



Detailed Exploration Report

Newcrest Mining Limited

September Quarter 2009

Key Points

- Drilling continued to test the potential south east strike extent of Kencana mineralisation
- Six diamond drill rigs operating on Morobe Mining JV tenements, testing targets in and around Hidden Valley and at Wafi-Golpu
- Resource definition drilling continued at O'Callaghans (Telfer, WA)

Summary

Exploration was ongoing across the portfolio at Namosi (Fiji), Morobe (PNG), Telfer (WA), Cracow (QLD) and Gosowong (Indonesia). This included near mine exploration targeting reserves replacement and expansions at Telfer, Cracow, Gosowong and Hidden Valley; advanced project work on O'Callaghans (Telfer), Waisoi (Namosi) and Wafi-Golpu (Morobe); and discovery exploration regionally in all provinces.

Gosowong (82.5%)

Drilling within the Toguraci Corridor, north of the exhausted open pit mine focussed on defining the continuity of mineralisation reported previously within the Damar and Yahut Structures. At Damar, drilling has defined a narrow high grade zone of mineralisation that extends over an area of 200m x 150m. New significant intercepts from this zone include:

TND011 :	0.6m (0.47m) ¹ @ 21g/t Au from 309.6m
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TND020 :	0.9m (0.50m) ¹ @ 40g/t Au from 178.4m
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Four holes were completed at Yahut with assays pending for two holes. Yahut is interpreted as the strike extension of the previously mined BOD shoot. Yahut is located approximately 150m west of Damar. Significant results include:

TND013 :	8.2m (1.3m) ¹ @ 24g/t Au from 289m
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TND021 :	4.4m (0.7m) ¹ @ 7.3g/t Au from 387.2m
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Also at Gosowong, drill testing of the potential south east strike extent of Kencana mineralisation was ongoing.

¹ Estimated true width

Telfer (100%)

Resource definition infill drilling to 200m x 200m spacing over the O'Callaghans area was completed. A total of 22 holes (OC09004 to OC09025) were drilled for a total of 8,973m. Sulphide skarn was intersected in all holes drilled in this program, with skarn thicknesses being in line with expectations and confirms continuity within the central part of the skarn unit. Up to 10% sphalerite has been observed within the skarn zones of these holes, suggesting potential for a continuous zone of zinc mineralisation on the (grid) east side of O'Callaghans project. Assay results for holes OC09004 to OC09022 were received during the quarter, with significant results tabulated below.

DRILL-HOLE NUMBER	METRES DOWN HOLE		GRADES			
	FROM	LENGTH	WO3 %	Cu %	Zn %	Pb %
OC09004	331	15.2	0.33	0.18	1.71	0.79
OC09005	315	41.5	0.35	0.36	0.40	0.21
OC09006	342	33.0	0.51	0.38	5.37	2.90
OC09007	351	40.0	0.43	0.40	2.73	1.95
OC09008	363	69.0	0.52	0.30	0.09	0.20
OC09009	331	51.0	0.49	0.26	0.03	<0.01
OC09010	377	29.0	0.48	0.29	0.29	0.11
OC09012	340	35.0	0.39	0.26	0.07	0.06
OC09015	395	15.0	0.35	0.34	2.84	1.05
OC09016	336	31.0	0.42	0.17	0.02	0.02
OC09017	418	18.0	0.55	0.41	2.31	0.77

Vertical Stockwork Corridor(VSC)

During the quarter, a review of the geological model and recently updated interpretation was used to develop a program comprising seven core holes for 3,200m. This is designed to assess the higher grade central area of the VSC. Step-out drilling to further test the strike and depth extents of the system is also planned.

North West High Grade (NWHG) Domain

Design of an initial work program to upgrade and further delineate the NWHG veins, Lower Limey Unit was completed during the period. The initial program of work, comprising four core holes for 900m, will be undertaken as the first stage of a two stage program.

Cracow JV (70%)

At Cracow, testing the near mine Kilkenny and Killarney structures was ongoing. Within the Killarney structure, drill-hole CBK274, designed to test 200m above CBK222 (10m @ 2g/t Au), intersected 2m (1.09m)¹ @ 11.7g/t Au from 592.7m. Follow up drilling is planned to determine the potential for a new shoot within the Killarney Structure. Drilling from underground targeting depth extensions to the northern Kilkenny shoot also intersected a wide zone of mineralisation totalling 49.3m (14m)¹ @ 4.1g/t Au including 9.0m (2.6m)¹ @ 9.2g/t Au (KKU002). This result improves the potential of increasing the Kilkenny resource. Follow up drilling is planned.

