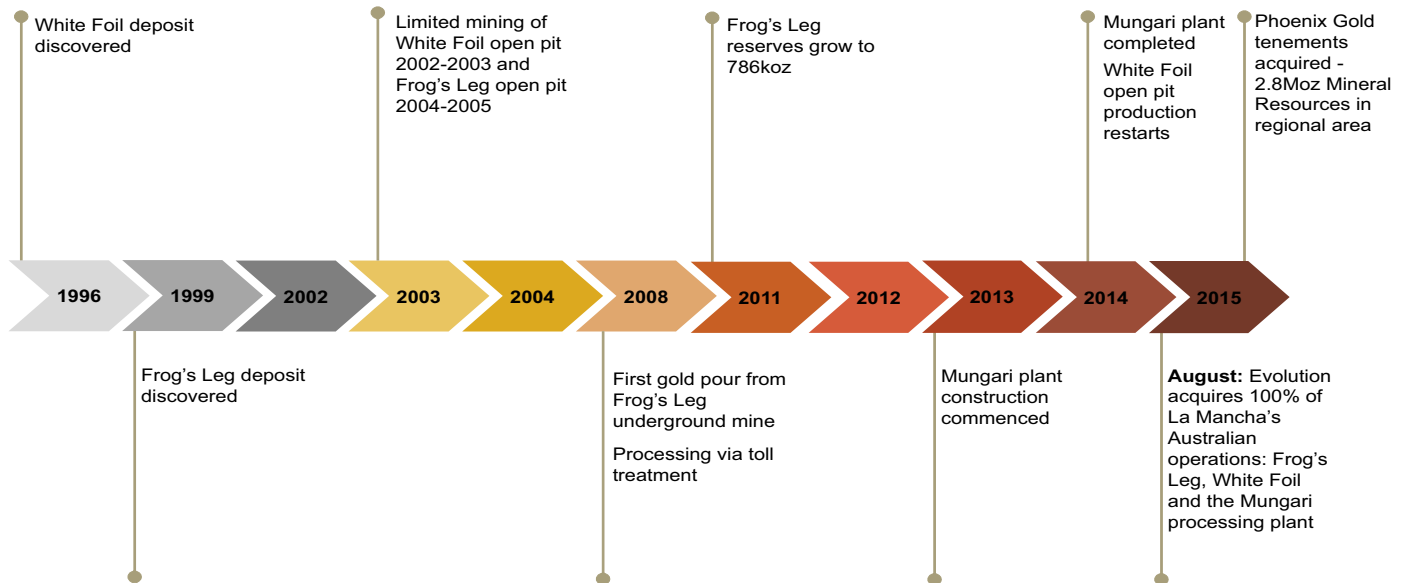


Overview

Evolution Mining is a leading growth focussed Australian gold company forecasting to produce between 800,000oz and 860,000oz gold in FY17. Mungari produced approximately 137,000oz gold in FY16 and is forecast to produce between 150,000oz and 160,000oz in FY17. Evolution acquired Mungari operations from La Mancha Group in August 2015.

Location: 20km west of Kalgoorlie-Boulder, Western Australia
Producing: Gold
Site management: Simon Jessop - General Manager Kalgoorlie Region
Mine Site contact number: (618) 9268 4000

History



Geology

Frog's Leg (underground)

Structurally controlled deposit within a NNW trending shear associated with the regional Zuleika Shear Zone, on the lithological contact between the Victorious Basalt and Black Flag Volcanic Sediments. Mineralisation occurs in laminated quartz veins, brecciation and alteration zones with widths ranging from 0.2-20m along strike length of 0.3-1.0km. Resource is open down plunge in areas and drill testing is ongoing.

Mineral Resource: 6.56Mt @ 3.87g/t containing 816koz Au
 Ore Reserve: 1.55Mt @ 5.21g/t containing 260koz Au

White Foil (open pit)

Structurally controlled sheeted stockwork deposit hosted within the upper unit of a differentiated gabbro sill. Gold is associated with zones of quartz veining and albite-pyrrhotite alteration. Resource is open at depth.

Mineral Resource: 7.00Mt @ 1.67g/t containing 376koz Au
 Ore Reserve: 5.77Mt @ 1.61g/t containing 299koz Au

Mining

White Foil is the open pit mine at the Mungari operations and utilises conventional drill and blast, load and haul methods. At our underground mine, Frog's Leg mining methodology is top-down bench stoping with paste fill. White Foil open-pit mine recommenced mid-2014 and in FY16 produced approximately 1,121kt @ 1.47g/t Au. Frog's Leg underground mine produced approximately 563kt @ 5.89g/t Au in FY16.



Frog's Leg (underground mining)

Mining method/s:	Top-down long hole stoping, with paste fill
Access:	5m x 5.5m decline from portal in pit, then twin declines from 125 metres below surface (mbs) to access north (Mist) and south (Rocket) sections. Deepest point current 550mbs, bottom of reserve is 650mbs
Ore mined:	FY12: 697kt for 126.2koz contained Au FY13: 679kt for 136.6koz contained Au FY14: 774kt for 132.4koz contained Au
Workforce:	Owner operation and maintenance
Work roster:	8/6 and 5/2,4/3
Loading:	2 x Caterpillar R2900G, 2 x Caterpillar R1700G
Trucking:	4 x Caterpillar AD55B
Drilling - development:	2 x Sandvik DD421 twin boom jumbo
Drilling - production:	2 x Sandvik DL421 production drill
Ground support:	Standard: friction bolts and mesh. Additional (as required): cable bolts, dynamic bolts, fibrecrete
Ancillary equipment:	2 x Rocmec charge-up, 3 x integrated toolcarrier
Explosives:	Stoping: emulsion, electronic initiation. Development: ANFO, non-electric initiation
Underground communications:	VHF leaky feeder network (radio and data). Optic fibre to copper LAN (microseismic system, video, data)
Mine planning software:	Vulcan, EPS

