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Distribution of Abandoned and Inactive Mines on National Forest System Lands

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Contents

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Introduction

Mining in the United States has a rich and colorful history. Domestic mineral production has facilitated economic growth, while furnishing many interesting tales of courage, hardship, and wealth creation. However, the industry has left another, less desirable legacy - abandoned mines. Before the 1970s, reclamation of mine sites was not required, and consequently, was not performed for most sites. Abandoned mines often were simply ignored. Although they may be of historical interest, abandoned mines are creating current problems. Unreclaimed sites often detract esthetically from the landscape and pose physical hazards that could cause personal injury. Moreover, both surface and underground mines, as well as mill tailing and smelter waste dumps, can discharge toxic materials and sediments that degrade water quality.

Currently, responsibility for cleaning up abandoned mine sites, depending on the locatability and financial viability of the private parties who operated the site, may be shared among federal and state agencies and the private entities involved. Typically private land owners are responsible for safeguarding hazards on their property. Similarly, the private mine owner or operator is responsible for safeguarding the public from hazards at active and inactive mine sites, but at the direction of the land management agency. Abandoned sites can be a problem, especially if the non-federal owner or operator cannot be located, or is not financially able to clean up the site. In this case, the federal land management agency, pursuant to its own policies and direction, or in joint effort with other federal and state agencies, may have to ensure that hazards at a site are corrected in substantive compliance with various federal and state laws. The federal laws may include, but are not limited to, the Clean Water Act as amended; the Resource Conservation and Recovery Act (RCRA), as amended by the Federal Facility Compliance Act (at least to the extent mine wastes are not excluded from RCRA regula-

tion); and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), which establishes the Forest Service's authority to clean up and restore natural resources at sites and seek cost recovery from potentially responsible parties. The state laws depend on programs the respective state is administering under its own authorities, or under EPA oversight.

Heightened concern about the negative impacts of abandoned mines on environmental quality are leading federal land management agencies to clean up mine sites left by others, and over which they historically had no enforceable authority. Although the Forest Service now has one of the more active CERCLA clean up programs in the Nation, it is spending public money to clean up privately caused pollution at these mine sites.

A significant portion of the Nation's mining has occurred on or near National Forest System (NFS) lands. This report characterizes the distribution of inactive and abandoned mines throughout the United States. The goal of the report is to provide a general understanding of the extent to which abandoned mines are likely to be found throughout the thousands of acres of NFS lands. Although we do not present great detail about individual national forests (NFs), this report indicates where among the Nation's NFS lands concerns regarding abandoned mines are the greatest.

This assessment is based on the nonconfidential portions of the Mineral Availability System/Mineral Industry Location System (MAS/MILS)² database that has been compiled by the U.S. Department of the Interior, Bureau of Mines (USBM) (1992).³ The accuracy of this national database varies by location and mineral. For some states the data are fairly accurate (e.g., FL), but in other cases they are incomplete (e.g.,

²Only the nonproprietary portions of MAS/MILS were used in this analysis.

³MILS and other Bureau of Mines data may be obtained by contacting Bureau of Mines Field Operations Centers, listed after the references.

MT) or misleading (e.g., ND). Further, the USBM definition of a mineral location differs from that used by some state agencies, leading to differing estimates of the magnitude of the problem. Readers are cautioned to utilize this study, and the data reported herein, only in a general manner. Nevertheless, we believe that the data provide a reasonable basis for characterizing a **lower limit** on the number of abandoned and inactive mines on and near national forests throughout the United States.

Design and Structure of the Minerals Availability System/Mineral Industry Location System Database

The Minerals Availability System/Mineral Industry Location System (MAS/MILS) database was established to provide comprehensive information for known mining operations, mineral deposits/occurrences, and processing plants. The non-proprietary information of the database is available to the general public and is referred to as the MAS Non-Proprietary (MAS/MILS) database. As the USBM points out, MAS/MILS is a working file. Data accuracy varies from preliminary, unconfirmed reports to validated assessments (USDI, Bureau of Mines 1992).

The original data were collected on a state by state basis from the mid-1970s to 1982, either directly by USBM personnel or through contracts with private firms or state agencies. Since that time, data records have been corrected, enhanced or removed as additional data have become available. Mineral assessments on federal lands have been a major source of recent additions to the data base. Initially, emphasis was placed on acquiring data for current and potential mineral producers; but information on past producing properties was included when available. Often, past producing properties were identified through reviews of the literature and of existing state⁴ and federal records. Given the increased interest in abandoned mines, the USBM is reviewing and upgrading this subset of the data, which should lead to revisions and a more accurate product in the future.

Coverage is more comprehensive in some geographic areas than in others. For example, information on Colorado is extensive because of the impor-

⁴State data vary greatly in quantity and quality, but nonetheless represent an essential source of information.

tance of the minerals industry in that State. Conversely, minimal data on Nebraska and Kansas are included, because their non-energy minerals industries were designated too limited to warrant expenditure of scarce data collection funds. The USBM data collection project was undertaken after responsibility for energy minerals had been shifted from that agency to the Department of Energy. As a result, oil and natural gas coverage is virtually nonexistent. Coal and uranium location data are fairly complete for a few states, such as North Dakota; but quite limited for most others. This partial treatment can be misleading. For example, the inclusion of 939 past producing coal mines in the North Dakota files gives that State undeserved prominence as an historic mining region. Also, information on minerals operations may be incomplete, because some state data included records for all past producers, while others did not (Fantel 1993). This is particularly a problem in the case of Montana, which has a long history of mining, but for which there are relatively few entries in MAS/MILS. As a result, use caution when comparing gross mineral activity levels across states.

Other complications result from different definitions being used by different agencies. The USBM defines as one mineral location⁵ all of the facilities and workings at a given site. An abandoned mine with several features, such as adits, shafts, surface workings, a mill and tailings pond, is recorded as a single mineral location. Conversely, states frequently count each feature separately, because each must be closed or remediated individually.⁶ Neither the USBM nor the states include every small exploration pit or trench. Following such different inventory approaches can lead to widely divergent estimates of the number of "abandoned mines." For example, the USBM reports 7,973 past producing mineral locations in Nevada; but State officials estimate that there are actually at least 50,000 hazardous sites. Moreover, the total number of sites, including small explorations pits, probably exceeds 300,000⁷ (Driesner 1994). For these reasons, in addition to incomplete data coverage in some areas, as mentioned previ-

⁵See Glossary for definition of terms.

⁶The primary purpose of MAS/MILS is not repository of information on all potential physical hazards at mine sites and so coverage of these items is very limited. The data base is deficient with regard to adit and shaft features, for example.

⁷This number is based upon a manual count of mineral activity symbols on U.S.G.S. topographic maps and includes numerous exploration pits, many of which are less than one foot deep.

ously, the USBM data represent a lower limit on the number of abandoned mines in the United States.

The MAS/MILS database is comprised of several data tables. This report focuses on two of them: the Mineral Industry Location System (MILS) table, and the commodity table. Tables are related to each other by a unique, 10-digit sequence number. The sequence number consists of a three-digit state Federal Information Processing Standards (FIPS) code (USDC, National Bureau of Standards 1987), a three-digit county FIPS code, and an arbitrary four-digit site reference number. Each sequence number refers to a unique mining operation, mineral deposit, or processing plant.

The MILS table consists of locational and descriptive information for each mine. Examples of descriptive information include type of operation and current status. Locational and descriptive data are arranged in a one-to-one relationship for each deposit.

The commodity table focuses on commodities that are or can be recovered from a mineral deposit, as well as commodities that may adversely affect the recovery of other commodities from that deposit. "Commodities" that may affect recovery of other commodities include water and sulfur. Commodity data are arranged in a one-to-many relationship, because one deposit may yield more than one commodity. Currently, there are 207,242 and 285,949 records in the MILS and commodity tables, respectively. The difference in the number of records results from the potential for more than one commodity at each deposit. Direct comparisons should not be made between totals or subtotals produced from the MILS and commodity data. Although information on mineralogy of ore bodies would be useful for water quality studies, these data are not always reported in MAS/MILS.

The terms "cannot verify" and "unknown" are valid entries to certain fields in the data tables. In addition, some or all of the fields for a particular deposit may have been left blank, in which case the observations were aggregated and reported separately in this publication.

Distribution of Mineral Locations

The MAS/MILS database for the United States comprises 207,242 domestic mineral locations, as of 1992. As figure 1 illustrates, their geographic distri-

Table 1.—States with significant mineral activity.^{1, 2}

	Past producers	Total mineral locations
Alaska	2,230	7,263
Arizona	3,592	10,512
California	7,002	28,194
Colorado	8,837	13,865
Idaho	2,356	8,837
Iowa	3,984	4,851
Missouri	13,614	14,699
Nevada	3,711	8,504
Oklahoma	4,086	4,807
Utah	3,337	6,621
Washington	2,659	10,948
Wisconsin	3,011	5,745
Wyoming	1,567	5,269

¹Coal and uranium underrepresented in data.

²Montana has had significant mineral activity, but this fact is not reflected in the MAS/MILS data base. Complete reporting would place Montana close to Colorado in number of past producing operations.

bution is uneven. Some areas of the country have experienced a great deal of mining activity, others relatively little. Readers familiar with the industry will be able to identify numerous historic mining districts, such as the Minnesota iron range, the California placer district, and the Arizona copper belt, by the intensity of activity in those areas. However, the high levels of mining activity in states such as Iowa, where coal mining was common, may be somewhat unexpected. States with significant past or current mining activity, as reported in MAS/MILS, are listed in table 1.

Type and Status

MAS/MILS includes selected information for each mineral location, of which Type and Status are particularly important. Type refers to the past, current, or expected future activity at a location (table 2). Extraction sites have been assigned to one of nine mining types. Beneficiation plants not associated with a specific mine were included in the category Processing Plants, which is generally applied to smelters, refineries, etc. Undeveloped properties either were assigned to the expected mining method, or, in other cases, to Mineral Location or Prospect. Where little information was available, Type was listed as Unknown. This designation usually is associated

with mineral locations identified from the literature. Frequency of Type by State is reported in Appendix A.

Almost half of the mineral locations in MAS/MILS are designated as surface mines (fig. 2), reflecting, in part, the large number of sand, gravel and stone operations in the country. Underground and combined surface-underground operations, which account for another 27% of the sites, are more typical of metallic ore mining. Approximately 4% of the locations are, were or are expected to be placer mines.

Each mineral location has been assigned a Status by the USBM (table 3) identifying the stage of mine development achieved at the site. Mineral development activities tend to take place in a consistent order. The purpose of the initial activities is to gain information about the character, grade, and extent of subsurface resources sufficient to determine if an economic deposit is present. Whether each succeed-

ing step is undertaken depends upon the information gained from the previous step. In general, the actions become more expensive, and more physically disruptive to the site, at each successive stage. If initial prospecting (e.g., geochemical, geophysical, seismic) indicates that the site might contain mineral resources, then exploration (e.g., core drilling) begins. This stage is followed by more extensive exploration (e.g., an exploration shaft), if presence of a deposit is suspected. For economic deposits, the normal course of events would be permitting (by state and local authorities), operating plan review (by federal land managing agency), site development (surface and underground facility construction), production, and eventually shut down. Current Forest Service regulations require reclamation; however, a "past producer" designation in the data base does not necessarily mean that reclamation has taken place.

The USBM ranks sites at which mining has not yet taken place in the following manner. Preproducers for which little exploration has been completed are ranked as Raw Prospects. Increasing amounts of exploration lead to the category of Explored Prospect. A Developed Deposit is a partially or wholly constructed mine at which production has not yet commenced. There is a fine distinction between Explored Prospect and Developed Deposit, in that exploration activities continue during development and certain development activities (e.g., roads, pilot plant construction) occur early in the exploration phase. As a result, coding is to some extent dependent upon the judgement of the coder.

The categories of Producer, Temporary Shutdown, and Past Producer are self explanatory. Where minimal information was available, the USBM designation was Unknown. Cannot Verify refers to questionable records. When grouped together, undeveloped deposits account for 43% of entries in MAS/MILS, producing deposits 14% and past producers 43% (fig. 3). Frequency of Status by State is reported in Appendix B.

Because of budget limitations, the USBM regularly updates records for only a subset of the 207,242 mineral locations. As a result, for many properties, information in the Status field may not be current. Mineral locations that were preproducers when entered into the database may now be either Producers or Past Producers. Furthermore, technological advancements, in some cases, have made re-mining of

Table 2.—Frequency of type — all sites.

Type	Frequency	Cumulative frequency	Percent	Cumulative percent
Brine	23	23	0.0	0.0
Hot spring	135	158	0.1	0.1
Leach	52	210	0.0	0.1
Mineral location	12,874	13,084	6.2	6.3
Placer	8,772	21,856	4.2	10.5
Processing plant	3,789	25,645	1.8	12.4
Prospect	20,711	46,356	10.0	22.4
Surface-underground	8,850	55,206	4.3	26.6
Surface	92,951	148,157	44.9	71.5
Underground	46,696	194,853	22.5	94.0
Underwater	477	195,330	0.2	94.3
Unknown	10,569	205,899	5.1	99.4
Well	1,343	207,242	0.6	100.0

Table 3.—Frequency of status — all sites.

Type	Frequency	Cumulative frequency	Percent	Cumulative percent
Cannot verify	17	17	0.0	0.0
Developed deposit	5,192	5,209	2.5	2.5
Explored prospect	24,834	30,043	12.0	14.5
Other	667	30,710	0.3	14.8
Past producer	89,081	119,791	43.0	57.8
Producer	29,143	148,934	14.1	71.9
Raw prospect	15,353	164,287	7.4	79.3
Temporary shutdown	639	164,926	0.3	79.6
Unknown	42,316	207,242	20.4	100.0

waste materials or exploitation of remaining inground resources profitable, thus turning Past Producers back into Producers.

Type and Status are combined in table 4. The original 13 Type designations have been reduced to 4 basic categories: surface, underground and surface/underground, placer, and all others. Similarly, the 9 Status designations have been aggregated into 4: all

stages of undeveloped, current producers, past producers, and all those for which status is unknown. (A table with all 13 Type and 9 Status categories is available in Appendix C). Each cell in the table represents the intersection of a Type and a Status, with descriptive statistics provided in each case. Instructions for reading the tables are provided in the beginning of the appendices.

As seen in table 4, 53% of the 89,720 past producers were surface mines, another 37% were underground or combined operations, and 4% were placer mines. Among current producers there is a much greater preponderance of surface operations (77%), and there are fewer placer mines. These changes reflect a shift toward solution mining techniques and away from more expensive or perhaps more environmentally damaging mining methods of the past.

Table 4.—Frequency of type by status.¹

Type	Status				
Frequency					
Percent					
Row %	Past producer	Producer	Undeveloped	Unknown	Total
Col %					
Placer	3,679 1.78 41.94 4.10	109 0.05 1.24 0.37	2,272 1.10 25.90 5.01	2,712 1.31 30.92 6.31	8,772 4.23
Surface	47,285 22.82 50.87 52.70	22,521 10.87 24.23 77.28	9,758 4.71 10.50 21.50	13,387 6.46 14.40 31.13	92,951 44.85
Underground-Surface	33,159 16.00 59.70 36.96	3,157 1.52 5.68 10.83	11,232 5.42 20.22 24.75	7,998 3.86 14.40 18.60	55,546 26.80
All others	5,597 2.70 11.20 6.24	3,356 1.62 6.72 11.52	22,117 10.67 44.26 48.74	18,903 9.12 37.83 43.96	49,973 24.11
Total	89,720 43.29	29,143 14.06	45,379 21.90	43,000 20.75	207,242 100.00

¹Table 4 and other tables of this type are read as follows: Starting in the lower right hand corner, the upper number (207,242) is the Total number of entries in the table, the lower number (100) is the percent of that Total. The pairs of numbers to the right of the row identifier "total" are the occurrences overall in each column category (here Status) and the percent of Total each represents. The upper numbers add to the Total; the percents add to 100. The pairs of numbers below the column identifier "total" are the occurrences overall in each row category (here Type) and the percent of Total each represents. These add in the same manner: upper to 207,242, lower to 100.

Each cell contains 4 data items, in order Frequency, Percent, Row %, and Col %. Frequency is the number of occurrences for that row-column pair. Percent signifies the percent of Total that Frequency represents. These can be added either vertically or horizontally to obtain the overall column or row percent values. Row % is the percent of the row total that each cell represents. These values can be compared across the row and add to 100. Col % is the percent of the column total that each cell represents. These should be read and add to 100 vertically.

Domain

Another perspective on the data can be gained by examining mineral location ownership and government administrative patterns. Two alternative approaches are utilized here: USBM "Domain" designations and physical (latitude-longitude) location. The USBM database identifies 23 possible Domain categories, including Private, NFS and numerous other federal, state and local governmental entities, and Unknown. Complete tables of these data, sorted by Type and by Status, are reported in Appendices D and E. Based on this classification system, there are 27,216 mineral locations on NFS lands. The only USBM Domain designations with higher levels of mineral activity are Unknown with 38,621 sites, and Private with 86,778 sites. Despite historically high levels of exploration and mining on lands under BLM administration, the USBM has assigned this Domain only 12,655 sites. The low number may be indicative of relative rates of claim patenting.

USBM Domain numbers are only approximate, as title to land changes hands. As previously noted, the Domain fields represent ownership or administrative responsibility at the time the site was entered into the database. The USBM actively maintains these fields for only a few sites. This is important to keep in mind when reviewing data for minerals on public lands. Mineralized land has been and continues to be transferred to the private sector under the Mining Law of 1872. This law regulates exploration, claim

staking, ownership, and production of metallic and some nonmetallic minerals from public domain lands, those which have never left the federal estate.⁸ If a U.S. citizen or firm can show that a claim site contains an economically viable deposit, it may be taken to patent, a process by which title to the surface and subsurface is permanently transferred to the private sector. Over the past 122 years, tens of thousands of mineral locations on lands once administered by public agencies have been transferred to private ownership (Leshy 1987).

Many abandoned and inactive mines in the western United States can be found on claims that were taken to patent in the late 1800 and early 1900s. Often these claims lie within what are now the contiguous boundaries of NFS, BLM or other federal lands. Federal employees usually may not enter these privately held sites to ascertain the status of mine workings or evaluate potential physical hazards to individuals or environmental risks to adjacent public lands or waters without permission of the owner.⁹ However, the current private owners may be difficult to locate or refuse to allow entry. Many federal agencies (including BLM, NPS, FWS) are in the process of inventorying the abandoned and inactive mines on their lands; however, mine sites on privately owned patented inholdings will not be included in these totals.

Nonetheless, many mines on or within NFS lands have the potential to create environmental problems, including water quality degradation. To provide an estimate of the magnitude of the potential problems active, abandoned and inactive mines pose for the Forest Service and other federal agencies, the data were organized according to location. Administrative boundaries have been digitized for most federal lands (the BLM excepted). Latitude and longitude for each mineral location, as reported in MAS/MILS, were compared to these data. Mineral locations falling within the administrative boundaries of NFS lands were assigned to the NFS administrative category. Mineral locations falling within the administrative boundaries of other federal lands, except BLM, were assigned to Federal Other Than BLM.¹⁰ The remaining sites were assigned to All Other Including

⁸Extraction of energy resources and some industrial minerals, as well as mining of all resources on acquired lands, is regulated under the Mineral Leasing Act of 1920 (as Amended.)

⁹This does not hold for CERCLA cleanup 104(e), 42 USC 9604 (e).

¹⁰BLM data are not reported separately because BLM boundaries have not been digitized. For this same reason they could not be included in the Other Federal category.

Table 5.—Frequency of type by domain.^{1, 2}

Type	Administrative boundaries			
	Domain			
Frequency	NFS ³	Federal ⁴	Other ⁵	Total
Percent				
Row %				
Col %				
All others	11,646 5.62 23.30 29.87	2,626 1.27 5.25 38.16	35,701 17.23 71.44 22.12	49,973 14.11
Placer	3,348 1.62 38.17 8.59	352 0.17 4.01 5.12	5,072 2.45 57.82 3.14	8,772 4.23
Surface	8,883 4.29 9.56 22.78	2,281 1.10 2.45 33.15	81,787 39.46 87.99 50.68	92,951 44.85
Underground/Surface	15,114 7.29 27.21 38.76	1,622 0.78 2.92 23.57	38,810 18.73 69.87 24.05	55,546 26.80
Total	38,991 18.81	6,881 3.32	161,370 77.87	207,242 100.00

¹Instructions for reading table are located after table 4.

²Domain determined by comparing latitude and longitude of mineral location, as reported in MAS/MILS, to digitized boundary data.

³National Forest System lands.

⁴All Federal lands other than NFS or BLM.

⁵All other lands including private and BLM, which is included here because their boundaries have not been digitized.

BLM. This information has been combined with Type in table 5. Less aggregated tables of the data organized by administrative boundary are available in appendices F and G.

When the data are viewed in this way, approximately 19% of all mineral locations occur within the administrative boundaries of NFS lands, an increase from the 13% occurring on NFS lands according to the USBM designations. Of the total of 38,991 locations, 15,114 are identified as underground or surface/underground mines, 8883 as surface and 3,348 as placer mines (fig. 4). In comparison with the other two Domain categories, a greater proportion of mines within the NFS boundaries tend to be underground and fewer surface. In terms of Status, 13,706 mineral locations within NFS boundaries are past producers,

1,798 are producing, and another 23,487 are as yet undeveloped (or status is unknown) (table 6, fig. 5).

Commodities

The USBM database identifies 89 commodities that may occur singly or in combination at mineral locations. With very few exceptions, these are, or potentially could be, "economic" commodities. A deposit contains an economic commodity if there is a demand for the mineral in the marketplace and its selling price exceeds extraction cost. Pure deposits of most minerals, native silver or copper, for example, are very rare. It is more common for minerals to occur

Table 6.—Frequency of status by domain.^{1,2}

Status	Administrative boundaries			
	Domain			
Frequency	NFS ³	Federal ⁴	Other ⁵	Total
Percent				
Row %				
Col %				
Undeveloped deposit	13,337 6.44 29.39 34.21	2,070 1.00 4.56 30.08	29,972 14.46 66.05 18.57	45,379 21.90
Producer	1,798 0.87 6.17 4.61	460 0.22 1.58 6.69	26,885 12.97 92.25 16.66	29,143 14.06
Past producer ⁶	13,706 6.61 15.28 35.15	2,126 1.03 2.37 30.90	73,888 35.65 82.35 45.79	89,720 43.29
Unknown	10,150 4.90 23.60 26.03	2,225 1.07 5.17 32.34	30,625 14.78 71.22 18.98	43,000 20.75
Total	38,991 18.81	6,881 3.32	161,370 77.87	207,242 100.00

¹Instructions for reading the table are located after table 4.

²Domain determined by comparing latitude and longitude of mineral locations, as reported in MAS/MILS, to digitized boundary data.

³National forest system lands. Includes both past producers and temporary shutdown categories.

⁴All federal lands except NFS and BLM.

⁵All other lands including BLM and private.

⁶Past producer here includes temporarily shut-down operations.

both in combination with each other and with various other elements. The commodities designated for each mineral location by the USBM are those presently or potentially extracted for financial gain. Constituents that could affect marketability often are reported as well. Other elements present, but not of economic significance, including those which at other locations might have been extracted for profit, may not be listed.

This approach to commodity designation has important implications for analysis of the relationship between mines and water quality. Polymetallic ores may have been extracted and processed to retrieve one or several elements considered at the time to be highly valuable. Any other elements of too low a grade (percentage content in the ore) to be economic or for which there was no market at the time, would have ended up in the waste material. As a result, the commodity designated for a site may not be the only mineral present, and the distribution of mines by commodity can only be considered one possible indicator of the presence of environmentally problematic elements.

In addition, the commodity designations in the database may or may not indicate current activity. Advances have made previously uneconomic or technologically unavailable resources attractive. For example, it is now both possible and potentially profitable to extract very fine particles of some minerals. Mine dumps and mill tailings are being re-mined and processed to extract more of the element originally of interest and other minerals as well. In other cases, technological changes in manufacturing have created markets for minerals previously discarded as useless. Although these efforts are undertaken with the hope of financial gain, one consequence may be enhanced mine reclamation.

Despite the difficulties noted above, the commodity designations do provide information about the distribution of economic mineral deposits and the relative magnitude of activity for various minerals. Figure 6 lists the frequency of occurrence of commodities interesting either because of their ubiquity or their potential for negative environmental impacts. A table reporting Frequency of Commodity by Status for all commodities can be found in Appendix H.¹¹

¹¹Care should be taken when reading both Figure 6 and the commodity tables in Appendix I. More than one commodity may occur at a single mineral location, so the total number of commodity occurrences exceeds the total number of mineral locations.

By far the most common types of mines are those for construction materials; fully 28% of the mineral locations have sand, gravel or stone listed as their primary commodity. The metallic mineral most frequently extracted is, not surprisingly, gold. For arsenic, cadmium, and mercury, the values are indicative only of those sites at which the mineral was designated as the primary commodity. In fact, distribution of the first two is significantly broader than these numbers would suggest, because they are commonly found in polymetallic deposits.

Distribution of Past Producing Mineral Locations

There are approximately 89,081¹² past producing mineral locations in the United States listed in the USBM MAS/MILS database. As figure 7 illustrates, they are found in all parts of the country. Not all abandoned or inactive mines are equally problematic in terms of their potential risk to water quality, however. Many are sand, gravel, or stone operations, as are the string of sites paralleling the TransAlaska Pipeline (fig. 8). The vast majority of mines for these types of commodities have no toxic affects, although they can cause sedimentation problems and be unsightly. For comparison, figure 9 illustrates the distribution of past producers with these three widespread commodities excluded. In following sections, the data are organized by mining method and mineral so as to highlight areas more likely to be at risk for water contamination from past mineral operations.

Past Producers by Type

Surface mining took place at 46,974 past producing mineral locations, underground and combined surface-underground mining at 32,903, and placer mining at 3,674 (fig. 10). By far the most widely distributed type of activity was surface mining (fig. 11). Underground and combined mines tend to be more geographically concentrated, and have been common in the Appalachian, Rocky, and Sierra Nevada Mountains as well as a few central states (fig. 12). Placer mining techniques are less widely applicable,

¹²This number reflects Past Producers only; the 89,720 reported in table 6 includes temporarily shutdown operations.

Table 7.—Table of domain by type — past producers.^{1,2,3}

Type	Administrative boundaries			
	Frequency	Domain		
Percent	NFS ⁴	Federal ⁵	Other ⁶	Total
Row %	Col %			
All others	869 0.98 15.71 6.39	333 0.37 6.02 16.10	4,328 4.86 78.26 5.90	5,530 6.21
Placer	1,347 1.51 36.66 9.91	115 0.13 3.13 5.56	2,212 2.48 60.21 3.01	3,674 4.12
Surface	3,689 4.14 7.85 27.13	808 0.91 1.72 39.07	42,477 47.68 90.43 57.86	46,974 52.73
Underground/Surface	7,692 8.63 23.38 56.57	812 0.91 2.47 39.26	24,399 27.39 74.15 33.23	32,903 36.94
Total	13,597 15.26	2,068 2.32	73,416 82.41	89,081 100.00

¹Instructions for reading are located after table 4.

²Domain determined by comparing latitude and longitude of mineral locations, as reported in MAS/MILS, to digitized boundary data.

³Past producers here do not include temporarily shutdown operations.

⁴National forest system lands.

⁵All Federal lands except NFS and BLM.

⁶All other lands including BLM and private.

but were commonly utilized during the gold rushes of the 1800s (fig. 13). See also Appendix I for data on the distribution of past producers by State by Type.

More than 15% of past producing mineral locations, as reported in MAS/MILS, are within the administrative boundaries of NFS lands (table 7 and Appendix I; Appendix J lists Past Producers by USBM Domain). More than 50% of past producing sites within NFS boundaries are underground or combined surface/underground operations. This is consistent with the percentages for mineral activities on NFS overall, but is not unexpected, given that underground mining is common in mountainous areas of the western United States where the agency administers large tracts of land. In addition, a disproportionate 37% of the placer operations took place at locations within what are now NFS boundaries.

The distribution of past producers overall and by mining method within the administrative boundaries of NFS lands are illustrated in figures 14 through 17. It is clear that while forests in all parts of the country are impacted, some areas have seen more historic mining activity than have others.¹³

Past Producers by Commodity

Organizing the data on past producing mines by commodity illustrates several important points. Firstly, one or two mining methods are commonly associated with each commodity. This is not surprising; each mineral is usually found in only a few types of ore bodies (e.g., veins), and the different ore body configurations lend themselves to specific extraction methods. Underground and combined surface/underground mining were the methods of choice at half of the past producers overall, and account for the vast majority of past producing copper, lead, gold, silver, and zinc mines (fig. 18 and Appendix L). Sand, gravel and stone represent half of the past producing surface mines, although this method was also common for lead and iron ore extraction.

The maps of past producing copper, gold, iron, lead, silver and zinc mines illustrate two additional important points (figs. 19- 24). Not all minerals are mined in all places, and some minerals are consistently found in certain areas. To readers familiar with geology this fact is obvious, but it is less widely understood by individuals not associated with the earth sciences. The location of mineral deposits is the result of complex geologic forces occurring over millennia. Some combinations of forces are more likely to lead to deposition of minerals in economic concentrations than are others. Places with the "right" geologic characteristics are logically the areas of interest for mineral extraction and many have experienced heavy mining activity over the years. The following are a few examples of this phenomenon.

There were large copper mines in Michigan and Montana and also in Arizona, where the industry remains important to the economy to this day. Development of the Copper Basin followed discovery of native copper in southeastern Tennessee. Eventually, more than 56 square miles of land were desertified by smelting activity. Gold mining was of

enormous importance to the history and settlement of much of the west, particularly Colorado, California, Nevada and western South Dakota. Extraction of this metal continues and the United States is currently the second largest gold producer in the world (USBM 1993). The presence of iron resources (in Minnesota, Michigan and in the East) was a deciding factor in locating the American steel industry along the Great Lakes and in Pennsylvania. Lead mining has been an important industry in Illinois and Wisconsin, and remains so today in Missouri. Silver mining drove the development of many western towns such as Leadville, CO. Zinc mining also has impacted Colorado along with Missouri, Illinois, Idaho, Washington, and Wisconsin. (See appendix M for detailed data on past producers by commodity, by state).¹⁴

National Forests located in areas that have experienced past mineral activity are more likely to have past producers within their boundaries. Table 8 lists the frequency of occurrence of past producers within NFS boundaries for selected commodities. (Also see appendix N for detail.) Again the preponderance of underground mining operations is clear.

Of the minerals listed in table 8, some are of more concern to water quality than others. Among metals, arsenic,¹⁵ cadmium, copper, lead, mercury, and zinc, have significant potential to cause water quality problems. We have labeled this group as minerals of concern. The level, if any, of environmental problem created by the presence of one of these minerals is a function of acidity, moisture, background geology and a host of other factors. Nonetheless, their presence warrants heightened awareness and oversight.

The USBM has identified 29,380 occurrences of these minerals at past producing mines in the United States (as indicated by their listing as economic commodity for the site). The minerals of concern have been mapped (fig. 25) to highlight the magnitude of the abandoned and inactive mine problem for the Forest Service. Red dots mark sites within NFS administrative boundaries. It should be noted, however, that minerals of a concern (because of toxicity) may be present in uneconomic quantities at other locations.

¹⁴Inactive and abandoned mine data are also available from the Western Governor's Association (Western Interstate Energy Board 1991; Interstate Mining Compact Commission 1992).

¹⁵It should be noted that arsenic may be present because it was co-produced or because it was used at a mining operation to facilitate recovery of a commodity (i.e., gold). It is seldom a primary product of mining.

¹³Because of the broad scope of this study, the data are not reported by individual National Forest.

Table 8.—Past producers on NFS:¹ selected commodities and type of operation.

	Surface-under-ground & under-ground		Processing			Total
	Surface	ground	Placer	plant	Other	
Arsenic	1	28	0	0	5	34
Cadmium	0	12	0	0	0	12
Copper	83	2,159	4	10	184	2,440
Gold	268	4,355	1,334	34	348	6,339
Iron	470	320	8	3	50	851
Lead	145	2,800	2	23	146	3,116
Mercury	8	62	5	0	2	77
Silver	120	4,189	548	31	308	5,196
Zinc	76	1,928	1	18	63	2,086
Total	1,171	15,853	1,902	119	1,106	20,151

¹Domain determined by comparing latitude and longitude of mineral locations, as reported in MAS/MILS, to digitized boundary data.

Table 9.—Past producing underground and surface-under-ground mines¹ with selected minerals² of concern.

Commodity	Frequency
Arsenic	73
Cadmium	48
Copper	6,090
Lead	10,113
Mercury	293
Zinc	7,949
Total underground and surface-under-ground mines at which at least one of the above minerals occur	13,281

¹First occurrence only.

²50% of locations have at least 2 of listed minerals.

There are 13,281 past producing underground and surface/underground mines at which at least one of these minerals was the primary commodity (table 9). As figure 26 clearly shows, many were located within the boundaries of NFS lands. Distribution of past producing surface operations, at which at least one of the minerals of concern was extracted, is illustrated in figure 27.

Conclusions

This survey has of necessity been very general in its analysis. It has been based on the USDI Bureau of Mines MAS/MILS database, the original purpose of

which was not cataloging the locations of past producers. One result is that coverage is incomplete, and care must be taken to avoid mischaracterization of the issue as a result of data shortcomings. This database is, nonetheless, the largest single collection of this type of data available in an automated information system.

Federal land management agencies, and numerous states, are in the process conducting comprehensive inventories of abandoned and inactive mines. Although data needs and project goals differ among the various agencies, efforts are being made to standardize definitions and share information (Juntunen 1993). Until these surveys are completed, the MAS/MILS numbers should be considered as a lower limit estimate of the number of abandoned and inactive mines existing in the United States.

The MAS/MILS database focusses on nonenergy resources; it has very limited coverage of energy resources, incomplete information on background mineralogy, and minimal data on physical features or acreage disturbed. However, other existing data sources may provide information to fill these gaps. The USDI Mine Safety and Health Administration maintains excellent records on active mines, including coal mines. However, these data are not organized by location. The National Inventory of coal mines was started in 1977 by the USDI Office of Surface Mining (OSM). The data are currently in paper format only. Merging OSM and MSHA data with USBM data will be difficult and time consuming.

The USDI Geological Survey maintains the Mineral Resource Data System (MRDS) database, which contains extensive information on geology and mineralogy. Many of the USBM records list only commodities, so additional background information on the mineralogy of an area will be necessary if all potential water contaminants are to be identified. More than 75% of the mineral locations in MRDS are identified by latitude and longitude; more than 20,000 also have the USBM Sequence Number listed. Merging these data with MAS/MILS will be challenging, and care will need to be taken to avoid duplication of records; however, a cooperative effort to accomplish this task is ongoing.¹⁶

As previously noted, another source of information is the four-volume study on Inactive and Aban-

¹⁶Forest Service Research is lead agency on the project and is working in cooperation with the Geological Survey and the Bureau of Mines.

doned Noncoal Mines, available from the Western Governor's Association (Western Interstate Energy Board 1991; Interstate Mining Compact Commission 1992). This state-by-state scoping study reports physical hazards and acreage disturbed, plus for some states numbers of mineral locations. Unfortunately, data are "not comparable among states" because of differences in definitions among respondents. Nonetheless, the wealth of detail and the associated discussions make these reports useful and place the data on inactive mines in historic and geographic context.

Given these caveats, it is possible to draw a number of general conclusions from the preceding analysis. Perhaps most striking is the widespread nature of the issue. Mining has taken place in virtually every part of the United States, so there are past producers everywhere as well. Not all of these mines are problems, particularly since the mining industry began reclaiming recently closed mine sites. However, thousands of mines date from the turn of the century, when there were no environmental regulations. Some of these historic mines are creating environmental problems; many more present physical hazards; thousands are eyesores.

Public lands have been impacted by these unreclaimed mines. The MAS/MILS database lists more than 13,500 past producing mines within the administrative boundaries of NFS lands alone. Many of them currently, or have the potential to, degrade surface or ground water quality, and impact natural ecosystems. For example, arsenic, cadmium, copper, lead, mercury, zinc were mined as economic commodities at 7,765 of the locations. Because these elements often occur in polymetallic deposits, there are undoubtedly additional sites where they were coproduced and discarded. Many more sites are likely to have had these commodities present in uneconomic quantities. In addition, 1,500 of the past producers within NFS boundaries already have been identified as having significant acid mine drainage problems (USDA Forest Service 1992).

The legal and financial responsibility for protecting the public against physical hazards and for the reclamation of polluted sites belongs to the mine owner in the case of private lands, or the operator in the case of leases on acquired lands. But the owners of many historic mine sites are unknown or unlocatable. In these cases, responsibility for clean up is problematic. What is clear, however, is that the financial burden for a complete cleanup may be

enormous. For that reason, prioritization of abandoned sites in need of reclamation is essential.

This report represents a first step toward the goal of understanding the abandoned mine problem by providing a national characterization of the distribution of sites. Other agencies are developing tools and methodology for hazard evaluation at abandoned mines (USBM 1994) or site specific risk assessment and prediction (Plumlee et al. 1993). Federal land managers and scientists are working closely with these and other agencies and with states and local governments to address the inactive and abandoned mine problem.

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- U.S. Department of the Interior, Bureau of Mines. 1993. Mineral commodity summaries. Washington, D.C. 201 p.
- U.S. Department of the Interior, Bureau of Mines. 1992a. Minerals availability system non-proprietary (MAS/MILS) data base, tape documentation. 39 p.
- U.S. Department of the Interior, Bureau of Mines. 1992b. Minerals availability system non-proprietary (MAS/MILS) data base.
- Western Interstate Energy Board. 1991. Inactive and abandoned noncoal mines, Vol's I-III. Western Governor's Association. Denver, CO.

MILS and other Bureau of Mines data may be obtained by contacting the following Bureau Field Operations Centers:

For the State of Alaska: Alaska Field Operations Center, 3301 C Street, Suite 525, Anchorage, AK, 99503-3935, Information No. (907) 271-2455, Facsimile No. (907) 271-3933.

For the States of California, Hawaii, Idaho, Montana, Nevada, Oregon, and Washington: Western Field Operations Center, E. 360 Third Avenue, Spokane, WA, 99204-1413, Information No. (509) 353-2700, Facsimile No. (509) 353-2661.

All other states: Intermountain Field Operations Center, P.O. Box 25086, Building 20, Denver Federal Center, Denver, CO, 80225, Information No. (303) 236-0421, Facsimile No. (303) 236-0238.

Glossary

- Adit** A mine entrance.
- Beneficiation** The processing of ores for the purpose of regulating size, removing unwanted constituents, and improving quality, purity, or assay grade of a desired product.

Cannot verify	MAS/MILS designation utilized when the site evaluator did not have information to complete a record. Used interchangeably with Unknown. Also utilized by USBM for blank records when prior databases were merged. (Fantel 1994)
Commodity	MAS/MILS designation for mineral commodity that has past, present or potential future economic value, plus materials affecting the marketability of same.
Deposit	An accumulated mass of a desirable element, pure or combined with other elements.
Developed deposit .	A mineral deposit at which exploration and at least some mine construction has taken place, but extraction has not begun.
Domain	MAS/MILS designation for land ownership or administration.
Economic deposit ...	A mineral deposit for which profitable extraction or production under defined investment assumptions has been established, analytically demonstrated, or assumed with reasonable certainty.
Explored prospect ..	A mineral location at which some exploration has taken place.
MAS/MILS.....	Minerals Availability System Database, USDI, Bureau of Mines. A comprehensive database for known mining operations, mineral deposits/occurrences and processing plants worldwide.
MILS	Mineral Industry Location System, USDI, Bureau of Mines. A subset of the MAS/MILS database providing locational information.
Mine	An excavation dug in the earth to extract ore or coal, or the site of such an excavation together with its buildings, equipment, etc.
Mineral location	The site of a mineral deposit or occurrence, or of any mineral activity, such as a mine or processing plant.

Past producer	A mineral location at which extraction has ceased and is not expected to recommence, given current technology and economics. ¹⁷	Raw prospect..... A mineralized site that has not been fully explored.
Processing plant	A facility at which concentrate is processed to remove undesirable constituents or to concentrate desirable constituents. Includes smelters, refineries, acid plants.	Status MAS/MILS designation for current activity at a mineral location.
		Temporary shutdown..... A mineral operation that is not operating, but which may be reopened at some time in the future.
		Type MAS/MILS designation for the method of extraction used at a mine.
		Unknown..... See Cannot Verify.

¹⁷The difference between a Past Producer and Temporary Shutdown is that at the former equipment has been sold and the plant dismantled. At a temporarily shutdown site equipment is present and minimal maintenance is ongoing.

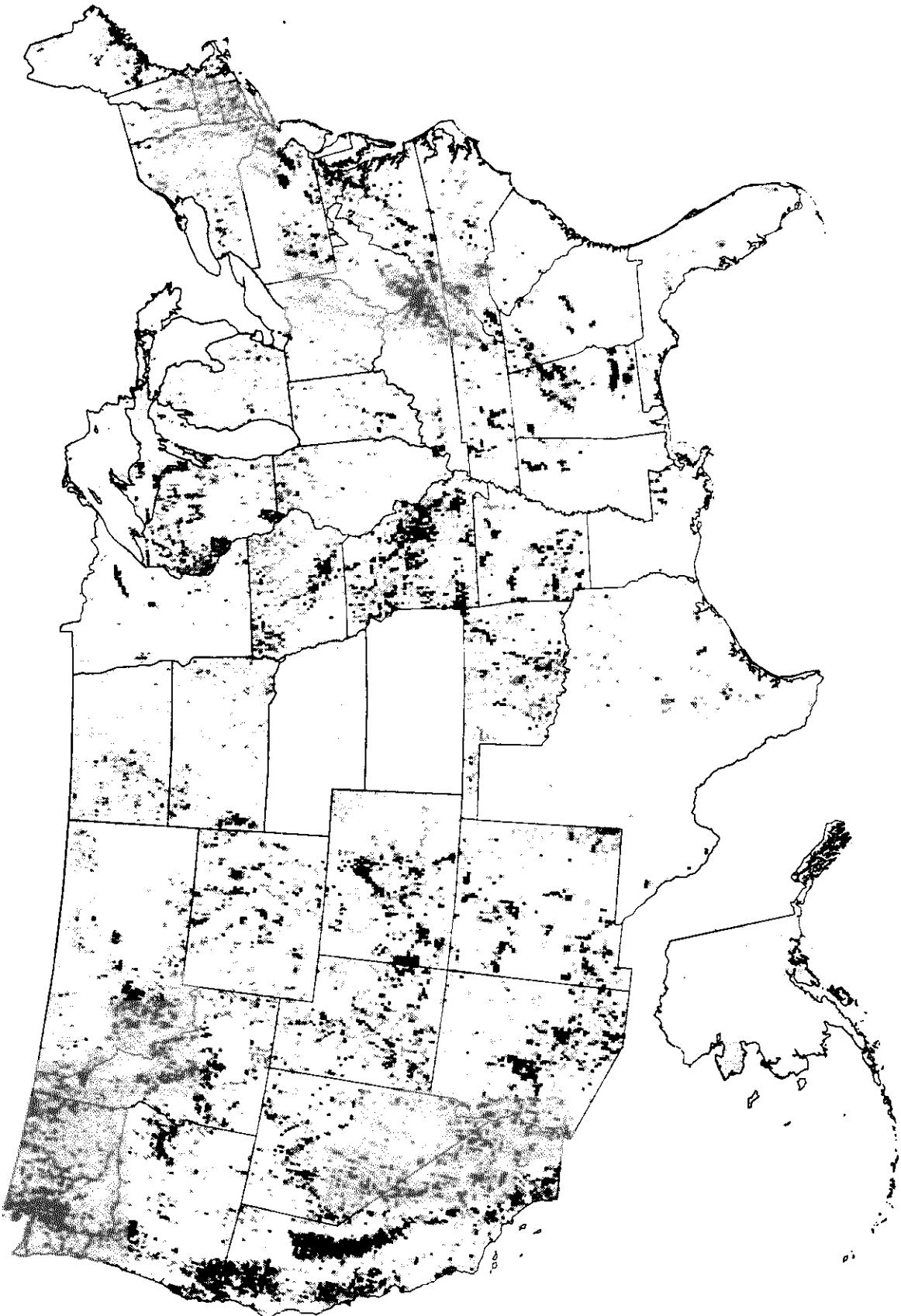


Figure 1.—Map of all mineral locations

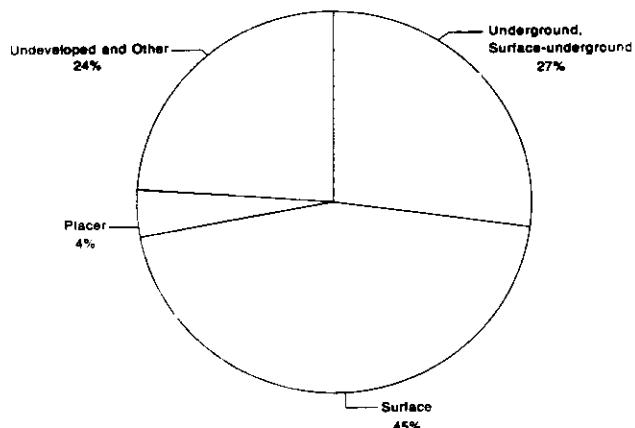


Figure 2.—Mineral locations by types (207,242). Some undeveloped deposits are listed in the MAS/MILS by expected mining method; so, results here are biased away from Undeveloped and Other.

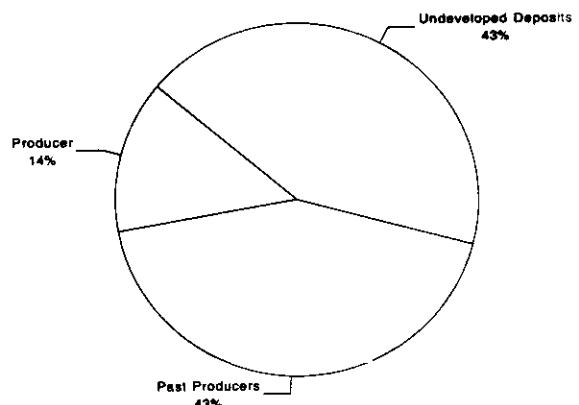


Figure 3.—Mineral locations by status (207,242).

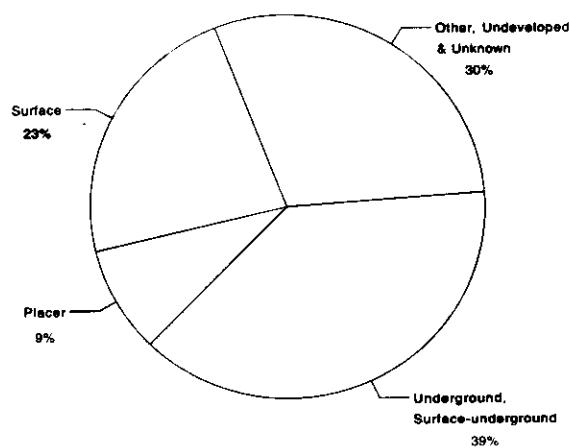


Figure 4.—Mineral locations by type on NFS (38,998).

