ASX ANNOUNCEMENT

19 July 2019 **ASX: G1A**

MULTIPLE ADDITIONAL HIGH-GRADE LEAD INTERSECTIONS AT ABRA

HIGHLIGHTS:

- **Assays received from the next fourteen drill-holes (AB109-120, AB123 and ABGT002) from Abra project development drilling, include the following significant intersections:**
    - **32.7m at 10.0% lead and 25g/t silver in ABGT002**
    - **18.3m at 12.6% lead and 75g/t silver in AB123 inc.**
      4.3m at 25.2% lead and 174 g/t silver
    - **14.1m at 12.7% lead and 18g/t silver in AB112**
    - **8.0m at 19.7% lead and 516g/t silver in AB119**
    - **10.4m at 10.8% lead and 21g/t silver in AB117**
    - **5.8m at 10.2% lead and 17g/t silver in AB113**
    - **6.2m at 9.8% lead and 17g/t silver in AB115**
    - **5.1m at 10.0% lead and 24g/t silver in AB109**
- **Results continue to support the Company's objective to improve the geological confidence in the upper northwestern section of Abra's mineralization where Mineral Resources are currently in the Inferred category**
- **Includes highest ever silver result seen at Abra (8.0m at 516g/t silver in AB112)**
- **Significant copper and zinc results in ABGT002 (1.1m at 2.3% copper and 5.1m at 5.5% zinc) provide further evidence of potential to for non-lead-silver polymetallic mineralised domains**

GALENA MINING LTD. ("**Galena**" or the "**Company**") **(ASX: G1A)** announces additional high-grade assay results returned from its ongoing 2019 project development drilling program .

Managing Director, Alex Molyneux commented, ***"These are strong high-grade results. Overall we're very happy with what we're seeing from this 2019 project development drilling. Its absolutely confirming what we want to see in terms of grades and thicknesses in the upper northwestern section of the deposit."***

Managing Director, Alex Molyneux went on to say, ***"We continue to see some interesting copper and zinc results coming through as well, highlighting the potential for more work to be done on establishing non-lead-silver domains at Abra."***

2019 PROJECT DEVELOPMENT DRILLING PROGRAM

Galena has now completed 33 drill-holes (AB103 to AB134) for 13,838 cumulative drill metres of its 18,000m 2019 Project Development Drilling Program. Assays have been received for holes AB103 to AB120 and AB123. Assays have also been received for ABGT002, a hole drilled for mine geotechnical study purposes. Assays for AB121, AB122 and AB124 to AB134 remain pending at this time.

The 2019 Abra Project Development Drilling Program has three primary objectives:

(i) to infill Inferred Resources on the northwestern area of the December 2018 Resource to upgrade that relatively shallower mineralisation to the Indicated category;

(ii) further infill drilling of the first years production to a closer drill spacing to enhance mine design and scheduling associated with short to medium term production planning; and

(iii) to further infill drill current Indicated Mineral Resources within the first 3 years planned production areas for medium to long term optimisation and planning.

Drilling will continue to de-risk the project before the box cut and underground decline development begins. Drilling will be completed in mid-August with an updated Mineral Resource Estimate planned to be completed by the end of 2019.

NEW DRILL-HOLE ASSAYS

Assays for the latest fourteen holes received (AB109 to AB120, AB123 and ABGT002) are graphically represented in Figure 1 and Figure 2 (below), Figure 3 and detailed in Appendix 1, together with drill collar locations in Appendix 2. Holes AB103 to AB108 were previously reported in May 2019 .

The drilling results reported are primarily from infill drilling of the upper northwestern section of the Abra deposit within what is expected to be the footprint of the first 3 years planned mine production. Drilling is designed to assist in project de-risking and for mine design work and continue to increase the geological confidence and understanding for mine planning.

