Table 1: Message Header Record: Host to Abaxis

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
7.1.1	Record Type ID	1	М	Н	Header, Upper Case Only
7.1.2	Delimiter Definition	4	М	1	Field delimiter, vertical bar, (0x7C)
				\	Repeat delimiter, backslash, (0x5C)
				^	Component delimiter, caret, (0x5E)
				&	Escape delimiter, ampersand, (0x26)
7.1.3	Message Control ID	2	M <sup>1</sup>	Alphanumeric	Required for VetScan, Ignored for piccolo
7.1.4	Access Password	64	M <sup>1</sup>	Alphanumeric	Required for VetScan, Ignored for piccolo
7.1.5	Sender Name or ID	TBD	M <sup>1</sup>	Alphanumeric	Required for VetScan, Ignored for piccolo
7.1.6	Sender Street Address	0	I	NULL	Not Used (Ignored)
7.1.7	Reserved Field	0	I	NULL	Not Used (Ignored)
7.1.8	Sender Telephone Number	0	I	NULL	Not Used (Ignored)
7.1.9	Characteristics of Sender	0	I	NULL	Not Used (Ignored)
7.1.10	Receiver ID	10	0	Alphanumeric	Analyzer Serial Number (alphanumeric), If NULL Message will be used without checking against analyzer Serial Number
7.1.11	Comment or Special Instructions	0	I	NULL	Not Used (Ignored)
7.1.12	Processing ID	0	I	NULL	Not Used (Ignored)
7.1.13	Version No.	0	I	NULL	Not Used (Ignored)
7.1.14	Date and Time of Message	14	M <sup>1</sup>	YYYYMMDDH HMMSS	ASTM specified date and time the order is requested

<sup>\*</sup> M = Mandatory; I = Ignored; O = Optional  $M^1$  Mandatory for VetScan only

Example of Message Header Record:

H|\\\\^\&\<CR>

 $H|Y^&||||||0000P21516 < CR > Message specific for S/N 0000P21516$ 

A Patient record is required for sending Orders. The Order sequence number shall always be set to one (1) when the Patient sequence number is always one (1).

Table 2: Patient Record: Host to Abaxis

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
8.1.1	Record Type	1	М	Р	Patient, Upper Case Only
8.1.2	Sequence Number	1	М	1	A sequence number consistent with sequence number rules. [always 1]
8.1.3	Practice Assigned Patient ID	14	М	Alphanumeric	Required Patient ID or Control ID assigned by practice
					(up to 14 character ASCII alphanumeric)
8.1.4	Laboratory Assigned Patient ID	14	0	Alphanumeric	Optional Sample ID assigned by practice
					(up to 14 character ASCII alphanumeric)
8.1.5	Patient ID No. 3	14	0	Alphanumeric	Optional Alternate ID assigned by practice
					(up to 14 character ASCII alphanumeric)
8.1.6	Patient Name	0	I	NULL	Not Used (Ignored)
8.1.7	Mother's Maiden Name	0	I	NULL	Not Used (Ignored)
8.1.8	Birthdate	8	O <sup>1</sup>	ASCII	Optional Date of Birth (DOB) assigned by practice
					(8 ASCII character numeric; e.g. 19531009)
8.1.9	Patient Sex	1	O <sup>1</sup>	М	Male or Neutered
				F	Female or Spayed
				U	Unspecified
				NULL	Unspecified

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
8.1.10	Patient Race-Ethnic Origin	2	O <sup>1</sup>	NULL	Not Used / Unknown
				W	White
				В	Black
				0	Asian/Pacific Islander
				NA	Native American/Alaskan Native
				Н	Hispanic
8.1.11	Patient Address	0	I	NULL	Not Used (Ignored)
8.1.12	Reserved Field	0	I	NULL	Not Used (Ignored)
8.1.13	Patient Telephone Number	14	0	ASCII	Optional Patient Telephone Number assigned by practice
					(up to 14 character ASCII alphanumeric)
8.1.14	Attending Physician ID	0	I	NULL	Not Used (Ignored)
8.1.15	Special Field 1	32	0	Alphanumeric	Optional "Owner/Admission ID^Patient Age^DOV" assigned by practice
					Owner/Admission ID: - VetScan VS2: Owner ID up to 14 character - piccolo xpress : Admission ID up to 14 character
					Patient Age: - in years
					Must be 1-3 digit integer
					DOV: - piccolo xpress: Last Vaccination (8 ASCII character numeric; e.g. 20060731)
8.1.16	Special Field 2	31	M <sup>2</sup>	Alphanumeric	Valid Reference Range Label from 1100-5084-5 assigned by practice
8.1.17	Patient Height	0	I	NULL	Not Used (Ignored)
8.1.18	Patient Weight	0	I	NULL	Not Used (Ignored)
8.1.19	Patient's Known or Suspected Diagnosis	0	I	NULL	Not Used (Ignored)

