NI 43-101 Updated Technical Report on Resources and Reserves
Pan Gold Project
White Pine County, Nevada

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1 Summary

This report was prepared as a National Instrument 43-101 (NI 43-101) Technical Report on Resources and Reserves (Technical Report) for Calibre Mining Corp. (Calibre) on the Pan Gold Project (Pan or the Project). This report was prepared by SRK Consulting (U.S.), Inc. (SRK) and APEX Geoscience Ltd. (APEX).

The Pan Mine is owned by GRP Pan, LLC d/b/a Fiore Gold Pan Mine (GRP), which is owned by Fiore Gold US (Inc), a subsidiary of Fiore Gold BC (Ltd), and finally a subsidiary of Calibre Mining Corp.

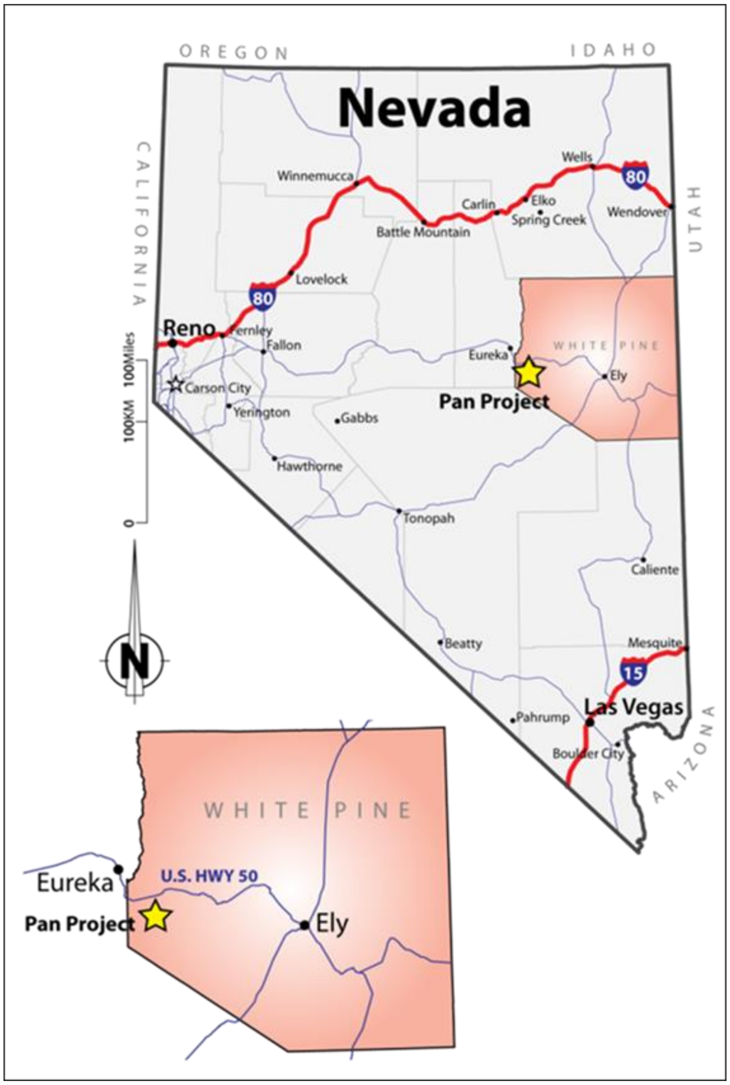
GRP acquired the Pan property as part of the acquisition of various mineral assets from subsidiaries of Midway Gold Corp. (Midway) by way of an asset purchase agreement. The acquisition closed on May 17, 2016, following approval of the asset sale by the United States Bankruptcy Court for the District of Colorado.

GRP returned the Pan property to commercial production on January 1, 2017.

1.1 Property Description and Ownership

The Pan property is located in the northern Pancake Range in White Pine County, Nevada, 22 miles southeast of the town of Eureka and 50 miles west of Ely. Location of the property is shown in Figure 1-1. The Project claim boundary encompasses approximately 10,673 acres, and consists of 563 contiguous, active, unpatented lode mining claims. Unpatented lode mining claims are kept active with annual maintenance fees paid to the Bureau of Land Management (BLM) and White Pine County by September 1st of each year.

Effective May 17, 2016, the Pan Mineral Lease dated January 7, 2003 was assigned and conveyed to GRP Pan, LLC.



Source: GRP, 2017

Figure 1-1: Project Location Map

1.2 Geology and Mineralization

The Pan Project is located in the Pancake Range of central Nevada, in the eastern sector of the Great Basin Physiographic Province. The current Great Basin landscape is shaped by crustal extension, which began in the middle Tertiary resulting in north-south trending mountain ranges and wide intervening valleys with thick sedimentary deposits. Mountain ranges are comprised of folded and tilted Jurassic to Cambrian-aged marine sedimentary rocks that have been uplifted on steeply dipping normal faults. Precambrian metamorphic rocks are present in some ranges, such as the Ruby Mountains north of the Project, but Paleozoic marine sedimentary rocks comprise the typical bedrock in the region. Tertiary extension has also caused localized volcanism, resulting in mafic to felsic flows, tuffs, and ash units capping sedimentary rocks. Volcanic units occur north and southeast of the Pan deposit areas. Lithologic units in the Pan area are Devonian- to Pennsylvanian-age marine sediments, Cretaceous igneous intrusions, Tertiary volcanic tuffs and debris flows, and minor Tertiary to Quaternary alluvial deposits.

Pan has three main mineralized zones; North, Central, and South. Gold (Au) mineralization spatially follows the Devils Gate Limestone – Pilot Shale contact in all three, and is also controlled by steeply-dipping faults that trend north-south and secondarily by west-northwest (WNW) open fold axes and related faults. North Pan is dominated by: 1) near-vertical pipes and bodies of silicified solution breccia localized at the Pilot Shale–Devils Gate Limestone contact adjacent to the Branham Fault Zone (BFZ), and 2) stratiform-like modestly dipping breccia bodies and zones west of the BFZ focused near the locally folded Pilot Shale–Devils Gate Limestone contact. Central and South Pan have more argillic alteration than silicic. North Pan exhibits dominantly silicic alteration. Mineralization in Central Pan is at the Pilot–Devils Gate contact and secondarily controlled by WNW trending open folds, and likely other subtle structures such as related faults, which have not been clearly identified. These open folds were not recognized from exploration drilling and have only become apparent after exposure in the pit walls. Their significance in controlling mineralization is also subtle but has been confirmed by examination of blast hole assays. South Pan mineralization occurs in two zones: 1) a wide, clay-altered, near-vertical solution breccia zone along the west side of the BFZ, and 2) a stratigraphically-controlled zone east of the Branham Fault along the Pilot–Devils Gate contact. This zone dips northeast at about 55°. The newly identified stratiform mineralization in the Banshee area, west of North Pan, is currently interpreted to represent the opposite limb ‘mirror image’ of the South Pan stratigraphically controlled zone.

1.2.1 Status of Exploration and Drilling

Historical drilling at the Pan deposit dates back to 1978 with the initial discovery of gold-bearing jasperoids. Drilling operations have been conducted over the Project area since this discovery.

During 2018 to 2022, Calibre completed a multi-phase, multi-year drilling campaign to replace and add to reserves at Pan. The program focused on infilling gaps in the mine resources, converting inferred resources to measured or indicated, and extending reserves adjacent to the current mine pits. The 2018 to 2022 Calibre drill programs comprised 571 reverse circulation (RC) drill holes totaling 271,015 ft and 38 core holes totaling 15,407 ft. At total of 304 RC drill holes totaling 163,555 ft and 24 core holes totaling 11,593 ft were completed in 2021 and 2022 since that last mineral resource and reserve update.

The 2018 development drilling focused on expanding the resource at Red Hill and North Pan/Campbell. Forty-six drill holes were completed during this phase of drilling and account for 70% of the total footage drilled during 2018. Only three holes did not contain gold greater than the cutoff of 0.20 grams per metric tonne (g/t) (0.006 troy ounces[oz]/short ton[ton]) Au over a minimum of 10 ft for the development phase of the drill program.

The exploration portion of the 2018 drill program consisted of 25 RC drill holes completed over Breccia Hill, Black Stallion, and Dynamite for a total of 8,865 ft of drilling. Most of the drilling was focused on the Breccia Hill and Black Stallion targets. The exploration portion of the drill program was successful in expanding the known zones of gold mineralization.

Mineralization was extended at all targets drilled during the 2019 drilling program. A new area of mineralization, called Banshee, was discovered southwest of Red Hill and west of North Pan. This area of mineralization follows the Pilot – Devils Gate contact as it rises towards the surface towards the west.

The style of mineralization and alteration present is similar to mineralization seen throughout the mine. A total of 10 holes from the 2019 drill program tested the Banshee area and intersected significant gold mineralization in all but two holes.

The 2020 drill program was carried out from January to June 2020 and was comprised of 15 core holes and 154 RC holes with the primary goals of:

- Expanding known mineralization and geological understanding of the current resource;
- Increasing the known mineralization at the newly discovered Banshee zone;
- Expanding the resource between Red Hill and North Pan in order to merge both pits;
- Identifying mineralization at the exploration target Mustang; and
- Sterilization drilling at the current and proposed waste dump sites.

An updated Mineral Resource Estimated (MRE) was completed at the end of the 2020 drilling campaign and was provided in Smith et al (2021). This MRE is updated and superseded by the MRE herein.

Two drill programs were completed in 2021 from January to February, and October to December 2021 that consisted of the completion of 63 RC drillholes totaling 33,321.5 ft, one core hole that drilled 400 ft of PQ then transitioned to HQ for 356 ft (totaling 756 ft), and 1 HQ core hole totaling 527 ft. The goal of the 2021 drill programs was to expand and upgrade the known resource and explore for new mineralization within the mine area.

The 2021 drilling focused on the following target areas: Black Stallion South, Dune, Dynamite, Orpiment Alley, Pegasus, South Pan, South Pit. Other than the sterilization holes at the North Pan waste dump, more than 75% of the 2021 holes returned intercepts greater than the cutoff grade of 0.20 g/t (0.006 oz/ton) Au and lengths greater than or equal to 10 ft.

The bulk of the drilling was completed in Black Stallion South and Dune, with 29% (18 drillholes) and 17% (11 drillholes), respectively. Five of the 6 RC holes completed in Pegasus resulted in significant intersections at ~200 ft depth and provide a critical connection between South Pit and Dynamite Pit.

Five RC drillholes were designed and completed as condemnation holes to test if mineralization is present below the proposed North Pan waste dump site. Four drillholes were completed on and encountered only minor mineralization that is considered not significant. Drillhole PR21-010 encountered 20.00 ft of 0.23 g/t (0.007oz/ton) Au at 740.00 ft in hole PR21-010 and was the only condemnation hole in this area that intersected any significant gold mineralization.

The 2022 drill program was carried out from January to November 2022 and consisted of the completion of 240 RC drillholes totaling 135,330 ft and 21 HQ-size core holes totaling 10,310 ft. The goal of the 2022 drill program was to expand and upgrade the known resource and explore for new mineralization within and outside the mine area.

The 2022 drilling focused on the following target areas: Mustang, North Banshee, Palomino, Pegasus, Dynamite, Black Stallion South, Dune, Boulders, Syncline, Black Stallion, Orpiment Alley, Benji, North Dynamite, South Pit, and Limestone Canyon. Several exploration holes were drilled at new targets outside of the open pit operation that had not yet been tested; these targets are Happy Valley, Chainman

Point, Coyote, and Gattica. More than 50% of the 2022 holes returned intercepts greater than 0.20 g/t (0.006 oz/ton) Au and lengths greater than or equal to 10 ft.

Drillholes with significant mineralization that could lead to expanding the resource base and require follow up exploration were completed at a number of targets including Coyote, Palomino, North Dynamite, Pegasus, the south end of North Pan, the northern limit of North Pan and Mustang northwest of North Pan.

Coyote was initially identified through historical surface geochemistry and rock chip sampling with an evolving structural geological interpretation. Four RC drillholes were completes at Coyote, which is located approximately 3 km south-southwest of the Pan South Pit and is considered open for expansion. At Coyote, PR22-238 intersected 1.36 g/t (0.040 oz/ton) Au over 45 ft including 2.78 g/t (0.081 oz/ton) Au over 15 ft. and 0.61 g/t (0.018 oz/ton) Au over 60 ft in PR22-237.

Holes drilled in North Dynamite extend mineralization down dip and along strike, expanding mineralization north from the Dynamite Pit. Notable intercepts include:0.47 g/t (0.014 oz/ton) Au over 60 ft in Hole PR22-210; 1.67 g/t (0.049 oz/ton) Au over 40 ft including 2.12 g/t (0.062 oz/ton) Au over 30 ft in Hole PR22-224; and 0.67 g/t (0.020 oz/ton) Au over 75 ft including 1.14 g/t (0.033 oz/ton) Au over 30 ft in Hole PR22-190.

Five RC holes and 1 core hole drilled in Pegasus, along the eastern margin of the South Pit intersected mineralization at depth. Most notable is PR22-085 with 1.47 g/t (0.043 oz/ton) Au over 140 ft including 70 ft at 2.33 g/t (0.068 oz/ton) Au.

1.3 Mineral Processing and Metallurgical Testing

Metallurgical testing programs have been performed for the Pan project since 2010, completed by Resource Development Inc. (RDi), Phillips Enterprises LLC, Kappes Cassidy and Associates (KCA), McClelland Laboratories, Inc. and Forte Analytical. Two NI 43-101 reports have been issued on the property (SRK, 2017 and SRK, 2021) which include details of testwork completed up to 2020.

It should be noted Pan material includes two quite different ore types: harder, low-clay siliceous zones and softer, clay-rich argillic zones. In 2014, the heap leach pad failed due to poor percolation from a high proportion of clay-rich material. Since then, the Pan property has operated with a target blend of 60:40 “hard” to “soft” material and not experienced any issues with pad stability or solution pooling.

In 2022, Forte Analytical completed a detailed test program on 3,414 ft of whole PQ core (85 mm diameter) from 15 drillholes provided by Calibre Mining (Forte Analytical, 2022). The core intervals were logged and composited into eight samples: four from the South pit (siltstone, limestone, limestone/clay and limestone/calcite), two from Red Hill/Banshee pit (argillic, silicified) and two from the North pit (silicified, non-silicified).

Metallurgical testwork results on Pan samples have demonstrated a wide range of column leach extractions as well as size sensitivity. This has been broadly related to “hard” vs. “soft” zones and/or clay content but changes in ore domaining have not allowed historical testwork to be applied to current operating practices. (For example, a target blend of 60:40 hard to soft.)

It is the QP's opinion that additional testwork be conducted to relate cyanide soluble to fire assay gold assays (CN/FA) to final column leach extractions. Recent results have shown CN/FA values not to be reliable in estimating column leach extractions and will need other factors such as crushed size distribution and composition (e.g., XRD results) also included. Finally, rapid percolation or slump testing should be done to provide an indication of heap leach geotechnical conditions which are not a factor in bottle roll leach (or cyanide "shake") tests.

As there is uncertainty on the amount of "hard" material in the future, better geometallurgical characterization of the Pan deposits is needed to understand how the current blend can be modified when constructing future leach pads. That is, a lower ratio of hard to soft needs to be demonstrated as the new target blend based on both column leach and permeability test results. In addition, a greater proportion of "hard" material needs to be characterized in both North and South Pan pit areas.

1.4 Mineral Resource Estimate

This report provides an updated Mineral Resource Estimate (MRE) for the Pan Mine and is based upon historical drilling and drilling conducted from 2018 to 2022 and supersedes all of the prior resource estimates for the Pan Mine. The resource estimate provided by Smith et al. (SRK 2021), Deiss et al. (SRK 2019) and Pennington et al. (SRK 2017) are superseded due to mining depletion and new drilling by the MRE herein. Other older resource estimates are now all considered historical.

The updated National Instrument (NI) 43-101 MRE was completed for the Pan Mine by APEX Geoscience Ltd. (APEX) of Edmonton, Alberta, Canada. Mr. Warren Black, M.Sc., P.Geo. and Mr. Tyler Acorn, M.Sc. contributed to the MRE under the direct supervision of co-author Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo, a qualified person who takes responsibility for Section 14. Mr. Dufresne, M.Sc., P.Geol., P.Geo., visited the property in September 2020. Mr. Black, M.Sc., P.Geo. visited the property in October and November 2019, and more recently in January 2022. Mr. Black, Mr. Acorn, and Mr. Dufresne are independent of the Property and Calbire.

Definitions used in this section are consistent with those adopted by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Council in "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019 and "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10th, 2014 and prescribed by the Canadian Securities Administrators' NI 43-101 and Form 43-101F1, Standards of Disclosure for Mineral Projects. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Calibre provided APEX with the Pan Mine drill hole database that consists of analytical, geological, density, collar survey information and downhole survey information. In addition, Calibre provided a geological model for the Pan Mine that contains a stratigraphic and structural three dimensional (3D) interpretation produced by Pennington et al. (SRK 2017) and modified and refined by Smith et al. (SRK 2021) and Deiss et al. (SRK 2019) during an interval model update completed by SRK. Mr. Dufresne, Mr. Black and Mr. Acorn spot checked the historical validated database provided by Pennington et al. (SRK 2017) and later updated by Deiss et al. (SRK 2019), which included drill hole data collected by Calibre in 2018. Drilling completed in 2019 to 2022 was validated and compiled on-site by APEX personnel. No significant issues were found with the historical or modern drillhole data. The drill hole database used to calculate the MRE is comprised of 1,786 exploration drill holes completed from 1978 to 2016 by previous operators (1,184 holes totaling 380,081 ft) and 602 holes completed from 2018 to 2022 by Calibre (totaling 280,446 ft), yielding a total of 128,508 sample/interval entries. In the opinion of Mr. Dufresne, the current Pan drill hole database is deemed to be in good condition and suitable to use in ongoing resource estimation studies.

The MRE was calculated using a block model size of 20 ft (X) by 20 ft (Y) by 20 ft (Z). The gold grade was estimated for each block using Ordinary Kriging with locally varying anisotropy to ensure grade continuity in various directions is reproduced in the block model. The block model was partially diluted by estimating a waste grade for the portions of the outer blocks overlapping the edge of the estimation domain boundaries using composites within a transition zone along the outer edge of the mineralized estimation domains. The waste grade was then proportionately combined with the estimated grade for the portion of the block within the mineralized domain to obtain a final grade for each overlapping block. The partially diluted block model was utilized for resource pit optimization studies and the final MRE. The Mineral Resources are not Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Modelling was conducted in the North American Datum (NAD) of 1983 (Zone 11) BLM feet projection. The database consists of 1,786 drill holes containing useable downhole data completed at the Pan Mine between 1978 to 2022. Estimation domains were constructed using a combination of gold grade and all available geological information that helped constrain different controls on mineralization. The estimation domains were used to subdivide the deposit into volumes of rock and the measured sample intervals within those volumes for geostatistical analysis. A total of 10 estimations domains for gold mineralization were created. A total of 37,588 sample intervals are contained within the combined 10 domains. The average grade of the raw samples is 0.016 oz/ton (0.44 g/t) Au. Downhole compositing was conducted at 10 ft intervals within the estimation domains. A total of 19,265 composites were created within the estimation domains including orphans, with an average grade of 0.013 oz/ton (0.43 g/t) Au without capping.

A total of 51 3D trend surfaces were modelled and used as input for the implicit modelling process applied to create the estimation domains and by kriging to ensure both honor the observed geological controls on mineralization. The trend surfaces were created using all available subsurface data, including RC and core drill hole assays, geological logs, and blasthole data. Nine of the trend surfaces represent faults associated with the Branham Fault Zone (BFZ). In contrast, the other 42 represent mineralization trends that run parallel or sub-parallel to the Pilot Shale–Devils Gate contact.

Ordinary Kriging (OK) was used to estimate gold grades for the Pan block models. Grade estimates are only calculated for blocks that contain more than 12.5% mineralized material by volume.

Estimation of blocks is completed with locally varying anisotropy (LVA), which uses different rotation angles to define the principal directions of the variogram model and search ellipsoid on a per-block basis. Blocks within the estimation domain are assigned rotation angles using a trend surface wireframe. This method allows structural complexities to be reproduced in the estimated block model. Variogram and search ranges are defined by the variogram model. To ensure that all blocks within the estimation domains are estimated, a three-pass method was used for each domain that utilizes three different variogram model and search ellipsoid configurations. Volume-variance corrections are enforced by restricting the maximum number of conditioning data to 20 and the maximum number of composites from each drill hole by 2 to 4 depending upon the domain.

The 2022 Pan Mine MRE Update is classified as a Measured, Indicated and Inferred Mineral Resource according to the CIM definition standards. The classification of the Pan Mine Measured, Indicated and Inferred Resource was based on geological confidence, data quality and grade continuity. The most relevant factors used in the classification process were:

- density of conditioning data;
- level of confidence in historical drilling results and collar locations;
- level of confidence in the geological interpretation; and,
- continuity of mineralization.

Resource classification was determined using a multiple-pass strategy that consists of a sequence of runs that flag each block with the run number of the block when it first meets a set of search restrictions. With each subsequent pass, the search restrictions are decreased, representing a decrease in confidence and classification from the previous run.

In order to demonstrate that the Pan Mine MRE has the potential for future economic extraction, the unconstrained and partially diluted resource block model was subjected to several pit optimization scenarios to look at the prospect for eventual economic extraction. Pit optimization was performed in Micromine using the industry standard Lerchs-Grossman algorithm (LG). The criteria used in the LG pit optimizer were considered reasonable for Nevada heap leach deposits. All Mineral Resources reported below are reported within an optimized pit shell using $US1,700/oz for gold and was defined using blocks classified as Measured, Indicated, or Inferred. A variable lower gold grade cutoff and recovery is used based on the overprinting alteration.

The updated Pan Mine MRE is reported at various cutoffs depending on what type of alteration each block is flagged as. The Measured, Indicated, and Inferred MRE is partially diluted, constrained within an optimized pit shell, and includes a Measured and Indicated Mineral Resource of 37.24 million tons (33.8 million tonnes) at 0.010 oz/ton (0.33 g/t) Au for 358,900 ounces of gold and an Inferred Mineral Resource of 3.58 million tons (3.25 million tonnes) at 0.012 oz/ton (0.40 g/t) Au for 42,000 ounces of gold (Table 1-1). The reported MRE utilizes a lower gold cutoff of 0.003 oz/ton Au (0.10 g/t) for blocks flagged as argillic altered or as unaltered and a cutoff of 0.004 oz/ton Au (0.14 g/t) for blocks flagged as silicic altered.

The 2022 Pan Mine MRE was initially completed with an effective database, topographic and model date of September 30, 2022. The Pan Mine MRE was then further depleted for mining from September 30, 2022 to December 31, 2022, therefore the effective date of the MRE herein is December 31, 2022.

Table 1-1: Pan Mine Edge-diluted Resource Estimate Constrained within the '$1700/oz' Pit Shell for Gold Specific to Area (effective date of December 31, 2022)

Region	Classification	Tons (tons)*	Tonnes(tonnes)*	Au Grade (oz/ton)	Au Grade (g/t)	Contained Au (troy ounces)*
North	Measured*	3,000	2,000	0.012	0.41	0
	Indicated*	11,470,000	10,405,000	0.010	0.34	113,400
	M&I*	11,472,000	10,408,000	0.010	0.34	113,500
	Inferred*	709,000	643,000	0.013	0.44	9,100
Central	Measured*	32,000	29,000	0.020	0.57	500
	Indicated*	6,396,000	5,803,000	0.010	0.33	62,400
	M&I*	6,428,000	5,831,000	0.010	0.34	62,900
	Inferred*	442,000	401,000	0.010	0.36	4,700
South	Measured*	10,000	9,000	0.017	0.57	100
	Indicated*	19,337,000	17,542,000	0.010	0.33	182,300
	M&I*	19,347,000	17,551,000	0.010	0.33	182,500
	Inferred*	2,427,000	2,202,000	0.012	0.40	28,200
Total	Measured*	44,000	40,000	0.016	0.55	700
	Indicated*	37,203,000	33,750,000	0.010	0.33	358,200
	M&I*	37,247,000	33,790,000	0.010	0.33	358,900
	Inferred*	3,578,000	3,246,000	0.012	0.40	42,000

Source: APEX, 2022

*Notes:
1. CIM (2014. 2019) guidelines, standards and definitions were followed for estimation and classification of mineral resources.
2. The estimate of mineral resources may be materially affected by environmental, permitting, legal, marketing or other relevant issues.
3. Resources are stated as contained within a constrained pit shell; pit optimization was based on an assumed gold price of US$1,700/oz, Silicic (hard) ore recoveries of 60% for Au and an Argillic (soft) ore recovery of 80% for Au, an ore mining cost of US$2.09/st, a waste mining cost of $1.97/st, an ore processing and G&A cost of US$3.13/st, and pit slopes between 45-50 degrees;
4. Resources are domain edge diluted and reported using a minimum internal gold cut-off grade of 0.003 oz/st Au (0.10 g/t Au).
5. Measured and Indicated Mineral Resources presented are inclusive of Mineral Reserves. Inferred Mineral Resources are not included in Mineral Reserves.
6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There has been insufficient exploration to define the inferred resources tabulated above as an indicated or measured mineral resource, however, it is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. There is no certainty that any part of the Mineral Resources estimated will be converted into Mineral Reserves;
7. Numbers in the table have been rounded to reflect the accuracy of the estimate and may not sum due to rounding.
8. Mr. Michael Dufresne, M.Sc., P. Geol., P. Geo. of APEX Geoscience Ltd. is responsible for reviewing and approving the Pan mine open pit Mineral Resource Estimate. Mr. Dufresne is a Qualified Person ("QP") as set out in NI 43-101.

The updated 2022 MRE shows a 16% decrease (68,500 gold ounces) in Measured and Indicated Resources to 358,900 gold ounces versus the 2020 MRE that utilized a June 30, 2020 topographic surface (SRK 2021). The approximate calculated mining depletion for the period of June 30, 2020 to December 31, 2022 is a little over 13 million tons and about 170,000 oz Au, the vast majority of which were Measured and Indicated Resources from the 2020 MRE. The 2021 to 2022 drilling has effectively resulted in the addition of Measured and Indicated Resources equivalent to approximately 100,000 gold ounces versus the 170,000 gold ounces that have been mined in the period from June 30, 2020 to

December 31, 2022. An additional Inferred Resource of 42,000 gold ounces has been estimated at the Pan Mine, that with continued drilling may provide additional Measured and/or Indicated gold ounces.

The 2022 Pan Mine MRE has been classified as comprising Measured, Indicated, and Inferred Resources according to recent CIM definition standards. The classification of the Pan Mine resources was based on geological confidence, data quality and grade continuity. All reported Mineral Resources occur within a pit shell optimized using values of US$1,700 per ounce for gold. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The MRE is partially (domain edge) diluted and is inclusive of Reserves.

1.5 Mineral Reserve Estimate

The conversion of mineral resources to ore reserves required accumulative knowledge achieved through Lerchs-Grossmann (LG) pit optimization, detailed pit design, and associated modifying parameters. Reserve estimation was performed using Hexagon's MinePlan® software and applies to the full Calibre Pan resource. Detailed pit slope design, access, haulage, and operational cost criteria were applied in this process for all mining areas. The Project was built in U.S. units and all metal grades are in oz/ton.

The orientation, proximity to the topographic surface, and geological controls of the GRP Pan mineralization support mining of the ore reserves with open pit mining techniques. To calculate the mineable reserve, pits were designed following an optimized LG pit based on a US$1,600/oz Au sales price. The quantities of material within the designed pits were calculated using a base Cutoff Grade (CoG) of 0.004 Au oz/ton for the argillized and unaltered material and a base CoG of 0.006 Au oz/ton for the silicified material. CoG calculation is based on the static US$1,600/oz Au sales price utilized for ore reserves in this study.

The Mineral Reserves for the Pan Mine are presented in Table 1-2.

Table 1-2: Pan Project Mineral Reserve Estimate as of December 31, 2022

Classification	Mass (000's st)	Grade (oz/st Au)	Grade (g/t Au)	Metal Contained (koz Au)
Proven	13	0.015	0.499	0.2
Probable	21,799	0.011	0.368	234
Proven and Probable	21,812	0.011	0.368	234
Probable Leach Pad Inventory (recoverable)				30
Total Proven and Probable				264

Source: SRK, 2023

1. Reserves stated in the table above are contained within an engineered pit design following the US$1,600/oz Au sales price Lerchs-Grossmann pit. Date of topography is December 31, 2022;
2. In the table above and subsequent text, the abbreviation "st" denotes US short tons;
3. Mineral Reserves are stated in terms of delivered tons and grade before process recovery. The exception is leach pad inventory, which is stated in terms of recoverable Au ounces;
4. Costs used include a mining cost of US$2.11/st and an ore processing and G&A cost of US$3.88/st;
5. Reserves for argillic (soft) and unaltered ore are based on a minimum 0.004 oz/st Au CoG, using a US$1,600/oz Au sales price and an Au recovery of 80%;

6. Reserves for silicic (hard) ore are based on a minimum 0.006 oz/st Au CoG, using a US$1,600/oz Au sales price and an Au recovery of 60%;

7. Mineral Reserves stated above are contained within and are not additional to the Mineral Resource, the exception being leach pad inventory; and,

8. Numbers in the table have been rounded to reflect the accuracy of the estimate and may not sum due to rounding.

1.6 Mining Methods

The Pan mine is a conventional hard rock open pit mine that uses a contractor to drill, blast, load, haul, and provide support equipment. Mining is performed on 20 ft benches using CAT 992 loaders, CAT 777 haul trucks, and conventional drill and blast activities. The mine is permitted to crush and place up to 14,000 tons per day on the heap leach pad. In practice, ore is delivered to the crusher at a rate of 12,325 tons per day, then placed on the heap leach pad using the mining fleet. The additional 1,675 tons per day are placed as ROM material. For this report, the QP limited the ore mining rate to the 12,325 tons per day that the crusher has historically achieved. It is assumed that the ore mined after April 2024 will be crushed and agglomerated to maintain permeability in the heap leach pad.

Due to the argillic alteration present in the ore, there is potential to lose permeability in the heap if too much clay is placed at one time. To maintain permeability, ore is defined as either hard or soft based on alteration type by the ore control geologist, and a blend of 60% hard to 40% soft by weight is placed on the pad. For this mine plan, it was assumed that all planned ore flagged as argillic or unaltered would be considered soft, and silicic alteration would be considered hard. Based on the current resource model, the 60% hard to 40% soft ratio can only be maintained through March 2024. Starting in April 2024, SRK the OP has assumed the ore will be agglomerated and stacked with a radial stacker.

1.7 Recovery Methods

Approximately 14,000 stpd of ore at a 60:40 hard to soft ratio is mined from North and South Pan pits, crushed to -6” and combined with 3.5 lb/ton of lime in the truck bed. After primary crushing, blended material is loaded into trucks from the crushed stockpile, dumped on the top surface of the leach pad cell, and pushed over with a dozer. For ROM pad loading, trucks dump directly.

Ore is mined concurrently from both North and South Pan pits and trucked to the crushing facility. Properly blended hard and soft ore is crushed and trucked to the pad where barren solution is used in transfer sprays for dust control.

On an annual basis, Pan’s consistent operating conditions and ability to achieve the target blend of hard to soft material has allowed the operation to steadily improve heap leach extractions since the crusher was installed. A recent review indicated gold extractions of 69% to 75% on this blend of material has been achieved.

Pan maintains a database of daily ore tonnes and grades since 2017. Using this database of results, constant gold extractions have been back calculated to determine heap pad performance. Current estimates of gold extractions are:

- Hard material: 50% ROM 60% crushed to 6”
- Soft material: 75% ROM 80% crushed to 6”

Typical extractions (relative to ultimate recovery) for both material types are:

- Year 1 = 75.5%
- Year 2 = 13.1%
- Year 3 = 6.5%
- Year 4 = 3.0%
- Year 5 = 1.5%

Current practice is to maintain a blend of 60:40 hard to soft material, for both crushed and ROM heap leach pad feed. As discussed in Section 13, Pan's determination of hard versus soft is not well defined; historically described as Argillic vs. Silicified alteration, then changed to North vs. South pits and currently based on blasthole logging by a site geologist. While this might be sustained for short-term planning, it does not provide confidence the future mine plan can maintain the 60:40 target blend.

For accurate forecasting of future Pan heap leach pad performance, geometallurgical characterization of all Pan ore sources must be undertaken. This includes improved understanding of:

- CN/FA values versus material type and crushed size
- Effect of crushed size/ clay content on permeabilities under load

Better geometallurgical characterization may allow the target blend of hard: soft to be adjusted and accommodate the apparent shortage of soft material in the future. It is not known if some/all of the Unaltered alteration type can be considered soft material for blending purposes.

1.8 Project Infrastructure

The Project is a fully operational mine with infrastructure constructed by the previous operator and subsequently expanded by Calibre. The existing infrastructure includes electrical power supply and distribution, access roads, security fences and gates, water supply and storage, office buildings, assay laboratory, heap leach pad and mineral processing facilities. In addition to the existing infrastructure, there are plans for an expansion of the existing leach pad in 2024 and installing a belt agglomeration system in by the end of the 1st quarter of 2024.

1.9 Environmental Studies and Permitting

GRP maintains the requisite environmental permits and authorizations from federal agencies (e.g., U.S. Bureau of Land Management [BLM], U.S. Fish and Wildlife Service, and the Environmental Protection Agency) and Nevada state agencies (e.g., Nevada Division of Environmental Protection [NDEP], Nevada Division of Water Resources, and the Nevada Department of Wildlife).

GRP's predecessor, Midway, submitted the Pan Mine Plan of Operations and Reclamation Permit Application in October 2011 per 43 Code of Federal Regulations §3809. The Pan Mine is located on public land administered by the BLM; as such, the BLM was the lead environmental permitting agency following the BLM requirements. The proposed activities were analyzed under the National Environmental Policy Act (NEPA) via an environmental impact statement (EIS). The Pan Mine Project

Final Environmental Impact Statement (FEIS), Volume I & II, Case File NVN-090444 (BLM 2013) was made available November 22, 2013, and the Record of Decision (ROD) was signed December 23, 2013. The Pan Mine Plan of Operations and Reclamation Permit Application (2013 Plan) was authorized in December 2013. Construction at the mine began in January 2014.

Per Nevada Administrative Code 519A.350, GRP is required to file a reclamation surety with the NDEP or a federal land management agency, as applicable, to ensure that reclamation will be completed on privately owned and federal land. The 2022 Pan Mine reclamation cost estimate was calculated using the Nevada Standardized Reclamation Cost Estimator (SRCE) using Davis Bacon wage rates. The SRCE is an estimation tool for the calculation of bond amounts required to reclaim land that is no longer used for exploration, mining, or processing ore. The SRCE totals $18,729,598 and was approved by both the BLM and the NDEP in 2022 for the Phase 1 disturbance of 2,393 acres.

Water appropriations are authorized by the Nevada Division of Water Resources. GRP leases about 1,200 acre-feet of water rights from KG Mining (Bald Mountain) Inc. for consumptive use.

GRP monitors surface and ground water and waste rock geochemistry per requirements in water pollution control permit NEV2012107; air emissions are monitored per the Class II air quality operating permit AP1041-3831.01. GRP maintains a surface area disturbance permit and a Mercury Operating Permit to Construct (AP1041-3302) that also has an emissions monitoring requirement.

As part of its off-site compensatory mitigation, GRP has contributed approximately $1.7 million toward five years of greater sage-grouse study conducted by the U.S. Geological Survey (USGS). As provided in the FEIS, the mine operator receives a fifty percent credit for funding contributed to the USGS study toward any required off-site compensatory mitigation.

The Greater Sage-Grouse Offset Mitigation Implementation Plan Agreement (BLM 2021), developed in coordination with GRP and the NDOW, includes the following key components:

- Complete off-site mitigation of impacted priority habitat management area (PHMA) on a three to one basis;
- Complete off-site mitigation of permanently impacted general habitat management area (GHMA) on a two to one basis; and
- Off-site mitigation will be initiated within one year of ground disturbance and completed within 10 years of ground disturbance (BLM 2013).

The BLM calculated a cost per acre of $419.67 for restoration treatment including monitoring. In January 2022, GRP issued a check to the BLM, Ely District, Bristlecone Field Office for $178,611.55 for greater sage-grouse mitigation.

In 2021, GRP submitted an application to the U.S. Fish and Wildlife Service for an eagle take permit valid for 30 years until July 2051 due to the potential for incidental disturbance take associated with mining activities over the life of the mine. This permit is currently under review.

Environmental issues identified in the 2013 EIS completed for the mine are mitigated by the requirements of the ROD as described for each resource below. At the time of publication, known environmental issues had been addressed and mitigated, as required.

Internal reclamation and closure costs were also estimated using the reclamation bond cost estimate described in Section 20.14.1 and the 2022 Asset Retirement Obligation Estimate and Cost Model for Pan Mine (H&A 2023). The two models, which include LOM facilities, were reviewed and compared to approximate inputs generated for the mine plan. Reclamation and closure costs were estimated to be approximately $17 million. This estimate is based on facilities that vary from the prior LOM facilities in the H&A models.

1.10 Capital and Operating Costs

1.10.1 Capital Cost Summary

The Pan Mine is constructed and is currently operating; historical data is used to estimate future capital requirements. For the purposes of this Technical Report all capital spent to date is considered a sunk cost. Additional capital is required to continue to operate through the remaining mine life. A crushing and conveying system (US$6.5M) is required because a 60:40 ratio of hard to soft ore is not possible after the 1st quarter of 2024. An additional leach pad phase ($US3.885M) is required to process the remaining mineral reserve. Reclamation, Closure (US$17M) and Post Closure Monitoring (US$0.675M), offset by ($US6.5M) of bond recovery is estimated for closure. Sustaining capital is estimated to be ($US0.480M) over 4 years.

The capital cost summary for the Project is presented in Table 1-3. A total LOM capital cost of (US$22.2M).

Table 1-3: Capital Cost Summary

Description	Cost (US$ 000's)
Mine	200
Process	6,500
Leach pads	3,885
Reclamation & Closure and Post Closure Monitoring, Bond Recovery	11,175
Sustaining Capital	480
Total	**22,240**

Source: SRK, 2023

1.10.2 Operating Cost Summary

The operating cost summary for the Project is presented in Table 1-4. The mine is presently operating using a contractor for all mining activities. Operating costs are based on historical costs from the period of October 2021 through September 2022. Mining costs are developed based on the current mining contract to estimate hourly equipment rates. Hauling hours for mining are based on MinePlan® Schedule Optimizer (MPSO) Hexagon software that generates truck hours which are applied to contract equipment hourly rates. Drilling and loading hours are calculated from the mine schedule and historical cycle times. Hours for support equipment are based on an 11 shifts per week schedule, 52 weeks per year. Historical processing costs are used and split into fixed and variable rate categories. Fixed process costs are primarily salary and wages. Variable costs are based on a cost per ton of ore placed. The variable cost remains the same on a unit cost basis until the end of the first quarter of 2024 when the crushing and belt agglomeration system is in place. Lime addition is replaced with cement addition; increasing the cost US$0.03/ton-ore. Rehandle cost is reduced by 50 percent. General and administrative costs are assumed to remain fixed until mining ends. One additional year of processing is required following mining activities and the process and administration costs are reduced in 2028. Administrative costs include the management functions required for the operation.

Table 1-4: Operating Cost Summary

Operating Costs	(US$ 000's)	US$/ton-ore
Mining	148,763	6.820
Processing	78,178	3.584
G&A	29,914	1.371
Total Operating	**256,855**	**11.776**

Source: SRK, 2023

1.11 Economic Analysis

Under NI 43-101 rules, producing issuers may exclude information required in Section 22. Economic Analysis on properties currently in production, unless the Technical Report includes a material expansion of current production. The Pan mine is currently in production, and material expansion is not being planned. SRK completed an economic analysis, and the outcome is a positive cash flow that supports the statement of mineral reserves.

1.12 Conclusions and Recommendations

Based on the assumptions outlined herein, the Pan Mine generates a positive net present value using a discount factor of 5% at a US$1,600gold price. The project currently operates with a contract miner who has operated since the inception of the project and the process plant operated since 2015. Production and cost data are derived from one of year of operation for the period from October 2021 through September 2022; Based on current goods and services prices the estimated cost projections are accurate, as long as projected production rates are maintained.

A number of recommendations have been made by various QPs to improve various aspects of the project:

- Further exploration drilling is warranted.
- Additional refinement to the mine plan presents an opportunity to improve the economic projections of the operation.
- A geotechnical evaluation is recommended to ascertain if slopes can be steepened.
- A geometallurgical to characterize hard and soft material is recommended.

The cost for the exploration drill program, geotechnical program, and geometallurgical characterization program are shown in Table 1-5.

Table 1-5: Recommended Work Plan

Area	Cost Estimate (USD,000)
Exploration drilling program	4,000
Mine plan	100
Geotechnical program (excluding drill program)	400
Geometallurgical characterization of hard vs soft material	500
Total	**5,000**

Source: SRK, 2023

2 Introduction

2.1 Terms of Reference and Purpose of the Report

This report was prepared as a National Instrument 43-101 (NI 43-101) Technical Report on Resources and Reserves (Technical Report) for Calibre Mining Corp. (Calibre) on the Pan Gold Project (Pan or the Project). This report was prepared by, SRK Consulting (U.S.), Inc. (SRK) and Apex Geoscience Ltd. (APEX).

The Pan Mine is owned by GRP Pan, LLC d/b/a Fiore Gold Pan Mine (GRP), which is owned by Fiore Gold US (Inc), a subsidiary of Fiore Gold BC (Ltd), and finally a subsidiary of Calibre Mining Corp.

The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in SRK's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Calibre subject to the terms and conditions of its contract with SRK and relevant securities legislation. The contract permits Calibre to file this report as a Technical Report with Canadian securities regulatory authorities pursuant to NI 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other uses of this report by any third party are at that party's sole risk. The responsibility for this disclosure remains with Calibre. The user of this document should ensure that this is the most recent Technical Report for the property as it is not valid if a new Technical Report has been issued.

This report provides Mineral Resource and Mineral Reserve estimates, and a classification of resources and reserves prepared in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum Standards on Mineral Resources and Reserves: Definitions and Guidelines, May 10, 2014 (CIM, 2014).

2.2 Qualifications of Consultants

The Consultants preparing this technical report are specialists in the fields of geology, exploration, Mineral Resource and Mineral Reserve estimation and classification, open pit mining, geotechnical, environmental, permitting, metallurgical testing, mineral processing, processing design, capital and operating cost estimation, and mineral economics.

None of the Consultants or any associates employed in the preparation of this report has any beneficial interest in Calibre. The Consultants are not insiders, associates, or affiliates of Calibre. The results of this Technical Report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between Calibre and the Consultants. The Consultants are being paid a fee for their work in accordance with normal professional consulting practice.

The following individuals, by virtue of their education, experience and professional association, are considered Qualified Persons (QP) as defined in the NI 43-101 standard, for this report, and are members in good standing of appropriate professional institutions. QP certificates of authors are provided in Appendix A. The QP's are responsible for specific sections as follows:

2.3 QP Responsibilities

Each QP listed in this report is responsible for specific sections. The list of QP's and their corresponding sections are listed in Table 2-1.

Table 2-1: QP Responsibilities

Qualified Person	Company	Expertise	Sections Responsible For
Michael Dufresne, M.Sc., P.Geol, P.Geo.	APEX	Mineral Resources	1.1, 1.2, 1.4, 4 (except 4.4), 5, 6, 7, 8, 9, 10, 11, 12, 14, 23, 24, 25.1, 25.2, 26.1
Valerie Sawyer, RM-SME	SRK	Environmental	1.9, 4.4, 20, 25.5
Justin Smith, B.Sc., P.E., RM-SME	SRK	Mining Engineering	1.5, 1.6, 2, 3, 15, 16 (Except 16.2.1), 24, 25.3, 26.2
Andy Thomas, M.Eng., Peng	SRK	Rock Mechanics	16.2.1, 26.3
Michael Iannacchione, B.Sc., MBA, P.E.	SRK	Mine Economics	1.8, 1.10, 1.11, 1.12, 18, 19, 21, 22, 25.6, 25.7, 26.5
Adrian Dance, PhD, Peng, FAusIMM	SRK	Metallurgy	1.3, 1.7, 13, 17, 25.4, 26.1, 26.4

Source: SRK 2023

2.4 Details of Inspection

Site inspections were conducted by all of the QPs and several supporting staff. Details of these visits are provided in Table 2-2.

Table 2-2: Site Visit Participants

Personnel	Company	Expertise	Date(s) of Visit	Details of Inspection
Michael Dufresne	APEX	Mineral Resources	September 1, 2020	Tour of haul roads and the north and south pits, inspection of alteration, structure and mineralization in benches and walls. Inspection and checking of drill collars.
Warren Black	APEX	Mineral Resources	Sep 22 to Oct 2, 2019, Oct 19 to Nov 9, 2019	Validated collar locations, sampling procedures, and QAQC procedures for the 2019-2020 drill program. Toured all pits, reviewed geology with staff.
Valerie Sawyer	SRK	Environmental	January 14, 2014	Pre-construction landforms, met with permitting staff
Justin Smith	SRK	Mining Engineering	December 6, 2022	Pit, haul roads, heap leach, waste facilities, processing facilities
Michael Iannacchione	SRK	Mine Economics	September 10, 2020	Pit, haul roads, heap leach, waste facilities, processing facilities
Andy Thomas	SRK	Rock Mechanics	December 6, 2022	Pit, haul roads, heap leach, waste facilities, processing facilities
Adrian Dance	SRK	Metallurgy	December 6, 2022	Pit, haul roads, heap leach, waste facilities, processing facilities

Source: SRK, 2023

2.5 Sources of Information

The sources of information include data and reports supplied by Calibre personnel as well as documents cited throughout the report and referenced in Section 27.

2.6 Effective Date

The effective date of this report is December 31, 2022.

2.7 Units of Measure

The US System for weights and units has been used throughout this report. Tons are reported in short tons of 2,000 lb. All currency is in U.S. dollars (US$) unless otherwise stated.

3 Reliance on Other Experts

The Consultant's opinion contained herein is based on information provided to the Consultants by Calibre throughout the course of the investigations. SRK has relied upon the work of other consultants in the project areas in support of this Technical Report.

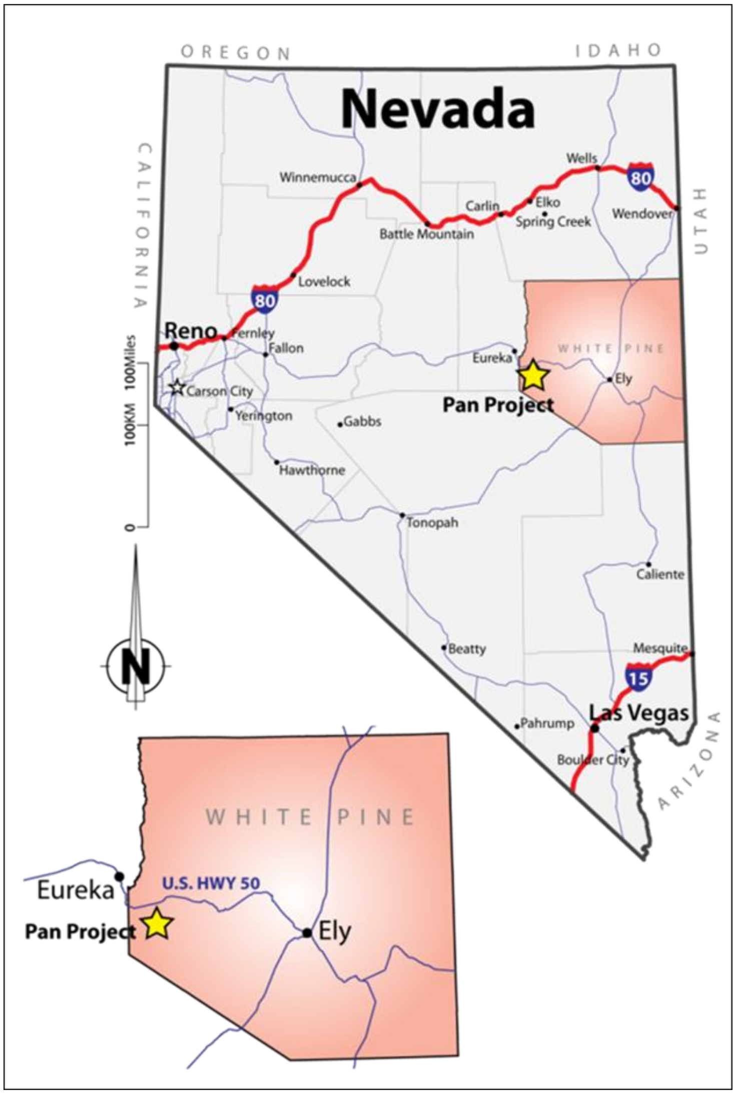
The Consultants used their experience to determine if the information from previous reports was suitable for inclusion in this technical report and adjusted information that required amending. This report includes technical information, which required subsequent calculations to derive subtotals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the Consultants do not consider them to be material.

These items have not been independently reviewed by SRK and SRK did not seek an independent legal opinion of these items.

4 Property Description and Location

4.1 Property Location

The Pan property is located in the northern Pancake Range in White Pine County, Nevada, 22 miles southeast of the town of Eureka and 50 miles west of Ely, as shown in Figure 4-1. The geographic center of the property is located at 39°17'N latitude and 115°44'W longitude, and the primary zones of mineralization on the property are located in Sections 25 and 36, Township 17 North, Range 55 East (T17N, R55E) and Section 1, T16N, R55E, Mount Diablo Base and Meridian (MDBM).

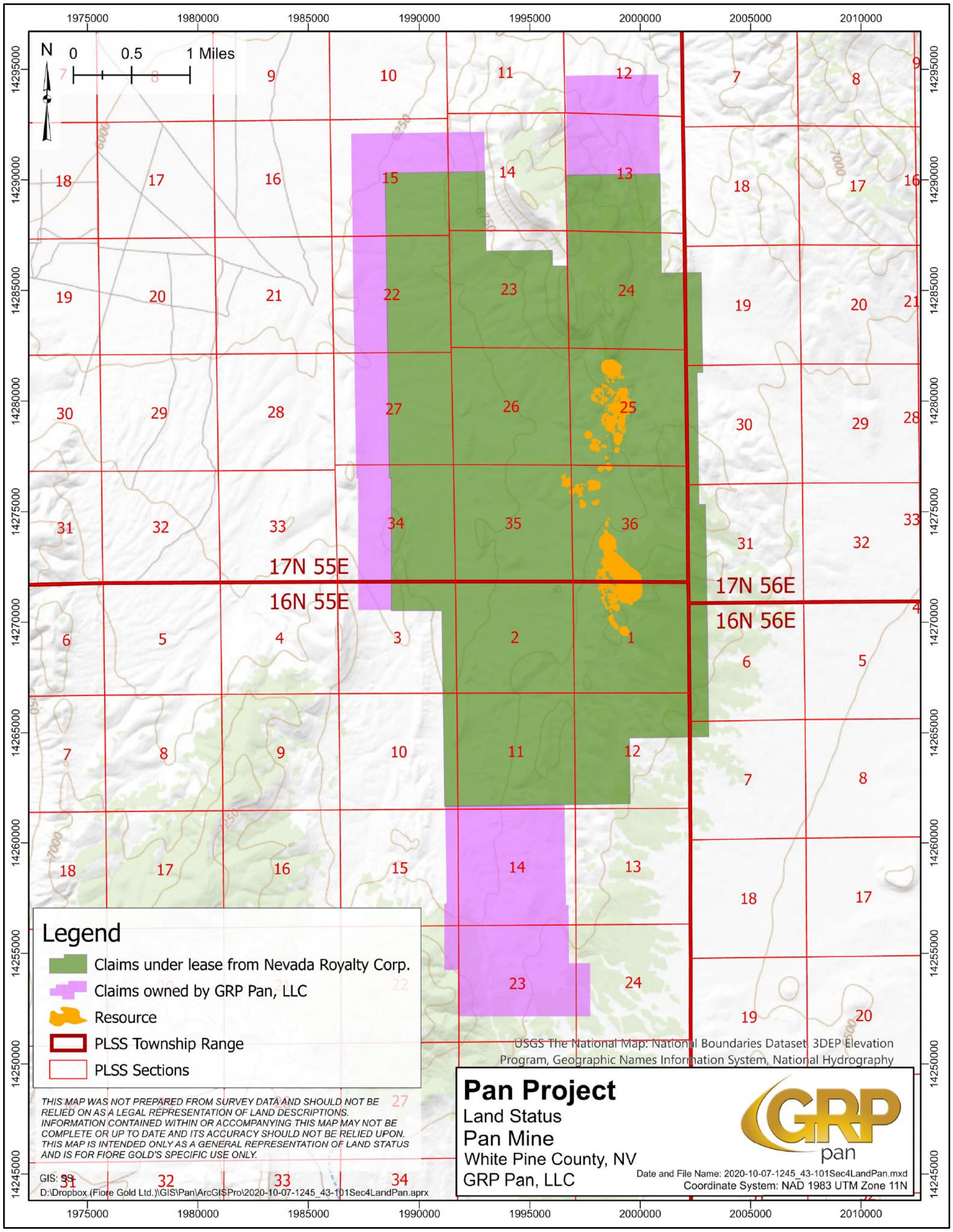


Source: GRP, 2017

Figure 4-1: Project Location Map

4.2 Mineral Titles

The Project claim boundary encompasses approximately 10,673 acres, all located within surveyed townships. The Pan property consists of 563 contiguous, active, unpatented lode mining claims covering portions of Sections 12 through 15, 22 through 27, and 34 through 36, T17N, R55E; portions of Sections 19, 30, and 31, T17N, R56E; portions of Sections 1 through 3, 10, through 12, 14, 15, and 22 through 24, T16N, R55E; and portions of Sections 6 and 7, 16N, R56E, as shown in Figure 4-2. A complete listing of the claims on file with the BLM and White Pine County is included in Appendix B. The U.S. Department of the Interior – BLM, Ely District Office – Bristlecone Field Office administers the federal public lands within the Project boundary. No private, United States Department of Agriculture (USDA) – Forest Service, or state-owned lands are located within the Plan Area or mineral materials sales site.



Source: GRP, 2020

Figure 4-2: Land Status Map

4.2.1 Nature and Extent of Issuer's Interest

The right of way permit #200571 covers the exit off of Highway 50. Permit #200571 is provided in Appendix C. The remainder of the Pan access road is included in the Plan of Operations as part of the mining operation.

Unpatented lode mining claims are kept active with annual maintenance fees paid to the BLM and White Pine County by September 1st of each year.

GRP Pan, LLC must incur a minimum of US$65,000 per year work expenditures during the term of the mining lease from Nevada Royalty Corp (NRC).

4.3 Royalties, Agreements and Encumbrances

GRP Minerals Corp. and its subsidiaries acquired various mineral properties, including the Pan Assets, on May 17, 2016, pursuant to an Asset Purchase Agreement (APA) with subsidiaries of Midway Gold Corp., which was approved and authorized by the United States Bankruptcy Court for the District of Colorado, in Midway Gold US Inc., et al, Case No. 15-16835 MER. On May 13, 2016, the Bankruptcy Court entered the Revised Order under 11 U.S.C §§ 105, 363, and 365 and Fed. Bankr. P. 2002, 6004, 6006, and 9014 (I) Approving (A) the Sale of Substantially All of the Debtor Assets Pursuant to the Asset Purchase Agreement with GRP Minerals, LLC and Related Agreements Free and Clear of Liens, Claims, Encumbrances and Other Interests and (B) the Assumption and Assignment of Certain Executory Contracts and Unexpired Leases in Connection with the Sale; and (II) Granting Related Relief.

Effective May 17, 2016, the Pan Mineral Lease dated January 7, 2003 was assigned and conveyed to GRP Pan, LLC. Nevada Royalty Corp. (NRC), successor in interest to the Lyle F. Campbell Trust, is the Lessor and owner of the claims subject to the Lease. As of November 22, 2013, NRC assigned to Orion Royalty Company, LLC, NRC's right to receive advance minimum and production royalty payments under the Pan Mineral Lease. On or before January 5 of each year, GRP Pan, LLC must pay an advance minimum royalty of the greater of US$60,000 or the US dollar equivalent of 174 oz of gold valued by the average of the London afternoon fixing for the third calendar quarter preceding January 1 of the year in which the payment is due. All minimum advance royalties will be creditable against a sliding scale gross production royalty of between 2.5% and 4% as shown in Table 4-1.

Ten claims are also subject to an overriding 1% NSR payable to Americomm Resources Corporation. They are PA 8A, PA 10, PA 12-18, and PA 49A.

There are 134 additional unpatented claims within the Pan property that are without royalty burden and are not subject to the NRC area of interest. They are the 10 PC, 56 NC, 41 GWEN, 26SP and 1 REE claims.

100% of the advanced minimum royalty paid within a calendar year can be applied to that same year's production royalty due. If the total production royalty due in any calendar year exceeds the advance minimum royalty paid within that year, GRP Pan, LLC can credit all un-credited advance minimum royalties paid in previous years against 50% of the gross production royalty due.

Table 4-1: Pan Royalty Schedule

Price of Gold (US$)	Percentage
To and including $340.00/oz.	2.5%
From $340.00/oz. to $450.00/oz.	3.0%
$450.00/oz. and greater	4.0%

Source: GRP, 2017

4.4 Environmental Liabilities and Permitting

4.4.1 Environmental Liabilities

Mining activity has taken place in the general region since 1876, but mining of the Pan deposit had not occurred prior to 2015. At the time of publication, there are no known environmental issues. There are no other known significant environmental factors or risks to continued operations and closure.

4.4.2 Required Permits and Status

The majority of the required federal, state, and local permits for construction, operations, and reclamation of the Pan Mine were acquired by Midway, GRP's predecessor. Since 2017, GRP has successfully transferred the permits to their control. GRP has all of the requisite and necessary permits necessary to construct, operate, and reclaim the Pan Mine. Table 4-2 provides a list of the major permits and authorizations and their status as of January 2023. All permits are issued to "GRP" unless otherwise noted in Table 4-2.

Table 4-2: Status of Major Permits, Authorizations, and Licenses as of January 2023

Permit	Agency	Permit Number	Status
Federal Permits and Authorizations			
Notification of Commencement of Operations	Mine Safety and Health Administration	26-02755	Active
Record of Decision and approved 2013 Plan of Operation and subsequent modifications	BLM	NVN-090444	Active
Mineral Materials Negotiated Sale (Borrow)	BLM	NVN-089672	Active
Programmatic Agreement [(1)]	BLM/state Historic Preservation Office	NVN-090444	Active
Eagle Take Permit	USFWS	Currently under review	Currently under review
Hazardous Waste ID (RCRA)	USEPA/NDEP/Department of Energy	LQG NVR 000 089 227	Active
FCC Radio License	Federal Communications Commission	Reg. #0023652175 Call Sign WQUC703	Active
Explosives Permit	Bureau of Alcohol, Tobacco, Firearms, and Explosives	#9-NV-033-33-1B-00416	Active
CSAT Security Threat	Department of Homeland Security	Midway Gold Corporation (MDW) Pan Facility ID 4133675 Facility survey ID 8022095 (dated Dec. 30, 2014)	Active
State Permits			
Air Quality Operating Permit -Class I Surface Area Disturbance Permit	NDEP Bureau of Air Pollution Control	AP1041-3674	Active Class I (Expires 11/28/2027)
Air Quality Operating Permit – Class II	NDEP Bureau of Air Pollution Control	AP1041-3831	Active Class II (Expires 07/07/2027)
Air Quality Permit – Mercury Operating Permit to Construct	NDEP Bureau of Air Pollution Control	AP1041-3302	Active (mercury permit [Lifetime])
Reclamation Permit	NDEP Bureau of Mining Regulation and Reclamation	350	Active
Water Pollution Control Permit	NDEP Bureau of Mining Regulation and Reclamation	NEV2012107	Active (Expires 04/04/2023; renewal application submitted on 10/06/2022)
Dam Safety Permit	Nevada Division of Water Resources	J-679	Active
Water Appropriation	Nevada Division of Water Resources	Permits 81667 - 81669, 84743 - 84746	Leased from KG Mining (Bald Mountain) Inc.
Encroachment Permit	Nevada Department of Transportation	Occupancy Permit No. 200571	Active
Industrial Artificial Pond Permit	Nevada Department of Wildlife	S407100S	Active (Expires 06/20/2027)
Stormwater Permit	NDEP Bureau of Water Pollution Control	MSW-42137	Active
Commercial Septic System Construction Permit	NDEP Bureau of Water Pollution Control	GNEVOSDS09-S-0397	Active
Landfill Permit	NDEP Bureau of Sustainable Materials Management	SW 539 SW1762	Active
Liquid Petroleum Gas (LPG) Licenses	Nevada Board for the Regulation of Liquefied Petroleum Gas	5-5427-01 (Admin) 5-5427-02 (ADR)	Active
Potable Water "non-transient non-community water system"	NDEP Bureau of Safe Drinking Water	WP-1142-NT-NTNC	Active
Occupancy Permit	State of Nevada Fire Marshall	N/A	Active
Mine Safety	Nevada Department of Business and Industry, Division of Industrial Relations	Mine ID 26-02755	Active

Source: SRK, 2023

[(1)] Also signed by Mt. Wheeler Power Company, Te-Moak Tribe of Western Shoshone Tribe, Duckwater Shoshone Tribe, and the Lincoln Highway Association, Nevada.

4.5 Other Significant Factors and Risks

At the time of publication, no significant factors and risks related to mineral title, royalties, agreements, encumbrances, existing environmental liabilities or permits to construct, operate or close the operation are known.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

Section 5 is extracted from Gustavson (2015) report. Standardizations have been made to suit the format of this report. Changes to the text are indicated by the use of brackets [ ] or in sentences containing "SRK".

5.1 Topography, Elevation and Vegetation

The Pan property is located within the rolling hills of the northernmost portion of the Pancake Range. The terrain is gentle to moderate throughout most of the project area, with no major stream drainages. Elevation ranges from 6,400 to 7,500 ft above mean sea level (amsl). Local vegetation includes Pinyon-Juniper woodlands broken by open areas of sagebrush and grass. No springs are known to exist on the property.

5.2 Accessibility and Transportation to the Property

Access to the Pan property is via a gravel road that intersects US Highway 50 approximately 17 miles southeast of Eureka, Nevada. It is approximately 5 miles by road from US 50 to the Pan Project site. The road is constructed as a gravel embankment and has been constructed specifically for the Pan Project. The property is accessible year-round, but weather conditions occasionally make access and on-site travel difficult during the winter months.

5.3 Climate and Length of Operating Season

The local climate is typical for the high desert of east-central Nevada and the Basin and Range province. Climate data collected in Eureka, Nevada between 1997 and 2008 reports average annual precipitation of 8.1 inches, and average temperatures ranging from 11°F in the winter to 91°F in the summer (Western Regional Climate Center, 2009). Mining and exploration can be conducted year-round, but snow may cause delays in overland travel during the winter months.

5.4 Sufficiency of Surface Rights

The surface rights as described in Section 4.2 are sufficient to conduct exploration and mining operations as currently planned for the Pan deposit. The Pan Project is wholly located on and operations will be contained within Calibre land holdings.

5.5 Infrastructure Availability and Sources

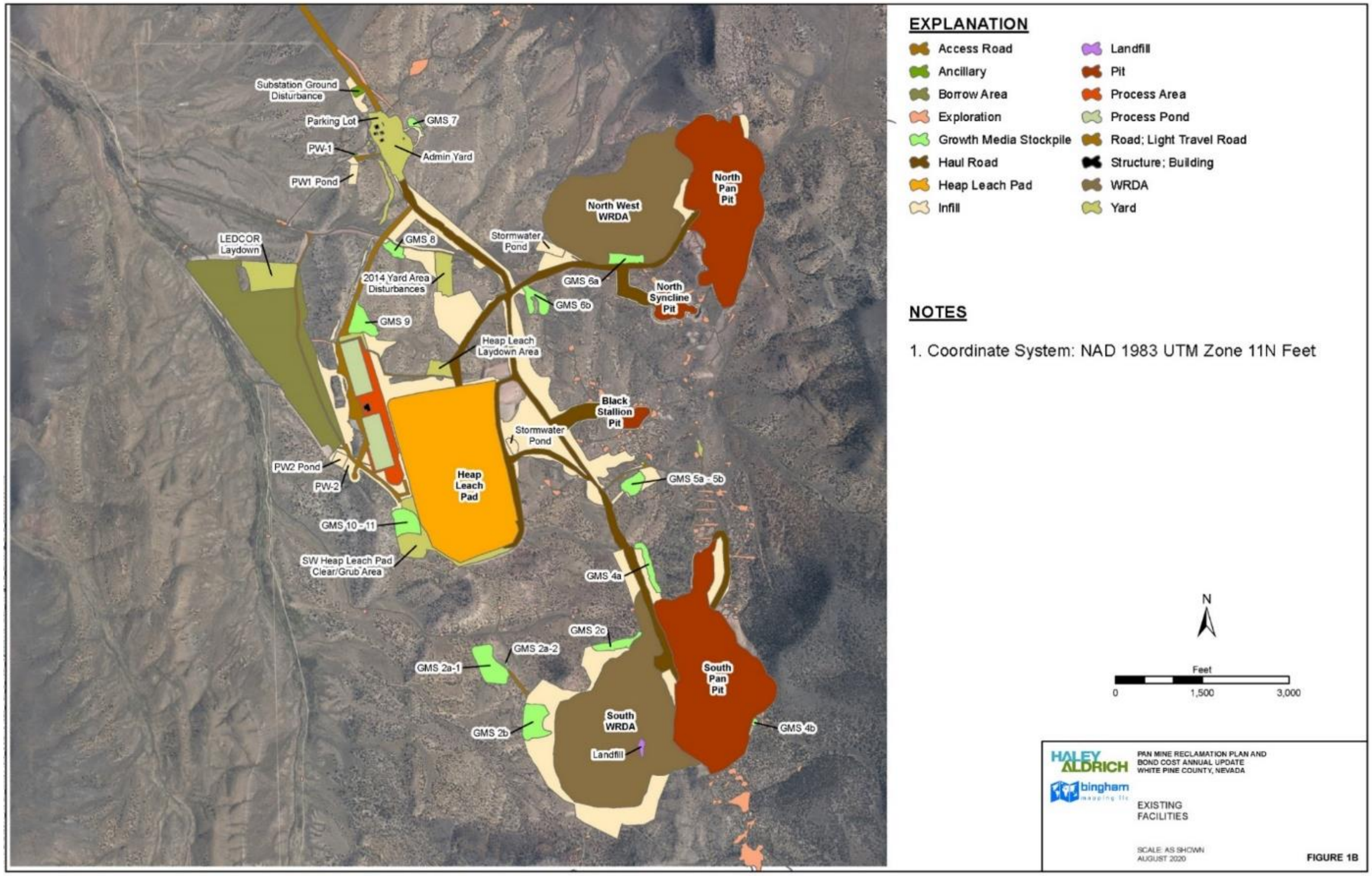
The town nearest to the project site, Eureka, Nevada, hosts a population of 610 according to 2010 US Census data. Greater Eureka County and White Pine County host area populations of 1,987 and 10,030 respectively, though population is centered primarily in Eureka and Ely, Nevada. Elko, Nevada, population of 18,297, is the nearest major city to the project site and is located approximately 110 miles to the north by road.

Logistical support is available in Eureka, Ely, and Elko, all of which currently support large open pit mining operations. The Ruby Hill Mine near Eureka has had recent operations (2020) and the Bald Mountain Mine, approximately 50 miles north of Pan, is currently being operated by Kinross. Robinson Nevada Mining Company operates the Ruth Copper pit near Ely, and large-scale mining by Barrick and Newmont Mining Corporation is ongoing near Elko and Carlin, Nevada to the north. Mining personnel and resources for operations at Pan have commuted from Eureka, White Pine, and Elko Counties.

Demand for skilled and technical labor has increased recently in central Nevada and some short-term operational difficulties could be encountered due to staff shortages.

Mine construction began in January 2014 and continued until operations were ceased in 2015. Figure 5-1 shows the current layout of the facilities at the Pan Mine. Both the north and south pits are completely opened up for mining activities. All required facilities are currently constructed, except for a planned heap leach pad expansion.

Detailed descriptions of existing and planned infrastructure are in Section 18.



Source: GRP, 2020

Figure 5-1: Existing Project Infrastructure

6 History

The Pan property is located in the loosely-defined Pancake District of east-central Nevada. The district was first organized in 1870, when silver ore was discovered approximately 10 miles to the southwest at Pogue's Station (MDA, 2005, Smith, 1976). Occurrences of lignite near Pancake Summit were briefly exploited from 1872-1877, with only minor production (Smith, 1976). During the 1870s, the Chainman Sandstone was also quarried from at least two localities in the District, for furnace lining at the Eureka smelter (Smith, 1976). There is no historic gold or silver mining activity on the Pan property.

6.1 Prior Ownership and Ownership Changes

Mr. Lyle Campbell discovered the Pan deposit while prospecting in 1978, when he encountered gold-bearing jasperoid, now referred to as Campbell Jasperoid. Mr. Campbell staked 147 original unpatented mining claims and transferred ownership of the claims to the LFC Trust in 1986. The LFC Trust was bought out in 2008 by Gold Standard Royalty (Nevada) Inc., which merged with, and is now owned by, Nevada Royalty Corp. Since 1978, numerous claims have been added and released from the Pan claim block. Between 1978 and 1993, several exploration companies leased the Pan claims and completed drilling programs. The Project was dormant from 1994 to 1998. Mr. Campbell passed away in 1998 and the LFC Trust continued to manage the Pan property until 2008. Exploration began again in 1999, starting with Latitude Minerals Corporation, then Castleworth Ventures, which became Pan Nevada Gold Corporation, and was acquired by Midway Gold Corp. in 2007.

Midway added unpatented claims to the land position to assemble the current land package. In 2016, GRP acquired the assets and mineral leases held by Midway in the Asset Purchase Agreement, as described in Section 4.3. GRP was acquired by Calibre Mining Corp. in 2021.

6.2 Exploration and Development Results of Previous Owners

Exploration on the Property has been conducted by several companies since 1978, and is summarized below.

sampling, and an induced polarization geophysical survey. Alta Bay initiated studies in support of mining development, including an archaeological survey, additional metallurgical test work, and preliminary mineral reserve estimations and mine designs.

- Alta Gold completed exploration drilling in 1992. Drilling results were reported, but the associated holes have not been validated and are not included in the current drill hole database.
- In 1993, Southwestern completed several reverse circulation holes. The associated drill hole collars have been identified in the field, but no other information has been located to validate these holes. These holes are not included in the current database. Drilling completed nearby in 2007 could not confirm the reported results.
- Between 1999 and 2001, the Latitude - Degerstrom joint venture conducted geologic mapping and outcrop and soil sampling, as well as drilling and metallurgical testing. Latitude drilling programs focused primarily on North and South Pan mineralization, but also resulted in the discovery of mineralization in the Syncline and Black Stallion target areas of Central Pan. Latitude terminated the

joint venture with Degerstrom in mid-2001, and joint ventured the project with Metallica later that year. From LFC Trust files, it appears that Metallica focused on thermal imagery and lineament study of satellite data over the Pan area. No additional subsurface exploration work was completed by Metallica.

- Castleworth Ventures. Inc. completed exploration drilling and conducted geologic mapping, surface sampling, metallurgical test work, and resource estimation between 2003 and 2006.
- Between 2007 and 2015, Midway completed 287 holes, of which 260 were reverse circulation and 27 diamond core drill holes for a total of 136,507 ft. Drilling efforts focused on expanding known mineralization, but also included confirmation drilling, core drilling for metallurgical samples, and exploration drilling in several potential target areas on the Pan property. Midway drilled seven water supply or monitoring wells in 2012. These were logged for geology, but not assayed and are not included in the drill hole database. In addition to exploration drilling, Midway completed geologic mapping, soil and outcrop sampling, and a gravity survey.
- Midway began construction of the Pan Mine in February 2014. Mining was initiated in October 2014 and heap leaching was initiated in February 2015. The first gold pour was in March 2015. Mining operations were suspended in June 2015 due to poor leach pad permeability and slower metal recovery than anticipated. Midway initiated bankruptcy in June 2015. Leaching and gold recovery continued through bankruptcy proceedings and the sale of the Property to GRP.
- GRP Pan, LLC acquired the Pan assets on May 17, 2016, from subsidiaries of Midway.
- Calibre Mining Corp. acquired GRP in 2021.

Drilling history to date is summarized in Table 6-1. More than 1,200 exploration or resource definition drill holes have been completed at Pan; many of the earliest drill holes cannot be verified and are not included in the database. Most drill holes completed early in the Project history by Alta Gold and Echo Bay are not included in the current database, due to lack of verifiable collar locations, geology and/or assay results. Water wells drilled by Midway in 2012 were logged for geology but not assayed and are excluded from the Table 6-1.

The current Mineral Resource drill hole database includes 1,179 drill holes totaling 377,744 ft, plus 2,324 ft in six water wells logged for geology but not sampled for assay. Of the assayed drill holes in the database, 1,146 holes with 364,839 ft were drilled by RC or rotary methods, and the rest were diamond core holes, totaling 12,905 ft in 33 drill holes.

MDA (2005), and Gustavson (2011, 2015) have reported on validation of the existence of drill hole collar location information, drilling logs and assay records for the drill holes in earlier modeling databases. Data verification and validation for the 2016 drill holes is reported in subsequent sections of this document.

Table 6-1: Project Drilling History

Company	Years	Holes Drilled (RC/ Core)	Footage Drilled (RC/Core)	Drill Type
Amselco	1978 to 1985	84	21,771	RC
Homestake	1980	3	620	RC
Hecla	1986	7	1,415	RC
Echo Bay	1987 to 1988	108/5(1)	19,905/825(1)	RC/Core (Met)
Alta Bay Venture	1988 to 1991	213	66,960	RC
Alta Gold	1991 to 1992	10/7(1)	2,645/958(1)	RC (Twin)/Core (Met)
Latitude/Degerstrom JV	1999 to 2001	54	16,143	RC
Castleworth Ventures	2003 to 2006	290/6	68,005/1,289	RC/Core
Midway Gold(2)	2007 to 2015	260/27	124,355/11,616	RC/Core
GRP Minerals	2016	127	45,665	RC
Totals in Database		1,146/33	364,839/12,905	RC/Core

Source: GRP and SRK, 2017

(1) No Alta Gold drill holes, or core drill holes by Echo Bay, are incorporated into the database for lack of verifiable collar locations, geology and/or assay results.
(2) Midway drilled 8 groundwater supply or monitoring wells in 2012. These were logged for geology, but not assayed; and are not included in this table. Six of these are included in the geological database, but none have assay data.

6.3 Historical Mineral Resource and Reserve Estimates

Many of the historical Resource and Reserves estimates for Pan were completed prior to implementation of NI 43-101 standards. A Qualified Person has not done sufficient work to classify these historical estimates as current resources, and the issuer is not treating these as currently meeting CIM and NI 43-101 standards. The estimates are superseded by new drilling and mining depletion, therefore they are considered historical in nature.

6.3.1 Echo Bay

A qualified person has not done sufficient work to classify the Echo Bay historical estimate as a current resource estimate or Mineral Reserve and the issuer is not treating the historical estimate as a current resource estimate.

Echo Bay completed a cross-sectional polygonal ore reserve estimation in 1988, presented in Table 6-2. These reserve estimates have not been verified, are not considered reliable, are not relevant to the updated mineral resource presented in this report and are mentioned here for historical completeness only.

The estimate was prepared based on grade cut-offs of 0.015 oz/ton Au and 0.020 oz/ton Au over minimum drill lengths of 10 ft. The area of influence allowed per hole was ½ the distance to the adjacent cross-section, up to 100 ft, in the north-south direction, and ½ the distance to the nearest hole, up to 50 ft, in the east-west direction. Tonnage factors used were 15 ft^3/ton at North Pan, and 13 ft^3/ton at South Pan.

Table 6-2: Echo Bay Historical Polygonal Ore Reserve Estimation, 1988

Area	0.015 oz/ton Au Cut-off			0.020 oz/ton Au Cut-off		
	Tons	Gold Grade (oz/ton)	Contained Au Ounces	Tons	Gold Grade (oz/ton)	Contained Au Ounces
North Pan	2,877,822	0.027	76,258	1,869,200	0.032	59,146
South Pan	2,476,340	0.031	76,689	1,958,365	0.035	68,244
Total	**5,354,162**	**0.029**	**152,947**	**3,827,565**	**0.033**	**127,390**

Source: Jeanne, 1988, reported in MDA, 2005

6.3.2 Alta BAY Joint Venture

Documentation of the following Alta Bay resource and reserve estimates is limited to annual reports submitted to LFC Trust that pre-date NI 43-101, and none appear to be modern CIM reporting standards. They should be treated as historical in nature.

Alta Bay calculated a polygonal geologic ore reserve in 1988 from 100 ft spaced cross-sections, presented in Table 6-3. The estimation was completed at 0.020 oz/ton Au cut-off and an area of influence of 100 by 50 ft per drill hole. Tonnage factors used were 15 ft^3/ton at North Pan, and 13 ft^3/ton at South Pan.

Table 6-3: Alta Bay Historical Polygonal Geologic Ore Reserves, 1990

Area	Tons	Gold Grade (oz/ton Au)	Contained Ounces
North Pan	6,744,406	0.021	140,942
South Pan	4,191,765	0.025	106,130
Total	**10,936,171**	**0.023**	**247,072**

Source: Myers, 1990, reported in MDA, 2005

In 1989 Alta Bay reported the results of [electronic] computer generated ore reserves for the Pan Project, summarized in Table 6-4. The annual report to LFC Trust indicates a strip ratio of 1.87 for North Pan and 1.63 for South Pan, but no other details are provided in the report. No original work could be located to further document this estimate.

Table 6-4: Alta Bay Historical Computer Generated Ore Reserves, 1990

Area	Tons	Gold Grade (oz/ton Au)	Contained Ounces
North Pan	5,125,240	0.022	112,509
South Pan	5,874,519	0.020	117,972
Total	**10,999,759**	**0.021**	**230,481**

Source: Myers, 1990, reported in MDA, 2005

In 1991, Alta Bay updated the polygonal “geologic ore reserves” for the project as shown in Table 6-5. This estimate was prepared using tonnage factors of 13 ft^3/ton for all material, except argillaceous material at South Pan, which has a tonnage factor of 14 ft^3/ton. All other parameters are the same as used in the previous estimation.

Table 6-5: Alta Bay Historical Polygonal Geologic Ore Reserves, 1991

Area	Tons	Gold Grade (oz/ton Au)	Contained Ounces
North Pan	6,744,406	0.0209	140,942
South Pan	4,687,126	0.0238	111,641
Total	**11,431,532**	**0.0231**	**252,583**

Source: Myers, 1991, reported in MDA, 2005

Also in 1991, Alta Bay reported "recoverable geologic ore reserves" for the Pan deposit as shown in Table 6-6. This model was completed using a tonnage factor of 13 ft^3/ton for North Pan and South Pan, a gold recovery rate of 65%, and a gold price of US$400/oz (Myers, 1991). No geology was used to constrain the model, and no other details were reported in the annual report to LFC Trust.

Table 6-6: Alta Bay Historical Computer Model Generated Recoverable Ore Reserves, 1991

Area	Contained Ounces(1)	Recoverable Ounces
North Pan	153,762	99,945
South Pan	115,343	74,973
Total	**259,105**	**174,918**

Source: Myers, 1991, reported in MDA, 2005

(1) Contained Ounce values are calculated from Recoverable Ounces and recovery rate.

6.3.3 Latitude Minerals Corporation

Prior to performing any surface work at the Pan Project, Latitude contracted Lynn Canal Geological Services of Juneau, Alaska to compile a digital drilling database, construct a three-dimensional geologic model, and estimate mineral resources on the property. The resource was modeled by performing variography on composited drill data to establish reasonable estimation parameters and estimated gold grades. Faults and lithologic contacts were used as hard boundaries. Tonnage factors applied were 13 ft^3/ton at North Pan and 14 ft^3/ton at South Pan. The resource estimate is summarized in Table 6-7, and according to MDA (2005) it appears to conform to definitions and criteria set out by the CIM. This resource estimate was not reviewed for the current report and is presented for project history only. Increase of the resource from the previous estimate appears to be the result of a lower resource CoG, as the same data was used for both.

Table 6-7: Latitude Historic Resource Estimate, 1999

Indicated Resources									
	North Pan			South Pan			Total Indicated		
Cut-off (oz/ton Au)	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces
0.010	10.41	0.017	172,800	8.46	0.017	144,300	18.86	0.017	317,100
0.015	4.88	0.022	107,900	4.26	0.022	94,900	9.14	0.022	202,800
0.020	2.37	0.028	66,100	2.25	0.027	61,300	4.62	0.028	127,400
Inferred Resources									
	North Pan			South Pan			Total Indicated		
Cut-off (oz/ton Au)	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces
0.010	3.46	0.013	44,500	3.89	0.013	50,600	7.34	0.013	95,100
0.015	0.78	0.017	13,900	0.94	0.018	17,300	1.72	0.018	31,200
0.020	0.14	0.024	3,400	0.31	0.022	6,900	0.45	0.023	10,300

Source: White and Buxton, 1999, reported in MDA, 2005

6.3.4 Castleworth Ventures

After exploration drilling in 2003 and 2004, Castleworth Ventures commissioned MDA to complete a NI 43-101 resource estimate on the Pan Project. Parameters for the estimate are thoroughly discussed in the 2005 MDA report, and the results are summarized in Table 6-8. Using a 0.010 oz/ton Au cut-off, the measured and indicated total resource is 18.97 Mt at 0.019 oz/ton Au, with 361,400 gold oz contained. The inferred total was 8.30 Mt at 0.017 oz/ton Au, with 140,600 gold oz contained. This resource evaluation used an economic cut-off of 0.010 oz/ton Au. Reported resources are total in situ resources unconstrained by an economic pit shell. A significant amount of drilling has been completed since this resource estimate was completed, therefore the resource is considered historical in nature.

Table 6-8: Castleworth Ventures Historical Resource Estimate, 2005

Measured Resources									
	North Pan			South Pan			Total Measured		
Cut-off (oz/ton Au)	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces
0.010	3.09	0.019	59,600	-	-	-	3.09	0.019	59,600
0.015	1.66	0.026	42,700	-	-	-	1.66	0.026	42,700
0.020	1.03	0.031	32,200	-	-	-	1.03	0.031	32,200
0.030	0.40	0.043	17,300	-	-	-	0.40	0.043	17,300
0.040	0.19	0.054	10,300	-	-	-	0.19	0.054	10,300
0.050	0.10	0.064	6,100	-	-	-	0.10	0.064	6,100
Indicated Resources									
	North Pan			South Pan			Total Indicated		
Cut-off (oz/ton Au)	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces
0.010	9.13	0.018	162,600	6.75	0.021	139,200	15.88	0.019	301,800
0.015	4.88	0.023	111,300	4.53	0.025	112,500	9.31	0.024	223,800
0.020	2.50	0.029	73,500	2.84	0.030	84,100	5.34	0.029	157,600
0.030	0.77	0.042	32,600	1.04	0.040	41,800	1.81	0.041	74,300
0.040	0.36	0.052	18,700	0.42	0.050	20,700	0.77	0.051	39,400
0.050	0.20	0.058	11,600	0.15	0.061	9,300	0.35	0.060	21,00
Inferred Resources									
	North Pan			South Pan			Total Inferred		
Cut-off (oz/ton Au)	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces	Tons (Mton)	Gold Grade (oz/ton Au)	Gold Ounces
0.010	2.82	0.017	49,200	5.49	0.017	91,400	8.30	0.017	140,600
0.015	1.46	0.023	32,900	3.17	0.020	62,900	4.62	0.021	95,900
0.020	0.79	0.028	22,000	1.12	0.026	28,800	19.1	0.027	50,800
0.030	0.26	0.036	9,600	0.28	0.036	9,200	0.52	0.036	18,700
0.040	0.08	0.045	3,600	0.04	0.045	2,000	0.12	0.045	5,500
0.050	0.01	0.051	700	0.01	0.053	400	0.2	0.052	1,200

Source: MDA, 2005

6.3.5 Midway 2011

Between 2006 and 2011, Midway completed 209 drill holes, primarily RC holes for exploration and resource delineation, and several core holes for metallurgical studies. Estimated Resources and Reserves from the 2011 Feasibility Study are reported in Table 6-9 and Table 6-10 respectively. A significant amount of drilling has been completed since this resource and reserve estimate was completed, therefore the estimates are considered historical in nature.

Table 6-9: Midway Historical Resource Estimate, 2011

Pan Total Measured Resource			
CoG (oz/ton)	**Tons**	**Grade Au (oz/ton)**	**Ounces**
0.008	30,150,640	0.0173	520,186
0.006	34,013,935	0.0161	546,756
0.004	40,697,193	0.0142	579,238
Pan Total Indicated Resource			
0.008	29,901,186	0.0152	453,351
0.006	35,992,335	0.0138	495,357
0.004	47,529,031	0.0116	550,571
Pan Total Measured Plus Indicated Resource			
0.008	60,051,826	0.0162	973,537
0.006	70,006,270	0.0149	1,042,112
0.004	88,226,224	0.0128	1,129,809
Pan Total Inferred Resource			
0.008	1,952,486	0.0170	33,120
0.006	2,457,481	0.0149	36,581
0.004	4,330,080	0.0105	45,261

Source: Gustavson, 2011

Table 6-10: Midway Historical Reserves Statement, 2011

Total Reserves	Tons (000's)	Gold	
		oz/ton	**Ounces (000's)**
Proven Reserves	27,827	0.018	487.51
Probable Reserves	25,427	0.015	376.71
Proven & Probable Reserves	53,254	0.016	864.22
Inferred within Designed Pit	695	0.013	9.00
Waste within Designed Pit	94,582		
Total tons within Designed Pit	**148,531**		

Source: Gustavson, 2011

6.3.6 Midway 2015

Midway issued an updated feasibility study (Gustavson, 2015) following a new resource and reserves estimation that incorporated early mine production data. The 2015 updated Mineral Resource and Mineral Reserve statements are presented in Table 6-11 and Table 6-12, respectively. A significant amount of drilling has been completed since this resource and reserve estimate was completed, therefore the estimates are considered historical in nature.

Table 6-11: Midway Historical Resource Estimate, 2015

	Measured			Indicated		
Cut-off (oz/ton)	Tons (000's)	Grade (oz/ton)	Contained (000's oz)	Tons (000's)	Grade (oz/ton)	Contained (000's oz)
0.008	15,676	0.017	264.7	12,208	0.014	167.4
0.006	18,339	0.015	283.3	15,818	0.012	192.8
0.004	20,430	0.014	293.4	19,185	0.011	210.1
	M&I			Inferred		
Cut-off (oz/ton)	Tons (000's)	Grade (oz/ton)	Contained (000's oz)	Tons (000's)	Grade (oz/ton)	Contained (000's oz)
0.008	27,886	0.016	433.3	6,014	0.015	88.4
0.006	34,157	0.014	Inferred	9,517	0.012	112.5
0.004	39,614	0.013	503.8	15,400	0.009	141.1

Source: Gustavson, 2015

Note: Open pit optimization was used to determine potentially mineable tonnage. Measured, Indicated and Inferred mineral classification was determined according to CIM Standards. Mineral resources, which are not mineral reserves, do not have demonstrated economic viability. The 2015 Measured, Indicated and Inferred resource is constrained within a US$1,500 LG Pit shell. The base case estimate applies a CoG of 0.004 oz/ton based on the current operating costs, the 2011 Feasibility Study recoveries, and a US$1,200 gold price.

Table 6-12: Midway Historical Reserves Statement, 2015

Total Reserves All Pits	Tons (000's)	Gold	
		oz/ton	ounces (000's)
Proven Reserves	14,004	0.0155	217.4
Probable Reserves	7,192	0.0118	85.1
Proven & Probable Reserves	21,196	0.0143	302.4
Waste within Designed Pits	19,289		
Total Tons within Designed Pits	40,486		

Source: Gustavson, 2015

6.4 Historical Production

Application of process solution to the leach pad began at Pan in March of 2015 and by June 2015, Midway initiated bankruptcy proceedings. Production continued from the stacked ore while reorganization was underway. Production did not stop after the sale to GRP Minerals, but by that time the rate of gold production from the stacked ore had diminished greatly. The production record is summarized in Table 6-13.

Table 6-13: Historical Gold Production at Pan

Mine Operator	Years of Production	Gold Ounces
Midway Gold Corp.	March 2015 - May 2016	27,586
GRP Pan, LLC	June 2016 - September 2016	2,162
GRP Pan, LLC	October 2016 - September 2017	10,070
GRP Pan, LLC	October 2017 - September 2018	34,290
GRP Pan, LLC	October 2018 - September 2019	41,518
GRP Pan, LLC	October 2019 - September 2020	46,039
GRP Pan, LLC	October 2020 - September 2021	45,398
GRP Pan, LLC	October 2021 - January 2022	10,809
Calibre Mining Corp.	January 2022 - December 2022	41,509
Total		259,381

Source: Calibre 2023

7 Geological Setting and Mineralization

7.1 Regional Geology

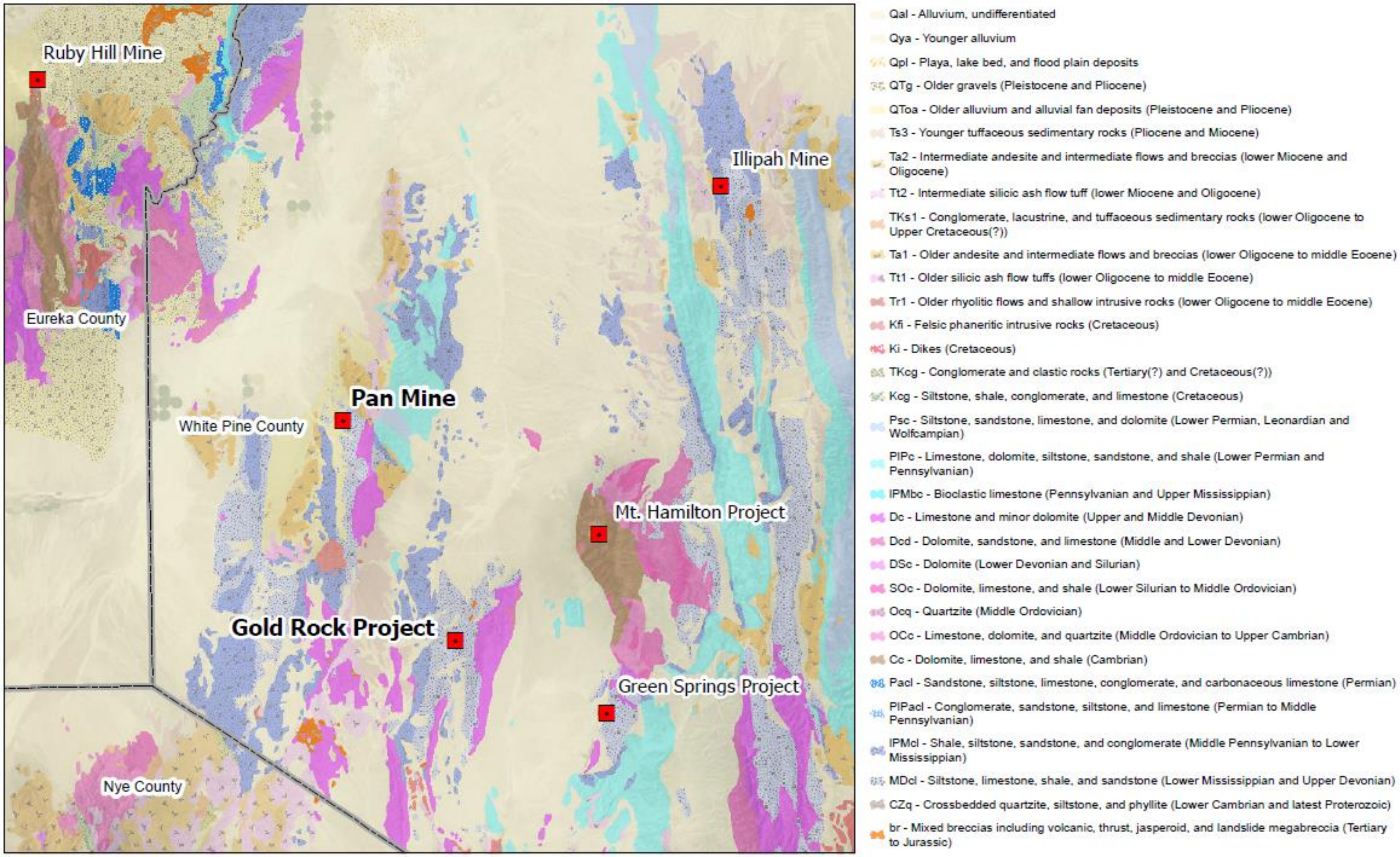
The Pan Project is located in the Pancake Range of central Nevada, in the eastern sector of the Great Basin Physiographic Province. When bedrock sediments were deposited during the middle to late Paleozoic Era, what is now central Nevada was at the margin of the North American plate. Variations in sea level caused facies changes in the sediments, from deep water shale to shallow water sandstone, and calcareous sediments at intermediate depths.

