



ASX Announcement

27 February 2024

Stephens Base Metals Project Update

HIGHLIGHTS

Stephens Project – Base Metals (100% DKM)

- Located 335km NNE of Perth
- 38km South of Deflector Gold Mine (Silver Lake Resources)
- Project comprises 1 granted tenement.
- The tenement is in the Gullewa Greenstone Belt in the Murchison Province.
- Historical work has intersected base metal mineralisation including copper, zinc, lead and silver.
- Significant historical drill intercepts include:
 - **9m @ 1.19% Cu & 15 g/t Ag inc. 5m @ 1.87% Cu & 22.2g/t Ag**
 - **12m @ 0.55% Cu & 15g/t Ag inc. 2m @ 1.49% Cu & 32g/t Ag**
 - **1m @ 11.3% Zn & 4.1% Pb & 1m @ 3.6% Zn, 1.2% Pb & 8.1g/t Ag**
 - **4m @ 30.4g/t Ag**
 - **9m @ 0.2% Zn, 0.54% Pb & 26.9g/t Ag inc. 1m @ 0.45% Zn, 2.5% Pb & 148g/t Ag**
 - **1m @ 0.67% Pb & 81g/t Ag**

Duketon Mining Limited (DKM) is pleased to provide an update on our 100% owned Stephens Project prospective for base metal mineralisation. It is located 335 km north-northeast of Perth in Western Australia and is on the southern limb of the Gullewa Greenstone Belt in the Murchinson Province of the Yilgarn Craton (Figure 1).

DKM are active in the area and are looking at accumulating more ground. Our next steps on the Stephens Project includes mapping and rock chipping.

