NI 43-101 TECHNICAL REPORT ON RESOURCES SPRING VALLEY PROJECT

Pershing County, Nevada

PREPARED FOR



Report Date: September 9, 2014 Effective Date: August 1, 2014

Prepared by William J. Crowl, R.G., MMSA QP Zachary J. Black, SME-RM Deepak Malhotra, PhD, SME-RM



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CERTIFICATE of AUTHOR

I, William J. Crowl do hereby certify that:

1. I am currently employed as Vice President, Mining by Gustavson Associates, LLC at:

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- 2. I am a graduate of the University of Southern California with a Bachelor of Arts in Earth Science (1968), and an MSc in Economic Geology from the University of Arizona in 1979, and have practiced my profession continuously since 1973.
- 3. I am a registered Professional Geologist in the State of Oregon (G573) and am a registered member of the Mining and Metallurgical Society of America (01412QP)..
- 4. I have worked as a geologist for a total of 40 years since my graduation from university; as a graduate student, as an employee of a major mining company, a major engineering company, and as a consulting geologist.
- 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 "NI 43-101 Technical Report on Resources, Spring Valley Project" dated September 9, 2014 with an effective date of August 1, 2014 (the "Technical Report"), with specific responsibility for Sections 1-8, and 15-19 and overall corporate responsibility for the general content and organization of the report. Mr. Crowl visited the site on October 24, 2013 for one day



7. I have had prior involvement with the property that is the subject of this Technical Report. I was responsible for the preparation of the report titled "NI 43-101 Technical Report on the Spring Valley Project, Pershing County, Nevada," dated May 24, 2011, with specific responsibility for Sections 9, 10 and 11 and overall corporate responsibility for the general content and organization of the report.

In addition, I was responsible for the preparation of the technical report titled "Updated NI 43-101 Technical Report on the Spring Valley Project" dated November 29, 2012, with specific responsibility for Sections 9, 10 and 11 and overall corporate responsibility for the general content and organization of the report.

- 8. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
- 9. I have read National Instrument 43-101 and Form 43-101, and the Technical Report has been prepared in compliance with that instrument and form.
- 10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
- 11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 9th day of September, 2014.

/s/ William J. Crowl Signature of Qualified Person

William J. Crowl Print name of Qualified Person



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- 2. I am a graduate of the University of Nevada Reno with a Bachelor of Science in Geological Engineering, and have practiced my profession continuously since 2005.
- 3. I am a registered member of the Society of Mining Metallurgy and Exploration (No. 4156858RM).
- 4. I have worked as a Geological Engineer/Resource Estimation Geologist for a total of seven years since my graduation from university; as an employee of a major mining company, a major engineering company, and as a consulting engineer. I have estimated numerous mineral resources containing gold and have seven years of precious and base metals experience.
- 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 "NI 43-101 Technical Report on Resources, Spring Valley Project" dated September 9, 2014 with an effective date of August 1, 2014 (the "Technical Report"), with specific responsibility for Sections 9-12 and 14. Mr. Black visited the site on October 21 and 22, 2010 and October 24, 2013 for one day.



- 7. I have had prior involvement with the property that is the subject of this Technical Report. I prepared the resource estimate in the report titled "NI 43-101 Technical Report on the Spring Valley Project, Pershing County, Nevada," dated May 24, 2011. In addition, I prepared the resource estimate in the report titled "Updated NI 43-101 Technical Report on the Spring Valley Project" dated November 29, 2012.
- 8. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
- 9. I have read National Instrument 43-101 and Form 43-101, and the Technical Report has been prepared in compliance with that instrument and form.
- 10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
- 11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 9th day of September, 2014.

/s/ Zachary J. Black Signature of Qualified Person

Zachary J. Black Print name of Qualified Person



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- 2. I am a graduate of Colorado School of Mines with a M.Sc. degree in Metallurgical Engineering (1974), and PhD in Mineral Economics (1978).
- 3. I am a registered member of the Society of Mining, Metallurgy and Exploration, Inc. (SME), member No. 2006420RM.
- 4. I have worked as a Metallurgist/Mineral Economist for a total of 40 years since my graduation from university; as an employee of several mining companies, an engineering company, a mine development and mine construction company, an exploration company, and as a consulting engineer..
- 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 "NI 43-101 Technical Report on Resources, Spring Valley Project" dated September 9, 2014 with an effective date of August 1, 2014 (the "Technical Report"), with specific responsibility for Section 13. I have not visited the Spring Valley Mine Site.
- 7. I have had prior involvement with the property that is the subject of this Technical Report. I was responsible for the preparation of the report titled "NI 43-101 Technical



Report on the Spring Valley Project, Pershing County, Nevada," dated May 24, 2011, with specific responsibility for Section 18.

- 8. In addition, I was responsible for the preparation of the technical report titled "Updated NI 43-101 Technical Report on the Spring Valley Project" dated November 29, 2012, with specific responsibility for Section 18.
- 9. I am independent of the issuer applying all of the tests in Section 1.5 of National Instrument 43-101.
- 10. I have read National Instrument 43-101 and Form 43-101, 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 for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
- 12. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 9th day of September, 2014.

/s/ Deepak Malhotra Signature of Qualified Person

Deepak Malhotra Print name of Qualified Person



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1. <u>SUMMARY</u>

1.1 Introduction

Gustavson Associates, LLC ("Gustavson") was retained by Midway Gold Corp. ("Midway") to update the National Instrument 43-101 ("NI 43-101") Technical Report on Resources, Spring Valley Project (the "Project" or the "Spring Valley Project") in Pershing County, Nevada, dated May 24, 2011 prepared by Gustavson. This report presents the results of the mineral resource estimate based on all available technical data and information as of August 1, 2014.

This report is prepared to fulfill Midway's disclosure requirements to the Toronto Stock Exchange. It should be noted that this report is independent of and distict from any parallel resource estimates or scoping studies being carried out by the Spring Valley Venture, or by Barrick as operator.

This report has been prepared in accordance with the Canadian Securities Administrators ("CSA") NI 43-101 and in compliance with the disclosure and reporting requirements set forth in Companion Policy 43-101CP and Form 43-101F1 (June 2011). Resources have been classified in accordance with standards as defined by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") "CIM Definition Standards - For Mineral Resources and Mineral Reserves", prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on December 17, 2010.

1.2 Geology and Mineralization

The Spring Valley property is located in the Humboldt Range, a north-south oriented, up-thrown fault block (horst) bounded on the west by the Humboldt River valley and on the east by Buena Vista Valley. Quaternary alluvial deposits fill the intermontane basins and alluvial valleys.

The bedrock geology of the Humboldt range within 20 miles of the Spring Valley property consists of Triassic shales and carbonate rocks, a thick sequence of Permo-Triassic intermediate to felsic volcanic rocks, and a north-south trending belt of Tertiary volcanic rocks. Triassic leucogranite and Cretaceous granodiorite locally intrude the Permo-Triassic volcanic package.

The known Spring Valley mineral system is beneath an intermontane basin filled with postmineral Quaternary alluvial deposits, thereby masking the bedrock geology immediately overlying or containing the mineralization. At the scale of the Spring Valley property position, the bedrock units are distributed in blocks aligned approximately north-south. The bedrock geology is dominated by the Limerick Formation in the western one-third of the property, the Rochester Formation in the central and eastern half of the property, and the Natchez Pass Limestone in the extreme northeast corner of the property. At this scale, the geology is



segmented by a number of faults: a relatively older north to northeast trending set including the West Spring Valley, Limerick and Black Ridge Faults; and, northwest trending, steeply dipping cross faults with oblique or lateral offsets that displace the older north to northeast trending faults. The West Spring Valley fault is interpreted as a steeply east dipping normal fault, whereas the Black Ridge and Limerick faults are interpreted as moderate to high angle normal faults with westerly dips. The Limerick fault may be listric in character, with flattening dip at depth. Eastwest and northeasterly faults are also mapped, but are not part of the predominant fabric on the property.

1.3 Drilling and Exploration Status

Exploration work carried out by Midway and Barrick Gold Exploration Inc., a wholly owned subsidiary of Barrick Gold Corporation ("Barrick") on the Spring Valley property has been and continues to be dominated by drilling. Midway and Barrick have also conducted extensive geological mapping and surface geochemical sampling campaigns in the surrounding hills and have conducted limited geophysical surveys in the basin to guide drilling. Early exploration work by previous operators included small-scale surface geochemical and geophysical surveys and drilling.

The Spring Valley resource area has been drilled with a total of 672 holes totaling 603,731 feet, including 531 Reverse Circulation (RC) drill holes totaling 428,500 feet and 141 diamond core holes totaling 173,011 feet.

1.4 Environmental and Permitting

1.4.1 <u>Environmental Liabilities</u>

Environmental liabilities at the property are limited to the construction of drill pads and roads, drilling, closure and reclamation of the currently permitted drilling program. This program is bonded with NDEP and the BLM. As work plans detailing the work, and reclamation cost estimates utilizing the states Standardized Reclamation Cost Estimator (SRCE), or equivalent, are required, the bond is considered adequate for the liability. Other potential environmental liabilities include the inadvertent impact of an unidentified cultural site or the allowance of invasion by a weedy species. The potential for impacting a cultural site or allowing the invasion of weedy species is considered low given the requirements for cultural surveys and the BLM's Standard Operating Procedures (SOPs), which include general protection procedures to preclude weedy invasion. The potential for impacts to rangeland, impacts due to a hazardous or solid waste release, impact to water resources or impacts to a wetland is considered extremely low given the permitting requirements, SOPs, and Barrick's operating practices.



1.4.2 <u>Permits</u>

According to the NDOM, all mining operations in Nevada are required to have:

- Legitimate mining claims registered with the BLM, or ownership or control of mineral rights on private land;
- An approved Plan of Operation from the BLM, the U.S. Forest Service or the Nevada Division of Environmental Protection, (NDEP); and
- Necessary state permits.

1.5 Operational Permits and Jurisdictions

Midway and Barrick exploration activities are permitted under a Plan of Operations (PoO) approved by the BLM in July 2007, and Reclamation Permit No. 0258 approved by the NDEP in December 2006. All of the permits and approvals, and the bonds, were transferred to Barrick in 2009. A new or amended PoO will be required if disturbances beyond the currently approved 75 acres are necessary.

1.6 Infrastructure

The Spring Valley property is accessed by Nevada State Route (SR) 50 (also known as Lovelock-Unionville Road), which extends eastward from US Interstate 80 at exit 119. SR 50 also serves as the main access to the Rochester Mine until a turnoff at Spring Valley Pass. Once in Spring Valley, access to the various parts of the Property is by dirt road. Alternatively, access is possible from the Buena Vista Valley to the east through Spring Valley Canyon on SR 50.

The nearest town to the Property is Lovelock, Nevada, which is situated along US Interstate 80 and hosts a population of 1,895 (Census 2012 data). The nearest city is Reno, Nevada, approximately 120 miles to the southwest, which hosts a population of 231,027 (Census 2012 data).

Power lines cross the property and ground water is abundant as evidenced by artesian wells in the main area of drilling. There is an adequate workforce in the surrounding region and the town of Lovelock. Northern Nevada is home to many gold mining operations with all associated support and supplies.



1.7 Mineral Processing and Metallurgical Testing

Barrick contracted with McClelland labs in Sparks, Nevada to complete a detailed metallurgical testing program on thirteen drill core composites from Spring Valley. The composite samples representing four rock types and three oxidation states were tested by column leaching, bottle roll and gravity methods. The composites were from a total of 355 split diamond drill core intervals, each interval representing approximately five feet. Grades of the composite samples ranged from 0.21 grams per tonne (gpt) to 5.07 gpt (0.006 oz/t to 0.148 oz/t); nine of the samples had grades less than 1.03 gpt (0.030 oz/t). The reported gold grades were determined by metallic screen fire assays. Column leach tests simulating heap leach conditions were conducted over 260 days, and yielded gold recoveries from 46% to 98% for all materials tested.

In December 2005, samples from eight drill holes were submitted for metallurgical testing at McClelland Laboratories Inc. in Sparks, Nevada by Midway. Select samples were combined to produce 19 composites for Gravity Recoverable Gold (GRG) testing. The composite samples were sequentially milled to progressively finer sizes, the resulting material (or gravity tailings after the first grind size) was processed using a laboratory Nelson Concentrator. The resulting concentrate and tailings were then assayed to determine gravity recovery of gold versus grind size. Testing in this way provides an estimate of the maximum recoverable gold values by gravity concentration. Recoveries for nine composites with head grades greater than 0.030 oz/st gold were between 67.5% and 96.5%.

The test samples described above are considered representative of the mineralization of the deposit as a whole. As of the date of this report, there are no processing factors that could have a significant effect on potential extraction.

1.8 Mineral Resources

Zachary J. Black, SME-RM, an associate Resource Geologist with Gustavson is responsible for the estimation of the mineral resource herein. Mr. Black is a qualified person as defined by NI 43-101 and is independent of Midway and of Barrick. Gustavson estimated the mineral resource for the Spring Valley Project from drill-hole data, using controls from the main rock types and implicit grade shells with an Ordinary Kriging ("OK") algorithm.

Gustavson received the exploration drill hole database on September 20, 2013. Drill hole data, including collar coordinates, down hole surveys, sample assay intervals, and geologic logs, were provided in a secure Microsoft Access database and as CSV files. The database is managed by Barrick under the Exploration, Development, and Joint Operating Agreement. A small number of additional drillholes have been completed by Barrick since the database was closed, but the results have not yet been received by Midway or by Gustavson. Gustavson does not expect that a few additional infill drillholes will materially impact the resource estimation.



The present database has been updated to include the remaining 2010, 2011, 2012, and the available 2013 drill holes, which were completed since the previous mineral resource estimate. The drill hole database contains gold assay analytical information for 112,858 sample intervals from core, RC, and mud rotary drilling methods.

A visual evaluation of the assay and geologic data in cross-section and plan view, in conjunction with the proximity analysis, reveals that while it is difficult to substantiate lithologic or alteration based domaining, there exists a significant spatial correlation between the higher grade samples and disseminated mineralization. It is Gustavson's opinion that the statistical analyses justify the use of a grade boundary at +0.003 oz/t, as a proxy for the mineralized alteration selvages and vein zones, and domaining the resource within this grade boundary is both reasonable and appropriate.

The mineral resource estimate for the Spring Valley Project is summarized in Table 1-1. This mineral resource estimate includes all drill data available to Midway and Gustavson as of the effective date of this report, and has been independently estimated by Gustavson. Mineral resources are not mineral reserves and may be materially affected by economic, environmental, permitting, legal, socio-economic, marketing, political, or other factors. In Table 1-1, mineral resources are reported above a +0.006 oz/t Au cut-off, assuming the three year trailing average gold price of US\$1,537 per ounce. This cut-off reflects the potential economic, marketing, and other issues relevant to an open pit mining scenario based on a carbon recovery process following cyanide heap leaching. Gustavson cautions that economic viability can only be demonstrated through prefeasibility or feasibility studies.

	Measured			Indicated			Measured + Indicated			Inferred		
Cutoff	Tons	Tons Gold		Tons	G	Gold	Tons Gold		Tons	Gold		
oz/t	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)
0.008	60,100	0.023	1,410	116,400	0.021	2,400	176,600	0.022	3,810	46,400	0.019	880
0.006	75,300	0.020	1,510	147,300	0.018	2,610	222,600	0.019	4,120	62,100	0.016	990
*0.004	91,500	0.017	1,590	179,100	0.016	2,780	270,600	0.016	4,370	78,400	0.014	1,070

Table 1-1 Mineral Resource Statement for the Spring Valley ProjectPershing County, Nevada, Gustavson Associates, LLC, August 1, 2014

Note * based on discussion of cutoff presented above, material below 0.006 oz/t is not considered resource for the purposes of this report. 0.004 oz/t cutoff is presented for informational purposes and for consistency with prior reports. Note: Values may not sum due to rounding.



1.9 Interpretations and Conclusions

1.9.1 Environmental

There are no known environmental liabilities on the Spring Valley project.

1.9.2 <u>Geology and Deposit Type</u>

The Spring Valley deposit is hosted within structurally prepared zones within a porphyry intrusion and overlying felsic volcanic rocks. Overall deposit geometry suggests that primary mineralizing fluid flow is related to steeply dipping, N20E to N30E- trending, deep-seated faults. Mineral emplacement is localized within structural preparation along these faults, as well as on contact horizons, deformation structures, and within permissive host rocks within a local graben /basin. The mineralization is associated with relatively thin, crystalline quartz veins that have large alteration selvages. In areas of dense quartz veining, the alteration selvages coalesce into regions of pervasively altered and veined rock.

1.9.3 Exploration, Drilling, and Analytical

The property has been explored using a variety of techniques including mapping, geophysical surveys, and geochemical sampling. The Spring Valley resource area has been drilled with a total of 672 holes totaling 603,731 feet, including 531 Reverse Circulation (RC) drill holes totaling 428,500 feet and 141 diamond core holes totaling 173,011 feet.

All drill intervals were first assayed by a 30 gram fire assay and mineralized intervals have been systematically re-assayed using MSFA. Where available, the MSFA numbers were utilized in the resource estimate. The project data is stored in a secure database. Assay and geology data have been checked for accuracy for all programs prior to 2009, and spot checked in the Barrick programs from 2009 through 2013.

Gustavson is of the opinion that exploration activities, drilling, and analytical procedures are being conducted in manner that meets or exceeds industry best practice.

1.9.4 Quality Assurance/Quality Control

Gustavson has reviewed the QA/QC assay programs and believes the programs provide adequate confidence in the data. Sample standard failures and the samples associated with erroneous blank samples have been reanalyzed prior to the completion of this Report and the results are comparable to the original assay.

1.9.5 <u>Mineral Processing and Metallurgical Testing</u>

The Spring Valley project mineralized material is potentially amenable to both gravity and heap leach recovery methods.



The test samples described in the Mineral Processing and Metallurgical testing item of this Technical Report are representative of the mineralization of the deposit as a whole. As of the date of this report, there are no processing factors that could have a significant effect on potential extraction.

1.9.6 <u>Data Verification</u>

Gustavson received original assay certificates in pdf and comma delimited format for all samples included in the current drill hole database. A random manual check of 1,210 samples within the database against the original certificate revealed 3 total errors. The results of the analysis indicate that the data imported into the database matches the certificates 99.7% of the time with a confidence interval of \pm 0.56% at a 95% confidence level. Gustavson considers the database adequate for estimation of mineral resource estimation purposes.

1.9.7 <u>Resource</u>

Within the main portion of the deposit, drill density is within 150 foot spacing, which is adequate to describe measured and indicated resources, given the variogram and the relative continuity of the resource estimate. However, some areas of the deposit are still in need of infill holes. Closer spaced drilling in these areas will be required to further upgrade the resource classification. Additionally there are areas of the project which are open to expansion of extents of mineralization.

1.10 Recommendations

Gustavson recommends the following program to advance the Spring Valley Project towards eventual development.

1.10.1 <u>Scoping Study</u>

Gustavson recommends that Midway complete a scoping study (PEA) on the project to evaluate proposed mining and processing methodologies, and economics associated with the implementation of various crushing, grinding, heap leach, and gravity recovery circuit combinations. The PEA should be completed to 43-101 standards and designed to support Midway's reporting requirements as an independent issuer.

1.10.2 <u>Geologic Model</u>

Gustavson understands that Barrick is undertaking systematic relogging of the drilling including trace element analysis in an effort to refine the geologic and alteration model for the deposit. Gustavson recommends that Midway maintain a level of engagement in the relogging parameters and process in order to facilitate information transfer and share interpretive insights. The results of this logging should be considered in any resource updates moving forward.



1.10.3 <u>Metallurgical Study</u>

Existing metallurgical studies have established that gold at Spring Valley is amenable to cyanidation and to gravity separation. Gustavson recommends that additional metallurgical studies be completed to evaluate the mix of mineral processing methods best suited for the mineralization at Spring Valley. The evaluation should include the study of conventional cyanidation at different crush sizes, as well as the impact of gravity concentration at different steps in the process stream. Testwork should include samples of mineralization of various alteration and oxidation types.

1.10.4 <u>Geotechnical and Hydrogeological Study</u>

Gustavson recommends that the existing Golder pit slope analysis and geotechnical studies be reviewed to identify critical geotechnical areas and to define a geotechnical exploration program to support final design parameters. The Golder geotechnical studies should form the basis for mine design for the proposed PEA. Additionally, Gustavson recommends that the preliminary hydrogeological studies be reviewed to determine critical path to support project water needs, secure remaining required water rights, and address potential pit dewatering concerns. This information should be included in the support of a proposed PEA.

1.10.5 <u>Environmental Permitting</u>

Gustavson recommends that continued work towards meeting the requirements of the State of Nevada to permit a mine on public land should include in the short term:

- Finalize Class III Cultural Survey report;
- Endangered Species Act (ESA) and other biological requirements; and
- Ongoing collection and evaluation of environmental baseline data.
- Installation and monitoring of groundwater monitoring as recommended for hydrologic models and baseline studies.

1.10.6 <u>Exploration Program</u>

Continued exploration diamond core drilling should be targeted in three areas within and adjacent to the immediate mineral resource area:

- Infill and step out drilling at the furthest south extent of drilling near the flanks of Gold Mountain.
- Exploration drilling along the Wabash fault that bisects the main Spring Valley resource. Extensions of this fault to both the east and west of the main resource have the potential to host mineralization that has not yet been tested. Placer gold is common along the trace of the fault to the SE.
- Infill and step out drilling targeting the lower Felsic Porphyry unit at depth in the main resource area, to the northern extents of the project and along the eastern Limerick fault.



• Limited infill drilling, primarily in those areas where substantial in-pit inferred mineralization has been identified, or in areas of high potential for pit expansion.

1.10.7 <u>Budget</u>

Under the terms of the Joint Venture Agreement, Barrick has assumed the responsibility for the exploration and development activities. The Spring Valley Joint Venture has a project development budget which includes most of the recommendations listed above. The SVV project is operated by Barrick, with 75% of the costs borne by Barrick, and the remainder by Midway Gold.

Table 1-2 presents the 2014-2015 development and exploration budgets for the Spring Valley Venture, as well as budget line items for Midway based on the recommendations described above.

Midway Studies & Reports	Costs (US\$)					
Metallurgical Studies	120,000					
Geotechnical Review	30,000					
Hydrogeologic Review	30,000					
Scoping Study (PEA)	150,000					
Midway Reporting Subtotal	\$330,000					
Spring Valley Venture PreFe	easibility Study					
Hydrology Studies & Test Wells	2,125,000					
Geochemistry, including ARD	982,000					
Geotechnical	500,000					
Metallurgy	1,070,000					
Mine Planning and Site Design	700,000					
Permit Development	150,000					
Archaeological, Community & Related	285,000					
Environmental Studies	875.000					
Land & Water Rights	3,100,000					
Condemnation Drilling	500,000					
Subtotal	\$ 10,287,000					
Midway Share at 25%	\$ 2,571,750					
Spring Valley Venture E	xploration					
Exploration Program 2014 - 2015	12,000,000					
Subtotal	\$ 12,000,000					
Midway Share at 25%	\$ 3,000,000					
Total Budget (Midway Share)						
Total Budget	\$5,901,750					

Table 1-2 Proposed Budget



2. INTRODUCTION AND TERMS OF REFERENCE

Gustavson Associates, LLC (Gustavson) was commissioned by Midway Gold Corp. (Midway) to prepare an update to the Mineral Resources and resulting Technical Report on Resources for the Spring Valley Project (or the Project) site in Pershing County, Nevada. The purpose of this report is to present the findings of the resource estimation in accordance with Canadian National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101), NI 43-101 Form F1, and Canadian Institute of Mining, Metallurgy and Petroleum (CIM) "Best Practices and Reporting Guidelines." This Technical Report is part of an ongoing effort by Midway to develop the Spring Valley Project.

