



PAPUA NEW GUINEA LABORATORY ACCREDITATION SCHEME

**PAPUA NEW GUINEA LABORATORY ACCREDITATION
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CHEMICAL TESTING LABORATORIES

Italpreziosi South Pacific Ltd. Chemical Division Laboratory (ISPCD)

ACCREDITATION No: 68

ISPCD Laboratory,
ISP Chemical Division Laboratory
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FACILITIES: Conditionally available for public testing

SCOPE OF ACCREDITATION

Date: 23 March 2017

7.01 Metals and Alloys

.31 Precious Metals

Analysis by Fire Assay
By in-house method; Determination of Gold Content – Gravimetric (Fire Assay) -
ISPCDQD-NM-002

CHEMICAL TESTING LABORATORIES

Intertek Testing Services (PNG) Limited

ACCREDITATION NO: 46

ITS (PNG) Limited
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Voco Point Road
Lae

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FACILITIES: Public Testing

SCOPE OF ACCREDITATION

7 June 2016

7.01 Metals and Alloys

- .31 Precious Metals
Analysis by fire assay and Atomic Absorption Spectrometer (AAS)
By the methods of –
In-house methods FA30 & FA50
For the following determination –
Gold

7.03 Ores and minerals

- .18 Precious Metal Ores
Analysis by direct combustion and infrared absorption
By the methods of –
In-house method ST01
For the following determination –
Sulphur

CHEMICAL TESTING LABORATORIES

Morobe Mine Joint Venture (MMJV) Hidden Valley Environmental Chemistry Laboratory

ACCREDITATION NO: 60

Hidden Valley Environmental Chemistry Laboratory
Hidden Valley Services Ltd
Morobe Mining Joint Venture
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Morobe Province

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FACILITIES: Not normally available for public testing

SCOPE OF ACCREDITATION

Date: 27 October 2015

7.81 Constituents of the Environment

Analysis by classical techniques, uv-vis spectrophotometric
by the methods of –
APHA 2310 B, 2320 B, 2510 B, 2540 D, 4500-H*B and In-house method 05-01-001, 05-01-002, 05-02-004

- .11 Waters other than saline
for the following determinations:
acidity; alkalinity; conductivity; cyanide (total); cyanide (WAD – weak acid dissociable); pH; solids-total suspended; sulphate in water

CHEMICAL TESTING LABORATORIES

National Agriculture Quarantine and Inspection Authority (NAQIA), National Animal Health and Food Testing Laboratory (NAHFTL)

ACCREDITATION NO: 57

National Animal Health and Food Testing Laboratory
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Port Moresby
National Capital District

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FACILITIES: Available for public testing

SCOPE OF ACCREDITATION

Date: 30 September 2015

7.51 Foods

- .05 Fish, Crustaceans and molluscs
Analysis by HPLC & Fluorometric
By methods of –
In-house NAHFTL-STM-HISTAMINE 1 & NAHFTL-HPLC-HISTAMINE For the
following determination:
Histamine

CHEMICAL TESTING LABORATORIES

New Britain Palm Oil (NBPOL) Mosa Central Laboratory

ACCREDITATION No: 56

NBPOL Mosa Central Laboratory
New Britain Oil Palm Limited
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Kimbe, West New Britain Province
Papua New Guinea

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FACILITIES: Not available for public testing

SCOPE OF ACCREDITATION

Date: 23 March 2017

7.66 Waters

.01 Waters for portable and domestic purposes

Analysis by classical techniques

By the methods of -

APHA 2540B, 2540C, 2540D, 4500-H+B, 5210, 5520B, 4500-NH₃ B and C: 2012,
4500-Norg B: 2012, 4500-NH₃ C: 2012 and 2120 B

By the methods of –

Reactor Digestion Technique, Photometer System (Lovibond) Method

In-house method 05-01-001, 05-01-002, 05-01-003, 05-01-004, 05-01-005, 05-01-006,
05-01-007, 05-01-008, 05-01-009, 05-01-010, 05-01-011, 05-01-012, 05-01-013 and
05-02-001

For the following determinations:

pH, Total Solids, Total Suspended Solid, Total Dissolved Solid, Oil & Grease,
Biochemical Oxygen Demand, Turbidity, Ammoniacal Nitrogen, Total Nitrogen,
Determination of Chemical Oxygen Demand, Determination of Nitrates, Determination
of Phosphates, color and E-Coli and Total Coliform.

.05 Trade wastes

Tests as listed under 7.66.01

.07 Bore waters

Tests as listed under 7.66.01

.71 Sampling

By the methods of –
APHA 1060B

.99 Other waters

Tests as listed under 7.66.01

CHEMICAL TESTING LABORATORIES

Oil Search Laboratory

ACCREDITATION No: 54

Oil Search Laboratory,
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NCD 121

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FACILITIES: Not available for public testing

SCOPE OF ACCREDITATION

Date: 3 February 2017

7.15 Crude Petroleum

.12 Physical tests

Analysis by classical techniques
By methods of
ASTM methods D323, D1298, D4007
For the following determinations:
API gravity, water and sediment, and vapour pressure

7.16 Fuels

.02 Liquid fuels

Analysis by classical techniques
By methods of ASTM methods D56, D86, D93, D130, D156, D976, D1094, D1298,
D1319, D1322, D2386, D2500, D2709, D3242, D3338, D3948, D4176, D5452, D1840,
D3227, and E203.
For the following determinations:
Colour, flash point (TCC and PM), sediments and water, freezing point, water reaction,
water separation, smoke point, total acidity, corrosiveness, aromatics, recovery
(distillation), particulate contamination, free water and particulate contamination, cloud
point, cetane index, net heat combustion, naphthalene hydrocarbons, (Thio Mercaptan)
Sulfur, water using volumetric fischer titration.

