



MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

Technical Report on the Trinity Project Pershing County, Nevada



Prepared for

Liberty Silver Corp.
130 King Street West, Suite 3670
Toronto, Ontario M5X 1A9 Canada
416-214-5576
www.libertysilvercorp.com

Renaissance Gold Inc.
940 Matley Lane, Suite 17
Reno, Nevada 89502
775-337-1545
www.rengold.com

Report Date: December 1, 2011
Effective Date: August 9, 2011

Paul D. Hartley
Michael M. Gustin, P. Geo.
Daniel W. Kappes, P. Eng.

775-856-5700

210 South Rock Blvd.
Reno, Nevada 89502
FAX: 775-856-6053



MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

CONTENTS

1.0	EXECUTIVE SUMMARY	1
1.1	Location and Ownership.....	1
1.2	History, Exploration, and Past Production	1
1.3	Geology and Mineralization	2
1.4	Metallurgical Testing and Mineral Processing.....	3
1.5	Silver, Lead, and Zinc Resources	4
1.6	Conclusions and Recommendations.....	4
2.0	INTRODUCTION AND TERMS OF REFERENCE	6
2.1	Project Scope and Terms of Reference	6
2.2	Frequently Used Acronyms, Abbreviations, Definitions, and Units of Measure.....	7
3.0	RELIANCE ON OTHER EXPERTS	8
4.0	PROPERTY DESCRIPTION AND LOCATION.....	9
4.1	Location.....	9
4.2	Land Area	9
4.3	Agreements and Encumbrances	12
4.3.1	Exploration Earn-in Agreement between Liberty Silver Corp. and Renaissance Gold Inc.	12
4.3.2	Minerals Lease and Sublease between Newmont Mining Corporation and Renaissance Gold Inc.	14
4.3.3	Royalties.....	14
4.3.3.1	Royalties Applicable to Sections 9 and 10	14
4.3.3.2	Royalties Applicable to the Remainder of the Trinity Property	15
4.4	Environmental Permitting and Liabilities	15
4.4.1	Environmental Liabilities.....	15
4.4.2	Permits and Approvals	16
4.4.3	Geochemistry	17
4.4.4	Surface and Groundwater.....	17
4.4.4.1	Special Status Species.....	17
4.4.4.2	Access Route	17
4.4.4.3	Permitting Risk	17

775-856-5700

210 South Rock Blvd.
Reno, Nevada 89502
FAX: 775-856-6053



5.0	ACCESS, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY	18
5.1	Access	18
5.2	Climate	18
5.3	Local Resources and Infrastructure	18
5.4	Physiography	18
6.0	HISTORY	20
6.1	Exploration and Mining History	20
6.1.1	U. S. Borax and Chemical Corporation	20
6.1.2	Santa Fe Pacific Mining, Inc.	22
6.1.3	Renaissance Gold Inc.	23
6.2	Historic Mineral Resource and Reserve Estimates	23
6.3	Historic Mine Production	27
7.0	GEOLOGIC SETTING AND MINERALIZATION	28
7.1	Geologic Setting	28
7.1.1	Regional Geology	28
7.1.2	Local Geology	30
7.1.3	Project Geology	32
7.2	Mineralization	35
8.0	DEPOSIT TYPES	38
9.0	EXPLORATION	39
10.0	DRILLING	40
10.1	U. S. Borax	42
10.2	Santa Fe Pacific Mining Inc.	43
10.3	Renaissance Gold Inc.	44
10.4	Summary of Drilling and Sampling	44
11.0	SAMPLE PREPARATION, ANALYSES, AND SECURITY	45
11.1	U. S. Borax	45
11.2	Santa Fe Pacific Mining Inc.	46
11.3	Renaissance Gold Inc.	47
11.4	Summary Statement	48
12.0	DATA VERIFICATION	49
12.1	Data Verification Studies by Other Workers	49
12.2	MDA Data Verification	49
12.2.1	CMS vs. USBRC Checks on Silver - 1983	50
12.2.2	Bondar-Clegg vs. USBRC Checks on Silver - 1984	51
12.2.3	USBRC vs. USBRC Checks on Silver – 1984-1985	52
12.2.4	Hunter vs. USBRC Pulp Checks on Silver - 1985	54
12.2.5	AAL vs. AAL Pulp Checks on Silver – 2006-2007	56
12.2.6	CMS vs. USBRC Analyses for Lead – 1983	58



12.2.7	USBRC vs. USBRC Checks on Lead – 1984/85	59
12.2.8	Hunter vs. USBRC Analyses for Lead - 1985	60
12.2.9	AAL vs. AAL Pulp Checks on Lead from RC Samples 2006/07	62
12.2.10	USBRC vs. USBRC Checks on Zinc - 1985	63
12.2.11	Hunter vs. USBRC Pulp Checks on Zinc - 1985	64
12.2.12	CMS vs. USBRC Checks on Zinc - 1985	66
12.2.13	AAL vs. AAL Pulp Checks on Zinc from RC Samples.....	67
12.3	Summary Statement on Data Verification.....	69
12.4	Assay Database Audit.....	69
13.0	MINERAL PROCESSING AND METALLURGICAL TESTING	70
13.1	Historical Testing and Mineral Processing.....	70
13.1.1	1983 U. S. Borax Research Corp. and Hazen Research Inc.	70
13.1.2	1983-1984 U. S. Borax Research Corp.....	71
13.1.3	1984-1985 U. S. Borax Research Corp.....	72
13.1.4	1986–1987 Kappes, Cassiday & Associates	73
13.2	Metallurgical Testing by Liberty Silver Corp.	73
14.0	MINERAL RESOURCE ESTIMATE	74
14.1	Introduction	74
14.1	Resource Modeling.....	76
14.1.1	Data	76
14.1.2	Deposit Geology Pertinent to Resource Modeling	76
14.1.3	Geologic and Oxidation Modeling.....	77
14.1.4	Density	77
14.1.5	Silver, Lead, and Zinc Modeling.....	77
14.2	Trinity Inferred Mineral Resources	86
15.0	ADJACENT PROPERTIES.....	92
16.0	OTHER RELEVANT DATA AND INFORMATION	93
17.0	INTERPRETATION AND CONCLUSIONS	94
18.0	RECOMMENDATIONS	96
19.0	REFERENCES	98
20.0	DATE AND SIGNATURE PAGE.....	101
21.0	CERTIFICATE OF AUTHORS.....	102



T A B L E S

Table 1.1	Trinity Inferred Mineral Resources.....	4
Table 4.1	Unpatented Lode Mining Claims of the Trinity Property.....	11
Table 6.1	1986 Trinity “Geologic Reserve Calculation” Prior to Mining.....	24
Table 6.2	1986 Southwest Extension Oxide “Reserve”.....	25
Table 6.3	July 1987 Initial and January 1988 Revised “Reserve” Estimate for the Oxide Ore Body...	25
Table 6.4	1988 Trinity Total Undeveloped “Reserves”.....	25
Table 6.5	1989 Borax Summary of Remaining “Mineral Reserves” at Trinity.....	26
Table 6.6	1989 Mineral “Reserve” Stockpile at the Trinity Mine.....	26
Table 10.1	Trinity Mineral Resource Database Summary.....	40
Table 12.1	CMS Analyses vs. USBRC Analyses for Silver – 1983.....	51
Table 12.2	Bondar Clegg Analyses vs. USBRC Analyses for Silver – 1984.....	52
Table 12.3	USBRC Checks vs. USBRC Original Analyses for Silver – 1984/85.....	54
Table 12.4	Hunter Checks vs. USBRC Original Analyses for Silver – 1985.....	56
Table 12.5	AAL Checks on Pulps from RC and Core Samples vs. AAL Analyses for Silver – 2007....	57
Table 12.6	CMS Checks on Rotary Percussion Samples Relative to Original USBRC Analyses for Lead – 1983.....	59
Table 12.7	USBRC Checks from Rotary Percussion Samples Relative to Original USBRC Analyses for Lead – 1984/85.....	60
Table 12.8	Hunter Checks on Pulps Relative to Original USBRC Analyses for Lead – 1985.....	61
Table 12.9	AAL Checks on Pulps from RC and Core Samples Relative to Original AAL Analyses for Lead – 2006/07.....	63
Table 12.10	USBRC Checks from Rotary Percussion Samples Relative to Original USBRC Analyses for Zinc – 1985.....	64
Table 12.11	Hunter Checks on Pulps Relative to Original USBRC Analyses for Zinc – 1985.....	65
Table 12.12	CMS Checks Relative to Original USBRC Analyses for Zinc – 1985.....	67
Table 12.13	AAL Checks on Pulps from RC and Core Samples Relative to Original AAL Analyses for Zinc – 2006.....	68
Table 14.1	Trinity Mineral Domains.....	78
Table 14.2	Descriptive Statistics of Coded Silver Assays.....	82
Table 14.3	Descriptive Statistics of Coded Lead Assays.....	82
Table 14.4	Descriptive Statistics of Coded Zinc Assays.....	82
Table 14.5	Trinity Silver Assay Caps.....	83
Table 14.6	Trinity Lead Assay Caps.....	83
Table 14.7	Trinity Zinc Assay Caps.....	83
Table 14.8	Descriptive Statistics of Trinity Silver Composites.....	84
Table 14.9	Descriptive Statistics of Trinity Lead Composites.....	84
Table 14.10	Descriptive Statistics of Trinity Zinc Composites.....	84
Table 14.11	Search Ellipse Orientations.....	85
Table 14.12	Summary of Trinity Estimation Parameters.....	85
Table 14.13	Trinity Inferred Mineral Oxide Resources.....	86
Table 14.14	Trinity Inferred Mineral Sulfide Resources.....	87
Table 18.1	Estimated Costs of Trinity Program.....	97



FIGURES

Figure 4.1	Location of the Trinity Property, Pershing County, Nevada	10
Figure 4.2	Property Map for the Trinity Project	13
Figure 5.1	Physiography of the Trinity Mine Area	19
Figure 6.1	View of the Historic Liberty Silver Open Pit	27
Figure 7.1	Regional Geology of the Trinity Range Area, Pershing County	29
Figure 7.2	Generalized Geology of the Trinity Area	31
Figure 7.3	Geology of the Trinity Mine Area	34
Figure 7.4	Sulfide Mineralization at Trinity	36
Figure 10.1	Drill-hole Location Map for the Trinity Project	41
Figure 12.1	CMS Checks Relative to Original USBRC Analyses for Silver – 1983	50
Figure 12.2	Bondar Clegg Checks Relative to Original USBRC Analyses for Silver – 1984	52
Figure 12.3	USBRC Checks Relative to Original USBRC Analyses for Silver – 1984/85	53
Figure 12.4	Hunter Checks Relative to Original USBRC Analyses for Silver – 1985	55
Figure 12.5	AAL Checks on Pulps from RC and Core Samples Relative to Original AAL Analyses for Silver – 2007	57
Figure 12.6	CMS Checks Relative to Original USBRC Analyses for Lead – 1983	58
Figure 12.7	USBRC Checks Relative to Original USBRC Analyses for Lead – 1984/85	59
Figure 12.8	Hunter Checks on Pulps Relative to Original USBRC Analyses for Lead – 1985	61
Figure 12.9	AAL Checks on Pulps Relative to Original AAL Analyses for Lead – 2006/07	62
Figure 12.10	USBRC Checks from Rotary Percussion Samples Relative to Original USBRC Analyses for Zinc – 1985	64
Figure 12.11	Hunter Checks on Pulps Relative to Original USBRC Analyses for Zinc – 1985	65
Figure 12.12	CMS Checks Relative to Original USBRC Analyses for Zinc – 1985	66
Figure 12.13	AAL Checks on Pulps Relative to Original AAL Analyses for Zinc – 2007	68
Figure 14.1	Cross Section 2800 Showing Silver Mineral Domains	79
Figure 14.2	Cross Section 2800 Showing Lead Mineral Domains	80
Figure 14.3	Cross Section 2800 Showing Zinc Mineral Domains	81
Figure 14.4	Trinity Variogram	85
Figure 14.5	Cross Section 2800 Showing Block Model Silver Grades	89
Figure 14.6	Cross Section 2800 Showing Block Model Lead Grades	90
Figure 14.7	Cross Section 2800 Showing Block Model Zinc Grades	91

Cover Photo: Overview of the historic Trinity open pit looking west-southwest toward the Seven Troughs Range.



MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

1.0 EXECUTIVE SUMMARY

Mine Development Associates (“MDA”) has been engaged to prepare this technical report on the Trinity project, Pershing County, Nevada, for Liberty Silver Corp., a Nevada corporation (“Liberty Silver”), and Renaissance Gold Inc., listed on the TSX Venture Exchange (“Renaissance”). At the time of the work described in this report and prior to October 29, 2010, Renaissance was known as AuEx Ventures, Inc. This report has been prepared in compliance 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 November 27, 2010.

MDA previously prepared a technical report, which was filed by Renaissance in April 2011, in support of the first NI 43-101-compliant mineral resource estimate of the Trinity silver, lead, and zinc deposit. The current updated report has been prepared in support of the anticipated listing of Liberty Silver on the TSX Exchange. This report updates the project land status to reflect the acquisition of additional claims and provides new recommendations for the Trinity project. No additional drilling or other work that is considered material to the resource estimate has occurred since publication of the previous technical report.

1.1 Location and Ownership

The Trinity project is located along the west flank of the Trinity Range in Pershing County, Nevada, about 23 miles by road northwest of Lovelock, the county seat.

The Trinity property consists of approximately 9,960 acres, which include 240 unpatented lode mining claims and portions of nine sections of private land. Renaissance holds a 100% leasehold interest in the Trinity property through its wholly owned subsidiary, Renaissance Exploration, Inc. Liberty Silver has the right to earn 70% of the Renaissance interest by means of an exploration earn-in agreement, subject to certain obligations.

1.2 History, Exploration, and Past Production

The Trinity project lies in the Trinity mining district, which had limited production of silver, lead, zinc, and gold from 1864 through 1942, primarily from the east side of the Trinity Range. In the vicinity of the Trinity project, which is located on the west side of the range, there was historic prospecting with unrecorded but presumed minor silver production.

775-856-5700

210 South Rock Blvd.
Reno, Nevada 89502
FAX: 775-856-6053



Minor exploration activity took place in the vicinity of the Trinity project in the 1950s, and in the 1960s Phelps Dodge Corporation completed trenching, IP surveying, and limited drilling in the area.

U. S. Borax and Chemical Corp. (“Borax”) became interested in what is now the Trinity project in 1982 on the basis of reconnaissance geochemical sampling that indicated the presence of anomalous lead and silver in the Willow Canyon area. By 1984, Borax had acquired a property position and had entered into a joint venture with Southern Pacific Land Company (later Santa Fe Pacific Mining, Inc. (“SFPM”) and still later Newmont Mining Corp. (“Newmont”)), in which Borax was the operator. From 1982 to 1986, Borax and its joint-venture partner explored the property and developed the Trinity mine. Borax operated the open pit heap-leaching mine, through a mining contractor, on behalf of the joint venture from September 3, 1987 to August 29, 1988, with leaching continuing into 1989. During this period, the mine produced about five million ounces of silver from about 1.1 million tons of oxidized ore grading six ounces of silver per ton. Borax drilled and conducted extensive metallurgical testing on the sulfide mineralization, but metal prices at the time were too low to support mining of this material.

In 1984-1985, 1987-1989, and 1990, SFPM conducted exploration and drilling on their property in the vicinity of the joint-venture lands. In 1991, SFPM acquired sole interest in the joint-venture lands, including Borax’s claims, and conducted further exploration through 1992. SFPM’s 1990-1992 exploration work concentrated on down-dip and lateral extensions of mineralization underlying the oxide pit and the sulfide mineralization, as well as extensions of mineralization outside the immediate mine area.

There was no exploration on the Trinity property from 1993 to 2005. In August 2005, Renaissance leased the property from Newmont, who had acquired SFPM’s Nevada holdings. Under an earn-in agreement with Piedmont Mining Company, Renaissance explored the property from September 2005 through July 2009, including limited drilling in 2006 and 2007 that encountered high-grade silver values below and adjacent to the open pit.

Liberty Silver entered into an earn-in agreement with Renaissance in March 2010. To date, Liberty Silver has conducted extensive data compilation and has completed a magnetotelluric geophysical survey of the project. The database of technical data for the property, developed since 1982, includes the results of soil and rock surveys, geophysical surveys, geologic mapping, lithology logging and multi-element analyses for about 400 drill holes, and metallurgical work, as well as data derived from the previous production of heap-leach silver.

1.3 Geology and Mineralization

The Trinity project lies on the western flank of the Trinity Range, one of the generally north-trending ranges formed during Tertiary extension of the Basin and Range Province.

Within the Trinity Range, the basement rocks are comprised of the Middle Triassic to Early Jurassic near-shore deltaic deposits of the Auld Lang Syne Group, which are represented by phyllite, argillite, quartzite, and dirty limestone at the Trinity project. The best-represented pre-Cenozoic deformation in this portion of the Trinity Range is the Jurassic and Cretaceous Nevadan Orogeny, which resulted in low-grade regional metamorphism, variably directed folding, and thrust faulting. A Cretaceous intrusive



episode culminated the Nevadan Orogeny and is exemplified by a Cretaceous granodiorite stock just northeast of the Trinity project.

Tertiary volcanic and sedimentary rocks and Quaternary sediments are abundant in the Trinity project area. There is a thin Tertiary rhyolite sequence along the central north-south axis of the property that includes the resource area. These volcanic rocks overlie the Mesozoic phyllite and argillite, exposed to the east, but are separated by an argillite breccia that is closely associated with faulting. The rhyolite includes interbedded rhyolitic flows, welded tuffs, air-fall tuffs, epiclastic tuffs, and lacustrine deposits. Several rhyolite domes, dikes, and sills have also been identified on the property, some of which may be related to mineralization. Early Tertiary north- to northwest-trending faults are present in the Trinity project area, as are younger north- to northeast-trending normal faults. Late Tertiary and/or Quaternary bench and channel gravel deposits and Quaternary alluvium and outwash unconformably overly the rhyolites and cover the western part of the property.

Rhyolite porphyry, aphanitic rhyolite, and volcanoclastic rocks are the principal host rocks for mineralization in the Trinity mine area. Silicification and quartz-adularia-sericite alteration are associated with the mineralization. Tertiary rhyolitic tuffs and flows were extensively altered and form a halo extending 1.6 miles beyond the main mineralized area. This alteration affected the Auld Lang Syne Group only locally along faults and breccia zones.

Mineralization at the Trinity project is controlled by a northeast-trending zone of normal faults. Silver, lead, and zinc mineralization occurs in fractures and bedding planes in Tertiary rhyolite in the hanging-wall block of the fault zone. Although mineralization continues downward into the underlying Triassic rocks, it is more tightly constrained to fractures that host higher-grade vein mineralization. The original Trinity silver deposit can generally be divided into two parts: a sulfide zone below the current pit and to the northeast, and an overlying oxide zone. Borax's mining in the late 1980s focused on a portion of the oxide zone.

Mineralization occurs as oxidized and unoxidized sulfides in veinlets, as fracture-controlled mineralization, and as disseminations within the host rocks, including breccia matrix. Sulfide mineralization consists mainly of pyrite, sphalerite, galena, marcasite, and minor arsenopyrite with various silver minerals, including tetrahedrite-freibergite, pyrargyrite, minor argentite, and rare native silver, with traces of gold, pyrrhotite, stannite, and chalcopyrite. Low-grade lead and zinc have the potential to add value as byproducts.

1.4 Metallurgical Testing and Mineral Processing

The Trinity oxide and sulfide mineralization underwent extensive metallurgical analyses during the early pre-production time period (1983–1987). The metallurgical studies were conducted by U.S. Borax Research Corporation (“USBRC”), Hazen Research Incorporated, and Kappes, Cassiday & Associates and included mineralogy studies, head material analyses, grinding studies, gravity separation, flotation, and leach test work. This work suggests that both oxidized and unoxidized types of silver mineralization are amenable to cyanidation, but the oxide performs better than the sulfide. The sulfide mineralization yielded significant extraction in the flotation tests, whereas the oxide did not.



Liberty Silver, in collaboration with Kappes, Cassiday & Associates, plans to conduct additional metallurgical studies, including the testing of new samples to verify and optimize the extractive process.

1.5 Silver, Lead, and Zinc Resources

The Trinity oxidized and unoxidized silver, lead, and zinc resources described in this report are listed in Table 1.1. All of the Trinity mineral resources are classified as Inferred.

Table 1.1 Trinity Inferred Mineral Resources

Cutoff (oz Ag/ton)	Inferred Oxide Resource		
	Tons	oz Ag/ton	oz Ag
0.65	1,901,000	1.37	2,605,000

Cutoff (oz Ag-equiv/ton)	Inferred Sulfide Resource				
	Tons	oz Ag/ton	oz Ag	% Pb	% Zn
1.30	5,336,000	1.69	9,036,000	0.25%	0.43%

The oxide resources are tabulated using a cutoff of 0.65 oz Ag/ton, which was derived using a \$17 per ounce silver price (three-year average) and a 75% heap-leach recovery factor. For the sulfide mineralization, a 1.30 oz/ton Ag-equivalent cutoff is used assuming 90% recovery by flotation of the silver, lead, and zinc, and metal prices of \$17 per ounce for silver and \$0.80 per pound for both lead and zinc. The cutoffs envision potential mining by open-pit methods.

1.6 Conclusions and Recommendations

MDA considers Trinity to be a property of merit that is worthy of further investment. The reliability of historic laboratory analyses of drill samples from the oxide resource should be evaluated by twinning approximately 12 of the historic holes with dry RC holes. Metallurgical testing of the oxide mineralization at representative grades is needed, as the historic work primarily tested high-grade material. Metallurgical testing of the unoxidized mineralization is also recommended. Core drilling will be required to obtain the material for this metallurgical test work; the core holes could also be used to twin some of the historic holes. In addition to the twinning program, there are several outlying areas of mineralization that warrant further drilling. Some of these poorly defined zones lie in the northeast quarter of Section 16 and the southeast quarter of Section 9, all south of the historic open pit, where current drill-hole spacing is 300 to 500 feet. This drilling should also help to define the southwest extension of mineralization. Additional higher-grade oxide zones may also be present in these areas, perhaps along structures that parallel the mineralized fault along the axis of the pit.

Once the drilling and metallurgical test work are completed, the resource should be updated. Using the updated resource, the completion of a preliminary economic assessment is recommended.

Total cost for this work is estimated at \$1,800,000.



Additional exploration targets on the property are at an early stage and consist primarily of geophysical and conceptual geological and geochemical targets. These targets were not thoroughly assessed by MDA and are not discussed in this report.



2.0 INTRODUCTION AND TERMS OF REFERENCE

Mine Development Associates (“MDA”) has been engaged to prepare this updated technical report on the Trinity project, Pershing County, Nevada, for Liberty Silver Corp. (“Liberty Silver”) and Renaissance Gold Inc. (“Renaissance”). Liberty Silver is a Nevada corporation and is traded on the Over-the-Counter Bulletin Board (LBSV) (website at <http://www.libertysilvercorp.com/>). Renaissance is listed on the TSX Venture Exchange (REN) (website at <http://www.rengold.com>).

Liberty Silver acquired its interest in the Trinity property through an exploration earn-in agreement with Renaissance. At the time of the work described in this report and prior to October 29, 2010, Renaissance was known as AuEx Ventures, Inc. (“AuEx”), but “Renaissance” will be used throughout this report unless a distinction is necessary.

This technical report has been prepared in compliance 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 November 27, 2010.

The effective date of this report is August 9, 2011, unless otherwise noted.

2.1 Project Scope and Terms of Reference

MDA previously prepared a technical report, which was filed by Renaissance in April 2011, in support of the first NI 43-101-compliant mineral resource estimate of the Trinity silver, lead, and zinc deposit (Hartley *et al.*, 2011). The current updated report has been prepared in support of the anticipated listing of Liberty Silver on the TSX Exchange. This report updates the project land status to reflect the acquisition of additional claims and provides new recommendations for the Trinity project. No additional drilling or other work that is considered material to the resource estimate has occurred since publication of the previous technical report.

This report has been prepared by Paul Hartley, a geologist with 34 years of mining industry experience and an associate of MDA, under the supervision of Michael M. Gustin, MDA Senior Geologist, who is a qualified person under NI 43-101. The mineral resources reported herein are taken from MDA’s earlier technical report and were estimated and classified under the supervision of Michael M. Gustin. There is no affiliation between Mr. Hartley or Mr. Gustin and Liberty Silver or Renaissance except that of an independent consultant/client relationship.

MDA has relied on the data and information provided by Liberty Silver for the completion of this report. In addition, MDA has relied upon the individuals described in Section 3.0 and the references cited in Section 19.0.

The authors’ mandate was to describe the history and geology of the Trinity project and to comment on substantive public or private documents and technical information listed in Section 19.0. The mandate also required on-site inspection and the preparation of this independent technical report containing the authors’ observations, conclusions, and recommendations. Mr. Hartley conducted a site visit on October 13, 2010.



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

Unless otherwise indicated, all references to dollars (\$) in this report refer to currency of the United States. Frequently used acronyms and abbreviations are listed below.

AA	atomic absorption spectrometry
Ag	silver
As	arsenic
Au	gold
CIM	Canadian Institute of Mining, Metallurgy, and Petroleum
Cu	copper
FA-AA	fire assay with an atomic absorption finish
ft	feet
ha	hectare
Hg	mercury
ICP	inductively coupled plasma
in.	inch
oz/ton	troy ounces per short ton
Pb	lead
QA/QC	quality assurance and quality control
RC	reverse-circulation drilling method
RQD	rock-quality designation
ton(s)	short ton(s) (one short ton = 2,000 pounds)
Zn	zinc

Analytical Values

	<u>percent</u>	<u>grams per metric tonne</u>	<u>troy ounces per short ton</u>
1%	1%	10,000	291.667
1 gram/tonne	0.0001%	1	0.0291667
1 oz troy/short ton	0.003429%	34.2857	1
100 ppm			2.917

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



3.0 RELIANCE ON OTHER EXPERTS

MDA is not an expert in legal matters, such as the assessment of the legal validity of mining claims, private lands, mineral rights, and property agreements in the United States. MDA did not conduct any investigations of the environmental or social-economic issues associated with the Trinity project and is not an expert with respect to these issues.

MDA has relied on Liberty Silver to provide full information concerning the legal status of Liberty Silver Corporation, as well as current legal title, material terms of all agreements, existence of applicable royalty obligations, and material environmental and permitting information that pertain to the Trinity property. The information summarized in Sections 4.2 Land Area and 4.3.3 Royalties was provided by Mr. Greg Ekins, principal of G.I.S. Land Services of Reno, Nevada, and the authors offer no professional opinions with respect to the provided information. MDA has relied upon Brian W. Buck, Vice President of JBR Environmental Consultants, Inc., Sandy, Utah, for Section 4.4 Environmental Permitting and Liabilities.



4.0 PROPERTY DESCRIPTION AND LOCATION

MDA is not an expert in land, legal, environmental, and permitting matters. The information on land area presented in Section 4.2 and on royalties in Section 4.3.3 is summarized from title reviews (the “Title Review”) prepared by Greg Ekins of G. I. S. Land Services (“G.I.S.L.S.”) (Ekins, 2011a, 2011b) that were effective as of November 24, 2010, with updated information provided by G.I.S.L.S. on August 5, 2011 included in Title Review 2011-22-TRA (Ekins, 2011c) and additional updated information provided by G.I.S.L.S. on November 14 and December 1, 2011. Sections 4.2 and 4.3 are effective as of December 1, 2011. Section 4.4, which discusses environmental permitting and liabilities, has been prepared by Brian W. Buck, Vice President of JBR Environmental Consultants, Inc., Sandy, Utah. The summary of agreements in Sections 4.3.1 and 0 is taken from news releases of AuEx and information provided by Liberty Silver.

4.1 Location

The Trinity project is located in Pershing County, Nevada, about 23 miles by road northwest of Lovelock, the county seat (Figure 4.1). The property lies along the west flank of the Trinity Range of northern Nevada. The Rochester silver mine, one of the larger silver mines in the U.S., lies about 25 miles southeast of the project, and the Seven Troughs gold district lies about 10 miles northwest of the project.

The center of the Trinity project is approximately located at 40.3965°N, 118.6101°W. The property is covered by the U.S. Geological Survey Natchez Spring 7.5’ topographic map.

4.2 Land Area

The Trinity property is comprised of approximately 9,960 acres as follows:

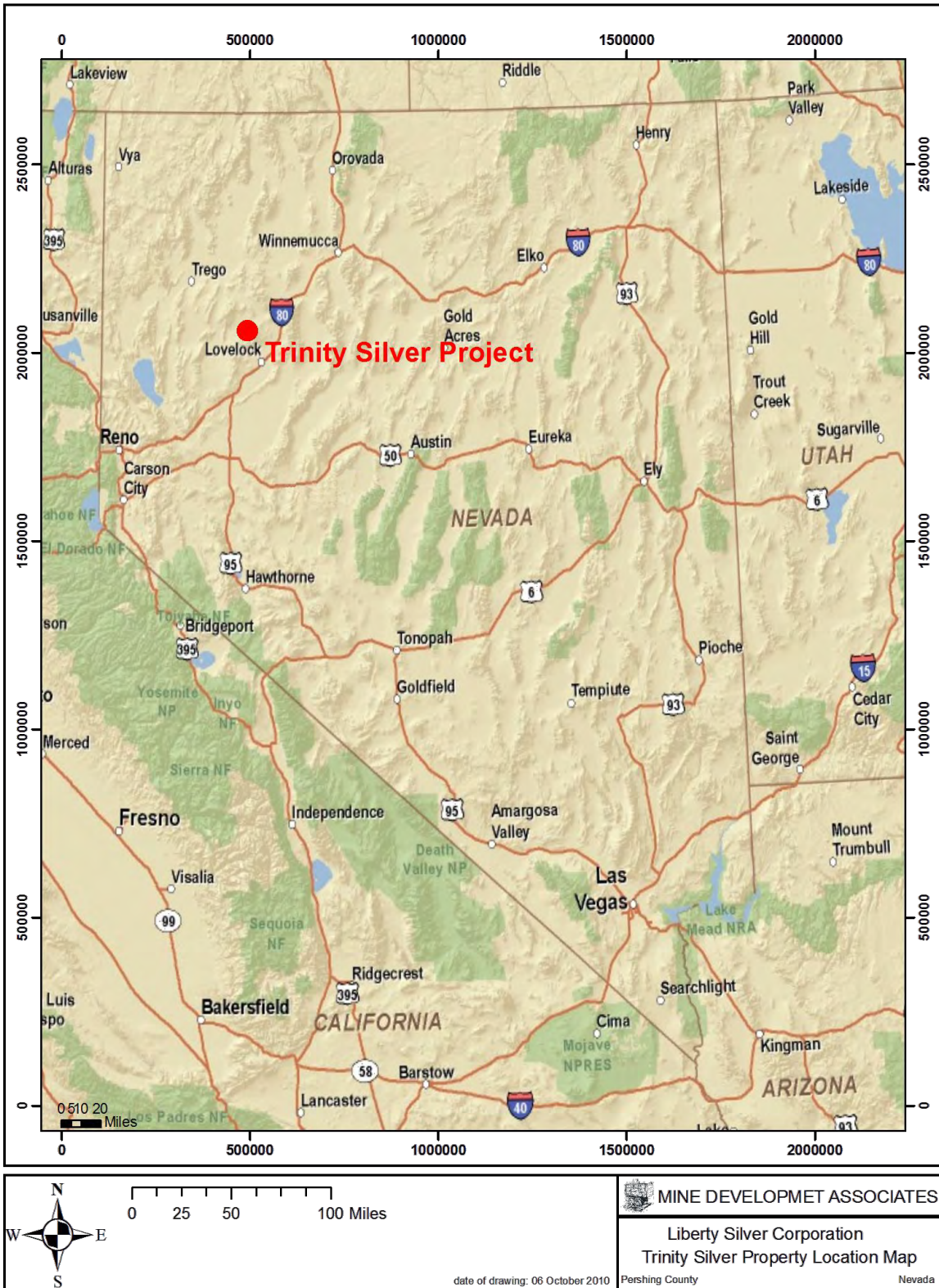
- Land leased by Renaissance from Newmont Mining Corp. (“Newmont”) in August 2005 that includes 4,396 acres of mineral leases controlled by Newmont plus 41 unpatented mining claims (SEKA- claims) and 1,280 acres of private lands owned by Newmont, and
- 199 unpatented mining claims (TS-, ELM-, and XXX- claims; see Table 4.1 for listing) owned by Renaissance Exploration, Inc., a wholly owned subsidiary of Renaissance Gold Inc.

Liberty Silver acquired its interest in the Trinity property through an exploration earn-in agreement with Renaissance effective March 29, 2010. Renaissance holds a 100% leasehold interest in the Trinity property, and through the earn-in agreement, Liberty Silver has the right to earn a 70% interest in Renaissance’s interest subject to certain obligations (see Section 4.3.1). All of the property listed above is subject to the earn-in agreement between Liberty Silver and Renaissance, as well as the Newmont and Renaissance Mining Lease and Sublease agreement (see Sections 4.3.1 and 0).

Liberty Silver contracted G.I.S.L.S. to prepare a Title Review (2010-22-TR) of 162 of the claims and nine parcels of private land in Pershing County, Nevada (Ekins, 2011a) and an additional Title Review 2011-22-TRA of the 78 claims (ELM-104 through 175 and XXX-1 through 6) staked by Liberty Silver in April 2011. The following discussion summarizes G.I.S.L.S.’ findings.



