

#### DISCLAIMER

#### Cautionary statement - Reference to FS

This report refers to the Abra Base Metals Project ("Abra" or the "Project") Feasibility Study ("FS"). A summary of the FS and material assumptions was published by Galena Mining Ltd ("Galena") on 22 July 2019 (see ASX announcements platform).

Environmental approvals, mining tenements and approvals, other governmental factors and infrastructure requirements for selected mining methods and for transportation to market were not included as modifying factors for the Ore Reserve contained in this report as they were all analysed in detail and determined not to pose any practical or economic restriction to the selected mining and processing model. Furthermore, all other material assumptions (eg, with respect to financial assumptions, metallurgy, mineralogy and geotechnical etc.) that were made in the previously announced FS have not materially changed, continue to apply.

Process and engineering designs for Abra's FS were developed to support capital and operating estimates to an accuracy of ±10%. Key assumptions that the FS was based on (including those defined as Material Assumptions under ASX Listing Rule 5.9.1) are outlined in the ASX announcement of 22 July 2019 and its Appendix 1. Galena believes the production target, forecast financial information derived from that target and other forward-looking statements included in that announcement and this presentation are based on reasonable grounds.

A number of key steps need to be completed in order to bring Abra into production. Many of these steps are referred to in this announcement. Investors should note that if there are delays associated with completion of those steps, outcomes may not yield the expected results (including the timing and quantum of estimated revenues and cash flows).

The economic outcomes associated with the FS are based on certain assumptions made for commodity prices, concentrate treatment and recovery charges, exchange rates and other economic variables, which are not within the Company's control and subject to change from time to time. Changes in such assumptions may have a material impact on the economic outcomes (including the timing and quantum of estimated revenues and cash flows).

To develop the Project as per the assumptions set out in the FS will require additional capital. Investors should note that any failure to precure the required additional capital may result in a delay, change in nature and scale, or even suspension of the Project.

#### Cautionary statement – FS Mine Model

The mineralised material scheduled to be mined and processed in the FS ("FS Mine Model") includes a mix of material taken from Probable Ore Reserves (67%) and Inferred Mineral Resources (33%), with no reduction factor applied to the tonnes and grades of the Inferred Mineral Resources. Inferred Mineral Resources have a lower level of geological confidence and can't be included in the calculation of Ore Reserves, and there can be no guarantee that a Mineral Resource estimate update will convert Inferred Mineral Resources to Indicated Mineral Resources or return the same grade and tonnage distribution. This may affect mining studies and outcomes (including economic) from the FS.

At the time of publication of the FS, Galena was completing the 2019 project development drilling program and subsequent to that a further infill drilling program was completed in 2020. The results of the combined drilling programs subsequent to the FS provided confidence and validation to the Company in regard to the assumptions and geological models which underpin FS, and resulted in the completion of an updated Mineral Resource estimate (the "April 2021 Resource") where the total Resource was amended to 34.7Mt at 7.2% lead and 16g/t silver, including 16.9Mt of Indicated material at 7.4% lead and 17g/t silver. Based on the status of geological information, Galena believes it has a strong basis for inclusion of certain Inferred Mineral Resource material in the FS Mine Model (defined below) at this time and whilst remaining within feasibility study level tolerances. To further test its basis, Galena ran the FS financial model on a check scenario assuming a zero grade for any Inferred Mineral Resource material in the FS Mine Model and that produced a substantial positive NPV outcome.



#### **DISCLAIMER**

#### **Competent Person's statement**

The information in this report related to the Abra Ore Reserve is based on work completed by Mr Roger Bryant, BEng (Mining, Member AUSIMM). Mr Bryant was an employee of Galena Mining Ltd at the time the Ore Reserve was prepared. Mr Bryant 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 Bryant consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report related to the Abra April 2021 Resource is based on work completed by Mr Angelo Scopel BSc (Geol), MAIG, a fulltime employee of Galena Mining and Mr Mark Drabble B.App.Sci. (Geology), MAIG, MAusIMM, Principal Consultant at Optiro Pty Ltd. Mr Scopelwas responsible for data review and QAQC, and. Mr Drabble was responsible for the development of the geological model, resource estimation, classification and reporting. Mr Scopel and Mr Drabble have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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 Scopel and Mr Drabble consent to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report to which this statement is attached that relates to exploration results and drilling data is based upon information compiled by Mr Angelo Scopel BSc (Geol), MAIG, a fulltime employee of Galena Mining. Mr Scopel has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are 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 Scopel consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.



