

Using Pivot Compatible Tables

OVERVIEW

This technical note details the configuration process required to use Pivot Compatible tables with Ponemah v5.20-SP7 and greater.

Pivot Compatible tables are used to simplify and eliminate data consolidation errors from the data summarization process. They are also useful for importing data into 3rd party software for further data processing and reporting, e.g. LIMS, SAS, and R. Pivot Compatible table will also aid in converting data into SEND format.

When enabled, Pivot Compatible tables are created during an acquisition session, as well as in Review upon Saving a Marked Section. These tables consolidate data from all subjects into a single tabular format per data type. The two tables are:

- **Derivations** This table is created from the Derived List View within Ponemah and contains all derived parameter data averaged at the user-specified logging rate.
- **DataReduction** This table is created from the data reduction tables and contains all derived data configured within the user-define Data Reduction setup menu.

ENABLING PIVOT COMPATIBLE TABLES

By default, Pivot Compatible tables are not enabled.

To enable Pivot Compatible tables:

1. Launch Ponemah.
2. Select **Options | Application Configuration**.
3. Select **Advanced**.
4. Locate the **ODBCInterface.Normalize** setting.
5. Set the **Value** by left-clicking in the **Value** field to: **2**
This will include Pivot Compatible tables in the Excel output (Figure 1).
6. Click **OK**.

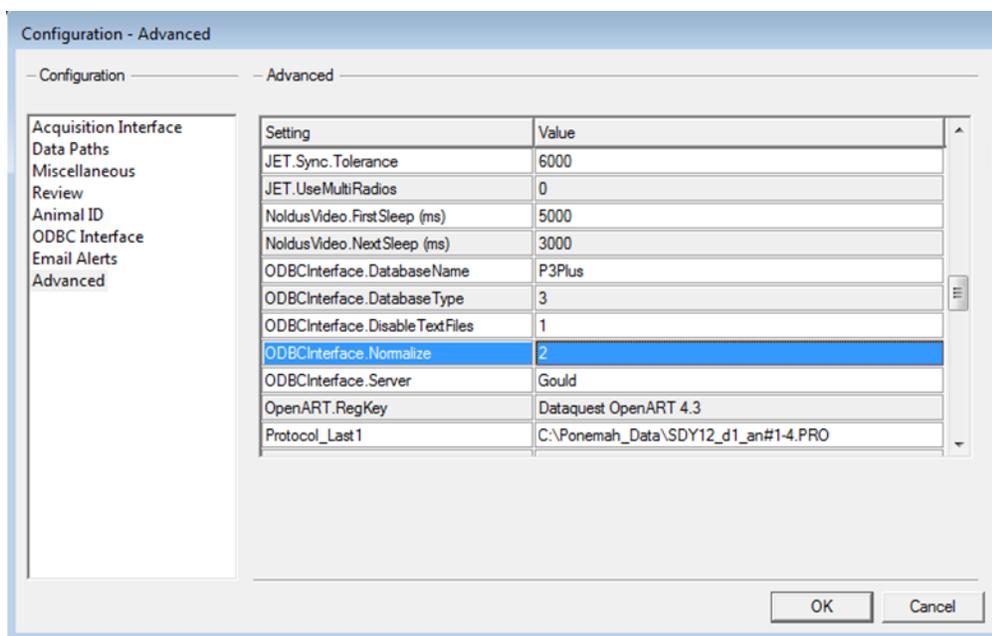


Figure 1: Application Configuration (Save to Excel)

CONFIGURING PIVOT COMPATIBLE TABLE INFORMATION

Pivot Compatible tables use information from the **Experimental Protocol Header** to populate the metadata fields within the table for treatment, dose, animal ID, etc.

To access the Experimental Protocol Header:

- Select **Setup | P3 Setup | Experimental Protocol Header**.

All Experimental Protocol Header input fields will be used. The text field Labels will be the column headers in the generated table. These may be updated to user defined values by double-clicking the Label. Should Labels be left blank, the resulting Pivot Compatible table will place *Header_X*, where *X* is the Label row number.

The information entered into these Experimental Protocol Header text fields will populate the Pivot Compatible table for every Derived and Data Reduction data point within the tables. For example, entering “10mg/kg” for the Dose Experimental Protocol Header label will be populate the Pivot Compatible table “DoseGroup” column.

