SNOWDEN

BCGold Corporation: Engineer Gold Project, BC, Canada
Project No. L502

Mineral Resource Estimate

April 2011

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This report has been prepared by Snowden Mining Industry Consultants Limited on behalf of BCGold Corporation.

This report was prepared as a National Instrument 43-101 Technical Report, in accordance with Form 43-101F1, for BCGold Corporation by Snowden. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in Snowden's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended to be used by BCGold Corporation, subject to the terms and conditions of its contract with Snowden. That contract permits BCGold Corporation to file this report as a Technical Report with Canadian Securities Regulatory Authorities pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities law, any other use of this report by any third party is at that party's sole risk.

Issued by the Snowden UK office. Project #L502.

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1 SUMMARY

1.1 INTRODUCTION

This Technical Report describes the Engineer Property, a mineral exploration area containing the historical Engineer gold mine located on Tagish Lake, Atlin District, British Columbia, Canada. The report was commissioned by BCGold Corporation to produce the first Mineral Resource estimate in the history of the Engineer mine.

BCGold Corporation is listed on the Toronto Stock Exchange (TSX-V: BCG) and is headquartered in Vancouver, Canada.

At the date of this Technical Report, BCGold Corporation holds a 60% interest in the Engineer Property – including the Engineer mine. BCGold Corporation can acquire the remaining 40% interest via:

- Taking an additional 15% interest by paying C$200,000 or issuing C$200,000 of value in shares and 100,000 Warrants by 16th January 2012; and
- A further additional 25% interest by paying C$400,000 or issuing C$400,000 of value in shares and 100,000 Warrants by 16th January 2013.

The Engineer Property consists of six crown grants and six surrounding claims. The six crown grants are owned by Engineer Mining Corporation of Whitehorse, British Columbia and were optioned to BCGold Corporation in 2007. Five claims, not including the Erik Claim, were optioned to BCGold Corporation by Guardsmen Resources during 2010. Full title to all six claims has been transferred to BCGold Corporation for the duration of the option. The eight cells of the Eric claim bridge between the crown grants and the other cell claims maintaining contiguity. All claims and crown grants are located in the Atlin Mining Division.

As of January 2010, BCGold Corporation agreed with Engineer Mining Corporation that 30% of the net proceeds from the sale of gold extracted from the #1 shoot of the Double Decker vein is payable (BCGold, 2010a). This payment will only be made on gold mined from between the 5 Level underhand stope (immediately below the 326 and 327 stopes), down-dip to the R805 stope on 8 Level after payment of costs and expenses associated with mining and processing.

BCGold is looking to take the Engineer mine into small-scale production in the near future; this Technical Report supports that aim.

1.2 GEOLOGY AND MINERALISATION

1.2.1 Geology

The Engineer Property lies within the collage of terranes accreted on the western margin of North America during the Mesozoic. It lies above a narrow slice of the Stikine terrane (volcanic arc system) lying between the Cache Creek (oceanic) and Nisling (continental, part of Boundary Range metamorphic suite) Terranes. Mineralisation host rocks are the Jurassic Laberge Group. This is a greywacke-mudstone sequence deposited as part of the Whitehorse Basin infill. This sequence largely lies on the Stikine Terrane, but does extend onto adjacent terranes. It has been folded and thrust during final docking of terranes with the American Craton. Late NNW-SSE trending dextral strike slip faults dissect the terranes and the Whitehorse Basin fill.

The mineralisation post-dates all local accretion events, associated deformation and subsequent uplift and erosion. It has a gross spatial association with the Eocene Sloko-Skukum volcanic group deposited unconformably on this deeply eroded terrain. Mineralisation cuts dioritic dykes inferred to be associated with the Eocene magmatism. Later Tertiary uplift and erosion has reduced the volcanic group to isolated outliers and exposed the mineralisation in the underlying Laberge Group. The area has a Quaternary cover on low ground and valleys are glacially over-deepened and now occupied by ‘finger’ lakes.

1.2.2 Mineralisation

The Engineer Property mineralisation occurs as vein systems in Laberge group mudstones on the east side of Tagish Lake. An outlier of the Sloko volcanic sequence occurs nearby on Engineer Mountain. Local topographic relief is approximately 1,400 m from Tagish Lake to the Engineer Mountain summit area (elevation 2,000 m) and indicates minimum thickness of cover during mineralisation.

Two gold bearing vein systems occur at Engineer: (1) a NNW-SSE set emplaced along an earlier NNW-SSE trending dextral shear zone (2) a NNE-SSW set extending across the property. The Engineer and Double Decker veins discussed here belong to the NNE-SSW set. These are narrow (commonly <2 m) dilational veins with a minor sinistral strike component. Both sets are inferred to result from reactivation of the dextral shear under brittle conditions.

The NNE-SSW veins are traceable along strike for up to 400 m and have been shown to extend vertically for up to 180 m. Short-term variations in strike are common and variations in thickness (2 m veins thinning to 0.1 m) produce pod like forms. Small offsets result from primary en-echelon patterns and small displacement by late faults.

The NNE-SSW veins systems have quartz dominated, quartz-carbonate and carbonate dominated in-fills. Sequences of veins and vein fill imply a change from quartz dominated to carbonate dominated with time. Micas are a significant component and include roscoelite and possibly mariposite as a locally distinctive feature. Sulphides are not abundant. Vein fills are commonly coarse grained and layered parallel to the walls. Examples of psuedomorphs after bladed calcite are recorded. Breccias of wall rock fragments in a quartz matrix occur in some veins, notably the Engineer vein. The depositional environment is provisionally inferred to be in the deeper part of a fault hosted epithermal system.

Historical workings and exploration have focused on visible gold occurrences. Gold (often as electrum) occurs in quartz and very conspicuously in association with roscoelite. Centimetre scale roscoelite clusters are associated with clusters of gold grains and wires. These rich clusters are likely to generate an extreme nugget effect in the gold distribution.

The gold occurs in steeply plunging (ore) shoots in the Engineer and Double Decker veins. Shoots are proved by extensive historical working between the surface and 5 Level (about 90 m vertically). In these areas shoots extend laterally for between 20 m to 50m. Historical working, supported by recent diamond drilling shows evidence that shoots may extend down to 8 Level (about 90 m below 5 Level).

1.3 EXPLORATION AND PRODUCTION

Exploration at the Engineer Property has been undertaken since about 1900. Activity immediately around the mine has focused on underground development and diamond drilling.

From 1912 to 1918, a substantial amount of work was done underground, mostly on the Engineer Vein. The period from 1923 to 1925 saw the 5 Level crosscut completed and three diamond drill holes tested Hubs A and B from surface. During 1925 to 1927 extensive development work was undertaken. On the Engineer vein, sinking of an internal shaft from the 5 to the 8 Levels, allowed development drifting on the 6, 7 and 8 Levels. On the 8 Level a crosscut was also driven to access the Double Decker vein, which then saw substantial drifting in both directions. During the period 1927 to 1934 only sporadic work was done on the property.

In 1980 Nu-Lady Gold Mines Ltd conducted a 15 diamond drill hole programme. No significant intersections were reported and this data is not available. In 1981, a further 11 holes were drilled and a soil survey conducted over an area in the north part of the property. Six holes tested for northeast extensions to the Double Decker and Engineer veins and three holes were drilled near the Boulder vein.

In 1987 Erickson Gold Mining Corporation flew an airborne VLF/Magnetic survey and then undertook ground geophysics, surface geological mapping and sampling and soil geochemistry over the old mine site, and some of the new claims. During fall of the same year, a diamond drilling programme consisting of 1,178 m in eight holes followed up on the earlier work and tested known structures at depth.

During 1991 to 1992, the portal and most of 5 Level was rehabilitated. Blasting and sampling on the No. 2, No. 3, and Double Decker veins was unsuccessful in locating new gold shoots. On the Engineer vein, high grade samples of gold were collected on small remnants of an ore shoot found in pillars between surface and 2 Level, and along the 5 Level. During the 1994 season, trial mining was undertaken including a 30 ton sample from the 524-2 raise (Boulder vein) which yielded a grade of 28.6 g/t Au. In 1995, bulk sampling continued and a total of 657 tons of material from both surface and underground was processed with variable results.

In 2007, BCGold Corporation collected samples from underground, surface, and select 1987 core. Exploration continued in 2008 with geological mapping on surface and 5 Level, petrology, underground chip/channel sampling and drilling. Underground channel sampling was completed on the Shaft, Boulder, Engineer, Double Decker veins and Shear Zone A. Of a total of 35 vein samples, one returned 860 g/t Au (Shaft vein), one 14.7 g/t Au, five were below 4 g/t Au and the rest below 1 g/t Au. The drilling (7 holes for 1,846 m) targeted the late stage hydrothermal breccia zone within a 400 m strike length of Shear Zone A. Six of the holes intersected the breccia zone and all returned anomalous gold and silver values, including 20.1 m of 0.48 g/t Au, 32 m of 0.44 g/t Au and 34 m of 0.45 g/t Au. The breccia zone remains open in all directions and appears to widen slightly towards the south.

In 2010, work consisted of drilling thirteen HQ diamond drill holes (1,218 m) in two phases, from two underground drill bays located on 5 Level. From the first drill bay four holes targeted the Double Decker vein on 8 Level in an area where 1928 reports indicated 84.3 g/t Au were drifted on. An additional three holes drilled from the same drill bay targeted the Engineer vein at very low angles. The remaining 6 drill holes were drilled from a second drill bay located a further 30 m along the main crosscut.

The total documented ore production during 1910 to 1952 for the Engineer mine is recorded as approximately 14,263 tonnes at 39.4 g/t Au and 19.5 g/t Ag (18,000 oz Au and 8,950 oz Ag).

1.4 APRIL 2011 MINERAL RESOURCE ESTIMATE FOR THE ENGINEER MINE

The April 2011 Mineral Resource estimate for the Engineer mine is reported in Tables 1.1, 1.2 and 1.3. This estimate includes only the Double Decker and Engineer veins. This is the first Mineral Resource publically released for the Engineer mine.

Table 1.1: April 2011 Mineral Resource estimate for the Engineer mine based on a nominal assay limit cut-off of 0.1 g/t Au where the entire ore shoot is extracted. All resources are classified in the Inferred Mineral Resource category. It is assumed that should production ever commence, the Engineer veins would be extracted by standard air-leg based narrow vein methods. Grades diluted to a 1 m width. Note - with a likely operational breakeven cut-off grade of 6-8 g/t Au, the Double Decker resource is potentially marginal

Category	Vein	Tonnage (t)	Global grade (g/t Au)	Contained gold (oz)
Inferred	Engineer	52,600	12.6	21,300
Inferred	Double Decker	18,400	8.1	4,800
Total		**71,000**	**11.5**	**26,300**

Notes: Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource, as there are insufficient close-spaced drill hole data to adequately define grade and geological continuity for this structurally complex deposit. It is uncertain if further exploration will result in upgrading the Inferred Mineral Resource to an Indicated or Measured Mineral Resource category.

Tonnage is reported in metric tonnes (t), grade as grammes per tonne gold (g/t Au) and contained gold in troy ounces (oz Au). Total tonnes have been rounded to the nearest 500 t and ounces to the nearest 100 oz and this may have resulted in minor discrepancies. The global grade is rounded to the nearest 0.5 g/t Au to indicate the accuracy of the estimate. The most likely cut-off grade for this deposit is not known and will need to be confirmed by the appropriate economic studies, but is likely to be around 7 g/t Au.

Table 1.2: April 2011 Mineral Resource estimate for the Engineer mine based on a nominal cut-off of 5 g/t Au where the resource margin is defined by historical pay limits/payability. All resources are classified in the Inferred Mineral Resource category. It is assumed that should production ever commence, the Engineer veins would be extracted by standard air-leg based narrow vein methods. Grades diluted to a 1 m stope width

Category	Vein	Tonnage (t)	Global grade (g/t Au)	Contained gold (oz)
Inferred	Engineer	30,800	20.6	20,400
Inferred	Double Decker	10,100	13.1	4,200
Total		**41,000**	**19.0**	**25,000**

Notes: Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource, as there are insufficient close-spaced drill hole data to adequately define grade and geological continuity for this structurally complex deposit. It is uncertain if further exploration will result in upgrading the Inferred Mineral Resource to an Indicated or Measured Mineral Resource category.

Tonnage is reported in metric tonnes (t), grade as grammes per tonne gold (g/t Au) and contained gold in troy ounces (oz Au). Total tonnes have been rounded to the nearest 500 t and ounces to the nearest 100 oz and this may have resulted in minor discrepancies. The global grade is rounded to the nearest 0.5 g/t Au to indicate the accuracy of the estimate. The most likely cut-off grade for this deposit is not known and will need to be confirmed by the appropriate economic studies, but is likely to be around 7 g/t Au.

Table 1.3: April 2011 Mineral Resource estimate for the Engineer mine based on a nominal cut-off of 25 g/t Au where the resource margin is defined by historical pay limits/payability. All resources are classified in the Inferred Mineral Resource category. It is assumed that should production ever commence, the Engineer veins would be extracted by standard air-leg based narrow vein methods. Grades diluted to a 1 m stope width

Category	Vein	Tonnage (t)	Global grade (g/t Au)	Contained gold (oz)
Inferred	Engineer	10,400	60	20,100
Inferred	Double Decker	3,600	30	3,500
Total		**14,000**	**52.5**	**23,600**

Notes: Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource, as there are insufficient close-spaced drill hole data to adequately define grade and geological continuity for this structurally complex deposit. It is uncertain if further exploration will result in upgrading the Inferred Mineral Resource to an Indicated or Measured Mineral Resource category.

Tonnage is reported in metric tonnes (t), grade as grammes per tonne gold (g/t Au) and contained gold in troy ounces (oz Au). Total tonnes have been rounded to the nearest 500 t and ounces to the nearest 100 oz and this may have resulted in minor discrepancies. The global grade is rounded to the nearest 0.5 g/t Au to indicate the accuracy of the estimate. The most likely cut-off grade for this deposit is not known and will need to be confirmed by the appropriate economic studies, but is likely to be around 7 g/t Au.

Snowden has independently reviewed the available Engineer mine data and undertaken a current Mineral resource estimate based on predominantly historical data together with limited recent drilling results. Snowden has not been able to verify all of the historical data, but has no reason to doubt its veracity.

This estimate is based on a VLP (vertical longitudinal section) approach with projection of ore shoots down-dip and along strike based on surface exposure and underground development. The global grade applied to each vein structure was based on the partitioning of grades from historical production figures and production records to indicate payability. All grades were diluted to minimum stoping width of 1 m. A density factor of 2.8 t/m^3 was used. Snowden was unable to identify raw bulk density data, and has applied the conservative value. 3D models for the Double Decker and Engineer veins were constructed using Vulcan software. The vein wireframes were constrained by historical mining records and recent drilling. The Vulcan solids were used to define the primary mineralised material volume. A bulk density factor and payability factor were applied to define tonnage. Areas of mined-out portions were subtracted where required, assuming a 1 m stope width.

1.5 CONCLUSIONS

The Engineer Property represents an advanced exploration and resource development project. Recent studies by BCGold Corporation have enabled the future potential of the Engineer mine to be realised. Wider exploration has shown that beyond the Double Decker and Engineer veins, the property has significant potential for the delineation of further resources based on appropriate work. Shear Zone A provides a bulk low-grade exploration target.

1.6 RECOMMENDATIONS

Based on the findings of this report, Snowden recommends BCGold Corporation conduct a two-phase, $10.2 million exploration and development programme to continue advancing the Engineer Property.

2 INTRODUCTION

2.1 BACKGROUND

This Technical Report has been prepared by Snowden Mining Industry Consultants Limited (“Snowden”) for BCGold Corporation (“BCGold”), in compliance with the disclosure requirements of Canadian National Instrument 43-101 (“NI 43-101”).

This report was commissioned by BCGold to produce the first Mineral Resource estimate in the history of the Engineer gold mine. BCGold is listed on the Toronto Stock Exchange (TSX-V: BCG) and is headquartered in Vancouver, British Columbia (“BC”), Canada. The company is focused on copper and gold exploration in the Canadian province of BC and the Yukon Territory.

BCGold is looking to take the Engineer mine into small-scale production in the near future; this Technical Report aims to support that intent.

2.2 QUALIFIED PERSONS

The Qualified Persons (“QP’s”), as defined by NI 43-101, responsible for preparation of this Technical Report are:

- Dr Simon C Dominy FAusIMM(CP) FGS(CGeol) FAIG(RPGeo) - Executive Consultant and General Manager with Snowden UK; and
- Dr Ian M Platten FGS(CGeol) - Senior Principal Consultant with Snowden UK.

Dr Dominy visited the Engineer Property on 19th March 2011. During this site visit, Dr Dominy inspected underground workings, specifically 5 Level development on the Double Decker and Engineer veins. Shear Zone A was also observed on 5 Level. Dr Dominy was accompanied underground by Darren O’Brien (BCGold), Jan Martensson (Ampex) and Fionnuala Devine (Merlin Geosciences). Due to deep snow cover, no site walk-over was possible. However, a helicopter fly-over was undertaken which included viewing of the general mine area; camp; plant; drill core storage locations; surface expression of veins/stoping; and Hubs A and B.

Dr Platten has not visited the Engineer Property.

Dr Dominy and Dr Platten are independent of BCGold.

Dr Dominy takes responsibility as QP for all sections of the Technical Report.

Dr Platten takes joint responsibility with Dr Dominy as QP for Sections 7, 8 and 9 of the Technical Report.

Snowden has previously undertaken work on the Engineer mine. In 2009, BCGold requested Snowden to undertake a desk-based study and provide guidelines for a bulk sampling programme. This study was completed by Dr Dominy and peer reviewed by Dr Platten, and is reported in Snowden (2009).

Reliance on the Technical Report may only be assessed and placed after due consideration of Snowden’s scope of work. The Technical Report is intended to be read as a whole, and sections or parts thereof should therefore not be read or relied upon out of context.

Unless otherwise stated, information and data contained in this report or used in its preparation was provided by BCGold.

The effective date of this Technical Report is 6th April 2011.

3 RELIANCE ON OTHER EXPERTS

Other than noted herein, Snowden has not relied upon any experts.

The following BCGold staff members have provided useful information and support during the preparation of this Technical Report:

- Mr Brian Fowler PGeo – President and Chief Executive Officer
- Mr Darren O'Brien PGeo – Vice-President Exploration
- Mr Bruce Coates PGeo – Senior Project Geologist
- Mr Gary Sidhu – Project Geologist
- Mr Serge Tremblay – GIS/Database Technician

QAQC data for the BCGold 2010 drilling programme was compiled by:

- Mr Gary Lustig PGeo – Consulting Geologist, GN Lustig Consulting Ltd, Kamloops, BC.

The site visit was facilitated by:

- Mr Jan "Swede" Martensson – President, Ampex Mining Ltd, Whitehorse, BC.
- Ms Fionnuala Devine – Contract Geologist, Merlin Geosciences Inc., Atlin, BC.

On behalf of Snowden, this Technical Report was Peer Reviewed by;

- EurIng David Kneebone FIMMM(CEng) FGS(CGeol) – Principal Consultant, Snowden UK.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 PROPERTY LOCATION

The Engineer mine (the "property") is located 32 km west of Atlin in north-western BC (Figure 4.1) on the east shore of the Taku Arm of Tagish Lake (Figure 4.1). It covers part of the western slopes of Gleaner and Engineer Mountains. Geographical coordinates for the centre of the property are 59° 29' north latitude, and 134° 14' west longitude. The NTS index is 104/M8 and M9, and the BCGS index is 104M 049.

Figure 4.1: Location map of Engineer mine (Source: Devine, 2008)

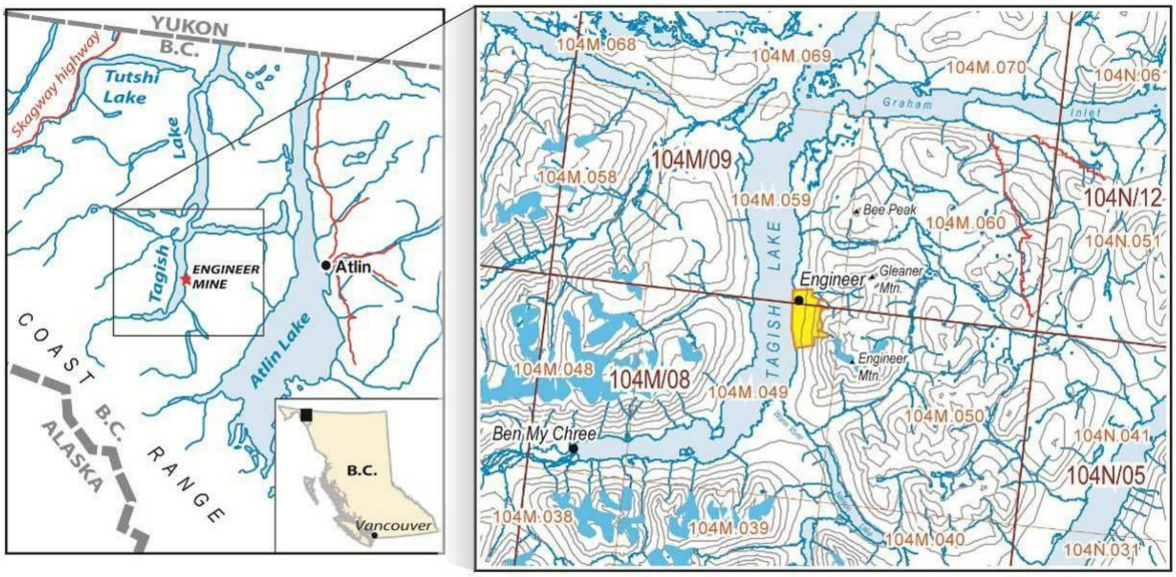


Figure 4.2: General view of Engineer mine area during summer from Tagish Lake (Source: Devine)

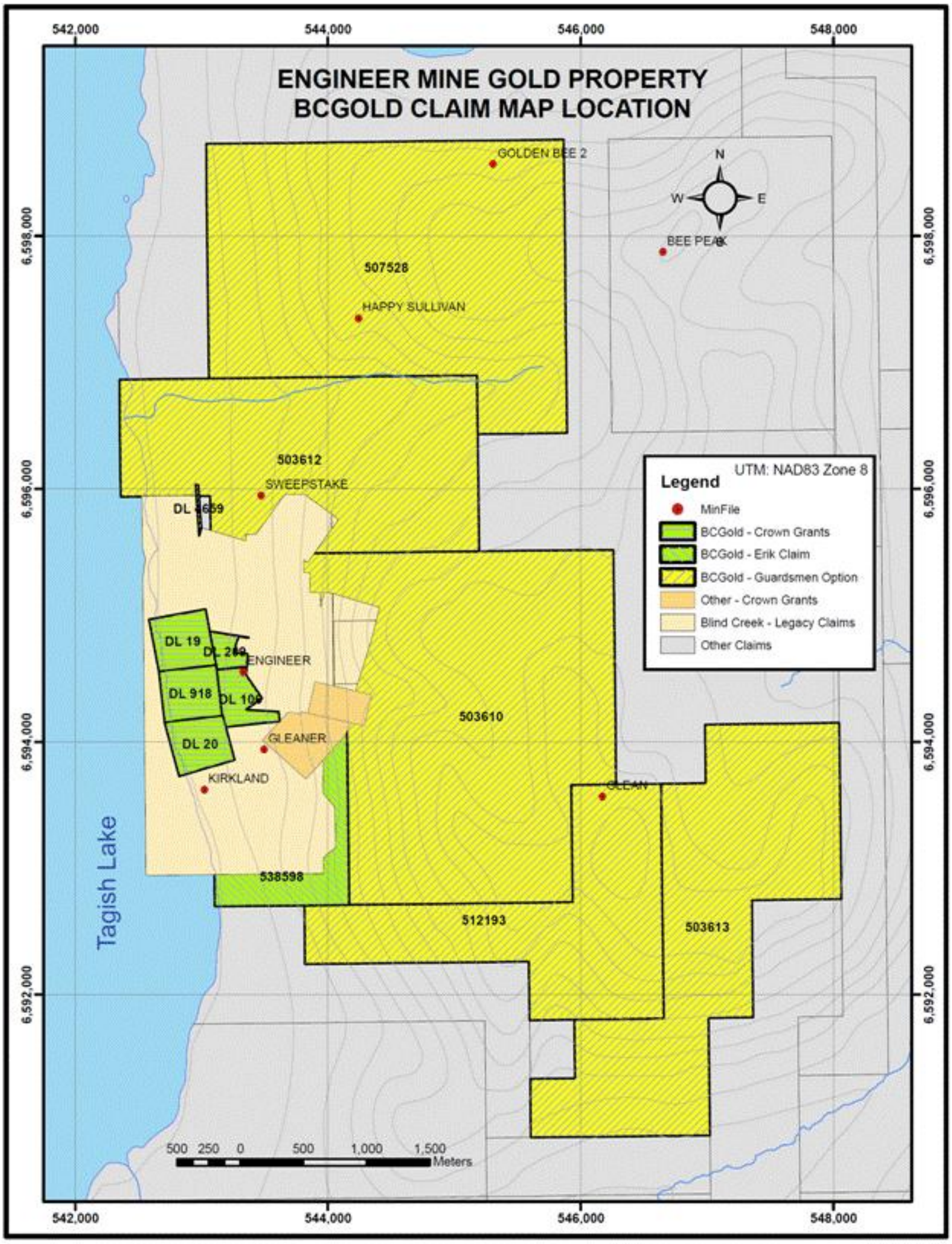
4.2 TENURE

The Engineer Property consists of six crown grants and six surrounding claims (Table 4.1 and Figure 4.3).

Table 4.1: Claims and Crown Grants comprising the Engineer Property (EMC = Engineer Mining Corporation)

Claim#	Claim Name	Area (Hectares)	Expiry	Annual work due	Annual fees due	Record date	Map sheet	Owner
Cell Claims:								
538598	Erik	131.546	2020/Aug/03	$1,052.37	$52.62	2006/Aug/03	104M049	BCGold
503610		575.420	2020/Nov/17	$4,603.36	$230.17	2005/Jan/15	104M049	BCGold
503612		361.500	2020/Nov/17	$2,892.00	$144.60	2005/Jan/15	104M049	BCGold
503613	LOL	361.860	2020/Nov/17	$2,894.88	$144.74	2005/Jan/15	104M049	BCGold
507528		558.450	2020/Nov/17	$4,467.60	$223.38	2005/Feb/19	104M049	BCGold
512193	Glint	246.71	2020/Nov/17	$1,973.68	$98.68	2005/May/06	104M049	BCGold
	Total:	2,103.940		$16,831.52	$841.58			
Crown Grants:								
19	Engineer #1	19.830	2011/Jul/02	None	$309.91	1912/Nov/28	104M049	EMC
20	North Partnership #2	18.454	2011/Jul/02	None	$304.58	1912/Mar/28	104M049	EMC
106	North Partnership #3	13.597	2011/Jul/02	None	$289.26	1911/Sep/07	104M049	EMC
209	North Partnership #4	5.900	2011/Jul/02	None	$244.59	1913/Sep/18	104M049	EMC
918	North Partnership #1	18.397	2011/Jul/02	None	$475.88	1910/Feb/17	104M049	EMC
4659	Bob Fr	0.813	2011/Jul/02	None	-	1929/Jan/10	104M049	EMC
	Total:	76.991						

Figure 4.3: Map of the Engineer Property leases and claims (Source: BCGold)



All six mineral claims are "cell" claims and are thus located online by a set of Universal Transverse Mercator map projection coordinates (NAD83, CSRS) for the northeast corner of each quarter unit (cell). The Erik mineral claim was staked online by EMC and optioned to BCGold with the six crown grants in 2007. The remaining five "cell claims" (2,104 hectares) were optioned to BCGold by Guardsmen Resources ("Guardsmen") in an agreement dated 30th September 2010. Full title to these claims has been transferred to BCGold for the duration of the option. BCGold can earn a 100% interest in the five claims by making C$100,000 in staged cash payments, and incurring C$500,000 in exploration work over the course of four years. Guardsmen retain a 2.5% net smelter return on the five claims, 2% of which can be purchased by BCGold for C$1.5 million. Cell claims require annual development work which must be registered within one year of the work being completed. Since all six mineral claims are greater than three years old, the value of exploration and development work required to maintain them is C$8/hectare per year. At this rate, application of the 2010 drilling expenditures keeps them in good standing until 2020 (the maximum). Mineral claims allow the holder certain rights to exploitation of subsurface minerals only, and no rights to surface commodities are implied by the Province.

