ASX Announcement

Scoping Study Demonstrates Outstanding Economics for the Abra Base Metal Project

28 June 2018

Galena Mining Limited ("Galena" or "the Company") is pleased to provide the details of a Scoping Study that has been undertaken at its 100% owned West Australian Abra Base Metal Project ("Abra", "the Abra Project" or "The Project") ("Study").

The Study is based on new work undertaken by Galena and its Study team, comprising internal personnel and industry expert external independent consultants, in relation to underground mining, ore processing, mine-site infrastructure, environmental permitting, logistics and marketing. The Study is also underpinned by the extensive historical technical database that has been acquired by Galena.

The Study confirms Abra as an economically and technically robust opportunity, with potential to become a significant, long-life, high margin West Australian lead-silver producer. There remains considerable exploration potential for additional lead-silver mineralisation already identified to be converted to JORC Resource with additional drilling. The deposit is also zoned with significant copper-gold intercepts at depth. The Abra deposit is a globally significant mineral deposit.

The potential development of Abra coincides with a very strong outlook for lead. Increasing demand and reducing supply has produced an average spot lead price of US$0.97/lb over the last 10 years. Base case analysis in the study uses a US$0.95/lb lead price.

Given the strength of the Scoping Study outcomes, Galena is progressing into the next phase of work at Abra, across multiple fronts and at a maximum pace. A Pre-Feasibility Study ("PFS") is due for completion in September 2018.

CEO, Ed Turner comments: "This Scoping Study has confirmed the economic viability of the Abra Project and has increased our confidence in the real potential of the project as a near-term Western Australian development opportunity. This is an exciting long life, high margin and low capital project in a Tier-1 jurisdiction. Abra's latest representative metallurgical test work (refer to 7 June 2018 ASX announcement) demonstrates that it can produce a very high grade (74.5% lead and 140 g/t silver), high quality clean concentrate that is in high demand."

IMPORTANT NOTE
The Study referred to in this announcement is a technical and economic investigation of the viability of the Abra Project. It is based on low accuracy technical and economic assessments, (+/- 35% accuracy) and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Study will be realised. Notwithstanding many components of this study, such as plant design, capital cost, processing operating cost are more accurate than +/- 35%. The Production Target referred to in this presentation is based on JORC Resources which are approximately 50% Indicated and 50% Inferred. The mine plan has been generated using sectional interpretation and averaging of grades over multiple year periods prior to the application of mining dilution. To achieve the outcomes indicated in this study initial funding in the order of $153 million is likely to be required. Investors should note that there is no certainty that Galena will be able to raise funding when needed. It is also possible funding may only be available on terms that may be dilutive to or otherwise effect the value of Galena's shares.

HIGHLIGHTS

- **Abra Scoping Study shows an outstanding economic outcome:**
  - **Base case pre-tax post royalties NPV_{10} of A$394 million and IRR of 61% (based on long term Pb price of US$0.95/lb, silver (Ag) price of US$16.50/oz and USD: AUD of $0.75);**
  - **Spot case pre-tax post royalties NPV_{10} of A$615 million and IRR of 82% (based on spot Pb price of US$1.14/lb, silver (Ag) price of US$16.50/oz and USD: AUD of $0.75);**

- **Initial mine life of 11 years, with opportunities identified to extend beyond 11 years;**

- **Annual throughput of 1 Mtpa, with average grades of 9.7% Pb and 15g/t Ag, producing 91ktpa of lead and 450koz of silver annually;**

- **Average life of mine cash (C1) costs of US$0.46/lb and total costs (C3) costs of US$0.56/lb (includes all royalties) – high margin, strongly cash generative operation;**

- **Strong market conditions and the outlook for lead are very favourable with strong upward movement in demand and pricing. The lead price has averaged US$0.97/lb over the last 10 years and averaged at US$1.14/lb during June 2018. Base Case lead price assumption is US$0.95/lb);**

- **Average LOM revenues estimate of $251 million and operating cash flows of $104 million per year (Base Case);**

- **Pre-production CAPEX estimated to be $153 million with a payback period of approximately 18 months;**

- **Pre-feasibility Study is nearing completion with release expected in September 2018; and**

- **Projected to be fifth or sixth largest lead producer in the world at full production rate.**

EXECUTIVE SUMMARY

Abra is a globally significant base metal deposit located in the Gascoyne region of Western Australia (see Figure 1). Galena owns a 100% interest in the Project which was discovered in the late 1970's and has been the subject of an extensive historical exploration and preliminary (Scoping) level economic studies. There has been no previous mining activity and the deposit does not outcrop. The Abra deposit is located within the granted Mining Licence M52/776.

The throughput rate for the Study is 1 million tonnes per annum (Mtpa), which allows mining to target/focus on high-grade lead-silver mineralisation. This rate is based on mining studies performed on the latest JORC Resource estimate. The high-grade model validated by recent Galena drilling supports a smaller, higher-grade underground mining model compared with previous scenarios

investigated by prior owners. The production rate was selected after analysing different ore grades against practical underground mining rates and optimising the Project's future infrastructure, which is based on different capital cost and grade optimisation scenarios.

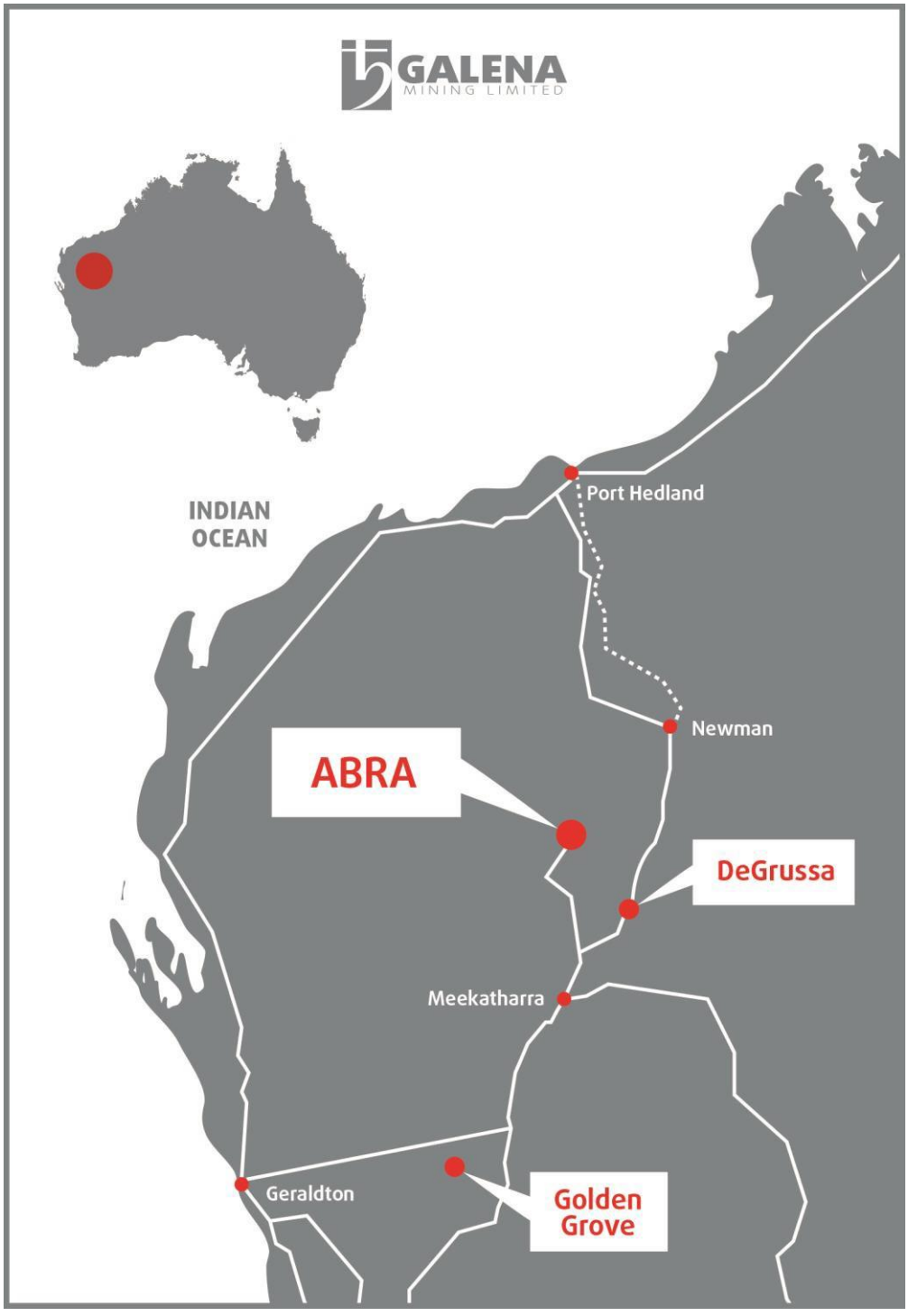

Figure 1: Project location

MINERAL RESOURCES AND MINEABLE MATERIAL

The Study is based on the 2018 Abra JORC Resource (refer to 14 March 2018 ASX announcement), which was completed in accordance with the guidelines of the 2012 JORC Code and summarised in Table 1.

Table 1: Abra March 2018 JORC Resource Estimate (Inverse Distance interpolation)

INDICATED RESOURCE				
Pb% Cut off	***Vol m³***	***Tonnes***	***Pb%***	***Ag g/t***
7.0	**1,800,000**	**6,300,000**	**10.1**	**26**
7.5	**1,500,000**	**5,300,000**	**10.6**	**28**
8.0	**1,300,000**	**4,500,000**	**11.1**	**30**
INFERRED RESOURCE				
Pb% Cut off	***Vol m³***	***Tonnes***	***Pb%***	***Ag g/t***
7.0	**2,300,000**	**7,800,000**	**9.1**	**26**
7.5	**1,700,000**	**5,900,000**	**9.7**	**29**
8.0	**1,300,000**	**4,600,000**	**10.2**	**32**
TOTAL RESOURCE (INFERRED AND INDICATED COMBINED)				
Pb% Cut off	***Vol m³***	***Tonnes***	***Pb%***	***Ag g/t***
7.0	**4,100,000**	**14,100,000**	**9.5**	**26**
7.5	**3,300,000**	**11,200,000**	**10.1**	**28**
8.0	**2,700,000**	**9,100,000**	**10.7**	**31**

This JORC Resource forms the basis of mineable material after the application of a range of modifying factors including minimum mining width, cut-off grades, mining dilution and mining recovery.

The mineable material that is the basis of the study compromises 9.2 Mt at a grade of 9.7% Pb & 15 g/t Ag for a contained 842,500 t lead & 4.2 Moz silver. Approximately 51% of the mineable material is in the Indicated category with the first two (2) years of production all in the Indicated category. This ensures 100% of the payback period (< 1.5 years of production) is mining solely Indicated resources. The mineable material in the indicated classification exceeds 75% up to year five (5) and therefore Inferred Resources do not underpin the economic viability of the project.

As can be seen in "Table 9: High Level Schedule" (Page 16) the Project is expected to generate positive cashflows between $89 M & $110 M pa from year three (3) onwards. A mix of debt and equity is the most likely funding model so 100% of the capital expenditure will not need to be borrowed.

PLANNED MINING METHOD

The planned mining method comprises an underground mine accessed by a decline (see Figure 2). Initial material is expected to be mined during the Q1 in CY2021.

Underground extraction will be mostly by sublevel open stoping mining and partly by room and pillar mining. These methods, together with paste filling high value stopes, will enable maximum extraction of the orebody.

The underground material will be trucked to the surface via the access decline.