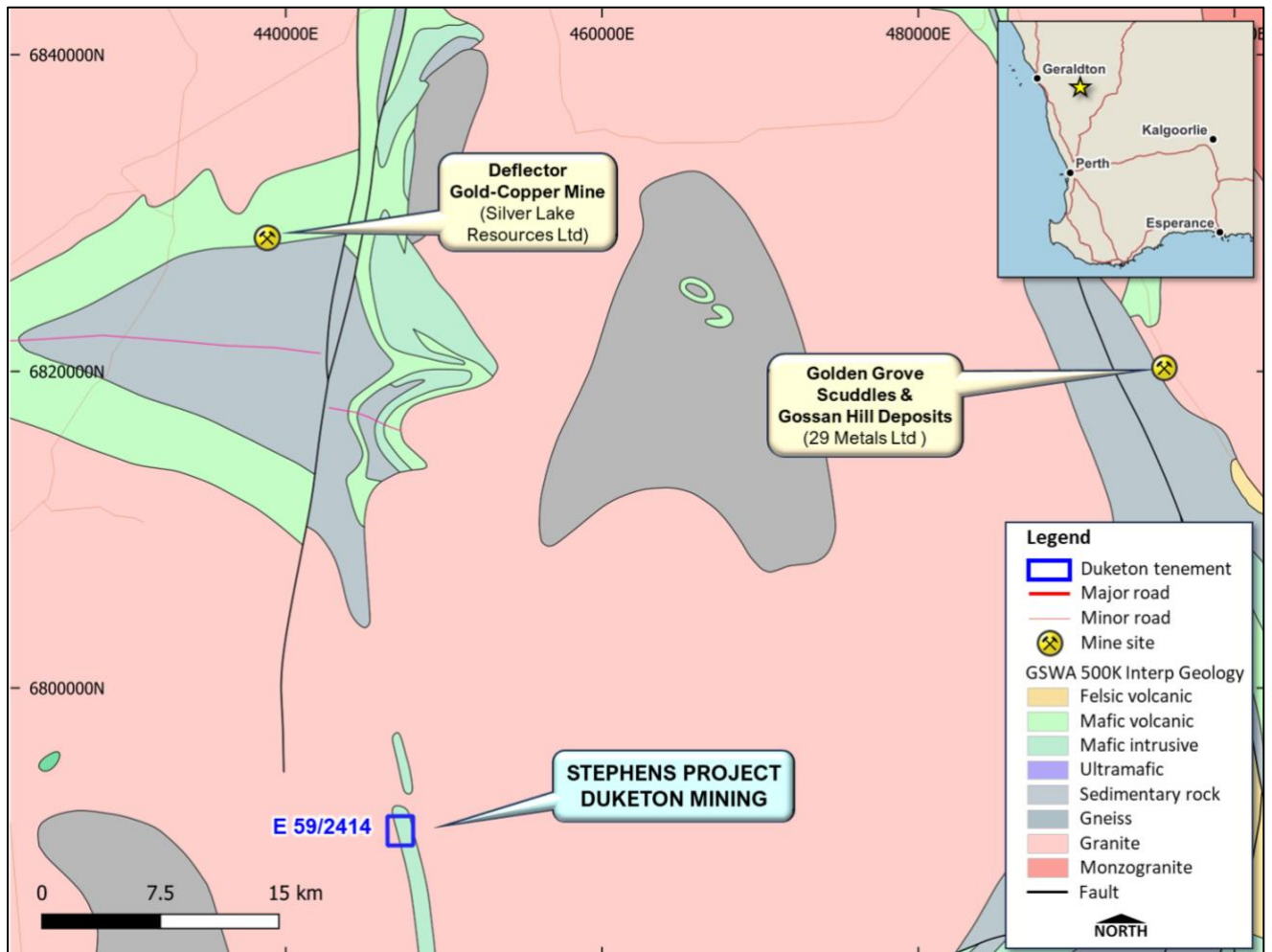


Figure 1: Stephens Project Location

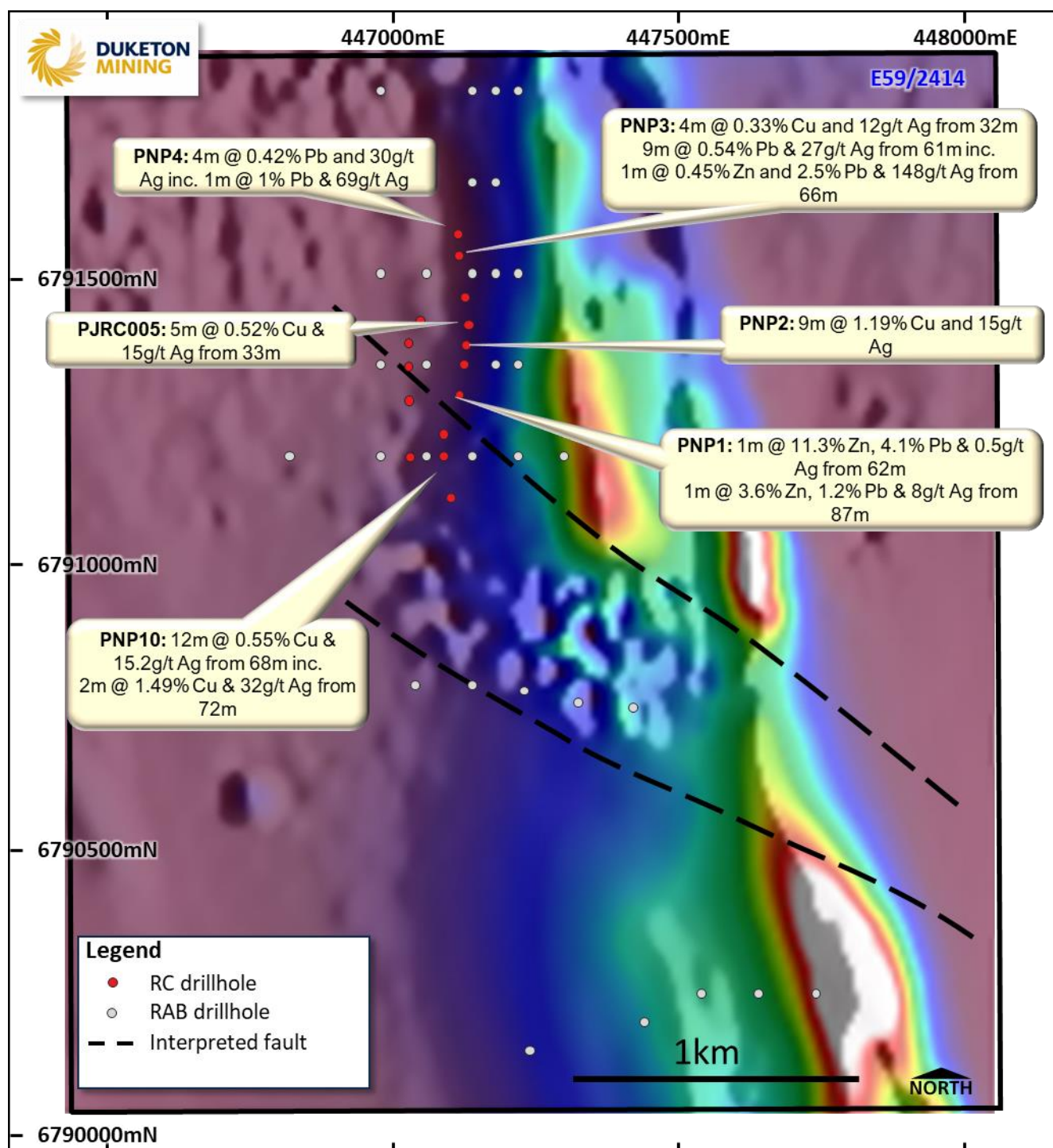


Figure 2: Historical Drilling, E59/2414 (over TMI Magnetics)

Table 2: Stephens Significant Intercepts

Significant intercepts are calculated using a 1% Pb or 1% Zn or 1% Cu or 5 g/t Ag cut-off grade and include no more than 2m of internal dilution.

Hole ID	Depth From	Depth To	Intercept Width (m)	Cu %	Zn %	Pb %	Ag g/t
PJRB063	19	20	1	0.01	0.14	0.67	81.00
PJRB067	16	17	1	0.26	0.03	0.01	32.00
PJRC001	89	94	5	0.01	0.01	0.00	5.40
and	98	99	1	0.01	0.01	0.00	5.00
PJRC005	33	38	5	0.52	0.02	0.08	15.00
and	85	91	6	0.01	0.26	0.21	12.67
and	97	98	1	0.05	0.04	0.59	9.00
PJRC007	126	128	2	0.01	0.01	0.04	6.50
PJRC008	33	40	7	0.50	0.01	0.01	15.29
PJRC008	67	71	4	0.01	0.23	0.05	11.00
PNP1	43	45	2	0.31	0.09	0.04	8.01
and	62	63	1	0.03	11.30	4.10	0.55
and	87	88	1	0.00	3.60	1.20	8.10
PNP10	68	80	12	0.55	0.05	0.08	15.17
inc.	72	74	2	1.49	0.15	0.12	32.00
PNP2	33	42	9	1.19	0.02	0.04	15.09
inc.	34	39	5	1.87	0.01	0.05	22.22
and	83	84	1	0.13	0.26	0.44	53.00
PNP3	32	36	4	0.33	0.00	0.00	12.44
and	61	70	9	0.02	0.20	0.54	26.90
inc.	66	67	1	0.03	0.45	2.50	148.00
PNP4	57	61	4	0.04	0.17	0.42	30.43
inc.	59	60	1	0.02	0.34	1.00	69.00
PNP8	4	6	2	0.01	0.00	0.02	8.00
PNP9	34	36	2	0.20	0.02	0.00	5.00
and	98	100	2	0.01	0.14	0.32	6.00



About the Stephens Project

Geology & Mineralisation

The Stephens Project is situated on the southern limb of the Gullewa Greenstone Belt in the Murchinson Province of the Yilgarn Craton. The greenstones within the project area are less than 1000m thick and dip moderate to steeply west. Detailed mapping by previous explorers have shown the rocks to be divided into a basalt dominated sequence to the east and a felsic volcanic and volcanoclastic dominated sequence to the west. The greenstone rocks are wedged between massive Archaean granitoids. The Badja Batholith lies to the east and the Koolanooka Porphyry to the west, with the western contact under cover. Metamorphic grade has reached lower to middle amphibolite facies, but retrograde metamorphism is widespread. The basalt dominated sequence, which is up to 200m thick, consists of fine to medium grained amphibolites, usually with a well-developed foliation. Intercalated with and overlying the basalt to the west are several units of BIF, 5m to 100m thick, which show a complex pattern of tight to isoclinal folding. The thickest and most extensive BIF unit appears to lie between the basalt dominated sequence and the felsic dominated sequence. The BIF is made up of fine to medium grained quartz, magnetite, hematite, goethite and limonite.

