MINE DEVELOPMENT ASSOCIATES
MINE ENGINEERING SERVICES

Technical Report on the Shafter Silver Project, Presidio County, Texas

Prepared for

Aurcana Corporation

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Cover photo: Gold Fields Mining Corporation's main hoist shaft accessing the eastern extension of the Shafter Deposit.

1.0 SUMMARY

Mine Development Associates ("MDA") has prepared this Technical Report on the Shafter silver project, located in Presidio County, Texas, at the request of Aurcana Corporation ("Aurcana"). Aurcana owns 100% of the Shafter project through its wholly owned subsidiary, Rio Grande Mining Company ("RGMC").

The purpose of this report is to provide a technical summary of the Shafter project and an updated mineral resource estimate prepared by MDA. The current report and associated resource estimate have been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards - For Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted by the CIM Council on May 10, 2014.

The Shafter silver deposit consists of replacement bodies, termed *mantos*, in a gently dipping to horizontal sequence of carbonate sedimentary rocks. The Shafter deposit was exploited by historic underground mining activity from 1881 through 1942, with further exploration and development work being conducted up through 1999. Aurcana commenced recent development in 2011 with underground and limited open-pit production starting in 2012 and ceasing in December 2013. The project has been on care and maintenance since December 2013.

The effective date of the Shafter database, on which the resources described in this Technical Report are estimated, is October 15, 2013 while the effective date of the Shafter resource estimate and this report is December 11, 2015.

1.1 Property Description and Ownership

The Shafter project is located in south-central Presidio County in southwestern Texas. The sparsely inhabited town of Shafter is situated at the eastern end of the property, 40 miles south of Marfa and 18 miles north of the border town of Presidio, Texas. The Shafter project area consists of rugged high-desert terrain on the southern side of the Chinati Mountains, on the slopes above the Rio Grande valley.

The Shafter property consists of a total of approximately 3,960 acres owned or controlled by RGMC. Surface and/or mineral rights may be deeded to or leased by RGMC. RGMC leases mineral rights from the State of Texas on 37 acres, with the remaining portions of Aurcana's Shafter property being privately held.

There are royalties of up to 6.25% for some of the parcels that comprise the Shafter property, including a 180-foot wide parcel that overlies the mineral resource described in this report.

1.2 Exploration and Mining History

The mineralized areas in the Shafter district were first discovered in 1880 or 1881, and the Presidio Mining Company was formed in 1881. Silver was produced from the Presidio mine from 1883 to 1926, when the American Metal Co. acquired the Shafter property and continued production. American Metal Co. subsequently merged with Climax Molybdenum Company to form American Metal Climax, Inc. ("Amax"). From 1883 to 1942, when the Presidio mine was closed, total recorded production was 2.307 million tons of ore containing 35.153 million ounces of silver at an average grade of 15.24oz Ag/ton.

Amax, Gold Fields Mining Corporation ("Gold Fields"), and Rio Grande Mining Company ("RGMC"), successively held the Shafter property and conducted extensive exploration programs, which included surface and underground drilling and sampling, from 1926 to 1999. Gold Fields identified the northeastern, down-dip extension of the Shafter deposit, extending more than 5,000 feet from the deepest development workings in the Presidio mine. During the 1970s, Gold Fields constructed a 1,052-foot deep shaft to access and explore the northeastern extension.

Aurcana purchased RGMC and the Shafter property in July 2008. RGMC is now a wholly owned subsidiary of Aurcana. Aurcana began exploration at Shafter in 2011 and has conducted geophysical surveying, drilling, mapping, and geochemical sampling since that time. Aurcana drilled 65 surface and 101 underground holes from 2011 through October 2013.

A total of 1,694 drill holes are in the Shafter project database used for the current resource estimate. These holes include 435 surface core holes, 1,171 underground core holes, and 88 reverse circulation holes. An additional eleven underground core holes were drilled by Aurcana in late 2013 after the database was finalized for use in the resource estimate. These holes are included in the 101 Aurcana underground holes as stated in the preceding paragraph.

Aurcana re-entered the old Presidio mine through a new decline on June 1, 2012, and commercial production commenced from material adjacent to and between Amax's old stopes on December 14, 2012. In conjunction with its underground operations, Aurcana began open-pit mining of lower-grade mineralization from the Mina Grande pit on April 23, 2012. This open-pit mining was discontinued after the plant commissioning and testing phase were complete. Due in part to lower silver prices, the mine was put on care and maintenance in December 2013. Aurcana reported that from October 2012 through December 2013, mine production totaled 149,882 tons, and mill feed from the mine totaled 109,599 tons. A total of 134,557 ounces of silver doré were poured.

1.3 Geology and Mineralization

In this part of southwestern Texas, a thick sequence of Jurassic-Cretaceous sedimentary basin rocks overlies older Paleozoic basement. The sedimentary basin sequence contains carbonate units that extend from southeastern Arizona and southern New Mexico, through northern Mexico and southwestern Texas, and were thrust faulted and folded during the Laramide orogeny. Silver-lead-zinc deposits, of which the Shafter deposit is an example, occur in Permian limestone, as well as these basinal, carbonate units. Deposits such as Shafter are referred to as "high-temperature, carbonate-hosted deposits" because of their irregular but sharp contacts with their enclosing carbonate host rocks.

The Shafter mining district is located on the south flank of the Chinati Mountains, adjacent to a Tertiary-age volcanic caldera. Outcrops in the district are predominantly Permian and Cretaceous limestone, dolomite, siltstone, and sandstone, which were tilted by uplift during the Laramide orogeny in late Cretaceous to early Tertiary time and were later cut by Tertiary intrusions.

The mineral deposits in the Shafter district occur mainly as silica-replacement bodies along bedding planes in the upper units of Permian limestone, usually just below the unconformity at the base of the Cretaceous rocks. The deposits, referred to as *mantos*, are generally parallel to the bedding which dips gently to the southeast. Manto thickness is generally 8-15 feet, but can be highly irregular with increased thickness along localized, near-vertical structures that appear to have served as fluid pathways. Veins containing the same minerals as the *mantos* are common in the western part of the Shafter district. Many of these veins are fissure fillings and have brecciated zones.

At the Shafter silver deposit, the massive limestone at the top of the Permian Cibolo Formation was the most favorable to replacement by mineralizing solutions; in the vicinity of the Presidio mine, this unit is called the Mina Grande Formation. The erosional surface of the Mina Grande Formation developed karst topography, which provided large open spaces that served as channels for mineralizing solutions. Silver and base metals were deposited where conditions were favorable.

The entire Shafter deposit is up to 1,500 feet wide in a north-south direction and extends at least 2.5 miles on a northeast trend. Silver is present predominately as oxidized acanthite in fine-grained aggregates of quartz, calcite, and goethite, with lesser dolomite, hemimorphite, willemite, anglesite, galena, smithsonite, and sphalerite.

1.4 Metallurgical Testing and Mineral Processing

Since historical operations ceased in 1942, the silver mineralization from the mine and the adjacent Shafter deposit has been tested with a number of laboratory programs, during which time various silver recovery processes have been investigated. These include optical sorting, gravity concentration, flotation, and cyanide and alternate leaching procedures.

Companies involved in earlier laboratory investigations include Gold Fields Research Laboratories of South Africa ("Gold Fields"), Colorado School of Mines Research Institute, ("CSMRI"), Hazen Research, ("Hazen"), Kappes, Cassiday & Associates ("KCA"), Kerley Chemical Corporation, and Warren Springs Laboratories. The test results from each organization were similar although more recent work focused on whole cyanidation and abandoned the earlier flowsheets which included initial production of a lead concentrate with cyanidation of the gravity tailings.

More recently, laboratory studies have been completed for Aurcana by Inspectorate Mining and Mineral Services Ltd., to evaluate various proposed process procedures, and Pocock Industrial Inc., to establish settling and filtration parameters for the process design.

The Aurcana Mill was operated in 2012-2013 based on a whole-ore cyanide leach circuit designed for 1,500 TPD using filtration and dry stacking of tailings. In the two years it operated, the mill failed to reach the design capacity or the projected silver recovery. The flowsheet was extensively modified over the brief operating history and was still undergoing modifications and additions when milling was suspended in late 2013.

1.5 Mineral Resource Estimate

The Shafter resources reported herein are based on Aurcana's database as of October 15, 2013, with MDA completing the data evaluation and geologic model by December 30, 2013. Since the resource database was finalized, there has been no subsequent material exploration activity and the database is considered complete and current with all available material exploration information, except for eleven underground drill holes completed by Aurcana in late 2013. These eleven drill holes were excluded as their location could not be subsequently confirmed with certainty, and their inclusion would not have a material impact on the resource model or the resource estimate.

Since publication of the previous 2008 technical report, a detailed review of the historical data and subsequent data compilation has resulted in the addition of approximately 800 holes to the database, including a considerable number of underground and surface holes drilled by Amax, a few additional Gold Fields holes, and new holes drilled by Aurcana. These holes were used in the current resource estimate and are included in the project database totals as stated in Section 1.2.

Upon completion of the database validation process, MDA constructed 150 cross sections spaced 50ft to 100ft apart and looking northeast at 70°. One set of sections was made for geology and then another for silver mineralization. High- and low-grade silver mineral domains were modeled, and each represents a distinct style of mineralization

The silver domains on cross sections were then used to code the drill samples. Quantile plots were made to assess validity of these domains and to determine capping levels. MDA capped 12 silver assays: two in the low-grade domain and 10 in the high-grade domain. Compositing was done to 4ft down-hole lengths (the model block size), honoring all mineral-domain boundaries.

The cross-sectional geology and silver domains were rectified three-dimensionally to long-sections on 10ft intervals that coincide with the mid-width of the model blocks. The long sections were used to code the block model to percent of block by clay/rubble alteration and silver domain. The clay/rubble zones were specifically modeled on long section due to their general inverse relationship with silver mineralization.

Tonnage factors used for the resource estimate ranged from 12 to 14 cubic feet/ton. The underground workings were imported into the block model as a 3-D solid, and resource blocks were coded by volume percentage within the underground solid. Those blocks coded at 5 percent or greater of underground workings were considered "mined out" and removed from the classified mineral resource.

The reported resource estimate was made using inverse distance to the third power to estimate the grade of each block. Ordinary-kriging and nearest-neighbor estimates were also made for comparison and validation. MDA classified the Shafter silver resources by a combination of distance to the nearest sample, and the number of samples, while at the same time taking into account reliability of underlying data and understanding and use of the geology. The Shafter reported resources are tabulated in Table 1.1. The stated resources are fully diluted to 10-foot by 10-foot by 4-foot blocks and are tabulated considering a silver cutoff grade of 4.0oz Ag/ton.

Table 1.1 Shafter Reported Resources

Shafter Reported Resource:

Class	Cutoff (oz Ag/ton)	Tons	oz Ag/ton	oz Ag
Measured	4.00	100,000	8.73	888,000
Indicated	4.00	1,110,000	9.15	10,171,000
Meas. + Ind.	4.00	1,210,000	9.14	11,059,000
Inferred	4.00	870,000	7.47	6,511,000

1.6 Conclusions and Recommendations

MDA has reviewed the project data and the Shafter drill-hole database and has visited the project site. MDA believes that the data provided by Aurcana are generally an accurate and reasonable representation of the Shafter silver deposit.

The Shafter mineral resource estimate honors the drill-hole geology and assay data and is supported by the geologic model. The resource is at a depth of less than 100 feet in the west-central portion of the deposit and then gradually deepens to a depth of over 1,000 feet within the eastern end of the deposit following the general stratigraphic dip. *Manto* thickness and silver grades can be highly variable, often related to near-vertical structures.

Although silver mineralization is generally continuous along the 13,000-foot length of the deposit, the resource is fragmentary in the vicinity of the historic Presidio mine due to the removal of mined-out material. The resource is also fragmented west of the historic Presidio mine underground development at the 4oz Ag/ton cutoff.

Aurcana proposes seven activities to advance the Shafter project prior to developing a new mine plan and converting the estimated mineral resources into mineral reserves. The estimated cost of these activities is $3 million. The proposed activities are:

- Develop a metallurgical map of the Shafter deposit by:
    - Re-examining drill core from Gold Field's campaigns;
    - Assaying all previously un-sampled intervals that intersect the mineralization;
    - Using drill logs, photographs, and remaining split core to document presence of silicification and the occurrence and abundance of jarosite and galena;
    - If sufficient pulps are available, performing ICP multi-element analyses on the mineralized intervals. Consideration should also be given to analyzing sulfur using the

Leco analyzer on intervals grading over 0.7% S as well as an LOI (loss on ignition) determination; and

- Analyzing a suite of representative samples using XRD (X-ray diffraction) or Qemscan (scanning electron microscope system).

- Drill 16 holes (pre-drilled by RC or rotary to 700 feet, then core) to test the zone east of mine-grid 53,750. The primary objective of this in-fill drill program is to obtain geotechnical data, samples for metallurgical testing, and rock density measurements. A secondary objective is to test for continuity and extensions of the high-grade domain (domain code 200) to the southeast.
- Re-examine historic drill-hole data with respect to collar locations, particularly underground.
- Update the database with historic channel-sample information and re-sample some locations to confirm historic results.
- Re-examine and compile historic information from Amax and Gold Fields.
  - Develop both level plans and sections that map mineral domains and rock types and that document the continuity of faults and dikes.
  - Compile results of Gold Fields' underground core drilling and sludge, panel, and bulk sampling.

- Develop an accurate survey of the project's land holdings with respect to proposed development activities.
- Metallurgical and Mineral processing recommendations include:
  - Expanding the analytical database to include lead assays wherever possible from existing core or rejects, or new samples that may become available;
  - Carry out bench-scale metallurgical tests on the indicated flowsheet to determine whether recovery of a lead concentrate is viable or necessary;
  - Expand the understanding of ore variability on mill recovery and the need for ore blending by completion of standard bench-scale leach tests on available samples;
  - Assess whether whole-ore leaching of higher lead grade materials will negatively impact mill operations. High lead concentrations can cause solution issues and increase consumption of cyanide, contributing to higher costs for solution treatment; and,
  - Assess the market for purchasers of lower grade silver bearing lead concentrates.

MDA believes that the Shafter project is a project of merit and warrants the program proposed by Aurcana and the level of expenditures outlined above.

2.0 INTRODUCTION AND TERMS OF REFERENCE

Mine Development Associates ("MDA") has prepared this Technical Report on the Shafter silver project, located in Presidio County, Texas, at the request of Aurcana Corporation ("Aurcana"), a Canadian company listed on the TSX Venture Exchange and the OTCQX. Aurcana owns 100% of the Shafter project through its wholly owned subsidiary Rio Grande Mining Company ("RGMC").

The current report and associated resource estimate have been prepared in accordance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards - For Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted by the CIM Council on May 10, 2014.

The Shafter silver deposit consists of replacement bodies, termed *mantos*, in a horizontal to gently dipping sequence of carbonate sedimentary rocks. The Shafter deposit was exploited by historic underground mining activity from 1881 through 1942, with further exploration and development work conducted up through 1999. Aurcana commenced recent development in 2011 with underground and limited open-pit production commencing in 2012 and terminating in December of 2013. The project has been on care and maintenance since December 2013.

2.1 Project Scope and Terms of Reference

The purpose of this report is to provide a technical summary of the Shafter project and an updated mineral resource estimate prepared by MDA. An estimate of mineral resources was previously reported in a technical report prepared for Aurcana by Tetra Tech Inc. in 2008 (Rozelle and Tschabrun, 2008).

The mineral resources described in the current technical report were estimated and classified under the supervision of Paul Tietz, C.P.G. and Senior Geologist for MDA. Mr. Tietz is a qualified person under NI 43-101 and has no affiliation with Aurcana or any of its subsidiaries except that of an independent consultant/client relationship. Mr. Tietz had prior experience with the Shafter project in the early 1980s while an employee of a previous operator. Peter Ronning, P.E., an associate of MDA, performed the quality assurance/quality control analysis as described in Section 12.2. Neil Prenn, P.E. and Principal Engineer for MDA, described Aurcana's mining at Shafter from December 2012 to December 2013 in Section 6.1.1.

Ross MacFarlane P.Eng. and Senior Associate Metallurgist with Watts, Griffis, and McOuat completed the review of the metallurgy of the Shafter deposit documented in Section 13 of this report, as well as the metallurgical recommendations included in Section 19. Mr. MacFarlane is a qualified person under NI 43-101 and has no affiliation with Aurcana or any of its subsidiaries except that of an independent consultant/client relationship.

The scope of this study included a review of pertinent technical reports and data provided to MDA by Aurcana relative to the general setting, geology, project history, exploration activities and results, methodology, quality assurance, interpretations, drilling programs, and metallurgy. MDA has relied on the data and information provided by Aurcana for the completion of this report, including the supporting data for the estimation of the mineral resources.

Mr. Tietz visited the Shafter project on January 30 and 31, 2013. This visit included a review of exploration data and associated drilling, logging and sampling procedures. Mr. Tietz toured the underground workings and the open pit, examined existing core, and reviewed the sampling procedures of the underground mine and the mill. In addition, Mr. Tietz also reviewed previous block models. Mr. Tietz visited the Shafter project again on May 21 through May 25, 2013. During the May 2013 site visit, additional historical drill data were discovered, compiled, and added to the project database. Mr. Tietz also worked with the Shafter geologic staff to develop a cross-sectional geologic model and made a brief underground tour of some of the working faces that were active at the time. Mr. Prenn visited the Shafter project during the week of April 1, 2013 to review mine plans and operations at Shafter. His observations are included in Section 6.1.1.

Mr. MacFarlane visited the Shafter project on March 27, 2014 after the suspension of operations in late 2013 and reviewed the mill and general site infrastructure as well as equipment additions that had been made or were in progress at the time of the shutdown. He also reviewed the extensive metallurgical testing as well as the operational records that were available on the Shafter deposit.

MDA has relied almost entirely on data and information derived from work done by Aurcana and its predecessor operators of the Shafter project. MDA has reviewed much of the available data and made site visits and has made judgments about the general reliability of the underlying data. Where deemed either inadequate or unreliable, the data were either eliminated from use, or procedures were modified to account for lack of confidence in that specific information. MDA has made such independent investigations as deemed necessary in the professional judgment of the author to be able to reasonably present the conclusions discussed herein.

The Shafter resources reported herein are based on Aurcana's database as of October 15, 2013. Except for eleven underground drillholes completed by Aurcana in late 2013, the database and subsequent resource estimate are still considered current. The effective date of this technical report is December 11, 2015.

2.2 Frequently Used Acronyms, Abbreviations, Definitions, and Units of Measure

In this report, measurements are generally reported in U.S. Customary units.

Currency: Unless otherwise indicated, all references to dollars ($) in this report refer to currency of the United States.

Frequently used acronyms and abbreviations

AA	atomic absorption spectrometry
Ag	silver
Au	gold
core	diamond core-drilling method
°F	degrees Fahrenheit
ft	foot or feet
gpm	gallons per minute
g/t	grams per tonne
hr	hour
ICP	inductively coupled plasma analytical method
ICPES/MS	inductively coupled plasma emission and mass spectrometry
ICP-OES	inductively coupled plasma-optical emission spectrometry analytical method
kg	kilograms
kV	kilovolt
Ma	million years old
mi	mile or miles
NSAMT	Natural Source Audio-frequency Magnetotellurics – type of geophysical survey that reads natural earth currents generated by lightning strikes
NSR	net smelter return
oz	troy ounce
ppm	parts per million
QA/QC	quality assurance and quality control
RC	reverse-circulation drilling method
RQD	rock-quality designation
t	metric tonne
ton	short ton
TPD	short tons per day
yr	year

3.0 RELIANCE ON OTHER EXPERTS

The authors have relied on Aurcana and RGMC to provide full information concerning the legal status of Aurcana and related companies, as well as current legal title, material terms of all agreements, and material environmental and permitting information that pertain to the Shafter project. MDA relies on Aurcana and RGMC for Sections 4.2 on Land Tenure in Texas and the Shafter area and Section 4.3 on Land Area, and on RGMC as well as their environmental and reclamation consultants for Section 4.4 on Environmental Liabilities and Section 4.5 on Environmental Permitting.

The authors are not experts in legal matters, such as the assessment of the legal validity of mining claims, private lands, mineral and surface rights, and property agreements in the United States. The authors did not conduct any investigations of the environmental, permitting, or social-economic issues associated with the Shafter project, and the authors are not experts with respect to these issues.

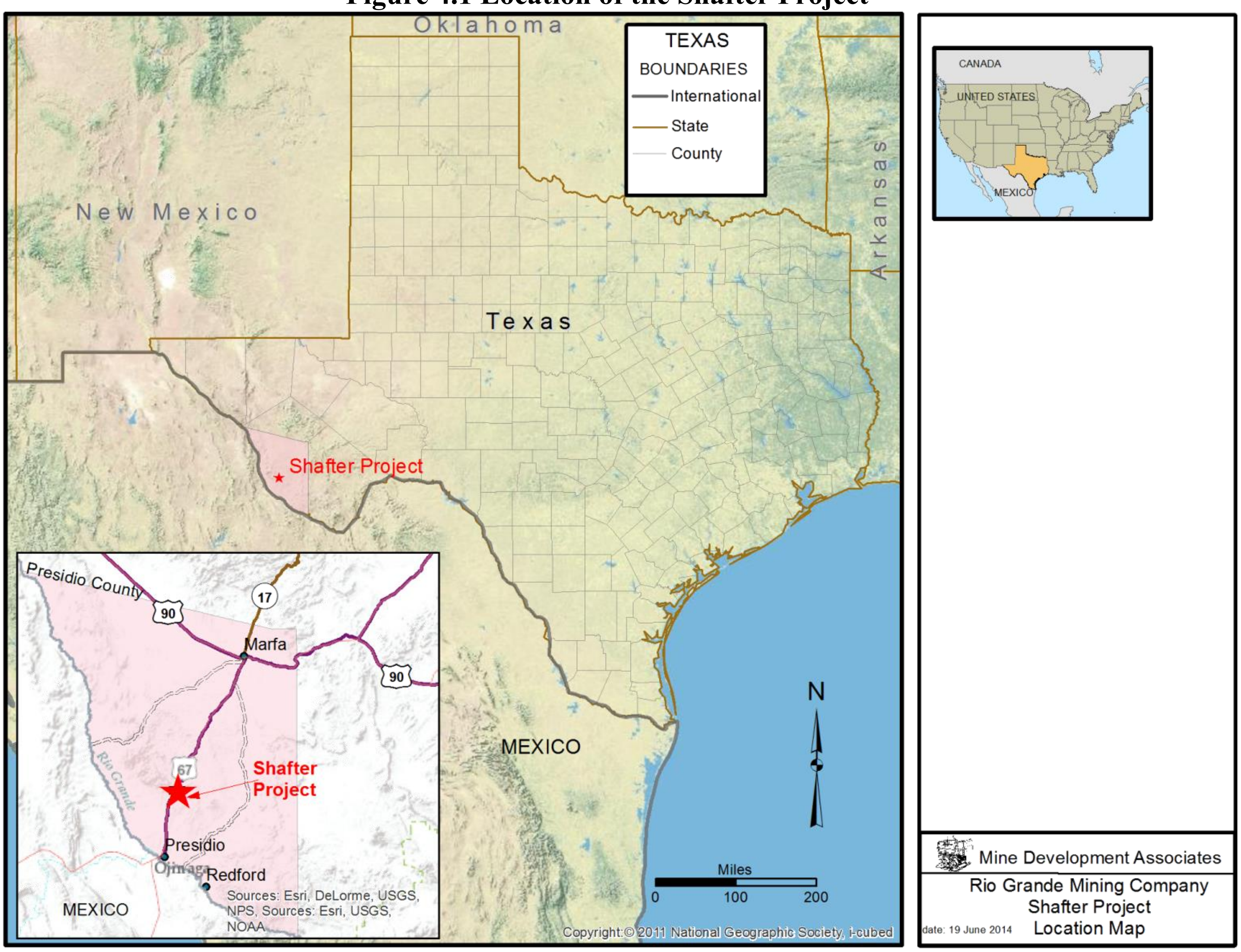
4.0 PROPERTY DESCRIPTION AND LOCATION

Sections 4.2, 4.3, 4.4, and 4.5 are based on information provided to the author by Aurcana and RGMC. The author presents this information to fulfill reporting requirements of NI 43-101 and expresses no opinion regarding the legal or environmental status of the Shafter project.

4.1 Location

The Shafter project is located in south-central Presidio County in the Trans-Pecos region of southwestern Texas (Figure 4.1). The center of the Shafter resource area is located at approximately 29° 48’ 49” North latitude and 104° 19’ 25” West longitude. The sparsely inhabited town of Shafter lies at the eastern end of the property, about 40 miles south of Marfa and about 20 miles north of Presidio, Texas. Presidio is located on the Mexican border.

Figure 4.1 Location of the Shafter Project



4.2 Land Tenure in Texas and the Shafter Area

Section 4.2 is based on information provided by Aurcana.

Private title to land in Texas has been granted by the central governing body (historically by Spain, then Mexico, then the Republic of Texas, and currently the State of Texas). Mineral rights have not always been conveyed with the surface rights unless expressly stated. Consequently, mineral rights may be held by private land owners or the State of Texas. Where the State retains the mineral rights, the benefits thereof are often allocated to various charities and educational institutions. When a landowner owns both the surface and the mineral rights to his tract, he may legally sever the mineral rights from the surface rights.

Although lease agreements vary, in Texas they typically permit the lessee to develop the mineral resources in order to earn a 7/8 interest; the landowner or lessor retains a 1/8 carried interest. Since 1955, the basic royalty on oil and gas on State lands has increased from 1/8 to 1/6, and since 1995, royalties for state-run lands of the Permanent School Fund have a minimum standard of 6.25 percent of the gross value. The Shafter project includes one parcel whose mineral rights Aurcana leases in this manner from the State, Section 10 of Block 23. Private landowners may have similar royalty expectations, but royalties with private landowners are negotiable. The State of Texas does not differentiate between metallic, non-metallic, oil, gas, and aggregate resources; they are all “minerals.”

In 1854, the Texas legislature offered an incentive to build railroad lines. Sixteen sections (10,240 acres) of land were available to the railroad companies for every mile of railroad contracted and put into operation. For each section the railroad companies surveyed, a second survey was done on a duplicate parcel of adjacent land. The second parcel was owned by the State, but the original by the railroad company, who usually sold the land immediately in order to construct more railroad line. This practice continued until 1882.

In western Texas, land is described in terms of “blocks” (usually surveyed by one entity, often a railroad company), and within the blocks are “sections.” Subsequent subdivisions of sections are into tracts or lots (in town sites, for example). Surface and mineral rights of sections and tracts or lots may or may not be held by the same entity. Surveying was done using “metes and bounds,” a method using a landmark as a point of origin (often a pile of stones), a series of compass bearings and distances from a sequence of turning points that determine corners of the property (at best, but sometimes a creek or a road), then back to the point of origin. Units of measure could be in feet, yards, miles, and acres, or in Spanish units of varas or leagues, labors, and lots. Sometimes all appear in the same survey notes. Geographic co-ordinates are usually in latitude/longitude. There are no reliable, comprehensive survey maps of the old Shafter town site.

Some mineral and surface titles at Shafter date back as far as 1884, although most are more recent. Both surface and mineral rights may be “leased” (whereby the rights are held by virtue of a lease agreement requiring annual payments or possibly work commitments) or “deeded” (purchased outright and title conveyed by a public deed). Title is recorded in county records by volume, abstract, and certificate number. An abstract number is assigned to a piece of land by the General Land Office of Texas when it is first granted or sold and is unique within the survey or league/labor to which it is assigned. Abstracts are associated only with surveys and league/labor land survey types, not for block/tract. The abstract number is assigned in perpetuity. All title documents and plats refer back to the original survey and original owner(s). Individual lots maybe surveyed (a "plat), and the map may show the location of the lot with respect to a nearby pile of stones, a steel rod or brass pin, or the corner of a landmark such as the abandoned jailhouse. Adjacent lots are rarely included on the same plat, and detailed examinations of the records indicate numerous inconsistencies between plats and reveal surveying errors. To make matters more confusing, most of the infrastructure of the town of Shafter is in disrepair or has disappeared; landmarks are destroyed; and only a few long-time or multi-generation residents remain. All these aspects make the location of lots in the Shafter town site in Section 327 uncertain. In order to track tenure, Gold Fields developed an indexing system for each parcel of land with an "L" (lease) or "D" (deed) followed by a 4-digit number (10XX). This internal filing system remains in use.

At Shafter, as with many areas in Texas, there are numerous right-of-ways for highways, roads, utility lines, and easements that allow the passage of people and goods or to facilitate hunting and grazing activities.

The preceding description is based upon internet research and private company materials. Important reference materials may be found at:

http://www.p2energysolutions.com/tobin-talk/land-survey-west-texas-vs-east-texas
http://www.rrc.state.tx.us/about/faqs/royaltiesleases.php
http://www.tshaonline.org/handbook/online/articles/gym01
http://www.glo.texas.gov/what-we-do/energy-and-minerals/hard-minerals/index.html
http://www.surveyhistory.org/metes_&_bounds_vs__public_lands.htm
http://www.mineralhub.com/2010/04/how-can-i-locate-who-owns-the-mineral-rights-under-my-land/
http://www.tobin.com/documents/TechWhitePaper8.pdf, and
http://www.tlma.org/resources.htm.

4.3 Land Area

Section 4.3 is based on information provided by Aurcana.

Through its wholly owned subsidiary, Rio Grande Mining Company, Aurcana owns or controls about 3,960 acres of property at Shafter, including eight sections or half sections, 13 parcels of Shafter town lots in two additional sections, and one additional half-section consisting of leased mineral claims.. All but one section consists of private land for which Aurcana holds either deeded surface rights or no surface rights, and deeded, leased, or no mineral rights. The mineral resource described in Section 14.0 is located on private land. Table 4.1 lists the parcels that comprise Aurcana's Shafter property, including the nature of Aurcana's interests, applicable royalties, and annual holding costs for each parcel. Figure 4.2 shows an overview of Aurcana's property holdings at Shafter.

Figure 4.3 shows more detail of Aurcana's holdings in the vicinity of the Shafter town site in Section 327, and Figure 4.4 shows greater detail of Aurcana's holdings in Section 328.

Table 4.1 Aurcana's Land Tenure at the Shafter Project

(See Figure 4.2, Figure 4.3, and Figure 4.4 for the location of the resource relative to the land held by Aurcana Corp.)

Gold Fields File No.	Aurcana's Mineral & Surface Rights	Description	Acreage	Royalties	Payments Owed by Aurcana	Easements (E) or Right-of-Ways (RoW)	Comments
BLOCK 23 – Galveston, Harrisburg & San Antonio Railway Company Survey							
D-1074	Deeded surface. No mineral rights	Section 9	36	N/A	N/A	Highway RoW	Note #2 Grazing, hunting rights granted
L-1090 D-1050 D-1074	Deeded surface. Mineral rights leased (M-110259) from State of Texas	Section 10	37	6.25% of "Market value". Minimum $1.25/ton (Note #1)	See Note #1	Highway RoW Electric Utilities (RoW), Telephone (E)	Note #2 Grazing, hunting rights granted
D-1088	Deeded surface. No mineral rights	Section 11	640	N/A	N/A	Passage (E)	Grazing, hunting rights leased
BLOCK 8 – Houston & Texas Central Railway Company Survey							
D-1056	Deeded Mineral. No surface rights.	Section 2	640	N/A	N/A	Not known	
D-1088	Deeded Surface. No mineral rights.	Section 4 S½	320	N/A	N/A	Passage (E) Electric Utilities (E)	Grazing, hunting rights leased
D-1050 D-1075	Deeded surface & mineral rights.	Section 5	640	N/A	N/A	Electric Utilities (E)	Grazing, hunting rights granted
	Leased mineral claims No surface rights	Section 6 N½	288	5% NSR	$1,000/yr	Option Agreement	Re-confirm annually by July 1. Expires 2019
D-1050 D-1074	Deeded surface & mineral rights	Section 8	640	N/A	N/A	Passage (E), Electric, Telephone Utilities (RoW),	Grazing & hunting rights granted
D-1088	Deeded surface. No mineral rights	Section 9 S½	320	N/A	N/A	Passage (E), Electric RoW	Grazing & hunting rights leased
BLOCK 23 - Adams, Beatty & Moulton							
L-1055	Leased mineral No surface rights	Section 328, Blk 1 (i.e., N½)	282.9	6.25%	$1,414.50/yr		

Gold Fields File No.	Aurcana's Mineral & Surface Rights	Description	Acreage	Royalties	Payments Owed by Aurcana	Easements (E) or Right-of-Ways (RoW)	Comments
D-1053	Deeded surface. 50.85% deeded (interest in) mineral rights	Part of Section 327	~35	No			
D-1057 L-1057	Deeded Surface (part labeled D-1057, part with no D- label). Leased Mineral rights.	Part of Section 327 SE	62.5	6.25%	$ 517.41/yr Portion paid in advance to 2031.		Lessors retain ownership of any revenue derived from waste rock or tailings
L-1058	Leased mineral No surface rights	W/2 of Town lot 1, Blk. F, Section 327	<1.0	6.25%	Paid to 2030		
D-1059	Deeded surface Deeded mineral	Part of Section 327, NE/4, NW/4	310.0	2%	N/A		Grazing leased
L-1060	Leased mineral No surface rights	Town lots 6 & 11 & land in between lots 7 & 10, Cibola Addition, Section 327	<3.0	6.25%	$15/yr Paid until 2020.		
D-1060.1	Deeded surface. Deeded mineral	Town lots 7 & 10,Cibola Addition, Section 327	<2.0	6.25%	N/A		
L-1068	Leased mineral. No surface rights	Town lots 2 & 3, Block F, & Lot 8 Cibola Addition, Section 327	<3.0	6.25%	Paid until 2032		
L-1080	Leased mineral. No surface rights.	Lots 1 & 4, Cibola Add., Lots 6 &7 Cibola Add. B & Lot 1, Blk. 1 Cibola Add. Section 327	<5.0	6.25%	$25/yr Paid until 2032.		
L-1081	Leased mineral. No surface rights.	2 town lots 6's, Blk. 4, Section 327	<2.0	6.25%			
D-1094 L-1094	Deeded surface. 5/6 mineral deed, 1/6 mineral lease	Part of Section 327, W of Hwy. 67 (Tr. 1)	24.5	1/6 of 6.5% and Shut-in royalty after production starts but is suspended	$10/yr per acre	Electric, Telephone (E), Electric (RoW), Right of Access to Amax	1.9 acres quitclaimed to Amax. Note #3

Gold Fields File No.	Aurcana's Mineral & Surface Rights	Description	Acreage	Royalties	Payments Owed by Aurcana	Easements (E) or Right-of-Ways (RoW)	Comments
D-1050 D-1074	Deeded surface & mineral rights.	Part of Section 327, W. of Hwy 67: Northern (Tr. 2b), Central (Tr. 4) Southern (Tr. 3)	66.5 5.38 40.2	No	N/A	Telephone (E), Right of Access to Amax	Portion (11.7 acres) of surface quit-claimed to Amax (covers historic tailings site). Small portion extends E of Hwy. 67.
"Amax"	Deeded mineral No surface	Part of Survey 327	~13.7	N/A		Right of Access to Amax	Surface quitclaimed to Amax for tailings remediation in 1995. Formerly part of D-1050 & D-1094.

<u>NOTE #1 MINING LEASE M-110259</u> ("Lease 110259") granted July 14, 2009, valid for 15 years under the following terms:

A - DELAY RENTAL: If production in paying quantities has not been obtained on or before one year after the date of the lease, then Lease 110259 terminates unless the Owner, on or before that date, pays a "delay of production" penalty (considered as a rental and to be covering the privilege of deferring commencement of production in paying quantities) to the State as per the following schedule:

Anniversary Year	Amount (US $)	Status	Anniversary Year	Amount (US $)	Status
2011	10,220	Paid	2017	12,440	-
2012	10, 590	Paid	2018	12,810	-
2013	10,960	Paid	2019	13,180	-
2014	11,330	Paid	2020	13,550	-
2015	11,700	Paid	2021	13,920	-
2016	12,070	-	2022	14,290	-
			2023	14,660	-

B - MINIMUM ADVANCE ROYALTY: Immediately upon commencement of production from Lease 110259, RGMC will pay $5,000.00 as a minimum advance royalty. (This Section does not apply to the production of waste materials). The payment of the initial minimum advance royalty is to be received by the COMMISSIONER, at Austin, on or before seven days after the date of the initial commencement of production. Thereafter, this royalty is to be paid and received on or before the anniversary date of Lease 110259, in advance, for each year (as determined by the anniversary date) in which the minerals are produced. It is understood and agreed that this minimum advance royalty is due and payable for every year that the leased minerals are produced from Lease 110259, regardless of the amount of actual production. If applicable, any minimum advance royalty paid will be credited against the first royalty due provided for the leased minerals actually produced from Lease 110259 during the lease year for which such minimum advance royalty is to paid.

