

## Follow-up drilling - Morille Tungsten and Tin Project

ASX via e-lodgement:  
17 September 2014

- **Follow-up drilling plan for Morille**
- **Drill permissions in place**
- **Reverse Circulation and Diamond drill programme scheduled for commencement in Q4 2014 and extending into Q1 2015**
- **Multi-pronged focus for drilling with aim to deliver first JORC resources in 2015.**

Plymouth Minerals Limited (“Plymouth”, “the Company”) is pleased to provide information on the planned follow-up drilling for its Morille tungsten-tin Project exploration programme at the Morille tungsten-tin project in Spain (“Morille”, “the Project”). This drilling is planned to commence in Q4 2014 and will extend into 2015.

The Morille tungsten-tin Project covers an area of 57km<sup>2</sup> and has 33 documented historic mines and mineral occurrences. An estimated 780,000t of tungsten and tin bearing ore was produced from within the Project area until cessation of mining in the mid 1980’s.

Plymouth has published an exploration target for tungsten (W) of 4-11Mt @ 0.25-0.50% WO<sub>3</sub>. Planned drilling is intended to convert part of this into JORC resources in 2015.

*(NB# Exploration target is conceptual in nature. There has been insufficient exploration (namely drilling) to define a Minerals Resource and it is uncertain if further exploration will result in the definition of a mineral resource)*

Drilling conducted by Plymouth in early 2014 was very successful in confirming high-grade mineralisation and the widespread extension of mineralisation within the Project area. Prior to Plymouths first pass (Phase 1) drilling in April-May 2014, only 12 drill holes had been drilled within the Project and 11 of these around just one of the multiple historic mines. Morille was grossly underexplored by modern standards and historic mining was based on visible outcropping of mineralisation. The Phase 2 drilling will focus on;

- Extending recently identified (Phase 1 drilling) high-grade intercepts (follow-up)
- Testing as-yet undrilled known historic workings (new)
- Testing for as-yet unknown, blind deposits under shallow cover (new).

### Plymouth Minerals Limited

ASX: PLH

#### Capital Structure

32,150,000 shares

10,716,667 options 25c (Q2 2015)

1,000,000 options 20c (Q2 2017)

Cash \$1.16m (June Qtr)

#### Board of Directors

Charles Schaus  
Non Exec Chairman

Adrian Byass  
Managing Director

Humphrey Hale  
Steve Brockhurst  
Non Exec Directors

Rob Orr  
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To date, less than half of the known historical workings have been tested by Plymouth and those which have been tested, have only been drilled to an average of 50m vertical below surface. The exploration target of 4-11Mt @ 0.25-0.50% WO<sub>3</sub> is calculated on known workings only and extrapolation of these to 150m depth. This illustrates the preliminary nature of Phase 1 drilling. The high-grade results obtained are therefore important and very encouraging. To expedite exploration and development, Plymouth is planning Phase 2 drilling for Q4 2014 and extending into 2015. This will comprise Reverse Circulation (RC) programme and later Diamond drilling.

Following on from this Phase 2 RC drilling, it is anticipated that targeted diamond drilling will be conducted to obtain geotechnical, structural and metallurgical information in areas which are deemed prospective for resource (JORC) generation. The Diamond drilling campaign size will be determined by the results of RC drilling.

Drilling will be conducted at the Westside and ACMA Prospects already tested, will also extend along structural corridors across previously untested zones (under shallow cover) in the northern and southern portions of the Project area and target some known, but as yet, undrilled workings as per Phase 1 drilling model (Figure 1).