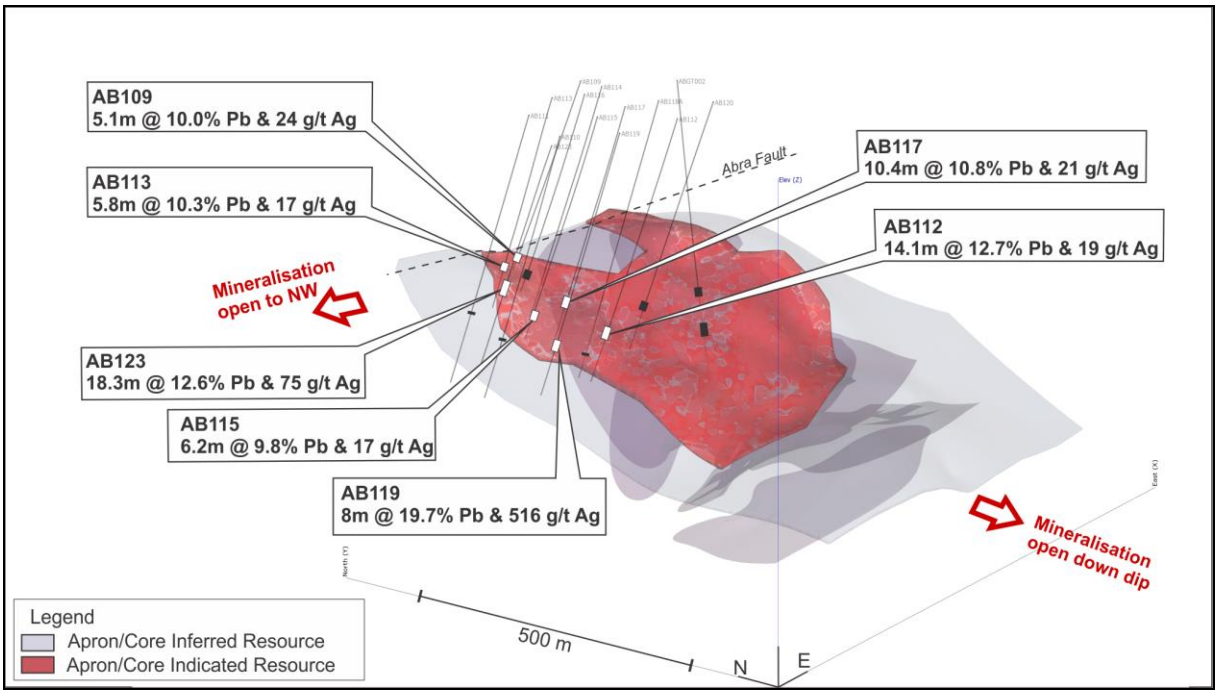

Figure 1: 3D model of December 2018 Resource (5% lead cut-off wireframes) looking obliquely east, with new drill-holes AB103 – AB120, AB123 and ABGT002 overlain

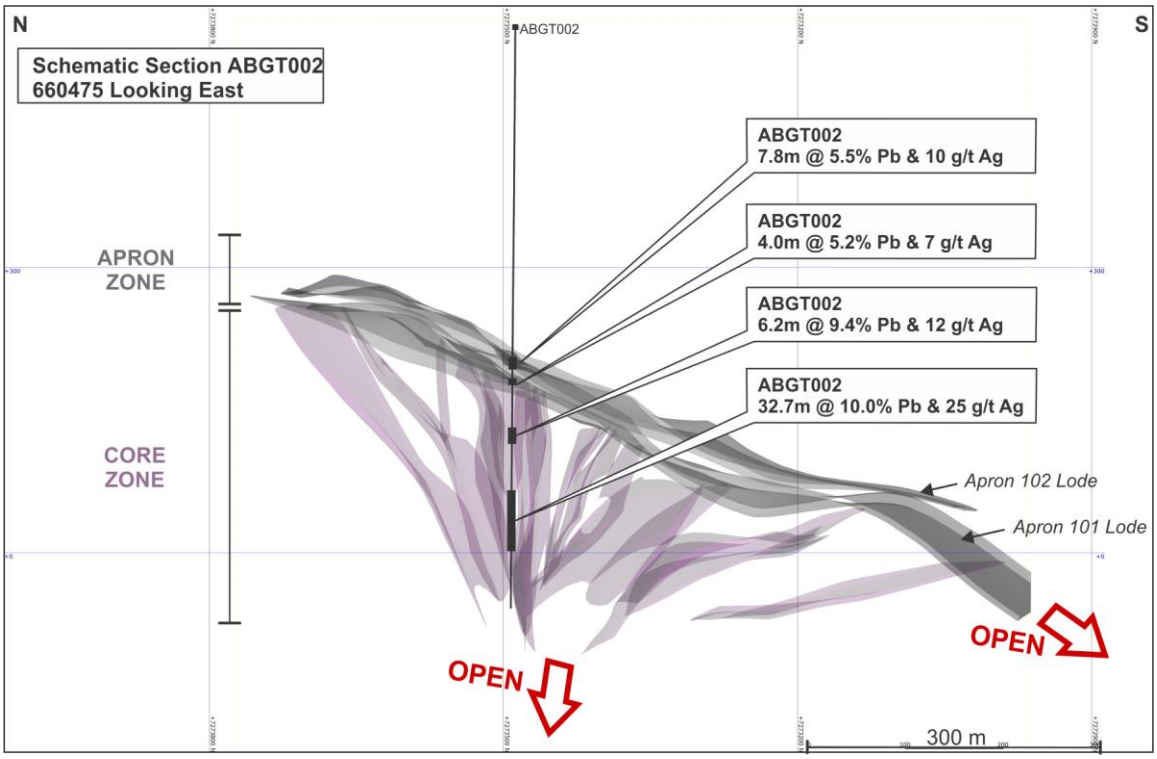

Figure 2: Schematic cross section of December 2018 Resource (5% lead cut-off wireframes) looking obliquely east, with new drill-hole ABGT002 overlain

In the northwestern sector stratiform Apron Zone lead-silver mineralisation occurs within two main lodes; the upper '102 Lode' and the lower '101 Lode' (Figure 3). The 102 Lode dips gently south, is the most laterally extensive in the north western area, forming the main focus of early production. The 101 Lode lies below, is sub parallel, and will be mined after the 102 Lode.