EMERGING PROVINCES

Namosi Joint Venture (69.94%)

Drilling continued with four rigs in operation at Waisoi and Waivaka. A total of 7,076m were drilled with 10 holes completed and four in progress.

Three rigs are presently operating within the Waivaka corridor following up higher grade mineralisation previously reported in NVD007 and testing additional prospects within the corridor. Two holes were completed and two are in progress:

NVD008:	602.6m @ 0.53%Cu and 0.03g/t Au from 241m Including 338m @ 0.79%Cu and 0.11g/t Au from 352m which included 94m @ 1.21%Cu and 0.23g/t Au from 490m
NVD012:	402.0m @ 0.23% Cu and 0.01g/t Au from 72m Including 46m @ 0.36% Cu and 0.01g/t Au from 214m

NVD008 is located 200m along strike to the west of the previous high grade intercept in NVD007. This zone of higher grade mineralisation is interpreted to be an ENE-WSW linear trending zone containing abundant quartz-carbonate-bornite-chalcopyrite stockwork and sheeted veins with bornite-chalcopyrite disseminations. Further drilling is underway to define the extent of this zone. NVD012, which targeted 200m vertically above NVD007, is interpreted to have intersected the upper halo of the higher grade zone.

Elsewhere in the Waivaka corridor, drilling targeted geophysical anomalies and potential vertical extension of mineralisation identified within historical drill holes. Three drill holes were completed during the quarter. Within the northwest Wainauoulo area drilling has intersected a broad zone of copper mineralisation:

NVD011:	350m @ 0.20%Cu and 0.01g/t Au from 458m
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The style of mineralisation of alteration and mineralisation within NVD011 indicates that this area is prospective for higher grade porphyry related mineralisation.

The Waisoi drilling program was designed to identify new areas of higher grade mineralisation in proximity to the current resource (refer to Reserve/Resource statement) and to test the area between the two deposits. Two holes were completed and one is in progress. This drilling confirmed extensions to the known resources and new zones of up to 0.4%Cu but is yet to identify new zones of higher grade mineralisation.

NSE009:	102m @ 0.45% Cu and 0.07g/t Au from 276m and 54m @ 0.53% Cu and 0.05g/t Au from 454m
NSW012:	40m @ 0.38% Cu and 0.04g/t Au from 458m and 34m @ 0.40% Cu and 0.03g/t Au from 634m and 30m @ 0.52% Cu and 0.07g/t Au from 712m
NSW013:	136m @ 0.41% Cu and 0.15g/t Au from 420m

Morobe Mining JV (50%)

A fleet of six diamond drilling rigs were operating on MMJV tenements in the quarter with three testing targets in and around Hidden Valley and three at Wafi-Golpu.

At Wafi, exploration focussed on drill testing Miapilli porphyry target and the highly prospective northern margin of the central diatreme. Three holes were completed and three in progress for a total of 2,754m for the period. At Miapilli, a broad zone of quartz stockwork veining was intersected that is interpreted to be analogous to porphyry related mineralisation seen at the nearby Nambonga. Assay results for this are:

WR315: 97m @ 0.75g/t Au and 0.15% Cu from 387m including 15m @ 1.2g/t Au and 0.29%Cu from 426m

Two holes were completed on the Northern margin of the diatreme. Drill hole WR316 collared within the diatreme and drilled towards the east intersected anomalous gold, copper and silver mineralisation associated with supergene enrichment of epithermal mineralisation overprinting an earlier porphyry event.

WR316: 25.5m @ 0.60g/t Au, 0.60%Cu from 80.5m and 36m @ 21.4 g/t Ag from 46m

At Hidden Valley, exploration focussed on identifying new zones of mineralisation within the vicinity of the Hidden Valley Operations, targeting extensions to the present known resources (refer to resource/reserve statement) and systematically testing the numerous grass roots prospects located within the Mining Lease. Drilling is presently ongoing at the Apu Creek prospect which is located approximately 800m east of the Hidden Valley – Kaveroi ore system, following up historical results from drill hole HV018 that intersected 10m @ 0.53g/t Au and 35m @ 0.41g/t Au.

