



## ASX ANNOUNCEMENT

29 October 2019

ASX: G1A

### ACTIVITIES REPORT FOR QUARTER ENDED 30 SEPTEMBER 2019

#### HIGHLIGHTS:

- Delivered outstanding FS for Abra
  - 16-year mine life producing a high-value, high-grade lead-silver concentrate containing 95ktpa of lead and 805kozpa of silver after ramp-up
  - Outstanding economics, with pre-tax NPV of A\$553M at spot prices
  - C1 direct cash cost to be among the lowest for global primary lead producers at US\$0.44/lb
  - Estimated pre-production capital expenditure of A\$170M
- Mining-experienced bank appointed to lead the project financing debt arrangement with 10 additional banks signing non-disclosure agreements to receive detailed information on the Project
- Finalisation of all necessary major permits for Abra
- Second \$10M tranche received from Toho increasing their interest in AMPL to 13.33% with Galena retaining 86.67%
- Warburton (an associated entity of Tim Roberts) purchased an additional 30,400,000 shares from certain individual shareholders increasing Tim Roberts' beneficial interest in Galena to 14.7%
- Additional high-grade assay results received as Abra's project development drilling program successfully concluded with a total of 43 diamond core drill-holes (18,255 metres) completed between April and August 2019
- Commencement of surface infrastructure construction at the Project

**GALENA MINING LTD.** ("Galena" or the "Company") (ASX: G1A) reports on its activities for the quarter ending 30 September 2019 (the "Quarter"), largely focused on advancing its 86.67%-owned Abra Base Metals Project ("Abra" or the "Project") located in the Gascoyne region of Western Australia.

## ABRA BASE METALS PROJECT (86.67%)

Abra comprises a granted Mining Lease, M52/0776 and is surrounded by the Exploration Licence E52/1455, together with several co-located General Purpose and Miscellaneous Leases. The Project is 100% owned by Abra Mining Pty Limited (“**AMPL**”), which in turn is currently 86.67% owned by Galena, with the remainder owned by Toho Zinc Co., Ltd. (“**Toho**”) (pursuant to an Investment Agreement and Shareholders Agreement with Toho).

### Definitive / bankable feasibility study (“**FS**”)

An outstanding FS was completed for the Project in July 2019. The FS envisages development of a mine and processing facility with a 16-year life producing a high-value, high-grade lead-silver concentrate containing approximately 95kt of lead and 805koz of silver per year after ramp-up. Based on a pre-development capital expenditure estimate of A\$170 million, the PFS modelled a pre-tax net present value for Abra (at an 8% discount rate) of A\$553 million and an internal rate of return of 39%. Abra has also received all major permits for construction, resolved an agreement with native title holders and commenced construction of site infrastructure.

The FS confirmed technical feasibility with low risk and strong projected economic returns for the development of the Project as a combined underground mine and conventional flotation concentrator to produce a high-value, high-grade lead-silver concentrate.

### Key FS outcomes – Production metrics

	Annual <sup>1</sup>	LOM
Mill throughput <sup>2</sup>	1.2Mt	16.3Mt
Diluted mined ore grade:		
- Lead		8.1%
- Silver		20.2g/t
Life of mine (“ <b>LOM</b> ”)		16-years
LOM recoveries:		
- Lead		94%
- Silver		94%
Production (metal in concentrate):		
- Lead	95kt	1.24Mt
- Silver	805koz	10.6Moz
High-value lead-silver concentrate grade:		
- Lead		75%
- Silver		200g/t

Notes: 1. Average of steady-state years 3-15. 2. 67% of the FS Mine Model is included within Probable Ore Reserves and the remainder is currently included in Inferred Mineral Resources, 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 update will convert Inferred Mineral Resources material into Indicated Mineral Resources or return the same grade and tonnage distribution.

## Key FS outcomes – Capital investment, operating cost and assumptions

	LOM
<u>Capital investment assumptions</u>	
Pre-production capital expenditure <sup>1</sup>	A\$169.6M
Construction period	15-months
<u>Operating cost</u>	
Lead C1 direct cash cost of production <sup>2</sup>	US\$0.44/lb (A\$0.63/lb)
<u>Financial assumptions and Project economics</u>	
Metal payability <sup>3</sup>	95%
Lead metal price	US\$0.92/lb
Silver metal price	US\$16.00/oz
Lead treatment charge	US\$96/t conc.
Exchange rate – US\$ per A\$1	0.70

Notes: 1. Including A\$7.7M of contingency, A\$15.0M of EPCM and A\$15.8M of owners and indirect costs. 2. Includes a by-product credit for net silver revenue of US\$0.04/lb (A\$0.06/lb). 3. Subject to standard deductions (i.e., 3 units for lead and 50g/t for silver).

