MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

Updated Technical Report

Northumberland Project

Nye County, Nevada USA

Prepared for

Fronteer Development Group Inc.

November 1, 2007

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1.0 EXECUTIVE SUMMARY

This updated technical report on the Northumberland project was prepared by Mine Development Associates ("MDA") at the request of Fronteer Development Group ("Fronteer"), which is based in Vancouver, British Columbia. The report was written in compliance with disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1. MDA previously authored a technical report pertaining to Northumberland for NewWest Gold Corporation ("NewWest") dated July 15, 2006. The information in this report is current as of November 1, 2007 unless otherwise noted.

The Northumberland project is comprised of unpatented lode mining claims, patented mining claims, and fee lands owned by Nevada Western Gold Corporation ("Nevada Western"), a wholly owned subsidiary of NewWest. Fronteer acquired 100% of NewWest, including the Northumberland project, on September 24, 2007.

The Northumberland Mineral Resources discussed in this technical report were estimated in December 2004 and January 2005 by NewWest personnel under the guidance of MDA; no mineral reserves were estimated. Michael M. Gustin, MDA Senior Geologist, and Steve Ristorcelli, MDA Principal Geologist, are qualified persons under Canadian Securities Administrators' National Instrument 43-101. There is no affiliation between Fronteer and Mr. Gustin and Mr. Ristorcelli except that of an independent consultant/client relationship.

1.1 Introduction

The Northumberland project is located near the geographic center of Nevada in northern Nye County, approximately 300-road miles northwest of Las Vegas and 250-road miles east-southeast of Reno. The towns of Austin and Round Mountain are the nearest population centers to the project. Open-pit heap-leach mining activities were undertaken at the project from 1981 through 1990.

The Northumberland project is comprised of approximately 34,000 acres (13,760ha) of unpatented lode claims and 3,885 acres (1,572ha) of patented mining claims, patented millsite claims, and fee lands, all of which are owned or controlled by Nevada Western Gold Corporation ("Nevada Western"), a wholly owned subsidiary of NewWest. The fee lands include two blocks, the Upper Site and Lower Site. The Upper Site is entirely surrounded by lands administered by the U.S. Forest Service and the Lower Site is surrounded by public lands administered by the Bureau of Land Management. All mining activities have taken place at the Upper Site, while some of the processing and other mining infrastructure from modern mining operations was located at the Lower Site. The unpatented claims are held in three discrete blocks, the largest of which surrounds the fee lands at the Upper Site. All of the Mineral

Resources described this report lie within the fee lands owned by Nevada Western. Title to the property was verified in an independent title report by Erwin and Thompson LLP that was commissioned by NewWest, completed in June 2005, and supplemented most recently in July 2007.

The Northumberland project is subject to a joint venture agreement dated December 19, 2003 between Nevada Western and Newmont Mining Corporation ("Newmont"). The joint venture agreement gives Newmont the right to earn a 60% interest in the Northumberland project by incurring a required amount of expenditures over a 10-year period.

A small portion of the Mineral Resources summarized below are subject to a 1% net smelter returns royalty.

1.2 Geology and Mineralization

The Northumberland mineralization occurs as stacked, sediment-hosted, finely disseminated, Carlin-type gold-silver deposits. Intrusive rocks also host significant mineralization. This deposit type and the overall geologic setting of the mineralization are quite similar to the Goldstrike deposit of the northern Carlin Trend. The gold-silver mineralization at Northumberland occurs in a cluster of eight more-or-less spatially distinct deposits that form an arcuate belt approximately 1.6 miles long in an east-west direction and 0.3 miles wide. The deposits are generally stratiform and follow three low-angle tectono-stratigraphic host horizons near the crest and within the west limb of the Northumberland anticline. The host horizons are structural discontinuities that include the intersection zone of the Prospect and Mormon thrusts and two bedding-plane faults. The overall geometry of the deposits and the higher-grade zones within the deposits appears to be influenced by east-trending high-angle structures in the area of the crest of the anticline.

Gold occurs as micron- to sub-micron-size particles that are intimately associated with sulfides. The gold is disseminated primarily within sedimentary units, although intrusive rocks host a significant portion of the mineralization. Silver occurs in a complex assemblage of copper-antimony sulfides and arsenic sulfosalts. The total sulfide content is less than five percent; pyrite, arsenopyrite, and marcasite are the most abundant species present. The mineralization is associated with both silicification and decalcification of carbonate hosts, and quartz-illite-pyrite alteration of igneous hosts.

1.3 Mining and Exploration History

The Northumberland property was in production under the operatorship of Northumberland Mining Company from 1939 to 1942, Cyprus Mining Company ("Cyprus") from 1981 to 1984, and Western States Minerals Corporation ("WSMC") from 1985 to 1990. The Northumberland Mining Company production details are not documented. Cyprus and WSMC mined over seven-million tons of ore from several open pits and produced over 230,000 ounces of gold and 485,000 ounces of silver by heap leaching of oxidized and partially oxidized ore that was either crushed or run-of-mine. Gold recoveries for crushed oxide ore and run-of-mine, partially oxidized ore from these operations has been estimated at approximately 75% and 50%, respectively.

Reconnaissance geologic mapping and soil geochemical sampling have been completed over most of the project, with detailed mapping undertaken in the area of the deposits. Various geophysical surveys cover significant portions of the property.

1.4 Drill-Hole and Assay Database

The Northumberland digital database used in the estimation of Mineral Resources includes 1,412 drill holes totaling 504,999ft of drilling. These holes were drilled from 1968 through 2004 by Homestake Mining Company, Idaho Mining Corporation, Cyprus, WSMC, and Newmont by air-track, conventional rotary, reverse circulation, and diamond core methods. Entire series of older drill holes are not included in the database due to sample quality and assay reliability issues. Holes drilled by Newmont in 2005 through 2007 are included in the database, but were not included in the Mineral Resource estimation.

Although QA/QC programs were apparently not systematically implemented and documented prior to Newmont's 2004 exploration work, check assay and twin-hole data from the Cyprus and WSMC drilling campaigns were compiled by MDA. An analysis of these data found no serious problems with the assay database, although additional check-assay data are needed. The twin-hole data suggests that down-hole contamination may be present locally. Several possible contaminated intervals were identified during the grade modeling of the deposits. These suspect assay intervals, as well as the contaminated volumes, were excluded from the resource estimation.

A number of assay pulps and/or rejects from mineralized WSMC drill intervals should be retrieved from storage and analyzed by an independent laboratory. All further drilling programs at Northumberland should continue the QA/QC procedures implemented by Newmont in 2004.

1.5 Metallurgical Testing

Metallurgical studies indicate that differences in the amenability of the Northumberland mineralization to direct cyanidation are primarily due to the degree of oxidation, as opposed to deposit-specific characteristics or crush size. Oxide material appears to be amenable to direct cyanidation by heap leaching, while sulfide mineralization requires oxidation prior to cyanidation. Sulfide mineralization is refractory due the close association of micron-size gold with sulfides and the local presence of preg-robbing carbonaceous material.

Diagnostic metallurgical testing completed to date indicates that gold and silver extractions from sulfide mineralization can be optimized by utilizing the N_2TEC flotation technology of Newmont with autoclaving of the concentrates. Extractions in excess of 90% for both gold and silver in the flotation concentrate were attained in the samples tested.

1.6 Mineral Resource Estimation

The Northumberland gold and silver resources were estimated in December 2004 and January 2005 by NewWest personnel under the guidance of MDA (Tables 1.1 and 1.2). Resource cutoff grades were chosen to define material that might have a reasonable prospect of economic extraction under the following scenarios: open-pit mining and heap leaching of oxide mineralization [0.010 oz Au/ton (0.34 g Au/t) cutoff]; open-pit mining and treatment of sulfide material [0.040 oz Au/ton (1.37 g Au/t) cutoff]; and underground mining and processing of sulfide material [0.100 oz Au/ton (3.43 g Au/t) cutoff]. All silver resources are categorized as Inferred due to the generalized nature of the estimation, and only silver lying within the modeled gold zones was tabulated. Silver resources are compiled from all modeled blocks that exceed the gold cutoffs; no silver cutoff is applied.

Table 1.1 Northumberland Gold Resources

Imperial Units

NORTHUMBERLAND GOLD RESOURCES

	MEASURED				INDICATED			MEASURED & INDICATED		
Type	Cutoff (oz Au/ton)	Tons	Grade (oz Au/ton)	Au Ounces	Tons	Grade (oz Au/ton)	Au Ounces	Tons	Grade (oz Au/ton)	Au Ounces
Oxide - >7,500 ft	0.010	8,951,000	0.034	302,000	6,793,000	0.033	221,000	15,744,000	0.033	523,000
Sulfide - >7,500 ft	0.040	3,903,000	0.094	368,000	9,441,000	0.097	912,000	13,344,000	0.096	1,280,000
Sulfide - <7,500 ft	0.100	144,000	0.159	23,000	1,678,000	0.138	232,000	1,822,000	0.140	255,000
Total		***12,998,000***	***0.053***	***693,000***	***17,912,000***	***0.076***	***1,365,000***	***30,910,000***	***0.067***	***2,058,000***

INFERRED GOLD RESOURCES

Type	Cutoff (oz Au/ton)	Tons	Grade (oz Au/ton)	Au Ounces
Oxide - >7,500 ft	0.010	1,007,000	0.036	36,000
Sulfide - >7,500 ft	0.050	1,846,000	0.094	174,000
Sulfide - <7,500 ft	0.100	1,528,000	0.124	189,000
Total		***4,381,000***	***0.091***	***399,000***

Metric Units

NORTHUMBERLAND GOLD RESOURCES

	MEASURED				INDICATED			MEASURED & INDICATED		
Type	Cutoff (g Au/tonne)	Tonnes	Grade (g Au/tonne)	Au Ounces	Tonnes	Grade (g Au/tonne)	Au Ounces	Tonnes	Grade (g Au/tonne)	Au Ounces
Oxide - >2,286 m	0.34	8,120,000	1.16	302,000	6,162,000	1.11	221,000	14,282,000	0.04	523,000
Sulfide - >2,286 m	1.37	3,540,000	3.23	368,000	8,565,000	3.31	912,000	12,105,000	0.11	1,280,000
Sulfide - <2,286 m	3.43	130,000	5.45	23,000	1,522,000	4.75	232,000	1,652,000	0.15	255,000
Total		***11,790,000***	***1.83***	***693,000***	***16,249,000***	***2.61***	***1,365,000***	***28,039,000***	***2.28***	***2,058,000***

INFERRED

Type	Cutoff (g Au/tonne)	Tonnes	Grade (g Au/tonne)	Au Ounces
Oxide - >2,286 m	0.34	914,000	1.22	36,000
Sulfide - >2,286 m	1.37	1,674,000	3.23	174,000
Sulfide - <2,286 m	3.43	1,386,000	4.25	189,000
Total		***3,974,000***	***3.12***	***399,000***

Table 1.2 Northumberland Silver Resources
(Tabulated with the gold resources and by gold cutoff grades)

Imperial Units

INFERRED SILVER RESOURCES				
Type	**Au Cutoff** (oz Au/ton)	**Tons**	**Grade** (oz Ag/ton)	**Ag Ounces**
Oxide - >7,500 ft	0.010	16,751,000	0.127	2,127,000
Sulfide - >7,500 ft	0.040	15,190,000	0.168	2,552,000
Sulfide - <7,500 ft	0.100	3,350,000	0.129	432,000
Total		***35,291,000***	***0.145***	***5,111,000***

Metric Units

INFERRED SILVER RESOURCES				
Type	**Au Cutoff** (g Au/tonne)	**Tonnes**	**Grade** (g Ag/tonne)	**Ag Ounces**
Oxide - >2,286 m	0.34	15,196,000	4.35	2,127,000
Sulfide - >2,286 m	1.37	13,780,000	5.76	2,552,000
Sulfide - <2,286 m	3.43	3,039,000	4.42	432,000
Total		***32,015,000***	***4.97***	***5,111,000***

1.7 Exploration Potential

The potential to find additional gold resources at Northumberland is considered to be excellent, both within the deposit area and in other portions of the large property holdings. The possibility of high-grade gold mineralization within structurally controlled zones in the core areas of the deposits warrants careful evaluation and drill testing. There is also potential to discover additional mineralization in the general area of the deposits in geologic settings similar to the known deposits.

There are a number of targets well beyond the limits of the Mineral Resources that are defined by soil and/or rock gold anomalies and favorable geology. Newmont drilled some of these anomalies in 2006 and 2007, and plans to drill other targets in 2008.

1.8 Conclusions and Recommendations

Fronteer, through Nevada Western, currently has a carried interest in the exploration of the Northumberland project. Newmont is conducting its exploration program in a technically sound manner and is producing results of value to Fronteer. MDA believes that Northumberland is a property of merit and warrants significant investment in further exploration.

The Northumberland Mineral Resources should be updated when the Newmont 2007 exploration program is completed, and pre-feasibility studies should then be initiated. The economic analysis should include the evaluation of both underground and surface mining methods, as well as the application of current flotation and autoclaving technologies to the sulfide mineralization.

2.0 INTRODUCTION

This updated technical report on the Northumberland project was prepared by Mine Development Associates ("MDA") at the request of Fronteer Development Group ("Fronteer"), which is based in Vancouver, British Columbia and listed on the Toronto, AMEX, and Frankfurt stock exchanges. The report was written in compliance with disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101, Companion Policy 43-101CP, and Form 43-101F1. MDA previously authored a technical report pertaining to Northumberland for NewWest Gold Corporation ("NewWest") dated July 15, 2006 (Gustin, et al., 2006).

The Northumberland project is comprised of unpatented lode mining claims, patented mining claims, and fee lands owned by Nevada Western Gold Corporation ("Nevada Western"), a wholly owned subsidiary of NewWest. Fronteer acquired 100% of NewWest, including the Northumberland project, on September 24, 2007.

The Mineral Resources for the Northumberland project were estimated in December 2004 and January 2005 by NewWest personnel under the supervision of MDA; no mineral reserves were estimated. Michael M. Gustin, MDA Senior Geologist, and Steve Ristorcelli, MDA Principal Geologist, are qualified persons under Canadian Securities Administrators' National Instrument 43-101. There is no affiliation between Fronteer and Mr. Gustin and Mr. Ristorcelli except that of an independent consultant/client relationship.

The information in this report is current as of November 1, 2007 unless otherwise noted.

The scope of this study included a review of pertinent technical reports and data in possession of Western States Minerals Corporation ("WSMC" the owner of the Northumberland project prior to NewWest), NewWest, and Fronteer relative to the general setting, geology, project history, exploration activities and results, methodology, quality assurance, interpretations, resources and metallurgy. MDA has made such independent investigations as has been deemed necessary in the professional judgment of MDA to be able to reasonably rely upon this information.

The authors' mandate was to comment on substantive public or private documents and technical information listed in Section 22. The mandate also required on-site inspections and preparation of an independent technical report containing the authors' observations, conclusions, and recommendations. Site inspections were conducted by the senior author on June 15 and 16, 2004 and July 14, 2006. Newmont personnel were present for both visits and presented updates of the ongoing exploration programs at Northumberland. In addition to reviews of the geology and mineralization, the site visits included inspection of surface outcrops, open pits, drill core, and verification of drill site locations.

Due to the historic corporate interrelationships between WSMC and NewWest, the two companies may sometimes be referred to interchangeably in this report.

Currency, units of measure, and conversion factors used in this report include:

Linear Measure

1 inch	= 2.54 centimetres
1 foot	= 0.3048 metre
1 yard	= 0.9144 metre
1 mile	= 1.6 kilometres

Area Measure

1 acre		= 0.4047 hectares
1 square mile	= 640 acres	= 259 hectares

Capacity Measure (liquid)

1 US gallon	= 4 quarts	= 3.785 liter

Weight

1 short ton	= 2000 pounds	= 0.907 tonne
1 pound = 16 oz	= 0.454 kg	= 14.5833 troy ounces

Analytical Values	percent	grams per metric tonne	troy ounces per short ton
1%	1%	10,000	291.667
1 gm/tonne	0.0001%	1	0.0291667
1 oz troy/short ton	0.003429%	34.2857	1
10 ppb			0.00029
100 ppm			2.917

Density

g/cc = 32.0369 ÷ tonnage factor (ft^3/ton)

g/cc = 0.016018 x pounds/ft^3

Currency

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

Frequently used acronyms and abbreviations

AA	atomic absorption spectrometry
ac.	acre
ADR	adsorption-desorption-recovery
Ag	silver
American Assay	American Assay Laboratories
Au	gold
BLM	U.S. Department of the Interior, Bureau of Land Management
Boyles Brothers	Boyles Brothers Drilling Company
^oC	degrees Centigrade
cc	cubic centimetres
CIL	carbon-in-leach treatment
CIM	Canadian Institute of Mining, Metallurgical, and Petroleum
cm	centimetre
core	diamond drill core
CSAMT	controlled source audio-magneto-tellurics survey
CV	coefficient of variation
Cyprus	Cyprus Northumberland Mining Company or Cyprus Mines Corporation
deposit area	area including the Northumberland open pits and known gold deposits
Eklund	Eklund Drilling Company
Elsing	Elsing Drilling and Pump Co., Inc.
Fronteer	Fronteer Development Group
°F	degrees Fahrenheit
ft	foot or feet
g	grams
g/t	grams per metric ton (tonne)
g Ag/t	grams silver per metric ton
g Au/t	grams gold per metric ton
ha	hectare
Homestake	Homestake Mining Company
ICP-MS	inductively coupled plasma – mass spectrometry
Idaho Mining	Idaho Mining Corporation
in	inch
K-Ar	potassium-argon age dating method
Kerr McGee	Kerr McGee Mining Company
m	metre
Ma	million years

Frequently used acronyms and abbreviations, cont.

Nevada Western	Nevada Western Gold Corporation
NewWest	NewWest Gold Corporation
Newmont	Newmont Mining Corporation
Northumberland	Northumberland project
NMC	Northumberland Mining Company
NSR	net smelter return
oz Ag/ton	troy ounces silver per short ton
oz Au/ton	troy ounces gold per short ton
PAH	Pincock, Allen & Holt, Inc.
RC	reverse circulation drilling
Rotary	conventional open-hole rotary drilling
Santa Fe	Santa Fe Pacific Gold Corporation
SG	specific gravity
TF	tonnage factor
ton	short ton
t	metric ton or tonne
Tonto	Tonto Drilling Services Inc.
USFS	U.S. Department of Agriculture, Forest Service
WSMC	Western States Minerals Corporation
WSRC	Western States Royalty Corporation

3.0 RELIANCE ON OTHER EXPERTS

A mineral status report of the Northumberland property prepared by Erwin and Thompson LLP (Erwin, 2005) documents royalty burdens and discusses the title status of the unpatented mining claims, fee lands, and patented mining claims as of April 2005. A fourth supplement to this report, prepared in July 2007 (Erwin 2007), was also reviewed by MDA. As MDA is not an expert for assessing legal matters pertaining to properties in the United States, MDA relies on the conclusions of Erwin and Thompson LLP (Erwin 2005, 2007) as to the title of, and royalties applicable to, the Northumberland properties.

MDA relies on Fronteer to provide full information concerning all corporate relationships and other corporate dealings, current legal title, and environmental permitting pertaining to Northumberland that is discussed in this report and not derived from Erwin and Thompson LLP (Erwin 2005 and 2007).

MDA has reviewed and, where deemed appropriate, relied on data and information provided by NewWest,WSMC, and Fronteer, including data derived from prior operators of the Northumberland project. Many of the conclusions made in this report are based entirely on the data provided to MDA. Although MDA has reviewed much of the available data and visited the project site, these tasks are dwarfed by the amount of data that exists. MDA believes, however, that the data presented by WSMC, NewWest, and Fronteer are generally an accurate and reasonable representation of the project.

George Lanier, Regional Geologist for Fronteer, is a co-author of this technical report in recognition of his efforts in assisting in the preparation of Sections 7, 8, 9, and 16 of the report, his cross-sectional modeling for the resource estimation, and his extensive contributions to the general understanding of the geology and mineralization at Northumberland.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Northumberland project is located in northern Nye County near the geographic center of Nevada at 38º 57' 29" N latitude and 116 º 50’ 44” W longitude (Figure 4.1). The project is approximately 300-road miles northwest of Las Vegas and 250-road miles east-southeast of Reno. The nearest population center to Northumberland is the Round Mountain area, which is located approximately 25 miles to the south. The central portion of the project lies in the center of the Toquima Range at Northumberland Pass.

4.2 Land Area

The Northumberland project is comprised of approximately 38,000 acres (15,380ha) of patented and unpatented mining claims and fee lands owned or controlled by NewWest (Figure 4.2). The fee lands include the Upper Site, which is entirely surrounded by Toyaibe National Forest lands administered by the U.S. Forest Service (“USFS”), and the Lower Site, which is surrounded by public lands administered by the Bureau of Land Management (“BLM”) (Figure 4.2). The Upper and Lower Site fee lands cover a total of 3,885 acres (1,572ha). All mining activities to date have occurred at the Upper Site, while some of the processing and other mining infrastructure from modern mining operations were located at the Lower Site (see Sections 6 and 10 for the mining and exploration history).

A mineral survey was conducted on the fee lands as part of the land exchange process discussed below. The unpatented mining claims in the general area of the Upper Site were surveyed by WSMC in the early 1990s; the remaining claims have not been surveyed.

4.3 Mining Claim Description

The Northumberland project includes 1,745 unpatented lode mining claims for a total of approximately 34,000 acres (13,760ha) (based on an assumption of 20 acres per claim that does not include 27 CAN claims staked to cover gaps in the other claims), and 3,885 acres (1,572ha) of patented mining claims, patented millsite claims, and fee lands. Some of the project lands are subject to net smelter return (“NSR”) royalties on production (Table 4.1). The unpatented claims, which are listed in Appendix A, lie in three discreet blocks, the largest of which surrounds the fee lands at the Upper Site (Figure 4.2). This block of claims includes one inlier claim block not controlled by Fronteer (shown as white in Figure 4.2). The 27 CAN claims were located in September 2006 to cover open fractions; the staking of these claims resulted in no additional area to the project relative to that reported in the 2006 technical report (Gustin et al., 2006).

Figure 4.1 Northumberland Location Map

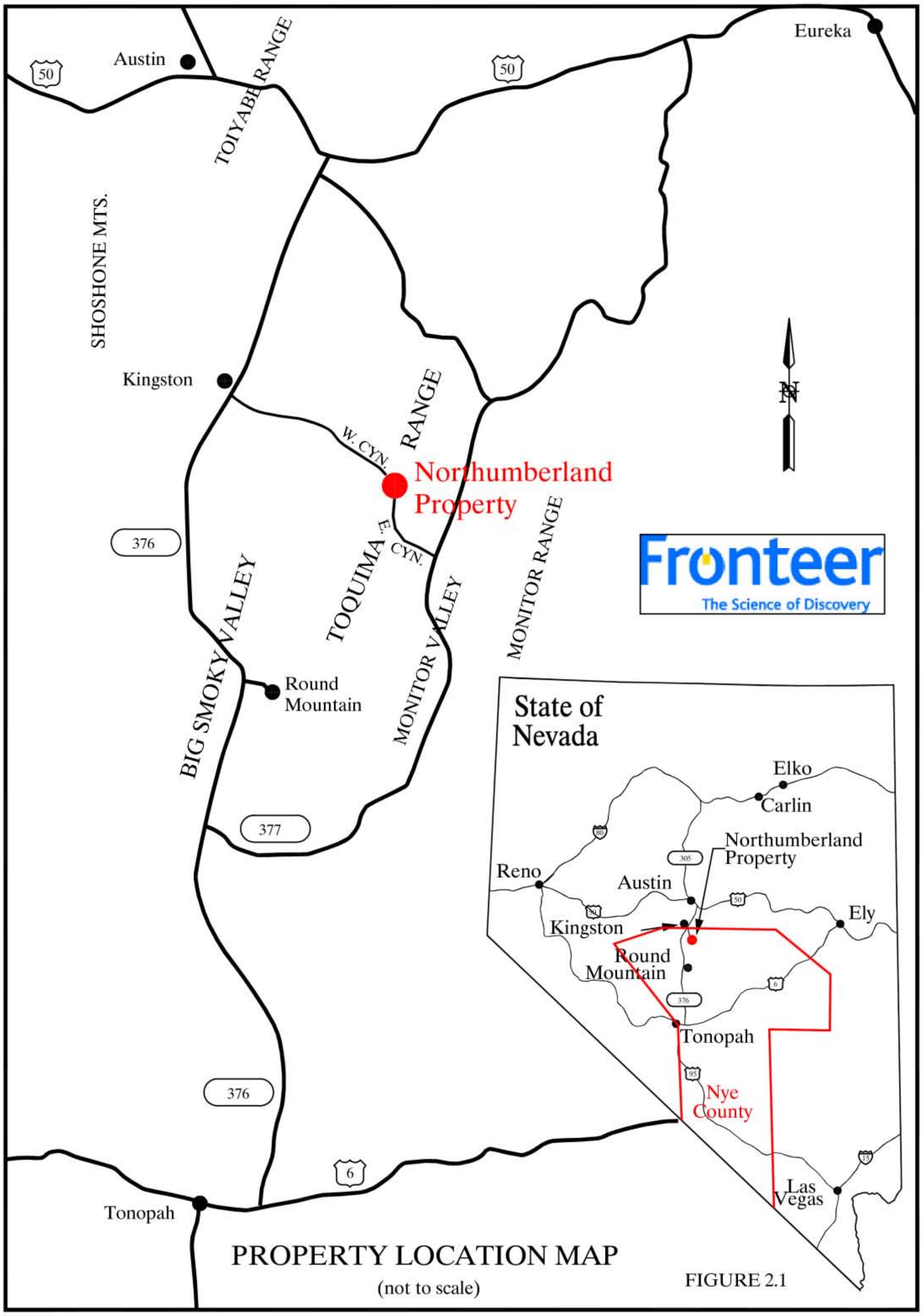


Figure 4.2 Northumberland Land Status Map

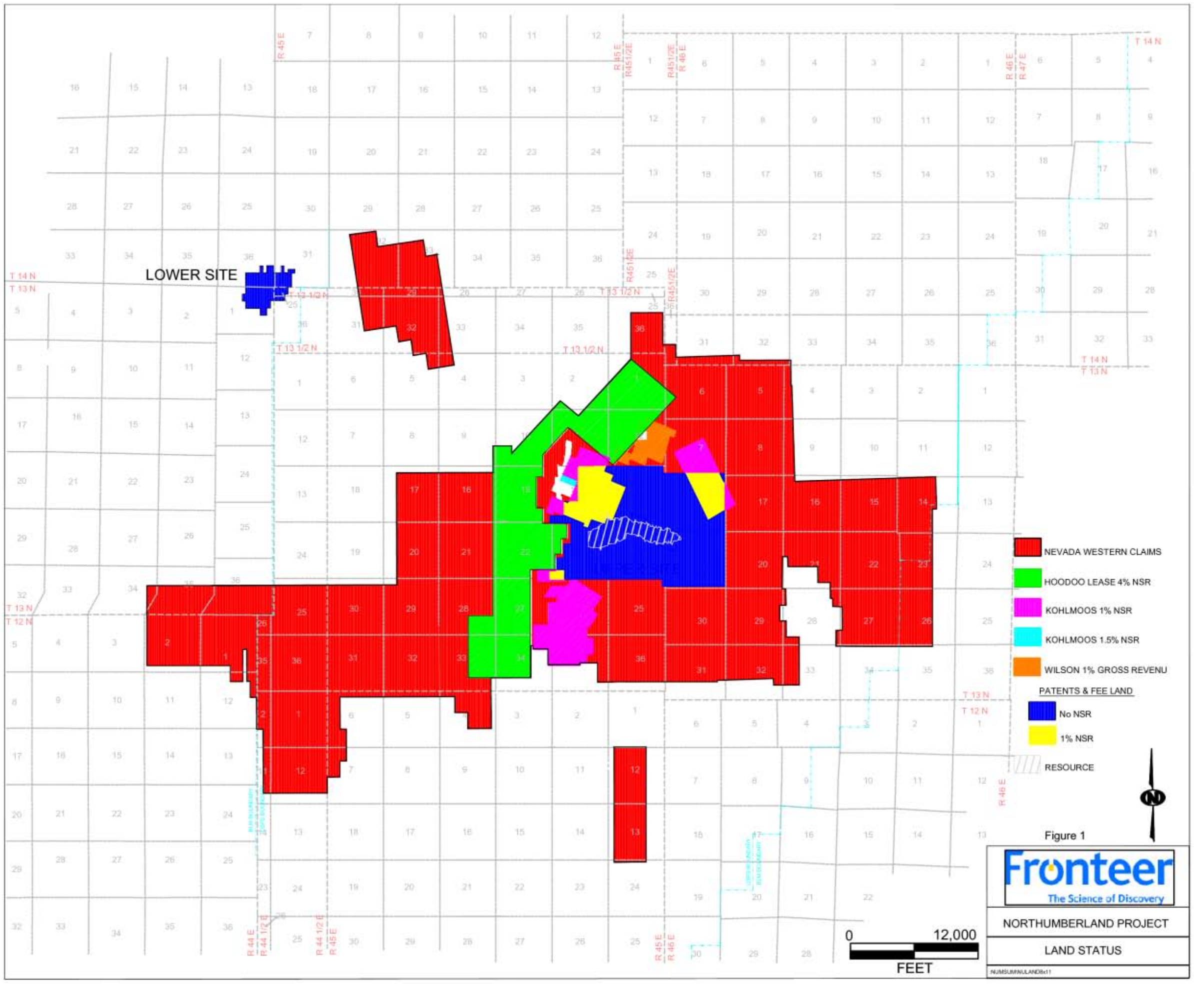


Table 4.1 Northumberland Land Holdings and Obligations

Property Type	Number	Approximate Area (acres)[1]	Approximate Area (hectares)	Annual Holding Costs[2]	Royalty Obligations
100%-Owned Unpatented Claims	1,194	24,040	9,730	$160,467	-
	15	300	120	2,002.50	1% of gross revenue[3]
	73	1,320	535	8,811.00	1% NSR
	1	20		135.50	1.5% NSR
Claims staked by Newmont within Area of Interest[4]	253	4,520	1,830	30,171.00	-
Leased Unpatented Claims (Sterling or "Hoodoo")	209	4,180	1,690	$47, 901.50	4% NSR
Patented Claims	9	184.47	74.65	$10,200	-
Patented Millsite Claims	63	315.00	127.5		-
Fee Lands		3,385.53	1,370.12		1% NSR on some portions
Totals	*1,817 claims*	*approx. 38,245 acres*	*Approx. 15,477 hectares*	*$212,600*	

[1] Assumes each claim covers 20 acres (with the exception of the 27 CAN claims): actual acreage may vary.
[2] Includes $125 Federal claim-holding fees, $8.50 County filing fees, lease or advance royalty payments, and county taxes.
[3] Applies to gold and silver; a 1% NSR applies to other minreals.
[4] Not including the Thumb claims, which are listed as Leased Unpatented Claims.

4.4 Agreements and Encumbrances

The royalty burdens and status of the unpatented mining claims and private lands discussed in this section are based on a review of various legal documents provided by WSMC and NewWest, as well as a mineral status report on the Northumberland property effective June 2005 and supplemented in 2007 (Erwin, 2005, 2007).

The Northumberland property includes unpatented mining claims, patented mining claims, patented millsite claims, and fee lands, all of which are 100% owned by Nevada Western, as well as unpatented claims controlled by Nevada Western by means of a lease agreement with Sterling Gold Mining Corporation.

The lands 100% owned by Nevada Western were acquired by staking and through a series of purchases and agreements. These agreements include:

- the sale of various unpatented claims and assets to WSMC by Cyprus Northumberland Mining Company ("Cyprus") on July 1, 1985;
- the sale of 9 unpatented claims to WSMC by Kohlmoos and others on September 24, 1992 subject to a 1% NSR royalty retained by Kohlmoos;
- the sale of 15 claims to WSMC by Wilson Minerals on October 15, 1992 subject to a mineral production royalty equal to 1% of the gross revenues on gold and silver and a 1% NSR royalty on other minerals retained by Wilson Minerals (Erwin, 2005);
- the sale of 106 unpatented claims to WSMC by Kohlmoos on November 6, 1992 subject to a 1% NSR royalty retained by Kohlmoos;
- an interest in 176 claims assigned to WSMC and Gooding Corporation, a Colorado corporation that subsequently merged with WSMC (Erwin, 2005), by Arroyo Minerals, Inc. and Bankruptcy Trustee on March 28, 1994;
- a land exchange between WSMC and the USFS on April 1, 1997, in which 3,385.53 acres of USFS-administered public lands in the core of the Northumberland project area, including claims held by WSMC by means of the Cyprus and Kohlmoos agreements summarized above, were deeded to WSMC in exchange for 767.28 acres of privately owned fee acreage in Nye, White Pine and Lander Counties, Nevada; and
- the sale of the Kay No. 18 claim to Nevada Western by Kohlmoos on December 20, 2005 subject to a 1.5% NSR royalty retained by the original owners (the royalty will be reduced to 1% if the US government imposes a production royalty in the future).

The Sterling Gold Mining Corporation lease (the "Hoodoo" lease in Table 4.1 and Figure 4.2) was originally executed on June 12, 1991 and applied to 204 HD and ZIG unpatented mining claims. Erwin (2005) reported that the HD and ZIG claims were located in 1978. A Notice of Intent to Hold for these claims was filed with the BLM in December of 1979, but was not recorded in Nye County during the 1979 calendar year as is required under the provisions of the Federal Land Policy and Management Act. Instead, the Notice of Intent to Hold was recorded on January 17, 1980. Erwin (2005) recommended that the matter be investigated further and, if the situation as reported was found to be accurate, the claims should be relocated. In cooperation with Mr. Sterling, Newmont abandoned the HD and ZIG claims and staked 209 Thumb claims in their place in 2005. The lease will remain in effect so long as annual minimum advance royalty payments of $20,000 are paid. These payments apply towards a mineral production royalty equal to 4% of the net smelter returns from minerals produced from the claims.

Nevada Western entered into a joint venture with Newmont to further explore and, if warranted, develop the Northumberland project on December 19, 2003. Under the terms of the joint venture agreement, Newmont must spend US$25 million within six years to earn a sixty percent interest in the project. After Newmont's earn-in, Nevada Western has options to have Newmont finance Nevada Western's contributions to commercial production. If Nevada Western should elect to be financed, amounts Newmont contributes on its behalf will be treated as non-recourse loans to be repaid out of production. The Northumberland property includes 253 claims staked by Newmont that are within the area of interest as defined by the Newmont-Nevada Western joint venture agreement.

The Mineral Resources reported in Section 17 of this technical report lie within the fee lands and patented mining claims owned by Nevada Western (Figure 4.2). A very small portion of the resources is subject to the Kohlmoos 1% NSR royalty (Figure 4.2).

The Federal annual unpatented mining claim maintenance fees for the annual assessment year from September 1, 2006 to September 1, 2007 have been properly and timely paid on the Northumberland unpatented claims (Erwin, 2007). Erwin (2007) reports that the BLM mining claim records indicate that the Northumberland unpatented claims are active and in good standing through September 1, 2007. MDA has reviewed documents provided to Fronteeer by Newmont that indicate that the maintenance fees for the Northumberland unpatented claims have been paid for the September 1, 2007 to September 1, 2008 assessment year.

4.5 Permits

All necessary permits are current at Northumberland, and the required reclamation bonding is in place. Current reclamation bonding with the Nevada Division of Environmental Protection, Bureau of Mining Regulation and Reclamation to cover disturbances at Northumberland currently stands at $1,544,454.

On August 2, 2004, a Nevada State Reclamation Permit (Gooding Plan) was issued that allows Newmont to explore the Northumberland fee lands and disturb up to 200 acres (Lauha and Powell, 2004b). In 2005 the USFS approved four Plan of Operation permits submitted by Newmont to cover anticipated exploration of various targets in 2005 through 2007, including the Rim, Orocopter, Wilson, and Ziggurat targets. Newmont also obtained the Ziggurat and Orocopter Notices from the BLM for exploration activities planned for 2005 through 2007 (Newmont, 2006). Newmont reports that there was no new permitting in 2006 and 2007.

4.6 Environmental Liabilities

There are ongoing environmental liabilities at Northumberland that are primarily related to the prior mining activities undertaken at both the Upper and Lower Sites. The most important of the environmental liabilities includes the closure of heaps and process ponds at the Upper Site, as well as sites with hydrocarbon-impacted soils at both the Upper and Lower Sites. Impacts to shallow ground water have been detected near ore-processing infrastructure related to WSMC's prior mining activities at the Upper Site, including an ore heap and a small pregnant solution pond, although no impacts to ground water have been detected to date in the deep aquifer or in shallow wells lying down the hydraulic gradient.

Original total mining disturbance at the Upper Site was 285 acres; reclamation activities have reduced the disturbed acreage to approximately 126 acres. All mine-waste dumps at the Upper Site have been re-contoured and reseeded. Two underground storage-tank sites and the barren-pond generator sites have been excavated and are considered closed by the Nevada Department of Environmental Protection. A total of 4,500 cubic yards of petroleum-impacted soils have been removed from the Upper Site and stockpiled at the Lower Site. Reclamation issues remaining to be addressed at the Upper Site include the impacted ground water detected at the south end of heap No. 3 and in the vicinity of the small pregnant solution pond, both of which are being monitored, and three hydrocarbon-impacted sites.

Disturbance at the Lower Site originally totaled 94 acres; approximately 21 acres remain to be reclaimed. Completed work includes the re-contouring of old heaps and the reclamation of the six process ponds. One block building, fencing, and some access roads remain to be reclaimed in the Lower Site, as well as approximately 4,500 cubic yards of hydrocarbon-impacted (diesel and motor oil) soils that are stockpiled on a closed heap.

In addition to the environmental liabilities attributable to past mining activities at Northumberland, there are lesser liabilities related to both prior and ongoing exploration activities, including drill access roads and drill sites.

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

5.1 Access

Northumberland can be accessed from State Highway 376 on the western margin of Big Smoky Valley by way of a well-maintained dirt road through West Northumberland Canyon. This dirt road intersects Highway 376 eighteen-road miles south of State Highway 50, and 85-road miles north of State Highway 6 (Figure 4.1).

5.2 Climate

The climate at the project site is typical of central Nevada's mid-latitude high-desert environment with warm dry summers and relatively cold windy winters. Average temperatures range from 74^{o} F in July to 30^{o} F in January. Precipitation is generally less than 12 inches per year with the bulk of it accumulating during winter storms and summer thunderstorms. Annual snowfall varies from year to year depending on the intensity and severity of individual storms. Vegetation ranges from sagebrush and grass at the Lower Site to juniper, pinion, and mountain cedar at the Upper Site.

5.3 Local Resources and Infrastructure

The town of Austin, located approximately 53-road miles to the northwest of Northumberland, and the Round Mountain area, located about 25-road miles to the south, are the nearest population centers to the project. The Round Mountain and Tonopah communities presently support mining operations at the Round Mountain gold mine.

A 230 kV transmission line that traverses Big Smoky Valley is the nearest power line to the project. It is situated at the eastern edge of the Lower Site, approximately 11 miles from the Upper Site. Power for the Cyprus and WSMC mining and processing activities at the upper site was provided by on-site generators. The private lands in the Upper and Lower Sites provide sufficient space for mining infrastructure required for extraction of the presently defined resources described in Section 17.

5.4 Physiography

The topography is moderately rugged with elevations across the property ranging from approximately 7,700ft to 9,165ft at Mount Gooding. The Cyprus and WSMC open pits in the Upper Site are at about 8,600ft. There is sufficient space in the area of the resources discussed in Section 17 to allow the construction of needed mining infrastructure.

6.0 HISTORY

6.1 Exploration and Mining History

Much of the following summary is taken from WSMC (1998).

The exploration and production history of Northumberland occurred during two periods. The first period began in 1866 when a prospector named Logan reportedly discovered silver mineralization in the Northumberland Mining district. Relatively minor amounts of silver were extracted from veins by underground mining methods during this time.

The second period of intermittent mining and exploration began in 1936 and continues to the present day. Significant low-grade gold mineralization was first discovered in 1936. The Northumberland Mining Company ("NMC") acquired the main properties of the district in 1938 and initiated production in 1939. NMC mined oxide ore from three small open pits that were located in what is now the east Main pit area. The ore was milled near the open pits and processed by cyanidation. Tailings were transported as slurry via a wooden flume one and one-half miles down East Northumberland Canyon to two tailing ponds. Operations stopped in 1942 when the federal government shut down gold mines by order L-208 as a result of World War II. In addition to its mining activities, NMC drilled 214 exploration and development churn holes between 1938 and 1942.

Gold exploration was the main activity at Northumberland between 1942 and 1975. Peter Joralemon drilled 47 conventional rotary ("rotary") holes between 1959 and 1963, Kerr McGee Mining Company ("Kerr McGee") drilled 27 rotary holes in 1963 and 1964, Homestake Mining Company ("Homestake") drilled 21 rotary holes in 1968; and Idaho Mining Corporation ("Idaho Mining") drilled 34 rotary holes between 1972 and 1974.

Cyprus Mines Corporation ("Cyprus") obtained the property in 1975 and drilled 53 rotary and core holes between 1975 and 1984 and 36 air-track holes in 1978. In addition to these holes, Cyprus drilled an unknown number of holes of unknown type with a "T83" prefix; the database includes 42 of these holes.

Cyprus succeeded in developing two distinct oxide gold deposits and began mining operations at the Upper Site in the Main and Chipmunk open pits in 1981. Mineralization from part of the Main deposit was mined in the Main pit, while the Chipmunk pit mined gold from the States deposit. The ore was crushed to -1/2 inch at facilities near the pits and hauled by truck to the Lower Site where heap-leach facilities were located. The pregnant solution produced from the heap was passed through activated-carbon columns, pressure stripped, and the gold and silver were recovered by electrowinning. Cyprus terminated heap-leaching operations in mid-1985.

Gold and silver production from Northumberland is summarized in Table 6.1.

Table 6.1 Northumberland Gold and Silver Production

(WSMC, 1998)

Company	Period	Tons	Gold (ounces)	Recovered Grade (oz Au/ton)	Silver (ounces)	Recovered grade (oz Ag/ton)
	Pre-1939	?	?	?	?	?
NMC	1939-1942	220,284	45,000	0.204	N/A	NA
Cyprus	1981-1984	2,153,016	92,000	0.043	103,900	0.048
WSMC	1985-1991	5,019,000	93,730	0.019	381,862	0.076
	Totals	*7,392,300*	*230,730*	*0.031*	*485,762*	*0.068*

6.2 WSMC and NewWest

WSMC acquired the Northumberland property from Cyprus in 1985. After turning the Cyprus heaps with a bulldozer, WSMC began to re-leach the heaps at the Lower Site shortly after acquiring the project. WSMC mined material from the two open pits developed by Cyprus from 1987 to 1990, with the primary ore production coming from the Chipmunk pit. Instead of hauling the crushed ore by truck to the Lower Site, as Cyprus had done, WSMC treated run-of-mine ore year-round on new heaps constructed at the Upper Site. WSMC ceased mining in 1990 and emphasis was then placed on exploration. Gold production from the WSMC heaps ended in 1991.

WSMC contracted Analytical Surveys, Inc. to conduct an aerial survey in 1990. This survey was used to create digital topography of the post-mining Northumberland surface.

Modeling of the known deposits allowed WSMC to understand the significance of the tectono-stratigraphic host horizons, project higher-grade mineralization within these horizons along lineaments, and test for mineralization in new areas. The significance of the South Ridge mineralization and high-grade core of the Chipmunk deposit was first recognized in 1990. The geometry of the high-grade cores of these deposits defined the east-striking lineaments. Deep holes drilled in Mormon Canyon approximately one-half mile west of the Chipmunk pit along the westward projection of these lineaments led to the discovery of the Zanzibar deposit in 1991. Further drilling in the southwestern portion of the Mormon Canyon target area resulted in the discovery of the high-grade Rockwell deposit in 1992. The northeast orientation of the Rockwell deposit and its potential to contain high grade (up to one oz Au/ton) was recognized in the 1997 drilling program. The presence of the Pad 4 deposit along the Chipmunk lineament was verified with a drill hole in the same year.

WSMC completed a land exchange with the USFS in 1997 that resulted in 3,386 acres (1,370ha) of USFS-administered public domain land becoming private fee land owned by WSMC. This fee land included the Upper Site and all of the gold deposits defined to date at Northumberland.

WSMC completed 679 RC and core holes for a total of approximately 310,000ft between 1985 and 1997. The geology of the entire project area was mapped and sampled on a reconnaissance scale. WSMC defined over 30 exploration targets outside of the deposit area based on the results from a trend analysis of satellite imagery, a CSAMT geophysical survey, two aeromagnetic surveys, over 6,600 rock chip samples, and 6,300 soil samples. Eight of these targets were drilled without encountering significant mineralization.

A number of metallurgical tests were completed by WSMC. The most significant of these are described in Section 16.

A Mineral Resource estimation was completed by NewWest personnel under the guidance of MDA using drill data through Newmont's 2004 program (Section 17).

6.3 Newmont – Nevada Western Joint Venture

WSMC's interests in the Northumberland projected were held by Nevada Western, a wholly owned subsidiary. Nevada Western entered into a joint venture with Newmont on the Northumberland project in late 2003. Through a series of transactions, Nevada Western became a wholly owned subsidiary of NewWest in 2005. Newmont, as operator of the joint venture, immediately began exploration work and has completed soil geochemical sampling, geological mapping, geophysical surveys, metallurgical testing, and drilling.

Newmont collected a total of 1,512 B-horizon soil samples in 2003 on a 328 by 328ft grid that covered much of the fee lands in the deposit area. A total of 818 soil samples were taken in areas of Paleozoic carbonate units lying to the north of the deposit area that were deemed to be favorable but were lacking in geochemical data (Branham, Lauha, and Powell, 2004; Lauha and Powell, 2004a). Newmont also was able to retrieve and re-assay 1,950 of 2,200 assay pulps from WSMC soil samples collected on 600ft by 750ft grids on the outer portions of the Northumberland claims (Branham, Lauha, and Powell, 2004). The 250 soil sites for which the sample pulps could not be found were re-sampled and 568 soil samples were collected to fill various gaps in the property soil grid (Lauha and Powell, 2004a). An additional 200 soil samples were collected on the east side of the property (Lauha and Powell, 2004a; see Section 9.8). Multi-element geochemical analyses were completed on all of the geochemical samples. Based on a detailed analysis of the results of the soil sampling in and around the deposit area, Jackson (2004) stated, "the Northumberland system is characterized by strong enrichment of elements known to be associated with Carlin deposits on the Carlin Trend and it exhibits many of the element zonation relationships observed on the Trend. …The levels of metal enrichment indicate it [the Northumberland mineral system] is a powerful system with the potential to host high grade deposits."

A 200-sample stream-sediment survey was conducted in the various drainages within the Northumberland caldera northwest of the Northumberland deposit area in 2004 (Lauha and Powell, 2004a). This survey was designed to examine a 100-square-mile area underlain by Tertiary volcanic rocks interpreted to include several altered diatreme breccia pipes. All anomalous results from the survey are considered by Newmont to reflect material eroded from the Northumberland deposit area (Branham, Lauha, and Powell, 2004; Newmont, 2005). Additional stream sediment sampling was undertaken in 2005 to infill and follow-up results obtained in the 2004 survey. At total of 27 bulk-leach extractable gold (BLEG) samples were taken (Newmont, 2006).

Detailed geologic mapping was completed over an area of about 10-square miles that included the fee ground and USFS lands south to the property boundary. New interpretative geologic cross sections of the deposit area were created. Preliminary mapping was also completed at specific target areas (Newmont, 2005; Newmont, 2006).

A total of 301 ten-foot channel samples were collected from 15 trenches excavated in the western portion of the Zanzibar area. These samples, as well as road-cut samples from the same area, were used to identify drill targets for potential drill testing.

Newmont conducted a reconnaissance gravity survey over much of the property. An infill gravity survey was also completed to attempt to define the eastern margin of the Northumberland caldera and improve the resolution around the Mount Gooding pluton (Newmont, 2005). A five-line CSAMT geophysical survey was completed over the Mount Gooding intrusion to assist in interpreting the shape of the pluton and its possible extension to the east (Lahua and Powell, 2004b; 2004d). Newmont completed an IP survey totaling 20 line kilometres in the Ziggurat target area and collected gravity data from 132 stations to infill existing data (Newmont, 2006). Newmont conducted a district-scale ground gravity survey in 2007 consisting of 658 new stations at 500m centers, and a helicopter magnetic and radiometric survey totaling 2,750 line kilometres with 100m line spacings and a nominal drape of 60m (Brock Bolin, oral communication).

Newmont defined drilling targets after compiling all available geological, geochemical, geophysical, and drilling data. A 26-hole RC drilling program, for a total of 32,595ft, was then completed in and around the deposit area in 2004, and an additional 20 RC holes totaling 22,200ft were drilled in 2005 (Lauha and Powell, 2004f; Newmont, 2006). The Zanzibar deposit and the southern edge of the Chipmunk deposit were the principle targets of the drilling, with additional holes testing the possible buried eastern extension of the Mount Gooding pluton, various targets in the area of the existing open pits, and the southern edge of the Mount Gooding pluton. Most of the 2005 Newmont drilling was undertaken within the limits of the Mineral Resources reported in Section 17, but the data were not available at the time of the resource estimation. The Newmont 2005 drill data are compared to the resource model in Section 17.9.

The 2006 holes were drilled with the goal of expanding the resource, establishing the orientation of the deeper high-grade mineralization discovered by Newmont hole NN-5, obtaining core samples for metallurgical and waste-rock characterization, and providing initial testing of the Ziggurat anomaly (Newmont, 2007). Five RC holes were completed at Ziggurat in 2006, all of which failed to return values in excess of 0.01 oz Au/ton. Newmont drilled 54 holes, for a total of 53,691 feet in 2006.

As of the date of this report, Newmont had completed 21 RC and core holes in 2007 for a total of 26,857 feet. One pre-collar hole was being drilled at the time of this report; footage for this hole is not included in totals. Newmont's 2007 program tested for high-grade structural conduits to the Zanzibar deposit, as well as district targets in the Orocopter, Barite Pit, and South Mormon Canyon areas.

Five composites of RC samples were sent to Newmont's metallurgical laboratory at the Lone Tree mine for testing in 2004. Three core samples of oxide material were sent to Newmont's Carlin Metallurgical Laboratory in 2006 to determine gold amenability to cyanide leaching. Also in 2006, core from four holes drilled in the Zanzibar deposit was used to obtain sulfide material for roaster and autoclave amenability tests. There are no reported results from these sulfide samples. Further details on metallurgical tests are discussed in Section 16.

Newmont added three blocks of unpatented mining claims to the Northumberland property in 2004 and 2005. A gap in the southern boundary of the property position was covered with 43 claims, 126 claims were staked on the eastern side, and 57 claims were added in the Ziggurat target area on the western side of the property. Newmont also staked 27 claims to cover gaps in the claim block.

Newmont drilled 89 RC, core, and pre-collared core holes in 2005, 2006, and 2007 that were drilled after the resource estimation discussed in Section 17, mostly in the general area of the resources. These holes were drilled to explore for both sulfide and oxide mineralization, obtain metallurgical and geotechnical samples, and verify RC drill results. Selected assay results for some of the 89 holes are highlighted in Table 6.2. Table 6.2 is derived from summary tables and a digital database provided to NewWest by Newmont; assay certificates have not yet been provided to NewWest for many of the drill holes.

Table 6.2 Northumberland JV Post-Resource Drill Summary: Selected Results

Drill Hole	TD (feet)	Zone (feet)	Imperial Units		Metric Units	
			Length (feet)	Grade (oz Au/ton)	Length (meters)	Grade (g Au/tonne)
Northumberland JV - 2005 Drilling Results						
NN-27(s)	650	525-570	45	0.145	13.72	4.97
NN-30 (s)	1400	860-985	125	0.113	38.10	3.87
NN-31 (s)	1400	870-935	65	0.134	19.81	4.59
NN-32 (s)	1370	770-855	85	0.198	25.91	6.79
NN-47 (s)	1460	835-850	15	0.203	4.57	6.96
		870-915	45	0.135	13.72	4.63
NN-48 (s)	1940	1190-1230	40	0.163	12.19	5.59
		1315-1360	45	0.138	13.72	4.73
NN-49 (s)	2050	1475-1505	30	0.101	9.14	3.46
		1585-1605	20	0.270	6.10	9.26

Table 6.2 Northumberland JV Post-Resource Drill Summary: Selected Results, cont.

