712	L24791	568456851984022315531623U	21	1	2.37				233456615	F
-18.43887		MT -2.89 0.01 -0.53 0.38 -0.07 -0.47	0.001027093010283957							
9812	L24791	568556861984022316251656U	20	1	2.34				233456615	F
5.31660		MT -2.80 0.00 0.34 -0.11 -0.06 0.13	0.001028395710295382							
9512	L24791	567956801984022315051528U	15	1	1.41				233456615	F
-20.77385		MT -1.50 0.00 -0.41 0.42 -0.03 -0.61	0.001035697510264075							
10312	L24791	5683568219840224 9400950U	1	1	0.01				233456615	B
0.29685		MT -0.04 0.00 0.04 -0.01 0.00 0.00	0.001027092210270923							
10112	L24791	5683568119840224 8570917U	6	1	0.41				233456615	F
-8.34582		MT -0.04 0.00 -0.23 0.26 0.00 -0.09	0.001027092210270925							
10012	L24791	5682568319840224 8450855U	1	1	0.01				233456615	F
-0.29667		MT 0.04 0.00 0.02 0.01 0.00 0.00	0.001027092310270922							
10412	L24791	5682568419840224 9551010U	5	1	0.52				233456615	B
0.02823		MT 0.11 -0.02 0.02 0.00 0.00 0.02	0.001027092310270930							
10512	L24791	568256841984022410271040U	6	1	0.50				233456615	B
0.02810		MT 0.11 0.00 -0.05 0.00 0.00 -0.01	0.001027092310270930							
10212	L24791	5681568319840224 9230940U	6	1	0.41				233456615	B
8.34552		MT 0.04 0.01 0.24 -0.24 0.00 0.14	0.001027092510270922							
9912	L24791	5684568219840224 8200840U	5	1	0.52				233456615	F
-0.03113		MT -0.11 0.02 0.06 0.00 0.00 -0.01	0.001027093010270923							
10612	L24791	568456821984022410451100U	6	1	0.50				233456615	F
-0.02912		MT -0.11 0.00 0.08 0.00 0.00 0.00	0.001027093010270923							
10812	L24791	569856971984022413331417U	28	1	1.33				233456615	B
-56.87992		MT 1.72 0.00 -1.67 1.14 -0.01 -1.69	0.001029037210283967							
10712	L24791	569956981984022413091327U	8	1	0.58				233456615	B
-9.94670		MT 0.71 0.00 -0.34 0.20 0.00 -0.62	0.001029363810290372							
11312	L24791	568756861984022710241055U	18	1	2.11				233456615	B
-19.59420		MT 2.67 0.01 -0.50 0.51 0.13 -1.36	0.001030758510295382							
11212	L24791	5688568719840227 9581021U	16	1	1.84				233456615	B
-21.80830		MT 2.09 0.01 -0.35 0.61 0.11 -1.12	0.001031618410307585							
11112	L24791	5689568819840227 9220944U	13	1	1.42				233456615	B
-4.92645		MT 1.95 0.00 -0.20 0.15 0.10 -0.18	0.001032445910316184							
11012	L24791	5690568919840227 9500919U	19	1	2.15				233456615	B
-22.24175		MT 2.40 0.01 -0.80 0.74 0.09 -2.49	0.001033430710324459							
10912	L24791	5691569019840227 8110947U	24	1	2.40				233456615	B
-44.52747		MT 3.25 0.00 -1.23 1.66 0.15 -5.52	0.001034894210334307							
11712	L24791	569456931984022714021434U	21	1	1.38				233456615	B
-38.15062		MT 1.41 0.00 -1.09 0.78 0.02 -0.18	0.001026580010358658							
11612	L24791	569556941984022713181400U	28	1	2.15				233456615	B
-44.12422		MT 2.88 0.00 -0.96 0.97 0.08 -0.43	0.001027583410265800							
11512	L24791	569656951984022712431316U	21	1	1.37				233456615	B
-33.44150		MT 1.34 0.00 -0.92 0.81 0.05 -0.52	0.001028075810275834							
11412	L24791	569756961984022712121240U	17	1	1.06				233456615	B
-25.35120		MT 0.91 0.00 -0.59 0.62 0.04 -0.28	0.001028396710280758							

Table 8c-3

Table 8c. National Geodetic Survey Line L24791: File L24791.prn(=.dat)--Continued

11912	L24791	569256911984022715221546U 12 1 1.09	233456615	B
-20.72662		MT 1.56 0.00 -0.59 0.41 0.00 -0.29 0.001035374610348942		
11812	L24791	569356921984022714451520U 22 1 1.32	233456615	B
-37.28677		MT 1.29 0.00 -0.83 0.78 0.01 -0.33 0.001035865810353746		
12012	L24791	5699994619840228 7550812U 9 1 0.71	233456615	F
-8.48702		MT -1.04 0.00 -0.20 0.28 -0.03 -0.02 0.001029363810297286		
12112	L24791	9946994519840228 8140843U 12 1 0.69	233456615	F
-19.24715		MT -0.75 0.00 -0.61 0.62 -0.03 0.04 0.001029728610299012		
12312	L24791	5700994519840228 8520854U 2 1 0.07	233456615	B
2.41112		MT 0.05 0.00 0.04 -0.07 0.00 0.00 0.001029900910299012		
12212	L24791	9945570019840228 8450850U 2 1 0.07	233456615	F
-2.41127		MT -0.05 0.00 -0.02 0.08 0.00 0.00 0.001029901210299009		
12412	L24791	9945994419840228 8560913U 6 1 0.48	233456615	F
-11.29902		MT -0.56 0.00 -0.37 0.35 -0.03 0.05 0.001029901210302637		

Table 9a. National Geodetic Survey Line L24792: File L24792.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
9930	10336367	S 405		0.00	36 37 11	116 17 20	864.94850	864.94850	0.00	0.00
9929	10337888	R 405		0.90	36 37 20	116 17 54	861.71512	861.71488	-0.09	0.00
9928	10339510	Q 405		1.85	36 37 32	116 18 30	862.54045	862.54393	0.04	0.00
1531	10339509	B 17 USGS RESET 1977		2.12	36 37 35	116 18 33	865.78689	865.79156	0.13	0.00
1530	10342740	P 405		3.41	36 37 53	116 19 20	870.93371	870.93315	0.13	0.00
1529	10342739	A 17 RESET 1977		5.29	36 37 53	116 20 35	851.52515	851.52323	-0.32	0.00
1528	10344380	N 405		6.84	36 38 02	116 21 38	829.08752	829.08487	-0.70	0.00
1527	10346022	Z 16 USGS RESET 1980		8.56	36 38 18	116 22 40	809.17106	809.17451	-1.07	0.00
1526	10349424	B 333		10.60	36 38 39	116 23 58	810.62782	810.63658	-0.98	0.00
5342	10349427	B 333 RESET 1980		10.61	36 38 39	116 23 58	810.64114	810.64990	-0.98	0.00
5341	10350996	H 409		11.06	36 38 42	116 24 14	811.05559	811.06393	-0.96	0.00
5340	10354228	C 333 RESET 1980		13.23	36 39 03	116 25 37	810.65987	810.66381	-0.98	0.00
5339	10355761	Y 16 USGS RESET 1980		14.95	36 39 17	116 26 43	805.76252	805.76346	-1.25	0.00
5338	10359213	F 409		16.66	36 39 32	116 27 47	800.20073	800.19925	-1.33	0.00
5337	10359214	DUNE		16.86	36 39 34	116 27 53	800.49173	800.49013	-1.33	0.00
5336	10362538	E 409		18.34	36 39 50	116 28 49	795.57502	795.57306	-1.39	0.00
5335	10264590	X 16 USGS RESET 1980		19.87	36 40 02	116 29 49	786.20254	786.20109	-1.67	0.00
5334	10266353	D 409		21.31	36 40 18	116 30 41	777.80764	777.80809	-1.94	0.00
5333	10269713	W 16 RESET 1980		23.15	36 40 33	116 31 55	780.38255	780.38357	-1.82	0.00
5332	10273097	V 16 USGS RESET 1980		24.78	36 40 58	116 32 50	786.48752	786.48979	-1.20	0.00
5331	10273094	B 91 USGS		24.81	36 40 58	116 32 50	788.01359	788.01599	-1.20	0.00
5330	10277858	C 409		26.67	36 41 29	116 33 53	790.76297	790.76417	-1.13	0.00
5329	10282820	B 409		28.15	36 41 54	116 34 42	786.55218	786.54941	-1.26	0.00
5328	10287643	T 16 USGS RESET 1978		29.79	36 42 24	116 35 34	783.85319	783.84602	-1.35	0.00
5327	10294193	A 409		32.01	36 43 07	116 36 43	792.06921	792.05719	0.10	0.00
5326	10295922	ASHTON		32.55	36 43 11	116 37 07	795.39007	795.37876	0.16	0.00
5325	10301391	Z 408		34.06	36 43 45	116 37 30	818.23511	818.22600	0.91	0.00
5324	10304807	S 16 USGS RESET 1978		35.19	36 44 00	116 38 07	810.79338	810.78306	0.80	0.00
5323	10308206	Y 408		36.49	36 44 28	116 38 44	818.11513	818.10446	1.03	0.00
5322	10316616	G 409		38.21	36 45 12	116 39 31	827.43599	827.42400	1.03	0.00
5320	10323336	R 16 USGS RESET 1978		40.06	36 45 52	116 40 24	838.90284	838.89053	0.85	0.00
5321	10321569	RAYET		40.20	36 45 49	116 40 28	854.19696	854.18642	0.87	0.00
5319	10328351	X 408		41.70	36 46 27	116 41 08	847.69035	847.68053	0.66	0.00
5318	10334759	W 408		43.20	36 47 02	116 41 46	858.12427	858.11987	0.60	0.00
5317	10341126	Q 16 USGS RESET 1978		44.94	36 47 44	116 42 39	872.28072	872.27526	0.60	0.00
5316	10347771	X 338 RESET 1978		46.41	36 48 20	116 43 14	885.11681	885.11137	0.81	0.00
5315	10350997	C 23 RESET 1978		47.54	36 48 47	116 43 48	894.32090	894.31635	0.77	0.00
5314	10360829	P 16 USGS RESET 1978		49.71	36 49 41	116 44 42	914.15317	914.15189	0.92	0.00
5313	10360827	PAYET		49.74	36 49 40	116 44 43	914.33845	914.33725	0.92	0.00
5312	10268071	V 338 RESET 1978		51.14	36 50 25	116 45 01	927.39677	927.39571	1.14	0.00

Table 9a. National Geodetic Survey Line L24792: File L24792.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
5311	10274671	U 338 RESET 1978		52.23	36 51 04	116 45 18	937.29257	937.29075	1.36	0.00
5310	10279622	D 23		53.30	36 51 30	116 45 28	945.26854	945.26661	1.52	0.00
5304	10286007	V 408		54.53	36 52 10	116 45 14	957.69745	957.69431	2.97	0.00
5305	10284432	3139 USGS		55.59	36 52 03	116 45 57	956.34623	956.34371	2.82	0.00
5306	10284431	Q 338		55.74	36 52 07	116 45 57	956.41579	956.41329	2.82	0.00
5303	10292592	U 408		55.94	36 52 54	116 45 07	972.03322	972.03291	4.22	0.00
5302	10303135	T 408		57.99	36 53 53	116 45 07	993.48413	993.48926	5.48	0.00
5301	10308203	N 16 USGS		59.34	36 54 22	116 45 37	1008.36750	1008.37780	6.16	0.00
9943	10306500	S 408		60.45	36 54 10	116 46 17	1042.80838	1042.82151	7.07	0.00
9942	10306501	R 408		61.81	36 54 11	116 47 07	1084.63617	1084.65290	8.32	0.00
9941	10303136	Q 408		62.58	36 53 59	116 47 30	1096.97562	1096.99340	8.45	0.00

