


# Schedule of Accreditation

issued by

## United Kingdom Accreditation Service

2 Pine Trees, Chertsey Lane, Staines-upon-Thames, TW18 3HR, UK

 <b>8407</b>  Accredited to ISO 15189:2012	<b>Royal Wolverhampton NHS Trust operating as Black Country Pathology Services</b>  <b>Issue No: 008   Issue date: 21 September 2023</b>	
	<b>City Hospital</b> Dudley Road Birmingham B18 7QH	<b>Contact: Katy New</b> <b>Tel: +44 (0)121 507 4227 Ext 4363</b> <b>E-Mail: katy.new@nhs.net</b>
Testing performed by the Organisation at the locations specified below		

### Locations covered by the organisation and their relevant activities

#### Laboratory locations:

Location details		Activity	Location code
<b>Address</b> Laboratories City Hospital Dudley Road Birmingham B18 7QH	<b>Local contact</b> Katy New BCPS Quality Manager	Blood Transfusion Essentials Laboratory (Biochemistry & Haematology) Toxicology	A
Laboratories Sandwell Hospital Lyndon West Bromwich B71 4HJ	As above	Clinical Biochemistry Haematology Blood Transfusion	B



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**Site activities performed away from the locations listed above:**

Location details		Activity
Medical Assessment Unit Hemosafe	MAU City Hospital Dudley Road Birmingham B18 7QH	Blood storage only
Hemosafe Issue Fridge	Annex to Blood Transfusion Lab City Hospital Birmingham B18 7QH	Blood storage only
Hemosafe Issue Fridge	Ground floor corridor area in immediate vicinity of Pathology Sandwell Hospital Lyndon West Bromwich B71 4HJ	Blood storage only



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DETAIL OF ACCREDITATION

Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS	<u>Blood Transfusion examination activities for the purpose of clinical diagnosis</u>	Documented In-house methods using:	
Venous Blood	Blood Grouping  A B O Rhesus: C, c, D, E, e, Kell	Immucor NEO and ECHO analyser Liquid Phase Microtitre plate  NE1 Operating the NEO NE3 NEO & ECHO Interpreting results NE4 Operating the ECHO  BB4 Manual Procedures in Transfusion  Manual tube technique Red cell agglutination.	A and B
	Antibody Detection	3 cell panels, Biorad Indirect Antiglobulin Test (Anti-IgG) Column agglutination  BB4 Manual Procedures in Transfusion	A and B
		Immucor NEO & ECHO analyser Automated Capture solid phase test  NE1 Operating the NEO NE3 NEO & ECHO Interpreting results NE4 Operating the ECHO	A and B



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Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	<u>Blood Transfusion examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	
Venous Blood	Antibody Identification  A B O Rhesus:-C <sup>w</sup> , C, c, D, E, e, K Fya, Fyb Jka, Jkb Kpa Lea, Leb Lua M, N, S, s	11 cell panels Manual Bio-Rad, column tube technology  BB4 Manual Procedures in Transfusion  14 cell panels Immucor NEO & ECHO analyser Automated Capture solid phase test  NE1 BB Operating the NEO NE3 NEO & ECHO Interpreting Results NE4 Operating the ECHO NE5 Dealing with Positive Antibody Screens BB4 Manual Procedures in Transfusion	A and B
	Blood Grouping A B O Rhesus:-C <sup>w*</sup> , C, c, D, E, e, K	Biorad Rh Phenotyping cards Column agglutination  BB4 Manual Procedures in Transfusion	A and B*
	Compatibility testing of patients' plasma with donor cells	Biorad Indirect Antiglobulin Test (Anti-IgG) Column agglutination. Manual method  BB5 IAT Crossmatching Adults & children	A and B



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HUMAN BODY FLUIDS (cont'd)	<u>Blood Transfusion examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	
Venous Blood	Direct Anti-Human Globulin	Biorad DC-Screening II cards Column agglutination.	A and B
	Estimation of Foetal cells	BB4 Manual Procedures in Transfusion  Kleihauer by Acid Elution using Guest Medical Acid Elution Kit  BB6 FMH-Kleihauer (and APT)	A



