



# Historic Stream Sediments Indicate Copper-Cobalt-Zinc-Lead Potential at Lawn Hill Project

*Tenement grant process ongoing with meetings  
scheduled for late 2017*

## ASX ANNOUNCEMENT

21 August 2017

ASX: TKM

ARBN: 124 462 826

### Board of Directors

Mr Greg Bittar

*Non-Executive Chairman*

Mr Bradley Drabsch

*Managing Director*

Ms Sonja Neame

*Non-Executive Director*

Mr Michael Bowen

*Non-Executive Director*

### Issued Capital

Shares – 232.0 M

Options – 55.5M

Share Price – A\$0.029

Market Cap. – A\$6.73M

### Registered Office – Australia

Suite 5/56 Kings Park Rd

WEST PERTH WA 6005

### Registered Office – Bermuda

Trinity Hall

43 Cedar Avenue

HAMILTON HM12

### Postal Address

P.O. Box 1796

WEST PERTH WA 6872

T +61 8 6555 1879

E [info@trekmetals.com.au](mailto:info@trekmetals.com.au)

W [trekmetals.com.au](http://trekmetals.com.au)

## HIGHLIGHTS

- Widespread Copper, Cobalt, Zinc and Lead anomalism indicated following compilation of historic stream sediment data
- Negotiations with the Traditional Owners in the Lawn Hill Project area are ongoing with a meeting scheduled for November 2017
- Anomalies directly along strike, in the same structural corridor that hosts the Walford Creek Copper-Cobalt-Zinc-Lead Project (Aeon Metals Limited, AML)
- Copper-Cobalt, Zinc and Lead occurrences “stop” at the NT/Qld border as a result of the lack of exploration on the NT side
- Historic drillholes intersected the same geological units hosting the Walford Creek Deposit

Trek Metals Limited (ASX:TKM) is pleased to advise that a compilation of available historic stream sediment data, collected in the 1980's across the Lawn Hill Project area, indicates the potential for copper, cobalt, zinc and lead mineralisation across the tenement application areas.

The Lawn Hill Project is located immediately across the border (approx. 35km west and directly along strike) on the Northern Territory side, from the emerging Walford Creek Copper-Cobalt-Zinc-Lead Project owned by Aeon Metals Limited. Aeon Metals suggests that the Walford Creek Project contains Australia's largest and most advanced sulphide cobalt resource.

The rocks hosting the Walford Creek Project, the Lawn Hill Platform, extend across the border from Queensland into the Northern Territory. An obvious and abrupt absence of copper-cobalt, zinc and lead occurrences within the Lawn Hill Platform rocks on the Northern Territory side of the border is not necessarily due to an absence of mineralisation but rather a lack of exploration.

ESSO conducted limited surface exploration between 1979 - 1981 which included:

- stream sediment sampling
- rock chip sampling
- gravity survey
- drilling of two stratigraphic diamond drillholes

## Historic Exploration

ESSO conducted first pass surface exploration during 1979 – 1981, which mostly included stream sediment sampling, rock chip sampling, a gravity survey and the completion of two stratigraphic diamond drillholes (stratigraphic drillholes are completed to provide an understanding of the sub-surface geology and are not necessarily specifically targeted at mineralisation).

Stream sediment sampling was also undertaken by the BMR (Bureau of Mineral Resources). Details of this programme are unknown.

A compilation of the stream sediment sampling results is provided in figures 2-5 below. Elemental concentrations have been levelled to geology and concentrations represented as percentile groups to indicate anomalism. Values at the 98<sup>th</sup> percentile could be considered as highly anomalous.

The two drillholes, ND-1 and ND-2 (see figure 2), were drilled vertically to a depth of 101.0m and 143.5m respectively. The sequence hosting the Walford Creek Deposit was encountered in both drillholes along with weakly anomalous base metal mineralisation.

Further compilation of this historic data is ongoing.

