# 2014 Annual Report

# Mining Act Reclamation Program



Energy, Minerals and Natural Resources Department Mining and Minerals Division

> Fernando Martinez, Director Holland Shepherd, Program Manager

# **Table of Contents**

Lis	st of Tables	ii
	st of Figures	
1.	Executive Summary	1
2.	General Description of Mining Operations	2
3.	General Description of Reclamation Practices	8
4.	Financial Assurance Update	. 10
5.	Amendments to the New Mexico Mining Act Rules	. 11
6.	Mineral Production Statistics for New Mexico in 2014	. 12

#### List of Tables

- Table 1. Mining Operations Approved from 1994 to 2014
- Table 2. Approved Permit Applications–2014
- Table 3. Approved Minimal Impact Exploration Permits–2014
- Table 4. Pending Regular Mine Permit Development–2014
- Table 5. Summary of Disturbed and Reclaimed Acres-2014
- Table 6. Summary of Financial Assurance Held by MMD–2014
- Table 7. Mineral Production Value, Rank, Employment, Payroll, and Revenue–2014

#### Appendix A:

Table A-1. Number of Acres Disturbed and Reclaimed as of December 2014

#### Appendix B:

Table B-1. New Mexico Financial Assurance as of December 2014

# List of Figures

- Figure 1. Percentage of Production Value, Employment, Payroll, and Revenue by Commodity–2014
- Figure 2. Mineral Industry Employment, 1990–2014

# 1. Executive Summary

This annual report summarizes activities regulated by, and related to, the Mining Act Reclamation Program ("MARP") of the New Mexico Mining and Minerals Division ("MMD"). Part 13 of the New Mexico Mining Act Rules (the "Rules") requires an annual report be provided to the New Mexico Mining Commission. The annual report is to contain a general description of mining operations, reclamation practices, proposed rule changes, and production figures for the state.

This report identifies activities related to the permitting and regulation of mines and mineral exploration under the Mining Act for the 2014 calendar year. In this report, we also provide production and reclamation statistics for the 2014 calendar year, as required in the Rules. This information is provided to us by our mine operators in annual reports that are required to be submitted by April of the following year. The 2014 information submitted in this report was provided by our operators in April 2015.

This report also provides tables identifying all mining and exploration operations that have obtained a permit, or submitted a permit application, under MARP since its inception in 1994.

#### This report includes:

- Production figures for New Mexico mines active during the 2014 calendar year;
- A description of reclamation activities and practices related to specific mines in the State of New Mexico;
- A description and summary of exploration and mine permitting activities for the 2014 calendar year;
- Summary of reclaimed and disturbed acreage for 2014;
- Summary of the one petition approved by the Commission in 2014; and
- Summary of financial assurance amounts and instruments for each approved mine site.

# 2. General Description of Mining Operations

#### Permit Types

Mining operations in New Mexico are designed by the following terminology:

- Minimal Impact Mining Operations are small extractive operations that are less than 10 acres in size (except for humate operations which can be up to 20 acres in size) and can be designated as either existing or new operations. Existing operations are those that operated between January 1, 1970, and June 18, 1993, while new operations are those permitted after 1993.
- Regular Mining Operations are larger mining operations of unlimited acreage, and can be designated as either existing or new operations. Existing regular mining operations are those that operated between January 1, 1970, and June 18, 1993, while new operations are those permitted after 1993.
- Minimal Impact Exploration Operations are those that create less than 5 acres of surface disturbance and meet the definition of "minimal impact mining operations" as defined by the Rules. These are typically small extractive operations that involve the sampling of ore bodies prior to full-scale mine development.
- Regular Exploration Operations are those that exceed 5 acres of surface disturbance or do not meet the definition of "minimal impact mining operations" as defined by the Rules.
- General Permit Operations cannot excavate materials greater than 200 cubic yards per year, or disturb greater than 2 acres of surface at any one time. The General Permit category is typically used by hobby and recreational miners.

The Minimal Impact Exploration and General Permit categories make up the largest number of permitted operations. Table 1 shows the various types of mining and exploration operations, by category, that have received approved permits since the start of MARP in 1994.

Table 1. Mining Operations Approved from 1994 to 2014

Type of Operation	Description	Number of Operations
Regular Existing Mining	>10 acres of disturbance	31
Regular New Mining	>10 acres of disturbance	0
Minimal Impact Existing Mining	<10 acres of disturbance	24
Minimal Impact New Mining	<10 acres of disturbance	33
Regular Exploration	>5 acres of disturbance	6
Minimal Impact Exploration	<5 acres of disturbance	156
General (Recreational)	<200 cubic yards/yr of disturbance	313
	Total Mining Operations Permitted	563

#### Permit Modifications and Revisions

Every year, MARP typically receives and processes a large number of permit modifications and revisions, which can be just as time-consuming in processing and approving as new permit applications. Modifications and revisions can involve updating reclamation acreage, permit transfers, operator name changes, as well as adjustments to financial assurance instruments and amounts.

