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23433

FINAL REPORT
UNIDO project EE/PAK/04/001 – Laboratory Accreditation service

All labs covered by this project have been assessed on site. The assessments of lab F1, F2, G1, G2 and H were postponed until April/May 2007 because the laboratories were not ready for assessment in January/February 2007 as originally scheduled. Two extraordinary assessment visits (covering lab B and D) were performed in June 2007. Accreditation is granted for all laboratories covered by the project but for some laboratories the scope for accreditation is reduced compared to the scope applied for. Below please find description of the process and result for each applicant. Scanned copies of each accreditation document is enclosed this report.

Lab A (Marine Fishery Department, Karachi - SP 682):

Assessment dates: 13., 15. and 16.01.2007. The chemical laboratory withdrew their scope from the application after the assessment visit. Accreditation was granted for microbiological tests according to the scope applied for. Accreditation ID no. is **TEST 213**.

Lab B (National Agricultural Research Centre, Grain Quality Testing Lab, Islamabad – SP 680):

Assessment dates: 9. and 10.02.2007. Extraordinary visit: 25.06.2007. Accreditation was granted for microbiological and chemical tests according to the scope applied for. Accreditation ID no. is **TEST 214**.

Lab C (Southernzone Agricultural Research Centre, Karachi - SP 681):

Assessment dates: 18. and 20.01.2007. Two out of four laboratories withdrew all their methods from the scope applied for. Accreditation was granted for 7 tests in chemistry. Accreditation ID no. is **TEST 217**.

Lab D (Quality Control Centre, PSQCA, Karachi - SP 679):

Assessment dates: 17. and 18.01.2007. Extraordinary visit: 21. and 22.06.2007. Accreditation was granted for microbiological tests according to the scope applied for. Accreditation ID no. is **TEST 212**.

Lab E (National Water Quality Laboratory, PCRWR, Islamabad – SP 683):

Assessment dates: 12. and 13.02.2007. Accreditation was granted for microbiological and chemical tests according to the scope applied for. Accreditation ID no. is **TEST 215**.

Lab F and F1 (PCSIR, Karachi – SP 687):

Assessment dates: 20., 22., 23. and 24.01.2007 (Microbiology and Chemistry) and 11. and 12.05.2007 (Textile). Accreditation was granted for microbiological tests according to the scope

applied for. Accreditation was granted for chemical testing and textile testing according to a limited scope compared to the scope applied for due to unsatisfactory correction of essential NCs. Accreditation ID no. is **TEST 218**.

Lab F2 (Leather Research centre, PCSIR, Karachi – SP 691):

Assessment dates: 08. and 09.05.2007. Accreditation was granted for leather testing according to the scope applied for. Accreditation ID no. is **TEST 220**.

Lab G1 (PCSIR, Lahore – SP 685):

Assessment dates: 04., 05. and 07.05.2007. Accreditation was granted for microbiological testing and leather and textile testing according to the revised, extended scope compared to what was originally applied for. Accreditation ID no. is **TEST 216**.

Lab G2 (Electrical Measurement laboratory, PCSIR, Lahore – SP 684):

Assessment dates: 08. and 09.05.2007. Accreditation was granted for electrical testing according to the scope applied for. Accreditation ID no. is **TEST 219**.

Lab H (National Textile University, Faisalabad – SP 686):

Assessment dates: 30.04 and 02.05.2007. Accreditation was granted for textile testing according to a limited scope compared to the scope applied for due to unsatisfactory correction of essential NCs. Accreditation ID no. is **TEST 221**.

Kjeller, 05.10.2007

Dr. Roald R. Nilsen

Roald K. Nilsen

Project leader

Norwegian Accreditation (NA)

Appendices:
Table of all labs/organisations assessed in this project.
Copy of accreditation documents/certificates for each laboratory in the project.

Overview of laboratories included in project EE/PAK/04/001 – Laboratory Acc

Lab. designation	A	B	C	D	E	F	F1	F2
	Marine Fisheries Department, Karachi	National Agricultural Research Centre, Grain Quality Testing Lab, Islamabad	Southern-zone Agricultural Reseach Centre, Karachi	Quality Controle Centre, PSQCA, Karachi	National Water Quality Laboratory, PCRWR, Islamabad	PCSIR, Microbiology & Chemistry labs, Karachi,	Textile lab, PCSIR, Karachi	Leather lab, PCSIR, Karachi
Project no.	06/0337	06/0333	06/0336	06/0327	06/0338	07/0012	07/0012	07/0156
Application no.	SP 682	SP 680	SP 681	SP 679	SP 683	SP 687	SP 687	SP 691
Dates of assessment	13., 15. & 16.01	9. & 10.02	18. & 20.01.	17. & 18.01.	12. & 13.02	20., 22., 23 & 24.01	11. & 12.05.	08. & 09.05
Ekstraordinary visit		25.06.2007		21.& 22.06				
Accreditation no.	TEST 213	TEST 214	TEST 217	TEST 212	TEST 215	TEST 218	TEST 218	TEST 220

:reditation service

G1	G2	H
Elecrical Measurement Lab, PCSIR, Lahore	Textile, Leather & Micro-biology Labs, PCSIR, Lahore	National Textile University, Faisalabad
07/0006	07/0007	07/0104
SP 684	SP 685	SP 686
08. & 09.05	04., 05. & 07.05.	30.04 & 02.05.
TEST 219	TEST 216	TEST 221

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

Pakistan Standard & Quality Control Authority, Microbiological Lab. Quality Control Centre

er første gang akkreditert den 05.09.2007 av Norsk Akkreditering

is accredited on 05.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 212**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 212