Drilling was also conducted on two regional prospects, the Kesiago prospect and Biamena prospect. The Kesiago prospect is located on the Wafi transfer structure approximately four kilometres along strike southwest of the Golpu Cu-Au deposit. Two holes were completed with the drilling targeting a gold-polymetallic soil anomaly adjacent to the Kesiago porphyry prospect:

KDH06: 2m @ 14.93 g/t Au, from 190m including 1m @ 29g/t Au & 200g/t Ag ; and
1m @ 3.68g/t Au & 168g/t Ag & 1000ppm Cu from 211m

At Biamena, final results have been received for drill hole BMA010 which targeted coincident geophysical anomalies. BMA010 intersected a zone of altered and weakly mineralised diorite. Best results within the hole are:

BMA010: 2m @ 3.6 g/t au from 61m

RESOURCES AND RESERVES

There were no material changes to Newcrest's Resource and Reserves in the period.

C Moorhead

EGM Minerals

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by C. Moorhead, EGM Minerals for Newcrest Mining Limited who is a Member of The Australasian Institute of Mining and Metallurgy, and a full-time employee of Newcrest Mining Limited. Mr Moorhead has sufficient experience which is relevant to the styles of mineralisation and types of 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 Exploration Results, Mineral Resources and Ore Reserves'. Mr Moorhead consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

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Appendix 1

Summary Drilling Results

INTERCEPTS

Gosowong Drilling Results

Reporting Criteria: Intercepts reported are intervals of Au >1g/t with intervals of <1g/t Au up to 2m included. Where no individual intercepts >1 g/t exist, the intercepts reported are intervals of Au >0.1g/t with intervals of <0.1g/t Au up to 2m included. Samples are generally from HQ diameter diamond drill core. Some core may be larger or smaller in diameter than HQ due to drilling logistics. Core is photographed and logged prior to preparation for analysis. Half core samples are prepared for assay and the other half is retained for future reference. For purposes of quality assurance and quality control, each assay batch includes duplicates and standards to monitor analytical laboratory performance.

Hole ID	Hole Type	Northing Local Grid (m)	Easting Local Grid (m)	Total Depth (m)	Azimuth (Magnetic)	Dip	From (m)	To (m)	Interval (m)	True Thickness (m)	Au g/t
		In Gosowong local grid	In Gosowong local grid								
TND006	DDH	10,320	3,275	592.6	270.0	-52.0	419.5	426.3	6.8	3.58	NSA
							472.2	474.0	1.8	1.45	0.53
							521.8	526.0	4.2	3.36	0.13
TND007	DDH	9,950	2,820	492.0	90.0	-54.0	0	393	Results	Reported	Previously
							393.4	400.9	7.5	5.53	0.90
		Including					395.5	396.2	0.7	0.50	2.0
		Including					399.4	400.3	0.9	0.64	3.7
							464.5	468.5	4.0	3.28	2.9
TND008W	DDH	10,150	3,600	554.5	270.0	-60.0	405.9	406.8	0.90	0.60	0.13
TND009	DDH	9,977	2,822	551.9	90.0	-65.0	256.0	257.0	1.0	0.81	1.0
							464.5	470	5.5	3.76	0.16
TND010	DDH	10,047	2,812	512.4	80.0	-50.0	334.5	336	1.5	1.14	0.30
							408.7	412.4	3.7	3.18	0.18
TND011	DDH	9,936	2,793	505.8	108.0	-50.0	304.5	306.2	1.7	1.32	2.7
							309.6	310.2	0.6	0.47	21
							404.2	410.6	6.4	4.75	1.6
TND012	DDH	10,086	3,526	371.3	248.0	-53.0	182.7	184.1	1.4	0.86	NSA
							257.1	272.4	15.3	13.93	NSA
TND013	DDH	9,977	2,682	806.8	90.0	-59.0	289.0	297.2	8.2	1.30	24
		Including					289.5	293.7	4.2	#	38
							376.9	377.8	0.9	0.43	2.9
TND014	DDH	10,282	3,346	245.4	115.0	-53.0	128.1	128.8	0.7	0.54	0.36
TND015	DDH	10,047	2,812	575.8	63.0	-51.0	396.1	396.8	0.7	0.47	1.2

