

#### MONTEZUMA MINING COMPANY LTD

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# Three Months Ending: 30 June 2010

ASX CODE: MZM ISSUED SHARES: 42.25M 52 WEEK HIGH: \$0.40 52 WEEK LOW: \$0.12 CASH ON HAND: \$6.09M

#### CONTACT:

JUSTIN BROWN Managing Director +61 8 9228 4833

## BOARD:

Denis O'Meara: Chairman Justin Brown: MD John Ribbons: Non-Exec

#### **KEY PROJECTS:**

PEAK HILL (100%) Gold

DURACK (earning 85%) Gold, Copper (VMS)

BUTCHERBIRD (100%) Manganese, Copper

MT PADBURY (100% of gold) Gold, Manganese, Iron

## **KEY SHARE HOLDINGS:**

AUVEX RESOURCES LTD 7,500,000 FPO Shares

BUXTON RESOURCES LTD 3,010,000 FPO Shares

## HIGHLIGHTS

## BUTCHERBIRD MANGANESE:

- Research highlights drilling by Alcoa which intersected 102m
  @ 8.3% Mn including:
  - 26m @ 7.1% Mn, from 0m
  - 42m @ 10.3% Mn, from 34m
  - 14m @ 11.2% Mn, from 82m.
- Data supports a model of high tonnage, low to medium grade beneficiable manganese ore.
- Alcoa drilling also intersected 6m @ 0.62% copper from 176m
- Maiden programme of 90 RC holes completed for 3,132m at Butcherbird over four target areas (**first ever drill program** targeting manganese mineralisation in the region).
- Extensive visual manganese apparent in the drill chips with down-hole widths of 5-36m from surface over strike length up to 2km.
- All samples are in the laboratory with **bulk assay grades and associated beneficiation test data** pending.
- Heritage surveys completed to allow drilling to commence on four additional manganese targets and the Butcherbird copper target.
- Further rock-chip sampling has identified two new targets.

## PEAK HILL GOLD:

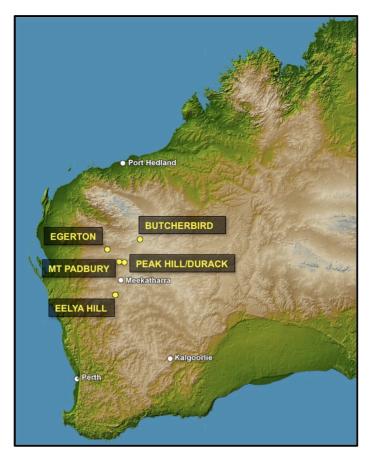
- A total of 39 RC holes completed at Peak Hill for 6,696m, testing seven potential new target areas.
- Best results include:
  - 6m @ 4.16 g/t from 38m
  - 3m @ 14.6 g/t from 8m
  - 8m @ 1.58 g/t from 8m
  - 5m @ 3.37 g/t from 102m
  - 5m @ 2.65 g/t from 53m
  - 3m @ 7.11g/t from 63m
- Next round of drilling currently being planned.

## **BUTCHERBIRD (100%)**

The Butcherbird Manganese and Copper project comprises one granted exploration licence straddling the Great North Highway approximately 120km south of Newman. Earlier reconnaissance surface sampling highlighted extensive surface manganese enrichment associated with supergene weathering processes. A recently completed RC drilling programme represents the first drill testing of these mineralised areas.

#### **Historic Drilling and Sampling Data**

A review of historic data recently acquired from the WAMEX archives has highlighted the potential for large tonnage, potentially



basin scale manganese mineralisation within E52/2350.

In 1982, Alcoa of Australia Ltd drilled a vertical, 350m deep diamond drill hole in the central northern part of the licence, testing for Volcanogenic Massive Sulphide ("VMS") style mineralisation. This drill hole returned a number of potentially significant manganese intercepts, with the drill logs indicating that the manganese occurs in flat lying siltstone, mudstones and shales as hard bands within the surrounding bedrock.

Subsequent to this work, in 2003 Pilbara Manganese Pty Ltd ("PMPL") undertook trenching in 4 locations, two on Bindi Bindi Hill, one near the Alcoa drill hole, and one at Cadgies Well.

