Review of the Mining at Merlin Diamond Mine



SEPTEMBER 2016

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This presentation contains “forward looking statements”. Such “forward looking statements” may include without limitation (1) estimates of future earnings, the sensitivity of such earnings to diamond values and foreign exchange rate movements (2) estimates of future diamond production (3) estimates of future cash costs (4) estimates of future cash flow, the sensitivity of such flows to diamond values and foreign exchange rate movements (5) statements regarding, future debt payments (6) estimates of future capital expenditure (7) estimates of reserves, resources and statements regarding future exploration results.

Where the Company expresses or implies an expectation or belief as to future events or results such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, “forward looking statements” are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such “forward looking statements”. Such risks include but are not limited to diamond values, currency fluctuations, increased production costs and variances in grades or recovery rates from those assumed in mining plans, as well as political and operational risks in the countries and states in which the Company operates or sells product and governmental regulation and judicial outcomes.

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Corporate Overview

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Corporate Snapshot	
ASX Code	MED
Shares on issue	543,811,742
Share price (A$/share)	2.1 cents
Market Cap (at 2.1 cents/share)	A$11.42 million

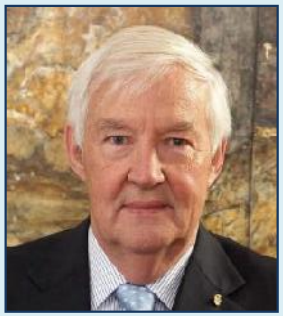
Experienced Board & Management Team



Mordechai Gutnick
Director



Henry Herzog
Non-Executive Director



David Tyrwhitt
Non-Executive Director



Peter Lee
Chief Financial Officer and Company Secretary

Foundation Resources – Our Consultants

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A tertiary qualified executive with a wealth of international experience and expertise, predominantly in diamonds and base metals, with a strong combination of operational, technical and corporate management ability to board level.

Neil Kaner
Executive Consultant



A geologist with over 10 years of experience in the diamond mining industry. Alex has extensive experience in resource evaluation production geology, geometallurgy and project management in Angola, DRC, Indonesia and Australia.

Alex Kidman
Principal Consultant



A geologist with over 26 years of experience in the diamond mining industry with extensive experience in diamond exploration, diamond evaluation projects and diamond mine production in Australia and South Africa.

Richard Price
Principal Consultant

Foundation Resources has access to a team of experienced mining consultants.

Home to World-Class Diamonds

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The largest diamond ever found in Australia came from the Merlin Diamond Mine measuring 104.73 cts

- Ashton Mining Ltd and Rio Tinto Ltd completed 5 years of trial mining at the Merlin Diamond Mine between 1999-2003 processing over 2.2 million tonnes to produce 507,000 cts
- Merlin diamonds is renowned for large, super white gem quality stones with over 31% of the stones previously produced being in the +13 DTC size fraction (approximately +0.7cts)
- Of the +1ct diamonds, in excess of 75% were assessed as 'gem' or 'near gem' quality
- Merlin has identified 80 exploration ready near mine targets for continued and sustained mining operations



