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19 October 2010

Company Announcements Office Australian Securities Exchange 20 Bridge Street SYDNEY NSW 2000 By Electronic Lodgement

Dear Sir/Madam

# QUARTERLY ACTIVITIES REPORT FOR PERIOD ENDING – 30 SEPTEMBER 2010

### **HIGHLIGHTS**

- Quarterly production of 1,362,713lb U<sub>3</sub>O<sub>8</sub> vs 1,442,842 from previous quarter
- Kayelekera delayed in achieving sustained nameplate until mid September
  - higher efficiencies and sustained nameplate production achieved after introduction of a resin cleaning circuit
- Langer Heinrich Reserve increase of 104% to 134.1Mlb, backstopping Stage 4 expansion studies targeting annual production of 10Mlb pa
- Sale of 1,043,000lb U<sub>3</sub>O<sub>8</sub> at an average realised price of US\$46.50/lb biased towards a predominance of spot sales in the quarter
- LHM Stage 3 tracking early 2011 mechanical completion and start-up of commissioning.

### **SAFETY**

The implementation of the NOSA safety system at both Langer Heinrich Mine (LHM) and Kayelekera Mine (KM) continues its positive impact with both operations recording no Lost Time Incidents (LTI) for the quarter. The various site initiatives associated with vehicle safety have commenced to show results with significantly fewer vehicle incidents being recorded.

With the LHM's Stage 3 expansion now in full construction mode, there has been a major increase in the number of contract workers at site. As such, an external safety audit by NOSA of all contractors was undertaken with overall results satisfactory and all key deficiencies noted and addressed.

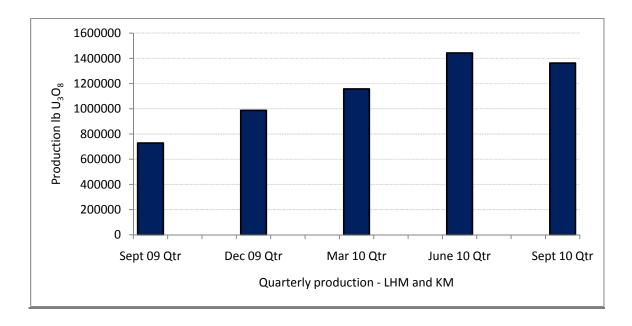
### **QUARTERLY URANIUM SALES**

Sales for the quarter were 1,043,000lb  $U_3O_8$  generating revenue of US\$48.4M representing an average sales price of US\$46.44/lb  $U_3O_8$  (average Ux spot price for the quarter was US\$45.50/lb  $U_3O_8$ ). The lower average sales price (US\$55.50/lb  $U_3O_8$  in the June quarter) reflects variations in quarterly delivery volumes in some sales contracts and the predominance of spot sales.

As nameplate production was not achieved at Kayelekera in July and August, this resulted in a higher unit cost of production for the September quarter. Taking a prudent approach it may be necessary to review the stock cost of material produced in the early part of the September quarter and to adjust the value down on a one-off basis. Any adjustment, if made, will be small and is not expected to be more than 5% of Kayelekera's finished goods stock value for that period. Unit costs are expected to rebalance in the forthcoming quarter as nameplate production starts to take effect.

## PALADIN GLOBAL PRODUCTION

Combined Site Totals	Sept Qtr	Dec Qtr	Mar Qtr	June Qtr	Sept Qtr
Production lb	728,598	987,310	1,157,375	1,442,842	1,362,713



## LANGER HEINRICH MINE (LHM), Namibia

## **Production**

LHM (Monthly)	July	Aug	Sept	Sept Qtr
Production lb	308,340	270,245	321,150	899,735

LHM (Quarterly)	Dec Qtr	Mar Qtr	June Qtr	Sept Qtr
Production lb	841,995	928,370	927,373	899,735

Processing of ore was slightly below target achieving 97.3% of design nameplate production for the quarter. The shortfall essentially arose in August with change of pit ore running through the plant. These issues have been overcome and the plant is now operating at slightly above design performance as exhibited in September.

The September quarter results represent an annualised  $3.6Mlb\ U_3O_8$  production level versus an installed nameplate of 3.7Mlb.