In 2014, Freeport McMoRan submitted Modification 14-1, which proposes to increase the size of the 9A waste rock stockpile beyond the current limits at the Tyrone Mine.

Similarly, Freeport McMoRan submitted three modification requests to MMD during calendar year 2014 for the Chino Mine:

- 1. Modification 14-1 to extend the Groundhog No. 5 reclamation schedule;
- 2. Modification 14-2 to construct the 3A stockpile; and
- 3. Modification 14-3 to perform a partial release of financial assurance associated with reclamation of Lake One.

In addition, both the Tyrone Mine and Chino Mine remain in the process of updating their closeout plans, which are major revisions to the mine permits involving updating financial assurance, changes to the reclamation plans, and extended negotiations with the operator, other regulatory agencies, and the public.

Chevron Mining Inc.'s ("CMI") Questa Mine has also involved a significant number of MARP staff and has required numerous MMD resources over the last several years. The Questa Mine has been designated a federal U.S. Environmental Protection Agency ("EPA") Superfund Site and MMD has been coordinating state reclamation plans with the EPA's prescription for remediation under the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") process. MMD has intentionally delayed the operator's requirement to submit a new updated closeout plan for the complete mining

and milling facility until after a Consent Decree has been satisfactorily negotiated to implement remediation requirements under the December 2010 Record of Decision ("ROD"). Further, CMI announced the pending closure of the Questa Mine during calendar year 2014.

The Mt. Taylor Mine operated by Rio Grande Resources, submitted Revision 14-1 to renew standby status. Several revisions submitted previously for the Mt. Taylor Mine continued to be processed by MMD throughout 2014 due to their complexity, on-going legal challenges, and challenges from public interest groups.

Table 2 identifies specific types of permit applications, including modifications and revisions, approved by MMD during the 2014 calendar year.

Table 2. Approved Permit Applications – 2014

Type of Operation	Description	Number of Approved Operations		
. The experiment		2014		
Regular New Mining	> 10 acres of disturbance	0		
Minimal Impact New Mining	< 10 acres of disturbance	3		
Regular Exploration	> 5 acres of disturbance	0		
Minimal Impact Exploration	< 5 acres of disturbance	3		
General Permits	< 200 cubic yards/yr of disturbance	21		
Revisions	Revision to an Existing Permit	0		
Modifications	Modification to an Existing Permit	11		

#### Exploration Projects and General Permits

Three minimal impact exploration permits were approved in 2014, as shown in Table 3 below.

**Table 3: Approved Minimal Impact Exploration Permits – 2014** 

Permit Number	Permit Name	Permit Operator	Commodity
GR068EM	TC Project	AVEN Associates, LLC	Copper, Gold, Silver
MK044EM	MVR Star Lake Section 4	Mesa Verde Resources	Humate
MK045EM	Section 12 Humate Exploration	Miocene, LLC	Humate

#### Approved Minimal Impact Mining Projects in 2014

Three new minimal impact mines were approved in 2014:

#### • Jim Crow Mine (Permit No. GR065MN)

The Jim Crow Mine is a <2 acre minimal impact silica and gold extraction operation located in the Steeple Rock Mining District in Grant County. The underground mining operation is located on several patented mining claims.

#### • Little Lode #3 Mine (Permit No. LU026MN)

The Little Lode #3 Mine is a small (<2 acres of disturbance) agate mining operation located in Luna County, New Mexico.

#### • Ojo Encino Humate Mine (Permit No. MK043MN)

The Ojo Encino Humate Mine is a 10-acre minimal impact humate mining operation by Broken Pick Proprietary, LLC and Miocene, LLC within McKinley County. The humate is extracted from BLM land.

#### Pending Regular Mine Applications

Five new conventional mines are engaged in some phase of permit development in New Mexico, a summary of which is provided in Table 4:

**Table 4: Pending Regular Mine Permit Development – 2014** 

Project Name	Operator	Surface Ownership	Commodity	Proposed Permit Area (acres)
	Permitti	ing In Progress		
Copper Flat Mine	New Mexico Copper Corporation	BLM and Private Owners	Copper	2,190
Roca Honda Mine	Uranium Resources, Inc.	USFS and SLO	Uranium	183
Р	resumed Inactive - No	Recent Activity From	n Operator	
La Jara Mesa Mine	Laramide Resources	USFS	Uranium	22
Cebolleta Mine	Neutron Energy	Private Land Grant	Uranium	4,475
Ortiz Mine	Santa Fe Gold Corporation	Private Land Grant	Gold	4,702

#### Copper Flat Mine (Copper and Molybdenum)

New Mexico Copper Corporation submitted a Sampling and Analysis Plan in 2010 for the Copper Flat Mine, a proposed new regular copper mine in Sierra County, and conducted baseline data collection and analysis during 2011. The Permit Application Package was submitted to MMD in July 2012. The operator also submitted a Plan of Operation to the BLM. MMD and BLM are working together to address the federal National Environmental Policy Act ("NEPA") and state Environmental Evaluation processes.