The following example includes updates to the default Labels to the following freeform text fields should be completed with the corresponding information as described below (see Figure 2):

- Study Day
- Test Article
- Dose Group
- Subject ID
- Gender
- Comments

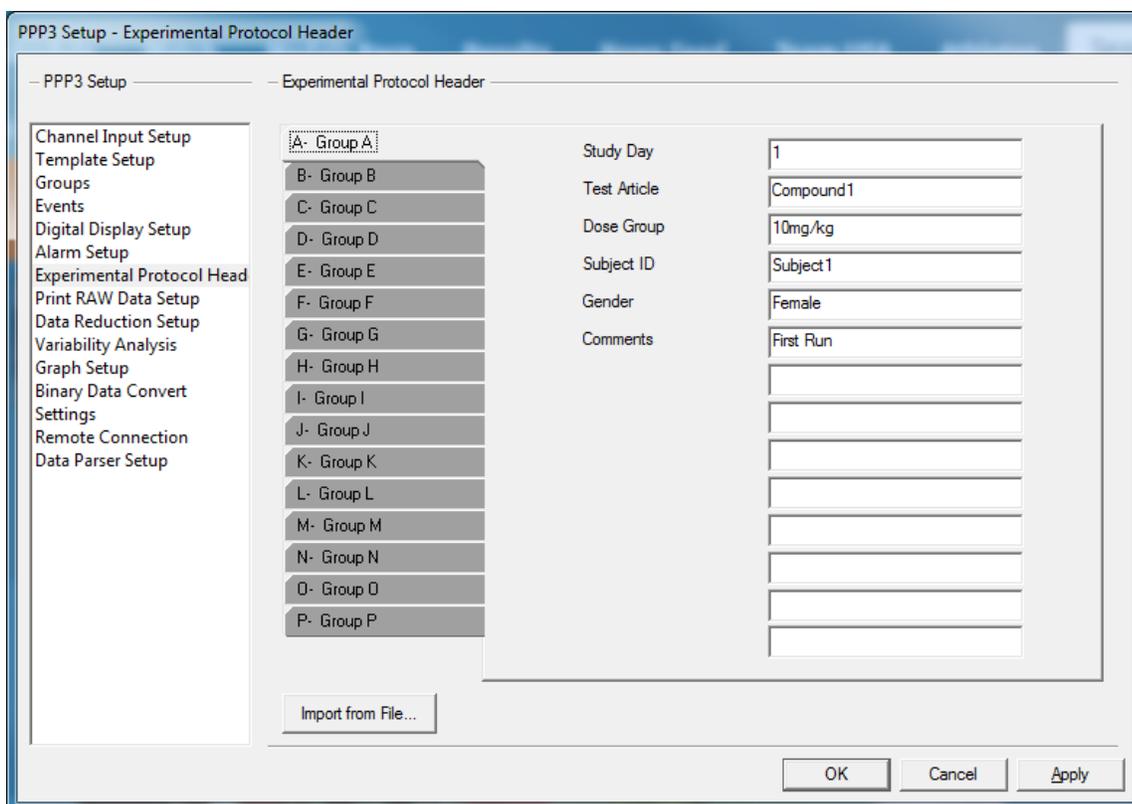


Figure 2:

Experimental Protocol Header filled out with user-defined Study metadata used to populate the Pivot Compatible table.

The following describes additional columns included in the **DataReduction** Pivot Compatible tab.

- TimeLabel** Populated with the Data Reduction Interval Label. To access the Data Reduction Setup select **Setup | P3 Setup | Data Reduction** (Figure 3). It is recommended to auto label the Data Reduction Intervals.
- ParserLabel** If Parser Segment was selected as the Data Reduction Type, this column will be populated with the Data Parser Label as defined in the Data Parser Dialog’s Individual Segments tab (Figure 4). This is automatically populated but can be renamed in the Data Parser Dialog.
- DRFunction** Populated by the derived calculation(s) abbreviation as selected in the Data Reduction Setup (e.g. Ave, Avg %Chg, SDev Est).
- StartTime/EndTime** Populated with the start time and end time of the Data Reduction Interval. If Parser Segment was selected as the Data Reduction Type, this will also be the Start Time of the Data Parser Segment.
- RealTime** Populated with the real time associated with the Data Reduction Interval. If Parser Segment was selected as the Data Reduction **Type**, this will be the real time of the start of the Parser Segment or the end of the segment depending on whether **Use End Time** was enabled.
- Duration** Populated with the duration of the Data Reduction Interval. If Parser Segment was selected as the Data Reduction type, this will also be the Duration of the Data Parser Segment.