Pakistan Standard & Quality Control Authority, Microbiological Lab. Quality Control Centre

Pak - Sectt Saddar Karachi,
Pakistan

The scope of accreditation is P16 Microbiological analysis in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 05.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993.
The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 05.09.2012.
The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope.
The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

05.09.2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. TEST 212

Administrative/geographical unit:
Microbiological Lab. Quality Control Centre
Pak - Sectt Saddar Karachi,
Pakistan

P16 Microbiological analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Water	Total Coliforms/E. Coli at 37°C	ISO 9308-1	TP-Micro-02/02	Accepted by EPA, APHA, AWWA and WEF
Water	Fecal Coliform at 44.5°C	Standard Methods 9222 D	TP-Micro-02/03	Accepted by EPA, APHA, AWWA and WEF
Water	Heterotrophic Plate Count at 22 °C and 37 °C	Standard Methods 9215 B	TP-Micro-02/01	Accepted by EPA, APHA, AWWA and WEF

05.09.2007
Date

Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

Marine Fisheries Department, Microbiology Laboratory

er første gang akkreditert den 10.09.2007 av Norsk Akkreditering

is accredited on 10.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 213**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Torleif M. Hauge

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 213

Marine Fisheries Department, Microbiology Laboratory

Marine fisheries Departement, Ministry of food Agriculture & Livestock,
Goverment of Pakistan
74000 Karachi

The scope of accreditation is P16 Microbiological analysis in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 10.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993. The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 11.09.2012. The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope. The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

10.09.2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 213

Administrative/geographical unit:
Microbiology Laboratory

P16 Microbiological analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Water	Heterotropic Plate Count at 22 oC or 37 oC	Standard Methods 9215 B	MFD/TM/ Microbiol-3	Pour plate method. Method accepted by APHA and EPA
Water	Colifom bacteria, fecal coliform bacteria, thermotolerant coliform bacteria	Standard Methods 9222 D	MFD/TM/ Microbiol-4	Membrane filter method. Method accepted by APHA
Fish, fish products and seafood	Total plate count	AOAC official method 966.23; Chapter 17.02.01	MFD/TM/ Microbiol-1	
Fish, fish products and seafood	Coliform bacteria, fecal coliform bacteria and thermotolerante coliform bacteria	AOAC official method 966.24; Chapter 17.02.02	MFD/TM/ Microbiol-2	

10.09.2007
Date

Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

National Agricultural Research Centre, Grain Quality Testing Laboratory

er første gang akkreditert den 05.09.2007 av Norsk Akkreditering

is accredited on 05.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 214**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Torleif M. Hauge

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 214

National Agricultural Research Centre, Grain Quality Testing Laboratory
Park road, Islamabad
Pakistan

The scope of accreditation is P12 Chemical analysis og P16 Microbiological analysis in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 05.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993.
The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 05.09.2012.
The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope.
The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

5/9- 2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 214

Administrative/geographical unit:
Cereal Chemistry

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Cereals grain, cereals flour & products	Moisture	AOAC Standard Method no. 925.10	CC/001 A & CC/001 B	
Cereals grain and flour	Ash	AOAC Standard Method no. 923.03	CC/002	
Cereals grain and flour	Crude fat	AOAC Standard Method no. 2003.06	CC/003	
Cereals grain & flour	Crude protein	Internal method	CC/004	Method based on Buchi Manual
Cereal grain & flour	Crude fiber	Internal method	CC/005	Method based on Cereal Chem: 59 (4) p. 318 (1982)
Fruit Juices	pH	AOAC Standard method no. 981.12	CC/006	
Water	pH	AOAC Standard Method no. 913.41	CC/006	
Wheat	Gluten	AACC Standard Method no. 38-12	CR/001	
Wheat	Falling Number	AACC Standard Method no. 56-81B	CR/002	
Wheat flour	Farinograph	AACC Standard Method no. 54-21	CR/003	

5/9-08
Date

Anne Granbom
Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 214

Administrative/geographical unit:
Food microbiology

P16 Microbiological analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Food	Aerobic plates count	FAO Food & Nutrition paper 14/4 Rev. 1 Chapter 2, p. 9	FM 001	
Food	Total Coliforms	FAO Food & Nutrition paper 14/4 Rev. 1 Chapter. 3, p. 13	FM 002	
Food	Fecal Coliforms & E.coli	FAO Food & Nutrition paper 14/4 Rev. 1 Chapter. 3, p. 14-18	FM 002	
Food	Yeast & Moulds	FAO Food & Nutrition paper 14/4 Rev. 1 Chapter 19, p. 221	FM 004	

5/9-07
Date

Anne Grandt
Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

National Water Quality Laboratory, Pakistan Council of Research in Water Resources, Chemistry and microbiology laboratories

er første gang akkreditert den 10.09.2007 av Norsk Akkreditering

is accredited on 10.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 215**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 215

National Water Quality Laboratory, Pakistan Council of Research in Water Resources, Chemistry and microbiology laboratories

Khayaban-e-Johar H-8/1 Islababad
46000 Islamabad

The scope of accreditation is P12 Chemical analysis og P16 Microbiological analysis in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 10.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993. The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 10.09.2012. The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope. The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

