



PALADIN ENERGY LTD

ACN 061 681 098

Ref: 181827

1 October 2010

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

By Electronic Lodgement

Dear Sir/Madam

LANGER HEINRICH MINE, NAMIBIA Significant Mineral Resource Upgrade

- **Ore Reserve increased 104% to 134.1Mlb**
- **Ore Reserve expected to provide in excess of 20 years project life at Stage 3 feed rates**
- **Mineral Resource and Ore Reserve increases backstop expansion studies targeting 10Mlb U₃O₈ pa production for Stage 4**
- **Ore Reserve expansion potential through anticipated further conversion of remaining Inferred Mineral Resources**
- **Opportunity for further Mineral Resource expansion through extension of mineralisation within ML140 and EPL3500**

Paladin Energy Ltd is pleased to announce that, following the completion of approximately 37,000m of drilling during 2010, a revised Mineral Resource and Ore Reserve estimate for the Langer Heinrich Mine (**LHM**) conforming to both the JORC (2004) guidelines and the requirements of National Instrument 43-101 – *Standards of Disclosure for Mineral Projects (NI 43-101)* has now been finalised and the results are reported below at a 250ppm cut off. This drilling programme was initiated to establish a sufficient Mineral Resource base capable of supporting an expansion at LHM from 5.2Mlb U₃O₈ pa to 10Mlb U₃O₈ pa with 9Mlb U₃O₈ derived from expansion of the existing processing plant and 1Mlb U₃O₈ pa from heap leach operations. This drilling was carried out across the full extent of the deposit. This work has been highly successful as 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, (250ppm U₃O₈ Cut Off, depleted for mining)

250ppm Cut-off	M t	Grade % U ₃ O ₈	t U ₃ O ₈	Mlb U ₃ O ₈
Measured Resources	46.7	0.053	24,838	54.71
Indicated Resources	77.6	0.055	42,921	94.54
Measured + Indicated	124.3	0.055	67,758	149.25 (106% increase)
Inferred Resources	18.5	0.06	10,910	24.04

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

Compared to the previous Mineral Resources announced in 2008 the updated 2010 Mineral Resource estimates outlined herein represent the following after depletion for mining:

- A 106% increase in the Measured and Indicated Mineral Resources from 32,858t (72.4Mlb) to 67,758t (149.2Mlb) contained U₃O₈, after depletion for mining.
- A substantial transfer of Inferred Mineral Resources to higher categories resulting in a reduction from 41,557t (91.6Mlb) in 2008 to 10,910t (24.0Mlb) contained U₃O₈.

A substantial portion of the Mineral Resources are in the Measured and Indicated Mineral Resource categories, representing 86%, of the overall Mineral Resources up from 44% previously and confirms the very robust nature of the deposit. The infill drilling in all areas of the deposit has shown an excellent conversion rate of Inferred to Measured and Indicated Mineral Resource categories giving confidence that future campaigns will achieve similar results.

COMPARISON OF NEW AND PREVIOUS MINERAL RESOURCE ESTIMATES

The tables below show the substantial overall increases in Mineral Resources in all Details following this re-estimation, using the same cut off grade as used in the 2008 estimate. Minor local reduction in Mineral Resource grades is a result of a change to the resource variance adjustment based on actual grade control reconciliations. The overall average grade is slightly reduced at 0.056% U₃O₈.

All Details – 250ppm U₃O₈ Cut Off

2008 and 2010 estimate comparison	CATEGORY OF MINERAL RESOURCE								
	MEASURED			INDICATED			INFERRED		
	Tonnes Mt	Grade ppm U ₃ O ₈	Metal t U ₃ O ₈	Tonnes Mt	Grade ppm U ₃ O ₈	Metal t U ₃ O ₈	Tonnes Mt	Grade ppm U ₃ O ₈	Metal t U ₃ O ₈
*Detail 1 2008	18.31	659	12,062	7.24	655	4,741	1.9	824	1,551
*Detail 1 2010	21.61	649	14,023	3.83	614	2,351	1.5	747	1,150
Increase/(Decrease)	18.0%	(1.6%)	16.3%	(47%)	(6.3%)	(50.5%)	(21.1%)	(9.5%)	(25.9%)
*Detail 2 2008	12.98	579	7,512	7.54	592	4,467	11.2	682	7,635
*Detail 2 2010	13.42	568	7,623	14.05	582	8,176	4.0	609	2,452
Increase/(Decrease)	3.4%	(1.9%)	1.4%	86.4%	(1.7%)	83.0%	(64.3%)	(10.7%)	(67.9%)
Detail 3 2008	3.97	429	1,702	2.65	483	1,277	2.9	612	1,801
Detail 3 2010	4.99	452	2,260	5.07	564	2,858	0.7	463	324
Increase/(Decrease)	25.7%	5.4%	32.8%	91.3%	16.7%	123.8%	(75.9%)	(24.4%)	(82.1%)
Detail 4 2008							15.3	379	5,807
Detail 4 2010	2.52	424	1,067	14.46	447	6,460	1.4	457	620
Increase/(Decrease)							(90.9%)	20.5%	(89.4%)
Detail 5 2008	1.26	455	574	6.17	453	2,795	7.9	465	3,655
Detail 5 2010	5.77	475	2,747	10.76	481	5,178	0.7	565	412
Increase/(Decrease)	357.9%	4.4%	378.5%	74.4%	6.2%	85.3%	(91.2%)	21.5%	(88.8%)
Detail 6 2008							5.5	459	2,527
Detail 6 2010	0.26	502	132	4.79	465	2,228	1.1	446	741
Increase/(Decrease)							(80.0%)	(2.9%)	(70.7%)
Detail 7 2008							25.9	716	18,580
Detail 7 2010	0.40	783	312	24.61	637	15,675	9.2	603	5,586
Increase/(Decrease)							(64.5%)	(15.8%)	(70.0%)