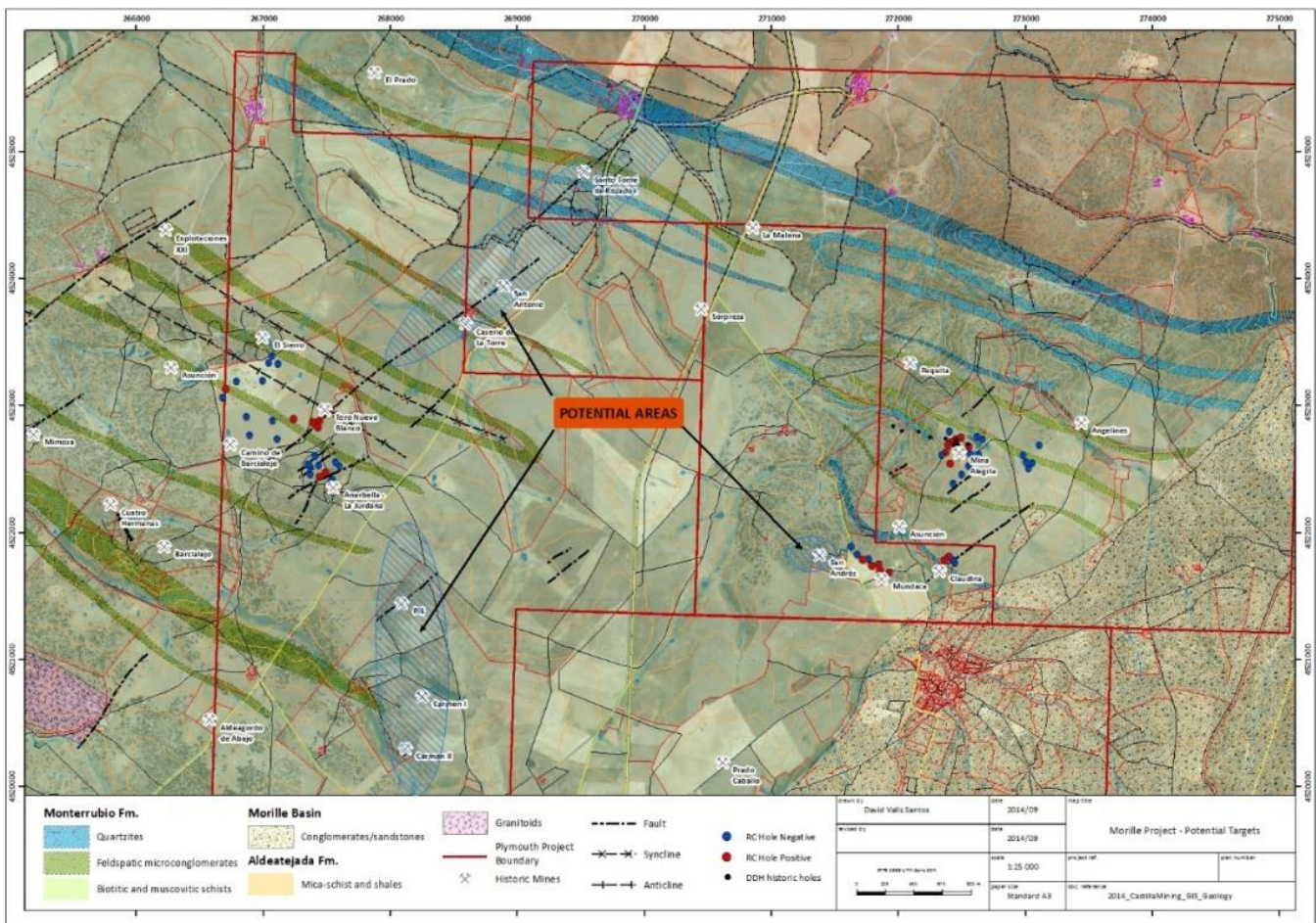


Figure 1: Morille Project Priority areas and new drill location plan



This drilling will be conducted using a Reverse Circulation (RC) drill rig as per the type which completed the Phase 1 drilling in early 2014 (Figure 2). These rigs are readily available in Spain and provide a fast and cost effective method for testing large areas.