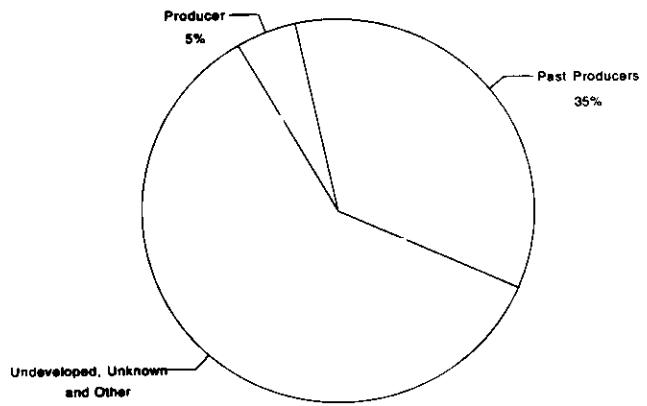


Figure 5.—Mineral locations by status on NFS (38,991).

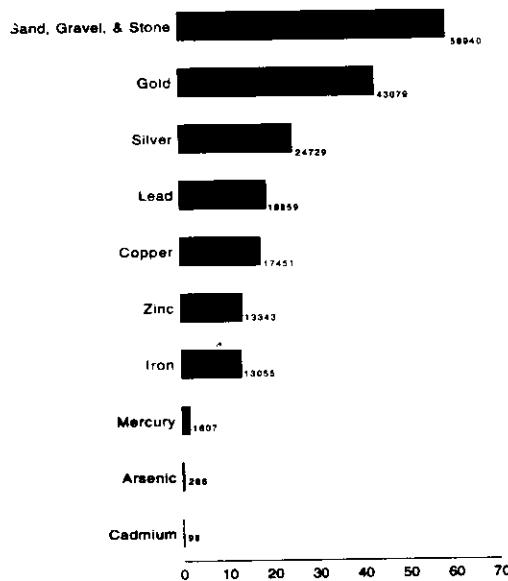


Figure 6.—Commodity occurrence. More than one commodity can occur at a location.

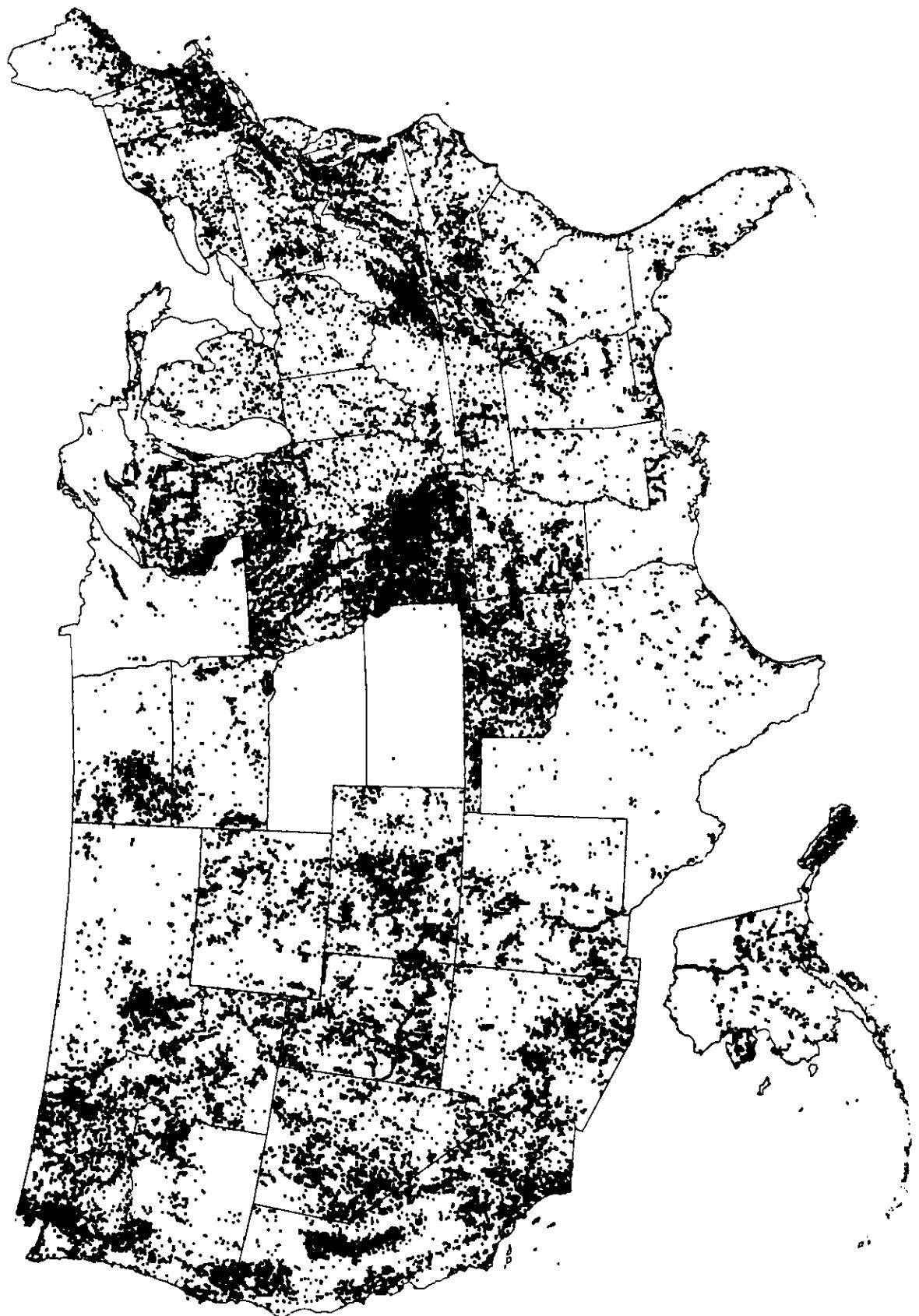


Figure 7.—Past producers - all.

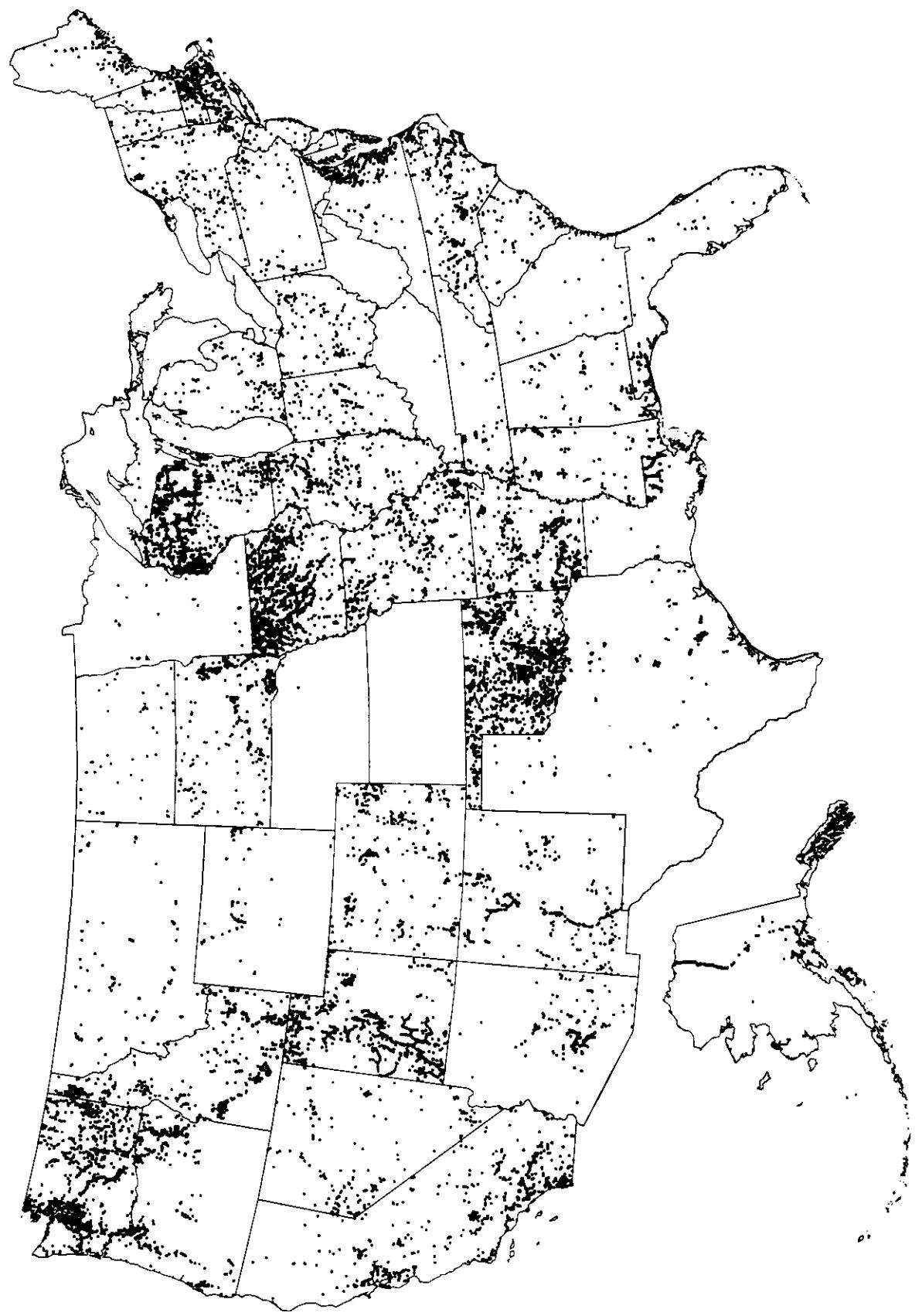


Figure 8.—Past producers - sand and gravel.

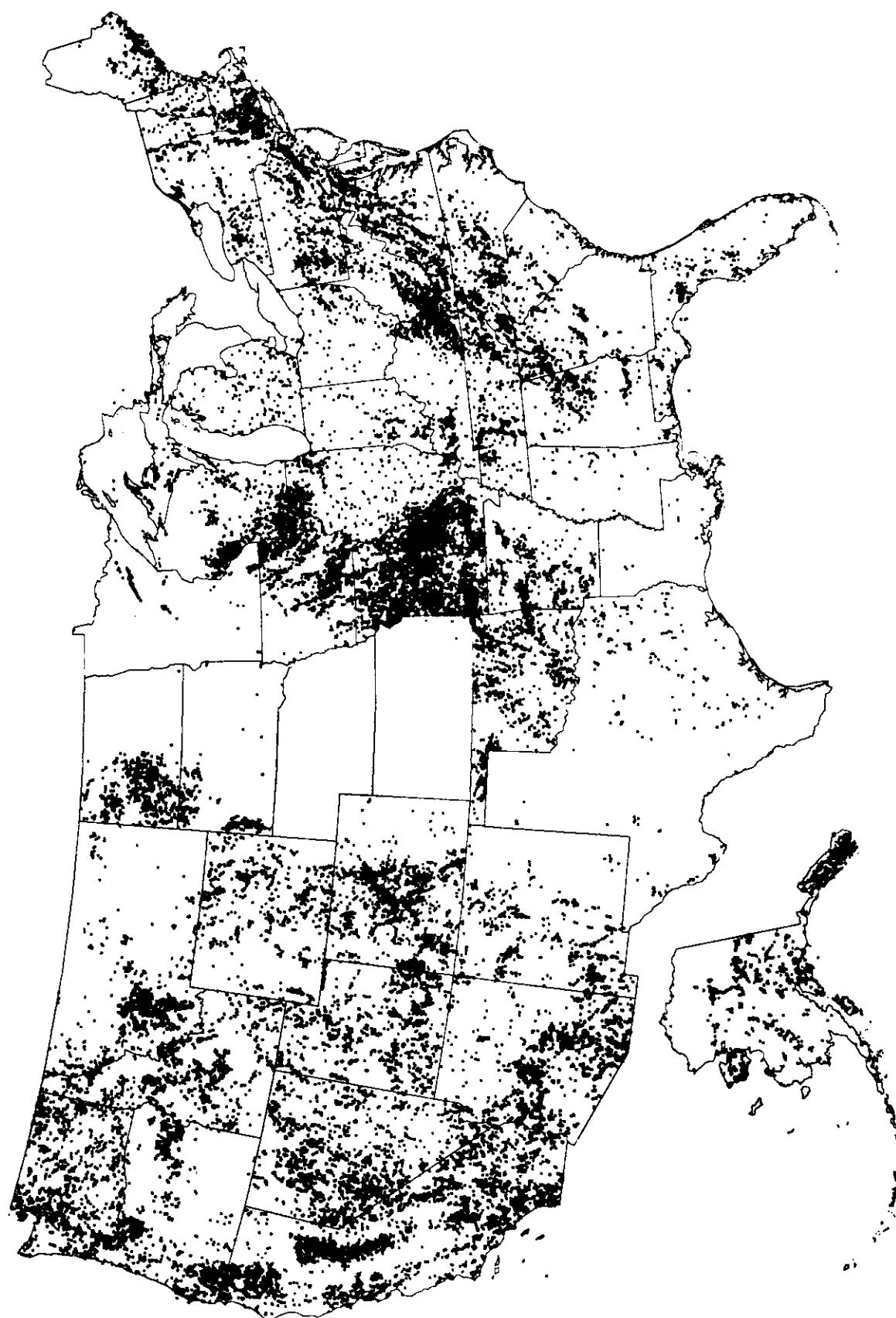


Figure 9.—Past producers - all except sand and gravel.

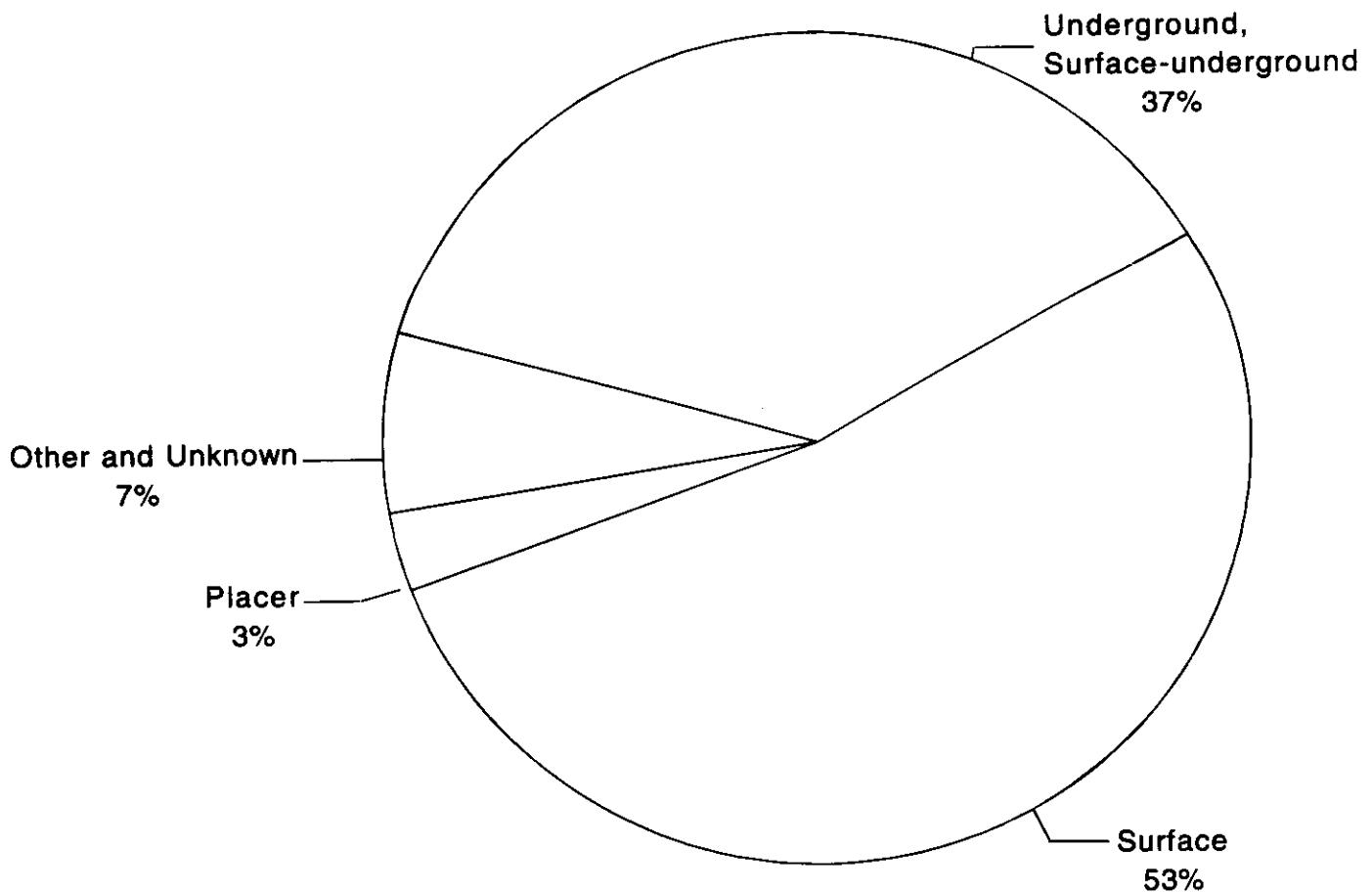


Figure 10.—Mineral locations by type - past producers (89,901 total).

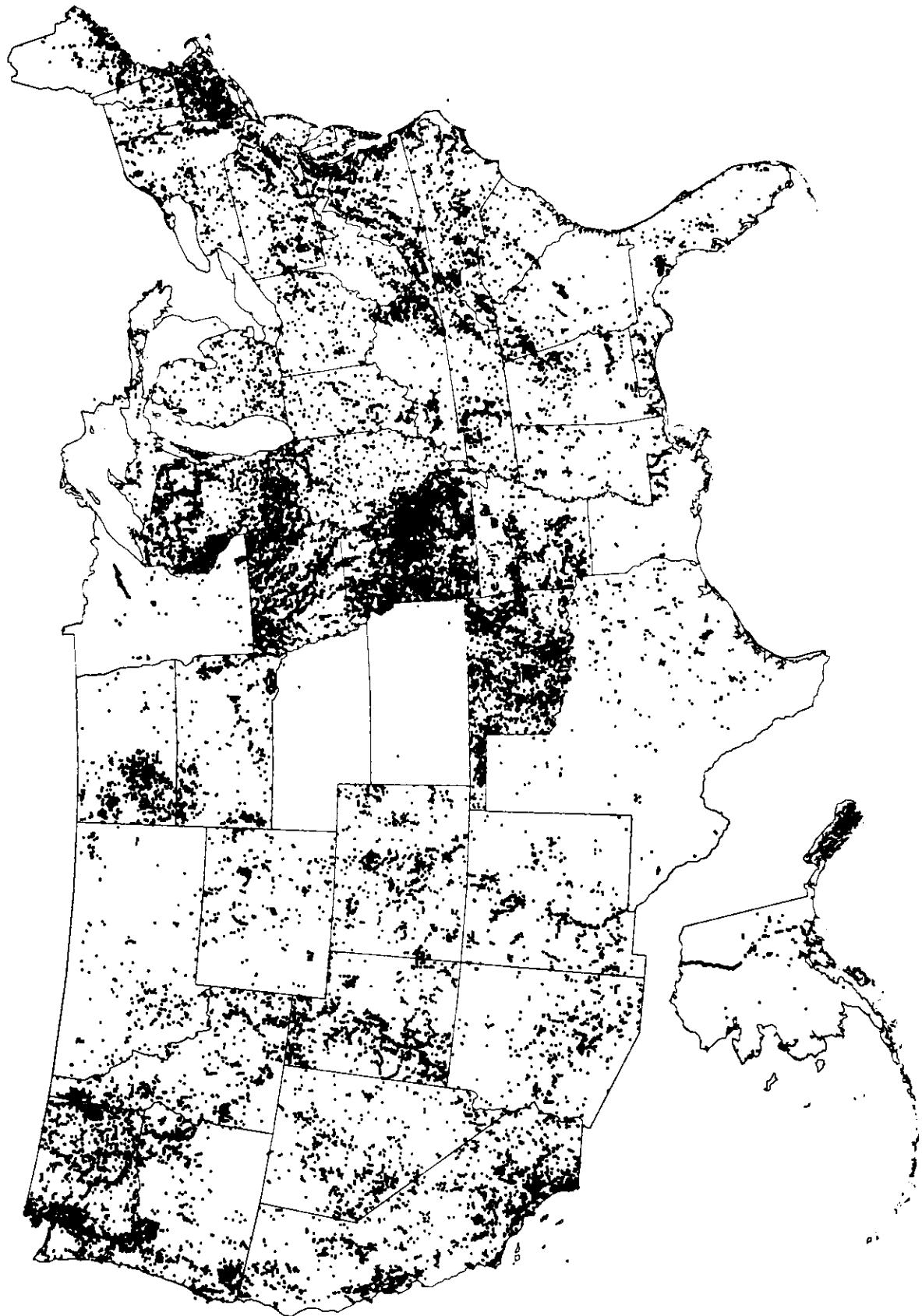


Figure 11.—Past producers - surface.

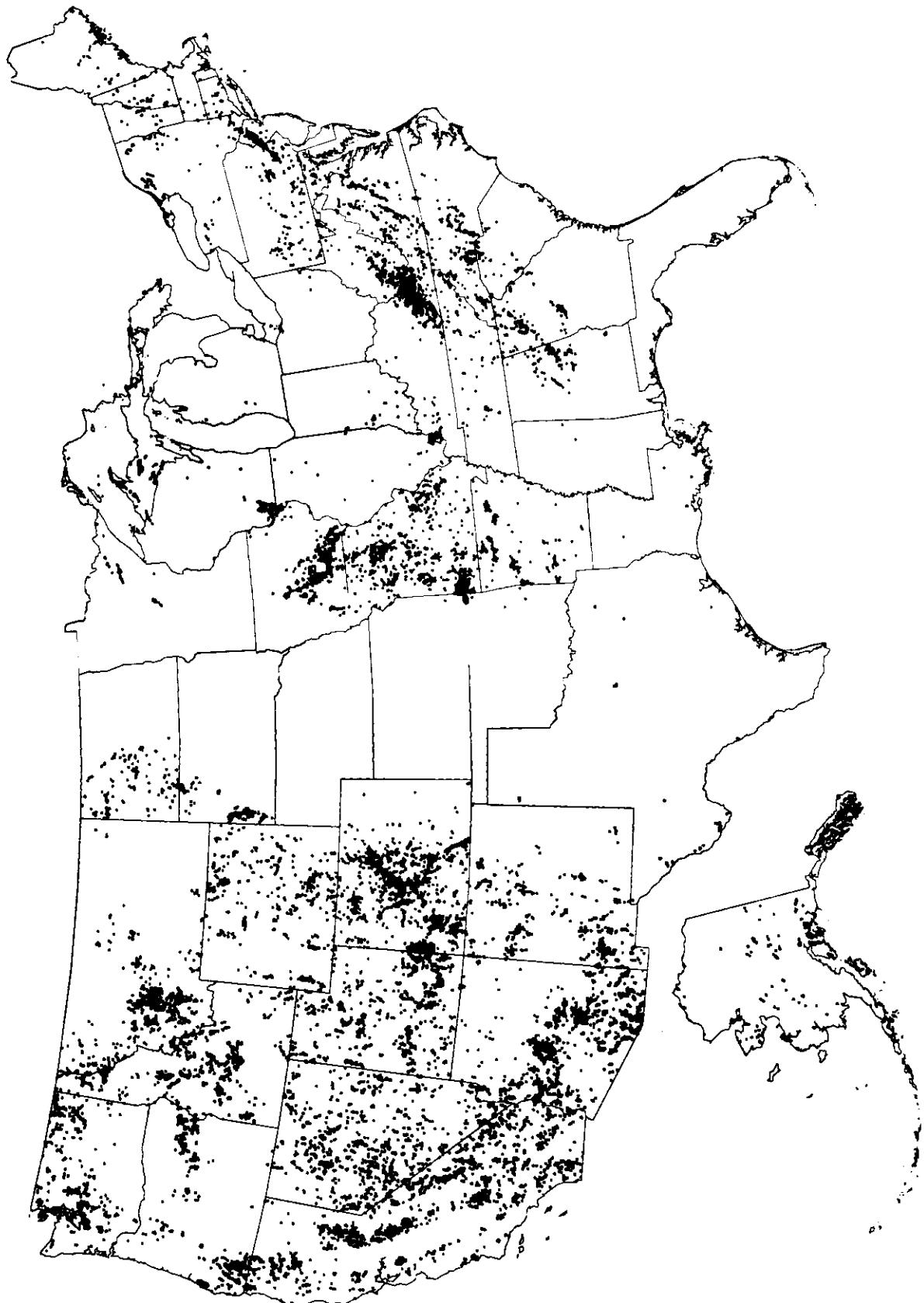


Figure 12.—Past producers - underground and surface-underground.

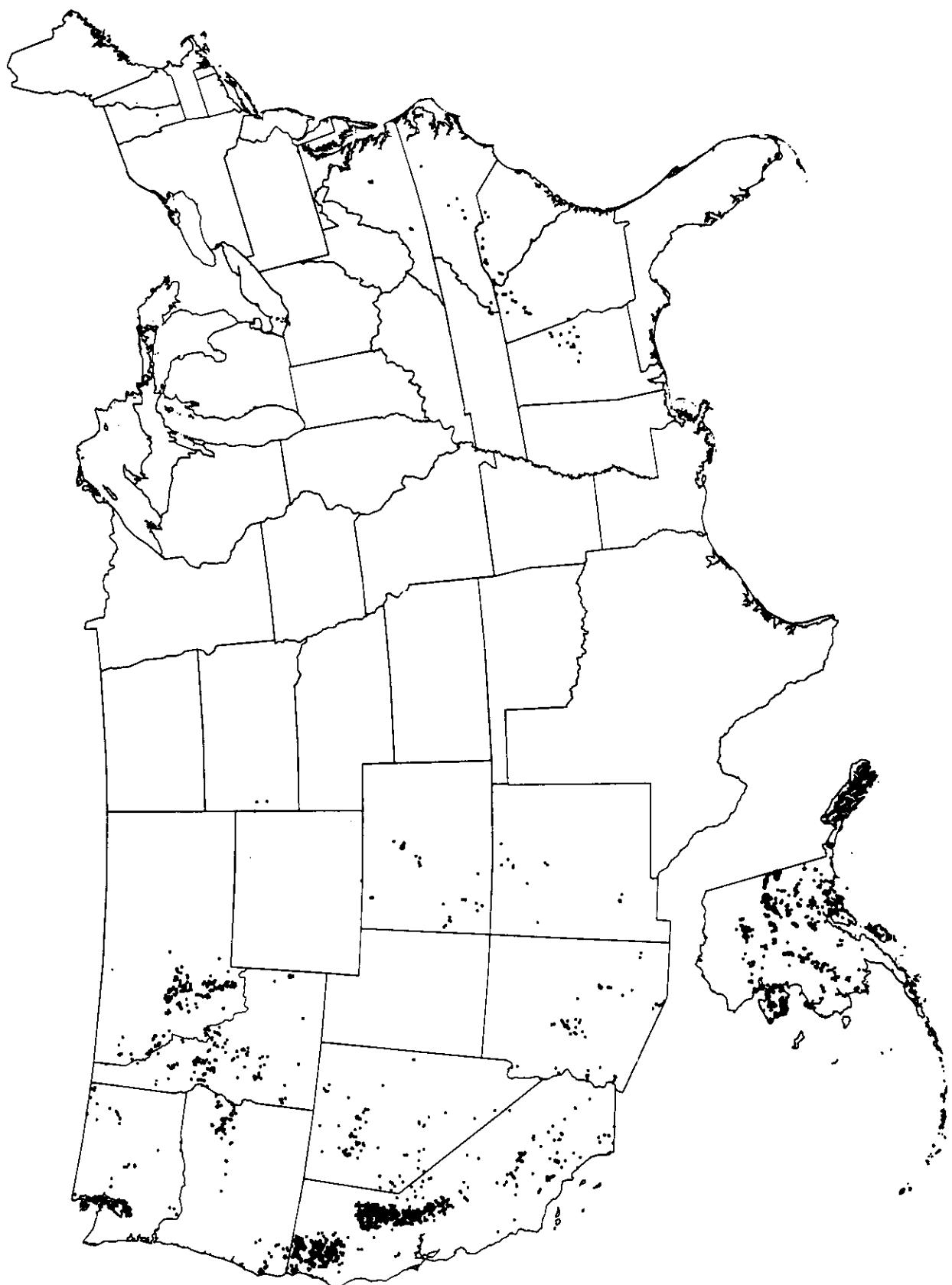


Figure 13.—Past producers - placer

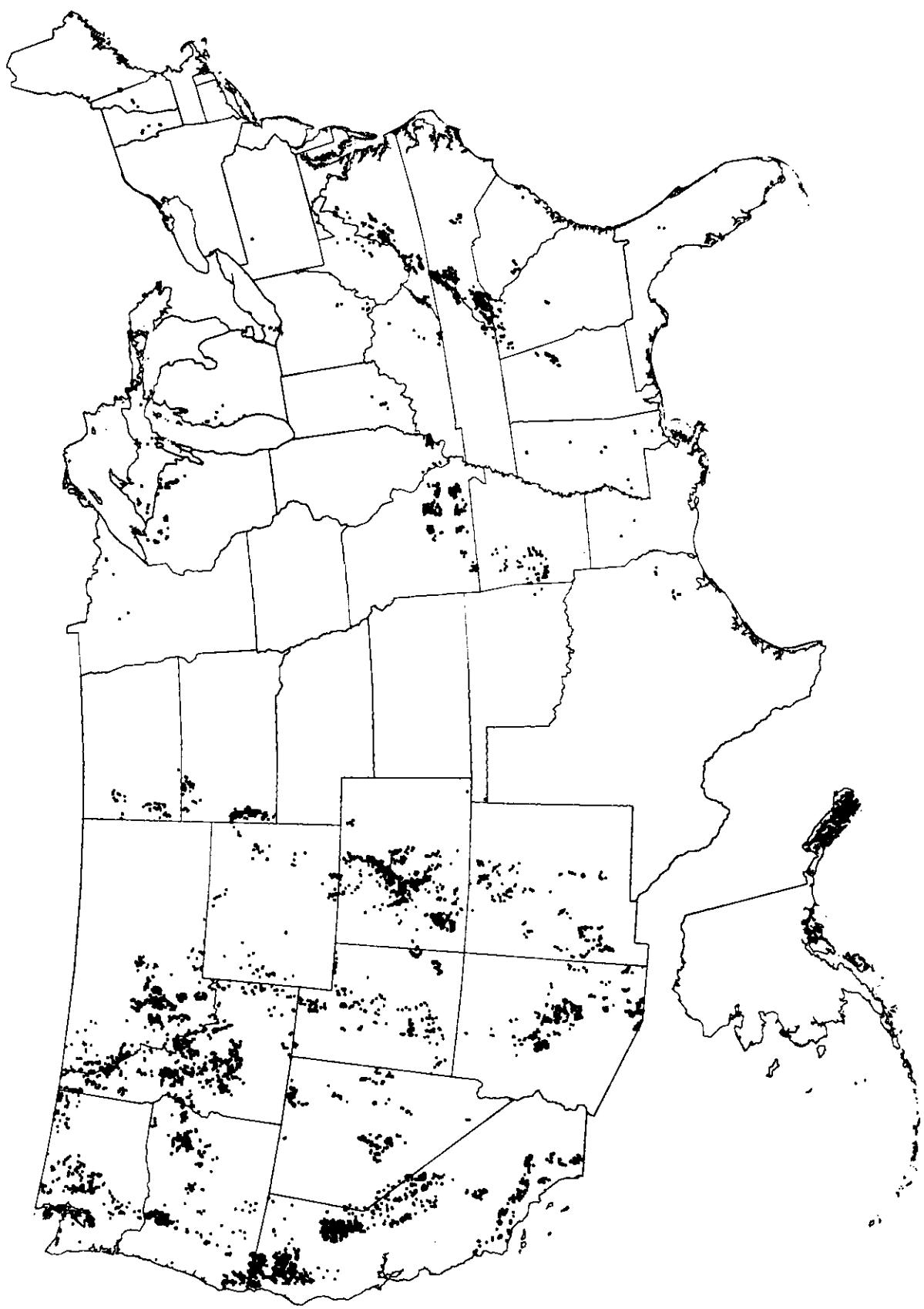


Figure 14.—Past producers - all NFS.

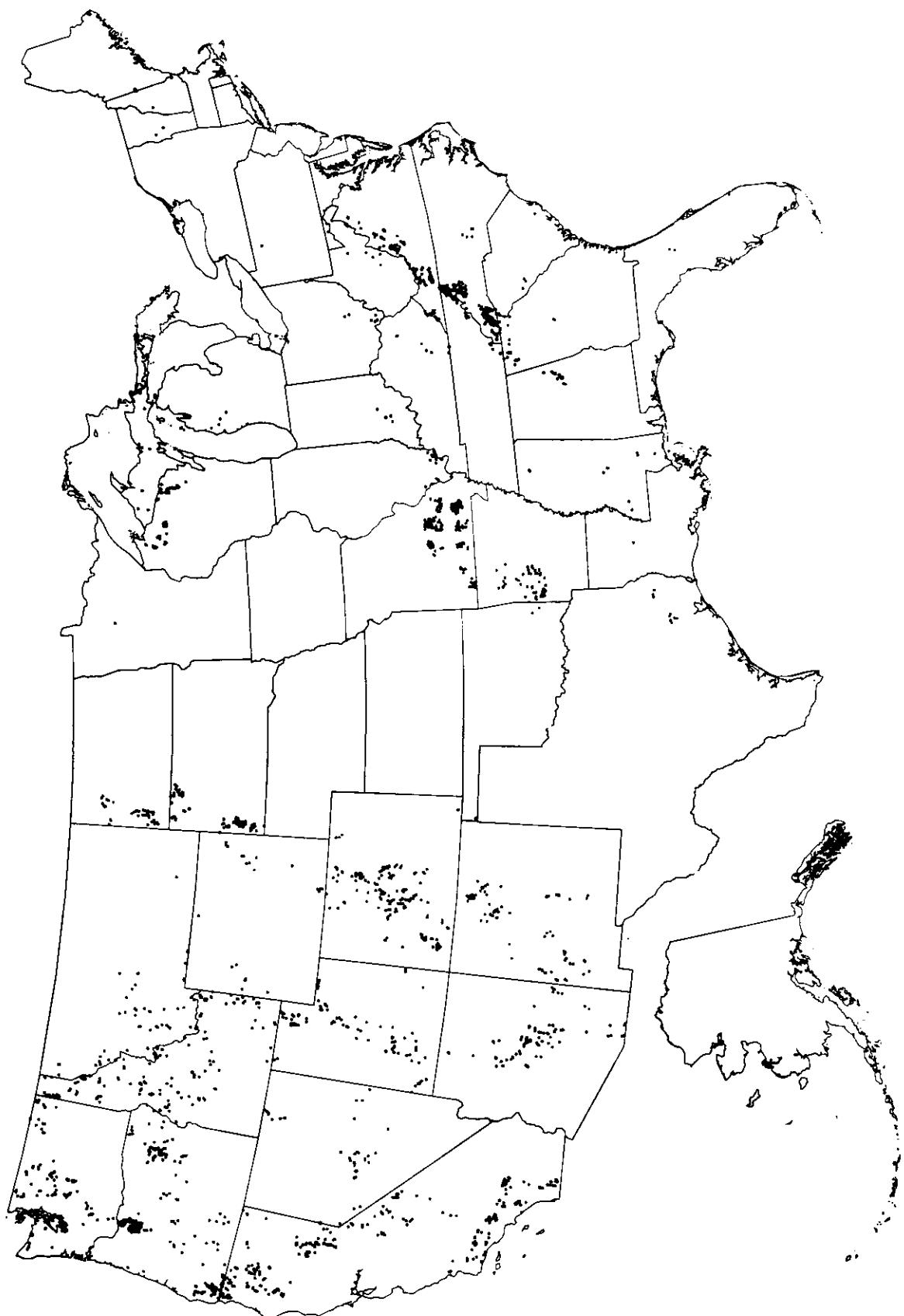


Figure 15.—Past producers - all NFS - surface

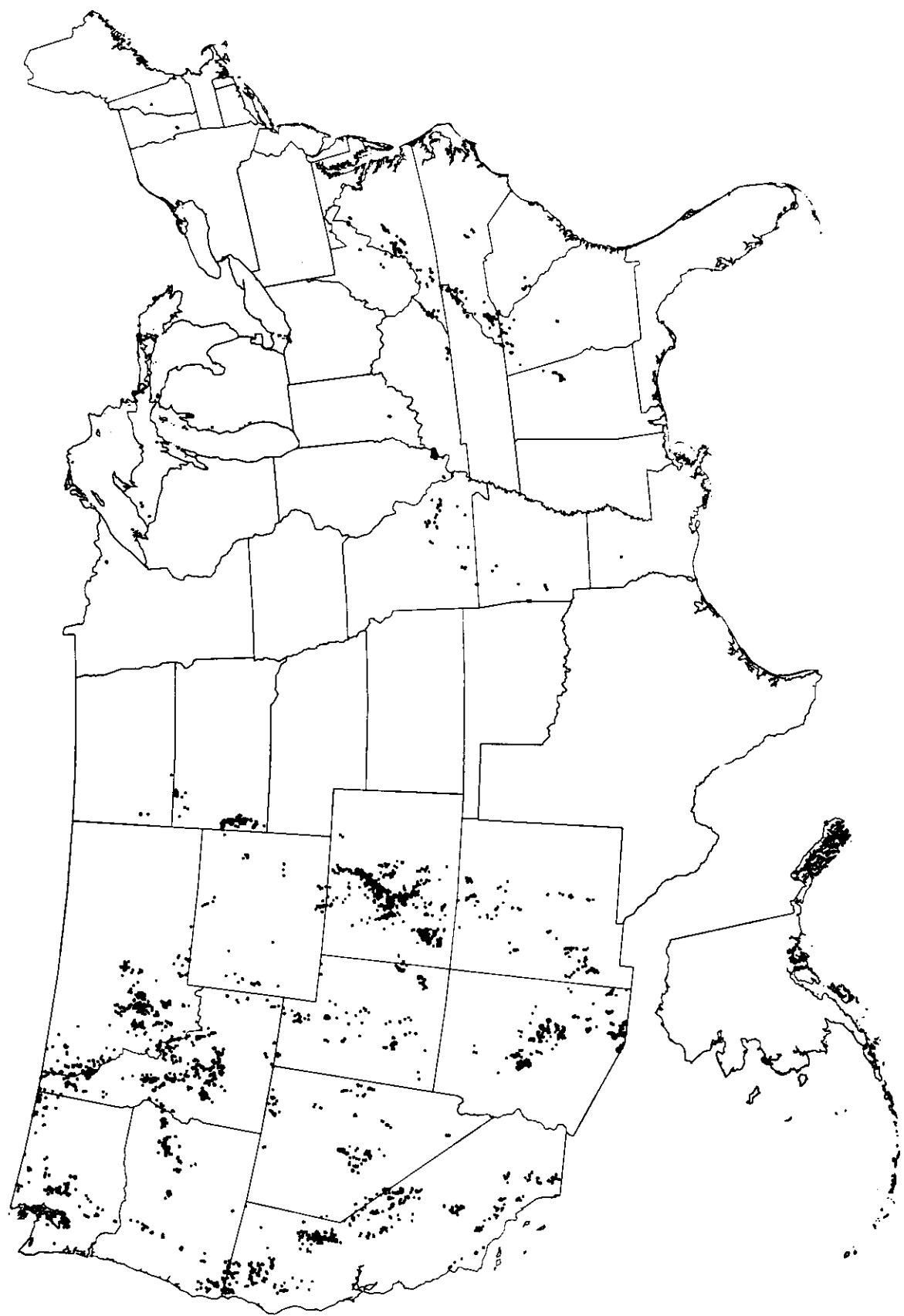


Figure 16.—Past producers - all NFS - underground and surface-underground.

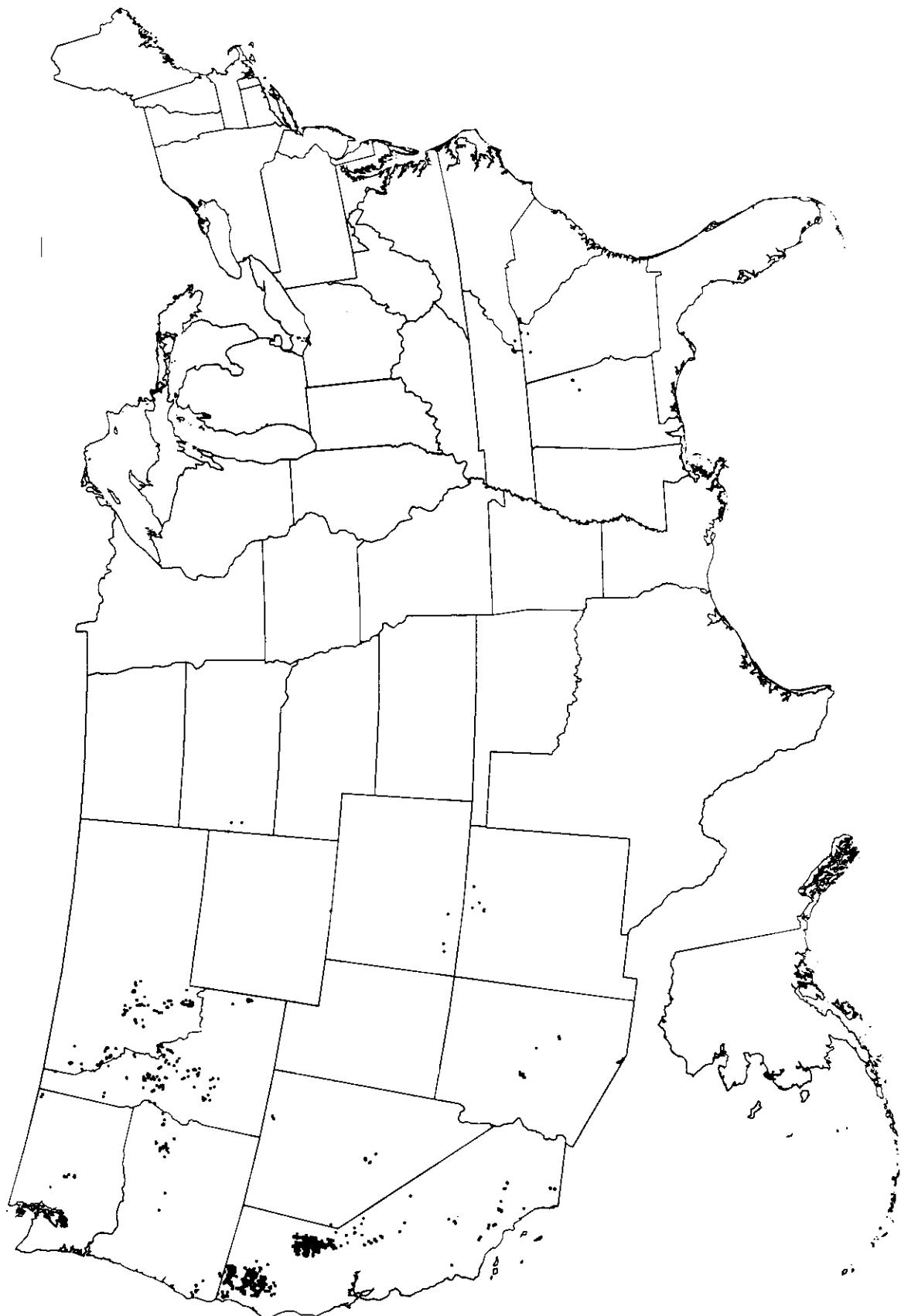
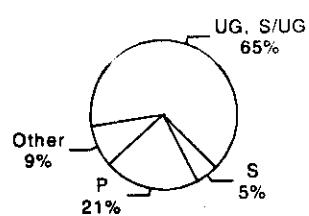
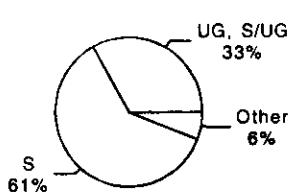


Figure 17.—Past producers - all NFS - placer.

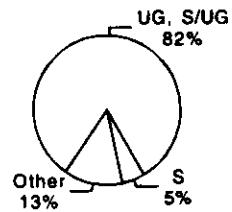
Gold
17,497



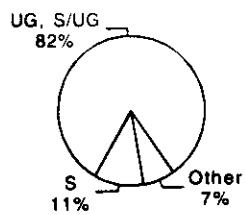
Iron
5,332



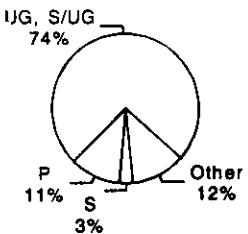
Copper
7,471



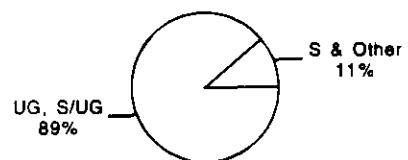
Lead
12,319



Silver
13,522



Zinc
8,966



P = Placer
S = Surface
UG = Underground
S/UG = Surface/Underground

Figure 18.—Past producers - selected commodities.

