# **ASX ANNOUNCEMENT**

## Significant copper intersections at Lumwana West, Zambia

### **Highlights**

- Final results for 13 diamond core tails received
- Highlights of combined RC/diamond core drill holes include:
  - o **176m at 0.55% copper** and 0.04% cobalt from 51m
    - including 33m at 1.04% copper and 0.1% cobalt from 166m in drill hole NYU11RD010
  - o **31m at 1.57% copper** and 0.02% cobalt from 173m
    - including 17m at 2.44% copper and 0.03% cobalt from 174m
    - and 6m at 5.51% copper and 0.7% cobalt and 0.3g/t gold from 174m in drill hole NYU11RD021
  - 90m at 0.46% copper and 0.7% cobalt from 12m in drill hole NYU11RD022
  - o **59m at 0.49% copper** and 0.02% cobalt from 8m
    - including 47m at 0.57% copper and 0.02% cobalt from 20m in drill hole NYU11RD023
- Program consisted of 23 RC pre-collars and 18 diamond core tails
- Results from five diamond core tails are pending
- Potential for 13km strike length, as defined by aeromagnetics
- Potential extensions of existing strike will be tested by IP and detailed soil geochemistry in April/May to define further drill targets
- Targets analogous to Malundwe and Chimwungo deposits of Barrick's Lumwana Mine to the East

Argonaut Resources NL (ASX: ARE) is pleased to announce results from 13 of 18 diamond core 'tails' completed in 2011 at the Nyungu prospect on the company's Lumwana West project in north-western Zambia.

Results of the remaining five diamond core tails were pending at the time of writing. Results of RC pre-collar intercepts were announced on 20 February 2012. Results presented in this announcement represent combined RC pre-collar and diamond core tail results.

The program targeted shear-hosted copper mineralisation associated with cobalt and gold within the Mwombezhi Dome, in the same broad, geological structure as Barrack's Lumwana Mine (Figure 1). The licence area covers numerous prospects, as defined by regional soil geochemistry (Figure 2). The Nyungu prospect was selected by Argonaut as the first area for intensive investigation.

Drilling tested IP (Induced Potential) chargeability anomalies associated with a demagnetised, north-south trending shear zone which is interpreted to be associated with copper sulphide mineralisation and extensions of historic copper intercepts. The shear zone is offset by faulting in several places and extends over a strike length of approximately13 kilometres (Figure 3).

Results show shallow oxide and transitional copper mineralisation extending to sulphide mineralisation to depths of 290m. Mineralisation intercepted by drilling completed to date covers a strike length of more than 1,200 metres (Figure 4), in the central portion of the Nyungu shear.

Highlights of results received to date include:

- NYU11RD001: 108m at 0.35% Cu, 0.07% Co and 0.12g/t Au from 37m
- NYU11RD001: 61m at 0.42% Cu from 184m including 13m at 0.81% Cu from 209m
- NYU11RD001: 22m at 0.46% Cu and 0.03% Co from 268m including 10m at 0.81% Cu and 0.03% Co from 274m
- NYU11RD002: 41m at 0.37% Cu and 0.03% Co from 94m
- NYU11RD002: 17m at 0.37% Cu and 0.08% Co and 0.11g/t Au from 142m
- NYU11RD004: 20m at 0.53% Cu and 0.02% Co from 121m including 10m at 0.74% Cu and 0.03% Co from 127m
- NYU11RD005: 73m at 0.28% Cu from 22m including 24m at 0.54% Cu and 0.1g/t Au from 61m
- NYU11RD006: 6m at 1.05% Cu from 107m
- NYU11RD008: 36m at 0.34% Cu from 83m including 7m at 0.75% Cu from 104m
- NYU11RD009: 11m at 0.44% Cu and 0.06% Co and 0.22g/t Au from 24m including 4m at 1.43g/t Au from 45m
- NYU11RD010: 176m at 0.55% Cu and 0.04% Co from 51m including 33m at 1.04% Cu and 0.1% Co from 166m
- NYU11RD013: 17m at 0.21% Cu and 0.04% Co from 29m including 1m at 0.57% Cu and 0.56% Co from 31m
- NYU11RD021: 74m at 0.34% Cu and 0.01% Co from 31m
- NYU11RD021: 14m at 0.65% Cu from 147m
- NYU11RD021: 31m at 1.57% Cu and 0.02% Co from 173m including 17m at 2.44% Cu and 0.03% Co from 174m and 6m at 5.51% Cu and 0.07% Co and 0.3g/t Au from 174m
- NYU11RD022: 90m at 0.46% Cu and 0.07% Co from 12m
- NYU11RD023: 59m at 0.49% Cu and 0.02% Co from 8m including 47m at 0.57% Cu and 0.02% Co from 20m

Full details of mineralised intercepts are shown in Appendix 1.