Bulk sampling was undertaken on material from the northern end of the larger trench on Bindi Bindi Hill. The material weighed 4.8 tonnes, and was sieved through 16mm screens. The screened material comprised botryoidal slabs of manganese or lump, which averaged 40.7% Mn. Further channel sampling from the trench recorded an average of 40.05% Mn after being sieved through 16mm mesh.

The "lump" component of the material represents approximately 20% of the entire mass of rock and the results provide favourable indications that the generally low bulk grades can be mechanically upgraded to produce high grade DSO equivalent material.

Location	Horizon	Туре	Mn %	Fe %	Al2O3 %	Р%	SiO2 %	S %
Bindi Bindi Hill T1	Soil	Fine fraction	7.38	8.11	11.9	0.06	55.2	0.321
Bindi Bindi Hill T1	Soil	Mn lump	40.5	6.24	4.53	0.062	15.7	0.052
Bindi Bindi Hill T1	Soil	Red/Br. Shale	29.7	16.58	4.98	0.067	18.1	0.086
Bindi Bindi Hill T1	Gypsum	Fine fraction	2.51	7.27	12.4	0.072	57	1.95
Bindi Bindi Hill T1	Gypsum	Mn lump	40.9	4.48	4.46	0.057	16	0.461
Bindi Bindi Hill T1	Gypsum	Red/Br. Shale	32.8	10.98	4.79	0.062	18.9	0.845

Table 1: Bulk sampling results for Trench 1

Location	Horizon	Туре	Sample %	Mn %	Fe %	Al2O3 %	Р%	SiO2 %	S %
Dindi Dindi		Fine fraction	79.1	5.7	11.3	11.6	0.076	53.3	0.489
Bindi Bindi Hill T1	Soil	Mn lump	9.3	38.6	6.4	5.2	0.063	17.3	0.151
		Red/Br. Shale	11.5	3.1	35.4	7.1	0.148	29.7	0.176
Die di Die di		Fine fraction	80.7	5.5	6.8	7.8	0.067	33.8	8.09
Bindi Bindi Hill T1	Gypsum	Mn lump	11.3	38.3	4.8	5.3	0.064	19.4	0.235
		Red/Br. Shale	7.9	19.7	18.5	6.7	0.131	27.0	0.231
Din di Din di		Fine fraction	76.5	8.0	9.6	12.3	0.069	51.2	0.421
Bindi Bindi Hill T1	Soil	Mn lump	19.7	41.7	4.5	4.7	0.041	15.7	0.097
		Red/Br. Shale	3.8	11.8	27.4	7.0	0.12	27.5	0.138
Die di Die di		Fine fraction	52.7	9.6	9.4	9.7	0.101	39.1	3.38
Bindi Bindi Hill T1	Gypsum	Mn lump	28.0	39.8	5.9	4.7	0.058	15.9	0.312
		Red/Br. Shale	19.2	28.9	12.2	6.3	0.086	22.5	0.305
Die di Die di		Fine fraction	45.0	4.5	10.6	12.4	0.108	48.5	1.91
Bindi Bindi Hill T1	Soil	Mn lump	34.5	41.0	4.2	5.7	0.052	16.6	0.105
		Red/Br. Shale	20.4	16.3	23.6	7.1	0.217	25.1	0.135
Die di Die di	Gypsum	Fine fraction	77.6	1.9	11.8	9.1	0.074	35.7	6.57
Bindi Bindi Hill T1		Mn lump	11.8	41.7	4.5	4.6	0.039	15.3	0.201
		Red/Br. Shale	10.5	7.7	30.9	7.4	0.101	27.0	0.304
Die di Die di	Soil	Fine fraction	66.7	6.8	9.2	13.3	0.064	52.8	0.141
Bindi Bindi Hill T1		Mn lump	28.3	40.4	5.6	5.0	0.049	16.4	0.067
		Red/Br. Shale	5.0	34.1	11.2	5.3	0.05	18.2	0.067
Die di Die di	Gypsum	Fine fraction	81.0	6.2	8.5	9.6	0.071	38.3	5.45
Bindi Bindi Hill T1		Mn lump	16.9	38.9	4.8	5.0	0.049	18.9	0.445
		Red/Br. Shale	2.1	31.7	11.0	5.7	0.062	21.4	0.237
Din di Din di	Soil	Fine fraction	84.5	11.5	8.2	11.2	0.059	50.0	0.171
Bindi Bindi Hill T2		Mn lump	15.5	45.3	2.4	4.3	0.062	13.4	0.052
· ···· · <b>_</b>		Red/Br. Shale	20.0	37.3	7.6	5.3	0.055	17.9	0.104
		Fine fraction	63.9	3.0	10.4	8.3	0.33	41.6	1.02
Alcoa Hole	Soil	Mn lump	19.4	41.9	2.9	4.7	0.02	15.6	0.043
		Red/Br. Shale	16.6	19.3	17.3	7.5	0.045	28.5	0.026
		Fine fraction	57.1	3.1	10.6	7.3	0.036	38.2	1.17
Alcoa Hole	Calcrete	Mn lump	16.6	39.3	6.0	4.3	0.029	16.6	0.045
		Red/Br. Shale	26.0	16.3	20.2	6.8	0.062	29.8	0.035
		Fine fraction	62.6	5.2	11.8	13.5	0.095	49.4	0.258
Cadgie Well	Shale	Mn lump	24.0	40.6	5.8	4.5	0.091	15.8	0.044
		Red/Br. Shale	13.3	26.9	13.2	6.6	0.128	24.1	0.054