Table 9b. National Geodetic Survey Line L24792: File L24792.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
9930										864.94850	0.00	0.00
9930	9929	-3.23322	0.00	-0.20	0.05	-0.01	-0.09	0.00	-3.23338	861.71512	-0.24	-0.09
9929	9928	0.82545	0.00	-0.10	-0.01	-0.01	0.13	0.00	0.82533	862.54045	3.48	0.04
9928	1531	3.24645	0.00	0.04	-0.05	0.00	0.09	0.00	3.24644	865.78689	4.67	0.13
1531	1530	5.14677	0.00	0.13	-0.08	0.00	0.00	0.00	5.14682	870.93371	-0.56	0.13
1530	1529	-19.40857	0.00	-0.32	0.30	0.03	-0.45	0.00	-19.40856	851.52515	-1.92	-0.32
1529	1528	-22.43752	0.00	-0.53	0.39	0.03	-0.38	0.00	-22.43763	829.08752	-2.65	-0.70
1528	1527	-19.91637	0.00	-0.52	0.40	0.03	-0.37	0.00	-19.91646	809.17106	3.45	-1.07
1527	1526	1.45685	0.00	0.02	-0.02	-0.09	0.09	0.00	1.45676	810.62782	8.76	-0.98
1526	5342	0.01335	0.00	-0.03	0.00	0.00	0.00	0.00	0.01332	810.64114	8.76	-0.98
5342	5341	0.41447	0.00	0.01	-0.01	-0.02	0.02	0.00	0.41445	811.05559	8.34	-0.96
5341	5340	-0.39567	0.00	0.03	0.00	-0.08	-0.02	0.00	-0.39572	810.65987	3.94	-0.98
5340	5339	-4.89690	0.00	-0.45	0.05	-0.05	-0.27	0.00	-4.89735	805.76252	0.94	-1.25
5339	5338	-5.56165	0.00	-0.28	0.12	0.02	-0.08	0.00	-5.56179	800.20073	-1.48	-1.33
5338	5337	0.29095	0.00	0.06	-0.01	0.00	0.00	0.00	0.29100	800.49173	-1.60	-1.33
5337	5336	-4.91687	0.00	0.04	0.10	0.02	-0.06	0.00	-4.91671	795.57502	-1.96	-1.39
5336	5335	-9.37245	0.00	-0.22	0.17	0.02	-0.28	0.00	-9.37248	786.20254	-1.45	-1.67
5335	5334	-8.39470	0.00	-0.34	0.14	0.00	-0.27	0.00	-8.39490	777.80764	0.45	-1.94
5334	5333	2.57473	0.00	0.22	-0.04	0.00	0.12	0.00	2.57491	780.38255	1.02	-1.82
5333	5332	6.10470	0.00	0.39	-0.08	-0.04	0.62	0.00	6.10497	786.48752	2.27	-1.20
5332	5331	1.52600	0.00	0.09	-0.02	0.00	0.00	0.00	1.52607	788.01359	2.40	-1.20
5331	5330	2.74935	0.00	0.14	-0.04	-0.07	0.07	0.00	2.74938	790.76297	1.20	-1.13
5330	5329	-4.21065	0.00	-0.14	0.06	-0.06	-0.13	0.00	-4.21079	786.55218	-2.77	-1.26
5329	5328	-2.69887	0.00	-0.08	0.04	-0.08	-0.09	0.00	-2.69899	783.85319	-7.17	-1.35
5328	5327	8.21580	0.00	0.46	-0.13	-0.11	1.45	0.00	8.21602	792.06921	-12.02	0.10
5327	5326	3.32085	0.00	0.09	-0.08	0.00	0.06	0.00	3.32086	795.39007	-11.31	0.16
5326	5325	22.84505	0.00	0.59	-0.57	-0.03	0.75	0.00	22.84504	818.23511	-9.11	0.91
5325	5324	-7.44182	0.00	-0.11	0.20	0.00	-0.11	0.00	-7.44173	810.79338	-10.32	0.80
5324	5323	7.32180	0.00	0.16	-0.19	0.02	0.23	0.00	7.32175	818.11513	-10.67	1.03
5323	5322	9.32065	0.00	0.52	-0.27	-0.04	0.00	0.00	9.32086	827.43599	-11.99	1.03
5322	5320	11.46680	0.00	0.44	-0.36	-0.03	-0.18	0.00	11.46685	838.90284	-12.31	0.85
5320	5319	8.78725	0.00	0.52	-0.19	-0.07	-0.19	0.00	8.78751	847.69035	-9.82	0.66
5319	5318	10.43365	0.00	0.55	-0.22	-0.06	-0.06	0.00	10.43392	858.12427	-4.40	0.60
5318	5317	14.15627	0.00	0.56	-0.31	-0.07	0.00	0.00	14.15645	872.28072	-5.46	0.60
5317	5316	12.83602	0.00	0.39	-0.28	-0.04	-0.21	0.00	12.83609	885.11681	-5.44	0.81
5316	5315	9.20415	0.00	0.18	-0.21	-0.03	-0.04	0.00	9.20409	894.32090	-4.55	0.77
5315	5314	19.83250	0.00	0.51	-0.64	-0.10	0.15	0.00	19.83227	914.15317	-1.28	0.92
5314	5313	0.18528	0.00	0.02	-0.01	-0.01	0.00	0.00	0.18528	914.33845	-1.20	0.92
5313	5312	13.05862	0.00	0.16	-0.39	-0.07	0.22	0.00	13.05832	927.39677	-1.06	1.14
5312	5311	9.89592	0.00	0.23	-0.28	-0.07	0.22	0.00	9.89580	937.29257	-1.82	1.36
5311	5310	7.97597	0.00	0.26	-0.22	-0.04	0.16	0.00	7.97597	945.26854	-1.93	1.52
5310	5304	12.42895	0.00	0.37	-0.34	-0.07	1.45	0.00	12.42891	957.69745	-3.14	2.97
5304	5305	-1.35112	0.00	-0.13	0.04	-0.02	-0.16	0.00	-1.35122	956.34623	-2.52	2.82
5305	5306	0.06957	0.00	0.00	0.00	-0.01	0.00	0.00	0.06956	956.41578	-2.50	2.82
5304	5303	14.33585	0.00	0.36	-0.37	-0.07	1.25	0.00	14.33577	972.03322	-0.31	4.22
5303	5302	21.45100	0.00	0.48	-0.53	-0.04	1.26	0.00	21.45091	993.48413	5.13	5.48

Table 9b-1

Table 9b. National Geodetic Survey Line L24792: File L24792.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
5302	5301	14.88322	0.00	0.52	-0.35	-0.02	0.68	0.00	14.88337	1008.36750	10.30	6.16
5301	9943	34.44040	0.00	1.26	-0.76	-0.02	0.91	0.00	34.44088	1042.80838	13.13	7.07
9943	9942	41.82750	0.00	1.37	-1.03	-0.05	1.25	0.00	41.82779	1084.63617	16.73	8.32
9942	9941	12.33950	0.00	0.31	-0.38	0.02	0.13	0.00	12.33945	1096.97562	17.78	8.45

Table 9c. National Geodetic Survey Line L24792: File L24792.prn(=.dat)

712	L24792	992999301984011011101140U	9	1	0.90			233456615	B
3.23322		MT 0.19 0.00 0.20 -0.05 0.01 0.09	0.0010337888	10336367					
512	L24792	153199281984011010361044U	3	1	0.27			233456615	B
-3.24645		MT 0.06 0.00 -0.04 0.05 0.00 -0.09	0.0010339509	10339510					
612	L24792	992899291984011010461108U	10	1	0.95			233456615	B
-0.82545		MT 0.25 0.00 0.10 0.01 0.01 -0.13	0.0010339510	10337888					
312	L24792	1529153019840110 9471013U	17	1	1.88			233456615	B
19.40857		MT 0.00 0.00 0.32 -0.30 -0.03 0.45	0.0010342739	10342740					
412	L24792	153015311984011010151033U	12	1	1.29			233456615	B
-5.14677		MT 0.38 0.00 -0.13 0.08 0.00 0.00	0.0010342740	10339509					
212	L24792	1528152919840110 9100932U	14	1	1.55			233456615	B
22.43752		MT 0.19 0.00 0.53 -0.39 -0.03 0.38	0.0010344380	10342739					
112	L24792	1527152819840110 8370907U	15	1	1.72			233456615	B
19.91637		MT 0.32 0.00 0.52 -0.40 -0.03 0.37	0.0010346022	10344380					
1212	L24792	152615271984011014181453U	18	1	2.04			233456615	B
-1.45685		MT 0.42 0.00 -0.02 0.02 0.09 -0.09	0.0010349424	10346022					
1112	L24792	534215261984011014121415U	1	1	0.01			233456615	B
-0.01335		MT 0.00 0.00 0.03 0.00 0.00 0.00	0.0010349427	10349424					
1012	L24792	534153421984011013541410U	4	1	0.45			233456615	B
-0.41447		MT 0.06 0.00 -0.01 0.01 0.02 -0.02	0.0010350996	10349427					
912	L24792	534053411984011013121339U	19	1	2.17			233456615	B
0.39567		MT 0.42 0.00 -0.03 0.00 0.08 0.02	0.0010354228	10350996					
812	L24792	533953401984011012401310U	15	1	1.72			233456615	B
4.89690		MT 0.28 0.00 0.45 -0.05 0.05 0.27	0.0010355761	10354228					
1712	L24792	533553341984011110291055U	15	1	1.44			233456615	F
-8.39470		MT -0.31 0.00 -0.34 0.14 0.00 -0.27	0.0010264590	10266353					
1812	L24792	533453331984011110581127U	19	1	1.84			233456615	F
2.57473		MT -0.29 0.00 0.22 -0.04 0.00 0.12	0.0010266353	10269713					
1912	L24792	533353321984011112431315U	17	1	1.63			233456615	F
6.10470		MT -0.48 0.00 0.39 -0.08 -0.04 0.62	0.0010269713	10273097					
2112	L24792	533153301984011113231359U	20	1	1.86			233456615	F
2.74935		MT -0.60 0.00 0.14 -0.04 -0.07 0.07	0.0010273094	10277858					
2012	L24792	533253311984011113171321U	1	1	0.03			233456615	F
1.52600		MT 0.00 0.00 0.09 -0.02 0.00 0.00	0.0010273097	10273094					
2212	L24792	533053291984011114121445U	16	1	1.48			233456615	F
-4.21065		MT -0.48 0.00 -0.14 0.06 -0.06 -0.13	0.0010277858	10282820					
2312	L24792	532953281984011114471519U	17	1	1.64			233456615	F
-2.69887		MT -0.58 0.00 -0.08 0.04 -0.08 -0.09	0.0010282820	10287643					
2412	L24792	532853271984011115211556U	20	1	2.22			233456615	F
8.21580		MT -0.83 0.00 0.46 -0.13 -0.11 1.45	0.0010287643	10294193					
1312	L24792	5339533819840111 8200855U	18	1	1.71			233456615	F
-5.56165		MT -0.30 0.00 -0.28 0.12 0.02 -0.08	0.0010355761	10359213					
1412	L24792	5338533719840111 9040913U	2	1	0.20			233456615	F
0.29095		MT -0.04 0.00 0.06 -0.01 0.00 0.00	0.0010359213	10359214					
1512	L24792	5337533619840111 9150944U	15	1	1.48			233456615	F
-4.91687		MT -0.31 0.00 0.04 0.10 0.02 -0.06	0.0010359214	10362538					
1612	L24792	5336533519840111 9471014U	16	1	1.53			233456615	F
-9.37245		MT -0.23 0.00 -0.22 0.17 0.02 -0.28	0.0010362538	10264590					
3212	L24792	532653271984011211301155U	6	1	0.54			233456615	B
-3.32085		MT 0.08 0.00 -0.09 0.08 0.00 -0.06	0.0010295922	10294193					
3112	L24792	532553261984011210451128U	17	1	1.51			233456615	B
-22.84505		MT 0.67 0.00 -0.59 0.57 0.03 -0.75	0.0010301391	10295922					
3012	L24792	532453251984011210151043U	12	1	1.13			233456615	B
7.44182		MT 0.30 0.00 0.11 -0.20 0.00 0.11	0.0010304807	10301391					
2912	L24792	5323532419840112 9421000U	12	1	1.30			233456615	B
-7.32180		MT 0.56 0.00 -0.16 0.19 0.02 -0.23	0.0010308206	10304807					
2812	L24792	5322532319840112 9140940U	15	1	1.72			233456615	B
-9.32065		MT 0.89 0.00 -0.52 0.27 0.04 0.00	0.0010316616	10308206					
2612	L24792	5321532019840112 8320842U	8	1	0.14			233456615	B
-15.29427		MT -0.06 0.00 -0.46 0.51 -0.01 -0.03	0.0010321569	10323336					
2712	L24792	5320532219840112 8450912U	16	1	1.85			233456615	B
-11.46680		MT 0.82 0.00 -0.44 0.36 0.03 0.18	0.0010323336	10316616					
2512	L24792	5320532119840112 8090830U	8	1	0.14			233456615	F
15.29407		MT 0.06 0.00 0.46 -0.53 0.01 0.02	0.0010323336	10321569					
3712	L24792	531953201984011215221546U	15	1	1.64			233456615	B
-8.78725		MT 0.73 0.00 -0.52 0.19 0.07 0.19	0.0010328351	10323336					
3612	L24792	531853191984011214531520U	16	1	1.50			233456615	B
-10.43365		MT 0.73 0.00 -0.55 0.22 0.06 0.06	0.0010334759	10328351					
3512	L24792	531753181984011214081441U	18	1	1.74			233456615	B
-14.15627		MT 0.89 0.00 -0.56 0.31 0.07 0.00	0.0010341126	10334759					
3412	L24792	531653171984011213421406U	15	1	1.47			233456615	B
-12.83602		MT 0.78 0.00 -0.39 0.28 0.04 -0.21	0.0010347771	10341126					
3312	L24792	531553161984011213191340U	12	1	1.13			233456615	B
-9.20415		MT 0.59 0.00 -0.18 0.21 0.03 0.04	0.0010350997	10347771					
4112	L24792	5312531119840113 9020924U	10	1	1.09			233456615	F
9.89592		MT -0.89 0.00 0.23 -0.28 -0.07 0.22	0.0010268071	10274671					
4212	L24792	5311531019840113 9391005U	12	1	1.07			233456615	F
7.97597		MT -0.60 0.00 0.26 -0.22 -0.04 0.16	0.0010274671	10279622					

Table 9c. National Geodetic Survey Line L24792: File L24792.prn(=.dat)---Continued

4312	L24792	531053041984011310071039U 12 1	1.23	233456615	F
12.42895		MT -0.94 0.00 0.37 -0.34 -0.07 1.45	0.001027962210286007		
4412	L24792	530453031984011310441110U 14 1	1.41	233456615	F
14.33585		MT -1.04 0.00 0.36 -0.37 -0.07 1.25	0.001028600710292592		
3812	L24792	5315531419840113 7520826U 20 1	2.17	233456615	F
19.83250		MT -1.20 0.00 0.51 -0.64 -0.10 0.15	0.001035099710360829		
4012	L24792	5313531219840113 8340900U 13 1	1.40	233456615	F
13.05862		MT -0.91 0.00 0.16 -0.39 -0.07 0.22	0.001036082710268071		
3912	L24792	5314531319840113 8290831U 1 1	0.03	233456615	F
0.18528		MT -0.09 0.00 0.02 -0.01 -0.01 0.00	0.001036082910360827		
4512	L24792	530353021984011312361314U 19 1	2.05	233456615	F
21.45100		MT -1.43 0.00 0.48 -0.53 -0.04 1.26	0.001029259210303135		
4612	L24792	530253011984011313161354U 16 1	1.35	233456615	F
14.88322		MT -0.71 0.00 0.52 -0.35 -0.02 0.68	0.001030313510308203		
4812	L24792	994399421984011314481548U 25 1	1.36	233456615	F
41.82750		MT -0.03 0.00 1.37 -1.03 -0.05 1.25	0.001030650010306501		
4712	L24792	530199431984011313591438U 16 1	1.11	233456615	F
34.44040		MT 0.30 0.00 1.26 -0.76 -0.02 0.91	0.001030820310306500		
5112	L24792	5306530519840116 8560900U 2 1	0.15	233456615	B
-0.06963		MT 0.09 0.00 0.00 0.00 0.01 0.00	0.001028443110284432		
5012	L24792	5305530619840116 8490854U 2 1	0.15	233456615	F
0.06950		MT -0.09 0.00 0.00 0.00 -0.01 0.00	0.001028443210284431		
5212	L24792	5305530419840116 9020928U 13 1	1.06	233456615	B
1.35052		MT -0.16 0.00 0.11 -0.04 0.01 0.15	0.001028443210286007		
4912	L24792	5304530519840116 8150847U 13 1	1.06	233456615	F
-1.35172		MT 0.16 0.00 -0.14 0.04 -0.02 -0.16	0.001028600710284432		
5312	L24792	9942994119840116 9531018U 12 1	0.77	233456615	F
12.33950		MT 0.32 0.00 0.31 -0.38 0.02 0.13	0.001030650110303136		