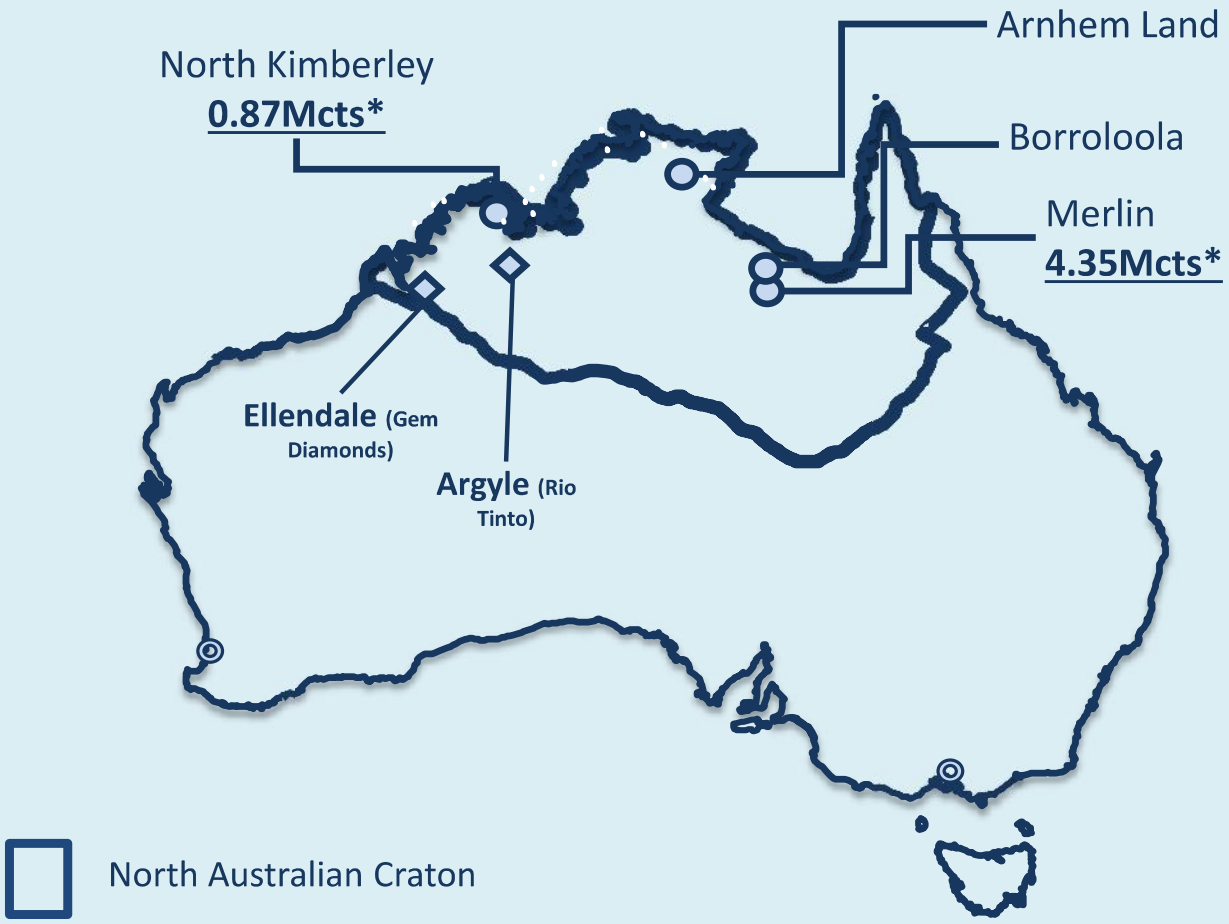
Largest diamond found in Australia 104.73cts


Merlin production examples

Merlin Project Areas

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Merlin Diamonds has secured substantial tenement holdings in the North Kimberley and Arnhem Land totaling approximately 22,000km²



Borroloola Project Areas:
Southern Cluster: PalSac, Launfal, Excalibur, Tristram
Central Cluster: Gawain, Ywain
Northern Cluster: Gareth, Kaye, Ector, Bedevere