The Draft Environmental Impact Statement for the Copper Flat Mine is anticipated by BLM to be issued in late 2015. Ongoing work by MMD throughout 2014 included regular meetings (approximately monthly) with the operator, BLM and other cooperating agencies, as well as continued review of geochemical data reports, hydrologic and geochemical modeling reports, and other technical data related to MMD regulations.

#### Roca Honda Mine (Uranium)

The proposed Roca Honda Mine by Roca Honda Resources is located in McKinley County on Cibola National Forest and state trust lands. Roca Honda Resources has submitted both the Sampling and Analysis Plan and the Permit Application Package to MMD.

The Roca Honda Mine application indicates that the mine plan is for construction of an underground mine of one or two shafts with surface facilities comprising approximately 183 acres within a proposed 1,920 acre permit area. Roca Honda Resources also submitted a Mining Plan of Operations to the U.S. Forest Service, which is being handled through the NEPA Environmental Impact Statement process. MMD continued to collaborate with the U.S. Forest Service and the operator on this mine throughout 2014. Additionally, several additional mine alternatives were reviewed by MMD for the pending draft Environmental Impact Statement.

#### • La Jara Mesa Mine (Uranium)

The proposed La Jara Mesa Mine by Laramide Resources, Inc. is located in Cibola County on Cibola National Forest land on the edge of the Mt. Taylor Traditional Cultural Property. The La Jara Mesa Mine application details an underground mine accessed from an incline portal with approximately 16 acres of surface disturbance within the proposed 77-acre permit area.

Laramide Resources submitted a permit application to the U.S. Forest Service for the proposed mine which is being handled through the NEPA process. Laramide Resources also initiated the permitting process with MMD by submitting a Sampling and Analysis Plan. No recent activity or communication from the operator has

occurred for this mine; therefore, MMD considers the permitting process for this site to be inactive.

#### • Cebolleta Mine (Uranium)

Neutron Energy submitted a Sampling and Analysis Plan in March 2012 for the Cebolleta Mine, a proposed new uranium mine in Cibola County. The proposed mine is located entirely on private land, most of which is owned by the Cebolleta Land Grant. The proposed mine permit boundary is approximately 4,475 acres, though the amount of disturbance is anticipated to be less. Neutron Energy was purchased by Uranium Resources, Inc. in 2012. Due to other priorities, the operator has slowed or ceased work on this permit application, therefore MMD considers the permitting process for this site to be inactive.

#### Ortiz Mine (Gold)

Santa Fe Gold Corporation submitted a Sampling and Analysis Plan in July 2013 for the Ortiz Mine, a proposed new gold mine in Santa Fe County. The proposed mine is located entirely on private land that is also a Spanish Mine Grant. The proposed mine permit boundary is approximately 4,702 acres and may include two separate open pits (one in Carache Canyon and one in Lukas Canyon) as well as a milling facility and tailings dam deposition facility. MMD and the cooperating agencies reviewed the Sampling and Analysis Plan in 2013 and provided comments to the operator so that implementation of the Baseline Data Collection phase could commence.

No recent activity or communication with Santa Fe Gold Corporation has occurred; therefore, it appears that the operator has put this permitting action on hold. Therefore, MMD considers the permitting process for this site to be inactive or on-hold.

# 3. General Description of Reclamation Practices

#### Use of Greenhouse Studies

In an effort to allow mining operations the opportunity to utilize atypical reclamation materials when suitable topsoil is unavailable, MARP has often allowed and encouraged operators to employ innovative experiments to demonstrate that these materials are capable of promoting vegetative growth that will develop into a self-sustaining ecosystem. At the Questa Mine during 2014, MMD collaborated with and authorized CMI to perform a greenhouse study using Spring Gulch waste rock material as a potential growth media in order to evaluate plant growth, plant uptake of molybdenum, and direct toxicity to plants. Spring Gulch waste rock is stockpiled mine overburden and is comprised primarily of mixtures of two rock types: aplite and andesite.



Greenhouse study in progress for the Questa Mine, Taos County, NM

The greenhouse study was just one of several studies in the process of developing a final cover design for acidic waste rock piles at the Questa Mine. Other studies included assessment of Spring Gulch waste rock as a suitable evapotranspiration cover system, which is another important characteristic for reclamation success.

#### Completed Reclamation

Ten mines have received a complete and final release for reclamation or for achieving the post-mine land use under the New Mexico Mining Act:

- Boston Hill Mine, Grant County
- Mesa Verde Resources Mill, Sandoval County
- Malone Mine, Grant County
- Toro Mine, Grant County
- CR Minerals Mill, Santa Fe County
- Velarde Mill, Rio Arriba County
- Alley Gypsum Mine, Doña Ana County
- Chino Limestone Mine, Grant County
- Shamrock Leach Site, Doña Ana County
- Chaco Limestone Quarry, San Juan County

#### Total Disturbance and Reclamation

Total disturbance and reclamation across the state is reported by the mine operators. Overall disturbed and reclaimed acreage under permit with MARP for the 2014 calendar year is summarized in Table 5.