Table 2: Trench channel sampling results.

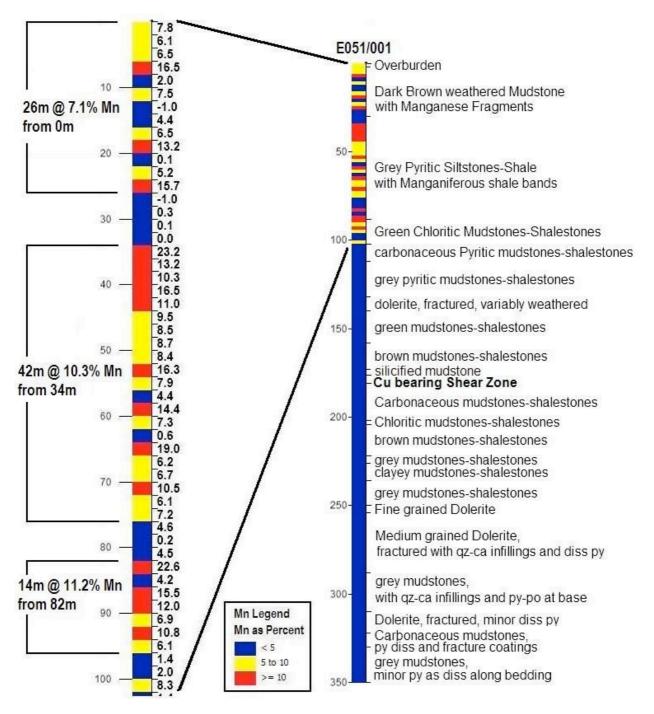


Figure 1: Graphical summary of Drill Hole E051/001, completed by Alcoa in 1982.

In addition to the manganese data from the Alcoa drilling, the samples were also assayed for copper, lead, and zinc. No signs of VMS mineralisation were observed, however a quartz-pyrite-chalcopyrite-bornite shear was intersected at 176m to 182m, with a composite grade of **6m @ 0.62% Cu** from 176m including **2m @ 1% Cu** from 176-178m.

This shear represents a structural copper mineralisation target, potentially analogous to the mineralisation at the Butcherbird copper mine to the east. Interestingly, the samples were not assayed for gold, despite the favourable geological environment described in the logs. Further drilling will be required to test this potential, however the data provides encouraging support for the regional copper/gold potential of the tenement.

#### **Current RC Drilling Programme**

During the quarter, a maiden programme of 90 RC holes was completed for a total of 3,132m over four manganese target areas. This programme represents the first ever drill program targeting manganese mineralisation in the region.

The drilling targeted four areas; Bindi Bindi Hill, Mungajerry, Alcoa Hole and Cadgies Flats. At Bindi Bindi Hill, visible manganese mineralisation was observed from surface, to a depth of up to 37m. Average depths of mineralisation appear to be 10-15m from surface. The thickest zone of mineralisation identified to date, as defined by field reconnaissance and drilling, occurs on the down slope area of Bindi Bindi Hill, over an area approximately 2km long by 500m wide.

