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# FORMATTING SURVEY MANUSCRIPTS FOR REVIEW AND EDITING

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**T**HIS SECTION TELLS HOW to format a Survey manuscript for technical review, editing, and Director's approval, whether formatted by a typist or by you yourself. General guidelines that apply to the entire manuscript are listed first, followed by details specific to particular parts. Few manuscripts are likely to have every part listed here. Most of the information applies to any technical manuscript; information that is specific to formal USGS series books or maps is so indicated.

## WHERE TO BEGIN

Before you begin work on your manuscript, gather all needed materials. You will need a recent sample of the publication, publisher's instructions, pertinent style manuals (such as this book), published examples of particular items (such as measured sections), and any specialized dictionaries or reference books. Of course for checking spelling and word usage you will have access to a dictionary (USGS and GPO recommend "Webster's Third New International Dictionary" for spelling), and "The Glossary of Geology, third edition" (Bates and Jackson, 1987). If your manuscript is to be published by the USGS, your local manuscript processing office will have guidelines for you. Take a few minutes to look through what is appropriate in those instructions and books so that your keyboarding session will be efficient and fruitful.

## GENERAL GUIDELINES FOR THE ENTIRE MANUSCRIPT

1. Use 8½- by 11-inch white paper; continuous-feed computer paper is acceptable, but you should set the page length so that copy does not print on or close to the bottom or side perforations.
2. Leave a margin of at least 1 inch all around each page.
3. Number pages consecutively; if there is a break, indicate in the following manner which page follows:

18 (p. 34 follows)

This kind of notation assures a reader that no pages are missing. Letters can be added to page numbers (when material is inserted, for example), but the page following the last lettered number should be indicated in the same way:

18d (p. 34 follows)

4. Double space all text, tables, and figure captions.
5. Avoid dividing words at the end of a line; use the wrap-around feature on word processor or computer (so there are no carriage returns at the ends of sentences within a paragraph).
6. Complete paragraphs on a page, for easier review and editing, even if the page runs short.

7. Rank of heading is indicated by number of spaces the heading is indented in the table of "Contents."

### Professional Papers.

CENTER AND CAPITALIZE  
ALL HEADINGS

**Bulletins, Circulars, and Water-Supply Papers.** Type headings flush left for first three ranks and center headings of lower rank; capitalize or lowercase letters as follows:

FIRST-RANK HEADING ALL CAPS,  
flush left

Second-Rank Heading Cap and  
Lowercase, flush left

Third-Rank Heading Cap and  
Lowercase, flush left

Fourth-Rank Heading Cap and  
Lowercase, center

8. Leave right margins ragged (not right-justified)—copy is easier to read.
9. Underline letters or words that are to be typeset in italic if your word processor does not have an italic typeface.
10. Capitalize and abbreviate according to guides in this book and in the GPO Style Manual for reports to be published by the USGS. Follow publisher's guide for reports to be published outside the USGS.

# NOTE FOR "NEW PUBLICATIONS OF THE U.S. GEOLOGICAL SURVEY"

All USGS books and all maps that are accompanied by text must have a brief note for the monthly list "New Publications of the U.S. Geological Survey." This note, written by the author and generally limited to about 75 words, may be titled "Note for Monthly List of Survey Publications" or perhaps just "Note for Monthly List." In the sample below, note format, spacing, and punctuation. Price is not entered for USGS Circulars because they are free. Make copy double spaced, with 1-inch margins.

Observe that the note for the monthly list is neither an abstract nor a synopsis. It describes the general content of the report but states no technical conclusions.

## FRONT MATTER

Front matter includes a title page and a table of contents that generally includes lists of illustrations and tables. Front matter also may include a frontispiece, false title page, foreword, and preface. If there is to be an art cover, you should provide a brief description of it; this description is printed on one of the first inside pages of the book. You may be asked to provide copy for the cover and backstrip of a USGS book. Any cooperative statement is placed on the cover, as well as on the title page. Double space all text in front matter.

## TITLE PAGE

Use the title page of a recent version of the series in which your report will be published as a guide to style, capitalization, and spacing. If words on the printed page are in italic (such as the word "By"), underline similar words on the copy you are preparing to indicate to the typesetter that those words should be set in italic. Follow the style of any descriptive note or cooperative statement for the particular series. Double space everything.

## CONTENTS

Use a recent version of the publication as a guide to formatting the contents, including lists of tables and illustrations. Align figure and table numbers on the period. Pay particular attention to indentation of headings, as this indentation indicates rank. Five spaces is the general rule for indentions; overruns are indented five spaces also, but may be indented more to avoid conflict. On a typewriter, word processor, or computer, use tab settings for these indentions rather than spaces. If headings are continued on a succeeding page, write each continued heading as follows so that the rank is preserved:

### NOTE FOR MONTHLY LIST

#### Professional Paper

Plant spores and other microfossils from Upper Devonian and Lower Mississippian rocks of Ohio, by M.R. Winslow. 19 . . . p. \$

About 80 species of microfossils have been described and illustrated from beds usually regarded as sparsely fossiliferous. About 130 horizons from 10 localities in northern and central Ohio were sampled from outcrops, cores, and well cuttings to establish the basic pattern of distribution for land plant spores and sporelike marine microfossils in Upper Devonian and Lower Mississippian Formations. Thirty-five of the most abundant and characteristic species have been named; four new genera are represented.