Figure 4.1 Location of the Trinity Property, Pershing County, Nevada





The earn-in agreement between Liberty Silver and Renaissance covers mineral rights in portions of Sections 2 through 5, 9 through 11, 15 through 17, and 21 of Township 29 North, Range 30 East and Sections 26, 27, 28, 33, 34, and 35 of Township 30 North, Range 30 East, Mount Diablo Base and Meridian, all in Pershing County, Nevada (Figure 4.2). These lands comprise the Trinity property subject to the earn-in agreement and include four groups of unpatented lode mining claims totaling 240 claims (SEKA-, TS-, ELM-, and XXX- claims on Table 4.1) and select portions of nine sections of private land (discussed below), totaling approximately 9,960 acres (4,031 hectares) of land.

Table 4.1 Unpatented Lode Mining Claims of the Trinity Property
(Ekins, 2011a; Ekins, 2011c)

Claim Name	Owner of Claims	BLM NMC Number
SEKA 1-6, 8-16	Newmont USA Ltd.	243016 – 243030
SEKA 61-64	Newmont USA Ltd.	264508 - 264511
SEKA 73-76	Newmont USA Ltd.	264520 - 264523
SEKA 95-112	Newmont USA Ltd.	264542 - 264559
TS-1 to TS-18	Renaissance Exploration, Inc.	930542 - 930559
ELM 1-18	Renaissance Exploration, Inc.	1027569 - 1027586
ELM 19-103	Renaissance Exploration, Inc.	1030226 - 1030310
ELM 104-175	Renaissance Exploration, Inc.	1040840 - 1040911
XXX 1-6	Renaissance Exploration, Inc.	1047549 - 1047554
240 claims total		

All of the private land is controlled by Newmont and is leased by Renaissance from Newmont. It consists of:

LEASED LANDS: (Minerals Lease – 4,396.44 acres, according to Exhibit A of the Newmont-Renaissance agreement described in Section 4.3.2)

Newmont leases the mineral rights on the land described below from Nevada Land and Resource Company, LLC through a Minerals Lease dated August 17, 1987. Newmont does not control the surface rights on this leased property.

Township 30 North, Range 30 East, MDB&M:

Section 27; All (640 acres)

Section 33; All (640 acres)

Section 35; N1/2, SE1/4, and N1/2 of SW1/4 (560 acres)

Township 29 North, Range 30 East, MDB&M:

Section 3; All (639.12 acres)

Section 5; All (637.32 acres)

Section 11; All (640 acres)

Section 17; All (640 acres)

OWNED (Private) LANDS: Surface & Minerals (1,280 acres)

Newmont owns the mineral and surface rights on the land described below.



Township 29 North, Range 30 East, MDB&M:
Section 9; All (640 acres)
Section 15, All (640 acres)

Based upon the exploration earn-in agreement between Renaissance and Liberty Silver dated March 29, 2010 (see Section 4.3.1), Liberty Silver has a contingent contractual leasehold interest in the mineral title of 70% of the mineral interests contained in the lands detailed in this summary of the Title Review. The ELM claims (Table 4.1) were located in the name of Liberty Silver and are subject to the terms of the exploration earn-in agreement. The XXX 1 through XXX 6 lode claims were also located in the name of Liberty Silver and are also subject to the terms of the earn-in agreement. These 181 claims were deeded by Liberty Silver to Renaissance on November 30, 2011.

Annual holding costs for the unpatented lode claims include an annual maintenance fee payable to the U. S. Bureau of Land Management (“BLM”) of \$140 per claim and an annual filing fee of \$10.50 per claim plus a \$4.00 document fee for the Notice of Intent to Hold payable to Pershing County

The claims and fee land that make up Liberty Silver’s property are contiguous. The Trinity deposit is located in Sections 9 and 10, T29N, R30E (Figure 4.2). As shown on Figure 4.2, there is property located in Sections 4 and 10 within the Trinity project that is not controlled by Liberty Silver.

4.3 Agreements and Encumbrances

4.3.1 Exploration Earn-in Agreement between Liberty Silver Corp. and Renaissance Gold Inc.

The following information has been provided by Liberty Silver.

Liberty Silver acquired its interest in the Trinity property through an exploration earn-in agreement with Renaissance effective March 29, 2010. Renaissance is the sole lessee of a 100% interest in that portion of the Trinity property which is controlled by Newmont (see Section 4.3.2). Liberty Silver can earn an undivided 70% interest in the property within a six-year period by meeting the following obligations:

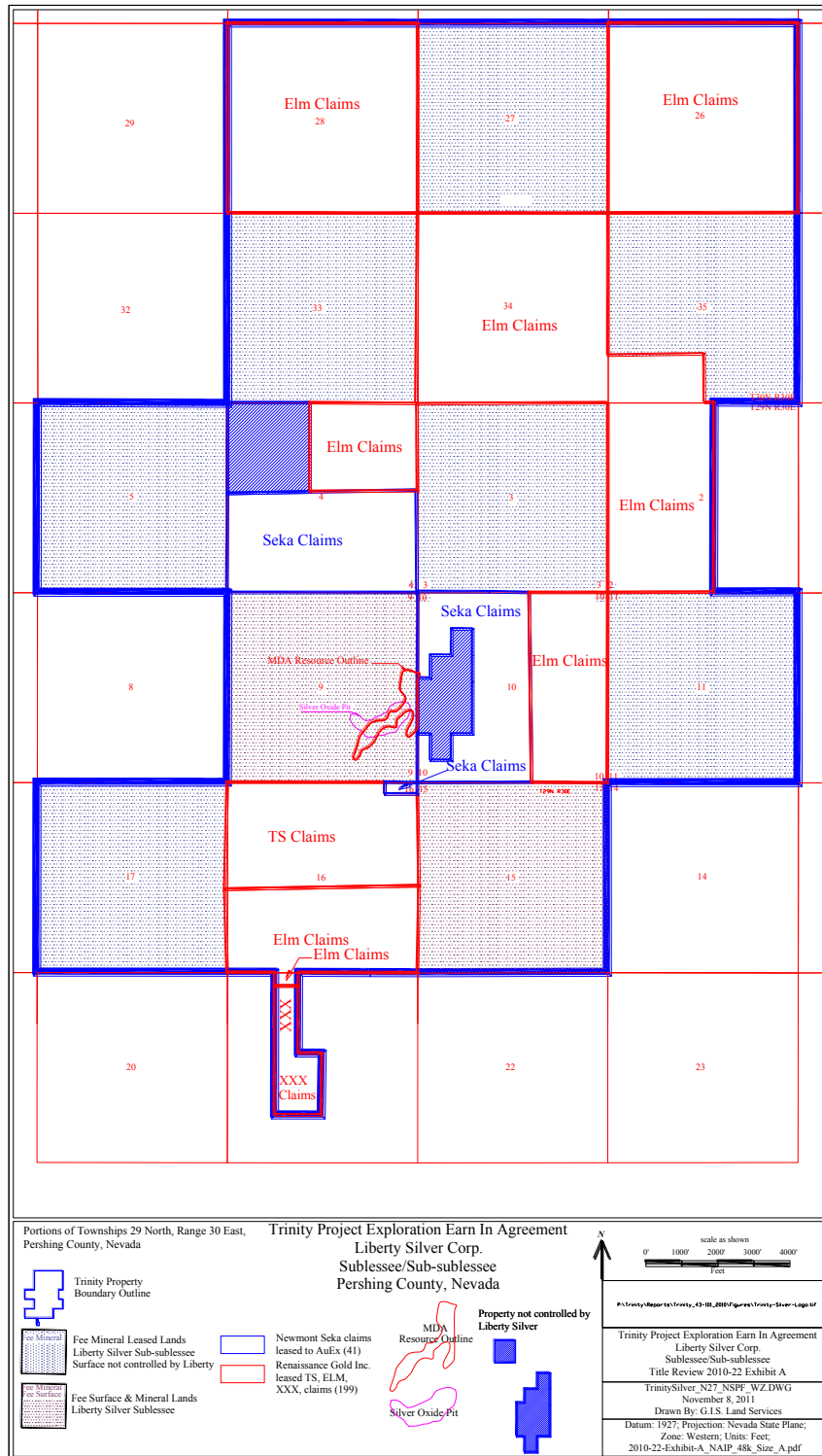
1. A signing payment of \$25,000, which has been made;
2. Expenditure of a minimum of \$5,000,000 in exploration and development expenses as follows:
 - \$500,000 in the first agreement year including the signing payment;
 - \$1,000,000 in each of the second through fifth agreement years; and
 - \$500,000 in the sixth agreement year.
3. Delivery of a Bankable Feasibility Study by the seventh anniversary of the effective date of March 29, 2010.

Under the terms of the agreement, upon having acquired its 70% interest, Liberty Silver will enter a formal joint venture with Renaissance, with Liberty Silver to act as the operator.

All of the claims and all fee land described in Section 4.2 are subject to the earn-in agreement.



Figure 4.2 Property Map for the Trinity Project
(Land information prepared by G.I.S. Land Services; resource outline added by MDA)





4.3.2 Minerals Lease and Sublease between Newmont Mining Corporation and Renaissance Gold Inc.

The following information is taken from an AuEx news release dated August 11, 2005, as reported on the AuEx website as of January 4, 2011.

In July 2005, AuEx, Inc. leased the Trinity property from Newmont and subsequently assigned the lease to Renaissance. The property included 4,396 acres of fee leases controlled by Newmont and 41 unpatented mining claims in addition to 1,280 acres of private lands owned by Newmont. Under the terms of the agreement, Renaissance reimbursed Newmont claim holding fees for 2004 and 2005, which totaled approximately \$11,000, and committed to expend \$200,000 in exploration expenses during the first 30 months of the agreement. Thereafter, the company must spend at least \$100,000 per year to keep the agreement in effect and must expend a total of \$2,000,000 on or before the seventh anniversary of the agreement. Renaissance can purchase the property at any time prior to the third anniversary of the agreement for \$500,000 or for \$1,000,000 thereafter, subject to a royalty retained by Newmont. In addition, Newmont retains the right to back-in (“Venture Option”) upon fulfillment by Renaissance of specific expenditure requirements. If Newmont elects the Venture Option, they will reimburse Renaissance in amounts determined by the completion of Renaissance’s obligations at the time of the Venture Option election.

4.3.3 Royalties

The following information on royalties is taken from title reviews prepared by Greg Ekins of G. I. S. Land Services (Ekins, 2011a, 2011b) that were effective as of November 24, 2010.

4.3.3.1 Royalties Applicable to Sections 9 and 10

The land in Sections 9 and 10 that is covered by the earn-in agreement between Liberty Silver and Renaissance and on which the resource described in Section 14.0 is located is subject to the following royalties:

Knox, Kaufman 4% Net Profits Interest Royalty

A Letter Agreement dated January 8, 1991 among Santa Fe Pacific Gold Corporation (“Santa Fe”), Pacific Coast Mines, Inc., U. S. Borax and Chemical Company (“Borax”), and Knox, Kaufman, Inc. confirmed and modified an earlier agreement dated January 1, 1979, for the payment of a 4% net profits interest (“NPI”) royalty to Knox, Kaufman, Inc. for production from the SEKA claims and Section 9 in T29N R30E. Based on the modification, the 4% NPI royalty in this agreement is be applied at 100% to the SEKA claims, and 50% of the royalty is applied to the areas in Section 9. Through acquisition of Santa Fe Pacific Gold Corporation, Newmont is the successor in interest and has acquired the assets and liabilities of Santa Fe Pacific Gold Corp., including the NPI royalty. No documents of record were located terminating this agreement, and it is not known if the royalty remains valid.

Newmont Contingent Royalty

Newmont has a contingent sliding-scale royalty applied to “Newmont Property” as defined in the Renaissance lease agreement. The royalties, summarized below, will be applied should Renaissance buy out Newmont’s interest in these lands.



Silver

2% when silver is less than or equal to \$5.00 per ounce.

3% when silver is greater than \$5.00 per ounce up to \$8.00 per ounce

4% when silver is greater than \$8.00 per ounce up to \$10.00 per ounce.

5% when silver is greater than \$10.00 per ounce.

Gold

2% when gold is less than or equal to \$300.00 per ounce.

3% when gold is greater than \$300.00 per ounce up to \$400.00 per ounce

4% when gold is greater than \$400.00 per ounce up to \$500.00 per ounce.

5% when gold is greater than \$500.00 per ounce.

Renaissance Contingent Royalty

The exploration earn-in-agreement between Renaissance and Liberty Silver provides for a 4% net smelter returns (“NSR”) royalty to Liberty Silver should Liberty Silver expend at least \$3,000,000 and then decide to terminate the agreement before completing a feasibility study by the seventh anniversary of the effective date. The royalty is capped at twice Liberty’s expenditures excluding overhead.

4.3.3.2 Royalties Applicable to the Remainder of the Trinity Property

For the remainder of the lands leased by Liberty Silver in the Trinity project, excluding Sections 9 and 10, there are various royalties described in the G.I.S.L.S. Title Review, and these royalty issues are complex. G.I.S.L.S. recommends that the validity of these royalties be determined by legal counsel.

4.4 Environmental Permitting and Liabilities

This section has been prepared by Brian W. Buck, Vice President of JBR Environmental Consultants, Inc., Sandy, Utah (“JBR”).

4.4.1 Environmental Liabilities

Exploration at the Trinity mine in the early to mid-1980s led to open-pit mining, milling, and heap leach processing in the late 1980s. The existing heap located to the south of the open pit was closed with an evaporative cap and underwent drain-down monitoring until 2006, when the heap drain-down ceased. No further monitoring of the heap is required by Nevada Department of Environmental Protection (“NDEP”), Bureau of Mining Regulation and Reclamation (“BMRR”). The base of the heap is lined; any future work on the heap will require discussion with NDEP prior to engaging in the work.

Previous reclamation work conducted at the Trinity mine includes work performed by Borax, Santa Fe, Renaissance, and Newmont. The most recent reclamation work on the site was completed by Newmont as a condition of bond release. The BMRR has released the most recent reclamation bond held on the property by Newmont. Final reclamation work by Newmont was conducted in August 2010, which involved upgrading the safety berm around the pit and abandoning a potable water well. The Trinity mine property has been released from all previous permits and reclamation obligations. BMRR indicates the property presents no legacy environmental issues and is in good standing with the State regulatory agencies.



4.4.2 Permits and Approvals

Liberty Silver is planning to conduct exploration on the private lands where exploration was conducted by prior operators and the existing pit is located. Permitting for work on the private land is regulated by BMRR.

Any future exploration onto the adjacent public land will be regulated by the BLM and requires compliance with the National Environmental Policy Act. Exploration on the public land claims may occur under a Notice of Intent (“NOI”) to the BLM; however, the BLM may ask for supporting surveys, monitoring, or an Environmental Assessment (“EA”) prior to approval of the NOI. The BLM would likely require an EA for this exploration work, which would include consultation with historic resources agencies, Native American interests, and public meeting notices of the proposed action. It is anticipated that a significant level of exploration or development of the unpatented mining claims on public land may require an additional EA. The EA for project development would require nine months to one year to complete. Much of the timeline associated with the EA is related to the mandatory public notice periods and agency comment periods.

Liberty Silver has retained the services of JBR to assist with the environmental permitting of the proposed Trinity mine. Liberty Silver and JBR have met with BMRR staff to present the project and discuss the permitting approval process. The BMRR requires the following authorizations for the proposed Trinity mine:

- NOI for exploration on fee lands (assuming greater than five acres of new disturbance)
- Mine Plan for mine development
- Reclamation Plan for mine development
- Water Pollution Control Permit (“WPCP”) Application for mine development
- Spill Prevention, Control and Countermeasures Plan
- Stormwater Pollution Prevention Plan
- Air Quality Permits for mine development
 - Class II Air Quality Permit Application (Class I Permit may be required if emissions exceed 100 Tons annually for any regulated air pollutant)
 - Surface Area Disturbance Permit.

Liberty Silver has initiated the process of obtaining the aforementioned exploration and operating permits for work on the private lands. Issuance of the mining permits will depend on completion of the planning work and submittal of a Mine Plan. The BMRR estimates that once these documents are submitted the permits can be issued within several months. Neither the BMRR nor JBR has identified any issues that would prevent the eventual permitting of the proposed mine.

Exploration work on the fee land can commence immediately upon issue of notice to BMRR. Mine development on the fee land claims can commence upon BMRR approval of the Mine Plan and Reclamation Permit and the requisite bonding, operating permits, and approval of a WPCP. The State permitting process may take up to 180 days following submission of the permit applications.

Liberty Silver will submit applications for the Reclamation Permit and a WPCP from the BMRR. Communication with NDEP staff indicated no issues are currently apparent that would prevent obtaining



these permits due the reclamation work by prior operators, BMRR's familiarity with the property, and the lack of surface and groundwater contamination potential. The previous reclamation permit and bond held by Newmont was released in August of 2010, and all open permits and ongoing reclamations efforts have been terminated. BMRR has issued a final closure notice of the previous reclamation work.

Review of the project area and refinement of the proposed action would lead to a final identification of the pertinent regulatory requirements and permits that will be needed for construction and operations associated with the project.

4.4.3 Geochemistry

Geochemical data collection by Liberty Silver will be used to address BMRR permit requirements regarding the potential for Acid Mine Drainage. Previous mining at the site was conducted in oxidized material, and the pit was stopped when they reached sulfide-bearing rocks. The Acid Base Accounting data currently being developed, along with the waste-rock characterizations, will further define the ongoing environmental requirements and the content of the reclamation plan.

4.4.4 Surface and Groundwater

The Trinity Range has few surface waters, and none exist in the vicinity of the project site. The local drainages flow west to the playa during significant storm events, but are otherwise ephemeral channels. Previous mining did not encounter groundwater, and groundwater is not expected to be encountered during mining operations as envisioned by Liberty Silver, as the depth to the water table in the area is several hundred feet below the bottom of the existing pit.

4.4.4.1 Special Status Species

The Trinity Range is listed as known and potential habitat for the Greater Sage Grouse by the BLM. The project site is immediately south of the habitat boundary line, and therefore permitting of the public lands may require additional Sage Grouse studies and monitoring. No other species of concern have been identified in the area.

4.4.4.2 Access Route

Liberty Silver will need to maintain the BLM road-use easement for the portion of the access road that extends from the county road to the private land. This is an existing easement on an existing improved road. Obtaining this BLM road-use easement is a matter of a renewal of the existing one and a transfer into Liberty Silver's name.

4.4.4.3 Permitting Risk

Based on our current understanding of the site conditions and plans for future development of the property, JBR believes that the risk of significant permit delays or denial is very low on this project. Due to the previous history of development on the property, good environmental use and reclamation record, limited potential environmental exposure to surface and groundwater, and a proposed zero-discharge processing circuit, the environmental concerns are believed to be minimal.



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

5.1 Access

The Trinity project is located in the Willow Canyon area on the west side of the Trinity Range in the Trinity mining district. The project can be reached from Reno, Nevada, by traveling on Interstate 80 about 89 miles northeast to Lovelock, then northwest on Nevada state route 399 for 13 miles, then north on the Sulfur-Seven Troughs road about nine miles, and then east on the mine access road four miles to the property. The Sulfur-Seven Troughs road is a county-maintained gravel road. The Willow Canyon road is an improved dirt road.

5.2 Climate

The climate of Pershing County is typical of the high desert of northern Nevada. Annual precipitation is about six inches in the valleys and as much as 20 inches in the mountains, with most of it falling as rain or snow in the winter months and occasional summer thunderstorms (Johnson, 1977). Winter temperatures are generally in the 30s and 40s, but occasionally fall below zero. Summer temperatures are generally in the 70s, but reach 90°F to 100°F in the valleys.

Exploration and mining activities can be conducted year round.

5.3 Local Resources and Infrastructure

Agriculture and mining are the principal economic activities in this area. Lovelock, the county seat of Pershing County, has an estimated population of 2,411 as of 2009 (Nevada State Demographer website) and is a source of experienced labor, materials, and lodging. Reno, Nevada, is a major metropolitan area located about 89 miles to the southwest of Lovelock.

The Burlington Northern Santa Fe Railroad passes through Lovelock, as does Interstate Highway 80.

The nearest source of power is at Lovelock, Nevada. Power for mining at the project will need to be generated on site.

Water used in prior mining operations came from wells that have since been reclaimed; new wells would have to be drilled to supply water for future mining. Water for exploration is brought in from Lovelock.

5.4 Physiography

The Trinity property lies on the northwest flank of the Trinity Range, one of the generally north-trending mountain ranges of the Basin and Range physiographic province.

The ranges in the area reach elevations of over 7,000ft, and the valleys are generally between 3,900 and 4,700ft in elevation. The principal areas of known mineralization on the Trinity property lie between 5,300 and 5,500ft above sea level (Ashleman, 1984).



Vegetation in the area is very sparse and consists of sage and “salt” and “antelope” brush, with small junipers in some of the canyons and at higher elevations (Ashleman, 1984).

Figure 5.1 shows the physiography in the vicinity of the Trinity mine area.

Figure 5.1 Physiography of the Trinity Mine Area



View looking west from the Trinity Range, overlooking the old Trinity open pit.



6.0 HISTORY

6.1 Exploration and Mining History

The following information has been taken from Ashleman (1987, 1988), Leonard *et al.* (1986), Muntean (1992), Whateley *et al.* (2006), Liberty Silver's website, and information provided by Liberty Silver with other references as cited.

Mineralization was first discovered in the Trinity Range in 1859. There was limited, intermittent production of silver, lead, zinc, and gold from the Trinity district from 1864 through 1942. Most of the known production from the district came from gold-silver mines in the Trinity Canyon area on the east side of the range. The Trinity project, located on the west side of the range in the Trinity district, was prospected historically with unrecorded but minor silver production. Johnson (1977) noted the presence of small mines on veins in the vicinity of the Trinity project, but indicated their history was not known. Ashleman (1984) reported that lead-silver-gold veins occur along northeast-trending shear and breccia zones in Triassic sedimentary rocks and were mined locally; most of them occur in Sections 2 and 3, T29N, R30E and in the Willow Canyon area, with several small prospect pits between the two areas. Tingley (1985) reported that older silver-lead workings north of Willow Creek in Section 3, T29N, R30E are located along brecciated and highly oxidized quartz veins in northeast-trending shears in Triassic-Jurassic metasedimentary rocks. Two samples from old workings in Section 3, taken as part of Tingley's work, returned 0.20 and 0.45 ppm gold, >2,000 ppm arsenic, >1,000 ppm antimony, >2,000 ppm zinc, 500 and 1,000 ppm silver, and 100 and 300 ppm tin, with anomalous bismuth and cadmium. Ashleman (1984) reported that there are several small prospect pits and other old workings, as well as evidence of minor activity in the 1950s, in the Willow Canyon area and that Phelps Dodge Corp. ("PD") completed trenching, IP surveys, and limited drilling in the 1960s. Most of PD's work was in the Triassic rocks north of Willow Creek, but some trenching was done south of Willow Creek along the contact of Tertiary rhyolite and Triassic metasedimentary rocks.

6.1.1 U. S. Borax and Chemical Corporation

As described by Ashleman (1984), Knox, Kaufman, Inc. of Spokane, Washington, conducted precious-metals exploration for U. S. Borax and Chemical Corp. ("Borax") in northern Nevada in early 1982 and sent a geologist to return to the Trinity area to duplicate an anomalous gold sample he had taken several years earlier in the Willow Creek area. Although the original sample was not duplicated, anomalous silver values were obtained. Additional work showed an extensive anomalous lead zone with many anomalous silver values in rhyolites to the south. Knox, Kaufman, Inc. recommended the Willow Canyon area to Borax as a potential bulk-tonnage precious-metal occurrence (Ashleman, 1988).

Land agreements were entered into with the owners of five existing lode mining claims and with Southern Pacific Land Company, later Santa Fe Pacific Mining, Inc. ("SFPM"), who owned private land in the area. The "SEKA" unpatented mining claims were staked by Pacific Coast Mines, Inc., a wholly owned subsidiary of Borax, to cover adjacent open ground. Pacific Coast Mines, Inc. and SFPM entered into a joint-venture operating agreement on January 30, 1984 for the Trinity project. Borax was named operator and managed exploration and development work on the Trinity project.



From 1982 to 1986, Borax and its joint-venture partner for part of the project lands, SFPM, explored the property (primarily Sections 9 and 15). During exploration, Borax conducted an IP and resistivity survey in 1983, airborne magnetic surveys in 1984 and 1987, and a VLF survey in 1985. Mining Geophysical Surveys, Inc. of Tucson, Arizona performed the 1983 IP-resistivity survey (Wieduwilt, 1983). The survey consisted of 15 east-west lines with a 1,000ft line interval that formed the gradient-array grid. The lines were about 8,500ft long with readings taken every 500ft. Two test lines using a 200ft dipole-dipole configuration were also run to further analyze anomalous IP trends. The VLF survey, conducted by SFPM at Borax's request, included north-south and east-west lines (Hendrickson, 1985). Of the geophysical surveys conducted over the sulfide mineralization, the magnetic survey was of little value because of poor contrast in magnetic values. Gamma-ray spectrometry using K, Th, and U was tested but was also found to be of little value. The gradient-array IP resistivity survey did reveal a chargeability anomaly that coincided with the area of sulfide mineralization, and it also revealed a north-northwest-trending belt of high resistivity located adjacent to the eastern margin of an area of known subsurface mineralization (Ashleman, 1984).

Borax also carried out surface and trench rock-chip sampling; geologic mapping; a soil geochemical survey; percussion, RC, and core drilling; and metallurgical test work on sulfide and oxide mineralization.

Geologic mapping was initially at a scale of 1:500, followed by detailed mapping of the mineralized zone at a scale of 1:100. A soil geochemical survey was completed over the oxide and sulfide mineralized areas with samples analyzed for lead, zinc, and silver. Because it was more stable in the soil horizons, lead was used as a pathfinder element for the silver mineralization (Ashleman, 1984). Significant lead anomalies were identified over the sulfide zone. Anomalies with >100 ppm lead defined potentially mineralized areas, and higher lead levels of >1,000 ppm coincided with silver mineralization at the surface. Anomalous lead values persisted even over buried silver mineralization.

Surface rock geochemistry was used as part of reconnaissance exploration, with results helping to define the extent of surface mineralization (Ashleman, 1984). Rock chips from drilling, trenching, and surface sampling were analyzed for lead, zinc, silver, and gold. Anomalies from the rock and soil geochemical surveys were used to plan the early drilling programs.

According to Leonard *et al.* (1986), 236 holes totaling 90,342 feet were drilled on the property from 1982 through the 1985 field season, which delineated the mineralization on approximately 100-foot centers. Additional drilling was undertaken during mining, and as of May 1989, a total of 281 holes totaling 104,266 feet had been drilled since 1982 (Baele and Pelletier, 1989). According to Baele and Pelletier (1989), drilling was generally performed on a 100ft grid aligned N11°W of true north.

Borax and their joint-venture partner SFPM developed the Trinity open-pit mine, which Borax mined on behalf of the joint venture from September 3, 1987 to August 29, 1988 through a contract miner, with leaching continuing into 1989. The mine was subsequently reclaimed (Section 4.4.1). From 1987 to 1989, the mine produced about five million ounces of silver from about 1.1 million tons of oxidized ore grading about six ounces of silver per ton (Baele and Pelletier, 1989). Borax drilled and conducted extensive metallurgical testing of the sulfide mineralization. However, metal prices were too low to support mining of the sulfide mineralization. Leonard *et al.* (1986) presented an economic analysis and mining plan for the deposit as estimated in 1986, prior to the mining by Borax. Borax prepared a



subsequent development plan for the sulfide and undeveloped oxide mineralization following completion of oxide mining in 1988 (Anon., 1988).

6.1.2 Santa Fe Pacific Mining, Inc.

In 1984 and 1985, SFPM drilled 26 holes (TR-series) mostly targeting extensions of the Trinity silver mineralization in Section 9 onto their own private ground in Sections 3 and 17. Their best intercept was 20 feet of 1.25 oz Ag/ton in a narrow shear zone in Mesozoic argillite (hole TR-6 in Section 3; Muntean, 1992). SFPM also tested a separate, unrelated area of mineralization in Section 27 of T30N, R30E. In 1987-1989, SFPM staked claims and drilled 22 holes (TR 87-series, TR 88-series, and TS-series), which did not identify significant mineralization (Muntean, 1992). Drilling in the alluvial-filled valley to the west found thicknesses of alluvium of up to at least 700 feet in places.

In 1990, SFPM undertook a CSAMT geophysical survey, an incline dipole-dipole survey, and an IP-resistivity survey. The CSAMT survey, conducted by Phoenix Geoscience, Inc., consisted of 27 line miles in five N45°W profiles and one tie line run at N45°E with a station spacing of 660ft (Ostrander, 1990). It confirmed the thicknesses of alluvium encountered in drilling in the valley and indicated the location of the northeast-trending range-front fault. SFPM subsequently dropped many of the claims located west of the inferred fault. The IP-resistivity survey along and south of Willow Creek, conducted by Practical Geophysics for Kennecott Exploration Company (“Kennecott”) (who by then controlled Borax’s interest as described below), was plotted and interpreted by Great Basin Geophysical, Inc. (Lide, 1991). Three northwest-trending lines spaced 1,000 feet apart were surveyed with a dipole-dipole array with a dipole length of 300 feet; the middle line was extended to the southeast using a 200-foot dipole length. The lines identified a generally north-striking range-front structure. Moderate IP response associated with the higher-resistivity rock in the southeast portion of the lines suggested potential for sulfide mineralization in this area.

SFPM acquired sole interest in the joint-venture lands (Sections 9 and 15) and Borax claims (Sections 4, 8, 10, and 16), which by then were owned by Kennecott, that surrounded the joint-venture area through an agreement dated January 31, 1991. SFPM proceeded to compile all Borax and Kennecott data and conduct further exploration on the property through 1992. Kennecott had acquired Borax’s unpatented mining claims by quitclaim deed dated May 1, 1990 and Borax’s leased mining claims by an assignment effective May 1, 1990 (Roesch, 1990) when Rio Tinto Zinc Corp., which had previously acquired Borax in 1968, bought Kennecott in 1989. Kennecott then reconveyed the claims to Borax prior to termination of the SFPM-Borax joint venture in January 1991 (Trubey, 1991b). SFPM subsequently dropped the leased claims in Section 10. The 1990-1992 exploration work concentrated on down-dip and lateral extensions of mineralization underlying the oxide pit and the sulfide mineralization, as well as extensions of mineralization outside the immediate mine area. Seven RC angle holes (DTS-1 through DTS-7) were drilled around the immediate mine area based on analysis of silver grade-thickness plots (Muntean, 1992). Based on that drilling, SFPM concluded that the mineralization does not plunge, but instead maintains its intensity to the southwest. Drilling beneath the ridge of silicified tuffs that were thought to be the center of mineralization did not encounter any significant silver and no gold mineralization. SFPM’s drilling identified additional low-grade silver, lead, and zinc mineralization at depth, but the results also indicated that the mineralization continues to narrow.



In exploring beyond the mine area, SFPM analyzed over 2,000 rock-chip, trench, and soil geochemical samples; carried out geologic mapping and air photo interpretation; examined existing drill data; and reviewed aeromagnetic, CSAMT, IP/resistivity gradient array, and dipole/dipole geophysical surveying (Muntean, 1992). In 1992, SFPM drilled four holes (DTS-8 through DTS-11) outside the mine area on SFPM private land, but failed to encounter significant mineralization.

6.1.3 Renaissance Gold Inc.

There was no significant exploration at the Trinity property from 1993 to 2005. In August 2005, Renaissance leased the property from Newmont, who had acquired SFPM's Nevada holdings. Renaissance explored the property with Piedmont Mining Company under the terms of an earn-in agreement signed in September 2005. Renaissance drilled 10 angled core holes (TSD-series) in 2006 and 15 RC holes (TS07-11 through TS07-25) in 2007 and encountered high-grade silver values in the sulfide zone below and adjacent to the open pit (AuEx website as of August 13, 2010 <http://www.auexventures.com/s/TrinitySilver.asp>). Renaissance's earn-in agreement with Piedmont was terminated on July 17, 2009 (AuEx website, news release dated September 1, 2009).

Renaissance and Yellowcake Mining, Inc. entered into a Letter of Intent in August 2009 that expired December 31, 2009. No exploration work was conducted during this period.

Liberty Silver entered into an earn-in agreement with Renaissance in March, 2010, as described in Section 4.3.1. Liberty Silver's work on the property is summarized in Section 9.0.

6.2 Historic Mineral Resource and Reserve Estimates

All estimates described in this section were prepared prior to establishment of NI 43-101 reporting requirements. There are insufficient details available on the procedures used in these estimates to permit MDA to determine if the estimates meet NI 43-101 standards. The classification terminology is presented as described in the original references, but it is not known if it conforms to the meanings ascribed to the measured, indicated, and inferred mineral resource classifications or proven and probable reserve classifications by the Canadian Institute of Mining, Metallurgy and Petroleum (the CIM Standards). Accordingly, these estimates should not be relied upon, and are presented herein merely as an item of historical interest with respect to the exploration targets at Trinity, and should not be construed as being representative of actual mineral resources or mineral reserves (under NI 43-101) present at the Trinity project. Current NI 43-101 mineral resources are discussed in Section 14.0 of this report.