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#### Forward looking statements

The contents of this presentation reflect various technical and economic conditions at the time of writing. Given the nature of the resources industry, these conditions can change significantly over relatively short periods of time. Consequently, actual results may vary from those in this presentation.

Some statements in this presentation regarding estimates or future events are forward-looking statements. They include indications of, and guidance on, future earnings, cash flow, costs and financial performance. Forward-looking statements include, but are not limited to, statements preceded by words such as "planned", "expected", "projected", "estimated", "may", "Scheduled", "intends", "anticipates, "believes", "potential", "predict", "foresee", "proposed", "aim", "target", "opportunity", "could", "nominal", "conceptual" and similar expressions.

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# **GALENA MINING LAST TWO YEARS ACHIEVEMENTS**

#### **APR 19**

Agreement with Toho Zinc of Japan

\$90M milestone based equity investment for 40% ownership in Abra

# JUL 19 ABRAMINING Outstanding Abra

Outstanding Abra DFS delivered

16-year / 1.2mpta mine plan

\$553M NPV<sub>in</sub>/<sub>systemed</sub>
39% IRR respect to Study

#### **OCT 19**

10-year offtake agreement with IXM

Premium to benchmark

#### **JAN 20**

Box-cut mining commenced

Project enabling construction works also including camp and infrastructure

#### **AUG-DEC 20**

~25km final surface infill drilling

Including some of the best lead-silver holes ever at Abra

#### **NOV 20**

US\$110M of debt facilities executed with Taurus

#### **FEB 21**

First ever coppergold zone (below lead-silver Resource) drill-hole hits 26.9m at 1.4% copper

#### **APR 21**

Abra project 16% complete

Main project enabling construction works complete



### **AUSTRALIA'S NEXT BASE METALS PRODUCER**

- A high return Western Australian base metals project on the cusp of final investment decision
- Set to produce 95ktpa of lead and 805kozpa of silver after ramp-up at cash costs among the lowest of global primary lead producers (C1 direct cash cost US\$0.44/lb)<sup>1</sup>
- Funded to production through combination of:
  - Existing cash resources: \$26.3M as at 31 March 2021
  - Remaining funding under Toho agreement: \$40M
  - Taurus debt facilities: ~\$143M (A\$ equivalent of US\$110M facilities)
- Large Mineral Resource backed by >100km of drilling 34.5Mt at 7.2% lead and 16g/t silver, open to the east, southeast, northwest and down dip<sup>2</sup>
- Growing zone of copper and gold mineralisation present below the lead-silver Resource
- Additional 100%-owned 76km of greenfields exploration tenements with multiple advanced prospects for copper, lead, zinc and gold

Notes: 1. Source: FS (see Galena ASX announcement of 22 July 2019). No reduction factor has been applied to the tonnes and grades of the Inferred Mineral Resources. Inferred Mineral Resources have a lower level of geological confidence and can't be included in the calculation of Ore Reserves, and there can be no guarantee that a Mineral Resource estimate update will convert Inferred Mineral Resources to Indicated Mineral Resources or return the same grade and tonnage distribution. This may affect mining studies and outcomes (including economic) from the FS. 2. See Galena ASX announcement of 28 April 2021.



# **CAPITALISATION**

#### **Capitalisation summary**

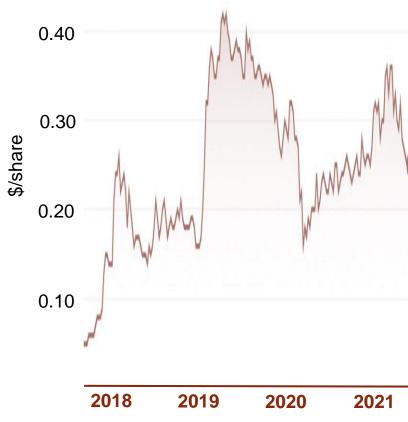
Ordinary shares on issue (ASX: G1A)	462.9M
Options / rights on issue <sup>1,2,3</sup>	33.3M
Share price (21 May 2021)	\$0.25/share
Market Capitalisation	\$115.7M
Cash balance (31 March 2021)	\$26.3M
Debt – US\$110M of undrawn Taurus debt facilities plus US\$3M of undrawn advance payment facility from IXM	Nil