First-rank heading--Continued

Second-rank heading (indented five spaces)--Continued

New third-rank heading (indented five spaces) -----

Either dot or dash leaders are acceptable. Run the leader from the last line of the entry (see sample "Illustrations" page). Some publications, such as the 8½- by 11-inch USGS Bulletin, have no leaders at all. Type page numbers at the end of the leaders to indicate to the reviewer or editor the page in the manuscript on which the item (such as a figure) appears or the page on which it is first mentioned. Double space all entries, and leave 1-inch margins.

## LIST OF ILLUSTRATIONS

The list of illustrations, which follows the "Contents," consists of short titles (not necessarily the entire caption), in which the illustrations are identified as to kind, such as map, diagram, or photograph. Four or more similar kinds of illustrations listed consecutively may be grouped and indented under one descriptor (see 3-6 in sample on facing page). Plates are listed before figures, regardless of

[Sample of contents page]

### CONTENTS

	Page
Abstract -----	1
Introduction -----	1
Analytical methods -----	2
Sample selection and preparation -----	3
Chemical methods -----	4
Computer techniques -----	6
Petrography -----	7
References cited -----	11

[End sample contents page]

where plates appear in the manuscript. Numbers are aligned on the period. Overruns are indented five spaces. A copy of the publication is your best guide to capitalization of "figure" and "plate." Double space all entries. Leave 1-inch margins.

## LIST OF TABLES

Type the list of tables the same way as the list of illustrations. Tables also can have short titles and be grouped according to kind. Overruns are indented five spaces, numbers are aligned on the decimal, and all entries are double spaced.

## FIRST PAGE

Title, authorship, and abstract generally go on the first page, but a recent copy of the publication will be your best guide. A long abstract may continue for several pages.<sup>1</sup> Page numbering begins with Arabic 1 on the first page and continues to the end of the report. (See also item 3 under "General Guidelines for the Entire Manuscript.") Leave at least 1-inch margin on all sides.

<sup>1</sup>A footnote before the end of the abstract (such as for an author's affiliation) is double spaced at the end of the abstract under a line about 16 spaces long. The footnote number is a superscript, the first line of the footnote is indented five spaces (use a tab), and any overruns are flush left. Footnotes are numbered consecutively throughout the text. Footnotes in tables are independent of those in text.

ILLUSTRATIONS

	Page
Plate 1. Fossils found in the Santa Rita quadrangle .....	46
[If plate were an oversize map, it would be shown as follows:]	
2. Geologic map of the Santa Rita quadrangle .....	In pocket
Figure 1. Index map of New Mexico [this entry is being extended to show that overrun is indented five spaces and that entries are leaded from the last line] .....	6
2. Columnar section of layered rocks .....	10
3-6. Photographs:	
3. Percha Shale-Lake Valley Limestone contact .....	15
4. Box Member of Percha Shale .....	23
5. Oswaldo Formation .....	26
6. Syrena Formation .....	31
7. Diagram showing Larsen plot of volcanic rocks .....	34
8. Map showing internal structure of rhyolite plug .....	36

## BODY OF TEXT

Double space all text. Allow at least 1-inch margins all around each page. Indent paragraphs five spaces (use a tab). Try to complete each paragraph on a page.

Paragraph heading.--Type the paragraph heading as shown here-- indent as for a paragraph, underscore, period, hyphen, hyphen (in print the hyphens will be replaced by a long solid line called a one-em dash). This heading is used for topics that require only a paragraph or two, such as the description of a series of minerals found in a certain rock unit. Paragraph headings may be a subheading under any order of heading and usually are omitted from "Contents."

## FIGURE AND TABLE REFERENCES IN TEXT

After the paragraph that has the principal reference to a figure or table, insert a note indicating where the figure or table is to be placed in the printed text as shown in the following sample:

[blank line]

**FIGURE X.--NEAR HERE**

[blank line]

[blank line]

**TABLE X.--NEAR HERE**

[blank line]

Leave a blank line above and below the insert, as shown. Note that the insert is typed in bold-face (but plain capitals are acceptable if your machine won't accommodate bold). No such insert is needed for a plate reference, because plates are either at the end of the book or in a pocket. In a USGS series publication, figure and table references in the text are not capitalized, and "table" is never abbreviated. "Figure" and "plate" are abbreviated (fig. and pl.) only where they appear inside parentheses or in tables.

[Sample text pages]

### HISTORY OF THE VOLCANO

Mount St. Helens is a symmetrical volcanic cone in southwestern Washington about 75 km northeast of Portland, Oreg. (fig. 1). Most of the visible part of the cone has been formed within the last thousand years, but it overlies an older volcanic center that evidently came into existence before 36,000 years ago (Hyde, 1975, p. B10). Mount St. Helens has had a long history of spasmodic explosive activity, and we believe it to be an especially dangerous volcano because of its past behavior and the relatively high frequency of its eruptions during the last 4,500 years (table 1).