During the Cretaceous and early Tertiary, between 140 to 60 mega-annum (Ma), the Great Basin region was subjected to compression during the Sevier and Laramide orogenies. This compression resulted in the formation of generally north-striking folds and thrust faults. Localized magmatism was common during this period, and metal deposits related to igneous activity of this period are widespread throughout western North America. Examples near Pan include the Mt. Hope porphyry-skarn system and the Mt. Hamilton silver-gold deposit.

The current Great Basin landscape is shaped by crustal extension, which began in the middle Tertiary resulting in north-south trending mountain ranges and wide intervening valleys with thick sedimentary deposits. Mountain ranges are comprised of folded and tilted, Jurassic to Cambrian-aged marine sedimentary rocks that have been uplifted on steeply dipping normal faults. Precambrian metamorphic rocks are present in some ranges, such as the Ruby Mountains north of the Project, but Paleozoic marine sedimentary rocks comprise the typical bedrock in the region.

Tertiary extension has also caused localized volcanism, resulting in mafic to felsic flows, tuffs, and ash units capping sedimentary rocks. Volcanic units occur north and southeast of the Pan deposit areas.

A map of the regional geology is provided in Figure 7-1.



Source: GRP, 2017

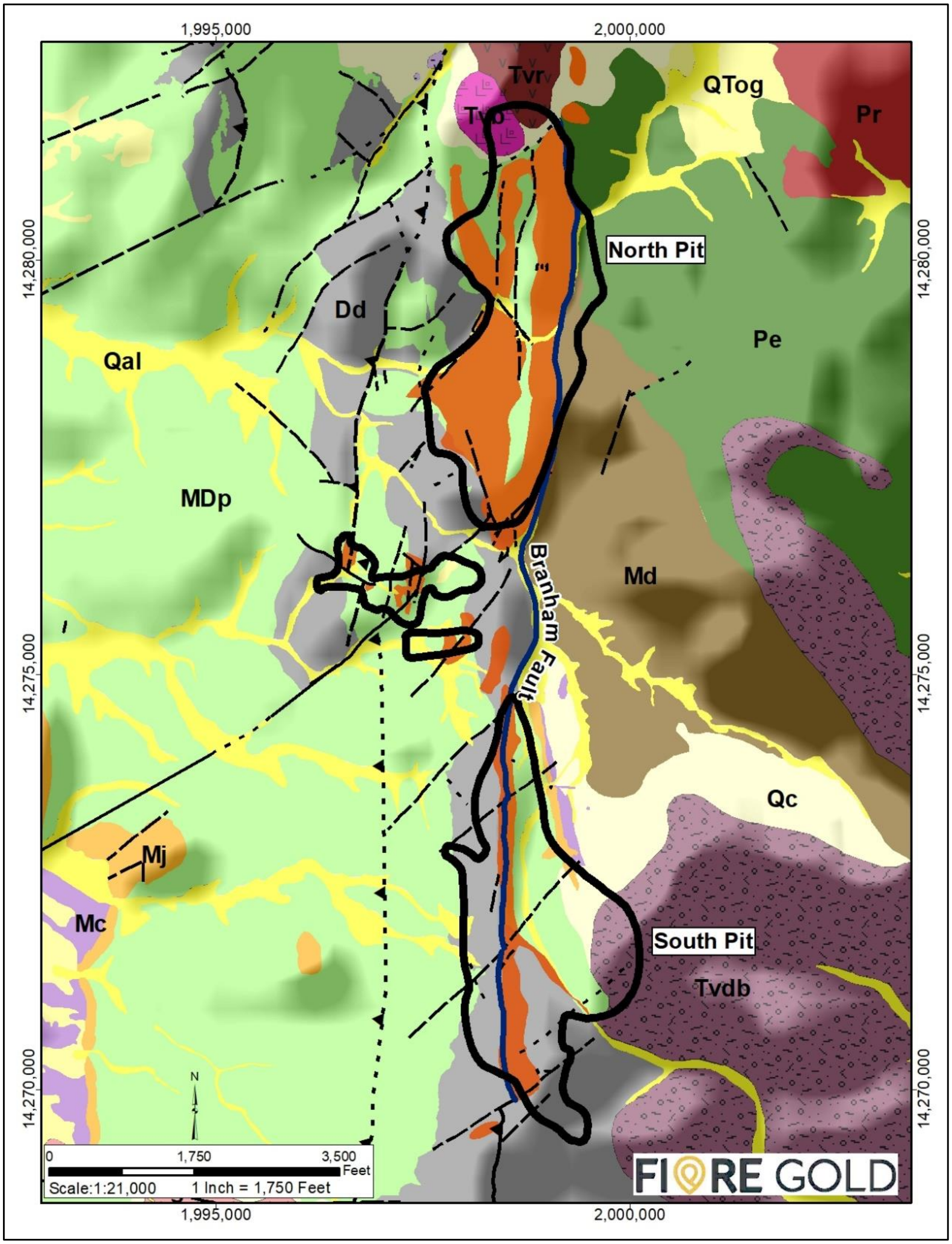
Figure 7-1: Regional Geology Map

7.2 Local and Property Geology

Geology in the Project area is dominated by Middle to Late Paleozoic stratigraphy overlain by minor Tertiary-aged volcanic units. Quaternary-aged detrital deposits are limited to drainage channels. Consequently, there is good bedrock exposure in most of the Project area.

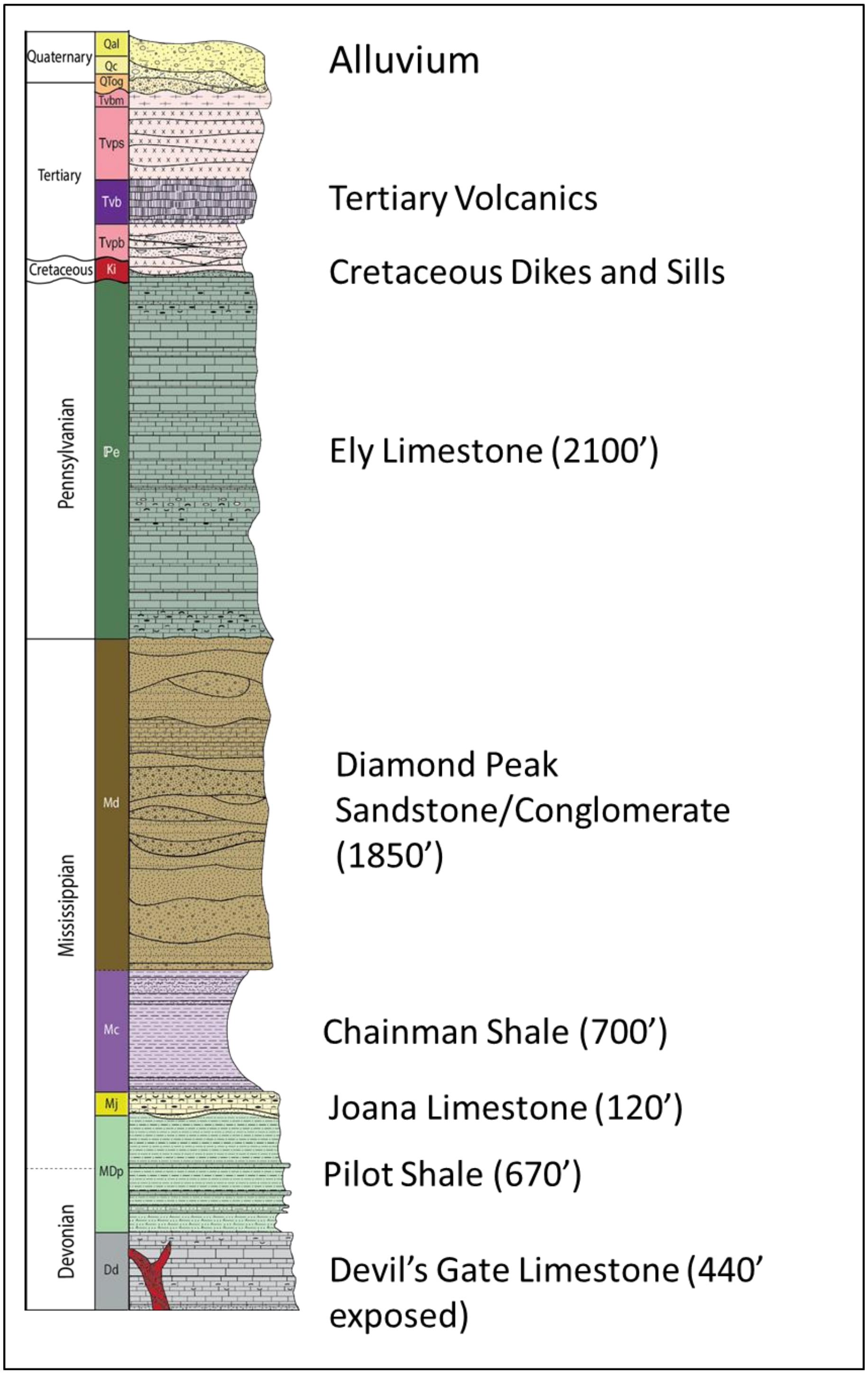
7.3 Lithology and Stratigraphy

Lithologic units in the area immediately surrounding Pan are dominantly Devonian- to Pennsylvanian-aged marine sediments, with lesser Cretaceous igneous intrusions, Tertiary volcanic tuffs and debris flows, and minor Tertiary to Quaternary alluvial deposits. In 2013, Midway geologists mapped the surface geology and measured stratigraphic thicknesses of the sedimentary units at Pan. The results are presented below, including a geologic map in Figure 7-2 and a stratigraphic column in Figure 7-3. Lithologic units are presented in order of oldest to youngest.



Source: GRP, 2020

Figure 7-2: Geologic Map of the Pan Mine Area with Conceptual Pit Crests



Source: Midway, 2013

Figure 7-3: Pan Project Stratigraphic Column

Simonson Dolomite (Ds) – Devonian

The Simonson Dolomite is the oldest lithologic unit intersected by drilling, but does not outcrop in the Project area. Thickness ranges from 500 to 1,300 ft thick in White Pine County (Smith, 1976), but only the top portion of the dolomite has been drilled at South Pan. The dolomite is a light gray, massively bedded unit.

Devils Gate Limestone (Dd) - Late Devonian

The Devils Gate Limestone, subdivided into a lower Meister Member and an upper Hayes Canyon Member, is the oldest lithologic unit that outcrops in the northern Pancake Range. Measured thicknesses of the formation range from approximately 1,000 ft to 2,500 ft, but at Pan only the topmost 400 to 500 ft is exposed at the surface.

The Meister Member at Pan is composed of alternating beds of medium-bedded, locally laminated and silty, very dense, medium gray dolomite and dolomitic limestone, interbedded with lesser light brownish-gray limestone. Micro and macrofossils are common throughout, particularly Stromatopora and Cladopora. The unit becomes pinkish and bleached where the amount of silt increases. This unit appears to be closer to the surface in the vicinity of North Pan as it was commonly intersected in the Banshee area.

The Hayes Canyon Member is composed entirely of thick-bedded, bleached to pink-red to light to medium brown-gray limestone that is locally silty or argillaceous. Where enough silt is present, the color becomes bleached, pink to red. Fossils are fairly common, in particular Stromatopora, Cladopora, ostracods, and brachiopods, with occasional gastropods. This unit becomes siltier and sandier upsection, immediately below the Devonian Pilot Formation.

The upper Devils Gate Limestone near the contact with Pilot Shale, is a host for gold mineralization at the Pan Mine.

Pilot Shale (MDp) - Late Devonian to Early Mississippian

Pilot Shale at Pan is 600 to 700 ft thick and has different characteristics in the upper and lower portions of the unit. The Lower Pilot is a calcareous and carbonaceous flaggy siltstone with silty limestone interbeds near the base. It is dark gray on a fresh surface and weathers to buff or tan. Silicified and argillized Lower Pilot Shale is a host of gold mineralization at the Pan property.

The Upper Pilot is dominantly a thinly bedded siltstone with zones of thinly bedded papery siltstone.

Joana Limestone (Mj) - Mississippian

Joana Limestone is 120 ft thick at Pan, and ranges in thickness from 90 to 500 ft in White Pine County (Smith, 1976). It is a gray, medium grained, unevenly bedded limestone with abundant fossil fragments, chert nodules, and detrital limestone interbeds. Reported fossil types include echinoderm, bryozoans, foraminifera, algae, and crinoids. Locally, quartz arenite sandstone is present at the base of the unit.

Chainman Shale (Mc) - Mississippian

The Chainman Shale ranges in thickness from 1,000 to 2,000 ft, and is 700 ft thick at Pan, possibly indicating structural thinning from regional faulting. It consists of dark gray to black shale with thin interbeds of olive gray silty shale and siltstone. The upper most portions contain relatively thin beds of rusty colored sandstones which grade upward into the Diamond Peak Formation.

Diamond Peak Formation (Md) - Mississippian

The Diamond Peak Formation consists of irregular beds of chert pebble orthoconglomerate, paraconglomerate and litharenite sandstone. Thickness of the formation ranges from less than 1,000 to 3,700 ft and was measured at about 1,700 ft thick near Pan.

Ely Limestone (Pe) - Pennsylvanian

The Ely Limestone was measured at 2,070 ft in the Pan area. The lower 700 ft consists of thin to medium bedded micrite to fine sparite with abundant brachiopod beds and tan to grey chert stringers and nodules. The upper 1,370 ft is medium to thin bedded limestone and silty limestone with minor chert nodule horizons. The siliciclastic content increases near the top of the unit.

Igneous Intrusives (Ki) - Cretaceous

Intrusive rocks are not common in the Pan area. Within the deposit area, rocks interpreted as thin dikes have been intercepted in a few drill holes and consist of pinkish monzonite porphyry containing irregular feldspar, hornblende, and biotite phenocrysts in a fine quartz-orthoclase matrix. Texture and composition is similar to that of other intrusive rocks in the White Pine Mountains, and these dikes are thought to be temporally related.

Volcanic Units, General (Tv) - Tertiary

Tertiary volcanic flows and tuffs cover the sedimentary units at the north end of North Pan, and a fairly young volcanic debris flow mantles the sediments southeast of the South Pan pit. At the north end of the North Pan mineralization, drilling has penetrated through these volcanic units and intercepted mineralized sediments. This would indicate that mineralization is older than the volcanic units.

Pinto Basin Tuff (Tvpb)

The Pinto Basin tuff is a light-colored pumice-rich, non-welded air fall tuff. Its thickness has been measured at 285 ft near Pan and has been dated at other locations at 34.6 Ma (Nolan et al., 1974).

Richmond Mountain Andesite (Tvb)

The Richmond Mountain andesite is a dark, aphanitic to glassy flow with flow banding, minor cooling jointing, and a basal layer of scoria. Near Pan the unit is 240 ft thick.

Pancake Summit Tuff (Tvps)

Tan or pink, crystal-rich, moderately welded ash flow tuff with coarse smoky quartz, sanidine, and biotite crystals. It is 400 ft thick near Pan.

Bates Mountain Tuff (Tvbm)

Densely welded, crystal-poor tuff with common spherulitic textures and vapor phase alteration. It is 50 ft thick near Pan.

Debris Flow (Tvdf)

Heterolithic, unconsolidated debris flow consisting of basaltic and siliciclastic cobbles and boulders in finer pumice-rich matrix. Thickness is variable and it is interpreted as a volcanic unit.

Tertiary and Quaternary Sedimentary Deposits

Silt to cobble clast size, unconsolidated material that post-dates the rock units listed above.

QTog: Older gravel commonly cemented by caliche, with incised drainages later filled with alluvium, and overlain by colluvium.

Qc: Colluvium as slope debris of variable composition and thickness, gravel to cobble clast size.

Qal: Alluvium as graded channel deposits, silt to gravel clast size, mostly limited to currently active intermittent stream channels.

7.3.1 Alteration

Alteration associated with the Pan deposits is typical of Carlin-style gold systems, and includes silicification, argillization, decalcification, and oxidation. Breccia bodies may be silicified, as jasperoid, or argillized, and can contain variably altered fragments, including silicified, clay altered, and/or decalcified fragments. The Pilot Shale-Devils Gate Limestone contact is commonly silicified, but may be argillized and/or decalcified. This contact frequently shows evidenced of karsting and solution cavities.

Silicification is characterized by multi-phase brecciation and passive silica flooding along bedding and structures. Silicification occurs in breccia zones and in the Pilot Shale, and small zones have also been identified in the Devils Gate Limestone. Minor quartz veining has been reported in North Pan, particularly in association with the Campbell Jasperoid.

Clay alteration is generally associated with hydrothermal alteration and carbonate destruction. Clay along faults and bedding is common in both the Pilot Shale and Devils Gate Limestone and is a common matrix of solution/collapse breccias. Clay content in some South Pan ores can be upwards of 30% of the rock by weight and is dominantly composed of illite and lesser amounts of kaolinite.

Decalcification of both the Devils Gate Limestone and calcareous siltstones of the Pilot Shale is spatially associated with mineralization encountered at Pan. Decalcification results in a sanded, punky texture, especially in lithologic units with high original carbonate content.

Mineralization at Pan occurs in strongly oxidized rock to a nominal depth of 500 ft and locally as deep as 700 ft. Oxidation is prevalent throughout each of the zones with strong development of goethite and hematite iron oxides. Liesegang banding in the Pilot Shale is associated with oxidation. Sulfide minerals have rarely been described in drill logs at Pan and are not associated with known gold mineralization.

Barite is a typical accessory mineral for gold mineralization and silicification. Most mineralized areas contain elevated barite levels, typically above 0.2% weight percent. Hydrothermal barite veins were briefly exploited in the 1970s at the Cue Ball Barite Mine, in the southeast area of the Property.

7.3.2 Structure

The Branham Fault Zone (BFZ) is a north-south trending, steeply dipping structure that controls the geology at Pan. The fault zone is exposed in both the North and South Pits, and has a slight dip west from vertical. On the west side of the fault, Devonian through Mississippian stratigraphic units strike north-south and dip 10° to 30° westward. On the east side of the fault, Devonian through Permian units strike about 30° to 35° to the northwest and dip 65° to 70° to the northeast.

The stratigraphic units on the east side of the BFZ comprise the southwest limb of a northwest trending syncline which is truncated by the BFZ. The BFZ is recognizable in the field by the juxtaposition of younger sedimentary rocks to the east against older sedimentary rocks to the west, and can be tracked north to Tertiary volcanic units.

The displacement along the BFZ is not completely understood, but given the juxtaposition of broadly folded, northeast dipping units against gently westerly dipping units, it seems difficult to ascribe simple normal displacement to the fault. Calibre geologists believe the BFZ to have a complex and long-lived history of movement, likely related to shifting and adjusting plate margins, and likely different displacement vectors. A recent interpretation by Calibre geologists, aided by accumulated blast hole data and detailed structural observation of exposed high walls suggests that the latest and perhaps most significant movement of the BFZ is as a right-lateral strike-slip fault, with lateral displacement of approximately 8,700 ft. This interpretation suggests that the North and South Pan mineralized zones were likely a single deposit at the time of mineralization but have since been separated by N-S movement along the BFZ. This interpretation is supported by independent structural patterns and by mineralization patterns in blast hole drilling.

To the south of the deposit area, the BFZ may be offset by cross-cutting northeast trending faults and appears to proceed south with Devils Gate Limestone on both sides of the fault, and without the distinctive alteration and mineralization in the Pan deposit area.

The terrain west of the BFZ is cut by a number of northeast trending high angle faults with varying displacement senses. There are also a number of north trending faults, which may include high angle, dip-slip faults, and low angle, easterly-directed thrust faults.

Considerable solution/collapse breccia is present along and in proximity to the BFZ and other associated structures to the west. The breccias host a substantial portion of the gold resource at the Pan Project and are interpreted as solution/collapse breccias and hydrothermal breccias. These formed by the small-scale transport of broken rock bodies in association with hot hydrothermal fluids during the mineralizing event(s). The resultant geometry is one of elongate pods of brecciation and alteration that form along north-south or northeasterly trending faults, along with brecciation and alteration forming along bedding planes of preferential units, most notably along the contact of the Pilot Shale and Devils Gate Limestone. Breccias vary from clast to matrix supported, and contain angular to subrounded sedimentary fragments. Associated crackle breccia, wherein the rock is shattered but fragments remain roughly in place and are not rotated, occurs marginal to or as relicts within the larger breccia bodies, and is altered and mineralized in a manner similar to the more well-developed breccias.

7.4 Significant Mineralized Zones

Pan has three main mineralized zones; North, Central, and South. Gold mineralization spatially follows the Devils Gate Limestone – Pilot Shale contact in all three and is also controlled by steeply-dipping faults that trend north-south and secondarily by west-northwest (WNW) open fold axes. North Pan is dominated by: 1) near-vertical pipes and bodies of silicified solution breccia localized at the Pilot Shale–Devils Gate Limestone contact adjacent to the BFZ, and 2) stratiform-like modestly dipping breccia bodies and zones west of the BFZ focused near the locally folded Pilot Shale–Devils Gate contact. Central and South Pan have more argillic alteration than silicic. Mineralization in Central Pan is at the Pilot–Devils Gate contact and secondarily controlled by WNW trending open folds, and likely other subtle structures which have not been clearly identified. These open folds were not recognized from exploration drilling, and have only become apparent after exposure in the pit walls. Their significance in controlling mineralization is also subtle but has been confirmed by examination of blast hole assays. South Pan mineralization occurs in two zones: 1) a wide, clay-altered, near-vertical solution breccia zone along the west side of the BFZ, and 2) a stratigraphically-controlled zone east of the Branham Fault along the Pilot–Devils Gate contact. This zone dips northeast at about 55°.

The newly identified stratiform mineralization in the Banshee area, west of North Pan, is currently interpreted to represent the opposite limb ‘mirror image’ of the South Pan stratigraphically- controlled zone.

8 Deposit Type

8.1 Mineral Deposit

The Pan gold deposits are Carlin-style, which are epithermal in origin, comprised of disseminated gold hosted in sedimentary rock units. Gold particles occur as micron to submicron size disseminations. Visible or coarse gold is not common in this type of deposit, and has not been observed at Pan. Controls on mineralization in Carlin-style systems and at the Pan Project include both structure and stratigraphy

8.2 Geological Model

Gold mineralization is generally distributed along high-angle faults, and in a more tabular fashion subparallel to stratigraphy. Solution breccias developed in association with faults at the Pan Project serve as the primary host for gold mineralization, and have internal anisotropy that follows relic bedding orientation. Additional mineralization is hosted in favorable stratigraphy, such as the lower Pilot Shale and the upper siltier portions of the Devils Gate Limestone. More subtle mineralization controls occur as the axial traces of open folds, both anticlines and synclines trending obliquely (most commonly WNW) to the BFZ.

9 Exploration

Exploration activities that were conducted prior to 2018 can be found in the 2017 technical report (SRK 2017) including near mine targets, and a summary of the historical exploration activities are detailed in Section 6 of this report.

Calibre conducted five drill programs between 2018 and 2022 at the Pan Mine at various targets including the active mine pits and selected near mine exploration targets. A detailed description of the drill programs is included in Section 10. No other significant exploration activities were conducted at the Pan Mine.

10 Drilling

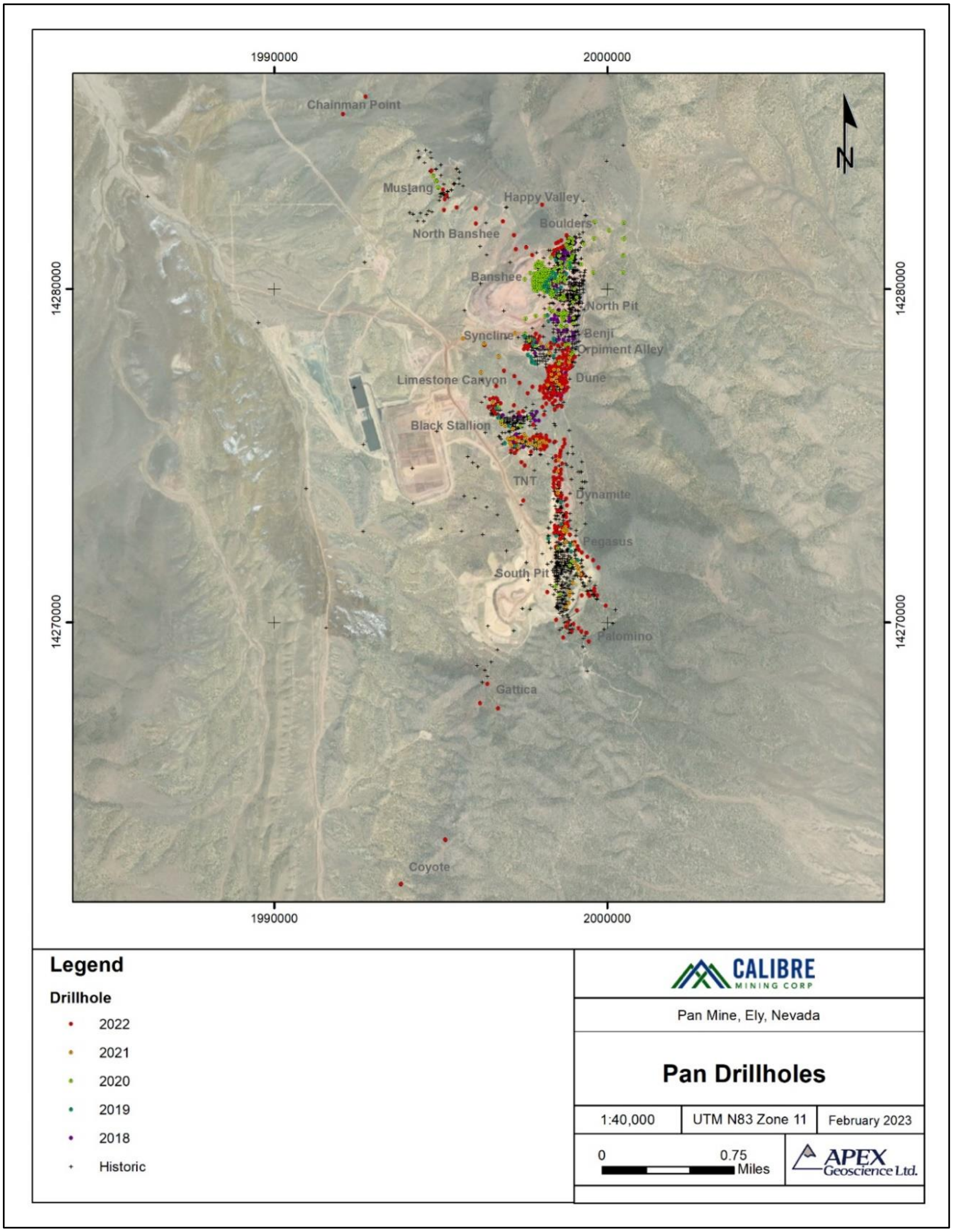
Historical drilling at the Pan deposit dates back to 1978 with the initial discovery of gold-bearing jasperoids. Drilling operations have been conducted over the Project area since this discovery. Historical drilling is discussed in Section 6.

More than 1,700 exploration or resource definition drillholes have been completed at Pan; many of the earliest drillholes cannot be verified and are not included in the database. Most drillholes completed early in the Project history by Alta Gold and Echo Bay are not included in the current database, due to lack of verifiable collar locations, geology and/or assay results.

The current Mineral Resource drillhole database includes 1,179 pre 2018 drillholes totaling 377,744 ft, plus 2,324 ft in 6 water wells logged for geology but not sampled for assay (Table 6-1). Of the assayed pre-2018 drillholes in the database, 1,146 holes with 364,839 ft were drilled by RC or rotary methods, and the rest were diamond core holes, totaling 12,905 ft in 33 drillholes.

MDA (2005), and Gustavson (2011, 2015) have reported on validation of the existence of drillhole collar location information, drilling logs and assay records for the drillholes in earlier modeling databases. Additional data verification of the pre-2018 drillhole data has been performed by SRK (SRK 2017; SRK 2019). APEX personnel and Mr. Dufresne have checked approximately 10% of the pre 2018 drill data and found no significant issues. Mr. Dufresne considers the Pan drillhole database, including the historical pre-2018 data and the 2018 to 2022 data, well validated and suitable for the preparation of the MRE and Minerals Reserves as presented herein.

The following section includes a brief summary discussion of the historical drilling pre-2018 and a more detailed discussion of the drilling programs conducted by Calibre between 2018 and 2022. Figure 10-1 outlines the locations of all drillholes completed by Calibre. All five programs used the same procedures for staking proposed drillhole locations, collection of samples, final collar surveying, and down hole drillhole deviation surveying.



Source: APEX, 2023

Figure 10-1: Calibre drillhole locations by year

10.1 Historical (Pre-2018) Drilling

The current Mineral Resource drillhole database includes 1,179 pre-2018 drillholes totaling 377,744 ft, plus 2,324 ft in six water wells (Table 6-1). Of the assayed pre-2018 drillholes in the database, the drilling can be divided into pre-2000 drilling involving a number of companies and largely completed by dry RC methods (with minor rotary drilling campaigns), and post-2000 drilling (2003 to 2016) with the vast majority of drilling completed by Castleworth Ventures, Midway and GRP utilizing wet RC methods. Castleworth Ventures and Midway did complete a number of core holes (33) during the period. About 40% of the historical drillholes in the database were completed pre-2000 and 60% of the holes between 2003 to 2016 (Table 6-1).

For the pre-2000 drilling data, holes lacking collar coordinates, geological logs, assay sheets/certificates were not utilized in the database. Approximately two thirds of the holes were drilled as vertical holes with one third drilled as angle holes. Down-hole surveys were either not completed or not documented/recorded for any of the historical pre-2000 drillholes. Collar coordinates were captured in grid coordinates and were entered into the database from copies of the original drill logs and checked against maps, which were then converted into NAD83, Zone 11 UTM coordinates in feet. Survey instrumentation and accuracy for the collar surveys for the pre-2000 drillholes in not known. Historical drillholes by Midway from 2007 onwards were surveyed by either professional licensed surveyors or the Pan mine site surveyors and were collected in NAD83, Zone 11 coordinates directly. Most drillholes from 2007 onwards (with a few exceptions) were down-hole surveyed utilizing a gyroscopic survey instrument by International Directional Services of Elko, Nevada.

Drill spacing for the historical drilling was completed at a nominal spacing of 100 ft centers at North and Central Pan and at 165 ft centers at South Pan. There is little to no documentation of sampling procedures for the historic pre-2000 drillholes. Most if not all the RC and rotary drilling was sampled utilizing 5 ft intervals. MDA (2005) describe the pre-2000 RC sampling as “standard dry RC sampling” whereby dry cuttings were collected in a cyclone, with the sample then passed through a riffle splitter and into a sample bag representing each 5 ft interval. This was standard practice at the time and likely utilized across many of the pre-2000 RC drilling campaigns. MDA (2005) indicates that groundwater was rarely encountered within 1,000 ft of surface. Ideal conditions for dry RC drilling.

The historical 2003 to 2016 drilling completed by Castleworth Ventures, Midway and GRP was conducted as wet RC drilling with water injection between 1 and 2 gallons per minute (Gustavson, 2011 and 2015). Samples were collected at 5 ft intervals with cuttings passed through a cyclone and into a rotary vane splitter yielding a constant sample size of about 7 kg. Plastic RC chip trays were prepared for each hole with the hole number and footage. The chip trays were then utilized for later geological logging of the RC drillholes. The RC samples were generally allowed to drain at site and then were either transported to Eureka or Ely each day by Castleworth, Midway or GRP personnel. Certified laboratory personnel picked up the samples from either location and transported them to the appropriate assay laboratory in either Elko, Winnemucca or Reno, Nevada.

A total of 27 diamond core holes were completed by Midway from 2010 to 2012. The core holes were completed using HQ sized core from ground surface. Core recovery was generally documented as good with recovery averaging about 92% (Gustavson, 2011 and 2015). However, core recovery did decrease in high fractured, brecciated and altered zones often associated with gold mineralization. The core holes were generally split in half with half sent for assays and the remaining half utilized for metallurgical work or archived in Ely, Nevada.

10.2 2018 Drilling

Calibre carried out a drill program between January and July of 2018 that consisted of the completion of 71 RC drillholes totaling 28,730 ft. The goals of this program were to increase the current resource by adding development drillholes to the current mine pits, and to expand the known mineralization currently not being mined using exploration drillholes outside the current mining area. Of the 71 RC drillholes, 56 returned significant gold mineralization greater than 0.20 grams per metric tonne (g/t), which is equivalent to 0.006 troy ounce per short ton (oz/ton), with an interval length greater than 10 ft. Table 10-1 summarizes the significant assay intercepts from the entire drill program. Drilling in 2018 was carried out by Layne Christensen.

Proposed drillholes were staked in the field by the Pan Mine survey group using RKT survey equipment. Pads were constructed over the drillhole locations with the appropriate dimensions in order to safely conduct drilling operations. A Calibre geologist confirmed the hole locations and lined up the drill rigs before drilling operations commenced. The drillers were provided with uniquely numbered sample bags assigned to each drillhole. The RC drill rig sampled every 5-foot interval utilizing a cyclone splitter that homogenized the entire interval and split out a 5-10 kg sample into a uniquely numbered sample bag. The drillers were also provided sample sheets indicating which 5-foot interval corresponded to each uniquely numbered sample bag to ensure each interval was properly sampled and tracked. The drillers also collected washed RC chips of each interval for future geological logging and interpretation. Once each hole was completed, International Directional Services (IDS) conducted a downhole survey using a Surface Recording Gyroscope model DG-69, to measure drillhole deviation. The final collar location was surveyed by the Pan Mine survey group and a wooden stake with the drillhole ID was placed in the ground to mark the location.

Each sample bag was placed into a bin containing all the samples for that drillhole. Calibre geologists prepared and inserted random quality assurance/quality control (QA/QC) samples at known intervals. During the 2018 program Calibre utilized 6 QA/QC standards, blank material, and field duplicates. The standards were chosen at random and inserted in regular intervals in the drill sequence. All samples were sent to ALS in Reno, NV for analysis. Calibre geologists described each 5-foot sample interval for lithology, alteration, mineralization, oxidation, structures, and any important geological features. This information was used to help guide geological interpretations in the subsurface.

The development drilling focused on expanding the resource at Red Hill and North Pan/Campbell. Forty-six drillholes were completed during this phase of drilling and account for 70% of the total footage drilled during 2018. All drillholes except PND18-21, 34, and 53 contained gold greater than the cutoff of 0.20 g/t (0.006 oz/ton) Au with an interval length greater than 10 ft for the development phase of the drill program. These results assisted in significantly expanding the current resource at the Pan Mine.

The exploration portion of the 2018 drill program consisted of 25 RC drillholes completed over Breccia Hill, Black Stallion, and Dynamite for a total of 8,865 ft of drilling. Most of the drilling was focused on the Breccia

Hill and Black Stallion targets. The exploration portion of the drill program was successful in expanding the known gold mineralization. The intercepts obtained were smaller than those intersected by the development drilling, however the intercepts from the exploration holes were often closer to surface.

Table 10-1: Pan 2018 RC Drillhole Assay Highlights

Hole ID	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PN18-09	Breccia Hill	255	265	10	0.582	0.017
PN18-11	Breccia Hill	45	55	10	0.293	0.009
PN18-11	Breccia Hill	105	115	10	0.280	0.008
PN18-12	Breccia Hill	100	130	30	0.326	0.010
PN18-12	Breccia Hill	170	180	10	0.292	0.009
PN18-47	Breccia Hill	55	90	35	0.259	0.008
PN18-49	Breccia Hill	65	100	35	0.263	0.008
PN18-52	Breccia Hill	70	160	90	0.485	0.014
PN18-58	Black Stallion	155	235	80	0.925	0.027
PN18-58	Black Stallion	300	310	10	0.319	0.009
PN18-59	Black Stallion	350	360	10	0.575	0.017
PN18-59	Black Stallion	185	230	45	0.435	0.013
PN18-62	Black Stallion	65	90	25	1.620	0.047
PN18-62	Black Stallion	285	295	10	0.249	0.007
PN18-65	Black Stallion	75	95	20	0.269	0.008
PN18-66	Black Stallion	130	200	70	1.450	0.042
PN18-66	Black Stallion	75	100	25	0.579	0.017
PN18-66	Black Stallion	305	315	10	0.525	0.015
PN18-69	Black Stallion	0	40	40	0.905	0.026
PND18-02	North Pan	0	35	35	0.907	0.026
PND18-03	North Pan	120	130	10	0.830	0.024
PND18-05	Campbell	105	120	15	1.017	0.030
PND18-05	Campbell	55	100	45	0.726	0.021
PND18-06	Campbell	65	320	255	0.569	0.017
PND18-08	North Pan	370	435	65	1.335	0.039
PND18-08	North Pan	0	15	15	1.235	0.036
PND18-13	Syncline	35	60	25	0.754	0.022
PND18-13	Syncline	95	105	10	0.610	0.018
PND18-19	North Pan	0	45	45	1.574	0.046
PND18-20	Campbell	165	230	65	0.565	0.016
PND18-23	Red Hill	270	330	60	0.707	0.021
PND18-27	Red Hill	140	155	15	2.412	0.070
PND18-27	Red Hill	170	190	20	0.644	0.019

Hole ID	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PND18-28	Red Hill	160	280	120	0.873	0.025
PND18-30	Red Hill	325	450	125	0.675	0.020
PND18-37	Red Hill	165	315	150	0.764	0.022
PND18-39	Red Hill	205	355	150	0.804	0.023
PND18-42	Red Hill	145	200	55	0.693	0.020
PND18-43	Red Hill	165	230	65	0.620	0.018

Source: APEX, 2020

*All drillholes were angle to vertical holes, with azimuths and inclinations designed to intersect targeted structures as nearly as possible to perpendicular. Consequently, all intercepts reported here are believed to be approximately 'true width', however there may be some exceptions to this on a hole by hole basis particularly holes targeting near vertical structures.

10.3 2019 Drilling

Calibre carried out an exploration program in the summer and fall of 2019 that consisted of 42 RC drillholes. The goal of the 2019 drill program was to expand the known resource and explore for new mineralization within the mine area. The scope of the program was limited to previously disturbed ground which was already permitted for disturbance. The 42 RC drillholes totaled 21,450 ft and the drilling was carried out by Boart Longyear.

All proposed drill sites were staked in the field by the Pan Mine survey group using RKT survey equipment and captured in UTM NAD 1983, Zone 11 in feet. Pads were constructed over the chosen drillhole locations with the appropriate dimensions in order to safety conduct drilling operations. A Calibre geologist confirmed each hole location and lined up the drill rigs before drilling operations commenced. The drillers were provided with uniquely numbered sample bags assigned to each drillhole. The RC drill rig sampled every 5-foot interval utilizing a cyclone splitter that homogenized the entire interval and split out a 5-10 kg sample into a uniquely numbered sample bag. The drillers were also provided sample sheets indicating which 55-foot interval corresponded to each uniquely numbered sample bag to ensure each interval was properly sampled and tracked. Additionally, the drillers collected washed RC chips of each interval for future geological logging and interpretation. Once each hole was completed, the drill crew conducted a downhole survey using a Reflex EZ-Gyro that measured the drillhole deviation. The final collar location was surveyed by the Pan Mine survey group and a wooden stake with the drillhole ID was placed in the ground to mark the location.

Each sample bag was placed in a bin that contained all the samples from that drillhole. Calibre geologists prepared and inserted QA/QC samples at known intervals. During the 2019 program Calibre utilized 3 QA/QC standards, blank material, and field duplicates. The standards alternated in a regular order between the 3 types. All drillhole samples were shipped in a sealed bin to ALS in Reno, NV for analysis. ALS was provided with a sample list and confirmed receipt of the specified number of samples and correct sample ID's. All chain of custody procedures were followed during shipment from Pan to the ALS facility.

Of the 42 drillholes completed during 2019, 30 intersected significant mineralization above a grade cutoff of 0.20 g/t (0.006 oz/ton) Au, with an interval length greater than 10 ft. Table 10-2 summarizes the key intersections from the 2019 drill program.

Mineralization was extended at all targets drilled during the 2019 exploration program. A new area of mineralization, called Banshee, was discovered southwest of Red Hill and west of North Pan. This area of mineralization follows the Pilot – Devils Gate contact as it rises towards the surface towards the west. The style of mineralization and alteration present is similar to mineralization seen throughout the mine. A total of 10 holes from the 2019 drill program tested the Banshee area and intersected significant mineralization in all but two holes. This indicated that the mineralization at Banshee was open in all direction.

Table 10-2: Pan 2019 RC Drillhole Assay Highlights

Hole ID	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PR19-002	Banshee	210	240	30	0.409	0.012
PR19-005	Banshee	5	120	115	0.638	0.019
PR19-005	Banshee	140	180	40	0.493	0.014
PR19-006	Banshee	30	70	40	1.162	0.034
includes	Banshee	40	65	25	1.445	0.042
PR19-007	Banshee	55	65	10	0.341	0.010
PR19-007	Banshee	145	195	50	0.768	0.022
includes	Banshee	155	170	15	1.237	0.036
PR19-009	North Pan	105	230	125	0.793	0.023
includes	North Pan	135	185	50	1.198	0.035
PR19-012	Syncline	150	165	15	0.511	0.015
PR19-014	Syncline	90	100	10	0.440	0.013
PR19-014	Syncline	150	160	10	0.569	0.017
PR19-015	Red Hill	105	135	30	0.353	0.010
PR19-015	Red Hill	150	160	10	0.448	0.013
PR19-015	Red Hill	175	205	30	0.350	0.010
PR19-016	Red Hill	170	185	15	2.447	0.071
PR19-017	Red Hill	210	220	10	0.452	0.013
PR19-018	Red Hill	175	205	30	1.409	0.041
PR19-019	South Pan	50	75	25	0.332	0.010
PR19-019	South Pan	100	110	10	0.674	0.020
PR19-019	South Pan	135	255	120	0.498	0.015
PR19-019	South Pan	275	435	160	0.571	0.017
includes	South Pan	320	330	10	1.201	0.035
PR19-019	South Pan	545	575	30	0.385	0.011
PR19-020	South Pan	225	245	20	1.054	0.031
PR19-020	South Pan	265	440	175	0.409	0.012

Hole ID	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PR19-021	South Pan	150	170	20	0.556	0.016
PR19-021	South Pan	260	325	65	0.394	0.011
PR19-021	South Pan	365	405	40	0.443	0.013
PR19-022	South Pan	435	480	45	0.395	0.012
PR19-024	Dynamite	135	205	70	0.632	0.018
includes	Dynamite	145	160	15	1.260	0.037
PR19-025	Dynamite	305	325	20	0.692	0.020
PR19-025	Dynamite	360	425	65	0.448	0.013
PR19-033	Black Stallion	65	85	20	0.965	0.028
PR19-033	Black Stallion	130	140	10	0.336	0.010
PR19-040	Campbell	390	400	10	2.328	0.068
PR19-042	Banshee	0	10	10	0.426	0.012

Source: APEX, 2020

*All drillholes were angle to vertical holes, with azimuths and inclinations designed to intersect targeted structures as nearly as possible to perpendicular. Consequently, all intercepts reported here are believed to be approximately 'true width', however there may be some exceptions to this on a hole by hole basis particularly holes targeting near vertical structures.

10.4 2020 Drilling

Two drill programs were carried out in 2020 from January to June and October to December 2020 with the primary goals of:

1. Expanding known mineralization and geological understanding of the current resource;
2. Increasing the known mineralization at the newly discovered Banshee zone;
3. Expanding the resource between Red Hill and North Pan in order to merge both pits;
4. Identifying mineralization at the exploration target Mustang; and
5. Sterilization drilling at the current and proposed waste dump sites.

The scope of the 2020 program was expanded from 2019 due to the approval of a permit allowing new ground disturbance. A total of 169 drillholes were completed throughout the Pan mine site in 2020. A total of 154 RC drillholes were completed by Boart Longyear from January to June in 2020 totaling 57,280 ft. A total of 15 PQ-size core drillholes were completed by Alford Drilling from October to December 2020 totaling 3,813.5 ft.

The same drilling procedures were implemented for the 2020 drill programs as used in 2019. All proposed drill sites were staked using the Pan Mine survey group and captured in UTM NAD 1983, Zone 11 in feet. Once a location was chosen for drilling, a pad was constructed with the proper dimensions for the rig to safely conduct drilling operations. A field geologist confirmed the hole location and lined up the drill rig before drilling operations commenced. Once the hole was completed, the drill crew conducted a downhole survey using a Reflex EZ-Gyro that measured the drillhole deviation. Once the drill was moved off the hole, the Pan Mine survey group surveyed the final collar location and marked it with the drillhole ID and a wooden stake.

For the RC, samples were collected every 5 ft using a cyclone splitter attached to the rig that homogenizes and splits each sample into the appropriate size. Chips of each interval were collected for geological logging. Each sample was collected into a uniquely identified sample bag and placed in a bin that contained all the samples from that drillhole. The same QA/QC procedures were followed from 2019, but only 2 different types of standards were used along with coarse blank and field duplicates. The results of the QA/QC work are discussed in Section 11. All samples were shipped in a sealed bin to ALS in Reno, NV for analysis. ALS was provided with a sample list and confirmed receipt of the specified number of samples and correct sample ID's before proceeding with sample preparation.

Core holes, once complete were shipped to ALS Reno, NV where they were logged and sampled. Logging was done by Calibre geologists and geotech, cutting, and sampling was completed by ALS personnel. Core samples were taken at variable intervals as determined by the discretion of the geologist and placed into uniquely identified sample bags. Core samples were then transported to the preparatory facility at ALS followed by appropriate geochemical laboratory.

Mineralization was expanded at Red Hill, North Pan, Campbell, Syncline, and Black Stallion near mine targets. Table 10-3 and Table 10-4 summarizes the important intercepts from the 2020 drill programs using a cutoff grade of 0.20 g/t (0.006 oz/ton) Au. Drilling at these targets upgraded a portion of the known resource from Inferred to Indicated and expanded the known resource.

Table 10-3: Pan 2020 RC Drillhole Assay Highlights

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PR20-005	Red Hill	125	135	10	0.911	0.027
PR20-006	Red Hill	90	195	105	0.745	0.022
PR20-007	Red Hill	75	90	15	1.051	0.031
PR20-008	Red Hill	115	215	100	0.761	0.022
includes	Red Hill	175	185	10	1.148	0.034
PR20-011	Banshee	40	70	30	1.459	0.043
PR20-013	Banshee	20	110	90	0.738	0.022
includes	Banshee	45	70	25	1.504	0.044
PR20-014	Banshee	125	160	35	1.147	0.034
includes	Banshee	130	155	25	1.358	0.040
PR20-016	Banshee	115	240	125	0.917	0.027
includes	Banshee	150	205	55	1.425	0.042
PR20-031	Red Hill	265	350	85	0.739	0.022
includes	Red Hill	270	280	10	1.728	0.050
PR20-034	Red Hill	135	145	10	0.790	0.023
PR20-040	Campbell	15	260	245	0.741	0.022

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
includes	Campbell	115	165	50	1.355	0.040
PR20-046	Banshee	170	190	20	0.787	0.023
PR20-050	Banshee	35	45	10	1.393	0.041
PR20-051	Banshee	20	30	10	1.413	0.041
PR20-052	Red Hill	195	285	90	0.677	0.020
includes	Red Hill	225	235	10	1.313	0.038
PR20-054	Banshee	125	160	35	0.716	0.021
includes	Banshee	135	145	10	1.478	0.043
PR20-055	Red Hill	0	50	50	2.605	0.076
PR20-062	Banshee	0	20	20	0.671	0.020
PR20-064	Red Hill	310	360	50	0.678	0.020
includes	Red Hill	320	335	15	1.283	0.037
PR20-067	Red Hill	260	325	65	0.697	0.020
includes	Red Hill	265	275	10	1.458	0.043
PR20-072	Mustang	150	160	10	1.563	0.046
PR20-074	Mustang	60	65	5	2.090	0.061
PR20-077	Mustang	95	105	10	1.553	0.045
PR20-084	Banshee	85	150	65	0.697	0.020
PR20-092	Red Hill	375	430	55	1.033	0.030
includes	Red Hill	380	410	30	1.478	0.043
PR20-107	Banshee	140	190	50	0.988	0.029
includes	Banshee	145	165	20	1.986	0.058
PR20-120	Red Hill	115	135	20	0.722	0.021
PR20-130	Red Hill	130	140	10	0.694	0.020

Source: APEX, 2020

*All drillholes were angle to vertical holes, with azimuths and inclinations designed to intersect targeted structures as nearly as possible to perpendicular. Consequently, all intercepts reported here are believed to be approximately 'true width', however there may be some exceptions to this on a hole by hole basis particularly holes targeting near vertical structures.

Table 10-4: Pan 2020 Core Drillhole Assay Highlights

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PCM20-001	South Pan	88	112.6	24.6	0.726	0.022
includes	South Pan	103.8	107.7	3.9	1.050	0.032
PCM20-001	South Pan	153	163	10	0.318	0.010
PCM20-003	South Pan	26.2	44.1	17.9	0.859	0.026
includes	South Pan	30.8	32.2	1.4	1.140	0.034
includes	South Pan	37	39.3	2.3	1.535	0.046

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PCM20-004	Red Hill Pit	142	163	21	0.479	0.014
PCM20-004	Red Hill Pit	177	203.8	26.8	0.691	0.021
includes	Red Hill Pit	182	190.5	8.5	1.466	0.044
PCM20-004	Red Hill Pit	212	237	25	0.693	0.021
includes	Red Hill Pit	227	232	5	1.845	0.055
PCM20-004	Red Hill Pit	256.4	266.6	10.2	0.251	0.008
PCM20-004	Red Hill Pit	292	302	10	0.412	0.012
PCM20-005	Banshee	102.5	127	24.5	0.344	0.010
PCM20-006	North Pit	0	57	57	0.593	0.018
includes	North Pit	0	10	10	1.615	0.048
PCM20-006	North Pit	82.5	102	19.5	0.281	0.008
PCM20-007	North Pit	6.8	30	23.2	0.478	0.014
PCM20-008	South Pan	0	76	76	0.935	0.028
includes	South Pan	0	11	11	1.400	0.042
includes	South Pan	13.5	23	9.5	1.173	0.035
includes	South Pan	37	45.5	8.5	1.509	0.045
includes	South Pan	50.5	56	5.5	2.070	0.062
PCM20-008	South Pan	146	161	15	0.578	0.017
PCM20-009	South Pan	0	17.5	17.5	0.992	0.030
includes	South Pan	4	12	8	1.318	0.040
includes	South Pan	15	17.5	2.5	1.135	0.034
PCM20-009	South Pan	34	44	10	0.627	0.019
PCM20-009	South Pan	49	61.5	12.5	0.519	0.016
PCM20-009	South Pan	94.5	175.5	81	0.854	0.026
includes	South Pan	109	130	21	1.954	0.059
PCM20-009	South Pan	180.5	197.8	17.3	0.406	0.012
PCM20-010	North Pit	0	70.5	70.5	0.926	0.028
includes	North Pit	0	3	3	1.460	0.044
includes	North Pit	23	38	15	1.762	0.053
PCM20-010	North Pit	86	109	23	0.568	0.017
PCM20-011	North Pit	0	12.5	12.5	3.088	0.093
PCM20-011	North Pit	14.5	111	96.5	1.008	0.030
includes	North Pit	25	30	5	2.060	0.062
includes	North Pit	35	47	12	1.480	0.044
includes	North Pit	55.5	65.5	10	1.755	0.053
includes	North Pit	75	80	5	1.720	0.052
includes	North Pit	84	87	3	1.770	0.053
PCM20-011	North Pit	146.3	177.6	31.3	0.616	0.018

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
includes	North Pit	171.6	174	2.4	1.300	0.039
PCM20-011	North Pit	179.5	202	22.5	0.730	0.022
includes	North Pit	179.5	182	2.5	3.050	0.092
PCM20-012	North Pit	0	24	24	0.416	0.012
PCM20-012	North Pit	42	77	35	0.422	0.013
PCM20-013	Banshee	53.5	74	20.5	0.919	0.028
includes	Banshee	53.5	58.5	5	1.860	0.056
PCM20-014	Red Hill Pit	197	207	10	2.718	0.082
PCM20-014	Red Hill Pit	220	235	15	0.375	0.011
PCM20-014	Red Hill Pit	261.5	287	25.5	1.625	0.049
includes	Red Hill Pit	261.5	277	15.5	2.284	0.069
PCM20-014	Red Hill Pit	337	357	20	0.314	0.009
PCM20-014	Red Hill Pit	378	400.5	22.5	0.456	0.014
PCM20-015	North Pit	34	58	24	0.308	0.009
PCM20-015	North Pit	153	167	14	0.297	0.009
PCM20-015	North Pit	191	201	10	0.207	0.006
PCM20-015	North Pit	206	231	25	0.264	0.008

Source: APEX, 2023

*All drillholes were angle to vertical holes, with azimuths and inclinations designed to intersect targeted structures as nearly as possible to perpendicular. Consequently, all intercepts reported here are believed to be approximately ‘true width’, however there may be some exceptions to this on a hole by hole basis particularly holes targeting near vertical structures.

Most of the drilling during the 2020 program focused around expanding and defining the newly discovered Banshee zone. It accounted for 45% (69 drillholes) of the RC drillholes and 20% (3 drillholes) of the core holes. The goal of the Banshee drilling was to identify the extent of mineralization in all directions and provide as much measured and indicated resource as possible. Drilling at Banshee identified a core of high-grade drill intercepts that was surrounded by low to zero grade drilling. The mineralization is similar to North Pan which is characterized by silicification and brecciation near the Pilot – Devils Gate contact which is the host for the gold. Banshee core holes corroborate nearby RC intersections.

A significant amount of gold mineralization was encountered between North Pan and Red Hill in 12 holes drilled during the 2020 program. The mineralization between the two target areas displays the same characteristics: silicification and brecciation near the Pilot-Devils Gate contact with jasperoid alteration.

Eight RC holes were drilled at the Mustang target northwest of the Pan mine. Six of the 8 RC holes encountered significant gold mineralization ranging from near surface to 265 ft below the surface. The RC holes drilled were vertical and angled northeast and southwest to understand the trends of the mineralization. The RC holes at Mustang collar in limestone, with the mineralization hosted in brecciated and silicified limestone. Hematite alteration is present but no real jasperoid alteration is seen. This style of mineralization is distinct from that seen at the Pan Mine.

Thirteen RC drillholes were designed and completed as condemnation holes to test if mineralization is present below the North Pan waste dump ramp and a potential new waste dump site. Four drillholes were completed on the current North Pan waste dump ramp and encountered only minor mineralization that is considered not significant. The other 9 drillholes were completed over a potential new waste dump site northeast of the current North Pan pit. Drillhole PR20-125 at 405-425 ft deep returned 0.266 g/t (0.008 oz/ton) Au and was the only condemnation hole in this area that intersected any significant gold mineralization.

Core drilling was focused in South Pit, North Pit, Red Hill Pit, and Banshee. Moderate to significant mineralization was encountered in the 6 core holes completed in North Pit, ranging from at surface to end-of-hole.

10.5 2021 Drilling

Calibre carried out 2 drill programs in 2021 from January to February, and October to December 2021 that consisted of the completion of 63 RC drillholes totaling 33,321.5 ft, 1 core hole that drilled 400 ft at PQ then transitioned to HQ for 356 ft (totaling 756 ft), and 1 HQ core hole totaling 527 ft. Eleven drillholes were completed by Boart Longyear and 54 drillholes were completed by Alford Drilling. The goal of the 2021 drill programs was to expand and upgrade the known resource and explore for new mineralization within the mine area.

The same drilling procedures were implemented for the 2021 drill programs as used in 2020. All proposed drill sites were staked using the Pan Mine survey equipment by field personnel and captured in UTM NAD 1983, Zone 11 in feet. Once a location was chosen for drilling, a pad was constructed with the proper dimensions for the rig to safety conduct drilling operations. A field geologist confirmed the hole location and lined up the drill rig before drilling operations commenced. Once the hole was completed, the drill crew conducted a downhole survey using a Reflex EZ-Gyro that measured the drillhole deviation or IDS was called to site to survey the hole. Drill crews would then abandon the hole and move to the next pad. Once the drill was moved off the hole, the field personnel surveyed the final collar location and marked it with the drillhole ID and a wooden stake.

For the RC, samples were collected every 5 ft using a cyclone splitter attached to the rig that homogenizes and splits each sample into the appropriate size. Chips of each interval were collected for geological logging. Each sample was collected into a uniquely identified sample bag and placed in a bin that contained all the samples from that drillhole.

The same QA/QC procedures were followed from 2020, but 4 different types of standards were used as well as coarse blanks and field duplicates. The results of the QA/QC work is discussed in Section 11. All samples were shipped in a bin to ALS in Reno, NV for analysis. ALS was provided with a sample list and confirmed receipt of the specified number of samples and correct sample ID’s before proceeding with sample preparation.

Core holes, once complete were shipped to Elko, NV to the Calibre core logging facility where they were logged and sampled. Logging was completed by Calibre geologists and geotech, cutting, and sampling was completed by Modern Lands Development personnel. Core samples were taken at variable intervals as determined by the discretion of the geologist and placed into uniquely identified sample bags. The samples were placed into bins and shipped to ALS Reno, NV for geochemical analysis.

The 2021 drilling focused on the following target areas: Black Stallion South, Dune, Dynamite, Orpiment Alley, Pegasus, South Pan, South Pit. Table 10-5 summarizes the important intercepts from the 2021 drill program using a cutoff grade of 0.20 g/t (0.006 oz/ton) Au and length greater than or equal to 10 ft.

Table 10-5: Pan 2021 Drillhole Assay Highlights

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PCM21-001	South Pan	149.5	227	77.5	0.955	0.029
includes	South Pan	159.5	178	18.5	1.371	0.041
includes	South Pan	196	199	3	1.050	0.032
includes	South Pan	204	217	13	1.646	0.049
PCM21-001	South Pan	230.5	261	30.5	0.602	0.018
includes	South Pan	256	261	5	1.325	0.040
PCM21-001	South Pan	292	308.3	16.3	0.452	0.014
PCM21-001	South Pan	312.5	337	24.5	0.484	0.015
PCM21-001	South Pan	452	476	24	0.356	0.011
PCM21-001	South Pan	499	567	68	0.354	0.011
PR21-001	Pegasus	255	335	80	0.519	0.016
includes	Pegasus	285	290	5	1.060	0.032
PR21-001	Pegasus	340	425	85	0.437	0.013
PR21-001	Pegasus	430	440	10	0.403	0.012
PR21-001	Pegasus	455	545	90	0.423	0.013
PR21-001	Pegasus	550	590	40	0.611	0.018
includes	Pegasus	550	555	5	1.515	0.045
includes	Pegasus	560	565	5	1.060	0.032
PR21-001	Pegasus	600	660	60	0.299	0.009
PR21-002	Pegasus	225	235	10	0.418	0.013
PR21-002	Pegasus	260	285	25	0.324	0.010
PR21-002	Pegasus	290	375	85	0.574	0.017
includes	Pegasus	305	310	5	1.025	0.031
PR21-003	Pegasus	505	520	15	0.388	0.012
PR21-010	Condemnation North dump	740	760	20	0.235	0.007
PR21-014	Black Stallion South	25	40	15	0.649	0.019
PR21-016	Black Stallion South	65	75	10	0.320	0.010
PR21-017	Black Stallion South	60	90	30	0.649	0.019
PR21-020	South Pit	20	30	10	0.378	0.011
PR21-020	South Pit	45	60	15	0.350	0.011

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PR21-020	South Pit	65	85	20	0.442	0.013
PR21-020	South Pit	445	455	10	0.336	0.010
PR21-021	South Pit	0	100	100	0.400	0.012
PR21-021	South Pit	205	215	10	0.223	0.007
PR21-021	South Pit	275	285	10	0.290	0.009
PR21-021	South Pit	300	315	15	0.367	0.011
PR21-021	South Pit	320	330	10	1.085	0.033
PR21-022	South Pit	0	40	40	0.321	0.010
PR21-022	South Pit	80	90	10	0.388	0.012
PR21-022	South Pit	95	205	110	0.646	0.019
includes	South Pit	95	100	5	1.410	0.042
includes	South Pit	175	185	10	1.758	0.053
PR21-022	South Pit	245	260	15	0.242	0.007
PR21-022	South Pit	270	350	80	0.676	0.020
includes	South Pit	310	320	10	1.065	0.032
PR21-025	Black Stallion South	10	40	30	0.413	0.012
PR21-027	Black Stallion South	0	25	25	0.292	0.009
PR21-027	Black Stallion South	65	80	15	1.076	0.032
PR21-033	Black Stallion South	35	60	25	0.517	0.016
PR21-034	South Pit	20	30	10	0.779	0.023
PR21-035	South Pit	0	25	25	0.477	0.014
PR21-035	South Pit	40	60	20	0.311	0.009
PR21-035	South Pit	65	75	10	0.348	0.010
PR21-035	South Pit	220	235	15	0.369	0.011
PR21-036	South Pit	140	155	15	0.518	0.016
PR21-037	South Pit	70	80	10	0.874	0.026
PR21-039	Black Stallion South	95	130	35	0.379	0.011
PR21-040	Black Stallion South	260	300	40	0.441	0.013
PR21-040	Black Stallion South	315	400	85	0.750	0.023
includes	Black Stallion South	330	335	5	1.640	0.049
includes	Black Stallion South	370	375	5	1.500	0.045
PR21-043	Dune	95	115	20	0.360	0.011
PR21-044	Pegasus	235	295	60	0.580	0.017
includes	Pegasus	245	250	5	1.550	0.047
includes	Pegasus	275	280	5	1.035	0.031
PR21-044	Pegasus	305	340	35	0.376	0.011
PR21-044	Pegasus	360	385	25	0.452	0.014
PR21-044	Pegasus	635	675	40	0.294	0.009

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PR21-045	Pegasus	200	250	50	2.022	0.061
includes	Pegasus	205	225	20	3.889	0.117
includes	Pegasus	245	250	5	1.620	0.049
PR21-045	Pegasus	255	265	10	0.973	0.029
includes	Pegasus	255	260	5	1.030	0.031
PR21-045	Pegasus	270	285	15	0.495	0.015
PR21-045	Pegasus	290	300	10	0.364	0.011
PR21-045	Pegasus	305	365	60	0.730	0.022
includes	Pegasus	325	335	10	1.470	0.044
PR21-045	Pegasus	445	465	20	0.535	0.016
PR21-045	Pegasus	480	490	10	0.307	0.009
PR21-046	Dune	75	85	10	0.304	0.009
PR21-046	Dune	90	105	15	0.404	0.012
PR21-046	Dune	215	230	15	0.462	0.014
PR21-047	Pegasus	465	485	20	1.278	0.038
includes	Pegasus	470	485	15	1.407	0.042
PR21-047	Pegasus	520	535	15	0.338	0.010
PR21-047	Pegasus	580	590	10	0.778	0.023
PR21-047	Pegasus	595	610	15	0.286	0.009
PR21-047	Pegasus	630	640	10	0.370	0.011
PR21-047	Pegasus	680	690	10	0.213	0.006
PR21-048	Dune	5	55	50	0.357	0.011
PR21-048	Dune	95	105	10	0.262	0.008
PR21-048	Dune	110	140	30	0.779	0.023
includes	Dune	115	120	5	1.555	0.047
PR21-050	Dune	80	100	20	0.521	0.016
includes	Dune	80	85	5	1.040	0.031
PR21-052	Dune	60	85	25	1.108	0.033
includes	Dune	65	80	15	1.563	0.047
PR21-053	Dynamite	340	400	60	1.293	0.039
includes	Dynamite	355	360	5	1.005	0.030
includes	Dynamite	365	385	20	2.919	0.088
PR21-054	Dune	65	85	20	0.327	0.010
PR21-055	Dynamite	210	240	30	1.458	0.044
includes	Dynamite	215	230	15	2.322	0.070
PR21-055	Dynamite	250	265	15	0.633	0.019
PR21-055	Dynamite	275	290	15	0.370	0.011
PR21-055	Dynamite	315	340	25	0.641	0.019

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PR21-055	Dynamite	350	385	35	0.697	0.021
includes	Dynamite	375	380	5	1.520	0.046
PR21-055	Dynamite	485	495	10	0.260	0.008
PR21-056	Dune	40	95	55	0.551	0.017
includes	Dune	50	60	10	1.165	0.035
PR21-056	Dune	120	130	10	0.387	0.012
PR21-056	Dune	140	155	15	0.227	0.007
PR21-056	Dune	160	170	10	0.271	0.008
PR21-056	Dune	210	235	25	0.375	0.011
PR21-057	Dynamite	35	65	30	0.272	0.008
PR21-057	Dynamite	195	215	20	0.257	0.008
PR21-057	Dynamite	255	320	65	0.392	0.012
PR21-058	Dune	35	50	15	0.273	0.008
PR21-058	Dune	55	85	30	0.443	0.013
includes	Dune	55	60	5	1.060	0.032
PR21-058	Dune	95	145	50	0.954	0.029
includes	Dune	100	125	25	1.332	0.040
PR21-062	Orpiment alley	245	295	50	0.506	0.015
PR21-062	Orpiment alley	465	475	10	0.464	0.014

Source: APEX, 2023

*All drillholes were angle to vertical holes, with azimuths and inclinations designed to intersect targeted structures as nearly as possible to perpendicular. Consequently, all intercepts reported here are believed to be approximately 'true width', however there may be some exceptions to this on a hole by hole basis particularly holes targeting near vertical structures.

The bulk of the drilling was completed in Black Stallion South and Dune, with 29% (18 drillholes) and 17% (11 drillholes), respectively.

Five of the 6 RC holes completed in Pegasus resulted in significant intersections at ~200 ft depth and provide a critical connection between South Pit and Dynamite Pit.

Five RC drillholes were designed and completed as condemnation holes to test if mineralization is present below the proposed North Pan waste dump site. Four drillholes were completed on and encountered only minor mineralization that is considered not significant. Drillhole PR21-010 encountered 20.00 ft of 0.23 g/t (0.007oz/ton) Au at 740.00 ft in hole PR21-010 and was the only condemnation hole in this area that intersected any significant gold mineralization.

10.6 2022 Drilling

The 2022 drill program was carried out from January to November 2022 and consisted of the completion of 240 RC drillholes totaling 135,330 ft and 21 HQ-size core holes totaling 10,310 ft. All 21 HQ-sized core holes were completed by Alford Drilling. A total of 193 RC drillholes were completed by Boart Longyear and 48 RC drillholes were completed by Alford Drilling. The goal of the 2022 drill program was to expand and upgrade the known resource and explore for new mineralization within and outside the mine area.

The same drilling procedures were implemented for the 2022 drill programs as used in 2021. All proposed drill sites were staked using the Pan Mine survey equipment by field personnel and captured in UTM NAD 1983, Zone 11 in feet. Once a location was chosen for drilling, a pad was constructed with the proper dimensions for the rig to safety conduct drilling operations. A field geologist confirmed the hole location and lined up the drill rig before drilling operations commenced. Once the hole was completed, the drill crew conducted a downhole survey using a Reflex EZ-Gyro that measured the drillhole deviation or IDS was called to site to survey the hole. Drill crews would then abandon the hole and move to the next pad. Once the drill was moved off the hole, the field personnel surveyed the final collar location and marked it with the drillhole ID and a wooden stake.

For the RC drilling, samples were collected every 5 ft using a cyclone splitter attached to the rig that homogenizes and splits each sample into the appropriate size. Chips of each interval were collected for geological logging. Each sample was collected into a uniquely identified sample bag and placed in a bin that contained all the samples from that drillhole.

The same QA/QC procedures were followed from 2021, using 4 different types of standards as well as coarse blanks and field duplicates. The results of the QA/QC work is discussed in Section 11. All samples were shipped in a bin to ALS in Reno, NV for analysis. ALS was provided with a sample list and confirmed receipt of the specified number of samples and correct sample ID's before proceeding with sample preparation.

Core holes, once complete were shipped to Elko, NV to the Calibre core logging facility where they were logged and sampled. Logging was completed by Calibre geologists and geotech, cutting, and sampling was completed by Modern Lands Development personnel. Core samples were taken at variable intervals as determined by the discretion of the geologist and placed into uniquely identified sample bags. The samples were placed into bins and shipped to ALS Reno, NV for geochemical analysis.

The 2022 drilling focused on the following target areas: Mustang, North Banshee, Palomino, Pegasus, Dynamite, Black Stallion South, Dune, Boulders, Syncline, Black Stallion, Orpiment Alley, Benji, North Dynamite, South Pit, and Limestone Canyon. Several exploration holes were drilled at new targets outside of the open pit operation that had not yet been tested, these targets are Happy Valley, Chainman Point, Coyote, and Gattica. Table 10-6 summarizes the important intercepts from the 2022 drill program using a cutoff grade of 0.20 g/t (0.006 oz/ton) Au and minimum length of 10 ft.

Table 10-6: Pan 2022 Drillhole Assay Highlights

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PC22-002	Mustang	98	116.5	18.5	0.867	0.026
PC22-004	Palomino	738.5	748.5	10	1.608	0.048
PC22-005	Pegasus	203	234.4	31.4	0.900	0.027
includes	Pegasus	208	218	10	1.555	0.047

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
includes	Pegasus	228	234.4	6.4	1.148	0.034
PC22-006	Dynamite	21.5	73	51.5	0.603	0.018
includes	Dynamite	37	42	5	1.020	0.031
includes	Dynamite	62.5	68	5.5	2.048	0.061
PC22-008	Black Stallion South	182.5	203	20.5	2.169	0.065
includes	Black Stallion South	187	200.5	13.5	2.931	0.088
PC22-009	Dune	42.5	76	33.5	0.471	0.014
includes	Dune	66	71	5	1.005	0.030
PC22-010	Dune	53	90	37	0.517	0.016
includes	Dune	61.5	65.5	4	1.185	0.036
PC22-011	Boulders	193.5	209	15.5	0.943	0.028
includes	Boulders	206.5	209	2.5	3.600	0.108
PC22-012	Syncline	6	65	59	2.174	0.065
includes	Syncline	28	56	28	4.153	0.125
PC22-013	Black Stallion	0	22	22	2.109	0.063
includes	Black Stallion	1.5	22	20.5	2.218	0.067
PR22-002	Dune	35	60	25	0.393	0.012
PR22-003	Dune	0	15	15	0.313	0.009
PR22-004	Dune	15	60	45	0.448	0.013
includes	Dune	20	25	5	1.260	0.038
PR22-005	Dune	0	15	15	0.586	0.018
PR22-007	Orpiment Alley	365	380	15	0.492	0.015
PR22-009	Orpiment Alley	165	175	10	0.329	0.010
PR22-011	Dune	180	190	10	0.252	0.008
PR22-012	Dune	45	65	20	0.269	0.008
PR22-013	Benji	150	170	20	0.442	0.013
PR22-014	Orpiment Alley	250	280	30	0.437	0.013
PR22-015	Benji	0	75	75	0.904	0.027
includes	Benji	0	25	25	1.599	0.048
PR22-016	Benji	5	50	45	0.427	0.013
PR22-017	Dynamite	20	65	45	0.249	0.007
PR22-017	Dynamite	145	160	15	0.434	0.013
PR22-018	Benji	90	120	30	0.328	0.010
PR22-020	Benji	90	105	15	0.333	0.010
PR22-023	Boulders	175	190	15	0.327	0.010
PR22-025	Boulders	170	195	25	0.320	0.010
PR22-026	Dynamite	0	105	105	0.383	0.011

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PR22-029	Palomino	200	210	10	0.550	0.017
PR22-030	Syncline	150	165	15	0.766	0.023
PR22-031	Palomino	0	10	10	0.212	0.006
PR22-032	Syncline	0	65	65	1.674	0.050
includes	Syncline	10	50	40	2.489	0.075
PR22-032	Syncline	115	125	10	0.282	0.008
PR22-034	Dune	55	85	30	0.315	0.009
PR22-038	Dune	65	100	35	0.301	0.009
PR22-039	Dune	0	10	10	0.214	0.006
PR22-041	Mustang	65	85	20	1.039	0.031
includes	Mustang	70	75	5	1.720	0.052
PR22-042	Palomino	30	50	20	1.268	0.038
includes	Palomino	30	40	10	1.710	0.051
PR22-043	Palomino	70	110	40	0.519	0.016
PR22-045	North Dynamite	90	105	15	1.026	0.031
includes	North Dynamite	95	100	5	1.605	0.048
PR22-048	South Pit	625	635	10	0.349	0.010
PR22-049	Palomino	0	25	25	0.293	0.009
PR22-055	Palomino	205	230	25	1.247	0.037
includes	Palomino	205	220	15	1.612	0.048
PR22-056	Dynamite	290	310	20	0.834	0.025
includes	Dynamite	295	305	10	1.170	0.035
PR22-057	Palomino	55	65	10	0.484	0.015
PR22-061	Dynamite	280	345	65	0.585	0.018
includes	Dynamite	290	300	10	1.180	0.035
PR22-062	Dynamite	445	455	10	0.242	0.007
PR22-063	Dynamite	85	100	15	0.320	0.010
PR22-064	Palomino	90	100	10	0.405	0.012
PR22-066	Dune	70	80	10	0.332	0.010
PR22-070	Pegasus	270	310	40	0.373	0.011
PR22-073	Dynamite	185	285	100	0.466	0.014
includes	Dynamite	225	230	5	1.100	0.033
PR22-075	Pegasus	290	305	15	0.478	0.014
PR22-077	Dynamite	480	500	20	0.708	0.021
includes	Dynamite	480	485	5	1.135	0.034
PR22-078	Dynamite	455	490	35	0.834	0.025
includes	Dynamite	460	465	5	1.025	0.031

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
includes	Dynamite	480	485	5	1.905	0.057
PR22-079	Pegasus	420	430	10	0.290	0.009
PR22-080	Pegasus	510	535	25	0.695	0.021
PR22-082	Pegasus	850	895	45	0.639	0.019
includes	Pegasus	860	865	5	1.505	0.045
includes	Pegasus	875	880	5	1.320	0.040
PR22-083	Black Stallion	35	70	35	0.510	0.015
includes	Black Stallion	40	45	5	1.005	0.030
PR22-085	Pegasus	630	770	140	1.471	0.044
includes	Pegasus	640	710	70	2.327	0.070
includes	Pegasus	730	735	5	1.500	0.045
PR22-087	Black Stallion	0	45	45	4.289	0.129
includes	Black Stallion	0	40	40	4.796	0.144
PR22-088	Pegasus	545	685	140	0.857	0.026
includes	Pegasus	555	565	10	2.453	0.074
includes	Pegasus	670	675	5	2.800	0.084
PR22-089	Black Stallion	100	115	15	0.280	0.008
PR22-090	Black Stallion	5	20	15	0.241	0.007
PR22-092	Limestone Canyon	265	275	10	0.524	0.016
PR22-093	Pegasus	575	675	100	0.650	0.020
includes	Pegasus	610	615	5	1.690	0.051
PR22-094	Pegasus	600	645	45	0.723	0.022
includes	Pegasus	610	620	10	1.325	0.040
PR22-094	Pegasus	680	690	10	0.237	0.007
PR22-098	Pegasus	10	20	10	0.240	0.007
PR22-098	Pegasus	35	50	15	0.495	0.015
PR22-098	Pegasus	140	150	10	0.276	0.008
PR22-100	Black Stallion	235	270	35	0.823	0.025
includes	Black Stallion	240	250	10	1.500	0.045
PR22-110	Mustang	25	40	15	1.000	0.030
includes	Mustang	30	40	10	1.370	0.041
PR22-111	Boulders	240	255	15	1.392	0.042
includes	Boulders	245	255	10	1.928	0.058
PR22-114	Boulders	320	330	10	0.359	0.011
PR22-116	Limestone Canyon	215	255	40	0.933	0.028
includes	Limestone Canyon	225	235	10	2.425	0.073
PR22-119	Dune	75	90	15	0.676	0.020

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
includes	Dune	80	85	5	1.215	0.036
PR22-121	Dune	110	120	10	0.316	0.009
PR22-122	Dune	85	100	15	0.353	0.011
PR22-126	Dune	20	30	10	0.336	0.010
PR22-135	Dune	75	90	15	0.334	0.010
PR22-138	Dune	385	395	10	0.337	0.010
PR22-141	Dune	35	65	30	0.378	0.011
PR22-146	Dune	80	90	10	0.239	0.007
PR22-148	Dune	130	155	25	0.315	0.009
PR22-149	Dune	285	310	25	0.470	0.014
PR22-150	Dune	260	270	10	0.360	0.011
PR22-151	Dune	35	50	15	0.315	0.009
PR22-152	Dune	25	50	25	0.549	0.016
PR22-154	Dune	80	95	15	0.335	0.010
PR22-157	Black Stallion	210	220	10	0.693	0.021
includes	Black Stallion	215	220	5	1.050	0.032
PR22-159	Black Stallion South	150	165	15	0.309	0.009
PR22-160	Black Stallion South	45	65	20	0.459	0.014
PR22-167	Black Stallion South	145	195	50	0.344	0.010
PR22-168	Black Stallion South	90	100	10	0.432	0.013
PR22-171	Dune	70	85	15	1.086	0.033
includes	Dune	75	80	5	1.540	0.046
PR22-176	Dune	45	55	10	0.264	0.008
PR22-177	Dune	0	15	15	0.295	0.009
PR22-178	Dune	140	150	10	0.221	0.007
PR22-179	Dune	95	115	20	0.470	0.014
PR22-181	Dune	210	220	10	0.559	0.017
PR22-182	Orpiment Alley	330	370	40	0.606	0.018
includes	Orpiment Alley	355	360	5	1.015	0.030
PR22-185	Dune	370	395	25	0.514	0.015
includes	Dune	385	390	5	1.235	0.037
PR22-187	Dune	50	60	10	0.242	0.007
PR22-188	North Dynamite	945	985	40	0.255	0.008
PR22-190	North Dynamite	90	155	65	0.745	0.022
includes	North Dynamite	115	135	20	1.315	0.039
PR22-192	Dune	150	160	10	0.284	0.009
PR22-197	Black Stallion	280	295	15	0.245	0.007

Hole	Target Area	From (ft)	To (ft)	Interval (ft)*	Au (g/t)	Au (oz/ton)
PR22-202	Dune	125	150	25	0.261	0.008
PR22-203	Benji	130	145	15	0.525	0.016
PR22-204	North Dynamite	25	35	10	0.384	0.012
PR22-206	North Dynamite	205	215	10	0.382	0.011
PR22-207	North Dynamite	65	75	10	0.415	0.012
PR22-208	North Dynamite	855	865	10	0.224	0.007
PR22-209	North Dynamite	290	360	70	0.559	0.017
includes	North Dynamite	325	330	5	1.440	0.043
PR22-210	North Dynamite	195	245	50	0.510	0.015
PR22-211	North Dynamite	70	220	150	0.674	0.020
includes	North Dynamite	195	210	15	1.367	0.041
PR22-212	North Dynamite	445	465	20	0.404	0.012
PR22-214	South Black Stallion	155	185	30	1.377	0.041
includes	South Black Stallion	165	180	15	2.048	0.061
PR22-218	Syncline	105	155	50	1.049	0.031
includes	Syncline	110	120	10	2.115	0.063
PR22-219	Syncline	135	160	25	0.674	0.020
includes	Syncline	150	155	5	1.955	0.059
PR22-221	Benji	45	65	20	0.532	0.016
PR22-224	North Dynamite	505	545	40	1.670	0.050
includes	North Dynamite	510	540	30	2.123	0.064
PR22-228	North Dynamite	690	710	20	0.468	0.014
PR22-229	Black Stallion South	140	150	10	0.291	0.009

Source: APEX, 2023

*All drillholes were angle to vertical holes, with azimuths and inclinations designed to intersect targeted structures as nearly as possible to perpendicular. Consequently, all intercepts reported here are believed to be approximately 'true width', however there may be some exceptions to this on a hole by hole basis particularly holes targeting near vertical structures.

Coyote was initially identified through historical surface geochemistry and rock chip sampling with an evolving structural geological interpretation. Four RC drillholes were completes at Coyote, which is located approximately 3 km south-southwest of the Pan South Pit and is considered open for expansion. At Coyote, PR22-238 intersected 1.36 g/t (0.040 oz/ton) Au over 45 ft including 2.78 g/t (0.081 oz/ton) Au over 15 ft. and 0.61 g/t (0.018 oz/ton) Au over 60 ft in PR22-237.

Holes drilled in North Dynamite extend mineralization down dip and along strike, expanding mineralization north from the Dynamite Pit. Notable intercepts include:

- 0.47 g/t (0.014 oz/ton) Au over 60 ft in Hole PR22-210;
- 1.67 g/t (0.049 oz/ton) Au over 40 ft including 2.12 g/t (0.062 oz/ton) Au over 30 ft in Hole PR22-224; and

- 0.67 g/t (0.020 oz/ton) Au over 75 ft including 1.14 g/t (0.033 oz/ton) Au over 30 ft in Hole PR22-190;

Five RC holes and 1 core hole drilled in Pegasus, along the eastern margin of the South Pit intersected mineralization at depth. Most notable is PR22-085 with 1.47 g/t (0.043 oz/ton) Au over 140 ft including 70 ft at 2.33 g/t (0.068 oz/ton) Au.

11 Sample Preparation, Analysis and Security

Historical drilling at the Pan deposit dates back to 1978. More than 1,700 exploration or resource definition drill holes have been completed at Pan; The current Mineral Resource drill hole database includes 1,179 pre 2018 drill holes totaling 377,744 ft, plus 2,324 ft in six water wells logged for geology but not sampled for assay (Table 6-1). Of the assayed pre 2018 drill holes in the database, 1,146 holes with 364,839 ft were drilled by RC or rotary methods, and the rest were diamond core holes, totaling 12,905 ft in 33 drill holes.

There is little information on drilling and sample procedures, sample preparation, analytical methods and Quality Assurance/Quality Control (QA/QC) for the pre-2000 drill hole data. There is no information on drill site sampling protocols and transportation of samples to the various laboratories for the pre-2000 drill holes. Although assay certificates exist for most of the pre-2000 drill holes in hard copy, there is little information on laboratory sample preparation methods and attributes such as assay charge or aliquot size. The assays records do provide basic information on the assay type i.e., fire assay for total gold or cyanide soluble gold using wet chemical techniques.

Early drill programs by Amselco and Hecla utilized Monitor Geochemical Laboratory (Elko, Nevada), Hunter Mining Laboratory (Sparks, Nevada), Amselco's own laboratory (Sparks, Nevada) and Rocky Mountain Geochemical (Sparks Nevada). Drill programs conducted by Echo Bay, Alta Bay and Alta Gold (pre-2000) utilized a number of mine site laboratories including Alta Gold controlled mine site laboratories at the Robinson, Illipah, and Easy Junior mining operations. In general, the mine site laboratories performed cold cyanide digestion followed by AA determination of gold content on 10 or 15 gram sample charges. Follow up fire assay gold analyses were generally performed on samples yielding greater than 0.01 to 0.012 opt Au. Latitude and Degerstrom transported samples to the Degerstrom laboratory in Spokane, Washington, where most of the samples were analyzed by 30-gram fire assay with AA finish.

Castleworth Ventures RC samples were transported to and processed at Chemex (the precursor to ALS Chemex) in Elko, Nevada. Standard sample preparation was employed at Chemex with the sample pulps transferred to Vancouver, B.C. where gold assays were performed by fire assay on one assay ton aliquots followed by AA finish. No cyanide gold analyses were performed by Castleworth Ventures. Core samples were collected and prepared for analysis by KCA. Core samples were sawn in half and collected as 5 ft samples. Fire assay gold utilizing a 30 gram aliquot and AA finish was performed on all the core samples. In addition, cold cyanide soluble gold analyses were performed on the core samples.

Midway 2007 to 2015 RC and core samples were either transported daily to secure facilities in Eureka or Ely, Nevada, or were stored on site in locked containers until they were picked up or transported to the appropriate laboratory in Elko, Winnemucca, or Reno, Nevada. During Midway's program history from 2007 to 2015, RC samples were transported and processed at ALS Chemex Elko, Winnemucca, and Reno, Nevada, American Assay Laboratory of Reno, Nevada and SGS Laboratory of Elko, Nevada. RC samples were analyzed by standard 30-gram fire assay with AA finish, Core samples collected in 2010 to 2012 were logged, photographed, and cut at Midway's Ely facility and then transported to ALS Chemex Elko, Nevada for sample preparation. Sample pulps were analyzed by standard fire assay for gold with AA finish and cold cyanide soluble gold with AA finish at either Reno, Nevada or Vancouver, B.C.

There is no information or data available on any QA/QC protocols including the analysis of certified reference materials (CRMs), duplicates, or blanks in the historical drill hole database prior to the Midway drilling campaigns in 2007.There is some information available in the database on QA/QC sampling conducted by Midway as part of the historical 2007 to 2015 drilling campaigns. QA/QC samples were inserted by Midway at a rate of about 1 in 20 (5%) versus original samples. Midway also completed a number of twin core holes of RC drill holes. The historical QA/QC data and twin hole data was reviewed by APEX personnel and Mr. Dufresne, the author of this section. No significant issues were identified, therefore the 2007 to 2015 Midway drilling data is deemed to be suitable for resource estimation.

SRK (Pennington *et al.* (SRK 2017) and Deiss *et al.* (SRK 2019)) performed a comprehensive database validation on behalf of Calibre, including a review of all documents and information available for the historical pre-2018 drilling. APEX personnel and Mr. Dufresne have reviewed the SRK validation efforts and have also reviewed the historical Pan drillhole data and the 2018 to 2022 drillhole data and found no significant issues. Based upon this review Mr. Dufresne, the author of this section has accepted the data and considers the data, including the historical pre-2018 data, well validated and suitable for the preparation of the MRE and Mineral Reserves as presented herein.

The following sections summarize the sample collection, preparation, analytical, and QA/QC methodology employed by Calibre in the 2018 and 2022 drilling programs.

11.1 Sample Collection, Preparation and Security

The RC sample procedures remained the same throughout the 2018 to 2022 drill programs. Prior to commencing each hole, Calibre geologists provided the drill crews with uniquely numbered sample bags for each 5-foot interval, with printed sheets. A subset of bags were removed from the sample sequence and used to insert quality assurance/quality control (QA/QC) samples into the sample sequence after each drill hole was complete. The drillers were also provided sample sheets indicating which 5-foot interval corresponded to each uniquely numbered bag to ensure each interval was properly sampled and tracked. The RC drill rigs used a cyclone splitter that homogenized all the rock chips from a given interval and split out a designated, consistent sample size. The sample size was approximately 5 to 10 kg. Each sample bag was placed in a bin that contained all the samples for that drill hole. Calibre geologists inserted QA/QC samples at specific intervals in the sample sequence for each drill hole. The type of QA/QC sample was predetermined by a set alternating pattern of samples. All samples were stored in a bin and shipped to ALS in Reno, NV. ALS was provided with a sample list and confirmed receipt of the specified number of samples and correct sample IDs.

11.2 Analytical Procedures

All 2018 – 2022 drill chip samples were prepared at various ALS prep labs and analyzed at ALS in Reno, NV, an accredited laboratory that conforms to requirements of CAN-P-1579 and CAN-P-4E (ISO/IEC 17025:2005). ALS is independent of the authors and the issuer. Samples were crushed to 70% <2 mm then riffle split and pulverized to better than 85% passing 75 microns (μm). Samples were then analyzed for gold, using ALS analytical method Au-AA23, Au-AA31, and Au-AA31a. Method Au-AA23 involves analyzing for gold using fire assays on a 30 g aliquot with an atomic absorption (AA) finish. Method Au-

AA31 is a Gold Preg-Robbing Cyanide Leach utilizing a 10 g aliquot with a Gold Spike. A known quantity of gold is introduced into the sample before analysis. This allows for the amount of Preg-Robbing to be quantified if it is an issue. Method Au-AA31a is a Gold -Preg-Robbing Cyanide Leach analysis utilizing a 10 g aliquot and was conducted without a spike. Preg-Robbing occurs when natural carbonaceous material absorbs gold from cyanide solution (Miller et al, 2016). If natural carbonaceous material is present in a sample, the Au-AA31a assay value will be lower than the Au-AA23 value. Understanding if carbonaceous material is present at Pan is important because the processing and recovery method at Pan is cyanide heap leach.

Additional analyses completed on select holes included a near total four acid digestion followed by an inductively coupled plasma mass spectrometry (ICP-MS) finish for multi-element analysis (lab code ME-MS61), and ore grade Zn analysis (Zn-OG62) at the ALS Laboratory in Vancouver, BC, Canada.

11.3 Quality Assurance – Quality Control

Calibre's sampling and fire assay QA/QC procedures for the 2018 to 2022 Pan drilling program consisted of the insertion of field duplicates, coarse blank samples, and pulps of known value (certified reference material (CRM) or standards) inserted into the sample stream.

The field duplicate samples comprised the collection of a second sample of RC chips representing the same interval, with both the "parent" and the "duplicate" samples submitted for separate assays. The field duplicates are used to assess the quality of homogenization achieved by the cyclone splitter. Significant differences between original and duplicate sample assay results could indicate sample bias during the splitting process or could be due to inhomogeneity inherent to the rock samples.

Coarse blank samples consisted of a commercial variety of decorative marble chips that contains no appreciable quantity of gold. Coarse blank samples provide a means by which the sample preparation procedures at laboratories can be tested for potential issues related to sample-to-sample contamination, usually due to poor procedures related to incomplete clearing/cleaning of crushing and pulverizing machines between samples.

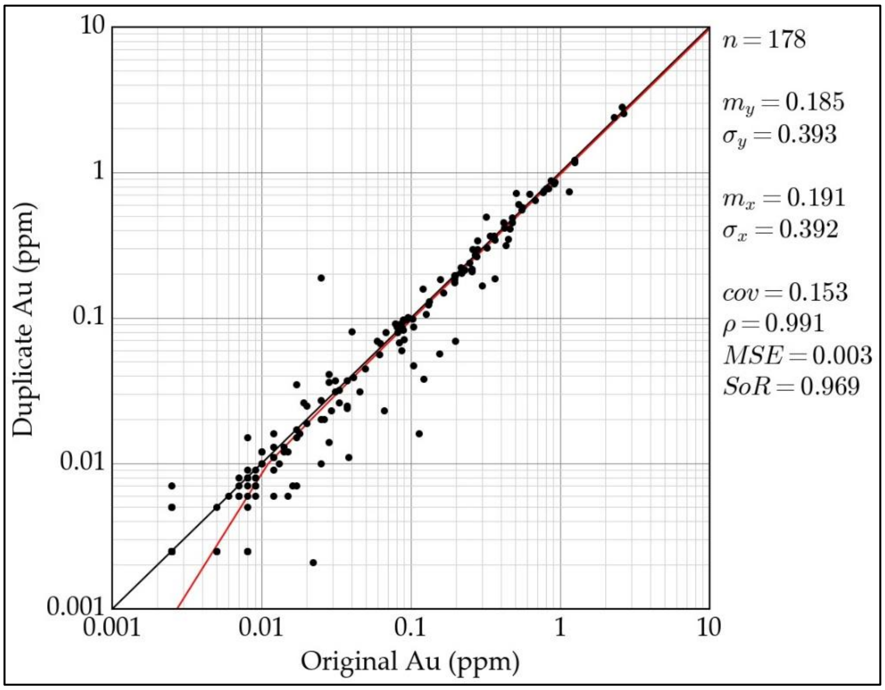
CRM's were inserted into the analytical sample stream in order to provide a means by which overall analytical precision and accuracy can be measured. Standard samples were commercially purchased and comprise pulverized and homogenized materials that have been suitably tested, normally by means of a multi-lab round robin analysis, in order to establish an accepted (certified) value for the standard and statistics to define and support the "acceptable range" (i.e., variance), by which subsequent analyses of the material may be judged. Generally, this involves the examination of assay results relative to inter-lab Standard Deviation (SD), resulting from each standard's round-robin testing data, whereby individual assay results may be examined relative to 2SD and 3SD ranges.

The following is a discussion of the QA/QC samples that were independently inserted into the sample sequence by Calibre.

11.3.1 2018 Drilling QA/QC

In 2018 a total of 5,726 RC samples were sent to ALS for gold analysis, along with 598 QA/QC samples. The QA/QC samples included 178 duplicate samples, 197 blank samples and 223 standards.

Duplicates were inserted into the sample stream randomly at regular intervals for the 2018 RC drill program. A total of 178 duplicates were analyzed via fire assay (Au-AA23) and cyanide leach (Au-AA31, Au-AA31a). The results of the fire assay analyses are illustrated in Figure 11-1 below. The data show excellent correlation (ρ = 0.991) with no issues to report.