### Mining

The mining and plant ore feed was as follows:

	July	Aug	Sept
Ore mined (t)	116,706	363,344	746,818
Grade (ppm)	744	930	864
Additional low grade mined (t)	52,291	38,648	132,256
Grade (ppm)	286	327	344
Waste/Ore ratio	5.9	2.4	0.59

	July	Aug	Sept
Ore crushed, t	182,072	179,714	186,080
Grade, ppm U <sub>3</sub> O <sub>8</sub>	994	881	1048

The variance in strip ratio on a monthly basis was only necessitated by the requirements to have sufficient waste rock available for the tailings storage facility (TSF) construction.

#### **Process Plant**

Tonnage through the process plant remained consistent with the previous quarter with a throughput of 547,866t of ore crushed.

Performance of the front end circuits suffered some challenges during the quarter with the ore commencing from the new Pit F area resulting in significant scaling of screens, piping and heat exchangers, especially during August. By the end of August the problem had been successfully addressed and the plant now treats the Pit F material without any significant scaling problems.

The leaching circuit had a slightly reduced extraction rate of 91.5%. The insulation of the leach tanks has now been completed. The December quarter will be the first quarter with all the tanks insulated thus enabling the actual energy savings to be reviewed.

The ion exchange resin cleaning system made a positive contribution later in the quarter, with significantly improved flow rates through the IX columns and lower barren solution grades. This improved performance has continued into October.

## **Tailings**

The construction work on TSF 2 is expected to progress according to schedule with the facility planned to receive tailings by the March quarter 2011.

### Stage 3

Construction of Stage 3 at LHM, expanding production to 5.2Mlb pa, is essentially 70% complete and tracking for mechanical completion early in the March quarter 2011 as planned. The budget remains within 10% of expectations.

- · Earth works and civil works are substantively complete
- All major long-lead equipment items have now arrived at the site
- Major equipment installation at the site is well advanced with the scrubber, crusher, flash splash, Leach tank, CCD tanks and tailings thickener equipment now being installed and assembled at site.
- Off-site fabrication of the IX columns is underway and remains the only critical path item under delivery pressure.

## Stage 4 - Resource/Reserve Upgrade

Following the completion of approximately 40,000m of drilling during 2009 and 2010, a revised Mineral Resource and Ore Reserve estimate for the Langer Heinrich Deposit conforming to both the JORC (2004) guidelines and the requirements of NI 43-101 has now been finalised and the results are reported below at a 250ppm cut-off. The upgrade has increased Ore Reserves and Mineral Resources sufficiently to justify the planned Stage 4 expansion, for which the feasibility study is currently underway.

### **Revised Mineral Resources and Ore Reserves**

## **Updated Mineral Resource Estimate (depleted for mining)**

250ppm Cut-off U₃O <sub>8</sub>	Mt	ppm	t	MIb
Measured Resources	46.7	530	24,838	54.71
Indicated Resources	77.6	550	42,921	94.54
Measured + Indicated	124.3	550	67,758	<b>149.25</b> (106% increase)
Inferred Resources	18.5	60	10,910	24.04

Resources are depleted for mining to 30 June 2010 and include stockpiled material.

The updated 2010 Mineral Resource estimates outlined herein represents a 6% increase in contained  $U_3O_8$  after depletion for mining and importantly a 106% increase in the Measured and Indicated Mineral Resources from 32,858t (72.4Mlb) to 67,758t (149.2Mlb) contained  $U_3O_8$ , after depletion for mining.

#### ORE RESERVE ESTIMATE

## **Updated Ore Reserve Estimate**

250ppm Cut-off U <sub>3</sub> O <sub>8</sub>	Mt	ppm	t	MIb
Proved Ore Reserve	31.4	550	17,360	38.3
Probable Ore Reserve	66.5	570	37,570	82.8
Stockpiles	12.3	490	6,021	13.2
Total Ore Reserve	110.2	550	60,830	<b>134.1</b> (104% increase)

Ore Reserve has been depleted for mining, and may not add due to rounding

Key takeaways from this resource update:-

- A 104% Reserve increase to 134.1Mlb or 124.3Mt at a grade of 550ppm U<sub>3</sub>O<sub>8</sub>
- Reserve provides a minimum 20 year LOM at Stage 3 design rates
- Reserve backstops Stage 4 expansion studies targeting 9Mlb pa conventional with an additional 1Mlb from heap leach using a lower grade ore component.