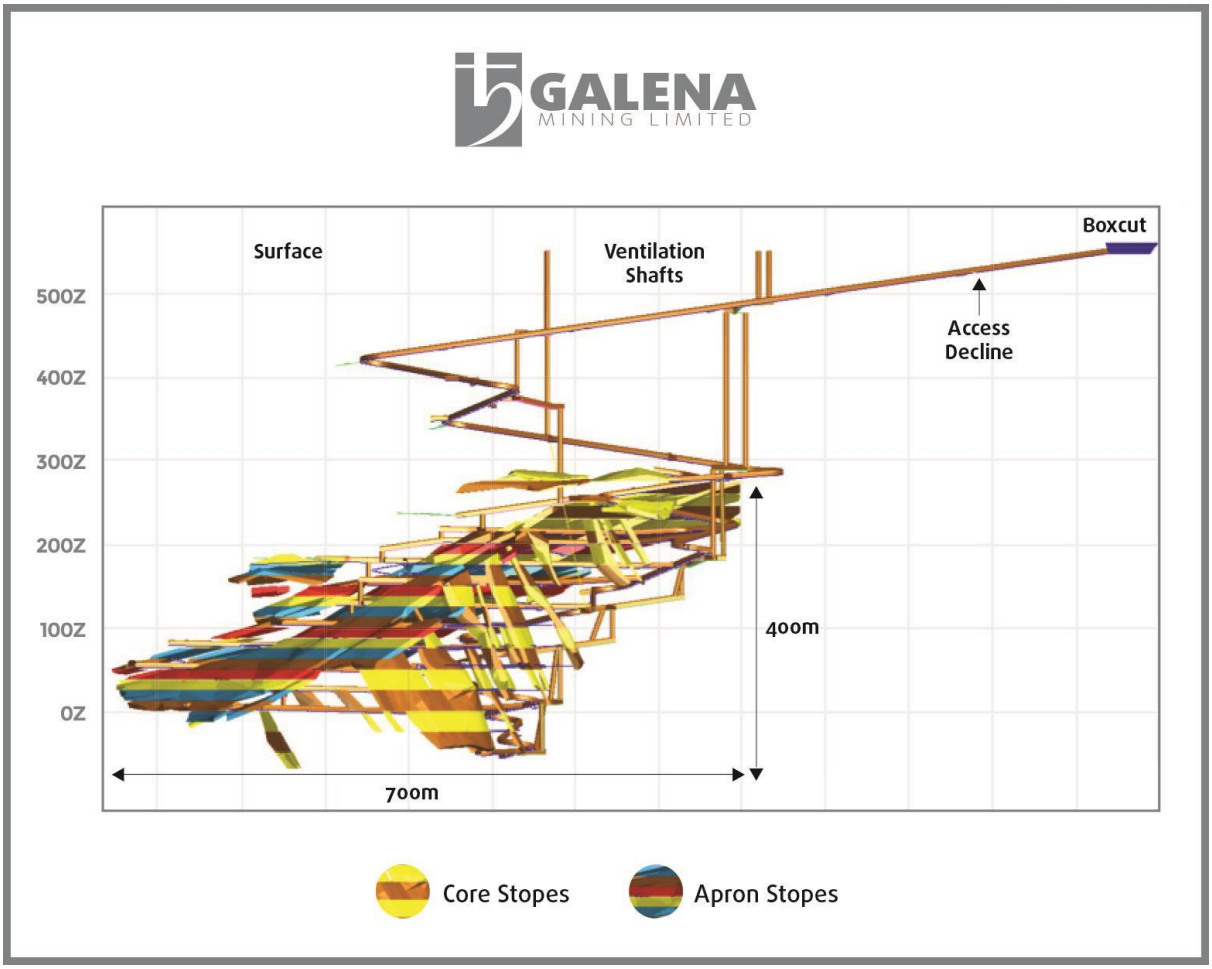

Figure 2: Abra's Conceptual Mine Design – Long Section View

PROCESSING

The Study is based on a 1 Mtpa capacity processing plant. Processing will comprise of conventional crushing, grinding and two stages of conventional flotation and filtration to produce a lead (plus silver) concentrate.

The processing facility construction cost is estimated at A$66 million including A$6 million of contingency costs. The construction is scheduled to commence during Q2 in 2020, with a 15-month time frame for commissioning.

METALLURGY AND CONCENTRATE PRODUCT QUALITY

Abra's metallurgical test work results have confirmed very high metal recoveries in an exceptionally high-grade and clean lead-silver concentrate.

Composite samples delivered lead concentrate grades ranging from 69% to 81% (averaging 74.5%) with recoveries between 94% and 96% (averaging 95%, see Figure 3). Abra's very high lead grades in

concentrate enables Galena to increase their metallurgical recoveries above 96%, if desired and still maintain an extremely high lead-in-concentrate product. The Study has assumed 94% recovery.

Figure 3: Abra lead concentrate

The plant will produce approximately 130,000 t concentrate per annum, containing 91,100 t of lead and 453,000 Oz of silver.

INFRASTRUCTURE, TRANSPORT AND LOGISTS

The Study has accommodation of 136 permanent rooms and accompanying infrastructure, which includes access roads, an airstrip (designed for planes capable of carrying 50 passengers), offices, workshops, communications and fuel storage and distribution facilities. Power will be provided by on-site diesel generation and water being provided from nearby bore fields.

Total site infrastructure costs are calculated at A$35 million including A$3.5 million of contingency.

It is proposed to transport lead concentrates in sealed half height sea containers by road to the port of Geraldton, which currently exports lead sulphide.

CAPITAL EXPENDITURE

The capital expenditure required to production of first concentrate totals A$153 million, as follows:

Table 2: Pre-Production Capital Cost Estimates

Pre-Production CAPEX Estimate	(A$) Million
Mine Development	30.0
Processing	60.0
Surface Infrastructure & Management	35.0
Port & Miscellaneous	5.0
Capital Contingency & Owners Costs	23.0
Total	153.0

OPERATING EXPENDITURE

A breakdown of operating cost estimates for Abra is as follows:

Table 3: Estimate of C1 Operating Cost Estimates

Average Operating Costs Estimates	(US$) ¢/lb
Mine	19.2
Mill	12.7
TC / RC & Concentrate Transport	14.1
Total C1 Cash Cost	46.0

PROJECTED REVENUE AND KEY ASSUMPTIONS

Revenue and cash flow forecasts have been developed using a consensus of analyst forecasts for the lead and silver prices over Abra's initial life of mine. An independent consensus USD:AUD exchange rate of $0.75 has been applied.

Table 4: Abra's Base Assumptions (life of mine averages)

Description	Values	
Millions of tonnes per annum (Mtpa)	1.0	
Years Construction	1.5-2.25	
Years Ramp Up ranges	0.5-1.0	
Process Recovery (%)	94	
Lead (Pb) Payabillity (%)	95	
Concentrate grade (% Pb)	75	
Mining Grade	9.7% Pb	15 g/t Ag
Exchange Rate – US$:A$	0.75	
Prices - Base case (US$)	Pb 0.95/lb	Ag 16.50/oz
Prices - Spot case (US$)	Pb 1.14/lb	Ag 16.50/oz

The below financials for the Base Case and Spot Price are based on the life of mine assumption tabulated above.

Table 5: Financial and Production Metrics

Key Financial and Production Metrics	
Processing capacity	1 Mtpa
Initial mine life	11 years
Average lead metal production	91 ktpa
Average silver metal production	450 ozpa
C1 cost payable	46 USc/lb
All-in sustaining cost	56 USc/lb
Pre-production capital	A$153 m

	Pre-tax
Average net cash flow (Years 3-11)	A$103 m
Net Present Value (DR @ 10% & Pb = US$ 0.95/lb) - long term Pb Price	A$394 m
Internal Rate of Return – long term Pb price	60.9%
Project Payback (from start of Production)	1-1.5 yrs
Net Present Value (DR @ 10% & Pb = US$ 1.14/lb) – spot Pb price	A$615 m
Internal Rate of Return – spot Pb price	82.5%

SENSITIVITY ANALYSIS

Sensitivity analysis using +/- 20% range pivoting on its base case (displayed in brackets) for the lead price (US$ 0.95), process recovery (94%), TC/RC (US$ 100), Capex ($150 million), OPEX ($118/t) and Mining production rate (1 Mtpa) are shown in Figure 4.

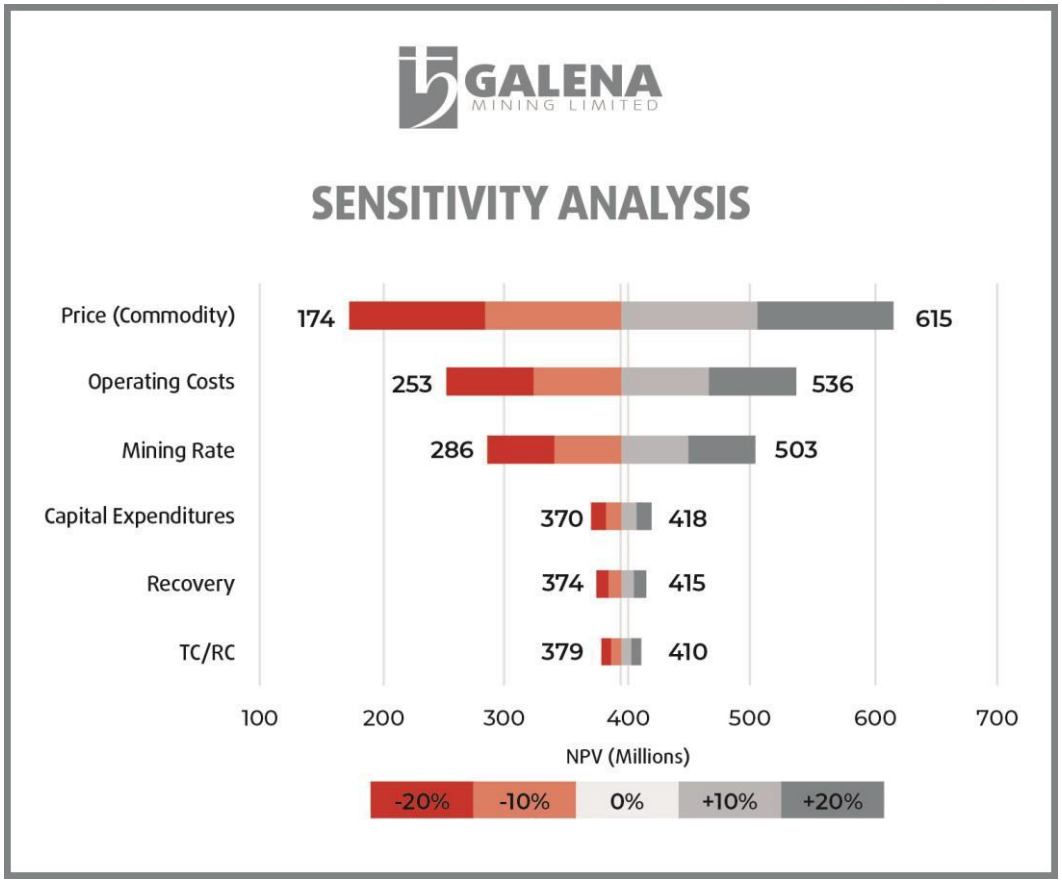

Figure 4: Abra's sensitivity analysis showing the project is very robust, as at lead prices of US$0.76/lb NPV (10%) = $174 million (versus June average price of US$ 1.14/lb)

TIMELINE TO PRODUCTION

The Study shows commencement of construction during Q3 of CY2019 with a decline extending 300 metres vertical below surface. Planned extraction of the first mineralisation from development is scheduled for Q1 of CY2021 (see Figure 5).