Table 10a. National Geodetic Survey Line L24686: File L24686.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
1863	10312986	D 371		0.00	36 24 54	115 27 03	1066.07810	1066.07810	0.00	0.00
1862	10312985	C 371		0.05	36 24 55	115 27 01	1057.89590	1057.89502	0.00	0.00
1861	10312984	B 371		0.13	36 24 56	115 27 00	1054.40819	1054.40693	0.00	0.00
1860	10316377	A 371		0.85	36 25 10	115 26 39	1023.02778	1023.02362	-0.84	0.00
1859	10319685	Z 370		2.36	36 25 32	115 25 44	950.14313	950.13376	-2.31	0.00
1858	10319687	R 398		2.82	36 25 35	115 25 26	930.79961	930.79016	-2.70	0.00
1857	10328098	Y 406		4.49	36 26 24	115 25 49	946.64257	946.63627	-2.05	0.00
1856	10336097	Z 406		6.15	36 27 11	115 26 17	958.20313	958.19974	-1.74	0.00
1855	10342518	X 406		7.99	36 27 59	115 26 54	974.63440	974.63273	-1.19	0.00
1854	10349111	A 407		10.06	36 28 37	115 28 01	1009.03297	1009.03428	-0.21	0.00
1853	10355509	B 407		11.78	36 29 10	115 28 52	1002.78439	1002.78734	-0.39	0.00
1852	10358897	C 407		13.40	36 29 38	115 29 43	992.02605	992.02876	-0.79	0.00
1851	10266002	D 407		15.09	36 30 11	115 30 39	975.09487	975.09577	-1.34	0.00
1850	10271102	E 407		16.90	36 30 44	115 31 36	962.21422	962.20863	-1.76	0.00
1849	10276044	F 407		18.35	36 31 11	115 32 24	959.07279	959.06337	-1.83	0.00
1848	10280951	G 407		20.08	36 31 42	115 33 16	969.72046	969.71183	-1.54	0.00
1847	10285741	H 407		21.72	36 32 11	115 34 07	975.51038	975.50106	-1.37	0.00
1846	10290565	J 407		23.46	36 32 42	115 35 01	982.16263	982.15321	-1.19	0.00
1845	10295603	K 407		25.08	36 33 11	115 35 50	986.73616	986.72409	-1.11	0.00
1844	10301085	L 407		26.71	36 33 40	115 36 40	983.42734	983.41096	-1.14	0.00
1843	10306169	M 407		28.46	36 34 17	115 37 44	970.12804	970.10855	-1.68	0.00
1842	10309541	N 407		30.01	36 34 36	115 38 39	956.83684	956.81656	-2.02	0.00
1841	10311298	P 407		31.60	36 34 40	115 39 45	950.06606	950.04430	-2.17	0.00
1866	10312990	T 296		33.11	36 34 52	115 40 32	950.40508	950.38258	-2.11	0.00
1840	10311299	Q 407		35.24	36 34 48	115 41 49	958.31428	958.29160	-1.90	0.00
1839	10311300	R 407		36.93	36 34 46	115 42 55	974.31743	974.29389	-1.53	0.00
1838	10309542	S 407		38.59	36 34 38	115 43 59	988.29680	988.27420	-1.06	0.00
1837	10309543	T 407		40.18	36 34 30	115 45 02	997.86126	997.84001	-0.82	0.00
1836	10307819	U 407		41.84	36 34 23	115 46 07	1005.32487	1005.30529	-0.62	0.00
1835	10306170	V 407		43.56	36 34 15	115 47 12	1016.31435	1016.29929	-0.30	0.00
1834	10304491	W 407		45.41	36 34 06	115 48 15	1031.71548	1031.70245	0.17	0.00
1833	10304489	N 17 USGS		46.81	36 34 01	115 49 11	1045.50349	1045.49244	0.60	0.00
1832	10306171	X 407		48.64	36 34 13	115 50 22	1060.80433	1060.78783	0.93	0.00
1831	10306172	Y 407		49.83	36 34 18	115 51 08	1073.15117	1073.13147	1.27	0.00
1830	10307820	Z 407		51.42	36 34 25	115 52 11	1080.02934	1080.01144	1.48	0.00
1829	10311294	M 17 USGS		53.48	36 34 46	115 53 28	1089.73713	1089.72391	1.81	0.00
1828	10314672	A 408		55.35	36 35 06	115 54 34	1098.06770	1098.05686	2.13	0.00
1827	10318057	B 408		57.09	36 35 24	115 55 38	1101.15139	1101.14150	2.21	0.00
1826	10321316	C 408		58.80	36 35 43	115 56 40	1106.95929	1106.94716	2.38	0.00
1825	10323089	K 17 USGS		60.07	36 35 53	115 57 33	1105.66148	1105.64540	2.31	0.00

Table 10a-1

Table 10a. National Geodetic Survey Line L24686: File L24686.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
1868	10324690	U 327 RESET 1963		60.75	36 36 06	115 57 57	1101.94110	1101.92261	2.22	0.00
1824	10324692	D 408		62.20	36 36 04	115 58 49	1070.62529	1070.60404	0.20	0.00
1867	10324688	V 327 RESET 1963		62.28	36 36 05	115 58 52	1068.22971	1068.20826	-0.12	0.00
1864	10331282	W 327		63.67	36 36 41	115 58 58	1065.16344	1065.14114	-0.42	0.00
1865	10332809	X 327		64.51	36 36 58	115 59 26	1053.35089	1053.32767	-0.85	0.00
1823	10323091	E 408		63.85	36 35 53	115 59 51	1055.65675	1055.63434	-0.62	0.00
1822	10321567	F 408		65.45	36 35 43	116 00 47	1027.89523	1027.86845	-2.56	0.00
1821	10319951	G 408		67.20	36 35 31	116 01 53	971.39840	971.36321	-5.40	0.00
1820	10316615	H 408		68.82	36 35 19	116 02 53	944.53615	944.49357	-7.15	0.00
1819	10313241	J 408		70.40	36 34 52	116 03 51	911.64519	911.59743	-9.14	0.00
1818	10309842	K 408		71.19	36 34 36	116 04 08	904.99866	904.95099	-9.49	0.00
1817	10303129	H 17 RESET 1962		72.75	36 33 58	116 04 52	884.16955	884.12058	-10.51	0.00
1816	10301390	L 408		74.57	36 33 43	116 05 53	864.34033	864.28760	-12.25	0.00
1814	10301381	B 98 USGS		76.28	36 33 49	116 06 58	865.35093	865.30164	-12.17	0.00
1815	10303127	G 17 USGS RESET 1962		76.32	36 33 51	116 07 00	863.84468	863.79531	-12.20	0.00
1813	10303134	M 408		77.75	36 33 56	116 07 53	858.28777	858.23503	-12.41	0.00
1812	10304806	N 408		79.06	36 34 00	116 08 40	845.81539	845.76005	-12.89	0.00
1811	10306499	F 17 RESET 1977		80.43	36 34 12	116 09 30	846.71441	846.66092	-12.83	0.00
1810	10308205	P 408		82.08	36 34 21	116 10 31	846.17831	846.12595	-12.85	0.00
1809	10309843	X 405		83.51	36 34 33	116 11 27	851.38661	851.33316	-12.68	0.00
1808	10313242	W 405		84.89	36 34 57	116 12 14	848.98944	848.93296	-12.69	0.00
1807	10314951	D 17		86.35	36 35 09	116 12 55	840.38037	840.32204	-12.63	0.00
1806	10321568	V 405		88.30	36 35 43	116 14 05	846.37388	846.31604	-11.96	0.00
1803	10323333	C 17-B 96 USGS		89.80	36 35 53	116 14 59	841.28088	841.22158	-12.19	0.00
1802	10326686	U 405		90.90	36 36 19	116 15 29	843.11408	843.05433	-12.08	0.00
1801	10331534	T 405		92.36	36 36 40	116 16 18	853.34864	853.28913	-11.96	0.00
9930	10336367	S 405		94.21	36 37 11	116 17 20	865.00474	864.94551	-11.62	0.00
9929	10337888	R 405		95.15	36 37 20	116 17 54	861.76954	861.71007	-11.71	0.00
9928	10339510	Q 405		96.10	36 37 32	116 18 30	862.59417	862.53842	-11.63	0.00

Table 10a-2

Table 10b. National Geodetic Survey Line L24686: File L24686.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
1863										1066.07810	0.00	0.00
1863	1862	-8.18195	-0.02	-0.36	0.13	0.00	0.00	0.00	-8.18220	1057.89590	-0.88	0.00
1862	1861	-3.48765	0.00	-0.12	0.06	0.00	0.00	0.00	-3.48771	1054.40819	-1.26	0.00
1861	1860	-31.37977	0.01	-1.28	0.64	-0.02	-0.84	0.00	-31.38041	1023.02778	-4.16	-0.84
1860	1859	-72.88365	0.00	-2.85	1.84	0.01	-1.47	0.00	-72.88465	950.14313	-9.37	-2.31
1859	1858	-19.34317	0.00	-0.74	0.40	-0.01	-0.39	0.00	-19.34352	930.79961	-9.45	-2.70
1858	1857	15.84280	0.00	0.37	-0.20	-0.01	0.65	0.00	15.84296	946.64257	-6.30	-2.05
1857	1856	11.56035	-0.01	0.39	-0.17	0.00	0.31	0.00	11.56056	958.20313	-3.39	-1.74
1856	1855	16.43107	0.00	0.47	-0.24	-0.03	0.55	0.00	16.43127	974.63440	-1.67	-1.19
1855	1854	34.39725	-0.01	2.10	-0.65	-0.12	0.98	0.00	34.39857	1009.03297	1.31	-0.21
1854	1853	-6.24835	0.00	-0.24	0.15	-0.14	-0.18	0.00	-6.24858	1002.78439	2.95	-0.39
1853	1852	-10.75827	-0.01	-0.21	0.26	-0.11	-0.40	0.00	-10.75834	992.02605	2.71	-0.79
1852	1851	-16.93070	0.00	-0.66	0.32	-0.14	-0.55	0.00	-16.93118	975.09487	0.90	-1.34
1851	1850	-12.88040	0.00	-0.29	0.16	-0.12	-0.42	0.00	-12.88065	962.21422	-5.59	-1.76
1850	1849	-3.14142	0.00	-0.03	0.03	-0.01	-0.07	0.00	-3.14143	959.07279	-9.42	-1.83
1849	1848	10.64755	0.00	0.19	-0.05	-0.02	0.29	0.00	10.64767	969.72046	-8.63	-1.54
1848	1847	5.78993	-0.02	0.11	-0.04	-0.06	0.17	0.00	5.78992	975.51038	-9.32	-1.37
1847	1846	6.65240	-0.02	0.07	-0.08	-0.12	0.18	0.00	6.65225	982.16263	-9.42	-1.19
1846	1845	4.57375	-0.01	-0.04	-0.06	-0.11	0.08	0.00	4.57353	986.73616	-12.07	-1.11
1845	1844	-3.30880	0.00	0.01	0.06	-0.09	-0.03	0.00	-3.30882	983.42734	-16.38	-1.14
1844	1843	-13.29917	0.01	-0.38	0.34	-0.10	-0.54	0.00	-13.29930	970.12804	-19.49	-1.68
1843	1842	-13.29090	0.01	-0.54	0.33	-0.10	-0.34	0.00	-13.29120	956.83684	-20.28	-2.02
1842	1841	-6.77082	0.00	-0.02	0.18	-0.12	-0.15	0.00	-6.77078	950.06606	-21.76	-2.17
1841	1866	0.33907	0.01	-0.03	-0.01	-0.02	0.06	0.00	0.33902	950.40508	-22.50	-2.11
1866	1840	7.90905	0.00	0.31	-0.11	-0.05	0.21	0.00	7.90920	958.31428	-22.68	-1.90
1840	1839	16.00285	0.00	0.46	-0.11	-0.05	0.37	0.00	16.00315	974.31743	-23.54	-1.53
1839	1838	13.97910	0.00	0.36	-0.05	-0.04	0.47	0.00	13.97937	988.29680	-22.60	-1.06
1838	1837	9.56455	0.02	0.03	-0.13	-0.01	0.24	0.00	9.56446	997.86126	-21.25	-0.82
1837	1836	7.46367	0.00	0.03	-0.07	-0.02	0.20	0.00	7.46361	1005.32487	-19.58	-0.62
1836	1835	10.98952	0.00	0.11	-0.15	0.00	0.32	0.00	10.98948	1016.31435	-15.06	-0.30
1835	1834	15.40117	0.00	0.25	-0.30	0.01	0.47	0.00	15.40113	1031.71548	-13.03	0.17
1834	1833	13.78795	0.00	0.38	-0.32	0.00	0.43	0.00	13.78801	1045.50349	-11.05	0.60
1833	1832	15.30038	0.02	0.82	-0.37	-0.01	0.33	0.00	15.30084	1060.80433	-16.50	0.93
1832	1831	12.34690	-0.02	0.24	-0.29	0.01	0.34	0.00	12.34684	1073.15117	-19.70	1.27
1831	1830	6.87815	0.01	0.10	-0.11	0.02	0.21	0.00	6.87817	1080.02934	-17.90	1.48
1830	1829	9.70780	0.02	0.11	-0.14	0.00	0.33	0.00	9.70779	1089.73713	-13.22	1.81
1829	1828	8.33052	0.00	0.05	-0.08	0.08	0.32	0.00	8.33057	1098.06770	-10.84	2.13
1828	1827	3.08355	0.01	0.10	-0.04	0.07	0.08	0.00	3.08369	1101.15139	-9.89	2.21
1827	1826	5.80785	0.00	0.15	-0.09	-0.01	0.17	0.00	5.80790	1106.95929	-12.13	2.38
1826	1825	-1.29780	0.01	-0.01	0.02	-0.03	-0.07	0.00	-1.29781	1105.66148	-16.08	2.31
1825	1868	-3.72023	0.02	-0.24	0.07	0.00	-0.09	0.00	-3.72038	1101.94110	-18.49	2.22
1868	1824	-31.31525	0.00	-1.36	0.86	-0.06	-2.03	0.00	-31.31581	1070.62529	-21.25	0.20
1824	1867	-2.39550	0.00	-0.13	0.06	0.00	-0.32	0.00	-2.39558	1068.22971	-21.45	-0.12
1867	1864	-3.06610	0.00	-0.17	0.05	-0.05	-0.30	0.00	-3.06627	1065.16344	-22.30	-0.42
1864	1865	-11.81222	0.00	-0.54	0.18	0.03	-0.43	0.00	-11.81255	1053.35089	-23.22	-0.85
1867	1823	-12.57237	0.00	-0.75	0.26	-0.10	-0.50	0.00	-12.57296	1055.65675	-22.41	-0.62