Table 5: Summary of Disturbed and Reclaimed Acres – 2014

Calendar Year	Disturbed Acres To Date	Reclaimed Acres To Date
2014	26,130.70	6,961.00

Appendix A contains summary tables of operator reports on disturbed and reclaimed acres for the 2014 calendar year.

### 4. Financial Assurance Update

Appendix B summarizes the types and amounts of financial assurance provided to the State of New Mexico by mining operators who have obtained approved permits and closeout plans. The forms of financial assurance include surety bonds, cash deposits, letters of credit, collateral (real estate), and third-party guarantees.

A summary of the amounts of financial assurance held by MMD for the 2014 calendar year is in Table 6 below. Appendix B lists financial assurance amounts for individual permits.

Table 6: Summary of Financial Assurance Held by MMD - 2014

Calendar Year	Financial Assurance Amount Held By MMD
2014	\$692,261,957.34

The total amount of financial assurance decreased in 2014 by approximately \$1.3 million compared to 2013.

# 5. Amendments to the New Mexico Mining Act Rules

No petitions to the New Mexico Mining Commission ("NMMC") were submitted during the 2014 calendar year; however, Petition 13-01 was finalized by the NMMC during the 2014 calendar year.

In 2013, Petition 13-01 was submitted by Mineris Vitae, LLC, the operator and permittee for the Section 2 humate mine in McKinley County. Petition 13-01 proposed an increase in the amount of surface disturbance allowed for a humate extraction operation under a minimal impact mining permit. Specifically, an increase from 10 acres to 60 acres was proposed in Petition 13-01, provided that expeditious reclamation is conducted. The NMMC conducted a hearing on August 26-27 and September 17, 2013. The NMMC issued a final order on February 12, 2014, granting an increase from 10 acres to 20 acres for the amount of surface disturbance a humate mine can create under a minimal impact mining permit.

No other rule changes were proposed or implemented in 2014.

#### 6. Mineral Production Statistics for New Mexico in 2014

For the third consecutive year, operators reported an all-time high mineral production value – more than \$3.1 billion worth of minerals were extracted from New Mexico mining operations in calendar year 2014, almost ten percent over 2013's total (Table 7). Operator-reported potash production value increased almost 20 percent from 2013, and copper production value increased 20 percent. These two commodities accounted for the lion's share of the production value increase.

New Mexico remains a leading United States mineral producer with 2014 rankings of first in potash, perlite and zeolite; third in copper, as reported by the U.S. Geological Survey ("USGS"); and twelfth in coal (2013, latest available information), as reported by the U.S. Energy Information Administration. The principal minerals, in descending order of 2014 production value, were potash, copper, and coal. According to USGS, for 2014 (preliminary), New Mexico ranked thirteenth when ranking states by the production value of non-energy minerals, producing 2.40 percent of the total U.S. production value of non-energy minerals (up from 2.07 percent in 2013).

Total 2014 revenues generated by mineral production in New Mexico increased by seven percent from 2013 levels to \$63.5 million (Figure 1). This is the second highest revenue total after 2009's \$70 million total. State revenue information is provided by the Taxation and Revenue Department and the State Land Office and includes state trust land mineral lease royalties, rentals and bonuses and associated taxes. Federal revenue information is provided by the Department of Interior's Office of Natural Resources Revenue and includes a 50 percent state share of federal royalties. In any production year, these revenues only accrue if the lessee is actually mining and producing commodities on federal or state land.

Copper was the largest employer in New Mexico's mining industry, followed by coal and potash operations. Despite an employment decrease in 2014, reported industry payroll (excluding benefits) fell off less than one percent from 2013 to just under \$342 million (Figure 2). Total mining sector direct and contract employment decreased by 13 percent from 2013 (7,112) to 2014 (6,145): direct employment decreased from 5,806 to 5,055 employees; contract employment decreased from 1,306 workers to 1,090; reclamation employment decreased from 416 workers to 324.

Registered active mining operations in New Mexico in 2014 numbered 226: four coal mines; eight potash operations (includes mines, refineries, and compaction plants); 11 metal mine, mill and SX/EW operations; 33 industrial mineral mines and mills; and 170 stone and aggregate operations.

Table 7: Mineral Production Value, Rank, Employment, Payroll, and Revenue – 2014

Mineral	Production <sup>1</sup>	Production Rank <sup>2</sup>	Production Value \$	Employment <sup>3</sup>	Reclamation Employment	Payroll \$4	Revenue Ge	ener	ated \$ <sup>5</sup>
							State		Federal
Coal	21,730,572	12	\$ 757,312,996	1,436	148	\$ 84,557,320	\$ 19,400,137	\$	8,033,183
Copper	343,292,033	3	\$ 1,071,057,411	1,842	36	\$ 110,877,438	\$ 8,785,019	\$	-
Gold <sup>6</sup>	8,580	-	\$ 10,858,944	-	-	-	\$ 62,924	\$	-
Industrial Minerals <sup>7</sup>	1,199,137	-	\$ 77,800,389	472	14	\$ 17,609,605	\$ 1,030,231	\$	316,161
Aggregates <sup>8</sup>	11,339,585	-	\$ 93,439,942	830	55	\$ 15,851,577	\$ 3,529,457	\$	-
Other Metals	71,352	-	\$ 982,217	26	-	\$ 1,308,156	\$ 4,429,933	\$	-
Molybdenum	13,183	-	\$ 150,194	431	30	\$ 13,017,482	\$ -	\$	-
Potash	2,130,352	1	\$ 1,093,208,523	1,078	33	\$ 97,754,429	\$ 7,067,326	\$	10,843,943
Silver	22,617	-	\$ 431,333	-	-	\$ -	\$ 2,912	\$	-
Uranium <sup>9</sup>	-	-	\$ -	30	8	\$ 597,941	\$ -	\$	-
TOTAL			\$ 3,105,241,950	6,145	324	\$ 341,573,947	\$ 44,307,940		\$19,193,287