### COMPETENT PERSONS STATEMENT

*The information in this report that relates to exploration results is based on information compiled by Mr Bradley Drabsch, Member of the Australian Institute of Geoscientists ("AIG") and Managing Director of Trek Metals Limited. Mr Drabsch 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. Mr Drabsch consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.*

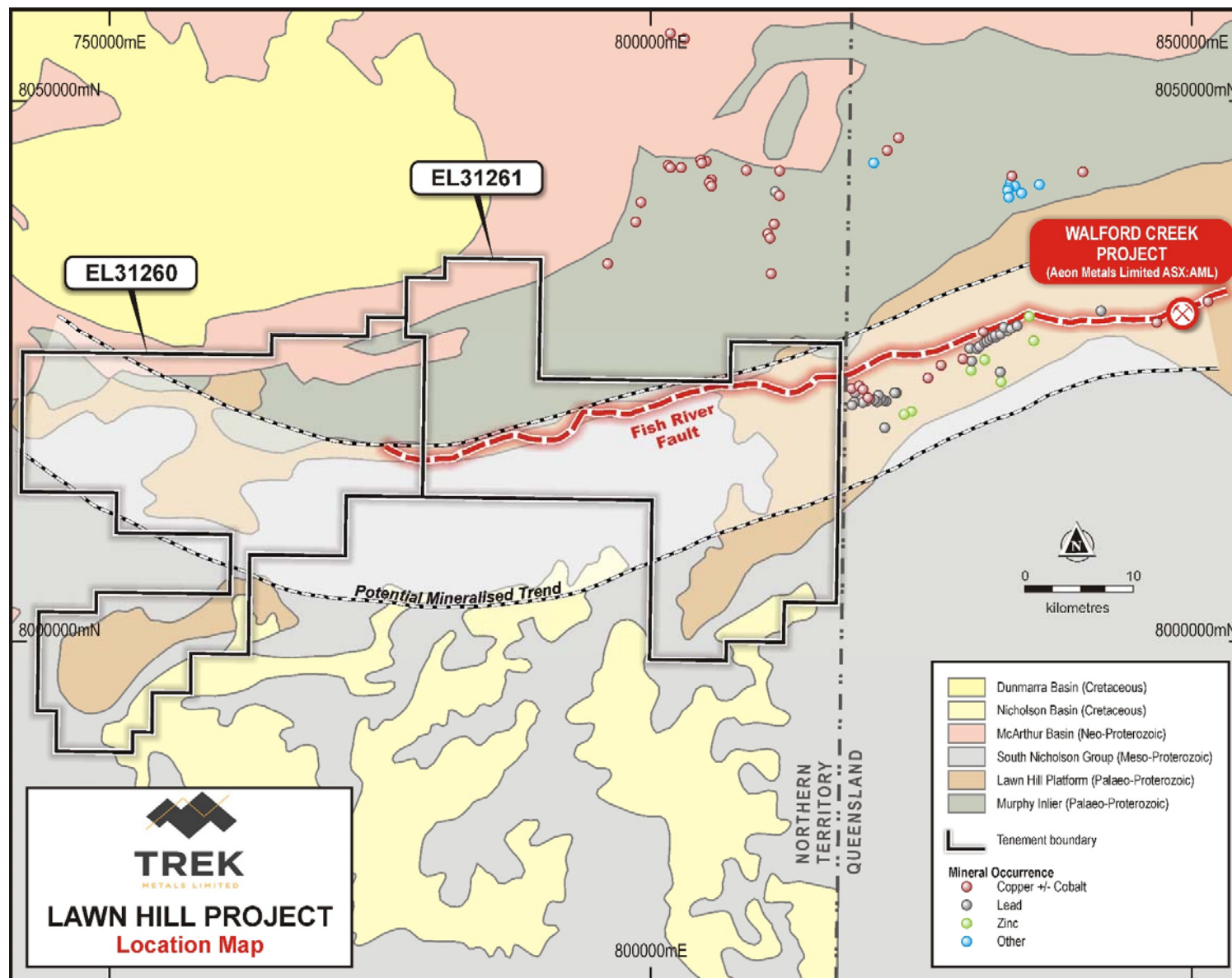


Figure 1: Lawn Hill Project Location Plan

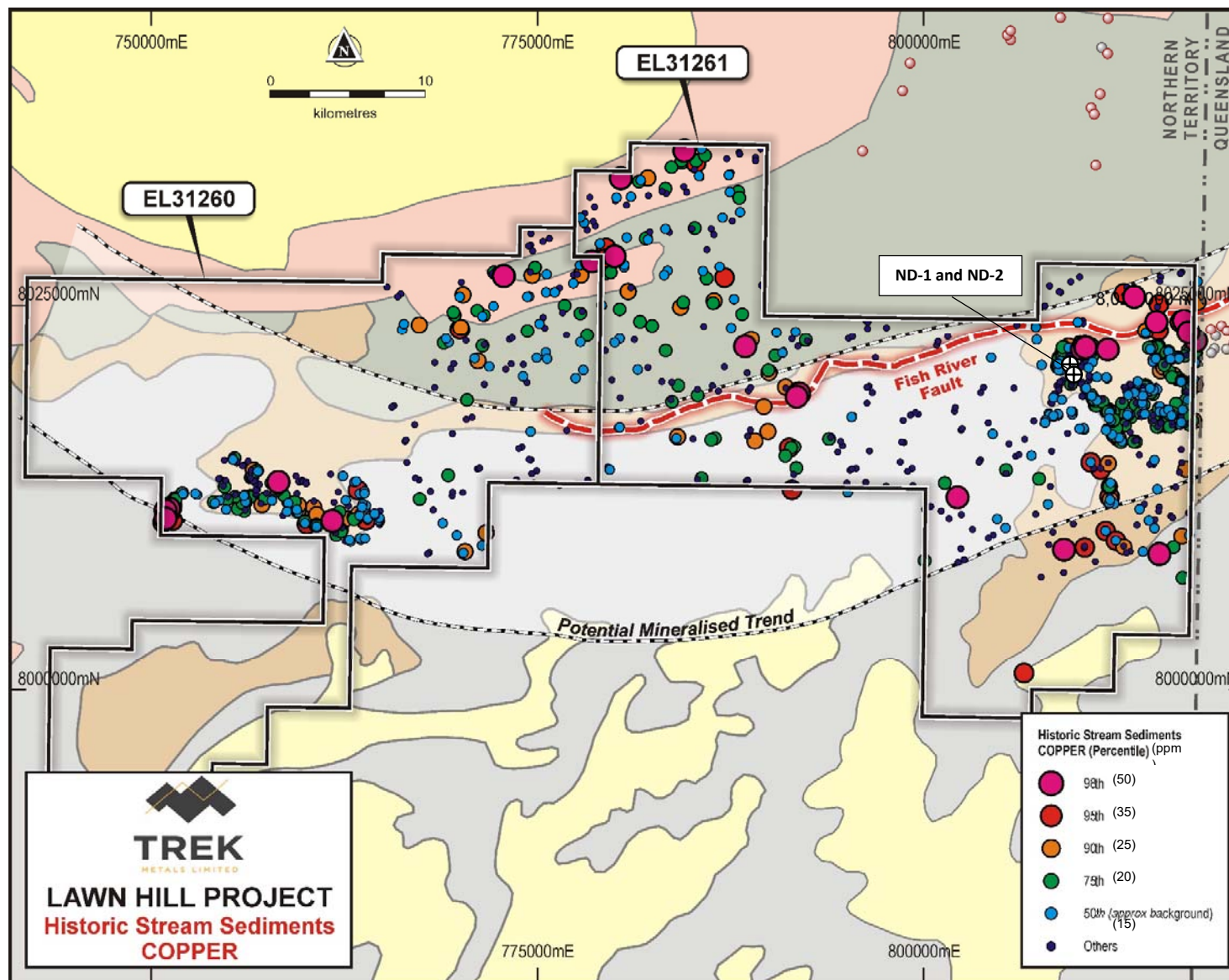


Figure 2: Historic Stream Sediment Geochemistry - Copper



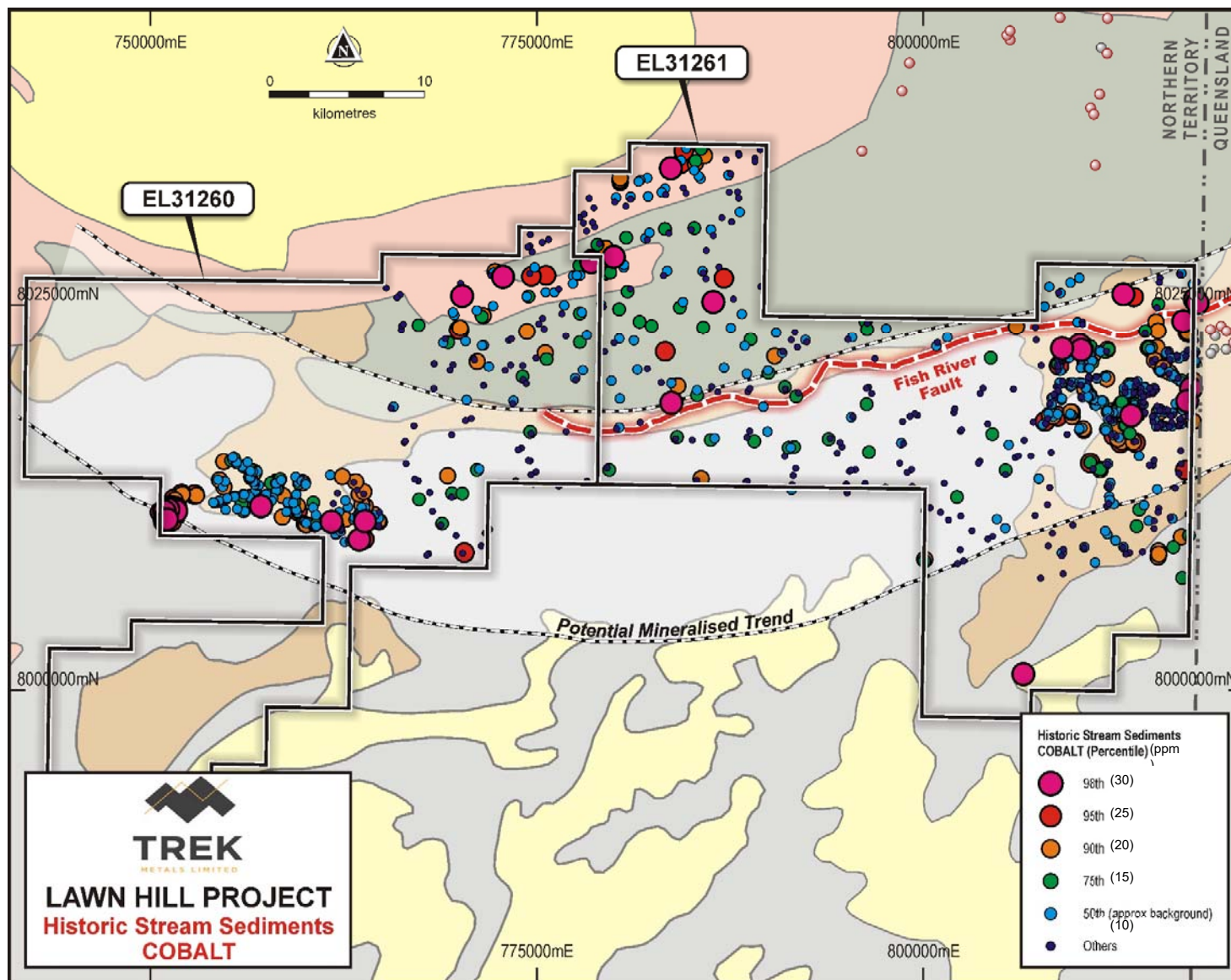


Figure 3: Historic Stream Sediment Geochemistry - Cobalt

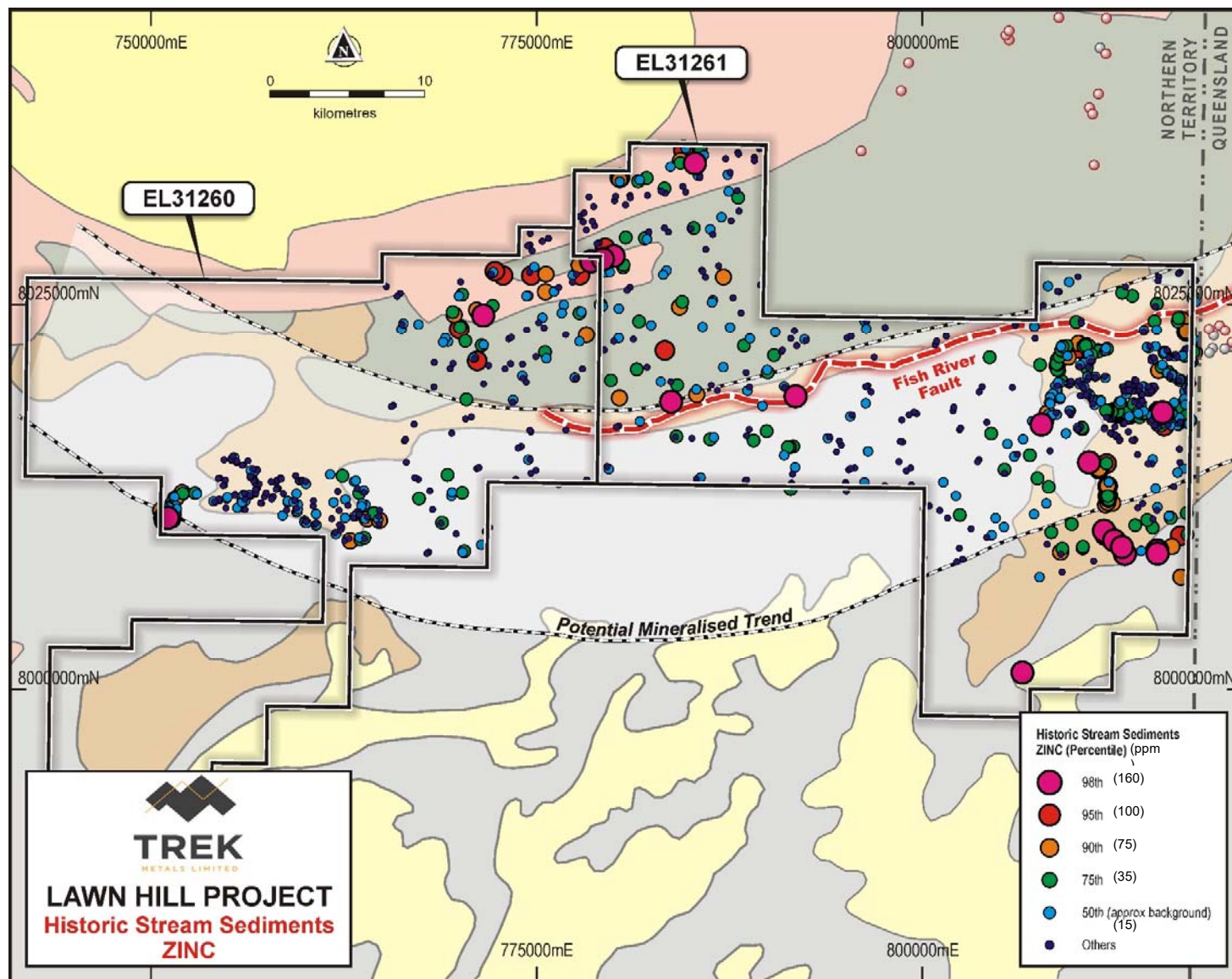


Figure 4: Historic Stream Sediment Geochemistry - Zinc

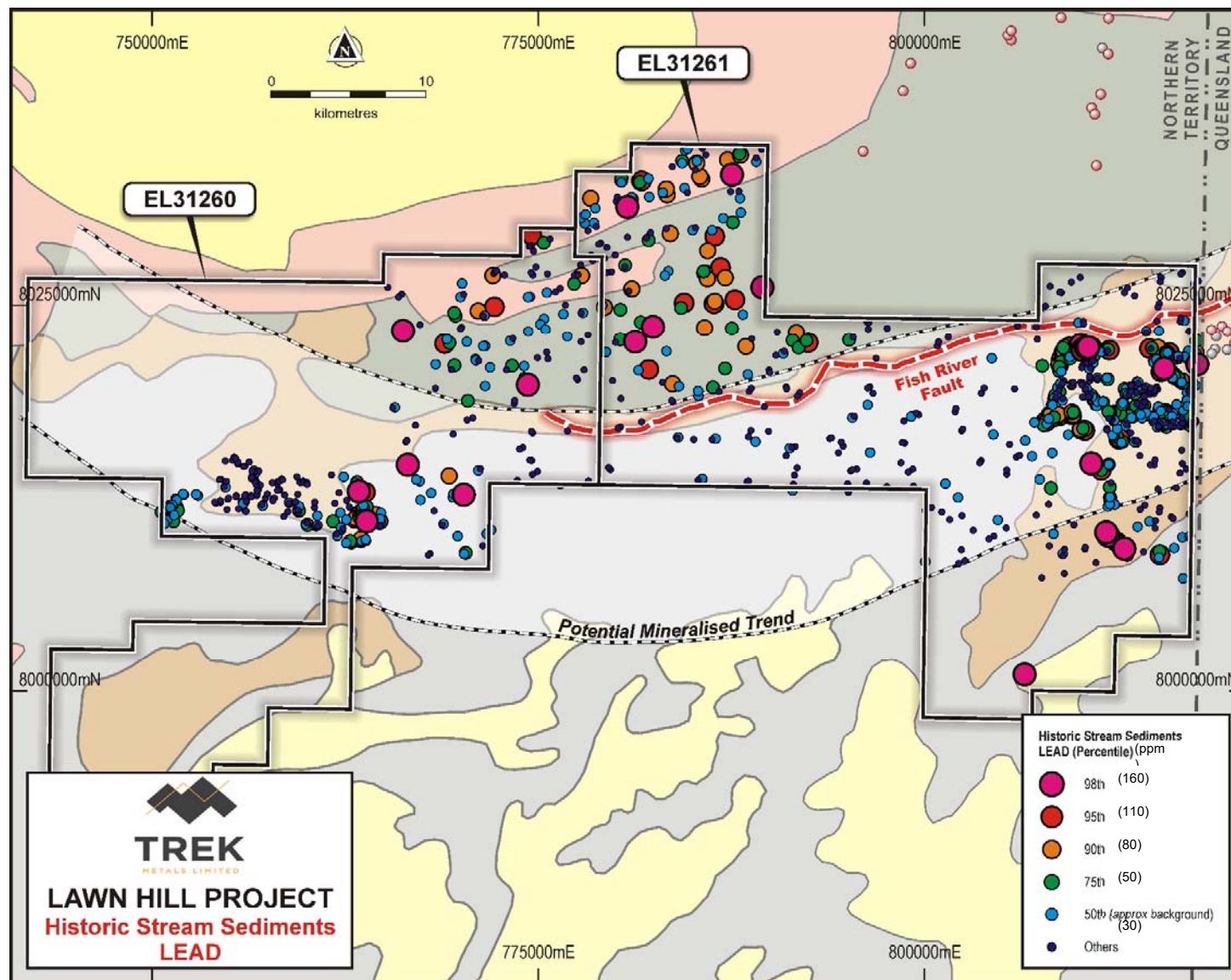


Figure 5: Historic Stream Sediment Geochemistry - Lead



## JORC Code, 2012 Edition – Table 1

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Samples referred to in this announcement are historical and their exact method of