

ASX ANNOUNCEMENT

23<sup>rd</sup> APRIL 2018

## Extensive vanadium mineralisation defined by historical drill data at Toolebuc Project, Queensland

*Lilyvale mineralisation extends eastwards onto Liontown's 100%-owned tenure*

### Highlights

- Historical drill hole data confirms the presence of widespread vanadium mineralisation on Liontown's tenure, immediately east of the 671Mt Lilyvale Mineral Resource of Intermin Resources' (ASX:IRC) (see IRC release dated 20<sup>th</sup> March 2018) with intersections including:
  - JRC08022 4m @ 0.48% V<sub>2</sub>O<sub>5</sub> from 15m, including 2m @ 0.63% V<sub>2</sub>O<sub>5</sub> from 16m.
  - JRC08036 7m @ 0.35% V<sub>2</sub>O<sub>5</sub> from 16m, including 1m @ 0.71% V<sub>2</sub>O<sub>5</sub> from 18m.
  - JRC08046 6m @ 0.37% V<sub>2</sub>O<sub>5</sub> from 16m, including 1m @ 0.65% V<sub>2</sub>O<sub>5</sub> from 18m.
  - JRC08067 8m @ 0.36% V<sub>2</sub>O<sub>5</sub> from 14m, including 1m @ 0.74% V<sub>2</sub>O<sub>5</sub> from 16m.
- The mineralised zone has been defined over an area of 5km x 3km, and remains open to the north and east.
- The grades and widths of the mineralisation appear similar to IRC's Lilyvale Mineral Resource.
- The 100%-owned Toolebuc Vanadium Project is located close to existing infrastructure including a gas pipeline, a major highway and a railway linked to Townsville Port.

Liontown Resources Limited (ASX: LTR) is pleased to advise that it has received data for historical drill holes which confirm the presence of significant vanadium mineralisation on its 100%-owned Toolebuc Vanadium Project, located 440km west of Townsville (*Figure 1*).

The data relates to 35 aircore holes drilled across the Lilyvale Extended area, immediately east of Intermin Resources Limited's Lilyvale Mineral Resource (*Figure 2*), and was provided by the Queensland Department of Natural Resources and Mines, which extracted this information from a historical statutory report.

The holes were drilled by Intermin in 2008 on an approximate 1,000 x 500m pattern as part of a larger resource drilling program.

The historical results (*see Appendix 1*) indicate a similar style and grade of mineralisation as reported by Intermin for the Lilyvale Inferred Mineral Resource, which is estimated to contain 671Mt @ 0.35% V<sub>2</sub>O<sub>5</sub> at a 0.29% lower cut-off grade (*see IRC release dated 20<sup>th</sup> March 2018*).

The mineralisation (>0.25% V<sub>2</sub>O<sub>5</sub>) on the Company's tenure has been defined over an area of approximately 5km x 3km and remains open to the north and east (*see Figure 3*).

It is located within a flat-lying horizon (*Figure 4*) close to the surface (<30m) and is hosted by marine sediments of the Early Cretaceous Toolebuc Formation. Liontown's project area covers ~1,000km<sup>2</sup> and includes extensive areas of outcropping Toolebuc Formation (*Figure 1*) which has not yet been assessed for vanadium.

Liontown will have the historic drill data reviewed by an independent consultant to determine whether it is suitable for estimating a JORC compliant Inferred Resource.

In addition, Liontown plans to complete additional drilling to confirm the historical results and define the limits of the mineralised zone east of Lilyvale. Wide-spaced aircore drill holes are also planned across untested parts of the Toolebuc Formation to define other areas of vanadium mineralisation.



