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# BREAKAWAY MINING RESEARCH

## *DAILY REPORT*

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Tuesday 5<sup>th</sup> September 2017\*

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### OVERNIGHT COMMENTARY

#### Markets

Stocks fell, while gold and the yen climbed as geopolitical tensions flared again, with U.S. President Donald Trump weighing new economic sanctions that could target China after a nuclear test Sunday by North Korea. The US dollar dropped for a third day, reports Bloomberg.

S&P 500 Index futures retreated and the Stoxx Europe 600 Index declined after a report that Pyongyang is preparing to launch an intercontinental ballistic missile. Most European government bonds advanced and the yen and Swiss franc led currency gains. Gold rose to an 11-month high. Gasoline declined to the lowest in more than a week as some U.S. Gulf Coast refineries said they plan to resume operations following shutdowns forced by flooding from Hurricane Harvey.

#### Commodities

Base metals were generally higher while gold continued to benefit from the geopolitical tensions. Almost all metals had been increasing on the back of stronger than expected China PMI data reported on Friday.

*\*prepared based on announcements made by ASX Listed Resource Companies on the preceding day*

Commodity Prices	Price	Daily Change	Market Movements	Price/Level	Daily Change
<b>Base Metal Prices (US\$/lb)</b>			<b>Broad Market Indices</b>		
Copper	3.12	1.2%	DJIA	21,987.56	0.0%
Lead	1.07	0.0%	FTSE-100	7,411.47	-0.4%
Zinc	1.45	0.6%	Nikkei 225	19,508.25	-0.9%
Nickel	5.53	1.8%	HK Hang Seng	27,740.26	-0.8%
Aluminium	0.95	-0.9%	Shanghai Composite	3,379.58	0.4%
Tin	9.52	0.7%			
Cobalt	27.56	0.0%	<b>S&amp;P/ASX 200</b>	<b>5,702.00</b>	<b>-0.4%</b>
<b>Precious Metal Prices (US\$/oz)</b>			<b>Mining and Energy Indices</b>		
Gold	1333	1.0%	S&P/ASX 200 Resources	3,648.20	0.1%
Silver	17.34	0.0%	S&P/ASX 300 Metals & Mining	3,264.80	0.2%
Platinum	1006	1.0%	S&P/ASX 200 Energy	9,193.00	-0.3%
Palladium	977	3.5%	S&P/ASX All-Ordinaries Gold	4,836.80	0.8%
<b>Energy</b>			<b>Global Mining</b>		
Oil WTI (US\$/bbl)	47.18	0.0%	S&P/TSX Global Mining	70.44	0.0%
Thermal coal (US\$/t)	77.90	0.5%	FTSE 350 Mining	18,013.28	0.1%
Uranium (US\$/lb)	20.25	0.5%	AIM Basic Resources	2,582.91	0.4%
<b>Steel making</b>			<b>Commodity Indices</b>		
Iron ore (US\$/t)	76.50	2.7%	CRB Index	183.12	0.0%
Metallurgical coal (US\$/t)	209.80	0.0%	LME Index	3217.30	0.0%
Molybdenum (US\$/lb)	7.09	0.0%	S&P GSCI	2253.93	0.0%
Tungsten ATP (US\$/t)	285.00	5.9%	Baltic Dry	1187.00	0.3%
<b>Exchange Rates</b>			<i>Sources include:</i>		
AUD/USD	0.795	-0.4%	<i>Bloomberg, Reuters, TradingEconomics, S&amp;P, yahoo finance</i>		
EUR/USD	1.192	0.3%	<i>Commsec, Xe.com, marketindex.com, Macquarie, Breakaway Research</i>		
USD/ZAR	12.98	0.2%			
USD/CNY	6.52	-0.6%			