7.66 Waters

.01 Waters for potable and domestic purposes

Analysis by classical and UV-Vis Spectrophotometry techniques
by the methods of –
APHA 2540B, 2320B, 4500-Cl⁻B, 2340C, 4500SO₃²⁻
In-house method 04-03-OSL-H 8025 (DR5000), 04-03-OSL-970, 04-03-OSL Orion-
920A, 04-03-OSL-Orion Dual Star, 04-03-OSL-H Sension EC 5, 04-03-OSL-HACH
(2100Q), 04-03-OSL-H 8021 (DR5000), 04-03-OSL-H 10069 (DR5000)
for the following determinations;
Total solids, alkalinity, chloride, hardness, sulfite, colour apparent, pH, conductivity,
turbidity, free chlorine LR, free chlorine HR.

CHEMICAL TESTING LABORATORIES

.04 Sewage
Analysis by classical techniques
by methods of –
APHA 5210B, 2450D,
In-house method 04-03-OSL-Orion Dual Star, 04-03-OSL-H 8167, 04-03-OSL-H
10070
For the following determinations –
Biological Oxygen Demand, total suspended solid, pH, chlorine residual LR, chlorine
residual HR,

.07 Bore Waters
Tests as listed under 7.66.01

7.81 Constituents of the environment

.11 Waters other than saline
Tests as listed under 7.66.01

8.18 Microbiological tests for monitoring defined environments

.03 Waters

Analysis by classical techniques
by the methods 04-05-001, 04-05-002, 04-05-003, 04-05-004 – Colilert-18 and 04-05-
005 – Colilert-18
for the following determinations:
Coliforms, Escherichia coli and thermotolerant coliforms, coliforms in water

CONSTRUCTION MATERIAL TESTING LABORATORIES

ACEM Geotechniques Limited Laboratory

ACCREDITATION NO: 28

ACEM Geotechniques
Port Moresby Laboratory
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GORDONS NCD
PAPUA NEW GUINEA

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FACILITIES: Public testing service

SCOPE OF ACCREDITATION

Issue Date: 08 July 2016

2.12 Concrete

by the methods of –
AS 1012.1, 3.1, 8.1, 9, 12.1

.01 Sampling

Fresh concrete

.12 Consistence

Slump test

.20 Making and curing test specimens

Making and curing compression test specimens in the field, concrete with slump ≥ 40 mm; making and curing test specimens in the laboratory; curing test specimens in the laboratory (compression specimens)

.23 Compression tests on moulded specimens

Tests in the range 20 to 1 000kN

.27 Mass per unit volume of hardened concrete

Measurement method

2.16 Aggregates

by the methods of –

AS 1141 3.1, 4, 5, 6.1, 11.1, 12,14, 15, 20.1, 21, 22,23, 24, 32

.01 Sampling

Sampling from a stockpile

.11 Bulk density

.12 Particle density and water absorption

Fine and course aggregate

.13 Particle size distribution

Sieve analysis, material finer than 75 μ m

.16 Particle shape tests

Proportional calliper, flakiness index,

.20 Aggregate strength tests

Aggregate crushing value, wet/dry strength variation

.21 Abrasion tests

Los Angeles value

.23 Soundness tests

Exposure to sodium sulphate solution

.24 Contaminants

Weak particles

2.18 Soils

CONSTRUCTION MATERIAL TESTING LABORATORIES

by the methods of –

AS 1289 1.1, 1.2.1, 2.1.1, 3.1.1, 3.1.2, 3.2.1, 3.3.1, 3.4.1, 3.6.1, 5.1.1, 5.2.1, 5.3.1, 5.4.1,
5.8.1, 6.1.1, 6.3.2

- .01 Sampling**
Disturbed sampling from a stockpile, pavement
- .03 Sample preparation**
Sample preparation
- .11 Classification tests**
Moisture content; liquid limit, plastic limit,
plasticity index; linear shrinkage; sieve analysis
- .32 Compaction tests**
Standard and modified compactions
- .35 Field density tests**
Field density (sand-cone);
dry density ratio, moisture variation and moisture ratio; field
density using a nuclear gauge
- .42 Bearing strength tests**
Bearing ratio (remoulded specimens CBR's 8 to 250%);
- .47 Strength and penetration field tests**
Penetration (dynamic-cone)

CONSTRUCTION MATERIAL TESTING LABORATORIES

AG Investment Material Testing Laboratory

ACCREDITATION NO: 65

AGI Materials Testing Laboratory
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FACILITIES: Public testing service

SCOPE OF ACCREDITATION

Issue Date: 27 May 2016

2.12 Concrete

by the methods of –
AS 1012.1, 3.1, 8.1, 9, 12.1

.01 Sampling

Fresh concrete

.12 Consistence

Slump test

.20 Making and curing test specimens

Making and curing test specimens in the field, compression specimens; flexural test specimen
Making and curing test specimens in the laboratory
Curing test specimens in the laboratory (compression specimens; flexural test specimen)

.23 Compression tests on moulded specimens

Tests in the range 150kN to 1500kN

.24 Compression tests on hardened concrete cores

Tests in the range 150kN to 1500kN

.27 Mass per unit volume of hardened concrete

Measurement method

2.16 Aggregates

by the methods of –
AS 1141 3.1, 21, .22

.01 Sampling

Sampling from a stockpile

.20 Aggregate strength tests

Aggregate crushing value; wet/dry strength variation.