The Property also includes six crown grants (77 hectares) owned by EMC. The underground workings and the resources reported on here are all contained within these crown grants. They were optioned to BCGold in an agreement (The "Agreement") dated 19th January 2007, and subsequently amended several times with the third and last amendment dated 12th January 2010. At the time of this report, BCGold has satisfied the obligations to earn a 60% interest in the property. BCGold can also acquire a further 15% (i.e. total 75%) interest in the six crown grants by paying an additional C$200,000 or issuing C$200,000 of value in Shares and 100,000 warrants by the 16th January 2012; and a further 25% (i.e. a total 100%) interest in the crown grants by paying C$400,000 or issuing C$400,000 of value in shares and 100,000 warrants by the 16th January 2013.

Since the six crown grants have "deeded title", the obligations and rights are more like those of private property owners than mineral claim holders. No annual work expenditures are required for crown grants, and in addition to subsurface mineral rights some surface rights are included. In recognition of this, BCGold has agreed in Amendment #3 to The Agreement to pay EMC a rental for the surface rights of C$10,000/year while the property is not in production or C$50,000/year when it is in production. BCGold can also purchase the remaining interest in the surface rights form EMC at fair market value (subject to a maximum of C$500,000) on the earlier of 17th January 2017 or the date the Company has ceased mining work, as defined in the agreements.

In addition to some surface rights, like private property, the deeded claims are also subject to yearly property taxes which are to BCGold's account. The yearly taxes indicated in Table 4.1 are for 2010, and the value changes (historically about 5% per year) at the discretion of the BC Assessment Authority. A final portion of Amendment #3 to the Agreement entitles EMC to 30% of the net proceeds from the sale of gold extracted from the Double Decker vein between the 5 Level underhand stope, immediately below the 326 and 327 stopes, down dip to the R805 stope on the 8 Level in the Engineer Mine, after payment of costs and expenses associated with the extraction. This corresponds with Shoot #1 of the Double Decker vein in the resource reported on here.

Data for the construction of Table 4.1 and Figure 4.3 was downloaded from the BC Mineral Titles Online ("MTO") Website. Diane Gregory and The Claim Group Inc. (Ladysmith, BC) tracks claim data for BCGold under contract.

4.3 EXPLORATION PERMITTING

The British Columbia Ministry of Energy Mines and Petroleum Resources ("MEMPR") requires a permit for any underground exploration, or surface exploration that requires reclamation. This Exploration Permit is attached to a "Mine Site" designation regardless of the stage of exploration and past or current production. Historically, exploration permits require a Notice of Work ("NoW") each year, and the reclamation work (with associated reclamation bonds) can be accumulated at the discretion of the operator, until they decide to discontinue work. At that time the operator completes any unfinished reclamation work to the satisfaction of the Mines Inspector, closes the Mine Site for further exploration, and applies to MEMPR to be reimbursed for the bond. In this regard, the Engineer Mine Project has a Mine Site designation of #0101107, an ongoing Mineral Exploration Permit (since the 2008 field programme) numbered MX-1-767, and a reclamation bond of C$25,000 held in trust by the Bank of Montreal. Recent changes by MEMPR allow (and encourage) Multi Year Area Based ("MYAB") exploration notices. On 9th March 2011 BCGold submitted a Notice of Work for the period 15th May 2011 to 31st October 2013 which describes some of the work recommended in this report. Attached was an application for a renewal of Explosive Storage and Use Permit.

BCGold is now the holder of Waste Management Permit (PE-14978), which was originally issued to EMC for the bulk sampling in the early 1990's. Annual Permit fees are up to date. This permit authorises effluent discharges from: (1) the gravity separation mill to the settling pond; (2) from the portal to Tagish Lake; and (3) from the settling pond to Engineer Creek. In the permit, each discharge point has specified conditions, for monitoring and sampling, reporting, and flow rates depending on various conditions. This permit will be sufficient for the processing of the bulk samples recommended in this report, but will not be sufficient for larger scale trial mining activities anticipated for the future. Although discharges from the portal in the original permit referred to dewatering of the underground workings, the stipulated maximum flow rate of 7 m^3 is not sufficient for this purpose. A temporary amendment for a higher discharge rate was granted to BCGold in early 2009, and extended until 15th April 2011. BCGold will have to re-obtain this amendment under the new MYAB regulations to dewater the lower three levels of the mine. BCGold has been assured by the Ministry of Environment that they will have little difficulty in re-obtaining this permit when it becomes necessary.

4.4 COMMERCIAL DEVELOPMENT

Commercial development to the extent currently foreseen by BCGold would be subject by MEMPR to the Mines Act. A NoW work for commercial activity would include plans for waste management, water management, environmental protection, closure and reclamation and community coordination. This would be submitted to the MEMPR District Manager and the local Regional Mine Development Review Committee ("RMDRC") for approval. This level of production would be below the threshold level for application of the BC Environmental Assessment Act. Depending on the required actions from Fisheries and Oceans Canada ("DFO"), the project may or may not be subject to the Canadian Environmental Assessment Act ("CEAA"), but in any event the project would be subject to environmental assessment as part of the NoW application.

4.5 SUSTAINABILITY

In June 2007, Golder Associates Limited was contracted by BCGold to conduct a Preliminary Environmental Review of the Engineer Property (Golder, 2007). This included a site visit to observe the results of past mining activities, and a review of available project data.

The report identified the possibility of some environmental liability from past operations at several small waste dumps, a small settling pond and intercepted surficial ground run-off draining from the portal. It recommended that BCGold prepare a "Site Profile" following MEMPR guidelines, to detail these in advance of commercial production.

The report also noted that the Engineer mine lies within the traditional territories of the Taku River Tlingit and Carcross-Tagish First Nations. It recommended an Archeological Impact Assessment in advance of production, and continued on-going communication with both groups throughout all phases of work.

In summary, Golder (2007) concluded that: "*no show stoppers associated with exploration or production were identified during this* [its] *review*".

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Access to the property from Atlin is by helicopter or float plane (approximately 15 minutes travel time). Service by high speed landing craft can be obtained via the community of Tagish (75 km north) or by barge from Carcross (100 km northwest). Beyond each of these towns, excellent highways connect to Watson Lake and Skagway or Whitehorse the main supply centre of the region.

The climate in the area is typical of north-western BC, with long, cold winters and short cool summers. Due to proximity to the Boundary Ranges, the Engineer property is strongly influenced by coastal weather systems and higher precipitation patterns. Heavy snow falls in winter and Tagish Lake usually freezes over in winter, but generally not sufficiently for ice road construction. On most days of the summer, Tagish Lake becomes windy and rough enough by mid-morning to be dangerous to small boats and float planes trying to land at the unprotected dock near camp.

The mine is isolated and requires itself to be self-sufficient in power and supplies. All power is generated on site via a diesel generator. Communications are via satellite phone and/or satellite hook-up to the internet.

Topography varies from 655 m at lake level up to 2,300 m elevation on Gleaner and Engineer peaks just east of the mine and within the Boundary Ranges to the south and southwest. Alpine glaciers are abundant in the latter which drain into Atlin and Tagish Lakes. These provide an enormous headwater reservoir for the Yukon River which is dammed at Whitehorse causing the lakes to fluctuate about 3 m through the season. Tree line elevation varies between 1,100 m and 1,400 m elevation. Lower slopes contain variable pine, aspen and balsam.

6 HISTORY

This section is based on material from Davidson (1998), Aspinall (2007) and Coates (2010).

6.1 PERIOD 1899 TO 1975

The Engineer mine has had a long history. Engineers working on the White Pass and Yukon Railway made the initial discovery in 1899 and the Engineer Mining Company of Skagway was formed. From 1900 to 1902, a number of surface cuts and adits were completed resulting in a small amount of hand sorted ore being shipped from site. A stamp battery was brought to the property.

After the claims lapsed in 1906, they were re-staked by Edwin Brown and partners of Atlin and sold to the Northern Partnership Syndicate, also of Atlin and headed by Captain James Alexander. From 1908 to 1911 the syndicate carried out extensive work near surface and setup the stamp mill. From 1912 to 1918, Captain Alexander increased his ownership of the property and a substantial amount of work was done underground, mostly on the Engineer vein. This included a 210 foot shaft [63 m] and development on 4 Levels, as well as a starting of the 5 Level crosscut from near the lakeshore. Production records are incomplete for this period, but range from 34 tons to 1,100 tons, with grades consistently above 2 oz/ton Au. For example, the Minister of Mines Report for 1918 describes one 24 lb (≈11 kg) lot of hand sorted ore containing 160 oz of gold. In 1918 Captain Alexander lost his life during the sinking of the “Princess Sophia” in Lyn Canal and ownership of the property fell into litigation. In 1922, the heirs of Captain Alexander were awarded the property, and vended it to some New York based entrepreneurs who formed Engineer Gold Mines in 1923. The period from 1923 to 1925 saw construction of new bunkhouses, a new 50 ton per day mill, power dam and generating station, and hydroelectric transmission lines from the Wann River. The 5 Level crosscut was completed. Up to 140 men were employed at one time.

In 1925 reports from the mine were so favourable, that the Engineer Gold Mines stock rose to US$100 per share on the New York exchange. During 1925 to 1927, the majority of the historically reported ore was produced at 15,143 tons grading 0.77 oz/ton (≈26 g/t Au) was milled (BC Government, Ministry of Mines Reports). Extensive development work was also done. On the Engineer vein, sinking of an internal shaft from the 5 to the 8 Levels, allowed development drifting on the 6, 7 and 8 Levels. On the 8 Level a crosscut was also driven access the Double Decker vein, which then saw substantial drifting in both directions. On the 5 Level, another long cross cut was driven through Shear Zone A, to the veins in the northeast (Boulder, Andy, Blue and Shaft) and some drifting on these was done as well. In addition to all of this, a small shaft was sunk on the Hub B with minor drifting. Incomplete production records from this period show that some production occurred from the lower mine levels. In particular, a section the Double Decker vein just south of the crosscut on 8 Level was reported to contain 84.3 g/t Au over a 10 m distance along the drift, and 3 or 4 lifts of ore were extracted from here.

During the period 1927 to 1934 only sporadic work was done on the property primarily by Reginald Brook. In 1934, the Mining Corporation of Canada bought the mine and though they never worked it, several lessees from Atlin are rumoured to have done some high grading above the flooded workings until 1952. In the early 1960’s, Tagish Gold Mines Ltd acquired the old crown grants and in 1975 ownership passed to Nu-Energy Development Corporation. That year, Nu-Energy undertook detailed sampling of the Shear Zone A along the 5 Level crosscut, some underground mapping and attempted unsuccessfully to dewater the mine below the 5 Level.

6.2 PERIOD 1976 TO 1989

In 1979 Nu-Lady Gold Mines Ltd optioned the mine and in 1980 conducted a 15 diamond drill hole programme testing “known vein structures accessible from the main workings”. No significant intersections were reported and this data is not available. In 1981, a further 11 holes were drilled and a soil survey conducted over an area in the north part of the property. Six holes tested for northeast extensions to the Double Decker and Engineer veins and three holes were drilled near the Boulder vein - all with no significant results. In 1983, further work discovered the Nutcracker vein, 45 m southeast of, and parallel to the Engineer vein. This vein carried 0.4 m at 3 oz/t Au where first discovered, but subsequent trenching and drilling of six holes indicated a stringer carrying very low gold values. Nu-Lady's option lapsed in1985.

In 1987 Erickson Gold Mining Corporation became the owner of the property by takeover of Nu-Energy. Early in that year, they flew an airborne VLF/Magnetic survey, before increasing the property size by staking, and then doing ground geophysics, surface geological mapping and sampling and soil geochemistry over the old mine site, and some of the new claims. During fall of the same year, a diamond drilling programme consisting of eight holes followed up on the earlier work and tested known structures at depth. Two holes targeting Shear Zone A intersected up to 29 m of mixed quartz vein and silicified and brecciated argillite, with low gold values throughout. Drill hole 87-106, drilled through both the Double Decker and Engineer veins, intersecting the former at about the 700 Level, but with no significant gold values, and failed to intersect the latter below the 8 Level.

In 1989, Gentry Resources Ltd optioned the property from Erickson and undertook geophysical surveys.

6.3 PERIOD 1990 TO 2006

In 1990 Gentry and Winslow Gold Corporation acquired the property from Erickson by a share agreement. Prior to the 1992 season, Ampex Mining Ltd negotiated a letter of intent with the new owners and early in that year made an initial assessment of the condition of the underground workings. In June of 1993, Ampex and Gentry/Winslow formed a formal pre-production agreement, and subsequent to that Winslow acquired all of the property from Gentry. In July 1994, Ampex agreed to sell all of its interest to the Old Engineer Mining Corporation, which in November of 1997 changed its name to simply the Engineer Mining Corporation (previously noted as “EMC”).

Davidson (1998) summarised the EMC/Ampex work done up until 1997. During 1991 to 1992, the portal and most of 5 Level was rehabilitated by Ampex and some original documents were acquired from Jim Brooks whose grandfather Reginald had worked on the property from 1899 to the 1930's. Blasting and sampling on the No. 2, No. 3, and Double Decker veins was unsuccessful in locating new gold shoots. On the Engineer vein, impressive samples of gold in roscoelite were collected on small remnants of an ore shoot found in pillars between surface and 2 Level, and along the 5 Level (bonanza shoot). Access to the 3 and 4 Levels was not attempted. In 1993 the northeast part of the mine was re-habilitated. At the north end of the Boulder vein (524 raise), approximately 150 tons of material averaged approximately 31 g/t Au and a smaller sample at the south end (523 raise) averaged 26 g/t Au. A boating accident at the end of the summer resulted in the loss of the daily records, mining journal and rock samples.

During the 1994 season, EMC secured permitting for a 30 ton per day pilot mill and a 10,000 ton bulk sample. The mill, a 150 kW generator, an enlarged camp, a dump truck, a D7 Cat and a 931 Cat loader were barged to site and assembled. A 50 ton sample from the 505-1 raise (Engineer vein) was processed, but problems in the mill circuit prevented an accurate assessment of grade. A 30 ton sample from the 524-2 raise (Boulder vein) was more successfully processed and yielded a grade of approximately 28.6 g/t Au. In 1995 track mining equipment was purchased and 600 m of track installed. Bulk sampling continued and a total of 945 tons of material from both surface and underground was processed with variable results.

6.4 PERIOD 2007 TO CURRENT TIME

In 2007, the Engineer crown grants were optioned by BCGold. In that year Aspinall (2007) collected 160 rock samples from underground, surface, and selected 1987 core.

Exploration the following year included mapping, petrology, underground chip/channel sampling and drilling. Mapping at 1:500 scale was compiled for surface and 5 Level at 1:1,500 and 1:1,000 scales respectively (Devine, 2008). Underground channel sill sampling with a diamond saw was done on the Shaft, Boulder (2 areas), Engineer, Double Decker and Shear Zone A. The drilling (7 holes for 1,846 m) targeted the late stage hydrothermal breccia zone within a 400 m strike length of Shear Zone A. Six holes were completed and all returned anomalous gold and silver values.

In 2010, work consisted of drilling thirteen HQ diamond drill holes (1,218 meters), in two phases, from two underground drill bays located on 5 Level. From the first drill bay (the old hoist room) four holes targeted the Double Decker vein on 8 Level in an area where 1928 reports indicated 84.3 g/t Au were drifted on. An additional three holes drilled from the same drill bay targeted the Engineer vein at very low angles. The remaining 6 drill holes were drilled from a second drill bay located a further 30 m along the main crosscut. These holes targeted the Engineer vein down-dip of the “bonanza shoot” between 5 and 7 Level where previous sampling had indicated high grades.

Further drilling and underground activity is planned for the period 2011-2013 (see Section 20.10).

7 GEOLOGICAL SETTING

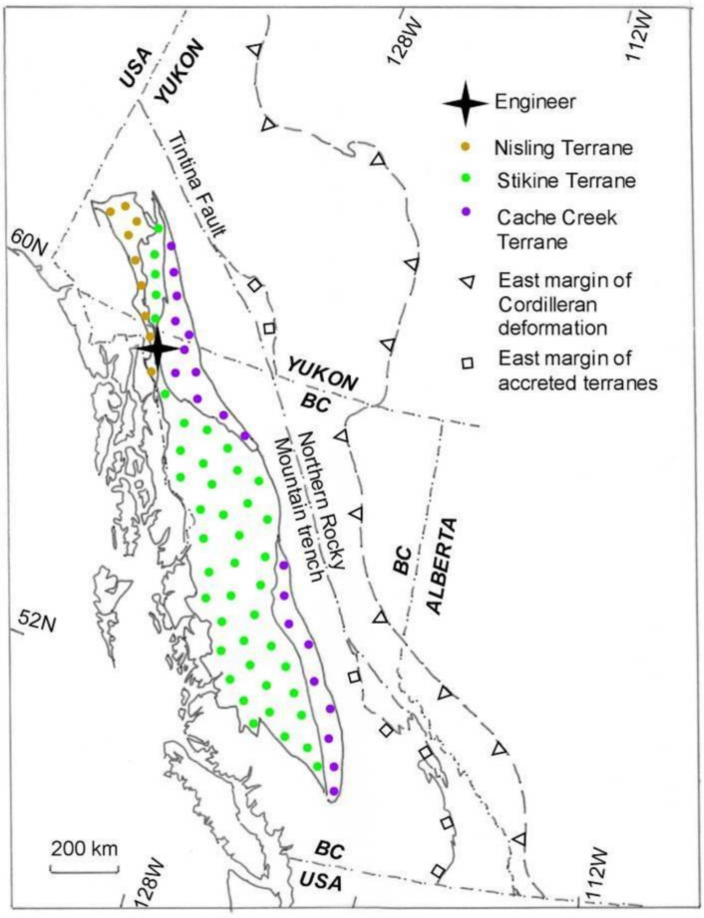
7.1 INTRODUCTION

The Engineer Property occurs in the Coastal Mountains near Tagish Lake, northern British Columbia. The Tagish Lake area forms part of the collage of terranes accreted on to the western margin of North America. The mineralised veins are associated with Palaeogene acid-intermediate igneous activity that spans terrane boundaries. Associated extrusive rocks are preserved as outliers and were deposited unconformably across a deeply eroded surface. The vein systems can be inferred to post-date accretion and associated tectonic events and to have been emplaced at geologically shallow depths. Post emplacement disturbance of the vein system is limited.

7.2 TAGISH LAKE IN A TERRANE CONTEXT

The Canadian part of the western American Cordillera is formed from a complex assemblage of terranes accreted during the Mesozoic and Cainozoic (Gabrielse *et al*, 1991; Wheeler *et al*, 1991). The Tagish Lake area lies within the Intermontane Superterrane, a 200 km to 300 km wide zone composed of the Cache Creek, Stikine and other smaller terranes (Figure 7.1). These terranes are inferred to have been assembled prior to accretion of the superterrane at the continental margin. Terrane boundaries trend between NW and NNW in this area.

Figure 7.1 Outline map showing the location of Engineer in relation to the Cordilleran Orogen and the local major terranes: Cache Creek, Stikine and Nisling Terranes. Map data extracted from Gabrielse *et al* (1991)



At Tagish Lake the Engineer deposit lies near the western margin of the Cache Creek terrane. The ground to the west lies within the Nisling Terrane, the Stikine Terrain being reduced to a narrow slice in this area. The Cache Creek Terrane is an oceanic terrane, the Stikine Terrane is of island arc origin whilst the Nisling Terrane is described as a pericratonic terrane. The Cache Creek and Stikine Terranes are overlain locally by post-accretion infill of the Whitehorse Trough.

7.3 THE WHITEHORSE TROUGH

The Whitehorse Trough is elongate Mesozoic basin developed on the Cache Creek and Stikine terranes. The fill begins with Late Triassic Stuhini Group characterised by volcanics passing laterally into siliclastic sediments. The later fill is composed of Early-Middle Jurassic Laberge Group, dominated by siliclastic rocks ranging from conglomerates to fine turbidites. Clasts derived from the Stikine and Cache Creek Terranes are found in the Laberge Group. Details of the stratigraphy of the Laberge Group in the Atlin-Tagish Lakes area are found in Mihalynuk (1999), Wright, English and Johnston (2004) and Shirmohammad *et al* (2007). This sequence was formerly called the Inklin Assemblage by Gabrielse *et al* (1991) and Wheeler *et al* (1991) and Inklin Formation by Johannson (1993).

The Engineer veins are emplaced in part of this cover sequence assigned to the Laberge Group. These are a sequence of turbidites with greywacke, siltstone and thinly bedded argillites forming mapping units. These rocks are inferred to lie on a Stikine Terrane basement at Engineer.

7.4 FOLDING OF THE WHITEHORSE TROUGH FILLS

The Laberge Group and other groups within the Whitehorse Trough are folded with axes trending NW-SE to NNW-SSE (Mihalynuk and Mountjoy, 1990; Mihalynuk and Smith, 1992; Mihalynuk, 1999; Wright, English and Johnston 2004). Folds vary from upright to overturned and are associated with sub-parallel thrust faults. These structures record regional shortening across the accreted terranes. The bulk of the Whitehorse trough fill is not metamorphosed and the northern parts (Yukon) are considered potential hydrocarbon/gas plays (Lowey, 2004).

7.5 MESOZOIC PLUTONS

Granitoid plutons were emplaced episodically during the Triassic, Jurassic and Cretaceous (Gabrielse *et al*, 1991; Wordsworth, Anderson and Armstrong, 1991). Plutons invade all terranes in the Intermontane Superterrane and merge into a major batholith west of the Stikine Terrane. Plutons may be emplaced across terrane boundaries. The mid-Cretaceous Whitehorse Suite invades the northern part of the Whitehorse Trough, extending south as far as Tagish Lake. The late Cretaceous Surprise Lake Suite forms a line of plutons extending ESE from Tagish Lake and cutting Stikine and Cache Creek terranes, including the Laberge group and other cover sediments. The larger plutons pass some 30 km north of the Engineer mine, but some small Cretaceous intrusions are mapped to the east of the Engineer area (Figure 7.3).

7.6 STRIKE SLIP FAULT SYSTEMS

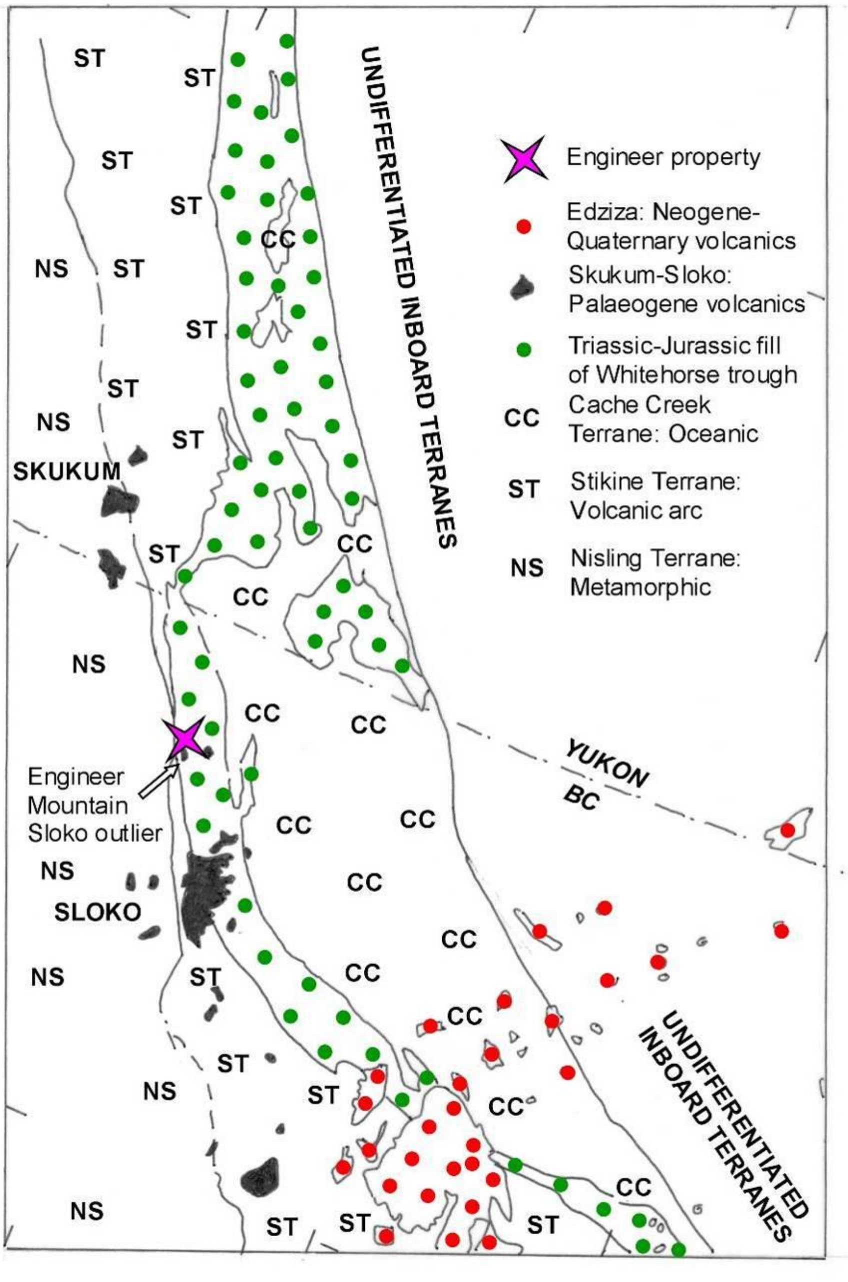
Dextral strike slip faults trending NW to NNW dissect the assembled terranes of the American Cordillera. These may have a lengthy history of movement as they may cut, or be cut by, the major plutons in the Canadian segment (Gabrielse *et al*, 1991).

In the Tagish area the Llewellyn Fault now bounds the western margin of the Laberge group but may have originally defined the margin of the Whitehorse trough (Mihalynuk and Mountjoy, 1990). The Nahlin Fault bounds the eastern margin of the Laberge Group. Outliers of Sloko Group volcanic rocks occur on the eastern side of the Llewellyn Fault but do not occur on the west side. Granitoid plutons assigned to the Sloko Group occur west of Tagish Lake. These relations suggest a local component of up to west movement on the Llewellyn Fault system after Sloko Group eruption.

7.7 PALAEOGENE TO QUATERNARY IGNEOUS ACTIVITY

The post Mesozoic history of the Tagish Lake area is characterised by erosion. Outliers of Palaeogene to Quaternary volcanic rocks occur across the region (Figure 7.2). They rest unconformably on the Terrane Assemblages, Mesozoic cover sequences (e.g. Inklin Assemblage/Laberge Group) and the Mesozoic Plutons. They overstep terrane boundaries and the later fault systems. The unconformity surface has significant relief.

Figure 7.2: Outline map showing position of Whitehorse Trough sediments and distribution of the Skukum, Sloko and Edziza volcanic groups in relation to terrane boundaries and the Engineer site. Map data extracted from Wheeler *et al* (1991) and Wheeler and McFeely (1991)



These volcanic rocks post-date tectonic activity associated with accretion and the related deformation and plutonism. They also postdate deep erosion of the assembled terranes and un-roofing of major Mesozoic plutons.

In northern British Columbia and southern Yukon the Palaeogene (Eocene) Skukum and Sloko volcanic groups and associated sub-volcanic intrusions are recognised (Figure 7.2). The extrusive rocks are andesites, dacite and rhyolite as flows, agglomerates and ignimbrites. Basal conglomerates are present below the volcanics. The volcanic activity is associated with local uplift, rifting and block faulting (Souther, 1967; 1991). Modern studies in the Yukon show that these magmas are derived from crustal sources modified by both differentiation and hybridisation with mantle derived melts (Mišković and Francis, 2005).

These volcanic sequences have been extensively eroded and are only now preserved as down-faulted outliers and in calderas. Mineralisation is spatially associated with the Sloko volcanics at Engineer and with the Skukum caldera at Bennett Lake (McDonald, 1987; Dawson *et al*, 1991).