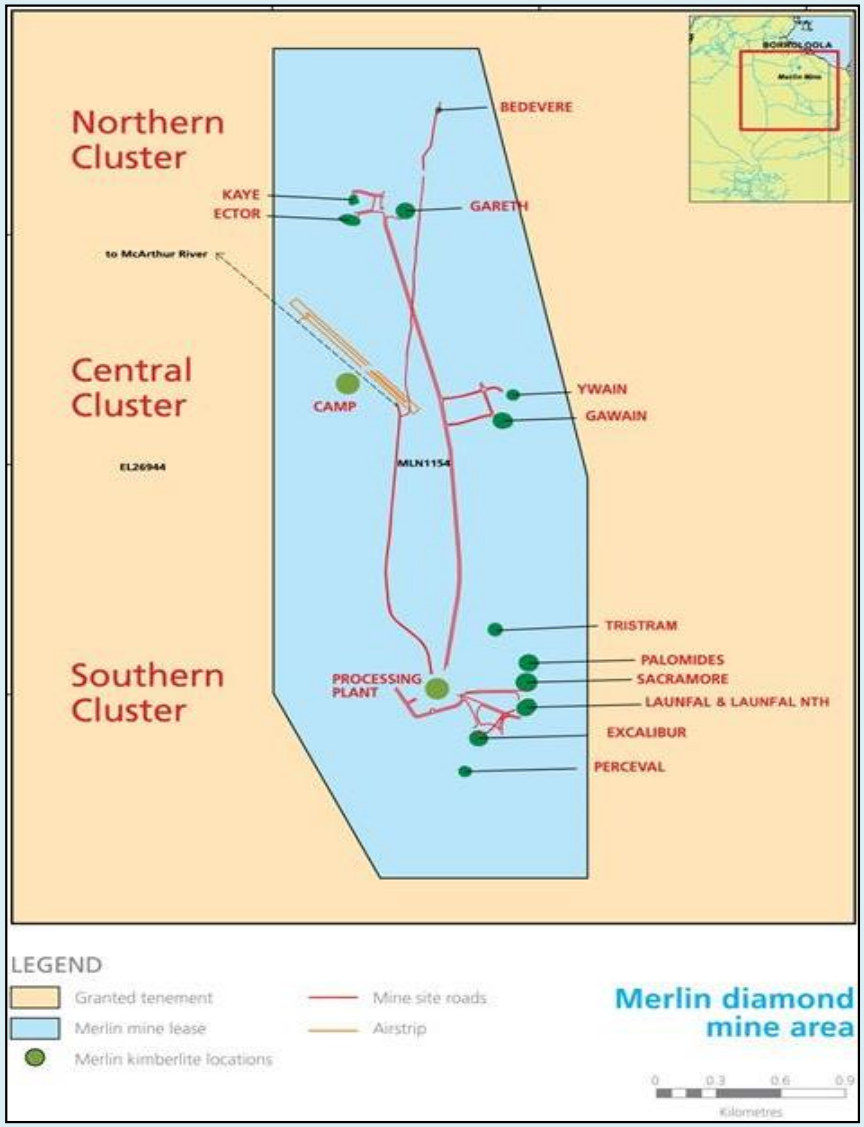
MERLIN ORBIT
Tintagel
Lancelot

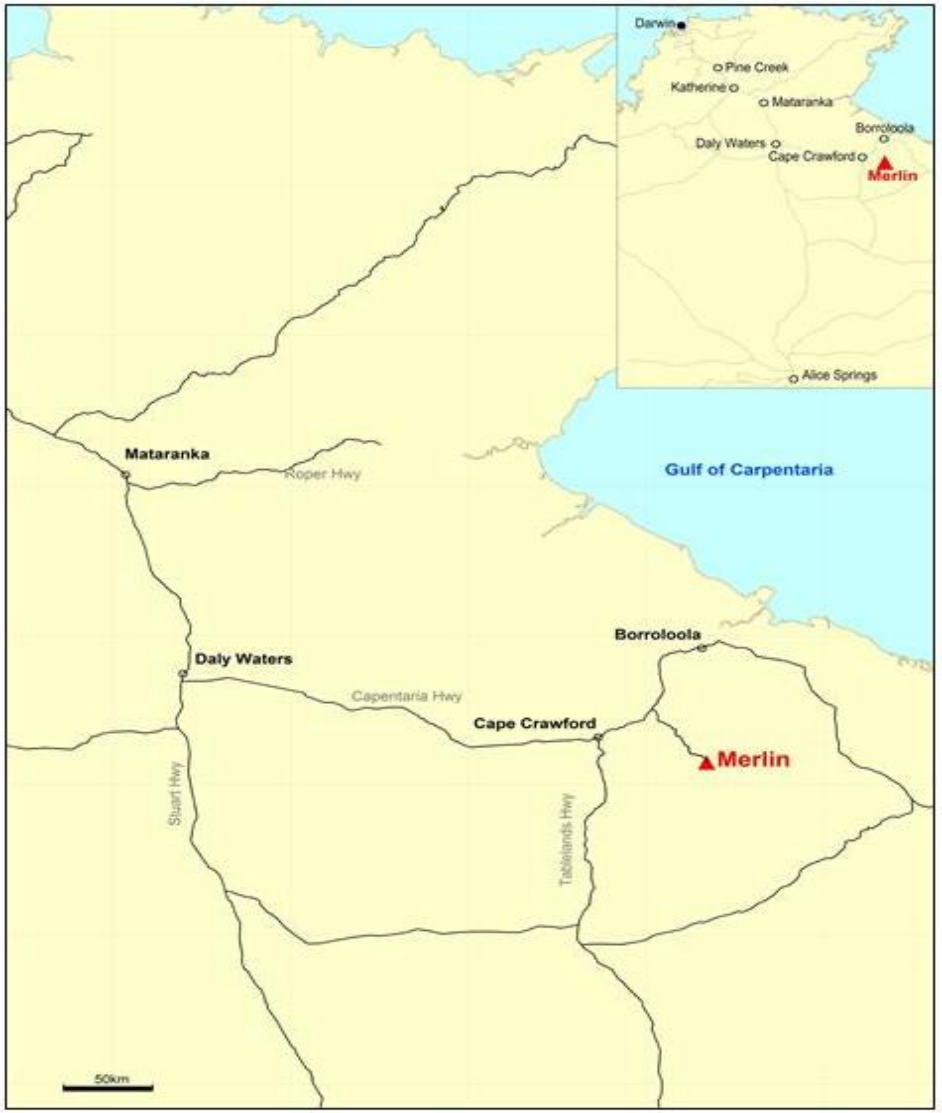
OTHER PROJECT AREAS
North Kimberley Seppelt 1 & 2 Ashmore
Arnhem Land