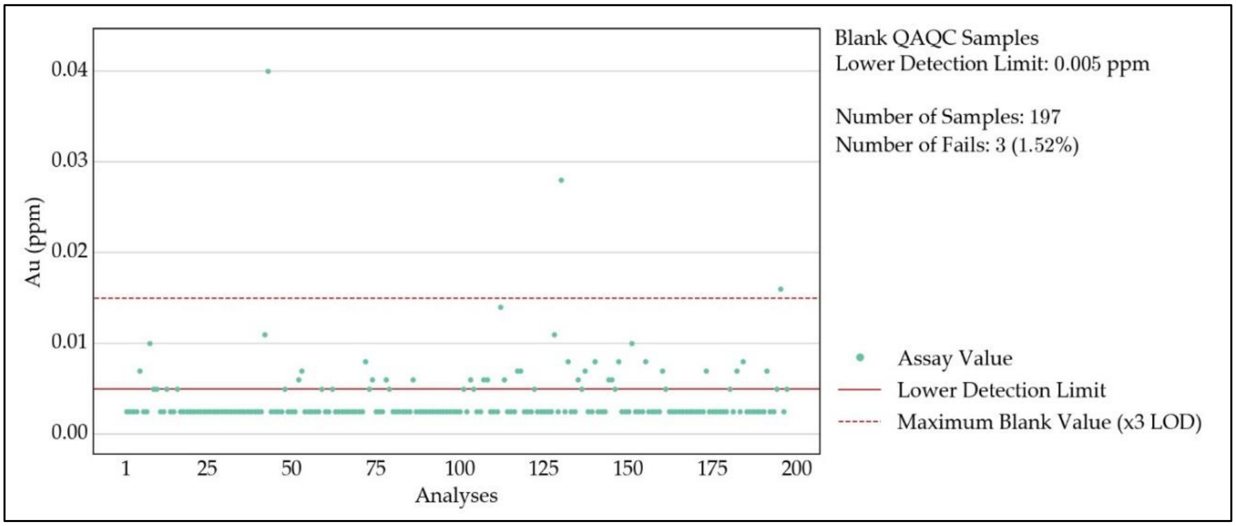


Source: APEX, 2020

Figure 11-1: 2018 Duplicate Au Fire Assay Results

Coarse blanks were inserted into the sample stream randomly at regular intervals for all 2018 RC holes. A total of 197 coarse blanks were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). The results of the coarse blank fire assay analyses are illustrated in Figure 11-2 below.

The blanks largely (98%) returned assay results within an allowable threshold (within 3x the lower detection limit), with the majority (73%) returning values below the Au-AA23 detection limit of 0.005 ppm Au. One blank sample (FG103932) returned 1.01 ppm Au; this sample was likely switched with the following RC sample FG103933 which assayed 0.008 ppm Au and has been re-assigned in the database. The results are considered acceptable.

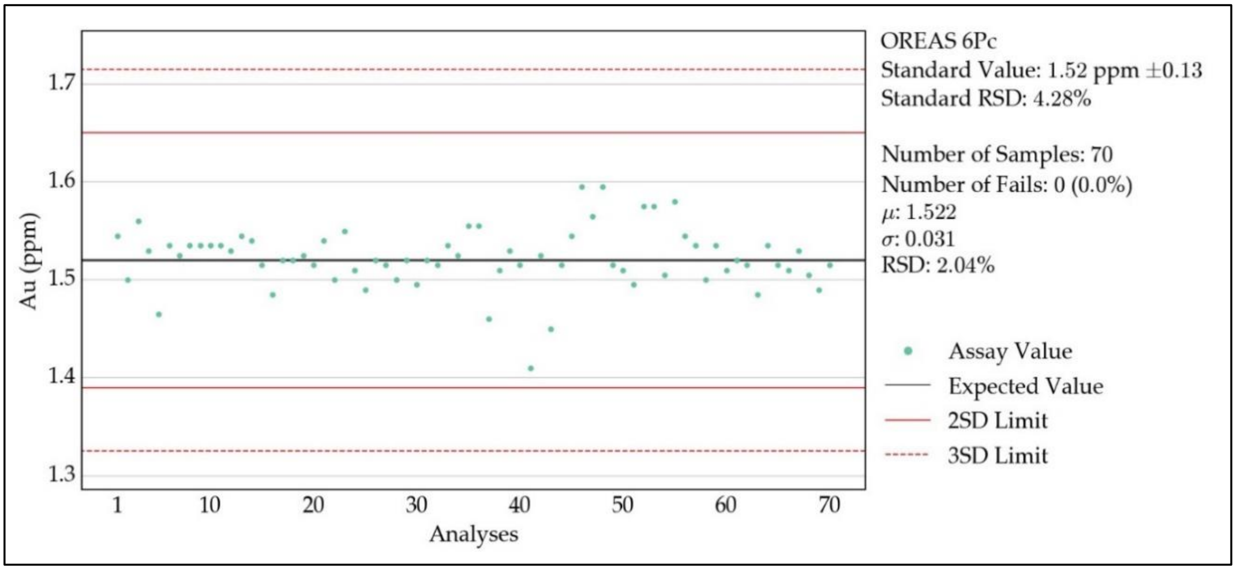


Source: APEX, 2020

Figure 11-2: 2018 Coarse Blank Au Fire Assay Results

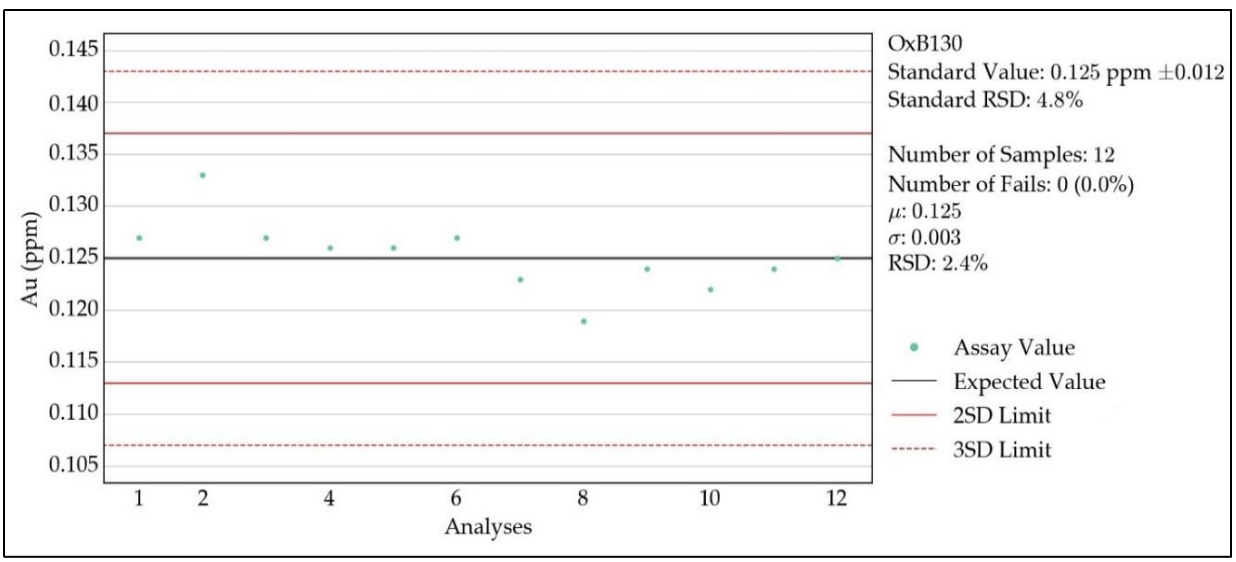
Standards were inserted into the sample stream randomly but at specified intervals for the 2018 RC drill holes. A total of 223 standards were analyzed using fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). Standards used during 2018 include five different certified reference materials from ROCKLABS: OxC129 (Au = 0.205 ppm, n = 66), OxE143 (Au = 0.621 ppm, n = 8), OxE126 (Au = 0.623 ppm, n = 59), OxB130 (Au = 0.125 ppm, n = 12), and OxI121 (Au = 1.834 ppm, n = 7), as well as one standard from OREAS: Oreas 6Pc (Au = 1.52 ppm, n = 70).

The results of the fire assay analyses for all standards are illustrated in Figure 11-3 through Figure 11-8. The majority of the standards returned assay results within acceptable limits. Three standard samples were mis-labeled and have been re-assigned to the correct standard and are included in the plots below.



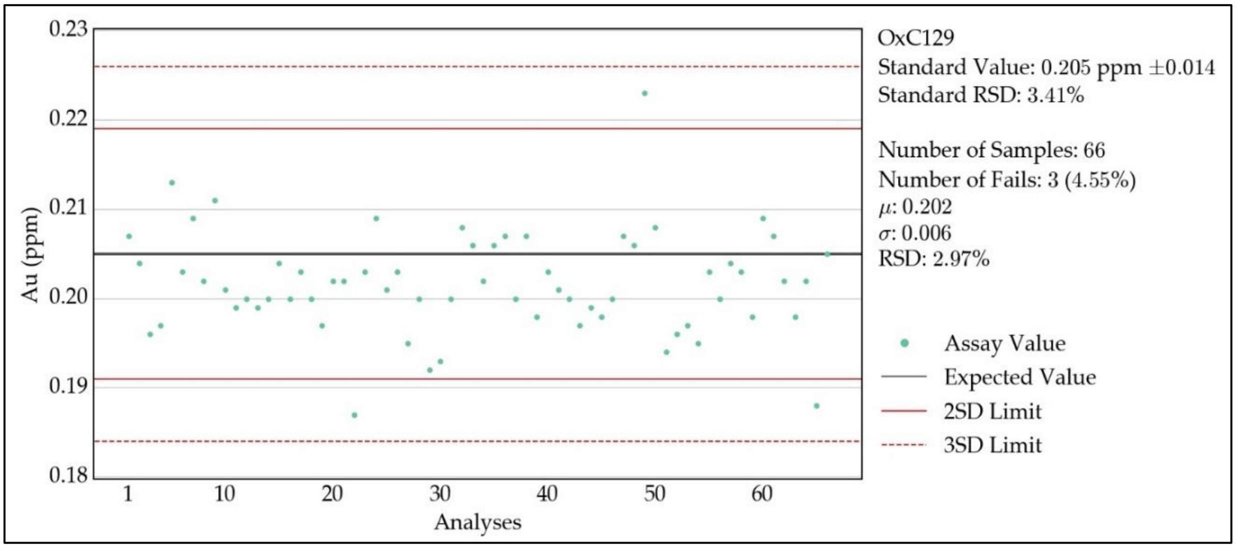
Source: APEX, 2020

Figure 11-3: 2018 Standard Reference Material (Oreas 6Pc) Fire Assay Results



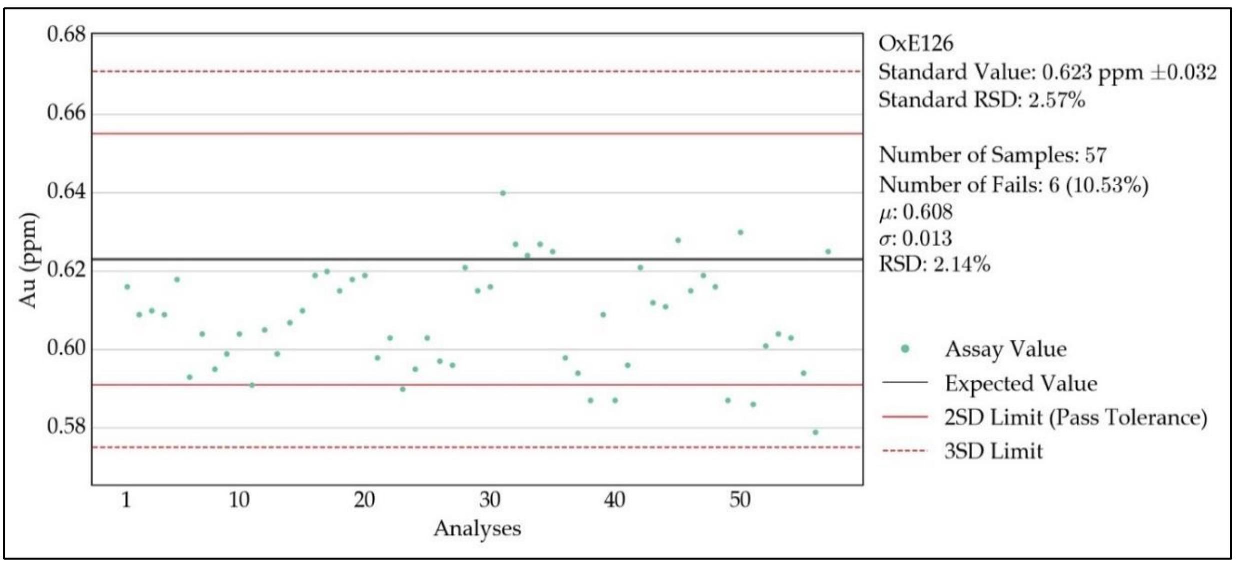
Source: APEX, 2020

Figure 11-4: 2018 Standard Reference Material (OxB130) Fire Assay Results



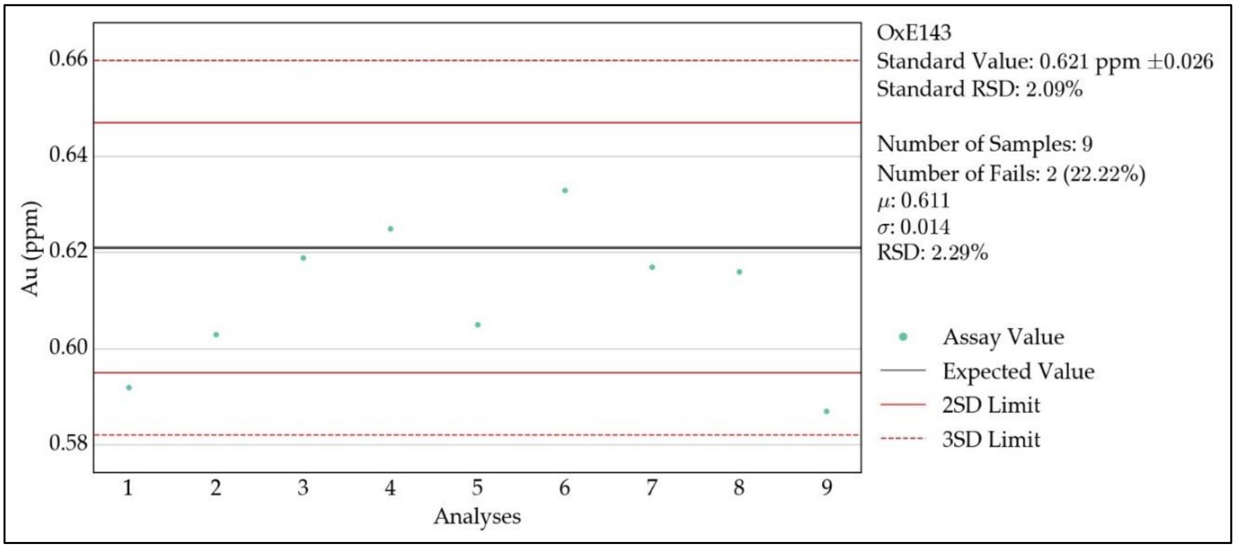
Source: APEX, 2020

Figure 11-5: 2018 Standard Reference Material (OxC129) Fire Assay Results



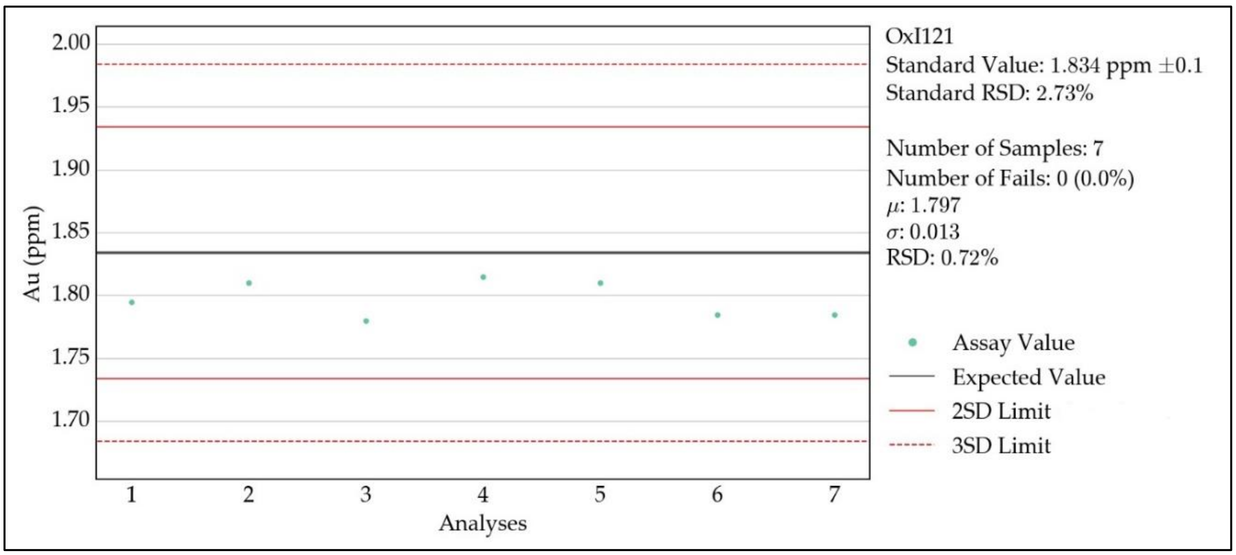
Source: APEX, 2020

Figure 11-6: 2018 Standard Reference Material (OxE126) Fire Assay Results



Source: APEX, 2020

Figure 11-7: 2018 Standard Reference Material (OxE143) Fire Assay Results



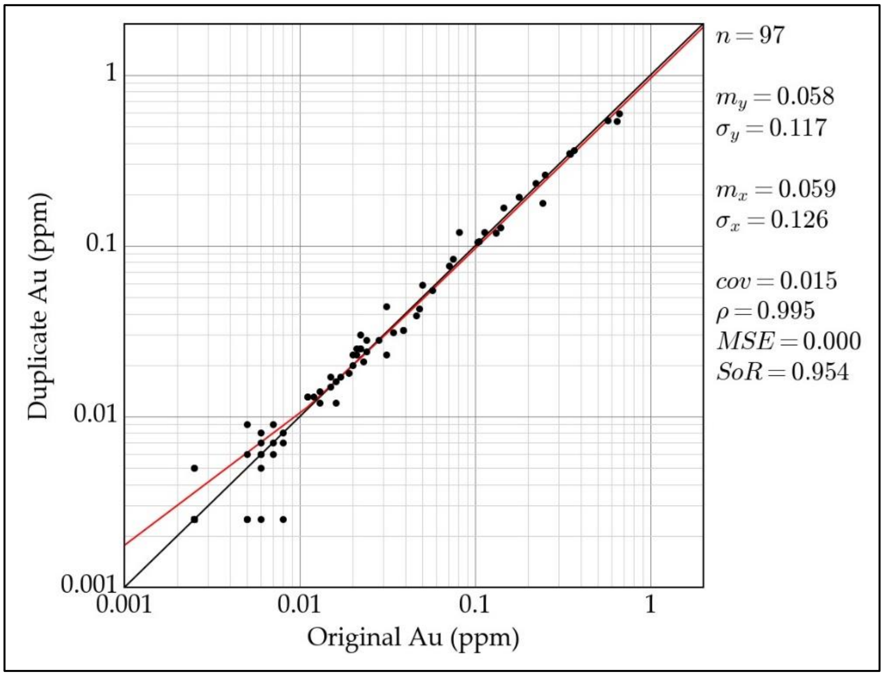
Source: APEX, 2020

Figure 11-8: 2018 Standard Reference Material (OxI121) Fire Assay Results

11.3.2 2019 Drilling QA/QC

In 2019, a total of 4,290 RC samples were sent to ALS for gold analysis, along with 579 randomly inserted (but at specified intervals) QA/QC samples. The QA/QC samples included 97 duplicate samples, 243 blank samples and 239 standards. One standard or blank was inserted approximately every 10 samples and one duplicate was inserted approximately every 50 samples.

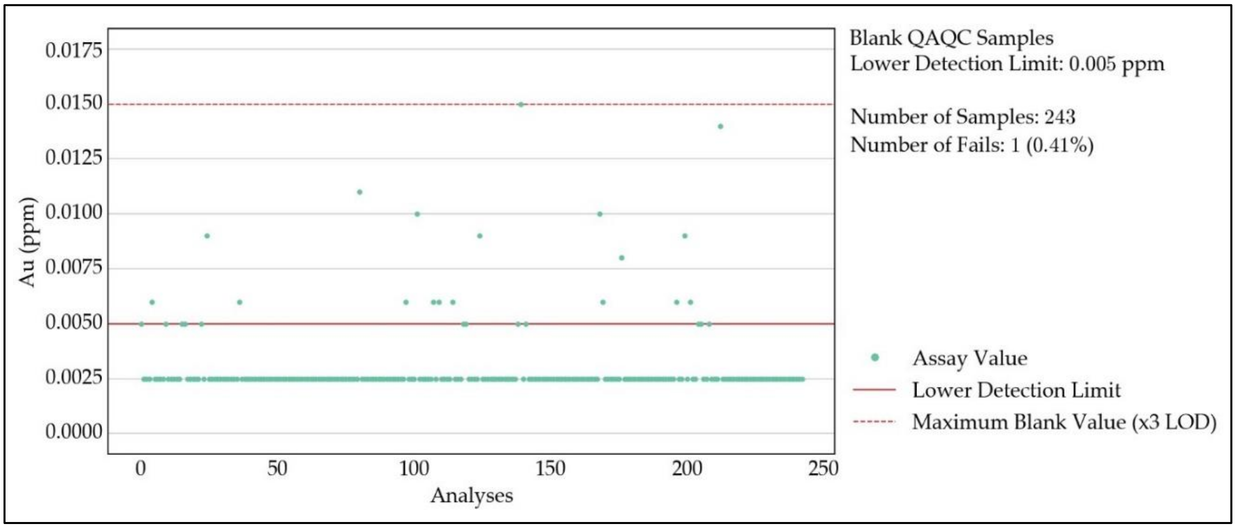
Duplicates were inserted into the sample stream randomly for the 2019 RC drill program. A total of 97 duplicates were analyzed via fire assay (Au-AA23) and cyanide leach (Au-AA31, Au-AA31a). The results of the fire assay analyses are illustrated in Figure 11-9. The data show excellent correlation (ρ = 0.995) with no issues to report.



Source: APEX, 2020

Figure 11-9: 2019 Duplicate Au Fire Assay Results

Coarse blanks were inserted into the 2019 sample stream at regular intervals (approximately every 20 samples). A total of 243 coarse blanks were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). The results of the fire assay analyses are illustrated in Figure 11-10. All blanks, with the exception of one sample, fell within an allowable threshold (3x the lower detection limit), with the majority returning values below the Au-AA23 detection limit of 0.005 ppm Au. The blank that failed and samples around it were not re-assayed because it did not fall within a mineralized zone.

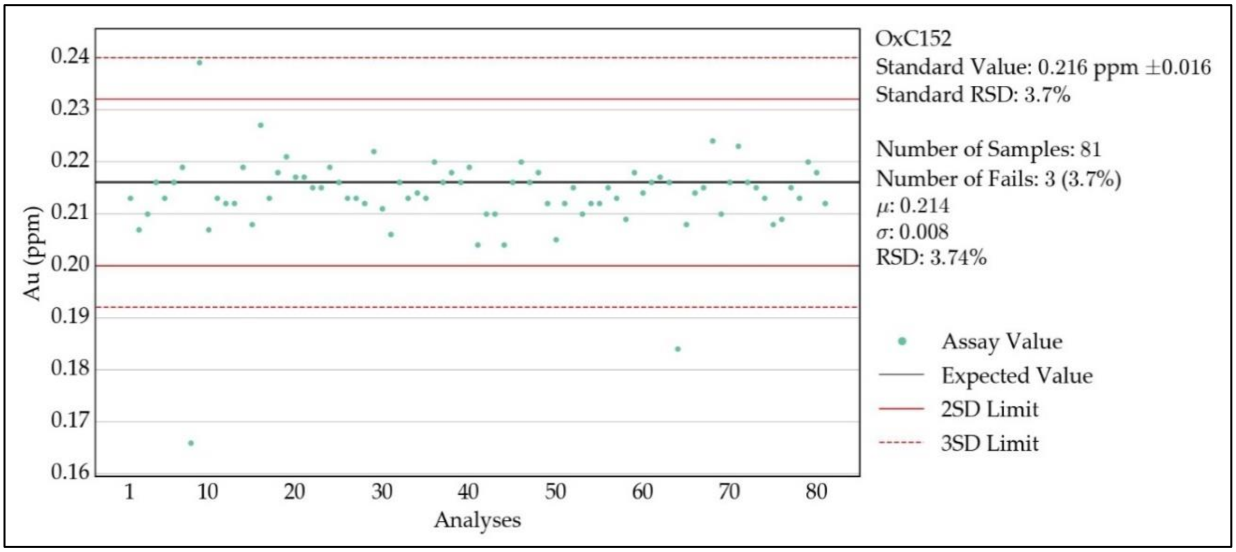


Source: APEX, 2020

Figure 11-10: 2019 Coarse Blank Au Fire Assay Results

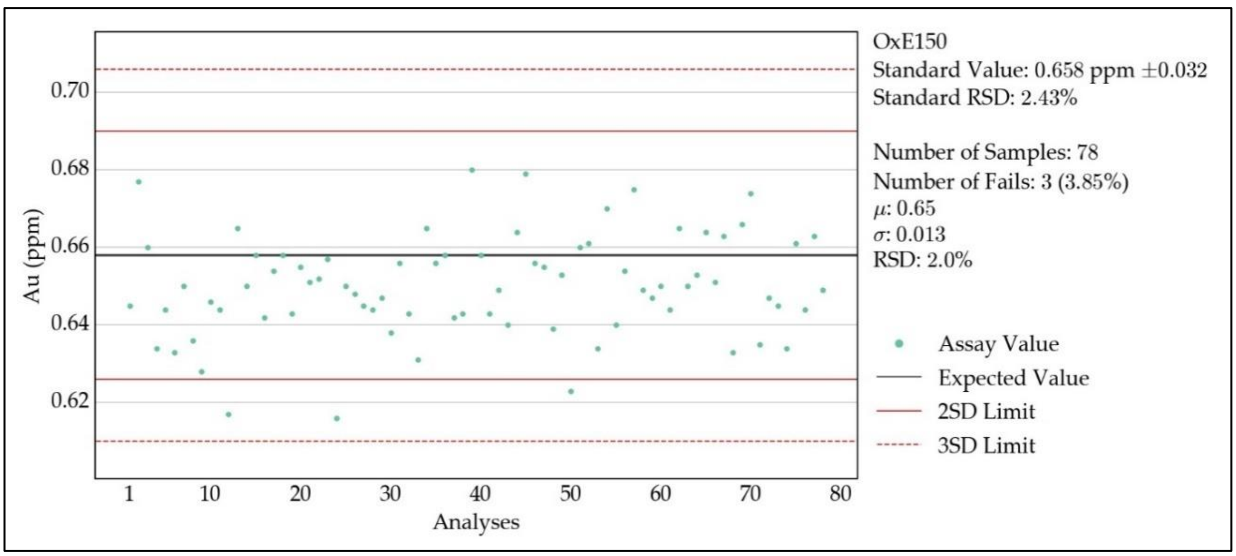
Standards were inserted into the 2019 sample stream at regular intervals (approximately every 20 samples). A total of 239 standards were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). Standards used during 2019 included three different certified reference materials from ROCKLABS: OxC152 (Au = 0.216 ppm, n = 81), OxE150 (Au = 0.658 ppm, n = 78), and OxJ137 (Au = 2.416 ppm, n = 80). The results of the fire assay analyses are illustrated in Figure 11-11 through Figure 11-13. No significant issues were identified, and the results are considered acceptable.

The majority of assay results for the standards during the 2019 drill program fell within three standard deviations from the certified value based on the standard deviation reported by the manufacturer. Failures outside of this range were only submitted for re-assay if the standard was within an anomalous mineralized zone (>0.2 ppm). A re-run would include 10 samples above the failed standard, the standard, and 10 samples below the failed standard. None of the standards that failed in 2019 fell within anomalous mineralized zones and hence none were sent for re-assay.



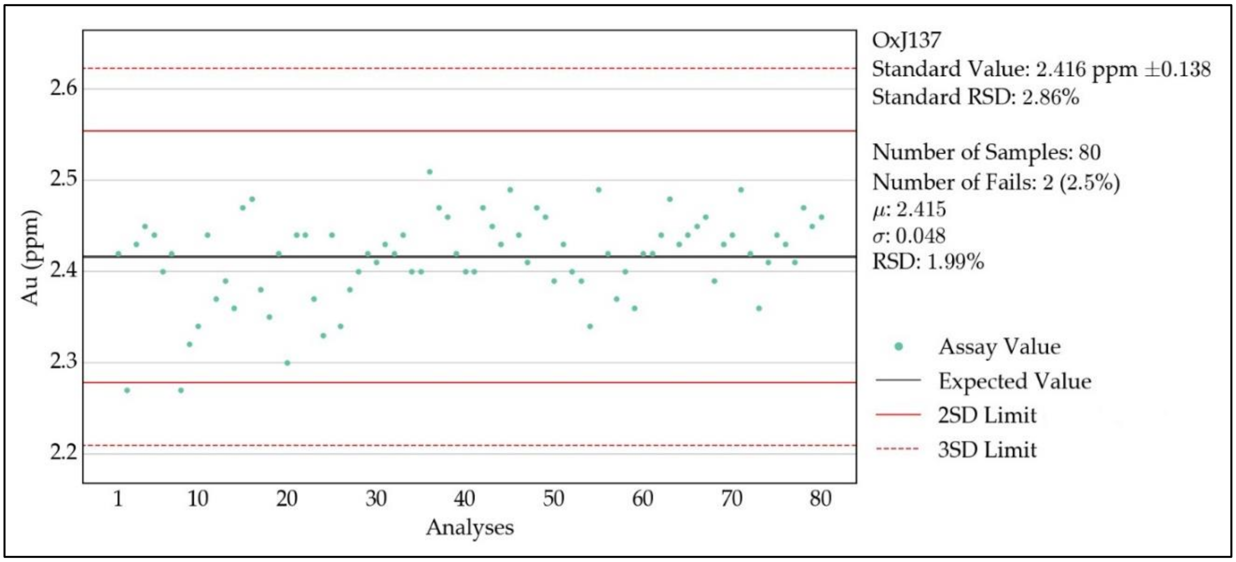
Source: APEX, 2020

Figure 11-11: 2019 Standard Reference Material (OxC152) Fire Assay Results



Source: APEX, 2020

Figure 11-12: 2019 Standard Reference Material (OxE150) Fire Assay Results



Source: APEX, 2020

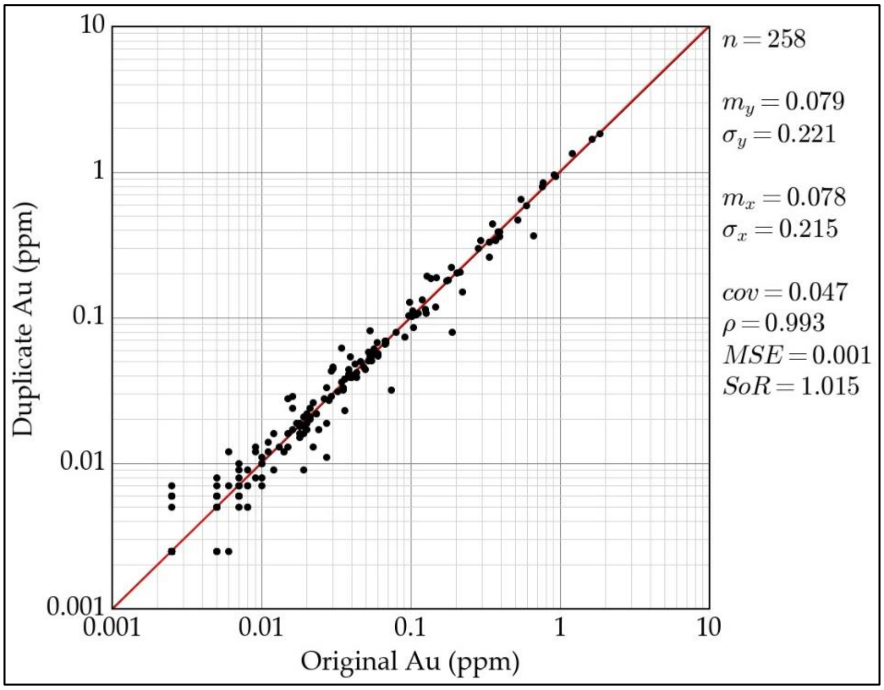
Figure 11-13: 2019 Standard Reference Material (OxJ137) Fire Assay Results

11.3.3 2020 Drilling QA/QC

During the February to June 2020 RC drill program a total of 8,626 RC samples were sent to ALS for gold analysis, along with 1,557 randomly inserted (but at specified intervals) QA/QC samples. The QA/QC samples included 258 duplicate samples, 650 blank samples and 649 standards. The same procedures from 2019 for inserting QA/QC samples and duplicates was followed for the 2020 program.

Duplicates were inserted into the sample stream randomly for the 2020 RC drill program. A total of 258 duplicates were analyzed via fire assay (Au-AA23) and cyanide leach (Au-AA31, Au-AA31a). The results of the fire assay analyses are illustrated in Figure 11-14. Overall, the data show an excellent correlation (ρ = 0.993) with no major issues to report.

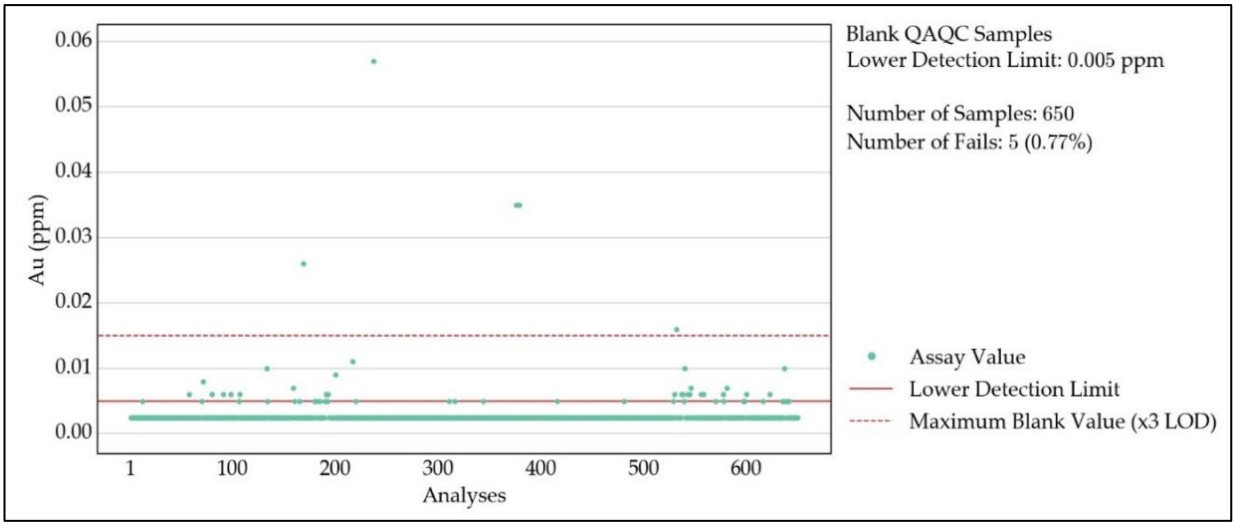
Failures in duplicate assays were assessed according to the following criteria: duplicate assays exceeding a 15% difference in ppm Au for samples assaying above 0.205 ppm Au were considered a failure. If a duplicate failure occurs within a mineralized zone the duplicate sample along with the 10 previous and 10 subsequent samples in the sample sequence are submitted for re-assay. In 2020, two duplicate samples failed and were submitted for re-assay. The discrepancy in the assay results between the original and duplicate samples was replicated by the re-assay and is attributed to heterogeneity inherent to the samples. The overall duplicate results are considered acceptable.



Source: APEX, 2020

Figure 11-14: 2020 Duplicate Au Fire Assay Results

Coarse blanks were inserted into the sample stream at regular intervals (approximately every 20 samples). A total of 650 coarse blanks were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). The results of the fire assay analyses are illustrated in Figure 11-15 below. The majority (99.2%) of the blanks fell within an allowable threshold, with the majority (91%) returning values below the Au-AA23 detection limit of 0.005 ppm Au. Four blanks fell outside of the 3x the lower detection limit. One of these blanks was within a mineralized zone and was submitted for re-assay along with the previous and following 9 samples in the sample sequence. The re-assay of this blank returned the same Au value in both Cyanide Leach (CN) and Fire Assay (FA) assays indicating that it contained a very small quantity of gold that may or may not have been the result of contamination. No significant issues were identified, and the results are considered acceptable.

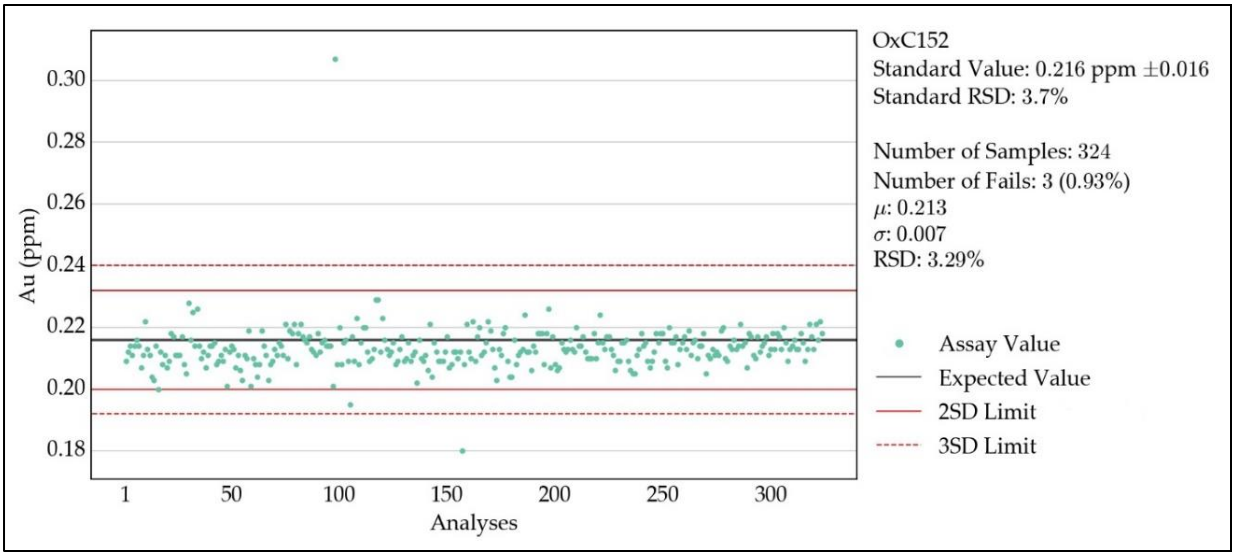


Source: APEX, 2020

Figure 11-15: 2020 Coarse Blank Au Fire Assay Results

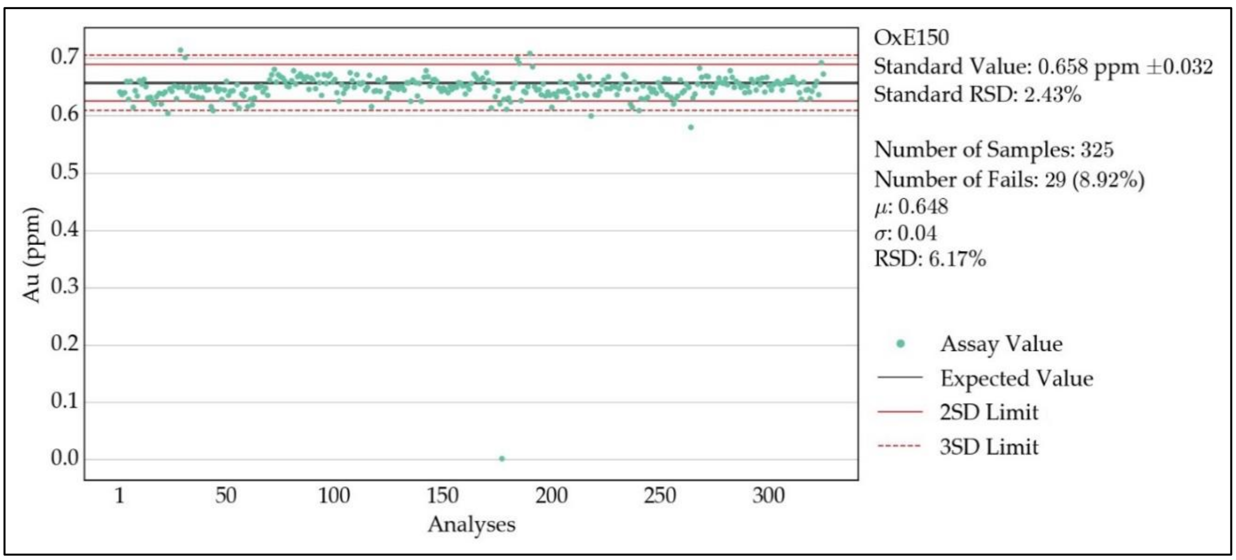
Standards were inserted into the sample stream at regular intervals (approximately every 20 samples). A total of 649 standards were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). Standards used during 2020 included two different certified reference materials from ROCKLABS: OxC152 (Au = 0.216 ppm, n = 324), and OxE150 (Au = 0.658 ppm, n = 325). The results of the fire assay analyses are illustrated in Figure 11-16 and Figure 11-17.

The majority of assay results for the standards during the 2020 drill program fell within 3 standard deviations from the certified value based on the standard deviation reported by the manufacturer. Failures outside of this range were only submitted for re-assay if the standard was within an anomalous mineralized zone (>0.2 ppm). A re-run would include 10 samples above the failed standard, the standard, and 10 samples below the failed standard. None of the failures for the standards in 2020 fell within anomalous mineralized zones and hence none were sent for re-assay. No significant issues were identified, and the results are considered acceptable.



Source: APEX, 2020

Figure 11-16: 2020 Standard Reference Material (OxC152) Fire Assay Results

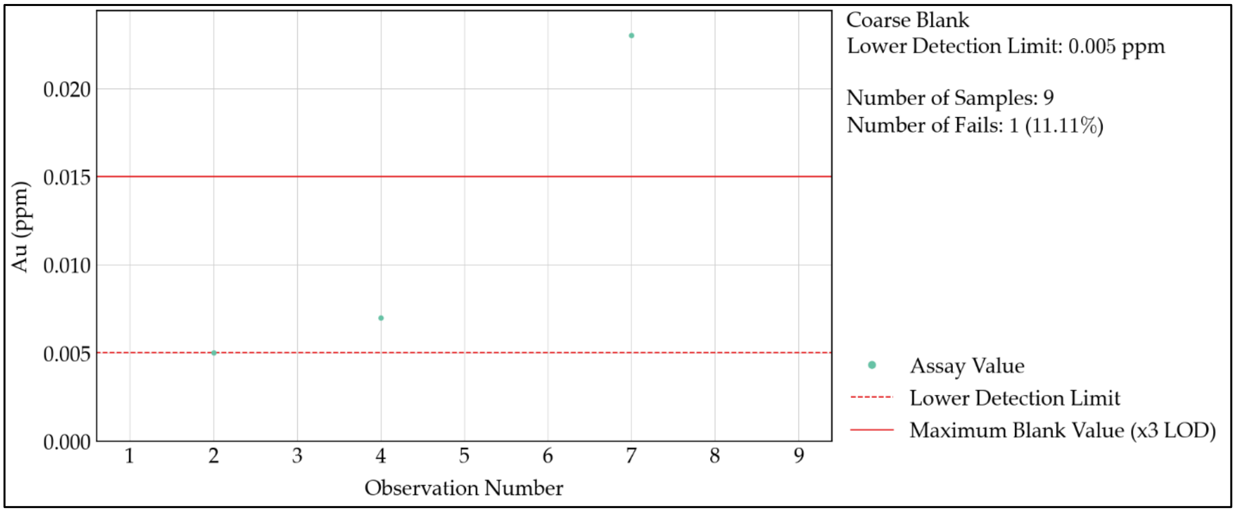


Source: APEX, 2020

Figure 11-17: 2020 Standard Reference Material (OxE150) Fire Assay Results

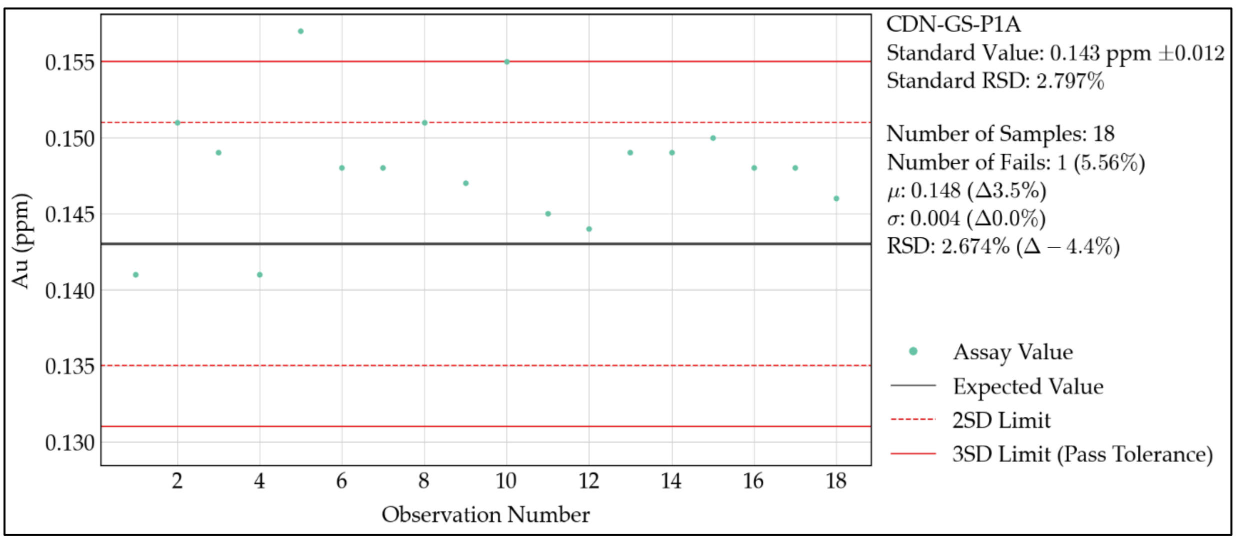
During the October to December 2020 core drill program, a total of 876 core samples were sent to ALS for gold analysis, along with 45 randomly inserted (but at specified intervals) QA/QC samples. The QA/QC samples consisted of 9 blank samples and 36 standards. No duplicate samples were inserted. Insertion and QA/QC procedures are exactly as outlined in this section for the February to June RC 2020 drilling program. Upon receiving the assay results, samples that did not undergo assay for reasons such as insufficient sample material, were removed from QA/QC analysis and do not appear in the following plots,

Figure 11-18 to Figure 11-21. No significant issues were identified, and the results are considered acceptable for all QA/QC for the October to December core 2020 drilling program.



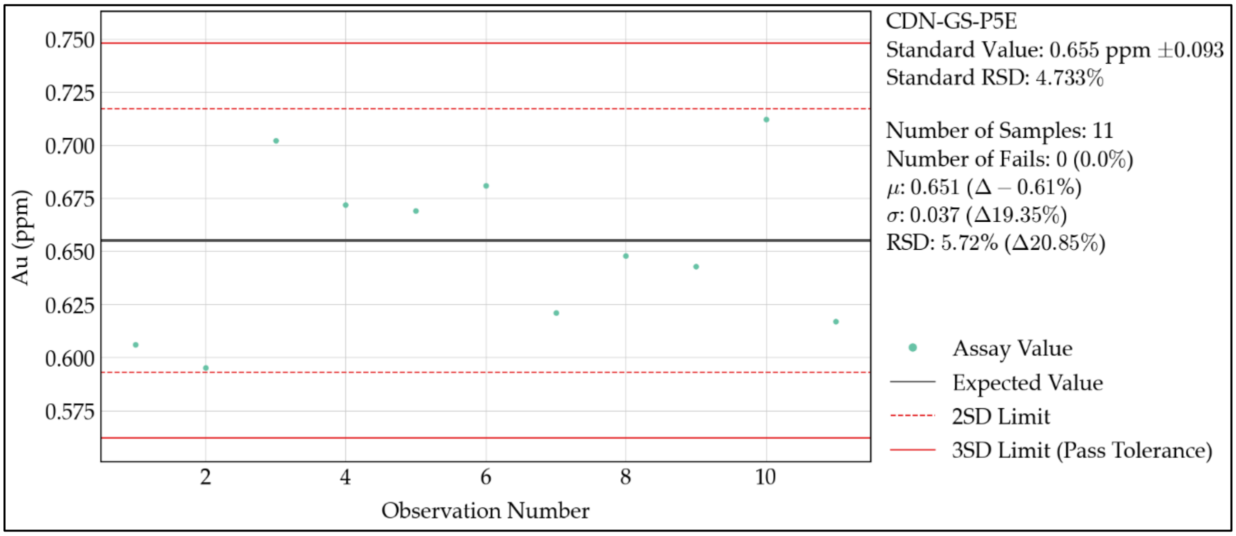
Source: APEX, 2023

Figure 11-18: Control chart of coarse blank samples assayed for the 2020 core drilling program



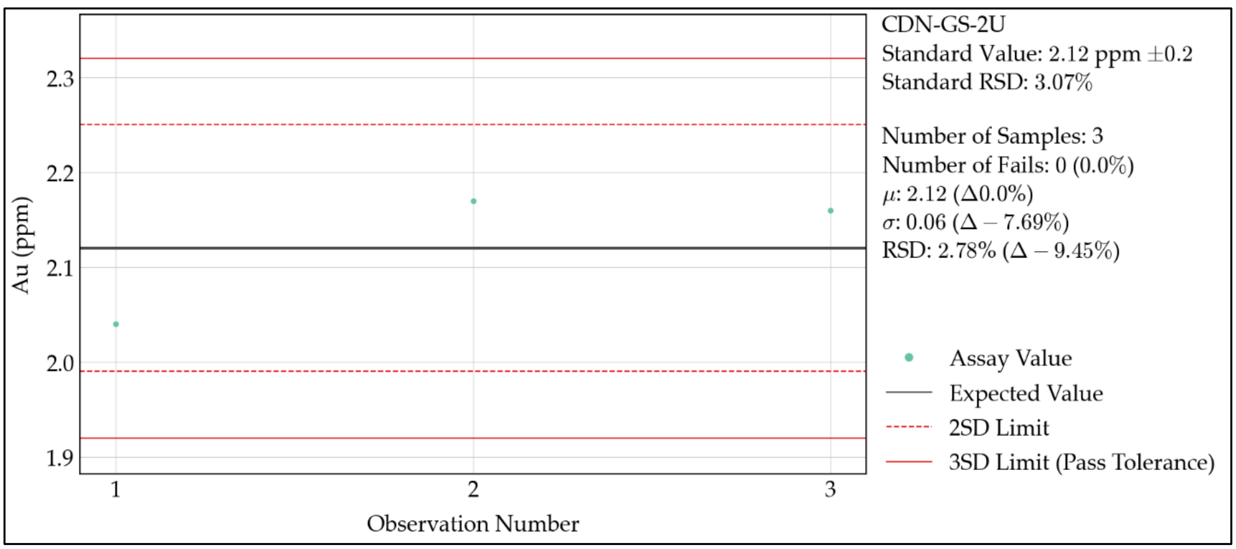
Source: APEX, 2023

Figure 11-19: Control chart of CDN-GS-P1A CRM samples assayed for the 2020 core drilling program



Source: APEX, 2023

Figure 11-20: Control chart of CDN-GS-P5E CRM samples assayed for the 2020 core drilling program



Source: APEX, 2023

Figure 11-21: Control chart of CDN-GS-2U CRM samples assayed for the 2020 core drilling program

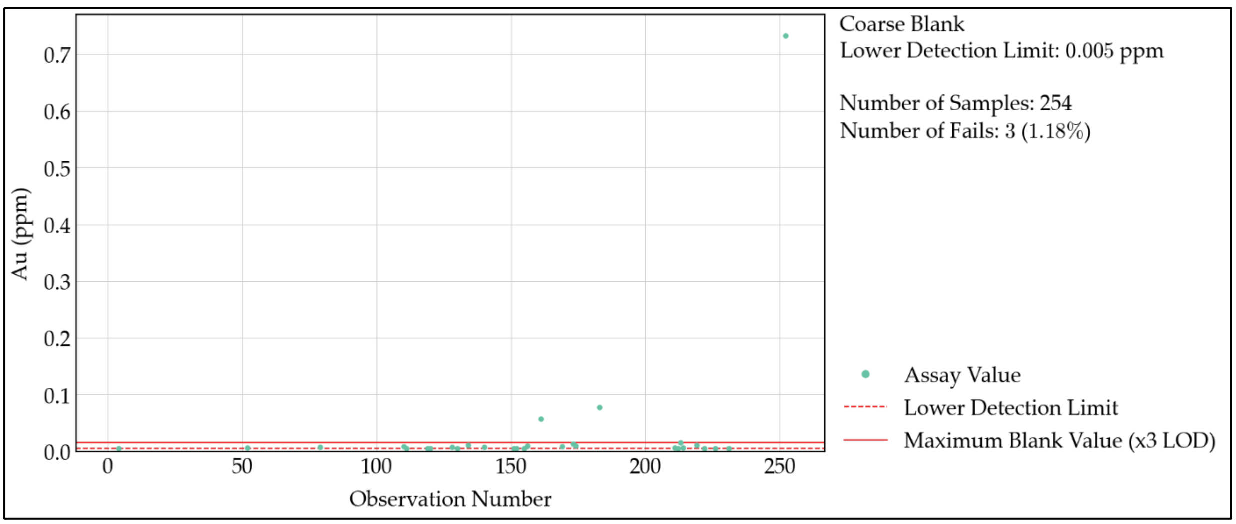
11.3.4 2021 Drilling QA/QC

The 2021 drill program consisted of a total of 5,047 RC samples and 282 core samples sent to ALS for gold analysis, along with 704 QA/QC samples inserted at predetermined intervals. The QA/QC samples included 112 duplicate samples, 293 blank samples, and 299 standards. The procedures for inserting QA/QC samples and duplicates for the 2021 program are provided below in the following sections. Upon receiving the assay results, samples that did not undergo assay for reasons such as insufficient sample material, were removed from QA/QC analysis and do not appear in the following plots.

Field duplicates were inserted into the sample stream every 50 samples for the 2021 RC drill program. Duplicates were not inserted in the core program. A total of 112 duplicates were sent for analysis via fire assay (Au-AA23) and cyanide leach (Au-AA31, Au-AA31a).

Failures in field duplicate assays were assessed with a scatter plot. The duplicate samples from 2021 were evaluated in combination with the 2022 field duplicate samples and are discussed in Section 11.3.5.

Coarse blanks were inserted into the sample stream at regular intervals (every 20 samples). A total of 254 coarse blanks were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). The results of the fire assay analyses are illustrated in Figure 11-22. The majority (98.8%) of the blanks fell within an allowable threshold, with the majority (76.7%) returning values below the Au-AA23 detection limit of 0.005 ppm Au. Three blanks fell outside of the 3x the lower detection limit. These failures were not cause for re-assay as they either did not fall within a mineralized zone or other passing blanks or CRMs were present within the fire assay batch. No significant issues were identified, and the results are considered acceptable.



Source: APEX, 2023

Figure 11-22: Control chart of coarse blank samples assayed for the 2021 RC and core drilling programs

Standards were inserted into the sample stream at regular intervals (every 20 samples) alternating each CRM type. A total of 259 standards were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). Standards used during the 2021 RC drilling included four different certified reference materials from CDN Resource Laboratories Ltd. (CDN) and OREAS:

- CDN-CM-29 (Au = 0.720 ppm, n = 62);
- OREAS 263 (Au = 214 ppb, n = 62);

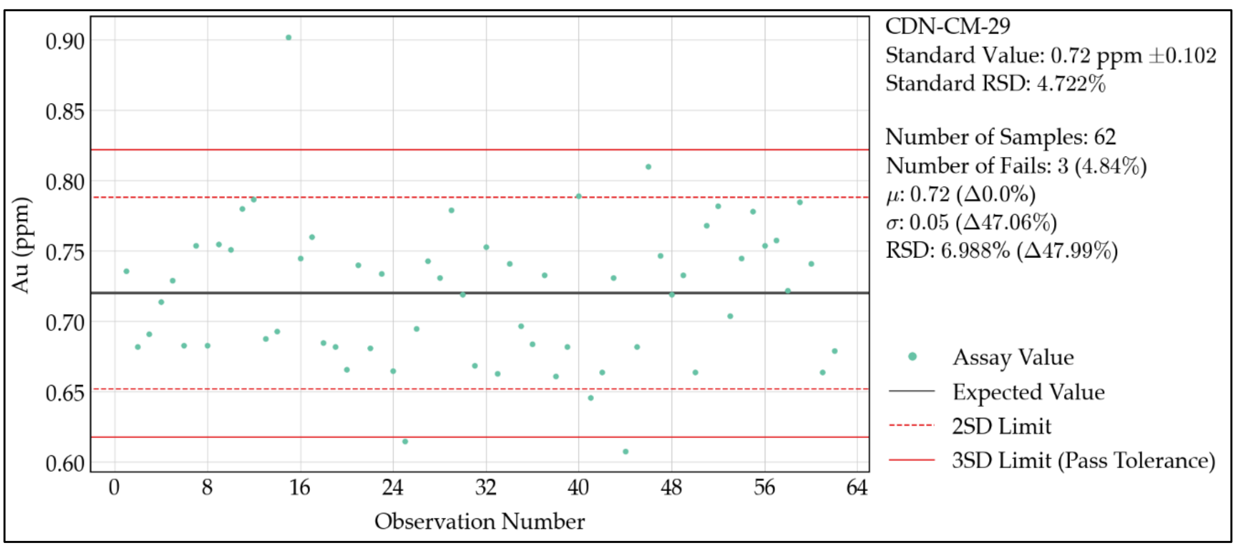
- OREAS 277 (Au = 3.39 ppm, n = 63); and
- OREAS 506 (0.364 ppm, n = 64).

Standards used during 2021 core drilling included two different certified reference materials from CDN:

- CDN-GS-P1A (Au = 0.143 ppm, n = 4); and
- CDN-GS-P5E (Au = 0.655 ppm, n = 4).

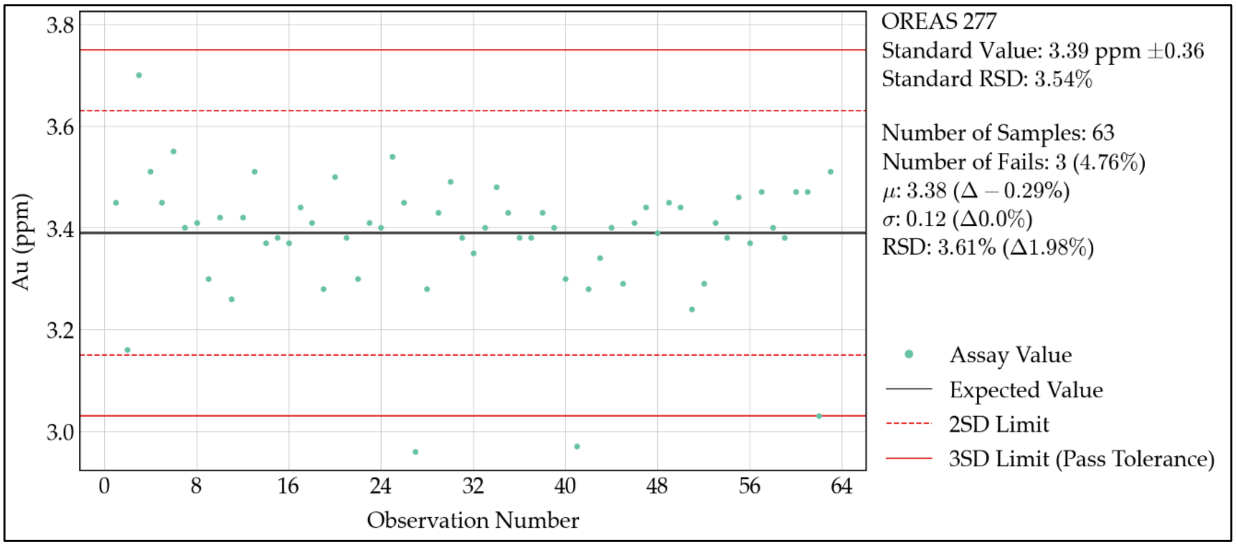
The results of the fire assay analyses are illustrated in Figure 11-23 to Figure 11-27.

The majority of assay results for the standards analyzed during the 2021 drill programs fell within 3 standard deviations from the certified value based on the standard deviation reported by the manufacturer. A sample is considered a failure should the assay results fall outside of this range. If a failed sample occurred in a fire assay batch that had drilling samples with gold assay values ≥0.20 ppm Au, and no other standard or blank samples passed in that batch, it was re-assayed. If a failed sample occurred in a fire assay batch that had no assays ≥0.20 ppm Au, the failure did not trigger re-assay procedures. None of the failures for the standards in 2021 fell within anomalous mineralized zones and in a fire assay batch with ≥0.20 ppm Au samples. Therefore, no samples were sent for re-assay. No significant issues were identified, and the results are considered acceptable.



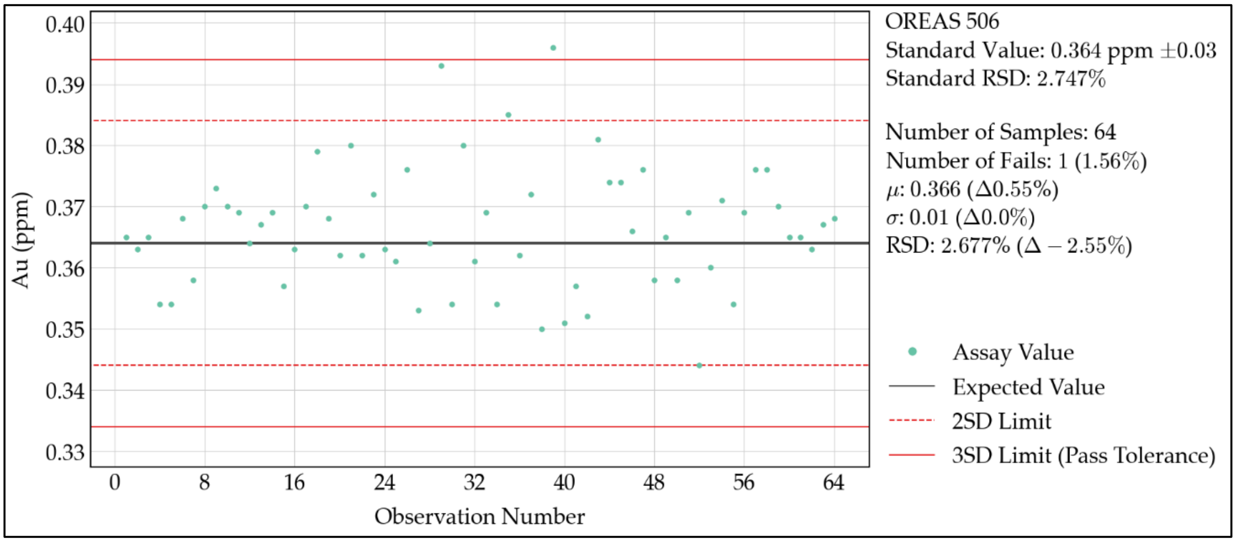
Source: APEX, 2023

Figure 11-23: Control chart of CDN-CM-29 CRM samples assayed for the 2021 RC drilling program



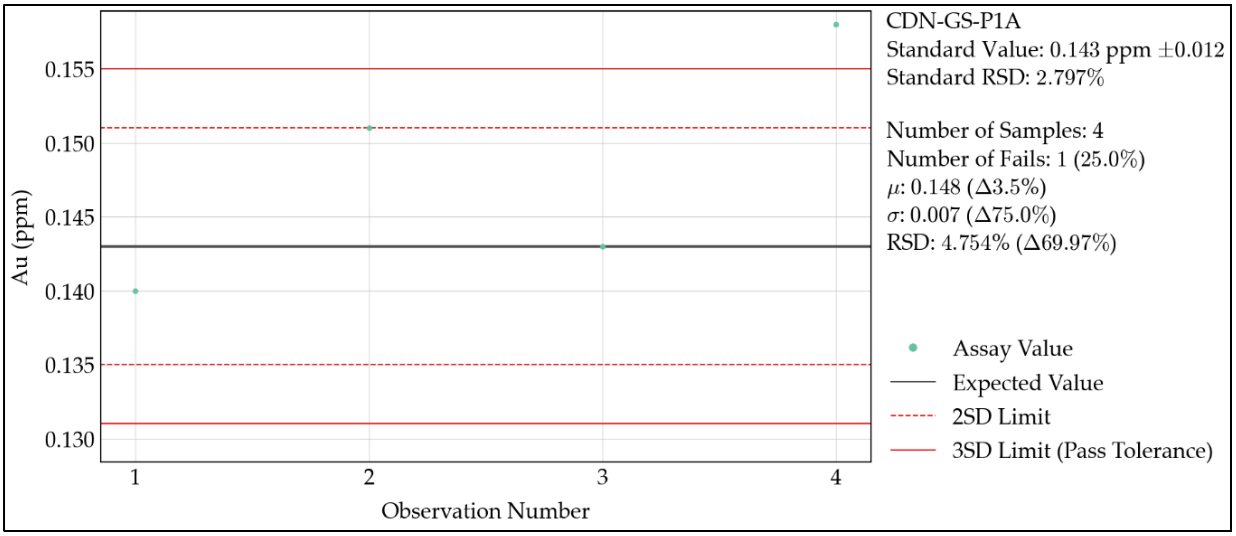
Source: APEX, 2023

Figure 11-24: Control chart of OREAS 277 CRM samples assayed for the 2021 RC drilling program



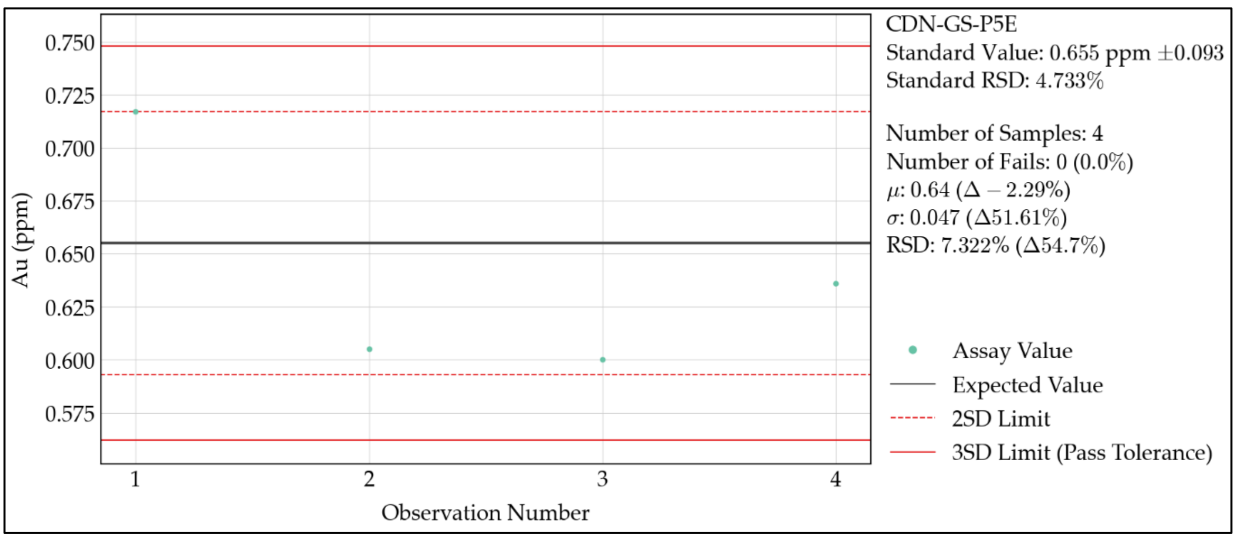
Source: APEX, 2023

Figure 11-25: Control chart of OREAS 506 CRM samples assayed for the 2021 RC drilling program



Source: APEX, 2023

Figure 11-26: Control chart of CDN-GS-P1A CRM samples assayed for the 2021 core drilling program



Source: APEX, 2023

Figure 11-27: Control chart of CDN-GS-P5E CRM samples assayed for the 2021 core drilling program

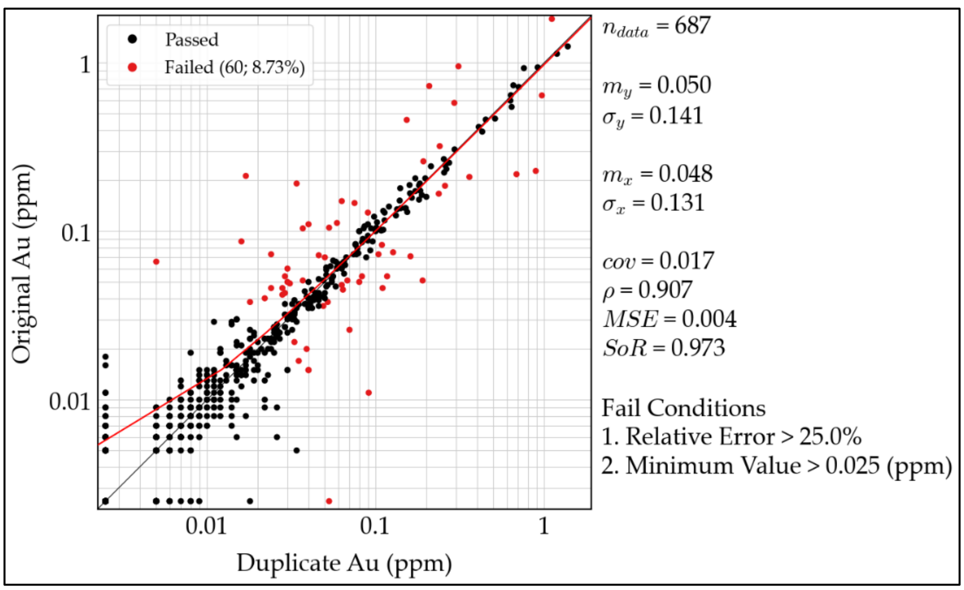
11.3.5 2022 Drilling QA/QC

The 2022 drill program consisted of a total of 26,466 RC samples and 2,195 core samples sent to ALS for gold analysis, along with 3,770 QA/QC samples inserted at predetermined intervals. The QA/QC samples included 608 duplicate samples, 1,553 blank samples, and 1,609 standards. The same procedures from 2021 for inserting QA/QC samples and duplicates was followed for the 2022 program. As of December

31, 2022, the effective date of this report, the following sample assays had been received with the results discussed in the following section: 26,190 RC samples, 1,852 core samples, 602 field duplicates, 1,533 coarse blanks, and 1,580 standards. Upon receiving the assay results, samples that did not undergo assay for reasons such as insufficient sample material, were removed from QA/QC analysis and do not appear in the following plots.

Field duplicates were inserted into the sample stream every 50 samples for the 2022 RC drill program. Duplicates were not inserted in the core program. A total of 588 duplicates were sent for analysis via fire assay (Au-AA23) and cyanide leach (Au-AA31, Au-AA31a).

A total of 700 field duplicates from 2021 and 2022 drilling programs were sent for fire assay, 687 returned with assay values. Failures were assessed with a scatter plot. Passing requirements were considered to be 90% of the duplicate pairs with relative error ≤25%. The 2021 and 2022 drilling program duplicates met passing requirements; no further evaluation was required. The overall duplicate results show a fair amount of scatter but there is no apparent bias and the results are considered acceptable. The results of the fire assay analyses are illustrated in Figure 11-28. Overall, the data show a good correlation (ρ = 0.907) with no major issues to report.

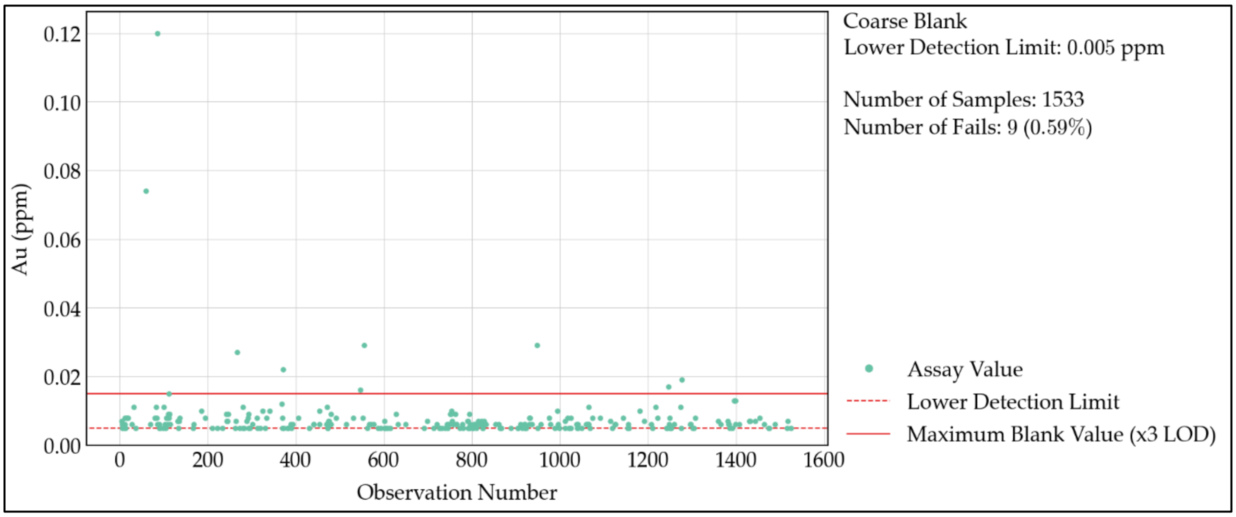


Source: APEX, 2023

Figure 11-28: Scatter plot of 2021 and 2022 field duplicate samples, Au (ppm) fire assay results

The 2021 and 2022 duplicate analysis show slightly more scatter than previous years, however, there does not appear to be a bias, and combined with the observation that the standards all performed within normal acceptable parameters, might indicate that some samples were either poorly homogenized or not crushed to proper sizing specifications. The results are considered acceptable on this basis.

Coarse blanks were inserted into the sample stream at regular intervals (every 20 samples). A total of 1,533 coarse blanks were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). The results of the fire assay analyses are illustrated in Figure 11-29 below. The majority (99.2%) of the blanks fell within an allowable threshold, with the majority (91%) returning values below the Au-AA23 detection limit of 0.005 ppm Au. Four blanks fell outside of the 3x the lower detection limit. One of these blanks was within a mineralized zone and was submitted for re-assay along with the previous and following 9 samples in the sample sequence. The re-assay of this blank returned the same Au value in both Cyanide Leach (CN) and Fire Assay (FA) assays indicating that it contained a very small quantity of gold that may or may not have been the result of contamination. No significant issues were identified, and the results are considered acceptable.



Source: APEX, 2023

Figure 11-29: Control chart of coarse blank samples assayed for the 2022 RC and core drilling programs

Standards were inserted into the sample stream at regular intervals (every 20 samples) alternating each CRM type. A total of 1,216 standards were analyzed via fire assay (Au-AA23) and Preg-Robbing cyanide leach (Au-AA31, Au-AA31a). Standards used during 2022 RC drilling included four different certified reference materials from CDN Resource Laboratories Ltd. (CDN) and OREAS:

- CDN-CM-29 (Au = 0.720 ppm, n = 378);
- OREAS 263 (Au = 214 ppb, n = 410);
- OREAS 277 (Au = 3.39 ppm, n = 373); and
- OREAS 506 (0.364 ppm, n = 397).

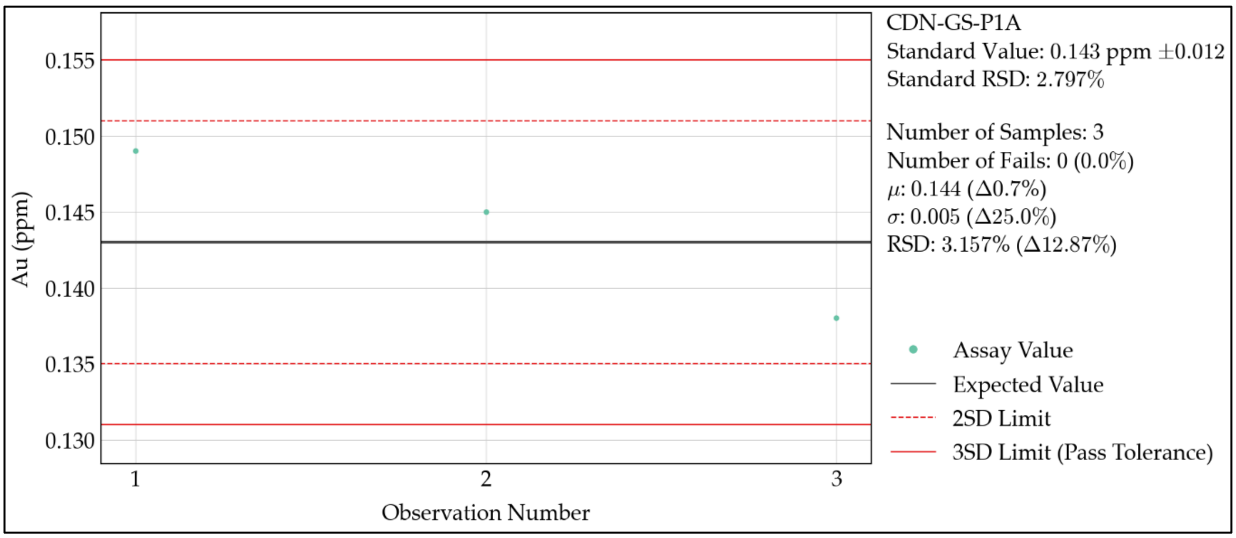
Standards used during 2022 core drilling included three different certified reference materials from CDN, as follows, but early on in the program transitioned to use the above standards, the same as the 2022 RC program:

- CDN-GS-P1A (Au = 0.143 ppm, n = 3);
- CDN-GS-P5E (Au = 0.655 ppm, n = 2); and

- CDN-GS-2U (Au = 2.12 ppm, n = 1).

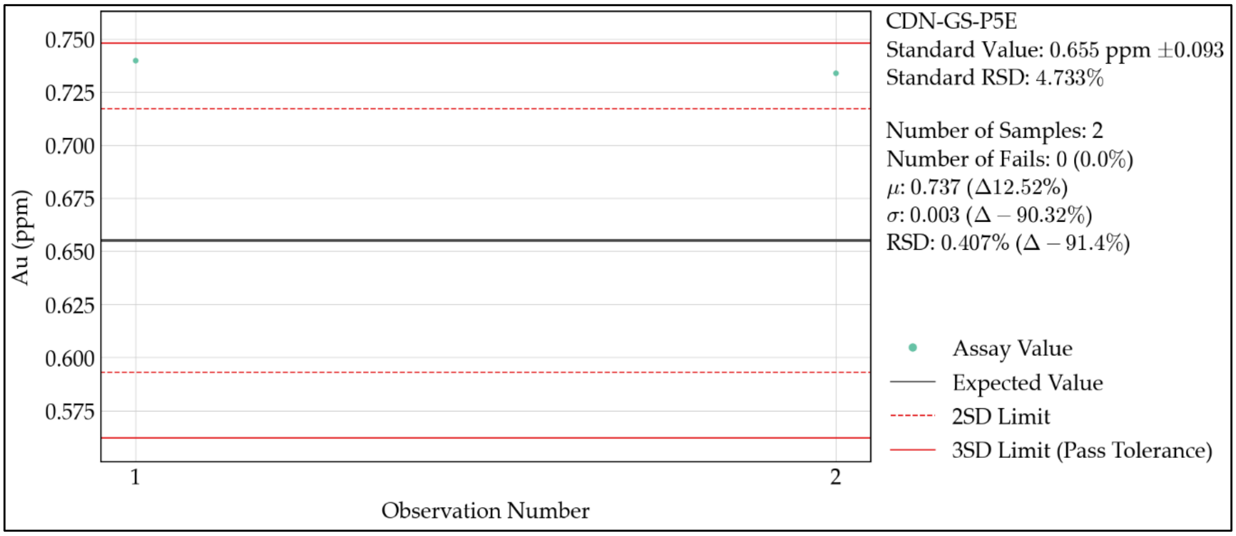
The results of the fire assay analyses are illustrated in Figure 11-30 to Figure 11-36.

The majority of assay results for the standards during the 2022 drill program fell within three standard deviations from the certified value based on the standard deviation reported by the manufacturer. A sample is considered a failure should the assay results fall outside of this range. If a failed sample occurred in a fire assay batch that had drilling samples with gold assay values ≥0.20 ppm Au, and no other standard or blank samples passed in that batch, it would have been re-assayed. If a failed sample occurred in a fire assay batch that had no assays ≥0.20 ppm Au, the failure did not trigger re-assay procedures. None of the failures for the standards in 2022 fell within anomalous mineralized zones and in a fire assay batch with ≥0.20 ppm Au samples. Therefore, no samples were sent for re-assay. No significant issues were identified, and the results are considered acceptable.



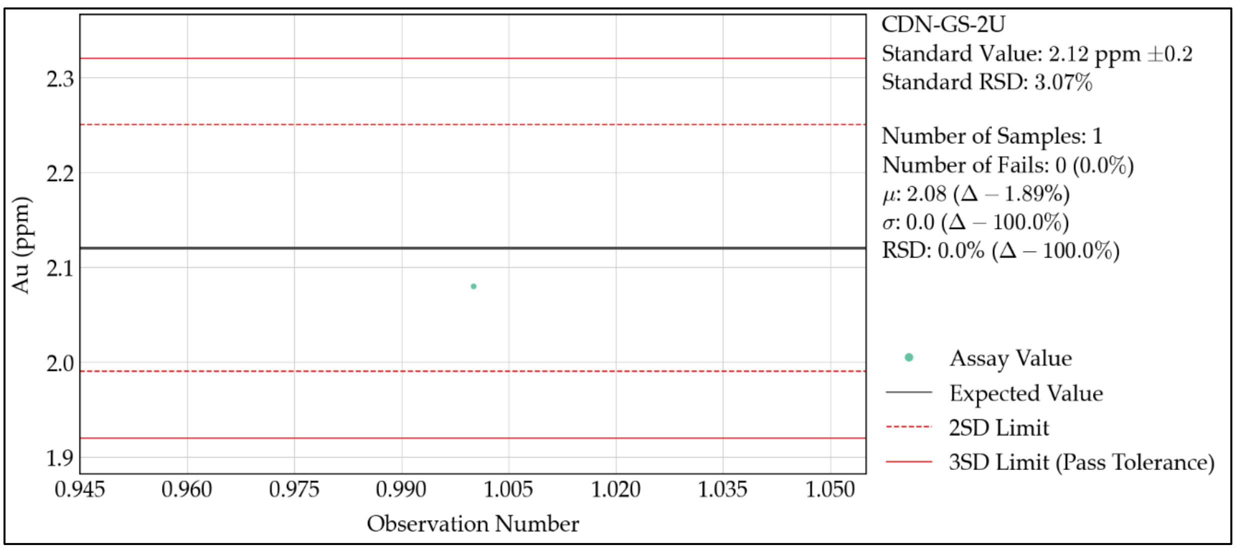
Source: APEX, 2023

Figure 11-30: Control chart of CDN-GS-P1A CRM samples assayed for the 2022 core drilling program



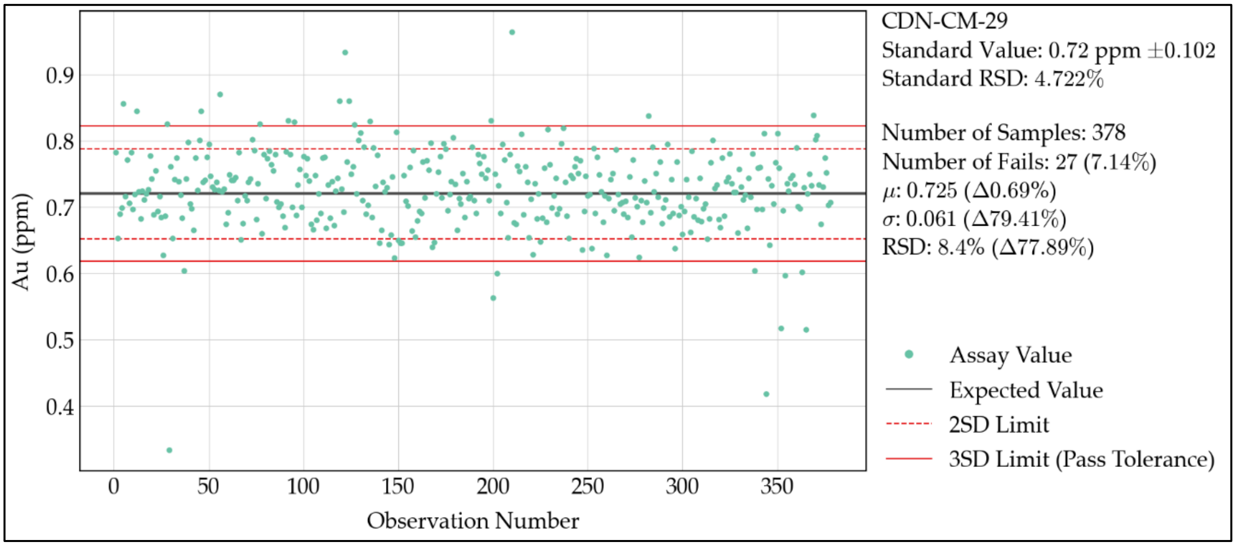
Source: APEX, 2023

Figure 11-31: Control chart of CDN-GS-P5E CRM samples assayed for the 2022 core drilling program



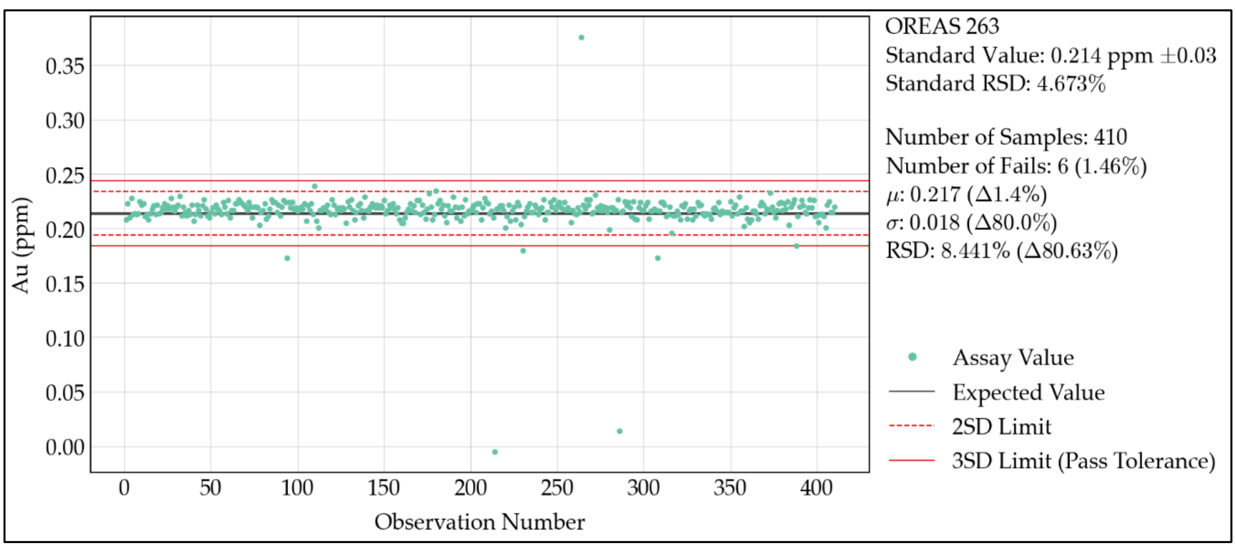
Source: APEX, 2023

Figure 11-32: Control chart of CDN-GS-2U CRM samples assayed for the 2022 core drilling program



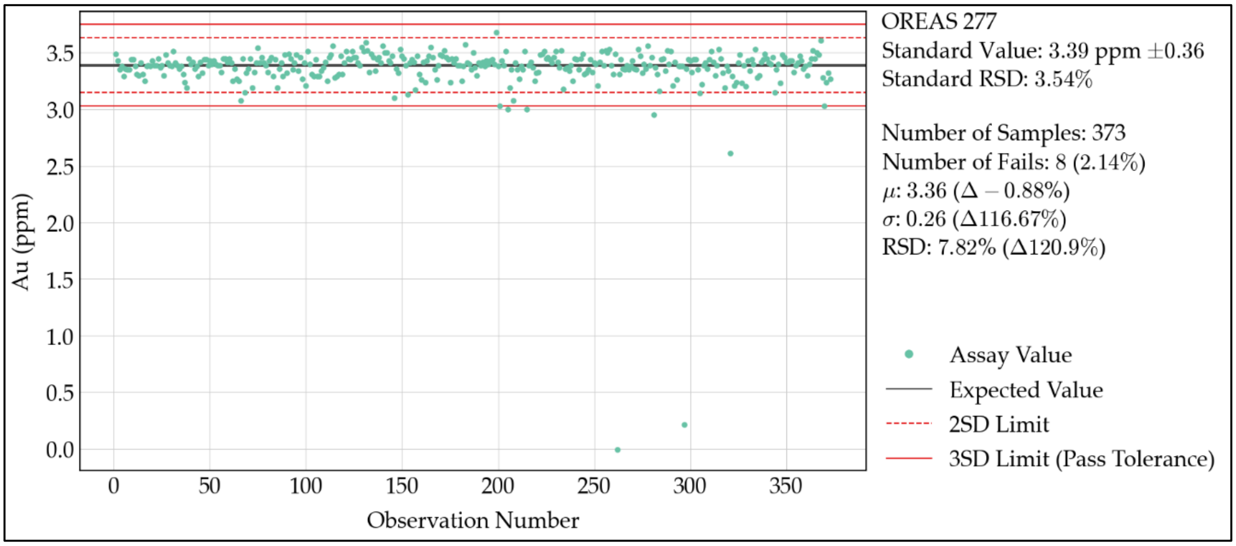
Source: APEX, 2023

Figure 11-33: Control chart of CDN-CM-29 CRM samples assayed for the 2022 RC and core drilling programs



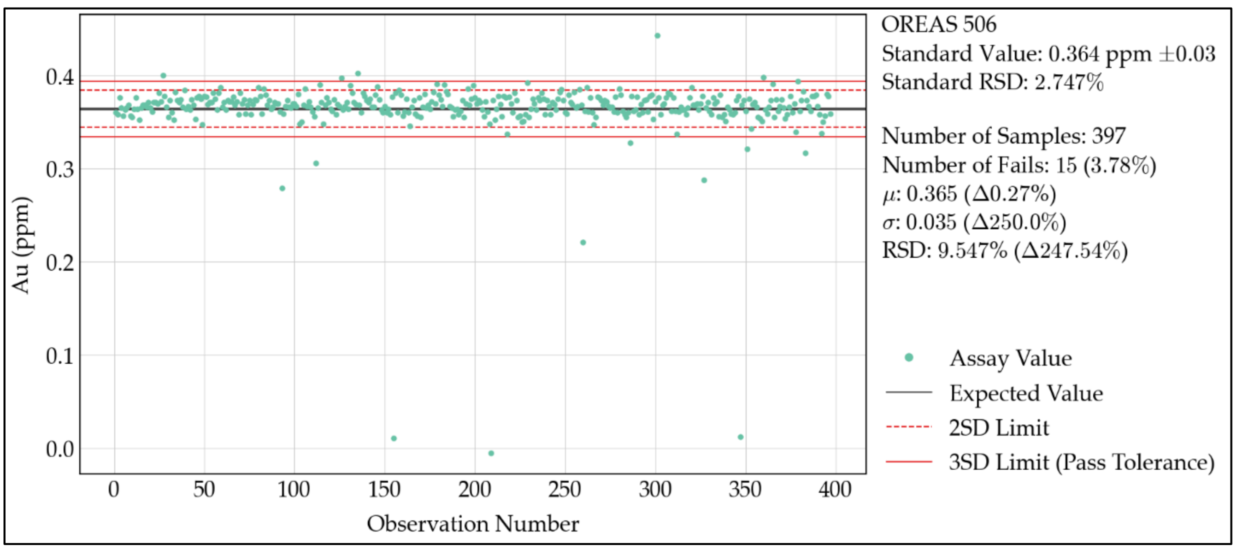
Source: APEX, 2023

Figure 11-34: Control chart of OREAS 263 CRM samples assayed for the 2022 RC and core drilling programs



Source: APEX, 2023

Figure 11-35: Control chart of OREAS 277 CRM samples assayed for the 2022 RC and core drilling programs



Source: APEX, 2023

Figure 11-36: Control chart of OREAS 506 CRM samples assayed for the 2022 RC and core drilling programs

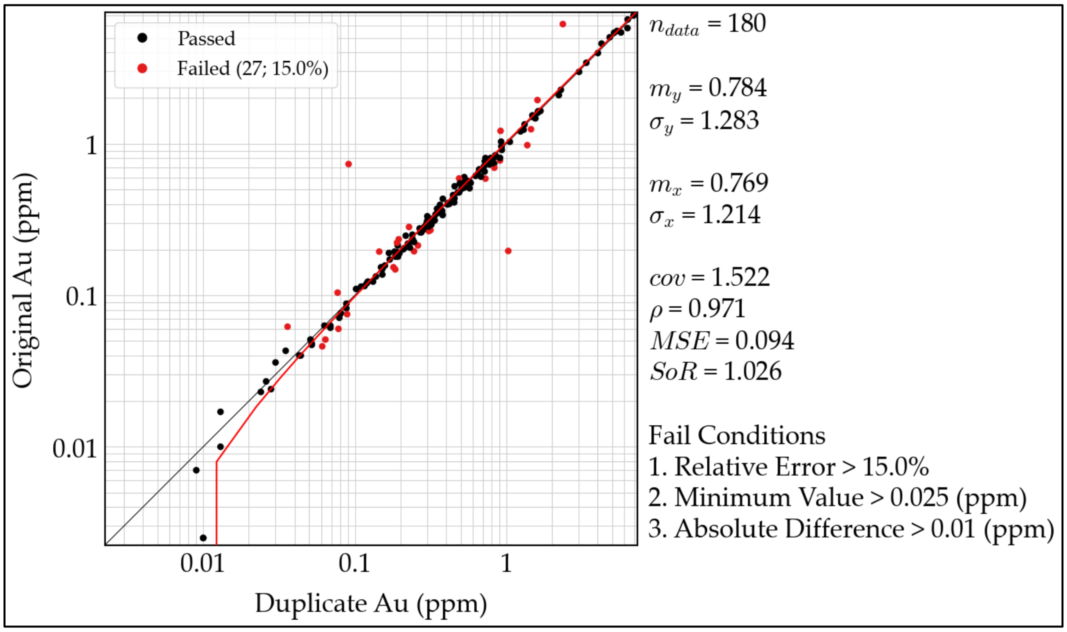
There are a number of marginal failures shown of Figure 11-33 to Figure 11-36 that are of little concern. There are a few fairly significant failures that potentially represent sample mix-ups. These significant failures were in batches with no contained mineralized intervals and therefore were not followed up with any re-assays or further investigation. The results to date are considered acceptable by the author.

