



## ASX ANNOUNCEMENT

22 FEBRUARY 2021

ASX: G1A

### FIRST TARGETTED COPPER-GOLD HOLE AT ABRA HITS 26.9M AT 1.4% COPPER

#### HIGHLIGHTS:

- Outstanding success from the first ever hole at Abra drilled specifically to target the interpreted copper-gold zone (AB195) adjacent to and below existing lead-silver mineralisation
- Significant copper-gold intersections from AB195 include:
  - 3.0m at 4.2g/t gold and 1.1% copper from 670.7m,
  - 2.0m at 6.9% copper from 698.1m, and
  - 26.9m at 1.4% copper from 763.8m, including:
    - 8.9m at 2.3% copper from 773.0m
- Significant copper and gold mineralisation in AB195 occurred within the potential copper-gold channel zone interpreted by the Company's geological and geophysical review in 2020
- Downhole electromagnetic survey is planned to be conducted on AB195 during the second quarter of 2021 for the definition of conductive plates within its vicinity

**GALENA MINING LTD.** ("Galena" or the "Company") (ASX: G1A) announces the outstanding result from drill-hole AB195, drilled as part of the recently completed 2020 Abra Drilling Program and as the first ever hole drilled specifically targetting the interpreted copper-gold zone at the Abra Base Metals Project ("**Abra**" or the "**Project**").

Managing Director, Alex Molyneux commented, "*We're astounded at the success of drill-hole AB195 in intersecting significant mineralisation where we interpreted the gold and copper zone to be! We're planning a follow-up downhole electromagnetic survey to take place in Q2 this year to consider further copper-gold targeted drilling thereafter.*"

#### **DRILL-HOLE AB195 AND THE 2020 ABRA DRILLING PROGRAM**

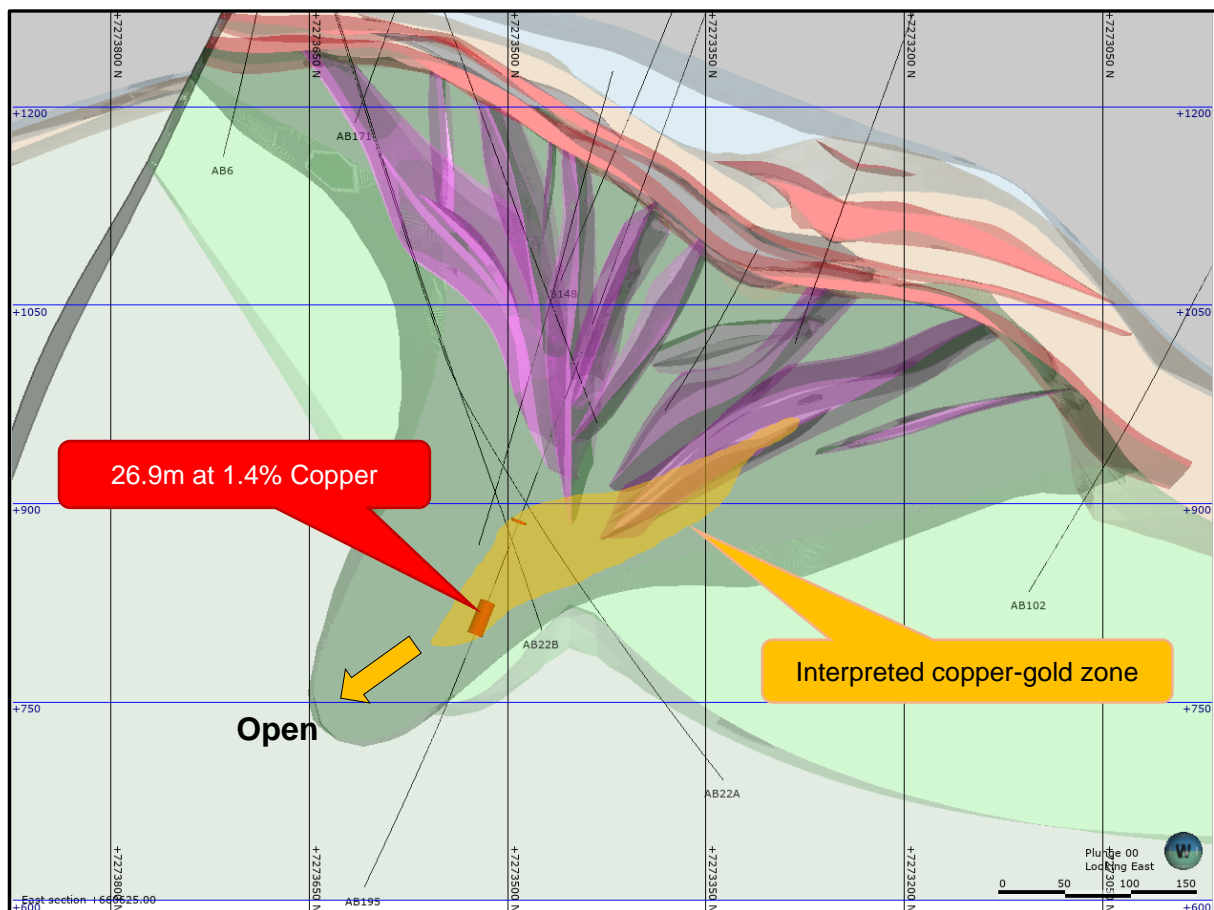
Drill-hole AB195, was drilled as part of the 2020 Abra Drilling Program, which concluded in late-December with 57 diamond core drill-holes being successfully completed for 24,832 cumulative linear metres. It's the first ever drill-hole at Abra drilled to specifically target the interpreted zone of gold and copper mineralisation lying immediately adjacent to and underneath the heavily explored lead and silver mineralised zones.