Source: Mining and Minerals Division, unless otherwise noted

Sources: Metals, potash, industrial minerals and aggregates: Mineral Resources Program, United States Geological Survey (minerals.er.usgs.gov)

Coal: Energy Information Administration, United States Department of Energy (www.eia.gov/coal); rank is for CY2013, latest available data

Federal revenue includes 50% state share of federal royalties.

Sources: State data: New Mexico Taxation and Revenue Department (www.state.nm.us/tax), New Mexico State Land Office (www.nmstatelands.org)

Federal data: Office of Natural Resources Revenue (www.onnr.gov)

<sup>&</sup>lt;sup>1</sup> Production is in short tons for coal, industrial minerals, aggregates, other metals and potash; in pounds for copper and molybdenum; and in troy ounces for gold and silver.

<sup>&</sup>lt;sup>2</sup> Production rank, where available, is based on 2014 production value (except coal is based on 2013 coal production value, latest available at publication date) in relation to other U.S. states.

<sup>&</sup>lt;sup>3</sup> Employment category includes direct and contract employees.

<sup>&</sup>lt;sup>4</sup> Payroll does not include benefits.

<sup>&</sup>lt;sup>5</sup> State revenue includes state trust land mineral lease royalties, rentals and bonuses; and severance, resource excise and conservation tax revenues.

 $<sup>^{6}</sup>$  Gold, silver and molybdenum are by-products of copper production. Employment/payroll for gold/silver included in copper.

<sup>&</sup>lt;sup>7</sup> Category includes brick clay, calcite, dimension stone, gypsum, humate, perlite, Portland cement, pumice, salt, silica, and zeolite.

<sup>&</sup>lt;sup>8</sup> Category includes base course, caliche, clay and shale, crushed rock, flagstone, fill dirt, gravel, limestone, red dog, rip-rap, sand, scoria and topsoil.

<sup>&</sup>lt;sup>9</sup> Employment/payroll numbers are for licensing/permitting at proposed uranium mines, and reclamation activities/maintenance at closed mines and mills.

Figure 1. Percentage of Production Value, Employment, Payroll, and Revenue by Commodity - 2014

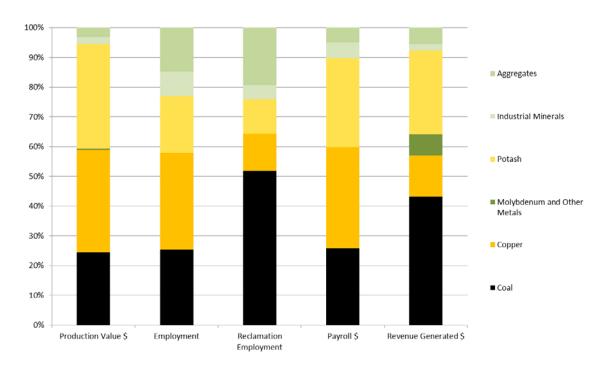
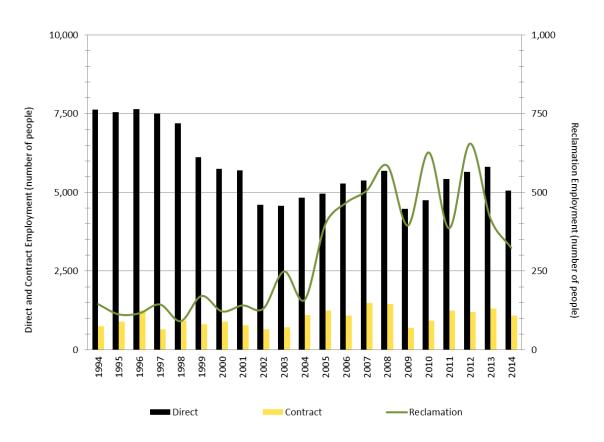