11.3.6 Umpire Checks

To ensure accuracy from ALS, umpire check pulp samples were selected from the 2021 and 2022 drilling assay campaigns and sent to Bureau Veritas (BV) (an accredited assay laboratory) to be re-assayed and compared to the original ALS assay results. Both ALS and BV are independent of the author and the Issuer.

Umpire samples were preferentially selected from significant mineralization intersections that illustrate both significant grade and thickness. The selected intervals included shoulders before and after the mineralization intersection into waste to allow the mineralization boundary to be tested. Approximately 10% of the total number of samples utilized in the 2022 Mineral Resource Update were selected and sent to BV for fire assay. CRM's were inserted every 20 samples with the umpire check pulps, but no coarse blanks were inserted into the sample stream. No prep work was completed at BV as samples from ALS met their pulverization standards. Best practices recommend ≤15% failure rate across all samples sent for umpire checks (Figure 11-37). Pan umpire samples resulted in a failure rate of 15% for the 2021 and 2022 drilling programs. All CRMs passed within 3SD's of their certified Au values.

While the results are considered acceptable, since the failure rate is at the best practices threshold, further investigation was conducted to attempt to determine the cause of failures. A statistical and temporal review of the samples were performed, with no significant patterns discernible. The failures seem to be distributed such that there is no indication of bias. Further investigation maybe warranted including checking the homogenization and pulverization (crush size) of the pulps at ALS. Further examination including but not limited to, sieve analysis of the pulverized material prior to fire assay to understand the particle size distribution of the pulp samples should be considered. However, the author considers the results acceptable for their intended use in this technical report.



Source: APEX, 2023

Figure 11-37: Scatter plot comparison of umpire samples, ALS assays (y-axis) against the BV assays (x-axis) for the 2021 and 2022 drill programs

11.3.7 Adequacy of Sample Collection, Preparation, Security and Analytical Procedures

The 2018 to 2022 sample collection, sample preparation, security and analytical procedures used at the Pan Project are appropriate for the type of mineralization that is being evaluated and the stage of the Project. The QA/QC measures including the insertion rates and performance of blanks, standards, and duplicates for the 2018-2022 drill programs indicate the observed failure rates are within expected ranges and no significant assay biases were apparent. Based upon the evaluation of the drilling, sampling and QA/QC programs completed by Calibre, it is Mr. Dufresne's opinion that the Pan Project's drill and assay data are appropriate for use in the resource modeling and estimation work discussed in Section 14.

12 Data Verification

12.1 Geology and Resources

There have been numerous attempts to verify and validate historical drilling on the Pan Project. Of these, the most extensive data verification program was completed by Gustavson Associates on behalf of Midway in 2012 (Crowl et al., 2012a). The most recent data verification was completed by SRK Consulting (US) Inc. on behalf of the issuer Calibre (SRK 2017 and SRK 2019). For more details regarding the historical data verification see the above reports. This section will focus on the data verification conducted by APEX personnel and the Co-author and QP Mr. Dufresne on behalf of Calibre. APEX personnel and Mr. Dufresne conducted their own independent verification of the drillhole database in 2019 – 2020 and again in 2022 and are not relying on past validation efforts. The drillhole database was examined and checked in detail, and was found to have only minor typographical errors, which were corrected. The drillhole database is deemed to be in good condition and suitable for mineral resource estimation.

Mr. Dufresne visited the Pan Mine most recently on January 28th and 29th, 2022 and conducted site visits to the various pits and reviewed the geology across the project.

12.2 Database Data Verification Process

APEX personnel at the request of Calibre compiled all digital drilling data into a Geosparks Analytics database. This was a combination of historical data compilations from SRK, as well as original Calibre assay certificate data and geological logs from the 2018 to 2022 modern drilling. The compilation included collar coordinates, downhole survey information, geological interval data, and assay information. All data were compiled into the Geosparks database. A total of 786 drill holes and 261,522 blast holes were compiled into the database. No data verification was conducted on the blast hole data. The blast hole data were not used in resource estimation but were used to assist in guiding the domain shapes and trends.

Once compiled, a brief and concise check program was completed comparing between the original drill logs, assay certificates, and collar coordinates, and the compiled database. The Geosparks database comes with verification tools and these were also employed to assist in the data verification. Original assay certificates and geological logs were utilized to check the Geosparks database for various generations of drilling. APEX personnel and Co-author Mr. Dufresne verified that the original data (including the pre-2018 drilling data) were adequately digitized and properly imported into the Geosparks database. Approximately 10% of the historical (pre-2018) drillhole data, including collars, downhole surveys (if present), geology and assays were checked against hardcopy paper logs and certificates in order to verify the historical data in Geosparks database. Minor typos and columns mismatches were found and rectified, but overall, the database is considered to be accurate and acceptable for resource estimation and mining given the current data at hand.

All the Calibre drilling data for 2018-2022 was compiled by APEX personnel from original data provided by Calibre into the Geosparks database and was reviewed by the Co-author and QP. The 2018 – 2022 drilling data contained adequate QA/QC data as summarized in Section 11. The geological logs were compared to the original paper copies for digitizing errors, and no errors were found. At the time of the

Geosparks database compilation, the 2022 drill program was underway and near completion. The 2022 drill hole data were validated and subsequently compiled into the Geosparks database. Mr. Dufresne considers the Pan drillhole database, including the historical pre 2018 data and the 2018 to 2022 data, well validated and suitable for the preparation of the MRE and Minerals Reserves as presented herein.

12.3 Current Data Verification

On January 28th and 29th, 2022 Mr. Dufresne, author and QP visited the Property to validate the historical and modern drilling. During his visit, numerous historical and Calibre drill collars were located and recorded using a hand-help GPS. Although most historical drill sites were unmarked in the field, collars were identifiable by remnant pad disturbance and drill cuttings. The Property visit found collar locations to be consistent with the drillhole database. Mr. Dufresne also verified drill core and RC chips from modern drill programs. The recovery and sample quality, as well as the geology was compared against the recorded information in the geology logs. Minor typos were noted, however no major issues were identified.

12.4 Metallurgy

The QP for metallurgy has been involved with and overseen most testwork on site and verifies that the data supporting the metallurgical assumptions for this report is valid.

12.5 Environmental

The QP has reviewed and accepted the following documents used to prepare Section 20, Environmental Studies, Permitting and Social or Community Impact:

BLM. 2013. Pan Mine Final Environmental Impact Statement Volume I and II, November 2013.

Haley Aldrich, 2020. Standard Reclamation Cost Estimator (SRCE), August 2020. The data was verified by comparing the authorized disturbances with the authorized reclamation permit. The 2020 cost data utilized in the SRCE was that authorized by the Nevada Division of Environmental Protection and U.S. Bureau of Land Management.

Haley Aldrich. December 23, 2020, Pan Mine Life of Mine Asset Retirement Obligation Estimate 2020. The disturbance acres and costs used to develop the costs were verified in coordination with Haley Aldrich.

12.6 Mine Economics

Economic models and costing were developed by QP using first principals and through careful review of actual costs from the previous year of operating activities.

12.7 Rock Mechanics

The QP reviewed and analyzed the rock mass and visible structures and formations during their site visit. The data observed in the field was consistent with that reported in previous rock mechanics studies.

13 Mineral Processing and Metallurgical Testing

Metallurgical testing programs have been performed for the Pan project since 2010, completed by Resource Development Inc. (RDi), Phillips Enterprises LLC, Kappes Cassidy and Associates (KCA), McClelland Laboratories, Inc. and Forte Analytical. The project has changed ownership several times and undergone metallurgical testwork programs at each stage. GRP Minerals Corp. acquired the Pan project from Midway Gold Corp in May of 2017 and was in operation for three years. After that, the company name was changed to Fiore Gold Corp. Calibre Mining received ownership in early 2022.

Two NI 43-101 reports have been issued on the property (SRK, 2017 and SRK, 2021) which include details of testwork completed up to 2020. This section will summarize historical testwork but discuss in more detail work recently undertaken by Calibre. The reader is encouraged to review the previous technical reports for more information on historical testwork.

It should be noted Pan material includes two quite different ore types: harder, low-clay siliceous zones and softer, clay-rich argillic zones. In 2014, the heap leach pad failed due to poor percolation from a high proportion of clay-rich material. Since then, the Pan property has operated with a target blend of 60:40 “hard” to “soft” material and not experienced any issues with pad stability or solution pooling.

Historically, samples for metallurgical testwork were selected using domain definitions that changed over time. Initially, they were selected as being silicified or argillized material and later changed to North vs. South pit areas (North considered hard and South considered soft). Included in the North category are the Banshee, Red Hill and Campbell zones. Included in the South category is Dynamite, with Black Stallion in the middle. Recently, Calibre has returned to logging blasthole cuttings to better define the lithology and alteration as hard or soft within the North and South mining areas.

A consequence of these changing domains is sample testwork results cannot be related to current blending practices or the target 60:40 hard to soft blend. While Pan is achieving reasonable gold extractions from the pad under well controlled conditions, it is the QP’s opinion that additional metallurgical testwork should be undertaken with the current metallurgical domains to better predict future ore performance.

Historical testwork by previous owners has demonstrated an increase in gold recovery through multi-stage crushing (to a 1½” passing size) compared with run-of-mine (ROM) material as well as from agglomeration of crusher product prior to pad placement. Despite these results, GRP made the decision in 2019 to only primary crush to 6” passing as well as not agglomerate. Since 2019, Pan has used cement to control pad pH levels, with a change to lime in 2021. Pan operates under constrained solution rates at between 0.001 gpm/ft^2 to 0.0026 gpm/ft^2 over the 90-day cycle period, with a solution to ore ratio of 1:1 for the first cycle.

13.1 Midway Gold Testwork (to 2017)

Six trench samples were collected from open faces in the pits for this program, with five from the South and one from the North. Each represented major lithologies of argillized shale, limestone and breccia as well as silicide breccia limestone or breccia shale. The testwork program was conducted by Resource Development Inc. (RDi, 2017a, RDi, 2017b).

For the samples tested, RDi reported -¾" crushed leach tests with 52% gold extraction for North material and 82% gold extraction for South material. RDi projected gold extractions for full-scale, commercial operation to be 80% for South material (ROM only) and 65% for North ROM material and 80% for North crushed to -1½". Carbon loading tests showed low likelihood of any issues in the Adsorption Desorption Recovery (ADR) plant using carbon columns.

At that time, most of the column testing had been done on -1½" crushed material, with RDi completing 10 tests at -1½", 11 tests at -1" and 14 tests at -½". A combination of Phillips Enterprises and RDi testing had been done on -2" (4 tests), -4" (2 tests) and 6" (2 tests). That is, limited testing had been done at coarser than 1½" but the effect of crush size on gold extraction was not expected to be significant by the metallurgical QP involved.

13.2 GRP Minerals Testwork (to 2018)

In August 2018, a detailed test program was completed by RDi on a 900 kg bulk sample of crushed material. The source, lithology, and representativeness of this sample was not disclosed. The sample was subjected to mineralogy, detailed head assays and particle size analysis and then used to conduct four bottle roll tests and eight column leach tests. The purpose of the study was to determine agglomeration requirements.

Bottle roll tests results averaged 56% gold extraction for a 10 mesh (2 mm) crush size and 77% for a 65 mesh (212 µm) grind size suggesting a strong correlation to recovery and particle size. Two static leach tests were also conducted on a split of the column leach test material. The static tests produced extractions between 63% and 68% with an average of 66%.

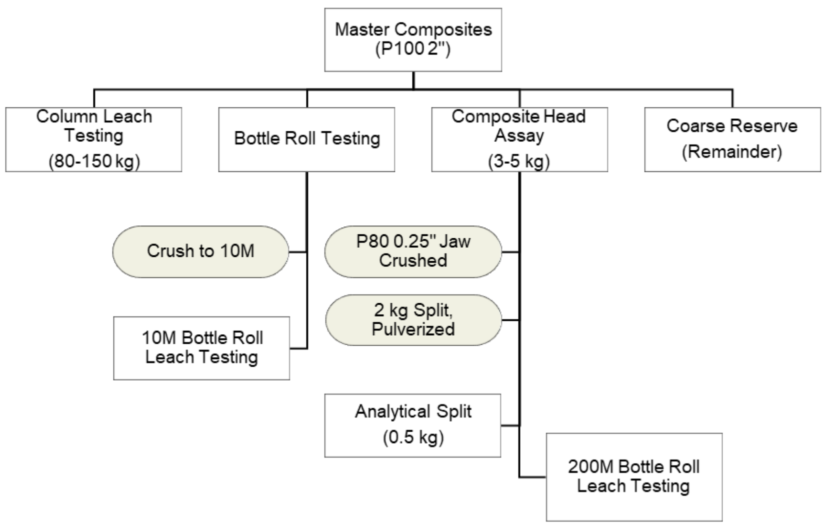
Eight column leach tests were conducted with different lime and cement dosages. The extractions were not impacted by lime or cement dosages and ranged between 59% and 64% based on residue and solution assays. However, cement agglomerated columns had much lower densities, lower compactions and higher permeabilities. Extractions based on head and residue size-by-size assays were between 71% and 74%. It was noted the gold grade of the -200 mesh (75 µm) fraction was twice the gold content of all coarser fractions and yielded over 90% of the gold. Extractions were significantly lower in the coarser fractions.

An onsite, test heap program was begun in December 2017 to evaluate differences in gold extraction between crushed and ROM material. The test was conducted on a 30,000 ton sample (50:50 North and South material). Two test heaps were constructed: a 13,002 ton ROM heap and a 9,158 ton crushed heap. Head grades were determined from crusher samples, ore control short-term model and calculated from trench samples of the leached heap and solution assays. From this range of samples, gold extractions were calculated between 51% and 67% for the ROM heap and between 64% and 74% for the crushed material heap.

13.3 Recent Calibre Mining Testwork

In 2022, Forte Analytical completed a detailed test program on 3,414 ft of whole PQ core (85 mm diameter) from 15 drillholes provided by Calibre Mining (Forte Analytical, 2022). The core intervals were logged and composited into eight samples: four from the South pit (siltstone, limestone, limestone/clay and limestone/calcite), two from Red Hill/Banshee pit (argillic, silicified) and two from the North pit (silicified, non-silicified).

A flowsheet showing the master composite preparation is shown in Figure 13-1.



Source: Forte Analytical, 2022

Figure 13-1: Master Composite Sample Preparation Flowsheet

Fire assay and cyanide-soluble ("shake test") gold assays are shown in Table 13-1 for the eight composite samples. Cyanide-soluble to fire assay ratios (CN/FA) were between 54% and 123% as a proxy indication of ultimate gold extraction. While South "soft" samples showed higher CN/FA values, this was not always the case; the same was true for North "hard" samples.

Table 13-1: Master Composite Gold Assays

	Fire Assay (oz/ton)	CN Soluble (oz/ton)	CN/FA %
South Siltstone	0.0210	0.0169	80%
South Limestone	0.0070	0.0038	54%
South Limestone/Clay	0.0042	0.0051	123%
South Limestone/Calcite	0.0201	0.0156	77%
Banshee Argillic	0.0130	0.0075	57%
Banshee Silicified	0.0078	0.0068	87%
North Silicified	0.0126	0.0092	73%
North Non-Silicified	0.0123	0.0081	66%

Source: Forte Analytical, 2022

LECO furnace carbon and sulfur species are shown in Table 13-2, with Banshee and North samples showing sulfide content while organic carbon levels (by difference) were below detection for all samples.

Table 13-2: Master Composite LECO Carbon & Sulfur

	Total Carbon %	Inorganic Carbon %	Total Sulfur %	Sulfide %
South Siltstone	1.00	1.00	0.15	BD
South Limestone	9.42	9.42	0.03	BD
South Limestone/Clay	7.97	7.97	0.34	0.02
South Limestone/Calcite	7.40	7.40	0.58	0.42
Banshee Argillic	0.07	0.07	0.70	0.48
Banshee Silicified	0.79	0.79	0.79	0.84
North Silicified	0.10	0.10	1.17	1.00
North Non-Silicified	0.06	0.06	1.43	1.10

Source: Forte Analytical, 2022

XRD results for the eight composites (Table 13-3) showed a range of muscovite levels, while kaolinite did not only occur in clay or argillic samples. Calcite level were very high in the limestone samples.

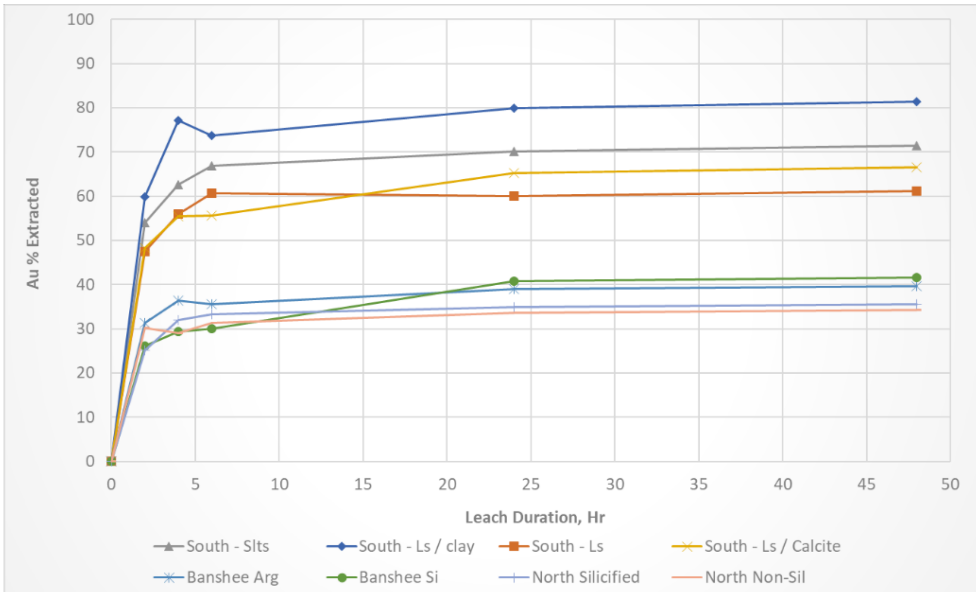
Table 13-3: Master Composite XRD Main Minerals (not 100% total)

	Quartz %	Muscovite %	Kaolinite %	Calcite %	Alunite %	Barite %
South Siltstone	64.3	26.4	3.6	5.7	-	-
South Limestone	14.3	4.5	0.5	80.7	-	-
South Limestone/Clay	26.4	-	2.6	68.6	-	-
South Limestone/Calcite	23.8	9.0	-	61.5	-	4.7
Banshee Argillic	66.9	16.8	2.7	4.8	3.6	5.2
Banshee Silicified	92.5	-	1.8	-	4.8	-
North Silicified	82.9	7.9	1.3	-	1.2	6.7
North Non-Silicified	76.8	12.4	1.3	-	2.0	7.5

Source: Forte Analytical, 2022

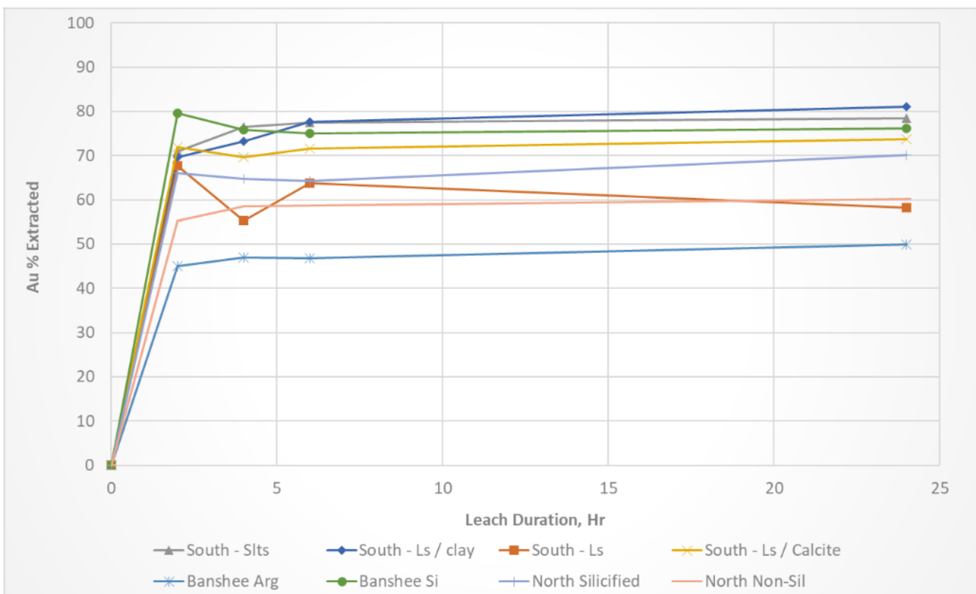
Bottle roll leach testing was completed on samples crushed to 10 mesh (2 mm) and ground to 200 mesh (75 µm). All tests were completed for 48 hours at 40% by weight solids with a leach solution containing 1g/L NaCN and a pH of 10.5 to 11. Tests were allowed to run with intermediate solution samples collected at periods specific to the particle size.

Figure 13-2 shows the coarser size gold kinetics over 48 hours while Figure 13-3 shows the ground size gold kinetics. A range of final gold extractions were observed with most of leaching completed after six hours. Only one test (200 mesh ground, South Ls) showed any gold losses from solution after this initial period. Interestingly, the ground bottle roll leach test final extractions were lower than that predicted by the CN/FA values in Figure 13-1.



Source: Forte Analytical, 2022

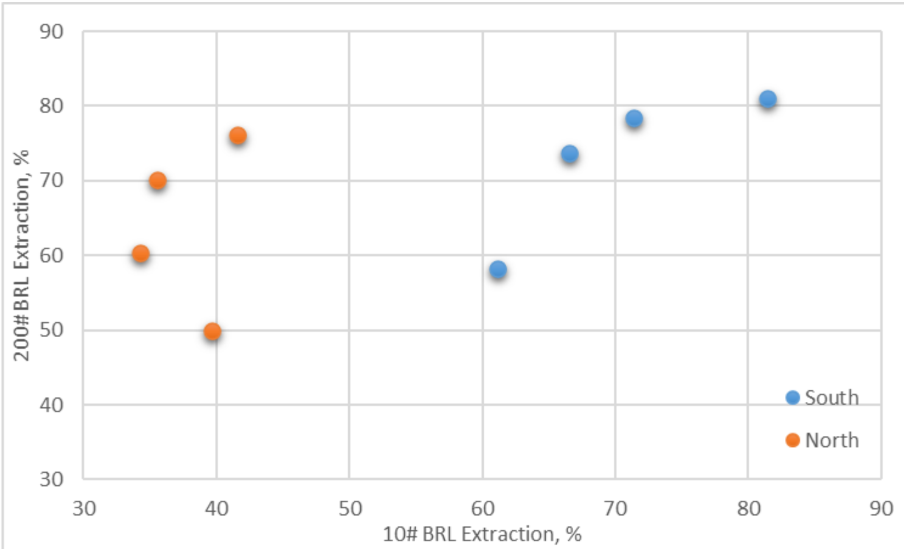
Figure 13-2: Master Composite 10 mesh (2mm) Bottle Roll Gold Kinetics



Source: Forte Analytical, 2022

Figure 13-3: Master Composite 200 mesh (75µm) Bottle Roll Gold Kinetics

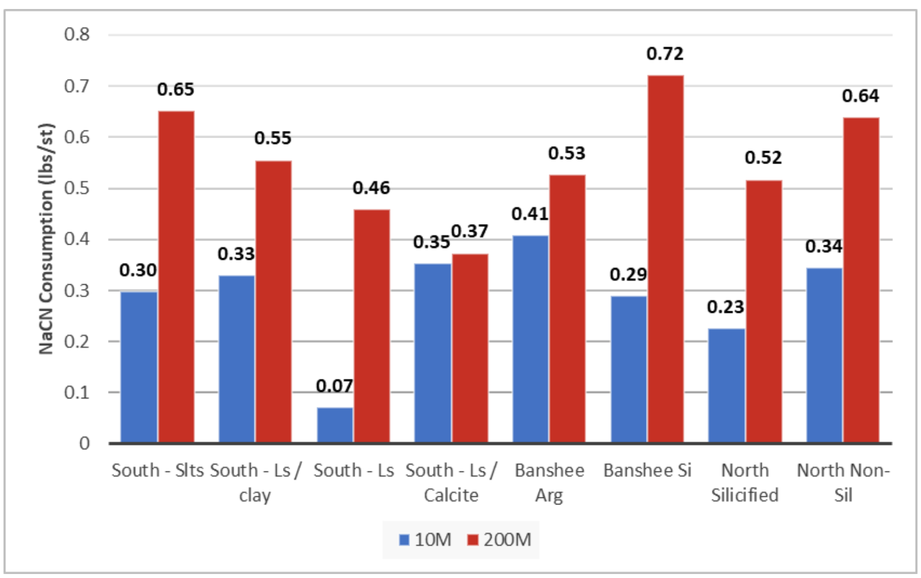
As an indication of size dependence, final gold extractions for the ground vs. crushed conditions are plotted in Figure 13-4. South samples are plotted with a different color to North/Banshee samples. As was observed in historical testing, South material showed minimal effect of particle size on gold extraction while North material extractions increased significantly between 10 mesh and 200 mesh feed sizes.



Source: SRK, 2023

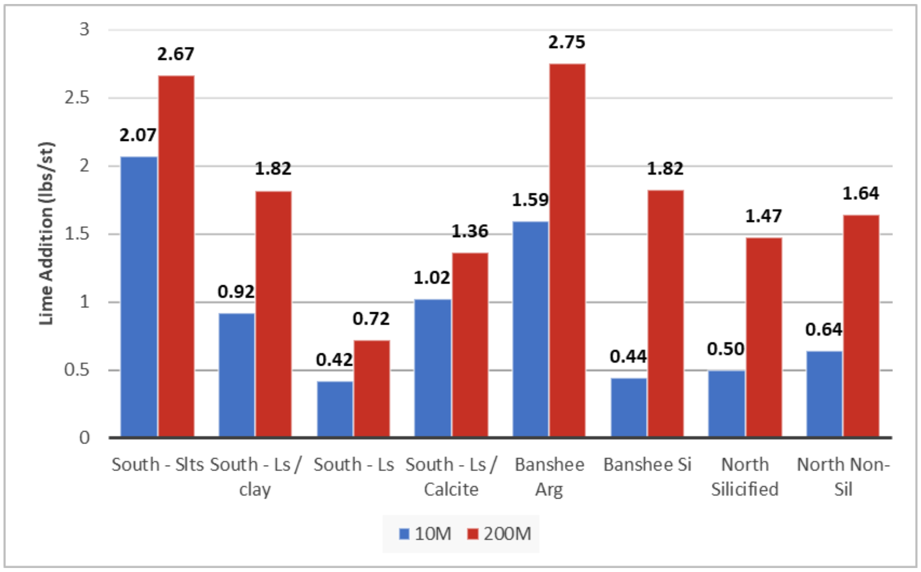
Figure 13-4: Master Composite 200 mesh vs. 10 mesh Bottle Roll Leach Extractions

Reagent consumptions were considered moderate by Forte Analytical with sodium cyanide (in lb/ton) increasingly slightly for the ground tests (see **Error! Reference source not found.**) and lime consumptions (in lb/ton) increasing significantly for the North/Banshee samples (see Figure 13-6). It is noted that Calibre have recently changed to lime instead of cement at a 3.5 lb/ton equivalent addition.



Source: Forte Analytical, 2022

Figure 13-5: Master Composite Bottle Roll NaCN Consumption



Source: Forte Analytical, 2022

Figure 13-6: Master Composite Bottle Roll Lime Consumption

Column leach testing was completed on all composites at 80% passing 1½". Ten inch diameter columns were loaded to a height of 10 ft with 1,000 ppm NaCN solution applied at a pH of 10 to 11, using quicklime (supplied by Calibre with a CaO activity of 64%). Solution application rates were targeted to between 0.004 and 0.005 gpm/ft^2. Leach durations of the columns were stopped at 46 days at the request of Calibre, following their standard testing protocol.

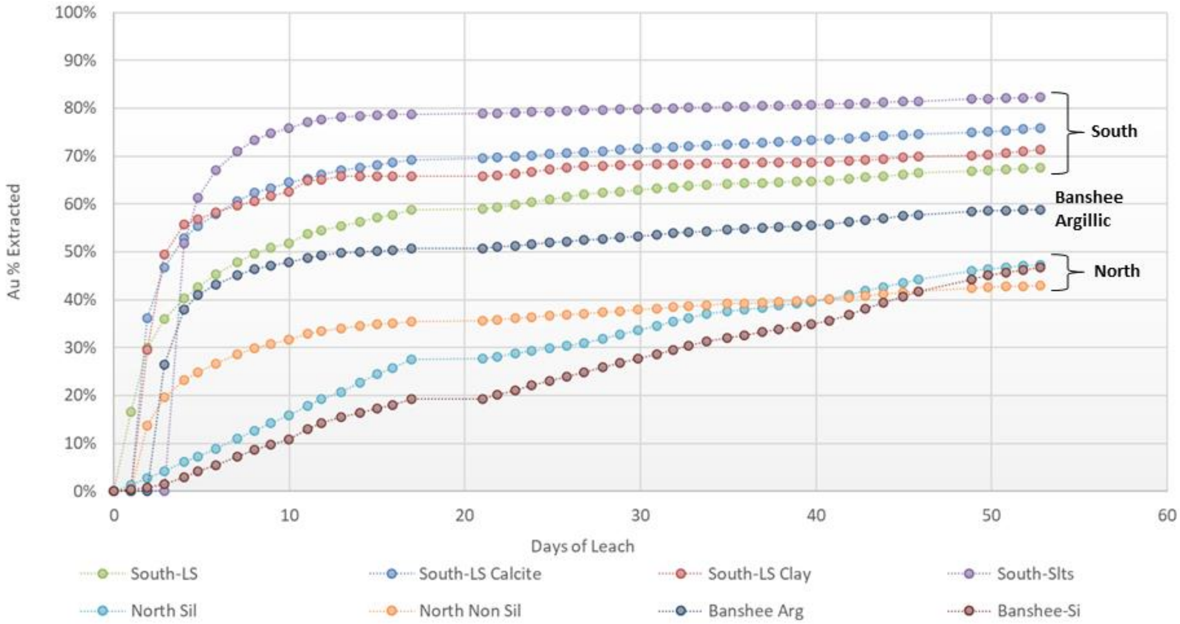
Final extractions ranged from 43% to 82%; although, extractions for most columns should be considered incomplete and the kinetic profiles were still increasing at the time of column take-down. The average for South pit materials was 74%, with Banshee and North pit materials at 49% (see Figure 13-7).

Slump tests were performed on all column residues (see Table 13-4).

Table 13-4: Master Composite Column Residue Slump

Composite Type	% -200 mesh	Initial Height (in)	Final Height (in)	Slump %
South Siltstone	2.9	119.0	110.6	6.8
South Limestone	1.8	116.9	112.6	3.8
South Limestone/Clay	28.0	117.7	111.8	5.1
South Limestone/Calcite	12.7	117.3	111.4	5.2
Banshee Argillic	26.2	116.9	111.0	5.1
Banshee Silicified	0.4	58.3	57.9	0.9
North Silicified	1.2	118.5	117.0	1.3
North Non-Silicified	2.6	117.7	116.9	0.9

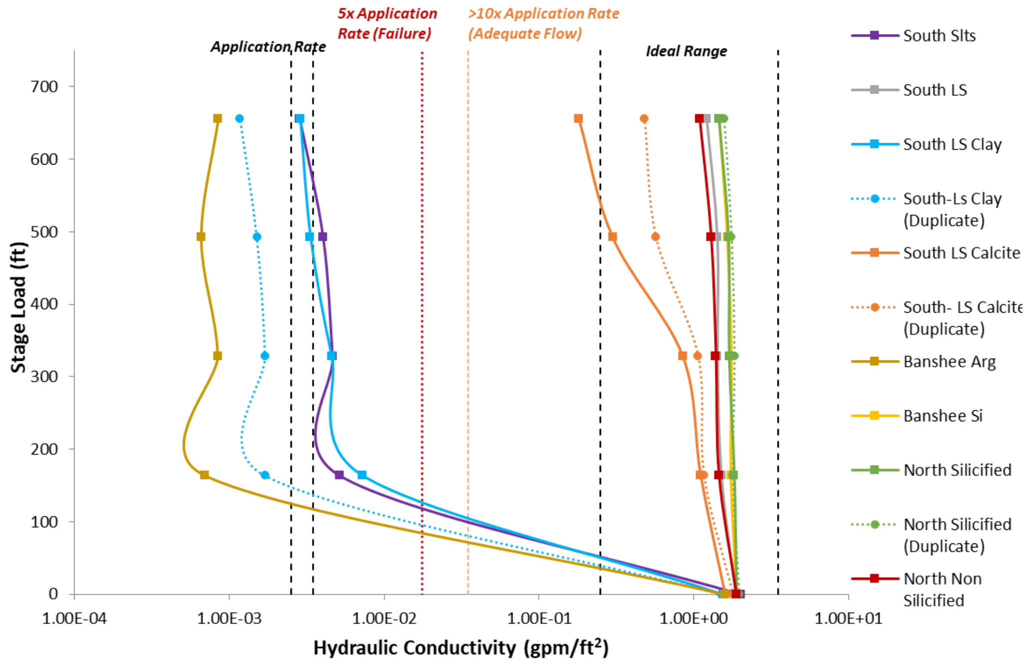
Source: Forte Analytical, 2022



Source: Forte Analytical, 2022

Figure 13-7: Master Composite Column Leach Gold Kinetics

South samples reported a consistent 5% or greater slump at this loading height while silicified North/ Banshee samples showed minimal slumping. Permeability testing was also performed on the column residues (see Figure 13-8).



Source: Forte Analytical, 2022

Figure 13-8: Master Composite Column Residue Permeability (equivalent load of 164 to 656ft)

Forte measured the hydraulic conductivity (in gpm/ft^2) for packed cells at applied loads equivalent to between 50 m and 200 m (164 to 656 ft). A conductivity of 0.002 gpm/ft^2 or 5x solution application rate, was considered the lower limit for a failed test. At 50 m loading, most of the South samples failed (along with the Banshee argillic) while most of the North samples passed up to 200 m loading (along with South limestone). The results shown in Figure 13-8 suggest loading above 50 m did not further impact hydraulic conductivity.

13.4 QP Comments

Metallurgical testwork results on Pan samples have demonstrated a wide range of column leach extractions as well as size sensitivity. This has been broadly related to “hard” vs. “soft” zones and/or clay content but changes in ore domaining have not allowed historical testwork to be applied to current operating practices. (For example, a target blend of 60:40 hard to soft.)

It is the QP’s opinion that additional testwork be conducted to relate CN/FA values to final column leach extractions. Recent results have shown CN/FA values not to be reliable in estimating column leach extractions and will need other factors such as crushed size distribution and composition (e.g., XRD results) also included. Finally, rapid percolation or slump testing should be done to provide an indication of heap leach geotechnical conditions which are not a factor in bottle roll leach (or cyanide “shake”) tests.

As there is uncertainty on the amount of “hard” material in the future, better geometallurgical characterization of the Pan deposits is needed to understand how the current blend can be modified when constructing future leach pads. That is, a lower ratio of hard to soft needs to be demonstrated as the new target blend based on both column leach and permeability test results. In addition, a greater proportion of "hard" material needs to be characterized in both North and South Pan pit areas.

14 Mineral Resource Estimate

The Mineral Resource Estimate (MRE) herein is based upon historical drilling and drilling conducted from 2018 to 2022 by Calibre and supersedes the prior resource estimates for the Pan Mine. The resource estimate provided by Smith et al. (SRK 2021) is now superseded by the MRE detailed in this report due to mining depletion and new drilling. Other older resource estimates are all considered historical in nature.

This section details an updated MRE completed for the Pan Mine by APEX Geoscience Ltd. (APEX) of Edmonton, Alberta, Canada. Mr. Warren Black, M.Sc., P.Geo. and Mr. Tyler Acorn, M.Sc. contributed to the MRE under the direct supervision of Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo, the QP who takes responsibility for Section 14. Mr. Dufresne has visited the property on a number of occasions, and most recently visited the property in January 2022. Mr. Black, M.Sc., P.Geo. visited the property in October and November 2019, and more recently in November 2022.

Definitions used in this section are consistent with those adopted by the Canadian Institute of Mining, Metallurgy and Petroleum ("CIM") Council in "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019 and "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10th, 2014, and prescribed by the CSA NI 43-101 and Form 43-101F1, Standards of Disclosure for Mineral Projects. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

14.1 Introduction

Statistical analysis, three-dimensional (3D) modelling and resource estimation was completed by Mr. Warren Black, M.Sc., P.Geo. and Mr. Tyler Acorn, M.Sc., of APEX (under the direct supervision of Mr. Michael Dufresne, M.Sc., P.Geol., P.Geo.). Mr. Dufresne takes full responsibility for Section 14 and the Pan MRE. The workflow implemented for the calculation of the Pan Gold Mine MRE was completed using the commercial mine planning software MICROMINE (v 22.0) and Resource Modelling Solutions Platform (RMSP; v.1.9.2). Supplementary data analysis was completed using the Anaconda Python distribution and a custom Python package developed by Mr. Black and Mr. Mr. Tyler Acorn, both of APEX.

Calibre provided APEX with the Pan Mine drill hole database that consists of analytical, geological, density, collar survey and downhole survey information. In addition, APEX personnel updated the geological model originally produced by Pennington et al. (SRK 2017), which was subsequently modified and refined by Deiss et al. (SRK 2019) and by APEX personnel in Smith et al. (SRK 2021).

APEX personnel spot checked the historical data reviewed and validated by Pennington et al. (SRK 2017) and later updated by Deiss et al. (2019), which included drill hole data collected by Calibre (formerly Fiore) in 2018 and found no significant issues. Drilling completed in 2018 by Calibre was reviewed and validated by APEX personnel. Drilling by Calibre in 2019 to 2022 was validated and compiled on-site by APEX personnel. In the opinion of Mr. Dufresne, the current Pan drill hole database is deemed to be in good condition and suitable to use in ongoing resource estimation studies and for the purposes used herein.

The MRE was calculated using a block model size of 20 ft (X) by 20 ft (Y) by 20 ft (Z). APEX personnel estimated the gold grade for each block using Ordinary Kriging (OK) with locally varying anisotropy (LVA) to ensure grade continuity in various directions is reproduced in the block model. The block model was partially diluted by estimating a waste grade for the portions of the outer blocks overlapping the edge of the estimation domain boundaries using composites within a transition zone along the outer edge of the mineralized estimation domains. The waste grade was then proportionately combined with the estimated grade for the portion of the block within the mineralized domain to obtain a final grade for each overlapping block. This partially diluted block model was utilized for resource pit optimization studies and reporting herein. Details regarding the methodology used to calculate the MRE are documented in this section. The Mineral Resources defined in this section are not Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.

Modelling was conducted in the North American Datum (NAD) of 1983 (Zone 11) BLM feet projection. The database consists of 1,786 drill holes containing useable downhole data completed at the Pan Mine between 1978 to 2022. APEX personnel constructed estimation domains using a combination of gold grade and all available geological information that helped constrain different controls on mineralization. The estimation domains were used to subdivide the deposit into volumes of rock and the measured sample intervals within those volumes for geostatistical analysis.

14.2 Drill Hole Data Description

14.2.1 Calibre Drill hole Data

Calibre provided APEX with the historical drill hole database for the Pan Mine that comprised data collected from 1978 to 2022. As described in Sections 10 to 12, the drill holes completed up to and including 2016 were reviewed and validated by Pennington et al. (SRK 2017). APEX personnel spot checked approximately 10% of the historical data and found no issues. Deiss et al. (SRK 2019) and Calibre completed additional validation work in 2018 that was reviewed by Mr. Dufresne and was comprised of:

- Adding six historical holes to the database;
- Adding historical analytical results;
- Rectifying problems with the survey and collar files; and
- Adding the 71 drill holes completed by Calibre in 2018 to the drill hole database.

Data from Calibre's 2019 to 2022 drilling programs were captured and validated on-site by APEX personnel during each drill program. APEX personnel compiled the results with the previously validated and spot-checked historical data. In the opinion of Mr. Dufresne, the current Pan drill hole database is deemed to be in good condition and suitable to use in ongoing resource estimation studies.

The drill hole database used to calculate the MRE is comprised of 1,786 exploration drill holes yielding 128,508 sample intervals completed between 1978 and 2022. Between 1978 and 2016, a total of 1,184 holes totaling 379,641 ft of drilling was completed by various operators. Between 2018 and 2022 Calibre completed 602 holes totaling 280,446 ft.

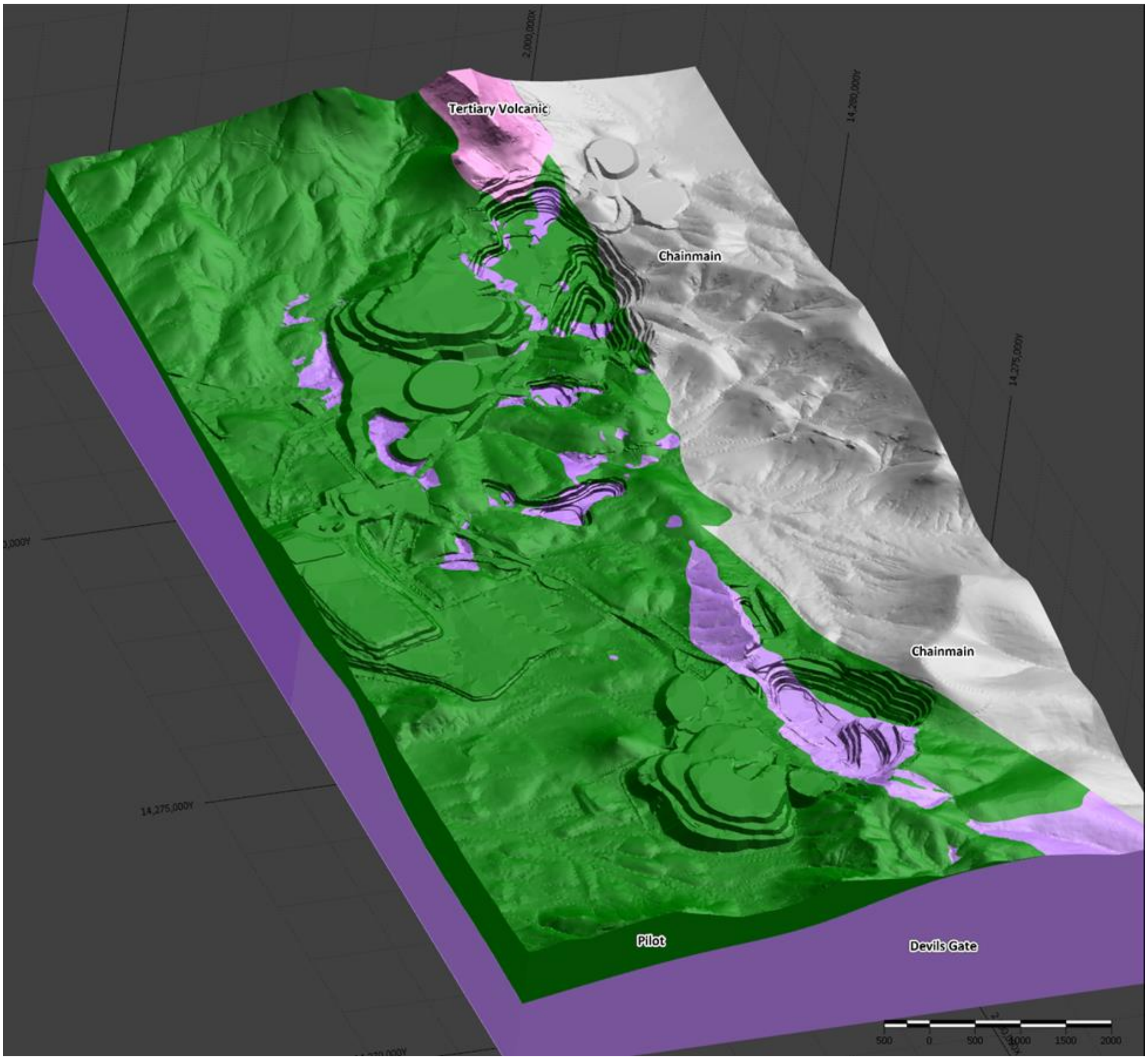
14.2.2 APEX Micromine Drill hole Database

In the Pan database presented to APEX, A total of 128,259 intervals were assayed for gold and returned a value greater than zero. However, a large portion of the assays are at or below the detection limit. A total of 11,480 either have a 0 or negative gold value in the assay database and were treated as samples returning assays below the detection limit. The gold value for these samples was replaced with a nominal waste value of 0.0025 ppm Au for the purposes of the resource estimation. A total of 243 drill hole intervals have explicit documentation that drilling did not return enough material to allow their analysis and are classified as "insufficient recovery" (IR). It is essential to distinguish between these two cases as they are treated differently during resource estimation. Intervals classified as "no sample" (NS) are assigned a nominal waste value of 0.0025 ppm Au, half the value of the lower detection limit of modern fire assay analyses. Intervals classified as "insufficient recovery" (IR) are left blank.

All data was validated using the Micromine validation tools when the data was imported into the software. Any validation errors encountered were data entry errors rectified by consulting original documentation. A detailed discussion on the verification of historical and 2021-2022 drill hole data is provided in Sections 10 to 12 of this report. Mr. Dufresne considers the current Pan drill hole database to be in good condition and suitable for ongoing resource estimation studies.

14.3 Geological Model

APEX updated the geological model using all available data collected by Calibre (2019-2022). No changes were required to the structural component of the Pennington et al. (SRK 2017) model because it was still accurate given the new Calibre data. The purpose of the geological model was to flag recovery and density for the MRE. APEX modelled argillic and silicification alteration, as well as the Tertiary Volcanics, Chainman, Pilot, and Devil's Gate formations (Figure 14-1). APEX utilized implicit modelling from the Micromine software package to construct these models. The formations were modelled using contact implicit modelling. Manual strings were created at the drillhole location of a given contact, and the Micromine fault modelling module was used to create surfaces for these contacts. These surfaces were merged to create 3D solids of each formation. For the alterations, the Micromine Intrusion modeler was used to create 3D solids from input interval data without creating manual strings. The argillic and silicification intervals from the geological logs were used to create the alteration models.



Source: APEX 2022

Figure 14-1: Oblique View of 2022 Formation Model for Pan Mine

14.4 Estimation Domain Interpretation

14.4.1 Geological Interpretation of Mineralization Domains

There are two dominant styles of gold mineralization at the Pan Mine. Both follow either the Devils Gate Limestone-Pilot Shale contact or the steeply dipping faults that trend north-south and are associated with or are parallel to the Branham Fault (Table 14-1).

Table 14-1: Geological Characteristics of Controls on Mineralization that occur within each Estimation Domain

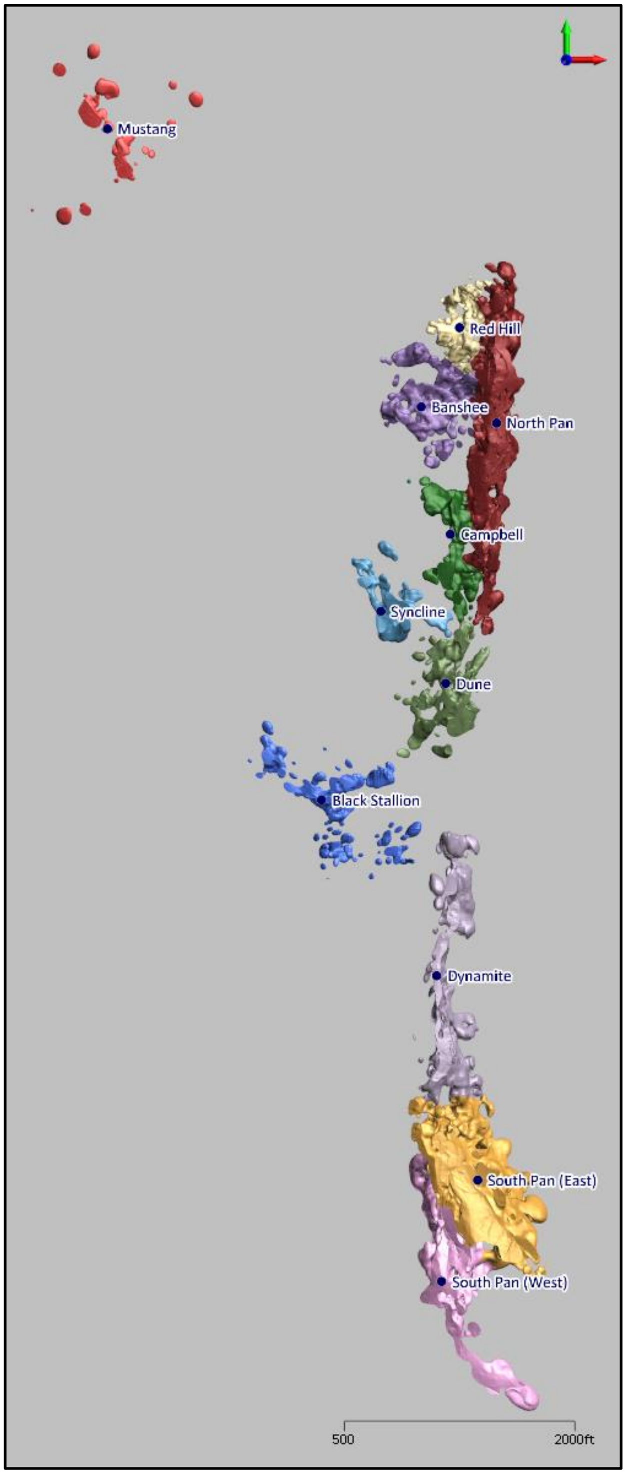
Geological Characteristics of Mineralization and Their Controls	Estimation Domains Characteristics are Present
Near-vertical pipes and bodies of silicified solution breccia localized at the Pilot Shale-Devils Gate Limestone contact adjacent to the Branham Fault	Dynamite, North Pan, South Pan (West)
Stratiform-like breccia bodies and zones that run parallel or sub-parallel to the folded Pilot Shale–Devils Gate contact	Banshee, Black Stallion, Campbell, Dune, Dynamite, Mustang, Red Hill, South Pan (East), Syncline

Source: APEX, 2022

A total of 51 3D trend surfaces were modelled and used as input for the implicit modelling process to create the estimation domains. These trend surfaces ensured that the kriging honored the observed geological controls on mineralization. The trend surfaces were created using all available subsurface data, including RC and core drill hole assays, geological logs, and blasthole data. Nine of the trend surfaces represent faults associated with the silicified solution breccia. In contrast, the other 42 represent mineralization trends that run parallel or sub-parallel to the Pilot Shale–Devils Gate contact. The trend surfaces were modelled in a way where if it were a fault-controlled trend surface intersecting a contact-controlled trend surface, the intersection represents the orientation of a mineralized pipe like feature. In combination with all the trend surface's orientation, those intersections are used to inform the LVA described in Section 14.7. Only the contact-controlled trend surfaces are used as input for the implicit modelling applied to create the estimation domains described in Section 14.4.2.

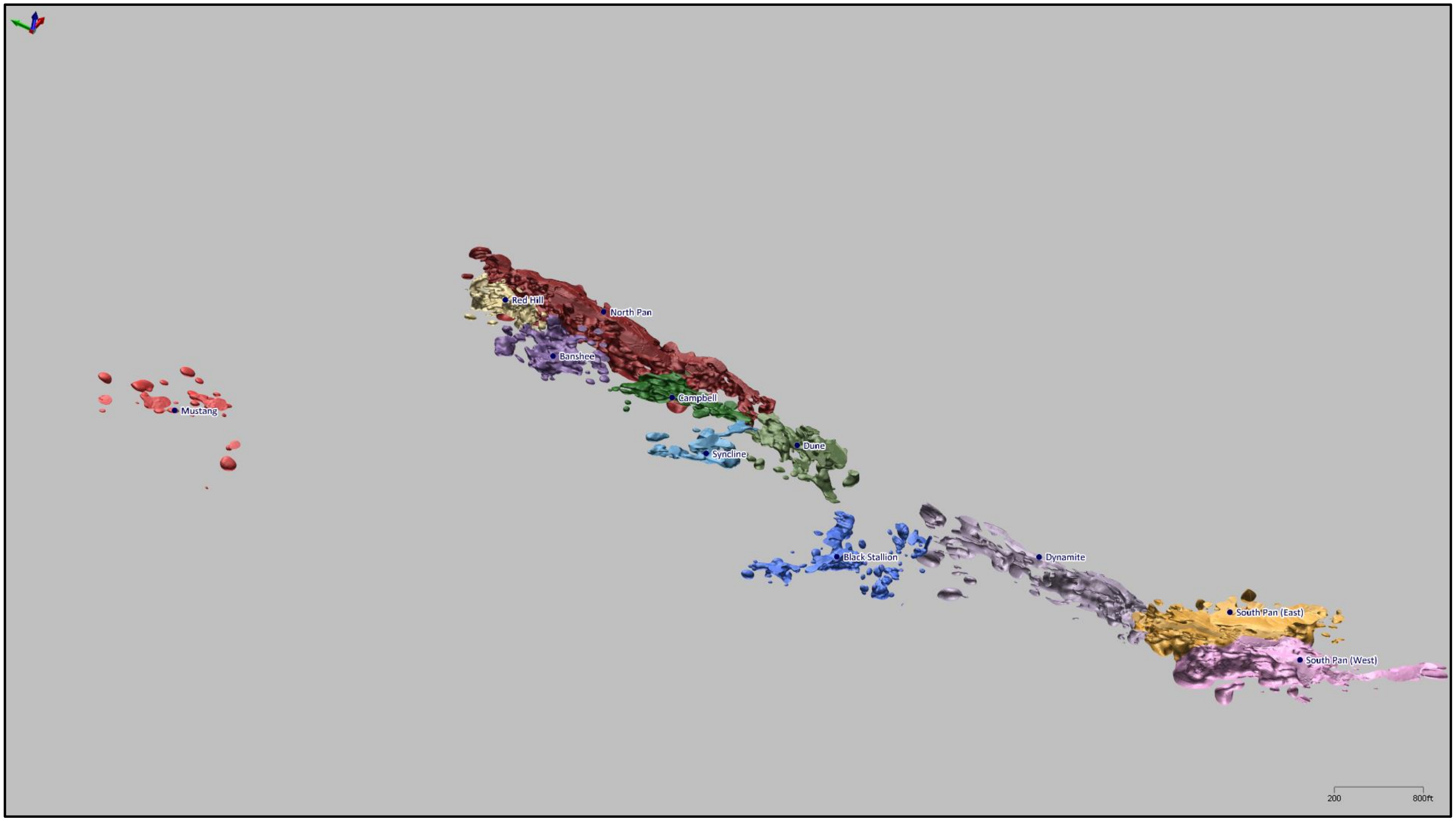
14.4.2 Estimation Domain Interpretation Methodology

An implicit modelling approach was used for constraining the estimation domains to a gold grade shell while still honoring interpretations of local geological controls on mineralization. The raw RC and core drill hole analytical data were composited and classified as either ore or waste. Those composites were then manually flagged as to what estimation domain they belong to, then used as input by implicit modelling to generate 3D estimation domain wireframes. The contact-controlled trend surfaces described in Section 14.4.1 are used as input for the implicit modelling process to ensure the generated estimation domains honor the observed geological controls on mineralization. Each estimation domain was evaluated in 3D and on a section-by-section basis. Control points were inserted to constrain spurious features in the generated wireframes and ensure that the underlying geology is honored. The control points were used in a second pass of the implicit model to construct the final estimation domains. Plan, oblique and an example cross-sectional view are provided in Figure 14-2, Figure 14-3 and Figure 14-4 below.



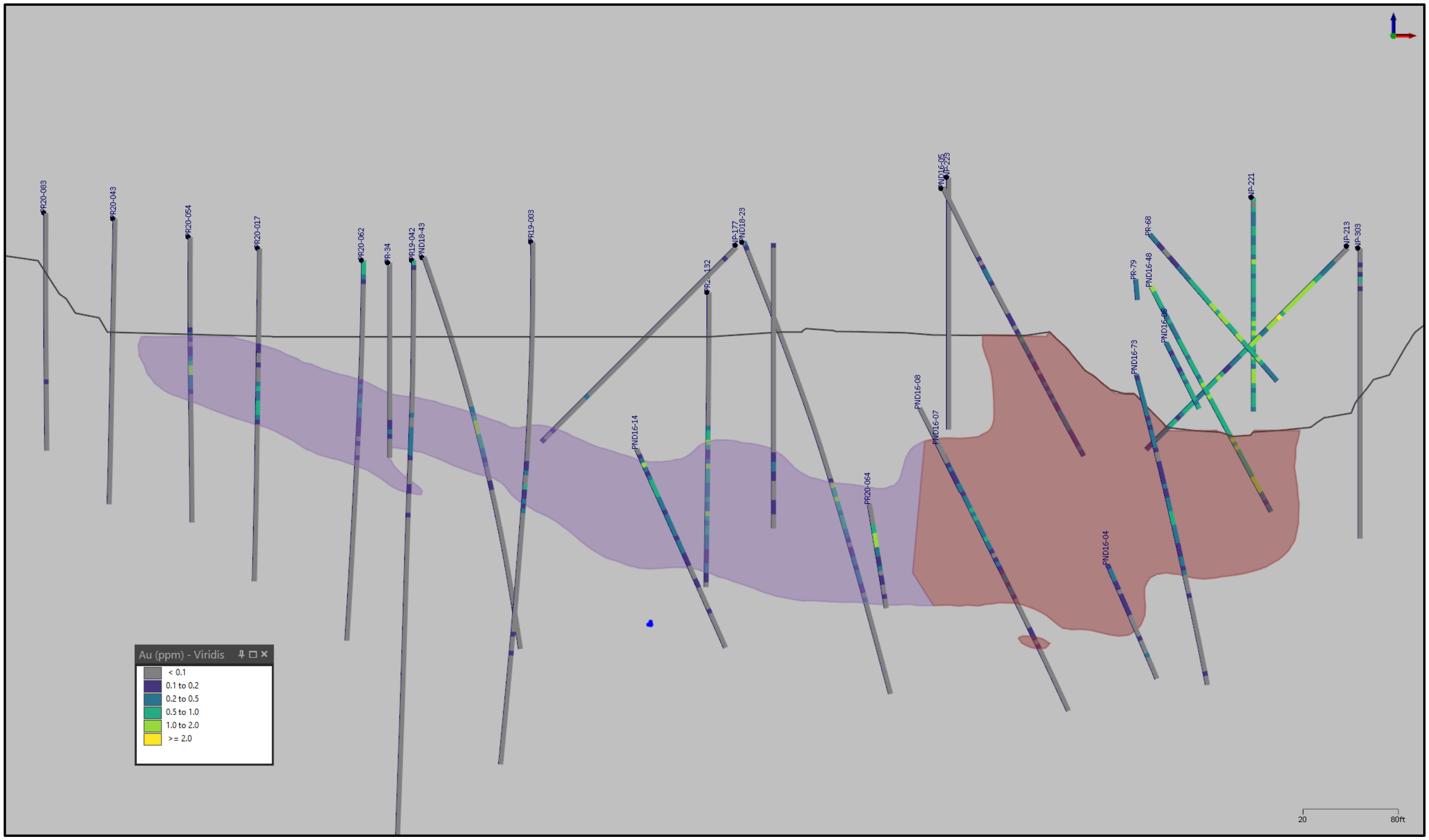
Source: APEX, 2022

Figure 14-2: Plan View of the Estimation Domain Wireframes



Source: APEX, 2022

Figure 14-3: Oblique View of the Domain Wireframes Looking Down the Vector 045/-45



Source: APEX, 2022

Figure 14-4: Cross-section Looking North along the Northing 14,280,385 N (purple – Banshee domain, red – North Pan domain

14.5 Exploratory Data Analysis and Compositing

14.5.1 Bulk Density

From 2020 to 2022, Calibre completed 31 core drill holes in which 1,006 density samples were collected and measured. In total, there are 1,264 density sample measurements for the Pan Project. The density samples were well placed within the deposit and provide a good spatial distribution. APEX personnel investigated the density sample measurements together with alteration, formation, lithology, and gold grade to determine the appropriate density domains and values. Two of the density measurements were outliers and unrepresentative and were therefore rejected in the original statistical analysis. Table 14-2 below lists the density values of each density domain used to assign density to each block in the MRE based on its assigned formation, alteration, and location.

Table 14-2: Tonnage Factors used in the MRE

Lithology - Alteration - Location	Specific Gravity (SG) in g/cm^3	Tonnage Factor (ft^3/ton)
Volcanics	2.19	14.63
Chainman Shale	2.30	13.93
Pilot Shale – Unaltered – Mineralized	2.28	14.05
Pilot Shale – Unaltered - Waste	2.22	14.43
Pilot Shale - Argilic	2.20	14.56
Pilot Shale - Silica	2.45	13.08
Devils Gate Limestone – Unaltered - Mineralized	2.50	12.81
Devils Gate Limestone – Unaltered - Waste	2.55	12.56
Devils Gate Limestone - Argilic	2.50	12.81
Devils Gate Limestone - Silica	2.50	12.81
Mine Material	2.00	16.02

Source: APEX, 2022

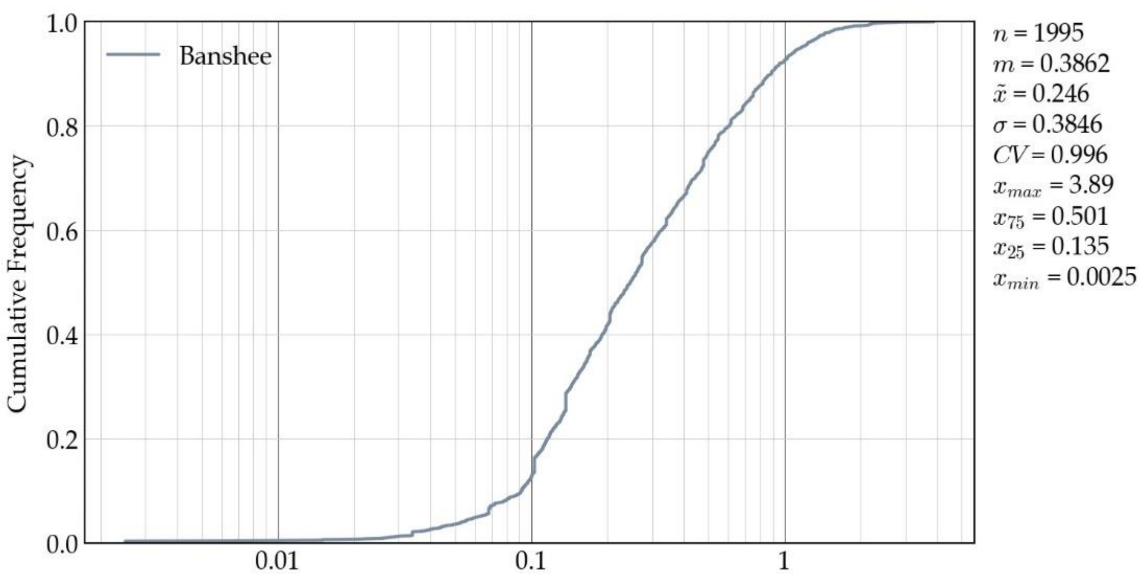
14.5.2 Raw Analytical Data

Cumulative histograms and summary statistics for the raw (un-composited) assays from sample intervals contained within the ten estimation domains are tabulated in Table 14-3. Assays within each domain generally exhibit a single statistical population. Figure 14-5 illustrates an example distribution of raw gold assays within the Banshee estimation domain.

Table 14-3: Summary Statistics of Raw Gold Assays (in ppm) from Sample Intervals Flagged within each of the Ten Estimation Domain

	Global	Banshee	Black Stallion	Campbell	Dune	Dynamite	Mustang	Pan North	Red Hill	South Pan		Syncline
										East	West	
count	37,588	1,995	1,917	1,296	1,354	3,226	360	11,724	1,978	7,914	5,181	643
mean	0.44	0.39	0.52	0.38	0.23	0.35	0.51	0.45	0.64	0.40	0.50	0.49
STD	0.55	0.38	0.70	0.35	0.22	0.40	0.58	0.53	0.81	0.53	0.62	0.67
var	0.31	0.15	0.49	0.12	0.05	0.16	0.34	0.29	0.65	0.28	0.39	0.45
CV	1.26	1.00	1.34	0.91	0.98	1.17	1.15	1.18	1.27	1.32	1.25	1.38
min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25%	0.14	0.14	0.14	0.14	0.11	0.13	0.13	0.18	0.14	0.13	0.14	0.14
50%	0.27	0.25	0.29	0.26	0.16	0.23	0.29	0.32	0.31	0.22	0.27	0.25
75%	0.53	0.50	0.62	0.52	0.26	0.42	0.65	0.55	0.79	0.46	0.62	0.55
max	20.55	3.89	6.51	3.16	1.85	7.88	3.60	20.55	7.58	9.91	8.68	5.79

Source: APEX, 2022



Source: APEX, 2022

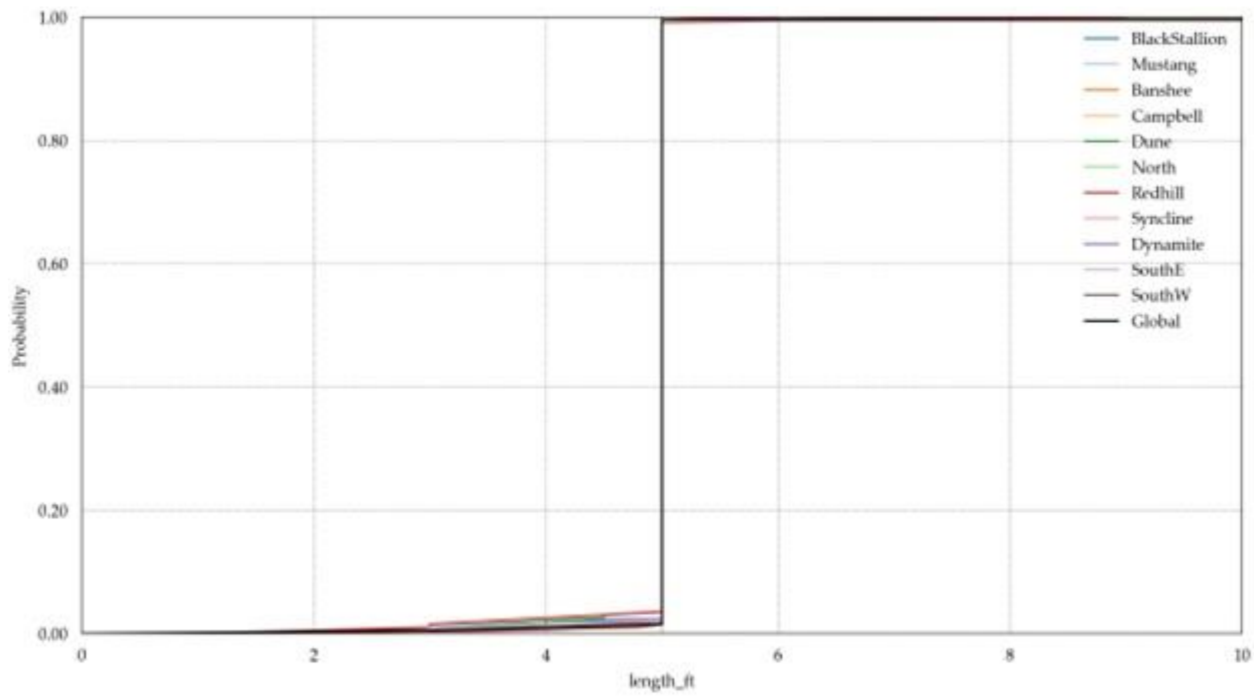
Figure 14-5: Example Cumulative Frequency Plot of Raw Gold Assays (in ppm) from Sample Intervals Flagged within the Banshee Estimation Domain

14.5.3 Compositing Methodology

Downhole sample length analysis shows sample lengths range from 0.5 ft to 20.0 ft, with the dominant sample length being 5 ft. A composite length of 10.0 ft is selected as it provides adequate resolution for mining purposes and is equal to, or larger than all but one drill hole sample (Figure 14-6).

The length-weighted compositing process starts from the drill hole collar and ends at the bottom of the hole. However, the final composite intervals along the drill hole cannot cross contacts between estimation domains that demonstrate a hard boundary. Therefore, composites extending downhole are truncated when one of these contacts are intersected. A new composite begins at these contacts and continues to extend downhole until the maximum composite interval length is reached, or another truncating contact is intersected.

There are only a few instances where two estimation domains are in contact, and when this happens, the contact is treated as a hard boundary. Therefore, the resulting composites are fully contained within the estimation domains or are classified as waste if they lie outside of the estimation domain wireframes.



	Global	BlackStallion	Mustang	Banshee	Campbell	Dune	North	Redhill	Syncline	Dynamite	SouthE	SouthW
count	128,501	1,917	360	1,998	1,296	1,354	11,735	1,981	643	3,235	7,914	5,183
mean	5.02	4.96	4.97	4.98	5.00	4.95	4.98	4.94	5.03	4.97	4.96	4.99
stdev	1.67	0.28	0.26	0.20	0.14	0.31	0.25	0.37	0.55	0.23	0.30	0.21
cv	0.33	0.06	0.05	0.04	0.03	0.06	0.05	0.08	0.11	0.05	0.06	0.04
min	0.00	1.00	1.50	1.50	5.00	2.00	0.50	1.00	3.00	2.00	1.00	1.40
P10	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
P50	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
P90	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
max	540.00	5.50	5.00	5.50	10.00	5.00	15.00	9.00	15.00	6.00	8.00	8.00

Source: APEX, 2022

Figure 14-6: Cumulative Histogram of the Sample Interval Lengths analyzed within the Estimation Domains. Intervals that were not sampled or had insufficient recovery are not considered.

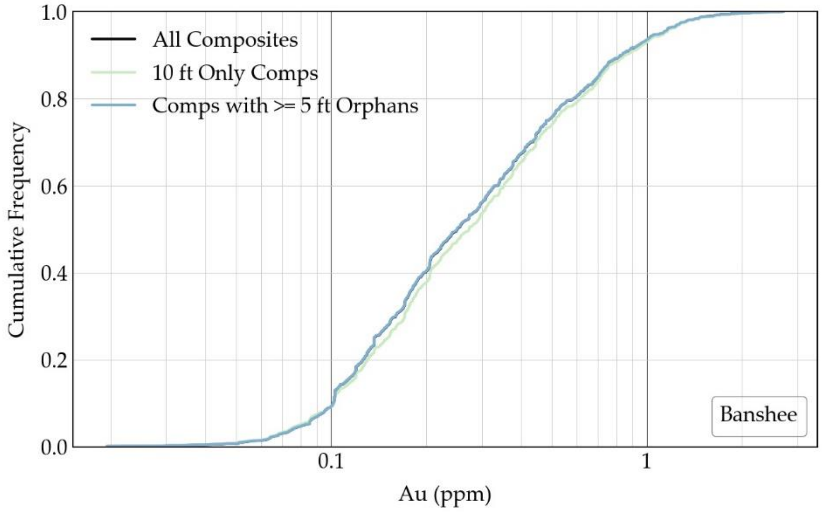
14.5.4 Orphan Analysis

Composites that do not reach their maximum allowed length are called orphans. Orphans are created during the truncation processes at contacts, as described in Section 14.5.3, or when a drill hole ends before the last composite reaches its full length. Considering all the orphans during the estimation process may introduce a bias. Therefore, gold's distribution was examined with and without orphans to determine if they should be deemed equivalent in importance to the full-length composite's estimation process. Three configurations are examined for this analysis:

- Composites that are 10 ft in length without any orphans;
- Composites and orphans greater than or equal to 5 ft in length; and
- All composites and orphans.

It is common to observe a decrease in the mean when comparing the composite values to the original raw assay statistics. This decrease in the mean is typical as large un-sampled intervals (that are assigned a nominal waste value, as discussed in Section 14.2.2) are split into multiple smaller intervals. Also, by not snapping truncating contacts of the estimation domain wireframes to the start or end of raw sample intervals, many orphans can be created that are redundant data that are not representative that may skew the resource estimate. However, the boundaries of the estimation domains constructed occur at the start or end of raw sample intervals, which will reduce the number of orphan samples significantly.

An orphan analysis was completed for all gold assays contained within the estimation domains. Figure 14-7 illustrates an example of the difference between the distribution of composited metal grade with the various composite length scenarios for the Banshee estimation domain. When comparing only the composites equal to 10 ft to all composites, including the orphans, gold assays illustrate a mean change of ±1.85% when orphans are considered (Table 14-4). The 769 orphans that are ≥ 5 ft in length are used when calculating the MRE. However, the six orphans that are < 5 ft in length are not used to calculate the MRE as they are considered redundant.



Source: APEX, 2022

Figure 14-7: Example of Orphan Analysis Comparing Cumulative Histograms of Raw Assays and Uncapped Composites with and without Orphans Contained within the Banshee Estimation Domain

Table 14-4: Orphan Analysis Comparing the Gold Statistics (in ppm) of Raw Assays and Uncapped Composite Samples with and without Orphans

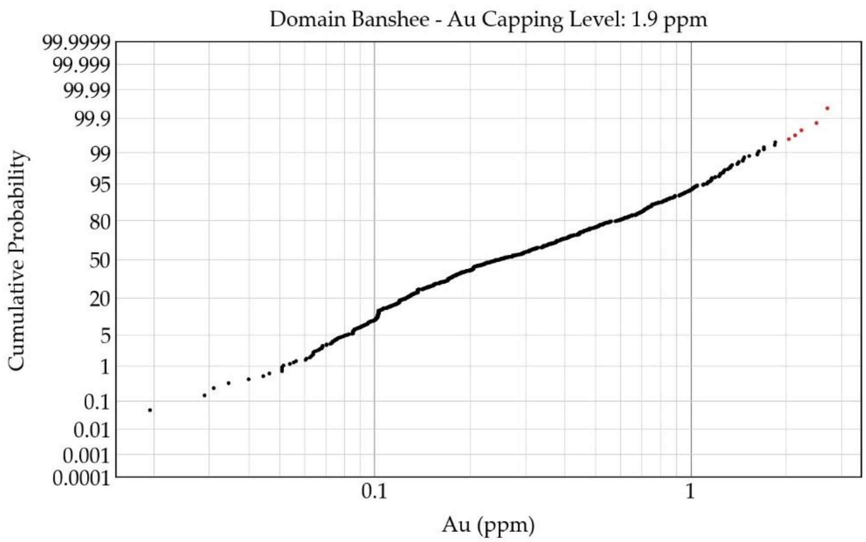
	Raw Assays	Comps with Orphans	Comps 10 ft Only	Comps ≥ 5 ft Orphans
count	37,588	19,306	18,105	19,265
mean	0.44	0.43	0.45	0.43
std	0.55	0.50	0.50	0.50
var	0.31	0.25	0.26	0.25
CV	1.26	1.15	1.13	1.15
min	0.00	0.00	0.00	0.00
25%	0.14	0.15	0.16	0.15
50%	0.27	0.27	0.29	0.27
75%	0.53	0.52	0.54	0.52
max	20.55	11.47	11.47	11.47

Source: APEX, 2022

14.5.5 Capping

To ensure gold grades are not overestimated by including outlier values during estimation, composites are capped to a specified maximum value. Probability plots illustrating each composite's values are used to identify outlier values that appear higher than expected relative to each estimation domain's gold distribution. Composites identified as potential outliers on the probability plots are evaluated in 3D to determine if they are part of a high-grade trend or not. If identified outliers are deemed part of a high-grade trend that still requires a capping level, the level used on them may not be as aggressive as the capping level used to control isolated high-grade outliers.

Probability plots of composited values were created for all domains for the indicated capping levels detailed in Table 14-5. The Banshee domain is again provided as an example (Figure 14-8). Visual inspection of the potential outliers (points shown in red in Figure 14-8) revealed they have no spatial continuity with each other. Therefore, the capping levels detailed in Table 14-5 (1.9 ppm Au for Banshee) are applied to composites used to calculate the MRE.



Source: APEX, 2022

Figure 14-8: Example of a Probability Plot of the Composited Gold Values Before Capping for Banshee. Capped Values are Highlighted in Red

Table 14-5: Capping Levels Applied to Composites Before Gold Estimation

Estimation Domain	Au Capping Level (ppm)
Banshee	1.9
Black Stallion	2.6
Campbell	1.4
Dune	1.25
Dynamite	2.42
Mustang	1
Pan North	6.5
Redhill	4.2
Pan South East	4
Pan South West	3.6
Syncline	3

Source: APEX, 2022

14.5.6 Declustering

It is typical to collect data in a manner that preferentially samples high valued areas over low-value areas. This preferential sampling is an acceptable practice; however, it produces closely spaced measurements that are likely statistically redundant, which results in under-represented sparse data compared to the closer-spaced data. Therefore, it is desirable to have spatially representative (i.e. declustered) statistics for global resource assessment and to check estimated models. Declustering techniques calculate a weight for each datum that results in sparse data having a higher weight than closely spaced data. The calculated declustering weights allow spatially repetitive summary statistics to be calculated, such as a declustered mean.

Cell declustering is performed globally on all composites within the estimation domains, which calculates a declustering weight for each composite. Cell declustering works by discretizing a 3D volume into cells that are the same size. The sum of the weights of all the composites within the cell must equal 1. Therefore, the weight assigned to each composite is proportional to the number of composites within each cell. For example, if there are four composites within a cell, they are all assigned a declustering weight of 0.25.

As a general rule, the cell size used to calculate declustering weights will ideally contain one composite per cell in the sparsely sampled areas. Visual evaluation of the sparsely sampled areas in a 3D visualization software gives a rough idea of this size. Additionally, a high-resolution block model populated with the distance to each block nearest composite can help guide the declustering of the cell size. The 90-percentile of the distance block model, with a cell size much lower than the final declustering cell size, approximates the optimal cell size. Finally, plotting a series of declustered means for a range of declustering cell sizes will help determine the optimal cell size. The optimal cell size will likely be when the declustered mean in the plot is locally low or high at a cell size that is very close to the two potential cell sizes that were determined from the visual review and calculated 90-percentile distance. Preferential sampling in high-grade zones results in a declustered mean that is likely within a local minimum. In contrast, preferential sampling in low-grade zones results in a declustered mean that is expected within a local maximum.

Declustering weights were calculated for each estimation domain separately. Visual evaluation of the sparsely sampled areas in Micromine suggests similar cell sizes as the 90-percentiles from the distance block model for each estimation domain. Plots comprised of a series of declustered means for a range of declustering cell sizes were used to inform the final cell sizes. Table 14-6 details the cell sizes used, and all were very close to the size indicated by the visual evaluation and distance block model.

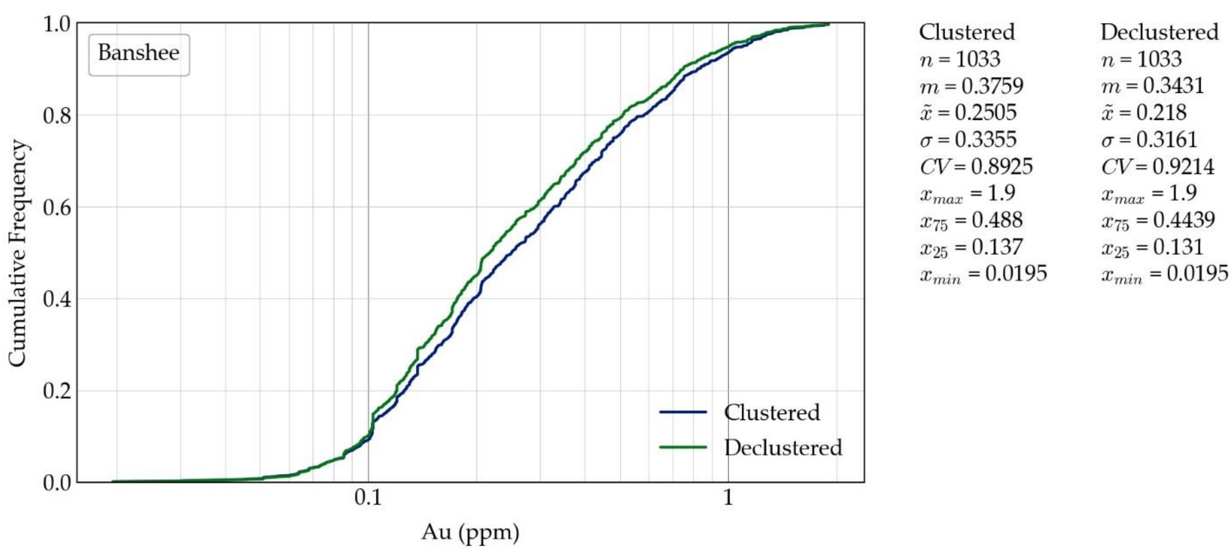
Table 14-6: Cell Sizes Used to Calculate Declustering Weight in each Estimation Domain

Estimation Domain	Cell Declustering Size (ft)
Banshee	45
Black Stallion	40
Campbell	80
Dune	60
Dynamite	50
Mustang	100
Pan North	63
Redhill	57
Pan South	67
Syncline	46

Source: APEX, 2022

14.5.7 Final Composite Statistics

Cumulative histograms and summary statistics for the declustered and capped composites contained within the interpreted estimation domains, without orphans < 5 ft, are tabulated in Table 14-7. An example cumulative histogram is presented for the Banshee Domain showing clustered vs declustered composites in Figure 14-9. The gold assays within each domain generally exhibit a single statistical population.



Source: APEX, 2022

Figure 14-9: Cumulative Histogram of Gold for the Banshee Domain Comparing Clustered and Declustered Composites

Table 14-7: Summary Statistics from Composites Contained within the Estimation Domains that have been Declustered and Capped, with the < 1.5 m Orphans Removed

	Global	Banshee	Black Stallion	Campbell	Dune	Dynamite	Mustang	Pan North	Redhill	Syncline	South	
											East	West
count	25,951	1,033	1,000	710	1,662	674	191	5,957	1,013	339	8,068	5,304
mean	0.36	0.34	0.43	0.21	0.30	0.31	0.39	0.37	0.45	0.42	0.33	0.39
std	0.40	0.32	0.46	0.18	0.30	0.27	0.30	0.40	0.59	0.49	0.39	0.44
var	0.16	0.10	0.21	0.03	0.09	0.07	0.09	0.16	0.34	0.24	0.15	0.20
CV	**1.12**	**0.92**	**1.07**	**0.83**	**0.99**	**0.85**	**0.77**	**1.07**	**1.29**	**1.18**	**1.16**	**1.13**
min	0.00	0.02	0.01	0.03	0.00	0.00	0.04	0.00	0.03	0.03	0.00	0.00
25%	0.14	0.13	0.14	0.11	0.12	0.13	0.15	0.15	0.14	0.14	0.13	0.14
50%	0.22	0.22	0.26	0.16	0.21	0.21	0.27	0.26	0.22	0.25	0.21	0.24
75%	0.42	0.44	0.51	0.24	0.37	0.41	0.56	0.45	0.55	0.47	0.38	0.47
max	6.50	1.90	2.60	1.25	2.42	1.40	1.00	6.50	4.20	3.00	4.00	3.60

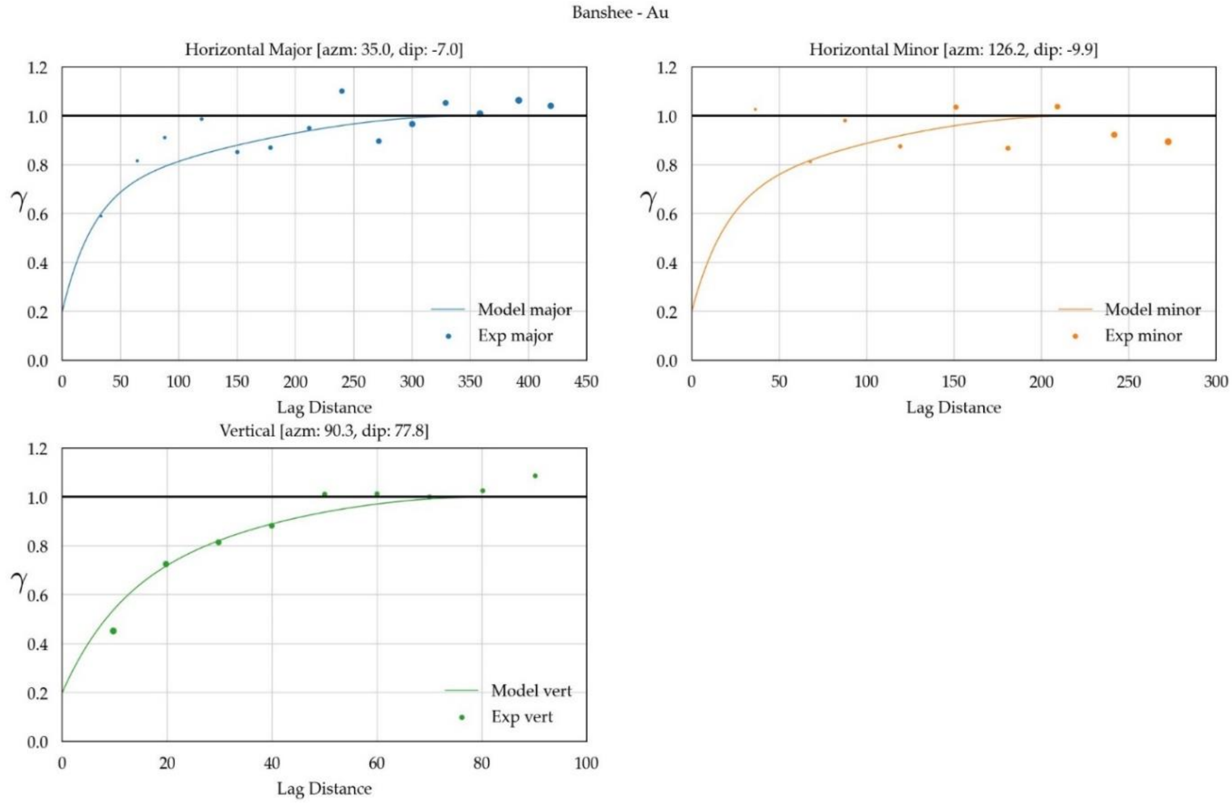
Source: APEX, 2022

14.5.8 Variography and Grade Continuity

The experimental semi-variograms, example shown in Figure 14-10, for each domain are calculated along the major, minor, and vertical principal directions of continuity that are defined by three Euler angles. Euler angles describe the orientation of anisotropy as a series of rotations (using a left-hand rule) that are as follows:

- Angle 1: A rotation about the Z-axis (azimuth) with positive angles being clockwise rotation and negative representing counter-clockwise rotation;
- Angle 2: A rotation about the X-axis (dip) with positive angles being counter-clockwise rotation and negative representing clockwise rotation; and
- Angle 3: A rotation about the Y-axis (tilt) with positive angles being clockwise rotation and negative representing counter-clockwise rotation.

Using the correlogram algorithm, gold experimental variograms were calculated using the composites for each estimation domain. The Banshee domain is provided as an example in Figure 14-10. Table 14-8 details the final variogram model parameters used by Kriging for all the domains. As described in Section 14.7, gold estimation uses LVA that defines the variogram's orientation on a per-block basis. The three Euler angles described in Table 14-8 are not used during estimation, only to calculate the experimental variogram.



Source: APEX, 2022

Figure 14-10: Example of Standardized Gold Experimental and Modelled Semi-variogram for Banshee Estimation Domain that can Produce Representative Variograms

Table 14-8: Parameters of the Modelled Gold Variograms from each Estimation Domain

Zone	Euler Angles			Sill	C0	Structure 1					Structure 2				
	1	2	3			Type	C1	Ranges (ft)			Type	C2	Ranges (ft)		
								Major	Minor	Vertical			Major	Minor	Vertical
Black Stallion	190	-5	16	0.25	0.05	exp	0.17	70	70	40	sph	0.02	250	70	40
Mustang	190	-5	16	0.10	0.02	exp	0.07	70	70	40	sph	0.01	250	70	40
Banshee	35	-7	10	0.11	0.02	exp	0.06	80	60	35	sph	0.03	350	220	80
Campbell	119	-5	-51	0.08	0.02	exp	0.04	100	60	35	sph	0.03	300	180	80
Dune	180	-13	0	0.03	0.01	exp	0.02	50	50	45	sph	0.01	200	60	45
Pan North	343	-34	-54	0.22	0.04	exp	0.12	120	65	12	sph	0.05	250	200	30
Redhill	115	-29	-10	0.53	0.11	exp	0.26	220	180	60	sph	0.16	250	180	60
Syncline	330	-10	-16	0.33	0.07	exp	0.20	150	100	65	sph	0.07	150	100	65
Dynamite	0	-20	80	0.10	0.02	exp	0.05	120	100	45	sph	0.03	300	120	60
Pan South East	5	-30	35	0.20	0.04	exp	0.12	70	55	80	sph	0.04	350	120	80
Pan South West	350	-20	-70	0.28	0.09	exp	0.14	90	90	35	sph	0.06	320	150	90

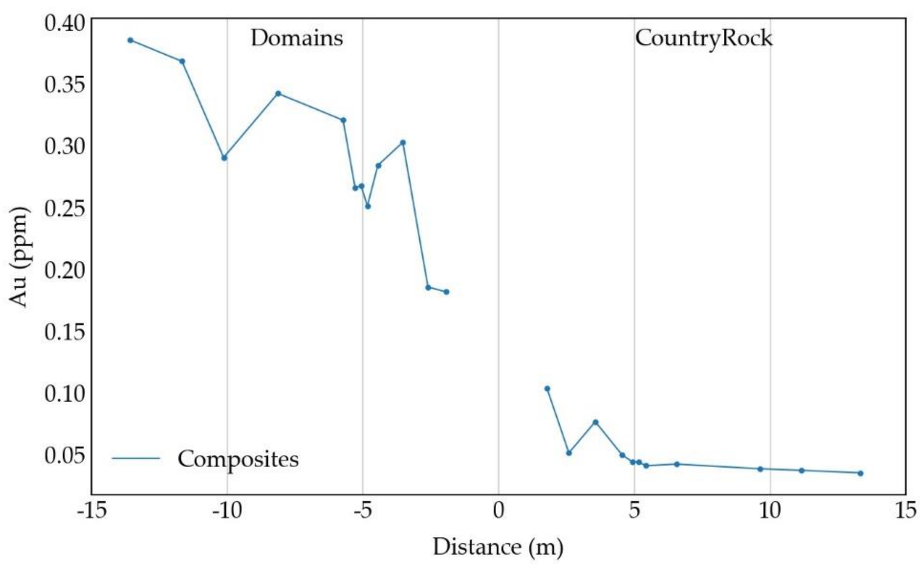
Source: APEX, 2022

Abbreviations - sph - spherical, exp - exponential; C0 - nugget effect; C1 - covariance contribution of structure 1; C2 - covariance contribution of structure 2; na – not available

14.5.9 Contact Analysis

The mineralization profile at the contact between different estimation domains can occur in a soft, hard, or semi-soft manner. Soft boundaries occur when mineralization at the contact gradually changes from high to low as you cross into the neighboring domain. Hard boundaries occur when mineralization at the contact abruptly changes as you cross into the neighboring domain. Semi-soft boundaries occur when mineralization changes gradually within a small window as you cross into the neighboring domain. If possible, the final block model should reproduce the mineralization profile observed in the drill hole data at contacts between estimation domains. A contact analysis was completed to evaluate the mineralization profile at each estimation domain contact using plots of grade as a function of distance to the contact to determine the type of mineralization profile (Figure 14-11).

