

ASX ANNOUNCEMENT

13 September 2019 ASX: G1A

FINAL ASSAYS FOR 2019 ABRA DRILLING INCLUDE MORE HIGH-GRADE LEAD INTERSECTIONS

HIGHLIGHTS:

- Final assays received for last 11 drill-holes out of total 43-hole Abra drilling program completed April-August 2019
- Significant intersections in final assays include:
 - 11.3m at 7.1% lead and 17g/t silver from 351.5m; and
 - 10.9m at 12.2% lead and 17g/t silver from 366.5m in hole AB141A
 - 8.2m at 13.0% lead and 24g/t silver from 368.8m in hole AB131W1
 - 5.3m at 10.8% lead and 51g/t silver from 402.5m in hole AB142
 - 3.8m at 10.3% lead and 10g/t silver from 406.8m in hole AB135
 - 7.1m at 9.0% lead and 12g/t silver from 364.1m in hole AB137
 - 9.2m at 8.2% lead and 6g/t silver from 362.0m in hole AB139
- 67% of holes from the overall program recorded significant intersections above the lead grade for the current Abra Mineral Resource estimate
- Updated Abra Mineral Resource estimate available early in Q4 CY2019

GALENA MINING LTD. ("**Galena**" or the "**Company**") **(ASX: G1A)** announces assays from the final 11 drill-holes of its 2019 project development drilling program at its Abra Base Metals Project ("**Abra**" or the "**Project**").

Managing Director, Alex Molyneux commented, "Our largest drilling program to date has been an astounding success! We have a mix of infill and step-out holes and overall its impressive to note that such a high proportion of holes have returned significant intersections higher than the most recently modelled resource grade."

Managing Director, Alex Molyneux went on to say, "I'd particularly like to thank our geology team for yet another program that successfully enhances Abra's status as a high-grade tier one Australian base metals deposit."

2019 PROJECT DEVELOPMENT DRILLING PROGRAM

The final 11 assay results for the Abra 2019 Project Development drilling program have now been received. The program comprised 43 drill holes (AB103 to AB143, AB131W1 and AB135W1) for a total of 18,255 cumulative metres of diamond core drilling. This brings the total amount of drilling



on Abra to approximately 78,000 cumulative linear metres, of which more than 50% has been drilled by Galena in the two years since it listed on the ASX.

The 2019 Abra project development drilling program had three primary objectives:

- (i) to infill Inferred Mineral 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 has confirmed Galena's geological interpretation of the deposit, significantly de-risked the project and provided a sound basis for upgrading Inferred Resources. Drilling results will be incorporated into a new Abra Mineral Resource estimate which will be completed early in Q4 2019.

Galena is pleased with the positive outcome that 67% of the 43 drill-holes in the overall program recorded significant intersections above the December 2018 Resource average lead grade of 7.5%. Furthermore, following the most extensive drilling program to date, Abra mineralisation remains open to the west and down dip.

NEW DRILL HOLE ASSAYS

The drill holes assays being reported in this release are the last 11 drill-holes of the Abra 2019 project development drilling program incorporating the drill holes AB131W1, AB135, AB135W1, AB136 to AB140, AB141A, AB142 and AB143.

The location of the drill holes is shown on Figures 1, 3 and 4 and are detailed in Appendix 1, together with drill collar locations in Appendix 2. Assays from drill-holes AB103 to AB134 were previously reported (see Galena ASX releases of 5 June 2019, 19 July 2019 and 13 August 2019).

The drilling results reported in this release are all from infill drilling of the north-western sector of Abra's existing mineralised envelope. Drilling targeted the two main mineralised lodes (the Apron Zone 101 and 102 lodes). Several holes also intersected significant mineralisation from the underlying vein and breccia hosted "Core Zone".