Figure 2. New Mexico Mineral Industry Employment from 1990-2014



# Appendix A:

Summary of Operator Reports for Disturbed and Reclaimed Acreage 2014

Table A-1. Number of Acres Disturbed and Reclaimed as of December 2014

Permit No.			Total Acres Reclaimed To Date
BE001RE	Tijeras Mine and Mill	589.40	103.50
CA002MN	Deadwood / Last Chance Mine	1.00	0.00
CA003ME	Hiawatha And Little Jim Mine	2.00	0.00
CA005RE	Challenge Mine and Mill	0.00	0.00
CA010MN	Apache Camp No. 1 Mine	0.00	0.00
CI002RE	Mt. Taylor Mine	147.70	0.00
CI003MN	ANP No. 2 Mine	2.00	0.00
CI004MN	Haskani Mine	13.30	0.50
CI005RE	Tinaja Pit Mine	40.00	0.00
CI006MN	Ray Claims No. 4 and No. 6 Mine	0.20	0.50
CI007RE	JJ No. 1 Mine	0.00	20.00
DA001MN	Shamrock Leach Site	2.00	2.00
DA003MN	Alley Gypsum Mine	1.20	0.00
GR001RE	Pinos Altos Mine	9.00	9.00
GR002RE	Continental Mine and Mill	928.00	19.00
GR006RE	Chino Limestone Mine	55.00	55.00
GR007RE	Little Rock Mine	254.00	32.00
GR008RE	Jersey Lily, Snowflake and Virtue Mines	22.00	22.00
GR009RE	Chino Mine and Mill	10750.70	889.00
GR010RE	Tyrone Mine and Mill	8548.10	4611.00
GR011ME	Summit Mine	2.00	0.00
GR012MN	KB Mine	41.00	42.00
GR016ME	Malone Mine	0.00	0.00
GR018ME	Banks Mine (Lost New Summit No. 1 Mine)	0.00	0.00
GR019ME	Boston Hill Mine	0.00	0.00
GR020RE	Georgetown Mine	0.00	0.80
GR024MN	Toro Mine	0.00	0.00
GR025ME	Mathis Limestone Quarry Mine	0.00	0.00
GR028RE	Center Mine	0.00	1.00
GR029ME	Mount Royal Mine and Mill	1.00	0.00
GR030ME	Chemical Lime Mine & Mill	0.00	4.40
GR036MN	Grooms Placer Mine	0.00	0.00
GR056MN	McCauley Perlite Mine	0.00	0.00
GR058MN	Billali Mine	1.20	0.00
GR065MN	Jim Crow Mine	0.00	0.00
HI001RE	Lordsburg Banner Mill	15.00	5.00

HI002RE	Brockman Mine	40.00	40.00
HI004MN	KM Mine	9.00	8.00
HI008ME	Volcano Mine	8.00	0.00
LI001ME	Warner Gulch Placer Mine	2.00	2.00
LI002ME	Smokey Mine	0.00	0.00
LI005ME	Capitan Iron Mine	12.00	0.00
LU001RE	Deming Jigging Mill	16.00	16.00
LU008RE	Cyprus Deming Tailings Impoundment	20.00	23.90
LU009RE	Asarco Deming Mill	56.50	44.00
LU012MN	Herb Bailey No. 2 Mine	0.00	0.00
MK002RE	Section 35 Mine	40.00	30.00
MK003ME	Star Lake Mine - Menefee	4.00	2.00
MK004RE	Northeast Church Rock Mine	0.00	17.00
MK005RE	Section 27 Mine	17.00	15.00
MK006RE	St. Anthony Mine	435.00	0.00
MK007ME	Star Lake Mine - Mesa Verde	59.80	48.00
MK008ME	Pueblo Alto Mine	42.10	41.80
MK009RE	Old Stope Leach Mine	81.00	78.00
MK010MN	U-Mate Mine	1.00	0.00
MK011MN	Morningstar Mine	14.00	19.00
MK012MN	Jaramillo Humate Mine	0.00	0.00
MK026MN	Black Spring Mine	14.50	10.00
MK037MN	Section 2 Mine	25.50	18.40
MK038MN	Double Tree I	0.00	0.00
MK039MN	Brie I Mine	13.40	10.60
OT001RN	Wind Mountain Quarry Mine	0.00	0.00
OT002MN	B.O.W. Mine	1.60	1.00
OT005MN	Orogrande Placer Gold Mine	1.80	0.00
RA001ME	Northstar Mine	1.30	0.00
RA003ME	Cullum Claims Mine	60.00	0.00
RA004RE	Rocky Mountain Mine	184.00	48.30
RA005RE	Velarde Mill	28.00	27.40
RA006ME	General Pumice Mine	17.00	60.00
SA001RE	El Cajete Mine	68.00	54.50
SA002RE	Clod Buster Mine and Mill	0.00	0.00
SA004MN	Copar South Pit Mine	9.00	18.50
SA005ME	Menefee Mill	9.70	0.00
SA006MN	Copper City Mine	1.00	0.00
SA009MN	Eagle Mesa Mine	8.10	20.50
SA010ME	Mesa Verde Resources Mill	0.00	0.00
SA011MN	San Luis Mine	15.00	10.00