- Includes material classified as reserves and resources

Merlin Diamond Field Overview

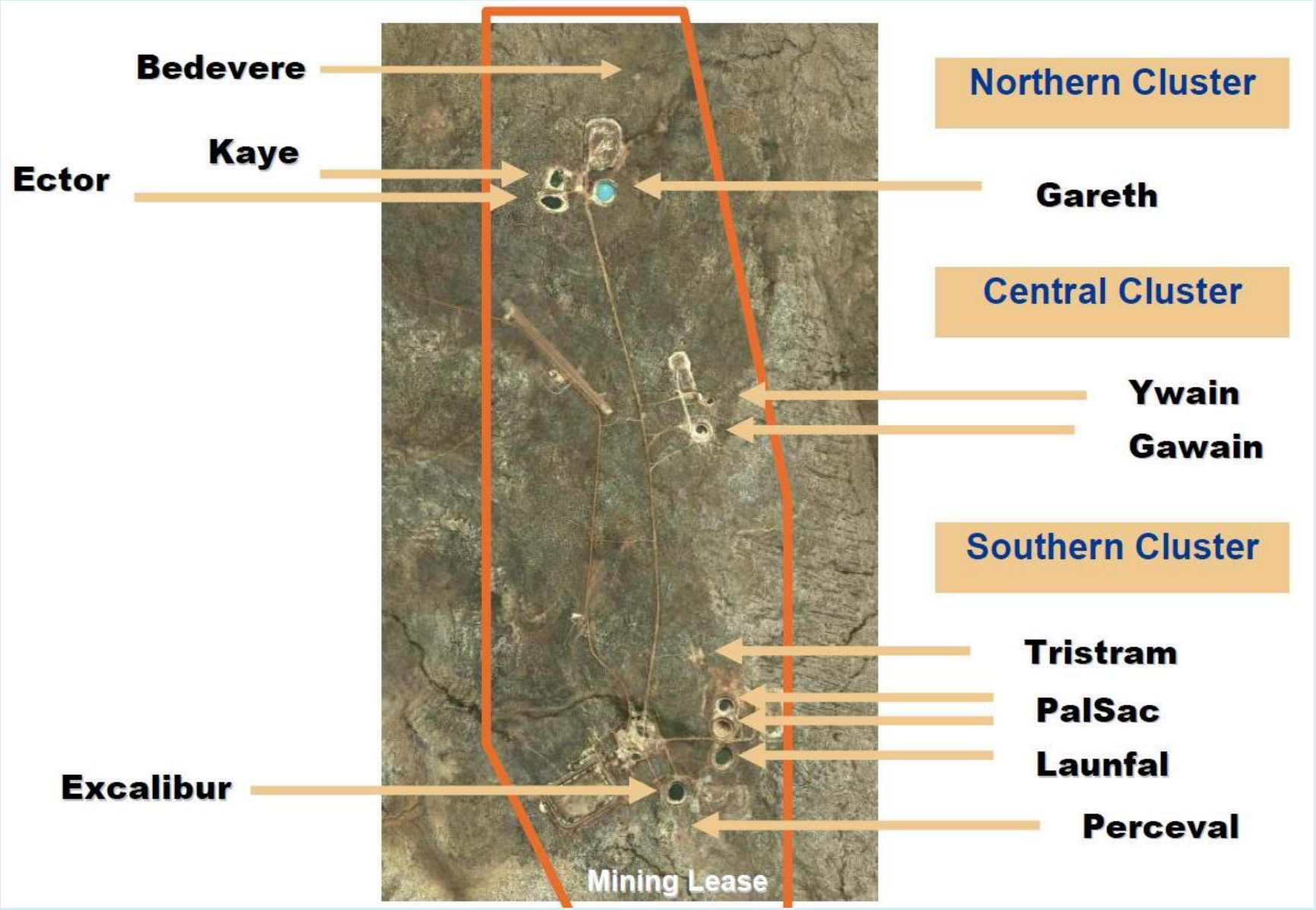
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Merlin Project Limited