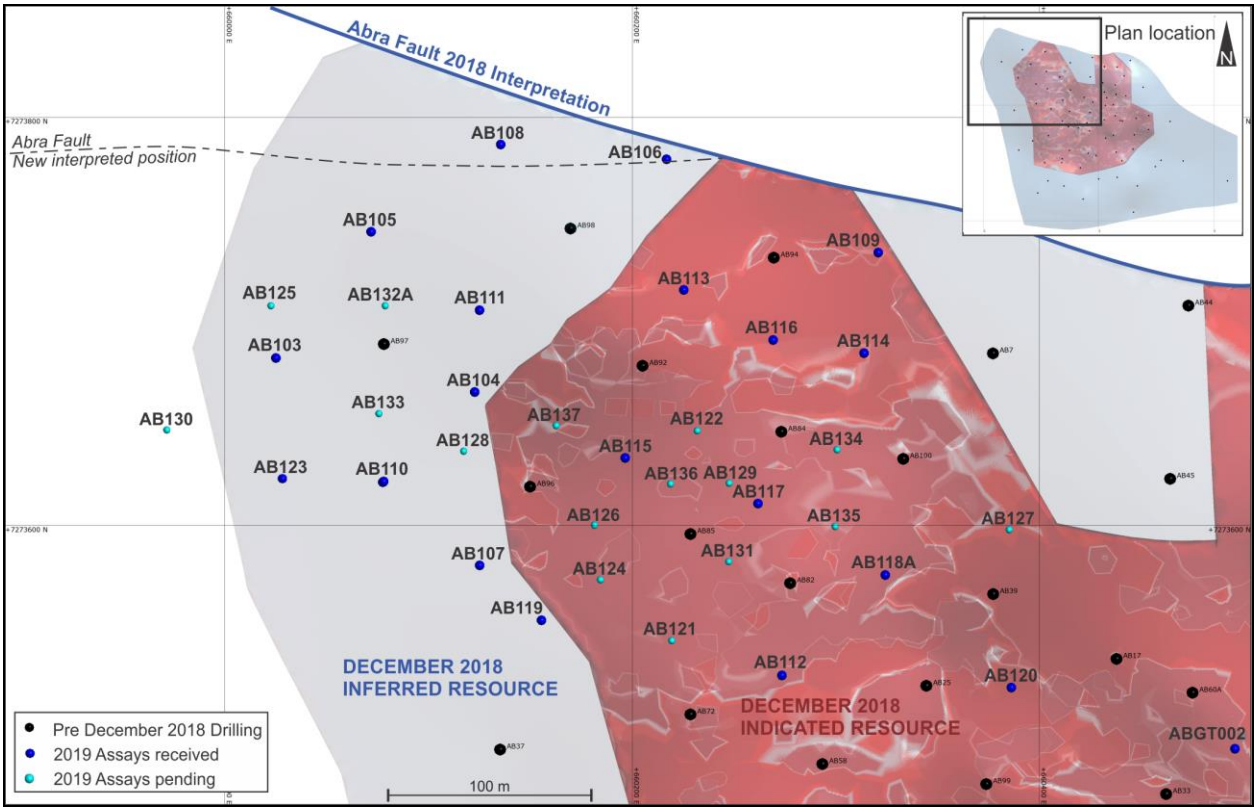

Figure3: Plan view of the northwestern area of the December 2018 Resource Apron Zone showing drill-hole pierce point positions

Figure 4 shows a plan view of the Apron Zone 102 Lode with drilling results for the 2019 drilling program. Better results include:

- 5.1m at 10.0% lead and 24g/t silver (AB109)
- 12.6m at 6.8% lead and 30g/t silver (AB112)
- 5.1m at 6.3% lead and 22g/t silver (AB113)
- 16.2m at 7.0% lead and 12g/t silver (AB114)
- 6.2m at 9.8% lead and 17g/t silver (AB115)
- 10.4m at 10.8% lead and 21g/t silver (AB117)
- 8.0m at 19.7% lead and 516g/t silver (AB119)
- 4.8m at 5.2% lead and 13g/t silver (AB120)
- 18.3m at 12.6% lead and 75g/t silver (AB123)
- 7.8m at 5.5% lead and 10g/t silver (ABGT002)

Of note is that AB119 intersected the highest ever silver result from drilling to date at Abra (8.0m at 19.7% lead and 516g/t silver). This intersection appears to form part of a higher grade silver zone that may have potential to further enhance project economics.

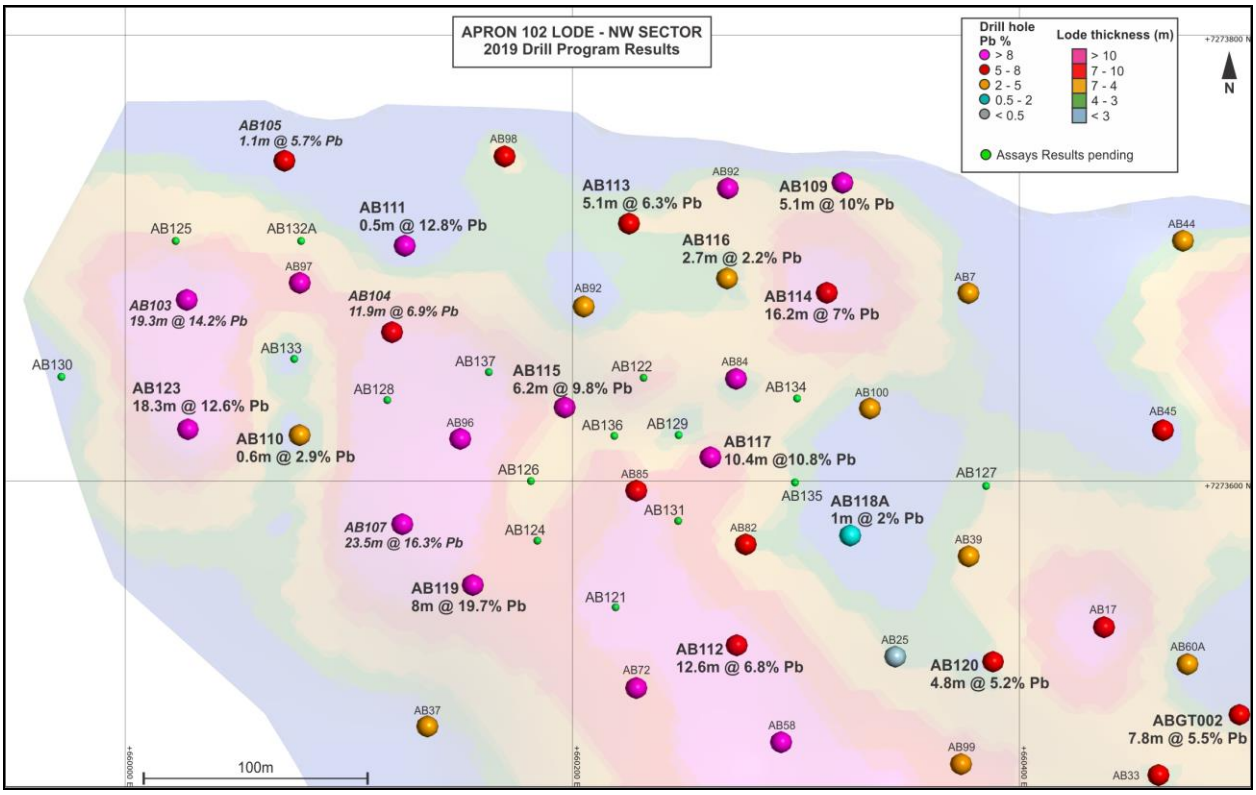

Figure 4: Plan view of the Apron Zone 102 Lode showing drillhole pierce points (coloured by lead grade) and lode thickness contours (N.B. thickness contours include visual thickness estimates from logged mineralisation for holes with pending assays)