Drill Hole	TD (feet)	Zone (feet)	Imperial Units Length (feet)	Imperial Units Grade (oz Au/ton)	Metric Units Length (meters)	Metric Units Grade (g Au/tonne)
Northumberland JV - 2006 Drilling Results						
NN-45 (s)	2000	1480-1505	25	0.127	7.62	4.35
		1565-1655	90	0.118	27.43	4.05
NN-50 (s)	1550	1015-1065	50	0.142	15.24	4.87
NN-54 (s)	1820	1205-1225	20	0.152	6.10	5.21
		1250-1260	10	0.104	3.05	3.57
		1280-1305	25	0.124	7.62	4.25
		1700-1720	20	0.123	6.10	4.22
NN-55 (s)	1530	820-845	25	0.168	7.62	5.76
		850-860	10	0.104	3.05	3.57
NN-56 (s)	1530	770-1060	290	0.118	88.39	4.05
	(includes)	995-1010	15	0.236	4.57	8.09
NN-57 (s)	1150	750-900	150	0.130	45.72	4.46
		955-965	10	0.124	3.05	4.25
NN-58 (s)	680	520-575	55	0.151	16.76	5.18
		600-605	5	0.200	1.52	6.86
NN-59 (s)	580	440-535	95	0.170	28.96	5.83
	includes	440-490	50	0.242	15.24	8.30
NN-60 (o)	320	45-55	10	0.021	3.05	0.72
		160-220	60	0.089	18.29	3.05
		225-245	20	0.093	6.10	3.19
NN-61(o)	300	135-230	95	0.057	28.96	1.95
NN-62 (s)	850	505-570	65	0.186	19.81	6.38
		710-775	65	0.104	19.81	3.57
NN-63 (s)	1077	720-820	100	0.226	30.48	7.75
		835-875	40	0.104	12.19	3.57
		990-1015	25	0.437	7.62	14.98
NN-64 (s)	1228	785-865	80	0.215	24.38	7.37
	includes	800-830	30	0.306	9.14	10.49
		1170-1190	20	0.156	6.10	5.35
NN-66 (s)	950	740-790	50	0.223	15.24	7.65
	includes	765-785	20	0.401	6.10	13.75
NUN-71 (s)	1080	850-895	45	0.149	13.72	5.11
NUN-72 (s)	900	755-800	45	0.220	13.72	7.54
NUN-74 (o)	150	30-70	40	0.285	12.19	9.77
NUN-75 (s)	600	420-495	75	0.159	22.86	5.45
NUN82 (s)	1900	1680-1755	75	0.176	22.86	6.03
	includes	1725-1755	30	0.246	9.14	8.43
NUN83 (s)	1800	1615-1665	50	0.198	15.24	6.79
	includes	1650-1660	10	0.448	3.05	15.36
NUN-84 (s)	1795	1445-1455	10	0.116	3.05	3.98
		1545-1555	10	0.288	3.05	9.87
NN-85 (s)	1800	1415-1485	70	0.153	21.34	5.25
	includes	1455-1475	20	0.287	6.10	9.84
NUN-89 (s)	1400	1055-1100	45	0.136	13.72	4.66
		1110-1125	15	0.098	4.57	3.36
		1140-1180	40	0.129	12.19	4.42
NUN-92 (s)	1910	1805-1855	50	0.166	15.24	5.69
NUN-93 (s)	1365	890-930	40	0.139	12.19	4.77
NUN-94 (s)	1225	820-880	60	0.112	18.29	3.84
	includes	865-875	10	0.220	3.05	7.54
NN-102 (o)	150	20-55	35	0.108	10.67	3.70
NN-104 (o)	120	25-85	60	0.078	18.29	2.67
	includes	45-70	25	0.157	7.62	5.38
NN-105 (o)	100	40-55	15	0.157	4.57	5.38

Table 6.2 Northumberland JV Post-Resource Drill Summary: Selected Results, cont.

Drill Hole	TD (feet)	Zone (feet)	Imperial Units		Metric Units	
			Length (feet)	Grade (oz Au/ton)	Length (meters)	Grade (g Au/tonne)
Northumberland JV - 2007 Drilling Results						
NUN-88 (s)	1800	1020-1085	65	0.110	19.81	3.77
NUN-90 (s)	1800	1240-1265	25	0.133	7.62	4.56
NUN-95 (s)	1300	800-840	40	0.243	12.19	8.33
NUN-96 (s)	1216	725-765	40	0.247	12.19	8.47
NUN-97 (s)	1402	750-775	25	0.184	7.62	6.31
		795-805	10	0.180	3.05	6.17
NUN-98 (s)	1206	680-770	90	0.147	27.43	5.04
NUN-107 (o)	645	0-25	25	0.032	7.62	1.10
NUN-108 (o)	485	85-100	15	0.026	4.57	0.89
		110-180	70	0.045	21.34	1.54
NUN-109 (o)	400	10-25ft	15	0.061	4.57	2.09
		95-105	10	0.101	3.05	3.46
		145-160	15	0.022	4.57	0.75
NUN-110 (o)	445	195-330	135	0.038	41.15	1.30
NUN-113 (s)	2000	1915-1925	10	0.141	3.05	4.83
		1930-1935	5	0.097	1.52	3.33

(s) = sulfide mineralization. Average values based on 0.050 oz Au/ton (1.71 g Au/tonne) cutoff.
(o) = oxide mineralization. Average values based on 0.010 oz Au/ton (0.34 g Au/tonne) cutoff.
Intervals may include internal values below cutoffs.

Hole NN-5, drilled by Newmont in 2004 and included in the Northumberland resource estimation, encountered two zones of mineralization, including 105 feet of 0.142 oz Au/ton within the Zanzibar deposit and 65 feet of 0.267 oz Au/ton immediately below the Zanzibar deposit. Two follow-up holes, NN56 and NN63, extended these mineralized zones. Hole N-56, located 65 feet east of NN-5, returned a 290-foot continuously mineralized zone grading 0.118 oz Au/ton that appears to be associated with both the Zanzibar Deposit and the lower zone discovered in hole NN-5. NN-63 and -64 were drilled to better define the deeper zone of mineralization encountered in both NN-5 and NN-56. NN-64 intercepted 80 feet of mineralization in the Zanzibar deposit with a grade of 0.215 oz Au/ton between 785 and 865 feet, which includes 30 feet of 0.306 oz Au/ton between 800 and 830 feet, but did not encounter the deeper zone. Hole NN-63 also intercepted the Zanzibar deposit (100 feet of 0.226 oz Au/ton between 720 and 820 feet) and encountered 25 feet of 0.437 oz Au/ton in the lower zone between 990 and 1015 feet. This deeper high-grade zone in NN-63 extended the mineralization in NN-56 approximately 60 feet to the south.

Hole NUN 113 was drilled 700 feet west of the northwestern-most hole in the Zanzibar deposit. NUN113 intersected a zone of mineralization that includes 10 feet of 0.141 oz Au/ton and five feet of 0.097 oz Au/ton between 1915 and 1935 ft. This hole may have intercepted an extension of the Zanzibar deposit, or may have encountered new sulfide mineralization.

Newmont drilled holes into oxide mineralization to obtain samples for metallurgical testing and to attempt to add oxide resources. NUN-110 was drilled to further test the oxide potential of the Pad 4 deposit. This hole intersected 135 feet of mineralization with a grade of 0.038 oz Au/ton between 195 and 330 feet.

Newmont plans further RC and core drilling in 2008 within the limits of the Mineral Resources discussed in Section 17. This drilling will explore for high-grade zones within the deeper portions of the deposits. The 2008 Newmont drilling plans also include drilling of several other targets beyond the limits of the Northumberland Mineral Resources.

7.0 GEOLOGIC SETTING

The following discussion is largely derived from an internal WSMC document (WSMC, 1998) that summarizes the geologic knowledge gained by the various governmental and company representatives that have studied the Northumberland project and its surrounding areas and from Kleinhampl and Ziony (1984). Additional observations of coauthor G. Lanier, Regional Geologist, Fronteer, are also included.

The Nevada Western–Newmont joint venture is continuing to refine both the regional and local geologic understanding of the Northumberland project and surrounding area.

7.1 Regional Geology

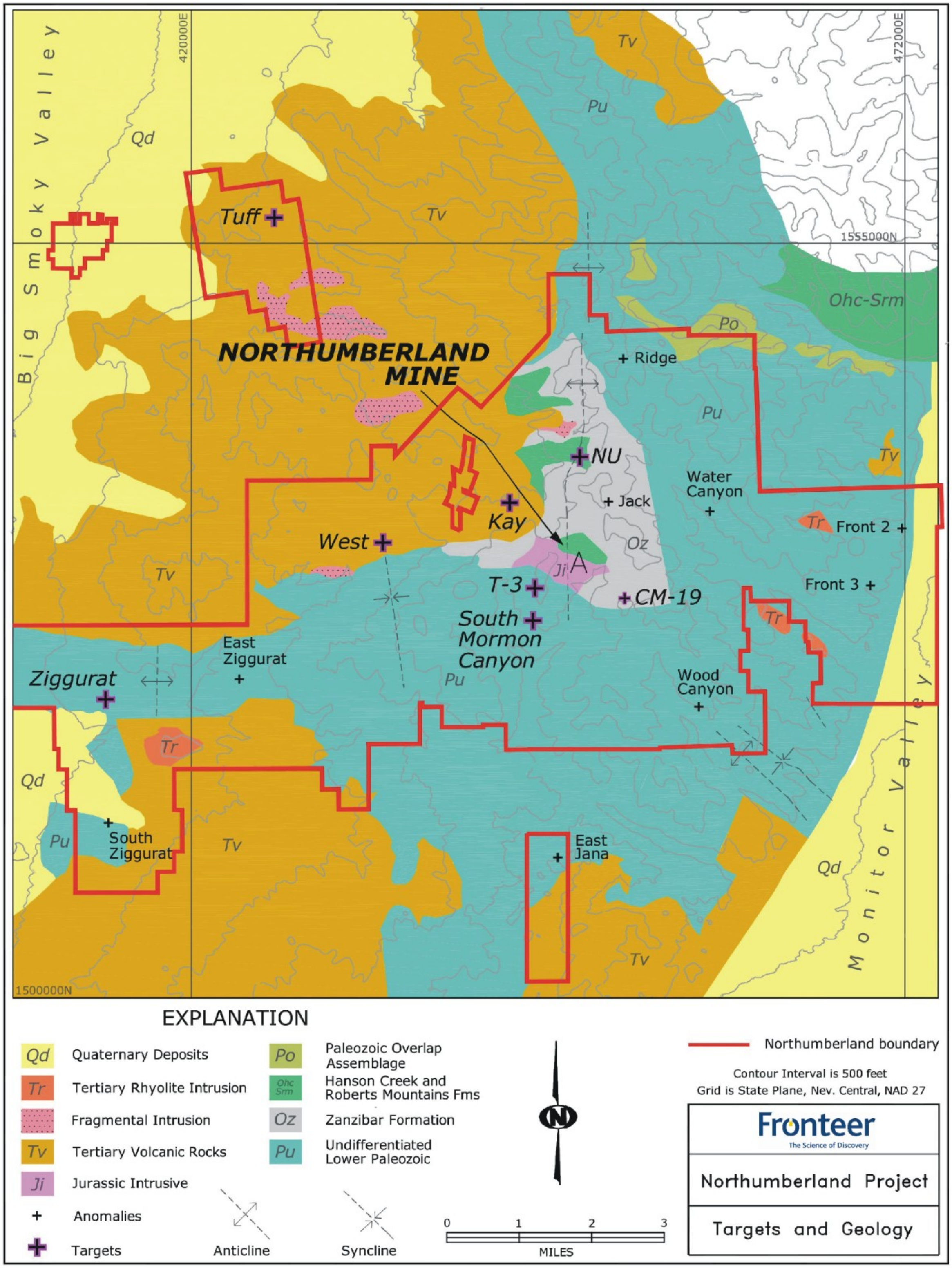
Northumberland is situated near the center of the Toquima Range, one of the north-trending ranges centrally located in the Great Basin portion of the Basin and Range Province. Northumberland lies along a north-northeast-trending alignment of large metal deposits in Nye County that includes Round Mountain, Manhattan, and Tonopah.

Paleozoic sedimentary rocks and Mesozoic plutons are exposed in an erosional window through Tertiary rhyolitic ash-flow tuff in the central portion of the Toquima Range (Figure 7.1). The window has been referred to as both the Ikes Canyon window and the Northumberland window (WSMC, 1998). The Paleozoic units include representatives of the autochthonous (units formed in their present location), parautochthonous (used here to represent units that formed at some intermediate distance from their present location that were transported by thrust faulting), allochthonous (used here to represent units formed a significant distance from their present location that were transported by thrust faulting), and overlap (sedimentary units derived from the erosion of the previously mentioned units) assemblages that characterize central Nevada. Ordovician to Devonian limestone, shale, and argillite total about 3,000ft in thickness and represent the autochthon in this region. Parautochthonous rocks include about the same thickness of the same units as the autochthon, but shaly limestone and shaly argillite that make up the Perkins Canyon Formation in the parautochthon correspond to a more basinward facies of the calcareous Pogonip Group of the autochthon (Kay and Crawford, 1964, cited in Kleinhampl and Ziony, 1984). Several thousand feet or more of argillite, chert, shale, and greenstone represent the allochthon in this part of the Toquima Range. Transported eastward from their original site of basinal deposition, some of these rocks may be correlatives of the Vinini Formation (McKee, 1972, cited in Kleinhampl and Ziony, 1984). The overlap assemblage in the Northumberland area consists of the Wildcat Peak Formation of Pennsylvanian age, which is made up of limy and clastic rocks. The Wildcat Peak Formation unconformably overlies the allochthon and locally the autochthon in the region.

A number of Jurassic plutons have been identified and dated in the Northumberland area. The largest in the district is named the Clipper Gap pluton and has been dated with K-Ar at 151 $\pm$ 3 Ma (Kleinhampl and Ziony, 1984).

Oligocene and Miocene tuffs, welded tuffs, and tuffaceous lacustrine sediments unconformably overlie the Paleozoic and Mesozoic units. According to Kleinhampl and Ziony (1984), these Tertiary rocks formed in part after the precious metal deposits were emplaced. A rhyolitic dome that is about 28 Ma

Figure 7.1 Regional Geology of Northumberland Area



cuts part of the Tertiary tuffs about five miles southwest of Northumberland. Tertiary megabreccias that may have been landslide and talus deposits (Kleinhampl and Ziony, 1984) are exposed west of the divide between East and West Northumberland canyons.

Dioritic to felsitic dikes in the region cut the Jurassic plutons and Paleozoic units; some intermediate dikes cut Tertiary tuffs. These dikes have been variously assigned Cretaceous and Tertiary(?) ages. Some of the dikes are thought to be related to the hydrothermal event that produced the gold mineralization (Kleinhampl and Ziony, 1984).

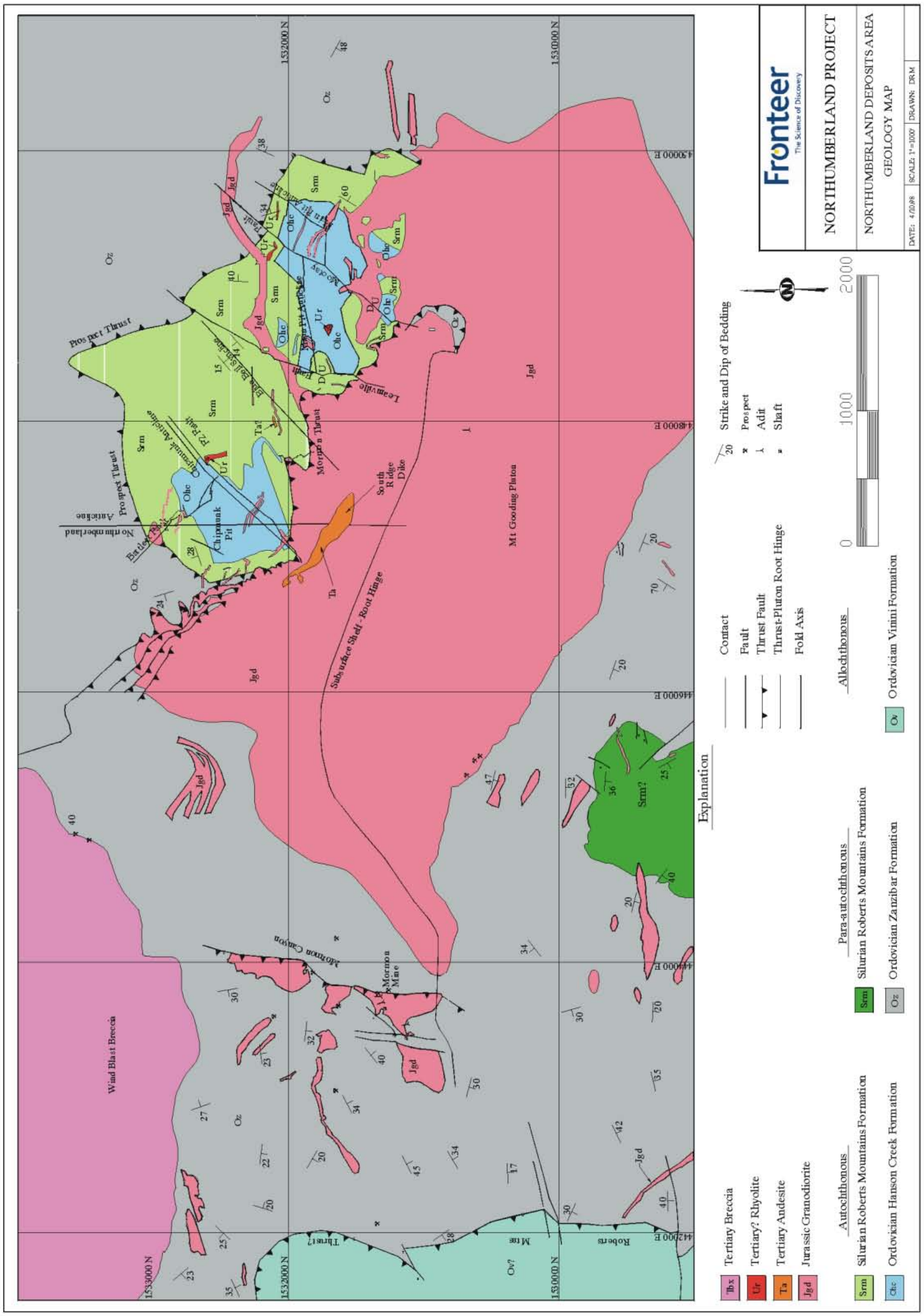
Folding and thrust faulting, probably part of the Paleozoic Antler Orogeny, have complexly deformed the Paleozoic rocks in the Toquima Range. Paleozoic sedimentary and the Jurassic intrusive rocks have been folded and cut by high-angle normal, high-angle oblique-slip, and low-angle thrust and bedding-plane faults. Tertiary and younger rocks were subjected to block faulting, which produced moderate tilting of the bedded Tertiary units. In addition, there are prominent volcanic structures, such as the partially collapsed Northumberland Caldera, which lies on the western flank of the range (McKee, 1974 and 1976, cited in Kleinhampl and Ziony, 1984).

7.2 Local Geology

The area that includes the Northumberland open pits and surrounding gold deposits (the “deposit area”) is underlain by lower Paleozoic sedimentary and metasedimentary rocks exposed in an erosional window through Tertiary volcanic rocks (Figure 7.2). In general, the Paleozoic stratigraphic units occur within a folded low-angle shear zone. The units are structurally bound and internally sheared, and also exhibit rapid facies changes. In the Northumberland mine area, the Prospect thrust, thought to be of Antler age, placed parautochthonous Ordovician Zanzibar Formation over the autochthonous, transitional, Silurian Roberts Mountains Formation. The Zanzibar Formation, which consists of cherty limestone with distinctive alternating bands of chert and argillaceous limestone and siltstone at its base, is an off-shelf facies equivalent to part of the Pogonip Group carbonate rocks (Harris, 2003). The Roberts Mountains Formation includes limy shale with a cherty dolostone bed at its base. A carbonate assemblage of the Hanson Creek Formation with upper dolostone and lower limestone members underlies the Roberts Mountains Formation.

The Paleozoic rocks have been intruded by the Jurassic Mount Gooding pluton and related apophyses, dikes, and sills. The stock is a fine- to medium-grained equigranular granodiorite with locally porphyritic margins. The stock consists of two parts, a high-angle root below a low-angle sill-like shelf that extends up to 1,500ft north of the root. The bottom of the shelf is in fault contact with sedimentary rocks. The fault contact consists of up to 40ft of generally silicified breccia and is defined as the Mormon thrust. This configuration suggests that the top of the stock has been decapitated and shifted to the northwest or that the top of the stock is a laccolith with a faulted contact at its bottom. The stock, including the root and shelf, is locally strongly altered to quartz-illite on its northern side. This assemblage grades to propylitic alteration distal from the structural controls. An east-trending dike swarm cuts the Northumberland mine area. These dikes can be completely altered to illite but are thought to be related to the Jurassic intrusive event based on relict texture. The Mount Gooding stock has been dated by K-Ar methods to be 154 $\pm$ 3 Ma (Silberman and McKee, 1971).

Figure 7.2 Local Geology of Northumberland



The Mormon thrust of probable Jurassic age truncates the Prospect thrust as well as Jurassic igneous bodies. The contacts between the Roberts Mountains and Hanson Creek Formations as well as the limestone-dolostone members of the Hanson Creek Formation are locally bedding-plane faults. The two bedding-plane faults and the Prospect thrust near its intersection with the Mormon thrust are the main low-angle horizons that are known to have controlled mineralization at Northumberland.

The Paleozoic rocks and associated low-angle structures described above are folded along the broad, north-trending Northumberland anticline, which, south of the deposit area, appears to plunge to the south. Much smaller northeast- to east-trending anticlines and synclines are superimposed on the larger anticline near its crest.

Tertiary intrusive rocks are also present in the Northumberland mine area and consist of andesitic and rhyolitic dikes, sills, and small stocks. The South Ridge dike in the Northumberland mine area represents the oldest dated Tertiary intrusive event. The dike is andesitic in composition, has an aphanitic to porphyritic texture, intrudes granodiorite just south of the mineralized area, and has a late Eocene to early Oligocene $^{40}Ar/^{39}Ar$ age of 35.2 $\pm$ 0.2 Ma (Peters, 1996 and 1997). The South Ridge dike is locally propylitically and argillically altered and hosts low-level anomalous gold values. Quartz-phyric dikes and sills of rhyolitic composition are also exposed in the mine area. These rocks are too altered to date and classify but may be related to the Mount Ziggurat rhyolitic intrusive event, which has been K-Ar dated at 26.5 $\pm$ 0.7 Ma (Boden, 1992).

Stratigraphic units are less understood outside of the immediate Northumberland deposit area. The Roberts Mountains thrust has been inferred to be present on the western side of the district where it may have placed the Vinini Formation over the Zanzibar Formation. To the east, the Roberts Mountains thrust could be absent, and there is a normal sequence of sedimentary rocks ranging from the Ordovician Antelope Valley Formation at the base, to the Roberts Mountains Formation, to the early Mississippian Pinecone Formation of Coles (1988) at the top. If this interpretation is correct, the Pinecone Formation is an autochthonous siliciclastic unit. The Pinecone Formation is similar to the Slaven Chert and contains thick-bedded barite deposits. The Pennsylvanian Wildcat Peak Formation, part of the overlap assemblage, is locally exposed in the northeast portion of the project area. The formation rests unconformably on older Paleozoic units.

A thick sequence of the volcanic rocks is exposed west of the Northumberland Paleozoic window. Volcanic rocks also occur as erosional remnants that cap peaks on the eastern side of the range and, prior to mining, at the Northumberland mine site. The main volcanic pile is composed of thick, continuous, northwest-dipping sheets of rhyolitic crystal lithic ash-flow tuff, out-flow breccia, water-laid tuffaceous sediments and minor interbeds of vitrophyre. Volcanic rocks have been subdivided into the Northumberland Tuff, K-Ar dated at 33 $\pm$ 0.8 Ma (Zhafiqullah, 1992), the overlying Hoodoo Tuff with a K-Ar date of 30.4 Ma (McKee 1974), and the Moores Creek Tuff with a K-Ar date of 27.2 $\pm$ 0.6 Ma (Boden, 1992). The Moores Creek Tuff is exposed in the southernmost part of the project area and is temporally related to the Toquima volcanic complex at Round Mountain, Nevada. The volcanic complex at Northumberland includes discordant breccias that have been variously interpreted as diatremes, breccia pipes, talus, or landslide deposits. The breccia bodies typically have an east-west elongation with poorly defined and steeply dipping internal layering. The breccias are clast-supported and composed predominantly of fragments of Paleozoic basement rock with minor igneous fragments.

The volcanic pile in the vicinity of Northumberland is considered by some to be part of the Northumberland Caldera (McKee, 1974). Tuffs exposed along the western range front have locally anomalous gold mineralization associated with faults.

8.0 DEPOSIT TYPE

The Northumberland mineralization occurs as stacked, sediment-hosted, finely disseminated, Carlin-type gold deposits. The mineralization is analogous in many ways to the Goldstrike (Betze\Post) deposit of the northern Carlin Trend in north-central Nevada (Leonardson and Rahn, 1996). Both are Carlin-type deposits that have a close spatial association with Jurassic-aged granodioritic stocks. The age of mineralization in both cases appears to be younger than the stocks, probably Eocene. Hydrothermal alteration and mineralization occur within and overprint contact metamorphic aureoles adjacent to the stocks. Host stratigraphic units are Ordovician to Silurian in age and include the Roberts Mountains Formation. There are inferred sill caps or traps above the deposits and there is a strong stratiform component to deposit geometries. Gold deposits are associated with the crests and limbs of anticlines, and both high- and low-angle structures are recognized as being important controls of the mineralization. Gold mineralization is micron-sized, disseminated, and associated with iron sulfides where not oxidized. Late hydrothermal barite is present at both Goldstrike and Northumberland.

The gold anomalies that occur in tuff to the west of the Paleozoic window at Northumberland are volcanic-hosted epithermal occurrences, similar in origin to the mineralization at Round Mountain, Nevada.

9.0 MINERALIZATION

The following discussion is derived primarily from the work of G. Lanier.

Gold and silver mineralization at Northumberland occurs in eight stratigraphically and more-or-less spatially distinct deposits that form an arcuate belt approximately 1.6 miles long in an east-west direction and 0.3 miles wide. The deposits are generally stratiform and follow three low-angle tectono-stratigraphic host horizons near the crest and within the west limb of the Northumberland anticline (Figures 9.1 and 9.2). The deposits can merge between horizons where the intervening rock layers are locally breached. From tectono-stratigraphic top to bottom, the mineralized horizons are referred to as the Prospect-Mormon thrust (upper), Basal Chert fault (middle), and Hanson Creek fault (lower) host horizons. As a generalization, the deposits that occur along the upper horizons are more dispersed laterally, while those at the lower horizon are more restricted perpendicular to stratigraphic layering.

The three host horizons are structural discontinuities that include the Prospect-Mormon thrust intersection zone and two bedding-plane faults. The Prospect-Mormon thrust horizon is a complex intersection between the two low-angle sub-parallel thrust faults that consists of a 20- to 40-ft thick shear zone. The shear zone consists of fault breccia with large sausage-shaped blocks of sedimentary and intrusive rocks bounded by internal shear planes. The Zanzibar deposit, the largest deposit at Northumberland, occurs along the Prospect-Mormon thrust horizon.

The Basal Chert and Hanson Creek fault horizons are bedding-plane faults. The former separates the lowermost Roberts Mountains Formation from the underlying Hanson Creek Formation. The basal chert unit of the Roberts Mountains Formation consists of interbedded chert and dolostone immediately above the Basal Chert fault and is often closely associated with gold mineralization. Deposits that are localized along this horizon include the States and Main deposits. The Hanson Creek fault separates the lower limestone member from the upper dolostone member of the Hanson Creek Formation. Deposits that generally follow or seem to originate from this fault horizon include Rockwell, Pad 4, Wedge-Shaped, Chipmunk, and South Ridge.

High-angle east-trending structures and dike swarms controlled the location and overall geometry of many of the Northumberland gold deposits. The distribution and internal high-grade zones of deposits associated with the Hanson Creek fault horizon define two east-trending deposit lineaments. The alignment of the east-oriented high-grade core within the Chipmunk deposit with the Pad 4 deposit defines the Chipmunk lineament, while the alignment of the South Ridge and Wedge-Shaped deposits defines the South Ridge lineament. The east-trending structural influence is also evident in the Basal Chert fault horizon where the States and Main deposits have geometric components that follow the two lineaments.

Northwest-trending structures had a local limiting effect on mineralization. The best example of this is the South Ridge dike and its projection. The dike establishes the western limit of the South Ridge deposit. The dike's northwest projection along a presumed structure establishes the eastern limit to most of the high-grade mineralization in the Zanzibar deposit.

Figure 9.1 Geologic Cross Sections Showing the Northumberland Gold Deposits

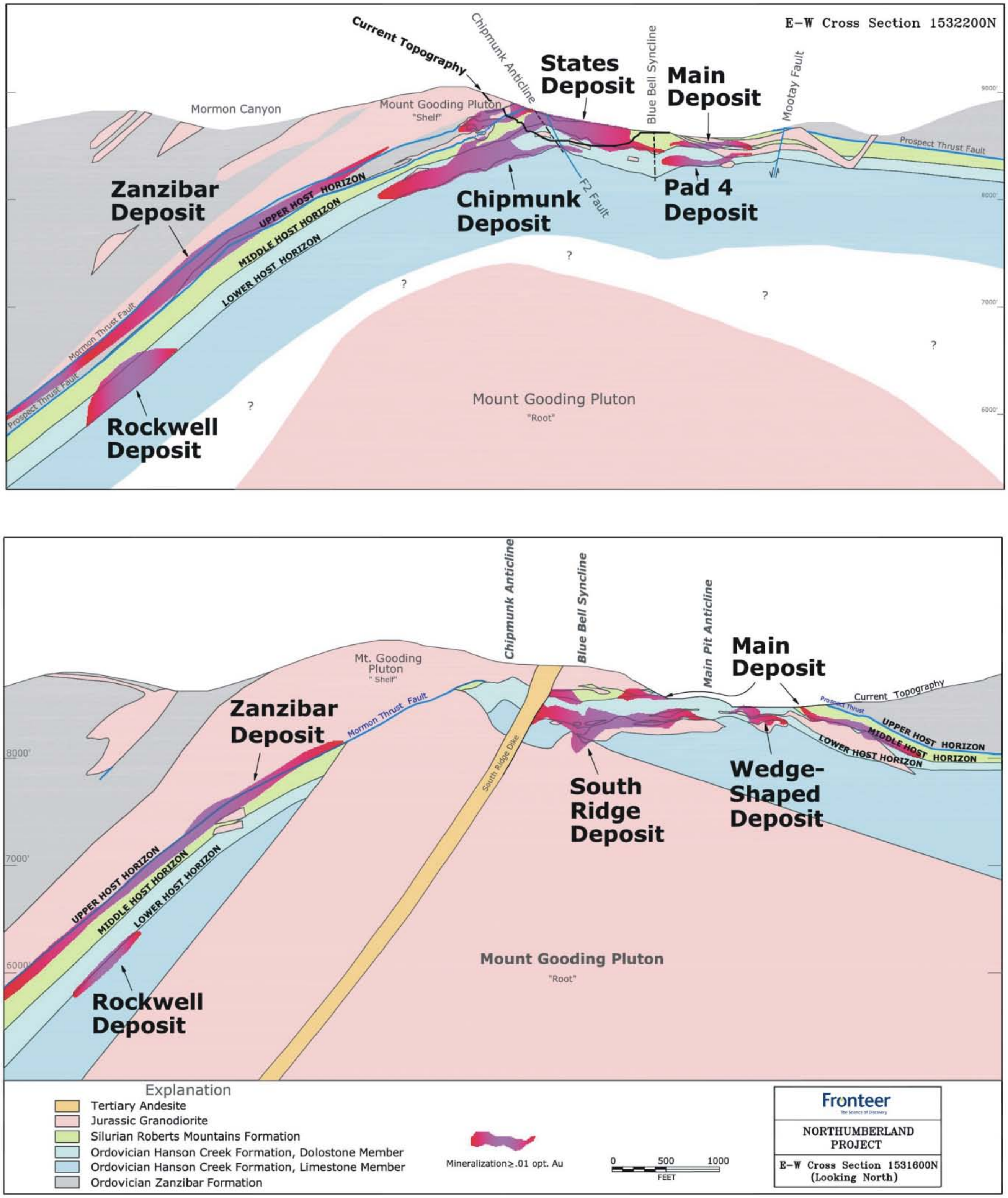


Figure 9.1 Geologic Cross Sections Showing the Northumberland Gold Deposits, continued

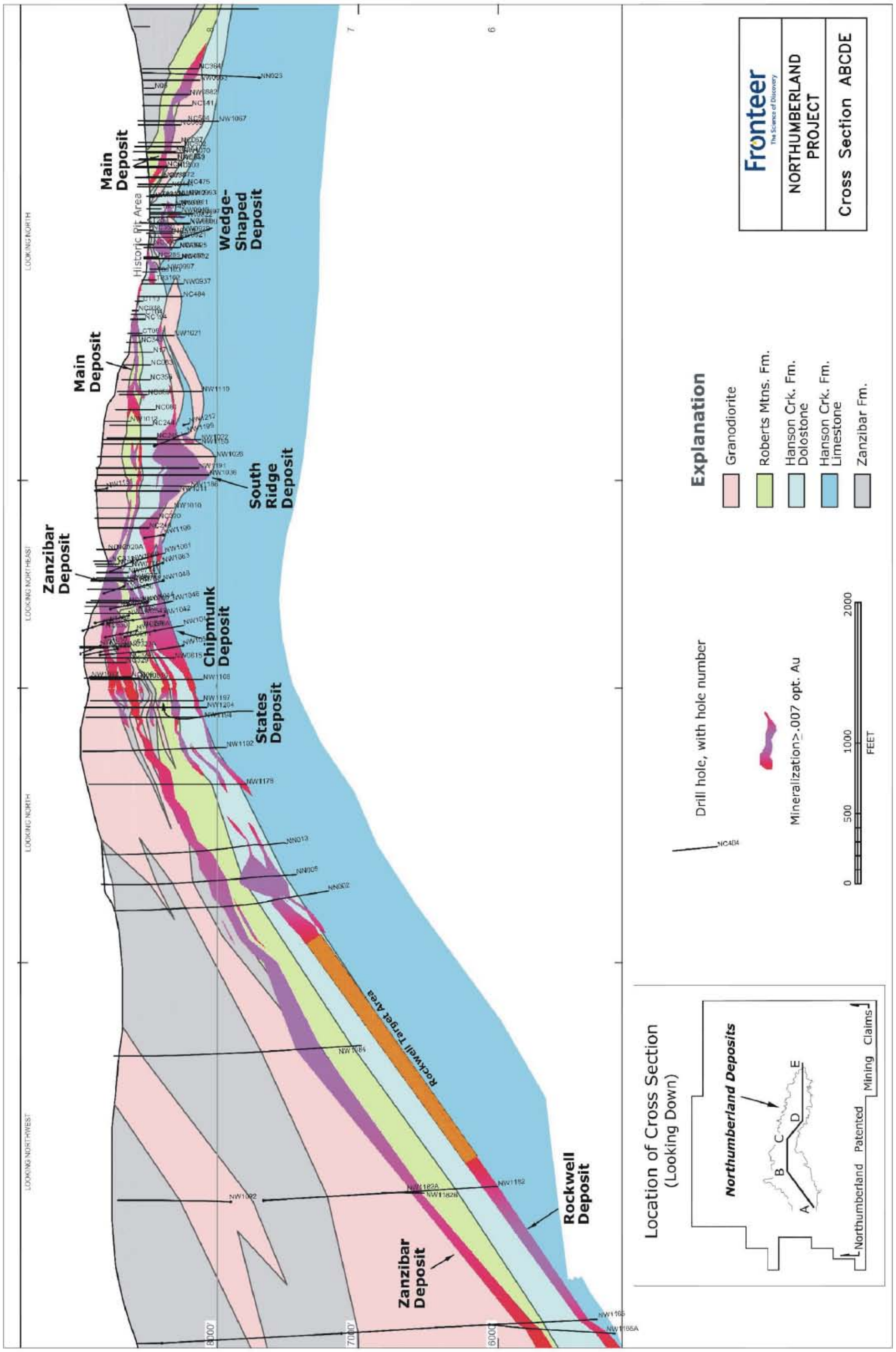
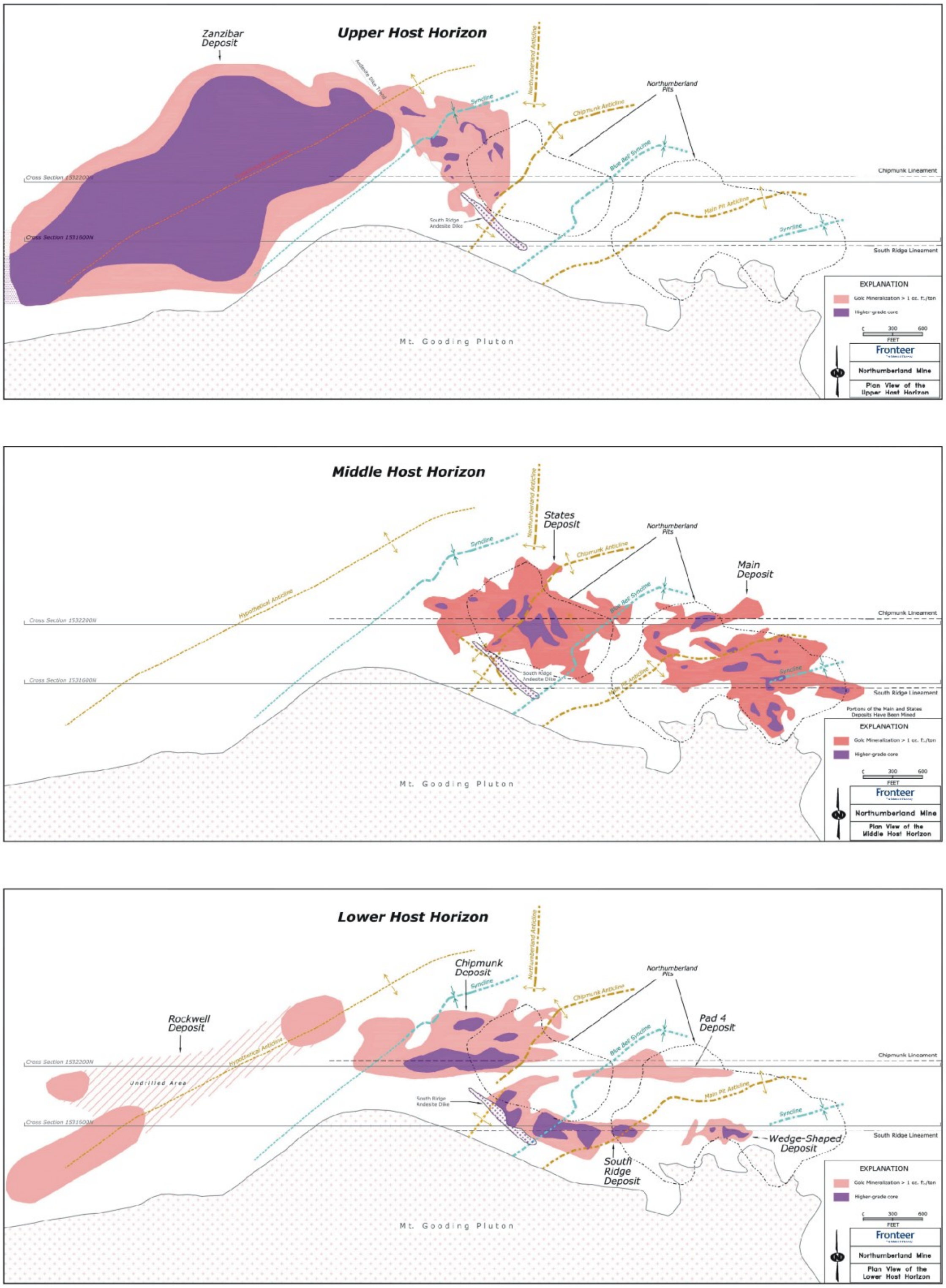


Figure 9.2 Plan Views of Northumberland Gold-Silver Host Horizons



The localization of gold was also influenced by folds. The cluster of Northumberland deposits is situated in the crest and west limb of the north-trending Northumberland anticline. Much smaller northeast- to east-trending anticlines and synclines are superimposed on the larger anticline. Two of the smaller anticlines are well defined and spatially associated with deposits. The States deposit is associated with the Chipmunk anticline, while the Main Deposit is associated with the Main anticline.

Gold localization was also fundamentally influenced by the contact aureole of the Mount Gooding pluton. There is a narrow, poorly mineralized zone adjacent to the stock that corresponds to the highest-grade of contact metamorphism. This proximal zone is mainly decarbonized (primary organic carbon is removed) through the formation of garnet-diopside hornfels, although marble is present as well. Gold deposits are best developed in a more distal zone of the northern contact aureole of the Mount Gooding pluton that is strongly carbonized (carbon remobilized from the proximal zone is added), especially along structures; hornfels is present only locally.

Gold occurs as micron-sized particles in quartz veinlets and enclosed in goethite pseudomorphs after pyrite (Kuipers, 1991). In general, gold in unoxidized Northumberland mineralization is thought to be intimately associated with pyrite and arsenopyrite, which is typical for a Carlin-type system. The pyrite association is supported by the fact that gold is liberated upon natural and metallurgically induced oxidation. The total sulfide abundance is less than five percent of which pyrite, arsenopyrite and marcasite are the most abundant species present. The gold is disseminated primarily within sedimentary rocks, although the Mount Gooding pluton and its associated intrusive rocks also host significant disseminated mineralization in all deposits.

Honea (1992) examined mineralized specimens with a scanning electron microscope and found fine-grained gold particles occurring as silver-rich electrum (Au:Ag = 2.6:1) that range in size from 0.5 to 72 microns. The electrum is associated with a complex silver-bearing assemblage of copper-antimony sulfides, arsenic sulfosalts, and stibnite. Copper, lead, zinc and molybdenum sulfides, as well as gold and lead tellurides, are present in trace amounts.

The oxidation of sulfides extends variably to a depth of over 800ft below surface and is grossly layered with respect to topography and the mineralized horizons. The deeper layered oxidation is only locally pervasive; islands of unoxidized to partially oxidized sulfides are usually present within these deeper oxide zones.

The alteration at Northumberland is generally typical of Carlin-type deposits. Alteration of carbonate host rocks involves decarbonatization (some percentage of the carbonate minerals are removed, often resulting in a poorly consolidated rock; this process is also referred to as “sanding”) followed by partial to locally complete silicification of the decarbonated rocks. Silicified rock is composed mainly of fibrous to anhedral replacement quartz that encloses organic carbon, sericite/illite, pyrite, and probably detrital quartz. Quartz veining accompanies the silicification, is locally abundant, and preserves up to five generations of fracturing and healing. Although significant gold mineralization can occur within both unsilicified sanded rock and silicified rock (jasperoid), jasperoid is the main gold host, especially in the upper horizons. Late-stage calcite and local barite veins overprint the silicification and decarbonatization. Northumberland is well known for its collection-quality barite specimens that are derived from the late-stage alteration.

Gold mineralization in igneous rocks is associated with two types of alteration, a typical quartz-illite/sericite-pyrite alteration and carbonation. The quartz-illite/sericite-pyrite alteration is common and occurs in the quartz-pyrite vein wall rocks. Adjacent to the main structural controls, the wall-rock alteration coalesces into pervasive zones of illite/sericite, which are locally accompanied by silicification. This alteration distally transitions to propylitically altered rock. The transition zone is characterized by the replacement of feldspars by illite/sericite and the replacement of biotite and hornblende with chlorite. Propylitic wall-rock alteration consists of chlorite-calcite-pyrite aggregates after mafic minerals and pyrite after magnetite.

Gold mineralization is also associated with an unusual occurrence of carbonated igneous rock. Dolomite is the main replacement mineral and can make up to 40% of the rock. While the general abundance and distribution of carbonated igneous rock are uncertain, it is known to be associated with high-grade gold mineralization in the Rockwell deposit and may also be present in the South Ridge and Wedge-Shaped deposits.

The eight gold deposits at Northumberland are briefly described below in the following stratigraphic order. The size dimensions of the deposits reported below are the horizontal distances of all gold mineralization enclosed within a grade-thickness contour of one ounce-ft per ton. Except where noted, thickness is the vertical thickness of gold mineralization greater than 0.007 oz Au/ton. Mineral Resources by deposit are reported in Section 17.

9.1 Zanzibar Deposit

The Zanzibar deposit (Figures 9.3 and 9.4) occurs in the Prospect-Mormon thrust horizon and is the largest known deposit at the project. The deposit is a tabular body of largely sulfide mineralization that is exposed in the high-wall of the Chipmunk pit and continues southwest for 4,700ft down the west-dipping limb of the Northumberland anticline to a drilled depth of 2,800ft. The mineralized zone is up to 140ft thick and is mainly hosted in silicified fault breccia of the Mormon thrust. Mineralization also extends above the breccia into broken and altered granodiorite, and below the fault into broken Roberts Mountains Formation.

The shallower, eastern portion of the deposit was drilled on a 100- by 200-ft grid in 1997 to evaluate the continuity of the higher-grade gold mineralization and the possibility of limited open pit mining. Grades up to about 0.2 oz Au/ton have good continuity within this area, while higher grades are less continuous. The western, deeper portion of the deposit is less densely drilled and the western limit of the deposit has not been established. The Zanzibar deposit is under active exploration by Newmont for high-grade zones.

9.2 States and Main Deposits

Most of the modern-day oxide gold production at Northumberland has come from the States and Main deposits. WSMC and Cyprus mined the States deposit from the Chipmunk pit. NMC, Cyprus, and WSMC mined high-grade pods of the Main deposit from a number of pits in the Main pit area. The mineralization that remains around the Chipmunk and Main pits includes both sulfide and oxide components.

Figure 9.3 Cross Section of the Modeled Zanzibar and Rockwell Deposits

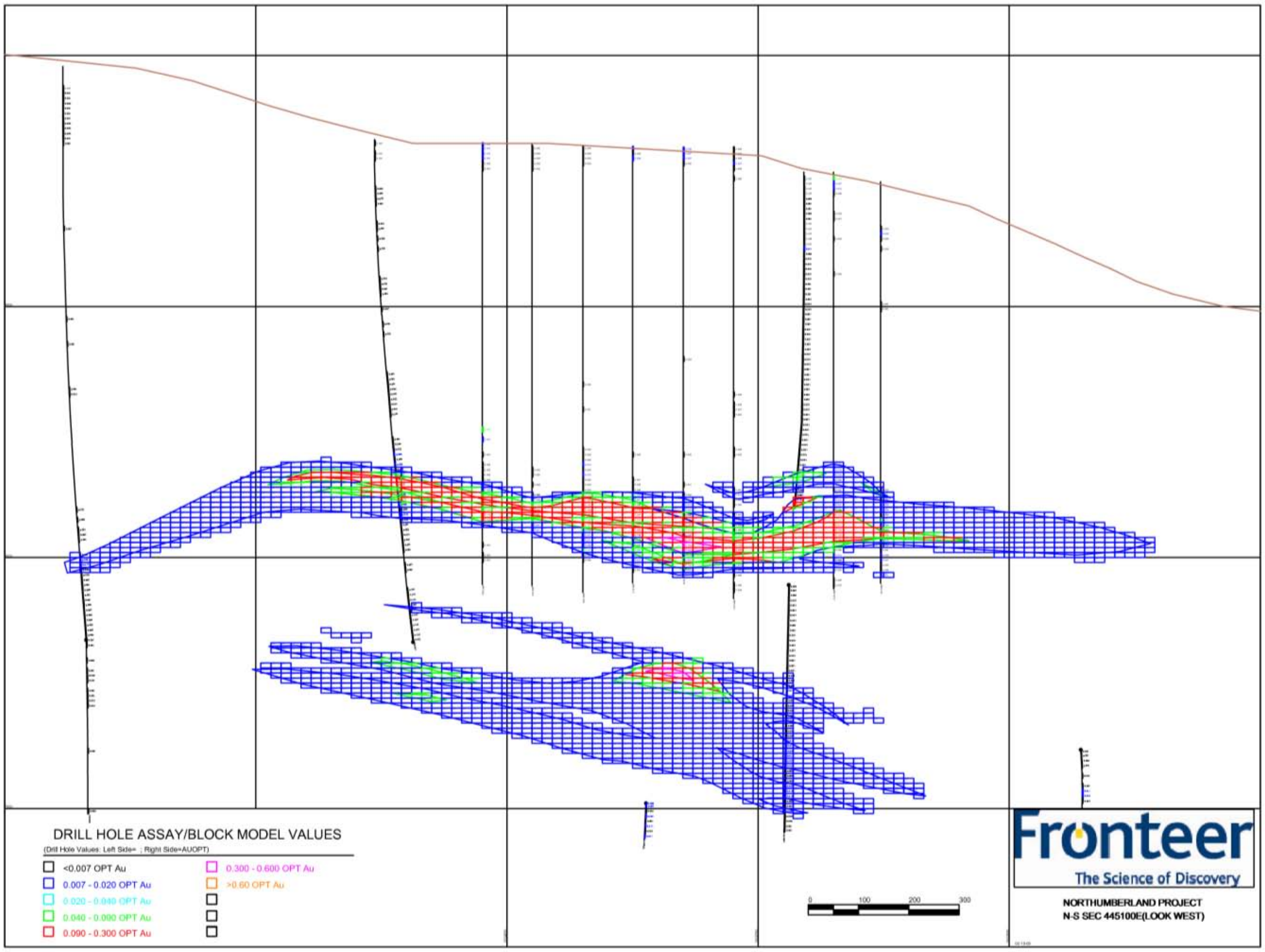
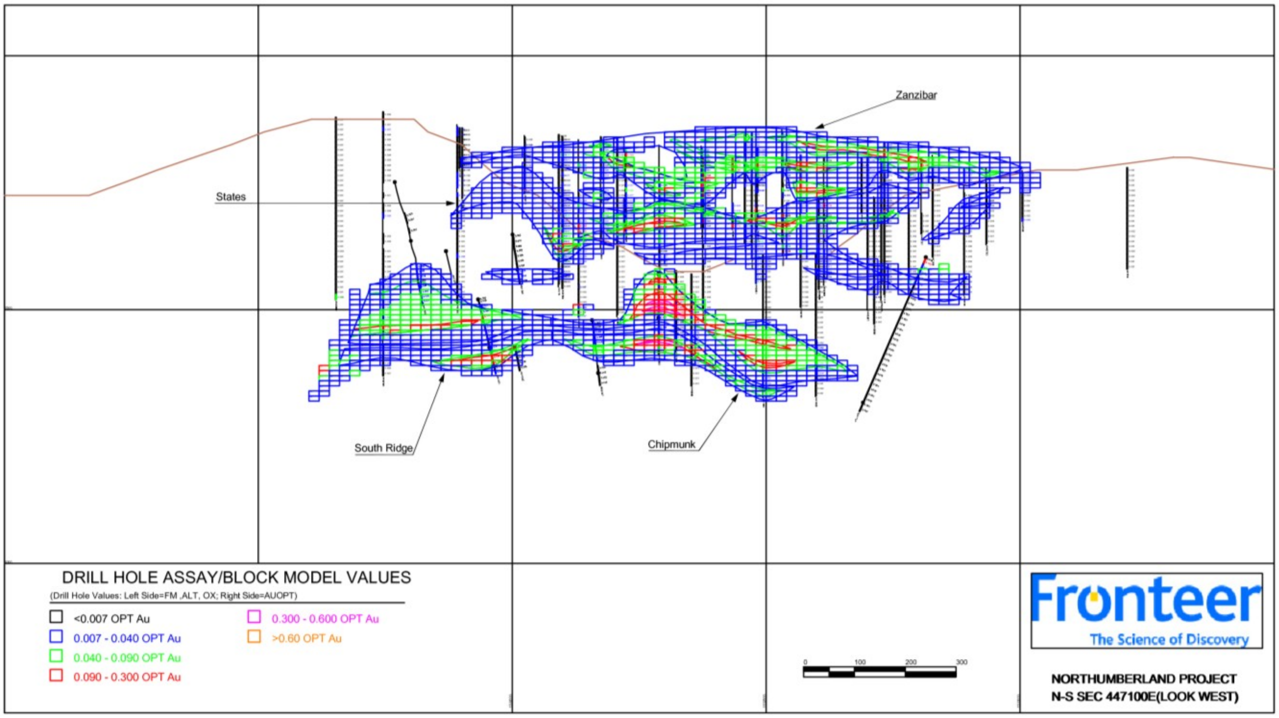


Figure 9.4 Cross Section of the Modeled Zanzibar, States, South Ridge, and Chipmunk Deposits



The States and Main deposits occur at the Basal Chert fault horizon where mineralization is mainly hosted in the 20-ft thick basal cherty bed of the Roberts Mountains Formation. In mineralized areas the bed is always silicified, with the silicification extending up to 100ft above the cherty bed. The dolostone in the basal chert unit of the Roberts Mountains Formation is generally sanded where the Hanson Creek dolostone underlies the States and Main deposits. A portion of the Main deposit is hosted in an argillized and unusually sulfidic granodiorite sill that is present below the basal chert unit. Coarsely crystalline barite mineralization is common in the States and Main deposits. The barite partially fills open fractures and cavities in jasperoid and is later than at least the bulk of the gold mineralization.