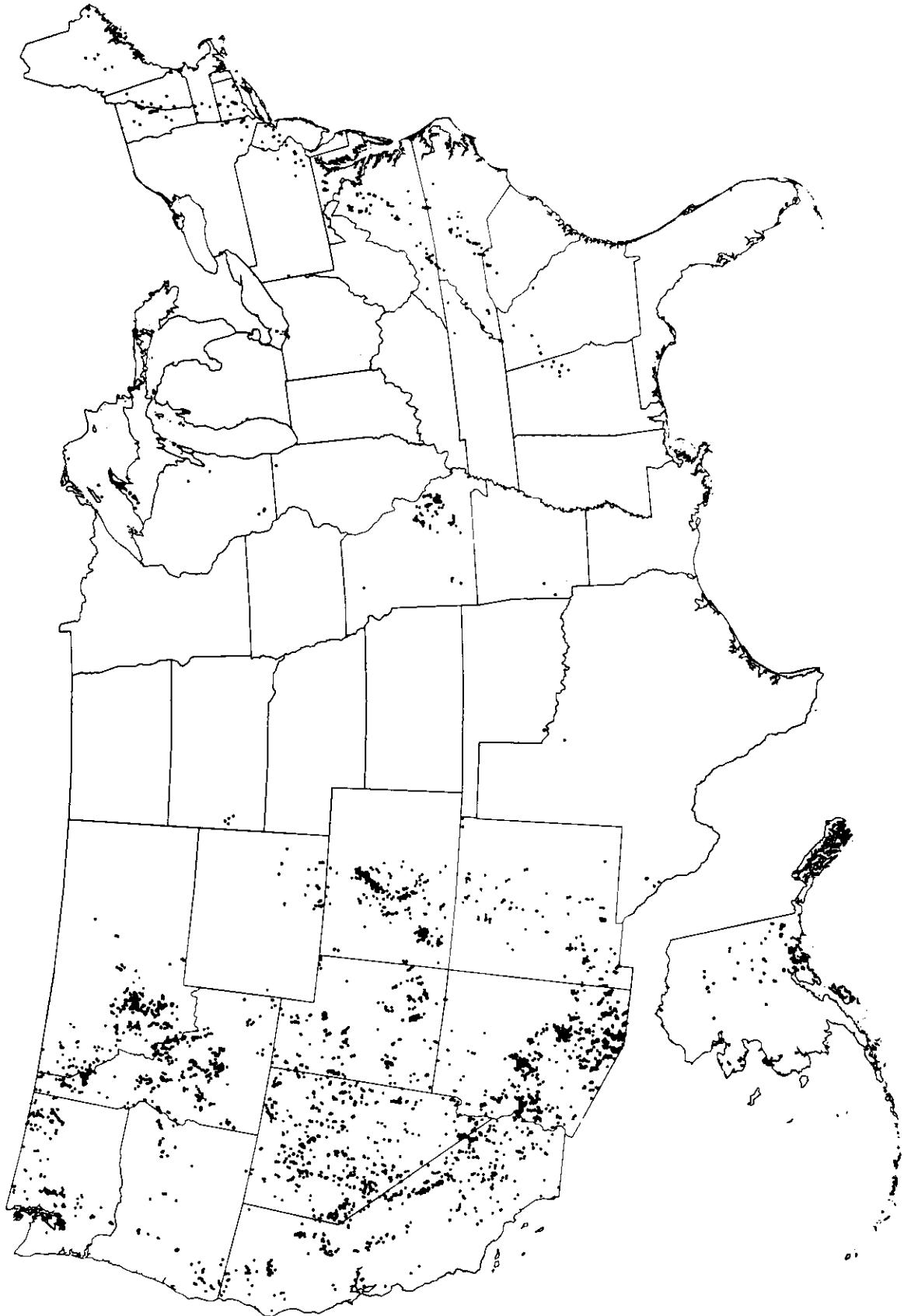


Figure 19.—Past producers - all copper.

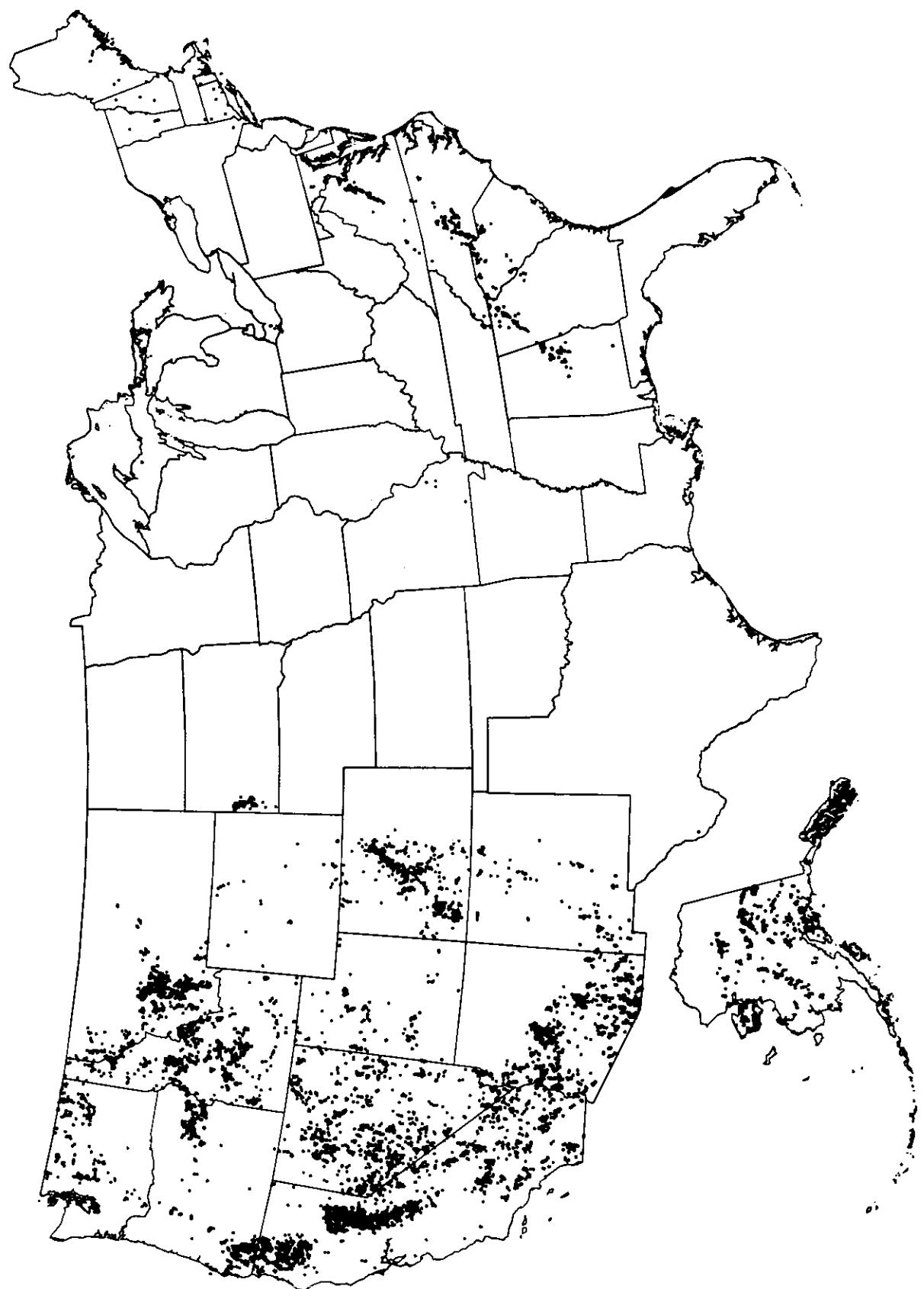


Figure 20.—Past producers - all gold.

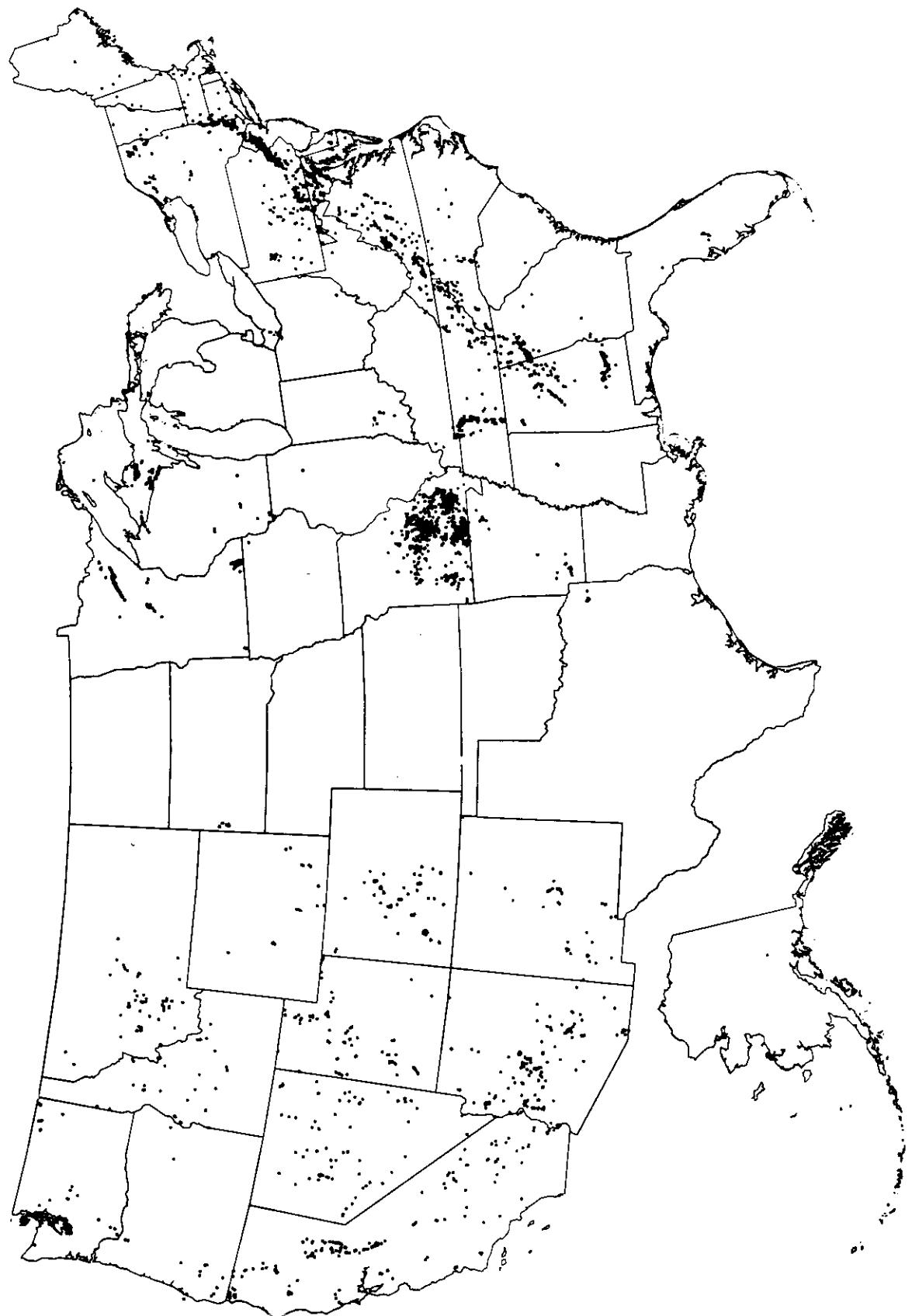


Figure 21.—Past producers - all iron.

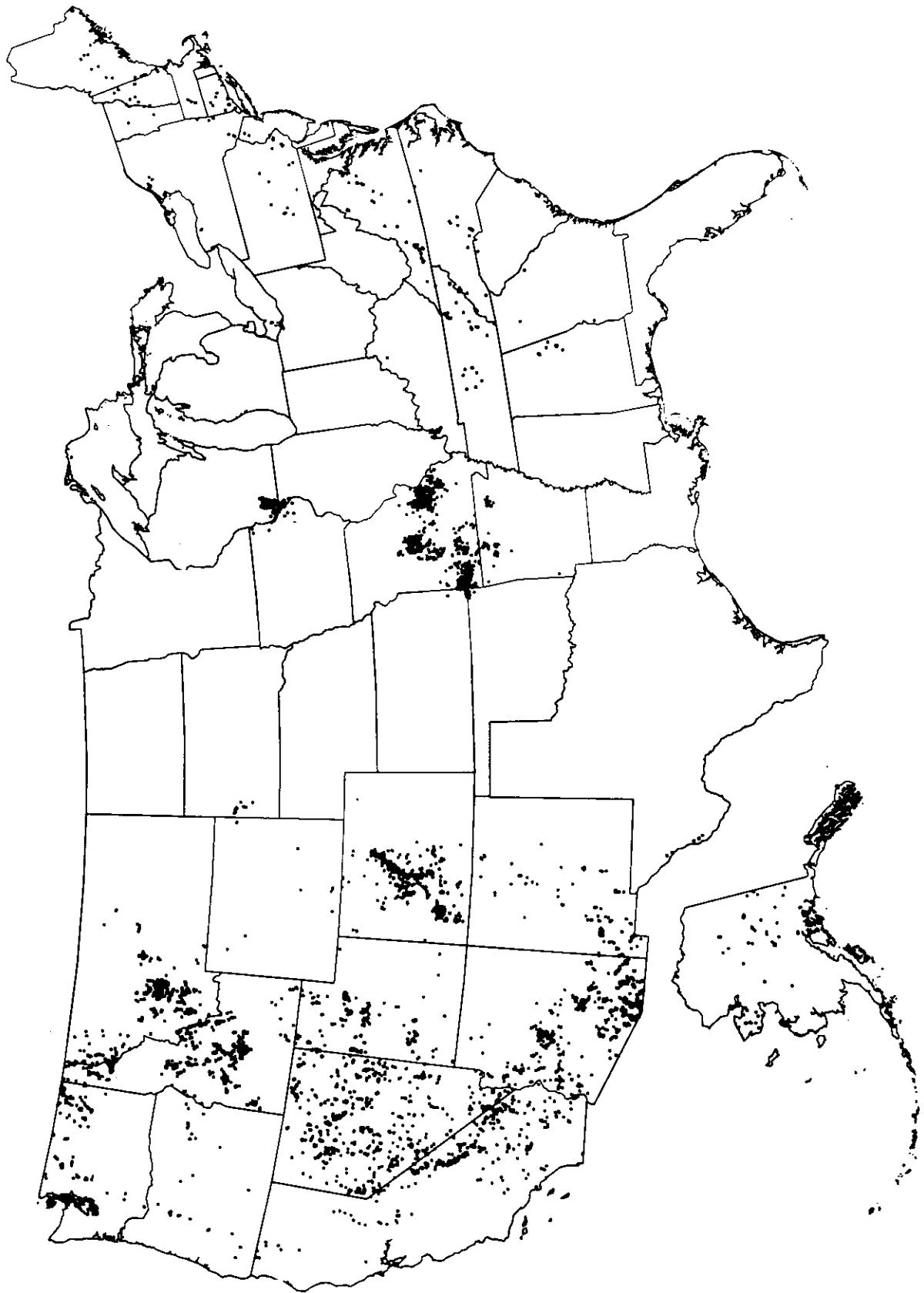


Figure 22.—Past producers - all lead.

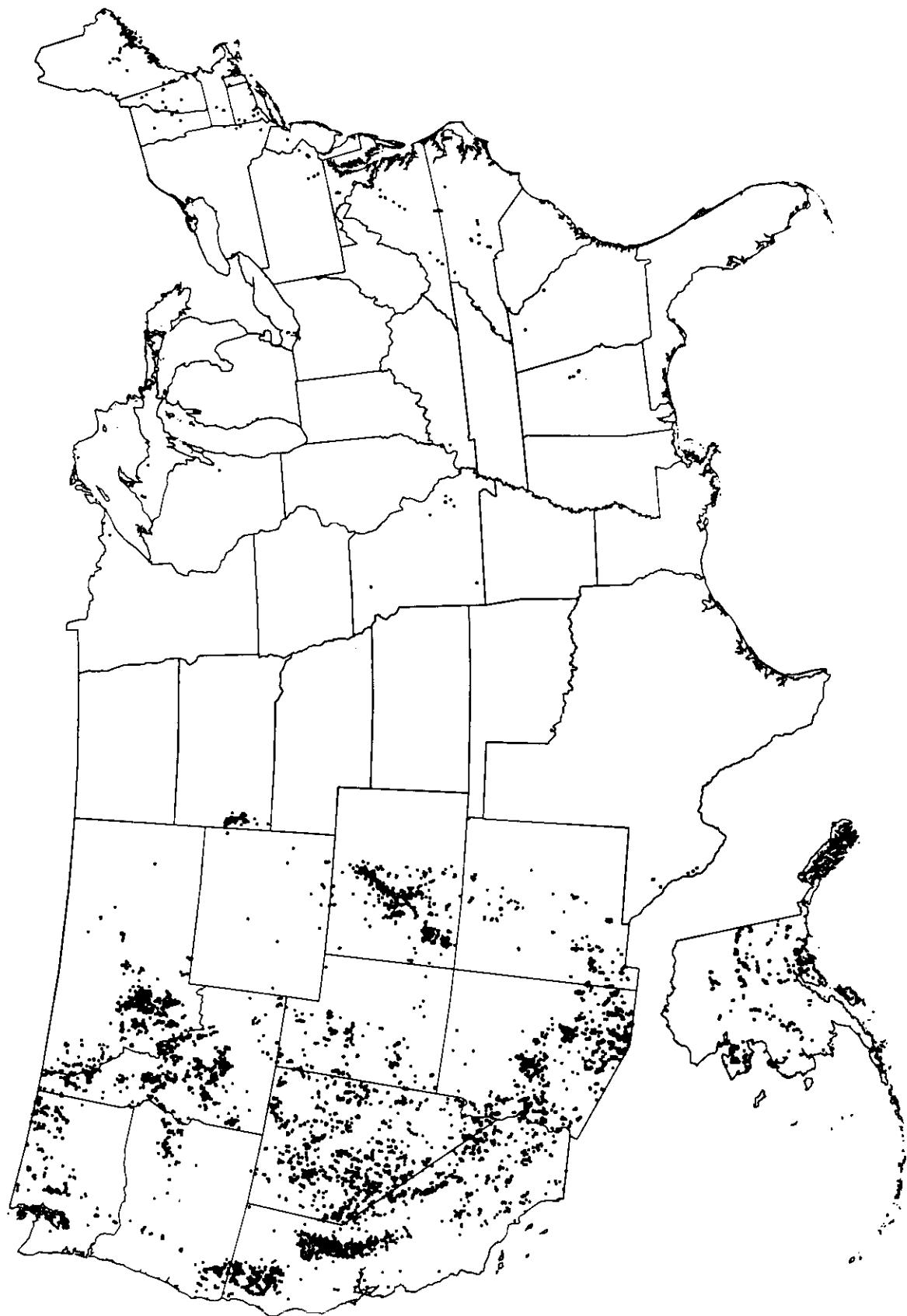


Figure 23.—Past producers - all silver

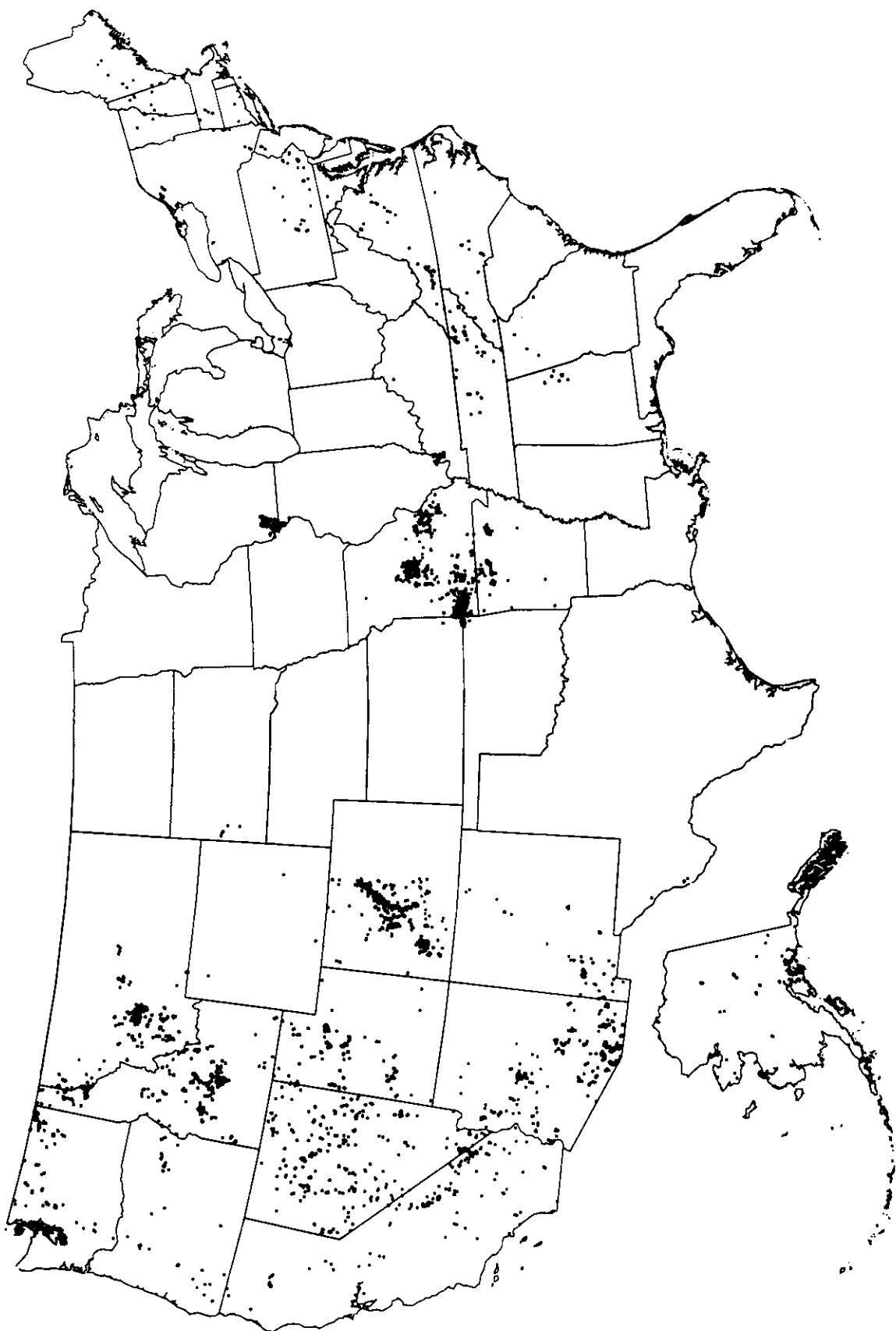


Figure 24.—Past producers - all zinc.

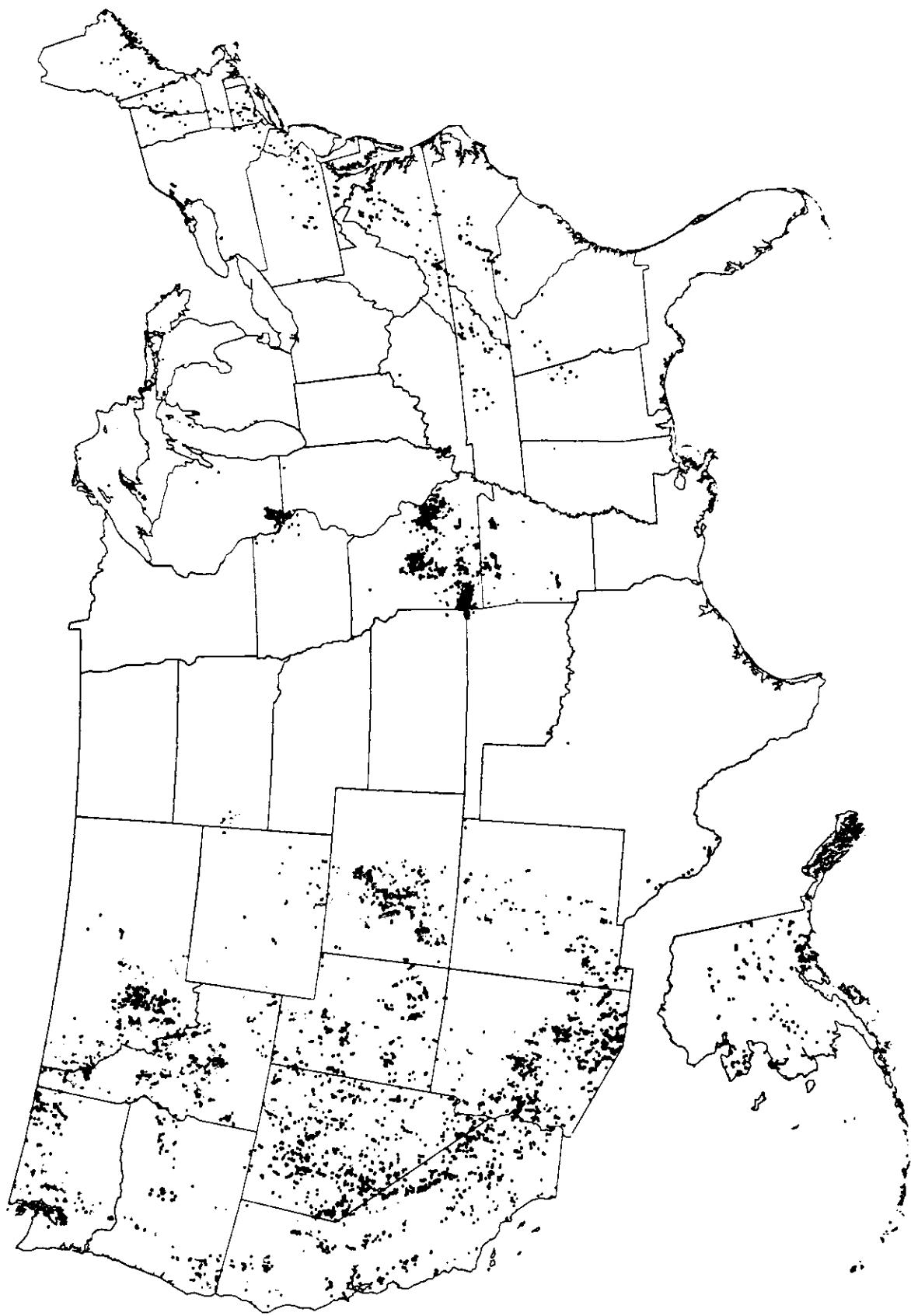


Figure 25.—Past producers - minerals of concern - all and NFS.

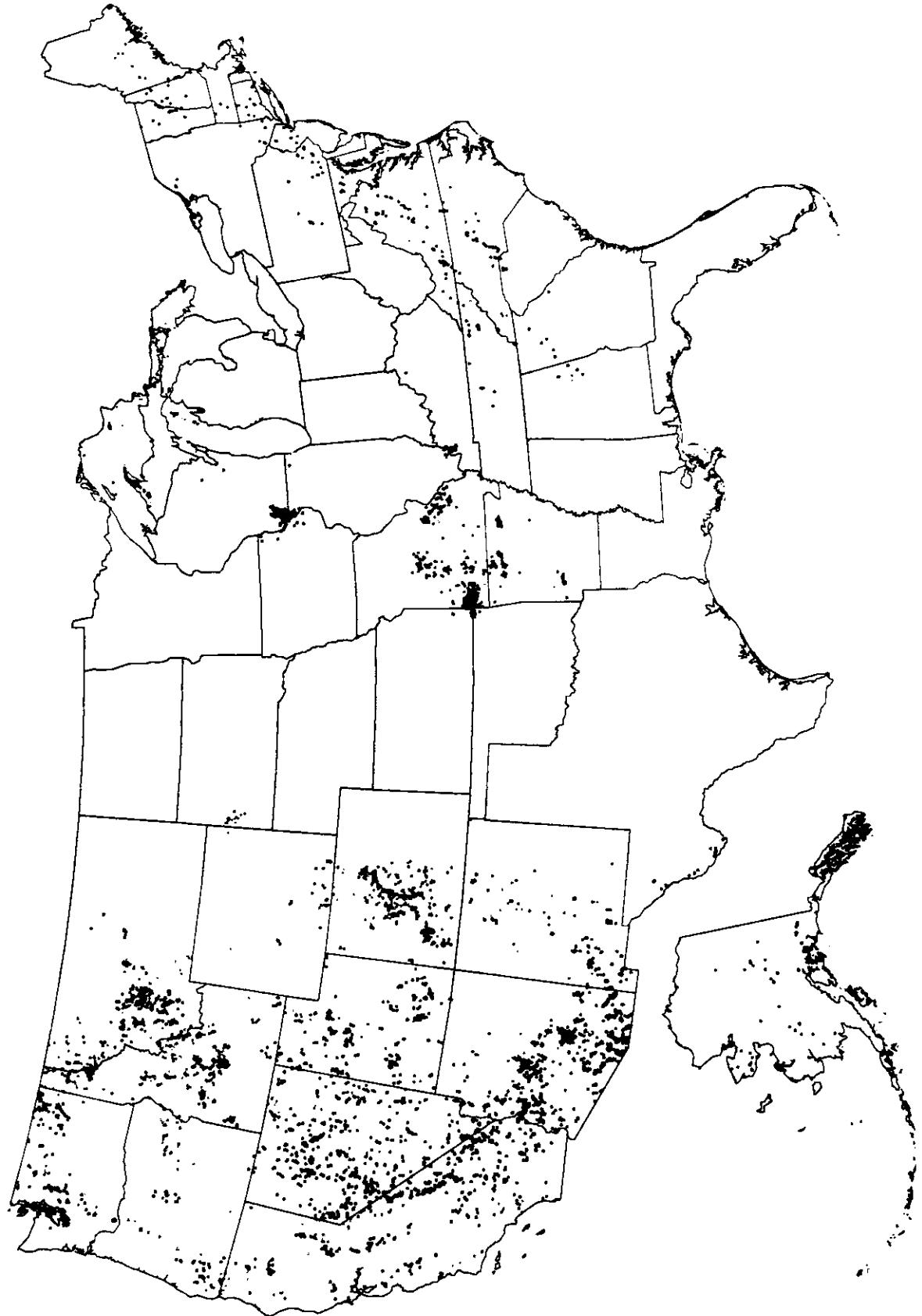


Figure 26.—Past producers - minerals of concern - all and NFS - underground and surface-underground.

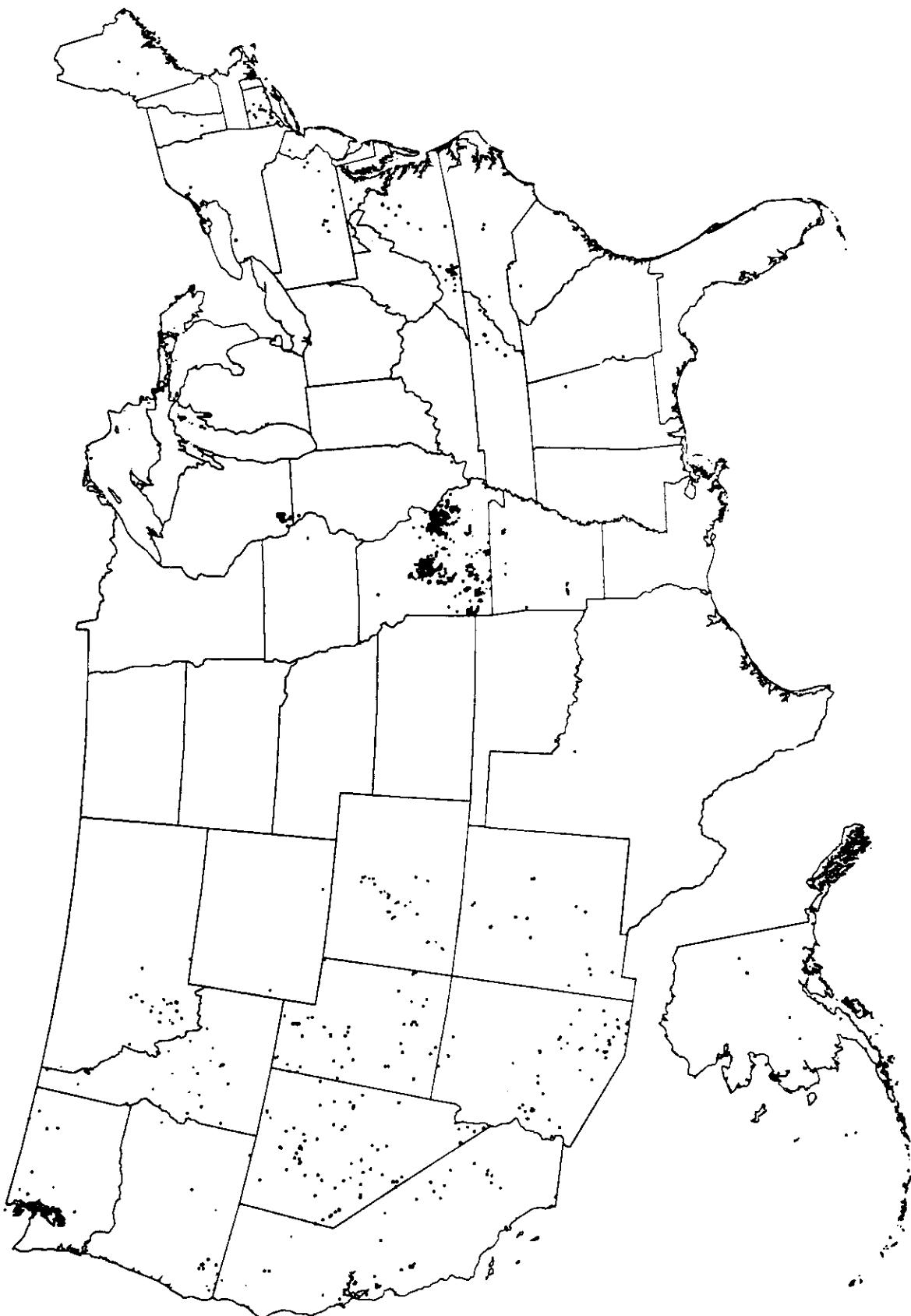


Figure 27.—Past producers - mineral of concern - all and NFS - surface.

Appendices

Appendix A and other tables of this type are read as follows. Starting in the lower right hand corner of the last page of the second half of the table, the upper number (207,242) is the Total number of entries in the table, the lower number (100) is the percent of that Total. The pairs of numbers to the right of the Total are the occurrences overall in each column category (here Type) and the percent of Total each represents. The upper numbers add to the Total; the percents add to 100. The pairs above the Total are the occurrences overall in each row category (here States) and the percent of Total each represents. These add in the same manner.

Each cell contains 4 data items, in order Frequency, Percent, Row %, and Col %. Frequency is the number of occurrences for that row-column pair. Percent signifies the percent of Total that Frequency represents. These can be added either vertically or horizontally to obtain the overall column or row percent values. Row % is the percent of the row total that each cell represents. These values can be compared across the row and add to 100. Col % is the percent of the column total that each cell represents. These should be read and add to 100 vertically.

Appendix A. — Frequency of state by type — all.

State	Type														
	Frequency														
	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known
AL	0	0	0	2	28	57	1145	123	2811	167	9	0	20	4362	
	0.00	0.00	0.00	0.00	0.01	0.03	0.55	0.06	1.36	0.08	0.00	0.00	0.01	2.10	
	0.00	0.00	0.00	0.05	0.64	1.31	26.25	2.82	64.44	3.83	0.21	0.00	0.46		
	0.00	0.00	0.00	0.02	0.32	1.50	5.53	1.39	3.02	0.36	1.89	0.00	0.19		
AK	0	0	1	8	2504	16	3630	127	602	322	4	11	38	7263	
	0.00	0.00	0.00	0.00	1.21	0.01	1.75	0.06	0.29	0.16	0.00	0.01	0.02	3.50	
	0.00	0.00	0.01	0.11	34.48	0.22	49.98	1.75	8.29	4.43	0.06	0.15	0.52		
	0.00	0.00	1.92	0.06	28.55	0.42	17.53	1.44	0.65	0.69	0.84	0.82	0.36		
AZ	0	0	21	223	177	128	1691	1118	1918	2601	24	597	2014	10512	
	0.00	0.00	0.01	0.11	0.09	0.06	0.82	0.54	0.93	1.26	0.01	0.29	0.97	5.07	
	0.00	0.00	0.20	2.12	1.68	1.22	16.09	10.64	18.25	24.74	0.23	5.68	19.16		
	0.00	0.00	40.38	1.73	2.02	3.38	8.16	12.63	2.06	5.57	5.03	44.45	19.06		
AR	0	0	4	29	3	110	138	120	3141	433	16	14	163	4171	
	0.00	0.00	0.00	0.01	0.00	0.05	0.07	0.06	1.52	0.21	0.01	0.01	0.08	2.01	
	0.00	0.00	0.10	0.70	0.07	2.64	3.31	2.88	75.31	10.38	0.38	0.34	3.91		
	0.00	0.00	7.69	0.23	0.03	2.90	0.67	1.36	3.38	0.93	3.35	1.04	1.54		
CA	17	8	1	4382	3967	299	2297	2116	6989	6431	11	76	1600	28194	
	0.01	0.00	0.00	2.11	1.91	0.14	1.11	1.02	3.37	3.10	0.01	0.04	0.77	13.60	
	0.06	0.03	0.00	15.54	14.07	1.06	8.15	7.51	24.79	22.81	0.04	0.27	5.67		
	73.91	5.93	1.92	34.04	45.22	7.89	11.09	23.91	7.52	13.77	2.31	5.66	15.14		
CO	0	14	2	375	63	233	153	124	3227	9301	0	9	364	13865	
	0.00	0.01	0.00	0.18	0.03	0.11	0.07	0.06	1.56	4.49	0.00	0.00	0.18	6.69	
	0.00	0.10	0.01	2.70	0.45	1.68	1.10	0.89	23.27	67.08	0.00	0.06	2.63		
	0.00	10.37	3.85	2.91	0.72	6.15	0.74	1.40	3.47	19.92	0.00	0.67	3.44		
CT	0	0	0	0	0	11	10	14	692	15	4	0	2	748	
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.33	0.01	0.00	0.00	0.00	0.36	
	0.00	0.00	0.00	0.00	0.00	1.47	1.34	1.87	92.51	2.01	0.53	0.00	0.27		
	0.00	0.00	0.00	0.00	0.00	0.29	0.05	0.16	0.74	0.03	0.84	0.00	0.02		
DE	0	0	0	0	0	7	0	0	26	0	0	0	0	33	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	0.00	21.21	0.00	0.00	78.79	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.03	0.00	0.00	0.00	0.00		
DC	0	0	0	0	0	0	1	0	22	0	0	0	0	23	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	
	0.00	0.00	0.00	0.00	0.00	0.00	4.35	0.00	95.65	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00		
FL	0	0	0	0	0	76	218	0	674	0	1	0	1	970	
	0.00	0.00	0.00	0.00	0.00	0.04	0.11	0.00	0.33	0.00	0.00	0.00	0.00	0.47	
	0.00	0.00	0.00	0.00	0.00	7.84	22.47	0.00	69.48	0.00	0.10	0.00	0.10		
	0.00	0.00	0.00	0.00	0.00	2.01	1.05	0.00	0.73	0.00	0.21	0.00	0.01		
GA	0	0	0	2	19	50	588	224	1003	117	5	0	13	2021	
	0.00	0.00	0.00	0.00	0.01	0.02	0.28	0.11	0.48	0.06	0.00	0.00	0.01	0.98	
	0.00	0.00	0.00	0.10	0.94	2.47	29.09	11.08	49.63	5.79	0.25	0.00	0.64		
	0.00	0.00	0.00	0.02	0.22	1.32	2.84	2.53	1.08	0.25	1.05	0.00	0.12		
HI	0	0	0	0	0	9	0	0	46	0	0	0	0	55	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.03	
	0.00	0.00	0.00	0.00	0.00	16.36	0.00	0.00	83.64	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.24	0.00	0.00	0.05	0.00	0.00	0.00	0.00		

(continued)

State	Type															
	Frequency		Percent													
	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
ID	0	30	0	252	743	37	1732	454	2537	2326	3	78	645	8837		
	0.00	0.01	0.00	0.12	0.36	0.02	0.84	0.22	1.22	1.12	0.00	0.04	0.31	4.26		
	0.00	0.34	0.00	2.85	8.41	0.42	19.60	5.14	28.71	26.32	0.03	0.88	7.30			
	0.00	22.22	0.00	1.96	8.47	0.98	8.36	5.13	2.73	4.98	0.63	5.81	6.10			
IL	0	0	0	0	0	53	128	88	1495	203	41	0	16	2024		
	0.00	0.00	0.00	0.00	0.00	0.03	0.06	0.04	0.72	0.10	0.02	0.00	0.01	0.98		
	0.00	0.00	0.00	0.00	0.00	2.62	6.32	4.35	73.86	10.03	2.03	0.00	0.79			
	0.00	0.00	0.00	0.00	0.00	1.40	0.62	0.99	1.61	0.43	8.60	0.00	0.15			
IN	0	0	0	0	0	62	160	8	650	58	58	0	2	998		
	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.00	0.31	0.03	0.03	0.00	0.00	0.48		
	0.00	0.00	0.00	0.00	0.00	6.21	16.03	0.80	65.13	5.81	5.81	0.00	0.20			
	0.00	0.00	0.00	0.00	0.00	1.64	0.77	0.09	0.70	0.12	12.16	0.00	0.02			
IA	0	0	1	0	0	32	0	18	3460	1327	10	0	3	4851		
	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	1.67	0.64	0.00	0.00	0.00	2.34		
	0.00	0.00	0.02	0.00	0.00	0.66	0.00	0.37	71.33	27.36	0.21	0.00	0.06			
	0.00	0.00	1.92	0.00	0.00	0.84	0.00	0.20	3.72	2.84	2.10	0.00	0.03			
KS	0	0	0	0	0	13	0	3	105	55	2	0	1	179		
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.05	0.03	0.00	0.00	0.00	0.09		
	0.00	0.00	0.00	0.00	0.00	7.26	0.00	1.68	58.66	30.73	1.12	0.00	0.56			
	0.00	0.00	0.00	0.00	0.00	0.34	0.00	0.03	0.11	0.12	0.42	0.00	0.01			
KY	0	0	0	7	0	217	30	23	1172	1311	18	0	1	2779		
	0.00	0.00	0.00	0.00	0.00	0.10	0.01	0.01	0.57	0.63	0.01	0.00	0.00	1.34		
	0.00	0.00	0.00	0.25	0.00	7.81	1.08	0.83	42.17	47.18	0.65	0.00	0.04			
	0.00	0.00	0.00	0.05	0.00	5.73	0.14	0.26	1.26	2.81	3.77	0.00	0.01			
LA	0	0	0	0	0	41	68	28	427	12	15	0	1	592		
	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.01	0.21	0.01	0.01	0.00	0.00	0.29		
	0.00	0.00	0.00	0.00	0.00	6.93	11.49	4.73	72.13	2.03	2.53	0.00	0.17			
	0.00	0.00	0.00	0.00	0.00	1.08	0.33	0.32	0.46	0.03	3.14	0.00	0.01			
ME	0	0	0	154	0	13	199	16	774	206	0	0	20	1382		
	0.00	0.00	0.00	0.07	0.00	0.01	0.10	0.01	0.37	0.10	0.00	0.00	0.01	0.67		
	0.00	0.00	0.00	11.14	0.00	0.94	14.40	1.16	56.01	14.91	0.00	0.00	1.45			
	0.00	0.00	0.00	1.20	0.00	0.34	0.96	0.18	0.83	0.44	0.00	0.00	0.19			
MD	0	0	0	11	1	27	21	37	653	41	2	0	0	793		
	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.02	0.32	0.02	0.00	0.00	0.00	0.38		
	0.00	0.00	0.00	1.39	0.13	3.40	2.65	4.67	82.35	5.17	0.25	0.00	0.00			
	0.00	0.00	0.00	0.09	0.01	0.71	0.10	0.42	0.70	0.09	0.42	0.00	0.00			
MA	0	0	0	7	0	45	82	2	512	13	0	0	1	662		
	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.00	0.25	0.01	0.00	0.00	0.00	0.32		
	0.00	0.00	0.00	1.06	0.00	6.80	12.39	0.30	77.34	1.96	0.00	0.00	0.15			
	0.00	0.00	0.00	0.05	0.00	1.19	0.40	0.02	0.55	0.03	0.00	0.00	0.01			
MI	5	0	0	79	0	73	786	34	1215	391	1	0	19	2603		
	0.00	0.00	0.00	0.04	0.00	0.04	0.38	0.02	0.59	0.19	0.00	0.00	0.01	1.26		
	0.19	0.00	0.00	3.03	0.00	2.80	30.20	1.31	46.68	15.02	0.04	0.00	0.73			
	21.74	0.00	0.00	0.61	0.00	1.93	3.80	0.38	1.31	0.84	0.21	0.00	0.18			
MN	0	0	0	109	0	74	17	11	1432	109	1	0	7	1760		
	0.00	0.00	0.00	0.05	0.00	0.04	0.01	0.01	0.69	0.05	0.00	0.00	0.00	0.85		
	0.00	0.00	0.00	6.19	0.00	4.20	0.97	0.63	81.36	6.19	0.06	0.00	0.40			
	0.00	0.00	0.00	0.85	0.00	1.95	0.08	0.12	1.54	0.23	0.21	0.00	0.07			
MS	0	0	0	177	0	29	491	0	295	5	37	0	4	1038		
	0.00	0.00	0.00	0.09	0.00	0.01	0.24	0.00	0.14	0.00	0.02	0.00	0.00	0.50		
	0.00	0.00	0.00	17.05	0.00	2.79	47.30	0.00	28.42	0.48	3.56	0.00	0.39			
	0.00	0.00	0.00	1.37	0.00	0.77	2.37	0.00	0.32	0.01	7.76	0.00	0.04			

(continued)

State	Type															
	Frequency		Percent													
	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
MO	0	0	0	12	0	90	25	96	10184	4211	39	1	41	14699		
	0.00	0.00	0.00	0.01	0.00	0.04	0.01	0.05	4.91	2.03	0.02	0.00	0.02	7.09		
	0.00	0.00	0.00	0.08	0.00	0.61	0.17	0.65	69.28	28.65	0.27	0.01	0.28			
	0.00	0.00	0.00	0.09	0.00	2.38	0.12	1.08	10.96	9.02	8.18	0.07	0.39			
MT	0	33	0	1602	524	40	267	451	1345	2781	1	12	377	7433		
	0.00	0.02	0.00	0.77	0.25	0.02	0.13	0.22	0.65	1.34	0.00	0.01	0.18	3.59		
	0.00	0.44	0.00	21.55	7.05	0.54	3.59	6.07	18.09	37.41	0.01	0.16	5.07			
	0.00	24.44	0.00	12.44	5.97	1.06	1.29	5.10	1.45	5.96	0.21	0.89	3.57			
NE	0	0	0	0	0	8	0	0	59	4	14	0	0	85		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.04		
	0.00	0.00	0.00	0.00	0.00	9.41	0.00	0.00	69.41	4.71	16.47	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.06	0.01	2.94	0.00	0.00			
NV	0	13	16	1021	196	180	338	693	2039	2535	11	51	1411	8504		
	0.00	0.01	0.01	0.49	0.09	0.09	0.16	0.33	0.98	1.22	0.01	0.02	0.68	4.10		
	0.00	0.15	0.19	12.01	2.30	2.12	3.97	8.15	23.98	29.81	0.13	0.60	16.59			
	0.00	9.63	30.77	7.93	2.23	4.75	1.63	7.83	2.19	5.43	2.31	3.80	13.35			
NH	0	0	0	11	1	9	214	50	262	33	5	0	6	591		
	0.00	0.00	0.00	0.01	0.00	0.00	0.10	0.02	0.13	0.02	0.00	0.00	0.00	0.29		
	0.00	0.00	0.00	1.86	0.17	1.52	36.21	8.46	44.33	5.58	0.85	0.00	1.02			
	0.00	0.00	0.00	0.09	0.01	0.24	1.03	0.56	0.28	0.07	1.05	0.00	0.06			
NJ	0	0	0	1	0	48	23	82	231	76	2	0	19	482		
	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.04	0.11	0.04	0.00	0.00	0.01	0.23		
	0.00	0.00	0.00	0.21	0.00	9.96	4.77	17.01	47.93	15.77	0.41	0.00	3.94			
	0.00	0.00	0.00	0.01	0.00	1.27	0.11	0.93	0.25	0.16	0.42	0.00	0.18			
NM	0	0	0	175	55	92	806	332	3415	1795	10	123	1372	8175		
	0.00	0.00	0.00	0.08	0.03	0.04	0.39	0.16	1.65	0.87	0.00	0.06	0.66	3.94		
	0.00	0.00	0.00	2.14	0.67	1.13	9.86	4.06	41.77	21.96	0.12	1.50	16.78			
	0.00	0.00	0.00	1.36	0.63	2.43	3.89	3.75	3.67	3.84	2.10	9.16	12.98			
NY	0	0	1	134	0	58	68	52	1367	138	1	145	36	2000		
	0.00	0.00	0.00	0.06	0.00	0.03	0.03	0.03	0.66	0.07	0.00	0.07	0.02	0.97		
	0.00	0.00	0.05	6.70	0.00	2.90	3.40	2.60	68.35	6.90	0.05	7.25	1.80			
	0.00	0.00	1.92	1.04	0.00	1.53	0.33	0.59	1.47	0.30	0.21	10.80	0.34			
NC	0	0	0	253	8	73	432	211	2049	223	24	0	15	3288		
	0.00	0.00	0.00	0.12	0.00	0.04	0.21	0.10	0.99	0.11	0.01	0.00	0.01	1.59		
	0.00	0.00	0.00	7.69	0.24	2.22	13.14	6.42	62.32	6.78	0.73	0.00	0.46			
	0.00	0.00	0.00	1.97	0.09	1.93	2.09	2.38	2.20	0.48	5.03	0.00	0.14			
ND	0	0	0	31	0	8	5	35	964	177	0	0	19	1239		
	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.47	0.09	0.00	0.00	0.01	0.60		
	0.00	0.00	0.00	2.50	0.00	0.65	0.40	2.82	77.80	14.29	0.00	0.00	1.53			
	0.00	0.00	0.24	0.00	0.00	0.21	0.02	0.40	1.04	0.38	0.00	0.00	0.18			
OH	0	0	0	0	0	152	6	1	1067	42	14	0	6	1288		
	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.51	0.02	0.01	0.00	0.00	0.62		
	0.00	0.00	0.00	0.00	0.00	11.80	0.47	0.08	82.84	3.26	1.09	0.00	0.47			
	0.00	0.00	0.00	0.00	0.00	4.01	0.03	0.01	1.15	0.09	2.94	0.00	0.06			
OK	0	0	0	0	0	110	29	3	4511	138	8	0	8	4807		
	0.00	0.00	0.00	0.00	0.00	0.05	0.01	0.00	2.18	0.07	0.00	0.00	0.00	2.32		
	0.00	0.00	0.00	0.00	0.00	2.29	0.60	0.06	93.84	2.87	0.17	0.00	0.17			
	0.00	0.00	0.00	0.00	0.00	2.90	0.14	0.03	4.85	0.30	1.68	0.00	0.08			
OR	1	11	0	117	200	27	800	182	4939	1317	1	94	522	8211		
	0.00	0.01	0.00	0.06	0.10	0.01	0.39	0.09	2.38	0.64	0.00	0.05	0.25	3.96		
	0.01	0.13	0.00	1.42	2.44	0.33	9.74	2.22	60.15	16.04	0.01	1.14	6.36			
	4.35	8.15	0.00	0.91	2.28	0.71	3.86	2.06	5.31	2.82	0.21	7.00	4.94			