SA012MN	Horizon Ag-Products Cuba Facility	0.00	0.00
SA015MN	H2 Screen Facility	3.50	0.00
SF001ME	San Pedro Mine and Mill	12.00	12.00
SF002RE	Cunningham Hill Mine	307.00	289.00
SF003ME	Silver Silica Mine	4.00	0.50
SF006ME	CR Minerals Mill	8.00	8.00
SI001ME	St. Cloud U.S. Treasury Mine	10.00	3.00
SI005MN	Burbank Canyon Mine	0.00	0.00
SI006RE	Zeolite Mine and Mill	51.00	24.50
SI007ME	Midnight Mine	4.00	0.00
SI020MN	Coyote Cliff No. 1 Mine	0.60	0.00
SI021MN	Coyote Cliff No. 2 Mine	0.80	0.00
SI025MN	Harding Mine	0.00	0.00
SJ001MN	Morningstar Humate Plant	7.70	0.00
SJ002MN	Chaco Limestone Quarry	2.00	3.50
SO001RE	Socorro Mine and Mill	160.00	43.40
SO002MN	Sais Quarry Mine	3.70	0.00
SO005MN	San Lorenzo Claim Mine	0.00	0.00
TA001RE	Questa Mine and Mill	2300.00	21.00
TA002RE	El Grande Mine and Mill	170.00	14.00
TA003RE	U. S. Hill Mine	60.00	61.50
TA005RE	No Agua Mine and Mill	276.00	0.00
	TOTAL:	26,130.70	6,961.00

# Appendix B:

Table of Financial Assurance Amounts

Table B-1. Financial Assurance as of December 2014

Permit No.	Permit Name	Type of FA	Amount of FA (\$)		
		Trust	867,500.00		
BE001RE	Tijeras Mine and Mill	Third Party Guarantee	2,812,500.00		
		Surety Bond	70,000.00		
CA003ME	Hiawatha And Little Jim Mine	Certificate of Deposit	736.00		
CI002RE	Mt. Taylor Mine	Surety Bond	725,056.00		
CI004MN	Haskani Mine	Certificate of Deposit	32,743.00		
CI005RE	Tinaja Pit Mine	Letter of Credit	161,514.00		
CI006MN	Ray Claims No. 4 and No. 6 Mine	Certificate of Deposit	20,405.00		
CI007RE	JJ No. 1 Mine	Surety Bond	642,298.90		
CI014ER	Coballata Evaluration Project	Letter of Credit	41,625.00		
CIUTAER	Cebolleta Exploration Project	Letter of Credit	46,980.00		
		Trust	3,000,000.00		
GR002RE	Continental Mine and Mill	Collateral Bond	6,173,600.00		
		Third Party Guarantee	18,181,672.00		
GR007RE	Little Rock Mine	Surety Bond	1,520,113.00		
GROOTRE	Little Rock Wille	Surety Bond	1,424,470.00		
GR008RE	Jersey Lily, Snowflake and Virtue Mines	Letter of Credit	46,600.00		
GR009RE	Chino Mine and Mill	Third Party Guarantee	111,230,029.00		
GINOUSINE		Trust	64,042,304.00		
		Third Party Guarantee	91,529,850.00		
	Tyrone Mine and Mill	Letter of Credit	170,874.00		
GR010RE		Trust	27,018,850.00		
GROTORE		Collateral Bond	27,951,986.00		
		Surety Bond	6,780,518.00		
		Surety Bond	25,000,000.00		
GR011ME	Summit Mine	Surety Bond	95,175.00		
GR012MN	KB Mine	Certificate of Deposit	24,182.00		
GR020RE	Georgetown Mine	Certificate of Deposit	5,200.00		
GR022MN	Farmers Backbreaker Mine	Certificate of Deposit	15,000.00		
GR025ME	Mathis Limestone Quarry Mine	Certificate of Deposit	3,000.00		
CDASSDE	Contar Mina	Surety Bond	28,225.20		
GR028RE	Center Mine	Certificate of Deposit	12,000.00		
GR030ME	Chemical Lime Mine & Mill	Surety Bond	62,287.00		
GR037EM	Codebreaker Enterprises, Inc. Santo Nino Claim	Certificate of Deposit	17,940.00		