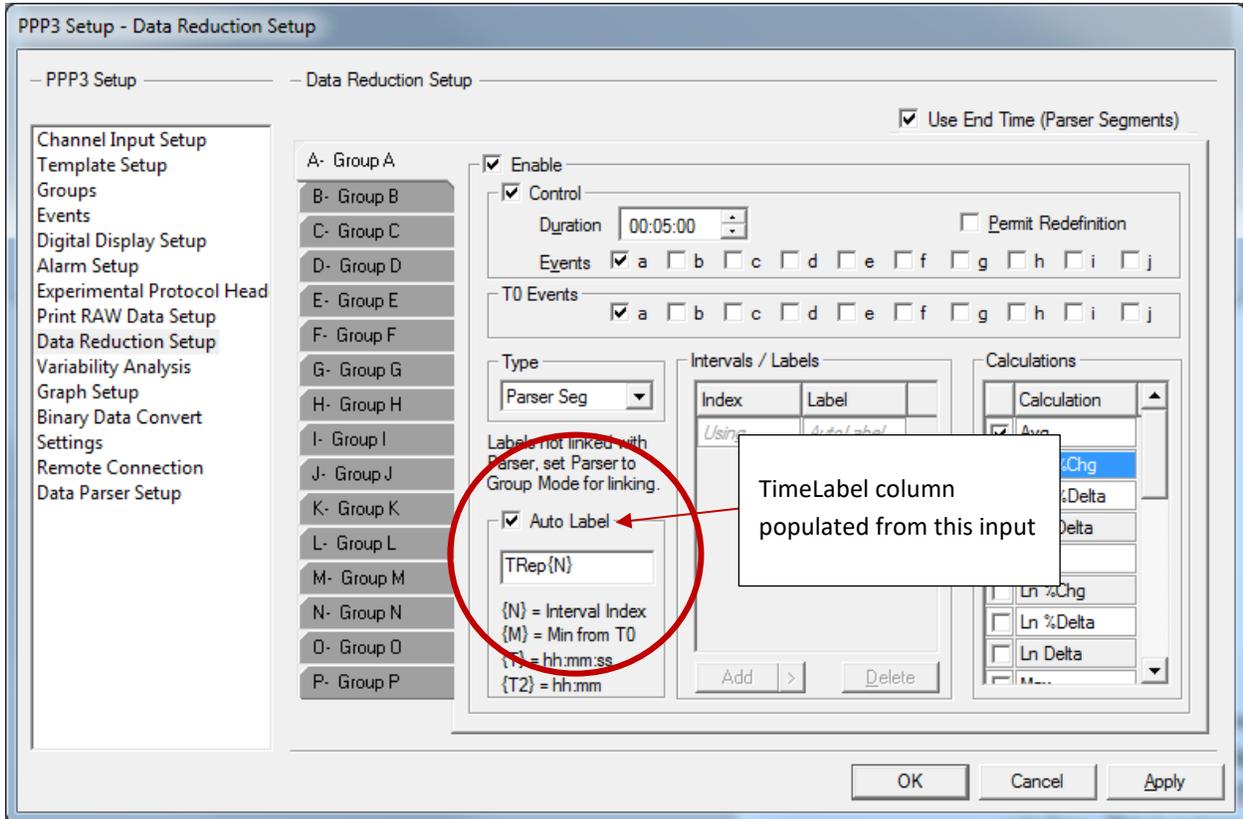


Figure 3: Location of user-definable Data Reduction Interval label used to populate the TimeLabel column of the DataReduction Pivot Compatible table.

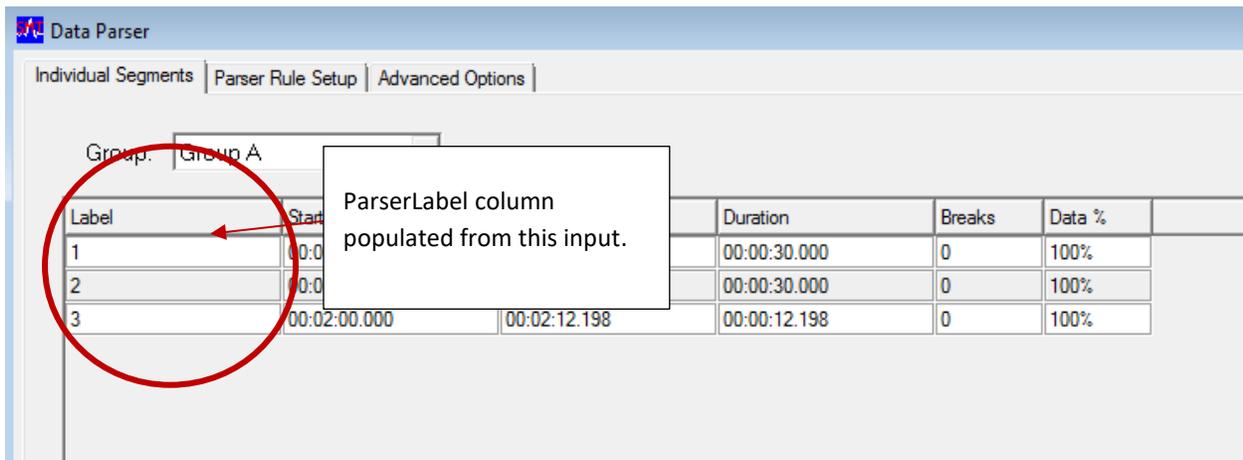


Figure 4: Location of the user-definable Data Parser label used to populate the ParserLabel column of the DataReduction Pivot Compatible table.