Mineralisation at Nyungu has been intersected over significant widths, depths and strike extent. The company is satisfied that intercepts cited are representative of the mineralised body.

Argonaut will extend IP and detailed soil geochemistry coverage over the northern and southern extensions of the Nyungu shear zone in April/May 2012. The program will cover the 13 kilometre strike extent delineated from aeromagnetics. Existing soil sampling is on 1 kilometre spaced east-west lines and appears to suffer from distortion due to hydromorphic effects. IP and soil geochemistry to be acquired in 2012 will be on 400m spaced lines.

The first stage of the planned program will consists of 48 line kilometres of IP and 2,000 soil samples. The company will commence its 2012 drilling program in July.

Argonaut is also continuing to assess drill targets at Lumwana, Kavipopo and ZNS prospects on the Lumwana West Licence.

#### **About Argonaut**

Argonaut is an Australian Stock Exchange listed mineral exploration and development company with projects in South Australia, Queensland, Laos and Zambia. Argonaut's projects are in the advanced exploration and feasibility stages.

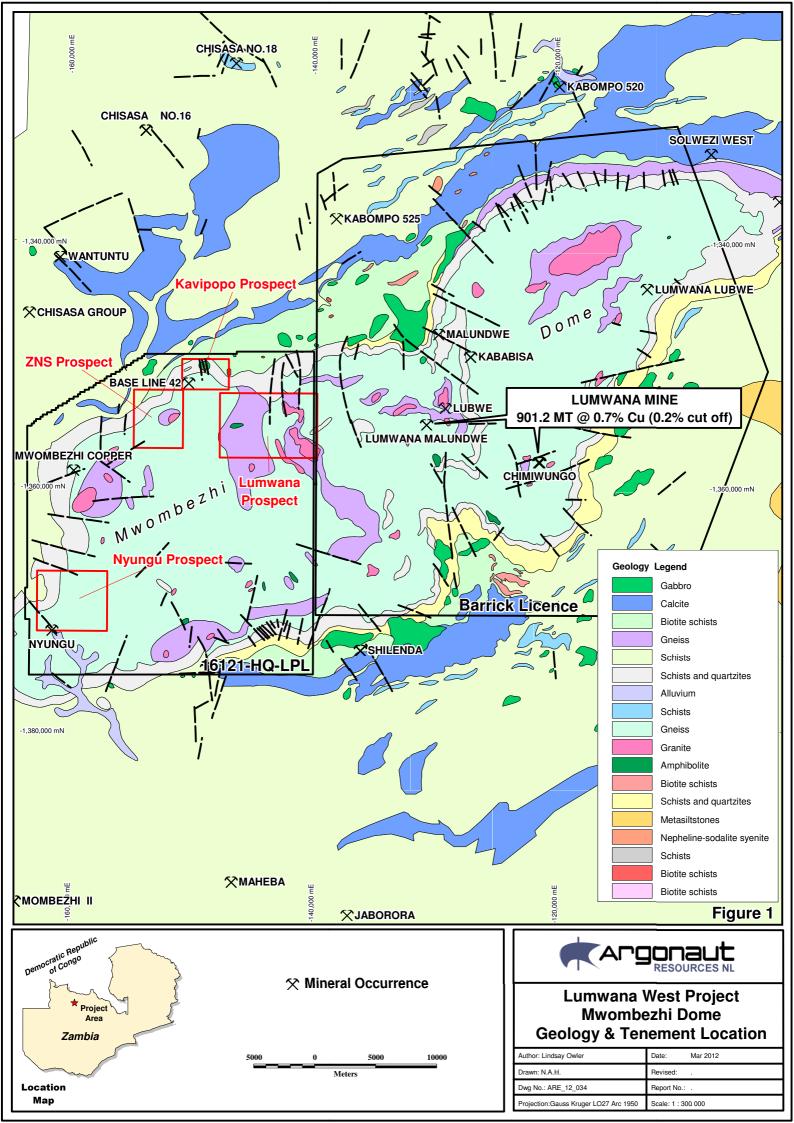
The company is exploring for gold and copper at its Alford and Torrens projects in South Australia, zinc-copper at Mt Kroombit in Central Queensland, gold in Laos and copper at the flagship Lumwana West Project in Zambia.