Figure 5 shows a plan view of the Apron Zone 101 Lode with drilling results for the 2019 drilling program. Better results include:

- 3.7m at 12.8% lead and 10 g/t silver (AB109)
- 14.1m at 12.7% lead and 19 g/t silver (AB112)
- 5.8m at 10.2% lead and 17 g/t silver (AB113)
- 13.1m at 7.0% lead and 16 g/t silver (AB117)
- 4.0m at 5.2% lead and 7 g/t silver (ABGT002)

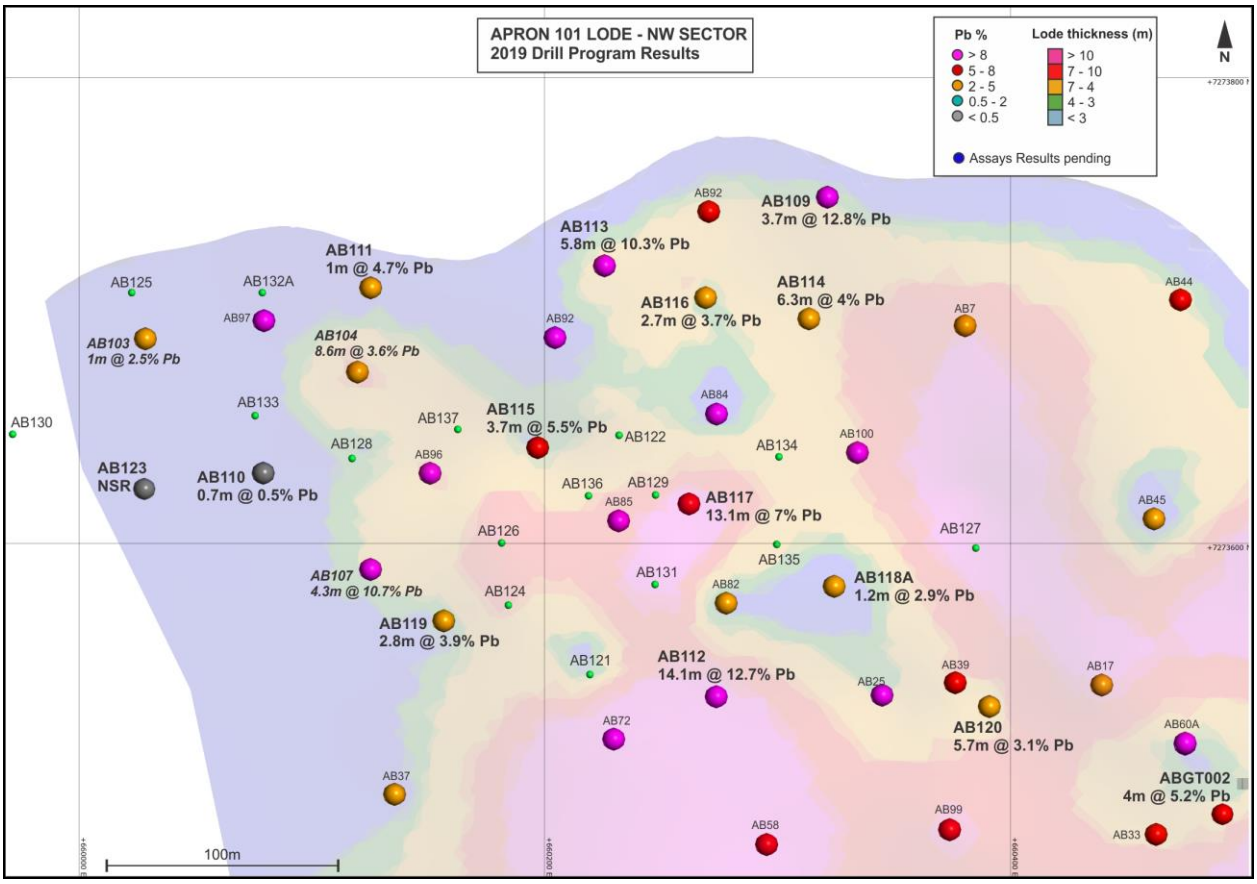

Figure 5: Plan view of the Apron Zone 101 Lode showing drillhole pierce points (coloured by lead grade) and lode thickness contours. (N.B. thickness contours include visual thickness estimates from logged mineralisation for holes with pending assays)

The results of 2019 drilling to date enhance the interpretation and estimation completed in December 2018. The Company is well on the way to achieving one of the objectives with this drill program of potentially converting a large portion of the northwestern mineralised zone into Indicated Mineral Resources. This is important for improving the confidence in the upper part of the orebody which will be developed first in a top-down mining sequence.