This report is prepared to fulfill Midway's disclosure requirements to the Toronto Stock Exchange. It should be noted that this report is independent of and distict from any parallel resource estimates or scoping studies being carried out by the Spring Valley Venture, or by Barrick as operator.

Items 15 through 22 of Form 43-101F1 (Mineral Reserve Estimates, Mining Methods, Recovery Methods, Project Infrastructure, Market Studies and Contracts, Environmental Studies, Permitting and Social or Community Impact, Capital and Operating Costs, and Economic Analysis, respectively) are not required for a Technical Report on Resources and are not included in this report.

2.1 Qualifications of Consultants

The Qualified Persons (QP's) responsible for this report are:

- William J. Crowl, R.G., QP MMSA, Vice President, Mining, Gustavson is a QP as defined by NI 43-101 and is responsible for Sections 1-8, and 15-19.
- Zachary J. Black, SME-RM, Associate Resource Geologist, Gustavson is a QP as defined by NI 43-101 and is responsible for Sections 9-12 and 14.
- Deepak Malhotra, PhD., SME-RM, President, RDi is a QP as defined by NI 43-101 and is responsible for Section 13.

2.1.1 Details of Inspection

Gustavson Associates representatives William J. Crowl and Zachary J. Black visited the Spring Valley Project on October 24, 2013. While on site, Mr. Crowl and Mr. Black conducted general geologic field reconnaissance and discussed in detail core drilling operations, sampling, and transportation with Barrick and Midway personnel. Mr. Crowl visited the Spring Valley project again on June 18th, 2014 and directly observed drilling and sampling practices at the project site. For the 2014 drill program, core splitting and sampling are being carried out at Barrick's Turquoise Ridge Facility. Accordingly, Mr. Crowl visited Turquoise Ridge on June 17th 2014 to



directly observe the splitting and sampling procedures being employed for the 2014 Spring Valley drill program.

2.1.2 <u>Sources of Information</u>

The information, opinions, conclusions, and estimates presented in this report are based on the following:

- Information and technical data provided by Midway;
- Observations made by Qualified Persons on site;
- Review and assessment of previous investigations;
- Assumptions, conditions, and qualifications as set forth in the report; and
- Review and assessment of data, reports, and conclusions from other consulting organizations and previous property owners.

Gustavson sourced information from referenced documents as cited in the text and those summarized in Section 19, References, of this report.

2.2 Effective Date

This report was completed based upon information available at the effective date of this report, August 1, 2014.

2.3 Units of Measure

Unless stated otherwise, all measurements reported here are in imperial units, tons are short tons, and currencies are expressed in constant US dollars. Precious metal content is reported in troy ounces per short ton (oz/t).



Common Units

Above mean sea levelamsl
Cubic foot feet ³
Cubic inchin ³
Cubic yardyd ³
Dayd
Degree°
Degrees Fahrenheit°F
Foot feet
Gallon gal
Gallons per minute (US) gpm
Grams per tonneg/t
Greater than>
Hectare
Hourh
Inch"
Kilo (thousand) k
Less than<
Micrometre (micron)µm
Milligram mg
Ounces per tonoz/t
Parts per billion ppb
Parts per millionppm
Percent%
Pound(s)Ib
Short ton (2,000 lb) st
Short ton (US)t
Specific gravitySG
Square foot feet ²
Square inchin ²
Yardyd
Year (US)yr



Metric Conversion Factors (divided by)

Short tons to tonnes	1.10231
Pounds to tonnes	2204.62
Ounces (Troy) to tonnes	32,150
Ounces (Troy) to kilograms	32.150
Ounces (Troy) to grams	0.03215
Ounces (Troy)/short ton to grams/tonne	0.02917
Acres to hectares	2.47105
Miles to kilometres	0.62137
Feet to metres	3.28084

Abbreviations

American Society for Testing and Materials	ASTM
Absolute Relative Difference	ARD
Atomic Absorption Spectrometry	AAS
Bureau of Land Management	BLM
Canadian Institute of Mining and Metallurgy	CIM
Diamond Drill	DD
Global Positioning System	GPS
Internal Rate of Return	IRR
Metallic Screen Fire Assay	MSFA
National Instrument 43-101	NI 43-101
Nearest Neighbour	NN
Net Smelter Royalty	NSR
Net Present Value	NPV
Probability Assigned Constrained Krigging	PACK
Reverse Circulation	RC/RCV
Rock Quality Designation	RQD
Selective Mining Unit Universal Transverse Mercator	SMU UTM



3. <u>RELIANCE ON OTHER EXPERTS</u>

During preparation of this report, Gustavson fully relied upon information provided by Midway regarding property ownership, mineral tenure, permitting, and environmental liabilities as described in Items 4 and 5 of this report.

Midway relies upon the accuracy and completeness of data provided by Barrick pursuant to the Exploration, Development, and Joint Operating Agreement dated March 9, 2009.

Based on the review conducted in 2011 and the further efforts documented in this report, Gustavson considers that the data provided by Barrick is sufficient for the purposes of a resource estimate.

4. <u>PROPERTY DESCRIPTION AND LOCATION</u>

4.1 **Property Location**

The Spring Valley property is located in Pershing County, Nevada 20 miles northeast of Lovelock within the Spring Valley Mining District. It is situated three miles north of the Rochester silver-gold mine in the Humboldt Range. The Spring Valley deposit lays 100% within the Spring Valley area of interest and is within the control of Midway and Barrick's joint venture (the "Spring Valley Venture"). The Participants directly control approximately 10,140 gross acres on 642 contiguous unpatented lode and placer mining claims plus 1,550 gross acres of fee land.

The Property is located on the USGS Lovelock 1:100,000 scale topographic map and the USGS Rochester and Fitting 1:24,000 scale, 7.5 minute series quadrangle maps. It is centered at latitude 40° 20' North and longitude 118° 08' West. The principal area of known mineralization on the Spring Valley property is located within the southern half of Sections 34 and 35, Township 29 North, Range 34 East (T29N, R34E) Mount Diablo Base and Meridian (MDBM). Mineralization also occurs at the Limerick target in Section 4, Township 28 North, Range 34 East (T28N, R34E) MDBM; at the Golden Gate target in Section 8, T28N, R34E; and at the American Canyon target in Section 14, T28N, R34E.

Unpatented mining claims are kept active through payment of a maintenance fee due on 31 August of each year. A complete list of claims is presented in Appendix A.



4.2 Agreements and Royalties

4.2.1 <u>Barrick Agreement</u>

On March 9, 2009, Midway and Barrick Gold Exploration Inc., a wholly owned subsidiary of Barrick Gold Corporation ("Barrick"), signed an agreement for the exploration, development, and eventual joint operating activities at the project. On Nov 15, 2013, Barrick completed the \$38 million expenditure required to earn a 70% interest at Spring Valley. As of Feb 24, 2014, the companies completed formation of the joint venture (the "Spring Valley Venture") with Barrick holding a 70% interest and Midway holding a 30% interest.

On July 9, 2014, Midway elected to have Barrick carry Midway to a production decision and arrange financing for Midway's share of mine construction expenses. The carrying and financing costs plus interest are to be recouped by Barrick from 90% of Midway's share of production once production has been established. Accordingly, upon completion of construction of the mine, Barrick will earn an additional 5% (75% total interest.)

4.2.2 <u>Agreements</u>

The property agreements for the Spring Valley project are summarized in the table below. The table documents the nature of title, obligations to retain the property, royalties, payments, and expiration dates of the agreements. Claims are unpatented mining claims on land administered by the Bureau of Land Management.



Ownership	Agreement Date	Expiry	Owner (source)	Claims	Gold Royalty	Approximate Acreage*	Payments
Optioned	10/30/2006	10/30/2016 (may be extended)	Chabino	2	3% NSR	42	\$6,000/yr
Optioned	6/10/2007	6/10/2017 purchase complete	G. Duffy	2	-	42	\$12,000/yr plus periodic option payments
Optioned	4/25/2006	4/25/2016 (may be extended)	L. Duffy	12	3% NSR	248	\$36,000/yr
Optioned	7/17/2006	7/17/2016 (may be extended)	Rowe and Stoeberl	46	3% NSR	951	\$20,000/yr
Owned	9/10/2003	-	Midway Gold (Echo Bay)	28	2% NSR	579	-
Owned	1/25/2006	-	Midway Gold (Coeur)	98	3% NSR	2087	-
Owned	7/3/2003, amended 8/15/2003	-	Midway Gold (Schmidt)	44	2-7% NSR	909	-
Owned	-	-	Midway Gold	410	-	8452	-
Owned	5/5/2006	-	Midway Gold (Seymork)	Fee	3% NSR	320/770	-
Owned	9/7/2005	-	Midway Gold (NLRC)	Fee	-	544/0	-
Owned	8/29/2006	-	Midway Gold (Sentman)	Fee	-	40/10	-
Leased	12/2/2010	12/2/2016 (may be extended)	Barrick Agreement with Third Party	Fee	3% NSR	0/544 0/76	\$300,000/yr
						0/120	
Owned	10/01/2010		Barrick Agreement with Third Party	Fee	-	76/0	-

Table 4-1	Summarv	of Spring	Vallev	Property	Agreements
	Summary	or opping	, and	roperty	igi cemento

*Surface/Mineral

4.3 Environmental Liabilities

Environmental liabilities at the property are limited to the construction of drill pads and roads, drilling, closure and reclamation of the currently permitted drilling program. This program is bonded with NDEP and the BLM. As work plans detailing the work, and reclamation cost estimates utilizing the states Standardized Reclamation Cost Estimator (SRCE), or equivalent, are required, the bond is considered adequate for the liability. Other potential environmental liabilities include the inadvertent impact of an unidentified cultural site or the allowance of invasion by a weedy species. The potential for impacting a cultural site or allowing the invasion of weedy species is considered low given the requirements for cultural surveys and the BLM's Standard Operating Procedures (SOPs), which include general protection procedures to preclude weedy invasion. The potential for impacts to rangeland, impacts due to a hazardous or solid waste release, impact to water resources or impacts to a wetland is considered extremely low given the permitting requirements, SOPs, and Barrick's operating practices.



4.4 Permits

According to the NDOM, all mining operations in Nevada are required to have:

- Legitimate mining claims registered with the BLM, or ownership or control of mineral rights on private land;
- An approved Plan of Operation from the BLM, the U.S. Forest Service or the Nevada Division of Environmental Protection, (NDEP); and
- Necessary state permits.

Spring Valley Venture exploration activities are permitted under a Plan of Operations (POO) approved by the BLM in July 2007, and Reclamation Permit No. 0258 approved by the NDEP in December 2006. All of permits and approvals, and the bonds, were transferred to Barrick in 2009. A new or amended POO will be required if disturbances beyond the currently approved 75 acres are necessary.

The latest NDEP/BLM Annual site inspection was conducted July 8th, 2014. No issues were reported by the agencies.

Water for exploration drilling is supplied by two water wells drilled under a temporary grant of water rights from the Nevada Division of Water Resources. The current 180 Day permit is in effect as of April 17th, 2014.

Table 4-2 provides a general summary of permits required by Federal State and Local government entities for mining or milling operations in the state of Nevada.



Permit/Authorization	Agency
Federal	
Activities in Wetlands and/or Waters of the U.S.	U.S. Army Corps of Engineers
Amended Exploration Plan of Operations	BLM
Endangered Species Act Compliance	U.S. Fish and Wildlife Service
Mine Plan of Operations	BLM
	Northern Nevada Mine Safety & Health
Notice of Commencement of Operation	Administration
	Bureau of Alcohol, Tobacco and Firearms, for
Purchase, Transport, or Storage of Explosives	Northern Nevada
Right of Way for Electrical Transmission on BLM-	
Administered Land	BLM
Road Access (R/W) on BLM Administered Land	BLM
Use of BLM-Administered Land	BLM
State	Neural Division of Environmental Destantion
Ain Quality One ration Degravit	Nevada Division of Environmental Protection,
Air Quality Operating Permit	Bureau of Air Quality
Annual Status and Production Report	Nevada Division of Environmental Protection
Approval to Operate a Solid Waste System	Ruroau of Waste Management
Approval to Operate a solid Waste System	Nevada Department of Transportation
Fire and Line Safety	Nevada State Fire Marshall
	Nevada Division of Environmental Protection
Ground Water Permit	Bureau of Water Pollution Control
	Nevada State Fire Marshal Division.
Hazardous Materials Permit	Hazardous Materials Section
Historic Preservation	Nevada Historic Preservation Office
Mine Registry Forms	Nevada Division of Minerals
Industrial Artificial Pond Permit	Nevada Division of Wildlife
Mineral Exploration Hole Plugging	Nevada Division of Water Resources
	Nevada Division of Environmental Protection
	 Bureau of Mining Regulation and
Mining Reclamation Permit	Reclamation, Reclamation Branch
Notification of Opening & Closing Mines	Nevada State Mine Inspector
Permit to Appropriate the Public Waters	Nevada Division of Water Resources
Permit for Occupancy (Encroachment Permit)	Nevada Department of Transportation
	Nevada State Health Division Bureau of
Permit for Sanitation Facilities	Health Protection Services
Protection of Wildlife	Nevada Division of Wildlife
Chamman have Campany I Damait	Nevada Division of Environmental Protection,
Stormwater General Permit	Bureau of Water Pollution Control
Surface Disturbance Dermit	Nevada Division of Environmental Protection
	- Bureau of Air Poliution Control
	Nevada Division of Environmental Protection
Water Pollution Control Permit	- Bureau of Minning, Regulation and
	הכנומוומנוטוו, הכצעומנוטוו סומוונוו
Ruilding Permit	
General Plan	
Special Use Permit	

Table 4-2 Agency Permits and Authorizations*

* Permits listed are general in nature; all items listed are not necessarily specific to Midway or Barrick.

** Local permits presented are general in nature.



Barrick continues to move forward with conducting environmental studies on the project property. Gustavson knows of no other significant factors or risks that may affect access, title, or the ability to perform work on the Spring Valley property.

5. <u>ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND</u> <u>PHYSIOGRAPHY</u>

5.1 Accessibility

The Spring Valley property is accessed by Nevada State Route (SR) 50 (also known as Lovelock-Unionville Road), which extends eastward from US Interstate 80 at exit 119. SR 50 also serves as the main access to the Rochester Mine until a turnoff at Spring Valley Pass. Once in Spring Valley, access to the various parts of the Property is by dirt road. Alternatively, access is possible from the Buena Vista Valley to the east through Spring Valley Canyon on SR 50.

The nearest town to the Property is Lovelock, Nevada, which is situated along US Interstate 80 and hosts a population of 1,895 (Census 2012 data). The nearest city is Reno, Nevada, approximately 120 miles to the southwest, which hosts a population of 231,027 (Census 2012 data).

5.2 Climate

The climate in the Spring Valley area is typical for northwestern Nevada. Average monthly high temperatures range from 82 to 94° F in the summer and 42° to 55° F in the winter. Yearly rainfall averages approximately 6 inches with nearly uniform distribution from October through June. July, August, and September are typically hot and dry months; December, January, and February receive the bulk of the snowfall (Desert Research Institute, 2010).

Exploration and operations are possible year round, although snow levels in winter and wet conditions in late autumn and in spring can make travel on dirt and gravel roads difficult.

5.3 Local Resources and Infrastructure

Power lines cross the property and ground water is abundant as evidenced by artesian wells in the main area of drilling. There is year-round road access directly to the project via Nevada state highway 50. The interstate (I80) runs approximately 10 miles west of the property. There is an adequate workforce in the surrounding region and the town of Lovelock. Northern Nevada is home to many gold mining operations with all associated support and supplies.



Coeur Mining's Rochester operation is situated on adjacent claims to the south of the Spring Valley Project and has the necessary infrastructure to support their operation on site. Electrical power is supplied to the site by a public utility company (NV Energy) via a 69KV overhead transmission line.

Emergency services, including law enforcement, are located approximately 25 miles from the site in Lovelock. Regulatory and other off-site services are located throughout the county and region and are typical of standard United States agencies. The Spring Valley Venture controls sufficient surface rights within Spring Valley and the lower Buena Vista basin to support an open pit operation and the associated waste rock disposal and heap leach facility.

5.4 Physiography

Spring Valley is a large (approximately two square miles) intermontane basin in the central part of the Humboldt Range. The valley floor slopes gently to the east and ephemeral streams on its surface drain into Spring Valley Canyon at its eastern margin. Elevation at the Property ranges from 5,120 to 6,040 feet above mean sea level and the topographic relief can be characterized as gentle to moderate.

Vegetation is typical of the Basin and Range physiographic province. The Property is covered by sagebrush, grass, and various other desert shrubs.

5.5 Water Rights

Proposed mining operations at Spring Valley will require significant water rights for dust reduction, exploration drilling, process water, as well as potable water for domestic use and site facilities. The Spring Valley Venture has identified properties within the Buena Vista Valley with sufficient water rights to support mine operations and is in the process of securing such rights. Regulatory approval will be required to modify the water rights for use by the mine.

6. <u>HISTORY</u>

Gold, silver, lead, mercury, copper, antimony, and sericite-pyrophyllite have been produced from the Spring Valley Mining District since its discovery in 1868 (Tingley, 1992). Placer gold was discovered in 1875 and was worked extensively during the period 1880-1890 (Johnson, 1977). The placers are said to have been the most productive in Nevada: placer production from Spring Valley and American Canyons were estimated at \$10 million (Ransome, 1909). The gravel deposits were up to 100 feet in depth or more and the gold recovered from them was generally coarse, though fine-grained gold was present and likely more abundant (Johnson, 1977).



The Wabash lead-silver mine, located on the eastern margin of the Property, was worked during the period of 1935 to 1938. Production recorded for 1938 was 170 tons of ore containing 1 oz gold, 6,774 oz silver, 651 lb copper, and 9,514 lb lead (Johnson, 1977). Mineralization at the Wabash mine consists of argentiferous galena and sphalerite in the matrix of intensely brecciated rocks in a fault zone.

Modern exploration at Spring Valley began in 1996 by Kennecott. Four reverse circulation (RC) holes, totaling 2,220 feet, were drilled across the basin in an effort to discover the source of the placer gold in Spring Valley Canyon. Hole KSV-2 intersected 40 feet grading 0.023 oz/t gold at the southeast edge of what is now known as the Pond Zone.

Echo Bay acquired the property in 2000 and drilled ESV-2, intersecting 145 feet grading 0.075 oz/t gold. Subsequent drilling by Echo Bay focused on step-out drilling from ESV-2, coring the mineralized zone and drilling exploration targets to the northwest. During the 2001-2002 drill campaign, Echo Bay completed 19 RC holes totaling 10,940 feet and 2 diamond drill (DDH) holes totaling 1,653 feet.

There were no historic mineral resources estimated for the Spring Valley project prior to Midway's acquisition of the property.



7. <u>GEOLOGICAL SETTING AND MINERALIZATION</u>

7.1 Regional Geologic Setting

The Spring Valley property is located in the Humboldt Range, a north-south oriented, up-thrown fault block (horst) bounded on the west by the Humboldt River valley and on the east by Buena Vista Valley. Quaternary alluvial deposits fill the intermontane basins and alluvial valleys.

The bedrock geology of the Humboldt range within 20 miles of the Spring Valley property consists of Triassic shales and carbonate rocks, a thick sequence of Permo-Triassic intermediate to felsic volcanic rocks, and a north-south trending belt of Tertiary volcanic rocks (Figure 7-1). Triassic leucogranite and Cretaceous granodiorite locally intrude the Permo-Triassic volcanic package.

The oldest rocks exposed in the central Humboldt Range are a series of Permo-Triassic volcanic and metavolcanic rocks, named the Koipato Group, that include, from oldest to youngest, the Limerick Greenstone, the Rochester Rhyolite, the Weaver Rhyolite, and their intrusive equivalents (rhyolite porphyry and leucogranite). The Koipato Group is interpreted as representing bimodal volcanism in a back-arc setting that was subsequently accreted onto the continental margin (LeLacheur et al., 2009). Contacts of the Koipato Group with the Triassic Natchez Pass and Prida Limestones to the north, west and on the eastern flank of the range are all fault contacts. Cretaceous granodiorite locally intruded the Permo-Triassic units. Quaternary alluvial and colluvial deposits unconformably overlie the older bedrock units. North-south, north-northwest, and north-northeast normal faults are the dominant structural features in the region.

The Humboldt Range in the region surrounding the Spring Valley project is well-mineralized. Styles of mineralization in the central Humboldt Range include base and precious metal vein and vein-stockwork mineralization and Tertiary sediment-hosted gold deposits. Examples of vein/vein stockwork systems include Spring Valley, Rochester, Nevada Packard, the Unionville district and the Dun Glen district. Examples of Tertiary sediment-hosted gold mineralization in the region include Florida Canyon, Relief Canyon, Standard, and Willard.





Figure 7-1 Geology of the Humboldt Range


7.2 Local Geologic Setting

The known Spring Valley mineral system is beneath an intermontane basin filled with postmineral Quaternary alluvial deposits, thereby masking the bedrock geology immediately overlying or containing the mineralization. At the scale of the Spring Valley property position, the bedrock units are distributed in blocks aligned approximately north-south. The bedrock geology is dominated by the Limerick Formation in the western one-third of the property, the Rochester Formation in the central and eastern half of the property, and the Natchez Pass Limestone in the extreme northeast corner of the property (Figure 7-2). At this scale, the geology is segmented by a number of faults: a relatively older north to northeast trending set including the West Spring Valley, Limerick and Black Ridge Faults; and, northwest trending, steeply dipping cross faults with oblique or lateral offsets that displace the older north to northeast trending faults. The West Spring Valley fault is interpreted as a steeply east dipping normal fault, whereas the Black Ridge and Limerick faults are interpreted as moderate to high angle normal faults with westerly dips. The Limerick fault may be listric in character, with flattening dip at depth. East-west and northeasterly faults are also mapped, but are not part of the predominant fabric on the property.

The bedrock geology beneath the Quaternary alluvial cover has been interpreted and compiled by Midway and other workers based on drill hole information. The surficial and subsurface bedrock geology within the Spring Valley intermontane basin is described below as modified from Stiles (2008), LeLacheur et al. (2009), Neal (2004), and Neal & LeLacheur (2010).

The Spring Valley basin is completely covered by between 50 and 375 feet of Quaternary alluvium, consisting mainly of valley fill gravels and mud flow deposits (Figure 7-2). Bedrock geology beneath the alluvium features northeast trending felsic volcanic and volcaniclastic rocks intruded by a feldspar porphyry intrusion at depth (Figure 7-2). The rhyolitic vent complex is interpreted as coeval with development of the Rochester and/or Weaver Rhyolites, and is thereby believed to be Triassic in age.

Structures in the alluvium covered area are interpreted primarily from logging of drill core and chips and, to a lesser degree, from geophysical surveys, mapping and projection of faults observed in the hills surrounding the basin. Faults within the area covered by alluvium are difficult to document, and are inferred from offsets in geologic units and/or trends of mineralized/altered zones and gold grade distributions. Many faults appear to have complex, long-lived histories, and may have developed prior to or at the time of emplacement of the Spring Valley rhyolitic vent complex, with reactivations during accretion of the Koipato Group, and Basin and Range development. Many structures thereby appear syn- to late-mineral relative



to alteration, mineralization and intrusion. The lack of detail regarding the timing and location of significant structures impacts the modeling of the associated gold mineralization, making determination of modeling domains difficult. Gustavson recommends a better understanding of the structural geology and its impact on the distribution of mineralization, alteration and rock types be developed.