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Merlin rough diamond production – super white colour



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Merlin cut and polished diamond production – whites and fancy yellow

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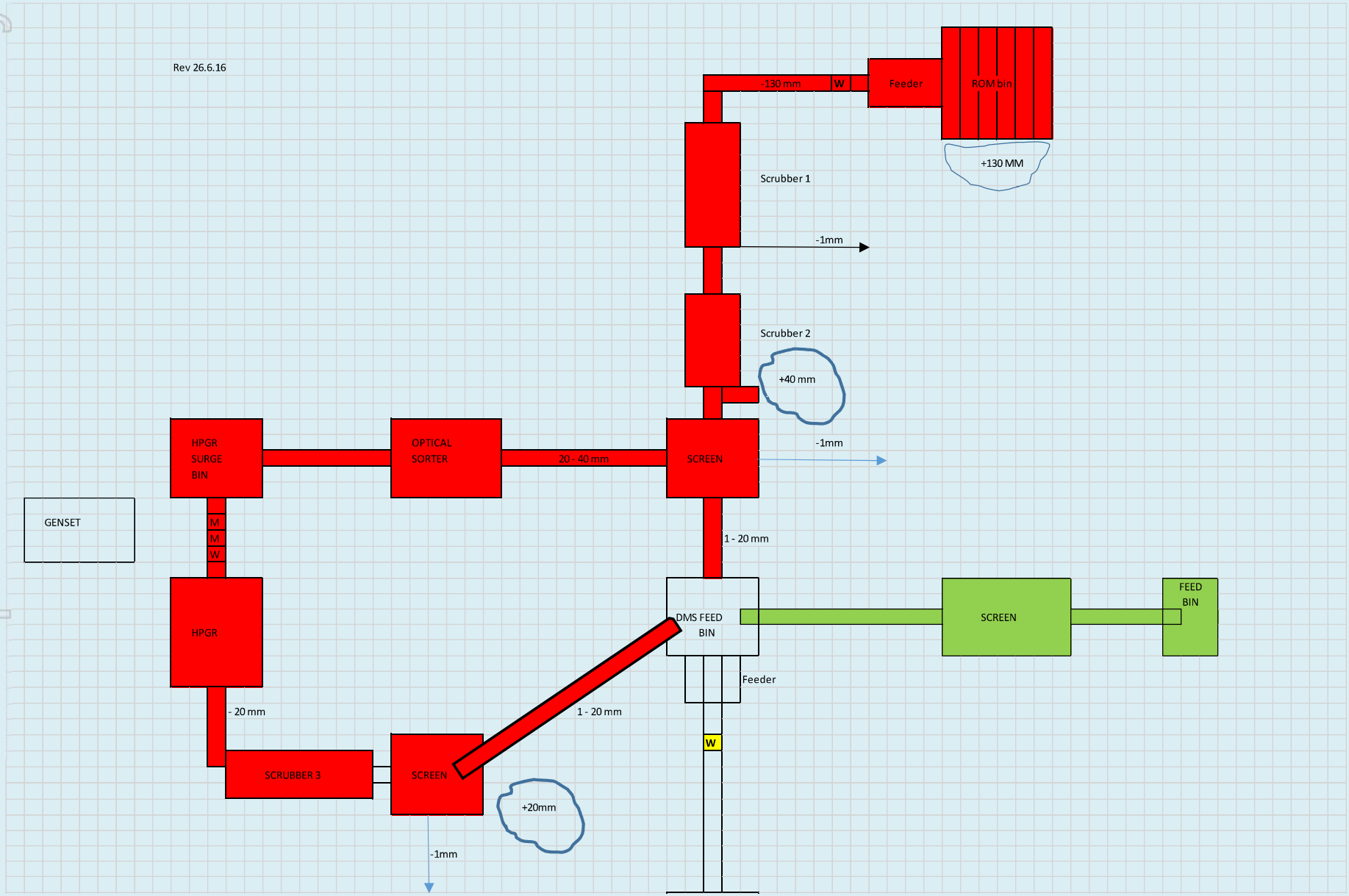
Village facilities



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Process – Flowsheet changes

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Mobile crushing and screening

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Process - Recovery



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Stockpiles

Trommel Oversize +40 mm – note weathering of kimberlite chert and sandstone content





