



## **Comstock Mine Water Monitoring Report – June 2007 Quarter**



**August 2007**

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## **1.0 Introduction**

Oceania Tasmania Pty Ltd (Oceania) is a wholly owned subsidiary of Zeehan Zinc Limited (Zeehan Zinc), and holds Comstock Mining Leases, 43M/85, 19M/1995, 123M/47 and 9M/2002. No extraction of Zn-Pb-Ag ore has occurred on site since September 2000 with major works concentrated on a Gravity Plant Development and commissioning, communications, tailings dam and polishing pond development, water storage, rehabilitation and extensive resource drilling program.

Section 37 of the Level 2 Mining Activity Environmental Permit (DPIWE, 6 July 2001) states it is a requirement for Oceania to carry out routine water quality tests every 3 months. This report summarises the required monitoring schedule including data from May 2001 to July 2007.

## **2.0 Water Monitoring**

Water samples at monitoring sites W1 and W3 (Figure 1) were collected in July 2007 and analysed at 'Analytical Services Tasmania' for pH, conductivity, total suspended solids (Al, Cd, Co, Cr, Cu, Fe, Mn, Ni, Pb, Zn), total alkalinity and acidity and as of this quarter hardness. Water monitoring site W2 (Figure 1), upper and lower Comstock Creek (supplementary sites) was not tested due to no flow.



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**Figure 1.** Location Map of the Comstock mine showing water monitoring locations: Water monitoring site W4 will no longer be a testing site as the silt traps that were located here no longer exist. These were removed in the construction of the tailings dam. Silt traps and sediment pond are currently being constructed in strategic locations around the whole mine site. These locations will be reported in the next quarter.

To supplement the quarterly water monitoring, twice weekly water sampling of 17 selected sites (Figure 29) around the mine area commenced (25 June 2007). Some of these sites included in this regime are currently being constructed and will be included as soon as completed.