AB195 was an outstanding success, intersecting 3.0 metres at 4.2g/t gold and 1.1% copper from 670.7 metres, 2.0 metres at 6.9% copper from 698.1 metres, and 26.9 metres at 1.4% copper from 763.8 metres, including 8.9 metres at 2.3% copper from 773.0m .

Prior to intersecting the copper-gold zone, drill-hole AB195 passed through the Abra lead-silver zones, with the following significant intersections:

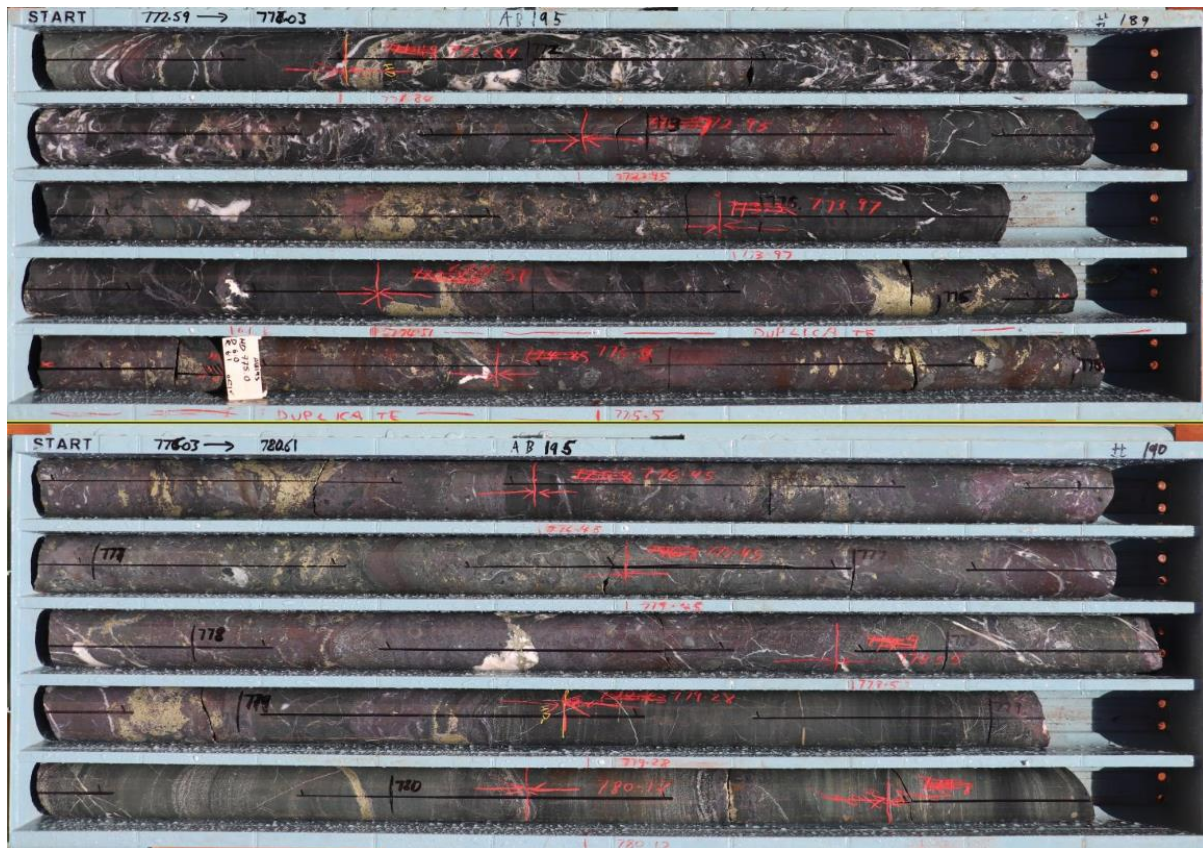
- 8.0 metres at 8.0% lead and 17g/t silver from 406.8 metres
- 5.5 metres at 12.1% lead and 12g/t silver from 541.3 metres
- 11.3 metres at 6.6% lead and 10g/t silver from 559.8 metres

The success of AB195 is borne out by the fact the significant copper and gold mineralisation was intersected where potential for gold-copper channels were interpreted to be, based on a major geological and geophysical interpretation exercise carried out by the Company in 2020 (see *Galena ASX announcement of 26 June 2020*) and Figure 1 (below). Furthermore, grade and thickness parameters from sub-sections within the broader intersection (ie, 8.9 metres at 2.3% copper) line up favourably in value terms with the lead-silver reserve grades.



**Figure 1. Showing drill-hole AB195 and the interpreted deep copper mineralisation zone**

The wider significant copper intersection in drill-hole AB195 occurred within a 45 metre zone of visual intermittent massive and disseminated copper-bearing chalcopyrite mineralisation from a down-hole depth of 752 metres (see sample drill-core photos in Figure 2 below).