## Key FS outcomes – Project economics

	LOM
Pre-tax net present value (“NPV”) (8% discount rate)	A\$553M
Pre-tax internal rate of return (“IRR”)	39%
Payback (from first full year of commercial production)	2-years
Post-tax NPV (8% discount rate) <sup>1</sup>	A\$381M
Post-tax IRR <sup>1</sup>	32%

Notes: 1. Calculated assuming AMPL available tax losses of A\$42M as at the commencement of project implementation and the inclusion of an A\$106M project financing loan (5-year tenor and 3.25% interest margin) as part of the overall project funding package.

## Project development drilling

On 22 March 2019, Galena announced commencement of an initial project development drilling program at Abra, which the Company considers a major advancement of the Project. The drilling involved decline positioning, water bores and additional infill holes associated with early production horizons.

During the Quarter, project development drilling was successfully concluded with a total of 43 drill-holes for 18,255 cumulative linear metres and 4,094 half core samples. All the assay results have been received with some of the most significant intercepts announced on 14 August 2019 (see *Galena ASX announcement*). The remaining most significant intercepts for the Quarter are listed below:

- 4.1m at 10.8% lead and 19g/t silver from 353.1m in AB132A;
- 4.53m at 6.3% lead and 11.3g/t silver from 332.8m in AB134;
- 7.8m at 6.2% lead and 2.2g/t silver from 402.74m in AB135;
- 7.7m at 5.9% lead and 9g/t silver from 415.16m in AB136;
- 7.1m at 9% lead and 11g/t silver from 364.11m in AB137;
- 9.2m at 8.2% lead and 11g/t silver from 362.02 in AB139;
- 11.1m at 7.7% lead and 18.2g/t silver from 349.78m in AB141A;

- 11.2m at 11.4% lead and 14g/t silver from 364.97m in AB141A;
- 6.8m at 8.2% lead and 13.9g/t silver from 384.69m in AB141A;
- 4.2m at 7.1% lead and 9g/t silver from 426.91m in AB141A;
- 5.3m at 10.8% lead and 50.6g/t silver from 402.54m in AB142;
- 8.6m at 10.9% lead and 27g/t silver from 360.71m in AB143.

Subsequent to the end of the Quarter an upgraded Mineral Resource estimate for Abra was completed incorporating the new drilling information (see *Galena ASX announcement of 17 October 2019*). The company is currently updating the Ore Reserves which will be announced in the December Quarter.

#### Project construction / development

During the Quarter, construction of Abra surface infrastructure commenced, including the following:

- Site clearing and roadworks – Topsoil clearing and storage, ground preparation at the permanent camp site and various site and access roadworks.
- Water supply and wastewater treatment facility – Equipping the previously drilled and prepared water production bores with pumps and constructing pipelines, together with construction and connection of wastewater treatment facilities.
- Permanent camp construction – Deployment to Abra and on-site assembly of the initial 80-person accommodation units of the permanent camp along with the final camp sized kitchen and messing facilities (all of which were previously purchased and have now been fabricated by the supplier and are ready for transportation and installation), together with on-site civil works and connection to services.

The combined works initiated are included in the FS construction plan at an estimated cost of approximately \$15 million (i.e., approximately 9% of the total estimated pre-development capital expenditure).

Moving forward with a major surface infrastructure development program early has been made possible by a combination of Galena's strong availability of equity funds and good progress being made with respect to the project financing debt process.

Selected recent photos of construction works at Abra site

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Paddock dumping material in the camp area



Conditioning material in the camp area



Conditioning material in the camp area



Loading the road train in the land fill area



Maintaining OMC on the fill material



Equipment on the go line



Selected recent photos of construction works at Abra site (continued)

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Dozer pushing up fill material



Fill material being placed in the fill



Other project development activities conducted during the Quarter, included:

- Further engineering works – Further final design and value engineering works continued following on from the outstanding FS.
- Scoping and negotiation of key contracts – Various tenders, discussions and negotiations regarding the key development contracts (i.e., Engineering Construction and Procurement contract for the plant and associated infrastructure, and the underground mining contract).
- Recruitment – Key personnel continued to be recruited including a Safety Manager and two Site Supervisors.

