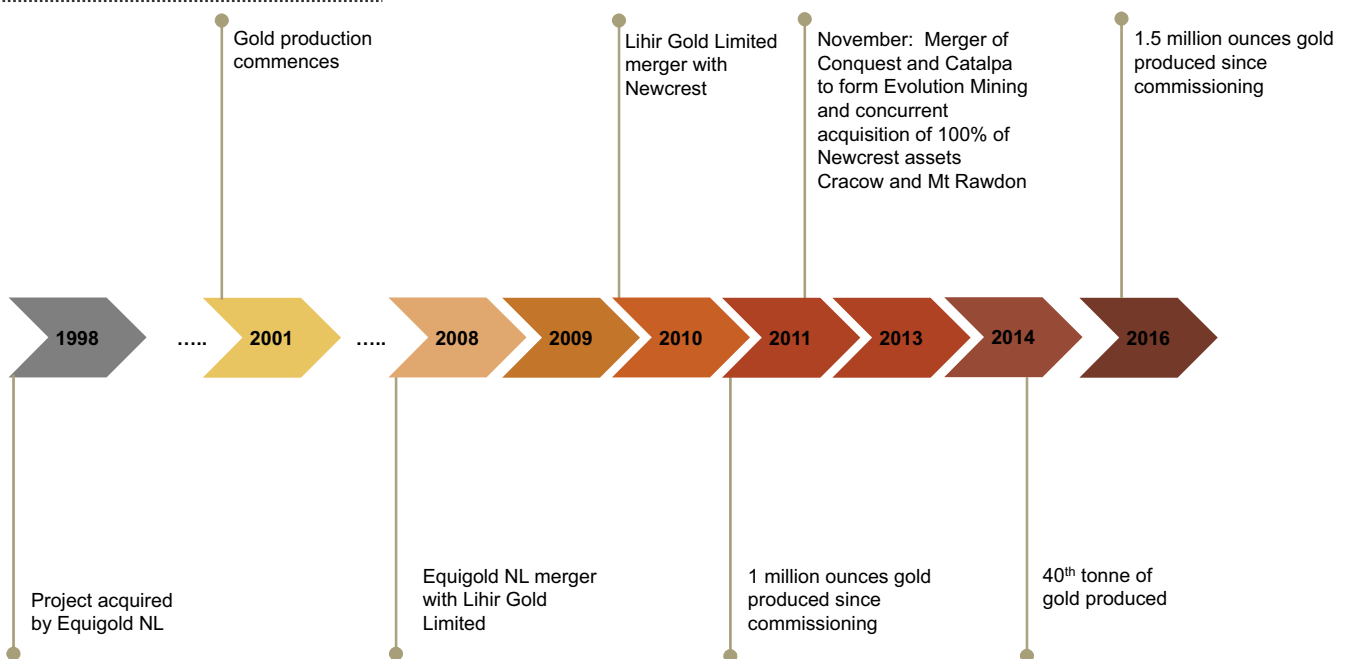


## Overview

Evolution Mining is a leading, growth focussed Australian gold company, forecasting to produce between 800,000oz and 860,000oz gold in FY17. It is also the largest gold producer in Queensland and is expected to produce between 260,000oz and 285,000oz gold from its three Queensland assets in FY17. Mt Rawdon mine has a history of reliable, safe production and has produced more than 1.5 million ounces of gold since first production in 2001. It is forecast to produce between 90,000oz and 100,000oz of gold at AISC of A\$960 - A\$1,040/oz in FY17.

<b>Location:</b>	75km south west of Bundaberg
<b>Producing:</b>	Gold
<b>Site management:</b>	Bernie Cleary - General Manager
<b>Mine Site contact number:</b>	+61 7 4156 2222

## History



## Geology

The Mt Rawdon gold deposit is a massive intrusive-related low grade gold deposit that exhibits excellent characteristics conducive to low cost mining and treatment. Alluvial gold was first discovered on the hill flanks in 1946 leading to early mining endeavours however the gold grade was too low to be profitable in those times. The gold mineralisation is closely associated with fine disseminated pyrite and base metal sulphides as well as in irregular discrete veinlets within the igneous host rocks. The gold grade is statistically independent of the sulphide percentage of the host however. The host rocks are predominantly rhyodacitic intrusives, breccias and a related volcanoclastic pile, with the orebody dipping moderately to the south west.

<b>Reserves:</b>	32.69Mt @ 0.83g/t gold for 873koz Au
<b>Resources:</b>	50.79Mt @ 0.73g/t gold for 1,186koz Au

## Mining

Mining production is derived from a single open pit, utilising conventional drill and blast, load and haul methodologies, mining 10-15m benches. The operation is scheduled to continue until FY26 at current estimates with a remaining life of mine strip ratio of 2:1.