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HUMAN BODY FLUIDS (cont'd)	<u>Haematology examination activities for the purpose of clinical diagnosis</u>	Documented In-house methods using:	
Venous Blood: Citrated	Blood Coagulation	ACL TOPS 350* ACL TOPS 550 PROC-Routine Running of the TOP analyser	A* and B
	Prothrombin time INR Activated Partial Thromboplastin Time	PROC-ACL TOP Prothrombin time PROC-ACL TOP Activated Partial Thromboplastin Time	
	Fibrinogen estimation Clauss D-dimer	PROC-ACL TOP Fibrinogen PROC-ACL TOP DDimer	B
	ESR	Starrsed Interliner V8 and Westergren method. PROC- ESR using Interliner V8	B
	ESR	Starrsed Inversa 24M and Westergren method PROC-ESR estimation using Inversa 24M	A and B



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HUMAN BODY FLUIDS (cont'd)	<u>Haematology examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	
		Documented in-house methods to meet the requirements of the Sickie and Thalassaemia screening programme as defined in the laboratory QA evidence requirements	
Venous whole blood: EDTA	Haemoglobinopathy Screening HbA2 HbF HbA HbS	TOSOH G11 and Sebia HPLC PROC-BS-HBOP 3 and PROC-BS-HBOP8	B
Venous whole blood: EDTA	Haemoglobin S	Microgen Bioproducts S-test kit and insolubility of haemoglobin S. PROC- -Sickie Cell Test	A and B
Venous whole blood: EDTA	FBC  Haemoglobin estimation Red cell and platelet counts Haematocrit  Differential white cell count Reticulocyte MCV MCH MCHC	Sysmex XN 9000 track including 3 x Sysmex XN 10 FBC analysers and 1 x Sysmex XN 20 FBC analyser using three primary analysis principles. Fluorescence flow cytometry using a semiconductor laser. Hydro dynamic focusing and impedance testing. Colourimetric Hb detector based on a sodium lauryl sulphate method. PROC- FBC Analysis using Sysmex XN series (XN9000)	B
	FBC Haemoglobin estimation Red cell and platelet counts Haematocrit Differential white cell count Reticulocytes MCV MCH MCHC	1 x Sysmex XN10 FBC analyser 1 x Sysmex XN 20 FBC analyser PROC- FBC Analysis using Sysmex XN series (XN9000)	A



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HUMAN BODY FLUIDS (cont'd)	<u>Haematology examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	
Venous whole blood: EDTA	Identification of normal and abnormal morphologies including WBC differential count	Sysmex SP10, automated slide preparation unit and stainer using May Grunwald and Giemsa stain PROC- Use of the Sysmex SP slide maker and stainer	A and B
		Sysmex RAL stainer methanol free, chromatic detection for Haematology PROC-H-F2-Use of RAL Stainer	B
		Microscopy Use of Microscope Blood Science 707	A and B
		PROC- Blood Film Examination and Referral to Consultant Haematologist	
Whole Blood	Malaria Parasite detection P. Falciparum P. malariae P. vivax P.ovale	CareStart Malaria Rapydtest and monoclonal antibodies	A and B
	Plasmodium Falciparum parasitaemia	PROC-H-F2-Malarial Parasites (thin blood film examination) and use of Rapid Antigen slide test	
Venous whole blood: EDTA	Infectious Mononucleosis screen (EBV) antibody	Alere Clearview IM and immunoassay. PROC-H-F2-IM Test- Clearview 2	A and B
Venous whole blood: EDTA	Glucose-6-Phosphate Dehydrogenase (G-6-PDH) Deficiency Screen	Trinity Biotech G6PD screen and fluorescence PROC- G6PD Screening Test.	A and B