**Figure 2. Drill-core photographs of AB195 from 772.59 metres to 780.61 metres down-hole.**

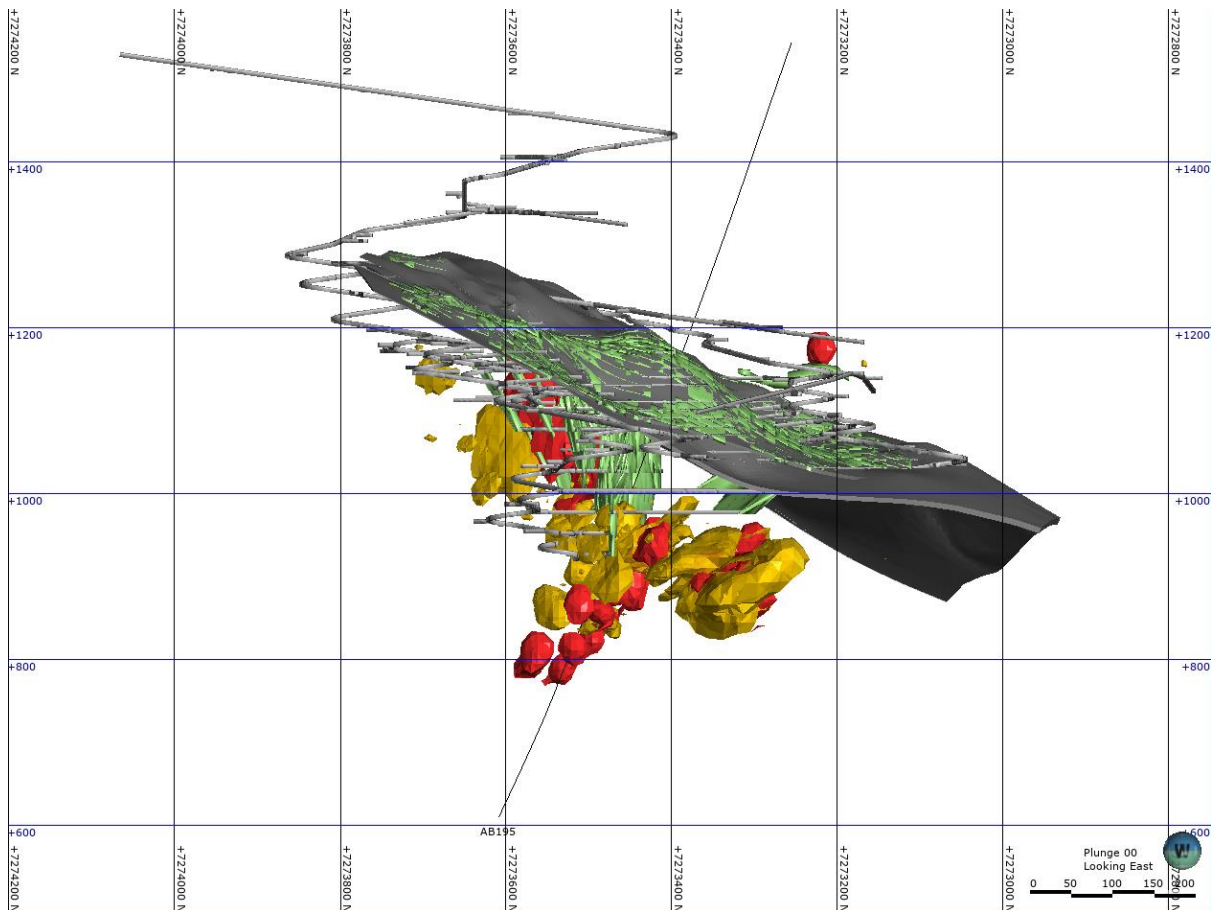
Given time constraints and the other objectives of the 2020 Abra Drilling Program, AB195 was the only hole drilled specifically to target the interpreted copper-gold zone. However, its success bodes well for additional follow-up work.

## **COPPER AND GOLD AT ABRA**

The Abra deposit mineralisation system is characterised by a stratiform high-grade lead-silver mineralisation zone forming multiple layers of mineralisation over the entire deposit following preferable sedimentary horizons. This stratiform mineralisation overlays a funnel-shaped chlorite breccia with sub-vertical vein-stringer zones (“feeding structures”) formed by quartz-barite-dolomite-galena bearing veins carrying high-grade mineralisation of galena and other sulphide minerals. This vein-stringer zone progressively changes with depth from lead-silver rich to copper-gold rich. The copper-gold mineralisation occurs more frequently at certain depths in the Abra deposit due to the metal zoning with lead-silver deposited at the top and copper-gold identified further down in the mineralisation system.

The copper and gold mineralisation at Abra remains under-explored and preferable copper-gold mineralisation trends have yet to be tested in a material and systematic way. To date, in excess of 100,000 cumulative linear metres of diamond core drilling has been completed at Abra and other than drill-hole AB195, that drilling has been focused on resource development of the lead-silver mineralisation. However, although previous drilling programs were not designed to systematically test gold-copper zones, a number of holes coincidentally intersected significant gold and copper mineralisation, establishing the existence of high-grade gold and copper mineralisation adjacent to, and underneath the lead-silver zone (see Figure 3 below).





**Figure 3. Isometric view of the Abra deposit looking east, showing the slope design and lateral development for the lead-silver project (green), and the distribution of known gold (>0.5g/t wireframes in gold colour) and copper (>0.5% wireframes in red) mineralisation.**

Significant high-grade gold and copper intersections observed in drill-holes targeting lead-silver mineralisation during the recently completed 2020 Abra Drilling Program included:

