



621 Rose Street
Lincoln, NE 68502 USA
www.celerion.com
Tel: 402-476-2811
Toll Free: 800-776-1716
Fax: 402-939-0428

Assessment of Serum Nicotine Exposure from Modern Smoke-Free Tobacco Products

LC-MS/MS Determination of Nicotine and Cotinine in Human Serum

Study: AA90478-01

Bioanalysis Final Report

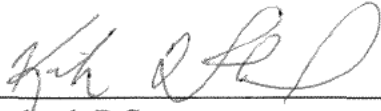
R. J. Reynolds Tobacco Company

Protocol CSD0914

Report Date: 16-Jul-2013

SIGNATURE

AUTHORIZATION



Kirk Newland, B.S.
Bioanalytical Principal Investigator

16-Jul-2013

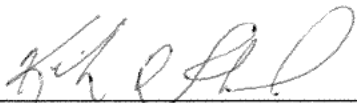
Date

COMPLIANCE STATEMENT

Herewith it is confirmed that this study was performed according to applicable GLP requirements and in compliance with Standard Operating Procedures (SOPs) in place in the Bioanalysis laboratory of Celerion, Lincoln, Nebraska. The SOPs are written based on the principles and requirements described in 21 CFR Part 58 (Good Laboratory Practice Regulation).

To ensure the integrity of the reported data, the bioanalysis laboratory verified all results. The Quality Assurance unit of Celerion, Lincoln, Nebraska, audited the study. A Quality Assurance statement was then issued and is included in [Attachment 1](#).

The data summaries, results, and conclusions in this bioanalytical report have been reviewed and were found to be consistent and scientifically rational. All deviations from the protocol and/or significant deviations from SOPs documented in this report have been reviewed and are scientifically valid.



Kirk Newland, B.S.
Bioanalytical Principal Investigator

16 Jul-2013

Date

TABLE OF CONTENTS

SIGNATURE	2
COMPLIANCE STATEMENT	3
LIST OF ABBREVIATIONS	6
REASSAY DESCRIPTIONS	8
1. INTRODUCTION	10
2. EXPERIMENTAL	10
2.1. Method and Materials	10
2.1.1. Analytical Method	10
2.1.2. Reference Standards	10
2.1.3. Biological Matrix	11
2.1.4. Stock Solutions	11
2.1.5. Calibration Curve Standards and Quality Control Samples	11
2.2. Study Samples	12
2.2.1. Sample Source and Date of Receipt	12
2.2.2. Sample Storage and Stability	12
2.2.3. Sample Summary	13
3. RESULTS	13
3.1. Batch Acceptance Criteria	13
3.2. Quality Control Sample Analyses (Between-batch Precision and Accuracy)	14
3.3. Dilution Quality Control Sample Analyses	14
3.4. Calibration Standard Concentrations	14
3.5. Standard Curve Parameters	14
3.6. Study Sample Concentrations	15
3.7. Reassays	15
3.7.1. Reassays for Analytical Reasons	15
3.7.2. Reassays for Sample Investigation	15
3.8. Incurred Sample Reproducibility	15

4. RAW DATA AND CHROMATOGRAMS	15
5. ANALYTICAL NOTES.....	16
6. STORAGE OF THE STUDY RELATED MATERIALS.....	18
7. COMPUTER APPLICATION PROGRAMS	18

TABLES

Table 1. Summary of Batches Performed.....	19
Table 2. Quality Control Sample Data (Between-batch Precision and Accuracy).....	22
Table 3. Back-calculated Calibration Curve Standard Concentrations	26
Table 4. Standard Curve Parameters.....	32
Table 5. Study Sample Concentrations.....	34
Table 6. Summary of Reassays for Analytical Reasons	136
Table 7. Summary of Reassays for Sample Investigation	153
Table 8. Incurred Sample Reproducibility Samples	154
Table 9. Incurred Sample Reproducibility Batch Statistics.....	164

FIGURES

Figure 1. Calibration Curve Nicotine.....	170
Figure 2. Calibration Curve Cotinine.....	171

ATTACHMENTS

Attachment 1. Quality Assurance Statement	
Attachment 2. Sample Analysis Plan	
Attachment 3. Method Validation Report	
Attachment 4. Certificate(s) of Analysis	
Attachment 5. Individual Run Reports	
Attachment 6. Chromatograms	

