

11 May 2010

ASX CODE: MZM

ISSUED SHARES: 42.10M

52 WEEK HIGH: \$0.34

52 WEEK LOW: \$0.06

**CONTACT:**

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**BOARD:**

Denis O'Meara: Chairman

Justin Brown: MD

Ian Cornelius: Non-Exec

**KEY PROJECTS:**

PEAK HILL (85-100%)  
Gold

DURACK (earning 85%)  
Gold, Copper

BUTCHER BIRD (100%)  
Manganese, Copper

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

**KEY SHARE POSITIONS:**

AUVEX RESOURCES LTD  
7,500,000 FPO Shares

BUXTON RESOURCES LTD  
3,010,000 FPO Shares

## HISTORIC DATA CONFIRMS MANGANESE POTENTIAL AT BUTCHER BIRD

- Historic bulk sampling data enhances the potential for Butcher Bird to yield high grade DSO manganese ore.
- Drilling by Alcoa 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.

Montezuma is pleased to announce that 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 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	Type	Mn %	Fe %	Al2O3 %	P %	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	Type	Sample %	Mn %	Fe %	Al2O3 %	P %	SiO2 %	S %
Bindi Hill T1	Soil	Fine fraction	79.1	5.7	11.3	11.6	0.076	53.3	0.489
		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
Bindi Hill T1	Gypsum	Fine fraction	80.7	5.5	6.8	7.8	0.067	33.8	8.09
		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
Bindi Hill T1	Soil	Fine fraction	76.5	8.0	9.6	12.3	0.069	51.2	0.421
		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
Bindi Hill T1	Gypsum	Fine fraction	52.7	9.6	9.4	9.7	0.101	39.1	3.38
		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
Bindi Hill T1	Soil	Fine fraction	45.0	4.5	10.6	12.4	0.108	48.5	1.91
		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
Bindi Hill T1	Gypsum	Fine fraction	77.6	1.9	11.8	9.1	0.074	35.7	6.57
		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
Bindi Hill T1	Soil	Fine fraction	66.7	6.8	9.2	13.3	0.064	52.8	0.141
		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
Bindi Hill T1	Gypsum	Fine fraction	81.0	6.2	8.5	9.6	0.071	38.3	5.45
		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
Bindi Hill T2	Soil	Fine fraction	84.5	11.5	8.2	11.2	0.059	50.0	0.171
		Mn lump	15.5	45.3	2.4	4.3	0.062	13.4	0.052
		Red/Br. Shale	20.0	37.3	7.6	5.3	0.055	17.9	0.104
Alcoa Hole	Soil	Fine fraction	63.9	3.0	10.4	8.3	0.33	41.6	1.02
		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
Alcoa Hole	Calcrete	Fine fraction	57.1	3.1	10.6	7.3	0.036	38.2	1.17
		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
Cadgie Well	Shale	Fine fraction	62.6	5.2	11.8	13.5	0.095	49.4	0.258
		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.**

If the results of the PMPL and Alcoa work are confirmed in the upcoming drilling programme, and sufficient tonnages of this material can be identified, the potential for this project to yield commercial manganese ores will be significantly enhanced.