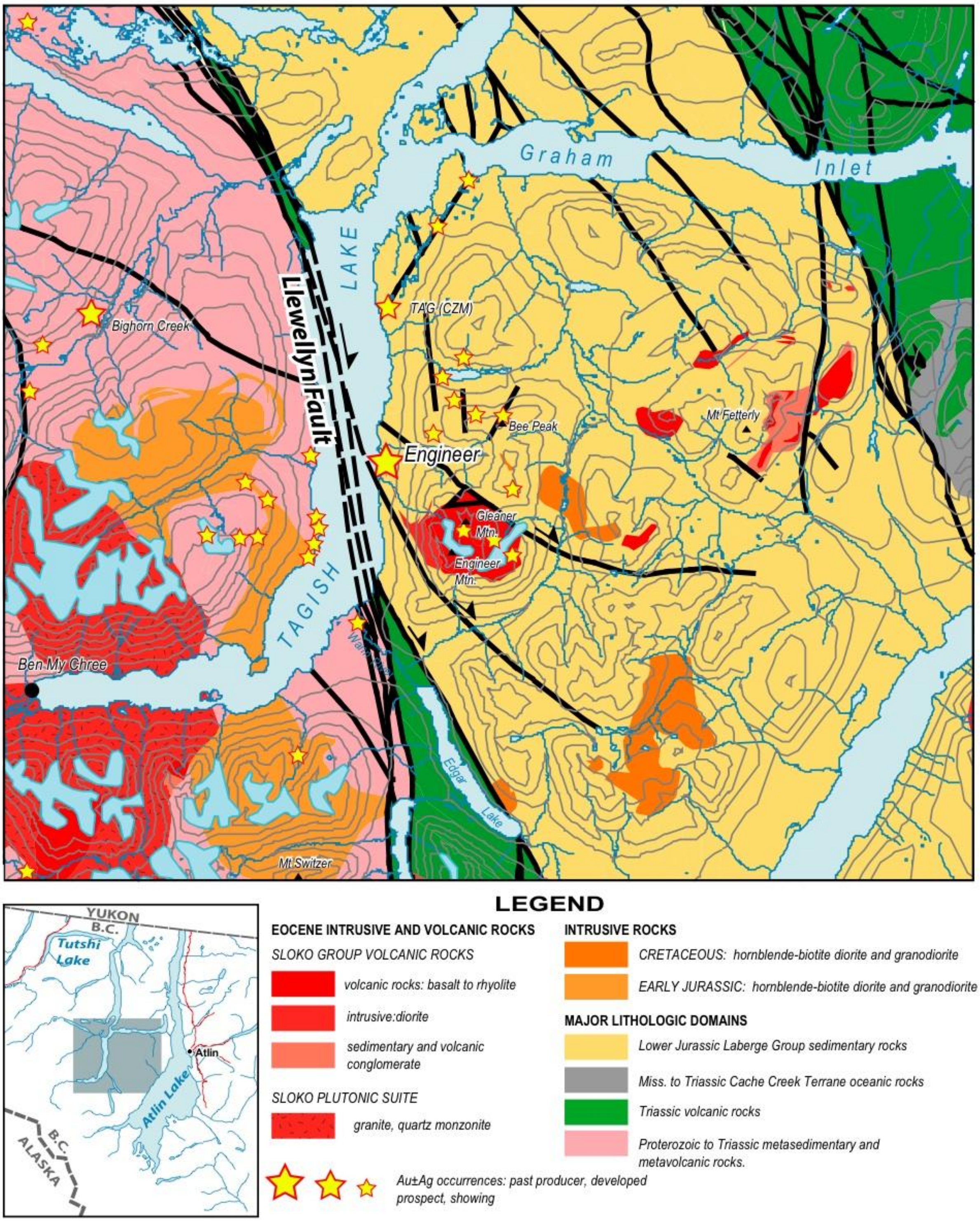
Plutons associated with the Sloko and Skukum volcanic suites are described by Souther (1967) and Wordsworth, Anderson and Armstrong (1991). The intrusions are leucocratic granitoids with miarolitic cavities and smoky quartz eyes. Biotite is the dominant ferromagnesian mineral and fluorite is an accessory mineral. Dioritic dykes and stocks are also associated with the suite. Aspects of the distribution are shown by Souther (1967) and Wheeler and McFeely (1991). In Tagish Lake-Atlin Lake area, a line of small intrusions are shown passing NE of the main volcanic outliers, including the Engineer Mountain outlier. A small diorite intrusion occurs at Engineer Mountain.

Neogene to recent volcanics occur south of the Tagish area and include the modern Mt Edziza shield volcano (Souther, Armstrong and Harakal, 1984; Souther and Yorath, 1991; Edwards and Russell, 2000). These are alkali basalts with peralkaline evolved associated rocks and are petrogenetically distinct from the Skukum/Sloko suite. The northern outcrop at Heart Peaks shows a basaltic shield resting unconformably on an outlier of the Sloko volcanic group, showing dissection of the Sloko volcanics predated early Edziza activity.

7.8 LOCAL SETTING AT ENGINEER

The Engineer mine site is located on the western side of the main outcrop of the Laberge Group and lies close to the Llewellyn Fault (Figure 7.3 - Davidson, 1998; Devine, 2008). The veins are emplaced in mudstone and greywacke of the Laberge Group. The local mudstones carry graphite and pyrite. The Laberge Group shows folding on NNW-SSE axes. A set of splay faults from the main Llewellyn Fault run SE and SSE (including Shear Zone A) into the mine area. These show intense folding and development of a steep foliation. The gold-bearing vein systems cut all these structures.

Figure 7.3: Map of Engineer mine area (Source: Devine, 2008)



The site lies within 1 km to 2 km of the outlier of the Eocene Sloko Group volcanic sequence on Engineer Mountain (Souther, 1967; Davidson, 1998; Devine 2008). The Engineer stock, a 2 km long zoned diorite body, cuts the volcanic sequence. This is reported to have been dated isotopically at 52 Ma. Fine to medium grained monzodiorite dykes trending NE-SW and NNW-SSE occurs in the mine area. Some of these may be related to the Engineer Stock. They cut the early phase of Shear Zone A, but are locally disrupted by later movement on the shear zone. The youngest dykes are extensively altered to clay-sericite assemblages but earlier dykes are reported to be fresh.

The vein systems are shown as cutting both NNE-SSW/NE-SW and NNW-SSE dykes in detailed mapping of 5 Level (BCGold, 2009). This mapping also shows faults offsetting NW-SE dyke but with little effect on vein trace (No 2 vein). The Double Decker vein sample in drill hole 87-106 is reported to contain clasts of dyke material, indicating that the vein post dates one of the NE-SW dykes (Smit, 1988). Aspinall (2007) shows a quartz-calcite filled fracture system in a dyke that is reported to cut the NNE end of the Engineer vein.

A late episode of faulting overprints the early Shear Zone A and is inferred to be Eocene in age. This may be related to the faults dissecting the Sloko volcanic sequence. There are no recognisable younger structures in the area.

Mineralisation thus occurs between the emplacement of dykes that are inferred to belong to the Eocene Sloko volcanicity and the development of the current topographic relief. It may be closely related to the Sloko volcanicity but this cannot be rigorously established.

8 DEPOSIT TYPES

8.1 DEPOSIT TYPE – GENERALISED GENETIC PERSPECTIVE

8.1.1 Introduction

The Engineer mine Double Decker and Engineer veins are narrow, high-nugget vein systems. They likely represent the lower part of a low-sulphidation epithermal system, close to the transition to mesothermal conditions. It may be related to the Sloko igneous event, but time relations are not well constrained. The relationship of mineralisation at Engineer to the deep ‘barren gap’ and ‘base metal sulphide zone’ in epithermal models is uncertain.

8.1.2 Vein geometry

The Engineer deposit is characterised by systems of steeply dipping narrow (0.1 m to 2.0 m) veins. Individual veins are traceable for up to 400 m along strike. These occur as a NNE-SSW set which includes the Engineer and Double Decker veins that are the primary subject of this report. A NNW-SSE set are also present, most lying within an earlier shear zone (Devine, 2008). The NNE-SSW trend of the Engineer and Double Decker veins is consistent with brittle, dilational fracture during dextral re-activation of the NNW-SSE trending shear zone (Devine, 2008).

8.1.3 Relationship with the Sloko Volcanics

The site lies within 1 km to 2 km of the outlier of the Sloko Group volcanic sequence on Engineer Mountain. The Engineer stock, a 2 km long zoned diorite body, cuts the volcanic sequence. Fine to medium grained monzodiorite dykes trending NE-SW and NNW-SSE and showing variable development of hydrothermal alteration occur in the mine area. These cut the early phase of Shear Zone A, but are locally disrupted by late movement of the shear zone. Veins are shown to cut some of these dykes. The time interval is unknown.

8.1.4 Geological control of depth of formation

Mountain summits in Laberge Group rocks east of Tagish Lake reach 1,700 m to 1,800 m indicating a Laberge Group cover of at least 800 m for the higher vein outcrops and 1,200 m for the lowest vein outcrops at the mine site. The total cover may be at least 200 m greater if the volcanic sequence capping the 2,000 m summit area of Engineer Mountain was present during vein emplacement. An unknown thickness of volcanic rock has been removed from the Engineer Mountain and other summits. Mihalynuk gives an estimate of 1,800 m for cover thickness (reported in Devine, 2008).

8.1.5 Vein mineralogy

Vein assemblages are predominantly quartz, quartz-carbonate or carbonate, the carbonates including calcite, siderite and ankerite. Veins show two main textural types:

- Crustified and vuggy textures with coarse or fine quartz and fresh coarse carbonate; and
- Breccias with wall rock clasts dispersed in a quartz dominated matrix.

Recent work has identified the presence of quartz psuedomorphs after bladed calcite in some quartz-rich segments (Jensen, 2008). Colloform growths of quartz and roscoelite are reported, but appear coarsely crystalline. Jensen (2008) illustrates core samples showing simple parallel layering in fine silica but does not identify the material as chalcedony. There are no reports or photographs of colloform chalcedony in other publications/mine reports.

Mica is an important minor component of vein fills. Muscovite and the dark green to black vanadium-bearing roscoelite [$K(V,Al)_2(AlSi_3O_{10})(OH)_2$] are recorded (Mauthner, Groat and Raudsepp, 1996; Aspinall, 2007; Devine, 2008). Mariposite (Cr-mica) was not found by Mauthner, Groat and Raudsepp (1996), but Aspinall (2007) and Coates (2010) identify pale green micas as possible mariposite. Roscoelite is a distinctive feature of some epithermal gold deposits in the western Pacific (Corbett and Leach, 1998).

Adularia, a feature of some epithermal gold deposits is not reported, but Fonseca (2008) notes two examples of K-feldspar replaced by clay and white mica. The possible relationship between K-bearing micas, including roscoelite and the scarcity of alkali-feldspar requires investigation.

Sulphides are reported to be a minor component; phases include pyrite, pyrrhotite and chalcopyrite. Arsenopyrite, löllingite and antimony and bismuth-bearing phases occur in minor amounts (Mauthner, Groat and Raudsepp, 1996).

Stibarsen (AsSb) or allemontite, an earthy botryoidal mineral occurs in the veins (Mauthner, Groat and Raudsepp, 1996; Devine, 2008). In the Double Decker vein, it is noted to occur in association with both gold and roscoelite.

8.1.6 Gold

Visible gold occurs as coarse grains and locally as clusters with wire forms. Large clusters are associated with roscoelite. It was the primary target of historical mining and exploration. The extent and location of any fine gold is unknown. The coarse gold is reported as electrum with 40 wt% to 42 wt% Au (Mauthner, Groat and Raudsepp, 1996). Assay results show Au/Ag ratios of >0.5 for gold-rich sections, but the commoner gold-poor (<1 g/t Au) sections have Au<<Ag (Coates, 2010). The location and form of gold in the low-grade (<7 g/t Au) vein material is currently unknown.

8.1.7 Fluid inclusions

Fluid inclusions give formation temperatures of up to 195°C, which are consistent with the epithermal nature of the mineralisation (Devine, 2008).

8.1.8 Epigenetic mineralisation in the Skukum volcanics

The Skukum volcanic and intrusive complexes are of similar age (Eocene) to the Sloko volcanics and lie immediately NNW of Engineer (Figure 7.2). They form part of a belt running NNW through BC and Yukon Territory. The Skukum centres show two epithermal deposits: a high-sulphidation system very close to surface and a low-sulphidation system at slightly greater depth (Dawson *et al*, 1991; Taylor, 2007).

8.1.9 Summary

The characteristic features of the NNE-SSW veins at Engineer are:

- Veins are largely dilational fissures related to an episode of dextral faulting;
- Veins are quartz and/or carbonate dominated with low content of sulphides;
- Veins fills show coarse crystalline texture or are breccias with clasts floating in quartz matrix;
- Psuedomorphs of plate calcite are present in some veins, indicative of boiling fluids;
- Chalcedony is not reported although some colloform texture is reported;
- Roscoelite mica is a distinctive feature of some veins and is associated with coarse gold;

- 195°C fluid temperatures;
- Cover >1 km, possibly at least 1.8 km;
- Dykes are the only igneous rock on site. A small 2 km stock lies 1 km to 2 km to the SE. These are thought to belong to the Sloko suite. No other significant intrusive body is present;
- Mineralisation post-dates terrane assembly, post assembly deformation and subsequent deep erosion;
- Outliers of Sloko volcanics are gently dipping and show some dissection by faults; and
- Uplift and erosion has generated 1,500 m of relief after deposition of Sloko volcanics and development of mineral veins.

8.1.10 Comment

The Engineer vein system was emplaced at relatively shallow depths in an area subject to long term erosion. Cover was potentially at least 1.8 km, including sediments and an unconformably overlying gently dipping, little modified volcanic sequence.

The vein texture and assemblage has some features of epithermal gold systems, notably the presence of psuedomorphs of plate shaped calcite, silver-bearing gold and low content of sulphides. Fluid temperatures are 195°C and former plate calcite indicates boiling condition for some veins. There is no evidence of near surface conditions, i.e. acid sulphate alteration or abundant chalcedony and the geologically controlled depth estimates place the site well below any contemporary surface.

The vein systems are controlled by dilation associated with NNW-SSE dextral faulting and there is no immediately adjacent igneous source, although the Engineer site lies within the Sloko-Skukum volcanic belt. The models for epithermal deposits centred directly on intrusive systems (e.g. Panteleyev, 1988) are not relevant. The system is considered to reflect the effects of faults intersecting crust with relatively elevated temperatures and deep seated intrusions (e.g. Corbett, 2004). This is the 'geothermal' model of Simmons, White and John (2005) and the fault-controlled systems in volcanic terranes of Taylor (2007).

Roscoelite is a distinctive feature at Engineer, but is not reported in many epithermal systems and is thus not considered in most models of such systems (Simmons, White and John, 2005). It is however reported from epithermal systems in the western Pacific where it occurs in late veins in the upper parts of such systems, for example in Porgera and Mt Kare in PNG and Emperor in Fiji (Corbett and Leach, 1998). Gold is coarse-grained in these veins, comparable with the Engineer occurrence. Jensen (2008) notes that this may be significant and comments on the association with alkali-rich (i.e. shoshonitic) igneous suites. The significance of roscoelite requires further investigation.

8.2 DEPOSIT TYPE – CONTEXT OF EVALUATION

8.2.1 The Nugget Effect

Nugget Effect is a quantitative geostatistical term describing the inherent variability between samples at very small separation distances; though in reality has a wider remit than just differences between contiguous samples. It is effectively a random component of variability that is superimposed on the regionalised variable, and is defined in a variogram as the percentage ratio of nugget variance to total variance (the sill). Deposits that possess nugget effect values above 50 per cent and particularly above 75 per cent are the most challenging to evaluate (Dominy *et al*, 2003).

The nugget effect reflects the proportion of nugget variance present in a data set – in effect the random variability. This variability has two principal components; (a) geological or in-situ nugget effect (GNE) and (b) sampling nugget effect (SNE).

The magnitude of the nugget effect is related to:

- In-situ heterogeneity of the mineralisation (geological and grade continuity effects);
- Sample support;
- Sample density;

- Sample quality; and
- Assay procedures.

Globally, many epithermal and mesothermal vein systems display a high nugget effect.

8.2.2 Evaluation – exploration and resource evaluation

A high-nugget effect leads to greater uncertainty during grade estimation, with the prediction of local grade difficult. Without close-spaced data, estimates are at best global. Larger high-quality samples are required to evaluate grade in the context of a well-established geological model. In a deposit such as Engineer, the restricted high-grade pocket nature of the mineralisation effectively requires samples of many tonnes.

Coarse gold-bearing mineralisation is characterised by a high GNE and prone to high SNE if protocols are not optimised. As a result, they usually display a total nugget effect in excess of 50 per cent. Standard samples such as diamond drill core and chip/channel often lead to grade understatement, unless sample spacing is fine.

In coarse gold systems, it is generally difficult to maintain assay accuracy and precision due to low grades, poor disintegration of gold particles during pulverising and high contrast between the densities of gold and gangue minerals. These problems can be overcome through the use of larger sample and assay charges, and correct procedures to minimise sampling errors such as fundamental sampling (FSE), grouping and segregation error (GSE), etc. For a discussion of sampling errors see Dominy, Platten and Minnitt (2010).

8.2.3 Exploitation - mining and grade control

The reserve estimate carries the same inherent uncertainly as the resource. At the mining (grade control) stage, unless enough quality samples are available, then local grade predictions may be difficult.

In the high nugget environment, a major issue encountered is the application of selective versus bulk mining approaches. Even where grades are estimated using an interpolator such as ordinary kriging, block grades (of a given domain) tend toward the mean grade and estimates have a high conditional bias. As a result, selective mining is difficult though in many underground situations is warranted to maintain head grade. In such a case, optimised sampling protocols are vital and should be supported by strong geological grade control (Dominy *et al*, 2009b; Dominy, Platten and Nugus, 2010).

Difficulties are encountered when a cut-off is applied since the local predictions are likely to be unreliable. This will lead to ore/waste misclassification. With increasing cut-off a potential loss cycle ensues, where as head grades are not achieved and the cut-off is raised, the reserve gets smaller and more waste is generated. Thus a greater chance of further misclassification occurs.

A low-grade stockpile is recommended to ensure that misclassified ore can be recovered, even if at the end of the mine life. There are examples of high-nugget mines that have processed low-grade stockpile(s) and found the mean grade to be higher than expected (potentially up to +25%).

During stope design and grade control strong geological input and control is required (Dominy and Platten, 2008; Dominy *et al*, 2009b). Where possible, proxies can be developed that provide further confidence in the likely grade of a sample or stope block (Dominy, Platten and Nugus, 2010). In context of the Engineer mine, likely proxies are quartz textures, specific mineral occurrences and/or trace element geochemistry.

8.2.4 Engineer veins and the nugget effect

The challenge of evaluating Mineral Resources and Reserves at the Engineer mine has long been recognised.

Hamm (1914) states "*Vein No 11* [Engineer vein], *which is the most important one and upon which most development has been performed, has a very uneven distribution of values. In driving upon the vein, sections are encountered wherein the number of these small pockets reaches a maximum. These rich sections may extend for a few feet, then without warning play out and little or no values are returned. These barren spots are often accompanied by a pinching of the vein*".

Brinker (1925) notes "*...this character of the vein results in the ore being very sporadic in value. Samples with but traces of gold may change within a few inches to assays of several thousands of dollars per ton".*

In addition, Brinker (1925) states "...*gold occurrence is sporadic but apparently confined to roughly delimited shoots of vertical extent within the veins. It is difficult, if not impossible, to accurately determine the average value of the ore within the shoots. The real value will probably not be known until after the shoots have been mined out, as it is not expected they will all have the same average grade".*

These characteristics are also noted more recently in Davidson (1998) and Coates (2010).

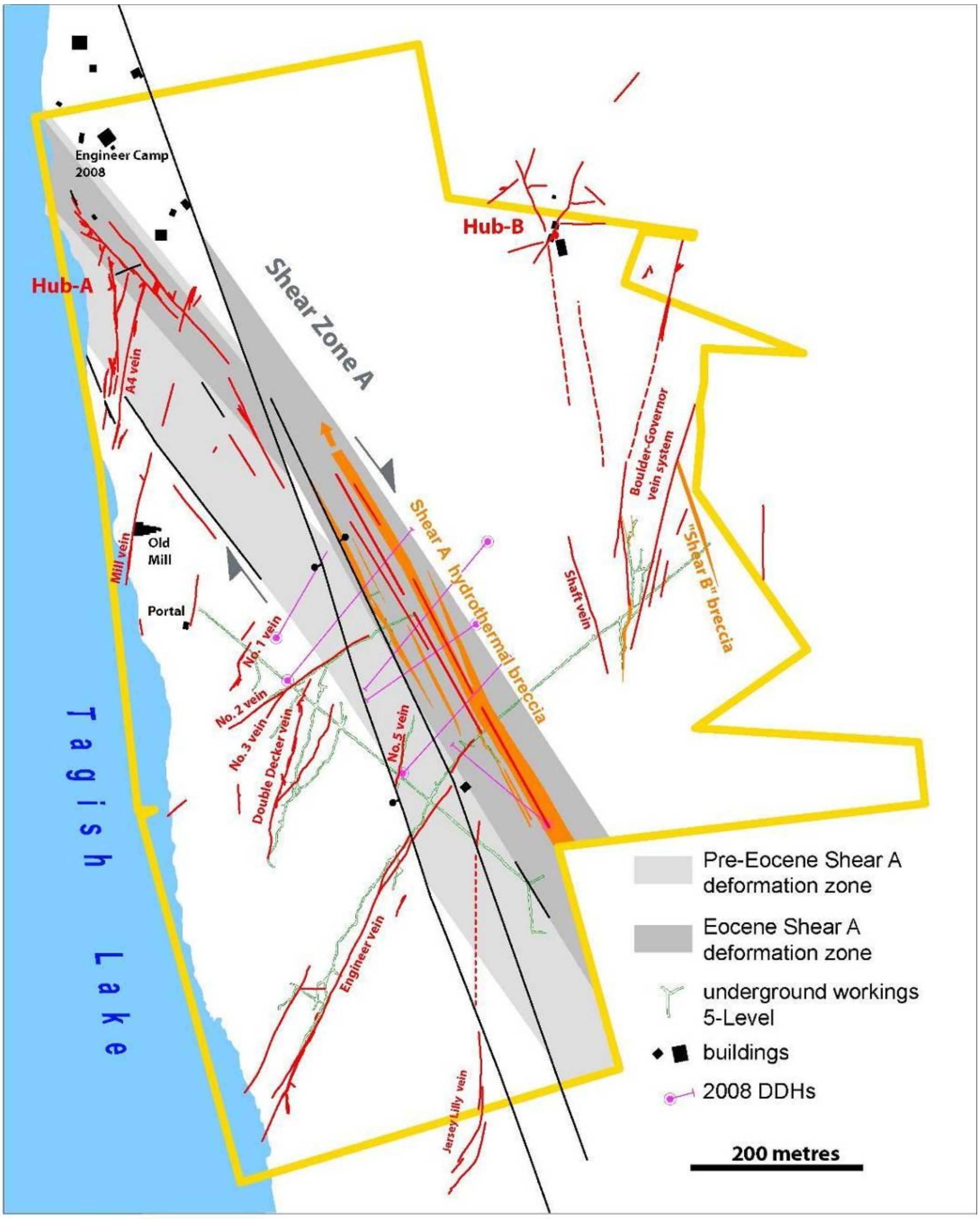
The difficulty in evaluation is related to the nugget effect manifesting itself as "sporadic" values – this relates to short-scale grade continuity and potential effects of geological continuity. In addition, the presence of coarse (electrum) gold also exacerbates the nugget effect through sampling errors (Dominy, Platten and Minnitt, 2010).

9 MINERALISATION

9.1 INTRODUCTION

The Engineer deposit is characterised by two systems of steeply dipping veins (Figure 9.1). A NNW-SSE trending set are emplaced within, and parallel to, a dextral shear zone reactivated during the Eocene (Shear Zone A). A set of NNE-SSW trending veins occur both east and west of the shear zone. The group to the west of Shear Zone A, includes the Engineer and Double Decker veins considered in this report. These NNE-SSW veins are considered to be dilational fissures formed sub-parallel to the maximum principal stress during dextral movement on Shear Zone A (Devine, 2008).

Figure 9.1: Map of vein systems on the Engineer Property. Key features are the Double Decker and Engineer veins; Hubs A and B; and Shear Zones A and B. Thick yellow box represent the Engineer mine lease area. North is vertically up the map (Source: Devine, 2008)



The NNW-SSE systems (Shear Zones A and B) are deformation zones bearing locally thick hydrothermal breccias with clasts floating in a quartz-dominated matrix.

The NNE-SSW set of veins are thin, usually <2 m. Individual veins are traceable for 20 m to 400 m along strike and mostly dip steeply to the WNW. Mineral assemblages are coarse, layered open space fills of quartz only, quartz-carbonate or carbonate only. Gold is coarse-grained and associated with quartz and roscoelite mica. Where associated with roscoelite it forms rich clusters. Sulphides are present but rare. Textures are well preserved. Breccias are a subordinate component. Discrete late carbonate veins, including NNW trending veins cut and displace the NNW-SSE set. Veins are also cut by late NNW-SSE trending steep faults.

Field photographs of veins in Aspinall (2007), Devine (2008) and Jensen (2008) all show sharp contacts between NNE-SSW veins and Laberge sedimentary rocks. There is no evidence of wall rock alteration at this scale but thin section descriptions report alteration and replacement of wall rock and the wall rock clasts in the vein material. Veins, including the Engineer vein, are also shown to cut the NNW-SSE and NE-SW dykes assigned to the Sloko volcanic group (BCGold, 2009).

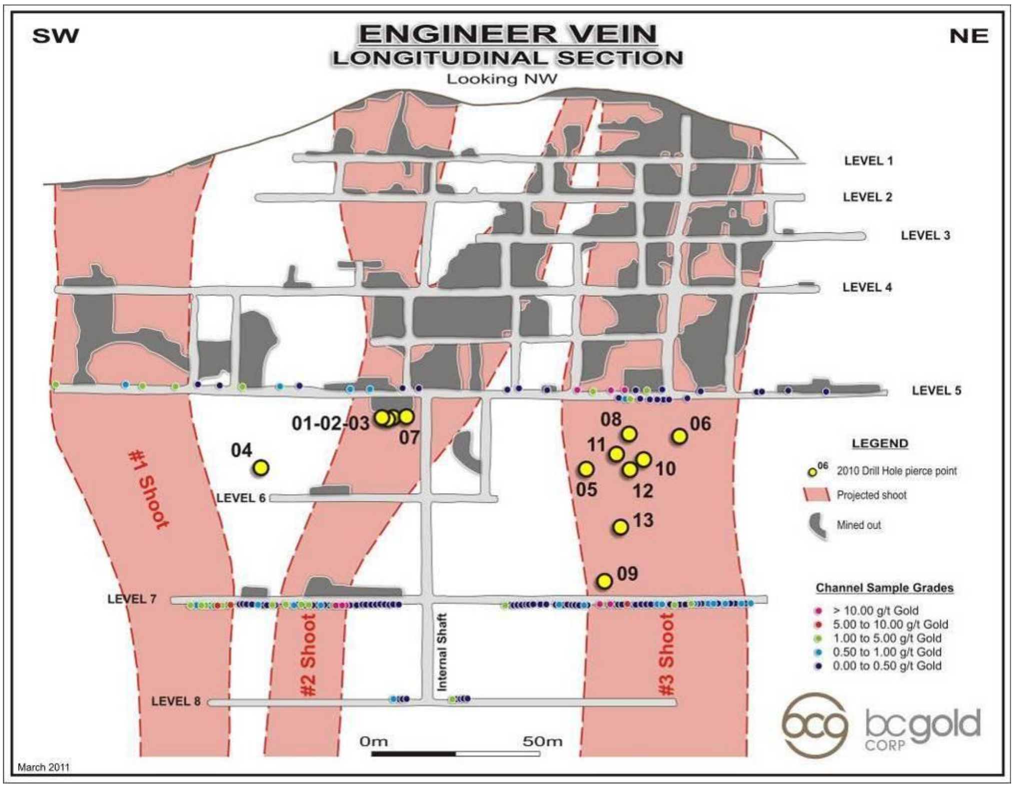
Two zones of semi-radial veining occur on the property – Hubs A and B (Figure 9.1). The veins, similar to the main Double Decker and Engineer sets, comprise fine to coarse white milky quartz with carbonate, commonly with coarse comb-quartz texture and open space filling. Silicification zones exist at individual vein intersections and where veins were most extended.