Table10b-1

Table 10b. National Geodetic Survey Line L24686: File L24686.ori--Continued

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
1823	1822	-27.76090	-0.01	-0.89	0.31	-0.03	-1.94	0.00	-27.76152	1027.89523	-26.78	-2.56
1822	1821	-56.49522	0.00	-2.74	1.18	-0.05	-2.84	0.00	-56.49683	971.39840	-35.19	-5.40
1821	1820	-26.86187	0.00	-0.52	0.22	-0.08	-1.75	0.00	-26.86225	944.53615	-42.58	-7.15
1820	1819	-32.88982	0.00	-1.21	0.12	-0.05	-1.99	0.00	-32.89096	911.64519	-47.76	-9.14
1819	1818	-6.64635	0.00	-0.17	0.00	-0.01	-0.35	0.00	-6.64653	904.99866	-47.67	-9.49
1818	1817	-20.82847	0.00	-0.64	0.03	-0.03	-1.02	0.00	-20.82911	884.16955	-48.97	-10.51
1817	1816	-19.82867	0.00	-0.65	0.11	-0.01	-1.74	0.00	-19.82922	864.34033	-52.73	-12.25
1816	1814	1.01040	0.00	0.21	-0.01	0.00	0.08	0.00	1.01060	865.35093	-49.29	-12.17
1814	1815	-1.50620	0.00	-0.07	0.02	0.00	-0.03	0.00	-1.50625	863.84468	-49.37	-12.20
1815	1813	-5.55695	0.00	-0.03	0.06	0.01	-0.21	0.00	-5.55691	858.28777	-52.74	-12.41
1813	1812	-12.47202	0.00	-0.44	0.07	0.01	-0.48	0.00	-12.47238	845.81539	-55.34	-12.89
1812	1811	0.89881	0.00	0.21	0.00	0.00	0.06	0.00	0.89902	846.71441	-53.49	-12.83
1811	1810	-0.53615	0.00	0.07	0.00	-0.02	-0.02	0.00	-0.53610	846.17831	-52.36	-12.85
1810	1809	5.20830	0.00	0.03	0.01	-0.04	0.17	0.00	5.20830	851.38661	-53.45	-12.68
1809	1808	-2.39695	-0.01	-0.15	-0.01	-0.05	-0.01	0.00	-2.39717	848.98944	-56.48	-12.69
1808	1807	-8.60857	0.00	-0.42	-0.08	0.00	0.06	0.00	-8.60907	840.38037	-58.33	-12.63
1807	1806	5.99332	0.00	0.16	0.02	0.01	0.67	0.00	5.99351	846.37388	-57.84	-11.96
1806	1803	-5.09277	0.00	-0.24	0.00	0.01	-0.23	0.00	-5.09300	841.28088	-59.30	-12.19
1803	1802	1.83317	-0.02	0.08	0.00	-0.03	0.11	0.00	1.83320	843.11408	-59.75	-12.08
1802	1801	10.23437	0.04	0.22	-0.16	0.09	0.12	0.00	10.23456	853.34864	-59.51	-11.96
1801	9930	11.65577	0.03	0.44	-0.20	0.06	0.34	0.00	11.65610	865.00474	-59.23	-11.62
9930	9929	-3.23520	0.07	-0.12	0.07	-0.02	-0.09	0.00	-3.23520	861.76954	-59.47	-11.71
9929	9928	0.82470	0.04	-0.02	-0.02	-0.07	0.08	0.00	0.82463	862.59417	-55.75	-11.63

Table 10c. National Geodetic Survey Line L24686: File L24686.prn(=.dat)

312	L24686	186118601983042213361505U	16	1	0.71		216202315	F
-31.37812		MT -0.36 0.02 -1.18 0.46 -0.01 -1.00	0.001031298410316377					
212	L24686	186218611983042213141328U	2	1	0.08		216202315	F
-3.48765		MT -0.03 0.00 -0.12 0.06 0.00 0.00	0.001031298510312984					
112	L24686	186318621983042212381311U	4	1	0.05		216202315	F
-8.18195		MT -0.03 -0.02 -0.36 0.13 0.00 0.00	0.001031298610312985					
712	L24686	186118601983042513151418T	16	1	0.72		216202315	F
-31.37952		MT -0.36 0.00 -1.42 0.53 -0.06 -0.74	0.001031298410316377					
412	L24686	1860186119830425 8300934T	15	1	0.73		216202315	B
31.38167		MT 0.36 0.00 1.23 -0.94 -0.02 0.78	0.001031637710312984					
512	L24686	1860185919830425 9511137T	37	1	1.51		216202315	F
-72.88365		MT -0.53 0.00 -2.85 1.84 0.01 -1.47	0.001031637710319685					
612	L24686	185918581983042511401215T	11	1	0.46		216202315	F
-19.34317		MT -0.07 0.00 -0.74 0.40 -0.01 -0.39	0.001031968510319687					
812	L24686	185818571983042514351548T	18	1	1.67		216202315	F
15.84280		MT -1.13 0.00 0.37 -0.20 -0.01 0.65	0.001031968710328098					
1212	L24686	182318221983051613501546T	24	1	1.60		216191674	F
-27.76090		MT 0.26 -0.01 -0.89 0.31 -0.03 -1.94	0.001032309110321567					
1112	L24686	186718231983051611051250T	22	1	1.57		216191674	F
-12.57237		MT 0.31 0.00 -0.75 0.26 -0.10 -0.50	0.001032468810323091					
912	L24686	1867182419830516 9250937T	1	1	0.08		216191674	B
2.39585		MT 0.03 0.01 0.16 -0.07 0.00 0.49	0.001032468810324692					
1012	L24686	1824186819830516 9401100T	16	1	1.44		216191674	B
31.31455		MT -0.05 0.01 0.97 -0.84 0.07 3.55	0.001032469210324690					
1512	L24686	182018191983051713571523T	23	1	1.58		216191674	F
-32.88982		MT 0.61 0.00 -1.21 0.12 -0.05 -1.99	0.001031661510313241					
1412	L24686	182118201983051712301356T	23	1	1.62		216191674	F
-26.86187		MT 0.28 0.00 -0.52 0.22 -0.08 -1.75	0.001031995110316615					
1312	L24686	1822182119830517 9301131T	26	1	1.75		216191674	F
-56.49522		MT 0.29 0.00 -2.74 1.18 -0.05 -2.84	0.001032156710319951					
1712	L24686	1814181619830518 9211025T	18	1	1.71		216191674	B
-1.01040		MT 0.13 0.00 -0.21 0.01 0.00 -0.08	0.001030138110301390					
1812	L24686	181618171983051810261131T	19	1	1.82		216191674	B
19.82867		MT -0.32 0.00 0.65 -0.11 0.01 1.74	0.001030139010303129					
1612	L24686	1815181419830518 9130920T	1	1	0.04		216191674	B
1.50620		MT 0.04 0.00 0.07 -0.02 0.00 0.03	0.001030312710301381					
1912	L24686	181718181983051812311335T	17	1	1.56		216191674	B
20.82847		MT -0.83 0.00 0.64 -0.03 0.03 1.02	0.001030312910309842					
2012	L24686	181818191983051813371450T	10	1	0.79		216191674	B
6.64635		MT -0.36 0.00 0.17 0.00 0.01 0.35	0.001030984210313241					
2412	L24686	180718081983052013481516T	21	1	1.46		216191674	B
8.60857		MT 0.25 0.00 0.42 0.08 0.00 -0.06	0.001031495110313242					
2312	L24686	180618071983052012341347T	23	1	1.95		216191674	B
-5.99332		MT 0.70 0.00 -0.16 -0.02 -0.01 -0.67	0.001032156810314951					
2212	L24686	180318061983052010261134T	17	1	1.50		216191674	B
5.09277		MT 0.23 0.00 0.24 0.00 -0.01 0.23	0.001032333310321568					
2112	L24686	1802180319830520 9401025T	11	1	1.10		216191674	B
-1.83317		MT 0.52 0.02 -0.08 0.00 0.03 -0.11	0.001032668610323333					
2812	L24686	185618571983042614541551T	15	1	1.66		216202315	B
-11.56035		MT 1.10 0.01 -0.39 0.17 0.00 -0.31	0.001033609710328098					
2712	L24686	185518561983042613351443T	20	1	1.84		216202315	B
-16.43107		MT 1.14 0.00 -0.47 0.24 0.03 -0.55	0.001034251810336097					
2612	L24686	185418551983042611081235T	23	1	2.07		216202315	B
-34.39725		MT 0.92 0.01 -2.10 0.65 0.12 -0.98	0.001034911110342518					
2512	L24686	1853185419830426 9161058T	19	1	1.72		216202315	B
6.24835		MT 0.81 0.00 0.24 -0.15 0.14 0.18	0.001035550910349111					
3112	L24686	185118501983042711101219T	20	1	1.81		216202315	F
-12.88040		MT -0.78 0.00 -0.29 0.16 -0.12 -0.42	0.001026600210271102					
3212	L24686	185018491983042713191430T	15	1	1.45		216202315	F
-3.14142		MT -0.64 0.00 -0.03 0.03 -0.01 -0.07	0.001027110210276044					
2912	L24686	1853185219830427 8470955T	17	1	1.62		216202315	F
-10.75827		MT -0.68 -0.01 -0.21 0.26 -0.11 -0.40	0.001035550910358897					
3012	L24686	1852185119830427 9561109T	19	1	1.69		216202315	F
-16.93070		MT -0.80 0.00 -0.66 0.32 -0.14 -0.55	0.001035889710266002					
3712	L24686	184818491983042813341439T	19	1	1.73		216202315	B
-10.64755		MT 0.73 0.00 -0.19 0.05 0.02 -0.29	0.001028095110276044					
3612	L24686	184718481983042812481333T	16	1	1.64		216202315	B
-5.78993		MT 0.69 0.02 -0.11 0.04 0.06 -0.17	0.001028574110280951					
3512	L24686	184618471983042810491148T	16	1	1.74		216202315	B
-6.65240		MT 0.74 0.02 -0.07 0.08 0.12 -0.18	0.001029056510285741					
3412	L24686	1845184619830428 9511043T	15	1	1.62		216202315	B
-4.57375		MT 0.70 0.01 0.04 0.06 0.11 -0.08	0.001029560310290565					
3312	L24686	1844184519830428 8520950T	16	1	1.63		216202315	B
3.30880		MT 0.70 0.00 -0.01 -0.06 0.09 0.03	0.001030108510295603					
3812	L24686	1844184319830429 9020959T	16	1	1.75		216202315	F
-13.29917		MT -0.89 0.01 -0.38 0.34 -0.10 -0.54	0.001030108510306169					
3912	L24686	184318421983042910001040T	14	1	1.55		216202315	F
-13.29090		MT -0.45 0.01 -0.54 0.33 -0.10 -0.34	0.001030616910309541					

Table 10c. National Geodetic Survey Line L24686: File L24686.prn(=.dat)--Continued