C- PRODUCTION ROYALTY: There is a royalty on production of six and one-quarter percent (6¼ %) of the"Market Value". The intention is that if production is achieved the State will receive not less than one-sixteenth (6.25%) of the value of the minerals produced. Market Value, as that phrase is used in this lease, is defined to mean the higher of, at the option of the Comissioner, either: (1) gross proceeds received by RGMC (e.g., the gross price paid or offered to RGMC) from the sale of minerals and including any reimbursements for severance taxes and production related costs, or (2) the highest price for materials or minerals (a) produced the from Lease 110259 or from other mines and (b) that are comparable in quality to those produced from Lease 110259. Price shall be determined by any generally accepted method of pricing chosen by the Commissioner, including, but not limited to, comparable sales (e.g. prices paid or offered), published prices plus premium, and values/costs reported to a regulatory agency. In no event will the royalty due the State be less than the minimum royalty amounts. The Minimum Royalty is defined to be no less than One and 25/100 Dollars ($ 1.25) per long ton of the minerals produced from Lease 110259.

Finally, by providing 60 days' notice the Commissioner may elect to take the production royalty in kind.

Payments and notices are due to the office of the Commissioner located in the General Land Office, State or State of Texas, 1700 North Congress, Austin, Texas (78701), Attention: Petroleum & Minerals Division.

As of the Effective Date of this report, RGMC has not commenced commercial production from the Lease 110259.

NOTE #2 THE 18 ACRE GRANT

By a Deed dated January 28, 1985 (257 DR 42), Gold Fields granted the State of Texas 10 parcels of land totaling 18.1953 acres for highway realignment purposes. Of the 18.1953 acres conveyed to the State of Texas 7.55 acres are on Section 327, and 0.11 acres are on Section 9, and 10.52 acres within Section 10, Block 23.

The Shafter resource does extend beneath the highway in Section 327, where three separate areas of the 18-acre grant totalling 6.23 acres are located immediately north of the Shafter resource area and 1.32 acres are situated a half a mile southwest of the Shafter resource area. Gold Fields did not own the mineral rights for the portion of the 18-acre grant falling within Section 327 at the time (1985) they signed the deed with the State. The Section 327 mineral rights were later acquired by RGMC when it completed the option payments to the underlying owners and title was conveyed to RGMC. As a result RGMC does have mineral title on those portions of the 18-acre grant located on Section 327.

RGMC does not own mineral rights beneath the 18-acre grant where it sits on Sections 9 and 10, other than for oil, gas, and sulfur.

NOTE #3 SHUT-IN ROYALTY

If RGMC (Lessee) first commences mineral production from the lands situated beneath D-1094/L-1094, and subsequently elects to suspend production from that same area on account of the lack of a suitable market for the minerals or other unsatisfactory market conditions, a "shut-in royalty" must be paid in the amount is 1I6th of $5,000 per annum. The first such payment is to be made within 90 days after Lessee ceases to produce. Thereafter production shall be deemed to be made in paying quantities, and such shut-in royalty payment shall extend the term of the lease for a period of one year from the first day of the next month succeeding the month in which the mine was shut-in and production ceased; and thereafter, if no suitable market for such mineral exists. The Lessee may extend the lease for four additional successive periods of one year each by the payment of a like sum of money (1I6th of $5,000), as provided. The Lessee is not relieved of the obligation to proceed with the reasonable development of the leased land and to make annual payments as required. In the event that the Lessee is conducting mining operations on or within the leased property in conjunction with mining operations on or within adjacent or other land, the leased property shall not be considered to be shut-in unless operations on the adjacent or other lands are ceased and also shut-in.

Figure 4.2 Aurcana's Property Position at the Shafter Project
(From Aurcana Corp., 2015)

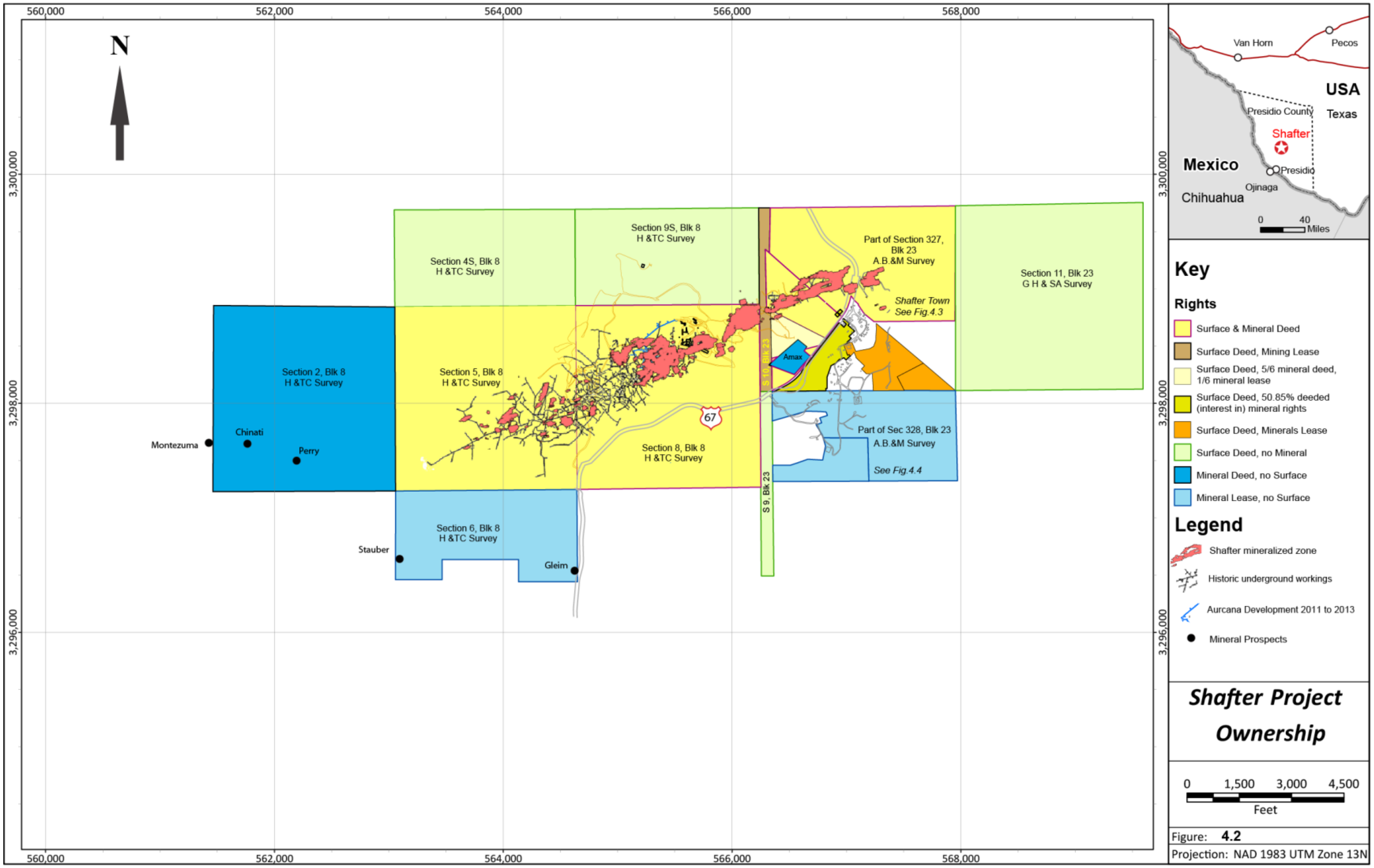


Figure 4.3 Detail of Part of Section 327 of Shafter Property Map
(From Aurcana Corp., 2014)

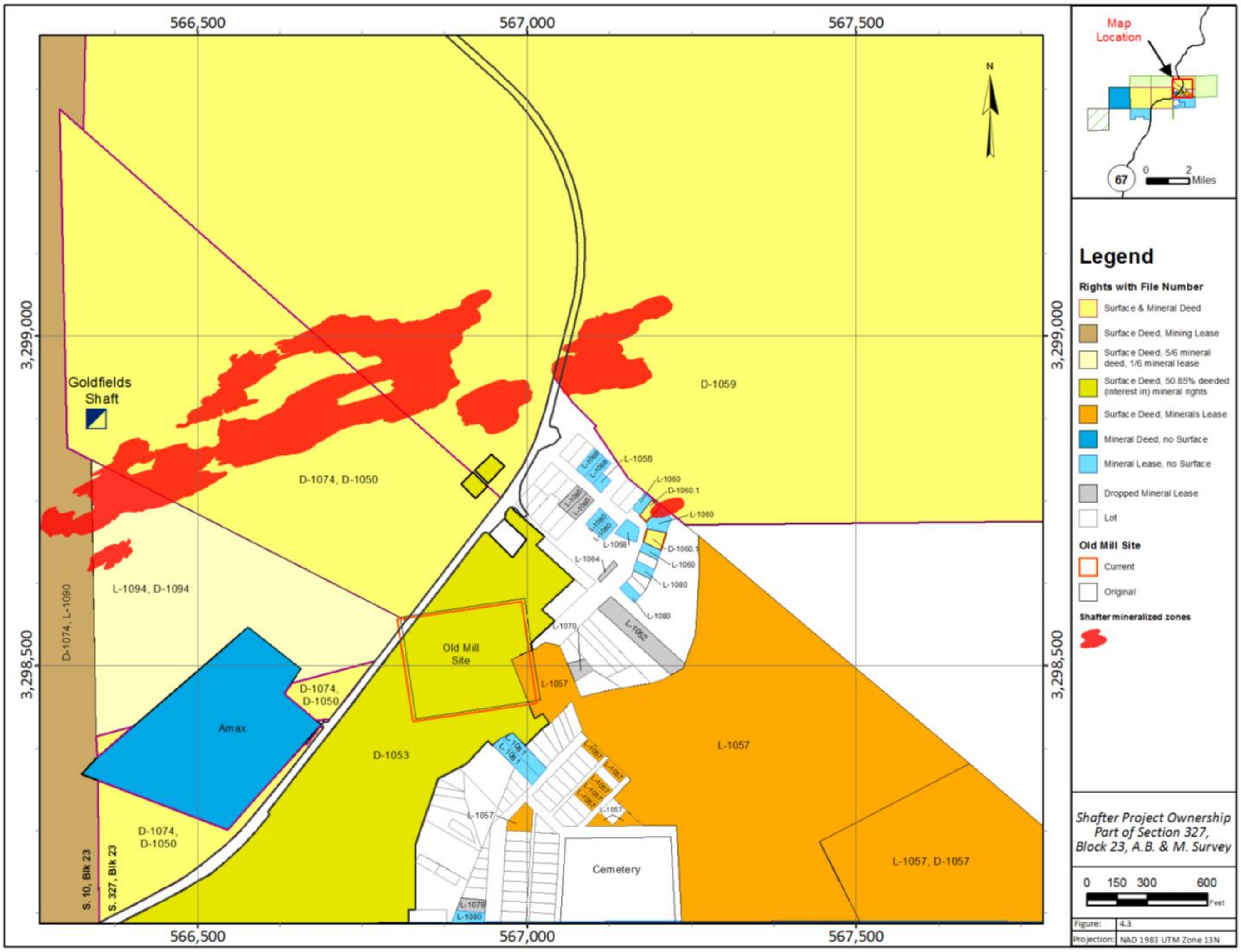
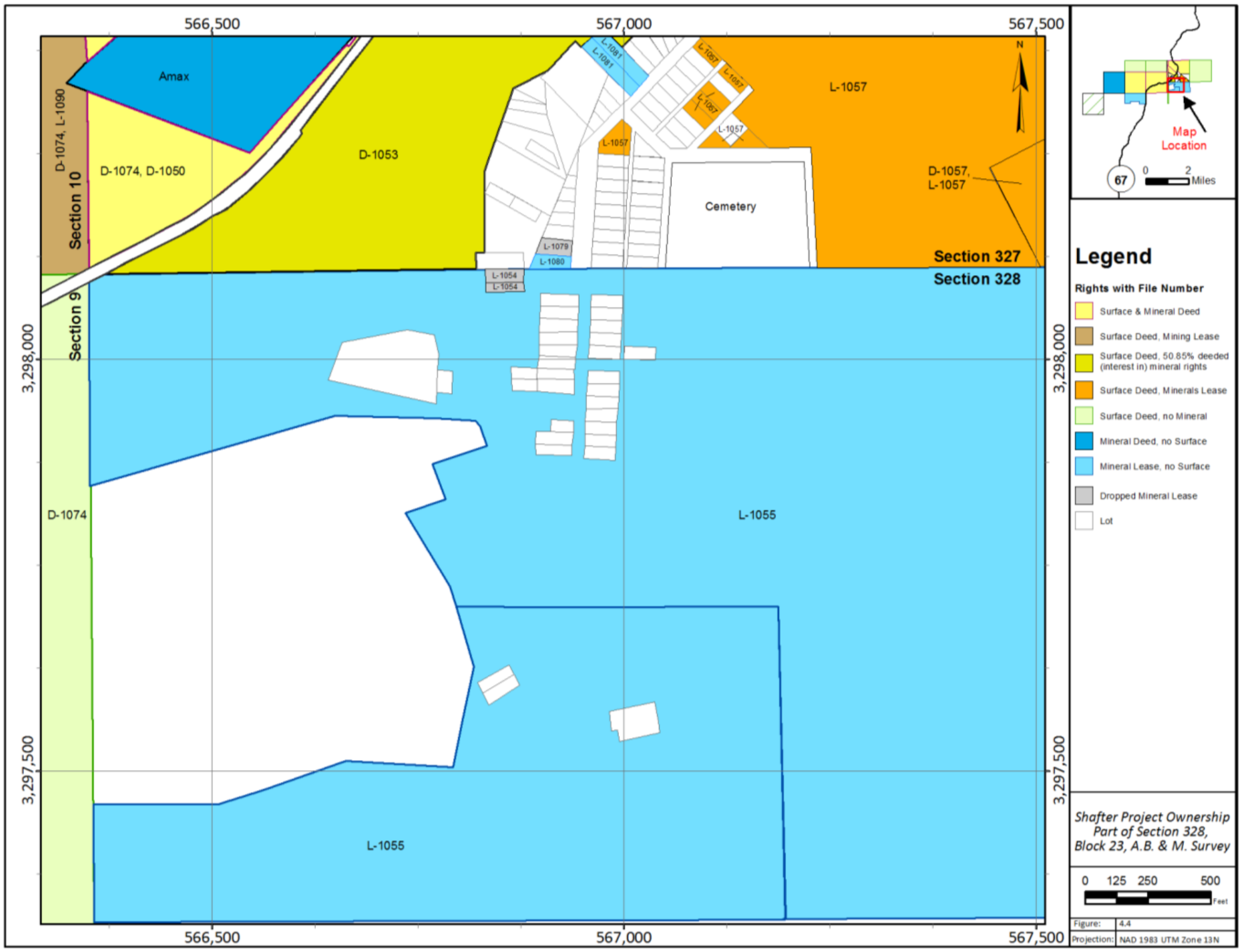


Figure 4.4 Detail of Part of Section 328 of Shafter Property Map
(From Aurcana Corp., 2014)



4.4 Environmental Liabilities

The information in this subsection has been supplied by employees of Rio Grande Mining Company, as well as their environmental and reclamation consultants.

Private land in Texas is exempt from many typical legislated reclamation measures providing that any long-term impact remains on the property. At Shafter, the intention is to leave the site self-sustaining and stable and to meet all requirements of the regulatory agencies. The production decline and all shafts will be covered with reinforced concrete caps, mobile equipment removed, and unnecessary buildings dismantled with materials to be sold or reclaimed. The tailings will be covered and reclaimed, the evaporation pond dried, and materials removed and reclaimed. Based on a March 2014 report on closure and reclamation at Shafter (Bokich, 2014), the cost of site reclamation is estimated to be approximately $600,000.

At this time, no financial security or bond is required by the state to secure a compliant, long-term closure of Shafter. Federal and state laws and regulations are continually changing, and the operator at Shafter should anticipate continuing expenditures to remain in compliance, the cost of which cannot be predicted at this time.

4.5 Environmental Permitting

The information in this subsection has been supplied by employees of Rio Grande Mining Company, as well as their environmental and reclamation consultants.

Permitting for the Shafter project is regulated by state (Texas) and local (Presidio County) agencies. Federal agencies have only limited purview. The principal permitting authority is the Texas Commission on Environmental Quality ("TCEQ"). All mining and exploration activities are located on privately owned lands upon which most Federal government agencies have limited jurisdiction, excepting the U.S. Army Corps of Engineers ("COE") and the Environmental Protection Agency ("EPA").

State agencies include the Texas General Land Office, TCEQ, Texas Health Department, Texas Historical Commission, Texas Parks and Wildlife, and Texas Department of Transportation. Local agencies include the County of Presidio and the Presidio County Underground Water Conservation District.

As a result of the development and exploration activities conducted by Aurcana between 2010 and 2013, most necessary permits are current and in good standing. Any permits necessary to operate are current as of April 30, 2014, and where permits need to be modified to reflect the project's current status and configuration, renewals or amendments have been filed. Approximately 45 permits and operating plans are required to permit mining operations at Shafter, plus numerous supporting studies. Important permits and management plans required by regulatory authorities are listed in Table 4.2.

Table 4.2 Important Permits and Management Plans Required at Shafter

Permit	Issuer	Status
Air Permit	TCEQ	Current
Industrial Waste Water Discharge Permit	TCEQ/Presidio Co.	Renewal with amendment
Potable Water System Permit	TCEQ/Presidio Co.	Current
Subsurface Excavation Exemption	TCEQ	Exempt
404 Permit	COE	Current
Storm Water Pollution Prevention Plan	TCEQ	Current
Plant Bleed Water Management Plan	TCEQ	Current
On-Site Septic Facility Permit	Presidio Co	Current
Above-ground Storage Tank Permit	TCEQ	Current
Spill Prevention Control & Countermeasures Plan	TCEQ	Current
Industrial Solid Waste Management Plan	TCEQ	Current
Exploration Permit	Tx General Land	Current

The Air Permit is issued by the TCEQ. The site is not located within a "problem" air quality attainment area. However, since it is located along an access route into a national park and several state parks, it is susceptible to public and regulatory scrutiny.

The Industrial Wastewater Discharge Permit expired on September 1, 2013 and is currently being renewed and revised. Any dewatering activities at the project are conducted under a state-approved discharge permit known as a Texas Pollutant Discharge Elimination System that allows for the direct discharge of wastewater into natural water-courses. Any wastewater is derived from perched water within rock strata and both natural and man-made voids (karsts and historic underground activities). Water will be pumped to the surface, where it will be treated in a sequence of sumps designed to settle any solids in the water. The expired wastewater discharge permit dictated that the water will then be transported via pipe and discharged to a designated outfall area, where it passes to a drainage ditch, and then to Arroyo del Muerto. The arroyo is typically dry, with only occasional rain water runoff.

The 404 Permit is issued by the U.S. Army Corps of Engineers, which has published nationwide permits pursuant to Section 404 of the Clean Water Act (33 CFR §330). The Nationwide Permit No. 26 authorizes discharge of dredged or fill materials into headwaters and isolated waters of the United States. In April 2014, after the Shafter project was put on care and maintenance status in December 2013, the entire area including the tailings area was bermed to control runoff. The tailings were not capped, pending decisions on future activity. RGMC estimates that they have only utilized 6% of their allowed tailings storage area.

The plant bleed water is managed through the state-approved Plant Bleed Water Management Plan. Excess barren leaching solution (known as "plant bleed water") is discharged to a waste-management unit (surface impoundment) known as the Bleed Water Pond. The solution is stored in the pond and re-used in the plant. The fluid is routed to and from the plant through double-lined, high-density polyethylene pipe lines. The Bleed Water Pond was designed and completed as a Class 1 pond. Storm water is routed around the impoundment. The pond is secured behind a high fence. The surface of the liquid in the pond is covered with 4-inch bird-balls to deter wildlife.

The pond is required through the operational life of the Shafter project. Following completion of any mining activities, the pond will be closed by removal and off-site disposal of residual water/sludge and the primary impoundment liner in accordance with state regulations.

The Spill Prevention Control and Countermeasures ("SPCC") Plan addresses requirements in accordance with Title 40 Code of Federal Regulations (CFR) §112.1, §112.3, §112.7. In addition, the plan also addresses state requirements for spill response and reporting under Chapter 26, Section 26.039 of the Texas Water Code; Chapter 327, Title 30, Texas Administrative Code; Preparedness and Prevention under Subpart C of 40 CFR §265; and Contingency Plan and Emergency Procedures under Subpart D of 40 CFR §265. The purpose of the SPCC Plan is to assist personnel with measures for preventing oil spills. In addition, the SPCC Plan addresses spill response, reporting, emergency preparedness and prevention, and contingency plan requirements under 40 CFR §265, Subparts C and D, that are associated with its operations involving hazardous waste and hazardous materials management.

The Solid Waste Management Unit ("SWMU"), managed under the Industrial Solid Waste Management Plan, provides for permanent storage of tailings on the mine-owned property. Operation of the mineral recovery system will generate "tailing sands" that will be disposed of on site. Cyanide levels in tailings will be reduced to less than 20 ppm with the moisture content being less than 18%. These conditions are obtained by filter-washing prior to leaving the plant. This is a dry-stack tailings process, in which tailings are filter pressed to get down to 18% water content. The tailings are hauled by truck from the process plant to the SWMU, and a bulldozer is used to spread and shape the SWMU to reduce erosion. Storm water is routed around the SWMU. The SWMU is designed to operate in a manner that facilitates protection to the environment at the end of the mine life. Storm water controls are designed to remain in place and function post-closure.

Tailings are to be capped with three feet of alluvium. At closure, the remaining active portion will be capped with an average of three feet of alluvium and seeded with a mix recommended by the Natural Resources Conservation Service. Utilization of native material for capping will promote growth of vegetation that results from the dry seeding and facilitate natural colonization of the area from the surrounding biotic communities.

Waste rock from mining activities is disposed both on surface and underground. Samples from tailing solids were analyzed for toxicity characteristic leachate potential, acid-base-accounting parameters, paste pH, and forms of sulfur. Results indicated there would be no acid produced by the waste tailing material and that it appears the waste material would not yield mobile metals constituents (Gault Group, LLC., 2010).

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY

5.1 Access to Property

The Shafter project is located in southwest Texas, approximately 20 miles via US highway 67 north of the Mexican border and the town of Presidio. Access to the property from El Paso, Texas is east via Interstate 10 to Van Horn (118 miles), then southeast via US highway 90 to Marfa (78 miles), then south-southwest via US highway 67 to the town of Shafter (40 miles). Most of the property lies west of Shafter and can be accessed by dirt roads from highway 67.

The closest major airport is at El Paso, which is about 3.5 hours' drive from the property.

5.2 Climate

The following information is taken from Burgess (2011) unless otherwise indicated.

The climate at the Shafter project is cool and dry during the winter and very hot and dry during the summer. Average annual precipitation is about 12 inches, with most of the rainfall occurring during thunderstorms during July, August, and September. High temperatures in the region range from 85° to 95°F in mid-summer, depending on elevation, to about 100°F in Presidio on the Rio Grande. Mid-winter low temperatures range from 27°F to 32°F. The average annual minimum temperature at Presidio is 55°, and the average annual maximum temperature is 87° (Aurcana Corp., written communication, 2014). Table 5.1 shows the precipitation and evaporation rates for the Shafter area.

Mining and exploration can be conducted year round.

Table 5.1 Precipitation and Evaporation near Shafter
(Data from the Texas Water Development Board as cited by Burgess, 2011)

Evaporation Rates Near Shafter Mine, inches/yr			
	Evaporation	Precipitation	Net Evap
	Mean	Mean	Mean
January	2.5	0.883	1.62
February	3.07	0.781	2.29
March	4.77	0.557	4.21
April	5.93	0.110	5.82
May	6.16	1.250	4.91
June	6.88	1.573	5.31
July	6.36	1.857	4.50
August	5.44	1.073	4.37
September	4.59	2.983	1.61
October	4.12	0.707	3.41
November	3.13	0.197	2.93
December	2.64	0.417	2.22
Total - inches/yr	55.590	12.387	43.20
Total - feet/yr			3.600

5.3 Physiography

The Shafter project area is located on the southern side of the Chinati Mountains in rugged, high-desert terrain, on the slopes above the Rio Grande valley to the south. Cibolo Creek is the major perennial stream in the area, which joins the Rio Grande at Presidio. Elevations range from 3,800ft at the town of Shafter, on Cibolo Creek, to 4,200ft at the western end of the property.

Vegetation in this rugged, high-desert terrain is mainly cactus and succulents.

5.4 Local Resources and Infrastructure

The Shafter project is within Presidio County, within which the principal towns are Marfa and Presidio. Marfa (population 1,800) is a local administrative center that relies on arts and culture, ranching, and tourism. Southeast of Marfa to Terlingua are several bentonite mines and numerous abandoned mercury and fluorite mines. Presidio (population 4,100) is an important administrative center for US Border Patrols, agriculture, ranching, tourism, and transportation. It is located across the Rio Grande River from Ojinaga (population 23,000), Chihuahua, Mexico. Presidio County is sparsely populated (2.03 people/square mile), predominately of Hispanic ethnicity and in 2013 had a per capita income of US$34,222 and a 12% unemployment rate (http://www.txcip.org/tac/census/profile.php?FIPS=48377).

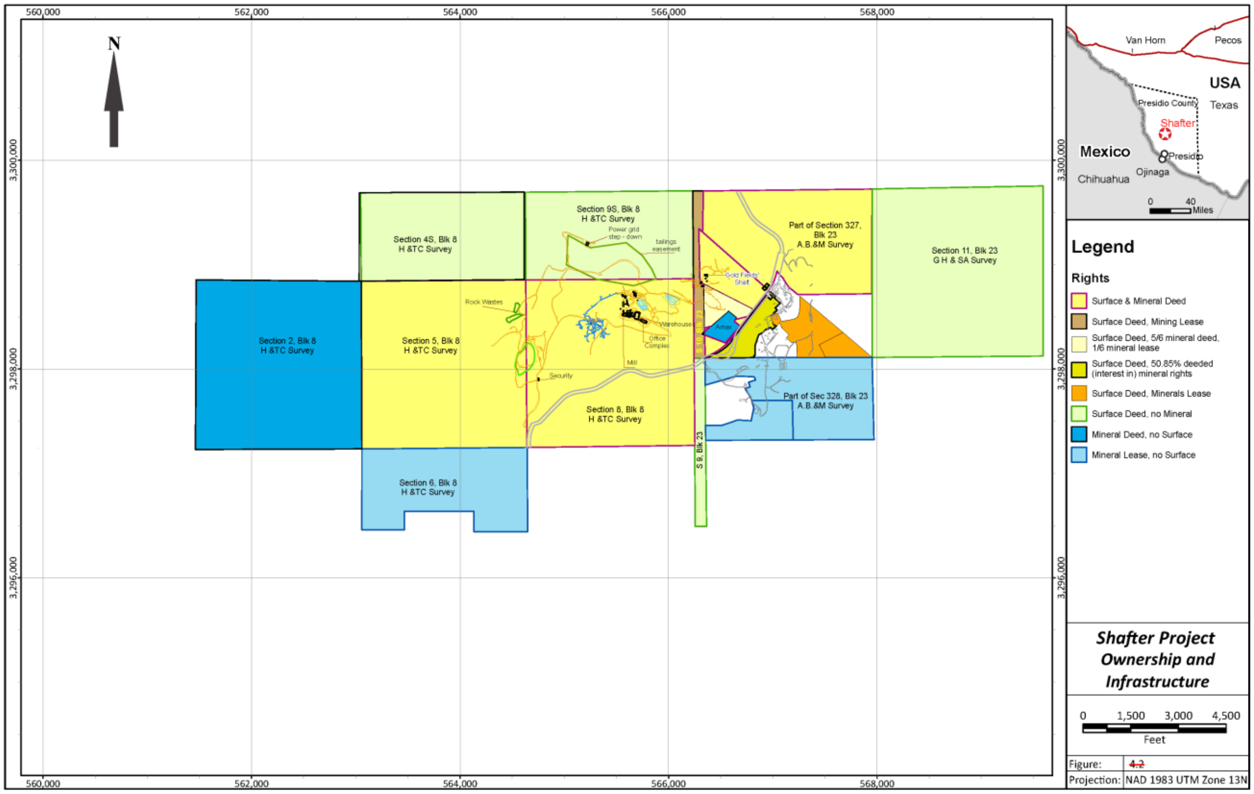
The town of Shafter itself is mostly abandoned and in ruins. The population is less than 20. There are no schools or shops at Shafter and municipal services, provided by Presidio County, are limited.

During recent (2010 through 2013) development activities at Shafter employees resided in either Presidio, Marfa or Alpine and commuted to the site daily. Despite numerous industrial mineral operations in the region, trained underground miners and mill operators were mostly sourced from outside, particularly Nevada, New Mexico, Canada, and Chihuahua.

Access into the project site is by gravel road, the turn-off for which is 5,900 feet south of what remains of the original Shafter town site. Two security gates control road access, land is fenced and access to underground is sealed.

The project is located on private land (see Figure 5.1) and project infrastructure is well-situated within its property holding.

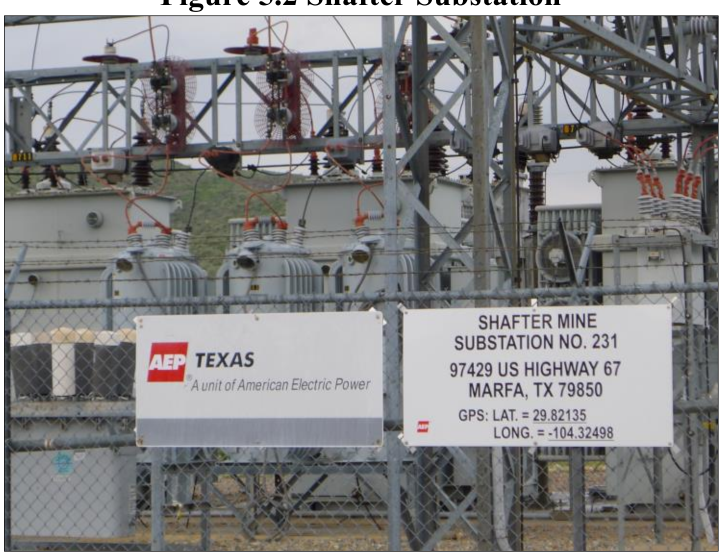
Figure 5.1 Shafter Project Site
(From Aurcana, 2015)



Water is obtained from wells, some of which is apportioned to residents of Shafter.

American Electric Power ("AEP") generates and transmits electricity in the region. The site is served by a 69 kV power line connected to a substation located on site (see Figure 5.2).

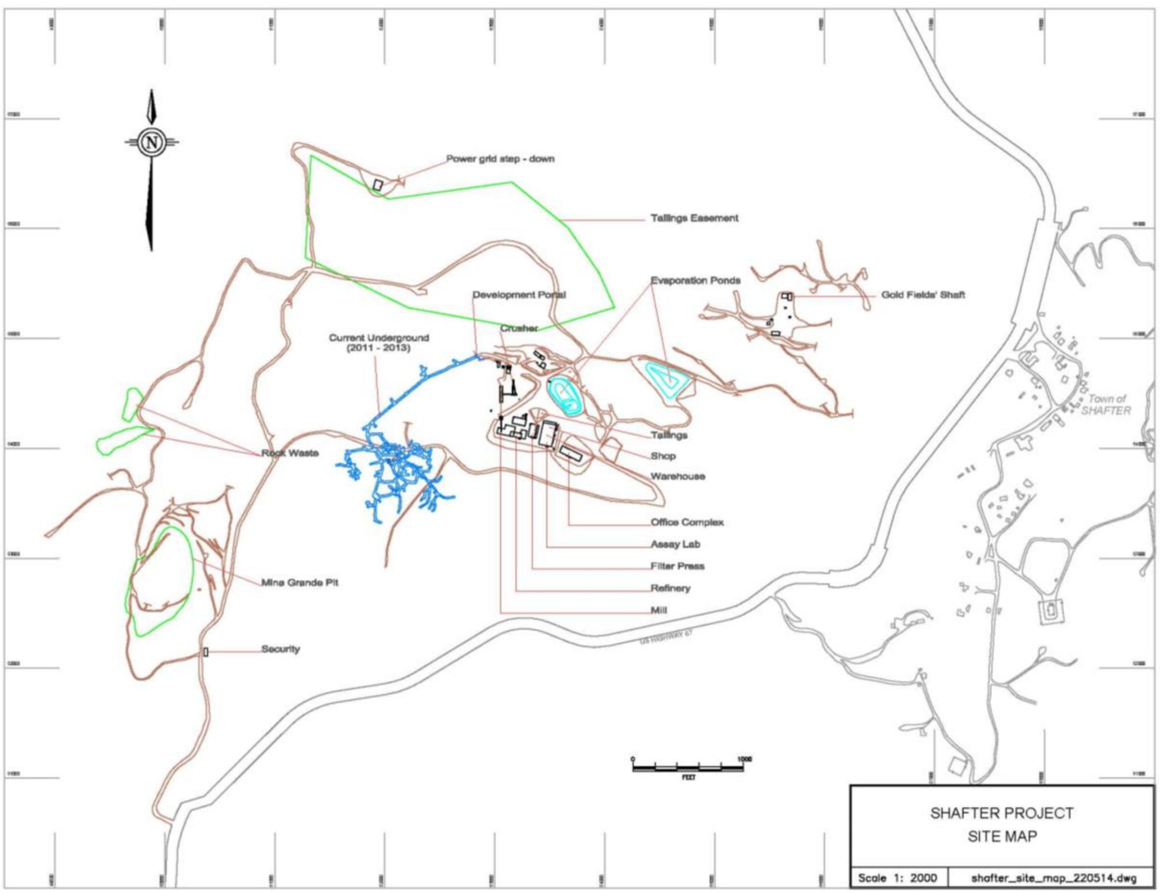
Figure 5.2 Shafter Substation



Gold Fields Mining Corporation built a 7ft-diameter exploration and production shaft and a separate rescue-ventilation shaft, two hoists, and shop buildings at Shafter (Balfour Holdings, Inc., 2000; Burgess, 2011). In addition, there is an air compressor and mine pumps at the site. In 2003, Silver Standard relocated a 900 TPD mill to the site.

Aurcana began detailed engineering studies in mid-2010 and the mine portal was excavated in August 2011. Construction of the mill, refinery, warehousing and administrative buildings was essentially complete by December 2012. The buildings at size are functional and adequate for near-term needs. The entire warehouse complex totals 24,000 square feet with the main components (see Figure 5.3) including a 6000 square-foot maintenance shop, 12,000 square feet of dry warehousing, a 6,000 square-foot assay laboratory, a 10,560 square-foot administration building, a 1,470 square-foot mill process unit, 1,470 square feet dedicated to mill offices, and a 2,691 square-foot Merrill-Crowe plant and refinery.

Figure 5.3 Infrastructure at the Shafter Project Site
(From Aurcana, 2015)



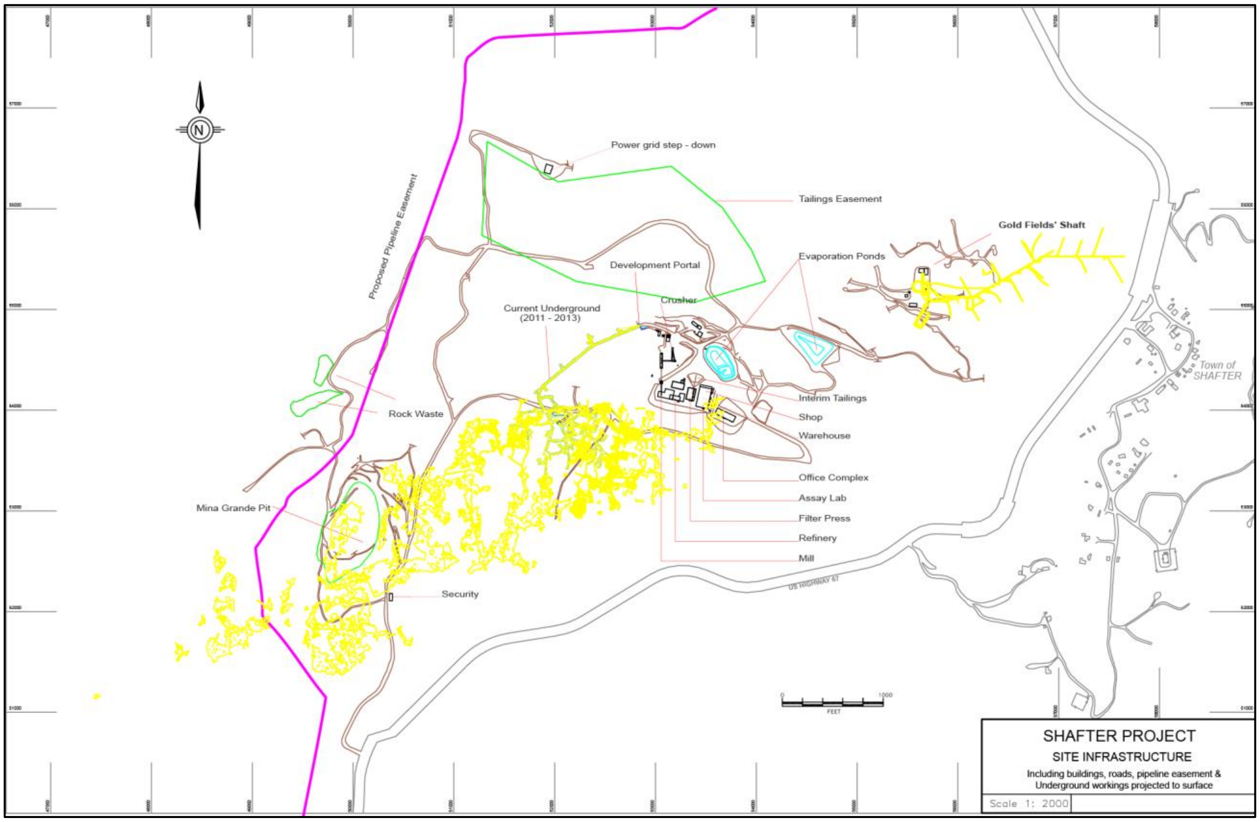
The in-mine cummunications, safety and rescue equipment, and geology-engineering offices are intact and the core storage facilities are fenced-in and secure. Underground entrances having been secured and ventillation has been pulled to surface. The area of the Company's recent underground advance is dry and in no danger of flooding.

