
BREAKAWAY MINING RESEARCH

DAILY REPORT

Monday 18th September 2017*

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

OVERNIGHT COMMENTARY

Markets

The S&P 500 Index powered past 2,500 for the first time, notching its third round-number milestone of the year as the bull market in U.S. equities rages on, reports Bloomberg.

The benchmark gained 0.2 percent to 2,500.23 Friday, capping its biggest weekly advance since January, as technology shares rebounded and banks climbed with Treasury yields. Up 12 percent since January, the S&P 500 is on course for its best annual gain in four years.

Equities broke out of a month long trading range after the worst-case scenarios from Hurricane Irma and North Korea didn't materialize. As geopolitical fears subsided, investors shifted focus back to fundamentals, where economic growth remains stable and corporate earnings are expected to increase every year through at least 2019.

Commodities

Commodity price movements were mixed on Friday.

There is a move by Chinese blast furnaces to use more efficient higher-grade Australian and Brazilian coals and lower feedstock throughput. Thursday's announcement of weak economic data from China, combined with tightening environmental legislations, have generated concerns over future demand for coking coal. The campaign to cut steel mill pollution, restricting raw material demand, has caused the greatest price drop in coking coal futures since inception in 2013, reports SP Angel.

Commodity Prices	Price	Daily Change	Market Movements	Price/Level	Daily Change
Base Metal Prices (US\$/lb)			Broad Market Indices		
Copper	2.93	0.1%	DJIA	22,268.34	0.3%
Lead	1.06	2.4%	FTSE-100	7,215.47	-1.1%
Zinc	1.38	1.1%	Nikkei 225	19,909.50	0.5%
Nickel	4.99	-1.0%	HK Hang Seng	27,807.59	0.1%
Aluminium	0.93	-0.5%	Shanghai Composite	3,353.62	-0.5%
Tin	9.37	0.2%			
Cobalt	28.05	2.0%	S&P/ASX 200	5,695.00	-0.8%
Precious Metal Prices (US\$/oz)			Mining and Energy Indices		
Gold	1323	-0.2%	S&P/ASX 200 Resources	3,579.20	-1.8%
Silver	17.7	-0.3%	S&P/ASX 300 Metals & Mining	3,196.20	-2.0%
Platinum	968	-1.5%	S&P/ASX 200 Energy	9,126.60	-0.8%
Palladium	918	-1.6%	S&P/ASX All-Ordinaries Gold	4,658.60	-0.1%
Energy			Global Mining		
Oil WTI (US\$/bbl)	49.73	-0.7%	S&P/TSX Global Mining	66.21	-1.0%
Thermal coal (US\$/t)	82.90	-0.6%	FTSE 350 Mining	16,527.86	-1.7%
Uranium (US\$/lb)	20.60	-0.2%	AIM Basic Resources	2,544.85	-0.4%
Steel making			Commodity Indices		
Iron ore (US\$/t)	70.00	-3.2%	CRB Index	186.34	0.4%
Metallurgical coal (US\$/t)	207.80	-0.5%	LME Index	3108.00	-2.1%
Molybdenum (US\$/lb)	7.09	0.0%	S&P GSCI	2295.85	1.4%
Tungsten ATP (US\$/t)	310.00	0.0%	Baltic Dry	1385.00	1.8%
Exchange Rates			<i>Sources include:</i>		
AUD/USD	0.801	0.4%	<i>Bloomberg, Reuters, TradingEconomics, S&P, yahoo finance</i>		
EUR/USD	1.195	0.6%	<i>Commsec, Xe.com, marketindex.com, Macquarie, Breakaway Research</i>		
USD/ZAR	13.22	0.6%			
USD/CNY	6.55	0.0%			

MARKET REVIEW

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

ASX Code	Company Name	Details
PDI	PREDICTIVE DISCOVERY	Have entered into a JV with Canadian based Progress Minerals International relating to PDI Burkina Faso Projects, whereby Progress can earn a 70% interest by funding \$US5M of exploration and evaluation in 3 stages over 4 years. PDI holds approx. 100km of strike of the Samira Hill Greenstone Belt that include numerous active artisanal activities. The Contained Resource at Bongou is 190Koz Au at 2.3g/t Au.
ELK	ELK PETROLEUM	Have entered into a purchase agreement to acquire the majority ownership of the producing Greater Aneth Oil Field located in Southern Utah USA, for \$US160M. Cumulative production to date 450MMbbls. Forecast 2018 production is 11,000bopd. The 2P Reserves are 59MMbbls, ELK will hope to grow production over the next 3 years. The acquisition is anticipated to be funded by \$US 22M equity, \$US98M debt and \$US55M unlisted preferred equity issues by a subsidiary of ELK.
RMS	RAMELIUS RESOURCES	Have entered into a second farm in and JV Agreement in Nevada USA, in this case with Newmont over the South Monitor Au Project Southern Nevada. RMS has the right to earn up to 80% equity by spending %US8M over 8 years via staged earn – ins. Historical intersections include 34m @ 3.7g/t Au. RMS is planning a DD Program to commence later this month.
EUC	EUROPEAN COBALT	Have expanded the Dobsina Co Ni Cu Project through the acquisition the adjacent Rejdova Cu Project by way of applying of vacant tenure. The Rejdova Cu Mine has been extended over a strike length of 800m and to depth of 80m.
CAE	CANNINDAH RESOURCES	Have entered into an Earn in Agreement over the Piccadilly Au Project Nth Qld. Some 35 line km of historic IP suggests an intrusive – centered gold system. Drilling will be planned.