9.2 ENGINEER VEIN

Surface outcrop extends NNE from the lake shoreline for approximately 440 m (Devine, 2008). The vein shows local short branches at the south end and splits around a horse towards the north (Figure 9.1). Davidson (1998) shows vein as actually exposed for 330 m, including the horse.

The vein is exposed in the 5 Level for 400 m (Davidson, 1998; Devine, 2008). Ore shoots (#1, 2 and 3) on the Engineer vein (Levels 6, 7 and 8) extend to 90 m below 5 Level (Figure 9.2). Recent drilling (Coates, 2010) intersects vein material in this interval on #3 shoot. Level 7 is the longest, driven for 90 m, but how much is on vein is not known. Historical sections, show between 60 m and 90 m of continuous, mostly stoped, vein between 5 Level and the ground surface. Total vertical extent of vein at the ore shoot is 180 m between highest surface outcrop and 8 Level.

Figure 9.2: Engineer vein long section showing development, stoping and 2010 drill hole intersections (Source: BCGold)



The vein is reported to terminate to the NNE against Shear Zone A (Davidson, 1998). This site lies within the Eocene part of the shear zone and close to one of the NNW-SSE hydrothermal breccia veins shown by Devine (2008). The detailed mapping BCGold (2009) shows the vein terminating short of the Eocene part of the shear zone, but close to one of the latest faults. The SSW end is not defined, but BCGold (2009) suggests that there may be a small en-echelon offset in the SW end of 5 Level.

Continuity of the gross structure along strike is good between 5 Level and the surface, approximately 400 m. At depth continuity along strike is only demonstrated in the vicinity of the main ore shoot (~90 m). Vertical continuity is good down to 5 Level and is demonstrated below 5 Level below the main ore shoot, 180 m total.

Comparison of surface outcrop position and vein in 5 Level indicates a gross, steep WNW dip. Segments in the SSW and around the horse show a very small separation of surface and 5 Level traces, indicating that the vein steepens locally. Drill hole intersections between 5 Level and 7 Level on the cross profile of Coates (2010) confirm a steep WNW dip, but suggest that dip angle may vary here. Davidson gives dips of >80°NW.

Detailed mapping of the 5 Level (BCGold, 2009) shows the NNE part of the system dominated by a quartz vein for 120 m. This section includes the main ore shoot shown on Davidson (1998). Strike is uniform along NNE development, but is sinuous to the SSW with segments 10 m to 15 m along strike. A change (20°) in gross strike occurs 25 m SSW of the cross-cut. Devine (2008) notes that (1) ore shoots are controlled by changes in vein orientation, thickest segments, marked by breccia, occur at extensional jogs and (2) vein shows predominantly dilational opening with a small component of sinistral strike slip.

The SSW part of 5 Level (BCGold, 2009) shows segments of quartz vein offset and separated by oblique and coplanar segments of carbonate dominated and mica dominated veins. Segments range between 5 m and 35 m in strike length on the map. Local strike varies between N-S and NE-SW for discrete vein segments. Although the vein is continuous in gross terms, it changes character rapidly along strike.

Devine (2008) reports that Engineer vein locally reaches 5 m within the main ore shoot section.

Quartz or mica cemented breccias are a distinctive feature of this vein and not seen in other NNE-SSW veins. Breccias are described as hydrothermal breccias and carry clasts of older vein events and wall rocks. Roscoelite flowers with gold are reported from the fine quartz matrix.

Example sections of the Engineer vein are shown in Figure 9.3.

Figure 9.3: [A]-[C] Underground photographs of the Engineer vein
[A] Width of view approximately 60 cm showing multi-stage quartz-calcite vein with open vugs, brecciation and banding (Source: Snowden, 2011)

[B] Horsetail quartz veining on 5 Level. Individual vein widths approximately 1 cm to 10 cm (Source: Snowden, 2011)

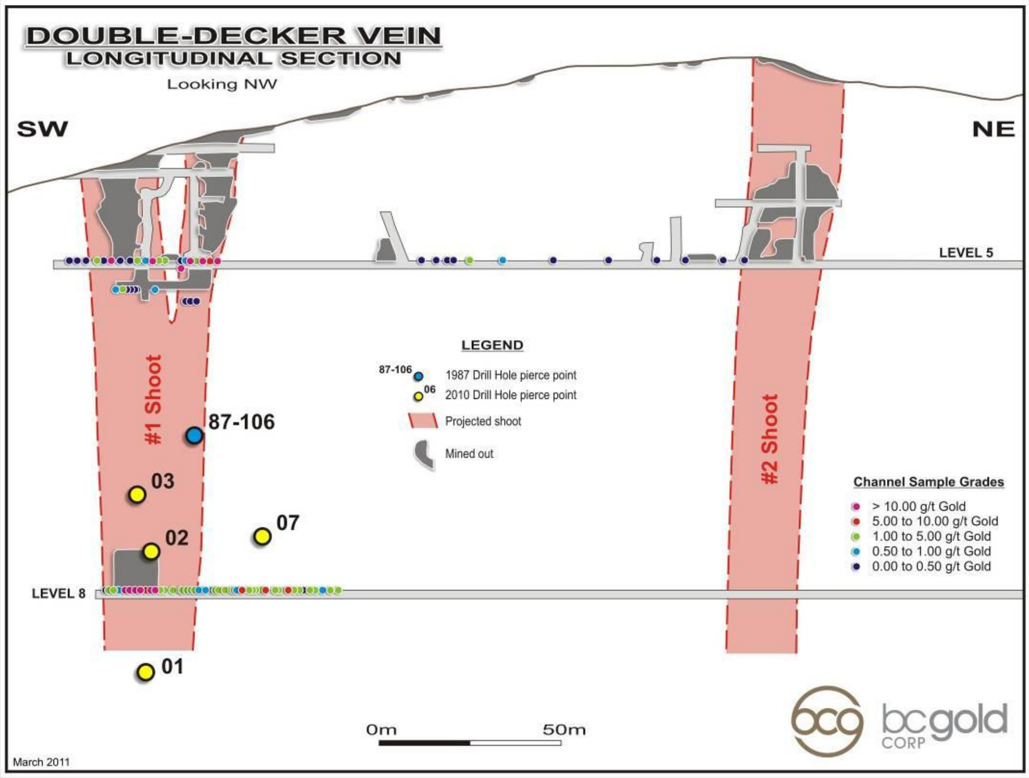
[C] Quartz vein split on 5 Level. Main vein (left hand side) width approximately 25 cm (Source: Snowden, 2011)

Other vein sections show coarse crustified vein fills with increasing amounts of carbonates being present. These include a carbonate-roscoelite-gold fill and 'colloform' banded green mica layers in coarse quartz carbonate.

9.3 DOUBLE DECKER VEIN

Surface outcrop of the Double Decker extends for 220 m, with a short splay off the east side called Double Decker No 4 vein (Devine 2008). The vein system is explored for 220 m underground in the 5 Level (Figure 9.4). The main vein trends NNE-SSW, but is discontinuous and irregular where the splay develops (BCGold, 2009). The splay vein trends initially NE, but then changes to run NNE, parallel to the main structure. At 8 Level the drive follows the vein for approximately 70 m, lying down-dip from the single vein section in 5 Level and SW of the vein split (Figure 9.1).

Figure 9.4: Double Decker vein long section showing development, stoping and 2010 drill hole intersections (Source: BCGold)



The gross vein has good lateral continuity between 5 Level and surface and may have significant continuity as far down as 8 Level (Figure 9.4). It is not clear if the east side splay is present at 8 Level. The vein is seen through a total of 150 m vertically from surface to 8 Level.

The north end of the main structure converges with No 2 vein, but appears to terminate just short of the intersection. The north end of the splay (No 4) appears to split and thin - it may or may not terminate before the drive end. The vein system appears to pass out of the drive wall at the SSW end.

The vein (main and splay), dips steeply to the ESE, the opposite sense to most other NNE-SSW veins at Engineer. This is shown by the position of surface outcrop and vein position in 5 Level (Devine, 2008). Devine (2008) quotes dip angles between 50° to 80°.

The detailed mapping of the vein on 5 Level shows strike variation on 25 m scale and some local breaks in continuity at a similar scale. Thickness variation produces pod like sections on a similar scale. Devine (2008) reports 0.1 m to 1.5 m range in thickness and illustrates rapid local tapering of the 0.8 m thick vein.

The section carrying the two main ore shoots at the SSW end of the drive is relatively thick (0.5 m to 1.0 m) and shows strike changes from N-S to NE-SW. It thins and terminates to the NNE. The vein in 8 Level shows similar style of changes in strike, but not directly down dip from the changes at 5 Level (Coates, 2010).

The detailed mapping shows the vein type as exclusively quartz-dominated. Devine (2008) illustrates vein fills with coarse textures - the sequence seen with comb quartz on walls and carbonate axial fills. Gold occurs primarily in quartz with coarse textures, including comb forms. One example of gold associated with roscoelite is reported. Green mica are also present in vein fills but is not said to be associated with gold.

Example sections of the Double Decker vein are shown in Figure 9.5.

Figure 9.5: [A]-[C] Underground photographs of the Double Decker vein on 5 Level. [A] Multi-stage quartz-calcite vein showing brecciation and banding. Width of vein approximately 20 cm (Source: F Devine)

[B] Multi-stage quartz-calcite vein showing crustiform banding and calcite-lined vugs. Width of vein approximately 20 cm (Source: F Devine)

[C] Branching quartz vein in stope pillar. Vein width approximately 30 cm (Source: Snowden, 2011)

9.4 GOLD TEXTURE AND CLUSTERING

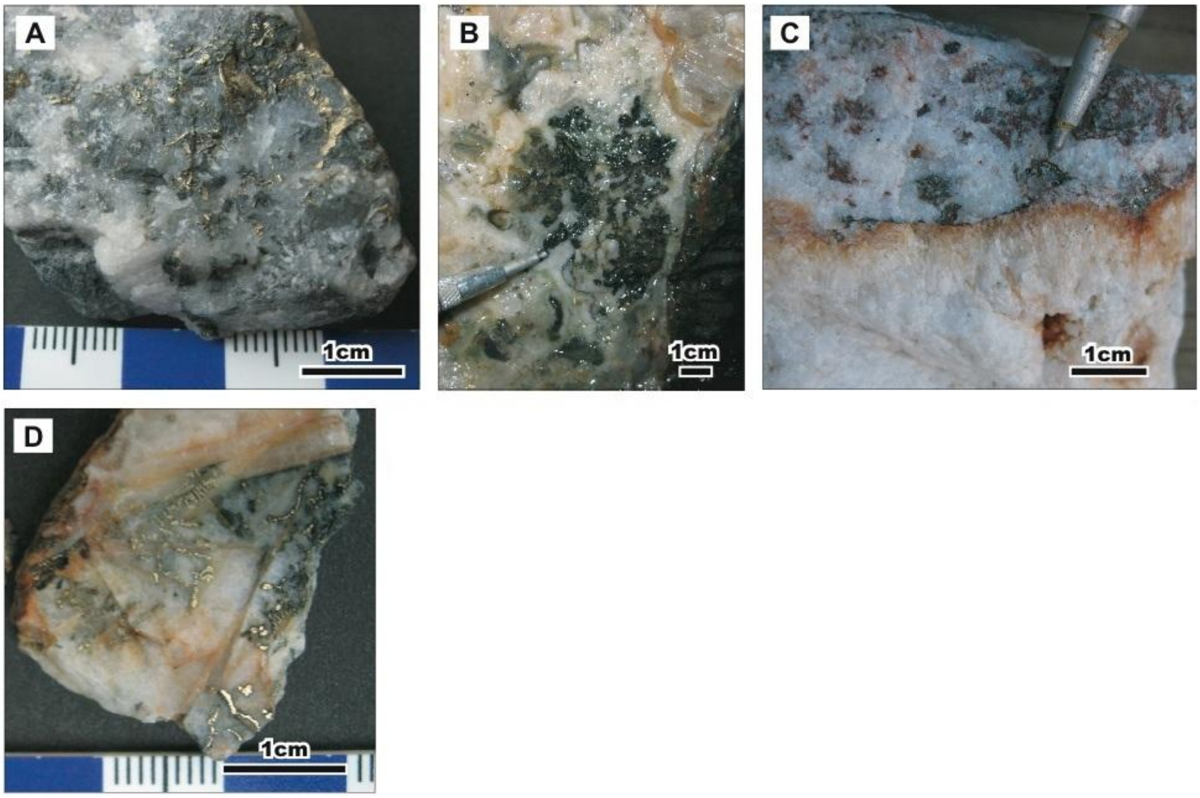
Visible, often very coarse, gold is reported (Brinker, 1925; Mauthner, Groat and Raudsepp, 1996; Davidson, 1998; Devine, 2008). It was used historically as a direct indication of ore (Brinker, 1925; Davidson, 1996) and even as a guide to allocating samples for assay (Davidson, 1998). Note that Mauthner Groat and Raudsepp (1996) describe the gold as auriferous silver or electrum.

Fine-grained gold is not reported apart from the very fine visible gold reported in drill hole BCGE10-1 (Coates, 2010). The role of fine-grained gold is effectively unknown. However it may be relevant to the gold losses of between 23% and 52% in milling reported by Davidson (1998) and Ampex (1996).

Gold commonly occurs in association with roscoelite clusters or flowers within quartz veins, but is also found alone in some quartz or quartz-carbonate veins (Figure 9.6). The most conspicuous association with roscoelite is as grains and wires in clusters up to 8 cm across (Mauthner Groat and Raudsepp, 1996; Devine, 2008). Any clustering of gold particles will effectively enhance short-scale variability and hence the geological nugget effect (Dominy and Platten, 2007).

The gold may be enclosed within the roscoelite or largely within the quartz between vermiform roscoelite cylinders. Mauthner Groat and Raudsepp (1996) illustrate a mass of arborescent gold partly occupying the open space in a quartz lined vug. This mass was 3.5 cm along the longest axis. Arborescent leaf forms up to 1 cm on long dimension occur in quartz and carbonate (Mauthner, Groat and Raudsepp, 1996). Davidson (1996) also reports disseminated gold and gold in cracks in quartz.

Figure 9.6: Examples of gold occurrence from the Engineer mine. [A] Gold in quartz. [B] Roscoelite "flower" with visible gold in quartz-carbonate from the Engineer vein. [C] Gold in roscoelite in fine quartz phase of quartz vein. [D] Filigree gold in roscoelite and quartz (adapted from Devine, 2008)



The vein adjacent to roscoelite-gold clusters can be very poor in gold. Davidson (1998) records vein samples adjacent to a roscoelite-gold patch yielded very low gold values.

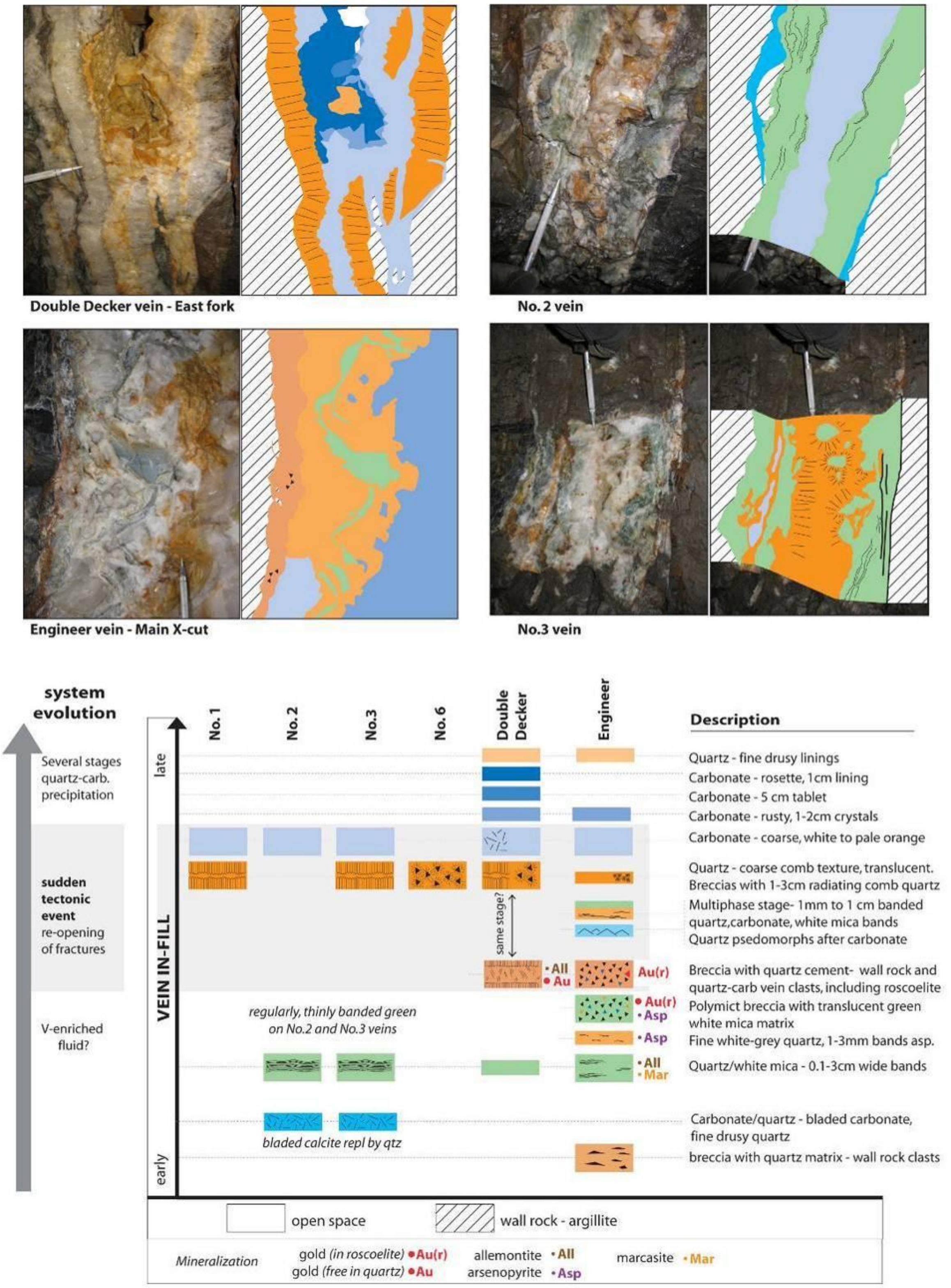
On a broader scale, Davidson (1996) comments on Brinker (1927) for 8 Level on Double Decker as citing gold showing at ten places in the first cut and in six places in the second cut. Davidson (1996) notes that "*due to the spotty nature of the ore*", a 100 kg bulk sample was required. These and other reports suggest that clusters may occur in groups within the higher-grade domains and may contribute significantly to the global grade in such areas.

The information on gold clusters, particularly the very rich clusters, may be biased. However there is clear evidence that high values of nugget effect are likely and sampling design and resource assessment need to take account of this risk and to quantify it in the modern context.

9.5 VEIN PARAGENESIS

Devine (2008) describes the texture, mineralogy and sequence of events in the Double Decker and Engineer veins (Figure 9.7).

Figure 9.7: Vein stages and paragenesis summary diagram. Figure shows a summary of vein observations on 5 Level and surface. Photos show the different vein stages present. The summary diagram on the bottom is coloured to match as a legend for the different vein stages (Source: Devine, 2008)



Mapping of veins on the 5 Level revealed a consistent vein in-fill sequence that could be correlated between veins. A fluid history for the system was established, at least locally within the system, by recording the vein-fill sequences for different veins (Devine, 2008). The vein-fill pattern establishes a paragenesis for the system. The dominantly extensional Engineer and Double Decker veins are the oldest in the system and they likely remained open through the development of the system. Other veins were the focus of specific fluids, implying that they were variably active. As a starting point it is assumed that there was a straightforward fluid development across the system with certain time markers. For example, coarse comb-textured quartz was deposited in many veins, perhaps indicating a sudden tectonic event that cracked the system open and created open-space in most veins. Quartz grain size or texture cannot be time-correlated across veins in different parts of the system; textures instead can be used to determine the stress-state of the vein at the time of precipitation. For example, large comb quartz likely represents high fluid volume into open space, whereas banded shear veins did not have open space at the time of quartz precipitation.

9.6 ORE SHOOTS

9.6.1 Introduction

Known (ore) shoots on the Engineer and Double Decker veins are outlined by the stoped out ground above 5 Level (Figures 9.2 and 9.4). These have been used as a starting point to outline the projected shoot outlines below 5 Level.

9.6.2 Engineer vein shoots

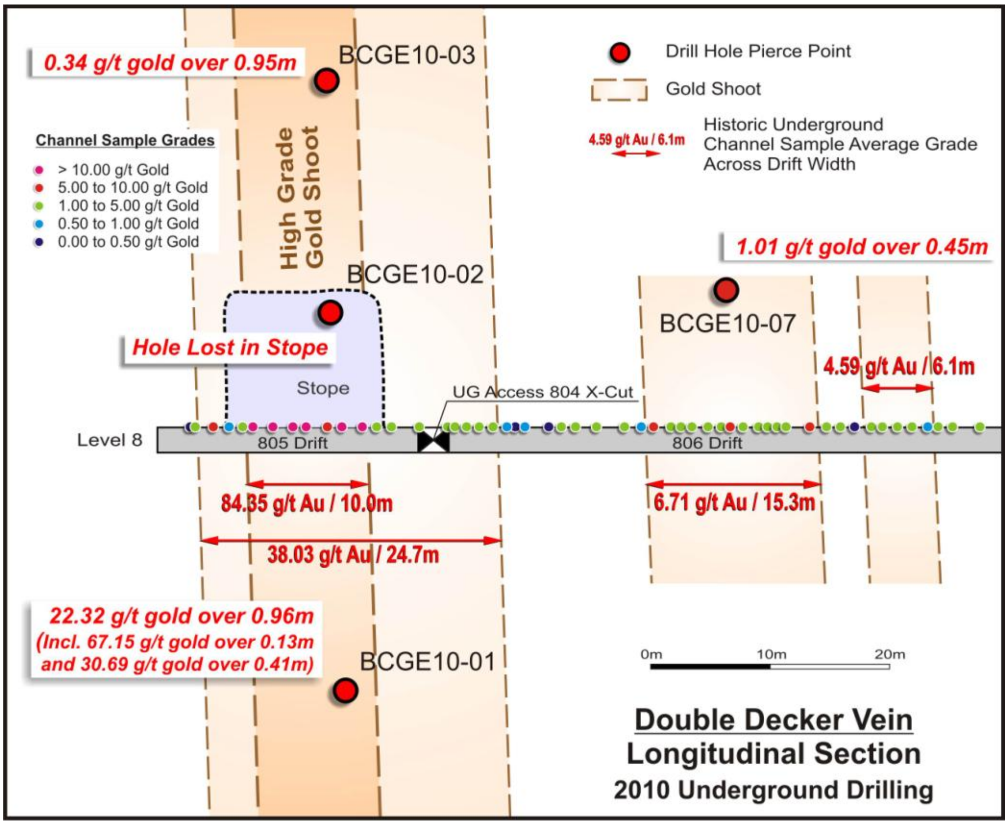
The zone with shoots in Engineer extends for 200 m along the vein, nearly half the explored length (Figure 9.2). The NNE end of the zone shows a large proportion of the vein extracted with well-defined steeply plunging boundaries to two ore shoots. These shoots extend approximately 90 m to the surface. The SSW part of the zone shows widely scattered stopes with little pattern. Some represent the removal of 5 m from the drive back for some 10 m to 25 m on strike. Others have shorter strike length, but extend 10 m to 15 m upwards. These are more difficult to interpret than the continuous structures.

Residual, unmined areas within the shoot outlines do not lack gold. Studies by BCGold have indicated sites where visible gold was observed in the old workings (BCGold, 2010b/c). Small bulk samples from residual vein in 5 Level were also collected and some processed (Ampex, 1995). These also indicate that material left as uneconomic may contain significant gold values in the modern context.

9.6.3 Double Decker vein shoots

In the Double Decker vein, two narrow shoots (Figure 9.4), each 20 m to 30 m along strike, rise from 5 Level for 35 m towards the surface. This may be compared with the 220 m explored length. The shoots are steeply plunging, the SSE shoot being subdivided into two by an unworked zone. Historical grade data on 8 Level of #1 shoot shows strong grade over 25 m (38 g/t Au over 25 m – Figure 9.8).

Figure 9.8: Historical gold grade data on the Double Decker vein #1 shoot, 8 Level. Drill hole BCGE10-03 intersected a 0.19 m true width quartz-carbonate vein and brecciated/silicified wallrock – grades were not anomalous (Source: BCGold)



9.6.4 Continuity within the shoots

The scale of vein pinch-outs, pinch and swell, and strike variation seen in the veins is at or smaller than some of the shoot dimensions shown by the stopes. Devine (2008) notes that stoped areas may correspond to thicker sections or 'swells' of vein material.

Groups of roscoelite-gold clusters are found along sections up to 14 m in length and may mark particularly high grade domains at scales less than gross shoot dimensions.

Table 9.1 defines the continuity domains and dimensions within the Engineer veins.

Table 9.1: Continuity domains within the Double Decker and Engineer veins

Continuity domain	Dimension (m)	Payability	Features
Vein	>400 m	-	Gross quartz vein structure. Locally anomalous, but predominantly gold-poor (0.1 g/t Au). On a local scale, deformation and faulting may have influence on gross continuity/geometry (e.g. Shear Zone A)
Ore shoot	35-40 m (strike) >200 m (dip)	100% MG + VHG comprise 60% of the shoot	Gross shoot grade in the region of 10-20 g/t Au made up of LG, MG and VHG
LG, MG and VHG domains comprise the shoot domain (see later Section 17.5.2)			
Low grade shoot zone [LG]	10's m (strike and dip)	40%	The LG zone is the very low grade (≈0.5 g/t Au) portion of the shoot outside of the pay limit defined by the MG and VHG
Medium grade shoot zone [MG]	5-10 m (strike) 5-10 m (dip)	45%	The MG represents the lower grade (≈7.5 g/t Au) halo around the VHG zones
High grade zone [VHG]	<5-20 m (strike) <5-20 m (dip)	15%	Localised pockets or sub-shoots of >30 g/t Au material dominated by an abundance of coarse visible gold±roscoelite. A VHG zone may comprise numerous effective clusters of coarse gold

The gross veins are laterally and in the dip direction relatively continuous. The veins host the shoots which are shown to be laterally short (<50 m), but potentially >200 m down-dip (Figures 9.2 and 9.4). Within the shoots grade continuity is short, generally <20 m and potentially related to the presence of gold-roscoelite clusters as noted in Section 9.4. Short-scale continuity effects in the Engineer vein are confirmed by Brinker (1926), where "*visible gold over 2 feet [0.6 m]*" for a 1 inch to 4 inch [2.5 cm to 10 cm] vein and "*heavy grade over 10 feet [3 m]*" in the 726 stope.

This review suggests that there are local high-grade pockets or sub-shoots within the shoot outlines and that unworked areas in historical shoots may contain material of interest in the modern context (e.g. lower cut-off grade). However, variability at several scales may result in short term variations in production grade. There may be difficulty in classifying ore versus waste in this context, and the need for geologically-driven grade control.

9.7 SHEAR ZONE MINERALISATION

On the Engineer Property, Shear Zone A shows two distinct periods of displacement focused in different areas (Figure 9.1). The early deformation may be as old as Middle Jurassic and consists of a pervasive right-lateral, shear-parallel cleavage. Overall this zone is up to 150 m wide, trends between 145° to 215° and is vertical to steeply southwest dipping. Within the main shear are 5 m to 20 m thick zones with more concentrated cleavage.