**FIGURE 1.--NEAR HERE**

**TABLE 1.--NEAR HERE**

In the future, Mount St. Helens probably will erupt violently and intermittently just as it has in the recent geologic past,<sup>1</sup> and these future eruptions will affect human life and health, property, agriculture, and general economic welfare over a broad area.

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<sup>1</sup>Place a footnote under a rule about 16 spaces long at the end of the paragraph in which the footnote is first used. The footnote number is a superscript, the first line of the footnote is indented (tabbed) five spaces, any overruns are flush left, and copy is double spaced.

[End sample text pages]

## FORMATTING ILLUSTRATIONS AND THEIR TITLES (CAPTIONS)

Each illustration (figure, plate, map) has a title or caption. An illustration can also have text, such as an explanation or description of map units. All captions and any text that is part of a figure or plate should be typed double spaced for reviewing and editing.

Each illustration must be referred to in the text.

Number illustrations consecutively in the order of their principal reference. If illustrations are added, combined, or deleted during review or editing, do not renumber at this stage (which might introduce errors). Use the following scheme and indicate changes in the short list of illustrations in "Contents."

1. Illustration added—Add letter to number of previous figure. Thus, an illustration added after figure 2 would be numbered figure 2A.
2. Illustrations combined—Use lowest figure number of illustrations combined. Thus, combined figures 3, 5, and 6 would be numbered figure 3.
3. Illustration deleted—Show deletion in "Contents" list.

Show these transactions in the "Contents" short list of illustrations as follows:

Figure 1-----  
Figure 2-----  
Figure 2A (added)-----  
Figure 3-----  
Figure 4 (deleted)  
Figure 5 (combined with  
figure 3)  
Figure 6 (combined with  
figure 3)  
Figure 7-----

Illustrations are renumbered before Director's approval. A duplicate of the illustrations list is a useful inventory item to accompany the illustrations themselves in the mill copy of your report during further processing.

The mode of publication determines placement of figure and caption in the draft copy of the manuscript, as follows:

**USGS book and map series only.** Each figure caption is on a page by itself. Attach figure caption page to the mill copy of the figure; also attach a completed "Author's Check List" to the mill copy of the figure or map. The "Author's Check List" is the yellow sheet—Form 9-1517 (revised March 1987). Do not interleave the illustrations themselves in the manuscript; place them at the end of the mill copy of the report (with the figure caption and the "Author's Check List").

**USGS Open-File Reports only.** Place caption below illustration on the same page.

**Reports for outside publication.** Follow instructions from journal or publisher.

## SAMPLE FIGURE CAPTIONS

Use the following styles for figure captions in USGS book reports. Note capitalization, punctuation, and spacing. Underline letters that represent parts of the figure (A,B) to indicate italic. The caption for fossil photographs that will be plates in a USGS book has a different style. A good general rule is to follow the style of a recent publication.

### USGS Professional Paper and Techniques of Water-Resources Investigations

FIGURE 13.--Fort Union Formation, east side of Crooks Gap, Wyo., in NW1/4NW1/4 sec. 17, T. 28 N., R. 92 W. A, Localities from which pollen samples were collected (open circles); B, Uranium prospects (solid circles).

If more than two lines, the first line of caption is flush left and overruns are indented five spaces.

### USGS Bulletin, Circular, and Water-Supply Paper

Figure 1. Fort Union Formation, east side of Crooks Gap, Wyo., in NW1/4NW1/4 sec. 17, T. 28 N., R. 92 W. A, Localities from which pollen samples were collected (open circles); B, Uranium prospects (solid circles).

Note that this format differs slightly in that "Figure" is cap and lowercase, no dash follows period, and first line and overruns are flush left; all other elements remain the same.

### Short Title

The following example shows how to condense the long caption to a short title for the "Contents" list of illustrations (indentation depends on style of publication).

Maps showing localities of pollen samples and uranium prospects in the Fort Union Formation near Crooks Gap, Wyo.

## FORMATTING AND TYPING TABLES

Tables for review or editing should be typed double spaced, except for column heads, which may be single spaced. If tables are long and time is of the essence, legible handwritten copy is acceptable. Keep in mind, however, that the tables will have to be keyboarded and proofed at some stage, so you must plan time for that. Follow the style and format of the book or map in which the table will be published. (See also section on tables, p. 216.)

Margins on the table must be adequate—at least 1 inch, and preferably as much as 1½ inches—on all four sides. Fold oversize tables to page size if possible using accordian-type folds so that the table number and at least part of the title appear at the top and the page number appears at the bottom. Make folds between columns to avoid damage to the typed matter. (Extremely large tables may need to be rolled instead of folded, and camera-copy originals should not be folded.)

At the end of the paragraph that contains the first principal reference to a table, insert a note indicating where the table is to be printed (see preceding section on figure and table references). The table itself is the next page of text (except for tables so large that they must be rolled instead of folded), and each sheet of the table is given a sequential text page number. (If you are preparing camera-ready tables, talk first to an editor.)