### 3.0 Results

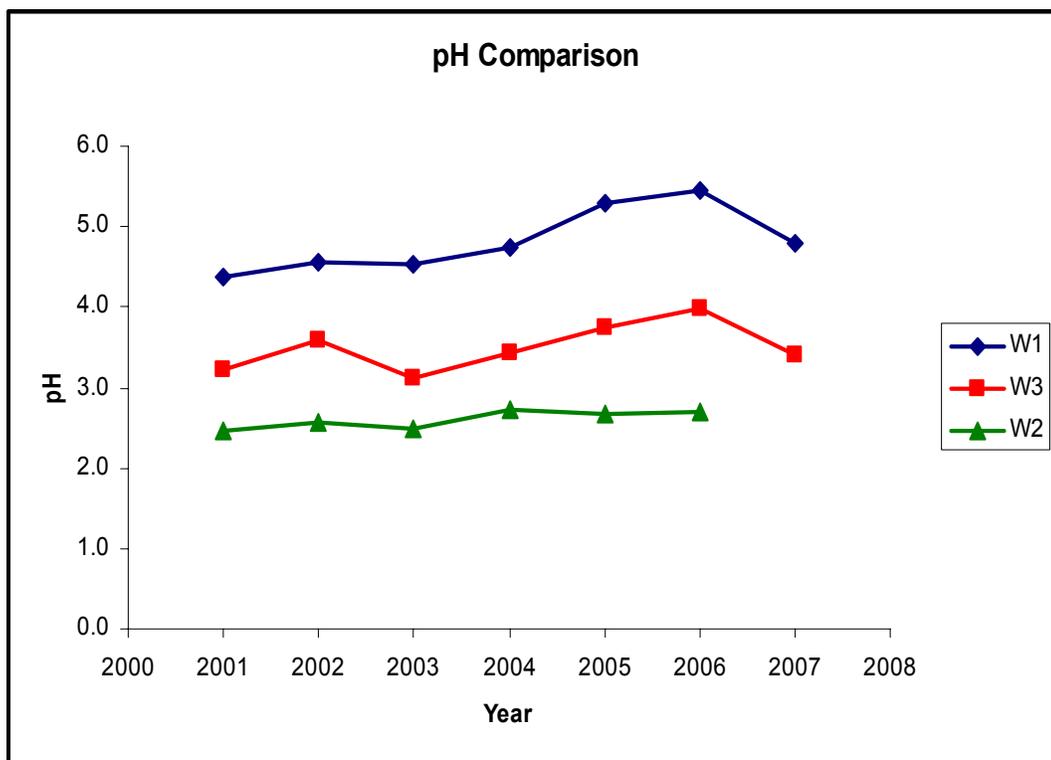


Figure 2 – Yearly average comparison of pH values at sites W1, W2 and W3

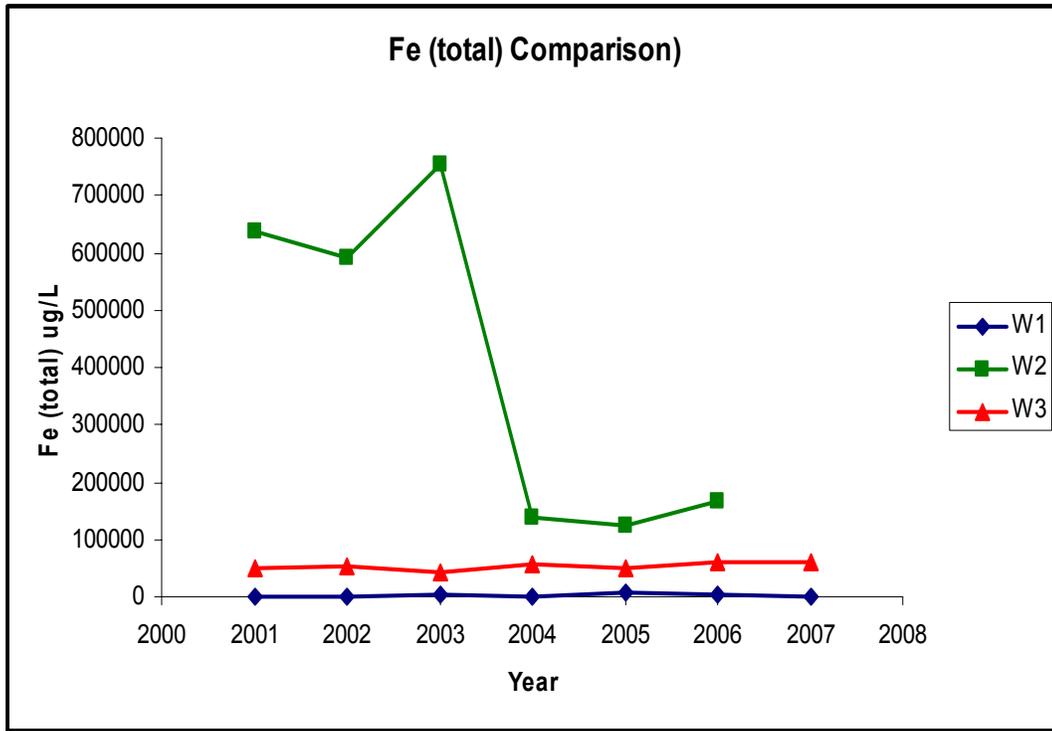


Figure 3 – Yearly average comparison of Fe (total) values at sites W1, W2 and W3

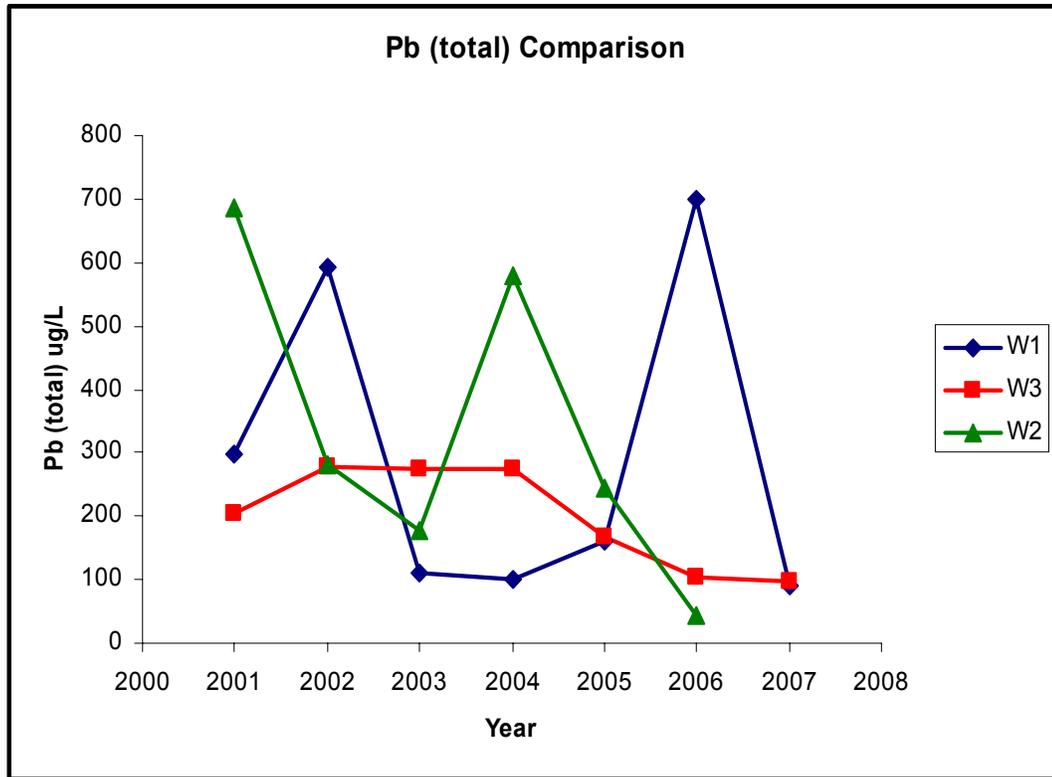


Figure 4 – Yearly average comparison of Pb (total) values at sites W1, W2 and W3

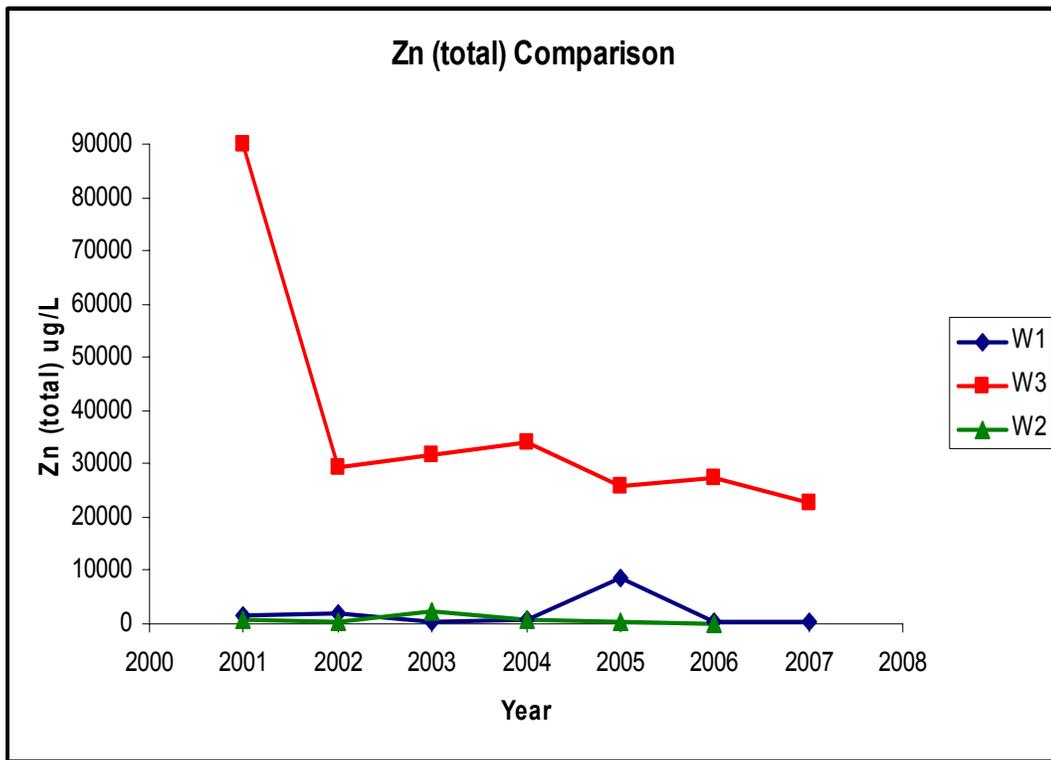


Figure 5 – Yearly average comparison of Zn (total) values at sites W1, W2 and W3

**Appendix 1**

Laboratory Analysis Results



**ANALYTICAL SERVICES TASMANIA**

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## Laboratory Report

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**Report No:** 32535      **Issue No:** 1      **Report Date:** 09-Aug-2007 16:42

**Status:** Full Report

**Site Description:** COMSTOCK

**Received:** 16-Jul-07

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**Submitted to:** New Town Laboratory

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**Client Order No:** 1188

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The tests, calibrations or measurements covered by this document have been performed in accordance with NATA requirements which include the requirements of ISO/IEC 17025 and are traceable to national standards of measurement.