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HUMAN BODY FLUIDS (cont'd)	<u>Haematology examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	
Bone Marrow Aspirate and Trepines	Reporting of normal and abnormal morphologies	Sysmex SP10, automated slide preparation unit and stainer using May Grunwald and Giemsa stain. PROC-H- Use of the Sysmex SP slide maker and stainer	A and B
		Sysmex RAL stainer methanol free, chromatic detection for Haematology. PROC-H-Use of RAL Stainer	B
		Manual method and Prussian Blue. PROC-H-F2-Perls stain PROC-H-F2 bone marrow Microscopy	A and B
Urine/ Bone Marrow	Haemosiderin	Manual method and Prussian Blue. PROC-H-F2-Perls stain Microscopy	A and B
Whole Blood	Zinc Protoporphyrin	Haematofluorometer Protofluor Z PROC-BS-HBOP1	B
Serum	Erythropoietin (EPO)	Beckman Coulter Access 2 and two-site Immunoassay assay PROC-H-ROUTINE Use of the Access II Immunoassay Analyser PROC-BS-EPO3 PROC-BS-EPO1 PROC-H-Erythropoietin	B



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis</u>	Documented In-house methods using:	A
Serum	Quantification determination of  Routine Chemistry Acetaminophen Alanine transaminase Alkaline Phosphatase Ammonia Amylase Cholesterol Creatine Kinase Ethanol Gamma G.T Glucose Lactate Lactate dehydrogenase Magnesium Salicylate Triglycerides Urea Uric Acid	Abbott c4000/Abbott ci4100 and Abbott kits  SOP: Routine Operation of the Abbott Architect ci4100 and c4000 Blood Sciences 274  Enzymatic	
Urine	Creatinine Potassium Sodium		
Serum/Plasma	CO2	Abbott c4000/ci4100	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	A
Serum/Plasma	Quantification determination of (cont'd)		
	Routine Chemistry Albumin Calcium Creatinine Direct Bilirubin Lithium Phosphate Total Bilirubin Total Protein	Abbott c4000/ci4100  SOP: Routine Operation of the Abbott Architect ci4100 and c4000 Blood Sciences 274  Colourimetric	
Serum/Plasma	CRP Lpa	Abbott c4000/ci4100 SOP: Routine Operation of the Abbott Architect ci4100 and c4000 Blood Sciences 274 Turbimetric	
Serum/Plasma	Amikacin Tobramycin  Vancomycin Gentamicin  HDL	Abbott c4000 PETINIA  Abbott c4000 Turbidimetric Inhibition Immunoassay  Abbott ci4100 Accelerator selective detergent	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	A
Urine/CSF	Quantification determination of (cont'd)	SOP: Routine Operation of the Abbott Architect ci4100 and c4000 Blood Sciences 274	
	Total Protein	Abbott c4000 Benzethonium Chloride	
Serum/Plasma	Chloride Potassium Sodium	ISE c4000 and ci4100 Indirect ISE	
	FT4 TSH	Abbott ci4100 Chemiluminescence	B
	Acetaminophen	Architect c16000 & Abbott kits	
	Alkaline phosphatase	SOP: Routine Use of the Sandwell	
	Alanine transaminase	Architect c16000 & i2000 analysers	
	Amylase	at Sandwell Enzymatic	
	Aspartate transaminase	Blood Sciences 303	
	Bile Acids		
	Cholesterol		
	CK		
	Ethanol		
	GGT		
	Glucose		
	LDH		
	Magnesium		
	Salicylate		
	Triglyceride		
	Urea		
	Uric Acid		
Urine	Amylase Glucose Magnesium Urea Uric Acid		