4012	L24686	184218411983042910411130T	14	1	1.59		216202315	F
-6.77082		MT -0.09 0.00 -0.02 0.18 -0.12 -0.15	0.001030954110311298					
4112	L24686	1841186619830503 9201048T	17	1	1.51		216202315	F
0.33907		MT -0.28 0.01 -0.03 -0.01 -0.02 0.06	0.001031129810312990					
4312	L24686	184018391983050313201430T	20	1	1.69		216202315	F
16.00285		MT 0.05 0.00 0.46 -0.11 -0.05 0.37	0.001031129910311300					
4412	L24686	183918381983050314321545T	20	1	1.66		216202315	F
13.97910		MT 0.19 0.00 0.36 -0.05 -0.04 0.47	0.001031130010309542					
4212	L24686	186618401983050310501220T	25	1	2.13		216202315	F
7.90905		MT 0.09 0.00 0.31 -0.11 -0.05 0.21	0.001031299010311299					
4512	L24686	1838183719830504 9251155T	20	1	1.59		216202315	F
9.56455		MT 0.19 0.02 0.03 -0.13 -0.01 0.24	0.001030954210309543					
4612	L24686	1833183419830505 9171019T	15	1	1.40		216202315	B
-13.78795		MT -0.13 0.00 -0.38 0.32 0.00 -0.43	0.001030448910304491					
4712	L24686	183418351983050510201132T	20	1	1.85		216202315	B
-15.40117		MT -0.23 0.00 -0.25 0.30 -0.01 -0.47	0.001030449110306170					
4812	L24686	183518361983050512021340T	20	1	1.72		216202315	B
-10.98952		MT -0.20 0.00 -0.11 0.15 0.00 -0.32	0.001030617010307819					
4912	L24686	183618371983050513471517T	19	1	1.66		216202315	B
-7.46367		MT -0.17 0.00 -0.03 0.07 0.02 -0.20	0.001030781910309543					
5012	L24686	1833183219830506 9321048T	20	1	1.83		216202315	F
15.30038		MT -0.31 0.02 0.82 -0.37 -0.01 0.33	0.001030448910306171					
5112	L24686	183218311983050610491140T	14	1	1.19		216202315	F
12.34690		MT -0.13 -0.02 0.24 -0.29 0.01 0.34	0.001030617110306172					
5212	L24686	183118301983050612401346T	19	1	1.59		216202315	F
6.87815		MT -0.18 0.01 0.10 -0.11 0.02 0.21	0.001030617210307820					
5312	L24686	183018291983050613471521T	25	1	2.06		216202315	F
9.70780		MT -0.56 0.02 0.11 -0.14 0.00 0.33	0.001030782010311294					
5812	L24686	182818291983050914321545T	22	1	1.87		216202315	B
-8.33052		MT 0.54 0.00 -0.05 0.08 -0.08 -0.32	0.001031467210311294					
5712	L24686	182718281983050913181430T	20	1	1.74		216202315	B
-3.08355		MT 0.49 -0.01 -0.10 0.04 -0.07 -0.08	0.001031805710314672					
5612	L24686	182618271983050911121218T	18	1	1.71		216202315	B
-5.80785		MT 0.51 0.00 -0.15 0.09 0.01 -0.17	0.001032131610318057					
5512	L24686	182518261983050910271111T	13	1	1.27		216202315	B
1.29780		MT 0.27 -0.01 0.01 -0.02 0.03 0.07	0.001032308910321316					
5412	L24686	1868182519830509 9411026T	7	1	0.68		216202315	B
3.72000		MT 0.35 -0.04 0.24 -0.08 0.04 0.05	0.001032469010323089					
6312	L24686	182518681983051015041541T	8	1	0.68		216202315	F
-3.72045		MT -0.35 0.00 -0.24 0.06 0.03 -0.12	0.001032308910324690					
6112	L24686	186718641983051012271351T	20	1	1.39		216202315	F
-3.06610		MT -0.94 0.00 -0.17 0.05 -0.05 -0.30	0.001032468810331282					
5912	L24686	1868182419830510 9411110T	20	1	1.45		216202315	F
-31.31595		MT 0.05 0.00 -1.74 0.88 -0.05 -0.50	0.001032469010324692					
6012	L24686	182418671983051011111127T	1	1	0.08		216202315	F
-2.39515		MT -0.03 0.00 -0.10 0.05 0.00 -0.15	0.001032469210324688					
6212	L24686	186418651983051013521440T	11	1	0.84		216202315	F
-11.81222		MT -0.44 0.00 -0.54 0.18 0.03 -0.43	0.001033128210332809					
6712	L24686	180118021983051113421510U	20	1	1.46		216202315	B
-10.23437		MT 0.44 -0.04 -0.22 0.16 -0.09 -0.12	0.001033153410326686					
6612	L24686	993018011983051112381340U	22	1	1.85		216202315	B
-11.65577		MT 0.65 -0.03 -0.44 0.20 -0.06 -0.34	0.001033636710331534					
6512	L24686	992999301983051110491138U	11	1	0.94		216202315	B
3.23520		MT 0.19 -0.07 0.12 -0.07 0.02 0.09	0.001033788810336367					
6412	L24686	992899291983051110041048T	11	1	0.95		216202315	B
-0.82470		MT 0.25 -0.04 0.02 0.02 0.07 -0.08	0.001033951010337888					
6812	L24686	1815181319830519 9181022T	15	1	1.43		216191674	F
-5.55695		MT -0.11 0.00 -0.03 0.06 0.01 -0.21	0.001030312710303134					
6912	L24686	181318121983051910231116T	14	1	1.31		216191674	F
-12.47202		MT -0.08 0.00 -0.44 0.07 0.01 -0.48	0.001030313410304806					
7012	L24686	181218111983051911171220T	15	1	1.37		216191674	F
0.89881		MT -0.25 0.00 0.21 0.00 0.00 0.06	0.001030480610306499					
7112	L24686	181118101983051912051403T	18	1	1.65		216191674	F
-0.53615		MT -0.19 0.00 0.07 0.00 -0.02 -0.02	0.001030649910308205					
7212	L24686	181018091983051914041458T	16	1	1.43		216191674	F
5.20830		MT -0.25 0.00 0.03 0.01 -0.04 0.17	0.001030820510309843					
7312	L24686	180918081983051914591606T	15	1	1.38		216191674	F
-2.39695		MT -0.50 -0.01 -0.15 -0.01 -0.05 -0.01	0.001030984310313242					

Table 11a. National Geodetic Survey Line L24576: File L24576.pro

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
9000	10276043	N 399		0.00	36 11 18	115 08 25	601.94180	601.94180	0.00	0.00
9001	10272796	Z 399		0.82	36 10 51	115 08 28	611.07882	611.07915	0.06	0.00
2034	10269371	P 314 RESET 1965		1.30	36 10 38	115 08 37	615.15588	615.15638	0.30	0.00
9002	10269380	V 398		1.87	36 10 38	115 09 00	620.89416	620.89515	0.64	0.00
1000	10269372	Q 365		2.18	36 10 37	115 09 11	621.58782	621.58894	0.67	0.00
1001	10269381	W 398		3.62	36 10 38	115 10 08	630.77206	630.77465	1.73	0.00
1002	10272797	X 398		4.79	36 10 52	115 10 41	638.57080	638.57459	2.53	0.00
1003	10279327	Y 398		6.36	36 11 32	115 11 20	650.68954	650.69514	3.44	0.00
1004	10282563	S 365		7.33	36 11 58	115 11 41	660.00347	660.01042	4.37	0.00
1005	10285738	P 169		8.07	36 12 18	115 11 59	667.59602	667.60390	5.07	0.00
1006	10290564	U 398		9.28	36 12 48	115 12 29	674.49907	674.50724	5.70	0.00
1007	10299241	T 398		11.13	36 13 38	115 13 13	687.27014	687.27765	6.47	0.00
1008	10301081	Q 169		11.39	36 13 44	115 13 18	687.36533	687.37273	6.47	0.00
1009	10307818	T 365 RESET 1964		12.88	36 14 23	115 13 54	697.87764	697.88550	7.14	0.00
1010	10314668	R 169 RESET 1964		14.44	36 15 05	115 14 29	707.11694	707.12735	8.13	0.00
1011	10323088	S 169 RESET 1963		16.19	36 15 51	115 15 12	718.34566	718.35898	9.34	0.00
1012	10328097	U 365		17.55	36 16 24	115 15 47	731.00478	731.02152	10.34	0.00
1013	10329668	S 398		18.06	36 16 38	115 15 58	737.13157	737.14961	10.85	0.00
1015	10336093	113 USGS		19.23	36 17 15	115 16 01	747.50426	747.52382	11.79	0.00
1016	10344150	U 169		20.93	36 18 07	115 16 24	763.95620	763.97484	12.65	0.00
1018	10352351	V 365		22.36	36 18 51	115 16 45	774.88202	774.89923	13.42	0.00
1017	10352350	A 18		22.37	36 18 51	115 16 45	775.28957	775.30682	13.42	0.00
1019	10360557	V 169		24.05	36 19 41	115 17 11	790.55401	790.57122	14.62	0.00
1020	10267750	112 USGS		25.60	36 20 26	115 17 42	805.98503	806.00271	16.39	0.00
1022	10276042	W 365		27.42	36 21 12	115 18 28	822.62164	822.63951	18.18	0.00
1021	10276041	X 314		27.44	36 21 12	115 18 28	822.49136	822.50924	18.18	0.00
1023	10280949	W 314		28.84	36 21 45	115 19 08	833.03155	833.04968	19.27	0.00
1024	10287365	V 314		30.42	36 22 23	115 19 52	841.43277	841.45062	20.08	0.00
1025	10288927	S 370		32.04	36 22 34	115 20 40	859.98764	860.00657	21.53	0.00
1026	10282565	T 370		33.60	36 21 57	115 21 22	903.59022	903.61379	23.22	0.00
1027	10288930	A 399		35.17	36 22 34	115 22 05	902.51778	902.53988	23.13	0.00
1028	10295602	Z 398		36.74	36 23 10	115 22 50	894.93158	894.95104	22.30	0.00
1029	10301082	W 370		38.35	36 23 48	115 23 36	881.32738	881.34362	21.02	0.00
1030	10309538	X 370		40.18	36 24 30	115 24 27	877.77264	877.78597	20.69	0.00
1031	10314669	Y 370		41.75	36 25 06	115 25 10	918.33761	918.35393	22.74	0.00
1032	10319687	R 398		42.73	36 25 35	115 25 26	930.81155	930.83279	23.55	0.00
1033	10319685	Z 370		43.20	36 25 32	115 25 44	950.15604	950.17736	23.66	0.00
1034	10316377	A 371		44.68	36 25 10	115 26 39	1023.04202	1023.06855	25.43	0.00
1035	10312984	B 371		45.38	36 24 56	115 27 00	1054.42493	1054.45436	25.95	0.00
1036	10312985	C 371		45.46	36 24 55	115 27 01	1057.91288	1057.94268	25.96	0.00

Table 11a-1

Table 11a. National Geodetic Survey Line L24576: File L24576.pro--Continued

Seq No.	UID	Benchmark	Spur Code	Distance (km)	Latitude	Longitude	Observed Elevation (m)	Obs Grav Ortho Ht (m)	Cumul. Refr Cor. (mm)	Cumul. Magn Cor. (mm)
1037	10312986	D 371		45.50	36 24 54	115 27 03	1066.09523	1066.12591	25.98	0.00

Table 11b. National Geodetic Survey Line L24576: File L24576.ori

FROM SEQ NO.	TO SEQ NO.	UNCORRECTED FIELD ELEVATION DIFFERENCE	LEVEL CORR.	ROD CORR.	ASTRO CORR.	TEMP. CORR.	REFR. CORR.	MAGN. CORR.	CORRECTED OBSERVED ELE. DIFFERENCE	CUMULATIVE OBSERVED ELEVATION (OF TO SEQ NO)	CUMULAT. OBS. GRAV ORTHO CORR.	CUMUL. REFR. CORR.
		(m)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(m)	(m)	(mm)	(mm)
9000										601.94180	0.00	0.00
9000	9001	9.13692	0.00	0.17	-0.08	0.01	0.06	0.00	9.13702	611.07882	0.33	0.06
9001	2034	4.07695	0.01	0.08	-0.01	0.03	0.24	0.00	4.07706	615.15588	0.50	0.30
2034	9002	5.73817	0.01	0.11	-0.01	0.00	0.34	0.00	5.73828	620.89416	0.99	0.64
9002	1000	0.69364	0.00	0.01	0.01	0.00	0.03	0.00	0.69366	621.58782	1.12	0.67
1000	1001	9.18399	0.00	0.17	0.09	0.00	1.06	0.00	9.18424	630.77206	2.59	1.73
1001	1002	7.79858	0.00	0.14	0.03	-0.01	0.80	0.00	7.79874	638.57080	3.79	2.53
1002	1003	12.11848	-0.01	0.22	0.08	-0.04	0.91	0.00	12.11874	650.68954	5.60	3.44
1003	1004	9.31375	0.00	0.17	0.03	-0.03	0.93	0.00	9.31393	660.00347	6.95	4.37
1004	1005	7.59240	0.00	0.14	0.03	-0.02	0.70	0.00	7.59256	667.59602	7.88	5.07
1005	1006	6.90289	0.00	0.13	0.06	-0.03	0.63	0.00	6.90305	674.49907	8.17	5.70
1006	1007	12.77091	0.00	0.24	-0.05	-0.03	0.77	0.00	12.77107	687.27014	7.51	6.47
1007	1008	0.09519	0.00	0.00	0.00	0.00	0.00	0.00	0.09519	687.36533	7.40	6.47
1008	1009	10.51217	0.01	0.19	-0.05	-0.02	0.67	0.00	10.51231	697.87764	7.86	7.14
1009	1010	9.23916	0.00	0.17	0.02	-0.05	0.99	0.00	9.23930	707.11694	10.41	8.13
1010	1011	11.22856	0.00	0.21	0.03	-0.09	1.21	0.00	11.22872	718.34566	13.32	9.34
1011	1012	12.65890	0.00	0.23	0.06	-0.06	1.00	0.00	12.65912	731.00478	16.74	10.34
1012	1013	6.12671	-0.01	0.11	0.00	-0.03	0.51	0.00	6.12679	737.13157	18.04	10.85
1013	1015	10.37256	-0.01	0.19	-0.03	-0.02	0.94	0.00	10.37269	747.50426	19.56	11.79
1015	1016	16.45180	0.00	0.30	-0.11	-0.06	0.86	0.00	16.45194	763.95620	18.64	12.65
1016	1018	10.92573	0.00	0.20	-0.04	-0.07	0.77	0.00	10.92582	774.88202	17.21	13.42
1018	1017	0.40754	0.00	0.01	0.00	0.00	0.00	0.00	0.40755	775.28957	17.25	13.42
1018	1019	15.67187	0.00	0.29	-0.10	-0.06	1.21	0.00	15.67200	790.55401	17.21	14.62
1019	1020	15.43075	-0.01	0.29	0.06	-0.06	1.77	0.00	15.43102	805.98503	17.68	16.39
1020	1022	16.63648	0.00	0.31	-0.09	-0.10	1.80	0.00	16.63660	822.62164	17.87	18.18
1022	1021	-0.13028	0.00	0.00	0.00	0.00	0.00	0.00	-0.13028	822.49136	17.88	18.18
1022	1023	10.40988	0.00	0.19	-0.06	-0.10	1.09	0.00	10.40991	833.03155	18.13	19.27
1023	1024	8.40121	0.00	0.16	-0.05	-0.11	0.81	0.00	8.40122	841.43277	17.85	20.08
1024	1025	18.55449	0.00	0.34	0.07	-0.02	1.45	0.00	18.55487	859.98763	18.93	21.53
1025	1026	43.60170	0.00	0.81	0.04	0.04	1.69	0.00	43.60259	903.59022	23.57	23.22
1026	1027	-1.07237	0.00	-0.02	0.00	-0.05	-0.09	0.00	-1.07244	902.51778	22.10	23.13
1027	1028	-7.58599	0.00	-0.14	-0.03	-0.05	-0.82	0.00	-7.58620	894.93158	19.46	22.30
1028	1029	-13.60386	0.00	-0.25	-0.05	-0.05	-1.28	0.00	-13.60420	881.32738	16.24	21.02
1029	1030	-3.55459	0.00	-0.07	-0.06	-0.03	-0.33	0.00	-3.55475	877.77263	13.33	20.69
1030	1031	40.56370	0.00	0.75	0.55	-0.03	2.05	0.00	40.56498	918.33761	16.32	22.74
1031	1032	12.47359	0.00	0.23	0.15	-0.03	0.81	0.00	12.47394	930.81154	21.24	23.55
1032	1033	19.34412	0.00	0.36	0.00	0.01	0.11	0.00	19.34449	950.15604	21.32	23.66
1033	1034	72.88325	0.00	1.35	1.43	-0.04	1.77	0.00	72.88598	1023.04202	26.53	25.43
1034	1035	31.38204	0.00	0.58	0.29	0.00	0.52	0.00	31.38291	1054.42493	29.43	25.95
1035	1036	3.48787	0.00	0.06	0.02	0.00	0.02	0.00	3.48795	1057.91288	29.80	25.96
1036	1037	8.18216	0.00	0.15	0.04	0.00	0.02	0.00	8.18235	1066.09523	30.68	25.98

