

TORONTO, ONTARIO--(Marketwired - Oct 17, 2016) - [Melior Resources Inc.](#) (TSX VENTURE:MLR) ("Melior" or the "Corporation"), is pleased to announce the completion of an updated resource report in compliance with NI 43-101 for the Goondicum Industrial Mineral Project (the Property) covering ML80044 and ML80141. Melior owns 100% of Goondicum Resources Pty Ltd (GR) which subsequently owns 100% of the Property. This report combines the two previously lodged resource reports and includes a new apatite resource estimate for the project as part of the previously reported ilmenite resource estimates for ML80044.

#### Highlights:

- Total Indicated Resources for the project contains 2.70 million tonnes of ilmenite and 0.55 million tonnes of apatite
- Total Inferred Resources for the project contain 2.57 million tonnes of ilmenite and 0.49 million tonnes of apatite
- ML80044 has a high grade portion of the Indicated Resource showing 9.0 million tonnes of mineralisation at 11.9% available ilmenite and 1.4% apatite and a high grade portion of the Inferred Resource showing 11.3 million tonnes of mineralisation at 11% available ilmenite and 1.5% apatite
- Additional mineralization prospective for further exploration has been identified on the eastern side of the ML80141

#### About the Resources

Melior Resources is a company focused exclusively on the mining sector. In 2014 Melior purchased the Property from Belridge Enterprises ("Belridge") and completed a refurbishment and upgrade exercise on the existing plant. The Property comprises a Mining Lease ML80044 ("ML") and an adjoining Mining Lease Application ML80141 ("MLA") that are both owned 100% by GR. The Goondicum deposit was mined within ML80044 by GR in 2015 and by Belridge in 2012-2013. The project has been on care and maintenance since September 2015. Both leases have defined Mineral Resources that have been completed in the past three years. The original exploration work for both the ML and MLA was completed by Monto Minerals in 1996 to 2005. Belridge followed up on this with the exploration drilling in 2009 on the ML.

The Goondicum Industrial Mineral Project is located 30 km due east of Monto, or about 50 km by bitumen and dirt road, in Central Queensland, Australia. Monto itself is approximately 150km south west of the port city of Gladstone.

The Goondicum Crater is a topographic feature centred on a roughly circular, 6 km diameter, layered gabbro complex. The main Goondicum ilmenite and apatite deposit lies within ML80044 which covers about 20 percent of the 'crater' (the northwest corner), with the remainder of the crater covered by concurrent mine lease application ML80141 and exploration leases, EPM 9100 and EPM 19382. Significant ilmenite, apatite and titanomagnetite mineralisation is variably present in a near surface weathered horizon throughout the crater. The dimensions of the mineralisation covered under ML80044 are approximately 3.5km by 1.3km for an area of approximately 5.1km<sup>2</sup> and is up to 25 m thick. The dimensions of the mineralisation covered under the western half of ML80141 are approximately 7km by 1.5km for an area of approximately 10.5km<sup>2</sup> and is up to 15 m thick.

The gabbro in the area under investigation has undergone multiphase oxidation and erosion producing a relatively complex weathering pattern, complete with a full lateritic profile within the host rock. A new geological model has been developed with four mineralised units being delineated from drilling information and surface topography/mapping, comprising colluvium ("CL"), an upper clay-sand unit sub-divided into high slimes ("CS\_H") and low slimes ("CS\_L") and a lower decomposed gabbro ("DG"). The last unit contains a small amount of material that was recognised as fresh gabbro ("GA"). For the MLA the CL and clay-sand units are combined into a "CS" unit and are thought to represent in situ to short-distanced transported material from both alluvial and gravity slide (soil creep) processes. The CS\_L may be indicative of more alluvial material but resembles the DG and the two lithotypes have been amalgamated as the DG unit for modelling purposes. The DG is believed to be in situ. Mineralisation comprises resistive ilmenite and apatite grains liberated by the relatively complex weathering process.