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	B
Serum/Plasma	CO2	Architect c16000 & Abbott kits SOP: Routine Use of the Sandwell Architect c16000 & i2000 analysers at Sandwell Blood Sciences 303	
Serum/Plasma	Albumin Calcium Creatinine Direct Bilirubin Iron Lithium Phosphorus Total Bilirubin Total Protein	Architect c16000 Architect c16000 & Abbott kits SOP: Routine Use of the Sandwell Architect c16000 & i2000 analysers at Sandwell Colourimetric Blood Sciences 303	
Urine	Calcium		
Serum/Plasma	Fructosamine	Roche Colourimetric	
	<ul style="list-style-type: none"> <li>Alpha-1-antitrypsin</li> <li>Alpha-1-glycoprotein</li> <li>Ceruloplasmin</li> <li>CRP</li> <li>IgA</li> <li>IgG</li> <li>IgM</li> <li>Transferrin</li> </ul>	Architect c16000 SOP: Routine Use of the Sandwell Architect c16000 & i2000 analysers at Sandwell Immunoturbidimetric Blood Sciences 303	
Plasma	Ammonia Lactate		



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	B
	Digoxin Gentamicin Valproic Acid Vancomycin	Architect c16000 Routine Use of the Sandwell Architect c16000 & i2000 analysers at Sandwell Turbidimetric Inhibition Immunoassay Blood Sciences 303	
Serum/Plasma/Urine	Chloride Potassium Sodium	Abbott c16000 Indirect ISE	
Serum/Plasma	Carbamazepine Phenobarbital Phenytoin Theophylline	Abbott c16000 Enzyme Immunoassay	
	HDL	Abbott c16000 Accelerator selective detergent	B
	Complement C3 & C4 levels Rheumatoid Factor	Turbidimetry Protein Immunochemistry	
Serum	AFP Ca125 Ca153 Ca199 CEA Cortisol DHEAS FSH FT3 FT4 LH Oestradiol Progesterone Prolactin PSA SHBG Testosterone TSH	Abbott i2000: SOP: Routine Use of the Sandwell Architect c16000 & i2000 analysers at Sandwell Chemiluminescence Blood Sciences 303	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis</u>	Documented In-house methods using:	
Urine/CSF	Total protein	Abbott c16000 Benzethonium Chloride	B
Urine	Microalbumin	Abbott c16000 Immunoturbidimetric	
CSF	Glucose Lactate	Abbott c16000 Enzymatic	
	Calculated tests AKI eGFR Adjusted calcium Protein Creatinine ratio (PCR) Albumin Creatinine ratio (ACR)	By Calculation By MDRD Calculation By Calculation By Calculation  By Calculation	A and B
Serum	Haematinics  Ferritin B12 Folate	Abbott Architect Immunoassay analyser and immunoassay PROC-BS-BFF 2	B
Serum/Plasma	Troponin I beta-HCG PTH BNP	Roche Cobas e411: SOP: Maintenance and Daily Operation of Cobas e411 analyser Blood Sciences 347	
Serum and Urine	Osmolality	Vitech Scientific: Freezing point depression SOP: Serum and urine osmolality PROC-CB-F2.1-MAN/16	
Whole blood	HbA1c	Tosoh G11 HPLC System SOP: Tosoh G11 HPLC HbA1c PROC-CB-F2.1-MAN/45	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	B
Urine	Urine Calculi	Thermo Nicolet iS10, Thermo Nicolet iS5 by FTIR SOP: Stone analysis by FTIR spectroscopy PROC-CB -F2.1-FTIR/01	
Serum	Macroprolactin	PEG precipitation SOP: Macroprolactin Screen PROC-CB-F2.1-FTIR/08  SOP: Routine Use of the Sandwell Architect c16000 & i2000 analysers at Sandwell Blood Sciences 303	
Urine	Oxalate	Ilab Aries: Spectrophotometer Quantification of Urinary Oxalate by Automated Spectrophotometer PROC-CB-F2.1FTIR/03 Chemistry Manuals 1300	
	Citrate	Quantification of Citrate in urine by Automated Spectrophotometer Chemistry - Manuals 1300	
Serum	Protein Electrophoresis and Immunotyping	Capillary Zone Electrophoresis using Sebia Capillarys 3 and in-house method: Chemistry Manuals 1575	
Serum	Quantitation of Carbohydrate Deficient Transferrin (CDT)	Capillary zone electrophoresis using Sebia Capillarys 3 and in-house method CHE/SOP/005	
Serum/Urine	Gel Immunofixation	Gel Electrophoresis using Sebia Hydrasys 2 and in-house method Chemistry Manuals 1580	
Urine	Bence Jones proteins	Gel Electrophoresis using Sebia Hydrasys 2 and in-house method: Chemistry Manuals 1578	