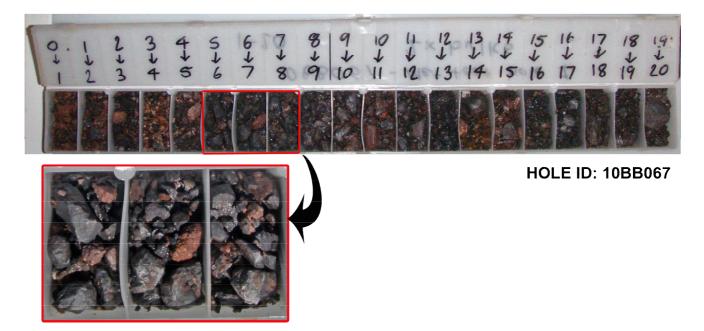


Figure 2: RC Chip tray showing strongly manganiferous intersection over 20m down hole from surface (tray intervals labelled in metres).

All samples from the drilling have been submitted for assay to determine bulk grades of the material, and two holes (10BB067 and 10BB054) have been selected for metallurgical/ beneficiation testing, with several 10m composites being tested to determine first pass indicative beneficiation parameters. It is envisaged that this work will guide the design of further bulk sample testing.

The manganese mineralisation appears to occur as high grade lump within low grade or nonmineralised clay rich colluvium. This suggests that the material is likely to be amenable to standard beneficiation techniques to yield a marketable and potentially high grade product. The results of the initial beneficiation test work will provide valuable information as to whether Bindi Bindi Hill is a good target area for potential first manganese production from the Butcherbird Project.



The majority of the drilling to date has been at Bindi Bindi Hill, however minor work at both Alcoa Hole and Cadgies Flats also intersected significant visible manganese mineralisation confirming the potential for the these two targets. Minor work at Mungajerry has downgraded this target and assays are awaited to determine whether follow up work is warranted.

A number of other priority targets were not drilled in the current programme due to access issues, however clearances have now been received and these target areas will be included in the next round of drilling. These target areas include the 2km long Yanneri Ridge, the 1.5km long Illgararie Ridge, the outlying Illgararie Hill, and two areas at Budgie Hill.

Further grab samples were also collected from two new areas. Assay results are presented in Table 3 below. The Cadgies samples were from surface supergene material, and were selected from the outer margins of a large, elevated flat pan area beyond the scope of the current drilling programme. The area hosts abundant surficial manganese that is estimated to be from 0.5m up to 5m thick.

The samples from Illgararie Hill represent supergene manganese capping. Detrital manganese is observed up to 500m down slope of this hill. Drill holes have been designed to test this area of manganese mineralisation.

	E GDA	N GDA	Mn	Fe	AI	Si	Ca	Mg				LOI	
Grab_ID	z50	z50	%	%	%	%	%	%	S %	Р%	Ti %	%	Comment
BBG023	767070	7304104	38.2	6.9	2.9	7.7	0.15	0.13	0.09	0.13	0.09	10.2	Cadgies Botryoidal
BBG024	765959	7304029	40.3	7.6	3.3	4.6	0.06	0.10	0.02	0.07	0.14	12.2	Cadgies Botryoidal
BBG025	766311	7304128	35.6	11.3	2.4	7.1	0.24	0.21	0.05	0.08	0.11	10.4	Cadgies Botryoidal
BBG026	766101	7303664	41.4	3.8	2.5	7.6	0.19	0.21	0.03	0.05	0.11	10.0	Cadgies Botryoidal
BBG027	766213	7303431	42.2	4.2	2.5	7.2	0.14	0.15	0.04	0.07	0.11	10.2	Cadgies Botryoidal
BBG028	774085	7302877	39.0	7.4	2.3	7.4	0.12	0.15	0.03	0.11	0.11	10.5	Illg Hill, Supergene
BBG029	774067	7302915	35.0	9.5	2.2	9.2	0.11	0.19	0.03	0.07	0.12	9.6	Illg Hill, Botryoidal
BBG030	774038	7302878	34.0	11.1	2.5	8.6	0.04	0.07	0.03	0.06	0.12	10.6	Illg Hill, top area
BBG031	774033	7302821	33.4	11.9	2.7	7.9	0.04	0.07	0.02	0.10	0.11	11.3	Illg Hill, top area
BBG032	773990	7302894	31.3	12.7	2.9	8.8	0.04	0.07	0.03	0.06	0.14	10.7	Illg Hill, top area
BBG033	773817	7302668	40.0	7.5	2.8	6.1	0.04	0.06	0.02	0.06	0.10	11.5	Illg Hill, Supergene
BBG034	773860	7302695	38.1	8.9	2.7	7.1	0.05	0.07	0.02	0.07	0.11	10.4	Illg Hill, Supergene
BBG035	773895	7302667	36.6	8.3	2.9	7.9	0.04	0.06	0.02	0.08	0.13	10.9	Illg Hill, Supergene
BBG036	773891	7302763	39.7	8.9	2.0	6.5	0.04	0.04	0.03	0.06	0.10	11.2	Illg Hill, Supergene
BBG037	773932	7302734	29.8	14.1	2.8	8.9	0.03	0.07	0.03	0.10	0.13	10.8	Illg Hill, Supergene
BBG038	773991	7302739	29.1	17.7	2.5	7.1	0.03	0.07	0.03	0.12	0.11	11.8	Illg Hill, Supergene
BBG039	773977	7302804	34.3	12.0	2.4	7.9	0.03	0.07	0.03	0.08	0.10	10.9	Illg Hill, Supergene