2.18 Soils

by the methods of –
AS 1289 1.1, 1.2.1, 2.1.1, 3.1.1, 3.1.2, 3.2.1, 3.3.1, 3.4.1, 3.6.1, 5.1.1, 5.2.1, 5.3.1, 5.4.1, 6.1.1

.01 Sampling

Disturbed sampling from a stockpile

.03 Sample preparation

Sample preparation

.11 Classification tests

Moisture content (drying oven); liquid limit (Four point Casagrande, One point Casagrande); plastic limit; plasticity index; linear shrinkage; sieve analysis

.32 Compaction tests

Standard compaction and modified compaction,

.35 Field density tests

Field density (sand-cone); dry density ratio, moisture variation and moisture ratio;

.42 Bearing strength tests

Bearing ratio (remoulded specimens CBR's_%)

CONSTRUCTION MATERIAL TESTING LABORATORIES

Cardno (PNG) Ltd Testing Laboratory

ACCREDITATION NO: 66

Cardno (PNG) Ltd
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Port Moresby

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FACILITIES: Available for public testing service

SCOPE OF ACCREDITATION

Date: 07 November 2016

2.12 Concrete

by the methods of
AS 1012.1, 3.1, 4.2, 5, 8.1, 9, 12.1, 14

- .01 Sampling**
Fresh concrete
- .12 Consistence**
Slump test
- .13 Air content of freshly mixed concrete**
Reduced air pressure
- .14 Mass per unit volume of freshly mixed concrete**
- .21 Making and curing test specimens in the field**
Compression and indirect tensile specimens
- .22 Making and curing test specimens in the laboratory**
Curing test specimens in the laboratory (compression and indirect tensile specimens)
- .23 Compression tests on moulded specimens**
Tests in the range 0 to 1000kN
- .24 Compression tests on hardened concrete cores**
Test in the range 0 to 1000kN
- .27 Mass per unit volume of hardened concrete**
Measurement method
- .29 Securing and testing cores from hardened concrete**
Securing, preparation (wet and dry) and conditioning of cores

2.16 Aggregates

by the methods of
AS 1141.3.1, 4, 5, 6.1, 11.1, 12, 15, 20.3, 21, 22, 23, 24, 33, 34, AS5101.4

- .01 Sampling**
Sampling from a stockpile
- .11 Bulk density**
- .12 Particle density and water absorption**
- .13 Particle size distributions**
Sieve analysis; materials finer than 75µm
- .16 Particle shape tests**
Proportional calliper, flakiness index and average least dimension
- .20 Aggregate crushing value**
- .21 Wet/dry strength variation**
- .22 Los Angeles value**

CONSTRUCTION MATERIAL TESTING LABORATORIES

- .51 Stabilisation tests**
 - Unconfined compressive strength

2.18 Soils

by the methods of –

AS 1289.1.1, 1.2.1, 1.4.1, 1.4.2, 2.1.1, 3.1.1, 3.1.2, 3.2.1, 3.3.1, 3.4.1, 3.5.1, 3.6.1, 3.8.1, AS 1726 Appendix A, Section A2 (laboratory tests only) , 5.1.1, 5.2.1, 5.3.1, 5.4.1, 5.4.2, 5.7.1, 5.8.1, 6.1.1, 6.3.2, AS5101.2.2

- .01 Sampling**

- Disturbed sampling from a stockpile

- .11 Classification tests**

- Sample preparation; site selection by random number; site selection by stratified random number; moisture content; liquid limit; plastic limit; plasticity index; linear shrinkage; particle density; sieve analysis; Emersion class number; description, identification and classification of soils

- .31 Compaction and density tests**

- Standard and modified compactions; field density (sand cone); dry density ratio, moisture variation and moisture ratio; dry density ration (rapid method) assignment of OMC and MDD; compaction control-Hilf method; field moisture content and field density using a nuclear gauge

- .41 Strength and consolidation tests**

- Bearing ratio (remoulded specimens CBR's ___%); penetration (dynamic-cone)

- .61 Soils stabilization preparation methods**

- Preparation of cement stabilized materials

CONSTRUCTION MATERIAL TESTING LABORATORIES

China Harbour Engineering Company Limited Port Moresby Testing Laboratory

ACCREDITATION NO: 64

China Harbour Engineering Limited

Port Moresby Testing Laboratory
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FACILITIES: Available for public testing service