Final permitting

During the Quarter, Abra received the following major approvals:

- The Western Australian Department of Mines, Industry Regulation and Safety (“**DMIRS**”) for the Mining Proposal, Mine Closure Plan and Native Vegetation Clearing Permit.
- The Western Australian Department of Water and Environment Regulation (“**DWER**”) Works Approval for the processing plant and tailings storage facility.
- Approval by the State Mining Engineer for the Abra Project Management Plan.
- Dangerous Goods licence.

Together with the previously received DWER Works Approval for the mine (see Galena announcement of 3 January 2019), the approvals received during the Quarter constitute all the major approvals required for construction, mining and production at Abra.

### Commercial initiatives in support of Abra development – Toho Transaction

Prior to the Quarter, Galena executed definitive agreements with Toho setting out the terms for Toho's investment of \$90 million in three tranches for a 40% ownership interest in Galena's previously wholly-owned subsidiary, AMPL (the "**Toho Transaction**"). Key relevant terms of the Toho Transaction include:

- Investment and investment structure – \$90 million total investment to be made via the subscription of new ordinary shares in AMPL such that Toho owns 40% of AMPL on completion of the full investment and Galena retains 60%.
- Tranched payment – \$20 million will be paid on initial closing of the transaction (for 8.89% of AMPL); \$10 million will be paid once Galena issues the DFS for Abra (for a further 4.44% of AMPL); and \$60 million will be paid once project financing debt for the Project has been confirmed (for a further 26.67% of AMPL, taking Toho's total ownership in AMPL to 40.00%).
- Toho funding support – Toho will assist AMPL to procure, by leveraging the attractive programmes available to it from its relationships with Japanese lenders, a contribution to project financing debt.
- Repayment of historical shareholder loans to Galena – As part of the Transaction, AMPL will repay \$10 million of historical shareholder loans back to Galena.
- Off-take –Galena and Toho will each enter into off-take agreements with AMPL to purchase their respective share of AMPL's high-grade high-value lead-silver concentrate on arms-length, benchmark terms. Each party will have rights to market and on-sell their respective share of purchased off-take.

During the Quarter the second \$10 million tranche was received from Toho, taking the total investment received from Toho to date to \$30 million. Upon receipt of the second investment tranche, Toho's interest in AMPL increased to 13.33%, with Galena retaining 86.67%.

### Commercial initiatives in support of Abra development – bank financing

During the Quarter, a mining-experienced bank was retained to lead the project financing debt arrangement. Under the guidance of that bank, an independent technical expert ("**ITE**") commenced technical due diligence on behalf of the banks. An additional 10 banks signed non-disclosure agreements to receive detailed information on the Project to enable them to enter into detailed discussions regarding the proposed financing, which are now ongoing.

### Near-Project exploration

There were no material near-Project exploration activities completed during the Quarter.

### **NON-ABRA PROSPECTS**

Galena's non-Abra prospects consist of Woodlands, Manganese Range and Quartzite Well, which are located between approximately 20-50 kilometres or further to the west of Abra and reside within three granted Exploration Licences, being: E52/1413; E52/3575 and E52/3630.

There were no material non-Abra exploration activities completed during the Quarter.

## CORPORATE

### Tim Roberts / Warburton increased stake in Galena to 14.7%

On 9 September 2019, Galena announced that Warburton Portfolio Pty Ltd (“**Warburton**”) purchased 30,400,000 shares from certain individual shareholders. Being an associated entity of Tim Roberts, the effect of the Warburton share purchase was to increase Tim Roberts’ beneficial interest in the Company to 14.7%.

### Offtake

During the Quarter, the Company continued to negotiate offtake arrangements for the 60% of Abra’s production not already ‘earmarked’ for Toho. Such negotiations concluded subsequent to the Quarter end with Galena announcing its entry into an offtake contract to sell 65ktpa of high-grade, high-value lead-silver concentrate to a tier one international trading firm, IXM S.A. for 10-years (see Galena ASX announcement of 24 October 2019).

## OUTLOOK

### Cash position

As at the end of the Quarter, the Company, together with its subsidiaries had approximately \$33.5 million in cash comprised of cash at bank and term deposit balances.

### Outlook

Galena has now commenced surface infrastructure construction at Abra and the Company continues to target initial production in 2021 and the first full-year of steady-state commercial production in 2022.