#### **Analyst coverage**

Euroz-Hartleys	Mike Millikan
Petra Capital	Hugh Stackpool

Notes: 1. Options issued to employees and management of 10.75m having an exercise price of \$0.08 and expiry date of 30 June 2021, 1.25m having an exercise price of \$0.50 and expiry date of 26 March 2023, 1.25m having an exercise price of \$0.60 and expiry date of 26 March 2023, 1.25m having an exercise price of \$0.50 and expiry date of 17 April 2023 and 1.25m having an exercise price of \$0.60 and expiry date of 17 April 2023. 2. 13.5m contingent performance rights for CEO and CFO. 3. 4.09m employee share appreciation rights.

#### **ASX: G1A (since IPO)**



Source: www.asx.com.au



# **BOARD AND MANAGEMENT**



Adrian Byass
Non-Executive Chairman
Geologist and Economist
Mine development and board
experience



Tony James
Non-Executive Director
Senior Mining Engineer
Midcap ASX mining company
CEO and underground mine
development experience



Stewart Howe
Non-Executive Director
Mining Engineer and Finance
Global lead industry and large
cap ASX mining company
senior executive experience



Geologist
Geology, mine development,
capital markets and board
experience

**Jonathan Downes** 

Non-Executive Director



Alexander Molyneux
Managing Director / CEO
Mining Executive and Financer
Mid cap ASX mining CEO,
mine development and
corporate finance experience



CFO
Chartered Accountant
Public company CFO, project
financing, with joint-venture
and treasury experience



Troy Flannery

CEO, Abra Mining JV

Mining Engineer

Extensive underground mining and underground mine development experience



Peter Stregas
Abra GM
Mining Engineer
Experienced underground
mine manager and site GM

# **ABRA: LOCATION AND LOGISTICS**

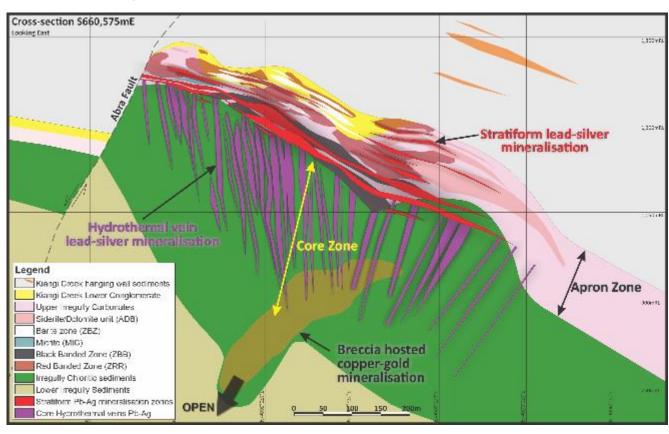


- In Gascoyne region of Western Australia Approximately 110km from Sandfire Resources' DeGrussa Copper Mine
- Granted mining lease, with all major permits and native title arrangements concluded
- Well serviced by existing Shire maintained roads
- Lead concentrate product to be trucked via public roads to the Port of Geraldton
- Port of Geraldton has all permits and infrastructure required to handle lead sulphide concentrates and is a current handler of third-party (Golden Grove) similar product

Port of Geraldton – Export port for Abra

# **ABRA: MINERALISATION MODEL**

Overlying stratiform mineralisation, known as the "Apron Zone" is largely galena-rich (ie, lead and silver), fed by mineralised breccia and vein zones called the "Core Zone" – Core Zone grades from lead-silver dominant upper levels to copper-gold at depth



- Sediments deposited in a basin setting and deformed with large scale folding and faulting
- Hydrothermal fluids carrying lead, silver, zinc, copper and gold have risen through breccia and fault zones
- Mineralised fluids have risen to a sedimentary boundary and have 'mushroomed' sideways settling in preferential (dolomitic) units