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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	
Faeces	Quantification determination of Faecal Calprotectin	ELISA on DS2 Faecal Calprotectin analysis using the DS2 analyser Chemistry Manuals 424	B
Urine	Porphyrim	Spectrophotometric screening test Investigations of Porphyrim (PROC-CB-F2.1-MAN)	B
Urine	Porphobilinogen (PBG)	Biorad Kit Manual method Investigations of Porphyrim PROC-CB-F2.1-MAN)	B
Serum	Adalimumab	Manual ELISA using the Thermo Plate reader and in house method Chem 492	
	Infliximab	Manual ELISA using in house method Chem 193	
Serum/Plasma	Serum/ Plasma Cholinesterase	Ilab Aries and in-house method Chem 915	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	B
	Quantification determination of (cont'd)		
	<u>Trace Metals</u>	Agilent 7500/Agilent 7700x/Thermo Fisher iCAPRQ by ICPMS	
Blood, serum, plasma, urine	Cobalt Chromium	Cobalt & chromium in whole blood & serum SPEC/SOP/TM/17 Cobalt, chromium, nickel & cadmium in urine SPEC/SOP/TM/40	
Blood/Urine	Lead Manganese Mercury Arsenic Cadmium Thallium Antimony Bismuth	Manganese, Lead, Cadmium, Arsenic and Thallium in whole blood SPEC/SOP/TM39  Mercury in whole blood & urine SPEC/SOP/TM/11  Manganese, arsenic, thallium & lead in urine SPEC/SOP/TM/10 Cobalt, chromium, nickel & cadmium in urine SPEC/SOP/TM/40	
Whole Blood	Barium Silver	Antimony, barium, bismuth, silver & strontium and nickel in whole blood and Nickel in serum SPEC/SOP/TM41	
Serum/Blood/Urine	Nickel	SPEC/SOP/TM41 SPEC/SOP/TM/40	
Plasma/Serum	Aluminium	Aluminium in plasma & serum (PROC-CB-TE/10)	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	
Serum/Urine/Plasma	Quantification determination of (cont'd)		
	<u>Trace Metals (cont'd)</u>		
	Copper Selenium Zinc	Agilent 7500/Agilent 7700x/Thermo Fisher iCAPRQ by ICPMS Copper, zinc and selenium in plasma & serum SPEC/SOP/TM16 SPEC/SOP/TM38 Selenium in urine PROC-CB-TE/42	B
Urine	Gallium Indium Iron	Copper, zinc, selenium and iron in urine by ICP-MS SPEC/SOP/TM/38	
	<u>Vitamins</u>		
Serum/Plasma	D2 D3	Waters Acquity UPLC & Xevo/TQD LC MS-MS Measurement of 25-Hydroxy vitamin D SPEC/SOP/VIT/-003	B
Blood Spots	D2 D3	Waters Acquity UPLC & Xevo TQSMS LC MS-MS Measurement of blood spot 25-Hydroxy vitamin D SPEC/SOP/VIT/005	
Serum/Plasma	Vitamin A Vitamin E $\beta$ Carotene	Shimadzu Prominence HPLC Measurement of vitamin A, E and carotenes SPEC/SOP/VIT/004	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	B
Blood	<u>TPMT</u>  Thiopurine methyl transferase (TPMT)	Shimadzu HPLC Measurement of whole blood TPMT activity SPEC/SOP/TPMT/15	
	TPMT Genotyping	QIASymphony SP ARMS-PCR SYNGENE InGenius <sup>3</sup>  Extraction of DNA from whole blood using the QIA Symphony SPEC/SOP/TPMT/14 TPMT genotyping by ARMS-PCR SPEC/SOP/TPMT/17 Agarose gel electrophoresis for analysis of TPMT ARMS reaction products SPEC/SOP/TPMT/18	
	6-thioguanine (TGN) 6-methylmercaptopurine nucleotides (6MMP)	Shimadzu Prominence HPLC Nexera UPLC  Measurement of whole blood 6-TGN and 6-MMP nucleotides SPEC/SOP/TPMT/24	