(continued)

State	Type															
	Frequency		Percent													
	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
PA	0	0	0	23	1	236	132	75	2338	475	10	0	15	3305		
	0.00	0.00	0.00	0.01	0.00	0.11	0.06	0.04	1.13	0.23	0.00	0.00	0.01	1.59		
	0.00	0.00	0.00	0.70	0.03	7.14	3.99	2.27	70.74	14.37	0.30	0.00	0.45			
	0.00	0.00	0.00	0.18	0.01	6.23	0.64	0.85	2.52	1.02	2.10	0.00	0.14			
RI	0	0	0	1	0	1	5	0	64	3	0	0	0	74		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.04		
	0.00	0.00	0.00	1.35	0.00	1.35	6.76	0.00	86.49	4.05	0.00	0.00	0.00			
	0.00	0.00	0.00	0.01	0.00	0.03	0.02	0.00	0.07	0.01	0.00	0.00	0.00			
SC	0	0	0	6	17	40	91	46	378	40	14	0	3	635		
	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.02	0.18	0.02	0.01	0.00	0.00	0.31		
	0.00	0.00	0.00	0.94	2.68	6.30	14.33	7.24	59.53	6.30	2.20	0.00	0.47			
	0.00	0.00	0.00	0.05	0.19	1.06	0.44	0.52	0.41	0.09	2.94	0.00	0.03			
SD	0	0	0	0	2	9	72	159	1413	353	1	1	5	2015		
	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.08	0.68	0.17	0.00	0.00	0.00	0.97		
	0.00	0.00	0.00	0.00	0.10	0.45	3.57	7.89	70.12	17.52	0.05	0.05	0.25			
	0.00	0.00	0.00	0.00	0.02	0.24	0.35	1.80	1.52	0.76	0.21	0.07	0.05			
TN	0	0	0	129	12	86	764	64	1766	220	10	0	160	3211		
	0.00	0.00	0.00	0.06	0.01	0.04	0.37	0.03	0.85	0.11	0.00	0.00	0.08	1.55		
	0.00	0.00	0.00	4.02	0.37	2.68	23.79	1.99	55.00	6.85	0.31	0.00	4.98			
	0.00	0.00	0.00	1.00	0.14	2.27	3.69	0.72	1.90	0.47	2.10	0.00	1.51			
TX	0	0	1	3	1	253	83	31	1118	83	18	0	531	2122		
	0.00	0.00	0.00	0.00	0.00	0.12	0.04	0.01	0.54	0.04	0.01	0.00	0.26	1.02		
	0.00	0.00	0.05	0.14	0.05	11.92	3.91	1.46	52.69	3.91	0.85	0.00	25.02			
	0.00	0.00	1.92	0.02	0.01	6.68	0.40	0.35	1.20	0.18	3.77	0.00	5.02			
UT	0	0	1	33	0	42	1191	340	2517	2231	5	14	247	6621		
	0.00	0.00	0.00	0.02	0.00	0.02	0.57	0.16	1.21	1.08	0.00	0.01	0.12	3.19		
	0.00	0.00	0.02	0.50	0.00	0.63	17.99	5.14	38.02	33.70	0.08	0.21	3.73			
	0.00	0.00	1.92	0.26	0.00	1.11	5.75	3.84	2.71	4.78	1.05	1.04	2.34			
VT	0	0	0	1	1	13	7	9	221	22	0	0	4	278		
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.11	0.01	0.00	0.00	0.00	0.13		
	0.00	0.00	0.00	0.36	0.36	4.68	2.52	3.24	79.50	7.91	0.00	0.00	1.44			
	0.00	0.00	0.00	0.01	0.01	0.34	0.03	0.10	0.24	0.05	0.00	0.00	0.04			
VA	0	0	0	226	16	88	631	339	1843	709	7	0	34	3893		
	0.00	0.00	0.00	0.11	0.01	0.04	0.30	0.16	0.89	0.34	0.00	0.00	0.02	1.88		
	0.00	0.00	0.00	5.81	0.41	2.26	16.21	8.71	47.34	18.21	0.18	0.00	0.87			
	0.00	0.00	0.00	1.76	0.18	2.32	3.05	3.83	1.98	1.52	1.47	0.00	0.32			
WA	0	26	0	1439	218	132	473	665	5908	1509	4	55	519	10948		
	0.00	0.01	0.00	0.69	0.11	0.06	0.23	0.32	2.85	0.73	0.00	0.03	0.25	5.28		
	0.00	0.24	0.00	13.14	1.99	1.21	4.32	6.07	53.96	13.78	0.04	0.50	4.74			
	0.00	19.26	0.00	11.18	2.49	3.48	2.28	7.51	6.36	3.23	0.84	4.10	4.91			
WV	0	0	0	1	0	198	97	11	390	901	6	1	4	1609		
	0.00	0.00	0.00	0.00	0.00	0.10	0.05	0.01	0.19	0.43	0.00	0.00	0.00	0.78		
	0.00	0.00	0.00	0.06	0.00	12.31	6.03	0.68	24.24	56.00	0.37	0.06	0.25			
	0.00	0.00	0.00	0.01	0.00	5.23	0.47	0.12	0.42	1.93	1.26	0.07	0.04			
WI	0	0.00	0	1	0	31	6	87	5214	354	1	0	51	5745		
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.04	2.52	0.17	0.00	0.00	0.02	2.77		
	0.00	0.00	0.00	0.02	0.00	0.54	0.10	1.51	90.76	6.16	0.02	0.00	0.89			
	0.00	0.00	0.00	0.01	0.00	0.82	0.03	0.98	5.61	0.76	0.21	0.00	0.48			
WY	0	0	3	1837	15	53	561	148	1471	882	9	61	229	5269		
	0.00	0.00	0.89	0.01	0.03	0.27	0.07	0.71	0.43	0.00	0.03	0.11	2.54			
	0.00	0.00	34.86	0.28	1.01	10.65	2.81	27.92	16.74	0.17	1.16	4.35				
	0.00	5.77	14.27	0.17	1.40	2.71	1.67	1.58	1.89	1.89	4.54	2.17				
Total		23	135	52	12874	8772	3789	20711	8850	92951	46696	477	1343	10569	207242	
		0.01	0.07	0.03	6.21	4.23	1.83	9.99	4.27	44.85	22.53	0.23	0.65	5.10	100.00	

Appendix B. — Frequency of state by status — all.

State	Status										
	Frequency		Percent								
	Row %	Col %	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify
AL	4		856	468	22	512	3	981	1516	0	4362
	0.00		0.41	0.23	0.01	0.25	0.00	0.47	0.73	0.00	2.10
	0.09		19.62	10.73	0.50	11.74	0.07	22.49	34.75	0.00	
	0.60		5.58	1.88	0.42	1.76	0.47	1.10	3.58	0.00	
AK	1		1087	3745	32	7	2	2230	159	0	7263
	0.00		0.52	1.81	0.02	0.00	0.00	1.08	0.08	0.00	3.50
	0.01		14.97	51.56	0.44	0.10	0.03	30.70	2.19	0.00	
	0.15		7.08	15.08	0.62	0.02	0.31	2.50	0.38	0.00	
AZ	3		449	1783	707	654	39	3592	3285	0	10512
	0.00		0.22	0.86	0.34	0.32	0.02	1.73	1.59	0.00	5.07
	0.03		4.27	16.96	6.73	6.22	0.37	34.17	31.25	0.00	
	0.45		2.92	7.18	13.62	2.24	6.10	4.03	7.76	0.00	
AR	7		23	77	39	473	9	2081	1462	0	4171
	0.00		0.01	0.04	0.02	0.23	0.00	1.00	0.71	0.00	2.01
	0.17		0.55	1.85	0.94	11.34	0.22	49.89	35.05	0.00	
	1.05		0.15	0.31	0.75	1.62	1.41	2.34	3.45	0.00	
CA	29		1876	4703	1006	1918	5	7002	11638	17	28194
	0.01		0.91	2.27	0.49	0.93	0.00	3.38	5.62	0.01	13.60
	0.10		6.65	16.68	3.57	6.80	0.02	24.84	41.28	0.06	
	4.35		12.22	18.94	19.38	6.58	0.78	7.86	27.50	100.00	
CO	189		73	213	79	1576	66	8837	2832	0	13865
	0.09		0.04	0.10	0.04	0.76	0.03	4.26	1.37	0.00	6.69
	1.36		0.53	1.54	0.57	11.37	0.48	63.74	20.43	0.00	
	28.34		0.48	0.86	1.52	5.41	10.33	9.92	6.69	0.00	
CT	0		2	11	11	144	0	575	5	0	748
	0.00		0.00	0.01	0.01	0.07	0.00	0.28	0.00	0.00	0.36
	0.00		0.27	1.47	1.47	19.25	0.00	76.87	0.67	0.00	
	0.00		0.01	0.04	0.04	0.49	0.00	0.65	0.01	0.00	
DE	0		0	1	0	13	0	14	5	0	33
	0.00		0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.02
	0.00		0.00	3.03	0.00	39.39	0.00	42.42	15.15	0.00	
	0.00		0.00	0.00	0.00	0.04	0.00	0.02	0.01	0.00	
DC	0		1	0	0	0	0	22	0	0	23
	0.00		0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
	0.00		4.35	0.00	0.00	0.00	0.00	95.65	0.00	0.00	
	0.00		0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	
FL	1		98	190	2	307	9	351	12	0	970
	0.00		0.05	0.09	0.00	0.15	0.00	0.17	0.01	0.00	0.47
	0.10		10.10	19.59	0.21	31.65	0.93	36.19	1.24	0.00	
	0.15		0.64	0.77	0.04	1.05	1.41	0.39	0.03	0.00	
GA	0		331	368	31	402	2	809	78	0	2021
	0.00		0.16	0.18	0.01	0.19	0.00	0.39	0.04	0.00	0.98
	0.00		16.38	18.21	1.53	19.89	0.10	40.03	3.86	0.00	
	0.00		2.16	1.48	0.60	1.38	0.31	0.91	0.18	0.00	
HI	0		0	4	0	6	0	44	1	0	55
	0.00		0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03
	0.00		0.00	7.27	0.00	10.91	0.00	80.00	1.82	0.00	
	0.00		0.00	0.02	0.00	0.02	0.00	0.05	0.00	0.00	

(continued)

State

Status

	Frequency Percent	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify	Total
	Row % Col %	Other								
ID	8 0.00 0.09 1.20	1494 0.72 16.91 9.73	1941 0.94 21.96 7.82	529 0.26 5.99 10.19	525 0.25 5.94 1.80	3 0.00 0.03 0.47	2356 1.14 26.66 2.64	1981 0.96 22.42 4.68	0 0.00 0.00 0.00	8837 4.26 0.00 0.00
IL	1 0.00 0.05 0.15	155 0.07 7.66 1.01	120 0.06 5.93 0.48	5 0.00 0.25 0.10	528 26.09 1.81	2 0.10 0.31	1212 59.88 1.36	1 0.05 0.00	0 0.00 0.00	2024 0.98 0.00 0.00
IN	0 0.00 0.00 0.00	94 0.05 9.42 0.61	67 0.03 6.71 0.27	3 0.00 0.30 0.06	474 47.49 1.63	3 0.30 0.47	328 32.87 0.37	29 2.91 0.07	0 0.00 0.00	998 0.48 0.00 0.00
IA	0 0.00 0.00 0.00	0 0.00 0.00 0.01	2 0.00 0.00 0.00	0 0.33 14.29 2.38	693 0.33 14.29 2.38	1 0.02 0.16	3984 82.13 4.47	171 3.53 0.40	0.00 0.00 0.00	4851 2.34 0.00 0.00
KS	0 0.00 0.00 0.00	0 0.00 0.00 0.01	2 0.00 1.12 0.02	1 0.06 69.27 0.43	124 0.06 69.27 0.43	1 0.56 0.56 0.16	50 27.93 0.56 0.06	1 0.56 0.00	0 0.00 0.00	179 0.09 0.00 0.00
KY	0 0.00 0.00 0.00	31 0.08 1.12 0.20	166 0.01 5.97 0.67	13 0.01 0.47 0.25	1153 0.56 41.49 3.96	2 0.00 0.07 0.31	1379 0.67 49.62 1.55	35 0.02 1.26 0.08	0 0.00 0.00	2779 1.34 0.00 0.00
LA	8 0.00 1.35 1.20	69 0.00 11.66 0.45	0 0.00 0.00 0.02	1 0.12 0.17 0.86	252 0.00 42.57 0.02	4 0.00 0.68 0.63	228 38.51 0.26	30 5.07 0.07	0 0.00 0.00	592 0.29 0.00 0.00
ME	0 0.00 0.00 0.00	83 0.04 6.01 0.54	252 0.12 18.23 1.01	99 0.05 7.16 1.91	220 0.11 15.92 0.75	3 0.00 0.22 0.47	600 43.42 0.67	125 9.04 0.30	0 0.00 0.00	1382 0.67 0.00 0.00
MD	0 0.00 0.00 0.00	4 0.00 0.50 0.03	34 0.02 4.29 0.14	9 0.00 1.13 0.17	138 0.07 17.40 0.47	0 0.00 0.00 0.00	605 76.29 0.68	3 0.38 0.01	0 0.00 0.00	793 0.38 0.00 0.00
MA	0 0.00 0.00 0.00	32 0.02 4.83 0.21	36 0.02 5.44 0.00	0 0.10 31.57 0.72	209 0.00 0.00 0.00	0 0.00 0.00 0.00	381 57.55 0.43	4 0.60 0.01	0 0.00 0.00	662 0.32 0.00 0.00
MI	1 0.00 0.04 0.15	208 0.10 7.99 1.35	683 0.33 26.24 2.75	45 0.02 1.73 0.87	847 0.41 32.54 2.91	2 0.00 0.08 0.31	815 31.31 0.91	2 0.08 0.00	0 0.00 0.00	2603 1.26 0.00 0.00
MN	2 0.00 0.11 0.30	124 0.06 7.05 0.81	113 0.05 6.42 0.46	39 0.02 2.22 0.75	921 0.44 52.33 3.16	13 0.01 0.74 2.03	532 30.23 0.60	16 0.91 0.04	0 0.00 0.00	1760 0.85 0.00 0.00
MS	0 0.00 0.00 0.00	211 0.10 20.33 1.37	461 0.22 44.41 1.86	1 0.00 0.10 0.02	183 0.09 17.63 0.63	0 0.00 0.00 0.00	171 16.47 0.19	11 1.06 0.03	0 0.00 0.00	1038 0.50 0.00 0.00

(continued)

State	Status										
	Frequency		Percent								
	Row %	Col %	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify
MO	53	66	228	121	543	7	13614	67	0	14699	
	0.03	0.03	0.11	0.06	0.26	0.00	6.57	0.03	0.00	7.09	
	0.36	0.45	1.55	0.82	3.69	0.05	92.62	0.46	0.00		
	7.95	0.43	0.92	2.33	1.86	1.10	15.28	0.16	0.00		
MT	2	398	977	554	428	5	1883	3186	0	7433	
	0.00	0.19	0.47	0.27	0.21	0.00	0.91	1.54	0.00	3.59	
	0.03	5.35	13.14	7.45	5.76	0.07	25.33	42.86	0.00		
	0.30	2.59	3.93	10.67	1.47	0.78	2.11	7.53	0.00		
NE	0	0	0	0	84	0	0	1	0	85	
	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.04	
	0.00	0.00	0.00	0.00	98.82	0.00	0.00	1.18	0.00		
	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00		
NV	3	419	1068	212	562	7	3711	2522	0	8504	
	0.00	0.20	0.52	0.10	0.27	0.00	1.79	1.22	0.00	4.10	
	0.04	4.93	12.56	2.49	6.61	0.08	43.64	29.66	0.00		
	0.45	2.73	4.30	4.08	1.93	1.10	4.17	5.96	0.00		
NH	2	95	147	72	66	0	198	11	0	591	
	0.00	0.05	0.07	0.03	0.03	0.00	0.10	0.01	0.00	0.29	
	0.34	16.07	24.87	12.18	11.17	0.00	33.50	1.86	0.00		
	0.30	0.62	0.59	1.39	0.23	0.00	0.22	0.03	0.00		
NJ	0	3	27	2	157	1	258	34	0	482	
	0.00	0.00	0.01	0.00	0.08	0.00	0.12	0.02	0.00	0.23	
	0.00	0.62	5.60	0.41	32.57	0.21	53.53	7.05	0.00		
	0.00	0.02	0.11	0.04	0.54	0.16	0.29	0.08	0.00		
NM	3	343	903	269	371	22	1818	4446	0	8175	
	0.00	0.17	0.44	0.13	0.18	0.01	0.88	2.15	0.00	3.94	
	0.04	4.20	11.05	3.29	4.54	0.27	22.24	54.39	0.00		
	0.45	2.23	3.64	5.18	1.27	3.44	2.04	10.51	0.00		
NY	1	115	118	36	821	3	874	32	0	2000	
	0.00	0.06	0.06	0.02	0.40	0.00	0.42	0.02	0.00	0.97	
	0.05	5.75	5.90	1.80	41.05	0.15	43.70	1.60	0.00		
	0.15	0.75	0.48	0.69	2.82	0.47	0.98	0.08	0.00		
NC	0	178	456	58	644	4	1933	15	0	3288	
	0.00	0.09	0.22	0.03	0.31	0.00	0.93	0.01	0.00	1.59	
	0.00	5.41	13.87	1.76	19.59	0.12	58.79	0.46	0.00		
	0.00	1.16	1.84	1.12	2.21	0.63	2.17	0.04	0.00		
ND	2	4	6	3	107	0	1005	112	0	1239	
	0.00	0.00	0.00	0.00	0.05	0.00	0.48	0.05	0.00	0.60	
	0.16	0.32	0.48	0.24	8.64	0.00	81.11	9.04	0.00		
	0.30	0.03	0.02	0.06	0.37	0.00	1.13	0.26	0.00		
OH	0	12	0	0	956	0	284	36	0	1288	
	0.00	0.01	0.00	0.00	0.46	0.00	0.14	0.02	0.00	0.62	
	0.00	0.93	0.00	0.00	74.22	0.00	22.05	2.80	0.00		
	0.00	0.08	0.00	0.00	3.28	0.00	0.32	0.09	0.00		
OK	9	17	29	0	640	4	4086	22	0	4807	
	0.00	0.01	0.01	0.00	0.31	0.00	1.97	0.01	0.00	2.32	
	0.19	0.35	0.60	0.00	13.31	0.08	85.00	0.46	0.00		
	1.35	0.11	0.12	0.00	2.20	0.63	4.59	0.05	0.00		
OR	28	703	1488	205	2323	0	2202	1262	0	8211	
	0.01	0.34	0.72	0.10	1.12	0.00	1.06	0.61	0.00	3.96	
	0.34	8.56	18.12	2.50	28.29	0.00	26.82	15.37	0.00		
	4.20	4.58	5.99	3.95	7.97	0.00	2.47	2.98	0.00		

(continued)

State		Status								
Frequency	Percent	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify	Total
Row %	Col %	Other								
PA	2	104	74	7	1421	1	1690	6	0	3305
	0.00	0.05	0.04	0.00	0.69	0.00	0.82	0.00	0.00	1.59
	0.06	3.15	2.24	0.21	43.00	0.03	51.13	0.18	0.00	
	0.30	0.68	0.30	0.13	4.88	0.16	1.90	0.01	0.00	
RI	0	1	4	0	38	0	31	0	0	74
	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.04
	0.00	1.35	5.41	0.00	51.35	0.00	41.89	0.00	0.00	
	0.00	0.01	0.02	0.00	0.13	0.00	0.03	0.00	0.00	
SC	0	32	87	15	221	0	267	13	0	635
	0.00	0.02	0.04	0.01	0.11	0.00	0.13	0.01	0.00	0.31
	0.00	5.04	13.70	2.36	34.80	0.00	42.05	2.05	0.00	
	0.00	0.21	0.35	0.29	0.76	0.00	0.30	0.03	0.00	
SD	0	51	236	41	316	5	1240	126	0	2015
	0.00	0.02	0.11	0.02	0.15	0.00	0.60	0.06	0.00	0.97
	0.00	2.53	11.71	2.03	15.68	0.25	61.54	6.25	0.00	
	0.00	0.33	0.95	0.79	1.08	0.78	1.39	0.30	0.00	
TN	8	533	601	77	495	4	1287	206	0	3211
	0.00	0.26	0.29	0.04	0.24	0.00	0.62	0.10	0.00	1.55
	0.25	16.60	18.72	2.40	15.42	0.12	40.08	6.42	0.00	
	1.20	3.47	2.42	1.48	1.70	0.63	1.44	0.49	0.00	
TX	11	51	32	4	938	34	451	601	0	2122
	0.01	0.02	0.02	0.00	0.45	0.02	0.22	0.29	0.00	1.02
	0.52	2.40	1.51	0.19	44.20	1.60	21.25	28.32	0.00	
	1.65	0.33	0.13	0.08	3.22	5.32	0.51	1.42	0.00	
UT	151	1135	429	386	741	325	3337	117	0	6621
	0.07	0.55	0.21	0.19	0.36	0.16	1.61	0.06	0.00	3.19
	2.28	17.14	6.48	5.83	11.19	4.91	50.40	1.77	0.00	
	22.64	7.39	1.73	7.43	2.54	50.86	3.75	0.28	0.00	
VT	0	4	23	1	163	2	80	5	0	278
	0.00	0.00	0.01	0.00	0.08	0.00	0.04	0.00	0.00	0.13
	0.00	1.44	8.27	0.36	58.63	0.72	28.78	1.80	0.00	
	0.00	0.03	0.09	0.02	0.56	0.31	0.09	0.01	0.00	
VA	1	423	713	35	821	3	1860	37	0	3893
	0.00	0.20	0.34	0.02	0.40	0.00	0.90	0.02	0.00	1.88
	0.03	10.87	18.31	0.90	21.09	0.08	47.78	0.95	0.00	
	0.15	2.76	2.87	0.67	2.82	0.47	2.09	0.09	0.00	
WA	122	825	981	278	1845	0	2659	4238	0	10948
	0.06	0.40	0.47	0.13	0.89	0.00	1.28	2.04	0.00	5.28
	1.11	7.54	8.96	2.54	16.85	0.00	24.29	38.71	0.00	
	18.29	5.37	3.95	5.35	6.33	0.00	2.98	10.02	0.00	
WV	0	91	21	3	937	0	556	1	0	1609
	0.00	0.04	0.01	0.00	0.45	0.00	0.27	0.00	0.00	0.78
	0.00	5.66	1.31	0.19	58.23	0.00	34.56	0.06	0.00	
	0.00	0.59	0.08	0.06	3.22	0.00	0.62	0.00	0.00	
WI	0	1678	59	4	790	0	3011	203	0	5745
	0.00	0.81	0.03	0.00	0.38	0.00	1.45	0.10	0.00	2.77
	0.00	29.21	1.03	0.07	13.75	0.00	52.41	3.53	0.00	
	0.00	10.93	0.24	0.08	2.71	0.00	3.38	0.48	0.00	
WY	15	771	687	135	436	43	1567	1615	0	5269
	0.01	0.37	0.33	0.07	0.21	0.02	0.76	0.78	0.00	2.54
	0.28	14.63	13.04	2.56	8.27	0.82	29.74	30.65	0.00	
	2.25	5.02	2.77	2.60	1.50	6.73	1.76	3.82	0.00	
Total	667	15353	24834	5192	29143	639	89081	42316	17	207242
	0.32	7.41	11.98	2.51	14.06	0.31	42.98	20.42	0.01	100.00

Appendix C.— Frequency of type by status — all.

Type Frequency Percent Row % Col %	Status									Total	
	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify		
	0	0	0	0	12	0	11	0	0	23	
	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	
Brine	0.00	0.00	0.00	0.00	52.17	0.00	47.83	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.04	0.00	0.01	0.00	0.00	0.00	
	14	64	0.00	0	52	0	4	1	0	135	
	0.01	0.03	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.07	
Hotspring	10.37	47.41	0.00	0.00	38.52	0.00	2.96	0.74	0.00	0.00	
	2.10	0.42	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	
	3	0	3	2	20	0	17	7	0	52	
	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.03	
Leach	5.77	0.00	5.77	3.85	38.46	0.00	32.69	13.46	0.00	0.00	
	0.45	0.00	0.01	0.04	0.07	0.00	0.02	0.02	0.00	0.00	
	16	2230	729	128	75	1	1393	8302	0	12874	
	0.01	1.08	0.35	0.06	0.04	0.00	0.67	4.01	0.00	6.21	
Mineral location	0.12	17.32	5.66	0.99	0.58	0.01	10.82	64.49	0.00	0.00	
	2.40	14.52	2.94	2.47	0.26	0.16	1.56	19.62	0.00	0.00	
	4	406	1600	266	109	5	3674	2708	0	8772	
	0.00	0.20	0.77	0.13	0.05	0.00	1.77	1.31	0.00	4.23	
Placer	0.05	4.63	18.24	3.03	1.24	0.06	41.88	30.87	0.00	0.00	
	0.60	2.64	6.44	5.12	0.37	0.78	4.12	6.40	0.00	0.00	
	6	10	6	10	2461	31	937	328	0	3789	
	0.00	0.00	0.00	0.00	1.19	0.01	0.45	0.16	0.00	1.83	
Processing plant	0.16	0.26	0.16	0.26	64.95	0.82	24.73	8.66	0.00	0.00	
	0.90	0.07	0.02	0.19	8.44	4.85	1.05	0.78	0.00	0.00	
	18	7853	9423	500	9	5	681	2222	0	20711	
	0.01	3.79	4.55	0.24	0.00	0.00	0.33	1.07	0.00	9.99	
Prospect	0.09	37.92	45.50	2.41	0.04	0.02	3.29	10.73	0.00	0.00	
	2.70	51.15	37.94	9.63	0.03	0.78	0.76	5.25	0.00	0.00	
	20	228	1915	800	187	33	4449	1218	0	8850	
	0.01	0.11	0.92	0.39	0.09	0.02	2.15	0.59	0.00	4.27	
Surface-underground	0.23	2.58	21.64	9.04	2.11	0.37	50.27	13.76	0.00	0.00	
	3.00	1.49	7.71	15.41	0.64	5.16	4.99	2.88	0.00	0.00	
	238	3570	4950	1238	22521	311	46974	13143	6	92951	
	0.11	1.72	2.39	0.60	10.87	0.15	22.67	6.34	0.00	44.85	
Surface	0.26	3.84	5.33	1.33	24.23	0.33	50.54	14.14	0.01	0.00	
	35.68	23.25	19.93	23.84	77.28	48.67	52.73	31.06	35.29	0.00	
	279	573	5510	2206	2970	223	28454	6480	1	46696	
	0.13	0.28	2.66	1.06	1.43	0.11	13.73	3.13	0.00	22.53	
Under-ground	0.60	1.23	11.80	4.72	6.36	0.48	60.93	13.88	0.00	0.00	
	41.83	3.73	22.19	42.49	10.19	34.90	31.94	15.31	5.88	0.00	
	0	9	12	2	267	18	146	23	0	477	
	0.00	0.00	0.01	0.00	0.13	0.01	0.07	0.01	0.00	0.23	
Underwater	0.00	1.89	2.52	0.42	55.97	3.77	30.61	4.82	0.00	0.00	
	0.00	0.06	0.05	0.04	0.92	2.82	0.16	0.05	0.00	0.00	
	26	122	134	1	319	7	184	550	0.00	1343	
	0.01	0.06	0.06	0.00	0.15	0.00	0.09	0.27	0.00	0.65	
Well	1.94	9.08	9.98	0.07	23.75	0.52	13.70	40.95	0.00	0.00	
	3.90	0.79	0.54	0.02	1.09	1.10	0.21	1.30	0.00	0.00	
	43	288	552	39	141	5	2157	7334	10	10569	
	0.02	0.14	0.27	0.02	0.07	0.00	1.04	3.54	0.00	5.1	
Unknown	0.41	2.72	5.22	0.37	1.33	0.05	20.41	69.39	0.09	0.00	
	6.45	1.88	2.22	0.75	0.48	0.78	2.42	17.33	58.82	0.00	
	Total	667	15353	24834	5192	29143	639	89081	42316	17	207242
		0.32	7.41	11.98	2.51	14.06	0.31	42.98	20.42	0.01	100.00

Appendix D. — Frequency of type by domain — all — BOM domain.

Type	Domain																					
	Frequency			Percent			Fed.			Muni-			Nat'l.			Nat'l.			State			
	Row %	Row %	Col %	BLM	County	erd	BIA	DOD	Mixed	pality	NFS	manu-	ment	off-	shore	NPS	privat-	recre-	wild-	off-	State	
Brine	15	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	23	
	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
	65.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.70	
	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	
Hotspring	25	4	0	0	0	0	1	0	45	0	0	3	0	6	0	16	0	0	0	0	35	135
	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	
	18.52	2.96	0.00	0.00	0.00	0.00	0.74	0.00	33.33	0.00	0.00	2.22	0.00	4.44	0.00	11.85	0.00	0.00	0.00	0.00	25.93	
	0.11	0.03	0.00	0.00	0.00	0.00	0.05	0.00	0.17	0.00	0.00	0.96	0.00	1.52	0.00	0.02	0.00	0.00	0.00	0.00	0.09	
Leach	3	10	0	1	1	0	6	0	4	0	0	0	0	0	0	19	1	0	0	0	7	52
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
	5.77	19.23	0.00	1.92	0.00	11.54	0.00	7.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	36.54	0.00	0.00	0.00	0.00	13.46	
	0.01	0.08	0.00	0.02	0.04	0.00	0.29	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	
Mineral location	235	774	14	509	226	10	36	2	2659	18	1	16	23	19	16	2837	367	7	1	39	5075	12874
	0.11	0.37	0.01	0.25	0.11	0.00	0.02	0.00	1.28	0.01	0.00	0.01	0.01	0.01	0.01	1.37	0.17	0.00	0.00	0.02	2.45	6.21
	1.83	6.01	0.11	3.95	1.76	0.08	0.28	0.02	20.65	0.14	0.01	0.12	0.18	0.15	0.12	22.04	2.77	0.05	0.01	0.30	39.42	
	1.05	6.12	0.87	9.92	8.54	3.28	1.72	0.43	9.77	14.75	20.00	5.10	4.37	4.81	3.27	7.91	2.72	7.69	11.82	13.14		
Placer	388	940	5	681	34	4	171	5	2112	0	0	24	154	63	92	677	468	3	1	5	2945	8772
	0.19	0.45	0.00	0.33	0.02	0.00	0.08	0.00	1.02	0.00	0.00	0.01	0.07	0.03	0.04	0.33	0.23	0.00	0.00	0.00	1.42	4.23
	4.42	10.72	0.06	7.76	7.76	0.39	0.05	1.95	0.06	24.08	0.00	0.00	0.27	1.76	0.72	0.05	7.72	0.05	0.01	0.06	33.57	
	1.73	7.43	0.31	13.27	1.28	1.31	6.17	1.08	7.76	0.00	0.00	7.64	29.28	15.95	11.36	0.78	10.36	1.17	7.69	1.52	7.63	
Processing plant	846	60	2	27	12	1	38	13	115	1	0	1	0	0	0	2185	14	2	0	1	471	3789
	0.41	0.03	0.00	0.01	0.01	0.00	0.02	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.01	0.00	0.00	0.23	1.83	
	22.33	1.58	0.05	0.71	0.32	0.03	1.00	0.34	3.04	0.03	0.00	0.03	0.00	0.00	0.00	57.67	0.37	0.05	0.00	0.03	12.43	
	3.77	0.47	0.12	0.53	0.45	0.33	1.82	2.80	0.42	0.82	0.00	0.32	0.00	0.00	0.00	2.52	0.31	0.78	0.00	0.30	1.22	
Prospect	635	1749	10	1436	240	37	476	15	3609	11	0	117	138	54	480	7556	1092	45	3	44	2964	20711
	0.31	0.84	0.00	0.69	0.12	0.02	0.23	0.01	1.74	0.01	0.00	0.06	0.07	0.03	0.23	3.65	0.53	0.02	0.00	0.02	1.43	9.99
	3.07	8.44	0.05	6.93	1.16	0.18	2.30	0.07	17.43	0.05	0.00	0.56	0.67	0.26	0.32	36.48	5.27	0.22	0.01	0.21	14.31	
	2.83	13.82	0.62	27.98	9.07	12.13	22.75	3.23	13.26	9.02	0.00	37.26	26.24	13.67	59.26	8.71	24.18	17.51	23.08	13.33	7.67	
Surface-underground	903	837	19	177	153	17	223	0	1962	13	1	15	35	42	46	2672	118	5	1	13	1598	8850
	0.44	0.40	0.01	0.09	0.07	0.01	0.11	0.00	0.95	0.01	0.00	0.01	0.01	0.02	0.02	1.29	0.06	0.00	0.01	0.77	4.27	
	10.20	9.46	0.21	2.00	1.73	0.19	2.52	0.00	22.17	0.15	0.01	0.17	0.40	0.47	0.52	30.19	1.33	0.06	0.01	0.15	18.06	
	4.03	6.61	1.17	3.45	5.78	5.57	10.66	0.00	7.21	10.66	20.00	4.78	6.65	10.63	5.68	3.08	2.61	1.95	7.69	3.94	4.14	
Surface	11161	3026	1496	839	1083	94	485	371	6234	20	1	54	41	63	68	52855	1915	148	4	156	12837	92951
	5.39	1.46	0.72	0.40	0.52	0.05	0.23	0.18	3.01	0.01	0.00	0.03	0.02	0.03	0.03	25.50	0.92	0.07	0.00	0.08	6.19	44.85
	12.01	3.26	1.61	0.90	1.17	0.10	0.52	0.40	6.71	0.02	0.00	0.06	0.04	0.07	0.07	56.86	2.06	0.16	0.00	0.17	13.81	
	49.77	23.91	92.46	16.35	40.91	30.82	23.18	79.96	22.91	16.39	20.00	17.20	7.79	15.95	8.40	60.91	42.40	57.59	30.77	47.27	33.24	

(continued)

Type	Domain														
	Frequency	Percent	Fed.	Muni-	Nat'l.	Nat'l.	Nat'l.	State	erat	off-	prim-	Wil-	State	State	State
	Row %	Col %	BLM	County	erat	BIA	DOD	Mixed	NFS	monu-	off-	prim-	Wil-	State	State
Underground	6591	3594	61	1225	497	73	465	55	8780	50	1	62	113	131	95
Underground	3.14	1.73	0.03	0.59	0.24	0.04	0.22	0.03	4.24	0.02	0.00	0.03	0.05	0.06	0.05
Underground	13.92	7.70	0.13	2.62	1.06	0.16	1.00	0.12	18.80	0.11	0.00	0.13	0.24	0.28	0.20
Underground	28.99	28.40	3.77	23.87	18.78	23.93	22.23	11.85	32.26	40.98	20.00	19.75	21.48	33.16	11.73
Underwater	15	11	5	19	1	0	4	0	27	0	0	1	0	2	1
Underwater	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Underwater	3.14	2.31	1.05	3.98	0.21	0.00	0.84	0.00	5.66	0.00	0.00	0.21	0.00	0.42	0.00
Underwater	0.07	0.09	0.31	0.37	0.04	0.00	0.19	0.00	0.10	0.00	0.00	0.32	0.00	0.51	0.12
Well	27	29	1	42	77	20	22	0	45	0	0	2	0	2	1
Well	0.01	0.01	0.00	0.02	0.04	0.01	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00
Well	2.01	2.16	0.07	3.13	5.73	1.49	1.64	0.00	3.35	0.00	0.00	0.15	0.00	0.15	0.00
Well	0.12	0.23	0.06	0.82	2.91	6.56	1.05	0.00	0.17	0.00	0.00	0.64	0.00	0.51	0.25
Unknown	1672	1621	5	176	323	49	165	3	1624	9	1	19	22	13	10
Unknown	0.81	0.78	0.00	0.08	0.16	0.02	0.08	0.00	0.78	0.00	0.00	0.01	0.01	0.00	0.00
Unknown	15.82	15.34	0.05	1.67	3.06	0.46	1.56	0.03	15.37	0.09	0.01	0.18	0.21	0.12	0.09
Total	22426	12655	1618	5132	2647	305	2092	464	27216	122	5	314	526	395	810
Total	10.82	6.11	0.78	2.48	1.28	0.15	1.01	0.22	13.13	0.06	0.00	0.15	0.25	0.19	0.39

Appendix E.—Frequency of status by domain - all - BOM domain.

Type	Domain																							
	Frequency	Percent	Row %	Col %	BLM	County	Fed-	BIA	DOD	Mixed	Municipal	NES	monu-	Nat'l.	Nat'l.	Wil-	State	State	State	Un-				
							eral	eral				NPS	ment	off-	prim-	der-	off-	shore	forest	park	Total			
Other	10	109	19	45	19	0.00	6	0.00	0.00	0.00	136	0.00	6	0	3	2	222	39	0	2	49	667		
	0.00	0.05	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.02	0.00	0.00	0.00	0.02	0.32			
	1.50	16.34	2.85	6.75	2.85	0.00	0.90	0.00	20.39	0.00	0.00	0.90	0.00	0.45	0.30	33.28	5.85	0.00	0.00	0.30	7.35			
	0.04	0.86	1.17	0.88	0.72	0.00	0.29	0.00	0.50	0.00	0.00	1.91	0.00	0.76	0.25	0.26	0.86	0.00	0.00	0.61	0.13			
Raw prospect	1162	1451	68	561	266	17	103	57	2750	8	1	79	77	34	235	5971	461	40	3	7	1938	15353		
	0.56	0.70	0.03	0.27	0.13	0.01	0.05	0.03	1.33	0.00	0.00	0.04	0.04	0.02	0.11	0.50	0.22	1.53	2.88	0.22	0.00	0.03	0.94	7.41
	7.57	9.45	0.44	3.65	1.73	0.11	0.67	0.37	17.91	0.05	0.01	0.51	0.50	0.22	1.25	0.75	38.89	3.00	0.26	0.02	0.46	12.62		
	5.18	11.47	4.20	10.93	10.05	5.57	4.92	12.28	10.10	6.56	20.00	25.16	14.64	8.61	29.01	6.88	10.21	15.56	23.08	21.52	5.02			
Explored prospect	3218	2144	14	1565	177	47	605	17	5333	28	0.00	69	310	186	435	6651	948	57	4	54	2972	24834		
	1.55	1.03	0.01	0.76	0.09	0.02	0.29	0.01	2.57	0.01	0.00	0.03	0.15	0.09	0.21	3.21	0.46	0.03	0.00	0.03	1.43	11.98		
	12.96	8.63	0.06	6.30	0.71	0.19	2.44	0.07	21.47	0.11	0.00	0.28	1.25	0.75	26.78	3.82	0.23	0.02	0.22	11.97				
	14.35	16.94	0.87	30.49	6.69	15.41	28.92	3.66	19.60	22.95	0.00	21.97	58.94	47.09	53.70	7.66	20.99	22.18	30.77	16.36	7.70			
Developed deposit	194	583	11	92	71	2	186	3	1380	2	1	19	25	29	12	1470	90	11	1	10	1000	5192		
	0.09	0.28	0.01	0.04	0.03	0.00	0.09	0.00	0.67	0.00	0.00	0.01	0.01	0.01	0.71	0.04	0.01	0.00	0.00	0.48	2.51			
	3.74	11.23	0.21	1.77	1.37	0.04	3.58	0.06	26.58	0.04	0.02	0.37	0.48	0.56	0.23	28.31	1.73	0.21	0.02	0.19	19.26			
	0.87	4.61	0.68	1.79	2.68	0.66	8.89	0.65	5.07	1.64	20.00	6.05	4.75	7.34	1.48	1.69	1.99	4.28	7.69	3.03	2.59			
Producer	7218	403	622	234	125	13	230	58	947	3	0.00	4	2	1	3	14623	349	15	2	13	4278	29143		
	3.48	0.19	0.30	0.11	0.06	0.01	0.11	0.03	0.46	0.00	0.00	0.00	0.00	0.00	0.00	7.06	0.17	0.01	0.00	0.01	2.06	14.06		
	24.77	1.38	2.13	0.80	0.43	0.04	0.79	0.20	3.25	0.01	0.00	0.01	0.01	0.00	0.01	50.18	1.20	0.05	0.01	0.04	14.68			
	32.19	3.18	38.44	4.56	4.72	4.26	10.99	12.50	3.48	2.46	0.00	1.27	0.38	0.25	0.37	16.85	7.73	5.84	15.38	3.94	11.08			
Temporary shutdown	19	162	3	6	24	0.00	13	0.00	73	1	0.00	0	1	0	0	286	26	0	2	23	639			
	0.01	0.08	0.00	0.00	0.01	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.14	0.01	0.00	0.00	0.00	0.01	0.31			
	2.97	25.35	0.47	0.94	3.76	0.00	2.03	0.00	11.42	0.16	0.00	0.16	0.00	0.00	44.76	4.07	0.00	0.00	0.00	0.31	3.60			
	0.08	1.28	0.19	0.12	0.91	0.00	0.62	0.00	0.27	0.82	0.00	0.00	0.19	0.00	0.00	0.33	0.58	0.00	0.00	0.61	0.06			
Past producer	7904	4812	719	1607	846	113	584	302	9891	51	1	85	44	82	65	48850	1174	114	1	132	11704	89081		
	3.81	2.32	0.35	0.78	0.41	0.05	0.28	0.15	4.77	0.02	0.00	0.04	0.02	0.04	0.03	23.57	0.57	0.06	0.00	0.06	5.65	42.98		
	8.87	5.40	0.81	1.80	0.95	0.13	0.66	0.34	11.10	0.06	0.00	0.10	0.05	0.09	0.07	54.84	1.32	0.13	0.00	0.15	13.14			
	35.24	38.02	44.44	31.31	31.96	37.05	27.92	65.09	36.34	41.80	20.00	27.07	8.37	20.76	8.02	56.29	26.00	44.36	7.69	40.00	30.30			
Unknown	2699	2991	162	1022	1119	113	365	27	6703	29	2	52	67	60	58	8703	1429	20	2	45	16648	42316		
	1.30	1.44	0.08	0.49	0.54	0.05	0.18	0.01	3.23	0.01	0.00	0.03	0.03	0.03	0.42	0.69	0.01	0.00	0.02	8.03	20.42			
	6.38	7.07	0.38	2.42	2.64	0.27	0.86	0.06	15.84	0.07	0.00	0.12	0.16	0.14	20.57	3.38	0.05	0.00	0.11	39.34				
	12.04	23.63	10.01	19.91	42.27	37.05	17.45	5.82	24.63	23.77	40.00	16.56	12.74	15.19	7.16	10.03	31.64	7.78	15.38	13.64	43.11			
Cannot verify	2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01			
	11.76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88	52.94			
	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.30	0.02			
Total	22426	12655	1618	5132	2647	305	2092	464	27216	122	5	314	526	395	810	86778	4516	257	13	330	38621	207242		
	10.82	6.11	0.78	2.48	1.28	0.15	1.01	0.22	13.13	0.06	0.00	0.15	0.25	0.19	0.39	41.87	2.18	0.12	0.01	0.16	18.64	100.00		

Appendix F. — Frequency of type by domain - all - administrative boundaries.