10/9-2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 215

Administrative/geographical unit:
Main Chemical laboratory

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Water	Nitrate	Standard Methods 4500-NO3 B	CLMC-06	Accepted by APHA, AWWA and WEF
Water	Fluoride	Standard Methods 4500-F C	CLMC-08	Accepted by EPA, APHA, AWWA and WEF
Water	Ca	Standard Methods 3500-Ca B	CLMC-01	Accepted by EPA, APHA, AWWA and WEF
Water	Mg	Standard Methods 3500-Mg B	CLMC-01	Accepted by EPA, APHA, AWWA and WEF
Water	pH	Standard Methods 4500 H+ B	CLPA-02	Accepted by EPA, APHA, AWWA and WEF
Water	Sulphate	Standard Methods 4500-SO4 E	CLMC-05	Accepted by EPA, APHA, AWWA and WEF
Water	Turbidity	Standard Methods 2130 B	CPLA-03	Accepted by EPA, APHA, AWWA and WEF
Water	Hardness	Standard Methods 2340	CLMC-01	Accepted by APHA, AWWA and WEF
Water	Conductivity	Standard methods 2510 B	CLPA-01	Accepted by EPA, APHA, AWWA and WEF

10/9 - 2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. TEST 215

Administrative/geographical unit:
Microbiology laboratory

P16 Microbiological analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Water	Fecal Coliforms	Standard Methods 9221 E	ML-MM-05	MPN-method. Approved by APHA and EPA
Water	Total coliforms and E. coli	Standard Methods 9221 B/C	ML-MM-05	MPN-method. Method accepted by APHA and EPA
Water	Heterotrophic Plate Count at 22 oC and 37 oC	Standard Methods 9215 B	ML-MM-04 and ML-MM-06	Pour Plate Count method. Standard method accepted by APHA and EPA

10/9-2007
Date

Anne Grandsen
Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 215

Administrative/geographical unit:
Waste Water laboratory

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Water	Chloride	Standard Methods 4500-Cl B	CLMC-03	Accepted by EPA, APHA, AWWA and WEF
Water	Bicarbonate	Standard Methods 2320 B	CLMC-02	Accepted by EPA, APHA, AWWA and WEF
Water	Carbonate	Standard Methods 2320 B	CLMC-02	Accepted by EPA, APHA, AWWA and WEF
Water	Na	Standard Methods 3500-Na B	CLMC-04	Accepted by EPA, APHA, AWWA and WEF
Water	Alkalinity	Standard Methods 2320 B	CLMC-02	Accepted by EPA, APHA, AWWA and WEF
Water	K	Standard Methods 3500-K B	CLMC-04	Accepted by APHA, AWWA and WEF

10/9-2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 215

Administrative/geographical unit:
AAS Laboratory

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Water	Zn, Cu, Mn	Standard Methods 3111 B	CLAAS 10, CLAAS 11, CLAAS 12	Accepted by EPA, APHA, AWWA and WEF
Water	As	Standard Methods 3114 B	CLAAS 01	Accepted by EPA, APHA, AWWA and WEF

10/9-2007
Date

Hanne Grendsen
Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

PCSIR Laboratories. Complex, Textile, Leather & Microbiology Laboratories

er første gang akkreditert den 11.09.2007 av Norsk Akkreditering

is accredited on 11.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 216**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 216

PCSIR Laboratories. Complex, Textile, Leather & Microbiology Laboratories
200 - Ferozepur Road, Lahore - 54600 , Pakistan

The scope of accreditation is P07 Physical testing, P12 Chemical analysis og P16 Microbiological analysis in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 11.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993.
The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 12.09.2012.
The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope.
The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

11.09.2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. TEST 216

Administrative/geographical unit:
Leather laboratory
200 - Ferozepur Road, Lahore - 54600, Pakistan

P07 Physical testing

Object	Parameter	Reference standard	Identity of internal	Comments
Leather and Leather Made-ups	Tensile Strength	Internal method	LL/TM/004	Method based on BS 3144 (method 5) and SLP 6 (IUP 6) (2001)
Leather and Leather Made-ups	Colour fastness to Circular Rubbing	Internal method	LL/TM/005	Method based on BS 1006, UK-LC (1996) and SLF 5
Leather and Leather Made-Ups	Tear Strength	Internal method	LL/TM/006	Method based on BS 3144 (method 6) and SLP 7 (IUP 8)(2001)

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Leather	Chromium VI	IUC 18	LL/TM/001	
Leather and Leather Made-ups	Pentachlorophenols (PCP)	Internal method	LL/TM/002	Method based on CLRI/Freiburg (gas chromatography)
Leather	Formaldehyde	IUC 19	LL/TM/003	
Leather and Leather Made-ups	pH of Aqueous Extracts	Internal method	LL/TM/007	Method based on BS 1309:9 (1996) and SLC 13 (IUC 11). Electrometric determination

11.09.2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. TEST 216

Administrative/geographical unit:
Microbiology Laboratory
200 - Ferozepur Road, Lahore - 54600, Pakistan

P16 Microbiological analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Foods	Total Plate Count	Manual of Food Quality Controls 14/4, Chaper 2	ML/TM/001	FAO Food and Nutrition Paper
Foods	Total coliforms, fecal coliforms and E. coli	Manual of food quality controls 14/4, Chapter 3	ML/TM/002	FAO Food and Nutrition Paper
Water	Heterotrophic Plate Count at 22 °C or 37 °C	Standard Methods 9215 B	ML/TM/003	Pour plate method. Method accepted by APHA and EPA
Water	Fecal coliforms and E. coli	Standard Methods 9221E & F	ML/TM/004	MPN method. Method accepted by APHA and EPA
Water	Total Coliforms	Standard Methods 9221B	ML/TM/004	MPN method. Method accepted by APHA and EPA
Foods	Salmonella	Manual of Food Quality Controls 14/4, Chaper 4	ML/TM/005	FAO Food and Nutrition Paper
Foods	Staphylococcus aureus	Manual of Food Quality Controls 14/4, Chaper 12	ML/TM/006	FAO Food and Nutrition Paper
Foods	Yeast and Moulds	Manual of Food Quality Controls 14/4, Chaper 19	ML/TM/007	FAO Food and Nutrition Paper

