Title	Maintain chromatographs		
Level	4	Credits	4

Purpose	People credited with this unit standard are able to: – calibrate chromatographs; and – maintain and repair chromatographs.

Classification	Industrial Measurement and Control > Industrial Measurement and Control - Maintenance

Available grade	Achieved	42

#### Guidance Information

- 1 This unit standard has been developed for learning and assessment in a workplace environment.
- 2 References

ANSI/ISA-51.1-1979 (R1993) *Process Instrumentation Terminology;* Electricity Act 1992; Electricity (Safety) Regulations 2010; Health and Safety at Work Act 2015 and associated regulations; ISSN 0114-0663, *New Zealand Electrical Codes of Practice*, available from Worksafe, <u>https://worksafe.govt.nz/;</u> and all subsequent amendments and replacements.

3 Definitions

*Industry requirements* – includes all asset owner requirements; manufacturers' specifications; enterprise requirements which cover the documented workplace policies, procedures, specifications, and business requirements; and quality management requirements relevant to the workplace in which the assessment is carried out.

*Maintain* – planned activity during normal operation, to conserve or keep an item or piece of equipment in a state of repair and to ensure that this is done in a sustainable way.

*Repair* – unplanned and often urgent work that needs to be carried out to restore plant or equipment to normal operation.

4 Recommended skills and knowledge: Unit 28081, *Demonstrate knowledge of gas analytical measurement flame, gas, smoke, and heat detection.* 

# Outcomes and performance criteria

## Outcome 1

Calibrate chromatographs.

## Performance criteria

1.1	Explain and follow safe work procedures.	
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Range may include but is not limited to – isolation, pressure.

1.2 Select test equipment according to accuracy and range of devices.

Range may include but is not limited to – test solution, test gases.

1.3 Identify type and cause of typical errors.

Range may include but is not limited to – gas sample, column selection.

- 1.4 Calibrate devices to an accuracy specified by the data sheet.
- 1.5 Document test results in accordance with industry requirements.

## Outcome 2

Maintain and repair chromatographs.

#### Performance criteria

- 2.1 Locate, interpret, and apply technical information for maintaining equipment.
- 2.2 Explain and follow safe work procedures.

Range may include but is not limited to – isolation, pressure.

2.3 Carry out maintenance and perform repairs to ensure correct and continued operation.

Range may include but is not limited to – tools, materials, parts, techniques, specifications.

2.4 Produce maintenance reports in accordance with industry requirements.

# This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Process	Version	Date	Last Date for Assessment
Registration	1	31 October 1995	31 December 2013
Revision	2	4 November 1997	31 December 2013
Revision	3	3 April 2001	31 December 2013
Review	4	22 June 2001	31 December 2013
Review	5	19 May 2008	31 December 2019
Review	6	21 November 2013	31 December 2027
Rollover and Revision	7	28 June 2018	31 December 2027
Review	8	30 January 2025	31 December 2027

Consent and Moderation Requirements (CMR) reference

0003

This CMR can be accessed at http://www.nzqa.govt.nz/framework/search/index.do.