The resource estimates for the ML are based on 224 aircore drillholes for 2,394m drilled in 2009. The logging codes were used to generate lithology surfaces with some minor modifications, particularly from the slimes assays, to maintain geological sense. The maiden resource estimates for the MLA are based on 332 reverse circulation ("RC") drillholes and 38 hand auger holes for 2,152m and 2,523 samples, drilled between 1996 and 2000. The new mapping information from 2014 and drillhole logging codes were used to generate new lithology surfaces for the base of CS\_H and CS\_L with some minor modifications, particularly from the slimes assays, to maintain geological sense.

The aircore drilling generated chip samples that were collected as bulk samples for each 1m drilled interval. The samples were transported to the Goondicum Minesite where they underwent sub-sampling prior to magnetic separation. The samples then underwent size and magnetic fraction analyses at Belridge's minesite laboratory before dispatch of selected composited intervals to Downer EDI Mining - Mineral Technologies Pty Ltd (Mineral Technologies) for Clerici float/sink testwork to determine ilmenite and apatite content. The QAQC for the sampling has included the use of a matrix-matched standards and field duplicates of the original aircore samples with no significant issues reported. The RC drilling generated chip samples that were collected as bulk samples for each 1m drilled interval. The 1996 samples were transported to the Monto-based DFS Laboratory

where they underwent sub-sampling, screening, and washing, prior to magnetic separation. The 1999/2000 samples were transported direct from the drill site to Readings Laboratory in Lismore where they underwent a similar program of sampling, screening, and washing, prior to magnetic separation to that used previously in the Monto Laboratory. In both cases following magnetic separation, composited intervals of the 5.5amps magnetic fractions were forwarded to MD Mineral Technologies Laboratory, on the Gold Coast, for Clerici float/sink test work and XRF analysis to determine the contained ilmenite, reported as an 'ilmenite conversion factor' for different lithologies. The QAQC for the sampling has included field duplicates of the original 1996 and 1999/2000 RC samples, testing of repeat samples from both drilling programmes and comparison between the 1996 Monto DFS and the 1999/2000 Readings laboratories sample treatment. Based on re-testing some shaking table tailings, the Readings Laboratory, in producing higher ilmenite in the table concentrates, also 'lost' between 18 and 23% of the total 5.5AM fraction during tabling.

On the ML a total of 997 by 1m composites were used to model 'available ilmenite' and 2,430 by 1m apatite and slimes composites were modelled for the apatite and slimes grades. Ilmenite grades for the CL and CS\_H are markedly higher than the CS\_L and DG lithotypes. There also appears to be some primary mineral zonation of the ilmenite in an arcuate zone parallel to the interpreted margin and the associated rock-forming mineralogical zonation of the layered gabbro. Higher apatite grades are linked to the arcuate outer 500m of the gabbro with similar grades for the CS\_H, CS\_L and DG, and probably represent remanent primary mineralisation. On the MLA a total of 1,844 1m composites were used to model the 5.5AM recovered magnetic fraction and slimes data (no apatite drilling data). Ilmenite and slimes grades for the CS are markedly higher than the DG.

The drill collar elevations were made the same in order to 'flatten' the composite data to allow for better variogram searches and modelling. Modelling used Ordinary Kriging in a two pass search strategy with flat circular searches. For the ML the initial search diameter was 400m (x and y) by 4m (z) for Pass 1 to 800m by 6m for Pass 2. Minimum data was 8 for Pass 1 decreasing to 4 for Pass 2. Minimum number of drillholes was 3 and 1 for Passes 1 and 2 respectively whilst maximum number of points per hole was 4 and 6 for Passes 1 and 2 respectively. For the MLA the initial search diameter of 200m (X and Y) by 4m (Z) for Pass 1 to 300m by 6m for Pass 2. Minimum data was 8 for Pass 1 decreasing to 4 for Pass 2. Minimum number of drillholes was 3 and 2 whilst maximum number of points per hole was 4 and 6 for Passes 1 and 2 respectively. Post modelling data manipulation involved unflattening the data to place it in real space. Average density values from earlier diamond core work on the MLA were used for reporting the resource estimates. New topographic surfaces were created for the ML based on the 2012 and 2013 LiDAR data in conjunction with the historic detailed 1m contour data and were used to constrain the resource modelling and the resource reporting. For the MLA a topographic surface was created from detailed 1m contour data derived from an air photo interpretation. In both cases a base-of-assaying surface was also interpreted from the drillhole data to provide an additional constraint to the resource modelling.