11.09.2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. TEST 216

Administrative/geographical unit:
Textile laboratory
200 - Ferozepur Road, Lahore - 54600, Pakistan

P07 Physical testing

Object	Parameter	Reference standard	Identity of internal	Comments
Textiles	Determination of Abrasion of Fabrics by Martindale Method	EN ISO 12947-2	TL/TP/009	
Fabrics	Mass Per Unit Area (Weight) of Fabric	Internal method	TL/TP/012	Method based on ASTM D 3776 (1996)
Textiles	Water Repellency: Spray Test	AATCC 22	TL/TP/022	

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Textiles	Colourfastness to Domestic and Commercial Laundering	ISO 105-C06	TL/TP/002	
Textiles	Colorfastness to Dry Cleaning	ISO 105-D01	TL/TP/003	
Textiles	Colorfastness to Water	ISO 105-E01	TL/TP/004	
Textiles	Colourfastness to Sea Water	ISO 105-E02	TL/TP/005	
Textiles	Colourfastness to Perspiration	ISO 105-E04	TL/TP/006	
Textiles	Colourfastness to Rubbing (16 mm peg)	ISO 105-X12	TL/TP/007	

11.09.2007
Date

Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

Southern zone Agricultural Researh Centre

er første gang akkreditert den 14.09.2007 av Norsk Akkreditering

is accredited on 14.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 217**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 217

Southern zone Agricultural Researh Centre
Pakistan Agricultral Research Council
Karachi University Campus
Karachi 75270 Pakistan

The scope of accreditation is P12 Chemical analysis in accordance with the specifications on the *following pages in this document.*

The accreditation was first time granted 14.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993. The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 14.09.2012. The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope. The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

14.09.2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. TEST 217

Administrative/geographical unit:
Southernzone Agricultural Researh Centre
Sarc, Parc, Karachi University Campus
75270 Karachi Pakistan

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Wheat grains	Determination of bulk density of cereal	ISO 7971-2	SARC/T.M/GQ-01	
Wheat grains	Determination of aflatoxin	Internal method	SARC/T.M/TC-01	Standard "NEOGEN test method (2005) for aflatoxin (high sensitivity and total) based on AOAC Method 2001.6
Wheat flour	Moisture - Air-Oven Methods	AACC 44-15A	SARC/T.M/GQ-03	Determination of moisture content in wheat flour using Brabender moisture tester
Wheat flour	Ash content	AACC 08-01	SARC/T.M/GQ-06	
Wheat flour	Falling Number/ á-amylase activity	AACC Standard Method no. 56-81B	SARC/T.M/GQ-05	
Wheat flour	Gluten	AACC Standard Method no. 38-12	SARC/T.M/GQ-04	Determination of gluten quantity and quality
Wheat grains	Determination of the mass of 1000 grains	ISO 520	SARC/T.M/GQ-02	

14.09.2007
Date

Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

PCSIR Laboratories complex, Karachi

er første gang akkreditert den 13.09.2007 av Norsk Akkreditering

is accredited on 13.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 218**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 218

PCSIR Laboratories complex, Karachi
off University Road Karachi
Karachi - 75280
Pakistan

The scope of accreditation is P07 Physical testing, P12 Chemical analysis og P16 Microbiological analysis in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 13.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993. The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 13.09.2012. The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope. The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

13.09.2007
Date

Inger Cecilie Laake
Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 218

Administrative/geographical unit:
Center for Environmental Studies, PCSIR Karachi

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Food	Fe, Pb, Cd, Zn	AOAC 18th Edition	KLC/CES/WI004	

13.09.2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 218

Administrative/geographical unit:
Chemical -Pharmaceutical Laboratory, PCSIR Karachi

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Spice	Sudan-I,II,III & IV	AOAC 920.208B	KL/PRC/004	UV visible spectroscopy, TLC

13.09.2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 218

Administrative/geographical unit:
Food Chemistry Laboratory, PCSIR Karachi

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Cereals grain, cereals flour & products	Moisture	AOAC 925.10	KL/FMRRC/WI-011/012	Air Oven Method
Cereals	Protein	AOAC 920.87	KL/FMRRC/ WI-011/015	Kjeldahl Method
Cereals	Fat	AOAC 920.39C	KL/FMRRC/ WI-011/014	Soxhlet Method
Cereals grain and flour	Ash	AOAC 923.03	KL/FMRRC/ WI-011/013	Direct Method
Cerals	Crude Fiber	AOAC 920.86	KL/FMRRC/WI/134	Weende Method
Cerals	Carbohydrate	Internal method	KL/FMRRC/WI/091	Method based on calulation from Nitrogen Free Extract according to: Modern Food Analysis by Hart & Fisher 1971
Cerals	pH	AOAC 943.02	KL/FMRRC/WI/092	
Cerals	Calorific Value / Energy Value	Internal method	KL/FMRRC/WI/093	Method based on calculation according to: MacCance & Widdowson's. The composition of Foods by Paul & Southgate 4th Ed 1988
Raw/Processed Foods	Fat	AOAC 922.06	KL/FMRRC/WI/131	Acid Hydrolysis Method
Raw/Processed Foods	Sorbic acid	AOAC 47.3.36	KL/FMRRC/WI/095	Oxidation Method
Food	Vitamin C	AOAC 967.21	KL/FMRRC/WI/098	Titremetric Method
Raw/Processed Foods	Vitamin A	Internal method	KL/FMRRC/WI/097	Method based on UV-Spectrophotometer; Pearson's Composition & Analysis of Food 9th Edition (Page 641)
Raw/Processed Foods	Vitamin C	AOAC 985.33	KL/FMRRC/WI/132	Titrimetric method
Red Chili, Rice, Food, Feed & Agriculture Commodities	Aflatoxins B1, B2, G1, G2	AOAC 975.36	KL/FMRRC/WI/025	1.Thin-layer chromatographic method 2. Liquid- Liquid Partition Chromatography
Milk & Milk Products	Aflatoxin M1	AOAC 980.21	KL/FMRRC/WI/026	1.Thin-layer chromatographic method 2. Column Chromatography
Red Resin, Wheat & Feed	Ochratoxin A	AOAC Chapter 49	KL/FMRRC/WI/027	1.Thin-layer chromatographic method 2. Column Chromatography