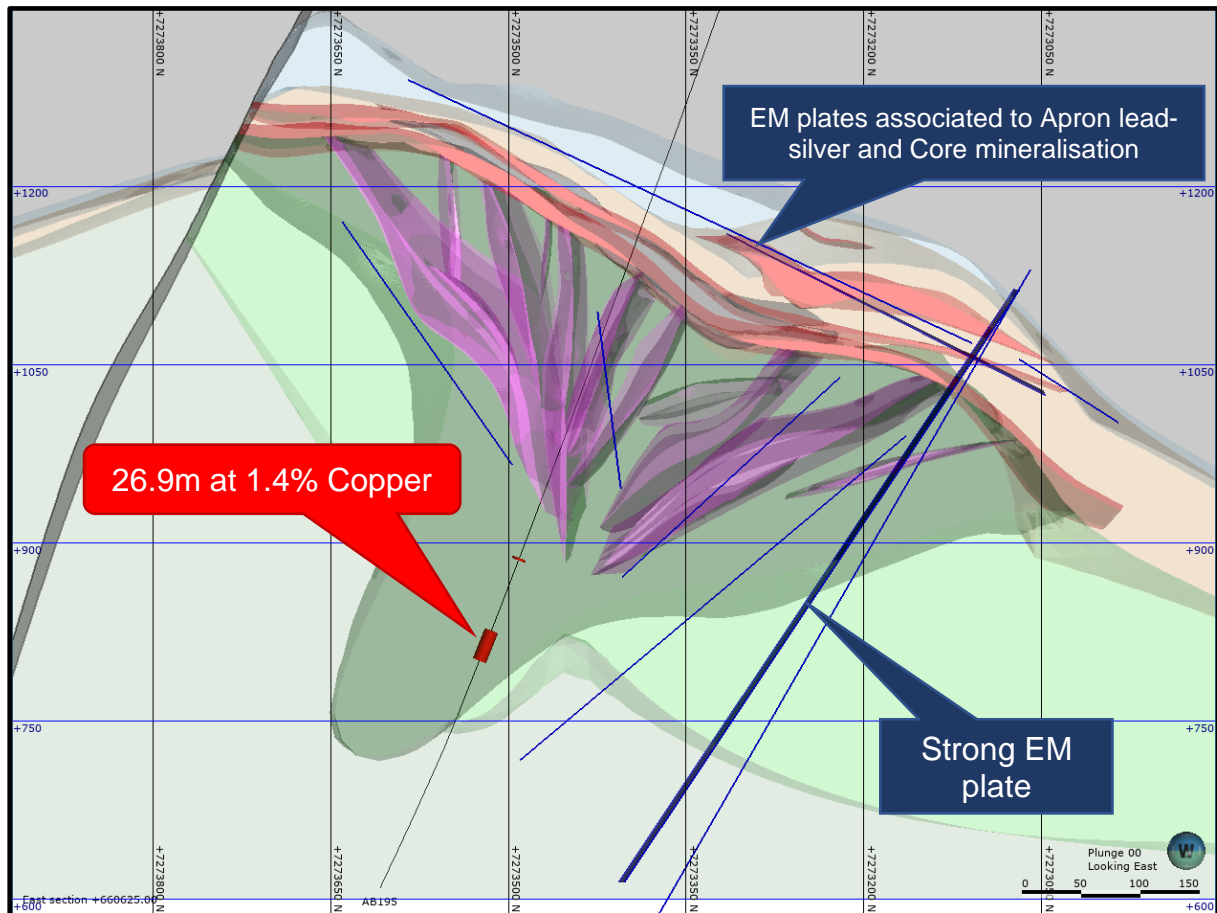
- 3.0 metres at 2.0% copper, 2.3g/t gold and 29g/t silver from 401.6m in AB174
- 6.0 metres at 1.8% copper and 1.3g/t gold from 391.8m in AB179
- 4.9 metres at 1.0 g/t gold and 24g/t silver from 424.2m in AB166

Significant high-grade gold and copper intersections observed in drill-holes targeting lead-silver mineralisation during historical programs included:

- 16 metres at 3.2g/t gold and 38g/t silver from 641.0 metres in AB50
- 12 metres at 3.0g/t gold and 1.1% copper from 690.0 metres in AB59
- 10 metres at 4.9g/t gold and 1.6% copper from 504.0 metres in AB3
- 12.0m at 6.7g/t gold from 706.0m in AB83,
  - Incl. 8m at 9.5g/t gold from 706.0m
- 8m at 1.5g/t gold and 1.9% copper from 633.43m in AB88
- 2.3m at 10.3g/t gold and 2.1% copper from 649.83m in AB80
- 6.0m at 3.5g/t gold and 2.0% copper from 683.4 in AB79
- 4.4m at 2.2% copper from 659.94m in AB78

In late-2018, the Company completed a downhole electromagnetic (“**EM**”) survey on drill-hole AB102, drilled at the southern portion of the Abra deposit and identified several EM conductors. Due to the advanced knowledge acquired with the 2017-2019 drilling programs, most of the EM conductors could be explained as correlated to the flatter lying Apron Zone lead-silver lodes and some correlated to the sub-vertical Core Zone lead-silver mineralisation as shown in Figure 4. The strong mineralisation identified within drill-hole AB195 appears to

be correlated to one of the conductive plates identified in the interpretation of the electromagnetic survey data. However, a much larger and deep conductive EM plate was identified at the southern end of the deposit, and that still remains untested. This conductive plate gained significant importance by the recognition of a potential structural control on the ingress of base and precious metals mineralisation into the deposit. A downhole EM survey on drill-hole AB195 will be highly useful to add to the analysis performed on the AB102 downhole EM survey results to assist in the definition and better locate relevant EM plates within the southern part of the deposit.



**Figure 4. Abra mineralisation domains (Apron Zone and Core Zone) and the correlation to the interpreted position of the electromagnetic conductive plates, together with the location of drill-hole AB195 and its significant copper-gold intersection.**

## PROPOSED NEXT STEPS FOR GOLD AND COPPER EXPLORATION AT ABRA

A downhole electromagnetic survey program is planned to be conducted on AB195 during the second quarter of 2021. The data gained from this will be combined to update the Company's previous geological and geophysical analysis for the interpreted copper and gold zone to establish the best plan for follow-up drilling.