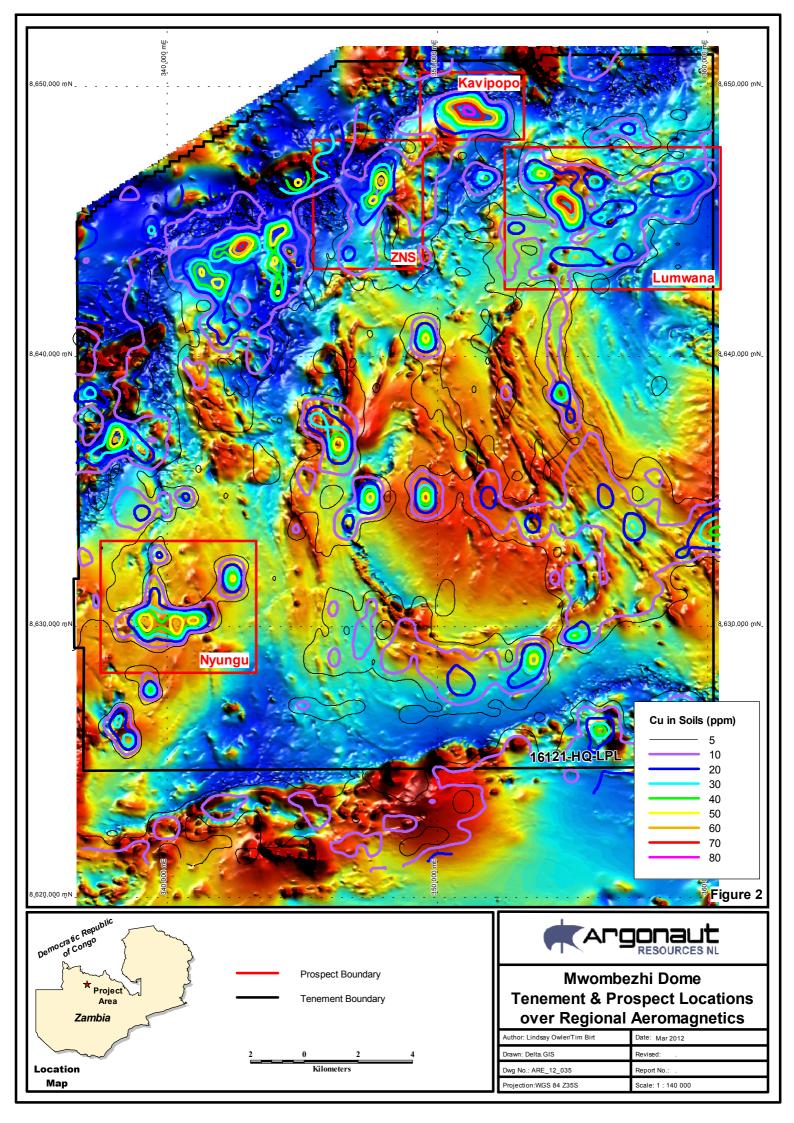
Argonaut has a significant investment in Cuesta Coal Ltd which plans to list on the Australian Stock Exchange in April 2012.

