



Digital Databases Containing Mining Claim Density Information for Arizona, California, Colorado, Idaho, Montana, Nebraska, New Mexico, Nevada, Oregon, South Dakota, Utah, Washington, and Wyoming Created From the BLM Mining Claim Recordation System: 1996

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Open-File Report 99-325
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This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

These databases, identified as “Digital databases containing mining claim density information for Arizona, California, Colorado, Idaho, Montana, Nebraska, New Mexico, Nevada, Oregon, South Dakota, Utah, Washington, and Wyoming created from the BLM Mining Claim Recordation System: 1996,” has been approved for release and publication by the Director of the USGS. Although the databases have been reviewed and are substantially complete, the USGS reserves the right to revise the data pursuant to further analysis and review. The databases are released on condition that neither the USGS nor the U.S. Government may be held liable for any damages resulting from their use.

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

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INTRODUCTION

This Open-File report describes digital databases of mining-claim density databases for 13 western states. These databases should contribute to research into the interrelationships of mining claim activity with physical geology and social concerns. This pamphlet serves to introduce and describe the data. There is no paper map included in the Open-File report.

These mining claim density databases were created from data obtained in March of 1997 from the Mining Claim Recordation System (MCRS) of the Bureau of Land Management (BLM). These databases provide mining claim density information in a tabular form. They quantify the status of mining claim activity for 1996 and include information on mining claim activity since 1976. The databases contain information identifying 1) the general location of mining claims within the Public Land Survey System (PLS), 2) the number and type of claims (lode, placer, mill site, tunnel site), and 3) the status of the claims (open is held, closed is no longer held by a claimant).

BLM is the official land and mineral ownership record-keeping agency for the Federal government. It maintains a cumulative computer listing of all unpatented mining claims on Federal lands, by meridian, township, range and section, in the MCRS in accordance with the Federal Land Policy and Management Act of 1976 (FLPMA). All unpatented mining claims located after 1976 must be recorded at the appropriate BLM state office. Location notices recorded with BLM are stamped with a serial number and placed into a folder. Amendments, proofs of labor, notices of intent to hold, notifications of change of address, quitclaim deeds, and any other correspondence relating to a claim are placed into the folder. This entire package is referred to as a 'case file' and is stored in serial-number order in the Dockets section of each BLM state office. A 'case' is considered 'closed' after relinquishment of a mining claim or after a formal BLM decision declares a mining claim null and void has been issued and the appeal period has expired. Otherwise, a 'case' or mining claim is 'open'.

The BLM officially releases mining claim data updates on a quarterly basis. However, a lag time is involved between the time a mining claim is recorded at a BLM office and the time the data is entered into the MCRS database. A March, 1997, quarterly data release should include any claims submitted toward the end of 1996 which would not have been included in a December, 1996, quarterly release.

Each statewide database was processed using the methodology outlined by Campbell (1996). Computer programs were written to analyze and summarize the data according to number, type, and status of mining claim within each section of the PLS.

The accuracy of the mining claim density databases depends on the accuracy of the MCRS. Possible sources of error in the MCRS may be due to erroneous locations submitted by a claimant or typographic errors during data input. These possible sources of error are difficult to quantify but are considered insignificant.

A source of error in the mining claim density database involves the accuracy of the physical location of a claim. The individual databases represent the physical location of a claim only to the section of the PLS first described in the MCRS database even though the claim may occur in several sections. The MCRS database may describe the physical location of a claim as being in several adjoining sections and may provide subsection detail. The decision was made to record the mining claim density information to the section because the section is the basic unit of the PLS. This decision also ensured an accurate count of mining claims by eliminating multiple counting of those claims occurring in several sections.

A geographic information system can be used to combine each database with its respective digital public land survey (PLS) to create digital mining claim density maps. An example of a digital mining claim density map, 'Digital mining claim density map for Federal lands in the Pacific Northwest: 1996,' was created by Campbell and Hyndman. Such digital maps should be useful in determining the nature and magnitude of mining claim activity on Federal mineral estate in each State. In addition, the digital maps should be useful in determining interrelationships with geologic, political, and sociologic concerns from other sources. Additional potentially useful information is available in the BLM digital mining claim database but is not included in the digital products presently being released. Figure 1 displays the general distribution of mining claims in 11 of the Western States (open shown in black and closed shown in gray).

