STANDARD FORMAT DEFINITION - ELECTRONIC TRANSFER OF PATHOLOGY RESULTS

Description of Format:

The record length is essentially variable so far as PCs are concerned.

Each line has a 3 numeral line code prefix followed by a space. Line Codes range from 001 to 999. The format is set up to be human-readable by ignoring the line code prefix, or machine processable by using the line code.

Result lines can contain formatting codes to enable highlighting of **sections of the line** or **the whole line** or **several contiguous lines** either on a VDU display or printer. The formatting control sequence is delimited by "~" and consists of one or more four character codes. The formatting relates to the inherent highlighting that would cccur if the result line was printed or displayed by the laboratory. For example, headings for report sections may be bolded and underlined and abnormal result lines may be highlighted by using red rather than black printing.

This section is a brief overview of the line prefix codes that are used.

Line Codes ending in "9" are used as separators for readability - either spaces or dashes.

Line Codes	000-099	relate to file header information
	001-009	Source and Run Id / Date / Time
	010-019	Surgery Doctors Index
	020-029	Patients on this file Index
	100-399	result report information
	100-109	Patient Name / Address / Birthdate / Age / Sex
	110-119	Specimen Reference / Medicare
	120-129	Referring Doctor and Copy Doctors
	130-139	Hospital Details
	200-299	Specimen Details and Request Details
	300-309	Normal Result lines
	311-319	Cumulative/Serial Results
	390	End of patient report
	999	end of result run flag - end of file.

Each transmission will contain an occurrence of every line.

The detailed description and layout follows in the next section.

Version Registration:

Version	Date	Annotation
01	12th March 1994	First standard specification released
02	April 1994	Added Line 205. (Test Name)
03	April 1994	Added Line 206. (Reported date & time)
04	June 1994	Modified Line 010 (Dr Provider Number added)
05	19th July 1994	Added Line 123 (Receiving Doctor)
06	15th Sept 1995	Line 001 - Add Control Type Line 001 - Add date of version Add Line 006 - Hospital information Add Line 105 - Patients Phone Number Line 111 - Change Lab Reference to be QML / S&N Line 123 - add provider number Add Line 130 - Hospital Ward Add Line 131 - Automatic Ward Print Add Line 139 - Blank separator Add Line 207 - Confidentiality Flag Add Line 208 - Test Category Add Line 209 - Blank Separator Add Line 210 - Normal Result Indicator
07	1st July 1996	Lines added at request of S&N to fit in with their new deal with the PMS vendors (the consortium changes) All Text data on LHS to be left justified rather than indenting for sub-levels Add Line 211 - Requested Tests (QML asked for this) Add Line 212 - Request complete indicator

Line Format Specification:

Current Version: 07 - 1st July 1996.

These are the Line Codes that are defined.
The colon in the contents column is used as a delimiter for narrative description and occurs in column 20.

Header Details:

Line	Description	Contents	Position	Size	Format
001	Source Lab Heading	Free format	05-60		
		\<control type\>	62-63	02	not used
		\<format version number\>	64-65	02	07
		\<date of version\>	67-76	10	01/07/1996
002	Separator	\<spaces\>			
003	Report Run Details-1	'Report Run Number:'	05-		
		\<run number\>	24-27	04	
		'Created'	29-		
		\<run date\>	40-49	10	dd/mm/yyyy
		'at'	55-56		
		\<run time\>	61-68	08	hh:mm:ss
004	Report Run Details-2	'Surgery:'	05-		
		\<surgery id\>	14-18	05	
		'Reports:'	21-		
		\<report from date\>	30-39	10	dd/mm/yyyy
		\<report from time\>	41-48	08	hh:mm:ss
		'to'	51-		
		\<report to date\>	55-64	10	dd/mm/yyyy
		\<report to time\>	66-73	08	hh:mm:ss
		\<rerun indicator\>	76-	05	'Rerun' or \<spaces\>
006	Hospital Run Detail	'Hospital:'	05		
		\<hospital code\>	17	\<=05	
		\<hospital name\>	32-64	32	
009	separator	dashes			End of Heading Lines
010	Surgery Doctors (one per line)	\<Dr. Name\>	05-36	32	Initial Surname (QML) Fname Initial Surname (S&N)
		\<code\>	40-	\<=5	variable length
		\<Provider Number\>	50	8	HIC Provider Number
019	separator	dashes			End of surgery doctors

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Line	Description	Contents	Position	Size	Format
020	Patient Heading Line	'Your Ref.'	05-		
		'Patient Name'	17-		
		'Lab Ref.'	48-		
		'Test Code'	61-		
021	Patients details	\<surgery reference\>	05-	\<=12	as per Line Code 20
		\<patient name\>	17-	\<=32	
		\<lab reference\>	48	\<=12	
		\<test code\>	64		
029	separator	\<dashes\>			end of patient index

Notes: The patients are listed in alphabetical order at the beginning of the file as an aid to view which patients are on this run. Each line 021 entry refers to one test for one patient. If a patient has three tests done then his name will appear three times in this list with three different test names.

