

Operational Training and Volunteerism
8 Lakeside Drive, Burwood East VIC 3151



4 December 2013

Country Fire Authority
8 Lakeside Drive
Burwood East Vic 3151

Dear,

Water Monitoring Results: Fiskville Batch 13-5139

The attached Central Highlands Water test results dated 31 October 2013 indicate the pH measured in water from the Red Pipe – PG Tank and the Beige Pipe – BU Tank reported 8.5 and 9.1 respectively. The pH value for the Beige Pipe – BU Tank is in slight exceedance of the water quality criterion range for pH (6.0 to 9.0), as stated in the Water Management Plan for Fiskville.

High pH levels in water at Fiskville have previously been linked with water supply from Lal Lal Reservoir, leaching of alkaline material from concrete lined pipes and low water use at CFA Fiskville Training Ground.

Criteria for pH are typically provided to minimise corrosion to infrastructure (low pH) and prevent scaly build up in pipes (high pH) or for aesthetic reasons (poor taste and odour). However, alkaline water with a pH greater than 10 may lead to gastrointestinal irritation in sensitive individuals and irritation of the eye, skin and mucous membranes at pH above 11. Therefore, the pH of 9.1 is not considered a human health problem.

The results have previously been reviewed by water quality and health specialists of Cardno Lane Piper and reported that these results do not indicate any water quality issues that would make the water from the Beige Pipe BU Tank unsuitable for use in fire fighting training. Additional monitoring of pH will be considered to ensure pH levels do not approach 10.

Yours sincerely,

CENTRAL HIGHLANDS WATER - LABORATORY SERVICES

7 Learmonth Rd. Wendouree, PO Box 152, Ballarat 3353 ABN: 75 224 340 348
Chemistry: 03 53203195 Microbiology: 03 53 203193 Email: laboratory@chw.net.au

TEST REPORT

Laboratory Report No: 13/5139

Client: CFA Training College - Fiskeville
Ballan - Geelong Road
FISKEVILLE VIC 3342

Attention:

Date Received: 31/10/13

Job Description: CFA Training Centre Fiskville

| LAB. No. | SAMPLE | SAMPLED |
|-----------|----------------------|------------|
| 13/5139-1 | Red Pipe - PG Tank | 31/10/2013 |
| 13/5139-2 | Beige Pipe - BU Tank | 31/10/2013 |

| Test Description | Method | Units | 13/5139-1 | 13/5139-2 |
|--------------------------------|-------------|-----------|-----------|-----------|
| BOD ₅ | CHW-BOD | mg/L | <5 | <5 |
| E. coli - Colilert | CHWM.08 | MPN/100mL | 0 | 0 |
| Electrical Conductivity @ 25°C | CHW-EC | µS/cm | 510 | 520 |
| Oil & Grease at ALS | | mg/L | <5 | <5 |
| pH | CHW - pH | Units | 8.5 | 9.1 |
| Ps. aeruginosa | CHWM.07 | cfu/100mL | 0 | 0 |
| Phosphorus - Total (Low) | CHW - Tot P | mg/L | 0.015 | 0.060 |
| Suspended Solids | CHW - SS | mg/L | 1 | 1 |
| Total Oxidised Nitrogen (as N) | CHW - Ox.N | mg/L | 0.81 | 1.0 |
| Total Kjeldahl Nitrogen (as N) | CHW - TKN2 | mg/L | 0.5 | 0.3 |

Analytical methods for chemical analyses in accordance with Central Highlands Water Laboratory Chemistry Methods (2013).
Analytical methods for microbiological analyses in accordance with Central Highlands Water Microbiology Methods Manual (2013).
Volatile Acid analysis not covered by NATA Accreditation.

Comments

Samples as received.
Bacteriological analysis performed on day of receipt.
O&G analysis performed at ALS, Accreditation No. 992.
Refer ALS Report No. 401026.

Digitally signed by Geoffrey
Prater
DN: cn=Geoffrey Prater,
o=Central Highlands Water,
ou=Laboratory Services

Digitally signed by Kate Martin
DN: cn=Kate Martin, o=Central
Highlands Water, ou=Laboratory

Signed

Report Date: 12 November 2013

Name

Chemistry

Microbiology

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