13.09.2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. TEST 218

Administrative/geographical unit:
Microbiology Laboratory, PCSIR Karachi

P16 **Microbiological analysis**

Object	Parameter	Reference standard	Identity of internal	Comments
Water	Heterotrophic Plate Count at 22 □C or 37 □C	Standard Methods 9215 B	KL/FMRRC/WI/121	Pour plate method. Method accepted by APHA and EPA
Water	Total Coliforms and E. Coli	ISO 9308-1	KL/FMRRC/WI/001	Membrane filtration
Water	Coliform organisms, thermotolerant coliform organisms and presumptive E. coli	ISO 9308-2	KL/FMRRC/WI/001	Multiple tube (most probable number) method
Food	Aerobic Plate Count	USFDA BAM Chapter 03	KL/FMRRC/WI/002	
Food	Total coliforms, fecal coliforms and E. coli	USFDA BAM Chapter 04	KL/FMRRC/WI/004	Multiple tube (most probable number) method
Food	Mould and Yeast Count	USFDA BAM Chapter 18	KL/FMRRC/WI/003	
Food	Salmonella	USFDA BAM Chapter 05	KL/FMRRC/WI/005	
Food	Staphylococcus aureus	USFDA BAM Chapter 12	KL/FMRRC/WI/088	

13.09.2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 218

Administrative/geographical unit:
Textile laboratory, PCSIR Karachi

P07 Physical testing

Object	Parameter	Reference standard	Identity of internal	Comments
Textiles (woven fabrics)	Recovery Angle Method	AATCC 66	KL/ACRC/TestM/009	
Textiles	Determination of maximum force using the grab method (tensile strength)	ISO 13934-2	KL/ACRC/TestM/010	
Textiles	Determination of maximum force and elongation at maximum force using the strip method	ISO 13934-1	KL/ACRC/TestM/011	
Textiles (Woven fabrics)	Determination of number of threads per unit length	ISO 7211-2	KL/ACRC/TestM/013	
Textiles (Woven fabrics)	Determination of mass per unit length and mass per unit area	ISO 3801	KL/ACRC/TestM/015	
Textiles	Determination of the abrasion resistance of fabrics by the Martindale method -- Part 1: Martindale abrasion testing apparatus	ISO 12947-1	KL/ACRC/TestM/017	
Textiles	Determination of the abrasion resistance of fabrics by the Martindale method -- Part 2: Determination of specimen breakdown	ISO 12947-2	KL/ACRC/TestM/017	
Textiles	Spray Rating	Internal method	KL/ACRC/TestM/018	Method based on AATCC 22 (2001)

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments

13.09.2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 218

Administrative/geographical unit:
Textile laboratory, PCSIR Karachi

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Textiles	*Colorfastness to* Crocking	AATCC-8	KL/ACRC/TestM/004	AATCC Crockmeter Method
Textiles	Colour fastness to perspiration	ISO 105-E04	KL/ACRC/TestM/005	
Textile	Colorfastness to Water	ISO 105-E01	KL/ACRC/TestM/006	
Textiles	Colour fastness to sea water	ISO 105-E02	KL/ACRC/TestM/007	
Textiles	Colour fastness to rubbing: Organic solvents	ISO 105-D02	KL/ACRC/TestM/008	
Textiles	Blend Ratio (Polyester/Cotton)	Internal method	KL/ACRC/TestM/012	Method based on ISO 1833 Method 10 (1977)
Water-Extract from Wet Processed Textiles	pH of the Water-Extract	AATCC 81	KL/ACRC/TestM/019	
Textiles (fabrics)	Colour fastness to washing and laundring	Internal method	KL/ACRC/Test/M001	Based on obsolete standard ISO 105 C01
Textiles (fabrics)	Colour fastness to washing and laundring	Internal method	KL/ACRC/Test/M002	Based on obsolete standard ISO 105 C02
Textiles (fabrics)	Colour fastness to washing and laundring	Internal method	KL/ACRC/TestM/003	Based on obsolete standard ISO 105 C03

13.09.2007
Date

Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

PCSIR Labs Complex, Lahore, Electrical Measurement &Test lab.

er første gang akkreditert den 10.09.2007 av Norsk Akkreditering

is accredited on 10.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **Test 219**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

Test 219

PCSIR Labs Complex, Lahore, Electrical Measurement &Test lab.
200 - Ferozepur Road,
Lahore - 54600,
Pakistan

The scope of accreditation is P05 og P20 in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 10.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993. The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 10.09.2012. The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope. The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

10/9-2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. Test 219

Administrative/geographical unit:
Electrical Measurement &Test lab.
PCSIR Laboratories Complex, Ferozepur Road, Lahore-Pakistan
54600 Lahore - Pakistan