The Board of Directors of Galena authorised this announcement for release to the market.

For further information contact:

**Galena Mining Ltd.,**



**Alex Molyneux**  
Managing Director

### Competent Person's Statement

The information in this report to which this statement is attached that relates to exploration results and drilling data is based upon information compiled by Mr Angelo Scopel, MAIG, a full time employee for Abra Mining Pty Limited. Mr Scopel has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Scopel consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

### About Abra Base Metals Project

77.28% 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).

Abra sits on a granted Mining Lease, is fully permitted, and construction works have commenced (12% complete). Project development is being funded via a combination of an A\$90 million investment by Toho Zinc Co., Ltd. of Japan and US\$110 million of project financing debt facilities provided by Taurus Funds Management.

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 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



**APPENDIX 1 – 2020 ABRA DRILLING PROGRAM DETAILS OF ASSAY RESULTS (22 February 2021)**

Minimum lead intersection (other than where noted): 4m at 5.0% lead. Maximum consecutive 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 Zn (%)	GRADE Cu (%)	GRADE Au (ppm)	Comment
AB144	396.16	396.55	0.39	7.5	43				
AB145	376.29	377.76	1.47	5.9	18				
AB145	381.69	383.14	1.46	10.2	28				
AB146	279.48	285.80	6.32	5.7	12				
AB146	302.60	314.12	11.52	17.2	27				
AB146	350.80	356.95	6.15	8.1	11				
AB147	255.88	260.19	4.31	6.3	20				
AB147	266.22	283.73	17.51	9.5	34	2.1			
AB147	288.06	308.94	20.88	7.3	20	0.7			
Including	280.00	295.77	15.77	7.1	25	4.5			
AB147	321.78	357.30	35.52	15.1	22				
AB147	366.16	375.08	8.92	17.1	26				
Including	372.7	375.1	2.4	18.5	30		1.1		
AB148	396.43	407.07	10.64	8.6	17				
AB149	400.37	402.47	2.1	3.1	15				
AB149	430.22	438.12	7.9	9.1	20	0.8			
Including	430.22	433.67	3.45	11.1	25	1.6			
AB149	461.66	466.94	5.28	13.7	24				
AB149	468.85	472.60	3.75	3.9	15		1.6		
AB150	421.43	432.65	11.22	2.5	9				
AB151	334.46	361.86	27.40	16.5	73	1.3			
Including	337.31	342.46	5.15	24.8	157	6.1			
AB151	368.52	372.29	3.77	13.8	24				
AB152	394.09	395.78	1.69	24.1	193				
AB153	312.96	319.58	6.62	6.9	9				
AB153	340.19	344.42	4.23	9.7	13				
AB154	291.45	295.87	4.42	6.0	11				
AB154	324.28	329.32	5.04	9.6	11				
AB155	280.16	288.65	8.49	11.1	47				
AB155	300.89	313.58	12.69	5.1	18				
AB155	352.00	370.57	18.57	7.9	11				
AB155	380.50	386.69	6.19	7.7	12				
AB156	361.37	366.69	5.32	9.4	29				
AB157	283.47	288.89	5.42	13.9	24				
AB157	301.11	313.46	12.35	10.7	16				
AB158	316.42	324.18	7.76	8	23				
AB158	346.51	356.16	9.65	11.3	20				



HOLE ID	FROM	TO	INTERVAL (m downhole)	GRADE Pb (%)	GRADE Ag (ppm)	Grade Zn (%)	GRADE Cu (%)	GRADE Au (ppm)	Comment
AB158	373.23	377.0	3.77	6.1	12				
AB158	415.6	418.18	2.6				1.5	1.1	
AB159	378.83	389.48	10.65	9.2	26				
AB160	448.94	466.4	17.46	5.6	17				
AB160	491.37	497.46	6.09	4.6	7				
AB161	298.52	300.08	1.6	11.5	36				
AB161	343.85	346.33	2.49	9.6	14				
AB162	353.57	357.85	4.28	16.9	26				
AB163	438.95	440.78	1.83	13.4	33				
AB164	380.34	390.14	9.80	19.1	24				
AB164	422.79	427.22	4.43				1.01		
AB165	397.23	414.03	16.80	6.3	94				
AB166	264.37	275.51	11.14	7.2	16				
AB166	334.84	341.63	6.79	15.4	21				
AB166	348.58	352.97	4.39	8.1	14				
AB166	372.93	382.97	10.04	7.5	18				
AB166	398.91	415.79	16.88	9.3	36				
AB166	424.22	429.16	4.94		24			0.96	
AB167	277.1	299.85	22.75	7.50	24	1			
Including	280.83	283.38	2.55	6.9	24	3.42			
Including	293.08	298.70	5.62	11.8	24	1.49			
AB167	304.32	310.12	5.80	9.4	18				
AB167	338.72	358.8	20.08	8.9	18				
AB167	363.75	369	5.25	7.6	12				
AB168W1	493.59	503.35	9.76	5.0	11				
AB168W1	507.10	518.92	11.82	6.0	11				
AB168W1	531.78	538.54	6.76	5.6	12				
AB169	270.61	274.1	3.49	5.1	12				
AB170	271.34	275.65	4.31	5.7	30				
AB170	297.66	308.28	10.62	6.8	22				
AB170	317.63	330.03	12.40	5.4	14				
AB170	352.65	369.24	16.59	9.2	25	0.8			
Including	353.86	357.93	4.07	5.3	15	2.2			
AB170	374.00	391.00	17.00	6.5	10				
AB171	308.08	325.74	17.66	8.8	30				
AB171	329.66	346.64	16.98	8.6	15				
AB172	259.40	265.65	6.25	4.1**	12**				**4% Lead cut-off applied
AB172	269.40	280.40	11	5.8**	32**				**4% Lead cut-off applied
AB172	288.46	312.75	24.29	10.9	24				
AB172	321.90	326.00	4.1	8.3	14				
AB172	342.30	352.20	9.90	18.07	31				
AB173	299.30	310.78	11.48	6.2	16				
AB173	404.04	417.17	13.13	8.7	16				

