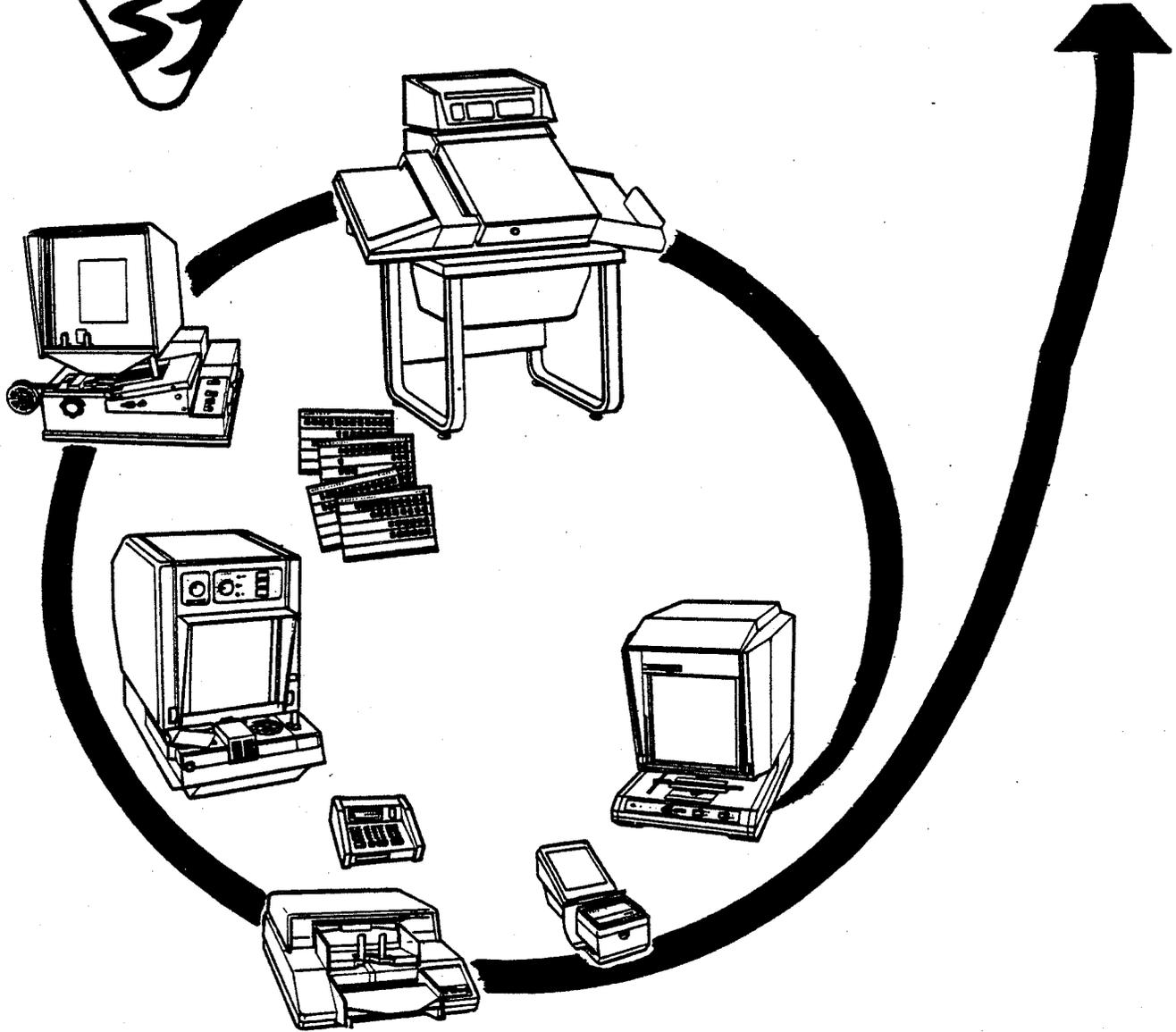




BLM 1276 MANUAL SECTION
MICROGRAPHICS



**U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT**

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.01 Purpose. This Manual Section outlines policy, responsibility, standards, procedures, and guidance for carrying out the Bureau micrographic program. It prescribes the administrative processes for proposing and initiating micrographic systems and projects to insure that they are practical, economical, and compatible with current systems and plans. It also documents approved Bureau micrographic systems.

.02 Objectives. The basic objectives of the Bureau micrographic program are:

- Preservation.
- Security.
- Broader Information Dissemination.
- Improved Administrative and Operations Procedures.
- Information Retrieval.
- Records Space Reduction.

A. Preservation. Microfilming is one of the most economical methods of preserving information contained in vital or permanent value records and for protecting the original documents from damage or deterioration through constant use or normal aging.

B. Security. Microfilming for security purposes is generally done as required by law. Other security filming may be proposed when justification shows that the records are a vital public or internal document. Any justification should show that it would be impossible or impractical to replace or reconstruct the records from other sources. Where security of records is required, this requirement can be met by having security microfilm stored in another office located far enough away so it would be unlikely that both records would be destroyed at the same time. Security microfilm should never be stored in the same building housing the records.

C. Broader Information Dissemination. Microfilming provides an excellent means for rapid and broad dissemination of records and information when duplication is necessary for Field Office reference and public use.

D. Improved Administrative and Operations Procedures. Microfilming of this type is done when systems studies have identified such benefits as: reduction of repetitive operations; expediting workflow; reduction of equipment, supply, and space requirements; improved information access; saving filing and research time; consolidation of records and information; and improving public service at a lower cost.

E. Information Retrieval. Microfilming is often used to improve the speed and reliability of information retrieval.

F. Records Space Reduction. This is ordinarily a subsidiary benefit of other microfilming objectives and can rarely be justified independently. Immediate disposal of the microfilmed material, either through destruction or shipment to a Federal Records Center, is essential to any proposal for reduction of space microfilming. Justification of this type filming must be judged on cost savings after deduction of the microfilming cost.

.03 Authority.

A. Federal Records Act of July 7, 1943, as amended.

B. 41 CFR 101-11.5.

.04 Responsibility.

A. Washington Office. The Chief, Branch of Records, in the Division of Information Resources Management is responsible for the Bureau's micrographic policy and program; approval of all new application proposals, systems, projects, and related micrographic equipment purchases; and providing the lead for technical assistance outside the realm of approved systems and projects.

B. Service Center. The Asst. Service Center Director, Data Systems, has the responsibility as assigned by the Washington Office for performing feasibility studies; the design, development, and review of micrographic systems; establishing and controlling technical standards; providing technical training; and furnishing technical advice, assistance, and microphotographic services for approved systems and projects to Field Offices on request.

.05 References.

A. Glossary of Micrographics, MS 100-1971, National Micrographics Association.

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.06 Policy. It is Bureau policy that:

A. All Bureau Field Offices, except the Service Center and the Eastern States Office, are limited in their micrographic activities to the normal update, maintenance, and use of approved systems unless otherwise authorized in writing.

B. Written approval from the Chief, Division of Information Resources Management, Washington Office, must be obtained prior to initiation of any micrographic study; system design and development; or conversion of records or documents to microfilm unless they are included in an approved system.

.1 Procedures and Guidance.

.11 Disposal of Records.

.12 Proposals. Proposals for new systems, applications or projects, or for modification of approved systems, are submitted in the form of requests for feasibility studies or systems review. The Washington Office, Division of Information Systems, and technical staff or the appropriate organizational unit review the merit of the proposal and the Chief, Division of Information Systems, advises the submitting office of the acceptance or rejection of the proposals.

A. Submitting Proposals. Proposals are submitted in narrative form either as a part of the normal programming and planning activity or by memoranda. All proposals should discuss the problem of current practice and the general improvements or objectives desired. Submit all memoranda proposals to the Director, 870.

B. Accepted Proposals. Proposals which are accepted by the Washington Office staff are converted to a Directive or Development project (DPP) for conducting a feasibility study and reporting the result.

.13 Feasibility Studies. Micrographics feasibility studies are assigned to, scheduled, and conducted by staff of the Division of Records Systems, Denver Service Center. Reports and recommendations of these studies are submitted to the Director, 870, for evaluation, analysis, and decision on implementation, deferral, or rejection of the proposal.

.14 Design and Development. The design and development of new applications and systems is performed by the Division of Records Systems, Denver Service Center, as assigned through the DPP process. Inhouse, contract, or industry expertise is utilized as appropriate to provide the most economical and effective systems possible which meet the intended objectives.

A. Considerations. Throughout the design and development, consider and minimize the possible impact on personnel and budgetary resources; and assure the highest compatibility with established systems, other operations, and existing micrographic equipment.

B. Pilot Tests. A pilot test of the specifications, technical requirements, and user procedures for each new system is performed and evaluated before final system documentation.

C. System Documentation. The operational features, specifications, procedures, and responsibilities for each new system are documented for the Bureau Manual. Implementation of any new system, application, or project is contingent upon approval of this documentation.

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1. User Review. Copies of the Manual draft for each system are furnished to appropriate Bureau offices for user review and comment.

2. Manual Draft Modification. Based upon the review comments received, the Manual draft is modified or improved as may be necessary and consistent with overall system objectives.

3. Submission. The final draft of the Manual, appropriate clearance forms, and implementation recommendations are forwarded to the Director, 870, for review and approval.

.15 System Approval. The Washington Office Chief, Division of Information Systems, obtains the required Washington Office review and clearances and approves the system as documented for the Bureau Manual. Implementation of systems is programmed, planned, scheduled, and assigned in accordance with established Bureau programming procedures.

.16 Implementation and Coordination. The Division of Records Systems, Denver Service Center, has lead responsibility for implementing and coordinating all approved micrographic systems. All offices assigned implementation functions participate in the planning and scheduling necessary to most efficiently affect the installation of a new system. These coordinated and consolidated plans and schedules provide the basis for AWP Directives for performing the work.

.17 Technical Standards and Quality Control. The Division of Records Systems, Denver Service Center, has the responsibility for establishing and controlling Bureau standards and specifications for the production of microforms; and the authority to reject substandard microforms produced by Bureau Field Offices or contractors. The general standard and specifications established in this part apply to all microform production unless specifically modified in an approved, documented system or modified by written Division approval of a requested deviation.

A. Standards and Specifications.

1. Camera Rollfilm. Use unperforated, unbacked 16mm and 35mm film, type AHU, or the equivalent. This film should be loaded into and removed from cameras in a subdued light. Unexposed film should be kept cool or refrigerated until 1 hour prior to camera loading.

2. Rollfilm Identification. A Roll Control Target (see Illustration 17 for format) is filmed at the beginning of all rolls. This target identifies the office having custody of the documents, the type of document, the year filmed, the filming office and roll number, the camera operator, and the camera used.

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3. Security Rollfilm. Security film is either the camera rollfilm or a positive polarity silver halide duplicate print of the camera roll. It is used only to produce replacement rollfilm or to reconstruct lost or destroyed documents or records.

4. Distribution - Use Microfilm. All microforms produced for distribution and system operations are negative polarity diazo or vesicular type film. Sale copy microforms may be either silver halide, diazo, or vesicular.

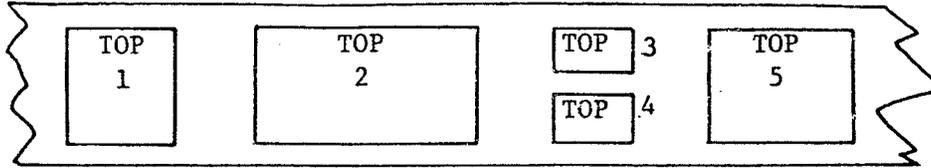
5. Reduction Ratios. Reduction ratios are generally selected to accommodate end use or system needs while considering factors such as document size; film size; microform; and reader and reader-printer screen, magnification, and print sizes. The following table will generally meet these considerations and should be used unless a specific ratio is designated in an approved system.

<u>Document Size</u>			<u>Such As</u>	<u>Reduction</u>	<u>Film Size</u>
<u>Width"</u>	X	<u>Height"</u>			
3	X	5	File Card	12:1	16/35mm
5	X	3	File Card	12:1	16/35mm
5	X	8	File Card	20:1	16/35mm
8	X	5	File Card	20:1	16/35mm
8	X	10.5	Memo/Letter	24:1	16/35mm
8.5	X	11	Letter	24:1	16/45mm
8.5	X	14	Legal	26:1	16/45mm
9	X	12	Drawing	24:1	16/35mm
10.5	X	8	Table	26:1	16/35mm
11	X	8.5	Table	26:1	16/35mm
12	X	9	Drawing	32:1 *	16/35mm
14	X	8.5	Table	32:1 *	16/35mm
14	X	11	Printout	32:1 *	16/35mm
		CRT	Printout	42:1	105mm
11	X	17	Drawing/Map	14.5:1	35mm
17	X	11	Drawing/Map	14.5:1	35mm
19	X	24	Survey Plat	20:1	35mm
22	X	17	Drawing/Map	14.5:1	35mm
24	X	19	Survey Plat	14.5:1	35mm
25.5	X	20	Status Plat	16:1	35mm
34	X	22	Drawing/Map	22:1	35mm
36	X	21	Eng. Drawing	22:1	35mm

* A lower reduction may be used. However, prints cannot then be obtained on letter size paper.

6. Image Orientation. Perform all filming (except simultaneous oil and gas filings) to produce right reading images in the comic mode when the emulsion side of the film is away from the eye. The following illustration depicts the proper orientation with the emulsion side down.

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7. Background Densities. The gross background densities of clear base camera microfilm images are acceptable within the range of .95 to 1.25. A density of 1.00 to 1.20 is most ideal for the majority of Bureau documents.

8. Resolution. The minimum resolution acceptable for camera microfilm for the more common reduction ratios are as follows:

<u>Reduction</u>	<u>Smallest NBS Pattern Read</u>	<u>Resolved Lines/mm</u>
12:1	8	96
14.5:1	8	116
16:1	7.1	114
20:1	5.6	112
24:1	5.0	120
32:1	4.5	135

9. Archival Quality. All security microfilm and silver halide microform masters of permanent records must meet the ANSI Standard PH1.28-1969 for archival quality and its specification for acceptable residual thiosulfate concentration.