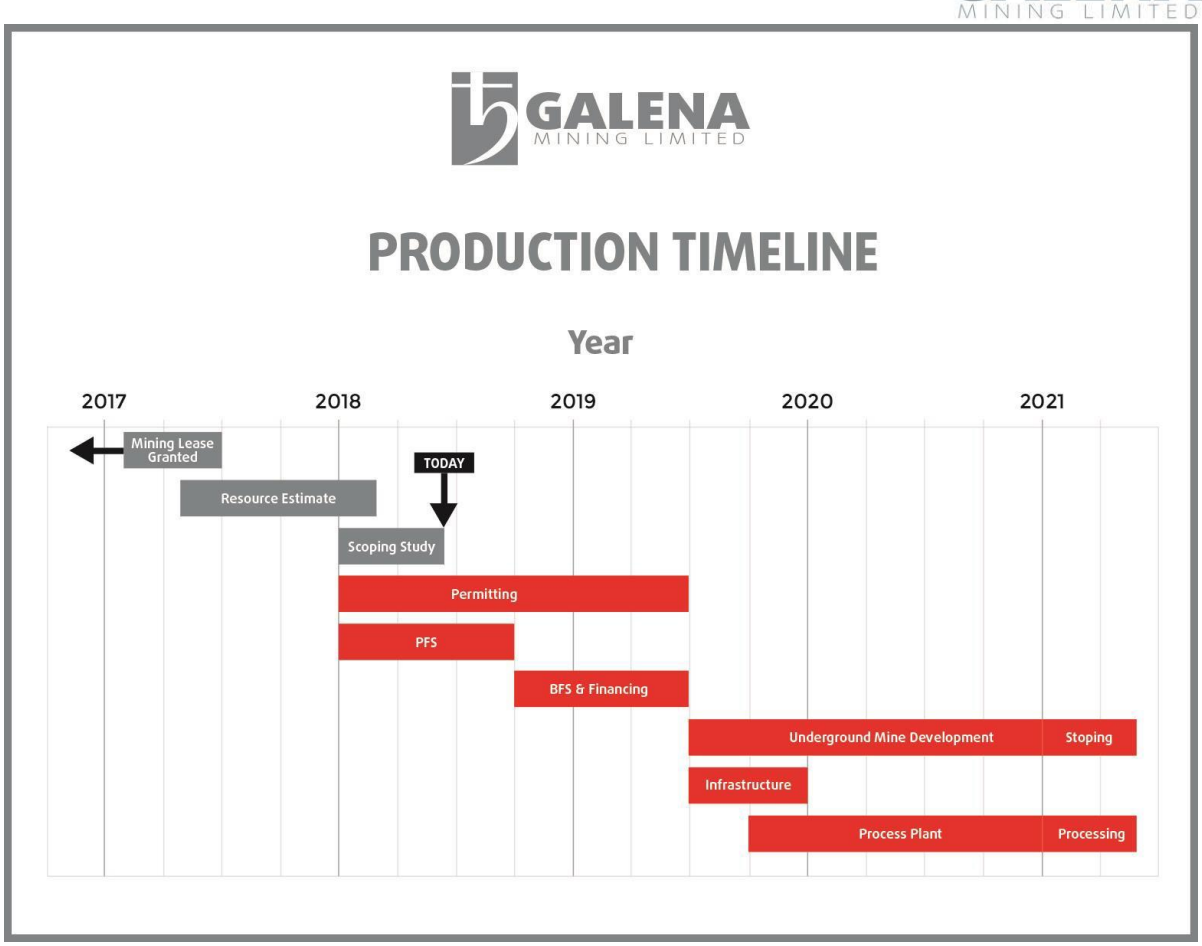

Figure 5: Abra's Proposed Development Timetable (Grey blocks have been completed)

PROJECT FUNDING

The Board of Galena believes there is a reasonable basis to assume the necessary funding for the Abra Project will be obtained for the following reasons.

- A mix of debt and equity is the most likely funding model so 100% of the capital expenditure will not need to be borrowed. Galena has already conducted preliminary discussions with potential debt, equity and offtake providers and received numerous expressions of interest with regards to assisting with Project financing.
- Galena currently has approximately $10M cash and therefore sufficient funds to complete infill resource drilling, upgraded resource estimate, Pre-Feasibility Studies and Bankable Feasibility Studies.
- The Company has a total of 36M options which are exercisable at 6 - 30c (to acquire one ordinary fully paid share) in the next 2-3 years and if all were exercised would provide an additional $3.645M cash.
- The Board and Management have a strong financing track record in mining project finance and equity raising for numerous ASX listed companies besides Galena over the last 15 years.
- Galena and its Board have previously demonstrated its ability to raise exploration and development funding for Abra. Galena's $6M IPO was heavily oversubscribed in September 2017 and an additional $9M fund raising in April 2018 was also heavily oversubscribed.
- The lead price today (US$1.10/lb) is currently 20% higher than the Study base case assumption

(US$0.95/lb). The sustained improvement in the market over the last 15 years (see Figure 6) supports Galena's positive views about the long-term demand and economic viability of the Abra Project.

NEXT STEPS

The next steps for Galena's Abra project include:

- Completing the Pre-Feasibility in September 2018;
- Additional infill drilling to convert more JORC Inferred Resource material to the higher confidence classification of Indicated in late 2018; and
- Completing its marketing exercise with potential buyers (i.e. smelters and traders) to obtain contract terms for Abra's lead concentrate.

LEAD MARKET OVERVIEW

Commentary on the lead market has been obtained from industry publications and open file data. The lead market has enjoyed a solid increase in consumption in the past decade (see Figure 6). Approximately 50% of the lead market demand is met by recycling.

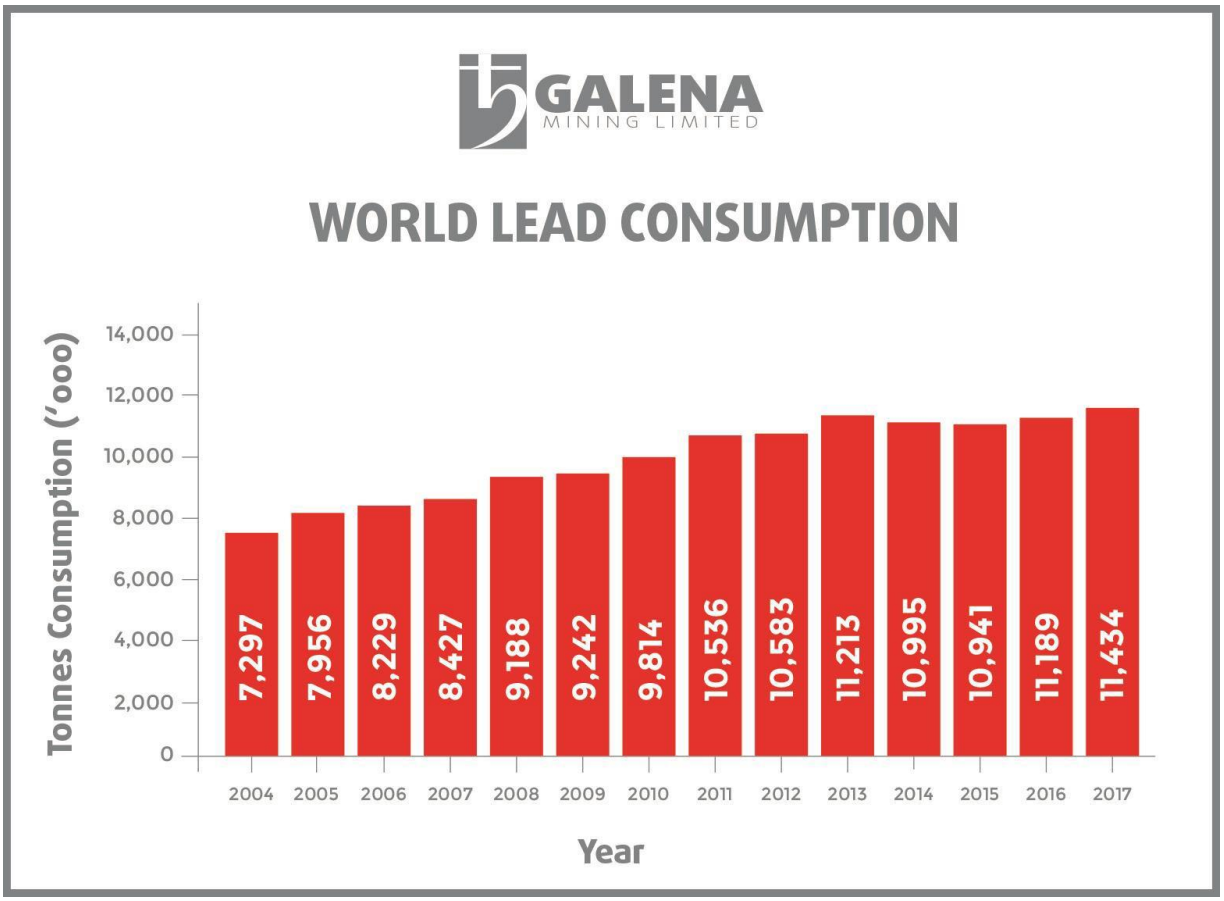

Figure 6: World lead consumption since 2014

London Metal Exchange (LME) stockpiles have shown a long-term decline and US$ prices increase (see Figure 7).

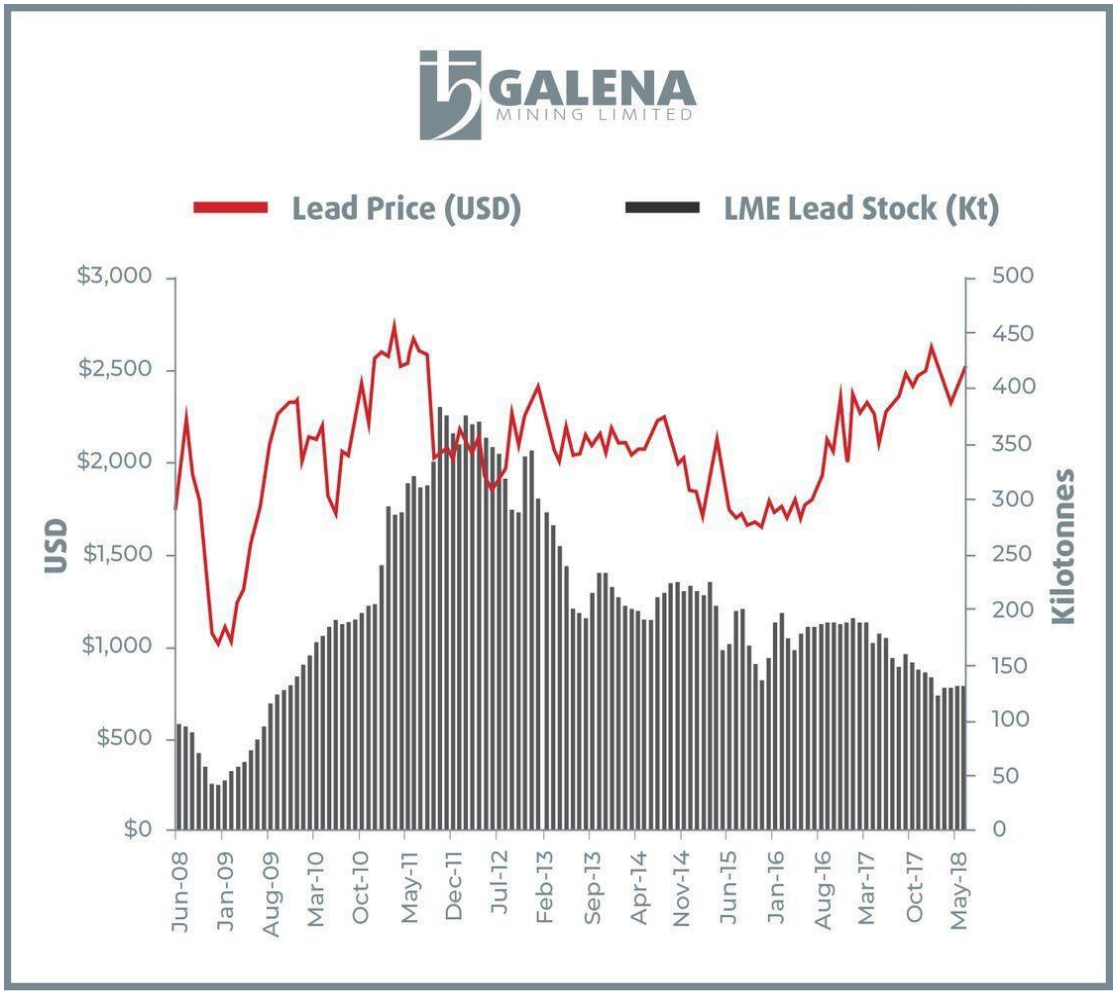

Figure 7: LME Stockpiles vs Lead Price (over 10 Year term)

ADDITIONAL DETAILS ON CAPEX, OPEX, MINING, PROCESSING AND APPROVALS

CAPITAL COST ESTIMATES

The pre-production capital estimate, including development and through to commencement of ore processing is A$153 million (including $13 million in contingency). Surface capital costs are detailed in Table 6.