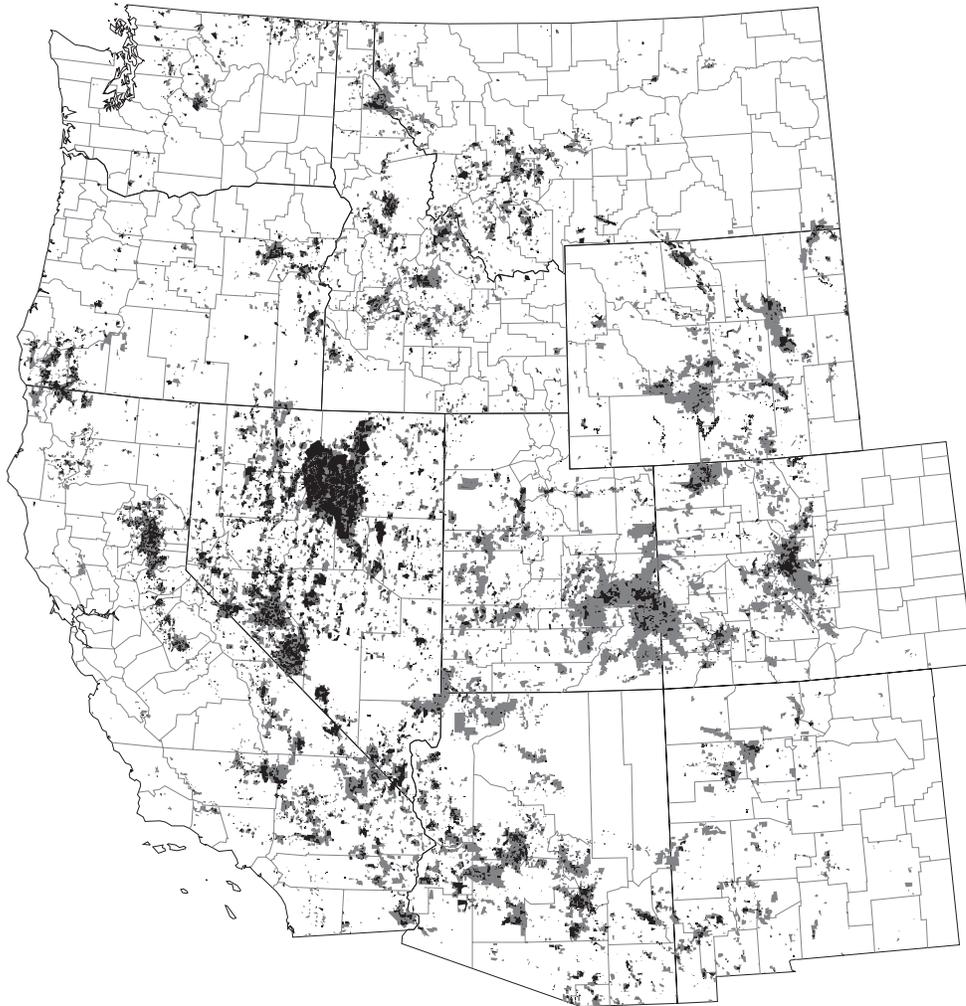


Figure 1. Open (black) and closed (gray) status of mining claims in 11 Western States for 1996

Nebraska and South Dakota are not shown in the figure because digital PLS maps of the states were not available. A digital PLS map of a State aids in making the data useful for spatial analysis.

OBTAINING DIGITAL DATA

An official quarterly release of BLM's MCRS database for an individual State is available by specific request from the:

United States Department of the Interior
Bureau of Land Management
Mining Claim Recordation System Coordinator
Denver Federal Center, Building 50
Denver, CO 80225-0047

The 13 digital mining claim density files created for this report are available in dBase 3 (Borland International, Scotts Valley, California) format and in fixed length ASCII format from the USGS public access FTP site and the World Wide Web site on the internet. The databases and this report were compressed into the file 'OF99-325.EXE', a self-extracting file created by WinZip version 6.3 (Niko Mak Computing, Mansfield, Connecticut).

The files for this report can be obtained over the Internet at URL <http://wrgis.wr.usgs.gov/open-file/of99-325/>

The files may also be obtained by FTP. Windows95 users may need to start FTP in the MSDOS window. Follow the steps below:

STEP (type the words between the quotes)	REASON
cd your_local_directory	Go to a directory to receive the WinZip file – you may need to make a directory first
'ftp wrgis.wr.usgs.gov'	Make ftp connection with the USGS computer, WRGIS
Name: 'anonymous'	Use 'anonymous' as your user name
Password: <i>your email address</i>	Use your email address as a password (you@email_address)
'cd pub/open-file'	Go down to the pub/open-file directory
'cd of99-325'	Go down to the specific open file directory
'binary'	Type the word 'binary' to change the transfer type to binary mode
'get of99-325.exe'	Copy the self-extracting file across the Internet to the receiving directory on your computer
'bye'	Close the ftp connection

Extracting the files from the of99-325.exe self-extracting file is accomplished by typing the name of the file, 'of99-325', and pressing the 'Enter' key. The files will unload automatically.