The felsic dominated sequence, which is over 400m thick, contains medium grained felsic volcanic and volcanoclastic rocks with poorly exposed intermediate volcanoclastics and thin amphibolite (basalt?) lenses, and minor psammite, mudstone and BIF. Within the felsic dominated sequence and close to its eastern boundary is a zone of ferruginous gossan and vein quartz over 2 km long with an outcrop thickness of up to 20m. This gossan is referred to as the Stephens Prospect and is anomalous in copper, zinc, lead, silver and gold. The gossan represents massive and breccia fill sulphides, with disseminated and banded sulphides in quartz. Some reefs of white buck quartz and non-gossanous white quartz-ironstone are also present in this zone, which is seen in three areas of rubbly outcrop and subcrop.

Exploration History

Between 1989 and 1997, the ground was held by Sipa Resources International NL ("Sipa") as part of their Perenjori Project, firstly in joint venture with Ashling Resources NL until 1993 and



subsequently in joint venture with Lachlan Resources NL ("Lachlan") from October 1995 to October 1996.

Mapping during 1992 resulted in the discovery of the Stephens Prospect, an 1,800m long gossanous vein quartz with anomalous geochemistry.

Sipa completed two drilling programs, a six (6) hole RC drilling program during 1992 for a total of 563m and an additional six (6) holes during 1994 for a total of 612m (PNP01-12). Drillholes PNP01-04, 09-10 & 12 lie within DKM's E59/2414. The drilling was designed to test beneath outcrop and subcrop where the gossan-quartz zone was at its thickest, where there was a high percentage of gossan after massive sulphide and / or in places of anomalous geochemistry.

The RC drilling results indicated a metal zonation. Copper mineralisation is located in a steeply west dipping pyrite-quartz zone up to 20m wide. Zinc-lead mineralisation is 20-40m below the copper zone in a quartz-chlorite schist, protolith unknown.

Felsic rocks comprising quartz-muscovite (sericite) schist generally lie above the sulphide-quartz zone. Underlying this zone is basalt, now generally an amphibolite and commonly further altered to a chlorite or quartz-chlorite schist in proximity to the sulphide-quartz zone. Also, within this mafic zone, intervals of talc-chlorite schist after ultramafic and quartz-chlorite-garnet schists after sediments have been intersected.

Pyrite in massive to semi massive form (20-70% pyrite) is the most abundant sulphide present within the sulphide-quartz zone. Significant copper enrichment is present in this zone which is best seen in the five holes covering 320 metres of strike in the southern part of the project (within E59/2414).

The footwall zinc-lead and gold mineralisation is associated with quartz veinlets plus fine grained disseminated pyrite and small pyrite blebs. An increase in chlorite alteration is apparent, particularly in the deeper holes where the mineralised intercept is below the saprolite zone (~20m depth). The best intersections were 1m @ 11.3% Zn, 4.1% Pb from 62m in PNP01 and 8m @ 1.3% Cu from 34m in PNP02.

During 1995, Lachlan completed a shallow RAB program, consisting of sixty-six (66) RAB holes (PJRB-series) for a total of 3,484m. Of these, thirty-five (35) RAB drillholes lie within E59/2414 (PJRB010-022, 056-059, 062-079). Holes were designed to test the geochemical



and geophysical anomalies defined previously by Sipa, as well as some wide-spaced regional reconnaissance holes.

During 2006, Prairie Downs Metals Limited ("Prairie Downs") completed eight (8) RC holes for a total of 1,032m, all located within the tenement. The drilling was designed to test for strike and down dip extensions of the copper mineralisation previously identified by Sipa. Drilling identified sulphides within the altered and sheared mafic schists. Prairie Downs considered the results to be disappointing, however intercepts included 3m @ 0.58% Zn and 0.14% Pb from 110m in PJRC002 and 1m @ 0.59% Pb from 97m in PJRC005.

Prairie Downs completed a ground magnetic survey over the project during 2012. The survey was intended to review the geology and better define the mineralisation and fault zone of the area. The survey highlighted a strong response running in a north-south direction dissected by an -NW-SE high angle fault and offset. Prairie Downs proposed drilling to target prospective stratigraphic horizons however this drilling was not completed.