Table 11b-1

Table 11c. National Geodetic Survey Line L24576: File L24576.prn(=.dat)

512	L24576	1035103619800519 9470957T	4 1 0.08	233456616	F
3.48787		MT 0.03 0.00 0.06 0.03 0.00 0.02	0.001031298410312985		
312	L24576	1035103419800519 8090905T	18 1 0.70	233456616	B
-31.38162		MT -0.36 0.00 -0.58 -0.20 -0.01 -0.47	0.001031298410316377		
212	L24576	1036103519800519 7540809T	4 1 0.08	233456616	B
-3.48787		MT -0.03 0.00 -0.06 0.00 0.00 -0.01	0.001031298510312984		
612	L24576	1036103719800519 9571008T	4 1 0.04	233456616	F
8.18210		MT 0.03 0.00 0.15 0.07 0.00 0.02	0.001031298510312986		
112	L24576	1037103619800519 7400754T	4 1 0.04	233456616	B
-8.18222		MT -0.03 0.00 -0.15 -0.01 0.00 -0.01	0.001031298610312985		
412	L24576	1034103519800519 9060947T	18 1 0.70	233456616	F
31.38245		MT 0.36 0.01 0.58 0.37 0.00 0.57	0.001031637710312984		
712	L24576	103410331980051910131157T	38 1 1.48	233456616	B
-72.88420		MT -0.53 0.00 -1.35 -1.26 0.03 -1.71	0.001031637710319685		
812	L24576	103310341980051912031345T	38 1 1.48	233456616	F
72.88230		MT 0.53 0.00 1.35 1.59 -0.05 1.83	0.001031968510316377		
1312	L24576	1030103119800520 9291034T	24 1 1.57	233456616	F
40.56280		MT -0.79 0.00 0.75 0.66 -0.02 2.29	0.001030953810314669		
1212	L24576	1031103019800520 8200929T	24 1 1.57	233456616	B
-40.56460		MT 0.79 0.00 -0.75 -0.44 0.03 -1.81	0.001031466910309538		
1412	L24576	103110321980052010341110T	12 1 0.98	233456616	F
12.47317		MT -0.66 0.00 0.23 0.23 -0.02 1.13	0.001031466910319687		
1012	L24576	1033103219800520 7240748T	12 1 0.47	233456616	B
-19.34407		MT -0.07 0.00 -0.36 -0.04 -0.01 -0.14	0.001031968510319687		
1112	L24576	1032103119800520 7480820T	12 1 0.98	233456616	B
-12.47400		MT 0.66 0.00 -0.23 -0.06 0.03 -0.49	0.001031968710314669		
912	L24576	1032103319800520 6550724T	12 1 0.47	233456616	F
19.34417		MT 0.07 0.00 0.36 -0.04 0.01 0.08	0.001031968710319685		
1512	L24576	103010291980052011201235T	22 1 1.83	233456616	B
3.55583		MT 0.90 0.00 0.07 0.07 0.04 0.35	0.001030953810301082		
1812	L24576	1027102819800521 8450928T	14 1 1.57	233456615	F
-7.58545		MT -0.79 0.00 -0.14 -0.03 -0.04 -0.93	0.001028893010295602		
1712	L24576	1028102719800521 7580844T	14 1 1.57	233456615	B
7.58652		MT 0.79 0.00 0.14 0.03 0.05 0.72	0.001029560210288930		
1912	L24576	1028102919800521 9281015T	14 1 1.60	233456615	F
-13.60435		MT -0.83 0.00 -0.25 -0.09 -0.03 -2.12	0.001029560210301082		
1612	L24576	1029102819800521 7000757T	16 1 1.62	233456615	B
13.60337		MT 0.83 0.00 0.25 0.00 0.06 0.44	0.001030108210295602		
2112	L24576	102710261980052111351240T	16 1 1.57	233456615	B
1.07163		MT 0.82 0.00 0.02 0.02 0.02 0.15	0.001028893010282565		
2012	L24576	102910301980052110171126T	22 1 1.83	233456615	F
-3.55335		MT -0.90 0.00 -0.07 -0.04 -0.02 -0.32	0.001030108210309538		
2212	L24576	1026102519800522 6450752T	24 1 1.56	233456615	B
-43.60267		MT -0.80 0.00 -0.81 0.16 -0.03 -0.62	0.001028256510288927		
2412	L24576	1024102519800522 8510955T	18 1 1.62	233456615	F
18.55415		MT -0.23 0.00 0.34 0.08 -0.01 1.67	0.001028736510288927		
2512	L24576	1025102619800522 9561111T	24 1 1.56	233456615	F
43.60072		MT 0.80 0.00 0.81 0.24 0.05 2.76	0.001028892710282565		
2312	L24576	1025102419800522 7520850T	18 1 1.62	233456615	B
-18.55482		MT 0.23 0.00 -0.34 -0.05 0.03 -1.22	0.001028892710287365		
3012	L24576	1021102219800527 9350940T	2 1 0.02	233456615	B
0.13035		MT 0.00 0.00 0.00 0.00 0.00 0.00	0.001027604110276042		
3112	L24576	1022102019800527 9401035T	18 1 1.81	233456615	B
-16.63647		MT 0.92 0.01 -0.31 0.08 0.11 -2.20	0.001027604210267750		
2912	L24576	1022102119800527 9300935T	2 1 0.02	233456615	F
-0.13020		MT 0.00 0.00 0.00 0.00 0.00 0.00	0.001027604210276041		
2812	L24576	1023102219800527 8480930T	14 1 1.42	233456615	B
-10.40935		MT 0.67 0.00 -0.19 0.04 0.10 -1.12	0.001028094910276042		
2612	L24576	1026102719800527 6500735T	14 1 1.57	233456615	F
-1.07312		MT -0.82 0.01 -0.02 0.01 -0.07 -0.03	0.001028256510288930		
2712	L24576	1024102319800527 7550848T	16 1 1.58	233456615	B
-8.40225		MT 0.78 0.01 -0.16 0.04 0.10 -0.66	0.001028736510280949		
3212	L24576	102010191980052710401157T	18 1 1.56	233456615	B
-15.43222		MT 0.88 0.01 -0.29 -0.03 0.08 -1.72	0.001026775010360557		
3312	L24576	101910201980052712001300T	18 1 1.56	233456615	F
15.42927		MT -0.88 -0.01 0.29 0.08 -0.04 1.81	0.001036055710267750		
3512	L24576	1020102219800528 7400833T	16 1 1.82	233456615	F
16.63650		MT -0.92 0.00 0.31 -0.09 -0.09 1.39	0.001026775010276042		
3612	L24576	1022102319800528 8330915T	14 1 1.42	233456615	F
10.41040		MT -0.67 0.00 0.19 -0.08 -0.09 1.06	0.001027604210280949		
3712	L24576	1023102419800528 9151008T	16 1 1.58	233456615	F
8.40017		MT -0.78 0.01 0.16 -0.05 -0.11 0.96	0.001028094910287365		
3412	L24576	1018101919800528 6410735T	16 1 1.69	233456615	F
15.67192		MT -0.96 0.00 0.29 -0.19 -0.03 0.39	0.001035235110360557		
4012	L24576	101710181980052811571202T	2 1 0.01	233456615	B
-0.40763		MT 0.00 0.00 -0.01 0.00 0.00 0.00	0.001035235010352351		
4112	L24576	101810161980052812051255T	16 1 1.43	233456615	B
-10.92520		MT 0.83 0.00 -0.20 -0.01 0.06 -1.37	0.001035235110344150		

Table 11c. National Geodetic Survey Line L24576; File L24576.prn(=.dat)--Continued

3912	L24576	101810171980052811501156T	2	1	0.01		233456615	F
0.40745		MT 0.00 0.00 0.01 0.00 0.00 0.00	0.00	0.00	0.00	0.001035235110352350		
3812	L24576	101910181980052810401148T	18	1	1.68		233456615	B
-15.67182		MT 0.96 0.01 -0.29 0.01 0.01 0.09	-2.02			0.001036055710352351		
4512	L24576	1012101319800529 9250944T	6	1	0.51		233456615	F
6.12542		MT -0.25 0.00 0.11 0.00 -0.03 0.53	0.001032809710329668					
4412	L24576	1013101219800529 9000925T	6	1	0.51		233456615	B
-6.12800		MT 0.25 0.02 -0.11 -0.01 0.03 -0.49	0.001032966810328097					
4612	L24576	1013101519800529 9441022T	12	1	1.17		233456615	F
10.37290		MT -0.67 -0.01 0.19 0.02 -0.03 1.25	0.001032966810336093					
4312	L24576	1015101319800529 7470825T	12	1	1.17		233456615	B
-10.37222		MT 0.67 0.01 -0.19 0.08 0.00 -0.63	0.001033609310329668					
4712	L24576	101510161980052910221125T	18	1	1.69		233456615	FF
16.45832		MT -0.96 0.00 0.30 0.07 -0.09 2.06	0.001033609310344150					
4212	L24576	1016101519800529 6470747T	16	1	1.70		233456615	B
-16.44997		MT 0.96 0.01 -0.30 0.21 0.02 -0.53	0.001034415010336093					
5112	L24576	1010100919800530 9081005T	16	1	1.56		233456615	B
-9.23862		MT 0.72 -0.01 -0.17 -0.02 0.08 -1.01	0.001031466810307818					
5012	L24576	1011101019800530 8220908T	16	1	1.76		233456615	B
-11.22925		MT 0.80 0.01 -0.21 0.00 0.07 -1.26	0.001032308810314668					
4912	L24576	1012101119800530 6450822T	12	1	1.36		233456615	B
-12.65812		MT 0.58 0.01 -0.23 0.00 0.03 -0.65	0.001032809710323088					
4812	L24576	1015101619800530 6420735T	16	1	1.71		233456615	F
16.44892		MT -0.96 0.00 0.30 -0.13 0.00 0.42	0.001033609310344150					
5212	L24576	101010111980053010081112T	20	1	1.75		233456615	F
11.22787		MT -0.80 0.02 0.21 0.07 -0.11 1.16	0.001031466810323088					
5312	L24576	10111012198005301151214T	16	1	1.35		233456615	F
12.65967		MT -0.58 0.00 0.23 0.12 -0.08 1.35	0.001032308810328097					
5612	L24576	1007100619800602 8030913T	18	1	1.85		233456615	B
-12.77042		MT 0.83 0.01 -0.24 -0.03 0.02 -1.20	0.001029924110290564					
5512	L24576	1008100719800602 7500803T	4	1	0.26		233456615	B
-0.09517		MT 0.10 0.00 0.00 0.00 0.00 0.00	0.001030108110299241					
5412	L24576	1009100819800602 6550750T	14	1	1.49		233456615	B
-10.51267		MT 0.66 -0.01 -0.19 0.06 0.01 -0.38	0.001030781810301081					
6012	L24576	1000100119800604 9281025T	14	1	1.44		233456615	F
9.18382		MT -0.02 -0.01 0.17 0.11 0.00 1.16	0.001026937210269381					
5912	L24576	1001100019800604 8340928T	14	1	1.44		233456615	B
-9.18415		MT 0.02 0.00 -0.17 -0.07 -0.01 -0.96	0.001026938110269372					
6112	L24576	100110021980060410251107T	12	1	1.17		233456615	F
7.79885		MT -0.22 0.00 0.14 0.06 -0.02 1.01	0.001026938110272797					
5812	L24576	1002100119800604 8030834T	12	1	1.16		233456615	B
-7.79830		MT 0.22 0.00 -0.14 0.00 0.00 -0.59	0.001027279710269381					
5712	L24576	1003100219800604 7050802T	16	1	1.57		233456615	B
-12.11790		MT 0.63 0.01 -0.22 -0.03 0.04 -0.46	0.001027932710272797					
6212	L24576	100210031980060411111232T	18	1	1.57		233456615	F
12.11907		MT -0.63 -0.01 0.22 0.14 -0.04 1.36	0.001027279710279327					
7012	L24576	100090021980060511101130T	6	1	0.31		233456615	B
-0.69357		MT -0.02 0.00 -0.01 -0.01 0.00 -0.03	0.001026937210269380					
7112	L24576	900210001980060511301200T	6	1	0.31		233456615	F
0.69370		MT 0.02 0.00 0.01 0.01 0.00 0.03	0.001026938010269372					
6712	L24576	1003100419800605 9110948T	10	1	0.97		233456615	F
9.31370		MT -0.42 0.00 0.17 0.04 -0.02 1.00	0.001027932710282563					
6612	L24576	1004100319800605 8400910T	10	1	0.97		233456615	B
-9.31380		MT 0.42 0.00 -0.17 -0.03 0.03 -0.86	0.001028256310279327					
6812	L24576	1004100519800605 9481013T	8	1	0.75		233456615	F
7.59217		MT -0.32 0.00 0.14 0.03 -0.01 0.84	0.001028256310285738					
6512	L24576	1005100419800605 8150840T	8	1	0.74		233456615	B
-7.59262		MT 0.32 -0.01 -0.14 -0.03 0.02 -0.56	0.001028573810282563					
6912	L24576	100510061980060510131055T	12	1	1.20		233456615	F
6.90290		MT -0.49 0.00 0.13 0.08 -0.01 0.90	0.001028573810290564					
6412	L24576	1006100519800605 7380815T	12	1	1.22		233456615	B
-6.90287		MT 0.49 -0.01 -0.13 -0.03 0.04 -0.37	0.001029056410285738					
6312	L24576	1016101819800605 6420725T	14	1	1.44		233456615	F
10.92625		MT -0.83 0.00 0.20 -0.09 -0.08 0.17	0.001034415010352351					
7412	L24576	2034900119800606 8200847T	6	1	0.48		233456615	B
-4.07695		MT -0.19 -0.01 -0.08 0.01 -0.03 -0.24	0.001026937110272796					
7312	L24576	9002203419800606 7550820T	6	1	0.57		233456615	B
-5.73817		MT 0.00 -0.01 -0.11 0.01 0.00 -0.34	0.001026938010269371					
7212	L24576	1016101519800606 6400735T	16	1	1.70		233456615	B
-16.45000		MT 0.96 0.00 -0.30 0.15 0.11 -0.42	0.001034415010336093					
7512	L24576	9001900019800609 6250655T	8	1	0.82		233456615	B
-9.13692		MT -0.40 0.00 -0.17 0.08 -0.01 -0.06	0.001027279610276043					
7612	L24576	1006100719800603 6420742T	18	1	1.84		233456615	F
12.77140		MT -0.83 0.00 0.24 -0.13 -0.03 0.34	0.001029056410299241					
7712	L24576	1007100819800603 7420752T	4	1	0.26		233456615	F
0.09520		MT -0.10 0.00 0.00 0.00 0.00 0.00	0.001029924110301081					
7812	L24576	1008100919800603 7520848T	14	1	1.49		233456615	F
10.51167		MT -0.66 0.01 0.19 -0.03 -0.02 0.96	0.001030108110307818					