P05

Object	Parameter	Reference standard	Identity of internal	Comments
Cable testing	Resistance of conductors	IEC 60227	EMTL/SOA/01	Part 2 clause 2.1 (2003) - Partr 3 (1997) - Part 4 (1997) - Part 5 (2003)
Cable testing	Voltage test on cores at 1500 V	IEC 60227	EMTL/SOA/02	Part 2 clause 2.3 (2003) - Part 5 (2003)
Cable testing	Voltage test on cores at 2000 V	IEC 60227	EMTL/SOA/03	Part 2 clause 2.3 (2003) - Part 4(1997)
Cable testing	Voltage test on completed cable at 2000 V	IEC 60227	EMTL/SOA/04	Part 2 clause 2.2 (1998) - Part 4 (1997) - Part 5 (2003)
Cable testing	Voltage test at 2500 V	IEC 60227	EMTL/SOA/05	Part 2 clause 2.2 (2003) - Part 3 (1997)
Cable testing	Insulation resistance at 70oC	IEC 60227	EMTL/SOA/06	Part 2 clause 2.4 (2003) - Part 3 (1997) - Part 4 (1997) - Part 5 (2003)
Cable testing	Checking of compliance with constructional provisions	IEC 60227	EMTL/SOA/07	Part 2 (2003) - Part 3 (1997) - Part 4 (1997) - Part 5 (2003)
Cable testing	Measurement of insulation thickness	IEC 60227	EMTL/SOA/08	Part 2 clause 1.9 (2003) - Part 3 (1997) - Part 4 (1997) - Part 5 (2003)
Cable testing	Measurement of sheath thickness	IEC 60227	EMTL/SOA/09	Part 2 clause 1.10 (2003) - Part 4 (1997) - Part 5 (2003)
Cable testing	Measurement of overall diameter	IEC 60227	EMTL/SOA/10	Part 2 clause 1.11 (2003) - Part 3 (1997) - Part 4 (1997) - Part 5 (2003)
Cable testing	Ovality	IEC 60227	EMTL/SOA/11	Part 2 clause 1.11 (2003) - Part 4 (1997) - Part 5 (2003)
Cable testing	Tensile test before ageing	IEC 60227 and IEC 60811	EMTL/SOA/12	IEC 60227: Part 3 (1997) - Part 4 (1997) - Part 5 (2003) IEC 60811-1-1 clause 9.1 (1985)
Cable testing	Tensile test after ageing	IEC 60227 and IEC 60811	EMTL/SOA/13	IEC 60227: Part 3 (1997) - Part 4 (1997) - Part 5 (2003) IEC 60811-1-2 clause 8.1 (1985)
Cable testing	Loss of mass test	IEC 60227 and IEC 60811	EMTL/SOA/14	IEC 60227: Part 3 (1997) - Part 4 (1997) - Part 5 (2003) IEC 60811-3-2 clause 8.1 (1985)
Cable testing	Tensile test before ageing	IEC 60227 and IEC 60811	EMTL/SOA/15	IEC 60227: Part 4 (1997) - Part 5 (2003) IEC 60811-1-1 clause 9.2 (1985)
Cable testing	Tensile test after ageing	IEC 60227 and IEC 60811	EMTL/SOA/16	IEC 60227: Part 4 (1997) - Part 5 (2003) IEC 60811 - 1.2 clause 8.1 (1985)
Cable testing	Loss of mass test	IEC 60227 and IEC 60811	EMTL/SOA/17	IEC 60227: Part 4 (1997) - Part 5 (2003) IEC 60811-3-2 clause 8.2 (1985)

10.09.2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. Test 219

Administrative/geographical unit:
Electrical Measurement &Test lab.
PCSIR Laboratories Complex, Ferozepur Road, Lahore-Pakistan
54600 Lahore - Pakistan

P05

Object	Parameter	Reference standard	Identity of internal	Comments
Cable testing	Insulation (Pressure test)	IEC 60227 and IEC 60811	EMTL/SOA/18	IEC 60227: Part 3 (1997) - Part 4 (1997) - Part 5 (2003) IEC 60811 - 3.1 clause 8.1 (1985)
Cable testing	Sheath (Pressure test)	IEC 60227 and IEC 60811	EMTL/SOA/19	IEC 60227: Part 4 (1997) - Part 5 (2003) IEC 60811-3-1 clause 8.2 (1985)
Cable testing	Bending test for insulation	IEC 60227 and IEC 60811	EMTL/SOA/20	IEC 60227: Part 3 (1997) - Part 4 (1997) - Part 5 (2003) IEC 60811 - 1.4 clause 8.1 (1985)
Cable testing	Bending test for sheath	IEC 60227 and IEC 60811	EMTL/SOA/21	IEC 60227: Part 4 (1997) - Part 5 (2003) IEC 60811 - 1.4 clause 8.2 (1985)
Cable testing	Elongation test for insulation	IEC 60227 and IEC 60811	EMTL/SOA/22	IEC 60227: Part 3 (1997) IEC 60811-1-4 clause 8.3 (1985)
Cable testing	Elongation test for sheath	IEC 60227 and IEC 60811	EMTL/SOA/23	IEC 60227: Part 4 (1997) IEC 60811-1-4 clause 8.4 (1985)
Cable testing	Impact test for insulation	IEC 60227 and IEC 60811	EMTL/SOA/24	IEC 60227: Part 3 (1997) IEC 60811-1-4 clause 8.5 (1985)
Cable testing	Impact test on completed cable	IEC 60227 and IEC 60811	EMTL/SOA/25	IEC 60227: Part 4 (1997) - Part 5 (2003) IEC 60811-1-4 clause 8.5 (1985)
Cable testing	Insulation	IEC 60227 and IEC 60811	EMTL/SOA/26	IEC 60227: Part 3 (1997) - Part 4 (1997) - Part 5 (2003) IEC 60811-3-1 clause 9.1 (1985)
Cable testing	Sheath	IEC 60227 and IEC 60811	EMTL/SOA/27	IEC 60227: Part 3 (1997) - Part 4 (1997) - Part 5 (2003) IEC 60811-3-1 clause 9.2 (1985)
Cable testing	Flexing test	IEC 60227	EMTL/SOA/28	Part 2 clause 3.1 (2003) - Part 5 (2003)
Cable testing	Test of flame retardance		EMTL/SOA/29	IEC 60332-1-1 and IEC 60332-1-2