B. Quality Control.

1. Photographic Quality. All microfilm rolls are inspected and tested to assure they meet minimum requirements for background density, resolution, and do not control technical flaws rendering them unacceptable for use or reproduction. In addition, residual thiosulfate testing is performed on permanent record silver halide microfilm rolls in accordance with recommended practice detailed in Section 5.6 of the National Micrographics Association Standard, MS-104-1972.

a. Quality Control Documents. National Bureau of Standards Microcopy Resolution Tests Charts arranged in accordance with the instructions provided in with the chart and a 90% reflectance test target are filmed at the beginning and end of each camera microfilm roll produced. These targets facilitate resolution, density measurement, and reproduction repeatability evaluations.

2. Application Acceptability. Application acceptability is based upon the ability of microforms to adequately reflect the information and data of the original document for viewing and reproduction of hard copy. Microform images are generally considered adequate if they provide equal readability and copy reproduction of the original as is obtained through other copy reproduction methods. Enhancement of the readability of an original document is rarely obtained through microphotography.

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a. Image Inspection. Microform images are inspected to determine their adequacy as stated above, to verify the correct application of filming procedures, for adherence to application or system specifications, and to identify equipment performance problems.

b. Unacceptable Images. All images found to be unacceptable during inspection or operational use are identified for refilming or other corrective measures. The apparent problem is determined and rectified prior to any refilming. Such problem rectification may include steps such as equipment adjustment, original document enhancement or replacement, technical procedure corrections or other appropriate methods. Direct enhancement of legal documents is not to be performed. Enhancement of legal documents and old faded or low contrast documents can often be obtained through office machine copy techniques. However, if the machine copy is manually "touched up," it cannot be certified as a "true copy of the original." Any transcribed, refurbished, or touched-up copy of an original legal document must include a notation that it is a "Transcribed Copy" before being microfilmed.

.18 Equipment and Supplies. The Division of Records Systems, Denver Service Center, has the responsibility for reviewing, testing, evaluating, and recommending equipment and supplies for the Bureau's micrographics program; reviewing Bureauwide micrographic equipment budget submissions; and providing expertise and consultation to Field Offices on contemporary and emerging equipment, processes, and supplies.

A. Considerations. Each of the following factors are considered and evaluated to determine the overall impact of specific equipment and supply selection:

- Compatibility.
- Versatility.
- User Requirements.
- Service and Repair.
- Obsolescence.
- Cost.
- Utilization.
- Current and Planned Systems.
- Technical Quality and Reliability.

1. Compatibility. Provide and perpetuate the greatest compatibility possible between existing and planned equipment, supplies, and systems. Inadequate consideration of this factor could result in unplanned obsolescence, costly single use, or underutilization of equipment and supplies.

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2. Versatility. Obtain the most broadly versatile equipment and supplies, without sacrificing quality or other requirements, to promote the goals of other consideration factors; reduce space requirements; and increase operator efficiency.

3. User Requirements. Consider items such as simplicity of operation; hard copy print durability (particularly for Field operations or public sale); operator fatigue; print size and magnification power; and system data or information use.

4. Service and Repair. This factor is relative to the type of equipment being selected, the frequency and probability of service or repair needs, and the availability of such service. Normal maintenance, cleaning, and bulb replacement on a simple viewer requires minimal consideration. However, service and repair availability are of maximum importance for cameras and reading-printing equipment.

5. Obsolescence. Research the possibility of the item being discontinued or replaced in the near future; service and parts availability if discontinued; introduction of prototype replacements; and emerging technology.

6. Cost. Perform a cost-benefit analysis and comparison of like products of various manufacture and capability. The cost-benefits analysis must include many of the related considerations outlined herein.

7. Utilization. Confirm the irrefutable inhouse need and a sufficient intermittent use to preclude contract or Branch of Micrographics services or the rental of equipment as needed.

8. Current and Planned Systems. Consider the specifications, microforms, and equipment of operational and planned systems to provide for the broadest compatibility and versatility possible. Exclusive single use equipment or supplies are rarely justifiable.

9. Technical Quality and Reliability. Conduct performance tests and evaluations of equipment and supplies to determine their ability to consistently meet performance, quality, and user requirements.

.19 Technical Assistance and Services. The Division of Records Systems, Denver Service Center, has the responsibility for providing technical assistance and micrographic services to Field Offices on all approved systems and as otherwise directed by the Washington Office. Field Offices may obtain technical assistance or services on approved systems from industry, service representatives, or contractors at their discretion and following appropriate procurement procedures. Use of Bureau expertise and services is normally less costly and is encouraged.

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A. Assistance. Requests for assistance are submitted in narrative form as a part of the normal programming and planning activity or by memoranda. The request should identify the type of assistance needed and the general objective. Submit requests which fall outside of the realm of approved systems to the Director, 870. Submit requests for assistance on approved systems to the Division of Records Systems, Denver Service Center.

B. Services. The Branch of Micrographics, Division of Records Systems, Denver Service Center, provides microphotographic services for Bureau Field Offices on request. These services include microphotography; film processing; microform duplication; inspection and quality control; editing and formatting; photographic reproduction and restoration of documents; and related lab functions.

1. Service Requests. Requests for service are submitted on Form 1510-18, Requisition/Oral Order, to the Branch of Micrographics, Division of Records Systems, Denver Service Center. The request, with any appropriate microforms are sent either by certified or registered mail as may be appropriate.

a. Content. As a minimum, the request should contain the following:

- The name of the requesting office.
- The type or types of work to be performed.
- The number of film copies required, if any.
- The mail code or person to whom the completed work should be sent.
- Fiscal codes.
- Phone number.

b. Request Exception. Requests for distribution or sale copies of master microforms maintained by the Branch of Micrographics, such as the survey Field note and plat microfiche masters, may be made by telephone. These requests are made by public contact personnel. Completed microform copies are sent to the requestor for further disposition.

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.2 Approved Micrographics Systems.

.21 Cadastral Survey Records. These systems provide a means of distributing to Field Offices the land survey records pertaining to their area of responsibility, facilitate information retrieval, and promote preservation of the original records from further deterioration.

A. Official Cadastral Survey Field Notes and Plats. This system's major objectives are to consolidate broadly dispersed interrelated information and to preserve the vital original records from loss or further deterioration. The various types of surveys are indexed and microfilmed by category consistent with Field Office operational needs, while maintaining Bureauwide uniformity to the maximum extent possible. Generally, these categories are: rectangular system surveys, mineral surveys, State boundary surveys, homestead entry surveys, and land grant surveys. Additional categories may be necessary for a specific State such as U.S. Surveys in Alaska.

1. Concepts. The general system concept is to consolidate in historical sequence all possible survey information pertaining to each specific township or survey. Although separate file segments, commensurate with survey categories, are created, copies of all survey microfiche are also filed following the township microfiche in which they are located. Indices are furnished for each survey category and contain a cross-reference to the township each survey is located in. The township index is a master index to all township information and includes a tabulated reference by survey type to all other surveys located within its boundaries. Illustration 1 depicts the interrelationship of the various types of Field notes and their microfiche and index treatment.

a. Townships. Each township's microfiche contains 16mm images of all pages of notes pertaining to the boundary, subdivisional lines, and corners of the township, irrespective of the source of the information. Each township's plat microfiche contain 35mm images of only those plats actually pertaining to that township. The plats of abutting townships or surveys are not included.

b. Land Grants and State Boundaries. The microfiche for Land Grant and State Boundary surveys contain Field note and plat information developed during the survey, resurvey, or retracement of these surveys themselves. Corner set-on lines of these surveys during execution of another type of survey are not included on these microfiche. The Field note information on these microfiche is also included on the township microfiche of the appropriate townships. The survey plats for these surveys are not duplicated on the township microfiche. These microfiche are created mainly for historical or research purposes. If complete Field note information is needed, use the appropriate township indices and microfiche to obtain the information.

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c. Mineral, Homestead Entry, U.S. and Other Surveys. The microfiche for these surveys contain all Field note and plat information available on each specific survey except for Field note information developed during a township subdivision survey. This exception is necessary because each individual page of township subdivisional notes are not abstracted. It should be understood that outside this exception, any retracement or resurvey of a survey made during execution of another survey is properly included on the microfiche and in the index. Microfiche of mineral surveys will not include images of any mineral location notices included with the Field notes. In those instances where the notices are bound along with the survey notes, an image identifying these omitted pages and their contents will be included.

d. Location and Mineral Monuments. A microfiche file for location or mineral monuments is not furnished. An index to these monuments is compiled and references the surveys and pages of the survey notes on which the monument description, ties, and other information may be found. Notes of a monument established independently from a survey are included on the index and microfiche of the township in which it is located.

2. Microform. The system microform is microfiche containing 16mm images of Field notes and 35mm images of plats.

3. Format. The notes and plats are placed in historical order on the microfiche. The Field notes from each individual volume are preceded by an eye-readable indicator showing the volume type and number containing those pages.

a. Townships. The top row of the first Field note microfiche is reserved for and contains the index images for the township. The subsequent rows and Field note microfiche contain the pages of Field notes pertaining to the township. The township plats and other appropriate plats (such as exchange surveys, reservations, segregations, etc.), are contained on separate 35mm microfiche. Each plat microfiche contains up to six plats and is filed immediately following the Field note fiche for that township. (See Illustrations 2 and 3.)

b. Numbered or Named Surveys. There is no index image or row in the microfiche of these individual surveys. The Field notes and plats are contained on combined 16mm and 35mm microfiche. These microfiche are filed either numerically, alphabetically, or in township order as each category dictates.

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c. Other Surveys. There is no index image or row in the microfiche of these surveys (State Boundaries, etc.). The Field notes and plats are treated either as in .21A3a or .21A3b depending on the dictates of the survey category.

d. Indices. All indices other than the township index are contained on index microfiche for each survey category and are filed in front of the survey microfiche for each category. Miscellaneous and crossreference indices are filed at the beginning of the township file. Illustrations 3 through 13 depict examples of the various indices.

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e. Color Codes. The survey and index microfiche header strips are color stripped to promote file integrity and survey information retrieval. The following color codes are used.

Township Microfiche

Northeast Quadrant	White
Southeast Quadrant	Red
Southwest Quadrant	Yellow
Northwest Quadrant	Green

Numbered Survey Microfiche

Mineral Surveys	Orange
Homestead Entry Surveys	Blue
U.S. Surveys	Blue
Small Holding Claim Surveys	Tan
Donation Land Claim Surveys	Tan
Coal Surveys	Tan

Named Surveys (Historical)

State Boundary Surveys	White
Land Grant Surveys	Red

Miscellaneous Indices Pink

f. Header Identification. Each microfiche header contains the township, range, meridian, survey number, or other unique identifying information on the left and the State, agency, and fiche number designation on the right. The type style is IBM Orator or the equivalent. A 12 pitch setting is used. The last jacket in a set of microfiche gets an asterisk. The following examples depict the format and spacing used.

T 8 N R 7 W WM	OR	USDI-BLM 1
T 101½ N R 110½ W WM	OR	USDI-BLM 11*
MS 8635 HOOD MD	OR	USDI-BLM 11*
MS 6435 HOOD MD	OR	USDI-BLM 11*
USS 5388	AK	USDI-BLM 11*
USS 5388	AK	USDI-BLM 11*

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4. Indexing. Developing an accurate and comprehensive index to the Field notes is the basis for providing a dynamic usable system. It is extremely important that indexing concepts and standards be adhered to; that competent people perform the work; and that data purification processes are employed to assure the highest degree of accuracy possible. It is not possible to cover all of the indexing variations which may occur from survey to survey and State to State. The system concept of creating indices which are complete for each township and survey must be employed. Generally, indexing concepts, methods, and procedures are detailed in the Handbook, H-1276-1, of this Manual.

a. Developing the Index. The index data is abstracted by going through each volume, page by page, and entering the pertinent survey information of forms 1276-1, 1276-2, and 1276-3 as shown on Illustrations 14, 15, and 16. This information is keyed, edited, and purified through EDP processes and forms the data base used to obtain COM indices and printout filming instructions.

b. Using the Indices. The indices are used to locate specific Field note information; cross referencing survey information and geographic locations; and to provide information needed to recall volumes from the Federal Records Centers if the original notes are required for litigation or other use. Each line on the index reflects the volume and pages containing information for that specific boundary, subdivision, or survey.

5. Filming. The quality of the microform images is as important to the system as providing accurate and usable indices. By careful application of contemporary filming and quality control techniques and procedures, it is possible to obtain satisfactory images or nearly all note pages or plats which are readable.

a. Unreadable or Inadequate Original. If a page of notes or a plat is found unsuitable for obtaining adequate microimages, one of the following options to rectify the problem is used. Direct touch-up or enhancement of the original document information is not permitted.

(1) Field Notes. The following options, listed in priority sequence, are used to rectify inadequate original Field note page problems.

(a) Obtain a machine copy of the page and film it in place of the original page. Do not touch up the machine copy.

(b) Obtain a machine copy of the page; touch it up as necessary using the original page for data; and film the touched-up machine copy. If original page data cannot be read or precisely interpreted, do not use this option.

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(c) Film the corresponding page from the Washington Office copy of the notes.

(d) Type, proof, and verify the page information and film the typed page.

Note: If option (b), (c), or (d) is used, the new image(s) is placed in the jacket alongside the image(s) of the original page(s). Each microimage of a touched-up machine copy, Washington Office copy, or typed page must include the statement "Transcribed copy of Original Field Notes."

(2) Plats. Plats containing unreadable or obscured survey information are reproduced at original scale using photographic enlargement or contact printing processes. The photographic copy is retouched and verified by or under the direct supervision of Cadastral Survey personnel to reflect the original plat data. The retouched copy is filmed and the image placed in the jacket alongside the image of the original plat. Images of retouched copies will contain the following statement:

NOTICE

SURVEY INFORMATION ON THIS PLAT HAS BEEN RETOUCED FOR THE PURPOSE OF OBTAINING CLARITY AND LEGIBILITY FOR MICROFILMING. IN CASES WHERE SURVEY INFORMATION WAS OBSCURED ON THE ORIGINAL PLAT, INTERPRETATION OF THIS INFORMATION WAS OBTAINED FROM THE BEST AVAILABLE RECORD SOURCES ON FILE IN THE BUREAU OF LAND MANAGEMENT.

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(a) Critical Survey Information. The listed items below are those of significant importance to warrant researching all available record sources and/or interpretations by Cadastral Survey personnel in order to produce an accurate representation of the original plat:

- (1) Section lines.
- (2) Section subdivision lines.
- (3) Lot lines.
- (4) Irregular grant lines.
- (5) Meander lines.
- (6) Bearings and distances.
- (7) Lot numbers and acreages.
- (8) Section subdivision acreages.
- (9) Section numbers and acreages.
- (10) Mineral survey name and number.
- (11) Witness corners.
- (12) Plat approval dates.
- (13) Official notations.
- (14) Plat memorandum.
- (15) Land hooks.
- (16) Plat heading.