Table 3: Grab sample results from Cadgies and Illgararie Hill

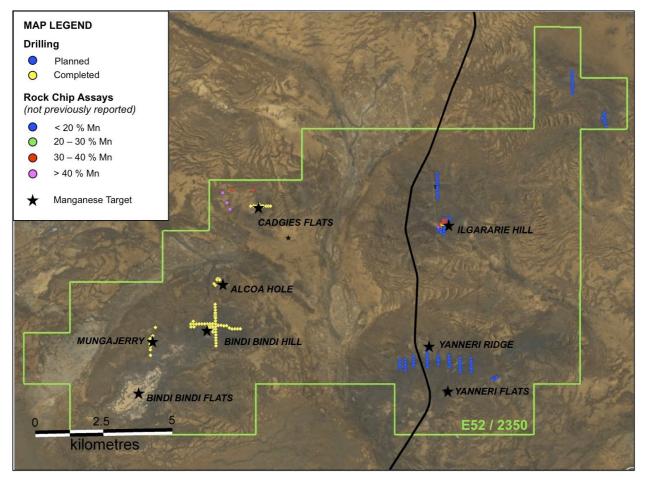


Figure 3: Drilled holes in yellow, planned holes in blue and recent grab sample locations.

## **PEAK HILL (85-100%)**

#### **Gold Production**

Gravity processing of old mill site material has continued to yield important gold production from the Peak Hill site.

Montezuma has in place a Tribute Mining Agreement with Resource Gold Pty Ltd ("RGL") to process suitable material from within the Project using RGL's gravity plant. All costs and environmental liabilities are carried by RGL and Montezuma receives 25% of all metal produced.

Work during the quarter has produced a total of 455.195 ounces of gold and 24.96 ounces of silver.

The cash-flow generated by the gold processing programme will help to fund accelerated exploration at Peak Hill and the surrounding tenure as well as at the company's exciting new copper/manganese project at Butcherbird to the northeast.

## **RC Drilling**

An RC drilling programme was completed during the quarter, comprising 39 holes for 6,696 metres. All assay results have now been received, with the results providing the foundation for the next round of drilling aimed at extending the known resources at Peak Hill.

The drilling tested a number of new targets, and to follow up the recent success at the Windsor Zone within the Durack Project. The drill programme was based on a number of new targets identified by re-examining the inherited database for zones of strong anomalism as well as areas targeted through structural analysis.