GR039ER	Long Mountain Drainet	Certificate of Deposit	68,250.00
		Certificate of Deposit	44,480.00
	Lone Mountain Project	Certificate of Deposit	57,210.00
		Certificate of Deposit	76,440.00
GR068EM	TC Project	Certificate of Deposit	58,492.00
		Certificate of Deposit	20,355.00
HI001RE	Lordsburg Banner Mill	Certificate of Deposit	3,879.00
		Certificate of Deposit	20,6471.00
HI002RE	Brockman Mine	Letter of Credit	276,900.00
HI004MN	KM Mine	Certificate of Deposit	1,824.00
HI008ME	Volcano Mine	Collateral Bond	28,652.00
HI013ER	Lordsburg Exploration Project II	Certificate of Deposit	126,100.00
HI016EM	Railroad Well Exploration Project	Certificate of Deposit	68,604.00
HI017EM	Lordsburg Project	Surety Bond	50,852.70
LI001ME	Warner Gulch Placer Mine	Letter of Credit	10,000.00
LI003ER	Bonito Gold & Silver Project	Cash	200.00
LI005ME	Capitan Iron Mine	Certificate of Deposit	15,000.00
LI013EM	M&E Exploration Project	Certificate of Deposit	6,000.00
LI030EM	KD Placer Claims	Certificate of Deposit	9,690.00
LU001RE	Deming Jigging Mill	Surety Bond	100,000.00
LU008RE	Cyprus Deming Tailings Impoundment	Letter of Credit	132,588.00
LU017EM	Victorio Project	Certificate of Deposit	80,299.00
MK003ME	Star Lake Mine - Menefee	Surety Bond	13,000.00
MK005RE	Section 27 Mine	Surety Bond	377,000.00
MKOOGDE	St. Anthony Mine	Third Party Guarantee	19,400,400.00
MK006RE		Letter of Credit	6,466,800.00
	Star Lake Mine - Mesa Verde	Certificate of Deposit	4,408.00
		Certificate of Deposit	1,577.00
MK007ME		Certificate of Deposit	21,193.00
		Certificate of Deposit	5,000.00
		Certificate of Deposit	24,794.00
	Pueblo Alto Mine	Certificate of Deposit	22,000.00
		Certificate of Deposit	2,800.00
MK008ME		Certificate of Deposit	2,160.00
		Certificate of Deposit	2,677.00
		Certificate of Deposit	21,051.00
		Certificate of Deposit	2,500.00
		Certificate of Deposit	27,825.00
MK009RE	Old Stope Leach Mine	Letter of Credit	578,000.00

MK010MN	U-Mate Mine	Certificate of Deposit	8,844.00
MK011MN	Morningstar Mine	Certificate of Deposit	2,880.00
MK023ER	Marquez Canyon Confirmation Drilling Program	Letter of Credit	115,030.00
MKOSEMNI	Plack Spring Mino	Certificate of Deposit	11,000.00
MK026MN	Black Spring Mine	Certificate of Deposit	25,000.00
MK037MN	Section 2 Mine	Certificate of Deposit	9,080.82
		Certificate of Deposit	5,000.00
MK038MN	Double Tree I	Letter of Credit	45,600.00
	Brie I Mine	Certificate of Deposit	1,152.00
NAIZOZONANI		Letter of Credit	34,385.44
MK039MN		Letter of Credit	45,600.00
		Letter of Credit	27,719.50
MK043MN	Ojo Encino Humate Mine	Certificate of Deposit	62,964.64
MK044EM	MVR Star Lake Section 4 Exploration	Certificate of Deposit	8,317.00
OT002MN	B.O.W. Mine	Letter of Credit	15,932.00
OT006EM	Cornudas Project	Certificate of Deposit	22,600.00
OT006MN	Iron Duke Mine	Certificate of Deposit	15,597.00
OT040EM	Cornudas Wind Mountain Project	Certificate of Deposit	58,826.12
RA001ME	Northstar Mine	Certificate of Deposit	11,099.07
RA003ME	Cullum Claims Mine	Letter of Credit	161,500.00
RA004RE	Rocky Mountain Mine	Letter of Credit	409,886.00
RA006ME	General Pumice Mine	Required	15,000.00
SA001RE	El Cajete Mine	Letter of Credit	12,103.00
SAUUTRE		Letter of Credit	78,747.00
SA004MN	Copar South Pit Mine	Letter of Credit	33,516.00
SA005ME	Menefee Mill	Certificate of Deposit	16,000.00
SA006MN	Copper City Mine	Cash	800.00
SA009MN	Eagle Mesa Mine	Letter of Credit	50,813.00
SA011MN	San Luis Mine	Letter of Credit	35,100.00
SA015MN	H2 Screen Facility	Letter of Credit	28,170.00
SF001ME	San Pedro Mine and Mill	Certificate of Deposit	8,288.00
SF002RE	Cunningham Hill Mine	Trust	378,766.00
SI001ME	St. Cloud U.S. Treasury Mine	Certificate of Deposit	1,857.00
SI005MN	Burbank Canyon Mine	Certificate of Deposit	30,000.00
SI006RE	Zeolite Mine and Mill	Collateral Bond	157,719.00
SI025EM	Copper Flat Exploration 2 Project	Certificate of Deposit	133,200.00
SJ001MN	Morningstar Humate Plant	Certificate of Deposit	51,257.06
SO001RE	Socorro Mine and Mill	Letter of Credit	688,166.00
		Letter of Credit	106,237.00

SO002MN	Sais Quarry Mine	Certificate of Deposit	2,661.89
SO019EM	Vin Exploration	Certificate of Deposit	46,650.00
		Letter of Credit	66,918,125.00
TA001RE	Questa Mine and Mill	Third Party Guarantee	200,754,376.00
		Letter of Credit	1,355,634.00
TA002RE	El Grande Mine and Mill	Letter of Credit	711,497.00
TA003RE	U. S. Hill Mine	Letter of Credit	201,354.00
TA005RE	No Agua Mine and Mill	Surety Bond	1,152,687.00
VA001ME	Lucero Quarry Mine	Certificate of Deposit	24,515.00
		TOTAL:	692,261,957.34