Hole ID	Hole Type	Northing Local Grid (m)	Easting Local Grid (m)	Total Depth (m)	Azimuth (Magnetic)	Dip	From (m)	To (m)	Interval (m)	True Thickness (m)	Au g/t
							459.2	463.9	4.7	4.58	0.15
TND016	DDH	9,936	2,793	620.8	108.0	-58.0	241.0	246.0	5.0	#	0.37
TND020	DDH	9,937	2,887	299.1	97.0	-54.0	178.4	179.3	0.9	0.50	40
							252.5	253.4	0.9	#	22
TND021	DDH	9,977	2,680	773.2	126.0	-55.0	378.2	382.6	4.4	0.70	7.3
		including					379.2	379.9	0.7	0.10	34

(# - True Thickness unable to be determined at present)

Note some results previously reported in Supplementary Exploration Report to the 2008/09 Full Year results.

Telfer Drilling Results O'Callaghans

Reporting Criteria: Intercepts reported are intervals of >5m downhole thickness with W >0.1% with intervals of <0.1% W up to 5m included. . Samples are generally from HQ diameter diamond drill core. Some core may be larger or smaller in diameter than HQ due to drilling logistics. Core is photographed and logged prior to preparation for analysis. Half core samples are prepared for assay and the other half is retained for future reference. For purposes of quality assurance and quality control, each assay batch includes duplicates and standards to monitor analytical laboratory performance.

Hole ID	Hole Type	Northing Local Grid (m)	Easting Local Grid (m)	Total Depth (m)	Azi (local grid)	Dip	From (m)	To (m)	Interval (m)	WO ₃ Grade %	Cu Grade %	Zn Grade %	Pb Grade %
OC09004	DDH	1,596	56,905	372.0	90	-85	331.1	346.3	15.2	0.33	0.18	1.71	0.79
OC09005	DDH	1,466	56,955	369.3	90	-85	283.0	289.0	6.0	0.42	0.38	0.04	0.01
And							315.0	356.5	41.5	0.35	0.36	0.40	0.21
OC09006	DDH	1,395	57,200	384.3	270	-85	342.0	375.0	33.0	0.51	0.38	5.37	2.90
OC09007	DDH	1,395	57,195	403.4	270	-75	351.0	391.0	40.0	0.43	0.40	2.73	1.95
OC09008	DDH	1,593	56,903	471.2	180	-60	320.0	341.0	21.0	0.28	0.09	0.14	0.02
And							363.0	432.0	69.0	0.52	0.30	0.09	0.20
And							439.0	444.0	5.0	0.26	0.12	0.02	<0.01
OC09009	DDH	1,203	56,793	398.3	90	-85	331.0	382.0	51.0	0.49	0.26	0.03	<0.01
OC09010	DDH	1,203	56,582	430.1	90	-85	377.0	406.0	29.0	0.48	0.29	0.29	0.11
OC09012	DDH	1,604	56,601	396.5	95	-85	340.0	375.0	35.0	0.39	0.26	0.07	0.06
OC09015	DDH	1,403	56,400	425.9	90	-85	395.0	410.0	15.0	0.35	0.34	2.84	1.05
OC09016	DDH	1,800	56,600	447.7	90	-85	336.0	367.0	31.0	0.42	0.17	0.02	0.02
OC09017	DDH	1,203	57,195	455.6	90	-85	418.0	436.0	18.0	0.55	0.41	2.31	0.77

Cracow Drilling Results

Reporting Criteria: Intercepts reported are intervals of Au >1g/t with intervals of <1g/t Au up to 2m included. Samples are generally from HQ diameter diamond drill core. Some core may be larger or smaller in diameter than HQ due to drilling logistics. Core is photographed and logged prior to preparation for analysis. Half core samples are prepared for assay and the other half is retained for future reference. For purposes of quality assurance and quality control, each assay batch includes duplicates and standards to monitor analytical laboratory performance.