The underground access ramp was collared in April 2011 and was steadily advancing by August 2011. In the 14 months to October 2013, the ramp had extended a distance of 3,800 feet. Stopes and raises were developed in eight areas, with over 4,100 feet of mining development (821,000 ft^3). Development work during this period found the historic resource models were unreliable at predicting grades in the lower portions of the Presidio Mine segment, the initial objective of the new ramp, and that many unexpected pre-WW II workings were being encountered. The project was placed on care and maintenance in December 2013.

During 2014 and early 2015, much of the mobile underground mining and service equipment was sold and removed from the site. A transaction is pending (December 2015) that will see some of the mill circuit, silver-recovery equipment and the tailings filter presses sold. Much of this equipment was over-built and it is anticipated that if and when Shafter re-starts it will be scaled back from the earlier 1,500 TPD operation to something closer to 500 TPD. Thus any re-start will require a replacement crusher, ball mill, tailings filter press and leachate press.

During 2015 the Company was approached by representatives of Trans Pecos Pipeline LLC who intend to build a 42-inch pipeline from the Permian Basin of west-central Texas to Presidio, Texas, for delivery in to customers in Chihuahua, Mexico. The proposed route of the pipeline passes through the Shafter property. The Company is currently in discussions with representatives of Trans Pecos concerning safety, the near and long-term impacts of the pipeline on Shafter, and the details of the location of the pipeline easement itself. As currently surveyed (Figure 5.4), the proposed route should not materially impact any resumption of near-term mining activities.

Figure 5.4 Proposed Gas Pipeline at Shafter Project Site
(From Aurcana, 2015)



6.0 HISTORY

6.1 Exploration and Mining History

The following information has been taken from Ross (1943), Kastelic (1983), Rio Grande Mining Co. (1998a, 1998b), Rossi and Springett (1995), Rozelle (2001), Rozelle and Tschabrun (2008), Balfour Holdings, Inc. (2000, including parts of a report by Pincock, Allen & Holt dated 2000b), and Smith (2011), with additional information as cited.

It is thought that some old workings in the Shafter district may date back to early prospecting by Spanish explorers. Post-colonial mining in the Chinati Mountains began about 1860, when rancher John Spencer freighted several cartloads of silver ore to Mexico for smelting (Smith, 2011). The mineralized areas in the Shafter district were first discovered in 1880 or 1881 by Spencer or his Mexican workers. Spencer interested a group of U.S. Army officers stationed at Fort Davis in his discoveries, including Capt. (and later General) William R. Shafter. The first official mining company was the Presidio Mining Company, organized by these officers and others in 1881. Mining of the only exposed mineralized rock at the Mina Grande open pit began in 1883 but was not profitable until 1888. Mining continued underground at what became known as the Presidio mine and was continuous until 1913, with grades of 20 to 30oz Ag/ton as estimated from annual mine output, which averaged about 20,000 tons per year from 1898 to 1913. The mercury-based pan-amalgamation mill had 82% recovery. Mining methods were updated, and a cyanide mill was built in 1913. Mine output increased to more than 84,000 tons per year through to 1926, but grade decreased to about 10oz Ag/ton. From 1913 to 1926, total recorded production from Shafter was 1,150,000 tons grading 17oz Ag/ton for a total of 19,550,000 ounces of silver (Pincock, Allen & Holt, 2000b, included in part as an appendix in Balfour Holdings, Inc., 2000).

The American Metal Company of Texas acquired the Shafter property in 1926 and subsequently merged with Climax Molybdenum Company to form American Metal Climax, Inc. ("Amax"); throughout the rest of this report, "Amax" will be used to refer to American Metal Co. as well as American Metal Climax, Inc. Amax conducted both surface and underground drilling; the database used for the estimate described in this technical report includes 1,048 Amax drill holes totaling 178,634 feet. Amax's annual production from the Presidio mine decreased to 50,000 tons, but at a grade of over 20oz Ag/ton from 1927 to 1929. Much of Amax's and also Presidio's earlier production was based on processing hand-cobbed, sorted ore.

Production continued through 1940, except for a period in 1930 to 1934 when the price of silver decreased. When operations resumed in 1934, the facilities were expanded to a capacity of milling approximately 140,000 tons per year. An average grade of nearly 20oz Ag/ton was maintained at first, but the grade declined with an increase in the mined tonnage. In the final full year of production, the mine produced 140,503 tons at an average grade of 9.39oz Ag/ton. The mine was closed in August 1942 due to the War Production Board Limitation Order L-208, and at that time the mill feed grades had dropped to an average of 8.5oz Ag/ton. Upon closure in 1942, the rails and hand carts were pulled and shipped for scrap metal as part of the war effort. Smith (2011) cited the apparent decline of the deposit's silver grade, diminished reserves, water flooding in the lower levels, and a wartime shortage of miners as other reasons for closure. Kastelic (1983) reported that the Presidio mine was dry to the 950 level, but after the operations ceased, the workings were flooded back to the 850 level. From 1926 to 1942, Amax mined 1,156,800 tons of material grading 13.49oz Ag/ton and containing 15.6 million ounces of silver, of which they recovered 13.57 million ounces of silver, 5,982 ounces of gold, and 4, 195 tons of lead. This implies a silver recovery rate of 87% (Pincock, Allen & Holt, 2000b, included in part as an appendix in Balfour Holdings, Inc., 2000).

Total recorded production from the Presidio mine from 1883 to 1942 was 2,306,800 tons of ore containing 35,153,466 ounces of silver, for an average grade of 15.2oz Ag/ton. Recovery from the mill was 82% from 1883 to about 1912, increasing to 84% until about 1926, when it increased again to 90%, until the mine closed in 1930. When the mine reopened in 1934, recovery from the mill was 85% until the mine closed in 1942 (Balfour Holdings, Inc., 2000). By 1942, the Presidio mine had been developed to the 900 level.

Elsewhere in the Shafter district about 14 smaller lead-silver ± zinc and gold mines and prospects operated west of the Presidio mine from about 1890 to the 1930s. The Stauber and Gleim mines appear to be on Aurcana's property in Section 6, southwest of the Presidio mine. The Perry and Chinati mines are also within Aurcana's property, in Section 2, west of the Presidio mine.

In 1946, M. F. Drunzer leased the Presidio mine and mined ore from the supporting pillars until 1947. Drunzer shipped more than 2,000 tons of material containing one ounce of gold, 1,056 pounds of copper, 29,368 pounds of lead, and 41,300 ounces of silver in 1946, followed by 13 carloads of silver-lead ore in 1947 (Smith, 2011).

The district was quiet until Phelps Dodge commenced evaluation of the Red Hills intrusion, five miles west of the Presidio mine, when copper prices increased in the 1950s. In the 1970s, Duval Corporation ("Duval") drilled approximately 80 holes into the Red Hills intrusion and outlined a copper-molybdenum porphyry zone. Duval also undertook a regional exploration program involving geochemical and geophysical surveys to search for other mineralized zones (Rozelle and Tschabrun, 2008).

Teton Exploration Drilling Company drilled about seven rotary holes near the Presidio mine in the early 1970s, hoping to find silver-lead-zinc mineralization west and south of the old workings along the Mina Grande fault. Although they intersected silver-lead-zinc mineralization in some of their holes, especially near old workings, the results were generally inconclusive (Kastelic, 1983). They abandoned the project in 1974.

Osceola Metals Corporation drilled eight air-hammer holes totaling 6,000 feet about 3,000 feet west-southwest of the Presidio mine, but not on property currently controlled by Aurcana, in 1970. Two of the eight holes intersected strong lead-zinc mineralization with weak silver and gold, generally as fracture/vein-related mineralization in Cretaceous sedimentary rocks (Kastelic, 1983).

Gold Fields Mining Corporation ("Gold Fields") (then called Azcon Corporation's Mining and Exploration Division, a subsidiary of Consolidated Gold Fields Ltd.) acquired the Shafter property in 1977 from Amax. From 1977 to 1983, Gold Fields spent over $20 million on exploration and development work in the Shafter silver district that included surface and underground mapping, sampling, and drilling, as well as extensive metallurgical test work. They drilled 355 core holes totaling 307,925 feet from October 1977 to April 1983 (Kastelic, 1983); MDA notes that the 2013 database contains a total of 403 surface and underground core holes attributed to Gold Fields, totaling 218,855 feet but cannot account for the difference. About 30 of these holes were drilled on the regional trend extending from the Presidio mine four miles west to the Red Hills. Through a systematic surface-drilling program, Gold Fields identified the northeastern, down-dip extension of the Shafter deposit, extending the deposit more than 5,000 feet from the lowest development work in the Presidio mine. (The name "Shafter deposit" as used in this report refers to the entire deposit, of which part was previously mined at the old Presidio mine.) Gold Fields sank two 1,000-foot deep shafts, conducted 5,100 feet of underground drifting, performed 9,510 feet of underground core and 1,346 feet of underground percussion drilling, and mined 8,000 tons of material for metallurgical testing to confirm tonnages and grades (Rossi and Springett, 1995; Pincock, Allen & Holt, 2000b). MDA notes that the database contains 7,719 feet of underground core drilling done by Gold Fields, but no percussion drilling data. Gold Fields reported that a comparison between the results of detailed underground sampling and diamond drilling from the surface indicated that the actual silver grade may be as much as 10% higher than the grade determined by surface drilling (Gold Fields, 1982). A second source (Balfour Holdings, Inc., 2000) indicates that Gold Fields' underground work in Block I (see Figure 6.1) found silver grades to be 15% higher than what had been indicated by surface drilling in the same area. It is unclear whether Balfour Holdings, Inc. (2000) references the same comparative study as Gold Fields (1982).

Gold Fields conducted extensive geophysical work in an attempt to acquire a geophysical signature of the deposit that could be used to generate additional targets (Kastelic, 1983). Audio-magneto tellurics ("AMT") gave a distinct anomaly, but other methods failed to detect the Shafter deposit. Gravity surveying identified an east-trending ridge, generally coincident with the deposit, which probably represented a deep-seated feature, such as a lineament, or a relic Permian-age shoreline. Induced polarization and dipole-dipole resistivity surveying failed to show anomalies over the Shafter deposit, probably due to strong oxidation of the mineralization. Ground magnetometer surveys located dikes but did not detect the deposit. Two seismic reflection lines were run over the deposit, but results were ambiguous because shot-holes were not deep enough to impart sufficient energy into the ground. A deep-level gradient-array resistivity survey was conducted in early 1981, which showed an anomaly coincident with the erosional edge of the Mina Grande Formation, but poor results were obtained from several holes drilled on other anomalies. An AMT survey initiated in January 1983 produced an anomaly that was generally coincident with the Shafter silver deposit, and subsequent surveys were conducted over large tracts of Duval and Gold Fields land in the Red Hills area. Six north-south lines were run across Sections 33, 34, 186, 187, and 2. Several of the additional anomalies were drilled, but no mineralization similar to that in the Shafter deposit was intersected.

Gold Fields also carried out detailed mapping and soil-grid, rock-chip, and fault sampling on the property. Surface geochemical sampling generally did not detect the Shafter deposit, probably due to its great depth from the surface (about 1,000 feet) (Kastelic, 1983). Limited large-scale mapping and sampling were carried out in specific areas of interest, such as the Montezuma prospect, which is located within the current property boundary, and the Sullivan mine, located outside the current property boundary. A photo-geological study of much of Presidio County was completed in 1981 and identified several structural and alteration features that were examined on the ground.

In addition to their work in the vicinity of the Presidio mine, from April 1980 to March 1983 Gold Fields conducted regional mapping, soil sampling, and drilling between Shafter and the Sullivan mine, located about 5.25 miles west of the Presidio mine. This work identified scattered occurrences of silver, zinc, and gold mineralization within the Shafter district and was part of a joint venture with Duval, with Gold Fields as the operator. The joint venture obtained two north-trending gravity profiles – one over the Red Hills stock and one just west of Section 34 – in October 1982 in an attempt to define the lateral limits of the Red Hills stock under Quaternary gravels (Naylor, 1982). The joint venture also engaged EM Technology, of Boulder, Colorado, to conduct controlled-source AMT surveys in the Shafter and Red Hills areas in early 1983, whose results are described above (Helming, 1983; Knox, 1983). Although Gold Fields stopped work on the Shafter deposit in April 1983 due to the collapse of silver prices, they held the property through most of 1994.

In October 1994, Rio Grande Mining Company ("RGMC"), then a partially-owned subsidiary of Belcor, Inc. acquired the Shafter project from Gold Fields. Belcor later changed its name in 1998 to Silver Assets, Inc. ("Silver Assets"). RGMC mapped and sampled the 40 and 80 levels of the old Presidio mine workings, sampled the stopes down to the 300 level, conducted additional drilling and sampling, and obtained all major permits necessary for commencement of operations by 2000 (Rozelle and Tschabrun, 2008; Rio Grande Mining Co., 1998a, 1998b). The drill-hole database used for the resource estimate described in this technical report includes 88 shallow reverse circulation ("RC") holes drilled in 1999 by RGMC over the near-surface mineralization above the Presidio workings. They reported that hundreds of Amax and Gold Fields sample results painted on the ribs and back of the old workings showed that many significant areas with 5 to 15oz Ag/ton remained in the old workings (Rio Grande Mining Co., 1998a).

Silver Assets increased its ownership in RGMC through a number of stock transactions in the late 1990'. Silver Assets was acquired by Silver Standard Resources Inc. ("Silver Standard") through stock purchases in 2000.

Aurcana purchased Silver Assets and thereby the Shafter property from Silver Standard in July 2008. Aurcana's exploration on the project is described in Section 9.0.

6.1.1 Mining by Aurcana Corporation

Aurcana re-entered the old Presidio mine through a new decline on June 1, 2012, and commercial production commenced from material adjacent to and between Amax's old stopes on December 14, 2012. In conjunction with its underground operations, Aurcana began open-pit mining of lower-grade material from the old Mina Grande pit at the Presidio mine on April 23, 2012. The open-pit mining was discontinued after the plant commissioning and testing phase were complete (Aurcana news releases, June 6, 2012; December 14, 2012). In addition to the mine and mill, Aurcana operated an on-site assay laboratory. Aurcana reported that from October 2012 through December 2013, mine production totaled 149,882 tons and mill feed from the mine totaled 109,599 tons. A total of 134,557 ounces of doré was poured. Due to a decline in silver prices, the unreliability of the historic resource model, and the unexpected presence of pre-WW II workings, production ceased, and the mine was put on care and maintenance in December 2013.

Aurcana's underground operation consisted of cut-and fill and room-and-pillar methods. The size of the development headings was reduced in 2013 from 15-foot x 15-foot to 12-foot x 12-ooft, cutting the size of a typical round from 216 tons to about 115 tons. At the time of MDA's site visit in April 2013, mining averaged over 400 tons per day of material averaging 5oz Ag/ton based on mine channel samples, and two stopes were available for production. Water was said to be present on or below the 600-foot level in the area Aurcana was mining and at the 770 level in the Gold Fields' shaft.

Ore stockpiled at the surface of the mine was transported by 30-ton haul trucks to the processing plant, where crushing, grinding, leaching, and smelting were conducted. Ore was crushed in two stages, using a jaw crusher and a cone crusher. Crushed ore was fed to the grinding circuit and ground in a ball mill. Ground ore was conveyed to the leach circuit to undergo cyanide leaching. Filter presses reclaimed the pregnant leach solution and filter cake, which were conveyed to a Merrill-Crowe precipitation circuit, where silver was precipitated by the addition of zinc dust. Precipitates were transferred to a smelter to separate silver from zinc.

6.2 Historic Mineral Resource Estimates

The Shafter deposit has been divided along its east-west trend into five exploration sectors; called blocks (see Figure 6.1). These blocks were defined by RGMC based on topography, the old Presidio workings, and the primary drill targets of Gold Fields (Balfour Holdings, Inc., 2000). Block I, farthest to the east, includes the Shafter deposit from 53,750 East to 59,000 East; it includes the underground development by Gold Fields but has had no previous production. Block II includes the Shafter deposit from 52,300 East to 53,750 East; it had a limited amount of production from the deepest workings of Amax's Presidio mine. Block III extends from 51,000 East to 52,300 East and includes extensive areas of production by Amax in the Presidio mine along with the 2013 and 2013 RGMC production. Block IV includes mineralized rock immediately east of the Mina Grande fault and extends from 49,600 East to 51,000 East; it was also mined extensively from Amax's Presidio mine. Block V, the westernmost block, extends from 45,500 East to 49,600 East and includes mineralized areas immediately west of the Mina Grande fault; this part of the deposit was mined to a limited degree by Amax.

Various historic mineral resource and reserve estimates are described in Section 6.2. Terminology shown in quotation marks is as described by the original authors and may not represent current classifications. A qualified person has not done sufficient work to classify the historic estimates described in this section as current mineral resources or mineral reserves, and Aurcana is not treating the historic estimates as current mineral resources or mineral reserves. These historic resource estimates should not be relied upon. These historic estimates are superseded by the current mineral resource estimate described in Section 14.0.

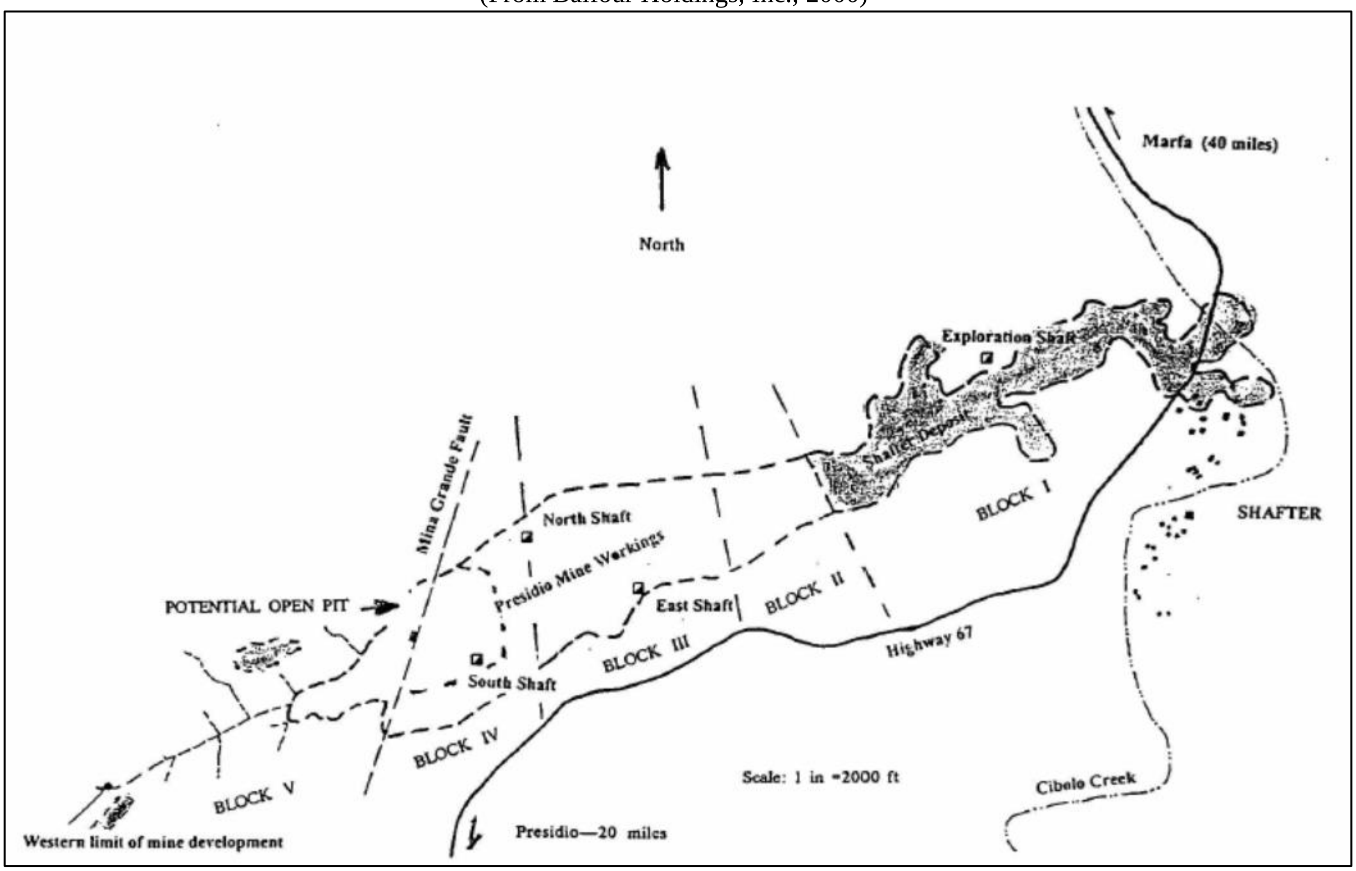
6.2.1 Gold Fields Mining Corp.

The following information is taken from an economic feasibility study conducted by Gold Fields in 1982 (Gold Fields Mining Corp., 1982), with additional information from Cracraft and Williams (1982) and Rossi and Springett (1995).

Gold Fields drilled the down-dip extension of the Shafter deposit from the surface and partially developed it with a shaft and underground workings in the late 1970s and early 1980s; the down-dip extension is shown as Blocks I and II on Figure 6.1. The first "ore reserve calculations" were made in 1979 using data from 44 surface core holes. Kriging was used for the estimate, and the results were compared with results derived from conventional polygonal analysis. This first estimate yielded "reserves" of 4.175 million tons at an average grade of 6.40oz Ag/ton (elsewhere in the Gold Fields report these "reserves" are said to total 4.275 million tons; MDA cannot reconcile this conflict).

Gold Fields completed an in-house economic feasibility study of the Shafter deposit in 1982. Based on this study, they reported a "geologic silver resource" of 4.47 million tons at an average grade of 6.32oz Ag/ton, for a total of approximately 28 million ounces of silver. Gold Fields estimated a "geologic ore reserve" of 4.49 million tons averaging 6.32oz Ag/ton using block kriging; a second estimate using the polygonal method yielded 4.08 million tons grading 6.03oz Ag/ton. The estimates were based on an 8-foot minimum mining height with a cutoff grade of 3oz Ag/ton. The "total ore reserve" based on block kriging was based on 52 surface core holes and was estimated by Gold Fields' Lakewood staff. The "reserve" based on the polygonal method used 57 surface core holes and was performed by the Shafter geological staff. The "geologic ore reserve" was diluted to a "mineable reserve" of 4.675 million tons at an average mill-head grade of 5.65oz Ag/ton, containing 26,406,409 ounces of silver. The 1982 "mineable reserve" included only the mineralization in the Shafter deposit discovered by Gold Fields and did not include an additional 1.2 million tons of "inferred ore" in unmined areas of the old Presidio mine. In 1982, the COMEX average silver price was $7.93 per ounce. Gold Fields used a tonnage factor of 11.65 cubic feet/ton to calculate their resource and reserve estimates (Rozelle and Tschabrun, 2008).

Figure 6.1 RGMC Block Locations for the Shafter Deposit
(From Balfour Holdings, Inc., 2000)



6.2.2 Rio Grande Mining Co. 1995

GeoSystems International, Inc. and Altamira Mining and Exploration LLC. prepared a "resource estimate" for the Shafter project in December 1995 (Rossi and Springett, 1995). Only Gold Fields' surface and underground drill-hole samples and some older Amax surface holes were used. Rossi and Springett (1995) noted that there were a significant number of sample intervals with poor recoveries, many of which correspond to higher-grade mineralization that is typically more friable than the rest. They developed a geologic block model of the Shafter deposit and used multiple indicator kriging to estimate the grade of the blocks. A polygonal technique was also used as a separate check on the grade estimates. The geologic model was based on envelopes drawn at a 3.0oz Ag/ton cutoff, using a minimum 6-foot thickness. The envelopes were developed on section and then wire-framed to create a three-dimensional volume of the mineralization. Mineralized blocks measured 50 by 20 by 6 feet. Contact dilution, internal dilution, and ore loss were not considered. At a cutoff of 3.0oz Ag/ton, they estimated "global *in situ* resources" of approximately 3.57 million tons with a grade of 6.36oz Ag/ton for approximately 22.7 million contained ounces of silver.

6.2.3 Rio Grande Mining Co. and Pincock, Allen & Holt 1998 and 1999

RGMC made several estimates of the Shafter silver deposit in 1998 and 1999 that are described by Balfour Holdings, Inc. (2000). The most recent "polygonal silver resources" estimated by RGMC as of 2000 are shown on Table 6.1, using cutoffs that can be compared to other historic estimates. This estimate (Table 6.1) assumed a 6-foot minimum height for underground mining and included Blocks I through V, which extended from east of Highway 67 to west of the Mina Grande fault (Figure 6.1). No date for this estimate in Table 6.1 is given by Balfour Holdings, Inc. except that it is more recent than the 1999 estimate that is described below and shown on Table 6.2. The polygonal dimensions used by Gold Fields in their 1982 "reserve" estimates were used by RGMC for the estimate in Table 6.1.

Table 6.1 Rio Grande Mining Co. Estimates of "Polygonal Silver Resources"
(Balfour Holdings, Inc., 2000)

Cutoff (oz Ag/ton)	"Drilled Resources"			"Diluted Resource"[1]		
	Tons (millions)	Silver oz/ton	Contained Silver (million ounces)	Tons (millions)	Silver oz/ton	Contained Silver (million ounces)
6	2.86	8.9	25.49	3.29	8.0	26.20
7	2.26	9.8	22.12	2.60	8.9	23.11

[1]15% dilution factor with 3.0oz Ag/ton material; 6ft minimum mining height.

RGMC had previously commissioned Pincock, Allen & Holt ("PAH") to digitize drilling and sampling data from Gold Fields, Amax, and RGMC, and to estimate a "resource." That estimate was apparently completed in 1999 and is shown in Table 6.2 (Balfour Holdings, Inc. (2000), including part of a report by Pincock, Allen & Holt (2000b) in the appendix). The 1999 PAH database contained 891 drill holes, totaling 262,473 feet of drilling, and 14,570 samples including Gold Fields' drill data and mine samples, the underground drill data from Amax, and data from RGMC's surface drilling and underground sampling programs.. Using the inverse distance cubed method to create a silver block model, PAH estimated the "geologic resource," which included "measured, indicated, and inferred confidence categories" shown in Table 6.2. The estimation did not provide for any dilutional effects of mining and was based on a density factor of 12.0 cubic feet/ton.

Table 6.2 1999 Pincock, Allen & Holt "Resource" Estimation
(Balfour Holdings, Inc., 2000)

Cutoff (oz Ag/ton)	Tons (millions)	Silver oz/ton	Contained Silver (million ounces)
6	2.76	13.2	36.26
7	2.16	15.0	32.43

Balfour Holdings, Inc. (2000) noted that the main differences between the 1999 estimates of PAH (Table 6.2) and the presumably later "drilled resources" estimate of RGMC (Table 6.1) were in Block I, which contained the largest portion of the mineralization and which was based on a drill-hole spacing of 200 feet. PAH did not assume continuity of mineralization between holes, but the polygonal method used by RGMC assumed continuity to the next hole along the strike of the deposit.

6.2.4 2001 Mineral Resource Estimate by Pincock, Allen & Holt for Silver Standard Resources Inc.

PAH prepared a technical report for Silver Standard in 2001 (Rozelle, 2001) that included a geologic resource estimate. Resources were estimated inside of a mineralized boundary that was developed using a 1.0oz Ag/ton limiting boundary and the drill-hole data. Individual model blocks were 25-foot by 25-foot in plan, with a block height of 3 feet. Underground stopes, drifts, and cross-cuts were incorporated into the model to account for material removed by previous underground mining. The resources were estimated using polygonal and inverse distance to the third power methods and were based on a density factor of 12.0 cubic feet/ton applied to all material. Table 6.3 shows the 2001 geologic resource estimate for the total of all five exploration blocks at cutoffs of 6.0 and 7.0oz Ag/ton.

Table 6.3 2001 Pincock, Allen & Holt Geologic Resource Estimation
(From Rozelle, 2001)

	Measured		Indicated		Measured + Indicated		Inferred	
Cutoff (oz Ag/ton)	Tons (thousands)	Ag oz/ton	Tons (thousands)	Ag oz/ton	Tons (thousands)	Ag oz/ton	Tons (thousands)	Ag oz/ton
6.0	503	11.26	1,061	11.76	1,564	11.60	1,191	15.20
7.0	388	12.68	788	13.60	1,176	13.30	986	17.03

MDA has not done sufficient work to classify these historic estimates as current mineral resources or mineral reserves, and Aurcana is not treating these historic estimates as current estimates. These historic resource estimates should not be relied upon. These historic estimates are superseded by the current mineral resource estimate described in Section 14.0.

6.3 Previous Mineral Resource and Reserve Estimates Prepared for Aurcana Corporation

The following mineral resource and reserve estimates were reported in previous technical reports prepared for Aurcana in 2008 and 2010. The reader is referred to the original reports for details. These estimates are superseded by the current mineral resource estimate described in Section 14.0.

6.3.1 2008 Mineral Resource Estimate by Tetra Tech Inc.

Tetra Tech Inc. ("Tetra Tech") prepared a mineral resource estimate of the Shafter deposit for Aurcana in 2008 (Rozelle and Tschabrun, 2008). The same qualified person, J.W. Rozelle, who had performed the 2001 estimate for Silver Standard (see Section 6.2.4) prepared the 2008 estimate for Aurcana. There had been no new drilling since the 2001 estimate. Following development of a computerized three-dimensional silver-grade model using the same modeling methods used in the 2001 estimate, silver grades were estimated using inverse distance to the third power and nearest-neighbor methods. The estimate included exploration Blocks I through V, described in Section 6.2.1. A density factor of 12.0 cubic feet/ton was applied to all material. The 2008 estimate is shown in Table 6.4.

Table 6.4 2008 Mineral Resource Estimate for the Shafter Deposit
(From Rozelle and Tschabrun, 2008)

Mineral Resource Summary for all Block Groups (Measured and Indicated)

Ag Cutoff Grade (opt)	Measured		Indicated		Measured and Indicated	
	Ktons	Ag Grade (opt)	Ktons	Ag Grade (opt)	Ktons	Ag Grade (opt)
3.0	1,185	7.21	2,809	7.06	3,994	7.10
4.0	883	8.50	2,017	8.48	2,900	8.48
5.0	658	9.89	1,427	10.14	2,085	10.06
6.0	503	11.26	1,061	11.76	1,564	11.60
7.0	388	12.68	788	13.60	1,176	13.30

Mineral Resource Summary for all Block Groups (Inferred)

Ag Cutoff Grade (opt)	Inferred	
	Ktons	Ag Grade (opt)
3.0	2,912	8.71
4.0	2,167	10.52
5.0	1,572	12.83
6.0	1,191	15.20
7.0	986	17.03

Note: "opt" refers to ounces per ton.

6.3.2 2010 Mineral Reserve Estimate by Burgess

Using the mineral resource estimate prepared by Tetra Tech in 2008 (Rozelle and Tschabrun, 2008), Jack W. Burgess, PE, prepared a mineral reserve estimate in November 2010 (Burgess, 2011). Burgess applied the following resource-to-reserve modification factors to the Measured and Indicated 2008 mineral resources:

- 90% of the resource is considered mineable (remainder is too narrow or isolated).
- There is a 12.5% loss of reserve during mining in pillars and wastage.
- There is an increase of 10% in the run-of-mine ore tonnage due to dilution (waste mined).
- There is a 91% reduction in the run-of-mine grade due to dilution (assumes 1oz Ag/ton in waste and 8oz Ag/ton average grade at a 4oz Ag/ton cutoff).

Table 6.5 shows the 2010 mineral reserve derived from the 2008 mineral resource at a cutoff of 4oz Ag/ton by applying the factors listed above.

Table 6.5 2010 Mineral Reserve Estimate of the Shafter Deposit
(From Burgess, 2011)

SHAFTER SILVER MINE - MINERAL RESERVE ESTIMATE							
		MINERAL RESOURCE			MINERAL RESERVE		
		Measured @ 4 opt Cut-Off Grade	Indicated @ 4 opt Cut-Off Grade	Measured & Indicated @ 4 opt Cut-Off Grade	Proven, @ 4 opt Cut-Off Grade	Probable, @ 4 opt Cut-Off Grade	Proven & Probable, @ 4 opt Cut-Off Grade
Block I	tons	452,000	967,000	1,419,000	395,500	846,125	1,241,625
	oz/ton	8.0	7.2	7.4	7.3	6.6	6.7
Block II	tons	319,000	447,000	766,000	279,125	391,125	670,250
	oz/ton	9.6	8.4	8.9	8.7	7.6	8.1
Block III	tons	25,000	171,000	196,000	21,875	149,625	171,500
	oz/ton	11.1	10.9	10.9	10.1	9.9	9.9
Block IV	tons	13,000	58,000	71,000	11,375	50,750	62,125
	oz/ton	11.4	9.9	10.2	10.4	9.1	9.3
Block V	tons	46,000	297,000	343,000	40,250	259,875	300,125
	oz/ton	8.5	11.2	10.9	7.8	10.3	9.9
TOTAL	tons	855,000	1,940,000	2,795,000	748,125	1,697,500	2,445,625
	oz/t	8.7	8.5	8.5	8.0	7.8	7.8
	oz	7,480,210	16,517,640	23,828,740	5,972,480	13,188,303	19,025,760

This 2010 mineral reserve estimate was based on the 2008 mineral resource estimate, which is no longer current. The 2008 mineral resource estimate is superseded by the estimate described in Section 14.0. There is no current mineral reserve estimate based on the mineral resource estimate described in Section 14.0.

7.0 GEOLOGIC SETTING AND MINERALIZATION

7.1 Geologic Setting

7.1.1 Regional Geology

The following information has been taken from Balfour Holdings, Inc. (2000), Rozelle (2001), Rozelle and Tschabrun (2008), Gilmer *et al.* (2003), and parts of a report by Pincock, Allen & Holt (2000b) that were included in Balfour Holdings, Inc. (2000).

Many of the world's largest carbonate-hosted silver-lead-zinc deposits occur in northern Mexico, and some have been in production since the 1600s. These deposits were formed in thick carbonate-dominant Jurassic to Cretaceous basinal sedimentary sequences underlain by Paleozoic or older crust. The Mexican districts lie within, or on the margins of, a major fold and thrust zone. The areas of mineralization appear to be controlled by structures parallel to the trend of the fold and thrust belt. Mineralized and hydrothermally altered intrusive and volcanic rocks of Tertiary age are present in most districts. The styles of mineralization are characterized by geometrically irregular deposits that often have definite structural controls and are not conformable to stratigraphic contacts.

