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Mining Industry Consultants

**NI 43-101  
TECHNICAL REPORT**

**Salave Gold Project  
Mineral Resource  
Update for Black Dragon  
Gold Corp.**

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## Executive Summary

Black Dragon Gold Corp. (BDG) commissioned CSA Global Pty Ltd (CSA Global) to prepare a Mineral Resource estimate (MRE) for the Salave gold deposit, located on the Iberian Peninsula in northern Spain.

This report has been prepared in compliance with the disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 (NI 43-101), Companion Policy 43-101CP, and Form 43-1010F, as well as with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards – For Mineral Resources and Reserves, Definitions and Guidelines" ("CIM Standards") adopted by the CIM Council on 10 May 2014.

The property includes five Mining Concessions covering a total area of 662 hectares (ha) with centre coordinates at 668,500 E and 4,825,900 N (UTM-29, ERTS 89) and an Investigation Permit (currently under renewal) covering 2,765 ha for a total project area of 3,427 ha.

BDG owns 100% of the Salave gold deposit through its wholly owned Spanish subsidiary, Exploraciones Mineras del Cantábrico SL (EMC). The BDG tenure includes five Mining Concessions and associated extensions covering 662 ha and an Investigation Permit covering another 2,765 ha.

No mining is currently occurring at the Salave deposit. The only known past production of gold from the Salave Project dates from Roman times.

The Salave gold deposit is primarily hosted by the Salave granodiorite. Mapping and drilling indicate an elongate shape, interpreted as a large dyke (Hutchison, 1983; Nieto, 2004). The granodiorite has a west-northwest trend and is interpreted to cover an area approximately 2 km x 500 m.

Most of the gold mineralisation has been delineated within an area 400 m wide, 500 m long and 350 m deep. Gold mineralisation occurs in a series of stacked, north to northwest trending, shallowly southwest dipping irregular lenses related to faults and fracture zones that are parallel to the contact of the intrusive and metasedimentary rocks.

Mineralisation at Salave is related to hydrothermal alteration of the host granodiorite. The highest gold grades are associated with intense albite-sericite alteration with fine-grained arsenopyrite, commonly disseminated as fine needles, pyrite and stibnite.

Gold mineralisation in the deposit area was discovered and explored by various companies from 1967. BDG completed a seven-hole confirmation drilling program in 2018 and these holes were included in the database used for the MRE.

A total of 371 historical drillholes for 64,925 m and two recent holes for 619 m were used to prepare the Salave MRE. A total number of 260 assayed drillholes intersect the interpreted mineralisation zone. The deposit was sampled using drillholes at a nominal 10 m x 10 m and 20 m x 20 m spacing on 20 m southwest-northeast oriented sections, extending out to 40 m x 40 m on the peripheries. Most holes were close to vertical, with some dipping 55–65° towards 110–125° or 280–290°.

Density measurements were taken from 75 holes (396 samples) and interpolated into each alteration domain of the block model. Two alteration domains ("CHL" – Chloritisation, and "SER" – Sericitisation) did not have sufficient number of samples and were assigned an average density value of 2.67 t/m<sup>3</sup>.

The MRE has been reported and classified as Measured, Indicated and Inferred in accordance with CIM Standards and is therefore suitable for public release. The classification level is based upon an assessment of geological understanding of the deposit, geological and grade continuity, drillhole spacing, quality control results, search and interpolation parameters, and analysis of available density information. The deposit appears to be of sufficient grade, quantity and coherence to have reasonable prospects for eventual economic extraction using underground methods.

Table 1: Salave MRE by CIM classification, 31 October 2018

Resource category	Tonnes (Mt)	Au grade (g/t)	Au contained metal (koz)
Measured	1.0	5.6	190
Indicated	7.2	4.4	1,020
<b>Measured + Indicated</b>	<b>8.2</b>	<b>4.6</b>	<b>1,210</b>
Inferred	3.1	3.5	350

Notes:

- Classification of the MRE was completed based on the guidelines presented by Canadian Institute for Mining (CIM, May 2014), adopted for Technical Reports which adhere to the regulations defined in Canadian NI 43-101.
- A cut-off grade of 2 g/t Au has been applied when reporting the Mineral Resource.
- All density values were interpolated, except CHL and SER domains where a single density value of 2.67 t/m<sup>3</sup> was used.
- Rows and columns may not add up exactly due to rounding.
- Mineral Resources that are not Mineral Reserves do not have economic viability.
- The quantity and grade of the Inferred Resources reported in this estimation are conceptual in nature and there has been insufficient exploration to define these Inferred resources as an Indicated and Measured Resource. It is uncertain if further exploration will result in upgrading them to an Indicated or Measured category, although it is reasonably expected that the majority of the Inferred Resources could be upgraded to Indicated Mineral Resources with further exploration.

The resource cut-off grade of 2.0 g/t Au was chosen to capture mineralisation that is potentially amenable to underground mining, sulphide concentration, and gold recovery using off-site processing. This cut-off grade was selected based on a gold price of US\$1,300/ounce, a gold recovery of 92%, a mining cost of US\$50/tonne, a processing cost of US\$18/tonne, and a general and administration (G&A) cost of US\$6/tonne. The reported resources occur in bodies of sufficient size and continuity to meet the requirement of having reasonable prospects for eventual economic extraction. Due to the necessity to maintain a surficial crown pillar in a potential underground operation, all material from the present surface to a depth of 40 m is not included in the Salave Resources.

Mineralisation wireframes for the zone were defined primarily by gold grades using a nominal cut-off grade of 0.47 g/t Au.

A block model constrained by the interpreted mineralised envelopes was constructed. A parent cell size of 4 m(E) x 4 m(N) x 4.5 m(RL) was adopted with standard sub-celling to 1 m(E) x 1 m(N) x 0.9 m(RL) to maintain the resolution of the mineralisation and alteration domains. Samples composited to 1.5 m length were used to interpolate gold grades into the block model using Ordinary Kriging interpolation techniques. The block model was domained using alteration codes which were grouped into nine main types. The alteration types were interpolated into the model using an indicator approach and Ordinary Kriging algorithm. Each alteration domain was estimated separately using corresponding grade composites. Block grades were validated both visually and statistically and all modelling was completed using Micromine software.

A CSA Global representative visited the deposit site in February 2018 and a review of quality assurance and quality control (QAQC) results in the historical reports was completed. Following this work, the Qualified Person formed the opinion that the data is suitable for preparing an MRE suitable for public reporting.

Mineral Resources have been reported above a cut-off grade of 2 g/t Au, which was considered suitable given the Mineral Resource is likely to be exploited by underground mining methods. The Mineral Resource is considered to have reasonable prospects for eventual economic extraction.

CSA Global recommends the following actions to support the ongoing exploration and evaluation effort at the Salave deposit:

- Current QAQC procedures should be maintained to ensure high-quality data is available for subsequent MREs.



- 
- Geotechnical and hydrogeological drilling and analyses should be completed to support geotechnical assessment and appraisal of mining parameters and costs.
  - A Scoping Study should be completed for the deposit, including testing the sensitivity of the model to the main input economic parameters, such as metallurgical recoveries, metal prices, mining costs and processing costs.
  - The vertical structures should be reviewed to determine if they are potentially feeder zones which could be modelled accordingly. Given most of historical drilling is close to vertical, the potential for high grade vertical structures needs to be completed in areas not adequately covered by angled drillholes.
  - Further physical property testwork and litho-geochemical analysis should be completed to fully understand the properties of the mineralisation to assist with further exploration or model updates.

More detailed recommendations are provided in the body of the report.



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# 1 Introduction

## 1.1 Terms of Reference

BDG commissioned CSA Global to prepare a NI 43-101 report based on the MRE for the Salave gold deposit, located on the Iberian Peninsula in northern Spain.

The deliverables under the scope of work included:

- A Mineral Resource report compiled in accordance with Canadian NI 43-101 and CIM (10 May 2014) guidelines
- Mineral Resource block model for the deposit and associated key data files.

This Report is effective as of 31 October 2018.

## 1.2 Sources of Information

CSA Global has completed the scope of work largely based on information provided by BDG. CSA Global has supplemented this information where necessary with other publicly available information.

CSA Global was provided with the information listed in Table 2 to complete the scope of work.

*Table 2: Sources of information*

Data file	Description
topo-surface1.dxf	Topography surface
dh_assay.csv, dh_alteration.csv, dh_bulkdens.csv, dh_collar.csv, dh_geotech.csv, dh_lithology.csv, dh_structure.csv, dh_strzone.csv, dh_survey.csv	Combined historical and recent drillhole database, including collars, assays, surveys, density, lithology, geotechnical, structural and alteration logging and assaying data

A CSA Global representative, Dr Belinda van Lente visited the deposit site in February 2018 followed by review of QAQC results in the historical reports. Following this work, the Qualified Person formed the opinion that the data is suitable for preparing an MRE suitable for public reporting.

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## 2 Reliance on Other Experts

CSA Global has completed the scope of work largely based on information provided by BDG. CSA Global has supplemented this information where necessary with other publicly available information.

For the purpose of this Report, CSA Global has relied on ownership information provided by BDG. To the extent possible CSA Global has reviewed the reliability of the data but has not researched property title or mineral rights for the Mine and expresses no opinion as to the ownership status of the property.

CSA Global was supplied the results of previous work completed by BDG in the course of exploration and evaluation of the project, which included geological reports, the results of drilling in a digital database, and the results of previous MREs.

The primary dataset used to inform the Mineral Resource is the digital drillhole database provided by BDG at commencement of CSA Global's engagement. CSA Global has reviewed the data, completed relevant QAQC checks and is satisfied the data is adequate for estimation of Mineral Resources.

These data have been used by CSA Global in the course of our work to estimate the Mineral Resources at the Salave Project. Where possible, CSA Global has verified the work of others.

### 3 Property Description and Location

#### 3.1 Location

The Salave gold deposit is situated on the northern coast of the Iberian Peninsula, in the Asturias region of Spain (Figure 1). The nearest village is Tapia de Casariego (population 2,000) about 2 km west of the Salave Gold Project (Figure 2). The nearest city is Oviedo (population 226,000) about 140 km east of the project (2012 population, Instituto Nacional de Estadística).

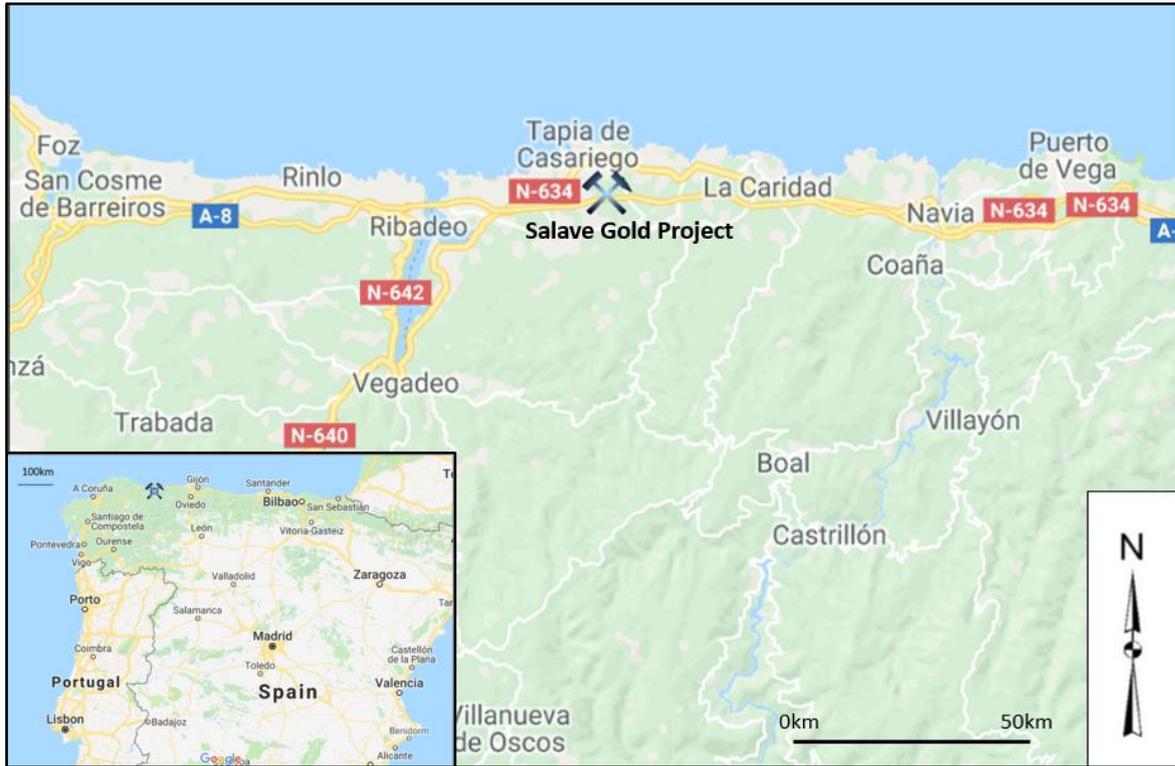


Figure 1: Location of the Salave Gold Project



Figure 2: Town of Tapia de Casariego (Turismo De Asturias)

### 3.2 Land Tenure and Permits

BDG owns 100% of the Salave gold deposit through its wholly owned Spanish subsidiary, EMC. The BDG tenure includes five Mining Concessions and associated extensions covering 662 ha and an Investigation Permit covering another 2,765 ha (Table 3) and (Figure 3).

An Investigation Permit gives the holder the right to carry out, within the indicated perimeter and for a specific term (a maximum of three years), studies and work aimed at demonstrating and defining resources and the right, once defined, to be granted a permit for mining them. The term of an Investigation Permit may be renewed by the Regional Ministry of Economy and Employment for three years and, exceptionally, for successive periods. The BDG Investigation Permit expired in February 2017 and is currently under application for extension and is pending a response from the respective authority.

A Mining Concession entitles its holder to develop resources located within the concession area, except those already reserved by the State.

Under Spanish regulations, ownership of the land is independent of ownership of the mineral rights. CSA Global to the extent known, is not aware of all environmental liabilities to which the property is subject.

To the extent known, CSA Global is not aware of the permits that must be acquired to conduct the work proposed for the property, and if the permits have been obtained; and

To the extent known, CSA Global is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform work on the property.

Table 3: BDG Concessions – Salave Gold Project, Spain

Concession/Investigation Permit name	Registration no.	Area (ha)	Date granted	Expiration date
<b>Concessions</b>				
Dos Amigos	24.371	41.99	10 Sep 1941	10 Oct 2045
Salave	25.380	67.98	10 Apr 1945	10 Oct 2045
Figueras	29.500	212.02	25 Jan 1977	25 Jan 2037
Demasia		92.55		
Ampliación de Figueras	29.969	10.99	9 Nov 1988	9 Nov 2018
Demasia		68.85		
Segunda Ampliación de Figueras	29.820	100.04	16 Sep 1981	16 Sep 2041
Demasia		67.55		
<b>TOTAL</b>		<b>661.97</b>		
<b>Investigation Permit</b>				
IP Salave	30.812	2,765	18 Feb 2014	18 Feb 2017*

\* Currently under application as at the effective date of this report

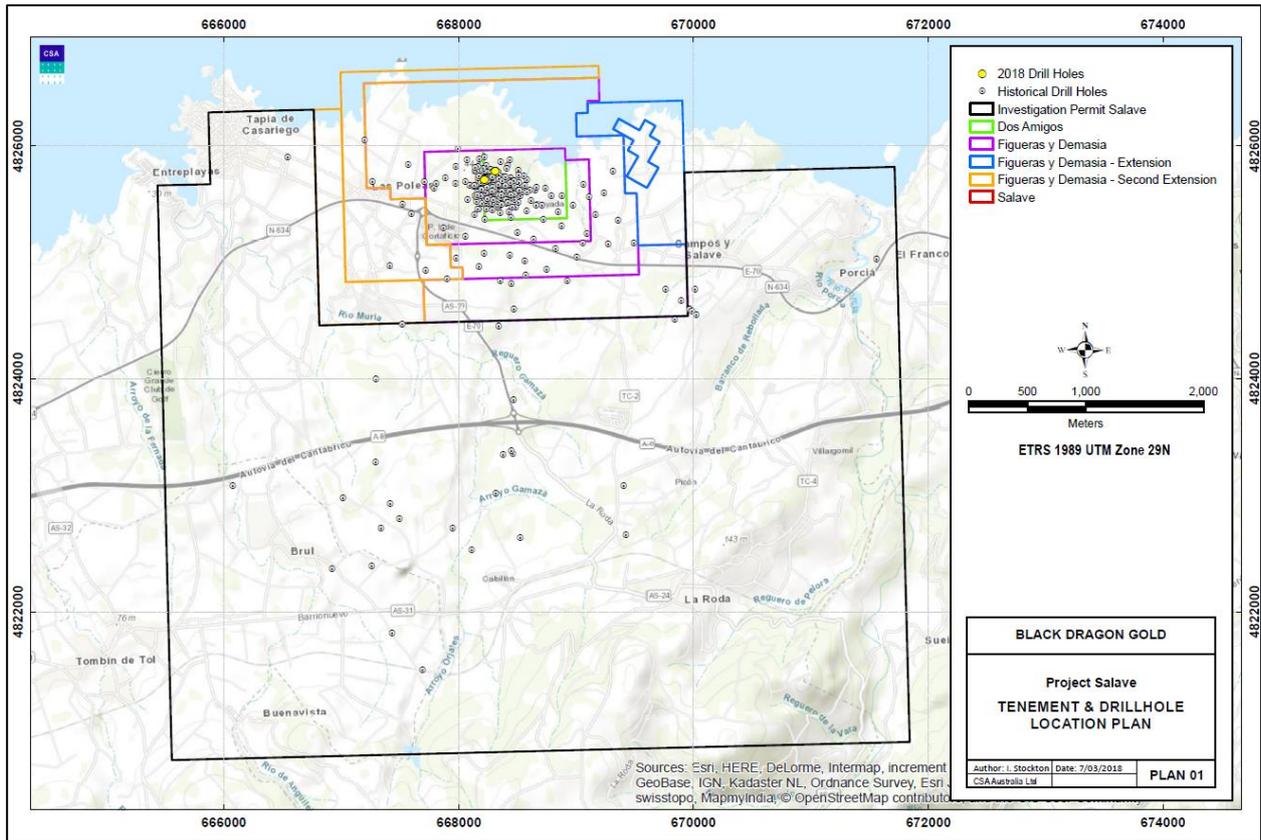


Figure 3: Tenement and drillhole location plan

## 4 Accessibility, Climate, Local Resources, Infrastructure and Physiography

### 4.1 Topography, Elevation and Vegetation

The physiography of the area is characterised by low elevations, with a coastal terrace in the north and hills of the Cantabrian range in the south. The coastal terrace ends, with cliffs 20–40 m high and draining into the Cantabrian Sea.

The land around Salave is used for agriculture and forestry, cattle, farming and tourism. The high rainfall, humidity and mild temperatures favour a vigorous growth of vegetation. Small areas of the original oak and birch forest remain in some mountain valleys to the south, but for the most part these have been replaced with faster growing species such as pine and eucalyptus. The frequent plantations of eucalyptus, alternating with green meadows, are an outstanding feature of the countryside. The Salave Project is locally covered by thick vegetation and woodland. Wildlife in the area includes deer, rabbits, various migratory birds and various species of fish (Figure 4).



Figure 4: Location of the Salave Gold Project and land use

Modified from Prenn, N., Gustin, Michael, M., Anderson, A. (2014 and updated in 2017)

### 4.2 Accessibility

Access is by paved highways, the A-8 and N634, which are less than 1 km from the property and access is also possible by boat. The nearest airport is Aeroporto de Asturias (OVD), near Aviles, 87 km to the east by highway A-8. There is a rail line nearby and port facilities 10 km to the west at Ribadeo. Local drill tracks provide access throughout the area.

### **4.3 Infrastructure**

Power is available at Tapia, which is linked to the Asturias power grid. There is an existing network of powerlines that enters the property and is connected to the national network.

Infrastructure is reasonable with the area having a long history of mining. Orvana Minerals Corporation operate the El Valle gold mine, some 100 km east of Tapia de Casariego.

Local towns have capacity to supply services and skilled workers and there is sealed road access to the site for staff and equipment. There are plentiful water supplies available.

### **4.4 Climate**

The climate at the Salave area is mild and humid with a typical average daily temperature of approximately 20°C in the summer and around 15°C in the winter. Annual rainfall average is 1,195 mm (ranging between 850 mm and 1,550 mm) and snow is very rare. The operation can be operated all year-round.

## 5 History

### 5.1 Key Ownership and Events

The following summary of key ownership and events since 1980 is modified from the NI 43-101 Technical Report; Preliminary Economic Assessment on the Salave Gold Project, Asturias Region, Spain, 2011; by Golder Associates (Golder) and Roscoe Postle and Associates (RPA) (referred to as the “PEA”) and updated with more recent events (Table 4).

Table 4: Ownership history

Date	Transaction/Event
Feb 1980	EMC acquires the concessions from the original owners.
6 Jul 1992	EMC leased the property to Lyndex Resources (John Sheridan), of Toronto, Canada.
28 Oct 2003	Naraval Gold SL, subsidiary of Rio Narcea Gold Mines SA, acquired 85% of the shares of EMC.
9 Mar 2004	End of contract with Lyndex Resources.
2004–2005	Naraval Gold SL increases ownership of the property to hold 90.7%, subject to a 1.3% net smelter return royalty to EMC.
Aug 2005	The Regional Government of Asturias halted the open pit project development of Salave due to the introduction of certain zoning legislation and ordered all exploration activities to be terminated on the property until further notice. EMC initiates legal proceedings against the Government of Asturias seeking reversal of the decision or monetary compensation.
Nov 2007	Lundin Mining Corp. announced that it has acquired the shares of Rio Narcea Gold Mines SA, including the interest in the Salave property, and increasing their interest to hold 95% at the beginning of 2010.
10 Feb 2010	Dagilev Capital Corp., of Vancouver, signs an agreement to acquire Rio Narcea Gold Mines SA’s 95% interest in EMC.
18 Mar 2010	Dagilev Capital Corp. reaches an agreement for the remaining 5% shares of EMC from other parties, to hold 100% of the company.
14 Apr 2010	Dagilev Capital Corp. announces that they have closed the acquisition of 100% of EMC from Lundin Mining Corp. and other parties.
4 Jun 2010	Dagilev Capital Corp. changes name to Astur Gold Corporation.
16 Oct 2016	Astur Gold Corporation changes name to Black Dragon Gold Corp., the current owner.

Exploration activities commenced in 1967 with several periods of exploration and mining studies prior to BDG taking ownership of the Project in 2010.

A significant amount of drilling has been undertaken at the Project, with 484 drillholes for 69,586 m completed prior to the 2018 program. This drilling commenced in 1970 and continued until 2013 (Table 5). BDG commenced a seven-diamond drillhole program in February 2018, the first to be undertaken since 2013 (see Section 8.1). A summary of exploration drilling activities by previous owners is provided in Table 5 and Figure 5.