(b) Noncritical Survey Information. The listed items below are those of minor importance and can be retouched after the above significant items are retouched:

- (1) Latitude and longitude.
- (2) Magnetic variation.
- (3) Scale.
- (4) North arrow.
- (5) History.
- (6) Township acreage.
- (7) Proper names.
- (8) Descriptive names.
- (9) Hydrographic names.
- (10) Hachures.
- (11) Topographic features.
- (12) Signatures.
- (13) Diagonal shading.

(c) Missing Data. In those instances where a portion of a plat is obliterated, a redraft of that portion will be necessary using the Field notes and/or another copy of the plat.

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d. Background Density. The target gross background density for camera film is 1.05. The acceptable density range is .95 to 1.25. (Exceptions may be applied under specific circumstances when necessary to obtain optimum legibility or reproduction capability.)

e. Reduction Ratios. The following reduction ratios or techniques are used for this system. Other reductions may be used only when required by odd documents sizes or special circumstance.

(1) Field Notes. Use the least reduction ratio that will allow the top and bottom of the pages of the open, right reading, volume to be totally within the vertical framing field. This technique will provide standard image sizes from the various size volumes and promote fiche format consistency.

(2) Plats. Use a 14.5:1 reduction ratio. This reduction allows making hard copy prints at or very near the original scale. Other reductions may be used only for oversize plats or if necessary to maintain the right reading comic mode.

f. Roll Control Documents. Three roll control documents are filmed at the beginning of each roll. These documents, in order of their filming are: A Roll Control Target (see Illustration 17 for format); 90% reflectance target; and National Bureau of Standards Microcopy Resolution Test Charts 1010A arranged in accordance with the instructions provided with the chart. The reflectance target and resolution test charts are also filmed at the end of the roll.

g. Filming Instructions. Two computer printout filming instructions for filming the Field notes are produced at the same time the COM indices are produced. One instruction is in volume, survey, and page order and is used as sequenced to perform the microfilming. The second instruction is in survey, volume, and page order and is used to verify the completeness and historical sequence of the unitized microform.

6. Quality Control. Camera and security rollfilm is inspected and tested for photographic and archival quality; density; resolution standards; and technical defects. Individual camera roll images are inspected for legibility, proper sequencing, reduction ratio, and information context for the survey unit being inspected. Images of questionable reproducibility are identified for subsequent final product acceptability tests and unacceptable images are identified for refilming or other rectification processes. In all cases, the apparent problem concerning borderline or unacceptable images is noted on the inspection sheet.

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7. Microform Master. The microform master is jacketed silver halide camera film formatted to produce distribution and use microfiche as described in .21A3. The jacketed microfilm will conform as nearly as is possible to Microfiche Format Type 2 as described in Section 4 of NMA Standard MS-5-1975, Microfiche of Documents.

8. Distribution/Use. The jacketed microfilm, microfiche copies, and security roll film of the records for each State are distributed and used as follows:

a. The Original Silver Film in microthin jackets is retained in the Micrographics Office security files and is used only for updating and producing new or additional microfiche copies.

b. Diazo Microfiche copies of each jacket master are sent to the National Archives and Records Center.

c. Diazo Microfiche copies for research viewing and system operations are sent to the Washington Office, Division of Cadastral Survey; the State Office Public Room and Cadastral Survey Office; and the appropriate District Office and detached Resource Area Office for their areas of jurisdiction.

d. A Silver Duplicate positive polarity microfilm roll of all camera rollfilm is sent to the Denver Federal Records Center for permanent retention and is used only to produce negative rollfilm for making new jackets of lost, damaged, or destroyed jacket masters.

9. Implementing the System. Use the following procedure for implementing the system:

<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
State Office	1.	At the request of the Branch of Micrographics, ships official survey plats in secure, registered priority mailing cartons, a batch at a time, to the Branch of Micrographics.
Micrographics Office	2.	Prior to initiation of Field note abstract and indexing for each State, films official plats for each township and survey.
	3.	Processes film and inspects for photographic quality.

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<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
	3a.	If film is photographically defective, repeat Steps 2 and 3.
	4.	Inserts plat film in appropriate jackets in historical sequence, identifies jacket header, and returns plats to the State Office.
	5.	At the State Offices, gathers preliminary data and information necessary for reference during Field note abstracting and indexing.
State Office	6.	At the request of the Micrographics Office, ships volumes of Survey Field Notes in secure, <u>registered priority mailing cartons</u> , a few at a time, to the Micrographics Office.
Micrographics Office	7.	Films Survey Field Note volumes straight through in page sequence.
	8.	Processes film and inspects for photographic quality.
	8a.	If film is photographically defective, repeats Steps 7 and 8.
	9.	Sends volume rollfilm to State Office for interim use.
	10.	Abstracts original Field notes and enters index data onto data processing input sheets, Forms 1276-1, 1276-2, and 1276-3. (See Illustrations 14, 15, and 16.)
	11.	Inspects and reviews index input sheets for accuracy, makes corrections as necessary, and sends corrected sheets to Data Operations Control, maintaining a microfilm copy to the input sheets in the Branch of Micrographics.
Data Operations Control	12.	Processes data input sheets when received and sends edits to the Branch of Micrographics.

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<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
Micrographics Office	13.	Inspects, reviews, corrects, and purifies ADP data base, as required, using system interface programs.
	14.	Produces preliminary index printouts for the State when all abstracting is complete and corrected.
	15.	Compares preliminary indices against existing State Office indices, plats, and related records; identifies and checks out all discrepancies.
	15a.	If an error or omission is found on the printout index, inserts corrections or additions on input sheets and forwards them to Data Operations Control. Requests corrected index printouts and repeats correction activities as necessary.
	16.	Produces one 16mm COM roll copy of all indices and two printout copies of each filming instruction and forwards the indices and filming instructions to the Micrographics Office.
	17.	Requests the State Office furnish a listing of the township and survey microfiche required by each District and detached Resource Area office and for sale to other governmental agencies and public sector parties who desire copies.
	State Office	18.

<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
Micrographics Office	19.	Films volumes and pages in historical sequence following the filming instruction formatted by volume.
	20.	Processes film and inspects for photographic quality and system specification requirements.
	20a.	If film is photographically defective, repeats Steps 19 and 20.
	20b.	If a page image is not adequate, applies the appropriate rectification option as outlined in .21A5a(1).
	21.	Inserts Field note film in appropriate jackets in historical sequence, identifies Field note jacket headers, and verifies the accuracy of the jacket microform against the filming instructions formatted by survey.
	21a.	Each transcribed Field note page image is placed in the jacket immediately following the original images found inadequate.
	22.	Sends positive polarity duplicate silver halide rollfilm to the Denver Federal Records Center as early as practicable.
	23.	Produces microfiche copies of all Field note and plat jacket masters in accordance with distribution requirements.
	24.	Files the microform jacket masters in the Micrographics Office security files for use in system updating and for producing additional microfiche copies.
	25.	Prepares and installs the completed microfiche in the Bureau Offices and provides training to operating personnel in the use and updating of the system.

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<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
	26.	Furnishes other agency and private or public sector microfiche sale copies to the State Office for disposition.
	27.	Ships the original Field note volumes and copies of the system microfiche to the appropriate NARS or Federal Records Center (see Manual Section 1272).
State Office	28.	Reviews microfiche images of the survey plats and identifies the plats that need refurbishing.
	29.	Requests the Micrographics Office produce photographic copies of the identified plats needing refurbishing.
Micrographics Office	30.	Produces copies of the plats at original scale using the original microimage or by contact printing from the original plat and sends copies to the State Office.
State Office	31.	Refurbishes and retouches copy of the plat and sends it to the Micrographics Office.
Micrographics Office	32.	Films refurbished plats.
	33.	Processes film and inspects images for photographic quality.
	33a.	If film is defective, repeats Steps 32 and 33.
	33b.	Destroys photographic copy of plats when film is acceptable.
	34.	Inserts image of refurbished plat in microform jacket immediately following the original plat image.

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<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
	35.	Produces and distributes new microfiche to replace those distributed prior to refurbishment.
Using Offices	36.	Files replacement microfiche and destroys original microfiche.

10. Updating. The approved plats and notes of all new official surveys and plats or notes that have had official actions noted upon them after production of the original microfiche are indexed, filmed, formatted, and distributed following the same basic methods applied to the implementation phase of the system. The Micrographics Office is responsible for the updating process. Offices contribute to the updating procedures as follows:

<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
State Office	1.	Sends the notes to the Micrographics Office at the first opportunity after official filing of the survey.
Micrographics Office	2.	Stamps appropriate sequential <u>volume</u> page numbers in black ink on all pages, placing the number one half inch from the outside edge of the page and one inch from the top.
	3.	The original notes <u>must</u> be retained in and bound into the designated volume.
	4.	Abstracts index data from the Field notes onto data processing input forms, reviews, and corrects input data and forwards forms to Data Processing.

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<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
	5.	Processes data input and correction input and produces one printout of all related indices and the two filming instruction formats. Sends printout indices and filming instructions to the Micrographics Lab.
Micrographics Office	6.	Inspects and reviews indices for accuracy and if necessary makes corrections and obtains corrected indices and filming instructions.
State Office	7.	Sends the approved original notes, and plat or the newly annotated plat or notes to the Micrographics Office via <u>registered priority</u> mail and includes a distribution listing of updated fiche copies required for filling standing orders of other agencies or public sector parties.
Micrographics Office	8.	Films indices, notes, and plats as appropriate, processes and inspects film.
	8a.	If film is defective, repeat Step 8.
	9.	Returns plats to State Office via <u>registered priority</u> mail.
	10.	Inserts updated indices, notes, and plats into the appropriate microform jacket master.
	10a.	When image is of original note pages or plat that have been changed by annotation, replaces the original image with the new image.
	10b.	When image of original pages or plat is augmented by a transcribed page or a refurbished plat, in addition to 10a above, creates a new image of the transcribed or refurbished page or plat showing the change noted on the original record.

<u>Responsible Office/Official</u>	<u>Step</u>	<u>Action</u>
	10c.	Replaces image of transcribed page or refurbished plat with image created in 10b above.
	11.	Produces and distributes new microfiche to replace or augment the previous fiche distributed.
	11a.	When an additional microform jacket master is added for a specific township or survey, replaces the entire group of fiche for that survey to reflect the correct number of total fiche.
Using Offices	12.	Files new or replacement microfiche and destroys previous corresponding fiche.
	11.	Sales of Copies. Sale of microfiche, obtainable from the Micrographics Office, and sale of hard copy prints is performed by the State Office.

.22 Basic Land Records.

A. Control Document Index. The Control Document Index (CDI) consists of aperture cards containing microimages of specified documents pertaining to land status and management actions. The CDI is updated as frequently as time and methods permit, but not less than each calendar quarter. Updating is performed by the State Office or by the Micrographics Office for States that do not have the equipment to produce aperture cards.

1. Method. Offices not producing their own aperture cards send a high quality machine copy of all documents required for the CDI to the Micrographics Office at the close of each calendar quarter. The Micrographics Office prepares the necessary aperture cards and sends the completed cards to the appropriate offices. The machine copies of patents are retained by the Micrographics Office and are used for the annual patent security filming. (See Manual Sections 1273.26, Item 3, and .22D of 1276.)

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2. Microform. The CDI microform is a Mil D aperture card containing a 35mm film chip. These preprinted aperture cards and duplicards are available from the Micrographics Office.

a. Master Card. The master aperture card contains silver halide negative film; is natural stock; edge coated, taped face, and corner cut at the top left.

b. Duplicards. Duplicate aperture cards contain diazo film; are natural stock, edge coated with the film chip on the back of the card; and corner cut at the top left.

3. Format. The aperture card images are right reading when viewing the face of the card. An aperture card or duplicard is prepared for all townships identified in a specific document. However, except for the key township, when multipage documents covering several townships are involved, only those pages of the document specifically concerning or identifying the subject township are included.

a. Card Identification. Each aperture card header contains the State, meridian, townships, range, the key township when applicable, the title or identification of the image document, and the date of the document.

4. Filming. The archival and photographic quality of the microimages is very important. Application of technical quality controls is mandatory. Processed camera film must meet archival quality standards.

a. Documents. All original or machine copies of documents are reviewed to assure that they can be adequately reproduced on microfilm.

b. Film. Use 35mm silver halide unperforated, unbacked type AHU camera film or the equivalent.

c. Camera. Use a 35mm planetary rollfilm camera with a lens capable of resolving a minimum of 110 lines per mm at 15 reductions. The camera must be capable of filming at reduction ratios from 12:1 through 24:1.

d. Background Density. The acceptable gross background density range is .95 to 1.25. The target density is 1.10.

e. Reduction Ratios. Use the appropriate reduction for the document size being filmed as shown in part .17A5 of this Manual Section.

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5. Quality Control. Camera film is inspected and tested for photographic quality; density and resolution standards; and technical defects. Individual images are inspected for legibility, reduction ratio, and context relative to the townships included and cards needed.

6. Distribution/Use. The aperture cards are filed in the State Office CDI files and are used for research viewing and production of internal use of sale copies. No further distribution is made.

7. Sale of Records. Sale of duplicate aperture cards or hard copy prints of card images is authorized.

B. Serial Register Pages. All serial register pages originated through December 31, 1954, are microfilmed. Microfilming of subsequent serial register pages is indefinitely suspended.

1. Microform. The microform is microfiche containing 16mm images of the serial register pages.

2. Format. The microfiche contain serial register pages in numerical sequence for the State or District Office. No single microfiche contains pages for more than one District and all pages of a single serial number are located on the same microfiche.

a. Header Identification. Each microfiche header contains the State, District (when applicable), and the beginning and ending serial numbers it contains.

b. Page Identification. When applicable, each page image is identified to reflect the District to which it pertains. (See Manual Section 1274.21A.)

3. Microforms Distribution and Use. The various system microforms are distributed and used as follows:

a. The Original Silver Film in microthin jackets is retained in the Micrographics Office Security files and is used only for producing replacement or additional microfiche copies.

b. Diazo or Vesicular Microfiche are sent to the appropriate State Office and are maintained in a use file for reference purposes and for producing paper copies as necessary for internal use or sale to the public.

c. A Duplicate Rollfilm of the original camera roll is sent to the appropriate Federal Records Center for permanent retention and is used only to produce new jackets of lost, damaged, or destroyed jacket masters.