9.3 Chipmunk Deposit

The Chipmunk deposit is 2,000ft long in an east-west direction and 700ft wide. A high-grade core zone occurs along the Chipmunk lineament where the deposit is locally up to 170ft thick, contains grades up to one oz Au/ton, and merges vertically with the States deposit. The highest point of the deposit has been exposed in the bottom of the Chipmunk pit, while the eastern half of the deposit is present below the pit. The western half extends to the west beneath the pit high-wall where the top of the deposit is presently defined at 750ft below the surface at its deepest point.

The deposit occurs or appears to originate at the Hanson Creek fault horizon and is hosted by sanded and locally silicified dolostone, and by lesser-decalcified limestone and argillized igneous dikes. A significant portion of the deposit is oxidized.

9.4 Pad 4 Deposit

The Pad 4 deposit is incompletely defined with only enough drill-hole penetrations to establish that a deposit is present. Existing drilling suggests that the deposit is relatively low grade but has the potential to be primarily oxidized. The deposit occurs along the Hanson Creek fault horizon and is located east of the Chipmunk deposit along the Chipmunk lineament.

9.5 South Ridge Deposit

The South Ridge deposit is a sulfide body that occurs beneath South Ridge along the South Ridge lineament. The deposit is 1,800ft long in an east-west direction, and up to 400ft wide and 350ft thick. The top of the deposit is 500ft below South Ridge at its deepest point.

Gold mineralization in the South Ridge deposit is related to the Hanson Creek fault horizon. Most of the mineralization is hosted in dolostone and sanded dolostone; silicification is present but minor. The thick mineralized body contains internal near-horizontal lenses of higher-grade gold mineralization that approach 0.5 oz Au/ton. A lower-grade deeper portion of the deposit is hosted in altered granodiorite.

9.6 Wedge-Shaped Deposit

The Wedge-Shaped deposit is a small, partially oxidized body located 50ft below the Main pit between 8,200- and 8,400-ft elevations. The deposit is essentially a continuation of the South Ridge deposit along the South Ridge lineament, but is distinguished by its unique geometry. While the other Northumberland deposits have a dominant low-angle stratiform component, the Wedge-Shaped deposit is for the most part internally and externally discordant to the stratigraphy. The deposit originates at the Hanson Creek fault horizon and ascends up through the dolostone member with an inclination of approximately 50 degrees to the south. The deposit is at least 800ft long and has a true thickness of up to 100ft.

Approximately half of the gold mineralization in the Wedge-Shaped deposit is hosted in altered igneous rock, 40 % is hosted in sanded dolostone, dolostone, and hornfels, and only 10% is hosted in jasperoid. The deposit is centered on a dark-gray aphanitic dike(?) that appears to be the control for mineralization. Internal higher-grade and lower-grade zones strike easterly.

9.7 Rockwell Deposit

The Rockwell deposit (Figure 9.3) represents a deep discovery by WSMC at Northumberland that is currently being explored by the Newmont-Nevada Western joint venture. The initial four discovery core holes drilled by WSMC encountered grades up to one oz Au/ton at the Hanson Creek fault horizon within a vertical depth range of 2,600 to 3,200ft. The discovery holes were drilled approximately one mile southwest of the Chipmunk pit to test a lineament. Other drilling that tested the deep horizon in the general area indicates that the deposit is at least 400ft wide in a northwest to southeast direction and lower-grade portions of the deposit could extend several thousand feet to the northeast. Newmont's RC hole NN-5 was drilled 2,100ft northeast of the initial drill holes and encountered 65ft with an average grade of 0.267 oz Au/ton within a 340ft thick zone of grades greater than 0.007 ounces per ton; the true thickness of this intercept is not known. Follow-up drilling by Newmont demonstrated that the high-grade mineralization intersected by NN-5 forms a pod that is discrete from the high-grade mineralized center defined by the WSMC discovery holes. Present drilling is consistent with the possibility that these pods are connected by continuous lower-grade mineralization.

The Rockwell deposit is hosted by sanded dolostone and decalcified limestone with local silicification at the initial discovery area with some of the highest grades occurring within dolomitized intrusive rock. The Rockwell deposit mineralization intersected in drill hole NN-5 occurs throughout the Hanson Creek dolostone and extends well up into the Roberts Mountains Formation where gold grades are highest.

9.8 Other Mineralization

There are numerous areas of gold mineralization at Northumberland, both within the general area of the defined deposits as well as in other portions of the large property. The areas are defined by soil and/or rock gold anomalies and favorable geology, only some of which have been tested by drilling. As operator of the joint venture with Nevada Western, Newmont plans to drill several of these anomalies in 2008.

10.0 EXPLORATION BY ISSUER

Fronteer has not conducted exploration, or any other type of on-site activities, at Northumberland. Exploration work completed by previous operators and Newmont is discussed in Section 6.

11.0 DRILLING

The Northumberland database used in the Mineral Resource estimation reported in Section 17 contains information from 1,412 drill holes for a total of 504,999.5ft, including holes drilled by Newmont in 2004 (Table 11.1). These include holes drilled by air-track, conventional open-hole rotary, RC, and core methods, as well as 42 holes of unknown type. Newmont holes drilled subsequent to 2004 were not included in the resource estimation discussed in Section 17.

The database also does not include the 214 churn holes drilled by Northumberland Mining Co., 47 rotary holes drilled by Joralemon, and 27 rotary holes drilled by Kerr McGee. These holes were removed from the database by WSMC due to suspect sample quality and suspect assays, including assays with a high detection limit (0.01 oz Au/ton). Eleven Homestake rotary holes are not in the database for unknown reasons. Cyprus holes NC079, NC080, NC255 through NC259, and NC289 are also not in the database due to missing data. WSMC holes T3-01 through T3-14 are in the database, but all assays are considered suspect and have been removed. WSMC hole NW1121 is not in the database due to erroneous collar coordinates. The hole, which lies beyond the limits of the resources discussed in Section 17, should be surveyed and added to the database.

Table 11.1 Northumberland Resource Drill-Hole Database Summary

Company	Year	Air-track		Rotary		RC		Core		Total Drill Holes	Total Footage
		No.	Feet	No.	Feet	No.	Feet	No.	Feet		
Homestake	1968			11	2,045					11	2,045
Idaho Mining	1972-1974			34	5,229					34	5,229
Cyprus	1975-1983	41	2,766	553	139,398	(2)[1]	?[1]	27[1]	9,331[1]	663[2]	155,455[2]
WSMC	1985-1997					644[3]	268,660	34[3]	41,015.5	678	309,675.5
Newmont	2004					26	32,595			26	32,595
TOTAL		41	2,766	598	146,672	670	301,255	61	50,346.5	1,412	504,999.5

[1] Two core holes pre-collared by RC, with unknown footage of RC; all footage is reported as core in table.
[2] Includes 42 holes of unknown type, for 3,960ft of the total footage.
[3] Includes 22 core holes pre-collared by RC, with 21,400ft of RC and 25,284ft of core.

11.1 Drill Data

Statistics of the drill-hole database used in the resource estimation described in Section 17 are given in Table 11.2. Summary statistics for the gold-assay data are summarized in Table 11.3 by drill type, and Table 11.4 by company.

Table 11.2 Northumberland Resource Drill-Hole Database - Statistics

Item	Number	Footage	Avg. Footage
Drill Holes	1,412	504,999.5	357.6
Samples Assayed for Au by Fire Assay	67,951	463,716.9	6.8
Samples Assayed for Au by Cyanide Leach	18,810	109,393.5	5.8
Samples Assayed for Au by Cyanide Leach with no Fire Assay	2,404	12,620	5.2
Samples Assayed for Total Ag (Fire Assay or Acid Digestion)	61,457	430,975.4	7.0
Samples Assayed for Ag by Cyanide Leach	20,281	129,092.5	6.4
Samples Assayed for Ag by Cyanide Leach with no Total Ag	2,026	10,830	5.3

Item	Hole ID	Northing (ft)	Easting (ft)	Elevation (ft)	Depth (ft)
Minimum Northing of Collar	NW1142	1520695	415350	6575	2002
Maximum Northing of Collar	NW1164	1557510	422430	6350	390
Minimum Easting of Collar	NW1142	1520695	415350	6575	2002
Maximum Easting of Collar	NC533	1530617	452917	8918	210
Minimum Elevation of Collar	NW1164	1557510	422430	6350	390
Maximum Elevation of Collar	NW1127	1531075	445529	9160	75
Minimum Depth of Hole	NC105	1531971	450072	8622	10
Maximum Depth of Hole	NW1143	1531601	442552	8750	3426

Table 11.3 Northumberland Resource Drill-Hole Database – Sample Statistics by Drill Type

Drill Type	Samples		Au Grade (oz Au/ton)				
	Number	Avg. Length (ft)	Mean	Min	Max	Std. Dev.	CV
Air-track	515	5.3	0.018	0.001	0.520	0.046	2.579
Rotary	14,937	9.7	0.010	0.001	1.290	0.029	3.087
RC	47,246	5.8	0.010	0.000	1.200	0.030	2.921
Core	5,044	7.1	0.016	0.000	1.244	0.063	3.832
Unknown	211	18.4	0.026	0.001	0.300	0.066	2.514
Total	*67,953*	*6.8*	*0.011*	*0.000*	*1.218*	*0.033*	*3.024*

Table 11.4 Northumberland Resource Drill-Hole Database – Sample Statistics by Company

Company	Samples		Au Grade (oz Au/ton)				
	Number	Avg. Length (ft)	Mean	Min	Max	Std. Dev.	CV
Homestake	387	5.1	0.003	0.001	0.060	0.007	2.350
Idaho Mining	518	10.0	0.016	0.001	0.310	0.034	2.088
Cyprus	15,758	9.7	0.011	0.001	1.290	0.037	3.355
WSMC	44,783	6.1	0.011	0.000	1.200	0.034	2.966
Newmont	6,507	5.0	0.004	0.000	0.415	0.021	5.361
Total	*67,953*	*6.9*	*0.011*	*0.000*	*1.169*	*0.034*	*3.274*

The average grade of the Newmont drilling is low compared to the campaigns of most other operators. The 26 Newmont holes were drilled to depths of 800 to 1870ft and were assayed over their entire lengths, much of which was unmineralized. Many holes were drilled outside of the limits of the deposits and did not encounter significant mineralization. MDA has reviewed the Newmont holes drilled within the known deposit areas on cross sections and concludes that the Newmont results are consistent with those from previous operators.

Newmont drill-hole collars were surveyed using a Real Time Trimble GPS Navigation unit, model TSCI. WSMC hole collars were surveyed using a theodolite. MDA does not know if the other hole collars were surveyed.

The database includes down-hole survey data for 80 of the WSMC holes and all 26 Newmont holes. The WSMC surveys were completed by Century Geophysics using a down-hole gyro instrument. The Newmont down-hole surveys were conducted using truck-mounted, wire-line, down-hole survey equipment. Constant dip angles are assumed for the remaining 1,306 holes in the database. This assumption is likely to introduce increasing location error with increasing depth of the drill holes, especially for angle holes. Of the holes lacking down-hole surveys, 134 are drilled to down-hole depths of 500ft or greater. All except two of these deep holes, however, were drilled vertically.

Of the 1412 holes in the database, 1362 were drilled at an angle of -80º or steeper. The overwhelming bulk of the Northumberland gold mineralization is grossly stratiform and broadly folded by the Northumberland anticline. Near-vertical drilling, therefore, will cut the mineralization at acceptable angles. The steepest dips to the mineralized bodies occur in the deep Zanzibar and Rockwell deposits, which have an average dip of about -45º. While near-vertical drill holes do not cut this mineralization orthogonally, the three-dimensional resource modeling of the drill-hole data described in Section 17 accurately reflects the true thicknesses of the mineralization.

11.2 Pre-WSMC Drilling

There are no records of the drill contractors, drill rigs, drilling equipment, etc. used in the Homestake, Idaho Mining, and Cyprus drilling campaigns.

11.3 WSMC Drilling

WSMC used a number of RC drilling contractors from 1985 to 1991. RC contractors known to MDA include Hackworth Drilling, Inc. of Elko, Nevada; Kelmine; Pioneer Drilling Company; Eklund Drilling Company of Carlin, Nevada ("Eklund"); and Elsing Drilling and Pump Co., Inc. of Twin Falls, Idaho ("Elsing"). In 1989 and 1990, Elsing used an Ingersoll-Rand TH60 with 5 ½- and 5 ¾-inch hammer bits. In 1990 and 1991, Hackworth used 5 1/2-inch hammer bits. Leroy Kay Drilling of Yerington, Nevada and Tonto Drilling Services Inc. of Salt Lake City, Utah ("Tonto") drilled core for WSMC in 1991. Elsing, Eklund, and Boyles Brothers Drilling Company of Sparks, Nevada ("Boyles Brothers", part of Layne Christensen Company) were used as RC contractors and Tonto as the core contractor in 1992 and 1993. Elsing used a 5 1/2-inch bit and Eklund used a VT-100 rig with 6-, 5 3/4-, and 5 7/8-inch bits. RC and core contractors used in 1997 were Boyles Brothers and Tonto, respectively. Boyles Brothers used a TH100A RC rig in 1992 and 1993, and the TH100A rig as well as an MPD-1500 rig in 1997. The types of rigs used by the other contractors are not known.

For all RC drilling, holes were started with hammer bits and were used to the end of holes unless ground conditions, such as broken rock or high-ground-water flow, required the use of a rock bit. Further details of the drilling procedures are not known.

11.4 Newmont Drilling

Newmont contracted Eklund for their 2004 through 2007 drilling campaigns. Eklund used an Ingersoll-Rand TH-75 drill rig with 5½- to 6-inch conventional-hammer and center-return tricone bits. The tricone bits were used when significant ground water was encountered in the drilling. Drilling additives and water were used to condition the hole and to maintain circulation in difficult rock conditions. Newmont contracted Layne Christensen Company for their 2006 and 2007 core and pre-collar core drilling programs. Holes were drilled using HQ-size bits. When required by ground conditions, holes were reduced using NQ-size bits.

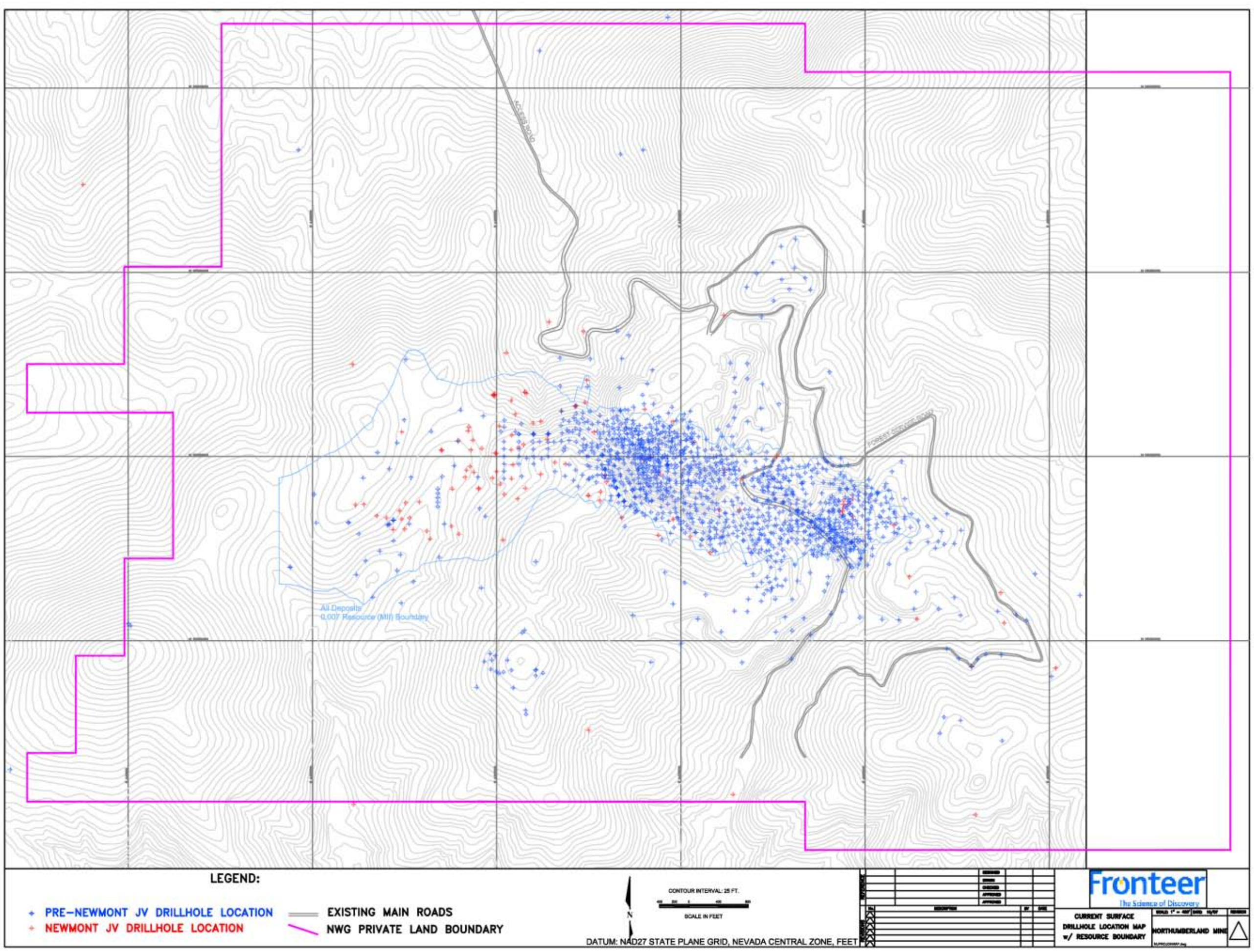
Newmont drilled 95 RC, core, and pre-collared core holes that were drilled after the resource estimation discussed in Section 17, mostly in the general area of the resources (Table 11.5; Figure 11.1). These holes were drilled to explore for both sulfide and oxide mineralization, obtain metallurgical and geotechnical samples, and verify RC drill results. The results from this drilling is discussed in Section 6.

Table 11.5 Newmont Post-Resource Drilling Summary

Company	Year	RC			Core			Total Drill Holes	Total	
		No.	Feet	Metres	No.	Feet	Metres		Feet	Metres
Newmont	2005	20	22,200	6,767				20	22,200	6,767
Newmont	2006	48[1]	45,280	13,801	15[1]	8,411	2,564	54	53,691	16,365
Newmont	2007	21[2]	23,560	7,181	5[2]	3,297[3]	1,005	21	26,857	8,186
TOTAL		89	91,040	27,749	20	11,708	3,569	95	102,748	31,318

[1] Includes 10 core holes pre-collared by RC.
[2] Includes 5 core holes pre-collared by RC.
[3] Includes 580ft of core drilled in the continuation of hole NOR-1, which was pre-collared in 2006.

Figure 11.1 Drill-Hole Location Map



12.0 SAMPLING METHOD AND APPROACH

MDA has no information concerning the RC and rotary sampling methods or approaches by operators at Northumberland prior to WSMC in 1989 other than the sample lengths stored in the digital database provided to MDA. Average drill sample lengths by company are given in Table 11.4.

Essentially all of the Homestake rotary samples were taken from five-ft intervals, while the Idaho Mining holes were sampled at 10-ft intervals. Cyprus air-track and rotary holes were sampled predominantly at five-ft and 10-ft intervals, respectively.

The drill holes in the Northumberland database are predominantly vertical, and sample intervals are usually in the range of five to ten feet. MDA believes the orientation and length of these samples are appropriate for the style of mineralization at Northumberland.

Individual drill-hole intercept grades and lengths are not given in this report; the resources described in Section 17 provide more meaningful data with regards to the scale and grade of the Northumberland mineralization.

12.1 Cyprus Core Sampling

WSMC was able to recover a significant amount of Cyprus core from a storage shed at Northumberland that had collapsed. The recovered core was then catalogued and stored in trailers at the site. The recovered Cyprus core is both NX- and NC-sized. The core was split with a mechanical splitter, with one-half of the core sent for assaying and one-half kept in the core boxes for future reference. Approximately 50% of the core footage was sampled at 10-ft intervals and the reminder was sampled at 5-ft intervals.

12.2 WSMC RC and Core Sampling

As part of an audit and verification of the Northumberland mineable reserves, Pincock, Allen & Holt, Inc. ("PAH") conducted a site visit in July 1989 and reviewed the drill sampling procedures. PAH (1989) reports that two approximately five-pound drill-sample splits were collected for each five-ft interval at the RC rig. One sample split was sent for assaying and the other split was stored at Northumberland for future reference.

Documentation of RC- and rotary-sampling methods beyond the PAH 1989 report is lacking. The following information on the 1989 to 1997 WSMC RC-drilling programs is derived from the personal knowledge of G. Lanier (pers. comm., 2005). A WSMC geologist was present while the rig was actively drilling. Cuttings collected during dry drilling were split with Jones-type tiered splitters supplied by the drilling contractor. Wet samples were split using the drillers' rotary splitters. Two identical splits, usually weighing at least five-pounds each, were collected at the rig and set on the ground at the drill site. According to the digital database, approximately one-half of the RC samples were collected at 10-ft intervals and the others were collected at five-ft intervals. The higher percentage of 10-ft intervals is related to drilling through known thick sections of unmineralized ground in Mormon Canyon. This determination was based on a modeled interpretation of mineralization prior to drilling specific holes. Five-foot intervals were used in all cases where there was a possibility of intersecting mineralization.

WSMC drill core, which was essentially all HQ-size, was sawed in half at the truck shop in the Upper Site. Approximately 55% of the core was sampled at 10-ft intervals, 27% at 5-ft intervals and less, and 18% between 5- and 10-ft intervals. A very small amount of the core was sampled at intervals greater than 10ft and less than 20ft. The core size was reduced from HQ to NQ in hole NW1165A due to ground conditions. NQ-size core was processed the same as the HQ-size.

12.3 Newmont RC Sampling

The following details of the Newmont 2004 RC-sampling program were provided by Eric Lauha, Newmont geologist (pers. comm., 2005). Water was injected by the drillers during the entire program, so that all samples were collected wet after passing through a rotary splitter. The sampler and/or driller adjusted the rotating splitter to optimize the filling of the 18-inch by 26-inch bags with the wet cuttings from each five-ft interval without overflow. The sample bags were labeled by hand, and a bar-code tag that identified the drill-hole number and footage interval was also attached to the bag. No rig duplicate samples were collected.

Occasional sample recovery problems due to lost circulation were experienced during the Newmont drilling program. The worst case was the lack of any sample recovery in hole NN-15 in the interval between 490 and 535ft, probably due to a broken structural zone and an associated solution cavity (Lauha, pers. comm., 2005). No significant gold was intersected immediately above and below this interval of no recovery. Other instances of loss of recovery were usually restricted to single 5-ft intervals.

12.4 Rotary and RC Sample Contamination

Newmont recognized indications of down-hole contamination in some holes that encountered difficult drilling conditions and where good circulation could not always be maintained (Lauha, pers. comm., 2005). The contamination was recognized by unusual mixtures of RC cuttings whereby lithologies previously encountered in the hole but not expected in the interval being drilled were seen. This type of contamination was sometimes seen at the end of drilling a 20-ft pipe length and the beginning of the next 20-ft section when drilling was paused and the hole was blown clean. The contaminating cuttings were derived from broken zones intersected higher in the drill holes.

No contamination is explicitly documented in the RC and rotary holes drilled prior to Newmont. However, several mineralized intervals suspected of being contaminated were excluded from the mineral envelopes created during the sectional grade modeling and therefore the resource estimation (see Section 17). These intervals were identified on the basis of gold values that extend to anomalous depths compared to nearby holes. As contamination is often difficult to recognize, it is likely that additional contaminated intervals remain in the database.

13.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

13.1 Sample Handling, Security, and Preparation

MDA has no information on sample handling, security, or preparation for operators at Northumberland prior to WSMC's work in 1989.

American Assay Laboratories of Sparks, Nevada ("American Assay") analyzed the 1989 through 1997 drill samples of WSMC. American Assay obtained ISO 9002 registration in 2000. American Assay picked up the RC drill samples that were stored on the drill pads, as well as the core samples stored in the truck shop, and transported them either to their Elko, Nevada facility for sample preparation prior to transporting the sample pulps to their Sparks, Nevada laboratory for analysis, or directly to Sparks for both preparation and analysis. WSMC would occasionally transport the drill samples directly to the Sparks laboratory when a short turnaround time on the analyses was desired.

WSMC also stored duplicate RC samples at the drill sites. If the sample sent for analysis was mineralized (~0.01 oz Au/ton or greater) or within a mineralized interval, the rig duplicate was placed in a secured sample storage facility at one of two ranches owned by WSMC in the Battle Mountain area. The rig duplicates of unmineralized samples were discarded. The stored rig duplicates, along with assay pulps, assay rejects, and half-core, were recently moved to secured storage at the Lower Site at Northumberland.

The Newmont 2004 RC samples were stored at the drill site and were periodically picked up by ALS Chemex ("Chemex") personnel. A Newmont geologist would typically arrange a pick-up with Chemex as soon as a drill hole was nearing termination, and a Chemex truck would often arrive when the drillers were abandoning the hole. Otherwise, the samples from the completed hole would be picked up by Chemex on the following day (Lauha, pers. comm., 2005).

13.2 Analytical Procedures

Many of the details of the analytical procedures used in the assaying of the drill-hole samples are not fully documented. As discussed in Section 11, all holes drilled by NMC, Joralemon, and Kerr McGee have been removed from the database due to suspect sample quality and assays, and will not be discussed further. Although gold and silver fire assays are included in the database for the Homestake drill holes and T83 series holes of Cyprus, neither the laboratory nor details of the analytical procedure are known. WSMC did not acquire the original assay certificates for holes drilled by Cyprus and earlier operators at the time WSMC took possession of Northumberland, although summary assay logs prepared by Whitney & Whitney, Inc. were obtained (Lanier, 1992a). Table 13.1 shows the extent of information known about the assay laboratories and analytical techniques used for the various series of drill holes through 1997.

Union Assay of Salt Lake City, Utah ("Union"); Skyline Laboratories of Denver, Colorado ("Skyline"); and Rocky Mountain Geochemical Corporation, of Sparks, Nevada ("Rocky Mountain") assayed Idaho mining drill samples.

Laboratories used to analyze the Cyprus drill samples include CMS of Salt Lake City, Utah; CRL of Salt Lake City; Hunter Mining Laboratory of Sparks, Nevada ("Hunter"); Monitor Geochemical Laboratory of Elko, Nevada ("Monitor"); Skyline; Union; Rocky Mountain; Western Testing Laboratories; Legend Laboratories of Reno, Nevada ("Legend"); and the Cyprus mine laboratory at Northumberland. Samples from holes NC01 through NC38 were analyzed by CMS using an MIBK technique whereby samples were roasted to 600º C to remove carbon, digested in aqua regia, and analyzed by atomic absorption ("AA"). Little is known of the analytical procedures used by the various laboratories. As discussed below, WSMC performed cyanide leach analyses on selected mineralized samples from some of the Cyprus holes at their laboratories in Elko and the Northumberland mine site.

Lanier (1992a) reported that the original gold and silver analyses for holes NC337 through NC553 (drilled by Cyprus during the period 1979-1983) were performed by Monitor by ½-assay-ton (15g charge) fire assay with gravimetric finish. Skyline was used for check assays and also analyzed by ½-assay-ton fire assay, although the finish is not known. Cyprus analyzed samples from many of these holes for silver by cyanide leach methods; gold was analyzed by cyanide leach in samples from NC337. Details of the cyanide leach procedures are not known. WSMC's Northumberland mine laboratory later ran check gold and silver analyses on NC341 and is believed to have used ½-assay-ton fire assaying. The WSMC lab also analyzed selected Cyprus samples by one-hour cold-cyanide leach with final gold and silver determination by AA.

Samples from WSMC holes T3-01 through T3-14, the CD88 series, and NW554 through NW799 were initially assayed at the WSMC Northumberland mine laboratory by cyanide soluble methods. Gold and silver were analyzed by one-hour 180º F shake-leach methods using a 10g charge in four-pound per ton cyanide solution with final determination by AA. Monitor also completed cyanide soluble assays of unknown type on some of the samples. Gold and silver cyanide leach values of samples from holes NW800 through NW958 were completed by WSMC, Barringer Laboratories, Inc. ("Barringer"), Universal Laboratories of Elko, Nevada ("Universal"), and Rocky Mountain. Samples from these WSMC holes that returned cyanide leach gold values of 0.010 oz Au/ton or greater were fire assayed, with gold and silver primarily determined by one-assay-ton (30g charge) fire assay with gravimetric finish at the WSMC laboratory (Lanier, 1992a).

The lack of comprehensive fire assay data precipitated the initiation of a program in mid-1989 to obtain complete gold and silver fire assays for all drill intervals. Available pulps or rejects from Cyprus and WSMC intervals lacking fire assay data were analyzed at the WSMC laboratory at Northumberland by fire assay with gravimetric determination of gold and silver values. Approximately 94% of the drill samples that were only analyzed by cyanide leach methods were fire assayed by the end of the program in 1990; neither pulps nor rejects for the remaining 6% could be located. The original cyanide soluble gold results commonly exceeded the new fire assay gold results, mainly for the NW700 series of holes drilled in 1987. Additional cyanide soluble gold assays were determined on these samples if the sample pulps could be located, and the original cyanide assays were replaced in the database with the new values. The original cyanide soluble results for those samples whose pulps could not be found were removed from the database.

Table 13.1 Laboratories and Assay Methods Employed Through 1997

Company	Drill Holes	Gold Analytical Technique and Laboratory					Silver Analytical Technique and Laboratory				
		FA/AA	FA/Grav	FA/?	Other	CN	FA/AA	FA/Grav	FA/?	AD/AA	CN
Idaho Mining	N01-16			Union					Union		
	N17-31			Skyline; Union					Skyline; Union		
	N32			Rocky Mountain						Rocky Mountain	
Homestake	NU01-21	?	?	?	?	?	?	?	?	?	?
Cyprus	NC001-038				CMS: Au assays by MIBK/AA	WSMC				CMS	
	NC039-081	CMS	CRL; Union			WSMC				CMS	
	NC082-220		Hunter	Union		WSMC	Hunter		Union		
	NC221-274A	Monitor		Union			Monitor		Union		
	NC275-298			Hunter; Skyline; Western; Legend		WSMC			Hunter; Skyline; Western		WSMC
	NC299-336		Skyline	Skyline; Monitor		WSMC	Skyline		Skyline; Monitor		WSMC
	NC337-536	Skyline	Monitor; WSMC	Monitor; Skyline		WSMC; Cyprus	Monitor	WSMC	Monitor; Skyline		Cyprus; WSMC
	NC537-553	?	Monitor	?	?	?	?	Monitor	?	?	?
	CT01-36A			Hunter; Monitor; Rocky Mountain					Hunter; Monitor; Rocky Mountain		
	T83 001-152	?	?	?	?	?	?	?	?	?	?
WSMC	NW554-799		WSMC	Monitor; Barringer		WSMC; Monitor		WSMC	Monitor; Barringer		WSMC; Monitor
	NW800-923		WSMC	Barringer; Rocky Mountain		Barringer; WSMC; Rocky Mountain		WSMC	Barringer	Barringer; Rocky Mountain	WSMC
	NW924-1222		American Assay	Universal; American Assay; Cone		Universal; American Assay; WSMC		American Assay	Cone	Universal; American Assay	WSMC
	T3 01-14		WSMC			WSMC		WSMC			WSMC
	T3 15-17			American Assay						American Assay	
	CNDM01-11			Barringer						Barringer	
	CD88 01-03		WSMC			WSMC		WSMC			WSMC

FA=fire assay AD=acid digestion CN=cyanide leach MIBK (see text)
AA=atomic absorption finish GRAV=gravimetric finish ?=unknown finish

Samples from holes NW946 through NW1222 were analyzed by American Assay by fire assay with AA finish. Samples returning values in excess of 3-ppm gold (0.088 oz Au/ton) were re-analyzed by fire assay with gravimetric finish. Cone Geochemical Inc. of Reno, Nevada ("Cone") performed some check analyses of selected samples from these holes by fire assaying with AA finish. Holes NW946 to NW1079 were analyzed by two-assay-ton (60g charge) fire assay; one-assay ton fire assaying was used on holes NW1080 through NW1222. The change to a charge weight of one-assay-ton was justified on the basis of 52 drill-hole samples assayed by both methods at American Assay. Silver was analyzed by an aqua regia partial digestion with an AA determination using a 0.3g charge. Samples that returned silver values in excess of 50 ppm were re-run using a 1g charge. Cyanide-soluble gold and silver were determined for mineralized intervals (greater than or equal to 0.01 oz Au/ton) using a 15-g, three-hour, cold-cyanide shake leach. The three-hour leach time was chosen after a statistical comparison between one-hour hot shake tests performed at the Northumberland laboratory and three-hour cold-shake tests performed at American Assay showed no significant differences.

Samples from Newmont's 2004 drill holes were sent to the Chemex preparation facility in Elko, Nevada. The sample cuttings were dried and all of the cuttings were passed through a preliminary jaw crusher and a secondary rotating jaw crusher. The crushed cuttings were passed through a riffle splitter several times to obtain a 250g subsample. The subsample was pulverized and a 100g split of the pulp was sent to the Chemex laboratory in Reno, Nevada or Vancouver, British Columbia for analysis. Chemex has ISO 9002 laboratory accreditation and ISO:9001:2000 for North America. Chemex analyzed the pulps by 30g fire assay with AA finish. The original pulp of any sample that returned a gold value greater than 10 ppm was re-assayed by 30g fire assay with gravimetric finish.

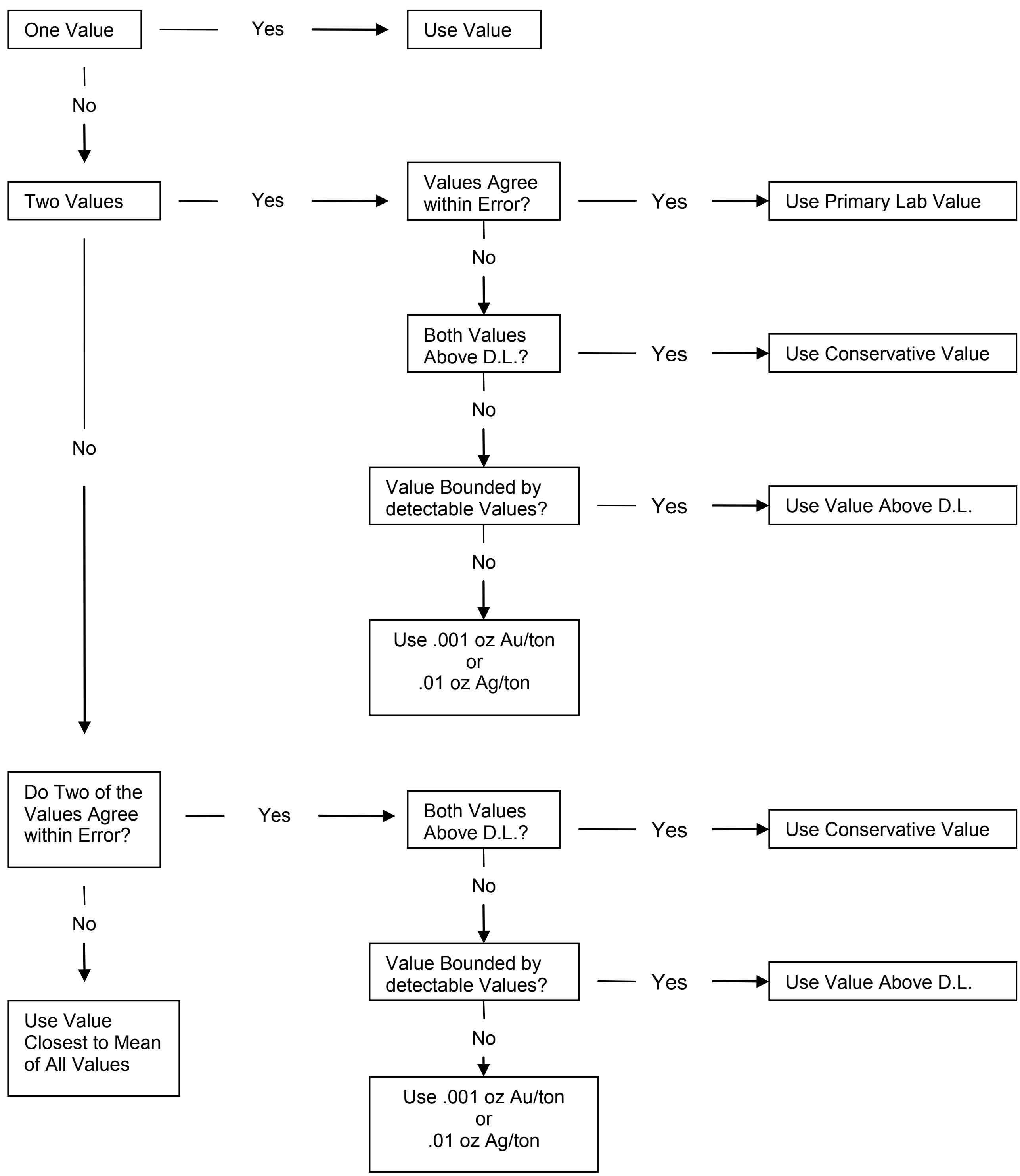
13.3 Soil Sample Analyses

The Newmont soil samples were sieved by Chemex and the 0.5- to 2.0-mm fraction was analyzed by fire assay with gold determination by inductively coupled plasma-mass spectrometry ("ICP-MS"). Trace elements were analyzed by aqua regia digestion with determination by ICP-MS and ICP-emission spectrometry. The analytical procedure used for the stream sediment samples is not known to MDA.

13.4 Drill-Hole Database

Due to multiple analytical gold and silver values for many of the drill-hole intervals, WSMC created a set of rules to govern the selection of a single assay value for use in the digital database for any given drill interval (Figure 13.1). Although MDA believes that averaging values is preferred over the selection of a single assay, the rules were followed closely and are unlikely to have introduced any material bias into the database.

Figure 13.1 Rules Governing Selection of Assay Value for Drill-Hole Database



D.L. = Detection Limit

14.0 DATA VERIFICATION

Documentation reviewed by MDA indicates that the drill-hole database was audited, corrected, and updated several times by WSMC. MDA audited the WSMC database using drill-hole log sheets, original assay certificates, copies of original assay certificates, and original down-hole survey data. As previously discussed, assay certificates are not available for the Cyprus holes, so typed sheets of assay results provided to WSMC at the time of the acquisition of the property from Cyprus were used to check these assay results. The collar coordinates for the Cyprus NC-series drill holes through NC314 that were selected for auditing had no survey data to compare with the database. These early holes were originally located on a local coordinate system and their collar locations were likely to have been verified by Northumberland personnel on the basis of Cyprus drill-hole plan maps (Lanier, pers. comm., 2004). Slightly more than five percent of the database was checked by MDA with only a few insignificant errors found and these were corrected.

MDA did not independently collect samples of the Northumberland mineralization for the purposes of verification. Drill sample assays from several major mining companies are included in the database, including assays from recent Newmont holes, and these companies used multiple recognized assay laboratories. The assay data from these operators are consistent with the results generated by the WSMC drilling programs. MDA did conduct a site visit to Northumberland, which included an inspection of gold-silver mineralization exposed in the open pits, road cuts, surface trenches, and drill core.

14.1 Check Assaying

Systematic, consistently implemented data checks and validation procedures appear to be lacking in many of the drilling programs conducted at Northumberland. While this may be partially due to the inability of WSMC to obtain all of the data from previous operators, many QA/QC procedures were either not commonly followed or not completely documented at the time of the Homestake, Idaho Mining, Cyprus, and early WSMC exploration programs.

MDA compiled and analyzed gold check assay data for all Northumberland holes. In most cases, the documentation did not allow the distinction of check assays performed on pulps versus rejects. The WSMC checks of Cyprus NC-series holes are an exception, as these checks were predominantly performed on rejects (Lanier, pers. comm., 2005). In the discussion below, all check-assay data are considered to have been performed on ‘pulps/rejects’.

<u>Cyprus Drill Holes</u>. Figure 14.1 compares Monitor original assays versus Skyline check assays of samples from holes in the sequence NC348 through NC385. The means compare quite well and the data yield a high correlation coefficient (0.99).

WSMC check assays of samples from three of the holes compared above are compared with the original Monitor assays in Figure 14.2. These results do not compare well (correlation coefficient = 0.34), although the means are closer than might be expected from a visual inspection of the graph. Since the Monitor assays are the primary assays that are used in the assay database, and the Skyline check results verify the Monitor results, the poor WSMC check data are not considered to be a problem.

Figure 14.1 Check Assays of Pulps/Rejects: Monitor vs. Skyline

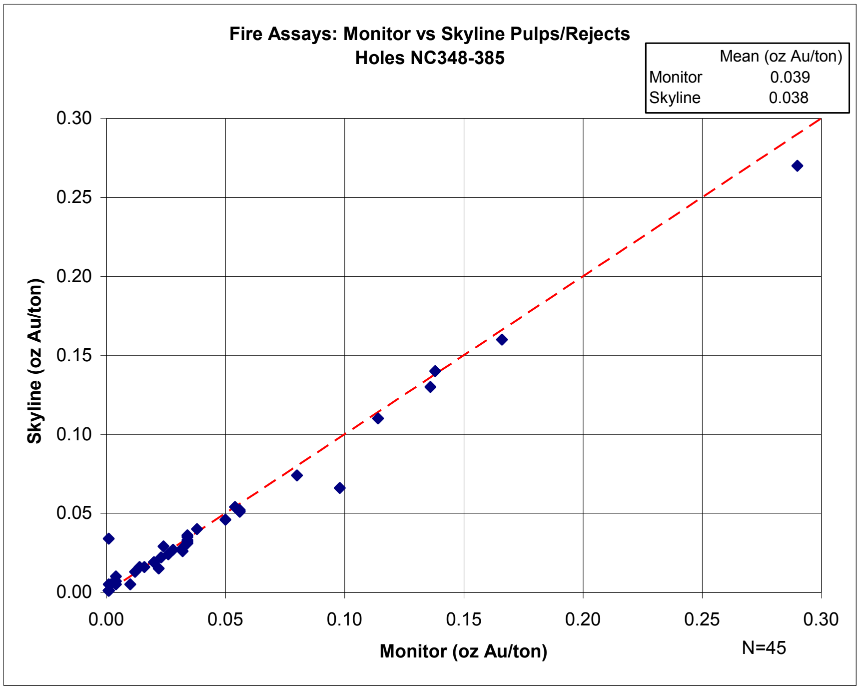
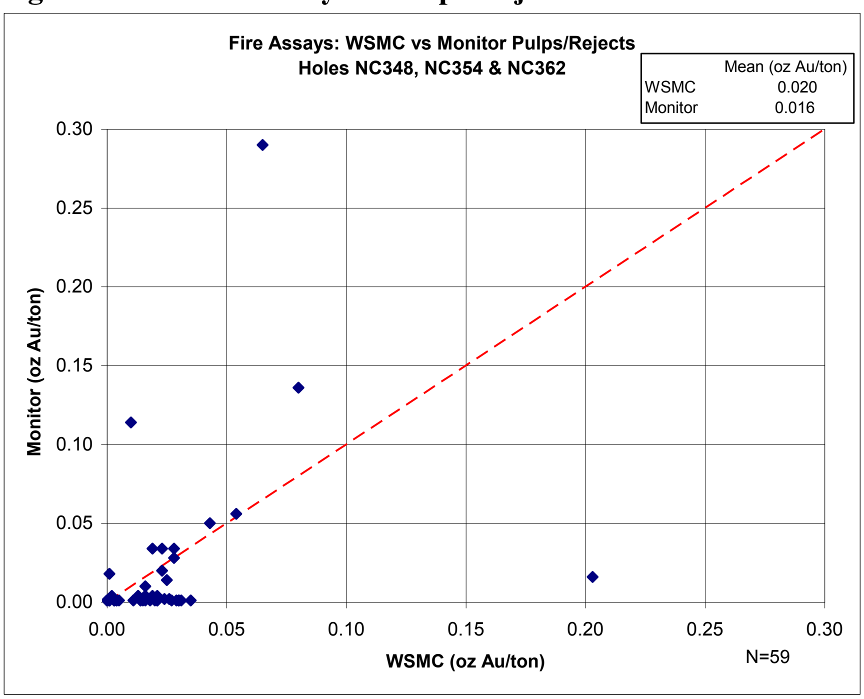


Figure 14.2 Check Assays of Pulps/Rejects: Monitor vs. WSMC



WSMC Drill Holes. American Assay original results are compared with Barringer check assays from holes NW959 and NW964 in Figure 14.3. The data compare very well, with a correlation coefficient of essentially 1.0.

Figure 14.3 Check Assays of Pulps/Rejects: American Assay vs. Barringer

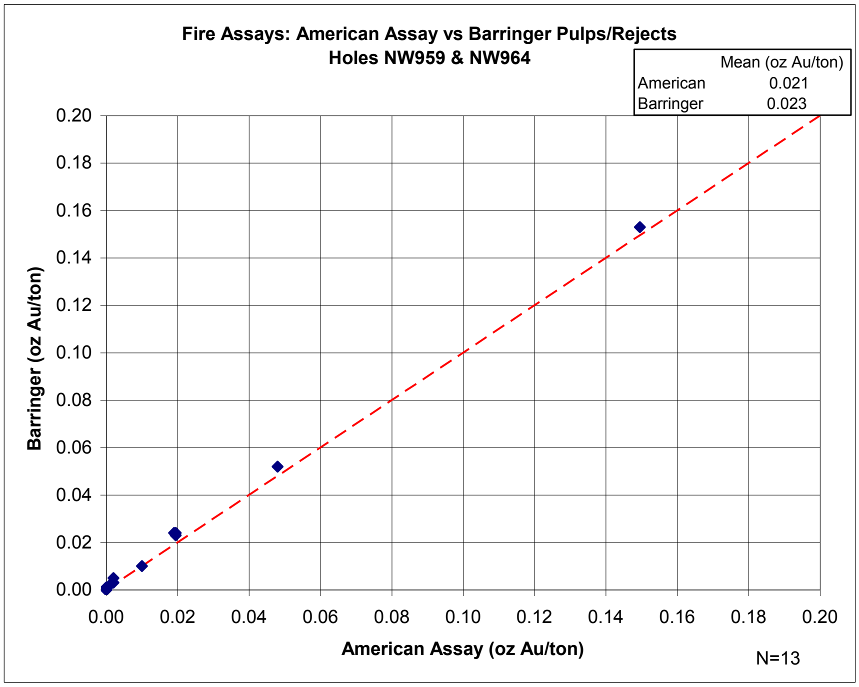


Figure 14.4 compares Barringer check assays with WSMC original assays from holes NW561 through NW964. The data compare reasonably well for samples where both assays grade up to about 0.05 oz Au/ton, while four samples with higher grades show considerable scatter. Thirty-three of the 40 assays values used in the database are from Barringer, including all the four higher-grade outlier samples.

WSMC assays from holes NW595 through NW959 are compared with Hunter check assays in Figure 14.5. The WSMC mean is 15% higher than the Hunter mean, and the data have a correlation coefficient of 0.82. Samples where both labs returned results less than about 0.05 oz Au/ton exhibit typical scatter for rig duplicate samples, while the remaining samples show a bias towards higher grades in the WSMC analyses.

Twenty Barringer sample results from hole NW887, all of which are used in the assay database, are compared with Rocky Mountain assays in Figure 14.6. The Rocky Mountain results are slightly, but systematically, higher than the Barringer assays.

Figure 14.4 Check Assays of Pulps/Rejects: WSMC vs. Barringer

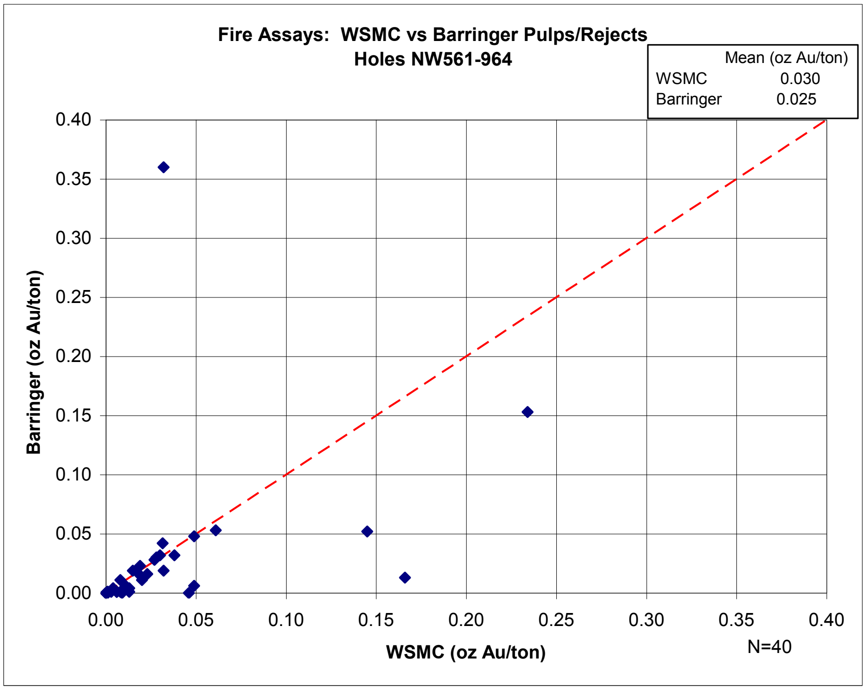


Figure 14.5 Check Assays of Pulps/Rejects: WSMC vs. Hunter

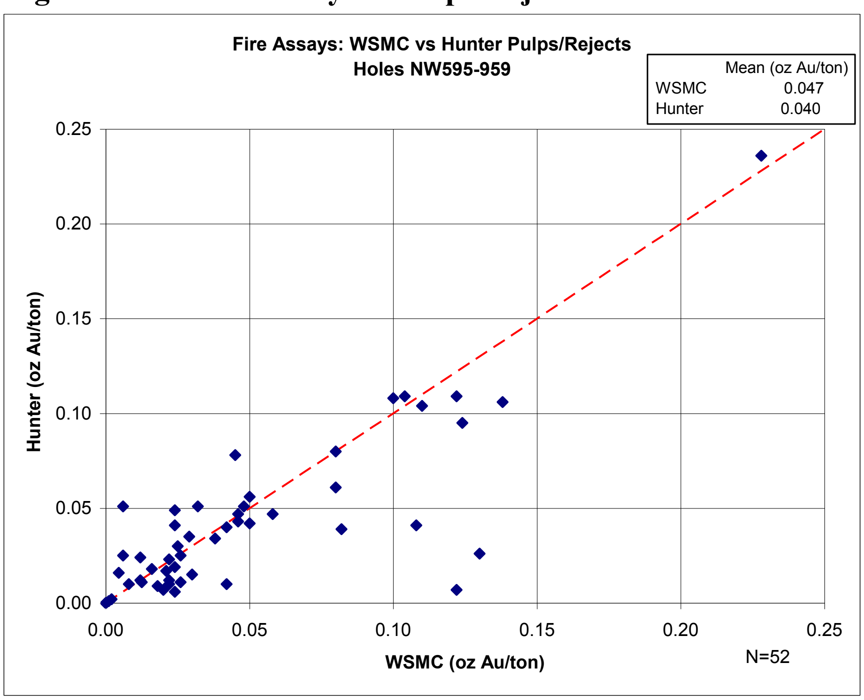


Figure 14.6 Check Assays of Pulps/Rejects: Barringer vs. Rocky Mountain

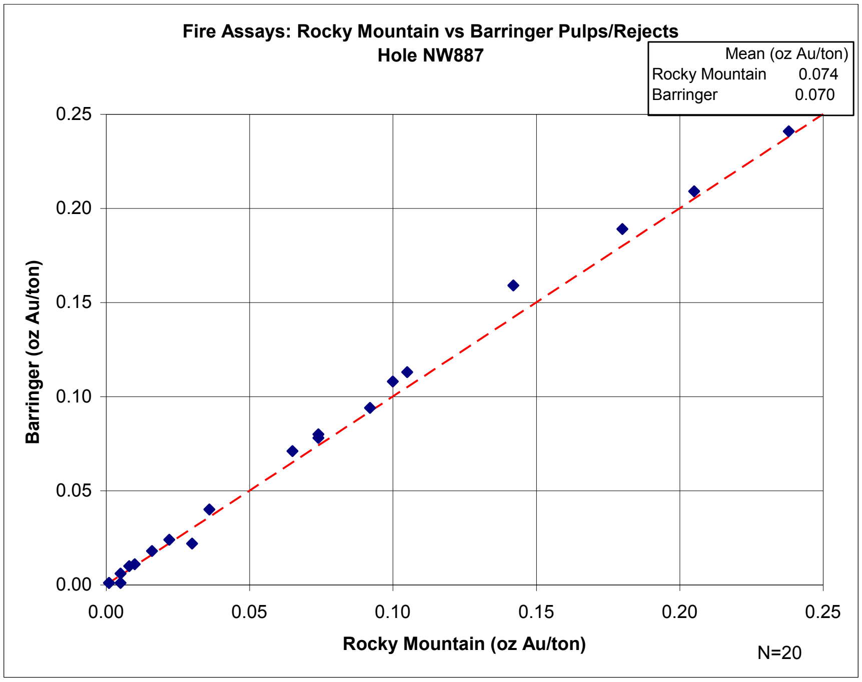
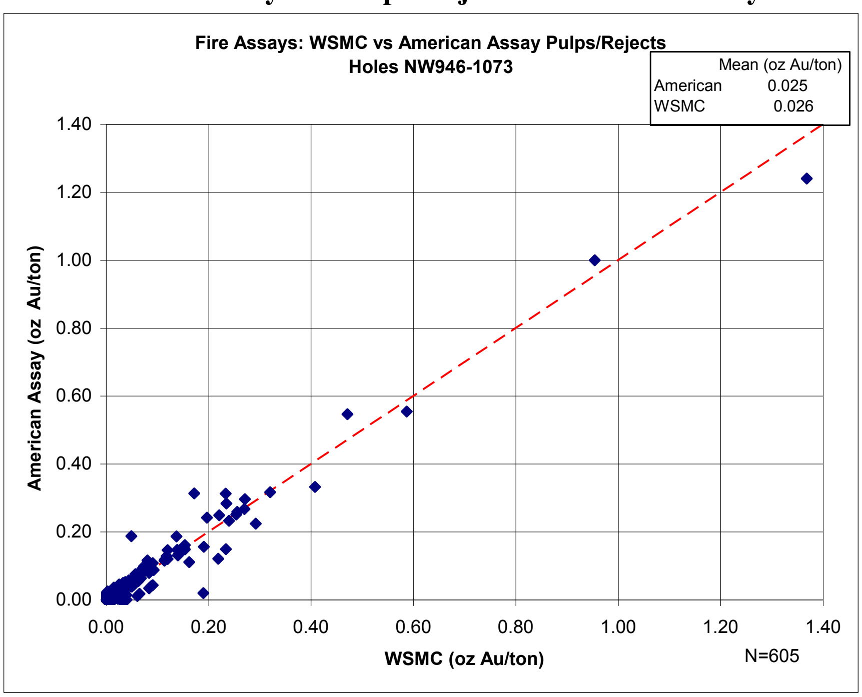


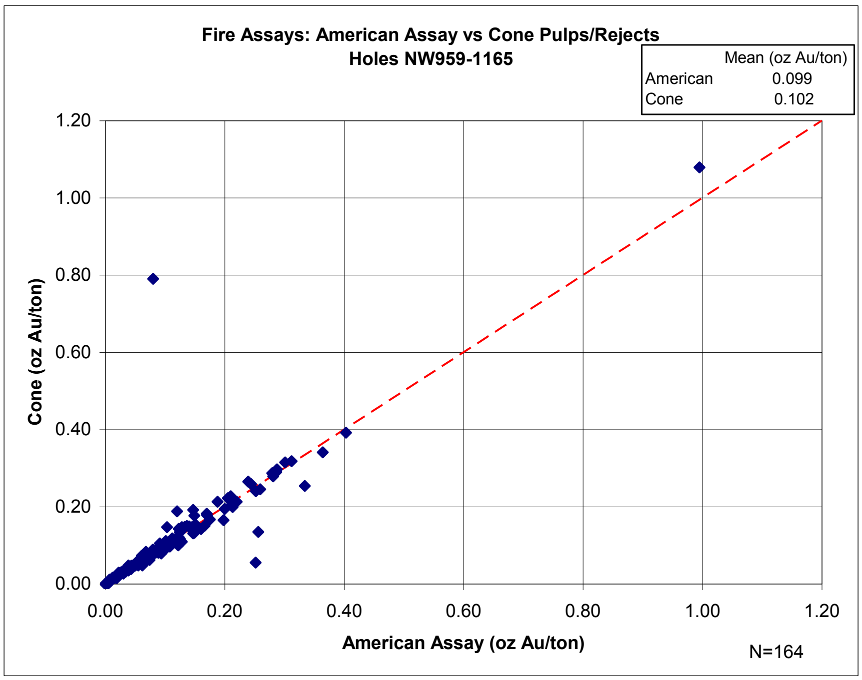
Figure 14.7 Check Assays of Pulps/Rejects: American Assay vs. WSMC



Original American Assay results compare well with WSMC check assays from holes NW946 through NW1073 (Figure 14.7). The WSMC mean grade is insignificantly higher than the American Assay mean, and the data have a correlation coefficient of 0.98.