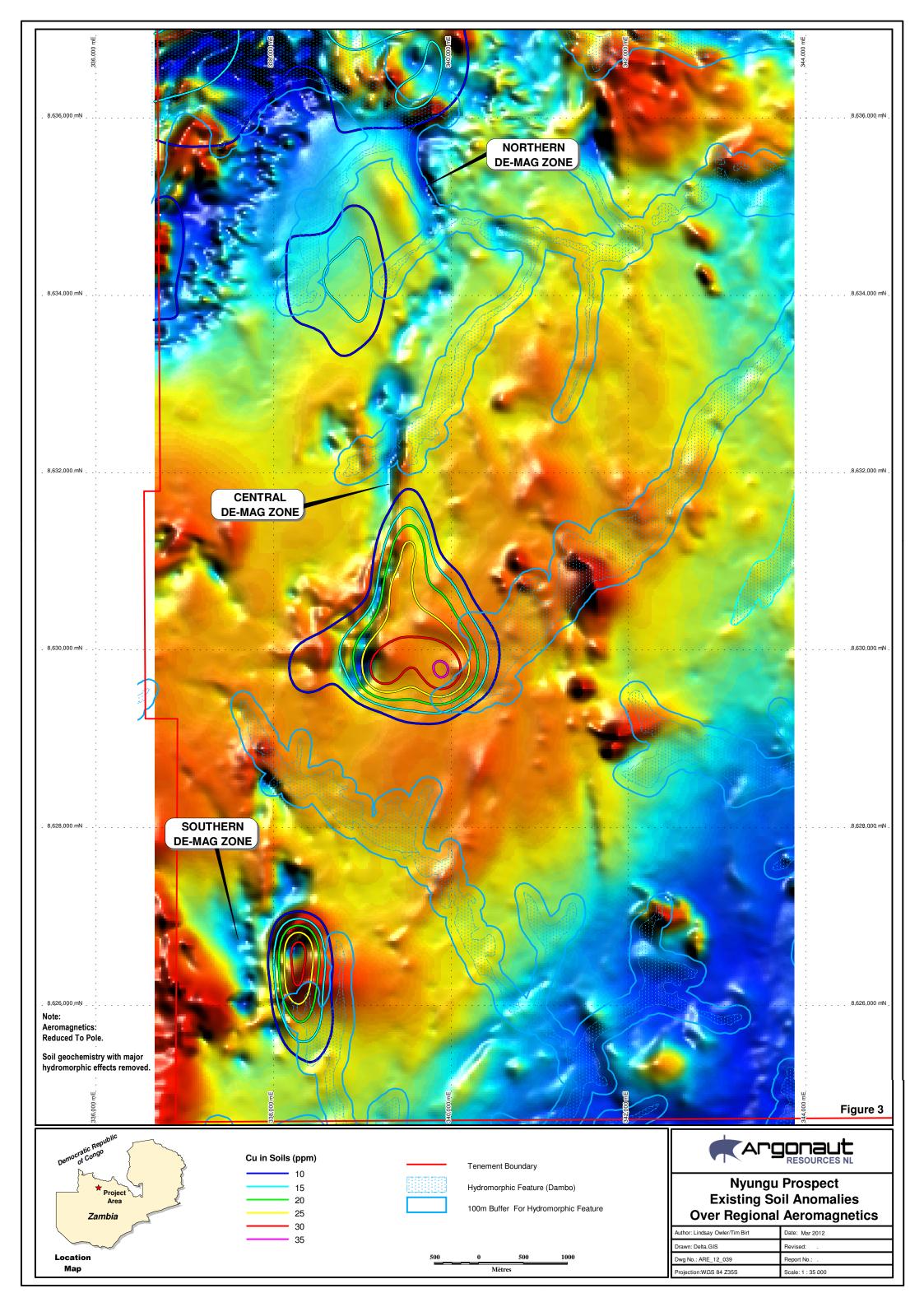
#### **Media Contacts**

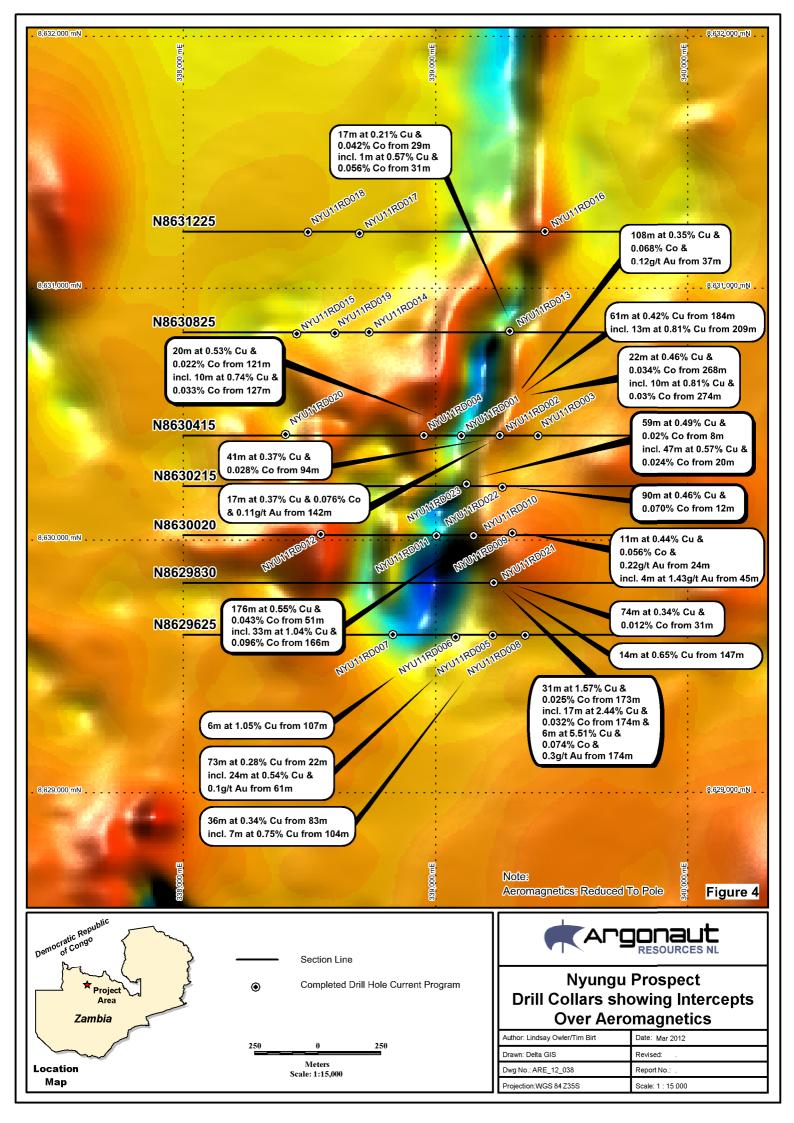
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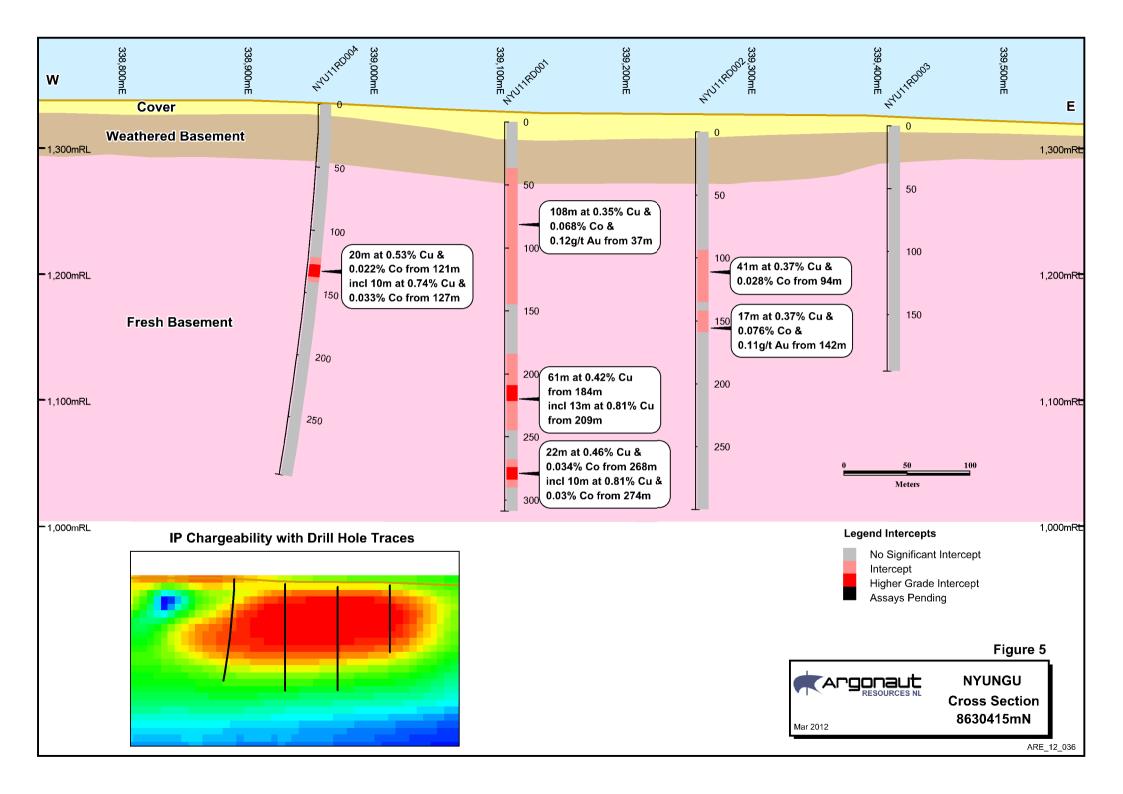
Sections of information contained in this report that relate to Exploration Results and Mineral Resources were compiled or supervised by Mr Lindsay Owler BSc, MAusIMM who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of Argonaut Resources NL. Mr Owler has sufficient experience which is relevant to the style of mineral deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Owler consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

