APOLLO PROSPECT 1987 HEAP-LEACH TESTWORK

Ahead of acquiring 100% of the Clonbinane Goldfield in July 2014, Nagambie Mining examined known gold occurrences in outcropping oxidised sediments at the Apollo Mine Prospect. The Company concluded that the disseminated gold could be heap-leach treated at the Nagambie Mine, 60 km to the north of Apollo (refer Figure 1).

Nagambie Mining is pleased to advise that it has now located a very encouraging 1987 report on heap-leach testing of bulk samples from the Apollo Prospect. Ausminde Pty Ltd, a previous owner of the Apollo Prospect, in 1987 commissioned Micron Research (W.A.) ("Micron") to carry out preliminary metallurgical tests on bulk samples collected from various exposures at the Apollo Prospect.

Micron crushed the whole of each bulk sample to minus 25 mm and then obtained representative samples for column leaching tests using a standard coning-and-quartering procedure. Each column leach test ran for 14 days. Excellent gold recoveries between 81.3% and 84.3% were recorded as follows (refer Appendix 1 for detailed column leaching results):

Apollo Prospect 1987 Heap-Leach Testwork				
Bulk Sample	**Weight (kg)**	**Specific Gravity**	**Head Grade (g/t gold)**	**Gold Recovery (after 14 days)**
Costean No. 1	53	2.62	**2.72**	**84.3%**
Trench No. 3	14	2.62	**2.62**	**81.3%**
Glady's Adit No. 1	50	2.54	**1.24**	**83.9%**

By comparison, early Nagambie Mine column leach testwork in 1988 by Nedpac Laboratories on composite drillcore, crushed to minus 26.5 mm, gave an average gold recovery of 76.2% for an average head grade of 1.57 g/t gold. Based on that testwork, a prediction of Nagambie Mine operational heap-leach gold recovery over time gave an ultimate predicted recovery of 80% (refer graph in Appendix 2) which proved to be reasonably accurate.

Given the relationship between the initial column leach tests and the ultimate operational recovery for the Nagambie Mine ore, Nagambie Mining is confident that the ultimate heap-leach recovery for Apollo ore could be in the range 80% - 85%, very high by industry standards.

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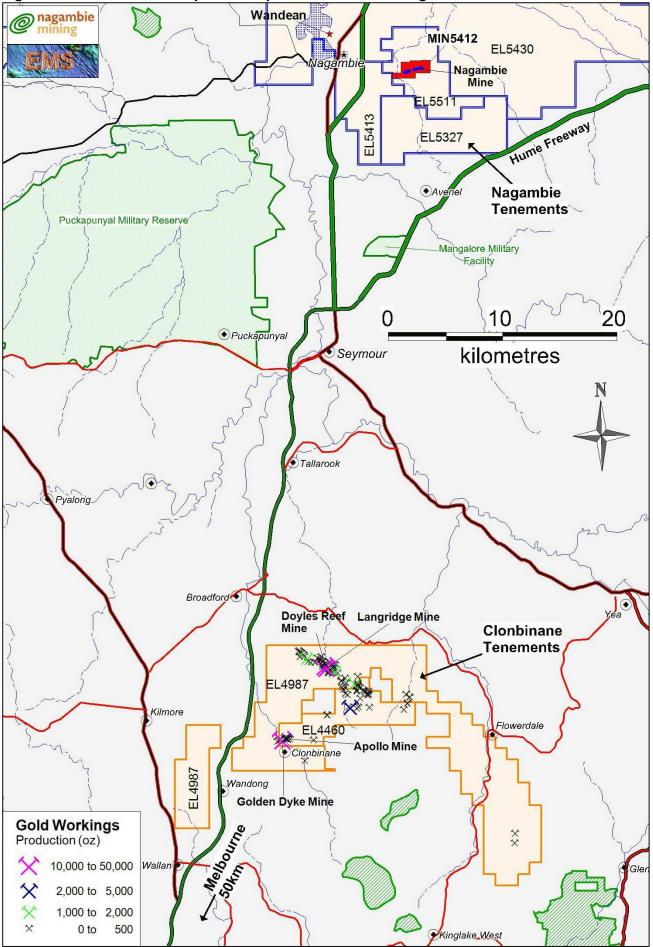**Figure 1   Location of the Apollo Prospect relative to the Nagambie Mine**

APPENDIX 1 – MICRON 1987 APOLLO DETAILED HEAP-LEACH TEST RESULTS

TABLE NO. 6.

DATA LOG HEAP LEACH COSTEEN NO. 1 AT MINUS 25mm.