HOLE ID	FROM	TO	INTERVAL (m downhole)	GRADE Pb (%)	GRADE Ag (ppm)	Grade Zn (%)	GRADE Cu (%)	GRADE Au (ppm)	Comment
AB174	271.00	276.1	5.10	9.3	16				
AB174	309.48	315.17	5.69	5.4	19				
AB174	320.31	331.03	10.72	5.8	11				
AB174	360.00	392.33	32.33	13.8	34				
AB174	401.61	404.56	2.95		29		2	2.3	
AB175	NSI								
AB178	437.84	453.70	15.86	7.4	14				
AB179	277.66	283.94	6.28	7.3	20				
AB179	287.62	293.75	6.13	5.2	15				
AB179	297.06	302.87	5.81	5.2	10				
AB179	316.63	319.86	3.23	14	21				
AB179	331.87	336.94	5.07	5	12				
AB179	346.80	354.54	7.74	6.6	10				
AB179	361.82	369.92	8.10	7.6	12				
AB179	391.83	397.78	5.95				1.8	1.3	
AB195	406.79	414.77	7.98	7.97	16.83				
AB195	541.34	546.82	5.48	12.05	12.29				
AB195	559.76	571.07	11.31	6.59	10.15				
AB195	600.14	605.82	5.68			1.93			
AB195	613.92	614.9	0.98					1.3	
AB195	632.08	638	5.92			1.55			
AB195	670.65	673.64	2.99				1.1	4.2	
AB195	698.1	700.06	1.96				6.9		
AB195	700.06	701.4	1.34					1.4	
AB195	704.51	705.64	1.13					2.4	
AB195	752.9	754.48	1.58				1.1	1.3	
AB195	759.65	760.65	1					1.5	
AB195	763.75	790.65	26.9				1.4		
Including	772.95	781.87	8.92				2.3		

\* Alternative compositions for zinc and copper intersections

\*\*1% lead cutoff applied to that intercept

**APPENDIX 2 – 2020 ABRA DRILLING PROGRAM COMPLETED DIAMOND CORE DRILL-HOLES AS AT 22 FEBRUARY 2021: COLLAR LOCATIONS AND DIRECTION DETAILS**

Hole_ID	NAT_East	NAT_North	NAT_RL	Dip	Azimuth	Max_Depth
AB144	660022.971	7273518.888	562.068	-70.03	358.21	421
AB145	659975.233	7273556.796	564.051	-70.56	357.76	409.05
AB146	660349.659	7273599.536	555.385	-70.20	353.65	374.93
AB147	660548.926	7273549.137	552.737	-71.11	356.88	391.24
AB148	660650.112	7273271.742	543.825	-71.14	353.07	510.97
AB149	660300.153	7273292.203	549.086	-71.17	356.86	514.42
AB150	660178.642	7273366.572	552.858	-71.20	355.75	468.68
AB151	659999.009	7273609.619	564.788	-74.91	355.93	393.04
AB152	660001.068	7273461.882	560.452	-71.01	356.32	427.1
AB153	660298.146	7273603.724	556.233	-69.71	355.63	381.87
AB154	660249.946	7273635.040	557.432	-70.99	353.23	363.82
AB155	660573.670	7273530.329	552.214	-72.74	357.17	397.14
AB156	660048.686	7273554.000	561.863	-70.37	354.71	401.5
AB157	660376.440	7273617.708	555.097	-72.12	353.87	348.7
AB158	660548.429	7273547.388	552.694	-74.67	353.56	421.06
AB159	659975.005	7273558.906	564.063	-66.99	355.65	415.05
AB160	660272.531	7273257.523	548.772	-71.89	358.33	499.15
AB161	660300.640	7273546.461	555.264	-70.00	356.02	402.07
AB162	660050.090	7273605.927	562.786	-69.74	355.88	373
AB163	660272.695	7273326.086	550.097	-71.88	351.45	475.05
AB164	660374.820	7273515.602	553.996	-68.16	353.36	430
AB165	660072.484	7273437.917	558.026	-71.20	355.98	454.07
AB166	660496.409	7273582.346	553.276	-79.04	356.56	436.43
AB167	660496.347	7273583.648	553.299	-73.48	357.06	376.1
AB168	660087.478	7273383.749	555.673	-71.80	89.59	256.7
AB168W1	660087.446	7273383.726	555.663	-71.80	89.59	561
AB169	660349.647	7273599.525	555.384	-75.00	357.31	385.4
AB170	660525.478	7273537.207	552.812	-72.72	356.90	405.1
AB171	660613.809	7273487.969	550.715	-70.90	3.18	385.06
AB172	660546.223	7273623.206	553.240	-78.95	351.63	366.84
AB173	660546.015	7273442.778	550.071	-70.42	354.52	483.96
AB174	660473.712	7273587.792	553.485	-77.90	357.07	445.6
AB175	660174.116	7273576.159	558.304	-69.81	356.42	384
AB176	660597.876	7273414.505	548.863	-70.42	354.42	417.98
AB177	660473.052	7273590.391	553.469	-74.21	357.33	373.5
AB178	660251.036	7273362.230	551.450	-69.66	359.09	473.45
AB179	660450.054	7273592.813	553.794	-74.01	357.70	412.01
AB180	660051.635	7273683.254	563.429	-79.18	171.80	166.8
AB180W1	660051.660	7273683.258	563.423	-79.18	171.80	430.5
AB181	660401.205	7273598.741	554.817	-71.95	353.70	361.85
AB182	660351.736	7273435.805	552.224	-70.06	356.42	487.59
AB183	660601.313	7273555.773	552.099	-80.81	352.31	24.8
AB183A	660601.276	7273555.754	552.120	-80.81	352.31	403.81