Secondary reactivation of Shear Zone A consists of a 20 m to 40 m wide zone of shearing and brittle hydrothermal breccia. In general, it follows the north-eastern margin of the older cleavage, but is slightly oblique to the north. Timing of the later shearing event is indirectly assumed to be Eocene since the deformation (and alteration) affects the dykes that cross it, and the dykes are assumed to be contemporaneous with the Eocene Sloko volcanism on Engineer Mountain.

Textures in the later hydrothermal Shear Zone A include shear bounded and rotated domains of bedded argillite clasts, multi-phase dominantly quartz breccias and quartz flooding. Zones of alteration and quartz veining both cross-cut shear structures, and are themselves sheared. Highest grades occur in fine quartz-flooded zones within the multi-phase breccia body.

A magnetite destructive alteration assemblage of kaolinite, illite, quartz, and carbonate±pyrite is associated with gold mineralisation (Fonseca, 2008). Illite and locally muscovite, show structures with higher crystallisation temperatures in the sections most anomalous for gold. Kaolinite-illite alteration is best recognised in drill core by a pale, bleached appearance to the argillite wall rock and some proximal feldspar porphyry dykes are similarly altered.

The hydrothermal breccia zone coincides with a 1.5 km linear surface depression and is not exposed in outcrop. Underground drifting on the zone has been done on the 8 Level at the northeast end of the Double Decker drift (250 m), on the 5 Level at the northeast end of the #3 Cross vein (75 m), and on the 5 Level in the Boulder vein access (30 m). The first two locations are flooded and inaccessible and the results unknown, but several chip samples in the third location returned values of ~0.8 g/t Au (Aspinall, 2007). The hydrothermal breccia near where it intersects the Engineer vein was the target of two holes during the 1987 drill campaign. Drill hole 87-101 intersected 30 m at 0.31 g/t Au, and drill hole 87-102 intersected 24 m at 0.24 g/t Au gold (Smit, 1988). Six holes by BCGold in 2008 targeted a 400 m length of the zone and all returned anomalous gold and silver values. The most northerly drill hole 08-02 intersected 20.1 m of 0.48 g/t Au, while the southernmost two holes, 08-05 and 08-07, intersected 32 m of 0.44 g/t Au, and 34 m of 0.45 g/t Au respectively (all drilled lengths).

The Shear Zone A hydrothermal breccia zone is still open to both the north and south, as well as down dip, and therefore continues to be an exploration target.

9.8 HUBS A AND B

Hub A occurs within Shear Zone A in the north of the property immediately above the lakeshore (Figure 9.1). Some of the first gold-bearing veins were discovered in this area. A tunnel was driven under Hub A and some 1920's era drilling took place here with limited success. The white pile of quartz vein and breccia material is still visible on the beach. A major zone of silicification and quartz vein breccia occurs over a 20 m area with quartz veins extending out from the centre in two main directions: parallel to Shear Zone A, and as tensional veins across Shear Zone A. Most are fine to coarse white milky quartz with carbonate, commonly with coarse comb-quartz texture and open space filling. Major silicification zones are at individual vein intersections and where veins were most extended. The A4 vein is one of the major tensional veins extending out from Hub A. It is a 0.5 m to 2 m wide comb-textured quartz vein that is mapped for over 200 m. Veins in this area returned surface grab samples of up to 0.8 g/t Au.

Hub B lies in the north of the property, along the projected extension of one vein set from the Boulder Governor system (Figure 9.1). The area was named for its similarities to the previously discovered Hub-A, where 1 to 2 m wide fine-grained white quartz veins intersect to form a silicified “hub”. The area is poorly exposed, but does have a 1920’s shaft with dump piles. The vein material is fine-grained, white quartz and carbonate with some coarse comb-quartz textures. There is a major intersection of veins at this location and gold mineralisation that was the focus of limited historical mining.

10 EXPLORATION

This section is based on material from Davidson (1998), Aspinall (2007) and Coates (2010).

10.1 PERIOD 1899 TO 1975

Exploration at the Engineer Property has been undertaken since about 1900. Activity immediately around the mine has focused on underground development and diamond drilling.

From 1912 to 1918, Captain Alexander increased his ownership of the property and a substantial amount of work was done underground, mostly on the Engineer vein. This included a 210 foot [63 m] shaft and development on 4 Levels, as well as a starting of the 500 Level crosscut from near the lakeshore. The period from 1923 to 1925 saw the 5 Level crosscut completed and three diamond drill holes on Hubs A and B from surface.

During 1925 to 1927 extensive development work was undertaken. On the Engineer vein, sinking of an internal shaft from the 5 to the 8 Levels, allowed development drifting on the 6, 7 and 8 Levels. On the 8 Level a crosscut was also driven to access the Double Decker vein, which then saw substantial drifting in both directions. On the 5 Level, another long cross cut was driven through Shear Zone A, to the veins in the northeast (Boulder, Andy, Blue and Shaft) and some drifting on these was done as well. In addition to all of this, a small shaft was sunk on the Hub B with minor drifting.

During the period 1927 to 1934 only sporadic work was done on the property. In the early 1960's, Tagish Gold Mines Ltd acquired it, and in 1975 ownership passed to Nu-Energy Development Corporation, who undertook detailed sampling of the Shear A along the 5 Level crosscut, and some underground mapping.

10.2 PERIOD 1976 TO 1989

In 1979 Nu-Lady Gold Mines Ltd optioned the mine and in 1980 conducted a 15 diamond drill hole programme. No significant intersections were reported and this data is not available. In 1981, a further 11 holes were drilled and a soil survey conducted over an area in the north part of the property. Six holes tested for northeast extensions to the Double Decker and Engineer veins and three holes were drilled near the Boulder vein - all with no significant results.

In 1987, Erickson Gold Mining Corporation became the property owner and flew an airborne VLF/Magnetic survey, surface geological mapping and sampling and soil geochemistry. During fall of the same year, a diamond drilling programme consisting of 1,178 m in eight holes followed up on the earlier work and tested known structures at depth. Numerous quartz veins were intersected, some with enhanced gold values. Two holes targeting Shear Zone A intersected up to 29 m of mixed quartz vein and silicified and brecciated argillite, with low gold values throughout. Drill hole 87-106, drilled through both the Double Decker and Engineer veins, intersecting the former at about the 700 Level, but with no significant gold values, and failed to intersect the latter below the 8 Level. Five holes targeted soil geochemical anomalies along Shear Zone B, and two of these returned values around 6 g/t Au within larger sections of quartz veining, breccia and silicified argillite (Smit, 1988).

10.3 PERIOD 1990 TO 2006

During 1991 to 1992, the portal and most of 5 Level was rehabilitated. Blasting and sampling on the No. 2, No. 3, and Double Decker veins was unsuccessful in locating new gold shoots. On the Engineer vein, high grade samples of gold in roscoelite were collected on small remnants of an ore shoot found in pillars between surface and 2 Level, and along the 5 Level. In 1993 the northeast part of the mine was re-habilitated.

During the 1994 season, trial mining was undertaken including a 30 ton sample from the 524-2 raise (Boulder vein) which yielded a grade of 28.6g/t Au. In 1995, bulk sampling continued and a total of 945 tons of material from both surface and underground was processed with variable results.

10.4 PERIOD 2007 TO PRESENT

In 2007, Aspinall (2007) collected 160 rock samples from underground, surface, and selected 1987 core. None of the 57 surface samples, and only 15 of the 92 underground samples carried greater than 1 g/t Au. Only 5 returned greater than 5 g/t Au. Exploration the following year included mapping, petrology, underground chip/channel sampling and drilling. Mapping at a scale of 1:500 was compiled for the surface, and 5 Level at 1:1,500 and 1:1,000 scales respectively (Devine, 2008). Underground channel sampling with a diamond saw was undertaken on the Shaft, Boulder (2 areas), Engineer, Double Decker (2 areas) and Shear Zone A. Of a total of 35 vein samples one contained 860 g/t Au (Shaft vein), one 14.7 g/t Au, five were below 4 g/t Au and the rest below 1 g/t Au. The drilling (7 holes for 1,846 m) targeted the late stage hydrothermal breccia zone within a 400 m strike length of Shear Zone A. Six holes were completed and all returned anomalous gold and silver values, including 20.1 m of 0.48 g/t Au, 32 m of 0.44 g/t Au and 34 m of 0.45 g/t Au. The breccia zone remains open in all directions and appears to widen slightly towards the south.

No work was done on the property in 2009.

In 2010, work consisted of drilling thirteen HQ diamond drill holes (1,218 m), in two phases, from two underground drill bays located on 5 Level. From the first drill bay (the old hoist room) four holes targeted the Double Decker vein on 8 Level in an area where 1928 reports indicated 84.3 g/t Au were drifted on. An additional three holes drilled from the same drill bay targeted the Engineer vein at very low angles. The remaining 6 drill holes were drilled from a second drill bay located a further 30 m along the main crosscut.

Further drilling and underground activity is planned for 2011, see Section 19.12.

11 DRILLING

This section is based on material from Davidson (1998), Aspinall (2007) and Coates (2010).

11.1 SUMMARY

Relatively limited drilling has been undertaken on the Engineer Property (Table 11.1). In the context of this Technical Report, only 14 holes have intersected the Double Decker and Engineer veins. Of this, there are 5 intersections on the Double Decker vein and 11 on the Engineer vein.

Table 11.1: Summary of historical drilling at the Engineer Property (1980 to 2010)

Year	No of holes (Metres drilled)	Company	Comments
1980	15	Nu-Lady Gold	No significant intersections reported. Data lost.
1981	11	Nu-Lady Gold	Six holes on northeast extension of Double Decker and Engineer veins.
			Three on Boulder vein.
			No significant results reported.
			Nutcracker vein discovered (0.76 m at 6 g/t Au)
1983	6	Nu-Lady Gold	Further holes on Nutcracker vein only.
1987	8 (1,178 m)	Erickson Gold	Seven holes of Shear Zone A and B.
			One hole intersects Engineer and Double Decker veins at below 7 Level – no significant gold values.
2008	7 (1,846 m)	BCGold	On Shear Zone A only.
2010	13 (1,218 m)	BCGold	On Double Decker and Engineer veins only.

11.2 1980 TO 1983 PROGRAMME

In 1980 Nu-Lady Gold Mines Ltd conducted a 15 diamond drill hole programme. No significant intersections were reported and this data is not available.

In 1981, a further 11 holes were drilled. Six holes tested for northeast extensions to the Double Decker and Engineer veins and three holes were drilled near the Boulder vein - all with no significant results. A final hole, 81-11 tested a soil geochemical anomaly and returned 0.76 m at 5.9 g/t Au on the Nutcracker vein.

11.3 1987 PROGRAMME

In 1987 Erickson Gold Mining Corporation undertook a diamond drilling programme consisting of 1,178 m in eight holes. Numerous quartz veins were intersected, some with enhanced gold values. Two holes targeting Shear Zone A intersected up to 29 m of mixed quartz vein and silicified and brecciated argillite, with low gold values throughout (average 0.25 g/t Au). Five holes targeted soil geochemical anomalies along Shear Zone B, and two of these returned values around 6 g/t Au within larger sections of quartz veining, breccia and silicified argillite (Smit, 1988).

Drill hole 87-106 is the only hole outside of the 2010 programme to target the Engineer and Double Decker veins. Drilled toward the southeast, it intersected the Double Decker vein at the 635 m elevation about half way between the workings on the 5 and 8 Levels. The vein occurred immediately below (down-hole) a dyke and contained dyke fragments in the top 0.7 m. The total cored distance of 1.6 m (0.55 m true width) contained 0.12 g/t Au and 1.7 g/t Ag. The core axis angles were flatter (20° vs. 40°) and the intersection deeper (90 m vs. 75 m) than predicted; so either the vein plots about 10 m further into the hangingwall than projected (giving a wobble to the dip) or the hole was actually drilled steeper. The interval consists of two quartz-carbonate breccia veins (~40 cm and 20 cm each) containing intense carbonate-sericite±disseminated pyrite altered argillite fragments (30%) and occasional fine-grained gray bands (potentially tetrahedrite-arsenopyrite-stibnite?) with quartz stringers in between. The Engineer vein was not present in this hole. It was expected at an elevation of 510 m, 85 m below the bottom of the main shaft on 8 Level. If the hole was steeper than planned, it may not have been drilled far enough to intersect the Engineer vein.

11.4 2008 PROGRAMME

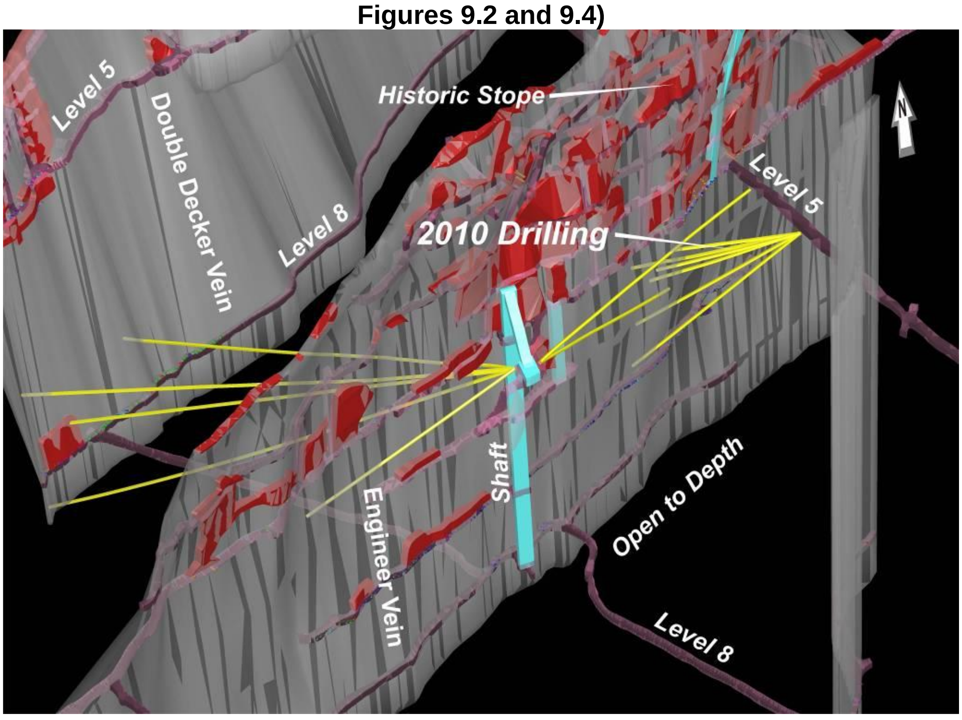
In 2007, the Engineer crown grants were optioned by BCGold. The 2008 drilling (7 holes for 1,846 m) targeted the late stage hydrothermal breccia zone within a 400 m strike length of Shear Zone A. Six holes were completed and all returned anomalous gold and silver values, including 20.1 m of 0.48 g/t Au, 32 m of 0.44 g/t Au and 34 m of 0.45 g/t Au.

11.5 2010 PROGRAMME

11.5.1 Summary

In 2010, work consisted of drilling thirteen HQ diamond drill holes (1,218 m), in two phases, from two underground drill bays located on 5 Level (Figure 11.1). From the first drill bay (the old hoist room) four holes targeted the Double Decker vein on 8 Level in an area where 1928 reports indicated 84.3 g/t Au were drifted on. An additional three holes drilled from the same drill bay targeted the Engineer vein at very low angles. The remaining six drill holes were drilled from a second drill bay located a further 30 m along the main crosscut. These holes all targeted the Engineer vein down dip below the “bonanza shoot” between 5 and 7 Level where previous sampling had indicated high grades.

Figure 11.1: Recent drill intersections on the Engineer and Double Decker veins (See also Figures 9.2 and 9.4)



Tables 11.2 and 11.3 summarise the 2010 drill holes intersecting the Double Decker and Engineer veins.

Table 11.2: Summary of drilling that intersects the Double Decker vein. Further detail is presented in Section 11.5.2. Drill hole pierce points are shown on Figure 9.4.

Hole No.	Intersection true width (m)	Gold grade (g/t Au)	Silver grade (g/t Ag)	Comment
87-106	0.55	0.1	1.7	[NB, drilled in 1987] Quartz stringer veins with trace sulphides
BCGE10-1	0.80	22.3	17.6	Quartz-carbonate breccia veins
BCGE10-2	-	-	-	Pierced old workings
BCGE10-3	0.19	Trace	Trace	Quartz-carbonate vein/brecciated and silicified wallrocks
BCGE10-7	0.45	1.0	1.0	Quartz vein with traces of sulphide

Table 11.3: Summary of drilling that intersects the Engineer vein. Further detail is presented in Section 11.5.2. Drill hole pierce points are shown on Figure 9.2

Hole No.	Intersection true width (m)	Gold grade (g/t Au)	Silver grade (g/t Ag)	Comment
87-106	-	-	-	[NB, drilled in 1987] Passed through vein zone, but failed to locate the vein. Vein may have pinched at this position
BCGE10-1	Trace	-	-	2 cm calcite vein. No anomalous grades
BCGE10-2	Trace	-	-	Intersected thin quartz stringers. No anomalous assays
BCGE10-3	0.19	1.2	1.7	Quartz-carbonate stringers with sulphides
BCGE10-4	0.28	0.2	6.0	Quartz vein with quartz-carbonate stringers
BCGE10-5	-	-	-	Vein not intersected
BCGE10-6	0.30	0.07	0.2	Quartz-carbonate brecciated wallrocks
BCGE10-7	0.45	9.4	18.5	Drusy quartz vein with quartz-carbonate stringers
BCGE10-8	0.60	0.3	0.5	Vuggy quartz-carbonate vein
BCGE10-9	0.40	-	32.3	Vuggy quartz-carbonate vein
BCGE10-10	0.14	0.4	2.5	Quartz-carbonate breccia vein
BCGE10-11	0.60	129.0	121.6	Sheared breccia vein with wires of visible electrum
BCGE10-12	0.70	0.3	0.8	Sheared breccia vein
BCGE10-13	1.20	0.4	0.9	Thin (<5 cm) quartz-carbonate veins

11.5.2 Detail of 2010 drill holes

Drill holes BCGE-10-1 to 3 and 7 targeted the Double Decker and Engineer veins.

Drill hole BCGE-10-1 intersected the Engineer vein 4 m below the underhand stope on 8 Level. Here it consisted of a tight 2 cm vein of coarse-grained calcite, with no significant assays returned from a 40 cm sample. The hole deviated and flattened less than anticipated, thus it intersected the Double Decker vein deeper than planned, but as predicted at a vertical distance of 20 m below 8 Level. The Double Decker vein in this hole consisted of two small (13 cm and 41 cm) quartz-carbonate breccia veins separated (42 cm) and surrounded (0.5 m to 3 m) by strong sericite-carbonate alteration (Figure 11.2).

Figure 11.2: [A] Drill core (2010 programme) from BCGE 10-01 on the Double Decker vein – true width 0.8 m at 22 g/t Au and 18 g/t Ag. Drill hole location shown on Figure 9.4 (Source: BCGold)

[B] Detail of [A] showing part of the vein intersection (30.7 g/t Au over 0.41 m; blue section in [A] above) where electrum and associated fine roscoelite occur both within and without ~1 cm thick overgrowths of cockscomb quartz on vein margin (left) and breccia clast of quartz-sericite altered argillite. Core width 63 mm (Source: BCGold)

The weighted average grade for the intersection is 22.3 g/t Au and 17.6 g/t Ag over a 0.96 m core length (0.8 m true width). In the lower vein, visible gold is contained in a roscoelite flower, while in the upper vein very fine visible gold is disseminated especially in one of the pyrite-carbonate-sericite altered siltstone clasts. Pale green mica blebs and a very fine silvery mineral (possibly stibnite or arsenopyrite) were present in both veins and also in the immediate moderately altered greywacke footwall rocks. Coarse calcite forms on clasts and is also replaced by vuggy drusy quartz, indicating a multi-episodic history. Late stringers in the very strongly altered immediate footwall are cut by later very low angle shears. This intersection represents the deepest gold occurrence in the history of the mine and confirms the presence of the 1928 reported gold grades on 8 Level.

Drill hole BCGE-10-2 should have intersected the Engineer vein 2 m below the underhand workings on 8 Level at about 14 m down-hole. Two or three stringers (all <0.5 cm thick) were intersected at this depth, but contained no anomalous assays. As with BCGE-10-1, this hole also flattened less than anticipated and therefore broke into the old Double Decker workings without intersecting the vein. It confirms that mining was done in 1928 to a minimum 10 m above the 8 Level backs.

Drill hole BCGE-10-3 intersected the Engineer vein as predicted, 1 m below the old underhand stope at a distance of 13.4 m down hole. The Engineer vein at this location carries 1.2 g/t Au and 1.7 g/t Ag over 0.15 m in multi-generational quartz/carbonate stringer veins (30% to 40%) with abundant fine arsenopyrite and stibnite, within a larger slightly anomalous, more diffuse stringer vein system which begins immediately below a dyke. Wall rock alteration is weak to absent. The Double Decker vein was intersected as predicted at 25.5 m above the back of 8 Level. The vein occurred immediately adjacent to a small dyke. The vein is narrow (0.23 m core thickness and 0.19 m true width) and not geochemically anomalous in any element. In the top half, white quartz is cut by late 5 mm carbonate fractures. In the bottom half, a breccia with 60% argillite slivers (moderately silicified and clay altered) preserves a shear texture parallel to contacts with minor vugs of yellow clay, pale green mica, and 1-2% pyrite disseminated mostly in the clasts. Wall rock alteration is absent. Reports from 1928 indicate that by the last lift mined from 8 Level, the vein was pinching out in the middle of the stope and stronger at either end. Since two separate areas were mined on 5 Level, it is possible that two separate shoots exist which join in a narrow V-shape at 8 Level. In this case, BCGE-10-1 would have pierced the vein below the junction point, while BCGE-10-3 may have gone between the two shoots.

Drill hole BCGE-10-7 intersected the Engineer vein as predicted, about 2 m below the underhand stope, and about 4 m north of the Engineer intersections in the other Double Decker holes. An intersection of 9.4 g/t Au and 18.5 g/t Ag over a width of 0.45 m was obtained from quartz carbonate stringers overprinting a 10 cm vuggy, drusy quartz breccia vein. The vein contained traces of both pale and dark green micas, fine arsenopyrite and was itself contained within a larger (1.6 m) carbonate stringer zone beginning 2 m below the dyke. Sericite wall rock alteration is very weak to absent. The Double Decker vein in this hole was again intersected exactly as predicted at a vertical distance of 15 m above the 8 Level drive and about 35 m north of the earlier drill holes. Weak patchy sericite-carbonate alteration occurs above the vein for 3 m up to the contact with a small dyke. Hairline carbonate fracture fills over about 0.5 m surround the vein, which consists of almost pure white quartz with slivers (0.5 cm to 1 cm) of black, argillite, only occasionally partly replaced by pyrite. It contains traces of arsenopyrite and stibnite, no green mica, and 1 g/t Au and 1 g/t Ag over a core width near true width of 0.45 m.

Drill holes BCGE-10-4 to 6 were drilled from the old hoist room on 5 Level (drill bay #1) and targeted the Engineer vein just below 5 Level with very low angles to the vein.

Drill hole BCGE-10-4 was drilled toward the southwest and intersected a thin low-angle predominantly quartz vein with and pyrite and clay filled vugs and breccia along its gradational margins. About 10% of quartz is gray (extremely fine arsenopyrite/stibnite?) and 10% is coloured by very-fine pale green mica. The main vein contains 0.2 g/t Au and 6.0 g/t Ag over a cored length of 0.6 m (0.28 m true width). This is surrounded by very strong sericite/carbonate alteration and quartz carbonate stringers extending for about 0.5 m to 1.5 m into the wall rock and carbonate fractures and stringers extending out a further 5 m to 7 m. A small dyke about 2 m to 3 m horizontally from the vein into the footwall (eastward), correlates well with the dyke intersected in the footwall of the Engineer vein in holes BCG-10-1 to 3 and 7.

Drill holes BCGE-10-5 and BCGE-10-6 were drilled toward the northeast and both holes intersected a late brittle cross fault at about 18 m before cutting a dyke. The cross fault can be seen in the drive trending at approximately 120º. The dyke seen in holes 1 to 4 and 7 just on the footwall side (southeast) of the Engineer vein, crosses into the hanging wall side (northwest) of the Engineer vein near the main shaft and is then offset by this fault about 12 m to 14 m right laterally back into the footwall, where it then connects to one of two dykes noted in drill bay #2. At a depth of 45.6 m to 49.2 m, the hole intersected what is interpreted to be the Engineer vein consisting of quartz-carbonate matrix breccia with no sulphides or alteration, and only traces of pale green mica.

Drill hole BCGE-10-6 appears to have penetrated the Engineer vein in two locations. At ~51 m depth, a breccia vein was cored with a total thickness of 0.9 m (0.30 m true width). The top 35 cm consists of mostly non-rotated black, unaltered argillite clasts in white fine-grained quartz-carbonate matrix with traces of pale green mica. The bottom 55 cm is mostly carbonate>>quartz with 10% to 15% strongly silicified sericite-pyrite altered argillite clasts and 5% drusy coated vugs with traces of fuchsite(?) and a fine grey mineral (arsenopyrite?). The lower two-thirds of the interval returned 0.36 g/t Au and 0.8 g/t Ag over 0.55 m while the upper one-third was barren. Wall rock alteration is weak to absent. From 75 m to 80.9 m depth, low-angle quartz stringers (20%) up to 3 cm in thickness occur in weak to moderately sericite altered argillite and greywacke. Two samples in this interval returned over 1 g/t Au and several were anomalous in arsenic, antimony and silver. At the bottom of the hole, the Engineer vein was cut a second time from at 80.9 m with a 0.25 m true width. The vein consists mostly of coarse-grained brecciated quartz later incompletely filled by carbonate with 5% pale green mica in vague, diffuse patches especially near the margins. Only tiny traces of pyrite and a silvery mineral are present and the interval returned no gold or silver grades.

Drill holes BCGE-10-8 to 13 were all drilled from drill bay #2 and targeted the Engineer vein down dip below the “bonanza shoot” between 5 and 7 Levels.

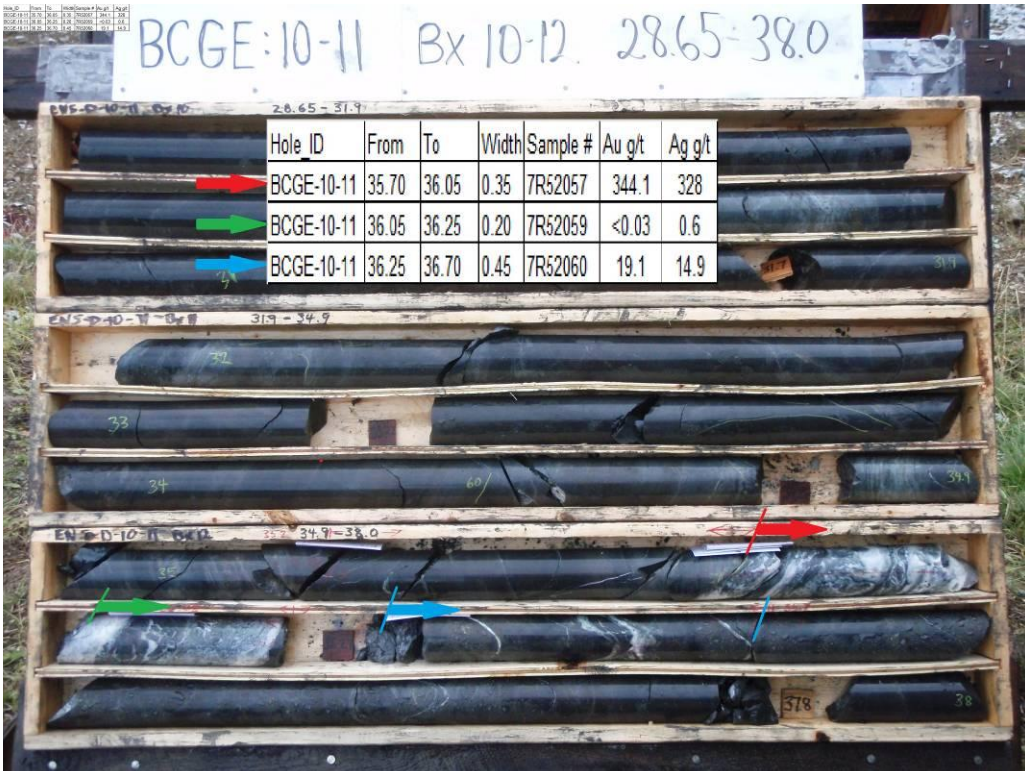
Drill hole BCGE-10-8 intersected a 0.65 m vein (0.60 m true width) containing 0.35 g/t Au and 0.5 g/t Ag at the predicted location. It consisted predominantly of vuggy coarse-grained bull quartz and carbonate with an open median of coarse drusy. Vugs up to 2 cm have drusy and or pale yellow clay in them. Near the top and bottom margins, minor pale green chalcedony surrounds ghost fragments over 15 cm and 10 cm respectively and in the top 7 cm, fine white carbonate is matrix to unaltered black argillite clasts. No pyrite or gray minerals were noted. Moderate to strong sericite/carbonate alteration is in the hanging wall (down-hole) for a few meters with a few carbonate fracture fills (<1 cm).