P20

Object	Parameter	Reference standard	Identity of internal	Comments
Fan testing	Classification	IEC 60335-2-80	EMTL/SOA/30	Clause 6
Fan testing	Marking and instructions	IEC 60335-2-80	EMTL/SOA/31	Clause 7

10.09.2007
Date

Inger Lise Saake
Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. Test 219

Administrative/geographical unit:
Electrical Measurement &Test lab.
PCSIR Laboratories Complex, Ferozepur Road, Lahore-Pakistan
54600 Lahore - Pakistan

P20

Object	Parameter	Reference standard	Identity of internal	Comments
Fan testing	Protection against access to live parts	IEC 60335-2-80	EMTL/SOA/32	Clause 8
Fan testing	Starting of motor-operated appliances	IEC 60335-2-80	EMTL/SOA/33	Clause 9
Fan testing	Power input and current	IEC 60335-2-80	EMTL/SOA/34	Clause 10
Fan testing	Heating	IEC 60335-2-80	EMTL/SOA/35	Clause 11
Fan testing	Leakage current and electric strength at operating temperature	IEC 60335-2-80	EMTL/SOA/36	Clause 13
Fan testing	Transient over voltages	IEC 60335-2-80	EMTL/SOA/37	Clause 14
Fan testing	Moisture resistance	IEC 60335-2-80	EMTL/SOA/38	Clause 15, excluding15.1 IPX1 and IPX2 water ingress testing
Fan testing	Leakage current and electric strength	IEC 60335-2-80	EMTL/SOA/39	Clause 16
Fan testing	Overload protection of transformers and associated circuits	IEC 60335-2-80	EMTL/SOA/40	Clause 17
Fan testing	Endurance	IEC 60335-2-80	EMTL/SOA/41	Clause 18
Fan testing	Abnormal operation	IEC 60335-2-80	EMTL/SOA/42	Clause 19, excluding 19.11.4 EMC testing of electronics
Fan testing	Stability and mechanical hazards	IEC 60335-2-80	EMTL/SOA/43	Clause 20
Fan testing	Mechanical strength	IEC 60335-2-80	EMTL/SOA/44	Clause 21
Fan testing	Construction	IEC 60335-2-80	EMTL/SOA/45	Clause 22, excluding 22.32 Oxygen bomb test
Fan testing	Internal wiring	IEC 60335-2-80	EMTL/SOA/46	Clause 23
Fan testing	Components	IEC 60335-2-80	EMTL/SOA/47	Clause 24, excluding 24.1 Components testing
Fan testing	Supply connection and external flexible cords	IEC 60335-2-80	EMTL/SOA/48	Clause 25
Fan testing	Terminals for external conductor	IEC 60335-2-80	EMTL/SOA/49	Clause 26
Fan testing	Provision of earthing	IEC 60335-2-80	EMTL/SOA/50	Clause 27
Fan testing	Screws and connections	IEC 60335-2-80	EMTL/SOA/51	Clause 28

10.09.2007
Date

Norwegian Accreditation

Accreditation document
Accreditation no. Test 219

Administrative/geographical unit:

Electrical Measurement &Test lab.
PCSIR Laboratories Complex, Ferozepur Road, Lahore-Pakistan
54600 Lahore - Pakistan

P20

Object	Parameter	Reference standard	Identity of internal	Comments
Fan testing	Clearances, creepage distance and solid insulation	IEC 60335-2-80	EMTL/SOA/52	Clause 29
Fan testing	Resistance to heat and fire	IEC 60335-2-80	EMTL/SOA/53	Clause 30
Fan testing	Resistance to rusting	IEC 60335-2-80	EMTL/SOA/54	Clause 31
Fan testing	Radiation, toxicity and similar hazards	IEC 60335-2-80	EMTL/SOA/55	Clause 32

10.09.2007
Date

Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

Leather Research Centre (LRC), PCSIR Karachi

er første gang akkreditert den 14.09.2007 av Norsk Akkreditering

is accredited on 14.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 220**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Torleif M. Hauge

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 220

Leather Research Centre (LRC), PCSIR Karachi
D-102 South Avenue, S.I.T.E, Karachi

The scope of accreditation is P07 Physical testing og P12 Chemical analysis in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 14.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993.
The laboratory complies with the requirementes in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 14.09.2012.
The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope.
The organitation itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

14.09.2007
Date

Inger Cecilie Laake
Norwegian Accreditation

Accreditation document
Accreditation no. TEST 220

Administrative/geographical unit:
Leather Research Centre (LRC), PCSIR Karachi
D-102 South Avenue, S.I.T.E, Karachi