DAVID RICHARDS

Managing Director

23<sup>rd</sup> April 2018

*The Information in this report that relates to Exploration Results is based on and fairly represents information and supporting documentation prepared by Mr David Richards, who is a Competent Person and a member of the Australasian Institute of Geoscientists (AIG). Mr Richards is a full-time employee of the company.*

*Mr Richards has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Richards consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

*This report contains forward-looking statements which involve a number of risks and uncertainties. These forward looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.*

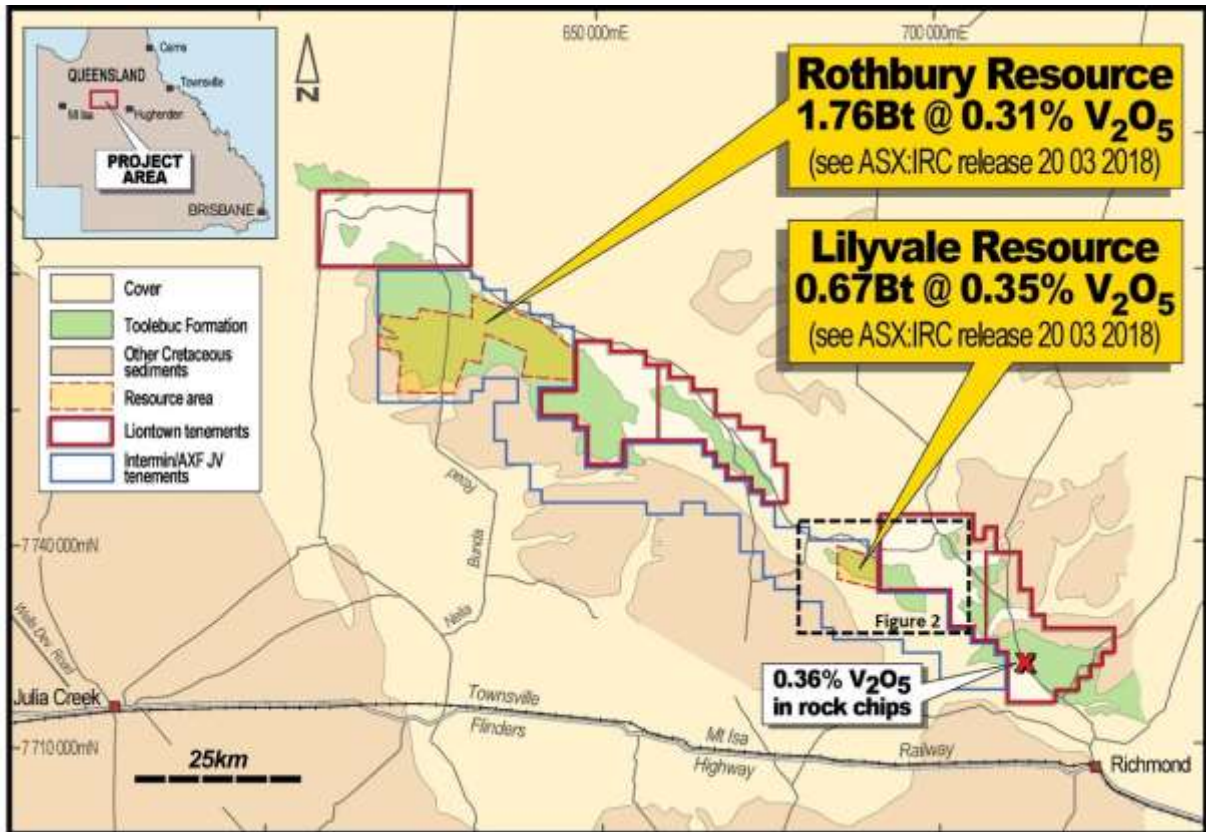


Figure 1: Toolebuc Vanadium Project – Tenure, regional geology and resources defined by Intermin Resources