Type	Domain							
Frequency								
Percent								
Row %								
Col %	BIA	DOD	NFS	NFW	NPS	Other	Wilder-ness	Total
Brine	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	23 0.01 100.00 0.01	0 0.00 0.00 0.00	23 0.01 0.00 0.00
Hot spring	6 0.00 4.44 0.17	0 0.00 0.03 0.17	66 0.00 48.89 0.17	1 0.00 0.74 0.32	4 0.00 2.96 0.21	57 0.03 42.22 0.04	1 0.00 0.74 0.31	135 0.07 0.74 0.31
Leach	1 0.00 1.92 0.03	0 0.00 3.85 0.01	2 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.02 94.23 0.03	49 0.00 0.00 0.00	0 0.00 0.00 0.00	52 0.03 0.00 0.00
Mineral location	291 0.14 2.26 8.22	43 0.02 1.82 5.67	3781 0.01 29.37 9.70	13 0.08 0.10 4.11	156 0.01 1.21 8.03	8571 4.14 66.58 5.31	19 0.01 0.15 5.86	12874 6.21 0.00 0.00
Placer	31 0.01 0.35 0.88	10 0.00 1.62 8.59	3348 0.01 38.17 7.91	25 0.13 0.28 14.26	277 2.45 3.16 3.14	5072 0.00 57.82 2.78	9 0.00 0.10 2.78	8772 4.23 0.00 0.00
Processing plant	16 0.01 0.42 0.45	4 0.00 0.11 0.53	234 0.00 0.03 0.32	1 1.70 0.13	5 0.00 0.03 0.26	3528 1.70 93.11 2.19	1 0.00 0.03 0.31	3789 1.83 0.00 0.00
Prospect	321 0.15 1.55 9.07	68 0.03 2.52 8.97	5229 0.03 25.25 13.41	56 0.33 0.27 17.72	691 0.33 3.34 35.58	14281 6.89 68.95 8.85	65 0.03 0.31 20.06	20711 9.99 0.00 0.00
Surface-under-ground	190 0.09 2.15 5.37	48 0.02 0.54 6.33	2633 1.27 29.75 6.75	15 0.01 0.17 4.75	84 0.04 0.95 4.33	5856 2.83 4.6.17 3.63	24 0.01 0.27 7.41	8850 4.27 0.00 0.00
Surface	1560 0.75 1.68 44.06	284 0.14 0.31 37.47	8883 4.29 9.56 22.78	133 0.06 0.14 42.09	264 0.13 0.28 13.59	81787 39.46 87.99 50.68	40 0.02 0.04 12.35	92951 44.85 0.00 0.00
Under-ground	602 0.29 1.29 17.00	147 0.07 0.31 19.39	12481 6.02 26.73 32.01	29 0.01 0.06 9.18	359 0.17 0.77 18.49	32954 15.90 70.57 20.42	124 0.06 0.27 38.27	46696 22.53 0.00 0.00
Under-water	1 0.00 0.21 0.03	0 0.00 8.60 0.00	41 0.02 0.21 0.11	1 0.00 0.84 0.32	4 0.00 0.52 0.21	430 0.21 86.90 0.27	0 0.00 0.00 0.00	477 0.23 0.00 0.00
Well	86 0.04 6.40 2.43	22 0.01 1.64 2.90	49 0.02 3.65 0.13	11 0.01 0.82 3.48	7 0.00 0.52 0.36	1167 0.56 86.90 0.72	1 0.00 0.07 0.31	1343 0.65 0.00 0.00
Unknown	436 0.21 4.13 12.31	132 0.06 1.25 17.41	2244 1.08 21.23 5.76	31 0.01 0.29 9.81	91 0.04 0.86 4.69	7595 3.66 71.86 4.71	40 0.02 0.38 12.35	10569 5.10 0.00 0.00
Total	3541 1.71	758 0.37	38991 18.81	316 0.15	1942 0.94	161370 77.87	324 0.16	207242 100.00

Appendix G. — Frequency of status by domain - all - administrative boundaries.

Status	Domain							
Frequency								
Percent								
Row %								
Col %	BIA	DOD	NFS	NFW	NPS	Other	Wilder-ness	Total
Other	26 0.01 3.90 0.73	0 0.00 20.84 0.00	139 0.07 0.90 0.36	6 0.00 1.65 1.90	11 0.01 72.71 0.57	485 0.23 0.00 0.30	0 0.00 0.00 0.00	667 0.32 0.00 0.00
Raw prospect	356 0.17 2.32 10.05	36 0.02 0.23 4.75	3649 1.76 23.77 9.36	39 0.02 0.25 12.34	333 0.16 2.17 17.15	10916 5.27 7.10 6.76	24 0.01 0.16 7.41	15353 7.41 0.00 0.00
Explored prospect	248 0.12 1.00 7.00	93 0.04 0.37 12.27	7880 3.80 31.73 20.21	43 0.02 0.17 13.61	663 0.32 2.67 34.14	15834 7.64 63.76 9.81	73 0.04 0.29 22.53	24834 11.98 0.00 0.00
Developed deposit	84 0.04 1.62 2.37	11 0.01 0.21 1.45	1808 0.87 34.82 4.64	5 0.00 0.10 1.58	51 0.02 0.98 2.63	3222 1.55 62.06 2.00	11 0.01 0.21 3.40	5192 2.51 0.00 0.00
Producer	296 0.14 1.02 8.36	56 0.03 0.19 7.39	1798 0.87 6.17 4.61	48 0.02 0.16 15.19	56 0.03 0.19 2.88	26885 12.97 92.25 16.66	4 0.00 0.01 1.23	29143 14.06 0.00 0.00
Temporary shutdown	54 0.03 8.45 1.52	0 0.00 17.06 0.00	109 0.05 0.00 0.28	0 0.00 0.00 0.00	3 0.00 0.47 0.00	472 0.23 73.87 0.16	1 0.00 0.29 0.31	639 0.31 0.00 0.00
Past producer	1113 0.54 1.25 31.43	304 0.15 0.34 40.11	13597 6.56 15.26 34.87	98 0.05 0.11 31.01	457 0.22 0.51 23.53	73416 35.43 82.41 45.50	96 0.05 0.11 29.63	89081 42.98 0.00 0.00
Unknown	1363 0.66 3.22 38.49	258 0.12 0.61 34.04	10008 4.83 23.65 25.67	77 0.04 0.18 24.37	368 0.18 0.87 18.95	30127 14.54 71.20 18.67	115 0.06 0.27 35.49	42316 20.42 0.00 0.00
Cannot verify	1 5.88 0.03	0 17.65 0.01	3 0.00 0.00	0 0.00 0.00	13 0.01 0.00	0 76.47 0.00	0 0.00 0.00	17 0.01 0.00 0.00
Total	3541 1.71	758 0.37	38991 18.81	316 0.15	1942 0.94	161370 77.87	324 0.16	207242 100.00

Appendix H.— Frequency of commodity by status — all.

Commodity	Status									Total			
	Frequency	Percent	Row %	Col %	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify
Not identified	30	573	1747	212	582	19	1183	5189	3	9538			
	0.01	0.20	0.61	0.07	0.20	0.01	0.41	1.81	0.00	3.34			
	0.31	6.01	18.32	2.22	6.10	0.20	12.40	54.40	0.03				
	2.34	2.91	4.51	2.41	1.80	2.02	0.90	9.97	16.67				
Abrasive	0	70	43	17	18	2	119	99	0	368			
	0.00	0.02	0.02	0.01	0.01	0.00	0.04	0.03	0.00	0.13			
	0.00	19.02	11.68	4.62	4.89	0.54	32.34	26.90	0.00				
	0.00	0.36	0.11	0.19	0.06	0.21	0.09	0.19	0.00				
Aluminum	5	394	483	55	107	12	497	186	0	1739			
	0.00	0.14	0.17	0.02	0.04	0.00	0.17	0.07	0.00	0.61			
	0.29	22.66	27.77	3.16	6.15	0.69	28.58	10.70	0.00				
	0.39	2.00	1.25	0.63	0.33	1.28	0.38	0.36	0.00				
Antimony	0	94	261	41	24	0	377	208	0	1005			
	0.00	0.03	0.09	0.01	0.01	0.00	0.13	0.07	0.00	0.35			
	0.00	9.35	25.97	4.08	2.39	0.00	37.51	20.70	0.00				
	0.00	0.48	0.67	0.47	0.07	0.00	0.29	0.40	0.00				
Arsenic	0	28	97	14	3	0	97	47	0	286			
	0.00	0.01	0.03	0.00	0.00	0.00	0.03	0.02	0.00	0.10			
	0.00	9.79	33.92	4.90	1.05	0.00	33.92	16.43	0.00				
	0.00	0.14	0.25	0.16	0.01	0.00	0.07	0.09	0.00				
Asbestos	0	77	137	20	16	0	163	138	0	551			
	0.00	0.03	0.05	0.01	0.01	0.00	0.06	0.05	0.00	0.19			
	0.00	13.97	24.86	3.63	2.90	0.00	29.58	25.05	0.00				
	0.00	0.39	0.35	0.23	0.05	0.00	0.12	0.27	0.00				
Ash	0	1	0	0	69	0	0	0	0	70			
	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02			
	0.00	1.43	0.00	0.00	98.57	0.00	0.00	0.00	0.00	0.00			
	0.00	0.01	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00			
Barium	4	263	324	36	135	8	1051	208	0	2029			
	0.00	0.09	0.11	0.01	0.05	0.00	0.37	0.07	0.00	0.71			
	0.20	12.96	15.97	1.77	6.65	0.39	51.80	10.25	0.00				
	0.31	1.34	0.84	0.41	0.42	0.85	0.80	0.40	0.00				
Beryllium	2	82	170	56	59	1	396	72	0	838			
	0.00	0.03	0.06	0.02	0.02	0.00	0.14	0.03	0.00	0.29			
	0.24	9.79	20.29	6.68	7.04	0.12	47.26	8.59	0.00				
	0.16	0.42	0.44	0.64	0.18	0.11	0.30	0.14	0.00				
Bismuth	0	9	41	15	4	0	93	23	0	185			
	0.00	0.00	0.01	0.01	0.00	0.00	0.03	0.01	0.00	0.06			
	0.00	4.86	22.16	8.11	2.16	0.00	50.27	12.43	0.00				
	0.00	0.05	0.11	0.17	0.01	0.00	0.07	0.04	0.00				
Borax	0	4	20	2	2	0	15	8	0	51			
	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.02			
	0.00	7.84	39.22	3.92	3.92	0.00	29.41	15.69	0.00				
	0.00	0.02	0.05	0.02	0.01	0.00	0.01	0.02	0.00				
Boron	0	8	6	2	7	0	48	7	0	78			
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03			
	0.00	10.26	7.69	2.56	8.97	0.00	61.54	8.97	0.00				
	0.00	0.04	0.02	0.02	0.02	0.00	0.04	0.01	0.00				
Bromine	0	50	0	1	12	1	16	0	0	80			
	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03			
	0.00	62.50	0.00	1.25	15.00	1.25	20.00	0.00	0.00	0.00			
	0.00	0.25	0.00	0.01	0.04	0.11	0.01	0.00	0.00				

(continued)

Frequency											
Percent											
Row %											
Col %	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify	Total	
Cadmium	0	6	14	3	18	1	51	5	0	98	
	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.03	
	0.00	6.12	14.29	3.06	18.37	1.02	52.04	5.10	0.00		
	0.00	0.03	0.04	0.03	0.06	0.11	0.04	0.01	0.00		
Calcium	3	221	178	37	298	7	570	222	0	1536	
	0.00	0.08	0.06	0.01	0.10	0.00	0.20	0.08	0.00	0.54	
	0.20	14.39	11.59	2.41	19.40	0.46	37.11	14.45	0.00		
	0.23	1.12	0.46	0.42	0.92	0.75	0.43	0.43	0.00		
Cesium	0	0	2	0	1	0	2	1	0	6	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	33.33	0.00	16.67	0.00	33.33	16.67	0.00		
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
Chlorine	0	4	0	0	4	0	7	1	0	16	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
	0.00	25.00	0.00	0.00	25.00	0.00	43.75	6.25	0.00		
	0.00	0.02	0.00	0.00	0.01	0.00	0.01	0.00	0.00		
Chromium	2	345	456	120	21	0	720	712	0	2376	
	0.00	0.12	0.16	0.04	0.01	0.00	0.25	0.25	0.00	0.83	
	0.08	14.52	19.19	5.05	0.88	0.00	30.30	29.97	0.00		
	0.16	1.75	1.18	1.37	0.06	0.00	0.54	1.37	0.00		
Clay	28	485	861	59	1388	9	4606	890	0	8326	
	0.01	0.17	0.30	0.02	0.49	0.00	1.61	0.31	0.00	2.91	
	0.34	5.83	10.34	0.71	16.67	0.11	55.32	10.69	0.00		
	2.18	2.47	2.22	0.67	4.29	0.96	3.49	1.71	0.00		
Coal	16	966	493	104	4503	85	10132	1182	0	17481	
	0.01	0.34	0.17	0.04	1.57	0.03	3.54	0.41	0.00	6.11	
	0.09	5.53	2.82	0.59	25.76	0.49	57.96	6.76	0.00		
	1.25	4.91	1.27	1.18	13.93	9.05	7.67	2.27	0.00		
Cobalt	1	114	109	20	12	2	148	51	0	457	
	0.00	0.04	0.04	0.01	0.00	0.00	0.05	0.02	0.00	0.16	
	0.22	24.95	23.85	4.38	2.63	0.44	32.39	11.16	0.00		
	0.08	0.58	0.28	0.23	0.04	0.21	0.11	0.10	0.00		
Columbium	0	15	37	16	4	1	74	53	0	200	
	0.00	0.01	0.01	0.01	0.00	0.00	0.03	0.02	0.00	0.07	
	0.00	7.50	18.50	8.00	2.00	0.50	37.00	26.50	0.00		
	0.00	0.08	0.10	0.18	0.01	0.11	0.06	0.10	0.00		
Copper	121	1395	3948	976	442	53	7471	3045	0	17451	
	0.04	0.49	1.38	0.34	0.15	0.02	2.61	1.06	0.00	6.10	
	0.69	7.99	22.62	5.59	2.53	0.30	42.81	17.45	0.00		
	9.44	7.09	10.20	11.11	1.37	5.64	5.65	5.85	0.00		
Diatomite	2	73	64	9	44	0	116	139	0	447	
	0.00	0.03	0.02	0.00	0.02	0.00	0.04	0.05	0.00	0.16	
	0.45	16.33	14.32	2.01	9.84	0.00	25.95	31.10	0.00		
	0.16	0.37	0.17	0.10	0.14	0.00	0.09	0.27	0.00		
Feldspar	3	163	334	131	99	2	1241	87	0	2060	
	0.00	0.06	0.12	0.05	0.03	0.00	0.43	0.03	0.00	0.72	
	0.15	7.91	16.21	6.36	4.81	0.10	60.24	4.22	0.00		
	0.23	0.83	0.86	1.49	0.31	0.21	0.94	0.17	0.00		
Fixed Carbon	0	0	0	0	61	0	0	0	0	61	
	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00		
Fluorine	4	228	497	66	94	9	841	236	0	1975	
	0.00	0.08	0.17	0.02	0.03	0.00	0.29	0.08	0.00	0.69	
	0.20	11.54	25.16	3.34	4.76	0.46	42.58	11.95	0.00		
	0.31	1.16	1.28	0.75	0.29	0.96	0.64	0.45	0.00		

(continued)

Frequency Percent	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify	Total
Row % Col %	Other								
Gallium	0	3	3	0	4	0	5	5	20
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	0.00	15.00	15.00	0.00	20.00	0.00	25.00	25.00	0.00
	0.00	0.02	0.01	0.00	0.01	0.00	0.00	0.01	0.00
Gemstone	1	141	129	37	137	2	325	183	0
	0.00	0.05	0.05	0.01	0.05	0.00	0.11	0.06	0.00
	0.10	14.76	13.51	3.87	14.35	0.21	34.03	19.16	0.00
	0.08	0.72	0.33	0.42	0.42	0.21	0.25	0.35	0.00
Geothermal	44	534	73	0	373	0	14	546	0
	0.02	0.19	0.03	0.00	0.13	0.00	0.00	0.19	0.00
	2.78	33.71	4.61	0.00	23.55	0.00	0.88	34.47	0.00
	3.43	2.72	0.19	0.00	1.15	0.00	0.01	1.05	0.00
Germanium	0	12	1	0	2	0	1	3	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	0.00	63.16	5.26	0.00	10.53	0.00	5.26	15.79	0.00
	0.00	0.06	0.00	0.00	0.01	0.00	0.00	0.01	0.00
Gold	168	2039	8390	1956	1071	92	17497	11864	2
	0.06	0.71	2.93	0.68	0.37	0.03	6.12	4.15	0.00
	0.39	4.73	19.48	4.54	2.49	0.21	40.62	27.54	0.00
	13.10	10.37	21.67	22.27	3.31	9.80	13.24	22.79	11.11
Graphite	0	45	58	13	14	1	103	82	0
	0.00	0.02	0.02	0.00	0.00	0.00	0.04	0.03	0.00
	0.00	14.24	18.35	4.11	4.43	0.32	32.59	25.95	0.00
	0.00	0.23	0.15	0.15	0.04	0.11	0.08	0.16	0.00
Gypsum	3	164	78	15	207	1	310	312	0
	0.00	0.06	0.03	0.01	0.07	0.00	0.11	0.11	0.00
	0.28	15.05	7.16	1.38	18.99	0.09	28.44	28.62	0.00
	0.23	0.83	0.20	0.17	0.64	0.11	0.23	0.60	0.00
Hafnium	0	1	3	0	0	0	1	2	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	14.29	42.86	0.00	0.00	0.00	14.29	28.57	0.00
	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Heat value	0	0	0	0	57	0	0	0	57
	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00
Helium	2	0	0	0	2	0	23	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01
	7.41	0.00	0.00	0.00	7.41	0.00	85.19	0.00	0.00
	0.16	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00
Indium	0	0	2	1	0	0	4	1	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	25.00	12.50	0.00	0.00	50.00	12.50	0.00
	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
Iodine	0	1	1	0	15	0	2	4	0
	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
	0.00	4.35	4.35	0.00	65.22	0.00	8.70	17.39	0.00
	0.00	0.01	0.00	0.00	0.05	0.00	0.00	0.01	0.00
Iron	10	1969	2663	416	314	28	5332	2323	0
	0.00	0.69	0.93	0.15	0.11	0.01	1.86	0.81	0.00
	0.08	15.08	20.40	3.19	2.41	0.21	40.84	17.79	0.00
	0.78	10.01	6.88	4.74	0.97	2.98	4.03	4.46	0.00
Kyanite group	0	95	26	1	7	0	20	64	0
	0.00	0.03	0.01	0.00	0.00	0.00	0.01	0.02	0.07
	0.00	44.60	12.21	0.47	3.29	0.00	9.39	30.05	0.00
	0.00	0.48	0.07	0.01	0.02	0.00	0.02	0.12	0.00

(continued)

Frequency Percent Row %	Col %	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify	Total
Lead	162	714	2534	730	285	41	12319	2074	0	18859	
	0.06	0.25	0.89	0.26	0.10	0.01	4.31	0.73	0.00	6.60	
	0.86	3.79	13.44	3.87	1.51	0.22	65.32	11.00	0.00		
	12.64	3.63	6.54	8.31	0.88	4.37	9.32	3.98	0.00		
Lithium	0	28	28	2	12	1	74	16	0	161	
	0.00	0.01	0.01	0.00	0.00	0.00	0.03	0.01	0.00	0.06	
	0.00	17.39	17.39	1.24	7.45	0.62	45.96	9.94	0.00		
	0.00	0.14	0.07	0.02	0.04	0.11	0.06	0.03	0.00		
Magnesium	0	96	139	19	90	6	129	150	0	629	
	0.00	0.03	0.05	0.01	0.03	0.00	0.05	0.05	0.00	0.22	
	0.00	15.26	22.10	3.02	14.31	0.95	20.51	23.85	0.00		
	0.00	0.49	0.36	0.22	0.28	0.64	0.10	0.29	0.00		
Manganese	2	656	1334	246	45	14	2090	746	1	5134	
	0.00	0.23	0.47	0.09	0.02	0.00	0.73	0.26	0.00	1.80	
	0.04	12.78	25.98	4.79	0.88	0.27	40.71	14.53	0.02		
	0.16	3.34	3.45	2.80	0.14	1.49	1.58	1.43	5.56		
Mercury	0	126	357	78	29	1	476	540	0	1607	
	0.00	0.04	0.12	0.03	0.01	0.00	0.17	0.19	0.00	0.56	
	0.00	7.84	22.22	4.85	1.80	0.06	29.62	33.60	0.00		
	0.00	0.64	0.92	0.89	0.09	0.11	0.36	1.04	0.00		
Mica	1	208	807	250	56	2	1837	121	0	3282	
	0.00	0.07	0.28	0.09	0.02	0.00	0.64	0.04	0.00	1.15	
	0.03	6.34	24.59	7.62	1.71	0.06	55.97	3.69	0.00		
	0.08	1.06	2.08	2.85	0.17	0.21	1.39	0.23	0.00		
Molybdenum	0	200	405	75	67	10	402	241	1	1401	
	0.00	0.07	0.14	0.03	0.02	0.00	0.14	0.08	0.00	0.49	
	0.00	14.28	28.91	5.35	4.78	0.71	28.69	17.20	0.07		
	0.00	1.02	1.05	0.85	0.21	1.06	0.30	0.46	5.56		
Natural gas	0	1	28	0	30	6	40	22	0	127	
	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01	0.00	0.04	
	0.00	0.79	22.05	0.00	23.62	4.72	31.50	17.32	0.00		
	0.00	0.01	0.07	0.00	0.09	0.64	0.03	0.04	0.00		
Nickel	0	133	233	25	20	1	146	146	0	704	
	0.00	0.05	0.08	0.01	0.01	0.00	0.05	0.05	0.00	0.25	
	0.00	18.89	33.10	3.55	2.84	0.14	20.74	20.74	0.00		
	0.00	0.68	0.60	0.28	0.06	0.11	0.11	0.28	0.00		
Nitrogen	0	5	4	0	0	0	4	2	0	15	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
	0.00	33.33	26.67	0.00	0.00	0.00	26.67	13.33	0.00		
	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00		
Perlite	0	61	41	3	66	0	79	87	0	337	
	0.00	0.02	0.01	0.00	0.02	0.00	0.03	0.03	0.00	0.12	
	0.00	18.10	12.17	0.89	19.58	0.00	23.44	25.82	0.00		
	0.00	0.31	0.11	0.03	0.20	0.00	0.06	0.17	0.00		
Petroleum	4	132	64	6	58	26	52	25	0	367	
	0.00	0.05	0.02	0.00	0.02	0.01	0.02	0.01	0.00	0.13	
	1.09	35.97	17.44	1.63	15.80	7.08	14.17	6.81	0.00		
	0.31	0.67	0.17	0.07	0.18	2.77	0.04	0.05	0.00		
Phosphate	1	106	357	87	148	14	366	396	0	1475	
	0.00	0.04	0.12	0.03	0.05	0.00	0.13	0.14	0.00	0.52	
	0.07	7.19	24.20	5.90	10.03	0.95	24.81	26.85	0.00		
	0.08	0.54	0.92	0.99	0.46	1.49	0.28	0.76	0.00		
Platinum group	1	83	114	18	26	0	183	106	0	531	
	0.00	0.03	0.04	0.01	0.01	0.00	0.06	0.04	0.00	0.19	
	0.19	15.63	21.47	3.39	4.90	0.00	34.46	19.96	0.00		
	0.08	0.42	0.29	0.20	0.08	0.00	0.14	0.20	0.00		

(continued)

Frequency Percent	Row %	Col %	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify	Total
Potash			1	29	31	4	27	1	26	6	0	125
			0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.04
			0.80	23.20	24.80	3.20	21.60	0.80	20.80	4.80	0.00	
			0.08	0.15	0.08	0.05	0.08	0.11	0.02	0.01	0.00	
Pumice			1	165	61	18	186	4	250	549	0	1234
			0.00	0.06	0.02	0.01	0.07	0.00	0.09	0.19	0.00	0.43
			0.08	13.37	4.94	1.46	15.07	0.32	20.26	44.49	0.00	
			0.08	0.84	0.16	0.20	0.58	0.43	0.19	1.05	0.00	
Quartz crystal			1	108	38	14	15	0	81	81	0	338
			0.00	0.04	0.01	0.00	0.01	0.00	0.03	0.03	0.00	0.12
			0.30	31.95	11.24	4.14	4.44	0.00	23.96	23.96	0.00	
			0.08	0.55	0.10	0.16	0.05	0.00	0.06	0.16	0.00	
Radium			0	0	1	0	0	0	10	5	0	16
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
			0.00	0.00	6.25	0.00	0.00	0.00	62.50	31.25	0.00	
			0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	
Rare earth			0	73	138	11	32	0	129	141	0	524
			0.00	0.03	0.05	0.00	0.01	0.00	0.05	0.05	0.00	0.18
			0.00	13.93	26.34	2.10	6.11	0.00	24.62	26.91	0.00	
			0.00	0.37	0.36	0.13	0.10	0.00	0.10	0.27	0.00	
Rhenium			0	0	2	0	3	1	2	7	0	15
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
			0.00	0.00	13.33	0.00	20.00	6.67	13.33	46.67	0.00	
			0.00	0.00	0.01	0.00	0.01	0.11	0.00	0.01	0.00	
Rubidium			0	0	0	0	1	0	1	0	0	2
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			0.00	0.00	0.00	0.00	50.00	0.00	50.00	0.00	0.00	
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sand			0	0	0	0	69	0	1	0	0	70
			0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02
			0.00	0.00	0.00	0.00	98.57	0.00	1.43	0.00	0.00	
			0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	
Sand & gravel			106	1434	208	217	11955	198	16921	6716	4	37759
			0.04	0.50	0.07	0.08	4.18	0.07	5.92	2.35	0.00	13.20
			0.28	3.80	0.55	0.57	31.66	0.52	44.81	17.79	0.01	
			8.27	7.29	0.54	2.47	36.97	21.09	12.80	12.90	22.22	
Scandium			0	0	0	0	1	0	3	2	0	6
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			0.00	0.00	0.00	0.00	16.67	0.00	50.00	33.33	0.00	
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Selenium			0	3	3	2	3	1	8	4	0	24
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
			0.00	12.50	12.50	8.33	12.50	4.17	33.33	16.67	0.00	
			0.00	0.02	0.01	0.02	0.01	0.11	0.01	0.01	0.00	
Silicon			6	147	211	80	306	6	601	202	0	1559
			0.00	0.05	0.07	0.03	0.11	0.00	0.21	0.07	0.00	0.55
			0.38	9.43	13.53	5.13	19.63	0.38	38.55	12.96	0.00	
			0.47	0.75	0.54	0.91	0.95	0.64	0.45	0.39	0.00	
Silver			139	1025	4624	1084	703	83	13522	3548	1	24729
			0.05	0.36	1.62	0.38	0.25	0.03	4.73	1.24	0.00	8.65
			0.56	4.14	18.70	4.38	2.84	0.34	54.68	14.35	0.00	
			10.84	5.21	11.94	12.34	2.17	8.84	10.23	6.82	5.56	
Sodium			11	39	99	6	112	1	223	53	0	544
			0.00	0.01	0.03	0.00	0.04	0.00	0.08	0.02	0.00	0.19
			2.02	7.17	18.20	1.10	20.59	0.18	40.99	9.74	0.00	
			0.86	0.20	0.26	0.07	0.35	0.11	0.17	0.10	0.00	

(continued)

Frequency Percent	Row %	Col %	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify	Total
Stone			54	912	367	117	6202	31	11482	2012	4	21181
			0.02	0.32	0.13	0.04	2.17	0.01	4.02	0.70	0.00	7.41
			0.25	4.31	1.73	0.55	29.28	0.15	54.21	9.50	0.02	
			4.21	4.64	0.95	1.33	19.18	3.30	8.69	3.87	22.22	
Strontium			0	17	14	2	5	0	17	27	0	82
			0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.03
			0.00	20.73	17.07	2.44	6.10	0.00	20.73	32.93	0.00	
			0.00	0.09	0.04	0.02	0.02	0.00	0.01	0.05	0.00	
Sulfur			1	57	124	31	126	7	256	80	0	682
			0.00	0.02	0.04	0.01	0.04	0.00	0.09	0.03	0.00	0.24
			0.15	8.36	18.18	4.55	18.48	1.03	37.54	11.73	0.00	
			0.08	0.29	0.32	0.35	0.39	0.75	0.19	0.15	0.00	
Sulfur/coal			0	0	0	0	68	0	0	0	0	68
			0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02
			0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	
			0.00	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	
Talc			1	99	148	13	90	5	257	122	0	735
			0.00	0.03	0.05	0.00	0.03	0.00	0.09	0.04	0.00	0.26
			0.14	13.47	20.14	1.77	12.24	0.68	34.97	16.60	0.00	
			0.08	0.50	0.38	0.15	0.28	0.53	0.19	0.23	0.00	
Tantalum			0	7	18	9	6	0	66	26	0	132
			0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.01	0.00	0.05
			0.00	5.30	13.64	6.82	4.55	0.00	50.00	19.70	0.00	
			0.00	0.04	0.05	0.10	0.02	0.00	0.05	0.05	0.00	
Tellurium			0	1	7	7	5	0	17	4	0	41
			0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
			0.00	2.44	17.07	17.07	12.20	0.00	41.46	9.76	0.00	
			0.00	0.01	0.02	0.08	0.02	0.00	0.01	0.01	0.00	
Thallium			0	0	0	0	1	0	1	0	0	2
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
			0.00	0.00	0.00	0.00	50.00	0.00	50.00	0.00	0.00	
			0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Thorium			1	67	87	20	9	1	57	168	0	410
			0.00	0.02	0.03	0.01	0.00	0.00	0.02	0.06	0.00	0.14
			0.24	16.34	21.22	4.88	2.20	0.24	13.90	40.98	0.00	
			0.08	0.34	0.22	0.23	0.03	0.11	0.04	0.32	0.00	
Tin			0	131	149	24	13	1	247	51	0	616
			0.00	0.05	0.05	0.01	0.00	0.00	0.09	0.02	0.00	0.22
			0.00	21.27	24.19	3.90	2.11	0.16	40.10	8.28	0.00	
			0.00	0.67	0.38	0.27	0.04	0.11	0.19	0.10	0.00	
Titanium			5	164	181	30	31	1	125	208	0	745
			0.00	0.06	0.06	0.01	0.01	0.00	0.04	0.07	0.00	0.26
			0.67	22.01	24.30	4.03	4.16	0.13	16.78	27.92	0.00	
			0.39	0.83	0.47	0.34	0.10	0.11	0.09	0.40	0.00	
Tungsten			0	242	676	134	67	5	1332	784	2	3242
			0.00	0.08	0.24	0.05	0.02	0.00	0.47	0.27	0.00	1.13
			0.00	7.46	20.85	4.13	2.07	0.15	41.09	24.18	0.06	
			0.00	1.23	1.75	1.53	0.21	0.53	1.01	1.51	11.11	
Uranium			154	1005	1155	399	522	66	3746	2508	0	9555
			0.05	0.35	0.40	0.14	0.18	0.02	1.31	0.88	0.00	3.34
			1.61	10.52	12.09	4.18	5.46	0.69	39.20	26.25	0.00	
			12.01	5.11	2.98	4.54	1.61	7.03	2.83	4.82	0.00	
Vanadium			3	78	139	80	158	30	1680	527	0	2695
			0.00	0.03	0.05	0.03	0.06	0.01	0.59	0.18	0.00	0.94
			0.11	2.89	5.16	2.97	5.86	1.11	62.34	19.55	0.00	
			0.23	0.40	0.36	0.91	0.49	3.19	1.27	1.01	0.00	

(continued)

Frequency Percent Row % Col %	Other	Raw prospect	Explored prospect	Developed deposit	Producer	Temporary shutdown	Past producer	Unknown	Cannot verify	Total
Vermiculite	0 0.00 0.00 0.00	21 0.01 11.86 0.11	24 0.01 13.56 0.06	4 0.00 2.26 0.05	28 0.01 15.82 0.09	0 0.00 0.00 0.00	73 0.03 41.24 0.06	27 0.01 15.25 0.05	0 0.00 0.00 0.00	177 0.06
Volatile content	3 0.00 2.22 0.23	15 0.01 11.11 0.08	21 0.01 15.56 0.05	7 0.00 5.19 0.08	69 0.02 51.11 0.21	0 0.00 0.00 0.00	18 0.01 13.33 0.01	2 0.00 1.48 0.00	0 0.00 0.00 0.00	135 0.05
Water content	3 0.00 0.80 0.23	15 0.01 4.02 0.08	113 0.04 30.29 0.29	48 0.02 12.87 0.55	85 0.03 22.79 0.26	6 0.00 1.61 0.64	100 0.03 26.81 0.08	3 0.00 0.80 0.01	0 0.00 0.00 0.00	373 0.13
Wollastonite	0 0.00 0.00 0.00	16 0.01 44.44 0.08	1 0.00 2.78 0.00	0 0.00 0.00 0.00	4 0.00 11.11 0.01	0 0.00 0.00 0.00	8 0.00 22.22 0.01	7 0.00 19.44 0.01	0 0.00 0.00 0.00	36 0.01
Zeolites	2 0.00 1.36 0.16	46 0.02 31.29 0.23	22 0.01 14.97 0.06	1 0.00 0.68 0.01	14 0.00 9.52 0.04	1 0.00 0.68 0.11	19 0.01 12.93 0.01	42 0.01 28.57 0.08	0 0.00 0.00 0.00	147 0.05
Zinc	170 0.06 1.27 13.26	493 0.17 3.70 2.51	1826 0.64 13.69 4.72	425 0.15 3.19 4.84	244 0.09 1.83 0.75	32 0.01 0.24 3.41	8966 3.14 67.20 6.78	1186 0.41 8.89 2.28	0 0.00 0.00 0.00	13342 4.67
Zirconium	0 0.00 0.00 0.00	35 0.01 16.06 0.18	38 0.01 17.43 0.10	5 0.00 2.29 0.06	13 0.00 5.96 0.04	0 0.00 0.00 0.00	44 0.02 20.18 0.03	83 0.03 38.07 0.16	0 0.00 0.00 0.00	218 0.08
Total	1282 0.45	19665 6.88	38720 13.54	8782 3.07	32335 11.31	939 0.33	132157 46.22	52051 18.20	18 0.01	285949 100.00

Appendix I. — Frequency of state by type — past producers.

State	Type														
	Frequency			Percent											
	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Under-ground Surface	Under-ground	Under-water	Well	Un-known
AL	0	0	0	0	0	26	17	56	87	685	107	3	0	0	981
	0.00	0.00	0.00	0.00	0.00	0.03	0.02	0.06	0.10	0.77	0.12	0.00	0.00	0.00	1.10
	0.00	0.00	0.00	0.00	0.00	2.65	1.73	5.71	8.87	69.83	10.91	0.31	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.71	1.81	8.22	1.96	1.46	0.38	2.05	0.00	0.00	
AK	0	0	0	0	0	1222	16	12	115	578	277	3	1	6	2230
	0.00	0.00	0.00	0.00	0.00	1.37	0.02	0.01	0.13	0.65	0.31	0.00	0.00	0.01	2.50
	0.00	0.00	0.00	0.00	0.00	54.80	0.72	0.54	5.16	25.92	12.42	0.13	0.04	0.27	
	0.00	0.00	0.00	0.00	0.00	33.26	1.71	1.76	2.58	1.23	0.97	2.05	0.54	0.28	
AZ	0	0	6	0	0	54	34	59	655	518	1621	2	21	622	3592
	0.00	0.00	0.01	0.00	0.00	0.06	0.04	0.07	0.74	0.58	1.82	0.00	0.02	0.70	4.03
	0.00	0.00	0.17	0.00	0.00	1.50	0.95	1.64	18.23	14.42	45.13	0.06	0.58	17.32	
	0.00	0.00	35.29	0.00	0.00	1.47	3.63	8.66	14.72	1.10	5.70	1.37	11.41	28.84	
AR	0	0	2	0	0	0	23	12	112	1582	321	7	10	12	2081
	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.01	0.13	1.78	0.36	0.01	0.01	0.01	2.34
	0.00	0.00	0.10	0.00	0.00	0.00	1.11	0.58	5.38	76.02	15.43	0.34	0.48	0.58	
	0.00	0.00	11.76	0.00	0.00	2.45	1.76	2.52	3.37	1.13	4.79	5.43	0.56		
CA	11	0	0	252	1614	62	39	682	2373	1837	3	5	124	7002	
	0.01	0.00	0.00	0.28	1.81	0.07	0.04	0.07	2.66	2.06	0.00	0.01	0.14	7.86	
	0.16	0.00	0.00	3.60	23.05	0.89	0.56	9.74	33.89	26.24	0.04	0.07	1.77		
	100.00	0.00	0.00	18.09	43.93	6.62	5.73	15.33	5.05	6.46	2.05	2.72	5.75		
CO	0	0	0	11	50	119	18	75	1105	7276	0	2	181	8837	
	0.00	0.00	0.00	0.01	0.06	0.13	0.02	0.08	1.24	8.17	0.00	0.00	0.20	9.92	
	0.00	0.00	0.00	0.12	0.57	1.35	0.20	0.85	12.50	82.34	0.00	0.02	2.05		
	0.00	0.00	0.00	0.79	1.36	12.70	2.64	1.69	2.35	25.57	0.00	1.09	8.39		
CT	0	0	0	0	0	6	0	10	539	15	3	0	2	575	
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.61	0.02	0.00	0.00	0.00	0.65	
	0.00	0.00	0.00	0.00	0.00	1.04	0.00	1.74	93.74	2.61	0.52	0.00	0.35		
	0.00	0.00	0.00	0.00	0.00	0.64	0.00	0.22	1.15	0.05	2.05	0.00	0.09		
DE	0	0	0	0	0	0	0	0	14	0	0	0	0	14	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00		
DC	0	0	0	0	0	0	0	0	22	0	0	0	0	22	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00		
FL	0	0	0	0	0	26	47	0	278	0	0	0	0	351	
	0.00	0.00	0.00	0.00	0.00	0.03	0.05	0.00	0.31	0.00	0.00	0.00	0.00	0.39	
	0.00	0.00	0.00	0.00	0.00	7.41	13.39	0.00	79.20	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	2.77	6.90	0.00	0.59	0.00	0.00	0.00	0.00		
GA	0	0	0	1	19	17	1	177	509	83	1	0	1	809	
	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.20	0.57	0.09	0.00	0.00	0.00	0.91	
	0.00	0.00	0.00	0.12	2.35	2.10	0.12	21.88	62.92	10.26	0.12	0.00	0.12		
	0.00	0.00	0.00	0.07	0.52	1.81	0.15	3.98	1.08	0.29	0.68	0.00	0.05		
HI	0	0	0	0	0	7	0	0	37	0	0	0	0	44	
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.05	
	0.00	0.00	0.00	0.00	0.00	15.91	0.00	0.00	84.09	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.75	0.00	0.00	0.08	0.00	0.00	0.00	0.00		

(continued)

State	Type															
	Frequency		Percent													
	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
ID	0	0	0	29	156	14	112	150	918	918	1	0	58	2356		
	0.00	0.00	0.00	0.03	0.18	0.02	0.13	0.17	1.03	1.03	0.00	0.00	0.07	2.64		
	0.00	0.00	0.00	1.23	6.62	0.59	4.75	6.37	38.96	38.96	0.04	0.00	2.46			
	0.00	0.00	0.00	2.08	4.25	1.49	16.45	3.37	1.95	3.23	0.68	0.00	2.69			
IL	0	0	0	0	0	4	0	80	970	132	17	0	9	1212		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09	1.09	0.15	0.02	0.00	0.01	1.36		
	0.00	0.00	0.00	0.00	0.00	0.33	0.00	6.60	80.03	10.89	1.40	0.00	0.74			
	0.00	0.00	0.00	0.00	0.00	0.43	0.00	1.80	2.06	0.46	11.64	0.00	0.42			
IN	0	0	0	0	0	21	0	6	235	50	16	0	0	328		
	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.26	0.06	0.02	0.00	0.00	0.37		
	0.00	0.00	0.00	0.00	0.00	6.40	0.00	1.83	71.65	15.24	4.88	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	2.24	0.00	0.13	0.50	0.18	10.96	0.00	0.00			
IA	0	0	0	0	0	2	0	15	2654	1311	2	0	0	3984		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	2.98	1.47	0.00	0.00	0.00	4.47		
	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.38	66.62	32.91	0.05	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.34	5.65	4.61	1.37	0.00	0.00			
KS	0	0	0	0	0	0	0	0	4	46	0	0	0	50		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.06		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.00	92.00	0.00	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.16	0.00	0.00	0.00	0.00			
KY	0	0	0	1	0	72	0	13	529	757	7	0	0	1379		
	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.01	0.59	0.85	0.01	0.00	0.00	1.55		
	0.00	0.00	0.00	0.07	0.00	5.22	0.00	0.94	38.36	54.89	0.51	0.00	0.00			
	0.00	0.00	0.00	0.07	0.00	7.68	0.00	0.29	1.13	2.66	4.79	0.00	0.00			
LA	0	0	0	0	0	2	0	8	213	4	1	0	0	228		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.24	0.00	0.00	0.00	0.00	0.26		
	0.00	0.00	0.00	0.00	0.00	0.88	0.00	3.51	93.42	1.75	0.44	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.21	0.00	0.18	0.45	0.01	0.68	0.00	0.00			
ME	0	0	0	10	0	5	31	11	490	53	0	0	0	600		
	0.00	0.00	0.00	0.01	0.00	0.01	0.03	0.01	0.55	0.06	0.00	0.00	0.00	0.67		
	0.00	0.00	0.00	1.67	0.00	0.83	5.17	1.83	81.67	8.83	0.00	0.00	0.00			
	0.00	0.00	0.00	0.72	0.00	0.53	4.55	0.25	1.04	0.19	0.00	0.00	0.00			
MD	0	0	0	7	1	17	3	32	511	33	1	0	0	605		
	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.04	0.57	0.04	0.00	0.00	0.00	0.68		
	0.00	0.00	0.00	1.16	0.17	2.81	0.50	5.29	84.46	5.45	0.17	0.00	0.00			
	0.00	0.00	0.00	0.50	0.03	1.81	0.44	0.72	1.09	0.12	0.68	0.00	0.00			
MA	0	0	0	7	0	19	18	2	322	13	0	0	0	381		
	0.00	0.00	0.00	0.01	0.00	0.02	0.02	0.00	0.36	0.01	0.00	0.00	0.00	0.43		
	0.00	0.00	0.00	1.84	0.00	4.99	4.72	0.52	84.51	3.41	0.00	0.00	0.00			
	0.00	0.00	0.00	0.50	0.00	2.03	2.64	0.04	0.69	0.05	0.00	0.00	0.00			
MI	0	0	0	0	0	19	0	33	394	355	0	0	14	815		
	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.04	0.44	0.40	0.00	0.00	0.02	0.91		
	0.00	0.00	0.00	0.00	0.00	2.33	0.00	4.05	48.34	43.56	0.00	0.00	1.72			
	0.00	0.00	0.00	0.00	0.00	2.03	0.00	0.74	0.84	1.25	0.00	0.00	0.65			
MN	0	0	0	0	0	4	0	10	447	69	0	0	2	532		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.50	0.08	0.00	0.00	0.00	0.60		
	0.00	0.00	0.00	0.00	0.00	0.75	0.00	1.88	84.02	12.97	0.00	0.00	0.38			
	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.22	0.95	0.24	0.00	0.00	0.09			
MS	0	0	0	0	0	11	0	0	150	2	8	0	0	171		
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.17	0.00	0.01	0.00	0.00	0.19		
	0.00	0.00	0.00	0.00	0.00	6.43	0.00	0.00	87.72	1.17	4.68	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	1.17	0.00	0.00	0.32	0.01	5.48	0.00	0.00			

(continued)

State	Type															
	Frequency		Percent													
	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
MO	0	0	0	12	0	6	6	83	9356	4102	23	1	25	13614		
	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.09	10.50	4.60	0.03	0.00	0.03	15.28		
	0.00	0.00	0.00	0.09	0.00	0.04	0.04	0.61	68.72	30.13	0.17	0.01	0.18			
	0.00	0.00	0.00	0.86	0.00	0.64	0.88	1.87	19.92	14.42	15.75	0.54	1.16			
MT	0	0	0	51	208	14	4	124	262	1146	0	5	69	1883		
	0.00	0.00	0.00	0.06	0.23	0.02	0.00	0.14	0.29	1.29	0.00	0.01	0.08	2.11		
	0.00	0.00	0.00	2.71	11.05	0.74	0.21	6.59	13.91	60.86	0.00	0.27	3.66			
	0.00	0.00	0.00	3.66	5.66	1.49	0.59	2.79	0.56	4.03	0.00	2.72	3.20			
NV	0	0	8	202	115	76	50	289	693	1548	6	3	721	3711		
	0.00	0.00	0.01	0.23	0.13	0.09	0.06	0.32	0.78	1.74	0.01	0.00	0.81	4.17		
	0.00	0.00	0.22	5.44	3.10	2.05	1.35	7.79	18.67	41.71	0.16	0.08	19.43			
	0.00	0.00	47.06	14.50	3.13	8.11	7.34	6.50	1.48	5.44	4.11	1.63	33.43			
NH	0	0	0	0	0	2	12	31	126	22	5	0	0	198		
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.14	0.02	0.01	0.00	0.00	0.22		
	0.00	0.00	0.00	0.00	0.00	1.01	6.06	15.66	63.64	11.11	2.53	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	0.21	1.76	0.70	0.27	0.08	3.42	0.00	0.00			
NJ	0	0	0	1	0	12	7	75	77	72	2	0	12	258		
	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.08	0.09	0.08	0.00	0.00	0.01	0.29		
	0.00	0.00	0.00	0.39	0.00	4.65	2.71	29.07	29.84	27.91	0.78	0.00	4.65			
	0.00	0.00	0.00	0.07	0.00	1.28	1.03	1.69	0.16	0.25	1.37	0.00	0.56			
NM	0	0	0	5	15	9	13	176	655	863	0	0	82	1818		
	0.00	0.00	0.00	0.01	0.02	0.01	0.01	0.20	0.74	0.97	0.00	0.00	0.09	2.04		
	0.00	0.00	0.00	0.28	0.83	0.50	0.72	9.68	36.03	47.47	0.00	0.00	4.51			
	0.00	0.00	0.00	0.36	0.41	0.96	1.91	3.96	1.39	3.03	0.00	0.00	3.80			
NY	0	0	1	50	0	11	10	36	538	93	1	120	14	874		
	0.00	0.00	0.06	0.00	0.00	0.01	0.01	0.04	0.60	0.10	0.00	0.13	0.02	0.98		
	0.00	0.00	0.11	5.72	0.00	1.26	1.14	4.12	61.56	10.64	0.11	13.73	1.60			
	0.00	0.00	5.88	3.59	0.00	1.17	1.47	0.81	1.15	0.33	0.68	65.22	0.65			
NC	0	0	0	218	6	30	9	166	1345	148	10	0	1	1933		
	0.00	0.00	0.00	0.24	0.01	0.03	0.01	0.19	1.51	0.17	0.01	0.00	0.00	2.17		
	0.00	0.00	0.00	11.28	0.31	1.55	0.47	8.59	69.58	7.66	0.52	0.00	0.05			
	0.00	0.00	0.00	15.65	0.16	3.20	1.32	3.73	2.86	0.52	6.85	0.00	0.05			
ND	0	0	0	15	0	1	1	34	782	166	0	0	6	1005		
	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.04	0.88	0.19	0.00	0.00	0.01	1.13		
	0.00	0.00	0.00	1.49	0.00	0.10	0.10	3.38	77.81	16.52	0.00	0.00	0.60			
	0.00	0.00	0.00	1.08	0.00	0.11	0.15	0.76	1.66	0.58	0.00	0.00	0.28			
OH	0	0	0	0	0	48	0	0	231	4	1	0	0	284		
	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.32		
	0.00	0.00	0.00	0.00	0.00	16.90	0.00	0.00	81.34	1.41	0.35	0.00	0.00			
	0.00	0.00	0.00	0.00	0.00	5.12	0.00	0.00	0.49	0.01	0.68	0.00	0.00			
OK	0	0	0	0	0	1	0	0	3964	119	0	0	2	4086		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.45	0.13	0.00	0.00	0.00	4.59		
	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	97.01	2.91	0.00	0.00	0.05			
	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	8.44	0.42	0.00	0.00	0.09			
OR	0	1	0	4	92	4	5	59	1437	587	1	1	11	2202		
	0.00	0.00	0.00	0.00	0.10	0.00	0.01	0.07	1.61	0.66	0.00	0.00	0.01	2.47		
	0.00	0.05	0.00	0.18	4.18	0.18	0.23	2.68	65.26	26.66	0.05	0.05	0.50			
	0.00	25.00	0.00	0.29	2.50	0.43	0.73	1.33	3.06	2.06	0.68	0.54	0.51			
PA	0	0	0	0	1	80	4	69	1261	261	3	0	11	1690		
	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.08	1.42	0.29	0.00	0.00	0.01	1.90		
	0.00	0.00	0.00	0.06	4.73	0.24	4.08	74.62	15.44	0.18	0.00	0.65				
	0.00	0.00	0.00	0.03	8.54	0.59	1.55	2.68	0.92	2.05	0.00	0.51				

(continued)

State

Type

Frequency Percent	Row %	Col %	Type												Total	
			Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	
RI	0	0	0	0	0	0	0	2	0	26	3	0	0	0	0	31
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.03
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.45	0.00	83.87	9.68	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.06	0.01	0.00	0.00	0.00	0.00	0.00
SC	0	0	0	0	15	13	2	36	160	34	7	0	0	0	0	267
	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.04	0.18	0.04	0.01	0.00	0.00	0.00	0.00	0.30
	0.00	0.00	0.00	0.00	5.62	4.87	0.75	13.48	59.93	12.73	2.62	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.41	1.39	0.29	0.81	0.34	0.12	4.79	0.00	0.00	0.00	0.00	0.00
SD	0	0	0	0	2	1	2	128	871	234	1	1	0	0	0	1240
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.98	0.26	0.00	0.00	0.00	0.00	0.00	1.39
	0.00	0.00	0.00	0.00	0.16	0.08	0.16	10.32	70.24	18.87	0.08	0.08	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.05	0.11	0.29	2.88	1.85	0.82	0.68	0.54	0.00	0.00	0.00	0.00
TN	0	0	0	129	12	14	11	52	967	95	2	0	5	0	5	1287
	0.00	0.00	0.00	0.14	0.01	0.02	0.01	0.06	1.09	0.11	0.00	0.00	0.01	0.00	0.01	1.44
	0.00	0.00	0.00	10.02	0.93	1.09	0.85	4.04	75.14	7.38	0.16	0.00	0.39	0.00	0.00	0.39
	0.00	0.00	0.00	9.26	0.33	1.49	1.62	1.17	2.06	0.33	1.37	0.00	0.23	0.00	0.00	0.23
TX	0	0	0	0	0	10	0	16	363	59	0	0	3	0	3	451
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.41	0.07	0.00	0.00	0.00	0.00	0.00	0.51
	0.00	0.00	0.00	0.00	0.00	2.22	0.00	3.55	80.49	13.08	0.00	0.00	0.67	0.00	0.00	0.67
	0.00	0.00	0.00	0.00	0.00	1.07	0.00	0.36	0.77	0.21	0.00	0.00	0.14	0.00	0.00	0.14
UT	0	0	0	30	0	3	102	229	1449	1433	2	0	89	0	89	3337
	0.00	0.00	0.00	0.03	0.00	0.00	0.11	0.26	1.63	1.61	0.00	0.00	0.10	0.00	0.10	3.75
	0.00	0.00	0.00	0.90	0.00	0.09	3.06	6.86	43.42	42.94	0.06	0.00	2.67	0.00	0.00	2.67
	0.00	0.00	0.00	2.15	0.00	0.32	14.98	5.15	3.08	5.04	1.37	0.00	4.13	0.00	0.00	4.13
VT	0	0	0	1	1	0	0	4	61	13	0	0	0	0	0	80
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.01	0.00	0.00	0.00	0.00	0.00	0.09
	0.00	0.00	0.00	1.25	1.25	0.00	0.00	5.00	76.25	16.25	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.07	0.03	0.00	0.00	0.09	0.13	0.05	0.00	0.00	0.00	0.00	0.00	0.00
VA	0	0	0	8	11	7	22	288	1204	310	3	0	7	0	7	1860
	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.32	1.35	0.35	0.00	0.00	0.01	0.00	0.01	2.09
	0.00	0.00	0.00	0.43	0.59	0.38	1.18	15.48	64.73	16.67	0.16	0.00	0.38	0.00	0.00	0.38
	0.00	0.00	0.00	0.57	0.30	0.75	3.23	6.47	2.56	1.09	2.05	0.00	0.32	0.00	0.00	0.32
WA	0	3	0	69	51	17	2	137	1873	464	2	14	27	0	27	2659
	0.00	0.00	0.00	0.08	0.06	0.02	0.00	0.15	2.10	0.52	0.00	0.02	0.03	0.00	0.00	2.98
	0.00	0.11	0.00	2.59	1.92	0.64	0.08	5.15	70.44	17.45	0.08	0.53	1.02	0.00	0.00	1.02
	0.00	75.00	0.00	4.95	1.39	1.81	0.29	3.08	3.99	1.63	1.37	7.61	1.25	0.00	0.00	1.25
WV	0	0	0	1	0	45	0	10	123	375	1	0	1	0	1	556
	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.01	0.14	0.42	0.00	0.00	0.00	0.00	0.00	0.62
	0.00	0.00	0.00	0.18	0.00	8.09	0.00	1.80	22.12	67.45	0.18	0.00	0.18	0.00	0.00	0.18
	0.00	0.00	0.00	0.07	0.00	4.80	0.00	0.22	0.26	1.32	0.68	0.00	0.05	0.00	0.05	0.05
WI	0	0	0	0	0	15	0	69	2580	341	0	0	6	0	6	3011
	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.08	2.90	0.38	0.00	0.00	0.01	0.00	0.01	3.38
	0.00	0.00	0.00	0.00	0.00	0.50	0.00	2.29	85.69	11.33	0.00	0.00	0.20	0.00	0.00	0.20
	0.00	0.00	0.00	0.00	0.00	1.60	0.00	1.55	5.49	1.20	0.00	0.00	0.28	0.00	0.00	0.28
WY	0	0	0	279	3	1	9	65	493	682	1	0	34	0	34	1567
	0.00	0.00	0.00	0.31	0.00	0.00	0.01	0.07	0.55	0.77	0.00	0.00	0.04	0.00	0.04	1.76
	0.00	0.00	0.00	17.80	0.19	0.06	0.57	4.15	31.46	43.52	0.06	0.00	2.17	0.00	0.00	2.17
	0.00	0.00	0.00	20.03	0.08	0.11	1.32	1.46	1.05	2.40	0.68	0.00	1.58	0.00	0.00	1.58
Total	11	4	17	1393	3674	937	681	4449	46974	28454	146	184	2157	89081		
	0.01	0.00	0.02	1.56	4.12	1.05	0.76	4.99	52.73	31.94	0.16	0.21	2.42	100.00		

Appendix J. — Frequency of domain by type — past producers — administrative boundaries.