Figure 7-2 Bedrock Geology Map of the Spring Valley Project



7.3 Lithologic Units

Lithologies recognized under the alluvium covered area at the Spring Valley prospect are shown in conceptual cross section in Figure 7-3, and are listed below.

7.3.1 <u>Quaternary Alluvium (Qal)</u>

Alluvial gravels with coarse angular clasts of local lithologies cover much of the intermontane basin. Gold mineralization, possibly placer deposits, has been identified in places at the base of this unit but this mineralization is not included in the mineral resource estimate.

7.3.2 <u>Limerick Greenstone:</u>

The Limerick Greenstone is comprised of a thick pile of intermediate to mafic flows and interbedded volcaniclastic sediments. The base of the sequence is not exposed on the project. Felsic sills and dikes intrude the greenstone. Small felsic flow domes of the Rochester Rhyolite are present in the upper part of the Limerick sequence.

At Spring Valley, the Limerick Greenstone can be divided into an upper greywacke, andesite flows, and intrusive gabbro. The upper greywacke is a fine- to coarse-grained, gray-green, chlorite-altered sandstone and mudstone. It has local cross bedding and variable thicknesses of fining-upward sequences that are common to submarine turbidite deposits. Thin interbeds of boulder-to-cobble conglomerate become increasingly common toward the top of the unit.

Underlying the greywacke is dark gray to black, fine-grained, conchoidally fractured andesite. This andesite has local phenocrysts of hornblende or plagioclase. Lithophysae are locally common. A dark green, fine grained mafic intrusive or gabbro is observed within the andesitic sequence. These sills or dikes contain fine crystals of hornblende and/or pyroxene and, less commonly, plagioclase. No large bodies of this unit have been identified to date.

All of the greenstone rocks have a weak metamorphic overprint of gray sericite, gray-green chlorite, and minor green epidote. The green coloration is caused by a strong chlorite content that may have formed as a regional propylitic alteration. Foliation is poorly developed on the east side of Spring Valley. A more pronounced phyllitic foliation is observed on the west side of the valley. Veins and local replacement pods of calcite are common and may be related to mineralization. Quartz-carbonate-chlorite veining is common. The chlorite in the veins appears to be psuedomorphs after tourmaline. These veins do not usually carry gold.

7.3.3 <u>Rochester Rhyolite</u>

The Rochester Rhyolite is comprised of massive and flow banded rhyolite flows, flow domes, tuffs, tuffaceous sediments, and a coarse, volcanic-derived breccia interpreted to be part of a



diatreme vent or eruption apron. All of these rocks have a high K-feldspar content. Felsic dikes and sills which are found throughout the Rochester are thought to be intrusive equivalents to the volcanic flows.

Lithologies identified from drilling within the Rochester at Spring Valley include:

7.3.4 <u>Upper Rhyolite</u>

The upper rhyolite is a dark brown to orange, massive rhyolite. Small plagioclase phenocrysts, larger K-feldspar phenocrysts and, rarely, small quartz phenocrysts are in a matrix of microcrystalline quartz and K-feldspar. Thin interbeds of tuffaceous sandstones or conglomerate are common. K-feldspar spherulites (up to 3 cm across), lithic fragments (up to 1-2 cm across), and more rarely, flow-banding are locally present within the unit. Perlitic cracks in the matrix were observed in thin section. In outcrop, this unit is locally bleached, or moderately sericitized, and weathers to a burnt brown color. The top of the unit has been removed by erosion, but in the area drilled the remaining unit is between 250 and 300 feet thick.

7.3.5 <u>Siltstone</u>

Directly beneath the upper rhyolite is 50 to 150 feet of white to gray-brown thinly bedded siltstone or fine sandstone. It is locally cross-bedded and has local graded bedding. Distribution of the siltstone in drill holes suggests it was deposited in a shallow lake or sea that formed between flow events. The unit contains abundant fine grained, disseminated tournaline needles.

7.3.6 <u>WT Rhyolite</u>

The WT rhyolite is a dark gray, dark purple or dark-brown banded rhyolite that is a distinctive marker horizon in parts of the project. The unit is characterized by distinctive irregular and discontinuous flow banding that is often contorted. The flow banding forms from layers of darker gray microcrystalline quartz and K-feldspar alternating with lighter gray layers of mostly microcrystalline K-feldspar

The planar orientation of the flow banding where measured in outcrop or seen in oriented core commonly strikes 170° - 190° with a near vertical dip. This is nearly perpendicular to the bedding orientation. In portions of the project area, the upper part of this unit is a massive, gray, lithic rhyolite with barely visible flow banding. Near mineralized areas, the flow banding is very pronounced where it is exaggerated by hydrothermal alteration.



7.3.7 <u>Breccia/Conglomerate</u>

Underlying the WT Rhyolite is a breccia with large rounded to subangular clasts in a matrix of smaller rock fragments. It is largely clast-supported, and poorly sorted. Clasts include fragments of silicified limestone and a variety of intrusive and extrusive igneous rocks not seen elsewhere in Spring Valley, as well as local units. In one area, the breccia cuts upward through the WT rhyolite and part of the siltstone. Fragments of these rock types were observed deeper in the breccia. This feature was interpreted as a diatreme and was the focus of drilling in the early stages of the project. Adjacent to the pipe, breccia is conformably overlain by the WT rhyolite and is interpreted to be an eruption apron. The base of the breccia has been obliterated by intrusion of feldspar porphyry.

7.3.8 <u>Intrusive rocks</u>

The Rochester Rhyolite and Limerick Greenstone were intruded by a shallow, hypabyssal intrusion that underlies the volcanic rocks throughout most of Spring Valley. The intrusion has distinct feldspar phenocrysts in a fine-grained matrix and has been designated as the feldspar porphyry (FP). The top of the intrusion is very irregular and includes apophyses that form sills and dikes that extend into faults, and along contacts of the Limerick and Rochester rocks. The eastern margin of the intrusion formed a west-dipping dike along the Limerick fault between the Limerick Greenstone and Rochester Rhyolite. This dike is strongly mineralized.

Hand samples of the feldspar porphyry intrusion are dark brown or gray, with medium-grained, white feldspar phenocrysts in an aphanitic matrix. Fine-grained, black biotite phenocrysts are also usually present. The feldspar porphyry has not been dated isotopically, but textures and composition are similar to the Rochester Rhyolite. Other workers (Wallace, 1969) have mapped similar rocks in surface outcrop as being coeval with the Rochester Rhyolite.

West of Spring Valley a swarm of quartz feldspar porphyry sills cut the Limerick Greenstone. The sills have feldspar phenocrysts in a greenish aphanitic groundmass and locally contain fine grained quartz phenocrysts. Many of the sills have sericitic alteration and fine grained disseminated limonite after pyrite cubes. The sills consistently host sheeted quartz and quartz-tourmaline veins, some with anomalous gold values. These sills are similar in character to the dike on the eastern margin of the deposit area that grades into the feldspar porphyry in zones of strong alteration and gold mineralization.

Intrusive bodies of biotite-feldspar porphyry and plagioclase porphyry are found north and east of Spring Valley. These are thought to be related to the feldspar porphyry or Rochester Rhyolite, but are not mineralized nor well studied.



Several small intrusive bodies east of the resource area are believed to be late-Cretaceous to Tertiary in age. Small exposures of hornblende diorite, monzonite, and granodiorite are surrounded by hornfelsed volcanic rocks. The hornblende diorite is a fine-grained porphyritic intrusion. The amphiboles are relatively unaltered and surrounded by a thin rim of ragged biotite. The amphiboles are intergrown with plagioclase and pyroxene phenocrysts in a fine-grained groundmass of plagioclase microlites and K-feldspar, with accessory magnetite. The magnetic signature of the hornblende diorite suggests that it could be over 800 meters across in the subsurface. Hornblende diorite with strong yellow-green sericite alteration of the hornblende has been observed adjacent to feldspar porphyry in deep drill samples on the east side of the gold occurrence.







Figure 7-3 Conceptual Cross Section of Lithologies (Modified from Chadwick, 2012)



Midway Gold Corp. Spring Valley Project

Symbol	Age	Formation	Litholigy		
××××× ××××××	v		Granodiorite		
×××	eou		Hornblende Porphyry		
	etac		Intrusion Breccia		
	ō		Pegmatite		
	Triassic Prida		Limestone		
TRp	Late Tr–Early P		Rhyolite Porphyry		
PTRRP - PTRRPB	Early Triassic		Lithic Tuff		
TRwit		Weaver	Nenzel Breccia		
		Rochester	Quartz-eye Rhyolite		
TRrQER			Lithic Tuff		
TRrLT	.c.		Volcanosedimentary Rxs		
TRrSD	rias		Welded Tuff		
TRrWT	신		Spherulitic Welded Tuff		
TRrWT (spherulitic)	Ш		Finer grained Agglomerates		
TRrAGL (volcanosedimentary)			Brecciated Agglomerates		
Viologia (RrAGL (Agglomerates)			Feldspar Porphyry		
		Limerick	Greenstone		
			Ash Flow Tuff		
	ate Permian		Volcanosedimentary Rxs		
			Volcanosedimentary Rxs		
Plvs (conglomerate)			Volcanosedimentary Rxs		
Plvs (mudstone)			Volcanosedimentary Rxs		
Plvs (sandstone)					
Plvs (undifferentiated)			Lithic tuff		
Pllt					

Figure 7-3 (Continued), Legend (Modified from Chadwick, 2012)



7.4 Mineralization Style

Quartz veining, alteration, and gold mineralization at Spring Valley are irregularly distributed throughout the favorable host rock area. Large intervals of dense quartz veining and pervasive alteration are interspersed with unmineralized and less strongly altered country rock.

Gold has been observed in quartz veins and in adjacent alteration selvages as disseminated free gold. Free gold is likely deposited on fracture surfaces as well. Relatively coarse gold (30 to 90 microns) is common and can be observed as free gold liberated by drilling (Figures 7-4 to 7-6). Most quartz veinlets are in the ½ inch to 4 inch size range with associated alteration selvages of a few feet to tens of feet wide, varying to areas of dense quartz veining with pervasive alteration.

The quartz veins are translucent, intergrown, coarse quartz crystals with few if any open spaces or fissures. In combination with the relatively much larger alteration selvages, the character of these veins suggests a mesothermal or plutonic origin. Epithermal-style veins have not been observed at Spring Valley.

Quartz veins commonly contain pyrite (2-10%), less commonly galena and traces of sphalerite, magnetite and visible gold. From a limited amount of trace element data collected from drill samples, there are low levels (a few tens of parts per million above background) of anomalous lead, zinc, and arsenic associated with the gold mineralization.

7.5 Alteration

There are several distinct types of alteration at Spring Valley, as listed below:

- 1) Pervasive to fracture controlled quartz-sericite and quartz-sericite-pyrite alteration;
- 2) Strong pervasive to fracture controlled argillic alteration;
- 3) Very strong clay and clay filled breccia formation;
- 4) Pervasive to fracture controlled iron-carbonate alteration;
- 5) Pervasive to fracture-controlled hematite-quartz alteration.

Gold zones are most pronounced in the quartz-sericite-pyrite zones and in the pervasive argillic zones, although gold is found in every alteration type.

Other types of alteration include quartz-tourmaline, and potassic. Tourmaline occurs as disseminated crystals in sediments and the diatreme breccia and as quartz-tourmaline veins. While gold is found in some quartz-tourmaline veins, tourmaline generally is not correlated with the gold. Locally, the introduction or remobilization of potassium is seen by fresh overgrowths on feldspar or fine secondary biotite. This potassic alteration style may be much more extensive



than currently understood due to the high potassium content of the Rochester Rhyolite which may mask the introduction of new potassium as an alteration product.

Carbonate alteration of the Limerick Formation greenstone rocks was observed locally adjacent to the Limerick fault. No direct correlation of carbonate alteration with gold mineralization was noted.



Figure 7-4 Coarse Gold from SV08-435 Drilled in the Big Leap Zone







Figure 7-5 Coarse Gold from SV08-410 at 310'

Figure 7-6 Coarse Gold from SV08-436 Drilled at the South End of the Big Leap

7.6 Geometry of Mineralization

The gold mineralization forms an irregularly-shaped cap encompassing at least the upper portions of the feldspar porphyry and significant volumes of the overlying or adjacent lithologies. The feldspar porphyry contact is very irregular. It was emplaced into a series of faults and irregular contacts, and may have been displaced by later fault movements. Overall the



mineralization trends N20E to N30E and has the appearance of plunging 5-10 degrees to the north, though some of this plunge may be due to later fault-block subsidence.

Mineralization has been intercepted in drilling over a strike length of 7,500 feet and is open in both strike directions. Mineralization averages about 2,300 feet wide. The shallowest mineralization is found at the top of bedrock beneath 50 feet of alluvium. Deep core drilling has intersected gold mineralization as deep as 1,500 feet below the surface.

Quartz vein strike and dip directions recorded from oriented drill core show several distinct orientations. The most prominent orientation strikes N74E, dipping 60 degrees south. This principle vein orientation is oblique to the overall trend of the gold mineralization at Spring Valley.

8. <u>DEPOSIT TYPES</u>

The Spring Valley deposit is hosted within a porphyry intrusion and overlying felsic volcanic rocks. Gold mineralization was controlled by steeply dipping, N20E to N30E- trending, deep-seated faults, as well as at contacts, deformation structures, and in permissive host rocks within a local graben. The mineralization is associated with relatively thin, crystalline quartz veins that have large alteration selvages. In areas of dense quartz veining, the alteration selvages coalesce into regions of pervasively altered and veined rock.

There are characteristics of the deposit which are similar to porphyry-hosted systems, but there are significant differences. There are also characteristics similar to orogenic type gold deposits, possibly related to accretion of the Koipato group. (Neal & LeLachleur, 2010). It is possible that there are multiple fluid phases influencing gold deposition in the system. Additional work is needed to better define the source of mineralizing fluids and to refine the deposit model.

Gold has been detected in gravels immediately above the bedrock-alluvium contact, indicating that placer gold deposits exist at and above the paleo-bedrock surface. Gustavson has not included an evaluation of the alluvium hosted deposits in this report.

9. <u>EXPLORATION</u>

Exploration work carried out by MGC and Barrick on the Spring Valley property has been and continues to be dominated by drilling. MGC and Barrick have conducted extensive geological mapping and surface geochemical sampling campaigns in the surrounding hills and have conducted limited geophysical surveys in the basin to guide drilling. Early exploration work by previous operators included small-scale surface geochemical, geophysical surveys and drilling.



9.1 **Pre-MGC Exploration**

The Spring Valley property was explored by previous operators from 1996 to 2002. A summary of exploration drilling by Kennecott and Echo Bay at Spring Valley is provided in the drilling summary, Item 11. In addition to drilling, Echo Bay used geophysics, surface mapping, and rock chip sampling to explore the property and define drill targets.

9.2 MGC Exploration

MGC has been active in all phases of exploration work on the Spring Valley property since acquiring the project in 2003, and prior to consummating the exploration agreement with option to joint venture with Barrick Gold Exploration Inc. in early 2009. Surface geochemistry, geologic mapping, and geophysical surveys have all helped to identify drill targets both proximal to the Spring Valley discovery and in new exploration targets spread over the property.

9.2.1 <u>Surface Geochemistry</u>

Rock and soil sampling were carried out largely on the margins of the Spring Valley discovery area. An extensive program of over 5,000 soil samples was completed over the property in 2006 and 2007. Soils were sieved to the -10+80 mesh size fraction and assayed at ALS Chemex for gold by standard fire assay methods on a 30g subsample and an additional 50 elements by aqua regia digestion of a 0.5 gram subsample and ICP finish.

9.2.2 <u>Rock Samples</u>

Rock chip samples were taken during reconnaissance geological traverses, prospect mapping and target delineation. Between 2003 and 2009, MGC collected a total of 1540 rock samples. Rock chip samples were crushed to 70% passing 2mm with a nominal 250 gram split pulverized to 85% passing 75µm, and assayed by the same procedures as the soil samples.

9.2.3 <u>Geological Mapping</u>

Geological mapping was completed by MGC geologists and consultants covering six square miles surrounding the Spring Valley prospect area. Detailed mapping of selected exploration target areas has also been carried out. Mapping helped clarify the property geological setting, identified structural trends helpful in targeting drilling, and identified prospective areas for follow-up exploration work.

9.2.4 <u>Geophysical Surveys</u>

Geophysical surveys have included a CSAMT survey in 2003, and ground based gravity and magnetic surveys. J.L. Wright Geophysics of Spring Creek, Nevada, interpreted the results.



Several anomalous features were interpreted to represent silicified bodies at depth (Wright, 2004).

The results of the geophysics, geologic mapping and geochemical surveys have helped to identify additional exploration targets on the property peripheral to the Spring Valley resource.

9.3 Barrick Exploration

Barrick has conducted additional exploration programs at Spring Valley from 2009 to 2013. This has included additional geologic mapping, collecting additional rock chip and soil samples as well as drilling.

9.4 Exploration Targets

Exploration at Spring Valley has been directed at identifying areas for resource expansion and new resource discovery. Numerous exploration targets outside of the resource area have been identified based on the results of soil and rock sampling, analysis of geophysical data, and improved geological mapping. Many of these targets remain untested by drilling and an expansion of the current permit boundary is needed to test them.

Examples of exploration targets include:

- Mineralized zones in the resource that can be projected to the north and northeast
- Cross structures cutting the resource area, such as the Wabash fault, that can be projected to the East along creeks mined for placer gold
- Soil and rock chip gold anomalies on Gold Mountain, south of the resource
- Soil and rock chip gold anomalies along the Fitting fault
- Buried intrusive rocks east of the resource

10. <u>DRILLING</u>

10.1 Type and Extent

This section provides a synopsis of all drilling conducted on the Spring Valley resource area. The Spring Valley resource area has been drilled with a total of 672 holes totaling 603,731 feet, including 531 Reverse Circulation (RC) drill holes totaling 428,500 feet and 141 diamond core holes totaling 173,011 feet (see Table 10-1).



Years	Company	Total Drill Holes	Total Drill Footage	Core Holes	Core Footage**	RC Holes	RC Footage
1996	Kennecott	4	2,220			4	2,220
2001/2002	Echo Bay	21	12,593	2	1,653	19	10,940
2003/2004	Midway*	30	23,679	2	1,769	28	21,910
2004	Midway	18	4,695			18	4,695
2005	Midway	100	51,249	21	10,088	79	41,160
2006	Midway	70	60,206	7	10,376	63	49,830
2007	Midway	142	102,356	9	12,521	133	89,835
2008	Midway	63	61,945	5	8,034	58	52,460
2008	Barrick	2	2,725	2	2,725		
2009	Barrick	32	39,842	8	9,722	24	27,395
2010	Barrick	38	54,901	23	35,501	15	19,400
2011	Barrick	44	60,501	12	16,925	32	43,575
2012	Barrick	58	57,140	23	26,255	35	34,285
2013	Barrick	50	68,148	27	37,442	23	33,015
тс	TALS	672	603,731	140	173,011	531	428,500

Table 10-1 Summary of Drilling Campaigns in the Spring Valley Resource Area

Note: Core footage includes RC pre-collar footage

* Managed by Global Geologic Services on Midway's behalf

** Diamond core drill hole totals are inclusive of pre-collar drilling length

Figure 10-1 shows the distribution of drilling in the Spring Valley resource area. Mineralization defined in the Spring Valley resource area remains open along the N20E-S20W trend to the north, south and at depth.





Figure 10-1 Spring Valley Project Area Drill Hole Location Map



10.2 Drilling Procedures and Conditions

The following information about Midway drilling is extracted from LeLacheur et al. (2009).

Drilling conditions at Spring Valley are optimal. Sites were constructed by digging a sump and, if necessary, by leveling a pad for the drill. Only rarely was more significant construction required for drill sites. Almost all holes were collared in valley fill alluvium with the water table generally between 20 to 30 feet below the surface. Water was present in nearly all holes and increased in amount with depth. Bedrock was between 50 feet and 500 feet below the surface, but was generally between 200 and 300 feet deep. The zones of highly fractured rock increased with clay and brecciated zones encountered near structures. Drilling at Spring Valley was conducted predominantly (~80%) using RC methods.

10.2.1 <u>Reverse Circulation Drilling</u>

RC drilling conducted by Midway was carried out using tricone bits, first to get through clay layers in the alluvium, then to enhance drill penetration below the water table. RC holes were drilled with 5 3/8 inch to 5 5/8 inch bits. The holes were generally cased only in the top 20 feet.

The majority of Barrick RC holes in areas with alluvial cover were drilled by mud rotary to the alluvium-bedrock interface. Thereafter, RC drilling was carried out using tricone bits. The only exceptions to this approach were for holes sited on bedrock exposures, where a down-hole hammer would be employed until significant water was encountered. RC holes were drilled with $5^{3}/_{8}$ inch to $5^{5}/_{8}$ inch bits.

10.2.1 Diamond Core Drilling

Midway diamond core holes were pre-collared with an RC drill to the alluvium-bedrock contact. The hole was then cased to the bedrock. Core holes have largely been drilled with HQ ($2\frac{1}{2}$ inch) size core, though three holes were drilled with PQ ($3^{3}/_{8}$ inch) size core in 2006. All 2008 core was oriented to enable the collection of structural data. Core recovery has in general been good, but core loss increased when the rock was highly fractured and brecciated. In 2008, modifications to the use of drilling muds resulted in significant improvements in recovery, especially in the highly fractured and brecciated zones.

Barrick diamond drill holes were drilled by mud rotary to the alluvium-bedrock interface, and were cased to the bedrock. Thereafter, RC drilling using a tricone bit was continued if the expected mineralized zone was at greater depth. Otherwise, the diamond drill core tail was initiated at the bedrock interface. Core holes have largely been drilled with HQ ($2\frac{1}{2}$ inch) size core, with reduction to NQ ($1^{7/8}$ inch) core as necessary.



10.2.2 Drill Collar and Downhole Surveys

Collar locations from the 2006-2008 drill campaigns were surveyed by TNT Exploration (TNT) of Reno, Nevada using a survey quality GPS. Collar locations from the 2004-2005 drill campaign originally surveyed by hand-held GPS were also surveyed by TNT in 2006. Most pre-2004 collar locations (84%) were located by a surveyor while the remainder were surveyed by hand-held GPS (16%). Collar locations for all of the Barrick (2009-2013) drilling campaigns were surveyed by a professional land surveyor, using a survey quality GPS.

Significant down-hole deviation has been observed in drilling at Spring Valley. Of holes drilled prior to 2004, only Echo Bay drill holes ESV-14 to ESV-19 and core holes SVC-1 and SVC-2 were surveyed down-hole. Other Echo Bay holes were not surveyed. Between 2004 and 2006, holes deeper than 500 feet were generally surveyed down the hole. In 2008, all but two completed holes were surveyed down-hole. International Directional Services (IDS) of Elko, Nevada and Major Directional Services of Salt Lake City, Utah were contracted to do the down-hole surveys. All Barrick RC and diamond drill holes were down-hole surveyed by IDS using a gyroscopic survey instrument.

10.3 Drilling Interpretations and Results

Drilling at the Spring Valley project has occurred over an area approximately 10,500 feet in a N20E-S20W direction and up to 3,000 feet wide. The drilling has defined a gold resource 7,500 feet in strike length by 2,300 feet wide. Additional exploration and step-out targets remain untested.

The Spring Valley gold resource has a strong NNE linear trend. That trend can be projected to the NE into an area of NNE trending faults with soil gold anomalies. This structural setting is similar to the main resource area and represents a significant target for expansion of the resource. Drill testing to the north has been limited by the boundary of the drill permit.