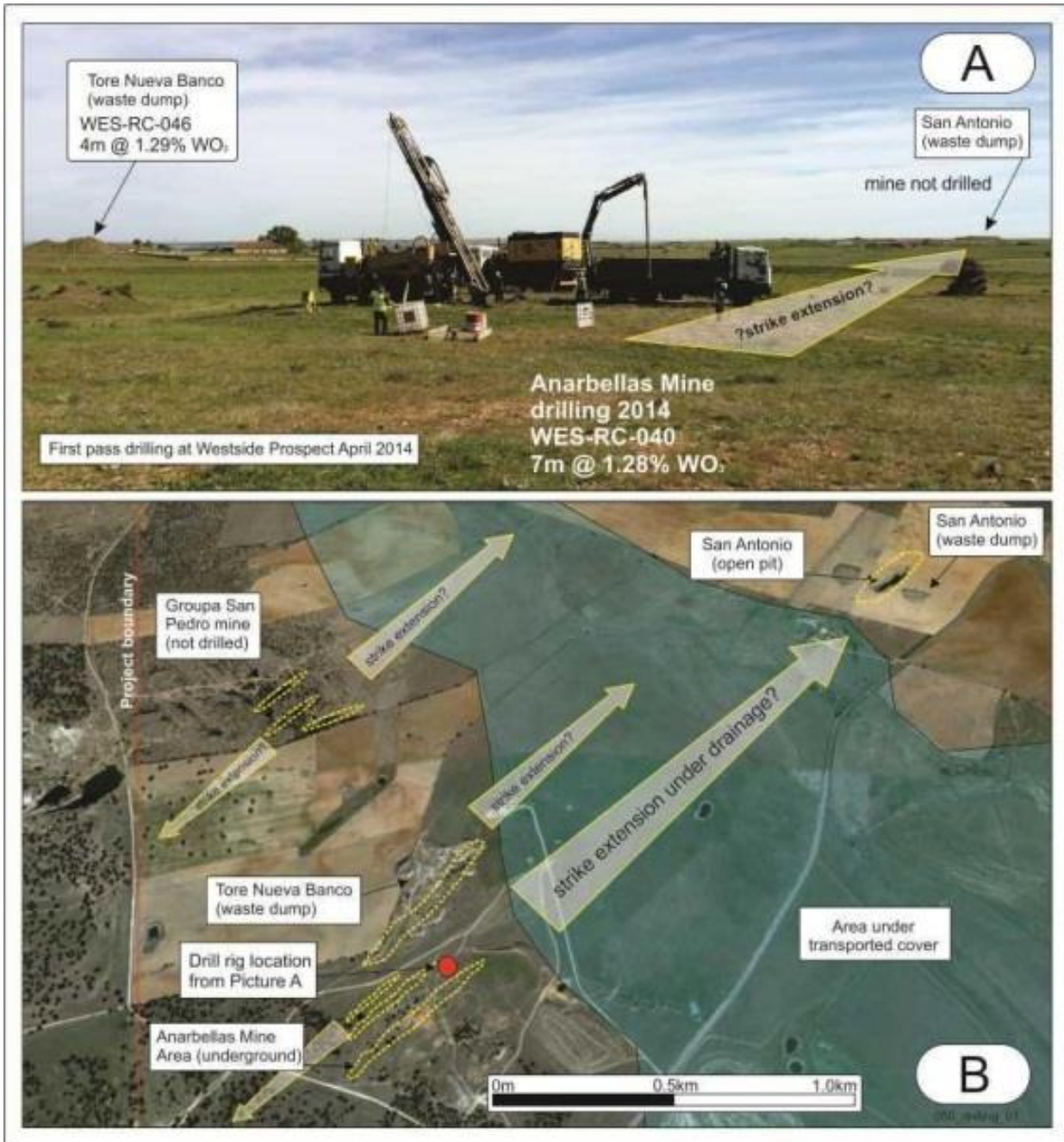


Figure 2: Westside drilling and 050-230 degree structural model

As previously reported, Phase 1 drilling at the Westside Prospect intersected very high grade mineralisation - up to 5%  $WO_3$  over single metre intercepts. Drill hits of multiple metres grading greater than 1%  $WO_3$  were intersected in holes over a wide area. This is potentially very economically significant. Plymouth is excited by the presence of high-grade such as this in conjunction with the more typical 0.2-0.5%  $WO_3$  Skarn style

mineralisation present throughout the Project and commonly seen in the region. The controls on this quartz-hosted, structurally controlled “lode” style of mineralisation are interpreted to be along 050-230 degree strike faults. Phase 2 drilling will primarily be used to confirm the geometry and extent of lode style mineralised structures intersected at the Westside Prospect. Plymouth is working towards extending these intercepts and establishing a JORC resource in 2015.