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4. System Operations. The following procedure is used by State Offices in the operation and maintenance of the system.

a. Operation of the microfiche system is the same as that used for the serial register book system with the addition of a reader for reference and viewing purposes and fiche files replacing the books.

b. Updating as may be required on unclosed or reactivated serial pages is performed by the State Office as follows:

(1) Recalls the appropriate page(s) from the Federal Records Center and makes the notations required.

(2) Punches out the corresponding page(s) on the microfiche copy to indicate the page is reactivated and the image data is superseded.

(3) Files the reactivated page(s) by land district in broken numerical sequence in a serial book maintained for recalled pages.

c. Duplicate Microfiche required for any purpose are obtained by request to the Micrographics Office. Upon receipt in the State Office, these copies are compared to the official file copy and any reactivated page images are punched out.

5. Sale of Copies. Sale of paper or microfiche copies of serial pages is authorized.

C. Land Status Records. The status records micrographic system consists of one or the other of two subsystems. These are identified as Reference Records In Binder and Reference Records In Aperture Cards. The working records, for both include the Historical Indices, Master Title and Supplemental Plats, Use Plats and the Mineral Location and Contest Sheet Index. The State Offices are responsible for the maintenance and updating of these subsystems, as applicable, with technical service and assistance provided by the Micrographics Office as needed. The components and specifications for each of the subsystems are detailed separately as follows:

1. Reference Records in Binders. The working records are microfilmed for this subsystem to provide records security when alternative security methods are not employed. The necessary security filming is performed by the State Office on an annual basis.

a. Microform. The microform for this subsystem is the original roll of camera microfilm.

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b. Format. The rollfilm for each State contains right reading images in the comic mode of Historical Indices, Master Title Plats, Supplemental Plats, and Use Plats for each township. These documents are sequenced and filmed in meridian, range, and township order.

c. Filming. The photographic quality and legibility of the microimages is highly important if the security film is needed for photographic full scale reconstruction of destroyed working records. Strict application of good microphotographic techniques and quality controls are mandatory.

(1) Documents. The working records are used for the filming.

(2) Film. Use 35mm silver halide unperforated, unbacked type AHU Camera film or the equivalent.

(3) Camera. Use a 35mm planetary rollfilm camera with a lens capable of resolving a minimum of 110 lines per mm at 15 reductions.

(4) Background Density. The target gross background density for this subsystem is 1.10. The acceptable density range is .95 to 1.25.

(5) Reduction Ratio. The reduction ratio used is 16:1.

(6) Roll Control Documents. Three roll control documents are filmed at the beginning of each roll. These documents, in order of their filming, are: a Roll Control Target four 90% reflectance targets, one at each corner of the exposure area; and National Bureau of Standards Microcopy Resolution Test Charter 1010A arranged in accordance with the instructions provided with the chart. The reflectance targets and resolution test charts are also filmed at the end of the roll.

d. Quality Control. All microfilm rolls are inspected and tested for photographic quality, density, resolution, and technical defects. The film does not need to meet archival requirements.

e. Distribution/Use. The processed camera rollfilm is retained by the Micrographics Office until superseded by the next annual filming or implementation of the Status Records In Aperture Cards subsystem in the State. The security rolls are used only to reconstruct the working records if the original working record is lost, deteriorated, or damaged beyond use or destroyed.

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(1) Superseded Rolls. Security rolls which are superseded by new security rolls are forwarded without cost to the appropriate Regional Office of the U.S. Forest Service.

2. Reference Records in Aperture Cards. This subsystem provides aperture cards containing images of the working records. The master aperture cards are maintained in the public room of State Offices and are kept current on a day-to-day basis. This is the preferred subsystem.

a. Microform. The microform is a preprinted Mil D aperture card containing a 35mm film chip. These preprinted camera aperture cards and duplicards are available from the Micrographics Office.

(1) Master Card. The master aperture card contains silver halide negative film; is natural stock; edge coated, taped face, and corner cut at the top left.

(2) Duplicards. Duplicate aperture cards contain diazo film; are natural stock; edge coated with the film chip on the back of the card; and corner cut at the top left.

b. Format. The aperture card images are right reading when viewing the face of the card.

(1) Card Identification. Each aperture card header contains the township, range, meridian, image document type, and the date filmed.

c. Filming. The photographic quality and legibility of the master card, the duplicard, and print quality of reproductions of the microimages is critical to the operation and use of this subsystem. By application of proper filming techniques, quality controls, and camera adjustment and maintenance, it is possible to obtain satisfactory images of a majority of the working records.

(1) Inadequate Originals. If a working record is found unsuitable for obtaining adequate microimages, the record is upgraded or replaced by photographic, cartographic, or other methods. An evaluation of the working record will be made and the most economical method for obtaining a high quality replacement will be employed. The upgrading of the working records is performed on a case-by-case basis as necessary. Approval of the Director, 870, must be obtained for upgrading working records on a project basis.

(2) Film. Use preprinted aperture cards containing a 35mm silver halide film chip. The unexposed cards are enclosed in a camera cartridge for daylight loading.

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(3) Cameras. Use a 35mm processor/camera which produces processed image aperture cards.

(4) Background Density. The target gross background density is 1.10. The acceptable density range is .95 to 1.25.

(5) Reduction Ratio. The reduction ratio used is 16:1.

d. Quality Control. A camera aperture card is made each week of four 90% reflectance targets, one at each corner of the exposure area and a second card is made each week of National Bureau of Standards Microcopy Resolution Test Charts 1010A arranged in accordance with the instructions provided with the chart. These cards are identified with the State Office name and are sent to the Micrographics Office for photographic quality, density and resolution inspection, and testing. State Offices are advised of any quality control or camera problem identified and the State Office initiates corrective action prior to further filming.

e. Distribution/Use. The silver original aperture cards and duplicards of the original are distributed and used as follows:

(1) The Original Silver Aperture Card is filed and maintained in the State Office Public Room and is used for internal and public reference purposes and to produce duplicards or hard copy prints as necessary. Any aperture card which becomes damaged is replaced immediately.

(2) Diazo Duplicards are sent to the appropriate District Office and are replaced whenever the State Office original is replaced due to updated status of the working records. District duplicards serve as security for the State Office Status Records and are replaced immediately if lost or damaged.

f. Sale of Records. Sale of duplicate aperture cards or hard copy prints of card images by State Offices is authorized.

D. Land Patent Security. This micrographic security system provides for the annual microfilming of all Land Patents issued during the course of each fiscal year to provide microform security of vital records. (See Manual 1273.) The Micrographics Office is responsible for performing the annual microfilming.

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1. Method. Each State Office which has not previously furnished patent copies to the Micrographics Office for CDI filming (see .21A1 of this section) sends high quality machine copies of all patents issued during the past fiscal year to the Micrographics Office by October 15 each year. After microfilming and shipment of the security microforms to the Federal Records Center, the machine copies are destroyed.

2. Microform. The security microform is the processed and inspected 16mm camera rollfilm.

3. Format. The rollfilm images are right reading with the document heading oriented toward the edge of the film; are arranged on the roll alphabetically by State; and in numerical sequence for each State.

4. Indexing. An external paper index to patents included on each roll is updated after completion of the annual microfilming. This index includes the fiscal year the patents were issued, the roll identification, and the inclusive patent numbers for each State which are contained on the roll.

a. Using the Index. The index is used in conjunction with Records Transmittal and Receipt, Form SF-135, and Form DSC-1272-1, to retrieve the rollfilm containing a specific patent from the Federal Records Center.

b. Index Custody. The index is maintained in the Division of Records Systems, Denver Service Center. A copy of the index is also included as an attachment to Form SF-135 maintained by the Federal Records Center.

5. Filming. The quality and legibility of the microform images is very important to the usability of the system. The application of contemporary filing and quality control techniques to assure total reproduction capability is mandatory.

a. Inadequate Machine Copy. All machine copies are inspected prior to filming. Any copies which are not totally adequate are replaced with a copy which meet all filming requirements. Direct enhancement of the patent or machine copy is not permitted.

b. Film. Use 16mm silver halide unperforated, unbacked type AHU camera film or the equivalent. The film must be loaded into the camera in subdued light.

c. Camera. Use a 16mm planetary camera with a minimum resolving power of 120 lines per mm at 24 reductions.

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d. Background Density. The target gross background density for the camera film is 1.10. The acceptable density range is .95 to 1.25.

e. Reduction Ratio. The reduction ratio for this system is 24:1.

f. Roll Control Documents. Three roll control documents are filmed at the beginning of each roll. These documents, in order of their filming are: a Roll Control Target (see Illustration 17 for format), a 90% reflectance target, and National Bureau of Standards Microcopy Resolution Test Charts 1010A arranged in accordance with the instructions provided with the chart. The reflectance target and resolution test charts are also filmed at the end of the roll.

6. Quality Control. The camera rollfilm is inspected and tested for photographic and archival quality, density, and resolution standards and technical defects. Each individual roll image is inspected for total legibility, proper sequencing, and reduction ratio. It is mandatory that the rollfilm and images meet all quality, archival, and legibility requirements and standards.

7. Distribution/Use. The acceptable security rollfilm is sent to the Denver Federal Records Center for permanent retention and is used only to reproduce a copy of a lost or destroyed official patent or to reconstruct patent records destroyed through catastrophic occurrence.

E. Mining Claims. Case documents filed for mining claim recordation are microfilmed and returned to the application (see Handbook H-1276-2).

.23 Engineering Records. These systems provide a means of distributing to Field Offices the records pertaining to their area of responsibility, provide historical specification, design, construction and contract reference, facilitate information retrieval, and promote the preservation of original records and drawings from deterioration.

.24 Administrative Records. These systems provide an economical, efficient, and rapid method of distributing administrative and management directives, information, records, and guidance to headquarters and Field Offices and improve the reporting, retrieval, and storage of program, financial, personnel, and statistical data.

A. Program and Financial Management Records. (Reserved).

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B. Controlled Directives System. The micrographic system for controlled directives consists of two subsystems. These are identified as the Temporary Directives and the BLM Manual. The features and requirements of these subsystems are accommodated by individual treatment consistent with the direction provided in Manual Section 1221. The Office of Data and Records Systems, Denver Service Center, is responsible for the implementation and maintenance of the micrographic systems.

1. Temporary Directives. This subsystem provides for the annual microfilming of all Washington Office Instruction, Information, and Organic Act memoranda (except Director's Office memo), which are issued during the course of each fiscal year. The appropriate Directives Digest Bulletins (DDB) are also microfilmed for the system. The Micrographics Office is responsible for the annual system update.

a. Microform. The microform is microfiche containing 16mm images of the memoranda and bulletins.

b. Format. The microfiche of the memos and the DDB's are categorized and unitized separately.

(1) Directive Digest Bulletins are segregated and unitized by DDB category. The DDB to current memo which is issued at the beginning of each fiscal year is included in the microfiche set of memos issued during the preceding fiscal year. The DDB categories consist of and are identified as follows.

Index - Current WO Memos By Subj.-Function	DDB of (Date)
Index - Current WO Memo By Number	DDB of (Date)
Index - Current WO Organic Act Directives	DDB of (Date)
Index - WO Inst. Memos 1 Thru 629	DDB of (Year)
Index - WO Info. Memos 1 Thru 288	DDB of (Year)
Index - WO Organic Act Directives 1 Thru 91	DDB of (Year)

(2) Prior Year Memos are on microfiche by category (Instruction, Information, and Organic Act), and in numerical sequence. All pages of a single memo are located on the same microfiche whenever possible. Exceptions may be necessary to accommodate cases of lengthy enclosures or attachments. The memo categories and microfiche are identified as follows:

WO Inst. Memos	77-1 Thru 77-24
WO Info. Memo	77-1 Thru 77-62
WO Organic Act Directives	77-1 Thru 77-19

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(3) Color codes are used for the microfiche header strips to identify the annual microfiche sets. The following colors will be used in sequence for each 5 year cycle of the microfiche files: red, yellow, green, white, and orange.

c. Filming. The quality of the original documents should normally be more than adequate to obtain high quality images.

(1) Documents. The Denver Service Center Library receives copies of all WO memoranda, except Director's Office memoranda, including attachments or enclosures and the DDB's. All attachments or enclosures which are publications are removed for Library maintenance and the memoranda stamped to reflect such action. Copies of the annotated memos, all other memos and their attachments or enclosures, and the DDB's are then sent to the Micrographics Office for filming.

(2) Film. Use 16mm silver halide unperforated unbacked type AHU camera film or the equivalent.

(3) Camera. Use a 16mm planetary or flow camera with a lens capable of resolving a minimum of 120 lines per mm at 24 reductions.

(4) Background Density. The target gross background density for this subsystem is 1.10. The acceptable density range is .95 to 1.25.

(5) Reduction Ratio. The reduction ratio use is 24:1.

(6) Roll Control Documents. Three roll control documents are filmed at the beginning of each roll. These documents, in order of their filming are: a Roll Control Target (see Illustration 17 for format), 90% reflectance target, and National Bureau of Standards Microcopy Resolution Test Charts 1010A arranged in accordance with the instructions provided with the chart. The reflectance target and resolution test charts are also filmed at the end of the roll.

(7) Filming Instructions. All DDB categories are filmed in issue date and page sequence and all memo categories are filmed in numerical and page sequence.

d. Quality Control. All camera rollfilm is inspected and tested for photographic quality, density, resolution, and technical defects. Individual camera roll images are inspected for legibility, document sequencing, and proper reduction ratio. The microfiche master is inspected prior to duplication to verify the proper application of format and header identification specifications. The silver halide camera film should meet archival quality standards.

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e. Microform Master. The microform master is either jacketed 16mm silver halide camera film or 105mm silver halide camera rollfilm formatted to produce distribution and use microfiche.

f. Distribution/Use. The jacketed 16mm or 105mm camera film and microfiche copies are distributed and used as follows:

(1) The Original Silver Film in jackets or 105mm rolls is retained in the Micrographics Office security files and is used to produce distribution copies as needed and for updating.

(2) Diazo or Vesicular Microfiche copies of the master microfiche are sent to each of the following offices for reference and research use:

Washington Office

State Offices

District Offices

Detached Resource Area Offices

California Desert Planning Office

Denver Service Center

Boise Interagency Fire Center

g. Updating. The annual filming of the prior year memos and any changes to previously filmed memos issued during the prior year is the only system updating required. The changes to previously filmed memos are filmed in historical and numerical sequence and are filed in front of the appropriate segment of the prior year memos being filmed. This procedure maintains the integrity of the year of issue, numerical sequencing, and memo type segregation.