Table 6: Abra's Surface Infrastructure Capital Cost Estimates

Type	Class	Units	Supply Cost $	Install Cost $	Freight Cost $	Total Cost $
DIRECT COSTS	Earthworks	(M)	7.02	5.91	0.00	12.93
	Civil works	(M)	3.27	4.00	0.01	7.28
	Mechanical equipment	(M)	18.39	2.20	1.15	21.73
	Platework	(M)	2.24	0.34	0.62	3.20
	Structural steel	(M)	4.26	1.68	0.36	6.30
	Electrical installations	(M)	5.97	2.61	0.24	8.82
	Piping	(M)	2.26	2.69	0.16	5.11
	Buildings	(M)	4.38	0.69	0.19	5.27
	Camp	(M)	8.74	1.09	0.39	10.22
	Construction equipment	(M)	2.24	0.71	0.11	3.06
DIRECT COSTS Total		**(M)**	**58.76**	**21.92**	**3.24**	**83.92**
INDIRECT COSTS	Temporary construction facilities	(M)	0.62	0.02	0.07	0.72
	Supervision and Construction Manageme	(M)	0.25	5.32	0.00	5.57
	Project and procurement management	(M)	0.20	2.21	0.00	2.40
	Engineering design	(M)	0.00	5.82	0.00	5.82
	Vendor Commissioning	(M)	0.00	0.03	0.00	0.03
	Commissioning	(M)	0.02	0.48	0.00	0.50
	Initial fills	(M)	0.52	0.00	0.00	0.52
	Insurance Spares	(M)	1.18	0.00	0.00	1.18
	Owners Costs	(M)	12.71	0.00	0.01	12.73
INDIRECT COSTS Total		**(M)**	**15.50**	**13.88**	**0.09**	**29.47**
CONTINGENCY	Contingency	(M)	6.08	3.93	0.35	10.36
Grand Total		**(M)**	**80.34**	**39.73**	**3.67**	**123.74**

Underground mining capital costs, which are based on the underground designs shown on the following pages, are at a +/- 35% accuracy is shown in Table 7.

Table 8: Pre-Production Underground Mining Capital Cost Estimates

Pre-Production Mining CAPEX	A$M
Site Preparation / Box cut	0.50
Decline, Ventilation & Upper Level Accesses	26.00
Contingency	2.65
Total Cost	**29.25**

MINING METHOD

A combination of retreat open stope mining and some room and pillar mining will be used to exploit the Apron and Core zones. There are zones of significant size and grade which will very likely utilise paste-fill to achieve high rates of mining recovery.

Assumed resource to reserve % = 85%;
Assumed extraction v pillar % = 90% for paste filled areas & 70% for non-paste filled areas; and
Assumed dilution will be into lower grade of 5% Pb.

The mining method will be long hole stoping using mostly 89mm holes along with some room and pillar jumbo stoping.

The maximum stope width will be 30m and the minimum pillar width 6m.

The total underground mining costs, which include owners' costs (Technical Services team) are outlined below:

The decline is 6m high and 5.5m wide, costing $6,000 per metre. This includes the ground support installation (assumes split sets & mesh), boring, charging, bogging and trucking the broken rock to the waste dump.

Access level development is expected to be 5.5m high and 5.5m wide, costing $5,500 per metre. This includes the ground support installation (assumes split sets & mesh), boring, charging, bogging and trucking the broken rock to the surface.

Type of equipment used at the peak mining stage is expected to be:
- 3 x Twin Boom Jumbos
- 2 x Production Rigs
- 6 x 2900 Loaders
- 5 x Trucks

The fresh air bases will be located on the decline. The mine will have 11KV to 1000V substation transformers.

Underground development in relation to the medium grade resource envelope are shown in Figure 8.

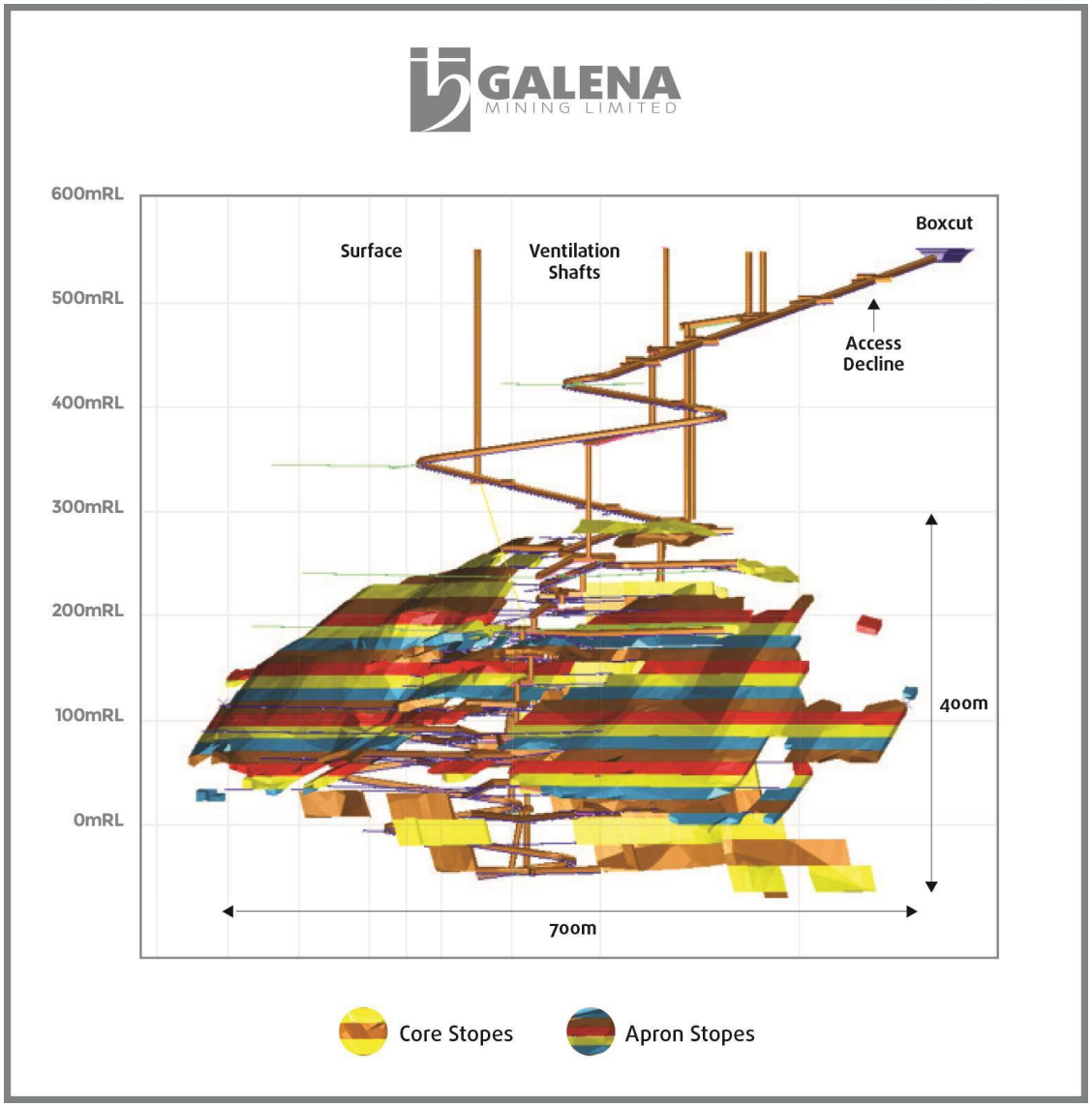

Figure 8: Abra Conceptual Mine Design

MINING SCHEDULE

AMC Mining consultants have been engaged to initially run Mine Stope Optimiser software on Abra's JORC Resource. A mining schedule suitable for Abra's PFS is currently being performed by AMC Consultants. Based on Abra's JORC Resource an average grade of 9.7% has been applied over the first 9.3 years of the mine's life (see Table 9).

Table 9: Abra Base Metals Project - High Level Schedule

Annual Cash flows (A$):	Units	Totals / Ave	0	1	2	3	4	5	6	7	8	9	10	11
PHYSICALS														
Indicated Classification - Mineable Material					100%	100%	100%	75%	60%	50%	30%	20%	12%	0%
Mining Ore Tonnes	000	9,250		0	250	1000	1000	1000	1000	1000	1000	1000	1000	1000
Lead Ave Grade (%)				9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%	9.7%
Silver Ave Grade (g/t)				15	15	15	15	15	15	15	15	15	15	15
Lead Tonnes - Sold (after Payability)	**000**	**800**		**0.0**	**21.6**	**86.5**	**86.5**	**86.5**	**86.5**	**86.5**	**86.5**	**86.5**	**86.5**	**86.5**
Silver Oz Sold (after Payability)	**000**	**3,984**		**0.0**	**107.7**	**430.7**	**430.7**	**430.7**	**430.7**	**430.7**	**430.7**	**430.7**	**430.7**	**430.7**
REVENUE														
FX	0.75		0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Lead Price (US$)	**T**	**2,094**		**2,094**	**2,094**	**2,094**	**2,094**	**2,094**	**2,094**	**2,094**	**2,094**	**2,094**	**2,094**	**2,094**
Silver Price (US$)	Oz	16.5		16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5	16.5
Total Revenue (A$)	**M**	**2,323**		**0.0**	**62.8**	**251.1**	**251.1**	**251.1**	**251.1**	**251.1**	**251.1**	**251.1**	**251.1**	**251.1**
COSTS - Capital & Operating														
CAPEX	**M**	**-136**	-5.0	-86.0	-40.0	-5.0	0	0	0	0	0	0	0	0
Sustaining Capital	**M**	**-39.6**	0.0	0.0	0.0	0.0	-26.4	-2.2	-2.2	-2.2	-2.2	-2.2	-2.2	0
C1 Costs - Operating Only - $/t ore		116	0	0	116	109	109	118	118	118	118	118	118	118
Total Operating Costs with Royalty	**M**	-1,325	0.0	-1.5	-35.8	-135.7	-135.7	-145.2	-145.2	-145.2	-145.2	-145.2	-145.2	-145.2
EARNINGS														
Net cash flow	**M**	**822.5**	**-5.0**	**-87.5**	**-13.0**	**110.5**	**89.1**	**103.8**	**103.8**	**103.8**	**103.8**	**103.8**	**103.8**	**106.0**
Cashflow Position	**M**		**-5.0**	**-92.5**	**-105.5**	**5.0**	**94.1**	**197.8**	**301.6**	**405.3**	**509.1**	**612.8**	**716.6**	**822.5**
Net present value - Discount Rate @	**10%**	**394.3 M**												
Internal rate of return		*61%*												

OPERATING COST ESTIMATES

Operating costs are inclusive of mining, processing, infrastructure, waste storage, administration, shipment, TC/RC and +/- royalty charges. Several general and administration costs have been allowed in the operating cost estimate including, insurances, freight, consultants, tenement fees, communications, offices and process plant related expenses. These costs have been derived from a variety of sources and reflect general mining operations and site/regional specific circumstances. The Study uses a value of $8/t ore for general and administration costs.

Labour costs have been estimated using an organisation chart for a typical mine and concentrate processing facility. Total personnel (excluding the head office) is estimated to be 136 persons operating on a 14 and 7-day roster. All costs are allocated into appropriate mining/waste storage and processing (See Table 10 and Figure 9).