There are few instances of domains contacting each other, when they do, the boundary is either artificially created for modelling purposes (e.g., Banshee-Red Hill contact) or is the merging point of two mineralized zones that resulted from the same geological processes (e.g., South Pan West-South Pan East contact). Therefore, it is not anticipated that there would be any instances of soft or semi-soft boundaries. Contact analysis of all the domain-domain contacts illustrated only hard boundaries (Figure 14-11). Therefore, the estimation of blocks within an estimation domain that is contact with another don’t consider or utilize the composites within the adjacent estimation domain.



Source: APEX, 2022

Figure 14-11: Contact Analysis of Gold Grade at the Boundary between the Pan Mine Mineralized Estimation Domain and Waste

14.6 Pan Block Model

14.6.1 Block Model Parameters

The block model used for the calculation of the Pan Mine MRE fully encapsulates the estimation domains used for resource estimation described in Sections 14.3 and 14.4. A block size of 20 ft by 20 ft by 20 ft is used. The coordinate ranges and block size dimensions used to build the Pan 3D block model are presented in Table 14-9.

A block factor (BF) representing the percentage of each block's volume that lies within each estimation domain was calculated and used to:

- flag what the estimation domain is for each block;
- calculate the volume of mineralized material and waste for each block; and
- calculate the tons of mineralized material of each block when calculating the MRE.

Table 14-9: Pan 3D Block Model Size and Extents

Axis	Number of Blocks	Block Size (ft)	Minimum Extent (ft)	Maximum Extent (ft)
X (Easting)	281	20	1994030	1999630
Y (Northing)	743	20	14269330	14284170
Z (Elevation)	67	20	5730	7050

Source: APEX, 2022

14.6.2 Volumetric Checks

A comparison of estimation domain wireframe volumes versus block model volumes illustrates there is no considerable over- or under-stating of tonnages (Table 14-10). The calculated block factor for each block is used to scale its volume when calculating the block model's total volume within each estimation domain.

Table 14-10: Estimation Domain Wireframe Versus Block-model Volume Comparison

Estimation Domain	Wireframe Volume (ft^3)	Block Model Volume with Block Factor (ft^3)	Volume Difference (%)
Banshee	68,292,416	68,297,366	-0.01%
Black Stallion	40,991,936	41,017,218	-0.06%
Campbell	50,433,920	50,419,718	0.03%
Dune	53,254,272	53,238,432	0.03%
Dynamite	198,986,176	201,765,177	-1.38%
Mustang	14,684,288	14,694,112	-0.07%
Pan North	427,961,920	427,939,003	0.01%
Redhill	46,338,432	46,329,481	0.02%
South Pan (East)	415,639,232	415,643,935	0.00%
South Pan (West)	251,263,744	251,249,603	0.01%
Total	1,592,052,544	1,594,801,865	**-0.172%**

Source: APEX, 2022

14.7 Grade Estimation Methodology

Ordinary Kriging (OK) was used to estimate gold grades for the Pan block model. Grade estimates are only calculated for blocks that contain more than 0.8% mineralized material by volume.

Estimation of blocks is completed with LVA, which uses different rotation angles to define the principal directions of the variogram model and search ellipsoid on a per-block basis. Blocks within the estimation domain are assigned rotation angles using a trend surface wireframe. This method allows structural complexities to be reproduced in the estimated block model. Variogram and search ranges are defined by the variogram model described in Section 14.5.8.

To ensure that all blocks within the estimation domains are estimated, a three-pass estimation method was used for each domain that utilizes three different variogram model and search ellipsoid configurations (Table 14-11). The ranges of the first and second estimation passes are typically informed by the variogram structure ranges; however, they are adjusted as required to ensure the correct amount of smoothing is achieved. The range of the first variogram structure never changes, while each subsequent run extends the range of the second structure as needed. The search ellipsoid distances are always defined by the range of the variogram's second structure. The second and third passes are required because of structural complexities in a couple of the domains geometry in particular due to folding. The search ellipsoid of the first pass is not able to look along bends paralleling the trends of folds, so second and third passes are completed as needed.

Volume-variance corrections are enforced by restricting the maximum number of conditioning data to 20 and the maximum number of composites from each drill hole to 2 to 4. These restrictions are implemented to ensure the estimated models are not over smoothed, which would lead to inaccurate estimation of global tonnage and grade. These corrections cause local conditional bias but ensure the global estimate of grade and tons is accurately estimated.

Blocks that contain more than or equal to 0.8% waste by volume are diluted by estimating a waste gold value that is volume-weight averaged with the estimated gold grade. It is desired that the behavior of gold at the boundary between the estimation domain and waste beyond its boundary is reproduced. The nature of gold mineralization at the mineralized/waste contact is evaluated and used to determine a window to flag composites that are used to condition a waste gold estimate for blocks containing waste material. As illustrated in Figure 14-11, gold behaves in a semi-soft manner, where the grade of the composite centroids flagged within an estimation domain transitions from mineralized to waste over a short window. Composites within a window of 20 ft into waste and at the domain boundary are used to estimate a waste gold value.

Table 14-11: Gold Grade Estimation Search and Kriging Parameters

Domain	Estimation Pass	Search Range			Min No. Holes	Max Comps Per Hole	Min No. Comps	Max No. Comps
		Major	Minor	Vertical				
Banshee	1	80	60	35	1	3	3	20
	2	350	220	80	1	3	1	20
Black Stallion	1	70	70	40	1	2	2	20
	2	250	70	40	1	2	1	20
Campbell	1	100	60	35	1	3	3	20
	2	300	180	80	1	3	1	20
Dune	1	200	60	45	1	3	1	20
Dynamite	1	120	100	45	1	2	2	20
	2	300	120	60	1	2	1	20
Mustang	1	250	70	40	1	4	1	20
North Pan	1	120	65	12	1	4	3	20
	2	250	200	30	1	4	3	20
	3	325	300	45	1	4	1	20
Redhill	1	250	180	60	1	3	1	20
South Pan (East)	1	70	55	10	1	3	3	20
	2	70	55	50	1	4	3	20
	3	350	120	80	1	4	1	20
South Pan (West)	1	90	90	10	1	4	1	20
	2	90	90	35	1	4	3	20
	3	320	150	80	1	4	1	20
Syncline	1	150	100	15	1	3	2	20
	2	150	100	65	1	3	1	20

Source: APEX, 2022

14.8 Model Validation

A visual and statistical validation was completed to ensure that the estimated block model honors directional trends observed in the composites and that the block model is not over-smoothed or over- or under-estimated.

14.8.1 Visual Validation

The block model was visually validated in plan view and in cross-section to compare the estimated gold values versus the conditioning composites. Overall, the model compares well with the composites. There is some local over- and under-estimation observed. Due to the limited number of conditioning data available for the estimation in those areas, this is the expected result. As illustrated in Figure 14-12 and Figure 14-13, overall, the estimated block values compare well with composite gold values illustrated along the drill hole traces.

14.8.2 Statistical Validation

Swath Plots

Swath plots verify that the estimated block model honors directional trends and identifies potential areas of over- or under-estimation. They are generated by calculating the average metal grades of composites and estimated block models within directional slices. A window of 100 ft is used in east-west slices, 100 ft in north-south slices, and 300 ft in vertical slices.

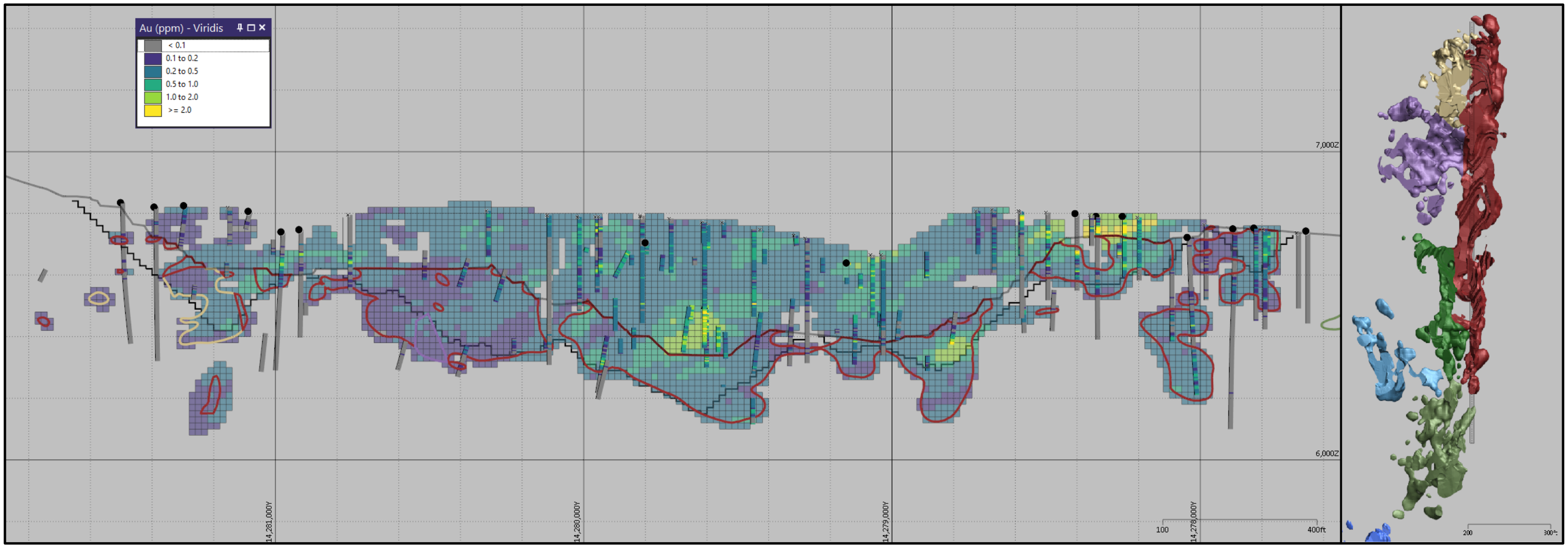
Swath plots for gold estimates in all of the estimation domains were created and checked and are illustrated using Banshee as an example in Figure 14-14. Average composite grades are compared to OK block model grades and Inverse Distance (IDW) block model grades (provided as a check for the OK estimation model). The volume of conditioning data utilized is provided as histogram bars in the swath plots. There are minor instances of localized over- and under-estimation; however, it is believed to be a product of a lack of conditioning data in those areas and the smoothing effect of kriging. Overall, the block model adequately reproduces the trends observed in the composites in all three directions for all of the domains.

Volume-Variance Validation

Smoothing is an intrinsic property of Kriging, and as described in Section 14.7 volume-variance corrections are used to help reduce its effects. To verify that the correct level of smoothing is achieved, theoretical histograms based on the composite data that indicate each estimated metal's anticipated variance and distribution at the selected block model size are calculated and plotted against the estimated final block model distribution in Figure 14-15. The actual block model variance and distribution fits closely to the calculated theoretical histograms. Smoothing is observed versus the composite data, which is considered normal; however, further modifications of the search strategy to help control the smoothing will degrade the quality of the gold estimates.

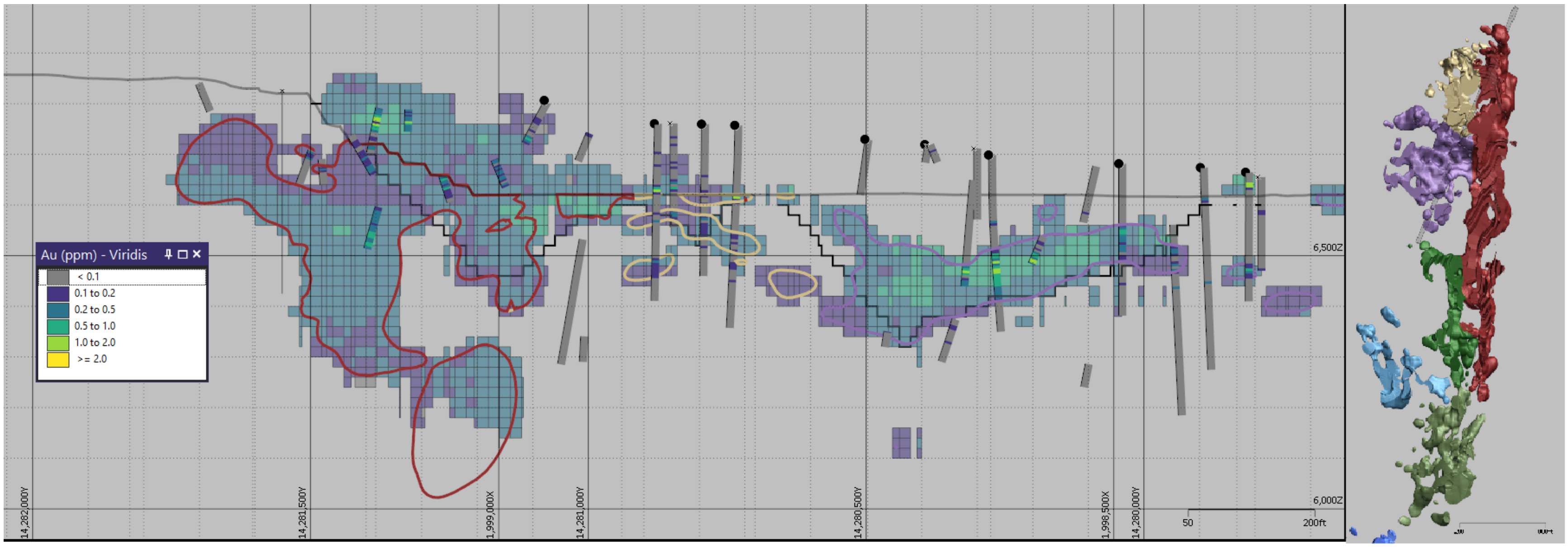
Contact Analysis Reproduction

As described in Section 14.7, blocks within the Pan Mine block model that contain more than or equal to 0.8% waste by volume are diluted using the estimated waste gold and mineralized zone gold values. Ideally, the nature of gold mineralization at the mineralization/waste contact observed in the composites is reproduced in the block model. A contact analysis plot checking contact profile reproduction is illustrated in Figure 14-16. The mineralization/waste contact profile is adequately reproduced with some over-estimation into waste and under-estimation into the mineralized domain.



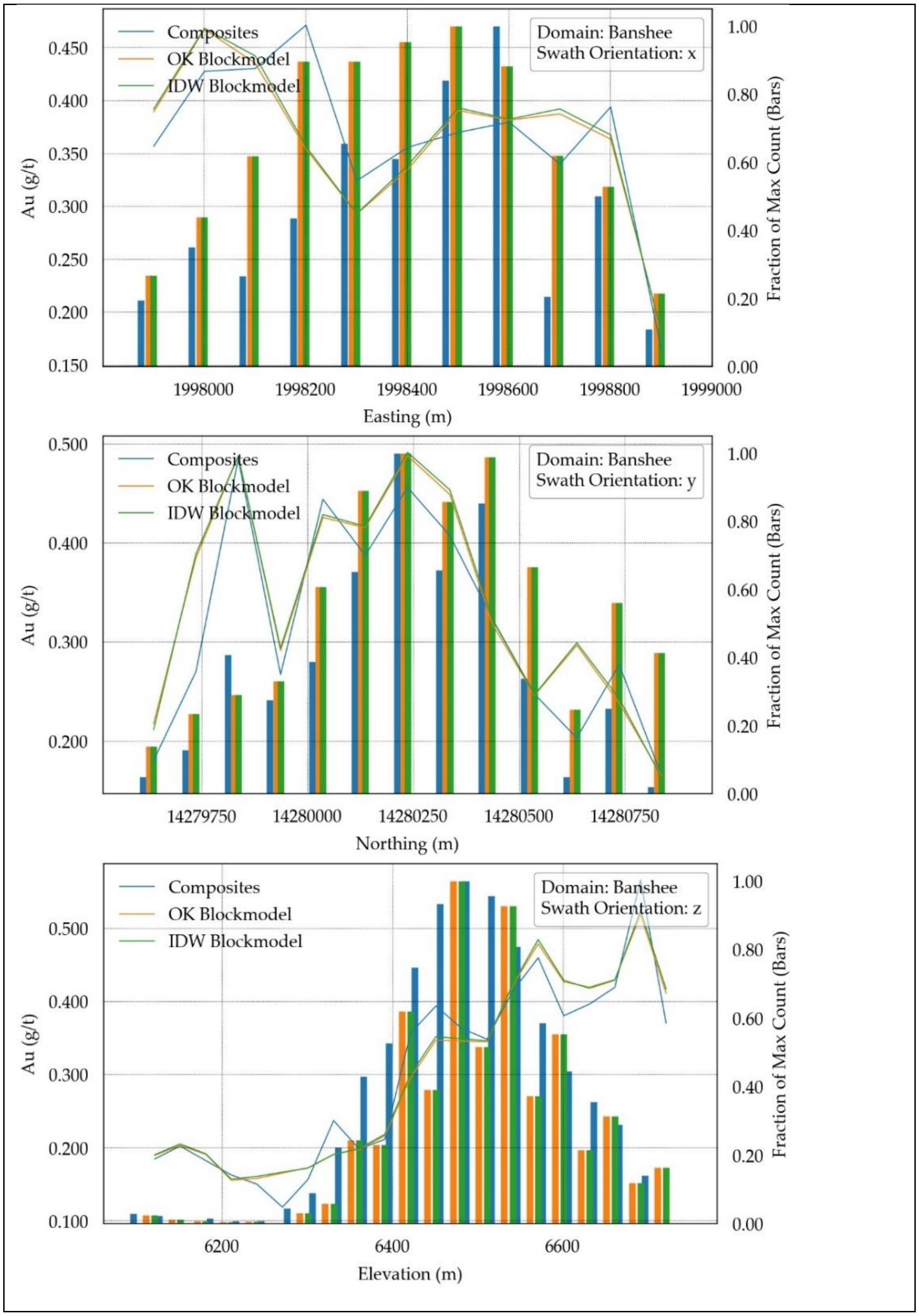
Source: APEX, 2022

Figure 14-12: Cross (Long)-section Looking East along 1998960E Illustrating the Estimated Au Values in the Block Model, the Estimation Domains (red line) and the $1700 Au Resource Pit Shell (thick black line)



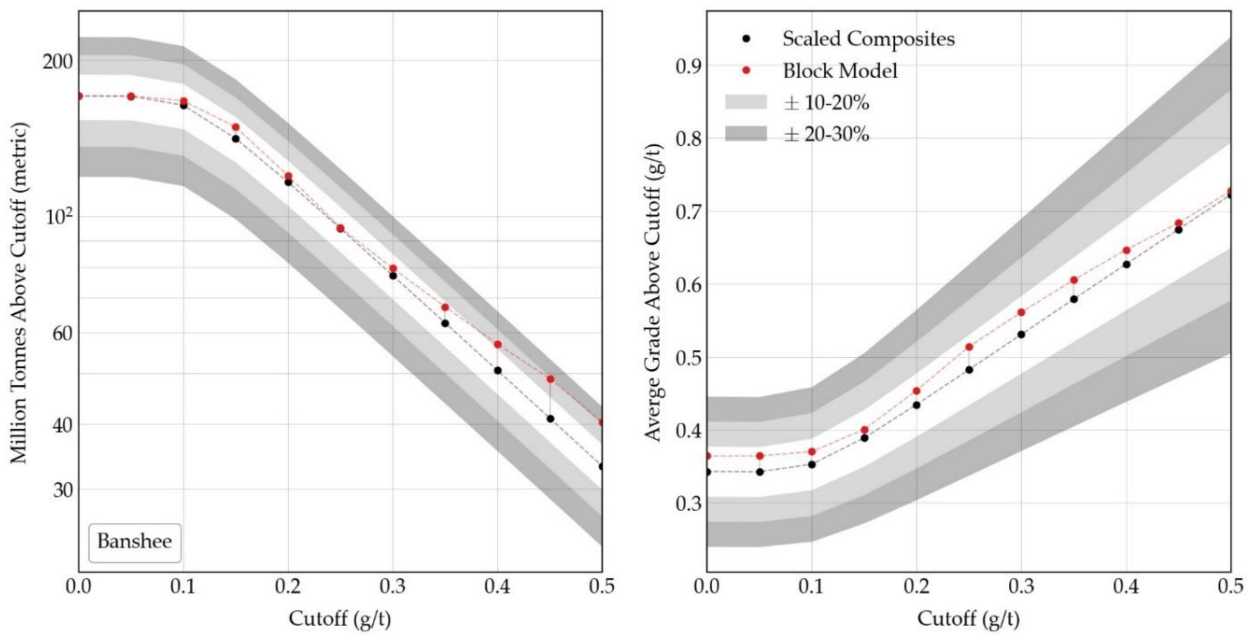
Source: APEX, 2022

Figure 14-13: Oblique Cross (Long)-section Looking Southeast Illustrating the Estimated Au Values in the Block Model, the Estimation Domains (red line) and the $1700 Au Resource Pit Shell (thick black line)



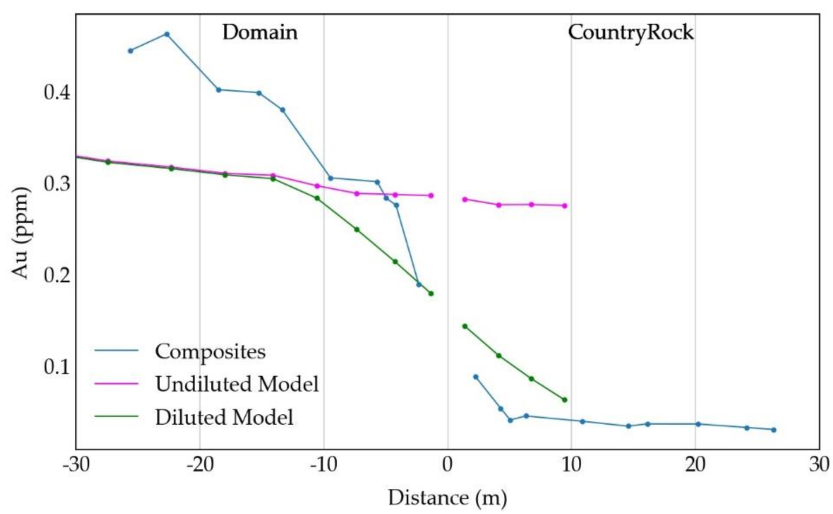
Source: APEX, 2022

Figure 14-14: Example Swath Plots Comparing Composite Gold Values Versus the Estimated Block Model Gold Values for the Banshee estimation domain



Source: APEX, 2022

Figure 14-15: Example Illustrating Volume Variance Check of the Block Model's Estimated Gold Grades within the Banshee Estimation Domain



Source: APEX, 2022

Figure 14-16: Contact Analysis of Comparison between Input Composites, Diluted and Undiluted Block Models Gold Grade at the Boundary of the Estimation Domain and Waste

14.9 Mineral Resource Classification

The Pan Mine MRE discussed in this report has been classified in accordance with guidelines established by the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019 and CIM "Definition Standards for Mineral Resources and Mineral Reserves" dated May 14th, 2014.

A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

The 2022 Pan Mine MRE Update is classified as a Measured, Indicated and Inferred Resource according to the above CIM definition standards. The classification of the Pan Mine Measured, Indicated and Inferred Resource was based on geological confidence, data quality and grade continuity. The most relevant factors used in the classification process were:

- density of conditioning data;
- level of confidence in historical drilling results and collar locations;
- level of confidence in the geological interpretation; and
- continuity of mineralization.

Resource classification was determined using a multiple-pass strategy that consists of a sequence of runs that flag each block with the run number a block first meets a set of search restrictions. With each subsequent pass, the search restrictions are decreased, representing a decrease in confidence and classification from the previous run. For each run, a search ellipsoid is centered on each block and orientated in the same way described in Section 14.7. For each run, Table 14-12 details the range of the search ellipsoid and the number of composites that must be found within the ellipse for a block to be flagged with that run number. The runs are executed in sequence from run 1 to run 3. Classification is then determined by relating the run number that each block is flagged as to measured (run 1), indicated (run 2), or inferred (run 3). Also, any blocks that were not classified during classification-passes 2 or 3 are only classified as Inferred.

Table 14-12: Search Restrictions Applied During Each Run of the Multiple-pass Classification Strategy

Run No.	Classification	Min No. Holes	Min No. Comp	Major Range	Minor Range	Vertical Range
Run 1	Measured	5	30	175	115	25
Run 2	Indicated	4	15	300	200	30
Run 3	Inferred	1	1	-	-	-

Source: APEX, 2022

14.10 Evaluation of Reasonable Prospects for Eventual Economic Extraction

In order to demonstrate that the Pan Mine MRE has the potential for future economic extraction, the unconstrained resource block model was subjected to several pit optimization scenarios to look at the prospect for eventual economic extraction. Pit optimization was performed in Micromine using the industry standard Lerchs-Grossmann algorithm (LG). The criteria used in the LG pit optimizer were considered reasonable for Nevada heap leach deposits including ongoing mining costs at the Pan Mine. All Mineral Resources reported below are reported within an optimized pit shell using $US1,700/oz for gold and was defined using blocks classified as Measured, Indicated, or Inferred. The criteria used for the $1,700/oz pit shell optimization are shown in Table 14-13. A variable lower gold grade cutoff and recovery is used based on the overprinting alteration. Blocks flagged as argillic altered or as unaltered utilized a lower cutoff of 0.003 oz/ton Au (0.10 g/t) and 80% recovery and blocks flagged as silicic altered utilized a grade cutoff of 0.004 oz/ton Au (0.14 g/t) and 60% recovery. This estimate was adjusted following the mine planning results to include additional material captured when detailed mine designs were captured.

Mr. Dufresne considers the LG pit parameters (Table 14-13) appropriate to evaluate the reasonable prospect for future economic extraction at the Pan Mine for the purpose of providing a MRE. The resources presented herein are not Mineral Reserves, and they do not have demonstrated economic viability. There is no guarantee that any part of the resources identified herein will be converted to Mineral Reserves in the future.

Table 14-13: Parameters for Lerchs-Grossman Pit optimization for Mineral Resource Estimate

Parameter	Unit	Cost
Gold price	$US/ounce	1,700
Gold recovery	%	Argillic – 80; Silicic – 60; Unaltered – 80
Pit wall angles	degrees	Limestone – 50; Default - 45
Ore Mining Cost	US$/ton	2.09
Waste Mining Cost	US$/ton	1.97
Ore Density	cubic feet/ton	Variable (see Section 14.4.1)
Waste Density	cubic feet/ton	Variable (see Section 14.4.1)
Processing Cost	US$/ton ore	2.4
G & A Cost	US$/ton ore	0.73
Royalty	percent	0

Source: APEX, 2022

14.11 Mineral Resource Reporting

The Pan Mine updated MRE is reported in accordance with the CSA NI 43-101 rules for disclosure and has been estimated using the CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines" dated November 29, 2019 and CIM "Definition Standards for Mineral Resources and Mineral Reserves" dated May 10th, 2014.

The MRE was estimated within 3D solids that were created from a combined implicit model and cross-sectional lode interpretation of geology and alteration. The upper contact has been cut by the topographic surface as of September 30, 2022. The model was then depleted further using the December 31, 2022 topographic surface validated against production for October to December 2022. There is little to no surficial overburden present at the Pan Mine. Grade was estimated into a block model with a block size of 20 ft (X) by 20 ft (Y) by 20 ft (Z).

Grade estimation of gold was performed using Ordinary Kriging (OK). For the purposes of the pit shell optimization and the reported MRE below, blocks that contain waste were diluted by estimating a waste value using composites within a transition zone along the outer boundary of the estimation domains. The final diluted gold grade for the diluted model assigned to each block is a volume-weighted average of the estimated gold and waste grade values. The MRE is reported within that pit shell and is reported as edge diluted but not mining diluted.

The updated Pan Mine MRE is reported at various cutoffs depending on what type of alteration each block is flagged as. The Measured, Indicated, and Inferred MRE is partially diluted, constrained within an optimized pit shell, and includes a Measured and Indicated Mineral Resource of 37.04 million tons (33.8 million tonnes) at 0.010 oz/ton (0.33 g/t) Au for 358,900 ounces of gold and an Inferred Mineral Resource of 3.58 million tons (3.25 million tonnes) at 0.012 oz/ton (0.40 g/t) Au for 42,000 ounces of gold (Table 14-14). The reported MRE utilizes a lower gold cutoff of 0.003 oz/ton Au (0.10 g/t) for blocks flagged as argillic altered or as unaltered and a cutoff of 0.004 oz/ton Au (0.14 g/t) for blocks flagged as silicic altered.

The Pan Mine MRE is presented versus alteration and recovery type in Table 14-15. Other cut-off grades are presented in Table 14-16 for review ranging from 0.003 oz/ton (0.10 g/t) Au to 0.012 oz/ton (0.4 g/t) Au for sensitivity analyses. The sensitivity analysis does not use variable cutoffs for each style of mineralization. Examples of the block model constrained within the resource pit shell are illustrated in Figure 14-12 and Figure 14-13.

The updated MRE shows a 16% decrease (68,500 gold ounces) in Measured and Indicated Resources to 358,900 gold ounces versus the 2020 MRE that utilized a June 30, 2020 topographic surface (Smith et al., 2021). The approximate calculated mining depletion for the period of June 30, 2020 to December 31, 2022 is a little over 13 million tons and about 170,000 oz Au, the vast majority of which were Measured and Indicated Resources from the 2020 MRE. The 2021 to 2022 drilling has effectively resulted in the addition of Measured and Indicated Resources equivalent to approximately 100,000 gold ounces versus the 170,000 gold ounces that have been mined in the period from June 30, 2020 to December 31, 2022. An additional Inferred Resource of 42,000 gold ounces has been estimated at the Pan Mine, that with continued drilling may provide additional Measured and/or Indicated gold ounces.

The 2022 Pan Mine MRE has been classified as comprising Measured, Indicated, and Inferred Resources according to recent CIM definition standards. The classification of the Pan Mine resources was based on geological confidence, data quality and grade continuity. All reported Mineral Resources occur within a pit shell optimized using values of US$1,700 per ounce for gold. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The MRE is partially (domain edge) diluted and is inclusive of Reserves.

Table 14-14: Pan Mine Edge-diluted Resource Estimate Constrained within the '$1700/oz' Pit Shell for Gold Specific to Area (effective date of December 31, 2022)

Region	Classification	Tons (tons)*	Tonnes (tonnes)*	Au Grade (oz/ton)	Au Grade (g/t)	Contained Au (troy ounces)*
North	Measured*	3,000	2,000	0.012	0.41	0
	Indicated*	11,470,000	10,405,000	0.010	0.34	113,400
	M&I*	11,472,000	10,408,000	0.010	0.34	113,500
	Inferred*	709,000	643,000	0.013	0.44	9,100
Central	Measured*	32,000	29,000	0.020	0.57	500
	Indicated*	6,396,000	5,803,000	0.010	0.33	62,400
	M&I*	6,428,000	5,831,000	0.010	0.34	62,900
	Inferred*	442,000	401,000	0.010	0.36	4,700
South	Measured*	10,000	9,000	0.017	0.57	100
	Indicated*	19,337,000	17,542,000	0.010	0.33	182,300
	M&I*	19,347,000	17,551,000	0.010	0.33	182,500
	Inferred*	2,427,000	2,202,000	0.012	0.40	28,200
Total	Measured*	44,000	40,000	0.016	0.55	700
	Indicated*	37,203,000	33,750,000	0.010	0.33	358,200
	M&I*	37,247,000	33,790,000	0.010	0.33	358,900
	Inferred*	3,578,000	3,246,000	0.012	0.40	42,000

Source: APEX, 2022

*Notes:

1. CIM (2014. 2019) guidelines, standards and definitions were followed for estimation and classification of mineral resources.
2. The estimate of mineral resources may be materially affected by environmental, permitting, legal, marketing or other relevant issues.
3. Resources are stated as contained within a constrained pit shell; pit optimization was based on an assumed gold price of US$1,700/oz, Silicic (hard) ore recoveries of 60% for Au and an Argillic (soft) ore recovery of 80% for Au, an ore mining cost of US$2.09/st, a waste mining cost of $1.97/st, an ore processing and G&A cost of US$3.13/st, and pit slopes between 45-50 degrees;
4. Resources are domain edge diluted and reported using a minimum internal gold cut-off grade of 0.003 oz/st Au (0.10 g/t Au).
5. Measured and Indicated Mineral Resources presented are inclusive of Mineral Reserves. Inferred Mineral Resources are not included in Mineral Reserves.
6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There has been insufficient exploration to define the inferred resources tabulated above as an indicated or measured mineral resource, however, it is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. There is no certainty that any part of the Mineral Resources estimated will be converted into Mineral Reserves;
7. Numbers in the table have been rounded to reflect the accuracy of the estimate and may not sum due to rounding.
8. Mr. Michael Dufresne, M.Sc., P. Geol., P. Geo. of APEX Geoscience Ltd. is responsible for reviewing and approving the Pan mine open pit Mineral Resource Estimate. Mr. Dufresne is a Qualified Person ("QP") as set out in NI 43-101.

Table 14-15: The Pan Mine Resource Estimate Constrained within the '$1700/oz' Au Pit Shell for Gold at Cut-off Grades Specific to Alteration Type (effective date of December 31, 2022)

Alteration Type	Classification	Tons (tons)*	Tonnes (tonnes)*	Au Grade (oz/ton)	Au Grade (g/t)	Contained Au (troy ounces)*
Argillic/ Unaltered	Measured*	36,000	33,000	0.015	0.53	600
	Indicated*	26,091,000	23,669,000	0.009	0.32	241,300
	M&I*	26,127,000	23,702,000	0.009	0.32	241,800
	Inferred*	3,148,000	2,856,000	0.012	0.41	37,400
Silicic	Measured*	8,000	7,000	0.016	0.56	200
	Indicated*	11,112,000	10,081,000	0.011	0.36	116,900
	M&I*	11,120,000	10,088,000	0.011	0.36	117,000
	Inferred*	430,000	390,000	0.011	0.36	4,500
Total	Measured*	44,000	40,000	0.016	0.55	700
	Indicated*	37,203,000	33,750,000	0.010	0.33	358,200
	M&I*	37,247,000	33,790,000	0.010	0.33	358,900
	Inferred*	3,578,000	3,246,000	0.012	0.40	42,000

Source: APEX, 2022

*Notes:
1. CIM (2014. 2019) guidelines, standards and definitions were followed for estimation and classification of mineral resources.
2. The estimate of mineral resources may be materially affected by environmental, permitting, legal, marketing or other relevant issues.
3. Resources are stated as contained within a constrained pit shell; pit optimization was based on an assumed gold price of US$1,700/oz, Silicic (hard) ore recoveries of 60% for Au and an Argillic (soft) ore recovery of 80% for Au, an ore mining cost of US$2.09/st, a waste mining cost of $1.97/st, an ore processing and G&A cost of US$3.13/st, and pit slopes between 45-50 degrees;
4. Resources are domain edge diluted and reported using a minimum internal gold cut-off grade of 0.003 oz/st Au (0.10 g/t Au).
5. Measured and Indicated Mineral Resources presented are inclusive of Mineral Reserves. Inferred Mineral Resources are not included in Mineral Reserves.
6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There has been insufficient exploration to define the inferred resources tabulated above as an indicated or measured mineral resource, however, it is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. There is no certainty that any part of the Mineral Resources estimated will be converted into Mineral Reserves;
7. Numbers in the table have been rounded to reflect the accuracy of the estimate and may not sum due to rounding.
8. Mr. Michael Dufresne, M.Sc., P. Geol., P. Geo. of APEX Geoscience Ltd. is responsible for reviewing and approving the Pan mine open pit Mineral Resource Estimate. Mr. Dufresne is a Qualified Person ("QP") as set out in NI 43-101.

Table 14-16: Sensitivity Analysis of the Pan Mine Edge-diluted Resource Estimate Constrained within the '$1700/oz' Pit Shell for Gold at Various Cut-off Grades (effective date of December 31, 2022)

Classification	Au Cut-off (oz/ton)	Au Cut-off (g/t)	Tons (tons)*	Tonnes (tonnes)*	Au Grade (oz/ton)	Au Grade (g/t)	Contained Au (troy ounces)*
Measured*	0.003	0.10	44,000	40,000	0.016	0.55	700
	0.004	0.14	37,800	34,300	0.014	0.58	600
	0.005	0.17	35,000	31,500	0.014	0.61	600
	0.006	0.21	31,500	28,700	0.015	0.64	600
	0.009	0.30	26,250	24,000	0.017	0.67	500
	0.012	0.40	20,000	18,000	0.02	0.67	400
Indicated*	0.003	0.10	37,203,000	33,750,000	0.010	0.33	358,200
	0.004	0.14	33,986,000	30,832,000	0.01	0.35	346,100
	0.005	0.17	30,022,000	27,236,000	0.011	0.38	328,300
	0.006	0.21	25,488,000	23,122,000	0.012	0.41	303,400
	0.009	0.30	15,950,000	14,469,000	0.015	0.51	234,000
	0.012	0.40	9,481,000	8,601,000	0.018	0.62	168,500
Measured and Indicated	0.003	0.10	37,247,000	33,790,000	0.010	0.33	358,900
	0.004	0.14	34,039,000	30,880,000	0.01	0.35	346,800
	0.005	0.17	30,072,000	27,281,000	0.011	0.38	328,900
	0.006	0.21	25,533,000	23,163,000	0.012	0.41	304,000
	0.009	0.30	15,985,000	14,501,000	0.015	0.51	234,500
	0.012	0.40	9,501,000	8,619,000	0.018	0.62	168,900
Inferred*	0.003	0.10	3,578,000	3,246,000	0.012	0.40	42,000
	0.004	0.14	3,217,000	2,918,000	0.012	0.42	40,100
	0.005	0.17	2,871,000	2,604,000	0.013	0.46	38,500
	0.006	0.21	2,563,000	2,325,000	0.014	0.49	36,800
	0.009	0.30	2,050,000	1,859,000	0.017	0.58	35,100
	0.012	0.40	1,392,000	1,263,000	0.02	0.7	28,400

Source: APEX, 2022

*Notes:
1. CIM (2014. 2019) guidelines, standards and definitions were followed for estimation and classification of mineral resources.
2. The estimate of mineral resources may be materially affected by environmental, permitting, legal, marketing or other relevant issues.
3. Resources are stated as contained within a constrained pit shell; pit optimization was based on an assumed gold price of US$1,700/oz, Silicic (hard) ore recoveries of 60% for Au and an Argillic (soft) ore recovery of 80% for Au, an ore mining cost of US$2.09/st, a waste mining cost of $1.97/st, an ore processing and G&A cost of US$3.13/st, and pit slopes between 45-50 degrees;
4. Resources are domain edge diluted and reported using a minimum internal gold cut-off grade of 0.003 oz/st Au (0.10 g/t Au).
5. Measured and Indicated Mineral Resources presented are inclusive of Mineral Reserves. Inferred Mineral Resources are not included in Mineral Reserves.
6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There has been insufficient exploration to define the inferred resources tabulated above as an indicated or measured mineral resource, however, it is reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. There is no certainty that any part of the Mineral Resources estimated will be converted into Mineral Reserves;
7. Numbers in the table have been rounded to reflect the accuracy of the estimate and may not sum due to rounding.

8. Mr. Michael Dufresne, M.Sc., P. Geol., P. Geo. of APEX Geoscience Ltd. is responsible for reviewing and approving the Pan mine open pit Mineral Resource Estimate. Mr. Dufresne is a Qualified Person ("QP") as set out in NI 43-101.

The Pan Mine Resource pit shell constrained MRE represents approximately 54% of the total volume and 61% of the total gold ounces in the entire unconstrained Pan Mine block model that was estimated in 2022.

14.12 Discussion of Resource Modelling and Risks

The drilling of 457 RC and 38 core holes by Calibre from 2020 to 2022 in the Pan resource area (including 303 RC and 23 core holes since the last MRE was constructed) focused on Pan South. Central and North greatly improved the understanding of the geological model that was used in the construction of the 2022 MRE herein. The geological and mineralization domains were improved and adjusted based upon this drilling versus the 2020 MRE constructed by APEX (SRK 2021), which was largely based on a significant amount of pre-2018 drilling. The Calibre 2020 to 2022 drilling also allowed for systematic capture of new fire assay Au data with concomitant cold CN soluble Au for all 605 RC and core holes and a thorough review of lithology, alteration, oxidation and gold mineralization across the entire Pan Mine area. The 2022 MRE also incorporated the use of the detailed and extensive blast hole data which was used to help guide the delineation of the mineralization domains for use in LVA trends and ongoing planning for drilling the extensions of potential mineralized zones.

Most of the data obtained from the 2020 to 2022 RC and core drilling at Pan has confirmed that the majority of mineralized material in the current MRE is oxidized with moderate to good CN soluble Au recoveries. However, there are some significant differences in the hardness of the mineralized material particularly between North and South Pan, and the behavior of that material with crushing. In addition, the current mining levels have progressed beyond much of the areas characterized by prior metallurgical work defined by historical core holes. The distribution and volumes of the "soft" versus "hard" mineralized material is not well understood nor well mapped in the current geological and MRE model. The gold recovery, bulk density and material hardness models for the Pan Deposits represent a low to moderate risk to the current MRE and warrant follow-up work. Additional work, including core drilling and detailed metallurgical work, will be required to improve the understanding of the recovery, bulk density and perhaps hardness models and translate that into an estimate of volumes and tonnages.

The authors are not aware of any other significant material risks to the MRE other than the risks that are inherent to mineral exploration, development and mining in general. The authors of this report are not aware of any specific environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant factors that might materially affect the results of this resource estimate much of which is mitigated with the Pan Gold Deposit currently being mined profitably.

15 Mineral Reserve Estimate

The conversion of mineral resources to ore reserves required accumulative knowledge achieved through Lerchs-Grossmann (LG) pit optimization, detailed pit design, and associated modifying parameters. Reserve estimation was performed using Hexagon's MinePlan® software and applies to the full Calibre Pan resource. Detailed pit slope design, access, haulage, and operational cost criteria were applied in this process for all mining areas. The Project was built in U.S. units and all metal grades are in oz/ton.

The orientation, proximity to the topographic surface, and geological controls of the GRP Pan mineralization support mining of the ore reserves with open pit mining techniques. To calculate the mineable reserve, pits were designed following an optimized LG pit based on a US$1,600/oz Au sales price. The quantities of material within the designed pits were calculated using a base Cutoff Grade (CoG) of 0.004 Au oz/ton for the argillized and unaltered material and a base CoG of 0.006 Au oz/ton for the silicified material. CoG calculation is based on the static US$1,600/oz Au sales price utilized for ore reserves in this study.

15.1 Conversion Assumptions, Parameters and Methods

Conversion of resources to reserves requires consideration of:

- The ore extraction method(s) used in relation to the ore body characteristics, which determine mining dilution and recovery; and
- Project operating costs and resulting CoGs.

In accordance with the CIM classification system only Measured and Indicated resource categories can be converted to reserves (through application of appropriate modifying factors). Inferred Mineral Resources are treated as waste for the purposes of reserve estimates. For the reserve stated herin, Measured resources were converted to Proven reserves and Indicated resources were converted to probable reserves.

The CoG may be modified to other values during the mining operations to optimize business profits. These operational CoG grades may accomplish different specific purposes.

Additionally, Calibre has maintained an inventory of recoverable ounces in the heap leach pad which were included as Probable reserves. The metallurgy QP reviewed the methodology used for tabulating these ounces and approved their inclusion in the Reserve.

15.1.1 Dilution

The Reserve is reported using diluted Au grades that take into account surrounding waste gold grades as described in Section 14.7. This level of dilution was sufficient to properly predict mining grades and additional dilution was not included.

15.1.2 Break Even Cut-off Grade

The typical expression for a break-even (BE) gold CoG is:

$$BE\ COG = \frac{\text{Total Unit Ore Mining, Processing and Administration Operating Costs}}{\text{(Au Price – (Royalty + Final Sales Costs)) x Process Recovery}}$$

15.1.3 Internal Cut-off Grade

The internal CoG is an operational CoG that accounts for all operating costs except for the mining cost; only the difference between the cost of mining the block as ore versus waste is considered. Material between the BE CoG and the internal CoG is considered to be marginal material. Because this marginal material can pay for downstream processing costs and other ore related costs, it qualifies as ore.

The typical expression for an internal CoG for gold projects is:

$$Int.COG = \frac{\text{Total Unit (Ore − Waste) Mining, Processing and Administration Operating Costs}}{\text{(Au Price – (Royalty + Final Sales Costs)) x Process Recovery}}$$

The internal CoG calculation was used as the basis of the CoGs applied for reserves in this report.

15.1.4 Cut-off Grade for Report

The CoG used by the QP to determine whether a block was ore or waste for the argillized and unaltered materials was 0.004 Au oz/ton.

For silicified material, an elevated cutoff grade of 0.006 Au oz/ton was applied. This cutoff was increased slightly from the calculated internal cutoff to account for the limited testwork available for silicified material near the CoG and generally observed reduced recovery for that material type at all grade ranges.

For cutoff calculations, the static US$1,600/oz Au sales price for ore reserves in this study was used, along with fixed process recoveries of 80% for argillic and unaltered materials, and 60% for silicic materials. To maintain consistency with what was used in the optimization, these CoGs were used as a basis to define ore and waste in the production schedule.

15.2 Reserve Estimate

The Mineral Reserve Estimate for Pan is presented in Table 15-1.

Table 15-1: Pan Project Mineral Reserve Estimate as of December 31, 2022

Classification	Mass (000's st)	Grade (oz/st Au)	Grade (g/t Au)	Metal Contained (koz Au)
Proven	13	0.015	0.499	0.2
Probable	21,799	0.011	0.368	234
Proven and Probable	21,812	0.011	0.368	234
Probable Leach Pad Inventory (recoverable)				30
Total Proven and Probable				264

Source: SRK 2023

9. Reserves stated in the table above are contained within an engineered pit design following the US$1,600/oz Au sales price Lerchs-Grossmann pit. Date of topography is December 31, 2022;
10. In the table above and subsequent text, the abbreviation "st" denotes US short tons;
11. Mineral Reserves are stated in terms of delivered tons and grade before process recovery. The exception is leach pad inventory, which is stated in terms of recoverable Au ounces;
12. Costs used include a mining cost of US$2.11/st and an ore processing and G&A cost of US$3.88/st;
13. Reserves for argillic (soft) and unaltered ore are based on a minimum 0.004 oz/st Au CoG, using a US$1,600/oz Au sales price and an Au recovery of 80%;
14. Reserves for silicic (hard) ore are based on a minimum 0.006 oz/st Au CoG, using a US$1,600/oz Au sales price and an Au recovery of 60%;
15. Mineral Reserves stated above are contained within and are not additional to the Mineral Resource, the exception being leach pad inventory; and,
16. Numbers in the table have been rounded to reflect the accuracy of the estimate and may not sum due to rounding.

15.3 Relevant Factors

The reserve estimated herein is subject to potential change based on changes to the forward-looking assumptions underlying cost and revenue estimates utilized in this study.

The heap leach pad has performed well at a hard to soft material ratio of 60% to 40%. As mining continues, there is less silicic (hard) material available based on the alteration types currently included in the resource model. To address the potential loss of permeability of the heap, SRK has assumed all material will be crushed, agglomerated, and stacked using a radial stacker starting in April 2024. The capital and operating costs for this equipment were accounted for in SRK's cashflow modeling.

The mine plan presented in this report only includes crushed material and is limited to 12,325 stpd based on historic performance of the current crusher. The mine is currently permitted to stack 14,000 tpd on the heap and may choose to stack ROM material during operations. While recoveries for ROM material are lower, they may be more economical than crushed material grades nearing the COG of this report due to the removal of crushing costs.

The QP is not aware of any existing environmental, permitting, legal, socio-economic, marketing, political, or other factors that are likely to materially affect the mineral reserve estimate beyond those discussed herein.

16 Mining Methods

The Pan mine is a conventional hard rock open pit mine that uses a contractor to drill, blast, load, haul, and provide support equipment. Mining is performed on 20 ft benches using CAT 992 loaders, CAT 777 haul trucks, and conventional drill and blast activities. The mine is permitted to crush and place up to 14,000 tons per day on the heap leach pad. In practice, ore is delivered to the crusher at a rate of 12,325 tons per day, then placed on the heap leach pad using the mining fleet. The additional 1,675 tons per day are placed as ROM material. For this report, the QP limited the ore mining rate to the 12,325 tons per day that the crusher has historically achieved. It is assumed that the ore mined after April 2024 will be crushed and agglomerated to maintain permeability in the heap leach pad.

Due to the argillic alteration present in the ore, there is potential to lose permeability in the heap if too much clay is placed at one time. To maintain permeability, ore is defined as either hard or soft based on alteration type by the ore control geologist, and a blend of 60% hard to 40% soft by weight is placed on the pad. For this mine plan, it was assumed that all planned ore flagged as argillic or unaltered would be considered soft, and silicic alteration would be considered hard. Based on the current resource model, the 60% hard to 40% soft ratio can only be maintained through March 2024. Starting in April 2024, the OP has assumed the ore will be agglomerated and stacked with a radial stacker.

16.1 Current Mining Methods

Currently, conventional open pit mining methods are implemented at Pan. A contract miner is conducting the mining activities. Ore and waste are drilled and blasted, then loaded into CAT 777 haul trucks with CAT 992 wheel loaders. The loading and haulage fleet is supported by track dozers, motor graders, and water trucks. Waste is hauled to waste rock storage facilities near each pit. Ore is hauled and placed directly at the crusher feed stockpile. At times when the ore mine exceeds the crusher capacity, ore may be placed directly on the heap leach pad without crushing. The ore placed at the crusher feed stockpile is rehandled into the crusher with one CAT 988 wheel loader operated by Calibre. The crushed ore is then rehandled from the crushed ore stockpile into CAT 777 haul trucks with CAT 992 wheel loaders and placed on the heap leach pad.

The Pan Mine uses a mining contractor for all mining activities except for crushing the ore and placement of ore into the crusher. The Pan Mine owns, operates, and maintains all other non-mining equipment on the site. The general site layout, including pits, waste dumps, crusher site, ponds, and heap leach pad, is shown in Figure 5-1.

Ore production is planned at a nominal rate of 12,325 t/d, equivalent to 4.5 Mt/y with an expected 5-year mine life. Mining is planned on a 7 day per week schedule on a double 12-hour shift per day Monday through Thursday and single 12-hour day shift Friday through Sunday, 365 days per annum. Peak ore and waste production is estimated at 58,000 t/d, with the average production being 40,000 t/d. The average LOM stripping ratio is 2.03:1 waste-to-ore, using a 0.004 oz/ton internal cut-off for the argillic and unaltered material and a 0.006 oz/ton elevated cut-off on silicic material. The change in CoG from one material to the next is a result of the metallurgical recovery testing, which showed the argillic and unaltered material to have an expected average recovery of 80% with the more silicified material having an expected recovery of 60%. The silicic material also has less recovery information near cutoff and this cutoff was elevated above the internal cutoff to account for this.

16.2 Parameters Relevant to Mine or Pit Designs and Plans

Metallurgical test work and operating experience has indicated that the softer ores (argillic/clay ores) need to be blended with silicified (hard) ore to achieve adequate permeability and stability in the heap leach pad. Hard and soft ores are currently blended at a ratio of 60% rock to 40% clay. This ratio can be reduced as the pad is stacked higher, but additional testwork will be required to determine appropriate ratios for given stack heights. Test work also indicates that optimum gold recovery of the ores can be achieved after blending hard and soft ores with crushing and agglomeration using cement, due to the presence of clay minerals.

The LOM ratio of hard to soft ores, as represented by the resource model, is only 28% hard to 72% soft. Because of this, the 60% hard to 40% soft ratio can only be maintained through March 2024. Of important note, the majority of the ore (54%) is flagged as unaltered in the resource model. There is limited characterization work for this material and thus, the QP has elected to include it all as soft ore for conservatism with regard to permeability and pad stability. With this in mind, the QP has required the addition of agglomeration using cement and stacking via conveyor and radial stacker to the mine plan.

Pan has committed to completing a comprehensive material characterization study in 2023.

The inclusion of the unaltered material in the soft category has also resulted in that material having a recovery assumption of 80%. Based on the historic performance of the pad it is likely that this assumption is accurate.

The ore is loaded using CAT 992 wheel loads and transported on CAT 777 haul trucks to a stockpile near the primary jaw crusher, which is set up on the leach pad. A front-end loader feeds the primary jaw crusher, which conveys the ore to the crushed ore stockpile on the heap leach pad. The crushed ore is then rehandled from the crushed ore stockpile into CAT 777 haul trucks with CAT 992 wheel loaders and placed on the pad. Waste material is loaded into CAT 777 haul trucks and hauled directly to the waste dumps. There are several satellite pits (Syncline and Black Stallion) that will be backfilled with waste as part of the closure plan. The backfill operations will take place prior to closure, during the 5-year mine life as part of concurrent reclamation planning.

16.2.1 Geotechnical Design – Pits

This section provides a brief summary of the pit geotechnical study to arrive at pit slope design recommendations. Key aspects of the geotechnical study were the review of historical information, site investigations, geotechnical characterization, and stability evaluations.

Information Review

SRK reviewed provided historical information and found that the key geotechnical studies were reported in Golder (2011) and SRK (2021). Golder (2011) advanced on a scoping level study in 2009 and comprised drillhole investigations, field and laboratory testing, geotechnical characterization and slope stability assessment for North Pan and South Pan pits. For the pits considered in the study, Golder concluded that the achievable pit slope angles would be defined by bench-scale configuration. Triple benching of the design 20ft high production benches was recommended along with the design parameters reproduced in Table 16-1.

Table 16-1: Pit Slope Design Parameters

Pit Design Criteria	Limestone Units	All Other Rock Units
Inter-Ramp Angles	50°	45°
Face Angles	70°	63°
Catch Bench Berm	30 ft	30 ft
Catch Bench Vertical Spacing	60 ft	60 ft

Source: Golder, 2011

SRK (2021) was a study of the North Pan pit as part of a 2020 Resources and Reserves update. The objective of the study was to assess the validity of applying the Golder (2011) design parameters for the planned north pit expansion. The study comprised review of previous investigations, pit face mapping, pit performance review, geotechnical characterization and two-dimensional numerical slope stability assessment. The study concluded that the as-built North Pan pit was in compliance with the pit slope design parameters and operating with good final wall control practices. The study concluded that the Golder (2011) design parameters were acceptable if accompanied with good operations practices.

From the review SRK identified a number of gaps in the geotechnical knowledge relevant to the planned ultimate pits for the Resources and Reserves Update. To address some of these SRK designed an investigation program of eight oriented diamond cored drillholes, comprising five for North Pan pit and three for South Pan pit.

Investigations

Calibre drilled and did downhole televiewer survey for four of the drillholes (Table 16-2) in the planned investigation program over September and October 2022. Logging of the recovered core was carried out by SRK in October 2022. Geomechanical laboratory testing of select recovered samples was conducted by Advance Terra Testing (ATT) in February 2023. The laboratory program comprised 12 Uniaxial Compressive Strength, 11 Triaxial Compressive Strength and 6 Brazilian Tensile Strength.

Table 16-2: Investigation Program Drillholes

Pit	Drillhole	Easting (ft)*	Northing (ft)*	Elevation (ft)	Azimuth (degrees)	Dip (degrees)	Length (ft)
North Pan	PC-22-015	1998208	14270913	6780	230	70	250
	PC-22-016	1998474	14272271	6601	360	60	251
South Pan	PC-22-019	1998059	14280028	6621	200	60	200
	PC-22-020	1998313	14280335	6624	340	60	301

Source: SRK, 2023

* - UTM WGS84_ft

Investigation were also informed by a site visit by SRK in early December 2022. During the site visit SRK was able to make limited observations of the walls of the North and South Pan pits, and core from two select historical drillholes.

<u>Characterization</u>

The site geology is presented in numerous reports and the geotechnical units are described in Golder (2011) and SRK (2022). Calibre provided SRK with the 3-D mine geology model which SRK understands was developed by SRK (US) in 2018. The model contains major structures and the primary lithology units: Devil's Gate Limestone, Pilot Shale, Joana Limestone, Chainman Shale, Diamond Peak Conglomerate and Tertiary Volcanics. In late December 2022, SRK was provided with a 3-D models of lithology (with units of Devil's Gate Limestone, Pilot Shale and Tertiary Volcanics) and alteration (argillic and silicious) which were produced by APEX Geosciences. SRK reviewed both models in the context of the planned ultimate pits and site visit observations. The SRK was adopted for the geotechnical characterization because it provided better resolution and also included the minor units. Based on this model, the walls of the planned ultimate pit are mostly comprised of Devil's Gate Limestone and Pilot Shale units. The 3-D alteration model is understood to be primarily for resource purposes, but shows 'spotty' distribution of the argillic alteration which is cannot be reasonably incorporated into pit-scale stability evaluations.

Based on the historical information, drillhole logging and laboratory testing data, SRK selected representative properties for geotechnical parameters required for slope stability analyses (Table 16-3). Parameters for the Devil's Gate Limestone and Pilot Shale units were defined with data from the investigations, and others were taken from previous studies. Mohr-Coulomb failure criterion was considered as more appropriate for the weaker material units.

Table 16-3: Pit Slope Stability Input Parameters

Unit	Unit Weight[1] (lbs/ft^3)	Hoek and Brown				Mohr-Coulomb[2]	
		UCS (psf)	GSI	mi	D Factor	Cohesion (psf)	Friction Angle (°)
Silicified Breccia[1]	154	417708	40	10	0.5	-	-
Devil's Gate Limestone	154	835344	46	10	0.5	-	-
Pilot Shale	138	522144	35	7	0.5	-	-
Fault	154	-	-	-	-	1440	28
Tertiary Volcanics	154	-	-	-	-	2016	40

1. Golder, 2011

2. SRK, 2021

Source: SRK, 2023 (except where otherwise noted)

Analyses

For the North and South Pan pits constructed using the Golder (2011) slope design parameters, SRK selected representative sections to conduct overall pit scale 2-D limit equilibrium 2-D numerical analyses. Each cross section was selected to study the effect of rock mass quality, major fault locations relative to pit walls and lithologic contacts in the ultimate pit walls. Previous reports indicate that groundwater at the site occurs in a deep carbonate aquifer approximately 600 feet below the current North and South Pan pits. Consequently, piezometric pressures were not considered in the analyses. In accordance with observation reported in Read and Stacey (2009) that there have been no positively identified instances of earthquakes triggering slope failures in large open pit mines, static loading only analyses were conducted. The results showed that all sections achieved a Factor of Safety (FoS) greater than 1.3 which complies with the selected internationally recognized design acceptance criteria for overall slope scale for 'medium' consequence of failure (Read and Stacey, 2009).

Conclusions

The study concluded that the Golder (2011) pit slope design parameters appear to be appropriate for design of the planned ultimate pit. An additional recommendation which is relevant to the larger slopes now under consideration is for maximum bench stack height to be 300 feet vertical and which point slopes should be 'decoupled' with a geotechnical berm of at least 60 feet wide. Regarding the bench face angles, there was an assessment in SRK (2019) of the design compliance which found that design bench face angles were not in accordance with the design angles in the argillic and interbedded limestone units. It was interpreted that this was because the steeper angle was not able to be achieved. Based on site visit observations, this is certainly true for the argillic alteration materials which cannot support such steep bench face angles. As indicated in the alteration model, the argillic alteration occurs in pockets distributed throughout. Their chaotic distribution does not allow for this unit to be explicitly considered in slope design and analyses. However, where such pockets are observed in the course of mining localized reduction of bench face angle will be required. As recommended in SRK (2019), the achieved bench face angle of 50 degrees is considered to be appropriate. Achieving these design parameters will require the continuation of good blasting practices including pre-splitting and buffer blasting, as well as disciplined bench scaling and clean-up.

The study and these conclusions were subject to few key limitations which were not able to be addressed in the study and which may have had an influence on the findings:

- The geology model used was from 2018 and has not been updated with pit wall exposure observations from mining since this time.
- The investigation program completed less than half of the drillholes in the program that SRK designed and recommended.
- The mining operation has not been conducting geotechnical inspections, monitoring or surveys which means that this critical pit behavior information was not available to inform analyses and design.

Recommendations

SRK provides the following recommendations accompanied with the note that there is reasonable potential for steepening slopes in some areas with the support of these standard industry practice measures:

- Update the SRK (2018) 3-D geology model to accurately reflect the lithology, major structures and alteration units exposed in the current pit walls and drillhole data.
- Using the updated geology model, construct a 3-D geotechnical domain model and refine their propertied based on additional drilling and geomechanical laboratory testing.
- Using the 3-D geotechnical domain model, refine and conduct additional slope stability analyses to verify and optimize the recommended design parameters.
- Implement a ground control monitoring plan including a program of pit wall monitoring and with associated Trigger Action Response Plans (TARPs) to appropriately respond to observed pit behavior.
- Instigate annual inspections by a suitably trained and experienced geotechnical specialist to assess the pit performance and stability, examine the pit design implementation practices, and review updated models.

16.2.2 Geotechnical Design – Waste Rock Disposal Areas

Designed Waste Rock Disposal Areas (WRDA) are based on the current mine plan, which predicts approximately 44.3 Mt of waste rock. The waste rock will be placed in two WRDA at an overall reclaimed slope of 3H:1V (18.4°).

Vegetation will be cleared from any additional required WRDA footprints; coarse woody debris and plant growth medium will be salvaged and placed in separate stockpiles. Coarse woody debris may be chipped and spread over reclaimed areas or added to growth media stockpiles. The final surfaces of the WRDA will be constructed by end dumping to create typical mining waste rock facilities. On sloped terrain, where safe and practicable, some weathered geologic materials below the plant growth medium may be pushed downhill to construct toe berms, to prevent rocks from scattering on the hillside below the toes of the WRDA.

16.2.3 Hydrological

Based on existing data and the recent installation of three water supply wells, groundwater at the Project occurs in a deep carbonate aquifer and a shallow alluvial aquifer along the normally dry stream channel west of the mine area. Shallow alluvial groundwater west of the mine area occurs at elevations that are approximately 500 ft higher than the deep carbonate aquifer. The deep carbonate aquifer is approximately 650 to 800 ft below the heap leach facility and approximately 600 ft below the bottom of the south pit. The rock mass in the current mine plan is above the carbonate aquifer water table, and groundwater is not a factor in mine design.

16.3 Pit Optimization

Pit optimization was completed using Hexagon's MinePlan® Economic Planner (MPEP) pit optimization software. Pit optimization is based on preliminary economic estimations of mining, processing and selling related costs, slope angles, and metal recoveries. These pit optimization factors differ from those reported in the final economic analysis, which is based on the pit design criteria and production schedule that follows the optimization work. The pit optimization software considered grades and tonnages in the model along with prices, recovery factors and mining, processing, and administrative costs to evaluate what material could be economically extracted using the Lerchs-Grossmann (LG) algorithm.

Pan's goals for the asset were to extend the mine life as they continue exploration efforts in the area. Because of this, the mining QP selected the $1,600 shell (Revenue Factor = 1.0) as the basis for mine planning.

16.3.1 Mineral Resource Models

APEX geoscience provided the mining QP with a 3D block model that was depleted to the September 30, 2022 EOM topo surface. Diluted total gold grades, densities, lithologies, and alteration information were included in this model as described in Section 15. The mining QP loaded this model into MinePlan software, and it serves as the basis for all material quantities reported in the mineral reserves estimate.

Only Measured and Indicated resources were considered in the evaluation; Inferred resources were treated as waste.

16.3.2 Topographic Data

Base topographic data is from an aerial survey completed in July 2010 by Aerotech Mapping of Reno, Nevada. Subsequently, the dataset has been updated with surveys from construction, and end of month surveys for the pit, leach pad, and dumps. The latest topography for the site is the end of month topography for December 2022. Material in the 3D block model above the December 2022 topo surface was considered mined out and was not included in the current mine plan.

16.3.3 Optimization Parameters and Constraints

Geotechnical slope parameters were determined by the rock units according to values in Table 16-5. and were incorporated into the LG runs. Diluted grades were used as described in Section 15.1.1.

Royalties

A royalty of 4% was applied to the Net Smelter Return.

Mining Costs

Operating costs were based upon the current mine contractor's Time and Materials (T&M) agreement.

Mining costs were estimated to be US$2.11 per ton mined for the pit optimization.

Processing Costs and Recoveries

Processing costs for the Pan area deposits, were calculated to be US$3.00 per ore ton for crushed ore. This estimate assumes primary crushing with addition of lime. This processing cost includes rehandling of the ore from the crushed ore stockpile to the leach pad cell, ADR and leaching costs. Recovery factors of 60% and 80% for silicic and argillic/unaltered materials, respectively, were used in the optimization runs.

Other Costs

General and administration costs were estimated at US$0.88 per ore ton from the current staff levels planned.

The pit optimization parameters are summarized in Table 16-4.

Table 16-4: Pit Optimization Parameters

Argillic and Unaltered Material		
Item	**Cost/Rate (US$)**	**Units**
Mining Cost	$2.11	US$ per ton
Processing Cost	$3.00	US$ per Ore ton
G&A Cost	$0.88	US$ per Ore ton
Process Recovery	80%	
Slope Angle	Variable	Varies by Rock Units
Silicic Material		
Item	**Cost/Rate**	**Units**
Mining Cost	$2.11	US$ per Ore ton
Processing Cost	$3.00	US$ per Ore ton
G&A Cost	$0.88	US$ per Ore ton
Process Recovery	60%	
Slope Angle	Variable	Varies by Rock Units

Source: SRK 2023

16.3.4 Pit Slope Angles

SRK utilized the standard geotechnical guidance outlined in section 16.2.1, which defines slope angles based on limestone, other rock types, and fill. Table 16-5 provides the slope angles used to generate the pit shells.

Table 16-5: Slope angle sectors used to generate pit shells

Sector	OSA Angle (degrees)
1 (rock other than limestone)	45
2 (limestone)	50
10 (fill material)	27

Source: SRK 2023

16.3.5 Pit Optimization Results

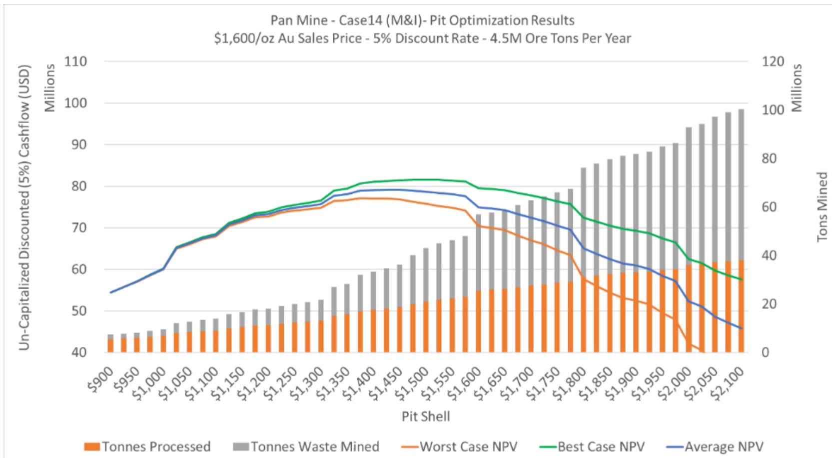
Table 16-6 provides the material quantities within the US$1,600/oz Au sales price LG pit.

Table 16-6: Ultimate LG Pit Material Quantities, US$1,600/oz Gold Sales Price

Pit	Material	Mass	Contained Au Grade		Contained Au Metal		Waste	Stripping Ratio
		(st 000's)	(opt)	(ppm)	(oz 000's)	(g 000's)	(st 000's)	(w/o)
North	Proven	2	0.013	0.429	0.0	1		
	Probable	7,930	0.012	0.405	94	2,915		
	Total Proven and Probable	**7,932**	**0.012**	**0.405**	**94**	**2,916**	**6,491**	**0.82**
South	Proven	11	0.015	0.514	0	5		
	Probable	13,719	0.011	0.368	147	4,581		
	Total Proven and Probable	**13,730**	**0.011**	**0.368**	**147**	**4,586**	**23,504**	**1.71**
Total	Proven	13	0.013	0.429	0.2	6		
	Probable	21,649	0.011	0.393	241	7,497		
	Total Proven and Probable	**21,662**	**0.011**	**0.382**	**241**	**7,503**	**29,995**	**1.38**

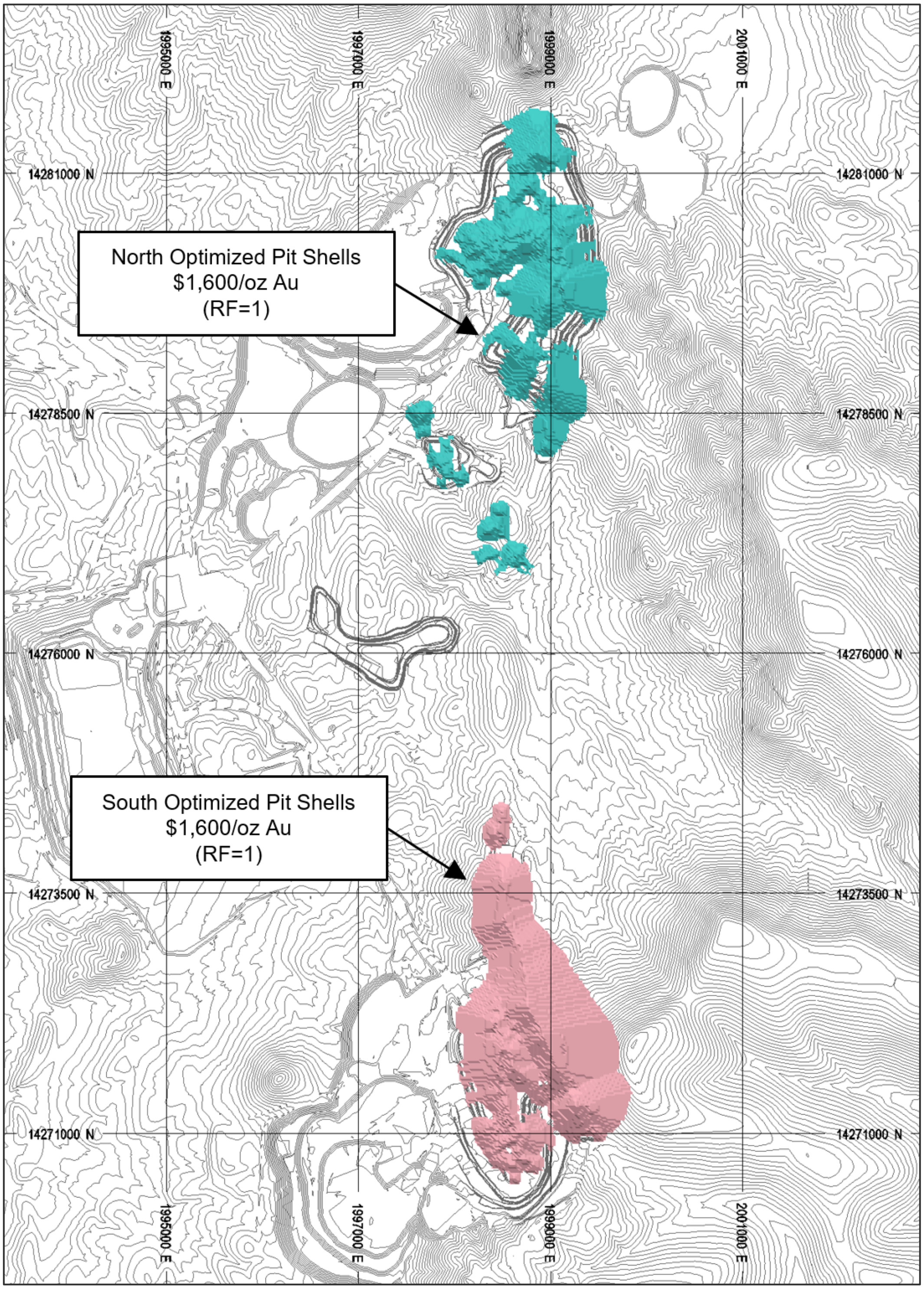
Source: SRK 2023

During the optimization, a series of LG pits were generated from US$900/oz to US$2,100/oz gold prices. As the gold price increases, the pits grow larger in size and the ore and waste tonnages both increase. In Figure 16-1, a graph is presented showing the ore and waste tonnages and NPV using a constant US$1,600/oz gold price with an assumed 5% discount rate against the pit shells generated at a given Au sales price. Best Case scenarios were generated where the best case mined each incremental shell in sequence before mining the ultimate shell last. Worst Case scenarios were generated where the ultimate shell was mined first top to bottom and the incremental shells were not mined in sequence as in the Best Case scenario. The ultimate LG pit configuration is shown in Figure 16-2.



Source: SRK, 2023

Figure 16-1: LG Pit Tonnages and NPV Sensitivity at a $1,600 Gold Price



Source: SRK, 2023

Figure 16-2: US$1,600 Au Sales Price Ultimate LG Pit

16.4 Pit Designs

Haul roads and catch benches for the pits were based on the design criteria outlined in the Golder report (Golder, 2011). Haul roads are designed at a width of 90 ft and a maximum gradient of 10% to provide safe two-way haulage traffic when a berm is added. In some cases, the lowermost benches had the road grade increased to 12% and the haul road width narrowed to 70 ft to minimize excessive waste stripping. Pan's pit design criteria are presented in Table 16-7.

Table 16-7: Pit Design Criteria – Operations

Pit Design Criteria	Limestone Units	All Other Rock Units
Inter-Ramp Angles	50°	45°
Face Angles	70°	63°
Catch Bench Berm	30 ft	30 ft
Catch Bench Vertical Spacing	60 ft	60 ft
Road Widths	90 ft	90 ft
Road Grade	10%	10%
Road Widths Pit Bottom	70 ft	70 ft
Road Grade Pit Bottom	12%	12%

Source: GRP, 2020

An ultimate pit shell was selected based on the pit optimization study described in section 16.3. This ultimate pit was used as the basis for detailed pit design work for Pan. This ultimate pit was further divided into individual economic phases to balance ore flow and cashflow over the life of the mine.

Using the selected economic phases, a series of pit designs were created including ramps and catch benches. In the south pit, several sub phases were developed to provide access to different areas of the pit, maximizing gold recovery while delaying waste stripping as much as possible. In the north pit, three independent designs were developed. These served as the basis for production scheduling and reserve reporting. The reserves for each pit design are included in Table 16-8.

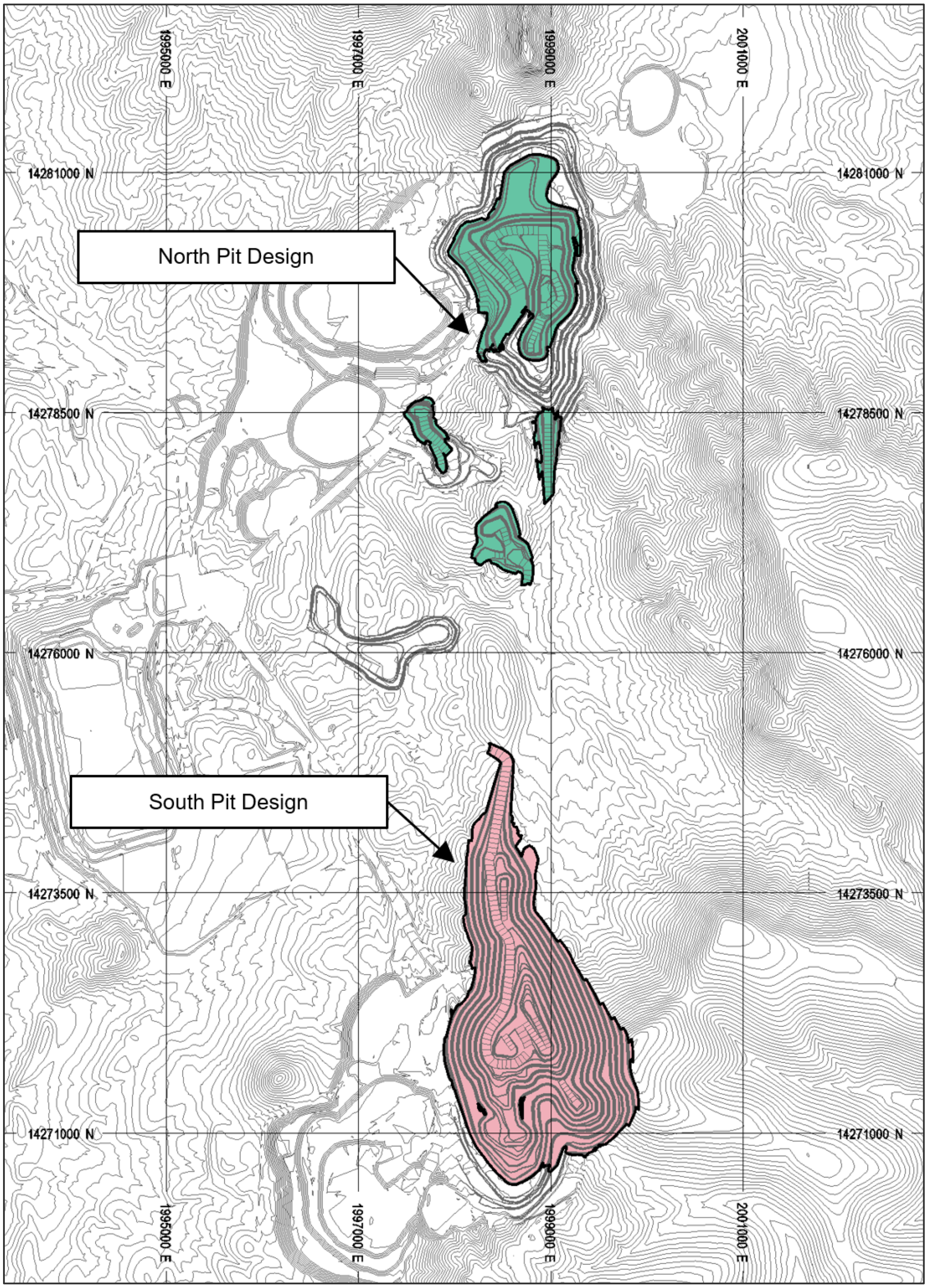
Table 16-8: Reserves by Mining Area

Pit	Material	Mass	Contained Au Grade		Contained Au Metal		Waste	Stripping Ratio
		(st 000's)	(opt)	(ppm)	(oz 000's)	(g 000's)	(st 000's)	(w/o)
North	Proven	2	0.013	0.429	0.0	1		
	Probable	6,584	0.011	0.393	75	2,347		
	Total Proven and Probable	**6,586**	**0.011**	**0.393**	**75**	**2,348**	**7,877**	**1.20**
South	Proven	11	0.015	0.514	0.2	5		
	Probable	15,215	0.010	0.357	158	4,923		
	Total Proven and Probable	**15,226**	**0.010**	**0.357**	**158**	**4,928**	**36,460**	**2.39**
Total	Proven	13	0.015	0.499	0.2	6		
	Probable	21,799	0.011	0.368	234	7,270		
	Total Proven and Probable	**21,812**	**0.011**	**0.368**	**234**	**7,276**	**44,337**	**2.03**

Source: SRK, 2023

1. Reserves stated in the table above are contained within an engineered pit design following the US$1,600/oz Au sales price Lerchs-Grossmann pit. Date of topography is December 31, 2022;
2. In the table above and subsequent text, the abbreviation "st" denotes US short tons;
3. Mineral Reserves are stated in terms of delivered tons and grade before process recovery.
4. Costs used include a mining cost of US$2.11/st and an ore processing and G&A cost of US$3.88/st;
5. Reserves for argillic (soft) and unaltered ore are based upon a minimum 0.004 oz/st Au cut off grade ("CoG"), using a US$1,600/oz Au sales price and an Au recovery of 80%;
6. Reserves for silicic (hard) ore are based upon a minimum 0.006 oz/st Au CoG, using a US$1,600/oz Au sales price and an Au recovery of 60%;
7. Mineral Reserves stated above are contained within and are not additional to the Mineral Resource, the exception being leach pad inventory; and,
8. Numbers in the table have been rounded to reflect the accuracy of the estimate and may not sum due to rounding

Figure 16-3 shows the phase designs for the Pan Mine.



Source: SRK, 2023

Figure 16-3: Pan North (Green) and South (Red) Pit Designs

16.5 Design Changes

Design changes are the changes in material quantities from the LG guide pit to a designed pit. The differences between the LG shells and the pit designs were related to small un-mineable pit areas and narrow, steeply dipping ore zones, which the LG will mine, but cannot be accessed after roads and ramps are included in the design pit. Designing a pit with access can deviate materially from the LG shell, particularly with small pits. The narrow deposit at Pan made designing ramp access to the bottom of the pit shell difficult without additional waste mining.

Of note, minimum mining widths and geotechnical wall configurations avoiding pinnacles in the middle of the pit and sharp noses added additional waste in design as compared to the LG pit. This also led to some ore in the pit bottoms being left behind.

Table 16-9 shows the percentage change between design and pit shell for each mining area, after the inclusion of in-pit ramps and minimum mining widths. A negative value indicates a lower value in the design pit than the guide LG.

The majority of the LG ore in the north pit that was not captured in the design is at the north end of the pit. Several designs were developed attempting to capture this ore in the mine plan, however, access costs drove the revenue of this mining area negative.

In the South, additional waste was mined to eliminate a nose of rock that the QP considered a geotechnical risk. In addition to this, additional ore tons were added when ramping to the north. Numerous design iterations were developed for this pit to ensure the design changes generated a pit shell with positive revenue.

Table 16-9: Design Changes

Source	Mining Area	Mass	Contained Au Grade		Contained Au Metal		Waste
		(st 000's)	(opt)	(ppm)	(oz 000's)	(g 000's)	(st 000's)
LG Shells	North	7,932	0.012	0.405	93.8	2,916	6,491
	South	13,730	0.011	0.368	147	4,586	23,504
	Total	**21,662**	**0.011**	**0.382**	**241**	**7,503**	**29,995**
Designed Pits	North	6,586	0.011	0.393	75	2,348	7,877
	South	15,226	0.010	0.357	158	4,928	36,460
	Total	**21,812**	**0.011**	**0.368**	**234**	**7,276**	**44,337**
Difference (Design - LG)	North	-1,345	0.000	-0.012	-18.3	-568	1,386
	South	1,496	0.000	-0.011	11	342	12,956
	Total	**151**	**0.000**	**-0.014**	**-7**	**-226**	**14,342**
% Difference (Design - LG)/LG	North	-17.0%	-3.0%	-3.0%	-19.5%	-19.5%	21.4%
	South	10.9%	-3.1%	-3.1%	7.5%	7.5%	55.1%
	Total	**0.7%**	**-3.7%**	**-3.7%**	**-3.0%**	**-3.0%**	**47.8%**

Source: SRK, 2023

16.6 Mine Production Schedule

The mine plan begins in January 2023 with mining in both the North and South Pan pits and targets a 60% to 40% ratio of hard to soft ores, respectively. The ratio drops after fifteen months of production when the hard material becomes scarcer according to the geologic model.

16.6.1 Mine Production

The yearly mine production schedule is presented in Table 16-10, beginning in January 2023 and ending in late 2027 for a total 5 years. The schedule below was completed monthly for the first two years of mining, and quarterly for the rest of the mine life. The production schedule is driven by the nominal rate of 12,325 t/d ore tons per day (4.5 Mt/y). Peak ore and waste production is estimated at 58,000 t/d, with the average production being 40,000 t/d. The average LOM stripping ratio is 2.03:1 waste-to-ore, using a 0.004 oz/ton internal cut-off for the argillic and unaltered material and a 0.006 oz/ton elevated cut-off on silicic material.

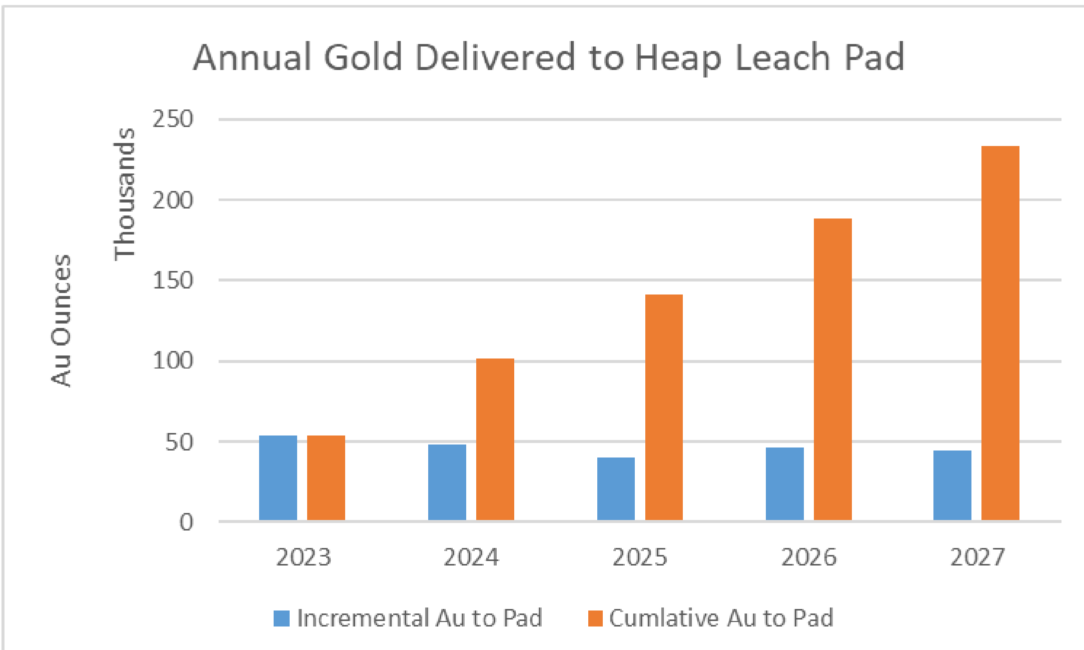
Scheduling was carried out using the reserve output by bench from each phase of mining for each open pit. MinePlan® Schedule Optimizer (MPSO) was used targeting 4.5 Mt/y and less than two benches per month. The number of haulage trucks and loaders needed were calculated from the haulage profiles and dig rates generated by MPSO to ensure that the contractor's equipment list was sufficient to meet the planned production rate.

Table 16-10: Mine Production Schedule

Description		2023	2024	2025	2026	2027	Total
Ore	Tons (000's)	4,539	4,518	3,845	4,482	4,427	**21,812**
	Au Oz/ton	0.012	0.011	0.011	0.010	0.010	**0.011**
	Au Oz (000's)	53	48	40	47	45	**234**
Waste	Tons (000's)	7,708	10,965	13,505	10,323	1,836	**44,337**
Total	Tons (000's)	**12,247**	**15,483**	**17,350**	**14,805**	**6,263**	**66,149**

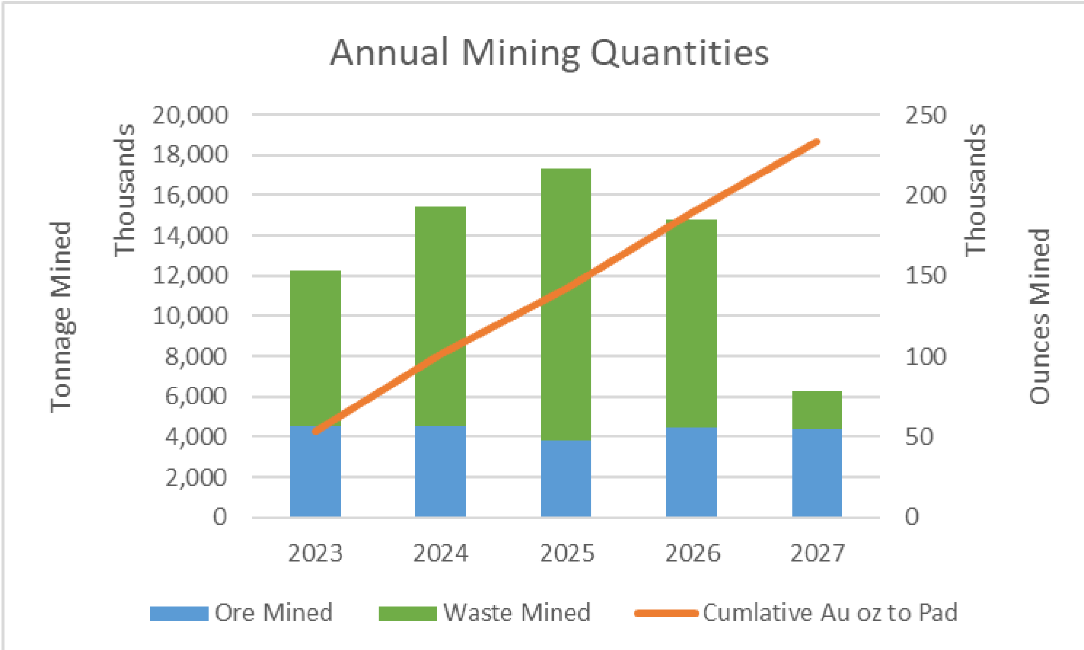
Source: SRK, 2023

Charts showing contained gold ounces delivered to the leach pad, ore and waste production, and ore production by pit, by year, and by hard or soft type are shown in Figure 16-4 through Figure 16-7, respectively. The end of year mine layouts are shown in Figure 16-8 through Figure 16-14.