P07 Physical testing

Object	Parameter	Reference standard	Identity of internal	Comments
Leather	Tensile Strength	Internal method	LTD/TM/002	Method based on ASTM D 2209 (1995) and IUP 6 (2001)
Leather	Elongation at Break	Internal method	LTD/TM/002	Method based on ASTM D 2211 (1994) and IUP 6 (2001)
Leather	Colour Fastness to rubbing (wet & dry)	Internal method	LTD/TM/004 and LTD/TM/005	Method based on BS 1006 UKLC (1996)
Leather	Measurement of tear load - Double edge tear	IUP 8	LTD/TM/006	
Leather	Measurement of distension and strength of grain by the Ball Burst Test	IUP 9	LTD/TM/007	
Leather	Measurement of leather softness	IUP 36	LTD/TM/008	
Leather	Colour fastness to water spotting	IUF 420	LTD/TM/009	
Leather	Measurement of flex resistance by flexometer method	IUP 20	LTD/TM/010	

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Leather	Determination of substances (fats and others) soluble in Dichloromethane.	IUC 4	CRD/TM/001	Result given as percent fat
Leather	Saponification value	Internal method	CRD/TM/002	Method based on ASTM D5558 (1995)
Leather	Cromic Oxide	Internal method	CRD/TM/003	Method based on SLC 8 (IUC 8) (1996)
Leather	Total ash content	Internal method	CRD/TM/004	Method based on ASTM D-2617 (1996)
Leather	Determination of volatile matter.	IUC 5	CRD/TM/005	
Aquoeous Extract of leather	pH of water extract	Internal method	CRD/TM/006	Method based on SLC-13 (1996)

14.09.2007
Date

Norwegian Accreditation

NORSK
AKKREDITERING

AKKREDITERINGSBEVIS

ACCREDITATION CERTIFICATE

National Textile University

er første gang akkreditert den 24.09.2007 av Norsk Akkreditering

is accredited on 24.09.2007 by the Norwegian Accreditation

som prøvingslaboratorium og tilfredstiller kravene i NS-EN ISO/IEC 17025

as a testing laboratory and complies with the requirements of NS-EN ISO/IEC 17025

Akkrediteringens omfang og varighet fremgår av gjeldende akkrediterings-dokument, og akkrediteringen forutsetter regelmessig oppfølging.

The scope and conditions of the accreditation are specified in the accreditation document, and the accreditation requires regular surveillance.

Akkrediteringsnummer: **TEST 221**

Accreditation number

NORSK AKKREDITERING

Norwegian Accreditation

Direktør/Director

NORSK
AKKREDITERING

ACCREDITATION DOCUMENT

TEST 221

National Textile University
Sheikhupura Road
Faisalabad-37610
Pakistan

The scope of accreditation is P12 Chemical analysis in accordance with the specifications on the following pages in this document.

The accreditation was first time granted 24.09.2007 and given according to Parlamentary Proposition no. 106 (1989/90) and the Statues of Norwegian Accreditation established by Royal Decree of 7 october 1993. The laboratory complies with the requirements in NS-EN ISO/IEC 17025 (2005)

The accreditation requires regular surveillance, and is valid until 24.09.2012. The decision of accreditation made by Norwegian Accreditation implies that the organisation has been found to fulfil the requirements for accreditation within the scope. The organization itself is responsible for the results of performed measurements.

NORWEGIAN ACCREDITATION

24.09.2007
Date

Norwegian Accreditation

NORSK AKKREDITERING

Accreditation document
Accreditation no. TEST 221

Administrative/geographical unit:
National Textile University
Sheikhupura Road
Faisalabad-37610
Pakistan

P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Textile, fabrics	Colour fastness to perspiration	ISO 105-E04	TP-01	.
Textile, fabrics	Colour fastness to Perspiration	AATCC-15	TP-01	.
Water-Extract from Wet Processed Textiles	pH of the Water-Extract from Wet Processed Textiles	AATCC-81	TP02	.
Textile, fabrics	Determination of pH of aqueous extract		TP-02	.
Textile, fabrics	Colour fastness to domestic and commercial laundering	ISO 105-C06	TP-03	.
Textile, fabrics	Colorfastness to Sodium Hypchlorite Bleach in Home Laundering	AATCC-61	TP-03	.
Textile, fabrics	Colour fastness to rubbing	ISO 105-X12	TP-04	.
Textile, fabrics	Colorfastness to Crocking. AATCC Crockmeter Method	AATCC-8	TP-04	.
Textile, fabrics	Color fastness to washing	Internal method	TP-05	Based on obsolete standard ISO 105-C01 : 1989
Textile, fabrics	Color fastness to washing	Internal method	TP-06	Based on obsolete standard ISO 105-C02 : 1989
Textile, fabrics	Color fastness to washing	Internal method	TP-07	Based on obsolete standard ISO 105-C03 : 1989
Textile, fabrics	Color fastness to washing	Internal method	TP-08	Based on obsolete standard ISO 105-C04 : 1989
Textile, fabrics	Color fastness to washing	Internal method	TP-09	Based on obsolete standard ISO 105-C05 : 1989
Textile, fabrics	Colorfastness to Sodium Hypochlorite Bleach in Home Laundering	AATCC-188	TP-10	.
Textile, fabrics	Colorfastness to Drycleaning	AATCC-132	TP-11	.
Textile, fabrics	Colorfastness to Drycleaning	ISO 105-D01	TP-11	.
Textile, fabrics	Colorfastness to Water	ISO 105-E01	TP-12	.

24.09.2007
Date

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P12 Chemical analysis

Object	Parameter	Reference standard	Identity of internal	Comments
Textile, fabrics	Colorfastness to Water	AATCC-107	TP-12	.
Textile, fabrics	Absorbency of Bleached Textiles	AATCC-79	TP-13	.
Textile, fabrics/yarn	Fiber Analysis: Quantitative	ISO 1833	TP-14	.
Textile, fabrics/yarn	Fiber Analysis: Quantitative	AATCC-20A	TP-14	.

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