Table 5: Summary of historical drilling, modified from the MDA report (2017)

Period	Company	Core holes		Percussion/RC holes		Total drillholes	
		Number	Metres	Number	Metres	Number	Metres
1970–1971	Northgate	34	7,026.40			34	7,026.40
1971–1972	Rio Tinto	10	2,014.00			10	2,014.00
1976	Gold Fields	8	1,855.00			8	1,855.00
1981–1988	Anglo	99	15,412.10	26	116	125	15,528.10
1981–1989	Anglo	22	1,080.50			22	1,080.50
1988	Oromet	20	503.00			20	503.00
1990–1991	Newmont	32	5,873.60	2	202.5	34	6,076.10
1996–1997	Lyndex	23	9,077.70	109	5,333	132	14,410.70
2004–2005	Rio Narcea	77	17,331.80	2	140	79	17,471.80
2011–2013	Astur	10	589.1			10	589.1
2013	Astur	10	3,031.0			10	3,031.0
<b>Total</b>		<b>345</b>	<b>63,794.20</b>	<b>139</b>	<b>5,791.50</b>	<b>484</b>	<b>69,585.70</b>

Note: RC = reverse circulation

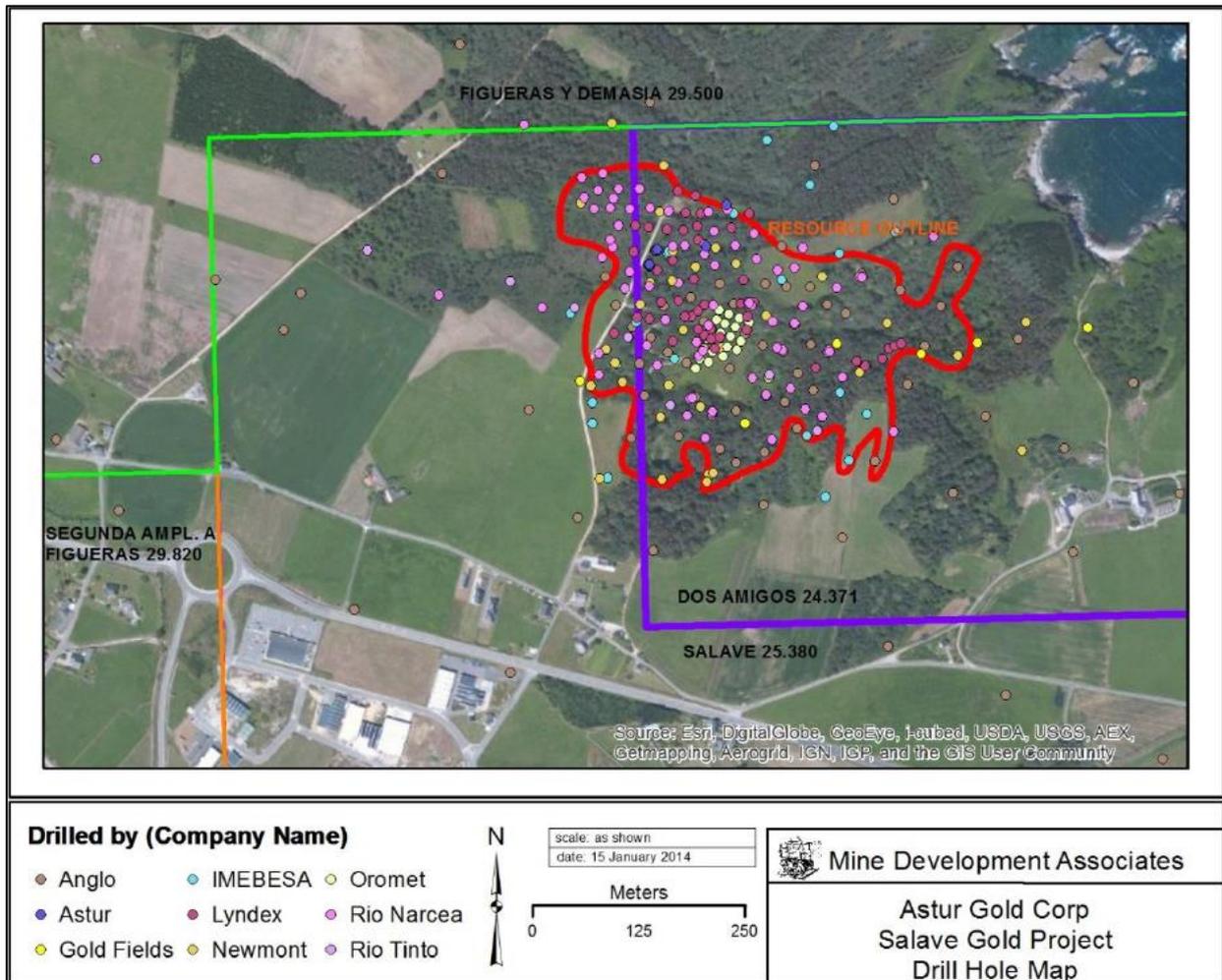


Figure 5: Location of drill collars by various explorers

## 5.2 Historical Exploration

### 5.2.1 *Cominco Ltd (1967)*

Cominco Ltd was the first company to undertake modern exploration with an induced polarisation (IP) survey over the Salave area in 1967, although no further exploration by Cominco Ltd is recorded on the property.

### 5.2.2 *Northgate Exploration Ltd (1970–1971)*

Northgate Exploration Ltd (Northgate) examined the Salave property from 1970 to 1971. From late May 1970 to the end of 1970, Northgate conducted geological mapping, geochemical surveying, and diamond drilling. Drilling consisted of 34 core holes totalling 7,026.4 m. These holes tested the depth extension of the mineralisation below the Roman open-pit workings and outlined a substantial area of significant gold mineralisation.

There is no information on the drill contractor and type of rig or procedures used for IMEBESA's remaining holes and no information on the size of core drilled for any of their holes.

### 5.2.3 *Rio Tinto (1971–1972)*

Rio Tinto explored the Salave property from 1971 to 1972, conducting geological, geochemical and geophysical surveys and drilling. An IP and resistivity survey covering 28-line kilometres was undertaken in April 1972 to investigate the intrusion surrounding the open pit, exploring for extensions to the mineralisation. A magnetic survey yielded negative results.

Rio Tinto drilled 10 vertical core holes (holes numbered 33 to 42) totalling 2,014 m from 1971 to 1972. Downhole survey data are not available for the Rio Tinto drillholes. They contracted Agua y Suelo Company to complete the drilling, who used two rigs: a Longyear 38 and a Craelius D-750. Drilling was with NQ and BQ core. Recovery always exceeded 95% and reached 100% for large intervals (Ayala, 1973).

Core logging paid special attention to petrography, structure, alteration, and mineralisation. Each core box was marked with the depths, and core recovery was calculated. All mineralised zones were prepared and analysed. All sample intervals measured 1 m. Core was split lengthwise with a mechanical splitter, and one half was placed back into the box while the other half was sent for analysis. When the condition of the core did not permit splitting, the sample was crushed and divided into two parts with a riffle splitter.

Thomas (1982) reported that when Anglo was evaluating the property, there were assay sheets but no logs or records of core recovery for Rio Tinto's drilling.

### 5.2.4 *Consolidated Gold Fields Ltd (1975–1976)*

Consolidated Gold Fields Ltd (Gold Fields) carried out geological and mineralogical studies as well as core drilling at Salave from October 1975 to December 1976. Field work commenced in October 1975 with geological mapping and thin and polished section examination of selected drill core.

Gold Fields drilled eight core holes (holes 43 through 50) totalling approximately 1,855 m in 1976. Some previous references listed only seven Gold Fields core holes, excluding hole 49, but Harris (1979) indicated hole 49 was drilled, although it is likely that this hole was lost prior to reaching mineralisation. All but one of the holes were inclined; one was vertical, with limited downhole survey information.

Gold Fields contracted with Compania General de Sondeos to conduct the drilling at Salave, which began in January 1976. Two types of drills were used: a Longyear 38 and a Craelius D-750. Most of the drilling was NQ and BQ core.

With the exception of holes 44 and 46, recovery exceeded 95%. Those two holes encountered highly fractured rock, and core recovery approximated 80% overall. Sludge samples (cuttings) were collected routinely for every run on all holes.

Samples for analysis were 2 m in length. Where practicable, core was cut with a diamond saw prior to preparation; one half was sampled and the other kept in storage. In sections where the rock was extensively broken, the core was jaw and roller crushed prior to splitting. All core was analysed for drillholes 43 through 48, but in hole 50, the visually barren sections were not sampled.

Gold Fields subsequently relinquished the property, concluding it was uneconomic at that time.

### 5.2.5 *EMC/Anglo American Corporation of South Africa Ltd (1980–1988)*

EMC acquired the concessions that comprise the Salave property in 1980 and entered into a joint venture with Anglo American Corporation of South Africa Ltd (Anglo). Anglo completed 14 vertical core holes to confirm the previously identified mineralisation, and these holes showed similar gold values to those obtained in earlier drilling.

Anglo conducted geological mapping, channel sampling, geochemical and outcrop sampling, and percussion drilling to probe for extensions to the mineralisation. Channel sampling over the area of the Roman workings and along the cliff faces west of the old workings, showed significant gold mineralisation, (up to 22 g/t Au over 2 m) in the eastern part of the old workings. Shallow percussion drilling south and east of the Roman workings showed anomalous concentrations of arsenic and gold, with a peak value of 1.45 g/t Au. Outcrop sampling within the old workings but beyond the limits of previous drilling revealed several areas with greater than 0.5 g/t Au.

Anglo completed an IP survey totalling 14.75 line-kilometres in 1983 over the area west of the Roman workings. Resistivity and chargeability profiles indicated several anomalies and seven core holes were drilled to test these anomalies to depths of between 50 m and 100 m for a total of 488.8 m. No granodiorite or significant mineralisation was intersected.

In 1984, Anglo signed an option agreement with EMC for the Fabrica de Mieres property adjoining the eastern end of the Salave granodiorite. An IP survey was completed, and Anglo drilled an additional 22 core holes to test the granodiorite and to investigate IP anomalies but found no significant mineralisation. Anglo did not renew the option on the Fabrica de Mieres property.

During their tenure on the Salave Project from 1981 to 1988, Anglo drilled 99 core holes totalling 15,412.14 m, and an additional 22 FM-series shallow core holes totalling 1,080.45 m that were drilled in 1984 on another property Anglo held for one year just off the southeast corner of the present Salave property. In addition, Anglo drilled 26 percussion holes (H-series) totalling 116 m.

Two drill rigs were used in Anglo's initial core drilling in 1981 and were also being used in 1983, when they were drilling HQ core (Charter Exploraciones SA, 1983a). For the drilling completed in 1983, the drill contractor was Drill Sure Sucursal en Espana (Drill Sure) (Charter Exploraciones SA, 1983a). There is no information on the drill contractor used for Anglo's other core drilling.

All the Anglo core drillholes were vertical, with downhole survey information available for all the holes.

Core was sawn longitudinally, with approximately 2 m half-core samples sent for assay (Hutchison, 1986).

A small percussion drill rig was used to drill the 26 H-series holes (Hutchison, 1986) but a high water table in the area south and east of the old Roman workings where these holes were drilled severely limited the effectiveness of this percussion drilling (Hutchison, 1982). These 26 holes are not in the database used for the resource estimate.

Anglo relinquished the Salave property following dissolution of an agreement with the Oromet Joint Venture.

### 5.2.6 *Oromet Joint Venture (1988–1989)*

The Oromet Joint Venture (Oromet) was a joint venture between Glamis Gold Inc. and Biomet Technology Inc. Oromet negotiated a controlling interest of the Salave property with Anglo to investigate the response of the Salave mineralisation to bio-oxidation.

Oromet completed 503 m of shallow core drilling in 20 holes (12.5 m x 12.5 m grid) in the central part of the old Roman pit in 1988. Summaries of drill logs indicate core was sampled on 2 m intervals and analysed for gold. There is no further information about drill contractors, the type of rig used, or drilling procedures.

Oromet soon after withdrew from Salave, and Anglo chose not to continue work on the Project, which reverted to EMC.

### 5.2.7 *Newmont Mining Corp. (1990–1991)*

Newmont Mining Corp. (Newmont) acquired a two-year lease with a purchase option on the Salave property from EMC in November 1990.

Newmont reportedly drilled a total of 5,870.45 m in 29 HQ-diameter, vertical core holes plus two failed reverse circulation (RC) holes totalling 181.05 m (Knutsen, 1991b); however, the database includes 34 holes totalling 6,076.05 m. The difference appears to be that Knutsen (1991) did not include the three additional NSC05 core holes lettered A-C. The database also showed 202.5 m as the total of the two RC holes, rather than the 181.05 m reported by Knutsen (1991). Downhole survey data are included in the drillhole database.

The following information on Newmont's drilling is taken from Knutsen (1991).

Newmont's drilling was conducted by Drill Sure. The drillers used two trailer-mounted Boyles BBS 56 or 37 rigs, according to the drill-contract specifications. Drill Sure set 116 mm conventional core casing into solid bedrock and drilled HQ wireline core to depths up to 300 m. Knutsen (1991) reported that core recovery was very good.

An attempt was made to use RC downhole hammer drilling, but problems with air leaks in the drill steel and the head drive precluded a viable test of the system. The attempt was abandoned after drilling holes NSR20 and NSR23.

Downhole surveys were conducted in each hole using a downhole Eastman camera; usually two surveys were conducted in each hole.

Because of proximity to the Bay of Biscay, Newmont paid particular attention to geotechnical evaluations (Knutsen, 1991). All drill core was photographed and geotechnically logged before cutting. Information recorded included: length of core run; core recovery; rock quality designation (RQD); Rock Mass Rating (RMR); fractures per metre of core; rock hardness; fracture type, orientation, and filling; and remarks relating to fracture sets. Uniaxial compression tests were performed in conjunction with evaluation of geotechnical logging. Piezometers were installed in 17 drillholes and monitored periodically. They revealed fluctuations in the water level, which were tentatively correlated with tidal variations.

Newmont commenced but did not complete a feasibility study and returned the property to EMC at the end of 1991 due to inadequate tonnage and grade for an underground mine.

In 1992, EMC leased the Salave property to John Sheridan, Lyndex Explorations Ltd (Lyndex) and an estimate of the mineral resources that could be exploited by underground mining was completed.

### 5.2.8 *Lyndex Explorations Ltd (1993–2004)*

Lyndex completed magnetic and electromagnetic surveys in November 1995 without detecting any significant anomalies.

Lyndex drilled 23 vertical core holes and 109 RC holes at Salave from October 1996 to December 1997. Downhole survey information is available for the core drillholes. In 2002, they drilled a percussion hole as a pilot for a proposed shaft. The following information has been taken from Catuxo (1997) and Campos de Orellana Pardesa (2001a, 2003; and Lobo, 1997a), unless otherwise noted.

Lyndex's 1996–1997 core drilling was conducted with three different rigs: one with their own crew used their own Craelius 90 rig drilling NQ and BQ core; the other two rigs, from contracted drilling company Insera, were a Longyear 44 and a Longyear 38, both truck-mounted and drilling HQ and NQ core. Core remaining after sampling was stored in waxed cardboard boxes kept in a warehouse the company maintained in the town of Barres. Logging of the core placed special emphasis on alteration, structure, and geotechnical features of the core.

Catuxo (1997) and Campos de Orellana Pardesa (2001a) identified 23 vertical core holes (S-96-1 and S-97-1 through S-97-22) totalling 9,044.9 m, although the database had a total of 9,077.65 m for the same holes. The Lyndex crew drilled holes S-96-1, S-97-1 through 3, 7, 11, 14, 16, 18, and 20-22; the INSERSA crews drilled the remaining 11 core holes.

The core was cut longitudinally. Sample intervals were variable, depending on lithology and mineralisation, but were a maximum of 1.5 m. Many were 1 m, and some were 0.5 m in length. Initially, Lyndex only sampled sections rich in sulphides as had been done by previous operators, but later the remaining sections were analysed, and subsequent holes were sampled in their entirety.

Geotechnical data were gathered on the 23 core holes, including RQD, RMR, structural discontinuities, fracture spacing, tensile strength, etc.

Lyndex's RC drilling consisted of very shallow holes. An Atlas-Copco Roc 203 rig was acquired by Lyndex in 1996 and used for this drilling with a contract drill crew. This rig can use conventional drilling or RC with diameters of 131 mm, 115 mm or 105 mm at the beginning and ending with 85 mm, and can drill to a depth of 50 m under optimum conditions (Campos de Orellana Pardesa and Lobo, 1997; Campos de Orellana Pardesa, 2001); however, 56 of the Lyndex holes exceeded 50 m in depth with a maximum of 75 m. Campos de Orellana Pardesa (2001) reported that Lyndex drilled 109 RC holes totalling 5,333 m, but Agnerian (2010) reported that Lyndex drilled 102 holes totalling 5,454 m. It was not possible to account for the difference.

The downhole hammer percussion hole drilled as a pilot for a proposed shaft in 2002 was drilled by Sondeos Principado, from Avilés, using a JR EFMS 3/2002 hydraulic drill on wheels with a #8 hammer and 4/3 drill. This hole was 30 cm in diameter and 200 m deep. The presence of Quaternary sediments and metasedimentary rocks in the first 42 m of the hole caused problems with stability of the walls, which were addressed with ground-freezing techniques. Water was encountered at a depth of 9 m, and at 15 m in depth, with the appearance of granodiorite, the flow of water entering the hole was 0.5 l/sec. In March 2003, four months after completion of the hole, the water level still stood at a depth of 10 m. No relationship was observed between water level in the hole and tides from completion of the hole on 13 November 2002 until water-level measurements stopped on 15 March 2003 (Campos de Orellana Pardesa, 2003).

Lyndex ceased exploration in 1997 but maintained a royalty agreement.

### 5.2.9 *Rio Narcea (2003–2010)*

The following information is taken from Agnerian (2010), with additional information provided by Astur and other references as cited.

Rio Narcea Gold Mines SA (Rio Narcea) took control of the property in 2003. Rio Narcea compiled all available information from previous operators into a database. In early 2005, Rio Narcea completed a gravimetric survey at Salave.

Rio Narcea drilled 79 holes from May 2004 to May 2005, of which five were geotechnical holes and two were for hydrological purposes. Hydrogeological holes were RC holes; the remaining 77 holes were core. The geotechnical and hydrological holes were sampled and assayed in the same manner as the resource holes, with the exception of the first hydrogeological hole.

Four rigs were used. Astur reports that Rio Narcea used their own rig for holes RN01, 02, 07, 09, 12, 35, 37, 42, 46, 48, 51, 59, 62, 68, 69, 71, 72 and 73, and that Sondeos y Perforaciones Industriales del Bierzo SA (SPIB) of Leon, Spain, drilled the remaining holes with Longyear 38 and 44 rigs plus an SPIB-built rig D640. The core holes were drilled with HQ core. The two RC holes were drilled by SPIB using their proprietary D640 rig, which had both RC and core capabilities.

Core logging and sampling were performed at a warehouse in the town of Tapia. Drill core was photographed and logged by Rio Narcea geologists. The core was oriented and reference lines were drawn on the core before logging to ensure that no sampling bias was introduced during splitting/sawing. RQD and core recovery measurements were completed on intact core prior to lithologic/mineralogical logging. Geologic data, core orientation, and additional geotechnical data were noted as part of the drillhole logging. Density measurements were taken. Upon completion of the geotechnical work and lithological logging, the handwritten forms were transferred to data entry personnel for conversion of the data into digital format. The newly entered data were checked by the geologists until they were free of data entry errors. All the original forms related to a drillhole were kept in a separate file folder for future reference.

Rio Narcea technicians sampled the whole drill core at regular intervals of 1–2 m. Sampling intervals were adjusted locally to honour changes in lithology. The core was cut with a diamond saw. Samples were bagged, put in large rice packing bags, and sent to the laboratory.

Nineteen of the 73 core holes were inclined, and 54 were drilled vertically. All of Rio Narcea's drillhole collar locations were surveyed by Rio Narcea surveyors, and the coordinates were in the Universal Transverse Mercator grid. Drillhole deviation was measured by downhole Flexit and Maxibor equipment and recorded directly into an onboard computer.

Rio Narcea ceased exploration at Salave in August 2005 when they were unable to permit an open-pit operation.

#### 5.2.10 *Lundin Mining Corp. (2007–2010)*

In 2007, Lundin Mining Corp. (Lundin) acquired the outstanding shares of Rio Narcea, and Rio Narcea became a wholly-owned subsidiary of Lundin. Rio Narcea conducted no further exploration or other activities at the Salave Gold Project.

#### 5.2.11 *Astur Gold Corporation (2010–2016)*

Dagilev Capital Corp. (Dagilev) acquired 100% interest in the Salave Gold Project by purchasing the issued and outstanding securities of EMC held by Lundin's subsidiary, Rio Narcea, in 2010, and EMC became a wholly-owned subsidiary of Dagilev. Dagilev was renamed Astur Gold Corporation (Astur) in 2010.

From late September to early November 2013, Astur drilled 10 exploration holes totalling 3,031 m. Drilling was completed under contract by SPIB.

The contractor provided two SPIB-manufactured core drill rigs. The rigs were track mounted. All drillholes were collared using PQ equipment and then downsized to HQ, generally when entering more competent intrusive rocks. Core recovery averaged approximately 90–95 % for the program, with the best recoveries in intrusive rocks.

Holes were designed to provide infill information where previous drilling was considered too widespread for confidence in interpretation and to extend the size of known mineralised zones. Two holes were also drilled to twin previous holes, one drilled by Lyndex and the other by Rio Narcea.



Due to issues concerning surface rights and environmental concerns associated with proximity to the Silva Lakes, the area in which the drillholes could be collared was severely limited. This necessitated drilling multiple holes from a single platform and drilling at azimuths and dips not considered ideal for the presumed geometry of the mineralisation.

All drillholes except for the two twin holes were inclined, while the twin holes were vertical.

Downhole surveying of the drillholes was performed by the SPIB drill crews, using a Reflex EZ-Shot. An initial measurement was taken at 15 m downhole, then at 50 m, and then at intervals of 50 m until the end of the hole.

All drillhole collars were surveyed by Topocad Ingeniera SL from Ribadeo, Galicia, Spain, using a Topcon GPT-7003 total station unit. Surveying was completed in ETRS89 UTM29 North grid.

In addition to the resource drilling, Astur drilled four geotechnical core holes from 2011 to 2012 and an additional six geotechnical core holes in May 2013 for a total of 589.05 m. Terratec Geotecnia y Sondeos SL (Terratec) was the drilling contractor, and all holes were drilled with HQ core. Terratec used two rigs manufactured by Rolatec in Spain – Rolatec RL 48 L and Rolatec RL 800.

The following description of sample preparation and core handling protocols applies to all drilling carried out by Astur on the Salave property.

Drill core was placed in wooden trays at the drill site by the drill crew. The geologist prepared a quick log of the drillhole at the drill site, after which the core boxes were transported to the core logging facility by Astur personnel. The drill site was kept secure by means of a fence and gate, and only authorised personnel had access.

When the core was received at the core shack, it was immediately washed, reconstituted, and all distance markers checked for accuracy and clarity. It was then photographed by Astur personnel. The photos were captured digitally, and at the end of the day were downloaded into a directory of core photographs with a separate folder for each drillhole. Core was photographed wet.

Once the geologist was ready to log the core, it was placed in order on the logging benches, and the core was reconstituted, if necessary. The geologist verified all the distance blocks and changed those that were in poor condition. Labelling of the boxes was verified, corrected where necessary, and augmented by adding the downhole distance (From-To) for each individual box.

Geotechnical logging was completed first, recording recovery and RQD, relative hardness, degree of weathering or oxidation, and fracture fillings. Data were recorded onto paper sheets and then transferred to Microsoft Excel before the end of each day. For drillholes SA-3 and SA-6, additional geotechnical data, mostly fracture information, were recorded as these two holes were used for hydrologic testing.

The core was descriptively logged and marked for sampling by Astur geologists. Logging and sampling information was entered onto paper logging sheets, which were later scanned and stored on several computers. Backups were made at regular intervals.

After logging, the core was prepared for sampling. A line was drawn down the core, and the cutter used this as a guide. The entire intrusive section was marked for splitting as the mineralisation was often very fine grained and difficult to identify visually. The core was sampled at intervals of no more than 1.5 m and no less than 0.3 m. The intervals shorter than 1.5 m were selected where dictated by the geology in order to respect contacts or changes in character of the mineralisation.

Astur did not have a core saw on site due to permitting issues. The core was transported by Astur personnel to a dimension stone cutting facility where it was cut under Astur supervision by a professional cutter. The core was then returned to the logging facility where half of the drill core was placed in a plastic sample bag, while the other half was retained in the core box for future reference. The sample number

was written on the bag, and an assay tag with the same number placed inside the bag. The samples and sample bags were numbered sequentially in advance, allowing for the insertion of standard reference samples, duplicates, and blanks. The plastic sample bags were placed in larger rice bags, palletised, and wrapped for shipment to the laboratory by commercial transport.