	Red Cell count (RCC) Haematocrit (HCT)	Sysmex XN-1000 Measurement of Red Blood Cell counts SPEC/SOP/TPMT/9	
Faeces	Elastase	Schebo ELISA kit Measurement of Faecal Pancreatic Elastase SEPC/SOP/TPMT/16	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	B
Blood	<u>TMPT (cont'd)</u>  Uridine diphosphoglucose glucuronosyltransferase enzyme (UGT1A1) for Gilbert's syndrome	QIASymphony SP Real-Time PCR  Extraction of DNA from whole blood using the QIASymphony SPEC/SOP/TPMT/14  Gilbert's syndrome: genotyping of UGT1A1 by Real-Time PCR SPEC/SOP/TPMT/21	
Blood	Haemochromatosis	QIASymphony SP Real-Time PCR and LightMix in vitro diagnostics kit Extraction of DNA from whole blood using the QIASymphony SP (Blood Science 911) Haemochromatosis: genetic screening for C282Y, H63D and S65C mutations (Blood Sciences 338)	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	A
Blood	Quantification determination of <u>Toxicology</u> Levetiracetam	HPLC-DAD Dionex Target Absorption/RT Quantitative analysis of drugs in plasma by HPLC-DAD SPEC/SOP/TOX/83	
Blood	Amitriptyline Nortriptyline	HPLC-DAD Dionex Target Absorption/RT Quantitative analysis of drugs in plasma by HPLC-DAD	
Blood	Clozapine & norclozapine Lamotrigine	HPLC-UV Prominence Absorption maxima/RT  Quantitative analysis of clozapine, norclozapine & lamotrigine by Shimadzu HPLC-UV SPEC/SOP/TOX/71	
Blood/Urine	Ethanol screening & confirmation Methanol screening	Shimadzu headspace- GC-FID Target ions  Quantitative analysis of ethanol & methanol SPEC/SOP/TOX/81	
Blood	TDM: Quetiapine TDM: Olanzapine	Waters Aquity UPLC-MS/MS Semi-quantitative MRM  Quantitative analysis of plasma Olanzapine & Quetiapine by Waters LC-MS/MS SPEC/SOP/TOX/85	
Blood	Ethylene glycol screening	Shimadzu GC 2020 plus GC-FID Target ions  Quantitative analysis of ethylene glycol by Shimadzu GC-FID SPEC/SOP/TOX/88	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	A
Oral Fluid using Salivette Collection Device	Quantification determination of (cont'd)		
	<u>Toxicology (cont'd)</u>		
	Cannabis	Abbot Architect c4000 Colourimetric determination Guide to analysis of samples for drugs of abuse and pH Blood Sciences 429	
Urine	6-MAM screen Methadone metabolite (EDDP) screen pH Cannabis	Abbott Architect ci4100 Immunoassay Guide to analysis of samples for drugs of abuse and pH Blood Sciences 429	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	A
Oral Fluid using Salivette Collection Device	Quantification determination of (cont'd) <u>Toxicology (cont'd)</u> Drugs of abuse screening: Morphine, Codeine Dihydrocodeine, 6MAM, Methadone EDDP Buprenorphine Norbuprenorphine Cocaine, Benzoylcegonine Amphetamine Methamphetamine MDA, MDMA, Diazepam Nordiazepam Oxazepam Temazepam Lorazepam Thebaine Ketamine Tramadol Mephedrone, 4-MEC Ethylphenidate Methiopropamine Adamantyl-NOID	Waters Acquity UPLC-MS/MS Semi-quantitative MRM  Analysis of Oral Fluid Drugs of Abuse by Waters LC-MS/MS SPEC/SOP/TOX/90	