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

ASX Code	Company Name	Details
OXX	OCTANEX	Report that the Floating Production Storage and Offload Facility (FPSO) has sailed from shipyards where it was built in Singapore to connect to the Ophir Platform Offshore Peninsula Malaysia. OXX hold a 50% interest and is fully funded by way of project financing via financial institutions based in Malaysia.

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

ASX Code	Company Name	Details
NMT	NEOMETALS	Have lodged a provisional patent application for the Company's Lithium Titanate Research Project, relating to the use of lithium titanate oxide in lithium-ion batteries.

New Drilling Intersections As Confirmed By Assays

ASX Code	Company Name	Details
CRL	COMET RESOURCES	Have completed 13 DD holes (690m) at the Springdale Graphite Project WA. Intersections include 15.5m @ 7.5%TGC and 14m @ 6.6%TGC from 8mdh. The drilling was to provide samples for metallurgical testing. Detailed aeromagnetic survey is currently being conducted to generate further targets. Next phase of drilling scheduled to commence this month.

Drill Targeting & Exploration News (Geological, Geochemical & Geophysical)

ASX Code	Company Name	Details
DHR	DARK HORSE RESOURCES	The Company is preparing to commence exploration within its various Argentinean Projects. The El Totoral pegmatite has been traced over 4.5kms of strike. Selected rock samples have returned assays to 3.3% Li ₂ O and 211g/t Ta. The Company is planning a program of geological mapping, sampling and geophysics to select drill site.
AHR	ANCHOR RESOURCES	Rock chip sampling at the Doolan Prospect (Walsh River/Aspiring Project Nth Qld) has outlined mineralized quartz veins with potential to extend over 1km of strike.

Capital Raisings & Financing > \$1M

ASX Code	Company Name	Details
EGA	EGAN STREET RESOURCES	Have received commitment to raise \$4M by way of a Share Placement at 25 cents per share, to accelerate drilling at the Rothsay Au Project WA. The current contained resource is 262koz Au. Drilling is underway to test down dip extensions. A resource update will follow the further drilling. Taylor Collison were the Lead Managers.
MAY	MELBANA ENERGY	Have raised \$5.2M by way of an Entitlement Offer at 1 cents per share. The raising was partially underwritten to \$3.4M by Patersons Securities. The funds will be used to accelerate preparation for drilling at Block 9 Cuba.
KAI	KAIROS MINERALS	Have raised \$1.7M by way of a Share Placement at 1.9 cents per share to clients of CPS Capital and Patersons Securities to fund exploration for conglomerate hosted Au within the Company's Pilbara Tenure and also the next stage of exploration at the Lake Roe Au Project WA.
ARL	ARDEA RESOURCES	Have received commitments to raise \$5.5M by way of a Share Placement at 72.5 cents to fund drilling within the KNP Cobalt Zone and a DFS into the development of the Project. Patersons Securities were the Lead Managers.
VML	VITAL METALS	Have raised \$1.98M by way of a Share Placement at 0.75 cents per share. Argonaut and Blackwood Capital were joint Lead Managers. The funds are to be used to update the resource at the Watershed Tungsten Project; ongoing metallurgical test work to optimize the process flow sheet and to update the 2014 DFS and optimize the mining schedule.

Corporate News (with a potential effect on projects)

ASX Code	Company Name	Details
GDA	GONDWANA RESOURCES	Have been removed from the Official List of the ASX due to being suspended continuously for 3 years.
EGO	EMPIRE OIL & GAS	Empire Oil Company (WA) has entered voluntary administration

Investor Presentations (Does Not Include AGM Presentations)