collection is unknown. The information relating to the samples was taken from historical exploration reports submitted by the company who collected the samples at the time (ESSO, Esso Exploration and Production Aust. Inc.) and the BMR (Bureau of Mineral Resources). They are known to be stream sediment samples which were screened to -80 mesh (approx. 180 microns). Analysis of the ESSO samples was conducted by ALS Laboratories in Brisbane by "Method 1" (details of this method are unknown).</li> <li>Details of the BMR samples are unknown at this time.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling was conducted</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling was conducted</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>No drilling was conducted</li> </ul>



Criteria	JORC Code explanation	Commentary
	<p>studies.</p> <ul style="list-style-type: none"> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Screening to -80 mesh, as these historic samples were, is an accepted method of sample preparation for stream sediment samples.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The exact method of assay is not known and is not detailed in the historic reports. An assumption can be made that the method used to analyse the samples would have been appropriate however this cannot be confirmed.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No verification has been undertaken at this time.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Maps within historic reports show the sample locations appear to be accurate however this has not been verified.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <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></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Maps within historic reports show the distribution of the stream sediment sampling and this appears to be appropriate</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <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></li> <li>• <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></li> </ul>	<ul style="list-style-type: none"> <li>• No drilling was conducted.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No reference to sample security is available in the historic reports.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• No reviews or audits have been undertaken at this stage.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>TM Resources, a wholly owned subsidiary of Trek Metals Limited owns the applications, EL31260 and EL31261.</li> <li>The land upon which these applications are located is within the bounds of an area administered by the Northern Land Council on behalf of the WAANYI/GARAWA ABORIGINAL LAND TRUST and as such the application and grant process is subject to Sections 40, 41 and 42 of the Aboriginal Land Rights Act which provides that consent must be obtained from the abovementioned Land Trust prior to the application proceeding to grant. This process of negotiation is underway.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The most relevant exploration conducted within the area the subject of these tenement applications was conducted by ESSO (Esso Exploration