MINING CLAIM DENSITY DATABASE CONTENTS AND SPECIFICS

The mining claim density databases are provided in dBase version 3 format and in ASCII text format. The contents consist of information pertinent to the distribution, type, and status of mining claim activity in each of the 13 States. Table 1 contains a list of the ASCII and Visual dBase 5 files, this report, and their sizes. Table 2 shows the fields, structure and descriptions in the mining claim density databases. Table 3 contains a list of Principal meridians of the PLS and the Federal Information Processing Standard (FIPS) code of each meridian. This code is incorporated into the MTRS field in the databases. Table 4 displays the cumulative number, type, and status of mining claims for each state. This table is provided to give a sense of the information contained in the databases and to enable the user to view one possible output of the data. Table 5 displays the maximum number of claims identified in a section, by type, in each database.

Table 1. List of database files in OF99-325.EXE

ASCII FILES	SIZE	DBASE 3 FILES	SIZE
blm_az.txt	1,125,569	blm_az.dbf	1,108,399
blm_ca.txt	1,371,265	blm_ca.dbf	1,350,256
blm_co.txt	883,137	blm_co.dbf	869,755
blm_id.txt	688,833	blm_id.dbf	678,487
blm_mt.txt	548,417	blm_mt.dbf	540,265
blm_ne.txt	3,457	blm_ne.dbf	3,820
blm_nm.txt	523,777	blm_nm.dbf	516,010
blm_nv.txt	1,977,857	blm_nv.dbf	1,947,370
blm_or.txt	448,705	blm_or.dbf	442,111
blm_sd.txt	98,561	blm_sd.dbf	97,438
blm_ut.txt	1,191,681	blm_ut.dbf	1,173,478
blm_wa.txt	209,921	blm_wa.dbf	207,058
blm_wy.txt	798,977	blm_wy.dbf	786,910

Other files in OF99-325 are this report, 850 kilobytes, and the metadata file, OF99-325.met, 32 kilobytes.

Table 2. Mining claim density database structure

FIELD NAME	FIELD TYPE	FIELD LENGTH	FIELD DESCRIPTION
MTRS	Character	18	Meridian, Township, Range, Section ¹
NOLC	Integer	4	Number of Open Lode Claims ²
NOPC	Integer	4	Number of Open Placer Claims
NOMC	Integer	4	Number of Open Mill site Claims
NOTC	Integer	4	Number of Open Tunnel Claims
TOC	Integer	4	Total number of Open Claims in a section
NCLC	Integer	4	Number of Closed Lode Claims
NCPC	Integer	4	Number of Closed Placer Claims
NCMC	Integer	4	Number of Closed Mill site Claims
NCTC	Integer	4	Number of Closed Tunnel Claims
TCC	Integer	4	Total number of Closed Claims in a section
TC	Integer	4	Total number of Claims of all kinds

¹ MTRS has the format 'MMTTT.TDRRR.RESS__' where MM is the FIPS meridian code, TTT.T is the township, D is the township direction (East or West), RRR.R is the range, E is the range direction (North or South), and SS is the section number. The two extra spaces, '__', were included in the event of some unusual designation but none were found. For example, '33 30.0S 29.2E05' is Meridian 33 (Willamette), Township 30 South, Range 29 ½ East, Section 5. Oregon also contains a 3/4 range, designated as 'RRR.3'.

² Number of claims in a section of the PLS

Table 3. Principal Meridians and Codes

MERIDIAN	STATES	FIPS MERIDIAN CODE
Sixth Principal	Colorado, Nebraska, Wyoming	06
Black Hills	South Dakota	07
Boise	Idaho	08
Gila – Salt River	Arizona	14
Humboldt	California	15
Montana Principal	Montana	20
Mount Diablo	California, Nevada	21
Navaho	Arizona	22
New Mexico	Colorado, New Mexico	23
Salt Lake	Utah	26
San Bernardino	California	27
Uintah Special	Utah	30
Ute	Colorado	31
Willamette	Oregon, Washington	33
Wind River	Wyoming	34