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Stockpiles

	Tonnes	Grade	Carats	Material
Sacramore sample	200	20,0	40	Kimberlite
D + F	19 240	17,7	3 406	Grizzley
A1	34 515	13,5	4 659	Trommel
A2	49 620	13,5	6 698	Trommel
G	400	10,0	40	Trommel
Tailings Dam	14 832	8,6	1 271	Trommel
Subtotal	118 807	13,56	16 115	
B1	110 603	5,0	5 530	Trommel
C	12 743	5,0	637	Trommel
Subtotal	123 345	5,00	6 167	
Grand Total	242 152	9,20	22 282	

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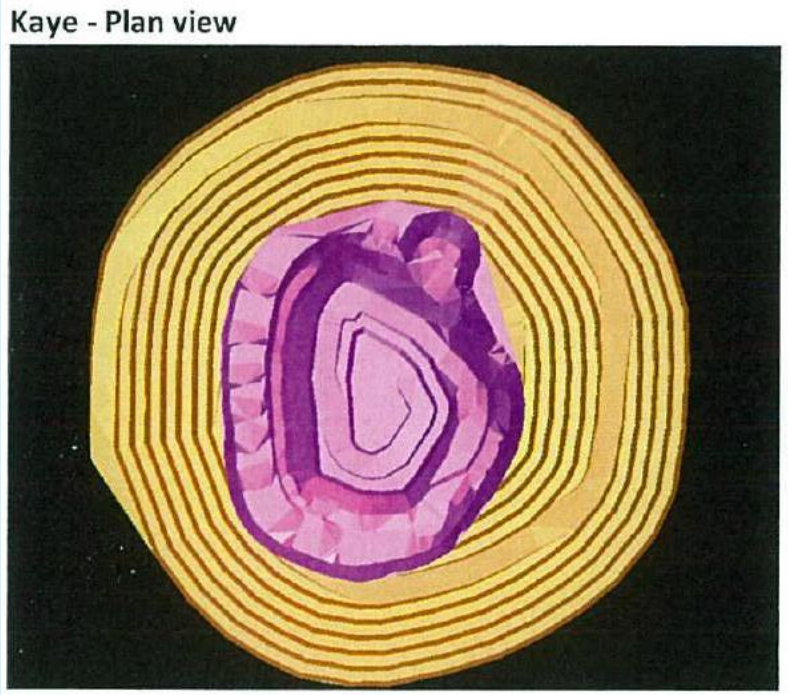
Pit Designs

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Full pit designs were only done on Kaye and Ector, using the revenue factor 1 shells as a guideline. The following design parameters were used:

Haul road width	12m
Haul road gradient	10%
Bench height	10m
Berm width	5m
Batter angle	75 degrees

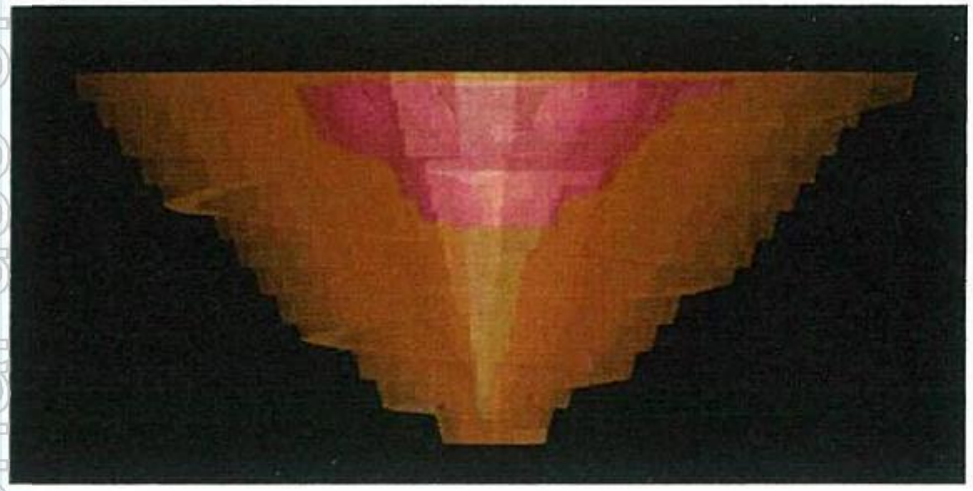
The designs are shown below with the final pits in brown and the starter pits in purple and green. The starter pits are based on completing the existing Kaye and Ector pits.