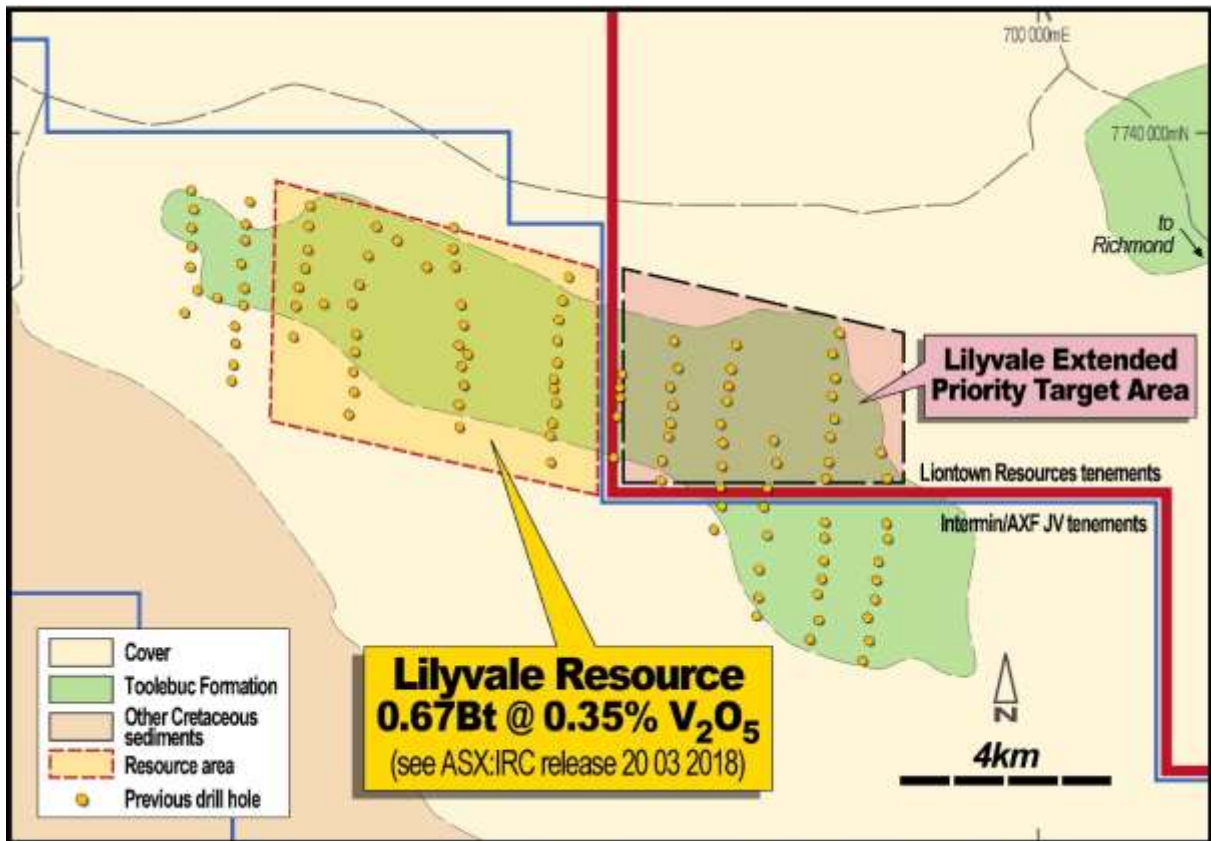


Figure 2: Lilyvale Area – Plan showing tenement boundaries and previous aircore drilling (see Figure 1 for location of diagram)