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
8.1.20	Patient Active Medications	0	I	NULL	Not Used (Ignored)
8.1.21	Patient's Diet	0	I	NULL	Not Used (Ignored)
8.1.22	Practice Field No. 1	0	I	NULL	Not Used (Ignored)
8.1.23	Practice Field No. 2	0	I	NULL	Not Used (Ignored)
8.1.24	Admission and Discharge Dates	0	I	NULL	Not Used (Ignored)
8.1.25	Admission Status	0	I	NULL	Not Used (Ignored)
8.1.26	Location	14	0	Alphanumeric	Optional Location or Kennel Number assigned by practice
8.1.27	Nature of Alternative Diagnostic Code and Classifiers	0	I	NULL	Not Used (Ignored)
8.1.28	Alternative Diagnostic Code and Classification	0	I	NULL	Not Used (Ignored)
8.1.29	Patient Religion	0	I	NULL	Not Used (Ignored)
8.1.30	Marital Status	0	I	NULL	Not Used (Ignored)
8.1.31	Isolation Status	0	I	NULL	Not Used (Ignored)
8.1.32	Language	0	I	NULL	Not Used (Ignored)
8.1.33	Hospital Service	0	I	NULL	Not Used (Ignored)
8.1.34	Hospital Institution	0	I	NULL	Not Used (Ignored)
8.1.35	Dosage Category	0	I	NULL	Not Used (Ignored)

<sup>\*</sup> M = Mandatory; I = Ignored; O = Optional

<sup>1</sup> Mandatory if eGFR calculation is enabled (piccolo only)

<sup>2</sup> Mandatory for VetScan only

## Examples of Patient Record:

Table 3: Test Order Record: Host to Abaxis

A Patient record is required for sending Orders. The Order sequence number shall always be set to one (1) and the Patient sequence number is always set to one (1). To modify or amend an order cancel the original order and submit a new order. Only one Battery may be placed per Order Record and only one order may be placed per Patient Record

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
9.4.1	Record Type ID	1	М	0	Order, Upper Case Only
9.4.2	Sequence Number	5	М	1 to 65535	A sequence number consistent with sequence number rules.
9.4.3	Specimen ID	0	I	NULL	Not Used (Ignored)
9.4.4	Instrument Specimen ID	0	I	NULL	Not Used (Ignored)
9.4.5	Universal Test ID	5	М		Required 2 Max Characters + 3 'A' delimiters
9.4.5.1	Universal Test ID	0		NULL	Not Used (Ignored)
9.4.5.2	Universal Test ID Name	0		NULL	Not Used (Ignored)
9.4.5.3	Universal Test ID Type	0		NULL	Not Used (Ignored)
9.4.5.4	Manufacturer's or Local Code	2		Numeric	Valid Test Battery Code from 1100-5084-6 assigned by practice
9.4.6	Priority	0	I	NULL	Not Used (Ignored)
9.4.7	Requested/ Ordered Date and Time	14	M <sup>1</sup>	YYYYMMDDH HMMSS	ASTM specified date and time the order is requested
9.4.8	Specimen Collection Date and Time	0	I	NULL	Not Used (Ignored)
9.4.9	Collection End Time	0	I	NULL	Not Used (Ignored)
9.4.10	Collection Volume	0	I	NULL	Not Used (Ignored)
9.4.11	Collector ID	0	I	NULL	Not Used (Ignored)
9.4.12	Action Code	1	М	C <sup>1</sup>	Cancel Request for Battery Named
				N	New Request
				Q	QC Test Sample

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
9.4.13	Danger Code	0	I	NULL	Not Used (Ignored)
9.1.14	Relevant Clinical Information	0	I	NULL	Not Used (Ignored)
9.4.15	Date/Time Specimen Received	0	I	NULL	Not Used (Ignored)
9.4.16	Specimen Descriptor	0	I	NULL	Not Used (Ignored)
9.4.16.1	Specimen Type	0		NULL	Not Used (Ignored)
9.4.16.2	Specimen Source	0		NULL	Not Used (Ignored)
9.4.17	Ordering Physician	14	0	Alphanumeric	Optional Fourteen character alphanumeric Physician ID assigned by practice
9.4.18	Physician 's Telephone Number	0	I	NULL	Not Used (Ignored)
9.4.19	Users Field No. 1	0	I	NULL	Not Used (Ignored)
9.4.20	Users Field No. 2	0	I	NULL	Not Used (Ignored)
9.4.21	Laboratory Field No. 1	17	0	Alphanumeric	Optional seventeen character alphanumeric text used to display the work list on the analyzer display. If this field is NULL, Practice Assigned Patient ID (8.1.3) will be used. This field is not returned in the output record.
9.4.22	Laboratory Field No. 2	0	I	NULL	Not Used (Ignored)
9.4.23	Date/Time Results Reported or Last Modified	0	I	NULL	Not Used (Ignored)
9.4.24	Instrument Charge to Computer System	0	I	NULL	Not Used (Ignored)
9.4.25	Instrument Section ID	0	I	NULL	Not Used (Ignored)
9.4.26	Report Types	1	М	0	User (host) requesting analysis be performed
9.4.27	Reserved Field	0	I	NULL	Not Used (Ignored)
9.4.28	Location or Ward of Specimen Collection	0	I	NULL	Not Used (Ignored)
9.4.29	Nosocomial Injection Flag	0	I	NULL	Not Used (Ignored)
9.4.30	Specimen Service	0	I	NULL	Not Used (Ignored)