Pit Designs

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Kaye – Side view



Ector - Plan view



Merlin Mine - Exploration Targets

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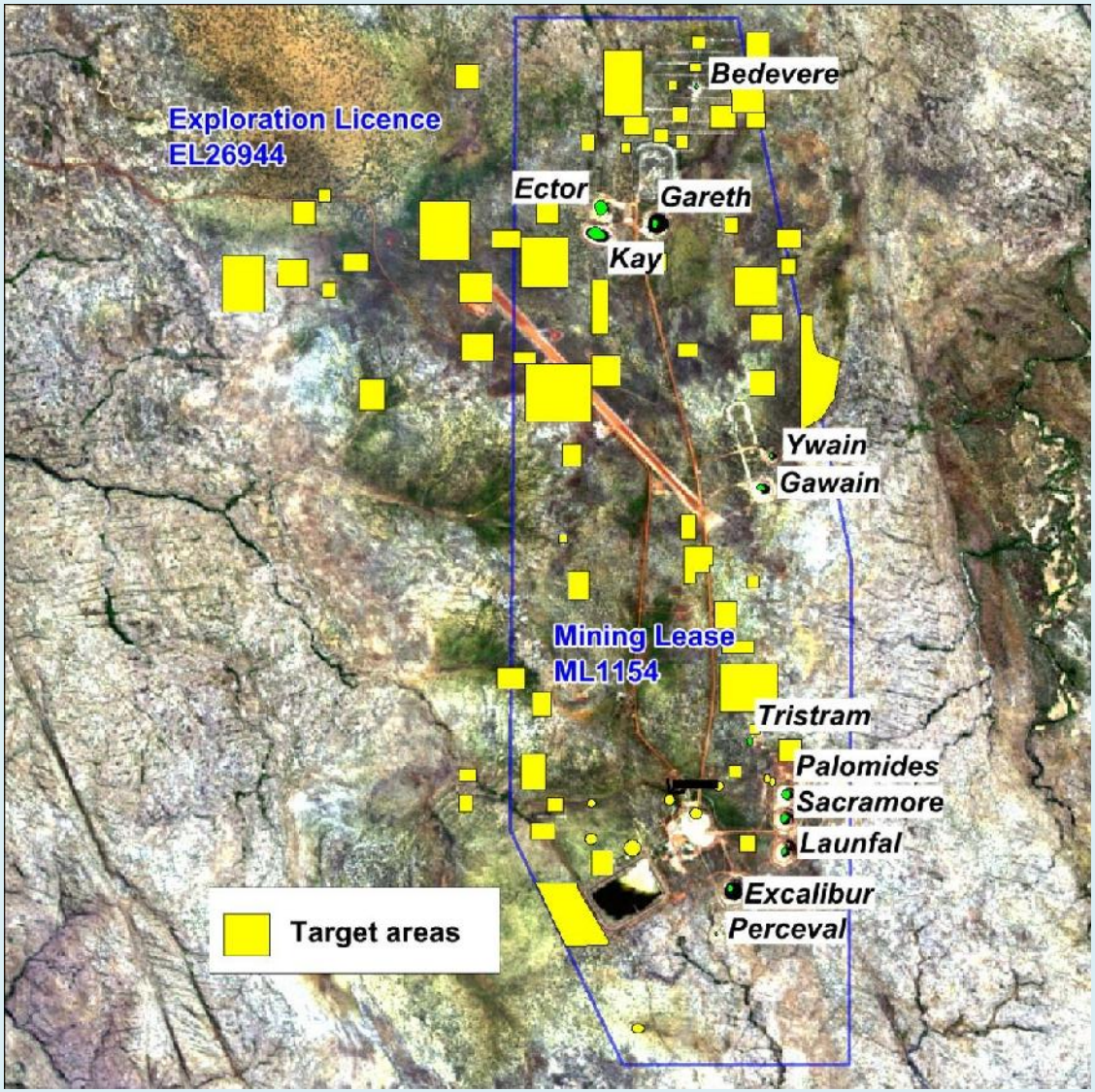
Rio Tinto's 1997 feasibility study on the Merlin Diamond Project made the following comments:

"Small pipes, such as Ywain, may be fairly common in the field..."

"There is some potential for significantly larger pipes...."

"...evidence indicates that the Merlin field is part of a broader kimberlite province."

" These factors (cretaceous cover, poor preservation of indicator minerals) while inhibiting the exploration effort, generally increase the possibility of other kimberlite fields and larger pipes to be present in the province."