Further to this work, drilling will be conducted on other as-yet undrilled historic workings which have similarities to those of Minas Anarbellas and Toro Nueva Banco at Westside. These historic mines delivered intercepts which included

- **4m @ 1.29% WO<sub>3</sub>** from 61m and
- **4m @ 0.31% WO<sub>3</sub>** from 68m (WES-RC-046)
- **2m @ 0.30% WO<sub>3</sub>** from 18m (WES-RC-045)
- **7m @ 1.28% WO<sub>3</sub>** from 67m (WES-RC-040)

(NB# full details including Table 1 were released for all drilling conducted to date at Morille in drilling release dated 18 June 2014)

A structural model of 050-230 degree striking structures links deposits at Sant Antonio to Westside Prospect. This will be tested. Other soon to be tested historic workings in and around Westside Prospect include Minas El Siero (Groupa San Pedro), Pili, La Torre and Santo Tomé de Rozados. Several of these were tin as well as tungsten producing mines on a small scale.

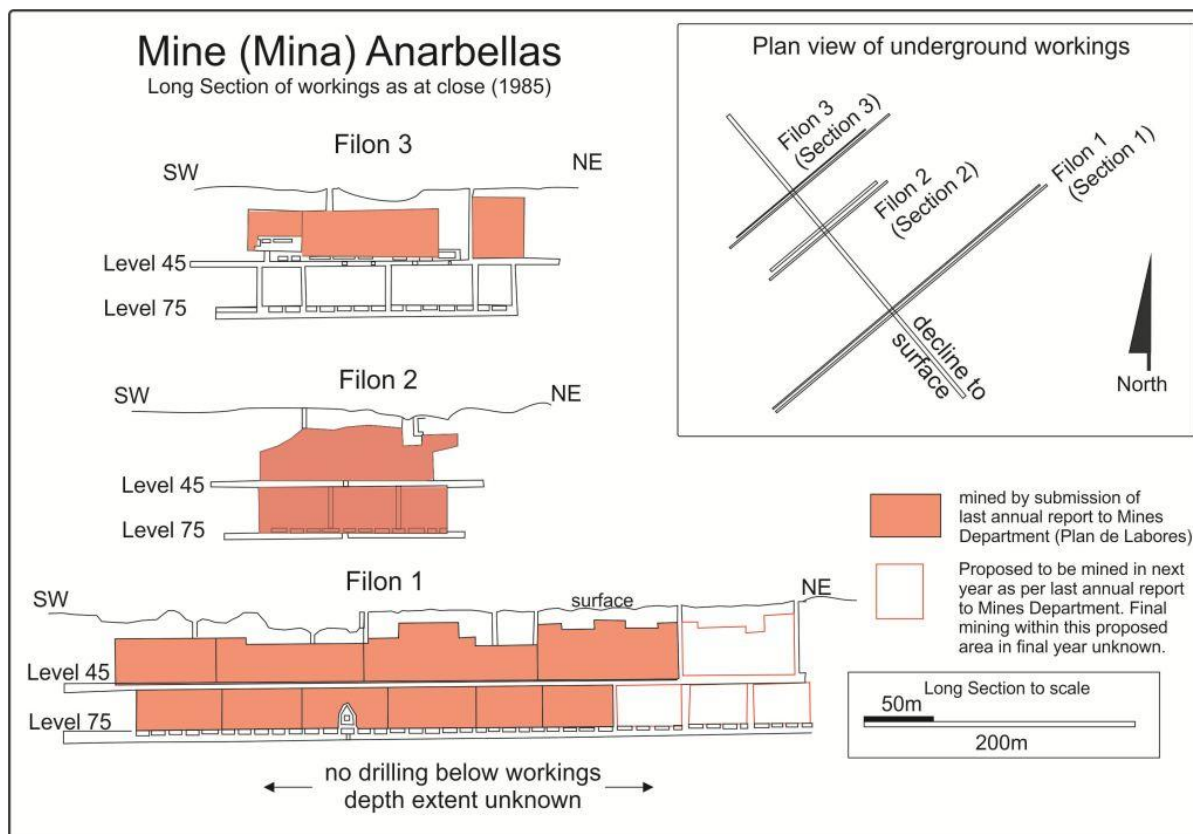


Figure 3: Anarbellas mine long section (note 050-230 degree strike of sub-vertical vein hosted mineralisation).