Astur commissioned RPA and Golder to complete a NI 43-101 technical report on the Project in 2011. Following the passing away of John Sheridan (Lyndex) in 2015, Astur assigned the underlying royalty and rights to SPG Royalties Inc. Astur commissioned Mine Development Associates (MDA) to carry out an MRE in 2014 and changed its name to Black Dragon Gold Corp. on 14 October 2016.

### 5.3 Historical Resources

A previous MRE was completed by MDA in March of 2014 and restated in January 2017 for BDG.

MDA applied conventional block modelling techniques with interpretation of nested mineralised bodies using 0.9 g/t and 8 g/t Au cut-offs. The MDA report used a 2 g/t reporting cut-off and the MRE is shown in Table 6. The MRE reported by MDA should not be treated as current, as CSA Global updated the MRE in October 2018.

Table 6: Salave MRE by MDA (January 2017)

Classification	Tonnes (Mt)	Au grade (g/t)	Au contained metal (koz)
Measured	0.5	5.9	97
Indicated	6.6	4.4	847
<b>Measured + Indicated</b>	<b>7.1</b>	<b>4.5</b>	<b>944</b>
Inferred	1.1	3.1	106

Historical resources were estimated by MDA for Astur in March 2014 (effective date 31 January 2014). The MDA technical report was updated with an effective date of 7 October 2016 and subsequent to amendments made at the request of the BC Securities Commission, the final technical report was issued on 31 January 2017. The reported 2017 MRE results were identical to those reported by MDA in 2014.

### 5.4 Mining Status

No mining is currently occurring at the Salave deposit.

According to the MDA report (January 2017), the only known past production of gold from the Salave Project dates from Roman times.

There are various reports of estimates of total production by the Romans. Rio Narcea estimated that approximately 3,265,000 tonnes of material were mined from the four areas of the Roman excavation (Rodriguez Terente, 2007, citing Maldonado, 2006). Hutchison (1986) reported that it had been estimated that about 3 million tonnes (Mt) of friable material were mined at an average grade of possibly 6 g/t Au (surface concentration). Crump and Suarez (1977) estimated that the Romans mined between 2 Mt and 4 Mt of material, recovering between 5,000 kg and 7,000 kg of gold (Parry, 1991, cited by Rodriguez Terente, 2007). Lavandeira (1992) estimated that the Romans removed some 5 Mt of rock. Harris (1979) reported a “rough volume calculation” of 4–5 Mt mined from the ancient open pits. Lyndex (1994) proposed the largest tonnage produced during the Roman era – some 6 Mt.

Mining by the Romans was by open-pit methods, excavating the near-surface material to depths averaging 30 m. Dewatering tunnels and canals were dug out to the sea. Processing of the material included gravity concentration of the gold by transporting the loose oxidised material along several large and adjacent sluice channels (Agnerian, 2010, citing Jones and Bird, 1972; Lewis and Jones, 1970; Domergue, 1970). Crump and Suarez (1977) hypothesised that the presence of abundant groundwater and high-grade



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mineralised outcrop at the base of the open pit imply the Romans abandoned the mine due to problems of draining below the local water table rather than because the deposit had been mined out.

# 6 Geological Setting and Mineralisation

## 6.1 Regional Geology

The Salave gold deposit is located within the West Asturian–Leonese Zone (WALZ) of the north-western portion of the Iberian Massif (Figure 6).

The WALZ represents the transition between the Cantabrian Zone situated to the east and the Hercynian orogen (Late Palaeozoic) to the west (Central Iberian Zone) (Figure 6). The Cantabrian Zone contains the continental part of the Palaeozoic succession, with relatively thin pre-orogenic sedimentary rocks that were deformed in a foreland thrust belt.

In contrast, the WALZ contains a nearly continuous series of Cambro-Ordovician to Carboniferous clastic siliceous and carbonate rocks approximately 11,000 m thick, which has undergone intense deformation. The Palaeozoic sedimentary rocks of the WALZ were deposited unconformably on Upper Proterozoic rocks that are not exposed in the Salave Gold Project area. Proterozoic rocks are found on the eastern and western edges of the WALZ in the cores of two antiforms. In the Tapia area, the metasedimentary rocks are intruded by three west-northwest trending plutons that range in composition from gabbro to granodiorite that are directly related to the Salave deposit (Figure 7).

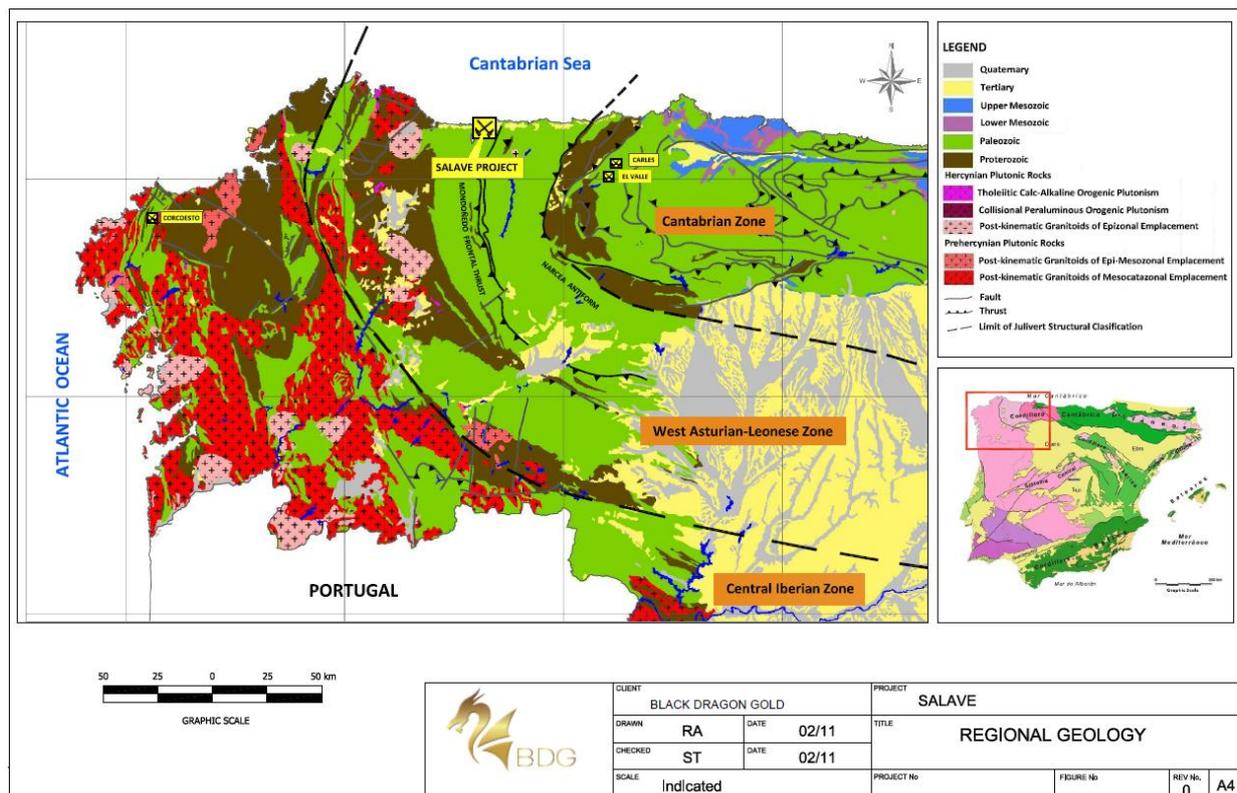


Figure 6: Regional geology map of the Iberian Peninsula, Spain (extracted from 2017 MDA report)

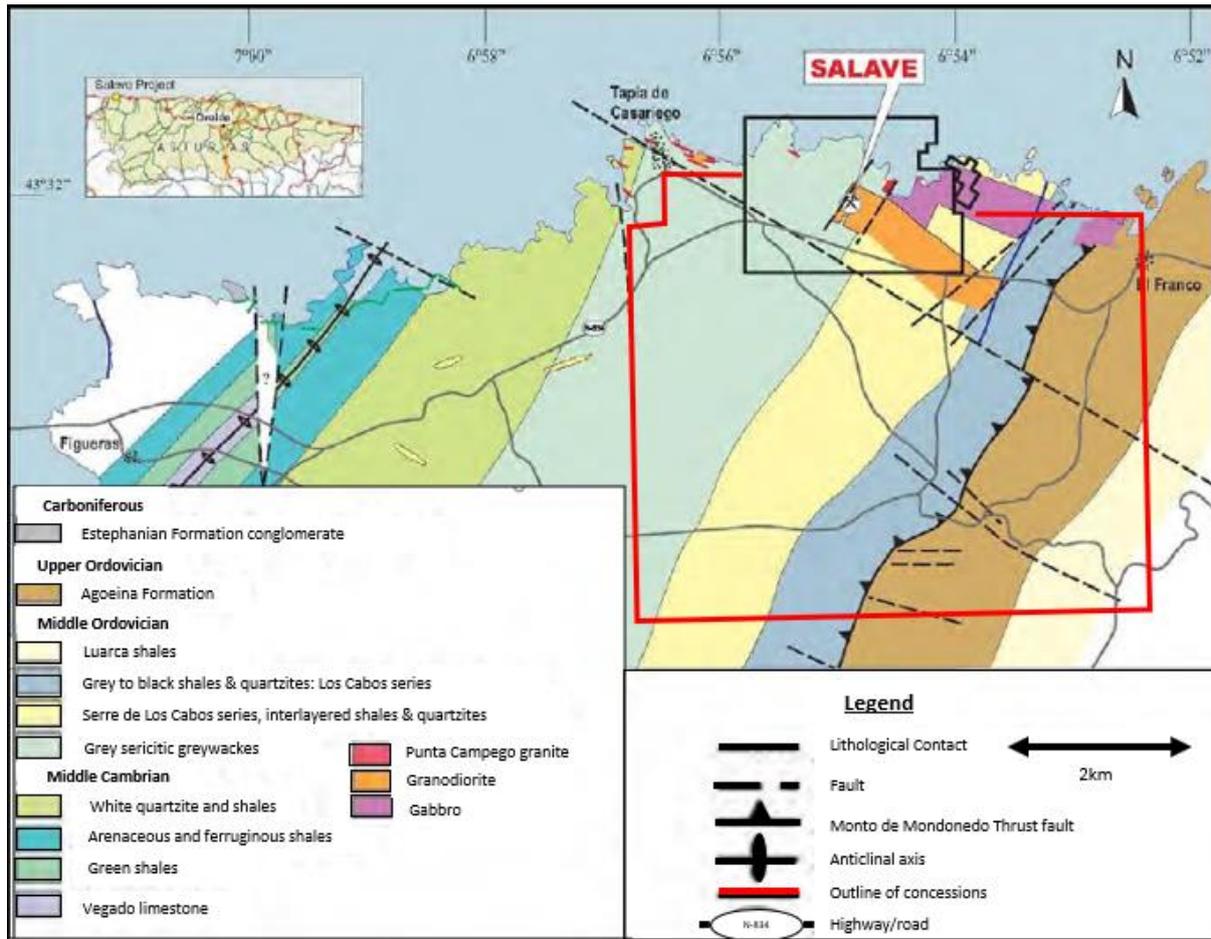


Figure 7: District geology of the Salave Gold Project (extracted from 2017 MDA report)

## 6.2 Regional Structural History

Compressional tectonics during the Hercynian orogeny formed east and northeast overturned and recumbent folds as well as major thrust faults (Figure 8). Three coaxial phases of deformation affected the WALZ.

The first deformation phase (D1) produced eastward-verging recumbent folds. The primary slaty cleavage or schistosity (S1) developed during D1.

The second deformation phase (D2) was responsible for the appearance of thrusts, associated sub-horizontal shear zones, and related structures. The largest of the thrust sheets is the Mondoñedo nappe. A variety of fault breccias, shear folds, crenulation cleavages or schistositities (S2), and mylonitic zones are related to this phase (Figure 8).

The third deformation phase (D3) gave rise to large, upright open folds with steep axial planes plus minor folds and local development of crenulation cleavage (S3). Locally there is also a system of transverse folds, which, when superimposed on the earlier D3 folds, produced interference patterns.

Figure 8 shows both a plan view and cross section illustrating the complex compressional deformation that has affected the WALZ. Commencing from west to east – stacked recumbent folds verging toward the east, thrusts, large open folds with sub-vertical axial planes and then a series of thrusts moving towards the Narcea antiform.

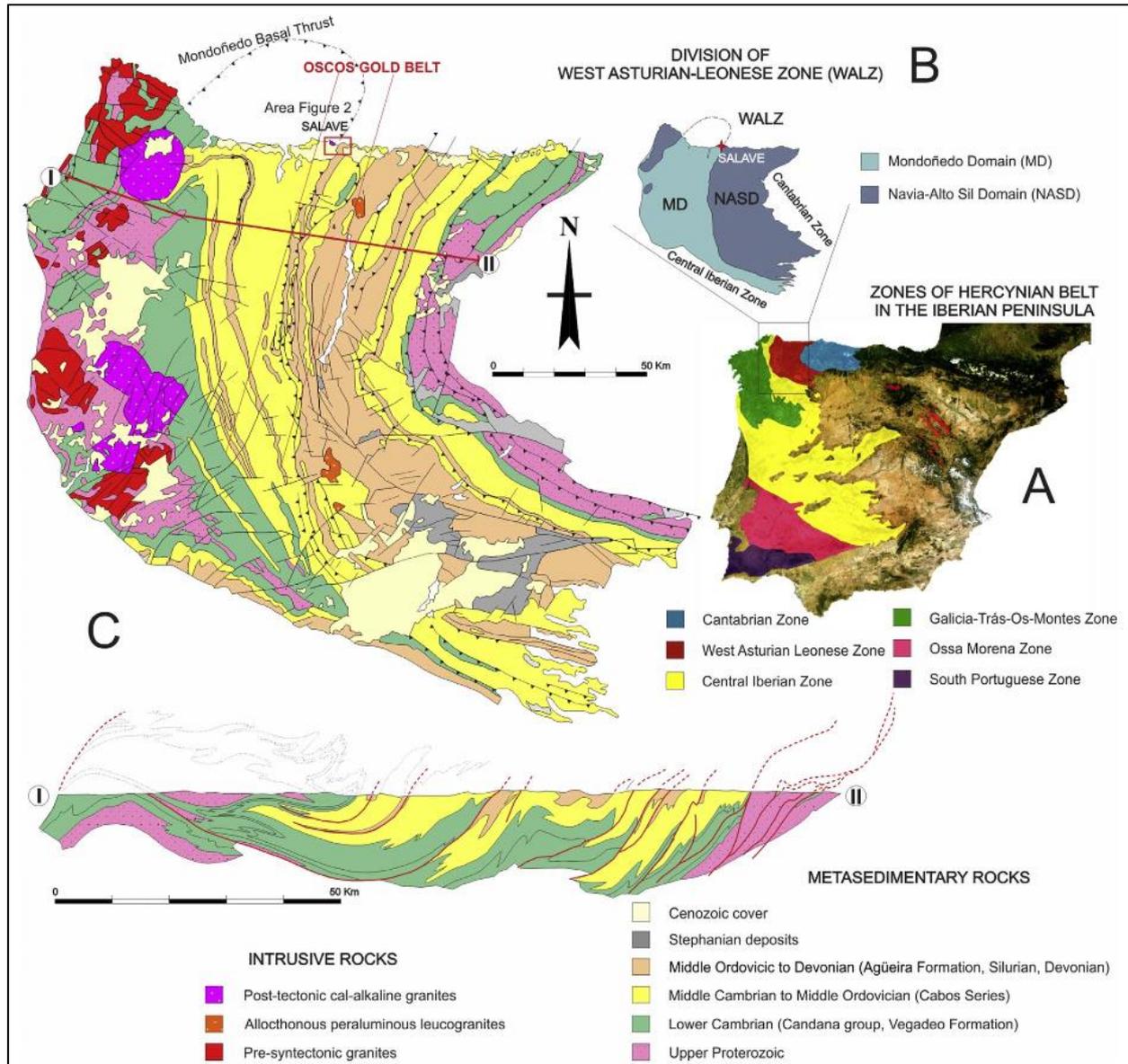


Figure 8: Deformation and Geology of the WALZ

Source: Rodríguez-Terente, et. al. (2018); The Salave Mine, a Variscan intrusion-related gold deposit (IRGD) in the NW of Spain

### 6.3 Regional Intrusives and Metamorphic History

Magmatism covers a time span of approximately 70 Ma (from 350 Ma to 280 Ma) and took place during the waning stages of the Hercynian collision. Syntectonic intrusions that include peraluminous monzogranites and leucogranites were emplaced during the D2 and D3 deformational events. Post-tectonic granodiorite-monzogranite intrusions with some leucogranite were emplaced after the main phases of Hercynian crustal shortening. These post-tectonic intrusions are mainly responsible for the Salave gold deposit and the gold-copper deposits of El Valle-Boinas and Carlés, as well as other gold prospects in the northern Iberian Peninsula.

Regional metamorphism, which increases toward the west from greenschist to amphibolite facies (Rodríguez-Terente *et al.*, 2018 and references therein), contact metamorphism related to intrusions, and retrograde metamorphism has affected the rocks within the WALZ. The Salave plutonic complex is mainly within the biotite zone however near the granitic intrusions andalusite-cordierite and locally garnet temperatures are reached.

## 6.4 Local and Property Geology

Most of the Salave Gold Project area is covered by Quaternary marine sediments ranging from a few centimetres to over 70 m thick. The scarcity of outcrops, which are largely confined to coastal cliffs, makes geological mapping of the property difficult.

The Salave concessions are situated at the eastern border of the Mondoñedo nappe, which is separated from a less deformed area to the east by the basal thrust of the nappe – the Mondoñedo thrust. West of the Mondoñedo thrust, and within the Salave property, the area is underlain by quartzite, sandstone, argillite, shale, and greywacke of the Cambro-Ordovician Los Cabos Series that have been metamorphosed to slate, arenite, quartzite, and graphitic slates (Figure 8). The Mondoñedo thrust places the Upper Cambrian Los Cabos Series over the Upper Ordovician Agüeira Formation.

Where the metasedimentary rocks are intruded by igneous rocks, contact metamorphism takes the form of biotite and pyroxene hornfels, with cordierite, andalusite, and local garnet, which is superimposed on the greenschist-grade regional metamorphism beyond the contact aureole.

The Salave deposit is underlain by granodiorite, which is a small part of the Porcia Intrusive Complex that extends approximately 4 km, from Rio Porcia to Represas Playa just east of Tapia (Figure 9). The granodiorite crops out in the western part of the complex. To the south, the complex is covered by thin Quaternary alluvium. Igneous rocks in the Salave area are directly related to the mineralisation and comprise several stocks and dykes whose ages range from 330 Ma to 287 Ma (Carboniferous). Oxidation is not intensive and extends for a few metres below the surface except along larger faults and structural zones where it can locally exceed 200 m vertically.

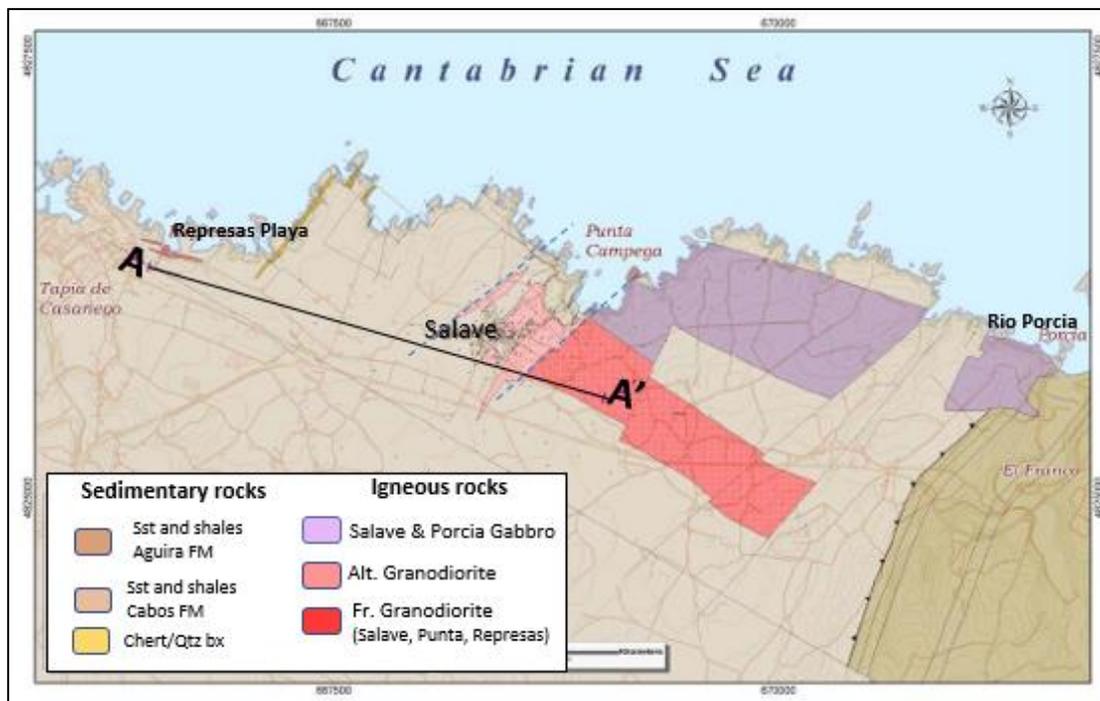


Figure 9: Local geology of the Salave Gold Project (cross section line is approximately 2 km long) (extracted from 2017 MDA report)

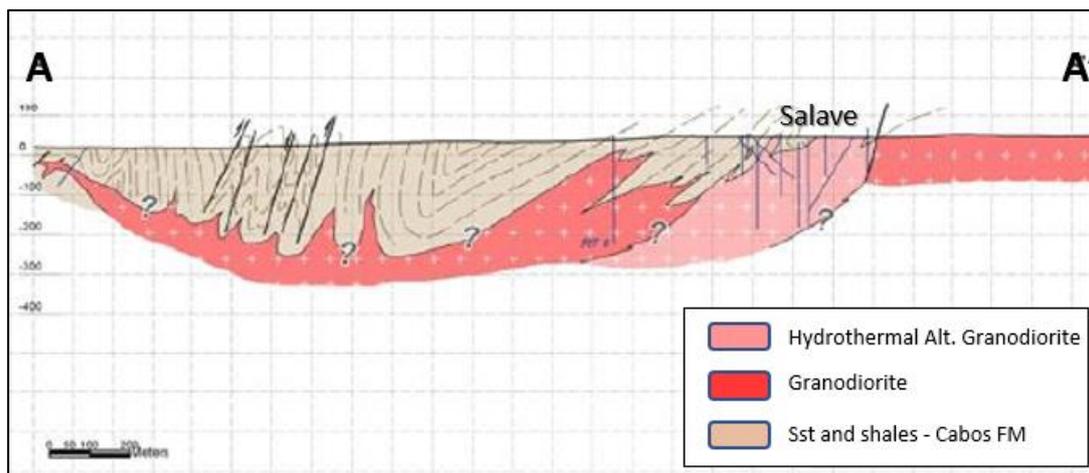


Figure 10: Cross section through the Salave Gold Project (extracted from 2017 MDA report)

#### 6.4.1 Igneous Rocks at Salave

In the Salave area, three main igneous complexes outcrop in an approximately east-west direction, Porcía, Salave and Represas (Rodríguez-Terente *et al.*, 2018 and references therein). Gold deposits are only located in the intense hydrothermal alterations affecting the western part of the Salave granodiorite.

The intrusive units occurring in the Salave area range in composition from gabbro to granite.

#### 6.4.2 Salave Granodiorite

The Salave gold deposit is primarily hosted by the Salave granodiorite. Mapping and drilling indicate an elongate shape, interpreted as a large dyke (Hutchison, 1983; Nieto, 2004). The granodiorite has a west-northwest trend and is interpreted to cover an area approximately 2 km x 500 m. In the old Roman open pit at Los Lagos, roof pendants and apophyses of metasedimentary rocks occur within the Salave granodiorite.

Two samples of fresh Salave granodiorite in various age dating studies indicate early to Late Permian ages which is consistent with the contact metamorphism overprint of the regional metamorphism.