Type	Domain											
	Frequency	Percent	Row %	Col %	BIA	DOD	NFS	NFW	NPS	Other	Wilderness	Total
Brine	0	0.00	0.00	0.00	0	0.00	0.00	0.00	0.00	11	0.00	11
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
Hot spring	0	0.00	0.00	0.00	0	1	0	0	3	0	0.00	4
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	25.00	25.00	0.00	0.00	75.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.66	0.00	0.00	0.00	0.00
Leach	0	0.00	0.00	0.00	0	0	1	0	0	16	0.00	17
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02
	0.00	0.00	0.00	5.88	5.88	0.00	0.00	0.00	0.00	94.12	0.00	0.00
	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00
Mineral location	5	0.01	0.36	0.45	2	0.14	0.42	0.00	0.00	5	1004	0
	0.01	0.01	0.36	0.45	0.00	0.14	0.42	0.00	0.01	1.13	0.00	1393
	0.36	0.36	0.45	0.66	27.06	0.66	2.77	0.00	0.36	72.07	0.00	1.56
	0.45	0.45	0.66	0.66	2.77	0.66	0.66	0.00	1.09	1.37	0.00	0.00
Placer	7	0.01	0.19	0.63	6	0.01	1.51	0.01	0.10	5	2212	4
	0.01	0.01	0.19	0.63	0.01	0.16	36.66	0.14	2.53	2.48	0.00	3674
	0.19	0.19	0.63	0.63	0.01	0.16	1.97	5.10	20.35	60.21	0.11	4.12
	0.63	0.63	0.63	0.63	0.01	0.16	9.91	5.10	20.35	3.01	4.17	0.00
Processing plant	7	0.01	0.75	0.63	1	0.00	0.09	0.00	0.00	1	847	0
	0.01	0.01	0.75	0.63	0.00	0.11	8.64	0.00	0.11	0.95	0.00	937
	0.75	0.75	0.63	0.63	0.00	0.11	8.64	0.00	0.11	90.39	0.00	1.05
	0.63	0.63	0.63	0.63	0.00	0.11	0.60	0.00	0.22	1.15	0.00	0.00
Prospect	10	0.01	1.47	0.90	4	0.00	0.19	0.00	0.01	6	490	2
	0.01	0.01	1.47	0.90	0.00	0.19	24.23	0.59	0.88	0.55	0.00	681
	1.47	1.47	0.90	0.90	0.00	0.19	1.32	4.08	1.31	71.95	0.29	0.76
	0.90	0.90	0.90	0.90	0.00	0.19	1.21	4.08	1.31	0.67	2.08	0.00
Surface-underground	78	0.09	1.75	7.01	27	0.03	0.61	1.29	0.01	9	43	10
	0.09	0.09	1.75	7.01	0.03	0.61	25.78	0.20	0.97	3135	0.01	4449
	1.75	1.75	7.01	7.01	0.03	0.61	8.64	0.20	0.97	3.52	0.01	4.99
	7.01	7.01	7.01	7.01	0.03	0.61	8.44	9.18	9.41	70.47	0.22	0.22
Surface	533	0.60	1.13	47.89	118	0.13	0.25	4.14	0.06	54	88	15
	0.60	0.60	1.13	47.89	0.13	0.25	7.85	0.11	0.19	42477	0.02	46974
	1.13	1.13	1.13	47.89	0.25	0.25	7.85	0.11	0.19	47.68	0.03	52.73
	47.89	47.89	47.89	47.89	38.82	27.13	27.13	55.10	19.26	55.10	90.43	0.00
Underground	303	0.34	1.06	27.22	79	0.09	0.28	7.35	0.01	12	202	49
	0.34	0.34	1.06	27.22	0.09	0.28	23.00	0.04	0.71	21264	0.06	28454
	1.06	1.06	27.22	27.22	0.28	25.99	48.14	12.24	44.20	23.87	0.17	31.94
	27.22	27.22	27.22	27.22	25.99	25.99	48.14	12.24	44.20	74.73	51.04	51.04
Underwater	0	0.00	0.00	0.00	0	0.00	0.00	0.01	0.00	1	139	0
	0.00	0.00	0.00	0.00	0	0.00	0.01	4.11	0.00	0.16	0.00	0.16
	0.00	0.00	0.00	0.00	0	0.00	0.04	0.00	0.68	95.21	0.00	0.00
	0.00	0.00	0.00	0.00	0	0.00	0.04	0.00	0.22	0.19	0.00	0.00
Well	5	0.01	2.72	0.45	0	0.00	0.00	0.00	0.00	0	177	0
	0.01	0.01	2.72	0.45	0	0.00	0.00	0.00	0.00	1	0.20	0.00
	2.72	2.72	2.72	0.45	0	0.00	0.01	0.00	0.00	0.20	0.00	0.21
	0.45	0.45	0.45	0.45	0	0.00	0.01	0.00	0.00	0.24	0.00	0.00
Unknown	165	0.19	7.65	14.82	67	0.08	3.11	0.26	0.02	14	15	16
	0.19	0.19	7.65	14.82	0.08	0.08	3.11	0.26	0.02	15	1644	2157
	7.65	7.65	7.65	14.82	3.11	3.11	10.94	0.65	0.70	1.85	0.02	2.42
	14.82	14.82	14.82	14.82	22.04	22.04	1.74	14.29	3.28	76.22	0.74	16.67
Total	1113	1.25	11.25	11.25	304	0.34	15.26	13597	0.11	98	457	73416
	1.25	1.25	1.25	1.25	0.34	0.34	15.26	0.11	0.51	0.51	82.41	0.11
											96	89081
											100.00	100.00

Appendix K. — Frequency of domain by type — past producers — BOM domain.

Type	Domain																				
	Frequency Percent [†]	Row % Col %	BLM	Fed- erat	County	BIA	DOD	Mixed	Muni- cipal	NFS	Monu- ment	NFS	Nat'l. off- shore	Nat'l. prim- itive	Wil- der- ness	Nat'l. priv- ate	State forest	State shore	State off- shore	State park	Un- known
Brine	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
	72.73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	18.18	
	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
Hot spring	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	4
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	2.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Leach	0	5	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	17
	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
	0.00	29.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.88	0.00	0.00	0.00	0.00	0.00	0.00	47.06	0.00	0.00	17.65	
	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03	
Mineral location	11	162	3	48	3	0	0	0	286	0	0	0	0	2	1	1	532	15	0	4	1393
	0.01	0.18	0.00	0.05	0.00	0.00	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.60	0.02	0.00	0.00	1.56
	0.79	11.63	0.22	3.45	0.22	0.00	0.00	0.00	20.53	0.00	0.00	0.00	0.14	0.07	0.07	38.19	1.08	0.00	0.00	0.29	23.33
	0.14	3.37	0.42	2.99	0.35	0.00	0.00	0.00	2.89	0.00	0.00	0.00	4.55	1.22	1.54	1.09	1.28	0.00	0.00	0.00	2.78
Placer	183	502	2	257	14	4	79	3	1176	0	0	9	14	7	23	242	234	3	0	1	921
	0.21	0.56	0.00	0.29	0.02	0.00	0.00	0.00	1.32	0.00	0.00	0.01	0.02	0.01	0.03	0.27	0.26	0.00	0.00	0.03	412
	4.98	13.66	0.05	7.00	0.38	0.11	2.15	0.08	32.01	0.00	0.00	0.24	0.38	0.19	0.63	6.59	6.37	0.08	0.00	0.03	25.07
	2.32	10.43	0.28	15.99	1.65	3.54	13.53	0.99	11.89	0.00	0.00	10.59	31.82	8.54	35.38	0.50	19.93	2.63	0.00	0.76	7.87
Processing plant	187	32	0	12	7	0	11	4	35	1	0	0	0	0	0	0	478	4	2	0	163
	0.21	0.04	0.00	0.01	0.01	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.18	
	19.96	3.42	0.00	1.28	0.75	0.00	1.17	0.43	3.74	0.11	0.00	0.00	0.00	0.00	0.00	51.01	0.43	0.21	0.00	0.11	17.40
	2.37	0.67	0.00	0.75	0.83	0.00	1.88	1.32	0.35	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.34	1.75	0.00	0.76
Prospect	7	67	1	11	6	4	4	0	120	1	0	4	3	4	0	290	26	0	0	133	681
	0.01	0.08	0.00	0.01	0.01	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.33	0.03	0.00	0.00	0.15	761
	9.84	1.03	0.15	1.62	0.88	0.59	0.00	17.62	0.15	0.00	0.59	0.44	0.59	0.00	42.58	3.82	0.00	0.00	0.00	19.53	
	0.09	1.39	0.14	0.68	0.71	3.54	0.68	0.00	1.21	1.96	0.00	4.71	6.82	4.88	0.00	0.59	2.21	0.00	0.00	0.00	1.14
Surface- underground	461	375	12	99	70	10	80	0	807	9	0	12	4	12	10	1797	64	3	0	7	617
	0.52	0.42	0.01	0.11	0.08	0.01	0.09	0.00	0.91	0.01	0.00	0.01	0.00	0.01	0.01	2.02	0.07	0.00	0.00	0.01	6449
	10.36	8.43	0.27	2.23	1.57	0.22	1.80	0.00	18.4	0.20	0.00	0.27	0.09	0.27	0.22	40.39	1.44	0.07	0.00	0.16	13.87
	5.83	7.79	1.67	6.16	8.27	8.85	13.70	0.00	8.16	17.65	0.00	14.12	9.09	14.63	15.38	3.68	5.45	2.63	0.00	5.30	5.27
Surface	3071	1251	659	297	352	53	150	241	2744	6	0	18	3	10	7	32151	597	85	0	90	5189 46974
	3.45	1.40	0.74	0.33	0.40	0.06	0.17	0.27	3.08	0.01	0.00	0.02	0.00	0.01	0.01	36.09	0.67	0.10	0.00	0.10	5.83 52.73
	6.54	2.66	1.40	0.63	0.75	0.11	0.32	0.51	5.84	0.01	0.00	0.04	0.01	0.02	0.01	68.44	1.27	0.18	0.00	0.19	11.05
	38.85	26.00	9166	18.48	41.61	46.90	25.68	79.80	27.74	11.76	0.00	21.18	6.82	12.20	10.77	65.82	50.85	74.56	0.00	68.18	44.34

(continued)

Type	Domain																				
	Frequency	Percent	Row %	Col %	BLM	County	Fed-eral	BIA	DOD	Mixed	Muni-cipal	NPS	Nat'l. man-u-ment	Nat'l. off-shore	Nat'l. pri-mate	Nat'l. re-crea-tion	State forest	State off-shore	State park	Un-known	Total
Underground	3315	2023	39	821	290	39	256	51	4545	31	1	37	15	46	23	12863	216	20	0	29	3794 28454
	3.72	2.27	0.04	0.92	0.33	0.04	0.29	0.06	5.10	0.03	0.00	0.04	0.02	0.05	0.03	14.44	0.24	0.02	0.00	0.03	4.26 31.94
	11.65	7.11	0.14	2.89	1.02	0.14	0.14	0.18	15.97	0.11	0.00	0.13	0.05	0.16	0.08	45.21	0.76	0.07	0.00	0.10	13.33
	41.94	42.04	5.42	51.09	34.28	34.51	43.84	16.89	45.95	60.78	100.00	43.53	34.09	56.10	35.38	26.33	18.40	17.54	0.00	21.97	32.42
Underwater	5	3	2	9	0	0	0	0	3	0	0	0	0	1	0	108	2	0	1	0	12 146
	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.01 0.16
	3.42	2.05	1.37	6.16	0.00	0.00	0.00	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.00	0.68	0.00	0.68	0.00	0.00	8.22
	0.06	0.06	0.28	0.56	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	1.22	0.00	0.22	0.17	0.00	100.00 0.10
Well	4	1	0	0	4	0	0	0	1	0	0	0	0	0	0	0	156	8	0	0	0 10 184
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.18	0.01	0.00	0.00	0.01 0.21
	2.17	0.54	0.00	0.00	2.17	0.00	0.00	0.00	0.54	0.00	0.00	0.00	0.00	0.00	0.00	84.78	4.35	0.00	0.00	0.00	5.43
	0.05	0.02	0.00	0.00	0.47	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.32	0.68	0.00	0.00	0.00	0.09
Unknown	652	391	1	53	100	3	4	3	171	3	0	3	3	1	1	224	8	1	0	0	535 2157
	0.73	0.44	0.00	0.06	0.11	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.01	0.00	0.00	0.00	0.60 2.42
	30.23	18.13	0.05	2.46	4.64	0.14	0.19	0.14	7.93	0.14	0.00	0.14	0.14	0.05	0.05	10.38	0.37	0.05	0.00	0.00	24.80
	8.25	8.13	0.14	3.30	11.82	2.65	0.68	0.99	1.73	5.88	0.00	3.53	6.82	1.22	1.54	0.46	0.68	0.88	0.00	0.00	4.57
Total	7904	4812	719	1607	846	113	584	302	9891	51	1	85	44	82	65	48850	1174	114	1	132	11704 89081
	8.87	5.40	0.81	1.80	0.95	0.13	0.66	0.34	11.10	0.06	0.00	0.10	0.05	0.09	0.07	54.84	1.32	0.13	0.00	0.15	13.14 100.00

Appendix L. — Frequency of commodity by type — past producers.

Commodity

Type

	Frequency	Percent	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Under-Surface	Under-ground	Under-water	Well	Un-known	Total
Not Identified	0	0	0	28	11	37	2	31	479	575	0	1	19	1183				
	0.00	0.00	0.00	0.02	0.01	0.03	0.00	0.02	0.36	0.44	0.00	0.00	0.01	0.90				
	0.00	0.00	0.00	2.37	0.93	3.13	0.17	2.62	40.49	48.61	0.00	0.08	1.61					
	0.00	0.00	0.00	1.37	0.18	3.00	0.16	0.37	0.93	1.01	0.00	0.42	0.42					
Abrasive	0	0	0	10	6	3	14	12	59	12	0	0	3	119				
	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.04	0.01	0.00	0.00	0.00	0.09				
	0.00	0.00	0.00	8.40	5.04	2.52	11.76	10.08	49.58	10.08	0.00	0.00	2.52					
	0.00	0.00	0.00	0.49	0.10	0.24	1.11	0.14	0.11	0.02	0.00	0.00	0.07					
Aluminum	0	0	0	3	0	11	4	44	387	45	0	0	3	497				
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.29	0.03	0.00	0.00	0.00	0.38				
	0.00	0.00	0.00	0.60	0.00	2.21	0.80	8.85	77.87	9.05	0.00	0.00	0.60					
	0.00	0.00	0.00	0.15	0.00	0.89	0.32	0.52	0.75	0.08	0.00	0.00	0.07					
Antimony	0	0	0	10	30	4	3	75	15	225	0	0	15	377				
	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.06	0.01	0.17	0.00	0.00	0.01	0.29				
	0.00	0.00	0.00	2.65	7.96	1.06	0.80	19.89	3.98	59.68	0.00	0.00	3.98					
	0.00	0.00	0.00	0.49	0.50	0.32	0.24	0.89	0.03	0.40	0.00	0.00	0.33					
Arsenic	0	0	0	2	0	0	15	10	4	63	0	0	3	97				
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.05	0.00	0.00	0.00	0.07				
	0.00	0.00	0.00	2.06	0.00	0.00	15.46	10.31	4.12	64.95	0.00	0.00	3.09					
	0.00	0.00	0.00	0.10	0.00	0.00	1.19	0.12	0.01	0.11	0.00	0.00	0.07					
Asbestos	0	0	0	18	2	3	8	23	35	73	0	0	1	163				
	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.02	0.03	0.06	0.00	0.00	0.00	0.12				
	0.00	0.00	0.00	11.04	1.23	1.84	4.91	14.11	21.47	44.79	0.00	0.00	0.61					
	0.00	0.00	0.00	0.88	0.03	0.24	0.63	0.27	0.07	0.13	0.00	0.00	0.02					
Barium	0	0	0	113	2	16	16	65	639	171	2	0	27	1051				
	0.00	0.00	0.00	0.09	0.00	0.01	0.01	0.05	0.48	0.13	0.00	0.00	0.02	0.80				
	0.00	0.00	0.00	10.75	0.19	1.52	1.52	6.18	60.80	16.27	0.19	0.00	2.57					
	0.00	0.00	0.00	5.52	0.03	1.30	1.27	0.77	1.24	0.30	1.18	0.00	0.60					
Beryllium	0	0	0	4	1	4	30	76	206	74	0	1	0	396				
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.16	0.06	0.00	0.00	0.00	0.30				
	0.00	0.00	0.00	1.01	0.25	1.01	7.58	19.19	52.02	18.69	0.00	0.25	0.00					
	0.00	0.00	0.00	0.20	0.02	0.32	2.38	0.90	0.40	0.13	0.00	0.42	0.00					
Bismuth	0	0	0	1	17	2	3	16	5	46	0	0	3	93				
	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.03	0.00	0.00	0.00	0.07				
	0.00	0.00	0.00	1.08	18.28	2.15	3.23	17.20	5.38	49.46	0.00	0.00	3.23					
	0.00	0.00	0.00	0.05	0.28	0.16	0.24	0.19	0.01	0.08	0.00	0.00	0.07					
Borax	0	0	0	0	0	0	0	1	4	8	0	0	2	15				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.67	26.67	53.33	0.00	0.00	13.33					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.04					
Boron	0	0	0	2	0	2	0	4	12	20	0	4	4	48				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.04				
	0.00	0.00	0.00	4.17	0.00	4.17	0.00	8.33	25.00	41.67	0.00	8.33	8.33					
	0.00	0.00	0.00	0.10	0.00	0.16	0.00	0.05	0.02	0.04	0.00	1.69	0.09					
Bromine	0	0	0	0	0	6	0	0	1	1	0	8	0	16				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01				
	0.00	0.00	0.00	0.00	0.00	37.50	0.00	0.00	6.25	6.25	0.00	50.00	0.00					
	0.00	0.00	0.00	0.00	0.00	0.49	0.00	0.00	0.00	0.00	0.00	3.39	0.00					
Cadmium	0	0	0	1	1	1	0	5	0	43	0	0	0	51				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.04				
	0.00	0.00	0.00	1.96	1.96	1.96	0.00	9.80	0.00	84.31	0.00	0.00	0.00					
	0.00	0.00	0.00	0.05	0.02	0.08	0.00	0.06	0.00	0.08	0.00	0.00	0.00					

(continued)

Commodity		Type																	
Frequency Percent Row %	Brine	Hot spring			Mineral location		Processing plant		Prospect		Surface under-ground				Under-ground	Under-water	Well	Un-known	Total
		Leach			Placer						Surface	Under-ground	Under-water						
Calcium	2	0	0	3	0	24	13	37	388	98	1	0	4	570					
	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.03	0.29	0.07	0.00	0.00	0.00	0.43					
	0.35	0.00	0.00	0.53	0.00	4.21	2.28	6.49	68.07	17.19	0.18	0.00	0.70						
	18.18	0.00	0.00	0.15	0.00	1.94	1.03	0.44	0.75	0.17	0.59	0.00	0.09						
Cesium	0	0	0	0	0	0	0	0	2	0	0	0	0	2					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00				0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
Chlorine	0	0	0	0	0	0	0	0	0	3	0	4	0	7					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	42.86	0.00	57.14	0.00	0.00					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	1.69	0.00	0.00					
Chromium	0	0	0	58	40	5	4	176	261	163	1	0	12	720					
	0.00	0.00	0.00	0.04	0.03	0.00	0.00	0.13	0.20	0.12	0.00	0.00	0.01	0.54					
	0.00	0.00	0.00	8.06	5.56	0.69	0.56	24.44	36.25	22.64	0.14	0.00	1.67						
	0.00	0.00	0.00	2.83	0.67	0.41	0.32	2.08	0.51	0.29	0.59	0.00	0.27						
Clay	0	0	0	36	0	103	29	59	4236	120	0	0	23	4606					
	0.00	0.00	0.00	0.03	0.00	0.08	0.02	0.04	3.21	0.09	0.00	0.00	0.02	3.49					
	0.00	0.00	0.00	0.78	0.00	2.24	0.63	1.28	91.97	2.61	0.00	0.00	0.50						
	0.00	0.00	0.00	1.76	0.00	8.35	2.30	0.70	8.23	0.21	0.00	0.00	0.51						
Coal	0	0	0	52	1	152	79	150	3875	5759	2	0	62	10132					
	0.00	0.00	0.00	0.04	0.00	0.12	0.06	0.11	2.93	4.36	0.00	0.00	0.05	7.67					
	0.00	0.00	0.00	0.51	0.01	1.50	0.78	1.48	38.25	56.84	0.02	0.00	0.61						
	0.00	0.00	0.00	2.54	0.02	12.32	6.26	1.77	7.53	10.16	1.18	0.00	1.37						
Cobalt	0	0	0	2	3	1	2	29	49	60	0	0	2	148					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.04	0.05	0.00	0.00	0.00	0.11					
	0.00	0.00	0.00	1.35	2.03	0.68	1.35	19.59	33.11	40.54	0.00	0.00	1.35						
	0.00	0.00	0.00	0.10	0.05	0.08	0.16	0.34	0.10	0.11	0.00	0.00	0.04						
Columbian	0	0	0	0	7	5	1	28	22	11	0	0	0	74					
	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.02	0.01	0.00	0.00	0.00	0.06					
	0.00	0.00	0.00	0.00	9.46	6.76	1.35	37.84	29.73	14.86	0.00	0.00	0.00						
	0.00	0.00	0.00	0.00	0.12	0.41	0.08	0.33	0.04	0.02	0.00	0.00	0.00						
Copper	0	0	9	133	49	35	114	937	383	5153	7	5	646	7471					
	0.00	0.00	0.01	0.10	0.04	0.03	0.09	0.71	0.29	3.90	0.01	0.00	0.49	5.65					
	0.00	0.00	0.12	1.78	0.66	0.47	1.53	12.54	5.13	68.97	0.09	0.07	8.65						
	0.00	0.00	18.00	6.50	0.82	2.84	9.03	11.06	0.74	9.09	4.12	2.12	14.29						
Diatomite	0	0	0	6	0	1	2	2	62	26	4	0	13	116					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.02	0.00	0.00	0.01	0.09					
	0.00	0.00	0.00	5.17	0.00	0.86	1.72	1.72	53.45	22.41	3.45	0.00	11.21						
	0.00	0.00	0.00	0.29	0.00	0.08	0.16	0.02	0.12	0.05	2.35	0.00	0.29						
Feldspar	0	0	0	42	0	3	24	100	983	82	1	1	5	1241					
	0.00	0.00	0.03	0.00	0.00	0.02	0.08	0.74	0.06	0.00	0.00	0.00	0.00	0.94					
	0.00	0.00	3.38	0.00	0.24	1.93	8.06	79.21	6.61	0.08	0.08	0.40							
	0.00	0.00	2.05	0.00	0.24	1.90	1.18	1.91	0.14	0.59	0.42	0.11							
Fluorine	0	0	0	25	0	9	11	129	130	507	0	0	30	841					
	0.00	0.00	0.02	0.00	0.01	0.01	0.10	0.10	0.38	0.00	0.00	0.00	0.02	0.64					
	0.00	0.00	2.97	0.00	1.07	1.31	15.34	15.46	60.29	0.00	0.00	0.00	3.57						
	0.00	0.00	1.22	0.00	0.73	0.87	1.52	0.25	0.89	0.00	0.00	0.00	0.66						
Gallium	0	0	0	0	0	1	0	1	0	3	0	0	0	5					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00					
	0.00	0.00	0.00	0.00	20.00	0.00	20.00	0.00	60.00	0.00	0.00	0.00	0.00	0.00					
	0.00	0.00	0.00	0.00	0.08	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00					

(continued)

Commodity		Type													
		Frequency													
		Percent													
Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
Gemstone	0	0	0	5	10	2	23	34	197	47	0	0	7	325	
	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.03	0.15	0.04	0.00	0.00	0.01	0.25	
	0.00	0.00	0.00	1.54	3.08	0.62	7.08	10.46	60.62	14.46	0.00	0.00	2.15		
	0.00	0.00	0.00	0.24	0.17	0.16	1.82	0.40	0.38	0.08	0.00	0.00	0.15		
Geothermal	0	4	0	0	0	0	1	0	6	1	0	2	0	14	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
	0.00	28.57	0.00	0.00	0.00	0.00	7.14	0.00	42.86	7.14	0.00	14.29	0.00		
	0.00	100.00	0.00	0.00	0.00	0.00	0.08	0.00	0.01	0.00	0.00	0.85	0.00		
Germanium	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Gold	0	0	13	312	3610	115	193	1269	923	10135	6	2	919	17497	
	0.00	0.00	0.01	0.24	2.73	0.09	0.15	0.96	0.70	7.67	0.00	0.00	0.70	13.24	
	0.00	0.00	0.07	1.78	20.63	0.66	1.10	7.25	5.28	57.92	0.03	0.01	5.25		
	0.00	0.00	26.00	15.25	60.40	9.32	15.29	14.98	1.79	17.87	3.53	0.85	20.33		
Graphite	0	0	0	2	0	4	3	10	69	14	0	0	1	103	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.05	0.01	0.00	0.00	0.00	0.08	
	0.00	0.00	0.00	1.94	0.00	3.88	2.91	9.71	66.99	13.59	0.00	0.00	0.97		
	0.00	0.00	0.00	0.10	0.00	0.32	0.24	0.12	0.13	0.02	0.00	0.00	0.02		
Gypsum	0	0	0	9	0	23	4	15	180	69	0	0	10	310	
	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01	0.14	0.05	0.00	0.00	0.01	0.23	
	0.00	0.00	0.00	2.90	0.00	7.42	1.29	4.84	58.06	22.26	0.00	0.00	0.00	3.23	
	0.00	0.00	0.00	0.44	0.00	1.86	0.32	0.18	0.35	0.12	0.00	0.00	0.00	0.22	
Hafnium	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Helium	0	0	0	0	0	1	0	0	1	0	0	21	0	23	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	
	0.00	0.00	0.00	0.00	0.00	4.35	0.00	0.00	4.35	0.00	0.00	91.30	0.00		
	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	8.90	0.00		
Indium	0	0	0	0	0	0	0	0	0	4	0	0	0	4	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00		
Iodine	0	0	0	0	0	1	0	0	1	0	0	0	0	2	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Iron	0	0	1	106	23	57	77	580	3247	1179	1	1	60	5332	
	0.00	0.00	0.00	0.08	0.02	0.04	0.06	0.44	2.46	0.89	0.00	0.00	0.05	4.03	
	0.00	0.00	0.02	1.99	0.43	1.07	1.44	10.88	60.90	22.11	0.02	0.02	1.13		
	0.00	0.00	2.00	5.18	0.38	4.62	6.10	6.85	6.31	2.08	0.59	0.42	1.33		
Kyanite group	0	0	0	1	1	1	0	4	7	5	0	0	2	20	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	5.00	5.00	0.00	20.00	35.00	25.00	0.00	0.00	10.00		
	0.00	0.00	0.00	0.02	0.08	0.00	0.05	0.01	0.01	0.00	0.00	0.00	0.04		
Lead	0	0	5	112	55	64	94	816	1371	9297	7	5	493	12319	
	0.00	0.00	0.00	0.08	0.04	0.05	0.07	0.62	1.04	7.03	0.01	0.00	0.37	9.32	
	0.00	0.00	0.04	0.91	0.45	0.52	0.76	6.62	11.13	75.47	0.06	0.04	4.00		
	0.00	0.00	10.00	5.47	0.92	5.19	7.45	9.63	2.66	16.40	4.12	2.12	10.91		

(continued)

Commodity		Type															
Frequency	Percent	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
Lithium	0	0	0	4	0	0	13	13	29	10	0	5	0	0	74		
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.06	
	0.00	0.00	0.00	5.41	0.00	0.00	17.57	17.57	39.19	13.51	0.00	6.76	0.00				
	0.00	0.00	0.00	0.20	0.00	0.00	1.03	0.15	0.06	0.02	0.00	2.12	0.00				
Magnesium	0	0	0	10	1	4	5	20	60	27	0	0	2	129			
	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.10	
	0.00	0.00	0.00	7.75	0.78	3.10	3.88	15.50	46.51	20.93	0.00	0.00	1.55				
	0.00	0.00	0.00	0.49	0.02	0.32	0.40	0.24	0.12	0.05	0.00	0.00	0.04				
Manganese	0	0	0	31	6	8	17	602	813	561	0	0	52	2090			
	0.00	0.00	0.00	0.02	0.00	0.01	0.01	0.46	0.62	0.42	0.00	0.00	0.04	0.00	0.04	1.58	
	0.00	0.00	0.00	1.48	0.29	0.38	0.81	28.80	38.90	26.84	0.00	0.00	2.49				
	0.00	0.00	0.00	1.52	0.10	0.65	1.35	7.11	1.58	0.99	0.00	0.00	1.15				
Mercury	0	0	0	7	80	1	6	127	63	166	2	0	24	476			
	0.00	0.00	0.00	0.01	0.06	0.00	0.00	0.10	0.05	0.13	0.00	0.00	0.02	0.00	0.02	0.36	
	0.00	0.00	0.00	1.47	16.81	0.21	1.26	26.68	13.24	34.87	0.42	0.00	5.04				
Mica	0	0	0	0.34	1.34	0.08	0.48	1.50	0.12	0.29	1.18	0.00	0.53				
	0.00	0.00	0.00	123	0	6	28	384	1142	148	1	0	5	1837			
	0.00	0.00	0.00	0.09	0.00	0.00	0.02	0.29	0.86	0.11	0.00	0.00	0.00	0.00	0.00	1.39	
	0.00	0.00	0.00	6.70	0.00	0.33	1.52	20.90	62.17	8.06	0.05	0.00	0.27				
	0.00	0.00	0.00	6.01	0.00	0.49	2.22	4.53	2.22	0.26	0.59	0.00	0.11				
Molybdenum	0	0	3	11	3	4	8	74	44	242	0	0	13	402			
	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.06	0.03	0.18	0.00	0.00	0.01	0.00	0.01	0.30	
	0.00	0.00	0.75	2.74	0.75	1.00	1.99	18.41	10.95	60.20	0.00	0.00	3.23				
	0.00	0.00	6.00	0.54	0.05	0.32	0.63	0.87	0.09	0.43	0.00	0.00	0.29				
Natural gas	0	0	0	3	0	0	0	0	1	0	0	36	0	40			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03		
	0.00	0.00	0.00	7.50	0.00	0.00	0.00	0.00	2.50	0.00	0.00	90.00	0.00				
	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	15.25	0.00				
Nickel	0	0	0	5	4	4	5	17	35	73	0	0	3	146			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.11	
	0.00	0.00	0.00	3.42	2.74	2.74	3.42	11.64	23.97	50.00	0.00	0.00	2.05				
	0.00	0.00	0.00	0.24	0.07	0.32	0.40	0.20	0.07	0.13	0.00	0.00	0.07				
Nitrogen	0	0	0	0	0	0	0	0	1	3	0	0	0	4			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	25.00	75.00	0.00	0.00	0.00				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00				
Perlite	0	0	0	4	0	10	3	4	31	23	0	0	4	79			
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.06	
	0.00	0.00	5.06	0.00	12.66	3.80	5.06	39.24	29.11	0.00	0.00	5.06					
	0.00	0.00	0.20	0.00	0.81	0.24	0.05	0.06	0.04	0.00	0.00	0.09					
Petroleum	0	0	0	0	0	1	1	5	20	19	0	5	1	52			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.04	
	0.00	0.00	0.00	0.00	1.92	1.92	9.62	38.46	36.54	0.00	9.62	1.92					
	0.00	0.00	0.00	0.00	0.08	0.08	0.06	0.04	0.03	0.00	2.12	0.02					
Phosphate	0	0	0	12	0	28	11	29	216	67	0	0	3	366			
	0.00	0.00	0.00	0.01	0.00	0.02	0.01	0.02	0.16	0.05	0.00	0.00	0.00	0.00	0.00	0.28	
	0.00	0.00	3.28	0.00	7.65	3.01	7.92	59.02	18.31	0.00	0.00	0.82					
Platinum group	0	0	0	0.59	0.00	2.27	0.87	0.34	0.42	0.12	0.00	0.00	0.07				
183	0	0	0	4	111	5	1	7	34	20	0	0	1				
	0.00	0.00	0.00	0.08	0.00	0.00	0.01	0.03	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.14	
	0.00	0.00	2.19	60.66	2.73	0.55	3.83	18.58	10.93	0.00	0.00	0.55					
	0.00	0.00	0.20	1.86	0.41	0.08	0.08	0.07	0.04	0.00	0.00	0.02					
Potash	0	0	0	0	0	1	1	2	17	5	0	0	0	26			
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	3.85	3.85	7.69	65.38	19.23	0.00	0.00	0.00					
	0.00	0.00	0.00	0.00	0.08	0.08	0.02	0.03	0.01	0.00	0.00	0.00					

(continued)

Commodity		Type													
		Frequency		Percent											
Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
Pumice	0	0	0	17	1	0	2	5	210	9	0	0	6	250	
	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.16	0.01	0.00	0.00	0.00	0.19	
	0.00	0.00	0.00	6.80	0.40	0.00	0.80	2.00	84.00	3.60	0.00	0.00	2.40		
	0.00	0.00	0.00	0.83	0.02	0.00	0.16	0.06	0.41	0.02	0.00	0.00	0.13		
Quartz crystal	0	0	3	0	0	1	7	47	23	0	0	0	0	81	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.02	0.00	0.00	0.00	0.06	
	0.00	0.00	0.00	3.70	0.00	0.00	1.23	8.64	58.02	28.40	0.00	0.00	0.00		
	0.00	0.00	0.00	0.15	0.00	0.00	0.08	0.08	0.09	0.04	0.00	0.00	0.00		
Radium	0	0	0	0	0	0	0	1	0	9	0	0	0	10	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.00	0.00	90.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00		
Rare Earth	0	0	0	1	39	8	3	13	38	26	0	0	1	129	
	0.00	0.00	0.00	0.00	0.03	0.01	0.00	0.01	0.03	0.02	0.00	0.00	0.00	0.10	
	0.00	0.00	0.00	0.78	30.23	6.20	2.33	10.08	29.46	20.16	0.00	0.00	0.78		
	0.00	0.00	0.00	0.05	0.65	0.65	0.24	0.15	0.07	0.05	0.00	0.00	0.02		
Rhenium	0	0	0	0	0	0	0	0	0	2	0	0	0	2	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Rubidium	0	0	0	0	0	0	0	0	0	1	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sand	0	0	0	0	0	0	0	0	1	0	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Sand & gravel	0	2	24	4	94	26	11	16466	85	113	1	95	16921		
	0.00	0.00	0.02	0.00	0.07	0.02	0.01	12.46	0.06	0.09	0.00	0.07	12.80		
	0.00	0.00	0.14	0.02	0.56	0.15	0.07	97.31	0.50	0.67	0.01	0.56			
	0.00	4.00	1.17	0.07	7.62	2.06	0.13	31.99	0.15	66.47	0.42	2.10			
Scandium	0	0	0	0	0	0	0	0	3	0	0	0	0	3	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00		
Selenium	0	0	0	0	0	1	0	3	0	4	0	0	0	8	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
	0.00	0.00	0.00	0.00	12.50	0.00	37.50	0.00	50.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.08	0.00	0.04	0.00	0.01	0.00	0.00	0.00	0.00		
Silicon	0	0	0	8	0	7	11	366	114	0	0	9	601		
	0.00	0.00	0.01	0.00	0.01	0.01	0.07	0.28	0.09	0.00	0.00	0.01	0.45		
	0.00	0.00	1.33	0.00	1.16	1.83	14.31	60.90	18.97	0.00	0.00	1.50			
	0.00	0.00	0.39	0.00	0.57	0.87	1.02	0.71	0.20	0.00	0.00	0.20			
Silver	0	0	13	202	1460	90	155	1035	425	8973	6	6	1157	13522	
	0.00	0.01	0.15	1.10	0.07	0.12	0.78	0.32	6.79	0.00	0.00	0.88	10.23		
	0.00	0.10	1.49	10.80	0.67	1.15	7.65	3.14	66.36	0.04	0.04	8.56			
	0.00	26.00	9.87	24.43	7.29	12.28	12.22	0.83	15.83	3.53	2.54	25.60			
Sodium	9	0	1	0	0	10	2	10	47	15	5	122	2	223	
	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.04	0.01	0.00	0.09	0.00	0.17	
	4.04	0.00	0.45	0.00	4.48	0.90	4.48	21.08	6.73	2.24	54.71	0.90			
	81.82	2.00	0.00	0.00	0.81	0.16	0.12	0.09	0.03	2.94	51.69	0.04			

(continued)

Commodity		Type																
Frequency	Percent	Row %	Col %	Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-ground	Under-water	Well	Un-known	Total
Stone	0	0	0	38	6	87	38	60	11086	128	4	0	35	11482				
	0.00	0.00	0.00	0.03	0.00	0.07	0.03	0.05	8.39	0.10	0.00	0.00	0.03	8.69				
	0.00	0.00	0.00	0.33	0.05	0.76	0.33	0.52	96.55	1.11	0.03	0.00	0.30					
	0.00	0.00	0.00	1.86	0.10	7.05	3.01	0.71	21.54	0.23	2.35	0.00	0.77					
Strontium	0	0	0	1	0	0	1	1	8	5	0	0	1	17				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01			
	0.00	0.00	0.00	5.88	0.00	0.00	5.88	5.88	47.06	29.41	0.00	0.00	5.88					
	0.00	0.00	0.00	0.05	0.00	0.00	0.08	0.01	0.02	0.01	0.00	0.00	0.02					
Sulfur	0	0	0	26	1	6	12	46	61	98	0	0	6	256				
	0.00	0.00	0.00	0.02	0.00	0.00	0.01	0.03	0.05	0.07	0.00	0.00	0.00	0.00	0.19			
	0.00	0.00	0.00	10.16	0.39	2.34	4.69	17.97	23.83	38.28	0.00	0.00	2.34					
	0.00	0.00	0.00	1.27	0.02	0.49	0.95	0.54	0.12	0.17	0.00	0.00	0.13					
Talc	0	0	0	40	0	4	2	16	106	83	0	0	6	257				
	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.01	0.08	0.06	0.00	0.00	0.00	0.00	0.19			
	0.00	0.00	0.00	15.56	0.00	1.56	0.78	6.23	41.25	32.30	0.00	0.00	2.33					
	0.00	0.00	0.00	1.96	0.00	0.32	0.16	0.19	0.21	0.15	0.00	0.00	0.13					
Tantalum	0	0	0	0	3	4	6	27	17	9	0	0	0	66				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00	0.00	0.05				
	0.00	0.00	0.00	0.00	4.55	6.06	9.09	40.91	25.76	13.64	0.00	0.00	0.00					
	0.00	0.00	0.00	0.05	0.00	0.32	0.48	0.32	0.03	0.02	0.00	0.00	0.00					
Tellurium	0	0	0	0	0	1	1	3	0	12	0	0	0	17				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01				
	0.00	0.00	0.00	0.00	0.00	5.88	5.88	17.65	0.00	70.59	0.00	0.00	0.00					
	0.00	0.00	0.00	0.00	0.00	0.08	0.08	0.04	0.00	0.02	0.00	0.00	0.00					
Thallium	0	0	0	0	0	0	0	1	0	0	0	0	0	1				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00				
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00					
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00					
Thorium	0	0	0	1	19	4	4	3	15	10	0	0	1	57				
	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.04				
	0.00	0.00	0.00	1.75	33.33	7.02	7.02	5.26	26.32	17.54	0.00	0.00	1.75					
	0.00	0.00	0.00	0.05	0.32	0.32	0.32	0.04	0.03	0.02	0.00	0.00	0.02					
Tin	0	0	0	0	145	1	2	27	25	46	0	0	1	247				
	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.02	0.02	0.03	0.00	0.00	0.00	0.19				
	0.00	0.00	0.00	58.70	0.40	0.81	10.93	10.12	18.62	0.00	0.00	0.00	0.40					
	0.00	0.00	0.00	2.43	0.08	0.16	0.32	0.05	0.08	0.00	0.00	0.00	0.02					
Titanium	0	0	0	1	29	9	6	10	43	27	0	0	0	125				
	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.01	0.03	0.02	0.00	0.00	0.00	0.09				
	0.00	0.00	0.00	0.80	23.20	7.20	4.80	8.00	34.40	21.60	0.00	0.00	0.00					
	0.00	0.00	0.00	0.05	0.49	0.73	0.48	0.12	0.08	0.05	0.00	0.00	0.00					
Tungsten	0	0	0	43	137	51	18	259	128	632	0	0	64	1332				
	0.00	0.00	0.03	0.10	0.04	0.01	0.01	0.20	0.10	0.48	0.00	0.00	0.05	1.01				
	0.00	0.00	3.23	10.29	3.83	1.35	19.44	9.61	47.45	0.00	0.00	4.80						
	0.00	0.00	2.10	2.29	4.13	1.43	3.06	0.25	1.11	0.00	0.00	1.42						
Uranium	0	0	0	269	31	17	24	219	665	2173	2	0	346	3746				
	0.00	0.00	0.20	0.02	0.01	0.02	0.17	0.50	1.64	0.00	0.00	0.26	2.83					
	0.00	0.00	7.18	0.83	0.45	0.64	5.85	17.75	58.01	0.05	0.00	9.24						
	0.00	0.00	13.15	0.52	1.38	1.90	2.59	1.29	3.83	1.18	0.00	7.65						
Vanadium	0	0	0	2	0	9	20	67	115	1283	0	1	183	1680				
	0.00	0.00	0.00	0.00	0.01	0.02	0.05	0.09	0.97	0.00	0.00	0.14	1.27					
	0.00	0.00	0.12	0.00	0.54	1.19	3.99	6.85	76.37	0.00	0.06	10.89						
	0.00	0.00	0.10	0.00	0.73	1.58	0.79	0.22	2.26	0.00	0.42	4.05						

(continued)

Commodity

Type

Frequency		Type													
Percent		Brine	Hot spring	Leach	Mineral location	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Under-water	Well	Un-known	Total
Row %	Col %														
Vermic- ulite	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.05	1 1.37 0.00	0 0.00 8.22 0.00	6 5.48 12.33 0.49	4 0.01 0.11 0.32	9 0.02 42.47 0.06	31 0.01 26.03 0.03	19 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	3 0.00 4.11 0.07	73 0.06 18 0.01
Volatile content	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 33.33 0.07	6 0.01 55.56 0.02	10 0.01 55.56 0.02	2 0.00 11.11 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	18 0.01 100 0.08
Water content	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 7.00 0.08	7 0.01 83.00 0.16	83 0.06 9.00 0.02	9 0.01 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.00 1.00 0.02	100 0.08 100 0.02
Wollastonite	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 62.50 0.01	5 0.00 37.50 0.01	3 0.00 0.00 0.01	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	8 0.01 0.01 0.00
Zeolites	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 5.26 0.01	1 0.01 52.63 0.02	10 0.01 36.84 0.01	7 0.01 0.00 0.01	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.00 5.26 0.02	19 0.01 19 0.02
Zinc	0 0.00 0.00 0.00	0 0.00 0.03 6.00	3 0.04 0.66 2.88	59 0.01 0.12 0.18	11 0.04 0.52 3.81	47 0.04 0.61 4.36	55 0.04 0.61 4.36	516 0.39 5.76 6.09	707 0.53 7.89 1.37	7433 5.62 82.90 13.11	5 0.00 0.06 2.94	5 0.00 0.06 2.12	125 0.09 1.39 2.77	8966 6.78	
Zirconium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.28	0 0.01 38.64 0.01	17 0.01 22.73 0.08	10 0.01 2.27 0.08	1 0.00 0.00 0.00	0 0.01 27.27 0.02	12 0.01 9.09 0.01	4 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	44 0.03 0.03 0.00
Total	11 0.01	4 0.00	50 0.04	2046 1.55	5977 4.52	1234 0.93	1262 0.95	8471 6.41	51475 38.95	56701 42.90	170 0.13	236 0.18	4520 3.42	132157 100.00	

Appendix M. — Frequency of commodity by type — past producers.