Date	Time	SOLUTION ON				SOLUTION OFF			
		Vol	pH	CN %	Au ppm	Vol	pH	CN %	Au ppm
15/10	1312	7000	11.0	0.20	Nil				
	1339					Start draining at base			
16/10	0800					300	8.25	0.004	3.64
	0900	(300	8.25	0.004	3.64				
		{210	11.0	0.20	Nil				
17/10	1200					535	9.3	0.010	3.13
	1230	(530	9.3	0.010	3.13				
		{20ml	10% NaCN						
18/10	0945					515	10.13	0.017	4.20
	0955	480	10.13	0.017	4.20				
19/10	0800					470	10.01	0.016	4.94
	1200	450	10.01	0.016	4.90				
20/10	0800					410	10.05	0.015	5.90
						(380 to carbon)			
	1300	380	10.05	0.015	0.04				
21/10	0800					390	10.63	0.014	3.26
						(355 to carbon)			
	1300	350	10.63	0.014	0.04				
						330	10.80	0.013	2.34
						(325 to carbon)			
22/10	0800	320	10.8	0.013	0.02				
28/10	900	Final solution				280	10.0	0.010	3.26

GOLD BALANCE

Gold in solution ex leach column

410 x 5.9 =	2419		38.2%
390 x 3.24 =	1271		20.1
330 x 2.34 =	772		12.2
280 x 3.26 =	913	5375	14.4	84.9
Gold in Returned Soln	35		0.6
Nett		5340	84.3
Gold in Residues			
2331 x 0.426		993	15.7
Gold Total:		6333	100.0

Calc Head $\dfrac{6333}{2331} = 2.72$ g/t

TABLE NO. 7.

DATA LOG HEAP LEACH TRENCH NO. 3 AT MINUS 25mm

Date	Time	SOLUTION ON				SOLUTION OFF			
		Vol	pH	CN %	Au ppm	Vol	pH	CN %	Au ppm
15/10	1315	700	11.0	0.2	Nil				
	1430					Start draining at base			
16/10	800					320	7.8	0.009	4.85
	900	(310	7.8	0.009	4.85				
		(170	11.0	0.2	Nil				
17/10	1200					460	8.46	0.003	3.24
	1300	450	11.0	0.28	3.24				
18/10	930					420	8.70	0.015	2.79
	1100	(410	10.03	0.015	2.79				
		(10	12.0	10%	Nil				
		(100	7.0	Nil	Nil				
19/10	800					420	8.55	0.020	4.00
	1100	410	8.55	0.020	4.00				
		5	12	10%	Nil				
20/10	800					390	9.75	0.257	3.86
	1100	380	9.75	0.257	3.86				
21/10	800					365	9.96	0.105	4.07
	1200	350	9.96	0.105	0.04	(360ml to carbon)			
22/10	800					330	10.07	0.100	3.88
	1200	320	10.07	0.100	0.03	(320ml to carbon)			
28/10	800	Final Solution				600	10.18	0.023	3.46

GOLD BALANCE

Gold in solution ex leach column

365 x 4.07 = 1486		25.1%		
330 x 3.88 = 1280		21.6		
600 x 3.46 = 2076	4842	35.0	81.7	

Gold in Return Solution   24   0.4

Nett   4818   81.3

Gold in Residue

2261g. x 0.49   1108   18.7

Gold Total: 5926   100.0

Calc Head = $\dfrac{5926}{2261}$ = 2.62 g/t Au

TABLE NO. 8.

DATA LOG HEAP LEACH GLADYS ADIT NO. 1

Date	Time	SOLUTION ON				SOLUTION OFF			
		Vol	pH	CN %	Au ppm	Vol	pH	CN %	Au ppm
15/10	1312	700	11.0	0.2	Nil				
	1512					Start draining at base			
6/10	800					360	8.4	0.013	4.64
	900	330	8.4	0.013	4.64				
		190	11.0	0.2	Nil				
7/10	1200					520	8.14	0.002	3.20
	1300	515	10.0	0.002	3.2				
		25	11.0	10%	Nil				
18/10	930					500	9.71	0.040	2.72
	940	480	9.71	0.040	2.72				
19/10	800					470	9.6	0.050	2.23
	900	440	9.6	0.050	2.23				
20/10	800					400	9.82	0.063	2.84
	1515	380	9.82	0.063	0.04	(390 ml to carbon)			
21/10	800					657	9.74	0.105	0.89
	1200	610	9.74	0.105	0.03	(630 ml to carbon)			
22/10	800					600	10.3	0.099	0.80
	900	590	10.3	0.099	0.80				
28/10	900	Final Solution				650	10.02	0.040	1.20

GOLD BALANCE

Gold in solution ex leach column

400	x	2.84	=	1136	39.7%
657	x	0.89	=	585	20.4
600	x	0.80	=	480	16.8
650	x	1.20	=	780	2981 27.2 104.1

Gold in Returned Solution   580   20.2

         2401   83.9

Gold in Residues

2317 g. x 0.20   463   16.1

         2864   100.0

$$\text{Calc Head} = \frac{2864}{2317} = \text{1.24 g/t Au}$$

APPENDIX 2

Nagambie Mine Heap-Leach Gold Recovery vs Time predicted on 1988 Column Leach Testwork

PREDICTED LEACH EXTRACTION vs TIME
8 METRE STACK, 7L/M2/HR