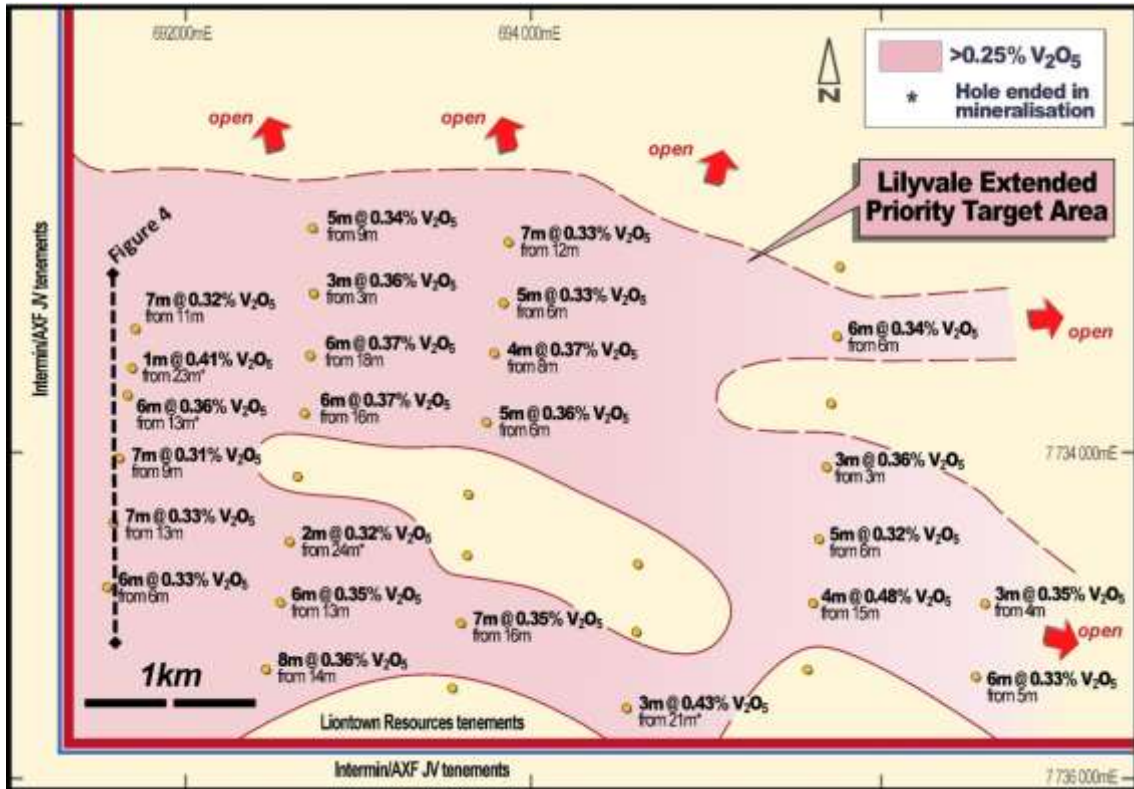


Figure 3: Lilyvale Extended area – Drill hole plan showing vanadium intersections