LIST OF ABBREVIATIONS

°C	degree Celsius (centigrade)
µg	microgram
AB	Applied Biosystems
API	atmospheric pressure ionization
BAM	bioanalysis method
BLK	blank
CDER	Center for Drug Evaluation and Research
CFR	Code of Federal Regulations
CV	coefficient of variation
Da	Dalton
EDTA	ethylenediaminetetraacetic acid
EXT	extraction
g	gram
GLP	good laboratory practices
h	hour
HDPE	high density polyethylene
HPLC	high performance liquid chromatography
ID	identification
INC	incongruous
INS	instrumentation
IS	internal standard
ISA	insufficient volume for full analysis
ISP	incomplete sample processing
ISR	incurred sample reproducibility
ISV	insufficient volume
IVR	insufficient volume to reassay
L	litre, liter
LLOQ	lower limit of quantitation
LNK	Celerion, Lincoln site
M	molar
mg	milligram
mL	millilitre, milliliter
mol	mole
MS	mass spectrometry
MW	molecular weight
n	number of data
N/AP	not applicable
N/AV	not available
NFV	not full volume
ng	nanogram
No.	number
NU	not used
OECD	Organization for Economic Cooperation and Development
PE	Perkin Elmer
Pd	Period
pg	picogram
QC	quality control
QCs	quality control samples
REF	reference
RI	reinjection
Rm.T.	room temperature
RR	reanalysis
RVL	remaining volume low
S.D.	standard deviation

SOP	standard operating procedure
SPE	solid-phase extraction
SST	system suitability test
STD	standard
Sub	subject
SVD	sample volume depleted
TBD	to be determined
Temp	temperature
ULOQ	upper limit of quantitation
USP	US pharmacopeia
\bar{x}	mean

REASSAY DESCRIPTIONS

If study samples were identified according to the following table, they were reassayed if sufficient sample volume remained.

Reassay Term	Description based on the current global SOP GL-BIO-10603
AAR - 'Above the Accepted Range'	Identifies a sample whose calculated concentration is greater than the upper limit of quantitation (ULOQ).
BLQ - 'Below the Limit of Quantitation'	Identifies a sample whose calculated concentration is below the lower limit of quantitation (LLOQ).
DCU - 'Diluted Concentration Unreliable'	Identifies a sample with a concentration below the LLOQ before correction for the final dilution factor.
DCU (DFNR) - 'Diluted Concentration Unreliable (Dilution Factor Not Reliable)'	Identifies a diluted study sample that has a measurable concentration but greater than 50% of the dilution Quality Control (QC) samples having the same dilution factor in the same batch did not meet the following acceptance criteria: For Chromatography: $\pm 15\%$ of nominal concentration.
EQB - 'Exceeding Quadratic Bounds'	Identifies a sample for which concentration data from a quadratic equation could not be obtained due to an inability to perform calculations.
HSR - 'Highest Standard Removed'	If the working range of the method is truncated as a result of the ULOQ standard being unavailable (rejected, lost in processing, etc.), then all samples with concentrations greater than the highest acceptable standard, are identified as 'highest standard removed.'
IIA - 'Incomplete Instrument Analysis'	Identifies a sample for which reliable data could not be obtained due to processing problems that occurred during injection or instrumental analysis and were documented by the analyst.
SSR - 'Sponsor Selected Reassays'	Reassays which are selected by the Sponsor.
BSS - 'Bracketing Study Samples'	Bracketing samples may be reassayed along with values requiring confirmation. The bracketing samples selected and the reason for including bracketing samples is documented prior to reassay.
ISF - 'Internal Standard Failure' OR UISR - 'Unacceptable Internal Standard Response'	Identifies a sample for which there is no internal standard (IS) response OR the IS response of the sample (unknown) is less than 50% or is greater than 180% of the determined mean IS response of evaluable standards and QCs.
LIP - 'Lost in Processing' OR IS P - 'Incomplete Sample Processing'	Identifies a sample for which concentration data could not be obtained due to, for example, technical problems (equipment failure, technical error, broken tubes, etc.).