Drill hole BCGE-10-9 targeted the Engineer vein just above the 7 Level in a place where the 1928 sampling had obtained 58.4 g/t Au across the width of the drive. The vein was intersected about 8 m to 9 m lower than expected, displacing it a few metres into the hangingwall of the 7 Level drive. The cored vein is 0.40 m thick and assayed at 32.3 g/t Ag with negligible Au. Mineralogy is similar to that in hole BCGE-10-8, consisting of vuggy coarse-grained quartz, less carbonate, 10% round pale green chalcedonic ghosts, traces of pyrite with argillite clasts in the top 3 cm, and sharp straight contacts. Two shear related veins occur about 2 m to 2.5 m up-hole from the main vein respectively, within a larger zone of quartz carbonate fractures. These veins consist of minor breccia and quartz along thin shears with strong sericite and silica alteration surrounding them. The uppermost of these contains 0.55 g/t Au and 9.2 g/t Ag across 0.35 m and has a large (1 cm by 3 cm) clot of allemontite along it. The structural complexity exemplified by these shears may form part of the explanation for the offset of the vein into the hanging wall.

Drill hole BCGE-10-10 shows a narrow quartz-carbonate breccia vein carrying 0.42 g/t Au and 2.5 g/t Ag over a distance of 0.25 m (0.14 m true width) at the expected location. Here light-gray quartz forms a 1 mm to 2 mm thick coating on the clasts and then fine-grained carbonate fills the remainder of the matrix. Clasts (70% up to 5 cm) are often sericite (±pyrite) altered and are often slivered parallel to extremely sharp top and bottom contacts parallel to a fault just up-hole. Only traces of pale green mica and no gray minerals were noted and only minor sericite alteration of the wall rock occurred around the fault.

Drill hole BCGE-10-11 contained the most significant intersection of the 2010 drill programme at 129.0 g/t Au and 121.6 g/t Ag over a core length of 1 m (0.6 m true width) in a sheared breccia vein at the predicted location (Figure 11.3).

Figure 11.3: [A] Drill core (2010 programme) from BCGE 10-11 on the Engineer vein – true width 0.6 m at 129 g/t Au and 122 g/t Ag. Drill hole location shown on Figure 9.2. (Source: BCGold)



[B] Detail of [A] showing part of intersection (344.1 g/t Au over 0.35 m; red section in [A] above) where coarser-grained arsenopyrite and electrum needles are associated with, and contained within roscoelite. Core width 63 mm (Source: BCGold)

The highest values are derived from the top 4 cm where the vein is most sheared and contains 5% to 7% coarse-grained (2 mm to 3mm) arsenopyrite needles and tiny wires of electrum in roscoellite. Further down within the same sample, gold and silver are also contained in a section where pyrite occurs along the margins of pseudo-clasts with pale green mica. Overall the vein is sheared throughout, with brecciated argillite clasts; some non-rotated and some slivered. In the top half, the vein is quartz>carbonate matrix to chalcedonic pale green mica and quartz overgrowths of pseudo clasts (re-brecciated?). The bottom half is dominated by fine-grained carbonate>quartz in a fine-grained (milled?) section of almost completely sericite altered argillite clasts (1 mm to 5 mm). There is no sericite alteration of the surrounding wall rock in this hole, but four small carbonate fractures below the vein contain abundant dark green chlorite and pyrite.

Drill hole BCGE-10-12 cored 0.7 m of sheared breccia vein at the predicted location. The top half of the intersection contains three breccia veins (3 cm to 6 cm true width) in argillite, with both angular and slivered clasts of mostly un-altered argillite, first rimmed (2 mm to 3 mm thick) by quartz, and then later crosscut by carbonate filled fractures. Vein margins are variably sheared with some lamellae of quartz, bright green mica, and traces of pyrite (occasionally replacing argillite clasts) and arsenopyrite. Veins and wall rock are both are cut by late carbonate fractures (one containing coarse arsenopyrite). In the bottom half of the intersection, one larger contiguous carbonate vein with the top margin weakly sheared, with trace diffuse pale green mineral and the bottom margin sheared over 7 cm (true) similar to shears in the top half, with more abundant pyrite, less arsenopyrite, and 3% drusy filled vugs (<5 mm). The top half of the intersection returned 0.58 g/t Au and 1.7 g/t Ag, while the bottom half is barren. No wall rock alteration surrounded this intersection.

Drill hole BCGE-10-13 intersected the least substantial vein intersection of the programme. It consisted of a number spidery quartz-carbonate fracture fills cut by two carbonate shear vein, each ~5 cm true thickness, with tiny chlorite pyrite lamellae along the margins, containing 0.43 g/t Au and 0.9 g/t Ag over a core length of 1.2 m. Moderate to strong sericite alteration occurs for about 0.5 m down-hole from the lower shear. This intersection plots toward the hangingwall (north) of the predicted location, as does the vein in the hole below it in drill hole BCGE-10-09. It is possible that a low angle structure similar to those seen in that hole offsets the vein slightly between the 625 m and 650 m elevations and is the reason for the offset of the intersection in drill hole BCGE-10-13. This structural complexity may also be the reason that 6 Level development was discontinued eastward at the 650 m elevation.

11.6 2010 PROGRAMME CORE QUALITY

Total Core Recovery (“TCR”) and Rock Quality Designation (“RQD”) averaged 99.1% and 87.0% respectively for all drilled runs of the programme. Although no specific tests (i.e. point load) were undertaken to determine the rock strength - it was considered to be very strong. RQD dropped in areas adjacent to and along veining, especially in drill holes BCGE-10-4 to 6 which were drilled at very low angles to the vein. RQD also dropped in areas where late brittle faults were crossed, for example in drill holes BCGE-10-5 and 6. In neither case, however did the TCR drop accordingly, so that sample quality was not compromised.

12 SAMPLING METHOD AND APPROACH

12.1 PRE-2007

Prior to 1987, no detail exists as to exact sampling methods. All underground samples dating back to 1914 were presumably collected by chipping of faces and backs. Grab samples were also noted from muck piles and trucks.

During the 1987 field season by Erickson Resources Limited, NQ core was cut in half and submitted to the laboratory. All drill core was logged on paper and is preserved on site. Logs are available as part of the Smit (1988) report.

12.2 POST-2007 (BCGOLD CORPORATION)

During the 2007 season, samples were collected from both surface and underground. These were principally chip or grab samples (Aspinall, 2007). Underground samples on 5 Level were chipped across the vein using a hammer and chisel. Grab samples were 'grabbed' from rock piles and ore chutes. All sample locations were noted on a map based on measurement from a cross-cut location. Samples were given a pre-assigned sample number tag and placed in a plastic bag. Sample sites were sprayed painted onto drive walls (Aspinall, 2007).

For the 2010 season, all core logging and sampling was undertaken by B F Coates at site (Coates, 2010). Block markers in imperial units were first transformed into metric units and the core was then metered with a yellow marker. TCR, RQD and rock hardness were determined and entered into a laptop computer. Interval lengths and descriptions of lithology, alteration, structure, mineralisation and sample intervals were entered. As the core boxes were moved to the cutting and sampling tent, they were labelled with aluminium tags and photographed. Lithological units less than 0.3 m were generally not noted unless specifically of interest. Drill hole logs were output into an MS Excel spreadsheet (Coates, 2010).

After logging, selected samples of core were marked both on the core and on the core box with a red marker. These intervals for geochemical analysis were chosen primarily for their potential to contain gold, but were also based on alteration, lithology, and to characterise background values for some rock units (for example dykes). Sample lengths varied between 0.13 m and 1.3 m and averaged 0.58 m in length. Drill core samples were cut with a diamond saw, and one half of the core replaced in the core box for future reference and the other half bagged in numbered plastic bags. Core samples were tracked by three-part ticket books. One part was placed in the core box at the end of the assay interval, one tag went with the sample for assay and the last tag was kept with the geologist's records.

At the end of the programme, the samples were delivered directly to the Whitehorse laboratory of Eco-Tech Laboratories Ltd by a BCGold representative with chain of custody documented. Echo-Tech Laboratories is a subsidiary of the global Alex Stewart Group. It is a BC Certified Assayer and maintains an ISO 9001:2000 certified laboratory in Whitehorse for sample preparation and a certified analytical laboratory in Kamloops, BC for analysis.

13 SAMPLE PREPARATION, ANALYSES AND SECURITY

13.1 PRE-2007

Pre-1987 no detail exists as to sample preparation protocols. Historical reports note the use of fire assay.

For samples collected pre-1987, Snowden is unable to confirm the veracity of security, preparation and assaying procedures. Much of this data is historic and dates back to pre-1930. Based on its general experience, Snowden notes that most historic assay data is of a reasonable quality – this is however not confirmed.

During the 1987 programme, a total of 434 samples were sent to Min-En Laboratories of North Vancouver, where they were analysed for gold by fire assay or atomic absorption and for 31 multi-elements by inductively coupled plasma (Smit, 1988). All original assay certificates are attached to the Smit (1988) report. Specific assay methodology was not documented, and neither an internal nor an external QAQC programme was reported. This was industry standard at the time.

For samples collected in 1987, Snowden is unable to confirm the veracity of security, preparation and assaying procedures. All sample preparation and assaying was undertaken by Min-En Laboratories, but with no QAQC.

13.2 POST-2007 (BCGOLD CORPORATION)

During the 2007 programme, analysis for gold was by atomic absorption. Any sample returning a value above 1 g/t Au Au or 30 g/t Ag was assayed using the methods described below. No external QAQC programme was conducted, but the Echo-Tech internal QAQC is contained in the original assay certificates appended to the Aspinall (2007) report.

For the 2008 and 2010 drill programmes operated by BCGold, all samples were fire assayed for gold. A 30 g sample was fired using a premixed flux containing 66% litharge, 24% sodium carbonate, 2.7% borax and 7.3% silica. Flux weight per fusion was 150 g. The resultant doré bead was parted and then digested with nitric acid followed by hydrochloric acid solutions and then analysis by atomic absorption. The gold detection limit was 0.03 g/t Au to 100 g/t Au. In addition to the standard fire assays, any samples containing greater than 3 g/t Au were also submitted for screen fire assay.

Rock samples were crushed to P_{70} -2 mm, split to achieve a 1,000 g sub sample (or less if the original sample size precluded it). The sample was pulverised to P_{95} -100 µm. The entire sample was weighed, then rolled and homogenised and screened through a 100 µm screen. The resulting -100 µm fraction was homogenised and two sub-sample portions are fire assayed. All of the resulting +100 µm material was fire assayed. The resultant fire assay beads were digested with nitric acid followed by hydrochloric acid and then analysed with an atomic absorption spectrometer. A 0.03 g/t Au detection limit was given.

If the gold values are over an agreed level a gravimetric finish would be performed. The resulting gold bead is weighed on a micro-balance. The results for the two -100 µm fraction values and single +100 µm fraction values are then calculated based on the original sample weight providing a net gold value. The entire set of samples is re-assayed if the quality control standard is outside two standard deviations or if the blank is greater than 0.015 g/t Au.

In addition to the gold assays, all samples were analysed by ICP-MS multi-acid digestion. In this procedure a 0.5 g sample was digested with nitric acid, hydrofluoric and perchloric acids. The sample is then taken to dryness and subsequently re-dissolved in an acid solution, which contained beryllium (Be acts as an internal standard) and then bulked with de-ionised water. Samples were analysed by ICP-MS.

For batches, QC samples were run to ensure no machine drift or instrumentation issues occurred during the run procedure. Repeat samples (every batch of 10 or less) and re-splits (every batch of 35 or less) are also run to ensure proper weighing and digestion occurred. Results are collated by computer and are printed along with accompanying quality control data (repeats, re-splits, and standards). Any of the base metal elements (Ag, Cu, Pb, Zn, etc) that were over limit (>1.0%) are immediately run as an ore grade assay.

Snowden can confirm that to the best of its knowledge, and after discussions with BCGold, no aspect of sample preparation was conducted by an employee, officer, director or associate of BCGold. All sample preparation and assaying was undertaken by Eco-Tech Laboratories. Snowden believes that the sample preparation, security and assay procedures used were appropriate.

14 DATA VERIFICATION

14.1 PRE-2007

Prior to 1987, written reports contain tables and maps of assay data. No assay certificates are available. Snowden was thus unable to verify the data, but has no reason to doubt that they exist.

Copies of all assay certificates for the 1987 programme are appended to the Smit (1988) report. Snowden was unable to view original 1987 assay certificates, but has no reason to doubt assay quality.

14.2 POST-2007 (BCGOLD CORPORATION)

Copies of all assay certificates for the 2007 programme are appended to the Aspinall (2007) report. Snowden was able to review all original assay certificates and has no reason to question the data.

Copies of all assay certificates for the 2010 programme are appended to the Coates (2010) report, with originals kept at the BCGold office. Snowden was able to review all original assay certificates and has no reason to question the data.

For the 2010 programme, external QC implemented by BCGold consisted of the insertion of certified reference materials (23), blanks (10) and quarter core field duplicates (8) into the sample shipment stream for a total of 41 additional QAQC samples. This results in 23% of all samples submitted being quality control samples. Snowden reviewed the QAQC report provided by Lustig (2011). The following summary is based on that report.

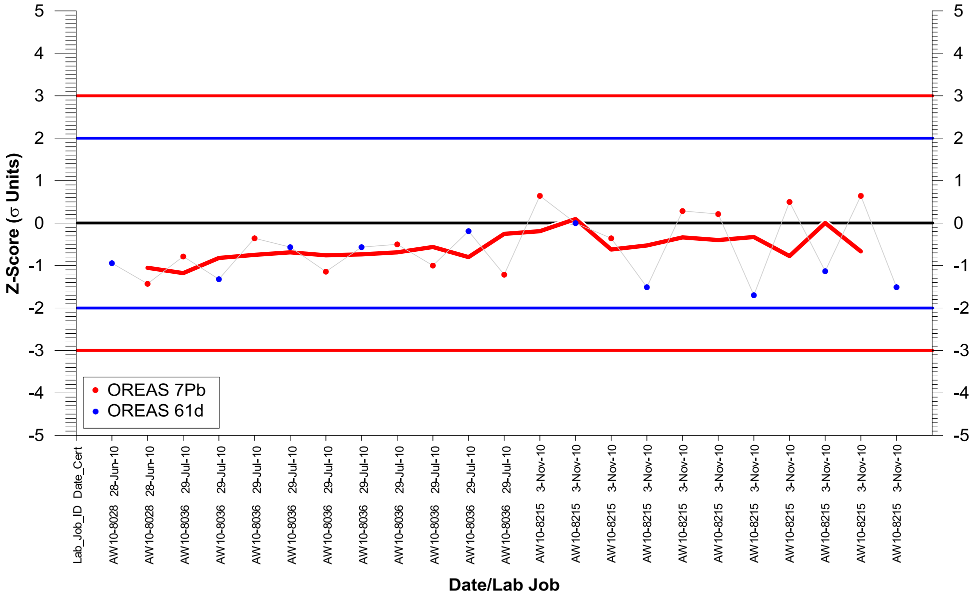
To monitor accuracy BCGold employed two certified reference materials (standards) that were inserted into the sample stream (Table 14.1).

Table 14.1: Certified reference materials used in the Engineer 2010 drilling programme. The standards were prepared by Ore Research & Exploration Pty Limited of Australia

Standard	Gold		Silver	
	Recommended value (g/t Au)	Standard deviation (g/t Au)	Recommended value (g/t Ag)	Standard deviation (g/t Ag)
OREAS 7Pb	2.77	0.053	-	-
OREAS 61d	4.76	0.14	9.27	0.48

The overall results of gold analyses of both standards are shown graphically (Figure 14.1) with a plot of the z-score. The z-score is essentially in standard deviation units above and below the mean and is useful to view the overall performance of all of the standards. All results are within ±2σ within an overall decreasing low bias.

Figure 14.1: Z-score chart of all gold standards (from Lustig, 2011)



The individual control chart for standard OREAS 7Pb indicates an overall low bias (Figure 14.2) with an increase in the bias at the end of the programme. Gold analyses of standard OREAS 61d have a slight low bias in the early batches (Figure 14.3), with the later batches showing a slight high bias. The round robin analyses of both standards indicated on the right side of the chart indicate that most laboratories were either biased low or high, but few actually straddled the recommended value. In this context, the bias observed in the Engineer mine analyses are within an acceptable range.

Figure 14.2: Control chart for standard OREAS 7Pb gold analyses (from Lustig, 2011)

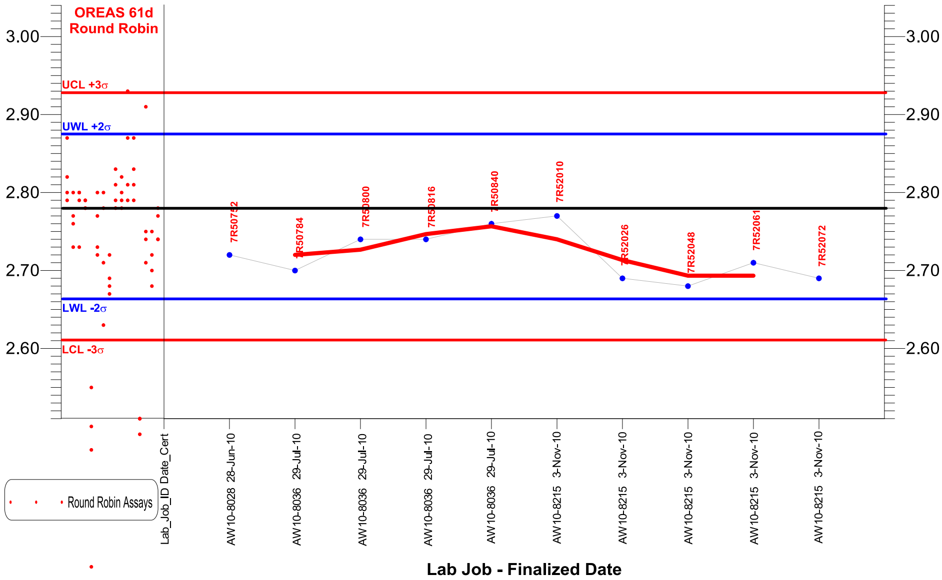
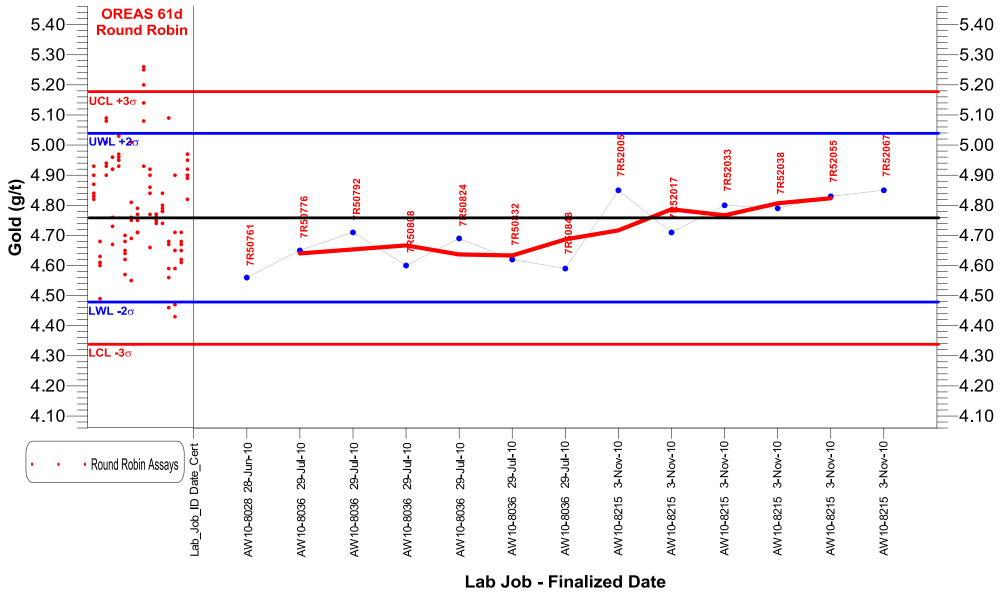
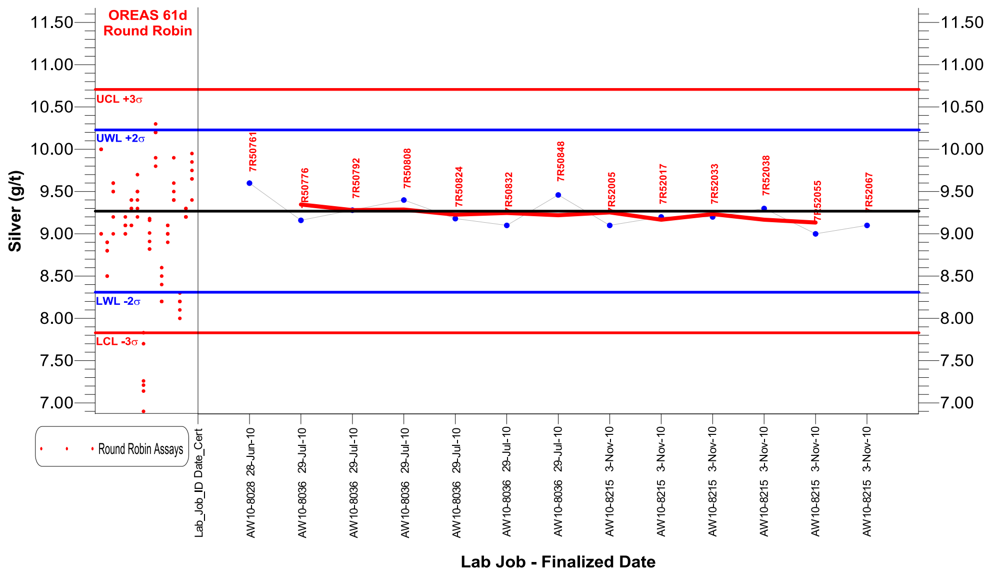


Figure 14.3: Control chart for standard OREAS 61d gold analyses (from Lustig, 2011)



As OREAS 61d is also certified for silver, a silver control chart was prepared which indicates all analyses to be very near the recommended value (Figure 14.4).

Figure 14.4: Control chart for standard OREAS 61d silver analyses (from Lustig, 2011)

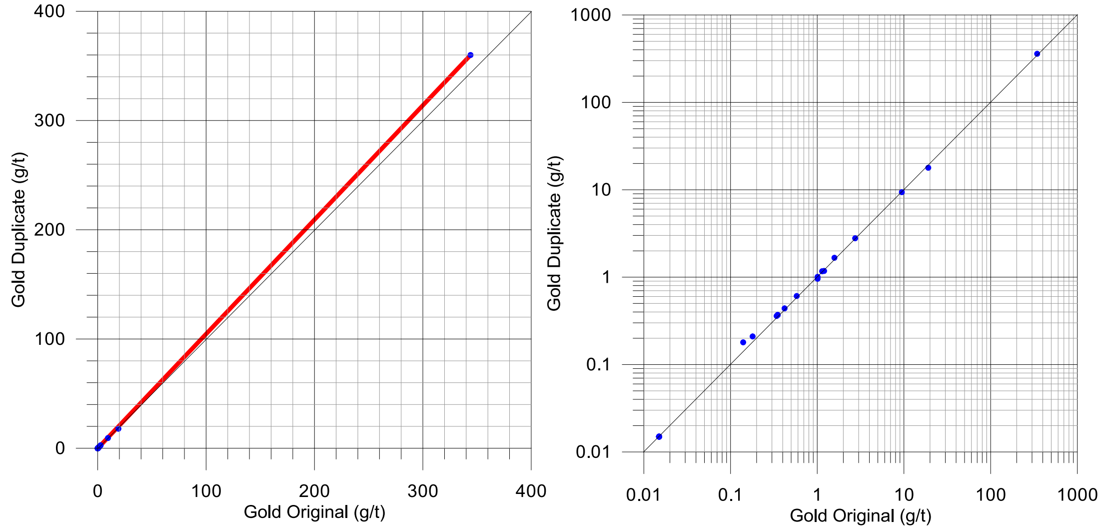


As a measure of precision, BCGold submitted eight quarter core duplicate samples for analyses. In addition to this, Eco-Tech analysed seven duplicates split after coarse crushing and 28 same pulp duplicates.

A large proportion of all of the duplicates returned gold values of less that the detection limit of 0.03 g/t Au; 6 of 8 field duplicates; 6 of 7 preparation duplicates and 12 of 28 pulp duplicates. The few sample pairs above the detection limit indicate that precision of the analyses is acceptable. However, given the small number of above detection they cannot be taken as being representative. A set of ore grade duplicates is required for rigorous evaluation.

The 16 pulp duplicates show a good correlation (Figures 14.5).

Figure 14.5: Scatter plot of all pulp duplicate samples that were part of the Eco-Tech internal QC programme (from Lustig, 2011)



Coarse duplicate material was submitted as a check on possible contamination during the sample preparation and analytical stages. All samples returned analyses of less than the detection limit for gold.

For the 2007 and 2010 BCGold assay data, Snowden believes that they are of an appropriate quality and has no reason to question their validity.

15 ADJACENT PROPERTIES

The Tag Property, lying about 10 km north of the Engineer mine (Figure 7.3), is the most significant occurrence in the surrounding area. Gold and silver mineralisation there are hosted by the 025 Fault Zone, which is partially exposed over a 6 km strike before disappearing under Tagish Lake at both ends. It consists of shearing, quartz veining, stockwork and breccia mineralisation, with disseminated to stringer sulphide mineralisation that cuts the calcareous Laberge Group sedimentary rocks. Between 2006 and 2008, CZM Capital Corporation (now Tagish Gold Corporation) completed airborne geophysical, soil geochemical and prospecting surveys, as well as extensive surface trenching and 11,476 m of drilling in 69 holes. This led to an NI43-101 compliant Mineral Resource estimate on the Main Zone, at the south end of the structure consisting of 250,000 t at 3 g/t Au and 12.1 g/t Ag Indicated Mineral Resources and a further 400,000 t at 3 g/t Au and 9.9 g/t Ag Inferred Mineral Resources (Reddick, 2009). The resource was reported at a 3 g/t Au equivalent cut-off based on three year average gold and silver prices at November 2009 (US$830/oz Au and US$13.85/oz Ag).

Snowden has not visited the Tag Property, but has reviewed the 2009 NI43-101 report (Reddick, 2009). The Tag mineralisation is a similar general style to that of Engineer, but appears to form a larger, low-grade bulk ore zone. It indicates clearly that the region has the potential to bear various styles of potentially economic epithermal gold-silver mineralisation.

Other nearby occurrences include the Gleaner quartz-calcite veins located about 1 km northeast of the mine, and the Happy Sullivan shear zone-hosted quartz vein about 5 km northeast of the mine. No production has been reported from these properties. Snowden has neither visited the sites nor reviewed any historical data on the properties.

16 MINERAL PROCESSING AND METALLURGICAL TESTING

No current metallurgical testing has been undertaken at Engineer. However the mine has had a long history of gold recovery.

During operations between 1925 and 1927, a small on-site plant comprised a two head stamp battery and rubber belt concentration table. Gold was extracted from the concentrate via mercury amalgamation. No data exists on metallurgical recovery, but during this period some 9,700 oz Au were recovered.