Barrick drilling to the south of the resource identified several smaller pods of gold mineralization. The largest of these is at the furthest south extent of drilling near the flanks of Gold Mountain. Drill testing to the south has also been limited by the boundary of the drill permit. This southern mineralization remains open with no drilling further south.

The Wabash fault is a NW-SE trending fault that bisects the main Spring Valley resource. Extensions of this fault to both the east and west of the main resource have the potential to host mineralization that has not yet been tested. Placer gold is common along the trace of the fault to the SE. This target has not been tested to date.



A lower Felsic Porphyry unit is mineralized at depth in the main resource area. Additional infill drilling is needed throughout the deposit to better define this deeper part of the resource. On the east side of the deposit, the host rock can be followed from depth back to the surface. There is potential for the lower Felsic Porphyry to be found close to the surface in areas not yet drilled.

11. <u>SAMPLE PREPARATION, ANALYSES, AND SECURITY</u>

11.1 Sampling Method and Approach

The Spring Valley gold system contains appreciable free gold, at all gold grades of mineralization. This has been discussed and analyzed in previous technical reports (Ristorcelli, 2003; Griffith and Ristorcelli, 2004; Wakefield and Seibel, 2006; Wakefield and Kuhl, 2008; LeLacheur et al., 2009; and Crowl, Hulse, Baker, Lane and Malhotra, 2011.

Midway and Barrick have established the practice of first assaying all samples with a 30 gram fire assay and then all mineralized intervals were systematically re-assayed using Metallic Screen Fire Assay (MSFA). Where available, the MSFA numbers were utilized in the resource estimate. Appropriate QA/QC procedures were followed. The project data is stored in a secure database. Assay and geology data have been checked for accuracy for all programs prior to 2009, and spot checked in the Barrick programs from 2009 through the 3rd quarter of 2013.

Sampling consultants F. Pitard in 2004 and Dr. Dominque François-Bongarçon in 2007, recommended analyzing very large samples to address the nugget effect in sampling. Midway investigated the possibility of analyzing very large samples with ALS Chemex, a commercial laboratory. The recommended sample size was too large for their sample preparation equipment so each sample would have had to be sub-divided up to 5 times, with each subsample assayed separately. Potential for significant errors was considered to be high. As a result, these recommendations were not implemented.

11.2 Midway Sampling Preparation, Analyses, and Security

The following information about Midway sampling is extracted from Wakefiled and Kuhl (2008) and LeLacheur et al. (2009).

11.2.1 <u>Sample Chain of Custody</u>

At the end of every drill shift, reverse circulation drill samples were taken from the project site by Midway geologists and transported to a facility in Lovelock, Nevada where the samples were stored behind locked gates. Core drill samples were stored at the same facility in separate bins. Periodically the samples were picked-up by ALS Chemex Labs and were transported to their



Winnemucca facility for assay preparation. ALS Chemex is an ISO 9001:2000 and ISO 17025:2000 registered assay laboratory. For check assays, coarse duplicates were also delivered to the Inspectorate American lab in Reno, Nevada for preparation and assay. Inspectorate is an ISO 9001:2000 registered assay laboratory. No Midway personnel were utilized in sample preparation or assaying.

11.2.2 Diamond Drilling Core Sampling

Core was recovered using a split tube assembly. Core was oriented and marked during the drilling using a Reflex® ACT electronic orientation tool. Recovered core is placed in cardboard core boxes at the drill site with the core run footage marked on wood blocks and the drill hole name and drill interval marked on the outside of the box. At least once per day, a geologist retrieved the full core boxes and transported them to the Lovelock facility. The core was photographed, logged, and sampled. The orientation of veins, fractures, and faults, as well as lithology, alteration, and geotechnical information was recorded during logging.

Core was sampled in intervals up to five feet while honoring geologic contacts where appropriate. The preferred sample interval was five feet and this was also the specified maximum sample length. Geologic contacts or features were used as sample boundaries wherever possible. The core was split with a saw if the rock was competent or the core was broken with a splitter if it was fractured or friable. The sample was bagged in large micro-pore bags marked with the sample number and stored at the logging facility until transport to the assay lab. Typically, ¹/₂ of the core sample was submitted for assay analysis and the remaining ¹/₂ stored for reference and other testing.

11.2.3 <u>Sampling of Reverse Circulation Cuttings</u>

Reverse Circulation (RC) drilling at Spring Valley was performed wet as the water table is typically 20 to 30 feet below the surface. Water flow tests were conducted at least once a drill shift or more often when water flow was high or changed drastically. Water flow varied but was typically 40 gallons per minute and has been measured as high as 150 gallons per minute, with the higher flows generally found at the bottom of the hole. RC drilling was generally performed with a tricone bit to improve penetration rate and quality of returns in the presence of ground water.

Cutting samples were collected every 5 feet by a designated and trained sampler. Cuttings from each 5-foot sample interval were passed through a cyclone and into a rotary splitter with 16 openings. The number of splitter openings was adjusted to maintain a roughly constant sample size of 15 kg. The number of openings was recorded in the drill log. This number, together with the dry weight for the interval at the assay laboratory, allowed an estimation of RC drilling



recovery. Drill samples were collected at five-foot intervals and the RC drill rods were 20 feet long. A representative split from the discharge material was placed into a plastic RC chip tray for geological logging. The chip tray was marked with the drill hole name and down-hole interval.

RC samples were collected in a five gallon bucket lined with large micro-pore bags marked with the sample number. The five gallon bucket was placed inside a wide, low profile tub designed to catch any fine grained cuttings in the overflow water. At the conclusion of a sample interval, the water in the bucket and tub was decanted, the overflow material in the tub was washed into the sample bag in the bucket and the bag was sealed. A nominal sample weight of 15 kg was taken to aid in getting an accurate assay in a coarse gold environment. In 2008, RC samples averaged 13.29 kg.

RC samples were laid out on the ground at the drill site, allowed to drain, and brought back to the Lovelock facility at the end of each drill shift by Midway Resources personnel. In Lovelock, samples were stored in secure bins until picked up and transported to Winnemucca by the commercial laboratory for preparation and assaying.

11.2.4 <u>Sample Preparation and Assay Procedures</u>

<u>2003</u>

Gold assays for the 2003 drilling campaign were performed by BSI Inspectorate of Reno, Nevada using a standard FA with a two assay ton sub-sample size and with the final concentration determined by AAS. Assays returning greater than 2.0 g/t (0.088 oz/t) gold were re-assayed by fire assay with a gravimetric finish. Metallic screen gold fire assays were performed on most mineralized intervals by ALS Chemex of Reno, Nevada.

ALS Chemex performed metallic screen fire assays using a 100 micron screen (150 mesh) on one kilogram sub-samples of re-split coarse reject. The assay of the coarse (+150 mesh) material was weight averaged with two assays of the fine (-150 mesh) material.

2004-2005

Several labs assayed drill hole samples from the 2004-2005 drilling campaign. American Assay Laboratories (AAL) were used to assay holes SV04-52 to SV04-66, Inspectorate were used to assay holes SV05-67c to SV05-79, and ALS Chemex to assay holes SV05-80 to SV05-166. Coarse rejects of select samples were resubmitted to AAL and Inspectorate for metallic screen assay. All three of these laboratories are located in Reno, Nevada. AAL is an ISO 17025 registered laboratory.

Sample preparation at AAL and Inspectorate consisted of crushing the entire sample to pass a 10 mesh screen, riffle splitting to generate a 250 gram sub-sample, and pulverizing this subsample



to pass a 150 mesh screen. ALS crushed the entire sample to 70% passing a 2 mm (10 mesh) screen, riffle split to generate a one kilogram sub sample, and pulverized this subsample to 85% passing a 75 μ m (200 mesh) screen.

Mineralized intervals were selected based upon visual examination of the cuttings or core by the logging geologist and assayed by metallic screen fire assay using a 150 mesh screen on one kilogram sub-samples. All three labs used the same procedure where the assay of the coarse (+150 mesh) material is weight averaged with two assays of the fine (-150 mesh) material. The remaining intervals were assayed for gold by standard fire assay on 30 gram subsamples with the final concentration read by AAS. Samples reporting greater than 10 g/t (0.292 oz/t) were re-assayed by fire assay and gravimetric finish.

2006-2007

In 2006 and 2007, ALS Chemex was the primary assay laboratory. ALS Chemex is an ISO 9001:2000 and ISO 17025:2000 registered assay laboratory. Midway prepared a sample assay protocol for use with the 2007 drill program that describes the sample preparation, assay, and QA/QC procedures to be used for RC and core drill samples

Sample preparation and assay procedures remained the same as those used at the end of 2005, except that all samples were submitted for 30 gram fire assay, and those assaying greater than 0.2 g/t (0.006 oz/t) were re-assayed by one kg metallic screen fire assay. Intervals with a high concentration of quartz veining or groupings of assays by fire assay greater than 0.1 g/t (0.003 oz/t) were also frequently re-assayed by one kg metallic screen fire assay.

ALS crushed the entire sample to 70% passing a 2 mm (10 mesh) screen, riffle split this material to generate a nominal 250 gram sub-sample, and pulverized this sub sample to 85% passing a 75 μ m (200 mesh) screen. All samples were assayed for gold by standard fire assay on 30 gram sub-samples with the final concentration read by AAS. Samples reporting greater than 10 g/t (0.292 oz/t) were re-assayed by fire assay and gravimetric finish. Samples reporting greater than 0.2 g/t (0.006 oz/t) gold by standard fire assay were re-assayed by metallic screen fire assay. Metallic screen fire assays were performed on one kilogram subsamples using a 150 mesh screen. The assay of the coarse (+150 mesh) material is weight averaged with two assays of the fine (-150 mesh) material to produce a final gold assay.

<u>2008</u>

ALS Chemex was the primary assay laboratory. Sample preparation at ALS Chemex consisted of normal sample drying, then crushing the entire sample to pass a 10 mesh screen, riffle splitting to generate a 250 gram sub-sample, and pulverizing this sub sample to pass a 150 mesh screen. Pulps were then forwarded by ALS to their lab in Reno, NV where the assaying was performed.



All samples were submitted for standard fire assay on 30 gram sub-samples with the final concentration read by AAS. Samples reporting greater than 10 g/t (0.292 oz/t) were re-assayed by fire assay and gravimetric finish. Mineralized zones assaying greater than 0.2 g/t (0.006 oz/t), and other intervals with high quartz vein concentration or other indicators of mineralization, were assayed by one kg metallic screen fire assay.

ALS Chemex performed metallic screen fire assays using a 100 micron screen (150 mesh) on one kilogram sub-samples of re-split coarse reject. The assay of the coarse (+150 mesh) material was weight averaged with two assays of the fine (-150 mesh) material. Assays were reported as a weighted average of the whole, and the weights and assays of the individual splits.

Assay work in 2008 included 12,366 samples by 30 gram fire assay and 4,143 samples by metallic screened fire assay.

11.2.5 <u>Standards, Duplicates, and Blanks</u>

<u>2003</u>

Midway employed a QA/QC program of Standard Reference Materials (SRMs) and field duplicates inserted in the project sample stream at a rate of approximately one control sample for every 20 project samples (no SRMs were submitted for holes SV-39 to SV-50).

The Inspectorate gold assays are acceptably accurate for purposes of mineral resource estimation.

2004-2005

Midway employed a QA/QC program that consisted of inserting Standard Reference Material (SRM) and coarse duplicates into the sample stream at the rate of 1 in 25 project samples. This program was consistent for the three laboratories employed. The same SRM was used as in the 2003 drilling campaign.

SRM results for the 2004-2005 drilling campaign were biased high. AAL assays are biased high by an average of 9%, Inspectorate assays were biased high by an average of 12%, and ALS assays were biased high by an average of 13%. The fact that all three laboratories obtained results biased high by similar amounts suggested that the SRM value was incorrect. Therefore it was found that the AAL, Inspectorate, and ALS gold assays are acceptably accurate for purposes of mineral resource estimation.

2006-2007

Midway employed a QA/QC program that consisted of inserting blanks, SRMs, and coarse duplicates into the sample stream at the rate of one in 25 project samples. Commercial SRMs



from Minerals Exploration and Environment Geochemistry (MEG) of Reno, Nevada and Ore Research & Exploration (Ore Research) of Bayswater, North Australia were used to monitor gold assay accuracy. MEG assayed five splits of each SRM for gold at five separate assay laboratories and assigned the recommended value to the average of the resulting 25 assays. Ore Research assayed four splits of each SRM for gold at 16 separate assay laboratories and assigned the recommended value to the median value of the average values from each of the 16 participating laboratories. One SRM provided by MEG was found to be unreliable and was eliminated after limited use.

Blank results (Figure 11-1) for gold by fire assay were found to be acceptable. A total of nine assays reported greater than 0.025 g/t gold (0.001 oz/t, five times the lower detection limit) out of the total 428 blank samples assayed during this period. Only two of these were greater than 0.125 g/t (0.004 oz/t) gold.



Figure 11-1 2006 – 2007 Blank Results

An analysis of SRM results (Figures 11-2 through 11-6) by AMEC (2008) shows that the accuracy of ALS Chemex gold assays is acceptable. A total of 780 SRMs were included with project samples from the 2006-2007 drill campaign. Approximately 88% of assay results fall within $\pm 10\%$ of the recommended value for all SRMs assayed. No significant bias was observed in the SRM results. Assay results falling more than 10% from the recommended value were flagged and remediated directly with ALS Chemex.





Figure 11-2 2006 – 2007 Standard MEG055 Results



Figure 11-3 2006 – 2007 Standard MEG160 Results





Figure 11-4 2006 – 2007 Standard MEG200 Results



Figure 11-5 2007 Standard MEG067 Results





Figure 11-6 2007 Standard MEG045 Results

Analysis of the results from the coarse duplicates found a higher than normal level of variance between assays, likely because of the amount of coarse gold in the samples. A total of 458 duplicates were assayed as part of the 2006-2007 drill campaign.

These gold assays are acceptably accurate for purposes of mineral resource estimation.

2008

Midway employed a QA/QC program that consisted of inserting blanks, SRMs and coarse duplicates into the sample stream at the rate of one in 25 project samples. Coarse duplicates were also delivered to the Inspectorate American lab in Reno, NV for preparation and assay.

Of the total of 247 blanks analyzed in 2008, there were 6 failures for a failure rate of 2.4%. Only 2 samples were above the 0.025 level and only a single value exceeded the 0.125 level. In the case of failures above a 0.025 level, the sampling protocol requires a rerun of the blanks and the surrounding assays. The results of the reruns found no significant error. There is no significant carry-over contamination affecting the 2008 assays.

Commercial SRMs from Ore Research (Figures 11-7 and 11-8) were used to monitor gold assay accuracy. Approximately 88% of assay results fell within $\pm 10\%$ of the recommended value for all SRMs assayed. A total of 325 SRM's were inserted into the assay stream and a total of 34 failures were reported, 22 of which were deemed significant enough to require re-assay of a range of samples above and below the failure. In each case the re-runs were comparable to the initial assays. Two SRM's were utilized: a "low-grade" value SRM at 1.02 g/t gold and a "high



grade" SRM at a 3.63 g/t gold value. The low-grade SRM was biased low by 9%, but the high grade SRM demonstrated no bias.



Figure 11-7 2007 – 2008 Standard OREAS102 Results



Figure 11-8 2007 – 2008 Standard OREAS342 Results



A total of 146 duplicates were assayed as part of the 2008 drill program. Analysis of the results from the coarse duplicates found a higher than normal level of variance between assays, consistent with the presence of coarse gold in the system.

11.3 Barrick Sampling Preparation, Analyses, and Security

11.3.1 <u>Sample Chain of Custody</u>

RC samples are bagged, laid out on the ground at the drill site, allowed to drain, and are secured in sealed and locked bins at the drill site, until picked up and transported to Winnemucca by the commercial laboratory for sample preparation and assaying.

Core drill samples are transported from site and stored at the Lovelock facility in separate bins. Periodically the samples were picked-up by ALS Chemex Labs and were transported to their Winnemucca facility for assay preparation.

11.3.2 Diamond Drilling Core Sampling

In the Barrick drilling programs, HQ drill core is recovered using a split tube assembly. Core is oriented and marked during the drilling using a Reflex ACT electronic orientation tool. Recovered core is placed in cardboard core boxes at the drill site with the core run footage marked on wood blocks and the drill hole name and drill interval marked on the outside of the box. At least once per day, the full core boxes are retrieved and transported to the Lovelock facility. The core is photographed, logged and marked for sample intervals. The orientation of veins, fractures and faults is recorded in drill logs as well as lithology, alteration and geotechnical information.

Core is sampled in intervals of at least two feet, and up to eight feet while honoring geologic contacts where appropriate. The preferred sample interval was five feet. Geological contacts or features are used as sample boundaries wherever possible. Whole core is submitted as assay samples for each sample interval. The sample is bagged in large micro-pore bags marked with the sample number and securely stored at the logging facility until transported to the assay lab. Select two-foot sections of drill core are collected as representative of specific alteration, mineralization and/or lithologic types, and are separately submitted for multi-element analysis by ICP methods. Four to six inch pieces of core are marked and separately bagged for specific gravity measurement at Chemex. Skeleton core is created by selecting a representative two to four inch piece of core within every five-foot interval. The skeleton core is stored on-site at the Lovelock facility.



11.3.3 <u>Sampling of Reverse Circulation Cuttings</u>

RC drilling at Spring Valley was performed wet as the water table is typically 20 to 30 feet below the surface. Water flow tests are conducted at least once a drill shift or more often when water flow was high or changed drastically. Water flow varies but is typically 40 gallons per minute and has been measured as high as 150 gallons per minute, with the higher flows generally found at the bottom of the hole.

Cutting samples are collected every 5 feet by a designated and trained sampler. Cuttings from each 5-foot sample interval are passed through a cyclone and into a rotary splitter with 16 openings. The number of splitter openings is adjusted to maintain a roughly constant sample size of 30 to 40 pounds. The number of openings is recorded in the drill log. This number, together with the dry weight for the interval at the assay laboratory, allows an estimation of RC drilling recovery. Drill samples are collected at five-foot intervals and the RC drill rods are 20 feet long. A representative split from the discharge material is placed into a plastic RC chip tray for geological logging. The chip tray is marked with the drill hole name and down-hole interval.

RC samples are collected in a five gallon bucket lined with large micro-pore bags marked with the sample number. The five gallon buckets are placed inside a wide, low-profile tub designed to catch any fine grained cuttings in the overflow water. At the conclusion of a sample interval, the water in the bucket and tub is decanted, and the overflow material in the tub is washed into the sample bag in the bucket and the bag is sealed. A nominal sample weight of 30 to 40 pounds is taken to aid in getting an accurate assay in a coarse gold environment.

RC samples are laid out on the ground at the drill site, allowed to drain, and are secured in sealed bins at the drill site, until picked up and transported to Winnemucca by the commercial laboratory for sample preparation and assaying.

11.3.4 <u>Sample Preparation and Assay Procedures</u>

ALS Chemex (ISO 9001:2000 and ISO 17025:2000 registered assay laboratory) was the primary assay laboratory. Sample preparation for both core and RC samples at ALS Chemex followed the flow sheet used by Midway beginning in 2007, until August 2009. The earlier process consisted of normal sample drying, then crushing the entire sample to pass a 10 mesh screen (>95% passing 10 mesh), rotary splitting to generate a 250 gram sub-sample, and pulverizing this sub-sample to pass a 200 mesh screen (>85% passing 200 mesh). Pulps were then forwarded by ALS to their lab in Reno, NV where the assaying was performed.

All samples were submitted for standard fire assay on 30 gram sub-samples with the final concentration read by AAS. Samples reporting greater than 10 g/t (0.292 oz/t) were re-assayed



by fire assay and gravimetric finish. Mineralized zones assaying greater than 0.2 g/t (0.006 oz/t), and intervals with high quartz vein concentration or other indicators of mineralization, were also assayed by one kilogram metallic screen fire assay.

ALS Chemex performed the metallic screen fire assays by generating a one kilogram pulp from a rotary split from the coarse reject, which was pulverized to 75 microns (>80% passing <75 microns). Material not passing a 150 mesh screen (+150 mesh) was weighed and assayed. Two 30 gram splits of fines (-150 mesh) were fire assayed for gold. Results were combined to calculate an assay for the sample. ALS Chemex reported a weighted average grade assay for the sample, as well as the weights and assays of the individual splits.

The sample preparation flow sheet was adjusted beginning August 2009 to generate a larger pulp. The crushed samples were split by rotary splitter to produce a 1,200 gram split which was then pulverized as in the previous scheme. The pulp was split into a 100 gram sample for analysis by fire assay with an AA finish. The remaining 1,100 gram master pulp was stored along with the coarse reject for future use. Upon review of the initial assay results, project geologists would submit a list of samples for metallic screen fire assay analysis to ALS Chemex. The master pulp was pulled from storage and split to generate a sample for the metallic screen fire assay procedure, identical to that outlined above.

11.3.5 <u>Standards, Duplicates and Blanks</u>

Barrick employs a QA/QC program that consists of inserting blanks, SRMs and coarse duplicates into the sample stream at the rate of approximately one in 25 project samples. Blanks were inserted as 1% of samples; SRMs – 2%; and duplicates – 1% of the total samples. ALS Chemex routinely runs lab duplicates on 3.5% of the samples in each batch. The QA/QC program is run internal to Barrick in its Elko office. Barrick reports a rigorous analysis of its evaluation of the results to Spring Valley project geologists on a monthly basis, indicating standard and duplicate failures and other issues. The analysis includes plots of SRM and blank results by batch number. The SRM results are compared to the certified value of the SRM, and to threshold values at two and three standard deviations. Results between two and three standard deviations from the accepted value are classified as warnings, and are resubmitted at the request of the onsite geologist. Samples exceeding three standard deviations are considered to have failed, and are immediately resubmitted.

Gustavson reviewed the monthly reports of Barrick and the 2011 QA/QC plots (Figures 11-9 through 11-16) and considers the QA/QC program of industry standards for treatment of the SRM and blank data to be adequate. An analysis of duplicate data was not available, and Gustavson did not compile this information.





Figure 11-9 Barrick 2011 Blank Results





Figure 11-10 Barrick 2011 Standard OxC72 Results



Figure 11-11 Barrick 2011 Standard OxG83 Results





Figure 11-12 Barrick 2011 Standard OxJ68 Results



Figure 11-13 Barrick 2011 Standard SE29 Results





Figure 11-14 Barrick 2011 Standard SE44 Results








Figure 11-16 Barrick 2011 Standard Si42 Results

11.3.6 Check Assay Programs

During the 2009 – 2013 programs there were no check assay inter-laboratory programs reported by Barrick to Midway.

11.3.7 <u>Twin Hole Comparisons</u>

In 2009, Barrick twinned diamond drill core with reverse circulation holes at six drill sites at Spring Valley, and in 2010 completed two diamond drill holes as twins of reverse circulation holes completed in previous programs.

With the exception of the two core holes with single sample interval high grade intercepts, the average gold grade of the RC drilling is slightly higher than that of the comparable core samples. This relationship was also recognized by Midway (LeLacheur et al., 2009) in a twin hole program of two pairs of core-RC holes, and in a study using a nearest neighbor RC assay result in comparison with a core assay interval; however the difference is negligible considering the documented coarse gold sampling issues, and the relatively small data set. All drill hole data has been included in the database, and in the generation of gold resources reported in this document. Gustavson believes this treatment is acceptable and within limits of the available data; especially in light of the coarse gold sampling comments of Pitard (2004), suggesting the nugget effect on



the project which results in an understatement of the gold grade, thereby creating a very conservative resource estimate.