Table10: Costs Before and After Payability and Royalties

	A$/T Lead		A$/lb Lead		US$/lb Lead
Costs ($/T Lead)	$1,275	Before Payability & Royalties	$0.58	($/lb Lead)	$0.43
Costs ($/T Lead)	$1,572	Before Payability & After Royalties	$0.71	($/lb Lead)	$0.53
C1 Costs ($/T Lead)	**$1,342**	**After Payability - Before Royalties**	**$0.61**	**($/lb Lead)**	**$0.46**
C3 Costs ($/T Lead)	$1,655	After Payability & After Royalties	$0.75	($/lb Lead)	$0.56

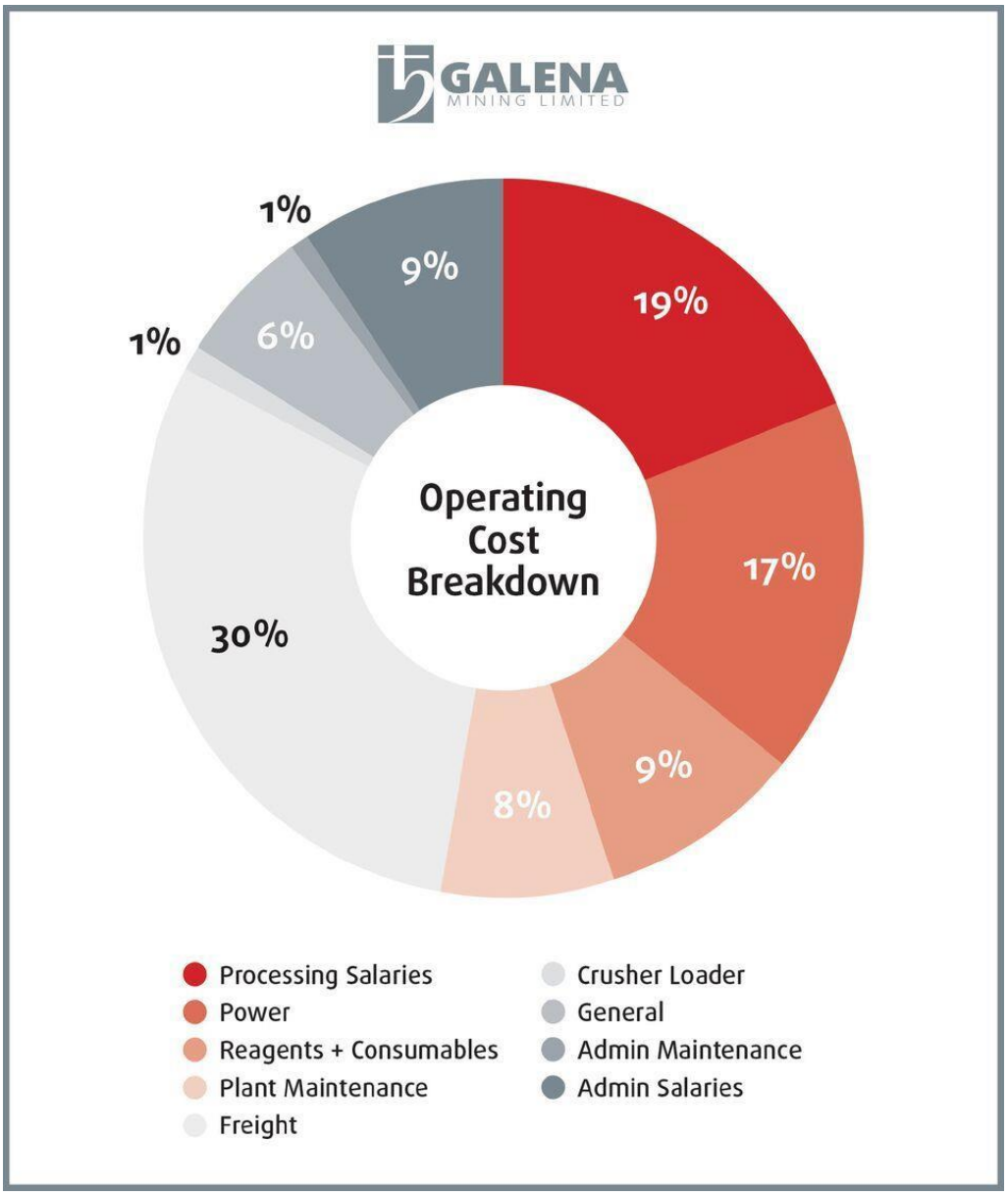

Figure 9: Operating Cost breakdown

METALLURGY

Abra's metallurgical test work results have confirmed very high metal recoveries in an exceptionally high-grade and clean lead-silver concentrate. These results are from test work carried out by the internationally recognised global leader in this type of work, ALS Global (Burnie, Tasmania). Results exceed expectations and the model from the internal Scoping Study test-work which wasconducted previously.

Composite samples delivered lead concentrate grades ranging from 69% to 81% (averaging 74.5%) with recoveries between 94% and 96% (averaging 95%). Abra's very high lead grades in concentrate

enables Galena to increase their metallurgical recoveries above 96%, if desired and still maintain an extremely high lead-in-concentrate product. The Study has assumed 94% recovery.

The proposed Process Design was produced by GR Engineering and based on ALS' Test-work as shown in Figure 10. GR Engineering have designed an ore processing plant for inclusion in the Pre-Feasibility Study based on the latest test-work results, contemporary design practices and in-house GR Engineering's procedures. This design is utilised in the Study. The proposed flow sheet will comprise the following stages:

- Single stage primary crushing;
- Single stage SAG milling with a flash flotation cell and pebble crusher;
- Flotation and concentrate regrind to produce a lead/silver concentrate;
- Concentrate dewatering utilising a thickener and a filter to produce transportable concentrates; and
- Tailings thickening and storage in a designated facility.

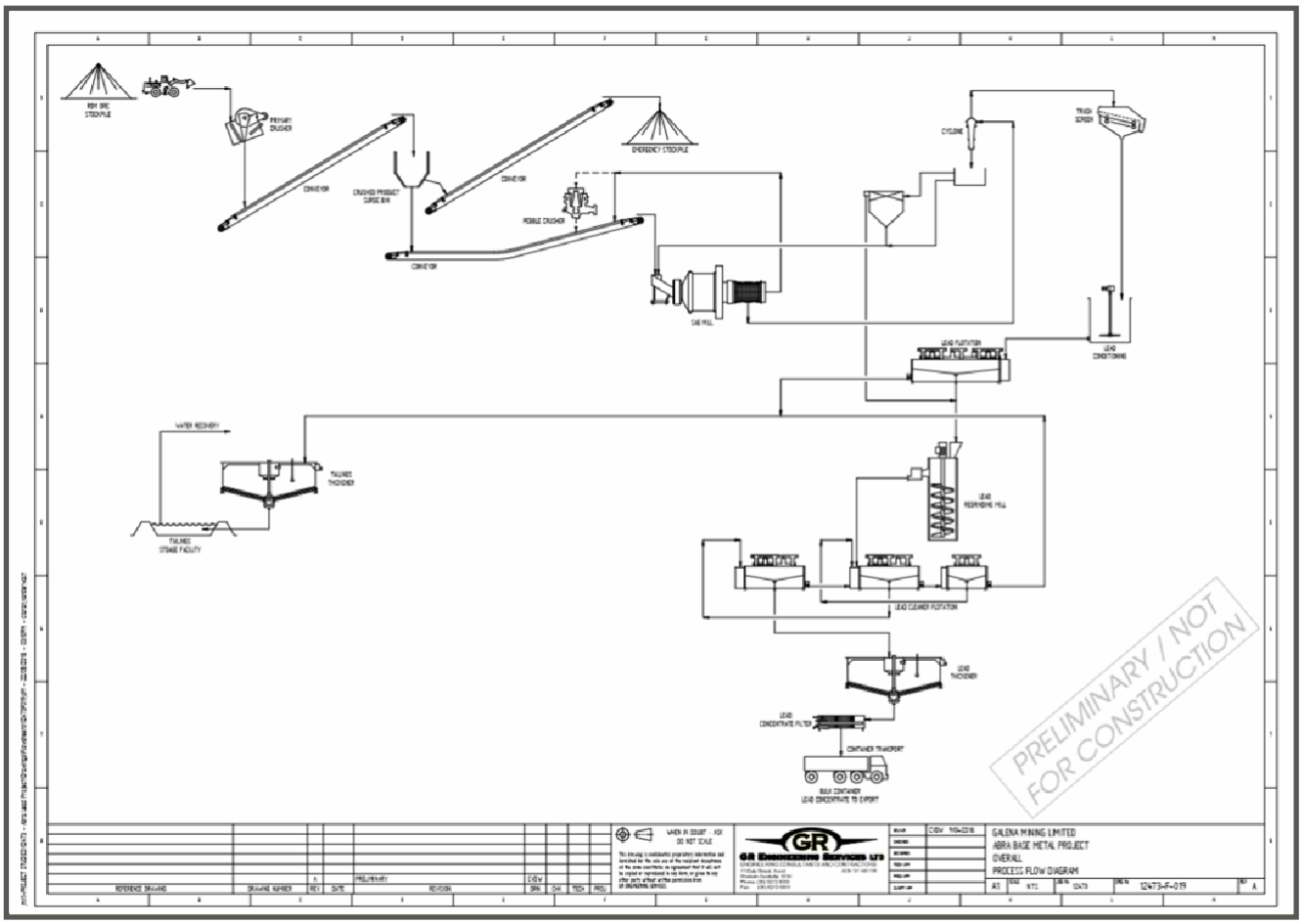

Figure 10: Abra Process flow sheet diagram

POWER

Power will be provided to the Abra mine site via reticulated power from a site-based power station. Power cost has been calculated based on a diesel usage of 0.26 L/kWh and diesel price of $0.80/L. An allowance of $0.02/kWh for maintenance and margin of 10% has been applied to the cost based on the assumption that the power will be supplied by a contract provider.

The power summary for the process plant and administration is detailed in table 11.

Table 11: Power Consumption (excluding underground mining)

Area	Power		Annual Usage	Fixed	Variable
	Installed kW	Consumed kW	MWh	MWh	MWh
Processing					
Primary Crushing	280	184	1,366	880	486
Ore Storage & Handling	249	174	1,271	1,053	218
Grinding & Classification	3,171	2,470	18,289	14,543	3,746
Flotation & Regrind	642	495	3,943	3,490	452
Concentrate Handling	160	117	588	472	116
Tailings Disposal	98	75	362	233	129
Reagents	57	37	193	192	1
Analysis	39	31	37	37	0
Air Services	318	251	1,020	714	306
Water Services	428	340	1,232	794	438
Admin, Lighting, Workshops	790	553	3,053	3,051	3
Totals	**6,231**	**4,726**	**31,353**	**25,458**	**5,895**
Cost $			**7,863**	**6,385**	**1,478**
Cost $/tonne			**7.86**	**6.38**	**1.48**

The all-in electrical energy unit cost for the Abra Project has been estimated at $251/MWh, based on a calculated cost of supply by GR Engineering. The amount of power for underground mining is estimated at 2,600 kW, which is sufficient power for the primary and secondary ventilation fans, dewatering, compressors and underground drilling equipment.

Abra ore is designated as medium hardness and metallurgical test work indicates that the ore is amenable to high recovery using a coarse crush. Power demands are expected to be low at a total of 10 MW across the entire site.

REAGENTS AND CONSUMABLES

Crush, grind and float base metals projects are relatively common in Australia and there is a high degree of knowledge in the field in relation of broad operating cost parameters. This has been utilised by Galena in consultation with GR Engineering and metallurgical consultants.

Reagents and consumables include the following cost elements:

- Crusher wear liners;
- Wear liners for the grinding mills;
- Grinding media for the grinding mills;
- All reagents used in the process;
- Fuel for mobile equipment assigned to the processing or maintenance groups; and
- Lubricants, operating tools and equipment, general and operator supplies.

Reagent addition rates were derived from laboratory test work and vendor testing. Reagent consumption rates have been calculated on a per tonne of mill feed from the steady state mass balance.

All process plant reagent and consumables have been considered to be a variable cost component except for the fuel costs for mobile equipment.

MAINTENANCE

Maintenance costs for the process plant equipment have been based on a fixed percentage of the equipment capital cost for each area (accuracy is at +/- 15% as per GR Engineering). The maintenance percentage varies depending on the type of equipment and process conditions of operation used in each area.

Maintenance costs include the cost for spare parts and maintenance materials to maintain the process plant. The maintenance cost has been applied as a percentage of the plant area capital cost.

Maintenance costs include contract re-lining of the grinding mill, plant shutdowns, main access road and internal road maintenance.

The direct labour cost for maintenance personnel has been included in the labour cost category. An allowance has been made for the maintenance costs for electrical distribution at 2% of $ 6,090,700 or $121,814 per year. Contract maintenance costs are summarised in the table 12 below.

Table 12: Contract Maintenance and Miscellaneous

Area	Cost $	Total Maintenance Cost $
Miscellaneous		
Misc. (small tools, software, consumables)	Allowance	350,000
Mobile Vehicle Maintenance	Allowance	585,105
Gensets	Allowance	50,000
Equipment Hire	Allowance	80,000
310 Crusher Reline	Allowance	Site Maintenance
310 Stockpile Management	Allowance	144,000
330 SAG Mill Reline	Allowance	126,850
330 Ball Mill Reline	Allowance	NA
330 Pebble Crusher Reline	Allowance	Site Maintenance
330 Regrind Mill Reline	Allowance	11,723
Maintenance Shutdowns	Allowance	598,680
Light Vehicle Maintenance Contract	Allowance	220,000
Auto Electrical Contract	Allowance	130,000
Sub Total		**2,296,000**

In total, maintenance materials are approximately 3.3% of the Total Installed Cost of the process plant and infrastructure. These percentage values have been developed from experience with similar operations and equipment across Australia.