*Detail 1 and 2 Mineral Resources have not been depleted for mining in this comparison

Figures may not add due to rounding

Mineral Resources are quoted inclusive of ROM stockpiles which, at the end of June 2010, contained 12.3Mt at a grade of 0.049% U₃O₈ for 6,021t (13.26Mlb) U₃O₈. Mineral Resources are quoted inclusive of any Ore Reserves.

ADDITIONAL MINERAL RESOURCE POTENTIAL

The potential for increasing the Mineral Resource base further within ML140 and EPL3500 is still regarded as good. All Details still contain significant amounts of mineralisation which remain in the Inferred Mineral Resources category and future drilling will concentrate on raising Mineral Resource confidence in these areas. Whilst the majority of the mineralisation has been closed off laterally there are still a number of areas, particularly in EPL3500, which need to be infilled within the main body of the Mineral Resource.

It should be noted that a considerable amount of mineralisation exists above a cut off of 100ppm and below the current Ore Reserve cut off of 250ppm U₃O₈, which has the potential to be of significant value should heap leach processing of calcrete uranium mineralisation prove to be viable. **The new Mineral Resource indicates (in the cut off range of 100ppm and 250ppm U₃O₈) that there is 78.8Mt at a grade of 164ppm for 28.5Mlb U₃O₈ in the Measured and Indicated Mineral Resource categories and 17.4Mt at a grade of 169ppm for 6.5Mlb U₃O₈ in the Inferred Mineral Resource category.** Heap leach studies are progressing at Langer Heinrich to determine the feasibility of processing this material.

ORE RESERVE ESTIMATE

Updated Ore Reserve Estimate (250ppm U₃O₈ cut off)

250ppm Cut-off	Mt	Grade % U ₃ O ₈	t U ₃ O ₈	Mlb U ₃ O ₈
Proved Ore Reserve	31.4	0.055	17,360	38.3
Probable Ore Reserve	66.5	0.057	37,570	82.8
Stockpiles	12.3	0.049	6,021	13.2
Total Ore Reserve	110.2	0.055	60,830	134.1 (104% increase)

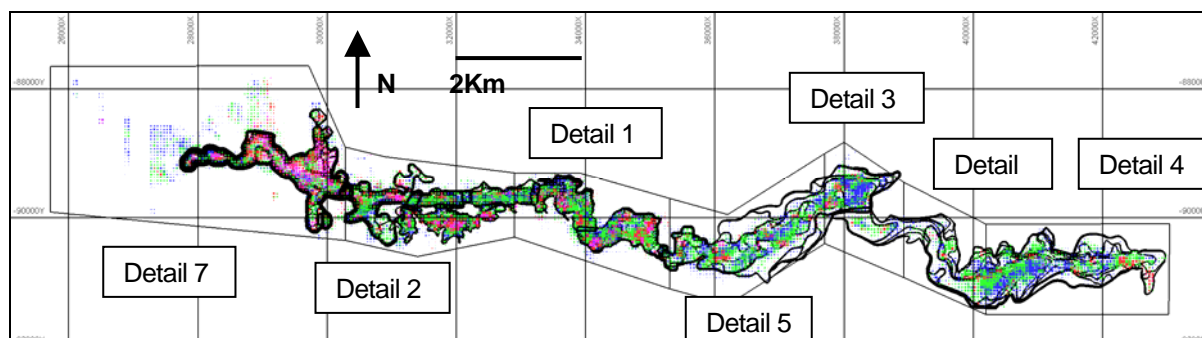
Ore Reserve has been depleted for mining, and may not add due to rounding

Compared to the previous ore reserve announced in 2008 (also reported at a 250ppm cut off) the new 2010 mineral reserve estimate outlined herein represents a 104% increase in contained U₃O₈. The Ore Reserve has been estimated from the above Measured and Indicated Mineral Resource of 124.3Mt at a grade of 0.055% U₃O₈. The Mineral Resource estimate is based on Multi Indicator Kriging and incorporates a specific adjustment based on expected mining parameters. As a result additional dilution and mining recovery are not included in the Ore Reserve estimation.