11.3.8 Exploration drilling 2014

Barrick, as operator of the Spring Valley Venture, began the 2014 exploration drill program in mid-March 2014. The data from the 2014 drill program have not yet been made available to Midway, and are not included in this resource estimation. Gustavson does not anticipate that a small number of additional infill drillholes will have a material impact on the resource.

11.4 Data Entry Validation Controls

Geologic and geotechnical logs (for core only) were completed for each Midway drill hole. For RC drilling, the geologists logged from drill chips directly into Microsoft Excel® spreadsheets using a PDA-type hand-held computer at the RC drill rig. Drill core was cleaned, photographed, and then logged by Midway geologists who input the information directly into Microsoft Excel® spreadsheets. Structure and vein orientations were recorded from oriented core. Drill logs were printed and stored in binders by hole name together with related drill information. All collar and drill log information was imported into a Microsoft Access® drill hole database. The logging forms were entered into a secure Microsoft Access® database, and any changes to the database needed to be approved by the project manager. This database was stored on the main computer at the Lovelock Office, and backed up to the server in the corporate office. Access to the primary database was restricted to the Project Manager and Database Manager for security.

Barrick project personnel follow sample handling and logging protocols outlined in a written procedures document. For diamond drill core, a visual quick-log of lithology is prepared while loading core at the drill site or unloading core at the Lovelock facility. Once at the Lovelock facility, the core is washed and photographed, with photos downloaded to a database. Photos are inspected for clarity and lighting, and reshot if necessary. Geological and geotechnical logs are completed, with data captured electronically, for each drill hole, using a preapproved logging form. Geotechnical aspects logged include core recovery, RQD, fractures per foot, and estimated hardness. Geologic features logged include lithology, alteration, mineralization, structure and measurement of magnetic susceptibility (every three feet). Sample intervals are marked by the geologist based on logged geology, alteration, mineralization and/or structure.

For RC drilling, the geologists logged from drill chips electronically using a PDA-type hand-held computer at the RC drill rig.

Drill logs were printed and stored in binders by hole name together with related drill information. All collar and drill log information was imported into Barrick's drill hole database. Access to the primary database was restricted to the Project Manager and Database Manager for security.



11.5 **Opinion on Adequacy**

Gustavson concludes that the sample preparation, security and analytical procedures are correct and adequate for preparing this Technical Report. The sample methods and density are appropriate and the samples are of sufficient quality to comprise a representative, unbiased database.

12. DATA VERIFICATION

Midway relies upon the accuracy and completeness of data provided by Barrick pursuant to the Exploration, Development, and Joint Operating Agreement dated March 9, 2009, and the subsequent Spring Valley Venture Agreement.

Gustavson (W. Crowl), along with William Neal of Midway, visited the Spring Valley Project site on June 17, 2014 and the Core Splitting and sampling facility at Turquoise Ridge on June 18, 2014. (core splitting and sampling for the 2014 Spring Valley drill program is being performed at Barrick's Turquoise Ridge facility due to availability of appropriate equipment and personnel.) Mr. Crowl observed drilling, drill sampling, and logging in progress at Spring Valley and observed core splitting and sampling procedures for the 2014 drill program at the Turquoise Ridge Facility. These observations do not have direct bearing on the sample database used for this resource estimation, but they serve as confirmation of Barrick's exploration practices and procedures described later in this report.

Gustavson (W. Crowl and Z. Black) visited the Spring Valley project site and the Lovelock facility on October 24, 2013. As with Gustavson's previous visit in 2011, there were no drilling activities in progress. In the company of William Neal of Midway and Bob Morrel, the Barrick District Manager, several geologic sites were visited and several hole collars were surveyed with hand-held GPS.

In the Lovelock office, Gustavson was provided a presentation of the current geologic understanding of the Spring Valley gold deposits. After the presentation, Gustavson toured the core storage and logging facilities. Barrick provided explanations of the current alteration and mineralization logging procedures and discussed the use of multi-element analyses in characterization of mineralization.

Gustavson (D. Baker) visited the Spring Valley project site and the Lovelock facility on February 24, 2011. There were no drilling activities in progress, and the project site was snow covered. Drill sites are typically reclaimed shortly after completion of drilling. These combined factors precluded on-site confirmation of the location of 2009 – 2010 drill holes.



The visit to the Lovelock facility enabled discussions with Spring Valley project personnel regarding drilling methods, sample handling and security, core logging protocols, data management and QA/QC programs. Discussion regarding drilling methods, sample handling and security, and QA/QC programs is provided in the appropriate sections above. Gustavson regards methods and management employed in these areas as acceptable and meeting industry standards.

In the Lovelock office, Gustavson reviewed core handling protocols with project personnel. A core logging procedures document was provided and reviewed, and outlines the full breadth of the core handling process, from the drill rig through the entire logging process. The procedures incorporate the washing and photographing of core, the taking of magnetic susceptibility readings, geotechnical logging categories, geologic and structure logging categories, and the sample selection process, including sample intervals for assay, multi-element samples, skeleton core and samples for density measurement. All logging information is captured electronically, with hard copies printed and filed.

A sampling of assay certificates provided to Midway by Barrick was reviewed by Gustavson. Assay information on the certificates matched that captured in the project database. This is to be expected in that assay results are transmitted and captured electronically.

Based on the observations from the 2014, 2013 and 2011 site visits, Gustavson considers that the data provided by Barrick is sufficient for use in the estimation of mineral resources.



12.1 Validation of Database

Gustavson conducted a thorough audit of the current Spring Valley exploration drill hole database. The following tasks were completed as part of the audit:

- Perform an mechanical audit of the database;
- Validate the assay values contained in the 2013 database with assay certificates from Midway; and
- Review the QA/QC protocol and summary results from Barrick.

12.1.1 <u>Received Data</u>

The exploration database used by Gustavson for the resource estimation incorporated all significant drillholes through the 2013 drill campaign, with the exception of 4 holes (SV13-653C, 659CA, 662C, and 672C) where assays were not available prior to the effective date of the report. Data from the missing holes is not expected to have a material impact on the resource estimation. Drill hole data, including collar coordinates, down hole surveys, sample assay intervals, and geologic logs, were provided in a secure Microsoft Access database and as CSV files (the database). The database is managed by Barrick under the Exploration, Development, and Joint Operating Agreement.

The present database has been updated to include the remaining 2010, 2011, 2012, and 2013 drill holes, which were available as of the effective date of the report. The drill hole database contains gold assay analytical information for 112,858 sample intervals from core, RC, and mud rotary drilling methods. All mud rotary drill samples were pre-collar samples taken within the alluvium and thus are not included in the resource estimation.

The Spring Valley Venture, managed by Barrick Exploration, initiated the 2014 drill program in March 2014.

Additionally, Gustavson was provided with QA/QC summaries, assay certificates (2009-2012), Vulcan block models, geologic solids and surfaces, topography, and spread sheets and reports detailing Barrick's block model estimation process.

12.1.2 <u>Mechanical Audit</u>

A mechanical audit of 8 database tables was completed using Leapfrog Geo software ("Geo"). The database was checked for missing survey data, overlaps, gaps, total drill hole length inconsistencies, non-numeric assay values, and negative numbers. A total of 673 drill holes were imported into Leapfrog for validation. Table 12-1 shows the results of the mechanical audit and the subsequent corrections.



Drill Hole	Validation Concern	Corrective Action
SV11-545X	No Collar Data	Removed from Estimation Database
SV12-586C	No Downhole Survey Data	Removed from Estimation Database
SV12-595X	No Downhole Survey Data	Removed from Estimation Database
SV13-659C	No Downhole Survey Data	Removed from Estimation Database
SV13-659CA	No Downhole Survey Data	Removed from Estimation Database
SV04-51	No Assay Data	No Action Taken
SV05-120C	No Assay Data	No Action Taken
SV05-121C	No Assay Data	No Action Taken
SC13-632C	No Assay Data	No Action Taken
SV13-644C	No Assay Data	No Action Taken
SV13-656C	No Assay Data	No Action Taken
SV13-664C	No Assay Data	No Action Taken
SV13-666C	No Assay Data	No Action Taken
SV13-659C	No Geology Data	No Action Taken
SV13-659CA	No Geology Data	No Action Taken
SV13-659C	No Alteration Data	No Action Taken
SV13-659CA	No Alteration Data	No Action Taken
SV13-659C	No Redox Data	No Action Taken
SV13-659CA	No Redox Data	No Action Taken
SV13-659C	No RQD Data	No Action Taken
SV13-659CA	No RQD Data	No Action Taken

Table 12-1 Mechanical Audit Errors

(Note: 664C and 666C are geotech holes for which data is not yet available as of the effective date of the report.)

12.1.3 Overlaps

The assay file imported into Geo contained a significant number of overlapping intervals. All of the overlaps are attributed to composited intervals and multiple samples from the core holes being submitted for analysis. There are four core sample types recorded in the database;

- 1. core (whole core samples)
- 2. core_chip (chip sampled core primarily for metallurgical holes)
- 3. core_select (select hand samples of core)
- 4. core_split (split or saw core).

Gustavson resolved the majority of the overlaps by removing the core_chip samples and composite intervals from the data set. The core_select and core_split intervals were reviewed wherever an overlap was identified. Table 12-2 summarizes the identified overlaps and the correction made to the database by Gustavson.



Hole ID	From	То	Sample Type	Correct From	Correct To	
SV12-558C	395	400	RC	395	397	
SV12-558C	397	402	Core	397	402	
SV12584C	495	500	RC	495	497	
SV12584C	497	502	Core	497	502	
SV13-615C	495	500	RC	495	497	
SV13-615C	497	502	Core	497	502	
SV13-652C	405	410	RC	405	407.5	
SV13-652C	407.5	412	Core	407.5	412	
SV12-577C	19	96.1	core_select	removed no assay data		
SV12-582C	5	96.1	core_select	removed no assay data		

 Table 12-2
 Database Overlap Summary

Gustavson disregarded the core_select samples in drill holes SV12-577C and SV12-582C without analytical information thereby resolving all the overlapping intervals. The remaining overlaps in Table 12-2 were a result of overlapping intervals at the pre-collar point of the 4 drill holes. Each of the RC sample types was adjusted to match the core interval.

12.1.4 Gaps, Non-numeric Assay Values, and Negative numbers

The software reported 870 missing intervals. The majority of which are located at the collar of the drill hole or within the pre-collar drilling samples of the historic drill holes, e.g. ESV1.

All of the non-positive numbers (-99 or -9) represent non-sampled intervals and were omitted from the dataset. Assay values of zero (0.0) within the historic drill data are assumed to be below detection limit assays and are included as 0.0001 oz/t in the resource estimation. Table 12-3 below summarizes the number of intervals imported, the number of missing intervals, the number of non-positive values, the number of 0.0 assays, and the number of valid assays for each element.

Table 12-3	Interval Import Summary
------------	-------------------------

Element	Element Missing Interval		Below Detection Limit	Assay Values
Au_Best_Value_OPT_dr	870	2,132	1,579	109,147



12.1.5 Survey Data

Drill hole SV12-607W has a duplicate downhole survey at the collar. Gustavson chose to use the more precise survey reported as it better matched the next survey down the hole. Two sets of drill holes were identified as potential twins or as possible wedges;

- SV05-75 and SV05-85C
- SV09-457 and SV09-462C.

12.1.6 <u>Table Depth Consistency</u>

The survey, assay, and the geology tables maximum sample depth was checked as compared to the maximum depth reported in the collar table for each drill hole. No intervals exceeded the reported drill hole depths.

12.1.7 <u>Assay Certificates</u>

Gustavson received original assay certificates in pdf and comma delimited format for all drillhole samples through 2012. A random manual check of 1,210 samples within the database (including 2013 data) against the original certificate revealed 3 total errors (Table 12-4). The results of the analysis indicate that the data imported into the database matches the certificates 99.7% of the time with a confidence interval of \pm 0.56% at a 95% confidence level.

Table 12-4 Certificate Validation Errors

Sample ID	Drill Hole	From	То	Certificate Au ppm	Database Au ppm	Sample Type	Database Certificate
604019	SV10-500C	345	350	0.0025	-99	CONVENTIONL_MUD	
614033	SV10-509C	1803.2	1808.4	0.009	1.31	Au_Au-AA23_ALS_ppm	WN11022280
613940	SV10-509C	1832.6	1834.9	0.043	0.029	Au_Au-AA23_ALS_ppm	WN11022280

13. MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 Mineral Processing and Metallurgical Testing

Barrick contracted with McClelland labs in Sparks, Nevada to complete a detailed metallurgical testing program on thirteen drill core composites from Spring Valley. The composite samples representing four rock types and three oxidation states were tested by column leaching, bottle roll and gravity methods. The composites were from a total of 355 split diamond drill core intervals, each interval representing approximately five feet. Grades of the composite samples ranged from 0.21 grams per tonne (gpt) to 5.07 gpt (0.006 oz/t to 0.148 oz/t); nine of the samples had grades less than 1.03 gpt (0.030 oz/t). Because coarse gold is known to be present at Spring Valley, the reported gold grades were determined by metallic screen fire assays, see Table 13-1.



Metallic Screen Assays	FP- OX A	FP-OX B	SD-OX	WT- OX A	WT- OX B	FP- TRANS A	FP- TRANS B	BX- RED A	BX- RED B	FP- RED A	FP- RED B	FP- RED C	WT- RED
Gold oz/t	0.015	0.027	0.026	0.006	0.08	0.036	0.008	0.013	0.027	0.022	0.022	0.034	0.148

Table 13-1 Composites

13.2 Column Leach Tests

Column leach tests simulating heap leach conditions were conducted over 260 days, and yielded gold recoveries from 46% to 98% at an average of 73% for all materials tested. Individual results for the oxide, transition and reduced ores averaged 77%, 80% and 68% respectively. Rocks tested by column leach methods were crushed to 80% passing one-half inch. Lime was mixed with the dry composite charges before the 4-inch diameter PVC columns were loaded. A cyanide solution of 2.0 lb/ton was applied to the columns at a rate of 0.003 gpm/ft² of column cross sectional area.

13.3 Bottle Roll Tests

Bottle roll tests were conducted for 96 hours on thirteen samples ground to minus 1700, 300, 150, and 75 microns (10, 48, 100 and 200 mesh sizes); these recoveries were 62%, 91%, 94% and 95% respectively. All tests were conducted at 40% solids. Lime was added to adjust the pH of the pulps to between 10.5 and 11.0 before adding the cyanide. Sodium cyanide equivalent to 2.0 lb. per ton of solution was added to the alkaline pulps. Gold recoveries from the 10 mesh feeds ranged from 17.9% to 87.5%. Gold recoveries from the 48 mesh feeds ranged from 70.0% to 96.7%. Gold recoveries from the 100 mesh feeds ranged from 88.9% to 97.8%. Gold recoveries from the 200 mesh feeds ranged from 85.7% to 97.4%. Rate of recovery from the 10 mesh feed was moderate, but were fairly rapid for the other feed sizes.

After leaching, rinsing and draining, residues were removed from the columns and moisture samples taken immediately. The remaining leached residues were air dried and split to obtain a sample for a tail screen analysis. Tail screens were conducted to determine residual precious metal content and distribution.

13.4 Gravity Tests

A gravity recoverable gold test was conducted on each of the 13 Spring Valley composites to determine response of the sample to gravity concentration. The gravity test consists of sequentially milling and processing a sample using a laboratory Knelson concentrator. Three sequential liberation/gravity concentration steps were conducted. Grind sizes evaluated were minus 20 mesh, 80% minus 65 mesh, 80% minus 100 mesh and 80% minus 200 mesh. The minus 20 mesh feeds were each processed through the Knelson concentrator. The resulting gravity rougher concentrate was cleaned by hand panning to produce a cleaner concentrate and a



cleaner tail. The resulting rougher tailings were dried, blended and split to obtain a sample for tail screen analysis. The remaining rougher tailings were milled to the next grind size, and the process was repeated. Similarly, the resulting gravity rougher tailings from the second step were milled to the final grind size, and the process was again repeated.

All 13 of the Spring Valley composites were amenable to gravity treatment at the feed sizes evaluated. Total rougher gold recoveries ranged from 78% to 97% and averaged 86% across all materials tested.

13.5 Bond Mill Work Index

Four samples representing reduced and oxidized material were selected for Bond Mill Work Index (BWi) determinations. The tests were completed by Philips Enterprises LLC of Golden, Colorado. The BWi ranged from 16.31 to 21.67 kW-hr/st.

13.6 Historical Test Work

Echo Bay conducted 144-hour bottle roll tests on seven 20 to 25 foot composites of RC cuttings logged as being in the oxide zone at McClelland Laboratories Inc. in 2002. Gold extractions progressed slowly, with extraction effectively complete after 96 hours. Cyanide consumption was low and lime requirements were moderate. Gold extractions ranged from 75% to 95% on nominal - 10 mesh material.

Glamis Gold conducted 96 hour bottle roll tests on three sulphide composites and two oxide composites in 2005. Composites were from HQ diameter core and tests were completed on both coarse crushed (nominal 10 mesh) and finely pulverized (200 mesh) material. Cyanide gold extraction ranged from 44%-88% from 10 mesh material, while gold extraction averaged 91%-95% from 200 mesh material.

In December 2005, samples from eight drill holes were submitted for metallurgical testing at McClelland Laboratories Inc. in Sparks, Nevada by Midway. Select samples were combined to produce 19 composites for gravity recoverable gold GRG testing. The composite samples were sequentially milled to progressively finer sizes, the resulting material (or gravity tailings after the first grind size) was processed using a laboratory Nelson Concentrator. The resulting concentrate and tailings were then assayed to determine gravity recovery of gold versus grind size. Testing in this way provides an estimate of the maximum recoverable gold values by gravity concentration. Recoveries for nine composites with head grades greater than 0.030 oz/t gold were between 67.5% and 96.5% with an average of 87.9%.



The test samples described above are considered representative of the mineralization of the deposit as a whole. As of the date of this report, there are no additional processing factors that could have a significant effect on potential extraction.

13.7 Summary & Recommendations

Scoping testwork has shown that the mineralization at Spring Valley is amenable to cyanidation, and also that a large percentage of mineralization may be recovered using gravity separation methods. Cyanide recoveries for Spring Valley are relatively slow, possibly due to the presence of coarse gold. It is recommended that the Spring Valley Venture undertake additional testwork to evaluate several processing options including all gravity, heap leach, and gravity with agitated leach.

14. MINERAL RESOURCE ESTIMATE

Zachary J. Black, SME-RM, an associate Resource Geologist with Gustavson is responsible for the estimation of the mineral resource herein. Mr. Black is a qualified person as defined by NI 43-101 and is independent of Midway and of Barrick. Gustavson estimated the mineral resource for the Spring Valley Project from drill-hole data, constrained by a single mineralized boundary with an Ordinary Kriging ("OK") algorithm.

The Mineral Resources contained within this Technical Report have been classified under the categories of Measured, Indicated and Inferred in accordance with standards as defined by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") "CIM Definition Standards - For Mineral Resources and Mineral Reserves", prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council on December 17, 2010. Classification of the resources reflects the relative confidence of the grade estimates.

14.1 Block Model Physical Limits

Gustavson created a three dimensional ("3D") block model in CAE Mining's Studio software. The block model was created with individual block dimensions of 20 x 20 x 20 ft (xyz). The model origin is located at 1,319,880 east, 14,643,940 north, and at an elevation of 3,200 ft above sea level ("asl"). The block model extends 8,040 ft (402 blocks) to the east, 12,560 ft (628 blocks) to the north, and vertically 3,120 ft (156 blocks) to an elevation of 6,320 ft asl. All of the block model coordinates are stored as UTM NAD27, Zone 11 survey feet with elevations based on North American Vertical Datum ("NAVD"). All property and minerals within the block model extents are owned or claimed by Midway. Each of the blocks was assigned attributes of gold, resource classification, rock density, lithology, and a grade domain classification.



14.2 Data Used for the Grade Estimation

Gustavson used the exploration drillhole database as described in 12.1.1 for resource estimation. Drill hole data, including collar coordinates, down hole surveys, sample assay intervals, and geologic logs, were provided in a secure Microsoft Access database and as CSV files. The database is managed by Barrick under the Exploration, Development, and Joint Operating Agreement.

The present database has been updated to include the 2010, 2011, 2012, and available 2013 drill holes, which were completed since the previous mineral resource estimate. The drill hole database contains gold assay analytical information for 112,858 sample intervals from core, RC, and mud rotary drilling methods. All mud rotary drill samples were pre-collar samples taken within the alluvium and thus are not included in the resource estimation.

14.3 Data

In order to assess the influence of geologic characteristics on assay data the individual files representing lithology, alteration, trace element analytical data, and gold analytical data were combined into a single interval file. The resulting file contained 121,488 intervals. The increase in the number of sample intervals results from the geologic or trace element data being collected on different intervals than the gold analytical data. Merging the intervals can subdivide individual assay intervals where the geologic data are recorded with a different interval pattern. The 121,488 samples were collected in both bedrock (99,821) and alluvium (21,667). Gustavson did not estimate mineral resources within the alluvium and the assay samples representing the alluvium are not included in the discussions below.

Metallic Screen assays are used as the primary assay database, when available, as this methodology is considered to handle coarse gold grade variability at Spring Valley more effectively than other assay techniques. Where Metallic Screen assays are not available, 30g fire assay values are used. Samples below detection limit (bdl) are treated as having a grade of half the detection limit applicable during the sampling campaign. (Typically 0.0001 oz/t Au) There is a distortion in the grade curves at the very low end caused by these bdl sample values, but it is not material to the estimate.

14.4 Geologic Model

The geology of the resource area is characterized by a thick series of Permian/Triassic aged volcanic and meta-volcanic rocks, named the Koipato Group. The Kiopato Group is comprised of three members from oldest to youngest, the Limerick Greenstone, the Rochester Rhyolite, the Weaver Rhyolite. Mississippian to Triassic Leucogranite and rhyolite porphyry locally intruded the Permian/Triassic units. Quaternary alluvial and colluvial deposits overlie the bedrock units.



The regional structural model is interpreted to have resulted from three stages of structural development of the Humboldt Range. The earliest was an east-west compressional event associated with the Nevadan Orogeny, resulting in regional folds and north-south faults and shear zones. The second stage marked a switch to extensional stresses which coincided with and controlled the mineralization along the north-south structures and through the associated dilatational zones. The north-south structures acted as conduits for fluids, which resulted in veins, stockworks, and disseminated mineralization along preferential flow paths. The final stage of structural development was an event related to Basin and Range tectonics which formed a graben block controlled by the Black Ridge fault system.

This structural model results in penetrative thrust faults overprinted by a complex structural system of high angle fracture sets.

Mineralization is hosted within complex structurally prepared fracture zones near the north-south faults and along the contacts between lithologic units. Mineralization is related to irregularly distributed quartz veining and alteration throughout the favorable intrusive rhyolite porphyry, and along the contacts with the greenstone and volcanoclastic units of the Rochester Member. Most quartz veins are in the ½-inch to 4-inch size range with associated alteration selvages of a few feet to tens of feet wide, varying to areas of dense quartz veining with pervasive alteration. Individual vein zones generally display limited lateral and vertical continuity; however, mineralized zones form broader corridors characterized by extensive lateral (along lithologic contacts) and depth continuity along the north-south trending faults. The project has been divided into five areas along the north-south trending structures and into three areas based on east-west structures (Figure 14-1). As structural offsets have continued through the Quaternary period there is offset represented in the mineralization trends. The orientation and sample statistics have been grouped within north-south structures. The resulting subdivided areas are the basis for the estimation domains.