Reassay Term	Description based on the current global SOP GL-BIO-10603
LSR - 'Lowest Standard Removed'	If the working range of the method is truncated as a result of the LLOQ standard being unavailable (rejected, lost in processing, etc.), all samples with concentrations below the lowest acceptable standard are identified 'lowest standard removed.'
Not Calculated	May be used to indicate statistics are not performed.
UCR - 'Unacceptable Chromatography'	Identifies a sample deemed by the reviewer to have exhibited chromatography that is unacceptable.
VRC – 'Value Requiring Confirmation'	From time to time, unexpected results may be obtained for individual study samples that appear inconsistent with the remaining data. Such values are defined as 'events' and are to be investigated.
Reassay Term	Description based on the current global SOP GL-BIO-10602
Fail	Identifies samples for which concentration data was not accepted because the batch did not meet batch acceptance criteria.

1. INTRODUCTION

(b) (4)



2. EXPERIMENTAL

2.1. Method and Materials

2.1.1. Analytical Method

(b) (4)



2.1.2. Reference Standards

(b) (4)



(b) (4)



2.1.3. Biological Matrix

(b) (4)



2.1.4. Stock Solutions

Stock solutions were stored at a nominal temperature of 5°C. Substock solutions were stored at a nominal temperature of -20°C.

2.1.5. Calibration Curve Standards and Quality Control Samples

(b) (4)



(b) (4)



2.2. Study Samples

2.2.1. Sample Source and Date of Receipt

Study samples were received frozen on ice packs on 12-Jan-2010 from R.J. Reynolds Tobacco Co., Winston-Salem, North Carolina.

2.2.2. Sample Storage and Stability

Study samples were stored from sample collection to the end of sample analysis at a nominal temperature of -20°C for a duration not exceeding 122 days.

Study samples were analyzed without exceeding short-term, freeze-thaw, or post-preparative stability. The following evaluations have been conducted:

Nicotine

Stability Summary	
Long-term stability	31 days in polypropylene tubes at -20°C
Short-term stability	26 hours in polypropylene tubes at ambient temperature under white light
Cumulative short-term stability	53 hours in polypropylene tubes at ambient temperature under white light (total of all thaw cycles)
Freeze-thaw stability	6 freeze (-20°C)-thaw (ambient temperature) cycles in polypropylene tubes under white light
Post-preparative stability	78 hours in a polypropylene 96 well plate at 5°C
Processed sample integrity	89 hours in a polypropylene 96 well plate at 5°C

Cotinine

Stability Summary	
Long-term stability	31 days in polypropylene tubes at -20°C
Short-term stability	26 hours in polypropylene tubes at ambient temperature under white light
Cumulative short-term stability	53 hours in polypropylene tubes at ambient temperature under white light (total of all thaw cycles)
Freeze-thaw stability	6 freeze (-20°C)-thaw (ambient temperature) cycles in polypropylene tubes under white light
Post-preparative stability	78 hours in a polypropylene 96 well plate at 5°C
Processed sample integrity	89 hours in a polypropylene 96 well plate at 5°C

An extended long-term stability evaluation, which covers the period from sample receipt at Celerion to the end of sample analysis will be performed and reported in an amendment to the Validation Report. A copy of the amendment will be provided to the Sponsor.

2.2.3. Sample Summary

The sample receipts state 15 subjects, 19 sampling times, and 5 periods.

	No. of Samples
Specified in received	1407
Total number of study samples analyzed	1407

All study samples are to be retained for a period specified in the service agreement, after which the Sponsor is to be contacted for further sample retention or disposition instructions.

3. RESULTS

All samples for a given subject were analyzed together in a single batch except when samples had to be reassayed. A batch, at a minimum, consisted of a set of calibration standards (consisting of a standard blank, a standard zero, and 1 replicate of at least 6 different non-zero standards) and replicate low, medium, and high concentration QC samples were included to reflect at least 5% of the number of unknown samples (minimum n=2).

3.1. Batch Acceptance Criteria

(b) (4)



(b) (4)



3.2. Quality Control Sample Analyses (Between-batch Precision and Accuracy)

Between-batch precision and accuracy results for QC samples prepared at low, medium, and high QC concentrations are summarized in [Table 2*](#). Precision (%CV) was less than or equal to 6.3% for nicotine and 7.0% for cotinine; accuracy (%Bias) ranged from -5.6% to -2.7% for nicotine and -4.8% to 1.0% for cotinine.