Alabama

Commodity	Type							Total				
	Frequency	Percent	Row %	Col %	Placer	Processing plant	Prospect	Surface-undergrnd	Surface	Underground	Underwater	
Aluminum	0	1	0	14	169	4	0	188				
	0.00	0.09	0.00	1.22	14.73	0.35	0.00	16.39				
	0.00	0.53	0.00	7.45	89.89	2.13	0.00					
	0.00	5.88	0.00	12.84	22.30	2.76	0.00					
Arsenic	0	0	11	2	0	0	0	0	0	0	0	13
	0.00	0.00	0.96	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13
	0.00	0.00	84.62	15.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	12.36	1.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Barium	0	0	3	1	15	0	0	0	0	0	0	19
	0.00	0.00	0.26	0.09	1.31	0.00	0.00	0.00	0.00	0.00	0.00	1.66
	0.00	0.00	15.79	5.26	78.95	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	3.37	0.92	1.98	0.00	0.00	0.00	0.00	0.00	0.00	
Calcium	0	1	0	2	2	4	1	10				
	0.00	0.09	0.00	0.17	0.17	0.35	0.09	0.87				
	0.00	10.00	0.00	20.00	20.00	40.00	10.00					
	0.00	5.88	0.00	1.83	0.26	2.76	33.33					
Clay	0	1	1	0	31	0	0	0	0	0	0	33
	0.00	0.09	0.09	0.00	2.70	0.00	0.00	0.00	0.00	0.00	0.00	2.88
	0.00	3.03	3.03	0.00	93.94	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	5.88	1.12	0.00	4.09	0.00	0.00	0.00	0.00	0.00	0.00	
Coal	0	1	0	0	14	0	0	0	0	0	0	15
	0.00	0.09	0.00	0.00	1.22	0.00	0.00	0.00	0.00	0.00	0.00	1.31
	0.00	6.67	0.00	0.00	93.33	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	5.88	0.00	0.00	1.85	0.00	0.00	0.00	0.00	0.00	0.00	
Cobalt	0	0	0	1	5	0	0	0	0	0	0	6
	0.00	0.00	0.00	0.09	0.44	0.00	0.00	0.00	0.00	0.00	0.00	0.52
	0.00	0.00	0.00	16.67	83.33	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.92	0.66	0.00	0.00	0.00	0.00	0.00	0.00	
Copper	0	0	12	1	0	8	0	21				
	0.00	0.00	1.05	0.09	0.00	0.70	0.00	1.83				
	0.00	0.00	57.14	4.76	0.00	38.10	0.00					
	0.00	0.00	13.48	0.92	0.00	5.52	0.00					
Feldspar	0	0	0	1	0	2	0	3				
	0.00	0.00	0.00	0.09	0.00	0.17	0.00	0.26				
	0.00	0.00	0.00	33.33	0.00	66.67	0.00					
	0.00	0.00	0.00	0.92	0.00	1.38	0.00					
Fluorine	0	0	0	0	0	1	0	1				
	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.09				
	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.09				
	0.00	0.00	0.00	0.00	0.00	0.69	0.00					
Gold	26	0	8	6	11	30	0	81				
	2.27	0.00	0.70	0.52	0.96	2.62	0.00	7.06				
	32.10	0.00	9.88	7.41	13.58	37.04	0.00					
	100.00	0.00	8.99	5.50	1.45	20.69	0.00					
Graphite	0	0	0	0	38	2	0	40				
	0.00	0.00	0.00	0.00	3.31	0.17	0.00	3.49				
	0.00	0.00	0.00	0.00	95.00	5.00	0.00					
	0.00	0.00	0.00	0.00	5.01	1.38	0.00					

(continued)

Alabama—(continued)

Commodity		Type							
Frequency	Percent	Placer	Processing plant	Prospect	Surface-undergrnd	Surface	Underground	Underwater	Total
Row %	Col %								
Iron	0	6	29	15	263	42	0	0	355
	0.00	0.52	2.53	1.31	22.93	3.66	0.00	0.00	30.95
	0.00	1.69	8.17	4.23	74.08	11.83	0.00	0.00	
	0.00	35.29	32.58	13.76	34.70	28.97	0.00	0.00	
Kyanite group	0	0	0	0	1	0	0	0	1
	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.09
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	
Lead	0	0	11	4	2	2	0	0	19
	0.00	0.00	0.96	0.35	0.17	0.17	0.00	0.00	1.66
	0.00	0.00	57.89	21.05	10.53	10.53	0.00	0.00	
	0.00	0.00	12.36	3.67	0.26	1.38	0.00	0.00	
Manganese	0	0	1	9	21	2	0	0	33
	0.00	0.00	0.09	0.78	1.83	0.17	0.00	0.00	2.88
	0.00	0.00	3.03	27.27	63.64	6.06	0.00	0.00	
	0.00	0.00	1.12	8.26	2.77	1.38	0.00	0.00	
Mica	0	0	0	43	29	27	1	0	100
	0.00	0.00	0.00	3.75	2.53	2.35	0.09	0.09	8.72
	0.00	0.00	0.00	43.00	29.00	27.00	1.00	1.00	
	0.00	0.00	0.00	39.45	3.83	18.62	33.33	33.33	
Perlite	0	2	0	0	0	0	0	0	2
	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.17
	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	11.76	0.00	0.00	0.00	0.00	0.00	0.00	
Phosphate	0	0	0	1	2	3	0	0	6
	0.00	0.00	0.00	0.09	0.17	0.26	0.00	0.00	0.52
	0.00	0.00	0.00	16.67	33.33	50.00	0.00	0.00	
	0.00	0.00	0.00	0.92	0.26	2.07	0.00	0.00	
Sand & gravel	0	0	0	0	94	0	1	0	95
	0.00	0.00	0.00	0.00	8.20	0.00	0.09	0.09	8.28
	0.00	0.00	0.00	0.00	98.95	0.00	1.05	1.05	
	0.00	0.00	0.00	0.00	12.40	0.00	33.33	33.33	
Silicon	0	0	0	1	3	3	0	0	7
	0.00	0.00	0.00	0.09	0.26	0.26	0.00	0.00	0.61
	0.00	0.00	0.00	14.29	42.86	42.86	0.00	0.00	
	0.00	0.00	0.00	0.92	0.40	2.07	0.00	0.00	
Silver	0	0	0	0	1	4	0	0	5
	0.00	0.00	0.00	0.00	0.09	0.35	0.00	0.00	0.44
	0.00	0.00	0.00	0.00	20.00	80.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.13	2.76	0.00	0.00	
Stone	0	2	0	1	30	0	0	0	33
	0.00	0.17	0.00	0.09	2.62	0.00	0.00	0.00	2.88
	0.00	6.06	0.00	3.03	90.91	0.00	0.00	0.00	
	0.00	11.76	0.00	0.92	3.96	0.00	0.00	0.00	
Sulfur	0	1	2	1	1	3	0	0	8
	0.00	0.09	0.17	0.09	0.09	0.26	0.00	0.00	0.70
	0.00	12.50	25.00	12.50	12.50	37.50	0.00	0.00	
	0.00	5.88	2.25	0.92	0.13	2.07	0.00	0.00	
Tin	0	0	1	1	0	2	0	0	4
	0.00	0.00	0.09	0.09	0.00	0.17	0.00	0.00	0.35
	0.00	0.00	25.00	25.00	0.00	50.00	0.00	0.00	
	0.00	0.00	1.12	0.92	0.00	1.38	0.00	0.00	

(continued)

Alabama—(continued).

Commodity		Type							
Frequency	Percent	Placer	Processing plant	Prospect	Surface-undergrnd	Surface	Underground	Underwater	Total
Row %	Col %								
Titanium	0	0	0	1	1	0	0	0	2
	0.00	0.00	0.00	0.09	0.09	0.00	0.00	0.00	0.17
	0.00	0.00	0.00	50.00	50.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.92	0.13	0.00	0.00	0.00	
Vermiculite	0	2	0	0	0	0	0	0	2
	0.00	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.17
	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	11.76	0.00	0.00	0.00	0.00	0.00	0.00	
Volatile content	0	0	0	0	2	2	0	0	4
	0.00	0.00	0.00	0.00	0.17	0.17	0.00	0.00	0.35
	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.26	1.38	0.00	0.00	
Water content	0	0	0	0	22	2	0	0	24
	0.00	0.00	0.00	0.00	1.92	0.17	0.00	0.00	2.09
	0.00	0.00	0.00	0.00	91.67	8.33	0.00	0.00	
	0.00	0.00	0.00	0.00	2.90	1.38	0.00	0.00	
Zinc	0	0	10	4	1	2	0	0	17
	0.00	0.00	0.87	0.35	0.09	0.17	0.00	0.00	1.48
	0.00	0.00	58.82	23.53	5.88	11.76	0.00	0.00	
	0.00	0.00	11.24	3.67	0.13	1.38	0.00	0.00	
Total	26	17	89	109	758	145	3	0	1147
	2.27	1.48	7.76	9.50	66.09	12.64	0.26	0.00	100.00

Alaska

Commodity		Type									
Frequency	Percent	Placer	Processing plant	Prospect	Surface-underground	Surface	Under-ground	Underwater	Well	Unknown	Total
Row %	Col %										
	1	0	0	2	0	0	0	0	0	0	3
	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.07
	33.33	0.00	0.00	66.67	0.00	0.00	0.00	0.00	0.00	0.00	
	0.04	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	
Aluminum	0	0	0	0	1	0	0	0	0	0	
	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	1
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	
Antimony	30	2	1	10	7	53	0	0	0	1	104
	0.73	0.05	0.02	0.24	0.17	1.28	0.00	0.00	0.00	0.02	2.52
	28.85	1.92	0.96	9.62	6.73	50.96	0.00	0.00	0.00	0.96	
	1.30	6.25	3.13	3.30	1.12	6.54	0.00	0.00	0.00	5.56	
Arsenic	0	0	2	3	0	5	0	0	0	0	10
	0.00	0.00	0.05	0.07	0.00	0.12	0.00	0.00	0.00	0.00	0.24
	0.00	0.00	20.00	30.00	0.00	50.00	0.00	0.00	0.00	0.00	
	0.00	0.00	6.25	0.99	0.00	0.62	0.00	0.00	0.00	0.00	

(continued)

Alaska—(continued).

Frequency Percent Row % Col %	Commodity	Type									
		Placer	Processing plant	Prospect	Surface-		Under-ground	Underwater	Well	Unknown	
					underground	Surface					
Asbestos		2	0	0	0	1	0	0	0	0	3
0.05	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.07	
66.67	0.00	0.00	0.00	0.00	33.33	0.00	0.00	0.00	0.00	0.00	
0.09	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	
Barium		1	0	0	0	2	0	1	0	0	4
0.02	0.00	0.00	0.00	0.00	0.05	0.00	0.02	0.00	0.00	0.10	
25.00	0.00	0.00	0.00	0.00	50.00	0.00	25.00	0.00	0.00	0.00	
0.04	0.00	0.00	0.00	0.00	0.32	0.00	12.50	0.00	0.00	0.00	
Beryllium		1	0	0	0	1	0	0	0	0	2
0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.05	
50.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	
0.04	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	
Bismuth		17	1	2	3	0	3	0	0	0	26
0.41	0.02	0.05	0.07	0.00	0.07	0.00	0.00	0.00	0.00	0.63	
65.38	3.85	7.69	11.54	0.00	11.54	0.00	0.00	0.00	0.00	0.00	
0.74	3.13	6.25	0.99	0.00	0.37	0.00	0.00	0.00	0.00	0.00	
Cadmium		1	0	0	0	0	1	0	0	0	2
0.02	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.05	
50.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	0.00	
0.04	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
Calcium		0	0	0	0	4	1	0	0	0	5
0.00	0.00	0.00	0.00	0.00	0.10	0.02	0.00	0.00	0.00	0.12	
0.00	0.00	0.00	0.00	80.00	20.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.64	0.12	0.00	0.00	0.00	0.00	0.00	
Chromium		35	0	0	2	3	1	0	0	0	41
0.85	0.00	0.00	0.05	0.07	0.07	0.02	0.00	0.00	0.00	0.99	
85.37	0.00	0.00	4.88	7.32	2.44	0.00	0.00	0.00	0.00	0.00	
1.52	0.00	0.00	0.66	0.48	0.12	0.00	0.00	0.00	0.00	0.00	
Clay		0	0	0	0	0	1	0	0	0	1
0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	
0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.00	
Coal		0	0	0	20	17	26	0	0	1	64
0.00	0.00	0.00	0.48	0.41	0.63	0.00	0.00	0.00	0.02	1.55	
0.00	0.00	0.00	31.25	26.56	40.63	0.00	0.00	0.00	1.56	0.00	
0.00	0.00	0.00	6.60	2.72	3.21	0.00	0.00	0.00	5.56	0.00	
Cobalt		3	0	0	1	1	5	0	0	0	10
0.07	0.00	0.00	0.02	0.02	0.12	0.00	0.00	0.00	0.00	0.24	
30.00	0.00	0.00	10.00	10.00	50.00	0.00	0.00	0.00	0.00	0.00	
0.13	0.00	0.00	0.33	0.16	0.62	0.00	0.00	0.00	0.00	0.00	
Columbium		4	0	0	0	0	0	0	0	0	4
0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10	
100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Copper		43	1	5	36	5	104	1	0	3	198
1.04	0.02	0.12	0.87	0.12	2.52	0.02	0.00	0.00	0.07	4.79	
21.72	0.51	2.53	18.18	2.53	52.53	0.51	0.00	0.00	1.52	0.00	
1.87	3.13	15.63	11.88	0.80	12.82	12.50	0.00	0.00	16.67	0.00	
Fluorine		0	0	0	0	1	0	0	0	0	1
0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02	
0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	

(continued)

Alaska—(continued).

		Type									
Frequency	Percent	Placer	Processing plant	Prospect	Surface-underground	Surface	Under-ground	Underwater	Well	Unknown	Total
Row %	Col %										
Gemstone	4	0	0	0	3	0	0	0	0	0	7
	0.10	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.17
	57.14	0.00	0.00	0.00	42.86	0.00	0.00	0.00	0.00	0.00	
	0.17	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00	
Gold	1216	7	11	72	16	215	3	0	5	1545	
	29.43	0.17	0.27	1.74	0.39	5.20	0.07	0.00	0.12	37.39	
	78.71	0.45	0.71	4.66	1.04	13.92	0.19	0.00	0.32		
	52.85	21.88	34.38	23.76	2.56	26.51	37.50	0.00	27.78		
Graphite	0	0	0	0	1	0	0	0	0	0	1
	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	
Gypsum	0	0	0	0	1	1	0	0	0	0	2
	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.05
	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.16	0.12	0.00	0.00	0.00	0.00	
Iron	7	0	2	3	3	7	0	0	0	0	22
	0.17	0.00	0.05	0.07	0.07	0.17	0.00	0.00	0.00	0.00	0.53
	31.82	0.00	9.09	13.64	13.64	31.82	0.00	0.00	0.00	0.00	
	0.30	0.00	6.25	0.99	0.48	0.86	0.00	0.00	0.00	0.00	
Kyanite group	1	0	0	0	0	0	0	0	0	0	1
	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Lead	45	4	2	40	10	109	0	0	2	212	
	1.09	0.10	0.05	0.97	0.24	2.64	0.00	0.00	0.05	5.13	
	21.23	1.89	0.94	18.87	4.72	51.42	0.00	0.00	0.94		
	1.96	12.50	6.25	13.20	1.60	13.44	0.00	0.00	11.11		
Magnesium	1	0	0	0	0	1	0	0	0	0	2
	0.02	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.05
	50.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00	0.00	
	0.04	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
Manganese	2	0	0	0	0	1	0	0	0	0	3
	0.05	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.07
	66.67	0.00	0.00	0.00	0.00	33.33	0.00	0.00	0.00	0.00	
	0.09	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	
Mercury	68	0	0	12	3	2	0	0	0	0	85
	1.65	0.00	0.00	0.29	0.07	0.05	0.00	0.00	0.00	0.00	2.06
	80.00	0.00	0.00	14.12	3.53	2.35	0.00	0.00	0.00	0.00	
	2.96	0.00	0.00	3.96	0.48	0.25	0.00	0.00	0.00	0.00	
Mica	0	0	0	1	0	0	0	0	0	0	1
	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	
Molybdenum	3	0	0	4	0	8	0	0	1	1	16
	0.07	0.00	0.00	0.10	0.00	0.19	0.00	0.00	0.02	0.02	0.39
	18.75	0.00	0.00	25.00	0.00	50.00	0.00	0.00	6.25		
	0.13	0.00	0.00	1.32	0.00	0.99	0.00	0.00	5.56		
Natural gas	0	0	0	0	0	0	0	0	1	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	

(continued)

Alaska—(continued).

Commodity	Type													
	Frequency	Percent	Row %	Col %	Placer	Processing plant	Prospect	Surface-underground	Surface	Under-ground	Underwater	Well	Unknown	Total
Nickel	4	0	0	0	0	0	0	1	1	0	0	0	0	6
	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.15
	66.67	0.00	0.00	0.00	0.00	0.00	0.00	16.67	16.67	0.00	0.00	0.00	0.00	
	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.12	0.00	0.00	0.00	0.00	
Platinum group	68	0	0	0	1	1	1	2	0	0	0	0	0	72
	1.65	0.00	0.00	0.00	0.02	0.02	0.02	0.05	0.00	0.00	0.00	0.00	0.00	1.74
	94.44	0.00	0.00	0.00	1.39	1.39	1.39	2.78	0.00	0.00	0.00	0.00	0.00	
	2.96	0.00	0.00	0.00	0.33	0.16	0.16	0.25	0.00	0.00	0.00	0.00	0.00	
Rare earth	20	0	0	0	2	0	0	0	0	0	0	0	0	22
	0.48	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53
	90.91	0.00	0.00	0.00	9.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.87	0.00	0.00	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sand & gravel	0	5	0	0	0	318	0	0	0	0	0	0	0	323
	0.00	0.12	0.00	0.00	0.00	7.70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.82
	0.00	1.55	0.00	0.00	0.00	98.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	15.63	0.00	0.00	0.00	50.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Silicon	0	0	0	0	0	1	0	0	0	0	0	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Silver	410	5	4	50	7	159	2	0	0	0	0	3	0	640
	9.92	0.12	0.10	1.21	0.17	3.85	0.05	0.00	0.00	0.00	0.00	0.07	0.00	15.49
	64.06	0.78	0.63	7.81	1.09	24.84	0.31	0.00	0.00	0.00	0.00	0.47	0.00	
	17.82	15.63	12.50	16.50	1.12	19.61	25.00	0.00	0.00	0.00	0.00	16.67	0.00	
Stone	1	3	0	0	207	0	0	0	0	0	0	0	0	211
	0.02	0.07	0.00	0.00	5.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.11
	0.47	1.42	0.00	0.00	98.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.04	9.38	0.00	0.00	33.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sulfur	0	0	0	3	0	0	0	0	0	0	0	0	0	3
	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tantalum	2	0	0	0	0	0	0	0	0	0	0	0	0	2
	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Thorium	10	0	0	1	0	0	0	0	0	0	0	0	0	11
	0.24	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27
	90.91	0.00	0.00	9.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.43	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tin	142	0	0	2	1	2	0	0	0	0	0	0	0	147
	3.44	0.00	0.00	0.05	0.02	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.56
	96.60	0.00	0.00	1.36	0.68	1.36	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	6.17	0.00	0.00	0.66	0.16	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Titanium	10	0	0	0	0	0	0	0	0	0	0	0	0	10
	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.24
	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Tungsten	119	1	0	4	4	17	0	0	0	0	0	0	0	145
	2.88	0.02	0.00	0.10	0.10	0.41	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.51
	82.07	0.69	0.00	2.76	2.76	11.72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	5.17	3.13	0.00	1.32	0.64	2.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	

(continued)

Alaska—(continued).

Commodity		Type									
Frequency	Percent	Placer	Processing plant	Prospect	Surface-underground	Surface	Under-ground	Underwater	Well	Unknown	Total
Row %	Col %										
Uranium		23	0	0	1	0	1	0	0	0	25
	0.56	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.61
	92.00	0.00	0.00	4.00	0.00	4.00	0.00	0.00	0.00	0.00	
	1.00	0.00	0.00	0.33	0.00	0.12	0.00	0.00	0.00	0.00	
Vanadium		0	0	0	1	0	0	0	0	0	1
	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.00	
Zinc		7	3	3	29	6	85	1	0	2	136
	0.17	0.07	0.07	0.70	0.15	2.06	0.02	0.00	0.05	0.05	3.29
	5.15	2.21	2.21	21.32	4.41	62.50	0.74	0.00	1.47		
	0.30	9.38	9.38	9.57	0.96	10.48	12.50	0.00	11.11		
Total		2301	32	32	303	626	811	8	1	18	4132
	55.69	0.77	0.77	7.33	15.15	19.63	0.19	0.02	0.44	0.44	100.00

Arizona

Commodity		Type										
Frequency	Percent	Leach	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Underwater	Well	Unknown	Total
Row %	Col %											
Not identified		0	0	5	1	6	25	18	0	0	3	58
	0.00	0.00	0.05	0.01	0.06	0.25	0.18	0.00	0.00	0.03	0.03	0.57
	0.00	0.00	8.62	1.72	10.34	43.10	31.03	0.00	0.00	0.00	5.17	
	0.00	0.00	10.87	0.81	0.31	3.32	0.32	0.00	0.00	0.00	0.20	
Abrasive		0	0	0	0	0	1	1	0	0	0	2
	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.13	0.02	0.00	0.00	0.00	0.00	
Aluminum		0	0	0	0	2	0	5	0	0	0	7
	0.00	0.00	0.00	0.00	0.02	0.00	0.05	0.00	0.00	0.00	0.00	0.07
	0.00	0.00	0.00	0.00	28.57	0.00	71.43	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.10	0.00	0.09	0.00	0.00	0.00	0.00	
Antimony		0	0	0	0	3	0	12	0	0	0	15
	0.00	0.00	0.00	0.00	0.03	0.00	0.12	0.00	0.00	0.00	0.00	0.15
	0.00	0.00	0.00	0.00	20.00	0.00	80.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.15	0.00	0.21	0.00	0.00	0.00	0.00	
Arsenic		0	0	0	1	0	0	11	0	0	2	14
	0.00	0.00	0.00	0.01	0.00	0.00	0.11	0.00	0.00	0.00	0.02	0.14
	0.00	0.00	0.00	7.14	0.00	0.00	78.57	0.00	0.00	0.00	14.29	
	0.00	0.00	0.00	0.81	0.00	0.00	0.20	0.00	0.00	0.00	0.13	
Asbestos		0	0	1	2	20	1	63	0	0	0	87
	0.00	0.00	0.01	0.02	0.20	0.01	0.62	0.00	0.00	0.00	0.00	0.86
	0.00	0.00	1.15	2.30	22.99	1.15	72.41	0.00	0.00	0.00	0.00	
	0.00	0.00	2.17	1.63	1.02	0.13	1.13	0.00	0.00	0.00	0.00	

(continued)

Arizona—(continued).

Frequency Percent Row % Col %	Commodity				Type						
	Leach	Placer	Processing plant	Prospect	Surface under-ground		Under-ground	Underwater	Well	Unknown	Total
					Surface	Under-ground					
Barium	0	1	0	2	17	12	32	0	0	0	64
	0.00	0.01	0.00	0.02	0.17	0.12	0.32	0.00	0.00	0.00	0.63
	0.00	1.56	0.00	3.13	26.56	18.75	50.00	0.00	0.00	0.00	0.00
	0.00	1.33	0.00	1.63	0.87	1.60	0.57	0.00	0.00	0.00	0.00
Beryllium	0	0	0	0	19	6	22	0	0	0	47
	0.00	0.00	0.00	0.00	0.19	0.06	0.22	0.00	0.00	0.00	0.47
	0.00	0.00	0.00	0.00	40.43	12.77	46.81	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.97	0.80	0.39	0.00	0.00	0.00	0.00
Bismuth	0	0	0	1	5	3	16	0	0	1	26
	0.00	0.00	0.00	0.01	0.05	0.03	0.16	0.00	0.00	0.01	0.26
	0.00	0.00	0.00	3.85	19.23	11.54	61.54	0.00	0.00	3.85	0.00
	0.00	0.00	0.00	0.81	0.26	0.40	0.29	0.00	0.00	0.07	0.00
Bromine	0	0	0	0	0	0	1	0	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.0	0.00	0.00	0.00	0.00
Cadmium	0	0	0	0	0	0	16	0	0	0	16
	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.16
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.00
Calcium	0	0	0	0	12	9	13	0	0	1	35
	0.00	0.00	0.00	0.00	0.12	0.09	0.13	0.00	0.00	0.01	0.35
	0.00	0.00	0.00	0.00	34.29	25.71	37.14	0.00	0.00	2.86	0.00
	0.00	0.00	0.00	0.00	0.61	1.20	0.23	0.00	0.00	0.07	0.00
Chlorine	0	0	0	0	0	0	2	0	0	0	2
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00
Chromium	0	0	0	0	0	0	1	0	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
Clay	0	0	0	0	4	11	3	0	0	0	18
	0.00	0.00	0.00	0.00	0.04	0.11	0.03	0.00	0.00	0.00	0.18
	0.00	0.00	0.00	0.00	22.22	61.11	16.67	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.20	1.46	0.05	0.00	0.00	0.00	0.00
Coal	0	0	0	0	2	2	7	0	0	2	13
	0.00	0.00	0.00	0.00	0.02	0.02	0.07	0.00	0.00	0.02	0.13
	0.00	0.00	0.00	0.00	15.38	15.38	53.85	0.00	0.00	15.38	0.00
	0.00	0.00	0.00	0.00	0.10	0.27	0.13	0.00	0.00	0.13	0.00
Cobalt	0	0	0	0	1	0	2	0	0	0	3
	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.03
	0.00	0.00	0.00	0.00	33.33	0.00	66.67	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.05	0.00	0.04	0.00	0.00	0.00	0.00
Columbium	0	0	0	0	2	2	0	0	0	0	4
	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00	0.04
	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.10	0.27	0.00	0.00	0.00	0.00	0.00
Copper	6	0	6	21	367	55	1052	2	0	357	1866
	0.06	0.00	0.06	0.21	3.64	0.54	10.42	0.02	0.00	3.54	18.48
	0.32	0.00	0.32	1.13	19.67	2.95	56.38	0.11	0.00	19.13	0.00
	28.5	0.00	13.04	17.07	18.77	7.31	18.81	28.57	0.00	23.75	0.00

(continued)

Arizona—(continued).

Commodity		Type											
Frequency	Percent	Row %	Leach	Placer	Processing plant	Prospect	Surface under-ground	Surface	Under-ground	Underwater	Well	Unknown	Total
Col %													
Diatomite	0	0	0	1	0	4	0	0	0	0	0	0	5
	0.00	0.00	0.00	0.01	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.05
	0.00	0.00	0.00	20.00	0.00	80.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.81	0.00	0.53	0.00	0.00	0.00	0.00	0.00	0.00	
Feldspar	0	0	0	0	5	8	5	1	0	0	0	0	19
	0.00	0.00	0.00	0.00	0.05	0.08	0.05	0.01	0.00	0.00	0.00	0.00	0.19
	0.00	0.00	0.00	0.00	26.32	42.11	26.32	5.26	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.26	1.06	0.09	14.29	0.00	0.00	0.00	0.00	
Fluorine	0	0	1	2	28	8	49	0	0	0	5	93	
	0.00	0.00	0.01	0.02	0.28	0.08	0.49	0.00	0.00	0.00	0.05	0.92	
	0.00	0.00	1.08	2.15	30.11	8.60	52.69	0.00	0.00	0.00	5.38		
	0.00	0.00	2.17	1.63	1.43	1.06	0.88	0.00	0.00	0.00	0.33		
Gallium	0	0	0	0	0	0	2	0	0	0	0	0	2
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
Gemstone	0	0	1	1	5	7	6	0	0	0	0	0	20
	0.00	0.00	0.01	0.01	0.05	0.07	0.06	0.00	0.00	0.00	0.00	0.00	0.20
	0.00	0.00	5.00	5.00	25.00	35.00	30.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	2.17	0.81	0.26	0.93	0.11	0.00	0.00	0.00	0.00	0.00	
Geothermal	0	0	0	0	0	0	1	0	0	0	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	
Germanium	0	0	0	0	0	0	1	0	0	0	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	
Gold	6	49	3	27	332	45	1134	0	0	0	388	1984	
	0.06	0.49	0.03	0.27	3.29	0.45	11.23	0.00	0.00	0.00	3.84	19.65	
	0.30	2.47	0.15	1.36	16.73	2.27	57.16	0.00	0.00	0.00	19.56		
	28.57	65.33	6.52	21.95	16.98	5.98	20.28	0.00	0.00	0.00	25.82		
Gypsum	0	0	0	1	2	10	2	0	0	0	0	0	15
	0.00	0.00	0.00	0.01	0.02	0.10	0.02	0.00	0.00	0.00	0.00	0.00	0.15
	0.00	0.00	0.00	6.67	13.33	66.67	13.33	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.81	0.10	1.33	0.04	0.00	0.00	0.00	0.00	0.00	
Helium	0	0	1	0	0	1	0	0	0	21	0	0	23
	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.21	0.00	0.00	0.23
	0.00	0.00	4.35	0.00	0.00	4.35	0.00	0.00	0.00	91.30	0.00		
	0.00	0.00	2.17	0.00	0.00	0.13	0.00	0.00	0.00	100.00	0.00		
Indium	0	0	0	0	0	0	3	0	0	0	0	0	3
	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.03
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	
Iron	0	1	0	1	45	15	142	0	0	0	0	0	204
	0.00	0.01	0.00	0.01	0.45	0.15	1.41	0.00	0.00	0.00	0.00	0.00	2.02
	0.00	0.49	0.00	0.49	22.06	7.35	69.61	0.00	0.00	0.00	0.00	0.00	
	0.00	1.33	0.00	0.81	2.30	1.99	2.54	0.00	0.00	0.00	0.00	0.00	
Lead	1	2	4	11	218	18	797	1	0	156	1208		
	0.01	0.02	0.04	0.11	2.16	0.18	7.89	0.01	0.00	0.00	1.55	11.97	
	0.08	0.17	0.33	0.91	18.05	1.49	65.98	0.08	0.00	0.00	12.91		
	4.76	2.67	8.70	8.94	11.15	2.39	14.25	14.29	0.00	0.00	10.38		

(continued)

Arizona—(continued).

Commodity	Type												
	Frequency Percent	Row % Col %	Leach	Placer	Processing plant	Prospect	Surface under- ground		Under- ground	Underwater	Well	Unknown	Total
							Surface	Under- ground					
Lithium	0	0	0	0	0	2	1	4	0	0	0	0	7
	0.00	0.00	0.00	0.00	0.00	0.02	0.01	0.04	0.00	0.00	0.00	0.00	0.07
	0.00	0.00	0.00	0.00	0.00	28.57	14.29	57.14	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.10	0.13	0.07	0.00	0.00	0.00	0.00	
Magnesium	0	0	0	0	0	0	2	3	0	0	0	0	5
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00	0.05
	0.00	0.00	0.00	0.00	0.00	0.00	40.00	60.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.05	0.00	0.00	0.00	0.00	
Manganese	0	0	2	5	151	112	105	0	0	0	1	376	
	0.00	0.00	0.02	0.05	1.50	1.11	1.04	0.00	0.00	0.00	0.01	3.72	
	0.00	0.00	0.53	1.33	40.16	29.79	27.93	0.00	0.00	0.00	0.27		
	0.00	0.00	4.35	4.07	7.72	14.89	1.88	0.00	0.00	0.00	0.07		
Mercurv	0	1	0	0	10	4	5	0	0	0	1	21	
	0.00	0.01	0.00	0.00	0.10	0.04	0.05	0.00	0.00	0.00	0.01	0.21	
	0.00	4.76	0.00	0.00	47.62	19.05	23.81	0.00	0.00	0.00	4.76		
	0.00	1.33	0.00	0.00	0.51	0.53	0.09	0.00	0.00	0.00	0.07		
Mica	0	0	2	3	5	8	2	0	0	0	2	22	
	0.00	0.00	0.02	0.03	0.05	0.08	0.02	0.00	0.00	0.00	0.02	0.22	
	0.00	0.00	9.09	13.64	22.73	36.36	9.09	0.00	0.00	0.00	9.09		
	0.00	0.00	4.35	2.44	0.26	1.06	0.04	0.00	0.00	0.00	0.13		
Molybdenum	2	0	0	3	37	8	94	0	0	0	0	144	
	0.02	0.00	0.00	0.03	0.37	0.08	0.93	0.00	0.00	0.00	0.00	1.43	
	1.39	0.00	0.00	2.08	25.69	5.56	65.28	0.00	0.00	0.00	0.00		
	9.52	0.00	0.00	2.44	1.89	1.06	1.68	0.00	0.00	0.00	0.00		
Nickel	0	0	0	0	0	0	2	0	0	0	0	2	
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00		
Perlite	0	0	1	0	3	5	1	0	0	0	0	10	
	0.00	0.00	0.01	0.00	0.03	0.05	0.01	0.00	0.00	0.00	0.00	0.10	
	0.00	0.00	10.00	0.00	30.00	50.00	10.00	0.00	0.00	0.00	0.00		
	0.00	0.00	2.17	0.00	0.15	0.66	0.02	0.00	0.00	0.00	0.00		
Phosphate	0	0	0	0	1	0	0	0	0	0	0	1	
	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Pumice	0	0	0	0	0	11	0	0	0	0	1	12	
	0.00	0.00	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.01	0.12	
	0.00	0.00	0.00	0.00	0.00	91.67	0.00	0.00	0.00	0.00	8.33		
	0.00	0.00	0.00	0.00	0.00	1.46	0.00	0.00	0.00	0.00	0.07		
Quartz crystal	0	0	0	0	3	1	6	0	0	0	0	10	
	0.00	0.00	0.00	0.00	0.03	0.01	0.06	0.00	0.00	0.00	0.00	0.10	
	0.00	0.00	0.00	0.00	30.00	10.00	60.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.15	0.13	0.11	0.00	0.00	0.00	0.00		
Rare earth	0	0	1	0	1	1	1	0	0	0	0	4	
	0.00	0.00	0.01	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.04	
	0.00	0.00	25.00	0.00	25.00	25.00	25.00	0.00	0.00	0.00	0.00		
	0.00	0.00	2.17	0.00	0.05	0.13	0.02	0.00	0.00	0.00	0.00		
Rhenium	0	0	0	0	0	0	1	0	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00		

(continued)

Arizona—(continued).

Frequency Percent	Type										
	Row % Col %	Processing plant			Surface under- ground	Surface	Under- ground				Total
		Leach	Placer	Prospect			Underwater	Well	Unknown		
Sand & gravel	0	0	0	0	0	182	0	0	0	0	182
	0.00	0.00	0.00	0.00	0.00	1.80	0.00	0.00	0.00	0.00	1.80
	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	24.20	0.00	0.00	0.00	0.00	0.00
Silicon	0	0	0	1	24	19	29	0	0	0	73
	0.00	0.00	0.00	0.01	0.24	0.19	0.29	0.00	0.00	0.00	0.72
	0.00	0.00	0.00	1.37	32.88	26.03	39.73	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.81	1.23	2.53	0.52	0.00	0.00	0.00	0.00
Silver	6	15	3	21	363	57	1201	1	0	517	2184
	0.06	0.15	0.03	0.21	3.60	0.56	11.90	0.01	0.00	5.12	21.63
	0.27	0.69	0.14	0.96	16.62	2.61	54.99	0.05	0.00	23.67	
	28.57	20.00	6.52	17.07	18.57	7.58	21.47	14.29	0.00	34.40	
Sodium	0	0	0	0	1	1	0	0	0	0	2
	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.05	0.13	0.00	0.00	0.00	0.00	0.00
Stone	0	1	1	3	7	37	13	0	0	0	62
	0.00	0.01	0.01	0.03	0.07	0.37	0.13	0.00	0.00	0.00	0.61
	0.00	1.61	1.61	4.84	11.29	59.68	20.97	0.00	0.00	0.00	0.00
	0.00	1.33	2.17	2.44	0.36	4.92	0.23	0.00	0.00	0.00	0.00
Strontium	0	0	0	0	1	2	4	0	0	0	7
	0.00	0.00	0.00	0.00	0.01	0.02	0.04	0.00	0.00	0.00	0.07
	0.00	0.00	0.00	0.00	14.29	28.57	57.14	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.05	0.27	0.07	0.00	0.00	0.00	0.00
Sulfur	0	0	1	0	0	0	3	0	0	0	4
	0.00	0.00	0.01	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.04
	0.00	0.00	25.00	0.00	0.00	0.00	75.00	0.00	0.00	0.00	0.00
	0.00	0.00	2.17	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00
Tantalum	0	0	0	0	1	2	0	0	0	0	3
	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.03
	0.00	0.00	0.00	0.00	33.33	66.67	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.05	0.27	0.00	0.00	0.00	0.00	0.00
Tellurium	0	0	0	1	1	0	1	0	0	0	3
	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.03
	0.00	0.00	0.00	33.33	33.33	0.00	33.33	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.81	0.05	0.00	0.02	0.00	0.00	0.00	0.00
Thorium	0	0	0	0	1	1	1	0	0	0	3
	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.03
	0.00	0.00	0.00	0.00	33.33	33.33	33.33	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.05	0.13	0.02	0.00	0.00	0.00	0.00
Tin	0	0	0	0	0	1	4	0	0	0	5
	0.00	0.00	0.00	0.00	0.00	0.01	0.04	0.00	0.00	0.00	0.05
	0.00	0.00	0.00	0.00	0.00	20.00	80.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.13	0.07	0.00	0.00	0.00	0.00
Titanium	0	1	0	0	1	1	1	0	0	0	4
	0.00	0.01	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.04
	0.00	25.00	0.00	0.00	25.00	25.00	25.00	0.00	0.00	0.00	0.00
	0.00	1.33	0.00	0.00	0.05	0.13	0.02	0.00	0.00	0.00	0.00
Tungsten	0	3	10	6	84	13	62	0	0	3	181
	0.00	0.03	0.10	0.06	0.83	0.13	0.61	0.00	0.00	0.03	1.79
	0.00	1.66	5.52	3.31	46.41	7.18	34.25	0.00	0.00	1.66	
	0.00	4.00	21.74	4.88	4.30	1.73	1.11	0.00	0.00	0.20	

(continued)

Arizona—(continued).

Frequency Percent Row % Col %	Type										
	Leach	Placer	Processing plant		Surface under- ground	Surface	Under- ground		Well	Unknown	
			Prospect	Leach			Underwater	Underground			
Uranium	0	1	1	2	30	22	87	1	0	48	192
	0.00	0.01	0.01	0.02	0.30	0.22	0.86	0.01	0.00	0.48	1.90
	0.00	0.52	0.52	1.04	15.63	11.46	45.31	0.52	0.00	25.00	
	0.00	1.33	2.17	1.63	1.53	2.93	1.56	14.29	0.00	3.19	
Vanadium	0	0	0	3	16	12	82	0	0	6	119
	0.00	0.00	0.00	0.03	0.16	0.12	0.81	0.00	0.00	0.06	1.18
	0.00	0.00	0.00	2.52	13.45	10.08	68.91	0.00	0.00	5.04	
	0.00	0.00	0.00	2.44	0.82	1.60	1.47	0.00	0.00	0.40	
Vermiculite	0	0	0	0	0	0	0	0	0	1	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07	
Water content	0	0	0	0	0	0	2	0	0	0	2
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	
Wollastonite	0	0	0	0	0	0	1	0	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	
Zeolites	0	0	0	0	0	1	0	0	0	1	2
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.02
	0.00	0.00	0.00	0.00	0.00	50.00	0.00	0.00	0.00	50.00	
	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.07	
Zinc	0	0	2	3	117	5	459	1	0	7	594
	0.00	0.00	0.02	0.03	1.16	0.05	4.55	0.01	0.00	0.07	5.88
	0.00	0.00	0.34	0.51	19.70	0.84	77.27	0.17	0.00	1.18	
	0.00	0.00	4.35	2.44	5.98	0.66	8.21	14.29	0.00	0.47	
Total	21	75	46	123	1955	752	5593	7	21	1503	10096
	0.21	0.74	0.46	1.22	19.36	7.45	55.40	0.07	0.21	14.89	100.00

Arkansas

Frequency Percent Row % Col %	Type										
	Leach	Processing plant	Prospect	Surface- underground		Surface	Under- ground		Underwater	Well	Unknown
				Surface	Underground		Underground	Underwater			
Not identified	1	0	0	2	0	0	0	0	0	0	3
	0	4	0	1	34	5	0	0	0	2	46
	0.00	0.18	0.00	0.05	1.57	0.23	0.00	0.00	0.00	0.09	2.12
	0.00	8.70	0.00	2.17	73.91	10.87	0.00	0.00	0.00	4.35	
Aluminum	0	1	0	0	2	0	0	0	0	0	3
	0.00	0.05	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.14
	0.00	33.33	0.00	0.00	66.67	0.00	0.00	0.00	0.00	0.00	
	0.00	4.17	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	

(continued)

Arkansas—(continued).

Commodity	Type													
	Frequency	Percent	Row %	Col %	Leach	Processing plant	Prospect	Surface-underground	Surface	Under-ground	Underwater	Well	Unknown	Total
	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Antimony	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	1.53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Barium	0	0	0	0	0	0	0	8	10	0	0	0	0	18
	0.00	0.00	0.00	0.00	0.00	0.37	0.46	0.37	0.46	0.00	0.00	0.00	0.00	0.83
	0.00	0.00	0.00	0.00	0.00	44.44	55.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.50	2.69	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Boron	0	0	0	0	0	0	0	0	1	0	0	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00	0.00
Bromine	0	5	0	0	0	0	0	1	0	0	0	8	0	14
	0.00	0.23	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.37	0.00	0.65
	0.00	35.71	0.00	0.00	0.00	7.14	0.00	0.00	0.00	57.14	0.00	0.00	0.00	0.00
	0.00	20.83	0.00	0.00	0.00	0.06	0.00	0.00	0.00	80.00	0.00	0.00	0.00	0.00
Calcium	0	0	0	0	0	0	0	8	2	0	0	0	0	10
	0.00	0.00	0.00	0.00	0.00	0.37	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.46
	0.00	0.00	0.00	0.00	80.00	20.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.50	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Clay	0	0	0	0	0	105	2	0	0	0	0	0	0	107
	0.00	0.00	0.00	0.00	0.00	4.84	0.09	0.00	0.00	0.00	0.00	0.00	0.00	4.93
	0.00	0.00	0.00	0.00	98.13	1.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	6.57	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coal	0	0	0	0	7	212	149	0	0	0	0	2	0	370
	0.00	0.00	0.00	0.32	0.32	9.77	6.87	0.00	0.00	0.00	0.00	0.09	0.00	17.06
	0.00	0.00	0.00	1.89	57.30	40.27	0.00	0.00	0.00	0.00	0.00	0.54	0.00	0.00
	0.00	0.00	0.00	5.34	13.27	40.05	0.00	0.00	0.00	0.00	0.00	16.67	0.00	0.00
Columbium	0	0	0	0	0	2	0	0	0	0	0	0	0	2
	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Copper	0	0	0	1	0	2	0	0	0	0	0	0	0	3
	0.00	0.00	0.00	0.05	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.14
	0.00	0.00	0.00	33.33	0.00	66.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.76	0.00	0.54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Diatomite	0	0	0	0	0	8	11	0	0	0	0	0	0	19
	0.00	0.00	0.00	0.00	0.00	0.37	0.51	0.00	0.00	0.00	0.00	0.00	0.00	0.88
	0.00	0.00	0.00	0.00	42.11	57.89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.50	2.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gemstone	0	0	0	0	0	2	0	0	0	0	0	0	0	2
	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Iron	0	2	0	2	20	5	0	0	0	0	0	1	0	30
	0.00	0.09	0.00	0.09	0.92	0.23	0.00	0.00	0.00	0.00	0.00	0.05	0.00	1.38
	0.00	6.67	0.00	6.67	66.67	16.67	0.00	0.00	0.00	0.00	0.00	3.33	0.00	0.00
	0.00	8.33	0.00	1.53	1.25	1.34	0.00	0.00	0.00	0.00	0.00	8.33	0.00	0.00
Lead	0	1	2	8	0	52	1	0	0	0	0	0	0	64
	0.00	0.05	0.09	0.37	0.00	2.40	0.05	0.00	0.00	0.00	0.00	2.95	0.00	2.95
	0.00	1.56	3.13	12.50	0.00	81.25	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	4.17	15.38	6.11	0.00	13.98	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00

(continued)

Arkansas—(continued).