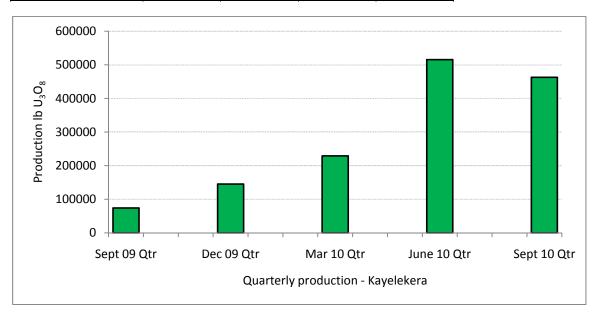
These Ore Reserves form the basis of the detailed mine planning for the Project. The revised mine model will allow a minimum mine life of over 20 years, based on a processing feed capacity of 3.45Mt pa, but does not include any contribution from the Inferred Mineral Resources within the open pit area.

The Ore Reserve is quoted inclusive of ROM stockpiles which, at the end of June 2010, contained 12.3Mt at a grade of 490ppm  $U_3O_8$  for 6,021t (13.2Mlb)  $U_3O_8$ .

## KAYELEKERA MINE (KM), Malawi

#### **Production**

	Dec Qtr	March Qtr	June Qtr	Sept Qtr
Production Ib	145,315	228,996	515,478	462,977



As previously released, Kayelekera installed and commissioned a secondary resin cleaning circuit during the September quarter. An ever increasing buildup of sand and foreign material in the resin caused a loss of efficiency in the elution circuit, restricting solution flow and hence plant capacity. However an approximate two week commissioning period for the cleaning circuit in early September has successfully resulted in the anticipated improvements of the process plant. Since mid-September, the plant is more consistently achieving nameplate design performance.

## Mining

The mining and plant ore feed during the quarter was as follows:

	July	Aug	Sept	Sept Qtr
Ore mined (t)	105,108	132,720	82,054	319,882
Grade (ppm) U <sub>3</sub> O <sub>8</sub>	1906	1555	2111	1813
		•		
Additional low grade mined (t)	39,680	33,473	49,073	122,226
Grade (ppm) U <sub>3</sub> O <sub>8</sub>	513	509	515	513
		•		
Waste/Ore ratio	1.2	1.75	2.3	1.7

## **Operating data - Process**

	July	Aug	Sept
Operating time hrs	591	587	478
Mill feed, dry tones	104,996	101,454	77,723
Grade (ppm)	1,306	1,093	1,330
Leach extraction %	83.7	84.1	86.3
RIP efficiency %	84.7	82.6	92.1
Overall efficiency %	68	64	76

#### **Process Plant**

Ore processing performance experienced a plateau from the beginning of the quarter and was further hampered by a reduction of operating hours in the earlier part of September due to the secondary screen implementation and maintenance.

The need to clean up the resin ahead of elution had been previously identified, as there had been a gradual increase in grit material within the plant which was having a detrimental effect on elution capacity, as highlighted by the drop off in production since June 2010. The new equipment installation was completed early in September and took 2 weeks to commission and optimise. Once operational, the impact was immediate, resulting in:

- Significantly cleaner resin being fed to elution
- Increased flow rate capacity
- Downtime elution reduction
- Efficiencies in excess of 95% being continuously achieved
- Increased grade of eluant going to precipitation
- Reduced RIP transfer time.

The table below presents key performance parameters for both the second half and the final week of September following the resin cleaning plant implementation.

	16-30 <sup>th</sup> Sept	24-30 <sup>th</sup> Sept
Leach Efficiency %	88.8	89.6
RIP Efficiency %	95.5	96.8
Overall Efficiency %	79.8	82.3
U <sub>3</sub> O <sub>8</sub> to Precipitation lb/day*	8,363	9,571

<sup>\*</sup>Nameplate is 9,041lb/day

This performance has continued into October and with steady state operations, both production levels and efficiencies are to design.

The crushing plant has been streamlined utilising both a mineral sizer and jaw crusher. This flexibility will allow for continued efficiencies and is expected to benefit ore handling going forward especially during the wet season.

Leach efficiency improved significantly over the month of September as a result of an on-going reagent dosing optimisation program. With steady state conditions and design throughput now continuous, unit reagent usage will normalise and reduce operating unit costs.

Resin-in-Pulp efficiency showed a dramatic improvement in September and the circuit is now considered quite robust and capable of very high operating efficiencies.

As a result of the cleaner resin the elution plant was able to operate at improved (nameplate) eluant flow rates and with less downtime for blockages. Consequently, overall uranium transfer to precipitation and elution efficiency both showed great improvements in the second half of September (transfer above nameplate for last 7 days and elution efficiencies consistently +/-95%).