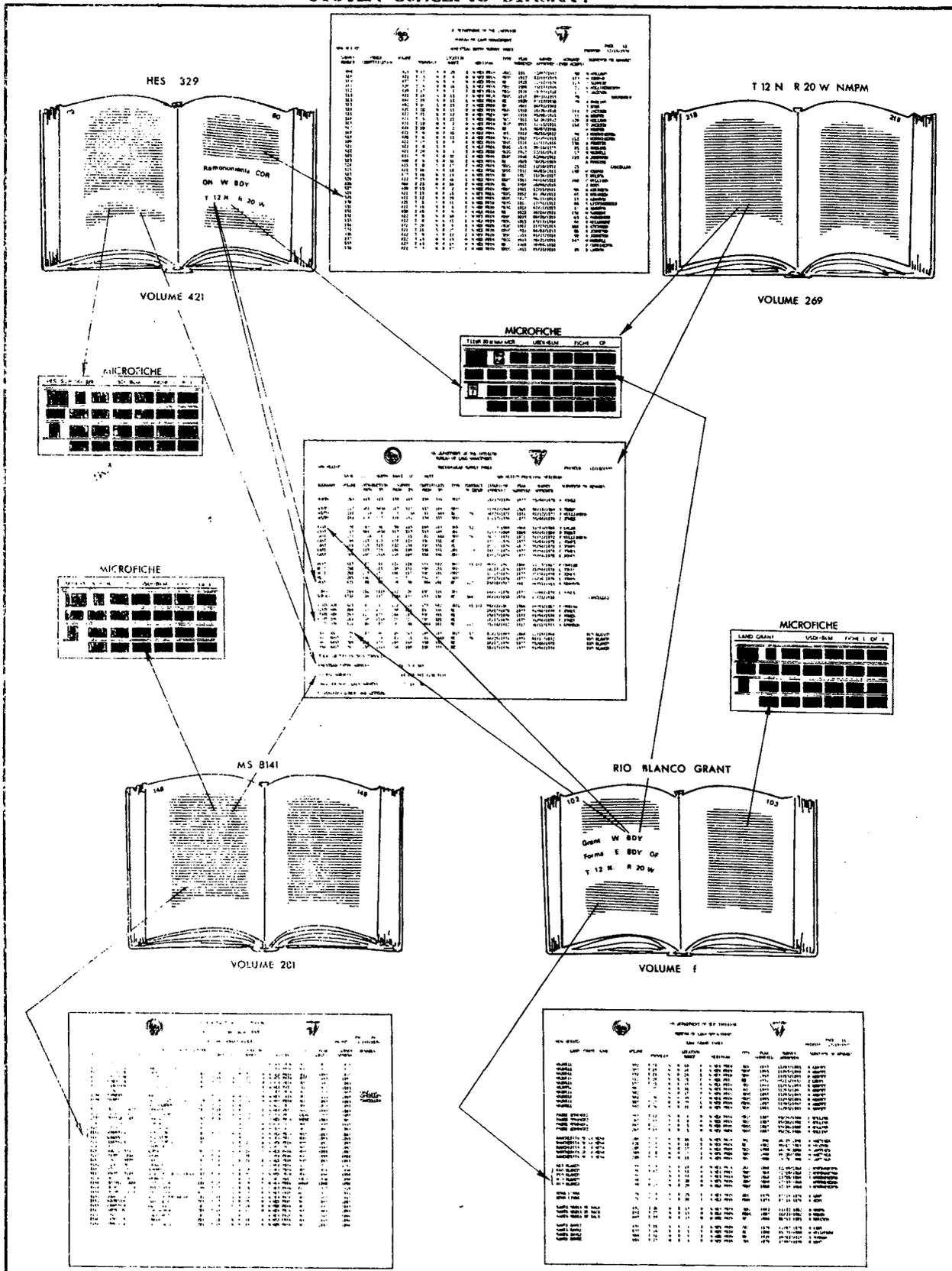
h. Sale of Copies. Sale of microfiche, obtainable from the Micrographics Office, or sale of hard copy prints, is permitted

C. Personnel Management Records. (Reserved).

.25 Resource Management Records. These systems provide for the storage, rapid retrieval and economical distribution of resource references, inventory and analysis information, and data of current and historical value in the resource management program of the Bureau.

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SYSTEM CONCEPTS DIAGRAM

Illustration 1
(.21A1)

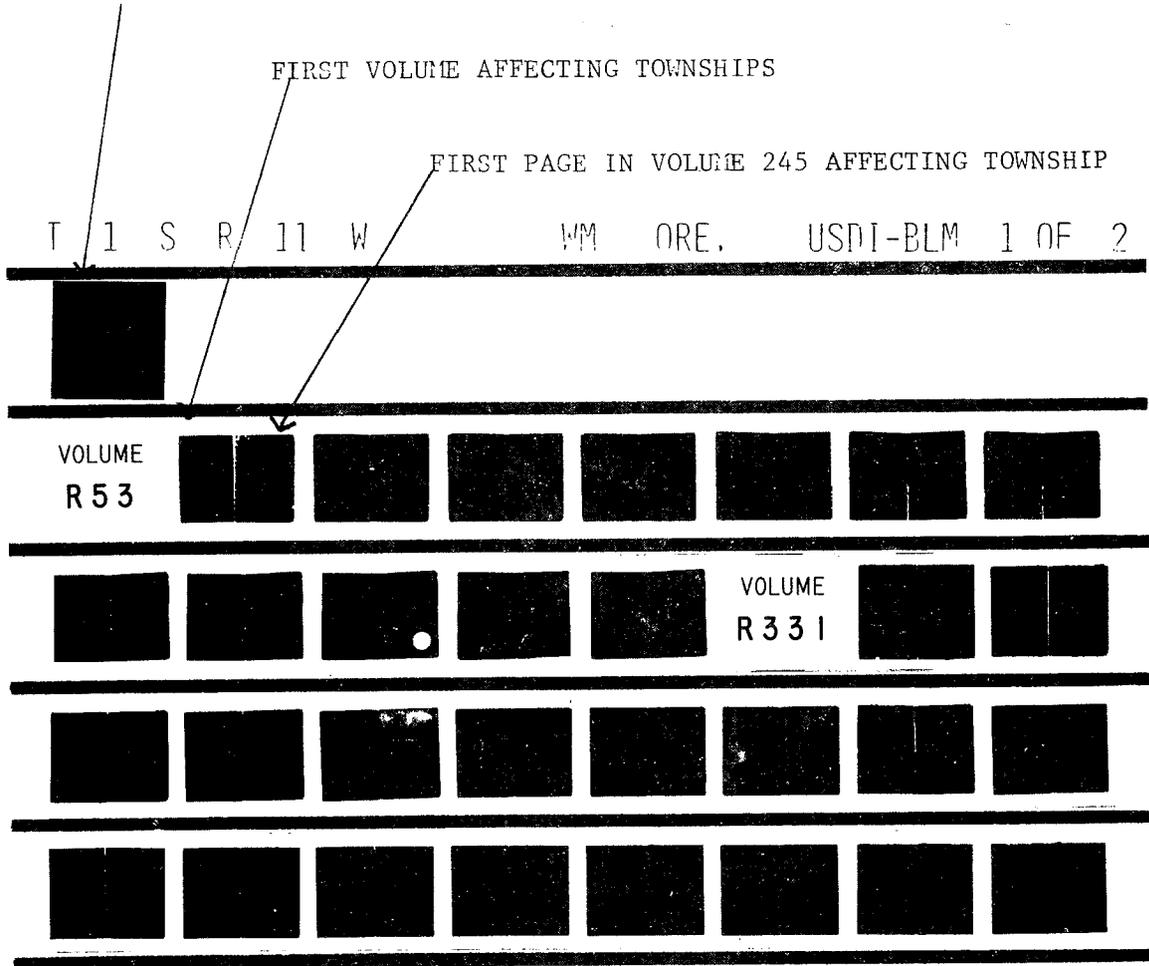


BLM MANUAL
Supersedes Rel. 1-614

Rel. 1-1393
10/19/84

1276 - MICROFILM
SURVEY FIELD NOTES

INDEX OF VOLUMES AND PAGES AFFECTING TOWNSHIPS



1276 - MICROGRAPHICS
RECTANGULAR SURVEY INDEX

NEW MEXICO		TOWNSHIP 12		NORTH RANGE 20		WEST		US DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT		RECTANGULAR SURVEY INDEX		NEW MEXICO PRINCIPAL MERIDIAN		SAMPLE 12/18/1970	
BOUNDARY	VOLUME	INTRODUCTION FROM TO	SURVEY FROM TO	CERTIFICATE FROM TO	TYPE	CONTRACT OR GROUP	ISSUED OR APPROVED	YEAR SURVEYED	SURVEY APPROVED	SURVEYOR OR REBARS					
NORTH	269	119 123	139 147	330 335	ORIG		10/17/1876	1877	05/04/1878	F. JONES					
SOUTH	217	501 503A	517 517	537 540	ORIG	76	11/02/1868	1869	05/18/1869	G. TRENT					
SOUTH	221	1A 4	5 5A	41 44A	RE		04/25/1871	1871	01/12/1871	F. WILLIAMSON					
SOUTH	269	119 123	124 131	330 335	ORIG		10/17/1876	1877	05/04/1878	F. JONES					
EAST	*F	83 86	99 103	140 143	ORIG	52	02/13/1868	1868	10/19/1868	J. LUCAS					
EAST	217	501 503A	517 517	537 540	ORIG		11/02/1868	1869	08/29/1869	P. TRENT					
EAST	221	1A 4	5 15	41 44A	ORIG	76	01/25/1871	1871	01/12/1871	F. WILLIAMSON					
EAST	269	119 123	124 124	330 335	RE		10/17/1876	1877	05/04/1878	F. JONES					
EAST	269	119 123	132 133	330 335	RE		10/17/1876	1877	05/04/1878	F. JONES					
EAST	269	119 123	140 140	330 335	ORIG		10/17/1876	1877	05/04/1878	F. JONES					
EAST	269	150 151A	154 160	330 335	ORIG		10/17/1876	1877	05/04/1878	F. JONES					
WEST	A13	47 51	122 128	579 582	ORIG	45 1/2	09/12/1865	1866	10/25/1867	P. ORFAN					
WEST	269	119 123	130 131	330 335	ORIG		10/17/1876	1877	05/04/1878	F. JONES					
WEST	269	119 123	146 147	330 335	ORIG		10/17/1876	1877	05/04/1878	F. JONES					
WEST	269	150 151A	216 216	330 335	ORIG		10/17/1876	1877	05/04/1878	F. JONES					
WEST	421	80 82	90 90	99A 101	RE	112	05/18/1912	1912	06/11/1913	A. ADAMSON					
SUBDIV	269	150 151A	152 226	330 335	ORIG		10/17/1876	1877	05/04/1878	F. JONES					
SUBDIV	472A	104 107	108A 132	133 136	RE	308	04/14/1938	1938	12/21/1938	CANCELLED					
STATE BDY	A13	47 51	122 128	579 582	ORIG	45 1/2	09/12/1865	1866	10/25/1867	P. ORFAN					
STATE BDY	269	119 123	130 131	330 335	RE		10/17/1876	1877	05/04/1878	F. JONES					
STATE BDY	269	119 123	146 147	330 335	RE		10/17/1876	1877	05/04/1878	F. JONES					
STATE BDY	269	150 151A	216 225	330 335	RE		10/17/1876	1877	05/04/1878	F. JONES					
STATE BDY	421	80 82	90 90	99A 101	RE	112	05/18/1912	1912	06/11/1913	A. ADAMSON					
LAND GRANT	*F	83 86	99 103	140 143	ORIG	52	02/13/1868	1868	12/19/1868	RIO BLANCO					
LAND GRANT	221	1A 4	15 15	41 44A	RE	76	04/25/1871	1871	01/12/1871	RIO BLANCO					
LAND GRANT	269	119 123	140 140	330 335	RE		10/17/1876	1877	05/04/1878	RIO BLANCO					
LAND GRANT	269	150 151A	154 160	330 335	RE		10/17/1876	1877	05/04/1878	RIO BLANCO					

OTHER SURVEYS IN THIS TOWNSHIP

HOMESTEAD ENTRY SURVEYS 261 329 368

MINERAL SURVEYS 64 288 941 1236 8141

SMALL HOLDING CLAIM SURVEYS 7 14 39

* SIGNIFIES LOWER CASE LETTERS

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MINERAL SURVEY INDEX

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MINERAL SURVEY INDEX



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SURVEY NUMBER	STATE	DISTRICT	SUBJECT	SECTION	ACRES	CLASS	SECTION	TOWNSHIP	RANGE	LOCATION	SECTION	TYPE	YEAR SURVEYED	PRINTED	REMARKS
8136	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 15	N R 20	N N MEX PRIN	ORIG	1893	1893					
8137	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 15	N R 20	N N MEX PRIN	ORIG	1893	1893					
8137	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 20	W N MEX PRIN	ORIG	1893	1893					
8137	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 20	W N MEX PRIN	ORIG	1893	1893					
8137	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 20	W N MEX PRIN	ORIG	1893	1893					
8138	WYOMING	PIONEER	CRIPPLE CREEK	279	T 8	N R 11	W N MEX PRIN	ORIG	1893	1893					CANCELLED
8138	WYOMING	PIONEER	CRIPPLE CREEK	279	T 8	N R 11	W N MEX PRIN	ORIG	1893	1893					CANCELLED
8139	WYOMING	CRIPPLE CREEK	CRIPPLE CREEK	281	T 28	N R 7	E N MEX PRIN	ORIG	1893	1893					
8139	WYOMING	CRIPPLE CREEK	CRIPPLE CREEK	281	T 28	N R 7	E N MEX PRIN	ORIG	1893	1893					
8139	WYOMING	CRIPPLE CREEK	CRIPPLE CREEK	297	T 28	N R 7	E N MEX PRIN	AMEND	1903	1903					
8140	WYOMING	PIONEER	CRIPPLE CREEK	281	T 8	N R 101 1/2	W N MEX PRIN	ORIG	1893	1893					
8141	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 12	N R 20	W N MEX PRIN	ORIG	1893	1893					
8141	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 12	N R 20	W N MEX PRIN	ORIG	1893	1893					
8141	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 20	W N MEX PRIN	ORIG	1893	1893					
8141	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 20	W N MEX PRIN	ORIG	1893	1893					
8142	WYOMING	QUARTZ CREEK	QUARTZ CREEK	281	T 4	S R 21	E N MEX PRIN	ORIG	1893	1893					
8142	WYOMING	QUARTZ CREEK	QUARTZ CREEK	281	T 4	S R 21	E N MEX PRIN	ORIG	1893	1893					
8142	WYOMING	QUARTZ CREEK	QUARTZ CREEK	281	T 4	S R 21	E N MEX PRIN	ORIG	1893	1893					
8143	WYOMING	QUARTZ CREEK	QUARTZ CREEK	412	T 4	S R 21	E N MEX PRIN	ORIG	1894	1894					
8143	WYOMING	QUARTZ CREEK	QUARTZ CREEK	282	T 4	S R 20	E N MEX PRIN	ORIG	1894	1894					
8144	WYOMING	CRIPPLE CREEK	CRIPPLE CREEK	281	T 27	N R 8	E N MEX PRIN	AMEND	1898	1898					
8144	WYOMING	CRIPPLE CREEK	CRIPPLE CREEK	281	T 27	N R 8	E N MEX PRIN	AMEND	1898	1898					
8144	WYOMING	CRIPPLE CREEK	CRIPPLE CREEK	749	T 27	N R 8	E N MEX PRIN	RE	1919	1919					
8145	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 19	W N MEX PRIN	ORIG	1893	1893					
8145	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 19	W N MEX PRIN	ORIG	1893	1893					
8145	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 19	W N MEX PRIN	ORIG	1893	1893					
8146	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 19	W N MEX PRIN	ORIG	1893	1893					
8146	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 19	W N MEX PRIN	ORIG	1893	1893					
8146	WYOMING	SUNNYSIDE	CRIPPLE CREEK	281	T 13	N R 19	W N MEX PRIN	ORIG	1893	1893					