and Production Aust. Inc.) during 1979 and 1980 as part of a broader exploration programme targeting uranium (Reports are held by the NTGS as CR19800200 and CR19810227).</li> <li>Geological mapping, stream sediment and rock chip sampling relating directly to base metals exploration was conducted by ESSO along with a gravity survey.</li> <li>Subsequently two diamond drill holes were completed. These holes were described as "stratigraphic holes" and were drilled to provide a better understanding of the subsurface geology.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The deposit style targeted is sediment hosted base metal deposits of a similar nature to other deposits in the region eg. Century and Walford Creek.</li> <li>The exact nature of any mineralisation sought is not known as no exploration has yet been conducted.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>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> </li> </ul>	<ul style="list-style-type: none"> <li>See table 1 within the document.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>The diagrams presented utilise percentiles as a method of displaying the stream sediment sample results. The 50<sup>th</sup> percentile could be considered as background with the 95<sup>th</sup> percentile and above, considered as highly anomalous. The results have been levelled against regional geological units as presented in the diagrams.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>No drilling has been conducted.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Refer to figures in report.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All historic stream sediment samples available are plotted.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>All meaningful and material information is reported.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Historic data compilation is ongoing along with the negotiation process to have the tenements granted. Should the negotiations with Traditional Owners result in consent to grant, it is likely that the grant process would not be completed until 2018.</li> </ul>