Figure 14.8 compares original American Assay results with Cone Geochemical Inc. ("Cone") check assays for samples from holes NW959 through NW1165. With the exception of a few outliers, the data compare quite well.

Figure 14.8 Check Assays of Pulps/Rejects: American Assay vs. Cone



PAH (1989) compared the results of American Assay original analyses of 47 drill samples to American Assay check assays on rig duplicate samples (Table 14.1). The samples were of 1989 drill intervals with original assays exceeding 0.01 oz Au/ton; drill hole numbers and intervals were not provided, although holes drilled in 1989 include NW946 to NW958. Both the original and check analyses were by fire assay with AA finish. PAH noted that, "The similar means, and very high correlation coefficient show excellent precision."

Table 14.1 Comparison: American Assay Original vs. Duplicate
(adapted from PAH, 1989)

	American Assay (oz Au/ton)	American Assay (oz Au/ton)
Number	47	47
Mean	0.1580	0.1616
Standard Deviation	0.2517	0.2549
Correlation Coefficient	0.9952	

The results of 40 mineralized samples analyzed by WSMC in 1989 by fire assay with gravimetric finish were compared with American Assay fire assays with AA finish (Table 14.2; PAH, 1989). PAH concluded that there was good agreement between the two labs and that care was taken in the WSMC laboratory to ensure that analytical values were of high quality. It is not clear whether the duplicate samples analyzed by American Assay represent check assays on the same pulps or on pulps prepared on a different sample split; MDA believes the checks represent analyses of the original pulps.

Table 14.2 Drill Sample Assay Comparison: American Assay vs. WSMC
(adapted from PAH, 1989)

	American Assay (oz Au/ton)	WSMC (oz Au/ton)
Number	40	40
Mean	0.1524	0.1491
Standard Deviation	0.2667	0.2743
Correlation Coefficient	0.9902	

Finally, PAH conducted a statistical analysis of 217 drill samples with American Assay fire assay/AA values greater than 0.01 oz Au/ton and WSMC cyanide leach assays of rig duplicate samples (Table 14.3). Fire assays are considered to represent the total gold content of the samples, while CN leach analyses represent the cyanide-soluble fraction of the samples. PAH (1989) believed that the correlation coefficient shows good correlation between the two analytical methods.

Table 14.3 Drill Sample Assay Comparison: American Assay Fire Assay vs. WSMC CN Leach
(adapted from PAH, 1989)

	American Assay Fire Assay (oz Au/ton)	WSMC CN Assay (oz Au/ton)	CN/Fire Assay
Number	217	217	
Mean	0.0496	0.0337	0.6794
Standard Deviation	0.0866	0.0573	
Correlation Coefficient	0.8993		

PAH (1989) concluded that, "Quality control is maintained at the [WSMC Northumberland mine and American Assay] labs by including internal standards and duplicate samples as a check on lab accuracy and precision."

Newmont submitted assay standards at various grades routinely with the 2004 drill-hole samples (Lauha, pers. comm., 2005). One standard was included for every 50-ft interval (every 10 drill samples). MDA was not provided with the standard assay data.

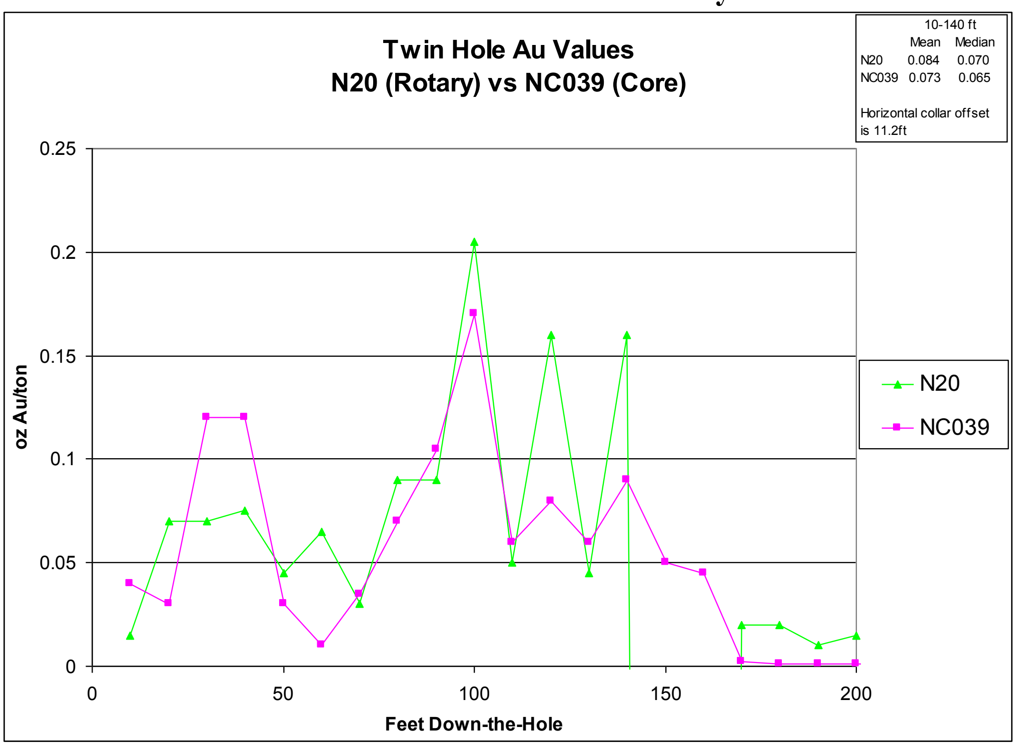
While the available check assays do not indicate serious problems with the assay database, more check data are needed before definitive conclusions can be made. Selected pulps and rejects from those that remain in WSMC storage should be re-assayed in order to augment the existing check-assay database. The early WSMC drilling data, in particular, warrant careful review and further verification by check assaying. All further drilling programs at Northumberland should continue the QA/QC procedures implemented by Newmont in 2004.

14.2 Twin-Hole Comparisons

Core Twins. Whitney & Whitney, Inc. (1980) undertook a statistical analysis of 12 core/rotary twin pairs drilled by Cyprus and concluded that no significant bias existed in the rotary gold and silver assay results as compared to the core results.

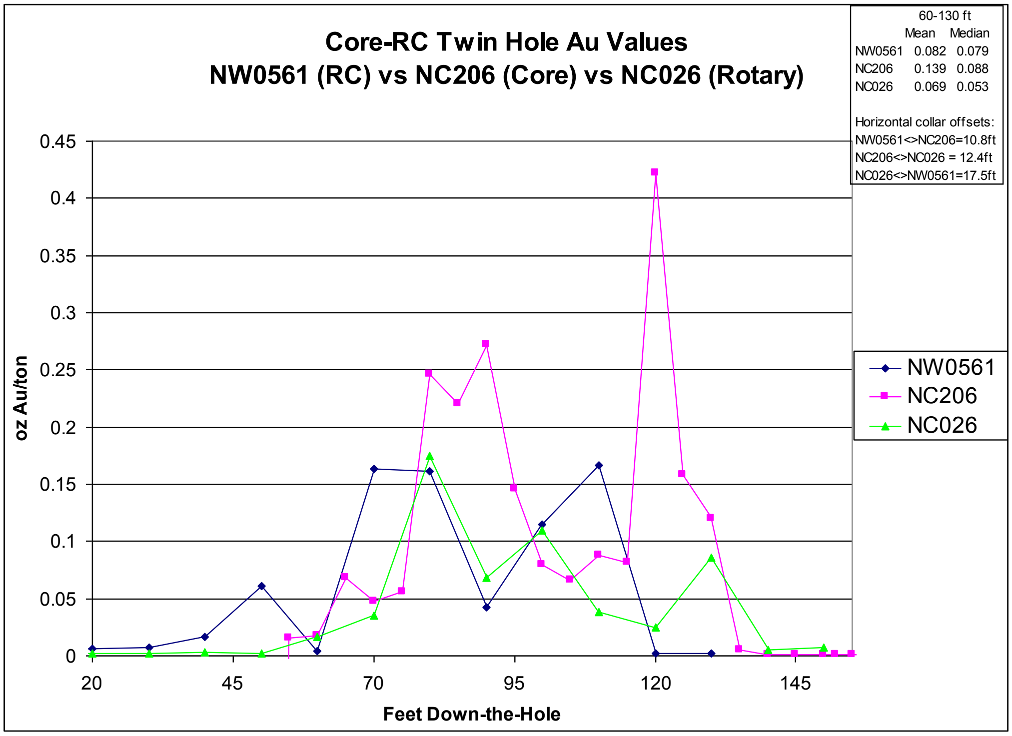
MDA compared five core/rotary twin pairs and one core/rotary/RC twin set (Figures 14.9 a-f). All of the core holes and all but one of the rotary holes in the twin sets were drilled by Cyprus. An Idaho Mining rotary hole and a WSMC RC hole are also included in the comparisons. The maximum distance between holes in any of the core twin sets is 17.5ft. The morphologies of the down-hole grade curves for each of the twin sets compare reasonably well, indicating that the twin holes sampled similar geology. The mean and median values of the mineralized core intervals are higher than the rotary twins in three cases and lower in the other three sets.

Figure 14.9 Down-Hole Gold Grade Plots of Core-Rotary and Core-RC Twin Sets

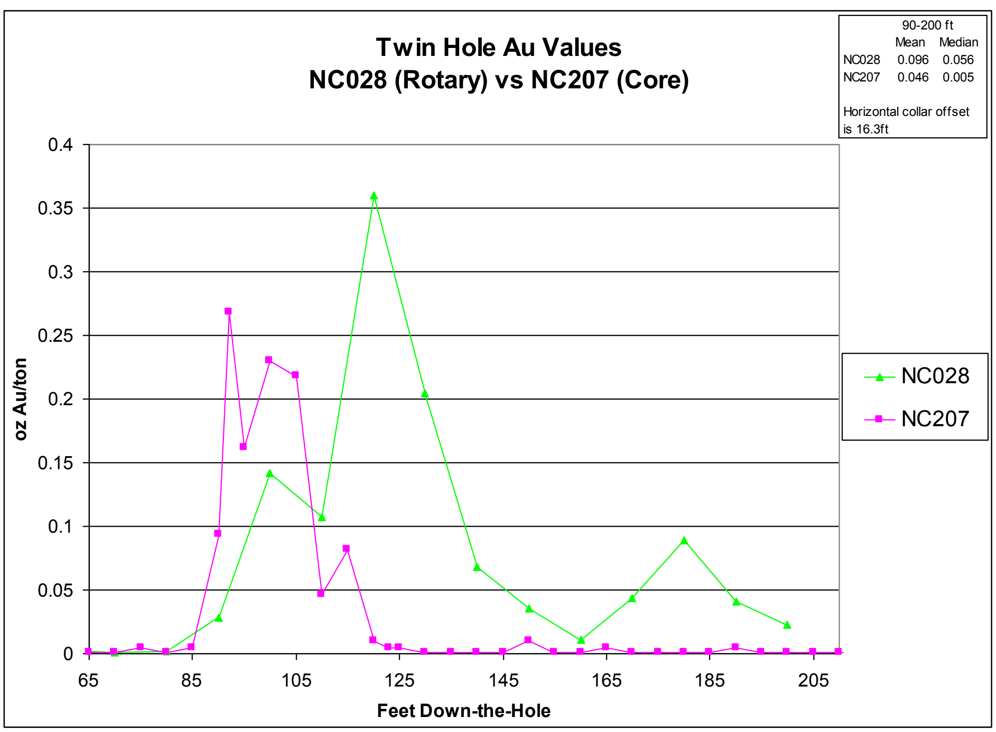


(a)

Figure 14.9 Down-Hole Gold Grade Plots of Core-Rotary and Core-RC Twin Sets (continued)

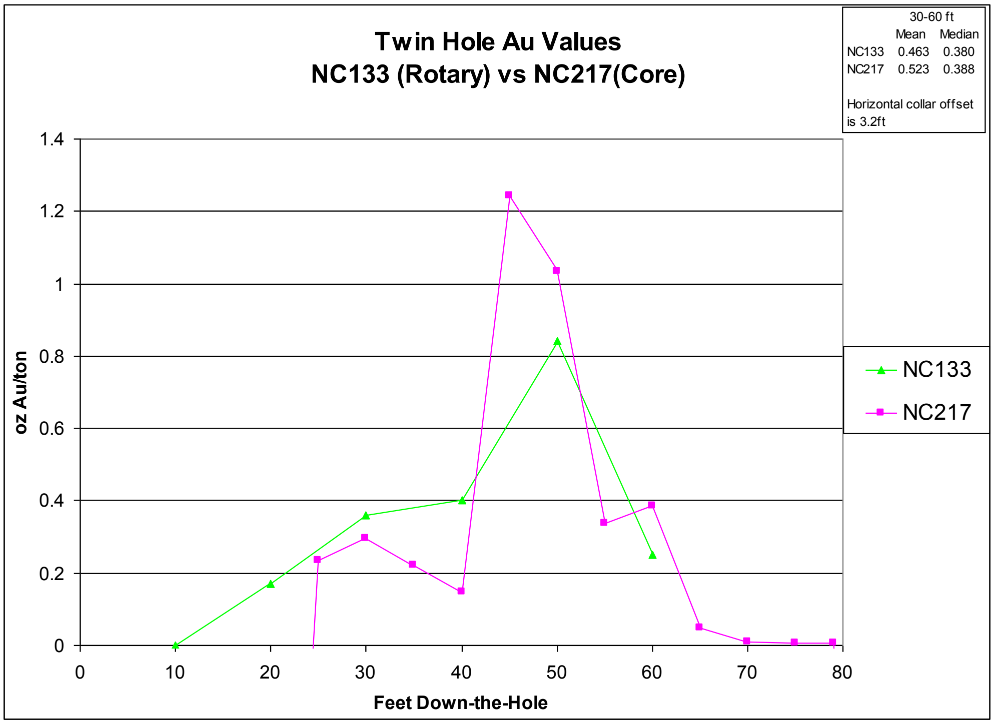


(b)

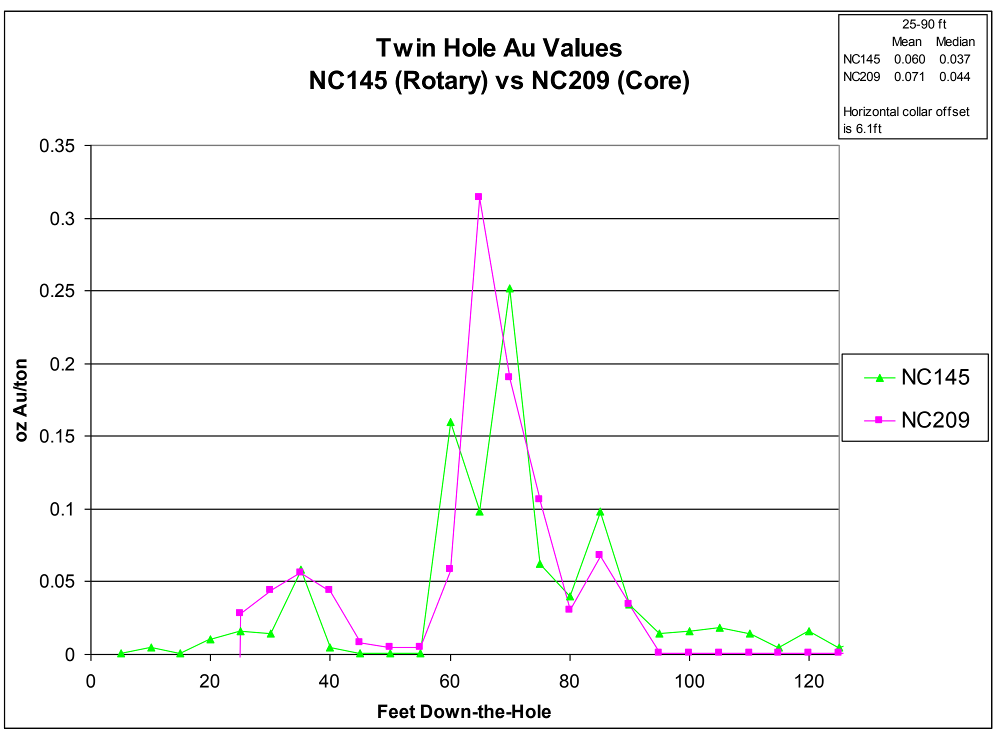


(c)

Figure 14.9 Down-Hole Gold Grade Plots of Core-Rotary and Core-RC Twin Sets (continued)

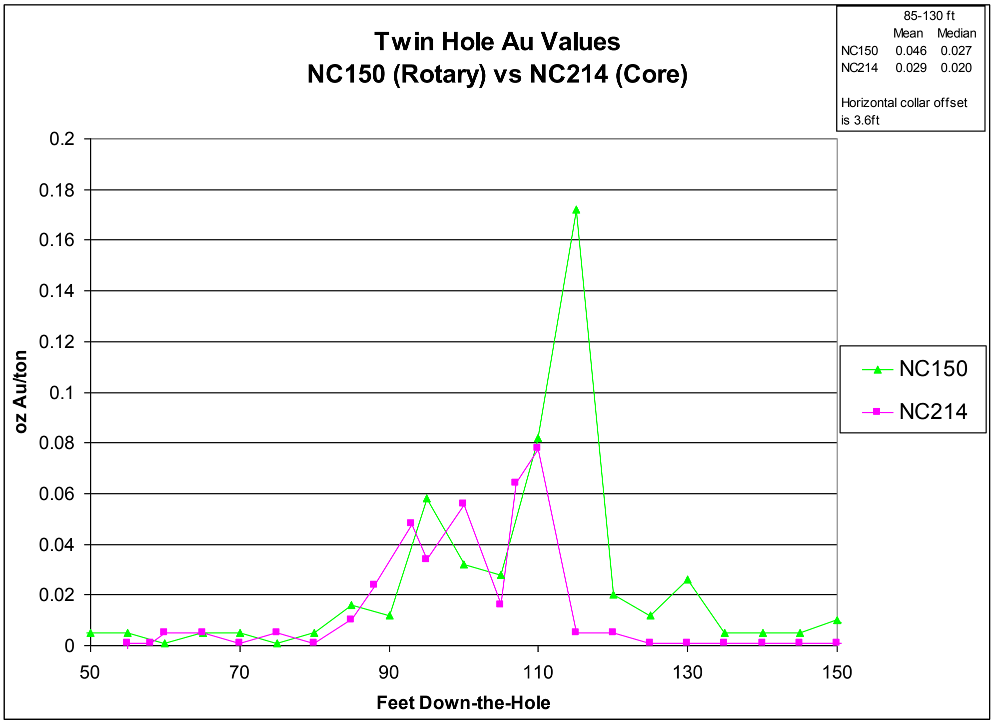


(d)



(e)

Figure 14.9 Down-Hole Gold Grade Plots of Core-Rotary and Core-RC Twin Sets (continued)



(f)

One of the main concerns with rotary and RC drilling is the potential for down-hole contamination. Contamination is possibly indicated by the gradual tailing off of values in rotary hole NC145 below the high-grade peak, which is in contrast to the abrupt loss of gold values in the core hole (Figure 14.9e). A certain amount of down-hole contamination is also evidenced in Figure 14.9e and f, where the baseline RC gold values down-hole of the mineralized intercepts are higher than the core baseline values.

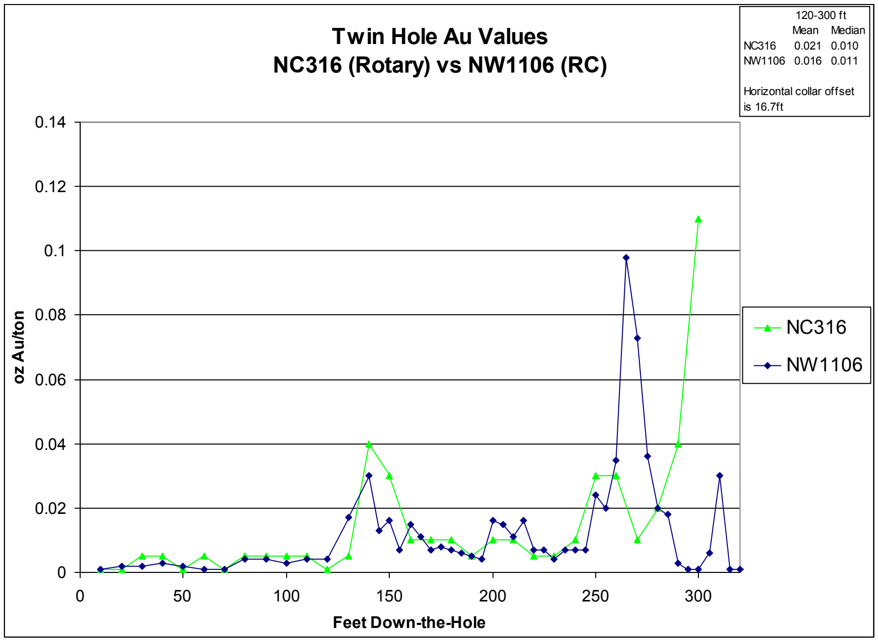
The grade differences in the core/rotary and core/RC twin pairs are not systematic, but appear to be primarily related to the magnitude of the higher-grade spikes. MDA believes that the limited data provided by these twin holes do not indicate a grade bias between core and RC/rotary drilling methods at Northumberland.

RC Twins. Down-hole grade plots of RC/rotary and RC/RC twin pairs are shown in Figure 14.10 a-d. The grade curves have been shifted in some cases to account for elevation differences and to facilitate visual comparisons.

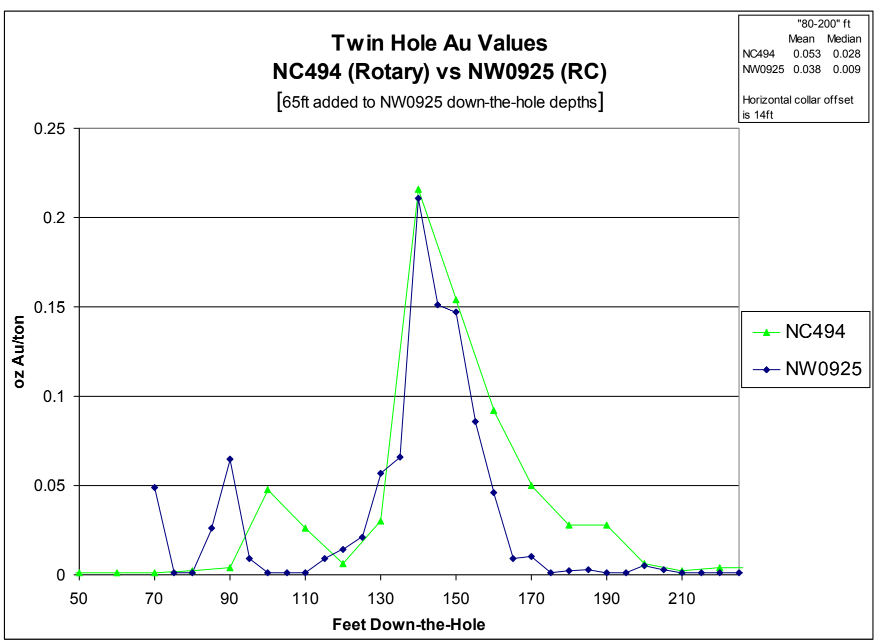
The morphologies of the grade plots compare well for each twin pair with the exception of NW621/NW904, which only has a gross correspondence of the curves. The results from rotary hole NC316 compare well with RC hole NW1106 (Figure 14.10a). The rotary/RC comparison in Figure 14.10b suggests that the rotary hole may have experienced down-hole smearing of values below higher-grade spikes, however. Grade differences in the RC/RC twin pair in Figure 14.10c may be due to sampling slightly different geology.

The RC twin data are insufficient to allow for meaningful conclusions. There are suggestions of at least local down-hole contamination of gold values, consistent with observations discussed in Section 12.4. It is noteworthy that the more recent RC holes demonstrate less contamination than the older holes, a relationship that implies ever-increasing vigilance with respect to drilling hygiene on the part of the operators.

Figure 14.10 Down-Hole Gold Grade Plots of RC-Rotary and RC-RC Twin Sets

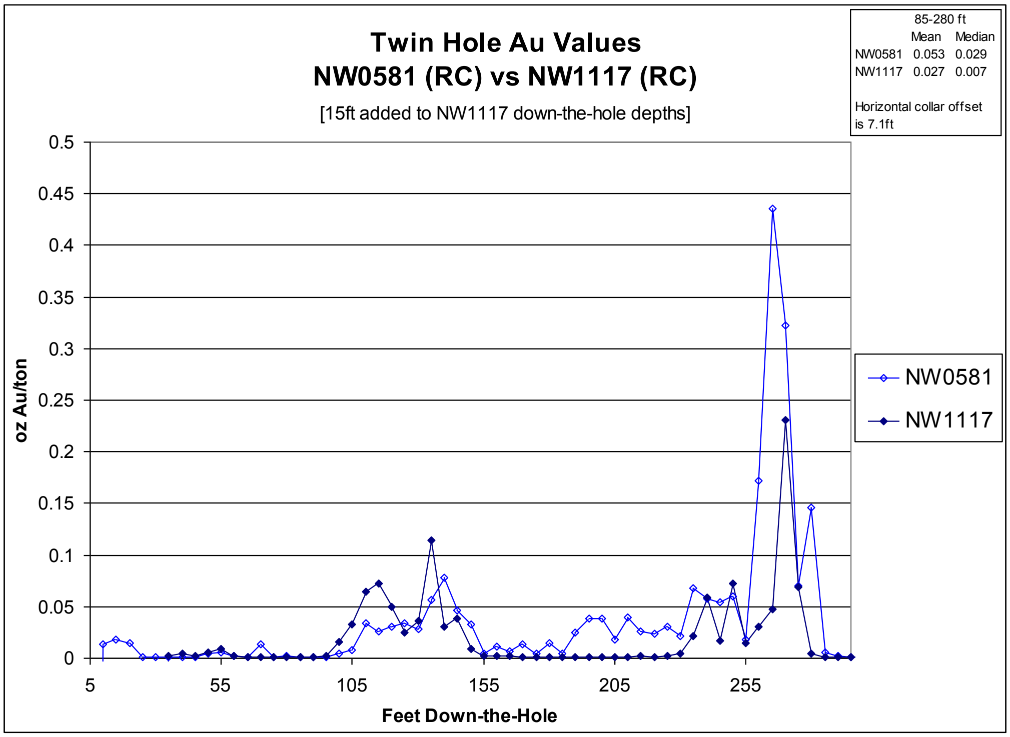


(a)

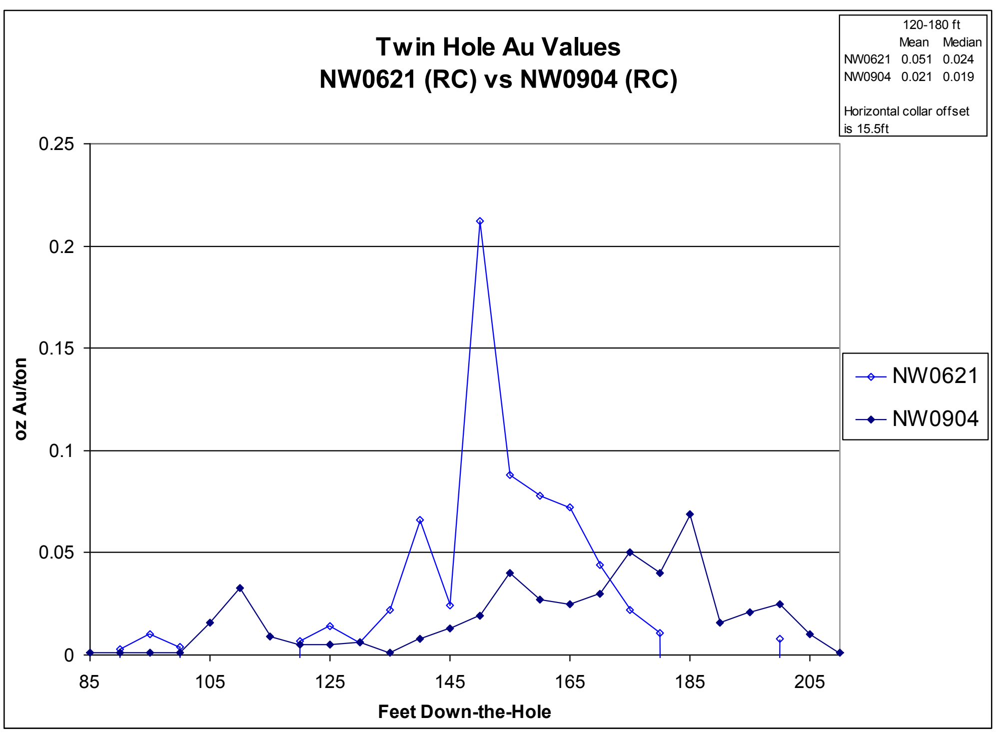


(b)

Figure 14.10 Down-Hole Gold Grade Plots of RC-Rotary and RC-RC Twin Sets (continued)



(c)



(d)

14.3 Assays Removed From Database

As discussed in Section 11, entire series of older drill holes have been removed from the database due to sample quality and assay reliability issues. Other assays have been removed during the mineral domain modeling discussed in Section 17 due to suspected down-hole contamination (see Section 12.4).

15.0 ADJACENT PROPERTIES

No properties adjacent to Northumberland are discussed in this report. Northumberland is a property of merit on its own and needs no additional support from properties.

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Historic gold production by Cyprus and WSMC from over seven million tons of ore utilized heap leaching of sized and run-of-mine oxide and semi-refractory ore. Gold recovery for oxide ore has been estimated at approximately 75% (Fiddler, 2003). Although a significant tonnage of the resources reported in Section 17 are categorized as oxide, the bulk of the resources are unoxidized (refractory) to partially oxidized (semi-refractory) and necessitate oxidation prior to cyanidation. Diagnostic metallurgical testing to date indicates that the best extraction of gold and silver from sulfide material can be achieved utilizing N_2TEC flotation technology of Newmont, which yielded recoveries in excess of 90% for both gold and silver in the mineralized material tested.

Due to the historic nature of much of the metallurgical data, MDA cannot definitively comment on the representivity of the samples used in each of the tests summarized below. MDA believes, however, that the test results can reasonably be used in the choice of the minimum cutoff grades applied to the resources discussed in Section 17.

16.1 Gold Recoveries from Mining Operations at Northumberland

Oxide ore, mainly from the Main and States deposits, was processed using cyanide leaching from 1939 to 1942 by the NMC, followed in 1981 to 1985 by Cyprus, and then in 1986 through 1990 by WSMC. NMC operated an all-sliming cyanide plant with a capacity of approximately 200 tons per day (Wark, 1943). Cyprus crushed ore to minus-½ inch at the Upper Site and hauled the crushed ore by truck to the Lower Site, which included heaps and an adsorption-desorption-recovery ("ADR") plant. The pregnant solution produced from the heaps was passed through activated-carbon columns, pressure stripped, and dore was produced from the solution by electrowinning. WSMC used essentially the same process, except heaps of run-of mine ore and the ADR plant were located at the Upper Site, which greatly reduced the hauling distance. Otherwise, WSMC's operations were essentially a continuation of the operations of Cyprus.

Prior to a production decision, Cyprus completed a test heap-leach program in 1978 (Kappes, 1979). The program consisted of mining and leaching mineralized material on two heaps; one heap was composed of 1,440 tons of crushed material from the Main deposit and the other consisted of 2,200 tons of ripped material from what is now referred to as the States deposit. The field tests indicated that gold recovery from crushed States deposit ore might be 75% to 80% with 90 days of leaching, and 61% with 80 days of leaching for Main deposit ore.

Actual gold recoveries from the commercial mining operations of Cyprus and WSMC were estimated by Fiddler (2003) using the average grade of the leached heaps as determined by a 2003 heap drilling program, the ounces produced and sold, and the tons delivered to the heaps based on production records. Ore mined by Cyprus from both the States and Main deposits went to the heap at the Lower Site. Estimated actual gold recovery for this heap is 75%, which is comparable to the test-heap predicted recoveries. Ore mined by WSMC was run-of-mine and was leached at the mine site in four separate heaps. Estimated actual gold recovery for these heaps is 50%. This lower recovery may be more related to an increase in partially oxidized material encountered below the oxide ore mined by Cyprus than to the difference in Cyprus' sized ore verses WSMC's run-of-mine ore.

Low gold recoveries caused the cessation of mining in 1990. This, along with the discovery of significant sulfide resources at about the same time, resulted in the initiation of preliminary geometallurgical studies and diagnostic metallurgical testing needed to establish a process to treat the semi-refractory and the newly discovered sulfide mineralization. A significant tonnage of oxide material remains in all deposits except Zanzibar, South Ridge, and Rockwell. This remaining oxide mineralization is expected to behave similarly to the historically processed oxide ore.

16.2 Geo-Metallurgical Studies

Drill-sample lithologies, percent of oxidation, percent of sulfide, carbon content (0-3 scale), and percent of clay from drill logs were compared to the corresponding cyanide-soluble/fire-assay gold ratios in order to obtain a geologic framework from which to understand the metallurgical characteristics of the Northumberland mineralization (Lanier, 1990). The ratio is considered an indicator of the amenability of the mineralized material to direct cyanidation (leachability). The analysis of the Wedge-Shaped deposit, which was studied in its entirety and contains mineralization representative of all oxidation stages present at Northumberland, showed that oxidation and lithology are the two variables that have the largest effect on leachability. As a generalization, samples with more complete oxidation have higher ratios. The effect of lithology is demonstrated by unique population distributions for intrusive and sedimentary rocks. The study also showed that there is no apparent relationship between grade and leachability, and that there is not an association between visible carbon and low cyanide-soluble/fire-assay gold ratios.

16.3 Metallurgical Testing

A number of metallurgical tests have been conducted on mineralized sulfide samples and mixed sulfide/oxide samples, some of the more important of which are summarized below. A detailed presentation of all testing completed to date is beyond the scope of this report. Metallurgical testing completed to date indicates that the N_2TEC flotation technology is the most promising method to achieve a viable processing option for the sulfide mineralization at Northumberland.

Dawson Metallurgical Laboratories (“Dawson”; 1990). Dawson performed non-optimized, pre-oxidation diagnostic testing on 11 gold-bearing drill-hole samples from 11 RC holes (Thompson, 1990). The samples were selected to represent refractory and semi-refractory material from the Zanzibar (NW1027 and NW1029), South Ridge (NW1007 and NW1009), States (NW953, NW1009, and NW1025), and Chipmunk (NW959, NW1001, and NW1005) deposits. Each composite sample was stage crushed to 20 mesh using a parallel-rolls crusher in closed circuit with a vibrating screen. Head grades were established for fire-assay Au and Ag, cyanide-soluble Au and Ag, total and sulfide sulfur, and total and organic carbon. Specific tests included whole-sample cyanidation; gravity concentration followed by bulk sulfide flotation with flotation tailings cyanidation; alkaline pre-oxidation with Na_2CO_3, NaOCl, and air followed by cyanidation; pre-acidification with H_2SO_4 followed by cyanidation; and pre-acidification followed by acid autoclaving with cyanidation of the autoclaved solids.

Average indicated extractions from these tests are as follows: whole-sample cyanidation - 40.7%, pre-acidification followed by cyanidation - 44.3%, gravity concentration followed by bulk sulfide flotation with tailing cyanidation - 46.9%, alkaline chlorination pre-oxidation followed by cyanidation - 68.0%, and pre-acidification followed by acid autoclaving followed by cyanidation - 81.0%. High cyanide consumption of up to 33 lbs/ton of material tested was observed during cyanidation of the alkaline chlorination pre-oxidized samples. High acid requirements were calculated for most of the samples tested in the acid autoclaving followed by cyanidation samples. Results indicated that the refractory nature of the material is mainly due to sulfide association. Gold extraction by cyanidation increased significantly after sulfides were oxidized by acid autoclaving in all but one sample, whose poor extraction was attributed to carbonaceous material that was not oxidized by acid autoclaving.

Western States Minerals Corporation (1991). WSMC (Kuipers, 1991) developed and directed a metallurgical study to analyze mineralogy, elemental content, response to diagnostic leaching, cyanidation amenability, and physical beneficiation by flotation and other methods. Microscopy of mineralized samples was conducted by Russ Honea; Resource Development Inc. and International Process Research Inc., both of Denver, Colorado, conducted metallurgical tests. The study used seven composited samples from 37 RC holes and 420 five-ft assay intervals chosen to represent the Main (composite M), South Ridge (S), Chipmunk (A, B, and I), and Zanzibar (Z and ND) deposits. The ND composite was derived from a deeper portion of the Zanzibar deposit than the Z composite. Samples were reduced to six mesh in a gyratory crusher and thoroughly blended into the composites.

The test procedure entailed "cyanidation leaching of a sample, ground to 80% -200 mesh to remove and recover non-refractory gold naturally existing in a 'free milling' state. Following this the sample is subjected to a hydrochloric acid leach, which should decompose oxides and hydroxides (i.e., hematite, goethite, etc.), the sulfide pyrrhotite, and carbonates such as dolomite and calcite. Following this acid leach the sample is again cyanidation leached to remove and recover any gold that is 'free' due to the decomposition of related materials. The procedure is repeated with nitric acid leach to decompose any remaining sulfides such as pyrite and arsenopyrite, followed by cyanidation, after which the sample is roasted to destroy any organic carbonaceous mineralization, again followed by cyanidation. Finally the sample is screened, and the various size fractions assayed to determine the distribution of the remaining encapsulated gold and gold associated minerals which did not yield to the decomposition and leaching processes" (Kuiper, 1991).

The main conclusions of the study were as follows (Kuiper, 1991):

- Gold occurs as micron- to sub-micron-size particles of metallic gold intimately associated with sulfides, occasionally in association with oxidized sulfide minerals, and rarely as free particles.
- The occurrence of gold is highly consistent throughout the deposits. Differences in cyanide leachability are mostly due to the degree of oxidation and silicification. 10% to 20% of the gold was not recoverable in the South Ridge, Zanzibar, and Chipmunk intrusion-hosted mineralization tested due to apparent silica encapsulation.
- The organic carbonaceous material is only slightly preg-robbing (absorbs gold preferentially over the cyanide solutions) within the areas of higher-grade mineralization. The organic carbonaceous material does not contain gold of higher grade than the rock itself and can be fairly efficiently removed by flotation, if desired.

- Flotation tests indicated that the gold-bearing mineralization can be effectively concentrated by flotation methods.
- The South Ridge and Zanzibar deposits are highly refractory and require complete pre-oxidation of sulfide and carbonaceous components to yield economic process recoveries. Roasting is probably the most applicable pre-oxidation process to follow pre-concentration by flotation.
- The Main deposit, along with unoxidized ores and some intrusive rocks from portions of the Chipmunk deposit, exhibit semi-refractory characteristics. Tests showed that an appreciable quantity of the gold (40-70%) is amenable to cyanidation without pre-oxidation. The remainder of the gold is associated with sulfides that require pre-oxidation.
- Oxidized rock from the Chipmunk deposit exhibits no significant refractory characteristics and is likely amenable to cyanidation by heap leaching.
- A generalized sequential milling and processing flow sheet could begin with the cyanidation of easily recoverable oxides, progressing to the treatment of semi-refractory material, and eventually to highly refractory material.
- All of the deposits contain elevated concentrations of arsenic (255-3000 ppm), and the Zanzibar deposit also contains elevated antimony (55 and 2100 ppm).

Kappes, Cassiday & Associates ("KCA"; 1993). Osmanson (1993) of Kappes, Cassidy & Associates of Sparks, Nevada ran 12 flotation tests on two composite samples of sulfide material, one from the Zanzibar deposit (the Z composite discussed above) and the other from the Chipmunk deposit (A composite, above), to optimize grind size, flotation pH, and collector type and dosage. A total of 12 tests were performed using products ranging from 44% +100 mesh to 100% -100 mesh (92.5% -325 mesh). Two variations were also tested that examined neutral to acid pH flotation, and one test examined pre-oxidation and carbon-in-leach ("CIL") treatment.

The flotation tests concentrated from 28% to 62% of the gold. In search of an alternative treatment method, the flotation tests were then followed by what KCA referred to as a "double-ox pre-oxidation test". This test program consisted of a caustic dosage of 30 pounds per ton of sample at 80º C with a continuous air sparge for a period of 62 hours, followed by carbon-in-leach ("CIL") cyanidation. Oxidation of the sulfides appeared complete, but the dominance of a graphite froth led to the belief that CIL would fail due to preg robbing. All preg-robbing analyses failed to confirm this, however. Omanson (1993) concluded that the carbon does not possess preg-robbing potential.

Dawson Metallurgical Laboratories ("Dawson"; 1996-1997). Dawson conducted a series of diagnostic tests in 1996 and 1997. The initial testing was conducted on a split-core sample from the Zanzibar deposit and compared the effect on cyanide leaching of crushing the mineralized material using High Pressure Grinding Rolls ("HPGR") with that of crushing the mineralized material using a simulated Vertical Shaft Impact Crusher ("VSI") (Allen, 1996a). In addition, a cursory test was performed to investigate whether recovery could be improved by oxidation of the sulfides using a neutral pH autoclave test procedure. This latter test was conducted because the use of acid autoclaving may not be practical due to high acid consumptions. Test results indicated that only slightly improved gold extraction was obtained after crushing the sample using the HPGR crusher (56% extraction) compared with conventional crushing to minus ¼ inch or VSI crushing to minus 6 mesh (52% extraction). More fines were produced in the HPGR crush (32 weight-percent) than in the simulated VSI crush (17 weight-percent) in the minus 100-mesh fraction with gold upgraded slightly in this fraction. Results of an unoptimized neutral autoclaving test followed by CIL cyanide leaching yielded about 82% gold extraction.

Dawson then compared autoclave pretreatment followed by CIL cyanidation (Allen, 1996b). A direct CIL cyanide leach test on refractory material from the Zanzibar deposit extracted less than 2% of the gold and oxidized 8% of the sulfide sulfur. This test was followed by neutral autoclave tests on two different grind sizes, 80% minus 145 microns, and 80% minus 58 microns. Gold extraction after cyanidation was 36% and 41%, with 29% and 32% of the sulfide sulfur oxidized for coarsely and finely ground samples, respectively. These tests were followed by acid autoclave of the fine grind material, which produced 88% extraction with 98% of the sulfide sulfur being oxidized; net acid consumption was 350 lb/ton. These results indicate that gold extraction is proportional to the degree of sulfide oxidation and is not significantly related to grind-size (Allen, 1996b).

Finally, Dawson evaluated the effect of grind size on flotation response, with and without pre-float acid addition (Thompson, 1996). The purpose of the acid was to help liberate sulfides from the carbonate gangue. The Zanzibar deposit sample was ground to achieve a fineness of 80% minus 132 microns, 80% minus 63 microns, and 80% minus 58 microns. Standard bulk-sulfide flotation procedures were used. Flotation at the lower grind fineness recovered about 55% of the gold into a combined rougher concentrate. Three stages of collector addition and flotation were used. The concentrate contained about 15% of the sample weight and assayed 0.533 oz Au/ton and only 5.5% sulfide sulfur. When the fineness was increased to the next step, gold recovery increased to nearly 61% from a 0.151 oz Au/ton back-calculated head grade. Further increasing the grind fineness did not result in any significant improvement in either gold or sulfide-sulfur recovery. Results from a bulk sulfide flotation test on a sample ground to 80% minus 63 microns with acid conditioning indicated that with 20 or 50 lb/ton sulfuric acid there was no increase in gold recovery from the sample after three stages of rougher flotation. A slight increase in recovery to about 67% occurred when a fourth stage of rougher flotation was added to the test with 50 lb/ton sulfuric acid. These flotation tests resulted in relatively low sulfide and gold recoveries, and low concentrate grades. Dawson concluded that the low recovery is mainly due to the very fine sulfide-grain structure and to the fact that the sulfide is well disseminated throughout the gangue.

Roasting the Zanzibar sample ground to 80% minus 145 microns resulted in the oxidation of over 98% of the sulfide. About 61% of the gold was extracted from this roasted sample by CIL. Although roasting oxidized about the same percentage of the sulfide as the acid autoclave test described above, gold leach extraction was higher in the acid autoclave test.

Geobiotics, Inc. ("Geobiotics"; 1996). Preliminary bio-oxidation tests on samples from the Zanzibar deposit were conducted by Geobiotics, Inc. (Rollin, 1996). The work indicated that the samples contained about 20 weight-percent carbonate and were therefore high acid consumers. Geobiotics concluded that an overall gold recovery of about 90% could be achieved with moderate operating cost in a process where the needed acid would be produced by bio-oxidation of the sample material when blended with a high-sulfide material.

The bio-oxidation test results are considered by WSMC and MDA to be inconclusive.

Hazen Research, Inc. (1996). Tests using Newmont's proprietary N_2TEC flotation technology were conducted on two refractory samples from the Zanzibar deposit by Hazen Research, Inc. (Oberg, 1996). The N_2TEC flotation technology was originally developed by Santa Fe Pacific Gold Corporation, who was subsequently acquired by Newmont. The two test samples consisted of drill-sample composites from holes drilled in the Zanzibar deposit. Sample #1 was a composite of 46 intervals from holes NW1029, NW1080, NW1081, NW1082A, NW1085, and NW1114. Sample #2 was a composite of 16 intervals of Roberts Mountains Formation and two intervals of intrusive rock from core hole NW1086A. Each sample weighed approximately three kilograms.

Bench-scale rougher concentrates extracted 92.9% and 92.0% of the gold and 98.5% and 96.3% of the silver in the two samples (Table 16.1). Following cyanidation, the flotation tails provided an additional 2 to 3% extraction of the gold. Organic carbon concentrations of 0.99% and 0.34% were obtained, which was considered to be a significant additional refractory component of the two samples. Using conventional flotation with comparable operating conditions, gold extraction was only 77.0% (Oberg, 1996).

Table 16.1 Summary of N_2TEC Flotation Testing on Northumberland Samples
(From Hanson, 1996)

Type	Calc. Head (oz Au/ton)	Residue (oz Au/ton)	Combined Concentrate (weight %)	Gold Recovery (%)	Silver Recovery (%)	Total Sulfur Recovery (%)
Sample #1	0.126	0.013	33.5%	92.9%	98.5%	91.5%
Sample #2	0.145	0.015	22.7%	92.0%	96.3%	94.3%

Note: Test work performed by Hazen Research, Inc. using proprietary technology of Newmont

The test results were considered promising, with experience in pilot plant operations with similar feed types indicating that the rougher concentrate weight might be reduced with only a minor loss of gold recovery (Hanson, 1996). Preliminary indications are that a 200-mesh grind is sufficient to liberate the submicron-size gold particles.

Newmont (2004). Composite samples of coarse rejects from four mineralized intervals in three Newmont 2004 RC holes drilled in the Zanzibar deposit and one RC composite from 2004 RC holes in the Main deposit were submitted to the metallurgical laboratory at Newmont's Lone Tree mine for flotation testing (Lauha and Powell, 2004c; 2004e). Direct cyanide leaching, roasting, and autoclaving were performed on a composite of all of the samples, and flotation tests were conducted on the individual intervals (Lauha and Powell, 2004c). Newmont stated that "typical roaster recoveries were around 60%, with flotation recovery near 70%, but autoclave recovery achieved over 80% recovery" and concluded that "due to the high organic carbon and the preg-robbing characteristics of some Northumberland ores, roasting initially appeared to be the process of choice based on head assays and preg-rob tests. However, the autoclave followed by cyanide leach achieved the highest recovery. These results are validated by test work performed in the early 1990s. Typical roaster recoveries were around 60%, with flotation recovery near 70%, but autoclave recovery achieved over 80% recovery. The overall best recovery was achieved by using the N_2TEC process at the Denver lab in 1996. Gold recovery was 92.4% average. This technology was not exactly duplicated at Lone Tree; however, further testing of Northumberland mineralization may be necessary to determine if the recovery can be improved to match the 1996 work" (House, 2004).

Newmont (2006-2007). Composite samples of oxide mineralization from 2006 core holes NN-60, NN-61, and NN-74 were studied by Newmont's Carlin Metallurgical Laboratory to determine the amenability of the gold to cyanide leaching (Eyzaguirre, 2007). The study included head assays, screen-fraction analysis at -1 inch, -10 mesh, and -200 mesh, standard cyanidation bottle-roll tests without charcoal addition at the three different size fractions, and column cyanide-leach tests performed on each composite of -1 inch agglomerated sample. Eyzaguirre's conclusions of the study are summarized as follows:

- The size fraction analysis showed homogeneous distribution of gold contents throughout all size fractions of the composites.
- Low values of mercury and relatively high values of arsenic should be considered when identifying final design of a flow sheet for the deposit.
- The Northumberland samples responded well to the fine-grind standard bottle-roll test procedure. The percent measured gold extractions for the three samples ranged from 78% to 85%.
- Drill hole NN-74 did not perform well in the -1 inch column and bottle roll tests. This is attributed to silicification of that sample. However, in view of the increased recoveries obtained in the bottle roll tests at finer grinds, and considering this is the highest-grade sample, milling of the material should be evaluated.
- Average reagent additions required to achieve gold extractions from the oxide samples are within acceptable limits.
- There are very small indications of preg-robbing effects in the three drill-hole samples.
- NCV values are all within positive ranges and indicate no signs of potential acid generation.
- Overall, and based on the samples studied, the oxide zone of the Northumberland deposit would qualify as a good heap-leach candidate.