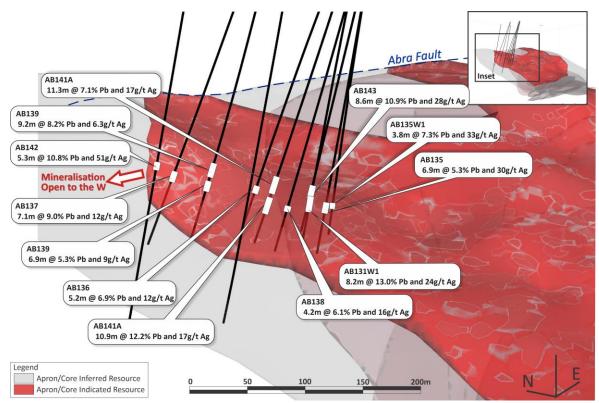


Figure 1: 3D model of December 2018 Resource (5% lead cut-off wireframes) looking obliquely north east, with new drill-holes AB131W1, AB135, AB135W1, AB136, AB137 – AB140, AB141A, AB142 and AB143 overlain.

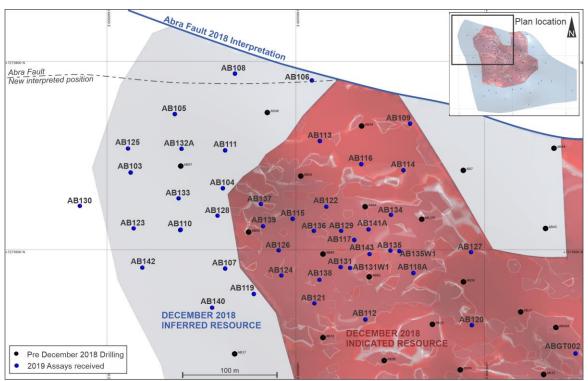


Figure 2: Plan view of the northwestern area of the December 2018 Resource Apron Zone showing drill-hole pierce point positions of 2019 drill-holes.



Figure 3 shows a plan view of the Apron Zone 102 lode with drilling results for the 2019 drilling program. Better results from the latest batch of assays on this particular lode include:

- 9.2m at 8.2% lead and 6g/t silver in AB139
- 11.3m at 7.1% lead and 17g/t silver in AB141A
- 5.3m at 10.8% lead and 51g/t silver in AB142

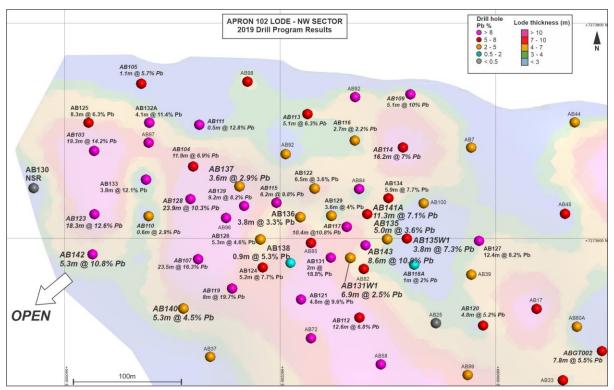


Figure 3: Plan view of Apron Zone 102 lode showing drill-hole pierce points (coloured by lead grade) and interpreted lode thickness contours.

Figure 4 shows a plan view of the Apron Zone 101 lode with drilling results for the 2019 drilling program. Better results from the latest batch of assays o this particular lode include:

- 8.2m at 13.0% lead and 24 g/t silver in AB131W1
- 6.9m at 5.2% lead and 30 g/t silver in AB135
- 3.8m at 7.3% lead and 33 g/t silver in AB135W1
- 5.2m at 6.9% lead and 12 g/t silver in AB136
- 7.1m at 9.0% lead and 12 g/t silver in AB137
- 4.2m at 6.1% lead and 16 g/t silver in AB138
- 6.9m at 5.3% lead and 9 g/t silver in AB139
- 10.9m at 12.2% lead and 17 g/t silver in AB141A
- 8.6m at 10.9% lead and 28 g/t silver in AB143