### PARTS OF A TABLE

#### Title

All tables, like figures, should stand alone—that is, a reader should be able to get the gist of a table without having to refer to

any other part of the report. The title, therefore, should include as much information as is necessary for comprehension, including the geographic location. No ending period follows the title in USGS publications (unless the last word is abbreviated). Some titles should be underlined for italic. If a table is continued from one sheet to another, repeat (1) the title followed by “—Continued,” (2) any explanatory material, either inside or outside brackets, between the title and the body of the table, and (3) any column headings. Follow the style of the book or map series in which you plan to publish the table. Use sample figure captions as guides for typing titles of various lengths.

### Bracketed Headnote

Include qualifying or explanatory information relevant to the table in a bracketed headnote. Brackets are the preferred punctuation mark for indicating such supplied information.

[A bracketed headnote follows the title and is typed double spaced. Use sample figure captions as guide to placement of lines and indentions. Headnote can be written in telegraphic style (as is a figure caption). Headnote contains such items as the definition of any abbreviations or acronyms used in the table: ppm, parts per million; Tr., trace; m, meters. Analysts: Dorothy Covel and Benton Curtis. Internal punctuation can be used, but no period at the end (unless the last word is abbreviated)]

### Leaders

Leaders in a table serve (1) to carry the eye from a reading column to the next column and (2) to indicate something within a column. Use dot or dash leaders for the first type and three hyphens, ---, for the second. Define

the second type in the bracketed headnote.

Material present	Amount, in ppm
Green stuff -----	8.9
Orange and red stuff -----	---
Orange and blue stuff -----	7.8

### Horizontal and Vertical Rules

Place a rule the width of the table at the beginning and end of the table; if the table is 10 pages long, the end rule goes only at the end of the table on page 10, not at the end of each page of the table. The GPO style manual describes use of rules within the table. Use vertical rules sparingly.

## CAMERA-READY TEXT AND TABLES

Because of the cost savings involved, camera-ready text and tables (those that can be photographed onto a printing plate for reproduction) are becoming increasingly popular. They are used in many Survey reports and maps (for example, USGS Professional Papers 852 and 1052, and Circular 827). Many outside publishers require camera-ready copy, particularly for abstracts. Camera-ready text and tables must be typed perfectly because the copy is the final one required for reproduction.

Print text or tables on a letter-quality printer after final corrections and formatting. Use good-quality bond paper; continuous form paper is not recommended but is acceptable if nothing else is available (do not print on perforations).

Text or tables stored in a computer can be transmitted elec-

tronically to another system and printed out on any good quality printer linked to the system. Printing terminals allow different print fonts, line spacing, 10 or 12 characters per inch (pitch), and even fine touches such as justification with incremental word/letter spacing and line measures (number of picas). Copy from a line printer or from dot matrix printers generally does not make good camera-ready copy.

### GUIDELINES

The following guidelines are useful for typing camera-ready tables:

1. Width is the most important dimension of the table. For best results, type tables at least 10 percent larger than publication size, but not larger than 50 percent. Use all the horizontal space. To arrange the data neatly within the allotted space, try this method: Select the longest line from each column and type all the words on one line. Check to see if the line will reduce to column width, page width, or broad measure. Then divide the space remaining between the end of this line and the right-hand margin for the required width into equal parts and apportion this space between the columns. Be sure to separate columns by at least two spaces.
2. Type all material in camera-ready tables single spaced, with the following exceptions:
  - 2.1 Use half-spaces above and below all horizontal rules (except above the top horizontal rule).

- 2.2 To make tables easier to read, insert a blank line after every four or five lines of data. To decide when to skip a line, add up the number of lines, and then determine what number the total is most easily divided by—four, five, or six—and place blank lines accordingly.
- 2.3 If subscripts or superscripts overlap adjacent lines, allow more space between lines. The method for doing this varies with the machine.
3. If titles and bracketed headnotes of tables in USGS books will be set by the typesetter, type the title on a separate page. At the top of camera-ready copy of the table, type the table number and title, and the name and typeface of the element (or the name of the print wheel or program) you used, so that corrections can be made if necessary.
4. Center column headings horizontally above the columns and vertically between the cross rules or as close to vertical as is possible.
5. Type horizontal rules if your printer makes a smooth, neat line. If not, mark the rules in blue pencil and have them drafted. If vertical rules are necessary (they seldom are) have them drafted.
6. Type footnote numbers within and at the bottom of the table as superscript numbers. The shelf ( $\_/\_$ ), which sometimes is marked on manuscript copy to indicate footnote numbers, should not be typed on camera-ready copy. If a Greek-math typing element, print wheel,

or program is available, the small numerals on it should be used instead of full-size superscripts.

7. Avoid underlining (to indicate italic) in tabular matter. If italic type is required in a table, use an italic print wheel or typing element that makes a crisp, dark imprint. Paleontologic names may be underlined, however, if italic is unavailable.