# **ABRA: LEAD-BEARING GALENA MINERALISATION**

**Massive mineralisation in Core Zone** 



**Strata from Apron Zone** 





# **ABRA: MINERAL RESOURCE**

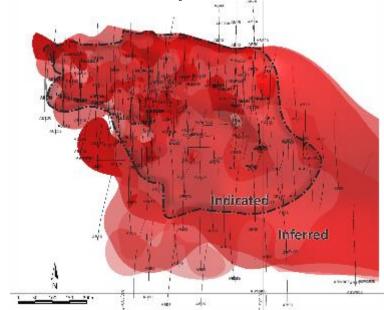
JORC Mineral Resource estimate (April 2021 Resource) at a 5% lead cut-off grade <sup>1</sup>				
Resource classification	Tonnes (Mt)	<u>Lead grade (%)</u>	Silver grade (g/t)	
Measured	-	-	-	
Indicated	16.9	7.4	17	
Inferred	17.5	7.0	15	
Total	34.5	7.2	16	

Notes: 1. Calculated using ordinary kriging method and a 5.0% lead cut-off grade. Tonnages are rounded to the nearest 100,000t, lead grades to one decimal place and silver to the nearest gram. Rounding errors may occur when using the above figures. For more detail please see Galena ASX announcement of 28 April 2021.

#### Resource based on 205 drill-holes

- 103.2km of cumulative linear drilling
- Two-thirds of the database made up of new drill-holes from 2017-2020
- Independently prepared by Optiro

#### Plan view of Abra April 2021 Resource





# **ABRA: MINERAL RESOURCE 3D IMAGE**

High-grade strata-bound (Apron Zone)

High-grade vein (Core Zone)

Looking east

Abra April 2021 Resource at 5% lead cut-off – Apron Zone and Core Zone shapes Eiffel Tower for reference (300m)

# **ABRA: METALLURGY & "IN DEMAND" PRODUCT**

- Conventional crushing, grinding, flotation and filtration
- Metallurgical testing confirms high (93-95%) recoveries into high-value, high-grade concentrate
- Concentrate product expected to be the highest grade primary lead concentrate available globally – 75% lead and ~200g/t silver
- 40% of offtake committed to Toho at benchmark terms under Abra joint-venture Investment Agreement
- Remaining 60% offtake sold by Galena to IXM (10-year contract) at a premium to benchmark:
  - Galena to procure material from Abra at benchmark and on-sell to IXM
  - Premium will create incremental cash flows at Galena level

#### Rendering of proposed plant



Source: GRES.

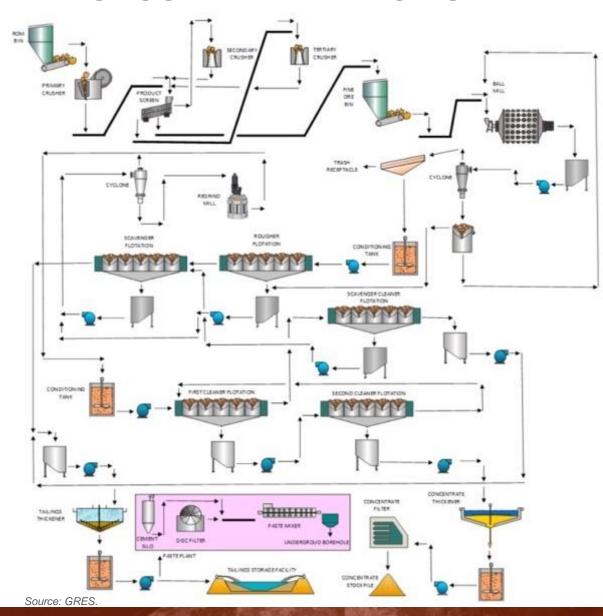
#### Rendering of proposed flotation circuit



Source: GRES



# **ABRA: PROPOSED PLANT FLOWSHEET**



- Simple conventional sulphide base metals processing flowsheet
- Potential for future expansion and / or use for copper-bearing primary sulphide minerals
- GRES awarded EPC contract for plant and ancillary infrastructure under a guaranteed maximum price arrangement

### ABRA: KEY DEVELOPMENT PARAMETERS

FS outcomes – Production metrics <sup>1</sup>	
Mill throughput	1.2Mtpa
Initial mine life	16-years
Average LOM lead metal production	95ktpa
Average LOM silver metal production	805kozpa
Lead C1 direct cash cost	A\$0.63/lb / US\$0.44/lb