Additional work at ACMA will follow-up from successful drilling at Minas Mundaca and Claudina as well as extending mineralisation at Minas Alegria and further afield at as-yet untested historical mines such as Minas San Andrés, Asuncion and Paquita.

The final aspect of Phase 2 drilling is anticipated to be conducted in Q1 2015 and will be directed to gather information in areas under shallow cover (red clays 1-5m deep) which may have obscured otherwise outcropping mineralisation. Historical mining was based on following surface expressions of tungsten-tin mineralisation and areas within prospective geological and structural areas but under cover to the north-east and east of Westside as well as the south-east of ACMA are priority targets for geophysics and drilling.

Further work planned to complete this drilling (estimated beginning of 2015) will utilise diamond drilling to gather geotechnical, structural and metallurgical information. To date, preliminary metallurgical test work has only been completed on skarn "Stratiform" style mineralisation from ACMA. Very high-grade mineralisation intersected at Westside is hosted in quartz-rich, structurally controlled veins up to 7m wide. Mineralisation is different to skarn type (Stratiform) mineralisation mined throughout the Project area and specifically at Alegria (ACMA Prospect) historically. It is very coarse grained and metallurgical work can only be conducted upon supply of diamond drill core to laboratories (Figure 4).

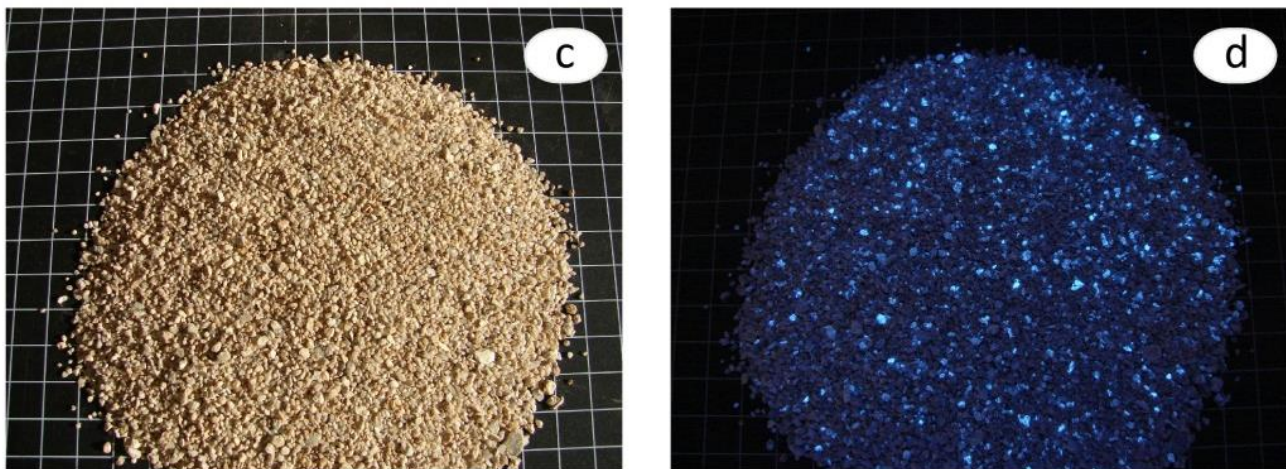


Figure 4: example of single metre "coarse crush" sample from ALS laboratory preparation (Westside drill hole) May 2014. Scheelite appears light blue amongst the dark blue host rock under ultra violet light. Sample grade >2% WO<sub>3</sub>

Structural and geotechnical information will be used to assist in resource estimation and open pit planning.

Drilling will be conducted using existing permissions and is compliant with the 'Plan de Labores' (Work Programme) submitted by Plymouth prior to Phase 1 drilling. Plymouth is pleased to enjoy a strong and positive working relationship with all landholders, local communities and the government departments overseeing mineral exploration in Salamanca.