Reporting of the resource estimates in both cases used a 2.5% ilmenite cut-off grade and partial percent volume adjustment factors for the topographic and the base-of-assaying surfaces. For the ML the available ilmenite grade field was used with no processing recovery factor. The ilmenite grade for the MLA is based on the 5.5AM value multiplied by the ilmenite conversion factor which makes provision for likely ilmenite recoveries from processing. An additional constraint for the MLA was the mapped outlines of prospective areas generated from the recent mapping work. Classification of the resource estimates in both cases is primarily based on the search criteria after consideration of other impacting criteria e.g. grade continuity, QAQC, sample recovery, density and geological understanding.

#### ML80044

	Available				Available		
	Tonnes	Ilmenite	Apatite	Slimes	Ilmenite	Apatite	Slimes
Category Mt	%	%	%	%	Mt	Mt	Mt
Indicated	31.3	6.1	1.8	22.9	1.9	0.55	7.17
Inferred	30.9	6.3	1.6	24.3	1.93	0.49	7.51

(minor rounding errors)

#### ML80141

	Tonnes Ilmenite		Slimes Ilmenite		Slimes	
	Mt	%	Mt	%	Mt	%
Indicated	15.6	5.1	29.5	0.79	4.6	
Inferred	12.3	5.2	27.3	0.64	3.37	

(minor rounding errors)

The apatite data for the MLA is limited in scope and has not been included in the resource estimate.

The resource estimates are also reported by host lithology.

#### ML80044

		Available			
	Tonnes	Ilmenite	Apatite	Slimes	
Lithology Category	Mt	%	%	%	
CL	Indicated	4.1	10.8	1	52.9

CS_H	Indicated	4.9	12.9	1.7	52.4
CS_L	Indicated	5	4	2.1	10.2
DG	Indicated	17.3	3.6	1.9	11.1
Totals	Indicated	31.3	6.1	1.8	22.9
CL	Inferred	2.5	10.1	0.8	53.1
CS_H	Inferred	8.8	11.2	1.7	46.3
CS_L	Inferred	5.9	4	1.9	11
DG	Inferred	13.7	3.3	1.5	10.7
Totals	Inferred	30.9	6.3	1.6	24.3

(minor rounding errors)

#### ML80141

		Tonnes Ilmenite		Slimes Ilmenite	
Lithology Category		Mt	%	%	Mt
CS	Indicated	8.7	6.1	43.8	0.53
DG	Indicated	6.9	3.7	11.4	0.26
Total	Indicated	15.6	5.1	29.5	0.79
CS	Inferred	7.5	6.1	37.9	0.46
DG	Inferred	4.8	3.7	10.8	0.18
Total	Inferred	12.3	5.2	27.3	0.64

(minor rounding errors)

Block validation consisted of visual comparison of blocks grades with composite grades, comparison with historical resource estimates and statistical comparisons including cumulative frequency plots and summary statistics. No significant issues were noted.

Reconciliation of the new H&SC ML block model with the 2012-2013 production showed a 10% difference which is considered acceptable for an Indicated Resource. Reconciliation of the new H&SC ML block model with the 2015 production showed a 24% difference in tonnes mined but only a 4% difference in recovered ilmenite product which is considered acceptable for an Indicated Resource. Depletion for the 2015 mining has not been factored into the current estimates due to the relatively small amount of material extracted and processed.

For the ML resource estimates for ilmenite only 40% of the 2009 composite data was used due the available Clerici data and this was the major factor in the resource classification. Further proposed exploration on the property is designed to upgrade the classification of the resource estimates and can be split into two phases with the latter phase dependant on outcomes of the former.