FS outcomes – Capital investment and project economics <sup>1</sup>		
Pre-production capital	\$170m	
Steady-state average EBITDA (yrs 3-15)	\$114m	
Project payback from commercial production	2-years	
Pre-tax NPV (8% discount rate)	\$553M	
Pre-tax IRR	39%	

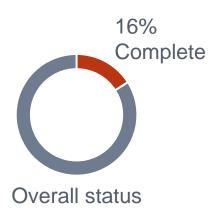
- FS assumptions are 'spot' as at 18 July 2019 and include: lead price US\$0.92/lb; silver price US\$16.00/oz, exchange rate of A\$1=US\$0.70 and lead treatment charge of US\$96/t of concentrate
- Post-tax NPV (8% discount rate) of \$381M and post-tax IRR of 32%
- World's lowest cost primary lead mine (source: Wood Mackenzie)
- FS assumes product sold at benchmark terms, ie, does not include premium enjoyed by Galena under IXM offtake arrangement

Notes: 1. Source: FS (see Galena ASX announcement of 22 July 2019). No reduction factor has been applied to the tonnes and grades of the Inferred Mineral Resources. Inferred Mineral Resources have a lower level of geological confidence and can't be included in the calculation of Ore Reserves, and there can be no guarantee that a Mineral Resource estimate update will convert Inferred Mineral Resources to Indicated Mineral Resources or return the same grade and tonnage distribution. This may affect mining studies and outcomes (including economic) from the FS. 2. See Galena ASX announcement of 28 April 2021.



# **ABRA: DEVELOPMENT PROGRESS**

#### **Project completion**











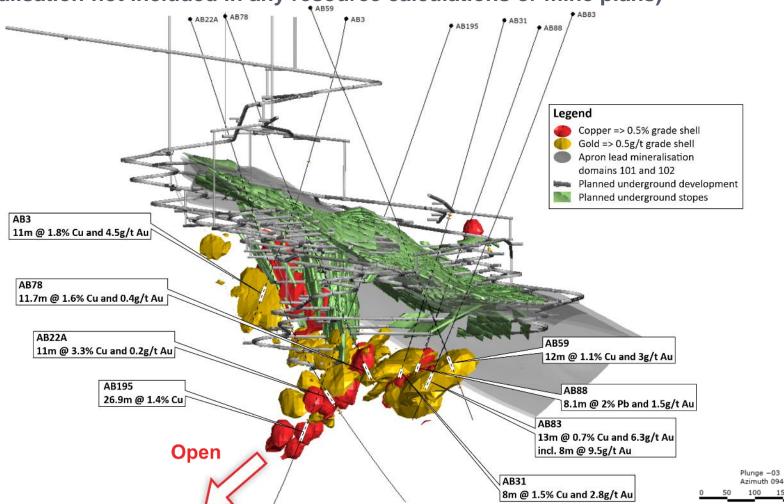
# **ABRA: UPCOMING MILESTONES**

- Initial US\$20-30M drawdown under US\$110M of project debt facilities
  - Facilitates continued project construction works
  - Drawdown is a 3-4 week process so drawdown to be initiated in advance of final investment decision
- Conclusion of conditions on conditional tranche of project debt facilities
  - Drawdown amounts in excess of US\$30M remain conditional on the update of the cash flow model incorporating the 2020 infill drilling – Updated mine planning to support this commenced following the late-April conclusion of the April 2021 Resource
- Receipt of final \$40M investment tranche from Toho Triggered by conclusion of conditions on conditional tranche of project debt
- Final investment decision
  - Commencement of plant procurement and construction under GRES EPC contract
  - Deployment of underground mining contractor to initiate the mine portal and decline development
- Abra project optimisation initiatives Ongoing mine plan optimisation works
- Continued exploration and resource development
  - Results from recent downhole electromagnetic survey conducted on drill-hole AB195, the first hole drilled to specifically target the copper and gold zone at Abra
  - Exploration works on the targets nearby Abra