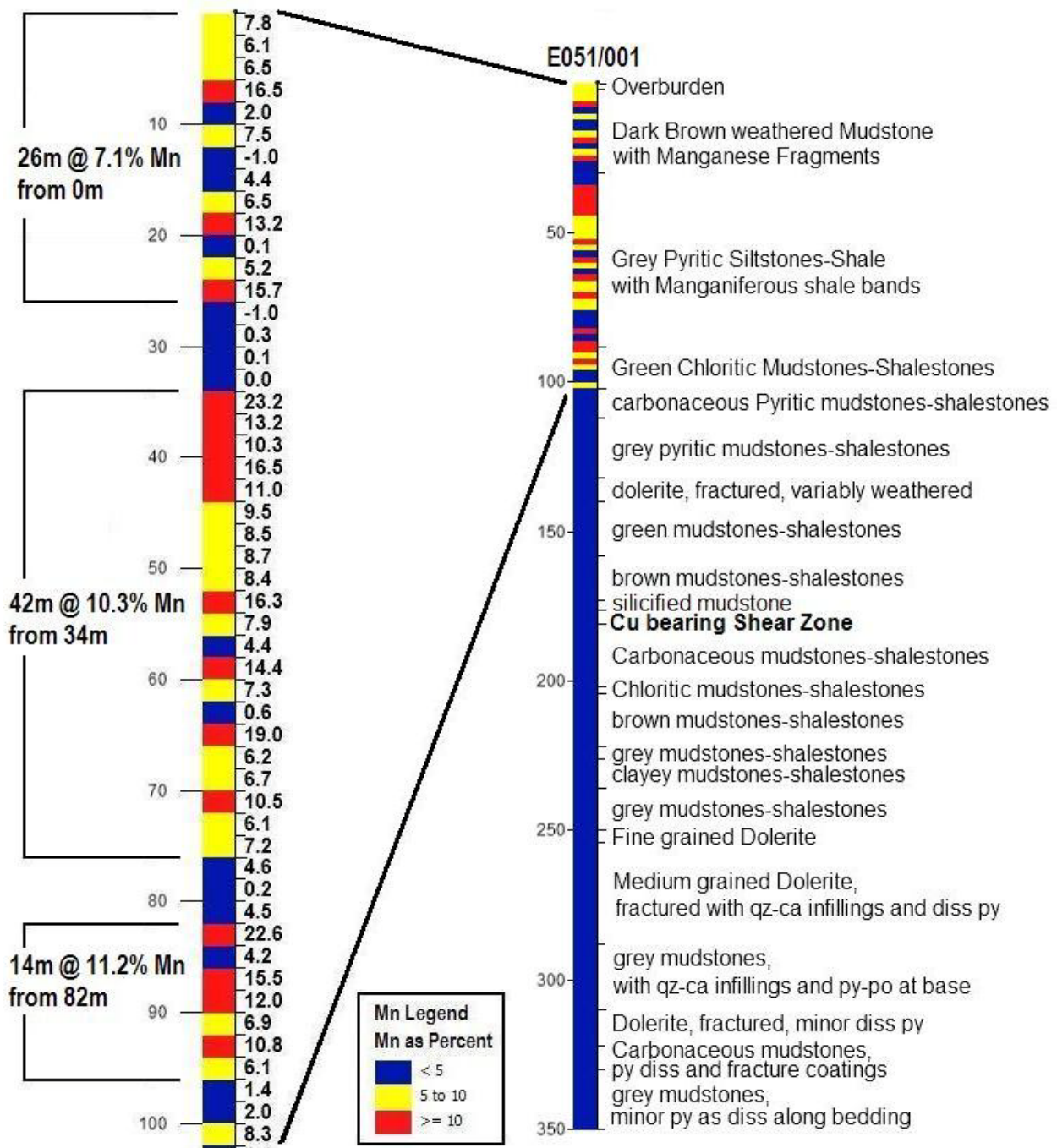


Figure 1: Graphical summary of Drill Hole E051/001, completed by Alcoa in 1982.

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 Butcher Bird 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.

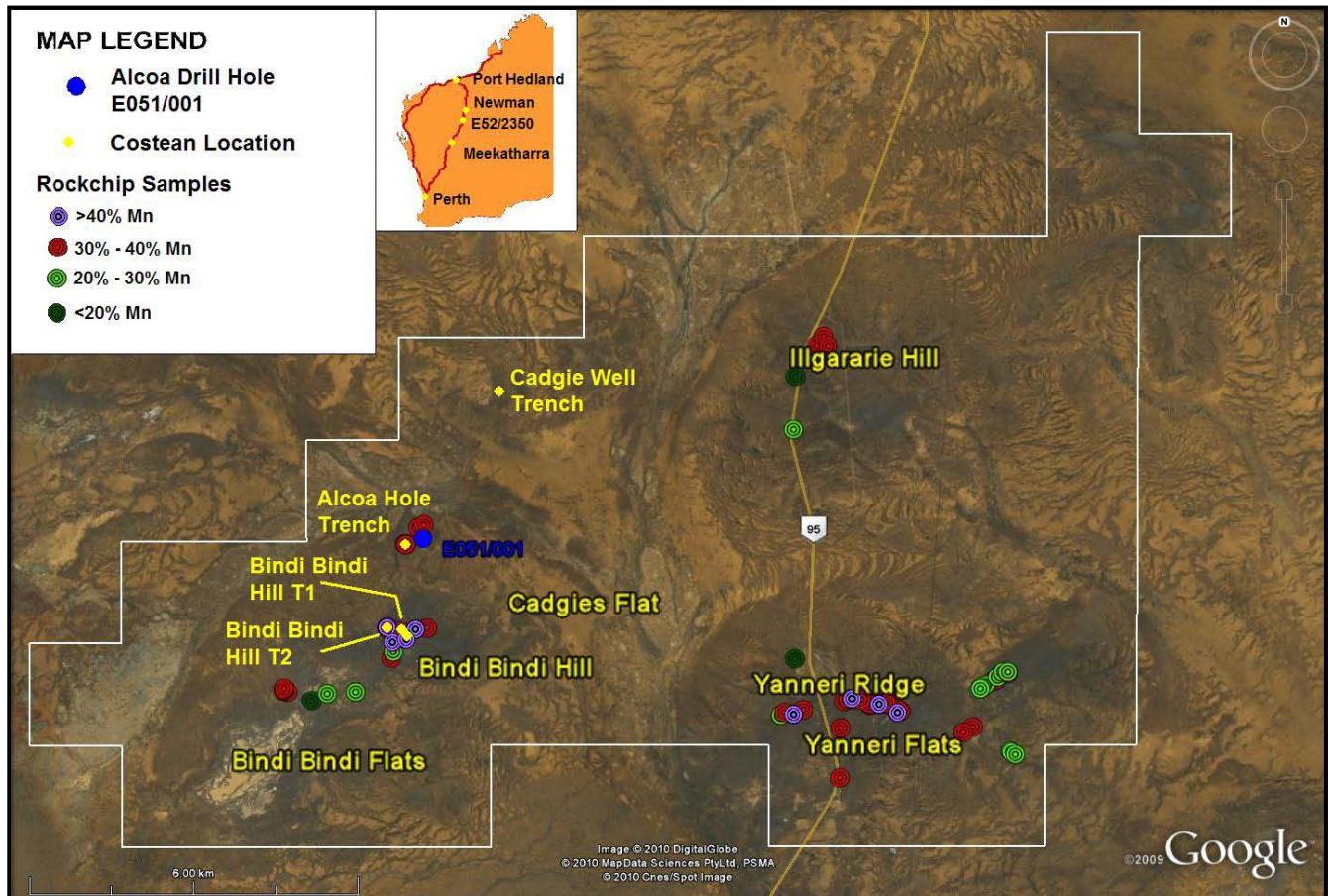


Figure 2: Location map of Alcoa DD Hole E051/001

Drilling at Butcher Bird is scheduled to commence as soon as the rig currently working at the Peak Hill Project has completed an initial phase of approximately 5-6000m of drilling. It is estimated that the Butcher Bird work programme will commence in mid-June.

## 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 "Australian 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.