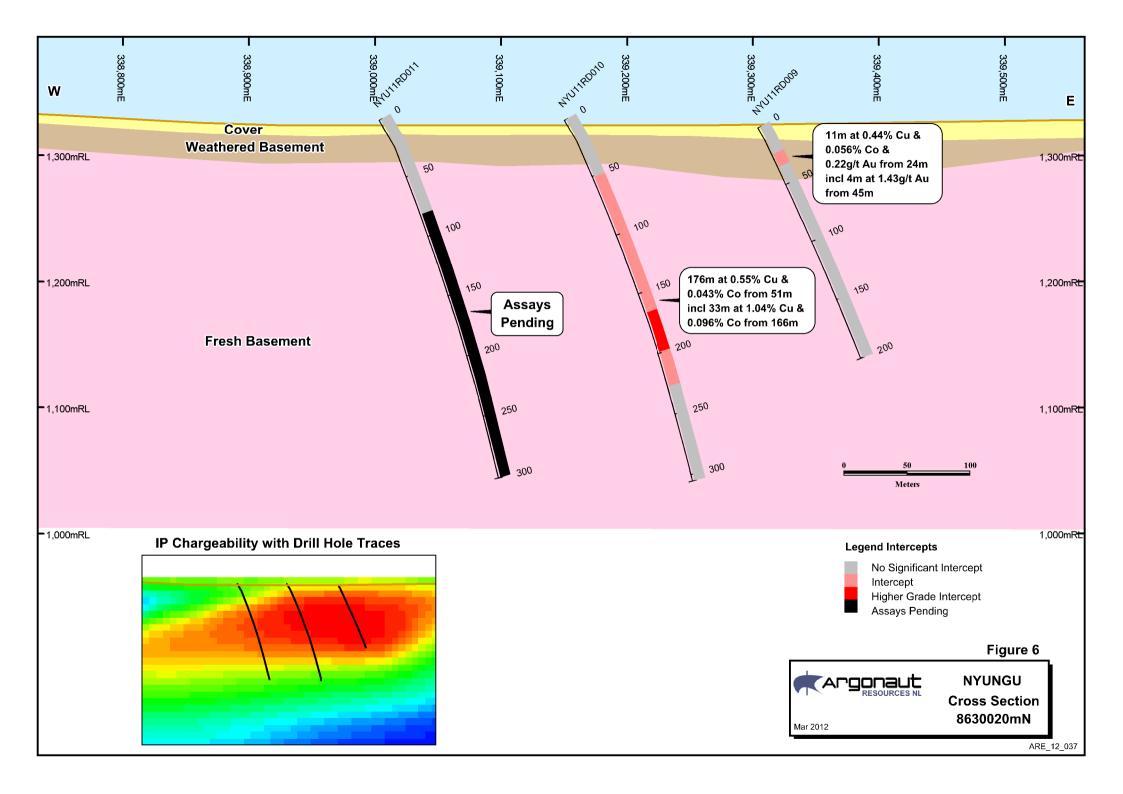












Appendix i		N1 41	-		A :				ECTION .		<b>O</b> (0/)	A / /:>	Algoriaut Resources No
Hole	East	North	RL		Azimuth	Total Depth	From	То	Interval				Comment
NYU11RD001	339102	8630414	1321	-90		308.50	37	145	108		0.07		RC and DD
including							63	90	27	0.51	0.05	0.14	
and							104	141	37	0.30	0.11	0.15	
							152	165	13	0.21		0.18	
							184	245	61	0.42			DD
including							187	189	2	0.38			DD
and							209	222	13	0.80			DD
							268	290	22	0.46	0.03		DD
including							274	284	10	0.81	0.03		DD
NYU11RD002	339254	8630416	1313	-90		299.81	94	135	41	0.37	0.03		DD
including							125	135	10	0.36	0.06	0.27	DD
							142	159	17	0.37	0.08	0.11	DD
including							142	151	9	0.48	0.12	0.16	DD
including							142	149	7	0.43	0.13	0.19	DD
NYU11RD003	339406	8630414	1318	-90		194.65				NSI			RC and DD
NYU11RD004	338954	8630416	1335	-90		296.50	121	141	20	0.53	0.02		RC
							127	137	10	0.74	0.03		DD
NYU11RD005	339227	8629624	1315	-90		185.60	22	95	73	0.28			RC and DD
including							61	85	24	0.54		0.10	DD
including							61	68	7	0.92	0.02	0.27	DD
NYU11RD006	339079	8629616	1328	-60	90	149.20	16	26	10	0.27	0.02		RC
							107	113	6	1.05			DD
NYU11RD007	338831	8629626	1335	-90		70.00				NSI			RC, no DD tail
NYU11RD008	339355	8629624	1320	-60	90	191.20	83	119	36	0.34			RC
including							104	111	7	0.75			RC
							135	147	12	0.13			RC
NYU11RD009	339304	8630028	1322	-60	90	200.30	24	79	55	0.23	0.02	0.21	RC
including							24	35	11	0.44	0.06	0.22	
and							40	54	14	0.26	0.03	0.56	
including							45	49	4	0.15	0.02	1.43	
3							128	140	12	0.32	0.03		DD
NYU11RD010	339150	8630018	1328	-60	90	305.14	4	36	32	0.15	0.02		RC
					- <del>-</del>		51	227	176		0.04		RC and DD
including							66	75	9	0.98	3.0 1		RC
and							96.85	112	15.15		0.02		DD
and							166	199	33		0.1		DD
NYU11RD011	339003	8630018	1328	-60	90	300.00				NSI	J. 1		RC
	555550	3000010	. 520	30		555.55	81.85	300	218.15				DD, AP