Hole_ID	NAT_East	NAT_North	NAT_RL	Dip	Azimuth	Max_Depth
AB184	660422.381	7273328.254	548.464	-70.07	353.84	442.5
AB185	660601.244	7273553.257	551.988	-74.99	356.76	367.09
AB186	660123.035	7273561.804	559.450	-69.58	355.48	15.7
AB186A	660123.042	7273561.272	559.505	-69.70	355.56	415.28
AB187	660401.178	7273596.980	554.706	-77.79	356.58	15.8
AB187A	660401.186	7273598.186	554.757	-77.79	356.58	368.27
AB188	660098.131	7273664.703	561.571	-79.83	179.93	159.7
AB188W1	660098.129	7273664.694	561.580	-80.00	180.00	457.73
AB189	660249.383	7273636.695	557.509	-81.95	355.88	393.91
AB190	660450.039	7273592.542	553.572	-80.13	356.74	415.1
AB191	660697.699	7273273.884	543.665	-70.78	354.15	493.24
AB192	660593.280	7273409.335	548.750	-76.77	356.25	564.3
AB193	660419.157	7273621.714	554.524	-79.90	356.57	372.92
AB194	660540.119	7273664.226	553.597	-78.96	173.04	469
AB195	660618.869	7273254.871	544.131	-71.15	356.02	1000
AB196	660323.205	7273544.045	554.872	-70.16	356.28	405.5
AB197	659998.654	7273611.669	564.768	-68.09	356.43	433.11
AB198	660419.111	7273622.616	554.614	-75.00	356.00	335.11
AB199	660525.155	7273536.509	552.713	-76.20	356.31	453.92
AB200	660596.369	7273409.404	548.676	-81.55	352.36	33.8
AB200A	660596.221	7273410.619	548.753	-81.67	352.47	492.75

## APPENDIX 3 – JORC CODE, 2012 EDITION: TABLE 1

### Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<p style="text-align: center;">Sampling techniques</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>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.</i></li> <li><input type="checkbox"/> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><input type="checkbox"/> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><input type="checkbox"/> <i>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.</i></li> </ul>	<p>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 borate flux 15% NaNO<sub>3</sub> and Fused Bead Laser Ablation ICP-MS. Gold was assayed by fire assay using a 50 g charge with AAS finish.</p> <p>Sample intervals were based upon geological logging and ranged from 0.3 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-silver-zinc-copper-gold).</p>
<p style="text-align: center;">Drilling techniques</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>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).</i></li> </ul>	<p>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.</p> <p>Galena's 2017 - 2020 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.</p>



Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><input type="checkbox"/> <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><input type="checkbox"/> <i>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.</i></li> </ul>	<p>All diamond core was measured/recorded for drilling recovery by Galena staff.</p> <p>Overall core recovery is excellent due to the silicified and competent nature of the rock with core recoveries typically being 100%.</p> <p>No grade versus recovery sample biases due to loss or gain of material has been identified.</p>
Logging	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>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.</i></li> <li><input type="checkbox"/> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><input type="checkbox"/> <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>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</p> <p>Core logging was both qualitative and quantitative. Lithological observations were qualitative. All geotechnical observations and core photographs were quantitative.</p> <p>100% of all core which included all mineralised intervals was logged. All core was photographed both wet and dry.</p>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><input type="checkbox"/> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><input type="checkbox"/> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> </ul>	<p>All holes were routinely sampled as half cut NQ2 core for assaying.</p> <p>N/A</p> <p>All core was appropriately orientated and marked up for sampling by company geologists prior to core cutting. Sample widths range from 0.3m 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.</p>
	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> </ul>	<p>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.</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>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</i></li> <li><input type="checkbox"/> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>In Galena's 2017 to 2020 drill program replicates of crushed core and duplicates (2<sup>nd</sup> half of crushed core) were routinely assayed. Results showed an excellent correlation demonstrating a high level of repeatability.</p> <p>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.</p>
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><input type="checkbox"/> <i>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.</i></li> </ul>	<p>Galena's samples were analysed by Bureau Veritas Laboratory in Perth/WA. The samples were analysed via XRF analysis – sulphide ore for the following elements: Ni, Cu, Co, Fe, S, MgO, CaO, SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Mn, Zn, Cr, Cl, K<sub>2</sub>O, P<sub>2</sub>O<sub>5</sub>, Pb, As, Ti, V, LOI, and by Fused Bead Laser Ablation ICP-MS for Ag, Ba, Bi, Ce, Eu, Gd, Hf, La, Mo, Nb, Nd, Pr, Rb, Sb, Sm, Sn, Sr, Ta, Th, U, W, Zr, and by Fire Assay for Au with AAS finish for a 50g charge..</p> <p>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.</p> <p>Blanks, certified standards, replicated 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.</p>
	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>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.</i></li> </ul>	<p>Galena quality control procedures include the following:</p> <p><b>Blank samples</b> – 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.</p> <p><b>Reference Standard samples</b> – submitted at a rate of 1 in 20 in sequence with the original core samples. Three different certified standards are being used.</p> <p><b>Duplicates</b> – two duplicate samples of the original samples are taken during this drilling program. The first duplicate samples is a split of the crushed material of the original samples taken in the laboratory, and the second duplicate sample corresponds to the other half of the core (field duplicate). The duplicate samples are taken at a rate of 4 per 100 samples, over selected mineralisation styles and also through waste rock material. These are considered as true duplicates and can be used for assessing field sampling methodology and laboratory precision.</p>
<p>Verification of sampling and assaying</p>	<ul style="list-style-type: none"> <li><input type="checkbox"/> <i>The verification of significant intersections by either independent or</i></li> </ul>	<p>All significant intersections are verified by alternative company geologists.</p>