Plant operations during 1995 are reviewed in Ampex (1996).

The current plant installed in 1995, comprises primary and secondary crushing (jaw and rolls crushers), a ball mill, jig and triple deck Diester Table. It has a 3 t per hour capacity, with a mean annual capacity of 25,000 t.

During trial mining in 1995, a series of bulk samples where fed through the plant and head and tails samples collected (Ampex, 1995). Table 16.1 indicates that for feed grades varying between 4 g/t Au and 32.5 g/t Au, recovery ranges between 48% and 97% with a weighted mean of 78%.

Table 16.1: Engineer mine 1995 bulk sample process results

Vein	Sample No.	Location	Tonnage (t)	Head Grade (g/t Au)	Tails grade (g/t Au)	Gold Recovery
Engineer	S2	505-1	122	12.8	5.5	57%
Engineer	S5	505-2S	23	25.9	0.7	97%
Engineer	S6	505-3	9	18.4	5.9	68%
Boulder	S13	523-1	6	4.0	1.1	73%
Boulder	S17	524-2	27	32.5	7.5	77%
Boulder	S18	530-1	75	11.9	6.2	48%

For the purpose of this Technical Report, Snowden considers that gold can be reasonably extracted from Engineer ore. However, modern test work is required and the existing plant is likely to need up-grading to support any on-going mining operation. Snowden expects that upgrading following suitable test work could increase gold recovery to between 85% and 95%.

Given historical production, the recovery of silver from the Engineer ore also requires appropriate testing.

During the 1995 programme, it was noted that the 'argillite' or clay content of the mill feed had a detrimental effect on milling capacity. This is to be expected in a feed where the vein is narrower than the minimum stoping width and the diluting material is often altered sediments. Proportionally, as the vein width, quartz content reduces the clay content increases. Comminution test work is required to investigate this further.

17 MINERAL RESOURCE AND MINERAL RESERVE

17.1 SUMMARY

The April 2011 Mineral Resource estimate for the Engineer mine is reported in Tables 17.1, 17.2 and 17.3. This estimate only includes the Double Decker and Engineer veins. This is the first Mineral Resource publically released for the Engineer mine. The location of the resource blocks are shown in Figures 17.1 and 17.2.

Table 17.1: April 2011 Mineral Resource estimate for the Engineer mine based on a nominal assay limit cut-off of 0.1 g/t Au where the entire ore shoot is extracted. All resources are classified in the Inferred Mineral Resource category. It is assumed that should production ever commence, the Engineer veins would be extracted by standard air-leg based narrow vein methods. Grades diluted to a 1 m width. Note - with a likely operational breakeven cut-off grade of 6-8 g/t Au, the Double Decker resource is potentially marginal

Category	Vein	Tonnage (t)	Global grade (g/t Au)	Contained gold (oz)
Inferred	Engineer	52,600	12.6	21,300
Inferred	Double Decker	18,400	8.1	4,800
Total		**71,000**	**11.5**	**26,300**

Notes: Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource, as there are insufficient close-spaced drill hole data to adequately define grade and geological continuity for this structurally complex deposit. It is uncertain if further exploration will result in upgrading the Inferred Mineral Resource to an Indicated or Measured Mineral Resource category.

Tonnage is reported in metric tonnes (t), grade as grammes per tonne gold (g/t Au) and contained gold in troy ounces (oz Au). Total tonnes have been rounded to the nearest 500 t and ounces to the nearest 100 oz and this may have resulted in minor discrepancies. The global grade is rounded to the nearest 0.5 g/t Au to indicate the accuracy of the estimate. The most likely cut-off grade for this deposit is not known and will need to be confirmed by the appropriate economic studies, but is likely to be around 7 g/t Au.

Table 17.2: April 2011 Mineral Resource estimate for the Engineer mine based on a nominal cut-off of 5 g/t Au where the resource margin is defined by historical pay limits/payability. All resources are classified in the Inferred Mineral Resource category. It is assumed that should production ever commence, the Engineer veins would be extracted by standard air-leg based narrow vein methods. Grades diluted to a 1 m stope width

Category	Vein	Tonnage (t)	Global grade (g/t Au)	Contained gold (oz)
Inferred	Engineer	30,800	20.6	20,400
Inferred	Double Decker	10,100	13.1	4,200
Total		**41,000**	**19**	**25,000**

Notes: Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource, as there are insufficient close-spaced drill hole data to adequately define grade and geological continuity for this structurally complex deposit. It is uncertain if further exploration will result in upgrading the Inferred Mineral Resource to an Indicated or Measured Mineral Resource category.

Tonnage is reported in metric tonnes (t), grade as grammes per tonne gold (g/t Au) and contained gold in troy ounces (oz Au). Total tonnes have been rounded to the nearest 500 t and ounces to the nearest 100 oz and this may have resulted in minor discrepancies. The global grade is rounded to the nearest 0.5 g/t Au to indicate the accuracy of the estimate. The most likely cut-off grade for this deposit is not known and will need to be confirmed by the appropriate economic studies, but is likely to be around 7 g/t Au.

Table 17.3: April 2011 Mineral Resource estimate for the Engineer mine based on a nominal cut-off of 25 g/t Au where the resource margin is defined by historical pay limits/payability. All resources are classified in the Inferred Mineral Resource category. It is assumed that should production ever commence, the Engineer veins would be extracted by standard air-leg based narrow vein methods. Grades diluted to a 1 m stope width

Category	Vein	Tonnage (t)	Global grade (g/t Au)	Contained gold (oz)
Inferred	Engineer	10,400	60	20,100
Inferred	Double Decker	3,600	30	3,500
Total		**14,000**	**52.5**	**23,600**

Notes: Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. There has been insufficient exploration to define these Inferred Mineral Resources as an Indicated or Measured Mineral Resource, as there are insufficient close-spaced drill hole data to adequately define grade and geological continuity for this structurally complex deposit. It is uncertain if further exploration will result in upgrading the Inferred Mineral Resource to an Indicated or Measured Mineral Resource category.

Tonnage is reported in metric tonnes (t), grade as grammes per tonne gold (g/t Au) and contained gold in troy ounces (oz Au). Total tonnes have been rounded to the nearest 500 t and ounces to the nearest 100 oz and this may have resulted in minor discrepancies. The global grade is rounded to the nearest 0.5 g/t Au to indicate the accuracy of the estimate. The most likely cut-off grade for this deposit is not known and will need to be confirmed by the appropriate economic studies, but is likely to be around 7 g/t Au.

Figure 17.1: Engineer vein long-section showing resource blocks on shoots #1, #2 and #3. All blocks are classified as "Inferred". Those above 5 Level are predominantly related to remnant material, whereas those below 5 Level relatively undeveloped ground (Source: BCGold)

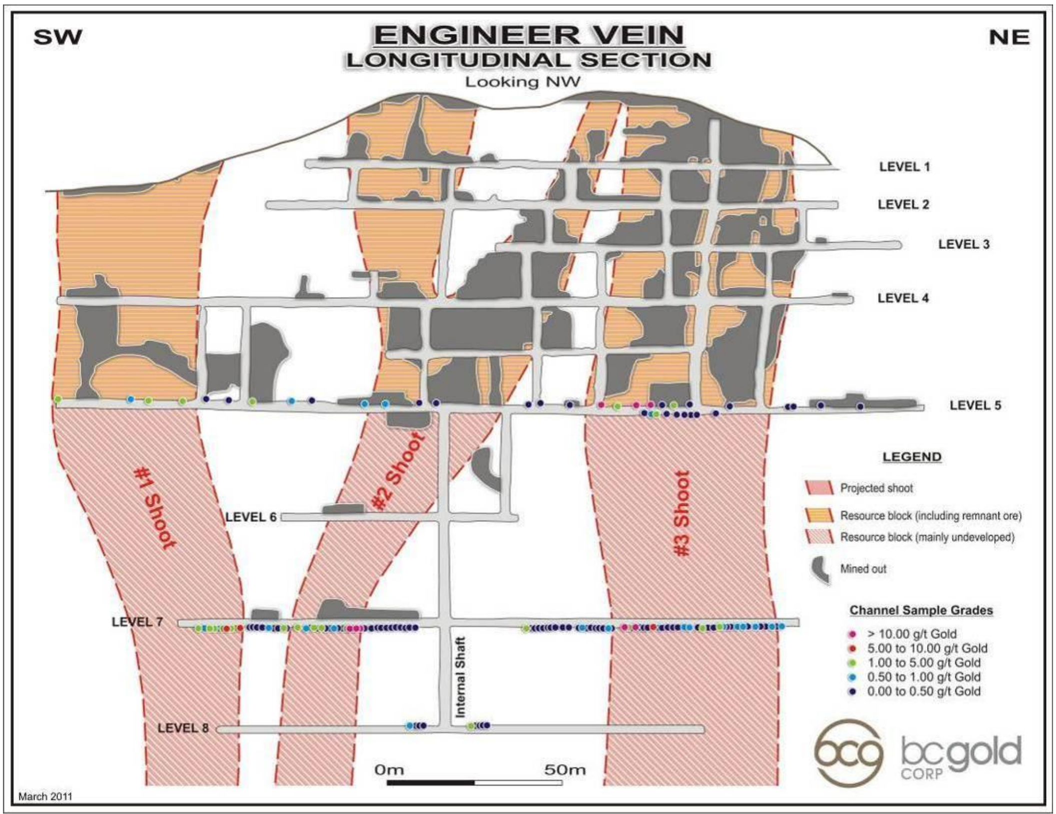
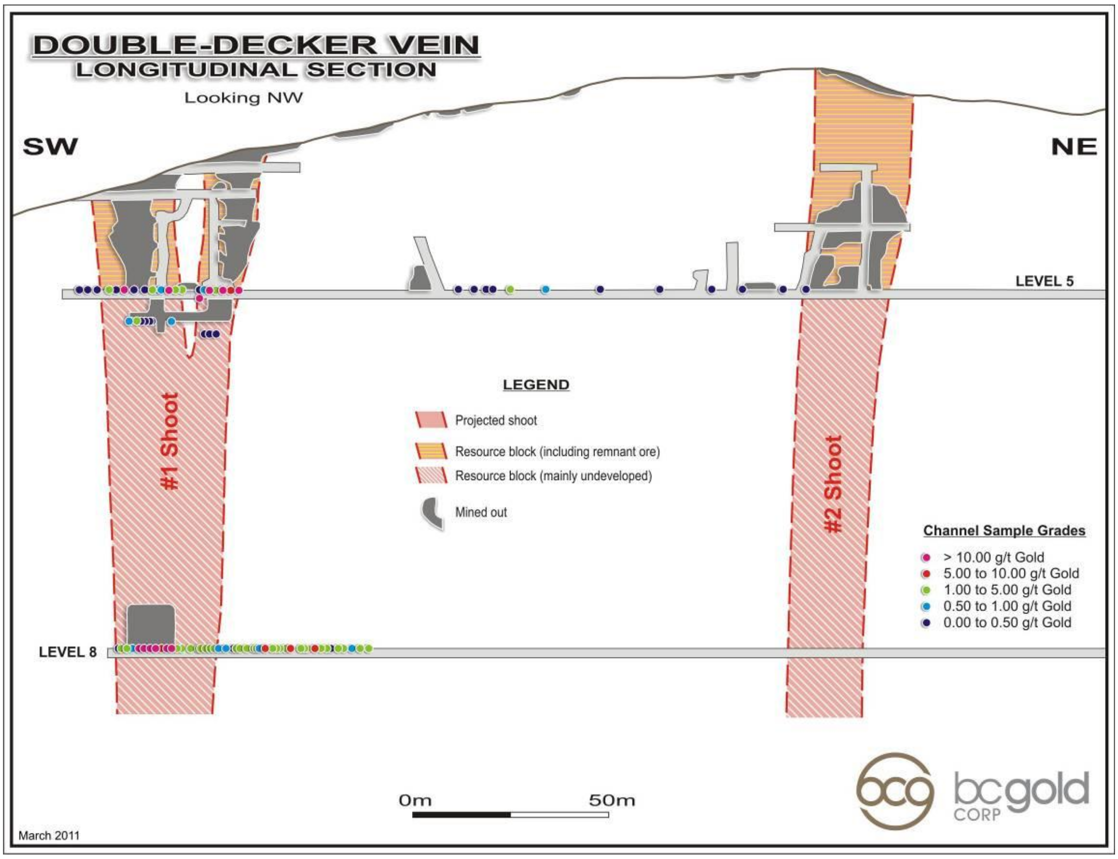


Figure 17.2: Double Decker vein long-section showing Mineral Resource blocks in ore shoots #1 and #2. All blocks are classified as "Inferred". Those above 5 Level are predominantly related to remnant material, whereas those below 5 Level relatively undeveloped ground (Source: BCGold)



There are no Mineral Reserves defined on the Engineer Property.

17.2 DISCLOSURE

The Mineral Resource estimate reported in Section 17 was prepared by Dr SC Dominy, an Executive Consultant and General Manager (UK) with Snowden and peer reviewed by a suitably experienced Snowden consultant – EurIng GD Kneebone.

Dr Dominy is a QP as defined by NI43-101. Dr Dominy is independent of BCGold Corporation as defined by NI43-101.

There are no Mineral Reserves estimated for the Engineer mine. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. In accordance with CIM Definition Standards, a Mineral Resource may be sub-divided in order of increasing geological confidence, into Inferred, Indicated, and Measured categories. "Measured and Indicated Mineral Resources" are that part of a Mineral Resource for which quantity and grade can be estimated with a level of confidence sufficient to allow the application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. An "Inferred Mineral Resource" is that part of a Mineral Resource for which quantity and grade can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity (CIM, 2005).

Snowden is unaware of any issues that materially affect the Mineral Resource in a detrimental sense. This conclusion is based on discussions with BCGold, where it advised that to the best of its knowledge:

- there are no known material exploration, legal, marketing, socio-economic, political, title, permitting or taxation issues;
- apart from the usual environmental aspects that require consideration as part of any mineral exploration project, there are no known material specific environmental issues; and
- there are no known material mining, metallurgical and/or infrastructure issues.

17.3 ASSUMPTIONS, METHODS AND PARAMETERS

Snowden has independently reviewed the available Engineer mine data and undertaken a current resource estimate based on predominantly historical data together with limited recent drilling results.

The definition of Mineral Resources based substantively on historical data is not unusual (Fraser, Bartlett and Quigley, 2003; Morrison, Storey and Towsey, 2004; Dominy, 2006; Dominy *et al*, 2009a; Goulios and Metheson, 2009). The study of historical records is an important tool during project evaluation, since it contributes to understanding the orebody, exploration target size and setting expectations. Mine records include documents such as plans, sections, reports, news cuttings, production tabulations, etc. A major advantage for the modern explorer is the capability of computer modelling to display this data in 3D. Historical records can give the explorer substantial information on various deposit characteristics, not least grade and geological continuity, geometry and architecture, mineralogy, metallurgical properties, bulk density and ground conditions. Effectively used, historical records can reduce geological uncertainty and focus evaluation efforts – thus reducing project risk.

Snowden has been unable to verify all of the historical data, but has in many cases viewed the relevant documents or copies thereof. Snowden has no reason to doubt their veracity. Snowden has estimated zones down-dip to previously extracted areas on the Double Decker and Engineer veins (see Figures 9.2 and 9.4).

This estimate is based on the following method and parameters:

(1) VLP (long section) approach with projection of ore shoots down-dip and along strike based on surface exposure and/or underground development;

(2) The global grade applied to each vein structure is based on a probabilistic approach, with grades assigned to domains from historical production figures;

(3) All grades were diluted to minimum stoping width of 1 m; and

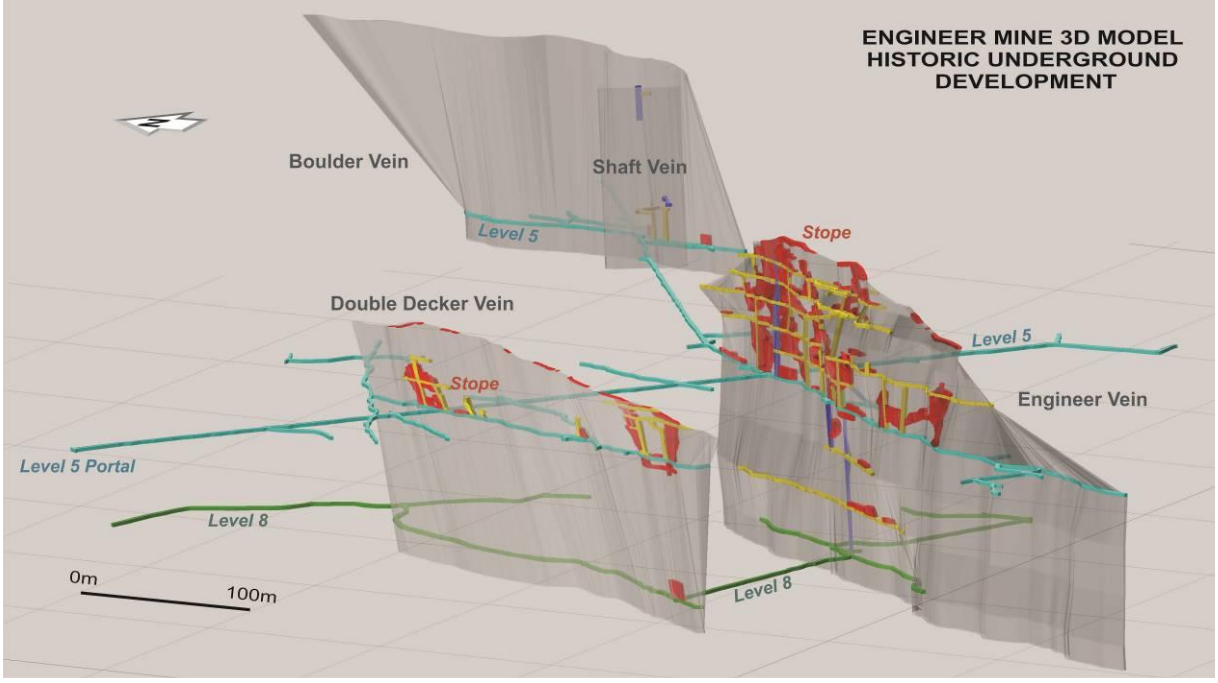
(4) A density factor of 2.8 t/m^3 was used. Snowden was unable to identify raw bulk density data, and has applied the conservative value.

Based on the maps and sections available, each vein was checked on a level-by-level basis to extrapolate between occurrences along strike and down-dip on the basis of development. It was assumed, where required, that the vein extended no more than 15 m below 8 Level. It should be noted that the VLPs provided no indication of local geological continuity, though with the support of stoped out areas provided a reasonable indication of gross geological continuity.

Snowden used stoping records to indicate payability (see Section 17.4).

In collaboration with Snowden, BCGold created 3D models for the Double Decker and Engineer veins using Vulcan software (Figure 17.3). The vein wireframes were constrained by historical mining records and recent drilling. The Vulcan solids were used to define the primary mineralised material volume. A bulk density factor and payability factor were applied to define tonnage. Areas of mined-out portions were subtracted where required, assuming a 1 m stope width.

Figure 17.3: View of Engineer mine workings and veins based on Vulcan model (from BCGold)



The estimation method used by Snowden is effectively a polygonal estimate where a single global grade is assigned to the entire area of each block. Given this application, it is not possible to predict where the resource tonnage will occur within a given block. The estimate is global in nature.

17.4 PAYABILITY FACTORS

Snowden has used payability factors for this estimate based on interpretation of historical data. The use of a payability factor has been common practice in the estimation of gold and other vein systems, and is usually applied to the resource tonnage (e.g. Garnett, 1967; Storrar, 1981; Dominy, 2006). The payability factor provides a measure of the likely mineable resources given '*reasonable prospects for eventual economic extraction'*. It effectively acts as a cut-off grade.

In most cases a single factor is applied, though in reality this should be the product of a *geological continuity factor* and a *payability factor* to give an *effective payability*. The continuity factor is a measure of global geological continuity within the resource blocks(s). In many cases it is effectively set at unity. However, where there is evidence of en-echelon structures or local faulting for example, then a lesser value would be used.

The payability factor can be based upon the percentage of stoped ground versus developed ground, but it can also be based on the relative number of samples in a database above a cut-off or on averaged pay runs along a development drive above a cut-off.

The choice of factors applied is dependent upon the QP. The most appropriate one will be based on an assessment of developed ground in historical or operating workings. Alternatively, the factor may represent the proportion of a projected ore shoot present in a block (based on a geological model for mineralisation).

In the experience of Snowden, effective payability factors for narrow-vein gold deposits generally range between 25% and 75% depending upon cut-off grade applied and deposit type.

17.5 ASSIGNMENT OF GRADE

17.5.1 Review of historical data

The assignment of grade to the Engineer veins is difficult due to the high nugget effect shown by gold – see Section 8.2.4.

Recent drilling on the Engineer vein has confirmed geological continuity and anomalous grade values (Section 11.5 and Figure 11.1). The best hole was BCGE10-11 which intersected the Engineer vein with a 0.6 m true width at 129 g/t Au (77 g/t Au over 1 m). Drill hole BCGE10-4 intersected a 0.28 m true width Engineer vein at 0.2 g/t Au.

It is typical that a high-grade intersection may indicate a zone of small influence (potentially <10 m), whereas a low-grade intersection may be located within or proximal to a high-grade zone.

Jutras (2008) reviewed the potential of the Engineer veins and reported the historical channel sample data for each reef (Table 17.4).

Table 17.4: Summary of historical channel sample data for veins and vein drives levels at the Engineer mine (after Jutras, 2008)

Vein	Ore shoot	Level	Strike length of level in shoot (m)	No. samples	Mean grade (g/t Au)	Maximum grade (g/t Au)
Engineer	#1	5	45	5	2.6	5.9
	#1	7	15	11	4.6	10.2
	#2	5	40	4	0.3	0.5
	#2	7	25	19	8.8	79.4
	#3	5	50	14	30.5	290.0
	#3	7	50	39	5.2	90.3
Double Decker	#1	5	35	20	143.9	2,138.6
	#1	8	15	20	32.8	305.8

The values show anomalous values, but bear the effect of very high grade values that skew the mean. The mean length weighted grade across all shoots (#1, #2 and #3) on the Engineer vein is 10 g/t Au at a zero cut-off and 16 g/t Au at a 5 g/t Au cut-off. Mean grades on the Double Decker vein are skewed by the very high grade on 5 Level.

Hamm (1914) reports the channel sampling of a 45 m length of the Engineer vein on 2 Level. The initial 35 samples were collected from the backs, followed by stripping and re-sampling of the new exposed back. The mean grade of the first set was 113 g/t Au (diluted to 1 m) and the second set 54 g/t Au (diluted to 1 m). Hamm (*op cit*) comments that of the two batches, anomalous gold grades were found in only 7 samples in each batch. The mean grade of both batches was 87 g/t Au. This historical data shows the nature of the mineralisation where most of the gold inventory is held in a relatively small proportion of the ore.

Brinker (1927) reports channel sampling on the 8 Level of the Double Decker vein. To the west of the cross-cut, this includes 25 m along strike at 38 g/t Au (1# ore shoot), including 10 m at 84 g/t Au. Drill hole BCGE10-1 intersected the Double Decker vein approximately 21 m below this level and graded at 22.3 g/t Au over 0.8 m true width [≈18 g/t Au over 1 m] (BCGold, 2010c). Mine reports state that the 805 raise was mined on this shoot for approximately 11 m, but ceased due to poor access. On the 5 Level, the shoot was mined in a 20 m shaft and sub-level (505 sub-level).

During 2010, BCGold undertook limited channel sampling on the 5 Level. These included samples on the Double Decker underhand stope (one sample) and Engineer vein 505 drive (two samples). Results were (BCGold, 2010b):

- Double Decker – 0.5 m at 537.7 g/t Au and 298.8 g/t Ag
- Engineer – 0.5 m at 794 g/t Au and 642 g/t Ag
- Engineer – 0.5 m at 4.4 g/t Au and 3.1 g/t Ag

The advantage that Engineer has is that it has been an operating mine and that some production records exist. The total documented production from the mine is 14,263 t at 39.4 g/t Au and 19.5 g/t Ag for 18,000 oz Au and 8,950 oz Ag.

Brinker (1925) reports on stoping the Engineer vein on the 3 and 4 Levels. A 405 ton sample was processed and yielded US$44 per ton (73 g/t Au). This sample underwent some hand sorting to remove waste rock – likely to be between 15% and 20%. Brinker then went on to state that a value of US$40 per ton was "a fair indication" of head grade - approximately 66 g/t Au in the Engineer vein. He subsequently noted that a value of US$25 per ton – approximately 42 g/t Au was appropriate for the Double Decker vein. The mean gold price during 1925 was US$20.64 per ounce.

Variation in grade can also be seen in the compilation of historical data presented in Table 17.5. Grades are not strictly comparable given the different sample sizes but serve the purpose of displaying variability.

Table 17.5: Compilation of trial milling lots from various stages of the Engineer mine history. Most of the ore is believed to be from the Engineer vein. The total tonnage is 4,206 t at a weighted mean grade of 44 g/t Au. Note that the level of dilution in each lot is unknown and that hand sorting to upgrade the ore was common practice. Historical stoping was to 3 ft in width (0.9 m). Samples S2 to S6 taken in 1995 are most likely to represent a modern stoping width with no hand sorting. NK = not known

Date	Sample No.	Location	Type	Reference/source	Tonnes (t)	Grade (g/t Au)
1910	NK	NK	NK	Daughtry (1975)	127	94.8
1913	NK	NK	NK	Daughtry (1975)	272	143.8
1925	NK	505-2R	Raise	Brinker (1925)	32	244.2
1925	NK	401-1	Stope	Brinker (1925)	36	348.8
1925	NK	NK	Stope	Brinker (1925)	367	73.1
1925	NK	NK	NK	Daughtry (1975)	1,542	36.6
1926	NK	3, 5 & 7L	Stope	Brinker (1926)	42	29.4
1926	NK	3, 5 & 7L	Stope	Brinker (1926)	41	28.5
1927	NK	NK	NK	Brinker (1927)	1,374	16.6
1927	NK	NK	Drive	Brinker (1927)	220	15.6
1995	S2	505-1	Stope	Davidson (1998)	122	12.8
1995	S5	505-2S	Stope	Davidson (1998)	23	25.9
1995	S6	505-3	Stope	Davidson (1998)	9	18.4

Brinker (1927) reports on the sampling of what appears to be lower grade development and stopes (Tables 17.6 and 17.7). At a nominal cut-off of 5 g/t Au, the data gives a 'lower' grade ore grade of 6.4 g/t Au. This is distinctly different from the high grade (>30 g/t Au) ore encountered elsewhere.

Table 17.6: Compilation of lower grade trial mining parcels reported in Brinker (1925). The total tonnage and mean grade is 1,172 t at 6.4 g/t Au, and at a 5 g/t Au cut-off 907 t at 7.5 g/t Au

Tonnes (t)	Grade (g/t Au)
26	14.9
156	5.1
155	7.0
398	6.1
168	12.4
42	1.8
42	3.8
17	2.8
95	2.3
70	3.7
4	6.7

In addition to the trial mining parcels shown in Table 17.6, Brinker (1927) also reports on mean channel samples grades within various sections of the Engineer vein.

Table 17.7: Specific sample results by level and location from lower grade ore reported in Brinker (1925)

Level	Location	Reported grade (g/t Au)
5	724 stope	6.6
5	728 stope	9.9
5	729 stope	8.2
5	5 Level drive	13.3
6	726 stope	4.9
8	327 stope	10.3
8	806 drive	5.6

Brinker (1925) states that very high grade mineralisation accounts for approximately 20% of the vein – with specific reference to the Engineer vein. It is most likely that this is 20% of a given ore shoot, given that the majority of mine development is focussed on projected shoots. Brinker (1925) indicates that the high grade sub-shoots are often greater than 60 g/t Au (>2 oz/t Au). Two trial parcels of high grade ore at 40 t and 25 t graded at 93 g/t Au and 75 g/t Au (diluted to 1 m) respectively. Elsewhere, very high grades are recorded – for example, from 2010 sampling on Engineer vein 5 Level (#3 shoot) 794 g/t Au over 0.5 m (397 g/t Au over 1 m); and Hamm (1914) on Engineer vein 2,097 g/t Au over 0.35 m (733 g/t Au over 1 m).