SCOPE OF ACCREDITATION

Date: 13 March 2017

2.11 Cements and cementitious materials

by the methods of
AS/NZS 2350 .3, 4, 5, 11, 12,

.11 Portland cement

Preparation of specimens; normal consistency; setting time; soundness;
compression strength tests in range 0 to 2000kN

.12 Blended cement

Preparation of specimens; normal consistency; setting time; soundness;
compression strength tests in range 0 to 2000kN

2.12 Concrete

by the methods of
AS 1012.1, 2, 3.1, 3.3, 8.1, 9, 12.1

.01 Sampling

Fresh concrete

.11 Mixing concrete and making test specimens in the laboratory

.12 Consistence

Slump test and Vebe test

.21 Making and curing test specimens in the field

Compression and indirect tensile specimens

.22 Making and curing test specimens in the laboratory

Curing test specimens in the laboratory (compression and indirect tensile
specimens)

.23 Compression tests on moulded specimens

Tests in the range 0kN to 2000kN

.24 Compression tests on hardened concrete cores

Test in the range 0kN to 2000kN

.27 Mass per unit volume of hardened concrete

Measurement method

2.16 Aggregates

by the methods of
AS 1141.3.1, 4, 5, 6.1, 11.1, 12, 14, 15, 18, 20.1, 22, 23, 24, 32, 50, Q101, Q103B, Q201,
Q205A, Q205B, Q205C, Q214B, Q215, Q217

CONSTRUCTION MATERIAL TESTING LABORATORIES

- .01 Sampling**
Sampling from a stockpile
- .11 Bulk density**
- .12 Particle density and water absorption**
- .13 Particle size distributions**
Sieve analysis; materials finer than 75µm
- .16 Particle shape tests**
Proportional calliper and average least dimension
- .17 Flakiness index**
- .21 Wet/dry strength variation**
- .22 Los Angeles value**
- .23 Soundness tests**
Exposure to sodium sulphate solution
- .25 Weak particles**
- .40 Adhesion of aggregates and binders**
Resistance to stripping
- .42 Crushed faces**

2.17 Bituminous Materials

by the methods of –

AS/NZS 2341.2, AS/NZS 2341.10, AS 2341.11, AS 2341.12, AS 2341.18

- .12 Viscosity tests**
Viscosity (dynamic-capillary tube)
- .13 Penetration tests**
Penetration
- .28 Softening point tests**
Softening point ring and ball
- .35 Durability tests**
RTFO test, long term exposure to heat and air
- .42 Ductility**

Ductility

2.18 Soils

by the methods of –

AS 1289.1.1, 1.2.1, 2.1.1, 3.1.1, 3.2.1, 3.3.1, 3.6.1, 5.1.1, 5.2.1, 5.3.1, 6.1.1, 6.3.2

- .01 Sampling**
Disturbed sampling from a stockpile
- .11 Classification tests**
Sample preparation; moisture content; liquid limit; plastic limit; plasticity index; sieve analysis
- .31 Compaction and density tests**
Standard and modified compactions; field density (sand cone)
- .41 Strength and consolidation tests**
Bearing ratio (remoulded specimens CBR's ___%); penetration (dynamic-cone)

2.19 Asphalts

by the methods of-AS/NZS 2891.3.2,

Q301, Q302B, Q303A, Q303B, Q305, Q306A, Q307A, Q308D, Q309, Q311, Q314

- .01 Sampling**
Uncompacted samples and compacted samples - cores (wet)
- .03 Sample preparation**

CONSTRUCTION MATERIAL TESTING LABORATORIES

- Sample preparation
- .10 Asphalt analysis**
 - Bitumen content and aggregate grading (Centrifugal extraction method)
 - Bitumen content and aggregate grading (ignition oven)
- .20 Mechanical properties**
 - Marshall stability and flow
- .30 Volumetric properties**
 - Maximum density (water displacement); voids and density relationships; bulk density (waxing)
- .40 Field tests**
 - Density ratio
- .50 Mix design**
 - Asphalt tolerance mixes

13.01 Metals and metal products

by the methods of –
AS1391, AS/NZS 4671

- .11 Tension tests on test pieces**
 - Tests in the range 0 kN to 1000 kN at ambient temperature
- .61 Tests on reinforcement for concrete**
 - Tension tests in the range 0kN to 1000 kN

CONSTRUCTION MATERIAL TESTING LABORATORIES

Covec (PNG) Ltd. Bougainville Laboratory

ACCREDITATION NO: 72

Covec (PNG) Ltd. Bougainville Laboratory

P O Box 5769,
Boroko,
NCD,
Papua New Guinea

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FACILITIES: Available for Public Testing

SCOPE OF ACCREDITATION

Date: 10 February 2017

2.12 Concrete

By the methods of
AS 1012.1, 9

.01 Sampling

Fresh concrete

.23 Compression tests on moulded specimens

Tests in the range 0 to 500kN

.24 Compression tests on hardened concrete cores

Tests in the range 0 to 500kN

2.16 Aggregates

By the methods of
AS 1141.3.1, 11.1, 24, 32

.01 Sampling

Sampling from a stockpile

.13 Particle size distribution

Sieve analysis; materials finer than 75µm

.21 Abrasion tests

Los Angeles Value

.24 Contaminants

Weak particles

2.18 Soils

By the methods of
AS 1289.1.1, 1.4.1, 2.1.1, 3.1.1, 3.2.1, 3.3.1, 3.4.1, 3.5.1, 3.6.1, 5.1.1, 5.2.1, 5.3.2, 5.4.1,
5.4.2, 6.1.1