## **Exploration**

Infill RC drilling to the west and north of the mine site was completed. A total of 113 holes for 11,933m were drilled. The drilling was aimed at upgrading the Inferred Resources outside the current pit to the Indicated and Measured Resource categories, to be included in pit optimisation studies, and a reserve upgrade which is expected late in the December quarter.

Drilling revealed an extension to the known mineralisation and it is expected that a considerable amount of the inferred resources in this area will convert to the indicated and measured categories.

The drilling also located some new mineralisation at depth west of the pit. The depth of the mineralisation is 80m – 90m below the known economic mineralisation and, under current conditions, not economic so will not be further investigated in the foreseeable future.

#### **Post Quarter Trend**

As described above, U<sub>3</sub>O<sub>8</sub> throughput has advanced significantly since mid-September and this performance level has continued through mid-October.

A programme has been underway for sometime upgrading materials of construction in areas highly susceptible to acid corrosion and abrasion which have contributed to plant downtime in the past. This programme is now well advanced and should be completed by the end of the December quarter. Improved plant availability and reduced maintenance costs are anticipated.

## **MOUNT ISA REGION PROJECTS, Queensland**

Work in the quarter included a resource upgrade for the Valhalla orebody. The resource drilling programme at the Odin Prospect was completed late in the guarter and drilling has commenced on the Bikini Prospect.

MOUNT ISA URANIUM JOINT VENTURE (Paladin Energy Ltd 50%, Summit Resources (Aust) Pty Ltd 50% Operator)

## Valhalla Uranium Deposit

A Mineral Resource estimate conforming to both the JORC (2004) guidelines and the requirements of NI 43-101 has now been completed for the Valhalla uranium deposit following validation and compilation of data from drilling undertaken earlier in the year. The estimate covers the main Valhalla deposit as well as the south eastern extension, Valhalla South.

The updated Mineral Resource estimate for the Valhalla uranium deposit is quoted using a cut-off grade of 230ppm  $U_3O_8$ .

U <sub>3</sub> O <sub>8</sub>	Mt	ppm	t	MIb
Measured Resources	16.02	819	13,116	28.9
Indicated Resources	18.64	840	15,662	34.5
<b>Total Measured &amp; Indicated</b>	34.66	830	28,778	63.5
Inferred Resources	9.1	643	5,824	12.8

(Figures in the table above may not add due to rounding)

Measured and Indicated Mineral Resources increased by 5.6% to 63.4Mlb  $U_3O_8$  (28,778t  $U_3O_8$ ) from previously announced 60.0Mlb  $U_3O_8$  (27,229t  $U_3O_8$ ). Total Mineral Resources increased from previous 69.9Mlb  $U_3O_8$  to 76.2Mlb  $U_3O_8$ .

## **Odin Prospect**

Resource definition drilling was completed at Odin, 1km north of Valhalla to a depth of 200m. A total of 99 holes for 16,044m were completed in 3 months. The Odin orebody has a strike length of 600m and contains two mineralised lenses. The main lense trends north-north-east and dips 50° - 60° to the east. The smaller southern lense strikes north-south and dips steeply to the east. Currently the dataset is being validated for a maiden resource in the December quarter.

### OVERALL PALADIN ATTRIBUTED MINERAL RESOURCES IN THE MOUNT ISA PROJECTS

Deposit		Measured Resources			Indicated Resources			Inferred Resources			Paladin Attribution
Cut-off ppm U <sub>3</sub> O <sub>8</sub>		Mt	Grade ppm	t U <sub>3</sub> O <sub>8</sub>	Mt	Grade ppm	t U <sub>3</sub> O <sub>8</sub>	Mt	Grade ppm	t U <sub>3</sub> O <sub>8</sub>	
Valhalla	230	16.0	819	13,116	18.6	840	15,662	9.1	643	5,824	91.0%
Skal	250				4.3	575	2,485	8.4	491	4,130	91.0%
Bikini	250							10.1	517	5,200	82.0%
Andersons	230							2.0	1,050	2,100	82.0%
Watta	230							4.2	410	1,720	82.0%
Duke Batman	250				0.5	780	388	1.6	630	1,020	100%
Honey Pot	250							2.6	700	1,800	100%
Total		16.0	819	13,116 (28.9Mlb)	23.4	792	18,535 (40.8Mlb)	38.0	573	21,794 (48Mlb)	

## ANGELA JOINT VENTURE, Northern Territory - Australia (Paladin 50% - Cameco 50% Operator)

A maiden JORC resource for the Angela and Pamela orebodies is expected in the next quarter. This project is essentially in the advanced exploration stage.