3.3. Dilution Quality Control Sample Analyses

The accuracy of sample dilution was verified by the performance of dilution QC samples. At least 50% of the diluted QC samples (denoted with the dilution factor following the QC identifier) must be within $\pm 15\%$ of the nominal concentration for the dilution scheme to be accepted. Results for dilution QC samples are summarized in [Table 2*](#). Precision (%CV) was less than or equal to 5.9% for nicotine and 7.0% for cotinine; accuracy (%Bias) ranged from -5.3% to -3.6% for nicotine and 1.8% to 2.0% for cotinine.

3.4. Calibration Standard Concentrations

Back-calculated calibration curve standard concentrations are provided in [Table 3*](#). Precision (%CV) was less than or equal to 3.4% for nicotine and 4.2% for cotinine; accuracy (%Bias) ranged from -2.6% to 3.3% for nicotine and -5.0% to 11.3% for cotinine.

3.5. Standard Curve Parameters

Standard curve parameters from 30 successful batches for nicotine and 31 successful batches for cotinine are provided in [Table 4*](#). Representative calibration curves are illustrated in [Figure 1](#) and [Figure 2](#). The coefficient of determination (R-squared) was 0.9951 or better for nicotine and 0.9943 or better for cotinine.

* The summary of QC samples, calibration standards, and standard curve parameters for the incurred sample reproducibility batches [with the exception of Batch 43] are not included in [Table 2](#), [Table 3](#), and [Table 4](#). Those results are reported in [Table 9](#).

3.6. Study Sample Concentrations

Study sample concentrations are provided in [Table 5](#).

Study samples, if any, which could not be repeated due to insufficient volume remaining are reported in [Table 5](#), Sample Comments column.

Study samples, if any, with no significant peak at the mass transition and retention time of nicotine and cotinine, or with peak area ratios below that of the LLOQ standard, are reported as being below the limit of quantitation (BLQ).

3.7. Reassays

3.7.1. Reassays for Analytical Reasons

After initial analysis, upon which no value was obtained, study samples that were identified for reassay due to analytical reasons were reassayed in singlicate if sufficient sample volume remained. These samples are identified in [Table 6](#).

3.7.2. Reassays for Sample Investigation

After initial analysis, study samples that were identified by the sponsor for reassay due to non-analytical reasons were reassayed if sufficient sample volume remained. These samples are identified in [Table 7](#).

3.8. Incurred Sample Reproducibility

To demonstrate that the analysis of incurred clinical sample concentrations were reproducible for the bioanalytical method, 126 clinical samples for nicotine and 125 samples for cotinine were reassayed. The samples were selected from multiple analytical runs and across the concentration range for clinical samples from the study. The % Difference for each pair of original and repeat assay results were calculated. If the % Difference was $\leq 20\%$, the pair was considered to be a match. The method was considered to be reproducible if at least two thirds (2/3) of the pairs matched. The results from this evaluation are presented in [Table 8](#). These results demonstrate that 90.5% of the pairs matched for nicotine and 95.2% of the pairs matched for cotinine and that the method is considered reproducible. The accuracy (%Theoretical) results for the calibration standards, QC samples, and standard curve parameters used for the incurred sample reproducibility are summarized in [Table 9](#).

4. RAW DATA AND CHROMATOGRAMS

The individual run reports for all accepted batches are presented in [Attachment 5](#). Chromatograms from a minimum of 20% of the subjects are provided in [Attachment 6](#).

Calculated concentrations as displayed on the chromatograms resulting from the Analyst™ software may differ from the calculated concentrations derived from the Watson™ LIMS

software. The Watson™ LIMS concentrations are the officially reviewed and accepted concentrations for the provided data.

5. ANALYTICAL NOTES

5.1. All Period 1 samples were diluted 10-fold prior to assay due to expected concentrations above the upper limit of quantitation.