Table 4. Summary table for mining claim data by State: 1996

STATE	OPEN MINING CLAIMS					CLOSED MINING CLAIMS					STATE TOTALS
	NOLC ¹	NOPC	NOMC	NOTC	TOC	NCLC	NCPC	NCMC	NCTC	TCC	TC (total claims)
Arizona	25,115	5,856	2,365	8	33,345	257,471	47,886	3,842	290	309,488	342,833
California	19,613	12,193	2,706	34	34,546	146,953	81,359	6,495	238	235,053	269,599
Colorado	7,491	2,058	222	17	9,788	216,161	18,638	3,502	121	238,422	248,210
Idaho	17,557	2,670	554	8	20,789	137,093	16,189	2,713	307	156,302	177,091
Montana	15,939	3,594	1,505	17	21,055	121,502	13,471	3,574	102	138,649	159,704
Nebraska	3	0	0	0	3	784	0	0	0	784	787
New Mexico	8,813	1,437	180	30	10,460	139,438	13,708	835	78	154,059	164,519
Nevada	202,375	14,425	9,286	20	226,274	469,005	46,205	15,352	34	530,772	757,046
Oregon	12,217	5,418	178	38	17,851	60,524	21,334	293	205	82,356	100,207
South Dakota	2,346	240	1	0	2,587	35,280	2,110	150	24	37,564	40,151
Utah	11,865	2,613	967	7	15,461	307,927	32,563	3,747	122	345,167	360,628
Washington	8,293	579	158	30	9,060	38,982	2,350	150	53	41,535	50,595
Wyoming	11,568	4,181	918	0	16,667	214,291	16,956	3,158	4	234,419	251,086
Column Totals	343,195	55,264	19,040	209	417,886	2,145,411	312,769	43,811	1578	2,504,570	2,922,456

1. Refer to Table 2 for the meanings of column titles.

Table 5. Summary table of maximum number of claims in a Section by State: 1996

STATE	OPEN MINING CLAIMS					CLOSED MINING CLAIMS					SECTION TOTALS
	NOLC ¹	NOPC	NOMC	NOTC	TOC	NCLC	NCPC	NCMC	NCTC	TCC	TC (total claims)
Arizona	67	38	117	1	129	172	104	144	12	235	254
California	194	64	132	4	194	241	109	192	3	241	313
Colorado	161	28	60	2	164	153	74	117	5	188	217
Idaho	147	36	80	1	182	908	115	155	7	991	1010
Montana	60	45	127	2	159	165	64	156	4	177	189
Nebraska	3	0	0	0	3	45	0	0	0	45	45
New Mexico	69	26	39	20	93	180	84	114	12	180	180
Nevada	194	64	132	4	194	241	109	192	3	241	313
Oregon	77	36	32	5	110	148	102	32	35	226	336
South Dakota	37	19	0	0	40	177	55	64	21	177	210
Utah	84	25	121	1	121	213	68	227	6	293	293
Washington	78	25	49	6	89	152	35	15	3	152	165
Wyoming	48	33	122	0	122	125	97	135	1	174	185

2. Refer to Table 2 for the meanings of column titles.

ACKNOWLEDGEMENTS

The authors gratefully acknowledge Cheryl Laudenbach, Denver Service Center, U.S. Bureau of Land Management (BLM) for providing assistance in obtaining digital mining claim recordation data from the BLM Mining Claim Recordation System databases.

REFERENCES CITED

Campbell, Harry W., 1996, Procedure for making a mining claim density map from BLM claim recordation digital data: U.S. Geological Survey Open-File Report 96-736, 13 p.

Campbell, Harry W. and Paul C. Hyndman, 1996, Digital mining claim density map for Federal lands in the Pacific Northwest: U.S. Geological Survey Open-File Report 96-737, 11 p.

METADATA

Identification_Information:

Citation:

Citation_Information:

Originator: Paul C. Hyndman

Originator: Harry W. Campbell

Publication_Date: Unpublished material

Title:

Digital databases containing mining claim density information for Arizona, California, Colorado, Idaho, Montana, Nebraska, Nevada, New Mexico, Oregon, South Dakota, Utah, Washington, and Wyoming created from the BLM Mining Claim Recordation System: 1996

Edition: Version 1.0

Geospatial_Data_Presentation_Form: database

Description:

Abstract:

The mining claim density data is contained in 13 databases in Open-File Report 99-325.