Patient/ Specimen Details:

Line	Description	Contents	Position	Size	Format
100	Patient Name	'Start Patient :' <patient name>	05 27-	 <=32	
101	Patient Address	<street>,<town>,<state><pcode> <street>,<town>,<pcode>	 27-		
104	Birth Details	'Birthdate:' <birthdate> 'Age: Y' <years> 'Sex: ' <sex>	27 38-47 52- 58-60 64- 69	 10	 dd/mm/yyyy may be "Y" "M" "D" eg. Y24, Y103, M03, D10 "M" or "F"
105	Patients Phone Number	'Telephone:' <telephone number>	27 38	 16	
109	separator	<spaces>			

Line	Description	Contents	Position	Size	Format
110	Surgery Reference	'Your Reference :' <reference number>	05- 27-	<=16	
111	Laboratory Reference	'<lab> Reference :' <reference number>	05- 27-	<=16	<lab> is QML or S&N
112	Medicare Number	'Medicare Number :' <medicare number>	05- 27-	<=10	
115	Phone Enquiries	'Phone Enquiries :' <consulting pathologist> <phone number>	05- 27- 60-	<=32 <=12	
119	separator	<spaces>			
121	Referring doctor	"Referred By... :" <doctor name>	05- 27-	<=32	
122	Copy doctor	"Copy To.. :" <doctor name>	05- 27-	<=32	All doctors to receive copies <title> <initial> <surname> <title> <fname> <init> <sname>
123	Receiving Doctor	"Addressee:" <doctor name> <provider number>	05- 27 61-	<=32 8	<title> <initial> <surname> <title> <fname> <init> <sname>
129	separator	<spaces>			

Hospital Details:

Line	Description	Contents	Position	Size	Format
130	Hospital Ward	'Ward:'	05		
		<ward>	27	<=32	Ward Name
131	Automatic Ward Print	'Auto Ward Print:'	05		
		<print indicator>	27	1	"Y" or "N"
139	Blank Line	<spaces>	05		

Result / Specimen / Request / Collection Details:

Line	Description	Contents	Position	Size	Format
200	Result Header	'Start of Result:'	05-		
201	Specimen Type	'Specimen:'	05-		
		<specimen type>	27-		
203	Request Date	'Requested:'	05-		
		<request date>	27-	10	dd/mm/yyyy
204	Collection Date	'Collection:'	05-		
		<collection date>	27-	10	dd/mm/yyyy
		<collection time>	39-	05	hh:mm
205	Test Name	'Name of Test:'	27-	05	test code
206	Report Date	'Reported:'	05-		
		<reported date>	27-	10	dd/mm/yyyy
		<reported time>	39-	05	hh:mm
207	Confidentiality Indicator	'Confidential:'	05-		
		<conf. indicator>	27	1	"Y" or "N"

208	Test Category	'Test Category:' <category indicator>	05 27	1	"R"= routine "U"=urgent
209	Separator	<spaces>			
210	Normal Result Indicator	'Normal Result:' <normal result indicator>	05 27	1	"Y" or "N"
211	Requested Tests	'Requested Tests:' <tests>	05 27-		free form
212	Request Completed Indicator	'Request Complete:' <request complete indicator>	05 27	1	"Y" or "N" Y if this is last result to be reported.
299	Separator	<spaces>			
301	Standard Result Line	<result lines>	05-		free form
309	Separator	<spaces>			end of standard report lines
311	Cumulative/Serial Result Line	<cumulative/serial results>	05-		free form
319	separator	<spaces>			end of cumulative report lines
390	End of report for patient	'End of Report :'	05-		specific message
399	Separator	<dashes>			to mark end of this report.

The file continues by repeating Line Codes 100 - 399 for each patient.

At the end of all patient results:

Footer Details:

Line	Description	Contents	Position	Size	Format
999	End of File	'END OF LISTING - Run Number:'	05-		
		<run number>	33-36		
		<run date>	39-48	10	dd/mm/yyyy
		<time>	51-58	08	hh:mm:ss

Formatting Control Sequences:

Format Control Sequences (FCS) are used to imbed highlighting controls within the patient and result data. FCS will occur in any of the Line Codes 100-390. They will be imbedded within the line after the Line Code. The surgery software is free to maintain the FCS and use them for display and/or hard copy, or alternatively, to discard them.