The 2019 drilling program is primarily targetting the stratiform Apron Zone mineralisation. A geotechnical hole (ABGT002) was drilled into the 'Core Zone' to obtain rock for geotechnical testwork. This hole returned broad zones of high grade lead-silver vein style mineralisation from within the Core Zone including:

- 32.7m at 10.0% lead and 25g/t silver
- 16.8m at 6.8% lead and 17 g/t silver
- 6.2m at 9.4% lead and 12g/t silver

The hole also intersected 5.1m at 5.5% zinc and 1.1m at 2.3% copper which presents potential for other mineral production streams later in the project life.

Presently much of the Core Zone is classified as an Inferred Resource, primarily due to a its complexity, depth and lack of sufficient drilling coverage. The Core Zone is planned to be drilled from underground drilling positions and this hole highlights the potential to add significantly to the Abra project life.

Galena Mining Ltd.,

Alex Molyneux
Managing Director

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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 December 2018 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.

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.

About Abra Base Metals Project

91.11% 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 recently completed an outstanding pre-feasibility study ("**PFS**") (see Galena ASX announcement of 25 September 2018) for development of a mine and processing facility with a 14-year life producing a high-value, high-grade lead-silver concentrate containing approximately 91kt of lead and 760koz of silver per year after ramp-up. Based on a pre-development capital expenditure estimate of A$154 million, the PFS modelled a pre-tax net present value for Abra (at an 8% discount rate) of A$528 million and an internal rate of return of 50%.[1]

Note: 1. Information relating to the production target and financial information derived from the production target is extracted from the ASX announcement of 25 September 2018. 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[1, 2]

Resource classification	Tonnes (Mt)	Lead grade (%)	Silver grade (g/t)
Measured	-	-	-
Indicated	15.0	8.7	22
Inferred	22.4	6.7	15
Total	37.4	7.5	18

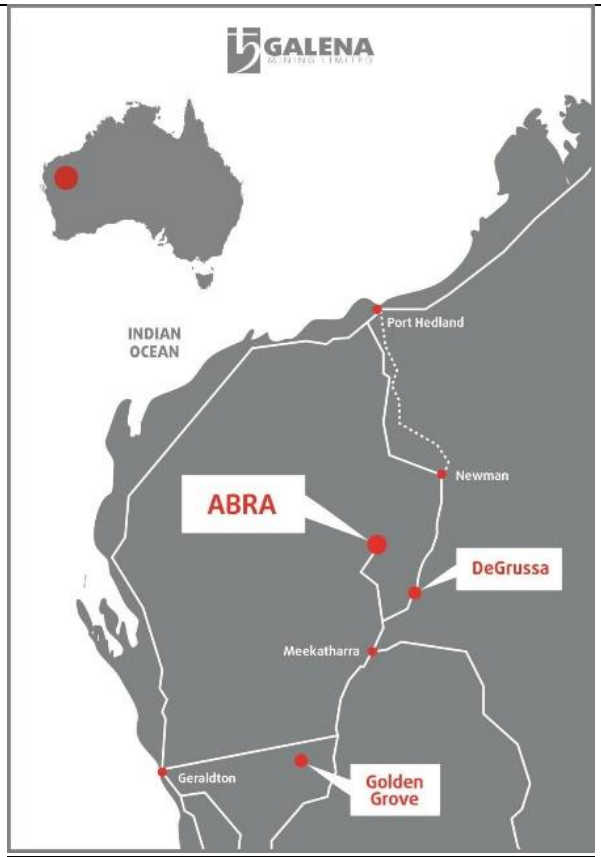
Notes: 1. See Galena ASX announcement of 18 December 2018. Galena confirms that it not aware of any new information or data that materially affects the information included in Galena's ASX announcement of 18 December 2018 and confirms that all material assumptions and technical parameters underpinning 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 JORC Ore Reserve statement[1, 2]

Reserve classification	Tonnes (Mt)	Lead grade (%)	Silver grade (g/t)
Proved	-	-	-
Probable	10.3	8.8	24
Total	10.3	8.8	24

Notes: 1. See Galena ASX announcement of 18 December 2018. Galena confirms that it not aware of any new information or data that materially affects the information included in Galena's ASX announcement of 18 December 2018 and confirms that all material assumptions and technical parameters underpinning the ore reserve estimates continue to apply and have not materially changed. 2. 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



APPENDIX 1 – GALENA MINING DETAILS OF ASSAY RESULTS (16 July 2019)

Minimum lead intersection: 4m at 5.0% lead. Maximum internal dilution: 4m at <5.0% lead. Minimum copper intersection: 2m at 1.0% copper. Minimum gold intersection: 2m at 1.0ppm gold. N.B. lower grade intersections reported for major lodes for transparency.