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MINERAL CLAIM NAME INDEX

NEW MEXICO	CLAIM NAME	SURVEY NUMBER	MINING DISTRICT OR OTHER IDENTIFICATION	TOWNSHIP	RANGE	MERIDIAN	YEAR SURVEYED	YEAR APPROVED	PRINTED	PAGE 1 12/18/1970	REMARKS
	AETNA	8142	QUARTZ CREEK	T 4 S	R 21 E	N MEX PRIN	1893	1893			
	BALD EAGLE	8145	SUNNYSIDE	T 13 N	R 19 W	N MEX PRIN	1893	1893			
	BELL OF THE BASIN	8145	SUNNYSIDE	T 13 N	R 19 W	N MEX PRIN	1893	1893			
	BELLE OF THE EL DORADO	8143	QUARTZ CREEK	T 4 S	R 20 E	N MEX PRIN	1894	1894			
	BESSIE	8137	SUNNYSIDE	T 13 N	R 20 W	N MEX PRIN	1893	1893			
	BIG DAN	8136	SUNNYSIDE	T 13 N	R 20 W	N MEX PRIN	1893	1893			
	BIG PERCENT	8137	SUNNYSIDE	T 13 N	R 20 W	N MEX PRIN	1893	1893			
	BLACK BART	8146	SUNNYSIDE	T 13 N	R 19 W	N MEX PRIN	1893	1894			
	BLACK NIGHT	8138	PIONEER	T 8 N	R 11 W	N MEX PRIN	1893	1893			CANCELLED
	BONANZA	8142	QUARTZ CREEK	T 4 S	R 21 E	N MEX PRIN	1893	1893			
		8144	CRIPPLE CREEK	T 27 N	R 8 E	N MEX PRIN	1893	1894			
	DEADWOOD	8143	QUARTZ CREEK	T 4 S	R 20 E	N MEX PRIN	1894	1894			
	EARNEST BROOKVILLE	8137	SUNNYSIDE	T 13 N	R 20 W	N MEX PRIN	1893	1893			
	EASTSIDE	8142	QUARTZ CREEK	T 4 S	R 21 E	N MEX PRIN	1893	1893			
	EUREKA	8146	SUNNYSIDE	T 13 N	R 19 W	N MEX PRIN	1893	1894			
	EXCELSIOR	8141	SUNNYSIDE	T 12 N	R 20 W	N MEX PRIN	1893	1893			
	EXCELSIOR NO 2	8141	SUNNYSIDE	T 13 N	R 20 W	N MEX PRIN	1893	1893			
	EXCELSIOR NO 2	8141	SUNNYSIDE	T 12 N	R 20 W	N MEX PRIN	1893	1893			
	EXCELSIOR NO 2	8141	SUNNYSIDE	T 13 N	R 20 W	N MEX PRIN	1893	1893			
	GRAY EAGLE	8145	SUNNYSIDE	T 13 N	R 19 W	N MEX PRIN	1893	1893			
	IRON ROD	8140	PIONEER	T 8 1/2 N	R 101 1/2 W	N MEX PRIN	1893	1893			
	JIMS FORTUNE	8145	SUNNYSIDE	T 13 N	R 19 W	N MEX PRIN	1893	1893			
	LAST CLAIM	8144	CRIPPLE CREEK	T 27 N	R 8 E	N MEX PRIN	1893	1894			
	MAID OF AUSTRALIA	8138	PIONEER	T 8 N	R 11 W	N MEX PRIN	1893	1893			CANCELLED
	MOLLIE BELLE	8146	SUNNYSIDE	T 13 N	R 19 W	N MEX PRIN	1893	1894			
	OLD HICKORY	8139	CRIPPLE CREEK	T 28 N	R 7 E	N MEX PRIN	1893	1893			
	PHOENIX	8139	CRIPPLE CREEK	T 28 N	R 7 E	N MEX PRIN	1893	1893			
	PHOENIX	8142	QUARTZ CREEK	T 4 S	R 21 E	N MEX PRIN	1893	1893			
	ROBBER	8138	PIONEER	T 8 N	R 11 W	N MEX PRIN	1893	1893			CANCELLED
	SURPLUS	8137	SUNNYSIDE	T 13 N	R 20 W	N MEX PRIN	1893	1893			
	TEN PERCENT	8137	SUNNYSIDE	T 13 N	R 20 W	N MEX PRIN	1893	1893			

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NEW MEXICO		U.S. DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT										PAGE 11 PRINTED 12/18/1970	
SURVEY NUMBER	OTHER IDENTIFICATION	VOLUME	TOWNSHIP	LOCATION RANGE	MERIDIAN	TYPE	YEAR SURVEYED	SURVEY APPROVED	ACREAGE (EVEN ACRES)	SURVEYOR OR REMARKS	PAGES		
											11	12/18/1970	
309		421	T 12	S R 20	E N MEX PRIN	ORIG	1912	12/07/1912	90	R HOLLAND			
310		421	T 5	N R 4	W N MEX PRIN	ORIG	1912	02/14/1913	113	H KEMPER			
310		472	T 5	N R 4	W N MEX PRIN	RE	1928	11/12/1928	113	J SCHMIDT			
311		426	T 6	N R 16	E N MEX PRIN	ORIG	1909	05/17/1910	22	H HOLLINGSWORTH			
312		426	T 17	S R 3	E N MEX PRIN	ORIG	1910	10/03/1910	17	T JACKSON			
313		421	T 10	S R 13	E N MEX PRIN	RE	1929	09/27/1911	79	A PERKINS		SUSPENDED	
313		441	T 10	S R 13	E N MEX PRIN	RE	1941	04/02/1942	79	J ROSS			
313		482	T 10	S R 13	E N MEX PRIN	ORIG	1910	10/26/1910	144	T JACKSON			
314		420	T 28	N R 11	W N MEX PRIN	ORIG	1914	05/09/1915	41	H KEMPER			
315		422	T 21	N R 12	W N MEX PRIN	ORIG	1911	02/26/1912	120	R HOLLAND			
316		421	T 5	S R 21	E N MEX PRIN	ORIG	1911	11/12/1911	154	T JACKSON			
317		421	T 19	N R 2	W N MEX PRIN	RE	1915	08/07/1916		H KEMPER			
318		424	T 19	N R 2	W N MEX PRIN	ORIG	1912	09/28/1912	74	J WORTHINGTON			
319		420	T 6	N R 12	W N MEX PRIN	ORIG	1912	01/20/1913	112	J WORTHINGTON			
320		422	T 17	S R 9	W N MEX PRIN	ORIG	1914	11/11/1914	136	R FENSTER			
321		422	T 9	S R 2	E N MEX PRIN	ORIG	1915	09/16/1915	85	E ROBBINS			
322		421	T 24	N R 3	E N MEX PRIN	ORIG	1912	12/11/1912	17	M MAXWELL			
323		421	T 5	S R 31	E N MEX PRIN	ORIG	1910	02/06/1911	119	A JOHNSON			
323		440	T 5	S R 31	E N MEX PRIN	RE	1919	10/25/1919		A PERKINS		CANCELLED	
324		421	T 8	S R 17	E N MEX PRIN	ORIG	1912	12/18/1912	25	H KEMPER			
325		421	T 16	N R 19	W N MEX PRIN	ORIG	1912	04/03/1913	139	T WILSON			
325		427	T 16	N R 19	W N MEX PRIN	RE	1917	11/26/1917		C WILLIAMS			
326		422	T 23	N R 16	E N MEX PRIN	ORIG	1912	04/14/1913	160	J ROSS			
326		464	T 23	N R 16	E N MEX PRIN	RE	1918	10/06/1918		A ATKINSON			
327		420	T 13	S R 2	W N MEX PRIN	ORIG	1911	12/15/1911	90	R ROBINSON			
328		421	T 13	N R 18	W N MEX PRIN	ORIG	1912	01/29/1913	40	R ROBINSON			
329		421	T 12	N R 20	W N MEX PRIN	ORIG	1912	06/11/1913	15	A ADAMSON			
330		421	T 1	S R 11	W N MEX PRIN	ORIG	1912	12/01/1912	49	S L STONBERGER			
331		421	T 15	S R 8	E N MEX PRIN	ORIG	1912	02/11/1913	151	A ADAMSON			
331		458	T 15	S R 8	E N MEX PRIN	RE	1922	10/24/1922	131	M SARGENT			
332		422	T 8	N R 10	E N MEX PRIN	ORIG	1913	08/29/1914	63	G PARMENTER			
333		422	T 8	N R 11	E N MEX PRIN	ORIG	1913	07/12/1914	84	R MILLHOUSE			
334		421	T 24	N R 6	W N MEX PRIN	ORIG	1912	11/27/1913	160	A ATKINSON			
335		421	T 11	S R 27	E N MEX PRIN	ORIG	1912	04/02/1913	86	A JOHNSON			
336		422	T 9	S R 22	E N MEX PRIN	ORIG	1913	01/13/1914	90	A JOHNSON			
337		422	T 13	N R 13	W N MEX PRIN	ORIG	1913	08/21/1914	147	M MAXWELL			
337		427	T 13	N R 13	W N MEX PRIN	RE	1918	10/04/1918		F CARRINGTON			
338		422	T 7	N R 17	E N MEX PRIN	ORIG	1913	05/22/1914	89	B CARSON			

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MINERAL AND LOCATION MONUMENT INDEX

NEW MEXICO	MONUMENT TYPE NAME OR NUMBER	DESCRIBED IN SURVEY TYPE NO.	ON PAGES FROM TO	GENERAL AND LOCATION MONUMENT INDEX			MERCIDIAN	TYPE	MINING DISTRICT OR OTHER IDENTIFICATION	PRINTED	PAGE	REMARKS
				VOLUME	TOWNSHIP	LOCATION RANGE						
LM	BROOKFIELD	HES 13	421 422	T 15	N R 20	W	ORIG			1		
LM	FAIRFAX	SIC 462	16 19	T 20	N R 28	F	ORIG	GOLDFIELD		12/18/1970		
MS	GOLDFIELD	MS 918	172 173	T 17	S R 14	W	ORIG					
LM	VALLEY	RECT	512 513	T 2	N R 4	E	ORIG					
MS	WILSON	MS 922	244 246	T 8 1/2	S R 20 1/2	F	ORIG	QUARTZ CREEK				
MS		MS 1	29 30	T 4	S R 20	E	ORIG	QUARTZ CREEK				
MS		MS 1	64 65	T 27	N R 8	E	ORIG	CRIPPLE CREEK				
MS		MS 4	113 114	T 12	N R 20	W	ORIG	SUNNYSIDE				
LM		HES 16	206 208	T 17	S R 5	E	ORIG					
MS		MS 7	148 150	T 4	S R 21	E	ORIG	QUARTZ CREEK				
MS		MS 3	79 81	T 8	N R 11	W	ORIG	PIONEER				
LM		SIC 312	510 510	T 26	N R 14	W	ORIG					
MS		RECT	462 463	T 26	N R 14	W	RE					
MS		MS 2479	97 97	T 26	N R 14	W	ORIG	PIONEER				
MS		MS 28	214 215	T 8	N R 11	W	ORIG	PIONEER				
MS		HES 79	618 619	T 8	N R 11	W	RE	PIONEER				
MS		HES 205	438 438	T 8	N R 11	W	RE	PIONEER				
MS		MS 11	329 330	T 13	N R 19	W	ORIG	SUNNYSIDE				
LM		MS 24	84 85	T 2	S R 5	E	ORIG	CRIPPLE CREEK				
MS		MS 15	13 13	T 27	N R 8	E	ORIG	SUNNYSIDE				
MS		MS 31	701 703	T 12	N R 19	W	ORIG	SUNNYSIDE				
MS		MS 1274	419 420	T 12	N R 19	W	ORIG	SUNNYSIDE				
MS		SIC 367	322 322	T 8	S R 26	E	ORIG	QUARTZ CREEK				
MS		MS 19	63 64	T 4	S R 20	F	RE	QUARTZ CREEK				
MS		MS 721	506 507	T 4	S R 20	F	RE	QUARTZ CREEK				
MS		HES 31	277 277	T 16	N R 8	W	RE	QUARTZ CREEK				
MS		HES 114	114 115	T 16	N R 8	W	RE	QUARTZ CREEK				
MS		MS 38	619 621	T 4	S R 19	E	ORIG	QUARTZ CREEK				
MS		HES 56	88 314	T 11	N R 4	W	ORIG	QUARTZ CREEK				
MS		MS 44	150 150	T 4	S R 20	E	ORIG	QUARTZ CREEK				
MS		HES 63	126 127	T 4	S R 20	E	RE	QUARTZ CREEK				
MS		RECT	44 45	T 4	S R 20	E	RE	SUNNYSIDE				
MS		HES 82	633 634	T 22	N R 5	W	ORIG	SUNNYSIDE				
MS		MS 1417	226 226	T 22	N R 5	W	ORIG	SUNNYSIDE				
MS		MS 39	303 304	T 12	N R 20	W	ORIG	SUNNYSIDE				
MS		SIC 404	71 72	T 4	S R 11	E	ORIG	SUNNYSIDE				
MS		MS 15	466 467	T 27	N R 9	E	ORIG	PIONEER				
MS		SIC 427	39 39	T 10	S R 27	E	ORIG	PIONEER				
MS		MS 61	188 189	T 8	N R 10	W	ORIG	PIONEER				
MS		MS 12321	593 593	T 8	N R 10	W	RE	PIONEER				
LM		HES 110	123 124	T 23	N R 5	E	ORIG					