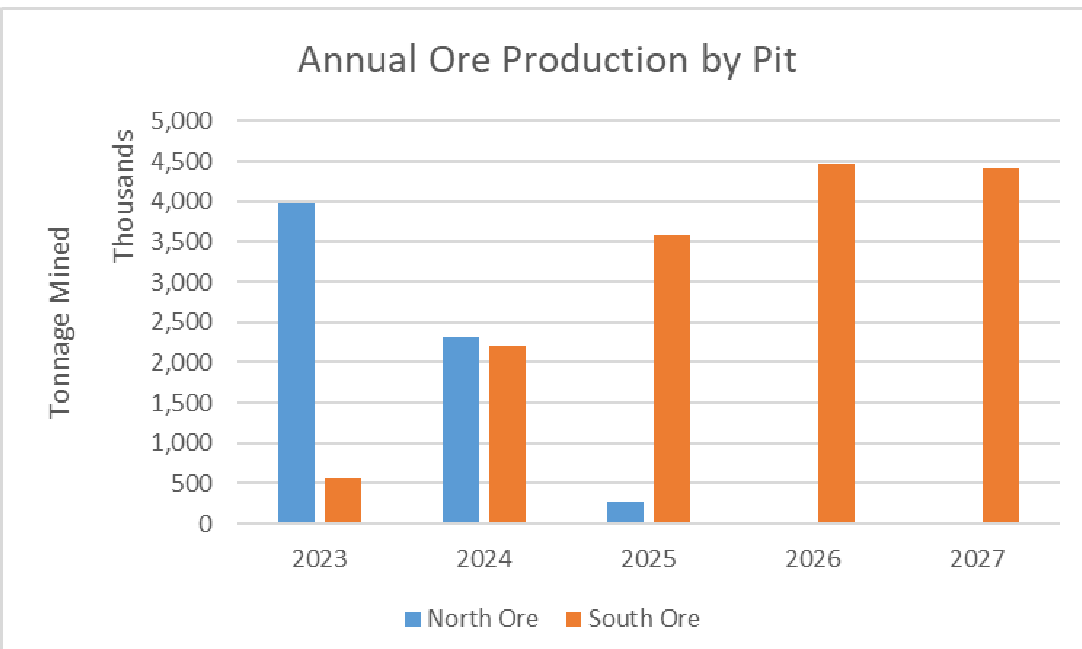
Source: SRK, 2023

Figure 16-4: Contained Gold Ounces to Leach Pad by Mining Year



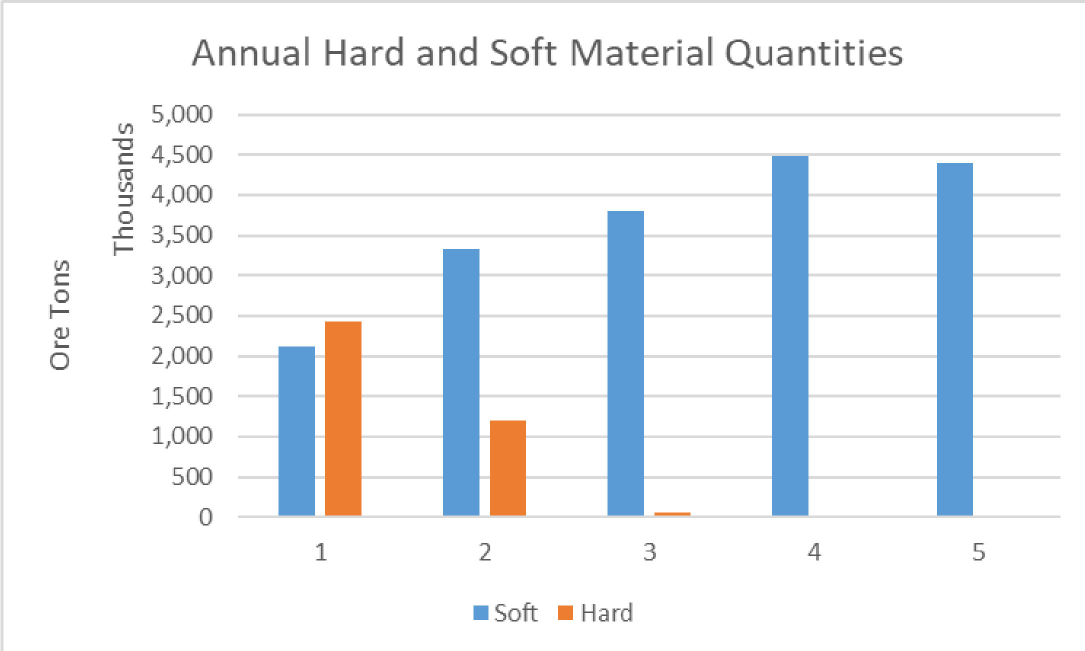
Source: SRK, 2023

Figure 16-5: Ore and Waste Mining (mined tons and contained Au oz) by Mining Year



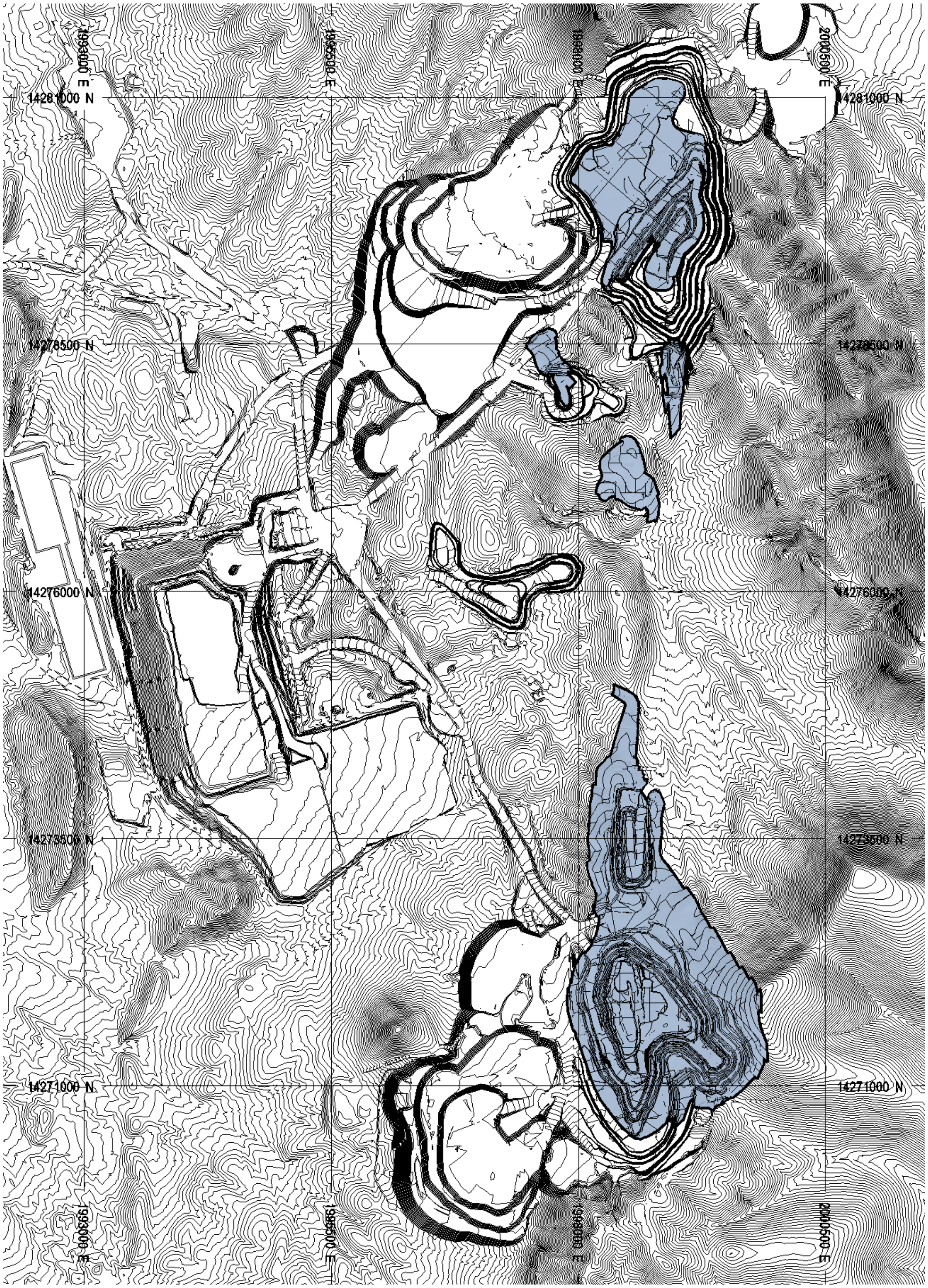
Source: SRK, 2023

Figure 16-6: Ore Production by Pit and Year



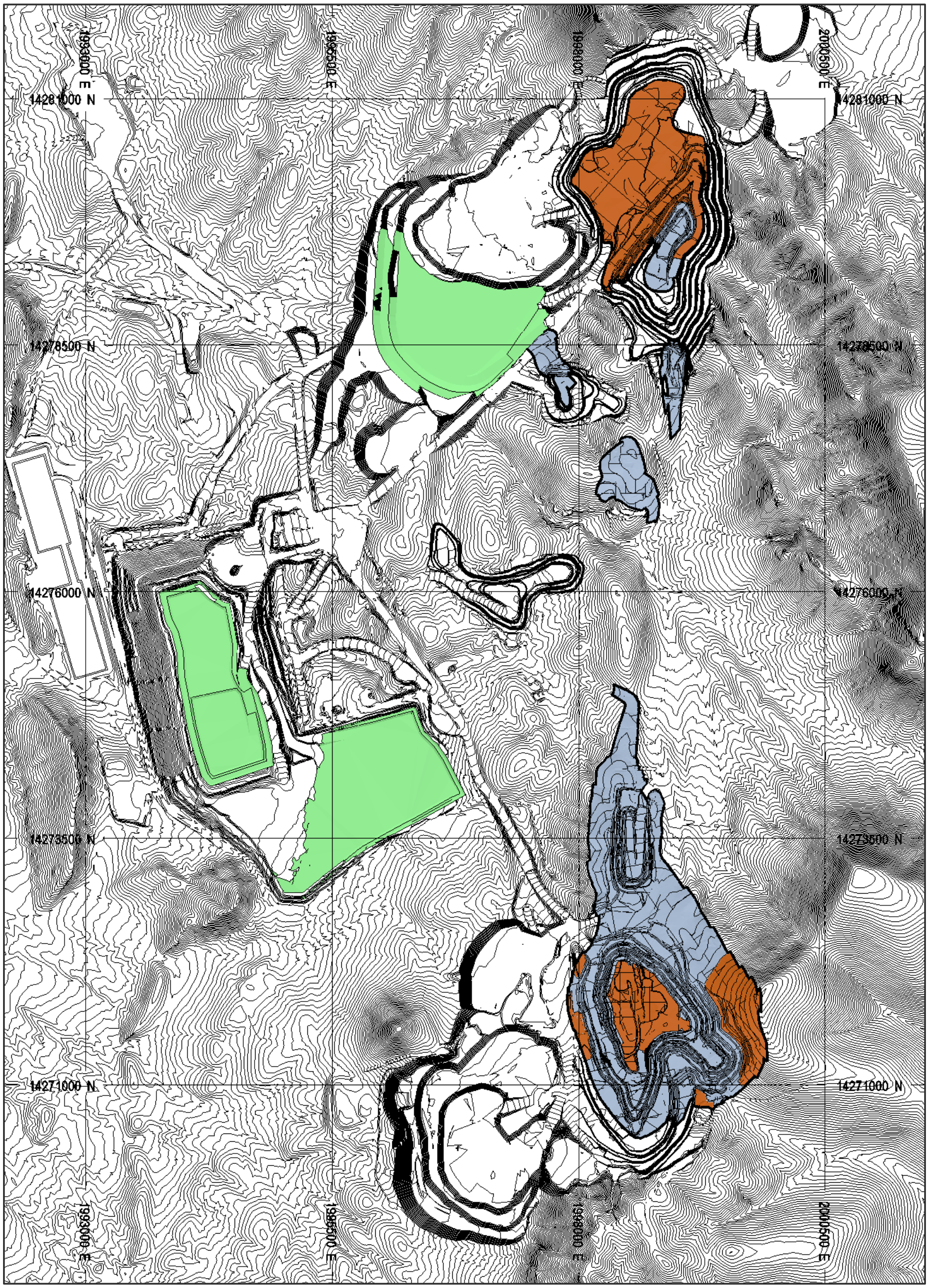
Source: SRK, 2023

Figure 16-7: Hard and Soft Ore Production by Year



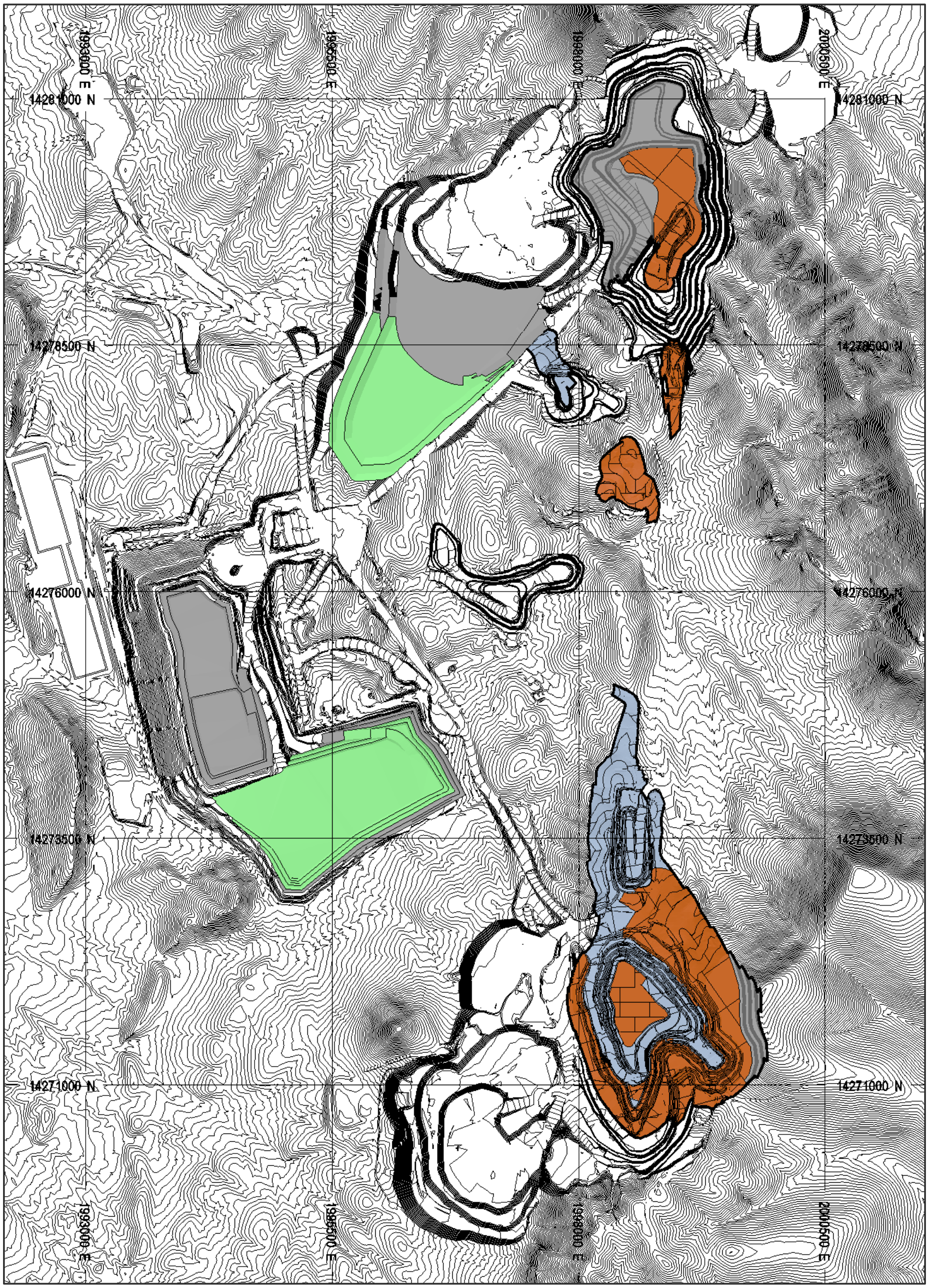
Source: SRK, 2023

Figure 16-8: Start of Mining – January 1, 2023



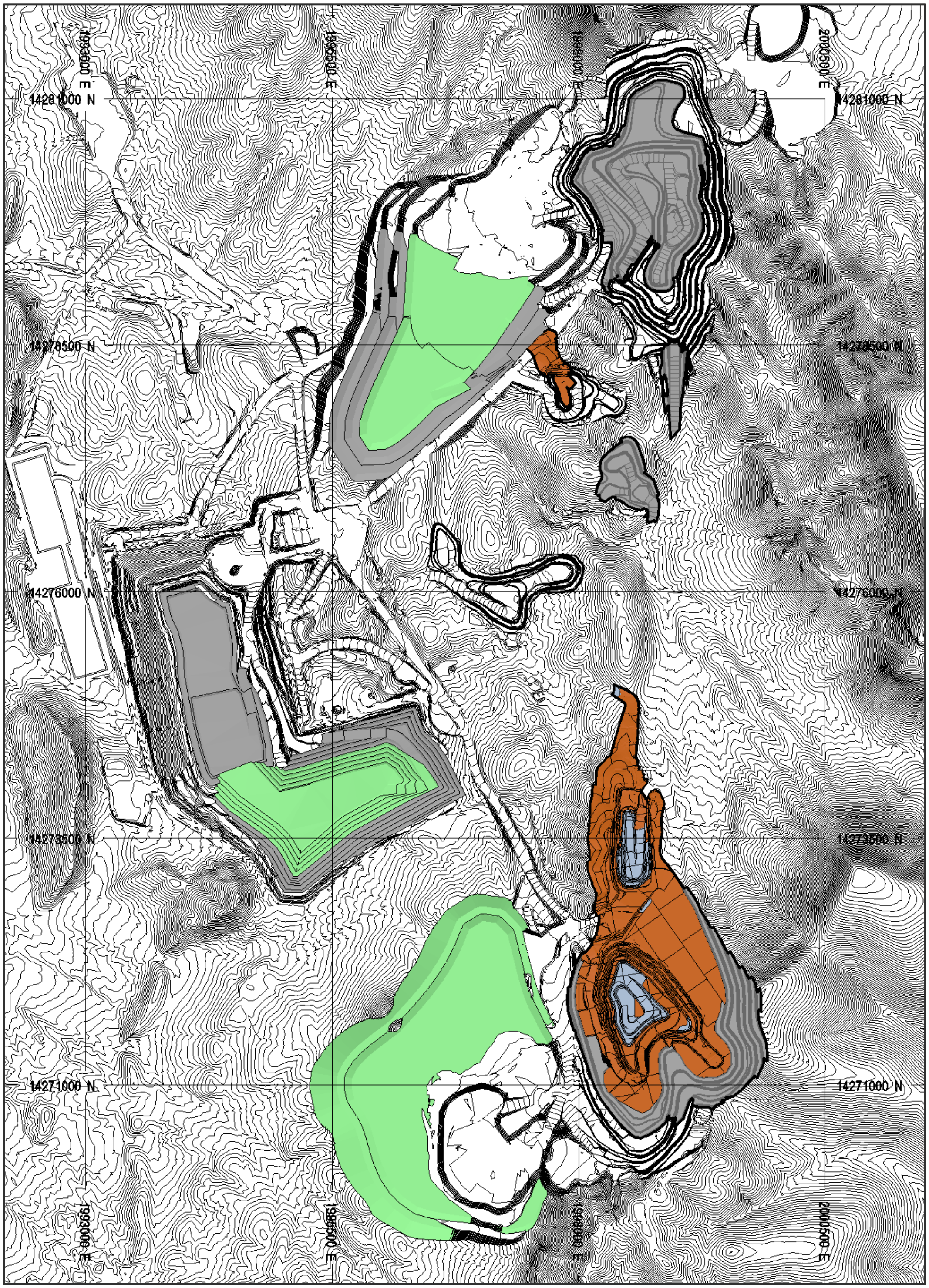
Source: SRK, 2023

Figure 16-9: Mining Activities in 2023 (Red = Mining, Green – Stacking)



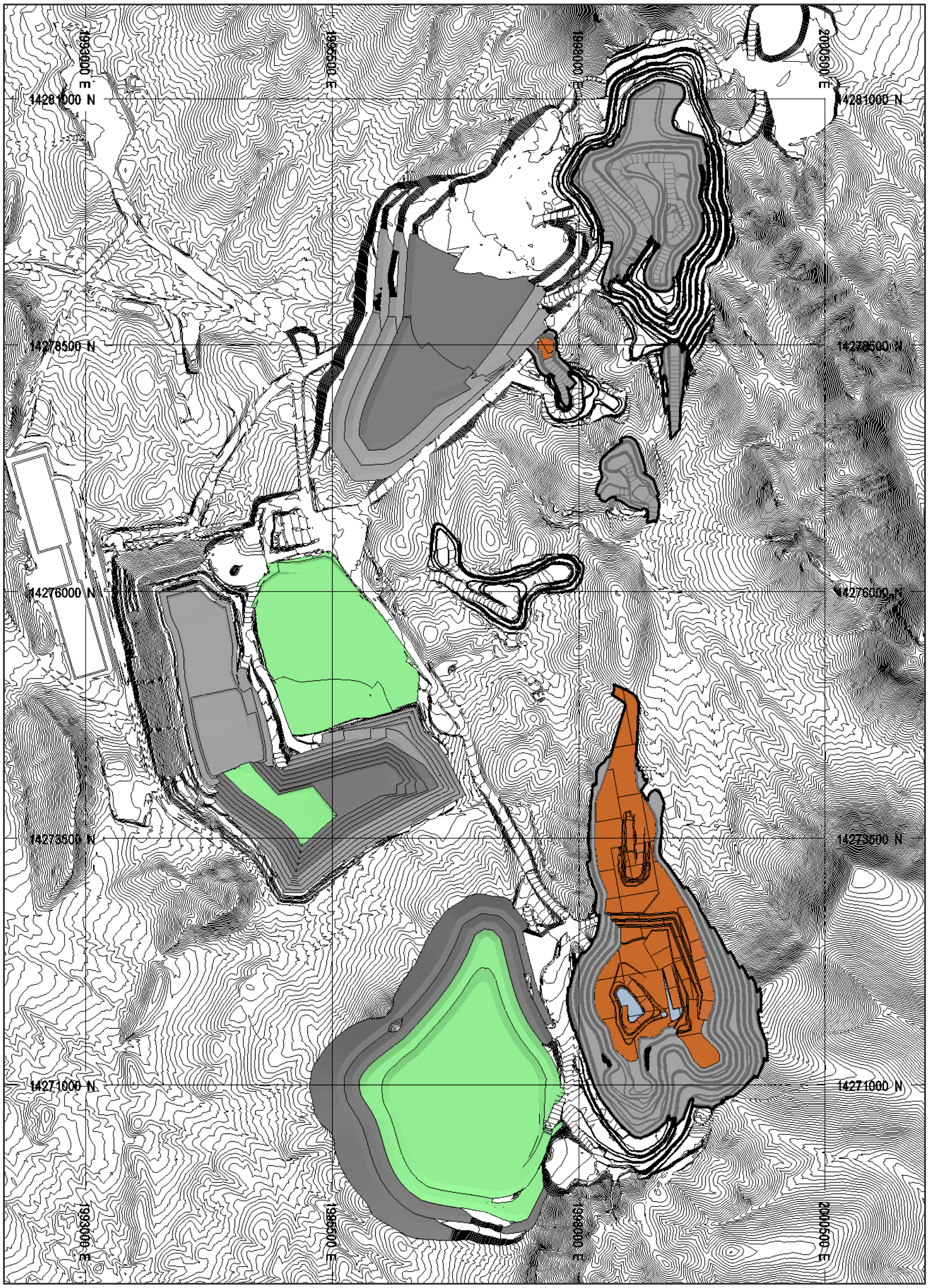
Source: SRK, 2023

Figure 16-10: Mining Activities in 2024 (Red = Mining, Green – Stacking)



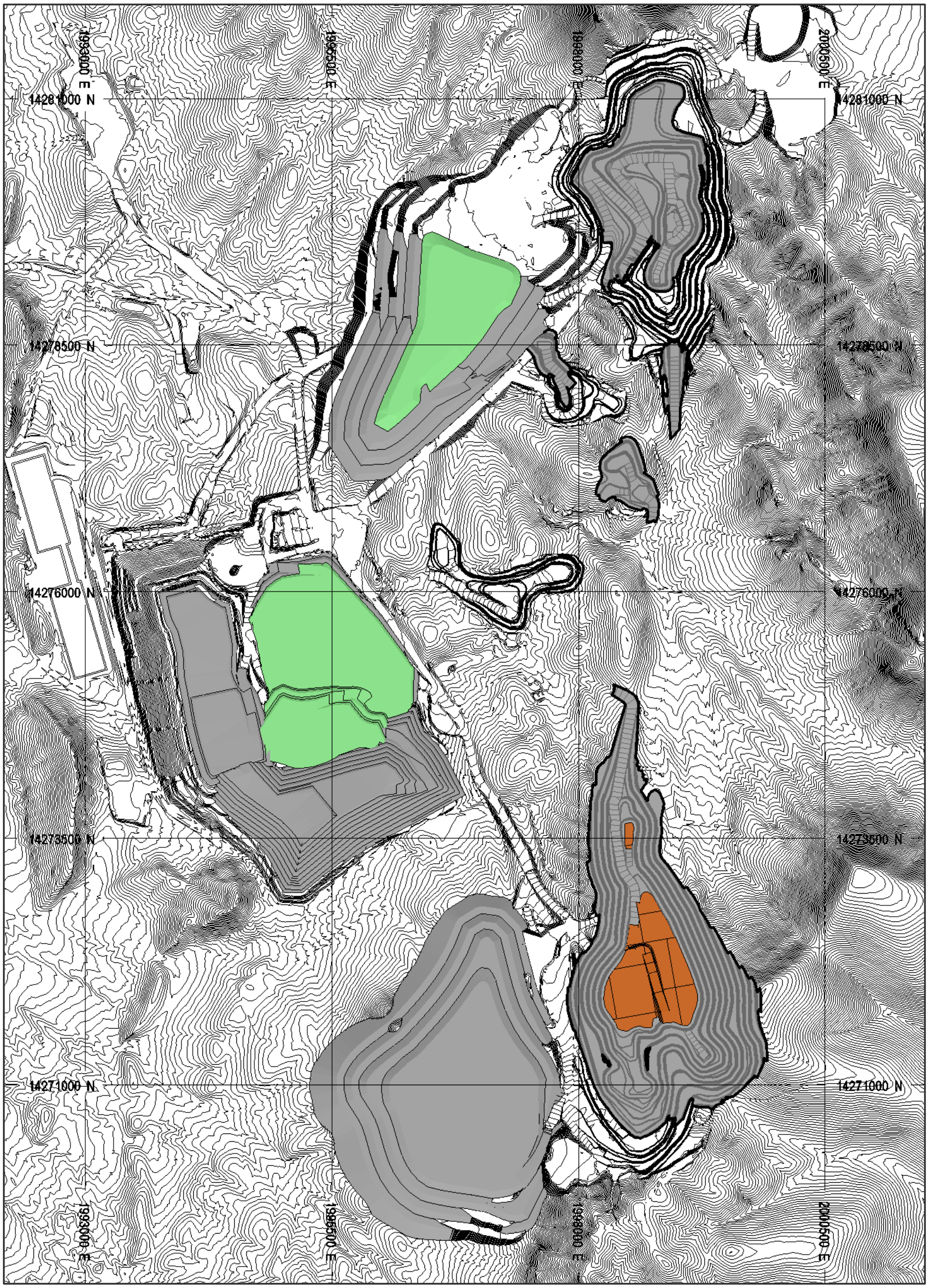
Source: SRK, 2023

Figure 16-11: Mining Activities in 2025 (Red = Mining, Green – Stacking)



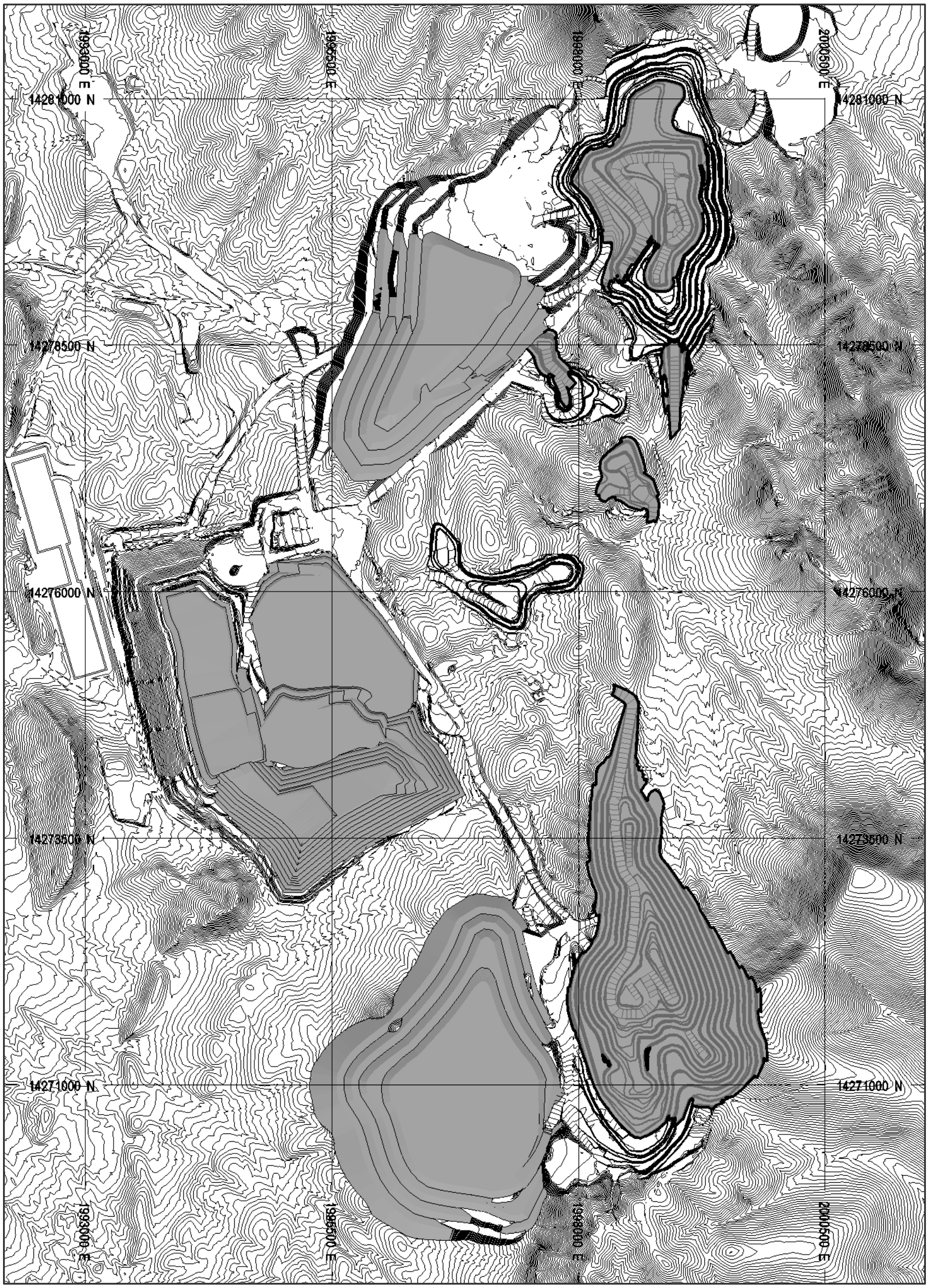
Source: SRK, 2023

Figure 16-12: Mining Activities in 2026 (Red = Mining, Green – Stacking)



Source: SRK, 2023

Figure 16-13: Mining Activities in 2027 (Red = Mining, Green – Stacking)



Source: SRK, 2023

Figure 16-14: End of Mining

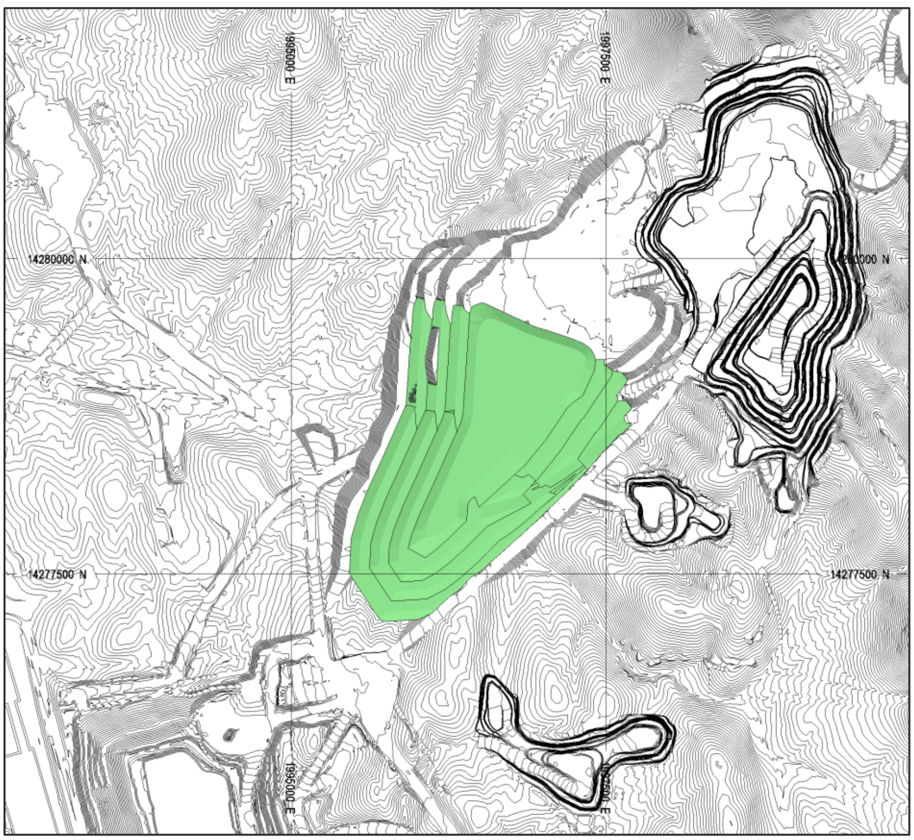
16.7 Waste and Stockpile Design

16.7.1 Waste Rock Storage Facility

The waste dumps were designed to represent typical haul and end dump facilities. The maximum overall slope angle of the waste dumps is limited to the final reclamation slope angle of 3H:1V, to minimize reclamation costs. Approximately 14.6 Mtons go to the North West WRDA, and approximately 29.7 Mtons will go to the South WRDA.

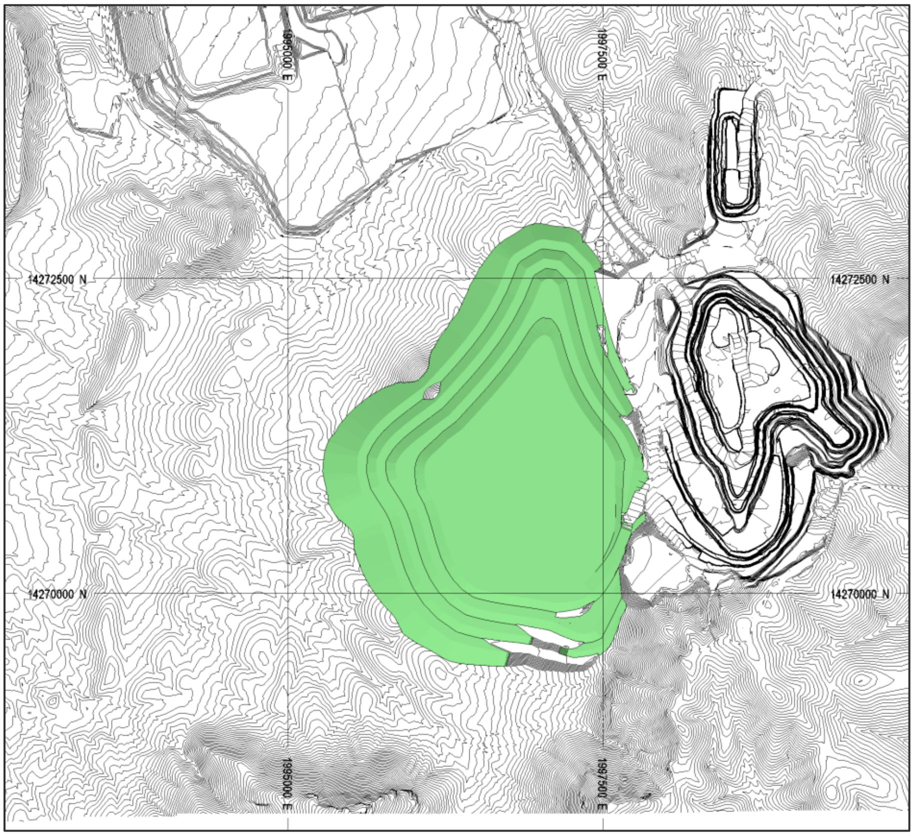
The North Pan waste dumps will be covered with a vegetated soil cover after resloping at reclamation to minimize the long-term potential for metals leaching. A 12-inch thick growth media cover will be placed over the dump.

The final configurations of the North Pan and South Pan waste dumps are shown in Figure 16-15 and Figure 16-16.



Source: Calibre 2023

Figure 16-15: North Pan WRDA



Source: Calibre 2023

Figure 16-16: South Pan WRDA

16.7.2 Ore Stockpiles

Two ore stockpiles are located near the crusher. The ore feed pile which is split for rock and clay ore placement will hold approximately 80,000 tons. The second ore pile located near the crusher on the leach pad is the crushed ore stockpile which will hold approximately 95,000 tons.

16.8 Mining Fleet and Requirements

16.8.1 General Requirements and Fleet Selection

All mine production equipment is provided by the mining contractor. Equipment on site includes CAT 992G/K loaders and CAT 777 off highway haul trucks. The contractor utilizes three Atlas Copco DM45 drills for blasthole drilling. Table 16-11 lists the mining fleet equipment numbers required to achieve the production schedule. Presently, there are 11 haul trucks at the mine. The mining contract is a Time and Materials based contract for equipment and manpower that allows Calibre to modify the size of the fleet and crews as needed to meet the production requirements. Calibre is responsible for supplying fuel to the mining contractor.

Table 16-11: Required Mine Production Equipment

Category	Make	Model	Number of Units
Truck	CAT	777F	11
Water Truck	CAT	773F	1
Water Truck	CAT	777D	1
Grader	CAT	14M	2
Front End Loader	CAT	992K or G	4
Dozer	CAT	D10T/D9	4
Dozer	CAT	D6	1
Blasthole Drill	Atlas Copco	DM45	3

Source: SRK, 2023

16.8.2 Drilling and Blasting

Production drilling and blasting is included in the mining contract. Calibre is responsible for providing ammonium nitrate and fuel oil (ANFO) for blasting. The design parameters used to define drill and blast requirements are based on a 6.75 inch diameter blasthole on a 15 ft by 17 ft pattern for all production blasts. Benches are blasted and mined on 20 ft levels with three feet of sub-drill in the North Pit and four feet of sub-drill in the South Pit. Buffer rows and pre-shear are planned to allow for controlled blasting and to minimize damage to the highwalls. The powder factor for the blasting is 0.42 lb/ton for both ore and waste.

16.8.3 Loading and Hauling

The main loading units at Pan are CAT 992K front end loaders. Cat 777 haul trucks with 100t capacity are the main hauling units; the loaders will require 4 to 5 passes to load the trucks. Dig faces are defined by ore control and are marked in the field with flags and on maps that are provided to the operators. The mine plan calculates the required loader and truck hours needed to meet production targets in the mine schedule. The required hours are presented to the contractor to ensure there is enough equipment and operators to meet the mine schedule. In the QP's opinion, the equipment listed in Table 16-11 is reasonable for an operation of this size and scale.

16.8.4 Support and Auxiliary Equipment

Support equipment will consist of three CAT D10 track dozers and one CAT D9 track dozer as the main dozing units and one CAT D6 utilized for the leach pad. Two CAT road graders service the access road, haul roads, and leach pad along with two CAT water trucks. Mobile light plants will be utilized for lighting the working areas during production in low light conditions. A maintenance service truck supplied by the contractor will be used for field maintenance.

16.8.5 Manpower

Mining personnel is supplied by the mining contractor, which is also responsible for management of the mining crews. Calibre technical and mine supervision personnel direct the mining contractor. The contractor currently has one project manager, one operations superintendent, one project coordinator, one safety coordinator, three shift supervisors, one maintenance superintendent, and one administrative assistant on site.

Calibre has one shift supervisor to supervise the contractor and manage mining. Calibre provides technical staff for mine planning, surveying, and ore control. Required personnel are summarized in Table 16-12.

Table 16-12: Personnel Requirements

	Supervisory and Technical	Operators	Maintenance
Contractor	10	88	20+ Contract Maintenance
Calibre	8	0	0

16.8.6 Ore Control

Calibre currently implements a blasthole sampling system for ore control. Blasthole cuttings piles are cut orthogonally to the drill hole using a narrow shovel to obtain a representative sample. The sample bags are tagged with a number. The drill hole is then staked and tagged with the same number as the sample. Samples are then delivered to the on-site laboratory for cyanide solution and fire assay analysis.

Prior to blasting, the drill hole locations are surveyed and the cuttings logged for determining lithology and alteration type. This information is then used to develop a geologic map of the blast pattern. This geologic mapping on each blast and bench, with the assay results, are used to design ore blocks. Ore blocks are staked after blasting with lath and pin flags to guide mining. Movement due to blasting is accounted for in the field staking. Calibre geologists monitor mining to maintain ore and waste control for proper material routing.

16.9 Mine Dewatering

16.10 Water Data Sources

Groundwater monitoring and water supply wells have been installed at the Project. Several historical wells in the Project vicinity have also provided groundwater data. There are no springs or bodies of surface water in the Project area.

16.10.1 Surface Water

Surface water from precipitation will be diverted away from the open pits by using berms and ditches, which places the water in sediment basis for evaporation, infiltration or overflow.

Best management practices (BMP) are being used to limit erosion and reduce sediment in precipitation runoff from mining facilities and disturbed areas during construction, operations, and initial stages of reclamation. BMP utilized during construction and operations are designed to minimize erosion and control sediment runoff. These BMP include:

- Surface stabilization measures – dust control, mulching, riprap, temporary gravel construction access, temporary and permanent revegetation/reclamation, and placing plant growth media;
- Runoff control and conveyance measures – hardened channels, runoff diversions; and,
- Sediment traps and barriers – check dams, grade stabilization structures, sediment detention basins, sediment/silt fence and straw bale barriers, and sediment traps.

Revegetation of disturbed areas will reduce the potential for wind and water erosion. Following construction activities, areas such as cut-and-fill embankments and plant growth media/cover stockpiles are being seeded as soon as practicable and safe. Concurrent reclamation is maximized to the extent practicable to accelerate revegetation of disturbed areas. Sediment and erosion control measures will be inspected periodically, and repairs performed as needed.

16.10.2 Groundwater

Groundwater is in a carbonate aquifer that is approximately 500 ft below the bottom of the pit. This will not impact the pit highwalls or operations.

16.10.3 Dewatering System

A dewatering system is not necessary for the current mine plan.

17 Recovery Methods

Calibre Mining operates a heap leach pad to recover gold in solution and produce doré for sale (see Section 19 Marketing). Since 2019, Pan has prepared heap leach pad feed by primary crushing and adding of lime or cement to regulate pH prior to stacking. Cyanide solution is distributed to the pad and allowed to percolate where it is recovered beneath the pad and sent to the ADR plant.

17.1 Historical Operation

The initial operation of the heap leach with South Pan ore encountered permeability problems due to the placement of clayey material and lack of blending with rocky material. The combination of ore placement in lifts as high as 50 ft., truck end dumping ore over the dump face leading to high segregation of coarse and fines as well as excessive equipment compaction on the dump surface. Leach solution applications much above 0.001 gpm/ft^2 resulted in excessive ponding. These areas had to be shut down to remain in compliance with environmental permits and regulations.

Laboratory testing showed a 60% rock and 40% clay blend would achieve adequate permeability for primary leaching and to sustain flows when up to 160 ft of additional ore stacked on top of the lift. Lower rock/clay ratios achieved acceptable permeability as the heap height increased and ore stacking on top of the blended material decreased.

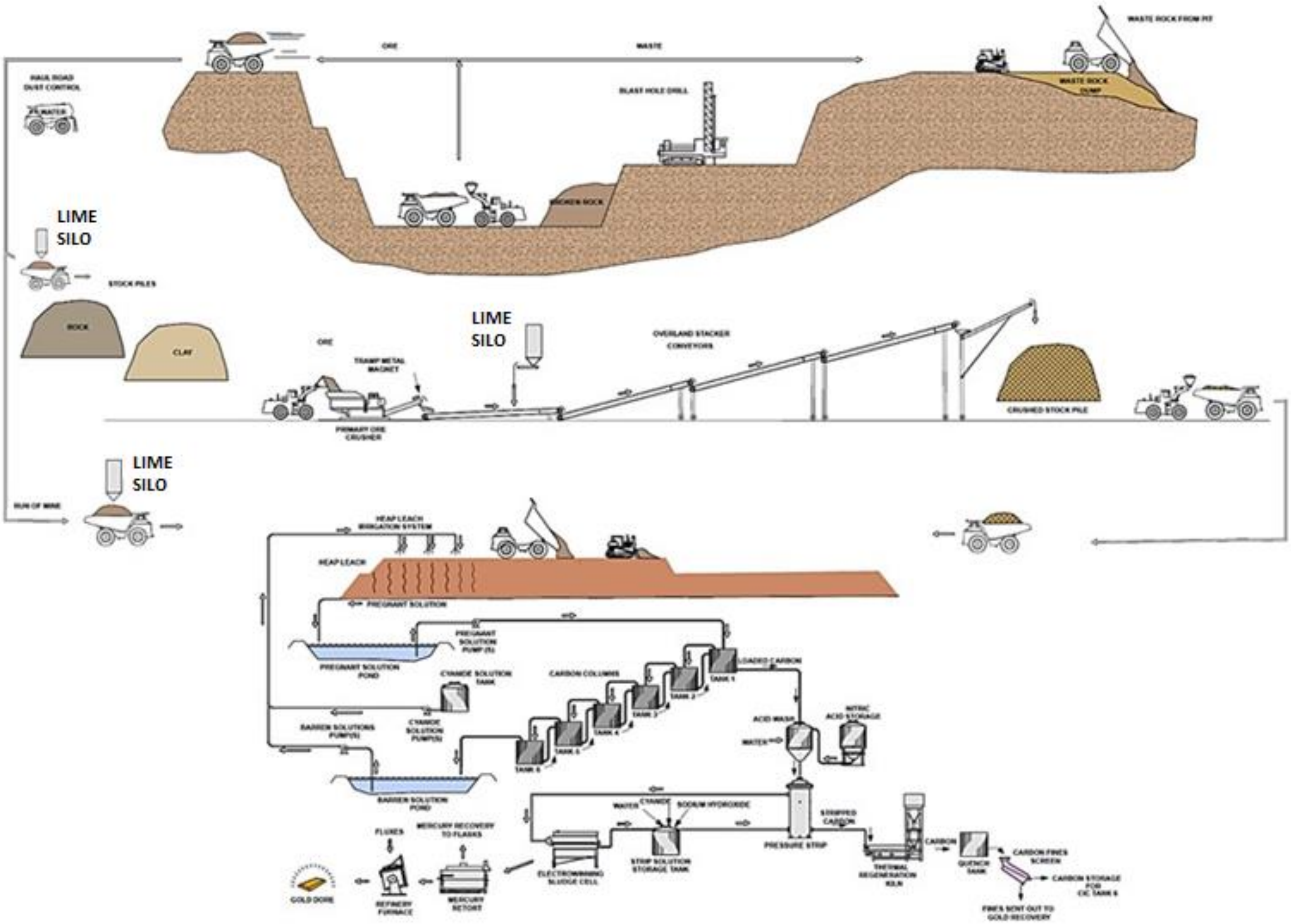
ROM ore stacking methodology was modified to minimize equipment compaction, ensuring blending of rock and clay. All material was placed on the leach pad with truck dumping in approximately 22.5 ft lifts and a dozer to push and blend the material. A typical 250 ft x 250 ft leach cell was stacked at 22.5 ft for roughly 2/3 of the final pad volume. This practice was maintained until late 2018 when testing verified dumping a 15 ft lift and using the dozer to push and blend material over the crest maintained adequate permeability. ROM ore continued to be placed in this manner until the crushing/stacking system was installed.

17.2 Current Practice

Approximately 14,000 stpd of ore at a 60:40 hard to soft ratio is mined from North and South Pan pits, crushed to -6" and combined with 3.5 lb/ton of lime in the truck bed (see Figure 17-2). After primary crushing, blended material is loaded into trucks from the crushed stockpile, dumped on the top surface of the leach pad cell, and pushed over with a dozer. For ROM pad loading, trucks dump directly.

The process flowsheet including the crushing system installed in 2019 is shown in Figure 17-1. Ore is mined concurrently from both North and South Pan pits and trucked to the crushing facility. Properly blended hard and soft ore is crushed and trucked to the pad where barren solution is used in transfer sprays for dust control.

Prior to dumping a new lift, the dump toe surface of the pad is ripped in one direction using a D10 dozer with a 6 ft to 8 ft shank. The ore is stacked in nominal 15 ft lifts. Trucks dump the bulk of the load on top of the cell material and it is pushed off with a dozer. The surface to be leached is cross ripped using a 6 ft to 8 ft shank. The final rip is perpendicular to the direction the drip emitters will be ripped in. Emitters used are 1 gph (spaced at 24 inches) in drip line and 36 inches on the header. The application rate generally does not exceed 0.0026 to 0.003 gpm/ft^2. The area under drip averages 1.55 Mft^2 to 1.75 Mft^2 at an average application rate of 0.0022 gpm/ft^2.



Source: Calibre, 2022

Figure 17-1: Mining and Processing Flowsheet for Pan Mine

The existing pregnant and barren solution ponds constitute a solution management system that will accommodate all process solutions including meteoric waters that enter the system as a result of the 25-year, 24-hour storm event. Barren solution is pumped from the barren pond via submersible and booster pumps to the top of the ore on the heap leach pad and the ore is irrigated using drip tube emitters. Cyanide levels are monitored and controlled with cyanide addition to the barren line as it pumps solution to the pad. Pregnant solutions report to the pregnant collection pond and are subsequently treated in the existing conventional ADR plant.

Figure 17-2 to Figure 17-5 shows some of the current operating elements of the heap leach pad.

Source: SRK, 2022

Figure 17-2: Lime Silo to South Ore Truck

Source: SRK, 2022

Figure 17-3: 36x50" Lippman Jaw Crusher with Stockpile Loading

Source: Brian Arthur, 2022

Figure 17-4: Example Heap Leach Panel

Source: Brian Arthur, 2022

Figure 17-5: Example Cell Showing Ripped Surface After Grading

Calibre has an assay laboratory on site which is used to conduct all mine and process assays. Gold content is measured using either cyanide leach tests (referred to as "shake" tests) or by fire assay. All blast hole samples are crushed, split, pulverized and “shake” tested. Samples with shake test assays above 0.003 opt Au are subject to fire assays so the grade of the ore control polygon can be accurately determined.

Calibre has two atomic adsorption (AA) machines on site. One is designated for fire assays and the other for shake testing. Process solutions are usually read on the same AA machine as the shake tests samples.

A metallurgical laboratory has been set up in a space at the ADR plant and can complete column and bottle roll tests. Laboratory columns are available in a variety of sizes with the largest being six, 18 in x 3 ft. column cells; primarily used for monthly composites. Coarse monthly composites are blended and split to run duplicate columns and bottle rolls to determine the gold extractability to be compared to the forecast model. The weekly crushed composites are blended and split to run duplicate bottle rolls each week. Results from the bottle roll tests are turned around rapidly enough to make operational changes if poor recovery is detected. In recent months, this practice has not been done but plans are underway to increase metallurgical staff and supervise the continued testing of monthly composites.

17.3 Recent Operating Results

Approximately 14,000 stpd of ROM and crushed ore are stacked on the leach pad. Table 17-1 shows the actual crushed ore tons annually since 2019, peaking at 4.7 Mstpa. All tonnes above this level are ROM stacked and in 2022, 1.4 Mst were directly truck dumped.

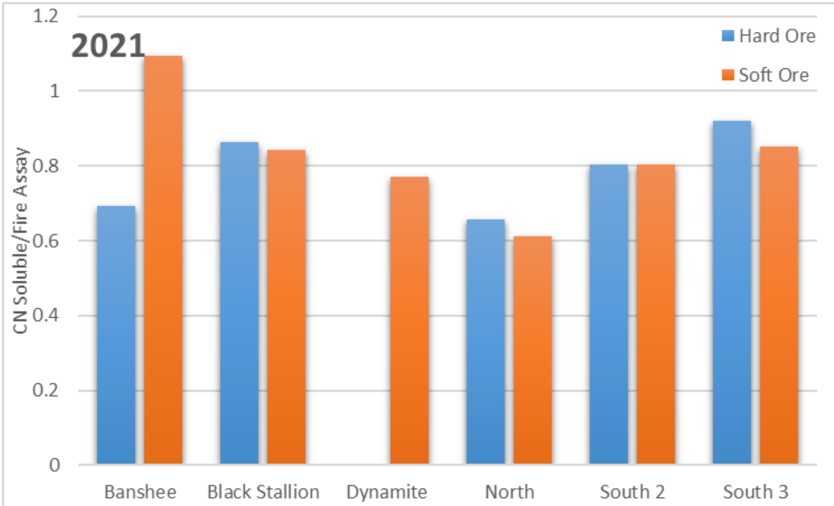
Table 17-1: Crushed Ore Stacked on Pad

Year	Crushed Ore, Mstpa
2019	0.86
2020	4.61
2021	4.73
2022 (Projected)	4.68

Source: Calibre, 2022

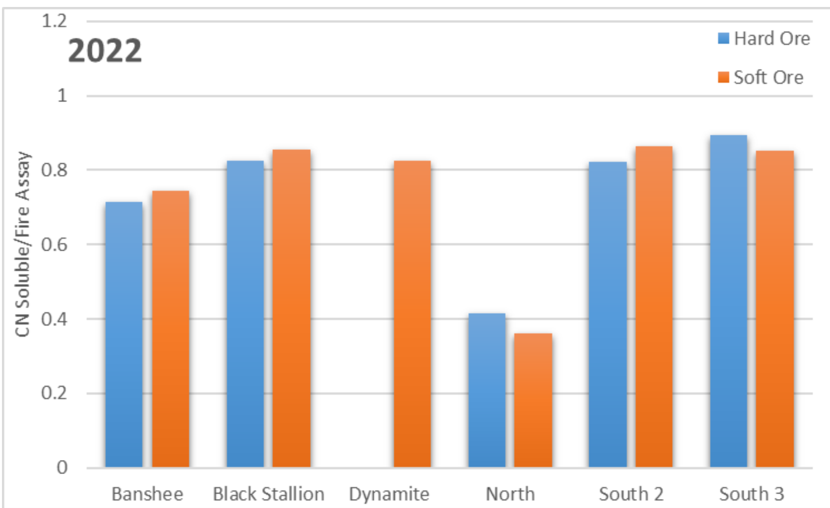
Ore grades have been between 0.005 opt to 0.018 opt for 2022, with soft ore slightly higher in grade than hard ore. Overall ore grades have averaged 0.012 opt for the past two years. As an estimate of ultimate gold extraction, shake test to fire assay (CN/FA) values are shown in Figure 17-6 and Figure 17-7. As noted in the recent whole PQ core testwork (Forte Analytical, 2022), CN/FA does not directly relate to final column leach test gold extraction, with both particle size and mineralogical factors to be considered as well.

On an annual basis, Pan’s consistent operating conditions and ability to achieve the target blend of hard to soft material has allowed the operation to steadily improve heap leach extractions since the crusher was installed (see Figure 17-8). A recent review indicated gold extractions of 69% to 75% on this blend of material has been achieved (Brian Arthur, 2022).



Source: SRK, 2022

Figure 17-6: Gold Cyanide-Soluble/ Fire Assay for Different Pits (2021)



Source: SRK, 2023

Figure 17-7: Gold Cyanide-Soluble/ Fire Assay for Different Pits (2022)

Pan maintains a database of daily ore tonnes and grades since 2017. Using this database of results, constant gold extractions have been back calculated to determine heap pad performance. Current estimates of gold extractions are:

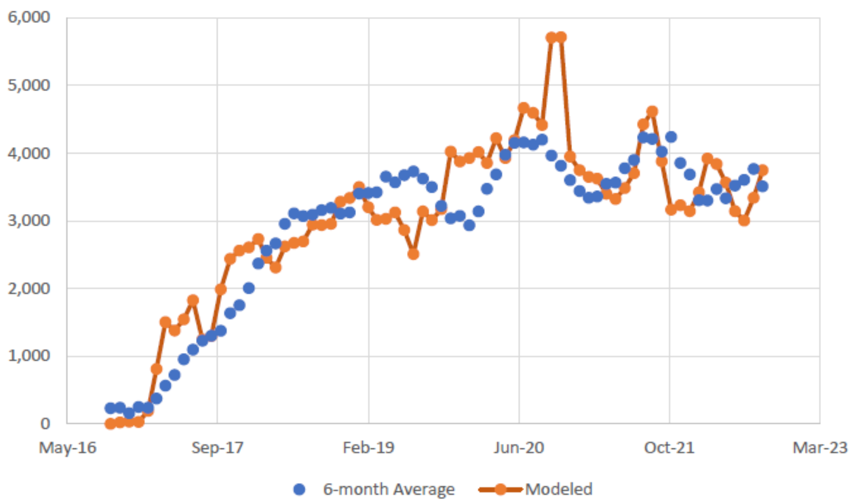
- Hard material: 50% ROM 60% crushed to 6”
- Soft material: 75% ROM 80% crushed to 6”

Typical extractions (relative to ultimate recovery) for both material types are:

- Year 1 = 75.5%
- Year 2 = 13.1%

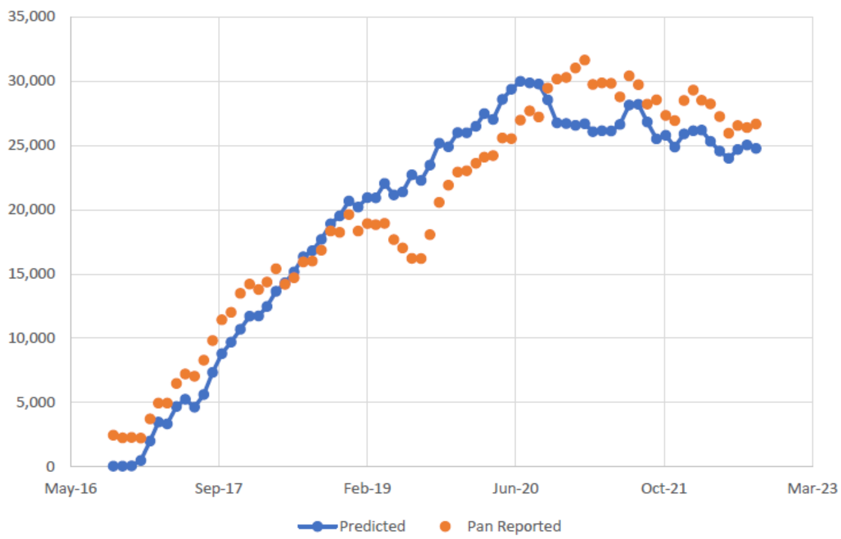
- Year 3 = 6.5%
- Year 4 = 3.0%
- Year 5 = 1.5%

As RDI and Calibre both note, the ore leaches quickly. A comparison of actual vs. modelled ounce production and pad inventory is shown in Figure 17-8 and Figure 17-9 (Brian Arthur, 2022).



Source: Brian Arthur, 2022

Figure 17-8: Modelled vs. Six-Month Average Gold Ounce Production



Source: Brian Arthur, 2022

Figure 17-9: Modelled vs. Reported Leach Pad Inventory (Gold Ounces)

The updated mine plan generated by SRK is summarized in Table 16-10. Using the crushed and ROM recoveries mentioned above for both hard and soft Material. The expected recoverable ounces are shown below, with an estimated 30,000 ounces of gold remaining on the pad at the end of 2027.

Table 17-2: Estimate of Recovered Gold Ounces

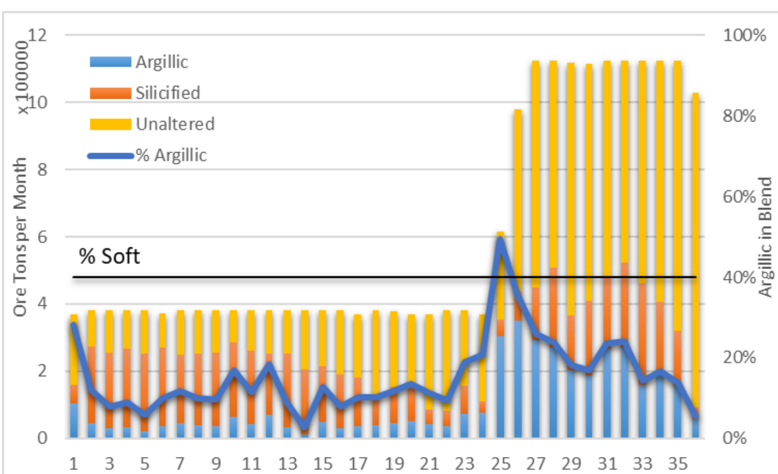
Description		2023	2024	2025	2026	2027	2028	2029	2030	Total
Crushed ore place on pad	Tons (000's)	4,539	4,518	3,845	4,482	4,427				21,812
	Au Oz/ton	0.012	0.011	0.011	0.010	0.010				0.011
	Au Oz (000's)	53	48	40	47	45				234
Recovered ounces from tons placed	Au Oz (000's)	39	35	31	35	35	3			179
Recovered inventory ounces	Au Oz (000's)						15	10	5	30
Total	Au Oz (000's)	39	35	31	35	35	18	10	5	209

Source: SRK, 2023

17.4 QP Comments

Current practice is to maintain a blend of 60:40 hard to soft material, for both crushed and ROM heap leach pad feed. As discussed in Section 13, Pan's determination of hard versus soft is not well defined; historically described as Argillic vs. Silicified alteration, then changed to North vs. South pits and currently based on blasthole logging by a site geologist. While this might be sustained for short-term planning, it does not provide confidence the future mine plan can maintain the 60:40 target blend.

The mine plan showing ore tonnes by alteration for the next 36 months is shown in Figure 17-10. If Argillic alteration is assumed to be soft material, the expected blend is around 80:20 and much higher in % hard than the target of 60:40. If some of the Unaltered lithology is soft as well, then the target blend can be maintained.



Source: SRK, 2023

Figure 17-10: Monthly Forecasted Pad Feed by Alteration

For accurate forecasting of future Pan heap leach pad performance, geometallurgical characterization of all Pan ore sources must be undertaken. This includes improved understanding of:

- CN/FA values versus material type and crushed size
- Effect of crushed size/ clay content on permeabilities under load

Better geometallurgical characterization may allow the target blend of hard to soft to be adjusted and accommodate the apparent shortage of soft material in the future. It is not known if some/all of the Unaltered alteration type can be considered soft material for blending purposes.

17.5 Consumables

The Pan heap leach pad and ADR plant operating cost consists of reagents, power, water, labor and G&A (as discussed in Section 21). A breakdown of reagent costs since 2018 is shown in Table 17-3. Reagent costs are primarily cyanide and cement/lime (for pH control) and increased from $0.38/ton to $1.03/ton in 2022. It is noted that Calibre have recently changed to lime instead of cement at 3.5 lb/ton equivalent addition, adding only to South material trucks.

Table 17-3: Reagent Cost 2018 to 2022

Reagent	2018		2019		2020		2021		2022 to Oct	
	lbs	$/ton	lbs	$/ton	lbs	$/ton	lbs	$/ton	lbs	$/ton
Carbon	16,000	0.01	28,000	0.01	24,872	0.01	32,784	0.01	22,052	0.01
Caustic	351,063	0.01	366,987	0.01	421,812	0.01	495,338	0.02	340,099	0.03
Cyanide	695,114	0.21	819,110	0.25	963,620	0.27	1,448,362	0.45	1,167,496	0.50
Cement			296,997	0.01	13,469,231	0.25	2,756,300	0.06		
Lime	7,007,515	0.16	5,302,866	0.12	4,311,380	0.09	20,001,066	0.50	16,888,400	0.47
Acid	164,476	0.01	203,427	0.02	212,495	0.01	264,772	0.01	200,554	0.01
Total $/ton	**0.38**		**0.42**		**0.64**		**1.05**		**1.03**	

Source: Calibre, 2022

Power consumption and cost per ton for power are given in Table 17-4 from 2018 to 2022. Power consumption increased in 2019 due to processing of higher tonnage (14,000 tpd from 10,000 tpd) and installation of a crushing and stacking circuit. However, overall cost/ton has increased from $0.07 in 2018 to $0.09 in 2022.

Table 17-4: Power Cost 2018 to 2022

	2018	2019	2020	2021	2022 to Oct
Consumption, kWh	4,563,000	5,162,400	6,364,800	6,658,200	5,617,800
Cost, $/kWh	0.079	0.080	0.077	0.076	0.078
$/ton	**0.07**	**0.08**	**0.09**	**0.10**	**0.09**

Source: Calibre, 2022

The peak make-up water requirements were estimated in 2017 to be 520 gpm. The water source for the project is production water well PW-1, located approximately three quarters of a mile north of the ADR plant and PW-2A located approximately 2,000 ft. southwest of the ADR plant. PW-1 and PW-2A wells are equipped with submersible pumps which pump to either the barren pond or a freshwater tank located three quarters of mile north of the ADR plant at the 6,520 ft. elevation (also used as a source of firewater). A third backup well PW-3 has been drilled near the ADR plant and could be put into service if either of the other wells failed. The system is designed for a peak flow of 5,000 gpm and consistent delivery of 3,800 gpm. No problems related to shortage of water have been experienced at the mine site. The cost of water is estimated to be $0.01/ton of ore processed.

18 Project Infrastructure

The following introductory information is from Gustavson, 2015, and SRK Updated Technical Report, 2021. Content in the rest of this chapter was written or edited in 2023 for this report.

The Project is located five miles by an all-season gravel road from US Highway 50, a major east-west, two-lane paved highway through central Nevada. Highway 50 connects to the towns of Eureka, 25 miles to the west and Ely, 50 miles to the east. Both towns supply housing for mine personnel. In addition, Ely has mine vendors and support services. Elko, Nevada is a major hub for mining vendors and support services and is approximately 140 road miles to the north.

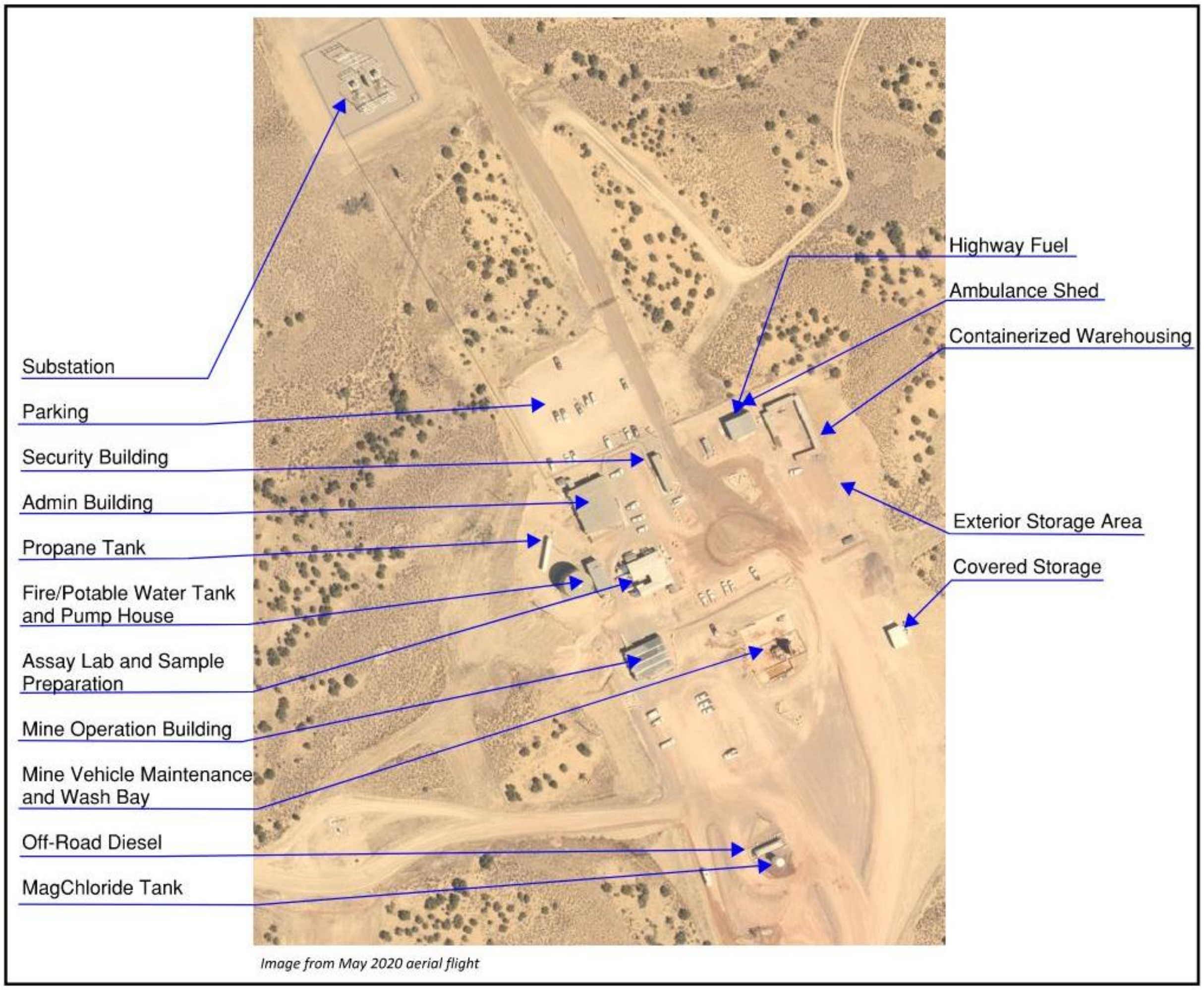
Airline service is available in Elko, Reno, Las Vegas, and Salt Lake City.

18.1 Infrastructure and Logistic Requirements

18.1.1 On-Site Infrastructure

The Project is a fully operational mine with infrastructure constructed by the previous operator. The following is a brief description of the existing infrastructure. A crusher was installed in 2019.

Figure 18-1 shows exiting infrastructure at the administrative office area.



Source: GRP, 2020

Figure 18-1: Existing infrastructure at the administrative office area

18.1.2 Water Supply and Site Water Management

Calibre leases water rights with a total consumptive use limitation of 1,200.69 acre-feet annually. The peak diversion rate under all permits is 4.469 cubic Feet per second (2,005 gpm). This is equivalent to a continuous annual pumping rate of 744 gpm and is sufficient for all of the Pan Project's needs, as summarized in Table 18-1. Predicted periods of additional water consumption during leach pad expansion are limited to four months or less, averaging 174 gpm over a 12-month period, assuming a peak demand of 1.0 million gallons per day during major earthworks.

Table 18-1: Maximum Water Usage

	Required Makeup GPM
Ore	200
Roads/Dust Control	300
Operations	100
Construction	200
Total	**800**

Source: GRP, 2020

Water is currently extracted from two wells, PW-1 and PW-2A, which were constructed to depths of approximately 900 ft and have static water levels at approximately 640 ft. Both wells are fully equipped and operational. The well PW-1 is equipped with a 125 HP pump and can deliver approximately 500 gpm. Well PW-2A is equipped with a 250 HP pump and is capable of delivering approximately 800 gpm. PW-3 has been drilled but does not have a pump installed at this time.

Water from PW-1 meets Nevada drinking water standards and will feed the potable and process water systems as well as fire suppression systems for all facilities. Well PW-2A has slightly elevated arsenic levels and is used for process water only. A chlorination system may be necessary to condition potable water supplied to the administration offices, security and safety building, assay laboratory, and process plant.

Fire water is supplied to Calibre’s and mining contractor’s offices, assay laboratory, security/safety building, ADR plant, and refinery. The fire suppression system is automated and includes a diesel powered firewater pump located in the pump-house adjacent to the fire water storage. Fire water is reserved and physically separated in the bottom half of the tank. In addition to the fire water pumps the pump-house also accommodates the process water distribution pumps, the truck wash pump, and potable water distribution pump.

Two septic systems were constructed. One serves the administration offices, assay laboratory and guard-house/safety building. The second system serves the process plant. Portable toilets will be placed at the mining and crushing areas as necessary.

18.1.3 Service and Access Roads

The mine access road connects the project site to US Highway 50, approximately 5 miles from the front gate of the property. The access road is an all-weather gravel road. Calibre is responsible for all road maintenance, including snow removal. In the summer, Calibre applies magnesium chloride to the road for dust control.

18.1.4 Mine Operations and Support Facilities

The mining contractor uses a reinforced concrete pad for tire and large component maintenance work. Adjacent to this pad is a separate truck wash pad with high pressure monitors and oil separator.

Diesel and gasoline are purchased in bulk and stored on site at two refueling depots. Both fuel facilities have been constructed using double wall tanks as a means of secondary containment. Mining and on-site diesel-powered mobile equipment are fueled at the 30,000-gallon storage tank. Over-the-highway diesel vehicles and gasoline powered vehicles refuel at the split tank having a capacity of 6,000 gallons of diesel and 2,000 gallons of gasoline.

18.1.5 Process Support Facilities

The process building is a pre-engineered, high-bay/low-bay steel building, with a footprint of 13,000 ft^2. The 30 ft high-bay section of the building contains all of the ADR process equipment, including the carbon-in-column (C-I-C) train, plant air system, and reagent storage tanks. The low-bay section houses the vault, refinery, and two security offices. The refinery is constructed with concrete-filled and steel-reinforced concrete blocks.

The laboratory is a pre-built modular building that is sized and fully equipped to handle all blasthole and process samples, including sample preparation and assaying. It includes a drying oven, fire assay kiln, and an instrument for AA analysis.

Buildings are heated with propane. Propane is also used in the carbon regeneration kiln and gold melt furnace. Tanks for propane storage are located in the administrative area and the process plant area. A belt agglomeration system is scheduled to be in place by April 2024. The crusher is described in Section 17.

18.1.6 Additional Support Facilities

The mine office building is a single-story, 4,320 ft^2 modular building that houses all administrative and technical staff. Meeting and training rooms are included in this building. It is located near the main access gate to the mine site.

The security and first aid building is a 240 ft^2 modular building which is located at the main gate. Standard security measures and operating procedures are established to control access to the site and secure the gold product. Security cameras record key areas around the mine site. Magnetic door locks with electronic keypads are used to control property gates and facility access.

The perimeter of the mine site is fenced with 3-strand barbed wire to keep out unauthorized personnel and grazing cattle. A security chain link fence is installed around the two process water ponds.

The emergency vehicle garage is a 1,200 ft^2 pre-engineered building to house the emergency and rescue vehicle.

The mining contractor has a single-story, 2,880 ft^2 modular building for administrative staff offices, a crew line out area, and training rooms.

A small pre-engineered steel building provides short-term storage for hazardous materials before they are shipped off-site to approved hazardous waste storage or disposal facilities.

A microwave-based communication system is on site to support internet and VOIP necessary for daily operation of the mine, plant, and office. The mine site also has good cell phone coverage.

A two-way radio system is established at the Project. Plant operators, survey crews, supervisors, and the mine contractor have portable hand-held radios for operational communications.

18.1.7 Power Supply and Distribution

The project is connected via a 69 kV utility power line to the mine substation with two transformers, each with a maximum capacity of 8,300 M Volt-Amperes, installed for 100% redundancy and being more than able to support all anticipated load additions and project expansions. The initial connected electrical load for the current operation is approximately 2.4 megawatts. The normal operating demand load is estimated to be 2.1 megawatts. When crushing, screening and agglomeration equipment are added, the demand load will increase to approximately 3.6 megawatts. When the anticipated load exceeds this level, a new contract will need to be negotiated with the utility company.

Site power is distributed throughout the mine site with three phase overhead powerlines at 24.9 kV. Local transformers drop the voltage to three phase 480 V or single phase 110/220 at the administrative area, the Process Plant, the water wells and at the future new crusher and ore stacking facility.

In the event of utility power interruption, back-up power is provided by a 1.5 MW diesel powered generator sized to run the pregnant and barren solution leach pumps thereby ensuring continuous control of process solutions and the maintaining of minimum freeboards in both process solution ponds. Back-up power is also available for critical pumps and processes in the ADR plant and communications systems.

18.2 Heap Leach Pad

Ore is currently processed on a 4,700,000 ft^2 leach pad, which is designed to support ongoing operations for roughly 3-years. Exact processing parameters can be found in Section 17. A 2,800,000 ft^2 expansion was designated as Phase 3A and was completed in 2021 which connected the south end of the existing pads. Expansions are required to place the mine reserve total tonnage. Phase 3B must be constructed in 2024; (approximately 1,500,00 ft^2). A description of the heap leach facilities is detailed in Section 17.

19 Market Studies and Contracts

The process facility for this operation produces gold doré bars between 80 and 99% purity, with 2 to 3% silver on average. Gold bars will be weighed and assayed at the mine to establish value. The bars are shipped regularly to a commercial refiner where their value is verified. Sale prices are obtained based on world spot or London Metals Exchange market pricing and are easily transacted. Silver values were not included in the economic analysis for this study.

The source of gold prices used for the project economics was the gold price used for the Reserve estimate. The Reserve price used for this report is $US1,600/oz Au.

Table 19-1: Gold price per ounce by year

Year	2023	2024	2025	2026	2027	2027 +
Gold Price ($US/oz Au)	$1,600	$1,600	$1,600	$1,600	$1,600	$1,600

Source: SRK, 2023

19.1 Contracts and Status

Mining activities are currently performed by a contract miner, Ledcor Group (Ledcor). The mining contract was made available for review to support this study. The current Ledcor contract is in place through December 2025 and can be extended through normal business practices through the end of the mine life. The hourly equipment costs are subject to escalation and de-escalation starting in January 2023 and reviewed every six months after January 2023. Escalation and de-escalation factors are based on the U.S. Department of Labor Producer Price Index (PPI) for "Other Heavy Machinery and Rental and Leasing".

Terms for an off-take and smelting agreement are based on an existing refinery agreement with METALOR Technologies USA Corporation, an international smelting and refining company with a facility at 225 John L. Dietsch Boulevard, North Attleboro, Massachusetts.

Contract terms and doré treatment charges listed below were used in this study:

- Treatment and Refining Charge: US$0.85/oz gross weight shipped under 1,000 troy ounces, US$0.65/oz gross weight shipped over 1,000 troy ounces;
- Gold Return: 99.93% of assayed content;
- Settlement: 5 working days from receipt; and
- Transportation Fee: US$875 pick-up fee plus US$0.25 per gross troy ounce.

20 Environmental Studies, Permitting and Social or Community Impact

The Pan Mine is owned by GRP Pan, LLC d/b/a Fiore Gold Pan Mine (GRP), which is owned by Fiore Gold US (Inc), a subsidiary of Fiore Gold BC (Ltd), and finally a subsidiary of Calibre Mining Corp. Because the environmental permits and authorizations are in the name of GRP Pan, LLC (GRP), this section refers to GRP rather than Calibre.

20.1 Permitting Overview

Since Lyle Campbell's discovery in 1978, the Pan deposit has been explored by several exploration and/or mining companies, including Amselco Minerals, Hecla Mining Company, Homestake Mining, Echo Bay Exploration Inc., Alta Gold Company, Southwest Gold Inc., Latitude Minerals Corporation, Castleworth Ventures Inc., Pan Nevada Gold Corporation, and Midway Gold US Inc. (Midway) (Midway 2013).

An Exploration Plan of Operations and Reclamation Permit Application NVN-078305 was submitted to the U.S. Bureau of Land Management Ely District Office, Egan Field Office (BLM) and the Nevada Division of Environmental Protection- Bureau of Mining Regulation and Reclamation (NDEP-BMRR) on behalf of Castleworth Ventures, Inc. for exploration drilling at the Project site in 2004. An environmental assessment (EA) was undertaken as part of the permitting process culminating in a decision record/finding of no significant impact (DR/FONSI) and approval to disturb up to 25 acres for drill pads and drill roads. The FONSI was signed in April 2004. The NDEP-BMRR issued reclamation permit No. 0228 in 2004 which was transferred to Midway, successor in interest to Castleworth, in 2008 (Midway 2013).

An amendment to the 2004 exploration plan was submitted in 2010 on behalf of Midway, which proposed an additional 75 acres of disturbance to develop a new access road and construct additional drill pads and drill roads. An EA for this amendment, resulted in a DR/FONSI and approval in July 2011. The amended reclamation permit was approved by NDEP-BMRR on October 3, 2011 (Midway 2013).

GRP's predecessor, Midway initially submitted the Pan Mine Plan of Operations and Reclamation Permit Application in October 2011 per 43 Code of Federal Regulations §3809. The Pan Mine is located on public land administered by the BLM; as such, the BLM was the lead environmental permitting agency following the BLM requirements. The proposed activities were analyzed under the National Environmental Policy Act (NEPA) via an environmental impact statement (EIS).

The permitting schedule for the Pan Mine was originally dictated by the federal NEPA process requirements, which typically included at least one year of baseline studies followed by a scoping process and production of draft and final EIS documents. Public review periods were required at the scoping, draft and final EIS stages. The Pan Mine baseline studies were completed in 2011, and the project went through the scoping process in 2012. The draft EIS was released for public review in March 2013. The Pan Mine Project Final Environmental Impact Statement (FEIS), Volume I & II, Case File NVN-090444 (BLM 2013) was made available November 22, 2013, and the Record of Decision (ROD) was signed

December 23, 2013. The Pan Mine Plan of Operations and Reclamation Permit Application (2013 Plan) was authorized in December 2013. Construction at the mine began in January 2014.

20.2 Major Federal Authorizations and Permits

Mining is Nevada is regulated by both federal and state agencies. The federal and state permitting processes are well-defined.

20.2.1 Bureau of Land Management

Since the 2013 Plan, GRP and their predecessors initiated four Determinations of NEPA Adequacy (DNA) actions to make minor changes to the 2013 Plan authorized in accordance with the FEIS. The BLM authorizations allow up to 3,245.8 acres of disturbance. The ROD for the 2013 final EIS also included mitigation measures for the protection of select environmental resources as described in Section 20.5.

20.2.2 U.S. Fish and Wildlife Service

In December 2013, the BLM approved the Pan Mine Project Final Environmental Impact Statement NVN-090444 (BLM 2013) and the 2013 Plan. To support environmental analysis, the owner of the mine at that time, Midway, provided a voluntarily prepared Bird and Bat Conservation Strategy (BBCS). The BBCS (JBR 2013b) concluded that, due to the presence of two known eagle nests near project facilities, an Eagle Conservation Plan (ECP) would be prepared, so impacts to golden eagles were therefore not addressed in the BBCS. However, the BBCS contained numerous environmental protection measures to protect raptors and migratory birds that would also reduce or minimize potential project impacts on eagles. The BBCS also made recommendations for future eagle monitoring.

The FEIS concluded that moderate impacts to golden eagles could occur. The recommended mitigation was the development and implementation of an ECP in consultation with the United States Fish and Wildlife Service (USFWS). However, the USFWS did not require an ECP after the ROD. Nonetheless, in consultation with the USFWS and BLM in the spring of 2019, GRP prepared an ECP (Wildlife Resource Consultants [WRC] 2021).

Golden eagle nesting surveys have been conducted in the Pan Mine area since 2011. In 2019, 50 stick nests likely constructed by golden eagles were observed within the Project Area and a 10-mile buffer. Sixteen nesting territories were delineated, an average of 3.125 nests per territory. The number of nests per territory ranged from 1 to 14. Most territories had alternative nests; only two territories had only one nest. Thirty occupied nests were observed in the twelve territories over the five years of monitoring (2013-2015, 2018-2019), an average of 2.31 occupied nests per territory over the period, or 0.46 occupied nests per territory per year. Nesting attempts, defined as evidence of egg laying, were observed nineteen times over the period of monitoring. Current general guidance from the USFWS is that for large active mines where blasting occurs, nests within two miles of the mine may be at risk for impacts due to nesting disturbance (WRC 2021).

In 2021 GRP submitted an application to the USFWS for an eagle take permit valid for 30 years until July 2051 due to the potential for incidental disturbance take associated with mining activities over the life of the mine. Two golden eagle nesting territories, Territory 5 and Territory 7 are within two miles of the Pan Mine; however, the nest in Territory 7 is over four miles south of the mine fence and mine disturbance. Impacts to this territory due to indirect impacts are unlikely and are not considered further (WRC 2021).

GRP identified risks to golden eagles from the Pan Mine and analyzed the potential for eagle take based on these risks and the golden eagle protection measures in place. These measures include design features, operational and administrative controls, or other actions and are documented in the FEIS, BBCS, and the reclamation plan. The analysis indicated that eagle take over the life of the mine is not anticipated, although there is potential for eagle take (WRC 2021).

GRP will implement five mitigation measure identified in the ECP to maintain stable or increasing breeding populations and to compensate for the potential incidental disturbance:

GRP will request authorization for disturbance take associated with mining activities that could result in the loss of one golden eagle breeding territory, Territory 5. This measure has been completed.

GRP will contribute to the USFWS' Pacific Southwest Region Bald and Golden Eagle Mitigation Account with the National Fish and Wildlife Federation, an approved in-lieu fee program, or a bond authorized under 43 CFR Subpart 3809: Surface Management. The contributions will be applied to retrofitting high-risk power poles within the same Eagle Management Unit (Pacific Flyway), although efforts will be made to implement mitigation within the natal dispersal range (109 mile-radius) if practicable. The amount of compensatory mitigation required will be determined through the USFWS Golden Eagle Resource Equivalency Analysis.

GRP may coordinate with the USFWS and the BLM on the possible creation of suitable nest platforms on the Pan Mine pit high walls during mine closure.

GRP will provide annual environmental training for personnel working onsite during operations. The training will include eagle recognition, identification, and ecology awareness to encourage proper operational conduct, response, and reporting if an eagle is observed or encountered onsite. Any eagle mortality encountered by personnel will be immediately reported to onsite environmental staff, who will in turn report to BLM, USFWS, and Nevada Department of Wildlife (NDOW) within 24 hours of discovery.

A carcass removal program has been instituted on the mine access road to remove carrion that could attract eagles. The road should be surveyed around daybreak each morning, and all carcasses found will be removed.

GRP will continue monitoring during operations within a two-mile radius of the active Pan Mine project area to obtain additional data on golden eagle nests.

20.3 Major State of Nevada Permits

20.3.1 Reclamation Permit

Reclamation permits are issued to an operator prior to construction of any exploration, mining, milling, or other beneficiation process activity that proposes to disturb more than five acres. Reclamation is regulated in Nevada under the authority of the Nevada Revised Statutes (NRS) 519A.010 - NRS 519A.280 and the Nevada Administrative Code (NAC) 519A.010 - NAC 519A.415.

The authorized Pan Mine Plan of Operations and Reclamation Permit Application was approved by the NDEP-BMRR in 2013 to disturb up to 3,233 acres. The NDEP-BMRR issued Reclamation Permit No. 0350, replacing Exploration Reclamation Permit No. 0228. GRP has completed multiple minor modifications to the authorized reclamation permit and reclamation cost estimate since 2014 to ensure alignment of operation goals with the regulatory authorizations. GRP is now authorized to disturb up to 3,245.8 acres within the 2013 Plan boundary.

20.3.2 Air Permits

The NDEP Bureau of Air Pollution Control issues air quality operating permits pursuant to NAC 445B.001 through 445B.640 to stationary and temporary mobile sources that emit regulated pollutants. GRP maintains a Class II air quality operating permit (AP1041-3831.01), a surface area disturbance permit, and a Mercury Operating Permit to Construct (AP1041-3302). Monitoring of emissions and opacity is required under these permits.

20.3.3 Water Pollution Control Permit

Mining in Nevada is regulated under the authority of the NRS 445A.300-NRS 445A.730 and the NAC 445A.350-NAC 445A.447. Water pollution control permits (WPCP) are issued to an operator prior to the construction of any mining, milling, or other beneficiation process activity. The need for a WPCP is not dependent on whether a discharge is intended, nor the quantity of ore to be extracted or processed.

In 2013, Midway was issued Water Pollution Control Permit NEV2012107 (Permit) to mine and process ore at the site. On October 14, 2014, the NDEP-BMRR received a notice of change of permittee from Midway Gold US Inc. to MDW Pan LLP. On 17 May 2016, the NDEP-BMRR received a notice of change of permittee from MDW Pan LLP to GRP Pan, LLC, the current permittee.

The WPCP authorizes GRP to mine the open pits, place waste rock in the waste rock dump areas (WRDAs), place ore on the heap and leach the ore with a sodium cyanide solution, collect the solution in lined process ponds, process the solution through the adsorption/desorption and recovery plant, and operate the refinery. Groundwater monitoring is required

GRP submitted the five-year renewal application to the NDEP-BMRR in October 2022. The renewal application is under regulatory review.

20.3.4 Dam Safety Permit

In the State of Nevada, the State Engineer is charged with dam safety pursuant to NRS 535. The goal of Nevada's dam safety program is to avoid dam failure and thus prevent loss of life and destruction of property. GRP maintains Dam Safety Permit J-679 issued by the Nevada Division of Water Resources for the for the process ponds which are over 20 feet in height above natural ground surface and impound over 20 acre-feet of water above natural ground surface.

20.3.5 Water Appropriations

Water appropriations are authorized by the Nevada Division of Water Resources. GRP leases water rights from KG Mining (Bald Mountain) Inc. Water appropriations are summarized below in Table 20-1.

Table 20-1: Water Appropriations

Well	Permit No.	Consumptive Amount (acre-feet per annum)
Pan Mine, PW-1	81667	207.09
	81668	48.49
	81669	442.91
Pan Mine, PW-3	84729	89.1
Pan Mine, PW-2	84743, 84744	162.00
	84745	162.00
	84746	89.10
Total	**-**	**1,200.69**

Source: GRP, 2022

20.3.6 Mining Stormwater Permit

The NDEP – Bureau of Water Pollution Control administers the mining stormwater permit program under NRS 445A.465 and 40 CFR 122.26. The program presently uses the 2013 Mining Stormwater General Permit (NVR300000) which has been administratively continued while a permit renewal is being drafted. The Pan Mine is operated under Mining Stormwater Permit MSW-42137 and maintains a stormwater pollution prevention plan for the site.

20.3.7 Industrial Artificial Pond Permit

Pursuant to NRS 502.390, NAC 502.475, NAC 502.480, and NAC 502.482, NDOW issued Industrial Artificial Pond Permit (IAPP) S407100 v.4 that authorizes GRP to construct and operate the Pan Mine in accordance with the conditions, limitations, and requirements set forth in this Permit. The IAPP allows GRP to construct and operate an artificial or artificially created body of water in the State of Nevada that contains chemicals or substances that cause or will cause the death of wildlife. GRP is required to implement and maintain wildlife protective measures that prevent wildlife mortality from occurring as a result of the Pan Mine and associated artificial or artificially created bodies of water. The IAPP stipulates standard wildlife protective measures and mortality reporting requirements.

20.4 Required Authorizations and Permits

GRP’s predecessors acquired the required original federal, state, and local permits for construction, operations, and reclamation of the Pan Mine. GRP has successfully transferred the permits to their control and maintained required permits for operations. GRP has maintained compliance with the permits and authorizations, so renewal of major and minor permits required for operations within the regulatory mandated deadlines is anticipated. Table 20-2 provides a list of the major permits, and authorizations, and their status as of January 2023. All permits are issued to “GRP” unless otherwise noted.

Table 20-2: Status of Major Permits, Authorizations, and Licenses as of January 2023

Permit	Agency	Permit Number	Status
Federal Permits and Authorizations			
Notification of Commencement of Operations	Mine Safety and Health Administration	26-02755	Active
Record of Decision and approved 2013 Plan of Operation and subsequent modifications	BLM	NVN-090444	Active
Mineral Materials Negotiated Sale (Borrow)		NVN-089672	Active
Programmatic Agreement [(1)]	BLM/state Historic Preservation Office	NVN-090444	Active
Eagle Take Permit	USFWS	Currently under review	Currently under review
Hazardous Waste ID (RCRA)	USEPA/NDEP/Department of Energy	LQG NVR 000 089 227	Active
FCC Radio License	Federal Communications Commission	Reg. #0023652175 Call Sign WQUC703	Active
Explosives Permit	Bureau of Alcohol, Tobacco, Firearms, and Explosives	#9-NV-033-33-1B-00416	Active
CSAT Security Threat	Department of Homeland Security	Midway Gold Corporation (MDW) Pan Facility ID 4133675	Active
		Facility survey ID 8022095 (dated Dec. 30, 2014)	
State Permits			
Air Quality Operating Permit -Class I	NDEP Bureau of Air Pollution Control	AP1041-3674	Active Class I (Expires 11/28/2027)
Surface Area Disturbance Permit			
Air Quality Operating Permit – Class II		AP1041-3831	Active Class II (Expires 07/07/2027)
Air Quality Permit – Mercury Operating Permit to Construct		AP1041-3302	Active (mercury permit [Lifetime])
Reclamation Permit	NDEP Bureau of Mining Regulation and Reclamation	350	Active
Water Pollution Control Permit		NEV2012107	Active (Expires 04/04/2023; renewal application submitted on 10/06/2022)
Dam Safety Permit	Nevada Division of Water Resources	J-679	Active
Water Appropriation		Permits 81667 - 81669, 84743 - 84746	Leased from KG Mining (Bald Mountain) Inc.
Encroachment Permit	Nevada Department of Transportation	Occupancy Permit No. 200571	Active
Industrial Artificial Pond Permit	Nevada Department of Wildlife	S407100S	Active (Expires 06/20/2027)
Stormwater Permit	NDEP Bureau of Water Pollution Control	MSW-42137	Active
Commercial Septic System Construction Permit		GNEVOSDS09-S-0397	Active
Landfill Permit	NDEP Bureau of Sustainable Materials Management	SW 539	Active
		SW1762	
Liquid Petroleum Gas (LPG) Licenses	Nevada Board for the Regulation of Liquefied Petroleum Gas	5-5427-01 (Admin)	Active
		5-5427-02 (ADR)	
Potable Water “non-transient non-community water system”	NDEP Bureau of Safe Drinking Water	WP-1142-NT-NTNC	Active
Occupancy Permit	State of Nevada Fire Marshall	N/A	Active
Mine Safety	Nevada Department of Business and Industry, Division of Industrial Relations	Mine ID 26-02755	Active

Source: SRK, 2023

Also signed by Mt. Wheeler Power Company, Te-Moak Tribe of Western Shoshone Tribe, Duckwater Shoshone Tribe, and the Lincoln Highway Association, Nevada.

20.5 Environmental Study Results

Environmental baseline studies were conducted for numerous resources (e.g., air, surface and ground water, wildlife, special status plant and animal species, cultural) to support the development of the 2013 EIS. The FEIS identified potential impacts and specified mitigation for the following resources:

- Special status plant and animal species;
- Archeological and cultural resources;
- Wild horses;
- Mine waste characterization and management;
- Groundwater characterization; and
- Visual resources.

Potential future expansion outside of the 2013 Plan boundary will require that baseline studies be conducted on the new area. Additional resource studies may be stipulated by the BLM or the NDOW.

20.5.1 Special Status Plant and Animal Species

Sagebrush Cholla

Three specimens of sagebrush cholla were found west of the site, outside of the 2013 Plant Area. Sagebrush cholla is a Nevada Natural Heritage Program special status species (BLM, 2013). Identification and relocation of plants found in disturbance areas was required by the ROD. Relocations ultimately only were necessary along the relocated powerline route.