17.0 MINERAL RESOURCE ESTIMATE

Mineral resource estimation reported for Northumberland follows the guidelines of Canadian National Instrument 43-101. The modeling and estimate of gold and silver resources were done by WSMC personnel under the guidance of Steve Ristorcelli, MDA Principal Geologist, and Michael Gustin, MDA Senior Geologist, both of whom are considered Qualified Persons by the definitions and criteria set forth in NI 43-101. There is no affiliation between Mr. Ristorcelli, Mr. Gustin, and NewWest and Fronteer except that of an independent consultant/client relationship.

17.1 Data

Cyprus compiled a digital database of the Northumberland drill data in 1984. This database was acquired by WSMC in 1985 as part of the acquisition of the property. WSMC subsequently and continually updated and refined the database. The database used in the estimation of gold and silver Mineral Resources at Northumberland, which was completed in December 2004 and January 2005, contains assay and geological information for 1,412 drill holes, including the 2004 Newmont drilling; the 2005 through 2007 Newmont drill data are not included in the resource estimation database. Digital topography of the post-mining surface was used in the modeling with all waste dumps and heaps uniquely identified.

17.2 Deposit Geology Pertinent to Mineral Resource Estimation

Gold and silver mineralization at Northumberland occurs in a cluster of eight generally stratiform deposits that follow three low-angle tectono-stratigraphic host horizons (see Section 7 for details beyond those summarized here). These horizons lie along the crest and west limb of the Northumberland anticline. The Rockwell, Pad 4, Wedge-Shaped, Chipmunk, and South Ridge deposits occur along the Hanson Creek fault horizon. The Rockwell deposit is spatially distinct and lies within the west limb of the anticline, while the other Hanson Creek horizon deposits lie along the crest of the anticline and partially merge with each other. The Basal Chert fault horizon hosts the States and Main deposits, which lie in the crest of the anticline and also merge near their extremities. The Zanzibar deposit occurs along the Prospect-Mormon thrust horizon near the crest and within the west limb of the anticline. Mineralization in each of the tectono-stratigraphic horizons locally breaches the intervening rock units and merges with mineralization in the neighboring host horizon. The overall geometry of the deposits and the higher-grade zones within the deposits appear to be influenced by east-trending high-angle structures in the area of the crest of the Northumberland anticline. The deposits are relatively laterally extensive and vertically restricted.

Small folds with northeast- to east-trending axial planes are superimposed on the Northumberland anticline. Two such anticlinal-synclinal sets cause significant variations in the orientations of the host horizons near the crest of the larger anticline. The gold-silver resource area was therefore subdivided into five geologic areas to reflect the variable orientations generated by the large- and small-scale folding. Each geologic area was assigned an average orientation for the purposes of grade estimation (Table 17.1).

Table 17.1 Geologic Areas

Area	Dip	Dip Azimuth	Predominant Deposits
1	-45º	270º	Zanzibar; Rockwell
2	-30º	285º	Zanzibar; Rockwell; States; Chipmunk
3	-15º	120º	States; Chipmunk
4	-10º	320º	Pad 4; Main
5	-10º	110º	Main; S. Ridge; Wedge-Shaped

17.3 Grade Modeling

Under the supervision of MDA, George Lanier and Jim Ashton of WSMC modeled and estimated the gold and silver resources at Northumberland by evaluating the drill data statistically, constructing geologic and mineral domains on sections, refining the mineral domain interpretations on orthogonal sections, performing geostatistics to establish estimation parametres, and estimating gold and silver grades into a three-dimensional block model. All modeling of the Northumberland Mineral Resources was performed using MineSight®.

Summary statistics of the Northumberland drill-hole sample database are shown in Table 17.2.

Table 17.2 Descriptive Statistics of Northumberland Gold and Silver Assays

All Au Assays

	Valid N	Median	Mean	Std. Dev.	CV	Min.	Max.	Units
Hole ID	1412							
Easting	68187	447112	447092			415350	452917	feet
Northing	68187	1532119	1532048			1520695	1557510	feet
Elevation	68187	8473	8332			4577	9155	feet
From	68187	220	388			0	3420	feet
To	68187	230	395			5	3426	feet
Length	68187	5.0	6.8	2.8	0.4	0.0	100.0	feet
Au	68187	0.001	0.010	0.031	3.232	0.000	1.290	oz Au/ton
Au Cap	68187	0.001	0.010	0.031	3.217	0.000	1.290	oz Au/ton
Au Domain	68187					-2	103	

All Ag Assays

	Valid N	Median	Mean	Std. Dev.	CV	Min.	Max.	Units
Hole ID	1369							
Easting	61668	447110	447002			415350	452917	feet
Northing	61668	1532135	1532105			1520695	1557510	feet
Elevation	61668	8490	8361			4577	9155	feet
From	61668	200	363			0	3420	feet
To	61668	210	370			5	3426	feet
Length	61668	5.0	7.0	2.9	0.4	0.5	100.0	feet
Ag	61668	0.005	0.103	0.807	7.808	0.000	74.620	oz Ag/ton
Ag Cap	61668	0.005	0.101	0.675	6.679	0.000	36.000	oz Ag/ton
Au Domain	61668					-2	103	

Gold Modeling. The gold grade distributions for the drill-hole assays were examined collectively and by deposit groupings (*e.g.*, Zanzibar and Rockwell; Chipmunk, South Ridge, Pad 4, and Wedge-shaped; etc.) in order to identify grade population characteristics. The entire Northumberland database was found not to be significantly different from the deposit groupings examined, and the distribution of all of the assays was therefore used to determine natural population.

The gold distribution curve is for the most part curvilinear, with distinct breaks at about 0.3 and 0.6 oz Au/ton. More subtle breaks are discernable at about 0.007, 0.02, 0.04, and 0.09 oz Au/ton.

North-south vertical sections were plotted on 100-ft intervals across the Rockwell deposit and the western portion of the Zanzibar deposit where drilling is relatively widely spaced, and on 50-ft intervals across the remainder of the mineralized areas. The topographic profile and drill-hole traces were placed on the sections, and gold assays and rock formation codes were plotted along the drill-hole traces. Geologic contacts of the major lithologic units were drawn to honor the coded drill-hole data.

Gold grades on the sections were reviewed to determine if any of the gold grade populations identified in the grade distribution plot represented continuous zones of mineralization. Grade ranges of 0.007 to 0.04, 0.04 to 0.09, 0.09 to 0.3, and greater than 0.3 oz Au/ton showed the best continuity, and these grade ranges were assigned to mineral domains 100, 101, 102, and 103, respectively. Gold grade envelopes were then created on the north-south sections for each of the mineral domains, guided by the previously completed geologic modeling. The north-south sectional mineral-domain envelopes were digitized, the envelopes were sliced and transferred to 20-ft-spaced east-west vertical sections, and the final mineral domains were refined and digitized from these orthogonal sections.

The north-south sectional grade envelopes were used to code the drill-hole assays to the appropriate mineral domain and deposit. Descriptive statistics (Table 17.3) and grade distributions of the drill-hole assays in each of the mineral domains were then examined to determine assay caps and/or grades above which search distances would be restricted during grade estimation (Table 17.4). Only two assays, both from the low-grade domain 100, were capped (at a value of 0.17 oz Au/ton). Search distances were restricted for grades in excess of 0.09, 0.3, and 0.6 oz Au/ton for domain 101, 102, and 103 samples, respectively.

Table 17.3 Descriptive Statistics of Drill-Hole Assays by Mineral Domain

Domain 100 Assays

	Valid N	Median	Mean	Std. Dev.	CV	Min.	Max.	Units
Hole ID	1042							
Easting	10695	446954	447033			442292	450616	feet
Northing	10695	1532284	1532238			1530593	1533797	feet
Elevation	10695	8570	8478			5251	8932	feet
From	10695	200	325			0	3331	feet
To	10695	210	331			5	3336	feet
Length	10695	5.0	6.2	2.2	0.4	0.5	11.0	feet
Au	10695	0.014	0.017	0.012	0.712	0.000	0.276	oz Au/ton
Au Cap	10695	0.014	0.017	0.012	0.691	0.000	0.170	oz Au/ton
Ag	10613	0.050	0.285	1.652	5.787	0.000	74.620	oz Ag/ton
Ag Cap	10613	0.050	0.276	1.367	4.961	0.000	36.000	oz Ag/ton
Au Domain						100	100	

Domain 101 Assays

	Valid N	Median	Mean	Std. Dev.	CV	Min.	Max.	Units
Hole ID	728							
Easting	3006	447048	447162			442290	450616	feet
Northing	3006	1532271	1532195			1530689	1533368	feet
Elevation	3006	8507	8423			5212	8882	feet
From	3006	175	346			0	3371	feet
To	3006	180	353			5	3375	feet
Length	3006	5.0	6.2	2.2	0.3	1.5	10.0	feet
Au	3006	0.051	0.055	0.021	0.392	0.001	0.422	oz Au/ton
Au Cap	3006	0.051	0.054	0.020	0.360	0.001	0.180	oz Au/ton
Ag	2986	0.100	0.316	1.643	5.199	0.000	54.000	oz Ag/ton
Ag Cap	2986	0.100	0.306	1.365	4.457	0.000	36.000	oz Ag/ton
Au Domain	3006					101	101	

Domain 102 Assays

	Valid N	Median	Mean	Std. Dev.	CV	Min.	Max.	Units
Hole ID	475							
Easting	1635	447006	446933			442290	450616	feet
Northing	1635	1532250	1532169			1530996	1533120	feet
Elevation	1635	8407	8304			5217	8872	feet
From	1635	290	448			0	3366	feet
To	1635	295	454			5	3371	feet
Length	1635	5.0	6.0	2.1	0.4	1.0	10.0	feet
Au	1635	0.126	0.142	0.060	0.423	0.002	0.661	oz Au/ton
Au Cap	1635	0.126	0.142	0.058	0.410	0.002	0.440	oz Au/ton
Ag	1630	0.170	0.304	0.557	1.833	0.000	9.100	oz Ag/ton
Ag Cap	1630	0.170	0.304	0.557	1.833	0.000	9.100	oz Ag/ton
Au Domain	1635					102	102	

Table 17.3 Descriptive Statistics of Drill-Hole Assays by Mineral Domain (continued)

Domain 103 Assays

	Valid N	Median	Mean	Std. Dev.	CV	Min.	Max.	Units
Hole ID	53							
Easting	118	447131	447119			442290	449809	feet
Northing	118	1532169	1532013			1530989	1533082	feet
Elevation	118	8427	8170			5225	8756	feet
From	118	169	521			0	3359	feet
To	118	176	527			10	3362	feet
Length	118	5.0	5.6	2.2	0.4	1.5	10.0	feet
Au	118	0.360	0.418	0.248	0.593	0.001	1.290	oz Au/ton
Au Cap	118	0.360	0.418	0.248	0.593	0.001	1.290	oz Au/ton
Ag	118	0.325	0.538	0.525	0.975	0.001	2.500	oz Ag/ton
Ag Cap	118	0.325	0.538	0.525	0.975	0.001	2.500	oz Ag/ton
Au Domain	118					103	103	

Table 17.4 Gold Assay Capping and Search Restriction Grades by Mineral Domain

Domain	Cap (oz Au/ton)	No. of Samples Capped	Search Restriction Grade (oz Au/ton)
100	0.17	2	-
101	-	-	0.09
102	-	-	0.30
103	-	-	0.60

A three-dimensional block model of the deposit area was created with 20ft x 20ft x 10-ft-vertical blocks. The east-west sectional grade envelopes were projected horizontally to code the blocks to mineral domains 100, 101, 102, and 103. In order for the block model to better reflect the irregularly shaped limits of the various gold domains, the percentage area of each mineral domain within each block was stored, as well as the percentage area outside of the mineral domains.

The capped drill-hole assays were composited down-hole at 10-ft intervals and coded by mineral domain and deposit. Due to typically abrupt changes in grade across each of the mineral domain envelopes, only assays from a particular mineral domain were used to create composites coded to that domain. Summary statistics of the composites are presented in Table 17.5.

Table 17.5 Descriptive Statistics of All Gold Composites

	Valid N	Median	Mean	Std. Dev.	CV	Min.	Max.	Units
Hole ID	1068							
Easting	10718	447026	447143			442290	450616	feet
Northing	10718	1532268	1532219			1530593	1533797	feet
Elevation	10718	8553	8468			5212	8929	feet
From	10718	180	313			0	3371	feet
To	10718	190	322			5	3375	feet
Length	10718	10.0	9.0	2.0	0.2	1.0	10.0	feet
Au	10718	0.021	0.040	0.057	1.428	0.001	1.290	oz Au/ton

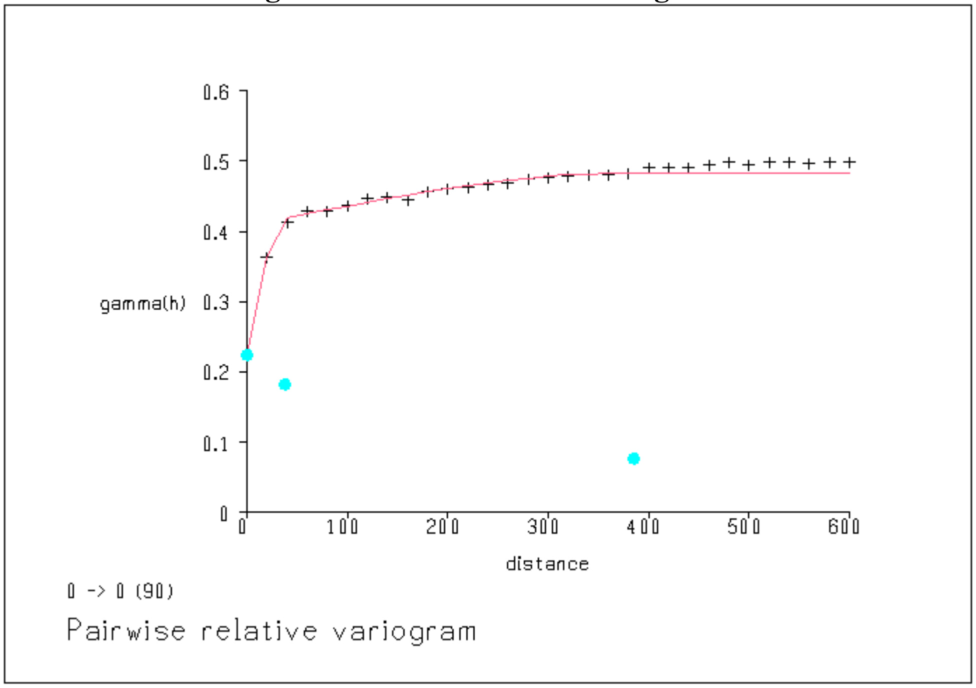
Variography was performed on composites from mineral domains 100 through 103 separately and collectively, as well as by area (Table 17.1), at varying lags, azimuths, and dips. Ultimately, well-developed structures were generated on global (Figure 17.1) and directional pairwise relative variograms that utilized all mineral domains for area 2 singly and areas 3, 4, and 5 collectively; not enough pairs are available from area 1 to generate useful variograms. The directional variograms used orientations that are close to the strike and dip of the mineralized horizons, as defined by the areas in Table 17.1.

Two kriging passes were used to estimate gold grades into the three-dimensional block model. The estimation passes were performed independently for mineral domains 100, 101, 102, and 103, so that only composites coded to a particular mineral domain were used to estimate grade into blocks that were coded to that domain. The estimated grades were coupled with the partial percentage of the mineral domains stored in the blocks to enable the calculation of weighted-average gold grades for each block.

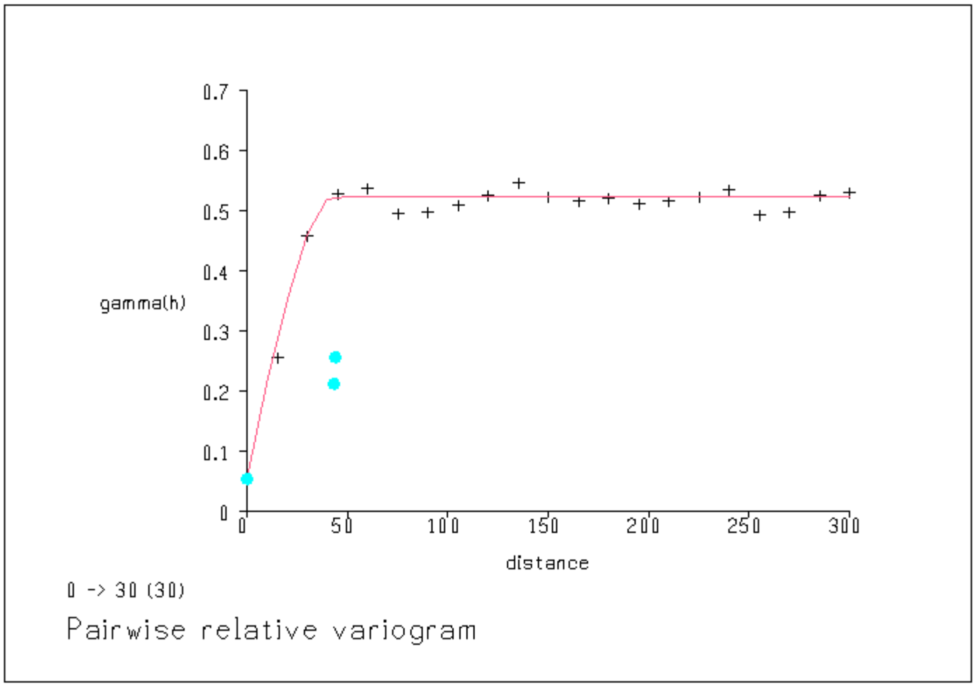
The estimation parameters for the first pass are shown in Tables 17.6 and 17.7. These parameters were derived from the variography, the definition of the geologic areas (Table 17.1), the statistical analysis of the coded assays (Table 17.3), point validations, and a three-dimensional examination of the gold mineralization. The first estimation pass for areas 1 and 2 used a maximum search distance of 400ft in the down-dip direction and 340ft along strike. Maximum search distances of 125ft and 70ft were allowed in the down-dip and strike directions, respectively, for areas 3, 4, and 5. The minor axes were effectively determined by the limited vertical extent of the modeled strataform mineralization.

The major search distance was increased to 1,500ft in the second pass in order to estimate all blocks coded to the modeled grade zones; the furthest distance of a sample from a block coded to a mineral domain was 1,250ft. The second estimation pass only assigned grades to blocks that had not been estimated by the first pass.

Figure 17.1 Gold Global Variograms



(a) Area 2



(b) Areas 3, 4, and 5

Table 17.6 Summary of Northumberland Gold Estimation Parameters: Areas 1 and 2

Areas 1 & 2		
Composites: Min / Max / Max per hole	Domain 100	1 / 12 / 3
	Domain 101	2 / 8 / 3
	Domain 102	1 / 8 / 3
	Domain 103	1 / 8 / 3
Composite Length-weighting		Yes
Estimation method		Kriging
Nugget (C_0)		0.00187
First sill (C_1) Ranges (ft): Dip / Strike / Across		.00152: 80 / 37 / 40
Second sill (C_2) Ranges (ft): Dip / Strike / Across		.000638: 470 / 400 / 190
Variography Directions: Azimuth / Dip / Tilt		290º / -30º / 0º
Search Distances (ft)	Domain 100	400 / 340 / 160
	Domain 101	300 /255 / 120
	Domain 102	250 / 210 / 100
	Domain 103	100 / 85 / 40
Search Restrictions: (oz Au/ton) / ft	Domain 100	None
	Domain 101	>0.09 / 120
	Domain 102	>0.3 / 100
	Domain 103	>0.6 / 50
Search Directions: Azimuth / Dip / Tilt	Area 1	270º / -45º / 0º
	Area 2	285º / -30º / 0º

Table 17.7 Summary of Northumberland Gold Estimation Parameters: Areas 3, 4, and 5

Areas 3, 4, & 5		
Composites: Min / Max / Max per hole	Domain 100	1 / 8 / 3
	Domain 101	2 / 8 / 3
	Domain 102	1 / 8 / 2
	Domain 103	1 / 8 / 3
Composite Length-weighting		Yes
Estimation method		Kriging
Nugget (C_0)		0.00108
First sill (C_1): Ranges (ft): Dip / Strike / Across		.00426: 15 / 43 / 2
Second sill (C_2) Ranges (ft): Dip / Strike / Across		.00512: 80 / 44 / 48
Variography Directions: Azimuth / Dip / Tilt		120º / -10º / 0º
Search Distances (ft): Dip / Strike / Across	Domain 100	125 / 70 / 50
	Domain 101	100 / 55 / 45
	Domain 102	80 / 45 / 40
	Domain 103	45 / 25 / 25
Search Restrictions (oz Au/ton) / ft	Domain 100	None
	Domain 101	>0.09 / 50
	Domain 102	>0.3 / 40
	Domain 103	>0.6 / 25
Search Directions: Azimuth / Dip / Tilt	Area 3	120º / -15º / 0º
	Area 4	320º / -10º / 0º
	Area 5	110º / -10º / 0º

Silver Modeling. A generalized estimate of the silver contained within the modeled gold domains was undertaken. Since the silver was not explicitly modeled, significant zones of silver mineralization lie outside of the gold domains and therefore were not included in the estimation.

Descriptive statistics of the silver assay data within the gold mineral domains are presented in Table 17.8. The assay data were capped at 36 oz Ag/ton in areas 1 and 2 (six assays) on the basis of an analysis of the population distribution; assays within areas 3, 4, and 5 were capped at 16 oz Ag/ton (four assays). The mean and median silver grades do not compare well, and the coefficient of variation ("CV") is quite high. These statistical characteristics result from the lack of modeling of the silver grades and are reflected in the categorization of all silver resources as Inferred.

The capped silver assays were composited and used in variography (Figure 17.2) in the same fashion as described for the gold data.

Table 17.8 Descriptive Statistics of Silver Drill-Hole Assays in All Gold Mineral Domains

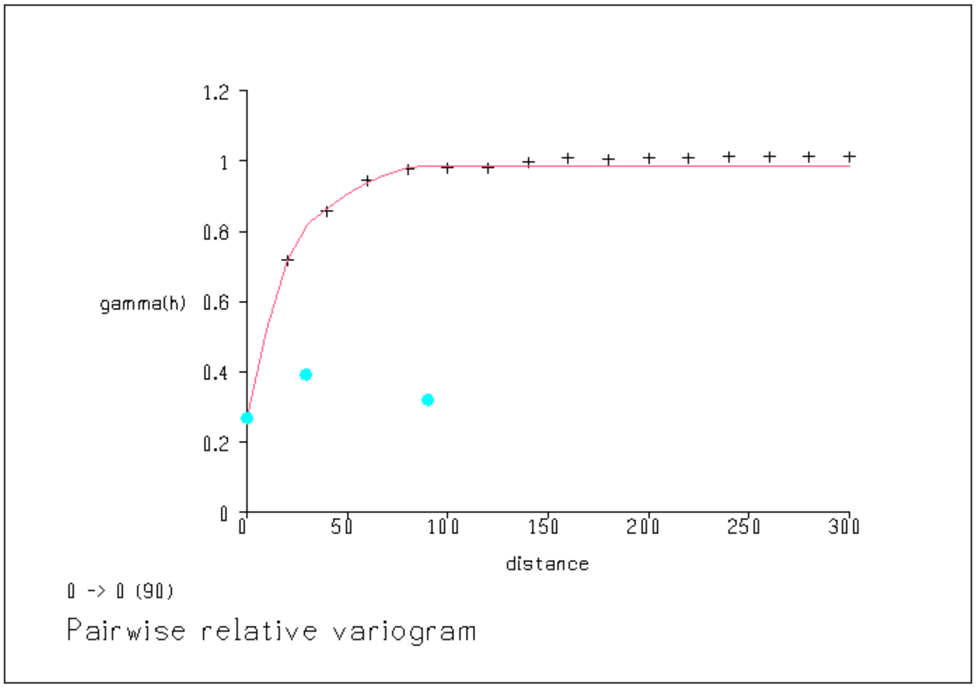
Au & Ag Assays in All Domains

	Valid N	Median	Mean	Std. Dev.	CV	Min.	Max.	Units
Hole ID	1066							
Easting	15454	446982	447048			442290	450616	feet
Northing	15454	1532279	1532221			1530593	1533797	feet
Elevation	15454	8539	8446			5212	8932	feet
From	15454	200	343			0	3371	feet
To	15454	210	350			5	3375	feet
Length	15454	5.0	6.2	2.2	0.4	0.5	11.0	feet
Au	15454	0.021	0.040	0.059	1.470	0.000	1.290	oz Au/ton
Au Cap	15454	0.021	0.040	0.058	1.461	0.000	1.290	oz Au/ton
Ag	15347	0.072	0.295	1.568	5.315	0.000	74.620	oz Ag/ton
Ag Cap	15347	0.072	0.286	1.303	4.551	0.000	36.000	oz Ag/ton
Au Domain	15454					100	103	

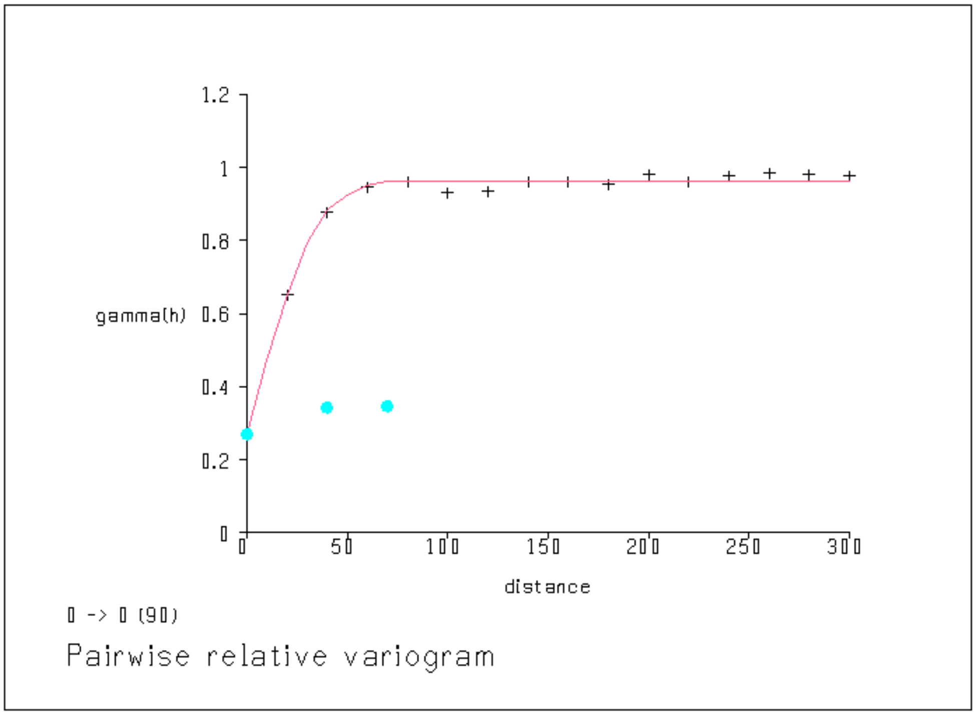
Ranges derived from the across-strike/dip directional variograms for areas 3-4-5 are unrealistically long due to the influence of down-hole pairs, which greatly exceed the number of directional pairs. Inspection of the silver assay data on section reveals that the mineralization is continuous along strike and especially dip, but quite restricted in the vertical direction. The silver search ellipses were therefore restricted on the across-strike/dip axes (Tables 17.9 and 17.10).

Two kriging passes were used to estimate silver grades into the three-dimensional block model. The estimation passes were performed without regard to the 101, 102, and 103 gold mineral domains, so that all composites were used to estimate the silver grades. The estimation parameters for the first pass are shown in Tables 17.9 and 17.10. The search distances in the second pass were increased to a maximum of 1,500ft and 1,500ft in the strike and dip directions, respectively, in order to estimate all blocks coded to the gold mineral domains. The second estimation pass only assigned grades to blocks that had not been estimated by the first pass.

Figure 17.2 Silver Global Variograms



(a) Areas 1 and 2



(b) Areas 3, 4, and 5

Table 17.9 Summary of Northumberland Silver Estimation Parameters: Areas 1 and 2

Areas 1 & 2		
Composites: Min / Max / Max per hole		1 / 10 / 2
Composite Length-weighting		Yes
Estimation method		kriging
Nugget (C_0)		1.0150
First sill (C_1) Ranges (ft): Dip / Strike / Across		1.4742: 40 / 30 / 32
Second sill (C_2) Ranges (ft): Dip / Strike / Across		1.2076: 80 / 95 / 110
Variography Directions: Azimuth / Dip / Tilt		290º / -30º / 0º
Search Distances (ft)		80 / 95 / 20
Search Restrictions (oz Ag/ton) / ft		>0.8 / 40
Search Directions: Azimuth / Dip / Tilt	Area 1	270º / -45º / 0º
	Area 2	285º / -30º / 0º

Table 17.10 Summary of Northumberland Silver Estimation Parameters: Areas 3, 4, and 5

Areas 3, 4, & 5		
Composites: Min / Max / Max per hole		1 / 10 / 2
Composite Length-weighting		Yes
Estimation method		kriging
Nugget (C_0)		0.2035
First sill (C_1): Ranges (ft; Dip / Strike / Across)		.2576: 35 / 5 / 32
Second sill (C_2) Ranges (ft): Dip / Strike / Across		.2604: 40 / 20 / 200
Variography Directions: Azimuth / Dip / Tilt		120º / -10º / 0º
Search Distances (ft)		40 / 20 / 20
Search Restrictions (oz Ag/ton) / ft		>0.4 / 20
Search Directions: Azimuth / Dip / Tilt	Area 3	120º / -15º / 0º
	Area 4	320º / -10º / 0º
	Area 5	110º / -10º / 0º

17.4 Density and Oxidation Modeling

Specific gravity ("SG") measurements of mineralized Northumberland material were made by WSMC using the immersion method and the Marcy direct-reading pulp-density scale. For the immersion method, selected samples of core were cleaned with a brush and sprayed with a thin lacquer (Krylon) to prevent the samples from absorbing water during the test (Lanier, 1992b). Hip chain string was used to suspend the samples, which were weighed suspended in air and in tap water. Bulk specific gravity was then calculated using the following equation:

$$SG = A / (A - B)$$

where: A = weight in air; and B = weight in water

A comparison was made of 30 Marcy measurements with determinations on the same samples using the immersion method. The Marcy and immersion method measurements averaged 2.59 and 2.61, respectively (Lanier, 1997). In addition to the WSMC data, Core Laboratories, Inc. of Dallas, Texas determined the SG of 19 samples for Cyprus.

A total of 295 SG, or tonnage factor ("TF"), measurements collected from mineralized Northumberland samples were used to determine densities. The SG results vary principally by lithology and oxidation. Since a lithologic model of Northumberland has not been created, average TF's were estimated for each deposit based on the percentage of each lithology in the deposit. Lithologic codes of all samples assigned to gold domains were used to estimate the relative amounts of mineralized dolostone, limestone, siltstone/silty limestone, jasperoid, hornfels, and intrusions in each deposit (Table 17.11). The average TF values for each of the lithologies were then weight-averaged to determine the 'unfactored' TF for each deposit. These values were increased by a 2% factor in oxidized rocks and 1% in unoxidized rocks in order to account for unmeasured void spaces, such as open fractures (Table 17.12).

Table 17.11 Tonnage Factors by Lithology

Deposit	Dolostone		Limestone		Ls-Siltstone		Jasperoid		Intrusions		Hornfels		Totals[1]
	No	TF	No	TF	No	TF	No	TF	No	TF	No	TF	
Zanzibar	12	11.95	6	12.42	28	12.29	51	12.38	43	12.20	3	11.94	143
Rockwell	7	12.76	7	12.09			1	11.69	2	12.00	4	12.00	21
Chipmunk	25	12.37	4	12.97	3	13.69	6	12.61	47	12.21			85
States-Main			8	14.90			8	12.76					16
S Ridge	9	12.97	16	13.13					2	15.48	3	13.18	30
Totals	*53*	*12.42*	*41*	*13.12*	*31*	*12.42*	*66*	*12.44*	*94*	*12.26*	*10*	*12.31*	*295*

[1] Table does not include two measurements of calc-silicate rocks

Table 17.12 Tonnage Factors by Deposit

Deposit	Oxidized TF	Unoxidized TF
Zanzibar	12.53	12.41
Rockwell	12.76	12.63
Chipmunk	12.78	12.65
States	12.95	12.82
Main	12.95	12.82
Wedge Shaped	12.80	12.68
Pad 4	13.10	12.97
South Ridge	12.78	12.66

In order to assign the tonnage factors to the blocks, an oxidation model was estimated using the oxidized ("2"), mixed ("1"), and unoxidized ("0") codes in the drill sample database. Oxidation trends within the deposits mimic the stratigraphy. Drill hole geologic codes were therefore contoured to create a digital surface representing the base of the Roberts Mountains Formation. The relative vertical distance of the blocks to the Roberts Mountains surface were calculated and stored in the block model. The block model was then used to code the relative vertical distance to the 10-ft oxidation composites. These procedures normalize true elevations of the composites and blocks to the Roberts Mountains surface, effectively flattening the undulating stratigraphy for the purposes of the oxidation estimation.

The oxide code was interpolated using the inverse-distance-cubed method that recognized the relative distances stored in the composites as the elevation values. Each geologic area was interpolated separately with unique search parameters. The search ellipses were highly anisotropic, with relatively long axes in the horizontal directions and short minor axes in the vertical direction in order to honor the stratigraphic control. The lengths of the major and semi-major axes of the search ellipses ranged from 550ft in geologic area 1 to 440ft in areas 4 and 5, while the minor axes used ranges of 35ft to 50ft. A minor amount of blocks were not estimated in the Zanzibar deposit. These blocks were set to zero (unoxidized).

The oxide codes were interpolated to assign blocks oxidation codes to the first decimal place. All blocks greater than or equal to 1.5 were assigned oxidized tonnage factors, while the remaining blocks were assigned unoxidized tonnage factors.

17.5 Metallurgical Modeling

Portions of the Northumberland gold-silver mineralization are amenable to direct cyanidation, while other portions require metallurgical treatment that includes oxidation prior to cyanidation (see Section 16). Due to the significant difference in costs involved in the recovery of gold and silver from these two styles of mineralization, unique grade cutoffs are necessary for the purposes of resource reporting. A generalized metallurgical model was therefore developed to define both the mineralization that is amenable to direct cyanidation and the mineralization that requires oxidation prior to cyanidation. These types of mineralization were identified on the basis of gold cyanide extraction ratios, which are defined as the ratios of cyanide leach assays to original fire assays expressed in percent. The metallurgical modeling, therefore, has been completed solely for the purposes of tabulating the Mineral

Resources at appropriate cutoffs. Additional work, including the possible development of a new metallurgical model, would need to be completed prior to taking these resources to reserves.

Variography performed on gold cyanide extraction ratio data indicated maximum ranges of about 700 to 800ft in both global and directional variograms, with most of the relationship between samples accounted for at a range of 550ft.

Cyanide extraction ratios were estimated by the inverse-distance-cubed ("ID^3") method using the parameters in Table 17.13. Relative elevations of the 10-ft composites to the Roberts Mountains surface were used in a similar fashion as the oxidation estimation described above. Cyanide extraction ratios derived from gold assays of less than 0.005 oz Au/ton were not used in the composites, as these low assay values can lead to spuriously high cyanide extractions and otherwise rather meaningless ratios. Only cyanide extraction ratios within the mineral domains were composited.

Table 17.13 Summary of Northumberland Cyanide Extraction Estimation Parameters

Areas 1 through 5	
Composites: Min / Max / Max per hole	1 / 5 / 3
Composite Length-weighting	Yes
Estimation method	ID^3
Search Distances (ft)	550 / 550 / 50
Search Directions: Azimuth / Dip / Tilt	0º / 0º / 0º

Approximately 90% of the blocks were estimated by the inverse-distance interpolation. The equation of a best-fit line derived from the relationship between cyanide extraction ratios and logged oxidation code was applied to the interpolated oxidation codes to calculate the cyanide extraction ratios for the unestimated blocks. The data used to derive the best-fit line were constrained to samples that: (1) have a minimum fire assay value of 0.01 oz Au/ton; (2) lie within the gold mineral domains; and (3) have a maximum extraction ratio of 115%. The minimum fire assay limit is imposed in order to remove many of the spurious extraction ratios well in excess of 100% and otherwise meaningless ratios, which are common at grades of less than 0.01 oz Au/ton. Only data lying within the mineral domains were used in the estimation. While the best-fit line reflects the expected positive relationship between increasing oxidation and increasing extraction values, the correlation is not strong (correlation coefficient = 0.49). This is partially due to the subjectivity associated with various loggers assigning codes of 1, 2, and 3 in the description of oxidation state. The interpolated extraction ratios were capped at 100%.

17.6 Northumberland Mineral Resources

The Mineral Resources stated in this report for the Northumberland project conform to the definitions and categories set out in the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Definition Standards on Mineral Resources and Mineral Reserves adopted by the CIM Council on August 20, 2000 and the revisions adopted on December 11, 2005. The CIM definitions are provided below for reference:

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.

Gold resources were classified by MDA on the basis of the distance of the model blocks to the nearest composite and the minimum number of composites used to estimate the block grades (Table 17.14). In all cases the classified blocks lie at least partially within a defined mineral zone. Measured resource blocks are those blocks coded to at least one mineral domain that lie within 50ft of the nearest composite and were estimated by at least two composites. Indicated resource blocks are those blocks coded to a mineral domain that lie within 50ft of the nearest composite and are estimated by a single composite, or those blocks that lie within 51 to 250ft of the nearest composite that are estimated with a minimum of two composites. Inferred resource blocks are those blocks coded to a mineral domain that are not classified as Measured or Indicated. In cases where a block was coded to multiple mineral domains, the classification parameters for the highest-mineral domain estimated in the block were used.

All silver resources are categorized as Inferred due the lack of time spent studying the geology of its occurrence, the high silver CV's, the lack of verification of the silver assay database in this study, and the generalized nature of the estimation. Silver was not modeled independently of the gold, so that only silver lying within the limits of the modeled gold zones was estimated. Significant additional silver lies outside of the gold zones and therefore was not estimated. This is far from an optimum method of estimating silver grades and tons, but it does serve to provide some insight into the magnitude of the silver mineralization associated directly with the gold. There is a good possibility that when estimated properly, the grades and tons will change.

Table 17.14 Northumberland Resource Classification Parameters

Type	Area	Classification	Nearest Sample	No. of Samples
Gold Resources	1 & 2	Measured	0 - 50 ft	≥ 2
		Indicated	0 - 50 ft	1
			51 - 250 ft	≥ 2
		Inferred	51 - 250 ft	1
			≥ 251 ft	≥ 1
	3, 4 & 5	Measured	0 - 40 ft	≥ 2
		Indicated	0 - 40 ft	1
			41 - 80 ft	≥ 2
		Inferred	41 - 80 ft	1
			≥ 80 ft	≥ 1
Silver Resources	1, 2, 3, 4, & 5	Inferred[1]	no restriction	≥ 1

[1]No silver resources are classified as Measured or Indicated

The gold resources are tabulated using three gold-grade cutoffs that are applied to the block model on the basis of reasonably expected mining methods, metallurgical characteristics, and comparisons with similar mining operations in Nevada. A cutoff grade of 0.010 oz Au/ton is applied to blocks that can reasonably be considered to be available for potential open-pit extraction and heap-leach processing; all blocks above an elevation of 7,500 ft with a cyanide extraction ratio of 50% or higher are deemed to be

potentially mineable by open-pit methods and oxidized sufficiently to be amenable to heap leaching. The 7,500-ft elevation limits blocks potentially available to open-pit mining. This elevation is supported by internal scoping-level economic studies undertaken by NewWest. The 0.01 cutoff grade for oxide material is derived from comparable open-pit heap-leach operations in Nevada.
Two cutoff grades are used for sulfide material, which will likely require oxidation prior to cyanide leaching. The sulfide material is identified by cyanide extraction ratios less than 50%. Sulfide blocks that lie above 7,500ft can reasonably be considered available for potential open-pit extraction and are compiled using a cutoff grade of 0.04 oz Au/ton. This cutoff was chosen with consideration given to the NewWest internal economic analyses mentioned above. Blocks lying below 7,500ft will likely require more costly underground mining methods and are compiled using a cutoff grade of 0.10 oz Au/ton.

The gold grades for each block represent the weighted average of the grades estimated for each of the mineral domains included in the block; they are not diluted to full blocks but rather to the mineralized zone only. Similarly, the tons of a block are derived from that portion of the block below surface topography and within the gold mineral domains.

The silver resources are compiled from all gold resource blocks based on the gold cutoff grades discussed above; no silver cutoff is applied.

The Measured, Indicated, and Inferred gold and silver resources are summarized in Tables 17.15 and 17.16, respectively. The gold resources at additional cutoffs are listed in Table 17.17.

Table 17.15 Northumberland Gold Resources

Imperial Units

NORTHUMBERLAND GOLD RESOURCES

MEASURED					INDICATED			MEASURED & INDICATED		
Type	**Cutoff** (oz Au/ton)	**Tons**	**Grade** (oz Au/ton)	**Au Ounces**	**Tons**	**Grade** (oz Au/ton)	**Au Ounces**	**Tons**	**Grade** (oz Au/ton)	**Au Ounces**
Oxide - >7,500 ft	0.010	8,951,000	0.034	302,000	6,793,000	0.033	221,000	15,744,000	0.033	523,000
Sulfide - >7,500 ft	0.040	3,903,000	0.094	368,000	9,441,000	0.097	912,000	13,344,000	0.096	1,280,000
Sulfide - <7,500 ft	0.100	144,000	0.159	23,000	1,678,000	0.138	232,000	1,822,000	0.140	255,000
Total		***12,998,000***	***0.053***	***693,000***	***17,912,000***	***0.076***	***1,365,000***	***30,910,000***	***0.067***	***2,058,000***

INFERRED				
Type	**Cutoff** (oz Au/ton)	**Tons**	**Grade** (oz Au/ton)	**Au Ounces**
Oxide - >7,500 ft	0.010	1,007,000	0.036	36,000
Sulfide - >7,500 ft	0.040	1,846,000	0.094	174,000
Sulfide - <7,500 ft	0.100	1,528,000	0.124	189,000
Total		***4,381,000***	***0.091***	***399,000***

Metric Units

NORTHUMBERLAND GOLD RESOURCES

MEASURED					INDICATED			MEASURED & INDICATED		
Type	**Cutoff** (g Au/tonne)	**Tonnes**	**Grade** (g Au/tonne)	**Au Ounces**	**Tonnes**	**Grade** (g Au/tonne)	**Au Ounces**	**Tonnes**	**Grade** (g Au/tonne)	**Au Ounces**
Oxide - >2,286 m	0.34	8,120,000	1.16	302,000	6,162,000	1.11	221,000	14,282,000	0.04	523,000
Sulfide - >2,286 m	1.37	3,540,000	3.23	368,000	8,565,000	3.31	912,000	12,105,000	0.11	1,280,000
Sulfide - <2,286 m	3.43	130,000	5.45	23,000	1,522,000	4.75	232,000	1,652,000	0.15	255,000
Total		***11,790,000***	***1.83***	***693,000***	***16,249,000***	***2.61***	***1,365,000***	***28,039,000***	***2.28***	***2,058,000***

INFERRED				
Type	**Cutoff** (g Au/tonne)	**Tonnes**	**Grade** (g Au/tonne)	**Au Ounces**
Oxide - >2,286 m	0.34	914,000	1.22	36,000
Sulfide - >2,286 m	1.37	1,674,000	3.23	174,000
Sulfide - <2,286 m	3.43	1,386,000	4.25	189,000
Total		***3,974,000***	***3.12***	***399,000***

Table 17.16 Northumberland Silver Resources

(Tabulated with the gold resources and by gold cutoff grades)

Imperial Units

INFERRED SILVER RESOURCES				
Type	**Au Cutoff** (oz Au/ton)	**Tons**	**Grade** (oz Ag/ton)	**Ag Ounces**
Oxide - >7,500 ft	0.010	16,751,000	0.127	2,127,000
Sulfide - >7,500 ft	0.040	15,190,000	0.168	2,552,000
Sulfide - <7,500 ft	0.100	3,350,000	0.129	432,000
Total		***35,291,000***	***0.145***	***5,111,000***

Metric Units

INFERRED SILVER RESOURCES				
Type	**Au Cutoff** (g Au/tonne)	**Tonnes**	**Grade** (g Ag/tonne)	**Ag Ounces**
Oxide - >2,286 m	0.34	15,196,000	4.35	2,127,000
Sulfide - >2,286 m	1.37	13,780,000	5.76	2,552,000
Sulfide - <2,286 m	3.43	3,039,000	4.42	432,000
Total		***32,015,000***	***4.97***	***5,111,000***

Table 17.17 Northumberland Gold Resources by Cutoff Grade

Imperial Units

MEASURED GOLD RESOURCES												
	Oxide - >7,500 ft			Sulfide - >7,500 ft			Sulfide - <7,500 ft			Total		
Cutoff	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**
(oz Au/ton)		(oz Au/ton)			(oz Au/ton)			(oz Au/ton)			(oz Au/ton)	
0.010	**8,951,000**	**0.034**	**302,000**							8,951,000	0.034	302,000
0.020	4,753,000	0.050	236,000							4,753,000	0.050	236,000
0.030	2,646,000	0.071	187,000							2,646,000	0.071	187,000
0.040	2,033,000	0.082	166,000	**3,903,000**	**0.094**	**368,000**				5,936,000	0.090	534,000
0.050	1,501,000	0.095	143,000	3,142,000	0.106	334,000				4,643,000	0.103	477,000
0.060	1,090,000	0.111	120,000	2,496,000	0.120	299,000				3,586,000	0.117	419,000
0.070	857,000	0.123	106,000	2,135,000	0.129	276,000				2,992,000	0.128	382,000
0.080	735,000	0.131	97,000	1,909,000	0.136	260,000				2,644,000	0.135	357,000
0.090	618,000	0.140	87,000	1,696,000	0.142	242,000				2,314,000	0.142	329,000
0.100	527,000	0.148	78,000	1,507,000	0.148	224,000	**144,000**	**0.159**	**23,000**	2,178,000	0.149	325,000
0.140	210,000	0.193	41,000	757,000	0.176	133,000	56,000	0.223	12,000	1,023,000	0.182	186,000
0.180	57,000	0.296	17,000	193,000	0.238	46,000	24,000	0.315	8,000	274,000	0.259	71,000

INDICATED GOLD RESOURCES												
	Oxide - >7,500 ft			Sulfide - >7,500 ft			Sulfide - <7,500 ft			Total		
Cutoff	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**
(oz Au/ton)		(oz Au/ton)			(oz Au/ton)			(oz Au/ton)			(oz Au/ton)	
0.010	**6,793,000**	**0.033**	**221,000**							6,793,000	0.033	221,000
0.020	3,635,000	0.047	170,000							3,635,000	0.047	170,000
0.030	1,944,000	0.068	132,000							1,944,000	0.068	132,000
0.040	1,460,000	0.079	115,000	**9,441,000**	**0.097**	**912,000**				10,901,000	0.094	1,027,000
0.050	1,100,000	0.090	99,000	7,991,000	0.106	848,000				9,091,000	0.104	947,000
0.060	779,000	0.105	82,000	6,650,000	0.117	775,000				7,429,000	0.115	857,000
0.070	607,000	0.117	71,000	5,802,000	0.124	721,000				6,409,000	0.124	792,000
0.080	496,000	0.126	63,000	5,192,000	0.130	675,000				5,688,000	0.130	738,000
0.090	415,000	0.134	56,000	4,622,000	0.136	627,000				5,037,000	0.136	683,000
0.100	338,000	0.144	48,000	4,117,000	0.141	580,000	**1,678,000**	**0.138**	**232,000**	6,133,000	0.140	860,000
0.140	126,000	0.189	24,000	1,918,000	0.165	316,000	455,000	0.197	90,000	2,499,000	0.172	430,000
0.180	46,000	0.248	11,000	369,000	0.213	79,000	102,000	0.356	36,000	517,000	0.244	126,000

INFERRED GOLD RESOURCES												
	Oxide - >7,500 ft			Sulfide - >7,500 ft			Sulfide - <7,500 ft			Total		
Cutoff	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**	**Tons**	**Grade**	**Au Ounces**
(oz Au/ton)		(oz Au/ton)			(oz Au/ton)			(oz Au/ton)			(oz Au/ton)	
0.010	**1,007,000**	**0.036**	**36,000**							1,007,000	0.036	36,000
0.020	521,000	0.055	28,000							521,000	0.054	28,000
0.030	297,000	0.079	23,000							297,000	0.077	23,000
0.040	234,000	0.091	21,000	**1,846,000**	**0.094**	**174,000**				2,080,000	0.094	195,000
0.050	191,000	0.101	19,000	1,598,000	0.102	163,000				1,789,000	0.102	182,000
0.060	148,000	0.115	17,000	1,357,000	0.110	150,000				1,505,000	0.111	167,000
0.070	112,000	0.131	15,000	1,158,000	0.118	137,000				1,270,000	0.120	152,000
0.080	88,000	0.146	13,000	1,004,000	0.125	126,000				1,092,000	0.127	139,000
0.090	72,000	0.160	12,000	876,000	0.131	115,000				948,000	0.134	127,000
0.100	60,000	0.173	10,000	747,000	0.137	103,000	**1,528,000**	**0.124**	**189,000**	2,335,000	0.129	302,000
0.140	33,000	0.218	7,000	284,000	0.171	49,000	221,000	0.176	39,000	538,000	0.177	95,000
0.180	20,000	0.261	5,000	61,000	0.226	14,000	39,000	0.287	11,000	120,000	0.250	30,000

Table 17.17 Northumberland Gold Resources by Cutoff Grade, cont.

Metric Units

MEASURED GOLD RESOURCES

	Oxide - >2,286 m			Sulfide - >2,286 m			Sulfide - <2,286 m			Total		
Cutoff	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces
(g Au/tonne)		(g Au/tonne)			(g Au/tonne)			(g Au/tonne)			(g Au/tonne)	
0.34	**8,120,000**	**1.16**	**302,000**							8,120,000	1.16	302,000
0.69	4,312,000	1.70	236,000							4,312,000	1.70	236,000
1.03	2,401,000	2.42	187,000							2,401,000	2.42	187,000
1.37	1,844,000	2.80	166,000	**3,540,000**	**3.23**	**368,000**				5,384,000	3.08	534,000
1.71	1,362,000	3.26	143,000	2,850,000	3.650	334,000				4,212,000	3.52	477,000
2.06	989,000	3.79	120,000	2,264,000	4.110	299,000				3,253,000	4.01	419,000
2.40	777,000	4.22	106,000	1,937,000	4.440	276,000				2,714,000	4.38	382,000
2.74	667,000	4.51	97,000	1,732,000	4.660	260,000				2,399,000	4.63	357,000
3.09	561,000	4.81	87,000	1,539,000	4.880	242,000				2,100,000	4.87	329,000
3.43	478,000	5.08	78,000	1,367,000	5.090	224,000	**130,000**	**5.45**	**23,000**	1,975,000	5.12	325,000
4.80	190,000	6.62	41,000	686,000	6.040	133,000	51,000	7.650	12,000	927,000	6.24	186,000
6.17	52,000	10.15	17,000	175,000	8.150	46,000	22,000	10.790	8,000	249,000	8.87	71,000

INDICATED GOLD RESOURCES

	Oxide - >2,286 m			Sulfide - >2,286 m			Sulfide - <2,286 m			Total		
Cutoff	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces
(g Au/tonne)		(g Au/tonne)			(g Au/tonne)			(g Au/tonne)			(g Au/tonne)	
0.34	**6,162,000**	**1.11**	**221,000**							6,162,000	1.12	221,000
0.69	3,298,000	1.61	170,000							3,298,000	1.60	170,000
1.03	1,764,000	2.32	132,000							1,764,000	2.33	132,000
1.37	1,324,000	2.71	115,000	**8,565,000**	**3.31**	**912,000**				9,889,000	3.23	1,027,000
1.71	998,000	3.09	99,000	7,249,000	3.640	848,000				8,247,000	3.57	947,000
2.06	706,000	3.60	82,000	6,033,000	3.990	775,000				6,739,000	3.96	857,000
2.40	550,000	4.00	71,000	5,264,000	4.260	721,000				5,814,000	4.24	792,000
2.74	450,000	4.33	63,000	4,710,000	4.460	675,000				5,160,000	4.45	738,000
3.09	376,000	4.60	56,000	4,193,000	4.650	627,000				4,569,000	4.65	683,000
3.43	306,000	4.92	48,000	3,735,000	4.830	580,000	**1,522,000**	**4.75**	**232,000**	5,563,000	4.81	860,000
4.80	114,000	6.47	24,000	1,740,000	5.640	316,000	413,000	6.740	90,000	2,267,000	5.90	430,000
6.17	41,000	8.51	11,000	335,000	7.320	79,000	93,000	12.190	36,000	469,000	8.36	126,000

INFERRED GOLD RESOURCES

	Oxide - >2,286 m			Sulfide - >2,286 m			Sulfide - <2,286 m			Total		
Cutoff	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces	Tonnes	Grade	Au Ounces
(g Au/tonne)		(g Au/tonne)			(g Au/tonne)			(g Au/tonne)			(g Au/tonne)	
0.34	**914,000**	**1.22**	**36,000**							914,000	1.23	36,000
0.69	473,000	1.87	28,000							473,000	1.84	28,000
1.03	269,000	2.70	23,000							269,000	2.66	23,000
1.37	213,000	3.11	21,000	**1,674,000**	**3.23**	**174,000**				1,887,000	3.21	195,000
1.71	174,000	3.46	19,000	1,450,000	3.490	163,000				1,624,000	3.49	182,000
2.06	135,000	3.93	17,000	1,231,000	3.790	150,000				1,366,000	3.80	167,000
2.40	102,000	4.49	15,000	1,050,000	4.060	137,000				1,152,000	4.10	152,000
2.74	80,000	5.00	13,000	910,000	4.290	126,000				990,000	4.37	139,000
3.09	66,000	5.47	12,000	795,000	4.490	115,000				861,000	4.59	127,000
3.43	54,000	5.94	10,000	678,000	4.710	103,000	**1,386,000**	**4.25**	**189,000**	2,118,000	4.43	302,000
4.80	30,000	7.46	7,000	257,000	5.880	49,000	200,000	6.040	39,000	487,000	6.07	95,000
6.17	18,000	8.95	5,000	56,000	7.750	14,000	35,000	9.820	11,000	109,000	8.56	30,000

A nearest-neighbor estimate of the deposit was undertaken as a check on the kriged grade model. At no cutoff grade, the tons and grade of all estimated blocks in the two models are essentially identical. Grade distribution plots of assays, composites, and nearest neighbor and kriged block grades were also evaluated. An additional test was made by taking the total volume of mineral domains and applying an estimated global grade and density to them. The results showed good agreement with global block model tonnage and ounces.