Ashleman (1984) reported preliminary "geologic ore reserves", based on exploration in 1982 and 1983, of 2.72 million tons grading 3.04 oz Ag/ton with a 5.63:1 stripping ratio at a 1.5 oz Ag/ton cutoff and 4.01 million tons grading 2.49 oz Ag/ton with a 3.48:1 stripping ratio using a 1.0 oz Ag/ton cutoff within a pit defined using the 1.5 oz Ag/ton cutoff. This estimate was based on holes S-1 to S-72 and used a tonnage factor of 13 ft³/t. No mining dilution or metallurgical recovery factors were applied.

In 1986, Borax completed three "total geologic reserve" calculations for the Trinity deposit, including both Borax and joint-venture ground (Ashleman, 1987; Table 6.1). A polygonal "ore reserve" calculation was done in January 1986 using a 1.0 oz Ag/ton cutoff within the main zone and a 1.5 oz



Ag/ton cutoff within the Southwest Extension (the small high-grade oxide body). Deep and/or peripheral intercepts were not used when it was felt they would have a high strip ratio. Two separate cross-sectional “reserve” calculations were completed using a 1.0 oz Ag/ton cutoff. Thin, deep, or isolated low-grade intercepts were discarded. Grade zones, based on knowledge of the geology and the nature of the mineralization, were subdivided by drawing boundaries midway between each hole and were not extended more than 50 feet from a drill hole without additional evidence of the mineralization extending further. The reported oxide values in Table 6.1 include the material that was subsequently mined from the Trinity open pit. MDA has not sufficiently evaluated these historic estimates for classification as current mineral resources or mineral reserves, and the issuer is not treating the historic estimates as current mineral resources or mineral reserves as defined under NI 43-101. These historic estimates should not be relied upon.

Table 6.1 1986 Trinity “Geologic Reserve Calculation” Prior to Mining
(From Ashleman, 1987; Leonard *et al.*, 1986; Reim, 1989b)

Method And Source	Tonnage Factor (ft ³ /t)	Min. Intercept Length (feet)	Cutoff (oz Ag/ton)	Material Type	Tons (millions)	Average Grade (oz Ag/ton)	Total Ag (million ounces)
Polygon* (Ashleman, 1987)	13.0	20	1.5*	Total Oxide Sulfide	5.441 1.459 3.952	4.00 5.41 3.48	21.6 7.9 13.7
N-S Cross-sections (Ashleman, 1987; Leonard <i>et al.</i> , 1986; Reim, 1989b) “demonstrated geologic reserves”	13.0	10	1.0	Total	9.90	2.98	29.5
				Oxide	3.08	3.63	11.2
				Sulfide	6.81	2.68	18.3
			approx. 1.5	Total	7.99	3.40	27.1
				Oxide	2.18	4.63	10.09
				Sulfide	5.81	2.93	17.02
			2.0	Total	5.83	4.01	16.926
				Oxide	1.48	6.00	
				Sulfide	4.35	3.36	
E-W Cross-sections Ashleman, 1987	13.0	10	1.0	Total Oxide Sulfide	9.275 2.803 6.472	3.06 3.91 2.70	28.4 11.0 17.5

*The polygon calculation is not comparable to the two cross-section calculations because it covered a restricted area. Cutoff is not strictly 1.5 oz Ag/ton cutoff, as material between grading between 1.0 and 1.5 oz Ag/ton was selectively included.

Borax (Ashleman, 1987) and Santa Fe (Whateley *et al.*, 2006) made undiluted “reserve” estimations of the high-grade oxide mineralization at the Southwest Extension using a tonnage factor of 13.3ft³/t (Table 6.2). MDA has not sufficiently evaluated these historic estimates for classification as current mineral resources or mineral reserves, and the issuer is not treating the historic estimates as current mineral resources or mineral reserves as defined under NI 43-101. These historic estimates should not be relied upon.



Table 6.2 1986 Southwest Extension Oxide “Reserve”
(From Ashleman, 1987, and Whateley *et al.*, 2006)

Method and Company	Composite Length (feet)	Cutoff (oz Ag/ton)	Tons (millions)	Average Grade (oz Ag/ton)	Total Ag (million oz)
Polygons Borax	20	1.5	0.967	6.95	6.22
N-S cross sections Borax	10	1.5	1.304	6.16	8.03
E-W cross sections Borax	10	1.5	1.293	5.90	7.63
N-S cross sections Borax	10	1.5	0.932	7.69	7.17
Polygons Santa Fe	20	3.0	0.669	9.10	6.09
N-S cross sections Santa Fe & Borax	10	2.0	0.870	8.00	6.96

After mining less than two months and completing the first three 15-foot benches, Borax found that the tons of ore and contained ounces of silver were significantly different than those estimated in the initial mine plan (Reim *et al.*, 1988). Additional drilling was then completed and a new hand-calculated ore “reserve” for the oxide ore body was undertaken in January 1988 using a lower cutoff grade that resulted in about 14% less material to be mined, but at a higher grade than in the July 1987 estimate (Table 6.3). Both estimates used a specific gravity of 13.7 ft³/t and a silver recovery of 79%, although Reim *et al.* (1988) noted that in the range of 1 to 2 oz Ag/ton, recovery was estimated to be 65% of the total contained silver.

Table 6.3 July 1987 Initial and January 1988 Revised “Reserve” Estimate for the Oxide Ore Body
(From Reim *et al.*, 1988)

	Cutoff (oz Ag/ton)	Tons	Grade (oz Ag/ton)	Silver (oz)
Initial July 1987 estimate	2.0	1,175,633	5.12	6,022,810
Revised January 1988 estimate	1.6	850,624	7.33	6,290,677

In August, 1988, following mining of the oxide deposit, Borax estimated the undeveloped oxide and sulfide silver “reserves” adjacent to and east of the Trinity open pit (Reim, 1988; Anon., 1988; Table 6.4). MDA has not sufficiently evaluated these historic estimates for classification as current mineral resources or mineral reserves, and the issuer is not treating the historic estimates as current mineral resources or mineral reserves as defined under NI 43-101. These historic estimates should not be relied upon.

Table 6.4 1988 Trinity Total Undeveloped “Reserves”
(Modified from Reim, 1988; Anon., 1988)

Material Type	Cutoff (oz Ag/ton)	Mineable Tons (millions)	Grade (oz Ag/ton)	Recovery (%)	Recoverable Ag (million ounces)
Oxide	1.5	0.213	2.66	66	0.374
Sulfide		4.400	2.7	78.4	9.314
Total					9.688



Baele and Pelletier (1989) updated the mineral inventory for the larger but lower-grade sulfide mineralized zone northeast of the open pit and the remaining oxide reserves in May 1989 using all available drill-hole data (Table 6.5). Their estimates used a cutoff grade of 1.0 oz Ag/ton and a bulk-density factor of 13.3ft³/t.

The “geologic reserves” include: (1) the main sulfide zone and associated near-surface oxide mineralization, which Baele and Pelletier categorized as “measured reserves;” (2) remaining oxide and sulfide “reserves” under the existing open pit; and (3) low-grade oxide and sulfide material encountered in the pit that was stockpiled separately during mining. Baele and Pelletier felt that their estimates were somewhat conservative due to dilution introduced by compositing, the relatively large block size (50 x 50 x 15ft high), and the smoothing effect of the interpolation process. Baele and Pelletier (1989) further estimated that the total minable reserves of the sulfide body within an ultimate pit shell constructed using a 1.37 oz Ag/ton break-even cutoff grade, an overall 50° pit slope, mining of all material above the cutoff grade without regards to stripping ratio, and a \$10/oz silver price was 4.367 million tons grading 2.41 oz Ag/ton (10,518,286 ounces) with a stripping ratio of 4.3:1.

Table 6.5 1989 Borax Summary of Remaining “Mineral Reserves” at Trinity
(From Baele and Pelletier, 1989)

	Cutoff Grade (oz Ag/ton)	Tons (thousands)	Grade (oz Ag/ton)	Ounces Ag (thousands)
OXIDE				
Project area	1.0	867	1.84	1,595
Under open pit	1.0	146	2.02	295
Stockpile	NA	398	1.17	466
Subtotal Oxide		1,411	1.67	2,356
SULFIDE				
Project area	1.0	4,803	2.15	10,326
Under open pit	1.0	522	2.92	1,524
Stockpile	NA	31	11.59	359
Subtotal Sulfide		5,356	2.28	12,209
Total		6,767	2.15	14,565

The stockpiled material summarized in Table 6.5 had been estimated by Borax in March, 1989 (Reim, 1989a; Table 6.6). Reim noted that these estimates are based on fire assays.

Table 6.6 1989 Mineral “Reserve” Stockpile at the Trinity Mine
(From Reim, 1989a)

	Tons	Grade oz Ag/ton	Contained Ag oz
Oxide	397,744	0.94 to 1.40	417,022
Sulfide	30,890	9.48 to 13.70	365,747
Total	428,634		782,769

MDA has not sufficiently evaluated these historic estimates for classification as current mineral resources or mineral reserves, and the issuer is not treating the historic estimates as current mineral resources or mineral reserves as defined under NI 43-101. These historic estimates should not be relied upon.



Finally, SFPM reported that the Trinity deposit contained a sulfide “reserve” of four million tons averaging 2.5 oz Ag/ton at a cutoff of 1.4 oz Ag/ton. These reserves lay directly to the northeast of the existing open pit (Santa Fe Pacific Mining, Inc., undated; Muntean, 1992).

6.3 Historic Mine Production

The Trinity deposit was placed into production in September 1987 as an open-pit, cyanide heap-leach operation. Mining was done under contract by Lost Dutchman Construction Company of Sparks, Nevada, at an average production rate of 18,000 tons per day and at a cutoff grade of 1.3 oz cyanide-extractable silver per ton (Ashleman, 1988). Ore was crushed to -3/4 inch, agglomerated, and placed onto cyanide-leach pads. Silver was recovered by the Merrill Crowe process.

Borax reported that they mined a total of 1,085,790 tons of silver oxide ore at an average grade of 6.32 oz Ag/ton from the Trinity mine (Baele and Pelletier, 1989). A total of 0.14 ounces of gold were reportedly recovered with every 1,000 ounces of silver. An undated, anonymous summary that is believed to have been produced by Renaissance staff reported that the estimated silver recovery was 75% and the cutoff grade during mining was 1.3 oz Ag/ton. The pre-mining estimate for the oxide Southwest Extension pit consisted of 1.33 million tons of “mineable ore” averaging 6.05 oz Ag/ton (diluted) for a total of 8.05 million ounces of silver, of which 6.04 million ounces were thought to be recoverable based on 75% recovery from initial column-leach tests (Leonard *et al.*, 1986).

Figure 6.1 is a recent photograph taken from within the Trinity pit.

Figure 6.1 View of the Historic Liberty Silver Open Pit



Northeast end of the historic open pit. The major controlling fault for the mineralization lies at the back of the pit on the right side.



7.0 GEOLOGIC SETTING AND MINERALIZATION

7.1 Geologic Setting

7.1.1 Regional Geology

The following information was largely taken from Johnson (1977).

Pershing County lies in the northern portion of the Basin and Range Province, a region characterized by generally north-trending mountain ranges and intervening alluvial-filled basins formed by Tertiary extension. The Trinity Range is one of these generally north-trending ranges.

During parts of the Paleozoic to Middle Jurassic time, northern Nevada was the site of dominantly marine deposition, with the continental shelf and associated carbonate rocks lying in the eastern part of the state and deeper water deposition of siliceous rocks with associated volcanism to the west. Representative units in Pershing County are generally heterogeneous sequences of mafic volcanic rocks, chert, clastic sedimentary rocks, and minor limestone, which are primarily exposed in the eastern third of the county, east of the Trinity Range. From Middle Triassic to Early Jurassic time, there was regional uplift, producing near-shore deltaic deposits of mudstone, shale, and sandstone that were deposited over much of what is now Pershing County; the Auld Lang Syne Group, exposed in the Trinity Range and found in the Trinity project area, is part of these deposits.

Pre-Cenozoic deformation in northern Nevada was characterized by three major compressional events, of which the youngest is best represented in western Pershing County, including the Trinity Range. The oldest was the Late Devonian and Early Mississippian Antler Orogeny, during which deep-water sedimentary and volcanic rocks were thrust eastward tens of miles over shallow-water sedimentary rocks of the continental shelf. Evidence of this deformation, particularly the Roberts Mountains thrust, is best displayed in northeastern Nevada, east of Pershing County. Compression during the Early Triassic Sonoma Orogeny again involved transport of deep-water sequences eastward over shallow-water units, now exemplified by the Golconda thrust that is exposed in the Sonoma Range of Pershing County and in ranges to the east. The Nevadan Orogeny took place during Jurassic and Cretaceous time and resulted in low-grade regional metamorphism, variably directed folding, and thrust faulting that affected all pre-Tertiary rocks in Pershing County, including the Trinity project area.

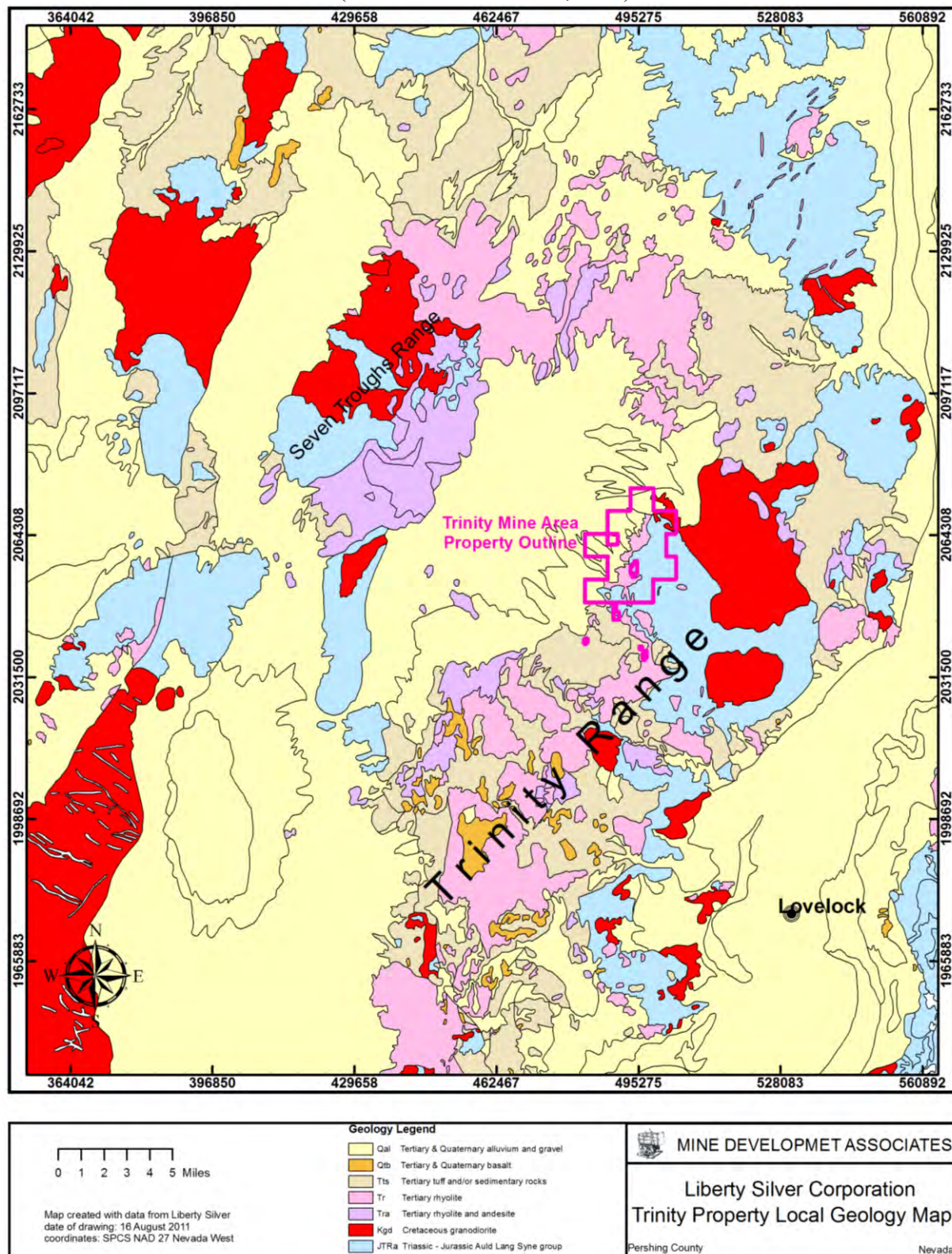
Plutonic rocks of Early Triassic, Middle Jurassic, Cretaceous, and Late Cretaceous ages are found in Pershing County, of which a Cretaceous granodiorite stock present just northeast of the Trinity project is the best example in the project area. The Cretaceous intrusive episode represented the culmination of the Nevadan Orogeny.

Tertiary volcanic and sedimentary rocks and Quaternary sediments are widespread in Pershing County and are abundant in the Trinity project area. Cenozoic extension created the Basin and Range physiography that dominates present-day Pershing County.

Figure 7.1 shows the regional geology of much of Pershing County.



Figure 7.1 Regional Geology of the Trinity Range Area, Pershing County
(Modified from Johnson, 1977)





7.1.2 Local Geology

The following information has been taken from Leonard *et al.* (1986), Ashleman (1988), Santa Fe Pacific Mining, Inc. (undated), and Whateley *et al.* (2006).

In this part of the Trinity Range, a thin Tertiary rhyolite sequence is underlain by Triassic to early Jurassic phyllite and argillite of the Auld Lang Syne Group that form the basement of the Trinity Range. The Auld Lang Syne Group is composed of fine-grained clastic shelf and basin deposits with interbedded turbidites. Both regional metamorphism and contact metamorphism, related to intrusion of Cretaceous granodiorite dikes and stocks northeast of the mine, affected the Auld Lang Syne Group. A fine-grained, matrix-supported argillite breccia that is closely associated with faulting marks the contact between the Auld Lang Syne Group and the Tertiary rhyolitic volcanic rocks.

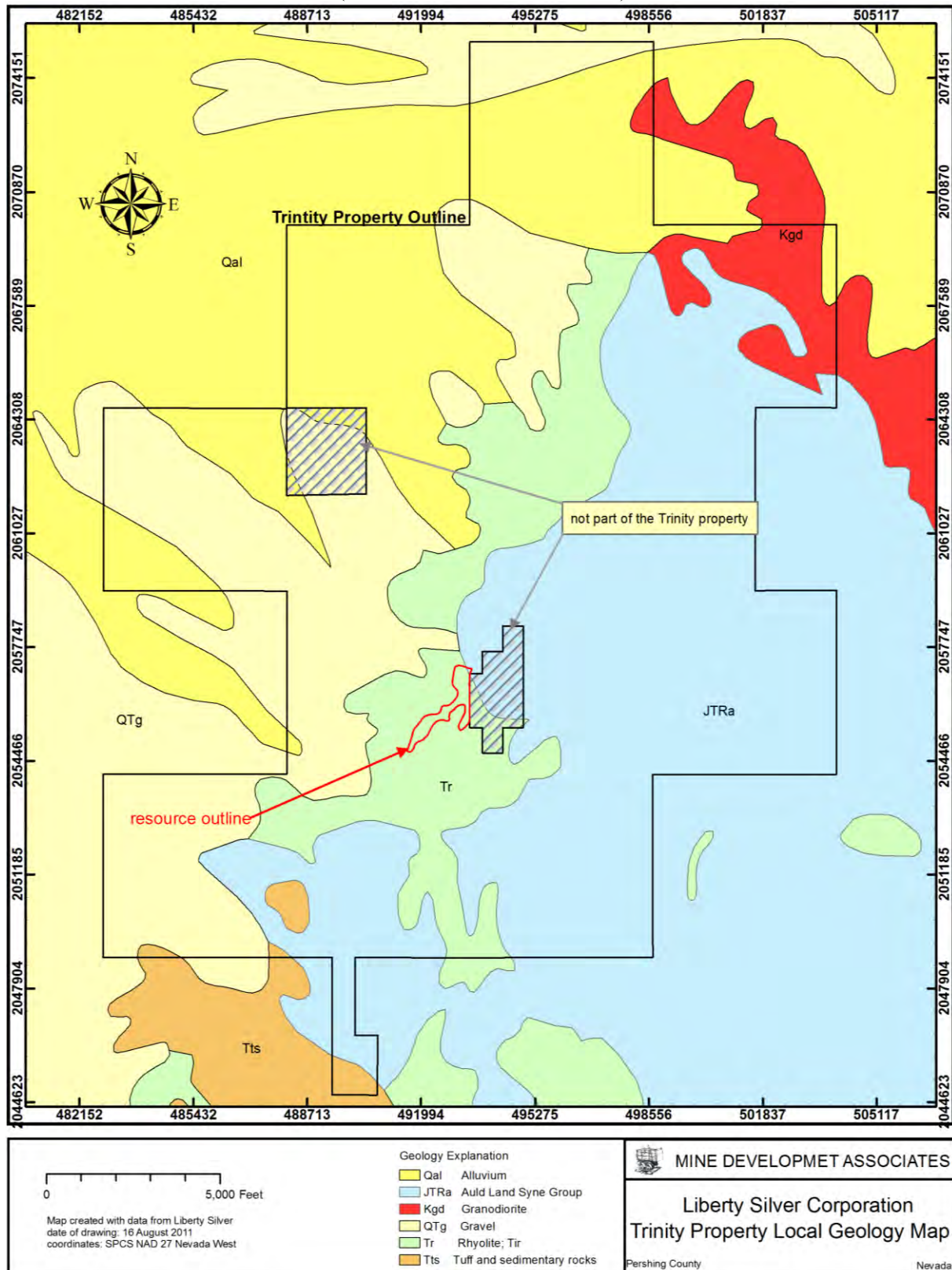
There is evidence of several episodes of structural deformation in the area. During the Nevadan Orogeny in Jurassic to early Cretaceous time, the Auld Lang Syne Group was strongly folded and faulted; low-grade regional metamorphism accompanied this deformation. Early Tertiary north- to northwest-trending faults are present within the Trinity mine area. The most prominent structural features in the area are north- to northeast-trending normal faults of Tertiary age, which offset all units except the gravel and alluvial deposits.

Tertiary hydrothermal alteration altered the Auld Lang Syne Group only locally along faults and breccia zones. In contrast, Tertiary rhyolitic tuffs and flows were extensively altered with a halo extending 1.6 miles beyond the main mineralized area.

The Trinity property lies along the eastern edge of a Tertiary basin filled with rhyolitic tuffs, flows, and intrusive rocks. The basement rocks to the east consist of Mesozoic argillite and quartzite and a Cretaceous granodioritic stock. Figure 7.2 shows the geology of the Trinity area.



Figure 7.2 Generalized Geology of the Trinity Area
(Modified from Johnson, 1977)





7.1.3 Project Geology

The following information has been taken from Leonard *et al.* (1986), Ashleman (1984, 1988), Santa Fe Pacific Mining, Inc. (undated), and Whateley *et al.* (2006) with other references as cited.

In this portion of the Trinity Range, Mesozoic argillite and quartzite that form the basement of the range on the east are overlain by Tertiary rhyolite to the west. Alluvium covers the western and northern portions of the project area. There are numerous northeast-, northwest-, and north-trending faults.

The oldest rocks exposed within the Trinity project area are Triassic marine sedimentary rocks of the Auld Lang Syne Group, which crop out in the eastern part of the property. Three units have been identified: locally calcareous quartzite and sandstone; dirty limestone with calcareous siltstone and sandstone; and argillite and siltstone with subordinate quartzite and sandstone. These rocks have been intruded by Cretaceous granodiorite to the northeast of the project area. The Auld Lang Syne Group has undergone low-grade regional metamorphism and local contact metamorphism.

A Tertiary tectonic breccia crops out in several locations within the project area; it is particularly abundant along the rhyolite-argillite contact in Section 10 just south of Willow Creek and also along the north side of Willow Creek. The breccia consists of angular fragments of argillite in a fine-grained matrix of argillite. The breccia is generally well cemented and forms resistant outcrops.

Tertiary rhyolite unconformably overlies and locally intrudes the Auld Lang Syne Group. The rhyolite includes interbedded rhyolitic flows, welded tuffs, air-fall tuffs, epiclastic tuffs, and lacustrine deposits. The lower part of the volcanoclastic section consists primarily of air-fall and reworked tuffs; pyroclastic rocks, including welded tuffs and pyroclastic flows along with local phreatic-clastic deposits dominate the upper part of the section. Several rhyolite domes, dikes, and sills have also been identified on the property, some of which may be related to mineralization (Leonard *et al.*, 1986). Rhyolite porphyry and aphanitic rhyolite intruded into the volcanoclastic rocks and formed exogenous domes and flows. Late-stage latitic to rhyolitic dikes, locally called “sugary rhyolite,” post-dated most of the rhyolitic rocks. The rhyolite porphyry, the aphanitic rhyolite, and the volcanoclastic rocks are the principal host rocks for the mineralization in the Trinity mine area (Ashleman, 1988).

Late Tertiary and/or Quaternary bench and channel gravel deposits and Quaternary alluvium and outwash unconformably overlie the rhyolites and cover the western part of the property.

Several episodes of structural deformation have affected the rocks of the Trinity area. A pre-Tertiary event strongly folded and faulted the rocks of the Auld Lang Syne Group and was accompanied by regional low-grade metamorphism. This event is thought to have been part of the Nevadan Orogeny. Tertiary deformation produced local north-trending open folds, high-angle faults, and local low-angle faults. Although northeast-trending, high-angle faults dominate the Trinity district, north-, northwest-, and west-northwest-trending, high-angle fault sets are well developed in the mine area and are important controls of mineralization (Ashleman, 1988). Still, the principal structural control on mineralization is the northeast trending, northwest dipping normal fault running down the center of the open pit.

All the rocks in the project area except the gravel and alluvial deposits locally exhibit various degrees of hydrothermal alteration and mineralization. The relatively permeable rhyolites and rhyolitic tuffs were



most receptive to silver mineralization and associated silicification and quartz-adularia-sericite alteration, but alteration and mineralization also occur to a limited extent in adjacent argillite and tectonic breccia.

Silver mineralization was discovered in outcrop in altered Tertiary rhyolite at the break in slope between Triassic basement rock of the Trinity Range and pediment gravels that extend to the west. Northeast-trending normal faults lie along the break in slope and controlled mineralization.

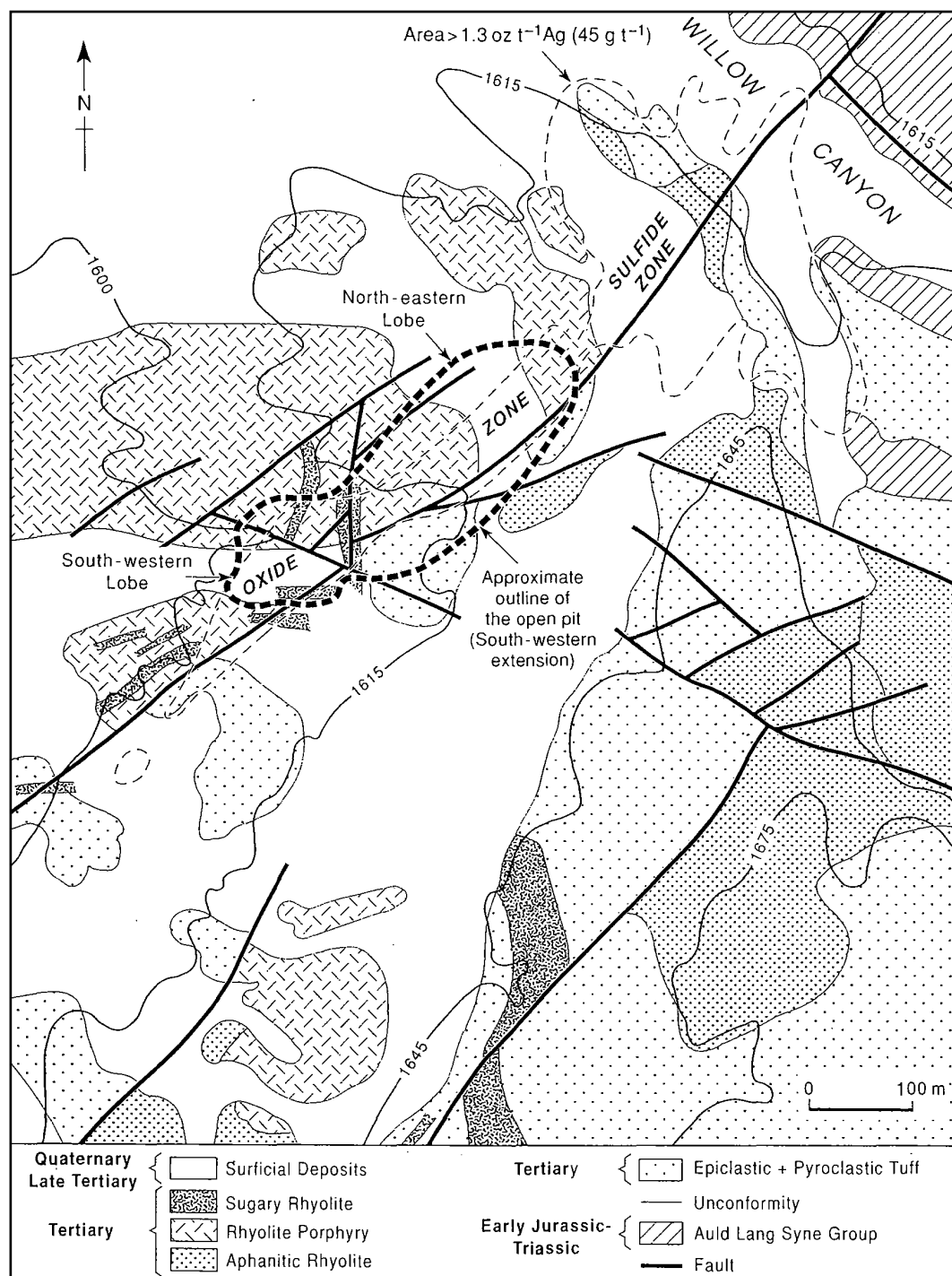
Most of the mineralization is hosted by rhyolite tuffs, flows, volcanoclastic rocks, and intrusive rocks. $^{40}\text{Ar}/^{39}\text{Ar}$ dating of sericite from highly altered rhyolite within the Trinity silver mine pit yielded an age of 26.829 Ma, but Appold and Muntean (1993) opined that a better upper limit for the age of mineralization is probably an age of 25.111 Ma from fresh sanidine phenocrysts within a relatively unaltered rhyolite porphyry that is a likely source of heat and/or metals for the deposit. They noted that this age inferred for Trinity is similar to the 24.7 to 26.4 Ma age inferred for the Majuba Hill porphyry system but is significantly older than the age of gold mineralization at Seven Troughs (14.1 Ma) across the valley to the west of Trinity.

A north-trending, gold-bearing, low-angle structure is present north of the Trinity mine (Santa Fe Pacific Mining, Inc., undated).

Figure 7.3 shows the geology in the vicinity of the old Trinity open-pit mine.



Figure 7.3 Geology of the Trinity Mine Area
(From Whateley *et al.*, 2006)





7.2 Mineralization

The discovery location for the silver and base metal mineralization at the Trinity project was an outcrop in altered Tertiary rhyolite at the break in slope between the Triassic phyllites and argillite that form the basement of the Trinity Range and pediment gravels that extend to the west. Mineralization lies within the hanging-wall block of a zone of normal faulting along this break in slope. The mineralization occurs primarily within rhyolite but is also hosted by Mesozoic argillites (Santa Fe Pacific Mining, Inc., undated). Although mineralization continues downward into the underlying Triassic rocks, it is more tightly constrained to fractures that host high-grade vein mineralization.

The original Trinity silver deposit can generally be divided into two parts: an oxide zone, a higher-grade portion of which was mined by Borax, and a low-grade sulfide zone that lies below and to the northeast of the oxide zone.

Alteration is widespread. Silicification, sericitization, and quartz-adularia-sericite alteration are the most common types. Propylitic (chlorite + calcite) alteration underlies and is peripheral to the other types. Kaolinite and illite are found along some late faults.

Silver, lead, and zinc mineralization occurs as oxidized and unoxidized sulfides within veinlets controlled by fractures and as disseminations within the host rocks, including breccia matrix. John and Muntean (2006) describe the form of the deposit as disseminated mineralization, including microfractures, stockwork zones, and breccia infill. High-grade zones in the oxide zone are spatially related to areas of strong jointing, sericitic alteration, and limonite (Ashleman, 1988, cited in Whateley *et al.*, 2006). Sulfide mineralization consists mainly of pyrite, galena, sphalerite, marcasite, minor arsenopyrite, various silver minerals, and traces of gold, pyrrhotite, stannite, and chalcopyrite (Figure 7.4). The silver minerals are tetrahedrite-freibergite, pyrargyrite, minor argentite, and rare native silver. Freibergite and pyrargyrite occur as free particles as well as intergrowths in pyrite/marcasite and in sphalerite, respectively (Woods and Smith, 1984). Limited ore petrography indicated that the silver-bearing minerals are generally paragenetically late relative to the base-metal sulfides.