## MARKET REVIEW

### New Deals (Including In Progress, Completed Or Terminated) & New Tenure.

ASX Code	Company Name	Details
SPI	SPITFIRE MATERIALS	Have along with ASX-AQQ signed the Merger Implementation Agreement. SPI will acquire all the capital of AQQ and AQQ shareholders 1 new SPI share for every 2.9 AQQ shares held. Closure is expected in December.
CLA	CELSIUS RESOURCES	CLA now hold a 95% interest in the Opuwo Co Project in Namibia, which with recent acquisitions now covers 1470 sq km. Airborne EM is planned to outline targets for drilling along the Dolomite Ore Formation (DOF). Mineralization has been outlined over 15kms of strike with rock samples returning up to 8.3%Cu 0.32%Co.
ARO	ASTRO RESOURCES	Have entered into a conditional contract to acquire 100% of the Needles Au Ag Project Nevada USA. The conditions include the transfer of the tenure by the Nevada Govt. Previous geochemical sampling has outlined anomalous areas for Au Ag. Upon completion the Company plans to carry out resistivity and ground magnetic surveys to identify drill targets, plus 1000m RC drilling.

### Production Or Emergent Production News (From Completed DFS/BFS Onwards)

ASX Code	Company Name	Details
TER	TERRACOM	The Company mined 25kt coal in August and sold 9kt from the Blair Athol Coal Mine Bowen Basin Qld. The Company is currently ramping up production to a target of 2Mtpa. First product coal was crushed on 25th August and the first dragline swing on 26th August.
DCN	DACIAN GOLD	DCN report that construction at the Mt Morgans Au Project WA is on track for first production in March 2018. The 2.5Mt CIL plant is now 26% complete and underground mining at the Beresford Deposit has passed 1000m and is ahead of schedule. The Accommodation Village is due for completion this month. 288 people now on site.
MUS	MUSTANG RESOURCES	Have processed 34.6kt of alluvial gravels in August to producer 15,613 carats of rubies at the Montepuez Ruby Project in Mozambique. The Company is now holding 176k carats of rubies and is targeting 200k carats for an auction in Mauritius in October.
TRY	TROY RESOURCES	Have completed a new Grade Control Model for the Smart's Ore Body with emphasis on structural controls at the Karouni Au Mine Guyana. The previous interpretation reflected selective high grade mining. The remodeling reflects a new view that the deposit is better mined as a bulk exercise, separating high and low grade ore on the ROM. TRY expect the strip ratio to fall from 8-10:1 to 4:1 by the end of 2017.

**Evaluation Studies (DFS, PFS, Scoping, Pilot, Appraisal & Metallurgical Testing)**

ASX Code	Company Name	Details
NLI	NOVO LITIO	Have completed a Scoping Study on the development of the Sepeda Lithium Petalite Project looking at several alternate process options, including making a 4% Li <sub>2</sub> O petalite concentrate only and/or lithium carbonate or a dual stream making both. The current resource is 10.3mt @ 1%Li <sub>2</sub> O. A resource update is due in Q4 17 to include current drilling. Most likely mining would be underground. In a separate announcement NLI reported that it had acquired 354 sq km of additional tenure around the Sepeda Project and now is the largest tenure holder in the Northern Portugal Lithium Belt. Historic data suggests a number of pegmatites occur on the new tenure and systematic mapping and sampling is planned, to identify RC drill targets.
BKT	BLACK ROCK MINING	BKT report that testing of spherical graphite produced from the Mahenge Graphite Project Tanzania, has performed well over a 200-cycle test, when compared to other competing graphite and hence is considered adequate for Li-Ion battery manufacture. The Company is now planning pilot scale test work to finalize the flow sheet design and spheronising tests with potential off takers.
ARU	ARAFURA RESOURCES	Have extended the December 2015 MOU with Korean Chemical producer OCI Company regarding the development of a Rare Earths separation Plant in Sth Korea. The Company's will work together on the piloting of RRO separation process and completing the Nolans RRE Project NT DFS. The parties will also seek MOU's with suitable NdPr off takers and end users.
LIT	LITHIUM AUSTRALIA	The Company suggests that it has closed the loop in the energy metal cycle, which they see as lithium exploration assets with a range of mineralization styles; extraction technologies; Li-Ion cathode manufacturing technologies and lithium battery recycling.