Each database was created from data obtained in March, 1997, from the Mining Claim Recordation System of the Bureau of Land Management. The data was analyzed, manipulated, and summarized into a database providing mining claim density information. Each database quantifies the status of mining claim activity on federal land within a state for 1996 and includes information on past mining claim activity on federal land since 1976. A database contains information identifying 1) the general location of mining claims within the Public Land Survey (PLS) system, 2) the number and type of claims (lode, placer, mill site, tunnel site) and 3) the status of the claims in 1976 (open is held, closed is no longer held by a claimant). Other terms used by BLM for closed claims are "Abandoned and Void" and "Void by Operation of the Law". According to BLM, new terminology for "Open" will be "Recorded" and for "Closed" will be "Terminated and Closed".

There is one database for each of the following 13 states:

Arizona	blm_az.dbf
California	blm_ca.dbf
Colorado	blm_co.dbf

Idaho	blm_id.dbf
Montana	blm_mt.dbf
Nebraska	blm_ne.dbf
Nevada	blm_nv.dbf
New Mexico	blm_nm.dbf
Oregon	blm_or.dbf
South Dakota	blm_sd.dbf
Utah	blm_ut.dbf
Washington	blm_wa.dbf
Wyoming	blm_wy.dbf

Purpose:

These databases were developed to provide mining claim information to quantify and qualify mining claim activity on federal lands in the western states. The information can be used in a geographic information system (GIS) and should be useful in researching interrelationships of mining claim activity with physical and social science concerns. The data are intended to be attached to a digital PLS of a state.

The data are not to be considered as legal descriptions of the Public Land Surveys or of mining claims and their boundaries.

Supplemental_Information: This data is in dBase 5 format.

Data_Set_Structure:

Data_Set_Part:

Part_Type: dBase 5 database
Part_Name: blm_az.dbf
Part_Description: This database contains mine claim density information for federal land in the State of Arizona from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:

Part_Type: dBase 5 database
Part_Name: blm_ca.dbf
Part_Description: This database contains mine claim density information for federal land in the State of California from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:

Part_Type: dBase 5 database
Part_Name: blm_co.dbf
Part_Description: This database contains mine claim density information for federal land in the State of Colorado from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:

Part_Type: dBase 5 database
Part_Name: blm_id.dbf
Part_Description: This database contains mine claim density information for federal land in the State of Idaho from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:

Part_Type: dBase 5 database
Part_Name: blm_mt.dbf
Part_Description: This database contains mine claim density information for federal land in the State of Montana from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:

Part_Type: dBase 5 database
Part_Name: blm_ne.dbf
Part_Description: This database contains mine claim density information of Nebraska from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:

Part_Type: dBase 5 database
Part_Name: blm_nv.dbf
Part_Description: This database contains mine claim density information for federal land in the State of Nevada from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:

Part_Type: dBase 5 database
Part_Name: blm_nm.dbf
Part_Description: This database contains mine claim density information for federal land in the State of New Mexico from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:

Part_Type: dBase 5 database
 Part_Name: blm_or.dbf
 Part_Description: This database contains mine claim density information for federal land in the State of Oregon from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:
 Part_Type: dBase 5 database
 Part_Name: blm_sd.dbf
 Part_Description: This database contains mine claim density information for federal land in the State of South Dakota from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:
 Part_Type: dBase 5 database
 Part_Name: blm_ut.dbf
 Part_Description: This database contains mine claim density information for federal land in the State of Utah from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:
 Part_Type: dBase 5 database
 Part_Name: blm_wa.dbf
 Part_Description: This database contains mine claim density information for federal land in the State of Washington from 1976 through 1996, based on data provided by the BLM in 1997.

Data_Set_Part:
 Part_Type: dBase 5 database
 Part_Name: blm_wy.dbf
 Part_Description: This database contains mine claim density information for federal land in the State of Wyoming from 1976 through 1996, based on data provided by the BLM in 1997.

Time_Period_of_Content:
 Time_Period_Information:
 Range_of_Dates/Times:
 Beginning_Date: 1976
 Ending_Date: 199703
 Currentness_Reference: Release date of data by the Bureau of Land Management in March, 1997

Status:
 Progress: Complete
 Maintenance_and_Update_Frequency: None planned

Spatial_Domain:
 Bounding_Coordinates:
 West_Bounding_Coordinate: -125
 East_Bounding_Coordinate: -102
 North_Bounding_Coordinate: 49
 South_Bounding_Coordinate: 31

Keywords:
 Theme:
 Theme_Keyword_Thesaurus: None
 Theme_Keyword: mining claim density
 Theme_Keyword: lode
 Theme_Keyword: placer
 Theme_Keyword: mill site
 Theme_Keyword: tunnel site
 Theme_Keyword: mine claim

Place:
 Place_Keyword_Thesaurus: None
 Place_Keyword: Arizona
 Place_Keyword: California
 Place_Keyword: Colorado
 Place_Keyword: Idaho
 Place_Keyword: Montana
 Place_Keyword: Nebraska
 Place_Keyword: New Mexico
 Place_Keyword: Nevada
 Place_Keyword: Oregon
 Place_Keyword: South Dakota
 Place_Keyword: Utah
 Place_Keyword: Washington
 Place_Keyword: Wyoming

Access_Constraints:
 None.