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
9.4.31	Specimen Institution	0	I	NULL	Not Used (Ignored)

## Examples of Test Order Record:

0|1|||^^^44|||||C|||||||||0<CR> 0|1|||^^^52|||||Q||||||||||0<CR> 0|1|||^^^48|||||N|||||||||0<CR>

0|1|||^^48|||||N|||| 27182818284590|||||||0<CR>

<sup>\*</sup> M = Mandatory; I = Ignored; O = Optional<sup>1</sup> The Order Date and Time sent from the Host may not be returned. The returned value for completed orders will be the Analysis Run Date and Time to be consistent with prior implementations of the protocol by this device. The returned value for canceled orders will be the Order Date and Time.

Table 4: Request Information Record: Host to Abaxis

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
12.1.1	Record Type ID	1	М	Q	Query, Upper Case Only
12.1.2	Sequence Number	5	M	1	A sequence number consistent with sequence number rules. [always 1]
12.1.3	Starting Range ID Number	14	М	Alphanumeric	Patient ID or Control ID as entered by the Operator on the Analyser
					All Stored Results (Qualified by Time Below)
					[case insensitive]
				"ALL"	
12.1.4	Ending Range ID Number	0	I	NULL	Not Used (Ignored)
12.1.5	Universal Test ID	0	I	NULL	Not Used (Ignored)
12.1.6	Nature of Request Time Limits	0	I	NULL	Not Used (Ignored)
12.1.7	Beginning Request Results Date and Time	14	0	YYYYMMDDH HMMSS	Oldest Result that will be transmitted  If omitted all available will be transmitted
12.1.8	Ending Request Results Date and Time	14	0	YYYYMMDDH	Newest result that will be transmitted
12.110	Ziranig request researce Date and Time			HMMSS	If omitted all results after beginning time will be transmitted
12.1.9	Requesting Physician Name	0	I	NULL	Not Used (Ignored)
12.1.10	Requesting Physician Telephone Number	0	I	NULL	Not Used (Ignored)
12.1.11	User Field No. 1	0	I	NULL	Not Used (Ignored)
12.1.12	User Field No. 2	0	I	NULL	Not Used (Ignored)
12.1.13	Request Information Status Codes	0	I	NULL	Not Used (Ignored)

\* M = Mandatory; I = Ignored; O = Optional

Examples of Query Record:

Transmit all stored results:

Q | 1 | ALL < CR >

Transmit all stored results after 17 November 2005 at 08:00:00:

Q|1|ALL||||20051117080000<CR>

Transmit all stored results for patient 655321:

Q|1|655321<CR>

Transmit all stored results for Control Level 1 between 1 January 2005 and 31 December 2005:

Q|1|LEVEL 1|||20050101000000|20051231235959<CR>

Transmit all stored results before 17 November 2005 at 08:00:00:

Q|1|ALL|||||20051117080000<CR>

Table 5: Message Terminator Record: Host to Abaxis

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
13.1.1	Record Type ID	1	M	L	Message Terminator, Upper Case Only
13.1.2	Sequence Number	5	M	1	A sequence number consistent with sequence number rules. [always 1]
13.1.3	Termination Code	0	I	NULL	Not Used (Ignored)

\* M = Mandatory; I = Ignored; O = Optional

Example of Message Terminator Record:

L|1<CR>

Table 6: Manufacturer Record: Host to Abaxis

ASTM	Field Name	Max Length	Required*	Field Contents	Field Description
15.1.1	Record Type ID	1	M	М	Manufacturer, Upper Case Only
15.1.2	Sequence Number	5	M	1	A sequence number consistent with sequence number rules. [always 1]
	Record Identifier	2	M	AS	AS = Request Analyzer Status

\* M = Mandatory; I = Ignored; O = Optional

Example of Manufacturer Record:

M|1|AS<CR> Request Analyzer Status