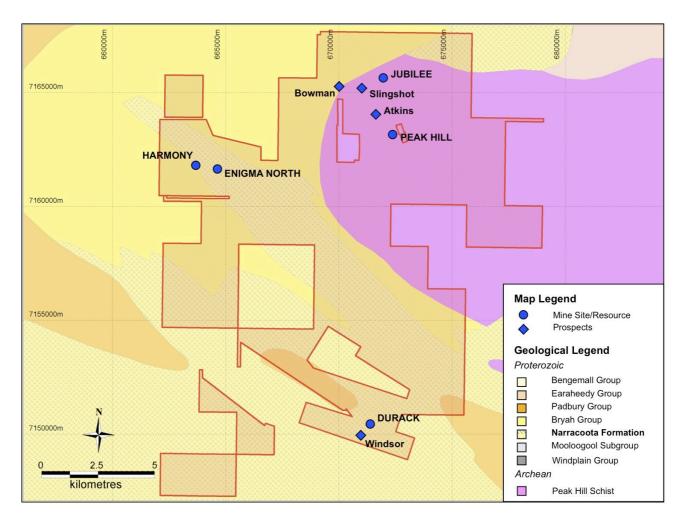


Figure 4: Montezuma Peak Hill Tenements and Prospect Locations

All drilling was undertaken by Murchison Exploration and Hire Services. All samples were split at the cyclone and a 2-3kg sample was submitted to Aurum Labs for first-pass Aqua Regia gold analysis. The significant results are displayed in Table 4 below. Intersections are quoted as down hole widths unless otherwise stated.

PROSPECT	HOLE_ID	NORTH	EAST	AZIM	DIP	DEPTH	FROM	то	Au	COMPOSITE
		(GDA)	(GDA)			(m)	(m)	(m)	(g/t)	
JUBILEE	10RC001	716524	672043	150	-60	160	8	12	0.59	
							12	16	2.58	8m @ 1.58 g/t
							146	147	1.16	
							147	148	4.3	
							148	149	0.63	
							149	150	3.21	4m @ 2.32 g/t
	10RC002	7165516	671992	150	-60	250	53	54	2.93	
			0				54	55	0.95	
							55	56	1.05	
							56	57	0.33	-
							57	58	7.97	5m @ 2.65 g/t
							105	106	0.91	om @ 2.00 g/t
							106	107	1.84	
							100	108	1.98	
							107	100	0.56	-
							100	110	2.63	5m @ 1.58 g/t
	1000002	7165251	670107	150	-60	166	71			5111 @ 1.56 g/t
	10RC003	7165251	672137	150	-60	100		72	1.62	
							135	136	1.06	0
							136	137	1.22	2m @ 1.14 g/t
							143	144	10.57	
							163	164	1.91	
	10RC004	7165486	672123	150	-60	190	10	11	3.05	
	10RC005	7165578	672073	150	-60	286	55	56	4.13	
							75	76	1.53	
							106	107	10.98	
							107	108	28.2	
							108	109	3.9	3m @ 14.6 g/t
							109	110	0.7	-
							120	121	0.53	
							121	122	6.22	
							122	123	11.79	_
							123	124	2	
							124	125	1.18	5m @ 4.34 g/t
ATKINS	10RC008	7163900	672270	90	-60	262	0	1	1.25	
							82	83	1.22	
							125	126	2.54	
SLINGSHOT	10RC023	7165280	670825	135	-60	124	33	34	1.19	
							63	64	0.77	
							64	65	20	
							65	66	0.57	3m @ 7.11g/t
							69	70	1.29	0 0
							73	74	1.7	
HARMONY	10RC027	7162188	663932	120	-60	124	35	36	1.23	
	10RC028	7162148	663862	120	-60	124	67	68	1.01	
							115	116	0.98	
	10RC029	7162109	663791	120	-60	124	43	44	1.05	
	10110020	1102100	000101	120	50	127	44	45	1.09	2m @ 1.07 g/t
	10RC030	7162324	663855	120	-60	130	108	109	8.04	
	10RC030				-60	130	38			
	1050031	7162286	663785	120	-00	150		39 40	20.0	
							39 40	40	0.62	
							40	41	1.15	