The ROD stipulates that a BLM-approved native seed mix be used within sand cholla habitat. A reference area was established at the time of transplantation and will be used as the target for reclamation. The frequency, density, and ground cover of the native vegetation will be documented for sand cholla habitat.

Greater Sage-Grouse

The Pan Mine is situated where there are few or no springs and seeps and sits high enough on the mountainside to not be located in primary sagebrush habitat. During the EIS development, the mine was considered to be located within “preliminary priority” and “preliminary general” habitats. The habitat definitions and nomenclature have since changed as has the status of greater sage-grouse as described in the Approved Resource Management Plan Amendments for the Great Basin Region (ARMPAs) (BLM 2015). However, the ROD was issued prior to the finalization of the ARMPAs, so the mine activities are not presently subject to the conditions of the ARMPAs.

In addition to the suitable greater sage-grouse habitat associated with the Project area, four greater sage-grouse leks were identified within three miles of the mine during the EIS development. Two of the leks are considered active, one lek has an unknown status, and one lek is inactive. The power line and access road route were relocated to avoid these leks. There are other leks further away that are either sufficiently far away from the mining activities to not pose a threat to the birds’ well-being or are inactive. There were no timing limitations required during construction, and normal mining activities should not be impacted.

The ROD stipulates that no construction or new ground disturbance will occur during the period from March 1 through May 15 from one hour before sunrise until three hours after sunrise within two miles of active greater sage-grouse leks. Additionally, the Pan Mine has a Noise Monitoring Plan that stipulates specific hours of restricted activities, modified use of facilities within the 2013 Plan boundary, and best management practices for minimizing noise levels during times of critical greater sage-grouse lek activity. In coordination with the NDOW and the BLM, monitoring of noise at the lek locations during the lekking period (March 1 to May 15) from one hour before sunrise to three hours after sunset was conducted for multiple years and discontinued in 2021 due to no noise exceedances being attributed to the mine operations for two successive years. The noise monitoring is required to resume if changes to operations could raise the noise levels beyond what has been monitored previously.

A crusher was installed in 2019. When the crusher was installed, a study, including noise modeling, was conducted on the additional noise from the crusher prior to the lekking season of 2020. The results of the crusher noise survey resulted in updated passive monitoring protocols for the Pan Mine (GRP 2020) that were reviewed and approved by the BLM and NDOW. In 2020, a new access road was installed through the Pan Mine to the Gold Rock property. A noise study, including a noise model, was prepared to evaluate this change in operations. The model indicated the new access road and related traffic would not raise noise levels sufficiently to affect the lek.

Passive monitoring was undertaken for the 2021 and 2022 lekking seasons and is proposed again for the 2023 lekking period. Passive monitoring consists of modifying operations to avoid excessive noise on the west side of the property, observing mine operations and ensuring nothing out of the ordinary is occurring, notification and approval processes for non-routine activities, and training for all mine staff and contractors to ensure that noise levels stay below the baseline level that has been analyzed in past studies. Specific procedures are outlined in the Pan Mine Noise Monitoring Plan for 2020 (GRP, 2020). The noise limit is 10 decibels above ambient. Ambient is 18 decibels (L_{50}).

From 2011 through 2015, the Sagebrush Ecosystem Council developed and implemented the Nevada Conservation Credit System (CCS) through the Sagebrush Ecosystem Technical Team (SETT). The goal of the Nevada CCS is to generate a net benefit of greater sage-grouse habitat by ensuring the impacts to greater sage-grouse habitat in the State of Nevada and federal lands from human disturbances (debits) are offset with commensurate habitat conservation actions (credits). Currently, the CCS is the required method for calculating off-site compensatory mitigation, which is a monetary sum a proponent would have to pay for the disturbance of greater sage-grouse habitat. However, as a result of the CCS not having a sufficiently developed process to determine accurate costs at the time of the original ROD for the Pan Project, or at the time of the preparation of the mitigation plan (2013 to 2019), GRP is not required to participate in the CCS program and may work directly with the BLM, with NDOW consultation, to develop a proponent-driven off-site mitigation program.

As part of its off-site compensatory mitigation, the Pan Mine has contributed approximately $1.7 million toward five years of greater sage-grouse study conducted by the U.S. Geological Survey. As provided in the FEIS, the mine operator receives a fifty percent credit for funding contributed to the USGS study toward any required off-site compensatory mitigation.

The Greater Sage-Grouse Offset Mitigation Implementation Plan Agreement (BLM 2021), developed in coordination with GRP and the NDOW, includes the following key components:

- Complete off-site mitigation of impacted priority habitat management area (PHMA) on a three to one basis, meaning that for every one acre that is permanently impacted by the project within PHMA, the operator would restore or enhance three acres of habitat either adjacent to the project, within the Population Management Unit, or within adjacent PHMA habitats;
- Complete off-site mitigation of permanently impacted general habitat management area (GHMA) on a two to one basis; and
- Off-site mitigation will be initiated within one year of ground disturbance and completed within 10 years of ground disturbance (BLM 2013).

Table 20-3 summarizes the habitat restoration acres.

Table 20-3: Acres of Mapped PHMA and GHMA and Ratios for Habitat Restoration Using Acreages

Acres PHMA	PHMA Acres Using 3:1 Mitigation Ratio	Acres GHMA	PHMA Acres Using 3:1 Mintigation Ratio	Total Acres
6.27	18.80	416.2	832.4	851.2

Source: BLM, 2021

The BLM calculated a cost per acre of $419.67 for restoration treatment including monitoring. In January 2022, GRP issued a check to the BLM, Ely District, Bristlecone Field Office for $178,611.55 for greater sage-grouse mitigation.

Pygmy Rabbits

No pygmy rabbits were found on the site during baseline studies or during any pre-construction clearance surveys conducted at the Pan Mine (Jensen 2023), though habitat is present and could be occupied (BLM 2013).

The ROD stipulates that pre-construction clearance surveys for pygmy rabbits will occur prior to any surface disturbance regardless of the season. If occupied pygmy rabbit habitat is identified during pre-construction clearance surveys and natal burrows are found, new disturbance will not occur within 200 feet of those areas. If disturbance of these areas is determined to be unavoidable, consultation with the appropriate BLM and NDOW wildlife biologists will occur to develop mitigation techniques. The pre-construction surveys only identified habitat in the southwest corner of the property, and this area has been avoided. However, future work in this area will require survey and potentially avoidance or consultation.

Western Burrowing Owl

Suitable habitat for western burrowing owl is present within the 2013 Plan Area though occurrences have not been documented. Construction activities could potentially destroy suitable and occupied nesting habitat for burrowing owls as well as displace individual owls.

The ROD stipulates that pre-construction clearance surveys for western burrowing owl will occur prior to any surface disturbance occurring from March 15 through August 31. If occupied western burrowing owl nesting territories are encountered, GRP will avoid the area within 0.25 miles of the active territory until a qualified biologist has determined the young have fledged, and the nesting territory has been abandoned for the season. If disturbance of these areas is determined to be unavoidable, consultation with the appropriate BLM and NDOW wildlife biologists will occur to develop mitigation techniques. No pre-construction clearance surveys to date have identified any occupied nesting territories, and no mitigation has been required.

Golden Eagles and Raptors

The golden eagle is listed as sensitive by the BLM and is protected by the State of Nevada. The species has no special status with the USFWS, although it is protected under the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. During agency consultation, the NDOW identified those golden eagle nests documented within the vicinity. Two golden eagle nests were identified within the northern portion of the 2013 Plan Area, and 39 were identified within a 10 mile buffer. Further, golden eagles were observed nesting during baseline surveys (BLM 2013). GRP developed the ECP (WRC 2021)

The bald eagle is listed as sensitive by the BLM and is protected by the State of Nevada. The 2013 Plan Area and adjacent areas serve as potential foraging habitat.

In 2021, GRP submitted an application to the USFWS for an eagle take permit valid for 30 years until July 2051 due to the potential for incidental disturbance take associated with mining activities over the life of the mine. This permit is currently under review.

The Bird and Bat Conservation Strategy describes the avian and bat protection measures for eagles, raptors, and other migratory bird and bat species. Annual nest surveys are conducted for the identified golden eagle and raptor nests within a 10-mile radius of the mine.

Migratory Birds and Bats

Several migratory bird species were found at the Pan site during baseline surveys. The BLM considers all bat species to be sensitive; however, no nesting or roosting habitat were found on site, and no further evaluation is required by the ROD.

The ROD stipulates that GRP will fully implement and adhere to the construction techniques, design standards, and avian mortality reporting set forth in the Bird and Bat Conservation Strategy for raptors, western burrowing owls, migratory birds, and bats and the ECP for golden and bald eagles. Nesting surveys for migratory birds will be conducted within seven days of disturbance if disturbance needs to occur between April 1 and July 31. In coordination with the BLM, an avoidance buffer will be determined, and the nest will be avoided to prevent destruction or disturbance of nests until the birds are no longer present.

Dark Kangaroo Mouse

During pre-construction trapping for dark kangaroo mice in potentially suitable habitat within the 2013 Plan Area, occupied dark kangaroo mouse habitat was identified; however, this habitat is outside of the disturbance area. Currently, no disturbance in these areas is proposed; however, consultation with the appropriate BLM and NDOW wildlife biologists will occur to develop avoidance strategies and mitigation techniques should disturbance be proposed in these areas in the future

20.5.2 Wild Horses

To minimize the potential of wild horses accidentally entering the fenced portion of the 2013 Plan Area and not being able to be released easily, gates will be installed along the fence line at every corner. If the fence stretches longer than one mile, a gate will be placed at one-mile increments. Gates will also be placed on either side of cattle guards.

20.5.3 Cultural Resources

The BLM, Nevada State Historic Preservation Office, and Midway signed the Programmatic Agreement between BLM, Nevada State Historic Preservation Office, and the Advisory Council on Historic Preservation (Programmatic Agreement) in conjunction with Mt. Wheeler Power Company and the Lincoln Highway Association, Nevada that directed all activities associated with identifying and mitigating archaeological sites. This Programmatic Agreement, which has been completed and transferred to GRP, facilitates future archaeological work on site.

The Lincoln Highway/Hamilton Stage Road – US Highway 50, was developed over the Lincoln Highway route in the Project area. The dirt road which originally accessed the Pan Mine and traversed the south end of the North Pit may have been an unimproved alternative route for the Lincoln Highway from 1913 to 1926, prior to the development of US Highway 50. Studies of this section of the route have determined that parts are eligible, and some parts are not eligible, for listing on the National Register of Historic Places (NRHP). A treatment plan was prepared, submitted to the BLM, and all required mitigation of segments within the mine disturbance area have been completed. The plan included designating another similar road in the area as a mitigation route, providing signage to inform and direct travelers to the new route, and installing two culverts on the road. Concurrence from the BLM was obtained in January 2013, and the completion of the mitigation was completed in early spring 2013.

The Hamilton Stage Road was a Pony Express, stage, and freight route between Elko and Hamilton, Nevada. It was likely constructed, or became used, in the late 1800s and was outdated by the early 1900s. The exact routing in the area of the Pan Project is unknown. It is believed to be in the Newark Valley, and not in the area of the Pan Project.

Carbonari sites, burn piles, and habitations from Swiss/Italian and Chinese charcoal producers have been identified within and near the 2013 Plan Area. Cultural surveys have been conducted to identify, locate, and record the carbonari sites. Approximately 300 sites were identified. Of these, approximately 150 were determined eligible for listing. Fifteen sites (10 percent) were determined to require mitigation due to their ability to provide knowledge about the carbonari in the area. A plan to mitigate the sites through recordation prior to disturbance was developed and submitted to the BLM in January 2013. The sites were mitigated during the early spring 2013.

A total of 158 cultural resource sites were encountered during the project-specific inventories, including 22 previously recorded sites. The majority of the sites encountered were historic sites (137) with seven prehistoric sites and 14 multi-component sites (both historic and prehistoric) also recorded. Of the 158 sites, 75 are considered eligible for the NRHP, one was unevaluated, and 82 are considered not eligible (BLM 2013).

Avoidance is the BLM-preferred treatment for preventing effects to any prehistoric or historic site eligible to the NRHP and ethno-historic properties or unevaluated cultural resources. If avoidance is not feasible because an area is needed for mine facilities or project operations or is not adequate to prevent adverse effects, GRP will undertake mitigation such as data recovery at the affected historic properties in accordance with the Programmatic Agreement. Development of a treatment plan, data recovery, archaeological documentation, and report preparation will be based on the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation, 48 CFR 44716, as amended and annotated. GRP has not mitigated NRHP-eligible sites since 2020.

20.5.4 Mine Waste Characterization and Management

To assess the potential impact to groundwater during the operations, maintenance, and reclamation phases of mining, acid-base accounting (ABA) and metals leaching (ML) potential tests were performed on a variety of rock samples at the site. ABA-ML tests were performed on over 600 rock samples from the site. Based on the results of this testing, using parameters established by the NDEP and BLM guidelines, the majority of waste rock samples were found to be non-acid generating with an overall low to moderate potential for metals leaching (BLM 2013).

Material characterization of waste rock and ore are presented in a report titled Final Baseline Geochemistry Report, Pan Project, Nevada, dated June 2012, prepared by Interralogic, Inc. (Interralogic, 2012). An additional characterization plan, Sample Selection for Supplementary Humidity Cell Testing for the GRP Pan North Pit Waste Rock (HydroGeologica, 2017), was completed to better define rock geochemistry as part of the 2017 permit renewal application. The results of quarterly overburden, waste rock and ore characterization are provided to NDEP in quarterly and annual reports and are generally consistent with the results and findings included in the 2017 update.

Waste rock from the South Pan Pit has very low sulfur content (average sulfide sulfur less than 0.1 percent) and has a high neutralizing potential due to the high percentage of limestone (approximately 70 percent). The waste rock from the North Pan Pit has a higher percentage of samples considered potentially acid generating (PAG). Using Nevada BLM criteria, the majority of waste rock samples are considered non-acid generating, having both a net neutralization potential greater than 20 tons of material per thousand tons of calcium carbonate and a neutralization to acid potential ratio of greater than 3. Using the NDEP criteria, the percentage of samples considered non-acid generating increases to 90 percent. Results of meteoric water mobility procedure (MWMP) analyses showed a low metals-leaching potential, with only arsenic and thallium having some leaching potential. Each of these elements was slightly above its respective Nevada groundwater Profile I Reference Value of 0.010 mg/L and 0.002 mg/L, respectively. Consequently, the potential for acid rock drainage and/or metals leaching from the WRDA is considered low (BLM 2013).

GRP continues to monitor waste rock and ore geochemistry as stipulated by WPCP NEV2012107. During operations, waste rock grab samples are collected quarterly for each major rock type encountered and submitted for ABA and MWMP testing. Routine blasthole samples (minimum of 10 percent of the North

Pan Pit blastholes) are analyzed to identify PAG materials. Testing includes visual inspection and chemical analysis when indicated based on the visual inspection, paste pH, net acid generating pH, and LECO carbon/sulfur analyses.

20.5.5 Surface and Groundwater Characterization

The Pan Mine is located in the Central Region (Hydrographic Region 10) primarily in the Newark Valley (Hydrographic Basin 154), with a small portion in the northern end of the Railroad Valley Basin/Northern Part (Hydrographic Sub-Basin 173b). Both are terminal basins that drain to playas. The Newark Valley Hydrographic Basin is approximately 801 square miles in an area with no surface water inlets or outlets, and the Railroad Valley/Northern Part Hydrographic Sub-basin is approximately 2,140 square miles (BLM 2013).

No seeps or springs were identified in the 2013 Plan Area, and all streams are ephemeral (BLM 2013). No water quality analyses are available.

There are three aquifers of note in southern Newark Valley: a small, perched alluvial aquifer just west of the 2013 Plan Area; an extensive valley fill aquifer; and a deep, regional, carbonate bedrock aquifer. The depth to groundwater beneath the Plan Area ranges from 650 to 800 ft below ground surface and, is not expected to be encountered by the construction or mining activities (BLM 2013). Groundwater quality below the 2013 Plan Area was good, with a neutral pH and total dissolved solids ranging from 260 to 290 mg/L. Groundwater was relatively warm at 80 degrees Fahrenheit (BLM 2013).

Well DMW-1 characterizes the water quality in the deeper carbonate aquifer south of the property and four wells (MW-1, MW-2, MW-3, and MW-4) characterize the perched alluvial aquifer. An observation well (OBS-1) was installed prior to drilling the first production well. This well is used as a second deeper carbonate aquifer monitoring well on the north side of the property. Production well PW-1 monitors water quality downgradient of the plant, heap, and process ponds. Groundwater monitoring is continuing per WPCP NEV2012107.

20.5.6 Visual Resources

The exterior surfaces of any ancillary facilities visible from any project Key Observation Point (KOP) or Highway 50 have or will be painted with non-reflective shale green if located in pinyon-juniper vegetation or shadow gray if located in shrublands or other open areas. Other non-reflective colors of paint, as determined by the BLM, may be used in place of shale green or shadow gray.

20.6 Mercury Management

Mercury is one of the naturally occurring elements that is associated with gold mineralization at the Pan Mine. The Nevada Mercury Control Program (NMCP) is a Nevada regulatory program that requires mercury emissions controls on thermal units located at precious metal mines. The NMCP regulatory authority is found in NAC 445B.3611 to NAC 445B.3689. The program achieves mercury reduction via add-on control technologies. At this time, the NMCP regulations focus on the potential for mercury emissions from thermal processing units only. At the core of the NMCP is the Maximum Achievable Control Technology (NvMACT) designated by the NDEP in accordance with NAC 445B.3677. Pursuant to NAC 445B.3625, owners or operators that operate, construct or modify a thermal unit that emits mercury must apply for, and obtain, a Mercury Operating Permit to Construct to apply the NvMACT. GRP maintains air permit AP1041-3302 to comply with the NAC.

As part of the Nevada Mercury Control Program, GRP currently uses chemical mercury suppressan(trade name Cherokee) in the processing circuit to sequester mercury in the leach pad thereby reduce mercury in the ADR. All thermal mercury units use use sulfur-impregnated carbon beds to reduce mercury emissions in off gas. The mercury vapor controls that meet the NvMACT in accordance with NAC 445B.3611.36899 are installed on all thermal devices. Activated carbon is changed out on a regular maintenance schedule; the used carbon is managed as hazardous waste. Stack testing of all mercury units is performed on annual basis to ensure that all mercury emissions are below permit limits.

Residual mercury in the gold-bearing material generated during electrowinning is removed during the retorting process. Elemental mercury is managed on site in accordance with the provisions of Section 5(g)(2)(D) of the Mercury Export Ban Act, as amended by the Frank Lautenberg Chemical Safety for the 21st Century Act. This act bans the export of elemental mercury from the United States as of January 1, 2013. The U.S. Department of Energy (DOE) must designate a facility(ies) for long-term management and storage of mercury generated in the United States and have it operational by January 1, 2013, which did not happen. The DOE is required to charge a fee to cover the cost of mercury storage. Until a federal facility(ies) is designated, elemental mercury is stored on site.

The Department of Energy published a final rule in the Federal Register to establish a fee for long-term management and storage of elemental mercury in accordance with the Mercury Export Ban Act effective January 22, 2020 (DOE 2019). The proposed rule initially established the fee for long-term management and storage of elemental mercury at the designated DOE storage facility as $55,100 per metric ton, plus a receiving charge of $3,250 per shipment. In response to comments received regarding the proposed rule, DOE adjusted the fee downward to $37,000 per metric ton. In accordance with Mercury Export Ban Act, this fee may be adjusted annually (DOE 2019).

Elemental mercury is stored in 2,000-pound ‘pigs’. Currently five full pigs are stored on site, and filling of a sixth pig is ongoing. The five full pigs are stored in Central Accumulation Area (Hazyard), which is covered, has concrete containment, and remains secured with a lock. The sixth pig is in a satellite accumulation area inside of the refinery.

20.7 Environmental Issues

Environmental issues identified in the 2013 EIS completed for the mine are mitigated by the requirements of the ROD as described for each resource below. At the time of publication, known environmental issues had been addressed and mitigated, as required.

20.8 Operating and Post Closure Requirements and Plans

20.8.1 Developed Operations

Mining began in May 2014 with pre-stripping and construction of the access road, South WRDA, and Phase 1 heap leach pad. Processing began when ore was first placed on the heap leach pad beginning late in the third quarter of 2014, with first leach solution applied in the first quarter of 2015. GRP has consolidated the previously authorized South Pan and North Pan pits as well as the three satellite pits into the Pan Pit as of November 2022. GRP hauls waste rock to the authorized waste rock facilities via a series of haul roads. Ore is leached on the heap, and the solution is sent to the ADR/refining plant for gold recovery. The mine is authorized to disturb up to 3,246 acres for open pits, waste rock disposal areas, heaps, roads, yards, buildings, and other ancillary facilities as shown in Table 20-4.

Table 20-4: Summary of Authorized Phase 1 and Life-of-Mine Disturbance

Mine Component	Existing Phase 1 Disturbance (acres)(1)	2022 Proposed Phase 1 Disturbance (acres)	Total Phase1 Disturbance (acres)(1)	Subsequent Phases Disturbance (acres)(2)	Total (acre)
Open Pits					
South Pan Pit	184	-184(3)	-	-	0
North Pan Pit	105	-105(3)	-	-	0
Black Stallion Pit	17	-17(3)	-	-	0
South Syncline Pit	-	-	-	-	0
North Syncline Pit	12	-12(3)	-	-	0
Pan Pit	-	936	936	-	936
Waste Rock Disposal Areas					
South WRDA	166	81	247	-	247
North West WRDA	126	68	194	-	194
North East WRDA	38	-1	37	-	37
Other					
Roads(4)	159	-28	131	-6(9)	125
Heap Leach Facility	180	31	211	118	329
Process Facilities	15	-	15	-	15
Process Ponds	14	-	14	-	14
Yards(5)	52	-1	52	33	85
Growth Media Stockpile	27	-9	18	15	3
Borrow Areas	75	-	75	135	210
Exploration(6)	209	-	209	-	209
Ancillary Facilities(7)	3	-	3	-2	1
Interfacility Disturbance(8)	379	-128	251	560	811
Total	1,761	632	2,393	853	3,246

Source: Reclamation Permit No. 0350, 2022

(1) Current bonded acreage.

(2) Additional surety required to be posted before engaging in Subsequent Phase disturbance.

(3) The existing South, North, Black Stallion, South Syncline, and North Syncline pits will ultimately be incorporated into the new Pan Pit.

(4) Includes the access, haul and secondary roads.

(5) Includes production wells PW-1 and PW-2 and monitoring well pads.

(6) Reconciled existing exploration disturbance with current facilities to account for disturbance absorbed in other components.

(7) Ancillary facilities include power supply, storm water controls, water supply and septic system, communication facilities, ore stockpile, monitoring wells and fencing.

(8) Interfacility Disturbance is the area between mining components that may be disturbed during construction, operations and reclamation/closure.
(9) Negative acreage value in Subsequent Phases column the result of a reduction in size of these facilities in future phases of the project.

The reclamation surety covers phased development (2,393 acres of disturbance) rather than the authorized 3,246 acres of disturbance. GRP will update the reclamation costs and surety either when disturbance approaches the bonded total or during the one-year phased bond reviews.

The pits, WRDAs, heap leach facility, roads, and ancillary facilities and a 69-kV transmission line may ultimately result in about 3,246 acres of total disturbance. Upon completion of mining, the operation will be closed and reclaimed in accordance with federal, state, and local requirements. Table 20-4 summarizes the bonded disturbance evaluated for Phase 1, and the total disturbance acreage for each component of the Pan Mine for complete build-out.

20.8.2 Period of Operations

The life of mine is estimated at five years until 2027, with additional time for associated closure, reclamation, and post-closure monitoring periods.

Heap leach drain down, closure, and reclamation is assumed to require approximately four years, ending in about Year 8 of the mine reclamation plan. The closure and reclamation of supporting facilities, and post-closure monitoring, will require approximately 30 years, bringing the entire Project life to approximately 38 years. Monitoring of the heap leach drain down may continue for up to 30 years following closure. Concurrent reclamation during active mining has been planned to begin as soon as practicable on areas where no further disturbance will occur, minimizing the need for post-mining reclamation.

20.8.3 Planned Operating Procedures

In addition to permit compliance, GRP has committed to many practices to prevent undue and unnecessary environmental degradation during the life of the mine. These practices listed below are part of the operating procedures included in the 2013 Plan of Operations and subsequent modifications or are parts of other permits:

- Fugitive dust control plan;
- Programmatic agreement;
- Groundwater monitoring plan;
- Stormwater pollution protection plan;
- Waste rock management plan;
- Quality assurance plan;
- Spill contingency and mitigation plan;
- Interim management plan;
- Petroleum-contaminated soils management plan;

- Bird and bat conservation strategy; and
- Eagle Conservation Plan.

20.9 Post-Performance or Reclamations Bonds

The NDEP-BMRR and the BLM issued reclamation permits (NVN-90444 and NDEP #0350) in 2013 and coordinate annual reviews. The Standardized Reclamation Cost Estimator (SRCE) is managed by NDEP and the bond (or surety) is held by the BLM. The bond is phased in that each year it is updated and re-calculated to estimate the predicted impacts for three years beyond the present.

The SRCE, which totals $18,729,598, was approved by the BLM and the NDEP in 2022 for Phase 1 disturbance of 2,393 acres.

20.10 Social and Community

The Pan Mine maintains support from the local community, counties (White Pine and Eureka), and state permitting authorities due to its capability to provide jobs and tax income. GRP attends the Duckwater Shoshone tribal meeting on a regular basis.

20.11 Mine Reclamation and Closure

Mine closure is defined as the chemical stabilization of process components. Nevada Administrative Code 445A.379 defines “stabilized” as “the condition which results when contaminants in a material are bound or contained so as to prevent them from degrading waters of the state under the environmental conditions that may be reasonably expected to exist at a site”.

The heap leach facilities will be decommissioned in accordance with NDEP regulations and guidelines for closure. A tentative plan for permanent closure, as required by NAC 445A.398, was included in the water pollution control permit. A final plan for permanent closure, to include all proposed process components, will be prepared and submitted to the NDEP and the BLM two years prior to the anticipated final termination of the heap leach facility operation, per NAC 445A.447.

Chemical stabilization of the heap leach facilities is required to obtain permanent closure. GRP anticipates that the spent heap will be allowed to drain with no freshwater rinsing. Final details of heap neutralization and closure will be developed at least two years prior to closure pursuant to the requirements of NAC 445A.446 and NAC 445A.447.

GRP will undertake the following conceptual plan for process fluid stabilization:

- After cessation of leaching, process solution will be recirculated from the process ponds to the heap until drain down is less than active evaporation capacity;
- Process solution will be actively evaporated on the heap until drain down flows can be managed through passive evaporation in the process ponds;
- The heap will be regraded;

- Growth media (i.e. cover soil,) will be placed on the heap with the aim of limiting long-term flow from the heap to a de minimus quantity; and
- The pregnant process pond will be converted to an evapotranspiration (ET) cell to store and release heap drain down through ET until de minimus flow is achieved, at which time the ET cell will be closed.

The operational monitoring data for drain down flows and chemistry will be used to confirm modeled flows and submitted as part of the final plan for permanent closure at least two years prior to the closure of the heap leach facility.

20.12 Reclamation Measures During Operations and Project Closure

Reclamation of disturbed areas resulting from activities outlined in the 2013 Plan have and will continue to be completed in accordance with BLM and NDEP-BMRR regulations. The purpose of Subpart 43 CFR § 3809 – Surface Management, is to prevent unnecessary or undue degradation of public lands by operations authorized under the mining laws. This subpart establishes procedures and standards to ensure that operators and mining claimants meet this responsibility and provide for the maximum possible coordination with appropriate state agencies. The NDEP requires that a reclamation plan be developed for any new exploration or mining project and for expansions of existing operations (NAC 519A).

GRP anticipates that, with the exception of the open pits for which reclamation exemptions under NAC 519A.250 were obtained, surface mine components and exploration will be reclaimed and revegetated according to the approved reclamation plan. The goals of the reclamation plan are to:

- Minimize surface disturbance and environmental impact to the extent practicable;
- Create diverse, reclaimed landscapes to promote vegetation and habitat diversity and hydrologic stability over time;
- Return mine-related disturbances to productive post-mining land uses that emphasize livestock grazing, greater sage-grouse habitat, wild horse use, and wildlife use with dispersed recreation and mineral exploration usage;
- Comply with applicable state and federal environmental rules and regulations;
- Limit visual impacts; and,
- Limit and/or eliminate long-term maintenance following reclamation to the extent practical.

These goals will be achieved by meeting the primary objectives listed below:

- Establish stable surface topographic and hydrologic conditions during mining and after reclamation that are compatible with the surrounding landscape by designing stable fill and cut slopes, controlling erosion, and managing surface water and earthen materials to minimize water quality impacts;
- Establish a stable, diverse and self-sustaining plant community through removing and redistributing suitable plant growth media on disturbed areas and by the seeding and planting of native and adapted plant species;

- Reclaim facilities that are no longer needed for operations as soon as practicable during the production period by implementing concurrent reclamation;
- Integrate mining plans with soil, water and waste management and reclamation plans;
- Separate process water and contact water from non-contact (i.e., un-impacted) water; and
- Incorporate operational stormwater management facilities into the design of closure stormwater.

GRP is committed to operating in a manner that protects, and where possible enhances, the environmental and social values of the ecosystems and communities within which it operates. To this end, GRP has a reclamation plan to reclaim the land to productive post-mining land uses. Such voluntary measures include:

- Live-handling of plant growth media, including removal and direct placement of plant growth media on surfaces that have been prepared for reclamation without stockpiling;
- Construction of WRDAs using stable design principles;
- Salvage and redistribution of woody debris for final reclamation;
- Contouring the top of the spent heap leach pad to create more natural forms and lines; and
- A revegetation plan that includes sowing seed and planting shrub seedlings according to landscape position and aspect.

20.12.1 Reclamation of Open Pits

Pit berms will be constructed along the pit perimeters where necessary to preclude public access and deter livestock, for the pits that will remain as post-mining features. Groundwater conditions at the Pan Mine indicate the regional water table lies about 300 ft below the bottom of both pits. Groundwater in not anticipated to enter the pit either during operations or post closure. Depending upon the balance between surface water runoff and evaporation, there is the potential that the pits may temporarily accumulate surface water during spring melt and/or large storm events. Precipitation-related water that could accumulate in the bottom of the pits and/or benches will be temporary given the high net evaporation (51.46 inches) compared to precipitation (7.55 inches) (SRK 2022). The pits are exempted from backfilling per NAC 519A.250.

20.12.2 Reclamation of WRDAs

The goal of the WRDA design is to establish a sustainable landform. The WRDA will be constructed and reclaimed to slopes of 3H:1V and concurrently reclaimed where practicable. Erosion during an initial equilibration period is anticipated and considered acceptable, as long as the erosion rate stabilizes to a sufficiently low long-term rate value.

The WRDA soil cover is intended to be non-erosive, or, for segments that undergo erosion, able to self-armor in a way that halts erosion before waste rock is exposed or free drainage is compromised. Concurrent reclamation of the WRDA during the production period will allow mine managers to monitor performance of the design, retrofit eroded areas as needed, and adjust yet-to-be constructed segments, as part of an adaptive management strategy.

Waste rock will be placed in accordance with the Waste Rock Management Plan (Interralogic, 2013). Material determined to be PAG that is in manageable pods in the pit will be isolated in the central portion of the Northeast and Northwest WRDAs, as needed. The final lift over the isolated PAG material in the Northeast and Northwest WRDAs will consist of approximately 2.5 ft of high carbonate material using waste rock set aside during mining, with an overlying vegetated growth media cover 12 inches thick to minimize the long-term potential for acid generation and metals leaching. GRP has committed to covering the PAG material within the WRDAs with 6.5 ft of non-PAG run-of-mine waste in addition to the 2.5 ft of high-carbonate material and 12 inches of growth media, for a total cover thickness of 10 ft.

20.12.3 Reclamation of the Heap Leach Facility

The heap leach pad will be constructed in lifts set on a 3H:1V (horizontal to vertical) balance line such that the overall reclaimed slope angle will be approximately 3H:1V. Following the end of heap leaching operations, drain down, and closure as described above, each heap lift will be regraded to the final slope configuration of approximately 3H:1V. This design will mitigate aesthetic impacts, provide stability, promote run-off, and reduce infiltration.

When no longer required for evaporation of fluids, the surface solution distribution piping will be removed. The side-slopes of the heap will be graded, so the final toe is within the interior crest of the perimeter berm. A store and release or ET cover will be installed on the regraded heap surface to limit infiltration of precipitation into the spent ore. The soil cover on the spent heap will allow retention of water in the cover material during snow melt and precipitation to establish grass and herbaceous vegetation. By retaining the water in the soil cover for plant uptake and ET, the amount of water infiltrating is reduced, thus minimizing the drain down solution and steady–state seepage that will need to be managed during closure and post-closure. The recontoured heap will be covered with 2.5-ft of growth media, (i.e., cover soil.) Midway conducted vadose zone modeling of potential cover soil types from within the mine disturbance and borrow areas. The vadose zone modeling indicated that for representative potential cover soil types, a 2.5 ft thick layer of cover soil will limit infiltration through the cover to one percent under average and wet climate conditions.

Reclamation of the heaps will be carried out following growth media placement as described above. The Grassland/Erosion Control seed mixture will be applied to the heap. The working slopes and the ability to operate equipment safely will determine the method of seeding. Stormwater diversion structures will be constructed upgradient of the heaps to prevent impacts from stormwater run-on. These structures will be maintained to minimize erosion over the long term.

20.13 Closure Monitoring

During operations, annual qualitative monitoring of key indicators of site stability of concurrently reclaimed areas will be conducted. These key stability indicators may include vegetation, surface erosion, sedimentation, and slope stability parameters. If specified performance guidelines are not satisfied, then appropriate maintenance activities will be implemented. Following completion of concurrent reclamation activities and until such time that a final bond release is attained, maintenance activities will occur as necessary to satisfy performance guidelines. Maintenance activities may include one or more of the following:

- Sediment removal from sediment ponds, stormwater drainage channels, and diversion as necessary to maintain their design capacity;
- The function of temporary erosion control best management practices such as silt fences and straw bales will be maintained. These best management practices will be removed when no longer essential for erosion control;
- Diverting surface water away from reclaimed areas where erosion jeopardizes attainment of reclamation standards;
- Stabilization of rills, gullies, other erosion features or slope failures that have exposed mine waste;
- Noxious weed control; and
- Reseeding or re-application of reclamation treatments will occur in areas where it is determined through monitoring and agency consultation that reclamation has not yet met reclamation standards.

Quantitative reclamation monitoring to measure compliance with the revegetation success criteria will begin during the first growing season after final reclamation is completed and will continue for a minimum of three years or until the reclamation success criteria are achieved. Qualitative monitoring of key indicators of site stability will continue, and the reclamation performance management guidelines will apply during this time. The reclamation bond release criteria will be applied to the data collected in the third year following reclamation. Data from previous years will be used to determine management needs. Revegetation success will be determined based on the NDEP-BMRR guidelines contained in the document Attachment B–Nevada Guidelines for Successful Revegetation for the *Nevada Division of Environmental Protection, the Bureau of Land Management, and the USDA Forest Service* (NDEP, BLM, and USFS, 2016).

GRP submits an annual report on or before April 15 of each year to the BLM and NDEP for the preceding calendar year. The annual reports contain descriptions of the reclamation activities completed during the previous year. The annual report will also include a summary of areas reclaimed and a discussion of the general vegetation performance, surface erosion status, slope stability status, and corrective actions completed and/or proposed.

The ET cell and associated downgradient monitoring wells will continue to be monitored for 30 years following construction of the ET cell.

20.14 Reclamation Bond and Closure Cost Estimate

20.14.1 Agency-Approved Reclamation Surety

Per NAC 519A.350, GRP is required to file a reclamation surety with the NDEP or a federal land management agency, as applicable, to ensure that reclamation will be completed on privately owned and federal land. The 2022 Pan Mine reclamation cost estimate was calculated using the Nevada Standardized Reclamation Cost Estimator (SRCE) 1.4.1 build 17b. The SRCE is an estimation tool for the calculation of bond amounts required to reclaim land that is no longer used for exploration, mining, or processing ore. Cost inputs for the SRCE model are provided from the NDEP's Cost Data File, Mobilization/Demobilization Cost Calculator, and the Nevada Process Fluids Cost Estimator (PFCE).

The cost data are updated annually by the BLM and the NDEP. Labor costs are based on Davis Bacon wage rates, and equipment and supply costs are based on regional rates. The SRCE costs are predicated on the reclamation being completed by a third party under agency direction.

The SRCE addresses the costs to regrade disturbed landforms, place growth media, seed with an agency-approved seed mix, and monitor for reclamation success. The demolition of buildings and foundations, removal of power lines and fences, and stormwater and erosion controls are also addressed. Monitoring of surface water quality and reclamation success and construction management costs are calculated. Other costs related to the management of draindown solution from the heap for interim fluid management and process fluid stabilization are calculated in the PFCE. The PFCE utilizes standardized labor crews, equipment, materials, and unit costs that are also updated annually to calculate bond amounts based on the specific heap leach pad or tailings storage facility physical parameters, volume of fluids, and timeframes required for the interim fluid management and process fluid stabilization. The Heap Leach Drain Down Estimator is used to estimate the timeframes and volumes of fluids to be managed.

The most recent SRCE was prepared by Haley & Aldrich, Inc. (H&A 2022) using the SRCE Version 1.4.1 build 17b and approved by the NDEP on October 10, 2022 (NDEP 2022); SRK did not validate the SRCE cost model provided by GRP.

The SRCE calculates the direct costs to reclaim a mine to achieve productive post-mining land uses. The SRCE also includes indirect costs for the managing agency to implement closure; these indirect costs added 35 percent of the Pan Mine direct costs to the total. This number includes all closure and post-closure monitoring plus contingencies, should the agency need to have the work done by a third-party contractor.

The SRCE totals $18,729,598 and was approved by both the BLM and the NDEP in 2022 for Phase 1 disturbance of 2,393 acres.

20.14.2 Closure Cost Estimate

Internal reclamation and closure costs were estimated using the bonding reclamation cost estimate described in Section 20.14.1 and the 2022 Asset Retirement Obligation Estimate and Cost Model for Pan Mine (H&A 2023). The two models, which include LOM facilities, were reviewed and compared to approximate inputs generated for the mine plan. Reclamation and closure costs were estimated to be approximately $17 million. This estimate is based on facilities that vary from the prior LOM facilities in the H&A models.

21 Capital and Operating Costs

Estimation of capital and operating costs is inherently a forward-looking exercise. These estimates rely upon a range of assumptions and forecasts that are subject to change depending upon macroeconomic conditions, operating strategy and new data collected through future operations. Therefore, changes in these forward-looking assumptions can result in capital and operating costs that deviate materially from the costs forecast herein.

21.1 Capital Cost Estimates

The Pan Mine is constructed and is currently operating. For the purposes of this Technical Report, all capital spent to date is considered a sunk cost. Additional capital is required to sustain the mine through the remaining mine life. Costs are also included for an access road, crushing and agglomeration belts leach pad construction, reclamation and closure, as well as sustaining capital. Table 21-1 summarizes these costs.

Table 21-1: Capital Cost Summary

Description	Cost (US$ 000’s)
Mine	200
Process	6,500
Leach pads	3,885
Reclamation & closure, post closure monitoring, bond recovery	11,175
Sustaining capital	480
Total	**22,240**

Source: SRK, 2023

21.1.1 Basis for Capital Cost Estimates

The basis for capital cost estimates is provided by vendor and supplier quotes, as well as historical data gathered during recent leach pad construction cost estimates.

21.1.2 Mine Capital Cost

Mine capital costs only consist of an in-pit access road. The cost is estimated by SRK. (US$200K). Table 21-2 lists the mine capital cost.

Table 21-2: Mine Capital Cost

Description	Cost (US$ 000’s)
Phase 6 access road	200
Total	**200**

Source SRK, 2023

21.1.3 Process Capital Cost

Process capital costs include equipment for a conveying and belt agglomeration system that will replace the current system of truck haulage to the pad. Table 21-3 lists the process capital costs.

Table 21-3: Process Capital Cost

Description	Cost (US$ 000's)
Crushing and conveying system	6,500
Total	**6,500**

Source SRK, 2023

21.1.4 Leach Pad Capital Cost

Additional leach pad will be constructed to hold the Reserve tonnage. Phase 3B represents the additional leach pad space that will be constructed. Table 21-4 lists the leach pad costs.

Table 21-4: Leach Pad Capital Cost

Description	Cost (US$ 000's)
Pan Phase 3B Heap Leach	3,885
Total	**3,885**

Source SRK, 2023

21.1.5 Reclamation and Closure Costs

Reclamation and closure costs (US$11.175M) include costs for reclamation and closure, post closure monitoring. offset by reclamation bond recovery. Reclamation and closure cost is (US$17.0M), post closure monitoring cost is (US$675K), offset by recovery of the reclamation bond deposit (US$6.5M). Reclamation and closure costs are discussed in Section 20 of this report.

21.1.6 Sustaining Capital

Sustaining capital is assumed to be (US$120K) per year from 2023 through 2026 resulting in a total of (US$480K) through the mine life.

21.2 Operating Cost Estimates

Total operating cost estimates for the Project are presented in Table 21-5. The unit operating costs are based on total ore stacked on the leach pad of 21,812 Mtons. Total mined material is 66,149 Mtons, of which 44,377 Mtons is waste and 21,812 Mtons is ore. The estimated mine life is five years.

Table 21-5: Life on Mine Operating Cost Summary

Operating Costs	(US$ 000's)	US$/ton-ore
Mining	148,763	6.820
Processing	78,178	3.584
G&A	29,914	1.371
Total Operating	**256,855**	**11.776**

Source: SRK, 2023

21.2.1 Basis for Operating Cost Estimates

Mining costs were dictated by the equipment selected and the conditions of the mine environment. The mine is presently operating using a contractor for all mining activities. Mining costs were developed based on the current mining contract and historic costs. Historic costs used for other mining costs which include the mine's support personnel are based on the period from October 1, 2021 through September 30, 2022. Mining is scheduled through 2027.

Processing costs are developed from historical costs, primarily from the period of October 1, 2021 through September 30, 2022. Processing is schedule through 2028, however costs are reduced in 2028. Closure costs begin in 2029.

General and Administrative (G&A) costs are developed from historical costs, primarily from the period of October 1, 2021 through September 30, 2022. General and Administrative costs remain through 2027 are reduced in 2028 when processing ends.

21.2.2 Mining Cost Estimates

The Pan operation currently employs a contract miner for all mining activities. The contractor supplies all the mining and support equipment, personnel to operate the equipment and direct supervision. The contract is a Time and Materials (T&M) contract in which the contractor supplies the equipment, personnel and works under the direction of the Pan Mine. This type of contract gives Pan Mine the greatest flexibility regarding where the contractor will operate and the production rate. The current mine schedule is on a 7 day per week, 52 weeks per year schedule. The mine runs 24 hours per day on Monday through Thursday, and 12 hours per day on Friday through Sunday. Drilling, blasting and loader costs are based on historical unit tonnage rates. Hauling costs are derived from the contractor's current hourly rates, as well as truck hours derived from MinePlan® Schedule Optimizer (MPSO), simulation software. Haulage times are based truck cycle time from individual pits to waste dumps and the ROM ore stockpile. Support equipment costs are based on the mine schedule and current contractor hourly rates. Equipment hourly rates were supplied by Calibre based on the current contract which was renewed in September 2022.

Table 21-6 shows the total mine production cost.

Table 21-6: Mine Production Costs

Description	Cost	Unit
LOM mining Cost	148.763	US$ 000's
Cost per ton mined	2.249	$/ton mined
Cost per ton ore	6.820	$/ton ore

Source: SRK, 2023

21.2.3 Contractor Mining Cost Estimates

Contractor mining costs include fixed and variable costs and outside maintenance. Table **21-7** lists the total fixed and variable cost.

Table 21-7: Contractor Mining Cost

Item	(US$ 000's)	US$/ton Mined
Fixed costs	18,949	0.286
Variable costs	81,807	1.237
Total	**100,756**	**1.523**

Source: SRK, 2023

Major fixed costs include salary and wages, outside maintenance and equipment charge. All fixed costs are calculated on a monthly basis. Table **21-8** lists the fixed mining costs.

Table 21-8: Contractor Fixed Mining Cost

Item	LOM (US$ 000's)	US$/ton Mined
Salary and wages	8,316	0.126
Equipment charge	3,029	0.046
ISP (outside maintenance)	4,574	0.069
LOA charge	2,198	0.032
Insurance charge	832	0.013
Total	**18,949**	**0.286**

Source: SRK, 2023

The major mining cost is haulage which comprises approximately 46% of the variable cost. As mentioned previously in section 21.2.2 truck hours are generated from simulation software. Drilling and loading hours are based on current loading cycle times and penetration rates. Support equipment hours are based on the current schedule. Table 21-9 lists the contractor variable cost.

Table 21-9: Contractor Variable Mining Cost

Item	LOM (US$ 000's)	US$/ton Mined
Drilling Ore and Waste	8,984	0.136
Blasting Ore and Waste	4,530	0.068
Loading Ore and Waste	11,155	0.169
Hauling Ore and Waste	37,605	0.568
Support Equipment	19,533	0.295
Total Contractor Variable Cost	**81,807**	**1.237**

Source: SRK, 2023

In addition to the contractor cost, Pan is responsible for all engineering services including mine planning and survey, blasthole sampling, ore control and overall supervision of the contractor's operation. Table 21-10 lists the owner total cost for owner mining.

Table 21-10: Owner Mining Cost Summary

Item	LOM (US$ 000's)	US$/ton Mined
Fixed	10,621	0.161
Variable	37,387	0.565
Total	**48,007**	**0.726**

Source: SRK, 2023

Salary and wages comprise 85% of the cost. Table 21-11 lists the owner fixed cost.

Table 21-11: Owner Fixed Cost Summary

Item	LOM (US$ 000's)	US$/ton Mined
Salary & Wages	9,088	0.137
Parts and Non-Capital Equipment	538	0.008
Fees, Travel & Other Admin	994	0.015
Total Owner Fixed Cost	**10,621**	**0.161**

Source: SRK, 2023

Diesel, ammonium nitrate and blasting down the hole service is provided by the owner and is calculated by a variable cost per ton mined. Table 21-12 lists the owner variable cost.

Table 21-12: Owner Variable Cost Summary

Item	LOM (US$ 000's)	US$/ton Mined
Diesel	23,887	0.361
Ammonium Nitrate	7,477	0.113
Blasting Down the Hole Service	4,564	0.069
Consumables	1,459	0.022
Total Variable Owner Variable Cost	**37,387**	**0.565**

Source: SRK, 2023

21.2.4 Processing Cost Estimates

The major processing cost elements include fixed and variable costs, as well as costs for rehandle of crushed, stockpiled material through the first quarter of 2024; until an agglomeration system is constructed. Fixed costs include salary and wages, non-capital, fees, travel related, other admin cost and taxes. Variable costs consist of chemical reagents, consumables, parts, fuel and lubricants, services and stockpile rehandle. The fixed and variable costs represent the cost to crush, agglomerate, leach and process ore. Rehandle costs represent the cost for the mining contractor to load and haul ore from a crushed ore stockpile to the pad through the 1st quarter of 2024. Variable costs are reduced for rehandle and lime. The rehandle cost is reduced 50% from the contractor haulage cost and lime addition is reduced to US$0.49/ton-ore. Cement addition is started in the 2nd quarter of 2024 at a cost of US$0.52/ton-ore. The LOM operating cost to process 21.8 Mton of ore is US$78.2 million, or US$3.58/ton ore processed. Table 21-13 shows the summarized process production costs.

Table 21-13: Process Production Costs

Item	LOM (US$ 000's)	US$/ton-ore processed
Fixed	24,277	1.113
Variable	53,900	2.471
Total Processing Cost	**78,178**	**3.584**

Source: SRK, 2023

Process fixed costs used historical data as described in Section 21.2.1. Fixed costs primarily consist of labor, which is assumed to be relatively fixed throughout the mine and crushing life. In 2028 the labor is reduced by 50% of 2027 costs and non-capital equipment rents and leases, as well as fees, travel and other admin are left at 2027 cost levels. Table 21-14 summarizes the fixed processing costs for the life of mine.

Table 21-14: Fixed Process Production Costs

Item	LOM (US$ 000's)	US$/ton-ore processed
Labor Salary, Wages & Employee Related	23,694	1.086
Non-Capital Equipment Rents and Leases	274	0.013
Fees, Travel and Other Admin	310	0.014
Total Fixed Processing Cost	**24,277**	**1.113**

Source: SRK, 2023

Variable process costs are also based on historical costs as described in Section 21.2.1. Variable costs are calculated using actual costs and tonnages for the period of October 1, 2021 through September 30, 2022. All costs are based on the mining and crushing schedule through 2027. In 2028 carbon, cyanide, consumables, drip emitters, propane and steel/tires/utilities are reduced by 50%. While power is reduced by 25%. Table 21-15 lists the variable process production costs through the life of mine.

Table 21-15: Variable Process Production Costs

Item	LOM (US$ 000's)	US$/ton-ore processed
Acids	436	0.020
Anti-Scalents	1,526	0.070
Carbon	240	0.011
Caustic Soda	654	0.030
Cyanide	12,977	0.591
Cement	8,389	0.385
Consumables - Other	481	0.022
Lime	2,783	0.128
Drip Emitters	240	0.011
Ground Engaging Tools	436	0.020
Lab Supplies/Crucibles	245	0.011
Propane/LPG	1,201	0.055
Steel, Tires, Utilities	1,527	0.070
Welding Supplies Consumables	654	0.030
Electric Power	2,765	0.127
Conveyors & Belting	1,309	0.060
Electrical Motors & Instrumentation	436	0.020
Pumps and Other Parts	436	0.020
Tanks/Vessels Screens	436	0.020
Transmissions	218	0.010
Repairs & Maintenance & Allocated Costs	654	0.030
Diesel/Oil & Lubricants	4,799	0.221
Contracted Maintenance	1,345	0.062
Maintenance & Repairs	3,556	0.165
Crusher Stockpile Rehandle	6,158	0.282
Total Variable Processing Cost	**53,900**	**2.471**

Source: SRK, 2023

21.2.5 General and Administrative Cost Estimate

General and Administrative costs represent the Pan Mine actual costs based on the current manpower level which are expected to remain relatively constant through the life of the operation. The costs were assumed to be fixed through the end of mining and crushing 2027. In 2028 general and administrative costs are reduced by 25%. Closure costs begin in 2029. Life of mine general and administrative costs are provided in Table 21-16.

Table 21-16: General and Administrative Costs

Item	LOM (US$ 000's)	US$/ton-ore processed
Salary Wages & Employee Related	12,213	0.560
Safety & Environmental	3,933	0.180
Non-Capital Equipment	828	0.038
Rents & Operating Leases	1,104	0.051
Services	1,518	0.070
Fees and Dues	2,484	0.114
Travel Related	213	0.010
Other Admin Costs	3,984	0.183
Variable Cost (Consumables, Parts, Fuel & Lubricants)	3,637	0.165
Total General and Administrative Cost	**29,914**	**1.371**

Source: SRK, 2023

22 Economic Analysis

Under NI 43-101 rules, producing issuers may exclude the information required in Section 22 Economic Analysis on properties currently in production, unless the Technical Report includes a material expansion of current production. The Pan mine is currently in production, and material expansion is not being planned. SRK completed an economic analysis, and the outcome is a positive cash flow that supports the statement of mineral reserves.

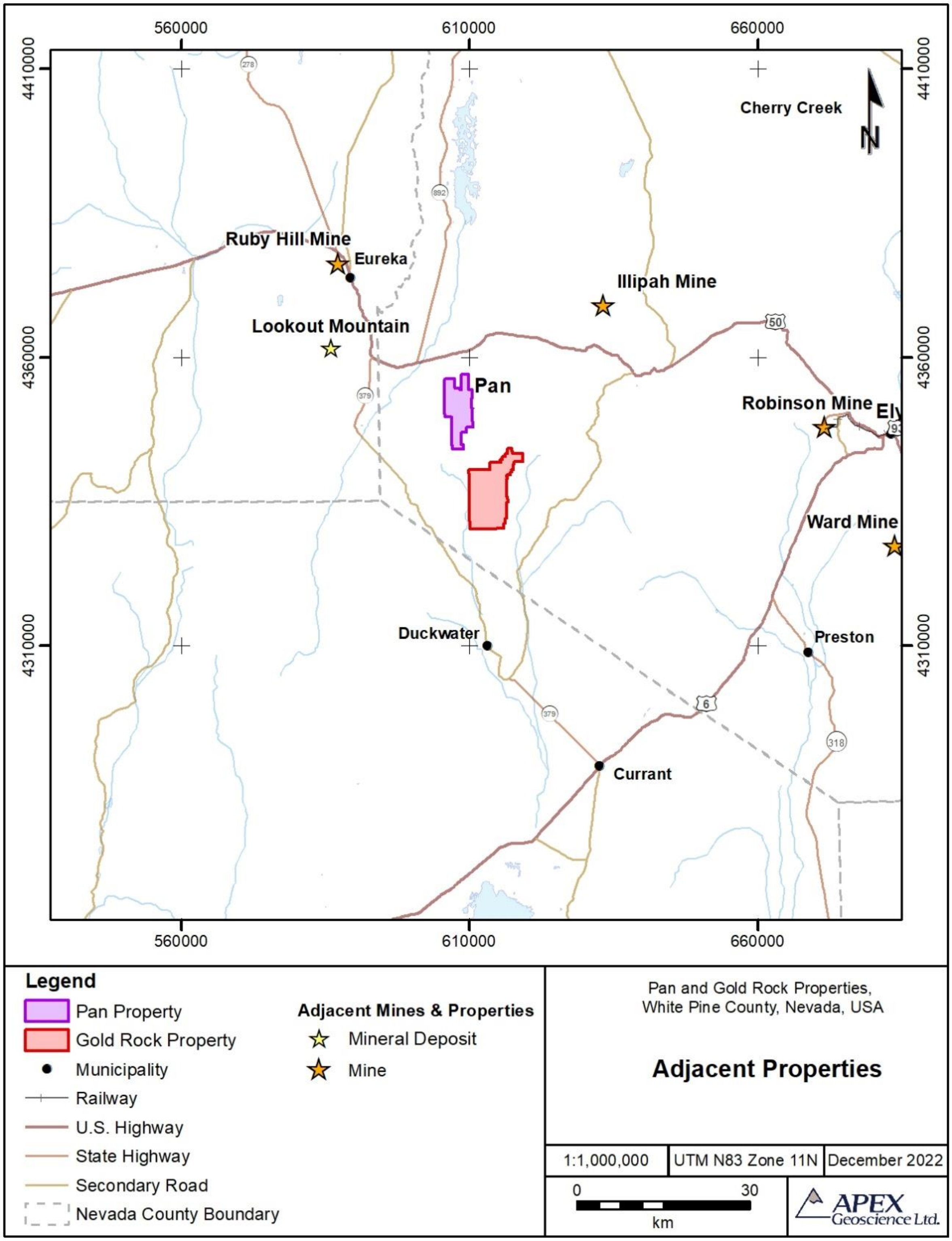
23 Adjacent Properties

The Pan Mine is situated to the south of the Battle Mountain – Eureka Carlin-type gold trend. This trend has been producing substantial mining projects for decades. Along with the Pan Mine Property, Calibre also has the Gold Rock Project in the southern portion of this trend located approximately 8 miles to the southeast of the Pan Mine. Other notable projects include the Bald Mountain Gold Mine located 45 miles north of the Pan Mine. There also a number of historical mines near the Pan Mine owned by a number of other companies including Mt Hamilton 10 miles to the southeast, Green Springs located 14 miles southeast. Illipah 19 miles to the northeast, Lookout Mountain (Windfall) 16.5 miles to the northwest and Ruby Hill 21 miles to the northwest near Eureka (Figure 23-1).

The authors of this report have been unable to verify the information pertaining to adjacent properties in the area. No inference is made in this report to similarities between the Pan Mine Property and adjacent properties discussed below.

23.1 Gold Rock

Calibre, formerly Fiore, acquired the Pan Gold Mine thru the bankruptcy process in May of 2016 at the same time it also acquired the Gold Rock Project. Calibre owns the Gold Rock Project located approximately 8.5 miles southeast of the Pan Mine. Much like the Pan Mine, the Gold Rock Deposit is a sedimentary hosted Carlin-style gold deposit. A recent Preliminary Economic Assessment (PEA) released in May 2020 based upon drilling in 2019 and historical drilling resulted in an updated resource model with an Indicated Mineral Resource of 20.94 million tons at 0.019 oz/ton Au for 403,000 ounces of gold and an Inferred Mineral Resource of 3.336 million tons at 0.025 oz/ton Au for 84,300 ounces of gold, using a lower cut-off grade of 0.003 oz/st Au (APEX 2021). The Gold Rock PEA provided a positive economic results and further work was recommended and is being conducted. The geology of the Gold Rock Property is dominated by Devonian through Mississippian limestone, shale, and sandstone. These rock types are exposed in a series of north-trending ridges that represent stacked, easterly-directed thrust blocks and low amplitude, open to tight folds. Gold mineralization is interpreted to postdate thrusting and folding. Mineralization at Gold Rock is localized in the apex and limbs of the slightly overturned, fault-bounded, EZ Junior Anticline. The primary host is the Joana Limestone, but mineralization is also hosted in the overlying Chainman Formation in calcareous shale and carbonate units. Scattered, minor, inconsistent mineralization also occurs in the underlying Pilot Formation. Gold mineralization was exposed at the pre-mining surface of the historical EZ Junior open pit. Gold mineralization at the Gold Rock Deposit occurs as disseminated, micrometer-scale grains hosted in sedimentary rock, usually impure calcareous siltstones and limestones. Mineralization is both structurally and stratigraphically controlled, occurring in vertical and sub-vertical feeder faults and cross faults, brecciated areas of folds, and parallel to bedding in favorable lithological units.



Source: APEX, 2022

Figure 23-1: Properties adjacent to the Pan Mine

23.2 Bald Mountain Mine

The Bald Mountain mine lies approximately 45 miles north of the Pan Mine. The mine is located on the southern end of the Battle Mountain – Eureka trend. Bald Mountain is a Carlin-style deposit with disseminated, micron sized gold hosted in calcareous shales and limestones. Exploration at Bald Mountain began in 1977 with production starting in the early 1980's. During 1995, the 1-5 open pit produced 5.6 million tons of ore grading 0.063 oz/ton Au (Western Mining History, 2017). As of 2021, reserves at Bald Mountain – proven and probable – were 798,000 ounces of gold within 45.173 million tons (40.98 million tonnes) at 0.018 opt (0.6 g/t) (Table 23-1). Also, a significant measured and indicated gold resource has been identified (Kinross Annual Report, 2021).

Table 23-1: 2021 Bald Mountain Reserve Statement

Category	Tons (000's)	Tonnes (000's)	Au Grade (oz/t)	Au Grade (g/t)	Contained Ounces (Au)
Proven	0	0	NA	NA	0
Probable	45,173	40,980	0.018	0.6	798,000
Proven and Probable	45,173	40,980	0.018	0.6	798,000

Source: Kinross Annual Report, 2021

23.3 Green Springs Mine

The historical Green Springs Mine is located 14 miles southeast of the Pan Mine within the White Pine Mining District. The historical Green Springs Mine is a gold and silver Carlin-style deposit located on the southern end of the Battle Mountain – Eureka trend. The Green Springs mine has produced 1.2 million tons of ore at 0.061 opt Au since the 1980's (Ely Gold, 2013).

Mineralization at the historical Green Springs Mine is dominantly found within the Joana Limestone; however, mineralization has also been found in the Pilot Shale. Exploration at the Green Springs Mine is ongoing to expand the potential of the property. Recent exploration by Colorado Resources Ltd. has yielded up to 135 ft of 0.094 oz/ton Au from the E Zone at the Chainman – Joana Limestone contact south of the historical mine workings (Colorado Resources Ltd., 2017).

23.4 Mount Hamilton Mine

Waterton Global's Mount Hamilton gold-silver deposit and historical mine is located 10 miles southeast of the Pan Mine within the White Pine Mining District. Exploration at Mount Hamilton began in the late 1960's. The Seligman and Centennial deposits were defined in the late 1980's with production and open pit mining of the Seligman Deposit commencing in 1994.

The epithermal/skarn oxide-hosted gold mineralization at Mt. Hamilton is typically hosted in the Cambrian Secret Canyon Shale and the Cambrian Dunderberg Shale, calcareous laminated mudstone units with thin limestone interbeds. Mineralization consists of skarn hosted tungsten, molybdenum, and copper +/- zinc with later possibly epithermal gold and silver. Gold mineralization is hosted in a thick skarn horizon bounded by hornfels. In the Centennial and Seligman deposits, gold is present as free gold, residing in oxide minerals or quartz, and adsorbed on clay minerals with oxide mineralization formed as a result of weathering and oxidation of original sulphide mineralization (Pennington et al., 2014).

23.5 Lookout Mountain Project

Timberline Resources Corporation's Lookout Mountain Project is located approximately 16.5 miles northwest of the Pan Mine. Gold mineralization at Lookout Mountain is Carlin-type disseminated sediment-hosted mineralization with characteristic decalcification, argillization and silicification alteration. The 2013 NI 43-101 MRE at Lookout Mountain includes 28.9 million of 0.018 oz/ton Au for a total of 508,000 ounces of gold (at a 0.006 oz/ton Au cut-off) for total measured and indicated resource (Table 23-2). In addition, the Inferred MRE for Lookout Mountain includes 11.7 million tons of 0.012 oz/ton Au for a total of 141,000 gold ounces (Gustin, 2013). Timberline is currently conducting additional exploration and advancing Lookout Mountain toward a production decision.

Table 23-2: Lookout Mountain Mineral Resource Statement

Category	Tons (000's)	Tonnes (000's)	Au Grade (oz/t)	Au Grade (g/t)	Contained Ounces (Au)
Measured	3,043	2,761	0.035	1.20	106,000
Indicated	25,897	23,493	0.016	0.55	402,000
Measured and Indicated	28,940	26,254	0.018	0.62	508,000
Inferred	11,709	10,622	0.012	0.41	141,000

Source: Gustin, 2013

Carlin-type gold mineralization at Lookout Mountain occurs within the Lookout Mountain breccias, as well as in the overlying Cambrian Dunderburg Shale. Mineralization was discovered in jasperoid that caps Ratto Ridge at the surface and has been intersected to depths of 1,500 ft (457 m). Gold mineralization is associated with strong surface concentrations of arsenic, mercury, and antimony in surface rock and soil samples. The main feature controlling mineralization is interpreted to be hydrothermal-related dissolution and associated brecciation, dolomitization, sideritization, and ankeritization within the Geddes Limestone (Gustin, 2013).

23.6 Ruby Hill Mine

Waterton Global's Ruby Hill gold deposit is located 30 miles (45 km) northwest of the Gold Rock Property along the Battle Mountain / Eureka gold trend. The Archimedes deposit was defined in the mid-1990's with production and open pit mining of the commencing in 1997. Production ceased in 2002. In 2007 Barrick Gold started production as an open-pit heap leach operation and the mine has been in production since that time.

Mineralization of the Archimedes deposit is primarily hosted in thin to thick bedded cherty limestone of the early Ordovician Goodwin Limestone of the Pogonip Group. Additionally, mineralization has been identified in the micritic to shaley limestone of the early Ordovician Ninemile Formation of the Pogonip Group, and early Cretaceous quartz porphyry. Mineralization is coincident with zones of iron-stained jasperoid and decalcified limestone. Mineralization is primarily controlled by WNW- and NE- to NNE trending faults, with secondary control by open folds and faulted fold limbs. Mineralization is also associated with stratigraphic traps formed by contacts between the limey mudstone and wackestone. The shape of the deposit is complex and irregular. Generally, it has a central elongate, sub-tabular body with an ovate cross section from which lobes branch and flare out along structural intersections. The orebody has a central elongated lens of higher Jasperoid ore enclosed by a more tabular envelope of lower grade decalcified limestone ore (USGS MRDS #10310484).

24 Other Relevant Data and Information

The QP is not aware of any additional information that would materially impact the conclusions of this report

25 Interpretation and Conclusions

25.1 Exploration

Nearly 100% of the mineral resources that were mined from 2018 up to the middle of 2020 at Pan were replaced with the 2018 to 2020 drilling (SRK 2021). However, approximately 80% of the mineral resources mined from mid-2020 to December 31, 2022 have been replaced with the 2021 to 2022 drilling. As production continues at Pan, it is important to conduct additional drilling to both replace reserves that are being mined and to maximize the mine life projections to create options for future expansion and financing.

Sedimentary contacts and horizons along with the extension of known important structures at Pan have gold mineralization potential and many have not been adequately tested. The Pan land package has potential for additional economic discoveries. Exploration targets should be included in future exploration expenditure, to increase the mineral resource base and replenish the reserves mined.

It is recommended that a multi-year multi-phase program of exploration drilling is planned that allows for the growth of the overall project resources and reserves. The program should be laid out utilizing a strategy of prioritizing targets nearest current production to reduce planning and development time as well as improve odds of success.

In addition to drilling, general exploration of areas away from current mining should be completed. Detailed geologic mapping and additional geochemical sampling may provide additional targets beyond those already identified for future drilling.

A multi-phased development and exploration drilling plan is proposed for 2023 which includes many of the recommendations noted above. Among the targets to be evaluated in initial phases are:

- North extension of Dynamite;
- South, Southeast of South Pan and East side of South Pan at depth and along strike – Palomino Pegasus Target areas;
- The NW-SE trending string of pearls of mineralization from Banshee to Mustang; and,
- Test splay faults extending off the Branham Fault for near surface pockets of mineralization from the south end of South Pan to Coyote, following up the 2022 Coyote discovery..

Additional areas to be considered for subsequent phases of development and exploration drilling are the north and south strike extensions of the Branham Fault Zone beyond previously identified mineralization and a number of previously identified (by Midway geologists) favorable geologic and geochemical targets within the Pan property boundary.

25.2 Mineral Resource Estimate

Pan has three main mineralized zones; North, Central, and South. Gold (Au) mineralization spatially follows the Devils Gate Limestone – Pilot Shale contact in all three and is also controlled by steeply-dipping faults that trend north-south and secondarily by west-northwest (WNW) open fold axes.

This report provides an updated Mineral Resource Estimate (MRE) for the Pan Mine and is based upon historical drilling and drilling conducted from 2018 to 2022 and supersedes all of the prior resource estimates for the Pan Mine. The resource estimate provided by Smith et al. (2021), Deiss et al. (2019) and Pennington et al. (2017), along with other older resource estimates are now all considered historical in nature.

The updated Pan Mine MRE is reported at various cutoffs depending on what type of alteration each block is flagged with. The Measured, Indicated, and Inferred MRE is edge diluted, constrained within an optimized pit shell, and includes a Measured and Indicated Mineral Resource of 37.247 million tons (33.75 million tonnes) at 0.010 oz/ton (0.33 g/t) Au for 358,900 ounces of gold, and an Inferred Mineral Resource of 3.578 million tons (3.246 million tonnes) at 0.012 oz/ton (0.40 g/t) Au for 42,000 ounces of gold (Table 25-1). The reported MRE utilizes a minimum gold cutoff of 0.003 oz/ton Au (0.10 g/t). The MRE is inclusive of reserves.

Table 25-1: Pan Mine Resource Estimate Constrained within the '$1700/oz' Pit Shell for Gold at a Cut-off Grade of 0.1 g/t (0.003 oz/t) by Area (effective date of December 31, 2022)

Region	Classification	Tons (tons)*	Tonnes (tonnes)*	Au Grade (oz/ton)	Au Grade (g/t)	Contained Au (troy ounces)*
North	Measured*	3,000	2,000	0.012	0.41	0
	Indicated*	11,470,000	10,405,000	0.010	0.34	113,400
	M&I*	11,472,000	10,408,000	0.010	0.34	113,500
	Inferred*	709,000	643,000	0.013	0.44	9,100
Central	Measured*	32,000	29,000	0.020	0.57	500
	Indicated*	6,396,000	5,803,000	0.010	0.33	62,400
	M&I*	6,428,000	5,831,000	0.010	0.34	62,900
	Inferred*	442,000	401,000	0.010	0.36	4,700
South	Measured*	10,000	9,000	0.017	0.57	100
	Indicated*	19,337,000	17,542,000	0.010	0.33	182,300
	M&I*	19,347,000	17,551,000	0.010	0.33	182,500
	Inferred*	2,427,000	2,202,000	0.012	0.40	28,200
Total	Measured*	44,000	40,000	0.016	0.55	700
	Indicated*	37,203,000	33,750,000	0.010	0.33	358,200
	M&I*	37,247,000	33,790,000	0.010	0.33	358,900
	Inferred*	3,578,000	3,246,000	0.012	0.40	42,000

Source: APEX, 2022

*Notes:

1. CIM (2014. 2019) guidelines, standards and definitions were followed for estimation and classification of mineral resources.
2. The estimate of mineral resources may be materially affected by environmental, permitting, legal, marketing or other relevant issues.
3. Resources are stated as contained within a constrained pit shell; pit optimization was based on an assumed gold price of US$1,700/oz, Silicic (hard) ore recoveries of 60% for Au and an Argillic (soft) ore recovery of 80% for Au, an ore mining cost of US$2.09/st, a waste mining cost of $1.97/st, an ore processing and G&A cost of US$3.13/st, and pit slopes between 45-50 degrees;
4. Resources are domain edge diluted and reported using a minimum internal gold cut-off grade of 0.003 oz/st Au (0.10 g/t Au).
5. Measured and Indicated Mineral Resources presented are inclusive of Mineral Reserves. Inferred Mineral Resources are not included in Mineral Reserves.
6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There has been insufficient exploration to define the inferred resources tabulated above as an indicated or measured mineral resource, however, it is

reasonably expected that the majority of the Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. There is no certainty that any part of the Mineral Resources estimated will be converted into Mineral Reserves;

7. Numbers in the table have been rounded to reflect the accuracy of the estimate and may not sum due to rounding.

8. Mr. Michael Dufresne, M.Sc., P. Geol., P. Geo. of APEX Geoscience Ltd. is responsible for reviewing and approving the Pan mine open pit Mineral Resource Estimate. Mr. Dufresne is a Qualified Person ("QP") as set out in NI 43-101.

The Pan Mine pit shell constrained MRE represents approximately 54% of the total volume and 61% of the total gold ounces in the entire unconstrained Pan Mine block model that was estimated in 2022. The updated MRE shows a 16% decrease in Measured and Indicated Resources to 358,900 gold ounces versus the 2020 MRE that utilized a June 30, 2020 topographic surface (Smith et al., 2021). The approximate calculated mining depletion for the period of June 30, 2020 to December 31, 2022 is a little over 13 million tons and about 170,000 oz Au, the vast majority of which were Measured and Indicated Resources from the 2020 MRE. The 2021 to 2022 drilling has effectively resulted in the addition of Measured and Indicated Resource equivalent to approximately 100,000 gold ounces versus the 170,000 gold ounces that have been mined during the period from June 30, 2020 to December 31, 2022. An additional Inferred Resource of 42,000 gold ounces has been estimated at the Pan Mine, that with continued drilling may provide additional Measured and/or Indicated gold ounces.

25.3 Mining and Mineral Reserve

By using a contract miner at Pan, major capital costs for equipment have been avoided. The operation has performed well over the past several years and the QP is not aware of any major risks from an operational perspective.

As with all precious metal projects, the Pan mine is sensitive to metal prices. A major change to the gold price could impact the operation.

The pit has performed well from a geotechnical perspective; however, a lack of data has led to the QP taking a more conservative approach to the pit slopes. The geotechnical parameters could be evaluated, including additional data collection, see if there is opportunity to steepen the pit slopes. This could reduce waste mining requirements and push some waste mining back in the production schedule, potentially improving the project economics.

In the QP's opinion, additional refinement to the mine plan presents an opportunity to improve the economic projections of the operation.

25.4 Metallurgy and Processing

In 2022, Forte Analytical completed a detailed test program on whole PQ core from 15 drillholes provided by Calibre Mining. The core intervals were logged and composited into eight samples: four from the South pit (siltstone, limestone, limestone/clay and limestone/calcite), two from Red Hill/Banshee pit (argillic, silicified) and two from the North pit (silicified, non-silicified).

Cyanide-soluble to fire assay ratios (CN/FA) were between 54% and 123% as a proxy indication of ultimate gold extraction. While South "soft" samples showed higher CN/FA values, this was not always the case; the same was true for North "hard" samples. As was observed in historical testing, South material showed minimal effect of particle size on gold extraction while North material extractions increased significantly between 10 mesh and 200 mesh feed sizes.

On an annual basis, Pan's consistent operating conditions and ability to achieve the target blend of hard to soft material has allowed the operation to steadily improve heap leach extractions since the crusher was installed.

Pan maintains a database of daily ore tonnes and grades since 2017. Using this database of results, constant gold extractions have been back calculated to determine heap pad performance. Current estimates of gold extractions are:

- Hard material: 50% ROM 60% crushed to 6"
- Soft material: 75% ROM 80% crushed to 6"

The target blend of 60:40 hard to soft may need to be revaluated based on the current 36-month mine plan. If Argillic alteration is assumed to be soft material, the expected blend is around 80:20 and much higher in % Hard than the target of 60:40. If some of the Unaltered lithology is soft as well, then the target blend can be maintained. Improved geometallurgical characterization of all Pan ore types (hard vs. soft, Argillic vs. Silicified alteration) is needed for more accurate forecasting of future heap leach pad performance.

25.5 Environmental Studies and Permitting

Calibre has maintained compliance with the permits and authorizations, so permit renewal of federal and state permits required for operations within the regulatory mandated deadlines is anticipated. At the time of reporting, known environmental issues had been addressed and mitigated, as required.

The authorized 2022 reclamation cost update, recently approved by the BLM and the NDEP, stands at US$18,729,598, covering 2,393 acres of disturbance. This estimate uses Davis Bacon wage rates and assumes that reclamation will be undertaken by a third party rather than the operator.

Internal reclamation and closure costs were also estimated using the reclamation bond cost estimate described in Section 20.14.1 and the *2022 Asset Retirement Obligation Estimate and Cost Model for Pan Mine* (H&A 2023). The two models, which include LOM facilities, were reviewed and compared to approximate inputs generated for the mine plan. Reclamation and closure costs were estimated to be approximately $17 million. This estimate is based on facilities that vary from the prior LOM facilities in the H&A models.

25.6 Projected Capital and Operating Outcomes

Capital costs are developed primarily from Calibre vendor quotations and from SRK 2022 construction estimates, Capital and operating 2022 dollars. No inflation factors are used in the economic projections. The analysis does not include any allowance for end of mine salvage value.

Operating costs are based on the current contract with the mining contractor; the contract term will end on December 31, 2025. The contract is subject to escalation and de-escalation factors based on the (PPI) index starting in January 2023 and reviewed every six months. All owner related cost is based on the actual cost for the period of October 2021 through September 2022. There is no allowance for corporate overhead. The LOM average cash cost is US$1,228/Au oz produced.

Based on the assumptions presented herein, the Pan mine reserve generates positive free cash flow at the assumed $1,600 gold price. The gold spot price is approximately $1,825, as of the effective date of this report which presents opportunity to improve the economic forecast for the reserve.

25.7 Foreseeable Impacts of Risks

Gold prices are volatile and there is no guarantee that Calibre will receive the gold price as used in the economics.

Inflation continues to put pressure on capital and operating costs and may add to capital and operating costs.

Changes in government regulations could adversely impact the future growth and operation of the facilities.

Demand for skilled and technical labor has increased recently in central Nevada and some short-term operational difficulties could be encountered due to staff shortages or labor costs may increase operating costs.

In order to maintain recovery and permeability of the heap leach pad, Calibre will need to carefully control the blend of hard and soft ores being delivered to the crusher. A belt agglomeration system is forecast to be installed by April 2024. A blend of hard and soft ores is not achievable after the 1st quarter of 2024. Unaltered material is assumed to be soft and is not well characterized. If the belt agglomeration system is not installed the permeability of the heap leach pad will be a risk to gold recovery.

26 Recommendations

26.1 Resources and Exploration

A multi-phased development and exploration work plan is proposed for the short term at the Pan Mine and surrounding areas. The initial phase should focus on identifying near mine additional resources which can be ultimately converted to mineable reserves. Several target areas at North Pan, Dynamite and South Pan require drilling. In parallel and subsequent to the initial phase of development drilling should be exploration programs designed to identify zones of mineralization not currently in the resource base. These programs should utilize detailed geologic mapping, geochemical sampling (soil and rock chip) followed by evaluation based on the most current interpretation of mineralization controls and stratigraphy at the Pan Mine.

Favorable targets generated by this work would be prioritized and drill tested as warranted. Current exploration targets that warrant drilling are Mustang, Pegasus, Palomino and South Pan to Coyote.

Subsequent and periodic resource conversion and exploration drilling programs should be employed to replace and add to reserves.

The estimated cost of the drilling program is approximately ($4.0M)

26.2 Mining

Refinement to the mine plan presents an opportunity to improve the economic projections of the operation. Estimated cost for mine plan refinement ($100K).

26.3 Pit Geotechnical Recommendations

SRK recommends that additional slope stability work is completed. Additional stability analyses will be necessary if designs deviate from the designs in the Golder stability analysis. The estimate cost for updating the alteration model, confirming and adjusting the argillic model strength parameters, designing and implementing a slope monitoring program and geotechnical expenses are estimated to be ($400K). Additional geotechnical characterization could allow for steepened pit slopes.

- Update the alteration model based on the ongoing 2020 exploration drilling program;
- Conduct geotechnical data collection using six exploration drill holes;
- Confirm and adjust the argillic material strength parameters used in this report;
- After completion of the geotechnical drilling program, update the geotechnical model;
- Continues with pre-split blasting and wall scaling;
- Implement a slope monitoring plan to anticipate potential wall instabilities;
- Update the geotechnical models as the mine is progressing; and,

- Commission geotechnical inspections by a geotechnical specialist to assess the pit performance, examine the pit design implementation practices, review the updated models, and review the wall stability.

26.4 Metallurgy and Processing

Metallurgical testwork results on Pan samples have demonstrated a wide range of column leach extractions as well as size sensitivity. This has been broadly related to “hard” vs. “soft” zones and/or clay content but changes in ore domaining have not allowed historical testwork to be applied to current operating practices. (For example, a target blend of 60:40 hard to soft.)

It is the QP’s opinion that additional testwork be conducted to relate CN/FA values to final column leach extractions. Recent results have shown CN/FA values not to be reliable in estimating column leach extractions and will need other factors such as crushed size distribution and composition (e.g., XRD results) also included. Finally, rapid percolation or slump testing should be done to provide an indication of heap leach geotechnical conditions which are not a factor in bottle roll leach (or cyanide “shake”) tests.

As there is uncertainty on the amount of “hard” material in the future, better geometallurgical characterization of the Pan deposits is needed to understand how the current blend can be modified when constructing future leach pads. That is, a lower ratio of hard to soft needs to be demonstrated as the new target blend based on both column leach and permeability test results. In addition, a greater proportion of “hard” material needs to be characterized in both North and South Pan pit areas

For accurate forecasting of future Pan heap leach pad performance, geometallurgical characterization of all Pan ore sources must be undertaken. This includes improved understanding of:

- CN/FA values versus material type and crushed size
- Effect of crushed size/clay content on permeabilities under load

Better geometallurgical characterization may allow the target blend of hard to soft to be adjusted and accommodate the apparent shortage of soft material in the future. It is not known if some/all of the Unaltered alteration type can be considered soft material for blending purposes.

The estimated cost of this geometallurgical characterization (including geotechnical studies into heap leach pad permeability) is ($500K).

26.5 Costs

Estimated Costs for the Recommendations are included in Table 26-1.

Table 26-1: Summary of Costs for Recommended Work

Area	Cost Estimate (USD,000)
Exploration drilling program	4,000
Mine plan	100
Geotechnical program (excluding drill program)	400
Geometallurgical characterization of hard vs soft material	500
Total	**5,000**

Source: SRK, 2023

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28 Glossary

The Mineral Resources and Mineral Reserves have been classified according to CIM (CIM, 2014). Accordingly, the Resources have been classified as Measured, Indicated or Inferred, the Reserves have been classified as Proven, and Probable based on the Measured and Indicated Resources as defined below.

28.1 Mineral Resources

A **Mineral Resource** is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.

An **Inferred Mineral Resource** is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.

An **Indicated Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing and is sufficient to assume geological and grade or quality continuity between points of observation. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Mineral Reserve.

A **Measured Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing and is sufficient to confirm geological and grade or quality continuity between points of observation. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.

28.2 Mineral Reserves

A **Mineral Reserve** is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported. The public disclosure of a Mineral Reserve must be demonstrated by a Pre-Feasibility Study or Feasibility Study.

A **Probable Mineral Reserve** is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

A **Proven Mineral Reserve** is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

28.3 Definition of Terms

The following general mining terms may be used in this report.

Table 28-1: Definition of Terms

Term	Definition
Assay	The chemical analysis of mineral samples to determine the metal content.
Capital Expenditure	All other expenditures not classified as operating costs.
Composite	Combining more than one sample result to give an average result over a larger distance.
Concentrate	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Crushing	Initial process of reducing ore particle size to render it more amenable for further processing.
Cut-off Grade (CoG)	The grade of mineralized rock, which determines as to whether or not it is economic to recover its gold content by further concentration.
Dilution	Waste, which is unavoidably mined with ore.
Dip	Angle of inclination of a geological feature/rock from the horizontal.
Fault	The surface of a fracture along which movement has occurred.
Footwall	The underlying side of an orebody or stope.
Gangue	Non-valuable components of the ore.
Grade	The measure of concentration of gold within mineralized rock.
Hanging wall	The overlying side of an orebody or slope.
Haulage	A horizontal underground excavation which is used to transport mined ore.
Hydrocyclone	A process whereby material is graded according to size by exploiting centrifugal forces of particulate materials.

Term	Definition
Igneous	Primary crystalline rock formed by the solidification of magma.
Kriging	An interpolation method of assigning values from samples to blocks that minimizes the estimation error.
Level	Horizontal tunnel the primary purpose is the transportation of personnel and materials.
Lithological	Geological description pertaining to different rock types.
LOM Plans	Life-of-Mine plans.
LRP	Long Range Plan.
Material Properties	Mine properties.
Milling	A general term used to describe the process in which the ore is crushed and ground and subjected to physical or chemical treatment to extract the valuable metals to a concentrate or finished product.
Mineral/Mining Lease	A lease area for which mineral rights are held.
Mining Assets	The Material Properties and Significant Exploration Properties.
Ongoing Capital	Capital estimates of a routine nature, which is necessary for sustaining operations.
Ore Reserve	See Mineral Reserve.
Pillar	Rock left behind to help support the excavations in an underground mine.
ROM	Run-of-Mine.
Sedimentary	Pertaining to rocks formed by the accumulation of sediments, formed by the erosion of other rocks.
Shaft	An opening cut downwards from the surface for transporting personnel, equipment, supplies, ore and waste.
Sill	A thin, tabular, horizontal to sub-horizontal body of igneous rock formed by the injection of magma into planar zones of weakness.
Smelting	A high temperature pyrometallurgical operation conducted in a furnace, in which the valuable metal is collected to a molten matte or doré phase and separated from the gangue components that accumulate in a less dense molten slag phase.
Stope	Underground void created by mining.
Stratigraphy	The study of stratified rocks in terms of time and space.
Strike	Direction of line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction.
Sulfide	A sulfur bearing mineral.
Tailings	Finely ground waste rock from which valuable minerals or metals have been extracted.
Thickening	The process of concentrating solid particles in suspension.
Total Expenditure	All expenditures including those of an operating and capital nature.
Variogram	A statistical representation of the characteristics (usually grade).

28.4 Abbreviations

The following abbreviations may be used in this report.

Table 28-2: Abbreviations

Abbreviation	Unit or Term
°	degree
AAL	American Assay Labs
AAS	Atomic Absorption Spectrometry
ABA	acid-base accounting
ABA-ML	Acid base accounting and metals leaching
ADR	adsorption-desorption-recovery
Ag	Silver
AMT	Alternative Minimum Tax
AMTI	Alternative Minimum Tax Income
ARMPA	Approved Resource Management Plan Amendments for the Great Basin Region
Au	Gold
BBCS	Bird and Bat Conservation Strategy
BE	break-even
BLM	United States Department of the Interior Bureau of Land Management
BMP	best management practices
CCS	Credit Conservation System
C-I-C	carbon-in-column
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
cm	centimeter
cm^3	cubic centimeter
CNAA	cyanide-soluble atomic absorption
CN/FA	cyanide-soluble/ fire assay ratio
CoG	Cut-off Grade
CPPs	Cumulative Probability Plots
CRM	Certified Reference Material
CSV	comma-separated values
Cu	Copper
DNA	determination of NEPA adequacy
DOE	Department of Energy
DR/FONSI	decision record/finding of no significant impact
EBITDA	earnings before interest, tax, depreciation and amortization
ECP	Eagle Conservation Plan
EDC	engineering design change
EIS	environmental impact statement
EPA	U.S. Environmental Protection Agency

Abbreviation	Unit or Term
ET	evapotranspiration
FA	fire assays
FoS	factors of safety
FS	feasibility study
ft^2	square feet
G&A	general and administrative
g	gram
g/t	gram per metric ton
g/L	grams per liter
gal	gallon
GHMA	general habitat management area
gpm	gallons per minute
IAPP	industrial artificial pond permit
ICP	Inductively Coupled Plasma
ID2	Inverse Distance Squared
IRR	Internal Rate of Return
KCA	Kappes, Cassidy and Associates
kg/t	kilograms per metric ton
KOP	Key Observation Point
koz	thousand troy ounces
kton	Thousand US short tons
kt	Thousand metric tonnes
kV	kilovolt
L	liter
LV	locally varying
lbs	pounds
LCY	loose cubic yard
LECO	LECO elemental analyzers – LECO Corporation
LG	Lerchs-Grossmann
LMDL	lower method detection limit
LOM	life-of-mine
M	million
MACRS	Modified Accelerated Cost Recovery System
MDW	Midway Gold Corp.
mg/L	milligrams per liter
Midway	Midway Gold Corp.
ML	metals leaching
Mn	manganese
MPEP	MineSight Economic Planner

Abbreviation	Unit or Term
MPEP	MineSight Economic Planner
MRE	Mineral Resource Estimated
Mt/y	million tons per year
MWMP	meteoric water mobility procedure
NAC	Nevada Administrative Code
NaCN	Sodium cyanide
NDEP-BMRR	Nevada Division of Environmental Protection-Bureau of Mining Regulation and Reclamation
NDOT	Nevada Department of Transportation
NDOW	Nevada Department of Wildlife
NDWR	Nevada Division of Water Resources
NEPA	National Environmental Policy Act
NI 43-101	National Instrument 43-101
NPV	Net Present Value
NRHP	National Register of Historic Places
NSR	Net Smelter Royalty
NvMACT	Nevada Maximum Achievable Control Technology
oz	Troy ounces
oz/ton	Troy ounces per short ton
PAG	potentially acid generating
Pan	Pan Gold Project
Pb	Lead
PE	Phillips Enterprises LLC
PHMA	priority habitat management area
PPI	Producer Price Index
ppm	parts per million
Programmatic Agreement	Programmatic Agreement between BLM, Nevada State Historic Preservation Office, and the Advisory Council on Historic Preservation
PSHA	Probabilistic Seismic Hazard Analysis
Q	quarter
QA/QC	Quality Assurance/ Quality Control
QMS	Quality Management System
RCRA	Resource Conservation and Recovery Act
RDi	Resource Development Corp.
ROD	Record of Decision
ROM	run-of-mine
SEC	U.S. Securities and Exchange Commission
sec	second
SRCE	Standardized Reclamation Cost Estimator
SRK	SRK Consulting (U.S.), Inc.

Abbreviation	Unit or Term
ton	US short ton (2,000 lbs.)
t	Metric tonne
T&M	Time and Materials
ton/d	tons per day
TMT	Tentative Minimum Tax
USDA	United States Department of Agriculture
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
V	volt
VA	volt-amperes
WRDA	Waste Rock Disposal Areas
XRD	X-ray diffraction (XRD)
XRF	X-ray fluorescence

Closure

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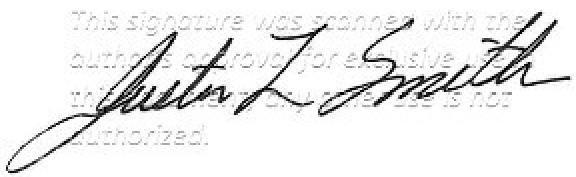

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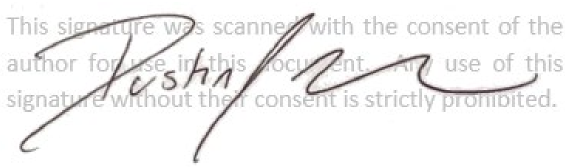

Dustin Meisburger, PEng., RM-SME

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

Appendix A Certificates of Qualified Persons

CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled: “NI 43-101 Updated Technical Report on Resources and Reserves Pan Gold Project, White Pine County, Nevada” prepared for Calibre Mining Corp. dated March 16, 2023 with an effective date of December 31, 2022 (the “Technical Report”).

I, Justin Smith, B.Sc., P.E., RM-SME, do hereby certify that:

1 I am a Principal Consultant (Mining) with the firm of SRK Consulting (U.S.), Inc. with an office at 5250 Neil Rd #300, Reno, NV 89502, United States.

2 I am a graduate of Colorado School of Mines in 2009 and received a Bachelor’s degree in mining engineering from Colorado School of Mines, United States. I have practiced my profession continuously since 2009 where I have provided on-site engineering, reserves calculations, and mine engineering. I have both worked at gold mines operations as well as consulted on a range of gold projects around the world. Additionally, I have been a contributor to several precious and base metal technical reports in Nevada, Alaska, Arizona, Nebraska, Idaho, and internationally.

3 I am a professional engineer registered with the State of Nevada, License #23214. I am a Registered Member of the Society for Mining, Metallurgy & Exploration, Registration #4152085-RM.

4 I have visited the Pan Gold property, for this Technical Report my site visit took place on December 6, 2022.

5 I have read the definition of “Qualified Person” set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a “Qualified Person” for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43 101F1.

6 As a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.

7 I accept professional responsibility for Sections 1.5, 1.6, 2, 3, 15, 16 (Except 16.2.1), 24, 25.3, and 26.2 of this Technical Report.

8 I was involved and a Qualified Person on the NI 43-101 Updated Technical Reports completed in 2017 and 2021.

9 As of the date of this certificate, to the best of my knowledge, information and belief, the portion of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the portion of the Technical Report for which I am responsible not misleading.

10 I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated 16th March, 2023 at Reno, United States.

[“signed and sealed”]

Justin Smith, B.Sc., P.E., RM-SME

Principal Consultant (Mining)

SRK Consulting (U.S.), Inc.

CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled: "NI 43-101 Updated Technical Report on Resources and Reserves Pan Gold Project, White Pine County, Nevada" prepared for Calibre Mining Corp. dated March 16, 2023 with an effective date of December 31, 2022 (the "Technical Report").

I, Michael B. Dufresne, M.Sc., P.Geol., P.Geo., do hereby certify that:

1. I am President and a Principal Consultant with the firm of APEX Geoscience Ltd. with an office at 11450 - 160 Street NW, Suite #100, Edmonton AB, T5M 3Y7 Canada.
2. I graduated with a B.Sc. in Geology from the University of North Carolina at Wilmington in 1983 and with a M.Sc. in Economic Geology from the University of Alberta in 1987. I have practiced my profession continuously since 1983. I have provided a range of on-site geological modelling and mineral resource estimation consulting for more than 20 years at gold development and mining operations as well as consulted on a range of gold projects around the world.
3. I am and have been registered as a Professional Geologist with the Association of Professional Engineers and Geoscientists of Alberta since 1989 (Licence M48439). I have been registered as a Professional Geologist with the association of Professional Engineers and Geoscientists of BC since 2012 (Licence 169929).
4. I have visited the Pan Gold property, for this Technical Report my site visit took place on January 28th and 29th, 2022.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43 101F1.
6. As a Qualified Person, I am independent of the Property and issuer as defined in Section 1.5 of National Instrument 43-101.
7. I accept professional responsibility for Sections 1.1, 1.2, 1.4, 4 (except 4,4), 5 to 12, 14, 23, 24, 25.1, 25.2 and 26.1 as well as contributions to portions of Sections 2 and 26 of this Technical Report.
8. I have had limited prior involvement as a Qualified Person on geological consulting at the Pan Project from 2017 to 2022.
9. As of the date of this certificate, to the best of my knowledge, information and belief, the portion of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the portion of the Technical Report for which I am responsible not misleading.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated March 16th, 2023 at Edmonton, Alberta Canada.