.02 Sampling

Site selection by random number

.03 Sample Preparation

Sample preparation

.11 Classification tests

Moisture content (drying oven); liquid limit (Casagrande); plastic limit; plasticity index;
linear shrinkage; sieve analysis;

.31 Strength and consolidation tests

CONSTRUCTION MATERIAL TESTING LABORATORIES

Standard and modified compactions;

.35 Field density tests

Field density (sand pouring apparatus); dry density ratio, moisture variation and moisture ratio; dry density ratio (rapid method) assignment of OMC and MDD

.42 Bearing strength tests

Bearing ratio (remoulded specimens CBR's __ %)

CONSTRUCTION MATERIAL TESTING LABORATORIES

Department of Works Lae Materials Testing Laboratory

ACCREDITATION NO: 20

Department of Works and Transport
Materials Testing Laboratory
P.O. Box 1261
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Papua New Guinea

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FAX: (675) 472 1344

FACILITIES: Available for public testing

SCOPE OF ACCREDITATION

Dated: 5 November 2015

2.12 Concrete

By the methods of
AS 1012 .1, 3.1, 8.1, 9

.01 Sampling

Fresh Concrete

.12 Consistence

Slump test

.21 Making and curing test specimens in the field

Concrete with slump ~ 40 mm

.22 Curing test specimens in the laboratory

Curing test specimens in the laboratory (compression specimens)

.23 Compression tests on moulded specimens

Tests in the range 100 kN to 2000 kN

2.16 Aggregates

By the methods of
AS 1141.3.1,4,5,6.1 ,11 .1,14.1,15,18,20.1,20.3,21 ,22, 23, 24, 32

.01 Sampling

Sampling from stockpiles

.11 Bulk density

.12 Particle density and water absorption

.13 Sieve analysis

.16 Particle shape test

Proportional calliper; average least dimension

.17 Flakiness index

.20 Aggregate crushing value

.21 Wet/dry strength variation

.22 Los Angeles value

.23 Soundness tests

Exposure to sodium sulphate solution

.25 Weak particles

.42 Crushed faces

2.18 Soils

By the methods of
AS 1289.1, 1.2.1,2.1.1,3.1.1,3.1.2,3.2.1 ,3.3.1,3.4.1,3.5.1, 3.6.1, 3.9.1, 5.1.1 ,5.2.1,5.3.1,5.4.1 ,

CONSTRUCTION MATERIAL TESTING LABORATORIES

5.8.1, 6.1.1, 6.3.2, AS 1726 (site investigation)

.01 Sampling

Disturbed sampling from a stockpile

.11 Classification tests

Sample preparation ; moisture content; liquid limit; plastic limit; plasticity index; linear shrinkage ; particle density ; sieve analysis

.31 Compaction and density tests

Standard and modified compaction ; field density (sand-cone); dry density ratio, moisture variation and moisture ratio ; field moisture content and field density using a nuclear gauge

.41 Strength and consolidation tests

Bearing ratio (remoulded specimens); penetration (dynamic cone).

DOW Specification

By in house methods of
6.2.4

(d) proportional calliper

(e) fractured faces

CONSTRUCTION MATERIAL TESTING LABORATORIES

Department of Works Port Moresby Testing Laboratory

ACCREDITATION NO: 10

Department of Works
Materials Testing Laboratory
P O Box 1108
BOROKO
National Capital District
Papua New Guinea

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FACILITIES: Available for public testing

SCOPE OF ACCREDITATION

Scope dated: 03 September 2015

2.12 Concrete

By the methods of
As 1012 .1, 3.1, 8.1, 9, 12.1, 12.2

.01 Sampling

Fresh Concrete

.12 Consistence

Slump test

.21 Making and curing test specimens in the field

Concrete with slump \geq 40 mm

.22 Curing test specimens in the laboratory

Curing test specimens in the laboratory (compression specimens)

.23 Compression tests on moulded specimens

Tests in the range 40 kN to 1500 kN

.27 Mass per unit volume of hardened concrete

Measurement and displacement methods

2.16 Aggregates

By the methods of
AS 1141.3.1, 4, 5, 6.1, 11.1, 14, 15, 20.1, 23, 24, 32

.01 Sampling

Sampling from a stockpile

.11 Bulk density

.12 Particle density and water absorption

.13 Sieve analysis

.16 Particle shape tests

Average least dimension

.17 Flakiness index

.22 Los Angeles value

.23 Soundness Test

Exposure to sodium sulphate solution

.25 Weak particles

CONSTRUCTION MATERIAL TESTING LABORATORIES

2.18 Soils

By the methods of
AS 1289.1.1, 1.2.1, 1.3.1, 2.1.1, 3.1.1, 3.2.1, 3.3.1, 3.3.2, 3.4.1, 3.6.1, 3.9.1, 5.1.1, 5.2.1,
5.3.1, 5.4.1, 5.8.1, 6.1.1, AS 1726 Appendix A, Section A2 (laboratory tests only), 6.3.2