Hole ID	Hole Type	Northing MGA (m)	Easting MGA (m)	Total Depth (m)	Azimuth MGA	Dip	From (m)	To (m)	Interval (m)	True Thickness (m)	Au Grade g/t
CBK274	DDH	7,200,111	223,536	702.4	90	-57	592.7	594.7	2	1.09	11.72
							600.3	606.8	6.5	3.55	1.89
KKU002	DDH	7,200,713	224,324	551.2	309	-42	431.1	480.4	49.3	14.0	4.1
						Incl.	452.0	461.0	9.0	2.6	9.2

Namosi JV Drilling Intercepts

Reporting Criteria: Intercepts reported are Cu >0.1% with up to 10m intervals of <0.1% Cu included. Also highlighted are high grade intervals of Cu >0.3% with intervals of <0.3% Cu up to 10m included. This highlights the lower grade porphyry potential and higher grade potential within a lower grade envelope. Samples are generally from HQ diameter diamond drill core. Some core may be larger or smaller in diameter than HQ due to drilling logistics. Core is photographed and logged prior to preparation for analysis. Half core samples are prepared for assay and the other half is retained for future reference. For purposes of quality assurance and quality control, each assay batch includes duplicates and standards to monitor analytical laboratory performance.

Hole ID	Hole Type	Northing Local Grid (m)	Easting Local Grid (m)	Total Depth (m)	Azimuth (local grid)	Dip	From (m)	To (m)	Interval (m)	Au g/t	Cu %
NVD008	DDH	3,882,984	1,940,314	816.6	200	-50	214.0	816.6	602.6	0.03	0.53
							352.0	690.0	338.0	0.11	0.79
							490.0	584.0	94.0	0.23	1.21
NVD010	DDH	3,882,229	1,939,337	791.0	200	-55	138.0	344.0	206.0	0.01	0.16
							396.0	438.0	42.0	0.02	0.30
							546.0	626.0	80.0	0.03	0.30
							546.0	576.0	30.0	0.07	0.48
NVD011	DDH	3,882,772	1,939,772	845.1	295	-50	458.0	808.0	350.0	0.01	0.20
NVD012	DDH	3,882,891	1,940,473	636.1	197	-50	72.0	474.0	402.0	0.01	0.23
							214.0	260.0	46.0	0.01	0.36
							514.0	630.0	116.0	0.01	0.17
NSE009	DDH	3,888,945	1,937,102	924.1	270	-50	12.0	540.0	528.0	0.04	0.30
							276.0	378.0	102.0	0.07	0.45
							454.0	508.0	54.0	0.05	0.53
							562.0	924.1	362.1	0.04	0.23
NSW012	DDH	3,888,591	1,936,420	954.0	090	-50	8.0	200.0	192.0	0.02	0.20
							448.0	810.0	362.0	0.03	0.29
							458.0	498.0	40.0	0.04	0.38
							634.0	668.0	34.0	0.03	0.40
							712.0	742.0	30.0	0.07	0.52
NSW013	DDH	1,935,973	3,888,688	853.6	090	-52	8.0	158.0	150.0	0.18	0.44
							16.0	146.0	130.0	0.19	0.47
							282.0	814.0	532.0	0.08	0.27
							420.0	556.0	136.0	0.15	0.41

Morobe Mining Joint Venture Drilling Results

Reporting Criteria: Intercepts reported are a minimum of 10m continuous runs of Au >0.1g/t with up to 10m intervals of <0.1g/t Au included. Also highlighted are high grade intervals of Au >1g/t with intervals of <1g/t Au up to 10m included. This highlights the lower grade porphyry potential and higher grade epithermal potential. Samples are generally from HQ diameter diamond drill core. Some core may be larger or smaller in diameter than HQ due to drilling logistics. Core is photographed and logged prior to preparation for analysis. Half core samples are prepared for assay and the other half is retained for future reference. For purposes of quality assurance and quality control, each assay batch includes duplicates and standards to monitor analytical laboratory performance.

Hole ID	Hole Type	Northing AMG Grid (m)	Easting AMG Grid (m)	Total Depth (m)	Azimuth (local)	Dip	From (m)	To (m)	Interval (m)	Au g/t	Ag g/t	Cu %					
KDH006	DDH	438265	9239120	483.0	280	-60	190.0	192.0	2.0	14.93	-	-					
											Incl.	191.0	192.0	1.0	29.00	200.0	-
												211.0	212.0	1.0	3.68	168.0	0.10
WR315	DDH	441100	9241874	851.8	70	-70	387.0	484.0	97.0	0.75	-	0.15					
											Incl.	426.0	441.0	15.0	1.21	-	0.29
WR316	DDH	439975	9241631	1005.7	103	-67	63.0	80.5	35.5	0.44	33.5	-					
												80.5	106.0	25.5	0.60	-	0.60
BMA010	DDH	444357	9230727	843.0	52	-75	61.0	63.0	2.0	3.60	-	-					