The cost parameters used in the Ore Reserve estimation are now well established and as such their inclusion can be reasonably justified. The revenue rate used in the estimate was US\$60/lb which is appropriate when compared to the Ux Consulting (Ux) spot price and existing term contracts.

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 figure below shows the Ore Reserve pit outline and the underlying Mineral Resource.

The Ore Reserve is quoted inclusive of ROM stockpiles which, at the end of June 2010, contained 12.3Mt U₃O₈ at a grade of 0.049% U₃O₈ for 6,021t (13.2Mlb) U₃O₈.



The Ore Reserve pit outline is shown in the figure above.

CONCLUSION

The resource drilling work has resulted in a significant increase in the Mineral Resources of the Langer Heinrich Deposit. At present, a total of 67,758t (over 149Mlb) of contained U_3O_8 is now identified in the Measured and Indicated Mineral Resource categories after depletion for mining. In the updated Mineral Resource base there are still 18.5Mt of Inferred Mineral Resources grading at 0.06% U_3O_8 containing 10,910t (24.0Mlb) U_3O_8 . The Directors believe a substantial amount of these Inferred Mineral Resources will be able to be converted to Measured and Indicated Mineral Resources categories in the future.

Ore Reserve studies involving pit optimisation and scheduling based on parameters derived from the 5.2Mlb pa LHM Stage 3 processing plant have been completed. The project now has an estimated Ore Reserve of 60,830t (134.1Mlb) U_3O_8 , including stockpiles and depleted for mining, which is sufficient for a minimum 20 year mine life and extended project life. These Ore Reserves will now form the basis of planning for the Stage 4 processing plant upgrade to a capacity of 10Mlb U_3O_8 pa (including 1Mlb U_3O_8 pa from heap leach).

This additional mine production is regarded as being essential to meet increasing worldwide demand. Therefore the opportunity to readily and substantially expand production of the Langer Heinrich mining operation with long term production output, places Paladin in an excellent position to capitalise on the market opportunities and further benefit its shareholders.

Yours faithfully
Paladin Energy Ltd



JOHN BORSHOFF
Managing Director/CEO

In the above announcement, for that information that is reported as conforming to the Joint Ore Reserves Committee (JORC) 2004 code (the "JORC Code"), the terms Inferred Mineral Resources, Indicated Mineral Resources, Measured Mineral Resources, Ore Reserves, Proven Reserves, Probable Reserves and Competent Person are equivalent to the terms used in Canadian National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("NI 43-101") Inferred Mineral Resources, Indicated Mineral Resources, Measured Mineral Resources, Mineral Reserves, Proven Reserves, Probable Reserves and Qualified Person respectively.

Declaration

The information in this announcement that relates to mineral resources and ore reserves is based on information compiled by David Princep BSc MAusIMM for Mineral Resources and Andrew Hutson BE, MAusIMM for Ore Reserve estimates. Each of Mr Princep and Mr Hutson has 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. Mr Princep and Mr Hutson are full-time employees of Paladin Energy Ltd and each consents to the inclusion of the information in this announcement in the form and context in which it appears.

Caution Concerning Forward-Looking Information:

This announcement contains forward-looking statements and forward-looking information within the meaning of securities laws of applicable jurisdictions. Such forward-looking statements and forward-looking information include, but are not limited to, statements and information with respect to the Company's strategies in connection with corporate growth and development and possible or assumed further results of operations, including the targeted annual production and mine life of Paladin's Langer Heinrich Mine in Namibia, plans to proceed with the Stage 3 expansion of the Langer Heinrich Mine. Assumptions upon which such forward-looking statements and forward-looking information are based include that the Stage 3 expansion of the Langer Heinrich Mine will proceed as planned, the Langer Heinrich Mine will meet its targeted annual production. Management believes these assumptions are reasonable. However, the forward-looking statements and forward-looking information are not guarantees of future performance and involve known and unknown risks, uncertainties and other factors, many of which are outside the control of Paladin and its officers, employees, agents and associates. Such risks, uncertainties and other factors include, but are not limited to: risks related to mining operations, including political risks and instability and risks related to international operations, actual results of current exploration activities, conclusions of economic evaluations, the price of uranium, changes in project parameters as plans continue to be refined. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking statements and forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. Actual results, performance or achievements may vary materially from those suggested by such forward-looking statements and forward-looking information and readers are cautioned not to place undue reliance on forward-looking statements and forward-looking information. The Company assumes no obligation to update such information, except as required by applicable law.

**NOT FOR DISTRIBUTION TO UNITED STATES NEWSWIRE SERVICES OR FOR DISSEMINATION
IN THE UNITED STATES.**