### **EXPLORATION: GOLD & COPPER AT ABRA**

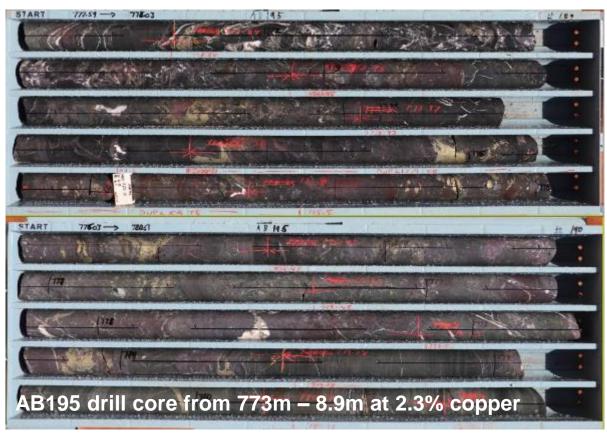
Emerging gold and copper zone (wireframes of copper (>0.5%) and gold (>0.5g/t) mineralisation not included in any resource calculations or mine plans)





#### **EXPLORATION: GOLD & COPPER AT ABRA**

First ever hole specifically targeting copper and gold zone, drill-hole AB195 provided assay results in February 2021 – Multiple copper and gold intersections



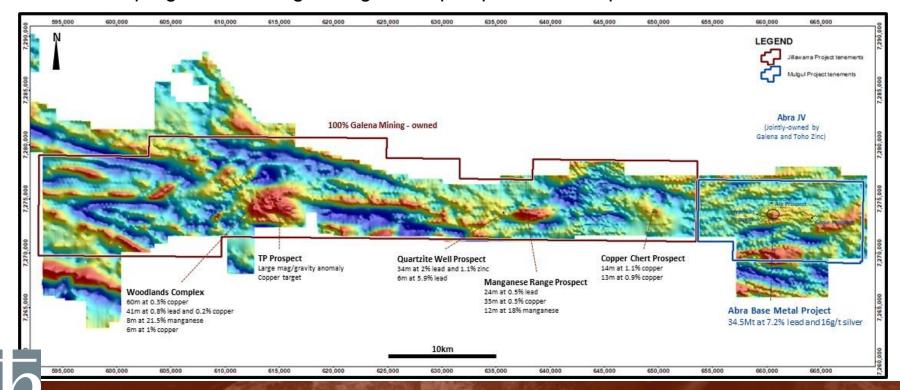
- AB195 returned 26.9m at 1.4% copper from 763.8m down-hole, including 8.9m at 2.3% copper from 773.0m
- Significant intersection occurred within 45m of visual intermittent massive and disseminated chalcopyrite mineralisation from 752m
- Other results in AB195 included: 3.0m at 4.2g/t gold and 1.1% copper from 670.7m, and 2.0m at 6.9% copper from 698.1m
- Results are pending from a follow-up down-hole EM survey conducted on the hole



### **EXPLORATION: PROSPECTS ALONG STRIKE**

Galena 100% owns >76km of licences along strike to the west of Abra, known to contain large coincident magnetic and gravity anomalies (similar to Abra)

- Abra was discovered as a coincident magnetic and gravity anomaly south of the QW Fault
- Galena tenements include two large-scale coincident magnetic and gravity anomalies along strike on the QW Fault
- 2021 work program including drilling at two prospects to take place from Q3 2021





# \$90M TOHO JOINT-VENTURE INVESTMENT



- Definitive agreements entered into with Toho Zinc (TYO: 5707) of Japan (12 April 2019) for investment of \$90M in tranches into Abra holding company, Abra Mining Pty Limited (AMPL)
- \$50M already received, with the remaining \$40M to be received once the conditional tranche of the project debt facilities becomes unconditional
- Toho now owns 22.72% of AMPL (Galena retains 77.28%) but eventual ownership will be 40% (Toho) and 60% (Galena) once Toho's remaining investment tranche is paid
- Toho Zinc is a large-scale lead and zinc smelting company and experienced miner In 2010 Toho acquired publicly-listed Australian lead and zinc mining company, CBH Resources Limited and continues to operate its Rasp and Endeavor mines in New South Wales
- Toho entered into an offtake to purchase 40% of Abra's product on 'arms length' benchmark terms
- Galena to retain 60% of AMPL and appoint majority of board members to joint-venture board





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