ASX Code	Company Name	Details
ARL	ARDEA RESOURCES	ARL holds the Kalgoorlie Lateritic Nickel Project (KNP) WA with a resource of 773Mt @ 0.05%Co and 0.7%Ni (includes high grade zone 64Mt @ 0.13%Co.), located 150kms NE of Kalgoorlie. The cobalt occurs in sub horizontal bodies within the laterite, overlying ultramafics, within 120m of surface, which means a low strip ratio, easy dig open pit is possible. PFS is underway on the project development and is expected to be completed by January 2018. However, the Company wants to expedite the DFS and hence have commenced a 40,000m drill program, metallurgical testing, resource definition and modelling. Drilling is focused on the Goongarrie, Black Camp, Siberia and Aubils Camps. The Company is planning acid digestion of the ore to produce both cobalt and nickel sulphides plus possibly also a Scandium Oxide is a by-product. The Company would like to complete the DFS by the end of 2019 and start Stage 1 development in 2020.
ELK	ELK PETROLEUM	ELK is transforming into a Producer through the acquisition of a 63% interest in the Greater Aneth Oil Field Utah USA, which is the 86th largest oil field and one of the most significant EOR Projects in the USA. The acquisition price is \$US160M. The 2P Net Reserves are 58.8MMbbls. Estimated 2018 Production is 6500bopd, with potential to increase that amount 206% YoY, through the use of Co2 injection techniques. Financial close of the deal is expected in late October. The funding to come from \$US98M of Senior Debt and the rest by way of equity. ELK has 49% working interest in the Madden/Lost Cabin Oil & Gas Project, a conventional gas operation in Wyoming USA and is increasing its interest to 60%. Current production is 25.4MMscf/ day gas, at an operating cost of \$US1.60/mcf. The 2P reserves for the Madden Oil & Gas Field have been increased 10% to 20.5MMboe. (25 year LOM). ELK also has a 49% WI in the Greive Project Wyoming, where carbon dioxide enhancement is to be used in the redevelopment of a producing conventional oil field. Project construction is 90% complete. ELK share of the remaining construction work is \$US5.5M, which is fully funded. Operating cost is estimated to be \$US10-13/bbl. The 2P reserves are 5.3MMbbls net to ELK and the 3C resource 7Mbbls. LOM 20 years.
DCN	DACIAN GOLD	DCN has commenced construction of a mine and 2.5Mtpa CIL Plant at the Mount Morgan's Au Project WA. Underground mining has commenced at the Beresford Deposit (Westralia Mine Area) and is expected to commence at Allanson Au Deposit in Q1 18. Open pit mining is to commence at Jupiter during Q4 17, where a large open pit 1.8kms long, 650m wide and 220m deep is planned, with an average strip ratio is 7.5. A 400 person camp has been completed. A \$107M EPC contract has been signed for the plant construction. The first gold pour is expected in March 2018. The capex pre-production is

		<p>estimated to be \$197M. Funding has been provided by a \$126M capital raising and \$150M Senior Debt Facility. The contained reserve is 1.2Moz at 2g/t Au and the resources 3.3Moz @ 2.3g/t Au. Recent intersections at Beresford outside the Reserves includes 7m @ 31g/t Au from 174mdh. The Company is also maintaining an aggressive gold regional exploration campaign, with the recent focus being at the Cameron Well Area, a +6 sq km oxide gold area associated with a syenite complex, outlined by 855 shallow RAB/AC drill holes.</p>
OZL	OZ MINERALS	<p>OZL is ramping up underground production at the Prominent Hill Cu Mine. Q2 17 Cu production was up 12% to 28,163kt Cu and Au production up 23% to 32,136koz Au. ASIC was \$US 1.15/lb down 20 cents on Q1. The Company has extended the mine life to at least 2028 and are planning to expand the operation thru put to 3.5-4Mtpa through the introduction of sub level cave mining. Contained Reserves 1400kt Cu, 1.8Moz Au and 22Moz Ag. OZL has commenced underground mine development at the Carrapateena Cu Mine SA and the decline is currently at 2594m. Contained Reserves are 1.4MT cu 1.8moz Au. The Project Preproduction Capex estimate is \$916M. Mining is to be by way of block caving with 3 underground crushers. The plant is a conventional flotation plant and construction is due to commence in Q2 18. It is expected to be commissioned Q4 19 to be followed by an 18-24 month ramp up phase. The expected production is 65ktpa Cu and 67kozpa Au. Tailings Dam and a 550 person camp construction are due to commence in Q3 18. Expected AISC is \$US 0.99/lb Cu. LOM is 20 years. OZL is planning to construct a concentrate treatment plant to upgrade both Prominent Hill & Carrapateena mine concentrates to 50-60% Cu, most likely at Port Augusta SA. OZL notes that 70% of Australia's Cu resources are in SA. OZL has an interest in exploration JV projects in SA, at Coompana with Mithril Resources; Mt Wood with Minotaur and Intercept Hill with Red Tiger Resources. Elsewhere OZL is undertaking a Scoping Study over the Succoth & Nebo-Babel Ni Cu Deposits located within the West Musgrave JV Projects in WA (with AX-CZI). Current resources is 203mt @ 1.38% Cu EQ at Nebo- Babel and 156Mt @ 0.6% Cu Succoth Deposit.</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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