SITE LAYOUT

Figure 11 below shows the proposed site layout including the box cut, process plant, site infrastructure, tailings dams and waste dumps.

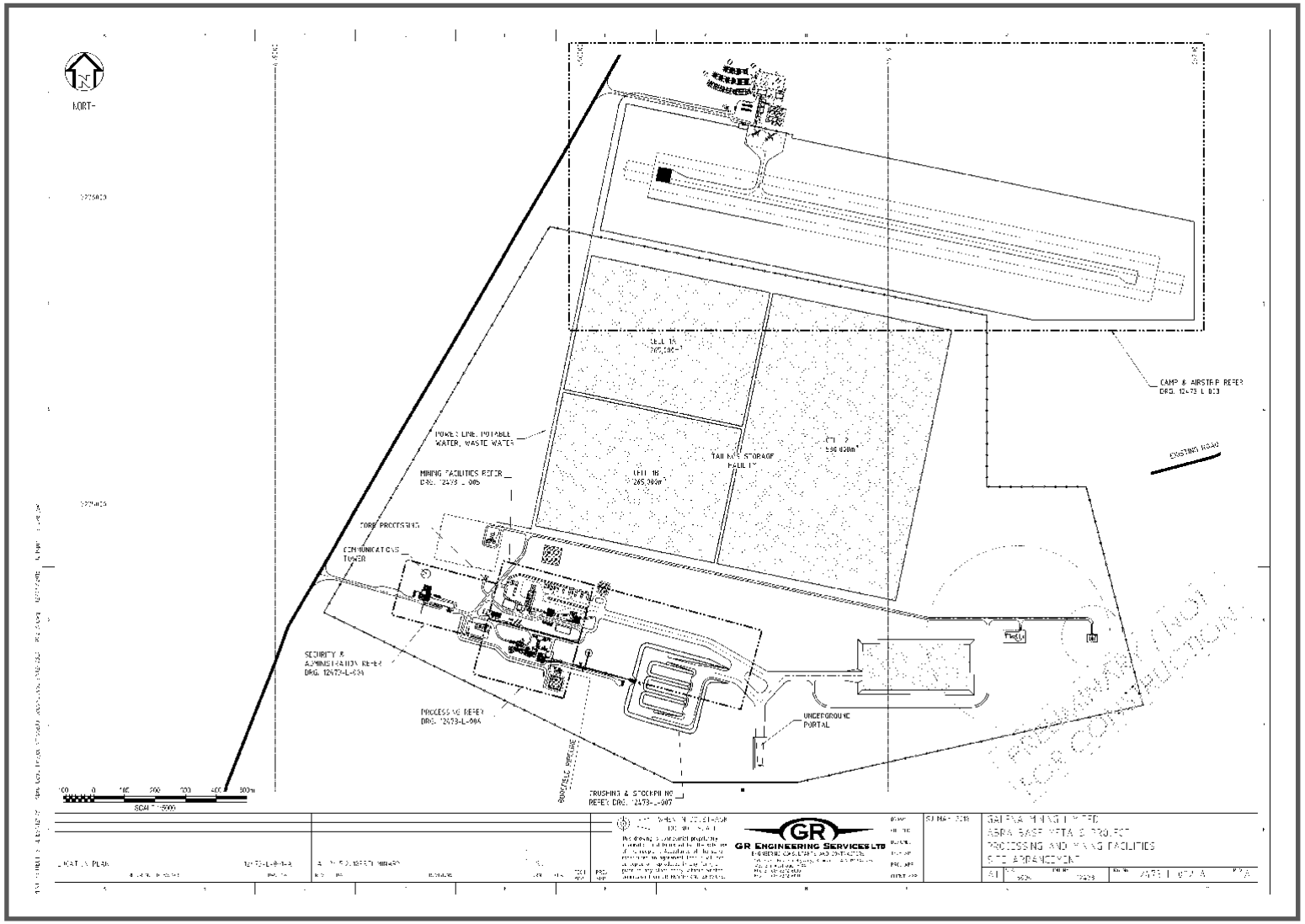

Figure 11: Abra Site layout (GR Engineering)

HYDROGEOLOGY

Rockwater Pty Ltd are well advanced in their study which assesses recent test pumping on existing bore holes within several kilometres of Abra and identifying the most prospective aquifers to supply water for the processing and camp. The project's water requirement peaks at 24 L/s, which is expected to be supplied by close by aquifers.

ELECTRICITY

Abra's total power requirements are calculated as 10 MW (includes standby equipment), which will be supplied by a diesel power station (likely to be operated under a BOM contract).

The average diesel consumption based on Abra's power & mobile plant requirements is calculated at 1.5 ML/month or 18.2 ML/year.

ENVIRONMENTAL AND PERMITTING

Base line studies have been completed over parts of the Mining Lease M52/776 and adjoining tenements G52/292 and E52/1455 that will be impacted on by the mining operation and site infrastructure such as processing plant, waste dumps, tailings dam, camp and airstrip.

Final reports are in progress however results from Abra's baseline surveys indicate there were no impediments in flora or fauna for development.

A summary of permits & proposals (with expected durations to obtain regulatory approval) that Galena is progressing with is outlined in Figure 12).

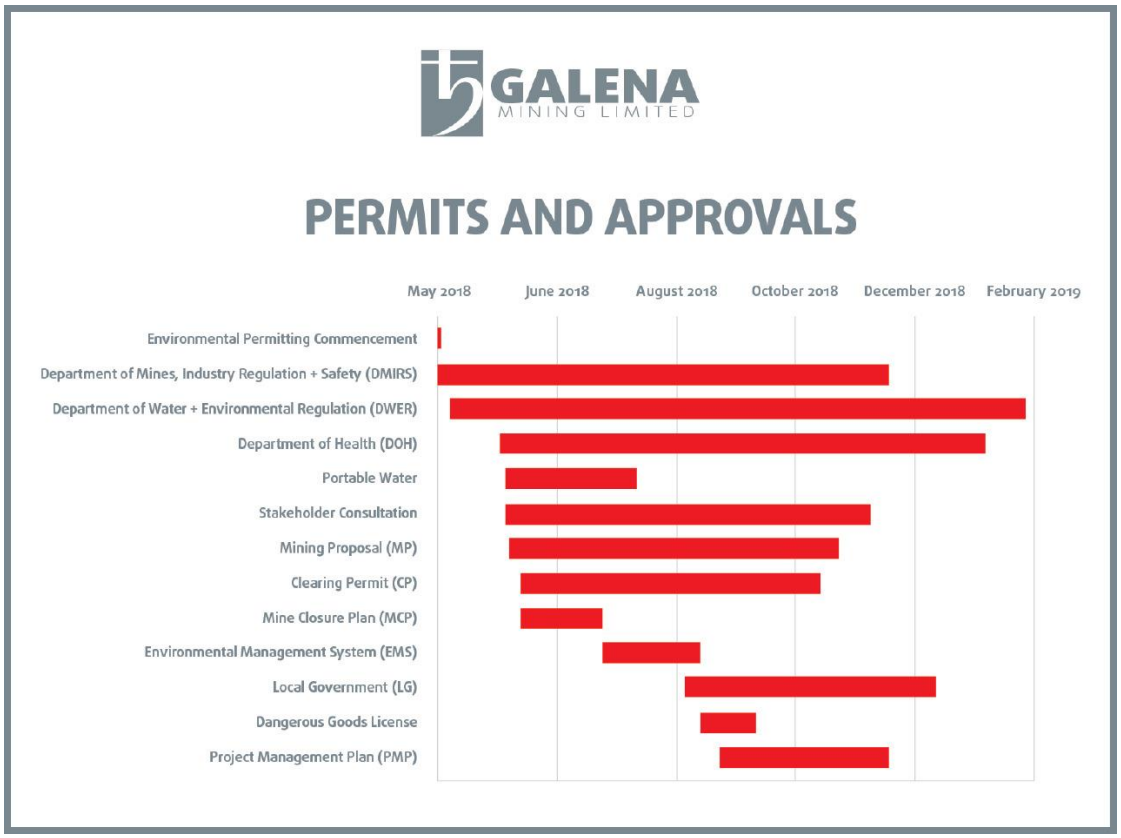

Figure 12: Gantt chart summarising Abra's various Permits & Approvals

LAND ACCESS AND TENURE

The Abra project is subject to an Indigenous Land Use Agreement ("ILUA") with the Jidi Jidi Aboriginal Corporation, the relevant native title claimant group. The Nharnuwangga Wajarri and Ngarla Group have been granted Native Title over the region including Abra's project area. AML established a heritage agreement in September 2005 with the Jidi Jidi Aboriginal Corporation, being the traditional owner representatives for the Nharnuwangga Wajarri Native Title Claim (Native Title reference number WAD0072_98).

For more information visit our website at www.galenamining.com.au

Contact

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Competent Person Statement

The information in this report related to the Abra Mineral Resource estimate is based on work completed by Mr A Byass, B.Sc Hons (Geol), B.Econ, FSEG, MAIG a Director of Galena Mining Limited and Mr Don Maclean MSc (Geol), MAIG and RP Geo (Exploration and Mining), MSEG, a consultant to Galena Mining. Mr Byass was responsible for technical oversight and reporting of the estimate. Mr Maclean was responsible for data review, QAQC, development of the geological model and resource estimation. Mr Byass and Mr Maclean 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 Byass and Mr Maclean 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 E Turner B.App Sc, MAIG who is an employee of Galena Mining. Mr Turner 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 Turner consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

APPENDIX 1: 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. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. • In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg	• The Abra resource estimate is primarily based upon geological and assay data from diamond drilling programs completed at Abra from 1981 until 2017. The database used for the estimate contains 77 holes for 46,424m of drilling (14,137 samples). Of this 12 holes (8,024m) were drilled by Galena Mining Limited (GML). Mineralised intervals were diamond drilled using NQ diameter, geologically logged, 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 either a three acid or four digest followed by an AAS or ICP-OES finish. Gold was assayed by fire assay using a 25 g or 30 g charge. • Sample intervals were based upon geological logging and ranged from 0.5 to 3.0m. Prior to GML involvement in the project drilling was typically sampled on 2m intervals. GML's sampling was generally on 1m intervals to assist in better delineating high grade mineralisation within the deposit. Sampling was continuous throughout the mineralised intervals with the right hand side of the core taken. The sampling methodology is considered to be representative and appropriate for the style of mineralisation at Abra (poly-metallic lead-zinc-silver-copper-gold).

	submarine nodules) may warrant disclosure of detailed information.	• The samples for Abra's 2018 metallurgical test work program were selected from diamond drill holes completed by Galena Mining in 2017 (holes AB70, AB71, AB72 and AB75). Six representative intervals of mineralisation were selected to be submitted for test work representing the major mineralisation styles. Three intervals of stratiform Pb-Ag mineralisation referred to as the "Apron", were selected (composites S1, S2, S3). Three intervals from the feeder vein and breccia mineralisation, referred to as the "Core" were also selected. These comprised vein hosted Pb-Ag mineralisation (composite V1), vein hosted Pb-Ag-Zn (composite V2) and the breccia hosted Cu-Au mineralisation (composite B1). For each composite the remaining half NQ core for was bagged as per the original assayed sample interval. For the 6 composites a total of 130 individual samples were submitted. Samples were dispatched to ALS Metallurgy in Burnie, Tasmania for metallurgical test work and mineralogical studies. • ALS Metallurgy performed comminution (Bond Ball Work Index), grindability, batch floatation for Galena and locked cycle floatation for circuit development. • ALS submitted samples for mineralogical assessment at the float grind size. • Concentrates generated were analysed for trace elements and classical wet chemistry for lead.