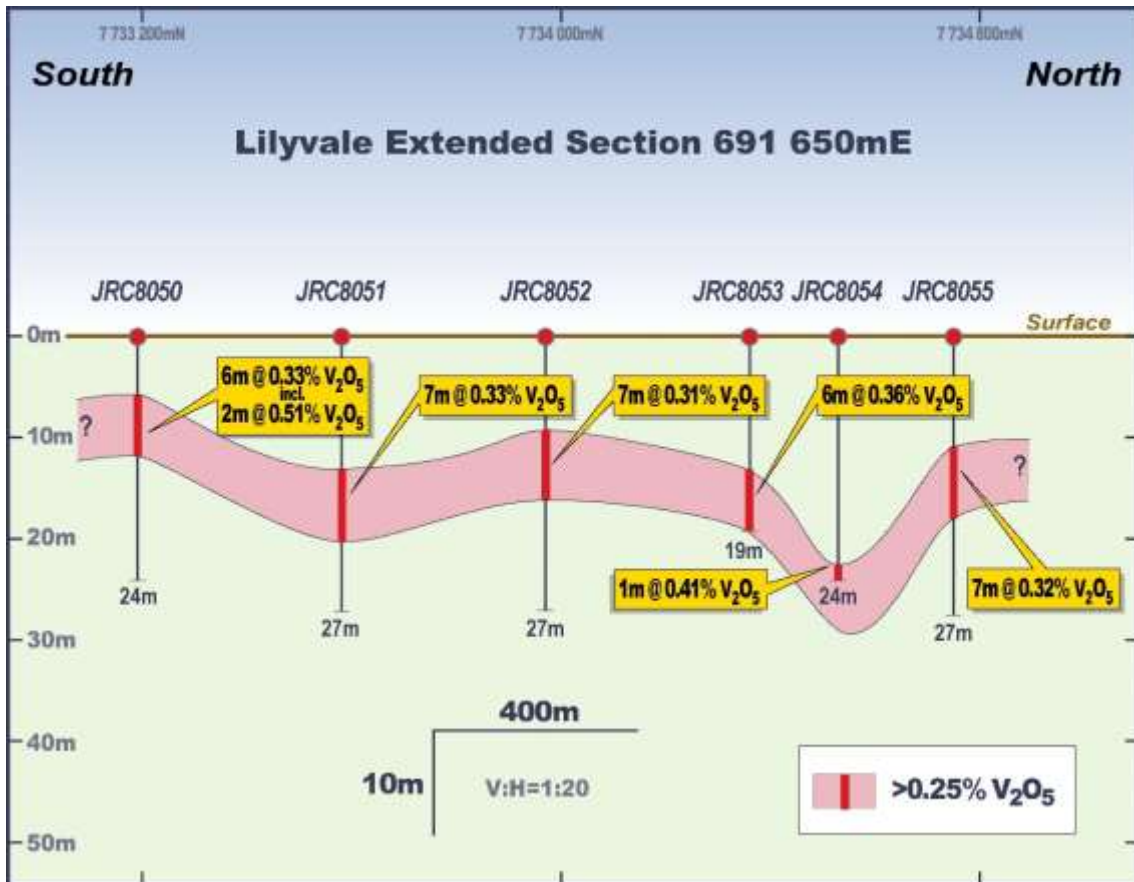


Figure 4: Lilyvale Extended area – Drill section 691650E (see Figure 3 for location)



## APPENDIX 1 – Toolebuc Vanadium Project/Lilyvale Extended – Historic Drill Hole Statistics

Hole_ID	Prospect	East	North	RL	Depth	Azimuth	Dip	Significant V2O5 (>0.25%)			
								From (m)	To (m)	Interval	V2O5%
JRC08016	Lilyvale	695813	7735519	135	30	0	-90	No significant assays			
JRC08017	Lilyvale	695776	7735124	135	24	0	-90	No significant assays			
JRC08018	Lilyvale	695745	7734704	135	24	0	-90	6	12	6	0.34
								incl. 1m @ 0.52% V2O5 from 8m			
JRC08019	Lilyvale	695712	7734299	135	24	0	-90	No significant assays			
JRC08020	Lilyvale	695680	7733911	135	21	0	-90	3	6	3	0.36
JRC08021	Lilyvale	695640	7733474	135	21	0	-90	6	11	5	0.32
								incl. 1m @ 0.51% V2O5 from 7m			
JRC08022	Lilyvale	695607	7733082	135	21	0	-90	15	19	4	0.48
								incl. 2m @ 0.63% V2O5 from 16m			
JRC08023	Lilyvale	695575	7732676	135	23	0	-90	No significant assays			
JRC08032	Lilyvale	696540	7732628	135	21	0	-90	5	11	6	0.33
								incl. 1m @ 0.55% V2O5 from 7m			
JRC08033	Lilyvale	696596	7733066	135	18	0	-90	4	7	3	0.35
JRC08034	Lilyvale	694590	7732894	135	27	0	-90	No significant assays			
JRC08035	Lilyvale	694601	7733314	135	21	0	-90	No significant assays			
JRC08036	Lilyvale	693582	7732961	135	27	0	-90	16	23	7	0.35
								incl. 1m @ 0.71% V2O5 from 18m			
JRC08037	Lilyvale	693606	7733377	135	21	0	-90	No significant assays			
JRC08038	Lilyvale	693626	7733744	135	20	0	-90	No significant assays			
JRC08039	Lilyvale	693727	7734181	135	24	0	-90	6	11	5	0.36
								incl. 1m @ 0.59% V2O5 from 7m			
JRC08040	Lilyvale	693770	7734602	135	24	0	-90	8	12	4	0.37
								incl. 1m @ 0.57% V2O5 from 10m			
JRC08041	Lilyvale	693820	7734912	135	12	0	-90	6	11	5	0.33
								incl. 1m @ 0.67% V2O5 from 8m			
JRC08042	Lilyvale	693860	7735279	135	24	0	-90	12	19	7	0.33
								incl. 1m @ 0.57% V2O5 from 14m			
JRC08043	Lilyvale	692540	7733081	135	24	0	-90	13	19	6	0.35
								incl. 1m @ 0.62% V2O5 from 14m			
JRC08044	Lilyvale	692590	7733454	135	26	0	-90	24	26	2	0.32
JRC08045	Lilyvale	692640	7733847	135	24	0	-90	No significant assays			
JRC08046	Lilyvale	692685	7734234	135	27	0	-90	16	22	6	0.37
								incl. 1m @ 0.65% V2O5 from 18m			
JRC08047	Lilyvale	692714	7734588	135	24	0	-90	18	24	6	0.37
JRC08048	Lilyvale	692735	7734978	135	27	0	-90	3	6	3	0.36
JRC08049	Lilyvale	692728	7735368	135	27	0	-90	9	14	5	0.34
JRC08050	Lilyvale	691540	7733177	135	24	0	-90	6	12	6	0.33
JRC08051	Lilyvale	691580	7733568	135	27	0	-90	13	20	7	0.33
JRC08052	Lilyvale	691615	7733964	135	27	0	-90	9	16	7	0.31
JRC08053	Lilyvale	691665	7734351	135	19	0	-90	13	19	6	0.36
JRC08054	Lilyvale	691687	7734514	135	24	0	-90	23	24	1	0.41
JRC08055	Lilyvale	691712	7734749	135	27	0	-90	11	18	7	0.32
JRC08067	Lilyvale	692457	7732674	135	30	0	-90	14	22	8	0.36
								incl. 1m @ 0.74% V2O5 from 16m			
JRC08068	Lilyvale	693533	7732554	135	24	0	-90	No significant assays			
JRC08071	Lilyvale	694524	7732441	135	24	0	-90	21	24	3	0.43
								incl. 1m @ 0.56% V2O5 from 23m			