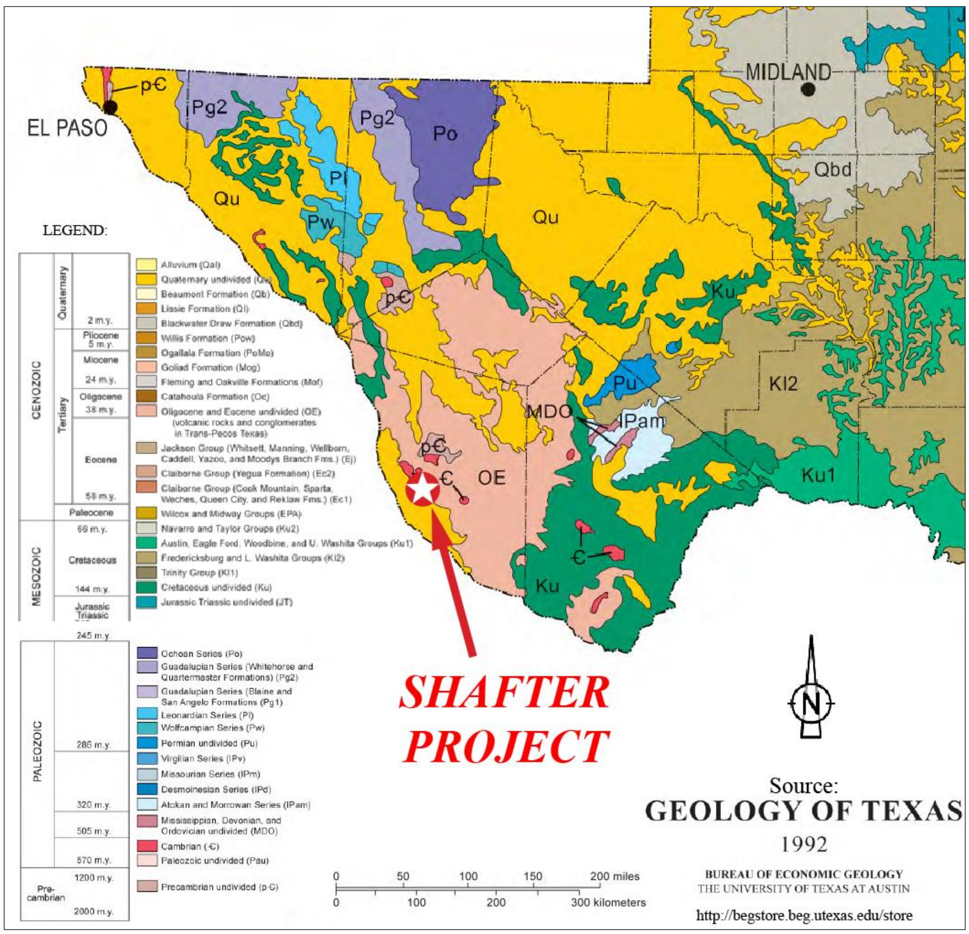
All the carbonate-hosted deposits in northeastern Mexico lie in a tectono-stratigraphic terrain underlain by Paleozoic or older crust. There appears to be no consistent connection between carbonate rock type and mineralization. In some districts, mineralization occurred within numerous different carbonate strata and sedimentary facies through vertical intervals of over 3,000 feet. In other places, specific strata or facies contain the bulk of the mineralized rocks. Overall, lithologic contrasts appear to be important, with many deposits containing mineralized zones in carbonate strata within, or below, relatively less-permeable rocks. Mineralization appears to have been controlled by a combination of folds, faults, fractures, fissures, and intrusive contacts that acted as structural conduits for mineralizing solutions. Mineralization apparently occurred between 47 and 26 Ma and is believed to be related to the mid-Tertiary Sierra Madre Occidental volcanic event (Megaw, Ruiz, and Titley, 1988).

The regional geology of southwestern Texas is similar to that of northern Mexico, with a thick Jurassic-Cretaceous sedimentary basin overlying older Paleozoic basement (Figure 7.1). The sedimentary basin contains thick carbonate sequences which extend over 1,000 miles in length from southeastern Arizona and southern New Mexico through northern Mexico and southwestern Texas. This thick sequence of Mesozoic sedimentary rocks represents a transgressive succession deposited during the subsidence of the eastern part of the basin and the formation of an island-reef-basin environment. The carbonate rock formations in the basin sequence often exceed 10,000 feet in thickness and consist of continuous sections of platform- and basin-deposited limestones with minor dolomite sequences.

During the late Cretaceous-early Tertiary Laramide orogeny, the Jurassic-Cretaceous rocks in southwestern Texas were folded, overturned, and cut by thrust faults in the intensely deformed Chihuahua tectonic belt. To the east lies the relatively stable Diablo platform, where corresponding Cretaceous rocks are flat lying. The Shafter district lies in the boundary area between the deformed Chihuahua tectonic belt to the west and the stable Diablo platform to the east.

The silver-lead-zinc deposits in the basinal limestone sequences of southwestern Texas are referred to as "high-temperature, carbonate-hosted deposits" because of their irregular, but sharp contacts with their enclosing host rocks (Megaw, Ruiz, and Titley, 1988). At Shafter, Permian fore-reef and basinal limestones are the main hosts for silver mineralization, although overlying Cretaceous carbonate rocks are also mineralized. Regionally, the carbonate deposits of northern Mexico lie along or near the eastern limit of mid-Tertiary volcanic fields and their eastern outliers, as does the Shafter silver deposit. Voluminous magmatism between 38 and 31 Ma generated a number of calderas in west Texas, including the Chinati Mountains caldera, which includes differentiated alkali-calcic to alkalic suites of ash-flow tuffs, intra-caldera lava flows, and intrusions just west of the Shafter deposit.

Figure 7.1 Regional Geologic Map of Southwest Texas



7.1.2 Local Geology

The following information has been taken from Ross and Cartwright (1935), Ross (1943), Rozelle and Tschabrun (2008), Pincock, Allen & Holt (2000b; report portions included as an appendix in Balfour Holdings, Inc., 2000), Bogle (2000), Gilmer *et al.* (2003), and Kastelic (1983).

The Shafter mining district is a rectangular area, approximately six miles east and west by three miles north and south, with the town of Shafter situated in the northeast part of the district. The district is located on the southeast flank of the Chinati Mountains, adjacent to a Tertiary volcanic caldera. Outcrops in the district are predominantly Permian and Cretaceous limestone, dolomite, siltstone, and sandstone, which were tilted by folding and uplift during the Laramide orogeny and later cut by Tertiary intrusions. The Tertiary intrusions may have been the heat source for the silver mineralization at Shafter (Balfour Holdings, Inc., 2000), although there is no direct evidence for that in the vicinity of the Shafter deposit, as discussed in Section 7.2.

The strata in the Shafter mining district appear to form part of a broad dome with cross-cutting faults that may have localized the mineralization at the Presidio mine.

Figure 7.2 shows the geology of the Shafter property and surrounding area as compiled by Aurcana Corp.

7.1.2.1 Permian Stratigraphy

The oldest rock unit exposed in the Shafter district is Permian limestone, with some interlayered shale and other sedimentary rocks. These Permian carbonate and siliciclastic rocks were deposited in the Marfa Basin, the westernmost of three large Permian sedimentary basins in west Texas. Permian carbonate rocks are the main hosts for the district's silver mineralization. The Permian units have a combined thickness of more than 1,000 feet in the vicinity of Shafter and are subdivided into the following formations from youngest to oldest:

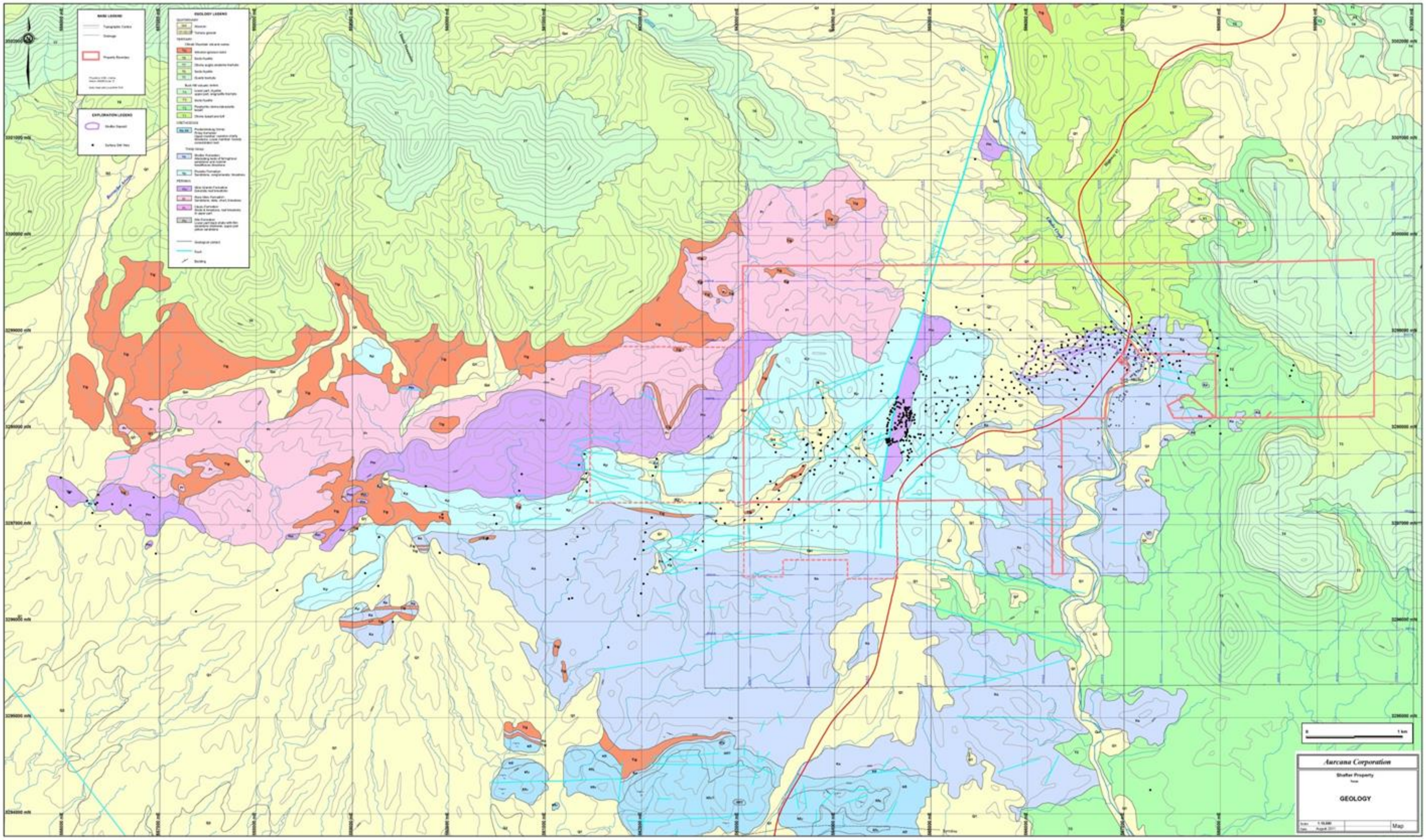
- Mina Grande Formation – Erosional remnants of massive, yellowish, dolomitic limestone, correlative with limestone at the top of the Permian Cibolo Formation elsewhere in the Shafter region, overlie reef-derived talus and fore-reef facies limestone.

- Ross Mine Formation – Alternating beds of black limestone, chert, and yellow sandy shale become more calcareous in the upper part.

- Alta Formation - Shale at the base grades up into yellow sandstone at the top.

- Cieneguita Formation – This basal unit contains shale, chert, and beds of limestone and conglomerate. Peterson (1973) describes this unit as Pennsylvanian.

Figure 7.2 Geology of the Shafter Property
(From Aurcana Corp., 2013)



See Figure 4.2 for current outline of the land position and resource outline.

7.1.2.2 Cretaceous Stratigraphy

Cretaceous rocks of the Trinity Group unconformably overlie the Permian units in the Shafter district. The Trinity Group includes the Presidio Formation, which is 450 feet thick, and the Shafter Limestone, which is greater than 1,000 feet thick. The Cretaceous units cover much of the Permian strata and may be locally mineralized directly above the Cretaceous/Permian unconformity.

The Presidio Formation crops out near the Presidio mine and consists of five major subdivisions, although there is considerable lateral variation in lithology and thickness of the units:

- Cap Rock Unit - 25 to +50-foot thick with massive, hard, arenaceous limestone and some beds of calcareous sandstone.

- Shell Breccia Unit - 110 to 165 feet thick with soft sandstone, arenaceous limestone, and two rather thick shell breccias.

- Tripartite Unit – 75+ feet thick with medium-bedded to massive limestone, shell breccia, and massive partly calcareous sandstone.

- Conglomerate Unit - 90 to 120 feet thick with arenaceous limestone, calcareous sandstone, and conglomerate.

- Basal Unit - 50 to 90 feet thick with soft marl, clay, arenaceous limestone, calcareous sandstone, and shell breccia.

The Shafter Limestone is exposed around the town of Shafter and forms a prominent range of hills about three miles southeast of Shafter. The unit rests unconformably on the Presidio Formation. The unit is of Upper Cretaceous age and is more than 1,000 feet thick. The unit is primarily limestone with interlayers of marl and sandstone. The unit has less variation than the Presidio Formation, but facies changes from sandstone to limestone can be abrupt.

Overlying the Shafter Limestone is the 80 to 120-foot thick Walnut Formation of the Fredericksburg Group. This unit is distinguished from the Shafter Limestone by having less limestone, a greater proportion of marl and clay, and very little sandstone. A thick succession of massive limestones overlies the Walnut Formation and was designated the Devils River Limestone (Ross, 1943).

7.1.2.3 Igneous Rocks

Mid-Tertiary volcanic rocks are present along the edges of the Shafter district, and intrusions of andesite and diorite are present within the district, including at the Red Hills west of Aurcana's property. In the central part of the Chinati Mountains and on the plateau east of Shafter, trachyte, rhyolite, andesite, and tuffs of Tertiary age are exposed. The Chinati Mountains Group of peralkaline rhyolite and trachyte flows and tuffs of Oligocene age is almost entirely confined to the Chinati Mountains caldera. The Chinati Mountains caldera, which has been dated at 32 Ma, was a major volcanic center that produced an alkali-calcic suite of ash-flow tuffs, flows ranging from basalt to rhyolite and trachyte, and intrusions of gabbro, alkali granite, and alkali granophyre. The Morita Ranch Formation, composed of basalt, rhyolite, and ash-flow tuff, lies east, south, and north of Shafter and is older than the Chinati Mountains Group. These volcanic rocks rest unconformably on the Cretaceous units and have undergone some faulting but only minor deformation.

Southeast of the Chinati Mountains, a circular intrusive stock, variously described as hornblende-augite andesite (diorite?), quartz monzonite, monzonite, or latite porphyry, crops out in the Red Hills. The Red Hills stock has been dated at 64 to 60 Ma (Gilmer *et al.*, 2003). The Red Hills are less than a mile south of the structural margin of the Chinati Mountains caldera. However, the radiometric age of the Red Hills stock demonstrates that it pre-dates the Chinati Mountains caldera and is part of the older Laramide magmatic arc that accompanied Laramide deformation as far east as the Trans-Pecos region of southwest Texas (Gilmer *et al.*, 2003). The Red Hills intrusion has been explored as a copper-molybdenum porphyry prospect. This stock is about four miles west of the Presidio mine and about one mile west of the western margin of the Shafter property described in this report.

Andesitic and basaltic dikes are reported from the immediate vicinity of the Presidio mine, while farther west, basaltic and andesitic sills that are locally up to 100 feet thick intrude the Permian and Cretaceous strata. Diorite porphyry intrudes the lower part of the Permian sequence and extends beneath the Tertiary flows west and north of Aurcana's property.

7.1.3 Property Geology

The following information is summarized from Rossi and Springett (1995), Lambeck (2012), Ross and Cartwright (1935), Ross (1943), a portion of a report by Pincock, Allen & Holt dated 2000b that is included in the appendix of Balfour Holdings, Inc. (2000), and Rozelle (2001).

At the Shafter deposit, the massive limestone at the top of the Permian Cibolo Formation, beneath the unconformable contact with the Cretaceous Presidio Formation, was the most favorable to replacement by solutions. In the vicinity of the mine, this unit is called the Mina Grande Formation. The erosional surface of the Mina Grande Formation developed karst topography, which provided large open areas that served as channels for mineralizing solutions. Silver and base metal minerals were deposited where conditions were favorable. The Mina Grande limestone formed as a Permian reef and has over two miles of mineralized strike length. It is up to 200ft thick and is composed of massive to thin-bedded wackestone to packstone and carbonate mudstone that have been divided into three broad units from bottom to top (Bogle, 2000, and Head, 2002): Basal unit consisting of unaltered or only slightly dolomitized wackestones to packstones (Fore Reef facies of Kastelic, 1983); Pseudobreccia unit of clasts of Mina Grande Formation in a matrix of orange-, red-, and brown-stained dolomite and fossiliferous limestone that shows evidence of dissolution during subaerial exposure (Reef Talus facies of Kastelic, 1983); and Massive unit directly below the Permian-Cretaceous unconformity that is a dolomitized unit with few to no original structures of fabrics evident (Massive Dolomite facies of Kastelic, 1983). The Mina Grande Formation is unconformably overlain by the Cretaceous Presidio Formation, which is in turn overlain by the Shafter Limestone. Narrow andesitic and basaltic dikes were reported by Ross (1943). Fissures and faults are present in all areas of the Presidio mine workings.

Several high-angle faults in the area may have been the main channels for the mineralizing solutions, and high-grade pockets of mineralization occurred within the karsts (Silver, 1999). The mineralization appears to have been controlled by east-trending faults, often where intersected by strong north-south faults such as the Mina Grande fault. The Mina Grande fault strikes N10°E and has a displacement of 300 to 400 feet. It is near the west end of the Shafter deposit and has displaced the mineralized horizons downward to the west (Kastelic, 1983). Northwest- and northeast-trending faults of regional extent also cross the Shafter property (Lambeck, 2012).

7.2 Mineralization

The following information has been summarized from Ross (1943), Corbett (1979), Kastelic (1983), Rossi and Springett (1995), Rozelle (2001), Head (2002), Rozelle and Tschabrun (2008), Shannon (2012), and Lambeck (2012), with additional information as cited.

The Shafter deposit is hosted within the gently dipping beds of the Permian Mina Grande Formation, just below their contact with Cretaceous rocks. The reef-derived dolomite and limestone of the Mina Grande Formation were susceptible to differential weathering and karst activity at the upper level of the formation, and passageways for mineralizing solutions formed along facies contacts and bedding planes.

The deposit is parallel to the bedding, has a tabular form, and is called a *manto* deposit, following colonial Spanish terminology for a blanket-like or tabular mineralized body. The deposit has some irregularities in its shape but dips generally east. Veins containing the same minerals as the *manto* are common in the eastern part of the Shafter district. Many of these veins are fissure fillings and have brecciated zones. Rozelle (2001) stated that the mineralization took place after the intrusion of dikes and sills of Tertiary age, and Ross (1943) reported that dikes in the Presidio mine are somewhat mineralized. In contrast, Lambeck (2012) reported that a dike in Aurcana's drill hole 201200694 cross-cuts mineralization. There has been no radiometric dating of minerals associated with the Shafter deposit, and a source for the mineralizing fluids has not yet been identified.

Mineral deposition took place in four main phases: (1) a limited amount of dolomitization; (2) silicification; (3) deposition of calcite and metallic minerals including galena, sphalerite, and acanthite; and (4) supergene alteration. Aurcana identified two separate stages of metal mineralization on the Shafter property – an initial lead stage potentially associated with the north-trending Mina Grande fault, followed by a second stage consisting of silver and anomalous lead and zinc, thought to be associated with the Herculano fault system and multiple east-trending faults that served as distal feeder systems (Lambeck, 2012). Contacts of the mineralized zones with unaltered wall rocks are generally sharp.

At the Presidio mine, based on drilling by Gold Fields, silver mineralization in Block Groups I and II appears to be continuous within the *manto* deposit, which extends over 6,000 feet of strike length along a zone trending roughly N60°E and lies between 700 and 900 feet below the surface. The entire Shafter deposit is up to 1,500 feet wide in a north-south direction and extends at least 2.5 miles on an east-west trend (Balfour Holdings, Inc., 2000). There appears to be a high-grade core within the broader mineralized zone located just below the Cretaceous-Permian unconformity. The high-grade core is very continuous in Blocks I and II and in the upper workings of the Presidio mine (Balfour Holdings, Inc., 2000).

About 5,000 feet northeast of the eastern limit of stoping in the Presidio mine, silver values decrease markedly. About 1,000 feet further east, the favorable Basal and Pseudobreccia units of the Mina Grande Formation were removed by pre-Cretaceous erosion or dolomitization (Kastelic, 1983). West of the Presidio mine, dolomitization has also destroyed much of the favorable host rock for the Shafter-type mineralization (Kastelic, 1983).

The mineralized material consists of a massive aggregate of medium-grained, sucrosic, often vuggy, silica stained with varying amounts of iron and manganese oxides. Mineralogy is fairly consistent within the deposit. The mineralization originally consisted of sulfide minerals, which are now almost thoroughly oxidized. Primary minerals include dolomite, calcite, quartz, pyrite, sphalerite, galena, acanthite, argentite, chalcopyrite, covellite, molybdenite, and tetrahedrite. Secondary minerals include iron and manganese oxides, hemimorphite, descloizite, embolite, plumbojarosite, cerargyrite, native silver, cerussite, anglesite, and small amounts of covellite, chrysocolla, and possibly other copper minerals. Silver occurs predominately as acanthite and within argentiferous galena in fine-grained aggregates of quartz, calcite, and goethite, with lesser dolomite, hemimorphite, willemite, anglesite, smithsonite, and sphalerite.

7.2.1 Structure and Control of Mineralization

The sequence of Late Carboniferous to Late Cretaceous sedimentary rocks in the Shafter mining district has been folded and forms a broad dome. The doming may be related to intrusive activity and is probably related to the Laramide orogeny. In the vicinity of the Presidio mine, beds dip southeast and south. Permian rocks in the Presidio mine are bounded on the west by a persistent fault, the Mina Grande fault, which strikes roughly north-south and drops beds about 270 feet to the west (Balfour Holdings, Inc., 2000). Bodies of Permian rock are located along this fault zone, which has been traced at the surface for over a mile in length and cuts sharply across the trend of the Cretaceous rocks. Several other faults in the area parallel the Mina Grande fault.

Extensive alteration and silver mineralization with anomalous lead and zinc values were observed in the east-trending Herculano fault system, which lies east of the Mina Grande fault (Lambeck, 2012). The underground workings of the old Presidio mine lie south of the Herculano fault, while the northeastward extension of mineralization found by Gold Fields lies north of the Herculano fault.

The block of Permian limestone that crops out at the Presidio mine is discordant to the Cretaceous stratigraphy, which seems separate from the stratigraphy in the rest of the area, and may have been thrust along a major fault zone. This fault zone may then have become a conduit for circulation of mineralizing solutions. Shearing and movement along fractures may have opened the bedding planes and provided the means for replacement of the limestone.

Faults and dikes are exceptionally numerous and closely spaced in the immediate vicinity of the Presidio mine. Mineralized bodies show more closely spaced fractures than the unaltered limestone nearby. Ross (1943) notes the following structural features in and near the Presidio mine that appear to determine the distribution of mineralization:

- Numerous steep faults, many of which do not have the same strike or dip as known faults in the surrounding region;
- Numerous narrow dikes in contrast to the sills in the region to the west; and
- Relatively large amount of shattering in the mineralized rock.

The Mina Grande Formation in the vicinity of the Shafter deposit had both a diagenetic and structural history that prepared it for hydrothermal mineralization (Head, 2002). Multiple phases of dolomitization and calcification, karstification during post-Permian uplift, and multiple phases of fracturing, all increased permeability, making the rock more conducive to subsequent mineralization.

7.2.2 Additional Historical Prospects

There are other prospects and occurrences of mineralization within and adjacent to Aurcana's Shafter property, but they are well outside the boundaries of the mineral resource described in this report. Past production, if any, was small. Most of the following information has been summarized from Ross (1943), Rozelle (2001), and Rozelle and Tschabrun (2008). This information is included in the interest of full disclosure.

Regional N70°E-trending structures are associated with a bedded zinc deposit and several high-grade lead-zinc veins (often with some minor gold values) at the Montezuma, Chinati, Perry, Stauber, and Gleim workings (see Figure 4.2 for locations). All of these workings lie within the boundaries of Aurcana's Shafter property.

The Gleim prospect is located about a mile south-southwest of the old Presidio mine, close to the highway to Presidio, on the eastern edge of Section 6 in the southern part of the Shafter property. Little is known about this prospect. The upper Presidio Formation is exposed at the surface, and there is a steeply dipping calcite vein that trends east to N70°E. Gold Fields drill hole SD 264 encountered seven feet of 10oz Ag/ton, 0.07oz Au/ton, 4 percent lead, and 2 percent zinc at 393 feet. Samples containing high gold values were reportedly taken at the east edge of the Gleim property (Rozelle and Tschabrun, 2008).

At the Stauber prospect west of the Gleim workings, in the western part of Section 6, silicified and otherwise altered rock containing silver and lead is associated with calcite veins in Cretaceous strata. Similar mineralization occurs south of the Perry prospect, which is located in Section 2. Surface exposures show considerable faulting at the Stauber prospect.

Kastelic (1983) noted that other small deposits, situated west-southwest of the Shafter deposit, were prospected mostly for their lead and zinc values, with only minor amounts of silver and gold. The Perry, Chinati, and Montezuma prospects are located 1.5 to two miles west of the Mina Grande fault in an area that drilling has shown contains high zinc values (Kastelic, 1983). Mineralization occurred primarily along steep fracture planes in the Perry prospect in Section 2. Small masses of galena and its oxidation products were found in and near the Perry workings in limestone close to the top of the Cibolo Formation; some of the rock was said to contain as much as 15% lead (Ross, 1943). The main mineralization occurred along a fracture zone that trends N50°E and dips steeply northwest. Locally the mineralization spread along bedding at the top of the Permian limestone.

At the Chinati and the Montezuma prospects in Section 2, west of the Perry prospect, workings explored thrust faults in a zone striking nearly east, with fracture planes dipping north generally 30-40°, but up to as much as 65°, opposite to the dip of the Permian limestone. These faults served as channels for mineralization. This is the only example of mineralization in the district known to be associated with thrust faults. Zinc was recovered from oxidized bodies in both mines. The Chinati and Montezuma prospects are in thick-bedded Permian limestone.

Gold Fields discovered a large zone of bedding-controlled and oxidized zinc mineralization during their regional drill program. Their north-south drill fence with SD 313, SD 316, and SD 317 intersected six feet of 10 percent zinc mineralization extending 1,200ft down-dip from the Montezuma workings. Drill hole SD 313, located approximately 200ft south of the Montezuma prospect, encountered two six-foot zones with 14 percent zinc, and the bottom horizon contained 0.03oz Au/ton. A 4 percent to 6 percent zinc zone was also encountered in Gold Fields' drill holes along strike in fences 2,000 feet to the east and 3,000 feet to the west of the Montezuma workings.

8.0 DEPOSIT TYPES

The Shafter silver deposit is considered an example of a polymetallic replacement deposit. Because of their irregular, but sharp contact with the enclosing carbonate host rocks, deposits of this type have been categorized as high-temperature, carbonate-hosted deposits. Other mining districts with examples of this deposit type are: Leadville, Colorado, Tintic, Utah, and Zacatecas, Mexico.

Polymetallic deposits consist of massive lenses and (or) pipes, known as mantos or replacement orebodies, and veins of iron, lead, zinc, and copper sulfide minerals that are hosted by and replace limestone, dolomite, or other sedimentary rocks; most massive ore contains more than 50 percent sulfide minerals. Sediment-hosted ore commonly is intimately associated with igneous intrusions in the sedimentary rocks. Emplacement of these intrusions triggered ore formation and they host polymetallic veins and disseminations that contain iron, lead, zinc, and copper sulfide minerals. Some polymetallic replacement deposits are associated with skarn deposits in which host carbonate rocks are replaced by calc-silicate±iron oxide mineral assemblages. Most polymetallic vein and replacement deposits are zoned such that copper-gold ore is proximal to intrusions, whereas lead-zinc-silver ore is laterally and vertically distal to intrusions.

There is little evidence in the Shafter district to indicate the source of the mineralizing solutions. No evidence of contact metamorphism has been noted, and this may indicate that the mineralizing solutions had traveled some distance, either horizontally or vertically through the stratigraphy.

9.0 EXPLORATION

The following information has been compiled from Lambeck (2012), Lambeck *et al.* (2013), and Aurcana news releases (March 5, 2012; June 6, 2012; April 3, 2013), with additional information provided by Aurcana.

From acquisition of the property in 2008 to 2011, Aurcana's work at the Shafter project was focused on completion of the permitting required to commence production and on initiating construction of a mine and mill.

Aurcana began exploration at Shafter in May 2011 with creation of an updated database that included Gold Fields' exploration data from 1977 to 1983. Geotech Ltd. performed a regional helicopter-borne ZTEM and aeromagnetic survey covering 51 square miles in May 2011 (Tong and Legault, 2011). A total of 748.7 line-kilometers of data were collected. The principal geophysical sensors were a Z-axis Tipper electromagnetic ("ZTEM") system and a cesium magnetometer. The survey was flown in a northwest to southeast direction, with a flight-line spacing of 200m; tie lines were flown perpendicular to the traverse lines at a spacing of 2,350m. Aurcana reports that the survey tested for conductivity responses indicating sulfide mineralization, resistivity responses indicating silicification, and magnetic responses indicating potential buried intrusive source rocks. Strong resistivity responses were detected that mirrored the strike of the Shafter deposit and correlated with silicification surrounding known mineralized zones. While the ZTEM magnetic data were of interest from a regional perspective and indicated a number of broad, anomalous features, interference from power lines made the data difficult to interpret relative to geologic features found during drilling.

Aurcana's subsidiary RGMC began drilling at Shafter in November 2011 and drilled 65 surface and 90 underground holes through early 2013. No drilling has been conducted since early 2013. Details concerning drilling are described in Section 10.0; in Table 10.1, these holes are shown as RGMC holes drilled from 2011 to 2013. Both the exploration and mine geology departments conducted drilling programs. The 2011-2012 exploration drilling program consisted of 29 of the 65 surface holes and looked for a vertical feeder system under known areas of mineralization. Although silver, lead, and zinc *manto*-type mineralization was intersected in 10 of these holes, no direct evidence for vertical feeder systems was observed. Extensive alteration and silver mineralization with anomalous lead and zinc values were observed in the east-trending Herculano fault system (Lambeck, 2012). Drilling across the north-trending Mina Grande fault intersected silicification with anomalous lead and zinc values that may represent an early mineralizing phase (Lambeck, 2012). Three of the 2011-2012 holes targeted a resistivity anomaly identified by Gold Fields in around 1983, after the Gold Fields drill program was completed, and found anomalous lead and zinc values. Following additional drilling and mapping in 2013, it was noted that intersections of northeast- and northwest-trending structures were critical to the mineralizing process, with mineralizing fluids most likely traveling along the northeast-trending faults (Lambeck *et al.*, 2013).

Field traverses were completed in the northwestern part of the property (sections 4 (S) and 9 (S)) in 2012 to investigate areas of silicification and alteration. Alteration was noted in the Mina Grande Formation, and siliceous veins and iron oxides were noted in outcrops of limestone (Lambeck, 2012).

Zonge International Inc. ("Zonge") of Tucson, Arizona, was contracted to conduct an NSAMT orientation survey over the Shafter deposit, with approximately 40 line-kilometers of survey conducted on 10 lines. However, the study was not completed due to technical reasons (Lambeck, 2012). Interpretation of results was hampered by interference from power lines and project infrastructure. The survey did indicate an anomalous zone striking north-south, parallel to the Mina Grande fault, locally known as the Presidio horst. Structural interpretation of Landsat data confirmed the presence of a parallel fault structure, but a hole drilled in 2012 to intersect the inferred anomaly did not intersect mineralized rocks or the fault structure (Lambeck, 2012).

In 2012, historic workings of the Mina Grande open pit were surveyed and chip sampled on four levels to a depth of 80ft to determine the extent of the mineralized area. Also in 2012, a geochemical study was completed on the intrusive rocks in the Herculano fault system based on 10 samples. The data suggest that the Herculano dike is a basaltic andesite.

During 2013, Aurcana undertook field mapping to identify zones of favorable structural and stratigraphic settings for mineralization, especially in the southwest part of the property (von Fersen *et al.*, 2013). Surface work included rock geochemical sampling of gossanous outcrops and goethitic fracture fillings. Underground reconnaissance was undertaken to investigate the extent of mine workings and stopes, as well as the structural framework of this same area and of the Presidio mine area. Selected intervals of historic Gold Fields drill core were re-assayed to determine a district-wide geochemical footprint of the Shafter deposit. Historical drill core near the Shafter deposit was re-logged to re-evaluate controls on mineralization. In addition, an ioGAS data analysis was undertaken using 2012 drill-core assay data, Gold Fields drill-core re-assay data, and historic Ag-Au-Pb-Zn data.

MDA has not analyzed the sampling methods and quality of surface sampling on the Shafter property, or how representative it was, because drilling results form the basis for the mineral resource estimate described in Section 14.0.

10.0 DRILLING

10.1 Summary

The following information has been compiled from Rozelle (2001) and Rozelle and Tschabrun (2008, apparently taken at least in part from Pincock, Allen & Holt's 2000b report included in part in the appendix to Balfour Holdings, Inc. (2000)), with updated information provided by Aurcana.

The Shafter project has been drilled by three companies from both surface and underground locations – Amax, Gold Fields, and RGMC. A summary of the drilling conducted by the various companies is shown in Table 10.1. Drilling by RGMC both before its acquisition by Aurcana and after the acquisition is grouped under RGMC in Table 10.1. A total of 1,694 drill holes are included in the present database for the Shafter project. Of these, 1,606 are diamond core holes, and 88 are RC holes. Since publication of the previous technical reports, approximately 800 holes have been added to the database, including a considerable number of underground and surface holes drilled by Amax (Table 10.1), as well as holes drilled by Aurcana (RGMC 2011-2013 in Table 10.1) and a few additional Gold Fields holes.

Most of the surface drill holes in Blocks I and II (see Figure 6.1 for location of blocks) were drilled by Gold Fields and spaced 100 to 300 feet apart, with an average spacing of approximately 200 feet. Underground holes by Gold Fields in Block I were drilled from stations at a variety of angles along lines spaced 50 feet apart. In Block II, underground holes by Amax were drilled from stations at a variety of angles, with stations spaced 100 to 200 feet apart. Surface drill holes in the Blocks III, IV, and V were drilled by Gold Fields, with some older holes by Amax, and some newer holes by RGMC/Aurcana. The surface holes in these blocks are more widely spaced, ranging from 100 to 400 feet. Underground holes by Amax were drilled from stations along drifts at a variety of angles and spaced from 50 to 300 feet apart. Drilling in 1998 by RGMC explored shallow mineralization immediately east of the Mina Grande fault based on mineralization of surface outcrops.

Since its acquisition by Aurcana, RGMC has drilled 65 surface core holes and 90 underground core holes for a total of 63,087.5 feet. Of the 65 surface holes, 29 were drilled for exploration, totaling 35,977 feet. These holes were drilled at dips between -45° and -70°. The remaining 36 surface core holes totaling 11,874 feet were drilled in 2012 and were designed by the mine geology department for a near-surface mine infill program; dips ranged from -65° to -90 °.

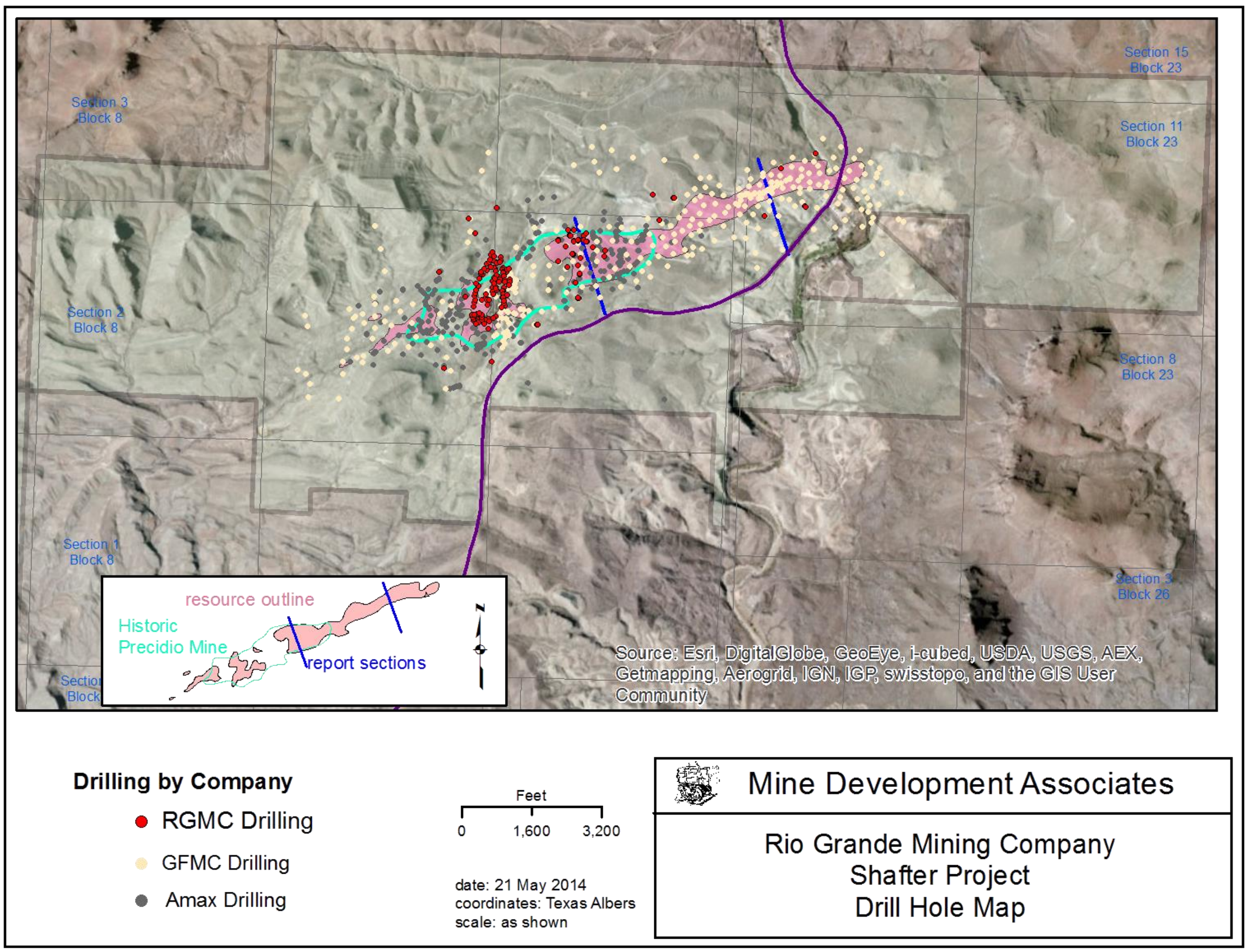
Not included in the resource database, or in the total RGMC drilling noted above, are eleven underground core holes completed by Aurcana in late 2013 after the database was finalized for use in the resource estimate.