Figure 7.4 Sulfide Mineralization at Trinity



Sulfide mineralization, in gray, in the bottom of the old Trinity open pit

Muntean (1992) reports that detailed analysis of bench-level geology and blasthole silver assays, including calculation of grade-thickness plots, demonstrates that mineralization within the oxide pit is strongly controlled by a N45°E structure running the length of the pit and dipping 45-70° to the northwest; the structure extends beyond the oxide pit to the northeast and southwest. The >2 oz Ag/ton contour is about 150ft wide and runs parallel to the structure, entirely within the hanging-wall rhyolite porphyry, while grades in the footwall lithic tuff are <1 oz Ag/ton. Numerous northwest-trending structures do not abruptly cut off mineralization and appear to have been formed prior to mineralization (Muntean, 1992). Within the pit, the silver mineralization was about 100-200ft thick, but lead and arsenic mineralization was more pervasive, with lead mineralization increasing to the east away from the pit. Much of the lead and arsenic mineralization appeared to be concentrated in tuffs directly above the Mesozoic argillite basement.

Using grade-thickness plots of the data from Borax's drilling for silver, lead, zinc, copper, and their ratios, SFPM determined that the highest lead and zinc values are widely spread to the southeast (Muntean, 1992). Along the N45°E structure running through the pit, the highest lead and zinc grade-thicknesses appear to have an antithetical relationship to the silver grade-thicknesses. Copper grade-thicknesses are highest along a conspicuous northeast-trending ridge of silicified tuffs located southeast of the open pit.

Ratios of the base metals and silver were used to search for zoning patterns (Muntean, 1992). The lead/silver and zinc/silver ratios show a strong zoning, increasing northwest to southeast. The lead/zinc ratio is relatively flat, except for a zinc-rich, northwest-trending structure (?) in the southeast part of the



mine area. The lead/copper and copper/silver ratios suggest that the main center of the hydrothermal system at Trinity may be below the ridge of silicified tuffs just southeast of the open pit. Muntean (1992) thought that these zoning patterns suggest the possibility that there may have been early base-metal mineralization centered largely on the ridge of silicified tuffs and later silver-rich, base-metal-poor mineralization associated with the N45°E structure running the length of the pit.

Renaissance investigated the potential to add value to the project by considering lead and zinc, with lesser contributions from copper and tin; gold was not included because it had not been assayed during the 2006 and 2007 drilling by Renaissance and had not been consistently assayed in earlier drilling by Borax (Coolbaugh, 2009a). Coolbaugh (2009a) noted that gold was recovered from the leach pads in the ratio of 0.14oz gold per 1,000oz silver. Renaissance concluded that, depending on cutoff grades and metal recoveries, byproducts could increase the dollar value of material produced from the sulfide zones at Trinity by as much as 50% or more, with the added value predominantly coming from low-grade lead and zinc. The highest tin grade reported from the 2006 and 2007 drilling was 0.0486%, with the highest contribution to the value of individual 5ft intervals of as much as 20%; however, Coolbaugh (2009a) noted that analyzing for tin is difficult, and he recommended check analyses of selected intervals.

Silver-lead-zinc-copper zonation in the Trinity district is permissive of additional silver and base-metal mineralization occurring east and south of the 2009 limit of drilling, and a plot of grade-thickness of equivalent silver grades suggests the deposit is open to the southeast, east, and potentially also to the northeast (Coolbaugh, 2009b).

In 1984, seven holes were drilled over outcropping Triassic rocks in Sections 27 and 3 that produced several intercepts of 0.015 to 0.005 oz Au/ton associated with a low-angle structure (Santa Fe Pacific Mining, Inc., undated). Although this mineralization also has an epithermal geochemical signature, it appears to be a different system than the silver-base metal signature of the Trinity mineralization, which suggests that there may be a separate Tertiary gold-bearing hydrothermal system in the area (Fe Pacific Mining, Inc., undated).



8.0 DEPOSIT TYPES

The Trinity deposit has been variously categorized as a Tertiary volcanic-hosted, epithermal silver-base metal deposit (Ashleman, 1984, 1988; Santa Fe Pacific Mining, Inc., undated; AuEx website, 2010) and as a mesothermal silver-base metal deposit probably related to an underlying magmatic source expressed at the surface as rhyolitic dikes and sills (Leonard *et al.*, 1986). In their website (AuEx) as of August 13, 2010, Renaissance suggested the possibility that porphyry-copper-style mineralization occurs at depth. They base this hypothesis on the strength of illitic alteration and on a crude district-wide zonation that is characterized by a central copper-rich zone, an intermediate base-metal-rich zone, and a peripheral silver-rich zone.

Silver-lead-antimony mineralization occurs about 12 miles east of the Trinity property in the Arabia mining district, which was discovered at about the same time as the Trinity district. The Arabia mineralization occurs in a series of parallel veins in Cretaceous granodiorite. The district was very active in the 1860s and 1870s, with sporadic mining until 1951. Production from the district is estimated to have been around 34,000 tons with a gross value of over \$1 million (Johnson, 1977).

The Rochester silver mine, one of the largest silver mines in the United States, lies in the Humboldt Range about 25 miles east of the Trinity property. The rich silver ores of the Rochester district were not discovered until 1912. Silver deposits occur in narrow fissure veins in Triassic rhyolite. The primary mineralization consisted of quartz, pyrite, sphalerite, galena, tetrahedrite, and chalcopyrite, but the silver mineralization that was mined formed by supergene enrichment of the sulfide mineralization. The district produced over 8.8 million ounces of silver from 1912 to 1966 (Johnson, 1977), followed by production of over 127 million ounces of silver and 1.5 million ounces of gold since 1986 by Coeur d'Alene Mines Corp. (www.coeur.com as of February 2011).

The Trinity deposit is similar chemically and structurally to large silver deposits of Bolivia. These deposits occur as strings of deposits along controlling structures. Muntean (1992) noted that although vein mineralization is lacking at Trinity, many of the features seen in the Bolivian silver-tin deposits are observed at Trinity, such as explosion breccias, basal tuffs, intrusive rhyolite domes, mantle breccias, and minor mineralization hosted by basement rocks. Tin values range up to more than 100 ppm at Trinity. Pyrrhotite and stannite, which are observed at Trinity, are indicative of highly reducing conditions, similar to those of the Bolivian deposits. Like Trinity, the Bolivian deposits are noted for their paucity of gold.

Muntean (1992) observed that Trinity also resembles some of the epithermal silver-base metal bonanza veins deposits in Mexico. The Mexican deposits are noted for the occurrence of high-grade mineralization as bands of limited width and thickness but great length, with the bands often being sinusoidal in shape. Muntean (1992) thought that the mineralization at Trinity also appears to have a gross sinusoidal form.



9.0 EXPLORATION

Liberty Silver began exploration of the Trinity project in May 2010 by contracting with Industrial Imaging Co. of Salt Lake City, Utah, to conduct a geophysical survey of the project area using its proprietary telluric-magnetotelluric (“TMT”) method. The survey is designed to identify additional concealed mineralized zones under the pediment cover and will result in a 3D subsurface image of the project area. Measurements were taken at 112 stations within the core area of the property, measuring frequencies from 2Hz to 220Hz. The data have been collected and are presently being interpreted. Computer modeling and 3D inversion of the data are continuing.

In addition to the geophysical work, Liberty Silver has conducted extensive data compilation for the project. The database of technical data for the property, developed since 1982, includes the results of soil and rock surveys, geophysical surveys, geologic mapping, lithology logging and multi-element analyses for about 400 drill holes, and metallurgical work, as well as previous production of heap-leach silver.

Liberty Silver has not conducted any further exploration since publication of the earlier technical report (Hartley *et al.*, 2011).

Exploration of the Trinity project by Renaissance is described in Section 6.1.3.



10.0 DRILLING

The mineral resources discussed in this report were estimated using the data provided by rotary percussion, reverse-circulation, and core drilling completed by Borax (including the joint venture with SFPM for which Borax was the operator), SFPM, and Renaissance. Liberty Silver has not yet completed any drilling on the property.

Table 10.1 lists the holes within the mineralized area that were used to estimate the mineral resources reported in Section 14.0.

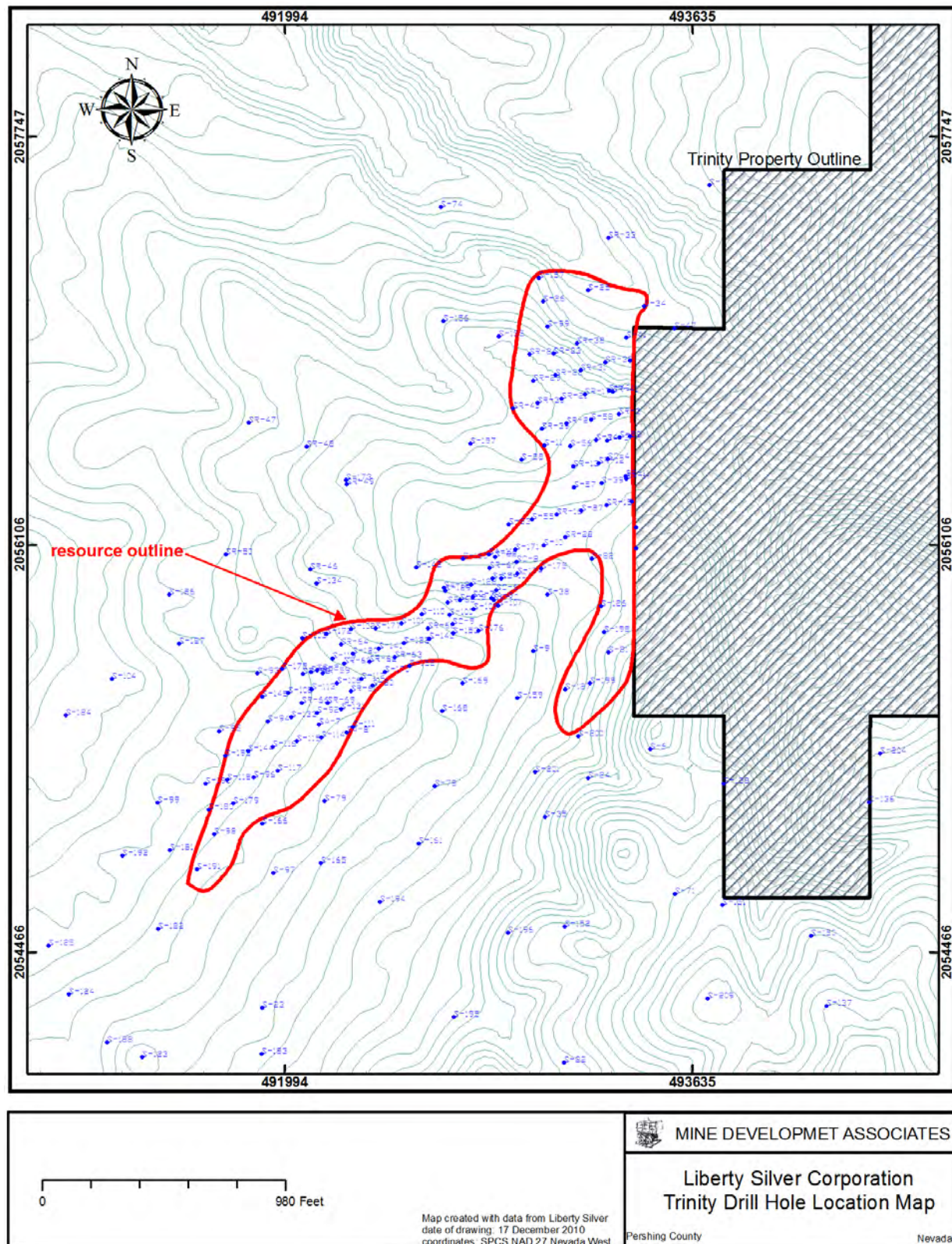
Table 10.1 Trinity Mineral Resource Database Summary

Hole Series	Number of holes	Total Footage	Period	Type	Operator
S-1 to S-209	199	74790	1982 - 1983	Vertical rotary percussion	Borax
SA-1 to SA-12	11	4715	1982 - 1983	Angled RC	Borax
SR-1 to SR-69	63	23225	1982 - 1983	Vertical RC	Borax
DTS-001 to DTS-011	8	8722	1992-1993	Angled RC	SFPM
TSD-001 to TSD-010	10	3712	2006	Core	Renaissance
TS07-011 to TS07-025	15	9355	2007	Angled RC	Renaissance
Total	306	124519			

Figure 10.1 shows the drill-hole locations for the holes drilled on the current Trinity property.



Figure 10.1 Drill-hole Location Map for the Trinity Project





The resource database includes a significant number of holes, approximately 60, drilled outside the limits of Liberty Silver's property holdings at the Trinity project. Regardless of location with respect to the property boundary, all holes listed in Table 10.1 were used to complete the resource estimation.

The mineralization at Trinity is controlled by the N45E-trending fault that dips to the northwest at 45 to 70 degrees and by the slightly (10 degree) northwest-dipping contact between the rhyolite sequence and underlying Triassic meta-sedimentary rocks. A total of 262 of the holes (86%) are vertical, and thus oriented approximately orthogonal to the shallow-dipping zones. In the vicinity of the pit, however, the vertical holes also intercepted the main structural zone at 20 to 45 degree angles and several angle holes were drilled close to down dip. Irrespective of the hole orientations, MDA's explicit modeling of the mineralized zones mitigates any true thickness issues.

10.1 U. S. Borax

Borax drilled conventional percussion holes as well as reverse-circulation holes, with the latter used for holes that were expected to penetrate the water table (Ashleman, 1987). They also drilled diamond core holes, some of which were used to provide material for metallurgical test work. What information MDA has found concerning drilling contractors, equipment used, and drilling details is provided below.

For their early drilling from 1982 through 1984, Borax used Eklund Drilling Company ("Eklund") of Carlin, Nevada, as their drill contractor for conventional percussion and reverse circulation ("RC") drilling (Ashleman, 1984, and information supplied by Liberty Silver). Holes S-1 through S-190, drilled in 1982 through 1985, were rotary down-hole hammer holes drilled with a TH-60 rig. Holes SA-1 through SA-8 were inclined RC holes drilled with a TR-60 rig; the same rig was used for RC holes SR-1 through SR-18, drilled by Eklund in 1984. For core holes SC-1 through SC-5 drilled in 1984, Boyles Brothers of Salt Lake City was the drill contractor. Holes SA-9 through SA-12 and SR-19 through SR-37 were rotary down-hole hammer holes drilled by Eklund in 1985 with a TH-60 rig.

In 1986, Borax drilled rotary down-hole hammer holes S-191 through S-211 and SR-38 through SR-41 using Eklund with a TH-60 rig. For its 1986 core drilling (holes SC-6 through SC-10), Borax used Diamond Drill Contracting Company of Spokane, Washington. Ashleman (1987) reported that these were HHR core holes with a diameter of 2 9/16 inches, drilled to obtain representative rock samples for cyanide column leach tests. MDA has no information on the type of rig used. Difficult drilling conditions were encountered, and the drillers were inexperienced with drilling in such conditions. Core recoveries were poor for the first two holes but improved on subsequent holes and were "*acceptable overall, providing high recoveries for enough of the mineralized zones to give sufficient representative samples for the metallurgical test program*" (Ashleman, 1987).

Leonard *et al.* (1986) reported that the rotary-percussion holes were 5 1/4 inches in diameter, and the core holes were 2 9/16 inches in diameter.

Baele and Pelletier (1989) noted that some of the earlier percussion drill holes had poor sample recovery below the water table; they did not specify which holes were involved.

Borax drill samples for assaying were generally taken on five-foot intervals (Baele and Pelletier, 1989). Metallurgical core holes were sampled every 1 to 3ft (Whateley *et al.*, 2006). Blastholes were sampled



by “sample pan cut or manual cone cuts”, each representing a 15ft composite (Whateley, *et al.*, 2006); MDA has no further details on this sampling methodology.

Ashleman (1989) discussed the reliability of the various types of drilling conducted by Borax, which included conventional percussion, RC, and core holes. He opined that the RC holes best represent the grade of the deposit. Although both conventional and RC holes adequately represented the grade of the rock above the water table, he noted that below the water table conventional rotary drilling poorly represented the grade of the rock due to dilution by erosion of rock from up hole, preferential loss of the heavier sulfide minerals to fractures in the rock, and loss of sulfides due to poor sampling procedures in the early conventional drill holes (e.g., S-3). He also noted that the core holes were drilled for metallurgical tests, not to test the grade of the deposit. He commented that they represent the smallest volume of rock, and because of variable core recovery in the areas of fracture-controlled mineralization, they give variable degrees of down-grading, which locally can be very significant.

MDA has no further details on drilling programs or sampling by Borax.

10.2 Santa Fe Pacific Mining Inc.

Santa Fe drilled RC holes TR-1 through TR-9 in 1984 with Eklund as the drill contractor using a TH-100 rig. RC holes TR-10 through TR-27 were drilled in 1985 by Becker Drilling, Inc. (“Becker”) of Denver, Colorado. The log for TR-12 shows Becker as the contractor and indicates the rig was a Drill Systems RC rig. It does not appear that a hole numbered TR-23 was ever drilled.

RC holes TR 87-1 through TR 87-9 were drilled by Becker. There is no information on the logs about the type of rig used.

MDA found logs and/or assays but no details on the drilling in 1988 of RC holes TR 88-1 through TR 88-5 and TR 88-7 through TR 88-9 (RC); MDA has no information on the drill contractor or types of rigs used. Holes TR 88-7 through TR 88-9 are not in the database used by MDA and may be beyond the area of the resource.

Holes TS-1 through TS-5 were rotary down-hole hammer holes drilled in 1989 by Eklund; MDA has no information on the type of rig used. The TS-holes are beyond the area of the resource and are not in the database used by MDA.

Logs for RC holes DTS1 through DTS11 drilled in 1991 and 1992 indicate that the drill contractor was Becker, but there is no information on the type of rigs used. Down-hole surveys were performed; logs for holes DTS2 through DTS6 indicate they were down-hole surveyed by Boyles-Welnav of Elko, Nevada, using a gyroscopic directional survey. Logs also indicate the drilling of hole DTS11 in 1992, but the contractor was Eklund.

MDA has no information on the sampling methods and approach used by SFPM.



10.3 Renaissance Gold Inc.

The following information came from new releases of Renaissance in 2006 and 2007 with other information as cited.

For the 10 core holes drilled in 2006 (TSD-001 to TSD-010), Renaissance used Kirkness Drilling Company, Inc. of Carson City, Nevada. Renaissance staff report (personal communication, 2010) that Kirkness used a skid-mounted rig that was probably a CS 14 Versadrill. All core recovered was HQ size (2.5-inch diameter). The core samples were photographed and logged onsite. Renaissance reported (August 3, 2006 news release) that the high-grade core intercepts encountered were thinner than had been suggested by earlier rotary drilling, as was expected.

For the 15 RC holes drilled in 2007 (TS07-11 to TS07-25), Renaissance used Layne Christensen Company of Chandler, Arizona. The rig was a Foremost Prospector W750 buggy rig drilling 5 ¼ to 5 ½-inch-diameter holes (Renaissance staff, personal communication, 2010).

All core recovered in Renaissance's 2006 drilling was HQ size. Renaissance reported (news release of August 3, 2006) that core loss occurred in several holes, especially in zones of mineralized rhyolite breccia. Sample intervals varied from 1 to 6ft and averaged 5ft in core length.

Sample lengths for RC drilling were 5ft. The rig had a rotating wet splitter mounted on a cyclone. Renaissance staff (personal communication, 2010) report that the RC holes were drilled wet except for setting surface casing.

10.4 Summary of Drilling and Sampling

The Trinity resource database includes assay data from conventional rotary, RC, and core drill holes. In part due to the lack of documentation of drilling and sampling procedures, MDA believes that the historic database is of sufficient quality for use in the estimation of Inferred mineral resources only.

The preponderance of samples for all drill programs of all operators were taken at intervals of 10ft or less, which is significantly less than the thickness of the bulk-tonnage style of mineralization at Trinity. Each drill sample is therefore a small fraction of the true thickness of the mineralized zones.



11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

The following sections summarize the extent of MDA's knowledge of sample preparation, analytical, and security procedures at Trinity.

11.1 U. S. Borax

According to Baele and Pelletier (1989), Trinity samples taken by Borax during their drilling programs were assayed on an air-dried basis. Borax compiled the sample assay data into a computer drill-hole database.

CMS, Inc. ("CMS"), a well known lab based in Salt Lake City, Utah, was the initial assayer for Borax on the Trinity project, assaying samples from holes S-1 through S-13 (Ashleman, 1984). Pulps from all the mineralized intercepts were sent to U. S. Borax Research Corp. ("USBRC") by CMS for check analyses, and composites of these intercepts were also sent to Union Assay Office, Inc. ("Union") of Salt Lake City for checks. The initial assays were for 10ft intervals; a sample was scooped from a 1/8 split of the rotary cuttings for two consecutive 5ft intervals and combined. Later, an assay sample was mechanically split with a Jones-type splitter out of a 1/8 split of the 5ft interval; these mechanically split 5ft assay samples were better, more representative samples, according to Ashleman (1984). CMS assayed for silver using atomic absorption spectrometry ("AA"); MDA has no information on the sample digestion method. Union used fire assay methods for their analyses of silver. USBRC used AA (MDA has no information on the sample digestion method); when results exceeded 100 ppm Ag, the samples were analyzed by fire assaying with a gravimetric finish.

Most of the assays for the Trinity project through 1987 were performed by USBRC (Reim *et al.*, 1988). For holes S-25 through S-68, both CMS and Bondar-Clegg (since then purchased by ALS Chemex) performed check assays on samples initially assayed by USBRC (Ashleman, 1984). In addition, USBRC performed some internal assay checks. In a sample-check program for holes S-25 through S-30, CMS used AA. Bondar Clegg used AA (MDA has no information on the sample digestion method), but for samples assaying >50 ppm Ag, fire assay was used. USBRC again used AA, with fire assay when results exceeded 100 ppm Ag. The AA check analyses are discussed in Section 14.

Apparently Hunter Mining Laboratory, Inc. ("Hunter") of Sparks, Nevada, performed check assaying for USBRC in 1985 on their 1985 TR-series holes; an invoice from Hunter included assay certificates.

In contrast to the AA analyses used for exploration drill-hole samples, blasthole samples were analyzed at the mine site by cyanide leach (Whateley, *et al.*, 2006). Comparisons between USBRC and on-site blasthole assays indicate an approximate 15% difference between the two methods, with the on-site assays yielding the lower values (Reim *et al.*, 1988). Reim *et al.* (1988) noted that the relative amount of refractory (non-cyanide extractable) silver varies significantly throughout the deposit. There are also rapid lateral and vertical changes in silver grade. They also noted that the difference between assays appeared to be greatest at the lower grades (1 to 2oz Ag/ton range), which has implications for cutoff grade considerations.

Certification of assay laboratories is a comparatively recent development, and Borax's drilling at Trinity took place before certification was widely used as an industry standard. Both Union and Hunter are no



longer in business, and MDA has no information on whether they were registered or certified. Bondar Clegg was ISO 9002 registered in 1998, well after their work for Borax at Trinity; Bondar Clegg is now part of ALS Chemex. MDA has no information on whether CMS or USBRC were certified or registered, but assumes they were not. Union, Hunter, and Bondar Clegg were all well-known commercial analytical laboratories that used industry-standard sample preparation and analytical techniques.

MDA has no information on security procedures used by Borax. Except for check assaying described in Section 12.1, MDA has no information on QA/QC procedures that Borax may have used.

11.2 Santa Fe Pacific Mining Inc.

MDA has obtained information about analyses on samples taken by SFPM from copies of assay certificates accompanying drill logs. These records for the TR-series holes drilled by SFPM in 1984 and 1985 indicate that assaying was performed by Chemex Labs Ltd. (“Chemex”) of North Vancouver, BC. Samples were analyzed for silver, gold, and, in some cases lead, arsenic, zinc, and antimony. For holes TR-1 through TR-22, the assay certificate shows “NAA” after Au, which is presumed to mean the analysis was by neutron activation; the lower detection limit for gold was 1 ppb. A hand-written note on the drill logs for holes TR-10 through TR-12, TR-14 through TR-16, TR-18 through TR-21, and TR-26 through TR-27 suggests that the analyses, presumably for all metals analyzed, were by “fire with NAA finish.” The Chemex assay certificates for holes TR-26 and TR-27 do not show “NAA” after Au, but instead indicate gold was determined by fire assaying with an AA finish. The silver assays show only “aqua R.”, which likely indicates these analyses used *aqua regia* digestion with determination by AA.

Copies of assay certificates accompanying drill logs for holes TR-87-1, TR-87-2, TR-87-7, TR-87-8, and TR-87-9, drilled in 1987, indicate assaying was performed by Chemex in Sparks, NV; logs for the remaining four holes of the nine-hole series do not include assay certificates. Three of the certificates indicate gold was analyzed by 10g fire assay with AA finish, with a detection limit of 5 ppb. Silver was analyzed with HNO₃ – *aqua regia* digestion and AA, with a detection limit of 0.1 ppm.

Copies of assay certificates accompanying drill logs for holes 88-1 through 88-9 drilled in 1988 indicate analysis by both Barringer Laboratories Inc. (“Barringer”) of Sparks, Nevada and by Chemex. It appears that Chemex was used for check assays on holes 88-1 and 88-2, but for holes 88-7 through 88-9 it is not evident who was the primary assayer. Barringer analyzed silver, arsenic, antimony, and lead by AA (MDA has no information on the sample digestion method). Gold was analyzed by fire assay. Mercury was analyzed by hydride generation. The detection limits for silver and gold appear to have been 0.1 ppm and 0.005oz Au/ton, respectively. At Chemex, lead and arsenic were assayed by HNO₃ – *aqua regia* digestion and AA with a detection limit of 1 ppm and an over-limit of 10,000 ppm. Mercury and antimony were assayed by two-acid digestion and AA.

Copies of assay certificates accompanying drill logs for holes TS-1 through TS-5 drilled in 1989 indicate that the principal assay lab was Chemex. Samples were analyzed for gold, silver, copper, lead, zinc, arsenic, mercury, antimony, and bismuth. Gold was analyzed using 10g charges that were fire assayed with AA finishes; the detection limit was 5 ppb, with an over-limit of 10,000 ppb. Silver was analyzed by HNO₃ – *aqua regia* digestion and AA; the minimum detection limit was 0.2 ppm, and the



upper detection limit was 100 ppm. The other metals were analyzed by nitric or two-acid *aqua regia* digestion and AA.

Copies of assay certificates accompanying drill logs for holes DTS-001 through DTS-011 drilled in 1991 and 1992 indicate that assaying was performed by Chemex. Silver was analyzed by HNO_3 – *aqua regia* digestion and AA; the detection limit was 0.2 ppm, with an over-limit of 100 ppm. Pb, Zn, Cu, As, and other metals were analyzed using nitric, two-acid, or three-acid *aqua regia* digestions and AA. Gold was analyzed using a 30g fire assay with AA finish. The detection limit for gold was 5 ppb, and the over-limit was 10,000 ppb.

Although certification of assay laboratories is a comparatively recent development and SFPM's drilling at Trinity took place before certification was widely used as an industry standard, Chemex currently holds ISO 9001:2008 and 17025:2005 certifications. Barringer had no known certification, but was a widely recognized commercial lab that is now part of Inspectorate America Corp.

MDA has no information on security procedures or QA/QC procedures used by SFPM, except for reference to check assays mentioned above.

11.3 Renaissance Gold Inc.

The following information on Renaissance sample analysis and security was taken from Renaissance news releases with additional information provided by Renaissance staff (personal communication, 2010).

For their 2006 core drilling program, samples were shipped to American Assay Laboratories, Inc. ("AAL") in Sparks, Nevada, where the core was split in half for assaying. Renaissance also used AAL for their 2007 RC drilling program. Silver assays were performed using inductively coupled plasma ("ICP") analytical techniques with a four-acid digestion of sample pulps in 2006 and two-acid sample digestion in 2007; assays were also determined for a broad suite of trace elements. For the 2007 drilling, samples exceeding 100 ppm silver were re-assayed using a 30 g sample fire assay with a gravimetric finish. Blanks and standards were included for quality control. In addition for the RC drill program, Renaissance collected two to three sets of duplicates per hole at the splitter (Renaissance staff, personal communication, 2010). The blanks consisted of coarse rhyolite. The two standards were from MEG Labs: MEG-Cu-1 containing about 25 ppm Ag and MEG-Ag-1 containing about 250 ppm Ag. Control samples including standards and blanks comprised about 8 to 10% of the samples per hole or about three control samples per 100 feet, alternating between blanks and standards (Renaissance staff, personal communication, 2010).

AAL is a widely used assayer in the mining industry; as of September, 2010, they were working on achieving ISO 17025 certification (personal communication, 2010).

AAL picked up the core and RC samples on site under the supervision of the rig geologist. AAL cut the core at the lab after logging and marking of sample intervals by the rig geologist in the field.



11.4 Summary Statement

MDA knows very little of the sample handling and sample security measures employed on any of the drilling programs undertaken at Trinity other than what was summarized in the previous sections. It should be noted that all of the companies who conducted exploration at Trinity were reputable, well-known mining/exploration companies that likely followed the accepted industry standards relating to sampling preparation methods, analytical techniques, and sample security protocols.

MDA has concerns about the quality of the AA analyses by USBRC at the pre-mining stage. These concerns are discussed in Section 12.2, and recommendations to address these concerns are addressed in Section 18.0.



12.0 DATA VERIFICATION

12.1 Data Verification Studies by Other Workers

As described in Section 11.1, CMS was the primary assayer for Borax at the Trinity project for the first two months of 1983 (holes S-1 through S-13). The CMS analytical method was atomic absorption but there is no information on the digestion method. Neither analytical method nor digestion technique is identified in the USBRC reports. Pulps from mineralized intercepts in holes S-1 through S-13 sent to USBRC and composites of these intercepts were sent to Union for check analyses. According to Ashleman (1984), in general, CMS silver results were 10 to 20% lower than USBRC results, and Union's results were 1 to 5% lower than USBRC. An analysis of results on lead and zinc by CMS and USBRC for holes S-1, S-3, and S-4 indicated that CMS's lead results were 2 to 7% lower for the three holes, while CMS zinc results were 0.55% and 7% higher in two holes and 2% lower in the third hole (Ashleman, 1984).

USBRC was the primary lab from March 1983 through 1984 (holes S-14 through S-209, SA-1 through SA-12, and SR-1 through SR-69), and checks between USBRC and CMS showed better overall agreement in this time period (Ashleman, 1984). There also was good agreement between Union and USBRC and Bondar Clegg and USBRC (Ashleman, 1984). A second sample-check program was conducted for holes S-25 through S-30. Nine pulps were sent to Bondar Clegg, and 44 pulps were sent to CMS. The Bondar Clegg checks were 9.8% lower than USBRC's initial results, but it is important to note that this observation is questionable because of the small number of samples. The CMS checks were 3.79% higher than USBRC's results, although CMS's results were generally lower for higher silver values (>1oz Ag/ton) and higher on the lower values (especially <0.5oz Ag/ton) (Ashleman, 1984).

In a third sample-check program, 21 composites were made from six 5ft intervals for each of 21 holes between S-8 and S-68 (Ashleman, 1984). These 21 composites were first assayed by USBRC and, as an internal check for consistency, were resubmitted to USBRC a second time using different sample numbers. It is not known if these were identical pulps, different splits or rejects that were resubmitted. In addition, the 21 samples were sent to Bondar Clegg for silver assaying. Again, the sample type is not known. Ashleman (1984) reported that there was good internal consistency for silver analyses, with the first set of composite assays being 2.3% lower than the original 5ft assays and the rerun of the composites 0.45% lower than the first set of assays. The Bondar Clegg check assays were 1.79% lower than USBRC's first set of composite assays and 4.05% lower than the original 5ft assays by USBRC.

Ashleman (1984) concluded that USBRC silver values are "*reasonably consistent and reliable*" compared against CMS originals, CMS checks, and Bondar Clegg checks.

12.2 MDA Data Verification

MDA compiled all of the available historic check analyses from the various drill programs for review. There are no definitive records that indicate the type of sample used for check assaying, except for the 2006-2007 Renaissance series.