Figure 14-1 Fault and Estimation Domain Plan View

Domains 1100 - 1300 are the portion of Spring Valley to the east of the Limerick fault and represent an area of limited drilling with sporadic intervals of mineralization. This portion of the project is assumed to be unmineralized and has not been estimated.

Domains 2100 - 2300 are the portion of Spring Valley that represent the Limb domains. These domains are bound by the Reverse fault to the west and by the Limerick fault to the east and at depth. The mineralization in these domains strikes between N30E and N45E and dips approximately 30° to the west along the intrusive porphyry. Mineralization is found along lithologic contacts, the margins of the intrusive and near the low angle Limerick Fault.

Domains 3100 - 3300 comprise the Main domain and host the majority of mineralization. These domains are bound on east by the Reverse fault and on the west by the Black Ridge Fault. The mineralization within the Main domains resides near the two main structures, but is found in near tabular lenses related to contacts of the lithologic units and the margin of the intrusion.



Domains 4000 and 5000 are to the west of the Black Ridge fault. The mineralization in these domains is primarily along lithologic contacts in close proximity the West and Black Ridge Faults.

14.5 Exploratory Data Analysis

Gustavson completed an Exploratory Data Analysis (EDA) on the gold analytical information contained in the Spring Valley exploration database. The purpose of an EDA is to summarize the main characteristics of the data provided using both statistical and visual methods. Gustavson utilized Leapfrog Geo (Geo) and ioGas Software to analyze the assay data.

The assay and geologic information was visually inspected in 3-dimensions, cross-sections, and plan views in Geo. As with many precious metal exploration projects much of the drillhole assay data collected is within non-mineralized zones. Metallic screen assays have a lower detection limit of 0.0015 oz/t and as such the exploratory data analysis was limited to assay values above 0.002 oz/t. Filtering the data assisted in defining zones of structural offset and differing directions of maximum continuity (Figure 14-2).





Figure 14-2 Oblique View of Filtered Gold Values (Au≥0.002 oz/t) Limerick Trend Encircled



The individual lithologic codes in the provided database were grouped into 7 primary lithologic units (Table 14-1) based on Midway's understanding of the Spring Valley geology. Descriptive statistics were calculated for the grouped lithologies.

Grouped Lithology	Lithology Codes
Alluvium (Qal)	Qal
Breccia and Veins (BX_Vn)	BX, VN
Fault (FLT)	FLT,GG
Limerick (Lmk)	AFT,LG,LK,LKAN,LKGW
Rhyolite (Rhy)	RP,RY,RYLT,RYSP
Volcanoclastic Sediments (VCS)	BC,FEL,SD,WT
Feldspar Porphyry (Inf)	DI,FELN,FP,FPB,HP,IBX,MINT,MZ, BP

Table 14-1 Lithologic Groups

The descriptive statistics presented in Table 14-2 support the visual inference that the statistical analysis of the mineralization can be restricted to the gold assay values ≥ 0.002 oz/t as represented by the total sample populations 75 percentile. The statistics indicate that there are subtle differences in the mineralization by lithology with the feldspar porphyry containing the higher average grades. The Limerick lithology is statistically lower grade with only 10-percent of the assays reporting ≥ 0.002 oz/t gold. The mineralized portions of the Limerick are assumed to be near the contact with the Rochester rhyolite or at structural contacts.

Statistic	Total	Not Logged	Breccia and Veins	Faults	Feldspar Porphyry	Limerick	Rhyolite	Volcanoclastic Sediments
Number of Samples	99,821	6,280	2,473	4,105	19,371	22,652	16,633	28,307
Minimum (oz/t)	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
Maximum (oz/t)	9.1001	1.8142	6.1834	0.7204	9.1001	5.3667	5.6438	2.4588
Mean (oz/t)	0.0065	0.0079	0.0112	0.0056	0.0105	0.0022	0.0056	0.0073
Median (oz/t)	0.0005	0.0004	0.0007	0.0007	0.0007	0.0001	0.0003	0.0007
Variance (oz/t ²)	0.0050	0.0030	0.0167	0.0008	0.0145	0.0016	0.0034	0.0021
Std. Dev. (oz/t)	0.0705	0.0545	0.1292	0.0278	0.1205	0.0396	0.0580	0.0459
Kurtosis	8129.4	553.6	2108.8	298.8	4039.6	14879.2	5774.7	992.2
Skewness	77.3	21.3	44.4	15.1	59.0	112.4	65.9	26.1
COV	118.3	48.1	133.1	25.5	131.5	330.6	108.4	39.4

 Table 14-2
 Spring Valley Project Sample Assay Gold Descriptive Statistics (oz/t)

Descriptive statistics (Table 14-3), Cumulative Frequency Plots (CFP) (Figure 14-3), and Tukey box plots (Figure 14-4) were calculated for each lithology with a minimum gold value of ≥ 0.002 oz/t to compare the statistical populations to one another and to evaluate for any statistical outliers. The descriptive statistics restricted to ≥ 0.002 oz/t reduce the differences between lithologies with the Limerick still representing a slightly lower average grade. However, as the



populations approach the upper percentiles of the CFP (Figure 14-3) they converge. This may indicate that a significant portion of the higher grade mineralization consists of stockwork veining or other structurally related mineralization within each of the lithologies. Statistical Tukey outliers are represented on both plots as open circle and triangle symbols.

Statistic	Total	Not Logged	Breccia and Veins	Faults	Feldspar Porphyr Y	Limerick	Rhyolit e	Volcanoclastic Sediments
Number of Samples	25,250	1,673	899	1,092	7,156	2,224	3,748	8,458
Minimum (oz/t)	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020	0.0020
Maximum (oz/t)	9.1001	1.8142	6.1834	0.7204	9.1001	5.3667	5.6438	2.4588
Mean (oz/t)	0.0247	0.0285	0.0298	0.0200	0.0276	0.0193	0.0238	0.0234
Median (oz/t)	0.0071	0.0072	0.0090	0.0073	0.0087	0.0053	0.0071	0.0067
Variance (oz/t ²)	0.0192	0.0106	0.0454	0.0026	0.0389	0.0157	0.0145	0.0067
Std. Dev. (oz/t)	0.1387	0.1028	0.2131	0.0512	0.1972	0.1252	0.1204	0.0818
Kurtosis	2129.1	153.1	776.6	86.1	1514.4	1503.0	1358.5	316.2
Skewness	39.8	11.3	27.0	8.2	36.2	35.9	32.2	14.9
COV	31.5	13.1	51.1	6.5	51.1	42.1	25.6	12.2

Table 14-3 Descriptive Statistics ≥0.002 oz/t Au by Lithology









Figure 14-4 Gold (oz/t) Box Plots by Lithology

The high Coefficient of Variation (COV) within gold assays in each lithologic unit and the overall statistical similarities at the higher grade intervals between the individual lithologies suggests that lithology is not the primary controlling feature of the mineralization at Spring Valley; however, due to the difficulties in accurately defining the lithology from the drill hole samples a correlation between lithology an mineralization may be masked. Similar statistical results were encountered in Gustavson's evaluation of gold correlation with alteration types.

Gold has been observed in quartz veins and adjacent alteration selvages as disseminated free gold. Free gold is likely deposited on fracture surfaces as well. Most quartz veinlets range from ½ inch to 4 inches in size, with associated alteration selvages from a few feet to tens of feet wide and variable areas of dense quartz veining with pervasive alteration.

It has been observed that gold is associated in certain areas of the system with zones of structural preparation as indicated by low RQD values and structural preparation observed in drill core. However, there is no observable correlation between RQD and gold grade, possibly because there are also areas of structural preparation, quartz veining, and gold mineralization which have healed and are no longer fractured, as well as areas of post-mineral faulting where there is low RQD but no mineralization.

Based on field and laboratory observations, mineralization at Spring Valley is postulated to be associated with RQD, specific alteration types, and lithology; however, statistical analyses do not necessarily support these hypotheses. The discrepancy between the postulated associations and



the results of the statistical analysis may simply reflect the challenges of effectively logging complex geologic characteristics such as those present at Spring Valley.

In an attempt to correlate the higher grades (in vein material) to the lower grade alteration selvages Gustavson conducted a proximity analysis. An indicator of 0.022 oz/t was selected to represent vein material (high grade) and statistics of data \geq 0.002 oz/t, \geq 0.004 oz/t, \geq 0.006 oz/t, \geq 0.008 oz/t, and \geq 0.01 oz/t were tabulated for samples residing within 1, 2, 3, 4, and 5 intervals of in vein material. Table 14-5 summarizes the results of the study.

The proximity analysis identified that 61% of the mineralized (≥ 0.002 oz/t) material resides within approximately 25-ft of a higher grade (≥ 0.022 oz/t) interval. Additionally, the higher the minimum cutoff analyzed the stronger the correlation to the indicator (≥ 0.022 oz/t). The analysis is useful in separating the portion of data near the lower tail of the mineralized distribution that is not related to the higher grade zones. The histogram in Figure 14-5 displays the gold assay data within 5 intervals of a high grade sample and Figure 14-6 summarizes the results of the proximity analysis.











Summary of Proximity Analysis

Figure 14-6 Samples above Cutoff within Range of Vein (>0.022 oz/t) Assay Interval *Note that 84% of samples above 0.01 oz/t are within a 25-foot distance of vein intervals*

Treating the vein material (>0.022 oz/t Au) to be representative of the mineralized structures, it is clear that the majority of mineralized material can be found in close proximity to these structures. This is consistent with patterns of mineralization observed in section and plan. A visual evaluation of the assay and geologic data in cross-section and plan view, in conjunction with the proximity analysis, reveals that while it is difficult to substantiate lithologic or alteration based domaining, there exists a significant spatial correlation between the higher grade samples and disseminated mineralization. It is Gustavson's opinion that the statistical analyses justify the use of a grade boundary at +0.003 oz/t, as a proxy for the mineralized alteration selvages and vein zones, and domaining the resource within this grade boundary is both reasonable and appropriate.

14.6 Compositing

A composite study comparing the population variance and average grades was completed (Figure 14-7). A composite length of 10-foot down-hole was selected for estimation as it is larger in length than the longest sample intervals; long enough to provide a variance reduction (40%) relative to using raw assay data, and still short enough to allow the estimate to show local variability of grade consistent with the sample distribution of the deposit. The composite statistics are summarized on Figure 14-7.





Figure 14-7 Composite Study

14.7 Capping

Grade capping is the practice for replacing statistical outliers with a maximum value from the assumed sampled distribution. This is done to better approximate the true mean of the sample population. The estimation of highly skewed grade distributions can be sensitive to the presence of even a few extreme values. Gustavson utilized a log scale cumulative Frequency Plot ("CFP") of the composite data for gold ≥ 0.001 oz/t to identify the presence of statistical outliers (Figure 14-8). A cap was assigned for each domain as summarized in Table 14-4. The descriptive sample statistics are presented in Figure 14-8.

Domain	Description	Au Cap (oz/t)
2100 - 2300	Limb (Red)	0.700
3100 -3300	Main (Green)	0.700
4000	West 1 (Cyan)	0.200
5000	West 2 (Blue)	0.030

 Table 14-4
 Capped Value by Domain





Figure 14-8 CFP Analysis by Domain



14.8 Grade Shell Generation

Leapfrog Geo software was used to generate grade boundaries using a Radial Basis Function ("RBF") in conjunction with a dual kriging algorithm. Leapfrog implicitly defined a lower grade boundaries for the Project at a 0.003 oz/t cut-off based on 10-foot composited intervals using a structural trend defined by geologic observations and split by the individual domain boundaries (Figure 14-9). The grade boundary has been used to constrain each of the estimation domains. The grade boundary was used to code blocks and the drill-hole assay composites residing within the individual grade boundary solid. The descriptive statistics are summarized in Table 14-5.



Figure 14-9 Grade Boundary

Table 14-5	Capped 10-foot	Composite	Statistics ≥0.001 oz/t
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Domain	Below	Inside	Minimum	Maximum	Mean	Variance	Std. Dev.	COV
2100	401	1389	0.0010	0.645	0.0233	0.0035	0.0590	2.53
2200	215	871	0.0010	0.676	0.0276	0.0043	0.0655	2.37
2300	174	661	0.0010	0.500	0.0151	0.0014	0.0374	2.48
3100	1111	4075	0.0010	0.700	0.0165	0.0017	0.0409	2.48
3200	362	1328	0.0010	0.700	0.0194	0.0020	0.0451	2.33
3300	861	2667	0.0010	0.700	0.0198	0.0022	0.0463	2.34
4000	254	841	0.0010	0.200	0.0148	0.0007	0.0273	1.85
5000	114	276	0.0010	0.030	0.0090	0.0001	0.0088	0.98



14.9 Variography

A variography analysis was completed to establish spatial variability of gold values in the deposit. Variography establishes the appropriate contribution that any specific composite should have when estimating a block volume value within a model. This is performed by comparing the orientation and distance used in the estimation to the variability of other samples of similar relative direction and distance.

Variograms were created for horizontal and vertical orientations in increments of 15° horizontally and 15° vertically. Search ellipsoid axis orientations were based on the results of the analysis. The sill and nugget values were taken from the omnidirectional and down-hole variograms, respectively. Table 14-6 summarizes the variogram parameters used for the analysis. The resultant variograms (Figures 14-10 through 14-12) were used to define the search ellipsoid responsible for the sample selection in the estimation of each block (Table 14-7).

The ellipse orientations are rotated dynamically to better represent changes in the strike and dip of the mineralization. A dynamic anisotropy was applied to both the search volume and to the variogram model. With this method, the orientation of the search ellipse and variogram model changes on a block by block basis to accommodate for local variations in the orientation of mineralization.





Figure 14-10 Example Variograms, 2100-2300 domain







Figure 14-11 Example Variograms, 3100-3300 domain





Figure 14-12 Example Variograms, 3100-3300 domains





4000, 5000 Domain Variogram Strike 30° Dip 15°



Figure 14-13 Example Variograms, 4000-5000 domains





Figure 14-14 Example Variograms, 4000-5000 domains

2100 -	2300 Domain	Variogram I	Parameters			
Nug	gget (C₀)	C ₁	C ₂			
	0.359	0.158	0.483			
Axis	Rotation	Range 1	Range 2			
Z	-60	30	86			
Υ'	0	42	144			
Χ'	45	45	164			
3100 - 3300 Domain Variogram Parameters						
Nug	gget (C₀)	C ₁	C ₂			
	0.409	0.295	0.295			
Axis	Rotation	Range 1	Range 2			
		•				
Z	30	33	253			
Z Y'	30 0	33 58	253 157			
Z Y' X'	30 0 15	33 58 65	253 157 247			
Z Y' X' 4000 -	30 0 15 5000 Domain	33 58 65 Variogram I	253 157 247 Parameters			
Z Y' X' 4000 -	30 0 15 5000 Domain gget (C₀)	33 58 65 Variogram I C ₁	253 157 247 Parameters C ₂			
Z Y' X' 4000 - Nug	30 0 15 5000 Domain gget (C ₀) 0.342	33 58 65 Variogram I C ₁ 0.128	253 157 247 Parameters C ₂ 0.530			
Z Y' X' 4000 - Nug Axis	30 0 15 5000 Domain gget (C ₀) 0.342 Rotation	33 58 65 Variogram I C ₁ 0.128 Range 1	253 157 247 Parameters C ₂ 0.530 Range 2			
Z Y' X' 4000 - Nug Axis Z	30 0 15 5000 Domain gget (C₀) 0.342 Rotation -60	33 58 65 Variogram I C ₁ 0.128 Range 1 39	253 157 247 Parameters C ₂ 0.530 Range 2 136			
Z Y' X' 4000 - Nug Axis Z Y'	30 0 15 5000 Domain 0.342 Rotation -60 -15	33 58 65 Variogram I C ₁ 0.128 Range 1 39 28	253 157 247 Parameters C ₂ 0.530 Range 2 136 116			

Table 14-6 Domain Variogram Parameters



14.10 Estimation Methodology

Gold grades were estimated in each domain by using incremental search ellipses oriented in the direction of maximum geologic and geostatistical continuity to provide an estimation of the gold grade within every block inside the grade shells. The estimation of each block was based on a factor of the distance in an anisotropic direction as established by the second structure range (Table 14-6) and from the variogram model and geologic observations of anisotropy. The 2100-2300 domains were set at a 3:3:1 anisotropy. The 3100 - 3300, 4000, and 5000 domains were set to 2:2:1 anisotropy.

Ordinary Kriging (OK) was used to estimate grade for all domains. Grade estimation uses a maximum of 3 composites from an individual drillhole, with a minimum of 4 and a maximum of 8 composites total used for estimation. The minimum number of composites was selected to ensure that a minimum of two separate drillholes contribute data for estimation of grade at a block. The maximum number of composites was set relatively low to limit grade smoothing in the estimation, and to allow for a higher local variability of grade. Estimation parameters are presented in Table 14-7.

Estimation Parameters							
Zone	Grade Shells						
No. of composites	1st Pass 2nd Pass 3rd Pass						
Min	4	4	4				
Max	8	8	8				
Max per Hole	3	3	3				
	Search Ellipsoid Distance						
2100-2300	½ (75x75x25)	1 (150x150x50)	2 (300x300x100)				
3100-3300	½ (125x125x62.5)	1 (250x250x125)	2 (500x500x250)				
4000,5000	½ (125x125x62.5)	1 (250x250x125)	2 (500x500x250)				

Table 14-7 Estimation Parameters

14.11 Mineral Resource Classification

The mineral resources were classified using the incremental search neighborhoods and a relationship between the distances to the closest composite used for the estimation of the block gold grade. Distance to closest composite is stored as anisotropic distance relative to the search volume. The Measured classification corresponds to blocks with 2 drillholes within ¹/₂ the range of the second variogram structure, while the Indicated classification corresponds to two drillholes within the range of the second variogram structure AND a single drillhole within 75%



of the variogram range. Inferred material is limited to blocks within twice the variogram range of two drillholes for each domain.

14.12 Density

Density measurements for each lithology were provided to Gustavson. Each modeled lithology was assigned a density based on Table 14-8.

Grouped Lithology	Density (ton/ft ³)
Alluvium (Qal)	0.0787
Rhyolite (Rhy)	0.0794
SD (SD)	0.0787
Welded Tuff (WT)	0.0816
Breccia Conglomerate (BC)	0.0831
Feldspar Porphyry (Inf)	0.0820
Limerick Greenstone (Lmk)	0.0830

14.13 Model Validation

Gustavson validated the results of the OK method by comparison with various alternative estimation methodologies. The combined evidence from these validation methods validates the OK method estimation model results.

14.13.1 <u>Statistical Model Comparison</u>

ID2, and NN models were run to serve as comparison with the estimated results from the OK method. Descriptive statistics for the OK model along with those for the ID2 and NN, and 10-foot drill-hole composites for gold are shown in Tables 14-9 through 14-11.

			Domair	n 2100 Au ≥0	.001 oz/t			
Model	Below	Inside	Minimum	Maximum	Mean	variance	Std. Dev.	COV
CP10	401	1389	0.0010	0.645	0.0233	0.0035	0.0590	2.53
ОК	530	33251	0.0010	0.276	0.0166	0.0004	0.0207	1.25
ID	656	33125	0.0010	0.299	0.0169	0.0005	0.0220	1.30
NN	8470	25311	0.0010	0.645	0.0210	0.0027	0.0523	2.49
			Domair	n 2200 Au ≥0	.001 oz/t			
Model Below Inside Minimum Maximum Mean variance Std. Dev. CC								
CP10	215	871	0.0010	0.676	0.0276	0.0043	0.0655	2.37
ОК	510	29790	0.0010	0.295	0.0215	0.0007	0.0268	1.25
ID	631	29669	0.0010	0.320	0.0220	0.0009	0.0295	1.34
NN	7421	22879	0.0010	0.676	0.0287	0.0047	0.0683	2.38

 Table 14-9 Descriptive Statistics for Domains 2100-2300 (Limb)



Domain 2300 Au ≥0.001 oz/t								
Model	Below	Inside	Minimum	Maximum	Mean	variance	Std. Dev.	COV
CP10	174	661	0.0010	0.500	0.0151	0.0014	0.0374	2.48
ОК	366	25995	0.0010	0.189	0.0126	0.0002	0.0151	1.20
ID	506	25855	0.0010	0.205	0.0133	0.0003	0.0173	1.30
NN	5717	20644	0.0010	0.500	0.0163	0.0019	0.0439	2.69



Domain 3100 Au ≥0.001 oz/t								
Model	Below	Inside	Minimum	Maximum	Mean	variance	Std. Dev.	COV
CP10	1111	4075	0.0010	0.700	0.0165	0.0017	0.0409	2.48
ОК	1237	178015	0.0010	0.272	0.0129	0.0002	0.0143	1.10
ID	1600	177652	0.0010	0.294	0.0133	0.0002	0.0157	1.18
NN	38250	141002	0.0010	0.700	0.0160	0.0014	0.0373	2.34
			Domain	3200 Au ≥0.0	001 oz/t			
Model	Below	Inside	Minimum	Maximum	Mean	variance	Std. Dev.	COV
CP10	362	1328	0.0010	0.700	0.0194	0.0020	0.0451	2.33
OK	383	90502	0.0010	0.237	0.0149	0.0003	0.0159	1.06
ID	548	90337	0.0010	0.308	0.0158	0.0003	0.0184	1.16
NN	17719	73166	0.0010	0.700	0.0187	0.0020	0.0447	2.39
			Domain	3300 Au ≥0.0	001 oz/t			
Model	Below	Inside	Minimum	Maximum	Mean	variance	Std. Dev.	COV
CP10	861	2667	0.0010	0.700	0.0198	0.0022	0.0463	2.34
ОК	346	156005	0.0010	0.302	0.0163	0.0004	0.0192	1.18
ID	477	155874	0.0010	0.414	0.0165	0.0004	0.0205	1.24
NN	30276	126075	0.0010	0.700	0.0195	0.0018	0.0425	2.18

Table 14-10 Descriptive Statistics for Domains 3100-3300 (Main)

 Table 14-11
 Descriptive Statistics for Domains 4000 and 5000 (West 1 and West 2)

	Domain 4000 Au ≥0.001 oz/t							
Model	Below	Inside	Minimum	Maximum	Mean	variance	Std. Dev.	cov
CP10	254	841	0.0010	0.200	0.0148	0.0007	0.0273	1.85
ОК	1737	52032	0.0010	0.081	0.0116	0.0001	0.0101	0.88
ID	1664	52105	0.0010	0.107	0.0126	0.0002	0.0130	1.03
NN	15502	38267	0.0010	0.200	0.0172	0.0011	0.0334	1.94
			Domain	5000 Au ≥0.0	001 oz/t			
Model	Below	variance	Std. Dev.	cov				
CP10	114	276	0.0010	0.030	0.0090	0.0001	0.0088	0.98
01								
OK	561	24965	0.0010	0.026	0.0068	0.0000	0.0030	0.44
ID	561 843	24965 24683	0.0010	0.026 0.029	0.0068	0.0000	0.0030	0.44

The overall reduction of the maximum, standard deviation, and coefficient of variation within the OK and ID models represent an appropriate amount of smoothing to account for the point to block volume variance relationship (Figure 14-10). The kriging algorithm's tendency is to provide more appropriate smoothing in densely drilled areas and to merge the mean of the



estimation gradually as data becomes sparser. In this particular estimate there is a high density of data in higher grade portions of the resource as compared to the lower grade areas resulting in an overall reduction in the mean of the estimated blocks. The close relationship between the OK model and the ID model indicates that the OK model as estimated assumes a high degree of grade selectivity in the mining operation. Care will need to be taken at the reserve stage to ensure that the degree of selectivity in the model is appropriate to the mining technique envisioned. It may be necessary to apply dilution and ore loss factors to a reserve model based on this resource if relatively low selectivity (i.e. large scale open pit) mining techniques are employed.