Figure 10.1 shows the locations of drill holes used for the resource estimate described in Section 14.0.

Table 10.1 Summary of Drilling in the Shafter Project Mineral Resource Database

Company	Date	Core				RC		Total	
		Surface		Underground					
		# of holes	Footage	# of holes	Footage	# of holes	Footage	# of holes	Footage
Amax	1926-1940	56	22,332	992	156,302			1,048	178,634
Gold Fields	1977-1982	314	211,136	89	7,719			403	218,855
RGMC	1998					88	5,712	88	5,712
	2011-2013	65	47,851	90	15,236.5			155	63,087.5
Total		435	281,319	1,171	179,257.5	88	5,712	1,694	466,288.5

Figure 10.1 Location of Drill Holes Utilized in the Shafter Resource Estimate



10.2 Drilling by Previous Operators

MDA has limited information on drilling contractors, drill-rig types, and procedures used by Gold Fields (Springett, 1984) and RGMC (1998 drilling) and no such information for the Amax drilling.

The database contains information on 314 surface core holes and 89 underground core holes drilled by Gold Fields. For their surface drill holes, Gold Fields used Longyear Drilling Co. as the drill contractor for their SD-1 through SD-23 holes and Boyles Brothers for the remaining SD- series, SPMD (SM)-series, and SPSC- series holes. Boyles Brothers used a truck-mounted diamond core rig for all of the surface drilling. Drill logs for the SD-, SPMD (SM)-, and SPSC- series of Gold Fields' surface holes indicate core was NC and NX size, but data are incomplete. It appears that NC holes were downsized to NX and BX as necessary. A few holes were started with a rotary drill, changing to NX coring.

Drill logs for the SU- series of underground core holes drilled by Gold Fields in 1981-1982 indicate that American Mine Services Inc. was the drill contractor. Holes were drilled from a track-mounted rig and were of BX size (Springett, 1984).

Gold Fields also completed an unknown number of underground percussion holes; Springett (1984) reported that they were drilled with a rubber-tired long-hole machine. A short, secondary percussion hole was drilled slightly below the collar of the percussion long-hole to enable sludge collection (Gold Fields Operating Co. – Shafter, undated). The percussion-hole data available is incomplete, and has not been tabulated for inclusion within the current database.

RGMC drilled 88 RC holes in October and November 1998 prior to the company's acquisition by Aurcana. Dateline Drilling, Inc. was the drill contractor, according to the drill logs.

10.3 Drilling by Aurcana Corporation

The following information was taken from Aurcana news releases (March 5, 2012; June 1, 2012; April 3, 2013) with additional information from Lambeck (2012) and as provided by Aurcana. This section describes drilling by Aurcana that is shown in Table 10.1 as RGMC 2011-2013 drilling.

Aurcana began drilling at Shafter in November 2011 (S-11-401 was the single hole drilled in 2011) and concluded in 2013 (Lambeck, 2012). Both surface and underground core drilling was conducted during this period. Of the 65 surface holes, 29 were drilled as part of the exploration program, while 36 were drilled by the mine geology department for mine infill drilling. Boart Longyear and Connors Drilling were the drill contractors for the surface holes drilled in 2011 and 2012, drilling HQ core holes with reduction to NQ core as necessary. Three drill rigs were used: one LY-44 and two LF-90s, one of which was truck mounted and one track mounted. The Boart Longyear LF-90 truck-mounted rig was the most productive rig used, but their LY-44 rig was inefficient and unable to cope with the difficult drilling conditions. Connors used the track-mounted LF-90, which was deemed too slow to move around the property. Holes from the exploration program were drilled at angles from 45° to 70° in an attempt to identify a vertical feeder system for the mineralization (Lambeck, 2012).

Of the 90 underground core holes in the database, five were drilled as part of the exploration program with the rest drilled by the mine geology department. Aurcana purchased a Boart Longyear Skid Steer

LM 30 core drill in August 2012 for underground drilling that was put into use in mid-2013. Logs of the underground core holes show that some holes were also drilled by Connors Drilling; core size was NQ. Of 81 logs of the underground core holes reviewed by MDA, 24 holes were drilled by Connors Drilling, and 57 do not have the drilling company identified but may have been drilled by Aurcana.

Not included in the resource database or in the total RGMC drilling noted above are eleven underground core holes completed by Aurcana in late 2013 after the database was finalized for use in the resource estimate.

All core logging for the 2011-2012 surface drilling was completed with hand-held Trimble Juno Units using GeoInfo Mobile software and imported into a GeoInfo Tools database (Lambeck, 2012). Logging included lithology, formations, recovery, RQD, structures, alteration, mineralogy, intervals of silver-bearing clays and sand called the Jaboncillo interval, vuggy intervals, and in a few holes, fluorescence (Lambeck, 2012).

10.4 Drill-Hole Collar Surveys

Drill-hole collar locations for holes drilled prior to Aurcana's drilling were reportedly (Rozelle, 2001) surveyed to determine the collar coordinates. Collars for Aurcana's underground holes were surveyed by Aurcana staff. Collars for Aurcana's surface holes were surveyed by Tony Trujillo Land Surveying.

10.5 Down-Hole Surveys

Pincock, Allen & Holt (2000a; 2000b, portion of a report included in the appendix of Balfour Holdings, Inc., 2000) reported that most of the 891 holes in the database for the Shafter project at the time of their report had not been surveyed for down-hole deviations. Those holes for which down-hole surveys were recorded on the drill logs did not indicate a "problematic degree of drift."

The current database has no down-hole survey data for any of the Amax or Gold Fields holes. However, Aurcana reports that drill logs for some of the SD- series holes, most of the SPMD- holes, and holes SPSC-217 to SPSC-309 show that these holes were down-hole surveyed, although it is not clear if these survey data were ever tabulated.

For Aurcana's 2011-2012 drilling, 24 of the 29 of the exploration surface core holes and 18 of the 36 mine infill surface drill holes were surveyed down hole. The surface holes were surveyed to the total depth with either a REFLEX EZ-Shot single-shot camera or a REFLEX EZ-TRAC multi-shot camera (Lambeck, 2012). The exploration holes were surveyed at 20-foot or 50-foot intervals while the mine infill holes were surveyed at 20-foot or 100-foot intervals. It was noted that the data for exploration holes S-12-417, S-12-438 to S-12-441, and S-12-459 to S-12-461 were inconsistent, and the tool was replaced for subsequent holes; the inconsistent data were attributed to the accelerometers in the tool being damaged due to excessive shock, which resulted in poor constant on the azimuth (Lambeck, 2012). The survey data for these holes were replaced with the collar set-up azimuth and dip along with a calculated dip angle at the drill hole's final depth.

Aurcana reports that there are Reflex scans for 12 of the 2012-2013 underground holes.

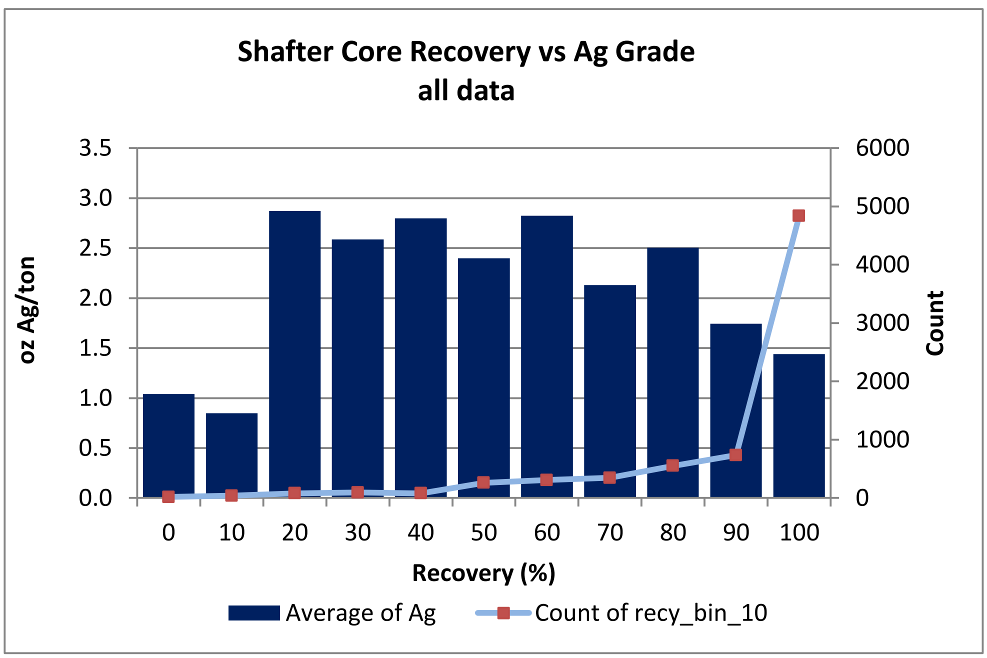
10.6 Core Recovery

The database contains core recovery data for the Gold Fields and Aurcana core holes. There are no core recovery data for any of the Amax underground core holes.

Average core recovery for all drill intervals is 93 percent while average core recovery for the mineralized intervals assaying greater than 1oz Ag/ton is 86 percent. The core is generally moderately to highly fractured within the mineralized horizons.

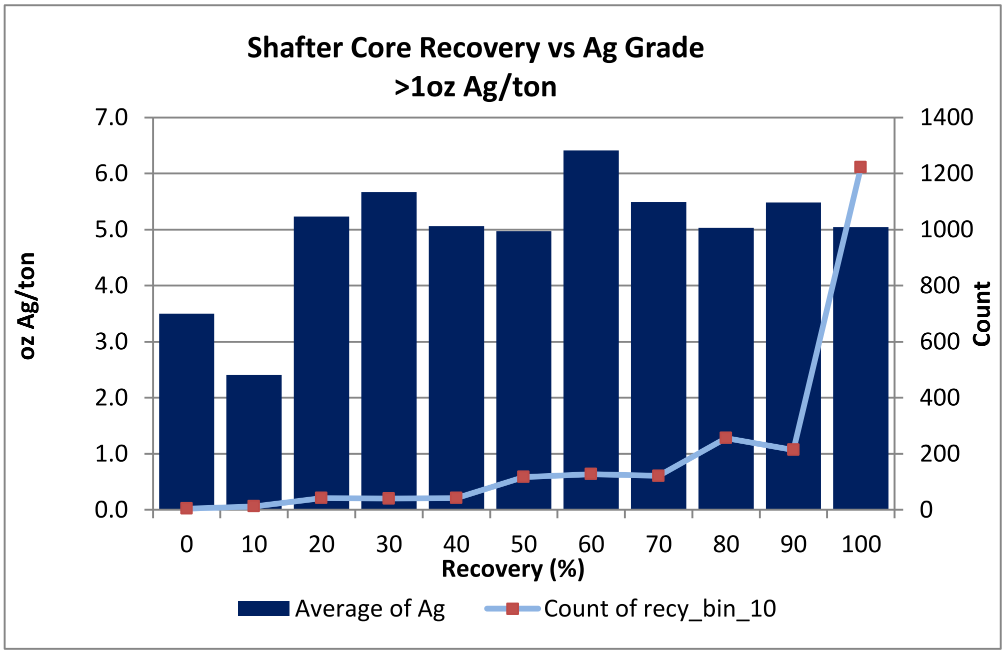
MDA analyzed the drill data to determine if there was a deposit-wide relationship between poor recovery intervals and decreasing silver grades. Figure 10.2 and Figure 10.3 show the silver grades (blue vertical bars) and the number "Count" of intervals (light blue line with orange data points) plotted in the vertical axis, while core recovery is plotted along the horizontal axis. The core recovery data have been separated into distinct bins for each 10 percent increase in recovery. So the "70" value in the horizontal axis contains all data points which have core recovery values between 70 and 80 percent. Figure 10.2 includes all sample intervals while Figure 10.3 has only those mineralized intervals assaying 1.0oz Ag/ton or greater. The high data count in the "100" recovery bin reflects the large number of intervals with recoveries of exactly 100 percent.

Figure 10.2 Core Recovery versus Silver Grade – All Sample Intervals



For all sample data (Figure 10.2), there is a distinct increase in silver grade with decreasing core recovery. This correlates with the observation from core and underground that the mineralized rock is fractured and susceptible to poor recovery as compared to the unmineralized limestone wallrock. When the data is filtered to only show those sample intervals assaying 1.0oz Ag/ton or greater (Figure 10.3), the inverse grade relationship with core recovery is no longer apparent. The data suggests that within the mineralized horizon there is not a selective grade loss with decreasing core recovery.

Figure 10.3 Core Recovery versus Silver Grade – Sample >1.0oz Ag/ton



10.7 Summary Statement

MDA believes that the drill sampling procedures provided samples that are representative and of sufficient quality for use in the resource estimations discussed in Section 14.0.

The current database does not include the eleven underground core holes completed by Aurcana in late 2013 after the database was finalized for use in the resource estimate nor the Gold Fields underground percussion drilling noted in Section 10.2. These data, if available, should be added to the project database though it is not expected that these additional holes would have a material impact on the current resource estimate.

There is some uncertainty associated with the Amax drilling due to the lack of original data and this uncertainty impacts upon the resource classification noted in Section 14.0.

MDA is unaware of any other drilling, sampling or recovery factors that materially impact the mineral resources discussed in Section 14.0.

11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

The following information has been taken from Gold Fields Operating Co. – Shafter (undated), Kastelic (1983), Springett (1984), Lambeck (2012), Rozelle (2001), and Rozelle and Tschabrun (2008) with updated information provided by Aurcana.

11.1 Sampling Procedures

Sampling at the Shafter project has occurred over a considerable time period and was conducted by various companies. Most of the samples that were taken prior to the work of Gold Fields came from chip samples in the ribs and back of the underground openings along with underground core drilling by Amax.

MDA has seen no information on sampling procedures used by Amax. The core sampling data in the current database, along with the original assay tables shown on the project cross-sections, indicate that Amax selectively sampled and assayed only those intervals with visual indications of mineralization. Many of the core holes have just a few individual samples with most of the hole length having no assay data.

Although Gold Fields' sampling included core, chip, channel, and underground bulk samples, only the core sample data were used in this resource estimate. Springett (1984) described the relative merits of different sampling methods that were examined during their underground test program: underground core drilling, sampling the cuttings from percussion holes, or developing raises and either bulk sampling or channel sampling the raise. A comparison of results from percussion drilling, bulk sampling, and core drilling indicated that the core results may be biased low, possibly due to washing out high-grade friable material during drilling (Springett, 1984).

Gold Fields sampled core in lengths varying from 1 foot to 5 feet; it was generally sampled in 2-foot to 3-foot intervals in weakly mineralized areas, while 1-foot samples were taken in strongly mineralized zones in order to minimize dilution (Kastelic, 1983). Although the protocols for sampling indicated sludge from the core drilling would be collected and assayed due to the fineness of the silver particles (Gold Fields Operating Co. – Shafter, undated), sludge was not collected from the core holes (Springett, 1984). Core from surface holes was generally NX or NC, but core from the underground holes was BX size. Visibly mineralized sections of core were selected and cut in half with a diamond saw in order to preserve loose fine material that contains many of the silver values. Standard 2ft intercepts were generally prepared for assay, but 1-foot intercepts were utilized on certain sections (Springett, 1984). One half of the sawn core was placed in bags and shipped to the assay lab for sample preparation and assaying.

For their underground percussion holes, which are not represented in the project database used for this report, Gold Fields collected the cuttings in either 5-gallon buckets for horizontal holes or in 32-gallon garbage cans for inclined holes. The excess water was carefully decanted, and the cuttings were stored in 10-inch by 16-inch plastic bags tied with a tagged wire and labeled with the hole number and footage increment. Cuttings were collected over 4ft increments corresponding to the drill-steel lengths.

For Gold Fields' underground bulk drift sampling, whose results are not included in the database used for the current resource estimate, each blasted round was mucked with a scoop tram and taken to the surface for separate treatment through a bulk-sampling plant. A guide to sampling procedures used by Gold Fields provided further details on this sampling method (Gold Fields Operating Co. – Shafter, undated).

Other than the drilling program carried out by RGMC in the late 1990s and Aurcana's recent drilling, the majority of the samples in the drill-hole database were collected prior to 1982. Although there is limited information available on the sampling methodology employed by the previous mining companies that can be reviewed or verified, Amax and Gold Fields were well respected mining companies with a long history of operational experience. The results obtained by each company generally agreed with results from others who explored in the district, as well as with data from the historical mining records.

RGMC's samples from their 1998-1999 drilling were reported to be standard 5ft-long chip samples from RC drilling and were split using a cyclone splitter (Rozelle and Tschabrun, 2008). However, Aurcana noted that according to the drill logs, samples were collected mainly in 2.5ft increments (occasionally 5-foot increments) where visual indications of mineralization and/or favorable lithology were noted by the rig geologist. The assay database indicates most of the samples were taken on 2.5ft intervals.

For Aurcana's 2011-2012 exploration surface drilling program, drill-core assay intervals were determined based on the geologist's visual examination of the core for mineralization, which was then confirmed with a hand-held Delta x-ray fluorescence ("XRF") instrument; intervals with silver greater than 20ppm by XRF and anomalous lead and zinc were selected for assay. A minimum of two XRF readings were obtained on each box of core. Sample intervals were normally 1 foot for initial orientation purposes and later were 2-foot intervals, with a barren sample selected above and below the mineralized zone to limit the mineralized zone. Core was sawn, and one half was placed into polyethylene sample bags along with a sample tag and secured with a zip-lock tie.

For Aurcana's underground drilling program, very limited information from logs of 81 of the 90 holes drilled indicates sample intervals were generally 2 feet. Sampling for surface drilling by Aurcana's mine geology department also appears to generally have been on 2-foot intervals, based on limited information from Aurcana.

11.2 Sample Preparation, Analysis, and Security

11.2.1 Previous Operators

Very little documentation exists regarding the sample preparation or security procedures used by former operators of the property. Gold Fields analyzed all mineralized core samples by fire assay for gold and silver; lead and zinc analyses were done by titration at first and later by atomic absorption (Kastelic, 1983). Gold Fields used Union Assay Office in Salt Lake City, Utah for sample preparation and assaying of all core samples until mid-1981 (Kastelic, 1983). Check samples were assayed by Skyline Labs, Inc. (now Skyline Assayers & Laboratories; "Skyline") in Wheat Ridge, Colorado. From 1981 until the end of Gold Fields' work, core samples were analyzed by various labs, including Gold Fields' own lab in Golden, Colorado, the Gold Fields Operating Co. – Shafter lab at the project, and Skyline.

Soil and stream-sediment samples were screened to minus 80 mesh at Shafter and sent to Skyline in Tucson, Arizona, for analysis. Silver and gold grades were determined by standard fire assaying techniques. Since Union Assay is no longer in business, details of their sample preparation procedures are not available for review.

RGMC used Actlabs-Skyline in Tucson, Arizona, as the assay laboratory for their 1998-1999 drilling program, based on copies of assay certificates in Aurcana's files. Sample analysis for gold and silver was performed using standard, one assay-ton, fire-assay techniques with a gravimetric finish.

11.2.2 Aurcana Corporation

The following information was taken from Lambeck (2012), Aurcana news releases (March 5, 2012; April 3, 2013), and information provided by Aurcana.

For their 2011-2012 exploration drilling program, Aurcana's drill-core samples were dried and crushed to minus 10 mesh. A 250g subsample was pulverized to 90% passing 150 mesh using a ring and puck pulverizer. Samples taken in early 2012 were analyzed by Pinnacle Analytical Laboratories ("Pinnacle") in Lovelock, Nevada (holes S-12-401, S-12-407, S-12-408, S-12-409, and, S-12-410 with S-12-412 not sampled). Duplicate samples on returned pulps for selected samples with high- and low-grade silver were sent to American Assay Labs ("American Assay") in Sparks, Nevada, for check assays. Pinnacle closed in 2012. Samples from surface holes S-12-417 to S-12-467 (which included both exploration and mine geology department surface holes) and from underground holes 201200602, 201200603, 201200604, 201200609, and 201200705 were sent to American Assay for analysis. Samples were delivered to the laboratories by courier.

At Pinnacle, all samples were assayed for silver and gold by fire assay with gravimetric finish on a 30g sample. Samples from S-12-401 were assayed with fire assay for silver and gold and for 37 other elements using ICP-OES analysis with two-acid total digestion. Holes S-12-407 through S-12-410 were only assayed for silver and gold. For the holes analyzed by American Assay, multi-element analysis for 72 elements including gold was performed, consisting of two-acid digestion and analysis by ICP-OES. For hole S-12-417, four-acid total digestion and analysis by ICP-OES was used. Samples with silver values greater than 2.917oz/ton were analyzed by fire assay with a gravimetric finish on a 30g charge. Pulps and rejects were returned to Aurcana by courier.

Pinnacle was accredited by the International Accreditation Service and complied with ANS/ISOIEC Standard 17025:2005, according to a copy of their accreditation certificate. American Assay is ISO 17025:2005 accredited, according to their website.

For their 2012-2013 underground drill program, most of Aurcana's drill samples were analyzed at their on-site laboratory. According to Aurcana, samples were crushed, pulverized, and screened, then subjected to multi-acid digestion. Silver was analyzed by atomic absorption spectrophotometry ("AA"). Samples with greater than 2.917oz Ag/ton were re-assayed using fire assay for gold and silver. MDA has not verified these procedures with Aurcana.

11.3 Quality Assurance/Quality Control

Kastelic (1983) reported that during Gold Fields' drill-core assaying, check samples were routinely sent of every fifth core sample and that results generally confirmed the original assays. Until mid-1981, Skyline performed the check assaying as described in Section 11.2.1. MDA also identified pulp check samples analyzed at Gold Fields' on-site mine laboratory and compared them to assays apparently performed by Skyline. MDA's analysis of these historic check assays is discussed in Section 12.2.1.

For drilling performed by Aurcana's mine geology department in 2012-2013, quality assurance/quality control ("QA/QC") consisted of standards, pulp duplicate assays, "coarse blank" material, and check assays. Three standards were prepared by MEG of Reno, Nevada. In addition, the mine lab used standards for internal quality control. Coarse blank material came from a quarry in Cretaceous rock that could potentially be weakly mineralized. Original assays were performed by the on-site mine lab, and coarse crush material was sent to Pinnacle for check assays. Analysis of QA/QC data from Aurcana's mine geology department is discussed in Section 12.2.2.

For Aurcana's surface exploration drilling in 2011 to 2012, pulp and field duplicates, control standards, and blanks were used for QA/QC. Standards and blanks were inserted into the sample batches by Aurcana staff at a minimum frequency of one QA/QC sample, alternating, for every 10 samples (Lambeck, 2012; Aurcana news release, March 5, 2012; April 3, 2013; information provided by Aurcana). Field duplicates consisted of quarter-core. Duplicate samples of returned pulps from selected high- and low-grade silver assays from Pinnacle were sent to American Assay for check assays. MDA's analysis of QA/QC data from Aurcana's exploration group is discussed in Section 12.2.2. Standards and blanks were not inserted by Aurcana into the sample stream for underground exploration holes 201200602, 201200603, 201200604, 2012609, and 201200705.

11.4 Security

MDA has no information on sample security used by operators prior to Aurcana's recent drilling. For the 2011-2012 drilling, Aurcana's samples were sent to either Pinnacle or American Assay by courier, with pulps and rejects returned by courier. Core is stored on-site in secure warehouse facilities.

11.5 Summary

MDA is of the opinion that the sampling methods, security, and analytical procedures are adequate for mineral resource estimation.

There is limited information available on the sampling methodology employed by Amax and Gold Fields. These were well respected mining companies with a long history of operational experience and the results obtained by each company generally agreed with the RGMC results.

The authors are not aware of any other sampling or assaying factors that may materially impact the mineral resources discussed in Section 14.0.

12.0 DATA VERIFICATION

12.1 Database Audit

12.1.1 Assay Table

In April of 2013, a representative of MDA visited the Shafter site for 4 ½ days and worked in the mine-site technical office. A principal task during that week was to search through 16 file cabinets and a dozen cardboard boxes that contain many of the historic records of the Shafter operation, looking for original sources of data to compare with the current digital database.

The primary focus of MDA's database audit was the assay table. There were two principal components of this work: the audit of the historic assays with reference to paper sources, and the audit of the assays produced by the drilling done by RGMC in the period 2011 to 2013 with reference to digital sources.

12.1.1.1 Historic Assays

Large numbers of historic assay certificates and related records exist, in multiple files at several locations within the file cabinets and boxes at the mine-site office. MDA requested that RGMC scan these records to PDF files, a task that RGMC was able to complete during the week that MDA was at the site. There is considerable repetition of the same documents among different file folders, cabinets, and boxes, but MDA asked to have everything that seemed relevant scanned and sorted out duplications and redundancies after the site visit.

In the assay certificates, it is usually, though not always, possible to ascertain from which drill hole samples originated. However, it is not common for the certificates to contain any information about sample intervals. As sources for sample intervals, MDA resorted to hand-written drill-hole summary records, in which assays had been entered and matched to the sample intervals by the original workers. MDA used the combination of assay certificates and summary records to match assays to drill holes and intervals in the digital assay table. In a small number of cases, no summary records existed, so while MDA was able to verify that the assays for a hole in the database match the assays on a certificate, MDA was not able to verify that the assays were assigned to the correct intervals.

Roughly a third of the historic assay records, and almost 60% of the historic records that MDA checked, have hole identifiers that consist only of numeric digits (e.g. "1095"). These holes are assigned to the "numeric" series in Table 12.1. Most, if not all, of these holes were drilled for Amax. All of the assay records in the "numeric" series were drilled for Amax. Assay certificates, or indeed even hand-written summaries of assays, are not available for these holes. However, the drill holes appear on a series of undated cross-sections with basic geological interpretations, and each cross section has in one corner a table setting out the assays for those holes that appear on the section. In reviewing these cross-sections, it was discovered that there were a significant number of AMAX drill holes that were on the cross-sections but not in the RGMC database. As described in Section 12.1.3, these drill holes were added to the database, getting locations from the cross sections and related plan views, and getting the assays from the tables on the cross-sections. Subsequently, different persons associated with MDA double-checked about 68% of the assay table records that MDA had entered, as indicated in Table 12.1.

One complicating factor that MDA encountered is that the historic drill-hole identifiers (names) used in the original typed assay certificates, hand-written logs, and hand-written summaries are very commonly not the same as the hole identifiers in the digital assay table, but are altered and usually shortened versions (see for example Table 12.3 in Section 12.1.2). It is likely that the digital assay table was first compiled at a time when computer memory and data storage capacity were very limited. It was common for software to impose limits on the sizes of data fields to conserve computing resources, and this is probably why many of the original Shafter hole identifiers were shortened. In most cases, the shortened identifiers are recognizably similar to the original long ones, but in a few cases, particularly those of underground drill holes, the identifiers in the database are quite unlike those in the original records. These could be matched to original ones only by matching the locations and orientations.

In general, MDA found that the data entry in the historic database was very accurate. Table 12.1 summarizes the results of the checks.

Note that four of the drill-hole series listed in Table 12.1, MDA did not have original sources to use for checking the assays. This does not necessarily mean that original sources do not exist, only that they did not come to hand during MDA's record search in April of 2013.

Table 12.1 Summary of Audit of Historic Assays

Drill Hole Series	Counts				Percentages		
	Records	Checks	Differences	Significant Differences	Checked	Differences	Significant Differences
numeric	5,631	3,836	57	9	68.1	1.5	0.2
RG	762	614	6	nil	80.6	1	nil
S	96	nil	n/a	n/a	n/a	n/a	n/a
SD	5,809	1,698	nil	nil	29.2	nil	nil
SM	539	nil	n/a	n/a	n/a	n/a	n/a
SPSC	170	nil	n/a	n/a	n/a	n/a	n/a
SU	2,477	nil	n/a	n/a	n/a	n/a	n/a
SW	775	302	11	nil	39.0	3.6	nil
Total	**16,259**	**6,450**	**74**	**9**	**39.7**	**1.1**	**0.1**

Notes: Different treatments of data at the lower detection limits are not counted as differences for the purpose of this compilation.

For the purpose of this tabulation, "records" are counted only if they have a silver assay. Some records for intervals without silver assays exist in the assay table but are not counted in this tabulation.

"numeric" drill hole identifiers consist simply of numerical digits. Such holes for the most part were drilled for A.M. Co. of Texas (Amax). All the "numeric" holes that were checked were Amax holes.

Checks of Amax holes were done using scanned, hand-drawn cross-sections as sources, not certificates.

MDA did not have original sources for assays in the "S", "SM", "SPSC" and "SU" holes.

Differences are determined to be "significant" if they are deemed to entail a risk that the local estimation would be affected in a material way. The determination of which differences are "significant" is subjective, based on the auditor's judgment. Usually, but not always, differences deemed to be significant differ by an order of magnitude.

12.1.1.2 Audit of Recent RGMC Assays

In order to audit the silver assays from drilling done by RGMC in 2012 and 2013, MDA obtained laboratory batch files from the mine geology department in the form of Excel files. MDA compiled the batch files into its own assay table and then used software tools to compare silver in the MDA assay table to silver in the RGMC assay table. The results of the comparison are summarized in Table 12.2.

Initially MDA found 128 differences in silver assays between its assay table and RGMC's table. In Table 12.2, a total of only four differences are indicated. The reason for the large reduction in differences is that MDA sent the original list of 128 differences to RGMC for review and comments. The review determined that MDA had not had all of the relevant batch files, and most of the differences resulted from RGMC having selected a different assay from two or more that were available for each sample. More than one assay was available for many samples because RGMC's mine geology department requested re-analyses from the laboratory as a consequence of quality control failures or results that seemed inconsistent with the known geology. In all such cases, MDA relied on RGMC's judgment as to which assay to use. A comparison of the differences shows no evidence that RGMC's selections are biased in favor of higher grades.

A few differences were consequences of record-keeping errors in the batch files, which RGMC had corrected, but which corrections were not reflected in the batch files given to MDA.

Table 12.2 Summary of Audit of RGMC Assays

Drill Hole Series	Counts				Percentages		
	Records	Checks	Differences*	Significant Differences	Checked	Differences	Significant Differences
2012	2,087	1990	3	1	95.4	0.2	<0.1
S-11	75	nil	n/a	n/a	n/a	n/a	n/a
S-12	1,563	754	1	nil	48.2	0.1	nil
P2013	24	nil	n/a	n/a	n/a	n/a	n/a
Total	**3,749**	**2,744**	**4**	**1**	**73.2**	**0.1**	**<0.1**

Notes: *Differences in counts reflect differences remaining <u>after</u> review by RGMC. See the discussion preceding the table.

12.1.2 Collar Locations

In reviewing historic documents, MDA found numerous iterations of collar-location tables, as well as reports describing campaigns of location verification. The collar locations in historic documents do not always agree exactly with those now found in the collar table of RGMC's drill-hole database. Table 12.3, from MDA's site-visit report of April 2013, shows some of the more extreme examples of the types of differences that exist between the coordinates in the database and the coordinates found in one original source, a typed list of coordinates issued by Bassham Land Surveying Company in 1981.

Table 12.3 Coordinate Differences in SM Series Drill Holes

Hole Identifiers		Coordinate Differences		
Database	Source Documents	x (ft)	y (ft)	z (ft)
SM1	801 or SMPD-1	-2.94	2.32	0.03
SM2	802 or SMPD-2	-6.24	4.42	0.70
SM3	803 or SMPD-3	-2.32	-0.26	-2.37
SM4	804 or SMPD-4	-0.16	4.78	4.86
SM5	805 or SMPD-5	-1.58	-0.18	3.00
SM6	806 or SMPD-6	5.54	-6.48	1.00
SM7	807 or SMPD-7	1.00	-0.59	7.52
SM8	808 or SMPD-8	1.56	10.28	3.47
SM9	809 or SMPD-9	-1.84	0.24	3.14
SM10	810 or SMPD-10	4.07	6.4	-5.00
SM11	811 or SMPD-11	1.78	2.84	-1.58
SM12	812 or SMPD-12	1.21	-4.19	-1.95
SM13	813 or SMPD-13	-1.42	-3.21	1.47
SM14	814 or SMPD-14	0.94	-3.02	-4.24
SM15	815 or SMPD-15	3.11	0.59	0.41
SM16	816 or SMPD-16	2.26	-0.50	0.50
SM17	817 or SMPD-17	-11.94	4.68	0.61
SM18	818 or SMPD-18	2.14	-2.21	0.56
SM19	819 or SMPD-19	-3.12	4.26	2.78
SM20	820 or SMPD-20	-3.00	1.80	1.09
SM21	821 or SMPD-21	-2.73	4.75	2.76
SM22	822 or SMPD-22	4.10	3.78	-4.32

The differences listed in Table 12.3 are, as stated, among the more extreme examples of differences. MDA has no means to judge the relative merits of any particular sets of coordinates. MDA did have a conversation with the person responsible for the coordinates in the 1981 list, who is now employed by RGMC as a surveyor and who has a long history with the Shafter operation. Based in part on this discussion, MDA believes that the collar coordinates in the current database provide a sound basis for the resource estimate. The comparison in Table 12.3 is presented only to illustrate the issue.

12.1.3 Historic Drill Data Added to Database

The existing project database did not include data on many of the Amax drill holes found on the geologic cross-sections and/or plan maps. These drill holes had not been in the original collar or assay table that MDA received from RGMC. MDA and RGMC worked together to add these holes, getting locations and geology, if available, from the cross-sections and related plan views and getting the assays, if available, from the tables on the cross-sections. A total of 589 underground holes and 56 surface core holes were added to the database. Of this total, 464 of the Amax drill holes had no recorded assay data within the cross-section assay tables. In a similar manner as MDA treated the unsampled intervals in those Amax holes which had partial assay data, the unsampled drill holes were considered unmineralized in the database and in the resource estimate.

In addition to the Amax drilling, 10 Gold Fields surface core holes, all within or adjacent to the current resource, were also added to the database.

12.2 Quality Control and Quality Assurance

This discussion of QA/QC focuses only on the drill-hole assay table used by MDA for the estimation of the Shafter resource. The bulk of the assay table contains “historic” data, which for practical purposes means data generated prior to the RGMC drilling programs of 2012 and 2013. The historic data set does not contain a set of compiled QA/QC data, and by modern standards, little QA/QC work was done historically. However, a number of campaigns of duplicate or check assays were conducted at various times. Those duplicate or check assays that MDA was able to identify are reviewed in Section 12.2.1.

The RGMC 2012 and 2013 assay data fall into two groups: those generated by the mine geology department and those generated by the exploration department. The former are discussed in Section 12.2.2, and the latter are discussed in Section 12.2.3.

12.2.1 Historical QA/QC Data

The historical database that MDA received from RGMC in digital form does not contain any QA/QC data, nor is there formal documentation of any QA/QC programs that may have been in effect from time to time prior to RGMC’s acquisition of the project. However, in MDA’s review of paper files available at the Aurcana mine office, MDA did find some files whose labels indicated that they contained “core check assays,” and which proved to contain copies of assay certificates or records from at least three labs. Aurcana personnel scanned the paper files to digital pdf files for MDA during MDA’s April 2013 visit to the site. Subsequently MDA reviewed the scanned records and was able to compile two sets of comparisons between labs. These are described in Section 12.2.1.1 and Section 12.2.1.2, which follow.