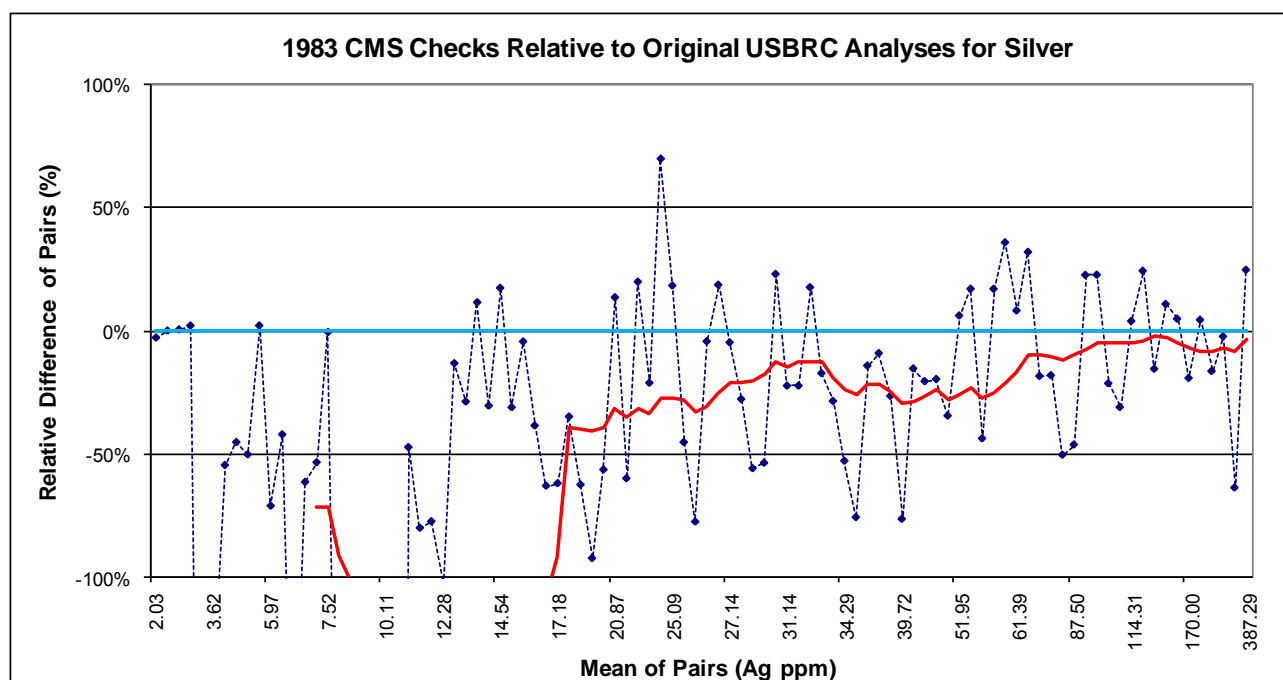


12.2.1 CMS vs. USBRC Checks on Silver - 1983

There are 96 CMS vs. USBRC duplicates. All samples were from rotary percussion S-series holes from 1982 and 1983. As mentioned in Section 11.1, CMS was the primary lab at the start of the project, and then the primary lab became USBRC, with CMS completing check analyses. The original and check analyses were by AA except for samples above 100ppm Ag which were fire assayed by USBRC. The digestion method for the AA analyses is not known. The exact type of sample submitted as checks is not known.

Figure 12.1 is a graph that shows the difference, plotted on the y-axis, of each check analysis relative to the original analysis. The x-axis of the graph plots the means of the paired data, with each pair consisting of an original analysis and the corresponding check analysis. The red line is a moving average and provides a visual guide to the trend of the relative differences.

Figure 12.1 CMS Checks Relative to Original USBRC Analyses for Silver – 1983



Descriptive statistics of the paired data are summarized in Table 12.1.



Table 12.1 CMS Analyses vs. USBRC Analyses for Silver – 1983

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	96	96	96		96	96
Mean	49.037	51.729	46.344	-10%	-54%	64%
Median	25.779	26.500	24.650			
Std. Dev.	67.712	69.527	67.486			
CV	1.381	1.344	1.456			
Min.	2.029	2.057	1.300	-37%	-826%	0%
Max.	387.286	392.000	430.000	10%	70%	826%

Mean ≥ 10.0 ppm Ag	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	76	76	76		76	76
Mean	60.458	63.366	57.549	-9%	-35%	46%
Median	32.054	34.800	28.800			
Std. Dev.	71.915	73.893	71.816			
CV	1.190	1.166	1.248			
Min.	10.107	12.686	2.000	-84%	-826%	2%
Max.	387.286	392.000	430.000	10%	70%	826%

Mean ≥ 35 ppm Ag	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	35	35	35		35	35
Mean	106.532	110.120	102.943	-7%	-12%	25%
Median	79.107	85.714	70.400			
Std. Dev.	85.403	88.335	85.809			
CV	0.802	0.802	0.834			
Min.	35.200	39.086	25.500	-35%	-77%	2%
Max.	387.286	392.000	430.000	10%	36%	77%

“A.V. Rel. Diff.” is the average absolute value of the difference between the original analysis and the check analysis.
“CV” is the Coefficient of Variation.

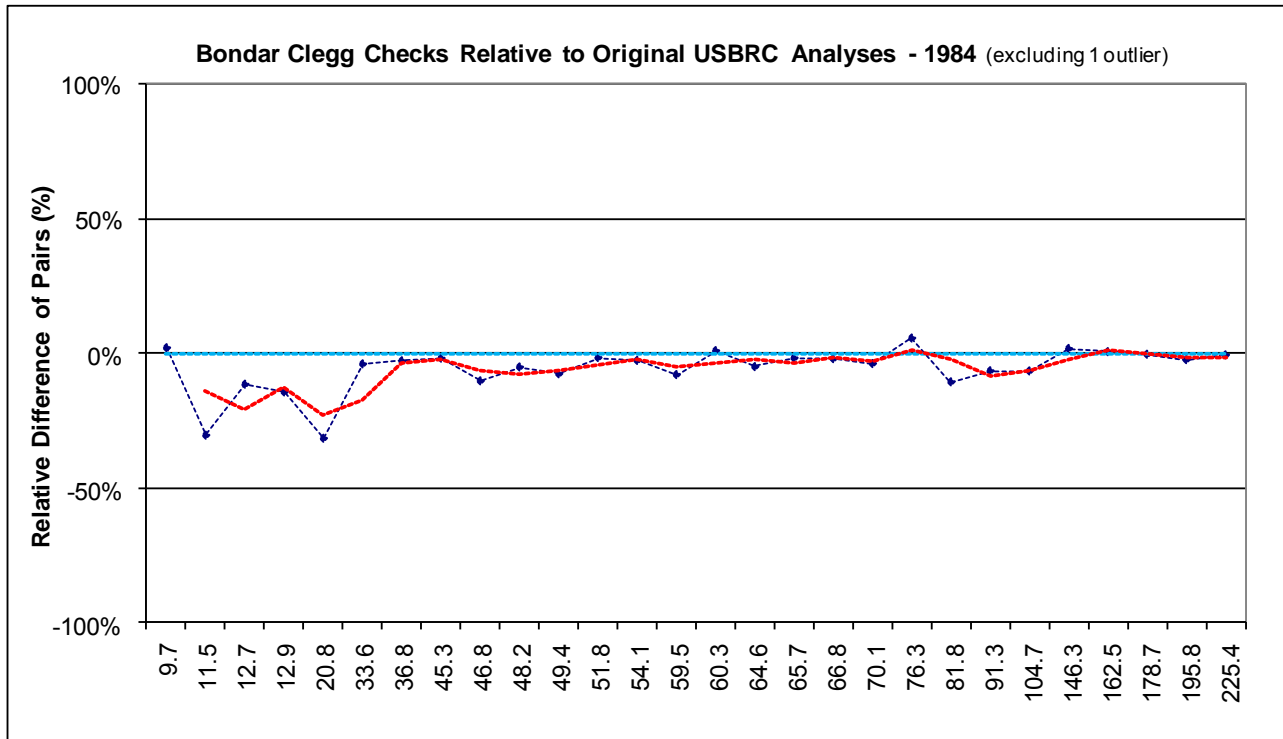
If 11 outliers from the lower-grade analyses are removed, the average difference in values drops by a few percentage points, but the CMS values remain consistently lower, even at mean silver values greater than 35 ppm. In the 0.5 to 2 oz Ag/ton (17 to 68 ppm Ag) range, the CMS values are approximately 25% lower than the USBRC values.

12.2.2 Bondar-Clegg vs. USBRC Checks on Silver - 1984

A total of 20 pulps of composited 5- and 10-foot intervals were analyzed by USBRC and were sent to Bondar-Clegg as checks in 1984. In addition, eight pulps from 5-foot samples that were analyzed by USBRC were also sent to Bondar-Clegg. All of these samples were from the rotary percussion S-series holes. The original and check analyses were by AA except for samples above 100ppm Ag which were fire assayed by USBRC. The digestion method for the AA analyses is not known. The exact type of sample submitted as checks is not known. Figure 12.2 is the graph that shows the difference of each check analysis relative to the original analysis.



Figure 12.2 Bondar Clegg Checks Relative to Original USBRC Analyses for Silver – 1984



Descriptive statistics of the paired data are summarized in Table 12.2.

Table 12.2 Bondar Clegg Analyses vs. USBRC Analyses for Silver – 1984

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	28	28	28		28	28
Mean	74.394	75.438	73.350	-3%	-6%	6%
Median	59.875	60.850	58.900			
Std. Dev.	57.343	57.246	57.472			
CV	0.771	0.759	0.784			
Min.	9.700	9.600	9.800	2%	-31%	0%
Max.	225.350	226.000	224.700	-1%	6%	31%

In the 0.5 to 2 oz Ag/ton (17 to 68 ppm Ag) range, the Bondar Clegg values are approximately 4% lower than the USBRC values.

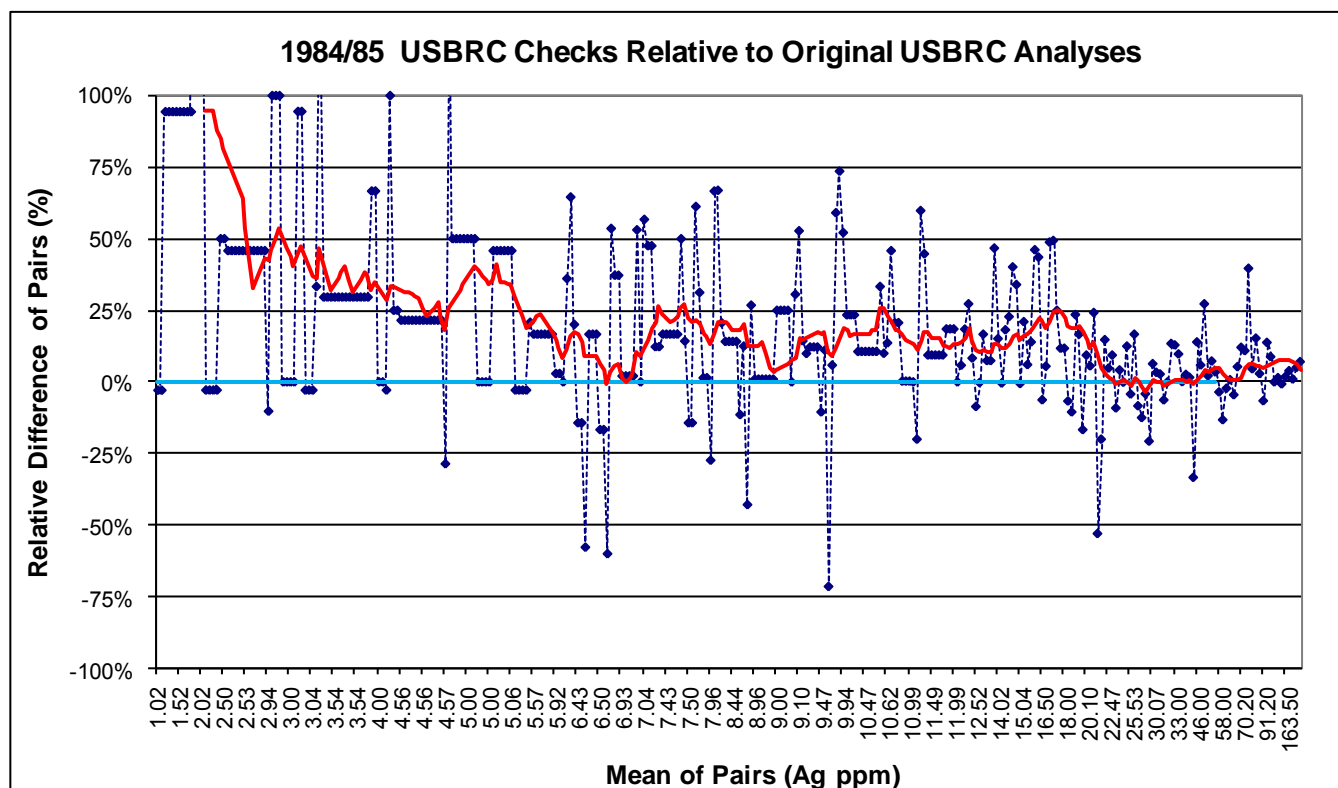
12.2.3 USBRC vs. USBRC Checks on Silver – 1984-1985

A total of 311 samples originally analyzed by the USBRC were re-submitted to the USBRC for analyses. It is not known if these are pulps from the original analyses, new splits from the original pulverized material, or new pulps generated from the crushed reject material. All of these checks were from the rotary percussion S-series holes drilled in 1982 and 1983. The checks and original analyses



were AA but the digestion method is not known. Figure 12.3 is a graph that shows the difference of each check analysis relative to the original analysis.

Figure 12.3 USBRC Checks Relative to Original USBRC Analyses for Silver – 1984/85



Descriptive statistics of the paired data are summarized in Table 12.3.



Table 12.3 USBRC Checks vs. USBRC Original Analyses for Silver – 1984/85

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	311	311	311		311	311
Mean	17.826	17.144	18.508	8%	21%	18%
Median	8.443	7.886	9.000			
Std. Dev.	31.234	30.738	31.789			
CV	1.752	1.793	1.718			
Min.	1.015	1.000	1.000	0%	-71%	0%
Max.	234.000	226.000	242.000	7%	200%	200%

Mean ≥ 10.0 ppm Ag	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	121	121	121		121	121
Mean	37.147	36.162	38.132	5%	9%	13%
Median	19.500	19.200	20.000			
Std. Dev.	43.525	42.826	44.319			
CV	1.172	1.184	1.162			
Min.	10.472	8.571	10.000	17%	-53%	0%
Max.	234.000	226.000	242.000	7%	60%	60%

Mean ≥ 35.0 ppm Ag	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	33	33	33		33	33
Mean	90.152	88.309	91.994	4%	4%	8%
Median	70.200	67.400	74.200			
Std. Dev.	54.751	53.738	55.963			
CV	0.607	0.609	0.608			
Min.	34.986	34.971	33.000	-6%	-33%	0%
Max.	234.000	226.000	242.000	7%	40%	40%

The check analyses are 20% higher between 7 and 22 ppm Ag. This low grade range is important because it is close to the cutoff used in the resource estimation.

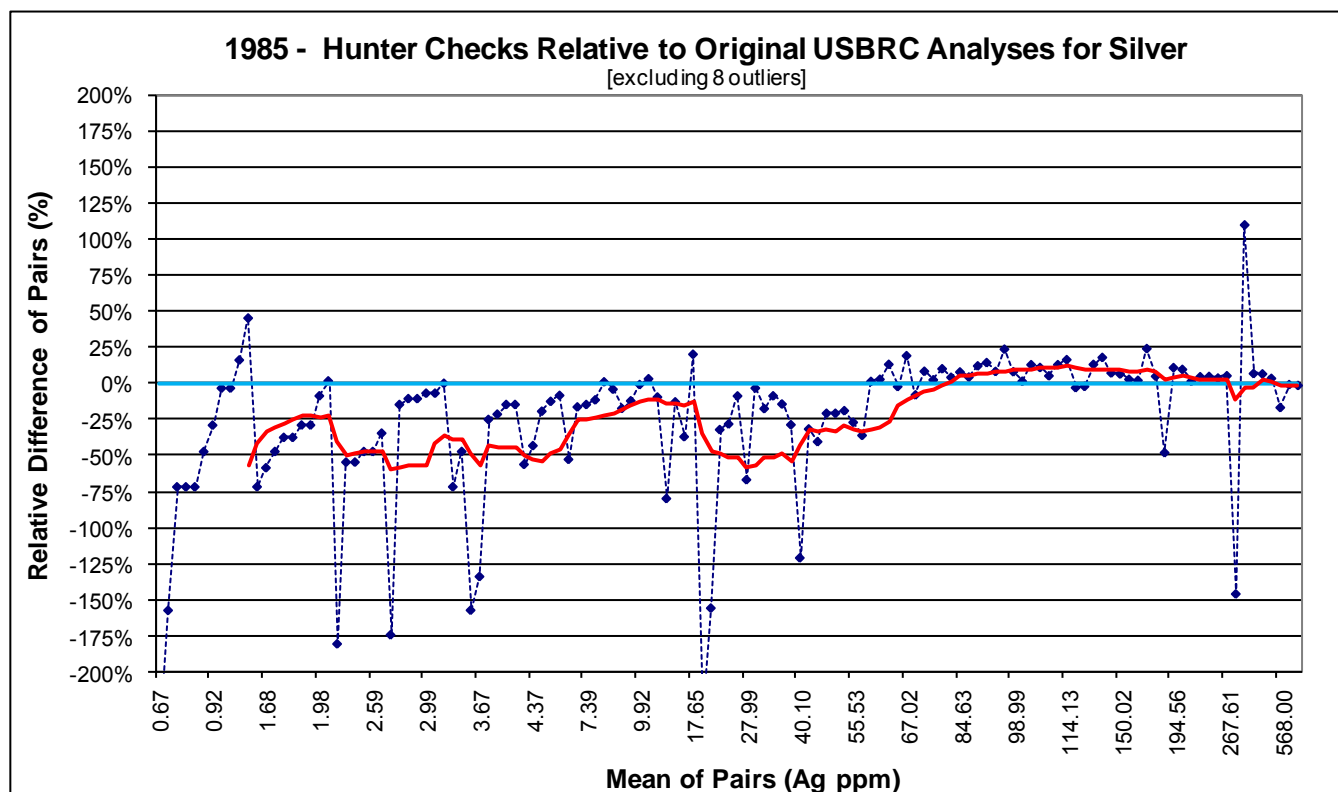
At values greater than 35 ppm Ag the check analyses are 4% higher than the original analyses but the dataset is too small to draw conclusions.

12.2.4 Hunter vs. USBRC Pulp Checks on Silver - 1985

A total of 98 duplicate pulps from original USBRC analyses in 1985 were sent to Hunter for checking. A billing invoice states that Hunter received pulps, and no sample preparation was charged. All of these pulps were from the rotary percussion S-series holes. The original and check analyses were by AA except for samples above 100ppm Ag which were fire assayed by USBRC. The digestion method for the AA analyses is not known. Figure 12.4 is a graph that shows the difference, of each check analysis relative to the original analysis. Eight extreme outliers were removed from this data set.



Figure 12.4 Hunter Checks Relative to Original USBRC Analyses for Silver – 1985



For mean values less than 55 ppm Ag, the Hunter analyses are between 15% and 55% lower than the USBRC analyses. The 17 to 55 ppm Ag range is significant to the resource estimation. For values greater than 55 ppm Ag, the Hunter analyses are generally a few percent higher than the USBRC values.

Descriptive statistics of the paired data are summarized in Table 12.4.



Table 12.4 Hunter Checks vs. USBRC Original Analyses for Silver – 1985
(8 outliers removed)

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	129	129	129		129	129
Mean	86.051	86.046	86.057	0%	-24%	33%
Median	25.057	30.171	21.000			
Std. Dev.	195.523	196.527	195.820			
CV	2.272	2.284	2.275			
Min.	0.665	1.029	0.300	-71%	-243%	0%
Max.	1910.000	1920.000	1900.000	-1%	110%	243%

Mean ≥ 10.0 ppm Ag	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	74	74	74		74	74
Mean	147.448	147.149	147.747	0%	-11%	24%
Median	89.272	85.500	93.000			
Std. Dev.	240.967	242.571	241.212			
CV	1.634	1.648	1.633			
Min.	10.122	9.943	8.400	-16%	-229%	0%
Max.	1910.000	1920.000	1900.000	-1%	110%	229%

Mean ≥ 35.0 ppm Ag	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	62	62	62		62	62
Mean	172.391	171.395	173.387	1%	-2%	17%
Median	102.286	98.572	109.000			
Std. Dev.	256.088	258.298	255.935			
CV	1.486	1.507	1.476			
Min.	35.500	36.000	25.000	-31%	-146%	0%
Max.	1910.000	1920.000	1900.000	-1%	110%	146%

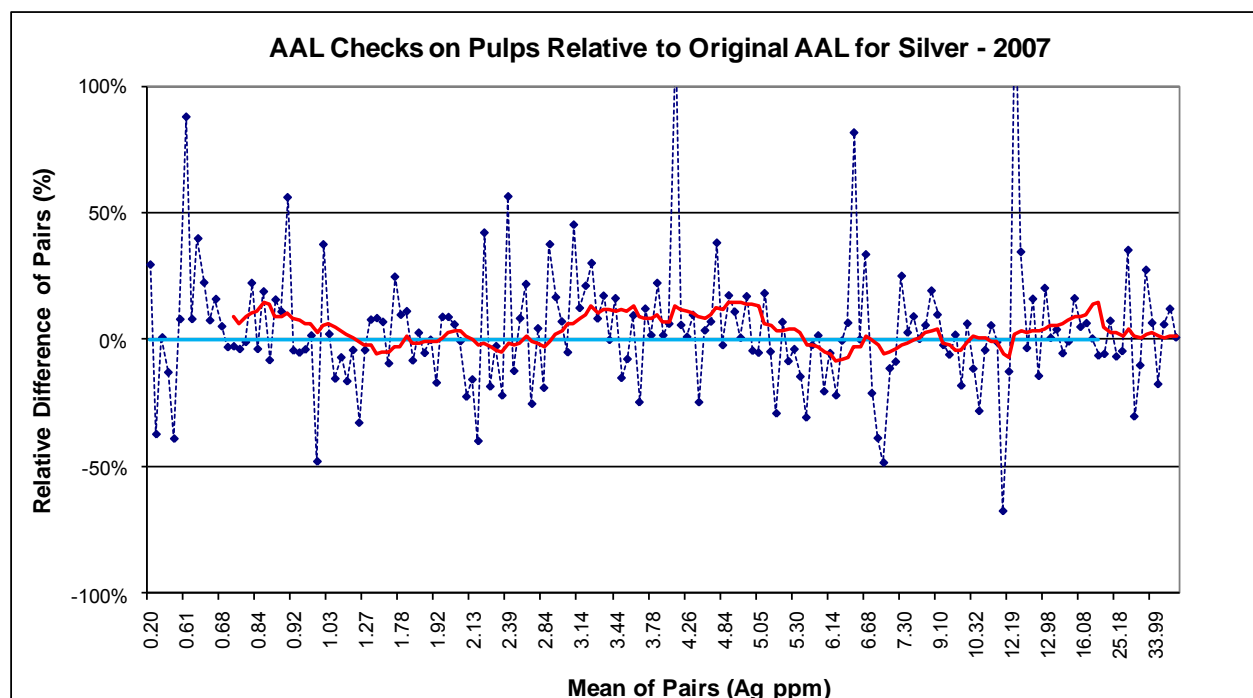
There is a substantial difference between Hunter silver analyses and the USBRC analyses in the 0.5 to 2 oz Ag/ton (17 to 68 ppm Ag) range, with the Hunter analyses 30% lower in this interval. These values are in the range of the inferred resource cut-off and average grades reported in Section 17.

12.2.5 AAL vs. AAL Pulp Checks on Silver – 2006-2007

AAL ran checks on pulps of 173 samples that AAL also analyzed. These samples are from the holes drilled by Renaissance during 2006 and 2007. All of the check sample analyses were by ICP and the analyses were reported on the same analytical reports. AAL used a four-acid digestion of sample pulps in 2006 and two-acid sample digestion in 2007. Figure 12.5 is the graph of the difference.



Figure 12.5 AAL Checks on Pulps from RC and Core Samples Relative to Original AAL Analyses for Silver – 2007



Descriptive statistics of the paired data for the 173 samples are summarized in Table 12.5.

Table 12.5 AAL Checks on Pulps from RC and Core Samples vs. AAL Analyses for Silver – 2007

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	173	173	173		173	173
Mean	7.768	7.689	7.846	2%	4%	16%
Median	3.890	3.794	3.988			
Std. Dev.	12.848	12.747	13.022			
CV	1.654	1.658	1.660			
Min.	0.199	0.173	0.224	30%	-67%	0%
Max.	110.422	109.900	110.944	1%	143%	143%

Mean >10.0 ppm Ag	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	35	35	35		35	35
Mean	24.698	24.441	24.954	2%	3%	16%
Median	15.889	15.679	17.089			
Std. Dev.	20.967	20.822	21.307			
CV	0.849	0.852	0.854			
Min.	10.318	7.243	8.884	23%	-67%	0%
Max.	110.422	109.900	110.944	1%	143%	143%

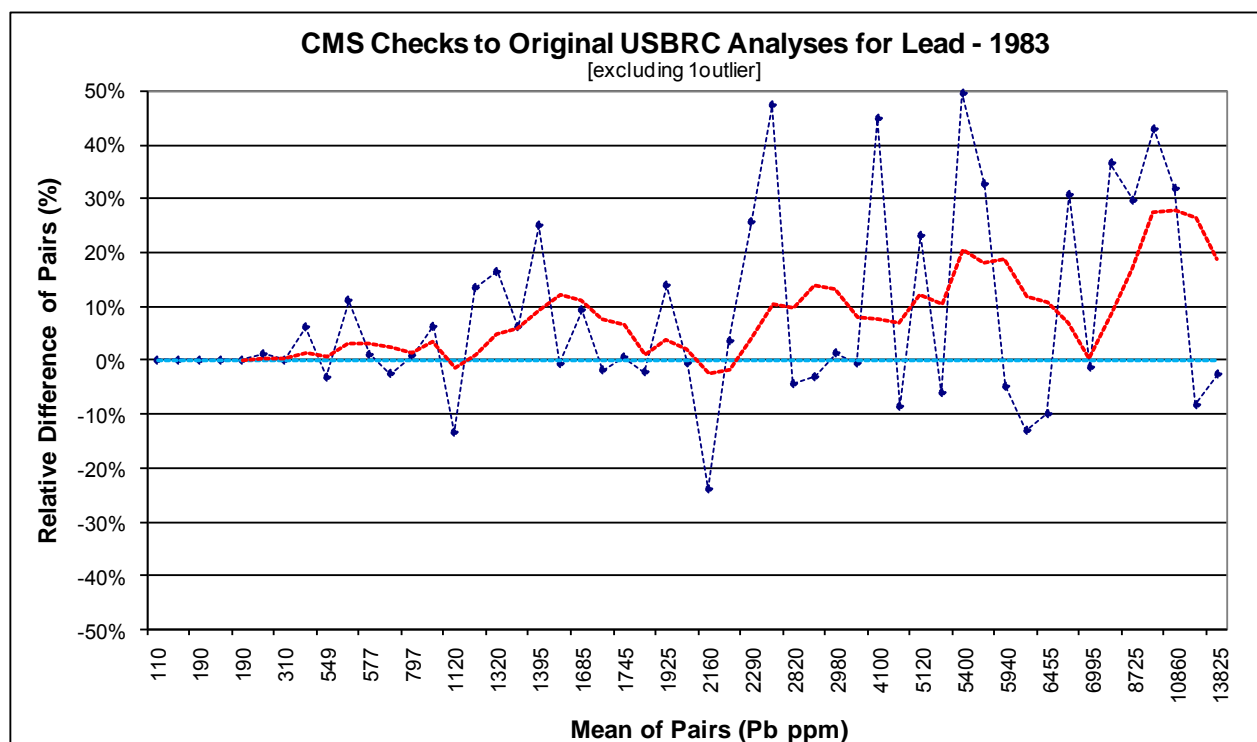


If six outliers are removed, the mean difference for all samples drops from 2% to 1%. Overall, the checks do not reflect any consistent bias, although the variability is surprisingly high for duplicate ICP silver analyses of pulps by the same lab on the same assay certificate. The variation could be explained by a nugget effect in the silver distribution. The mean of most of these checks is below 12 ppm Ag and below the cut-off for the Inferred resource total.

12.2.6 CMS vs. USBRC Analyses for Lead – 1983

There were 52 duplicate samples submitted to CMS for lead analyses to compare against original USBRC analyses. The samples are from the 1982 and 1983 S-series holes. The original and check analyses were by AA. The digestion method for the AA analyses and the type of check samples submitted are not known. Figure 12.6 is the graph of the differences. One extreme outlier was removed in this plot.

Figure 12.6 CMS Checks Relative to Original USBRC Analyses for Lead – 1983



Descriptive statistics of the paired data for the 51 samples are summarized in Table 12.6.



Table 12.6 CMS Checks on Rotary Percussion Samples Relative to Original USBRC Analyses for Lead – 1983

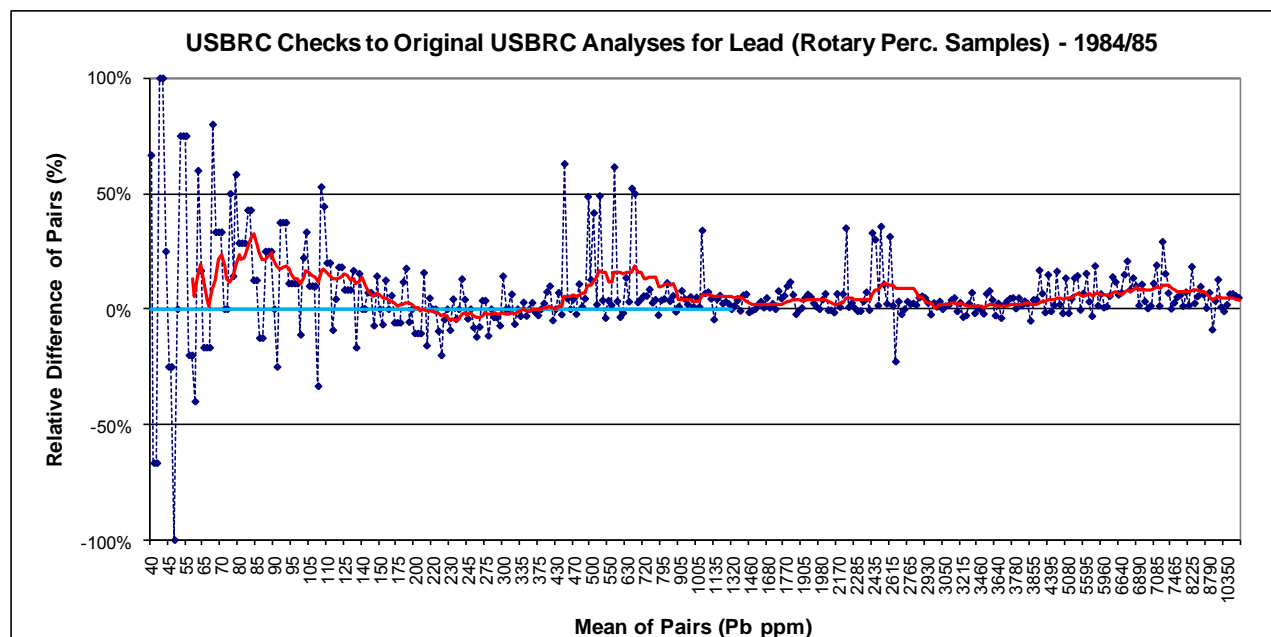
All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	51	51	51		51	51
Mean	3337.04	3168.00	3506.08	11%	8%	12%
Median	2015.00	2020.00	2010.00			
Std. Dev.	3293.52	3135.32	3504.95			
CV	0.99	0.99	1.00			
Min.	110.00	110.00	110.00	0%	-24%	0%
Max.	13825.00	14000.00	13650.00	-3%	49%	49%

Although the data set is small, the CMS values are 10% higher than the USBRC values. The divergence becomes even more pronounced at higher lead values.

12.2.7 USBRC vs. USBRC Checks on Lead – 1984/85

There were 372 check samples submitted to USBRC for lead analyses to compare against original USBRC analyses. The type of check sample submitted is not known. All of the samples are from 1982 through 1983 S-series holes. The original and check analyses were by AA. The digestion method for the AA analyses is not known. Figure 12.7 is a graph that shows the difference.

Figure 12.7 USBRC Checks Relative to Original USBRC Analyses for Lead – 1984/85



Descriptive statistics of the paired data for the 372 samples are summarized in Table 12.7.