#### MAXIMUM, MINIMUM, AND IDEAL WIDTHS FOR CAMERA-READY TABLES PREPARED FOR USGS PUBLICATIONS

Widths are herein listed in inches. Widths are based on readable reductions of standard 12-pitch type (12 characters per inch). Tables typed in 10-pitch type (10 characters per inch) can be about 20 percent wider (table 15).

## EQUATIONS

Equations can be typed or handwritten legibly for review and editorial purposes. Most letter symbols in equations are set in italic; logarithmic and trigonometric functions, chemical symbols, and units of measure are not italic. Indicate italic to the typesetter by underlining each letter. Underlining can be done by hand on typed copy, if it is too difficult or time consuming to do on a machine. Center equation on the manuscript page and place the equation number in parentheses at the right margin.

In text, reference is to equation 1 (no parentheses around number). The equations on the facing page show format, spacing, and usage (U.S. GPO Style Manual, p. 155–156). If you need to prepare camera copy of equations, your local editor may have current advice.

Table 15. Widths, in inches, for camera-ready tables

Type of publication and form of presentation	Typed camera-copy widths			
	Publication width	Maximum <sup>1</sup>	Minimum	Ideal
Professional Paper:				
Column width-----	3.5	5.3	3.9	4.4
Page width-----	7.2	10.8	8.0	9.0
Side title-----	9.0	13.5	10.0	11.3
Bulletin, Circular,				
Water-Supply Paper:				
Column width-----	3.3	5.0	3.7	4.2
Page width-----	6.9	10.4	7.7	8.6
Side title-----	9.2	13.8	10.2	11.5
Techniques of Water-				
Resources Investigations				
Column width-----	3.2	4.8	3.5	4.0
Page width-----	6.5	9.8	7.2	8.1
Side title-----	8.7	13.0	9.6	10.8
MF map: Column width <sup>2</sup> -----	4.0–4.5	6.0	4.0	5.0
Other maps: Column width <sup>2</sup> -----	4.2–4.6	6.0	4.2	5.0

<sup>1</sup>Tables wider than the suggested maximums may be unavoidable, but be aware that every extra fraction of an inch over the maximum decreases the legibility and quality of reproduction of the table.

<sup>2</sup>Tables may be designed to span any number of text columns. To find recommended size for typed copy, multiply the column-width figure by the number of text columns to be spanned, and then add 0.5 in. for each column more than one.

$$\sqrt{\Phi} = \sum_{k=0}^m k(A_k \cos k\psi + B_k \sin k\psi) \quad (1)$$

$$\frac{e}{e_0} = \frac{1}{\sqrt{\left[1 - (f/f_M)^2 + \frac{C_M}{c}\right]^2 + \left[\frac{r}{X_{cw}}\right]^2}} \quad (2)$$

$$\begin{aligned} O &= \left(\frac{p_2}{p_1}\right)^{\frac{1}{\gamma}} \left\{ 2g p_1 v_1 \left(\frac{\gamma}{\gamma-1}\right) \left[1 - \left(\frac{p_2}{p_1}\right)^{\frac{\gamma-1}{\gamma}}\right]^{\frac{1}{2}} \right\} \\ &= A_2 \frac{p_1}{v_1} \left(\frac{\gamma}{\gamma-1}\right) \left[ \left(\frac{p_2}{p_1}\right)^{\frac{2}{\gamma}} - \left(\frac{p_2}{p_1}\right)^{\frac{\gamma+1}{\gamma}} \right]^{\frac{1}{2}} \end{aligned} \quad (3)$$

$$\begin{aligned} \omega_n(x, \theta_x) &= \frac{1}{\sqrt{r_1 r_2}} \int_0^x dx_2 \int_0^{x_2} dx_1 \cos n\psi_x(x_1, x_2) \\ &\quad \left[ \frac{r_1 r_2}{p_1 p_2} (\phi_{n-1}(k_1) + \phi_{n+1}(k_1)) + 2\phi_n(k_1) \right] \end{aligned} \quad (4)$$

$$\begin{aligned} m_{\theta_1, \theta_2} &= \int_{x_{i_1}}^{x_{i_2}} dx_1 \int_{x_{i_1}}^{x_{i_2}} dx_2 \int_0^{2\pi} \frac{d\theta_1}{2\pi} \\ &\quad \frac{\frac{r_1 r_2}{p_1 p_2} \cos(\theta_2 - \theta_1) + 1}{\int_0^{2\pi} \frac{d\theta_2}{2\pi} \sqrt{(x_2 - x_1)^2 + R^2(\theta_2 - \theta_1)}} \\ &= \int_{x_{i_1}}^{x_{i_2}} dx_1 \int_{x_{i_1}}^{x_{i_2}} dx_2 \int_0^{2\pi} \frac{d\psi}{2\pi} \frac{\frac{r_1 r_2}{p_1 p_2} \cos \psi + 1}{\sqrt{(x_2 - x_1)^2 + R^2(c)}} \end{aligned} \quad (5)$$

$$\begin{aligned} \sum_2 (\psi_n, c_n) &= 2c_2 \frac{\tan(2\psi_2 - \psi_1) \tan(2\psi_2 - \psi_3)}{\cos(2\psi_2 - \psi_3) + 6c_3 \cos(2\psi_2 - \psi_3)} \\ &\quad + 14c_4 \frac{\tan(2\psi_4 - \psi_3)}{\cos(2\psi_4 - \psi_3)} + \dots \\ &\quad + 2(2^{1+n} - 1)c_{n+2} \frac{\tan(2\psi_{n+2} - \psi_{n+1})}{\cos(2\psi_{n+2} - \psi_{n+1})} \dots \end{aligned} \quad (6)$$