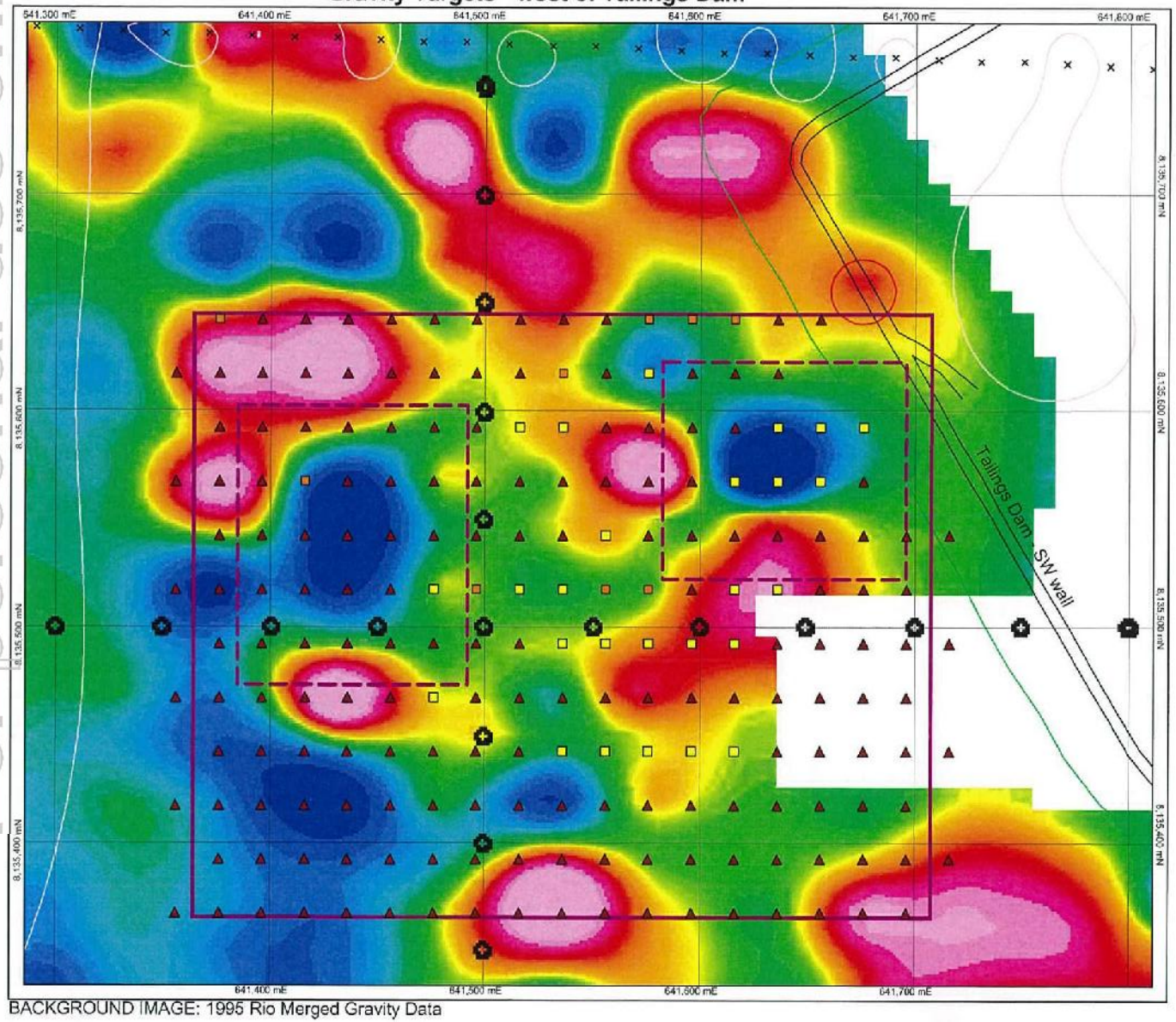


Merlin Mining lease priority exploration targets

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Merlin DIAMONDS

Map 1: MERLIN PROJECT - MerAn010 - EM34-3 Grid
Gravity Targets - west of Tailings Dam



LEGEND

× Ashton EM survey points

contours - Ashton EM data

EM34-3 grid area

gravity anomaly proposed by JW

MerAn010
Rocktypes
- Bukalara Sst
- ferricrete
- sand

BACKGROUND IMAGE: 1995 Rio Merged Gravity Data

DATUM - GDA94 zone 53
SCALE - 1 : 2,500

Contact Details

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