Criteria	JORC Code explanation	Commentary
	<p><i>alternative company personnel.</i></p> <p><input type="checkbox"/> <i>The use of twinned holes.</i></p> <p><input type="checkbox"/> <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></p> <p><input type="checkbox"/> <i>Discuss any adjustment to assay data.</i></p>	<p>Due to the depth to mineralisation no twinned holes have been attempted yet.</p> <p>During Galena's 2017- 2020 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 2018-2020 drill programs.</p> <p>There were no adjustments made to assay data.</p>
Location of data points	<p><input type="checkbox"/> <i>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.</i></p> <p><input type="checkbox"/> <i>Specification of the grid system used.</i></p>	<p>Down hole surveys are completed every 15-30m during the drilling using using a north seeking gyro by the drilling contractor during during drilling. A selection of holes will be then later gyro surveyed by ABIMS using a north seeking gyro for quality control.</p> <p>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.</p> <p>Data captured in Map Grid of Australia GDA 94, Zone 50.</p>
	<p><input type="checkbox"/> <i>Quality and adequacy of topographic control.</i></p>	<p>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.</p>
Data spacing and distribution	<p><input type="checkbox"/> <i>Data spacing for reporting of Exploration Results.</i></p> <p><input type="checkbox"/> <i>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.</i></p> <p><input type="checkbox"/> <i>Whether sample compositing has been applied.</i></p>	<p>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.</p> <p>Drill holes in the current round of drilling is infill drilling and will improve the spacing to approximately 30 by 30m.</p> <p>Data spacing is sufficient to establish geological and grade continuity to establish a mineral resource estimate.</p> <p>No sample compositing has been applied.</p>

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<p><input type="checkbox"/> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</p> <p><input type="checkbox"/> 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.</p>	<p>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 in the current program are oriented to the north to sample most of the identified structures in the Apron zone an unbiased manner.</p> <p>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 its 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.</p>
Sample security	<p><input type="checkbox"/> The measures taken to ensure sample security.</p>	<p>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.</p>
Audits or reviews	<p><input type="checkbox"/> The results of any audits or reviews of sampling techniques and data.</p>	<p>Mitchell River Group completed an audit of the geological database for data up to October 2019. This audit included review and documentation of sampling and geological data integrity. No issues have been identified</p> <p>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.</p>

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<p><input type="checkbox"/> 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.</p> <p><input type="checkbox"/> 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.</p>	<p>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 L52/0121, L52/0194, L52/0198, and L52/210. A 3.0% Net Smelter Royalty exists over leases M52/0776 and E52/1455. Within the adjoining Jillawarra Project Galena Mining holds 100% of E52/1413, E52/3630, E52/3823 and E52/3575.</p> <p>All tenements are in good standing and have existing Aboriginal Heritage Access Agreements in place. No mining agreement has been negotiated.</p>

Criteria	JORC Code explanation	Commentary
<p><i>Exploration done by other parties</i></p>	<p><i>Acknowledgment and appraisal of exploration by other parties.</i></p>	<p>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).</p> <p>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</p> <p>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.</p>
<p><i>Geology</i></p>	<p><i>Deposit type, geological setting and style of mineralisation.</i></p>	<p>The Abra deposit lies within sediments of the Proterozoic Edmund Group. Abra is a polymetallic base metal 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.</p> <p>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.</p> <p>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.</p>



Criteria	JORC Code explanation	Commentary
<p>Drill hole Information</p>	<ul style="list-style-type: none"> <li>· 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:               <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length.</li> </ul> </li> <li>· 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.</li> </ul>	<p>Coordinates, dip, depth and azimuth of Galena’s 2020 completed holes are listed in Appendix 2.</p>
<p>Data aggregation methods</p>	<ul style="list-style-type: none"> <li>· 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.</li> <li>· 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.</li> <li>· The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>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.</p> <p>A maximum internal dilution interval of 4m@ &lt;5% Pb was applied.</p> <p>No metal equivalent calculations were made.</p>
<p>Relationship between mineralisation widths and intercept lengths</p>	<ul style="list-style-type: none"> <li>· These relationships are particularly important in the reporting of Exploration Results.</li> <li>· If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> </ul>	<p>All intersection widths reported are downhole widths.</p> <p>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).</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>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').</li> </ul>	
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	A plan is included in the report.
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	All significant results are reported and tabulated.
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<p>Galena has completed various studies as part of its FS study program, including geotechnical, metallurgical and environmental studies. To date no significant issues have been identified,</p> <p>Groundwater studies and test work has identified water sources suitable for processing water supplies</p>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<p>The 2020 Abra resource development drilling program is ongoing and focused on:</p> <ul style="list-style-type: none"> <li>infill drilling of the Apron lead-silver orebody to support mine design work;</li> <li>testing selected prospective 'metal rich' zones that have potential to enhance life of mine plan optimisation; and</li> <li>testing prospective gold-copper zones</li> </ul>