.01 Sampling

Disturbed sampling from a stockpile; undisturbed sampling using oven-drive samplers

.11 Classification tests

Sample preparation; moisture content; liquid limit; plastic limit; plasticity index; linear shrinkage; sieve analysis; description, identification and classification of soils

.31 Compaction and density tests

Standard and modified compaction; field density (sand cone); dry density ratio, moisture variation and moisture ratio; field moisture content and field density using a nuclear gauge

.41 Strength and consolidation tests

Bearing ratio (remoulded specimens); penetration (dynamic-cone)

2.22 Masonry, clay and concrete products

By the methods of
AS/NZS 4456.2, .3, .4, .5

0.20 Dimensional tests

Geometry

0.30 Strength tests

Compression strength tests; breaking load test

CONSTRUCTION MATERIAL TESTING LABORATORIES

Gazelle Restoration Authority (GRA) Soils Laboratory

ACCREDITATION NO.: 35

Gazelle Restoration Authority

GRA Soils Laboratory

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FACILITIES: Public Testing Facility

SCOPE OF ACCREDITATION

Scope Dated: 19 April 2016

2.12 Concrete

By the methods of -

AS 1012 .1, 3.1, 9, 12.1

.01 Sampling

Fresh Concrete

.12 Consistence

Slump test

.23 Compression tests on moulded specimens

Tests in the range 0 kN to 1500 kN

.27 Mass per unit volume of hardened concrete

Measurement method

2.16 Aggregates

By the methods of

AS 1141.3.1, 11.1

.01 Sampling

Disturbed samples from a stockpile

.13 Sieve Analysis

2.18 Soils

By the methods of

AS 1289.1.1, 1.2.1, 2.1.1, 3.1.1, 3.1.2, 3.2.1, 3.3.1, 3.4.1, 3.6.1, 5.1.1, 5.2.1, 5.3.1, 5.4.1, 5.4.2, 5.8.1, 6.1.1, 6.3.2

.01 Sampling

Disturbed samples from a stockpile; pavement and in-situ

.11 Classification tests

Sample preparation; moisture content; liquid limit; plastic limit; plasticity index; linear shrinkage; sieve analysis.

.31 Compaction and density tests

Standard and modified compaction; field density (sand-cone); density ratio, moisture variation and moisture ratio; assignment of OMC and MDD; field density using a nuclear gauge

.41 Strength and consolidation tests

Bearing ratio test (remoulded specimens CBR's 5 to 200%); penetration (dynamic-cone)

CONSTRUCTION MATERIAL TESTING LABORATORIES

Department of Mineral Policy and Geohazard Management,
Geotechnical Material Testing Laboratory (GMTL)

ACCREDITATION NO: 73

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FACILITIES: Conditionally Available for Public Testing

SCOPE OF ACCREDITATION

Date: 10 February 2017

2.16 Aggregates

By the methods of
AS 1141.3.1, 11.1, 14, 15, 18, 20.1, 20.2, 20.3, 21, 22, 24, 32

.01 Sampling

Sampling from a stockpile

.13 Particle size distribution

Sieve analysis;

.16 Particle shape tests

Proportional calliper, flakiness index, crushed faces and average least dimension

.20 Aggregate strength tests

Aggregate crushing value, wet/dry strength variation

.23 Soundness tests

Exposure to sodium sulphate solution

24 Contaminants

Weak particles

2.18 Soils

By the methods of
AS 1289.1.1, 1.2.1, 1.3.1, 2.1.1, 3.1.1, 3.1.2, 3.2.1, 3.3.1, 3.4.1, 3.6.1, 3.9.1, 5.1.1, 5.2.1, 6.1.1,
6.1.2, 6.3.2

01 Sampling

Disturbed sampling from a stockpile; undisturbed sampling using open-drive samplers

0.3 Sample preparation

Sample preparation

.11 Classification tests

Moisture content (drying oven); liquid limit (Casagrande); plastic limit; plasticity index;
linear shrinkage; sieve analysis

.31 Compaction tests

Standard and modified compactions;

.42 Bearing strength tests

Bearing ratio (remoulded specimens CBR's ___%), Bearing ratio (undisturbed specimens
CBR's ___%)

.47 Strength and penetration tests - field

Penetration (dynamic-cone)

CONSTRUCTION MATERIAL TESTING LABORATORIES

Materials Testing Services (MTS), Curtain Bros

ACCREDITATION NO: 38

Materials Testing Services (MTS)
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FACILITIES: Public Testing Facility

SCOPE OF ACCREDITATION

Date: 22 July 2016

2.12 Concrete

By *the methods of-*
AS1012.1, 3.1, 8.1, 9

.01 Sampling

Fresh concrete

.12 Consistence

Slump test

.20 Making and curing test specimens

Making and curing compression specimens in the field , concrete with slump ~ 40mm ;
making and curing test specimens in the laboratory, curing test specimens in the laboratory,
(compression specimens)