12.2.1.1 Skyline vs. Union Silver Checks

MDA was able to match 495 sample numbers of assays done by Skyline in 1980 and 1981 to sample numbers in the Shafter database. The original analyses were done by Union Assay Labs, and Skyline received pulps for the purpose of check assays.

MDA compared the silver grades in the 495 sample pairs. Twelve assay pairs were judged to have extreme differences that skewed the comparison and obscured the underlying relationship between the Skyline checks and the original assays. MDA evaluated the remaining 483 pairs and obtained the results illustrated in Figure 12.1 and Figure 12.2.

Figure 12.1 Skyline Silver Checks vs. Original

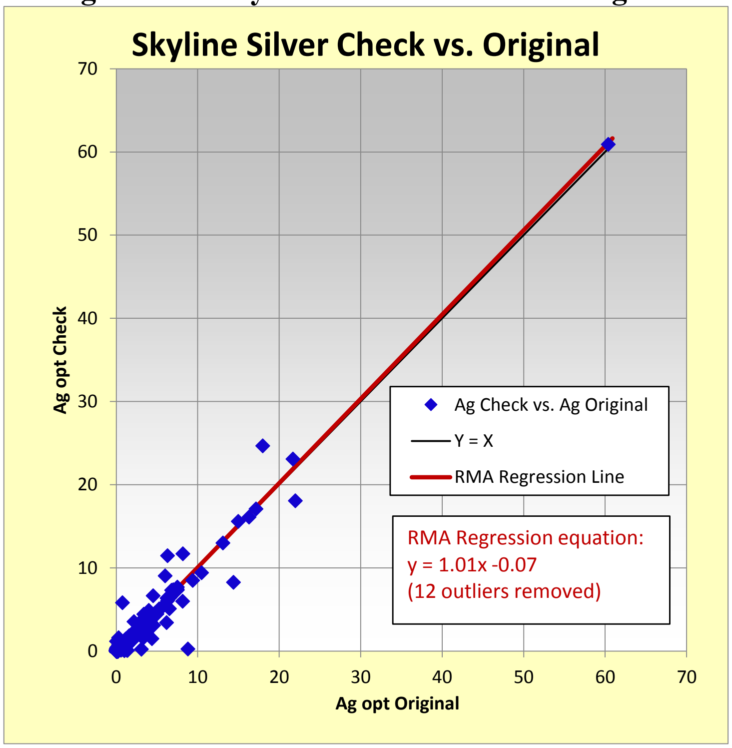
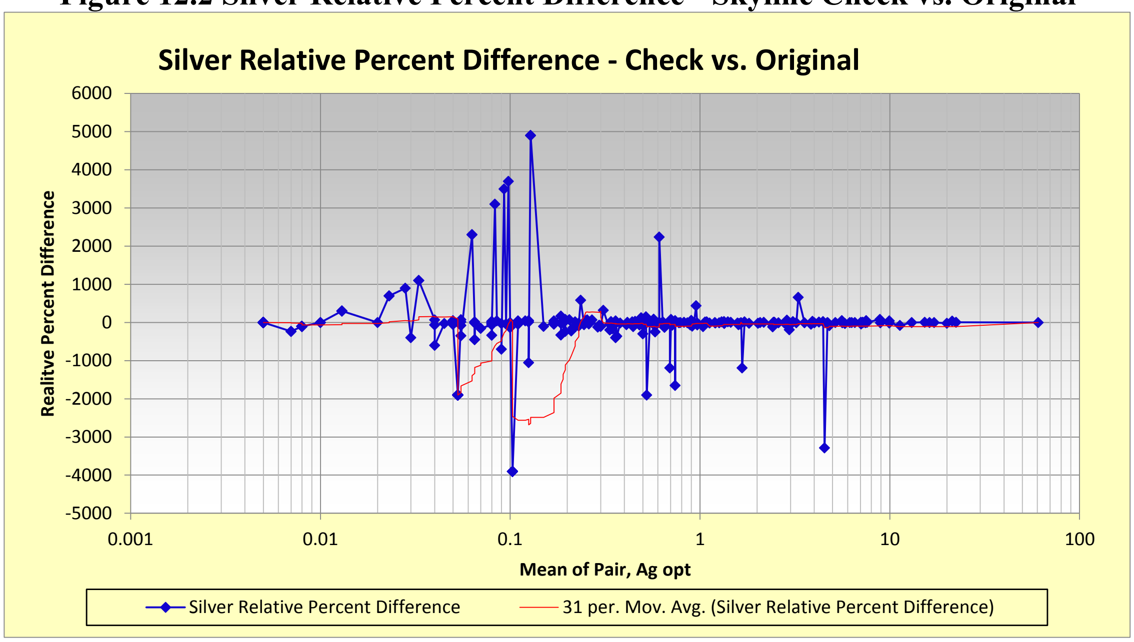


Figure 12.2 Silver Relative Percent Difference - Skyline Check vs. Original



In Figure 12.2 and similar charts the relative percent difference is calculated as:

$$100\ x \frac{Dup-Original}{lesser\ of\ (Dup,Original)}$$

Figure 12.1 and Figure 12.2 suggest that, with some exceptions, the correspondence between the Skyline checks and the original Union Assay data is quite good, particularly for silver grades above about 0.1oz Ag/ton. It should be noted, however, that the paired data sets "fail" standard statistical tests for differences in means and medians at the 95% confidence level, suggesting that significant differences do exist. Nevertheless, MDA concludes that the Skyline silver check assays substantially support the silver assays in the Shafter database.

12.2.1.2 Gold Fields vs. Skyline Silver Checks

MDA was able to identify 93 pulp check samples done at Gold Fields' on-site mine laboratory and compare the silver values to the silver values in the Shafter assay table. The assays in the assay table appear to have been done by Skyline.

MDA eliminated one pair of silver assays having an extreme difference from the comparison, leaving 92 assay pairs. Figure 12.3 and Figure 12.4 illustrate the comparison.

Figure 12.3 Gold Fields Silver Checks vs. Original

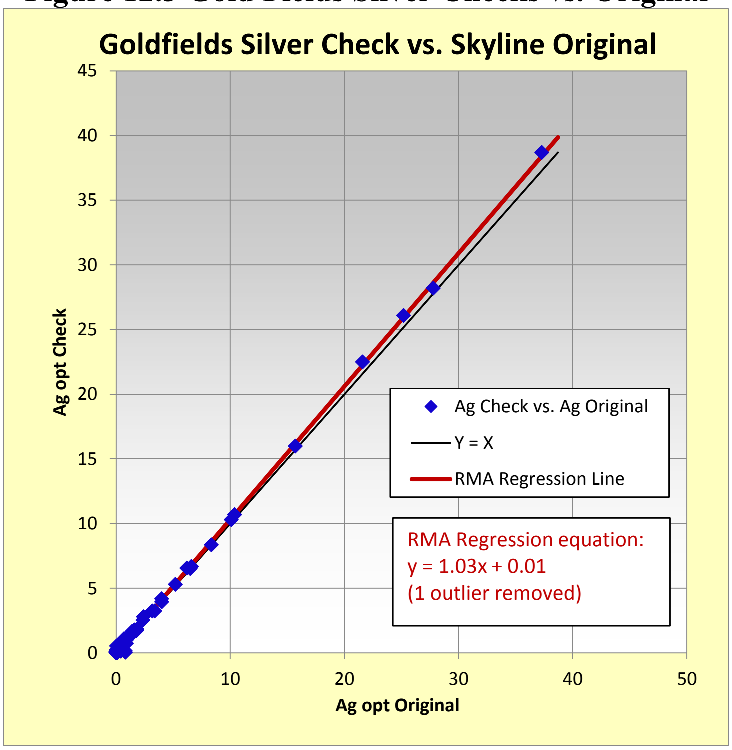
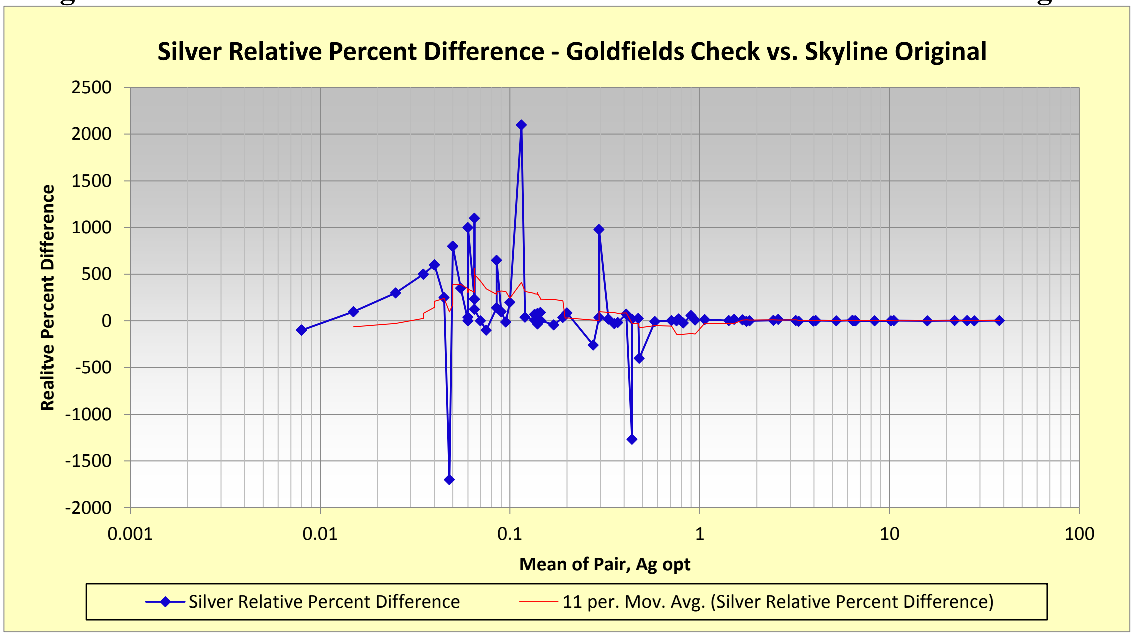


Figure 12.4 Silver Relative Percent Difference - Gold Fields Check vs. Original



In Figure 12.4 and similar charts the relative percent difference is calculated as:

$$100\ x \frac{Dup - Original}{lesser\ of\ (Dup, Original)}$$

Figure 12.3 and Figure 12.4 suggest that, with some exceptions, the correspondence between the Gold Fields checks and the original Skyline data is quite good, particularly for silver grades above about 0.1oz Ag/ton. It should be noted, however, that the paired data sets "fail" standard statistical tests for differences in means and medians at the 95% confidence level, suggesting that significant differences do exist. Nevertheless, MDA concludes that the Gold Fields silver check assays substantially support the silver assays in the Shafter database.

12.2.2 Aurcana/RGMC Mine Geology QA/QC Data

12.2.2.1 Standards

RGMC's mine geology department at Shafter used three distinct standards during the 2012 - 2013 drilling campaign. All three were prepared by MEG of Reno, Nevada. Two of the standards, MEG-Au.09.03 and MEG-Ag-2, were from MEG's regular inventory. The third, Shafter-A, was custom-made using material from Shafter. MDA has specifications provided by MEG for these standards.

In the notes provided with the specifications, MEG stated that the specifications for Shafter-A are preliminary and should be modified as results from Shafter's own analyses become available. In the accompanying charts, for the three MEG standards MDA has shown limits using both MEG's statistics and statistics generated from the Shafter lab data. The failure counts in Table 12.4 were determined using MEG's statistics.

The laboratory batch files that MDA obtained from RGMC also contained results for samples designated "control," which were standards used by the on-site mine lab for internal quality control. It appears that two distinct "control" samples were used during different but overlapping time periods. MDA has listed these as "Control 1" and "Control 2" in Table 12.4. MDA does not have specifications for these two control samples, so MDA calculated a set of statistics from the results themselves.

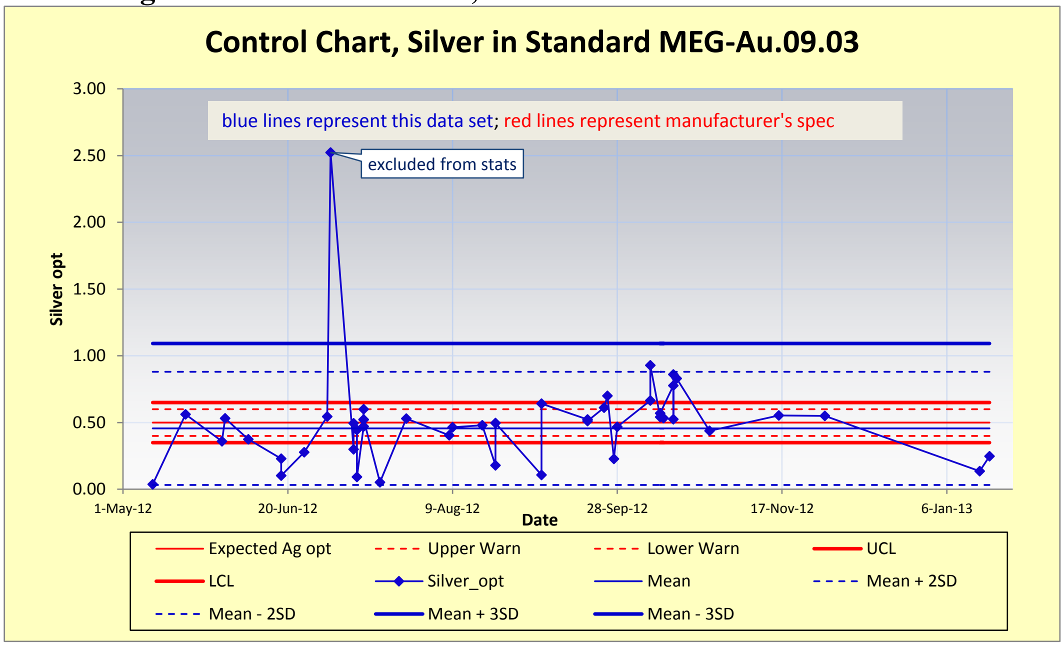
The mine geology department provided MDA with compilations of the results of the standards inserted by that department. MDA built its own compilation of the mine lab's control samples, working from laboratory batch files.

The results obtained for the standards are summarized in Table 12.4 and shown graphically for each standard in Figure 12.5 through Figure 12.9, inclusive. The "Fail Counts" listed in Table 12.4 include any analyses falling outside the "best" value ± 3 standard deviations, using the specifications provided by MEG for the three MEG standards and statistics calculated from the compiled analyses for the two control samples.

Table 12.4 Specifications and Results for Standards

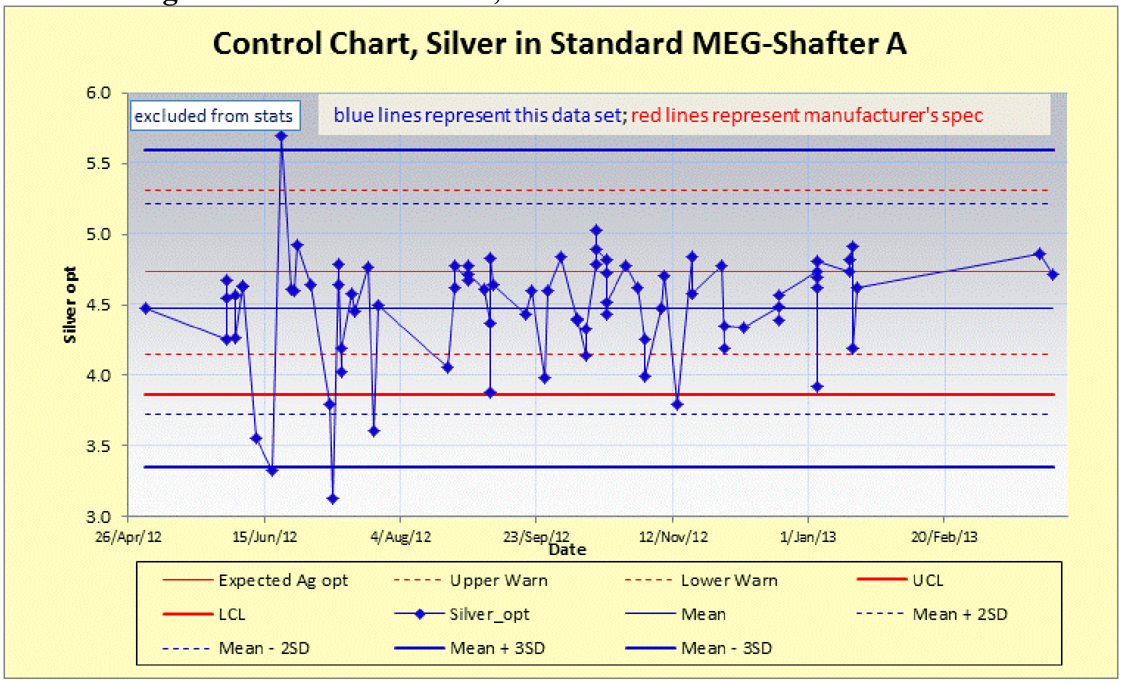
Standard	Insertions	Start Date	End Date	Best Value	Average	Bias Pct	Fail Counts	
							High	Low
Standards Inserted by Mine Geology Department								
MEG-Au.09.03	47	10-May-12	19-Jan-13	0.5	0.501	+0.2	7	12
MEG-Shafter-A	81	2-May-12	1-Apr-13	4.73	4.487	-5.1	1	6
MEG-Ag-2	42	20-May-12	19-Jan-13	8.54	7.86	-8	0	2
Standards Inserted by Lab								
Control 1	205	10-May-12	8-Dec-12	??	1.744	n/a	2	0
Control 2	65	19-Nov-12	6-Apr-13	??	3.538	n/a	0	2

Figure 12.5 Control Chart, Silver in Standard MEG-Au.09.03



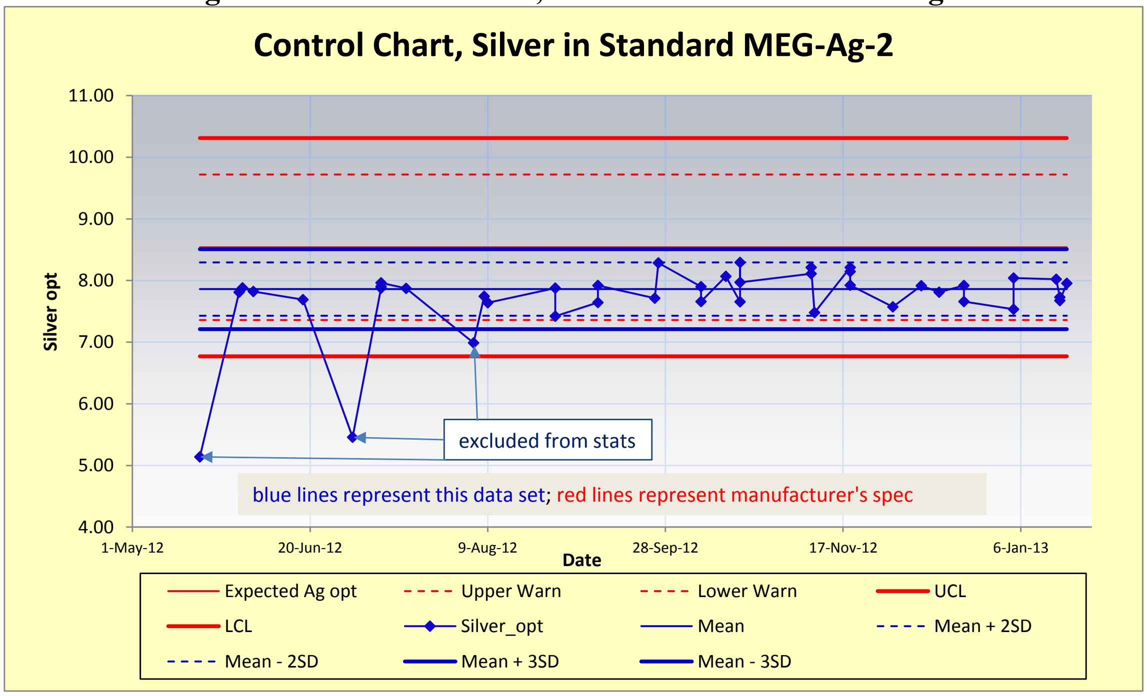
Except for one unexplained high outlier, the results for MEG-Au.09.03 (Figure 12.5) exhibit a period of generally low bias from May through to the end of September 2012. In the first two weeks of October 2012, a distinct high bias is present, after which an overall low bias resumes. At the relatively low grade of this standard, the high failure count and the magnitudes of all but one of the failures themselves engender no concern with respect to the silver grades in the resource estimate. The one unusually high outlier is puzzling; it may be due to an analytical failure or to some other cause such as a sample mix-up.

Figure 12.6 Control Chart, Silver in Standard MEG-Shafter-A



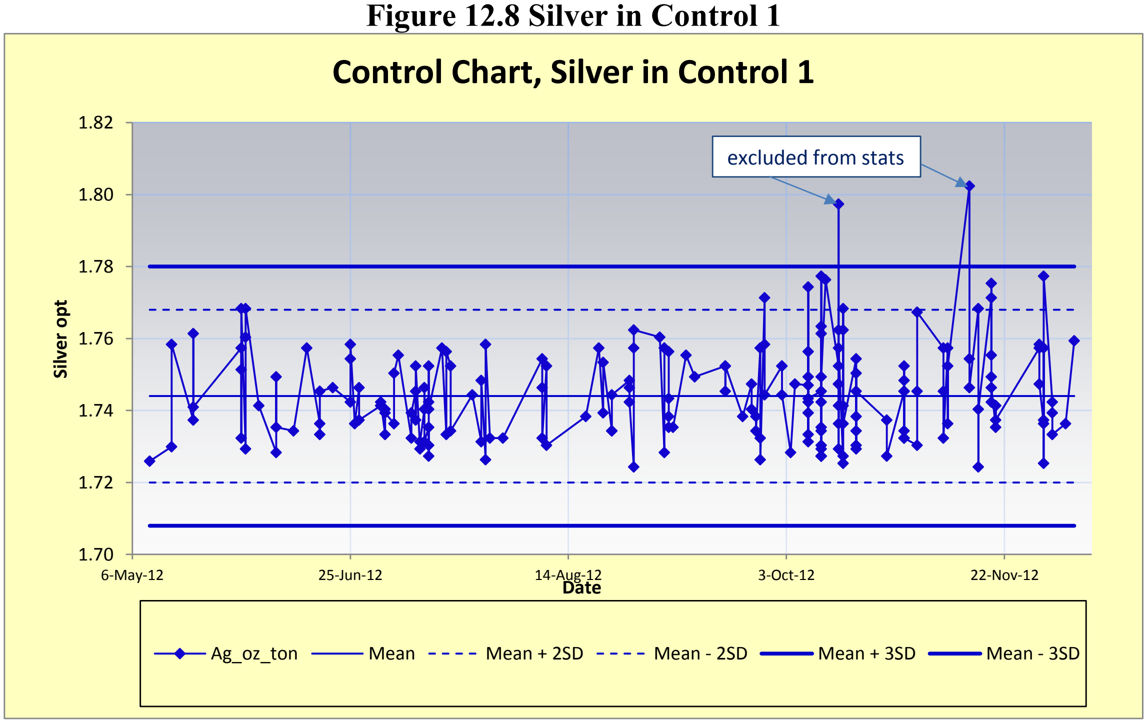
The results for standard MEG-Shafter-A (Figure 12.6) show a generally low bias relative to the preliminary results obtained by MEG from three labs used by MEG for its round-robin tests. Though not conclusive, this suggests the possibility that the on-site mine lab may produce slightly low silver results in this grade range.

Figure 12.7 Control Chart, Silver in Standard MEG-Ag-2



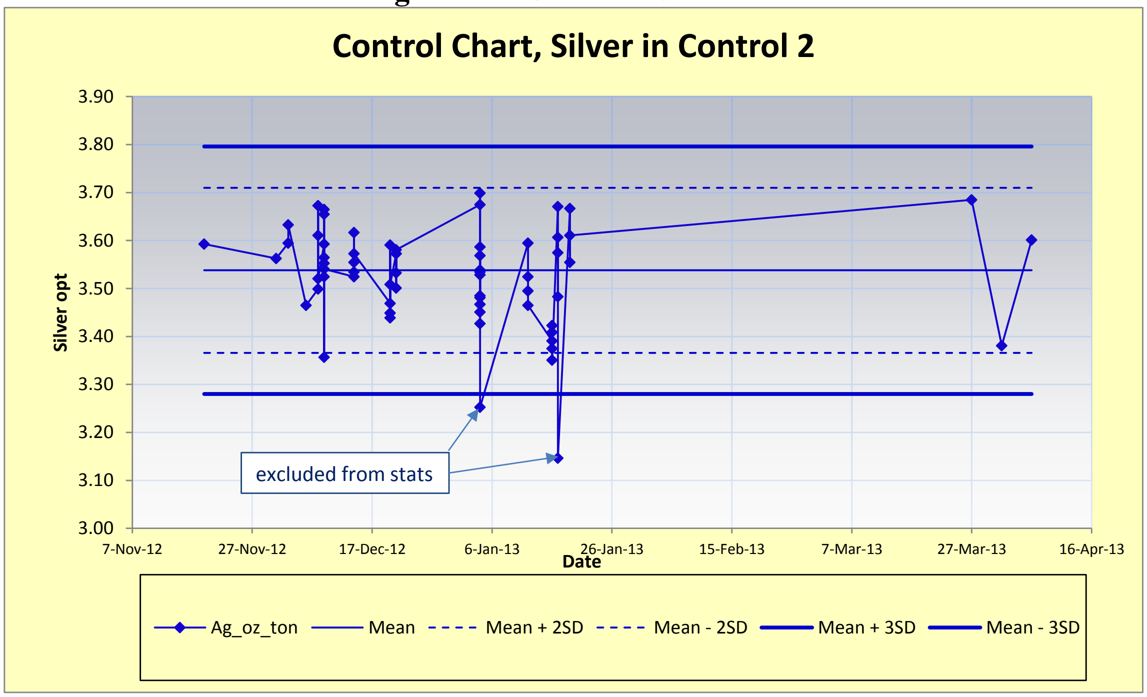
The silver results for MEG-Ag-2 (Figure 12.7) are all biased slightly low relative to the statistics reported by MEG.

Figure 12.8 Silver in Control 1



Predictably, the analyses of Control 1 conform reasonably well to statistical control limits derived from those same analyses. It is evident that at about the beginning of October 2012 some change took place that resulted in greater "scatter" of results from then on, even producing two high-side failures.

Figure 12.9 Silver in Control 2



The results for Control 2, illustrated in Figure 12.9, reveal two low-side failures but are otherwise unremarkable.

12.2.2.2 Pulp Duplicate Samples

Pulp duplicate assays are analyses of splits from the original pulps, done by the RGMC lab during the same analytical runs as the original assays. MDA compiled the pulp duplicate data from individual Excel batch files provided by RGMC. Note that a number of cases exist in which the mine geology department requested that analytical batches be re-run, resulting in re-analyses for every sample in the batch. For the purpose of this discussion, such re-analyses, done in a separate analytical run at a different time on batches whose results were already deemed suspect, are not considered to be part of the pulp duplicate data set.

MDA identified 178 pulp duplicate pairs derived from 160 batch files provided by RGMC. Ninety-six batch files do not contain any duplicate analyses.

Four of the duplicate pairs are statistical outliers exhibiting extreme differences in the silver values. Possible causes for this include, but are not limited to, natural heterogeneity in the sample material, problems during sample preparation, analytical errors, or sample mix-ups. To get a sense of underlying quality of the duplicate data, MDA eliminated the four outliers from its statistical evaluations.

MDA evaluated the remaining 174 pairs using a scatter plot (Figure 12.10), relative difference charts (Figure 12.11), and statistical tests including a paired T-test, Wilcoxon signed rank test, and a Pearson correlation coefficient. All tests suggest that there is no meaningful difference between the results for the original and the duplicate.

Figure 12.10 RGMC Silver Pulp Duplicate Scatterplot

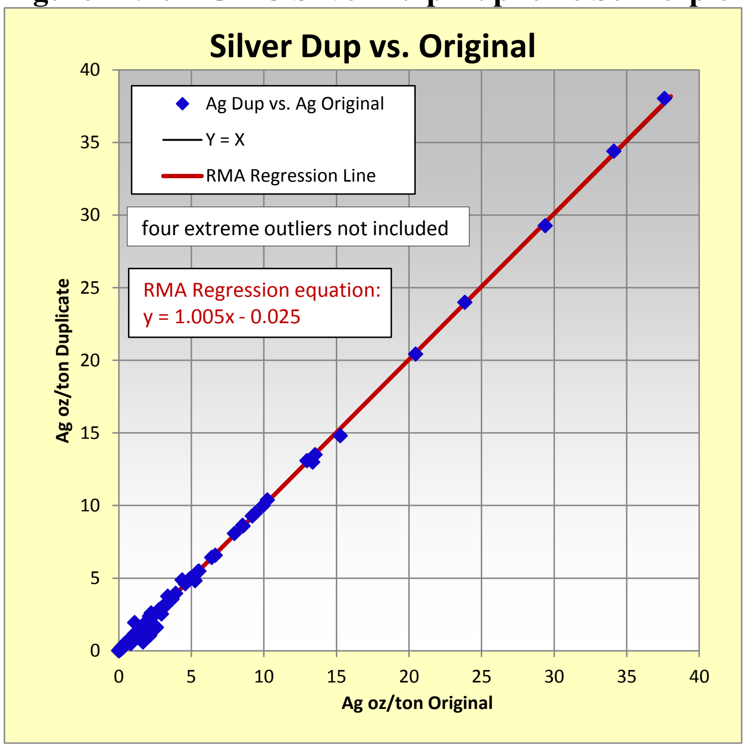
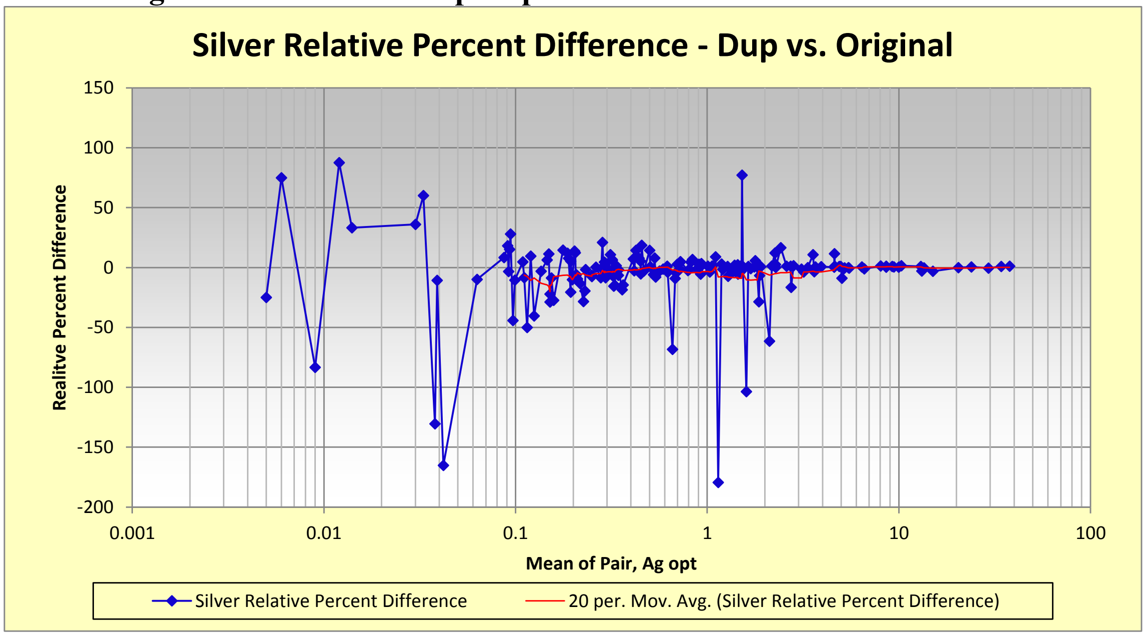


Figure 12.11 RGMC Pulp Duplicates - Relative Percent Difference



In Figure 12.11 and similar charts the relative percent difference is calculated as:

$$100\ x\ \frac{Dup - Original}{lesser\ of\ (Dup, Original)}$$

12.2.2.3 Coarse Blank

The QA/QC data include 19 analyses of material described as "coarse blank," analyzed during the period July 10, 2012 through January 16, 2013. RGMC advises MDA that the material used for the coarse blank is from a quarry in Cretaceous rock and that it could potentially be weakly mineralized.

Figure 12.12 is a time-series chart of the silver analyses of the coarse blank material. Given the possibility that the material is naturally weakly mineralized, MDA can draw no important conclusions from these data, other than to conclude that there is no evidence for contamination of a severity likely to have a material effect on the resource estimate.

Figure 12.12 Silver Grades in Coarse Blank

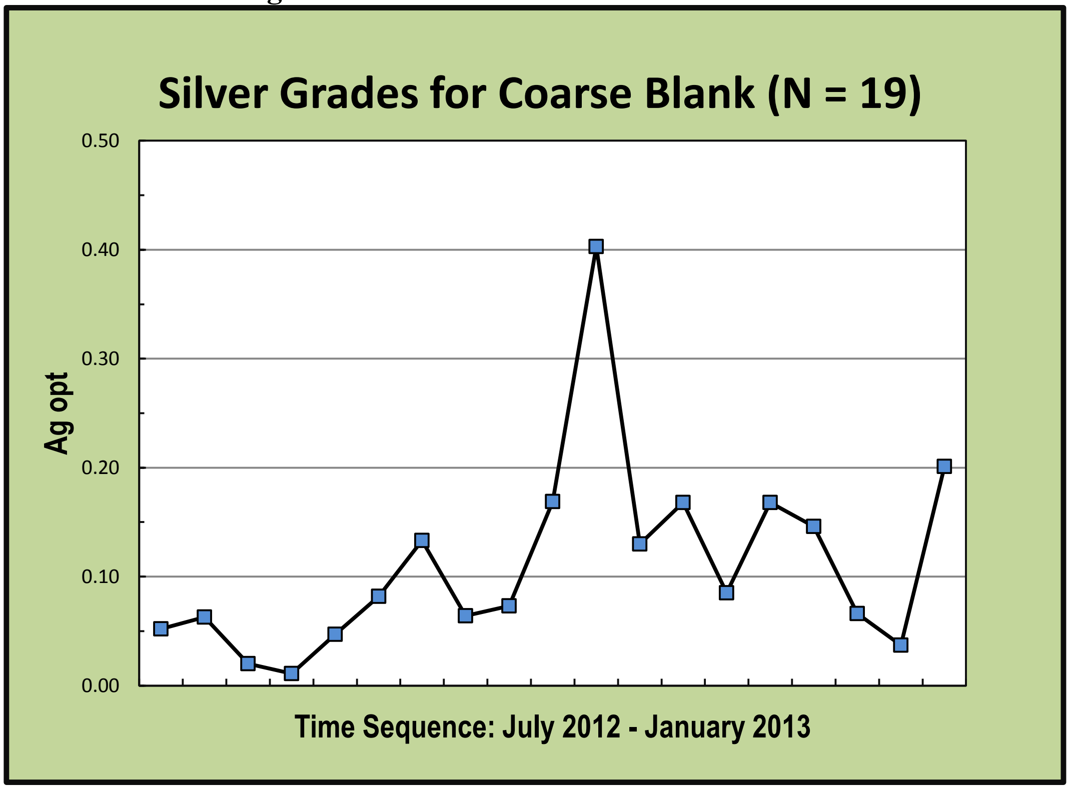


Figure 12.12 was modified by MDA from a chart originally prepared by RGMC.

12.2.2.4 Checks at External Lab

RGMC provided MDA with a file containing a comparison of silver analyses of 43 samples from the 2012 drilling program. The samples were originally analyzed by the on-site mine lab, and then coarse crushed reject material was sent to Pinnacle for comparative analyses. The use of coarse reject material for external check analyses means that rather than producing a comparison of just analytical results, the outcomes of the entire processes of splitting, pulverizing, and analyzing are being compared.

The results of MDA's evaluation of the Pinnacle checks vs. the Shafter originals are illustrated by Figure 12.13 and Figure 12.14. The Pinnacle silver analyses are on average significantly higher than the Shafter analyses. The magnitude of the differences is best illustrated by the relative difference chart in Figure 12.14. MDA cautions that this comparison provides no information as to which lab is closer to the "true" silver concentration, and it is complicated by the fact that Pinnacle was given coarse crush material to work with, introducing many variables into the comparison. The comparison does indicate that relative to Pinnacle, the Shafter lab produces relatively low or "conservative" silver results.