MDA is unaware of any unusual environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other such factors that may impact the potential development of the Northumberland Mineral Resources.

17.7 Other Mineralization

In addition to the resources reported in Tables 17.15 and 17.17, there are approximately 70 million tons grading 0.026 oz Au/ton at a cutoff of 0.010 oz Au/ton that were estimated in the model but excluded from the resources. This mineralization consists of refractory blocks lying above an elevation of 7,500 feet with grades from 0.01 to 0.04 oz Au/ton and blocks lying below an elevation of 7,500 with grades between 0.01 and 0.1 oz Au/ton.

The additional gold mineralization is not currently considered to have reasonable prospects for economic extraction. The portion of this material that lies above 7,500 feet warrants re-evaluation, if silver mineralization is properly modeled, which may lead to added value, or if positive changes are realized in such factors as commodity prices, operating-cost efficiencies, or metallurgical advances.

In addition to the other gold mineralization described above, a significant amount of silver lies outside of the gold mineral domains and therefore was not estimated.

17.8 Recommended Improvements for Subsequent Modeling

The silver mineralization needs to be modeled independently of the gold in order to upgrade silver resources into the Measured and Indicated categories. Modeling procedures similar to those described above for gold should be used. In order to accomplish this, a better understanding of the geology of the silver mineralization needs to be obtained and the silver assay database needs to be verified.

East-west sections in subsequent modeling should pass through the block model centroids; the east-west sections in the current model lie along block edges.

The north-south sectional grade-domain interpretations were modified on the east-west sections, which were used to code the block model. In the current model, especially in the steeper dipping Zanzibar area, the drill data required local vertical modifications to the north-south interpretations. These modifications were only made on the east-west section that included the drill hole that necessitated the change, instead of incorporating the change in a gradual manner in adjacent sections as well. The current model, therefore, has locally abrupt changes in the final grade-domain envelopes as viewed in north-south sectional space. Subsequent modeling should smooth these irregularities.

Finally, consideration should be given to improving the three-dimensional model of metallurgical parameters, such as oxidation and cyanide extraction ratios. The generalized oxidation and metallurgical models in this study were created for the purpose of applying appropriate specific gravity factors and gold-grade cutoff values for resource reporting, respectively. A more robust metallurgical model would be needed for feasibility-type studies.

17.9 Impact of 2005 Newmont Drill Data on the Mineral Resource Model

Newmont 2005 holes were drilled subsequent to the Mineral Resource estimation. A visual inspection reveals that the 2005 Newmont holes are quite consistent with the resource model with the exception of an Inferred portion of the Rockwell deposit near Newmont hole NN-5. NN-5 was drilled in 2004 and was included in the modeling. Subsequent drilling by Newmont in 2005 demonstrated that the high-grade mineralized pod intersected by NN-5 does not extend to the limits interpreted in the resource model. This discrepancy is limited to Inferred material, and the remainder of the model agrees well with the new drill data.

MDA has not reviewed the Newmont 2006 and 2007 drill data in detail.

18.0 MINERAL RESERVE ESTIMATE

No reserves are estimated in this report.

19.0 OTHER RELEVANT DATA AND INFORMATION

MDA is not aware of additional information that is material to this technical report.

20.0 INTERPRETATIONS AND CONCLUSIONS

The Northumberland mineralization occurs as stacked, primarily sediment-hosted, finely disseminated, Carlin-type gold-silver deposits that, taken as a whole, are similar to the Goldstrike deposit of the northern Carlin Trend. The gold-silver mineralization at Northumberland occurs in a cluster of eight more-or-less spatially distinct deposits that form an arcuate belt approximately 1.6 miles long in an east-west direction and 0.3 miles wide. The deposits are generally stratiform and follow three low-angle tectono-stratigraphic host horizons near the crest and within the west limb of the Northumberland anticline. The deposits locally merge between horizons where the intervening rock units are breached. From stratigraphic top to bottom, the mineralized horizons are referred to as the Prospect-Mormon thrust (upper), Basal Chert fault (middle), and Hanson Creek fault (lower) host horizons. The three horizons are structural discontinuities that include the Prospect-Mormon thrust intersection zone and two bedding-plane faults. The overall geometry of the deposits and the higher-grade zones within the deposits appear to be influenced by east-trending high-angle structures in the area of the crest of the anticline.

Gold occurs as micron- to sub-micron-size particles that are intimately associated with sulfides, occasionally in association with oxidized sulfide minerals, and rarely as free particles. The gold is disseminated primarily within sedimentary units, although the Mount Gooding pluton and its associated intrusive rocks host disseminated mineralization in all of the deposits. Silver occurs in a complex assemblage of copper-antimony sulfides and arsenic sulfosalts. The total sulfide content is less than five percent; pyrite, arsenopyrite, and marcasite are the most abundant species present. The mineralization is associated with both silicification and decalcification of carbonate hosts, and quartz-illite-pyrite alteration of igneous hosts.

Cyprus and WSMC mined over seven-million tons of ore from several open pits and produced over 230,000 ounces of gold and 485,000 ounces of silver by heap leaching of sized and run-of-mine oxidized and partially oxidized ore. Gold recoveries for crushed oxide ore and run-of-mine, partially oxidized ore from these operations have been estimated at approximately 75% and 50%, respectively.

Metallurgical studies indicated that differences in the amenability of the Northumberland mineralization to direct cyanidation are primarily due to the degree of oxidation, as opposed to deposit-specific characteristics or crush size. Oxide material appears to be amenable to direct cyanidation, while sulfide mineralization requires oxidation prior to cyanidation. Silica encapsulation may be a local factor, but does not appear to be a major impediment to gold recovery. Sulfide mineralization is refractory due the close association of micron-size gold with sulfides and the local presence of preg-robbing organic-rich/carbonaceous material.

Diagnostic metallurgical testing to date indicates gold and silver extractions from sulfide mineralization can be optimized by utilizing the N_2TEC flotation technology of Newmont with autoclaving of the concentrates. Extractions in excess of 90% for both gold and silver in the flotation concentrate were attained in the samples tested.

Gold and silver resources at Northumberland were estimated from information provided by a database that includes 1,412 holes for a total of 504,855ft of drilling. These holes were drilled from 1968 through

2004 by conventional rotary, reverse circulation, and core methods; a small amount of air-track data is also included. Entire series of older drill holes have been removed from the database due to sample quality and assay reliability issues. Although QA/QC programs were not systematically implemented and documented prior to Newmont's 2004 exploration work, check assay and twin hole data were compiled by MDA. An analysis of these data found no serious problems with the assay database, although additional check assay data are needed. The twin-hole data suggest the possibility of local down-hole contamination. Several possible contaminated intervals were identified during the grade modeling of the deposits, and the suspect assay intervals, as well as the contaminated volumes, were excluded from the resource estimation.

There is excellent exploration potential at Northumberland, both within the deposit area and in other areas of the large property holdings. Within the deposit area, gold-silver mineralization in each of the three tectono-stratigraphic horizons locally breaches the intervening rock units and merges with mineralization in the neighboring host horizon. These discordant zones are frequently cored by high-grade mineralization that is presumably structurally controlled and in many cases not properly defined by drilling. These high-grade core zones warrant further drill testing, as do the possible deeper extensions of the controlling structures. In addition, Newmont is actively exploring beyond the limits of the known deposits in an attempt to discover additional mineralization in similar geologic settings.

There are a number of targets beyond the limits of the deposit area that are defined by soil and/or rock gold anomalies, only some of which have been tested by drilling. Newmont plans more of these anomalies in the future.

21.0 RECOMMENDATIONS

Fronteer currently has a carried interest (through Nevada Western) in the exploration of the Northumberland project. Newmont is conducting its exploration program in a technically sound manner and is producing results of value to Fronteer. MDA believes that Northumberland is a property of merit and warrants significant investment in further exploration.

The Mineral Resources should be updated when the Newmont 2006 exploration program is completed, and pre-feasibility studies should then be initiated. The economic analysis should include the evaluation of both underground and surface mining methods, as well as the application of current flotation and autoclaving technologies to the sulfide mineralization.

Additional check assay data are needed at Northumberland. A number of assay pulps and/or rejects from mineralized WSMC drill intervals should be retrieved from storage and analyzed by an independent laboratory. A set of existing pulps and/or rejects from mineralized WSMC drill intervals should be analyzed by an independent laboratory. All further drilling programs at Northumberland should continue the QA/QC procedures implemented by Newmont in 2004.

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23.0 DATE AND SIGNATURE PAGE

Effective Date of report:	November 1, 2007
Completion Date of report:	November 1, 2007

November 1, 2007
Date Signed

"Michael M. Gustin"
Michael M. Gustin, P. Geo.

November 1, 2007
Date Signed

"Steven Ristorcelli"
Steven Ristorcelli, P. Geo.

November 1, 2007
Date Signed

"George Lanier"
George Lanier

24.0 CERTIFICATE OF AUTHOR

I, Michael M. Gustin, do hereby certify that:

1. I am currently employed as Senior Geologist by:

   Mine Development Associates, Inc.
   210 South Rock Blvd.
   Reno, Nevada 89502.

2. 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.
3. I am a Registered Geologist in the State of Washington, a Licensed Professional Geologist in the State of Utah, a member of the Society of Mining Engineers, and a member of the Geological Society of Nevada.
4. I have worked as a geologist for a total of 23 years.
5. 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.
6. I am responsible for the preparation of the technical report titled *Updated Technical Report, Northumberland Project, Nye County, Nevada USA* and dated November 1, 2007 (the "Technical Report") relating to the Northumberland property. I visited the Northumberland project site on June 15 – June 16, 2004 and July 14, 2006.
7. I have not had prior involvement with the property that is the subject of this Technical Report.
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 1.4 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and 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 this 1st day of November 2007.

"Michael M. Gustin"

Signature of Qualified Person

I, Steven Ristorcelli, P. Geo., do hereby certify that:

1. I am currently employed as Principle Geologist by:

   Mine Development Associates, Inc.
   210 South Rock Blvd.
   Reno, Nevada 89502.

2. I graduated with a Bachelor of Science degree in Geology from Colorado State University in 1977 and a Master of Science degree in Geology from the University of New Mexico in 1980.
3. I am a Registered Professional Geologist in the states of California (#3964) and Wyoming (#153) and a Certified Professional Geologist (#10257) with the American Institute of Professional Geologists, and a member of the Geologic Society of Nevada, Society for Mining, Metallurgy, and Exploration, Inc., and Prospectors and Developers Association of Canada.
4. I have worked as a geologist for a total of 27 years since my graduation from undergraduate university.
5. 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.
6. I am responsible for the preparation of the technical report titled *Updated Technical Report, Northumberland Project, Nye County, Nevada USA* and dated November 1, 2007 (the "Technical Report") relating to the Northumberland property. I have not visited the Northumberland project site.
7. I have not had prior involvement with the property that is the subject of this Technical Report.
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 1.4 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and 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 this 1st day of November 2007.

"Steven Ristorcelli"
Signature of Qualified Person

I, George Lanier, do hereby certify that:

1. I am currently employed as Regional Geologist by:

   NewWest Gold USA, Inc.
   250 South Rock Blvd. Suite 118
   Reno, Nevada 89502.

2. I graduated with a Bachelor of Science degree in Geology from the University of Utah in 1970 and a Master of Arts degree in Anthropology from the University of Utah in 1987.
3. I am a member of the Geologic Society of Nevada.
4. I have worked as a geologist for a total of 33 years.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and conclude that by reason of my lack of affiliation with a professional association (as defined in NI 43-101), I do not fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I assisted in the preparation of the technical report titled *Updated Technical Report, Northumberland Project, Nye County, Nevada USA* and dated November 1, 2007 (the "Technical Report") relating to the Northumberland property. I have worked extensively at the Northumberland project site.
7. I am not an independent geologist with respect to the preparation of this report and the conclusions and recommendations therein, by reason of my position with Western States Minerals Corporation.
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 not independent of the issuer.
10. I have read National Instrument 43-101 and Form 43-101F1, and 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 this 1st day of November 2007.

"George Lanier"
George Lanier , Author

APPENDIX A

UNPATENTED LODE MINING CLAIMS

(compiled by NewWest)

NORTHUMBERLAND PROJECT UNPATENTED CLAIMS

BLM NMC #	CLAIM NAME	CO.	BK	PG	AMENDED BK	AMENDED PG	TWP	RGE	SEC	MER	MAP #
			DOCUMENT #, OR		DOCUMENT #, OR						
135960	SIDEHILL #2	NYE	257	65	324	328	13N	45E	25	MDB&M	52133
220675	CANYON NO. 3	NYE	322	391			13N	45E	25	MDB&M	51057
349616	CANYON NO. 4	NYE	503	44			13N	45E	25	MDB&M	146895
349617	CANYON NO. 5	NYE	503	43			13N	45E	25	MDB&M	146895
221294	CANYON NO. 6	NYE	325	395			13N	45E	25	MDB&M	52569
225591	WEB NO. 1	NYE	327	475			13N	45E	25	MDB&M	53581
281630	WEB NO. 2	NYE	399	446			13N	45E	25	MDB&M	91216
225593	WEB NO. 3	NYE	327	477			13N	45E	25,26	MDB&M	53581
225594	WEB NO. 4	NYE	327	478			13N	45E	25,26	MDB&M	53581
229681	WEB NO. 5	NYE	331	556			13N	45E	26	MDB&M	55877
										MDB&M	
252377	WEB NO.18	NYE	353	488			13N	45E	23	MDB&M	55877
280081	WEB NO.19	NYE	398	86			13N	45E	26,25	MDB&M	90390
280082	WEB NO.20	NYE	398	87			13N	45E	26,25	MDB&M	90390
280083	WEB NO.21	NYE	398	88			13N	45E	26	MDB&M	90390
280084	WEB NO.22	NYE	398	89			13N	45E	26	MDB&M	90390
280085	WEB NO.23	NYE	398	90			13N	45E	26	MDB&M	90390
76131	NATHAN #10	NYE	246	318	324	404	13N	45E	23,24,25,26	MDB&M	52133
76132	NATHAN #11	NYE	246	319	324	405	13N	45E	24,25	MDB&M	52133
76133	NATHAN #12	NYE	246	320	324	406	13N	45E	25	MDB&M	52133
76134	NATHAN #13	NYE	246	321	324	407	13N	45E	25	MDB&M	52133
76135	NATHAN #14	NYE	246	322	324	408	13N	45E	24,25	MDB&M	52133
76136	NATHAN #15	NYE	246	323	324	409	13N	45E	25	MDB&M	52133
76137	NATHAN #16	NYE	246	324	324	410	13N	45E	25	MDB&M	52133
76138	NATHAN #17	NYE	246	325	324	411	13N	45E	25	MDB&M	52133
349614	NATHAN #18	NYE			503	41	13N	45E	25	MDB&M	146895
							13N	46E	19,30	MDB&M	
349615	NATHAN #19	NYE			503	42	13N	45E	25	MDB&M	146895
76141	NATHAN #20	NYE	246	328	324	414	13N	45E	25	MDB&M	52133
76142	NATHAN #21	NYE	246	329	324	415	13N	45E	25,24	MDB&M	52133
							13N	46E	19,30	MDB&M	
76163	SUSAN NO.20	NYE	246	288	324	435	13N	46E	19,20	MDB&M	52133
76164	SUSAN NO.21	NYE	246	289	324	436	13N	46E	20	MDB&M	52133
76165	SUSAN NO.22	NYE	246	290	324	437	13N	46E	20	MDB&M	52133
719051	SUSAN 31	NYE	376726				13N	46E	19,30	MDB&M	
76175	SUSAN #32	NYE	246	300	324	447	13N	46E	19,30	MDB&M	52133
76176	SUSAN #33	NYE	246	301	324	448	13N	45E	19,30	MDB&M	52133
76177	SUSAN #34	NYE	246	302			13N	45E	19,30	MDB&M	7848
76178	SUSAN #35	NYE	246	303	324	449	13N	45E	30	MDB&M	52133
76179	SUSAN #36	NYE	246	304	324	450	13N	45E	30	MDB&M	52133
76180	SUSAN #37	NYE	246	305	324	451	13N	45E	30	MDB&M	52133
76181	SUSAN #38	NYE	246	306	324	452	13N	45E	30	MDB&M	52133
76182	SUSAN #39	NYE	246	307	324	453	13N	45E	19,30	MDB&M	52133
244074	JACK NO. 2	NYE	344	565	359	62	13N	45E,46E	12,13 7,18	MDB&M	62650
244075	JACK NO. 3	NYE	344	566	359	63	13N	45E	12,13	MDB&M	62650
244084	JACK NO.12	NYE	344	575	359	72	13N	45E	12,13	MDB&M	62650
373427	Shirley 1	NYE	542	10			13N	45E,46E	12 7	MDB&M	166134
373428	Shirley 2	NYE	542	11			13N	46E	7	MDB&M	166134

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
373429	Shirley 3	NYE	542	12			13N	46E	7,18	MDB&M	166134
373433	Shirley 7	NYE	542	16			13N	46E	7	MDB&M	166134
349612	T-1 (Placer)	NYE	503	39			13N	45E	25	MDB&M	146858
349613	T-2 (Placer)	NYE	503	40			13N	45E	25	MDB&M	146858
							13N	45E		MDB&M	
352743	NU-1	NYE	509	167			13N	45E	12,13	MDB&M	149904
352744	NU-2	NYE	509	168			13N	45E	12,13	MDB&M	149904
352745	NU-3	NYE	509	169			13N	45E	12	MDB&M	149904
352746	NU-4	NYE	509	170			13N	45E	12,13	MDB&M	149904
352747	NU-5	NYE	509	171			13N	45E	12	MDB&M	149904
352748	NU-6	NYE	509	172			13N	45E	12	MDB&M	149904
352749	NU-7	NYE	509	173			13N	45E	12	MDB&M	149904
352750	NU-8	NYE	509	174			13N	45E	12	MDB&M	149904
352751	NU-9	NYE	509	175			13N	45E	12	MDB&M	149904
352752	NU-10	NYE	509	176			13N	45E	12	MDB&M	149904
352753	NU-11	NYE	509	177			13N	45E	12	MDB&M	149904
352754	NU-12	NYE	509	178			13N	45E	12	MDB&M	149904
352755	NU-13	NYE	509	179			13N	45E	12	MDB&M	149904
352756	NU-14	NYE	509	180			13N	45E 46E	12 7	MDB&M	149904
352757	NU-15	NYE	509	181			13N	45E	12	MDB&M	149904
102882	Windy No. 1	NYE	101	554	360	294	13N	46E	7	MDB&M	32963
102883	Windy No. 2	NYE	101	554	360	296	13N	46E	7	MDB&M	32963
102884	Windy No. 3	NYE	101	554	360	298	13N	46E	7	MDB&M	32963
102885	Windy No. 4	NYE	101	554	360	300	13N	46E	7	MDB&M	32963
102886	Windy No. 5	NYE	101	554	360	302	13N	46E	7	MDB&M	32963
102887	Windy No. 6	NYE	101	554	360	304	13N	46E	7	MDB&M	32963
102888	Windy No. 7	NYE	101	554	360	306	13N	46E	7	MDB&M	32963
102889	Windy No. 8	NYE	101	554	360	308	13N	45E 46E	12,13 7	MDB&M	32963
102890	Windy No. 9	NYE	101	554	360	310	13N	45E 46E	12 7	MDB&M	32963
66579	Kay No. 9	NYE	213	301		339585	13N	45E	11,14	MDB&M	
719047	Kay 10	NYE	376722				13N	45E	11,14	MDB&M	
66583	Kay No. 17	NYE	213	304		339593	13N	45E	14	MDB&M	339607
713029	Kay 21	NYE	366058				13N	45E	14	MDB&M	366061
66595	Kay No. 29	NYE	91	462		339601	13N	45E	14,15	MDB&M	339607
719048	Kay 32	NYE	376723				13N	45E	14	MDB&M	
55789	Kay No. 34	NYE	239	145		339606	13N	45E	14	MDB&M	339607
683325	Kay 35	NYE	339573				13N	45E	14,15	MDB&M	339576
683326	Kay 36	NYE	339574				13N	45E	14,15	MDB&M	339576
222520	North No. 1	NYE	328	191			13N	45E	11	MDB&M	53897
222521	North No. 2	NYE	328	192			13N	45E	11,12	MDB&M	53897
222522	North No. 3	NYE	328	193			13N	45E	11	MDB&M	53897
222523	North No. 4	NYE	328	194			13N	45E	11,14	MDB&M	53897
134893	Rainbow #1	NYE	258	522			13N	45E	34,35	MDB&M	15037
134894	Rainbow #2	NYE	258	523			13N	45E	34,35	MDB&M	15037
134895	Rainbow #3	NYE	258	524			13N	45E	34,35	MDB&M	15037
134896	Rainbow #4	NYE	258	525			13N	45E	34,35	MDB&M	15037
134897	Rainbow #5	NYE	258	526			13N	45E	26,27,34,35	MDB&M	15037
134898	Rainbow #6	NYE	258	527			13N	45E	26,27	MDB&M	15037
134899	Rainbow #7	NYE	258	528			13N	45E	35	MDB&M	15037
134900	Rainbow #8	NYE	258	529			13N	45E	35	MDB&M	15037
134901	Rainbow #9	NYE	258	530			13N	45E	35	MDB&M	15037
134902	Rainbow #10	NYE	258	531			13N	45E	35	MDB&M	15037

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
134903	Rainbow #11	NYE	258	532			13N	45E	26,35	MDB&M	15037
134904	Rainbow #12	NYE	258	533			13N	45E	26	MDB&M	15037
134905	Rainbow #20	NYE	258	534			13N	45E	26,27	MDB&M	15037
134906	Jane	NYE	258	536			13N	45E	22,27	MDB&M	15037
134908	Jane #2	NYE	258	535			13N	45E	22,27	MDB&M	15037
134911	Lynx	NYE	258	540			13N	45E	26	MDB&M	15037
134912	Mary Jane V	NYE	258	541			13N	45E	26,27	MDB&M	15037
134913	Hazel #1	NYE	258	542			13N	45E	26	MDB&M	15037
134914	Hazel #2	NYE	258	543			13N	45E	26	MDB&M	15037
134915	Hazel #3	NYE	258	544			13N	45E	26	MDB&M	15037
134916	Hazel #4	NYE	258	545			13N	45E	26	MDB&M	15037
134917	Hazel #5	NYE	258	546			13N	45E	26	MDB&M	15037
134918	Hazel #6	NYE	258	547			13N	45E	26	MDB&M	15037
134919	Hazel #7	NYE	258	548			13N	45E	26	MDB&M	15037
134920	Hazel #8	NYE	258	549			13N	45E	26	MDB&M	15037
134921	Hazel #9	NYE	258	550			13N	45E	26	MDB&M	15037
134922	Hazel #10	NYE	258	551			13N	45E	26	MDB&M	15037
134923	Hazel #11	NYE	258	552			13N	45E	26	MDB&M	15037
134924	Gendron	NYE	258	553			13N	45E	26	MDB&M	15037
134925	Valley View	NYE	258	554			13N	45E	34	MDB&M	15037
134926	Valley View #1	NYE	258	555			13N	45E	34	MDB&M	15037
134927	Valley View #2	NYE	258	556			13N	45E	27,34	MDB&M	15037
134928	Valley View #3	NYE	258	557			13N	45E	27	MDB&M	15037
134929	Cord	NYE	258	558			13N	45E	26,27	MDB&M	15037
134930	Cord #1	NYE	258	559			13N	45E	26	MDB&M	15037
134931	Cord #2	NYE	258	560			13N	45E	26	MDB&M	15037
134932	Cord #3	NYE	258	561			13N	45E	26	MDB&M	15037
134933	Cord #4	NYE	258	562			13N	45E	26,27	MDB&M	15037
134934	Cord #5	NYE	258	563			13N	45E	26,27	MDB&M	15037
134935	Upset	NYE	258	564			13N	45E	26	MDB&M	15037
134936	Edna	NYE	258	565			13N	45E	35	MDB&M	15037
134937	Mary Jane	NYE	258	566			13N	45E	26,35	MDB&M	15037
134938	Bettifae	NYE	258	567			13N	45E	35	MDB&M	15037
28197	Wig No. 7	NYE	220	248			13N	46E	7	MDB&M	68253
28198	Wig No. 8	NYE	220	249			13N	46E	7	MDB&M	68253
28199	Wig No. 9	NYE	220	250			13N	46E	7	MDB&M	68253
28200	Wig No. 10	NYE	220	251			13N	46E	7	MDB&M	68253
28201	Wig No. 11	NYE	220	252			13N	46E	7	MDB&M	68253
28202	Wig No. 12	NYE	220	253			13N	46E	7	MDB&M	68253
28203	Wig No. 13	NYE	220	254			13N	46E	7	MDB&M	68253
28204	Wig No. 14	NYE	220	255			13N	46E	7	MDB&M	68253
28205	Wig No. 15	NYE	220	256			13N	46E	7,18	MDB&M	68253
28206	Wig No. 16	NYE	220	257			13N	46E	7	MDB&M	68253
630934	STUD 3	NYE	291748				13N	45E	26	MDB&M	291778
630935	STUD 4	NYE	291749				13N	45E	26,35	MDB&M	291778
630936	STUD 5	NYE	291750				13N	45E	26	MDB&M	291778
630937	STUD 6	NYE	291751				13N	45E	26,35	MDB&M	291778
630938	STUD 7	NYE	291752				13N	45E	26	MDB&M	291778

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
630939	STUD 8	NYE	291753				13N	45E	26,35	MDB&M	291778
630940	STUD 9	NYE	291754				13N	45E	25	MDB&M	291778
630941	STUD 10	NYE	291755				13N	45E	25,26	MDB&M	291778
630942	STUD 11	NYE	291756				13N	45E	25	MDB&M	291778
630943	STUD 12	NYE	291757				13N	45E	25,26	MDB&M	291778
630944	STUD 13	NYE	291758				13N	45E	25	MDB&M	291778
630945	STUD 14	NYE	291759				13N	45E	25,26	MDB&M	291778
630946	STUD 15	NYE	291760				13N	45E	25	MDB&M	291778
630947	STUD 16	NYE	291761				13N	45E	25,26	MDB&M	291778
630948	STUD 17	NYE	291762				13N	45E	25	MDB&M	291778
630949	STUD 18	NYE	291763				13N	45E	25,26	MDB&M	291778
630950	STUD 19	NYE	291764				13N	45E	25	MDB&M	291778
630951	STUD 20	NYE	291765				13N	45E	25	MDB&M	291778
630952	STUD 21	NYE	291766				13N	45E	25	MDB&M	291778
630953	STUD 22	NYE	291767				13N	45E	25	MDB&M	291778
630954	STUD 23	NYE	291768				13N	45E	25	MDB&M	291778
630955	STUD 24	NYE	291769				13N	45E	25	MDB&M	291778
630956	STUD 25	NYE	291770				13N	45E	25	MDB&M	291778
630957	STUD 26	NYE	291771				13N	45E	25	MDB&M	291778
630958	STUD 27	NYE	291772				13N	45E 46E	25 30	MDB&M	291778
630959	STUD 28	NYE	291773				13N	45E 46E	25 30	MDB&M	291778
630960	STUD 29	NYE	291774				13N	45E		MDB&M	291778
630961	STUD 30	NYE	291775				13N	45E	25,26	MDB&M	291778
630962	STUD 31	NYE	291776				13N	45E	11	MDB&M	291782
630963	STUD 33	NYE	291777				13N	45E	11	MDB&M	291782
630964	STUD 35	NYE	291778				13N	45E	11,12	MDB&M	291782
630965	STUD 37	NYE	291779				13N	45E	11,12	MDB&M	291785
630966	STUD 38	NYE	291780			376754	13N	45E	12	MDB&M	291785
630967	STUD 39	NYE	291781				13N	45E	22,27	MDB&M	291785
630968	STUD 40	NYE	291782				13N	45E	27	MDB&M	291785
630969	STUD 41	NYE	291783				13N	45E	27	MDB&M	291785
630970	STUD 42	NYE	291784				13N	45E	27	MDB&M	291785
630971	STUD 43	NYE	291785				13N	45E	27	MDB&M	291785
630972	STUD 44	NYE	291786				13N	45E	27	MDB&M	291785
630973	STUD 45	NYE	291787				13N	45E	27	MDB&M	291785
630974	STUD 46	NYE	291788			376755	13N	45E	23	MDB&M	376767
630975	STUD 47	NYE	291789				13N	45E	23	MDB&M	376767
630976	STUD 48	NYE	291790				13N	45E	23	MDB&M	376767
719049	STUD 49	NYE	376724				13N	45E	14	MDB&M	
634535	STUD 232	NYE	296505			376758	13N	45E	7	MDB&M	376767
634537	STUD 236	NYE	296507			376760	13N	45E	8,17	MDB&M	376767
634522	STUD 252	NYE	296522			376762	13N	45E	17	MDB&M	296545
634553	STUD 253	NYE	296523			376763	13N	45E	17	MDB&M	296545
634554	STUD 254	NYE	296524			376765	13N	45E	17	MDB&M	296545
634567	STUD 267	NYE	296537			376766	13N	45E	17,20	MDB&M	296545
		NYE									
656135	STUD 232A	NYE	310793			376759	13N	45E	7	MDB&M	310796
656137	STUD 253A	NYE	310795			376764	13N	45E	17	MDB&M	310796

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
719050	STUD 569	NYE	376725				13N	45E	22,23	MDB&M	
										MDB&M	
										MDB&M	
661594	CONNIE #1	NYE	316147				13N	45E	12	MDB&M	316148
589895	JANA #134	NYE	258755				13N	45E	35,36	MDB&M	258761
589896	JANA #135	NYE	258756				13N	45E	35,36	MDB&M	258761
589901	JANA #152	NYE	258763				13N	45E	35,36	MDB&M	258776
589902	JANA #153	NYE	258764				13N	45E	35,36	MDB&M	258776
589903	JANA #154	NYE	258765				13N	45E	35,36	MDB&M	258776
589904	JANA #155	NYE	258766				13N	45E	35	MDB&M	258776
589905	JANA #156	NYE	258767				13N	45E	35,36	MDB&M	258776
589906	JANA #157	NYE	258768				13N	45E	35	MDB&M	258776
589907	JANA #158	NYE	258769				13N	45E	35,36	MDB&M	258776
							13N	45E		MDB&M	
607076	JANA #161	NYE	270470				13N	45E	35	MDB&M	270472
607077	JANA #162	NYE	270471				13N	45E	35	MDB&M	270472
							13N	45E		MDB&M	
589922	JANA #172	NYE	258775				13N	45E	34	MDB&M	258776
							13N	45E		MDB&M	
607081	BA #19	NYE	270476				13N	45E	25	MDB&M	270494
607082	BA #20	NYE	270477				13N	45E	36	MDB&M	270494
607083	BA #21	NYE	270478				13N	45E	25	MDB&M	270494
607084	BA #22	NYE	270479				13N	45E	36	MDB&M	270494
607085	BA #23	NYE	270480				13N	45E	25	MDB&M	270494
607086	BA #24	NYE	270481				13N	45E	36	MDB&M	270494
							13N	45E		MDB&M	
607087	BA #26	NYE	270482				13N	45E	36	MDB&M	270494
							13N	45E		MDB&M	
607088	BA #29	NYE	270483				13N	45E	36	MDB&M	270494
607089	BA #30	NYE	270484				13N	45E	36	MDB&M	270494
607090	BA #31	NYE	270485				13N	45E	36	MDB&M	270494
607091	BA #32	NYE	270486				13N	45E	36	MDB&M	270494
607092	BA #33	NYE	270487				13N	45E	36	MDB&M	270494
607093	BA #53	NYE	270493				13N	45E	36	MDB&M	270494
607094	BA #54	NYE	270488				13N	45E	36	MDB&M	270494
607097	BA FRACTION #55	NYE	270492				13N	45E	36	MDB&M	270494
607098	BA #56 FRACTION	NYE	270489				13N	45E	36	MDB&M	270494
680473	KORFAX 5	NYE	335117				13N	45E 46E	25 30	MDB&M	335131
680474	KORFAX 6	NYE	335118				13N	45E	22,27	MDB&M	335131
680475	KORFAX 7	NYE	335119				13N	45E	27	MDB&M	335131
680476	KORFAX 8	NYE	335120				13N	45E	26,27	MDB&M	335131
680477	KORFAX 9	NYE	335121				13N	45E	27	MDB&M	335131
680479	KORFAX 11	NYE	335123				13N	45E	27	MDB&M	335131
680480	KORFAX 12	NYE	335124				13N	45E	27	MDB&M	335131
680481	KORFAX 13	NYE	335125				13N	45E	27	MDB&M	335131
680482	KORFAX 14	NYE	335126				13N	45E	27,34	MDB&M	335131
680483	KORFAX 15	NYE	335127				13N	45E	26,35	MDB&M	335131
684284	TUFF 1	NYE	341905				14N	45E	33	MDB&M	341936
684285	TUFF 2	NYE	341906				14N	45E	33	MDB&M	341936
684286	TUFF 3	NYE	341907				14N	45E	33	MDB&M	341936