Authorised for release by:

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Competent Person Statement:

The information in this release that relates to exploration results is based on information compiled by Ms Kirsty Culver, Member of the Australian Institute of Geoscientists (AIG) and an employee of Duketon Mining Limited. Ms Culver has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a competent person as defined in the JORC Code 2012. Ms Culver consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

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Appendix 1: Stephens Drill collars

Hole ID	Drill Type	Easting MGA94_50	Northing MGA94_50	Depth	Dip	Azimuth
PJRB010	RAB	447419	6790751	54	-60	90
PJRB011	RAB	447324	6790761	66	-60	90
PJRB012	RAB	447229	6790781	53	-60	90
PJRB013	RAB	447139	6790791	60	-60	90
PJRB014	RAB	447039	6790791	51	-60	90
PJRB015	RAB	446939	6790791	30	-60	90
PJRB016	RAB	446839	6790791	46	-60	90
PJRB017	RAB	446739	6790791	55	-60	90
PJRB018	RAB	447739	6790251	3	-60	90
PJRB019	RAB	447639	6790251	54	-60	90
PJRB020	RAB	447539	6790251	52	-60	90
PJRB021	RAB	447439	6790201	50	-60	90
PJRB022	RAB	447239	6790151	87	-60	90
PJRB056	RAB	447219	6791831	27	-60	90
PJRB057	RAB	447179	6791831	50	-60	90
PJRB058	RAB	447139	6791831	50	-60	90
PJRB059	RAB	446979	6791831	40	-60	90
PJRB062	RAB	447179	6791671	47	-60	90
PJRB063	RAB	447139	6791671	50	-60	90
PJRB064	RAB	447059	6791671	20	-60	90
PJRB065	RAB	447219	6791511	12	-60	90
PJRB066	RAB	447179	6791511	30	-60	90
PJRB067	RAB	447139	6791511	38	-60	90
PJRB068	RAB	447059	6791511	17	-60	90
PJRB069	RAB	446979	6791511	12	-60	90
PJRB070	RAB	447219	6791351	35	-60	90
PJRB071	RAB	447179	6791351	38	-60	90
PJRB072	RAB	447059	6791351	15	-60	90
PJRB073	RAB	446979	6791351	15	-60	90
PJRB074	RAB	447299	6791191	19	-60	90
PJRB075	RAB	447219	6791191	29	-60	90
PJRB076	RAB	447139	6791191	50	-60	90
PJRB077	RAB	447059	6791191	27	-60	90
PJRB078	RAB	446979	6791191	18	-60	90
PJRB079	RAB	446819	6791191	8	-60	90
PJRC001	RC	447030	6791189	149	-60	90
PJRC002	RC	447089	6791229	131	-60	90
PJRC003	RC	447029	6791288	146	-60	90
PJRC004	RC	447028	6791348	130	-60	90
PJRC005	RC	447129	6791385	119	-60	90

Hole ID	Drill Type	Easting MGA94_50	Northing MGA94_50	Depth	Dip	Azimuth
PJRC006	RC	447028	6791388	131	-60	90
PJRC007	RC	447048	6791428	149	-60	90
PJRC008	RC	447127	6791468	77	-60	90
PNP1	RC	447117	6791297	95	-55	100
PNP10	RC	447089	6791191	120	-60	90
PNP12	RC	447101	6791118	126	-60	90
PNP2	RC	447133	6791420	89	-55	100
PNP3	RC	447116	6791542	89	-55	100
PNP4	RC	447115	6791579	95	-55	100
PNP9	RC	447124	6791351	102	-55	90