The fresh granodiorite appears as a hard, black-and-white and slightly porphyritic rock. It has a hypidiomorphic-granular texture, and the main minerals are plagioclase (40%), quartz (30%), biotite (15%), potassium feldspar (10–15%), and muscovite (1%).

#### 6.4.3 Salave and Porcía Gabbros

The Salave and Porcía gabbros extend over an area of 2.5 km x 0.6 km in two main bodies from El Figo beach to the western bank of the Porcía River (Figure 9). These igneous bodies are the oldest intrusions in the area, and gabbro xenoliths frequently occur in the granodiorite. The contacts of gabbro with the metasedimentary rocks are sharp and xenoliths of the metasedimentary rocks are common in the gabbros. Sericitic and chloritic alteration and carbonatisation in some of the gabbros are generally fracture controlled, however there is no significant mineralisation.

#### 6.4.4 Punta Campega Granite

This rock is described as microgranite or aplitic granite and intrudes the Salave gabbro at the coast (Figure 9). It is a leucocratic equigranular rock, with allotriomorphic textures, formed by quartz, sericitised plagioclase, potassium feldspar, sericitised chlorite, and iron oxides. The intrusion has a slightly reddish appearance.

#### 6.4.5 Dykes

Porphyritic dykes of dacitic to rhyodacitic and andesitic composition occur in the Salave area. They range from a few centimetres to over a metre in width, and when fresh, are dark coloured and composed of feldspar, biotite, and generally rounded quartz phenocrysts in a very fine-grained matrix of similar composition that is typically altered to sericite. Dykes are older than the hydrothermal alteration and mineralisation, and they are affected by the same events as the granodiorite.

#### 6.4.6 Represas Intrusions

The Represas intrusions occur less than 1.5 km west from the westernmost known extension of the Salave granodiorite. Three main types of igneous rocks are observed in this area: fine-grained biotite-rich granodiorite; quartz-rich granodiorite with lesser amount of mica; and a small outcrop of pinkish rhyodacite porphyry with quartz, chlorite, and altered feldspar in a matrix of quartz and potassium feldspar. The Represas intrusions are interpreted to have been controlled by the same steeply-dipping, northwest-trending fault system that controlled the emplacement of the Salave granodiorite.

### 6.5 Local Structure at Salave

Metasedimentary rocks in the Salave region are affected by the three main stages of Hercynian deformation and show the corresponding folding, faulting, and cleavage. The following synthesis of structural information is extracted from the MDA report (2017) and the Golder PEA report (2011).

The dominant structural orientation in the region is northeast, with the contact between the metasedimentary rocks and the Salave granodiorite oriented in this direction. Intrusive-metasedimentary rock contacts in core and outcrop are largely conformable, suggesting that the granodiorite intrusion was passive (Figure 7).

Other features orientated in this direction include; the basal thrust of the Mondoñedo nappe, porphyry dykes, some gold-bearing quartz veins in the metasedimentary rocks, and the tabular zone that encases the various mineralised horizons of the Salave deposit.

Northwest-trending faults are parallel to the general shape of the Salave granodiorite and may have provided a conduit for the emplacement of the granodiorite. This would imply that the intrusive was emplaced during D2 deformation.

Mapping and subsequent structural analysis by Newmont in the Salave pit and to the northeast of the pit identified four major fault trends:

- An east-west trend is strongest on the west side of the pit
- Steeply dipping N20°E trend is strongest toward the centre of the pit
- A N40°E trend with moderate to steep dips to the northwest is strongest toward the east side of the pit
- Faults with a N40°W trend and dipping steeply to the southwest are crosscut by most other generations of faults but appear to guide the distribution of intrusive rocks and possibly gold mineralisation.

Other structural observations include bedding parallel faulting in the metasedimentary rocks striking N20°E and dips 40–60°NW. A second dominant subset of joints/veins that cut both intrusive and metasedimentary rocks strikes N66°W and dips 46°SW, nearly perpendicular to the overall trend of bedding in metasedimentary rocks. This subset of data may be much more pertinent to the distribution of gold since both rock types host gold mineralisation, and mineralisation apparently straddles the upper contact of the intrusion with metasedimentary rocks (Figure 7).

In 2013, structural analysis from oriented core data was undertaken to assist with modelling of the mineralisation. The principal conclusion was that one subset of fracture/joint/vein orientations with a strike and dip of 114°/46°SW appears to control gold distribution at the Salave deposit. These fractures/joints extend across the contact between upper intrusive and metasedimentary rocks. In metasedimentary host rocks, these fractures are slightly different exhibiting a mean orientation of 127°/57°SW. The difference in fractures/joints orientation between the host rocks can be attributed to refraction of fracture orientations across the rheologic contact between them. The moderate south-southwest dip of this fracture/joint subset may correlate with progressively deeper distribution of gold mineralisation at Salave to the south-southwest.

## 6.6 Mineralisation

The gold mineralisation at the Salave Gold Project has been described in the PEA and MDA report on the Salave Gold Project and is summarised below.

The Salave gold deposit is hosted mainly by the strongly altered Salave granodiorite at its western boundary, close to the contact with the Los Cabos sedimentary sequence (Figure 11).

Most of the gold mineralisation has been delineated within an area 400 m wide, 500 m long and 350 m deep. Gold mineralisation occurs in a series of stacked, north to northwest trending, shallowly southwest dipping irregular lenses related to faults and fracture zones that are parallel to the contact of the intrusive and metasedimentary rocks. The faults and fracture zones appear to be related to one or more vertical structures some of which contain high-grade gold mineralisation. These structures may play an important role as conduits and opening shallow dipping structures with subsequent deposition of hydrothermal solutions, particularly at the contact with the metasediments (Figure 12).

Previous explorers noted that the attitude of the sheeted alteration-mineralisation zones mirrors that of the overlying metasedimentary rocks. In places, these lenses may be sub-horizontal. The dimensions of the individual mineralised zones range from 50 m to 300 m in length, 10 m to 150 m in width, and 5 m to 60 m in thickness, with an average thickness in the order of 20 m. Narrow zones of gold mineralisation are also present within the Los Cabos metasedimentary rocks, possibly reflecting later reactivation and leakage.

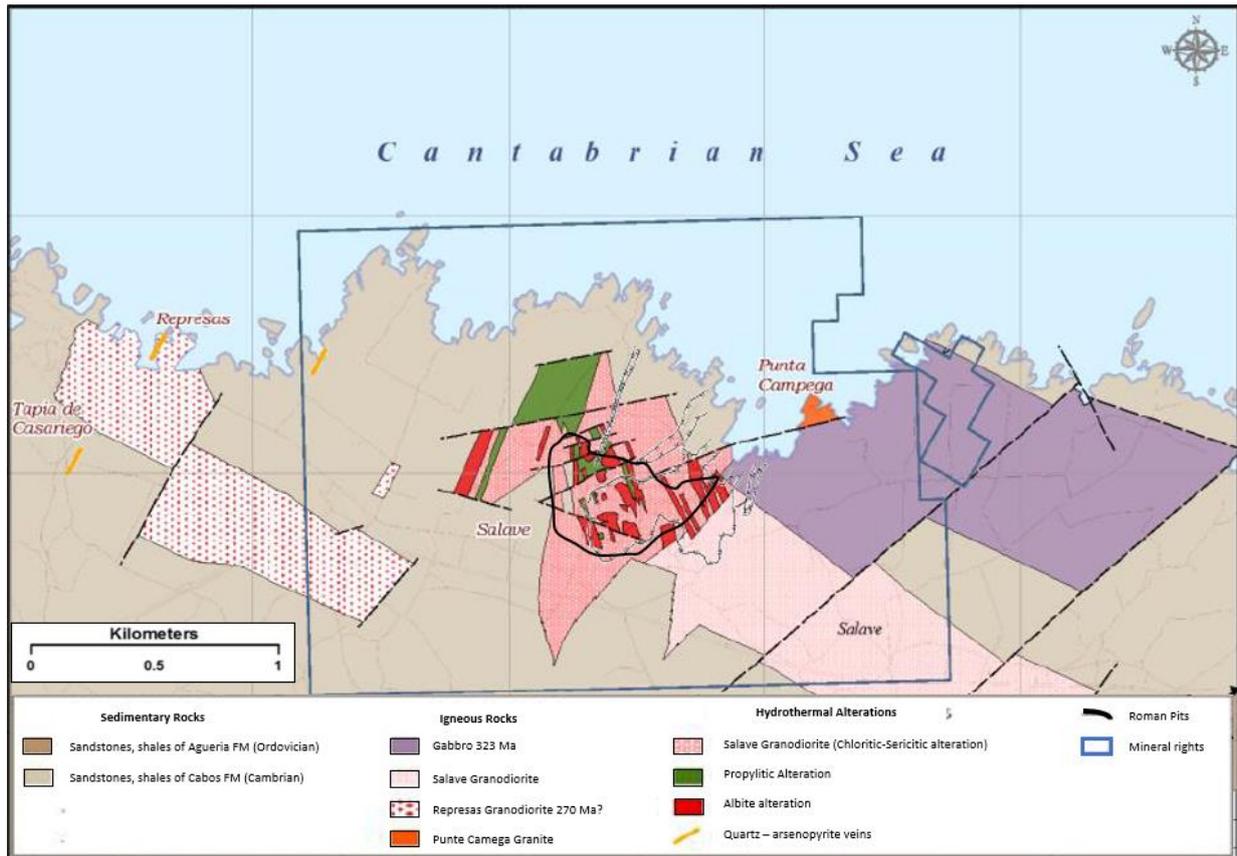


Figure 11: Plan view of the mineralisation and alteration within the altered part of the Salave granite (extracted from 2017 MDA report)

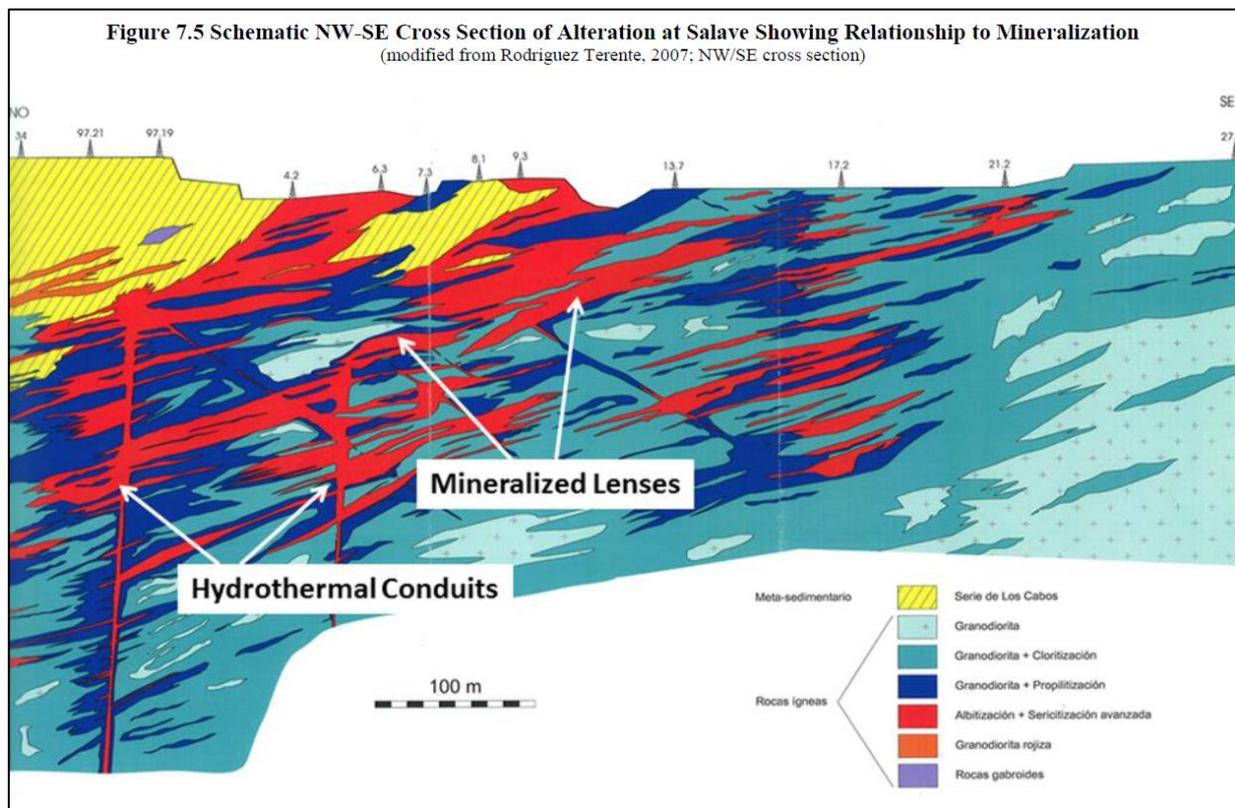


Figure 12: Geometry of the mineralisation and alteration at Salave, dipping to the southwest (extracted and modified from Rodríguez-Terente et al. (2018))

## 7 Deposit Types

### 7.1 Mineralisation Type

Gold mineralisation at Salave is related to hydrothermal alteration of the host granodiorite. The highest gold grades are associated with intense albite-sericite alteration with fine-grained arsenopyrite, commonly disseminated as fine needles, pyrite and stibnite. Destruction of the original texture is a major feature of the most intensively altered and mineralised granodiorite. Quartz veins, and quartz-carbonate molybdenite-bearing veins present in the deposit do not contain gold and represent a separate mineralising event.

BDG consider the Salave deposit to be an intrusive related gold deposit with similarities to other intrusions related gold deposit models including Fort Knox, Pogo and Donlin Creek in Alaska and Telfer and Boddington in Western Australia.

Based on a review of literature and site visit, CSA Global consider that either an orogenic gold model, as implied by Rodriguez Terente (2007) based on mineralogical relationships and timing with the Hercynian orogeny, or an intrusive related gold deposit model as interpreted by BDG, as appropriate mineralisation models. Whether the mineralisation is orogenic or intrusive related does not have a material impact on the initial objectives of BDG in terms of delineating a resource within the mineralised footprint. The model may have implications for district-scale exploration. CSA Global recommends further study to determine a more definitive model which may have implications for exploration within the region.

## 8 Exploration

### 8.1 2018 Exploration Activities – BDG

BDG completed a program of seven drill holes for 2,217 m from January to April 2018 (Figure 13). The holes were drilled from two existing drill collars and were designed to accomplish the following:

- Confirm the orientation of high-grade gold mineralisation intersected in numerous drillholes during previous diamond drilling programs
- Provide information on the orientation of structures that potentially control the orientation of gold mineralisation at Salave
- Confirm the gold tenor and intersection lengths of previous diamond drillholes
- Provide additional samples for metallurgical testwork optimisation studies
- Provide additional structural and geotechnical data for ongoing project development studies.

The core drilling was PQ to the oxide/fresh rock interface and varied from 16 to 61m and then HQ in fresh rock.

Core recovery from current drilling is estimated using the drillers recorded depth marks against the length of the core recovered. There was no significant core loss from the 2018 drilling.

Core photography was completed for each box of the drill core, both dry and wet, before core cutting.

Drill core was orientated using a standard spear method except the upper altered part.

Whole drill core was geotechnically logged including recovery, RQD, number and strength of fractures, and other parameters in order to obtain the RMR rating of the formations.

All core was logged for geology, alteration, geotechnical and mineralogy. Density measurements were also carried out. Logging is qualitative whilst geotechnical data is quantitative. The data gathering process consists of manual logging and input to Microsoft Excel format and finally direct transfer to a drillholes database. A backup is kept off site.

All drillhole collars were surveyed by handheld global positioning system (GPS) or a total station device by a certified topographic surveying company (TOPCAD) that were used previously.

Downhole survey was completed with a Maxibor or Gyrosmart nonmagnetic device continuously every 3 m or 5 m.

Drill core is stored securely at BDG's warehouse.

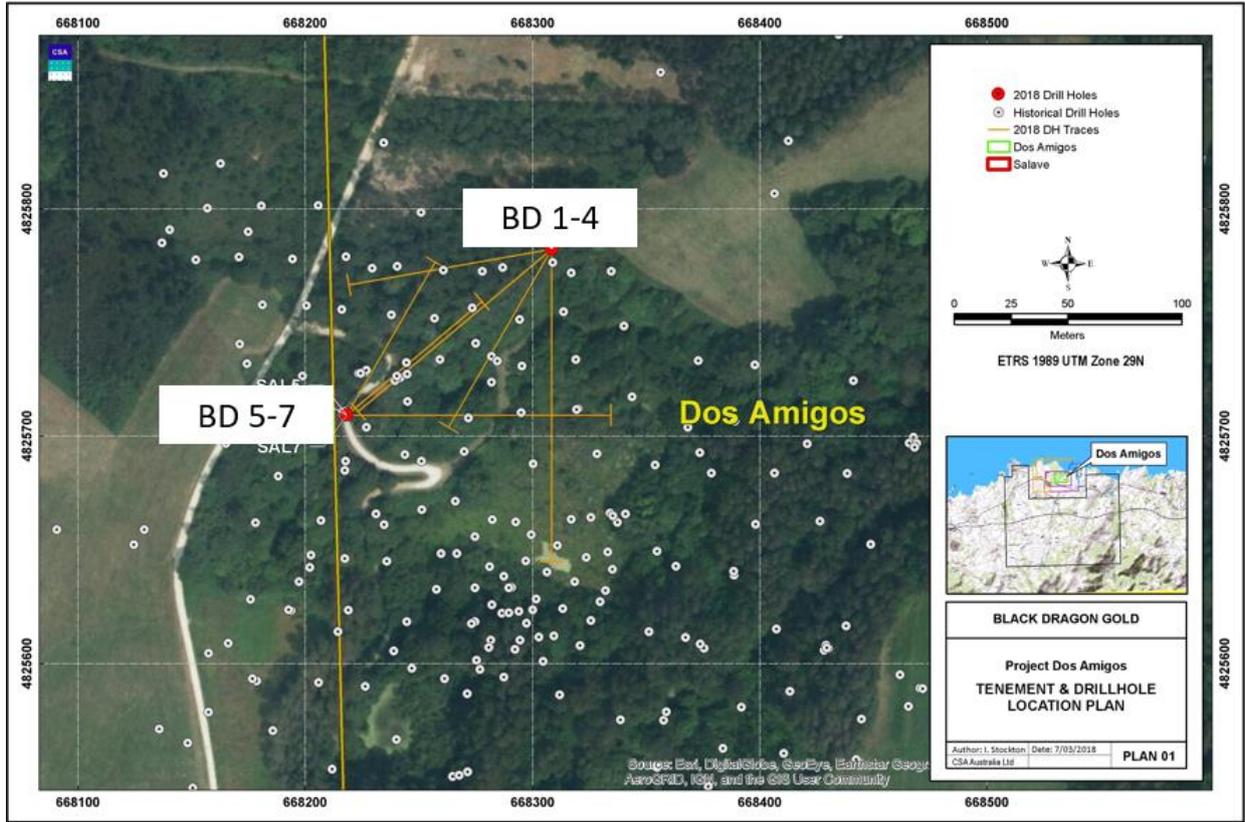


Figure 13: Location of 2018 drill program by BDG (holes labelled BD)

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## 9 Drilling

For details regarding the drilling history, see Section 5.2 and the drilling activity completed by BDG is outlined in the Section 8.1.

# 10 Sample Preparation, Analyses, and Security

## 10.1 Sample Preparation, Analysis and QAQC

The Salave Project has had 10 operators since modern exploration commenced in 1967. The following section including references is taken from Prenn (2014, 2017). Mr Prenn has reviewed this information and believes this summary accurately represents the Salave property – “Prenn, N, Gustin, Michael, M, Anderson, A. (2014 and updated in 2017) Amended Technical Report (NI43-101) on the Salave Gold Project, Asturias Region, Spain (2017). Prepared for Black Dragon Gold Corp”. The author does not disclaim responsibility for the inclusion of this referenced information.

### 10.1.1 IMEBESA

IMEBESA’s drill-core and surface samples taken in 1970 were analysed by the following laboratories:

- Irish Base Metals Ltd, Exploration Department in Loughrea, Ireland – soil samples
- Metals and Chemicals Ltd in Cork, Ireland – soil samples
- Instituto Geologico y Minero de España (IGME) in Madrid, Spain – surface outcrop and drill core samples
- Empresa Nacional Adaro de Investigaciones Mineras (Adaro) in Madrid, Spain – drill core samples
- X Ray Assay Laboratories Ltd (XRAL) in Ontario, Canada – drill-core samples
- Lakefield Research of Canada Ltd (Lakefield) in Ontario, Canada – preliminary metallurgical testing of drill core material.

A report by Rio Tinto in 1973 (Ayala, 1973) identified the laboratories who analysed the drill samples of IMEBESA as IGME, Bell-White Analytical Laboratories Ltd in Ontario, and Griffith-Ituribarria, SA but did not mention the other laboratories who analysed drill-core samples listed above by Müller (1971).

Through their 1970 drilling, IMEBESA assayed all core samples for Au and Mo, with part of the samples also analysed for As, Sb, and Ag. Thomas (1982) reported that the first two holes were analysed for As and Mo by colorimetry, but after that, As was dropped, and Mo, Sb and Ag were analysed only sporadically. Müller (1971) reported that Mo assays were conducted by IGME, Adaro, XRAL and Lakefield, and that a comparison of the results indicated IGME results were probably too high and XRAL’s too low. Adaro results appeared to be confirmed by the few Lakefield results (Müller, 1971).

### 10.1.2 Rio Tinto

Rio Tinto crushed split core to 6–8 mm in size with a jaw crusher. The whole sample was then reduced to less than 10 mesh in size with a roll crusher. A riffle splitter was used to obtain a sample of approximately 300 g, which was sent to the laboratory for analysis. A second split was sent to archives.

Rio Tinto’s analyses were performed by their laboratory at Huelva (Harris, 1979). The sample was pulverised to –270 mesh and quartered. A 100 g sample was sent for fire assay, while 200 g was saved, with a fraction used for other determinations. Although Rio Tinto’s report by Ayala (1973) indicated 100 g was analysed by fire assay, a later report by Anglo indicated samples were analysed for Au, Ag, Mo, As and S by atomic absorption (Thomas, 1982), which may have referred to additional analyses. Except for hole number 37, all samples were analysed for Au, Ag and S. As was analysed on all samples except for 29 samples from hole number 34 and eight from hole number 41; and Mo was analysed in all samples except those from holes numbered 38 and 40 as well as eight samples from hole 41 (Ayala, 1973). Duplicate samples were analysed

by Rio Tinto's laboratory (Ayala, 1973). Check assaying on Rio Tinto's samples was performed by Anglo American's laboratory in Salisbury, Rhodesia for 10 samples from drillholes 33, 34 and 35.

### 10.1.3 Gold Fields

Gold Fields split core with a diamond saw then crushed it to less than 5 mm with a jaw crusher, followed by crushing with a roll crusher to -30 mesh (Crump and Suarez, 1977). Splitting produced a sample for storage and a 300 g sample for analysis. The 300 g sample was pulverised with a disc pulveriser to -100 mesh (Harris, 1979). A 50 g split was sent to Gold Fields' Little Daugh laboratory for Au analysis by atomic absorption (Harris, 1979). For every tenth sample, a 200 g split was sent to Imperial Chemical Industries (ICI), a custom laboratory for gold analysis by neutron activation (Harris, 1979).

Thomas (1982) reported that all the Gold Fields core was analysed for Au by atomic absorption; the majority was also tested for S, and core from two of the holes was also analysed for Mo, Sb and As. Drill logs indicate that the Mo, As and Sb analyses were performed on holes 47 and 48; they were performed by Hunting Technical Services Ltd (Hunting; now HTSPE Limited) in the United Kingdom; Harris (1979) reported that those analyses were made by colorimetry and noted that the same analyses were performed for Gold Fields on parts of holes 18, 22, 24, 28, 29, 32, 33 and 35. Harris (1979) reported that a 50 g sample was sent to Hunting or Robertson Research for analysis of Ag, As, Sb, Mo and S with variable frequency.