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Samples analysed as received.



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## ANALYTICAL SERVICES TASMANIA

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Method	Analyte	Units / Sampled On :	Lab.No.:	111128	111129
			Sample Id.:	w1	w3
			12/07/07 12:00	12/07/07 12:45	
1001-Water	pH			4.9	3.3
1002-Water	Conductivity	µS/cm		112	904
1005-Water	TSS	mg/L		<1	<1
1101-Water	Alkalinity Total	mg CaCO3/L		<2	<2
1102-Water	Acidity	mg CaCO3/L		7	108
1109-Water	Hardness	mg CaCO3/L		15.8	274
1301-Water	Al Dissolved	µg/L		212	2170
	Al Total	µg/L		288	2750
	As Dissolved	µg/L		<5	12
	As Total	µg/L		<5	181
	Cd Dissolved	µg/L		2	20
	Cd Total	µg/L		2	21
	Co Dissolved	µg/L		2	52
	Co Total	µg/L		3	52
	Cr Dissolved	µg/L		<1	<1
	Cr Total	µg/L		<1	<1
	Cu Dissolved	µg/L		4	3
	Cu Total	µg/L		5	3
	Fe Dissolved	µg/L		232	1490
	Fe Total	µg/L		886	58000
	Mn Dissolved	µg/L		174	9290
	Mn Total	µg/L		171	9280
	Ni Dissolved	µg/L		9	100
	Ni Total	µg/L		9	100
	Pb Dissolved	µg/L		74	74
	Pb Total	µg/L		104	113
Zn Dissolved	µg/L		547	23900	
Zn Total	µg/L		530	23700	
1302-Water	Ca Dissolved	mg/L		1.72	52.1
	Mg Dissolved	mg/L		2.80	34.8