["signed and sealed"]

Michael B. Dufresne, M.Sc., P.Geol., P.Geo.
President and Principal Consultant
APEX Geoscience Ltd.

CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled: "NI 43-101 Updated Technical Report on Resources and Reserves Pan Gold Project, White Pine County, Nevada" prepared for Calibre Mining Corp. dated March 16, 2023 with an effective date of December 31, 2022 (the "Technical Report").

I, Michael Iannacchione, B.Sc., P.E., MBA, do hereby certify that:

1 I am an Associate Principal Consultant (Mining) with the firm of SRK Consulting (U.S.), Inc. with an office at 5250 Neil Rd #300, Reno, NV 89502, United States.

2 I am a graduate of the University of Nevada in 1982 with a Bachelor's degree in mining engineering from the University of Nevada, United States. I also received a Master of Business Administration degree from the University of Notre Dame, United States in 2018. I have practiced my profession continuously since 1982 and have provided engineering, management and financial planning. The financial planning included strategic business plans and budgets. I have worked at gold mines and a molybdenum operation. I managed a range of gold projects., as well as the molybdenum project. I provided a financial review of an oil shale project in Utah. Additionally, I contributed to the previous Technical Report for the Pan Mine in 2020. My experience includes mines and projects in Nevada, Alaska, and Utah. I also conducted due diligence for mergers and acquisitions in Mexico.

3 I am a professional engineer registered with the State of Nevada, License #10643.

4 My site visit took place on September 10, 2020.

5 I have read the definition of "Qualified Person" set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43 101F1.

6 As a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.

7 I accept professional responsibility for Sections 1.8, 1.10, 1.11, 1.12, 18, 19, 21, 22, 25.6, 25.7, 26.5 of this Technical Report.

8 I was involved as a Qualified Person on the NI 43-101 Updated Technical Reports completed in 2020.

9 As of the date of this certificate, to the best of my knowledge, information and belief, the portion of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the portion of the Technical Report for which I am responsible not misleading.

10 I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated 16th March, 2023 at Reno, United States.

["signed and sealed"]

Michael Iannacchione, B.Sc., P.E., MBA

Associate Principal Consultant (Mining)

SRK Consulting (U.S.), Inc.

CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled: "NI 43-101 Updated Technical Report on Resources and Reserves Pan Gold Project, White Pine County, Nevada" prepared for Calibre Mining Corp. dated March 16, 2023 with an effective date of December 31, 2022 (the "Technical Report").

I, Valerie Sawyer, B.Sc., RM-SME, do hereby certify that:

1. I am a Principal Consultant (Environmental) with the firm of SRK Consulting (U.S.), Inc. with an office at 1250 Lamoille Highway, Suite 520, Elko, Nevada 89801, United States.
2. I am a graduate of Michigan Technological University in 1981 and received a Bachelor's degree in metallurgical engineering from Michigan Technological University, United States. I have practiced my profession continuously since 1981. I have worked as a metallurgical engineer and environmental professional for a total of 40 years since my graduation from university in federal, state, and local mine environmental permitting and compliance and metallurgical engineering in the western United States.
3. I am a Registered Member in good standing of the Society for Mining, Metallurgy, and Exploration, Member No. RM 4192564.
4. I have visited the Pan Gold property, for this Technical Report my site visit took place on January 14, 2014.
5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43 101F1.
6. As a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.
7. I accept professional responsibility for Sections 1.9, 4.4, 20, and 25.5 of this Technical Report.
8. I was involved and a Qualified Person on the NI 43-101 Updated Technical Reports completed in 2017 and 2021.
9. As of the date of this certificate, to the best of my knowledge, information and belief, the portion of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the portion of the Technical Report for which I am responsible not misleading.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated 16th March, 2023 at Elgin, Arizona United States.

This signature was scanned with the author's approval for exclusive use in this document; any other use is not authorized.

["signed and sealed"]

Valerie Sawyer, B.Sc., RM-SME

Principal Consultant (Environmental)

SRK Consulting (U.S.), Inc.

srk consulting

CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled: "NI 43-101 Updated Technical Report on Resources and Reserves Pan Gold Project, White Pine County, Nevada" prepared for Calibre Mining Corp. dated March 16, 2023, with an effective date of December 31, 2022 (the "Technical Report").

I, Adrian Dance, P.Eng., do hereby certify that:

1 I am a Principal Consultant with the firm SRK Consulting (Canada) Inc., which has an office at 2600 – 320 Granville Street, Vancouver, British Columbia, V6C 1S9, Canada.

2 I am a graduate of the University of British Columbia in 1987 where I obtained a Bachelor of Applied Science and a graduate of the University of Queensland in 1992 where I obtained a Doctorate. I have practiced my profession continuously since 1992 including twenty years as a consultant and have experience working in a number of gold operations around the world.

3 I am a Professional Engineer registered with the Association of Professional Engineers & Geoscientists of British Columbia, license # 37151.

4 I have visited the Pan Gold property for this Technical Report, my site visit took place on December 6, 2022.

5 I have read the definition of "qualified person" set out in National Instrument 43-101 *Standards of Disclosure for Mineral Projects* ("NI 43-101") and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.

6 As a Qualified Person, I am independent of the issuer as defined in Section 1.5 of NI 43-101.

7 I accept professional responsibility for portions of Sections 1, all of Sections 13 and 17, and portions of Sections 25 and 26 of the Technical Report.

8 I have not been involved in previous studies and technical reports issued regarding the subject property.

9 As of the date of this certificate, to the best of my knowledge, information and belief, the portion of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the portion of the Technical Report for which I am responsible not misleading.

10 I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated this 16th March 2023, in Vancouver, British Columbia, Canada.

This signature has been scanned. The author has given permission to its use for this particular document in accordance with the disclosure statement hereof. The original signature is held on file.

["signed and sealed"]

Dr. Adrian Dance, PEng. (BC # 37151), FAusIMM
Principal Consultant - Metallurgy
SRK Consulting (Canada) Inc.

CERTIFICATE OF QUALIFIED PERSON

To accompany the report entitled: "NI 43-101 Updated Technical Report on Resources and Reserves Pan Gold Project, White Pine County, Nevada" prepared for Calibre Mining Corp. dated March 16, 2023 with an effective date of December 31, 2022 (the "Technical Report").

I, Andy Thomas, M.Eng., P.Eng.

1 I am a Principal Consultant (Rock Mechanics) with the firm of SRK Consulting (Canada), Inc. with an office at 2600-320 Granville Street, Vancouver, BC, V6C 1S9.

2 I am a graduate of The University of Adelaide in 2004 where I obtained a Bachelor of Engineering (Civil & Environmental) and a Bachelor of Science (Geology). I am also a graduate of The University of British Columbia in 2014 where I obtained a Master of Engineering (Geological). Aside from the time spent studying my postgraduate degree, I have practiced my profession continuously since 2005. My relevant experience includes geotechnical investigations and geotechnical assessments for open pit and underground mining projects internationally. Additionally, I have been a contributor to several precious and base metal technical reports.

3 I am a Professional Engineer registered with the Engineers and Geoscientists British Columbia, license #44961

4 I have visited the Pan Gold property, for this Technical Report my site visit took place on December 6, 2022.

5 I have read the definition of "Qualified Person" set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43 101F1.

6 As a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101.

7 I accept professional responsibility for Sections 16.2.1 and 26.3 of this Technical Report.

8 I was involved in the NI 43-101 Updated Technical Report completed in 2021.

9 As of the date of this certificate, to the best of my knowledge, information and belief, the portion of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the portion of the Technical Report for which I am responsible not misleading.

10 I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

Dated 16th March, 2023 at Vancouver, Canada.

["signed and sealed"]

Andy Thomas, M.Eng., P.Eng.

Principal Consultant (Rock Mechanics)

SRK Consulting (Canada), Inc.

Appendix B Mineral Claims

BLM Serial #	Claim Name	Expiration Date	Owner
NMC1031802	PR 1	8/31/2017	Nevada Royalty Corp.
NMC1031803	PR 2	8/31/2017	Nevada Royalty Corp.
NMC1031804	PR 3	8/31/2017	Nevada Royalty Corp.
NMC1031805	PR 4	8/31/2017	Nevada Royalty Corp.
NMC1031806	PR 5	8/31/2017	Nevada Royalty Corp.
NMC1031807	PR 6	8/31/2017	Nevada Royalty Corp.
NMC1031808	PR 7	8/31/2017	Nevada Royalty Corp.
NMC1031809	PR 8	8/31/2017	Nevada Royalty Corp.
NMC1031810	PR 9	8/31/2017	Nevada Royalty Corp.
NMC1057236	PC 1	8/31/2017	Nevada Royalty Corp.
NMC1057237	PC 2	8/31/2017	Nevada Royalty Corp.
NMC1057238	PC 3	8/31/2017	Nevada Royalty Corp.
NMC1057239	PC 4	8/31/2017	Nevada Royalty Corp.
NMC1057240	PC 5	8/31/2017	Nevada Royalty Corp.
NMC1057241	PC 6	8/31/2017	Nevada Royalty Corp.
NMC1057242	PC 7	8/31/2017	Nevada Royalty Corp.
NMC1057243	PC 8	8/31/2017	Nevada Royalty Corp.
NMC1057244	PC 9	8/31/2017	Nevada Royalty Corp.
NMC1057245	PC 10	8/31/2017	Nevada Royalty Corp.
NMC1057246	PC 11	8/31/2017	Nevada Royalty Corp.
NMC1057247	PC 12	8/31/2017	Nevada Royalty Corp.
NMC1057248	PC 13	8/31/2017	Nevada Royalty Corp.
NMC1057249	PC 14	8/31/2017	Nevada Royalty Corp.
NMC1057250	PC 15	8/31/2017	Nevada Royalty Corp.
NMC1057251	PC 16	8/31/2017	Nevada Royalty Corp.
NMC1057252	PC 17	8/31/2017	Nevada Royalty Corp.
NMC1057253	PC 18	8/31/2017	Nevada Royalty Corp.
NMC1057254	PC 20	8/31/2017	Nevada Royalty Corp.
NMC1102847	NC 125	8/31/2017	Nevada Royalty Corp.
NMC1102848	NC 134	8/31/2017	Nevada Royalty Corp.
NMC1102849	PAN 114	8/31/2017	Nevada Royalty Corp.
NMC1102850	PAN 121	8/31/2017	Nevada Royalty Corp.
NMC1102851	LAT 48	8/31/2017	Nevada Royalty Corp.
NMC205565	PAN #119	8/31/2017	Nevada Royalty Corp.
NMC37169	PAN # 37	8/31/2017	Nevada Royalty Corp.
NMC37170	PAN # 38	8/31/2017	Nevada Royalty Corp.
NMC37172	PAN # 63	8/31/2017	Nevada Royalty Corp.
NMC37173	PAN # 65	8/31/2017	Nevada Royalty Corp.
NMC37174	PAN # 67	8/31/2017	Nevada Royalty Corp.
NMC37175	PAN # 69	8/31/2017	Nevada Royalty Corp.
NMC427129	PE #50	8/31/2017	Nevada Royalty Corp.
NMC427131	PE #52	8/31/2017	Nevada Royalty Corp.
NMC427133	PE #54	8/31/2017	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC57946	PAN # 71	8/31/2017	Nevada Royalty Corp.
NMC57947	PAN # 72	8/31/2017	Nevada Royalty Corp.
NMC57948	PAN # 73	8/31/2017	Nevada Royalty Corp.
NMC57949	PAN # 74	8/31/2017	Nevada Royalty Corp.
NMC61102	PAN # 22	8/31/2017	Nevada Royalty Corp.
NMC61103	PAN # 23	8/31/2017	Nevada Royalty Corp.
NMC61104	PAN # 24	8/31/2017	Nevada Royalty Corp.
NMC61105	PAN # 25	8/31/2017	Nevada Royalty Corp.
NMC61106	PAN # 26	8/31/2017	Nevada Royalty Corp.
NMC61107	PAN # 27	8/31/2017	Nevada Royalty Corp.
NMC61108	PAN # 28	8/31/2017	Nevada Royalty Corp.
NMC61114	PAN # 34	8/31/2017	Nevada Royalty Corp.
NMC61115	PAN # 35	8/31/2017	Nevada Royalty Corp.
NMC61116	PAN # 36	8/31/2017	Nevada Royalty Corp.
NMC630283	PA 8A	8/31/2017	Nevada Royalty Corp.
NMC630284	PA 10	8/31/2017	Nevada Royalty Corp.
NMC630285	PA 12	8/31/2017	Nevada Royalty Corp.
NMC630286	PA 13	8/31/2017	Nevada Royalty Corp.
NMC630287	PA 14	8/31/2017	Nevada Royalty Corp.
NMC630288	PA 15	8/31/2017	Nevada Royalty Corp.
NMC630289	PA 16	8/31/2017	Nevada Royalty Corp.
NMC630290	PA 17	8/31/2017	Nevada Royalty Corp.
NMC630291	PA 18	8/31/2017	Nevada Royalty Corp.
NMC630323	PA 49A	8/31/2017	Nevada Royalty Corp.
NMC815131	LAT 9	8/31/2017	Nevada Royalty Corp.
NMC815132	LAT 10	8/31/2017	Nevada Royalty Corp.
NMC815133	LAT 11	8/31/2017	Nevada Royalty Corp.
NMC815134	LAT 12	8/31/2017	Nevada Royalty Corp.
NMC815135	LAT 13	8/31/2017	Nevada Royalty Corp.
NMC815136	LAT 14	8/31/2017	Nevada Royalty Corp.
NMC815137	LAT 15	8/31/2017	Nevada Royalty Corp.
NMC815138	LAT 16	8/31/2017	Nevada Royalty Corp.
NMC815139	LAT 17	8/31/2017	Nevada Royalty Corp.
NMC815140	LAT 18	8/31/2017	Nevada Royalty Corp.
NMC815141	LAT 19	8/31/2017	Nevada Royalty Corp.
NMC815142	LAT 20	8/31/2017	Nevada Royalty Corp.
NMC815143	LAT 21	8/31/2017	Nevada Royalty Corp.
NMC815144	LAT 22	8/31/2017	Nevada Royalty Corp.
NMC815145	LAT 23	8/31/2017	Nevada Royalty Corp.
NMC815146	LAT 24	8/31/2017	Nevada Royalty Corp.
NMC815147	LAT 25	8/31/2017	Nevada Royalty Corp.
NMC815148	LAT 26	8/31/2017	Nevada Royalty Corp.
NMC815149	LAT 27	8/31/2017	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC815150	LAT 28	8/31/2017	Nevada Royalty Corp.
NMC815151	LAT 29	8/31/2017	Nevada Royalty Corp.
NMC815152	LAT 30	8/31/2017	Nevada Royalty Corp.
NMC815153	LAT 31	8/31/2017	Nevada Royalty Corp.
NMC815154	LAT 32	8/31/2017	Nevada Royalty Corp.
NMC815155	LAT 33	8/31/2017	Nevada Royalty Corp.
NMC815156	LAT 34	8/31/2017	Nevada Royalty Corp.
NMC815157	LAT 35	8/31/2017	Nevada Royalty Corp.
NMC815158	LAT 36	8/31/2017	Nevada Royalty Corp.
NMC815159	LAT 37	8/31/2017	Nevada Royalty Corp.
NMC815160	LAT 38	8/31/2017	Nevada Royalty Corp.
NMC815161	LAT 40	8/31/2017	Nevada Royalty Corp.
NMC815162	LAT 42	8/31/2017	Nevada Royalty Corp.
NMC815163	LAT 44	8/31/2017	Nevada Royalty Corp.
NMC815164	LAT 46	8/31/2017	Nevada Royalty Corp.
NMC815166	LAT 49	8/31/2017	Nevada Royalty Corp.
NMC815167	LAT 50	8/31/2017	Nevada Royalty Corp.
NMC815168	LAT 51	8/31/2017	Nevada Royalty Corp.
NMC815169	LAT 52	8/31/2017	Nevada Royalty Corp.
NMC815170	LAT 53	8/31/2017	Nevada Royalty Corp.
NMC815171	LAT 54	8/31/2017	Nevada Royalty Corp.
NMC815172	LAT 55	8/31/2017	Nevada Royalty Corp.
NMC815173	LAT 56	8/31/2017	Nevada Royalty Corp.
NMC815174	LAT 57	8/31/2017	Nevada Royalty Corp.
NMC815175	LAT 58	8/31/2017	Nevada Royalty Corp.
NMC815176	LAT 59	8/31/2017	Nevada Royalty Corp.
NMC815177	LAT 60	8/31/2017	Nevada Royalty Corp.
NMC815178	LAT 47	8/31/2017	Nevada Royalty Corp.
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NMC815180	LAT 62	8/31/2017	Nevada Royalty Corp.
NMC815181	LAT 63	8/31/2017	Nevada Royalty Corp.
NMC815182	LAT 64	8/31/2017	Nevada Royalty Corp.
NMC815183	LAT 65	8/31/2017	Nevada Royalty Corp.
NMC958546	NC 30	8/31/2017	Nevada Royalty Corp.
NMC958547	NC 31	8/31/2017	Nevada Royalty Corp.
NMC958548	NC 32	8/31/2017	Nevada Royalty Corp.
NMC958549	NC 33	8/31/2017	Nevada Royalty Corp.
NMC958550	NC 34	8/31/2017	Nevada Royalty Corp.
NMC958551	NC 35	8/31/2017	Nevada Royalty Corp.
NMC958552	NC 36	8/31/2017	Nevada Royalty Corp.
NMC958553	NC 37	8/31/2017	Nevada Royalty Corp.
NMC958554	NC 38	8/31/2017	Nevada Royalty Corp.
NMC958555	NC 39	8/31/2017	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC958556	NC 40	8/31/2017	Nevada Royalty Corp.
NMC958557	NC 41	8/31/2017	Nevada Royalty Corp.
NMC958558	NC 42	8/31/2017	Nevada Royalty Corp.
NMC958559	NC 43	8/31/2017	Nevada Royalty Corp.
NMC958560	NC 44	8/31/2017	Nevada Royalty Corp.
NMC958561	NC 45	8/31/2017	Nevada Royalty Corp.
NMC958562	NC 46	8/31/2017	Nevada Royalty Corp.
NMC958563	NC 47	8/31/2017	Nevada Royalty Corp.
NMC958564	NC 48	8/31/2017	Nevada Royalty Corp.
NMC958565	NC 49	8/31/2017	Nevada Royalty Corp.
NMC958566	NC 50	8/31/2017	Nevada Royalty Corp.
NMC958567	NC 51	8/31/2017	Nevada Royalty Corp.
NMC958568	NC 52	8/31/2017	Nevada Royalty Corp.
NMC958575	NC 59	8/31/2017	Nevada Royalty Corp.
NMC958576	NC 60	8/31/2017	Nevada Royalty Corp.
NMC958577	NC 61	8/31/2017	Nevada Royalty Corp.
NMC958578	NC 62	8/31/2017	Nevada Royalty Corp.
NMC958579	NC 63	8/31/2017	Nevada Royalty Corp.
NMC958580	NC 64	8/31/2017	Nevada Royalty Corp.
NMC958581	NC 65	8/31/2017	Nevada Royalty Corp.
NMC958582	NC 66	8/31/2017	Nevada Royalty Corp.
NMC958583	NC 67	8/31/2017	Nevada Royalty Corp.
NMC958584	NC 68	8/31/2017	Nevada Royalty Corp.
NMC958585	NC 69	8/31/2017	Nevada Royalty Corp.
NMC958586	NC 70	8/31/2017	Nevada Royalty Corp.
NMC958587	NC 71	8/31/2017	Nevada Royalty Corp.
NMC958588	NC 72	8/31/2017	Nevada Royalty Corp.
NMC958610	NC 94	8/31/2017	Nevada Royalty Corp.
NMC958611	NC 95	8/31/2017	Nevada Royalty Corp.
NMC958612	NC 96	8/31/2017	Nevada Royalty Corp.
NMC958613	NC 97	8/31/2017	Nevada Royalty Corp.
NMC958614	NC 98	8/31/2017	Nevada Royalty Corp.
NMC958615	NC 99	8/31/2017	Nevada Royalty Corp.
NMC958616	NC 100	8/31/2017	Nevada Royalty Corp.
NMC958617	NC 101	8/31/2017	Nevada Royalty Corp.
NMC958618	NC 102	8/31/2017	Nevada Royalty Corp.
NMC958619	NC 103	8/31/2017	Nevada Royalty Corp.
NMC958620	NC 104	8/31/2017	Nevada Royalty Corp.
NMC958621	NC 105	8/31/2017	Nevada Royalty Corp.
NMC958622	NC 106	8/31/2017	Nevada Royalty Corp.
NMC958623	NC 107	8/31/2017	Nevada Royalty Corp.
NMC958624	NC 108	8/31/2017	Nevada Royalty Corp.
NMC958625	NC 109	8/31/2017	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC958626	NC 110	8/31/2017	Nevada Royalty Corp.
NMC958627	NC 111	8/31/2017	Nevada Royalty Corp.
NMC958628	NC 112	8/31/2017	Nevada Royalty Corp.
NMC958629	NC 113	8/31/2017	Nevada Royalty Corp.
NMC958630	NC 114	8/31/2017	Nevada Royalty Corp.
NMC958631	NC 115	8/31/2017	Nevada Royalty Corp.
NMC958632	NC 116	8/31/2017	Nevada Royalty Corp.
NMC958633	NC 117	8/31/2017	Nevada Royalty Corp.
NMC958634	NC 118	8/31/2017	Nevada Royalty Corp.
NMC958635	NC 119	8/31/2017	Nevada Royalty Corp.
NMC958636	NC 120	8/31/2017	Nevada Royalty Corp.
NMC958637	NC 121	8/31/2017	Nevada Royalty Corp.
NMC958638	NC 124	8/31/2017	Nevada Royalty Corp.
NMC958640	NC 126	8/31/2017	Nevada Royalty Corp.
NMC958641	NC 127	8/31/2017	Nevada Royalty Corp.
NMC958642	NC 128	8/31/2017	Nevada Royalty Corp.
NMC958643	NC 129	8/31/2017	Nevada Royalty Corp.
NMC958644	NC 130	8/31/2017	Nevada Royalty Corp.
NMC958645	NC 133	8/31/2017	Nevada Royalty Corp.
NMC958647	NC 135	8/31/2017	Nevada Royalty Corp.
NMC958648	NC 136	8/31/2017	Nevada Royalty Corp.
NMC958649	NC 137	8/31/2017	Nevada Royalty Corp.
NMC958650	NC 138	8/31/2017	Nevada Royalty Corp.
NMC958651	NC 139	8/31/2017	Nevada Royalty Corp.
NMC958652	NC 142	8/31/2017	Nevada Royalty Corp.
NMC958653	NC 143	8/31/2017	Nevada Royalty Corp.
NMC958654	NC 144	8/31/2017	Nevada Royalty Corp.
NMC958655	NC 145	8/31/2017	Nevada Royalty Corp.
NMC958656	NC 146	8/31/2017	Nevada Royalty Corp.
NMC958657	NC 149	8/31/2017	Nevada Royalty Corp.
NMC958658	NC 150	8/31/2017	Nevada Royalty Corp.
NMC958659	NC 151	8/31/2017	Nevada Royalty Corp.
NMC958660	NC 152	8/31/2017	Nevada Royalty Corp.
NMC958661	NC 153	8/31/2017	Nevada Royalty Corp.
NMC958662	NC 154	8/31/2017	Nevada Royalty Corp.
NMC958663	NC 157	8/31/2017	Nevada Royalty Corp.
NMC958664	NC 158	8/31/2017	Nevada Royalty Corp.
NMC958665	NC 159	8/31/2017	Nevada Royalty Corp.
NMC958666	NC 160	8/31/2017	Nevada Royalty Corp.
NMC958667	NC 161	8/31/2017	Nevada Royalty Corp.
NMC958668	NC 162	8/31/2017	Nevada Royalty Corp.
NMC958669	NC 165	8/31/2017	Nevada Royalty Corp.
NMC958670	NC 166	8/31/2017	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC958671	NC 167	8/31/2017	Nevada Royalty Corp.
NMC958672	NC 168	8/31/2017	Nevada Royalty Corp.
NMC958673	NC 169	8/31/2017	Nevada Royalty Corp.
NMC958674	NC 170	8/31/2017	Nevada Royalty Corp.
NMC980710	CT 30	8/31/2017	Nevada Royalty Corp.
NMC980711	CT 31	8/31/2017	Nevada Royalty Corp.
NMC980712	CT 32	8/31/2017	Nevada Royalty Corp.
NMC980713	CT 33	8/31/2017	Nevada Royalty Corp.
NMC980714	CT 34	8/31/2017	Nevada Royalty Corp.
NMC980715	CT 35	8/31/2017	Nevada Royalty Corp.
NMC980716	CT 38	8/31/2017	Nevada Royalty Corp.
NMC980717	CT 39	8/31/2017	Nevada Royalty Corp.
NMC980718	CT 40	8/31/2017	Nevada Royalty Corp.
NMC980719	CT 41	8/31/2017	Nevada Royalty Corp.
NMC980720	CT 42	8/31/2017	Nevada Royalty Corp.
NMC980721	CT 43	8/31/2017	Nevada Royalty Corp.
NMC980722	CT 46	8/31/2017	Nevada Royalty Corp.
NMC980723	CT 47	8/31/2017	Nevada Royalty Corp.
NMC980724	CT 48	8/31/2017	Nevada Royalty Corp.
NMC980725	CT 49	8/31/2017	Nevada Royalty Corp.
NMC980726	CT 50	8/31/2017	Nevada Royalty Corp.
NMC980727	CT 51	8/31/2017	Nevada Royalty Corp.
NMC980728	PETER 1	8/31/2017	Nevada Royalty Corp.
NMC980729	PETER 2	8/31/2017	Nevada Royalty Corp.
NMC980730	PETER 3	8/31/2017	Nevada Royalty Corp.
NMC980731	PETER 4	8/31/2017	Nevada Royalty Corp.
NMC980732	PETER 5	8/31/2017	Nevada Royalty Corp.
NMC980733	PETER 6	8/31/2017	Nevada Royalty Corp.
NMC980734	PETER 7	8/31/2017	Nevada Royalty Corp.
NMC980735	PETER 8	8/31/2017	Nevada Royalty Corp.
NMC980736	PETER 9	8/31/2017	Nevada Royalty Corp.
NMC980737	PETER 10	8/31/2017	Nevada Royalty Corp.
NMC980738	PETER 11	8/31/2017	Nevada Royalty Corp.
NMC980739	PETER 12	8/31/2017	Nevada Royalty Corp.
NMC980740	PETER 13	8/31/2017	Nevada Royalty Corp.
NMC980741	PETER 14	8/31/2017	Nevada Royalty Corp.
NMC980742	PETER 15	8/31/2017	Nevada Royalty Corp.
NMC980743	PETER 16	8/31/2017	Nevada Royalty Corp.
NMC980744	PETER 17	8/31/2017	Nevada Royalty Corp.
NMC980745	PETER 18	8/31/2017	Nevada Royalty Corp.
NMC980746	PETER 19	8/31/2017	Nevada Royalty Corp.
NMC980747	PETER 20	8/31/2017	Nevada Royalty Corp.
NMC980748	PETER 21	8/31/2017	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC980749	PETER 22	8/31/2017	Nevada Royalty Corp.
NMC980750	PETER 23	8/31/2017	Nevada Royalty Corp.
NMC980751	PETER 24	8/31/2017	Nevada Royalty Corp.
NMC980752	PETER 25	8/31/2017	Nevada Royalty Corp.
NMC980753	PETER 26	8/31/2017	Nevada Royalty Corp.
NMC980754	PETER 27	8/31/2017	Nevada Royalty Corp.
NMC980755	PETER 28	8/31/2017	Nevada Royalty Corp.
NMC980756	PETER 29	8/31/2017	Nevada Royalty Corp.
NMC980757	PETER 30	8/31/2017	Nevada Royalty Corp.
NMC980758	PETER 31	8/31/2017	Nevada Royalty Corp.
NMC980759	PETER 32	8/31/2017	Nevada Royalty Corp.
NMC980760	PETER 33	8/31/2017	Nevada Royalty Corp.
NMC980761	PETER 34	8/31/2017	Nevada Royalty Corp.
NMC980762	PETER 35	8/31/2017	Nevada Royalty Corp.
NMC980763	PETER 36	8/31/2017	Nevada Royalty Corp.
NMC980764	PETER 37	8/31/2017	Nevada Royalty Corp.
NMC980765	PETER 38	8/31/2017	Nevada Royalty Corp.
NMC980766	PETER 39	8/31/2017	Nevada Royalty Corp.
NMC980767	PETER 40	8/31/2017	Nevada Royalty Corp.
NMC980768	PETER 41	8/31/2017	Nevada Royalty Corp.
NMC980769	PETER 42	8/31/2017	Nevada Royalty Corp.
NMC980770	PETER 43	8/31/2017	Nevada Royalty Corp.
NMC980771	PETER 44	8/31/2017	Nevada Royalty Corp.
NMC980772	PETER 45	8/31/2017	Nevada Royalty Corp.
NMC980773	PETER 46	8/31/2017	Nevada Royalty Corp.
NMC980774	PETER 47	8/31/2017	Nevada Royalty Corp.
NMC980775	PETER 48	8/31/2017	Nevada Royalty Corp.
NMC980776	PETER 49	8/31/2017	Nevada Royalty Corp.
NMC980777	PETER 50	8/31/2017	Nevada Royalty Corp.
NMC980778	PETER 51	8/31/2017	Nevada Royalty Corp.
NMC980779	BSW 38	8/31/2017	Nevada Royalty Corp.
NMC980780	BSW 39	8/31/2017	Nevada Royalty Corp.
NMC980781	BSW 40	8/31/2017	Nevada Royalty Corp.
NMC980782	BSW 41	8/31/2017	Nevada Royalty Corp.
NMC980783	BSW 42	8/31/2017	Nevada Royalty Corp.
NMC980784	BSW 43	8/31/2017	Nevada Royalty Corp.
NMC980785	BSW 44	8/31/2017	Nevada Royalty Corp.
NMC980786	BSW 45	8/31/2017	Nevada Royalty Corp.
NMC980787	BSW 1	8/31/2017	Nevada Royalty Corp.
NMC980788	BSW 2	8/31/2017	Nevada Royalty Corp.
NMC980789	BSW 3	8/31/2017	Nevada Royalty Corp.
NMC980790	BSW 4	8/31/2017	Nevada Royalty Corp.
NMC980791	BSW 5	8/31/2017	Nevada Royalty Corp.

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NMC980792	BSW 6	8/31/2017	Nevada Royalty Corp.
NMC980793	BSW 7	8/31/2017	Nevada Royalty Corp.
NMC980794	BSW 8	8/31/2017	Nevada Royalty Corp.
NMC980795	BSW 9	8/31/2017	Nevada Royalty Corp.
NMC980796	BSW 10	8/31/2017	Nevada Royalty Corp.
NMC980797	BSW 11	8/31/2017	Nevada Royalty Corp.
NMC980798	BSW 12	8/31/2017	Nevada Royalty Corp.
NMC980799	BSW 13	8/31/2017	Nevada Royalty Corp.
NMC980800	BSW 14	8/31/2017	Nevada Royalty Corp.
NMC980801	BSW 15	8/31/2017	Nevada Royalty Corp.
NMC980802	BSW 16	8/31/2017	Nevada Royalty Corp.
NMC980803	BSW 17	8/31/2017	Nevada Royalty Corp.
NMC980804	BSW 18	8/31/2017	Nevada Royalty Corp.
NMC980805	BSW 19	8/31/2017	Nevada Royalty Corp.
NMC980806	BSW 20	8/31/2017	Nevada Royalty Corp.
NMC980807	BSW 21	8/31/2017	Nevada Royalty Corp.
NMC980808	BSW 22	8/31/2017	Nevada Royalty Corp.
NMC980809	BSW 23	8/31/2017	Nevada Royalty Corp.
NMC980810	BSW 24	8/31/2017	Nevada Royalty Corp.
NMC980811	BSW 25	8/31/2017	Nevada Royalty Corp.
NMC980812	BSW 26	8/31/2017	Nevada Royalty Corp.
NMC980813	BSW 27	8/31/2017	Nevada Royalty Corp.
NMC980814	BSW 28	8/31/2017	Nevada Royalty Corp.
NMC980815	BSW 29	8/31/2017	Nevada Royalty Corp.
NMC980816	BSW 30	8/31/2017	Nevada Royalty Corp.
NMC980817	BSW 31	8/31/2017	Nevada Royalty Corp.
NMC980818	BSW 32	8/31/2017	Nevada Royalty Corp.
NMC980819	BSW 33	8/31/2017	Nevada Royalty Corp.
NMC980820	BSW 34	8/31/2017	Nevada Royalty Corp.
NMC980821	BSW 35	8/31/2017	Nevada Royalty Corp.
NMC980822	BSW 36	8/31/2017	Nevada Royalty Corp.
NMC980823	BSW 37	8/31/2017	Nevada Royalty Corp.
NMC980824	BSW 46	8/31/2017	Nevada Royalty Corp.
NMC980825	BSW 47	8/31/2017	Nevada Royalty Corp.
NMC980826	PA 19	8/31/2017	Nevada Royalty Corp.
NMC980827	PA 21	8/31/2017	Nevada Royalty Corp.
NMC980828	PA 44	8/31/2017	Nevada Royalty Corp.
NMC980829	PA 46	8/31/2017	Nevada Royalty Corp.
NMC980830	PA 48	8/31/2017	Nevada Royalty Corp.
NMC980831	PE 56	8/31/2017	Nevada Royalty Corp.
NMC980832	NP 1	8/31/2017	Nevada Royalty Corp.
NMC980833	NP 2	8/31/2017	Nevada Royalty Corp.
NMC980834	NP 3	8/31/2017	Nevada Royalty Corp.

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NMC980835	NP 4	8/31/2017	Nevada Royalty Corp.
NMC980836	NP 5	8/31/2017	Nevada Royalty Corp.
NMC980837	NP 6	8/31/2017	Nevada Royalty Corp.
NMC980838	NP 7	8/31/2017	Nevada Royalty Corp.
NMC980839	NP 8	8/31/2017	Nevada Royalty Corp.
NMC980840	NP 9	8/31/2017	Nevada Royalty Corp.
NMC980841	NP 10	8/31/2017	Nevada Royalty Corp.
NMC980842	NP 11	8/31/2017	Nevada Royalty Corp.
NMC980843	NP 12	8/31/2017	Nevada Royalty Corp.
NMC980844	NP 13	8/31/2017	Nevada Royalty Corp.
NMC980845	NP 14	8/31/2017	Nevada Royalty Corp.
NMC980846	NP 15	8/31/2017	Nevada Royalty Corp.
NMC980847	NP 16	8/31/2017	Nevada Royalty Corp.
NMC980848	NP 17	8/31/2017	Nevada Royalty Corp.
NMC980849	NP 18	8/31/2017	Nevada Royalty Corp.
NMC980850	NP 19	8/31/2017	Nevada Royalty Corp.
NMC980851	NP 20	8/31/2017	Nevada Royalty Corp.
NMC980852	NP 21	8/31/2017	Nevada Royalty Corp.
NMC980853	NP 22	8/31/2017	Nevada Royalty Corp.
NMC980854	NP 23	8/31/2017	Nevada Royalty Corp.
NMC980855	NP 24	8/31/2017	Nevada Royalty Corp.
NMC980856	NP 25	8/31/2017	Nevada Royalty Corp.
NMC980857	NP 26	8/31/2017	Nevada Royalty Corp.
NMC980858	NP 27	8/31/2017	Nevada Royalty Corp.
NMC980859	NP 28	8/31/2017	Nevada Royalty Corp.
NMC980860	NP 29	8/31/2017	Nevada Royalty Corp.
NMC980861	NP 30	8/31/2017	Nevada Royalty Corp.
NMC980862	NP 31	8/31/2017	Nevada Royalty Corp.
NMC980863	NP 32	8/31/2017	Nevada Royalty Corp.
NMC980864	NP 33	8/31/2017	Nevada Royalty Corp.
NMC980865	NP 34	8/31/2017	Nevada Royalty Corp.
NMC980866	NP 35	8/31/2017	Nevada Royalty Corp.
NMC980867	NP 36	8/31/2017	Nevada Royalty Corp.
NMC980868	NP 37	8/31/2017	Nevada Royalty Corp.
NMC980869	NP 38	8/31/2017	Nevada Royalty Corp.
NMC980870	NP 39	8/31/2017	Nevada Royalty Corp.
NMC980871	NP 40	8/31/2017	Nevada Royalty Corp.
NMC980872	NP 41	8/31/2017	Nevada Royalty Corp.
NMC980873	ET 1	8/31/2017	Nevada Royalty Corp.
NMC980874	ET 2	8/31/2017	Nevada Royalty Corp.
NMC980875	ET 3	8/31/2017	Nevada Royalty Corp.
NMC980876	ET 4	8/31/2017	Nevada Royalty Corp.
NMC980877	ET 5	8/31/2017	Nevada Royalty Corp.

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NMC980878	ET 6	8/31/2017	Nevada Royalty Corp.
NMC980879	ET 7	8/31/2017	Nevada Royalty Corp.
NMC980880	ET 8	8/31/2017	Nevada Royalty Corp.
NMC980881	ET 9	8/31/2017	Nevada Royalty Corp.
NMC980882	ET 10	8/31/2017	Nevada Royalty Corp.
NMC980883	ET 11	8/31/2017	Nevada Royalty Corp.
NMC980884	ET 12	8/31/2017	Nevada Royalty Corp.
NMC980885	ET 13	8/31/2017	Nevada Royalty Corp.
NMC980886	ET 14	8/31/2017	Nevada Royalty Corp.
NMC980887	ET 15	8/31/2017	Nevada Royalty Corp.
NMC980888	ET 16	8/31/2017	Nevada Royalty Corp.
NMC980889	ET 17	8/31/2017	Nevada Royalty Corp.
NMC980890	ET 18	8/31/2017	Nevada Royalty Corp.
NMC980891	ET 19	8/31/2017	Nevada Royalty Corp.
NMC980892	ET 20	8/31/2017	Nevada Royalty Corp.
NMC980893	ET 21	8/31/2017	Nevada Royalty Corp.
NMC980894	ET 22	8/31/2017	Nevada Royalty Corp.
NMC980895	ET 23	8/31/2017	Nevada Royalty Corp.
NMC980896	ET 24	8/31/2017	Nevada Royalty Corp.
NMC980897	ET 25	8/31/2017	Nevada Royalty Corp.
NMC980898	ET 26	8/31/2017	Nevada Royalty Corp.
NMC980899	ET 27	8/31/2017	Nevada Royalty Corp.
NMC980900	ET 28	8/31/2017	Nevada Royalty Corp.
NMC980901	ET 29	8/31/2017	Nevada Royalty Corp.
NMC980902	ET 30	8/31/2017	Nevada Royalty Corp.
NMC980903	ET 31	8/31/2017	Nevada Royalty Corp.
NMC980904	ET 32	8/31/2017	Nevada Royalty Corp.
NMC980905	ET 33	8/31/2017	Nevada Royalty Corp.
NMC980906	ET 34	8/31/2017	Nevada Royalty Corp.
NMC980907	ET 35	8/31/2017	Nevada Royalty Corp.
NMC980908	ET 36	8/31/2017	Nevada Royalty Corp.
NMC980909	ET 37	8/31/2017	Nevada Royalty Corp.
NMC980910	ET 38	8/31/2017	Nevada Royalty Corp.
NMC980911	ET 39	8/31/2017	Nevada Royalty Corp.
NMC980912	ET 40	8/31/2017	Nevada Royalty Corp.
NMC980913	ET 41	8/31/2017	Nevada Royalty Corp.
NMC984635	GWEN 17	8/31/2017	Nevada Royalty Corp.
NMC984636	GWEN 18	8/31/2017	Nevada Royalty Corp.
NMC984637	PAN 111	8/31/2017	Nevada Royalty Corp.
NMC984638	PAN 112	8/31/2017	Nevada Royalty Corp.
NMC984640	PAN 120	8/31/2017	Nevada Royalty Corp.
NMC984642	PAN 122	8/31/2017	Nevada Royalty Corp.
NMC1057292	PC 19	8/31/2017	GRP Pan, LLC

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NMC1057293	PC 21	8/31/2017	GRP Pan, LLC
NMC1057294	PC 22	8/31/2017	GRP Pan, LLC
NMC1057295	PC 23	8/31/2017	GRP Pan, LLC
NMC1057296	PC 24	8/31/2017	GRP Pan, LLC
NMC1057297	PC 25	8/31/2017	GRP Pan, LLC
NMC1057298	PC 26	8/31/2017	GRP Pan, LLC
NMC1057299	PC 27	8/31/2017	GRP Pan, LLC
NMC1057300	PC 28	8/31/2017	GRP Pan, LLC
NMC1057301	PC 29	8/31/2017	GRP Pan, LLC
NMC958517	NC 1	8/31/2017	GRP Pan, LLC
NMC958518	NC 2	8/31/2017	GRP Pan, LLC
NMC958519	NC 3	8/31/2017	GRP Pan, LLC
NMC958520	NC 4	8/31/2017	GRP Pan, LLC
NMC958521	NC 5	8/31/2017	GRP Pan, LLC
NMC958522	NC 6	8/31/2017	GRP Pan, LLC
NMC958523	NC 7	8/31/2017	GRP Pan, LLC
NMC958524	NC 8	8/31/2017	GRP Pan, LLC
NMC958525	NC 9	8/31/2017	GRP Pan, LLC
NMC958526	NC 10	8/31/2017	GRP Pan, LLC
NMC958527	NC 11	8/31/2017	GRP Pan, LLC
NMC958528	NC 12	8/31/2017	GRP Pan, LLC
NMC958529	NC 13	8/31/2017	GRP Pan, LLC
NMC958530	NC 14	8/31/2017	GRP Pan, LLC
NMC958531	NC 15	8/31/2017	GRP Pan, LLC
NMC958532	NC 16	8/31/2017	GRP Pan, LLC
NMC958533	NC 17	8/31/2017	GRP Pan, LLC
NMC958534	NC 18	8/31/2017	GRP Pan, LLC
NMC958535	NC 19	8/31/2017	GRP Pan, LLC
NMC958536	NC 20	8/31/2017	GRP Pan, LLC
NMC958537	NC 21	8/31/2017	GRP Pan, LLC
NMC958538	NC 22	8/31/2017	GRP Pan, LLC
NMC958539	NC 23	8/31/2017	GRP Pan, LLC
NMC958540	NC 24	8/31/2017	GRP Pan, LLC
NMC958541	NC 25	8/31/2017	GRP Pan, LLC
NMC958542	NC 26	8/31/2017	GRP Pan, LLC
NMC958543	NC 27	8/31/2017	GRP Pan, LLC
NMC958544	NC 28	8/31/2017	GRP Pan, LLC
NMC958545	NC 29	8/31/2017	GRP Pan, LLC
NMC958569	NC 53	8/31/2017	GRP Pan, LLC
NMC958570	NC 54	8/31/2017	GRP Pan, LLC
NMC958571	NC 55	8/31/2017	GRP Pan, LLC
NMC958572	NC 56	8/31/2017	GRP Pan, LLC
NMC958573	NC 57	8/31/2017	GRP Pan, LLC

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NMC958574	NC 58	8/31/2017	GRP Pan, LLC
NMC958589	NC 73	8/31/2017	GRP Pan, LLC
NMC958590	NC 74	8/31/2017	GRP Pan, LLC
NMC958591	NC 75	8/31/2017	GRP Pan, LLC
NMC958592	NC 76	8/31/2017	GRP Pan, LLC
NMC958593	NC 77	8/31/2017	GRP Pan, LLC
NMC958594	NC 78	8/31/2017	GRP Pan, LLC
NMC958595	NC 79	8/31/2017	GRP Pan, LLC
NMC958596	NC 80	8/31/2017	GRP Pan, LLC
NMC958597	NC 81	8/31/2017	GRP Pan, LLC
NMC958598	NC 82	8/31/2017	GRP Pan, LLC
NMC958599	NC 83	8/31/2017	GRP Pan, LLC
NMC958600	NC 84	8/31/2017	GRP Pan, LLC
NMC958601	NC 85	8/31/2017	GRP Pan, LLC
NMC958602	NC 86	8/31/2017	GRP Pan, LLC
NMC958603	NC 87	8/31/2017	GRP Pan, LLC
NMC958604	NC 88	8/31/2017	GRP Pan, LLC
NMC958605	NC 89	8/31/2017	GRP Pan, LLC
NMC958606	NC 90	8/31/2017	GRP Pan, LLC
NMC958607	NC 91	8/31/2017	GRP Pan, LLC
NMC958608	NC 92	8/31/2017	GRP Pan, LLC
NMC958609	NC 93	8/31/2017	GRP Pan, LLC
NMC965337	GWEN 1	8/31/2017	GRP Pan, LLC
NMC965338	GWEN 2	8/31/2017	GRP Pan, LLC
NMC965339	GWEN 3	8/31/2017	GRP Pan, LLC
NMC965340	GWEN 4	8/31/2017	GRP Pan, LLC
NMC965341	GWEN 5	8/31/2017	GRP Pan, LLC
NMC965342	GWEN 6	8/31/2017	GRP Pan, LLC
NMC965343	GWEN 7	8/31/2017	GRP Pan, LLC
NMC965344	GWEN 8	8/31/2017	GRP Pan, LLC
NMC965345	GWEN 9	8/31/2017	GRP Pan, LLC
NMC965346	GWEN 10	8/31/2017	GRP Pan, LLC
NMC973536	REE-81	8/31/2017	GRP Pan, LLC
NMC973537	REE-82	8/31/2017	GRP Pan, LLC
NMC977345	GWEN 49	8/31/2017	GRP Pan, LLC
NMC977346	GWEN 50	8/31/2017	GRP Pan, LLC
NMC977347	GWEN 51	8/31/2017	GRP Pan, LLC
NMC977350	GWEN 54	8/31/2017	GRP Pan, LLC
NMC977351	GWEN 55	8/31/2017	GRP Pan, LLC
NMC977352	GWEN 58	8/31/2017	GRP Pan, LLC
NMC977353	GWEN 59	8/31/2017	GRP Pan, LLC
NMC977354	GWEN 60	8/31/2017	GRP Pan, LLC
NMC977355	GWEN 61	8/31/2017	GRP Pan, LLC

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NMC977356	GWEN 62	8/31/2017	GRP Pan, LLC
NMC977357	GWEN 63	8/31/2017	GRP Pan, LLC
NMC977358	GWEN 64	8/31/2017	GRP Pan, LLC
NMC977359	GWEN 65	8/31/2017	GRP Pan, LLC
NMC984556	GWEN 19	8/31/2017	GRP Pan, LLC
NMC984557	GWEN 20	8/31/2017	GRP Pan, LLC
NMC984558	GWEN 21	8/31/2017	GRP Pan, LLC
NMC984559	GWEN 22	8/31/2017	GRP Pan, LLC
NMC984560	GWEN 23	8/31/2017	GRP Pan, LLC
NMC984561	GWEN 24	8/31/2017	GRP Pan, LLC
NMC984562	GWEN 25	8/31/2017	GRP Pan, LLC
NMC984563	GWEN 26	8/31/2017	GRP Pan, LLC
NMC984564	GWEN 27	8/31/2017	GRP Pan, LLC
NMC984565	GWEN 28	8/31/2017	GRP Pan, LLC
NMC984566	GWEN 29	8/31/2017	GRP Pan, LLC
NMC984567	GWEN 30	8/31/2017	GRP Pan, LLC
NMC984568	GWEN 31	8/31/2017	GRP Pan, LLC
NMC984569	GWEN 32	8/31/2017	GRP Pan, LLC
NMC984570	GWEN 33	8/31/2017	GRP Pan, LLC
NMC984571	GWEN 34	8/31/2017	GRP Pan, LLC
NMC984572	GWEN 35	8/31/2017	GRP Pan, LLC
NMC984573	GWEN 36	8/31/2017	GRP Pan, LLC
NMC984574	GWEN 37	8/31/2017	GRP Pan, LLC
NMC984575	GWEN 38	8/31/2017	GRP Pan, LLC
NMC984576	GWEN 39	8/31/2017	GRP Pan, LLC
NMC984577	GWEN 40	8/31/2017	GRP Pan, LLC
NMC984578	GWEN 41	8/31/2017	GRP Pan, LLC
NMC984579	GWEN 42	8/31/2017	GRP Pan, LLC
NMC984580	GWEN 43	8/31/2017	GRP Pan, LLC
NMC984581	GWEN 44	8/31/2017	GRP Pan, LLC
NMC984582	GWEN 45	8/31/2017	GRP Pan, LLC
NMC984583	GWEN 46	8/31/2017	GRP Pan, LLC
NMC984584	GWEN 47	8/31/2017	GRP Pan, LLC
NMC984585	GWEN 48	8/31/2017	GRP Pan, LLC

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NMC1031802	PR 1	8/31/2021	Nevada Royalty Corp.
NMC1031803	PR 2	8/31/2021	Nevada Royalty Corp.
NMC1031804	PR 3	8/31/2021	Nevada Royalty Corp.
NMC1031805	PR 4	8/31/2021	Nevada Royalty Corp.
NMC1031806	PR 5	8/31/2021	Nevada Royalty Corp.
NMC1031807	PR 6	8/31/2021	Nevada Royalty Corp.
NMC1031808	PR 7	8/31/2021	Nevada Royalty Corp.
NMC1031809	PR 8	8/31/2021	Nevada Royalty Corp.
NMC1031810	PR 9	8/31/2021	Nevada Royalty Corp.
NMC1057236	PC 1	8/31/2021	Nevada Royalty Corp.
NMC1057237	PC 2	8/31/2021	Nevada Royalty Corp.
NMC1057238	PC 3	8/31/2021	Nevada Royalty Corp.
NMC1057239	PC 4	8/31/2021	Nevada Royalty Corp.
NMC1057240	PC 5	8/31/2021	Nevada Royalty Corp.
NMC1057241	PC 6	8/31/2021	Nevada Royalty Corp.
NMC1057242	PC 7	8/31/2021	Nevada Royalty Corp.
NMC1057243	PC 8	8/31/2021	Nevada Royalty Corp.
NMC1057244	PC 9	8/31/2021	Nevada Royalty Corp.
NMC1057245	PC 10	8/31/2021	Nevada Royalty Corp.
NMC1057246	PC 11	8/31/2021	Nevada Royalty Corp.
NMC1057247	PC 12	8/31/2021	Nevada Royalty Corp.
NMC1057248	PC 13	8/31/2021	Nevada Royalty Corp.
NMC1057249	PC 14	8/31/2021	Nevada Royalty Corp.
NMC1057250	PC 15	8/31/2021	Nevada Royalty Corp.
NMC1057251	PC 16	8/31/2021	Nevada Royalty Corp.
NMC1057252	PC 17	8/31/2021	Nevada Royalty Corp.
NMC1057253	PC 18	8/31/2021	Nevada Royalty Corp.
NMC1057254	PC 20	8/31/2021	Nevada Royalty Corp.
NMC1102847	NC 125	8/31/2021	Nevada Royalty Corp.
NMC1102848	NC 134	8/31/2021	Nevada Royalty Corp.
NMC1102849	PAN 114	8/31/2021	Nevada Royalty Corp.
NMC1102850	PAN 121	8/31/2021	Nevada Royalty Corp.
NMC1102851	LAT 48	8/31/2021	Nevada Royalty Corp.
NMC205565	PAN #119	8/31/2021	Nevada Royalty Corp.
NMC37169	PAN # 37	8/31/2021	Nevada Royalty Corp.
NMC37170	PAN # 38	8/31/2021	Nevada Royalty Corp.
NMC37172	PAN # 63	8/31/2021	Nevada Royalty Corp.
NMC37173	PAN # 65	8/31/2021	Nevada Royalty Corp.
NMC37174	PAN # 67	8/31/2021	Nevada Royalty Corp.
NMC37175	PAN # 69	8/31/2021	Nevada Royalty Corp.
NMC427129	PE # 50	8/31/2021	Nevada Royalty Corp.
NMC427131	PE # 52	8/31/2021	Nevada Royalty Corp.
NMC427133	PE # 54	8/31/2021	Nevada Royalty Corp.

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NMC57946	PAN # 71	8/31/2021	Nevada Royalty Corp.
NMC57947	PAN # 72	8/31/2021	Nevada Royalty Corp.
NMC57948	PAN # 73	8/31/2021	Nevada Royalty Corp.
NMC57949	PAN # 74	8/31/2021	Nevada Royalty Corp.
NMC61102	PAN # 22	8/31/2021	Nevada Royalty Corp.
NMC61103	PAN # 23	8/31/2021	Nevada Royalty Corp.
NMC61104	PAN # 24	8/31/2021	Nevada Royalty Corp.
NMC61105	PAN # 25	8/31/2021	Nevada Royalty Corp.
NMC61106	PAN # 26	8/31/2021	Nevada Royalty Corp.
NMC61107	PAN # 27	8/31/2021	Nevada Royalty Corp.
NMC61108	PAN # 28	8/31/2021	Nevada Royalty Corp.
NMC61114	PAN # 34	8/31/2021	Nevada Royalty Corp.
NMC61115	PAN # 35	8/31/2021	Nevada Royalty Corp.
NMC61116	PAN # 36	8/31/2021	Nevada Royalty Corp.
NMC630283	PA 8A	8/31/2021	Nevada Royalty Corp.
NMC630284	PA 10	8/31/2021	Nevada Royalty Corp.
NMC630285	PA 12	8/31/2021	Nevada Royalty Corp.
NMC630286	PA 13	8/31/2021	Nevada Royalty Corp.
NMC630287	PA 14	8/31/2021	Nevada Royalty Corp.
NMC630288	PA 15	8/31/2021	Nevada Royalty Corp.
NMC630289	PA 16	8/31/2021	Nevada Royalty Corp.
NMC630290	PA 17	8/31/2021	Nevada Royalty Corp.
NMC630291	PA 18	8/31/2021	Nevada Royalty Corp.
NMC630323	PA 49A	8/31/2021	Nevada Royalty Corp.
NMC815131	LAT 9	8/31/2021	Nevada Royalty Corp.
NMC815132	LAT 10	8/31/2021	Nevada Royalty Corp.
NMC815133	LAT 11	8/31/2021	Nevada Royalty Corp.
NMC815134	LAT 12	8/31/2021	Nevada Royalty Corp.
NMC815135	LAT 13	8/31/2021	Nevada Royalty Corp.
NMC815136	LAT 14	8/31/2021	Nevada Royalty Corp.
NMC815137	LAT 15	8/31/2021	Nevada Royalty Corp.
NMC815138	LAT 16	8/31/2021	Nevada Royalty Corp.
NMC815139	LAT 17	8/31/2021	Nevada Royalty Corp.
NMC815140	LAT 18	8/31/2021	Nevada Royalty Corp.
NMC815141	LAT 19	8/31/2021	Nevada Royalty Corp.
NMC815142	LAT 20	8/31/2021	Nevada Royalty Corp.
NMC815143	LAT 21	8/31/2021	Nevada Royalty Corp.
NMC815144	LAT 22	8/31/2021	Nevada Royalty Corp.
NMC815145	LAT 23	8/31/2021	Nevada Royalty Corp.
NMC815146	LAT 24	8/31/2021	Nevada Royalty Corp.
NMC815147	LAT 25	8/31/2021	Nevada Royalty Corp.
NMC815148	LAT 26	8/31/2021	Nevada Royalty Corp.
NMC815149	LAT 27	8/31/2021	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC815150	LAT 28	8/31/2021	Nevada Royalty Corp.
NMC815151	LAT 29	8/31/2021	Nevada Royalty Corp.
NMC815152	LAT 30	8/31/2021	Nevada Royalty Corp.
NMC815153	LAT 31	8/31/2021	Nevada Royalty Corp.
NMC815154	LAT 32	8/31/2021	Nevada Royalty Corp.
NMC815155	LAT 33	8/31/2021	Nevada Royalty Corp.
NMC815156	LAT 34	8/31/2021	Nevada Royalty Corp.
NMC815157	LAT 35	8/31/2021	Nevada Royalty Corp.
NMC815158	LAT 36	8/31/2021	Nevada Royalty Corp.
NMC815159	LAT 37	8/31/2021	Nevada Royalty Corp.
NMC815160	LAT 38	8/31/2021	Nevada Royalty Corp.
NMC815161	LAT 40	8/31/2021	Nevada Royalty Corp.
NMC815162	LAT 42	8/31/2021	Nevada Royalty Corp.
NMC815163	LAT 44	8/31/2021	Nevada Royalty Corp.
NMC815164	LAT 46	8/31/2021	Nevada Royalty Corp.
NMC815166	LAT 49	8/31/2021	Nevada Royalty Corp.
NMC815167	LAT 50	8/31/2021	Nevada Royalty Corp.
NMC815168	LAT 51	8/31/2021	Nevada Royalty Corp.
NMC815169	LAT 52	8/31/2021	Nevada Royalty Corp.
NMC815170	LAT 53	8/31/2021	Nevada Royalty Corp.
NMC815171	LAT 54	8/31/2021	Nevada Royalty Corp.
NMC815172	LAT 55	8/31/2021	Nevada Royalty Corp.
NMC815173	LAT 56	8/31/2021	Nevada Royalty Corp.
NMC815174	LAT 57	8/31/2021	Nevada Royalty Corp.
NMC815175	LAT 58	8/31/2021	Nevada Royalty Corp.
NMC815176	LAT 59	8/31/2021	Nevada Royalty Corp.
NMC815177	LAT 60	8/31/2021	Nevada Royalty Corp.
NMC815178	LAT 47	8/31/2021	Nevada Royalty Corp.
NMC815179	LAT 61	8/31/2021	Nevada Royalty Corp.
NMC815180	LAT 62	8/31/2021	Nevada Royalty Corp.
NMC815181	LAT 63	8/31/2021	Nevada Royalty Corp.
NMC815182	LAT 64	8/31/2021	Nevada Royalty Corp.
NMC815183	LAT 65	8/31/2021	Nevada Royalty Corp.
NMC958546	NC 30	8/31/2021	Nevada Royalty Corp.
NMC958547	NC 31	8/31/2021	Nevada Royalty Corp.
NMC958548	NC 32	8/31/2021	Nevada Royalty Corp.
NMC958549	NC 33	8/31/2021	Nevada Royalty Corp.
NMC958550	NC 34	8/31/2021	Nevada Royalty Corp.
NMC958551	NC 35	8/31/2021	Nevada Royalty Corp.
NMC958552	NC 36	8/31/2021	Nevada Royalty Corp.
NMC958553	NC 37	8/31/2021	Nevada Royalty Corp.
NMC958554	NC 38	8/31/2021	Nevada Royalty Corp.
NMC958555	NC 39	8/31/2021	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC958556	NC 40	8/31/2021	Nevada Royalty Corp.
NMC958557	NC 41	8/31/2021	Nevada Royalty Corp.
NMC958558	NC 42	8/31/2021	Nevada Royalty Corp.
NMC958559	NC 43	8/31/2021	Nevada Royalty Corp.
NMC958560	NC 44	8/31/2021	Nevada Royalty Corp.
NMC958561	NC 45	8/31/2021	Nevada Royalty Corp.
NMC958562	NC 46	8/31/2021	Nevada Royalty Corp.
NMC958563	NC 47	8/31/2021	Nevada Royalty Corp.
NMC958564	NC 48	8/31/2021	Nevada Royalty Corp.
NMC958565	NC 49	8/31/2021	Nevada Royalty Corp.
NMC958566	NC 50	8/31/2021	Nevada Royalty Corp.
NMC958567	NC 51	8/31/2021	Nevada Royalty Corp.
NMC958568	NC 52	8/31/2021	Nevada Royalty Corp.
NMC958575	NC 59	8/31/2021	Nevada Royalty Corp.
NMC958576	NC 60	8/31/2021	Nevada Royalty Corp.
NMC958577	NC 61	8/31/2021	Nevada Royalty Corp.
NMC958578	NC 62	8/31/2021	Nevada Royalty Corp.
NMC958579	NC 63	8/31/2021	Nevada Royalty Corp.
NMC958580	NC 64	8/31/2021	Nevada Royalty Corp.
NMC958581	NC 65	8/31/2021	Nevada Royalty Corp.
NMC958582	NC 66	8/31/2021	Nevada Royalty Corp.
NMC958583	NC 67	8/31/2021	Nevada Royalty Corp.
NMC958584	NC 68	8/31/2021	Nevada Royalty Corp.
NMC958585	NC 69	8/31/2021	Nevada Royalty Corp.
NMC958586	NC 70	8/31/2021	Nevada Royalty Corp.
NMC958587	NC 71	8/31/2021	Nevada Royalty Corp.
NMC958588	NC 72	8/31/2021	Nevada Royalty Corp.
NMC958610	NC 94	8/31/2021	Nevada Royalty Corp.
NMC958611	NC 95	8/31/2021	Nevada Royalty Corp.
NMC958612	NC 96	8/31/2021	Nevada Royalty Corp.
NMC958613	NC 97	8/31/2021	Nevada Royalty Corp.
NMC958614	NC 98	8/31/2021	Nevada Royalty Corp.
NMC958615	NC 99	8/31/2021	Nevada Royalty Corp.
NMC958616	NC 100	8/31/2021	Nevada Royalty Corp.
NMC958617	NC 101	8/31/2021	Nevada Royalty Corp.
NMC958618	NC 102	8/31/2021	Nevada Royalty Corp.
NMC958619	NC 103	8/31/2021	Nevada Royalty Corp.
NMC958620	NC 104	8/31/2021	Nevada Royalty Corp.
NMC958621	NC 105	8/31/2021	Nevada Royalty Corp.
NMC958622	NC 106	8/31/2021	Nevada Royalty Corp.
NMC958623	NC 107	8/31/2021	Nevada Royalty Corp.
NMC958624	NC 108	8/31/2021	Nevada Royalty Corp.
NMC958625	NC 109	8/31/2021	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC958626	NC 110	8/31/2021	Nevada Royalty Corp.
NMC958627	NC 111	8/31/2021	Nevada Royalty Corp.
NMC958628	NC 112	8/31/2021	Nevada Royalty Corp.
NMC958629	NC 113	8/31/2021	Nevada Royalty Corp.
NMC958630	NC 114	8/31/2021	Nevada Royalty Corp.
NMC958631	NC 115	8/31/2021	Nevada Royalty Corp.
NMC958632	NC 116	8/31/2021	Nevada Royalty Corp.
NMC958633	NC 117	8/31/2021	Nevada Royalty Corp.
NMC958634	NC 118	8/31/2021	Nevada Royalty Corp.
NMC958635	NC 119	8/31/2021	Nevada Royalty Corp.
NMC958636	NC 120	8/31/2021	Nevada Royalty Corp.
NMC958637	NC 121	8/31/2021	Nevada Royalty Corp.
NMC958638	NC 124	8/31/2021	Nevada Royalty Corp.
NMC958640	NC 126	8/31/2021	Nevada Royalty Corp.
NMC958641	NC 127	8/31/2021	Nevada Royalty Corp.
NMC958642	NC 128	8/31/2021	Nevada Royalty Corp.
NMC958643	NC 129	8/31/2021	Nevada Royalty Corp.
NMC958644	NC 130	8/31/2021	Nevada Royalty Corp.
NMC958645	NC 133	8/31/2021	Nevada Royalty Corp.
NMC958647	NC 135	8/31/2021	Nevada Royalty Corp.
NMC958648	NC 136	8/31/2021	Nevada Royalty Corp.
NMC958649	NC 137	8/31/2021	Nevada Royalty Corp.
NMC958650	NC 138	8/31/2021	Nevada Royalty Corp.
NMC958651	NC 139	8/31/2021	Nevada Royalty Corp.
NMC958652	NC 142	8/31/2021	Nevada Royalty Corp.
NMC958653	NC 143	8/31/2021	Nevada Royalty Corp.
NMC958654	NC 144	8/31/2021	Nevada Royalty Corp.
NMC958655	NC 145	8/31/2021	Nevada Royalty Corp.
NMC958656	NC 146	8/31/2021	Nevada Royalty Corp.
NMC958657	NC 149	8/31/2021	Nevada Royalty Corp.
NMC958658	NC 150	8/31/2021	Nevada Royalty Corp.
NMC958659	NC 151	8/31/2021	Nevada Royalty Corp.
NMC958660	NC 152	8/31/2021	Nevada Royalty Corp.
NMC958661	NC 153	8/31/2021	Nevada Royalty Corp.
NMC958662	NC 154	8/31/2021	Nevada Royalty Corp.
NMC958663	NC 157	8/31/2021	Nevada Royalty Corp.
NMC958664	NC 158	8/31/2021	Nevada Royalty Corp.
NMC958665	NC 159	8/31/2021	Nevada Royalty Corp.
NMC958666	NC 160	8/31/2021	Nevada Royalty Corp.
NMC958667	NC 161	8/31/2021	Nevada Royalty Corp.
NMC958668	NC 162	8/31/2021	Nevada Royalty Corp.
NMC958669	NC 165	8/31/2021	Nevada Royalty Corp.
NMC958670	NC 166	8/31/2021	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC958671	NC 167	8/31/2021	Nevada Royalty Corp.
NMC958672	NC 168	8/31/2021	Nevada Royalty Corp.
NMC958673	NC 169	8/31/2021	Nevada Royalty Corp.
NMC958674	NC 170	8/31/2021	Nevada Royalty Corp.
NMC980710	CT 30	8/31/2021	Nevada Royalty Corp.
NMC980711	CT 31	8/31/2021	Nevada Royalty Corp.
NMC980712	CT 32	8/31/2021	Nevada Royalty Corp.
NMC980713	CT 33	8/31/2021	Nevada Royalty Corp.
NMC980714	CT 34	8/31/2021	Nevada Royalty Corp.
NMC980715	CT 35	8/31/2021	Nevada Royalty Corp.
NMC980716	CT 38	8/31/2021	Nevada Royalty Corp.
NMC980717	CT 39	8/31/2021	Nevada Royalty Corp.
NMC980718	CT 40	8/31/2021	Nevada Royalty Corp.
NMC980719	CT 41	8/31/2021	Nevada Royalty Corp.
NMC980720	CT 42	8/31/2021	Nevada Royalty Corp.
NMC980721	CT 43	8/31/2021	Nevada Royalty Corp.
NMC980722	CT 46	8/31/2021	Nevada Royalty Corp.
NMC980723	CT 47	8/31/2021	Nevada Royalty Corp.
NMC980724	CT 48	8/31/2021	Nevada Royalty Corp.
NMC980725	CT 49	8/31/2021	Nevada Royalty Corp.
NMC980726	CT 50	8/31/2021	Nevada Royalty Corp.
NMC980727	CT 51	8/31/2021	Nevada Royalty Corp.
NMC980728	PETER 1	8/31/2021	Nevada Royalty Corp.
NMC980729	PETER 2	8/31/2021	Nevada Royalty Corp.
NMC980730	PETER 3	8/31/2021	Nevada Royalty Corp.
NMC980731	PETER 4	8/31/2021	Nevada Royalty Corp.
NMC980732	PETER 5	8/31/2021	Nevada Royalty Corp.
NMC980733	PETER 6	8/31/2021	Nevada Royalty Corp.
NMC980734	PETER 7	8/31/2021	Nevada Royalty Corp.
NMC980735	PETER 8	8/31/2021	Nevada Royalty Corp.
NMC980736	PETER 9	8/31/2021	Nevada Royalty Corp.
NMC980737	PETER 10	8/31/2021	Nevada Royalty Corp.
NMC980738	PETER 11	8/31/2021	Nevada Royalty Corp.
NMC980739	PETER 12	8/31/2021	Nevada Royalty Corp.
NMC980740	PETER 13	8/31/2021	Nevada Royalty Corp.
NMC980741	PETER 14	8/31/2021	Nevada Royalty Corp.
NMC980742	PETER 15	8/31/2021	Nevada Royalty Corp.
NMC980743	PETER 16	8/31/2021	Nevada Royalty Corp.
NMC980744	PETER 17	8/31/2021	Nevada Royalty Corp.
NMC980745	PETER 18	8/31/2021	Nevada Royalty Corp.
NMC980746	PETER 19	8/31/2021	Nevada Royalty Corp.
NMC980747	PETER 20	8/31/2021	Nevada Royalty Corp.
NMC980748	PETER 21	8/31/2021	Nevada Royalty Corp.

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NMC980749	PETER 22	8/31/2021	Nevada Royalty Corp.
NMC980750	PETER 23	8/31/2021	Nevada Royalty Corp.
NMC980751	PETER 24	8/31/2021	Nevada Royalty Corp.
NMC980752	PETER 25	8/31/2021	Nevada Royalty Corp.
NMC980753	PETER 26	8/31/2021	Nevada Royalty Corp.
NMC980754	PETER 27	8/31/2021	Nevada Royalty Corp.
NMC980755	PETER 28	8/31/2021	Nevada Royalty Corp.
NMC980756	PETER 29	8/31/2021	Nevada Royalty Corp.
NMC980757	PETER 30	8/31/2021	Nevada Royalty Corp.
NMC980758	PETER 31	8/31/2021	Nevada Royalty Corp.
NMC980759	PETER 32	8/31/2021	Nevada Royalty Corp.
NMC980760	PETER 33	8/31/2021	Nevada Royalty Corp.
NMC980761	PETER 34	8/31/2021	Nevada Royalty Corp.
NMC980762	PETER 35	8/31/2021	Nevada Royalty Corp.
NMC980763	PETER 36	8/31/2021	Nevada Royalty Corp.
NMC980764	PETER 37	8/31/2021	Nevada Royalty Corp.
NMC980765	PETER 38	8/31/2021	Nevada Royalty Corp.
NMC980766	PETER 39	8/31/2021	Nevada Royalty Corp.
NMC980767	PETER 40	8/31/2021	Nevada Royalty Corp.
NMC980768	PETER 41	8/31/2021	Nevada Royalty Corp.
NMC980769	PETER 42	8/31/2021	Nevada Royalty Corp.
NMC980770	PETER 43	8/31/2021	Nevada Royalty Corp.
NMC980771	PETER 44	8/31/2021	Nevada Royalty Corp.
NMC980772	PETER 45	8/31/2021	Nevada Royalty Corp.
NMC980773	PETER 46	8/31/2021	Nevada Royalty Corp.
NMC980774	PETER 47	8/31/2021	Nevada Royalty Corp.
NMC980775	PETER 48	8/31/2021	Nevada Royalty Corp.
NMC980776	PETER 49	8/31/2021	Nevada Royalty Corp.
NMC980777	PETER 50	8/31/2021	Nevada Royalty Corp.
NMC980778	PETER 51	8/31/2021	Nevada Royalty Corp.
NMC980779	BSW 38	8/31/2021	Nevada Royalty Corp.
NMC980780	BSW 39	8/31/2021	Nevada Royalty Corp.
NMC980781	BSW 40	8/31/2021	Nevada Royalty Corp.
NMC980782	BSW 41	8/31/2021	Nevada Royalty Corp.
NMC980783	BSW 42	8/31/2021	Nevada Royalty Corp.
NMC980784	BSW 43	8/31/2021	Nevada Royalty Corp.
NMC980785	BSW 44	8/31/2021	Nevada Royalty Corp.
NMC980786	BSW 45	8/31/2021	Nevada Royalty Corp.
NMC980787	BSW 1	8/31/2021	Nevada Royalty Corp.
NMC980788	BSW 2	8/31/2021	Nevada Royalty Corp.
NMC980789	BSW 3	8/31/2021	Nevada Royalty Corp.
NMC980790	BSW 4	8/31/2021	Nevada Royalty Corp.
NMC980791	BSW 5	8/31/2021	Nevada Royalty Corp.

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NMC980792	BSW 6	8/31/2021	Nevada Royalty Corp.
NMC980793	BSW 7	8/31/2021	Nevada Royalty Corp.
NMC980794	BSW 8	8/31/2021	Nevada Royalty Corp.
NMC980795	BSW 9	8/31/2021	Nevada Royalty Corp.
NMC980796	BSW 10	8/31/2021	Nevada Royalty Corp.
NMC980797	BSW 11	8/31/2021	Nevada Royalty Corp.
NMC980798	BSW 12	8/31/2021	Nevada Royalty Corp.
NMC980799	BSW 13	8/31/2021	Nevada Royalty Corp.
NMC980800	BSW 14	8/31/2021	Nevada Royalty Corp.
NMC980801	BSW 15	8/31/2021	Nevada Royalty Corp.
NMC980802	BSW 16	8/31/2021	Nevada Royalty Corp.
NMC980803	BSW 17	8/31/2021	Nevada Royalty Corp.
NMC980804	BSW 18	8/31/2021	Nevada Royalty Corp.
NMC980805	BSW 19	8/31/2021	Nevada Royalty Corp.
NMC980806	BSW 20	8/31/2021	Nevada Royalty Corp.
NMC980807	BSW 21	8/31/2021	Nevada Royalty Corp.
NMC980808	BSW 22	8/31/2021	Nevada Royalty Corp.
NMC980809	BSW 23	8/31/2021	Nevada Royalty Corp.
NMC980810	BSW 24	8/31/2021	Nevada Royalty Corp.
NMC980811	BSW 25	8/31/2021	Nevada Royalty Corp.
NMC980812	BSW 26	8/31/2021	Nevada Royalty Corp.
NMC980813	BSW 27	8/31/2021	Nevada Royalty Corp.
NMC980814	BSW 28	8/31/2021	Nevada Royalty Corp.
NMC980815	BSW 29	8/31/2021	Nevada Royalty Corp.
NMC980816	BSW 30	8/31/2021	Nevada Royalty Corp.
NMC980817	BSW 31	8/31/2021	Nevada Royalty Corp.
NMC980818	BSW 32	8/31/2021	Nevada Royalty Corp.
NMC980819	BSW 33	8/31/2021	Nevada Royalty Corp.
NMC980820	BSW 34	8/31/2021	Nevada Royalty Corp.
NMC980821	BSW 35	8/31/2021	Nevada Royalty Corp.
NMC980822	BSW 36	8/31/2021	Nevada Royalty Corp.
NMC980823	BSW 37	8/31/2021	Nevada Royalty Corp.
NMC980824	BSW 46	8/31/2021	Nevada Royalty Corp.
NMC980825	BSW 47	8/31/2021	Nevada Royalty Corp.
NMC980826	PA 19	8/31/2021	Nevada Royalty Corp.
NMC980827	PA 21	8/31/2021	Nevada Royalty Corp.
NMC980828	PA 44	8/31/2021	Nevada Royalty Corp.
NMC980829	PA 46	8/31/2021	Nevada Royalty Corp.
NMC980830	PA 48	8/31/2021	Nevada Royalty Corp.
NMC980831	PE 56	8/31/2021	Nevada Royalty Corp.
NMC980832	NP 1	8/31/2021	Nevada Royalty Corp.
NMC980833	NP 2	8/31/2021	Nevada Royalty Corp.
NMC980834	NP 3	8/31/2021	Nevada Royalty Corp.

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NMC980835	NP 4	8/31/2021	Nevada Royalty Corp.
NMC980836	NP 5	8/31/2021	Nevada Royalty Corp.
NMC980837	NP 6	8/31/2021	Nevada Royalty Corp.
NMC980838	NP 7	8/31/2021	Nevada Royalty Corp.
NMC980839	NP 8	8/31/2021	Nevada Royalty Corp.
NMC980840	NP 9	8/31/2021	Nevada Royalty Corp.
NMC980841	NP 10	8/31/2021	Nevada Royalty Corp.
NMC980842	NP 11	8/31/2021	Nevada Royalty Corp.
NMC980843	NP 12	8/31/2021	Nevada Royalty Corp.
NMC980844	NP 13	8/31/2021	Nevada Royalty Corp.
NMC980845	NP 14	8/31/2021	Nevada Royalty Corp.
NMC980846	NP 15	8/31/2021	Nevada Royalty Corp.
NMC980847	NP 16	8/31/2021	Nevada Royalty Corp.
NMC980848	NP 17	8/31/2021	Nevada Royalty Corp.
NMC980849	NP 18	8/31/2021	Nevada Royalty Corp.
NMC980850	NP 19	8/31/2021	Nevada Royalty Corp.
NMC980851	NP 20	8/31/2021	Nevada Royalty Corp.
NMC980852	NP 21	8/31/2021	Nevada Royalty Corp.
NMC980853	NP 22	8/31/2021	Nevada Royalty Corp.
NMC980854	NP 23	8/31/2021	Nevada Royalty Corp.
NMC980855	NP 24	8/31/2021	Nevada Royalty Corp.
NMC980856	NP 25	8/31/2021	Nevada Royalty Corp.
NMC980857	NP 26	8/31/2021	Nevada Royalty Corp.
NMC980858	NP 27	8/31/2021	Nevada Royalty Corp.
NMC980859	NP 28	8/31/2021	Nevada Royalty Corp.
NMC980860	NP 29	8/31/2021	Nevada Royalty Corp.
NMC980861	NP 30	8/31/2021	Nevada Royalty Corp.
NMC980862	NP 31	8/31/2021	Nevada Royalty Corp.
NMC980863	NP 32	8/31/2021	Nevada Royalty Corp.
NMC980864	NP 33	8/31/2021	Nevada Royalty Corp.
NMC980865	NP 34	8/31/2021	Nevada Royalty Corp.
NMC980866	NP 35	8/31/2021	Nevada Royalty Corp.
NMC980867	NP 36	8/31/2021	Nevada Royalty Corp.
NMC980868	NP 37	8/31/2021	Nevada Royalty Corp.
NMC980869	NP 38	8/31/2021	Nevada Royalty Corp.
NMC980870	NP 39	8/31/2021	Nevada Royalty Corp.
NMC980871	NP 40	8/31/2021	Nevada Royalty Corp.
NMC980872	NP 41	8/31/2021	Nevada Royalty Corp.
NMC980873	ET 1	8/31/2021	Nevada Royalty Corp.
NMC980874	ET 2	8/31/2021	Nevada Royalty Corp.
NMC980875	ET 3	8/31/2021	Nevada Royalty Corp.
NMC980876	ET 4	8/31/2021	Nevada Royalty Corp.
NMC980877	ET 5	8/31/2021	Nevada Royalty Corp.

BLM Serial #	Claim Name	Expiration Date	Owner
NMC980878	ET 6	8/31/2021	Nevada Royalty Corp.
NMC980879	ET 7	8/31/2021	Nevada Royalty Corp.
NMC980880	ET 8	8/31/2021	Nevada Royalty Corp.
NMC980881	ET 9	8/31/2021	Nevada Royalty Corp.
NMC980882	ET 10	8/31/2021	Nevada Royalty Corp.
NMC980883	ET 11	8/31/2021	Nevada Royalty Corp.
NMC980884	ET 12	8/31/2021	Nevada Royalty Corp.
NMC980885	ET 13	8/31/2021	Nevada Royalty Corp.
NMC980886	ET 14	8/31/2021	Nevada Royalty Corp.
NMC980887	ET 15	8/31/2021	Nevada Royalty Corp.
NMC980888	ET 16	8/31/2021	Nevada Royalty Corp.
NMC980889	ET 17	8/31/2021	Nevada Royalty Corp.
NMC980890	ET 18	8/31/2021	Nevada Royalty Corp.
NMC980891	ET 19	8/31/2021	Nevada Royalty Corp.
NMC980892	ET 20	8/31/2021	Nevada Royalty Corp.
NMC980893	ET 21	8/31/2021	Nevada Royalty Corp.
NMC980894	ET 22	8/31/2021	Nevada Royalty Corp.
NMC980895	ET 23	8/31/2021	Nevada Royalty Corp.
NMC980896	ET 24	8/31/2021	Nevada Royalty Corp.
NMC980897	ET 25	8/31/2021	Nevada Royalty Corp.
NMC980898	ET 26	8/31/2021	Nevada Royalty Corp.
NMC980899	ET 27	8/31/2021	Nevada Royalty Corp.
NMC980900	ET 28	8/31/2021	Nevada Royalty Corp.
NMC980901	ET 29	8/31/2021	Nevada Royalty Corp.
NMC980902	ET 30	8/31/2021	Nevada Royalty Corp.
NMC980903	ET 31	8/31/2021	Nevada Royalty Corp.
NMC980904	ET 32	8/31/2021	Nevada Royalty Corp.
NMC980905	ET 33	8/31/2021	Nevada Royalty Corp.
NMC980906	ET 34	8/31/2021	Nevada Royalty Corp.
NMC980907	ET 35	8/31/2021	Nevada Royalty Corp.
NMC980908	ET 36	8/31/2021	Nevada Royalty Corp.
NMC980909	ET 37	8/31/2021	Nevada Royalty Corp.
NMC980910	ET 38	8/31/2021	Nevada Royalty Corp.
NMC980911	ET 39	8/31/2021	Nevada Royalty Corp.
NMC980912	ET 40	8/31/2021	Nevada Royalty Corp.
NMC980913	ET 41	8/31/2021	Nevada Royalty Corp.
NMC984635	GWEN 17	8/31/2021	Nevada Royalty Corp.
NMC984636	GWEN 18	8/31/2021	Nevada Royalty Corp.
NMC984637	PAN 111	8/31/2021	Nevada Royalty Corp.
NMC984638	PAN 112	8/31/2021	Nevada Royalty Corp.
NMC984640	PAN 120	8/31/2021	Nevada Royalty Corp.
NMC984642	PAN 122	8/31/2021	Nevada Royalty Corp.
NMC1057292	PC 19	8/31/2021	GRP Pan, LLC

BLM Serial #	Claim Name	Expiration Date	Owner
NMC1057293	PC 21	8/31/2021	GRP Pan, LLC
NMC1057294	PC 22	8/31/2021	GRP Pan, LLC
NMC1057295	PC 23	8/31/2021	GRP Pan, LLC
NMC1057296	PC 24	8/31/2021	GRP Pan, LLC
NMC1057297	PC 25	8/31/2021	GRP Pan, LLC
NMC1057298	PC 26	8/31/2021	GRP Pan, LLC
NMC1057299	PC 27	8/31/2021	GRP Pan, LLC
NMC1057300	PC 28	8/31/2021	GRP Pan, LLC
NMC1057301	PC 29	8/31/2021	GRP Pan, LLC
NMC1148240	SP 1	8/31/2021	GRP Pan, LLC
NMC1148241	SP 2	8/31/2021	GRP Pan, LLC
NMC1148242	SP 3	8/31/2021	GRP Pan, LLC
NMC1148243	SP 4	8/31/2021	GRP Pan, LLC
NMC1148244	SP 5	8/31/2021	GRP Pan, LLC
NMC1148245	SP 6	8/31/2021	GRP Pan, LLC
NMC1148246	SP 7	8/31/2021	GRP Pan, LLC
NMC1148247	SP 8	8/31/2021	GRP Pan, LLC
NMC1148248	SP 9	8/31/2021	GRP Pan, LLC
NMC1148249	SP 10	8/31/2021	GRP Pan, LLC
NMC1148250	SP 11	8/31/2021	GRP Pan, LLC
NMC1148251	SP 12	8/31/2021	GRP Pan, LLC
NMC1148252	SP 13	8/31/2021	GRP Pan, LLC
NMC1148253	SP 14	8/31/2021	GRP Pan, LLC
NMC1148254	SP 15	8/31/2021	GRP Pan, LLC
NMC1148255	SP 16	8/31/2021	GRP Pan, LLC
NMC1148256	SP 17	8/31/2021	GRP Pan, LLC
NMC1148257	SP 18	8/31/2021	GRP Pan, LLC
NMC1148258	SP 19	8/31/2021	GRP Pan, LLC
NMC1148259	SP 20	8/31/2021	GRP Pan, LLC
NMC1148260	SP 21	8/31/2021	GRP Pan, LLC
NMC1148261	SP 22	8/31/2021	GRP Pan, LLC
NMC1148262	SP 23	8/31/2021	GRP Pan, LLC
NMC1148263	SP 24	8/31/2021	GRP Pan, LLC
NMC1148264	SP 25	8/31/2021	GRP Pan, LLC
NMC1148265	SP 26	8/31/2021	GRP Pan, LLC
NMC958517	NC 1	8/31/2021	GRP Pan, LLC
NMC958518	NC 2	8/31/2021	GRP Pan, LLC
NMC958519	NC 3	8/31/2021	GRP Pan, LLC
NMC958520	NC 4	8/31/2021	GRP Pan, LLC
NMC958521	NC 5	8/31/2021	GRP Pan, LLC
NMC958522	NC 6	8/31/2021	GRP Pan, LLC
NMC958523	NC 7	8/31/2021	GRP Pan, LLC
NMC958524	NC 8	8/31/2021	GRP Pan, LLC

BLM Serial #	Claim Name	Expiration Date	Owner
NMC958525	NC 9	8/31/2021	GRP Pan, LLC
NMC958526	NC 10	8/31/2021	GRP Pan, LLC
NMC958527	NC 11	8/31/2021	GRP Pan, LLC
NMC958528	NC 12	8/31/2021	GRP Pan, LLC
NMC958529	NC 13	8/31/2021	GRP Pan, LLC
NMC958530	NC 14	8/31/2021	GRP Pan, LLC
NMC958531	NC 15	8/31/2021	GRP Pan, LLC
NMC958532	NC 16	8/31/2021	GRP Pan, LLC
NMC958533	NC 17	8/31/2021	GRP Pan, LLC
NMC958534	NC 18	8/31/2021	GRP Pan, LLC
NMC958535	NC 19	8/31/2021	GRP Pan, LLC
NMC958536	NC 20	8/31/2021	GRP Pan, LLC
NMC958537	NC 21	8/31/2021	GRP Pan, LLC
NMC958538	NC 22	8/31/2021	GRP Pan, LLC
NMC958539	NC 23	8/31/2021	GRP Pan, LLC
NMC958540	NC 24	8/31/2021	GRP Pan, LLC
NMC958541	NC 25	8/31/2021	GRP Pan, LLC
NMC958542	NC 26	8/31/2021	GRP Pan, LLC
NMC958543	NC 27	8/31/2021	GRP Pan, LLC
NMC958544	NC 28	8/31/2021	GRP Pan, LLC
NMC958545	NC 29	8/31/2021	GRP Pan, LLC
NMC958569	NC 53	8/31/2021	GRP Pan, LLC
NMC958570	NC 54	8/31/2021	GRP Pan, LLC
NMC958571	NC 55	8/31/2021	GRP Pan, LLC
NMC958572	NC 56	8/31/2021	GRP Pan, LLC
NMC958573	NC 57	8/31/2021	GRP Pan, LLC
NMC958574	NC 58	8/31/2021	GRP Pan, LLC
NMC958589	NC 73	8/31/2021	GRP Pan, LLC
NMC958590	NC 74	8/31/2021	GRP Pan, LLC
NMC958591	NC 75	8/31/2021	GRP Pan, LLC
NMC958592	NC 76	8/31/2021	GRP Pan, LLC
NMC958593	NC 77	8/31/2021	GRP Pan, LLC
NMC958594	NC 78	8/31/2021	GRP Pan, LLC
NMC958595	NC 79	8/31/2021	GRP Pan, LLC
NMC958596	NC 80	8/31/2021	GRP Pan, LLC
NMC958597	NC 81	8/31/2021	GRP Pan, LLC
NMC958598	NC 82	8/31/2021	GRP Pan, LLC
NMC958599	NC 83	8/31/2021	GRP Pan, LLC
NMC958600	NC 84	8/31/2021	GRP Pan, LLC
NMC958601	NC 85	8/31/2021	GRP Pan, LLC
NMC958602	NC 86	8/31/2021	GRP Pan, LLC
NMC958603	NC 87	8/31/2021	GRP Pan, LLC
NMC958604	NC 88	8/31/2021	GRP Pan, LLC

BLM Serial #	Claim Name	Expiration Date	Owner
NMC958605	NC 89	8/31/2021	GRP Pan, LLC
NMC958606	NC 90	8/31/2021	GRP Pan, LLC
NMC958607	NC 91	8/31/2021	GRP Pan, LLC
NMC958608	NC 92	8/31/2021	GRP Pan, LLC
NMC958609	NC 93	8/31/2021	GRP Pan, LLC
NMC965337	GWEN 1	8/31/2021	GRP Pan, LLC
NMC965338	GWEN 2	8/31/2021	GRP Pan, LLC
NMC965339	GWEN 3	8/31/2021	GRP Pan, LLC
NMC965340	GWEN 4	8/31/2021	GRP Pan, LLC
NMC965341	GWEN 5	8/31/2021	GRP Pan, LLC
NMC965342	GWEN 6	8/31/2021	GRP Pan, LLC
NMC965343	GWEN 7	8/31/2021	GRP Pan, LLC
NMC965344	GWEN 8	8/31/2021	GRP Pan, LLC
NMC973537	REE 82	8/31/2021	GRP Pan, LLC
NMC977346	GWEN 50	8/31/2021	GRP Pan, LLC
NMC977347	GWEN 51	8/31/2021	GRP Pan, LLC
NMC977350	GWEN 54	8/31/2021	GRP Pan, LLC
NMC977353	GWEN 59	8/31/2021	GRP Pan, LLC
NMC977354	GWEN 60	8/31/2021	GRP Pan, LLC
NMC977355	GWEN 61	8/31/2021	GRP Pan, LLC
NMC984556	GWEN 19	8/31/2021	GRP Pan, LLC
NMC984557	GWEN 20	8/31/2021	GRP Pan, LLC
NMC984558	GWEN 21	8/31/2021	GRP Pan, LLC
NMC984559	GWEN 22	8/31/2021	GRP Pan, LLC
NMC984560	GWEN 23	8/31/2021	GRP Pan, LLC
NMC984561	GWEN 24	8/31/2021	GRP Pan, LLC
NMC984562	GWEN 25	8/31/2021	GRP Pan, LLC
NMC984563	GWEN 26	8/31/2021	GRP Pan, LLC
NMC984564	GWEN 27	8/31/2021	GRP Pan, LLC
NMC984565	GWEN 28	8/31/2021	GRP Pan, LLC
NMC984566	GWEN 29	8/31/2021	GRP Pan, LLC
NMC984567	GWEN 30	8/31/2021	GRP Pan, LLC
NMC984568	GWEN 31	8/31/2021	GRP Pan, LLC
NMC984569	GWEN 32	8/31/2021	GRP Pan, LLC
NMC984570	GWEN 33	8/31/2021	GRP Pan, LLC
NMC984571	GWEN 34	8/31/2021	GRP Pan, LLC
NMC984572	GWEN 35	8/31/2021	GRP Pan, LLC
NMC984573	GWEN 36	8/31/2021	GRP Pan, LLC
NMC984574	GWEN 37	8/31/2021	GRP Pan, LLC
NMC984575	GWEN 38	8/31/2021	GRP Pan, LLC
NMC984576	GWEN 39	8/31/2021	GRP Pan, LLC
NMC984577	GWEN 40	8/31/2021	GRP Pan, LLC
NMC984578	GWEN 41	8/31/2021	GRP Pan, LLC

BLM Serial #	Claim Name	Expiration Date	Owner
NMC984579	GWEN 42	8/31/2021	GRP Pan, LLC
NMC984580	GWEN 43	8/31/2021	GRP Pan, LLC
NMC984581	GWEN 44	8/31/2021	GRP Pan, LLC
NMC984582	GWEN 45	8/31/2021	GRP Pan, LLC

Appendix C Nevada Department of Transportation Right-Of-Way Permit

725-1

Fee $500 00/100	Permit No. 20657
Milepost WP-8.00 / US-50	District 3
District No.: 33-1-12	
Applicant: Midway Gold	
Type of Work: Type-5 Approach	
FOR DEPARTMENT USE ONLY	

REVOCABLE APPLICATION AND PERMIT FOR OCCUPANCY OF
NEVADA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY
(Under the provisions of NRS 408.423, 408.210 and NAC 408)

1. Location where excavation, construction, installation and/or occupancy is proposed

US-50 — Local name of highway

STA. 428+87, MP. WP-8.00 — Street address or nearest cross street

2. Describe in detail the type and scope of work; capacity or size of facility; stages and time frame for development; scheduled dates for start and completion. Attach 4 sets of detailed plans or drawings.

Construct a Type-V approach along US Highway 50 at STA. 428+87. The new approach is needed for access to Midway Gold's new exploration road. The roadway will be constructed shortly after approval by the BLM. It is anticipated that construction will begin early in 2012 pending upon BLM approval, and be completed early in 2013. We will notify NDOT of BLM's approval so that a more accurate construction start date can be set.

3. PERMITTEE hereby acknowledges that he has read and received a copy of the specific Terms and Conditions Relating to Right-of-Way Occupancy Permits issued by the State of Nevada Department of Transportation, and accepts said terms and conditions and any additional terms and conditions stated in this permit.

4. **SPECIFIC TERMS AND CONDITIONS APPURTENANT TO THIS PERMIT ARE LISTED ON PAGE 2.**

5. THE PERMIT SHALL BE SIGNED AND RETURNED TO THE DISTRICT OFFICE.

Midway Gold Company Name of PERMITTEE (Type or Print)	[signature] Signature of PERMITTEE
705 Avenue K Address	VP of New Ops — 775-530-4314 Title — Phone No.
Ely, Nevada 89301 City, State, Zip	December 20, 2011 Date of Application
(775) 289-2851 Phone No. — (775) 289-2490 Fax No.	Permittee's I.D. No. or Parcel No.

NDOT
035 001
Rev. 10/03