Harris (1979) reported on the following procedures for Mo, Sb, and As used by Hunting:

- Mo: Digestion by  $\text{HNO}_3$  and  $\text{HClO}_4$  with leaching of the residue with dilute HCl. No concentration determined spectrophotometrically. The lower detection limit was 0.2 ppm Mo.
- Sb: Ammonium chloride digestion followed by leaching with dilute HCl and oxidation with sodium nitrate. Sb concentration measured spectrophotometrically. The lower detection limit was 0.5 ppm Sb.
- As: Fusion with potassium bisulphate, followed by leaching with dilute HCl and addition of potassium iodide and stannous chlorite. Zn pellets were added, and liberated arsine permeated filter paper impregnated with mercuric chloride. Colour was compared to standard colour charts. The advertised lower detection limit is 5 ppm As.

### 10.1.4 Anglo

For Anglo's core drilling, with the exception of their 1984 holes, the core was split and half was sent for analysis by fire assay to Anglo American Research Laboratory in South Africa (Anglo American Corporation of South Africa Limited and Charter Consolidated PLC, 1982). Initial samples submitted by Anglo in 1981 were analysed for Au, Ag, total S, Mo, As and Sb, but later in 1981, Anglo changed their procedure and samples were analysed for Au and Ag, and also for total S, Mo, As, Sb and  $\text{CO}_3$  if the Au value returned was greater than 0.5 g/t (Hutchison, 1986). Samples from Anglo's 1984 holes, including the FM-series, were split and sent to the Charter Laboratory in England for assay.

### 10.1.5 Oromet

Oromet analysed their core samples for gold, but there are no details on the procedures used; however, the assays are generally on 2 m intervals, with check assays every five to 10 samples.

### 10.1.6 Newmont

For Newmont's drilling, all core was sawn in half, and one-half of the core was subject to a primary crush in Tapia (Knutsen, 1991b). After drying at 100°C for 24 hours and depending on Newmont's sample preparation capacity relative to drill productivity, crushed material was either roll-crushed to 95% minus 10-mesh on site or sent directly to the assay laboratory for sample preparation. The laboratories pulverised the minus 10-mesh material to at least minus 100-mesh before taking a representative split for fire assay.

Samples were sent for analysis of Au by fire assay to Caleb Brett (now called Intertek Group Plc) in St. Helens, England; XRAL in Toronto, Canada; or Rocky Mountain Geochemical (RMGC) in Salt Lake City, Utah (Knutsen, 1991b). Samples from the first phase of drilling were sent to either Caleb Brett or XRAL, and samples from the second phase (holes NSC5A, 5B, 5C, 24, 28-31) were sent to RMGC. All samples were analysed by one-assay-ton fire assay. In the first phase, all samples were analysed on 1.5 m intervals. In the second phase, only obviously well mineralised (sulphides) intervals were analysed, and assay intervals were 1 m.

#### 10.1.7 *Lyndex*

Lyndex sent their core samples to XRAL in Quebec, Canada, for sample preparation and analysis, using the following procedures (Catuzo, 1997):

- Coarse grinding to 90% passing –10 mesh
- Quartering for pulverising
- Pulverising to 90% passing –200 mesh
- Quartering for analysis
- Analysis for gold by fire assay.

All samples were analysed for Au, and some were also analysed for Sb and Mo.

#### 10.1.8 *Rio Narcea*

The following information is taken from Agnerian (2010) and Valdés Suárez (2012), with additional information provided by Astur.

Rio Narcea sent samples from their drilling program to their laboratory at the El Valle mine for analysis. Rio Narcea's geotechnical and hydrological holes were sampled and assayed in the same manner as the exploration holes, with the exception of one of hydrogeological holes. These are described as follows:

- The initial drillhole sample was split to produce a 5 kg subsample.
- Samples weighing 5–7 kg were dried, crushed through a jaw crusher (95% <6 mm), and further reduced (95% passing <4 mm) using an LM5 ring mill. An Essa splitter was used to take a 450–550 g subsample of each split for pulverising. The remaining reject portion was bagged and stored.
- After reducing the subsample to a nominal –200 mesh with an LM2 pulveriser, the samples were thoroughly blended and sent to the fire assay department. A 50 g portion or two 30 g (60 g) portions were used for fire assay.
- For geochemical analysis, or when lower detection was required, the gold was dissolved, and the concentration was determined by the atomic absorption method.

All samples were analysed for Au and As. For intervals of significant mineralisation (>1 g/t Au), samples were also analysed for Mo, Sb, total C and total S. The determinations for C and S were completed at ITMA, in Oviedo, Asturias. Acid digestion for As, Sb and Mo was completed on 2 g aliquots of samples. The laboratory used multi-element aqua regia ICP analyses performed by OMAC Laboratories Ltd (OMAC) on samples from holes RNO2 through RN11 and additional analyses for S on samples from holes RNO2 through RN16.

Assay results were faxed to the Rio Narcea exploration office at Tapia with original certificates sent by regular mail or through the normal pick-up procedure. Pulps and rejects were also returned through the normal pick-up routine. These were sorted for recheck and/or storage. Low-grade material that was well removed from known zones was discarded (Agnerian, 2010).

### 10.1.9 Astur

ALS was selected by Astur as their principal laboratory for the analysis of Salave samples. Sample preparation was completed by a preparation facility in Seville, Spain, and then the pulps for analysis were shipped to ALS laboratory facilities in Loughrea, Ireland operating under OMAC. OMAC with registration number 173T is accredited by the Irish National Accreditation Board to undertake testing as detailed in the Schedule bearing the Registration Number detailed above, in compliance with the International Standard ISO/IEC 17025:2005.

ALS was requested to do their 31B preparation method on the sample, which pulverised approximately 1 kg of material to 85% < 75 µm. A 29.167 g assay charge (one assay ton) was then weighed out for analysis.

The prepared sample was fused with a mixture of lead oxide, sodium carbonate, borax, silica, and other reagents as required, impregnated with 6 mg of gold-free silver, and then cupelled to yield a precious-metal bead. The bead was digested in 0.5 ml dilute nitric acid in the microwave oven. Hydrochloric acid of 0.5 ml concentration was then added, and the bead was further digested in the microwave at a lower power setting. The digested solution was cooled, diluted to a total volume of 10 ml with de-mineralised water, and analysed by atomic absorption spectroscopy (AAS) against matrix matched standards. Detection limits were 0.01 g/t Au at the lower end and 100 g/t Au at the upper end.

If a gold sample assayed over 10 g/t Au, the sample was re-analysed with a gravimetric finish. A prepared sample was fused with a mixture of lead oxide, sodium carbonate, borax, silica, and other reagents in order to produce a lead button. The lead button containing the precious metals was cupelled to remove the lead. The remaining gold and silver bead was parted in dilute nitric acid, annealed, and weighed as gold. The lower detection limit was 0.05 g/t Au, while the upper limit was 1,000 /t Au.

A 33-element ICP analysis was undertaken on all samples using a four-acid digestion. The sample is digested in a mixture of nitric, perchloric, and hydrofluoric acids. Perchloric acid was added to assist oxidation of the sample and to reduce the possibility of mechanical loss of sample as the solution was evaporated to moist salts. Elements were determined by inductively coupled plasma – atomic emission spectroscopy (ICP-AES).

### 10.1.10 BDG

BDG completed a program of seven drillholes for 2,217 m from January to April 2018. Quartered core was sampled. Half core was split into two quarters and one quarter over predominantly 1–2 m sample lengths (average sample length 1.33 m) was sent for analysis. The core size method produced a representative sample. The samples were transported by courier packed and palletised.

All samples from the 2018 drill program were analysed at ALS Laboratory Group (ALS) in Seville, Spain, a fully accredited laboratory using the following methods:

- Au-AA26 Au by fire assay and AAS (50 g pulp sample) for gold.
- PREP-31CY for sample preparation fine crushing – 70%; <2 mm, split sample – Boyd rotary splitter, pulverise 1,000 g to 85% <75 µm.
- ICP 61 – near total four-acid digest for (S, As, Sb).

QAQC procedures included the insertion of certified reference materials (CRMs) and blank material for each sample batch at 5% of samples sent as well as duplicates.

AGQ Laboratories, located in Seville, Spain was used as an umpire laboratory for approximately 100 samples. All QAQC data was reviewed, and initial duplicate results demonstrated significant analytical errors compared to the initial ALS results. Repeat analysis of the same samples by ALS and AGQ replicated the initial ALS results. The difference was explained as incomplete sample dissolution. The initial ALS

results were used in the MRE. The Qualified Person is satisfied with the QAQC results and the data used in the MRE.

Analytical work was performed by ALS in Spain and Ireland. ALS is an ISO 17025-2005 accredited and internationally recognised analytical services provider. All drill core was logged and sampled at its core storage facility in Tapia de Casariego. Sample intervals varied from 0.9 m to 2.0 m and all core was split and one half quartered by saw and quarter-core samples were shipped to ALS in Seville. Samples were crushed and pulverised at ALS and a 50 g sample was analysed for gold by fire assay method and atomic absorption finish. Samples were also analysed by four-acid ICP-AES for arsenic, antimony and sulphur. BDG follows industry standard procedures for the work carried out on the Salave Gold Project, with a QAQC program. Blank, duplicate and standard samples were inserted into the sample sequence sent to the laboratory for analysis.

The techniques are considered total assay.

## 10.2 Qualified Person's Summary and Comments

Exploration activities at the Salave deposit were carried out by 10 different companies commencing in 1970. Their exploration activities are described in Section 8.

Different companies applied different quality assurance (QA) procedures, which were summarised in the following historical reports:

- Golder and RPA (12 February 2011): National Instrument 43-101 Technical Report; Preliminary Economic Assessment on The Salave Gold Project, Asturias Region, Spain.
- Prens, N., Gustin, Michael, M., Anderson, A. (2014 and updated in 2017) Amended Technical Report (NI43-101) on the Salave Gold Project, Asturias Region, Spain (2017). Prepared for BDG.

No historical data with the results of repeat sampling, umpire laboratories results, blanks or standards were made available to the Qualified Person, thus it was not possible to run an independent QAQC analysis in this report.

The Qualified Person reviewed the described QA procedures in the historical reports. It was found that the QA procedures that were generally applied could be accepted for the purposes of MRE, as each company was checking all previous exploration stages, re-drilling and re-sampling the deposit, and comparing their own results with historical data. That resulted in a relatively dense exploration grid density of 20 m x 20 m and 10 m x 10 m in some areas.

The only identified concern was related to the quality of the IMEBESA sampling (1970 exploration program), because the resampled coarse rejects returned lower grades than originally reported. However, the IMEBESA drillholes were well logged and the alteration codes and gold grades could be used for interpretation of the mineralised zone and interpolation of alteration codes.

The Qualified Person estimated the overall contribution of the IMEBESA drilling results to the resource model. The blank model was interpolated with gold grades twice: first time with all available analytical data, and second time with the IMEBESA holes excluded from the database. The difference between the models is shown in Table 7 with the cut-off grades of 0.0 g/t Au and 2.0 g/t Au.

It could be concluded that when the IMEBESA holes are used for modelling, the overall global tonnage and metal is about 3% higher with similar average gold grade, than when the IMEBESA holes are excluded from the estimate.

The Qualified Person formed the opinion that the IMEBESA holes could be used contribute to the modelling process, as their overall impact to the final estimate is not material.

QAQC procedures for the 2018 BDG exploration program included the insertion of CRMs and blank material for each sample batch at 5% of samples sent. An umpire laboratory, AGQ, located in Seville will be used for approximately 100 samples.

Table 7: Impact of IMEBESA data

Cut-off (Au g/t)	CIM classification	Difference (%)		
		Tonnes	Au (g/t)	Au (oz)
0	Measured	0.0	-2.9	-2.9
	Indicated	0.0	-1.8	-1.8
	Inferred	0.0	-8.4	-8.4
	<b>Total</b>	<b>0.0</b>	<b>-4.5</b>	<b>-4.5</b>
2	Measured	1.1	-3.3	-2.3
	Indicated	-2.3	0.0	-2.3
	Inferred	-6.1	-1.1	-7.1
	<b>Total</b>	<b>-3.1</b>	<b>-0.3</b>	<b>-3.4</b>

### 10.3 Data Quality Assessment by Qualified Person

Based on an assessment of the data and review of the historical reports, the Qualified Person considers the entire dataset to be acceptable for resource estimation with assaying posing minimal risk to the overall confidence level of the MRE.

# 11 Data Verification

## 11.1 Data and Database Verification

All drillhole data files were imported into Micromine software. Validation of the data was then completed which included checks for:

- Duplicate drillhole names
- One or more drillhole coordinates missing in the collar file
- FROM or TO missing or absent in the assay files
- FROM > TO in the assay files
- Sample intervals are not contiguous in the assay file (gaps exist between the assays)
- Sample intervals overlap in the assay files
- First sample is not equal to 0 m in the assay files
- First depth is not equal to 0 m in the survey files
- Several downhole survey records exist for the same depth
- Azimuth is not between 0° and 360° in the survey files
- Dip is not between 0° and 90° in the survey files
- Azimuth or dip is missing in survey files
- Total depth of the holes is less than the depth of the last sample.

No critical errors were identified in the analytical data. 64 historical holes had no assays, and they were excluded from the modelling process.

The following changes were introduced to the analytical database:

- All intervals with missing gold grades were replaced with zero grades.

The topography digital terrain model (DTM) was validated to make sure that it covered the area of the modelled deposits and honoured the drillhole collar data. Drillhole collars were found to match with the topography surface.

## 11.2 Site Visit

Dr Belinda van Lente, an employee of CSA Global and Qualified Person for aspects of this technical report, visited the Salave Gold Project, located in Spain, over three days from 19 to 21 February 2018.

The site visit was required for the purposes of inspection, ground truthing, review of activities, and collection of information and data.

Objectives included:

- Inspect the principal assets within the Salave Project
- Complete initial geological assessment, including inspection of drill core and outcropping mineralisation
- Review access in the tenement area
- Review geology within the tenement
- Visual validation of mineralisation against assay results was undertaken for several holes.

The Qualified Person was given full access to the relevant tenement and discussions were held with BDG personnel to obtain information on the current and planned exploration work.

The following conclusions were made from the site visit:

- Local company geologists associated with the Project are familiar with the geology, deposit type and mineralisation within the tenement.
- The closest town, Tapia de Casariego, sits about 2 km to the west of the Salave Project. Access is very good, with tarred roads in close vicinity and leading to the property, as well as various unsealed roads on the property itself. The closest port of entry is Ribadeo, located approximately 10 km west of the tenement area. There is also a rail line nearby.
- Drilling, drill core cutting, sampling and logging procedures were reviewed and witnessed, and found to be suited to the deposit type and style of mineralisation, as currently understood.

#### Drilling:

- One 12-hour shift/day, drilling at a rate of 30 m/day.
- Safety procedures in place and followed by personnel.
- Care taken to ensure minimal environmental impact, with water from containers used for drilling, lined sumps for collection of drill water runoff, and topsoil stockpiled for rehabilitation.
- At the end of each shift, drill core is transported to the core shed, where photos are taken of the core, both dry and wet, before core cutting.

#### Drill core cutting and sampling:

- Drill core is cut in quarters at a local dimensional stone factory (Marmoleria Alonso), by a trained technician, with a company geologist assisting.
- Drill core is sampled as 1.5 m quarter-core intervals, starting from the top of the hole and downhole, irrespective of geological boundaries. Blanks, standards and duplicates are inserted at a rate 5% into the sample stream. Samples are sent to ALS Global for preparation and analysis (Au, Ag, As, Sb and S).

#### Drill core logging:

- Whole drill core is orientated and logged, recording fracture orientation, recovery, RQD, geology and mineralogy.
- Drill core storage and security is considered good.
- Density determination is by the water immersion method. The procedure for density measurement was reviewed and is considered acceptable.
- The mineralisation at the Salave Project contains elevated gold grades, as well as molybdenum and silver grades, over reasonable strike lengths. The confidence of the mineral distribution and continuity was tested by infill drilling during 2017/2018.
- Drill core from the 2017/2018 drilling campaign was inspected for two drillholes, BD2 and BD5. Gold mineralisation is associated with arsenopyrite and hosted within strongly altered granodiorite. The gold mineralisation is related to faults and fracture zones, parallel to the contact with gabbros, dykes and metasedimentary rocks (quartzite and shale). The mineralogical assemblage typically consists of pyrite, chalcopyrite, arsenopyrite, molybdenite, sphalerite, carbonates, quartz, biotite and chlorite. This was visually confirmed. Granodiorite at various stages of alteration was inspected, with alteration preferentially developed near shear zones and associated veinlets. The stages of alteration include fresh (unaltered biotite), propylitic (biotite to chlorite alteration) and albitic (replacement of plagioclase by K-feldspar and sericite). The rocks in the drill core are non-magnetic (tested with swing magnetic pen).
- Due to extensive overgrowth and ground cover, it was not possible to review outcrops other than some instances of quartzite exposed on the “pit walls” of the historic Roman workings, or the entrances of historical adits. Unsealed roads give generally good access. Over the past centuries,

the lower lying areas of the workings have been filled with meteoric water, forming what is known today as the Lagunas de Salave. These ponds are filled with water that contains high levels of arsenic.

A review of the sampling techniques and data was carried out by CSA Global’s employee, Dr Belinda van Lente during the site visit. The sampling techniques and data were considered to be of sufficient quality to support resource estimation.

Visual validation of the drillhole locations and mineralised intersections was undertaken against hard copy drill sections. The drillholes samples used were considered acceptable for reporting an MRE under the CIM Code. The sampling and analytical procedure is well documented and was appropriate.

CSA Global verified the locations of the current drilling of BD2 and BD6 with visual inspection and by handheld GPS, as shown in Table 8. The collar locations have not yet been surveyed by BDG at the time of the site inspection, and as such only the planned X and Y coordinates were available for comparison. However, these compare very well to the CSA Global GPS readings. The calculated coordinates were then compared with the corresponding ones in the database. The collar coordinates were found to be within several metres from the database records. This is within the normal accuracy of a handheld GPS instrument.

Table 8: Coordinates of two current drillholes (BD2 and BD6) collected using handheld GPS

BHID	Year	BDG database			CSA Global differential GPS			Difference	
		X	Y	Z	X	Y	Z	X	Y
BD2	2018	668315.00	4825872.00	-	668314.00	4825869.00	47.90	-1.00	-3.00
BD6	2018	668230.00	4825805.00	-	668228.00	4825805.00	50.96	-2.00	0.00

Extensive overgrowth and ground cover severely hampered attempts in locating previous drillhole collar locations. However, four historical drillhole locations were found, based on old drill pads, and a single drillhole collar marker (Figure 14). CSA Global was not able to identify the drillhole names however the coordinates were taken by handheld GPS. These coordinates were plotted up in Datamine and compared to historical collars listed in BDG’s drillhole database. Through this process, these four drillholes were tentatively identified as IM12, AA1/3, RN36 and RN67 (Table 9). CSA Global acknowledges that this process is not standard procedure for verifying previous drillhole locations, and as such does not qualify as ground truthing of historical drillholes. It does however highlight the need for BDG to set up a work program in order to locate and identify at least a recommended 10% of these historical drillhole collars for the purpose of QA.

Table 9: Coordinates of four tentatively identified historic drillholes collected using handheld GPS

BHID	Year	BDG database			CSA Global GPS			Difference		
		X	Y	Z	X	Y	Z	X	Y	Z
IM12	1971	668254.60	4825685.53	24.08	668260.00	4825685.00	27.43	5.40	-0.53	3.36
AA1/3	1984	668242.41	4825748.77	40.91	668247.00	4825751.00	47.39	4.59	2.24	6.49
RN36	2005	668269.47	4825617.08	22.85	668268.00	4825610.00	23.29	-1.47	-7.08	0.44
RN67	2005	668243.66	4825732.66	39.03	668241.00	4825729.00	49.95	-2.66	-3.66	10.93



Figure 14: Historical drillhole collar (CSA Global site visit photo, 2018)

### 11.3 Data Spacing and Distribution

Most holes at Salave were drilled at nominal spacings with an average 20 m x 20 m between the collars with nominal orientation of exploration lines from southwest to northeast (Figure 15). Central parts of the deposit had drill density up to 10 m x 10 m, and flanks were explored with approximate grid density of 40 m x 40 m.

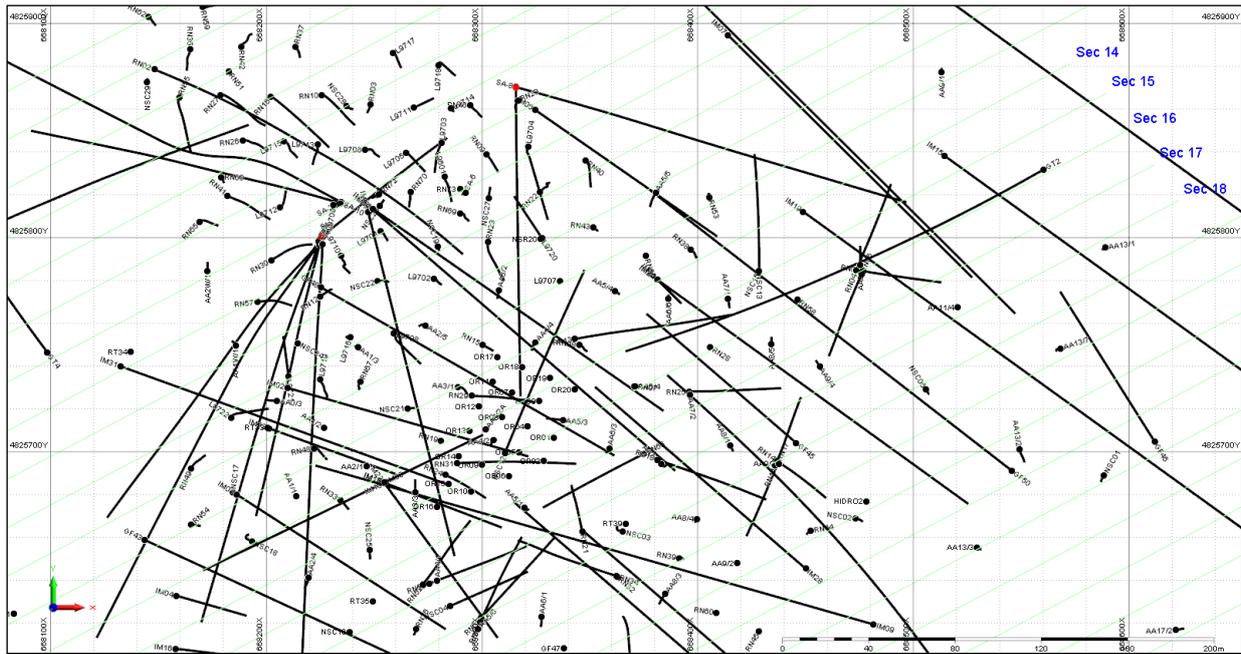


Figure 15: Exploration grid density at Salave

### 11.4 Orientation in relation to Geological Structure

Most holes at the Salave deposit were close to vertical; however, some were drilled towards either 110–125° or 280–290° at dips of about 55–65° to either intersect the mineralised zone or explore the zone down dip (Figure 16).