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 NQ diameter between 80 and 200m. Several holes were RC pre-collared through the barren upper sequence rocks, cased and diamond tailed using NQ diameter drilling. Diamond drilling was by wireline methods using standards tubes. Completed hole depths range in depth from 400 to 955 m with and average depth of 650m. • Most core holes were oriented. Pre-GML mining holes were either orientated using a spear or Ballmark/Ezymark type systems. GML's 2017 drilling was systematically oriented using either a Reflex ACT Mk.3 or TrueCore core orientation system. The bottom of hole 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 GML 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, mineralisation, magnetic response. • Core logging was both qualitative and quantitative. Lithological observations were qualitative. All geotechnical observations and core photographs were quantitative. • 100% of all mineralised core intervals were logged.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *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 in situ material collected, including for instance results for field*	• Almost all holes were routinely sampled as half cut NQ core for assaying. Two holes drilled in 2012 which were quarter cored. The metallurgical samples were all from ½ NQ diameter core. • The estimate is based entirely on diamond drill core. • 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. GMLs sampling was generally in 1m intervals whereas its predecessors were generally 2m intervals. ½ 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. • Blanks samples were routinely dispatched to the laboratory to monitor

	duplicate/second-half sampling. • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	sample preparation. These generally performed within acceptable tolerances. Some elevated lead values are present which is likely the result of cross sample contamination by soft lead caking the sample preparation bowls. The magnitude of this is not of material impact on the lead values estimates in the resource estimate. • In GML's 2017 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. Historically some original half core (110 samples) was later quarter cored to compare assaying results from earlier generations of drilling/assaying. Results were consistent with the earlier assays. GML has sent 130 samples of the second half of the core for metallurgical test work. These will be routinely analysed for base metals and other trace elements. Assay results for this work are pending at the time of this report. • 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.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *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.*	• Several different laboratories have been used for assaying of Abra samples over the projects life prior to GML. Sample analysis for the older holes (1981-1995) was generally a three acid digest with an AAS finish for the base metals. Silver and gold were determined by fire assay using a 30 g or 100g charge. From 2005 samples analysed using a four acid digest with either and AAS or ICP-OES finish. Later samples were NaOH fusion for base metals followed by ICP-OES. Gold was analysed using either a 25 or 40g fire assay.

	• *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.*	• GML's samples were analysed by SGS Laboratories in Perth. An ore grade 4 acid digest was used followed by an ICP-AES finish. Gold was by fire assay with a 50g charge. • The assaying methods are appropriate for the style and tenor of mineralisation at Abra. • No XRF or other geophysical data is reported here • Geopeko verified its assay data by submission of duplicate samples and cross checks by umpire laboratories. RGC submitted standards every 20 samples. The majority of holes were either drilled by AML or GML (2005 - 2017) who used industry standard QAQC programs. Blanks, certified standards and duplicates were regularly submitted to the assaying laboratory and monitored. Both AML and GML 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.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Most historic significant intersections were verified by GML Geologists Angelo Scopel and Don Maclean while completing a core relogging program in 2017 • Due to the depth to mineralisation no twinned holes have been attempted yet. • Prior to GML primary geological logging and sampling data was firstly recorded on paper and then entered into electronic files onsite. Electronic copies were transferred periodically to the Perth head office where the master database was administered. Duplicates of the data were kept onsite after validation. Duplicates of all paper copies of sample data were made for site and head

	• *Discuss any adjustment to assay data.*	office. • During GML's 2017 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 Datashed database to ensure data integrity. • No adjustments were made to assay data.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All drill hole collars were surveyed using a DGPS by Haines Surveys (2005), MHR Surveys (2007) and Galt Mining Solutions (2017). DGPS accuracy is within 0.02m. • Prior to 2008 diamond holes were routinely surveyed evey 30 to 50m downhole during drilling using an Eastman Single Shot camera. A number of these holes were later gyroscopically surveyed due to the magnetite rich rocks present in some parts of the deposit which renders the Eastman azimuths inaccurate. Some inconsistancies between the Eastman single shot and gyro data was identified in historic reviews, which was largely attributed to incorrect set-up azimuths being provided to the gyro-operators and some poor gyro QAQC controls. The pre-GML dowhole downhole survey data was reviewed and erroneous data discarded or azimuths were corrected to be consistant with

		neighbour reliable surveys. From 2008 electronic multi-shot (Ranger and Ezi-shot) tools were used for routine surveying every 30 m while drilling. A north seeking gyro was used to survey all 12 holes drilled by GML in 2017 drilling and 6 historic holes. Drill hole trace acurracy is considered to within several metres downhole (depending on the depth). • Data is captured in Map Grid of Australia GDA 94, Zone 50. • The topography of the area is very flat. The topographic model used for the resource estimate was generated from DGPS drill collar surveys which is of sufficient accuracy for the resource estimate. A detailed site topographic survey is recommended for future mining studies. • Locations of the metallurgical test work samples are shown in the report attached to this table
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The footprint of the Abra deposit extends 1,000m east-west along strike and 800m north south. Drill spacing ranges from 150m spaced centres on the periphery to 100 and 50m spacing in the central parts of the deposit. In some small areas drill spacing was close to 50m by 25m. The deposit lies from between 250m and 700 m below surface. • 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.*	• Some initial drill holes may have been drilled sub-parallel to mineralised structures which dip steeply to the north but the majority of drill holes are oriented to the south so as to sample possible structures in an unbiased manner. The upper sections of the mineralisation are relatively shallow dipping to the south and can therefore be drilled in either direction. • It is not considered that there is a significant sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• The various companies that drilled the deposit maintained their own sample security measures. All sampled core was transmitted from site to Perth assay laboratories either by company personnel or by courier. All remaining core is stored on site. Drill core was taken twice daily from the drill rig, immediately following completion of day shift and night shift respectively. • For GML drilling core was transported to the core yard where it was logged and sampled. Securely sealed sample bulka-bags were either transported by GML staff from the Abra site to Meekatharra for commercial trucking to the laboratory in Perth or trucked directly by GML contractors.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews of sampling techniques and data have been completed.

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.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• Abra Mining holds 100% interest in the Mulgul Project, consisting of Mining Lease M52/0776 and Exploration Licence E52/1455. A 3.0% Net Smelter Royalty exists over leases M52/0776 and E52/1455. Miscellaneous licences G52/286 and L52/021 are also held 100% by Abra Mining and these fall within E52/1455. Within the adjoining Jillawarra Project Abra Mining holds 100% of E52/1413 and E52/3575. • All tenements are in good standing and have existing Aboriginal Heritage Access Agreements in place. No mining agreement has been negotiated.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Initial exploration around the Abra deposit by Amoco Minerals 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 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). • AML resumed drilling in 2005 and has completed all holes between and

		including AB23-59. AML drilled out the main extents of the deposit and completed various drilling programs focussing 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 HNC divested the project in 2016. Galena Mining acquired the project in 2017 and floated on the ASX. • 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. Silver, copper, zinc and gold are also present but are of much lower tenor. • The deposit can be divided into two main parts. The upper "Apron" zone comprises strata-form massive and disseminated lead- sulphides (galena) and minor copper sulphides (chalcopyrite) within a highly altered sequence of clastic and dolomitic sediments. Alteration products include jasperlitic rich sediments (the "Red Zone") and a distinctive stratiform zone of hematatite-magnetite

		alteration (the "Black Zone". The Apron zone extends for 1,000m along strike, 700m down dip and dips gently south. • The "Core" zone underlies the Apron and comprises an elongate funnel shaped body of hydrothermal breccias, veining and intense alteration overprinting gently south dipping sediments. The veining and breccia zones in the Core typically dip steeply to the north. 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 coherent body at the base of Core. The core zones extends from 300 to 750m below surface and can be traced for 400m along strike.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *hole length.* • *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*	• The Abra resource estimate is primarily based upon geological and assay data from diamond drilling programs completed at Abra from 1981 until 2017. The database used for the estimate contains 77 holes for 46,424m of drilling. The database includes several RC precollars that were never tailed and a number of core holes that were abandoned before mineralisation was encountered due to hole deviation or drilling issues. In total the database includes 64 holes successful holes for 43,887m (14,137 samples). • A complete listing of all drill hole details and drill hole intercepts used in the estimate is not appropriate for this report. All drill hole information has been previously reported and its exclusion does not detract from the understanding of this report.

	explain why this is the case.	
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• No exploration results are reported in this report • Non-aggregated exploration data is reported here • No metal equivalents are reported here
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').*	• No exploration results are reported here. • The upper strata-bound mineralisation is gently dipping and drilling intercepts are typically close to true width. • The lower vein-hosted mineralisation is generally steeply dipping and drilling intercepts are greater than the true width of the mineralisation
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of*	• Appropriate diagrams are included with this report showing the spatial location of the metallurgical samples.

	drill hole collar locations and appropriate sectional views.	
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.*	• No exploration results are reported here.
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.*	• GML and its predecessors have collected a substantial amount of bulk density from drill core using standard water immersion techniques (over 7,100 readings). This data was used to appropriately assign density in the resource estimate. • A small preliminary metallurgical test work program was completed in 2008 which indicated very favourable lead recoveries. Quantitative optical mineralogy examination of five (5) composites of Abra's (lead) mineralized material was conducted by McArthur Ore Deposits Assessments Pty Ltd (MODA). This found the Abra galena to be quite coarse-grained and free of any elevated deleterious elements. • Preliminary geotechnical studies were completed by AML. No major geotechnical issues have been identified.
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.*	• The positive Scoping Study results warrant progressing to Pre-feasibility level studies (PFS). These studies will examine such aspects as: ◦ Mining methods ◦ Geotechnical ◦ Hydrology ◦ Metallurgically ◦ Plant and infrastructure design ◦ Transport and shipping

		• Environmental studies • Social impact studies • Additional drilling is recommended to improve geological confidence to upgrade the resource to higher confidence categories (ie from Inferred Resource to Indicated Resource, and from Indicated Resource to Measured Resource to aid in future Reserve estimates.

Section 3 Estimating and Reporting of Mineral Resources

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

Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Diamond drilling geological and assay data was stored in an Access database which was exported into Micromine as csv files where it was validated for inconsistencies, overlapping intervals, out of range values, and any other erroneous data. • All data was visually validated on import. Other validation steps included visual comparison of data to historic cross sections and systematic checking of high grade assay values against source data.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• The CP for the geological/assay data and geological interpretation Mr Ed Turner is an employee of GML and spent extensive time at Abra in 2017. Mr Turner was also previously an employee of AML and worked on Abra from 2008 to 2010 as Exploration Manager. • The CP is of the opinion that this work has all been completed in line with industry best practice and to an appropriate standard for the mineral

		resource reported.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The geological interpretation is based upon geological logging data from diamond drill core for the Abra deposit. Structural data from orientated drill core and historic structural studies were important guides for the interpretation. • Geological modelling utilised Micromine software. Wireframing was carried on 50 spaced N-S orientated cross sections which was cross checked in plan. A 3D geological model was developed which encompassed the major litho-stratigraphic units, alteration zones, brecciation zones, hydrothermal vein zones, and faults. The deposit comprises the gently south dipping stratiform "Apron" zone and the steeply north dipping hydrothermal veins and breccias of the "Core" zone. • The 3D geological model was used to guide the mineralization wire-frame interpretation on 50m spaced N-S orientated cross sections. Solid wireframes were created for the "Apron" zone (at Pb>2% and Pb>5% lower cut-offs) and for the "Core" zone (at Pb>2% and Pb>5% lower cut-offs). These form continuous coherent zones. Interpretation parameters were at least 2 holes, a minimum of 4m down hole width and a maximum of 4m internal dilution (although in some cases material below cut-off was included if it was close to the cut-off or to maintain a geologically coherent shape). • A copper-gold zone was modelled in the lower part of the deposit at a nominal 0.2% copper cut-off, although it includes significant volumes of lower grade material that was necessary to include to create a coherent

		mineralized body. • The primary lode domains were interpreted using lead grades and then the geometry reviewed by looking at zinc, copper and silver. Silver correlates with lead grade suggesting silver is present in argentiferous galena. Zinc and copper are generally spatially associated with the lead domains but generally not of sufficient tenor to warrant domaining separately. There is some indications that zinc may be horizontally zoned and it may be able to be domained separately with additional drilling. • Copper and gold mineralisation is spatially related and the is a clear copper-gold zone lying at the base of the deposit. • No alternate interpretations have been considered as the model developed is believed best represent the current geological understanding of the deposit.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The Resource estimate encompasses all of the Abra Lead Deposit which extends for 1000m along strike and 800m across strike. The resource lies between 250 and 700 metres below surface.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance*	• Resource modelling was carried out using Micromine software. • Sample assays were composited to 2.0m which is the most common