Upcoming value-adding Abra and corporate milestone workstreams include:

- Conclusion of project financing debt
- Completion of construction of Abra’s permanent village and other surface infrastructure facilities
- Commencement of the box-cut
- Mobilisation of the underground mining contractor
- Full construction decision and execution of plant EPC contract

**Galena Mining Ltd.**



**Alex Molyneux**  
Managing Director



### Competent Person's Statement

The information in this report related to the Abra Ore Reserve estimate is based on work completed by Mr Roger Bryant, BEng (Mining, Member AUSIMM). Mr Bryant is an employee of Galena Mining Ltd. 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 October 2019 Resource estimate is based on work completed by Mr Don Maclean MSc (Geol), MAIG and RP Geo (Exploration and Mining), MSEG, a consultant to Galena Mining and Mr Mark Drabble B.App.Sci. (Geology), MAIG, MAusIMM, Principal Consultant at Optiro Pty Ltd. Mr Maclean was responsible for data review, QAQC, and development of the geological model. Mr Drabble was responsible for resource estimation, classification and reporting. Mr Maclean 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 Maclean 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 Don Maclean MSc (Geol), MAIG and RP Geo (Exploration and Mining), MSEG, a consultant to Galena Mining. Mr Maclean 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 Maclean consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

### No new information

This report contains references to exploration results and Mineral Resource estimates, all of which have been cross-referenced to previous announcements made by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant announcements and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed.

### Forward-looking statements

The contents of this announcement 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 announcement.

Some statements in this announcement 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.

Forward-looking statements, opinions and estimates included in this announcement are based on assumptions and contingencies which are subject to change without notice, as are statements about market and industry trends, which are based on interpretations of current market conditions. Forward-looking statements are provided as a general guide only and should not be relied on as guarantee of future performance. Forward-looking statement may be affected by a range of variables that could cause actual results to differ from estimated results and may cause the Company’s actual performance and financial results in future periods to materially differ from any projections of future performance or results expressed or implied by such forward-looking statements. So there can be no assurance that actual outcomes will not materially differ from these forward-looking statements.

**Appendix 3 – Tenement information as required by Listing Rule 5.3.3**

<b>Country</b>	<b>Location</b>	<b>Project</b>	<b>Tenement</b>	<b>Change in Holding (%)</b>	<b>Current Interest (%)</b>
Australia	WA	Abra	M52/0776	0	100
Australia	WA	Jillawarra	E52/1413	0	100
Australia	WA	Abra	E52/1455	0	100
Australia	WA	Abra	G52/0286	0	100
Australia	WA	Abra	L52/0121	0	100
Australia	WA	Jillawarra	E52/3575	0	100
Australia	WA	Jillawarra	E52/3630	100	100
Australia	WA	Abra	G52/0292	100	100
Australia	WA	Abra	L52/0194	100	100
Australia	WA	Abra	L52/0198	100	100
Australia	WA	Teano	L52/205	100	100
Australia	WA	Erivilla	L52/206	100	100
Australia	WA	Teano	L52/207	100	100
Australia	WA	Teano	L52/210	100	100

The Company's interest in the Abra tenements is held by virtue of its 86.67% equity holding in AMPL which in turn has a 100% interest in the tenements.

## About Abra Base Metals Project

86.67% owned by Galena, the Abra Base Metals Project (“**Abra**” or the “**Project**”) is a globally significant lead-silver project located in the Gascoyne region of Western Australia (between the towns of Newman and Meekatharra, approximately 110 kilometres from Sandfire’s DeGrussa Project).

Galena completed an outstanding definitive / bankable feasibility study (“**FS**”) (see *Galena ASX announcement of 22 July 2019*) for development of a mine and processing facility with a 16-year life producing a high-value, high-grade lead-silver concentrate containing approximately 95kt of lead and 805koz of silver per year after ramp-up. Based on a pre-development capital expenditure estimate of A\$170 million, the FS modelled a pre-tax net present value for Abra (at an 8% discount rate) of A\$553 million and an internal rate of return of 39%.<sup>1</sup>

*Note: 1. Information relating to the production target and financial information derived from the production target is extracted from the ASX announcement of 22 July 2019. Galena confirms that that all material assumptions underpinning the production target, or forecast financial information derived from a production target, in that announcement continue to apply and have not materially changed.*

### Abra JORC Mineral Resource estimate<sup>1, 2</sup>

Resource classification	Tonnes (Mt)	Lead grade (%)	Silver grade (g/t)
Measured	-	-	-
Indicated	16.7	8.5	24
Inferred	24.4	6.5	14
<b>Total</b>	<b>41.1</b>	<b>7.3</b>	<b>18</b>

*Notes: 1. See Galena ASX announcement of 17 October 2019. Galena confirms that it not aware of any new information or data that materially affects the information included in Galena’s ASX announcement of 17 October 2018 and confirms that all material assumptions and technical parameters underpinning the resource estimates continue to apply and have not materially changed. 2. 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.*

Abra location

