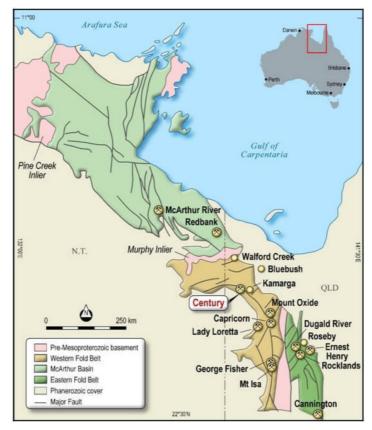




The Century Zn-Pb-Ag deposit was discovered in 1990 by Rio Tinto Exploration Pty Ltd while drill testing a zinc, lead, silver soil geochemical anomaly. The deposit contained a resource estimate of 118Mt @ 10.2% Zn, 1.5% Pb & 36g/t Ag. The deposit was mined from 1999 to 2015, producing an average of 475,000tpa zinc concentrate and 50,000tpa lead concentrate.



Regional Geology of Century Mine



# **Century Tailings Deposit**

A single substantial tailings deposit exists at Century, generated from 16 years of large scale operations from the Century open pit. The current JORC compliant Ore Reserve within the Century Tailings Deposit stand at 77.3Mt at 3.1% ZnEq for 2,287,000 contained zinc tonnes as shown below:

#### **Century Tailings Deposit Ore Reserve**

Reserve Category	Tonnes	ZnEq	Zinc	Silver
	(Mt)	(%)	(%)	(g/t)
Proved	77.3	3.1	3.0	12

Substantial recoverable zinc mineralisation exists in the tailings at Century, due to the historical focus on throughput maximisation as opposed to recovery maximisation. The nature of the original Century ore required extended flotation time and given the scale of the original Century deposit (105Mt at 12% Zn) a high throughput processing plant was constructed, achieving relatively modest recoveries (74% in 2015) over the life of operations.

Three independent metallurgical studies have been completed on the Century Tailings Deposit, demonstrating the tailings may be reprocessed through the existing plant on site with minor modifications to achieve recovery of >60% of remaining zinc mineralisation into a saleable ~52% zinc concentrate.

The simple reprocessing of the Century tailings provides a mechanism for the economic rehabilitation of the mine site, with the tailings area representing a significant portion of the current rehabilitation requirements. After reprocessing, the tailings are planned to be deposited back into the original open pit and encapsulated via subaqueous deposition.

## **In-situ Deposits**

Beyond the significant tailings resource, three insitu resources provide the ability to expand production or increase mine life beyond processing of tailings. The total JORC compliant Indicated and Inferred Mineral Resources is 9.3Mt at 6.1% Zn, 4.7% Pb and 66g/t Ag for 568,000t contained zinc, 433,000t contained lead and 19,850,000oz contained silver.



In-situ Mineral Resources

#### **Century Mine Mineral Resources**

Mineral Resources	Tonnes (Mt)	Zn (%)	Pb (%)	Ag (g/t)	Zn (t)	Pb (t)
South Block (Indicated)	6.1	5.3	1.5	43	322,000	90,000
Silver King (Inferred)	2.7	6.9	12.5	120	186,000	337,500
East Fault Block (Inferred)	0.5	11.6	1.1	48	60,000	5,500
Total	9.3	6.1	4.7	66	568,000	433,000
•						•

## **Silver King Deposit**

The Silver King lead-zinc-silver deposit is 1.5km SW of the original Century open pit. The JORC compliant Inferred mineral resource at Silver King is 2.7Mt at 6.9% Zn, 12.5% Pb and 120g/t Ag (20.5% ZnEq), reported above a 5% Pb cut-off, for a total zinc equivalent metal content of 553,500t.

Mineral Resources				Ag (g/t)	Zn (t)	Pb (t)	ł
Silver King (Inferred)	2.7	6.9	12.5	120	186,000	186,000	1
4							

Discovered in 1897, Silver King had a rich history of small scale mining until 1961, having been accessed by 15 shafts and associated underground workings to a depth of approximately 60m. Estimated historical production is 3,149t of lead and 100,000oz of silver.

The Silver King mineralisation consists of a series of moderately to steeply dipping quartz-galenasphalerite-siderite veins associated with a NE trending dextral strike-slip fault. Further sphalerite and galena mineralisation occurs within shale hosted breccia also associated with the veins.

Silver King provides further potential for an economic operation to be established on site utilising existing infrastructure. The Silver King Deposit was never mined by previous owners of Century largely due to its relatively small scale (and partial underground) nature compared with the Century open pit operations.

With the implementation of tailings reprocessing operations, potential exists to extract Silver King for utilisation as a blending ore.