EXAMPLE PIVOT COMPATIBLE TABLES

An example of the Derivations and Data Reduction Pivot Compatible tables Excel output is shown in Figure 5 and Figure 6.

Note: The metadata input into the Experimental Protocol Header as display in Figure 2 was used to populate these example Pivot Compatible tables

	A	B	C	D	E	F	G	H	I	J	P	Q	R	S	T	U	V	W	X	Y
1	SubjectID	Study_Day	Test_Article	Dose_Group	Subject_ID	Gender	Comments	Header_7	Header_8	Header_	ElapsedTime	RealTime	UserEvent	Alarm	ParameterName	ParmValue				
2	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			Sys:BP	165				
3	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			Dia:BP	118				
4	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			Mean:BP	131				
5	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			PH:BP	47				
6	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			HR:BP	53				
7	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			TPK:BP	160				
8	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			ET:BP	324				
9	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			+dP/dt:BP	1119				
10	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			-dP/dt:BP	734				
11	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			%REC:BP	452				
12	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			NPMN:BP	126				
13	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			Q-A:BP	132				
14	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			Sys:LVP	152				
15	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			LVEDP:LVP	12				
16	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			Min:LVP	5				
17	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			TTI:LVP	33				
18	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			DP:LVP	140				
19	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			HR:LVP	54				
20	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			+dP/dt:LVP	2439				
21	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			-dP/dt:LVP	4103				
22	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			CI:LVP	31				
23	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			RT1:LVP	24				
24	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			RT2:LVP	41				
25	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			dP-A:LVP	1816				
26	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			dP-B:LVP	1874				
27	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			dP-C:LVP	2080				
28	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			dP-D:LVP	2406				
29	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			NPMN:LVP	36				
30	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/2016			Q-A:LVP	32				
31	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/1995			IVT:LVP	48				
32	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/1995			TTI-T:LVP	275				
33	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/1995			Tau:LVP	42				
34	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/1995			RR-I:ECG	1111				
35	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/1995			HR:ECG	54				
36	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run				0000:06:14.0	4/19/1995			R-H:ECG	1				

Figure 5: Example Derivations Pivot Compatible Table

	A	B	C	D	E	F	G	H	I	J	K	Q	R	S	T	U	V	W	X	Y
1	ColID	SubjectID	Study_Day	Test_Article	Dose_Group	Subject_ID	Gender	Comments	Header_7	Header_8	Header_	ParserLabel	TimeLabel	DRFunction	StartTime	EndTime	Duration	RealTime	ParameterName	ParmValue
2	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	Sys:BP	146.98
3	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	Dia:BP	100.11
4	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	Mean:BP	121.2
5	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	PH:BP	46.877
6	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	HR:BP	51.187
7	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	TPK:BP	167.4
8	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	ET:BP	259.56
9	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	+dP/dt:BP	1197.6
10	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	-dP/dt:BP	763.87
11	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	%REC:BP	602.53
12	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	NPMN:BP	119.75
13	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	Q-A:BP	129.81
14	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	Sys:LVP	140
15	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	LVEDP:LVP	12.076
16	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	Min:LVP	2.8039
17	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	TTI:LVP	127.93
18	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	DP:LVP	30.795
19	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	HR:LVP	51.207
20	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	+dP/dt:LVP	2430.8
21	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	-dP/dt:LVP	4128.7
22	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	CI:LVP	34.578
23	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	RT1:LVP	17.315
24	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	RT2:LVP	33.589
25	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	dP-A:LVP	1699.4
26	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	dP-B:LVP	1842.6
27	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	dP-C:LVP	2118.6
28	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	dP-D:LVP	2381.8
29	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	NPMN:LVP	35.417
30	1	Subject 1	1	Compound1	10mg/kg	Subject1	Female	First Run					Control	Average	0000:06:09.0	0000:07:36.0	0000:01:27.0	4/19/2016	Q-A:LVP	33.973

Figure 6: Example Data Reduction Pivot Compatible Table