

ASX ANNOUNCEMENT

25th October, 2010

Significant Early Results from Queensland Drilling Program

PepinNini Minerals Limited has completed a reverse circulation (RC) drilling program of twenty five boreholes for 3,246 metres at its Forsayth and Percyville Projects in north Queensland. The drilling program was designed to investigate high grade gold and copper mineralisation identified in shallow historic workings and surface samples from EPM15547 'The Return' and over portions of EPM15440 'Percyville'.

Results have been received for six of the sixteen boreholes drilled on EPM15547 with significant high grade gold intersections evident in two boreholes. Table 1 summarises significant assay results received to date.

Borehole RC10RT004 targeted shallow historic workings which extend for over 100 metres and from which surface samples displaying high grade gold, silver and copper were previously collected. The borehole intersected a 2 metre interval grading 10.1g/t gold, 33g/t silver and 0.6% copper at a depth of 21 metres. The result is encouraging in that the intersection is interpreted as representing the surface historic workings at depth confirming continuity of the high grade zone as presented in Figure 1.

Borehole RC10RT010 also targeted historic workings at the surface and intersected three zones of encouraging gold grades as presented in Figure 3. A maximum grade of 20.3 g/t gold, 35g/t silver and 0.6% copper was returned for the interval 64 metres to 65 metres.

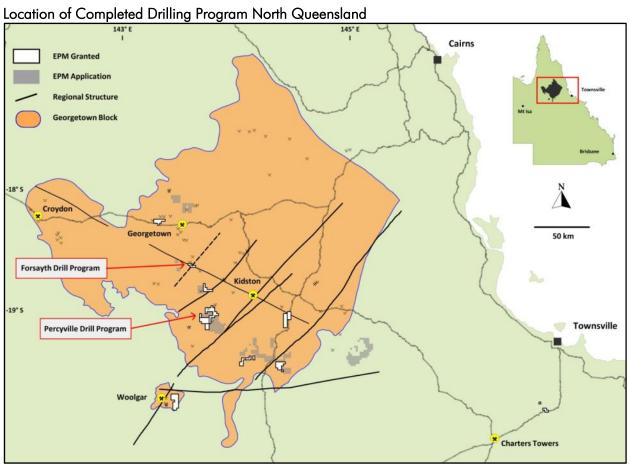
Results from the remaining ten boreholes drilled on EPM 15547 and nine boreholes drilled on EPM 15440 are expected over the next four to five weeks and will be reported when received.

For further information please contact:

Mr Norman Kennedy Chairman and Managing Director, PepinNini Minerals Limited Phone: +61 (0)8 8218 5005 **Note:** Additional information on PepinNini Minerals Limited can be found on the website: <u>www.pepinnini.com.au</u>

The information in this report that relates to Exploration Results is based on information compiled by Norman Kennedy BSc MAusIMM. Norman Kennedy is the Chairman and Managing Director of PepinNini Minerals Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Norman Kennedy consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

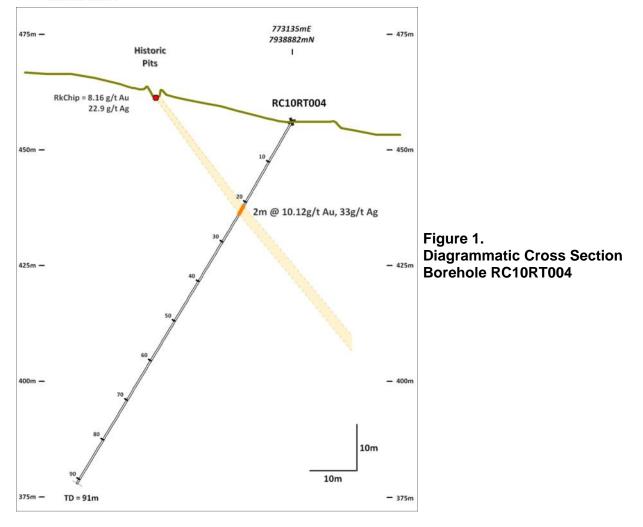






Drilling in Progress – EPM 15547 The Return, September, 2010.