### South Block Deposit

The South Block deposit is located on teh southernmost portion of the original Century ore body and directly adjacent to the existing processing plant. The JORC compliant mineral

# resources of the South Block deposit are 6.1Mt at 5.3% Zn, 1.5% Pb and 43g/t Ag.

#### **Century Mine Mineral Resources**

Mineral Resources	Tonnes (Mt)			-	Zn (t)	Pb (t)	Ag
South Block (Indicated)	6.1	5.3	1.5	43	322,000	90,000	8,5
4							•

While South Block represents a continuation of the historical Big Zinc ore body, which was successfully mined and processed for over 16 years, New Century elected to complete metallurgical testwork on the drilling samples for confirmation of historical performance and potential areas of recovery optimistation.

Preliminary testwork completed to date has been positive, with the New Century metallurgical team confirming South Block will be suitable for processing via the existing plant configuration at the Mine. This includes the requirement for utilisation of the existing carbon pre-float circuit of the plant, which allows for the initial removal of carbon prior to lead then zinc flotation, ensuring target concentrate grades are maintained.

Recoveries of up to 82% zinc, 85% lead and 83% silver have been achieved to date. Further metallurgical testwork and optimisation is planned in the coming months in order to finalise sufficient inputs for New Century's planned Feasibility Study, due to commence in Q2, 2018.



#### South Block Resource

Further information on the South Block resource and planned Feasibility Study

## East Fault Block Deposit

The East Fault Block is a small deposit located 35m below the surface of the run-of-mine stockpile area at the mine site and extends to a depth of 112m. The JORC compliant mineral resources of the East Fault Block are 520,000t at 11.6% Zn, 1.1% Pb and 48 g/t Ag (12.3% ZnEq), for a total zinc equivalent metal content of 64,000t.

#### **Century Mine Mineral Resources**

Mineral Resources	Tonnes (Mt)	Zn (%)		-	Zn (t)	Pb (t)	Ag ((
East Fault Block (Inferred)	0.5	11.6	1.1	48	60,000	5,500	800,
•							•

#### **Phantom Hills Phosphate Deposit**

The Century tenements host substantial phosphate mineralisation in the Phantom Hills Deposit and other minor deposits, located directly to the NE of the Century open pit. In 2013, a 14,300m RC and diamond drilling program was completed over the phosphate deposit area. 1.53Mb 😑

Despite the extensive drilling to date, a defined resource for the Phantom Hill Phosphate Deposit is yet to be estimated.

Conversion of the Century infrastructure to support a phosphate rock processing operation presents a low cost and low risk option to extending the life of Century operations and infrastructure beyond zinc and lead processing activities.

#### **Exploration Potential**

Excellent exploration potential remains at Century for the discovery of smaller scale high grade deposits within the 783km<sup>2</sup> of mining licences and the exploration permit.

Despite the tenements being located in the highly prospective Termite Range Fault district, since 1990 exploration has been predominantly focused on a relatively narrow strategy targeting further discovery of large (>25Mt) sediment-hosted Zn/Pb/Ag deposits of similar scale to the original Century deposit.

The large-scale Century deposit was located in the middle of a 20km diameter cluster of smaller high grade vein-breccia lodes. Limited exploration work has occurred on these high-grade targets, providing potential for adoption of a revised strategy targeting delineation of smaller (1-10Mt) high grade deposits.

These vein-breccia lodes form distinct ridges and outcrops opposing the recessive siltstone and shale members throughout the mineral field. Over 40 of these lode targets have been recorded to date, with the largest being the already defined Silver King Deposit. Many have shafts, pits or small historic workings to mark their locations. Given the planned near term re-starting of operations via tailings reprocessing, potential exists for these resources to be used as blending material and processed via the existing plant at Century.

An extensive exploration database over the Century tenements has been acquired in addition to a comprehensive review of the exploration history of the region. This data is now under analysis and will be utilised to form the basis of future exploration programs over the tenements.



## **Century Gallery**

Located at Lawn Hill, 250km north-west of Mount Isa in the Lower Gulf of Carpentaria, the Century mine began open-pit production in 1999. During its initial 16 years of operation, Century was one of the largest zinc mines in the world, producing and processing an average of 475,00tpa zinc concentrate and 50,000tpa lead concentrates at Lawn Hill.

View Gallery 🖾

COMPANY	INVESTOR CENTRE
Leadership Team	Announcements
Corporate Governance	Presentations and Media
Corporate Directory	Annual Reports
Careers	Share Price & Registry
Working On Site	
CENTURY MINE	LEGAL
Project Overview	Commercial Terms and Conditions
Geology & Resources	Privacy Policy
Sustainability	



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