5.2. The following batches were not included in the data set.

<u>Batch</u>	<u>Analyte</u>	<u>Reason for Non-inclusion</u>
14	Nicotine / Cotinine	Batch 14 was reassayed as Batch 30 due to only 6 of 9 standards meeting acceptance criteria.
15	Nicotine / Cotinine	Batch 15 was reassayed as Batch 31 due to only 2 of 6 QC samples meeting acceptance criteria.
23	Nicotine / Cotinine	Batch 23 was reassayed as Batch 33 due to batch related carryover.
42	Nicotine / Cotinine	Batch 42 was reassayed as Batch 43 due to no internal standard peak being detected.
44	Cotinine	Batch 44 was rejected as Data Not Needed.

5.3. The following batches were not included in the data set due to instrumentation issues. The issues were resolved, and the batches were reinjected.

<u>Batch</u>	<u>Analyte</u>	<u>Reason for Non-inclusion</u>
1	Nicotine / Cotinine	Batch 1 was reinjected as Batch 26 due to unacceptable chromatography.
7	Nicotine / Cotinine	Batch 7 was reinjected as Batch 29 due to absolute response drift.
25	Cotinine	Batch 25 was reinjected as Batch 38 due to a failed ending signal to noise evaluation.

5.4. Batches 27 and 28 consisted of reassays for nicotine only. The batch was not regressed for cotinine.

5.5. Batches 32, 34, 35 and 37 consisted of reassays for cotinine only. The batch was not regressed for nicotine.

5.6. When a sample was reassayed for only one compound and the reassay result for the other compound was not needed, the unnecessary reassay result was deactivated as “Not Used” and was not reported.

5.7. Event investigation LNK-EIR-2010-127 was initiated due to an unexpected result on Batch 13. It was noted the Standard J (50.0 ng/mL nicotine, 200 ng/mL cotinine) on Batch 13 was greater than 80% deviant from the theoretical concentration for both nicotine and cotinine. It was suspected that an aliquotting error resulted in the unexpected concentration measurement. The Standard J was dropped from the regression thus reducing the ULOQ for the batch to 160 ng/mL. As a result, 4 clinical samples quantifying between 200 and 160 ng/mL for cotinine required reanalysis to determine a reliable concentration. The samples were reassayed successfully. There was no further impact on the study results.

5.8. Event investigation LNK-EIR-2010-137 was initiated due to unexpected results on Batch 17. Greater than 5% of the samples on Batch 17 were coded as unreliable internal standard response. Test injections of the samples with variable internal standard response confirmed the original observations. The internal standard response for all but the 4 coded UISR samples was consistent. Incurred sample reproducibility samples tested from Batch 17 confirmed the sample results accuracy (6 of the 7 ISR test samples were acceptable). The 4 samples noted to have unusual internal standard response on Batch 17 were successfully reassayed. There was no further impact on the study results.

5.9. Event investigation LNK-EIR-2010-138 was initiated due to unexpected results on Batch 16. It was noted the Standard J (50.0 ng/mL nicotine, 200 ng/mL cotinine) on Batch 16 was greater than 80% deviant from the theoretical concentration for both nicotine and cotinine. It was suspected that an aliquotting error resulted in the unexpected concentration measurement. It should be noted that the analyst that performed Batch 16 also processed Batch 13 where a similar aliquotting error was suspected to have occurred. The Standard J was dropped from the regression thus reducing the ULOQ for the batch to 160 ng/mL. As a result 3 clinical samples quantifying between 200 and 160 ng/mL for cotinine required reanalysis to determine a reliable concentration. The samples were reassayed successfully. There was no further impact on the study results.

5.10. Event investigation LNK-EIR-2010-126 and 142 were initiated due to an unexpected results on Batches 13 and 18, respectively. An internal standard peak was observed in control blank injection number 85. It was suspected that an internal standard spiking errors resulted in the internal standard response observed in the control blanks, as the IS response is similar to the remainder of the batches. The other control blanks on the batches were clear of internal standard. The batches were therefore acceptable and there was no further impact on the study results..

6. STORAGE OF THE STUDY RELATED MATERIALS

All raw data, associated data, and the report are archived by Celerion, according to the SOP in effect during the conduct of the study.

7. COMPUTER APPLICATION PROGRAMS

Computer application programs used to acquire and derive data for this study included Watson™ LIMS 7.3 and AB | MDS Sciex Analyst™ 1.4.1. All regressions and calculations of concentrations were performed by Watson™ LIMS. Additionally, raw data was stored in electronic notebook system, Labnotes™ Web Client 1.10.4.