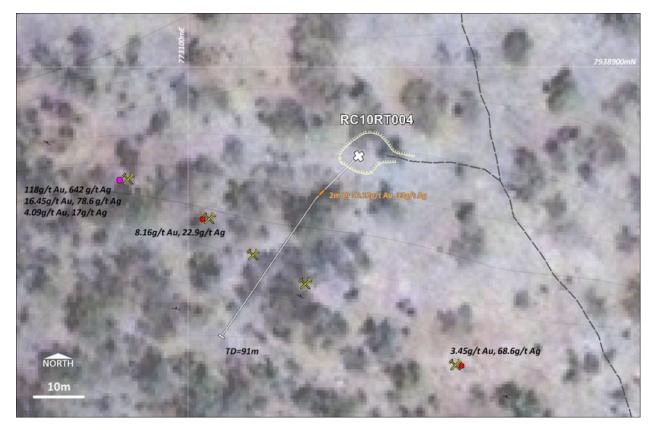


Figure 2. Location Plan Borehole RC10RT004



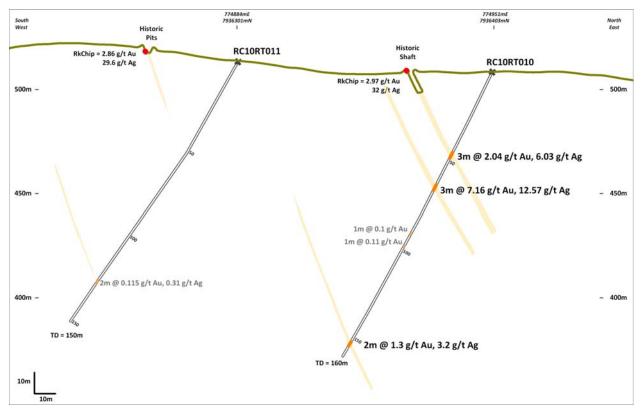


Figure 3. Diagrammatic Cross Section Boreholes RC10RT010 and RC10RT011

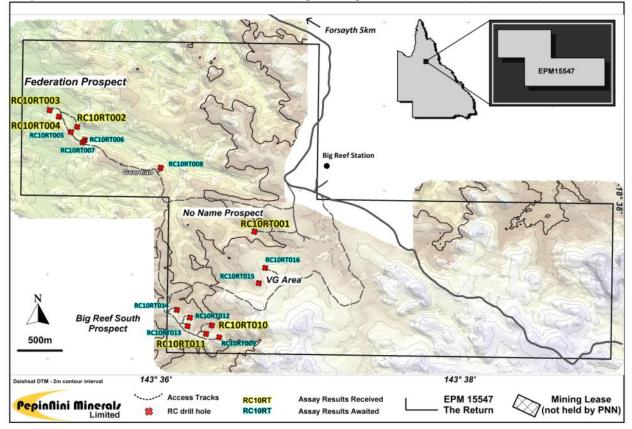


Figure 4. The Return EPM15547 - Forsayth Project Drill Holes



Hole ID	From (m)	To (m)	Grade Au (g/t)	Grade Ag (g/t)	Copper (ppm)
RC10RT001	No Significant Results				
RC10RT002	61	62	0.42	5.9	268
RC10RT003	21	22	0.84	4.5	417
	25	26	0.08	7.7	617
	55	56	0.60	<0.5	4
RC10RT004	21	22	6.54	15.3	2750
	22	23	13.7	50.7	10050
	23	24	0.23	1.9	285
RC10RT010	45	46	0.47	1.1	113
	46	47	5.40	16.0	1085
	47	48	0.25	1.0	132
	63	64	0.42	0.9	120
	64	65	20.3	35.0	5880
	65	66	0.76	1.8	269
	152	153	1.89	5.3	425
	153	154	0.71	1.1	131

Table 1. EPM 15547 The Return – Summary of Significant RC Drilling Results

Note: All depths quoted are downhole depths for drillholes inclined at 60 degrees.