In September the Chief Minister of the Northern Territory (NT) announced that his government will not support the establishment of a uranium mine at Angela and Pamela, south of Alice Springs even through in the NT uranium development approvals fall under the direct responsibility of the Federal Government.

The NT Government did not consult with the joint venture partners in advance of the announcement and neither party had received any indication that the government might adopt this view.

In December 2006, the NT Government invited interested mining companies to apply for an exploration licence for the Angela and Pamela sites. Of the 37 expressions of interest received, in February 2008 the Paladin and Cameco joint venture was selected by the NT Government as the preferred applicant. Management plans were submitted and approved and, in October 2008, the government granted the Paladin-Cameco joint venture an exploration licence.

Relying on encouragement and positive support from the government, Paladin pursued the joint venture in good faith, with both partners honouring the undertakings they made during the selection process. The project is still at the exploration phase and, in addition to drilling work, has been progressing with environmental and hydrogeological studies. It was always Paladin's expectation that the government would consider the project on its merits and due process, which would include appropriate scientific studies and assessments.

Paladin is considering its options in advance of further discussions with the NT Government.

#### **CORPORATE**

## **NGM** Resources Ltd Takeover

On 24 September 2010, Paladin announced that its off-market scrip takeover offer for NGM Resources Ltd would lapse at the end of the offer period on 8 October 2010 as a consequence of the non-fulfilment of the defeating conditions contained in paragraphs 10.12(I) (*Force Majeure*) and 10.12(m) (*Material Adverse Effect*) of Paladin's Bidder's Statement.

On 8 October 2010, the Takeovers Panel declared that Paladin's purported reliance on the non-fulfilment of the above conditions constituted unacceptable circumstances. Details of the Panel's declaration is contained in its media release dated 8 October 2010 and the offer period was extended in relation to its off-market takeover bid for NGM until 5:00pm (Perth time) on 22 October 2010. Paladin further extended the offer period until 5.00pm (Perth time) on 5 November 2010. To date Paladin has not received the minimum 90% acceptance as outlined as a condition within the Bidder's Statement.

#### **URANIUM MARKET COMMENTS**

The Ux spot price moved in a range from US\$41.75/lb  $U_3O_8$  in July 2010 to US\$46.50/lb  $U_3O_8$  in September. The Ux long term price indicator rose from US\$58/lb  $U_3O_8$  to US\$60/lb  $U_3O_8$  during the quarter.

In July the OECD Nuclear Energy Agency and the IAEA released their joint report *Uranium 2009: Resources, Production and Demand* – also known as the "Red Book" – which is the 23<sup>rd</sup> edition of this report which examines uranium market fundamentals and provides a detailed analysis of global uranium resources and reserves. The 2009 Red Book provides assurance that the identified global uranium resource base is sufficient to underpin projected requirements and, as such, will not limit significant reactor growth during the century. However, the report, which re-introduces the high-cost category of resources (<US\$260/kg U) to reflect increased prices and mining costs since 2003, also observes that although there are sufficient production centres technically capable of meeting a high-demand case through to 2028, beyond that date there is a need to identify new resources and bring them into production "in a timely fashion". The report emphasises that "strong market conditions will be required to bring the required investment to the industry". The report also notes that their supply/demand projections are based on the reactor fleet until 2035 and does not take account of the lifetime fuel requirements for reactors for new plants connected between 2010 and 2035.

The anticipated surge in new builds will place increased pressure on exploration, research, and investment in order to develop new mining projects.

Yours faithfully Paladin Energy Ltd

JOHN BORSHOFF
Managing Director/CEO

## **Declaration**

The information in this announcement that relates to Exploration, Mineral Resources and Ore Reserves is based on information compiled by Eduard Becker B.Sc, David Princep B.Sc and Andrew Hutson B.E., all of whom are members of the AuslMM. Messrs Becker, Princep and Hutson each have sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves", and as a Qualified Person as defined in Canadian National Instrument 43-101. Messrs Becker, Princep and Hutson are full-time employees of Paladin Energy Ltd and consent to the inclusion of the information in this announcement in the form and context in which it appears.