## MEASURED SECTIONS

General directions for preparing measured sections are given on page 54. Instructions for key-boarding follow:

Measured sections are similar in format to tables in many ways. For example, the title of a section is underlined for italic, and the final period in the title is omitted (unless the

last word is abbreviated). Abbreviate units of measurement, such as m and cm, when used with a value. Double space all entries in manuscript.

Repeat the title of a measured section (followed by "—Continued") and the column headings on continued pages. This repetition helps the typesetter and reader maintain correct stratigraphic ordering. To avoid excessive repetition,

especially if the title is long, use paper longer than regular manuscript paper. Do not repeat the bracketed headnote. Do not break the description of individual stratigraphic units at the bottom of a page. However, the section may be broken between units, with the proper headings repeated on the next page followed by "—Continued" as shown on the sample measured section.

If description requires more than one line, indent overruns at least two spaces. Indent total lines about three or four spaces more than the spaces allowed for overruns so as to emphasize the total. In deciding whether to put rules above or below the total values, much depends on what is being totaled throughout the section. Look at published sections, use judgment, and perhaps seek the advice of an editor. The annotated section that follows may be useful.

Some reports contain many measured sections, which may be scattered through the text or grouped at the end of the report. If many sections are grouped together, you may number the sections ("Section 1," "Section 2," and so on) to facilitate cross reference (see sample).

## DISCLAIMERS

The Geological Survey has a longstanding policy of avoiding the use of trade, product, industry, or firm names in its reports. The purpose of this policy is to maintain the Survey's unbiased objectivity in the eyes of its readers. At times, however, the Survey must use trade or product names to identify particular things that have unique properties. Industry or firm names rarely must be used to aid in identifying sampling or study sites, especially if these sites have been publicly identified. The use of industry or firm names in connection with statements about sources of pollutants or factors causing changes in natural or artificial systems has never been permitted. Since 1988, Survey policy has been to put the trade

Section 1.--Three Forks, Jefferson, and Maywood Formations, and Devils Glen Dolomite along ridge on west side of George Gulch  
[SW1/4 sec. 31, T. 22 N., R. 9 W.; measured by M. R. Mudge, August 1974]

	<u>Thickness</u> (meters)
(F) Allan Mountain Limestone.	
Three Forks Formation:	
(4) 12. Limestone, very fine grained, grayish-brown, □ very thick bedded; weathers gray; brachiopod fragments-----	25.9
11. Evaporite-solution breccia containing fragments □ of limestone and magnesium limestone, light- yellowish-brown, massive; forms prominent ledge-----	18.5
(2) Total Three Forks Formation-----	44.4
Jefferson Formation:	
(2) Birdbear Member:	
(4) 10. Limestone, dolomitic, very pale orange, thick □ bedded; forms ledge-----	12.2
#9. Dolomite, calcitic, light-brownish gray; very thin □ bedded; weathers platy-----	6.1
(2) Total Birdbear Member-----	18.3
(2) Lower member:	
(4) #8. Dolomite, finely crystalline, dark-yellowish-brown; □ weathers yellowish gray; calcite-line pits-----	8.2

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and company (product) names disclaimer on the back of the title page of all Survey book reports, regardless of whether or not any such names are used in a given report. Use the wording given in the footnotes at right (but without the footnote number and end period). In Survey map series reports, place the same disclaimer in the lower right corner of the map, above the for-sale note. Survey authors publishing outside the Survey should footnote the first usage of such a name and

place the disclaimer at the end of that paragraph as you would any footnote, as follows:

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<sup>1</sup>Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

The following disclaimer may occasionally be appropriate, and the same guidelines apply:

Section 1. Three Forks, Jefferson, and Maywood Formations, and  
Devels Glen Dolomite along ridge on west side of Big George  
Gulch--Continued

Thickness  
(meters)

(f1)	Jefferson Formation--Continued	
	(2) Lower member--Continued	
align points	(4) #7. Dolomite, porous; dark-brown; weathers blocky,	
	□ fetid odor-----	14.6
	(4) Total lower member-----	22.8
	Total Jefferson Formation-----	41.1
	Unconformity.	
	Maywood Formation:	
	(2) Upper member:	
	(4) #6. Limestone, magnesium, brownish-gray, thin-bedded--	18.3
	#5. Dolomite, pale-yellow, thin-bedded; weathers blocky	15.2
	(4) Total upper member-----	33.5
	(2) Lower member:	
	(4) #4. Mudstone, gray, iron-stained; weathers olive green-	6.1
	#3. Limestone, dolomitic, grayish-brown; fine	
	□ laminated in upper part-----	9.1
	#2. Mudstone, like unit 4-----	7.6
	(2) Total lower member-----	22.8
	Total Maywood Formation-----	56.3

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[End of sample measured section]

<sup>1</sup>The use of trade, product, industry, or firm names in this report is for descriptive or location purposes only and does not constitute endorsement of products by the U.S. Government nor impute responsibility for any present or potential effects on the natural resources.