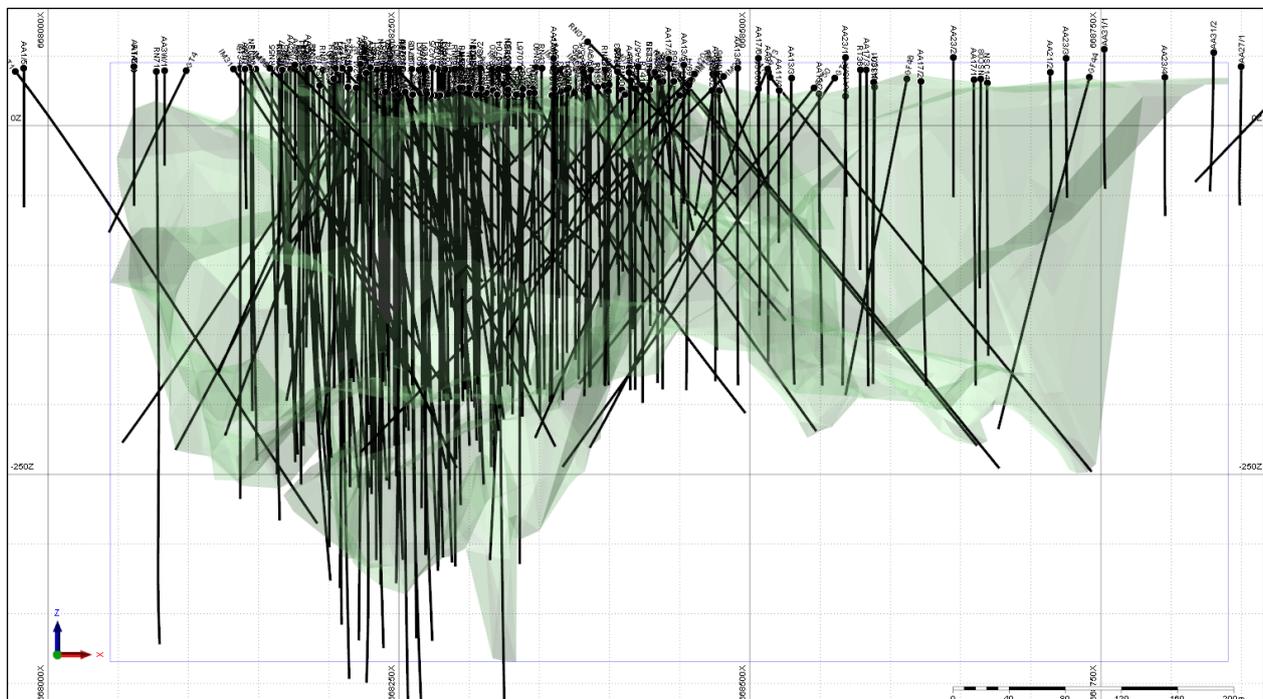


Figure 16: Vertical section showing hole traces and mineralised body (green solid), looking north

### 11.5 Qualified Person’s Global Summary

Based on an assessment of the data and review of the historical reports, the Qualified Person considers the entire dataset to be reliable for the purposes of downstream use in Mineral Resource estimation.

## 12 Mineral Processing and Metallurgical Testing

Results of metallurgical testwork are described in detail in the following historical reports:

- “Preliminary Economic Assessment on the Salave Gold Project, Asturias Region, Spain” by Golder in February 2011
- “Amended Technical Report on the Salave Gold Project, Asturias Region, Spain” by MDA in January 2017.

Both reports describe results of various metallurgical tests completed by various companies.

The MDA report states that considerable metallurgical testing of drill core has been completed. The main purpose was to compare the testwork metallurgical grades and grades estimated from the database.

The first metallurgical tests that can be compared to drillhole assay data were from two large-scale metallurgical tests that were completed by Ammtec in 2005, compositing nearly 3 tonnes of mostly Rio Narcea drill core in each of the two composites for upper and lower mineralised horizons. A pilot flotation plant was operated to consume the composites at a rate of about 150 kg per day.

The results of the metallurgical tests were considered to be acceptable. The pilot plant metallurgical testing indicated higher grades than drillhole assays, which was explained by a presence of a coarse gold component.

Ammtec also completed 65 variability tests. Drill core was selected, weighed, and compositing into 65 samples for the tests. Each composite was based on a 7 kg sample, used to make the upper and lower horizon composites for the pilot plant testwork. The assay grades and calculated grades of the 1 kg split sample can be compared to the expected value calculated from the drillhole assays of the intervals used in the composite. The comparison of estimated and calculated grades returned acceptable results.

Astur completed metallurgical tests on a number of composites. Composite samples were constructed from low-grade, average-grade, and high-grade samples from both upper and lower zones of the deposit. The size of each test was generally around 2 kg. The metallurgical tests showed slightly higher grades than the estimated head grade by using the drillhole assays.

The Golder report describes results of various tests, including conventional cyanidation methods, biometallurgy technologies (bio-oxidation and bioleaching) and pressure oxidation technologies. Different methods returned different recoveries, but no particular method was recommended in the Golder report.

CSA Global reviewed the reports, but CSA Global did not use the metallurgical recoveries in the MRE and reporting. The review of metallurgical testwork demonstrated that:

- Gold could be recovered successfully by flotation with reported recoveries ranging between 96.3% and 97.8%,
- Bulk tests returned grades similar to the ones reported by core samples,

which is sufficient for this study.

# 13 Mineral Resource Estimate

## 13.1 Statistical and Geostatistical Analysis

Classical statistical and geostatistical analyses were completed for raw and composited gold grades.

Before undertaking the resource estimate, statistical assessment of the data was completed to understand how the estimate should be accomplished. Exploration sample data were statistically reviewed, and variograms were calculated to determine spatial continuity for gold grades.

Statistical analysis was carried out using Micromine software.

## 13.2 Data Coding and Composite Length Selection

Drillhole coding is a standard procedure which ensures the correct samples are used in classical statistical and geostatistical analyses, and grade interpolation. For this purpose, a solid wireframe for the mineralised envelope was used to select drillhole samples using Micromine software.

Mineralisation wireframe was used to select drillhole samples, and the data was assigned a code in the field “ORE”. Further coding of sample intervals was completed using logged alteration codes. The interval file with logged alteration codes was merged with analytical data table. Several drillholes had missing alteration codes. The alteration codes were interpolated into these holes using indicator approach and inverse distance weighting (IDW) algorithm. The resultant analytical data table has alteration codes assigned to each assayed interval.

A summary of the codes and fields used to distinguish the data during geostatistical analysis and grade estimation is provided in Table 10.

Table 10: Domain field and description

Field	Flag	Description
ORE	1	Within mineralised wireframe zone
	0	Outside of mineralised wireframe zone
AU_CUT		Grade field
RESCAT	1	Measured
	2	Indicated
	3	Inferred
PILLAR	0	Below -40 m from surface
	1	Above -40 m from surface
alt_code	OX	Iron oxides
	AS	Albitisation-sericitisation
	CL	Chloritisation and chloritisation-sericitisation
	FR	Fresh rocks
	MT	Metamorphised sediments
	SE	Sericitisation
	TH	Albitisation with hematite
AB	Albitisation	

Visual validation of the flagged samples was carried out to make sure the correct samples were selected by the wireframe.

Classical statistical analysis was then repeated for all grades within the mineralised envelope and separately for each alteration rock type. Top-cut grades were estimated for each alteration type and applied to all sample intervals before the interval compositing process.

Basic statistical parameters were obtained for the raw and composited data to make sure that compositing has not distorted the statistics.

Based on the drillhole coding, samples from within the resource wireframes were used to conduct a sample length analysis. The majority of raw sample intervals are 1.5 m in length (average 1.52 m) as shown in Figure 17. Based on the review, a 1.5 m composite length was selected. The selected samples within the modelled mineralised zone were composited over 1.5 m interval, starting at the drillhole collar and progressing downhole. Compositing was stopped and restarted at all boundaries between geological domains. If a gap between samples of less than 15 cm occurred, it was included in the sample composite. If the gap was longer than 15 cm, the composite was stopped, and another composite was started from the next sample.

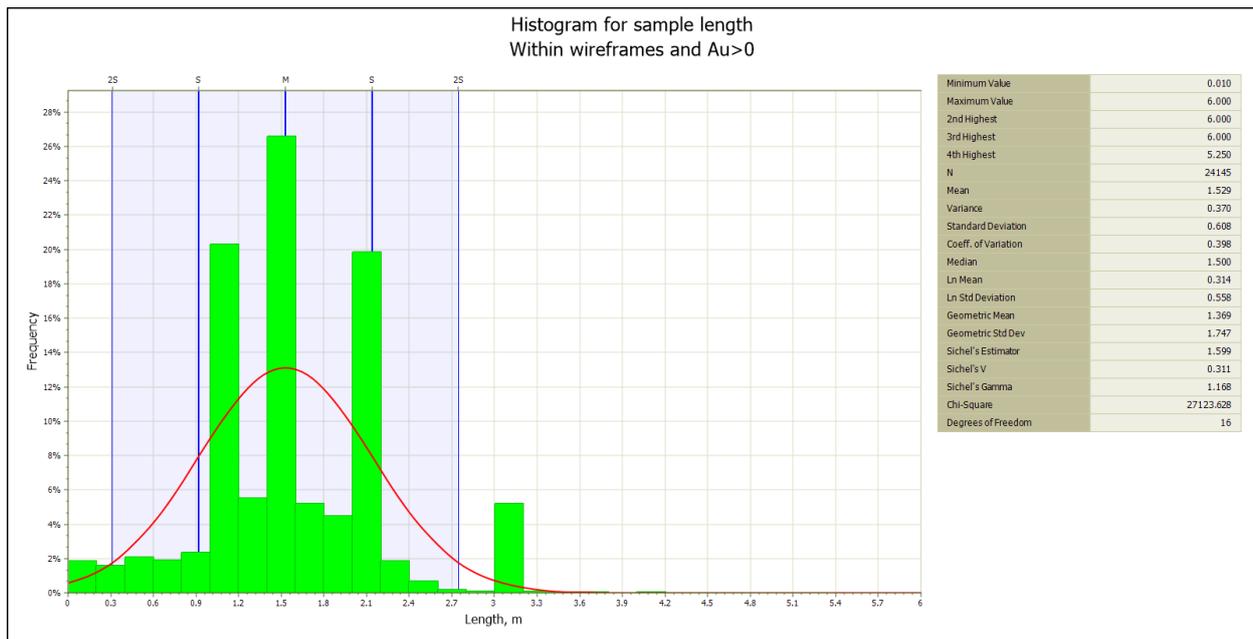


Figure 17: Histogram of sample lengths

### 13.3 Statistical Analysis

Once the mineralised zone for the deposit was interpreted and wireframed, and all samples were coded by the alteration domains, classical statistical analysis was repeated for the sample composites within the interpreted envelope and within each alteration domain to meet the following objectives:

- To assess the mixing effect of grade populations for gold grades
- To assess the necessity of separation of grade populations if more than one population was observed.

Histograms and probability plots were generated for gold grades separately for each alteration domain. Histograms demonstrated that the domaining resulted in successful separation of gold domains. Most of histograms show lognormal distribution of gold grades without apparent mixing of gold grades. Gold grade statistics for all domains are shown in Table 11.

The coefficient of variation for gold grades is between 1.1 and 4.6 which indicates that top-cutting is required for most domains.

Table 11: Classical statistics for gold (weighted on sample length)

Element	Domain	Minimum	Maximum	No. of samples	Mean	Variance	Standard deviation	Coefficient of variation	Median
<b>Unconstrained assays</b>									
Au, g/t	-	0.001	166	33,725	1.25	16.3	4.03	3.41	0.10
<b>Assays within mineralised zone</b>									
Au, g/t	ORE = 1	0.001	166	24,718	1.52	19.5	4.42	2.92	0.30
<b>1.5 m composites within mineralised zone</b>									
Au, g/t	ORE = 1	0.001	166	30,051	1.42	16.1	4.01	2.80	0.30
<b>1.5m composites within alteration domains</b>									
Au, g/t	AS	0.005	166	8,246	3.55	41.9	6.47	1.82	1.80
Au, g/t	OX	0.025	2.85	66	0.54	0.3	0.57	1.09	0.43
Au, g/t	CL	0.002	83	11,889	0.55	4.0	2.01	3.52	0.10
Au, g/t	FR	0.001	36.64	4,147	0.24	1.0	1.02	4.21	0.03
Au, g/t	MT	0.001	38	2,953	0.74	2.7	1.65	2.23	0.16
Au, g/t	SE	0.130	45.8	76	6.21	75.3	8.68	1.43	2.48
Au, g/t	TH	0.005	26	630	0.75	3.9	1.97	2.52	0.12
Au, g/t	AB	0.005	60.07	2,044	1.35	8.2	2.87	2.15	0.70

### 13.4 Treatment of Outliers

A review of grade outliers was undertaken to ensure that extreme grades are treated appropriately during grade interpolation. Although extreme grade outliers within the grade populations of variables are real, they are potentially not representative of the volume they inform during estimation. If these values are not cut, they have the potential to result in significant grade over-estimation on a local basis.

Classical statistical analysis was carried out for each geological domain. The selected top-cuts were applied to all gold grades in the corresponding geological domains before the length compositing process.

Table 12: Selected top-cuts

Domain	Au (g/t)
OX	-
AS	100
CL	31
FR	21
MT	24
SE	-
TH	16
AB	19

### 13.5 Geostatistical Analysis

The purpose of geostatistical analysis is to generate a series of semi-variograms that can be used as the input weighting mechanism for Kriging algorithms. The semi-variogram ranges determined from this analysis contribute heavily to the determination of the search neighbourhood dimensions.

All variograms were calculated and modelled for the composited sample file constrained by the mineralised zone for gold with all alteration domains combined. It was decided to model relative semi-variogram model given they were more interpretable.

Downhole experimental variograms were modelled to estimate the expected nugget effect. The modelled nugget effect was then used when directional semi-variograms were modelled.

The main axes for semi-variogram modelling were selected using overall geological dimensions of the deposit. The azimuth of the main direction was 350° with no plunge. The azimuth of the second direction was 80° with a –15° dip and the third axis perpendicular to the first two axes – an azimuth of 80° with a 75° dip.

All modelled experimental semi-variograms were exponential and spherical and had two nested structures. The parameters of the modelled semi-variograms are listed in Table 13 and shown in Figure 18.

The semi-variogram ranges were used to determine the search radii for gold (81.7 m for the main direction, 79.9 m for the second direction, and 56.1 m for the third direction). The semi-variogram ranges were used in the search ellipse and grade interpolation process. Generally, most of the semi-variogram ranges were greater than sample spacing.

Table 13: Semi-variogram characteristics

Element	Type	Axis	Azimuth	Dip	Nugget	Partial sills	Ranges
Au	Exponential and spherical	Main	350	0	0.398	0.461 and 0.242	5.5 and 81.7
		Second	80	-15			3.8 and 79.9
		Third	80	75			15.1 and 56.1

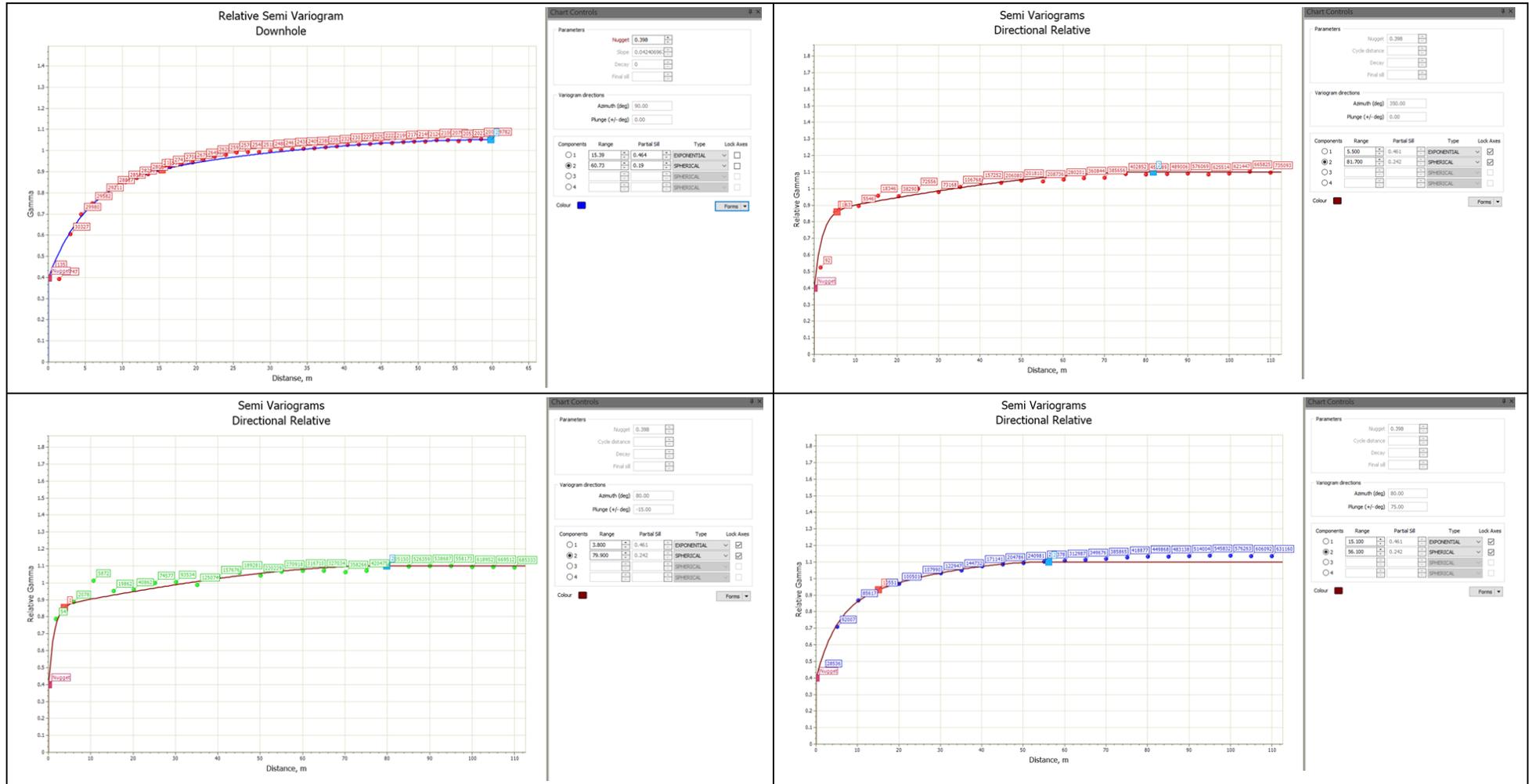


Figure 18: Downhole and directional semi-variogram models for gold

## 13.6 Density

BDG supplied CSA Global with density measurements taken on drill core using the water immersion method, which is based on sample weight in air and in water-saturated state.

Density measurements were taken from 73 historical and two recent holes at various depths from all main representative rock types at the deposit. The total number of supplied density measurements was 396 for the historical holes and 78 for the recent drilling. CSA Global decided that 474 measurements are sufficient for interpolation of density values into the block model.

All density values were interpolated into the block model separately into each alteration domain using the same interpolation parameters as for the gold grades. It was found that two geological domains did not have sufficient number of density measurements – domains SER and CHL. These domains were assigned an average density value of 2.67 t/m<sup>3</sup>, which is an average density value for all geological domains combined.

## 13.7 Block Modelling

### 13.7.1 Software

Block modelling was undertaken by CSA Global using Micromine version 18.0.703.0 software.

### 13.7.2 Block Model Construction

A block model (“Model\_OK\_V2.DAT”) was created to encompass the full extent of the Salave deposit. Block model parameters are shown in Table 14 and block model attributes are shown in Table 15.

Table 14: Block model parameters

Axis	Extent (m)		Block size (m)	Maximum sub-celling (m)	No. of parent blocks
	Minimum	Maximum			
Easting	667,998	668,902	4	1	226
Northing	4,825,398	4,826,052	4	1	164
RL	-402.5	52.5	4.5	0.9	101

Table 15: Block model attributes

Field	Description
X	Easting (m)
Y	Northing (m)
Z	RL
_X	Easting block size (m)
_Y	Northing block size (m)
_Z	RL block size (m)
sg	Density values (t/m <sup>3</sup> )
alt_code	Alteration code: OX Iron oxides AS Albitisation-sericitisation CL Chloritisation and chloritisation-sericitisation FR Fresh rocks MT Metamorphised sediments SE Sericitisation TH Albitisation with hematite AB Albitisation
RESCAT	Resource categories: 1 – Measured, 2 – Indicated, 3 – Inferred
AU_CUT	Au grade field (g/t)

The block model used a parent cell size of 4.0 m(E) x 4.0 m(N) x 4.5 m(RL) with sub-celling to 1.0 m(E) x 1.0 m(N) x 0.9 m(RL) to maintain the resolution of the mineralised zone. The parent cell size was selected based on approximately quarter of the average drill section spacing at the deposit and considering underground method of its development. The model cell dimensions were also selected to provide sufficient resolution to the block model in all directions.

An empty block model was created within the closed wireframe model for the mineralised zone. The block model was then restricted below the topography surface (i.e. all the model cells above the surface were deleted from the model file). The initial filling with a corresponding parent cell size was followed by sub-celling where necessary. The sub-celling occurred near the boundaries of the mineralised zone or where model was truncated with the topographic surface. The sub-cells were optimised in the models where possible to form larger cells.

### 13.8 Grade Interpolation

Gold grades were interpolated into the empty block model using Ordinary Kriging (OK). The block model was initially domained using alteration codes. The domaining used the following process:

- 1) An additional field “IND\_AS” was created in the sample data file. All intervals with the alteration code “AS” were assigned a value of 1 in this field, and all other intervals were assigned a value of 0.
- 2) All 0 and 1 values from the field “IND\_AS” were interpolated into the model cells.
- 3) Similar fields were created for all other alteration codes (i.e. “IND\_OX”, “IND\_AB” etc) and interpolated into the model. Thus, the model has nine new fields with interpolated 0 and 1 values for each alteration type. The interpolated values indicated the estimated probability for each alteration type in each model cell.
- 4) A maximum value for those indicators was established for each model cell, and a corresponding alteration code, which had maximum probability, was assigned to the corresponding model cells.

Gold grades were then interpolated into the block model with the corresponding top-cut grades applied. Gold grades for each alteration domain were interpolated separately to the corresponding domain in the block model, thus no grade mixing between the alteration domains took place.

A “parent block estimation” technique was applied (i.e. all sub-cells within the limits of a parent cell were informed with the same gold grade).

The OK process was performed at different search radii until all cells were interpolated. The search radii were incremented from one-tenth of the semi-variogram long ranges in all directions to the full semi-variogram ranges in all directions, and all subsequent runs were incremented by full semi-variogram ranges in all direction until all model cells were informed with gold grades.

The orientation of the search ellipse was determined from the geology of the deposit and semi-variogram directions: azimuth = 350°, plunge = 0°, dip = -15°.

The blocks were interpolated using only assay composites restricted by the wireframe model for the mineralised zone of the deposit, and separately to each alteration domain. When model cells were estimated using radii not exceeding the full semi-variogram ranges, a restriction of at least three samples from at least two drillholes or trenches was applied to increase the reliability of the estimates. The interpolation strategy is shown in Table 16.

Table 16: Interpolation parameters

Interpolation method	OK			
	Less or equal to 1/3 of semi-variogram ranges	Less or equal to 2/3 of semi-variogram ranges	Less of equal to semi-variogram ranges	Greater than semi-variogram ranges
Search radii				
Minimum number of samples	3	3	3	1
Maximum number of samples	12	12	12	12
Minimum number of drillholes or trenches	2	2	2	1

De-clustering was performed during the interpolation process by using four sectors within the search neighbourhood. Each sector was restricted to a maximum of three points, and the search neighbourhood was restricted to an overall minimum of three points for the interpolation runs using radii within the semi-variogram long ranges. The maximum combined number of samples allowable for the interpolation was therefore 12. Change of support was honoured by discretising to 5-points x 5-points x 5-point kriged estimates. These point estimates are simple averages of the block estimates.

### 13.9 Block Model Validation

Validation of the grade estimates was completed by:

- Visual checks on screen in cross-section and plan view to ensure that block model grades honour the grade of sample composites
- Statistical comparison of sample and block grades
- Alternative interpolation methods
- Generation of swath plots to compare input and output grades in a semi-local sense, by easting, northing and elevation.

#### 13.9.1 Visual Validation

The block model with interpolated grades was displayed on screen along with the sample grades and colour coded according to alteration domains. Visual validation demonstrated close correlation between modelled grades and composited samples, as well as interpolated alteration domains and logged lithology in the database.

#### 13.9.2 Statistical Validation

The average gold grades in the model were compared with the average grades in the composited sample files. It was found that the estimated grades were globally 30% relative lower than the grades in the composites (1.42 g/t Au in the composite file vs. 0.97 g/t Au in the block model), which is a natural result due to the clustering of the sample data.