14.14 Swath Plots

Swath plots were generated to compare average gold grade in the estimated gold grade from OK method, the Barrick model and the validation model methods (ID3 and NN). The results from the




OK model method, plus those for the validation ID2 and Barrick model methods are compared using the swath plot to the distribution derived from the NN model method (Figure 14-11).

Figure 14-16 Elevation Swath Model

On a local scale, the NN model method does not provide a reliable estimate of grade, but on a much larger scale, it represents an unbiased estimation of the grade distribution based on the total data set. Therefore, if the OK model is unbiased, the grade trends may show local fluctuations on a swath plot, but the overall trend should be similar to the distribution of grade from the NN. The



Nearest Neighbor estimation represents declustered composite grades, which eliminates the impact of variable drill spacing. Overall, there is good correlation between the grade models.

14.15 Mineral Resources

The mineral resource estimate for the Spring Valley Project is summarized in Table 14-12. This mineral resource estimate includes all of the available drill data through the effective date of this report and has been independently verified by Gustavson. Mineral resources are not mineral reserves and may be materially affected by economic, environmental, permitting, legal, socio-economic, marketing, political, or other factors.

Gustavson used a cutoff grade to test for reasonable prospects for economic extraction.

Baseline assumptions for cutoff grade are based on the formula:

- Cutoff Grade (oz/t) = Operating Cost (per t) / Metal Price (per oz) / Metal Recovery (%)
- Gold price assumption of \$1537 /oz is based on the trailing 3-year average gold price as of the effective date of this report.

Basis of Assumptions Crush & Heap Leach Case:

- Operating Cost (Open Cut mining, Heap leach, Carbon Recovery): \$7.00/ton (assuming 1.5:1 stripping ratio, \$1.60/t mining cost, \$3.30/t Heap Leach Process cost)
- Gold Price: \$1537 /oz
- Gold Recovery (Crush and Heap Leach): 73%
- Cutoff grade = 7.00 / ton / 1537 / oz / 73% = 0.0062 oz/t

Based on these assumptions, Gustavson considers that reporting resources at a 0.006 oz/t cutoff constitutes reasonable prospects for economic extraction based on an open pit mining scenario with carbon recovery following cyanide heap leaching. Mineral resources are reported in Table 14-12. Additional cutoff grades are included to allow for direct comparison with prior reporting. Gustavson cautions that economic viability can only be demonstrated through prefeasibility or feasibility studies.



	r ersning County, Nevaua, Gustavson Associates, LLC, April 50, 2014											
	Measured Indicated		Measured + Indicated		Inferred							
Cutoff	Tons	G	iold	Tons	G	iold	Tons	G	old	Tons	G	old
oz/t	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)
0.008	60,100	0.023	1,410	116,400	0.021	2,400	176,600	0.022	3,810	46,400	0.019	880
0.006	75,300	0.020	1,510	147,300	0.018	2,610	222,600	0.019	4,120	62,100	0.016	990
*0.004	91,500	0.017	1,590	179,100	0.016	2,780	270,600	0.016	4,370	78,400	0.014	1,070

Table 14-12 Mineral Resource Statement for the Spring Valley Project,

Pershing County, Nevada, Gustavson Associates, LLC, April 30, 2014
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Note * based on discussion of cutoff presented above, material below 0.006 oz/t is not considered resource for the purposes of this report. 0.004 oz/t cutoff is presented for informational purposes and for consistency with prior reports. Note: Values may not sum due to rounding.

14.16 Pit-constrained Mineral Resource

In order to assess on a preliminary basis the portion of the Spring Valley resource accessible by open pit mining methods, Lechs-Grossman pit shells were generated at several gold price thresholds using Whittle Four X analyser version 4.0. Resource contained within various pit shells is presented as Table 14-13. Gustavson cautions that pit-constrained resources are not reserves and that economic viability can only be demonstrated through prefeasibility or feasibility studies.

	Measured		Indicated		Measured + Indicated		Inferred					
Pit Shell	Tons	G	iold	Tons	G	iold	Tons	G	old	Tons	G	old
\$US	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)	(x1000)	oz/t	t. oz. (x1000)
\$1,100	41,500	0.029	1,200	69,700	0.024	1,640	111,200	0.026	2,840	19,000	0.022	370
\$1,300	50,000	0.028	1,410	79,600	0.023	1,860	129,600	0.025	3,270	21,600	0.021	460
\$1,500	54,500	0.027	1,490	88,100	0.023	2,030	142,600	0.025	3,510	22,900	0.022	490
\$1,700	61,700	0.025	1,550	91,600	0.023	2,120	153,200	0.024	3,660	23,300	0.022	500

Table 14-13 Pit-Constrained Resource for selected Whittle Shells.

Note: All in-pit resources are reported at a 0.006 oz/t cutoff. Individual values may not sum due to rounding.



15. <u>ADJACENT PROPERTIES</u>

15.1 Coeur Rochester

The Rochester silver and gold project is located south of the Spring Valley project, 12 mi north of Lovelock, Nevada. Conventional open pit drill and blast truck and loader methods are used, which consist of mining from in-situ and stockpiled open pit sources using heap leach extraction methods.

According to the Coeur Mining NI 43-101 Technical Report dated November 6, 2013 Coeur's 100% owned Rochester mine has produced more than 134 million ounces of silver and 1.5 million ounces of gold from 1986 to August 2013. Rochester recovered 1.9 million silver ounces and 21,894 gold ounces year to date through August 31, 2013.

Effective September 16, 2013 proven and probable reserves totaled approximately 86 million silver ounces and 605,000 gold ounces, with additional measured and indicated resources of 69.3 million silver ounces and 560,000 gold ounces, and inferred resources were 26.2 million silver ounces and 105,000 gold ounces.

15.2 Lincoln Hill Property

The Lincoln Hill gold and silver project is located approximately 3mi northeast of the Spring Valley project near Lovelock, Nevada.

According to the Rye Patch Gold Corp. (Rye Patch) website, 2013, the 4.5mi² project is 100% owned by Rye Patch. The project status is at exploration stage with reported resources.

Effective September 2012, current measured and indicated resources contain 9.6 million ounces of silver and 334,000 ounces of gold at a gold grade of 0.395 g/t. Inferred resources contain 6.2 million ounces of silver and 165,000 ounces of gold at a gold grade of 0.36 g/t.

15.3 Moonlight Project

The Moonlight gold and silver project is located north of the Spring Valley Project, northeast of Lovelock, Nevada. The project status is that of an exploration project.

According to the Terraco Gold Corp. (Terraco) website, 2013, the Moonlight Project is 100% owned by Terraco and comprises 13mi^2 . To date, Terraco has completed an aero-magnetic survey of the project area, collected and analyzed more than 400 rock samples, and drilled over 40 reverse-circulation drill holes ranging in depth from 400 to 800 feet, partially testing only a few of the target areas. There are no reported resources or reserves. The adjacent properties discussed above do not have shared resources and are not necessarily indicative of the resources of the Spring Valley Project.



16. OTHER RELEVANT DATA AND INFORMATION

Gustavson knows of no additional relevant data or information that is not contained within this report.

17. INTERPRETATION AND CONCLUSIONS

17.1 Environmental

There are no known environmental liabilities on the Spring Valley project.

17.2 Geology and Deposit Type

The Spring Valley deposit is hosted within structurally prepared zones within a high-potassium porphyry intrusion and the overlying felsic volcanic rocks. Primary mineralizing fluid flow is related to steeply dipping, N20E to N30E- trending, deep-seated faults. Mineral emplacement is localized within structural preparation along these faults, as well as on contact horizons, deformation structures, and within permissive host rocks within the local graben /basin. The mineralization is associated with relatively thin, crystalline quartz veins that have large alteration selvages. In areas of dense quartz veining, the alteration selvages coalesce into regions of pervasively altered and veined rock.

17.3 Exploration, Drilling, and Analytical

The property has been explored using a variety of techniques including mapping, geophysical surveys, and geochemical sampling. The Spring Valley resource area has been drilled with a total of 672 holes totaling 603,731 feet, including 531 Reverse Circulation (RC) drill holes totaling 428,500 feet and 141 diamond core holes totaling 173,011 feet.

All drill intervals were first assayed by a 30 gram fire assay and mineralized intervals have been systematically re-assayed using MSFA. Where available, the MSFA numbers were utilized in the resource estimate. The project data is stored in a secure database. Assay and geology data have been checked for accuracy for all programs prior to 2009, and spot checked in the Barrick programs from 2009 through 2013.

Gustavson is of the opinion that exploration activities, drilling, and analytical procedures are being conducted in manner that meets or exceeds industry best practice.

17.4 Quality Assurance/Quality Control

Gustavson has reviewed the QA/QC assay programs and believes the programs provide adequate confidence in the data. Sample standard failures and the samples associated with erroneous blank



samples have been reanalyzed prior to the completion of this Report and the results are comparable to the original assay.

17.5 Mineral Processing and Metallurgical Testing

The Spring Valley project mineralized material is potentially amenable to both gravity and heap leach recovery methods.

The test samples described in the Mineral Processing and Metallurgical testing item of this Technical Report are representative of the mineralization of the deposit as a whole. As of the date of this report, there are no processing factors that could have a significant effect on potential extraction.

17.6 Data Verification

Gustavson received original assay certificates in pdf and comma delimited format for all samples included in the current drill hole database. A random manual check of 1,210 samples within the database against the original certificate revealed 3 total errors. The results of the analysis indicate that the data imported into the database matches the certificates 99.7% of the time with a confidence interval of \pm 0.56% at a 95% confidence level. Gustavson considers the database adequate for estimation of mineral resource estimation purposes.

17.7 Resource

Within the main portion of the deposit, drill density is within 150 foot spacing, which is adequate to describe measured and indicated resources, given the variogram and the relative continuity of the resource estimate. However, some areas of the deposit are still in need of infill holes. Closer spaced drilling in these areas will be required to further upgrade the resource classification. Additionally there are areas of the project which are open to expansion of extents of mineralization.

18. <u>RECOMMENDATIONS</u>

Gustavson recommends the following program to advance the Spring Valley Project towards eventual development. Scoping Study

Gustavson recommends that Midway complete a scoping study (PEA)on the project to evaluate proposed mining and processing methodologies, and economics associated with the implementation of various crushing, grinding, heap leach, and gravity recovery circuit combinations. The PEA should be completed to 43-101 standards and designed to support Midway's reporting requirements as an independent issuer.



18.1 Geologic Model

Gustavson understands that Barrick is undertaking systematic relogging of the drilling including trace element analysis in an effort to refine the geologic and alteration model for the deposit. Gustavson recommends that Midway maintain a level of engagement in the relogging parameters and process in order to facilitate information transfer and share interpretive insights. The results of this logging should be considered in any resource updates moving forward.

18.2 Metallurgical Study

Existing metallurgical studies have established that gold at Spring Valley is amenable to cyanidation and to gravity separation. Gustavson recommends that additional metallurgical studies be completed to evaluate the mix of mineral processing methods best suited for the mineralization at Spring Valley. The evaluation should include the study of conventional cyanidation at different crush sizes, as well as the impact of gravity concentration at different steps in the process stream. Testwork should include samples of mineralization of various alteration and oxidation types.

18.3 Geotechnical and Hydrogeological Study

Gustavson recommends that the existing Golder pit slope analysis and geotechnical studies be reviewed to identify critical geotechnical areas and to define a geotechnical exploration program to support final design parameters. The Golder geotechnical studies should form the basis for mine design for the proposed PEA. Additionally, Gustavson recommends that the preliminary hydrogeological studies be reviewed to determine critical path to support project water needs, secure remaining required water rights, and address potential pit dewatering concerns. This information should be included in the support of a proposed PEA.Environmental Permitting

Gustavson recommends that continued work towards meeting the requirements of the State of Nevada to permit a mine on public land should include in the short term:

- Finalize Class III Cultural Survey report;
- Endangered Species Act (ESA) and other biological requirements; and
- Ongoing collection and evaluation of environmental baseline data.
- Installation and monitoring of groundwater monitoring as recommended for hydrologic models and baseline studies.

18.4 Exploration Program

Continued exploration diamond core drilling should be targeted in three areas within and adjacent to the immediate mineral resource area:



- Infill and step out drilling at the furthest south extent of drilling near the flanks of Gold Mountain.
- Exploration drilling along the Wabash fault that bisects the main Spring Valley resource. Extensions of this fault to both the east and west of the main resource have the potential to host mineralization that has not yet been tested. Placer gold is common along the trace of the fault to the SE.
- Infill and step out drilling targeting the lower Felsic Porphyry unit at depth in the main resource area, to the northern extents of the project and along the eastern Limerick fault.
- Limited infill drilling, primarily in those areas where substantial in-pit inferred mineralization has been identified, or in areas of high potential for pit expansion.

18.5 Budget

Under the terms of the Joint Venture Agreement, Barrick has assumed the responsibility for the exploration and development activities. The Spring Valley Joint Venture has a project development budget which includes most of the recommendations listed above. The SVV project is operated by Barrick, with the costs shared by Barrick and Midway Gold, according to the terms of the Joint Venture Agreement.

Midway gold has exercised a carry option such that Barrick will carry Midway's share of the development costs, to be recovered, along with accrued interest at prime +2%, from 90% of Midway's share of future production. Under the terms of this carry option, Barrick shall earn an additional 5% interest (for a total of 75%) in the Spring Valley Venture upon completion of construction of the mine. Accordingly, Midway's share of the PFS and exploration costs are estimated as 25% of the total cost

Table 18-1 presents the 2014-2015 development and exploration budgets for the Spring Valley Venture, as well as budget line items for Midway based on the recommendations described above.



Midway Studies & Reports	Costs (US\$)		
Metallurgical Studies	120,000		
Geotechnical Review	30,000		
Hydrogeologic Review	30,000		
Scoping Study (PEA)	150,000		
Midway Reporting Subtotal	\$330,000		
Spring Valley Ventu	ure PreFeasibility Study		
Hydrology Studies & Test Wells	2,125,000		
Geochemistry, including ARD	982,000		
Geotechnical	500,000		
Metallurgy	1,070,000		
Mine Planning and Site Design	700,000		
Permit Development	150,000		
Archaeological, Community & Related	285,000		
Environmental Studies	875,000		
Land & Water Rights	3,100,000		
Condemnation Drilling	500,000		
Subtotal	\$ 10,287,000		
Midway Share at 25%	\$ 2,571,750		
Spring Vall	ey Venture Exploration		
Exploration Program 2014 - 2015	12,000,000		
Subtotal	\$ 12,000,000		
Midway Share at 25%	\$ 3,000,000		
Total Budget (Midway Shar			
Total Budget	\$5,901,750		

Table 18-1 Proposed Budget



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Serial Num	Claim Name	Book / Page	Location
		Number	Date
NMC140862	HMS #4	106/179	12/5/1979
NMC140863	HMS #5	106/180	12/5/1979
NMC140864	HMS #6	106/181	12/5/1979
NMC140941	HMS #84	106/258	1/24/1980
NMC140942	HMS #85	106/259	1/24/1980
NMC140943	HMS #86	106/260	1/25/1980
NMC140944	HMS #87	106/261	1/25/1980
NMC349508	SDB #1	173/127	9/5/1985
NMC349509	SDB #2	173/128	9/5/1985
NMC349510	SDB #3	173/129	9/5/1985
NMC349511	SDB #4	173/130	9/5/1985
NMC349512	SDB #5	173/131	9/6/1985
NMC349513	SDB #6	173/132	9/6/1985
NMC349514	SDB #7	173/133	9/6/1985
NMC349515	SDB #8	173/134	9/6/1985
NMC364282	IDA #12	177/124	3/11/1986
NMC364283	IDA #13	177/125	3/11/1986
NMC364284	IDA #14	177/126	3/11/1986
NMC364285	IDA #15	177/127	3/11/1986
NMC364286	IDA #16	177/128	3/11/1986
NMC364287	IDA #17	177/129	3/11/1986
NMC364288	IDA #18	177/130	3/11/1986
NMC364289	IDA #19	177/131	3/11/1986
NMC364290	IDA #20	177/132	3/11/1986
NMC364291	IDA #21	177/133	3/11/1986
NMC364292	IDA #22	177/134	3/11/1986
NMC364293	IDA #23	177/135	3/11/1986
NMC364295	IDA #25	177/137	3/11/1986
NMC364363	SHO #3	177/205	3/19/1986
NMC364364	SHO #4	177/206	3/18/1986
NMC364365	SHO #5	177/207	3/18/1986
NMC364366	SHO #6	177/208	3/20/1986
NMC364367	SHO #7	177/209	3/20/1986
NMC364368	SHO #8	177/210	3/20/1986
NMC364369	SHO #9	177/211	3/20/1986
NMC364370	SHO #10	177/212	3/20/1986
NMC364371	SHO #11	177/213	3/20/1986

Appendix A: Claims List Exhibit



Sorial Num	Claim Namo	Book / Page	Location	
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NMC364372	SHO #12	177/214	3/20/1986	
NMC364373	SHO #13	177/215	3/20/1986	
NMC364374	SHO #14	177/216	3/20/1986	
NMC364375	SHO #15	177/217	3/20/1986	
NMC364376	SHO #16	177/218	3/20/1986	
NMC364377	SHO #17	177/219	3/20/1986	
NMC364378	SHO #18	177/220	3/20/1986	
NMC364379	SHO #19	177/221	3/20/1986	
NMC364380	SHO #20	177/222	3/20/1986	
NMC364384	SHO #24	177/226	3/19/1986	
NMC364385	SHO #25	177/227	3/19/1986	
NMC364386	SHO #26	177/228	3/19/1986	
NMC364387	SHO #27	177/229	3/19/1986	
NMC364388	SHO #28	177/230	3/19/1986	
NMC364389	SHO #29	177/231	3/19/1986	
NMC364390	SHO #30	177/232	3/19/1986	
NMC364391	SHO #31	177/233	3/19/1986	
NMC364392	SHO #32	177/234	3/18/1986	
NMC364393	SHO #33	177/235	3/19/1986	
NMC364394	SHO #34	177/236	3/19/1986	
NMC364395	SHO #35	177/237	3/19/1986	
NMC364396	SHO #36	177/238	3/19/1986	
NMC364397	SHO #37	177/239	3/19/1986	
NMC364398	SHO #38	177/240	3/19/1986	
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NMC364400	SHO #40	177/242	3/19/1986	
NMC364401	SHO #41	177/243	3/19/1986	
NMC364402	SHO #42	177/244	3/19/1986	
NMC364403	SHO #43	177/245	3/19/1986	
NMC364404	SHO #44	177/246	3/19/1986	
NMC364405	SHO #45	177/247	3/19/1986	
NMC364406	SHO #46	177/248	3/19/1986	
NMC364407	SHO #47	177/249	3/19/1986	
NMC364408	SHO #48	177/250	3/19/1986	
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NMC364410	SHO #50	177/252	3/19/1986	
NMC364411	SHO #51	177/253	3/19/1986	
NMC364412	SHO #52	177/254	3/19/1986	



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NMC364414	SHO #54	177/256	3/19/1986
NMC364415	SHO #55	177/257	3/19/1986
NMC364416	SHO #56	177/258	3/19/1986
NMC364417	SHO #57	177/259	3/19/1986
NMC364418	SHO #58	177/260	3/20/1986
NMC364419	SHO #59	177/261	3/20/1986
NMC371072	Porcupine #1	180/24	6/20/1986
NMC371073	Porcupine #2	180/25	6/20/1986
NMC371074	Porcupine #3	180/26	6/20/1986
NMC371075	Porcupine #4	180/27	6/20/1986
NMC371076	Porcupine #5	180/28	6/20/1986
NMC371077	Porcupine #6	180/29	6/20/1986
NMC371078	Porcupine #7	180/30	6/20/1986
NMC371079	Porcupine #8	180/31	6/20/1986
NMC371080	Porcupine #9	180/32	6/20/1986
NMC371081	Porcupine #10	180/33	6/20/1986
NMC371082	Porcupine #11	180/34	6/20/1986
NMC39574	Crown Hills #7	42/510	8/22/1972
NMC39593	Crown Hills #8	42/511	8/22/1972
NMC39594	Crown Hills #9	42/512	8/22/1972
NMC39595	Crown Hills #10	42/513	8/22/1972
NMC662873	Porcupine #28	267/567	8/27/1992
NMC748203	SV 8	304/446	6/5/1996
NMC748205	SV 10	304/448	6/5/1996
NMC748207	SV 12	304/450	6/5/1996
NMC748209	SV 14	304/452	6/5/1996
NMC748211	SV 16	304/454	6/5/1996
NMC748213	SV 18	304/456	6/5/1996
NMC748215	SV 20	304/458	6/5/1996
NMC748222	SV 27	304/465	6/5/1996
NMC748224	SV 29	304/467	6/5/1996
NMC748225	SV 30	304/468	6/5/1996
NMC748226	SV 31	304/469	6/5/1996
NMC748227	SV 32	304/470	6/5/1996
NMC748228	SV 33	304/471	6/5/1996
NMC748229	SV 34	304/472	6/5/1996



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NMC748232	SV 37	304/475	6/5/1996
NMC748233	SV 38	304/476	6/5/1996
NMC748234	SV 39	304/477	6/5/1996
NMC748235	SV 40	304/478	6/5/1996
NMC748236	SV 41	304/479	6/5/1996
NMC748237	SV 42	304/480	6/5/1996
NMC748238	SV 43	304/481	6/5/1996
NMC748239	SV 44	304/482	6/5/1996
NMC780754	Freedom #2	325/50	11/3/1997
NMC785920	Freedom #1	325/522	11/3/1997
NMC811224	Duffy #1	348/308	1/4/2000
NMC811225	Duffy #2	348/309	1/4/2000
NMC817628	SV 1	352/678	6/21/2000
NMC817629	SV 2	352/679	6/21/2000
NMC817630	SV 3	352/680	6/21/2000
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NMC817637	SV 13	352/687	6/21/2000
NMC817638	SV 15	352/688	6/21/2000
NMC817639	SV 17	352/689	6/21/2000
NMC817640	SV 19	352/690	6/21/2000
NMC817641	SV 21	352/691	6/21/2000
NMC817642	SV 22	352/692	6/21/2000
NMC817643	SV 23	352/693	6/21/2000
NMC817644	SV 24	352/694	6/21/2000
NMC817645	SV 25	352/695	6/21/2000
NMC817646	SV 26	352/699	6/21/2000
NMC817647	SV 28	352/697	6/21/2000
NMC825454	SV 51	362/325	10/4/2001
NMC825455	SV 52	362/326	10/4/2001
NMC825456	SV 53	362/327	10/4/2001
NMC825457	SV 54	362/328	10/4/2001