Figure 12.13 Silver in Pinnacle Check vs. Shafter Original

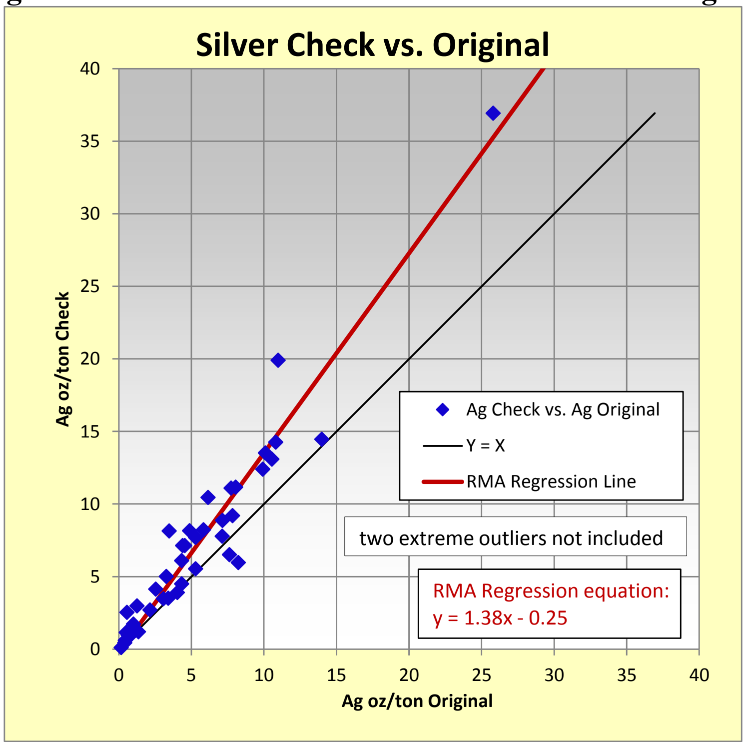
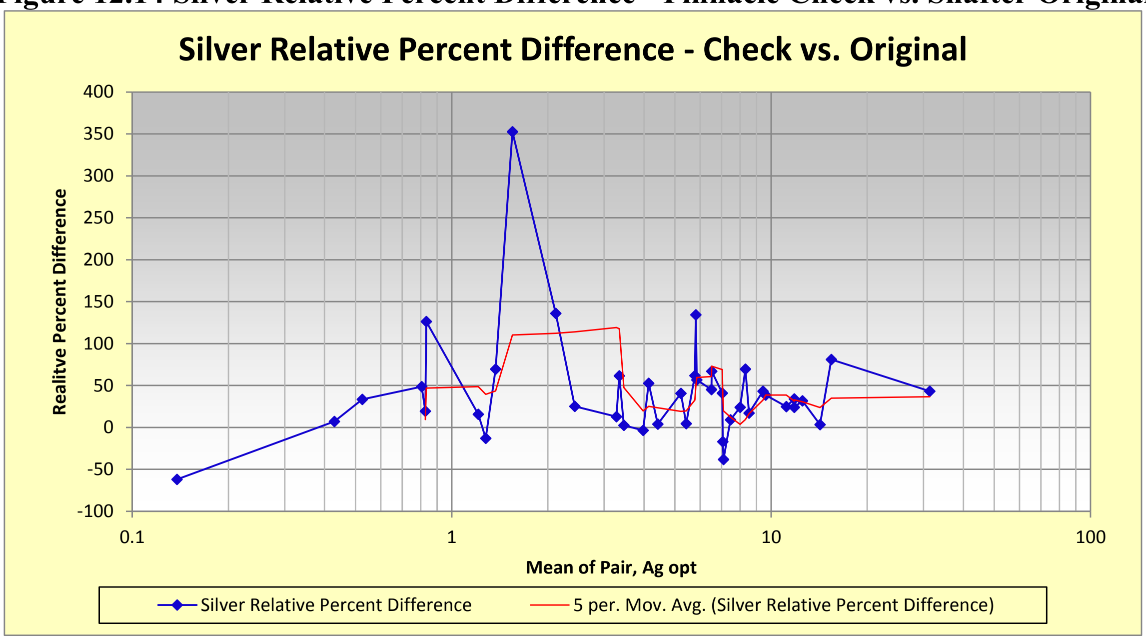


Figure 12.14 Silver Relative Percent Difference - Pinnacle Check vs. Shafter Original



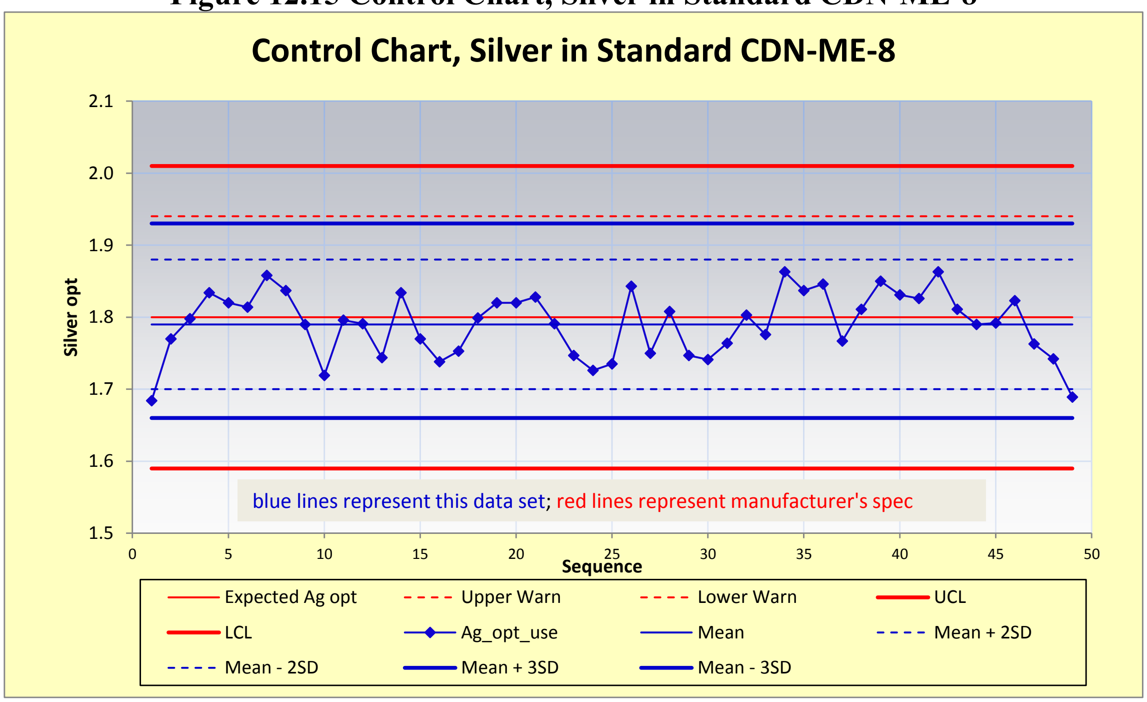
12.2.3 Exploration Geology QA/QC Data

12.2.3.1 Standards

The QA/QC data set provided by Aurcana's exploration group includes 55 analyses of a commercial standard, CDN-ME-8, two analyses of a standard identified as "A-1," and two analyses of one identified as "MEG." The analyses of A-1 and MEG were done by Pinnacle, as were six of the analyses of CDN-ME-8. The remaining 49 analyses of CDN-ME-8 were done by American Assay.

Of the three standards, only CDN-ME-8 was analyzed enough times to be useful for monitoring the quality of routine silver assays. The six analyses of CDN-ME-8 done by Pinnacle show erratic silver values. MDA suspects that the erratic values are due to sample mix-ups rather than analytical errors, but in any case, MDA concludes that the data from Pinnacle are not useful. This leaves the 49 analyses done by American Assay as useful monitoring data. MDA's evaluation of the results of these analyses is illustrated in Figure 12.15. No failures or other problems are evident.

Figure 12.15 Control Chart, Silver in Standard CDN-ME-8



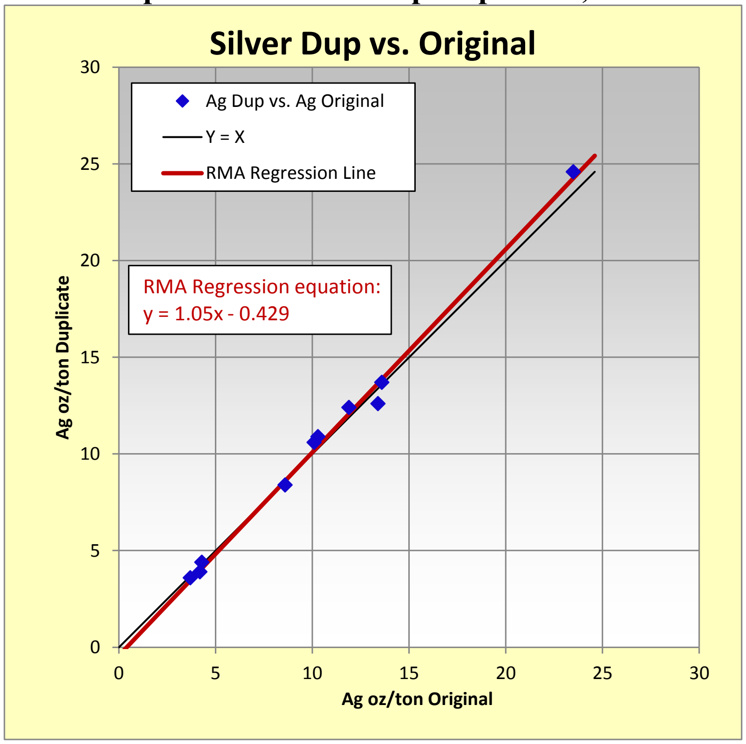
Note: The horizontal axis in Figure 12.15 represents an approximate time sequence.

12.2.3.2 Pulp Duplicates

12.2.3.2.1 Pulp Duplicates Fire Assay - Gravimetric

Twenty pulp duplicates are included in the QA/QC data set for the exploration drill holes. In 10 instances, both the original analysis and the duplicate analysis were done using a fire assay preparation with a gravimetric finish. MDA reviewed these 10 duplicate pairs using scatter plots, relative difference charts, and statistical tests including T-tests and Pearson Correlations and found no issues of consequence. The comparison is illustrated by the scatter plot in Figure 12.16.

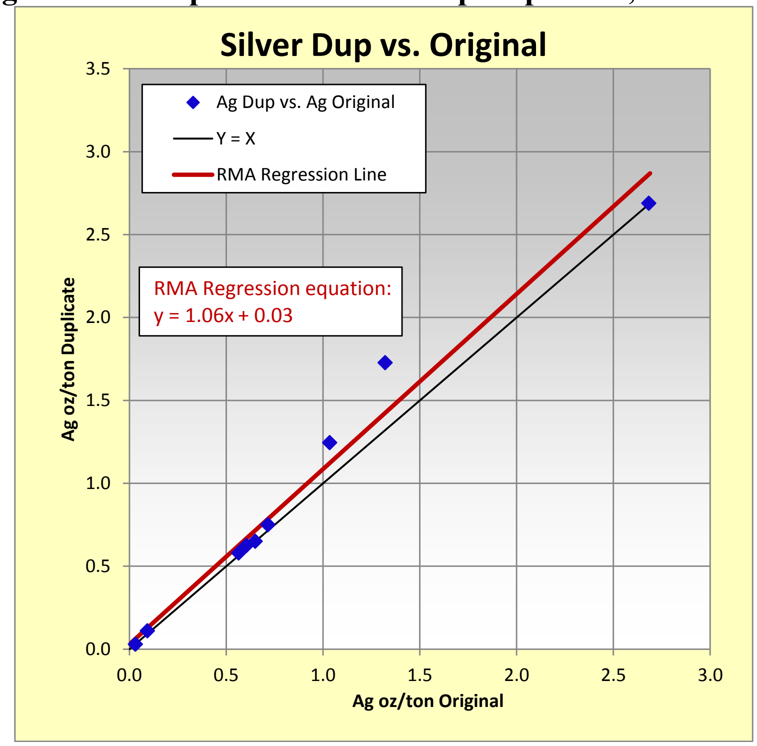
Figure 12.16 Exploration Silver Pulp Duplicates, FA-Gravimetric



12.2.3.2.2 Pulp Duplicates ICPES/MS

In nine instances, both the original and the duplicate pulp analysis were done using an ICPES/MS method. In all but one case, a two-acid digestion was used for both the original and duplicate analyses. In one of the nine cases, the original analysis was done using a four-acid digestion, but the duplicate was again done using a two-acid digestion. As with other duplicate pairs, MDA reviewed these nine duplicate pairs using scatter plots, relative difference charts, and statistical tests including T-tests and Pearson Correlations. MDA found no issues of consequence. The comparison is illustrated by the scatter plot in Figure 12.17. Two sample pairs, readily identifiable in Figure 12.17, cause the average value of the duplicates to be biased high relative to the original samples. If those two sample pairs are removed from consideration, the bias effectively disappears.

Figure 12.17 Exploration Silver Pulp Duplicates, ICPES/MS



For one instance of a pulp duplicate, the initial analysis was done using ICPES/MS with a two-acid digestion, but the duplicate was done using fire assay with a gravimetric finish. These analyses yielded 2.57oz Ag/ton and 3.0oz Ag/ton, respectively. No general conclusion can be drawn based on this one comparison of the two analytical methods.

12.2.3.3 Field Duplicates

The exploration department's QA/QC data include results for three duplicate pairs described as "field duplicates." The results appear in Table 12.5. Three duplicate pairs are too few to draw any general conclusions, but MDA notes nothing unusual in the results.

Table 12.5 Silver in Exploration Field Duplicates

Original Sample	Duplicate Sample	Original Batch	Duplicate Batch	Original Ag (oz/ton)	Duplicate Ag (oz/ton)
2012441014	2012441015	SP0102194	SP0102194	1.321	1.727
2012441020	2012441021	SP0102194	SP0102194	2.505	1.718
2012441025	2012441026	SP0102194	SP0102194	1.035	1.245

12.2.3.4 Blanks

The QA/QC data set provided by Aurcana's exploration group includes 55 silver analyses of material described in the database as "KBlank." Lambeck (2012) says the blank material was unmineralized Cretaceous rock from core.

12.2.3.4.1 Blanks Analyzed at Pinnacle Analytical Laboratories

Seven of the 55 silver analyses of blanks were done at Pinnacle, using a fire assay gravimetric method. Six of the seven analyses returned less than 0.1oz Ag/ton. The other analysis returned 0.59oz Ag/ton. MDA has no explanation for this aberration. It could affect hole S-12-407.

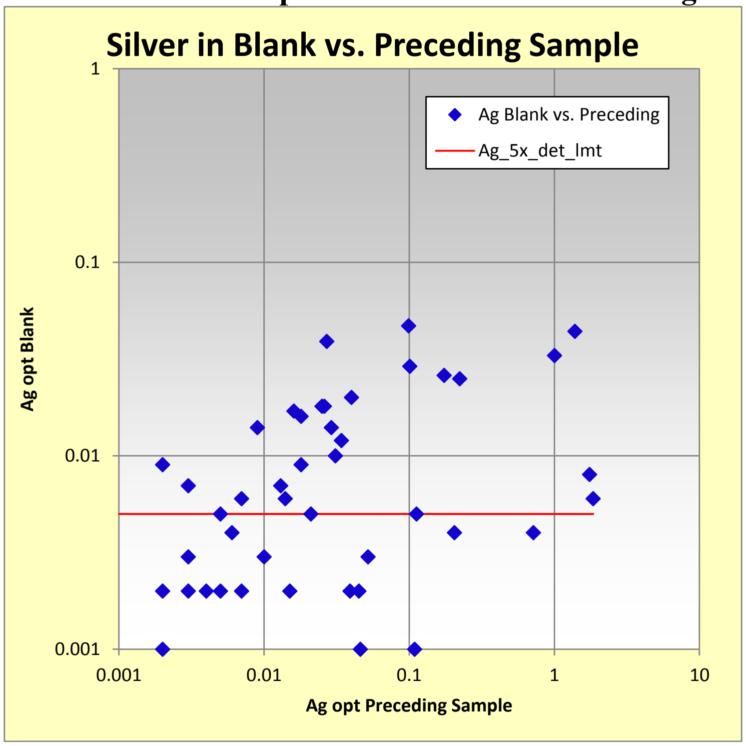
12.2.3.4.2 Blanks Analyzed at American Assay Laboratories

Forty-eight of the 55 silver analyses of blanks were done at American Assay. MDA was able to match 47 of those to samples that numerically preceded them in the sample sequence. MDA found that in 22 instances, the samples numerically preceding blanks in the same batches were themselves blanks. In one rather extreme example, batch SP0101800 contained five blanks in numerical sequence from 2012437051 through 2012437055.

Figure 12.18 is a scatter plot showing the silver analyses obtained for the 47 blanks referenced to the vertical axis, plotted against the silver in the numerically preceding sample referenced to the horizontal axis. The intent of this type of plot is to gain a visual impression as to whether the analysis obtained for a blank is influenced by the grade of the preceding sample. In Figure 12.18, there is a visual impression that blanks numerically following higher-grade samples tend to have higher grades reported than blanks that follow lower-grade samples. A Spearman rank correlation test supports this possibility, yielding a correlation coefficient of 0.44, found to be significant at the 95% confidence level.

While the blanks show plausible evidence of low-level between-sample contamination somewhere in the processing of samples, the magnitude of such contamination does not appear to be severe enough to have a material effect on the outcome of a resource estimate.

Figure 12.18 Silver in Exploration Blanks vs. Preceding Sample



12.3 Data Verification Summary and Conclusions

MDA is of the opinion that the data verification procedures support the geologic interpretations and confirm the database quality. Therefore, the Shafter database is adequate for use in estimating and classifying a Mineral Resource. Principal findings from the data verification are:

- There is no QA/QC data on the Amax drilling which is reflected in the Mineral Resource classification.
- Research efforts to ensure all Amax drill data is added to the database should be continued.
- The limited Gold Fields QA/QC data indicate that these assay data are sufficiently accurate for use in Mineral Resource estimation.
- There is limited evidence from standard and second lab check analyses that the RGMC lab shows a low bias in the silver grades. MDA does not believe this bias has a material effect on the resource estimate.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

The following information has been taken from the 2010 Shafter Project Feasibility Study documented in the 2011 technical report by Burgess (2011), with information added from the 2008 technical report by Rozelle and Tschabrun, 2008, KCA's 2004 scoping study (KCA, 2004), and Gold Fields' in-house economic feasibility study (Gold Fields Mining Corp., 1982). The operating history of the Presidio Mill and the Aurcana Mill which processed the Shafter deposit is also referenced.

13.1 Operating History

The Shafter deposit has been subject to several operating periods beginning in 1882 and numerous metallurgical testing programs in its history. The initial operation was known as the Presidio Mine, which had an intermittent operation and was shut down in 1942. By that time the mill head grade had gradually fallen to 8.0 oz/ton. In 1927, cyanide leaching of the gravity tailings was added to the flowsheet. Starting in the 1980's, a series of studies were started to reestablish operations on the property. With due reference to the historical operations and further metallurgical testing, a mining and milling operation was re-established by Aurcana in 2012. The operation failed to reach design head grades, mill capacity, or silver recoveries, and was in review and optimization at the time of the shutdown in late 2013.

13.2 Mineralogy

Studies of the mineralogy by the Colorado School of Mines in 1979 concluded that silver in the Shafter deposit is normally present as argentite. The silver also occurs as native silver or in a silver-iron-sulfur phase that may be a primary mineral such as sternbergite or a secondary mineral such as argentojarosite. Some argentiferous grains in the 1-12 micron size are locked in the larger grains of quartz gangue and difficult to liberate with normal fine grinding.

The other metal minerals in the deposit are predominantly compounds of lead, zinc, copper, and iron. The lead occurs as galena that can be as coarse as a few millimeters, and as secondary lead minerals such as cerrusite and anglesite. Zinc occurs as sphalerite and as hemimorphite.

In 2013 when the Aurcana mine was still in operation, SGS Metcom ("SGS") carried out mineralogical studies on the Shafter deposit using four composite samples selected from core and a fifth underground grab sample, called the "galena composite", selected by the mine geologists. The sample selection was based on the mine plan for the deposit and was an attempt to consider ore-type variations in a series of upgrades and optimizations in the mill. The sample selection was based on areas planned to be mined in year one, years two and three, years four through six, and years seven through ten.

The results of the SGS mineralogical studies are shown in Table 13.1

Table 13.1 SGS Metcom 2013 Composite Test Results

Assays/Sample ID	Overall (1) Composite	Galena Composite	13001 (Year 1)	13002 (Years 2-3)	13003 (Years 4-6)	13004 (Years 7-10)
Au (g/t)	0.15	0.29	0.13	0.12	0.05	0.11
Ag (g/t)	329	1,090	218	342	204	294
Pb (%)	0.97	6.60	0.44	0.35	0.21	0.26
Zn (%)	1.22	2.09	1.36	1.22	0.69	0.75
Total C (%)	**NA**	**NA**	**2.17**	**1.97**	**2.56**	**4.54**
C-Graphite (%)	**NA**	**NA**	<0.01	<0.01	<0.01	<0.01
C-Inorganic (%)	**NA**	**NA**	2.07	1.86	2.38	4.28
C-Organic (%)	**NA**	**NA**	0.10	0.11	0.18	0.27
Total S (%)	0.08	0.43	0.03	0.03	0.04	0.07
Sulfate $SO_4^{=}$ (%)	**NA**	0.10	<0.01	0.01	0.02	<0.01
Sulfide $S^{=}$ (%)	**NA**	**0.20**	**0.03**	**0.02**	**0.03**	**0.06**
Insoluble (%)	**75.72**	**78.08**	**75.19**	**78.75**	**73.54**	**59.59**

Remarks: (1) Composite Prepared by Blending all Samples Received for Testing, NA: Assay Not Available

SGS employed their automated mineral analysis system in which the samples were crushed and the particle size distribution were measured with the fractions scanned using an automated, energy-dispersive electron microprobe. The procedure identifies the mineral associations and chemistry of the constituent minerals. The four composites were found to represent an oxide type ore with the total sulfide content at trace levels, ranging from 0.01% in sample 10316 (year 1) to a maximum of 0.18% in sample 13004 (years 7 to 10). Acanthite (a monoclinic form of argentite) was identified as the main economic mineral at 0.05% by volume. Acanthite was most commonly hosted in quartz as small inclusions (<10 microns), but was also found in calcite, dolomite, hemimorphite, iron oxide and mica. The acanthite liberation was optimal in the minus 400-mesh fraction where most of the acanthite was found in each of the composites.

The gangue minerals, noted by volume percentage, were quartz ranging from approximately 50 to 75%, calcite at 7 to 16%, and iron oxide from 4 to 8%. Dolomite was 3 to 5% except in the composite for years 7 to 10 where it increased to 19%. Mica in the composites ranged from 2 to 7%. Hemimorphite, a potential economic mineral was found at 2% in the composite for years 1 through 3, but decreased to less than 1% in the composite for years 4 through 10. The lead mineral was identified as cerussite and ranged from 0.2 to 0.6%.

13.3 Metallurgical Testing

Records from the early operating history and the more recent short-term operation, as well as operational reviews that were in progress during 2012 – 2013, provide a good reference into the Shafter metallurgy and the optimum flowsheet for silver recovery from the deposit. Additionally, there were a series of mineralogy studies and metallurgical tests carried out in the period 1979 to 1999 to support project development studies. The metallurgical testing included optical sorting, work index determinations, abrasion index measurements, gravity separation, flotation, liberation and leach kinetics, and solid-liquid separation both for leach solutions and the tailings. Companies involved in this work included: Gold Fields Mineral Research Laboratories ("Goldfields") in South Africa for general process development testing, the Colorado School of Mines ("CSMRI") in 1979 for mineralogy studies and in 1982 for gravity separation test work, Allis Chalmers in 1982 for work index and abrasion testing, Hazen Research Inc. ("Hazen") in 1982 for general bench-scale flowsheet testing of various unit operations, and Kappes Cassiday and Associates ("KCA") for general flowsheet development in 1999. Additionally, San Francisco Mining Associates were engaged in 1982 to review and critique the metallurgical testing results.

The KCA bottle roll testing in 1998 (Table 13.2) showed the requirement of fine grinding would maximize the silver extractions.

Table 13.2 Summary of KCA Bottle Roll Leach Tests on Shafter Ore Bulk Composites
(From KCA, 1998 as cited by Rozelle and Tschabrun, 2008, and Burgess, 2011)

Grind Size P80 Microns	Calculated Head (Ag opt)	Silver Extraction %
900	14.71	78.70
165	15.40	86.00
80	15.15	82.40
74	13.94	85.80
62	16.54	92.00
42	15.88	91.40
35	14.96	93.00

With further evaluation in the project economics and the need to test more representative samples, further metallurgical work was carried out to address possible variations in the style of mineralization as well as several inconsistencies in prior test results. This later work included Reyna Mining, who was engaged in 2008 to test a 9.6 oz/ton sample, and PRA Laboratories, engaged in 2010 to test variations in grinding and leach kinetics on an 8 oz/ton sample taken from the Shafter underground workings.

The host of metallurgical studies completed on the project are summarized and referenced in the Technical Report on the Shafter Feasibility Study completed in November, 2010 and updated by Jack Burgess in June, 2011 (Burgess, 2011). Questions about some of the testing results were raised within the feasibility study concerning the ore variability and the potential that the samples may not be fully representative of the mineralization types to be mined in the future. One of the more extensive test work programs by KCA in 2010 used sample material that had a grade of 13 oz/ton that is more than double the expected mill head grade anticipated in the mine plan. Additionally, lead grades and their variability were not well understood.

13.4 Development of the Process Flowsheet

A feasibility study was completed in 1982 by Stearns Rodgers Engineering Corp., with a process section that proposed a 1,500 TPD mill. The design parameters referenced the previous operating history as well as the metallurgical test work results available at that time. The flowsheet included a gravity separation step using Reichert Cones, spirals, and Wilfley tables to produce a lead concentrate and projected a combined silver recovery of 76%.

A prefeasibility study was completed in 2010 which included a 1,500 TPD mill design with cyanide leaching of the whole ore and Merrill Crowe recovery of the soluble silver, and no gravity circuit for recovery of a lead concentrate. Pocock Industrial Inc. was engaged to establish settling and filtration parameters for the thickening and the tailings filtration procedures in support of the design of the tailings dry stacking operation. The study projected 83% recovery of silver. The 2010 feasibility study also included a 1,500 TPD mill with a whole-ore cyanidation flowsheet refined by more test work, and projected an 84% silver recovery. This study led to the construction of the Aurcana Mill that was commissioned in 2012.

13.5 Lead Recovery

The historical operations that ended in 1942 included a gravity recovery process using shaking tables that produced a low-grade lead-silver concentrate. The concentrate contained about 23% of the head-grade silver while approximately 54% of the silver was recovered by cyanide leaching of the gravity tailings. At that time, crushed and milled ore sized at -10 mesh to +200 mesh was processed by gravity on Wilfley tables to produce a lead-silver concentrate, and the 70% passing 200 mesh gravity circuit tailings were leached by cyanide in Pachuca tanks. The overall silver recovery of the historical operation was approximately 76%. Metallurgical data from the last year of the Presidio mine's production is informative as the head grade at that time of 8oz Ag/ton was similar to what was planned in the 2010 feasibility study.

Testwork in the early 1980's by Gold Fields, Hazen Research, and CSMRI included gravity recovery of a lead concentrate. The gravity recovery testing included Reichert Cones, spirals and Wilfley tables and projected lead concentrate grades in the 30% range. The latter stage test work focused on finer grinding and cyanidation of the whole ore with reported overall recoveries greater than 80%. Flash flotation of the lead mineralization in the grinding circuit may be an alternative to gravity recovery and should be further investigated.

The distribution of lead mineralization in the Shafter resource has not been tracked, although lead content is anticipated to vary and can reach more than 6% as indicated by the composite sample collected for metallurgical testing in 2013. At these grades, significant lead mineralization would be leached in a whole-ore cyanidation process if no lead recovery operation is included in the flowsheet. This could have the combined impact of increased cyanide consumption and high lead concentrations in the leach and barren solutions that would have to be investigated.

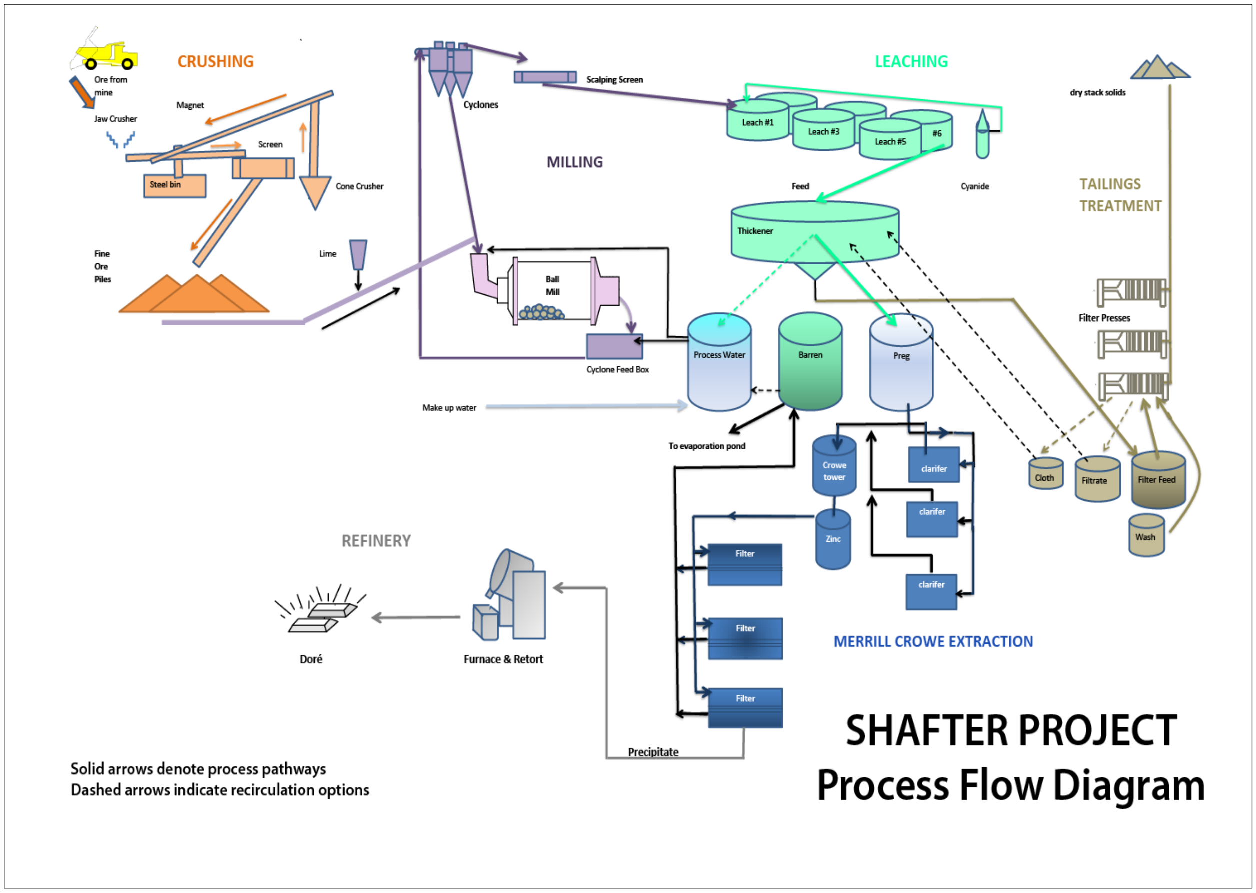
In conjunction with the lead metallurgy, the resulting concentrate will have to be characterized with lead and silver grades established, and potential markets identified, if production of a lead concentrate becomes a necessary part of the flowsheet.

13.6 Aurcana Mill

The 1,500 TPD mill commissioned by Aurcana in 2012 was designed as a whole-ore cyanide leach guided by the collective conclusions of the prior metallurgical test work. The mill that was constructed was assembled partly from used equipment that in some cases was not fully suitable for the design parameters of the various unit operations. Along with other issues with the mining operation, the mill failed to reach the design capacity or the projected silver recovery in the two years it operated. The flowsheet was extensively modified over the brief operating history and was still undergoing modifications and additions when milling was suspended in late 2013.

The major change in the Aurcana Mill flowsheet in 2013 was the addition of a countercurrent-decantation circuit to reduce silver solution losses of silver. The decantation circuit was under construction when operations were suspended. For the most part, the major process equipment has either been sold or may not be suitable for utilization in the restart of the mill. Various tankage in the flowsheet that remains on site may possibly be integrated into a new flowsheet. Although it may have excess capacity, the existing Merrill Crowe circuit, precipitate dryers, and induction furnaces can probably be adapted to renewed operation. The process flowsheet that was installed by Aurcana at the Shafter Mine is shown in Figure 13.1.

Figure 13.1 Shafter Mill Process Flow Diagram



13.7 Main Process Design Parameters

From the indications of two previous operations at the Shafter deposit, and the numerous metallurgical test work programs over the project history, the following are considered to be the main process design considerations and some further investigations that will be necessary to guide a future Shafter mill flowsheet:

Crushing and Grinding: The operations of either a fine crushing and ball mill grinding circuit, or a primary crushing, SAG mill and ball mill circuit will be required to produce a product of

80% passing 75microns. Dependent on the need to integrate a gravity recovery circuit or flash flotation for lead, the decision on the options should be primarily economic. Test work on the Shafter mineralization has demonstrated a strong correlation between silver recovery and the fineness of the grind, making it important to design the comminution circuit to achieve the required capacity at the minimum of 75% passing 75 microns. The circuit would have a thickener to recycle water and produce a product on the order of 45% solids for the leach circuit.

Lead Concentrate: The feasibility of recovering a lead concentrate will require a review of representative samples of the Shafter resources, as well as further metallurgical test work to determine whether recovery of a lead concentrate is economically attractive. Further investigation of the most appropriate process approach, either gravity or flotation, and the potential markets for what will probably be a lower grade lead concentrate will need to be investigated.

Cyanide Leaching: The leach circuit would be a series of 3 to 5 staged agitated leach tanks providing the flexibility of 30 to 40 hour retention times for cyanide leaching. The circuit would be designed to operate at 45% solids. Testing has indicated variability in the leach kinetics for various ore types so the flexibility to take leach capacity off line should be incorporated in the design.

Countercurrent Decantation: This circuit should be designed with 4 or 5 stages to both clarify and concentrate the pregnant solution prior to the Merrill Crowe recovery of silver. As well as the need for clarity and high tenors in the pregnant solution going to the Merrill Crowe silver recovery, there is a need to minimize silver solution losses to the tailings filtration process.

Tailings Filtration and Dry Stacking: Filtration and dry handling and stacking of the tailings was new to the Texas jurisdiction, but, apart from the equipment shortcomings during the brief operating period, their viability at the Shafter operation was demonstrated.

Merrill Crowe Silver Extraction and Silver Refinery: These processes never reached stable operation at Shafter in 2013-2014 due to the upstream issues with solution tenors and clarity. Additionally, the refinery initially had insufficient filtration and furnace capacity although this was being corrected at the time of the shutdown.

13.8 Summary and Conclusions on Metallurgy

The large amount of metallurgical information available on the Shafter deposit, as well the historic operation of the Presidio Mine and the more current Aurcana Mill, provide a solid base for refinement of the flowsheet for an updated milling operation. The main deficiency remaining is understanding the distribution of the lead mineralization in the deposit and the potential requirement of including production of a lead concentrate in the flowsheet. To a lesser extent, the variability of the ore types is not well understood and should be further investigated with a determination of the lead distribution and the completion of the associated testing to provide a better metallurgical map of the deposit.

From this review the following recommendations are provided:

1. Expand the resource data base to include lead assays wherever possible from existing core, rejects, or new samples that may become available;
2. Carry out bench scale metallurgical tests on the indicated flowsheet to determine whether recovery of a lead concentrate is viable and/or economically beneficial;
3. Expand the understanding of ore variability on mill recovery and the need for ore blending by completion of standard bench-scale leach tests on available samples;
4. Assess whether whole-ore leaching of higher lead grade materials will negatively impact mill operations with high lead in solution issues, and higher costs for cyanide and solution treatment; and,
5. Assess the market for lower grade silver bearing lead concentrates.

14.0 MINERAL RESOURCE ESTIMATE

14.1 Introduction

The modeling and estimation of silver resources were done under the supervision of Paul G. Tietz. Mr. Tietz is independent of Aurcana and there is no affiliation between Mr. Tietz and Aurcana except that of an independent consultant/client relationship. Mr. Tietz had prior experience with the Shafter project in the early 1980s while an employee of a previous operator (Gold Fields).

The Shafter resources reported herein are based on Aurcana's database as of October 15, 2013, with MDA completing the data evaluation and geologic model by December 30, 2013. Since the resource database was finalized, there has been no subsequent material exploration activity and the database is considered complete and current with all available material exploration information, except for eleven underground drill holes completed by Aurcana in late 2013. These eleven drill holes were excluded as their location could not be subsequently confirmed with certainty, and their inclusion would not have a material impact on the resource model or the resource estimate.

Although MDA is not an expert with respect to any of the following aspects of the project, MDA is not aware of any unusual environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that may materially affect the Shafter mineral resources as of the date of this report.