	of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	sample length and appropriate for the mineralisation style and block size. • Lead is the primary economic element and was modelled using both ordinary kriging and inverse distance squared interpolation. Secondary metals silver, zinc, copper and gold were estimated using inverse distance squared interpolation. • Search ellipse maximum axes ranging from 95 to 220 metres depending on the domain. The search ellipse and variogram axes were aligned to the overall dip and strike of each mineralised domain. • Kriging parameters were based on lead variography. Ancillary items estimated included the number of holes and composites used to estimate a block, kriging variance and regression line slope. These were used to assist in resource classification. • Pb, Zn, Cu, Au and Ag were estimated for each domain using only composites from within that domain. • Three estimation passes were used to estimate each block (at 60%, 100% and 150% of the variogram range). The minimum/maximum number of samples and holes required for each block estimate varied depending on the pass. For pass 1 and 2 a minimum of 10 (max 24) composites from 4 holes was required. For pass 3 a minimum of 4 samples (max 24) from 2 holes was required, • A block size of 10m (X) by 10m (Y) by 4m (Z) was used with sub-celling to 2m (X) by 2.5m (Y) by 2.5m (Z). This block size is believed to be appropriate for the data set and for evaluation as an underground mine. • Block grades were estimated at the parent block size. • Samples were cut to the 99th percentile. Sample cutting has minimal impact

		on the contained metal. • Validation of the estimate included systematic visual cross checking of the model in cross section and plan, comparison of the estimated grades to composite data and cross checking of wireframe volumes.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Model estimates are done on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• A range of cut-off grades are reported which are believed to be appropriate for underground mining.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The Resource estimate has been prepared assuming mining will be undertaken using conventional underground mining methods.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• It is assumed that lead and silver sulphide mineralisation can be economically extracted using conventional flotation methods. Preliminary metallurgical test work was conducted in 2008 by AML on three core samples from two holes to support a 2008 conceptual study of the project. Test work indicated that a float recovery of 95% is achievable for lead in the lead domain and an expected concentrate grade of approximately 55% to 65% Pb is achievable. • GML has sent 130 half core samples from six zones representing the major

		mineralization styles to ALS Global in Burnie, Tasmania for metallurgical test work. Results of this program are pending.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a Greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The Abra project is on a granted mining lease. No environmental factors/issues have been identified to date. • The project will produce a lead sulphide concentrate that can easily trucked to Geraldton and shipped. The Golden Grove Mine has been shipping similar concentrate products from Geraldton for many years.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vughs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• A total of 7,137 bulk density measurements were taken from a suite of mineralised and un-mineralised drill core using conventional water immersion techniques. • Bulk densities were assigned to each domain based on the mean measured density from test work for each domain. Bulk densities applied range from 2.8 to 3.6 depending on the domain • Bulk density does appear to increase with sulphide content but more work is needed to reliably estimate bulk densities based on this relationship
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values,*	• The resource classification for Abra is based upon review of critical modifying factors. Important modifying factors taken into consideration include: • Data density is adequate for Indicated/Inferred resources. Drill spacing

	quality, quantity and distribution of the data). • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	ranges from 50 by 50m spacing up to 150m spacing. • Data quality. The diamond drilling all have been carried in accordance with modern industry best practice standards and have QAQC data to support the assay data. • Geological structure. The overall geometry of the main mineralised domains are reasonably well understood from diamond core geological logging and structural data. However structure is locally complex as can be seen by some of the complex veins/breccias within the "Core" zone. Structure is generally well understood and geological/grade continuity can be demonstrated with an appropriate level of confidence. • Geostatistics and variography. Reasonable variograms could be obtained for the major domains which supports continuity and the parameters used for the estimate. • Based on review of the modifying factors the Competent Person is of the view that the resource should be classified as an Indicated and Inferred Resource and this is an appropriate reflection of status of the project. • The Resource has been classified as Indicated in areas where there is high geological confidence (ie the Apron and Core >5% Pb modelled domains) and there is appropriate drill spacing (from generally 50 by 50 but in some areas on 70m by 70m where there is good continuity of geology and grade). • Inferred Resources are reported where drill spacing is generally greater than 50 by 50 constrained by the Apron and Core >5% Pb and

		>2% Pb domains. The maximum distance from a drill hole is 150m for an appropriately informed block estimate. • Further drilling/sampling is needed to increase the confidence to a level for an appropriate for classification in a higher category (ie from Inferred to Indicated and Indicated to Measured Resource)
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Brett Gossage of EGRM Consulting Pty Ltd has provided ongoing input and review of the geological interpretation, grade estimation studies, and the resource classification approach.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The estimate is based on diamond core drilling with appropriate modern QAQC . The estimate utilises all available geological and structural data. It is the CP's opinion that the resource classification used is consistent with the relative accuracy/confidence levels guidelines in the 2012 JORC Code. • The estimate is classified as Inferred (global) and Indicated (local) and is intended for scoping and preliminary PFS level studies • The deposit is un-mined and no production data is available

Section 4 Estimation and Reporting of Ore Reserves

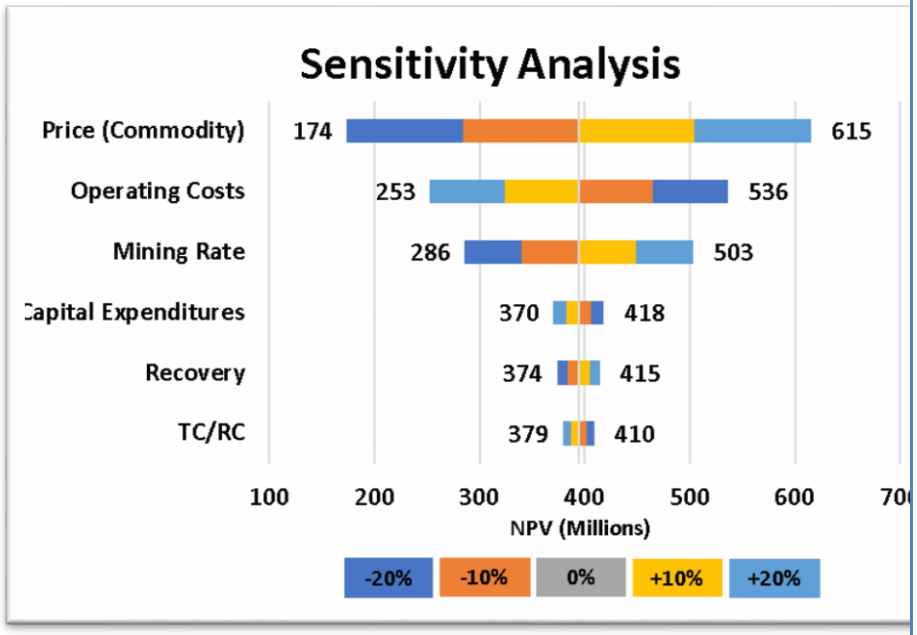
(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.* • *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	• Mineral resource is based on ordinary kriging estimation method • This scoping study / mining study is not reporting any mining reserves
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Numerous site visits have been undertaken by the JORC Resource Competent Person.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* • *The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.*	• This scoping study / mining study is not reporting any mining reserves • Scoping Study level
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• Cut-off grades are based on comparable WA UG mining costs & a long term lead price of US$0.90/lb
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).* • *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design*	• This scoping study / mining study is not reporting any mining reserves • The UG mining method and assumptions are based on a detailed mine design. • Sub Level Open Stoping (SLOS) and Room & Pillar (R&P) underground

Criteria	JORC Code explanation	Commentary
	issues such as pre-strip, access, etc. • *The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.* • *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).* • *The mining dilution factors used.* • *The mining recovery factors used.* • *Any minimum mining widths used.* • *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.* • • *The infrastructure requirements of the selected mining methods.*	mining methods are commonly applied in WA, which are applied to the Abra deposit • Standard geotechnical conditions for a shallow UG mine in WA are applied to Abra • Slope optimization modelling does not apply to the Abra UG mine • Mining dilution = 10% • Mining recovery = 70% • Minimum mining width = 5m • Approximately 30% of the applied resource is inferred, this is scheduled at the end of the mine's life and has minimal impact on the Project's NPV give a discount rate of 10% is applied. • A decline and associated ventilation and dewatering infrastructure is required before the UG level accesses can be constructed, which are required for SLOS and R&P mining methods.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.* • *Whether the metallurgical process is well-tested technology or novel in nature.* • *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.* • *Any assumptions or allowances made for deleterious elements.* • *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.* • *For minerals that are defined by a specification, has the ore reserve*	• Crush, grind & flotation is the proposed metallurgical process, this is the appropriate process for a base metals project. • The process has been successfully applied for many decades across Australia • The metallurgical test work is representative for the part of Abra's ore body (Apron & Core) that is covered in this mining study. • No problematic deleterious have been identified • N/A • This scoping study / mining study is not reporting any mining reserves

Criteria	JORC Code explanation	Commentary
	estimation been based on the appropriate mineralogy to meet the specifications?	
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• Environmental base line studies performed on Abra have not identified any hinderances to permitting of the project. • Waste rock characterization studies are currently in progress
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Infrastructure to suit a 1 Mtpa operation is planned to be installed over Abra's GP lease. Existing roads that run within 0.5 km of the Abra ore body will be used for transporting the final concentrate to the Port of Geraldton, which has excess capacity.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.* • *The methodology used to estimate operating costs.* • *Allowances made for the content of deleterious elements.* • *The source of exchange rates used in the study.* • *Derivation of transportation charges.* • *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.* • *The allowances made for royalties payable, both Government and private.*	• Capital costs are based on detailed studies on Abra by leading EPCM and Mining Consultancies. • Operating costs are based on detailed design work by above consultancies. • No problematic deleterious have been identified • The long term average of US$:AU$ of $0.75 has been applied • Transport charges are based on quotes from trucking & ship broking companies • Treatment & Refining charges are based on current data publicly available for lead concentrate • Allowances have been made for government (5% for Pb & 2.5% for Ag) & private (3%) royalties.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates,*	• A head grade of 9.5% for lead & silver grade of 15 g/t have been applied based on the Abra JORC Resource.

Criteria	JORC Code explanation	Commentary
	transportation and treatment charges, penalties, net smelter returns, etc. • *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	• A long-term lead price of US$ 0.90/lb & US$ 16.50/oz for silver have been applied.
Market assessment	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.* • *A customer and competitor analysis along with the identification of likely market windows for the product.* • *Price and volume forecasts and the basis for these forecasts.* • *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	• Recent London Metals Exchange (LME) stockpiles indicate that there is an under supplied lead market, which is expected to remain in place for reasonable period of time. • LME for lead is a transparent and deep market, lead production from the Abra project (will account for ~5% of the lead market) is not expected to over supply the market. • Abra's lead concentrate is extremely high grade and clean, which exceeds all published lead customer specifications
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.* • *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	• NPV = $ 394M as the base case, which has a discount rate of 10% applied, lead price of US$ 95/lb & silver price US$ 16.50/oz, no inflation • Accuracy is at +/-35%; Capex = $150M & Opex (C1 cost payable) = US$ 0.46/lb • NPV ranges are displayed in the below graph

Criteria	JORC Code explanation	Commentary
		
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• The Abra project is on a Mining lease with an existing native title agreement in place.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:* • *Any identified material naturally occurring risks.* • *The status of material legal agreements and marketing arrangements.* • *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and*	• This scoping study / mining study is not reporting any mining reserves • No material risks have been identified for the Abra Project. • The Abra Project has a native title agreement in place, no marketing arrangements have been agreed.

Criteria	JORC Code explanation	Commentary
	government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	• The Abra Project is on a granted Mining Lease, a General Purpose lease for site infrastructure has been applied for. • There are no material unresolved matters with any parties.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.* • *Whether the result appropriately reflects the Competent Person's view of the deposit.* • *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	• N/A; this scoping study / mining study is not reporting any mining reserves
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	• N/A; this scoping study / mining study is not reporting any mining reserves
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *Accuracy and confidence discussions should extend to specific*	• This scoping study / mining study is not reporting any mining reserves • +/- 35% accuracy applied to this scoping study

Criteria	JORC Code explanation	Commentary
	discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	