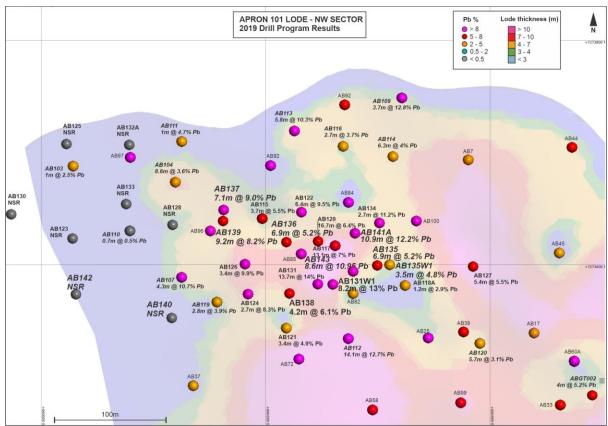


Figure 4: Plan view of Apron Zone 101 lode showing drill-hole pierce points (coloured by lead grade) and interpreted lode thickness contours.

The 2019 project development drilling program has been primarily focussed on the stratiform "Apron Zone" mineralisation. However, several holes intersected significant zones of vein hosted "Core Zone" mineralisation including:

- 3.8m at 10.3% lead and 10.1g/t silver from 406.75m in AB135
- 7.65m at 5.9% lead and 10 g/t silver in AB136
- 6.87m at 5.3% lead and 9 g/t silver on AB139
- 4.4m at 6.4% lead and 10 g/t silver in AB141A

Presently much of the Core Zone is classified in the Inferred Mineral Resource category, primarily due to a its complexity, depth and lack of sufficient drilling coverage. The Core Zone is planned to be drilled more from underground drilling positions once Abra's underground decline development is complete in late-2020.

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 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

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%.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}

	- (11)		011 1 ((1)
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.

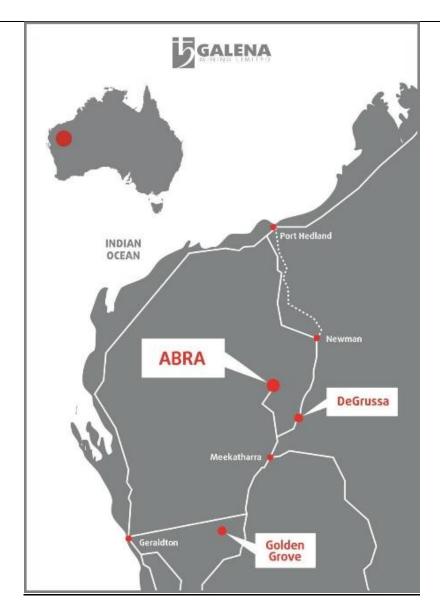
Abra JORC Ore Reserve statement^{1, 2}

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 geological model

Abra lies within sediments of the Proterozoic Edmund Group. Abra is a base metal replacementstyle deposit hosted by sediments. The primary economic metal is lead. Silver, copper, zinc and gold are also present but are of 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 1,000 metres along strike, 800 metres down dip and dips gently south.

The "Core Zone" underlies the Apron Zone 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 Zone 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 Zone. 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 Zone. The Core Zone extends from 300 metres to 750 metres below surface and can be traced for 400 metres along strike.

Figure 5 (below) shows a stylised cross-section of Abra along with regional stratigraphy and main zones of interest.

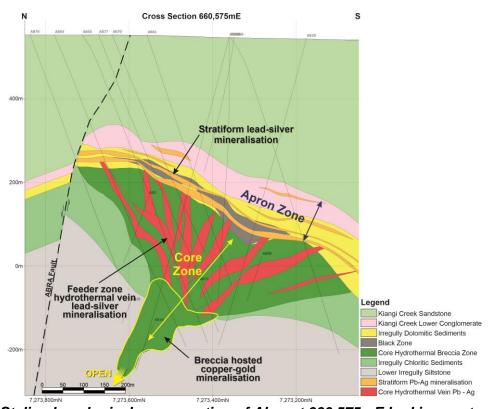


Figure 5: Stylised geological cross section of Abra at 660,575mE looking east.