Table 11c. National Geodetic Survey Line L24576: File L24576.prn(=.dat)--Continued

7912	L24576	1009101019800603 8480958T 16 1 1.56	233456615	F
9.23970		MT -0.72 0.00 0.17 0.01 -0.02 0.96 0.001030781810314668		

TABLE 12: THIRD-ORDER LEVELING
USGS Summary Book A-6668, pp. 27-37
January to February 1907
Beatty to Las Vegas, Nevada
Amargosa Valley/Las Vegas Valley

bm (=alias)	DISTANCE		LEVEL+				CORRECTED OBSERVED ELEVATION ^{3/} USING METHOD 1				CORRECTED OBSERVED ELEVATION ^{3/} USING METHOD 2			
			UNCORRECTED FIELD COLLIMATION		TEMPERATURE		ROD CORRECTION ^{2/}		METHOD 1		METHOD 2		ROD CORRECTION	
			ELEVATION ^{1/}		CORRECTION ^{1/}		CORRECTION ^{1/}		METHOD 1		METHOD 2		ROD CORRECTION	
			(ft)	(m)	(ft)	(ft)	(ft)	(ft)	(ft)	(m)	(ft)	(m)	(ft)	(m)
3139	0.0	0.0	3138.860	956.726	-0.157	+0.054	-0.110	+0.440	3138.647	956.662	3139.197	956.829		
3002=P16=86	2.0	3.2	3002.285	915.098	-0.154	+0.042	-0.105	+0.420	3002.068	915.032	3002.593	915.192		
2865=Q16=87	5.0	3.0	2865.149	873.299	-0.155	+0.031	-0.100	+0.401	2864.925	873.231	2865.426	873.384		
2755=R16=88	8.0	12.9	2754.656	839.621	-0.154	+0.020	-0.096	+0.386	2754.426	839.551	2754.908	839.698		
2664=S16=89	11.0	17.7	2664.079	812.013	-0.154	+0.013	-0.093	+0.373	2663.845	811.942	2664.311	812.083		
2575=T16=90	14.0	22.5	2575.483	785.009	-0.153	+0.006	-0.090	+0.361	2575.246	784.937	2575.697	785.074		
2587=V16=91	17.0	27.3	2587.261	788.599	-0.151	+0.006	-0.091	+0.362	2587.025	788.527	2587.478	788.665		
2582=X16=92	20.0	32.2	2582.473	787.139	-0.150	+0.006	-0.090	+0.362	2582.239	787.068	2582.691	787.206		
2648=Y16=93	23.0	37.0	2647.594	806.988	-0.147	+0.013	-0.093	+0.371	2647.367	806.919	2647.831	807.061		
2658=Z16=94	27.0	43.4	2658.227	810.229	-0.143	+0.015	-0.093	+0.372	2658.006	810.162	2658.471	810.304		
2843=B17=95	31.0	49.8	2843.331	866.649	-0.137	+0.023	-0.100	+0.398	2843.117	866.584	2843.615	866.736		
2761=C17=96	35.0	56.3	2760.762	841.482	-0.135	+0.016	-0.097	+0.387	2760.546	841.416	2761.030	841.564		
2765=D17=97	39.0	62.7	2764.919	842.749	-0.134	+0.016	-0.097	+0.387	2764.704	842.684	2765.188	842.831		
2776	40.7	65.4	2775.753	846.051	-0.133	+0.016	-0.097	+0.389	2775.539	845.986	2776.025	846.134		
2781	41.0	65.9	2780.934	847.630	-0.133	+0.016	-0.098	+0.389	2780.719	847.565	2781.206	847.713		
2840=G17=98	43.0	69.1	2839.726	865.550	-0.132	+0.018	-0.099	+0.398	2839.513	865.485	2840.010	865.637		
3034=I17=99	47.0	75.6	3033.597	924.642	-0.130	+0.036	-0.106	+0.425	3033.397	924.581	3033.928	924.743		
3320=J17=100	51.0	82.0	3319.570	1011.807	-0.125	+0.070	-0.116	+0.465	3319.399	1011.755	3319.980	1011.932		
3628=K17=101	55.0	88.4	3628.144	1105.861	-0.118	+0.095	-0.127	+0.508	3627.994	1105.815	3628.629	1106.008		
3576=L17=102	59.0	94.9	3575.945	1089.950	-0.118	+0.091	-0.125	+0.501	3575.793	1089.904	3576.419	1090.095		
3431=M17=103	63.0	101.3	3430.782	1045.704	-0.118	+0.083	-0.120	+0.480	3430.627	1045.657	3431.227	1045.840		
3279=N17=104	67.0	107.7	3279.293	999.531	-0.117	+0.068	-0.115	+0.459	3279.129	999.481	3279.673	999.646		
3136=O17=105	71.0	114.2	3135.677	955.756	-0.114	+0.052	-0.110	+0.439	3135.505	955.704	3136.054	955.871		
3148=P17=106	75.0	120.6	3147.537	959.379	-0.112	+0.052	-0.110	+0.441	3147.367	959.319	3147.918	959.487		
3084=Q17=107	79.0	127.0	3074.211	937.021	-0.113	+0.057	-0.108	+0.432	3074.047	936.971	3074.587	937.136		
3062=R17=108	83.0	133.5	3061.772	933.230	-0.112	+0.055	-0.107	+0.429	3061.608	933.180	3062.144	933.343		
3029=S17=109	87.0	139.9	3029.089	923.268	-0.113	+0.051	-0.106	+0.424	3028.921	923.217	3029.451	923.379		
2876=T17=110	91.0	146.3	2875.843	876.559	-0.112	+0.044	-0.101	+0.403	2875.674	876.507	2876.178	876.661		
2779=U17=111	95.0	152.8	2779.366	847.153	-0.112	+0.038	-0.097	+0.389	2779.195	847.100	2779.681	847.249		
2645=V17=112	99.0	159.2	2645.183	806.253	-0.112	+0.025	-0.093	+0.371	2645.003	806.199	2645.467	806.340		
2454=W18=113	103.0	165.6	2453.759	747.907	-0.112 ^{4/}	+0.004	-0.086	+0.344	2453.565	747.848	2453.995	747.979		
2294=X18=114	107.0	172.1	2293.907	699.184	-0.112	-0.007	-0.080	+0.321	2293.708	699.124	2294.109	699.246		
2139=Y18=115	111.0	178.5	2138.553	651.832	-0.112	-0.016	-0.075	+0.299	2138.350	651.770	2138.724	651.884		
2033B=116	114.9	184.8	2032.725	619.576	-0.112	-0.023	-0.071	+0.285	2032.519	619.513	2032.875	619.622		
2024B=117	115.3	185.6	2023.784	616.851	-0.112	-0.024	-0.071	+0.283	2023.577	616.788	2023.931	616.895		

^{1/} The uncorrected field elevation, level + collimation, and temperature corrections are from U.S. Geological Survey Summary Book A-6668, pp. 27-37. The uncorrected field elevations are the original values recorded in the field as entered in the summary book.

^{2/} Rod corrections are computed by two different methods.

Method 1 is based on the latest available presurvey rod calibrations and is the procedurally applicable method specified by Rappleye (1948). The latest presurvey rod calibrations for the rod pair (22+24) used in this survey were done in 1905. The rod excess value is the average of the measured rod calibration values for each rod, which for the 1905 calibration is:

$$(-0.00001) + (-0.00006) = (-0.00007) \div 2 = -0.000035$$

Method 2 is based on the earliest available postsurvey rod calibrations. Postsurvey rod calibrations for rod pair 22+24 were done in 1908. The postsurvey rod excess value also is the average of the measured rod calibration values for each rod, which for the 1908 calibration is:

$$(+0.00014) + (+0.00014) = (+0.00028) \div 2 = +0.00014$$

Only rod corrections determined by Method 1 were used to compute values for plotting height change profiles and circuit misclosures in this report.

^{3/} The corrected observed elevation is the sum of the uncorrected field elevation, level + collimation, temperature, and respective rod corrections.

^{4/} The level + collimation correction for benchmark 2454 is not indicated in A-6668 (p. 36); the value shown is assumed to be equivalent to values for adjoining sections.

Table 12-1

TABLE 13: THIRD-ORDER LEVELING
USGS Summary Book A-6668, pp. 47-51
March 1907

King Spring, Nevada to Furnace Creek, California
Amargosa Valley/Furnace Creek Wash Area

bm	DISTANCE		UNCORRECTED FIELD ELEVATION ^{1/}		LEVEL+ COLLIMATION CORRECTION ^{1/}	TEMPERATURE CORRECTION ^{1/}	ROD CORRECTION ^{2/}			CORRECTED OBSERVED ELEVATION ^{3/} USING METHOD 1		CORRECTED OBSERVED ELEVATION ^{3/} USING METHOD 2		CORRECTED OBSERVED ELEVATION ^{3/} USING METHOD 3	
							METHOD 1	METHOD 2	METHOD 3	ROD CORRECTION		ROD CORRECTION		ROD CORRECTION	
	(mi)	(km)	(ft)	(m)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(m)	(ft)	(m)	(ft)	(m)
2268	0.0	0.0	2266.521	690.837	-0.226	+0.062	-0.079	+0.317	+0.434	2266.278	690.763	2266.674	690.884	2266.811	690.925
2172	2.9	4.7	2172.394	662.147	-0.226	+0.057	-0.076	+0.304	+0.434	2172.149	662.072	2172.529	662.188	2172.659	662.228
2101	8.5	13.7	2101.300	640.478	-0.220	+0.051	-0.074	+0.294	+0.420	2101.057	640.404	2101.425	640.516	2101.551	640.554
2117	11.7	18.8	2117.083	645.288	-0.221	+0.051	-0.074	+0.296	+0.423	2116.839	645.214	2117.209	645.327	2117.336	645.365
2180	13.4	21.5	2179.501	664.313	-0.223	+0.057	-0.076	+0.305	+0.436	2179.259	664.240	2179.640	664.356	2179.771	664.396
2572	17.9	28.8	2572.122	783.984	-0.227	+0.078	-0.090	+0.360	+0.514	2571.883	783.912	2572.333	784.049	2572.487	784.096
2864	20.6	33.1	2864.215	873.033	-0.238	+0.097	-0.100	+0.401	+0.573	2864.034	872.959	2864.535	873.112	2864.707	873.164
3041	22.1	35.5	3041.157	926.947	-0.242	+0.110	-0.106	+0.426	+0.608	3040.919	926.874	3041.431	927.036	3041.633	927.092
2701	25.7	41.3	2700.932	823.246	-0.234	+0.088	-0.095	+0.378	+0.540	2700.691	823.172	2701.184	823.316	2701.326	823.366
1938	29.9	48.1	1938.458	590.863	-0.208	+0.036	-0.068	+0.271	+0.388	1938.218	590.770	1938.557	590.873	1938.674	590.909
1330	33.4	53.7	1330.443	405.520	-0.193	+0.002	-0.047	+0.186	+0.266	1330.205	405.447	1330.438	405.518	1330.518	405.543
283	39.0	62.7	282.878	86.221	-0.170	-0.100	-0.010	+0.040	+0.057	282.598	86.136	282.648	86.151	282.665	86.157
-178	41.5	66.7	-178.932	-54.5386	-0.159	-0.140	+0.006	-0.025	-0.036	-179.225	-54.628	-179.256	-54.637	-179.267	-54.641

^{1/} The uncorrected field elevation, level + collimation, and temperature corrections are from U.S. Geological Survey Summary Book A-6668, pp. 47-51. The uncorrected field elevations are the original values recorded in the field as entered in the summary book.

^{2/} Rod corrections are computed by two different methods.