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NATIONAL PARKS - RESERVATIONS AND MISCELLANEOUS
FIELD NOTE INDEX

NAME	FIND	VOLUME	TOWNSHIP	LOCATION RANGE	MERIDIAN	TYPE	YEAR SURVEYED	SURVY APPROVED	REMARKS	PRINTED	PAGE
CARLSBAD CAVERNS	NATL PARK	404	T 25	S R 22	N MEX PRIN	ORIG	1902	11/16/1902			
CARLSBAD CAVERNS	NATL PARK	404	T 26	S R 22	N MEX PRIN	ORIG	1902	11/16/1902			
CARLSBAD CAVERNS	NATL PARK	404	T 25	S R 23	N MEX PRIN	ORIG	1902	11/16/1902			
CARLSBAD CAVERNS	NATL PARK	404	T 26	S R 23	N MEX PRIN	ORIG	1902	11/16/1902			
CARLSBAD CAVERNS	NATL PARK	404	T 24	S R 24	N MEX PRIN	ORIG	1902	11/16/1902			
CARLSBAD CAVERNS	NATL PARK	404	T 25	S R 24	N MEX PRIN	ORIG	1902	11/16/1902			
CARLSBAD CAVERNS	NATL PARK	404	T 24	S R 25	N MEX PRIN	ORIG	1902	11/16/1902			
CARLSBAD CAVERNS	NATL PARK	404	T 25	S R 25	N MEX PRIN	ORIG	1902	11/16/1902			
FORT WINGATE	MILITARY RES	316	T 14	N R 16	N MEX PRIN	ORIG	1873	01/13/1874			
FORT WINGATE	MILITARY RES	316	T 15	N R 16	N MEX PRIN	ORIG	1873	01/13/1874			
FORT WINGATE	MILITARY RES	316	T 13	N R 17	N MEX PRIN	ORIG	1873	01/13/1874			
FORT WINGATE	MILITARY RES	316	T 14	N R 17	N MEX PRIN	ORIG	1873	01/13/1874			
FORT WINGATE	MILITARY RES	380	T 14	N R 17	N MEX PRIN	RE	1894	10/26/1895			
FORT WINGATE	MILITARY RES	316	T 15	N R 17	N MEX PRIN	ORIG	1873	01/13/1874			
UTE MOUNTAIN	INDIAN RES	381	T 31	N R 14	N MEX PRIN	ORIG	1894	08/11/1895			
UTE MOUNTAIN	INDIAN RES	381	T 32	N R 14	N MEX PRIN	ORIG	1894	08/11/1895			
UTE MOUNTAIN	INDIAN RES	381	T 31	N R 15	N MEX PRIN	ORIG	1894	08/11/1895			
UTE MOUNTAIN	INDIAN RES	381	T 32	N R 15	N MEX PRIN	ORIG	1894	08/11/1895			
UTE MOUNTAIN	INDIAN RES	381	T 31	N R 16	N MEX PRIN	ORIG	1894	08/11/1895			
UTE MOUNTAIN	INDIAN RES	381	T 32	N R 16	N MEX PRIN	ORIG	1894	08/11/1895			
WHITE SANDS	NATL MON	472	T 17	S R 5	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 18	S R 5	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 19	S R 5	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 17	S R 6	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 18	S R 6	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 19	S R 6	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 17	S R 7	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 18	S R 7	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 19	S R 7	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 17	S R 8	N MEX PRIN	ORIG	1958	04/29/1959			
WHITE SANDS	NATL MON	472	T 18	S R 8	N MEX PRIN	ORIG	1958	04/29/1959			



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TOWNSITE INDEX

ALASKA	NAME OF TOWNSITE	SURVEY NUMBER	VOLUME	TRANSHIP	LOCATION RANGE	METHOD	TYPE	YEAR SURVEYED	SURVEY APPROVED	SURVEYOR OR REMARKS	PAGE	PRINTED	12/18/1970
	ANCHORAGE	1246	59	T 15	N R 4	Seward	ORIG	1903	11/12/1893	R JENKINS			
	ANCHORAGE	2817	83	T 15	N R 4	Seward	RE	1937	05/27/1938	L CONTRACTOR			
	ANCHORAGE	3058	90	T 15	N R 4	Seward	ADJTN	1963	09/06/1965	D LANGFORD			
	BARROW	1906	101	T 23	N R 18	IMVT	ORIG	1964	10/21/1965	R ORR			
	BETHEL	3712	94	T 8	N R 71	Seward	ORIG	1960	05/18/1961	J ROBERTS			
	CORDOVA	1921	71	T 15	S R 3	Copper Riv	ORIG	1902	12/14/1902	H SWENSON			
	DILLINGHAM	3217	88	T 13	S R 55	Seward	ORIG	1940	07/10/1950	J COURTNEY			
	DILLINGHAM	3084	100	T 13	S R 55	Seward	RE	1964	07/28/1965	R HANSEN			
	EGEGIK	3763	95	T 23	S R 50	Seward	ORIG	1960	03/02/1961	M MILLS			
	FAIRBANKS	2402	79	T 1	N R 1	Fairbanks	ORIG	1921	10/27/1922	H KLINGLIMAN			
	FAIRBANKS	2911	84	T 1	N R 1	Fairbanks	ADJTN	1941	04/11/1942	R THOMPSON			
	PORT YUKON	3026	85	T 20	N R 12	Fairbanks	ORIG	1947	11/13/1948	C TRENT			
	GALENA	3212	88	T 8	S R 9	KATEL PIV	ORIG	1950	06/29/1951	C LAWRENCE			
	GLENDALE	3675	94	T 4	K R 2	Copper Riv	ORIG	1959	11/01/1960	C MYSEK			
	ILLIAMA	3813	97	T 4	S R 32	Seward	ORIG	1961	09/22/1962	R WILTFORD			
	JUNEAU	7A	43	T 41	S R 66	Copper Riv	ORIG	1849	12/18/1849	H ROBINSON			
	JUNEAU	3926	99	T 41	S R 66	Copper Riv	ADJTN	1963	08/20/1964	J SMITH			
	KODIAK	1164	59	T 27	S R 19	Seward	ORIG	1889	02/13/1890	K PETERS			
	KODIAK	3327B	89	T 27	S R 19	Seward	ADJTN	1932	07/11/1933	D SELLERS			
	KODIAK	3715	94	T 27	S R 21	Seward	ADJTN	1960	04/24/1961	C GODDALL			
	KETCHIKAN	1802	70	KETCHIKAN	C 4	Copper Riv	ORIG	1902	11/26/1902	J POWERS			
	MIANTO	3442	90	T 2	N R 7	Fairbanks	ORIG	1955	10/12/1956	J TYSON			
	NAME	2309	76	T 11	S R 33	KATEL PIV	ORIG	1913	05/29/1914	N NEMURSKI			
	NASKEK	3627	93	T 17	S R 47	Seward	ORIG	1958	05/07/1960	J ROBERTS			
	PALMER	2714	82	T 17	N R 1	Seward	ORIG	1933	01/17/1934	L CONTRACTOR			
	POINT HOPE	3011	84	T 34	N R 35	KATEL PIV	ORIG	1933	07/14/1934	L MAXWELL			
	SITKA	849	55	SITKA	D 5	Copper Riv	ORIG	1865	11/08/1866	R THOMPSON			

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NEW MEXICO	LAND GRANT NAME	VOLUME	TOWNSHIP	RANGE	SECTION	TYPE	YEAR SURVEYED	SURVEY APPROVED	SURVIVOR OR REMARKS
	MAXWELL	302	T 24	R 18	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	MAXWELL	302	T 25	R 18	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	MAXWELL	302	T 24	R 19	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	MAXWELL	512	T 24	R 19	E	N MEX PRIN	1931	05/13/1932	J LEWIS
	MAXWELL	302	T 25	R 15	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	MAXWELL	302	T 25	R 16	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	MAXWELL	302	T 25	R 17	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	MAXWELL	302	T 26	R 20	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	MAXWELL	302	T 27	R 20	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	MAXWELL	302	T 26	R 21	E	N MEX PRIN	1893	11/03/1893	R ABBOTT
	PADRE DOMINGEZ	263	T 12	R 4	W	N MEX PRIN	1887	03/26/1888	E ROLLINS
	PADRE DOMINGEZ	263	T 13	R 4	W	N MEX PRIN	1887	03/26/1888	E ROLLINS
	PADRE DOMINGEZ	263	T 12	R 5	W	N MEX PRIN	1887	03/26/1888	E ROLLINS
	PADRE DOMINGEZ	263	T 13	R 5	W	N MEX PRIN	1887	03/26/1888	E ROLLINS
	RANCHERITA DE LA MESA	289	T 7	R 16	E	N MEX PRIN	1890	10/20/1890	M HASTINGS
	RANCHERITA DE LA MESA	420	T 7	R 16	E	N MEX PRIN	1902	08/17/1903	R ERICSON
	RANCHERITA DE LA MESA	289	T 7	R 17	E	N MEX PRIN	1890	10/20/1890	M HASTINGS
	RANCHERITA DE LA MESA	289	T 8	R 17	E	N MEX PRIN	1890	10/20/1890	M HASTINGS
	RANCHERITA DE LA MESA	289	T 7	R 18	E	N MEX PRIN	1890	10/20/1890	M HASTINGS
	RIO BLANCO	*F	T 13	R 18	W	N MEX PRIN	1868	12/19/1868	J WORTHINGTON
	RIO BLANCO	*F	T 12	R 19	W	N MEX PRIN	1868	12/19/1868	J WORTHINGTON
	RIO BLANCO	*F	T 13	R 19	W	N MEX PRIN	1868	12/19/1868	J WORTHINGTON
	RIO BLANCO	*F	T 12	R 20	W	N MEX PRIN	1868	12/19/1868	J WORTHINGTON
	RIO BLANCO	*F	T 13	R 20	W	N MEX PRIN	1868	12/19/1868	J WORTHINGTON
	ROMA LINDA	76	T 9	R 23	E	N MEX PRIN	1873	07/14/1874	K KENT
	ROMA LINDA	76	T 9	R 24	E	N MEX PRIN	1873	07/14/1874	K KENT
	SANTA MARIA DE BACA	192	T 26	R 13	W	N MEX PRIN	1882	11/22/1882	D MASON
	SANTA MARIA DE BACA	403	T 27	R 13	W	N MEX PRIN	1882	11/22/1882	D MASON
	SANTA MARIA DE BACA	403	T 27	R 13	W	N MEX PRIN	1904	06/12/1905	R ERICSON
	SANTA RAVEZ	191	T 16	R 5	E	N MEX PRIN	1879	12/07/1879	R KENT
	SANTA RAVEZ	437	T 16	R 5	E	N MEX PRIN	1908	05/25/1909	M MULLINCKE
	SANTA RAVEZ	504	T 16	R 5	E	N MEX PRIN	1927	10/02/1927	D GUYMAN
	SANTA RAVEZ	491	T 17	R 5	E	N MEX PRIN	1879	12/07/1879	R KENT