White Foil (open pit mining)

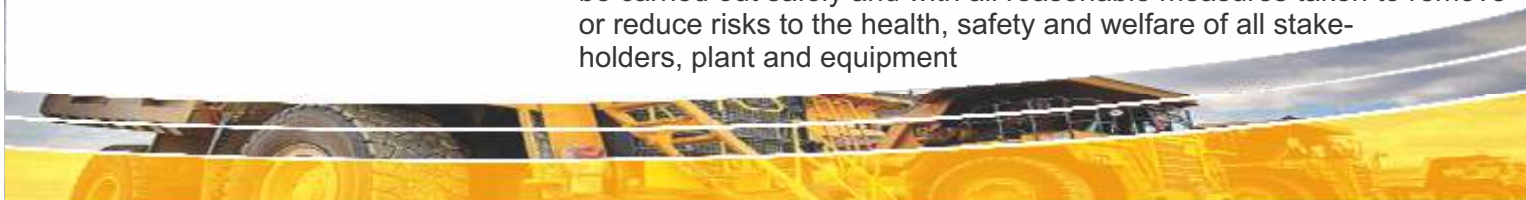
Mining method/s:	Conventional open pit (drill, blast, load and haul)
Final design:	525m EW, 1,120m NS, 240m deep
Ore mined:	FY15: 1,075kt for 44.6koz contained Au
Workforce:	Load and haul: owner operator; drill & blast: Ausdrill contractors; maintenance: Emeco contractors
Work roster:	7D/3off/5N/6off
Loading:	1 x Hitachi EX2600, 1 x Komatsu PC1250, 1 x Komatsu PC200
Hauling:	6 x Caterpillar 777D, 5 x Caterpillar 785
Dozers:	2 x Caterpillar D10T
Road maintenance:	1 x Caterpillar 16M, 1 x Caterpillar 773D water cart
Drilling equipment:	3 x Drilltech DK45 DTH (165mm, 10m bench) 4 x Sandvik Pantera 1500 TopH (wall control)
Explosives:	Emulsion or watergel
Mine planning software:	Geovia Surpac
OP Operations Systems:	Emeco Operating System or EOS

Processing Plant

Ore treatment/processing method/s:	Three stage crushing, ball mill, gravity and CIP
Annual average throughput rate:	1.75Mtpa (Design 1.5Mtpa)
Utilisation:	94-96%
Recovery:	92-95%
Crushing plant total capacity:	Currently 1.75Mtpa (Design 1.5Mtpa)
Power:	Western Power - grid supply
Crushing circuit:	Three stage crushing: Primary Metso C140 Jaw crusher (220kW) -1250 x 940mm throat- feed size 800mm, product size p80-120mm. Secondary(1) and tertiary(1) crushers: Metso HP 4 (315kW) Product size 17mm. Product Screen: Joest inclined vibrating screen 2.44 x 7.6m. 4 x conveyor belts, Belt and static magnets as well as a rock breaker for the primary crusher.
Grinding plant equipment:	Ball Mill with 4,500kW installed power, Mill size 5.5m(dia) x 8.74m(l), Polymet composite liners, Classification Weir Cavex 250mm (x11) Grind size p80 – 106 µm
Grinding media:	Donhad 94 and 78mm balls (40/60)
Recovery method:	Gravity & CIP
Screening plant/equipment:	Trash screen 1.53m x 3.05m horizontal vibratory screen; 0.8 mm aperture
Recycle crusher:	None
Mineral liberation/recovery method:	Gravity & CIP
Mineral liberation plant/equipment:	2 x 1,140m ³ leaching tanks, 6 x 750m ³ adsorption tanks, Kmex interstage screens, Pump cell screens
Mineral recovery plant/equipment:	CIP leach circuit with 2 x 1,140m ³ tanks and 6 x 750m ³ adsorption tanks. Elution circuit – split AARL. 3 x Electrowinning tanks - Consep, 2 in parallel for leach circuit and 1 for gravity circuit
Gravity circuit:	SQ30MS Knelson concentrator, followed by Consep Acacia Reactor type CS1000
Process pumps:	Mill discharge pumps - Metso HR250 centrifugal slurry pumps (Duty and stand-by); Final tails pumps - Metso HR150 3 stage (Duty and stand-by)
Chemicals/reagents used:	Sodium Cyanide, Oxygen 30t liquid oxygen storage vessel, Quicklime, Sodium Hydroxide, Hydrochloric acid, activated carbon, LPG
Refining plant/equipment:	4t elution and acid wash column
Process control system:	Factorysuite SCADA
Maintenance system:	Pronto
Production work roster:	4 shifts - 7/7 continuous roster; 2 day shifts - 7/7 continuous roster
Maintenance work roster:	5/2 and 5/2, 4/3 roster

General

Accommodation:	Residential accommodation in Kalgoorlie
Mine Workforce:	342 employees & contractors
Safety/Environment/Community:	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 all stakeholders, plant and equipment



Process Flowsheet