Table 12.7 USBRC Checks from Rotary Percussion Samples Relative to Original USBRC Analyses for Lead – 1984/85

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	372	372	372		372	372
Mean	2245.37	2187.24	2303.49	5%	7%	11%
Median	1000.00	965.00	1010.00			
Std. Dev.	2747.76	2673.17	2826.53			
CV	1.22	1.22	1.23			
Min.	40.00	30.00	30.00	0%	-100%	0%
Max.	14550.00	14200.00	14900.00	5%	100%	100%

Mean ≥ 1000 ppm Pb	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	186	186	186		186	186
Mean	4200.38	4092.90	4307.85	5%	5%	6%
Median	3312.50	3300.00	3310.00			
Std. Dev.	2719.29	2640.09	2806.72			
CV	0.65	0.65	0.65			
Min.	1005.00	880.00	1020.00	16%	-23%	0%
Max.	14550.00	14200.00	14900.00	5%	36%	36%

Mean ≥ 5000 ppm Pb	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	62	62	62		62	62
Mean	7481.69	7253.23	7710.16	6%	7%	7%
Median	7050.00	6780.00	7300.00			
Std. Dev.	2033.61	2020.72	2070.38			
CV	0.27	0.28	0.27			
Min.	5040.00	4760.00	5030.00	6%	-9%	0%
Max.	14550.00	14200.00	14900.00	5%	29%	29%

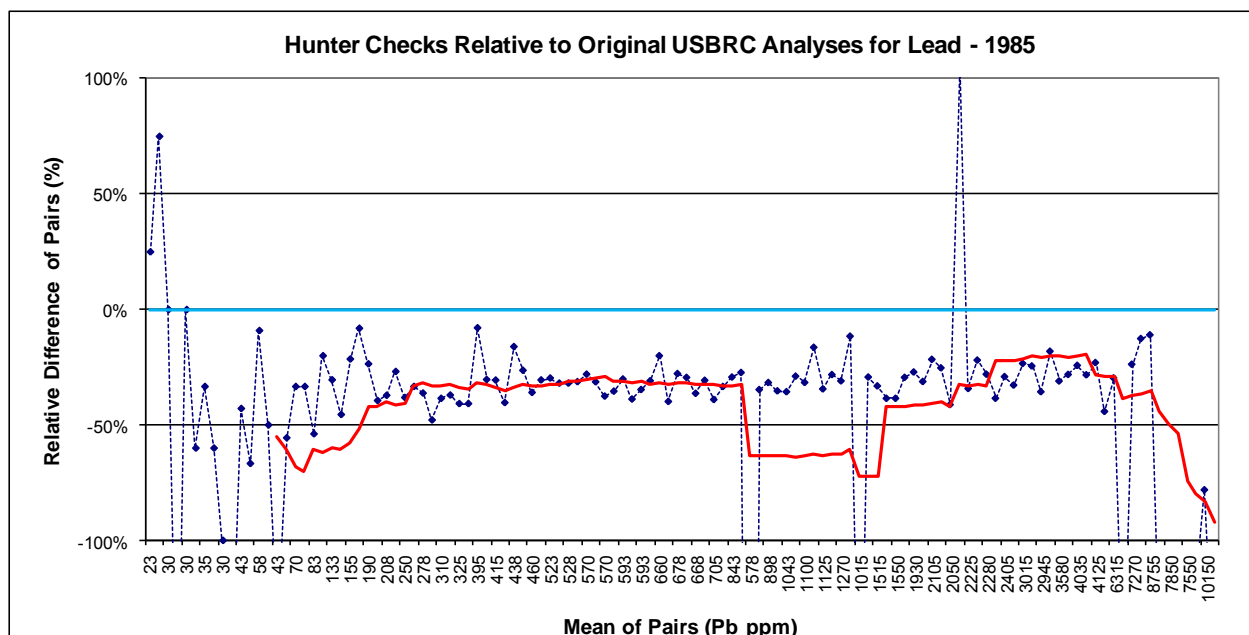
The checks are consistently 5% to 6% higher than the original assays at the same lab, especially within the 0.1 to 1.0% lead range. There is no indication that different analytical techniques were used.

12.2.8 Hunter vs. USBRC Analyses for Lead - 1985

There were 118 duplicate pulps submitted to Hunter for lead analyses to compare against original USBRC analyses. The samples are from rotary percussion S- and reverse circulation SA- and SR-series holes drilled in 1982 and 1983. The original and check analyses were by AA. The digestion method for the AA analyses is not known. Figure 12.8 is a graph of the relative difference.



Figure 12.8 Hunter Checks on Pulps Relative to Original USBRC Analyses for Lead – 1985



Descriptive statistics of the paired data for the 118 samples are summarized in Table 12.8.

Table 12.8 Hunter Checks on Pulps Relative to Original USBRC Analyses for Lead – 1985

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	118	118	118		118	118
Mean	1768.347	2142.161	1394.534	-35%	-46%	50%
Median	663.750	765.000	550.000			
Std. Dev.	2596.792	3445.517	1872.989			
CV	1.468	1.608	1.343			
Min.	20.00	20.00	10.000	-50%	-500%	0%
Max.	15550.00	22500.00	8600.000	-62%	106%	500%

Mean ≥ 1000 ppm Pb	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	49	49	49		49	49
Mean	3758.112	4582.653	2933.571	-36%	-49%	54%
Median	2405.000	2630.000	2100.000			
Std. Dev.	3069.800	4289.844	2083.299			
CV	0.817	0.936	0.710			
Min.	1015.00	1190.00	500.000	-58%	-321%	11%
Max.	15550.00	22500.00	8600.000	-62%	106%	321%

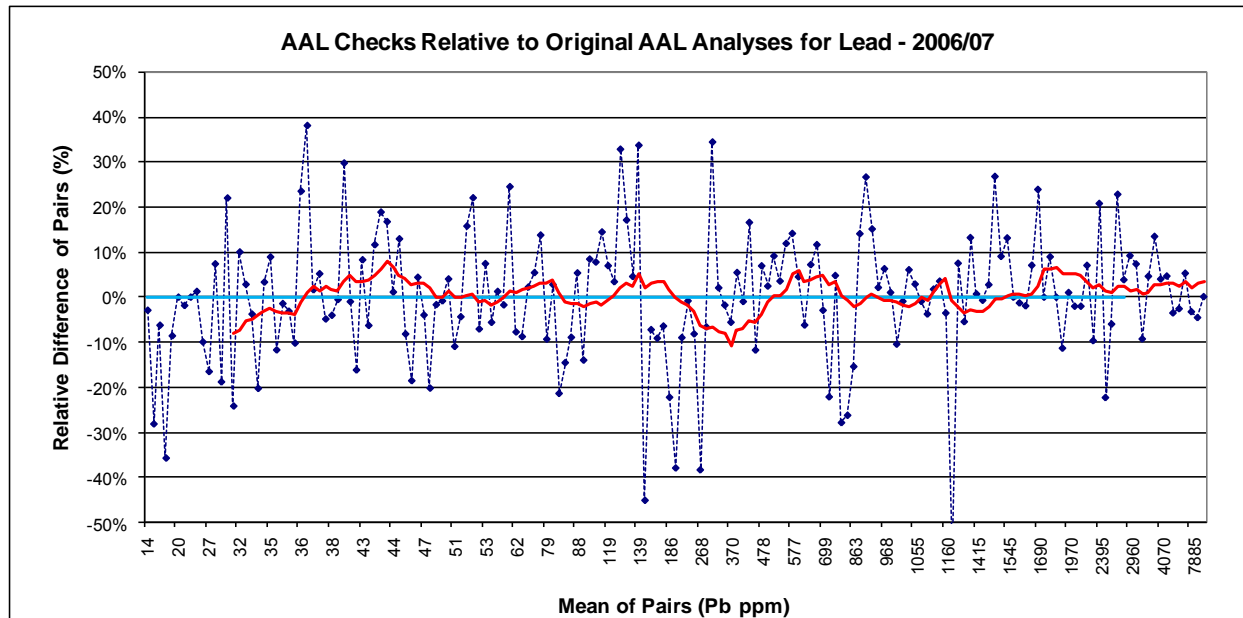
Hunter lead analyses are consistently 30% lower than the USBRC analyses.



12.2.9 AAL vs. AAL Pulp Checks on Lead from RC Samples 2006/07

The AAL set of checks includes 173 duplicate pulp analyses from the 2006/2007 Renaissance drilling and were reported on the same analytical reports. Lead analyses were completed using inductively coupled plasma (“ICP”) analytical techniques with a four-acid digestion of sample pulps in 2006 and two-acid sample digestion in 2007. Figure 12.9 is a graph that shows the difference.

Figure 12.9 AAL Checks on Pulps Relative to Original AAL Analyses for Lead – 2006/07



Descriptive statistics of the paired data for the 173 samples are summarized Table 12.9.



Table 12.9 AAL Checks on Pulps from RC and Core Samples Relative to Original AAL Analyses for Lead – 2006/07

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	173	173	173		173	173
Mean	890.645	885.560	895.731	1%	0%	10%
Median	195.000	219.000	172.000			
Std. Dev.	1480.493	1480.636	1482.967			
CV	1.662	1.672	1.656			
Min.	14.000	14.200	13.800	-3%	-57%	0%
Max.	9195.000	9190.000	9200.000	0%	38%	57%

Mean ≥1000 ppm Pb	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	49	49	49		49	49
Mean	2576.357	2558.571	2594.143	1%	2%	8%
Median	1940.000	1940.000	1940.000			
Std. Dev.	1896.197	1912.248	1886.517			
CV	0.736	0.747	0.727			
Min.	1020.000	990.000	943.000	-5%	-57%	0%
Max.	9195.000	9190.000	9200.000	0%	27%	57%

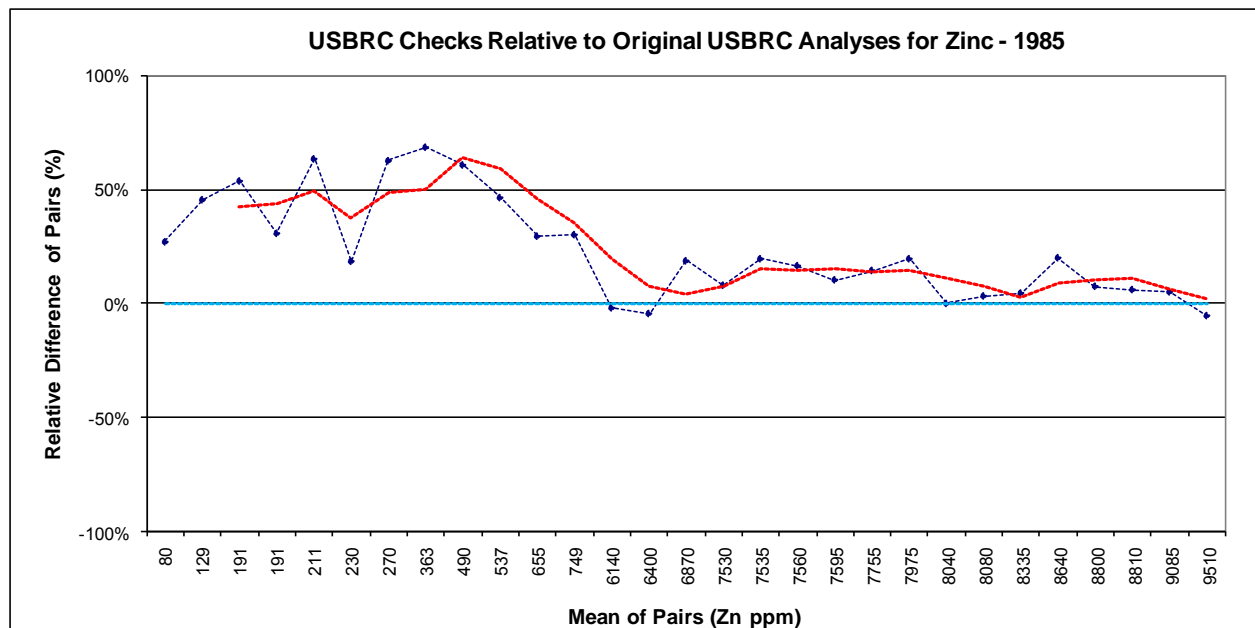
The results for these checks are similar for the silver checks at AAL. There is variation in results, but no consistent divergence.

12.2.10 USBRC vs. USBRC Checks on Zinc - 1985

There were 29 check samples submitted to USBRC for zinc analyses to compare against original USBRC analyses. The type of check sample submitted is not known. All of the samples are from 1982 through 1983 S-series holes. The original and check analyses were by AA. The digestion method for the AA analyses is not known. Figure 12.10 is a graph that shows the difference of each check analysis relative to the original analysis.



Figure 12.10 USBRC Checks from Rotary Percussion Samples Relative to Original USBRC Analyses for Zinc – 1985



Descriptive statistics of the paired data for the 29 samples are summarized in Table 12.10.

Table 12.10 USBRC Checks from Rotary Percussion Samples Relative to Original USBRC Analyses for Zinc – 1985

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	29	29	29		29	29
Mean	4784.534	4579.828	4989.241	9%	24%	24%
Median	6870.000	6540.000	7460.000			
Std. Dev.	3863.968	3749.635	3992.737			
CV	0.808	0.819	0.800			
Min.	79.500	70.000	89.000	27%	-5%	0%
Max.	9510.000	9760.000	9430.000	-3%	69%	69%

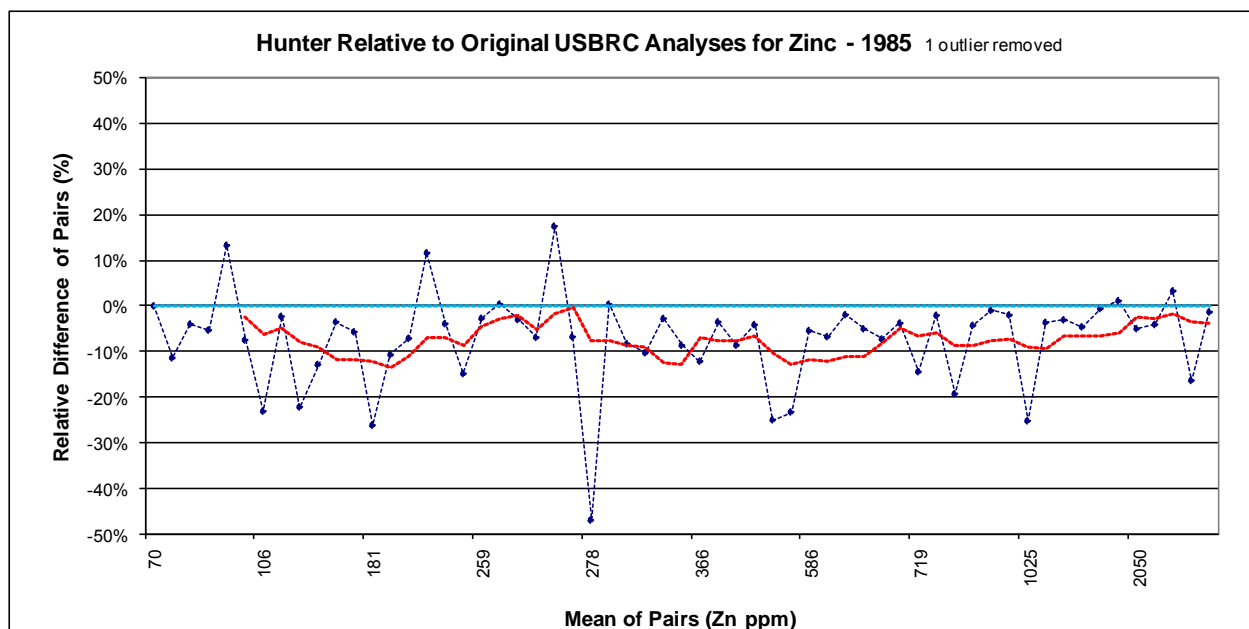
The USBRC checks are on zinc are 5% to 15% higher than originals in the 0.6% to 0.95% zinc range.

12.2.11 Hunter vs. USBRC Pulp Checks on Zinc - 1985

There were 60 duplicate pulps submitted to Hunter for zinc analyses to compare against original USBRC analyses. The samples are from rotary percussion S- and from reverse circulation SA- and SR-series holes (drilled in 1983). Figure 12.11 is a graph that shows the difference.



Figure 12.11 Hunter Checks on Pulps Relative to Original USBRC Analyses for Zinc – 1985
(1 outlier removed)



Descriptive statistics of the paired data for the 59 (one outlier removed) samples are summarized in Table 12.11.

Table 12.11 Hunter Checks on Pulps Relative to Original USBRC Analyses for Zinc – 1985

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	59	59	59		59	59
Mean	729.280	749.831	708.729	-5%	-7%	9%
Median	349.500	364.000	335.000			
Std. Dev.	996.327	1017.095	977.061			
CV	1.366	1.356	1.379			
Min.	70.000	70.000	70.000	0%	-47%	0%
Max.	6040.000	6080.000	6000.000	-1%	18%	47%

Mean \geq 1000 ppm Zn	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	12	12	12		12	12
Mean	2165.833	2214.167	2117.500	-4%	-5%	6%
Median	1747.500	1745.000	1750.000			
Std. Dev.	1464.870	1494.836	1439.458			
CV	0.676	0.675	0.680			
Min.	1010.000	1020.000	910.000	-11%	-25%	1%
Max.	6040.000	6080.000	6000.000	-1%	3%	25%

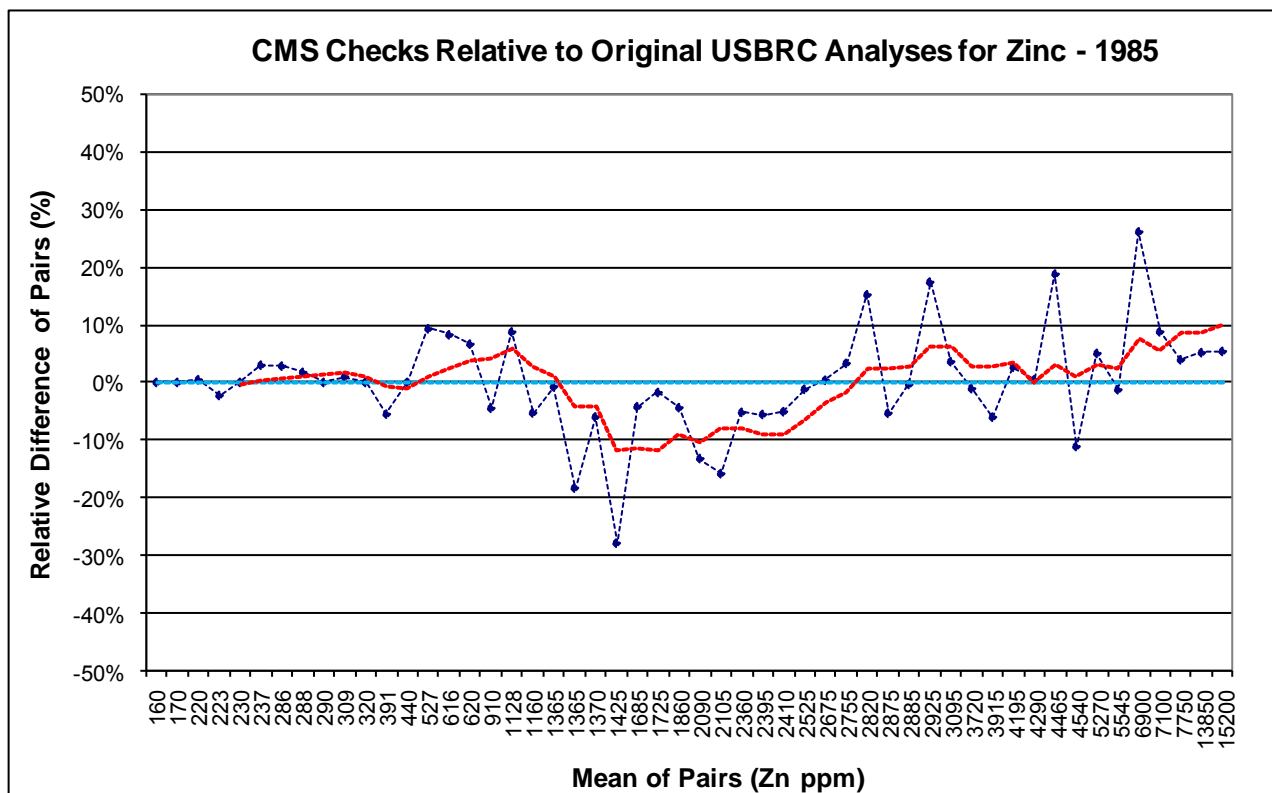


These checks samples are at the low end of zinc values but are consistently lower than the USBRC analyses by 5% to 10%.

12.2.12 CMS vs. USBRC Checks on Zinc - 1985

There were 52 duplicate pulps submitted to CMS for zinc analyses to compare against original USBRC analyses. The original and check analyses were by AA. The digestion method for the AA analyses is not known. The type of check sample submitted is not known. The samples are from rotary percussion S-series holes drilled in 1983. Figure 12.12 is a graph that shows the difference.

Figure 12.12 CMS Checks Relative to Original USBRC Analyses for Zinc – 1985



Descriptive statistics of the paired data for the 52 samples are summarized in Table 12.12.



Table 12.12 CMS Checks Relative to Original USBRC Analyses for Zinc – 1985

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	52	52	52		52	52
Mean	2691.740	2657.423	2726.058	3%	0%	6%
Median	1975.000	2060.000	1885.000			
Std. Dev.	3069.692	2973.946	3171.374			
CV	1.140	1.119	1.163			
Min.	160.000	160.000	160.000	0%	-28%	0%
Max.	15200.000	14800.000	15600.000	5%	26%	28%

Mean ≥1000 ppm Zn	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	35	35	35		35	35
Mean	3821.071	3771.429	3870.714	3%	0%	8%
Median	2820.000	2690.000	2800.000			
Std. Dev.	3178.028	3056.184	3307.838			
CV	0.832	0.810	0.855			
Min.	1127.500	1080.000	1130.000	5%	-28%	0%
Max.	15200.000	14800.000	15600.000	5%	26%	28%

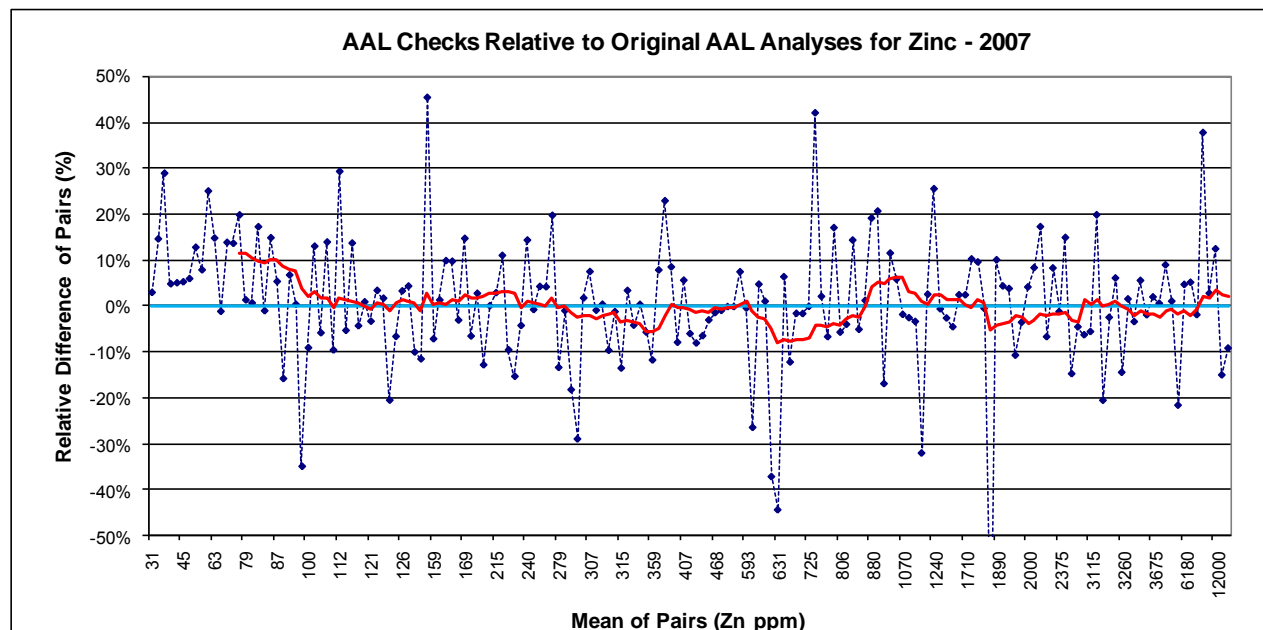
The CMS checks are lower by 8% in the 0.13% to 0.27% Zn range and then trend upward and cross over the mean above 0.28% zinc.

12.2.13 AAL vs. AAL Pulp Checks on Zinc from RC Samples

The AAL set of checks includes 173 duplicate pulp analyses from the 2006/2007 Renaissance drilling and were reported on the same analytical reports. Zinc analyses were completed using inductively coupled plasma (“ICP”) analytical techniques with a four-acid digestion of sample pulps in 2006 and two-acid sample digestion in 2007. Figure 12.13 is a graph that shows the difference.



Figure 12.13 AAL Checks on Pulps Relative to Original AAL Analyses for Zinc – 2007



Descriptive statistics of the paired data for the 173 samples are summarized in Table 12.13.

Table 12.13 AAL Checks on Pulps from RC and Core Samples Relative to Original AAL Analyses for Zinc – 2006

All Pairs	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	173	173	173		173	173
Mean	1344.862	1341.971	1347.754	0%	1%	10%
Median	408.000	421.000	407.000			
Std. Dev.	2380.521	2373.744	2401.872			
CV	1.770	1.769	1.782			
Min.	31.450	31.000	31.900	3%	-81%	0%
Max.	15900.000	16600.000	15200.000	-8%	45%	81%

Mean >1000 ppm Zn	Mean	Original	Duplicate	Diff.	Rel. Diff.	A.V. Rel. Diff.
Count	55	55	55		55	55
Mean	3567.364	3557.273	3577.455	1%	0%	9%
Median	2375.000	2370.000	2370.000			
Std. Dev.	3246.390	3237.702	3288.579			
CV	0.910	0.910	0.919			
Min.	1015.000	960.000	1030.000	7%	-81%	1%
Max.	15900.000	16600.000	15200.000	-8%	38%	81%

The results for these checks are similar for the silver and lead checks at AAL. There is variation in results, but no consistent bias.



12.3 Summary Statement on Data Verification

MDA is concerned about the accuracy of the USBRC analyses for silver, lead, and zinc. The USBRC analyses represent 82% of the values used in the Inferred resource estimation (Section 14.0) and the USBRC silver, lead, and zinc values are consistently higher when compared to CMS, Hunter and Bondar Clegg checks (the only exception is the CMS lead analyses which are 10% higher than the USBRC analyses). This is especially true for the 0.5 to 2.0 oz/ton range for silver, and the 0.02 to 1.0% range for lead and zinc. The average grades reported in Section 17 for the Inferred resources are within these grade ranges.

Because the 0.5 to 2.0 oz Ag/ton range is critical for this deposit, it must be determined if the USBRC analyses are reliable for silver, lead and zinc before the resources can be classified higher than the Inferred category. Since the pulps are no longer available, twinning of some of the holes from the early Borax drilling is required. Twelve drill-hole locations have been identified outside, but in the vicinity of, the existing open pit that would twin USBRC-analyzed holes and might provide a statistically viable data set. Additional holes may be required after the first phase of twinning.

12.4 Assay Database Audit

The majority of the 1982 through 1992 drill-hole analytical data and collar information was entered into a digital database by Renaissance prior to 2007. Approximately 10% of the silver values were checked by MDA against original lab reports and entries were accurate. However, several discrepancies for the lead and zinc values required that all lead and zinc values be checked against the lab reports. The information from the 2006 and 2007 drilling was in digital form and was imported by MDA into the project database.



13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Historical Testing and Mineral Processing

In discussing possible processing costs and processes prior to mining at Trinity, Ganderup (1986) provided the following discussion of projected recoveries:

“Oxide leach extractions are estimated to be 93% [for silver] based on an average of more than 40 intervals from 10 holes. Surface oxide results which yielded lower extractions were excluded because they represent only a very minor portion of the reserves.

Flotation recovery of silver from sulfide ore is estimated to be 92% at a weight concentration ratio of 10:1. Leach extraction from the sulfide concentrate following a 48 hour atmospheric pre-aeration at 85°C is optimistically estimated to be 87%. However, this leach extraction requires a potentially difficult solid-liquid separation between the pre-aeration and leach stages and there are some indications of minor silver losses to the pre-aeration liquor.

It is estimated that an additional silver loss of roughly 1% can be expected in the 4-stage CCD [countercurrent decantation] circuit. Therefore the overall silver recovery is estimated to be 92% for oxide ore and 79% for sulfide ore.”

Whateley, *et al.* (2006) provided the following summary of mineral processing:

- The oxide mineralization is amenable to direct leaching resulting in a 94 to 97% silver recovery.
- Oxide material recoveries of silver by flotation were low at 50 to 60%.
- Sulfide mineralization required fine grinding to give a 78 to 84% silver recovery; cyanide consumption was high.
- Flotation tests on sulfide material liberated 90 to 95% of the silver and 90% of the lead and zinc, providing that the pH values of the collectors, which suppress Fe and As, were high.
- Following production of the oxide deposit, it was estimated that 75% of the silver in the oxide material was recovered by heap leaching.

The following subsections describe specific metallurgical testing programs undertaken in 1983 to 1987, prior to production from the Trinity mine.

13.1.1 1983 U. S. Borax Research Corp. and Hazen Research Inc.

In March-April 1983, USBRC conducted preliminary metallurgical testing on three predominantly sulfide samples and one oxidized sample of rotary drill cuttings, including cyanide leach and froth flotation testing (Smith, 1983). Silver recovery following grinding and rougher/scavenger froth flotation procedures was about 90%, with a maximum of 93% and a minimum of 72%. Cyanide leaching resulted in silver recovery of about 50%, with a high of 65% and a low of 24%; reagent consumption was high.



Later in 1983, Hazen Research, Inc. (“Hazen”) reviewed the prior test results from USBRC and proceeded with preliminary testing and a mineralogical examination of the Trinity silver mineralization (Gathje, 1983). Hazen’s test work used a sample composite prepared by Borax from rotary drill holes S-8 and S-13. The following is a summary of their conclusions:

- Bulk sulfide flotation achieved silver recoveries of 90 to 95% into a bulk concentrate assaying about 20 oz silver/ton and containing about 15-20% by weight of the feed. Corresponding lead and zinc recoveries ranged from the high 80s to low 90s percent. A typical cleaner concentrate contained 77% of the contained arsenic and assayed 1.90% arsenic.
- Selective sulfide flotation achieved a silver recovery of 84.6% into a single-stage cleaner concentrate assaying 156.8 oz silver/ton and containing 2.07% by weight of the feed. This concentrate, assaying 0.60% arsenic and containing approximately 8% of the arsenic in the feed, demonstrated the possibility of producing concentrates low in arsenic.
- Cyanide leach tests, using 2 to 10g NaCN/liter and grinds from 77 to 92% passing 270 mesh, demonstrated slow kinetics for silver dissolution. In all cases, the data show the need for leach times of at least 72 to 96 hours. At 96 hours, the cyanidation of whole ore gave silver dissolutions of 78 to 84%. The cyanidation of a bulk flotation concentrate, after regrinding, achieved a silver dissolution of 82.4% after 96 hours. Cyanide consumptions were high, presumably due to interactions between the sulfides and cyanide.

13.1.2 1983-1984 U. S. Borax Research Corp.

Following the preliminary metallurgical work showing that flotation was feasible, whereas direct cyanidation of the ore was very slow with high cyanide consumption (described in Section 13.1.1), USBRC evaluated a wider selection of rotary drill-hole composite samples with four objectives: depressing arsenic, iron, and zinc; analyzing rougher and cleaner concentrates to produce a concentrate acceptable to a smelter; investigating ways to make cyanidation feasible; and evaluating gravity separation (Woods and Smith, 1984). All of the samples contained a high amount of fines (rotary drill cuttings). Composites were developed from holes S-1, S-3, S-4, S-8, S-13, S-26, S-30, S-42, and S-45. The following is a summary of their conclusions:

- Screen fractionation and analyses showed increased silver assay with decreasing particle size down to 325 mesh; the minus 325 mesh fraction had a normal silver content. Even the coarsest fraction could not be discarded without serious silver losses.
- A bulk sample of oxidized surface rock gave Bond work index values of 7.5 kilowatt hours per short ton (“kwh/st”) (ball mill) and 5.5 kwh/st (rod mill). Due to a lack of core, no work index data could be obtained on the sulfide ore.
- Flotation of oxidized ore, representing about 20% of the deposit, gave 50-60% recovery of silver, even with use of a sulfidizer. However, this ore was amenable to direct cyanide leaching, providing 94-97% recovery of silver with moderate cyanide consumption.
- Bulk flotation of sulfide ore using a strong collector gave silver recoveries of 87-96%. Lead and zinc recoveries generally also are high, followed by arsenic and iron. Maintaining a high pH (11) during bulk flotation substantially lowered the arsenic, zinc, and iron recoveries with only a



slight effect on silver recovery. Changing to more selective collectors (Aero 325 and the Minerecs) gave much lower arsenic recovery, while silver recovery dropped to the 76-89% range.

- Two stages of cleaning can give 87% recovery of silver, with a second increment of arsenic and iron depression (pH 11). Regrinding of the intermediate rougher concentrate is beneficial.
- Cyanidation of sulfide ore directly is not practicable due to very slow leach rate, poor ultimate silver recovery, and high cyanide consumption. Finer grinding and higher initial cyanide concentration increased the leaching rate but pushed the cyanide consumption even higher.
- Pre-aeration of bulk concentrates oxidizes iron minerals, and subsequent cyanide leaching gives greatly improved results. Addition of soda ash to maintain a pH near 10 during the oxidation is beneficial.
- Heavy media sink-float experiments were not encouraging.

13.1.3 1984-1985 U. S. Borax Research Corp.

From February 1984 through December 1985, USBRC undertook extensive metallurgical testing of the Trinity oxide and sulfide ores (Ganderup and Woods, 1986). In contrast to the 1983 USBRC and Hazen studies that primarily involved rotary cuttings (Section 1.1.1), this work studied core samples from holes SC-1 through SC-5 (only ore zones running 1.5 oz silver/ton and higher were composited). This work included a study of mineralogy and determination of ore specific gravity; gravity separation; rod and ball mill grinding studies; flotation; analysis of cyanidation vs. depth; and column leaching. They also studied agglomeration, percolation, acid extraction, oxidation-reduction potential, and Merrill-Crowe silver recovery. The following are some of their conclusions:

- Rod mill and ball mill grindability tests on five sulfide core composites yielded moderate work indices, averaging 10 kwh/st; rod mill testing of four oxide composites yielded an average work index of 8.7 kwh/st.
- For five sulfide core composites, in general, silver recovery and the total weight of the flotation concentrate both increased at finer grinds; the ideal grind was around 60-65% minus 200 mesh, at finer grinds minimal improvement was seen in silver recovery.
- At a grind of 60% minus 200 mesh, the core composites averaged 93.2% recovery of silver to a concentrate containing 10.7% of the initial feed weight.
- In contrast to earlier results on rotary cuttings, three of the five sulfide core composites yielded poor rejection of arsenic (15-35%) under high pH conditions (pH 11).
- Specific gravity determinations were made on core samples taken at 50ft intervals within each hole. The mineral specific gravity (without voids) for rhyolite tuff averaged 2.61, intrusive rhyolite averaged 2.65, and argillite averaged 2.66. The rock specific gravities showed more variance for the rhyolites and averaged 2.10 for the tuff, 2.24 for the intrusive rhyolites, and 2.56 for the argillite.
- Tabling tests on ground core showed that sufficient grinding to relieve gangue locking gave unacceptable silver losses to slimes.