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U. S. SURVEY INDEX

ALASKA	SURVEY NUMBER	OTHER IDENTIFICATION	VOLUME	TOWNSHIP	LOCATION PAGE	MULTIPLIES	TYPE	YEAR SURVEYED	SURVEY APPROVED	ACREAGE (EVN. ACRES)	SURVEYOR OR REMARKS
	3110		66	T 26 N 13	W SEWARD	ORIG	ORIG	1937	04/21/1958	5	J IRBY
	3120		66	T 16 N 12	F COPPER RIV	ORIG	ORIG	1937	09/03/1938	15	M HENLEYMAN
	3121		66	T 5 S 2	E FAIRBANKS	ORIG	ORIG	1937	10/13/1938	80	A BLACKBURN
	3121		86	T 5 S 2	I FAIRBANKS	RE	ORIG	1958	01/26/1960		R ORR
	3122		66	T 16 S 4	W SEWARD	ORIG	ORIG	1937	05/09/1938	12	R THOMPSON
	3122		81	T 16 S 4	V SEWARD	RE	ORIG	1953	07/18/1954		J ROBERTS
	3125		66	T 4 N 11	W FAIRBANKS	ORIG	ORIG	1937	12/24/1937	5	C CHRISTIANSON
	3124		65	T 2 N 12	W KATEL RIV	ORIG	ORIG	1937	08/10/1938	5	F LAWRENCE
	3125	HES 24	66	T 37 S 4	E COPPER RIV	ORIG	ORIG	1937	08/10/1938	115	H WILKES
	3126		66	T 13 S 5	F UMIAT	ORIG	ORIG	1938	10/25/1939	5	J IRBY
	3126		74	T 13 S 5	F UMIAT	RE	ORIG	1947	02/14/1948		J ROBERTS
	3126		02	T 13 S 5	F UMIAT	RE	ORIG	1963	06/30/1965		D LANGFORD
	3127		66	T 10 S 1	W SEWARD	ORIG	ORIG	1938	12/06/1939	160	S SAMUEL
	3127		82	T 10 S 1	W SEWARD	RE	ORIG	1954	10/12/1955		H ARRON
	3128		66	T 14 N 7	W COPPER RIV	ORIG	ORIG	1938	05/17/1939	5	J ROBERTS
	3129		67	T 3 N 7	E KATEL RIV	ORIG	ORIG	1938	12/21/1938	20	T WILLIAMS
	3130		66	T 3 N 8	E FAIRBANKS	ORIG	ORIG	1937	05/15/1938	5	A ROBINSON
	3130		67	T 3 N 8	E FAIRBANKS	ORIG	ORIG	1938	11/02/1938	150	S GILLIAM
	3131		67	T 16 N 10	E SEWARD	ORIG	ORIG	1950	01/11/1951	5	D LANGFORD
	3132		78	T 16 N 10	E SEWARD	RE	ORIG	1950	01/11/1951		F LAWRENCE
	3133		67	T 10 S 7	W SEWARD	ORIG	ORIG	1938	05/27/1939	5	C NELSON
	3134		67	T 22 N 14	E COPPER RIV	ORIG	ORIG	1938	06/02/1939	80	M MELIHOUSE
	3135		67	T 12 N 3	W SEWARD	ORIG	ORIG	1938	05/18/1939	160	D SMITH
	3136		67	T 12 N 3	W SEWARD	ORIG	ORIG	1938	06/02/1939	5	S JONES
	3137	ALAS ALLOT	14	KETCHIKAN B 5	COPPER RIV	ORIG	ORIG	1938	06/02/1939		H ARRON
	3137	ALAS ALLOT	74	KETCHIKAN B 5	COPPER RIV	RE	ORIG	1946	10/11/1947		J ROBERTS
	3137	ALAS ALLOT	91	KETCHIKAN B 5	COPPER RIV	RE	ORIG	1962	12/21/1962		R ORR
	3137	ALAS ALLOT	98	KETCHIKAN B 5	COPPER RIV	RE	ORIG	1965	07/25/1966		R THOMPSON
	3138		67	T 11 N 3	W KATEL RIV	ORIG	ORIG	1938	10/13/1939	5	C GOODALL
	3139		67	T 4 N 1	E SEWARD	ORIG	ORIG	1939	05/08/1940	70	F DICKINSON
	3140		67	T 16 N 4	W SEWARD	ORIG	ORIG	1938	05/26/1939	5	F WILKES
	3141		85	T 16 N 4	W SEWARD	RE	ORIG	1958	09/20/1959		L JOHNSON
	3142		67	T 29 N 6	W SEWARD	ORIG	ORIG	1938	11/05/1939	5	C TRENT
	3142		67	T 4 S 10	W FAIRBANKS	ORIG	ORIG	1938	01/12/1939	40	H HORTON
	3143		70	T 4 S 10	W FAIRBANKS	RE	ORIG	1951	08/02/1952		P DAVIS
	3144		67	T 6 S 10	F UMIAT	ORIG	ORIG	1938	12/16/1939	5	J POWERS
	3144		67	T 15 N 16	F COPPER RIV	ORIG	ORIG	1938	12/04/1939	72	
	3145		67	T 22 S 26	E SEWARD	ORIG	ORIG	1938	10/27/1939	5	
	3146		67	T 13 N 9	W SEWARD	ORIG	ORIG	1938	10/27/1939	5	

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DONATION LAND CLAIM INDEX

OREGON		LOCATION		MERCIDIAN		CLAIMANT OR OTHER IDENTIFICATION		SURVEY NUMBER	VOLUME	YEAR SURVEYED	SURVEY APPROVED	TYPE	ACREAGE (EVEN ACRES)	PRINTED	12/18/1970
TOWNSHIP	RANGE	SECTION	QUARTER	TOWNSHIP	RANGE	SECTION	QUARTER							SURVEYOR	REMARKS
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	ADAMS J	589	1871	10/14/1871	ORIG	22	K LARSON	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	BALOH D	618	1882	12/04/1882	ORIG	16	A LELAND	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	BALOH D	306	1903	04/16/1904	RE	16	M WOODHOUSE	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	BLACKSTONE K	53	1882	01/21/1883	ORIG	30	D THOMPSON	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	BROWN A	42	600	1876	ORIG	14	J POWELL	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	BROWN A	48	1874	08/12/1875	ORIG	49	L CARTER	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	CAPLES W	595	1874	08/12/1875	ORIG	64	L CARTER	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	CHAPMAN W	46	591	05/28/1873	ORIG	64	L CARTER	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	COUGH J	52	618	12/11/1881	ORIG	12	D THOMPSON	CAN. LAND
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	DAVIDSON E	61	1883	11/29/1883	ORIG	30	E FISHER	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	DAVIDSON E	61	361	03/07/1910	RE	26	R BLACKWOOD	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	DOXE M	600	1876	09/26/1876	ORIG	26	I MITCHELL	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	FOSTER J	59	600	09/26/1876	ORIG	15	A LELAND	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	GUILD P	37	1870	11/10/1870	ORIG	38	A LELAND	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	GUILD P	619	1882	04/07/1883	ORIG	22	J POWELL	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	HALL W	45	600	1877	ORIG	27	L CARTER	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	HALL W	45	600	06/21/1878	ORIG	53	I MITCHELL	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	IRVING W	599	1876	09/21/1876	ORIG	40	L CARTER	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	KUTRIDGE G	56	615	1879	ORIG	18	L CARTER	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	LOVE A	41	589	01/13/1873	ORIG	33	I MITCHELL	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	MILLARD G	44	590	1872	ORIG	44	J POWELL	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	NEFF M	57	601	1875	ORIG	18	I MITCHELL	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	PAYNE H	47	600	04/14/1878	ORIG	18	I MITCHELL	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	POTTER L	55	601	02/13/1875	ORIG	39	D THOMPSON	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	POTTER L	50	604	10/02/1880	ORIG	17	R WEST	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	QUINN J	58	1871	06/23/1872	ORIG	45	L CARTER	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	ROBERTSON D	40	590	12/20/1872	ORIG	16	L COPELAND	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	ROBERTSON D	49	604	1879	ORIG	28	S BRONSON	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	STONE J	51	614	12/04/1881	ORIG	14	G STEVENS	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	TOMPKINSON R	60	1882	02/13/1883	ORIG	60	R WEST	
T 1	R 1	E	1	WILLAMETTE	R 1	E	1	WILLIAMS	42	590	11/21/1875	ORIG	48	L CARTER	
T 2	R 1	E	1	WILLAMETTE	R 1	E	1	ARLINGTON S	29	590	02/26/1875	ORIG	27	I MITCHELL	
T 2	R 1	E	1	WILLAMETTE	R 1	E	1	FRANCINGTON G	43	591	10/04/1876	ORIG	34	A LELAND	
T 2	R 1	E	1	WILLAMETTE	R 1	E	1	HALL R	37	589	10/28/1872	ORIG	39	D THOMPSON	
T 2	R 1	E	1	WILLAMETTE	R 1	E	1	LAWSDALE D	41	590	04/22/1877	ORIG	26	R WEST	
T 2	R 1	E	1	WILLAMETTE	R 1	E	1	MAYFIELD R	40	590	09/29/1875	ORIG	14	D THOMPSON	
T 2	R 1	E	1	WILLAMETTE	R 1	E	1	ROSS H	58	590	01/25/1878	ORIG	28	S BRONSON	
T 2	R 1	E	1	WILLAMETTE	R 1	E	1	WORTHINGTON F	47	597	12/14/1884	ORIG	30	L CARTER	
T 3	R 1	E	1	WILLAMETTE	R 1	E	1	BAKER A	38	591	06/21/1879	ORIG	14	D THOMPSON	
T 3	R 1	E	1	WILLAMETTE	R 1	E	1	FARRELL S	44	594	1889	ORIG	28	A LELAND	
T 3	R 1	E	1	WILLAMETTE	R 1	E	1	LYON G	44	594	08/01/1890	ORIG	30	L CARTER	

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SURVEY OR REMARKS

ACREAGE

SUBMITTY APPROVED (T/VA ACRES)

YEAR SURVEYED

TYPE

MERIDIAN

LOCATION RANGE

TOWNSHIP

VOLUME

OTHER IDENTIFICATION

SURVEY NUMBER

NEW MEXICO

U.S. DEPARTMENT OF THE INTERIOR
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SMALL HOLDING CLAIM SURVEY INDEX

CANCELLLED

SURVEY NUMBER	NEW MEXICO	OTHER IDENTIFICATION	VOLUME	TOWNSHIP	LOCATION RANGE	MERIDIAN	TYPE	YEAR SURVEYED	SUBMITTY APPROVED (T/VA ACRES)	ACREAGE	SURVEY OR REMARKS
3412			269	T 26	N 7	T N MEX PRIN	ORIG	1893	10/26/1893	4	A JONES
3413			269	T 12	R 26	E N MEX PRIN	ORIG	1893	09/14/1893	17	R BLANKINSHIP
3414			269	T 27	S 12	W N MEX PRIN	ORIG	1892	11/02/1892	23	S KLAUS
3415			269	T 4	K R 6	W N MEX PRIN	ORIG	1893	11/17/1893	2	J OVERTON
3415			381	T 4	N 6	W N MEX PRIN	PT	1906	05/12/1907		H WOODWORTH
3415			422	T 4	N 6	W N MEX PRIN	RE	1915	06/09/1916		C MAXWELL
3416			260	T 13	S R 14	W N MEX PRIN	ORIG	1894	12/14/1894	16	D HOWARD
3417			269	T 18	N 29	E N MEX PRIN	ORIG	1893	11/30/1893	11	C SHERMAN
3418			269	T 7	N 18	W N MEX PRIN	ORIG	1892	09/22/1892	9	J DUNN
3419			269	T 2	S 4	W N MEX PRIN	RE	1904	12/11/1904	3	L MURDOCK
3419			379	T 21	S R 4	W N MEX PRIN	ORIG	1892	01/18/1893	7	H NEWTON
3420			269	T 21	S R 19	E N MEX PRIN	ORIG	1892	01/18/1893	4	O FREEMAN
3421			269	T 19	N 2	E N MEX PRIN	ORIG	1892	01/18/1893	11	D HICKORY
3422			269	T 8	N 17	W N MEX PRIN	ORIG	1893	01/18/1894	9	A DUNCAN
3423			269	T 27	N 34	E N MEX PRIN	ORIG	1893	10/04/1893	5	F WOODHOUSE
3424			269	T 27	N 32	E N MEX PRIN	ORIG	1892	11/19/1893	5	J EVANS
3425			269	T 22	N 8	W N MEX PRIN	ORIG	1893	02/10/1894	14	L MURDOCK
3426			269	T 13	S R 8	W N MEX PRIN	ORIG	1893	04/27/1909	14	J OVERTON
3426			383	T 13	S R 9	W N MEX PRIN	RE	1908	04/27/1909	14	M MILTON
3427			269	T 1	S R 29	E N MEX PRIN	ORIG	1893	12/12/1893	5	R MURPHY
3428			270	T 30	N R 36	E N MEX PRIN	ORIG	1893	12/12/1893	2	R GREGORY
3429			270	T 21	S R 14	W N MEX PRIN	ORIG	1893	12/16/1893	15	H NEWTON
3430			270	T 19	S R 2	E N MEX PRIN	ORIG	1894	09/02/1894	1	A JONES
3431			270	T 8	S R 15	W N MEX PRIN	ORIG	1892	10/06/1892	7	A JONES
3432			270	T 21	S R 20	W N MEX PRIN	ORIG	1893	11/20/1893	12	C SHERMAN
3432			396	T 21	N R 20	W N MEX PRIN	PT	1912	05/15/1913		A DUNCAN
3433			270	T 10	N R 17	E N MEX PRIN	ORIG	1893	11/09/1893	5	L MURDOCK
3434			270	T 18	S R 9	W N MEX PRIN	ORIG	1893	11/09/1893	3	J OVERTON
3435			270	T 5	S R 24	E N MEX PRIN	ORIG	1892	01/09/1893	7	J HILLER
3436			270	T 13	S R 13	E N MEX PRIN	ORIG	1892	01/21/1893	7	H NEWTON
3437			270	T 12	N 20	W N MEX PRIN	ORIG	1892	12/28/1892	12	P BLANKINSHIP
3438			270	T 3	N 19	W N MEX PRIN	RE	1904	07/13/1905	5	D HICKORY
3438			380	T 5	N 20	W N MEX PRIN	ORIG	1893	12/06/1894	5	C SHERMAN
3439			270	T 12	N R 20	W N MEX PRIN	ORIG	1893	11/23/1893	8	P GREGORY
3440			270	T 1	S R 3	E N MEX PRIN	ORIG	1893	11/23/1893	5	O FREEMAN
3441			270	T 16	S R 15	E N MEX PRIN	ORIG	1892	09/19/1892	13	H HILLER
3442			270	T 9	N R 8	W N MEX PRIN	ORIG	1892	01/07/1892	10	T WOODWORTH
3443			271	T 15	N R 17	W N MEX PRIN	ORIG	1893	01/07/1894	10	R MURPHY
3444			271	T 12	N R 20	W N MEX PRIN	ORIG	1893	01/07/1894	7	J EVANS

MICROFILM ROLL CONTROL TARGET

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
MICROFILM ROLL CONTROL TARGET

ENTER DATA USING HEAVY LETTERS ONE INCH HIGH.

ROLL IDENTIFICATION

1. STATE RECORDS FOR 2. SYSTEMS CODE 3. YEAR FILMED 4. ROLL NUMBER

OPERATION DATA

5. CAMERA OPERATOR SURNAME 6. CAMERA PROPERTY NUMBER

DSC 1276-13 (November 1978)

INSTRUCTIONS

Instructions

Film this completed roll control target at the beginning of each microfilm roll containing Bureau records or documents. All roll identification data is a part of the roll number and must be shown on the rollfilm container in addition to being the initial film image. Complete each form in accordance with the following guidance:

- | <u>Item</u> | <u>Action-Definition</u> |
|-------------|---|
| 1. | Enter the State alpha code to which the documents pertain. |
| 2. | Enter the applicable document-system code. (See codes below.) |
| 3. | Enter the calendar year of the filming. |
| 4. | Enter the office code doing the filming and the sequential roll number containing the same type documents filmed during the year. |
| 5. | Enter the camera operators surname. |
| 6. | Enter the property number of the camera being used. |

<u>System-Document</u>	<u>Code</u>	<u>System-Document</u>	<u>Code</u>
Cadastral Field Notes	CFN	Land Status Security	LSS
Cadastral Survey Plats	CSP	Land Utilization Files	LUF
Construction Project			
Records	CPR	Simultaneous Oil and Gas	SOG
Control Document Index	CDI	Survey Indexing Sheets	SIS
Environmental Impact		Unit Resource Records	URR
Statement	EIS		
Forest Inventory Records	FIR	Washington Office Memos	WOM
Land Patent Security	PAT		

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