Use_Constraints:

The U.S. Geological Survey makes no warranties related to the accuracy of the data and users are required to determine suitability of use for any particular purpose.

These digital databases are not meant to be construed as legal representations of mining claim boundaries. The information in the database does not provide the legal location or status of individual mining claims.

The user must obtain current information on mining claims from the State Office of the Bureau of Land Management for the area of interest since the mine claim density data is not current.

Any hardcopies utilizing this data set shall clearly indicate their source. If the user has modified the data in any way they are obligated to describe the types of modifications they have performed on the hardcopy map. User specifically agrees not to misrepresent this data set, nor to imply that changes they made were approved by the U.S. Geological Survey.

Point_of_Contact:

Contact_Information:

Contact_Person_Primary:

Contact_Person: Paul Hyndman

Contact_Organization: U.S. Geological Survey

Contact_Position: Geologist

Contact_Address:

Address_Type: mailing and physical address

Address: 904 W. Riverside Ave., Rm. 202

City: Spokane

State_or_Province: Washington

Postal_Code: 99201

Country: U.S.A.

Contact_Voice_Telephone: 509-368-3100 or 509-368-3118

Contact_Facsimile_Telephone: 509-368-3199

Contact_Electronic_Mail_Address: phyndman@usgs.gov

Contact_Instructions: General office phone is 509-368-3100

Data_Set_Credit:

Cheryl Laudenbach, Denver Service Center, BLM, provided the mining claim data from the Mining Claim Recordation Database.

Native_Data_Set_Environment: Windows95, Pentium PC, dBase 5

Data_Quality_Information:

Attribute_Accuracy:

Attribute_Accuracy_Report:

The attributes of the mining claim data from BLM data, claims per section, do not represent the exact number of claims in each section. Some claims overlap into adjoining sections and/or townships. In order to count each claim only once, it was necessary to choose one section for each claim to be identified with. Therefore, the first section listed in the BLM database for a particular claim was chosen as the section the claim was counted in.

The accuracy was tested by summing each category of claim in the mining claim database and comparing the sum to those from the original BLM database. The sums for each category matched.

No attempt was made to determine the accuracy of BLM's database.

Completeness_Report:

None of the data from BLM was omitted. The data is considered complete for the purpose of determining mining claim density in this state.

Logical_Consistency_Report:

The data set is a derived subset of the original BLM data. No modifications to the BLM data were made.

Positional_Accuracy:

Horizontal_Positional_Accuracy:

Horizontal_Positional_Accuracy_Report:

A claim may be within a section or it may straddle two, three, or four sections. In order to count each claim only once, it was necessary to choose one section for each claim to be identified with. Therefore, the first section listed in the BLM database for a particular claim was chosen as the section the claim was counted in. Interested persons should contact BLM for detailed

information on mine claim locations and dimensions.

Lineage:

Source_Information:

Source_Citation:

Citation_Information:

Originator:

Bureau of Land Management, Denver Federal Center, Colorado -
Cheryl Laudenbach

Title: This data does not have a title

Publication_Date: 199703

Geospatial_Data_Presentation_Form: tabular database

Type_of_Source_Media: 9-track tape

Source_Time_Period_of_Content:

Time_Period_Information:

Range_of_Dates/Times:

Beginning_Date: 1976

Ending_Date: 199703

Source_Currentness_Reference:

The data was copied from BLM's MCRD database on March, 1997.

The data is cumulative from 1976, when the database was created.

Source_Citation_Abbreviation: BLM MCRD, 1997

Source_Contribution:

The BLM, through Cheryl Laudenbach, contributed the mining claim data of the State. The data included

Process_Step:

Process_Description:

The detailed process steps are described in the U.S. Geological Survey Open-File Report OF 96-736 by Harry W. Campbell. An example of the use of the data is in Open-File Report OF 96-737 by Campbell and Hyndman. <http://wrgis.wr.usgs.gov/open-file/>

To summarize the process, the BLM data was brought into dBase, separated into 4 sub-databases, then massaged and summarized with several dBase programs to produce a mining claim density database. A unique field, MTRS, was created to enable the data to be joined to a digital PLS of a State. The State PLS digital file will also have to have the MTRS field created in order to properly connect the data.