.23 Compression tests on moulded specimens

Tests in the range 40 to 2000 kN

2.16 Aggregates

By *the methods of-*
AS 1141.3.1, 5, 11 .1, 14, 24

.01 Sampling

Sampling from stockpile

.12 Particle Density and water absorption

Particle density and water absorption of fine aggregate,

.13 Particle size distribution

Sieve analysis

.16 Particle shape tests

Proportional calliper

.23 Soundness tests

Exposure to sodium sulphate solution

2.18 Soils

By *the methods of-*
AS 1289.1.1, 1.2.1, 1.4.1, 2.1.1, 3.1 .1, 3.1.2, 3.2.1, 3.3.1, 3.4.1, 3.5.1, 3.6.1, 3.9.1, 5.1.1, 5.2.1, 5.3.1,
5.4.1, 5.8.1, 6.1.1, 6.3.2

CONSTRUCTION MATERIAL TESTING LABORATORIES

.01 Sampling

Sampling from a stockpile, pavement; site selection by random number

.03 Sample preparation

Sample preparation

.11 Classification tests

Moisture content (drying oven), liquid limit (Casagrande four point, Casagrande one point); plastic limit; plasticity index; linear shrinkage; particle density; sieve analysis

.32 Compaction tests

Standard and modified compactions

.35 Field density tests

Field density (sand-cone); dry density ratio, moisture variation and moisture ratio; field density using a nuclear gauge.

.42 Bearing strength tests-laboratory

Bearing ratio (remoulded specimens CBR's_ %)

.47 Strength and penetration tests-field

Penetration (dynamic-cone)

2.22 Masonry units and segmental pavers

By *method of*-
AS/NZS 4456.4

0.3 Strength tests

CONSTRUCTION MATERIAL TESTING LABORATORIES

Monier Materials Testing Laboratory

ACCREDITATION NO: 50

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FACILITIES: Not normally available for public testing service

SCOPE OF ACCREDITATION

Date: 21 October 2016

2.12 Concrete

by the methods of
AS 1012.1, 3.1, 4.2, 6, 8.1, 9, 12.1, 13

.01 Sampling

Fresh concrete

.12 Consistence

Slump test

.13 Air content of freshly mixed concrete

Reduced air pressure

.15 Bleeding

.20 Making and curing test specimens

Making and curing test specimens; compression specimens (in the field) ,making and curing test specimens in the laboratory; curing test specimens in the laboratory (compression specimens)

.23 Compression tests

Compression tests on moulded specimens, tests in the range 0 to 2000kN;
compression tests on hardened concrete cores, test in the range 0 to 2000kN

.27 Mass per unit volume of hardened concrete

Measurement method

.28 Drying shrinkage

Drying and measurement of specimens

2.16 Aggregates

by the methods of
AS 1141.3.1, 4, 5, 6.1, 11.1, 12, 14, 15, 18, 20.1, 20.3, 21, 22, 23, 24, 25.2, 31, 32, 33, 34, Q216

.02 Sampling of aggregates

Sampling from a stockpile

.11 Bulk density

.12 Particle density and water absorption

.13 Particle size distribution

Sieve analysis; material finer than 75µm

.16 Particle shape tests

Proportional calliper; average least dimension and crushed faces

.17 Flakiness index

.20 Aggregate strength tests

Aggregate crushing value; wet/dry strength variation

.21 Abrasion tests

Los Angeles value

.23 Soundness tests

CONSTRUCTION MATERIAL TESTING LABORATORIES

Exposure to sodium sulphate solution; degradation factor on course aggregate

.24 Contaminants

Light particles; weak particles; clay and fine silt; organic impurities other than sugar

.40 Adhesion of aggregates and binders

Degree of pre-coating

2.18 Soils

by the methods of –

AS 1289.1.1, 1.2.1, 2.1.1, 3.1.1, 3.1.2, 3.2.1, 3.3.1, 3.4.1, 3.6.1, 5.1.1, 5.2.1, 6.1.1, 6.3.2, Q141A, Q141B, Q143

.01 Sampling

Disturbed sampling from a stockpile and face

.03 Sample preparation

Sample preparation

.11 Classification tests

Moisture content (drying oven method) ; liquid limit (Casagrande four point; Casagrande one point) plastic limit; plasticity index; linear shrinkage; sieve analysis

.32 Compaction tests

Standard and modified compactions; treatment of oversize

.35 Field density tests

Field density (sand cone); compacted density of soils and crushed rocks (nuclear gauge)

42 Bearing strength tests

Bearing ratio (remoulded specimens CBR's ___%)

.47 Strength and penetration field tests

Penetration (dynamic-cone)

2.19 Asphalts

By the methods of AS 2891.1, 2.1, 3.1, 5, 7.1, 8, 9.1, 9.2, 9.3,

Q050, Q301, Q302A, Q302B, Q303A, Q303B, Q305, Q306A, Q306B, Q306C, Q306E, Q307A, Q308A, Q308C, Q309, Q311, Q315

.01 Sampling

Compacted and uncompacted samples

.02 Site Selection

Site selection by random number, random stratified and systematic random stratified number

.03 Sample preparation

Sample preparation

.10 Asphalt analysis

Bitumen content and aggregate grading (reflux)

.20 Mechanical properties

Marshall stability and flow

.30 Volumetric properties

Maximum density (water displacement); voids and density relationships; bulk density (waxing, silicone sealed, presaturation); binder film thickness; mix volume voids, mix volume ratio