Analysis of the foregoing historical data clearly indicates that mineralisation in the Engineer veins is high-nugget and that very high grades have a restricted continuity. This is not an uncommon effect in epithermal and mesothermal vein systems (Dominy and Platten, 2008; Platten and Dominy, 2001).

The mean payability of ore shoots on the Engineer and Double Decker veins determined by Snowden, is 60% and 55% respectively, based on the areas of stoped ground above the 5 Level within the known ore shoot zones. In addition, Brinker (1925) records that about 20% of the shoot – by inference a volume within the stoped 'payable' regions is very high grade ore. At the Gwynfynydd gold mine (North Wales, UK), mesothermal veins are characterised by localised very high-grade sub-shoots/pockets that make up around 15% of the defined shoots, but contain 85% of the gold inventory (Platten and Dominy, 2003).

17.5.2 Engineer grade estimate

Based on the foregoing discussions, Snowden has defined a global grade for each vein based on partitioning into three grade domains:

- Very high grade domain (VHG);
- Moderate grade domain (MG): and
- Low grade domain (LGD)

For each domain, a mean grade is assigned (Table 17.8).

Table 17.8: Snowden assigned grades to Engineer mine grade domains. EV = Engineer vein; DDV = Double Decker vein

Domain	Vein	Grade (g/t Au)	Comment
VHG	EV	60	Based on nominal high grade ore quoted in Brinker (1925) of US$40 per ton – approximately 2 oz/t Au, though locally higher
VHG	DDV	30	Based on figure quoted in Brinker (1925) of US$25 per ton – approximately 1 oz/t Au
MG	EV & DDV	7.5	Based on lower grade material at a nominal 5 g/t Au cut-off (see Table 17.6)
LG	EV & DDV	0.1	Nominal low grade

Global grade assignment for each vein is presented in Tables 17.9 and 17.10 based on payability factors.

Assignment was based on payabilities defined from historical development and stoping patterns. VHG was assumed to be conservative at 15% of shoot area – Brinker (1925) suggested 20%. An entire ore shoot comprises the VHG, MG and LG domains and is assumed to represent 100% payability at a nominal 0.1 g/t Au cut-off (Tables 17.9 and 17.10).

Table 17.9: Grade assignment for the Engineer vein at nominal 0.1 g/t Au and 5 g/t Au cut-offs

Grade assignment - Engineer vein							
Domain	Fraction	Domain mean grade (g/t Au)	Domain fraction grade (g/t Au)	Domain	Fraction	Domain grade mean (g/t Au)	Domain fraction grade (g/t Au)
VHG	0.15	60	9.0	VHG	0.25	60	15.0
MG	0.45	7.5	3.4	MG	0.75	7.5	4.9
LG	0.40	0.5	0.2			**5 g/t Au cut-off:**	**20.6**
	0.1 g/t Au cut-off:		**12.6**				

Table 17.10: Grade assignment for the Double Decker vein at nominal 0.1 g/t Au and 5 g/t Au cut-offs

Grade assignment – Double Decker vein							
Domain	Fraction	Domain mean grade (g/t Au)	Domain fraction grade (g/t Au)	Domain	Fraction	Domain grade mean (g/t Au)	Domain fraction grade (g/t Au)
VHG	0.15	30	4.5	VHG	0.25	30	7.5
MG	0.45	7.5	3.4	MG	0.75	7.5	5.6
LG	0.40	0.5	0.2			**5 g/t Au cut-off:**	**13.1**
	0.1 g/t Au cut-off:		**8.1**				

The pay zone defined by stoping and development comprises the VHG and MG domains and is nominally defined at a 5 g/t Au cut-off.

The VHG domain for each shoot is effectively 15% payability.

Snowden has been able to estimate global grades in the Engineer and Double Decker veins at nominal cut-offs of 0.1 g/t Au, 5 g/t Au and 25 g/t Au (Table 17.11).

Table 17.11: Nominal cut-offs defined for the Engineer veins

Cut-off grade (g/t Au)	Basis
0.1	Includes all material within a given ore shoot
5	Includes all material within the 'pay zone' inside an ore shoot based on the payability (stope) limits
25	Brinker (1925) indicates a breakeven cut-off of about 25 g/t Au based on mining/processing costs at that time. Likely to be the grade at which the miners were able to visually call the very high grade ore. Experience shows that generally historic miners operated to a 15 g/t Au to 30 g/t Au 'visible gold' cut-off

17.6 TONNAGE MODELLING

Resource tonnage for each vein was defined from the Vulcan 3D model. Vein volume was depleted for stopes and development, leaving potential mineable material.

Table 17.12 presents the tonnage and payability figures used to define resource tonnages for the Engineer and Double Decker vein shoots at the different cut-offs.

An SG value of 2.8 t/m^3 was used. No determinations have been undertaken. The figure is based on general experience of quartz minor-sulphide veins and slate/argillite host rocks.

Table 17.12: Tonnage and grade calculations for Engineer mine Mineral Resource estimate. Actual payability figures are based on measured payability from development and stoping on the given vein and ore shoot. Total tonnes column is that depleted for historical development and stoping. Mean grades assigned to each cut-off are those defined in Tables 17.9 and 17.10 [Area figures are in m^2; tonnes t and grades g/t Au]

Engineer vein - Mineral Resource										
			Total	Actual	0.1 g/t Au cut-off		5 g/t Au cut-off		25 g/t Au cut-off	
Shoot	Area	Mined area	Tonnes	Payability	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade
#1	6,588	497	17,055	0.35	17,100		6,000		3,400	
#2	6,904	2,152	13,307	0.70	13,300		9,300		2,600	
#3	9,933	2,011	22,183	0.70	22,200		15,500		4,400	
					52,600	**12.6**	**30,800**	**20.6**	**10,400**	**60.0**
					oz Au	21,311	oz Au	20,401	oz Au	20,064

Double Decker vein - Mineral Resource										
			Total	Actual	0.1 g/t Au cut-off		5 g/t Au cut-off		25 g/t Au cut-off	
Shoot	Area	Mined area	Tonnes	Payability	Tonnes	Grade	Tonnes	Grade	Tonnes	Grade
#1	4,135	682	9,668	0.65	9,700		6,200		1,900	
#2	3,445	341	8,693	0.45	8,700		3,900		1,700	
					18,400	**8.1**	**10,100**	**13.1**	**3,600**	**30.0**
					oz Au	4,792	oz Au	4,254	oz Au	3,473

17.7 MINERAL RESOURCE CONFIDENCE CLASSIFICATION

In determining the application of "Measured, Indicated, and Inferred" classifications to the structurally-controlled vein-hosted Engineer Mineral Resource estimate, Snowden has considered the following items:

- Historical production and trial mining data;
- Historical and modern sampling data;
- Results of the various QAQC assessments presented in Section 14;
- Development and drill hole spacing;
- Geological and gold grade continuity; and
- Mineral Resource estimation quality.

Given the very high-nugget nature of the mineralisation and over-reliance on historical data, Snowden concludes that the tonnage and grade estimates for all shoots on the Double Decker and Engineer veins should be classified collectively as an "Inferred Mineral Resource".

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

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

This Mineral Resource is global in nature. From the data available, it is not possible to predict where the mineable grades will be, except that they will be hosted within the defined ore shoots. Prediction of high-grade zone size and grade will be particularly difficult. Additional development and drilling will be required to up-rate the resource classification.

Snowden has opted to quote the Engineer Inferred Mineral Resource grades with a global mean grade rounded to the nearest g/t Au.

17.8 REASONABLE PROSPECTS FOR ECONOMIC EXTRACTION

Compliance with the 2004 CIM Definition Standards on Mineral Resources and Reserves requires demonstration that a Mineral Resource has "*reasonable prospects for economic extraction*".

No preliminary economic study has been undertaken at Engineer. Snowden believes that Mineral Resource presented in this Technical Report may reasonably support a small narrow-vein mining operation.

Historical production and accessible workings show that the veins can be exploited by selective air-leg means without excessive dilution (minimum stoping width around 1 m). Ground conditions through the mine are generally good.

Fast-track to production may be possible given the existing surface and underground infrastructure. Operational capacity is likely to be initially in the range of 10,000 t to 15,000 t per annum, expanding up to 25,000 t per annum. Based on general experience of other small gold mines globally, Snowden expects the operational breakeven cut-off grade at Engineer to be in the range 6 g/t Au to 8 g/t Au.

In addition, it is proven historically that gold can be extracted by gravity based means that could almost certainly be improved upon with modern technology (for example, in-line pressure jigs and/or centrifugal concentrators).

This resource estimate did not evaluate the likely silver grades for the Double Decker or Engineer veins due to lack of data. Historical silver production from the mine was 19.5 g/t Au for 8,950 oz Ag over the period 1910 to 1952 and modern drilling confirms its presence (Tables 11.2 and 11.3). It is reasonable to assume that future production from the mine may yield silver and thus a potential additional revenue stream. Appropriate test work is required to evaluate the extraction of silver.

Snowden thus believes that the April 2011 Engineer mine Mineral Resource presented in this Technical Report has "*reasonable prospects for economic extraction*" and that the property has additional potential beyond the defined resource (with appropriate studies to be undertaken).

18 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information to disclose with respect to the Engineer Property as pertains to this Technical Report.

19 INTREPRETATION AND CONCLUSIONS

19.1 SUMMARY

Engineer is an advanced exploration project that possesses a small Inferred Mineral Resource.

Recent diamond drilling, surface and underground mapping and review of historical data by BCGold have enabled the future potential of the Engineer mine to be realised. The 2010 drilling programme has confirmed the global geological continuity of the Double Decker and Engineer veins with depth. Wider exploration has shown that beyond the Double Decker and Engineer veins, the Engineer Property has significant potential for the delineation of further resources based on appropriate further work.

Given the relative lack of recent drilling and development, and reliance on unverifiable historical data, it is not an unreasonable or unusual situation for a vein-gold deposit such as Engineer to contain a small Inferred Resource at project start-up (Dominy *et al*, 1999; Dominy, Stephenson and Annels, 2003; Dominy, 2006). Similarly, it is common for vein-gold operations to contain substantial Inferred Resources ahead of development. Once underground development and mining commence, then it is likely that only 12 months of resources will be defined prior to mining. This level is highly dependent upon the amount of definition drilling and development that are undertaken during each year.

The Engineer veins, in common with many narrow-vein high-nugget systems are challenging to evaluate. They suit the historical adage of *"drill for structure and drive for grade"* where resources (Indicated and Measured categories) and reserves are best evaluated through development and associated close-spaced sampling and geological mapping (Dominy *et al*, 1999; Dominy, Stephenson and Annels, 2003). Diamond drilling can be used to determine global geological continuity to support Inferred Resources, but beyond this underground development is required.

19.2 RISK REVIEW

The current Mineral Resource is characterised by a number of uncertainties that led Snowden to define Inferred Mineral Resources (Tables 17.1, 17.2 and 17.3, and Section 17.7).

The resource risks are reviewed in Table 19.1.

Table 19.1: Risk matrix for the current Engineer Mineral Resource estimate

Factor	Risk	Comment
Bulk density	Moderate	The current value of 2.8 t/m^3 is a default value and not based on verified determinations.
Sample collection, preparation and assaying	High	Historical sampling methods and protocols are not verifiable. With coarse gold (electrum) present in notable quantities, then sampling uncertainty is likely to high as a result of the nugget effect (sampling errors).
QAQC	Moderate-High	No rigorous QAQC programme was in operation during historical sampling (pre-2010). The 2010 drilling programme QAQC to industry standard
Geological data and model	Moderate-High	General geological control is reasonable, though there is a lack of detailed understanding of the geology, in particular small-scale local continuity issues which lead to a high nugget effect. Vein is known to pinch-and-swell and pinch out in places, but extent of characteristic unknown.
Grade estimate	High	The grade estimate bears a high uncertainty due to a very high-nugget effect, sampling and historical data uncertainties. Snowden has not been able to verify all original assay data. The current estimate relies on a global grade for each vein, applied to an essentially polygonal model. Grades are thus projected over relatively large areas, but with gross geological control. The estimate is global in nature and the exact location of high-grade zones (VHG) is unknown at present.
Tonnage estimate	Moderate-High	The current estimate is reasonable, given that volume is based on a Vulcan model constrained by drilling and development. Actual tonnage will be variable based on bulk density value and variation and payability.
Resource up-rating and extension	Moderate	Resource up-rating will be based on further linear and/or vertical (raise) development. Resource extension will require further drilling. For Double Decker and Engineer, there is immediate small potential down dip. Other veins within the mine sett have the potential to provide additional Mineral Resources with appropriate drilling.
Economic factors including mineral processing	Moderate	Based on the current resource, Engineer has reasonable prospects for economic extraction as a small narrow-vein operation. The project already has a good infrastructure and plant. Historical production indicates a mean gold recovery of 77%. No preliminary economic assessment has been undertaken. No Mineral Reserves have been defined.
Accuracy of the estimate	Moderate-High	On a global basis, Snowden believes the accuracy of tonnage estimate to be within -50% to -15%, and for grade within ±50% range based on general experience of this style of mineralisation. Head grade from the Engineer mine is expected to be highly variable (potentially up to ±100%) on a short-term (days) small-scale (few 100's t) basis, as is typical of a high-nugget effect systems.
Overall rating	**High**	**The current resource estimate carries high uncertainty and risk. This risk is principally related to the use of historical data and a high inherent nugget effect in the Double Decker and Engineer veins. This rating is reflected by the sole use of the "Inferred Mineral Resource" category.**

19.3 CONCLUSIONS

The Engineer Property represents an advanced exploration project, with the potential for near term small-scale development. Wider exploration has shown that beyond the Double Decker and Engineer veins, the property has significant potential for the delineation of further resources based on appropriate work. Shear Zone A provides a low-grade exploration target.

Further evaluation and potential exploitation of the Double Decker and Engineer veins relates principally to geological risks that include:

- the assumption that veins and/or ore shoots may continue and/or repeat at depth and/or along strike based on limited drilling and historically-based geological models;
- the risk that each vein will not have the contained metal in the mineable bodies with the shapes, sizes, grades and distributions expected; and
- that the boundaries and internal gold grade distribution of the extracted bodies will not be correctly assigned ahead of mining, resulting in either or both excessive dilution or misclassification of ore as waste.

All narrow high-nugget gold veins bear a level of inherent risk/uncertainty related to the nugget effect (see Section 8.2). Despite this, many claim a sustainable mine life over a number of years based on on-going drilling and development, and strong geological understanding and control (Dominy *et al*, 1999; Dominy and Platten, 2008).

20 RECOMMENDATIONS

20.1 EXPLORATION

20.1.1 Double Decker and Engineer veins

Additional drilling should further explore two areas of the Engineer vein, which could be undertaken concurrently with dewatering of the mine to 6 Level to access an area of previous stoping for bulk sampling (Coates, 2010):

1. From drill bay #1 down-dip and along strike slightly to the southwest warrants further exploration. This drilling would be designed to test the area between the underhand mining, and intersection in BCGE-10-7, and an area on 6 Level where some stoping has been done in the past and where bulk sampling might be attempted.
2. Additional drilling is warranted on the Engineer vein along strike in both directions from the section tested by the 2010 programme (drill bay #2). If this work targeted the 650 m elevation, then it would have the additional benefit of clarifying the possible vein discontinuity suggested by the intersections in BCGE-10-9 and BCGE-10-13. In addition, future development on 6 Level to access any ore here would be more precisely guided by drilling at that elevation.

To up-rate Inferred Mineral Resources to Indicated Mineral Resources (and potentially Probable Mineral Reserves), underground development will be required. A traditional approach of blocking out is most likely to provide an appropriate level of confidence. Development must be accompanied by high quality face mapping and sampling.

As above, a phased programme is recommended to include bulk sampling on the Double Decker and Engineer veins, together with limited diamond drilling (as above). Dewatering the internal shaft will allow access to 6 Level to permit rehabilitation, mapping, backs sampling and bulk sampling.

20.1.2 Other veins

The recent enlargement of the property by the optioning of the claims from Guardsmen Resources will necessitate a compilation of all data relevant to the new claims. In the field, establishment of a grid and a programme of geological mapping, rock sampling and hand auger soil sampling are recommended. Soil sampling appears to have worked in at least two previous programmes in the history of the property. This work could be done in conjunction with a soil auger survey over the area between Shear Zones A and B, and north of 5 Level looking for faulted-off Double Decker and Engineer vein extensions.

Substantial drilling (4,500 m) is warranted on Shear Zone A to gain a better picture of the geology and likely tenor of the structure at depth and along strike.

Immediate underground targets include the Shaft and Boulder-Governor veins.

Elsewhere, Hubs A and B are good surface drilling targets.

20.2 GEOLOGICAL STUDIES

Snowden recommends additional detailed underground geological mapping beyond the work of Devine (2008). Specifically, detailed mapping at a scale of 1:100 should have a focus on mapping texture domain continuity and vein pinch-and-swell and pinch-out. This should be completed together with a mineralogical and geochemical study to define which textures and mineral associations relate to/carry gold. This may lead to the definition of proxies to assist with grade definition.

20.3 DRILLING

The continued use of HQ core is supported. All holes should continue to have surveyed collars and down hole extents.

20.4 SAMPLING

An ore characterisation programme is recommended that will tie in with suggested metallurgical testing (Section 20.6). Such a programme should include (Dominy, Platten and Xie, 2008; Dominy, Xie and Platten, 2008a/b):

- Ore/mineralogical determination through inspection of drill cores, hand specimens and thin section study; and
- Metallurgical testing: gravity recoverable gold (GRG) and leach tests.

Key outputs are:

- Realisation of gold deportment and exposure, in particular the partitioning of gold as free gold, gold in sulphides and refractory gold;
- Gold particle size curve(s), including effects of clustering and relationship between gold particle size and grade;
- Definition of key fundamental sampling error relationship inputs (e.g. liberation diameter versus clustered-liberation diameter) and the sampling constant (K); and
- Recommendations as to optimum in-situ sample mass requirements for face and grab samples and likely in-situ representivity of drill core samples.

Leading to:

- Nomogram production;
- Optimised sample collection, sample preparation and assay protocols to reduce sampling error within the context of the Theory of Sampling (see Dominy, 2007; Dominy, Platten and Minnitt, 2010); and
- Bulk sampling design.

20.5 DATABASE

As the project develops, a bespoke database will be required that can integrate historical data with modern data.

20.6 QAQC

Continued application of industry best practice QAQC is required for diamond drill and chip-channel samples, including core-split/field duplicates.

20.7 BULK DENSITY DETERMINATION

A test programme is required to determine bulk density values and variability. This should cover both wall-rock and vein rocks.

20.8 MINERAL RESOURCE ESTIMATION/ON-GOING EVALUATION

On-going evaluation will require underground development and bulk sampling to facilitate up-rating of resources classification. A traditional approach of development blocking out is most likely to provide an appropriate level of confidence, to potentially achieve the Indicated Mineral Resource category. Development must be accompanied by high quality face mapping and sampling.

Bulk sampling programmes are an established methodology for verifying grade, short-scale geological variation, mining conditions and process parameters during the evaluation of high nugget systems (Dominy, Johansen and Annels, 2001; Dominy and Petersen, 2005; Dominy, Platten and Xie, 2008). At Engineer, this should involve removing individual and composite samples from between 10 t to 100 t at selected locations on the Double Decker and Engineer veins. Sample sites must be fully mapped and sampled before and during extraction. Sample batches should be processed through the Engineer plant as part of the programme and include appropriate head and tails samples.

Diamond drilling can be used to test global vein continuity, but is unlikely to result in the definition of Indicated or Measured Resources or Mineral Reserves, unless drill spacing is very small (potentially <5 m). A drill spacing of 15 m to 25 m is likely to suffice the resolution of global vein continuity.

It is unlikely that computerised block modelling and geostatistical methods will ever be appropriate to estimation. The on-going use of 3D modelling software for geological and mine modelling is strongly endorsed by Snowden. Tonnage definition should be based on a drill and development informed 3D model, whereas grade is likely to be based on local means of development sample data (face and/or bulk sample results) supported by drill data.

20.9 METALLURGY AND PROCESSING

No modern metallurgical test data exists. A test programme is recommended so that the current plant can be optimised to improve gold recovery above 70%. Testing should include determination of gold recovery by gravity (full GRG test) and leaching, and if appropriate by sulphide flotation.

Given the variability in the clay content of the ore, comminution tests should investigate likely variability and effect on gravity recovery. Testing should permit appropriate optimisation and control of the plant.

Four to six 100 kg samples should be collected from different grade domains within each of the Double Decker and Engineer veins. Samples should be tested for comminution and gold recovery parameters.

Metallurgical testing can be combined with the recommendations of Section 20.4 to gain a better understanding of gold particle size distribution and hence lead to sampling optimisation.

Test work should also investigate the extraction of silver from Engineer ores.

20.10 WORK PROGRAMME

Snowden recommends the following two stage work programme to continue advancing the Engineer Property with the following objectives:

- Acquire bulk samples of the Double Decker and Engineer veins to design sampling protocols and determine metallurgical characteristics;
- Evaluate mining techniques to optimise head grade;
- Partially dewater mine to assess lower mine workings;
- Evaluate and optimise 30 t per day pilot mill circuit;
- Investigate exploration potential of Shear Zone A as a bulk tonnage target; and
- Conduct property-wide exploration programme covering the Engineer Property as well as the Guardsmen option.

BCGold has provided the following budget for the recommended programme which includes surface and underground exploration, drilling, bulk sampling, metallurgical studies, test milling and partial dewatering of the lower levels.

The total cost for the two stage programme is estimated at C$10.2M (Tables 20.1 and 20.2). Snowden has reviewed the proposed budget and finds the allocated costs to be appropriate.

Table 20.1: Budget for proposed stage 1 - 2011 work programme

Item	Details	Budget (C$K)
Project Management	Off-site project management, scheduling and document management, reporting	180
Camp / Administration / Logistics	On-site project management, camp supplies and staff, fuel, equipment rentals, travel	370
Surface Exploration	Airborne geophysics, aerial photography, geological mapping and prospecting covering Engineer and Guardsman claims	260
Drilling	1,500 m exploring Shear Zone A	560
Mining	Muck out and ground support entrance to Internal Shaft; dewater to 6 Level to evaluate internal shaft; extend 5 Level track to south end Engineer vein	110
Bulk Sampling	5 Level underground bulk and channel sampling; surface excavation	170
Milling	Refurbish and operate on-site mill	90
Metallurgy	Gold deportment, gold particle size curves, sampling error relationships, determine optimum in-situ sample mass requirements, bulk density determination	60
Contingency		200
Total:		**C$2M**

Contingent upon positive results of the 2011 programme, the budget for the 2012 to 2013 work programme is recommended as follows (Table 20.2).

Table 20.2: Budget for proposed stage 2 - 2012 to 2013 work programme

Item	Details	Budget (C$K)
Project Management	Off-site project management, scheduling and document management, reporting	360
Camp/Administration/Logistics	On-site project management, camp supplies and staff, fuel, equipment rentals, travel	800
Surface Exploration	Ground geophysics, geological mapping and prospecting	300
Drilling	3,000 m exploring Shear Zone A 1,000 m definition drilling on Engineer vein	3,000
Mining	Partial dewatering and refurbishing of Internal Shaft to 6 Level; install hoisting mechanism and 6 Level equipment;	2,300
Bulk Sampling	6 Level geological mapping, bulk and channel sampling	340
Milling	Mill optimisation; mill operating cost	500
Contingency		600
Total:		**C$8.2M**

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22 DATE AND SIGNATURE PAGE

Name of Report:

Engineer Gold Project, BC, Canada: Mineral Resource Estimate

Effective Date:

6th April 2011

Issued by:

BCGold Corporation

[Signed and Sealed] S. C. Dominy	6th April 2011
Dr S C Dominy FAusIMM(CP) FGS(CGeol)	**Date**

[Signed and Sealed] I. M. Platten	6th April 2011
Dr I M Platten FGS(CGeol)	**Date**

23 CERTIFICATES

CERTIFICATE of QUALIFIED PERSON

I, Simon Charles Dominy, Executive Consultant and General Manager (UK) of Snowden Mining Industry Consultants Limited, Abbey House, Wellington Way, Brooklands Business Park, Weybridge, Surrey KT13 0TT, England, do hereby certify that:

a) I am an author of the Technical Report titled "Engineer Gold Project, BC, Canada: Mineral Resource Estimate" and dated 6th April 2011 (the 'Technical Report') relating to the Engineer Property prepared for BCGold Corporation.

b) I graduated with the following degrees: BSc (Hons) Applied Geology, London City University (1987); MSc Mining, Camborne School of Mines (1989) and PhD Resource Geology, Kingston University (1993). I hold the following professional qualifications and remain in good standing with the following bodies: Fellow of the Australasian Institute of Mining & Metallurgy (FAusIMM) and Chartered Professional (CP); Fellow of the Geological Society of London (FGS) and Chartered Geologist (CGeol) and European Geologist (EurGeol); and Fellow of the Australian Institute of Geoscientists (FAIG) and Registered Professional Geoscientist (RPGeo). I have worked as a mining geologist/geological engineer in academia, underground operations and consulting for over 23 years since graduation. I have particular experience and skills in the evaluation and exploitation of narrow-vein high-nugget effect gold deposits, and in the re-evaluation of historical mining projects.

c) I have read the definition of 'qualified person' set out in National Instrument 43-101 ('the Instrument') and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfil the requirements of a 'qualified person' for the purposes of the Instrument. I have geologically modelled and generated Mineral Resource estimates for a variety of gold deposits in different geological settings using industry accepted practices. I have worked on the evaluation of mineral deposits for over 20 years.

d) I made a current visit to the Engineer Property on the 19th March 2011.

e) I am responsible for the preparation of all sections of the Technical Report.

f) I am independent of the issuer as defined in section 1.4 of the Instrument.

g) I have not had prior involvement with the property that is the subject of the Technical Report. In September 2009, I completed a desk top bulk sampling review/plan on the Engineer mine for BCGold.

h) I have read the Instrument and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

i) As of the date of this certificate, to the best of my knowledge, information, and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Weybridge, Surrey, England this 6th day of April 2011

[Signed and Sealed] S. C. Dominy

EurGeol Dr S C Dominy FAusIMM(CP) FGS(CGeol) FAIG(RPGeo)

CERTIFICATE of QUALIFIED PERSON

I, Ian Malcolm Platten, Senior Principal Consultant of Snowden Mining Industry Consultants Limited, Abbey House, Wellington Way, Brooklands Business Park, Weybridge, Surrey KT13 0TT, England, do hereby certify that:

a) I am an author of the Technical Report titled “Engineer Gold Project, BC, Canada: Mineral Resource Estimate” and dated 6th April 2011 (the ‘Technical Report’) relating to the Engineer Property prepared for BCGold Corporation.

b) I graduated with the following degrees: BSc (Hons) Geology, University of London (1961) and PhD Geology, University of London (1966). I hold the following professional qualification and remain in good standing with the following body: Fellow of the Geological Society of London (FGS) and Chartered Geologist (CGeol). I have worked as a geologist, in academia and consulting, for over 49 years since graduation. I have particular experience and skills in the geological evaluation of narrow-vein high-nugget effect gold deposits.

c) I have read the definition of ‘qualified person’ set out in National Instrument 43-101 (‘the Instrument’) and certify that by reason of my education, affiliation with a professional association, and past relevant work experience, I fulfil the requirements of a ‘qualified person’ for the purposes of the Instrument. I have undertaken geological studies pertaining to metalliferous mineral deposits for over 30 years, and in particular narrow vein gold deposits for over 15 years.

d) I have not visited the Engineer Property.

e) I am responsible for the preparation of Sections 7, 8 and 9 of the Technical Report.

f) I am independent of the issuer as defined in section 1.4 of the Instrument.

g) I have not had prior involvement with the property that is the subject of the Technical Report.

h) I have read the Instrument and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

i) As of the date of this certificate, to the best of my knowledge, information, and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated at Weybridge, Surrey, England this 6th day of April 2011

[Signed and Sealed] I. M. Platten

Dr I M Platten FGS(CGeol)