*Down hole widths approximately equivalent to true widths*

## APPENDIX 2 – Toolebuc Vanadium PROJECT - JORC Table 1

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<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>	All drilling for which results are reported was completed by Intermin Resources and documented in Statutory Report CR54392 submitted to Queensland DNRM.  Drill samples collected by aircore (AC) drilling techniques (see below).  Drill holes oriented perpendicular to the interpreted strike of the mineralised trend.
	<i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i>	Regular cleaning of cyclone to remove hung up clays and avoid cross-sample contamination. Samples typically dry.
	<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>	AC samples were collected by the metre from the drill rig cyclone, bagged and speared before being dispatched to the lab.  All samples assayed at ALS: <ul style="list-style-type: none"> <li>• Entire sample pulverized</li> <li>• Sample digest – 4 acid</li> <li>• Analytical procedure – ICPMS for Ag and Mo, ICP-OES for other elements</li> </ul>
<b>Drilling techniques</b>	<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>	Aircore – 89mm bit.  (Drilling by Belldale Drilling utilizing a truck mounted 650cfm 300psi drilling rig.)
<b>Drill sample recovery</b>	<i>Method of recording and assessing core and chip sample recoveries and results assessed.</i>	Sample recoveries are visually estimated and recorded for each metre.
	<i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i>	Dry drilling and regular cleaning of sampling material.
	<i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i>	None noted
<b>Logging</b>	<i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i>	No drill logs provided with historic data.
	<i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i>	No drill logs provided with historic data.
	<i>The total length and percentage of the relevant intersections logged.</i>	No drill logs provided with historic data.
<b>Sub-sampling techniques and sample preparation</b>	<i>If core, whether cut or sawn and whether quarter, half or all core taken.</i>	No core drilling completed.
	<i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i>	Samples speared – typically dry.
	<i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i>	Sample preparation follows industry best practice standards and is conducted by internationally recognised laboratories ;i.e. ALS Chemex

Criteria	JORC Code explanation	Commentary
	<i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i>	QA/QC data provided by ALS and considered adequate by Intermin
	<i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i>	Bulk samples dry and homogenised. Regular cleaning of cyclones and sampling equipment to prevent contamination
	<i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i>	Sample size submitted to lab consistent with industry standards.
<b>Quality of assay data and laboratory tests</b>	<i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i>	Assaying completed by ALS Townsville and ALS Perth, using industry standard procedures for multi-element suite including vanadium. Analytical techniques are total.
	<i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i>	None used
	<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>	See above.
<b>Verification of sampling and assaying</b>	<i>The verification of significant intersections by either independent or alternative company personnel.</i>	Internal review by alternate company personnel.
	<i>The use of twinned holes.</i>	None completed
	<i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i>	Data extracted from statutory reports, entered into excel spreadsheets, validated and loaded into an Access database.  Data is exported from Access for processing by a number of different software packages.  All electronic data is routinely backed up.
	<i>Discuss any adjustment to assay data.</i>	V% converted to V <sub>2</sub> O <sub>5</sub> % by multiplying by 1.78
<b>Location of data points</b>	<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>	All drill holes located using a hand held GPS.  No downhole surveys completed due to shallow nature and vertical holes.
	<i>Specification of the grid system used</i>	GDA 94 Zone 54
	<i>Quality and adequacy of topographic control.</i>	Nominal RLs based on regional topographic datasets.
<b>Data spacing and distribution</b>	<i>Data spacing for reporting of Exploration Results.</i>	Holes drilled on approximate 1000 x 500m pattern
	<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>	Data currently being reviewed by independent consultant to determine suitability for Mineral Resource estimation
	<i>Whether sample compositing has been applied.</i>	No compositing completed
<b>Orientation of data in relation to geological structure</b>	<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>	Orientation of sampling perpendicular to mineralised horizon means no bias likely.
	<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>	Given style and homogeneity of mineralisation, no sampling bias is likely.