#### 13.9.3 Alternative Interpolation

The blank model was used to interpolate gold grades using IDW with the powers of two and three. It was found that the model with interpolated grades using IDW methods returned about 3% lower (relative) average gold grades and 4% lower metal than the OK model at a 0 g/t Au cut-off grade. With the cut-off of 2 g/t applied to the models, the gold grades were 5 to 7% higher with 1–1% lower metal in the IDW models (Table 17). The results are believed to be within acceptable limits.

#### 13.9.4 Swath Plots

Swath plots were generated for each 20 m bench and each 20 m vertical section in east-west and north-south directions for all alteration domains combined. The results of this validation for all lithological

domains combined are shown in Table 17. The plots generated for individual alteration domains demonstrate close correlation between the modelled gold grades and sample composites. It is apparent that the model has smoothed the composite grades, which is to be expected due to the volume variance effect.

Table 17: Comparison between OK and IDW interpolation method

Cut-off Au (g/t)	OK		IDWx2		IDWx3		Difference (%)			
	Au		Au		Au		With IDW x 2		With IDW x 3	
	g/t	koz	g/t	koz	g/t	koz	g/t	koz	g/t	koz
0	0.97	2,908	0.94	2,808	0.93	2,788	-3.4	-3.5	-4.1	-4.1
0.2	1.39	2,821	1.42	2,718	1.45	2,698	2.3	-3.7	4.3	-4.4
0.4	1.73	2,683	1.77	2,587	1.80	2,573	2.5	-3.6	4.3	-4.1
0.6	2.04	2,528	2.12	2,433	2.15	2,422	3.7	-3.8	5.6	-4.2
0.8	2.34	2,370	2.44	2,285	2.49	2,277	4.2	-3.6	6.2	-3.9
1	2.66	2,205	2.76	2,141	2.81	2,138	3.6	-2.9	5.7	-3.0
1.2	2.99	2,048	3.10	1,997	3.16	1,999	3.5	-2.5	5.6	-2.4
1.4	3.33	1,901	3.45	1,860	3.51	1,867	3.7	-2.1	5.6	-1.8
1.6	3.66	1,770	3.79	1,740	3.87	1,748	3.6	-1.7	5.7	-1.2
1.8	3.97	1,659	4.12	1,633	4.21	1,644	4.0	-1.6	6.1	-0.9
2	4.27	1,556	4.48	1,531	4.58	1,541	4.8	-1.6	7.2	-1.0
2.2	4.60	1,456	4.82	1,439	4.94	1,451	4.8	-1.1	7.4	-0.3
2.4	4.95	1,361	5.17	1,357	5.29	1,372	4.5	-0.3	7.0	0.8
2.6	5.29	1,277	5.52	1,281	5.64	1,301	4.3	0.4	6.6	1.9
2.8	5.65	1,198	5.86	1,214	5.98	1,236	3.7	1.4	6.0	3.2
3	5.99	1,130	6.20	1,152	6.32	1,178	3.5	2.0	5.5	4.3

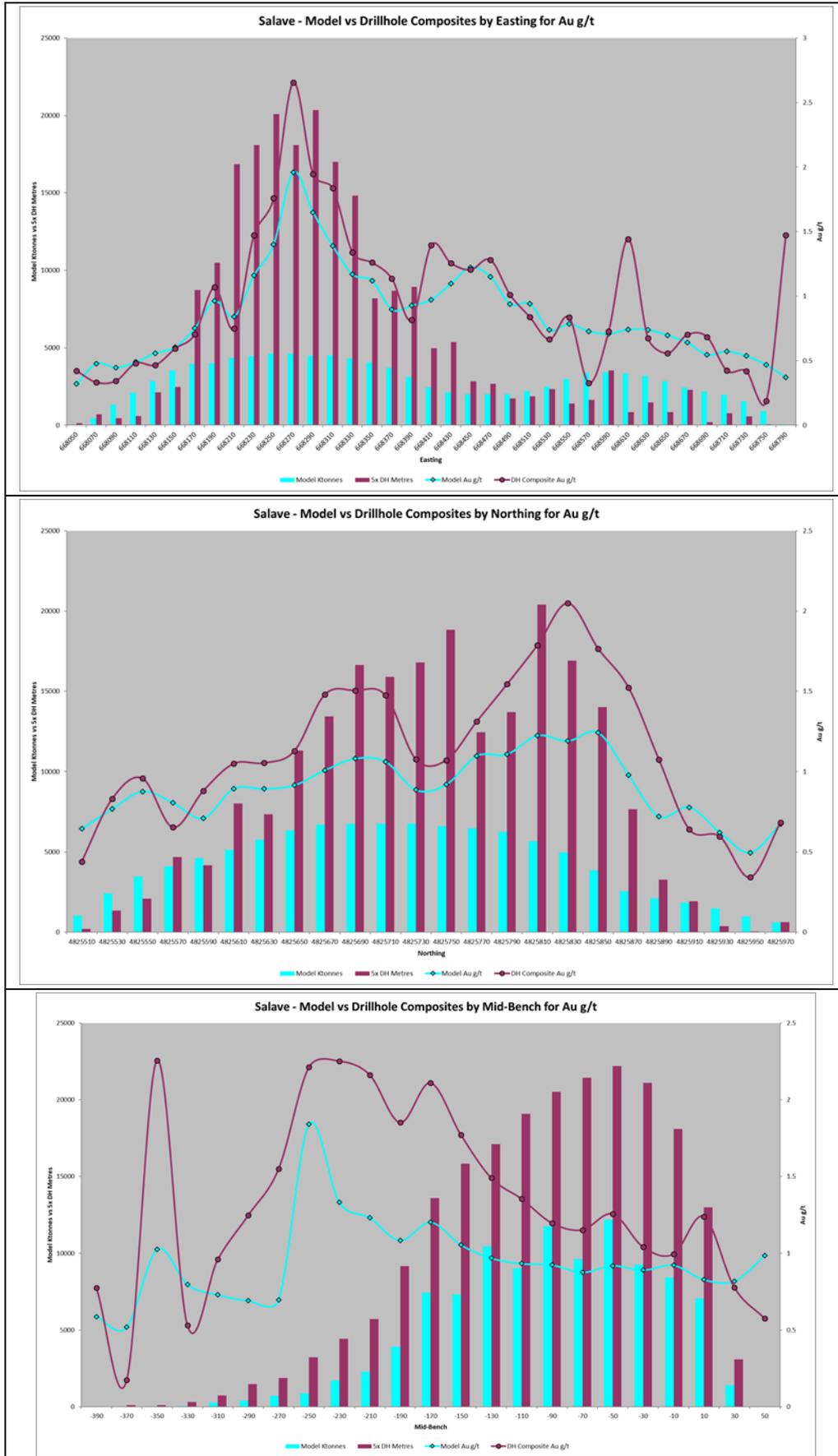


Figure 19: Swath plots for gold grades – combined alteration domains

## 13.10 Geological Modelling

### 13.10.1 Software

Geological modelling was undertaken by CSA Global using Micromine version 18.0.703.0 software.

### 13.10.2 Preliminary Statistical Assessment

Preliminary statistical assessment was carried out to review the distribution of unrestricted gold grades and to select the cut-off grade for interpretation of the mineralisation at the deposit. Figure 20 summarises the statistical properties of the combined unrestricted assay database for gold.

The histogram demonstrates that there are several gold populations at the deposit. A cut-off grade of 0.47 g/t Au was selected for interpretation of the mineralised zone. The analysis of the gold grades distribution resulted in the conclusion that the deposit has several grade populations above the selected cut-off grade, and further domaining of grades is therefore required.

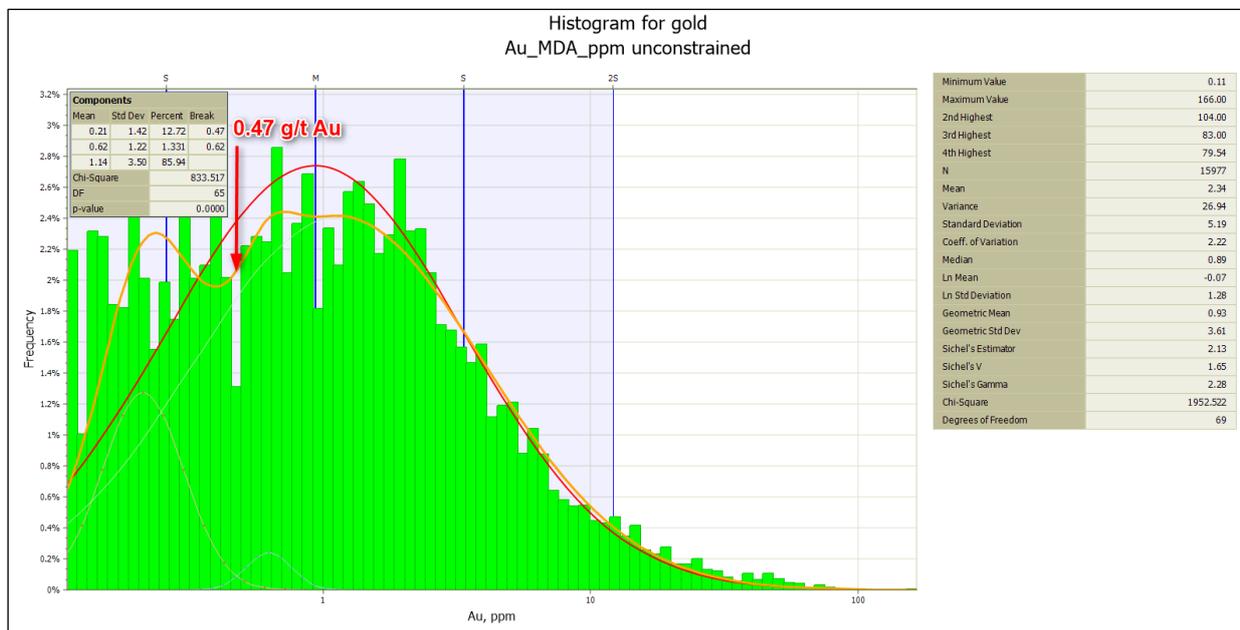


Figure 20: Log histogram for unrestricted gold grades

## 13.11 Lithology, Structure and Alteration

The database included full logging of lithology and alteration codes of the deposit. Further statistical analysis and visual examination of cross sections established strong correlation between the types of alteration and gold grades. For example, most of high-grade zones are strongly correlated with zones of intense albite-sericite alteration and structure in the granodiorite.

It was decided to model the alteration codes using indicator approach which is described in detail in the following sections of the report. Figure 21 shows an example cross section with interpolated alteration domains in the block model. The modelled alteration domains closely reflect logged alteration in drillholes.

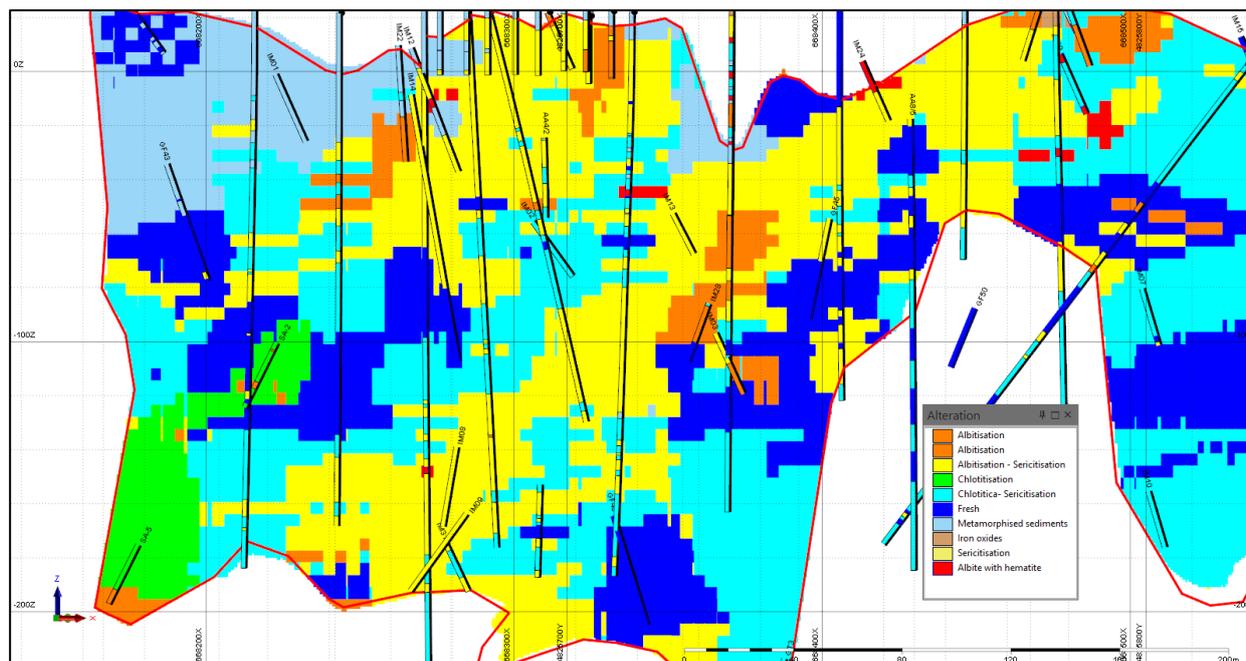


Figure 21: Modelled domains for alteration types (section 16, looking northwest)

### 13.12 Mineralisation

Interpretation of the Salave deposit was based on the current understanding of the deposit geology. Each cross section generally 20 m spaced apart was displayed in Micromine software together with drillhole traces colour-coded according to gold values.

Grade composites were created to assist with the interpretation and wireframing. The grade compositing process was run with the following input parameters:

- Trigger value: 0.47 g/t Au
- Maximum composite length: 1 m
- Minimum grade of final composite: 0.47 g/t Au
- Maximum consecutive length of waste: 2 m
- Minimum grade \* length: 0.47 g/t\*m Au.

All grade composites were displayed along the drillhole traces to help with visualisation of mineralised intervals and interpretation and interpretation of the mineralised zone. The grade composites were not used for any further modelling stages.

The following techniques were employed whilst interpreting the mineralisation:

- Each cross section was displayed on screen with a clipping window equal to a half distance from the adjacent sections ( $\pm 10$  m).
- All interpreted strings were snapped to drillhole intervals.
- Internal waste within the mineralised envelopes was not interpreted and modelled. It was included in the interpreted envelopes.
- If a mineralised envelope did not extend to the adjacent drillhole section, it was projected halfway to the next section, and terminated. The general direction and dip of the envelopes was maintained.
- Where no drillhole was present down dip, the mineralisation was extended approximately 10 m down dip.

- If a mineralised lens extended to the topography surface, it was extended, at the same width as the last drillhole, above the surface to ensure there would not be any gaps between the mineralised zone and the topography when the block model was built.

Figure 22 shows an example of an interpreted cross section with mineralisation.

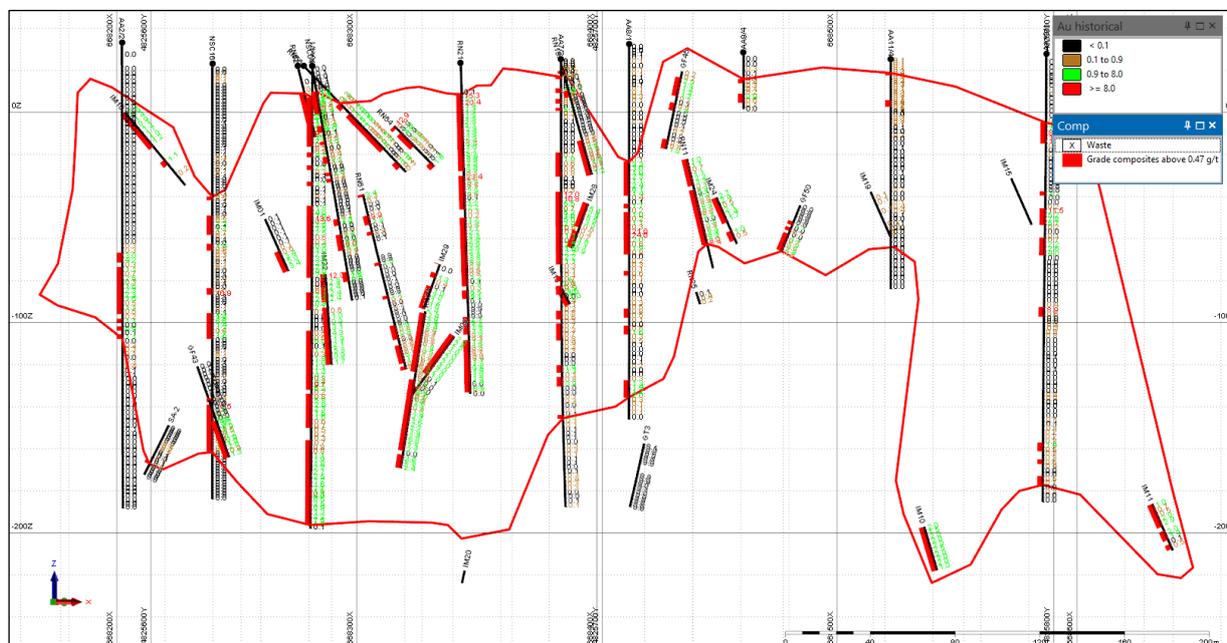


Figure 22: Example of interpretation of mineralisation – section 18 (looking northwest)

All interpreted strings were “snapped” to drillholes based on logged lithologies and chemical assays/grade composites. The strings were then triangulated to form a closed wireframe model.

The interpreted strings were used to generate 3D solid wireframe for the mineralised envelope. Every section was displayed on-screen along with the closest interpreted section. If the corresponding envelope did not appear on the next cross section, the former was projected halfway to the next section, where it was terminated. The modelled envelope for the mineralised zone is shown in Figure 23.

A mineralisation wireframe was generated and saved to the file “ORE - Ore”.

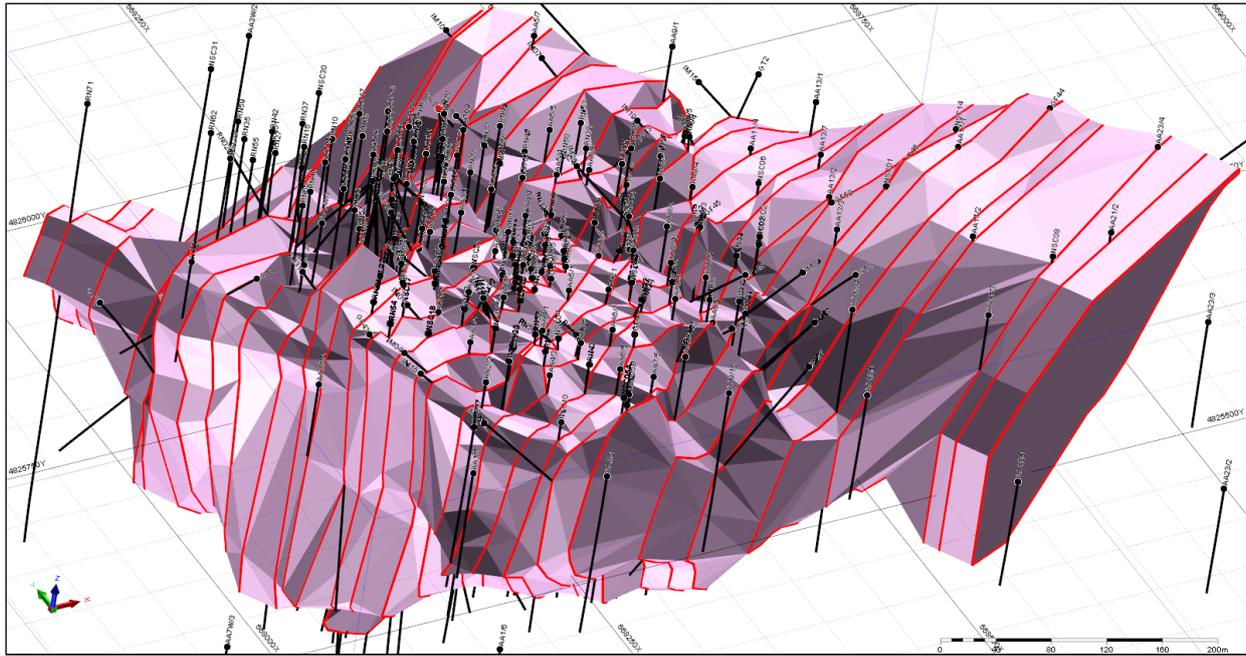


Figure 23: 3D view of the wireframed mineralised zone (looking northeast)

### 13.13 Topography

The topographic surface was provided by BDG in DXF format and imported to Micromine. The surface was digitised from a topographic map with 1 m contours, which were then used to generate the triangulated surface. This surface was employed by CSA Global to limit the block model.

# 14 Mineral Resource Reporting

## 14.1 Reasonable Prospects Hurdle

Under CIM guidelines (10 May 2014), all reports of Mineral Resources must have “reasonable prospects for eventual economic extraction”, regardless of the classification of the resource.

The Qualified Person deems that there are reasonable prospects for eventual economic extraction on the following basis:

- Preliminary metallurgical testwork indicates that Salave mineralisation may be amenable to successful extraction
- The cut-off grade adopted for reporting (2 g/t Au) is considered reasonable given the Mineral Resource is likely to be exploited by underground mining methods, sulphide concentration, and gold recovery using off-site processing.

## 14.2 Resource Classification

The Salave Gold Project Mineral Resources have been classified using the CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by CIM Council, and procedures for classifying the reported Mineral Resources were undertaken within the context of the Canadian Securities Administrators NI 43-101.

The classification level is based upon an assessment of geological understanding of the deposit, geological and mineralisation continuity and confidence in the deposit geology, drillhole spacing, QC results and data quality, search and interpolation parameters and an analysis of available density information.

The following approach was adopted when classifying the Mineral Resources:

- Measured Mineral Resources were defined where block grades were interpolated from a minimum of three composites derived from a minimum of two holes, where the average distance to the block centroid did not exceed 10 m.
- Indicated Mineral Resources were defined in areas where the drill density did not exceed approximately 20 m x 20 m with at least two mineralisation intersections. Geological structures are relatively well understood and interpreted.
- Inferred Mineral Resources were defined in areas lying outside the Indicated wireframes, which still display reasonable strike continuity and down dip extension, based on the current drillhole intersections.
- The resource classification applied is illustrated in Figure 24 (red – Measured, light green – Indicated, blue – Inferred).

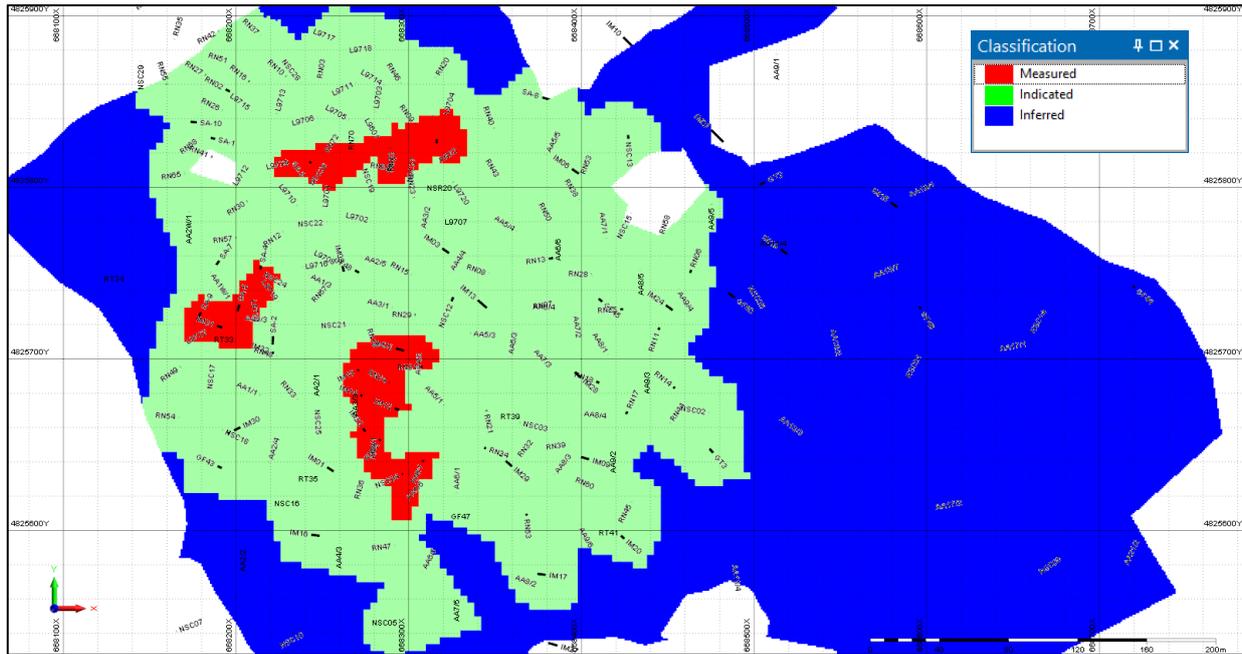


Figure 24: Mineral Resource classification – plan view at -50 m RL

### 14.3 Mineral Resource Estimate

The MRE has been classified and reported in accordance with the CIM Code and is therefore suitable for public release. The MRE is reported by classification in Table 18. The Mineral Resource has been reported above a cut-off of 2 g/t Au and is current to 31 October 2018.