Two other types of disclaimers also are used by the Survey. The first generally is used on Open-File Reports, but either may be appropriate for other types of reports as well. Use only those

parts of the disclaimer that actually apply to the report.

1. For reports generated within the Survey:

This report (map) is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic Code.

2. For reports prepared by contractors or grantees:

This report (map) was prepared under (contract to) (a grant from) the U.S. Geological Survey and has not been reviewed for conformity with USGS editorial standards or with the North American Stratigraphic Code. Opinions and conclusions expressed herein do not necessarily represent those of the USGS.

If you plan to publish a computer program, you may want to include a disclaimer either on the title page or in the introduction. There is no formal wording for such a disclaimer, but what you want to tell readers is that the program runs on your machine but might not run on theirs.

## REFERENCES CITED

### REFERENCE LIST

The reference list in Survey publications generally is called "References Cited." Basic guidelines for formatting references are summarized here. Detailed instructions for preparing references in USGS style are given in the section "Preparing References for Survey Reports," page 234.

- ▶ All entries are double spaced.
- ▶ Overruns in a reference are indented five spaces.
- ▶ References are arranged alphabetically by author and chronologically under each author's name, the earliest publication first.
- ▶ A dash about six typewritten spaces long (use underline) can take the place of exactly the same name(s) in the previous citation.
- ▶ If there is more than one reference by the same author (or exactly the same group of authors) in the same year, letters are added to the year to make the distinction.

- ▶ Authors' initials have periods, but no spaces, between them.
- ▶ All journal names are spelled out.
- ▶ Only first words and proper names are capitalized.
- ▶ Generally, only one colon per reference is used—after the title.
- ▶ Brackets indicate supplied information [translation of a title, for example].

The following generalized format is used for each citation in the reference list, depending on type of publication:

Author, Initial, Initial, year, Title:  
 City, State, publisher, pagination (for book);  
 Journal name, volume, pagination;  
 Series name and number, pagination.

### UNPUBLISHED INFORMATION

Unless approved for publication, a report “in preparation” is not listed under “References Cited”—to do so would mislead your reader. Such material is cited in text as unpublished data or unpublished mapping. Information acquired from other workers is also cited only in text and as a written or oral communication.

If the name is a logical part of the sentence, cite in text as follows:

The cave was explored by P.C. Noble (unpub. data, 1978), or

P.C. Noble (unpub. mapping, 1979), or

P.C. Noble (oral commun., 1980), or

P.C. Noble (written commun., 1981)

If the name is not a logical part of the sentence, put the citation at the end, as in the following example:

The cave walls are mainly limestone (P.C. Noble, unpub. mapping, 1979).

Add an affiliation and an address after the name, if such information would be useful to the reader.

### REFERENCE CITATION IN TEXT

References in text of Survey publications are cited as follows: If a paper has one or two authors, both authors' names should be used—in and out of parentheses. If the paper has three or more authors and if only one reference can be cited in that way, the reference should be to the first author “and others.”

#### Samples of References Cited in Typed Text

Some of the pyrite with the uranium minerals is framboidal, according to Daniels and Gilbert (1966). According to Wilson and others (1973), however, the pyrite \* \* \*. This report was prepared on the basis of earlier work in the area (Turner and Verhoogen, 1960; Wilson and others, 1973; Sohl, 1978; J.E. Hogan, written commun., 1973).

Two papers by exactly the same author (or exactly the same group of authors) in the same year are cited in text as “\* \* \* according to Smith (1979a, b).”

Note punctuation (semicolons, commas, ellipses) and spacing. See section “Preparing References for Survey Reports” for more detailed instructions (p. 234).

### HALFTITLE PAGE

A halftitle page is used in a USGS book report before a group of items (tables or fossil plates, for example) at the end of a report to designate what follows. Double space this material and center it vertically on the page with a double rule before and after the typed material. (See facing page.)

## APPENDIXES

Appendixes are placed at the end of a USGS report and generally are preceded by a halftitle page. For more than one appendix, number (not letter) them consecutively. Type them in the same manner as text or tables and follow the same general rules for format, style, and spacing. List them in “Contents” after “References Cited.”

## FORMATTING ABSTRACTS FOR SCIENTIFIC MEETINGS

Prepare double-spaced copy for review and editing as you would any manuscript. Send all technical review copies with the mill copy. You can print the abstract on a copy of the society's form to check the fit and ensure that you've made the best possible use of the space, but wait until Director's approval to print out the final copy.