# Mt Rawdon CONT



## Mining CONT

<b>Mining method/s:</b>	Drill, blast, load and haul
<b>Ore mined:</b>	3.3Mt per annum (FY16); 3.3Mt (FY15)
<b>Waste mined:</b>	14Mt per annum (FY16, includes 12.0Mt capital waste); 11.9Mt (FY15)
<b>Mining contractor:</b>	Owner miner from 1 July 2014
<b>Mine work roster:</b>	7/7 (operators and maintenance, 8/6 blast crews, 5/2 - 4/3 technical staff)
<b>Haulage/mine trucks:</b>	10 x MT3300 Terex, 3 x Komatsu 630E, 2 x Komatsu 785-7
<b>Shovels/excavators/loaders:</b>	3 x Komatsu PC3000, 1 x Hitachi Ex1200, 1 x Komatsu PC1250
<b>Dozers:</b>	3 x Komatsu 375-5, 1 x Cat 854G wheel dozer
<b>Haul road maintenance regime/equipment:</b>	2 x CAT16M graders, 1 x Komatsu 465-7 water truck, 1 x CAT777D water truck, 1 x CAT988F loader
<b>Drilling equipment:</b>	1 x Pantera 1500, 3 x Sandvik DR580
<b>Explosives:</b>	Orica Vistas and Extra emulsion / Unitronic detonation
<b>Mine survey equipment/products:</b>	Surpac / Trimble and Topcon survey equipment
<b>Geotechnical equipment/products:</b>	Sirovision, Prism monitoring
<b>Mine planning software:</b>	Surpac, Talpac and MineSched

Mt Rawdon open pit July 2016 looking north to stage 4 cutback



Gold Pour



Mt Rawdon Plant

# Mt Rawdon CONT



## Processing Plant

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<b>Ore treatment/processing method/s:</b>	Conventional crush-grind-CIL to produce gold doré
<b>Annual average throughput rate:</b>	(FY13): 3.3Mtpa; (FY14): 3.6Mtpa; (FY15): 3.4Mtpa; (FY16): 3.4Mtpa
<b>Nameplate capacity of plant:</b>	3.5Mtpa
<b>Crushing plant total capacity:</b>	720tph (two stage crushing)
<b>Power:</b>	Ergon Transmission, AGL Energy supply 25 kwhr/t
<b>Primary crushing/grinding plant/machinery:</b>	Allis Chalmers 42/65 Superior Gyratory
<b>Secondary crushing/grinding plant/machinery:</b>	Jaques J65. Pre screen with double deck Joest vibrating screen. Syntron feeder to screen and bypass using an overflow bin for lump. Nominal reduction ratio of 5-1 (125 mm primary crush to 25 mm secondary crush)
<b>Grinding Plant Equipment:</b>	Dominion 28' SAG, Nordberg 42/70HD Ball mill
<b>Grinding Media:</b>	High Manganese steel. 125 mm ball (steel lined SAG mill) 64mm balls (rubber lined Ball mill) Grind size 60%-106 um
<b>Screening plant/equipment:</b>	Wet screen
<b>Recycle crusher:</b>	Autofine 736 Cone Crusher (Allis Chalmers)
<b>Mineral liberation/recovery method:</b>	CIL
<b>Mineral liberation plant/equipment:</b>	1 x 1,500 m <sup>3</sup> leaching tank, 5 x 1,500 m <sup>3</sup> adsorption tanks
<b>Mineral recovery plant/equipment:</b>	Tanks
<b>Gravity circuit:</b>	Knelson Concentrator 13% of gold recovered via gravity
<b>Process pumps:</b>	Warman 10/12 split casing
<b>Chemicals/reagents used:</b>	Air Liquide (oxygen), Unimin (lime), Elgas (LPG), IXIM (Hcl, caustic), Orica (cyanide), Hay Carb (carbon)
<b>Refining plant/equipment:</b>	8t AARL elution column
<b>Process control system:</b>	Wonderware
<b>Maintenance system:</b>	Pronto
<b>Work roster:</b>	8/6 - operations, 9/5 - maintenance, 5/2 4/3 - technical

## General

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<b>Accommodation:</b>	Residential accommodation in Mt Perry
<b>Mine Workforce:</b>	250 employees & contractors
<b>Safety/Environment/Community:</b>	Evolution strives to enable all work activities related to its operations to be carried out safely and with all reasonable measures taken to remove or reduce risks to the health, safety and welfare of personnel, plant and equipment. Evolution is committed to attaining an outstanding level of environmental performance in all of its workplaces and has a strong corporate culture and a commitment to proactively and positively engage with the communities in which we operate. We recognise the need to consult with and understand the values, needs, beliefs, traditions and sensitivities of the communities in which we operate



## Process Flowsheet