.40 Field tests

Density ratio

.50 Mix design

Asphalt tolerance mixes

.60 Adhesion and stripping

Sensitivity of asphalt to water

2.22 Masonry units and segmental pavers

by methods of –

AS 4456.4, AS 456.5, AS/NZS 4058 Appendix F

.30 Strength tests

CONSTRUCTION MATERIAL TESTING LABORATORIES

Compression strength tests in the range 0 to 2000kN; breaking load tests in the range 0 to 2000kN

.60 Permeability and absorption tests

Absorption

2.24 Road Pavement and Surfaces by method of Q712

.20 Surface profile tests

Rut depth (straight edge)

CONSTRUCTION MATERIAL TESTING LABORATORIES

Nawae Construction Limited Materials Testing Laboratory

ACCREDITATION NO: 59

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FACILITIES: Private testing facility

SCOPE OF ACCREDITATION

Date: 06 November 2015

- 2.12 Concrete**
by the methods of
AS 1012.1, 3.1, 8.1, 8.2, 9, 12.1, 13
- .01 Sampling**
Fresh concrete
- .12 Consistence**
Slump test
- .21 Making and curing test specimens in the field**
Compression and indirect tensile specimens, concrete with slump ≥ 40 mm;
compression and
Indirect tensile specimens; flexural test specimens; drying shrinkage specimens
- .22 Making and curing test specimens in the laboratory**
Curing test specimens in the laboratory (compression, indirect tensile, flexural test
specimens); accelerated curing, drying shrinkage specimens.
- .23 Compression tests on moulded specimens**
Tests in the range 0 to 2000 kN
- .24 Compression test on hardened concrete cores**
Test in the range 0 to 2000 kN
- 2.16 Aggregates**
By the methods of
AS 1141.3.1, 11.1, 12, 15, 33, 34
- .01 Sampling**
Sampling from stockpiles
- .13 Sieve analysis**
- .14 Material finer than 75 μ m**
- .17 Flakiness index**
- .26 Clay and fine silt**
- .27 Organic impurities other than sugar**
- 2.18 Soils**
By the methods of
AS 1289.1.1, 2.1.6
- .11 Classification tests**
Sample preparation, moisture content

CONSTRUCTION MATERIAL TESTING LABORATORIES

Railway Ltd Materials Testing Laboratory

ACCREDITATION NO: 71

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FACILITIES: Available for public testing service

SCOPE OF ACCREDITATION

Date: 23 November 2016

2.12 Concrete

by the methods of
AS 1012.1, 3.1, 8.1, 9, 12.1, 14

- .01 Sampling**
Fresh concrete
- .12 Consistence**
Slump test
- .21 Making and curing test specimens in the field**
Compression and indirect tensile specimens, (concrete with slump \geq 40mm)
- .22 Curing test specimens in the laboratory**
Making and curing test specimens in the laboratory (compression, indirect tensile specimens)
- .23 Compression tests on moulded specimens**
Tests in the range 0 to 1500kN
- .24 Compression tests on hardened concrete cores**
Test in the range 0 to 1500kN
- .27 Mass per unit volume of hardened concrete**
Measurement method
- .29 Securing and testing cores from hardened concrete**
Securing, preparation (wet and dry) and conditioning of cores

2.16 Aggregates

by the methods of
AS 1141.3.1, 4, 5, 6.1, 6.2, 11.1, 12, 14, 15, 18, 20.1, 20.2, 20.3, 21, 22, 23, 24, 32, 50

- .01 Sampling**
Sampling from a stockpile
- .11 Bulk density**
- .12 Particle density and water absorption**
- .13 Particle size distribution**
Sieve analysis; materials finer than 75 μ m
- .16 Particle shape tests**
Proportional calliper, flakiness index, crushed faces and average least dimension
- .20 Aggregate strength tests**
Aggregate crushing value, wet/dry strength variation
- .21 Abrasion tests**
Los Angeles value
- .23 Soundness tests**

CONSTRUCTION MATERIAL TESTING LABORATORIES

- Exposure to sodium sulphate solution
- .24 Contaminants**
 - Weak particles
- .40 Adhesion of aggregates and binders**
 - Resistance to stripping
- 2.18 Soils**
 - by the methods of –
AS 1289.1.1, 1.2.1, 2.1.1, 3.1.1, 3.2.1, 3.3.1, 3.4.1, 3.5.1, 3.6.1, 5.1.1, 5.2.1, 5.3.1, 5.4.1,
5.4.2, 5.8.1, 6.1.1, 6.3.2
 - .01 Sampling**
 - Disturbed sampling from a stockpile
 - 0.3 Sample preparation**
 - Sample preparation
 - .11 Classification tests**
 - Moisture content (drying oven); liquid limit (Casagrande); plastic limit; plasticity index; linear shrinkage; particle density; sieve analysis;
 - .31 Compaction tests**
 - Standard and modified compactions;
 - .35 Field density tests**
 - Field density (sand cone); dry density ratio, moisture variation and moisture ratio; dry density ration (rapid method) assignment of OMC and MDD, field moisture content and field density using a nuclear gauge
 - .42 Bearing strength tests**
 - Bearing ratio (remoulded specimens CBR's ___%)
 - .47 Strength and penetration tests - field**
 - Penetration (dynamic-cone)