- Column leaching of agglomerated oxide material showed that at depth, oxide should be amenable to heap leaching, but surface oxide would require finer grinding and give lower recovery.
- Cyanidation as a function of depth for two rotary and two core holes showed a sharp break in silver recovery between oxide and sulfide material, also suggesting that direct cyanidation of upper sulfide material would not be feasible.
- Column-leach recoveries were low, and cyanide consumption was high on agglomerated sulfide material; air oxidation at ambient temperature prior to cyanidation gave only marginal improvement.
- Mineralized material from RC drill hole SR-5 was floated to produce rougher concentrate for oxidation/cyanidation studies. Recovery of 93.6% of the silver was achieved in a concentrate with 12.2% of the initial feed weight; rejection of arsenic and iron was good.

13.1.4 1986–1987 Kappes, Cassiday & Associates

In late 1986, Kappes, Cassiday & Associates (“KCA”) received five (5) core samples from the Trinity, Nevada property (SC-6 through SC-10). The core samples were assayed (gold and silver) and split to form two composites (upper and lower). These composites were utilized for head assay, bottle roll leach, NaCN/pH optimization, agglomeration and column leach test work. (Dix, 1987)

Results for the (SC-6 through SC-10) composites indicated:

- Column leach tests on agglomerated material (minus 3/4 inch) indicated an average silver recovery of 84% based on 67 days of leaching and an average calculated head of 6.86 oz silver/ton. Chemical consumption averaged 2.18 pounds of NaCN and 0.23 pounds of hydrated lime per ton of ore.
- Bottle roll leach tests on pulverized material (minus 100 mesh) indicated an average silver recovery of 94% in 24 hours of leaching, based on an average calculated head of 7.16 oz silver/ton. Chemical consumption averaged 1.14 pounds of NaCN and 1.10 pounds of hydrated lime per ton of ore.

In late 1987, KCA conducted additional test work on five additional samples from the Trinity property. These samples were identified as Mn low grade (5310', 1.3 oz/ton Ag), Drain from Cell 1&2 Composite, Drain from Cell 3 Composite, Drain from Cell 4 Composite and Drain from Cell 5 Composite. The material (minus 10 mesh) was utilized for bottle roll leach tests. Results for the bottle roll leach test work indicated silver recovery in the range of 27.3% – 52.5% based on calculated heads between 0.44 – 1.13 oz silver/ton of ore (Yernberg, 1987).

13.2 Metallurgical Testing by Liberty Silver Corp.

Liberty Silver Corp. has engaged Kappes, Cassiday & Associates to undertake additional testing of the Trinity, Nevada deposit. Future laboratory studies will include additional test work completed on new samples to verify and optimize the extractive process.



14.0 MINERAL RESOURCE ESTIMATE

14.1 Introduction

Mineral resources described in this report for the Trinity project have been estimated in accordance with standards adopted by the Canadian Institute of Mining, Metallurgy and Petroleum (“CIM”) in 2000, as amended on November 27, 2010, and prescribed by Canadian Securities Administrators’ NI 43-101 (“NI 43-101”). The modeling and estimate of the mineral resources were done under the supervision of Michael M. Gustin, a qualified person with respect to Mineral Resource estimation under NI 43-101. Mr. Gustin is independent of Liberty Silver by the definitions and criteria set forth in NI 43-101; there is no affiliation between Mr. Gustin and Liberty Silver except that of an independent consultant/client relationship. There are no Mineral Reserves estimated for the Trinity project as of the date of this report. The Trinity resources were modeled, estimated, and classified in August through December of 2010.

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 Trinity 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” (2010) and therefore Canadian National Instrument 43-101. CIM mineral resource definitions are given below:

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 diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

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 technical, economic, legal, environmental, socio-economic and governmental factors. The phrase ‘reasonable prospects for economic extraction’ implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under



realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

Inferred Mineral Resource

An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.

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 can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

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 Preliminary 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 so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches,



pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

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 of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

14.1 Resource Modeling

14.1.1 Data

A model was created for estimating the silver, lead, and zinc resources at Trinity from data generated by Borax, SFPM, and Renaissance between 1982 and 2007, including geologic mapping, core, rotary percussion and RC drill data, and project topography derived from a 1988 final pit map and USGS digital elevation data. These data were incorporated into a digital database using Nevada State Plane West Zone and the NAD27 datum. All units are in feet. All modeling of the Trinity resources was performed using Gemcom Surpac[®] mine planning software.

It is important to note that the project database includes a significant amount of data from holes drilled beyond the limits of the lands controlled by Liberty Silver. From an estimation standpoint, these holes provide data that are critical to the estimation of the resources controlled by Liberty Silver, as modeling of the entire deposit is needed to properly estimate any subset of the mineralization. Similarly, drill data that lies within the existing pit, which has since been mined, were also used in the modeling. Only resources that lie within the property controlled by Liberty Silver and that lie outside of the pit limits are reported herein.

In addition, although the blast hole data from the mining during the 1980's was loaded into the drill hole database, it was not used in this resource estimation.

14.1.2 Deposit Geology Pertinent to Resource Modeling

There are two primary controls on mineralization at Trinity. In the vicinity of the existing pit, mineralization is controlled by a northeast-trending normal fault zone that dips steeply to the northwest. Mineralization dissipates in the hanging wall of the fault zone, but there is substantial continuity in the footwall to the southeast and east. The footwall mineralization is primarily within rhyolite units, but generally follows the contact with the underlying Mesozoic meta-sedimentary rocks. Both the rhyolites and older sedimentary rocks are offset by a series of normal faults that strike primarily to the northeast and dip steeply to the northwest. Some of these normal faults may be cross faults that strike to the west-northwest. Although some of the mineralized zones may be offset by these normal faults, this Inferred resource study was not sufficiently detailed to model those offsets.



14.1.3 Geologic and Oxidation Modeling

MDA entered the principal rock types into the drill-hole database, but ultimately the contact between the Tertiary volcanic rocks and underlying Auld Lang Syne Group was the only significant lithologic control on mineralization that was identified on a set of cross sectional interpretations completed by MDA. Mapped faults (Ashleman (1983) were projected from the surface and used to help interpret offsets in the Triassic/Tertiary contact. While it is likely that there are additional lithological and local structural controls, there are many inconsistencies in the geological drill-hole logs that would need to be resolved before these could be defined accurately. In addition, logging of alteration related to mineralization, especially silicification, was found to be very inconsistent.

The oxide/sulfide boundary was logged in many of the drill holes, and MDA used these data to model this boundary as an undulating surface. If it was not noted in the log, the oxide/sulfide boundary was interpreted as the first consistent appearance of sulfide, even if small amounts of iron oxide staining were noted on the logs.

14.1.4 Density

After reviewing the available density data, Baele and Pelletier's (1989) bulk tonnage factor of 13.3ft³/ton was selected for use in the modeling of both the oxide and sulfide material.

14.1.5 Silver, Lead, and Zinc Modeling

The Trinity mineral resources were modeled and estimated by:

- 1) Statistically evaluating the drill-hole data to determine silver, lead, and zinc mineral domains;
- 2) Interpreting the mineral domains in cross section at 100ft spacings;
- 3) Analyzing the modeled domains geostatistically to determine estimation parameters; and
- 4) Interpolating grades into a three-dimensional block model.

Mineral Domains. MDA modeled the Trinity silver, lead, and zinc mineralization by interpreting mineral-domain polygons on vertical N40E-looking cross sections that span the extents of the deposit. A mineral domain is a natural grade population of a metal that occurs in a specific geologic environment. In order to define the mineral domains at Trinity, the natural populations were identified on quantile graphs that plot the silver, lead, and zinc grade distributions of the drill-hole assays. This analysis led to the identification of low, medium, and high-grade populations for each metal (Table 14.1). Ideally, each of these populations can be correlated with specific geologic characteristics that are captured in the project database to aid in the definition of the mineral domains.



Table 14.1 Trinity Mineral Domains

Domain	Ag_ppm	Pb_ppm	Zn_ppm
100	~6 to ~25	~100 to ~1,000	~300 to ~1,500
200	~25 to ~650	~1,000 to ~6,000	~1,500 to ~7,000
300	>~650	>~6,000	>~7,000

A total of 40 cross sections spaced at 100ft intervals across the deposit were used for the modeling of the Trinity mineral domains. The drill-hole traces, topographic profile, top of the Triassic sedimentary rocks, interpreted fault surfaces, and the oxide/sulfide boundary were displayed on the sections, with silver, lead, and zinc assays (colored by the grade domain population ranges defined above) and lithologic codes plotted along the drill-hole traces. These data were used as the base for MDA's interpretations of the mineral domains. Mineral-domain envelopes were interpreted on the sections to more-or-less capture assays corresponding approximately to each of the defined grade populations. Representative cross sections showing silver, lead, and zinc mineral-domain interpretations are shown in Figure 14.1, Figure 14.2, and Figure 14.3, respectively.

The mineral domains were interpreted through the volume now occupied by the open pit. The highest grade silver domain is confined to the vicinity of the open pit and extends up to 50ft below the bottom of the pit. This 650 ppm Ag domain is controlled by the northeast trending, northwest dipping fault zone. This silver domain is enclosed by a lens of the 6000 ppm lead domain. The high grade silver zone is not enclosed by a higher grade (7000 ppm) zinc zone. The 25 to 650 ppm Ag domain encloses high grade silver domain but is not nearly as controlled by the northeast fault zone. To the southeast and northeast of the pit, this silver domain flattens out. It is confined to the rhyolites but parallels the contact with the Triassic rocks.

The low grade (100 to 1000 ppm) lead domain encloses all of the silver domains and is generally steep dipping along the northeast fault zone and flat dipping to the south and northeast of the pit. There are higher grade zones south of the pit that may or may not enclose elevated silver zones (greater than 25 ppm Ag). The lead and silver zones do not appear to be affected by the oxide sulfide boundary, but the zinc is partially leached from the oxide zone and most all of the high grade (greater than 7000 ppm Zn) domains are below the oxide/sulfide surface. There are higher-grade zinc lenses along the northeast fault zone, but these are entirely below the pit.



Figure 14.1 Cross Section 2800 Showing Silver Mineral Domains
(Looking N40E)

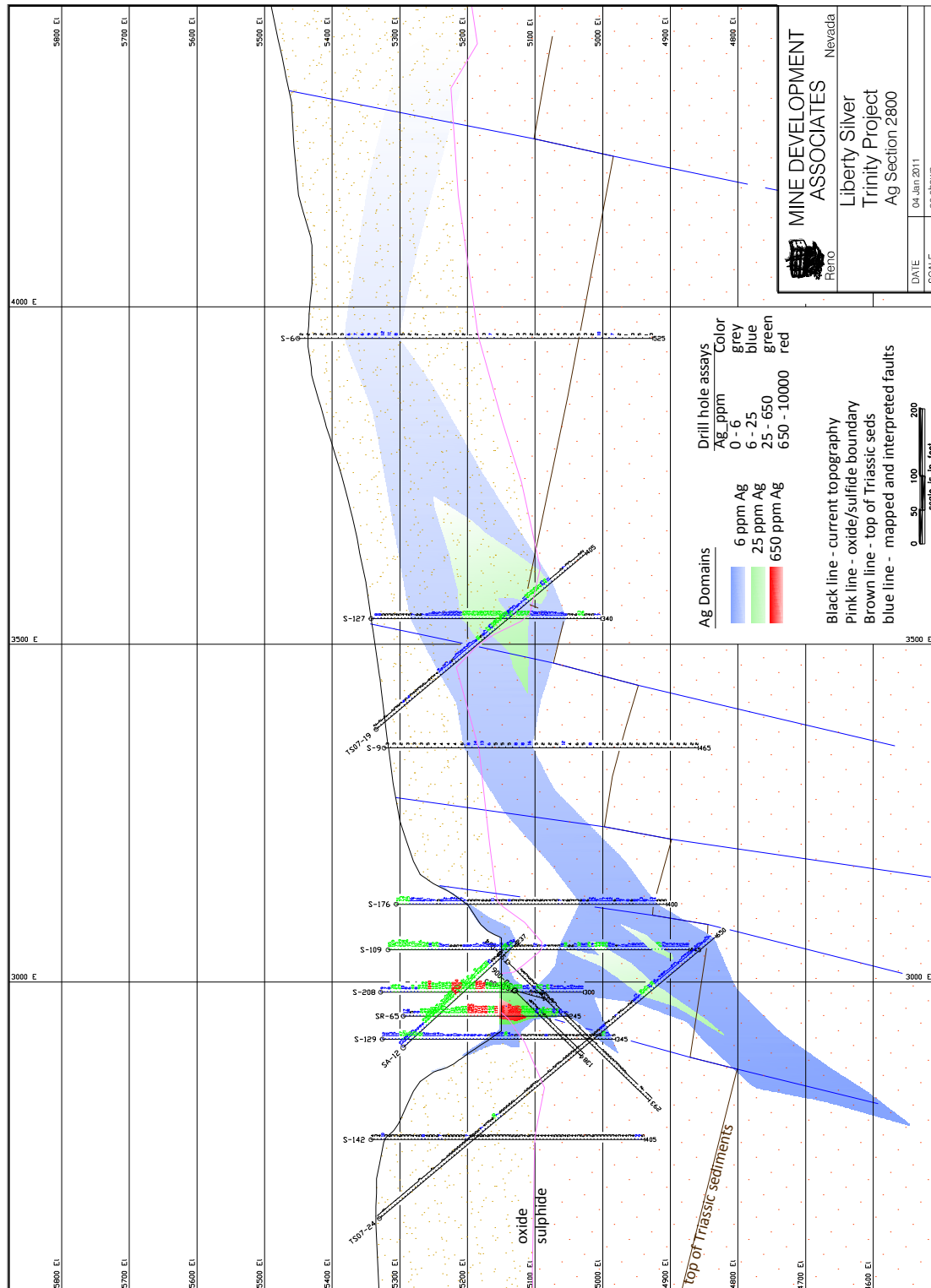




Figure 14.2 Cross Section 2800 Showing LeadMineral Domains
(Looking N40E)

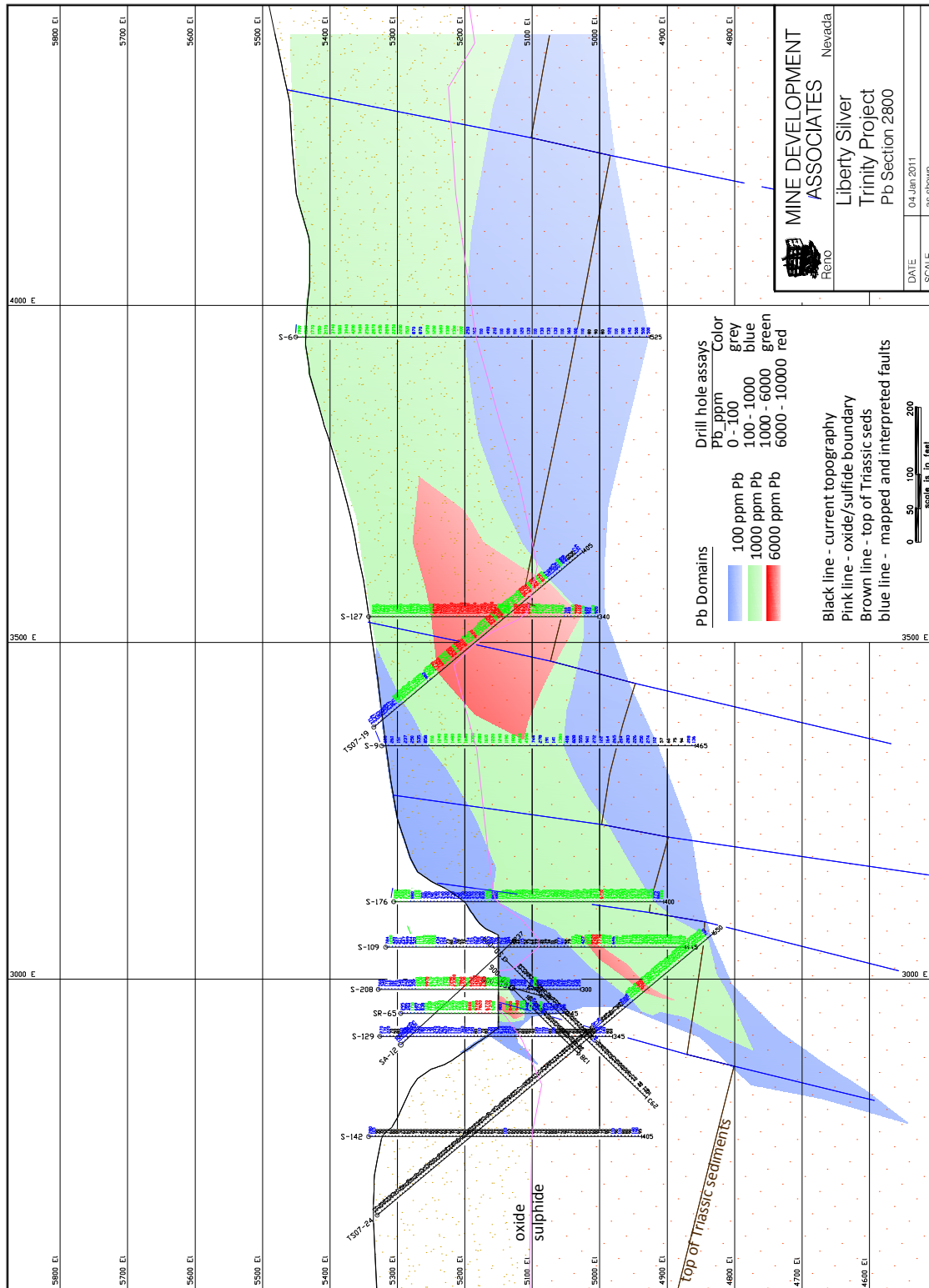
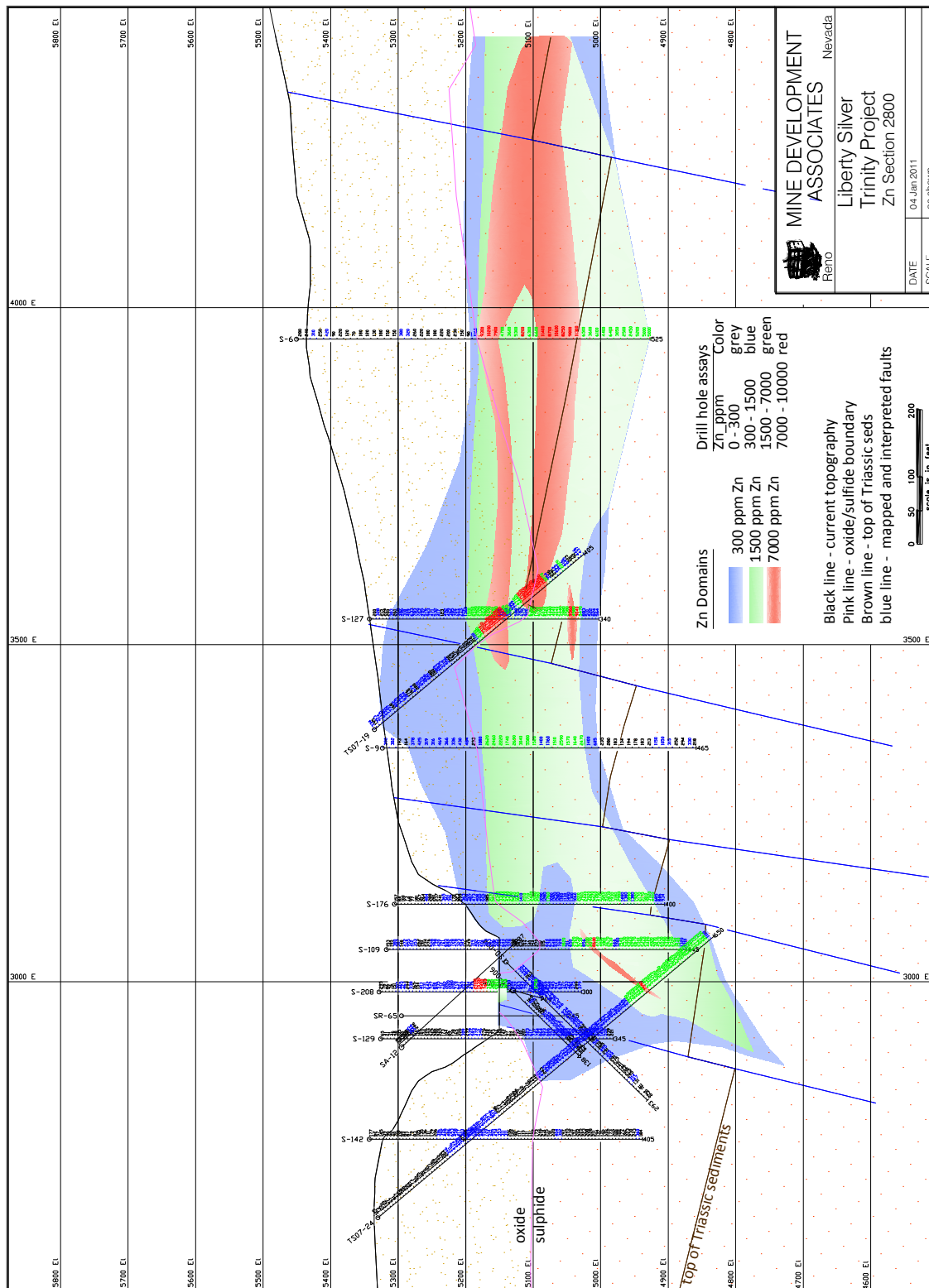




Figure 14.3 Cross Section 2800 Showing Zinc Mineral Domains
(Looking N40E)





Assay Coding, Capping, and Compositing. Drill-hole silver, lead, and zinc assays were coded to their domains by the sectional mineral-domain envelopes. Descriptive statistics of the coded assays are provided in Table 14.2 for silver, Table 14.3 for lead, and Table 14.4 for zinc.

Table 14.2 Descriptive Statistics of Coded Silver Assays

Domain	Assays	Count	Mean	Median	Std. Dev.	CV	Minimum	Maximum
100	Ag_ppm	8640	12.1	10.6	8.0	0.66	0.0	313.4
	Ag_ppm_cap	8640	12.1	10.6	6.9	0.57	0.0	75.0
200	Ag_ppm	4350	72.7	46.6	73.7	1.01	0.4	629.8
	Ag_ppm_cap	4350	72.7	46.6	73.3	1.01	0.4	550.0
300	Ag_ppm	132	801.5	620.0	524.0	0.65	16.3	3003.4
	Ag_ppm_cap	132	792.1	620.0	489.6	0.62	16.3	2350.0
All	Ag_ppm	13122	39.6	15.1	105.1	2.66	0.0	3003.4
	Ag_ppm_cap	13122	39.4	15.1	102.6	2.60	0.0	2350.0

Table 14.3 Descriptive Statistics of Coded Lead Assays

Domain	Assays	Count	Mean	Median	Std. Dev.	CV	Minimum	Maximum
100	Pb_ppm	9520	405.9	267.0	443.8	1.09	10.0	20110.0
	Pb_ppm_cap	9520	405.5	267.0	434.2	1.07	10.0	6000.0
200	Pb_ppm	5356	2055	1710.0	1364.7	0.66	11.1	13100.0
	Pb_ppm_cap	5356	2053.2	1710.0	1352.4	0.66	11.1	10000.0
300	Pb_ppm	939	7415.7	6600.0	4618.0	0.62	15.8	40100.0
	Pb_ppm_cap	939	7406.3	6600.0	4559.6	0.62	15.8	33000.0
All	Pb_ppm	15815	1378.6	599.0	2196.3	1.59	10.0	40100.0
	Pb_ppm_cap	15815	1377.2	599.0	2183.9	1.59	10.0	33000.0

Table 14.4 Descriptive Statistics of Coded Zinc Assays

Domain	Assays	Count	Mean	Median	Std. Dev.	CV	Minimum	Maximum
100	Zn_ppm	6119	675.6	531.0	541.7	0.80	17.0	19100.0
	Zn_ppm_cap	6119	672.6	531.0	486.7	0.70	17.0	4200.0
200	Zn_ppm	3197	2762.2	2300.0	1693.8	0.60	17.5	12400.0
	Zn_ppm_cap	3197	2690.0	2300.0	1665.2	0.60	17.5	9000.0
300	Zn_ppm	744	9443.5	8860.0	5295.1	0.60	400.0	86000.0
	Zn_ppm_cap	744	9343.4	8860.0	4464.4	0.50	400.0	27000.0
All	Zn_ppm	10060	1992.7	900.0	2932.4	1.50	17.0	86000.0
	Zn_ppm_cap	10060	1981.3	900.0	2795.7	1.40	17.0	27000.0



The process of determining assay caps began with inspection of quantile plots of the coded assays by domain to assess the mineral-domain populations and identify possible high-grade outliers that might require capping. Descriptive statistics of the coded assays by domain and visual reviews of the spatial relationships of the possible outliers and their potential impacts during grade interpolation were also considered in the process of determining appropriate assay caps. The caps are tabulated below for silver, lead, and zinc (Table 14.5, Table 14.6, and Table 14.7, respectively). The effects of the assay capping can be qualitatively evaluated by examination of the descriptive statistics of the mineral-domain assays (Table 14.2, Table 14.3, and Table 14.4).

Table 14.5 Trinity Silver Assay Caps

Domain	Ag_ppm Cap	Count	Number Capped	Percent of Samples
100	75	8640	10	0.12%
200	550	4350	8	0.18%
300	2350	132	2	1.52%

Table 14.6 Trinity Lead Assay Caps

Domain	Pb_ppm Cap	Count	Number Capped	Percent of Samples
100	6000	9520	4	0.04%
200	10000	5356	4	0.07%
300	33000	939	2	0.21%

Table 14.7 Trinity Zinc Assay Caps

Domain	Zn_ppm Cap	Count	Number Capped	Percent of Samples
100	4200	6119	7	0.11%
200	9000	3197	19	0.59%
300	27000	744	5	0.67%

The capped assays were composited down-hole by domain at 10ft intervals intervals (Table 14.8, Table 14.9, and Table 14.10). In the silver analyses, about 3% of the analytical intervals were 10-foot samples, and 97% were 5-foot intervals. Approximately 80% of the analytical intervals for lead and silver represented 5 foot samples with most of the remainder 10 foot intervals.



Table 14.8 Descriptive Statistics of Trinity Silver Composites

Domain	Count	Mean (Ag_ppm)	Median (Ag_ppm)	Std. Dev.	CV	Min (Ag_ppm)	Max (Ag_ppm)
100	4640	12.19	10.99	5.98	0.49	0.66	75
200	2362	71.5	47.5	65.83	0.92	0.36	506
300	76	790.1	652.6	431.7	0.55	25.3	2336
All	7078	40.3	15.6	101.7	2.52	0.36	2336

Table 14.9 Descriptive Statistics of Trinity Lead Composites

Domain	Count	Mean (Pb_ppm)	Median (Pb_ppm)	Std. Dev.	CV	Min (Pb_ppm)	Max (Pb_ppm)
100	5072	406.9	279	399.1	0.98	13.8	6000
200	2937	2053.2	1755	1245.2	0.61	29.2	10000
300	507	7409.7	6890	3944.6	0.53	21.3	25400
All	8516	1391.6	622.5	2107.3	1.51	13.8	25400

Table 14.10 Descriptive Statistics of Trinity Zinc Composites

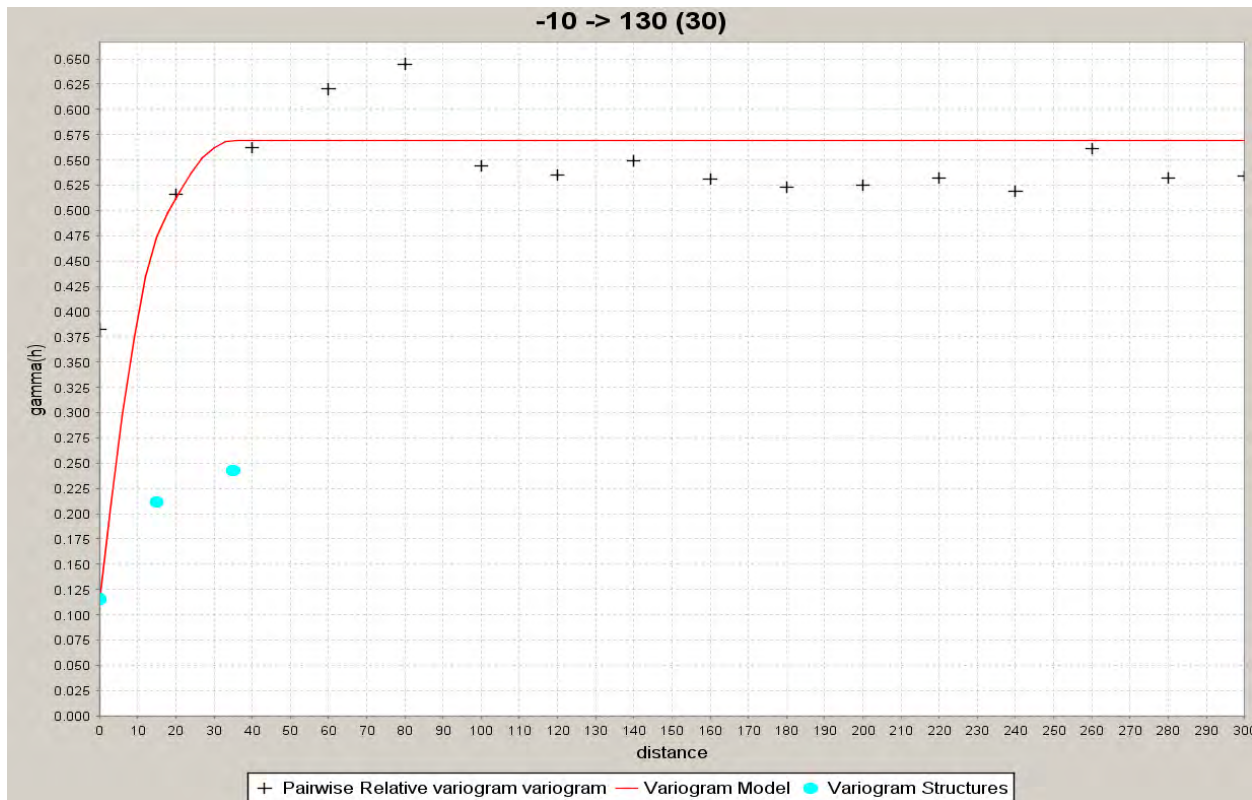
Domain	Count	Mean (Zn_ppm)	Median (Zn_ppm)	Std. Dev.	CV	Min (Zn_ppm)	Max (Zn_ppm)
100	3256	675.6	549.5	441.8	0.65	27.5	4200
200	1661	2697.5	2360	1469.6	0.54	27.1	8605
300	412	9391.6	8902.5	4022.9	0.43	400	27000
All	5329	1979.7	915	2736.9	1.38	27.1	27000

Block Model Coding. Solids were created by extruding the 100ft spaced sectional mineral-domain polygons half way to the adjacent sections. These solids were used to code a three-dimensional block model comprised of blocks 20 feet in width, 20 feet in length, and 15 feet in height. The model bearing is rotated so that the “x” direction is N40°E, matching the orientation and view of the cross sections. In order for the block model to better reflect the irregularly shaped limits of the various silver, lead, and zinc domains, as well as to explicitly model dilution, the percentage volume of each mineral domain within each block is stored (the “partial percentages”). The percentage of each block that lies below the topographic surface, as well as above and below the oxide/sulfide surface, is also stored.

Grade Interpolation. A variographic study was performed using the silver, lead, and zinc composites from each mineral domain, collectively and separately, at various azimuths, dips, and lags. The variogram in Figure 14.4 is fairly typical of the dip direction (10° dip at azimuth 310°) and strike (040° azimuth) variograms for all three metals. The ranges varied between 30 and 60 feet.



Figure 14.4 Trinity Variogram



Since the average drill-hole spacing is closer to 100 feet and this is an Inferred resource estimate, only nearest neighbor and inverse distance interpolations were used to estimate grades into the block model. Table 14.11 and Table 14.12 summarize the estimation parameters.