HOLE ID	FROM	TO	INTERVAL (m downhole)	GRADE Pb (%)	GRADE Ag (ppm)	GRADE Cu (%)	GRADE Au (ppm)	Comment
AB109	286.8	291.9	5.1	10.0	24			Apron 102 Lode
AB109	295.8	297.9	2.1			1.0		
AB109	302.4	304.8	2.3			2.0		
AB109	335.3	339.0	3.7	12.3	10			Apron 101 Lode
AB110	382.0	382.6	0.6	2.9	9			Apron 102 Lode
AB111	373.4	376.0	0.5	12.8	42			Apron 102 Lode
AB112	387.7	400.3	12.6	6.8	30			Apron 102 Lode
AB112	409.3	423.4	14.1	12.7	19			Apron 101 Lode
AB113	305.4	310.5	5.1	6.3	22			Apron 102 Lode
AB113	315.7	321.4	5.8	10.2	17			Apron 101 Lode
AB114	288.3	292.0	3.8	10.9	29			
AB114	302.5	305.5	3.0	7.4	16			
AB114	314.2	329.7	16.2	7.0	12			Apron 102 Lode
AB114	353.4	359.6	6.3	4.0	6			Apron 101 Lode
AB115	366.0	372.4	6.2	9.8	17			Apron 102 Lode
AB115	388.5	392.7	3.9	5.5	19			Apron 101 Lode
AB116	316.0	318.8	2.7	2.2	7			Apron 102 Lode
AB116	353.1	355.8	2.7	4.0	9			Apron 101 Lode
AB117	359.9	370.4	10.4	10.8	21			Apron 102 Lode
AB117	375.6	388.8	13.1	7.0	16			Apron 101 Lode
AB118A	363.9	364.9	1.0	2.0	1			Apron 102 Lode
AB118A	380.9	382.1	1.2	2.9	15			Apron 101 Lode
AB119	382.2	390.1	8.0	19.7	516			Apron 102 Lode
AB119	420.0	422.9	2.8	3.9	6			Apron 101 Lode
AB120	357.3	362.1	4.8	5.2	13			Apron 102 Lode
AB120	397.0	402.7	5.7	3.1	13			Apron 101 Lode
AB120	410.0	417.0	7.0	5.2	13			Core Zone
AB123	374.6	382.9	18.3	12.6	75			Apron 102 Lode
ABGT002	357.0	364.8	7.8	5.5	10			Apron 102 Lode
ABGT002	374.4	378.4	4.0	5.2	7			Apron 101 Lode
ABGT002	423.1	429.3	6.2	9.4	12			Core Zone
ABGT002	435.2	442.9	7.7	6.5	10			Core Zone
ABGT002	470.0	471.1	1.1			2.3		Core Zone
ABGT002	495.0	511.0	16.0	6.8	17			Core Zone
ABGT002	517.0	549.7	32.7	10.0	25			Core Zone

APPENDIX 2 – GALENA MINING 2019 COMPLETED DIAMOND CORE DRILL-HOLES AS AT 15 July 2019: COLLAR LOCATIONS AND DIRECTION DETAILS

Hole ID	E	N	Dip	Azi	Depth
AB103	660025	7273563	-70	356	418
AB104	660125	7273548	-70	356	424
AB105	660075	7273631	-70	356	370
AB106	660225	7273679	72	356	376.3
AB107	660125	7273428	-70	356	457.1
AB108	660125	7273675	-68	356	320.1
AB109	660326	7273622	-68	356	364.8
AB110	660075	7273504	-70	356	493.1
AB111	660129	7273596	-68	356	400
AB112	660285	7273384	-68	356	496.3
AB113	660225	7273612	-68	356	391
AB114	660325	7273577	-70	356	427.1
AB115	660200	7273500	-70	356	421.6
AB116	660276	7273580	-70	356	373.1
AB117	660275	7273488	-70	356	427
AB118A	660335	7273459	-73	355	511.3
AB119	660160	7273422	-70	356	493
AB120	660387	7273378	-68	356	478
AB121	660225	7273401	-68	356	496
AB122	660225	7273503	-67	356	448
AB123	660028	7273479	-68	356	445.2
AB124	660192	7273429	-68	356	439
AB125	660025	7273566	-66	356	431.7
AB126	660192	7273429	-64	357	438.1
AB127	660389	7273482	-68	356	474.8
AB128	660125	7273548	-76	356	420.2
AB129	660250	7273488	-68	356	444.9
AB130	659975	7273500	-69	356	463.9
AB131	660250	7273486	-74	356	442
AB132A	660075	7273550	-64	356	408.9
AB133	660075	7273545	-73	356	405.7
AB134	660300	7273519	-71	356	439.1

APPENDIX 3 – JORC CODE, 2012 EDITION: TABLE 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* *Aspects of the determination of mineralisation that are Material to the Public Report.* *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	Mineralised intervals were diamond drilled using NQ2 diameter core, geologically logged, photographed, cut and then ½ core samples were submitted to the laboratory for analysis. Samples were oven dried, crushed, pulverised and analysed for base metals using XRF with a lithium metaborate / tetraborate flux. Gold was assayed by fire assay using a 25 g, 30 g or 50 g charge. Sample intervals were based upon geological logging and ranged from 0.5 to 1.6m. Galena's sampling generally used 1m intervals. Sampling was continuous throughout the mineralised intervals with the right-hand side of the core taken. The sampling methodology is considered to be representative and appropriate for the style of mineralisation at Abra (poly-metallic lead-zinc-silver-copper-gold).
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Most holes were diamond drilled from surface to minimise hole deviation using HQ diameter and reduced to NQ2 diameter at between 80 and 200m depth. Diamond drilling was by wireline methods. Completed hole depths range from 350 to 955 m. Galena's 2017 - 2019 drilling was systematically oriented using either a Reflex ACT Mk.3TM or TrueCoreTM core orientation system. The bottom of hole line was marked on the core as a reference for structural measurements. Only reliable core orientations were used for obtaining structural measurements.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.* *Measures taken to maximise sample recovery and ensure representative nature of the samples.* *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	All diamond core was measured/recorded for drilling recovery by Galena staff. Overall core recovery is excellent due to the silicified and competent nature of the rock with core recoveries typically being 100%. No grade versus recovery sample biases due to loss or gain of material has been identified.
Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* *The total length and percentage of the relevant intersections logged.*	All drill core was logged geologically and geotechnically in detail sufficient to support the Mineral Resource estimate, mining and metallurgical studies. Logging included lithology, texture, veining, grain size, structure, alteration, hardness, fracture density, RQD, alteration and, mineralisation Core logging was both qualitative and quantitative. Lithological observations were qualitative. All geotechnical observations and core photographs were quantitative. 100% of all core which included all mineralised intervals was logged. All core was photographed both wet and dry.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.* *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	All holes were routinely sampled as half cut NQ2 core for assaying. N/A All core was appropriately orientated and marked up for sampling by company geologists prior to core cutting. Sample widths range from 0.5m to 3.0m. Galena's sampling was generally in 1m intervals whereas its predecessors were generally 2m intervals. Half core samples were submitted to the commercial laboratories in Perth laboratory for analysis. Sample preparation comprised industry standard oven drying, crushing, and pulverisation to less than 75 microns. Homogenised pulp material was used for assaying.