> The surgery software may retain them on the data base but wish to ignore them for display purposes until appropriate software functions have been made available. It is recommended that you take advantage of the facility as later versions of the Formatting Standard will most likely include extensions. These may comprise generic codes to indicate abnormal results for a standard report, a critical rise/fall in an cumulative report, or to indicate that the following data is a graphical result and the PC display is graphics mode.

FCS will usually occur in pairs - one set to turn on highlighting, a second set to change or turn off highlighting. A single FCS is delimited by tildes (~) and will comprise one or more sets of 4 byte codes. When an FCS is used, its effect will remain in force until the next FCS is detected. Therefore, it may be used to highlight:

- a single character or word in a line, or
- a whole line, or
- several lines.

The format is: <tilde><format command>[<format command>......]<tilde>

where: <tilde>   = "~"
                <format command>   = 4 byte command as shown below.

The commands defined for version "01" are:

FGnn	set foreground colour	nn is defined below
BGnn	set background colour	nn is defined below
SBLD	start bold	
EBLD	end bold	
SUND	start underline	
EUND	end underline	
SBLK	start blink	
EBLK	end blink	
DFLT	set everything to default	

The following items are reserved for future definitions and are not defined for version "06":

FOff	set font to ff	ff is defined below
PIpp	set pitch to ff	pp is defined below
TABS	tabbing / locating for variable pitch fonts	

For all relevant commands, FG-BG-FO-PI, a value of "99" indicates that the surgery software should set itself to its standard default for that option.   The option "DFLT" indicates that all options should be set to their default value.

An example:

  ~FG12BG15SUND~Warning: RED on WHITE underlined~DFLTFG15~White print~FG99~

For FG and BG, nn relates to the standard 16 colour set for IBM Pcs.

00	- Black
01	- Dark Blue
02	- Green
03	- etc
...	
15	- White

Fonts - FOff - are not yet defined.

Pitch - PIpp - are not yet defined.

This is the end of the definition

```
001 THIS IS AN EXAMPLE OF FORMATTED PATHOLOGY REPORTS       xx07 01/07/1996
002
003 Report Run Number: xxxx Created dd/mm/yy at hh:mm
004 Surgery: XXXXX  Reports: 08/07/1996 08:30:00  to  08/07/1996 14:45:10  Rerun
006 Hospital:  H1234        THIS HOSPITAL
009 -----------------------------------------------------------------------------
010 Dr. A. Adams                       AA001     123456
010 Dr. B. Brown-Ashton                BA042     234567
010 Dr. C. Chesterman-Barker           CB183     345678
019 -----------------------------------------------------------------------------
020 Your Ref.   Patient Name                   Lab Ref      Test
021 12345678    HEADLAND,ROCKY                 BY-123456    BIOCHEMICAL PROFILE
021 45198       REEF,CORAL                     QXB987654    FULL BLOOD COUNT
021 45198       REEF,CORAL                     Z345987XA    CYTOLOGY SMEAR
029 -----------------------------------------------------------------------------
100 Start Patient  :      HEADLAND,ROCKY
101                       MARINE PARADE, LONGREACH QLD 4730
104                       Birthdate: 17/07/1948    Age: Y45    Sex: M
105 Telephone:            07-12345678
109
110 Your Reference :      12345678
111 QML  Reference :      BY-123456
112 Medicare Number:      4567123489
115 Phone Enquiries:      Dr. S. CASTLE                    2468135
119
121 Referred By   :      Dr. Adama
122 Copy To:             Dr. Smith
122 Copy To:             Dr. Jones
123 Addressee     :      Dr. Adams                         123456
129
130 Ward:                B13 Ward At Hospital
131 Auto Ward Print:     Y
139
200 Start of Result:
201 Specimen:            xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
203 Requested:           07/07/1996
204 Collected:           07/07/1996  11:56:00
205 Test Name:           XXXXXXXX
206 Reported:            07/07/1996  12:43:00
207 Confidential:        Y
208 Test Category:       R
209
210 Normal Result:       Y
211 Requested Tests:     CBC, 25T, TSH
212 Request Complete:    N
299
301 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
301 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx
309
311 zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz
311 zzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzzz
319
390 End of Report  :
399 -----------------------------------------------------------------------------
100 Start of Report:   For New  Laboratory Number
104
...
301 xxxxxxxxxxxxxxxxxxxxxx
309
390 End of Report  :
399 -----------------------------------------------------------------------------
999 END OF LISTING - Run Number xxxx  dd/mm/yy    hh:mm:ss
```

End of Specification