JORC Table 1

JORC Code, 2012 Edition – Table 1 report – Stephens Project

Section 1 Sampling Techniques and Data –

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <i>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i> <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i> <i>Aspects of the determination of mineralisation that are Material to the Public Report.</i> <i>In cases where ‘industry standard’ work has been done this would be relatively simple (eg ‘reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay’). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</i> 	<ul style="list-style-type: none"> Various drilling methods have been employed by previous workers in the historic data presented, including RAB and reverse circulation drilling. Drillholes have been sampled at various intervals which include multi and single metre composites. The exact sampling methods cannot be determined, with confidence, from the historic data.
Drilling techniques	<ul style="list-style-type: none"> <i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i> 	<ul style="list-style-type: none"> Various drilling methods have been employed by previous workers in the historic data presented, including RAB and reverse circulation drilling.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Due to the historic nature of the data, recovery cannot be determined with confidence. The relationship between sample recovery and grade is unknown
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Not all geological data is available for all drillholes. Where data is available, it has been compiled. The data will be unsuitable for use in a Mineral Resource or more advanced study and is to be used as an exploration aid only.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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 duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	<ul style="list-style-type: none"> The nature of the sub-sampling of the percussion and diamond drilling is unknown. The sample preparation and sample size information is unknown
Quality of assay data and	<ul style="list-style-type: none"> 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, 	<ul style="list-style-type: none"> Method of analysis of historic drilling is unknown

Criteria	JORC Code explanation	Commentary
laboratory tests	<p><i>the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></p> <ul style="list-style-type: none"> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> 	
Verification of sampling and assaying	<ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> 	<ul style="list-style-type: none"> • The historic data cannot be verified and it has been collected from publicly available sources. • Data was extracted from WAMEX reports A037979, A043955, A051361, A054210, A074699, A101724, A105033 • DKM data is checked internally for correctness by senior DKM geological and corporate staff.
Location of data points	<ul style="list-style-type: none"> • <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i> • <i>Specification of the grid system used.</i> • <i>Quality and adequacy of topographic control.</i> 	<ul style="list-style-type: none"> • Historic data was presented as AMG84_Zone 50, coordinates were converted to GDA94_Zone 50 in Micromine.
Data spacing and distribution	<ul style="list-style-type: none"> • <i>Data spacing for reporting of Exploration Results.</i> • <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i> • <i>Whether sample compositing has been applied.</i> 	<ul style="list-style-type: none"> • Data has been collected at various spacing.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i> • <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> 	<ul style="list-style-type: none"> • The historic data is to be used as a guide to future exploration and at face value has been collected in a manner that is sensible with respect to gross geological trends however, more detailed interpretation would be required to assess this further.

Criteria	JORC Code explanation	Commentary
Sample security	<ul style="list-style-type: none"> <i>The measures taken to ensure sample security.</i> 	<ul style="list-style-type: none"> Due to the historic nature of the data presented, this cannot be determined.
Audits or reviews	<ul style="list-style-type: none"> <i>The results of any audits or reviews of sampling techniques and data.</i> 	<ul style="list-style-type: none"> No external audits or reviews have been conducted apart from internal company reviews as this is publicly available, historic data.

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	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> The tenements E59/2414 is 100% owned by Duketon Mining Limited and is in good standing and there are no known impediments to obtaining a licence to operate in the area. The historic data presented, however, has not been collected by Duketon Mining Limited and was not collected originally on tenements owned by Duketon Mining Limited.
Exploration done by other parties	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> The data presented was collected by various companies including Sipa Resources International NL, Lachlan Resources NL and Prairie Down Metals Ltd.

Criteria	JORC Code explanation	Commentary
Geology	<ul style="list-style-type: none"> • Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> • The base metal mineralisation has affinities with Archaean VMS deposits
Drill hole Information	<ul style="list-style-type: none"> • A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> ◦ easting and northing of the drill hole collar ◦ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ◦ dip and azimuth of the hole ◦ down hole length and interception depth ◦ hole length. 	<ul style="list-style-type: none"> • Collar details have been included as an Appendix to this announcement.
Data aggregation methods	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • Results have been presented as collected from historic data sources. • Significant intercepts are calculated using a 1% Pb or 1% Zn or 1% Cu or 5g/t Ag cut-off grade and include no more than 2m of internal dilution.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • 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'). 	<ul style="list-style-type: none"> • Mineralisation orientations have not been determined conclusively.

Criteria	JORC Code explanation	Commentary
Diagrams	<ul style="list-style-type: none"> Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	<ul style="list-style-type: none"> Refer to figures in document.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The historic data presented is to illustrate trends only and all available data is provided.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Refer to document.
Further work	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Further work will include detailed interrogation of historic data and possible follow-up and extension of this work possibly including soil and rock geochemistry and mapping.