NYU11RD012	338545	8630024	1338	-60	90	121.50	01.00	500		NSI			RC and DD
NYU11RD012		8630830			90	116.20	29	46	17		0.04		RC
110111013	555254	0000000	1310	-00	30	110.20	23	40	17	0.21	0.04		1.0

Hole	East	North	RL	Dip	Azimuth	Total Depth	From	То	Interval	Cu (%)	Co (%)	Au (g/t)	Comment
including							31	32	1	0.57	0.56		RC
NYU11RD014	338736	8630826	1349	-60	90	200.20				NSI			RC
							76	200.2	124.2				DD, AP
NYU11RD015	338450	8630820	1349	-60	90	82.00				NSI			RC, no DD tail
NYU11RD016	339434	8631226	1337	-60	90	180.30				NSI			RC
							117.9	180.30	62.4				DD, AP
NYU11RD017	338699	8631218	1331	-70	90	53.00				NSI			RC, no DD tail
NYU11RD018		8631224			90	76.00				NSI			RC, no DD tail
NYU11RD019	338600	8630822	1350	-70	90	179.30				NSI			RC
							82	179.3	97.3				DD, AP
NYU11RD020	338405	8630420	1332	-70	90	150.30				NSI			RC
							46.3	150.3	104				DD, AP
NYU11RD021	339230	8629832	1331	-70	90	206.30	31	105	74		0.01		RC and DD
including							49	58	9		0.01		RC
and							70	77	7	0.76			RC
and							91	94	3				DD
							115	121	6				DD 
							147	161	14				DD
. , ,,							173	204	31		0.02		DD
including							174	191	17		0.03	0.00	DD
including	22225	0000040	4004	00		400.40	174	180	6		0.07	0.30	
NYU11RD022	339265	8630212	1324	-90		180.40	12	102	90		0.07		RC and DD
including							32	52 98	20		0.14 0.07		RC
and	220422	0620224	1226	00		67.00	64		34				RC
NYU11RD023	339123	8630224	1326	-90		67.00	8 16	67 26	59 10		0.02	0.38	RC
including									10		0.04	0.38	
and							20	67	47	0.57	0.02		RC, open EOH, DD tail planned for 2012

#### Notes

- 1 Pre collars by Reverse Circulation drilling
- 2 1m and 2 to 4m composite sample interval in RC drilling
- 3 1m and 2m composite sample interval in Diamond Core drilling
- 4 Analysis by SGS Methods ICP40Q and ICP23Q (for ore grade Cu), FAA303 for Au
- 5 Coordinate System: WGS84, Zone 35 South
- 6 NSI = No Significant Intercepts
- 7 RC = Reverse Circulation intercept
- 8 DD = Diamond Core intercept
- 9 AP = Assays Pending
- 10 EOH = End of Hole