TABLES

Table 1. Summary of Batches Performed

Analyte Name	Batch Number	Regression Status	Extraction Date	Assay Date	Description	Comment
Nicotine	2	Accepted	22-Mar-2010	26-Mar-2010	SUB 007, 009, 011 PD 1	OK
Nicotine	3	Accepted	22-Mar-2010	26-Mar-2010	SUB 012, 013, 015 PD 1	OK
Nicotine	4	Accepted	22-Mar-2010	27-Mar-2010	SUB 018, 019, 021 PD 1	OK
Nicotine	5	Accepted	23-Mar-2010	29-Mar-2010	SUB 024, 026, 028 PD 1	OK
Nicotine	6	Accepted	23-Mar-2010	30-Mar-2010	SUB 001, 003, 005 PD 2	OK
Nicotine	8	Accepted	23-Mar-2010	30-Mar-2010	SUB 012, 013, 015 PD 2	OK
Nicotine	9	Accepted	23-Mar-2010	30-Mar-2010	SUB 018, 019, 021 PD 2	OK
Nicotine	10	Accepted	23-Mar-2010	31-Mar-2010	SUB 024, 026, 028 PD 2	OK
Nicotine	11	Accepted	23-Mar-2010	31-Mar-2010	SUB 001, 003, 005 PD 3	OK
Nicotine	12	Accepted	23-Mar-2010	31-Mar-2010	SUB 009, 011, 012 PD 3	OK
Nicotine	13	Accepted	31-Mar-2010	31-Mar-2010	SUB 013, 015, 018 PD 3	OK
Nicotine	14	Rejected	31-Mar-2010	01-Apr-2010	SUB 019, 021, 024 PD 3	std/qc fail acceptance
Nicotine	15	Rejected	31-Mar-2010	01-Apr-2010	SUB 026, 028, 007 PD 3	std/qc fail acceptance
Nicotine	16	Accepted	31-Mar-2010	01-Apr-2010	SUB 001, 003, 005 PD 4	OK
Nicotine	17	Accepted	01-Apr-2010	01-Apr-2010	SUB 007, 009, 011 PD 4	OK
Nicotine	18	Accepted	01-Apr-2010	02-Apr-2010	SUB 012, 013, 015 PD 4	OK
Nicotine	19	Accepted	05-Apr-2010	05-Apr-2010	SUB 018, 019, 021 PD 4	OK
Nicotine	20	Accepted	05-Apr-2010	06-Apr-2010	SUB 024, 026, 028 PD 4	OK
Nicotine	21	Accepted	05-Apr-2010	05-Apr-2010	SUB 001, 003, 005 PD 5	OK
Nicotine	22	Accepted	05-Apr-2010	06-Apr-2010	SUB 007, 009, 011 PD 5	OK
Nicotine	24	Accepted	06-Apr-2010	06-Apr-2010	SUB 018, 019, 021 PD 5	OK
Nicotine	25	Accepted	08-Apr-2010	08-Apr-2010	SUB 024, 026, 028 PD 5	OK
Nicotine	26	Accepted	22-Mar-2010	27-Mar-2010	SUB 001, 003, 005 PD 1 (RI of RUN-001)	OK
Nicotine	27	Accepted	08-Apr-2010	09-Apr-2010	REASSAYS- NICOTINE ONLY	OK
Nicotine	28	Accepted	08-Apr-2010	10-Apr-2010	REASSAYS- NICOTINE ONLY	OK
Nicotine	29	Accepted	23-Mar-2010	30-Mar-2010	RI of RUN_007 (SUB 007, 009, 011 PD 2)	OK
Nicotine	30	Accepted	08-Apr-2010	10-Apr-2010	RR OF FAILED RUN 14 (SUB 019, 021, 024 PD 3)	OK
Nicotine	31	Accepted	12-Apr-2010	12-Apr-2010	RR OF FAILED RUN 15(SUB 026, 028, 007 PD 3) + RRs	OK
Nicotine	33	Accepted	12-Apr-2010	13-Apr-2010	RR OF RUN 23 (SUB 012, 013, 015 PD 5)	OK
Nicotine	36	Accepted	13-Apr-2010	14-Apr-2010	REASSAYS	OK
Nicotine	39	Accepted	15-Apr-2010	15-Apr-2010	ISRs	OK
Nicotine	40	Accepted	15-Apr-2010	16-Apr-2010	ISRs	OK