Criteria	JORC Code explanation	Commentary
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Blank samples were routinely dispatched to the laboratory to monitor sample preparation. These generally performed within acceptable tolerances. However elevated lead values were returned from some blanks which is thought to either represent cross sample contamination (i.e. soft lead caking the sample preparation bowl) or issues with the high lead values on the AAS plasma. From hole AB78 onwards barren flushes were carried out after each sample in sample preparation. The magnitude of the elevated values is not considered to be a material issue on the lead value estimates in the resource estimate.
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling	In Galena's 2017 to 2019 drill program duplicates of crushed core (proxy for a field duplicate) were routinely assayed. Results showed an excellent correlation demonstrating a high level of repeatability.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Sample sizes were typically 3 to 6 kg (depending on the length of the sample) and are considered appropriate to the fine – medium grained grain size common in the host rock and galena mineralisation at percent grades.
Quality of assay data and laboratory tests	*The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Galena's samples were analysed by SGS Laboratories in Perth. An ore grade 4-acid digest was used followed by an ICP-AES finish. From hole AB84 samples were analysed using XRF with a platinum crucible using a lithium metaborate / tetraborate flux. Gold was by fire assay with a 50g charge.. The analysis methods used are considered to approach total dissolution thus reporting total assay values and are appropriate for the style and tenor of mineralisation at Abra.
	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	Blanks, certified standards and duplicates were regularly submitted to the assaying laboratory and monitored. Galena completed umpire assaying by an alternate laboratory with results returned consistent with the primary samples. The QAQC data indicates that assaying data accuracy and precision is of an appropriate quality for resource estimation work.
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias)	Galena quality control procedures include the following: **Blank samples** – submitted at selected points within mineralised intersections at a nominal rate of 2 per 100 samples. The blank material is Bunbury basalt certified as a blank.

Criteria	JORC Code explanation	Commentary
	and precision have been established.	**Reference Standard samples** – submitted at a rate of 1 in 20 in sequence with the original core samples. Three different certified standards are being used. **Duplicates** – to be routinely taken by the laboratory at a rate of 1 in 20 through a second split of the crushed core. They were submitted with the next sample number after the primary sample as part of a continuous sample stream. These are considered as true duplicates and can be used for assessing laboratory precision.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	All significant intersections are verified by alternative company geologists.
	The use of twinned holes.	Due to the depth to mineralisation no twinned holes have been attempted yet.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	During Galena's 2017- 2019 drilling program geological logging and sampling data was firstly recorded on either paper or in a Toughbook computer according to then entered into an electronic Excel and Access database files onsite. Electronic copies are backed up onsite and routinely transferred to the Perth head office. All paper documents are scanned onsite and electronic copies kept. Duplicates of the data are kept in Perth office after validation. Assay data was imported and merged directly from lab digital files in excel then later uploaded in an Access Database. All data has recently been migrated to a DatashedTM database to ensure data integrity. Galena used LogChiefTM for logging and sampling for the 2018-2019 drill programs.
	Discuss any adjustment to assay data.	There were no adjustments made to assay data.
Location of data points	*Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Down hole surveys are completed every 15-30m during the drilling using using a north seeking gyro. Holes were then later gyro surveyed by ABIMS using a north seeking gyro. Drill holes were set out using a handheld GPS and then are later picked up with differential GPS. Galt Mining Solutions completed A Real Time Kinematic (RTK) GPS pickup of drill hole collars to enhance the precision of the survey, providing centimetre-level accuracy. A Department of Land Administration (DOLA) State Survey Mark (SSM) was used for the base station, the coordinates are provided in GDA94 using vertical datum AHD71.
	Specification of the grid system used.	Data captured in Map Grid of Australia GDA 94, Zone 50.
	Quality and adequacy of topographic control.	The RL of previous drill collars was measured by both DGPS surveys to an accuracy of 0.02m which gives us with a satisfactory control over the topography.