Method 1 is based on the latest available presurvey rod calibrations and is the procedurally applicable method specified by Rappleye (1948). The latest presurvey rod calibrations for the rod pair (22+24) used in this survey were done in 1905. The rod excess value is the average of the measured rod calibration values for each rod, which for the 1905 calibration is:

$$(-0.00001) + (-0.00006) = (+0.00028) + 2 = -0.000035$$

Method 2 is based on the earliest available postsurvey rod calibrations. Postsurvey rod calibrations for rod pair 22+24 were done in 1908. The postsurvey rod excess value also is the average of the measured rod calibration values for each rod, which for the 1908 calibration is:

$$(+0.0000) + (+0.00014) = (+0.00028) + 2 = +0.00014$$

Only the rod corrections determined by Method 1 were used to compute values for plotting height change profiles and circuit misclosures in this report.

^{3/} The corrected observed elevation is the sum of the uncorrected field elevation, level + collimation, temperature, and respective rod corrections.

TABLE 14: THIRD-ORDER LEVELING
USGS Summary Book A-6668, pp. 20-27
January to March 1907

Death Valley, California via Daylight Pass to Beatty, Nevada
Central and Northern Death Valley and Grapevine Mountains

										CORRECTED OBSERVED		CORRECTED OBSERVED	
										ELEVATION ^{3/}		ELEVATION ^{3/}	
										USING METHOD 1		USING METHOD 2	
bm	DISTANCE		UNCORRECTED FIELD		COLLIMATION	TEMPERATURE	ROD CORRECTION ^{2/}		ROD CORRECTION		ROD CORRECTION		
			ELEVATION ^{1/}		CORRECTION ^{1/}	CORRECTION ^{1/}	METHOD 1	METHOD 2					
(mi)	(km)	(ft)	(m)	(ft)	(ft)	(ft)	(ft)	(ft)	(m)	(ft)	(ft)	(m)	
-215	0.0	0.0	-214.668	-65.431	-0.281	-0.175	+0.008	-0.030	-215.116	-65.568	-215.154	-65.579	
-224	2.9	4.7	-224.187	-68.332	-.277	-.175	+0.008	-.031	-224.631	-68.468	-224.670	-68.480	
-235	6.0	9.6	-234.593	-71.504	-.275	-.176	+0.008	-.033	-235.036	-71.639	-235.077	-71.652	
-244	9.0	14.5	-243.965	-74.361	-.270	-.176	+0.009	-.034	-244.402	-74.494	-244.445	-74.507	
-248	12.0	19.3	-248.065	-75.610	-.251	-.176	+0.009	-.035	-248.483	-75.738	-248.527	-75.751	
-276	16.0	25.7	-265.918	-81.052	-.233	-.177	+0.010	-.039	-266.318	-81.174	-266.367	-81.189	
-260	19.5	31.4	-249.752	-76.125	-.235	-.176	+0.010	-.036	-250.153	-76.247	-250.199	-76.261	
-253	23.0	37.0	-243.448	-74.203	-.233	-.174	+0.009	-.036	-243.846	-74.324	-243.891	-74.338	
-263	26.0	41.8	-252.928	-77.093	-.229	-.175	+0.009	-.037	-253.323	-77.213	-253.369	-77.227	
-283	28.5	45.2	-273.689	-83.421	-.230	-.176	+0.010	-.040	-274.085	-83.541	-274.135	-83.557	
-233	31.0	49.8	-222.675	-67.872	-.228	-.175	+0.008	-.033	-223.070	-67.992	-233.111	-68.004	
-227	34.0	54.7	-217.083	-66.167	-.226	-.172	+0.008	-.032	-217.473	-66.286	-217.513	-66.298	
-188(=-178)	37.2	59.8	-177.883	-54.219	-.217	-.167	+0.006	-.026	-178.261	-54.334	-178.293	-54.344	
-262	41.5	66.7	-252.889	-77.081	-.215	-.175	+0.010	-.037	-253.269	-77.197	-253.316	-77.211	
-258	45.5	77.2	-248.109	-75.624	-.213	-.176	+0.009	-.036	-248.489	-75.740	-248.534	-75.735	
-248	49.0	78.8	-237.935	-72.523	-.213	-.176	+0.009	-.035	-238.315	-72.639	-238.359	-72.652	
1	51.0	82.0	11.199	3.414	-.202	-.160	0.000	-.000	10.837	3.303	10.837	3.303	
669	55.0	88.4	678.624	206.845	-.189	-.095	-.023	+0.094	678.317	206.751	678.434	206.787	
2253	59.3	95.3	2263.207	689.827	-.161	+0.017	-.079	+0.315	2263.080	689.788	2262.984	689.759	
3117	61.9	99.5	3127.206	953.174	-.138	+0.072	-.109	+0.436	3127.031	953.121	3127.576	953.287	
4307	68.7	110.5	4317.330	1315.925	-.117	+0.132	-.151	+0.603	4317.194	1315.883	4317.948	1316.113	
3560	72.7	116.9	3569.986	1088.134	-.160	+0.091	-.125	+0.498	3569.792	1088.075	3570.415	1088.265	
3472	75.8	121.9	3481.662	1061.213	-.156	+0.085	-.122	+0.486	3481.469	1061.154	3482.077	1061.339	
3561	77.4	124.5	3571.188	1088.500	-.150	+0.089	-.125	+0.499	3571.002	1088.444	3571.626	1088.634	
3139	81.9	131.7	3138.860	956.726	-.157	+0.054	-.110	+0.440	3138.647	956.662	3139.197	956.829	

^{1/} The uncorrected field elevation, level + collimation correction, and temperature correction are from U.S. Geological Survey Summary Book A-6668, p. 20-27.
The uncorrected field elevations are the original values recorded in the field as entered in the summary book.

^{2/} Rod corrections are computed by two different methods.

Method 1 is based on the latest available presurvey rod calibrations and is the procedurally applicable method specified by Rappleye (1948). Presurvey rod calibrations for the rod pair (22+24) used in this survey were done in 1905. The rod excess value is the average of the measured rod calibration values for each rod, which for the 1905 calibration is:

$$(-0.00001) + (-0.00006) = (-0.00007) + 2 = -0.000035$$

Method 2 is based on the earliest available postsurvey rod calibrations. Postsurvey rod calibrations for this rod pair were done in 1908. The postsurvey rod excess value also is the average of the measured rod calibration values for each rod, which for the 1908 calibrations is:

$$(+0.00014) + (+0.00014) = (+0.00028) + 2 = +0.00014$$

Only the rod corrections determined by Method 1 were used to compute values for plotting the height change profiles and circuit misclosures in this report.

^{3/} The corrected observed elevation is the sum of the uncorrected field elevation, level + collimation, temperature, and respective rod corrections.

Table 14-1

TABLE 15: THIRD-ORDER LEVELING
USGS Summary Book A-6668, pp. 37-47
February to March 1907

Las Vegas via Pahrump and King Spring to Amargosa Valley, Nevada
Amargosa Valley/Pahrump Valley

Rural gosa valley rural valley												
bm	DISTANCE		LEVEL +		TEMPERATURE CORRECTION ^{1/}	ROD CORRECTION ^{2/}		CORRECTED OBSERVED ELEVATION ^{3/} , USING		CORRECTED OBSERVED ELEVATION ^{3/} , USING		
			UNCORRECTED FIELD ELEVATION ^{1/}	COLLIMATION CORRECTION		METHOD 1	METHOD 2	METHOD 1	ROD CORRECTION	METHOD 2	ROD CORRECTION	
	(mi)	(km)	(ft)	(m)	(ft)	(ft)	(ft)	(ft)	(ft)	(m)	(ft)	(m)
2024B	0.0	0.0	2023.784	616.851	-0.112	-0.024	-0.071	+0.283	2023.577	616.788	2023.931	616.895
2136	4.4	7.1	2135.656	650.949	-.112	-.016	-.075	+0.299	2135.453	650.887	2135.827	651.001
2336	8.4	13.5	2336.028	712.923	-.112	+0.003	-.082	+0.327	2335.837	711.965	2336.827	712.089
2631	12.3	19.8	2631.293	802.020	-.108	+0.030	-.092	+0.368	2631.123	801.968	2631.583	802.108
3036	16.9	27.2	3036.062	925.394	-.097	+0.059	-.106	+0.425	3035.918	925.350	3036.444	925.512
3493	20.4	32.8	3492.764	1064.597	-.090	+0.094	-.122	+0.489	3492.646	1064.561	3493.257	1064.747
4557	24.7	39.7	4557.222	1389.044	-.053	+0.173	-.160	+0.638	4557.182	1389.032	4557.980	1389.275
5504	28.4	45.7	5503.324	1677.417	-.026	+0.261	-.193	+0.770	5503.366	1677.427	5504.329	1677.723
4556	32.3	51.9	4556.005	1388.673	-.116	+0.231	-.160	+0.638	4555.960	1388.659	4556.758	1388.903
3909	36.1	58.0	3909.506	1191.620	-.153	+0.177	-.137	+0.547	3909.343	1191.585	3910.077	1191.794
3162	41.5	66.7	3162.324	963.878	-.256	+0.115	-.111	+0.443	3162.072	963.802	3162.626	963.970
2809	46.5	74.8	2808.535	856.043	-.301	+0.083	-.098	+0.393	2808.219	855.947	2808.710	856.097
2929	52.7	84.7	2929.297	892.852	-.306	+0.090	-.103	+0.410	2928.978	892.754	2929.491	892.911
2776	60.7	97.6	2775.775	846.058	-.309	+0.082	-.097	+0.389	2775.451	845.959	2775.937	846.107
2668	66.9	107.6	2667.505	813.057	-.315	+0.077	-.093	+0.373	2667.174	812.956	2667.640	813.098
2566	72.7	116.9	2565.875	782.080	-.315	+0.075	-.090	+0.359	2565.545	781.980	2565.994	782.117
2503	81.0	130.2	2503.360	763.026	-.248	+0.075	-.088	+0.350	2503.099	762.946	2503.537	763.080
2315	88.4	142.1	2315.183	705.669	-.229	+0.065	-.081	+0.324	2314.938	705.595	2315.343	705.718
2268	89.9	144.6	2267.521	691.142	-.222	+0.06	-.079	+0.317	2267.280	691.068	2267.676	691.189
2488	92.0	147.9	2488.481	758.491	-.214	+0.073	-.087	+0.348	2488.253	758.421	2488.688	758.554
2331	96.2	154.7	2330.857	710.447	-.213	+0.059	-.082	+0.326	2330.621	710.375	2331.029	710.499
2430	100.3	161.3	2429.832	740.614	-.216	+0.064	-.085	+0.340	2429.595	740.542	2430.020	740.672
2776	104.2	167.6	2776.828	846.3779	-.229	+0.091	-.097	+0.389	2776.593	846.307	2777.079	846.455
2781	104.5	168.0	2782.007	847.957	-.230	+0.096	-.097	+0.390	2781.776	847.887	2782.263	848.036

^{1/} The uncorrected field elevation, level + collimation correction, and temperature correction are from U.S. Geological Survey Summary Book A-6668, p. 20-27. The uncorrected field elevations are the original values recorded in the field as entered in the summary book.

^{2/} Rod corrections are computed by two different methods.

Method 1 is based on the latest available presurvey rod calibrations and is the procedurally applicable method specified by Rappleye (1948). Presurvey rod calibrations for the rod pair (22+24) used in this survey were done in 1905. The rod excess value is the average of the measured rod calibration values for each rod, which for the 1905 calibration is:

$$(-0.00001) + (-0.00006) = (-0.00007) + 2 = -0.000035$$

Method 2 is based on the earliest available postsurvey rod calibrations. Postsurvey rod calibrations for this rod pair were done in 1908. The postsurvey rod excess value also is the average of the measured rod calibration values for each rod, which for the 1908 calibrations is:

$$(+0.00014) + (+0.00014) = (+0.00028) + 2 = +0.00014$$

Only the rod corrections determined by Method 1 were used to compute values for plotting the height change profiles and circuit misclosures in this report.

^{3/} The corrected observed elevation is the sum of the uncorrected field elevation, level + collimation, temperature, and respective rod corrections.

Table 15-1

Table 16. Rod calibration data for third order leveling

[Sources of data: U.S. Geological Survey summary books A-6667 and A-6668; Dates of leveling: January 3 to April 13, 1907; Rod numbers: 22 (BS35) and 24 (BS37)]

Rod 22		
Date of calibration	Temperature	Rod excess value
November 10, 1905	21°C	-0.00006 ^{1/}
October 10, 1908	20°C	+0.00014
February 18, 1910	21°C	-0.00030

Rod 24		
Date of calibration	Temperature	Rod excess value
November 10, 1905	21°C	-0.00001 ^{1/}
October 10, 1908	21°C	+0.00014
February 19, 1910	21°C	-0.00031

^{1/}1905 values appended in summary book as "not used".

Table 17. List of reset benchmark equivalent values

[Source of data: Emery I. Balazs, National Geodetic Survey N/CG132, National Oceanic and Atmospheric Administration, Rockville, Maryland, written communication, May 16, 1989]

from	Benchmark name	to	Height difference (Δh) in meters
W16		W16 reset 1980	-1.746
V16 (B91 USGS)		V16 reset 1980	-1.525
P16		P16 reset 1978	-0.564
Q16		Q16 reset 1978	-0.554
C23		C23 reset 1978	-0.390
U338		U338 reset 1978	-2.064
V338		V338 reset 1978	0.018
R16		R16 reset 1978	-0.308
T16		T16 reset 1978	-0.646 ^{1/}
S16		S16 reset 1978	-0.820
Z16 (B94 USGS)		Z16 reset 1980	-0.721
B333		B333 reset 1980	0.012
X16 (B92 USGS)		X16 reset 1980	-0.568
Y16 (B93 USGS)		Y16 reset 1980	-0.885
F17		F17 reset 1977	0.072
A17		A17 reset 1977	-0.331
B17 (B95 USGS)		B17 reset 1977	-0.547
X338		X338 reset 1978	-0.338
G17		G17 reset 1962	-1.502
H17		H17 reset 1962	1.139

^{1/}1984 leveling indicates either movement or error in reset Δh .

National Geodetic Survey could not recover any reset information for benchmarks C333 or 90 USGS reset 1942.



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Table 17-1

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