APPENDIX 1 - DETAILS OF ASSAY RESULTS REPORTED IN THIS RELEASE

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	ТО	INTERVAL (m)	GRADE Pb (%)	GRADE Ag (ppm)	GRADE Cu (%)	Comment
AB131W1	350.98	357.84	6.9	2.5	19		Apron Zone 102*
AB131W1	368.80	377.00	8.20	13.0	24		Apron Zone 101
AB135	326.74	331.78	5.04	3.6	17		Apron Zone 102*
AB135	344.57	351.43	6.94	5.2	30		Apron Zone 101
AB135	361.94	364.16	2.22	18.9	48		Core Zone
AB135	406.75	410.51	3.76	10.3	10		Core Zone
AB135W1	324.4	328.19	3.79	7.3	33		Apron Zone 102
AB135W1	344.85	348.32	3.47	4.8	28		Apron Zone 101
AB136	366.6	370.38	3.78	3.3	15		Apron Zone 102*
AB136	383.75	388.9	5.20	6.9	12		Apron Zone 101
AB136	394.74	397.68	2.94	7.0	11		Core Zone
AB136	415.16	422.81	7.65	5.9	10		Core Zone
AB137	349.59	353.19	3.6	2.9	11		Apron Zone 102*
AB137	364.11	371.24	7.13	9.0	12		Apron Zone 101
AB138	373.83	374.81	0.93	5.3	26		Apron Zone 102*
AB138	388.35	392.5	4.15	6.1	16		Apron Zone 101
AB139	352.43	354.53	2.1	5.0	14		Apron Zone 102
AB139	362.02	371.18	9.16	8.2	6.3		Apron Zone 101
AB139	388.72	395.59	6.87	5.3	8.6		Core Zone
AB140	424.39	429.7	5.31	4.5	33		Apron Zone 102*
AB141A	351.46	362.74	11.3	7.1	17		Apron Zone 102
AB141A	366.46	377.37	10.9	12.2	17		Apron Zone 101
AB141A	429.6	434	4.4	6.4	10		Core Zone
AB142	402.54	407.79	5.25	10.8	51		Apron Zone 102
AB143	346.57	348.84	2.27	1.1	6		Apron 102 Lode
AB143	360.71	369.26	8.55	10.9	28		Apron Zone 101



APPENDIX 2 – 2019 COMPLETED DIAMOND CORE DRILL-HOLES: COLLAR LOCATIONS AND DIRECTION DETAILS

Hole ID	Easting	Northing	Azimuth	Dip	Depth
AB103	660025	7273563	360	70	418
AB104	660125	7273548	360	70	424
AB105	660075	7273631	360	70	370
AB106	660225	7273679	360	72	376.3
AB107	660125	7273428	360	70	457.1
AB108	660125	7273675	360	68	320.1
AB109	660326	7273622	360	68	364.8
AB110	660075	7273504	360	70	493.1
AB111	660129	7273596	360	68	400
AB112	660285	7273384	360	68	496.3
AB113	660225	7273612	360	68	391
AB114	660325	7273577	360	70	427.1
AB115	660200	7273500	360	70	421.6
AB116	660276	7273580	360	70	373.1
AB117	660275	7273488	360	70	427
AB118A	660335	7273459	355	73	511.3
AB119	660160	7273422	360	70	472
AB120	660387	7273378	360	68	478
AB121	660225	7273401	360	68	496
AB122	660225	7273503	360	67	448
AB123	660028	7273479	360	68	445.2
AB124	660192	7273429	360	68	439
AB125	660025	7273566	356	-66	431.7
AB126	660192	7273429	357	-64	438.1
AB127	660389	7273482	360	68	474.8
AB128	660125	7273548	356	-76	420.2
AB129	660250	7273488	356	-68	444.9
AB130	659975	7273500	356	-69	463.9
AB131	660250	7273486	356	-74	442
AB131W1	660245	7273529	003	-74	241.3
AB132A	660075	7273550	356	-64	408.9
AB133	660075	7273545	356	-73	405.7
AB134	660300	7273519	356	-71	439.1
AB135	660300	7273519	356	-78	429
AB135W1	660300	7273519	356	-78	242
AB136	660221	7273442	356	-62	444.6
AB137	660175	7273511	356	-68	442.5
AB138	660221	7273442	356	-70	427
AB139	660175	7273511	356	-72	419.7
AB140	660075	7273405	010	-73	472
AB141A	660275	7273488	356	-68	448
AB142	660025	7273474	356	-78	456.2
AB143	660275	7273486	356	-74	414.6