**Reserves and Resources Updates**

ASX Code	Company Name	Details
VMY	VIMY RESOURCES	Have updated the Reserves at the Mulga Rock Uranium Project WA to 22.7Mt @ 845ppm U <sub>3</sub> O <sub>8</sub> for 42.3Mlbs of U <sub>3</sub> O <sub>8</sub> insitu (19,185t). The resources are 71Mt @ 570ppm U <sub>3</sub> O <sub>8</sub> for 90Mlbs Insitu. The proposed open pits at Princess, Ambassador and Shogun make up 85% of the Reserves. VMY is currently updating the DFS.
CZL	CONSOLIDATEZINC	Have updated the Plomosas Zn Pb Ag Project in Northern Mexico to 968kt @ 12.1% Zn 3.8%Pb and 24g/t Ag for 117kt of contained Zn, 37kt Pb and 748koz Ag. The Scoping Study on the Project is on-going and is focused on the Tres Amigos and Las Espadas Deposits. Metallurgical studies suggest recoveries > 90%. Further drilling is planned at the 4 prospects to extend the resource.
ALK	ALKANE RESOURCES	Have updated the Tomingley Au Reserves to 2.7Mt @ 1.9g/t Au for 166koz Au contained and the Resources to 9.2Mt @ 1.7g/t Au for 508koz Au contained. The Reserves include underground reserves of 0.5Mt @ 3.7g/t Au (62koz Au). Drilling is testing further underground targets. FY 17 production was 69koz Au produced at an AISC of \$1335/oz.

### New Drilling Intersections As Confirmed By Assays

ASX Code	Company Name	Details
OKU	OKLU RESOURCES	Assays from the remaining 33AC holes (182-hole program) at the Seko Prospect (Dandoko Au Project Mali) has returned 10 intersections including 74m @ 2.1g/t Au. The program has outlined 5 Anomaly areas. Anomaly 1 extends over 200m of strike and is the largest of the anomalies. The Company is planning the program for the next field season.
AZS	AZURE MINERALS	Assays from a 16- hole 994m DD program undertaken by the previous owners, prior to the acquisition of the Oposura Zn Pb Ag Project in Mexico has returned 7 intersections noted by AZS including 4.6m @ 22.2% Zn 2.4% Pb 0.7% Cu 147g/t Ag. AZS is planning follow up drilling.
KGL	KGL RESOURCES	Further assays from drilling at the Rockface Prospect (Jervois Cu Project NT) has returned 2m @ 9.2% Cu 38g/t Ag 0.3g/t Au from 587mdh and 14m @ 4.7% Cu 23g/t Ag 0.28g/t Au from 610mdh.
MRP	MACPHERSON RESOURCES	Assays from 3 further deep DD holes drilled at the Southern Stockworks Prospect (Boorara Au Project WA) has returned 6 intersections noted by MRP including 36m @ 1.0g/t Au from 24mdh. Deeper intersections include 34m @ 1.1g/t Au from 199mdh. Drilling is continuing.
MEU	MARMOTA	Assays made on the basis of 1m sampling interval from drilling at the Aurora Tank Au Project SA has returned 10 assays noted by MEU ( each of 1m downhole interval) up to 93g/t Au

### Drilling Pending, Underway OR Completed with Assays Pending

ASX Code	Company Name	Details
KOR	KORAB RESOURCES	An RC drilling program is to commence shortly at the Batchelor Au Co Project NT. The drilling will target EM and IP anomalies coincident with anomalous Co Au rock chips, as well as follow up historical drilling which includes 0.1% Co 1.7 % Cu.
AOU	AUROCH MINERALS	Hole 3 drilled at the Alcoutim Cu Zn Project Portugal has reached 689m of its planned depth of 1200m. The hole has intersected sulphide rich sedimentary horizons. Pyritic black shales were intersected at 491m. This unit typically contains 2% pyrite. The lithologies encountered suggest that the VSC is becoming shallower to the NE. Assays pending.
VXR	VENTUREX RESOURCES	A 17-hole DD program has commenced at Sulphur Springs Project WA, designed to in-fill the western portion of the current Inferred Supergene Resource of 0.8Mt @ 4.2% Cu and to provide samples for metallurgical testing. An Aerial geophysical survey is also underway targeting the corridor between Sulphur Springs and Kangaroo Caves Deposits.
BML	BOTSWANA METALS	RC drilling is underway at the Dibete (1000m) and Airstrip (500m) Projects Botswana, to test new targets associated with metamorphic rocks of the Limpopo Mobile Belt. Both projects have historically returned numerous shallow high grade Cu Ag intersections.
MBK	METALBANK	MBK report intense alteration with mineralization typical of bulk tonnage Au-Cu –Mo mineral systems in the first hole drilled at the Chief Adachi Prospect (Triumph Au Project Qld). A follow up program of 5Rc and 1 DD hole has been completed for 936m and MBK