Table 14.11 Search Ellipse Orientations

Search Ellipse Orientation			
Estimation Domain	Major Bearing	Plunge	Tilt
100, 200, 300	040°	0°	10°

Table 14.12 Summary of Trinity Estimation Parameters

Estimation Parameters: Ag, Pb, & Zn Domains 100, 200, 300							
Estimation Pass	Search Ranges (m)			Comp Constraints			
	Major	S-Major	Minor	Min	Max	Max/hole	Min Holes
1	120	120	40	1	18	3	1
2	500	500	500	1	18	3	1



The major and semi-major axes of the search ellipses approximate the average dip directions of the silver, lead, and zinc mineralization. The first-pass search distances take into consideration drill-hole spacing. The second pass was designed to estimate grade into all blocks coded to the mineral domains that were not estimated in the first pass. Grades were interpolated using inverse distance to the third power and nearest-neighbor methods. The mineral resources reported herein were estimated by inverse-distance interpolation.

The two 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 and un-modeled waste stored in the blocks to enable the calculation of a single weight-averaged block-diluted grade for each block.

14.2 Trinity Inferred Mineral Resources

The Trinity project oxidized silver mineral resources are listed in Table 14.13 using a cutoff grade of 0.65 oz Ag/ton. This cutoff was chosen to capture mineralization potentially available to open-pit extraction and heap-leach processing, and it was derived using a \$17 per ounce silver price (three-year average) and a 75% heap-leach recovery factor.

Table 14.13 Trinity Inferred Mineral Oxide Resources

Cutoff (oz Ag/ton)	Inferred Oxide Resources		
	Tons	oz Ag/ton	oz Ag contained
0.30	12,019,000	0.54	6,490,000
0.40	5,506,000	0.78	4,295,000
0.50	2,863,000	1.1	3,149,000
0.65	1,901,000	1.37	2,605,000
1.00	1,019,000	1.87	1,906,000
2.00	203,000	4.08	828,000

Unoxidized silver, lead, and zinc mineral resources are listed in Table 14.14 using a silver-equivalent cutoff grade of 1.3 oz Ag/ton, chosen to reflect potential open-pit mining, milling, and production of concentrates by flotation. The cutoff assumes 90% recovery by flotation of the silver, lead, and zinc, and metal prices of \$17 per ounce for silver and \$0.80 per pound for both lead and zinc. The cutoff envisions potential mining by open-pit methods. Metallurgical data, summarized in Section 13.0, suggest that the expected recoveries of the three metals are similar.



Table 14.14 Trinity Inferred Mineral Sulfide Resources

Cutoff (oz/ton Ag equiv)	Inferred Sulfide Resource				
	Tons	oz Ag/ton	% Pb	% Zn	oz Ag
1.00	8,408,000	1.27	0.23%	0.43%	10,691,000
1.20	6,113,000	1.56	0.25%	0.43%	9,539,000
1.30	5,336,000	1.69	0.25%	0.43%	9,036,000
1.50	4,119,000	1.97	0.26%	0.42%	8,100,000
2.00	2,288,000	2.70	0.30%	0.37%	6,170,000
3.00	902,000	4.14	0.32%	0.33%	3,731,000

The block-diluted resources reported in Table 14.13 and Table 14.14 are tabulated at additional cutoffs in order to give grade-distribution information, as well as to provide for economic conditions other than those envisioned by the chosen resource cutoffs. Only modeled mineralization that lies within the Liberty Silver property is reported. The pre-mining deposit was modeled and estimated, after which the mined-out material was removed to allow for reporting of the present-day resources.

At low grades, there is a significant increase in contained silver ounces. Although silver and lead grades increase with increasing cutoffs, as expected, zinc grades actually decrease at the higher cutoffs.

The Trinity resources are classified entirely as Inferred due to: (1) the simplistic sectional modeling method; (2) suspect USBRC AA data that dominate the data used in the resource modeling; (3) lack of backup data that could be used to verify the historic conventional rotary, RC, and core drill-hole data; and (4) limited amount of density data.

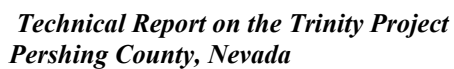
The following checks of the Trinity resource model were completed:

- Cross sections showing the mineral domains, drill-hole assays, geology, topography, sample coding, and interpolated inverse-distance block grades were reviewed for reasonableness;
- A comparison against the total mineral inventory estimated by Paul Hartley in 2006 showed that this current Inferred resource is within 4% of the tonnage and 6% of the total silver ounces estimated in 2006;
- Volume checks between the extruded sections and block model domain values were essentially identical;
- A nearest-neighbor interpolation was completed for comparisons with the inverse-distance results; at a zero cutoff grade, there was a 0.23% difference in the grade of the inverse distance and nearest neighbor estimates for silver, a 3.3% difference in lead, and 0.94% difference in the zinc;
- Population distribution plots of assays, composites, and block model grades were evaluated and found to be reasonable; and



- A total of 1.01 million tons grading 5.8 oz/ton Ag modeled to lie within the existing open pit. This compares with the reported production of approximately 1.1 million tons of 6 oz/ton Ag.

Representative cross sections showing silver, lead, and zinc blocks, colored to reflect their respective mineral-domain grade ranges, are shown in Figure 14.5, Figure 14.6, and Figure 14.7, respectively.



MINE DEVELOPMENT ASSOCIATES
 Nevada
 Liberty Silver
 Trinity Project
 Ag Section 2800

Block Model Colors
 Ag_ppm Color
 0 - 6 grey
 6 - 25 blue
 25 - 650 green
 650 - 10000 red

0 50 100 200

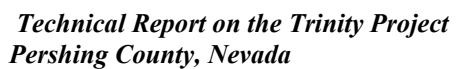
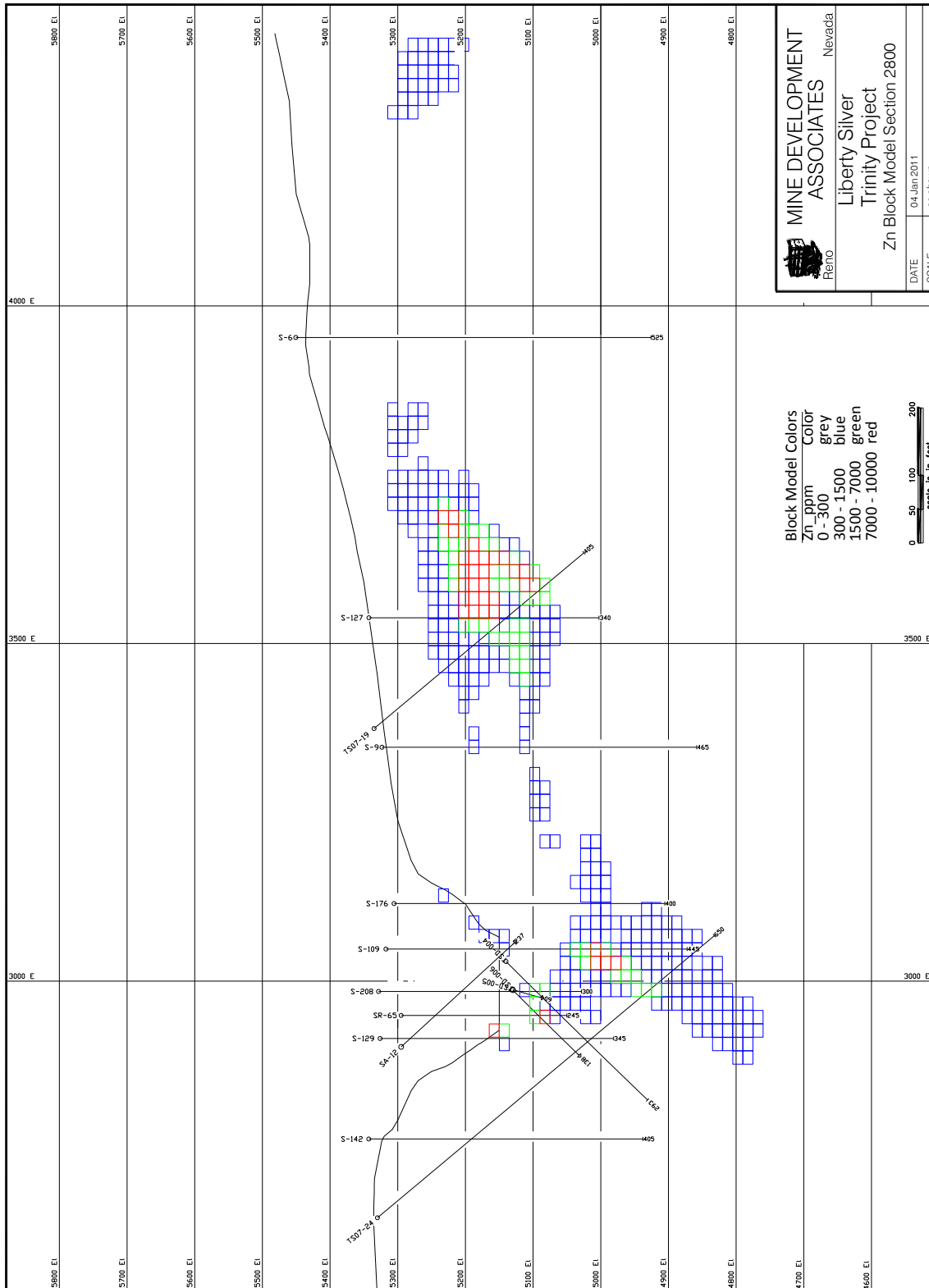
[illegible]



Figure 14.7 Cross Section 2800 Showing Block Model Zinc Grades
(Looking N40E)





15.0 ADJACENT PROPERTIES

MDA is not aware of any activity on adjacent properties that is relevant to this report.



16.0 OTHER RELEVANT DATA AND INFORMATION

There is no remaining infrastructure related to the 1987-1989 mining operations conducted on the property.



17.0 INTERPRETATION AND CONCLUSIONS

MDA completed a comprehensive review of Liberty project data, including the drill-hole database. The review included a field visit to the project site. Based on this review, two primary controls on the silver, lead, and zinc mineralization were identified and used to model the mineral domains. Mineralization is controlled by (1) a northeast-trending zone of normal faults, the primary one being along the axis of the pit, and (2) the contact between the underlying Triassic sedimentary rocks and overlying Tertiary rhyolitic volcanic rocks, creating a tabular, slightly northwest-dipping, zone. The bulk of this low-angle tabular zone is in the rhyolites.

Silver mineralization at Trinity occurs as oxidized and unoxidized sulfides in veinlets, as fracture-controlled mineralization, and as disseminated mineralization primarily within Tertiary rhyolite porphyry, aphanitic rhyolite, and volcanoclastic rocks. There is an oxide zone that overlies sulfide mineralization.

Between 1982 and 1985, 273 rotary percussion and reverse-circulation holes were drilled by Borax to explore and define the Trinity mineralization. The bulk of the silver, lead, and zinc analyses were completed by Borax. A review of the QA/QC data collected between 1982 and 1985 identified inconsistencies with the Borax results and check analyses. The check analyses by commercial laboratories are not within acceptable ranges. Twinning of at least some of the early drill holes is required to compare verifiable analyses with the Borax values.

The oxide portion of the Trinity silver deposit was mined by a joint venture of Borax and SFPM from September 1987 to August 1988, with leaching continuing into 1989. During that time, the mine produced about five million ounces of silver from about 1.1 million tons of oxidized ore grading six ounces of silver per ton. Mining ceased when sulfide mineralization was encountered. Although metallurgical testing on the sulfide mineralization indicated there was potential to recover silver, lead, and zinc, metal prices were too low at that time to support mining of the sulfide mineralization.

Liberty Silver provided MDA with a project drill-hole database consisting of information derived from 199 rotary percussion holes, 97 reverse circulation holes, and 10 core holes. These holes were drilled by Borax, Santa Fe Pacific Mining, and Renaissance. MDA completed and checked the analytical portion of the database and entered a standardized general lithologic coding into the database. The oxide and sulfide mineral resources reported herein were estimated using this database.

The resources reported herein are entirely classified as Inferred. Although grades and tons are felt to be reasonably reflective of the project data, the cross sections that controlled the estimate are 100 feet apart, and the spatial distribution of the mineralization is not sufficiently understood to allow for higher resource categorization. In addition, there is a question about the accuracy of the US Borax analyses, which dominate the project database, that can only be addressed by twinning at least some of the 1982 to 1985 holes.

The oxide silver resources are tabulated at a cutoff grade of 0.65 oz Ag/ton. Inferred oxide resources total 1.9 million tons averaging 1.37 oz/ton Ag (2,605,000 ounces). The Inferred sulfide resources are tabulated at a cutoff grade of 1.30 oz/ton Ag equivalent. The sulfide resources totaled 5.3 million tons, averaging 1.69 oz/ton Ag (9,036,000 ounces), 0.25% Pb, and 0.43% Zn.



Trinity is considered to be a property of merit. There is an oxide resource that may be amenable to open pit mining and heap leaching, as well as a larger sulfide resource that may be amenable to open pit mining and the production of a concentrate by flotation. In addition, the large area of geochemically anomalous lead and zinc encountered in the drilling is suggestive of an intrusive-related system that has not been systematically explored, especially to the south of Section 9.



18.0 RECOMMENDATIONS

There are a number of questions that need to be answered in the next phase of work at Trinity to advance the project.

- 1) What recoveries can be expected from the lower-grade oxide silver mineralization?

Although there is higher-grade, multi-ounce silver mineralization along the main northeast-trending fault zone beneath the pit, at the southwest end of the pit, and 600 feet to the northeast of the pit, the bulk of the silver ounces modeled by MDA are in the low-grade halo that surrounds this fault and in tabular zones to the southeast of the fault. This is true for both the remaining oxide and most of the sulfide mineralization.

Previous cyanide-leach test work has been primarily directed towards higher-grade oxide samples. MDA believes test work on lower-grade oxide material (0.3 to 1.0 oz Ag/ton) is needed and recommends that the testing program be planned in concert with metallurgical experts. Large-diameter core drilling should be used to obtain samples for the metallurgical test work. Density measurements should also be completed on the core samples.

- 2) How feasible is it to produce a saleable silver/lead/zinc concentrate from the sulfide mineralization?

The economics of mining the low-grade sulfide mineralization hinge on producing a saleable silver, lead, and zinc concentrate. Many of the same core holes that are drilled for oxide metallurgical testing should be deepened to obtain sulfide metallurgical test samples.

- 3) How reliable are the old USBRC silver analyses and can they be used to advance the Inferred resource into Measured and Indicated categories?

To upgrade the Inferred resources, the reliability of the early USBRC analyses for all three metals must be addressed since more than 80% of the analyses used to estimate the resources are USBRC analyses. MDA recommends twinning 12 of the USBRC-analyzed holes, with the goal of providing a statistically viable comparative data set. Dry reverse-circulation drilling can be used for the twin program, although preferably most or all of the metallurgical core holes could also be used to twin the USBRC holes. Additional holes may be required after the initial phase of twinning, depending on the results.

- 4) What are the continuity and grades of silver, lead, and zinc mineralization to the south of the pit, and are there additional higher-grade zones similar to the one in the area of the pit?

In addition to the twinning program, there are several outlying areas of mineralization that warrant further drilling. These areas are partially within the Inferred resource, but the mineralized zones are only defined by one to three holes. Some of these poorly defined zones lie in the northeast quarter of Section 16 and the southeast quarter of Section 9, all south of the pit. This drilling should also help to define the southwesterly limits of mineralization. Current drill-hole spacing is 300 to 500



feet apart in this area. Additional higher-grade oxide zones may also be present in these areas, perhaps along structures that parallel the mineralized fault along the axis of the pit.

The mineralization in the hanging wall of the fault along the axis of the pit is reasonably well defined, and therefore no additional drilling is required northwest of the pit. The down-dip extent along the pit fault mineralization holds some potential, but the deepest holes have tested the zone at a depth of 750 feet below the surface. Although drill-hole spacing at this depth is only about 400 feet, the mineralized zones are much narrower and no deep drilling is recommended in this phase.

There are inconsistencies in the 1982 through 1992 drill-hole lithologic logging. Additional work should be completed to determine if lithologies and alteration can be standardized. This might aid in further refining the controls on mineralization, in addition to better defining the contact between Tertiary volcanic rocks and Triassic sedimentary rocks and the main northeast fault.

5) What are the updated Measured, Indicated, and Inferred resources?

Following the completion of the work outlined above, the resource model should be updated.

6) What is the preliminary economic viability of these resources?

Based on the new metallurgical work and resource model, a preliminary economic assessment is recommended to determine the economic viability of this project.

Table 18.1 summarizes the above recommendations with estimated costs.

Table 18.1 Estimated Costs of Trinity Program

Item	Estimated Cost
Core Drilling (PQ size) for Metallurgical Test Samples (~2500 feet)	\$ 250,000
RC Twin Drilling and Assaying (~6,000 feet)	210,000
RC Definition and Stepout Drilling and Assaying (~30,000 feet)	1,045,000
Density Determinations and Metallurgical Test Work	180,000
Updated Resource Modeling	75,000
Preliminary Economic Assessment	40,000
<i>Total</i>	<i>US \$1,800,000</i>

Additional exploration targets on the property are at an early stage. They are mostly geophysical and conceptual geological and geochemical targets. They were not thoroughly assessed by MDA and are not considered in any detail in this report.



19.0 REFERENCES

- Anonymous, 1988, *Preliminary evaluation of silver sulfide mineral deposit, Trinity project, Pershing County, Nevada*: Internal U. S. Borax memorandum, 33 p.
- Appold, M., and Muntean, J., 1993 (January), *Results of isotopic analyses from the Trinity silver mine*: Report prepared for Santa Fe Pacific Mining, Inc., 26 p.
- Ashleman, J. C., 1984, *Trinity silver project 1982-1983 progress summary report*: U. S. Borax and Chemical Corporation internal report no. EX 84-10, 88 p.
- Ashleman, J. C., 1987, *Trinity venture project, 1986 summary report*: U. S. Borax and Chemical Corporation internal report no. EX 87-3, 30 p.
- Ashleman, J. C., 1988, *The Trinity silver deposit, Pershing County, Nevada*, in *International meeting on gold exploration; techniques, concepts and problems*: Field Trip Guide 2, Precious Metal Deposits of Northwestern Nevada, p. 18-23.
- Ashleman, 1989 (May 25), *Trinity project – 1989, ore reserve calculations*: U. S. Borax interoffice correspondence, 3 p.
- Baele, S. M., and Pelletier, S. C., 1989 (May 30), *Silver reserve estimation, Trinity silver project, Pershing County, Nevada*: U. S. Borax and Chemical Corporation internal report no. MD 89-1, 17 p. plus appendices.
- Coolbaugh, M., 2007 (December 21), *Preliminary review of core vs. reverse circulation assays at Trinity Ag*: Internal AuEx Ventures memorandum, 2 p.
- Coolbaugh, M., 2009a (May 17), *Potential byproducts of mining sulfides at Trinity Ag*: Internal AuEx Ventures memorandum, 2p.
- Coolbaugh, M., 2009b (Revised May 26), *Revised progress report, grade-thickness of silver equivalents at Trinity Ag*: Internal AuEx Ventures memorandum, 2 p.
- Dix, R. B., 1987 (March 28), *Trinity property core composites cyanide leach tests*: Report prepared for U. S. Borax Research by Kappes, Cassiday & Associates, 29 p.
- Dyer, T. L., and Prenn, N., 2008 (April 14), *Pit optimization for the Trinity deposit*: Report prepared for AuEx Ventures by Mine Development Associates, 5 p.
- Ekins, G., 2011a (January 5), *Trinity silver project title review, Seka, TS, and ELM lode claims, 9 sections of fee lands, Pershing County, Nevada*: Title Review Report 2010-22-TR prepared for Liberty Silver Corporation by G.I.S. Land Services, 16 p.
- Ekins, G., 2011b (January 11), *Trinity silver project title review, Seka, TS, and ELM lode claims, 9 sections of fee lands, Pershing County, Nevada*: Title Review Report 2010-22-TR prepared for Liberty Silver Corporation by G.I.S. Land Services, 3 p.



- Ekins, G., 2011c (August 5), *Trinity silver project title review, the “XXX” lode claims, Pershing County, Nevada*: Title Review Report 2011-22-TRA prepared for Liberty Silver Corporation by G.I.S. Land Services.
- Ganderup, K. R., 1986 (May 27), Letter regarding potential processing of Trinity silver ore from U. S. Borax Research Corp. to U. S. Borax and Chemical Corp., 7 p.
- Ganderup, K. R., and Woods, W. G., 1986 (March 18), *Trinity silver metallurgy – tabling, specific gravity, grinding, and flotation of core; direct cyanidation of ore, February 1984 – December 1985*: U. S. Borax Research Corporation report no. CR 86-1, 28 p. plus appendices.
- Gathje, J. C., 1983 (July 19), *Metallurgical investigation of a Nevada silver ore*: Report prepared by Hazen Research, Inc. for U. S. Borax Research Corp., 25 p. plus appendices.
- Hartley, P., 2007 (June 5), *Summary on work completed for AuEx on the Trinity silver project, Pershing County, Nevada*: Report prepared for AuEx Ventures by Mine Development Associates, 7p.
- Hartley, P. D., Gustin, M. M., and Kappes, D. W., 2011 (February 22), *Technical report on the Trinity project, Pershing County, Nevada*: Report prepared by Mine Development Associates for Liberty Silver Corp. and Renaissance Gold Inc., 103 p.
- Hendrickson, R. E., 1985 (November 1), *Monthly report – October 1985*: Internal Santa Fe Pacific Mining memorandum, 10 p.
- John, D., and Muntean, J., 2006, *Summary of characteristics of Tertiary metallic mineral deposits in the Lovelock area, northwestern Nevada, in Geology and mineral resources of the Trinity, Seven Troughs, and Kamma Ranges, west-central Nevada, 2006 spring field trip guidebook*: Geological Society of Nevada Special Publication no. 42, p. 60-69.
- Johnson, M. G., 1977, *Geology and mineral deposits of Pershing County, Nevada*: Nevada Bureau of Mines and Geology Bulletin 89, 115 p.
- Leonard, F. A., Baele, S. M., and Ellingsen, R. B., 1986 (September 30), *Screening evaluation, Trinity silver project, Pershing County, Nevada*: United States Borax & Chemical Corporation Internal Report No. MD 86-3, 76 p.
- Lide, C. S., 1991 (March 7), *Trinity IP data*: Correspondence to Santa Fe Pacific Mining, Inc. from Great Basin Geophysical, Inc., 1 p. plus attachments.
- Muntean, J. L., 1992 (April 29), *Summary report on the Trinity project*: Internal Santa Fe Pacific Mining, Inc. report, 10 p. plus maps.
- Nevada Bureau of Mines and Geology, 1994, *The Nevada mineral industry – 1994*: Nevada Bureau of Mines and Geology Special Publication MI-1994, 57 p.
- Ostrander, A., 1990 (August 17), *CSAMT survey interpretation and final report, Trinity prospect, Pershing County, Nevada*: Report prepared for Santa Fe Pacific Mining, Inc., 4 p. plus attachments.



- Reim, K. M., 1988 (August), *Preliminary evaluation of silver sulfide mineral deposit, Trinity project, Pershing County, Nevada*: U. S. Borax interoffice correspondence, 5 p. plus figures and appendix.
- Reim, K. M., 1989a (March 22), *Mineral reserve stockpile, Trinity mine, Nevada*: U. S. Borax interoffice correspondence, 3 p.
- Reim, K. M., 1989b (April 19), *Revised sulfide silver mineral reserve estimate, Trinity project*: U. S. Borax interoffice correspondence, 2 p.
- Reim, K. M., Ashleman, J. C., Baele, S. M., Haggerty, M. T., and Jensen, R. C., 1988 (February 26), *Review of initial ore reserve estimate versus actual and updated ore grade and tonnage estimate, Trinity silver project, Nevada*: Internal U. S. Borax memorandum, 8 p. plus attachments.
- Roesch, T., 1990 (December 12), *Trinity project, Pershing County, NV*: Internal correspondence of Santa Fe Pacific Mining, Inc., 4 p.
- Santa Fe Pacific Mining, Inc., undated, *Trinity, Au Ag, available joint venture, Pershing County, NV NK-11-10-22*: Company property promotional material, 2 p.
- Smith, J. A., 1983 (April 19), *Trinity project, preliminary metallurgical investigations, March-April 1983*: U. S. Borax Research Corp. report no. CR 83-6, 53 p.
- Tingley, J. V., 1985, *Trinity district, in* A mineral inventory of the Paradise-Denio and Sonoma-Gerlach resource areas, Winnemucca district, Nevada: Nevada Bureau of Mines and Geology Open-file Report 85-3, p. 192-194.
- Trubey, D., 1990 (December 18), *Trinity project, effect of 1979 agreement on transfer of properties from U. S. Borax to SFPM*: Internal correspondence of Santa Fe Pacific Mining, Inc., 2 p.
- Trubey, D. B., 1991a (January 8), *Trinity mine project, Pershing County, Nevada*: Letter from Santa Fe Pacific Gold Corp. to U. S. Borax & Chemical Corp., 2 p.
- Trubey, D. B., 1991b (February 14), *Trinity mine area*: Internal correspondence of Santa Fe Pacific Mining, Inc., 1 p.
- Whateley, M. K. G., Bell, T., and Moon, C. J., 2006, *Disseminated precious metals – Trinity mine, Nevada, in Introduction to mineral exploration*: Blackwell Publishing, second edition, Charles J. Moon, Michael K. G. Whateley, and Anthony M. Evans, eds., p. 386-412.
- Wieduwilt, W. G., 1983 (April 13), *Induced polarization and resistivity survey, Trinity project, Pershing County, Nevada*: Report prepared for Knox, Kaufman, Inc. by Mining Geophysical Surveys Inc., 9 p. plus attachments.
- Woods, W. G., and Smith, J. A., 1984 (March 6), *Trinity/Seka silver-metallurgical studies, May 1983 – January 1984*: U. S. Borax Research Corp. report no. CR 84-2, 17 p. plus appendices.
- Yernberg, W. R., 1987 (December 17), *Trinity project cyanide bottle roll test*: Report prepared for U. S. Borax by Kappes, Cassiday & Associates, 7 p.



20.0 DATE AND SIGNATURE PAGE

Effective Date of report:

August 9, 2011

The data on which the contained resource estimates are based were current as of the Effective Date.

Completion Date of report:

December 1, 2011

“Paul D. Hartley”

Paul D. Hartley, Geo.

Date Signed:

December 1, 2011

“Michael M. Gustin”

Michael M. Gustin, P. Geo.

Date Signed:

December 1, 2011

“Daniel W. Kappes”

Daniel W. Kappes, P. Eng.

Date Signed:

December 1, 2011



21.0 CERTIFICATE OF AUTHORS

MICHAEL M. GUSTIN, P.GEO.

I, Michael M. Gustin, P. Geo., do hereby certify that I am currently employed as Senior Geologist by Mine Development Associates, Inc., 210 South Rock Blvd., Reno, Nevada 89502 and:

1. I graduated with a Bachelor of Science degree in Geology from Northeastern University in 1979 and a Doctor of Philosophy degree in Economic Geology from the University of Arizona in 1990. I have worked as a geologist in the mining industry for more than 25 years. I am a Licensed Professional Geologist in the state of Utah (#5541396-2250), a Licensed Geologist in the state of Washington (# 2297), and a member of the Society of Mining Engineers and the Geological Society of Nevada.
2. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101), and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI 43-101. I am independent of Liberty Silver and Renaissance, and all of their subsidiaries, as defined in Section 1.5 of NI 43-101 and in Section 1.5 of the Companion Policy to NI 43-101.
3. I have not visited the Trinity project site.
4. I am responsible for all sections of this report, except for Sections 1.4 and 13.0, titled, “***Technical Report on the Trinity Silver Project, Pershing County, Nevada***”, dated December 1, 2011 (the “Technical Report”), subject to my reliance on other experts identified in Section 3.0.
5. I have had no prior involvement with the property or project that is the subject of the Technical Report.
6. As of the date of this certificate, to the best of my knowledge, information, and belief, this Technical Report contains all the scientific and technical information that is required to be disclosed to make this technical report not misleading.
7. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
8. The Technical Report contains information relating to mineral titles, permitting, environmental issues, regulatory matters, and legal agreements. I am not a legal, environmental or regulatory expert, and do not offer a professional opinion regarding these issues.
9. A copy of this report is submitted as a computer readable file in Adobe Acrobat® PDF® format. The requirements of electronic filing necessitate submitting the report as an unlocked, editable file. I accept no responsibility for any changes made to the file after it leaves my control.

Dated December 1, 2011

signed “Michael M. Gustin”

Michael M. Gustin

Daniel W. Kappes, P. Eng.

I do hereby certify that:

1. My name is Daniel W. Kappes and I am President of the firm of Kappes, Cassiday & Associates at 7950 Security Circle, Reno, Nevada USA 89506.
2. I am a Professional Mining and Metallurgical Engineer (No. 3223) in the state of Nevada, USA, registered through the Nevada State Board of Professional Engineers and Land Surveyors.
3. I am a graduate of the Colorado School of Mines (1966) and the University of Nevada, Mackay School of Mines (1972), and hold B. Sc. and M. Sc. degrees in Mining Engineering.
4. I have practiced my profession continuously since 1966.
5. I am a "Qualified Person" for the purposes of NI 43-101 by reason of my education, affiliation with a professional association as defined by NI 43-101 and past relevant work experience.
6. I am responsible for Section 1.4 and Section 13.0 of this report titled "*Technical Report on the Trinity Silver Project, Pershing County, Nevada*" dated December 1, 2011.
7. I have not visited the Trinity project.
8. Prior to my work on this report, Kappes, Cassiday & Associates performed metallurgical testing on samples from the Trinity project submitted by a prior operator. That is the extent of my prior involvement with the Trinity project.
9. Neither I, nor any affiliated entity of mine, is at present, under agreement, arrangement, or understanding or expects to become, an insider, associate, affiliated entity or employee of Liberty Silver Corporation or Renaissance Gold Inc. or any associated or affiliated entities.
10. Neither I, nor any affiliated entity of mine own, directly or indirectly, nor expect to receive, any interest in the properties or securities of Liberty Silver Corporation, or any associated or affiliated companies.
11. A copy of this report is submitted as a computer readable file in Adobe Acrobat© PDF© format. The requirements of electronic filing necessitate submitting the report as an unlocked, editable file. I accept no responsibility for any changes made to the file after it leaves my control.

Signed and dated at Reno, Nevada, December 1, 2011.

"Daniel W. Kappes"

Daniel W. Kappes
President
P. Eng., B. Sc., M. Sc.
Kappes, Cassiday & Associates

Brian W. Buck, VP
JBR Environmental Consultants, Inc.
8160 S. Highland Drive
Sandy, Utah 84093

I, Brian W. Buck, P.G., C.E.M. do hereby certify that:

1. I have been employed for the last 25 years as a Principal and Vice President of:
JBR Environmental Consultants, Inc., 8160 S. Highland Drive, Sandy, UT, USA 84093
2. I graduated with a Master of Science, Geological Engineering, from the University of Utah, Salt Lake City, Utah, 1976, and a Bachelor of Science, Geology, from the University of Wisconsin, Madison, Wisconsin, 1973.
3. I am registered with the following professional associations:
Registered Professional Geologist, State of Utah, 2003
Certified Environmental Manager, State of Nevada, 1994
Registered Professional Geologist, State of Wyoming, 1992
Registered Environmental Assessor, State of California, 1989
4. I have worked as a Geologist and Environmental Professional for a total of 34 years since 1976.
5. I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the purposes of NI43-101.
6. I am responsible for Section 4.4 of the Technical Report titled “*Technical Report on the Trinity Silver Project, Pershing County, Nevada*” dated December 1, 2011.
7. I have had prior involvement with the property that is the subject of the Technical Report. The nature of my prior involvement was to assist Newmont Gold Company with planning for closure of their heap leach facility at the property.
8. I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclose which makes the Technical Report misleading.
9. I am independent of the issuer applying all of the tests in Section 1.5 of NI 43-101.
10. I have read national Instrument 43-101 and Form 43-101F1, and to my knowledge, the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated 1st day of December, 2011

“Brian W. Buck”

Brian W. Buck, P.G., C.E.M.



PAUL D. HARTLEY

I, Paul D. Hartley, do hereby certify that I am currently employed as a Geologist by Mine Development Associates, Inc., 210 South Rock Blvd., Reno, Nevada 89502 and:

1. I graduated with a Bachelor of Science degree in Geology from Stanford University in 1976 and a Master of Science degree in Minerals Exploration from the Stanford University in 1976. I have worked as a geologist in the mining industry for more than 33 years. I am member of the Society of Mining Engineers and the Geological Society of Nevada.
2. I am independent of Liberty Silver Corporation and Renaissance Gold Inc. as defined in Section 1.5 of NI 43-101 and in Section 1.5 of the Companion Policy to NI 43-101.
3. I visited the Trinity project site during August 2010.
4. During 2006 and 2007, I provided an independent interpretation of the Trinity mineralization for Renaissance.
5. As of the date of this certificate, to the best of my knowledge, information, and belief, this Technical Report contains all the scientific and technical information that is required to be disclosed to make this technical report not misleading.
6. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
7. The Technical Report contains information relating to mineral titles, permitting, environmental issues, regulatory matters, and legal agreements. I am not a legal, environmental or regulatory expert, and do not offer a professional opinion regarding these issues.
8. A copy of this report is submitted as a computer readable file in Adobe Acrobat® PDF® format. The requirements of electronic filing necessitate submitting the report as an unlocked, editable file. I accept no responsibility for any changes made to the file after it leaves my control.

Dated December 1, 2011

signed "Paul D. Hartley"

Paul D. Hartley