Process_Date: 1997-1998

Entity_and_Attribute_Information:

Detailed_Description:

Entity_Type:

Entity_Type_Label: blm_XX.dbf

Entity_Type_Definition:

Summary of values for number and type of mining claims in each section. The data is tied to an MTRS code which represents the Meridian + Township + Range + Section. This code provides a unique identifier for each Section of the PLS.

Entity_Type_Definition_Source:

The Bureau of Land Management is the official source for PLS designations and surveys and for the mining claim data.

Attribute:

Attribute_Label: MTRS

Attribute_Definition:

A concatenation of Meridian, Township, Range, and Section of the PLS

Attribute_Definition_Source: Bureau of Land Management

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value:

MTRS is an 18-character field which is a concatenation of meridian (M), Township (T), township direction (D), range (R), range direction (E), and section (S). The form of the field is MMTT.TDRRR.RESS__. The last two spaces were included in the beginning of the study but were not utilized.

Enumerated_Domain_Value_Definition:

MM = the FIPS code for meridian. FIPS stands for the Federal Information Processing Standard. The codes for the meridians are:

06 - 6th Principal
07 - Black Hills

08 - Boise
 14 - Gila & Salt River
 15 - Humboldt
 20 - Principal
 21 - Mount Diablo
 22 - Navajo
 23 - New Mexico
 26 - Salt Lake
 27 - San Bernardino
 30 - Uintah
 31 - Ute
 33 - Willamette
 34 - Wind River

TTT.T = BLM Township designation as 'TTT.T' may include a fraction of a Township. For example, Township 1 would be '_1.0'. Township 27 1/2 would be '_27.2'. The underscore represents a blank space. The 'TTT.2' represents the 1/2 township.

D = BLM Township direction may be North (N) or South (S).

RRR.R = BLM Range designation as 'RRR.R' which may include a fraction of a Range. See Township (T) for example. The Oregon database also contains a 3/4 Range which is represented by 'RRR.3'.

E = BLM Range direction may be East (E) or West (W).

SS = BLM Section number. For example, section 1 is '_1' and section 35 is '35'. Generally the highest section number is 36, but there are exceptions in several States.

Attribute:

Attribute_Label: NOLC
 Attribute_Definition:
 Number of Open (or recorded) Lode Claims
 within a section
 Attribute_Definition_Source: Hyndman and Campbell, 1999
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value:
 Arizona 67
 California 194
 Colorado 161
 Idaho 147
 Montana 60
 Nebraska 3
 Nevada 194
 New Mexico 69
 Oregon 77
 South Dakota 37
 Utah 84
 Washington 78
 Wyoming 48
 Enumerated_Domain_Value_Definition:
 The maximum number of open lode claims
 recorded within a section in the database for the state

Attribute:

Attribute_Label: NOPC
 Attribute_Definition:
 Number of Open (or recorded) Placer Claims
 within a section
 Attribute_Definition_Source: Hyndman and Campbell, 1999
 Attribute_Domain_Values:
 Enumerated_Domain:
 Enumerated_Domain_Value:
 Arizona 38
 California 64
 Colorado 28
 Idaho 36
 Montana 45
 Nebraska 0

Nevada	64
New Mexico	26
Oregon	36
South Dakota	19
Utah	25
Washington	25
Wyoming	33

Enumerated_Domain_Value_Definition:
 The maximum number of open placer claims
 recorded within a section in the database of for the state

Attribute:

Attribute_Label: NOMC

Attribute_Definition:

Number of Open (or recorded) Mill site Claims
 within a section

Attribute_Definition_Source: Hyndman and Campbell, 1999

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value:

Arizona	117
California	132
Colorado	60
Idaho	80
Montana	127
Nebraska	0
Nevada	132
New Mexico	39
Oregon	32
South Dakota	0
Utah	121
Washington	49
Wyoming	122

Enumerated_Domain_Value_Definition:
 The maximum number of open mill site claims
 recorded within a section in the database for the state

Attribute:

Attribute_Label: NOTC

Attribute_Definition:

Number of Open (or recorded) Tunnel site Claims
 within a section

Attribute_Definition_Source: Hyndman and Campbell, 1999

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value:

Arizona	1
California	4
Colorado	2
Idaho	1
Montana	2
Nebraska	0
Nevada	4
New Mexico	20
Oregon	5
South Dakota	0
Utah	1
Washington	6
Wyoming	0

Enumerated_Domain_Value_Definition:
 The maximum number of open tunnel site
 claims recorded within a section in the database for the state