Commodity	Type											
	Frequency		Percent									
	Row %	Col %	Leach	Processing plant	Prospect	Surface-underground	Surface	Under-ground	Underwater	Well	Unknown	Total
Manganese	0	1	3	64	125	8	0	0	0	0	201	
	0.00	0.05	0.14	2.95	5.76	0.37	0.00	0.00	0.00	0.00	9.27	
	0.00	0.50	1.49	31.84	62.19	3.98	0.00	0.00	0.00	0.00		
	0.00	4.17	23.08	48.85	7.83	2.15	0.00	0.00	0.00	0.00		
Mercury	0	0	3	26	10	8	2	0	5	54		
	0.00	0.00	0.14	1.20	0.46	0.37	0.09	0.00	0.23	2.49		
	0.00	0.00	5.56	48.15	18.52	14.81	3.70	0.00	9.26			
	0.00	0.00	23.08	19.85	0.63	2.15	25.00	0.00	41.67			
Molybdenum	0	0	0	0	0	1	0	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.05	
	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.00		
Phosphate	0	0	0	0	1	0	0	0	0	0	1	
	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.05	
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00		
Sand & gravel	2	8	2	0	862	6	4	1	2	887		
	0.09	0.37	0.09	0.00	39.74	0.28	0.18	0.05	0.09	40.89		
	0.23	0.90	0.23	0.00	97.18	0.68	0.45	0.11	0.23			
	100.00	33.33	15.38	0.00	53.98	1.61	50.00	10.00	16.67			
Silicon	0	0	0	0	20	0	0	0	0	20		
	0.00	0.00	0.00	0.00	0.92	0.00	0.00	0.00	0.00	0.00	0.92	
	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	1.25	0.00	0.00	0.00	0.00	0.00		
Stone	0	2	0	0	158	6	0	0	0	0	166	
	0.00	0.09	0.00	0.00	7.28	0.28	0.00	0.00	0.00	0.00	7.65	
	0.00	1.20	0.00	0.00	95.18	3.61	0.00	0.00	0.00	0.00		
	0.00	8.33	0.00	0.00	9.89	1.61	0.00	0.00	0.00	0.00		
Titanium	0	0	0	0	2	1	0	0	0	0	3	
	0.00	0.00	0.00	0.00	0.09	0.05	0.00	0.00	0.00	0.00	0.14	
	0.00	0.00	0.00	0.00	66.67	33.33	0.00	0.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.13	0.27	0.00	0.00	0.00	0.00		
Vanadium	0	0	0	0	0	1	0	1	0	0	2	
	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.00	0.09	
	0.00	0.00	0.00	0.00	0.00	50.00	0.00	50.00	0.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.27	0.00	10.00	0.00	0.00		
Zinc	0	0	3	20	17	102	1	0	0	0	143	
	0.00	0.00	0.14	0.92	0.78	4.70	0.05	0.00	0.00	0.00	6.59	
	0.00	0.00	2.10	13.99	11.89	71.33	0.70	0.00	0.00	0.00		
	0.00	0.00	23.08	15.27	1.06	27.42	12.50	0.00	0.00	0.00		
Total	2	24	13	131	1597	372	8	10	12	2169		
	0.09	1.11	0.60	6.04	73.63	17.15	0.37	0.46	0.55	100.00		

(continued)

California

		Type									
Frequency		Mineral	Processing	Surface-	Under-	Under-	Well	Unknown	Total		
Row %	Col %	Brine	location	plant	under-	ground	ground	Underwater			
			Placer	Prospect	Surface	Under-	Underwater	Well	Unknown	Total	
Not identified	0	5	7	0	10	45	12	0	0	79	
	0.00	0.05	0.07	0.00	0.10	0.44	0.12	0.00	0.00	0.78	
	0.00	6.33	8.86	0.00	0.00	12.66	56.96	15.19	0.00	0.00	
	0.00	1.78	0.28	0.00	0.00	0.92	1.70	0.37	0.00	0.00	
Abrasive	0	0	0	0	1	3	1	0	0	6	
	0.00	0.00	0.00	0.00	0.01	0.03	0.01	0.00	0.01	0.06	
	0.00	0.00	0.00	0.00	0.00	16.67	50.00	16.67	0.00	16.67	
	0.00	0.00	0.00	0.00	0.09	0.11	0.03	0.00	0.00	0.54	
Aluminum	0	0	0	0	5	7	0	0	0	12	
	0.00	0.00	0.00	0.00	0.05	0.07	0.00	0.00	0.00	0.12	
	0.00	0.00	0.00	0.00	0.00	41.67	58.33	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.46	0.26	0.00	0.00	0.00	0.00	
Antimony	0	0	0	0	8	1	26	0	0	38	
	0.00	0.00	0.00	0.00	0.08	0.01	0.26	0.00	0.03	0.38	
	0.00	0.00	0.00	0.00	0.00	21.05	2.63	68.42	0.00	7.89	
	0.00	0.00	0.00	0.00	0.74	0.04	0.81	0.00	0.00	1.61	
Arsenic	0	0	0	0	2	0	1	0	0	3	
	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.03	
	0.00	0.00	0.00	0.00	0.00	66.67	0.00	33.33	0.00	0.00	
	0.00	0.00	0.00	0.00	0.18	0.00	0.03	0.00	0.00	0.00	
Asbestos	0	1	0	0	1	0	9	5	0	16	
	0.00	0.01	0.00	0.00	0.01	0.00	0.09	0.05	0.00	0.00	
	0.00	6.25	0.00	0.00	6.25	0.00	56.25	31.25	0.00	0.00	
	0.00	0.36	0.00	0.00	2.13	0.00	0.34	0.16	0.00	0.00	
Barium	0	2	0	0	0	6	10	10	0	28	
	0.00	0.02	0.00	0.00	0.00	0.06	0.10	0.10	0.00	0.00	
	0.00	7.14	0.00	0.00	0.00	21.43	35.71	35.71	0.00	0.00	
	0.00	0.71	0.00	0.00	0.00	0.55	0.38	0.31	0.00	0.00	
Beryllium	0	0	0	0	0	1	1	1	0	3	
	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.03	
	0.00	0.00	0.00	0.00	0.00	33.33	33.33	33.33	0.00	0.00	
	0.00	0.00	0.00	0.00	0.09	0.04	0.03	0.00	0.00	0.00	
Bismuth	0	0	0	0	0	0	0	1	0	1	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	
Borax	0	0	0	0	0	1	3	8	0	14	
	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.08	0.00	0.02	
	0.00	0.00	0.00	0.00	0.00	7.14	21.43	57.14	0.00	14.29	
	0.00	0.00	0.00	0.00	0.09	0.11	0.25	0.00	0.00	1.08	
Boron	0	1	0	1	0	4	6	17	0	35	
	0.00	0.01	0.00	0.01	0.00	0.04	0.06	0.17	0.00	0.02	
	0.00	2.86	0.00	2.86	0.00	11.43	17.14	48.57	0.00	11.43	
	0.00	0.36	0.00	1.32	0.00	0.37	0.23	0.53	0.00	5.71	
	0.00	18.18	0.00	3.95	8.51	0.65	4.75	0.12	0.00	1.08	
Calcium	2	1	0	3	4	7	126	4	0	148	
	0.02	0.01	0.00	0.03	0.04	0.07	1.25	0.04	0.00	0.01	
	1.35	0.68	0.00	2.03	2.70	4.73	85.14	2.70	0.00	0.68	
	18.18	0.36	0.00	3.95	8.51	0.65	4.75	0.12	0.00	0.54	

(continued)

California—(continued).

Commodity		Type											
Frequency Row %	Mineral Col %	Brine	Mineral location	Placer	Processing plant	Prospect	Surface- under- ground	Surface	Under- ground	Underwater	Well	Unknown	Total
Chlorine	0	0	0	0	0	0	0	0	0	0	4	0	4
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.04
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.79	0.00	0.00	0.00
Chromium	0	56	0	0	2	136	159	80	1	0	11	445	
	0.00	0.55	0.00	0.00	0.02	1.34	1.57	0.79	0.01	0.00	0.11	4.40	
	0.00	12.58	0.00	0.00	0.45	30.56	35.73	17.98	0.22	0.00	2.47		
	0.00	19.93	0.00	0.00	4.26	12.53	6.00	2.49	25.00	0.00	5.91		
Clay	0	6	0	21	1	17	184	11	0	0	2	242	
	0.00	0.06	0.00	0.21	0.01	0.17	1.82	0.11	0.00	0.00	0.02	2.39	
	0.00	2.48	0.00	8.68	0.41	7.02	76.03	4.55	0.00	0.00	0.83		
	0.00	2.14	0.00	27.63	2.13	1.57	6.94	0.34	0.00	0.00	1.08		
Coal	0	0	0	0	0	1	9	8	0	0	0	18	
	0.00	0.00	0.00	0.00	0.00	0.01	0.09	0.08	0.00	0.00	0.00	0.00	0.18
	0.00	0.00	0.00	0.00	0.00	5.56	50.00	44.44	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.09	0.34	0.25	0.00	0.00	0.00	0.00	
Cobalt	0	0	0	0	0	0	1	0	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	
Copper	0	15	1	3	5	83	20	403	1	4	14	549	
	0.00	0.15	0.01	0.03	0.05	0.82	0.20	3.98	0.01	0.04	0.14	5.43	
	0.00	2.73	0.18	0.55	0.91	15.12	3.64	73.41	0.18	0.73	2.55		
	0.00	5.34	0.04	3.95	10.64	7.65	0.75	12.52	25.00	13.79	7.53		
Diatomite	0	0	0	0	0	0	14	1	0	0	5	20	
	0.00	0.00	0.00	0.00	0.00	0.00	0.14	0.01	0.00	0.00	0.05	0.20	
	0.00	0.00	0.00	0.00	0.00	0.00	70.00	5.00	0.00	0.00	25.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.03	0.00	0.00	2.69		
Feldspar	0	1	0	0	0	5	23	6	0	0	3	38	
	0.00	0.01	0.00	0.00	0.00	0.05	0.23	0.06	0.00	0.00	0.03	0.38	
	0.00	2.63	0.00	0.00	0.00	13.16	60.53	15.79	0.00	0.00	7.89		
	0.00	0.36	0.00	0.00	0.00	0.46	0.87	0.19	0.00	0.00	1.61		
Fluorine	0	1	0	0	0	5	3	8	0	0	0	17	
	0.00	0.01	0.00	0.00	0.00	0.05	0.03	0.08	0.00	0.00	0.00	0.00	0.17
	0.00	5.88	0.00	0.00	0.00	29.41	17.65	47.06	0.00	0.00	0.00	0.00	
	0.00	0.36	0.00	0.00	0.00	0.46	0.11	0.25	0.00	0.00	0.00	0.00	
Gallium	0	0	0	0	0	1	0	0	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	
Gemstone	0	1	0	0	0	15	20	10	0	0	2	48	
	0.00	0.01	0.00	0.00	0.00	0.15	0.20	0.10	0.00	0.00	0.02	0.47	
	0.00	2.08	0.00	0.00	0.00	31.25	41.67	20.83	0.00	0.00	4.17		
	0.00	0.36	0.00	0.00	0.00	1.38	0.75	0.31	0.00	0.00	1.08		
Geothermal	0	0	0	0	0	0	4	0	0	1	0	5	
	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.05	
	0.00	0.00	0.00	0.00	0.00	80.00	0.00	0.00	0.00	20.00	0.00		
	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	3.45	0.00		
Gold	0	129	1593	10	9	239	136	1257	0	0	24	3397	
	0.00	1.28	15.75	0.10	0.09	2.36	1.34	12.43	0.00	0.00	0.24	33.58	
	0.00	3.80	46.89	0.29	0.26	7.04	4.00	37.00	0.00	0.00	0.71		
	0.00	45.91	63.09	13.16	19.15	22.03	5.13	39.05	0.00	0.00	12.90		

(continued)

California—(continued).

Frequency Row % Col %	Type										Total
	Brine	Mineral location	Placer	Processing plant	Prospect	Surface- under- ground	Surface	Under- ground	Underwater	Well	
Graphite	0	0	0	0	0	2	6	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.02	0.06	0.00	0.00	0.00	0.08
	0.00	0.00	0.00	0.00	0.00	25.00	75.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.18	0.23	0.00	0.00	0.00	0.00
Gypsum	0	5	0	0	0	5	59	3	0	0	3
	0.00	0.05	0.00	0.00	0.00	0.05	0.58	0.03	0.00	0.00	0.03
	0.00	6.67	0.00	0.00	0.00	6.67	78.67	4.00	0.00	0.00	4.00
	0.00	1.78	0.00	0.00	0.00	0.46	2.22	0.09	0.00	0.00	1.61
Iron	0	0	1	0	0	90	64	56	0	0	0
	0.00	0.00	0.01	0.00	0.00	0.89	0.63	0.55	0.00	0.00	0.00
	0.00	0.00	0.47	0.00	0.00	42.65	30.33	26.54	0.00	0.00	0.00
	0.00	0.00	0.04	0.00	0.00	8.29	2.41	1.74	0.00	0.00	0.00
Kyanite group	0	0	0	0	0	1	0	1	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	50.00	0.00	50.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.03	0.00	0.00	0.00
Lead	0	4	1	2	2	54	10	298	0	4	24
	0.00	0.04	0.01	0.02	0.02	0.53	0.10	2.95	0.00	0.04	0.24
	0.00	1.00	0.25	0.50	0.50	13.53	2.51	74.69	0.00	1.00	6.02
	0.00	1.42	0.04	2.63	4.26	4.98	0.38	9.26	0.00	13.79	12.90
Lithium	0	0	0	0	1	1	1	0	0	4	0
	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.04	0.00
	0.00	0.00	0.00	0.00	14.29	14.29	14.29	0.00	0.00	57.14	0.00
	0.00	0.00	0.00	0.00	2.13	0.09	0.04	0.00	0.00	13.79	0.00
Magnesium	0	2	0	0	0	5	18	5	0	0	2
	0.00	0.02	0.00	0.00	0.00	0.05	0.18	0.05	0.00	0.00	0.02
	0.00	6.25	0.00	0.00	0.00	15.63	56.25	15.63	0.00	0.00	6.25
	0.00	0.71	0.00	0.00	0.00	0.46	0.68	0.16	0.00	0.00	1.08
Manganese	0	3	1	0	1	71	64	41	0	0	26
	0.00	0.03	0.01	0.00	0.01	0.70	0.63	0.41	0.00	0.00	0.26
	0.00	1.45	0.48	0.00	0.48	34.30	30.92	19.81	0.00	0.00	12.56
	0.00	1.07	0.04	0.00	2.13	6.54	2.41	1.27	0.00	0.00	13.98
Mercury	0	2	2	0	0	24	23	43	0	0	1
	0.00	0.02	0.02	0.00	0.00	0.24	0.23	0.43	0.00	0.00	0.01
	0.00	2.11	2.11	0.00	0.00	25.26	24.21	45.26	0.00	0.00	1.05
	0.00	0.71	0.08	0.00	0.00	2.21	0.87	1.34	0.00	0.00	0.54
Mica	0	0	0	0	2	1	9	2	0	0	1
	0.00	0.00	0.00	0.00	0.02	0.01	0.09	0.02	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	13.33	6.67	60.00	13.33	0.00	0.00	6.67
	0.00	0.00	0.00	0.00	4.26	0.09	0.34	0.06	0.00	0.00	0.54
Molybdenum	0	1	0	0	0	2	2	10	0	0	0
	0.00	0.01	0.00	0.00	0.00	0.02	0.02	0.10	0.00	0.00	0.00
	0.00	6.67	0.00	0.00	0.00	13.33	13.33	66.67	0.00	0.00	0.00
	0.00	0.36	0.00	0.00	0.00	0.18	0.08	0.31	0.00	0.00	0.00
Natural gas	0	3	0	0	0	0	0	0	0	0	3
	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	1.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nickel	0	0	0	0	0	1	0	0	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00

(continued)

California—(continued).

Commodity		Type									
Frequency						Surface-					Total
Row %	Brine	Mineral location	Placer	Processing plant	Prospect	under-ground	Under-ground	Underwater	Well	Unknown	
Col %						Surface	Under-ground	Underwater	Well	Unknown	
Perlite	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 9.09 1.32	0 0.00 0.00 0.00	0 0.10 90.91 0.38	10 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	11 0.11 0.00 0.00
Petroleum	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.02 50.00 0.18	2 0.02 50.00 0.08	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	4 0.04 0.00 0.00
Phosphate	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	4 0.04 36.36 0.37	7 0.07 63.64 0.26	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	11 0.11 0.00 0.00
Platinum group	0 0.00 0.00 0.00	3 0.03 9.38 1.07	22 0.22 68.75 0.87	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.06 18.75 0.23	6 0.01 3.13 0.03	1 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	32 0.32 0.00 0.00
Potash	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 20.00 0.09	4 0.04 80.00 0.15	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	5 0.05 0.00 0.00
Pumice	0 0.00 0.00 0.00	1 0.01 1.61 0.36	0 0.00 0.00 0.00	0 0.00 0.00 0.00	3 0.03 4.84 0.28	57 0.56 91.94 2.15	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	62 0.61 0.01 0.54
Quartz crystal	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 9.09 2.13	1 0.01 9.09 0.09	8 0.08 72.73 0.30	1 0.01 9.09 0.03	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	11 0.11 0.00 0.00
Radium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 100.00 0.09	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.00
Rare earth	0 0.00 0.00 0.00	0 0.01 50.00 0.04	1 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 50.00 0.04	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.02 0.00 0.00
Sand	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 100.00 0.04	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.00
Sand & gravel	0 0.00 0.00 0.00	6 0.06 0.78 2.14	1 0.01 0.13 0.04	18 0.18 2.35 23.68	7 0.07 0.92 14.89	1 7.15 0.13 0.09	723 94.51 27.26	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	9 0.09 1.18 4.84
Silicon	0 0.00 0.00 0.00	1 0.01 0.73 0.36	0 0.00 0.00 0.00	0 0.00 0.00 0.00	35 0.35 25.55 3.23	80 0.79 58.39 3.02	18 0.18 13.14 0.56	0 0.00 0.00 0.00	0 0.00 0.00	0 0.00 0.00	3 0.03 2.19 1.61
Silver	0 0.00 0.00 0.00	12 0.12 0.76 4.27	879 8.69 55.63 34.81	4 0.04 0.25 5.26	1 0.01 0.06 2.13	92 0.91 5.82 8.48	37 0.37 2.34 1.40	520 5.14 32.91 16.15	0 0.00 0.00 0.00	4 0.04 0.25 13.79	31 0.31 1.96 16.67

(continued)

California—(continued).

Commodity			Type										
Frequency Row %	Mineral Col %	Brine	Mineral location	Placer	Processing plant	Prospect	Surface- under- ground	Surface	Under- ground	Underwater	Well	Unknown	Total
Sodium	9 0.09 30.00 81.82	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	4 0.04 13.33 0.37	15 0.15 50.00 0.57	0 0.00 0.00 0.00	1 0.01 3.33 0.00	0 0.00 0.00 0.00	1 0.01 3.33 0.54	30 0.30 3.33 0.54	
Stone	0 0.00 0.00 0.00	12 0.12 2.00 4.27	1 0.01 0.17 0.04	6 0.06 1.00 7.89	3 0.03 0.50 6.38	6 0.06 1.00 0.55	567 5.61 94.34 21.38	6 0.06 1.00 0.19	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	601 5.94 0.00 0.00	
Strontium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.05 0.00 0.19	5 0.05 71.43 0.19	1 0.01 14.29 0.03	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 14.29 0.54	7 0.07 0.00 0.00	
Sulfur	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.03 13.64 0.28	3 0.07 31.82 0.26	7 0.12 54.55 0.37	12 0.00 0.00 0.37	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	22 0.22 0.00 0.00	
Talc	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.11 15.28 1.01	11 0.23 31.94 0.87	23 0.37 51.39 1.15	37 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 1.39 0.54	72 0.71 0.00 0.00	
Tellurium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 100.00 0.04	1 0.01 100.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.00	
Thorium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 100.00 0.00	1 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.00	
Tin	0 0.00 0.00 0.00	0 0.02 15.38 0.08	2 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.05 38.46 0.46	5 0.00 0.00 0.00	0 0.06 46.15 0.19	6 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	13 0.13 0.00 0.00	
Titanium	0 0.00 0.00 0.00	0 0.02 18.18 0.08	2 0.01 9.09 1.32	1 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.05 45.45 0.19	5 0.03 27.27 0.09	3 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	11 0.11 0.00 0.00	
Tungsten	0 0.00 0.00 0.00	4 0.04 1.51 1.42	9 0.09 3.40 0.36	5 0.05 1.89 6.58	5 0.05 1.89 10.64	78 0.77 29.43 7.19	27 0.27 10.19 1.02	129 1.28 48.68 4.01	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	8 0.08 3.02 4.30	265 2.62 0.00 0.00
Uranium	0 0.00 0.00 0.00	3 0.03 13.04 1.07	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.04 17.39 0.37	4 0.08 34.78 0.30	8 0.07 30.43 0.22	7 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 4.35 0.54	23 0.23 0.00 0.00	
Vanadium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 50.00 0.03	1 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 50.00 0.00	1 0.01 50.00 0.54	2 0.02 0.00 0.00	
Vermiculite	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 50.00 2.13	0 0.00 0.00 0.00	0 0.00 0.00 0.04	1 0.01 50.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.02 0.00 0.00	

(continued)

California—(continued).

Commodity			Type								
Frequency Row % Col %	Mineral Brine	location	Placer	Processing plant	Prospect	Surface- under- ground	Under- ground	Underwater	Well	Unknown	Total
Volatile content	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 100.00 0.04	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.00
Water content	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 100.00 0.04	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.00
Wollastonite	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	4 0.04 66.67 0.15	2 0.02 33.33 0.06	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	6 0.06 0.00 0.00
Zeolites	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 16.67 0.09	4 0.04 66.67 0.15	1 0.01 16.67 0.03	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	6 0.06 0.00 0.00
Zinc	0 0.00 0.00 0.00	0 0.01 0.53 0.04	1 0.01 0.53 1.32	1 0.01 0.53 2.13	29 0.29 15.34 2.67	7 0.07 3.70 0.26	143 1.41 75.66 4.44	1 0.01 0.53 25.00	4 0.04 2.12 13.79	2 0.02 1.06 1.08	189 1.87 1.06 1.08
Zirconium	0 0.00 0.00 0.00	0 0.01 50.00 0.04	1 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 50.00 0.03	1 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.02 0.00 0.00
Total	11 0.11	281 2.78	2525 24.96	76 0.75	47 0.46	1085 10.73	2652 26.22	3219 31.82	4 0.04	29 0.29	186 1.84
											10115 100.00

Colorado

Commodity			Type								
Frequency Percent Row % Col %	Mineral location	Placer	Processing plant	Prospect	Surface- under- ground	Surface	Underground	Well	Unknown	Total	
Not identified	2 0.01 0.50 7.14	1 0.01 0.25 1.52	13 0.08 3.23 5.75	0 0.00 0.00 0.00	2 0.01 0.50 1.23	6 0.04 1.49 0.45	379 2.23 94.04 2.57	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	403 2.38 0.00 0.00
Abrasive	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 12.50 0.07	7 0.04 87.50 0.05	0 0.00 0.00 0.00	0 0.00 0.00 0.00	8 0.05 0.00 0.00	
Aluminum	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 14.29 0.07	6 0.04 85.71 0.04	0 0.00 0.00 0.00	0 0.00 0.00 0.00	7 0.04 0.00 0.00	

(continued)

Colorado—(continued).

Frequency Percent	Mineral location	Placer	Processing plant	Prospect	Surface- under- ground	Type				
						Surface		Underground	Well	Unknown
						Row %	Col %			Total
Antimony	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 100.00 0.07	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.00
Barium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.01 16.67 0.15	10 0.06 83.33 0.07	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	12 0.07 0.00 0.00
	1 0.01 1.67 3.57	0 0.00 1.67 0.44	1 0.01 0.00 0.00	0 0.02 5.00 1.85	24 0.14 40.00 1.80	31 0.18 51.67 0.21	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	60 0.35 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	3 0.02 100.00 0.02	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	3 0.02 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00
Bismuth	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.02 100.00 0.02	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	3 0.02 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00
Cadmium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.01 66.67 1.23	2 0.01 0.00 0.00	0 0.01 33.33 0.01	1 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	3 0.02 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00
Calcium	0 0.00 0.00 0.00	0 0.00 0.01 2.70 0.44	1 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 16.22 0.45	6 0.04 16.22 0.45	30 0.18 81.08 0.20	0 0.00 0.00 0.00	0 0.00 0.00 0.00	37 0.22 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
Clay	0 0.00 0.00 0.00	0 0.00 0.01 1.18 0.44	1 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.35 69.41 4.42	59 0.15 29.41 0.17	25 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	85 0.50 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
Coal	0 0.00 0.00 0.00	0 0.00 0.01 0.12 0.44	1 0.00 0.00 0.00 0.00	0 0.01 0.12 0.62	1 0.29 6.00 3.67	49 4.50 93.50 5.17	763 4.50 0.00 0.00	0 0.00 0.00 0.00	2 0.01 0.00 0.00	816 4.81 0.25 0.56
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
Cobalt	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.02 100.00 0.02	3 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	3 0.02 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
Columbium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.01 100.00 0.02	2 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.01 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00	0 0.00 0.00 0.00 0.00
Copper	4 0.02 0.42 14.29	1 0.01 0.10 1.52	12 0.07 1.25 5.31	0 0.00 0.00 0.00	13 0.08 1.36 8.02	13 0.08 1.36 0.97	915 5.39 95.41 6.20	0 0.00 0.00 0.00	1 0.01 0.10 0.28	959 5.65 5.10 0.28
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	9 0.05 8.41 5.56	57 0.34 8.41 4.27	40 0.24 37.38 0.27	0 0.00 0.00 0.00	0 0.00 0.00 0.00	107 0.63 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	9 0.05 8.41 5.56	11 0.06 8.73 0.82	105 0.62 83.33 0.71	0 0.00 0.00 0.00	1 0.01 0.00 0.00	126 0.74 0.00 0.00
	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.01 1.59 7.14	2 1.59 7.14	11 3.17 1.77	105 0.62 83.33 0.71	0 0.00 0.00 0.00	1 0.01 0.00 0.00

(continued)

Colorado—(continued).

Frequency Percent Row % Col %	Mineral location	Placer	Processing plant	Prospect	Surface- under- ground	Type				
						Surface	Underground	Well	Unknown	Total
Gallium	0	0	0	0	0	0	1	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Gemstone	0	0	0	0	0	0	10	0	0	10
	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.06
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00
Gold	4	45	44	5	25	83	3320	0	2	3528
	0.02	0.27	0.26	0.03	0.15	0.49	19.57	0.00	0.01	20.80
	0.11	1.28	1.25	0.14	0.71	2.35	94.10	0.00	0.06	0.06
	14.29	68.18	19.47	16.67	15.43	6.21	22.50	0.00	0.56	
Graphite	0	0	0	0	0	0	2	0	0	2
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Gypsum	0	0	2	0	0	12	19	0	0	33
	0.00	0.00	0.01	0.00	0.00	0.07	0.11	0.00	0.00	0.19
	0.00	0.00	6.06	0.00	0.00	36.36	57.58	0.00	0.00	0.00
	0.00	0.00	0.88	0.00	0.00	0.90	0.13	0.00	0.00	0.00
Indium	0	0	0	0	0	0	1	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Iron	1	0	2	0	2	15	51	0	0	71
	0.01	0.00	0.01	0.00	0.01	0.09	0.30	0.00	0.00	0.42
	1.41	0.00	2.82	0.00	2.82	21.13	71.83	0.00	0.00	0.00
	3.57	0.00	0.88	0.00	1.23	1.12	0.35	0.00	0.00	0.00
Kyanite group	0	0	0	0	0	0	1	0	0	1
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Lead	4	4	32	1	11	25	1821	0	6	1904
	0.02	0.02	0.19	0.01	0.06	0.15	10.74	0.00	0.04	11.22
	0.21	0.21	1.68	0.05	0.58	1.31	95.64	0.00	0.32	0.32
	14.29	6.06	14.16	3.33	6.79	1.87	12.34	0.00	1.69	
Lithium	0	0	0	0	0	2	1	0	0	3
	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	66.67	33.33	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.15	0.01	0.00	0.00	0.00
Magnesium	0	0	0	0	0	2	5	0	0	7
	0.00	0.00	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.04
	0.00	0.00	0.00	0.00	0.00	28.57	71.43	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.15	0.03	0.00	0.00	0.00
Manganese	0	2	1	0	0	30	178	0	0	211
	0.00	0.01	0.01	0.00	0.00	0.18	1.05	0.00	0.00	1.24
	0.00	0.95	0.47	0.00	0.00	14.22	84.36	0.00	0.00	0.00
	0.00	3.03	0.44	0.00	0.00	2.25	1.21	0.00	0.00	0.00
Mercury	0	0	0	0	0	2	2	0	0	4
	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.02
	0.00	0.00	0.00	0.00	0.00	50.00	50.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.15	0.01	0.00	0.00	0.00

(continued)

Colorado—(continued).

Frequency Percent Row % Col %	Mineral location	Type								Total	
		Placer	Processing plant	Prospect	Surface- under- ground		Well	Unknown			
					Surface	Underground					
Mica	0	0	0	0	7	24	21	0	0	52	
	0.00	0.00	0.00	0.00	0.04	0.14	0.12	0.00	0.00	0.31	
	0.00	0.00	0.00	0.00	13.46	46.15	40.38	0.00	0.00	0.31	
	0.00	0.00	0.00	0.00	4.32	1.80	0.14	0.00	0.00	0.00	
Molybdenum	0	0	0	0	1	4	26	0	0	31	
	0.00	0.00	0.00	0.00	0.01	0.02	0.15	0.00	0.00	0.18	
	0.00	0.00	0.00	0.00	3.23	12.90	83.87	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.62	0.30	0.18	0.00	0.00	0.00	
Nickel	0	0	0	0	0	3	12	0	0	15	
	0.00	0.00	0.00	0.00	0.00	0.02	0.07	0.00	0.00	0.09	
	0.00	0.00	0.00	0.00	0.00	20.00	80.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.22	0.08	0.00	0.00	0.00	
Nitrogen	0	0	0	0	0	0	2	0	0	2	
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Perlite	0	0	0	0	0	1	21	0	0	22	
	0.00	0.00	0.00	0.00	0.00	0.01	0.12	0.00	0.00	0.13	
	0.00	0.00	0.00	0.00	0.00	4.55	95.45	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.07	0.14	0.00	0.00	0.00	0.00	
Petroleum	0	0	1	0	0	0	4	0	0	5	
	0.00	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.00	0.03	
	0.00	0.00	20.00	0.00	0.00	0.00	80.00	0.00	0.00	0.00	
	0.00	0.00	0.44	0.00	0.00	0.00	0.03	0.00	0.00	0.00	
Phosphate	0	0	0	0	0	1	0	0	0	1	
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	
	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	
Platinum group	0	0	0	0	2	1	1	0	0	4	
	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	50.00	25.00	25.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	1.23	0.07	0.01	0.00	0.00	0.00	
Potash	0	0	0	0	0	4	0	0	0	4	
	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.02	
	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	
Pumice	0	0	0	0	0	5	7	0	0	12	
	0.00	0.00	0.00	0.00	0.00	0.03	0.04	0.00	0.00	0.07	
	0.00	0.00	0.00	0.00	0.00	41.67	58.33	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.37	0.05	0.00	0.00	0.00	
Quartz crystal	0	0	0	0	1	16	14	0	0	31	
	0.00	0.00	0.00	0.00	0.01	0.09	0.08	0.00	0.00	0.18	
	0.00	0.00	0.00	0.00	3.23	51.61	45.16	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.62	1.20	0.09	0.00	0.00	0.00	
Radium	0	0	0	0	0	0	9	0	0	9	
	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.05	
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	
Rare earth	1	0	0	0	1	10	7	0	0	19	
	0.01	0.00	0.00	0.00	0.01	0.06	0.04	0.00	0.00	0.11	
	5.26	0.00	0.00	0.00	5.26	52.63	36.84	0.00	0.00	0.00	
	3.57	0.00	0.00	0.00	0.62	0.75	0.05	0.00	0.00	0.00	

(continued)

Colorado—(continued).

Commodity		Type								
Frequency Percent Row %	Mineral location	Placer	Processing plant	Prospect	Surface- under- ground	Surface	Underground	Well	Unknown	Total
Rubidium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.01	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.00 0.00
Sand & gravel	0 0.00 0.00 0.00	1 0.01 0.19 1.52	10 0.06 1.86 4.42	0 0.00 0.00 0.00	0 2.79 87.92 35.40	473 0.31 9.85 0.36	53 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.19 0.28	538 3.17
Selenium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.01	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	1 0.01
Silicon	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.01 12.50 1.23	4 0.02 25.00 0.30	10 0.06 62.50 0.07	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	16 0.09
Silver	4 0.02 0.14 14.29	7 0.04 0.24 10.61	35 0.21 1.20 15.49	3 0.02 0.10 10.00	16 0.09 0.55 9.88	34 0.20 1.16 2.54	2826 16.66 96.55 19.15	0 0.00 0.00 0.00	2 0.01 0.07 0.56	2927 17.26
Sodium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 0.01	2 0.01 66.67	0 0.00	0 0.00	3 0.02
Stone	0 0.00 0.00 0.00	0 0.00 0.05 0.00	9 0.05 5.29 3.98	0 0.00 0.00 0.00	0 0.00 0.00 0.00	143 0.84 84.12 10.70	18 0.11 10.59 0.12	0 0.00 0.00	0 0.00 0.00	170 1.00
Sulfur	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.01 11.11 0.15	16 0.09 88.89 0.11	0 0.00 0.00	0 0.00 0.00	0 0.00	18 0.11
Tantalum	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	1 0.01 12.50 0.62	1 0.01 12.50 0.07	6 0.04 75.00 0.04	0 0.00 0.00	0 0.00 0.00	0 0.00	8 0.05
Tellurium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	2 0.01 100.00 0.01	0 0.00 0.00	0 0.00 0.00	0 0.00	2 0.01
Thorium	1 0.01 6.25 3.57	0 0.00 0.00 0.00	0 0.01 6.25 3.33	1 0.00 0.00 0.00	0 0.04 37.50 0.45	8 0.05 50.00 0.05	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	16 0.09
Tin	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	4 0.02 100.00 0.03	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	4 0.02
Titanium	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	0 0.00 0.00 0.00	6 0.04 100.00 0.04	0 0.00 0.00	0 0.00 0.00	0 0.00 0.00	6 0.04

(continued)

Colorado—(continued).

Commodity		Type									
Frequency	Percent	Mineral location	Placer	Processing plant	Prospect	Surface-underground	Surface	Underground	Well	Unknown	Total
Row %	Col %										
Tungsten	0	0	12	0	1	13	190	0	0	0	216
	0.00	0.00	0.07	0.00	0.01	0.08	1.12	0.00	0.00	0.00	1.27
	0.00	0.00	5.56	0.00	0.46	6.02	87.96	0.00	0.00	0.00	
	0.00	0.00	5.31	0.00	0.62	0.97	1.29	0.00	0.00	0.00	
Uranium	2	1	11	9	29	99	1224	0	172	1547	
	0.01	0.01	0.06	0.05	0.17	0.58	7.22	0.00	1.01	9.12	
	0.13	0.06	0.71	0.58	1.87	6.40	79.12	0.00	11.12		
	7.14	1.52	4.87	30.00	17.90	7.41	8.29	0.00	48.45		
Vanadium	0	0	8	9	22	68	1043	0	165	1315	
	0.00	0.00	0.05	0.05	0.13	0.40	6.15	0.00	0.97	7.75	
	0.00	0.00	0.61	0.68	1.67	5.17	79.32	0.00	12.55		
	0.00	0.00	3.54	30.00	13.58	5.09	7.07	0.00	46.48		
Vermiculite	0	0	0	1	0	6	18	0	0	0	25
	0.00	0.00	0.00	0.01	0.00	0.04	0.11	0.00	0.00	0.00	0.15
	0.00	0.00	0.00	4.00	0.00	24.00	72.00	0.00	0.00	0.00	
	0.00	0.00	0.00	3.33	0.00	0.45	0.12	0.00	0.00	0.00	
Zeolites	0	0	0	0	0	0	6	0	0	0	6
	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.04
	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	
Zinc	2	3	25	0	9	17	1467	0	3	1526	
	0.01	0.02	0.15	0.00	0.05	0.10	8.65	0.00	0.02	9.00	
	0.13	0.20	1.64	0.00	0.59	1.11	96.13	0.00	0.20		
	7.14	4.55	11.06	0.00	5.56	1.27	9.94	0.00	0.85		
Zirconium	0	1	0	0	0	0	2	0	0	0	3
	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.02
	0.00	33.33	0.00	0.00	0.00	0.00	66.67	0.00	0.00	0.00	
	0.00	1.52	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
Total	28	66	226	30	162	1336	14758	2	355	16963	
	0.17	0.39	1.33	0.18	0.96	7.88	87.00	0.01	2.09	100.00	

Connecticut

Commodity		Type							
Frequency	Percent	Processing plant	Surface-underground	Surface	Underground	Underwater	Unknown	Total	
Row %	Col %								
Abrasive	1	0	4	0	0	0	0	5	
	0.15	0.00	0.58	0.00	0.00	0.00	0.00	0.73	
	20.00	0.00	80.00	0.00	0.00	0.00	0.00		
	16.67	0.00	0.64	0.00	0.00	0.00	0.00		
Arsenic	0	0	1	0	0	0	0	1	
	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.15	
	0.00	0.00	100.00	0.00	0.00	0.00	0.00		
	0.00	0.00	0.16	0.00	0.00	0.00	0.00		

(continued)

Connecticut—(continued).

Commodity		Type						
Frequency	Percent	Processing plant	Surface-underground	Surface	Underground	Underwater	Unknown	Total
Row %	Col %							
Asbestos	0	0	1	0	0	0	0	1
	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.15
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
Barium	0	0	4	2	0	0	0	6
	0.00	0.00	0.58	0.29	0.00	0.00	0.00	0.87
	0.00	0.00	66.67	33.33	0.00	0.00	0.00	0.00
	0.00	0.00	0.64	9.09	0.00	0.00	0.00	0.00
Beryllium	0	2	31	0	0	0	0	33
	0.00	0.29	4.52	0.00	0.00	0.00	0.00	4.81
	0.00	6.06	93.94	0.00	0.00	0.00	0.00	0.00
	0.00	7.69	4.95	0.00	0.00	0.00	0.00	0.00
Bismuth	0	0	2	0	0	0	0	2
	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.29
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00
Clay	0	0	4	0	0	0	0	4
	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.58
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00
Cobalt	0	2	2	3	0	0	1	8
	0.00	0.29	0.29	0.44	0.00	0.00	0.15	1.17
	0.00	25.00	25.00	37.50	0.00	0.00	12.50	0.00
	0.00	7.69	0.32	13.64	0.00	0.00	33.33	0.00
Columbium	0	0	3	0	0	0	0	3
	0.00	0.00	0.44	0.00	0.00	0.00	0.00	0.44
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00
Copper	0	3	6	8	0	0	0	17
	0.00	0.44	0.87	1.17	0.00	0.00	0.00	2.48
	0.00	17.65	35.29	47.06	0.00	0.00	0.00	0.00
	0.00	11.54	0.96	36.36	0.00	0.00	0.00	0.00
Diatomite	0	0	1	0	0	0	0	1
	0.00	0.00	0.15	0.00	0.00	0.00	0.00	0.15
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.16	0.00	0.00	0.00	0.00	0.00
Feldspar	0	5	40	0	0	0	0	45
	0.00	0.73	5.83	0.00	0.00	0.00	0.00	6.56
	0.00	11.11	88.89	0.00	0.00	0.00	0.00	0.00
	0.00	19.23	6.39	0.00	0.00	0.00	0.00	0.00
Gemstone	0	1	1	0	0	0	0	2
	0.00	0.15	0.15	0.00	0.00	0.00	0.00	0.29
	0.00	50.00	50.00	0.00	0.00	0.00	0.00	0.00
	0.00	3.85	0.16	0.00	0.00	0.00	0.00	0.00
Gold	0	0	5	0	0	0	0	5
	0.00	0.00	0.73	0.00	0.00	0.00	0.00	0.73
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.80	0.00	0.00	0.00	0.00	0.00
Graphite	0	0	2	0	0	0	0	2
	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.29
	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.32	0.00	0.00	0.00	0.00	0.00

(continued)

Connecticut—(continued).

Commodity	Frequency Percent	Row % Col %	Type					Total
			Processing plant	Surface-underground	Surface	Underground	Underwater	
Iodine	1		0	0	0	0	0	1
	0.15		0.00	0.00	0.00	0.00	0.00	0.15
	100.00		0.00	0.00	0.00	0.00	0.00	
	16.67		0.00	0.00	0.00	0.00	0.00	
Iron	1		1	24	0	0	0	26
	0.15		0.15	3.50	0.00	0.00	0.00	3.79
	3.85		3.85	92.31	0.00	0.00	0.00	
	16.67		3.85	3.83	0.00	0.00	0.00	
Lead	0		0	9	1	0	0	10
	0.00		0.00	1.31	0.15	0.00	0.00	1.46
	0.00		0.00	90.00	10.00	0.00	0.00	
	0.00		0.00	1.44	4.55	0.00	0.00	
Lithium	0		1	0	0	0	0	1
	0.00		0.15	0.00	0.00	0.00	0.00	0.15
	0.00		100.00	0.00	0.00	0.00	0.00	
	0.00		3.85	0.00	0.00	0.00	0.00	
Manganese	0		0	1	0	0	0	1
	0.00		0.00	0.15	0.00	0.00	0.00	0.15
	0.00		0.00	100.00	0.00	0.00	0.00	
	0.00		0.00	0.16	0.00	0.00	0.00	
Mica	1		5	35	0	0	0	41
	0.15		0.73	5.10	0.00	0.00	0.00	5.98
	2.44		12.20	85.37	0.00	0.00	0.00	
	16.67		19.23	5.59	0.00	0.00	0.00	
Nickel	0		2	2	3	0	2	9
	0.00		0.29	0.29	0.44	0.00	0.29	1.31
	0.00		22.22	22.22	33.33	0.00	22.22	
	0.00		7.69	0.32	13.64	0.00	66.67	
Quartz crystal	0		0	3	0	0	0	3
	0.00		0.00	0.44	0.00	0.00	0.00	0.44
	0.00		0.00	100.00	0.00	0.00	0.00	
	0.00		0.00	0.48	0.00	0.00	0.00	
Sand & gravel	1		0	99	0	3	0	103
	0.15		0.00	14.43	0.00	0.44	0.00	15.01
	0.97		0.00	96.12	0.00	2.91	0.00	
	16.67		0.00	15.81	0.00	100.00	0.00	
Silicon	0		1	2	1	0	0	4
	0.00		0.15	0.29	0.15	0.00	0.00	0.58
	0.00		25.00	50.00	25.00	0.00	0.00	
	0.00		3.85	0.32	4.55	0.00	0.00	
Silver	0		0	6	0	0	0	6
	0.00		0.00	0.87	0.00	0.00	0.00	0.87
	0.00		0.00	100.00	0.00	0.00	0.00	
	0.00		0.00	0.96	0.00	0.00	0.00	
Stone	1		0	328	2	0	0	331
	0.15		0.00	47.81	0.29	0.00	0.00	48.25
	0.30		0.00	99.09	0.60	0.00	0.00	
	16.67		0.00	52.40	9.09	0.00	0.00	
Talc	0		0	4	0	0	0	4
	0.00		0.00	0.58	0.00	0.00	0.00	0.58
	0.00		0.00	100.00	0.00	0.00	0.00	
	0.00		0.00	0.64	0.00	0.00	0.00	

(continued)

Connecticut—(continued).

Commodity		Type					
Frequency Percent	Processing plant	Surface-underground	Surface	Underground	Underwater	Unknown	Total
Row % Col %							
Tantalum	0	1	3	0	0	0	4
	0.00	0.15	0.44	0.00	0.00	0.00	0.58
	0.00	25.00	75.00	0.00	0.00	0.00	
	0.00	3.85	0.48	0.00	0.00	0.00	
Tin	0	2	0	0	0	0	2
	0.00	0.29	0.00	0.00	0.00	0.00	0.29
	0.00	100.00	0.00	0.00	0.00	0.00	
	0.00	7.69	0.00	0.00	0.00	0.00	
Tungsten	0	0	3	0	0	0	3
	0.00	0.00	0.44	0.00	0.00	0.00	0.44
	0.00	0.00	100.00	0.00	0.00	0.00	
	0.00	0.00	0.48	0.00	0.00	0.00	
Zinc	0	0	0	2	0	0	2
	0.00	0.00	0.00	0.29	0.00	0.00	0.29
	0.00	0.00	0.00	100.00	0.00	0.00	
	0.00	0.00	0.00	9.09	0.00	0.00	
Total	6 0.87	26 3.79	626 91.25	22 3.21	3 0.44	3 0.44	686 100.00

Delaware

District of Columbia

Commodity		Type	Commodity		Type		
Frequency Percent	Row % Col %	Surface	Total	Frequency Percent	Row % Col %	Surface	Total
Clay	1 7.14 100.00 7.14	1 7.14 100.00 7.14	7.14	Clay	5 21.74 100.00 21.74	5 21.74	21.74
Iron	7 50.00 100.00 50.00	7 50.00 100.00 50.00	50.00	Sand & gravel	10 43.48 100.00 43.48	10 43.48	43.48
Sand & gravel	6 42.86 100.00 42.86	6 42.86 100.00 42.86	42.86	Stone	7 30.43 100.00 30.43	7 30.43	30.43
Total	14 100.00	14 100.00	100.00	Talc	1 4.35 100.00 4.35	1 4.35	4.35
				Total	23 100.00	23 100.00	100.00