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NMC832256	SV 62	369/573	8/10/2002
NMC832257	SV 63	369/574	8/10/2002
NMC832258	SV 64	369/575	8/10/2002
NMC832259	SV 65	369/576	8/10/2002
NMC832260	SV 66	369/577	8/10/2002
NMC832261	SV 67	369/578	8/10/2002
NMC832262	SV 68	369/579	8/10/2002
NMC832263	SV 69	369/580	8/10/2002
NMC832264	SV 70	369/581	8/10/2002
NMC832265	SV 71	369/582	8/10/2002
NMC832266	SV 72	369/583	8/13/2002
NMC832267	SV 73	369/584	8/13/2002
NMC832268	SV 74	369/585	8/13/2002
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NMC832271	SV 77	369/588	8/9/2002
NMC832272	SV 78	369/589	8/9/2002
NMC832273	SV 79	369/590	8/9/2002
NMC832274	SV 80	369/591	8/30/2002
NMC832275	SV 81	369/592	8/30/2002
NMC832276	SV 82	369/593	8/30/2002
NMC832277	SV 83	369/594	8/30/2002
NMC860702	SV 45	380/569	11/9/2003
NMC860703	SV 46	380/570	11/9/2003
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NMC860705	SV 48	380/572	11/9/2003
NMC860706	SV 49	380/573	11/9/2003
NMC860707	SV 50	380/574	11/9/2003
NMC860708	SV 51	380/575	11/9/2003
NMC860709	SV 52	380/576	11/9/2003
NMC860710	SV 53	380/577	11/9/2003
NMC860711	SV 54	380/578	11/9/2003
NMC860712	SV 55	380/579	11/9/2003
NMC860713	SV 56	380/580	11/9/2003
NMC860714	SV 57	380/581	11/9/2003
NMC860715	SV 58	380/582	11/9/2003



Social Num	Claim Namo	Book / Page	Location
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NMC860717	SV 60	380/584	11/9/2003
NMC860718	SV 61	380/585	11/9/2003
NMC860719	SV 62	380/586	11/9/2003
NMC860720	SV 63	380/587	11/9/2003
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NMC860722	SV 65	380/589	11/9/2003
NMC860723	SV 66	380/590	11/9/2003
NMC860724	SV 67	380/591	11/9/2003
NMC860725	SV 68	380/592	11/9/2003
NMC860726	SV 69	380/593	11/9/2003
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NMC860728	SV 71	380/595	11/9/2003
NMC860729	SV 72	380/596	11/9/2003
NMC860730	SV 73	380/597	11/9/2003
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NMC860732	SV 75	380/599	11/9/2003
NMC860733	SV 76	380/600	11/9/2003
NMC860734	SV 77	380/601	11/9/2003
NMC860735	SV 78	380/602	11/9/2003
NMC872357	SV 84	384/488	5/12/2004
NMC872358	SV 85	384/489	5/12/2004
NMC872359	SV 86	384/490	5/12/2004
NMC872360	SV 87	384/491	5/12/2004
NMC872361	SV 88	384/492	5/12/2004
NMC872362	SV 89	384/493	5/12/2004
NMC872363	SV 90	384/494	5/12/2004
NMC872364	SV 91	384/495	5/12/2004
NMC872365	SV 92	384/496	5/12/2004
NMC872366	SV 93	384/497	5/12/2004
NMC872367	SV 94	384/498	5/12/2004
NMC872368	SV 95	384/499	5/12/2004
NMC872369	SV 96	384/500	5/12/2004
NMC872370	SV 97	384/501	5/12/2004
NMC872371	SV 98	384/502	5/12/2004
NMC872372	SV 99	384/503	5/12/2004
NMC887449	SV 100	390/17	10/19/2004
NMC887450	SV 101	390/18	10/18/2004



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NMC887452	SV 103	390/20	10/18/2004
NMC887453	SV 104	390/21	10/18/2004
NMC887454	SV 105	390/22	10/18/2004
NMC887455	SV 106	390/23	10/18/2004
NMC887456	SV 107	390/24	10/18/2004
NMC887457	SV 108	390/25	10/18/2004
NMC887458	SV 109	390/26	10/18/2004
NMC887459	SV 110	390/27	10/18/2004
NMC887460	SV 111	390/28	10/18/2004
NMC887461	SV 112	390/29	10/18/2004
NMC887462	SV 113	390/30	10/18/2004
NMC887463	SV 114	390/31	10/18/2004
NMC887464	SV 115	390/32	10/18/2004
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NMC887466	SV 117	390/34	10/18/2004
NMC887467	SV 118	390/35	10/18/2004
NMC887468	SV 119	390/36	10/18/2004
NMC887469	SV 120	390/37	10/18/2004
NMC887470	SV 121	390/38	10/19/2004
NMC887471	SV 122	390/39	10/19/2004
NMC887472	SV 123	390/40	10/19/2004
NMC887473	SV 124	390/41	10/19/2004
NMC887474	SV 125	390/42	10/19/2004
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NMC889144	SV 127	390/438	11/10/2004
NMC889145	SV 128	390/439	11/15/2004
NMC889146	SV 129	390/440	11/15/2004
NMC889147	SV 130	390/441	11/15/2004
NMC889148	SV 131	390/442	11/15/2004
NMC889149	SV 132	390/443	11/15/2004
NMC889150	SV 133	390/444	11/15/2004
NMC889151	SV 134	390/445	11/15/2004
NMC889152	SV 135	390/446	11/15/2004
NMC906917	SVP 1	398/285	6/16/2005
NMC906918	SVP 2	398/286	6/16/2005
NMC906919	SVP 3	398/287	6/16/2005
NMC906920	SVP 4	398/288	6/16/2005



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NMC906931	SVP 15	398/299	6/16/2005		
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NMC906935	SVP 19	398/303	6/16/2005		
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NMC906937	SVP 21	398/305	6/16/2005		
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NMC906939	SVP 23	398/307	6/16/2005		
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NMC906944	SVP 28	398/312	6/16/2005		
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NMC906946	SVP 30	398/314	6/16/2005		
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NMC906948	SVP 32	398/316	6/16/2005		
NMC906949	SVP 33	398/317	6/16/2005		
NMC906950	SVP 34	398/318	6/16/2005		
NMC906951	SVP 35	398/319	6/16/2005		
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NMC906955	SVP 39	398/323	6/16/2005		
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NMC906957	SV 136	398/281	6/9/2005		
NMC906958	SV 137	398/282	6/9/2005		



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NMC906960	SV 139	398/284	6/9/2005
NMC925039	SV 146	407/352	2/11/2006
NMC925040	SV 147	407/353	2/11/2006
NMC925041	SV 148	407/354	2/11/2006
NMC925042	SV 149	407/355	2/11/2006
NMC925043	SV 150	407/356	2/11/2006
NMC925044	SV 151	407/357	2/11/2006
NMC925045	SV 152	407/358	2/11/2006
NMC925046	SV 153	407/359	2/11/2006
NMC925047	SV 154	407/360	2/11/2006
NMC925048	SV 155	407/361	2/9/2006
NMC925049	SV 156	407/362	2/9/2006
NMC925050	SV 157	407/363	2/9/2006
NMC925051	SV 158	407/364	2/9/2006
NMC925052	SV 159	407/365	2/9/2006
NMC925053	SV 160	407/366	2/9/2006
NMC925054	SV 161	407/367	2/9/2006
NMC925055	SV 162	407/368	2/9/2006
NMC925056	SV 163	407/369	2/9/2006
NMC925057	SV 164	407/370	2/9/2006
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NMC925059	SV 166	407/372	2/9/2006
NMC925060	SV 167	407/373	2/9/2006
NMC925061	SV 168	407/374	2/9/2006
NMC925062	SV 169	407/375	2/9/2006
NMC925063	SV 170	407/376	2/9/2006
NMC925064	SV 171	407/377	2/9/2006
NMC925065	SV 172	407/378	2/9/2006
NMC925066	SV 173	407/379	2/9/2006
NMC925067	SV 174	407/380	2/9/2006
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NMC925069	SV 176	407/382	2/9/2006
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NMC925073	SV 180	407/386	2/9/2006
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NMC925077	SV 184	407/390	2/9/2006
NMC925078	SV 185	407/391	2/11/2006



Sorial Num	Claim Name	Book / Page	Location
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NMC925082	SV 189	407/395	2/10/2006
NMC925083	SV 190	407/396	2/10/2006
NMC925084	SV 191	407/397	2/10/2006
NMC925085	SV 192	407/398	2/10/2006
NMC925086	SV 193	407/399	2/10/2006
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NMC925088	SV 195	407/401	2/10/2006
NMC925089	SV 196	407/402	2/10/2006
NMC925090	SV 197	407/403	2/10/2006
NMC925091	SV 198	407/404	2/10/2006
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NMC925093	SV 200	407/406	2/10/2006
NMC925094	SV 201	407/407	2/10/2006
NMC925095	SV 202	407/408	2/10/2006
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NMC925101	SV 208	407/414	2/10/2006
NMC925102	SV 209	407/415	2/10/2006
NMC925103	SV 210	407/416	2/10/2006
NMC925104	SV 211	407/417	2/10/2006
NMC925105	SV 212	407/418	2/11/2006
NMC925106	SV 213	407/419	2/11/2006
NMC925108	SV 215	407/421	2/11/2006
NMC925109	SV 216	407/422	2/17/2006
NMC925110	SV 217	407/423	2/17/2006
NMC925111	SV 218	407/424	2/17/2006
NMC925112	SV 219	407/425	2/17/2006
NMC925113	SV 220	407/426	2/17/2006
NMC925114	SV 221	407/427	2/12/2006
NMC925115	SV 222	407/428	2/12/2006
NMC925116	SV 223	407/429	2/12/2006
NMC925117	SV 224	407/430	2/12/2006



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NMC925118	SV 225	407/431	2/12/2006
NMC925119	SV 226	407/432	2/12/2006
NMC925120	SV 227	407/433	2/12/2006
NMC925121	SV 228	407/434	2/12/2006
NMC925122	SV 229	407/435	2/12/2006
NMC925123	SV 230	407/436	2/12/2006
NMC925124	SV 231	407/437	2/12/2006
NMC925125	SV 232	407/438	2/12/2006
NMC925126	SV 233	407/439	2/12/2006
NMC925127	SV 234	407/440	2/12/2006
NMC925128	SV 235	407/441	2/12/2006
NMC925129	SV 236	407/442	2/12/2006
NMC925130	SV 237	407/443	2/12/2006
NMC925131	SV 238	407/444	2/12/2006
NMC925132	SV 239	407/445	2/12/2006
NMC925133	SV 240	407/446	2/12/2006
NMC925134	SV 241	407/447	2/12/2006
NMC925135	SV 242	407/448	2/12/2006
NMC925136	SV 243	407/449	2/12/2006
NMC925137	SV 244	407/450	2/12/2006
NMC925138	SV 245	407/451	2/13/2006
NMC925139	SV 246	407/452	2/13/2006
NMC925140	SV 247	407/453	2/13/2006
NMC925141	SV 248	407/454	2/13/2006
NMC925142	SV 249	407/455	2/13/2006
NMC925143	SV 250	407/456	2/13/2006
NMC925144	SV 251	407/457	2/13/2006
NMC925145	SV 252	407/458	2/13/2006
NMC925146	SV 253	407/459	2/12/2006
NMC925147	SV 254	407/460	2/12/2006
NMC925148	SV 255	407/461	2/12/2006
NMC925149	SV 256	407/462	2/17/2006
NMC925150	SV 257	407/463	2/17/2006
NMC925151	SV 258	407/464	2/17/2006
NMC925152	SV 259	407/465	2/17/2006
NMC925153	SV 260	407/466	2/17/2006
NMC925154	SV 261	407/467	2/17/2006
NMC925156	SV 277	407/469	2/14/2006



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NMC925157	SV 278	407/470	2/14/2006
NMC925158	SV 285	407/471	2/14/2006
NMC925159	SV 286	407/472	2/14/2006
NMC925160	SV 287	407/473	2/14/2006
NMC925161	SV 288	407/474	2/14/2006
NMC925162	SV 289	407/475	2/14/2006
NMC925163	SV 290	407/476	2/14/2006
NMC925164	SV 291	407/477	4/12/2006
NMC925165	SV 292	407/478	4/12/2006
NMC925166	SV 293	407/479	2/15/2006
NMC925167	SV 294	407/480	2/15/2006
NMC925168	SV 295	407/481	2/15/2006
NMC925169	SV 296	407/482	2/15/2006
NMC925170	SV 297	407/483	2/15/2006
NMC925171	SV 298	407/484	2/15/2006
NMC925172	SV 299	407/485	2/15/2006
NMC925173	SV 300	407/486	2/15/2006
NMC925174	SV 301	407/487	2/15/2006
NMC925175	SV 302	407/488	2/15/2006
NMC925176	SV 303	407/489	2/15/2006
NMC925177	SV 304	407/490	2/15/2006
NMC925178	SV 305	407/491	2/15/2006
NMC925179	SV 306	407/492	2/15/2006
NMC925180	SV 307	407/493	2/15/2006
NMC925181	SV 308	407/494	2/15/2006
NMC925182	SV 309	407/495	2/15/2006
NMC925183	SV 310	407/496	2/15/2006
NMC925184	SV 311	407/497	2/15/2006
NMC925185	SV 312	407/498	2/15/2006
NMC925186	SV 313	407/499	2/15/2006
NMC925187	SV 314	407/500	2/15/2006
NMC925188	SV 315	407/501	2/17/2006
NMC925189	SV 316	407/502	2/17/2006
NMC925190	SV 317	407/503	2/17/2006
NMC925191	SV 318	407/504	2/17/2006
NMC925192	SV 319	407/505	2/14/2006
NMC925193	SV 320	407/506	2/15/2006
NMC925194	SV 321	407/507	2/15/2006



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NMC925195	SV 322	407/508	2/15/2006
NMC925196	SV 323	407/509	4/6/2006
NMC925197	SV 324	407/510	2/15/2006
NMC925198	SV 325	407/511	2/15/2006
NMC925199	SV 326	407/512	2/15/2006
NMC925200	SV 327	407/513	2/15/2006
NMC925201	SV 328	407/514	2/15/2006
NMC925202	SV 329	407/514A	2/15/2006
NMC925203	SV 330	407/515	2/15/2006
NMC925204	SV 331	407/516	2/15/2006
NMC925205	SV 332	407/517	2/15/2006
NMC925206	SV 333	407/518	2/15/2006
NMC925207	SV 334	407/519	2/15/2006
NMC925208	SV 335	407/520	2/15/2006
NMC925209	SV 336	407/521	2/15/2006
NMC925210	SV 337	407/522	2/15/2006
NMC925211	SV 338	407/523	2/15/2006
NMC925212	SV 339	407/524	2/15/2006
NMC925213	SV 340	407/525	2/15/2006
NMC925214	SV 341	407/526	2/15/2006
NMC925215	SV 342	407/527	2/15/2006
NMC925216	SV 343	407/528	2/15/2006
NMC925217	SV 344	407/529	2/15/2006
NMC925218	SV 345	407/530	2/15/2006
NMC925219	SV 346	407/531	2/15/2006
NMC925220	SV 347	407/532	2/15/2006
NMC925221	SV 348	407/533	2/15/2006
NMC925222	SV 349	407/534	2/15/2006
NMC925223	SV 350	407/535	2/15/2006
NMC925224	SV 351	407/536	2/15/2006
NMC925225	SV 352	407/537	2/15/2006
NMC925226	SV 353	407/538	2/15/2006
NMC925227	SV 354	407/539	2/15/2006
NMC925228	SV 355	407/540	4/13/2006
NMC925229	SV 356	407/541	4/14/2006
NMC925230	SV 357	407/542	2/13/2006
NMC929379	SV 266	409/624	5/15/2006
NMC929380	SV 267	409/625	5/15/2006



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Senarivum	Claim Name	Number	Date
NMC929381	SV 268	409/626	4/14/2006
NMC929382	SV 269	409/627	4/14/2006
NMC929383	SV 270	409/628	4/14/2006
NMC929384	SV 271	409/629	4/14/2006
NMC929385	SV 272	409/630	4/14/2006
NMC929386	SV 273	409/631	4/14/2006
NMC929387	SV 274	409/632	4/14/2006
NMC929388	SV 275	409/633	4/14/2006
NMC929389	SV 276	409/634	4/14/2006
NMC929394	SV 283	409/639	4/12/2006
NMC929395	SV 284	409/640	4/12/2006
NMC930781	PS 1	410/362	4/20/2006
NMC930782	PS 2	410/363	4/20/2006
NMC930783	PS 3	410/364	4/20/2006
NMC930784	PS 4	410/365	4/20/2006
NMC930785	PS 5	410/366	4/20/2006
NMC930786	PS 6	410/367	4/20/2006
NMC930787	PS 7	410/368	4/20/2006
NMC930788	PS 8	410/369	4/20/2006
NMC930789	PS 9	410/370	4/20/2006
NMC930790	PS 10	410/371	4/20/2006
NMC930791	PS 11	410/372	4/20/2006
NMC930792	PS 12	410/373	4/20/2006
NMC930793	PS 13	410/374	4/20/2006
NMC930794	PS 14	410/375	4/20/2006
NMC930795	PS 15	410/376	4/20/2006
NMC930796	PS 16	410/377	4/20/2006
NMC930797	PS 17	410/378	4/20/2006
NMC930798	PS 18	410/379	4/20/2006
NMC930799	PS 19	410/380	4/20/2006
NMC930800	PS 20	410/381	4/20/2006
NMC930801	PS 21	410/382	4/20/2006
NMC930802	PS 22	410/383	4/20/2006
NMC930808	PS 28	410/389	4/20/2006
NMC930809	PS 29	410/390	4/20/2006
NMC930810	PS 30	410/391	4/20/2006
NMC930811	PS 31	410/392	4/20/2006
NMC930812	PS 32	410/393	4/20/2006



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		Number	Date
NMC930814	PS 34	410/395	5/17/2006
NMC930815	PS 35	410/396	5/17/2006
NMC930816	PS 36	410/397	5/17/2006
NMC930817	PS 37	410/398	5/17/2006
NMC930818	PS 38	410/399	5/17/2006
NMC930819	PS 39	410/400	5/17/2006
NMC930820	PS 40	410/401	5/17/2006
NMC930823	PS 43	410/404	4/20/2006
NMC930824	PS 44	410/405	4/20/2006
NMC930825	PS 45	410/406	4/20/2006
NMC930826	PS 46	410/407	4/20/2006
NMC930827	PS 47	410/408	4/20/2006
NMC930828	PS 48	410/409	4/20/2006
NMC930838	PS 58	410/419	4/20/2006
NMC930839	PS 59	410/420	4/20/2006
NMC930840	PS 60	410/421	4/20/2006
NMC930841	PS 61	410/422	4/20/2006
NMC930842	PS 62	410/423	4/20/2006
NMC930843	PS 63	410/424	4/20/2006
NMC954162	Dry 1	423/200	3/26/2007
NMC954163	Dry 2	423/201	3/26/2007
NMC954164	Dry 3	423/202	3/26/2007
NMC954582	SSV 142	423/203	3/29/2007
NMC954583	SSV 143	423/204	3/29/2007
NMC954584	SSV 144	423/205	3/29/2007
NMC954585	SSV 370	423/206	3/29/2007
NMC954586	SSV 371	423/207	3/29/2007
NMC954587	SSV 372	423/208	3/29/2007
NMC954588	SSV 373	423/209	3/29/2007
NMC954589	SSV 374	423/210	3/29/2007
NMC954590	SSV 375	423/211	3/29/2007
NMC954591	SSV 376	423/212	3/29/2007
NMC954592	SSV 377	423/213	3/29/2007
NMC954593	SSV 378	423/214	3/29/2007
NMC954594	SSV 379	423/215	3/29/2007
NMC954595	SSV 380	423/216	3/29/2007
NMC954596	SSV 381	423/217	3/29/2007
NMC954597	SSV 382	423/218	3/29/2007



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NMC954598	SSV 383	423/219	3/29/2007
NMC954599	SSV 385	423/220	3/29/2007
NMC954600	SSV 386	423/221	3/29/2007
NMC954601	SSV 387	423/222	3/29/2007
NMC954602	SV 262	423/223	3/29/2007
NMC965332	Duffy #5	427/745	9/5/2007
NMC965333	Duffy #6	427/746	9/5/2007
NMC965334	Duffy #7	427/747	9/5/2007
NMC965335	Duffy #8	427/748	9/5/2007
NMC977866	SV 214	432/395	11/7/2007
NMC987526	SVR 1	435/587	3/26/2008
NMC987527	SVR 2	435/588	3/26/2008
NMC987528	SVR 3	435/589	3/26/2008
NMC987529	SVR 4	435/590	3/26/2008
NMC987530	SVR 5	435/591	3/26/2008
NMC987531	SVR 6	435/592	3/26/2008
NMC987532	SVR 7	435/593	3/26/2008
NMC987533	SVR 8	435/594	3/26/2008
NMC987534	SVR 9	435/595	3/26/2008
NMC987535	SVR 10	435/596	3/26/2008
NMC987536	SVR 11	435/597	3/26/2008
NMC987537	SVR 12	435/598	3/26/2008
NMC987538	SVR 13	435/599	3/26/2008
NMC987539	SVR 14	435/600	3/26/2008
NMC987540	SVR 15	435/601	3/26/2008
NMC987541	SVR 16	435/602	3/26/2008
NMC1011089	SVB 13	449/865	9/22/2009
NMC1023658	SVB 1	453/660	2/18/2010
NMC1023659	SVB 2	453/661	2/18/2010
NMC1023660	SVB 3	453/662	2/18/2010
NMC1023661	SVB 4	453/663	2/18/2010
NMC1023662	SVB 5	453/664	2/18/2010
NMC1023663	SVB 6	453/665	2/18/2010
NMC1023664	SVB 7	453/666	2/18/2010
NMC1023665	SVB 8	453/667	2/18/2010
NMC1023666	SVB 9	453/668	2/18/2010
NMC1023667	SVB 10	453/669	2/18/2010
NMC1023668	SVB 11	453/670	2/18/2010



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NMC1023669	SVB 12	453/671	2/18/2010
NMC1034792	SHO 60	461/284	11/11/2010
NMC1034793	SHO 61	461/285	11/11/2010
NMC1034794	SHO 62	461/286	11/12/2010
NMC1034795	SHO 63	461/287	11/12/2010
NMC1034796	SHO 64	461/288	11/12/2010
NMC1034797	SHO 65	461/289	11/12/2010
NMC1034798	SHO 4A	461/290	11/8/2010
NMC1034799	SHO 5A	461/291	10/1/2010
NMC1034800	HMS 4A	461/292	10/1/2010
NMC1062740	SVB 14	477/247	10/18/2011
NMC1062741	SVB 15	477/248	10/18/2011
NMC1062742	SVB 16	477/249	10/18/2011
NMC1062743	SVB 17	477/250	10/18/2011
NMC1096898	SVB 18	500/0753	9/13/2013
NMC1096899	SVB 19	500/0754	9/13/2013
NMC1096900	SVB 20	500/0755	9/29/2013
NMC1096901	SVB 21	500/0756	9/29/2013
NMC1096902	SVB 22	500/0757	9/14/2013
NMC1096903	SVB 23	500/0758	9/15/2013
NMC1096904	SVB 24	500/0759	9/15/2013
NMC1096905	SVB 25	500/0760	9/16/2013
NMC1096906	SVB 26	500/0761	9/16/2013
NMC1096907	SVB 27	500/0762	9/16/2013
NMC1096908	SVB 28	500/0763	9/17/2013
NMC1096909	SVB 29	500/0764	9/17/2013
NMC1096910	SVB 30	500/0765	9/17/2013
NMC1096911	SVB 31	500/0766	9/14/2013
NMC1096912	SVB 32	500/0767	9/28/2013
NMC1096913	SVB 33	500/0768	9/28/2013
NMC1096914	SVB 34	500/0769	9/18/2013
NMC1096915	SVB 35	500/0770	9/18/2013
NMC1096916	SVB 36	500/0771	9/29/2013
NMC1096917	SVB 37	500/0772	9/29/2013
NMC1096918	SVB 38	500/0753	9/30/2013
NMC1096919	SVB 39	500/0774	9/30/2013