For further information contact;

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*Competent Person Statement: The information in this report related to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr A Byass, B.Sc Hons (Geol), B.Econ, FSEG, MAIG an employee of Plymouth Minerals Limited. Mr Byass has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Byass consents to the inclusion in the report of the matters based on this information in the form and context in which it appear.*

Tenement	Historical Mine	Previous Production	Exploration Target	Grade WO <sub>3</sub> %
6634-30	Westside	0.2-0.3Mt	0.5-3Mt	0.1-1
6250-30	Mundaca/Claudina	0.3-0.6Mt	1.5-3Mt	0.2-0.5
6340-30	Anarbellas	0.2-0.3Mt	0.5-1Mt	0.2-0.5
6634-20	Alegria	0.25Mt	1.5-4Mt	0.3-0.5
<b>Total</b>		~1Mt*	<b>4-11Mt*</b>	<b>0.25-0.5*</b>

- Exploration Target derived from mapping, exposed ore in pits, Spanish Geological Survey data and compilation of historical reports.
- Mineralisation extrapolated to between 150m depth below surface based on historic mining records referencing mineralisation style and exposure. Tin mineralisation and grades are not estimated in the Exploration Target based on insufficient information available for verification.
- Data derived from Aurum Mining Plc, Plymouth Minerals Limited work, Spanish published and unpublished sources is considered insufficient for the calculation of a Mineral Resource as defined by the JORC Code (2012) however is considered adequate to calculate an Exploration Target under these guidelines. The Exploration Target is conceptual in nature. There has been insufficient exploration (namely drilling) to define a Minerals Resource and it is uncertain if further exploration will result in the definition of a mineral resource.
- The basis for this Exploration Target for the Morille includes:-
- Tonnage, but not grade estimates for Exploration Targets reported by Aurum Mining PLC dated May 2012 and released to the London Stock Exchange (AIM) Market in 2012, Spanish Geological Survey (IGME)
- Tungsten mineralisation is hosted in sedimentary "Stratiform" style mineralisation and mapping has identified target areas used as the basis of this estimate surface area. Historical mining records and current pit exposures have been used to estimate width ranges and density values.
- Historical mining at deposits to a depth of 75 metres below surface at Minas Anarbellas, 65m below surface at Minas Mundaca and 24m below surface in open pit mining at Minas Alegria
- Historical mine development of over 30 separate small deposits (open pit) and numerous underground workings documented by Spanish Geological Survey and published in 1975, 1979, 1980, 1983 and 1985
- Surface mapping of outcrop by consultants in 2011, 12 and 2013 by Aurum and Plymouth.
- The cessation of mining in 1986 due to rapid and decline in tungsten prices rather than depletion of resources. Mine plans submitted to authorities for work (mining) to be conducted in 1986 that were not conducted due to closure of mines.
- Good continuity and predictability of geology with allowance for short scale high-grade mineralisation
- The Morille mines were small tonnage, low cost operations that produced for several years at an average grade of 0.5% tungsten (through process plants on site) and delivered high quality concentrate with good recovery. Product specification reports from off-take purchasers and minimum specification requirements at the time.
- Results from drilling in 2014 to tested the validity of the Exploration Target.

## About the Morille Project

The Morille Project is an attractive brownfields exploration and development opportunity in a major tungsten and tin producing region. Extensive, small scale, unconsolidated mining activity by uncoordinated private groups in the 1970's and 1980's was stopped abruptly in the mid 1980's due to falling commodity prices.



The recent (post 2009) consolidation of the Morille Project into a contiguous tenement package is a significant advancement for efficient exploration and potential development. The Morille Project now covers an area in excess of 57km<sup>2</sup> within which over 20 separate small underground and open pit mining operations and 2 separate processing facilities operated historically, delivered high quality (high grade and low impurity) tungsten concentrate to domestic and international consumers and were never coherently optimised and mined.

The area has been effectively unexplored, with only 12 drillholes completed within the entire 57km<sup>2</sup> tenement package by the Spanish Geological Survey in 1979 and limited surface mapping/prospecting being conducted to date.

Plymouth acquired an 80% interest in the Morille Project through the purchase of a 100% interest in Spanish companies: Castilla Mining S.L., which in turn owns 80% of Morille Mining S.L. The Morille Project consists of 5 tenements covering 57km<sup>2</sup> which are 100% owned by Morille Mining S.L.

Going forward, the Company looks forward to working with the Projects 20% holder, Aurum Mining PLC, which enjoys a 'free carry interest' until a Decision to Mine stage is reached, upon which they can elect to contribute pro rata to the development of the Project or dilute to a 0.5% NSR.