Attribute:

Attribute_Label: TOC

Attribute_Definition:

Total number of Open (or recorded) Claims of all types
 within a section

Attribute_Definition_Source: Hyndman and Campbell, 1999

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value:

Arizona	129
California	194

Colorado	164
Idaho	182
Montana	159
Nebraska	3
Nevada	194
New Mexico	93
Oregon	110
South Dakota	40
Utah	121
Washington	89
Wyoming	125

Enumerated_Domain_Value_Definition:

The maximum number of all open claims recorded within a section in the database for the state

Attribute:

Attribute_Label: NCLC

Attribute_Definition:

Number of Closed (or terminated and closed)

Lode Claims within a section

Attribute_Definition_Source: Hyndman and Campbell, 1999

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value:

Arizona	172
California	241
Colorado	153
Idaho	908
Montana	165
Nebraska	45
Nevada	241
New Mexico	180
Oregon	148
South Dakota	177
Utah	213
Washington	152
Wyoming	125

Enumerated_Domain_Value_Definition:

The maximum number of closed lode claims recorded within a section in the database for the state

Attribute:

Attribute_Label: NCPC

Attribute_Definition:

Number of Closed (or terminated and closed)

Placer Claims within a section

Attribute_Definition_Source: Hyndman and Campbell, 1999

Attribute_Domain_Values:

Enumerated_Domain:

Enumerated_Domain_Value:

Arizona	104
California	109
Colorado	74
Idaho	115
Montana	64
Nebraska	0
Nevada	109
New Mexico	84
Oregon	102
South Dakota	55
Utah	68
Washington	35
Wyoming	97

Enumerated_Domain_Value_Definition:

The maximum number of closed placer claims recorded within a section in the database for the state

Attribute:

Attribute_Label: NCMC

Attribute_Definition:

Number of Closed (or terminated and closed)

Mill site Claims within a section

Attribute_Definition_Source: Hyndman and Campbell, 1999

Attribute_Domain_Values:

```

Enumerated_Domain:
  Enumerated_Domain_Value:
    Arizona      144
    California   192
    Colorado     117
    Idaho        155
    Montana      156
    Nebraska     0
    Nevada       192
    New Mexico   114
    Oregon       32
    South Dakota 64
    Utah         227
    Washington   15
    Wyoming     135
  Enumerated_Domain_Value_Definition:
    The maximum number of closed mill site
    claims recorded within a section in the database for the state
Attribute:
  Attribute_Label: NCTC
  Attribute_Definition:
    Number of Closed (or terminated and closed)
    Tunnel site Claims within a section
  Attribute_Definition_Source: Hyndman and Campbell, 1999
  Attribute_Domain_Values:
    Enumerated_Domain:
      Enumerated_Domain_Value:
        Arizona      12
        California   3
        Colorado     5
        Idaho        7
        Montana      4
        Nebraska     0
        Nevada       3
        New Mexico   12
        Oregon       35
        South Dakota 21
        Utah         6
        Washington   3
        Wyoming     1
      Enumerated_Domain_Value_Definition:
        The maximum number of closed tunnel site
        claims recorded within a section in the database for the state
Attribute:
  Attribute_Label: TCC
  Attribute_Definition:
    Total number of Closed (or terminated and closed)
    Claims of all types within a section
  Attribute_Definition_Source: Hyndman and Campbell, 1999
  Attribute_Domain_Values:
    Enumerated_Domain:
      Enumerated_Domain_Value:
        Arizona      235
        California   241
        Colorado     188
        Idaho        991
        Montana      117
        Nebraska     45
        Nevada       241
        New Mexico   180
        Oregon       226
        South Dakota 177
        Utah         293
        Washington   152
        Wyoming     174
      Enumerated_Domain_Value_Definition:
        The maximum number of all closed claims
        within a section in the database for the state
Attribute:
  Attribute_Label: TC
  Attribute_Definition:

```

Total number of all Claims of all types
within a section
Attribute_Definition_Source: Hyndman and Campbell, 1999
Attribute_Domain_Values:
Enumerated_Domain:
Enumerated_Domain_Value:
Arizona 254
California 313
Colorado 217
Idaho 1010
Montana 189
Nebraska 45
Nevada 313
New Mexico 180
Oregon 336
South Dakota 210
Utah 293
Washington 165
Wyoming 185
Enumerated_Domain_Value_Definition:
The maximum number of all claims
within a section in the database for the state

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Metadata_Time_Convention: local time
Metadata_Access_Constraints: none
Metadata_Use_Constraints: none