PROSPECT	HOLE_ID	NORTH	EAST	AZIM	DIP	DEPTH	FROM	то	Au	COMPOSITE
		(GDA)	(GDA)			(m)	(m)	(m)	(g/t)	
							41	42	1.22	
							42	43	1.18	
							43	44	0.81	6m @ 4.16 g/t
							48	49	2.32	
							118	119	4.08	
ENIGMA	10RC032	7162838	663616	120	-60	142	115	116	1.45	
NORTH							122	123	1.96	
	10RC033	7161825	664268	120	-60	118	98	99	1.58	
	10RC034	7161797	664215	120	-60	124	93	94	2.03	
							94	95	0.56	
							95	96	0.94	
							96	97	1.08	
							97	98	0.24	
							98	99	1.28	
							99	100	1.05	7m @ 1.03 g/t
							102	103	13.42	
							103	104	0.55	
							104	105	0.6	
							105	106	0.49	
							106	107	1.81	5m @ 3.37 g/t
DURACK	10D001	7150430	671230	220	-60	202	18	19	0.97	
	10D002	7150343	671221	220	-60	142	13	14	1.15	
	10D003	7150331	671078	220	-60	142	128	129	1.47	
							129	130	0.57	2m @ 1.02 g/t
	10D004	7150406	671143	220	-60	160	36	37	1.82	
							44	45	1.54	

Table 4: RC Drilling Collar Locations and Results

Twelve RC holes were drilled at the Atkins prospect, for a total of 2,610m. These were designed on deep drilling targets that could be extensions to the main/5 ways pit. Deep gold mineralisation is known to extend north from the main/5 ways pit and is still open. The deep holes were to all possible strike variations to the mineralisation. Shallower holes were also designed to test the contacts of the Jubilee dolerite as it extends south. This drilling was unsuccessful.

Seven holes were completed at Jubilee for 1,390m, targeting the footwall and hanging wall contacts of the Jubilee dolerite, where mineralisation is known to occur beyond the defined extent of the Jubilee deposit. These holes were designed to test the potential for additional along strike mineralisation.

Bowman is an historic RAB anomaly 300m west of the Archers historic shafts. Two holes were designed to confirm the anomaly. Minor mineralisation was observed.

Slingshot is 400m east of Archers, and sporadic RAB and RC drilling by a number of companies has highlighted this area to be prospective for gold mineralisation. A traverse of five holes was drilled to test the prospect, which sits at the contact between the Peak Hill Schist and the Narracoota Formation.

Significant anomalism occurs east of the Harmony open cut as outlined by previous RAB drilling. To test this, five holes over two traverses were completed to confirm the existence of the gold and to determine if follow-up drilling could be justified. The northern line hit 6m @ 4.16 g/t mineralisation from 38m, indicating a northeast extension to Harmony mineralisation.

Enigma North mineralisation is known to be open in a number of places, and four holes were designed to test these possible extensions/gaps. Two holes, 10RC033 and 10RC034 were placed to test for signs of displaced mineralisation at the northern end of the main Enigma North lodes. These holes were successful in finding mineralisation at a depth of 93m. Additionally the two northern holes 10RC032 and 10RC035 confirm anomalous gold mineralisation extends further north and provides a target for follow-up programs.

The Windsor discovery south of the Durack gold lodes were tested with four holes to further define and to extend to mineralisation discovered in late 2009. It has been observed that mineralisation in this part of the Narracoota Formation may be associated with a swarm of intrusive granitoids. Confirmation of this hypothesis will lead to more drilling targets in previously under explored areas.

The results from this round of drilling will now be used to refine the Company's targeting model and to design the next phase of drilling.

#### CORPORATE

#### lan "Inky" Cornelius Passes Away

It is with the deepest regret that Montezuma Mining Company Limited advises that Mr Ian "Inky" Cornelius passed away during the quarter.

The Company would like to pay tribute to Mr Cornelius for his valued contribution since his appointment to the Board. Mr Cornelius was a founding director of Montezuma and has been a major contributor to the success of the Company to date.

Montezuma Mining Company Limited has appointed Mr John Ribbons as a non-executive director of the Company. Mr Ribbons is an accountant with more than fifteen years experience and currently acts as the Montezuma's Company Secretary.

#### Mt Padbury Iron Ore Sale

Montezuma is pleased to advise that the Company received a \$4M cash payment during the quarter from Sinosteel Midwest Corporation Limited, pursuant to the terms of the Mt Padbury sale agreement.

The additional funding will further underpin aggressive exploration at the Company's Projects.

**More Information** 

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The Information in this report that relates to exploration results is based on information compiled by Justin Brown, who is a member of the Australian Institute of Mining & Metallurgy. Mr Brown is a geologist and has sufficient experience which is relevant to the style of mineralisation and type of deposit 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. Justin Brown consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.