MDA classifies resources in order of increasing geological and quantitative confidence into Inferred, Indicated, and Measured categories to be in compliance with the "CIM Definition Standards - For Mineral Resources and Mineral Reserves" (2014). CIM mineral resource definitions are given below, with CIM's explanatory material shown in italics:

Mineral Resource

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

Material of economic interest refers to diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals.

The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of Modifying Factors. The phrase 'reasonable prospects for eventual economic extraction' implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. The Qualified Person should consider and clearly state the basis for determining that the material has reasonable prospects for eventual economic extraction. Assumptions should include estimates of cutoff grade and geological continuity at the selected cut-off, metallurgical recovery, smelter payments, commodity price or product value, mining and processing method and mining, processing and general and administrative costs. The Qualified Person should state if the assessment is based on any direct evidence and testing.

Interpretation of the word 'eventual' in this context may vary depending on the commodity or mineral involved. For example, for some coal, iron, potash deposits and other bulk minerals or commodities, it may be reasonable to envisage 'eventual economic extraction' as covering time periods in excess of 50 years. However, for many gold deposits, application of the concept would normally be restricted to perhaps 10 to 15 years, and frequently to much shorter periods of time.

Inferred Mineral Resource

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An Inferred Mineral Resource is based on limited information and sampling gathered through appropriate sampling techniques from locations such as outcrops, trenches, pits, workings and drill holes. Inferred Mineral Resources must not be included in the economic analysis, production schedules, or estimated mine life in publicly disclosed Pre-Feasibility or Feasibility Studies, or in the Life of Mine plans and cash flow models of developed mines. Inferred Mineral Resources can only be used in economic studies as provided under NI 43-101.

There may be circumstances, where appropriate sampling, testing, and other measurements are sufficient to demonstrate data integrity, geological and grade/quality continuity of a Measured or Indicated Mineral Resource, however, quality assurance and quality control, or other information may not meet all industry norms for the disclosure of an Indicated or Measured Mineral Resource. Under these circumstances, it may be reasonable for the Qualified Person to report an Inferred Mineral Resource if the

Qualified Person has taken steps to verify the information meets the requirements of an Inferred Mineral Resource.

Indicated Mineral Resource

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation.

An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Pre-Feasibility Study which can serve as the basis for major development decisions.

Measured Mineral Resource

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit.

Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade or quality of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability of the deposit. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

Modifying Factors

> Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

MDA reports resources at cutoffs that are reasonable for deposits of this nature given anticipated mining methods and plant processing costs, while also considering economic conditions, because of the regulatory requirements that a resource exists "in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction."

14.2 Database

The Shafter database used in the current resource estimate contains 1,694 drill holes with a total footage of 466,288.5 feet. Of these, 1,606 are diamond core holes, and 88 are RC holes. A summary of the drilling conducted by the various companies is shown in Table 10.1. The majority of drill holes (992 holes) are underground core holes completed by Amax in the 1940s.

Since publication of the previous technical reports, approximately 800 holes have been added to the database, including a considerable number of underground and surface holes drilled by Amax as well as new holes drilled by Aurcana (RGMC 2011-2013 on Table 10.1) and a few additional Gold Fields holes.

The Shafter drill-hole assay database contains 20,006 silver assays, 8,144 lead assays, and 5,584 zinc assays. Both lead and zinc are associated with the silver mineralization, though only silver was estimated due to the relative lack of lead and zinc data.

The database contains down-hole survey information only for the recent RGMC surface and underground drilling. Drill-hole locations for the Amax drilling are approximate locations derived from both plan maps and underground cross-sections. The lack of down-hole survey data and the possible inaccuracies in the Amax hole locations create some risks in the current resource estimate.

The project coordinates, including topography, are in a (50,000E, 50,000N) local grid using Imperial units (feet).

14.3 Geologic Background and Modeling

Silver mineralization at Shafter occurs as a sub-horizontal *manto* within variably silicified Mina Grande limestone at or just below the Cretaceous/Permian unconformity. Mineralization occurs over a 13,000-foot east-northeast strike length, is up to 1,200 feet across, and is generally 8 to 15 feet thick. The resource is at a depth of less than 100 feet in the west-central portion of the deposit and then gradually deepens to a depth of over 1,000 feet within the eastern end of the deposit following the general stratigraphic dip. *Manto* thickness and silver grades can be highly variable, often related to near-vertical structures that served as fluid conduits and/or structural traps.

Upon completion of the database validation process, MDA constructed 150 cross sections spaced 50 to 100 feet apart and looking northeast at 70°. The sections were spaced to best fit the existing drilling with the tighter spacing within the center of the deposit in the area of the recent RGMC underground development and drilling.

One set of sections was made for lithology and then another for silver. Drill-hole information, including rock type and silver grades, along with the topographic surface were plotted on the cross sections. The lithology cross sections were constructed with RGMC and MDA working in tandem, whereas the silver cross sections were constructed by MDA using the lithology sections as a guide.

The lithology cross-sectional model includes the Cretaceous/Permian unconformity, the Mina Grande Formation/Ross Mine Formation contact, the dominant faults, the Herculano intrusive dike and associated intrusive dikes, the strong clay/rubble alteration along the unconformity, and the zones of silicified limestone. These modeled surfaces and rock types were used to guide the silver domain model and, in the case of the clay/rubble zones, assign densities into the block model.

Quantile plots of silver were made to help define the natural populations of silver grades to be shown on the silver-domain sections. The analytical population breaks indicated on the quantile plots were used to guide the creation of distinct low- and high-grade mineral domains. The silver domains as modeled and drawn on the cross sections are not strict grade shells but were created using geologic information such as orientation, geometry, lithologic contacts, and continuity. Each of these domains represents a distinct style of mineralization. The low-grade domain is associated with weakly fractured and silicified limestone characterized by silver grades between 0.8oz Ag/ton and 5.0oz Ag/ton (domain code 100). The high-grade domain (>5.0oz Ag/ton) is associated with strongly silicified, fracture/brecciated limestone that can contain a few percent lead and zinc (domain code 200).

The cross-sectional geology and silver domains were rectified three-dimensionally to long-sections on 10-foot intervals that coincide with the mid-width of the model blocks. The long sections of the clay/rubble zones and silver were used to code the block model to percent of block by lithology and silver domain.

The underground workings were imported into the block model as a solid, and blocks were coded by volume percentage within the underground solid. As described in Section 14.7, those blocks coded at 5 percent or greater underground workings were considered “mined out” and removed from the classified mineral resource.

14.4 Density

The Shafter density database consists of 59 specific gravity measurements on Gold Fields drill core. The analyses were completed by KCA in 1998 using the water-immersion method to calculate the specific gravity value. The core samples collected for testing were from moderately to strongly mineralized material predominantly within the eastern half of the deposit.

In addition to the individual measurements on core, specific gravity and bulk density analyses were completed by SGS lab in 2013 on four composite samples of mineralized core collected by Aurcana.

The composite samples were from both Gold Fields and Aurcana core holes in the vicinity and to the immediate east of Aurcana's underground development.

Four density (tonnage factor) values were used in the resource model as shown in Table 14.1. MDA's analysis of all of the specific gravity data was done in the context of the geologic model, and a specific rock type and silver grade were assigned to each KCA density value. This analysis indicated that all of the density data are from within the modeled silver domains with no density data from the unmineralized limestone or from within the generally weakly mineralized, clay-dominant rubble zones. Due to the occasionally fractured nature of the deposit and to account for the unavoidable sample-selection bias, the measured density values were factored down by 1% to 2%. The factored data, shown in Table 14.1, reflect the tonnage factor values assigned to the Shafter block model.

Table 14.1 Shafter Tonnage Factors by Rock Type

Rock Type	TF (cuft/ton)
outside Ag domains	12*
low-grade Ag (domain 100)	12.7
high-grade Ag (domain 200)	13.1
clay/rubble	14**

* No data; unmineralized tonnage factor uses general limestone value.
** No data; clay/rubble value is an estimate based on field observations

A single tonnage factor of 11.65 cubic feet/ton for all mineralized material was used by Gold Fields in their economic evaluation during the 1980s. This tonnage factor was determined from an underground bulk sample, but MDA has no knowledge of the material source or the type of analysis. This tonnage factor is significantly lower than all subsequent measurements and was not used in the current analysis.

The relative lack of density data and the use of estimated values within the model introduce some risk into the resource estimate. MDA recommends that significantly more density data be collected and the density variability be better characterized, both spatially and by rock type.

14.5 Sample Coding and Composites

The cross-sectional silver domains were used to code samples in the drill database. Quantile plots were made to assess validity of these domains and to determine capping levels. As a result, MDA chose to cap 12 silver assays: two in the low-grade domain and 10 in the high-grade domain. Assay statistics, including the capping grade, for the silver domains used in the resource estimate are presented in Table 14.2.

Table 14.2 Shafter Silver Mineral Domain Descriptive Statistics - Assays

Domain	Assays	Count	Mean (oz Ag/ton)	Median (oz Ag/ton)	Std. Dev.	CV	Min. (oz Ag/ton)	Max. (oz Ag/ton)
100	Ag	6191	2.04	1.52	1.80	0.88	0.00	63.58
	Ag Cap	6191	2.04	1.52	1.66	0.81	0.00	20.00
200	Ag	2196	13.70	9.23	16.76	1.22	0.00	310.44
	Ag Cap	2196	13.45	9.23	13.93	1.04	0.00	120.00
All	*Ag*	*8387*	*4.62*	*2.00*	*9.38*	*2.03*	*0.00*	*310.44*
	Ag Cap	*8387*	*4.56*	*2.00*	*8.21*	*1.80*	*0.00*	*120.00*

Compositing was done to 4ft down-hole lengths (the model block size), honoring all mineral-domain boundaries. The composites were coded by the mineral-domain interpretations, and length-weighted composites were used in the block-model grade estimation. The volume inside each mineral domain was estimated using only composites from inside that domain. Composite descriptive statistics are presented in Table 14.3.

Table 14.3 Shafter Silver Mineral Domain Descriptive Statistics – Composites

Domain	Count	Mean (oz Ag/ton)	Median (oz Ag/ton)	Std. Dev.	CV	Min. (oz Ag/ton)	Max. (oz Ag/ton)
100	4161	2.04	1.69	1.38	0.68	0.00	16.88
200	1240	13.45	9.91	11.87	0.88	1.16	120.00
All	5401	4.56	2.14	7.42	1.63	0.00	120.00

14.6 Estimation

The resource block model reflects the general east-northeast trend and sub-horizontal nature of the Shafter *manto*-hosted silver mineralization. A variographic study was performed using the silver composites from each mineral domain, collectively and separately, at various azimuths, dips, and lags. Acceptable variogram models were obtained from composites from silver domain 100, as well as both silver domains together. A maximum range of about 90 feet was obtained in the horizontal strike (azimuth 70°) and dip (azimuth 150°) directions; these are geologically reasonable orientations for the global strike and dip of the mineralization, respectively. Parameters obtained from the variography study were used in an ordinary-kriging interpolation and also provided information relevant to both the estimation parameters used in an inverse-distance interpolation and resource classification.

The estimation parameters applied at Shafter are summarized in Table 14.4. The estimation used three search passes with successive passes not overwriting previous estimation passes. The first-pass search distances take into consideration the results of both the variography and drill-hole spacing. The second and third passes were designed to estimate grade into all blocks coded to the mineral domains that were not estimated in the first pass.

The estimation passes were performed independently for each of the mineral domains, so that only composites coded to a particular domain were used to estimate grade into blocks coded by that domain.

The estimated grades were coupled with the partial percentages of the mineral domains to enable the calculation of a single weight-averaged block-diluted grade for each block.

To reflect the change in *manto* orientation observed along the strike of the deposit, three search ellipse orientations, all based on the local mine grid Eastings, were used to control the resource estimate. See Table 14.5 for search ellipse parameters.

Silver grades were interpolated using inverse distance to the third power, ordinary-kriging, and nearest-neighbor methods. The mineral resources reported herein were estimated by inverse-distance interpolation, as this technique was judged to provide results superior to those obtained by ordinary kriging. The nearest-neighbor estimation was also completed as a check on the other interpolations.

Silver grades were estimated into all blocks coded by the silver mineral domains, including those blocks coded as "mined out" (greater than 5% of block volume within underground workings).

Table 14.4 Shafter Estimation Parameters

All Mineral Domains	
Description	**Parameter**
First Pass Samples: minimum/maximum/maximum per hole	2 / 9 / 3
First Pass Search (ft): major/semi-major/minor	75 / 75 / 37.5
Second Pass Samples: minimum/maximum/maximum per hole	1 / 12 / 3
Second Pass Search (ft): major/semi-major/minor	300 / 150 / 100
Third Pass Samples: minimum/maximum/maximum per hole	1 / 18/ 3
Third Pass Search (ft): major/semi-major/minor	Fill domain / isotropic
Rotation/Dip/Tilt (all searches)	See below
Inverse distance power	3

Table 14.5 Shafter Search Ellipse Orientations

Estimation Area	Major Bearing	Plunge	Tilt
Area 10; <51100 East	70°	0°	-5°
Area 20; 51100 East to 54250 East	70°	-10°	-10°
Area 30; >54250 East	70°	0°	0°

14.7 Mineral Resources

MDA classified the Shafter silver resources by a combination of distance to the nearest sample and the number of samples, while at the same time taking into account reliability of underlying data and understanding and use of the geology. The samples used for the classification criteria stated above are independent of the modeled domains. The criteria for resource classification are given in Table 14.6. There are Measured, Indicated, and Inferred resources within the Shafter deposit. There are no Measured resources associated with the Amax historic drilling due to a) some uncertainty in the drill-hole locations; b) a lack of QA/QC data; and c) no original laboratory assay data. None of these detract from the overall confidence in the global project resource estimate, but they do detract from confidence in some of the accuracy which MDA requires for a Measured resource.

Table 14.6 Criteria for Shafter Resource Classification

Measured (RGMC and Gold Fields drill holes only)	
Minimum no. of samples /minimum no. of holes / maximum distance (ft)	3 / 2 / 30
Indicated	
Minimum no. of samples /minimum no. of holes / maximum distance (ft)	2 / 1 / 50 or 2 / 2 / 75
All material not classified above but lying within the modeled mineralized domains is Inferred	

To account for the historic mining, all blocks coded at five percent or greater underground workings were considered "mined out" and removed from the classified mineral resource.

Because of the requirement that the resource exists "in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction," MDA is reporting the resources at cutoff grades that are reasonable for deposits of this nature that will be mined by underground methods. As such, some economic considerations were used to determine cutoff grades at which the resource is presented. MDA considered reasonable metal prices and extraction costs and recoveries, albeit in a general sense, and then dropping the resource cut-off grade a bit to account for that material that would become ore using internal cutoffs.

The Shafter total reported resources are tabulated in Table 14.7. The stated resource is fully diluted to 10-foot by 10-foot by 4-foot blocks and is tabulated on a silver cutoff grade of 4.0oz Ag/ton. The block-diluted resources are also tabulated at additional cutoffs in Table 14.8 in order to provide grade-distribution information.

Typical cross sections of the Shafter block model are shown in Figure 14.1 (Cross section 6100) and Figure 14.2 (Cross section 10500). Locations of the cross-sections are shown in Figure 10.1. Cross-section 6100 is within the historic Presidio mine in the area of the recent RGMC development, while cross-section 10500 is to the east in the down-dip extension drill defined by Gold Fields.

Table 14.7 Shafter Reported Resources

Shafter Reported Resource:

Class	Cutoff (oz Ag/ton)	Tons	oz Ag/ton	oz Ag
Measured	4.00	100,000	8.73	888,000
Indicated	4.00	1,110,000	9.15	10,171,000
Meas. + Ind.	4.00	1,210,000	9.14	11,059,000
Inferred	4.00	870,000	7.47	6,511,000

Table 14.8 Shafter Mineral Resource

Shafter Measured Resource

Cutoff (oz Ag/ton)	Tons	oz Ag/ton	oz Ag
2.000	220,000	5.55	1,200,000
3.000	170,000	7.39	1,006,000
4.000	**100,000**	**8.73**	**888,000**
5.000	80,000	9.77	799,000
6.000	70,000	10.70	719,000
7.000	60,000	11.68	637,000
8.000	50,000	12.53	567,000
9.000	40,000	13.49	494,000
10.000	30,000	14.48	426,000
12.000	20,000	16.84	299,000
15.000	10,000	20.14	185,000
20.000	3,000	25.71	80,000

Shafter Indicated Resource

Cutoff (oz Ag/ton)	Tons	oz Ag/ton	oz Ag
2.000	2,490,000	5.60	13,967,000
3.000	1,940,000	7.56	11,646,000
4.000	**1,110,000**	**9.15**	**10,171,000**
5.000	880,000	10.41	9,114,000
6.000	710,000	11.53	8,230,000
7.000	580,000	12.69	7,363,000
8.000	470,000	13.89	6,550,000
9.000	380,000	15.22	5,757,000
10.000	310,000	16.47	5,122,000
12.000	210,000	19.07	4,039,000
15.000	130,000	22.67	2,954,000
20.000	60,000	28.71	1,772,000

Shafter Inferred Resource

Cutoff (oz Ag/ton)	Tons	oz Ag/ton	oz Ag
2.000	2,610,000	4.29	11,189,000
3.000	1,370,000	6.00	8,193,000
4.000	**870,000**	**7.47**	**6,511,000**
5.000	650,000	8.49	5,518,000
6.000	490,000	9.47	4,649,000
7.000	370,000	10.41	3,887,000
8.000	280,000	11.45	3,160,000
9.000	200,000	12.50	2,549,000
10.000	150,000	13.57	2,044,000
12.000	70,000	16.25	1,207,000
15.000	40,000	19.28	712,000
20.000	10,000	24.34	267,000

Figure 14.1 Shafter Block Model with Silver Grades– Cross-Section 6100

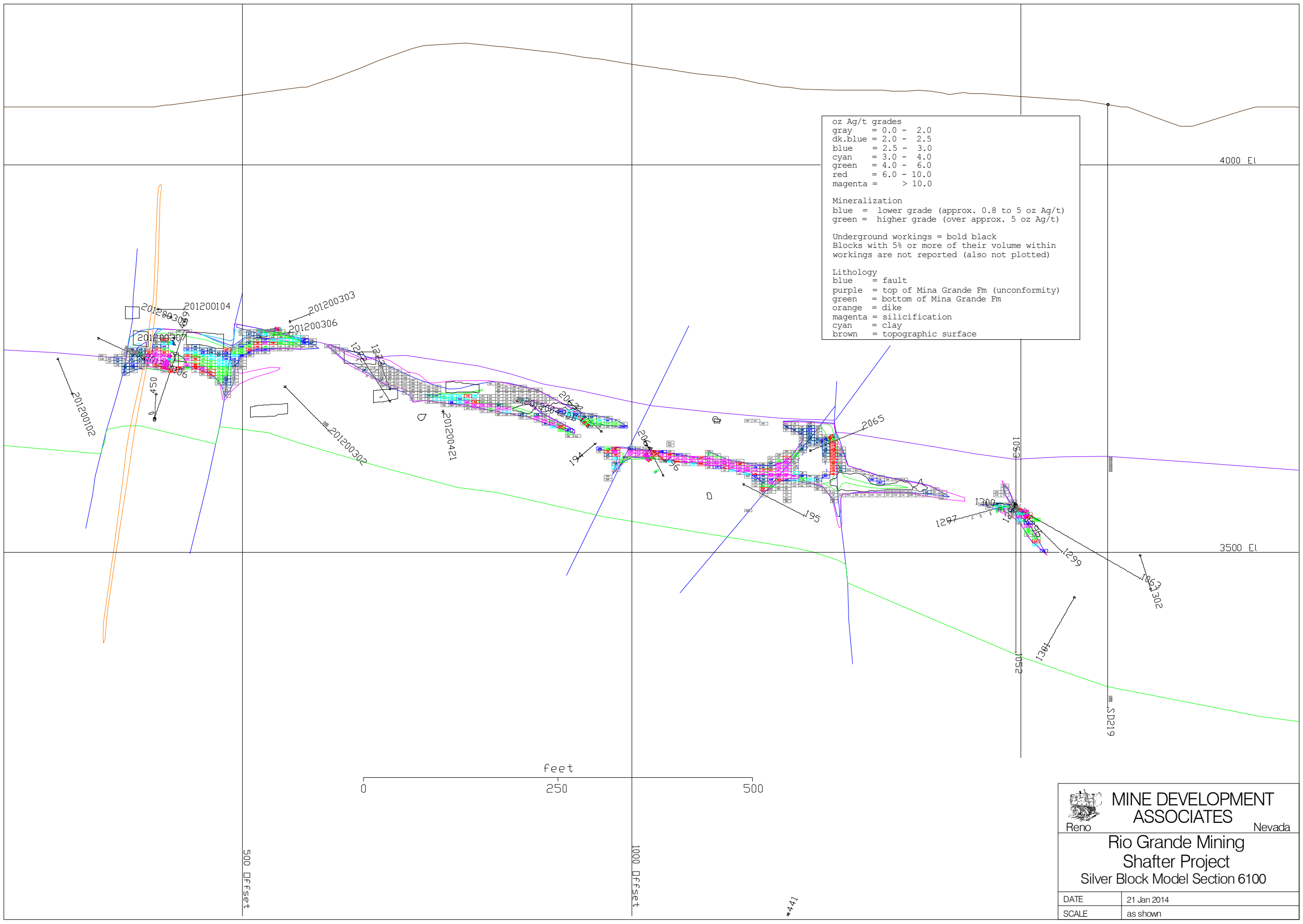
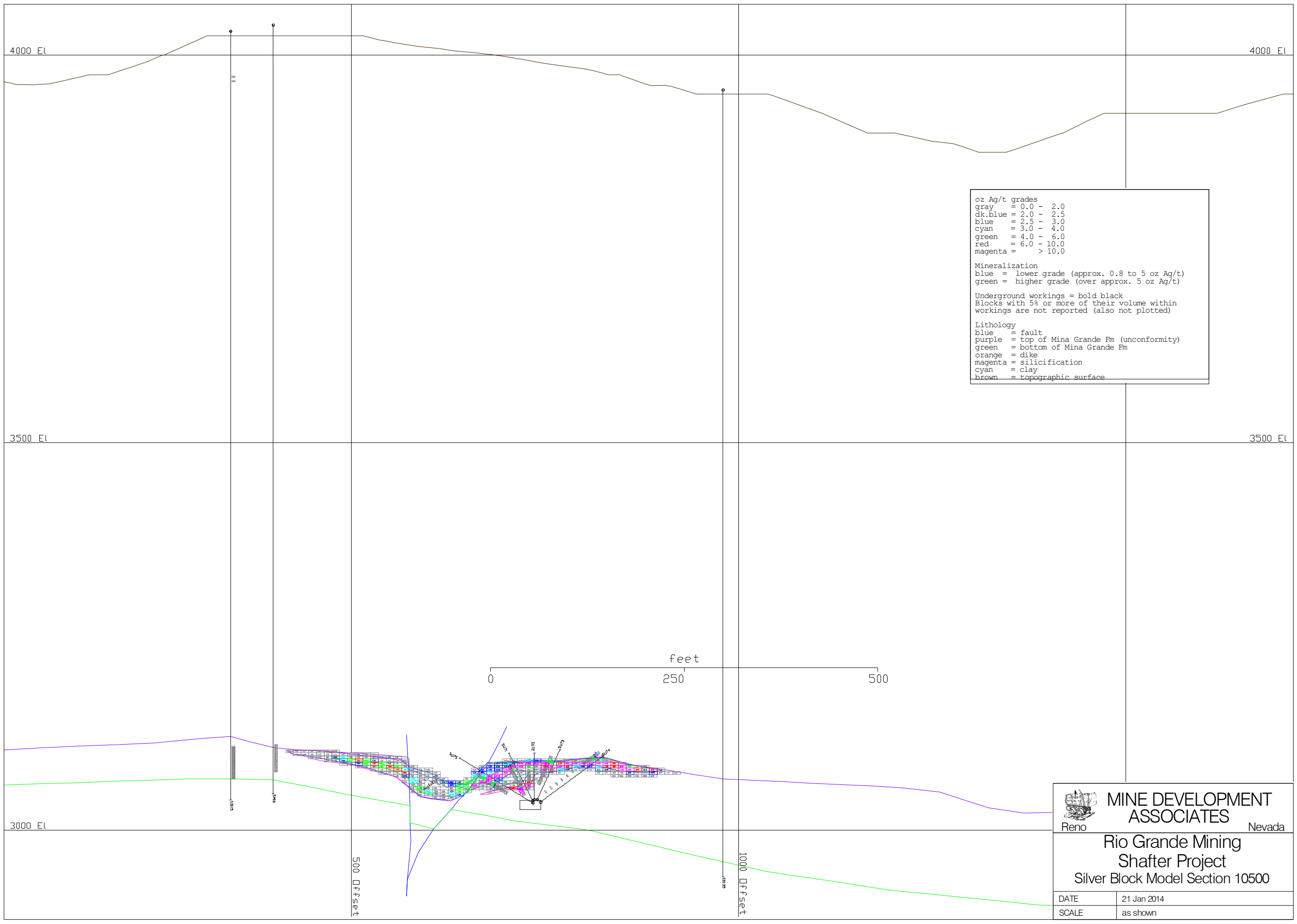


Figure 14.2 Shafter Block Model with Silver Grades– Cross-Section 10500



Checks were made on the Shafter resource model in the following manner:

- Block-model information, such as mineral domains, metal grade, geology coding, and number of samples, was checked visually on the computer on sections and long-sections;
- Cross-section volumes to level-plan volumes to block-model volumes were checked;
- Nearest-neighbor and ordinary-kriging models were made for statistical and visual comparison;
- A simple polygonal model was made with the original modeled section domains; and
- Normal quantile distribution plots of assays, composites, and block-model grades were made to evaluate differences in distributions of silver grades.

14.8 Discussion of Resources

The Shafter mineral resource estimate honors the drill-hole geology and assay data and is supported by the geologic model. Silver mineralization occurs as a sub-horizontal *manto* within variably silicified limestone at, or just below, the Cretaceous/Permian unconformity. The Shafter resource occurs over a 13,000-foot east-northeast strike length, is up to 1,200 feet wide, and is generally 10 to 20 feet thick. The resource is at a depth of less than 100 feet in the west-central portion of the deposit and then gradually deepens to a depth of over 1,000 feet within the eastern end of the deposit following the general stratigraphic dip. *Manto* thickness and silver grades can be highly variable, often related to near-vertical structures that served as conduits for mineralizing fluids and/or structural traps.

Silver mineralization is generally continuous along the length of the deposit, though at the 4.0oz Ag/ton cutoff, the resource becomes fragmented to the west of the historic Presidio mine workings. The removal of the “mined out” material spatially associated with the underground workings also contributes to the fragmentary nature of the resource within the historic Presidio mine area.

The use of the historic Amax drill data and the associated uncertainties in Amax’s drill locations and assay quality bring some risk to the resource estimate. This risk is somewhat ameliorated by the presence of the underground workings, which helps spatially define the mineralization, and the similar tenor of the more recent RGMC and Gold Fields assay data.

Additional infill drilling, increased underground mapping and sampling, and significantly more density measurements are recommended to bring greater confidence to the current mineral resource estimate.

15.0 MINERAL RESERVE ESTIMATES

No estimate of mineral reserves based on the current mineral resource described in Section 14.0 has been made for this report.

16.0 ADJACENT PROPERTIES

MDA is not aware of any additional information from adjacent properties that is relevant to the mineral resource estimate for the Shafter deposit described in this report.

17.0 OTHER RELEVANT DATA AND INFORMATION

KCA undertook a scoping study on the Shafter project for Silver Standard in 2004 based on the assumption of underground mining followed by an agitated-leach, countercurrent-decantation ("CCD") recovery plant (Kappes, Cassiday & Associates, 2004). Their study was based on polygonal resources calculated by RGMC in 1998, which have been superseded by the current mineral resource described in Section 14.0.

A feasibility study of the Shafter deposit was prepared for Aurcana in November 2010 and was described in a technical report by Burgess (2011). That study was based on a mineral resource estimate prepared by Tetra Tech and described in the same technical report, which was based on 891 drill holes included in the database at that time, including holes completed by RGMC in 1998. The mineral resource in the 2011 technical report used for the feasibility study has been superseded by the current mineral resource described in Section 14.0.

The Shafter deposit was exploited by historical underground mining activity from 1881 through 1942 with further exploration and development work being conducted up through 1999. Aurcana commenced recent development in 2011 with underground and limited open-pit production that began in 2012 and ceased in December 2013. Aurcana reported that from October 2012 through December 2013, mine production totaled 149,882 tons and mill feed from the mine totaled 109,599 tons. A total of 134,557 ounces of doré was poured. Due to a decline in silver prices, the unreliability of the historic resource model, and the unexpected presence of pre-WW II workings, production ceased, and the mine was put on care and maintenance in December 2013.

Mining and processing infrastructure currently on site is described in Section 5.4.

18.0 INTERPRETATION AND CONCLUSIONS

MDA has reviewed the project data and the Shafter drill-hole database and has visited the project site. MDA believes that the data provided by Aurcana are generally an accurate and reasonable representation of the Shafter silver deposit.

The Shafter deposit has been extensively drilled from both the surface and underground by Amax, Gold Fields, and RGMC (both before and after the company's acquisition by Aurcana). Since publication of the previous technical reports, about 800 holes have been added to the database, including a considerable number of historic Amax and Gold Fields holes, as well as the new holes drilled by Aurcana since 2011. The database used for the current mineral resource estimate includes 1,694 holes totaling over 466,000 feet.

The Shafter mineral resource estimate honors the drill-hole geology and assay data and is supported by the geologic model. Silver mineralization occurs as a sub-horizontal *manto* within variably silicified limestone at, or just below, the Cretaceous/Permian unconformity. The Shafter resource occurs over a 13,000-foot east-northeast strike length, is up to 1,200 feet wide, and is generally 8 to 15 feet thick. The resource is at a depth of less than 100 feet in the west-central portion of the deposit and then gradually deepens to a depth of over 1,000 feet within the eastern end of the deposit following the general stratigraphic dip. *Manto* thickness and silver grades can be highly variable, often related to near-vertical structures that served as conduits for mineralizing fluids and/or structural traps.

Although silver mineralization is generally continuous along the 13,000-foot length of the deposit, the resource is fragmentary in the vicinity of the historic Presidio mine due to the removal of mined-out material. The resource is also fragmented west of the historic Presidio mine underground development at the 4oz Ag/ton cutoff.

Additional infill drilling, increased underground mapping and sampling, and more density measurements are recommended to bring greater confidence to the current mineral resource estimate. Additional metallurgy and mineral processing studies are also recommended.

19.0 RECOMMENDATIONS

Aurcana proposes six activities to advance the Shafter project prior to developing a new mine plan and converting the estimated mineral resources into mineral reserves. The estimated cost of these activities is $3 million. The proposed activities are:

- Develop a metallurgical map of the Shafter deposit by:
  - Re-examining drill core from Gold Field's campaigns;
  - Assaying all previously un-sampled intervals that intersect the mineralization;
  - Using drill logs, photographs, and remaining split core to document presence of silicification and the occurrence and abundance of jarosite and galena;
  - If sufficient pulps are available, performing ICP multi-element analyses on the mineralized intervals. Consideration should also be given to analyzing sulfur using the Leco analyzer on intervals grading over 0.7% S as well as an LOI (loss on ignition) determination; and
  - Analyzing a suite of representative samples using XRD (X-ray diffraction) or Qemscan (scanning electron microscope system).
- Drill 16 holes (pre-drilled by RC or rotary to 700 feet, then core) to test the zone east of mine-grid 53750. The primary objective of this in-fill drill program is to obtain geotechnical data, samples for metallurgical testing, and rock density measurements. A secondary objective is to test for continuity and extensions of the high-grade domain (domain code 200) to the southeast.
- Re-examine historical drill-hole data with respect to collar locations, particularly underground.
- Update the database with historic channel-sample information and re-sample some locations to confirm historic results.
- Re-examine and compile historic information from Amax and Gold Fields.
  - Develop both level plans and sections that map mineral domains and rock types and that document the continuity of faults and dikes.
  - Compile results of Gold Fields' underground core drilling and sludge, panel, and bulk sampling.
- Develop an accurate survey of the project's land holdings with respect to proposed development activities.

Metallurgical testing and mineral processing recommendations include:

1. Expanding the analytical data base to include lead assays wherever possible from existing core or rejects, or from new samples that may become available;

2. Carry out bench-scale metallurgical tests on the indicated flowsheet to determine whether recovery of a lead concentrate is viable or necessary;

3. Expand the understanding of ore variability on mill recovery and the need for ore blending by completion of standard, bench-scale leach tests on available samples;

4. Assess whether whole-ore leaching of higher grade lead grades will negatively impact mill operations. High lead concentrations contribute to solution issues and increase consumption of cyanide, leading to higher costs for solution treatment; and,

5. Assess the market for purchasers of lower grade silver bearing lead concentrates.

MDA believes that the Shafter project is a project of merit and warrants the program proposed by Aurcana and the level of expenditures outlined above.

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21.0 DATE AND SIGNATURE PAGE

Effective Date of report: December 11, 2015

Completion Date of report: January 11, 2016

"Paul Tietz" January 11, 2016
Paul Tietz, C.P.G. Date Signed

"Ross MacFarlane" January 11, 2016
Ross MacFarlane, P.Eng Date Signed

22.0 CERTIFICATE OF QUALIFIED PERSON

Paul Tietz, C.P.G.

I, Paul Tietz, C.P.G., do hereby certify that:

1. I am currently employed as Senior Geologist for Mine Development Associates, Inc. located at 210 South Rock Blvd., Reno, Nevada 89502 and
2. I graduated with a Bachelor of Science degree in Biology/Geology from the University of Rochester in 1977, a Master of Science degree in Geology from the University of North Carolina, Chapel Hill in 1981, and a Master of Science degree in Geological Engineering from the University of Nevada, Reno in 2004.
3. I am a Certified Professional Geologist (#11004) with the American Institute of Professional Geologists and have worked as a geologist in the mining industry for more than 30 years.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101"). I have previously explored, drilled, evaluated and modelled similar silver deposits in carbonate rocks in the western U.S. and elsewhere. I certify that by reason of my education, affiliation with certified professional associations, and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I am one of the authors of this technical report titled *"Technical Report on the Shafter Silver Project, Presidio County, Texas"* prepared for Aurcana Corp., and dated January 11, 2016. Subject to those issues discussed in Section 3.0, I am responsible for Sections 2 through 12, 14 through 18, and 20, and take co-responsibility for Sections 1 and 19 of the Technical Report.
6. I have not had prior involvement with the property that is the subject of this Technical Report. I visited the Shafter project site on January 30 and 31, 2013 and May 21 through May 25, 2013.
7. To the best of my knowledge, information and belief, the technical report contains the necessary scientific and technical information to make the technical report not misleading.
8. I am independent of Aurcana Corp. and related companies applying all of the tests in Section 1.5 of National Instrument 43-101 and in Section 1.5 of the Companion Policy to NI 43-101.
9. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in accordance with the requirements of that instrument and form.

Dated this January 11, 2016

"Paul Tietz"
Signature of Qualified Person

Paul Tietz
Print Name of Qualified Person

CERTIFICATE OF QUALIFIED PERSON

ROSS MACFARLANE P.ENG..

I, G.R. MacFarlane, B.Eng., P.Eng., do hereby certify that:

1. I am currently employed as Senior Associate Mining and Metallurgical Engineer with Watts, Griffis, and McOuat Ltd. located at 300-8 King Street East, Toronto ON, M5C 1B5.
2. I graduated with a Bachelor of Engineering in Mining and Metallurgy from Dalhousie University, Halifax Nova Scotia in 1973.
3. I am a Registered Professional Engineer (# 28062503) with the Professional Engineers of Ontario (PEO) and have been engaged in an engineering capacity in the mining industry for more than 40 years.
4. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101"). I have previously developed and managed mining and milling operations as well as provided consulting services around the world in similar operations to that being developed by Aurcana. I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
5. I am one of the authors of this technical report titled *"Technical Report on the Shafter Silver Project, Presidio County, Texas"* prepared for Aurcana Corp., and dated January 11, 2016. Subject to those issues discussed in Section 3.0, I am responsible for Section 13 and take co-responsibility for Sections 1 and 19 of the Technical Report.
6. I have not had prior involvement with the property that is the subject of this Technical Report. I visited the Shafter project site on March 27, 2014.
7. To the best of my knowledge, information and belief, the technical report contains the necessary scientific and technical information to accurately describe the history of the Shafter deposit, recent developments on the property, and future potential and plans for the site.
8. I am independent of Aurcana Corp. and related companies applying all of the tests in Section 1.5 of National Instrument 43-101 and in Section 1.5 of the Companion Policy to NI 43-101.
9. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in accordance with the requirements of that instrument and form.

Dated this January 11, 2016

"Ross MacFarlane"
Signature of Qualified Person

Ross MacFarlane
Print Name of Qualified Person