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
684287	TUFF 4	NYE	341908				14N	45E	33	MDB&M	341936
684288	TUFF 5	NYE	341909				14N	45E	33	MDB&M	341936
684289	TUFF 6	NYE	341910				14N	45E	33	MDB&M	341936
684290	TUFF 7	NYE	341911				14N	45E	32,33	MDB&M	341936
684291	TUFF 8	NYE	341912				14N	45E	32,33	MDB&M	341936
684292	TUFF 9	NYE	341913				14N	45E	32,33	MDB&M	341936
684293	TUFF 10	NYE	341914				14N	45E	32,33	MDB&M	341936
684294	TUFF 11	NYE	341915				14N	45E	32	MDB&M	341936
684295	TUFF 12	NYE	341916				14N	45E	32	MDB&M	341936
684296	TUFF 13	NYE	341917				14N	45E	32	MDB&M	341936
684297	TUFF 14	NYE	341918				14N	45E	32	MDB&M	341936
684298	TUFF 15	NYE	341919				14N	45E	32	MDB&M	341936
684299	TUFF 16	NYE	341920				14N	45E	32	MDB&M	341936
684300	TUFF 17	NYE	341921				14N	45E	32	MDB&M	341936
684301	TUFF 18	NYE	341922				14N	45E	32	MDB&M	341936
684302	TUFF 19	NYE	341923				14N	45E	32	MDB&M	341936
684303	TUFF 20	NYE	341924				14N	45E	32	MDB&M	341936
684304	TUFF 21	NYE	341925				14N	45E	32	MDB&M	341936
684305	TUFF 22	NYE	341926				14N	45E	32	MDB&M	341936
684306	TUFF 23	NYE	341927				14N	45E	32	MDB&M	341936
684307	TUFF 24	NYE	341928				14N	45E	32	MDB&M	341936
684308	TUFF 25	NYE	341929				14N	45E	32	MDB&M	341936
684309	TUFF 26	NYE	341930				14N	45E	32	MDB&M	341936
684310	TUFF 27	NYE	341931				13.5N 14N	45E	29 33	MDB&M	341936
684311	TUFF 28	NYE	341932				13.5N 14N	45E	29 33	MDB&M	341936
684312	TUFF 29	NYE	341933				14N	45E	33	MDB&M	341936
684313	TUFF 30	NYE	341934				14N	45E	33	MDB&M	341936
684314	TUFF 31	NYE	341935				14N	45E	33	MDB&M	341936
853716	TUFF 32	NYE	573067				13.5N 14N	45E	30,31 32	MDB&M	
853717	TUFF 33	NYE	573068				13.5N	45E	31	MDB&M	
853718	TUFF 34	NYE	573069				13.5N 14N	45E	30,31 32	MDB&M	
853719	TUFF 35	NYE	573070				13.5N	45E	31	MDB&M	
853720	TUFF 36	NYE	573071				13.5N 14N	45E	30,31 32	MDB&M	
853721	TUFF 37	NYE	573072				13.5N	45E	31	MDB&M	
853722	TUFF 38	NYE	573073				13.5N 14N	45E	29,30 32	MDB&M	
853723	TUFF 39	NYE	573074				13.5N	45E	29,30,31,32	MDB&M	
853724	TUFF 40	NYE	573075				13.5N 14N	45E	29 32	MDB&M	
853725	TUFF 41	NYE	573076				13.5N	45E	29,32	MDB&M	
853726	TUFF 42	NYE	573077				13.5N 14N	45E	29 32	MDB&M	
853727	TUFF 43	NYE	573078				13.5N	45E	29,32	MDB&M	
853728	TUFF 44	NYE	573079				13.5N 14N	45E	29 32,33	MDB&M	
853729	TUFF 45	NYE	573080				13.5N	45E	29,32	MDB&M	
853730	TUFF 46	NYE	573081				13.5N 14N	45E	29 33	MDB&M	
853731	TUFF 47	NYE	573082				13.5N	45E	29,32	MDB&M	
853732	TUFF 48	NYE	573083				13.5N 14N	45E	29 33	MDB&M	
853733	TUFF 49	NYE	573084				13.5N	45E	29,32	MDB&M	
853734	TUFF 50	NYE	573085				13.5N 14N	45E	29 33	MDB&M	
853735	TUFF 51	NYE	573086				13.5N	45E	29,32	MDB&M	
853736	TUFF 52	NYE	573087				13.5N	45E	31	MDB&M	
853737	TUFF 53	NYE	573088				13.5N	45E	29,32	MDB&M	
853738	TUFF 54	NYE	573089				13.5N	45E	31	MDB&M	
853739	TUFF 55	NYE	573090				13.5N 14N	45E	29,32 33	MDB&M	
853740	TUFF 56	NYE	573091				13.5N	45E	31	MDB&M	
853741	TUFF 57	NYE	573092				13.5N 14N	45E	28,29,32,33 33	MDB&M	
853742	TUFF 58	NYE	573093				13.5N	45E	31,32	MDB&M	
										MDB&M	
853743	TUFF 60	NYE	573094				13.5N	45E	32	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
										MDB&M	
853744	TUFF 62	NYE	573095				13.5N	45E	32	MDB&M	
853745	TUFF 63	NYE	573096				13.5N	45E	32	MDB&M	
853746	TUFF 64	NYE	573097				13.5N	45E	32	MDB&M	
853747	TUFF 65	NYE	573098				13.5N	45E	32	MDB&M	
853748	TUFF 66	NYE	573099				13.5N	45E	32	MDB&M	
853749	TUFF 67	NYE	573100				13.5N	45E	32	MDB&M	
853750	TUFF 68	NYE	573101				13.5N	45E	32	MDB&M	
853751	TUFF 69	NYE	573102				13.5N	45E	32	MDB&M	
853752	TUFF 70	NYE	573103				13.5N	45E	32	MDB&M	
853753	TUFF 71	NYE	573104				13.5N	45E	32	MDB&M	
853754	TUFF 72	NYE	573105				13.5N	45E	32	MDB&M	
853755	TUFF 73	NYE	573106				13.5N	45E	32	MDB&M	
853756	TUFF 74	NYE	573107				13.5N	45E	32	MDB&M	
853757	TUFF 75	NYE	573108				13.5N	45E	32,33	MDB&M	
853758	TUFF 76	NYE	573109				13.5N	45E	3233	MDB&M	
853759	TUFF 77	NYE	573110				13.5N	45E	33	MDB&M	
853760	TUFF 78	NYE	573111				13N 13.5N	45E	5 32	MDB&M	
										MDB&M	
853761	TUFF 80	NYE	573112				13N 13.5N	45E	5 32	MDB&M	
										MDB&M	
853762	TUFF 82	NYE	573113				13.5N	45E	32	MDB&M	
853763	TUFF 83	NYE	573114				13N 13.5N	45E	5 32	MDB&M	
853764	TUFF 84	NYE	573115				13.5N	45E	32	MDB&M	
853765	TUFF 85	NYE	573116				13N 13.5N	45E	4,5 32	MDB&M	
853766	TUFF 86	NYE	573117				13.5N	45E	32,33	MDB&M	
853767	TUFF 87	NYE	573118				13N 13.5N	45E	4,5 32,33	MDB&M	
853768	TUFF 88	NYE	573119				13.5N	45E	33	MDB&M	
853769	TUFF 89	NYE	573120				13N 13.5N	45E	4 33	MDB&M	
702570	TIE 1	NYE	356030				13N	45E	14,15	MDB&M	356053
702571	TIE 2	NYE	356031				13N	45E	15	MDB&M	356053
702572	TIE 3	NYE	356032				13N	45E	15	MDB&M	356053
702573	TIE 4	NYE	356033				13N	45E	15	MDB&M	356053
702574	TIE 5	NYE	356034				13N	45E	15	MDB&M	356053
702575	TIE 6	NYE	356035				13N	45E	15	MDB&M	356053
702576	TIE 7	NYE	356036				13N	45E	14,15	MDB&M	356053
702577	TIE 8	NYE	356037				13N	45E	14,15	MDB&M	356053
702578	TIE 9	NYE	356038				13N	45E	10,15	MDB&M	356053
702579	TIE 10	NYE	356039				13N	45E	10,11	MDB&M	356053
702580	TIE 11	NYE	356040				13N	45E	10,11,14,15	MDB&M	356053
702581	TIE 12	NYE	356041				13N	45E	11	MDB&M	356053
702582	TIE 13	NYE	356042				13N	45E	11,14	MDB&M	356053
702583	TIE 14	NYE	356043				13N	45E	11	MDB&M	356053
702584	TIE 15	NYE	356044				13N	45E	11	MDB&M	356053
702585	TIE 16	NYE	356045				13N	45E	11	MDB&M	356053
702586	TIE 17	NYE	356046				13N	45E	11	MDB&M	356053
702587	TIE 18	NYE	356047				13N	45E	11	MDB&M	356053
702588	TIE 19	NYE	356048				13N	45E	11	MDB&M	356053
702589	TIE 20	NYE	356049				13N	45E	11	MDB&M	356053
702590	TIE 21	NYE	356050				13N	45E	10	MDB&M	356053
702591	TIE 22	NYE	356051				13N	45E	10	MDB&M	356053
713032	TIE 23	NYE	366062				13N	45E	10,11	MDB&M	366063
702592	TIE 24	NYE	356052				13N	45E	11	MDB&M	356053
										MDB&M	
719020	EX 1	NYE	376727				13N	46E	18	MDB&M	
719021	EX 2	NYE	376728				13N	46E	18	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
719022	EX 3	NYE	376729				13N	46E	18,19	MDB&M	
719023	EX 4	NYE	376730				13N	46E	19,20	MDB&M	
719024	EX 5	NYE	376731				13N	46E	19,20	MDB&M	
719025	EX 6	NYE	376732				13N	46E	19,20	MDB&M	
719026	EX 7	NYE	376733				13N	46E	19,30	MDB&M	
719027	EX 8	NYE	376734				13N	46E	19	MDB&M	
719028	EX 9	NYE	376735				13N	45E	25	MDB&M	
719029	EX 10	NYE	376736				13N	45E	25	MDB&M	
719030	EX 11	NYE	376737				13N	45E	25	MDB&M	
719031	EX 12	NYE	376738				13N	45E	25,26	MDB&M	
719032	EX 13	NYE	376739				13N	45E	26	MDB&M	
719033	EX 14	NYE	376740				13N	45E	26	MDB&M	
719034	EX 15	NYE	376741				13N	45E	26,27	MDB&M	
719035	EX 16	NYE	376742				13N	45E	23	MDB&M	
719036	EX 17	NYE	376743				13N	45E	23	MDB&M	
719037	EX 18	NYE	376744				13N	45E	23	MDB&M	
719038	EX 19	NYE	376745				13N	45E	14	MDB&M	
719039	EX 20	NYE	376746				13N	45E	11	MDB&M	
719040	EX 21	NYE	376747				13N	45E	11	MDB&M	
719041	EX 22	NYE	376748				13N	45E	12	MDB&M	
719042	EX 23	NYE	376749				13N	45E	12,13	MDB&M	
719043	EX 24	NYE	376750				13N	45E 46E	13 18	MDB&M	
719044	EX 25	NYE	376751				13N	46E	17	MDB&M	
719045	EX 26	NYE	376752				13N	45E	14,23	MDB&M	
719046	EX 27	NYE	376753				13N	45E	23	MDB&M	
771499	EX 28	NYE	418740				13N	45E	14	MDB&M	
771500	EX 29	NYE	418741				13N	45E	14	MDB&M	
656457	NE 1023	NYE	311792				13N	46E	8	MDB&M	
656458	NE 1024	NYE	311793				13N	46E	8	MDB&M	
656459	NE 1025	NYE	311794				13N	46E	8	MDB&M	
656460	NE 1026	NYE	311795				13N	46E	8	MDB&M	
656461	NE 1027	NYE	311796				13N	46E	8	MDB&M	
656462	NE 1028	NYE	311797				13N	46E	8,9	MDB&M	
656463	NE 1029	NYE	311798				13N	46E	8,9	MDB&M	
656464	NE 1030	NYE	311799				13N	46E	9	MDB&M	
656465	NE 1031	NYE	311800				13N	46E	9	MDB&M	
656482	NE 1048	NYE	311817				13N	46E	5	MDB&M	
656483	NE 1049	NYE	311818				13N	46E	5,8	MDB&M	
656484	NE 1050	NYE	311819				13N	46E	5	MDB&M	
656485	NE 1051	NYE	311820				13N	46E	5,8	MDB&M	
656486	NE 1052	NYE	311821				13N	46E	4,5	MDB&M	
656487	NE 1053	NYE	311822				13N	46E	4,5,8,9	MDB&M	
656488	NE 1054	NYE	311823				13N	46E	4	MDB&M	
656489	NE 1055	NYE	311824				13N	46E	4,9	MDB&M	
656502	NE 1068	NYE	311837				13N 13.5N	46E	5,32	MDB&M	
656503	NE 1069	NYE	311838				13N		5	MDB&M	
656504	NE 1070	NYE	311839				13N 13.5N	46E	5,32	MDB&M	
656505	NE 1071	NYE	311840				13N		5	MDB&M	
656506	NE 1072	NYE	311841				13N 13.5N	46E	5,32	MDB&M	
656507	NE 1073	NYE	311842				13N		5	MDB&M	
656508	NE 1074	NYE	311843				13N 13.5N	46E	5,32	MDB&M	
656509	NE 1075	NYE	311844				13N		5	MDB&M	
656510	NE 1076	NYE	311845				13N 13.5N	46E	5,32	MDB&M	
656511	NE 1077	NYE	311846				13N		5	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
656512	NE 1078	NYE	311847				13N 13.5N	46E	5,32	MDB&M	
656513	NE 1079	NYE	311848				13N		5	MDB&M	
656514	NE 1080	NYE	311849				13N 13.5N	46E	4,5, 32	MDB&M	
656515	NE 1081	NYE	311850				13N		4,5	MDB&M	
656516	NE 1082	NYE	311851				13N 13.5N	46E	4 32,33	MDB&M	
656517	NE 1083	NYE	311852				13N	46E	4	MDB&M	
680484	STUD 32	NYE	335128				13N	46E	30	MDB&M	
680485	STUD 34	NYE	335129				13N	46E	30	MDB&M	
680486	STUD 36	NYE	335130				13N	46E	30	MDB&M	
631499	STUD 53	NYE	291800				13N	46E	19,30	MDB&M	
631500	STUD 54	NYE	291801				13N	46E	30	MDB&M	
631501	STUD 55	NYE	291802				13N	46E	19,30	MDB&M	
631502	STUD 56	NYE	291803				13N	46E	30	MDB&M	
631503	STUD 57	NYE	291804				13N	46E	19,20,29,30	MDB&M	
631504	STUD 58	NYE	291805				13N	46E	29,30	MDB&M	
631505	STUD 59	NYE	291806				13N	46E	20,29	MDB&M	
631506	STUD 60	NYE	291807				13N	46E	29	MDB&M	
631507	STUD 61	NYE	291808				13N	46E	20,29	MDB&M	
631508	STUD 62	NYE	291809				13N	46E	29	MDB&M	
631509	STUD 63	NYE	291810				13N	46E	20,29	MDB&M	
631510	STUD 64	NYE	291811				13N	46E	29	MDB&M	
631511	STUD 65	NYE	291812				13N	46E	20,29	MDB&M	
631512	STUD 66	NYE	291813				13N	46E	29	MDB&M	
631513	STUD 67	NYE	291814				13N	46E	20,29	MDB&M	
631514	STUD 68	NYE	291815				13N	46E	29	MDB&M	
631515	STUD 69	NYE	291816				13N	46E	20,29	MDB&M	
631516	STUD 70	NYE	291817				13N	46E	29	MDB&M	
631517	STUD 71	NYE	291818				13N	46E	20,29	MDB&M	
631518	STUD 72	NYE	291819				13N	46E	29	MDB&M	
631519	STUD 73	NYE	291820				13N	46E	30	MDB&M	
631520	STUD 74	NYE	291821				13N	46E	30,31	MDB&M	
631521	STUD 75	NYE	291822				13N	46E	30	MDB&M	
631522	STUD 76	NYE	291823				13N	46E	30,31	MDB&M	
631523	STUD 77	NYE	291824				13N	46E	30	MDB&M	
631524	STUD 78	NYE	291825				13N	46E	30,31	MDB&M	
631525	STUD 79	NYE	291826				13N	46E	29,30	MDB&M	
631526	STUD 80	NYE	291827				13N	46E	29,30,31,32	MDB&M	
631527	STUD 81	NYE	291828				13N	46E	29	MDB&M	
631528	STUD 82	NYE	291829				13N	46E	29,32	MDB&M	
631529	STUD 83	NYE	291830				13N	46E	29	MDB&M	
631530	STUD 84	NYE	291831				13N	46E	29,32	MDB&M	
631531	STUD 85	NYE	291832				13N	46E	29	MDB&M	
631532	STUD 86	NYE	291833				13N	46E	29,32	MDB&M	
631533	STUD 87	NYE	291834				13N	46E	29	MDB&M	
631534	STUD 88	NYE	291835				13N	46E	29,32	MDB&M	
631535	STUD 89	NYE	291836				13N	46E	29	MDB&M	
631536	STUD 90	NYE	291837				13N	46E	29,32	MDB&M	
631537	STUD 91	NYE	291838				13N	46E	29	MDB&M	
631538	STUD 92	NYE	291839				13N	46E	29,32	MDB&M	
631539	STUD 93	NYE	291840				13N	46E	29	MDB&M	
631540	STUD 94	NYE	291841				13N	46E	29,32	MDB&M	
631541	STUD 97	NYE	291842				13N	46E	31	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
631542	STUD 98	NYE	291843				13N	46E	31	MDB&M	
631543	STUD 99	NYE	291844				13N	46E	31	MDB&M	
631544	STUD 100	NYE	291845				13N	46E	31	MDB&M	
631545	STUD 101	NYE	291846				13N	46E	31,32	MDB&M	
631546	STUD 102	NYE	291847				13N	46E	31,32	MDB&M	
631547	STUD 103	NYE	291848				13N	46E	32	MDB&M	
631548	STUD 104	NYE	291849				13N	46E	32	MDB&M	
631549	STUD 105	NYE	291850				13N	46E	32	MDB&M	
631550	STUD 106	NYE	291851				13N	46E	32	MDB&M	
631551	STUD 107	NYE	291852				13N	46E	32	MDB&M	
631552	STUD 108	NYE	291853				13N	46E	32	MDB&M	
631553	STUD 109	NYE	291854				13N	46E	32	MDB&M	
631554	STUD 110	NYE	291855				13N	46E	32	MDB&M	
631555	STUD 111	NYE	291856				13N	46E	32	MDB&M	
631556	STUD 112	NYE	291857				13N	46E	32	MDB&M	
631557	STUD 113	NYE	291858				13N	46E	32	MDB&M	
631558	STUD 114	NYE	291859				13N	46E	32	MDB&M	
631559	STUD 115	NYE	291860				13N	46E	32	MDB&M	
631560	STUD 116	NYE	291861				13N	46E	32	MDB&M	
634455	STUD 131	NYE	296425				13N 13.5N	46E	6,31	MDB&M	
634456	STUD 132	NYE	296426				13N	46E	6	MDB&M	
634457	STUD 133	NYE	296427				13N 13.5N	46E	6,31	MDB&M	
634458	STUD 134	NYE	296428				13N	46E	6	MDB&M	
634459	STUD 135	NYE	296429				13N 13.5N	46E	6,31	MDB&M	
634460	STUD 136	NYE	296430				13N	46E	6	MDB&M	
634461	STUD 137	NYE	296431				13N 13.5N	46E	6,31	MDB&M	
634462	STUD 138	NYE	296432				13N	46E	6	MDB&M	
634463	STUD 139	NYE	296433				13N 13.5N	46E	6,31	MDB&M	
634464	STUD 140	NYE	296434				13N	46E	6	MDB&M	
634465	STUD 141	NYE	296435				13N 13.5N	46E	6,31	MDB&M	
634466	STUD 142	NYE	296436				13N	46E	6	MDB&M	
634467	STUD 143	NYE	296437				13N 13.5N	46E	6,31	MDB&M	
634468	STUD 144	NYE	296438				13N	46E	6	MDB&M	
634469	STUD 145	NYE	296439				13N 13.5N	46E	6,31	MDB&M	
634470	STUD 146	NYE	296440				13N	46E	6	MDB&M	
634471	STUD 147	NYE	296441				13N 13.5N	46E	6,31	MDB&M	
634472	STUD 148	NYE	296442				13N	46E	6	MDB&M	
634473	STUD 149	NYE	296443				13N 13.5N	46E	5,6,31	MDB&M	
634474	STUD 150	NYE	296444				13N	46E	5,6	MDB&M	
634475	STUD 151	NYE	296445				13N 13.5N	46E	5,31,32	MDB&M	
634476	STUD 152	NYE	296446				13N	46E	5	MDB&M	
634477	STUD 153	NYE	296447				13N 13.5N	46E	5,32	MDB&M	
634478	STUD 154	NYE	296448				13N	46E	5	MDB&M	
634479	STUD 168	NYE	296449				13N	46E	6,7	MDB&M	
634480	STUD 169	NYE	296450				13N	46E	6	MDB&M	
634481	STUD 170	NYE	296451				13N	46E	6,7	MDB&M	
634482	STUD 171	NYE	296452				13N	46E	6	MDB&M	
634483	STUD 172	NYE	296453				13N	46E	6,7	MDB&M	
634484	STUD 173	NYE	296454				13N	46E	6	MDB&M	
634485	STUD 174	NYE	296455				13N	46E	6,7	MDB&M	
634486	STUD 175	NYE	296456				13N	46E	6	MDB&M	
634487	STUD 176	NYE	296457				13N	46E	6,7	MDB&M	
634488	STUD 177	NYE	296458				13N	46E	6	MDB&M	
634489	STUD 178	NYE	296459				13N	46E	6,7	MDB&M	
634490	STUD 179	NYE	296460				13N	46E	6	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
634491	STUD 180	NYE	296461				13N	46E	6,7	MDB&M	
634492	STUD 181	NYE	296462				13N	46E	6	MDB&M	
634493	STUD 182	NYE	296463				13N	46E	6,7	MDB&M	
634494	STUD 183	NYE	296464				13N	46E	6	MDB&M	
634495	STUD 184	NYE	296465				13N	46E	6,7	MDB&M	
634496	STUD 185	NYE	296466				13N	46E	5,6	MDB&M	
634497	STUD 186	NYE	296467				13N	46E	5,6	MDB&M	
634498	STUD 187	NYE	296468				13N	46E	5	MDB&M	
634499	STUD 188	NYE	296469				13N	46E	5	MDB&M	
634500	STUD 189	NYE	296470				13N	46E	5	MDB&M	
634501	STUD 190	NYE	296471				13N	46E	5	MDB&M	
634502	STUD 191	NYE	296472				13N	46E	5	MDB&M	
634503	STUD 192	NYE	296473				13N	46E	5	MDB&M	
634504	STUD 193	NYE	296474				13N	46E	5	MDB&M	
634505	STUD 194	NYE	296475				13N	46E	5	MDB&M	
634506	STUD 195	NYE	296476				13N	46E	5	MDB&M	
634507	STUD 196	NYE	296477				13N	46E	5	MDB&M	
634508	STUD 197	NYE	296478				13N	46E	5	MDB&M	
634509	STUD 198	NYE	296479				13N	46E	5	MDB&M	
634510	STUD 203	NYE	296480				13N	46E	7	MDB&M	
634511	STUD 204	NYE	296481				13N	46E	7	MDB&M	
634512	STUD 205	NYE	296482				13N	46E	7	MDB&M	
634513	STUD 206	NYE	296483				13N	46E	7	MDB&M	
634514	STUD 207	NYE	296484				13N	46E	7	MDB&M	
634515	STUD 208	NYE	296485				13N	46E	7	MDB&M	
634516	STUD 209	NYE	296486				13N	46E	7	MDB&M	
634517	STUD 210	NYE	296487				13N	46E	7	MDB&M	
634518	STUD 211	NYE	296488				13N	46E	7	MDB&M	
634519	STUD 212	NYE	296489				13N	46E	7	MDB&M	
634520	STUD 213	NYE	296490				13N	46E	7	MDB&M	
634521	STUD 214	NYE	296491				13N	46E	7	MDB&M	
634522	STUD 215	NYE	296492				13N	46E	7	MDB&M	
634523	STUD 216	NYE	296493				13N	46E	7,8	MDB&M	
634524	STUD 217	NYE	296494				13N	46E	7,8	MDB&M	
634525	STUD 218	NYE	296495				13N	46E	8	MDB&M	
634526	STUD 219	NYE	296496				13N	46E	8	MDB&M	
634527	STUD 220	NYE	296497				13N	46E	8	MDB&M	
634528	STUD 221	NYE	296498				13N	46E	8	MDB&M	
634529	STUD 222	NYE	296499				13N	46E	8	MDB&M	
634530	STUD 223	NYE	296500				13N	46E	8	MDB&M	
634531	STUD 224	NYE	296501				13N	46E	8	MDB&M	
634532	STUD 225	NYE	296502				13N	46E	8	MDB&M	
634533	STUD 226	NYE	296503				13N	46E	8	MDB&M	
634534	STUD 227	NYE	296504				13N	46E	8	MDB&M	
634536	STUD 235	NYE	296506				13N	46E	7,8	MDB&M	
634538	STUD 237	NYE	296508				13N	46E	8	MDB&M	
634539	STUD 238	NYE	296509				13N	46E	8,17	MDB&M	
634540	STUD 239	NYE	296510				13N	46E	8	MDB&M	
634541	STUD 240	NYE	296511				13N	46E	8,17	MDB&M	
634542	STUD 241	NYE	296512				13N	46E	8	MDB&M	
634543	STUD 242	NYE	296513				13N	46E	8,17	MDB&M	
634544	STUD 243	NYE	296514				13N	46E	8	MDB&M	
634545	STUD 244	NYE	296515				13N	46E	8,17	MDB&M	
634546	STUD 245	NYE	296516				13N	46E	8	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
634547	STUD 246	NYE	296517				13N	46E	8,17	MDB&M	
634548	STUD 247	NYE	296518				13N	46E	8	MDB&M	
634549	STUD 248	NYE	296519				13N	46E	8,17	MDB&M	
634550	STUD 249	NYE	296520				13N	46E	8	MDB&M	
634551	STUD 250	NYE	296521				13N	46E	8,17	MDB&M	
634555	STUD 255	NYE	296525				13N	46E	17	MDB&M	
634556	STUD 256	NYE	296526				13N	46E	17	MDB&M	
634557	STUD 257	NYE	296527				13N	46E	17	MDB&M	
634558	STUD 258	NYE	296528				13N	46E	17	MDB&M	
634559	STUD 259	NYE	296529				13N	46E	17	MDB&M	
634560	STUD 260	NYE	296530				13N	46E	17	MDB&M	
634561	STUD 261	NYE	296531				13N	46E	17	MDB&M	
634562	STUD 262	NYE	296532				13N	46E	17	MDB&M	
634563	STUD 263	NYE	296533				13N	46E	17	MDB&M	
634564	STUD 264	NYE	296534				13N	46E	17	MDB&M	
634565	STUD 265	NYE	296535				13N	46E	17	MDB&M	
634566	STUD 266	NYE	296536				13N	46E	17	MDB&M	
634568	STUD 268	NYE	296538				13N	46E	17,20	MDB&M	
634569	STUD 269	NYE	296539				13N	46E	17,20	MDB&M	
634570	STUD 270	NYE	296540				13N	46E	17,20	MDB&M	
634571	STUD 271	NYE	296541				13N	46E	17,20	MDB&M	
634572	STUD 272	NYE	296542				13N	46E	17,20	MDB&M	
634573	STUD 273	NYE	296543				13N	46E	17,20	MDB&M	
634574	STUD 274	NYE	296544				13N	46E	17,20	MDB&M	
632230	STUD 337	NYE	293723				13N	46E	8	MDB&M	
632231	STUD 338	NYE	293724				13N	46E	8,17	MDB&M	
632232	STUD 339	NYE	293725				13N	46E	8,9	MDB&M	
632233	STUD 340	NYE	293726				13N	46E	8,9,16,17	MDB&M	
632234	STUD 341	NYE	293727				13N	46E	9	MDB&M	
632235	STUD 342	NYE	293728				13N	46E	9,16	MDB&M	
632250	STUD 357	NYE	293743				13N	46E	17	MDB&M	
632251	STUD 358	NYE	293744				13N	46E	17,16	MDB&M	
632252	STUD 359	NYE	293745				13N	46E	16	MDB&M	
632253	STUD 360	NYE	293746				13N	46E	16	MDB&M	
632254	STUD 361	NYE	293747				13N	46E	16	MDB&M	
632255	STUD 362	NYE	293748				13N	46E	16	MDB&M	
632256	STUD 363	NYE	293749				13N	46E	16	MDB&M	
632257	STUD 364	NYE	293750				13N	46E	16	MDB&M	
632258	STUD 365	NYE	293751				13N	46E	16	MDB&M	
632259	STUD 366	NYE	293752				13N	46E	16	MDB&M	
632260	STUD 367	NYE	293753				13N	46E	16	MDB&M	
632261	STUD 368	NYE	293754				13N	46E	16	MDB&M	
632262	STUD 369	NYE	293755				13N	46E	16	MDB&M	
632263	STUD 370	NYE	293756				13N	46E	16	MDB&M	
632264	STUD 371	NYE	293757				13N	46E	16	MDB&M	
632265	STUD 372	NYE	293758				13N	46E	16	MDB&M	
632266	STUD 373	NYE	293759				13N	46E	16	MDB&M	
632267	STUD 374	NYE	293760				13N	46E	16	MDB&M	
632268	STUD 375	NYE	293761				13N	46E	15,16	MDB&M	
632269	STUD 376	NYE	293762				13N	46E	15,16	MDB&M	
632270	STUD 387	NYE	293763				13N	46E	15	MDB&M	
632271	STUD 388	NYE	293764				13N	46E	15	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
632272	STUD 389	NYE	293765				13N	46E	15	MDB&M	
632273	STUD 390	NYE	293766				13N	46E	15	MDB&M	
632274	STUD 391	NYE	293767				13N	46E	15	MDB&M	
632275	STUD 392	NYE	293768				13N	46E	15	MDB&M	
632276	STUD 393	NYE	293769				13N	46E	15	MDB&M	
632277	STUD 394	NYE	293770				13N	46E	15	MDB&M	
632278	STUD 395	NYE	293771				13N	46E	15	MDB&M	
632279	STUD 396	NYE	293772				13N	46E	15	MDB&M	
632280	STUD 397	NYE	293773				13N	46E	15	MDB&M	
632281	STUD 398	NYE	293774				13N	46E	15	MDB&M	
632282	STUD 399	NYE	293775				13N	46E	15	MDB&M	
632283	STUD 400	NYE	293776				13N	46E	15	MDB&M	
632284	STUD 401	NYE	293777				13N	46E	15	MDB&M	
632285	STUD 402	NYE	293778				13N	46E	15	MDB&M	
632286	STUD 403	NYE	293779				13N	46E	14,15	MDB&M	
632287	STUD 404	NYE	293780				13N	46E	14,15	MDB&M	
632322	STUD 477	NYE	293815				13N	46E	14	MDB&M	
632323	STUD 478	NYE	293816				13N	46E	14	MDB&M	
632324	STUD 479	NYE	293817				13N	46E	14	MDB&M	
632325	STUD 480	NYE	293818				13N	46E	14	MDB&M	
632326	STUD 481	NYE	293819				13N	46E	14	MDB&M	
632327	STUD 482	NYE	293820				13N	46E	14	MDB&M	
632328	STUD 483	NYE	293821				13N	46E	14	MDB&M	
632329	STUD 484	NYE	293822				13N	46E	14	MDB&M	
632330	STUD 485	NYE	293823				13N	46E	14	MDB&M	
632331	STUD 486	NYE	293824				13N	46E	14	MDB&M	
632332	STUD 487	NYE	293825				13N	46E	14	MDB&M	
632333	STUD 488	NYE	293826				13N	46E	14	MDB&M	
658303	STUD 203A	NYE	312855				13N	45E 46E	12 6,7	MDB&M	
658340	SE 37	NYE	312893				13N	46E	32	MDB&M	
658341	SE 38	NYE	312894				13N	46E	32,33	MDB&M	
658342	SE 39	NYE	312895				13N	46E	33	MDB&M	
658343	SE 40	NYE	312896				13N	46E	33	MDB&M	
658344	SE 41	NYE	312897				13N	46E	32	MDB&M	
658345	SE 42	NYE	312898				13N	46E	29,32	MDB&M	
658346	SE 43	NYE	312899				13N	46E	32,33	MDB&M	
658347	SE 44	NYE	312900				13N	46E	28,29,32,33	MDB&M	
658348	SE 45	NYE	312901				13N	46E	33	MDB&M	
658349	SE 46	NYE	312902				13N	46E	28,33	MDB&M	
658350	SE 47	NYE	312903				13N	46E	33	MDB&M	
658351	SE 48	NYE	312904				13N	46E	28,33	MDB&M	
658352	SE 49	NYE	312905				13N	46E	29	MDB&M	
658353	SE 50	NYE	312906				13N	46E	28,28	MDB&M	
658354	SE 51	NYE	312907				13N	46E	29	MDB&M	
658355	SE 52	NYE	312908				13N	46E	29	MDB&M	
658356	SE 53	NYE	312909				13N	46E	28,29	MDB&M	
658357	SE 54	NYE	312910				13N	46E	27,28,33,34	MDB&M	
658358	SE 55	NYE	312911				13N	46E	27,34	MDB&M	
658359	SE 56	NYE	312912				13N	46E	27,34	MDB&M	
658360	SE 57	NYE	312913				13N	46E	27	MDB&M	
658361	SE 58	NYE	312914				13N	46E	27	MDB&M	
658362	SE 59	NYE	312915				13N	46E	27	MDB&M	
658363	SE 60	NYE	312916				13N	46E	27	MDB&M	
658364	SE 61	NYE	312917				13N	46E	27,28	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
658365	SE 62	NYE	312918				13N	46E	28	MDB&M	
658366	SE 63	NYE	312919				13N	46E	21,28	MDB&M	
658367	SE 64	NYE	312920				13N	46E	21	MDB&M	
658368	SE 65	NYE	312921				13N	46E	21	MDB&M	
658369	SE 66	NYE	312922				13N	46E	21	MDB&M	
658370	SE 67	NYE	312923				13N	46E	21	MDB&M	
658371	SE 68	NYE	312924				13N	46E	21	MDB&M	
658372	SE 69	NYE	312925				13N	46E	21	MDB&M	
658373	SE 70	NYE	312926				13N	46E	21	MDB&M	
658374	SE 71	NYE	312927				13N	46E	21	MDB&M	
658375	SE 72	NYE	312928				13N	46E	21	MDB&M	
658376	SE 73	NYE	312929				13N	46E	21	MDB&M	
658377	SE 74	NYE	312930				13N	46E	21	MDB&M	
658378	SE 75	NYE	312931				13N	46E	21	MDB&M	
658379	SE 76	NYE	312932				13N	46E	21	MDB&M	
658380	SE 77	NYE	312933				13N	46E	21	MDB&M	
658381	SE 78	NYE	312934				13N	46E	21	MDB&M	
658382	SE 79	NYE	312935				13N	46E	21	MDB&M	
658383	SE 80	NYE	312936				13N	46E	21	MDB&M	
658384	SE 81	NYE	312937				13N	46E	16,21	MDB&M	
658385	SE 82	NYE	312938				13N	46E	16,21	MDB&M	
658386	SE 83	NYE	312939				13N	46E	16	MDB&M	
658387	SE 84	NYE	312940				13N	46E	16	MDB&M	
658388	SE 85	NYE	312941				13N	46E	16	MDB&M	
658389	SE 86	NYE	312942				13N	46E	16	MDB&M	
658390	SE 87	NYE	312943				13N	46E	21	MDB&M	
658391	SE 88	NYE	312944				13N	46E	21	MDB&M	
658392	SE 89	NYE	312945				13N	46E	21	MDB&M	
658393	SE 90	NYE	312946				13N	46E	16,21	MDB&M	
658394	SE 91	NYE	312947				13N	46E	16	MDB&M	
658395	SE 92	NYE	312948				13N	46E	16	MDB&M	
658396	SE 93	NYE	312949				13N	46E	16	MDB&M	
658397	SE 94	NYE	312950				13N	46E	16,21	MDB&M	
658398	SE 95	NYE	312951				13N	46E	21	MDB&M	
102891	Wig No. 33	NYE	250 193				13N	46E	17,20	MDB&M	
102892	Wig No. 34	NYE	250 194				13N	46E	17,20	MDB&M	
680470	KORFAX 2	NYE	335114				13N	46E	30	MDB&M	
680471	KORFAX 3	NYE	335115				13N	46E	20	MDB&M	
680472	KORFAX 4	NYE	335116				13N	46E	20	MDB&M	
329579	WC 1	NYE	474 371				13N	46E	20,29	MDB&M	
329580	WC 2	NYE	474 372				13N	46E	20,29	MDB&M	
329581	WC 3	NYE	474 373				13N	46E	20,29	MDB&M	
329582	WC 4	NYE	474 374				13N	46E	20,29	MDB&M	
329583	WC 5	NYE	474 375				13N	46E	20,29	MDB&M	
329584	WC 6	NYE	474 376				13N	46E	20,29	MDB&M	
329585	WC 7	NYE	474 377				13N	46E	20,29	MDB&M	
329586	WC 8	NYE	474 378				13N	46E	20,29	MDB&M	
329587	WC 9	NYE	474 379				13N	46E	20,29	MDB&M	
329588	WC 10	NYE	474 380				13N	46E	20	MDB&M	
329589	WC 11	NYE	474 381				13N	46E	20	MDB&M	
329590	WC 12	NYE	474 382				13N	46E	20	MDB&M	
329591	WC 13	NYE	474 383				13N	46E	20	MDB&M	
329592	WC 14	NYE	474 384				13N	46E	20	MDB&M	
329593	WC 15	NYE	474 385				13N	46E	20	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
329594	WC 16	NYE	474 386				13N	46E	20	MDB&M	
329595	WC 17	NYE	474 387				13N	46E	20	MDB&M	
329596	WC 18	NYE	474 388				13N	46E	20	MDB&M	
329597	WC 19	NYE	474 389				13N	46E	20	MDB&M	
329598	WC 20	NYE	474 390				13N	46E	20	MDB&M	
329599	WC 21	NYE	474 391				13N	46E	20	MDB&M	
329600	WC 22	NYE	474 392				13N	46E	20	MDB&M	
329601	WC 23	NYE	474 393				13N	46E	20	MDB&M	
329602	WC 24	NYE	474 394				13N	46E	20	MDB&M	
329603	WC 25	NYE	474 395				13N	46E	21	MDB&M	
329608	WC 30	NYE	474 400				13N	46E	16,21	MDB&M	
329613	WC 35	NYE	474 405				13N	46E	16	MDB&M	
329619	WC 41	NYE	474 411				13N	46E	17,20	MDB&M	
329620	WC 42	NYE	474 412				13N	46E	17,20	MDB&M	
329621	WC 43	NYE	474 413				13N	46E	17,20	MDB&M	
329622	WC 44	NYE	474 414				13N	46E	17,20	MDB&M	
329623	WC 45	NYE	474 415				13N	46E	17,20	MDB&M	
329624	WC 46	NYE	474 416				13N	46E	17,20	MDB&M	
329625	WC 47	NYE	474 417				13N	46E	17,20	MDB&M	
329626	WC 48	NYE	474 418				13N	46E	17	MDB&M	
641599	SW 2	NYE	301070				13N	45E	21	MDB&M	
641601	SW 4	NYE	301072				13N	45E	21	MDB&M	
641603	SW 6	NYE	301074				13N	45E	21	MDB&M	
641605	SW 8	NYE	301076				13N	45E	21	MDB&M	
641607	SW 10	NYE	301078				13N	45E	21	MDB&M	
641609	SW 12	NYE	301080				13N	45E	21	MDB&M	
641611	SW 14	NYE	301082				13N	45E	21	MDB&M	
641613	SW 16	NYE	301084				13N	45E	21	MDB&M	
641615	SW 18	NYE	301086				13N	45E	20,21	MDB&M	
641617	SW 20	NYE	301088				13N	45E	20	MDB&M	
641622	SW 25	NYE	301093				13N	45E	21	MDB&M	
641623	SW 26	NYE	301094				13N	45E	21,28	MDB&M	
641624	SW 27	NYE	301095				13N	45E	21	MDB&M	
641625	SW 28	NYE	301096				13N	45E	21,28	MDB&M	
641626	SW 29	NYE	301097				13N	45E	21	MDB&M	
641627	SW 30	NYE	301098				13N	45E	21,28	MDB&M	
641628	SW 31	NYE	301099				13N	45E	21	MDB&M	
641629	SW 32	NYE	301100				13N	45E	21,28	MDB&M	
641630	SW 33	NYE	301101				13N	45E	21	MDB&M	
641631	SW 34	NYE	301102				13N	45E	21,28	MDB&M	
641632	SW 35	NYE	301103				13N	45E	21	MDB&M	
641633	SW 36	NYE	301104				13N	45E	21,28	MDB&M	
641634	SW 37	NYE	301105				13N	45E	21	MDB&M	
641635	SW 38	NYE	301106				13N	45E	21,28	MDB&M	
641636	SW 39	NYE	301107				13N	45E	21	MDB&M	
641637	SW 40	NYE	301108				13N	45E	21,28	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
641638	SW 41	NYE	301109				13N	45E	20,21	MDB&M	
641639	SW 42	NYE	301110				13N	45E	20,21,28,29	MDB&M	
641640	SW 43	NYE	301111				13N	45E	20	MDB&M	
641641	SW 44	NYE	301112				13N	45E	20,29	MDB&M	
641700	SW 103	NYE	301171				13N	45E	28	MDB&M	
641701	SW 104	NYE	301172				13N	45E	28	MDB&M	
641702	SW 105	NYE	301173				13N	45E	28	MDB&M	
641703	SW 106	NYE	301174				13N	45E	28	MDB&M	
641704	SW 107	NYE	301175				13N	45E	28	MDB&M	
641705	SW 108	NYE	301176				13N	45E	28	MDB&M	
641706	SW 109	NYE	301177				13N	45E	28	MDB&M	
641707	SW 110	NYE	301178				13N	45E	28	MDB&M	
641708	SW 111	NYE	301179				13N	45E	28	MDB&M	
641709	SW 112	NYE	301180				13N	45E	28	MDB&M	
641710	SW 113	NYE	301181				13N	45E	28	MDB&M	
641711	SW 114	NYE	301182				13N	45E	28	MDB&M	
641712	SW 115	NYE	301183				13N	45E	28	MDB&M	
641713	SW 116	NYE	301184				13N	45E	28	MDB&M	
641714	SW 117	NYE	301185				13N	45E	28	MDB&M	
641715	SW 118	NYE	301186				13N	45E	28	MDB&M	
641716	SW 119	NYE	301187				13N	45E	28,29	MDB&M	
641717	SW 120	NYE	301188				13N	45E	28,29	MDB&M	
641718	SW 121	NYE	301189				13N	45E	29	MDB&M	
641719	SW 122	NYE	301190				13N	45E	29	MDB&M	
641720	SW 123	NYE	301191				13N	45E	29	MDB&M	
641721	SW 124	NYE	301192				13N	45E	29	MDB&M	
641722	SW 125	NYE	301193				13N	45E	29	MDB&M	
641723	SW 126	NYE	301194				13N	45E	29	MDB&M	
641724	SW 127	NYE	301195				13N	45E	29	MDB&M	
641725	SW 128	NYE	301196				13N	45E	29	MDB&M	
641726	SW 129	NYE	301197				13N	45E	29	MDB&M	
641727	SW 130	NYE	301198				13N	45E	29	MDB&M	
641728	SW 131	NYE	301199				13N	45E	29	MDB&M	
641729	SW 132	NYE	301200				13N	45E	29	MDB&M	
641730	SW 133	NYE	301201				13N	45E	29	MDB&M	
641731	SW 134	NYE	301202				13N	45E	29	MDB&M	
641732	SW 135	NYE	301203				13N	45E	29	MDB&M	
641733	SW 136	NYE	301204				13N	45E	29	MDB&M	
641734	SW 137	NYE	301205				13N	45E	29,30	MDB&M	
641735	SW 138	NYE	301206				13N	45E	29,30	MDB&M	
641736	SW 139	NYE	301207				13N	45E	30	MDB&M	
641737	SW 140	NYE	301208				13N	45E	30	MDB&M	
641738	SW 141	NYE	301209				13N	45E	30	MDB&M	
641739	SW 142	NYE	301210				13N	45E	30	MDB&M	
641740	SW 143	NYE	301211				13N	45E	30	MDB&M	
641741	SW 144	NYE	301212				13N	45E	30	MDB&M	
641742	SW 145	NYE	301213				13N	45E	30	MDB&M	
641743	SW 146	NYE	301214				13N	45E	30	MDB&M	
641744	SW 147	NYE	301215				13N	45E	30	MDB&M	
641745	SW 148	NYE	301216				13N	45E	30	MDB&M	
641746	SW 149	NYE	301217				13N	45E	30	MDB&M	
641747	SW 150	NYE	301218				13N	45E	30	MDB&M	
641748	SW 151	NYE	301219				13N	45E	30	MDB&M	
641749	SW 152	NYE	301220				13N	45E	30	MDB&M	
641750	SW 153	NYE	301221				13N	45E	30	MDB&M	
641751	SW 154	NYE	301222				13N	45E	30	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
641752	SW 155	NYE	301223				13N	44.5E	25	MDB&M	
641753	SW 156	NYE	301224				13N	44.5E	25	MDB&M	
641754	SW 157	NYE	301225				13N	44.5E	25	MDB&M	
641755	SW 158	NYE	301226				13N	44.5E	25	MDB&M	
641756	SW 159	NYE	301227				13N	44.5E	25	MDB&M	
641757	SW 160	NYE	301228				13N	44.5E	25	MDB&M	
641758	SW 161	NYE	301229				13N	44.5E	25	MDB&M	
641759	SW 162	NYE	301230				13N	44.5E	25	MDB&M	
641760	SW 163	NYE	301231				13N	44.5E	25	MDB&M	
641761	SW 164	NYE	301232				13N	44.5E	25	MDB&M	
641762	SW 165	NYE	301233				13N	44.5E	25	MDB&M	
641763	SW 166	NYE	301234				13N	44.5E	25	MDB&M	
641764	SW 167	NYE	301235				13N	44.5E	25	MDB&M	
641765	SW 168	NYE	301236				13N	44.5E	25	MDB&M	
641766	SW 169	NYE	301237				13N	44.5E	25	MDB&M	
641767	SW 170	NYE	301238				13N	44.5E	25	MDB&M	
641768	SW 171	NYE	301239				13N	44E 44.5E	36 25	MDB&M	
641769	SW 172	NYE	301240				12N 13N	44.5E	25,26 36	MDB&M	
641770	SW 173	NYE	301241				13N	44E 44.5E	36	MDB&M	
641771	SW 174	NYE	301242				13N	44.5E	36 26	MDB&M	
641772	SW 175	NYE	301243				13N	44E	36	MDB&M	
641773	SW 176	NYE	301244				13N	44.5E	36 26	MDB&M	
641774	SW 177	NYE	301245				13N	44E	36	MDB&M	
641775	SW 178	NYE	301246				12N 13N	44E 45E	1 36	MDB&M	
641776	SW 179	NYE	301247				13N	44E	36	MDB&M	
641777	SW 180	NYE	301248				12N 13N	44E 45E	1 36	MDB&M	
641778	SW 181	NYE	301249				13N	44E	36	MDB&M	
641779	SW 182	NYE	301250				12N 13N	44E 45E	1 36	MDB&M	
641780	SW 183	NYE	301251				13N	44E	36	MDB&M	
641781	SW 184	NYE	301252				12N 13N	44E 45E	1 36	MDB&M	
641782	SW 185	NYE	301253				13N	44E	36	MDB&M	
641783	SW 186	NYE	301254				12N 13N	44E 45E	1 36	MDB&M	
641784	SW 187	NYE	301255				13N	44E	36	MDB&M	
641785	SW 188	NYE	301256				12N 13N	44E 45E	1 36	MDB&M	
641786	SW 189	NYE	301257				13N	44E	35,36	MDB&M	
641787	SW 190	NYE	301258				12N 13N	44E 45E	1 36	MDB&M	
641788	SW 191	NYE	301259				13N	45E	28	MDB&M	
641789	SW 192	NYE	301260				13N	45E	28,33	MDB&M	
641790	SW 193	NYE	301261				13N	45E	28	MDB&M	
641791	SW 194	NYE	301262				13N	45E	28,33	MDB&M	
641792	SW 195	NYE	301263				13N	45E	28	MDB&M	
641793	SW 196	NYE	301264				13N	45E	28,33	MDB&M	
641794	SW 197	NYE	301265				13N	45E	28	MDB&M	
641795	SW 198	NYE	301266				13N	45E	28,33	MDB&M	
641796	SW 199	NYE	301267				13N	45E	28	MDB&M	
641797	SW 200	NYE	301268				13N	45E	28,33	MDB&M	
641798	SW 201	NYE	301269				13N	45E	28,29	MDB&M	
641799	SW 202	NYE	301270				13N	45E	28,29,32,33	MDB&M	
641800	SW 203	NYE	301271				13N	45E	29	MDB&M	
641801	SW 204	NYE	301272				13N	45E	29,32	MDB&M	
641802	SW 205	NYE	301273				13N	45E	29	MDB&M	
641803	SW 206	NYE	301274				13N	45E	29,32	MDB&M	
641804	SW 207	NYE	301275				13N	45E	29	MDB&M	
641805	SW 208	NYE	301276				13N	45E	29,32	MDB&M	
641806	SW 209	NYE	301277				13N	45E	29	MDB&M	
641807	SW 210	NYE	301278				13N	45E	29,32	MDB&M	
641808	SW 211	NYE	301279				13N	45E	29	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
641809	SW 212	NYE	301280				13N	45E	29,32	MDB&M	
641810	SW 213	NYE	301281				13N	45E	29	MDB&M	
641811	SW 214	NYE	301282				13N	45E	29,32	MDB&M	
641812	SW 215	NYE	301283				13N	45E	29	MDB&M	
641813	SW 216	NYE	301284				13N	45E	29,32	MDB&M	
641814	SW 217	NYE	301285				13N	45E	29	MDB&M	
641815	SW 218	NYE	301286				13N	45E	29,32	MDB&M	
641816	SW 219	NYE	301287				13N	45E	29,30	MDB&M	
641817	SW 220	NYE	301288				13N	45E	29,30,31,32	MDB&M	
641818	SW 221	NYE	301289				13N	45E	30	MDB&M	
641819	SW 222	NYE	301290				13N	45E	30,31	MDB&M	
641820	SW 223	NYE	301291				13N	45E	30	MDB&M	
641821	SW 224	NYE	301292				13N	45E	30,31	MDB&M	
641822	SW 225	NYE	301293				13N	45E	30	MDB&M	
641823	SW 226	NYE	301294				13N	45E	30,31	MDB&M	
641824	SW 227	NYE	301295				13N	45E	30	MDB&M	
641825	SW 228	NYE	301296				13N	45E	30,31	MDB&M	
641826	SW 229	NYE	301297				13N	45E	30	MDB&M	
641827	SW 230	NYE	301298				13N	45E	30,31	MDB&M	
641828	SW 231	NYE	301299				13N	45E	30	MDB&M	
641829	SW 232	NYE	301300				13N	45E	30,31	MDB&M	
641830	SW 233	NYE	301301				13N	45E	30	MDB&M	
641831	SW 234	NYE	301302				13N	45E	30,31	MDB&M	
641832	SW 235	NYE	301303				13N	45E	30	MDB&M	
641833	SW 236	NYE	301304				13N	45E	30,31	MDB&M	
641834	SW 237	NYE	301305				13N	45E	25	MDB&M	
641835	SW 238	NYE	301306				13N	44.5E	25,26	MDB&M	
641836	SW 239	NYE	301307				13N	45E	25	MDB&M	
641837	SW 240	NYE	301308				13N	44.5E	25,26	MDB&M	
641838	SW 241	NYE	301309				13N	45E	25	MDB&M	
641839	SW 242	NYE	301310				13N	44.5E	25,26	MDB&M	
641840	SW 243	NYE	301311				13N	45E	25	MDB&M	
641841	SW 244	NYE	301312				13N	44.5E	25,26	MDB&M	
641842	SW 245	NYE	301313				13N	45E	25	MDB&M	
641843	SW 246	NYE	301314				13N	44.5E	25,26	MDB&M	
641844	SW 247	NYE	301315				13N	45E	25	MDB&M	
641845	SW 248	NYE	301316				13N	44.5E	25,26	MDB&M	
641846	SW 249	NYE	301317				13N	45E	25	MDB&M	
641847	SW 250	NYE	301318				13N	44.5E	25,26	MDB&M	
641848	SW 251	NYE	301319				13N	44.5E	25	MDB&M	
641849	SW 252	NYE	301320				13N	44.5E	26	MDB&M	
641850	SW 253	NYE	301321				13N	44.5E	26	MDB&M	
641851	SW 254	NYE	301322				12N	44E	1	MDB&M	
641852	SW 255	NYE	301323				12N	44E	1	MDB&M	
641853	SW 256	NYE	301324				12N	44E	1	MDB&M	
641854	SW 257	NYE	301325				12N	44E	1	MDB&M	
641855	SW 258	NYE	301326				12N	44E	1	MDB&M	
641856	SW 259	NYE	301327				12N	44E	1	MDB&M	
641857	SW 260	NYE	301328				12N	44E	1	MDB&M	
641859	SW 262	NYE	301330				12N	45E	21,22	MDB&M	
641860	SW 263	NYE	301331				12N	45E	21,22	MDB&M	
641861	SW 264	NYE	301332				13N	45E	21,22,27,28	MDB&M	
641862	SW 265	NYE	301333				13N	45E	27,28	MDB&M	
641863	SW 266	NYE	301334				13N	45E	27,28	MDB&M	
641864	SW 267	NYE	301335				12N	45E	4	MDB&M	
641865	SW 268	NYE	301336				12N	45E	4	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
641866	SW 269	NYE	301337				12N	45E	4	MDB&M	
641870	SW 273	NYE	301341				13N	45E	33	MDB&M	
641871	SW 274	NYE	301342				13N	45E	33	MDB&M	
641872	SW 275	NYE	301343				13N	45E	33	MDB&M	
641873	SW 276	NYE	301344				13N	45E	33	MDB&M	
641874	SW 277	NYE	301345				13N	45E	33	MDB&M	
641875	SW 278	NYE	301346				13N	45E	33	MDB&M	
641876	SW 279	NYE	301347				13N	45E	33	MDB&M	
641877	SW 280	NYE	301348				13N	45E	33	MDB&M	
641878	SW 281	NYE	301349				13N	45E	33	MDB&M	
641879	SW 282	NYE	301350				13N	45E	33	MDB&M	
641880	SW 283	NYE	301351				13N	45E	33	MDB&M	
641881	SW 284	NYE	301352				13N	45E	33	MDB&M	
641882	SW 285	NYE	301353				13N	45E	32,33	MDB&M	
641883	SW 286	NYE	301354				13N	45E	32,33	MDB&M	
641884	SW 287	NYE	301355				13N	45E	32	MDB&M	
641885	SW 288	NYE	301356				13N	45E	32	MDB&M	
641886	SW 289	NYE	301357				13N	45E	32	MDB&M	
641887	SW 290	NYE	301358				13N	45E	32	MDB&M	
641888	SW 291	NYE	301359				13N	45E	32	MDB&M	
641889	SW 292	NYE	301360				13N	45E	32	MDB&M	
641890	SW 293	NYE	301361				13N	45E	32	MDB&M	
641891	SW 294	NYE	301362				13N	45E	32	MDB&M	
641892	SW 295	NYE	301363				13N	45E	32	MDB&M	
641893	SW 296	NYE	301364				13N	45E	32	MDB&M	
641894	SW 297	NYE	301365				13N	45E	32	MDB&M	
641895	SW 298	NYE	301366				13N	45E	32	MDB&M	
641896	SW 299	NYE	301367				13N	45E	32	MDB&M	
641897	SW 300	NYE	301368				13N	45E	32	MDB&M	
641898	SW 301	NYE	301369				13N	45E	32	MDB&M	
641899	SW 302	NYE	301370				13N	45E	32	MDB&M	
641900	SW 303	NYE	301371				13N	45E	31,32	MDB&M	
641901	SW 304	NYE	301372				13N	45E	31,32	MDB&M	
641902	SW 305	NYE	301373				13N	45E	31	MDB&M	
641903	SW 306	NYE	301374				13N	45E	31	MDB&M	
641904	SW 307	NYE	301375				13N	45E	31	MDB&M	
641905	SW 308	NYE	301376				13N	45E	31	MDB&M	
641906	SW 309	NYE	301377				13N	45E	31	MDB&M	
641907	SW 310	NYE	301378				13N	45E	31	MDB&M	
641908	SW 311	NYE	301379				13N	45E	31	MDB&M	
641909	SW 312	NYE	301380				13N	45E	31	MDB&M	
641910	SW 313	NYE	301381				13N	45E	31	MDB&M	
641911	SW 314	NYE	301382				13N	45E	31	MDB&M	
641912	SW 315	NYE	301383				13N	45E	31	MDB&M	
641913	SW 316	NYE	301384				13N	45E	31	MDB&M	
641914	SW 317	NYE	301385				13N	45E	31	MDB&M	
641915	SW 318	NYE	301386				13N	45E	31	MDB&M	
641916	SW 319	NYE	301387				13N	45E	31	MDB&M	
641917	SW 320	NYE	301388				13N	45E	31	MDB&M	
641918	SW 321	NYE	301389				13N	44.5E	36	MDB&M	
641919	SW 322	NYE	301390				13N	44.5E	36	MDB&M	
641920	SW 323	NYE	301391				13N	44.5E	36	MDB&M	
641921	SW 324	NYE	301392				13N	44.5E	36	MDB&M	
641922	SW 325	NYE	301393				13N	44.5E	36	MDB&M	
641923	SW 326	NYE	301394				13N	44.5E	36	MDB&M	
641924	SW 327	NYE	301395				13N	44.5E	36	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
641925	SW 328	NYE	301396				13N	44.5E	36	MDB&M	
641926	SW 329	NYE	301397				13N	44.5E	36	MDB&M	
641927	SW 330	NYE	301398				13N	44.5E	36	MDB&M	
641928	SW 331	NYE	301399				13N	44.5E	36	MDB&M	
641929	SW 332	NYE	301400				13N	44.5E	36	MDB&M	
641930	SW 333	NYE	301401				13N	45E	33	MDB&M	
641931	SW 334	NYE	301402				12N	45E	4	MDB&M	
641932	SW 335	NYE	301403				13N	45E	33	MDB&M	
641933	SW 336	NYE	301404				12N	45E	4	MDB&M	
641945	SW 348	NYE	301416				12N	44.5E	1	MDB&M	
641946	SW 349	NYE	301417				12N	44.5E	1	MDB&M	
641947	SW 350	NYE	301418				12N	44.5E	1	MDB&M	
641954	SW 357	NYE	301425				12N 13N	45E	4 33	MDB&M	
641955	SW 358	NYE	301426				12N	45E	4	MDB&M	
641956	SW 359	NYE	301427				12N 13N	45E	4 33	MDB&M	
641957	SW 360	NYE	301428				12N	45E	4	MDB&M	
641958	SW 361	NYE	301429				12N 13N	45E	4 33	MDB&M	
641959	SW 362	NYE	301430				12N	45E	4	MDB&M	
641960	SW 363	NYE	301431				12N 13N	45E	4 33	MDB&M	
641961	SW 364	NYE	301432				12N	45E	4	MDB&M	
641962	SW 365	NYE	301433				12N 13N	45E	4 33	MDB&M	
641963	SW 366	NYE	301434				12N	45E	4	MDB&M	
641964	SW 367	NYE	301435				12N 13N	45E	4 33	MDB&M	
641966	SW 369	NYE	301437				12N 13N	45E	4 33	MDB&M	
641968	SW 371	NYE	301439				12N 13N	45E	4,5 32,33	MDB&M	
641970	SW 373	NYE	301441				12N 13N	45E	5 32	MDB&M	
641972	SW 375	NYE	301443				12N 13N	45E	5 32	MDB&M	
641974	SW 377	NYE	301445				12N 13N	45E	5 32	MDB&M	
641976	SW 379	NYE	301447				12N 13N	45E	5 32	MDB&M	
641978	SW 381	NYE	301449				12N 13N	45E	5 32	MDB&M	
641980	SW 383	NYE	301451				12N 13N	45E	5 32	MDB&M	
641982	SW 385	NYE	301453				12N 13N	45E	5 32	MDB&M	
641984	SW 387	NYE	301455				12N 13N	45E	5 32	MDB&M	
641986	SW 389	NYE	301457				12N 13N	45E	5,6 31,32	MDB&M	
641988	SW 391	NYE	301459				12N 13N	45E	6 31	MDB&M	
641990	SW 393	NYE	301461				12N 13N	45E	6 31	MDB&M	
641992	SW 395	NYE	301463				12N 13N	45E	6 31	MDB&M	
641994	SW 397	NYE	301465				12N 13N	45E	6 31	MDB&M	
641996	SW 399	NYE	301467				12N 13N	45E	6 31	MDB&M	
641998	SW 401	NYE	301469				12N 13N	45E	6 31	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
642000	SW 403	NYE	301471				12N 13N	45E	6 31	MDB&M	
642001	SW 404	NYE	301472				12N	45E	6	MDB&M	
642002	SW 405	NYE	301473				12N 13N	45E	6 31	MDB&M	
642003	SW 406	NYE	301474				12N	45E	6	MDB&M	
642004	SW 407	NYE	301475				12N 13N	44.5E	1 36	MDB&M	
642005	SW 408	NYE	301476				12N	44.5E	1	MDB&M	
642006	SW 409	NYE	301477				12N 13N	44.5E	1 36	MDB&M	
642007	SW 410	NYE	301478				12N	44.5E	1	MDB&M	
642008	SW 411	NYE	301479				12N 13N	44.5E	1 36	MDB&M	
642009	SW 412	NYE	301480				12N	44.5E	1	MDB&M	
642010	SW 413	NYE	301481				12N 13N	44.5E	1 36	MDB&M	
642011	SW 414	NYE	301482				12N	44.5E	1	MDB&M	
642012	SW 415	NYE	301483				12N 13N	44.5E	1 36	MDB&M	
642013	SW 416	NYE	301484				12N	44.5E	1	MDB&M	
642014	SW 417	NYE	301485				12N 13N	44.5E	1 36	MDB&M	
642015	SW 418	NYE	301486				12N	44.5E	1	MDB&M	
642027	SW 430	NYE	301498				12N	45E	6	MDB&M	
642028	SW 431	NYE	301499				12N	45E	6	MDB&M	
642029	SW 432	NYE	301500				12N	44.5E	1	MDB&M	
642030	SW 433	NYE	301501				12N	44.5E	1	MDB&M	
642031	SW 434	NYE	301502				12N	44.5E	1	MDB&M	
642032	SW 435	NYE	301503				12N	44.5E	1	MDB&M	
642033	SW 436	NYE	301504				12N	44.5E	1	MDB&M	
642034	SW 437	NYE	301505				12N	44.5E	1	MDB&M	
642035	SW 438	NYE	301506				12N	44.5E	1	MDB&M	
642036	SW 439	NYE	301507				12N	44.5E	1	MDB&M	
642037	SW 440	NYE	301508				12N	44.5E	1	MDB&M	
642038	SW 441	NYE	301509				12N	44.5E	2	MDB&M	
642039	SW 442	NYE	301510				12N	44.5E	2	MDB&M	
642040	SW 443	NYE	301511				12N	44.5E	2	MDB&M	
642041	SW 444	NYE	301512				12N	44.5E	2	MDB&M	
656138	SW 445	NYE	311471				12N	45E	6	MDB&M	
656139	SW 446	NYE	311472				12N	45E	6,7	MDB&M	
656140	SW 447	NYE	311473				12N	45E	6	MDB&M	
656141	SW 448	NYE	311474				12N	45E	6,7	MDB&M	
656170	SW 477	NYE	311503				12N	45E	7	MDB&M	
630977	STUD 121	NYE	291791				13N	46E	30	MDB&M	
630978	STUD 122	NYE	291792				13N	46E	30	MDB&M	
657987	NE 968	NYE	313646				13.5N	45E	36	MDB&M	
657988	NE 969	NYE	313647				13.5N	45E	36	MDB&M	
657989	NE 970	NYE	313648				13.5N	45E	36	MDB&M	
657990	NE 971	NYE	313649				13.5N	45E	36	MDB&M	
657991	NE 972	NYE	313650				13.5N	45E	36	MDB&M	
658006	NE 987	NYE	313665				13N	45E	1	MDB&M	
658007	NE 988	NYE	313666				13N	45E	1	MDB&M	
658008	NE 989	NYE	313667				13N	45E	1	MDB&M	
658016	NE 997A	NYE	313675				13N	45E	1	MDB&M	
658017	NE 997	NYE	313676				13N	45E	1	MDB&M	
658018	NE 998	NYE	313677				13N	45E	1	MDB&M	
658019	NE 999	NYE	313678				13N	45E	1	MDB&M	
658020	NE 1000	NYE	313679				13N	45E	1	MDB&M	
658021	NE 1001	NYE	313680				13N	45E	1	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
										MDB&M	
656456	NE 1022	NYE	311791				13N	46E	8	MDB&M	
										MDB&M	
658049	NE 1107	NYE	313708				13.5N	45E	36	MDB&M	
658050	NE 1108	NYE	313709				13N 13.5N	45E	1 36	MDB&M	
658051	NE 1109	NYE	313710				13.5N	45E	36	MDB&M	
658052	NE 1110	NYE	313711				13N 13.5N	45E	1 36	MDB&M	
658053	NE 1111	NYE	313712				13.5N	45E	36	MDB&M	
658054	NE 1112	NYE	313713				13N 13.5N	45E	1 36	MDB&M	
658055	NE 1113	NYE	313714				13.5N	45E	36	MDB&M	
658056	NE 1114	NYE	313715				13N 13.5N	45E	1 36	MDB&M	
658057	NE 1115	NYE	313716				13.5N	45E	36	MDB&M	
658058	NE 1116	NYE	313717				13N 13.5N	45E	1 36	MDB&M	
658060	NE 1118	NYE	313719				13.5N	45.5E	36	MDB&M	
658062	NE 1120	NYE	313721				13.5N	45.5E	36	MDB&M	
658304	SE 1	NYE	312857				12N	46E	12	MDB&M	
658305	SE 2	NYE	312858				12N	46E	12	MDB&M	
658306	SE 3	NYE	312859				12N	46E	12	MDB&M	
658307	SE 4	NYE	312860				12N	46E	12	MDB&M	
658308	SE 5	NYE	312861				12N	46E	12	MDB&M	
658309	SE 6	NYE	312862				12N	46E	12	MDB&M	
658310	SE 7	NYE	312863				12N	46E	12	MDB&M	
658311	SE 8	NYE	312864				12N	46E	12	MDB&M	
658312	SE 9	NYE	312865				12N	46E	12	MDB&M	
658313	SE 10	NYE	312866				12N	46E	12	MDB&M	
658314	SE 11	NYE	312867				12N	46E	12	MDB&M	
658315	SE 12	NYE	312868				12N	46E	12	MDB&M	
658316	SE 13	NYE	312869				12N	46E	12	MDB&M	
658317	SE 14	NYE	312870				12N	46E	12	MDB&M	
658318	SE 15	NYE	312871				12N	46E	12	MDB&M	
658319	SE 16	NYE	312872				12N	46E	12	MDB&M	
658320	SE 17	NYE	312873				12N	46E	12,13	MDB&M	
658321	SE 18	NYE	312874				12N	46E	12,13	MDB&M	
658322	SE 19	NYE	312875				12N	46E	13	MDB&M	
658323	SE 20	NYE	312876				12N	46E	13	MDB&M	
658324	SE 21	NYE	312877				12N	46E	13	MDB&M	
658325	SE 22	NYE	312878				12N	46E	13	MDB&M	
658326	SE 23	NYE	312879				12N	46E	13	MDB&M	
658327	SE 24	NYE	312880				12N	46E	13	MDB&M	
658328	SE 25	NYE	312881				12N	46E	13	MDB&M	
658329	SE 26	NYE	312882				12N	46E	13	MDB&M	
658330	SE 27	NYE	312883				12N	46E	13	MDB&M	
658331	SE 28	NYE	312884				12N	46E	13	MDB&M	
658332	SE 29	NYE	312885				12N	46E	13	MDB&M	
658333	SE 30	NYE	312886				12N	46E	13	MDB&M	
658334	SE 31	NYE	312887				12N	46E	13	MDB&M	
658335	SE 32	NYE	312888				12N	46E	13	MDB&M	
658336	SE 33	NYE	312889				12N	46E	13	MDB&M	
658337	SE 34	NYE	312890				12N	46E	13	MDB&M	
658338	SE 35	NYE	312891				12N	46E	13,24	MDB&M	
658339	SE 36	NYE	312892				12N	46E	13,24	MDB&M	
664404	SWA 1	NYE	319823				12N	45E	6	MDB&M	
664405	SWA 2	NYE	319824				12N	45E	6,7	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
664406	SWA 3	NYE	319825				12N	44.5E	1	MDB&M	
664407	SWA 4	NYE	319826				12N	44.5E	1,12	MDB&M	
664408	SWA 5	NYE	319827				12N	44.5E	1	MDB&M	
664409	SWA 6	NYE	319828				12N	44.5E	1,12	MDB&M	
664410	SWA 7	NYE	319829				12N	44.5E	1	MDB&M	
664411	SWA 8	NYE	319830				12N	44.5E	1,12	MDB&M	
664412	SWA 9	NYE	319831				12N	44.5E	1	MDB&M	
664413	SWA 10	NYE	319832				12N	44.5E	1,12	MDB&M	
664414	SWA 11	NYE	319833				12N	44.5E	1	MDB&M	
664415	SWA 12	NYE	319834				12N	44.5E	1,12	MDB&M	
664416	SWA 13	NYE	319835				12N	44.5E	1	MDB&M	
664417	SWA 14	NYE	319836				12N	44.5E	1,12	MDB&M	
664418	SWA 15	NYE	319837				12N	44.5E	1	MDB&M	
664419	SWA 16	NYE	319838				12N	44.5E	1,12	MDB&M	
664420	SWA 17	NYE	319839				12N	44.5E	1	MDB&M	
664421	SWA 18	NYE	319840				12N	44.5E	1,12	MDB&M	
664422	SWA 19	NYE	319841				12N	44.5E	1,2	MDB&M	
664423	SWA 20	NYE	319842				12N	44.5E	1,2,11,12	MDB&M	
664424	SWA 21	NYE	319843				12N	44.5E	2	MDB&M	
664425	SWA 22	NYE	319844				12N	44.5E	11	MDB&M	
664426	SWA 23	NYE	319845				T12N	R45E	7	MDB&M	
664428	SWA 25	NYE	319847				12N	44.5E	12	MDB&M	
664429	SWA 26	NYE	319848				12N	44.5E	12	MDB&M	
664430	SWA 27	NYE	319849				12N	44.5E	12	MDB&M	
664431	SWA 28	NYE	319850				12N	44.5E	12	MDB&M	
664432	SWA 29	NYE	319851				12N	44.5E	12	MDB&M	
664433	SWA 30	NYE	319852				12N	44.5E	12	MDB&M	
664434	SWA 31	NYE	319853				12N	44.5E	12	MDB&M	
664435	SWA 32	NYE	319854				12N	44.5E	12	MDB&M	
664436	SWA 33	NYE	319855				12N	44.5E	12	MDB&M	
664437	SWA 34	NYE	319856				12N	44.5E	12	MDB&M	
664438	SWA 35	NYE	319857				12N	44.5E	12	MDB&M	
664439	SWA 36	NYE	319858				12N	44.5E	12	MDB&M	
664440	SWA 37	NYE	319859				12N	44.5E	12	MDB&M	
664441	SWA 38	NYE	319860				12N	44.5E	12	MDB&M	
664442	SWA 39	NYE	319861				12N	44.5E	12	MDB&M	
664443	SWA 40	NYE	319862				12N	44.5E	12	MDB&M	
664444	SWA 41	NYE	319863				12N	44.5E	11,12	MDB&M	
664445	SWA 42	NYE	319864				12N	44.5E	11,12	MDB&M	
664446	SWA 43	NYE	319865				12N	44.5E	11	MDB&M	
664447	SWA 44	NYE	319866				12N	44.5E	11	MDB&M	
667096	SWB 1	NYE	320670				13N	44.5E	36	MDB&M	
667097	SWB 2	NYE	320671				13N	44.5E	36	MDB&M	
667098	SWB 3	NYE	320672				13N	44.5E	36	MDB&M	
667099	SWB 4	NYE	320673				13N	44.5E	36	MDB&M	
667100	SWB 5	NYE	320674				13N	44.5E	35,36	MDB&M	
667101	SWB 6	NYE	320675				13N	44.5E	35,36	MDB&M	
667102	SWB 7	NYE	320676				13N	44.5E	35	MDB&M	
667103	SWB 8	NYE	320677				13N	44.5E	35	MDB&M	
667104	SWB 9	NYE	320678				12N	44E 44.5E	12 35	MDB&M	
667105	SWB 10	NYE	320679				12N	44E 44.5E	1,12 35	MDB&M	
667106	SWB 11	NYE	320680				12N	44E 44.5E	1 35	MDB&M	
667107	SWB 12	NYE	320681				12N	44E 44.5E	1 35	MDB&M	
667108	SWB 13	NYE	320682				12N	44E 44.5E	1 35	MDB&M	
667109	SWB 14	NYE	320683				13N	44.5E	36	MDB&M	
667110	SWB 15	NYE	320684				13N	44.5E	36	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
667111	SWB 16	NYE	320685				13N	44.5E	35,36	MDB&M	
667112	SWB 17	NYE	320686				13N	44.5E	35	MDB&M	
667113	SWB 18	NYE	320687				13N	44.5E	35	MDB&M	
667114	SWB 19	NYE	320688				12N	44E	1	MDB&M	
667115	SWB 20	NYE	320689				12N	44E	1	MDB&M	
667116	SWB 21	NYE	320690				12N	44E	1	MDB&M	
667117	SWB 22	NYE	320691				12N	44E	1	MDB&M	
667118	SWB 23	NYE	320692				12N	44E	1	MDB&M	
667119	SWB 24	NYE	320693				12N	44E	1	MDB&M	
667120	SWB 25	NYE	320694				12N	44E	1	MDB&M	
679393	SWB 26	NYE	333918				12N	44E	12	MDB&M	
679394	SWB 27	NYE	333919				12N 13N	44.5E	12 35	MDB&M	
679395	SWB 28	NYE	333920				12N 13N	44.5E	12 35	MDB&M	
679396	SWB 29	NYE	333921				12N 13N	44.5E	1 36	MDB&M	
679397	SWB 30	NYE	333922				12N 13N	44.5E	1 36	MDB&M	
679398	SWB 31	NYE	333923				12N 13N	44.5E	1 36	MDB&M	
718939	RCL 1	NYE	377127				13N	45E	15,16	MDB&M	
718940	RCL 2	NYE	377128				13N	45E	16	MDB&M	
718941	RCL 3	NYE	377129				13N	45E	16	MDB&M	
718942	RCL 4	NYE	377130				13N	45E	16	MDB&M	
718943	RCL 5	NYE	377131				13N	45E	16	MDB&M	
718944	RCL 6	NYE	377132				13N	45E	16	MDB&M	
718945	RCL 7	NYE	377133				13N	45E	16	MDB&M	
718946	RCL 8	NYE	377134				13N	45E	16	MDB&M	
718947	RCL 9	NYE	377135				13N	45E	16	MDB&M	
718948	RCL 10	NYE	377136				13N	45E	16,17	MDB&M	
718949	RCL 11	NYE	377137				13N	45E	17	MDB&M	
718950	RCL 12	NYE	377138				13N	45E	17	MDB&M	
718951	RCL 13	NYE	377139				13N	45E	17	MDB&M	
718952	RCL 14	NYE	377140				13N	45E	17	MDB&M	
718953	RCL 15	NYE	377141				13N	45E	17	MDB&M	
718954	RCL 16	NYE	377142				13N	45E	17	MDB&M	
718955	RCL 17	NYE	377143				13N	45E	17	MDB&M	
718956	RCL 18	NYE	377144				13N	45E	17	MDB&M	
718957	RCL 19	NYE	377145				13N	45E	17	MDB&M	
718958	RCL 20	NYE	377146				13N	45E	17	MDB&M	
718959	RCL 21	NYE	377147				13N	45E	17	MDB&M	
718960	RCL 22	NYE	377148				13N	45E	17	MDB&M	
718961	RCL 23	NYE	377149				13N	45E	17	MDB&M	
718962	RCL 24	NYE	377150				13N	45E	17	MDB&M	
718963	RCL 25	NYE	377151				13N	45E	17	MDB&M	
718964	RCL 26	NYE	377152				13N	45E	17	MDB&M	
718965	RCL 27	NYE	377153				13N	45E	17	MDB&M	
718966	RCL 28	NYE	377154				13N	45E	17	MDB&M	
718967	RCL 29	NYE	377155				13N	45E	16,17	MDB&M	
718968	RCL 30	NYE	377156				13N	45E	16,17	MDB&M	
718969	RCL 31	NYE	377157				13N	45E	16	MDB&M	
718970	RCL 32	NYE	377158				13N	45E	16	MDB&M	
718971	RCL 33	NYE	377159				13N	45E	16	MDB&M	
718972	RCL 34	NYE	377160				13N	45E	16	MDB&M	
718973	RCL 35	NYE	377161				13N	45E	16	MDB&M	
718974	RCL 36	NYE	377162				13N	45E	16	MDB&M	
718975	RCL 37	NYE	377163				13N	45E	16	MDB&M	
718976	RCL 38	NYE	377164				13N	45E	16	MDB&M	
718977	RCL 39	NYE	377165				13N	45E	16	MDB&M	
718978	RCL 40	NYE	377166				13N	45E	16	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
718979	RCL 41	NYE	377167				13N	45E	16	MDB&M	
718980	RCL 42	NYE	377168				13N	45E	16	MDB&M	
718981	RCL 43	NYE	377169				13N	45E	16	MDB&M	
718982	RCL 44	NYE	377170				13N	45E	16	MDB&M	
718983	RCL 45	NYE	377171				13N	45E	16	MDB&M	
718984	RCL 46	NYE	377172				13N	45E	16	MDB&M	
718985	RCL 47	NYE	377173				13N	45E	15,16	MDB&M	
718986	RCL 48	NYE	377174				13N	45E	15,16	MDB&M	
718987	RCL 49	NYE	377175				13N	45E	20	MDB&M	
718988	RCL 50	NYE	377176				13N	45E	20	MDB&M	
718989	RCL 51	NYE	377177				13N	45E	20	MDB&M	
718990	RCL 52	NYE	377178				13N	45E	20	MDB&M	
718991	RCL 53	NYE	377179				13N	45E	20	MDB&M	
718992	RCL 54	NYE	377180				13N	45E	20	MDB&M	
718993	RCL 55	NYE	377181				13N	45E	20	MDB&M	
718994	RCL 56	NYE	377182				13N	45E	20	MDB&M	
718995	RCL 57	NYE	377183				13N	45E	20	MDB&M	
718996	RCL 58	NYE	377184				13N	45E	20	MDB&M	
718997	RCL 59	NYE	377185				13N	45E	20	MDB&M	
718998	RCL 60	NYE	377186				13N	45E	20,21	MDB&M	
718999	RCL 61	NYE	377187				13N	45E	21	MDB&M	
719000	RCL 62	NYE	377188				13N	45E	21	MDB&M	
719001	RCL 63	NYE	377189				13N	45E	21	MDB&M	
719002	RCL 64	NYE	377190				13N	45E	21	MDB&M	
719003	RCL 65	NYE	377191				13N	45E	21	MDB&M	
719004	RCL 66	NYE	377192				13N	45E	21	MDB&M	
719005	RCL 67	NYE	377193				13N	45E	21	MDB&M	
719006	RCL 68	NYE	377194				13N	45E	21	MDB&M	
719007	RCL 69	NYE	377195				13N	45E	21,22	MDB&M	
719008	RCL 70	NYE	377196				13N	45E	20	MDB&M	
719009	RCL 71	NYE	377197				13N	45E	20	MDB&M	
719010	RCL 72	NYE	377198				13N	45E	20	MDB&M	
719011	RCL 73	NYE	377199				13N	45E	20	MDB&M	
719012	RCL 74	NYE	377200				13N	45E	20	MDB&M	
719013	RCL 75	NYE	377201				13N	45E	20	MDB&M	
719014	RCL 76	NYE	377202				13N	45E	20	MDB&M	
719015	RCL 77	NYE	377203				13N	45E	20	MDB&M	
719016	RCL 78	NYE	377204				13N	45E	20	MDB&M	
719017	RCL 79	NYE	377205				13N	45E	20	MDB&M	
871860	GATE 1	NYE		595456			13N	46E	16	MDB&M	
871861	GATE 2	NYE		595457			13N	46E	16,21	MDB&M	
871862	GATE 3	NYE		595458			13N	46E	15,16	MDB&M	
871863	GATE 4	NYE		595459			13N	46E	15,16,21,22	MDB&M	
871864	GATE 5	NYE		595460			13N	46E	15	MDB&M	
871865	GATE 6	NYE		595461			13N	46E	15,22	MDB&M	
871866	GATE 7	NYE		595462			13N	46E	15	MDB&M	
871867	GATE 8	NYE		595463			13N	46E	15,22	MDB&M	
871868	GATE 9	NYE		595464			13N	46E	15	MDB&M	
871869	GATE 10	NYE		595465			13N	46E	22	MDB&M	
871870	GATE 11	NYE		595466			13N	46E	15	MDB&M	
871871	GATE 12	NYE		595467			13N	46E	15,22	MDB&M	
871872	GATE 13	NYE		595468			13N	46E	15	MDB&M	
871873	GATE 14	NYE		595469			13N	46E	15,22	MDB&M	
871874	GATE 15	NYE		595470			13N	46E	15	MDB&M	
871875	GATE 16	NYE		595471			13N	46E	15,22	MDB&M	
871876	GATE 17	NYE		595472			13N	46E	15	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
871877	GATE 18	NYE		595473			13N	46E	15,22	MDB&M	
871878	GATE 19	NYE		595474			13N	46E	15	MDB&M	
871879	GATE 20	NYE		595475			13N	46E	15,22	MDB&M	
871880	GATE 21	NYE		595476			13N	46E	15	MDB&M	
871881	GATE 22	NYE		595477			13N	46E	14,15,22,23	MDB&M	
871882	GATE 23	NYE		595478			13N	46E	14	MDB&M	
871883	GATE 24	NYE		595479			13N	46E	14,23	MDB&M	
871884	GATE 25	NYE		595480			13N	46E	14	MDB&M	
871885	GATE 26	NYE		595481			13N	46E	14,23	MDB&M	
871886	GATE 27	NYE		595482			13N	46E	14	MDB&M	
871887	GATE 28	NYE		595483			13N	46E	14,23	MDB&M	
871888	GATE 29	NYE		595484			13N	46E	14	MDB&M	
871889	GATE 30	NYE		595485			13N	46E	14,23	MDB&M	
871890	GATE 31	NYE		595486			13N	46E	21	MDB&M	
871891	GATE 32	NYE		595487			13N	46E	21	MDB&M	
871892	GATE 33	NYE		595488			13N	46E	21,22	MDB&M	
871893	GATE 34	NYE		595489			13N	46E	21,22	MDB&M	
871894	GATE 35	NYE		595490			13N	46E	22	MDB&M	
871895	GATE 36	NYE		595491			13N	46E	22	MDB&M	
871896	GATE 37	NYE		595492			13N	46E	22	MDB&M	
871897	GATE 38	NYE		595493			13N	46E	22	MDB&M	
871898	GATE 39	NYE		595494			13N	46E	22	MDB&M	
871899	GATE 40	NYE		595495			13N	46E	22	MDB&M	
871900	GATE 41	NYE		595496			13N	46E	22	MDB&M	
871901	GATE 42	NYE		595497			13N	46E	22	MDB&M	
871902	GATE 43	NYE		595498			13N	46E	22	MDB&M	
871903	GATE 44	NYE		595499			13N	46E	22	MDB&M	
871904	GATE 45	NYE		595500			13N	46E	22	MDB&M	
871905	GATE 46	NYE		595501			13N	46E	22	MDB&M	
871906	GATE 47	NYE		595502			13N	46E	22	MDB&M	
871907	GATE 48	NYE		595503			13N	46E	22	MDB&M	
871908	GATE 49	NYE		595504			13N	46E	22	MDB&M	
871909	GATE 50	NYE		595505			13N	46E	22	MDB&M	
871910	GATE 51	NYE		595506			13N	46E	22,23	MDB&M	
871911	GATE 52	NYE		595507			13N	46E	22,23	MDB&M	
871912	GATE 53	NYE		595508			13N	46E	23	MDB&M	
871913	GATE 54	NYE		595509			13N	46E	23	MDB&M	
871914	GATE 55	NYE		595510			13N	46E	23	MDB&M	
871915	GATE 56	NYE		595511			13N	46E	23	MDB&M	
871916	GATE 57	NYE		595512			13N	46E	23	MDB&M	
871917	GATE 58	NYE		595513			13N	46E	23	MDB&M	
871918	GATE 59	NYE		595514			13N	46E	23	MDB&M	
871919	GATE 60	NYE		595515			13N	46E	23	MDB&M	
871920	GATE 61	NYE		595516			13N	46E	21,28	MDB&M	
871921	GATE 62	NYE		595517			13N	46E	27,28	MDB&M	
871922	GATE 63	NYE		595518			13N	46E	21,22,27,28	MDB&M	
871923	GATE 64	NYE		595519			13N	46E	27,28	MDB&M	
871924	GATE 65	NYE		595520			13N	46E	22,27	MDB&M	
871925	GATE 66	NYE		595521			13N	46E	27	MDB&M	
871926	GATE 67	NYE		595522			13N	46E	22,27	MDB&M	
871927	GATE 68	NYE		595523			13N	46E	27	MDB&M	
871928	GATE 69	NYE		595524			13N	46E	22	MDB&M	
871929	GATE 70	NYE		595525			13N	46E	22,27	MDB&M	
871930	GATE 71	NYE		595526			13N	46E	22	MDB&M	
871931	GATE 72	NYE		595527			13N	46E	22,27	MDB&M	
871932	GATE 73	NYE		595528			13N	46E	22	MDB&M	
871933	GATE 74	NYE		595529			13N	46E	22,27	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
871934	GATE 75	NYE		595530			13N	46E	22	MDB&M	
871935	GATE 76	NYE		595531			13N	46E	22,27	MDB&M	
871936	GATE 77	NYE		595532			13N	46E	22	MDB&M	
871937	GATE 78	NYE		595533			13N	46E	22,27	MDB&M	
871938	GATE 79	NYE		595534			13N	46E	22,23	MDB&M	
871939	GATE 80	NYE		595535			13N	46E	22,23,26,27	MDB&M	
871940	GATE 81	NYE		595536			13N	46E	22,23	MDB&M	
871941	GATE 82	NYE		595537			13N	46E	23,26	MDB&M	
871942	GATE 83	NYE		595538			13N	46E	23	MDB&M	
871943	GATE 84	NYE		595539			13N	46E	23,26	MDB&M	
871944	GATE 85	NYE		595540			13N	46E	23	MDB&M	
871945	GATE 86	NYE		595541			13N	46E	23,26	MDB&M	
871946	GATE 87	NYE		595542			13N	46E	23	MDB&M	
871947	GATE 88	NYE		595543			13N	46E	23,26	MDB&M	
871948	GATE 89	NYE		595544			13N	46E	23	MDB&M	
871949	GATE 90	NYE		595545			13N	46E	23,26	MDB&M	
871950	GATE 91	NYE		595546			13N	46E	27	MDB&M	
871951	GATE 92	NYE		595547			13N	46E	27	MDB&M	
871952	GATE 93	NYE		595548			13N	46E	27	MDB&M	
871953	GATE 94	NYE		595549			13N	46E	27	MDB&M	
871954	GATE 95	NYE		595550			13N	46E	27	MDB&M	
871955	GATE 96	NYE		595551			13N	46E	27	MDB&M	
871956	GATE 97	NYE		595552			13N	46E	27	MDB&M	
871957	GATE 98	NYE		595553			13N	46E	27	MDB&M	
871958	GATE 99	NYE		595554			13N	46E	27	MDB&M	
871959	GATE 100	NYE		595555			13N	46E	27	MDB&M	
871960	GATE 101	NYE		595556			13N	46E	27	MDB&M	
871961	GATE 102	NYE		595557			13N	46E	27	MDB&M	
871962	GATE 103	NYE		595558			13N	46E	26,27	MDB&M	
871963	GATE 104	NYE		595559			13N	46E	26,27	MDB&M	
871964	GATE 105	NYE		595560			13N	46E	26	MDB&M	
871965	GATE 106	NYE		595561			13N	46E	26	MDB&M	
871966	GATE 107	NYE		595562			13N	46E	26	MDB&M	
871967	GATE 108	NYE		595563			13N	46E	26	MDB&M	
871968	GATE 109	NYE		595564			13N	46E	26	MDB&M	
871969	GATE 110	NYE		595565			13N	46E	26	MDB&M	
871970	GATE 111	NYE		595566			13N	46E	26	MDB&M	
871971	GATE 112	NYE		595567			13N	46E	26	MDB&M	
871972	GATE 113	NYE		595568			13N	46E	26	MDB&M	
871973	GATE 114	NYE		595569			13N	46E	26	MDB&M	
871974	GATE 115	NYE		595570			13N	46E	27,34	MDB&M	
871975	GATE 116	NYE		595571			13N	46E	27,34	MDB&M	
871976	GATE 117	NYE		595572			13N	46E	27,34	MDB&M	
871977	GATE 118	NYE		595573			13N	46E	27,34	MDB&M	
871978	GATE 119	NYE		595574			13N	46E	27,34	MDB&M	
871979	GATE 120	NYE		595575			13N	46E	27,34	MDB&M	
871980	GATE 121	NYE		595576			13N	46E	26,27,34,35	MDB&M	
871981	GATE 122	NYE		595577			13N	46E	26,35	MDB&M	
871982	GATE 123	NYE		595578			13N	46E	26,35	MDB&M	
871983	GATE 124	NYE		595579			13N	46E	26,35	MDB&M	
871984	GATE 125	NYE		595580			13N	46E	26,35	MDB&M	
871985	GATE 126	NYE		595581			13N	46E	26,35	MDB&M	
871986	PLUG 1	NYE		595412			13N	46E	30	MDB&M	
871987	PLUG 2	NYE		595413			13N	46E	30	MDB&M	
871988	PLUG 3	NYE		595414			13N	46E	30	MDB&M	
871989	PLUG 4	NYE		595415			13N	46E	30	MDB&M	
871990	PLUG 5	NYE		595416			13N	46E	30	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
871991	PLUG 6	NYE		595417			13N	46E	30	MDB&M	
871992	PLUG 7	NYE		595418			13N	46E	30	MDB&M	
871993	PLUG 8	NYE		595419			13N	46E	30	MDB&M	
871994	PLUG 9	NYE		595420			13N	46E	30	MDB&M	
871995	PLUG 10	NYE		595421			13N	46E	30	MDB&M	
871996	PLUG 11	NYE		595422			13N	45E 46E	25, 36 30,31	MDB&M	
871997	PLUG 12	NYE		595423			13N	45E 46E	36 31	MDB&M	
871998	PLUG 13	NYE		595424			13N	46E	30,31	MDB&M	
871999	PLUG 14	NYE		595425			13N	46E	31	MDB&M	
872000	PLUG 15	NYE		595426			13N	46E	30,31	MDB&M	
872001	PLUG 16	NYE		595427			13N	46E	31	MDB&M	
872002	PLUG 17	NYE		595428			13N	46E	30,31	MDB&M	
872003	PLUG 18	NYE		595429			13N	46E	31	MDB&M	
872004	PLUG 19	NYE		595430			13N	46E	30,31	MDB&M	
872005	PLUG 20	NYE		595431			13N	46E	31	MDB&M	
872006	PLUG 21	NYE		595432			13N	46E	30,31	MDB&M	
872007	PLUG 22	NYE		595433			13N	46E	31	MDB&M	
872008	PLUG 23	NYE		595434			13N	46E	31	MDB&M	
872009	PLUG 24	NYE		595435			13N	46E	31	MDB&M	
872010	PLUG 25	NYE		595436			13N	45E	36	MDB&M	
872011	PLUG 26	NYE		595437			13N	45E	36	MDB&M	
872012	PLUG 27	NYE		595438			13N	45E	36	MDB&M	
872013	PLUG 28	NYE		595439			13N	45E	36	MDB&M	
872014	PLUG 29	NYE		595440			13N	45E	36	MDB&M	
872015	PLUG 30	NYE		595441			13N	45E	36	MDB&M	
872016	PLUG 31	NYE		595442			13N	45E	36	MDB&M	
872017	PLUG 32	NYE		595443			13N	45E	31,36	MDB&M	
872018	PLUG 33	NYE		595444			13N	46E	31	MDB&M	
872019	PLUG 34	NYE		595445			13N	46E	31	MDB&M	
872020	PLUG 35	NYE		595446			13N	46E	31	MDB&M	
872021	PLUG 36	NYE		595447			13N	46E	31	MDB&M	
872022	PLUG 37	NYE		595448			13N	46E	31	MDB&M	
872023	PLUG 38	NYE		595449			13N	46E	31	MDB&M	
872024	PLUG 39	NYE		595450			13N	46E	31	MDB&M	
872025	PLUG 40	NYE		595451			13N	45E	36	MDB&M	
872026	PLUG 41	NYE		595452			13N	45E	25,36	MDB&M	
872027	PLUG 42	NYE		595453			13N	45E	25,30	MDB&M	
872028	PLUG 43	NYE		595454			13N	45E	25,30	MDB&M	
892839	ZIG 1	NYE					13N	44E	34,35	MDB&M	
892840	ZIG 2	NYE					12N 13N	44E	2 34,35	MDB&M	
892841	ZIG 3	NYE					13N	44E	34,35	MDB&M	
892842	ZIG 4	NYE					12N 13N	44E	2 35	MDB&M	
892843	ZIG 5	NYE					13N	44E	35	MDB&M	
892844	ZIG 6	NYE					12N 13N	44E	2 35	MDB&M	
892845	ZIG 7	NYE					13N	44E	35	MDB&M	
892846	ZIG 8	NYE					12N 13N	44E	2 35	MDB&M	
892847	ZIG 9	NYE					13N	44E	35	MDB&M	
892848	ZIG 10	NYE					12N 13N	44E	2 35	MDB&M	
892849	ZIG 11	NYE					13N	44E	35	MDB&M	
892850	ZIG 12	NYE					12N 13N	44E	2 35	MDB&M	
892851	ZIG 13	NYE					13N	44E	35	MDB&M	
892852	ZIG 14	NYE					12N 13N	44E	2 35	MDB&M	
892853	ZIG 15	NYE					13N	44E	35	MDB&M	
892854	ZIG 16	NYE					12N 13N	44E	2 35	MDB&M	
892855	ZIG 17	NYE					13N	44E	35	MDB&M	
892856	ZIG 18	NYE					12N 13N	44E	2 35,36	MDB&M	
892857	ZIG 19	NYE					13N	44E	35,36	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
892858	ZIG 20	NYE					12N 13N	44E	2 35,36	MDB&M	
892859	ZIG 21	NYE					12N	44E	2	MDB&M	
892860	ZIG 22	NYE					12N	44E	2	MDB&M	
892861	ZIG 23	NYE					12N	44E	2	MDB&M	
892862	ZIG 24	NYE					12N	44E	2	MDB&M	
892863	ZIG 25	NYE					12N	44E	2	MDB&M	
892864	ZIG 26	NYE					12N	44E	2	MDB&M	
892865	ZIG 27	NYE					12N	44E	2	MDB&M	
892866	ZIG 28	NYE					12N	44E	2	MDB&M	
892867	ZIG 29	NYE					12N	44E	2	MDB&M	
892868	ZIG 30	NYE					12N	44E	2	MDB&M	
892869	ZIG 31	NYE					12N	44E	2	MDB&M	
892870	ZIG 32	NYE					12N	44E	2	MDB&M	
892871	ZIG 33	NYE					12N	44E	2	MDB&M	
892872	ZIG 34	NYE					12N	44E	2	MDB&M	
892873	ZIG 35	NYE					12N	44E	2	MDB&M	
892874	ZIG 36	NYE					12N	44E	2	MDB&M	
892875	ZIG 37	NYE					12N	44E	1,2	MDB&M	
892876	ZIG 38	NYE					12N	44E	1,2	MDB&M	
892877	ZIG 39	NYE					12N	44E	1	MDB&M	
892878	ZIG 40	NYE					12N	44E	1	MDB&M	
892879	ZIG 41	NYE					12N	44E	2	MDB&M	
892880	ZIG 42	NYE					12N	44E	2	MDB&M	
892881	ZIG 43	NYE					12N	44E	2	MDB&M	
892882	ZIG 44	NYE					12N	44E	2	MDB&M	
892883	ZIG 45	NYE					12N	44E	2	MDB&M	
892884	ZIG 46	NYE					12N	44E	2	MDB&M	
892885	ZIG 47	NYE					12N	44E	2	MDB&M	
892886	ZIG 48	NYE					12N	44E	2	MDB&M	
892887	ZIG 49	NYE					12N	44E	1,2	MDB&M	
892888	ZIG 50	NYE					12N	44E	1	MDB&M	
892889	ZIG 51	NYE					12N	44E	1	MDB&M	
892890	ZIG 52	NYE					12N	44E	1	MDB&M	
892891	ZIG 53	NYE					12N	44E	1	MDB&M	
892892	ZIG 54	NYE					12N	44E	1	MDB&M	
892893	ZIG 55	NYE					12N	44E	1,12	MDB&M	
892894	ZIG 56	NYE					12N	44E	1	MDB&M	
892895	ZIG 57	NYE					12N	44E	1,12	MDB&M	
66584	Kay No. 18	NYE	213	305			13N	45E	14	MDB&M	
905108	THUMB 001	NYE				630972	0130N	0450E	1	MDB&M	
905109	THUMB 002	NYE				630973	0130N	0450E	1	MDB&M	
905110	THUMB 003	NYE				630974	0130N	0450E	1	MDB&M	
905111	THUMB 004	NYE				630975	0130N	0450E	1	MDB&M	
905112	THUMB 005	NYE				630976	0130N	0450E	1	MDB&M	
905113	THUMB 006	NYE				630977	0130N	0450E	1	MDB&M	
905114	THUMB 007	NYE				630978	0130N	0450E	2	MDB&M	
905115	THUMB 008	NYE				630979	0130N	0450E	2	MDB&M	
905116	THUMB 009	NYE				630980	0130N	0450E	2	MDB&M	
905117	THUMB 010	NYE				630981	0130N	0450E	1	MDB&M	
	THUMB 010	NYE					0130N	0450E	2	MDB&M	
905118	THUMB 011	NYE				630982	0130N	0450E	1	MDB&M	
	THUMB 011	NYE					0130N	0450E	2	MDB&M	
905119	THUMB 012	NYE				630983	0130N	0450E	1	MDB&M	
905120	THUMB 013	NYE				630984	0130N	0450E	1	MDB&M	
905121	THUMB 014	NYE				630985	0130N	0450E	1	MDB&M	
905122	THUMB 015	NYE				630986	0130N	0450E	1	MDB&M	
905123	THUMB 016	NYE				630987	0130N	0450E	1	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
905124	THUMB 017	NYE				630988	0130N	0450E	1	MDB&M	
905125	THUMB 018	NYE				630989	0130N	0450E	1	MDB&M	
905126	THUMB 019	NYE				630990	0130N	0450E	1	MDB&M	
905127	THUMB 020	NYE				630991	0130N	0450E	1	MDB&M	
905128	THUMB 021	NYE				630992	0130N	0450E	1	MDB&M	
905129	THUMB 022	NYE				630993	0130N	0450E	1	MDB&M	
905130	THUMB 023	NYE				630994	0130N	0450E	1	MDB&M	
905131	THUMB 024	NYE				630995	0130N	0450E	1	MDB&M	
905132	THUMB 025	NYE				630996	0130N	0450E	1	MDB&M	
905133	THUMB 026	NYE				630997	0130N	0450E	1	MDB&M	
905134	THUMB 027	NYE				630998	0130N	0450E	1	MDB&M	
905135	THUMB 028	NYE				630999	0130N	0450E	1	MDB&M	
	THUMB 028	NYE					0130N	0460E	6	MDB&M	
905136	THUMB 029	NYE				631000	0130N	0450E	1	MDB&M	
	THUMB 029	NYE					0130N	0460E	6	MDB&M	
905137	THUMB 030	NYE				631001	0130N	0460E	6	MDB&M	
905138	THUMB 031	NYE				631002	0130N	0460E	6	MDB&M	
905139	THUMB 032	NYE				631003	0130N	0460E	6	MDB&M	
905140	THUMB 033	NYE				631004	0130N	0450E	10	MDB&M	
905141	THUMB 034	NYE				631005	0130N	0450E	10	MDB&M	
905142	THUMB 035	NYE				631006	0130N	0450E	3	MDB&M	
	THUMB 035	NYE					0130N	0450E	10	MDB&M	
905143	THUMB 036	NYE				631007	0130N	0450E	10	MDB&M	
905144	THUMB 037	NYE				631008	0130N	0450E	3	MDB&M	
	THUMB 037	NYE					0130N	0450E	10	MDB&M	
905145	THUMB 038	NYE				631009	0130N	0450E	10	MDB&M	
905146	THUMB 039	NYE				631010	0130N	0450E	2	MDB&M	
	THUMB 039	NYE					0130N	0450E	3	MDB&M	
	THUMB 039	NYE					0130N	0450E	10	MDB&M	
	THUMB 039	NYE					0130N	0450E	11	MDB&M	
905147	THUMB 040	NYE				931011	0130N	0450E	10	MDB&M	
	THUMB 040	NYE					0130N	0450E	11	MDB&M	
905148	THUMB 041	NYE				631012	0130N	0450E	2	MDB&M	
	THUMB 041	NYE					0130N	0450E	11	MDB&M	
905149	THUMB 042	NYE				631013	0130N	0450E	11	MDB&M	
905150	THUMB 043	NYE				631014	0130N	0450E	2	MDB&M	
	THUMB 043	NYE					0130N	0450E	11	MDB&M	
905151	THUMB 044	NYE				631015	0130N	0450E	11	MDB&M	
905152	THUMB 045	NYE				631016	0130N	0450E	2	MDB&M	
	THUMB 045	NYE					0130N	0450E	11	MDB&M	
905153	THUMB 046	NYE				631017	0130N	0450E	11	MDB&M	
905154	THUMB 047	NYE				631018	0130N	0450E	2	MDB&M	
	THUMB 047	NYE					0130N	0450E	11	MDB&M	
905155	THUMB 048	NYE				631019	0130N	0450E	11	MDB&M	
905156	THUMB 049	NYE				631020	0130N	0450E	2	MDB&M	
	THUMB 049	NYE					0130N	0450E	11	MDB&M	
905157	THUMB 050	NYE				631021	0130N	0450E	11	MDB&M	
905158	THUMB 051	NYE				631022	0130N	0450E	2	MDB&M	
	THUMB 051	NYE					0130N	0450E	11	MDB&M	
905159	THUMB 052	NYE				631023	0130N	0450E	11	MDB&M	
905160	THUMB 053	NYE				631024	0130N	0450E	2	MDB&M	
	THUMB 053	NYE					0130N	0450E	11	MDB&M	
905161	THUMB 054	NYE				631025	0130N	0450E	11	MDB&M	
905162	THUMB 055	NYE				631026	0130N	0450E	1	MDB&M	
	THUMB 055	NYE					0130N	0450E	2	MDB&M	
	THUMB 055	NYE					0130N	0450E	11	MDB&M	
	THUMB 055	NYE					0130N	0450E	12	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
905163	THUMB 056	NYE				631027	0130N	0450E	11	MDB&M	
	THUMB 056	NYE					0130N	0450E	12	MDB&M	
905164	THUMB 057	NYE				631028	0130N	0450E	1	MDB&M	
	THUMB 057	NYE					0130N	0450E	12	MDB&M	
905165	THUMB 058	NYE				631029	0130N	0450E	12	MDB&M	
905166	THUMB 059	NYE				631030	0130N	0450E	1	MDB&M	
	THUMB 059	NYE					0130N	0450E	12	MDB&M	
905167	THUMB 060	NYE				631031	0130N	0450E	12	MDB&M	
905168	THUMB 061	NYE				631032	0130N	0450E	1	MDB&M	
	THUMB 061	NYE					0130N	0450E	12	MDB&M	
905169	THUMB 062	NYE				631033	0130N	0450E	12	MDB&M	
905170	THUMB 063	NYE				631034	0130N	0450E	1	MDB&M	
	THUMB 063	NYE					0130N	0450E	12	MDB&M	
905171	THUMB 064	NYE				631035	0130N	0450E	12	MDB&M	
905172	THUMB 065	NYE				631036	0130N	0450E	1	MDB&M	
	THUMB 065	NYE					0130N	0450E	12	MDB&M	
905173	THUMB 066	NYE				631037	0130N	0450E	12	MDB&M	
905174	THUMB 067	NYE				631038	0130N	0450E	1	MDB&M	
	THUMB 067	NYE					0130N	0450E	12	MDB&M	
905175	THUMB 068	NYE				631039	0130N	0450E	12	MDB&M	
905176	THUMB 069	NYE				631040	0130N	0450E	1	MDB&M	
	THUMB 069	NYE					0130N	0450E	12	MDB&M	
905177	THUMB 070	NYE				631041	0130N	0450E	12	MDB&M	
905178	THUMB 071	NYE				631042	0130N	0450E	1	MDB&M	
	THUMB 071	NYE					0130N	0450E	12	MDB&M	
905179	THUMB 072	NYE				631043	0130N	0450E	1	MDB&M	
	THUMB 072	NYE					0130N	0450E	12	MDB&M	
	THUMB 072	NYE					0130N	0460E	6	MDB&M	
	THUMB 072	NYE					0130N	0460E	7	MDB&M	
905180	THUMB 073	NYE				961044	0130N	0450E	9	MDB&M	
	THUMB 073	NYE					0130N	0450E	10	MDB&M	
905181	THUMB 074	NYE				631045	0130N	0450E	10	MDB&M	
905182	THUMB 075	NYE				631046	0130N	0450E	10	MDB&M	
905183	THUMB 076	NYE				631047	0130N	0450E	10	MDB&M	
905184	THUMB 077	NYE				631048	0130N	0450E	10	MDB&M	
905185	THUMB 078	NYE				631049	0130N	0450E	10	MDB&M	
905186	THUMB 079	NYE				631050	0130N	0450E	10	MDB&M	
905187	THUMB 080	NYE				631051	0130N	0450E	10	MDB&M	
905188	THUMB 081	NYE				631052	0130N	0450E	10	MDB&M	
905189	THUMB 082	NYE				631053	0130N	0450E	10	MDB&M	
	THUMB 082	NYE					0130N	0450E	11	MDB&M	
905190	THUMB 083	NYE				631054	0130N	0450E	11	MDB&M	
905191	THUMB 084	NYE				631055	0130N	0450E	11	MDB&M	
905192	THUMB 085	NYE				631056	0130N	0450E	11	MDB&M	
905193	THUMB 086	NYE				631057	0130N	0450E	11	MDB&M	
	THUMB 086	NYE					0130N	0450E	12	MDB&M	
905194	THUMB 087	NYE				631058	0130N	0450E	12	MDB&M	
905195	THUMB 088	NYE				631059	0130N	0450E	12	MDB&M	
905196	THUMB 090	NYE				631060	0130N	0450E	12	MDB&M	
905197	THUMB 092	NYE				631061	0130N	0450E	12	MDB&M	
905198	THUMB 093	NYE				631062	0130N	0450E	12	MDB&M	
905199	THUMB 094	NYE				631063	0130N	0450E	12	MDB&M	
905200	THUMB 095	NYE				631064	0130N	0450E	9	MDB&M	
	THUMB 095	NYE					0130N	0450E	10	MDB&M	
	THUMB 095	NYE					0130N	0450E	15	MDB&M	
	THUMB 095	NYE					0130N	0450E	16	MDB&M	
905201	THUMB 096	NYE				631065	0130N	0450E	15	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
	THUMB 096	NYE					0130N	0450E	16	MDB&M	
905202	THUMB 097	NYE				631066	0130N	0450E	10	MDB&M	
	THUMB 097	NYE					0130N	0450E	15	MDB&M	
905203	THUMB 098	NYE				631067	0130N	0450E	15	MDB&M	
905204	THUMB 099	NYE				631068	0130N	0450E	10	MDB&M	
	THUMB 099	NYE					0130N	0450E	15	MDB&M	
905205	THUMB 100	NYE				631069	0130N	0450E	15	MDB&M	
905206	THUMB 101	NYE				631070	0130N	0450E	10	MDB&M	
	THUMB 101	NYE					0130N	0450E	15	MDB&M	
905207	THUMB 102	NYE				631071	0130N	0450E	15	MDB&M	
905208	THUMB 103	NYE				631072	0130N	0450E	10	MDB&M	
	THUMB 103	NYE					0130N	0450E	15	MDB&M	
905209	THUMB 104	NYE				631073	0130N	0450E	15	MDB&M	
905210	THUMB 105	NYE				631074	0130N	0450E	10	MDB&M	
	THUMB 105	NYE					0130N	0450E	15	MDB&M	
905211	THUMB 106	NYE				631075	0130N	0450E	15	MDB&M	
905212	THUMB 107	NYE				631076	0130N	0450E	10	MDB&M	
	THUMB 107	NYE					0130N	0450E	15	MDB&M	
905213	THUMB 108	NYE				631077	0130N	0450E	15	MDB&M	
905214	THUMB 109	NYE				631078	0130N	0450E	15	MDB&M	
	THUMB 109	NYE					0130N	0450E	16	MDB&M	
905215	THUMB 110	NYE				631079	0130N	0450E	15	MDB&M	
	THUMB 110	NYE					0130N	0450E	16	MDB&M	
905216	THUMB 111	NYE				631080	0130N	0450E	15	MDB&M	
905217	THUMB 112	NYE				631081	0130N	0450E	15	MDB&M	
905218	THUMB 113	NYE				631082	0130N	0450E	15	MDB&M	
905219	THUMB 114	NYE				631083	0130N	0450E	15	MDB&M	
905220	THUMB 115	NYE				631084	0130N	0450E	15	MDB&M	
905221	THUMB 116	NYE				631085	0130N	0450E	15	MDB&M	
905222	THUMB 117	NYE				631086	0130N	0450E	15	MDB&M	
905223	THUMB 118	NYE				631087	0130N	0450E	15	MDB&M	
905224	THUMB 119	NYE				631088	0130N	0450E	15	MDB&M	
905225	THUMB 120	NYE				631089	0130N	0450E	15	MDB&M	
905226	THUMB 121	NYE				631090	0130N	0450E	15	MDB&M	
905227	THUMB 122	NYE				631091	0130N	0450E	15	MDB&M	
905228	THUMB 123	NYE				631092	0130N	0450E	15	MDB&M	
	THUMB 123	NYE					0130N	0450E	16	MDB&M	
	THUMB 123	NYE					0130N	0450E	21	MDB&M	
	THUMB 123	NYE					0130N	0450E	22	MDB&M	
905229	THUMB 124	NYE				631093	0130N	0450E	21	MDB&M	
	THUMB 124	NYE					0130N	0450E	22	MDB&M	
905230	THUMB 125	NYE				631094	0130N	0450E	15	MDB&M	
	THUMB 125	NYE					0130N	0450E	22	MDB&M	
905231	THUMB 126	NYE				631095	0130N	0450E	22	MDB&M	
905232	THUMB 127	NYE				631096	0130N	0450E	15	MDB&M	
	THUMB 127	NYE					0130N	0450E	22	MDB&M	
905233	THUMB 128	NYE				631097	0130N	0450E	22	MDB&M	
905234	THUMB 129	NYE				631098	0130N	0450E	15	MDB&M	
	THUMB 129	NYE					0130N	0450E	22	MDB&M	
905235	THUMB 130	NYE				631099	0130N	0450E	22	MDB&M	
905236	THUMB 131	NYE				631100	0130N	0450E	15	MDB&M	
	THUMB 131	NYE					0130N	0450E	22	MDB&M	
905237	THUMB 132	NYE				631101	0130N	0450E	22	MDB&M	
905238	THUMB 133	NYE				631102	0130N	0450E	15	MDB&M	
	THUMB 133	NYE					0130N	0450E	22	MDB&M	
905239	THUMB 134	NYE				631103	0130N	0450E	22	MDB&M	
905240	THUMB 135	NYE				631104	0130N	0450E	15	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
	THUMB 135	NYE					0130N	0450E	22	MDB&M	
905241	THUMB 136	NYE				631105	0130N	0450E	22	MDB&M	
905242	THUMB 137	NYE				631106	0130N	0450E	15	MDB&M	
	THUMB 137	NYE					0130N	0450E	22	MDB&M	
905243	THUMB 138	NYE				631107	0130N	0450E	22	MDB&M	
905244	THUMB 139	NYE				631108	0130N	0450E	15	MDB&M	
	THUMB 139	NYE					0130N	0450E	22	MDB&M	
905245	THUMB 140	NYE				631109	0130N	0450E	22	MDB&M	
905246	THUMB 141	NYE				631110	0130N	0450E	21	MDB&M	
	THUMB 141	NYE					0130N	0450E	22	MDB&M	
905247	THUMB 142	NYE				631111	0130N	0450E	21	MDB&M	
	THUMB 142	NYE					0130N	0450E	22	MDB&M	
	THUMB 142	NYE					0130N	0450E	27	MDB&M	
	THUMB 142	NYE					0130N	0450E	28	MDB&M	
905248	THUMB 143	NYE				631112	0130N	0450E	22	MDB&M	
905249	THUMB 144	NYE				631113	0130N	0450E	22	MDB&M	
	THUMB 144	NYE					0130N	0450E	27	MDB&M	
905250	THUMB 145	NYE				631114	0130N	0450E	22	MDB&M	
905251	THUMB 146	NYE				631115	0130N	0450E	22	MDB&M	
	THUMB 146	NYE					0130N	0450E	27	MDB&M	
905252	THUMB 147	NYE				631116	0130N	0450E	22	MDB&M	
905253	THUMB 148	NYE				631117	0130N	0450E	22	MDB&M	
	THUMB 148	NYE					0130N	0450E	27	MDB&M	
905254	THUMB 149	NYE				631118	0130N	0450E	22	MDB&M	
905255	THUMB 150	NYE				631119	0130N	0450E	22	MDB&M	
	THUMB 150	NYE					0130N	0450E	27	MDB&M	
905256	THUMB 151	NYE				631120	0130N	0450E	22	MDB&M	
905257	THUMB 152	NYE				631121	0130N	0450E	22	MDB&M	
	THUMB 152	NYE					0130N	0450E	27	MDB&M	
905258	THUMB 153	NYE				631122	0130N	0450E	22	MDB&M	
905259	THUMB 154	NYE				631123	0130N	0450E	22	MDB&M	
	THUMB 154	NYE					0130N	0450E	27	MDB&M	
905260	THUMB 155	NYE				631124	0130N	0450E	22	MDB&M	
905261	THUMB 156	NYE				631125	0130N	0450E	22	MDB&M	
	THUMB 156	NYE					0130N	0450E	27	MDB&M	
905262	THUMB 157	NYE				631126	0130N	0450E	22	MDB&M	
905263	THUMB 158	NYE				631127	0130N	0450E	22	MDB&M	
	THUMB 158	NYE					0130N	0450E	27	MDB&M	
905264	THUMB 159	NYE				631128	0130N	0450E	27	MDB&M	
	THUMB 159	NYE					0130N	0450E	28	MDB&M	
905265	THUMB 160	NYE				631129	0130N	0450E	27	MDB&M	
	THUMB 160	NYE					0130N	0450E	28	MDB&M	
905266	THUMB 161	NYE				631130	0130N	0450E	27	MDB&M	
905267	THUMB 162	NYE				631131	0130N	0450E	27	MDB&M	
905268	THUMB 163	NYE				631132	0130N	0450E	27	MDB&M	
905269	THUMB 164	NYE				631133	0130N	0450E	27	MDB&M	
905270	THUMB 165	NYE				631134	0130N	0450E	27	MDB&M	
905271	THUMB 166	NYE				631135	0130N	0450E	27	MDB&M	
905272	THUMB 167	NYE				631136	0130N	0450E	27	MDB&M	
905273	THUMB 168	NYE				631137	0130N	0450E	27	MDB&M	
905274	THUMB 169	NYE				631138	0130N	0450E	27	MDB&M	
905275	THUMB 170	NYE				631139	0130N	0450E	27	MDB&M	
905276	THUMB 171	NYE				631140	0130N	0450E	28	MDB&M	
905277	THUMB 172	NYE				631141	0130N	0450E	28	MDB&M	
	THUMB 172	NYE					0130N	0450E	33	MDB&M	
905278	THUMB 173	NYE				631142	0130N	0450E	28	MDB&M	
905279	THUMB 174	NYE				631143	0130N	0450E	28	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
	THUMB 174	NYE					0130N	0450E	33	MDB&M	
905280	THUMB 175	NYE				631144	0130N	0450E	28	MDB&M	
905281	THUMB 176	NYE				631145	0130N	0450E	28	MDB&M	
	THUMB 176	NYE					0130N	0450E	33	MDB&M	
905282	THUMB 177	NYE				631146	0130N	0450E	28	MDB&M	
905283	THUMB 178	NYE				631147	0130N	0450E	28	MDB&M	
	THUMB 178	NYE					0130N	0450E	33	MDB&M	
905284	THUMB 179	NYE				631148	0130N	0450E	27	MDB&M	
	THUMB 179	NYE					0130N	0450E	28	MDB&M	
905285	THUMB 180	NYE				631149	0130N	0450E	27	MDB&M	
	THUMB 180	NYE					0130N	0450E	28	MDB&M	
	THUMB 180	NYE					0130N	0450E	33	MDB&M	
	THUMB 180	NYE					0130N	0450E	34	MDB&M	
905286	THUMB 181	NYE				631150	0130N	0450E	27	MDB&M	
905287	THUMB 182	NYE				631151	0130N	0450E	27	MDB&M	
	THUMB 182	NYE					0130N	0450E	34	MDB&M	
905288	THUMB 183	NYE				631152	0130N	0450E	27	MDB&M	
905289	THUMB 184	NYE				631153	0130N	0450E	27	MDB&M	
	THUMB 184	NYE					0130N	0450E	34	MDB&M	
905290	THUMB 185	NYE				631154	0130N	0450E	27	MDB&M	
905291	THUMB 186	NYE				631155	0130N	0450E	27	MDB&M	
	THUMB 186	NYE					0130N	0450E	34	MDB&M	
905292	THUMB 187	NYE				631156	0130N	0450E	27	MDB&M	
905293	THUMB 188	NYE				631157	0130N	0450E	27	MDB&M	
	THUMB 188	NYE					0130N	0450E	34	MDB&M	
905294	THUMB 189	NYE				631158	0130N	0450E	27	MDB&M	
905295	THUMB 190	NYE				631159	0130N	0450E	27	MDB&M	
	THUMB 190	NYE					0130N	0450E	34	MDB&M	
905296	THUMB 191	NYE				631160	0130N	0450E	33	MDB&M	
905297	THUMB 192	NYE				631161	0130N	0450E	33	MDB&M	
905298	THUMB 193	NYE				631162	0130N	0450E	33	MDB&M	
905299	THUMB 194	NYE				631163	0130N	0450E	33	MDB&M	
905300	THUMB 195	NYE				631164	0130N	0450E	33	MDB&M	
905301	THUMB 196	NYE				631165	0130N	0450E	33	MDB&M	
905302	THUMB 197	NYE				631166	0130N	0450E	33	MDB&M	
905303	THUMB 198	NYE				631167	0130N	0450E	33	MDB&M	
905304	THUMB 199	NYE				631168	0130N	0450E	33	MDB&M	
	THUMB 199	NYE					0130N	0450E	34	MDB&M	
905305	THUMB 200	NYE				631169	0130N	0450E	33	MDB&M	
	THUMB 200	NYE					0130N	0450E	34	MDB&M	
905306	THUMB 201	NYE				631170	0130N	0450E	34	MDB&M	
905307	THUMB 202	NYE				631171	0130N	0450E	34	MDB&M	
905308	THUMB 203	NYE				631172	0130N	0450E	34	MDB&M	
905309	THUMB 204	NYE				631173	0130N	0450E	34	MDB&M	
905310	THUMB 205	NYE				631174	0130N	0450E	34	MDB&M	
905311	THUMB 206	NYE				631175	0130N	0450E	34	MDB&M	
905312	THUMB 207	NYE				631176	0130N	0450E	34	MDB&M	
905313	THUMB 208	NYE				631177	0130N	0450E	34	MDB&M	
905314	THUMB 209	NYE				631178	0130N	0450E	34	MDB&M	
905315	THUMB 210	NYE				631179	0130N	0450E	34	MDB&M	
905316	THUMB 211	NYE				631180	0130N	0450E	10	MDB&M	
	THUMB 211	NYE					0130N	0450E	15	MDB&M	
937444	CAN 1	NYE	672202				0130N	0450E	11	MDB&M	
937445	CAN 2	NYE	672203				0130N	0450E	11	MDB&M	
937446	CAN 3	NYE	672204				0130N	0450E	11,14	MDB&M	
937447	CAN 4	NYE	672205				0130N	0450E	14,15,22,23	MDB&M	
937448	CAN 5	NYE	672206				0130N	0450E	14,23	MDB&M	