APPENDIX 3: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

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. 	 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.
	 Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 	 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
	 Aspects of the determination of mineralisation that are Material to the Public Report. 	to be representative and appropriate for the style of mineralisation at Abra (poly-metallic lead-zinc-silver-copper-gold).
	• In cases where 'industry standard' work has been done this would be relatively simple (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.	

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.
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 (and its predecessors). 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	If core, whether cut or sawn and whether quarter, half or all core taken.	All holes were routinely sampled as half cut NQ2 core for assaying.
sample preparation	 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. 	 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.
	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. Measures taken to ensure that the sampling is representative of the institute material collected including for instance results for field. 	 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
situ material collected, including for instance results for field duplicate/second-half sampling.	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.	
	Whether sample sizes are appropriate to the grain size of the material being sampled.	 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.
		 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 aboratory	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.
ests	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.	 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. 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
	Nature of quality control procedures adopted (eg, standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	 data accuracy and precision is of an appropriate quality for resource estimation work. Galena 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. • 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.

assessing laboratory precision.

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

Verification of sampling	The verification of significant intersections by either independent or alternative company personnel.	All significant intersections are verified by alternative company geologists.
and assaying	alternative company personner.	Due to the depth to mineralisation no twinned holes have been attempted yet.
assaying	 The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 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.
		No adjustments were made to assay data.
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole 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.
	Troccured community	 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
	Specification of the grid system used.	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.
	Quality and adequacy of topographic control.	
		Data is captured in Map Grid of Australia GDA 94, Zone 50.
		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.
Data spacing and distribution	Data spacing for reporting of Exploration Results.	 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.
	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	Drill holes in the current round of drilling is infill drilling and will improve the spacing to
	applied.	approximately 70 by 70m to 50m x 50m.
	Whether sample compositing has been applied.	 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.

APPENDIX 3: JORC Code, 2012 Edition – Table 2

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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.	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.
	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.	All tenements are in good standing and have Aboriginal Heritage Access Agreements in place.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Initial exploration around the Abra deposit by Amoco Minerals Australia Company (Amoco)in 1974 but they 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. In total they drilled 8 diamond core holes (AB1-11) before being taken over by North Limited (North) which did not complete any exploration. In 1995 Renison Goldfields Corporation (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). AML resumed drilling in 2005 and has completed all holes between and including AB23-59. Abra Mining drilled out the main extents of the deposit and completed various drilling programs focusing on establishing a high tonnage, low grade lead resource that would be amenable to bulk underground mining. Preliminary mining, geotechnical and metallurgical studies were completed.

		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 and the data sets generated are appropriate for use in the mineral resource estimate.
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 Zone 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 Zone 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 Zone. 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 Zone. 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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 should clearly explain why this is the case. 	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.
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. 	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.
	 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. 	 A maximum internal dilution interval of 4m@ <5% Pb was applied. No metal equivalent calculations were made.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	

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 Zone" 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 Zone" mineralization).
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.
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: Test the open northwestern margin of the deposit. Infill drill areas within the first 3 years of project life to assist in mine design. Further close spaced infill drilling of the first years project life for detailed mine design work.
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