Phase 1 of the proposed exploration programme for the ML involves a desk study to try and incorporate more of the 1996-2004 Monto Minerals exploration data, in particular the 1996-2000 aircore drilling data. If the amalgamation of the drilling data can be achieved, then new resource estimates should be completed which will allow for an upgrading of the resource as effectively there will be double the number of drillholes. If the amalgamation cannot be achieved then Phase 2 needs to be implemented, which is an infill drill programme for the northern arcuate half of the deposit where there is generally better grade and tonnes available. This will allow for the upgrading of the resource to include a significantly increased amount of Indicated and possibly Measured Resources.

The infill drilling will use QEMSCAN analysis of the 1m samples. These analyses would allow for the distinguishing of the different titanium minerals based on their titanium content and thus provide a more accurate measurement of ilmenite content in the samples.

There are opportunities for expanding the size of the resource on the MLA by drilling in the identified prospective areas of the crater that have no drilling to date. Further field inspection of the periphery of the prospective areas is required to confirm suggestions from the resource modelling of additional resource marginal to the target areas.

Further exploration opportunities exist within the remainder of the Goondicum Crater as some of the earlier drilling work by Monto Minerals had intersected significant amounts of similar style ilmenite mineralisation within the eastern part of the crater.

Further proposed exploration on the MLA is primarily designed to expand the size of the resource.

#### About Melior

Melior is the owner and operator of the Goondicum Mine, a past-producing ilmenite and apatite mine strategically located in

Queensland Australia. Melior is committed to extracting shareholder value from the Goondicum operations by either selling down some or all of the project or by restarting the project at a target production level of approximately 170,000 tonnes of ilmenite per annum. Further details on Melior and the Goondicum mine can be found at [www.meliorresources.com](http://www.meliorresources.com) and regulatory filings are available on SEDAR.

Melior is incorporated under the provisions of the Business Corporations Act (British Columbia) and has a registered office in Toronto, Ontario. Melior is classified as a Tier 1 Mining Issuer under the policies of the TSX Venture Exchange.

For further details on Melior, please refer to SEDAR or the Melior website

[www.meliorresources.com](http://www.meliorresources.com)

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Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

## Qualified Persons Statement

Mineral resources were estimated by H&S Consultants Pty Ltd ("H&SC"), a geological consultancy based in Sydney, NSW, Australia and are reported in accordance with Canadian Securities Administrators National Instrument 43-101. The effective date of the mineral resources estimates disclosed in this press release is September 26, 2016.

The scientific and technical information, in this press release has been reviewed and approved by Simon Tear (BSc (Hons),, PGeo, EurGeol, MIOm3, MAusIMM ) a director H&SC and Graham Lee (BSc, FAusIMM, CP(Geo)), an Associate of H&SC both of whom are Qualified Persons under National Instrument 43-101.

For detailed technical information please see the technical report prepared by H&S Consultants Pty Ltd, which will be posted on Melior's SEDAR profile.

## Forward Looking Statements Disclaimer

Certain information contained in this news release constitutes forward looking information under the provisions of Canadian securities laws. Forward-looking statements are statements that are not historical facts and are generally, but not always, identified by the use of forward- looking terminology such as "plans", "expects", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", "projects", "potential", "believes" or variations of such words and phrases or statements that certain actions, events or results "may", "could", "would", "should", "might" or "will" be taken, "occur" or "be achieved" or the negative connotation. Although the forward-looking statements contained in this press release reflect management's current beliefs based upon information currently available to management and based upon what management believes to be reasonable assumptions, Melior cannot be certain that actual results will be consistent with these forward-looking statements. A number of factors could cause events and achievements to differ materially from the results expressed or implied in the forward-looking statements. Such risk factors include but are not limited to risk factors identified by Melior in its continuous disclosure filings filed from time to time on SEDAR. These factors should be considered carefully and prospective investors should not place undue reliance on the forward-looking statements. Forward-looking statements necessarily involve significant known and unknown risks, assumptions and uncertainties that may cause Melior's actual results, events, prospects and opportunities to differ materially from those expressed or implied by such forward-looking statements. Although Melior has attempted to identify important risks and factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors and risks that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. These forward-looking statements are made as of the date of this press release, and Melior assumes no obligation to update or revise them to reflect new events or circumstances, unless otherwise required by law.

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