BLM NMC #	CLAIM NAME	CO.	BK	PG	BK	PG	TWP	RGE	SEC	MER	MAP #
937449	CAN 6	NYE	672207				0130N	0450E	14,23	MDB&M	
937450	CAN 7	NYE	672208				0130N	0450E	22,23	MDB&M	
937451	CAN 8	NYE	672209				0130N	0450E	23	MDB&M	
937452	CAN 9	NYE	672210				0130N	0450E	23	MDB&M	
937453	CAN 10	NYE	672211				0130N	0450E	23	MDB&M	
937454	CAN 11	NYE	672212				0130N	0450E	23	MDB&M	
937455	CAN 12	NYE	672213				0130N	0450E	22,23,26,27	MDB&M	
937456	CAN 13	NYE	672214				0130N	0450E	22,27	MDB&M	
937457	CAN 14	NYE	672215				0130N	0450E	26	MDB&M	
937458	CAN 15	NYE	672216				0130N	0450E	26,27	MDB&M	
937459	CAN 16	NYE	672217				0130N	0450E	26	MDB&M	
937460	CAN 17	NYE	672218				0130N	0450E	36	MDB&M	
937461	CAN 18	NYE	672219				0130N	0450E	36	MDB&M	
937462	CAN 19	NYE	672220				0130N	0450E	36	MDB&M	
937463	CAN 20	NYE	672221				0130N	0450E	36	MDB&M	
937464	CAN 21	NYE	672222				0130N	0450E	20	MDB&M	
937465	CAN 22	NYE	672223				0130N	0450E	20	MDB&M	
937466	CAN 23	NYE	672224				0130N	0450E,046E	12,7	MDB&M	
937467	CAN 24	NYE	672225				0130N	0450E	12,13	MDB&M	
937468	CAN 25	NYE	672226				0130N	0450E,046E	12,7	MDB&M	
937469	CAN 26	NYE	672227				0130N	0460E	7	MDB&M	
937470	CAN 27	NYE	672228				0130N	0460E	7	MDB&M	

1745 TOTAL CLAIMS