Criteria	JORC Code explanation	Commentary
Data spacing and distribution	*Data spacing for reporting of Exploration Results.* *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* *Whether sample compositing has been applied.*	The footprint of the Abra deposit extends 1,000m east-west along strike and 800m north south. Drill spacing ranges from 150m spaced centres on the periphery to 100 and 50m spacing in the central parts of the deposit. In some areas drill spacing is close to 50m by 25m. The deposit lies between 250m and 700 m below surface. Drill holes in the current round of drilling is infill drilling and will improve the spacing to approximately 70 by 70m to 50m x 50m. Data spacing is sufficient to establish geological and grade continuity to establish a mineral resource estimate. No sample compositing has been applied.
Orientation of data in relation to geological structure	*Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* *If the relationship between the drilling orientation and the orientation of key mineralized structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	The mineralisation in the Apron Zone consists of tabular shallow south dipping zones can be drilled from north or south with high intersection angles. The Core zone has steeply dipping structures that trend east-west. The majority of drill holes are oriented to the south to sample most of the identified structures in the Core Zone an unbiased manner. Approximately 40 early drillholes were drilled oriented towards the north, which is sub-parallel to some of the mineralised structures in the Core breccia zone. The Apron Zone is not considered to have any sample bias issues due to the high intersection angles of all the drilling. By virtue of is nature as a feeder zone to the Apron mineralisation, the Core Zone has drilling at low intersection angles to the mineralised structures. It is not considered that there is a sampling bias.
Sample security	*The measures taken to ensure sample security.*	All sampled core will be transmitted from site to Perth assay laboratories either by company personnel or by courier. All remaining core is stored on site.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	Mitchell River Group completed an audit of the geological database for data up to November 2018. This audit included review and documentation of sampling and geological data integrity. No issues have been identified Optiro carried out a review of the sampling and data collection processes during the site visit to Abra in 2018 and found that the protocols met industry standard with no material issues.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	· *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* · *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	Abra Mining holds 100% interest in the Mulgul Project, consisting of Mining Lease M52/0776, Exploration Licence E52/1455, General Purpose Leases G52/292 and G52/286 and Miscellaneous Licence L52/021. A 3.0% Net Smelter Royalty exists over leases M52/0776 and E52/1455. Within the adjoining Jillawarra Project Abra Mining holds 100% of E52/1413, E52/3630 and E52/3575. All tenements are in good standing and have existing Aboriginal Heritage Access Agreements in place. No mining agreement has been negotiated.
Exploration done by other parties	· *Acknowledgment and appraisal of exploration by other parties.*	Historical exploration commenced around the Abra deposit by Amoco Minerals in 1974 but failed to discover the Abra deposit when testing the significant magnetic anomaly associated with the mineralisation. Geopeko Limited entered into a JV with Amoco in 1980 and drilled the discovery hole in 1981. 8 diamond core holes (AB1-11) were drilled before takeover by North Limited which did not complete any exploration. In 1995 RGC Exploration joint ventured in and drilled another deep diamond core hole (AB22A) with a daughter hole wedged from it (AB22B). Both North and RGC were subject to takeovers and the tenement was relinquished in 1999. Old City Nominees Pty Ltd, a private company, the acquired the ground and subsequently vended the project into Abra Mining Limited (AML). Abra resumed drilling in 2005 and completed all holes between and including AB23-61. All diamond core drilling completed by all parties was completed to a high standard and contributed towards defining the extent and limits of the mineralization AML was subsequently taken over in 2011 by Chinese company Hunan Nonferrous Metals' Australian subsidiary, HNC Resources Pty Ltd (HNC), following a lengthy acquisition process. Two diamond holes were drilled in 2012 (AB60A and AB61) HNC divested the project in 2016. Galena Mining acquired the project in 2017 and floated on the ASX. The historic exploration work on the project is of a very high standard.

Criteria	JORC Code explanation	Commentary
Geology	· *Deposit type, geological setting and style of mineralisation.*	The Abra deposit lies within sediments of the Proterozoic Edmund Group. Abra is a base metal replacement-style deposit hosted by sediments. The primary economic metal is lead (Pb). Silver (Ag), copper (Cu), zinc (Zn) and gold (Au) are also present but are of much lower tenor. The deposit can be divided into two main parts. The upper "Apron" zone comprises stratiform massive and disseminated lead- sulphides (galena) and minor copper sulphides (chalcopyrite) within a highly altered sequence of clastic and dolomitic sediments. Alteration products include jaspilitic rich sediments (the "Red Zone") and a distinctive stratiform zone of hematite-magnetite alteration (the "Black Zone". The Apron zone extends for 1,000m along strike, 700m down dip and dips gently south. The "Core" zone underlies the Apron and comprises an elongate funnel shaped body of hydrothermal breccias, veining and intense alteration overprinting gently south dipping sediments. The veining and breccia zones in the Core form a feeder style flower shaped geometry in cross section. Hydrothermal veining dips moderately south on the northern flank, sub-vertically in the central parts and gently to the north on the southern margins. High grade lead sulphide mineralisation is predominantly hosted in intensely veined zones. High grade zinc sulphide mineralisation (sphalerite) is found in the central parts of the Core. Copper (chalcopyrite) and gold mineralisation is sporadically found throughout the upper parts of the Core zone but forms a semi-coherent body at the base of Core. The Core zone extends from 300 to 750m below surface and can be traced for 400m along strike.
Drill hole Information	· *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.*	Historic drill hole information has previously been reported and is included in a table within appendices of the Galena's IPO Prospectus, and for Galena's 2017 and 2018 drilling in ASX releases in 2017 and 2018. Coordinates, dip, depth and azimuth of Galena's 2019 completed holes are listed in Appendix 2.
	· *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person*	

Criteria	JORC Code explanation	Commentary
	should clearly explain why this is the case.	
Data aggregation methods	· *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* · *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* · *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Significant intersections are calculated as weighted average means for downhole intervals greater than 4m@5% Pb. There was no cutting of high grades. Lower grade intersections reported for major lodes for transparency. A maximum internal dilution interval of 4m@ <5% Pb was applied. No metal equivalent calculations were made.
Relationship between mineralisation widths and intercept lengths	· *These relationships are particularly important in the reporting of Exploration Results.* · *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* · *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	All intersection widths reported are downhole widths. The upper strata-bound mineralisation drill intercepts are interpreted as being close to true width ("Apron" mineralisation). The lower vein-hosted mineralisation has drill intercepts that, depending on drillhole orientation, may not be close to true width (true width not known) ("Core" mineralisation.
Diagrams	· *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	A plan is included in the report.

Criteria	JORC Code explanation	Commentary
Balanced reporting	· *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	The focus of this drilling program is convert Inferred Resources to Indicated Resources. All significant results are reported.
Other substantive exploration data	· *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Galena has commenced various studies as part of its FS study program, including geotechnical, metallurgical and environmental studies. To date no major issues have been identified, Groundwater studies and test work has identified water sources suitable for processing water supplies
Further work	· *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* · *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	Further drilling is planned to support feasibility studies and the the planned development. Additional drilling is planned to: (1) Test the open northwestern margin of the deposit. (2) Infill drill areas within the first 3 years of project life to assist in mine design (3) Further close spaced infill drilling of the first years project life for detailed mine design work