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Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)	Documented In-house methods using:	A
Urine	Quantification determination of (cont'd)  <u>Toxicology (cont'd)</u>  Drugs of abuse screening: Morphine Codeine Dihydrocodeine 6MAM Methadone EDDP Buprenorphine Norbuprenorphine Benzoylcegonine Amphetamine Methamphetamine MDA MDMA Diazepam Nordiazepam Oxazepam Temazepam Lorazepam Thebaine Ketamine N-desmethyltramadol Mephedrone 4-MEC Ethylphenidate Methiopropamine, Adamantyl-NOID Creatinine	Waters UPLC-MS/MS Semi-quantitative MRM  Analysis of urine drugs of abuse by Waters LC-MS/MS SPEC/SOP/TOX/86	



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Materials/Products tested	Type of test/Properties measured/Range of measurement	Standard specifications/ Equipment/Techniques used	Location Code
HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	A
Urine	Quantification determination of (cont'd)		
	<u>Toxicology (cont'd)</u>		
	Drugs of Abuse Confirmation	Shimadzu QP2010 GC-MS Target Ions	
	Heroin metabolite 6-Monoacetylmorphine (6MAM)	Quantitative analysis of 6-MAM in urine by Shimadzu GC-MS SPEC/SOP/TOX/75	
	Benzodiazepines Diazepam Nordiazepam Temazepam Oxazepam Lorazepam	Quantitative analysis of Benzodiazepines: Diazepam, Nordiazepam, Oxazepam, Temazepam and Lorazepam in Urine by Shimadzu GC-MS SPEC/SOP/TOX/52	
	Opiates Morphine Codeine Dihydrocodeine	Quantitative analysis of Opiates: Morphine, Codeine and Dihydrocodeine in Urine by Shimadzu GC-MS SPEC/SOP/TOX/76	
	Cannabis metabolite 11-nor-9-carboxy-delta-9-tetrahydrocannabinol (THC-COOH)	Quantitative Analysis of Cannabis Metabolite (11-nor-9-carboxy-delta-9-tetrahydrocannabinol, THC-COOH) in Urine by Shimadzu GC-MS SPEC/SOP/TOX/113	
	Amphetamines Amphetamine Methamphetamine MDMA	Waters Acquity LC-MS/MS Target Ions  Quantification of Amphetamine (amphetamine, methamphetamine, MDMA, MDA) Methadone, EDDP and Benzoylcegonine in urine by Waters LC-MS/MS SPEC/SOP/TOX/72	



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HUMAN BODY FLUIDS (cont'd)	<u>Biochemistry examination activities for the purpose of clinical diagnosis (cont'd)</u>	Documented In-house methods using:	A
Urine (cont'd)	<u>Toxicology (cont'd)</u>  Drugs of Abuse Confirmation (cont'd)	Waters Acquity LC-MS/MS Target Ions	
Biological material	Methadone and metabolite Methadone EDDP  Cocaine metabolite Benzoyllecgonine		
	Unknown toxicology screen: General drugs screen (positive electrospray) as per Waters (Masslynx 4.1 TOF TOX database 1)	Waters Xevo UPLC-MS/TOF Exact mass/RT Toxicology screening using the Waters Xevo G2 TOF: General drug screening method with positive electrospray SPEC/SOP/TOX/106	
	Unknown toxicology screen: General drugs screen (negative electrospray) as per Waters (Neg-ion-library-201115)	Toxicology screening using the Waters Xevo G2 TOF: General drug screening method with negative electrospray SPEC/SOP/TOX/107	
END			