Table 18: Salave MRE by classification –31 October 2018

Resource category	Tonnes (Mt)	Au grade (g/t)	Au contained metal (koz)
Measured	1.0	5.6	190
Indicated	7.2	4.4	1,020
<b>Measured + Indicated</b>	<b>8.2</b>	<b>4.6</b>	<b>1,210</b>
Inferred	3.1	3.5	350

Notes:

- Classification of the MRE was completed based on the guidelines presented by CIM, adopted for Technical Reports which adhere to the regulations defined in Canadian NI 43-101.
- A cut-off grade of 2 g/t Au has been applied when reporting the Mineral Resource.
- All density values were interpolated, except CHL and SER domains where a single density value of 2.67 t/m<sup>3</sup> was used.
- Rows and columns may not add up exactly due to rounding.

The Mineral Resources exclude mineralised material that lies between surface and a depth of 40 m. This is due to the necessity to maintain a surficial crown pillar in a potential underground operation.

### 14.4 Comparison with Previous Estimates

An MRE was previously completed by MDA in January 2017 (Table 18). MDA adopted a 2 g/t reporting cut-off grade.

Table 19: Salave MRE by MDA – January 2017

Classification	Tonnes (Mt)	Au grade (g/t)	Au contained metal (koz)
Measured	0.5	5.9	97
Indicated	6.6	4.4	847
<b>Measured + Indicated</b>	<b>7.1</b>	<b>4.5</b>	<b>944</b>
Inferred	1.1	3.1	106

CSA Global's model reports globally 42% more tonnage, almost identical average gold grades and 53% more gold metal.

When combined Measured and Indicated Mineral Resources are compared between the estimates, CSA Global's model returns 16% more tonnage, 3% higher average grade and 31% more contained metal.

The main differences can be explained by the following:

- 1) MDA did not model the deposit alteration domains. Instead, hard boundaries were interpreted using 0.9 g/t Au and 8 g/t Au cut-offs. CSA Global did not find any justification for the high grade domaining. An indicator approach was adopted to model the main alteration types for the deposit, and grades were interpolated separately to each alteration domain. Eighty-eight percent of the Mineral Resource belongs to the AS alteration domain, 7% belongs to CL domain, and the remaining 5% are within the other seven alteration domains (at a 2 g/t cut-off).
- 2) Fifty-nine percent of all gold assays above 0.9 g/t and 29% of gold assays above 8 g/t are outside of the MDA model and, therefore, were not used for the MRE. CSA Global used all available analytical information for modelling. Figure 25 shows all sampled intervals above 0.9 g/t Au that occur outside of the MDA model (red circles).

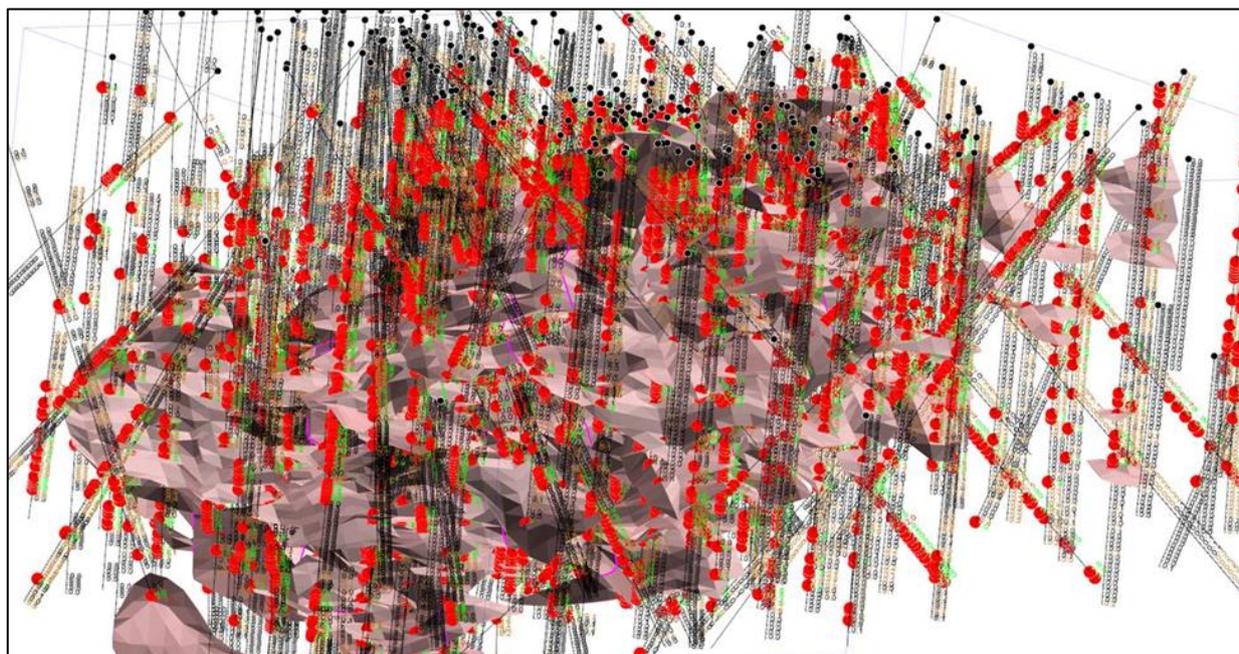


Figure 25: Gold assays >0.9 g/t outside of the MDA model

## 14.5 Audits and Reviews

Internal audits were completed by CSA Global which verified the technical inputs, methodology, parameters and results of the estimate. No external audit of the MRE has been undertaken.

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## 15 Mineral Reserve Estimates

There are no Mineral Reserves defined over the Property, and the potential economic viability of this Mineral Resources is not supported by a PEA, a prefeasibility study or a feasibility study. Therefore, the Property is not considered an Advanced Property and as such, there is no information to disclose under this section heading.

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## 16 Mining Methods

There are no Mineral Reserves defined over the Property, and the potential economic viability of this Mineral Resources is not supported by a PEA, a prefeasibility study or a feasibility study. Therefore, the Property is not considered an Advanced Property and as such, there is no information to disclose under this section heading.

## 17 Recovery Methods

There are no Mineral Reserves defined over the Property, and the potential economic viability of this Mineral Resources is not supported by a PEA, a prefeasibility study or a feasibility study. Therefore, the Property is not considered an Advanced Property and as such, there is no information to disclose under this section heading.

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## 18 Project Infrastructure

There are no Mineral Reserves defined over the Property, and the potential economic viability of this Mineral Resources is not supported by a PEA, a prefeasibility study or a feasibility study. Therefore, the Property is not considered an Advanced Property and as such, there is no information to disclose under this section heading.

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## 19 Market Studies and Contracts

There are no Mineral Reserves defined over the Property, and the potential economic viability of this Mineral Resources is not supported by a PEA, a prefeasibility study or a feasibility study. Therefore, the Property is not considered an Advanced Property and as such, there is no information to disclose under this section heading.

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## 20 Environmental Studies, Permitting, and Social or Community Impact

There are no Mineral Reserves defined over the Property, and the potential economic viability of this Mineral Resources is not supported by a PEA, a prefeasibility study or a feasibility study. Therefore, the Property is not considered an Advanced Property and as such, there is no information to disclose under this section heading.

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## 21 Capital and Operating Costs

There are no Mineral Reserves defined over the Property, and the potential economic viability of this Mineral Resources is not supported by a PEA, a prefeasibility study or a feasibility study. Therefore, the Property is not considered an Advanced Property and as such, there is no information to disclose under this section heading.

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## 22 Economic Analysis

There are no Mineral Reserves defined over the Property, and the potential economic viability of this Mineral Resources is not supported by a PEA, a prefeasibility study or a feasibility study. Therefore, the Property is not considered an Advanced Property and as such, there is no information to disclose under this section heading.

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## 23 Adjacent Properties

CSA Global is not aware of any current information regarding adjacent properties that is relevant to the mineral resources described in this report. This section is not applicable to the current report.

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## 24 Other Relevant Data and Information

There is no additional information or explanation necessary to make the technical report understandable.

## 25 Interpretation and Conclusions

Analytical and geological results obtained during multiple exploration programs completed from 1970 through 2018, geological understanding of the deposit, and the topographic surface were utilised to estimate the Mineral Resource for the Salave gold deposit in Spain.

Drilling programs completed by various companies between 1970 and 2018 have provided a robust database from which the current Mineral Resource has been estimated.

The modelling approach adopted was developed after the review of geological logging of drillholes. It was decided the logged alteration type has a critical control over the distribution of gold grades and, therefore, it was essential to model alteration prior to grade interpolation.

CSA Global completed all major modelling steps and stages, including database import and validation, interpretation and development of the mineralisation model, statistical analyses, interpolation of alteration codes to the model and model domaining, grade interpolation into each modelled alteration domain, and model categorisation and reporting. The complete analytical data file was used to perform classical statistical analysis. The analytical data was composited to 1.5 m, which was the most common length for routine sampling of the mineralisation. An indicator approach with OK was used to estimate alteration in the model and OK was adopted to estimate gold grades within each alteration domain.

CSA Global reviewed the described QA procedures in the historical reports. It was found the QA procedures that were generally applied could be accepted for the purposes of MRE, as each company was checking all previous exploration stages, re-drilling and re-sampling the deposit, and comparing their own results with historical data. That resulted in a relatively dense exploration grid density of 20 m x 20 m and 10 m x 10 m in some areas.

A CSA Global representative visited the deposit site in February 2018. That was followed by review of QAQC results in the historical reports. Following this work, the Qualified Person formed the opinion that the data is suitable for preparing an MRE suitable for public reporting.

Mineral Resources have been reported above a cut-off grade of 2 g/t Au, which was considered suitable given the Mineral Resource is likely to be exploited by underground mining methods. The Mineral Resource is considered to have reasonable prospects for eventual economic extraction.

## 26 Recommendations

CSA Global recommends the following actions are completed to support the ongoing exploration and evaluation effort at the Salave deposit:

- Current QAQC procedures should be maintained to ensure high-quality data is available for subsequent MREs.
- Geotechnical and hydrogeological drilling and analyses should be completed to support geotechnical assessment and appraisal of mining parameters and costs.
- A Scoping Study should be completed for the deposit, including testing the sensitivity of the model to the main input economic parameters, such as metallurgical recoveries, metal prices, mining costs and processing costs.
- The vertical structures should be reviewed to determine if they are potentially feeder zones which could be modelled accordingly. Given most of historical drilling is close to vertical, the potential for high grade vertical structures needs to be completed in areas not adequately covered by angled drillholes.
- Further physical property testwork and litho-geochemical analysis should be completed to fully understand the properties of the mineralisation to assist with further exploration or model updates.

BDG has acknowledged and will be following up on the recommendations made by CSA. BDG is currently undertaking a Preliminary Economic Assessment of the Salave deposit based on the mineral resource reported herein. Additionally, BDG has engaged a consulting structural geologist that will be reviewing all BDG geological database and all aspects of the structural setting at Salave in order to refine the understanding of the regional structural setting and main structural controls that have influenced the geometry and grade distribution within and potentially beyond the current limits of the Salave deposit. Based on recommendations of this work, BDG will be planning further drilling and surface exploration for 2019. In addition to resource definition and expansion, the proposed 2019 drilling may be expanded to include drilling for the purposes of confirming or enhancing the geotechnical and hydrogeological studies completed to date. The QP considers the budget adequate given the substantial work completed on the project to date. The estimated costs to complete this work are summarized in the Table 20.

Table 20: Estimated budget

Phase I	Euros
Structural Study	32,000.00
Geological Mapping, Logging, Supervision	30,000.00
Geophysical Surveys	50,000.00
PEA	15,000.00
Drilling (2000 metres @ 110 Euro/metre)	220,000.00
Metallurgical Testwork	100,000.00
Contingency (15%)	67,050.00
<b>Total Phase I</b>	<b>514,050.00</b>
Phase II	
PFS and Studies	158,000.00
EIA Activities	150,000.00
Contingency (15%)	46,200.00
<b>Total Phase II</b>	<b>354,200.00</b>
<b>Total Phase I &amp; II</b>	<b>868,250.00</b>



## 27 References

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## 28 Abbreviations and Units of Measure

Units of measurement used in this report conform to the metric system. All currency in this report is US dollars (US\$) unless otherwise noted.

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%	percent
°	degrees
°C	degrees Celsius
3D	three-dimensional
AAS	atomic absorption spectroscopy
Adaro	Emprese Nacional Adaro de Investigaciones Mineras
ALS	ALS Laboratory Group
Anglo	Anglo American Corporation of South Africa Ltd
Assay	A measured quantity of material within a sample
Astur	Astur Gold Corporation
Au	The element gold
Azimuth	Azimuth angle on which an exploration hole was drilled (deviation to north)
BDG	Black Dragon Gold Corp.
CIM	Canadian Institute of Mining, Metallurgy and Petroleum – Best Practices and Guidance for Mineral Resources and Mineral Reserves.
Collar	Geographical coordinates of a drillhole or shaft starting point
Compositing	In sampling and resource estimation, process designed to carry all samples to certain equal length
CRM	certified reference material
CSA Global	CSA Global Pty Ltd
Cumulative frequency graph	Graphical representation of data ranked in ascending or descending order, which are shown in a non-decreasing function between 0% and 100%. The percent frequency and cumulative percent frequency forms are interchangeable, since one can be obtained from the other
Cut-off grade	The threshold above which material is selectively mined or queried
Dagilev	Dagilev Capital Corp.
Drill Sure	Drill Sure Sucursal en Espana
DTM	digital terrain model
EMC	Exploraciones Mineras del Cantábrico SL
FA	fire assay
g	gram(s)
G&A	general and administration (costs)
g/t	grams per tonne
Geostatistics	Science studying and describing the spatial continuity of any kind of natural phenomena: Au, Cu and Ag grades in this study
Golder	Golder Associates
Gold Fields	Consolidated Gold Fields Ltd

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GPS	global positioning system
ha	hectares
Histogram	A graphical presentation of the distribution of data by frequency of occurrence
Hunting	Hunting Technical Services Ltd (now HTSPE Limited)
ICI	Imperial Chemical Industries
ICP	inductively coupled plasma
ICP-AES	inductively coupled plasma – atomic emission spectroscopy
IDW	Inverse Distance Weighting. Geostatistical method to calculate mineral resource. Since this method makes the weight for each sample inversely proportional to its distance from the point being estimated it gives more weight to the closest samples and less to those that are farthest away. Method works very efficiently with regularly gridded data. Extreme versions of IDW are the global de-clustering methods like the polygonal method and the local sample mean method.
IGME	Instituto Geologico y Minero de España
Indicator	Transformed value
IP	Induced polarisation
ISO	International Standards Organization
JORC Code	Australasian Code for Reporting of Mineral Resources and Ore Reserves
kg	kilogram(s)
km	kilometre(s)
km <sup>2</sup>	square kilometres
Lakefield	Lakefield Research of Canada Ltd
Lognormal	Refers to the distribution of a variable where the distribution of the logarithm of that variable is normal
Lundin	Lundin Mining Corp.
Lyndex	Lyndex Explorations Ltd
m	metre(s)
M	million(s)
m <sup>2</sup>	square metres
m <sup>3</sup>	cubic metres
Ma	million years ago
MDA	Mine Development Associates
Mean	average
Median	Value of the middle sample in a data set arranged in rank order
Micromine	Mining and exploration software
mm	millimetre
MRE	Mineral Resource estimate
Mt	million tonnes
Newmont	Newmont Mining Corp.
NI 43-101	National instrument for the Standards of Disclosure for releases of mineral exploration reports, reporting of resources and reserves,
Northgate	Northgate Exploration Ltd

Nugget effect	Measure of the variability in re-analysing a sample due to sampling errors or short scale variability. Though the value of a variogram at 0 distance should be 0, several factors, such as sampling errors and short scale variability, may cause sample values to be separated by extremely small distances. The vertical jump at the origin of a variogram graph from 0 to a certain value at extremely small separation distance is called the nugget effect
OK	Ordinary Kriging (interpolation method)
OMAC	OMAC Laboratories Ltd
Oromet	Oromet Joint Venture
Percentile	One hundredths of the total data. 50th percentile correspond to the median
Population	In geostatistics, population encompasses grades which show the same or close geostatistical characteristics. Ideally, one population is characterised by linear distribution
Probability plot	Plot showing cumulative frequencies over different intervals on a log scale probability plot
QA	quality assurance
QAQC	quality assurance and quality control
QC	quality control
Range	Distance at which variogram reaches its plateau
RC	reverse circulation (drilling)
Rio Narcea	Rio Narcea Gold Mines SA
RL	Reduced level, i.e. elevation relative to a local datum
RMGC	Rocky Mountain Geochemical
RMR	Rock Mass Rating
RPA	Roscoe Postle and Associates
RQD	rock quality designation
SG	specific gravity (units per cubic centimetre)
Sill	Distance at which variogram reaches its sill. Physically, there is no correlation between paired samples at that distance
SP	self-potential
SPIB	Sondeos y Perforaciones Industriales del Bierzo SA
Standard deviation	A statistical measure of the dispersion of sample data around the mean value
t	tonne(s)
t/m <sup>3</sup>	tonne(s) per cubic metre
Terratec	Terratec Geotecnia y Sondeos SL
WALZ	West Asturian–Leonese Zone
Wireframe solid	Closed wireframe
Wireframe	Three-dimensional surface defined by triangles
XRAL	X Ray Assay Laboratories Ltd

## 29 Date and Signature

### 29.1 Certificate of Qualified Person – Belinda van Lente

I, Belinda van Lente, Geologist, as an author of this report entitled “Technical Report – Salave Gold Project Mineral Resource Update” dated effective 31 October 2018 prepared for Black Dragon Cop. (the “Issuer”) do hereby certify that:

- 1) I am a Principal Geologist with CSA Global (UK) Ltd. My office address is Suite 2, Springfield House, Springfield Road, Horsham, West Sussex, RH12 2RG UK.
- 2) This certificate applies to the technical report entitled “Technical Report – Salave Gold Project Mineral Resource Update”.
- 3) I am familiar with National Instrument 43-101 – Standards of Disclosure for Mineral Projects (“NI 43-101”) and by reason of education, experience and professional registration I fulfil the requirements of a “qualified person” as defined in NI 43-101.
- 4) I did visit the Salave Gold Project from 19 to 21 February 2018.
- 5) I am responsible for Sections 6 and 11.2 of the Technical Report.
- 6) I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
- 7) I have no prior involvement with the property that is the subject of the Technical Report.
- 8) I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
- 9) At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 31<sup>st</sup> day of October 2018.

*“signed and sealed”*

**Belinda van Lente**  
CSA Global Principal Geologist



## 29.2 Certificate of Qualified Person – Dmitry Pertel

I, Dmitry Pertel, Geologist, as an author of this report entitled “Technical Report – Salave Gold Project Mineral Resource Update” dated effective 31 October 2018 prepared for Black Dragon Cop. (the “Issuer”) do hereby certify that:

1. I am a Principal Geologist with CSA Global Pty Ltd. My office address is Level 2, 3 Ord Street, West Perth, Western Australia 6005.
2. This certificate applies to the technical report entitled “Technical Report – Salave Gold Project Mineral Resource Update”.
3. I am familiar with national Instrument 43-101 – Standards of disclosure for Mineral Projects (“NI 43-101”) and by reason of education, experience and professional registration I fulfil the requirements of a “qualified person” as defined in NI 43-101.
4. I did not visit the property.
5. I am responsible for Sections 10, 11.1, 11.3, 11.4, 11.5, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25 and 26 of the Technical Report.
6. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
7. I have no prior involvement with the property that is the subject of the Technical Report.
8. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
9. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 31<sup>st</sup> day of October 2018.

*“signed and sealed”*

**Dmitry Pertel**

CSA Global Principal Geologist

### 29.3 Certificate of Qualified Person – Ian Stockton

I, Ian Stockton, Geologist, as an author of this report entitled “Technical Report – Salave Gold Project Mineral Resource Update” dated effective 31 October 2018 prepared for Black Dragon Cop. (the “Issuer”) do hereby certify that:

1. I am a Principal Geologist with CSA Global Pty Ltd. My office address is Level 2, 3 Ord Street, West Perth, Western Australia 6005.
2. This certificate applies to the technical report entitled “Technical Report – Salave Gold Project Mineral Resource Update”.
3. I am familiar with national Instrument 43-101 – Standards of disclosure for Mineral Projects (“NI 43-101”) and by reason of education, experience and professional registration I fulfil the requirements of a “qualified person” as defined in NI 43-101.
4. I did not visit the property.
5. I am responsible for Sections 1, 2, 3, 4, 5, 7, 8, 9, 27 and 28 of the Technical Report.
6. I am independent of the Issuer applying the test set out in Section 1.5 of NI 43-101.
7. I have no prior involvement with the property that is the subject of the Technical Report.
8. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
9. At the effective date of the Technical Report, to the best of my knowledge, information, and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 31<sup>st</sup> day of October 2018.

*“signed and sealed”*

**Ian Stockton**  
CSA Global Principal Geologist

## Appendix 1: Key File and Field List

The following documentation gives details of key file names associated with the resource modelling detailed in this report, Micromine file format.

### Results Files

#### *Exploration Database*

##### Historical drillholes:

- DH HIS.dhdb - Drillhole database
- 00\_Collars.dat - Drillhole collars (371 records)
- 00\_Surveys.dat - Drillhole surveys (2,068 records)
- 00\_Assays.dat - Drillhole assays (32,247 records)
- 00\_Alteration.dat - Drillhole alteration logging (5,173 records)
- 00\_Geotech.dat - Drillhole geotechnical logging (5,173 records)
- 00\_Lithology.dat - Drillhole lithological logging (1,805 records)
- 00\_Structure.dat - Drillhole structural logging (1,805 records)
- 00\_Density.dat - Drillhole density data (396 records)

##### 2018 drillholes:

- DH 2018.dhdb - Drillhole database
- 01\_Collars 2018.dat - Drillhole collars (2 records)
- 01\_Surveys 2018.dat - Drillhole surveys (126 records)
- 01\_Assays 2018.dat - Drillhole assays (420 records)
- 01\_Lithology 2018.dat - Drillhole lithological logging (73 records)

##### Composites:

- Comp15m.dat - 1.5 m composites (29,226 records)

##### Strings:

- Interpretation CSA.str - Interpretation (1,711 records)

##### Wireframes:

- ORE: Ore - Wireframed mineralised zone
- DTM: Topo - Topography surface
- CLASS: Indicated Ver2 - Indicated category
- CLASS: Measured Ver2 - Measured category

##### Block models:

- Model\_OK\_V2.dat - Block model (820,585 records, grade field AU\_CUT, RESCAT: 3 - Inferred, 2 – Indicated, 1 – Measured. MRE carried out for material below -40 m surface (PILLAR=0))

##### Macros:

- Modelling Salave May 2018 Ver2 smaller search.MCR – Sample preparation, block modelling and reporting

All files have been saved on the Perth server in the directory “L:\Clients\Files\Black Dragon Gold\BDGMRE01 Salave MRE May 2018”.



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