Criteria	JORC Code explanation	Commentary
<b>Sample security</b>	<i>The measures taken to ensure sample security.</i>	Intermin geologist supervised all sampling and subsequent storage in field. No unauthorised access was permitted.
<b>Audits or reviews</b>	<i>The results of any audits or reviews of sampling techniques and data.</i>	None completed.

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<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>	<p>The Toolebuc Vanadium Project comprises 5 granted exploration permit applications (EPMs 26490-26492 and 26494-26495) which were applied for by Liontown Resources Limited in March 2017.</p> <p>The combined tenement package covers a total area of ~1,040km<sup>2</sup> and is located 440km west of Townsville in north Queensland.</p> <p>There are no other material encumbrances affecting the tenements</p>
	<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>	All tenements are in good standing.
<b>Exploration done by other parties</b>	<i>Acknowledgment and appraisal of exploration by other parties.</i>	<p>There have been multiple phases of exploration in the region since the early 1970s with the main focus being on hydrocarbons and/or vanadium hosted by the Toolebuc Formation.</p> <p>Liontown's tenure about significant vanadium resources originally reported by Intermin Resources in 2007 and 2010 and subsequently updated in March 2018 (see <a href="https://www.intermin.com.au/?projects=richmond-oil-shale-v-mo-jv-project">https://www.intermin.com.au/?projects=richmond-oil-shale-v-mo-jv-project</a>).</p> <p>Following assistance from the Queensland DNRM, detailed data has been recovered for the Intermin drill holes located immediately east of the Lilyvale Mineral Resource.</p> <p>The only other significant exploration completed was by Pacminex in 1973 and Jacaranda Minerals in 2007, both of which conducted wide-aircore drilling over EPMs 26492 and 26494. This work intersected strongly anomalous vanadium values hosted by the Toolebuc Formation.</p>
<b>Geology</b>	<i>Deposit type, geological setting and style of mineralisation.</i>	<p>The Project area is largely underlain by sediments belonging to the Lower Cretaceous Rolling Downs Group which includes the Toolebuc Formation, the main host to the vanadium mineralisation.</p> <p>The Toolebuc Formation is a flat lying sediment about 100 million years old and consists of black carbonaceous and bituminous shale, minor siltstone with limestone lenses and coquinites. In the Project area, the Formation is draped over an interpreted basement high and has been structurally uplifted to the surface.</p> <p>The resources estimated by Intermin relate to near surface mineralisation derived from the oxidation of the oil shale horizon.</p> <p>At Lilyvale Extended, the mineralisation is hosted by flat lying, 3-8m thick horizon &lt;30m from the surface. The mineralisation is soft and would most likely be suitable for free digging.</p>





Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<p>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:</p> <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul>	See Appendix attached to ASX release.
<b>Data aggregation methods</b>	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.	See Appendix attached to ASX release.
	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.	See Appendix attached to ASX release.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalents reported.
<b>Relationship between mineralisation widths and intercept lengths</b>	These relationships are particularly important in the reporting of Exploration Results.	
	<p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p> <p>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’).</p>	Drill hole widths approximate true widths.
<b>Diagrams</b>	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.	See Figures in body of report
<b>Balanced reporting</b>	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.	All available exploration results reported.
<b>Other substantive exploration data</b>	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.	Results of preliminary metallurgical test previously reported
<b>Further work</b>	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	Review of available drill hole data to determine suitability for resource estimation.
		Further aircore drilling to confirm historic results and define limits of mineralisation at Lilyvale Extended.
		Wide-spaced aircore drilling across areas of exposed Toolebuc formation.
		Further metallurgical test work.