The USGS asks authors to list their government mail address (as well as affiliation) so that readers know where to direct inquiries.

You'll need to be aware of how the society will process your abstract. Will the abstract be reduced from your camera-ready copy? If so, resist squeezing too much into too little space. Leave the right margin ragged because it's easier to read than right-justified text. Avoid ornate typefaces. Past programs are a source of both good and bad ideas. Copy from a proportional-space printer looks more typeset than that from other printers. An impact printer produces sharper copy than a thermal or dot-matrix printer. A reducing copier will help you see how your abstract looks when reduced.

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PLATES 2-7

Contact photographs of the plates [here, photographs of fossils] in this report are available, at cost, from the U.S. Geological Survey Photographic Library, Denver Federal Center, Denver, CO 80225.

[The number of lines in the title determines placement; follow guides in preceding section "Sample Figure Captions." The statement about contact photographs should accompany any fossil plates.]

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[End of sample halftitle page]

If your abstract is past deadline, please write a note to reviewers and editors explaining the circumstances. If they don't know it's late, they probably will assume you have already submitted it and will see little point in spending their time in offering suggestions.

See section "Abstracts for Talks at Scientific Meetings" (p. 23) for information about writing the abstract.

## CHECKLISTS

### CHECKLIST FOR COMPLETED MANUSCRIPT

#### General Guidelines

- \_\_\_ Copy is on 8½- by 11-inch white paper.
- \_\_\_ Cover and title page are in style of publication.
- \_\_\_ Cooperative note is on both cover and title page.

- \_\_\_ Author affiliation and address are given, if appropriate.
- \_\_\_ Top of first page of text has 1½-inch margin.
- \_\_\_ Each succeeding page has 1-inch margin all around.
- \_\_\_ Pages are numbered consecutively.
- \_\_\_ All textual material, including tables and figure captions, is double spaced. Wrap-around feature on word processor is used.
- \_\_\_ Words are not divided at the end of a line.
- \_\_\_ Paragraphs are indented five spaces using a tab.
- \_\_\_ Paragraphs are complete on a page if possible.
- \_\_\_ All headings in a USGS Professional Paper are centered and all words are capitalized.
- \_\_\_ Headings in a USGS Bulletin, Circular, or Water-Supply Paper are flush left for first three ranks and centered for lower ranks. Capitalization follows scheme shown on page 250 in section "General Guidelines for the Entire Manuscript."
- \_\_\_ Right margin is ragged (not right justified).
- \_\_\_ Abbreviation and capitalization follow publisher's style.
- \_\_\_ Words to be set in italic are underlined.
- \_\_\_ Note for USGS monthly list is in correct format.

### Contents, Lists of Illustrations, and Tables

- \_\_\_ Overruns in "Contents," "Illustrations," and "Tables" are indented five spaces.
- \_\_\_ Rank of heading is identified by indentation.
- \_\_\_ Illustrations list (in "Contents") identifies figures as to kind.
- \_\_\_ Short titles of figures are used in list of illustrations.
- \_\_\_ Figure and table numbers are aligned on period in "Contents."

## Footnotes

- Footnotes are placed under a rule about 16 typewritten spaces long at the end of the paragraph in which they first appear. The first line of a footnote is indented five spaces and overruns are flush left.
- .Footnotes are numbered consecutively throughout text.
- .Footnote numbers are superscripts.

## Figure and Table Citations in Text

- The following notation is made at the end of the first paragraph that contains the principal citation to the figure or table, and a blank line precedes and follows each such notation.

**FIGURE X.--NEAR HERE**

**TABLE X.--NEAR HERE**

- .Figure and table citations in text are capitalized and abbreviated according to publisher's style. USGS style is figure 1 and table 1 outside parentheses (and fig. 1 and table 1 inside parentheses).

## Illustrations and Their Captions

- Illustrations are numbered consecutively.
- Figure caption is in proper place in manuscript.

## Tables

- Tables are numbered consecutively and are interleaved in text.
- Tables have margins of at least 1 inch all around.
- Bracketed headnote in table or measured section has no period at the end.
- Tables have one top (head) and one bottom (end) rule.

- .Entries in table are centered under column head.
- .Entries in table are aligned on decimal point or hyphen (denoting range).

## Equations

- Equation number is in parentheses at right margin.
- Reference to equation in text is not parenthesized.
- Letters are properly underlined for italic.

## Measured Sections

- Measured sections are in format and style of publisher.
- .Each stratigraphic unit in a measured section is complete on a page.
- .Ordering is maintained in measured sections by repeating headings and “—Continued” at the top of the following page.
- .Overruns are consistently spaced in measured sections.

## Disclaimers

- Appropriate disclaimers are used, if needed.

## References

- Reference citations are in correct format in both text and list.

## Appendixes

- Appendixes are numbered consecutively and are at the end of the report.

## CHECKLIST FOR ABSTRACTS FOR SCIENTIFIC MEETINGS

- Copy is double spaced.
- Survey author's affiliation and address are given.
- Right margin is ragged.
- Technical review copies are with mill copy.