		report a continuation of the mineralized structure at depths exceeding 75m associated with a large IP anomaly (800m x 200m) No assays reported yet.
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### Drill Targeting & Exploration News (Geological, Geochemical & Geophysical)

ASX Code	Company Name	Details
LI3	LITHIUM CONSOLIDATE	A gravity infill data survey has been completed over the NW Clayton Valley Basin Lithium Brine Project Nevada USA, and the data merged with historic data and 3D inversion model of the basin in order to define boundaries of sub basins where lithium bearing brines may be concentrated and hence where drill holes should be targeted.
NTM	NTM GOLD	A 5,000m RC drilling has commence at the Redcliffe Au Project WA to test targets within a large 1km long geochemical anomaly within the Mertondale Shear Zone. Several deeper holes will test the Main and E1 Lodes at the Nambi Deposit.
PSC	PROSPECT RESOURCES	Bulk and grade control sampling has been focused on the Main Pegmatite at the Arcadia Lithium Project Zimbabwe. A 20t sample has been collected for metallurgical testing.
ICG	INCA MINERALS	Underground mapping and sampling has commenced at Cerro Rayas, 15 kms from the Company's Riqueza Project.
GTE	GREAT WESTERN	Infill soils sampling on a 320m x 40m grid at the May Queen Prospect (Yandal West Au Project WA) has returned values to 2.38g/t Au. The anomaly has now been outlined over a 3.8kms strike. Finals soils and geological mapping will be undertaken prior to RC drilling in October.
RTR	RUMBLE RESOURCES	Geophysical VTEM survey has identified multiple conductors at the Braeside Zn Pb Project WA, within a Zn Pb Cu mineralized trend that strikes up to 4kms. An infill soils geochemistry program has commenced over the conductors to further define future drill targets.

### Corporate News which may affect Projects & Operations

ASX Code	Company Name	Details
FNT	FRONTIER RESOURCES	FNT reports that Anglo American have applied for 2400 sq km surrounding FNT Bulago EL within the Highlands Province PNG.

**Investor Presentations (Does Not Include AGM Presentations)**

ASX Code	Company Name	Details
MRP	MCPHERSONS	<p>MRP hold the 13 sq km Boorara Au Project, comprising 4 deposits (Northern Stockworks, Cataract Historical Au Mine; Crown Jewels and Southern Stockworks) extending 1.5kms of strike, 15kms E of Kalgoorlie WA. The current resource estimate is 6Mt @ 1.2g/t Au for 232koz Au contained. The resource is based on 182 drillholes (16,974m.) 90% of the resource is within 120 m of the surface and hence amenable to open pit development. A resource update is expected by the end of 2017. Ongoing RC drilling is occurring at both the Southern and Northern Stockworks Deposits that have extended the mineralization. Intersections include 163m @ 1.94g/t Au. A DFS is to commence immediately following the updated resource. A trial pit has been completed to a depth of 20m to provide information on grade, recovery and geology.</p>

## BREAKAWAY RESEARCH

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Austex Mining Principal Rob Murdoch is an Australian geologist who has specialised in the management of junior resource companies for 30 years. His experience enables Rob to provide a quick and valid assessment on the potential of impact of many announcements, for example those involving new discoveries, drill results or resource upgrades and tracks the progress of companies on their various exploration or development projects.

Austex maintains an extensive database on all ASX listed resource companies, their corporate situations and the status of their various projects. This database helps to identify industry and investment trends which may not be apparent otherwise. Breakaway Research is extremely pleased to be able to utilise Rob's extensive experience in both corporate and technical capacity to assist in identifying resource investments that will directly benefit our subscribers.



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