Analyte Name	Batch Number	Regression Status	Extraction Date	Assay Date	Description	Comment
Nicotine	41	Accepted	15-Apr-2010	15-Apr-2010	REASSAYS	OK
Nicotine	43	Accepted	20-Apr-2010	20-Apr-2010	RR of 42 (ISR REASSAYS + Added ISRs) + Added ISRs	OK
Nicotine	44	Accepted	12-May-2010	12-May-2010	SSR	OK
Cotinine	2	Accepted	22-Mar-2010	26-Mar-2010	SUB 007, 009, 011 PD 1	OK
Cotinine	3	Accepted	22-Mar-2010	26-Mar-2010	SUB 012, 013, 015 PD 1	OK
Cotinine	4	Accepted	22-Mar-2010	27-Mar-2010	SUB 018, 019, 021 PD 1	OK
Cotinine	5	Accepted	23-Mar-2010	29-Mar-2010	SUB 024, 026, 028 PD 1	OK
Cotinine	6	Accepted	23-Mar-2010	30-Mar-2010	SUB 001, 003, 005 PD 2	OK
Cotinine	8	Accepted	23-Mar-2010	30-Mar-2010	SUB 012, 013, 015 PD 2	OK
Cotinine	9	Accepted	23-Mar-2010	30-Mar-2010	SUB 018, 019, 021 PD 2	OK
Cotinine	10	Accepted	23-Mar-2010	31-Mar-2010	SUB 024, 026, 028 PD 2	OK
Cotinine	11	Accepted	23-Mar-2010	31-Mar-2010	SUB 001, 003, 005 PD 3	OK
Cotinine	12	Accepted	23-Mar-2010	31-Mar-2010	SUB 009, 011, 012 PD 3	OK
Cotinine	13	Accepted	31-Mar-2010	31-Mar-2010	SUB 013, 015, 018 PD 3	OK
Cotinine	14	Rejected	31-Mar-2010	01-Apr-2010	SUB 019, 021, 024 PD 3	std/qc fail acceptance
Cotinine	15	Rejected	31-Mar-2010	01-Apr-2010	SUB 026, 028, 007 PD 3	std/qc fail acceptance
Cotinine	16	Accepted	31-Mar-2010	01-Apr-2010	SUB 001, 003, 005 PD 4	OK
Cotinine	17	Accepted	01-Apr-2010	01-Apr-2010	SUB 007, 009, 011 PD 4	OK
Cotinine	18	Accepted	01-Apr-2010	02-Apr-2010	SUB 012, 013, 015 PD 4	OK
Cotinine	19	Accepted	05-Apr-2010	05-Apr-2010	SUB 018, 019, 021 PD 4	OK
Cotinine	20	Accepted	05-Apr-2010	06-Apr-2010	SUB 024, 026, 028 PD 4	OK
Cotinine	21	Accepted	05-Apr-2010	05-Apr-2010	SUB 001, 003, 005 PD 5	OK
Cotinine	22	Accepted	05-Apr-2010	06-Apr-2010	SUB 007, 009, 011 PD 5	OK
Cotinine	24	Accepted	06-Apr-2010	06-Apr-2010	SUB 018, 019, 021 PD 5	OK
Cotinine	26	Accepted	22-Mar-2010	27-Mar-2010	SUB 001, 003, 005 PD 1 (RI of RUN-001)	OK
Cotinine	29	Accepted	23-Mar-2010	30-Mar-2010	RI of RUN_007 (SUB 007, 009, 011 PD 2)	OK
Cotinine	30	Accepted	08-Apr-2010	10-Apr-2010	RR OF FAILED RUN 14 (SUB 019, 021, 024 PD 3)	OK
Cotinine	31	Accepted	12-Apr-2010	12-Apr-2010	RR OF FAILED RUN 15(SUB 026, 028, 007 PD 3) + RRs	OK
Cotinine	32	Accepted	12-Apr-2010	13-Apr-2010	REASSAYS-COTININE ONLY	OK
Cotinine	33	Accepted	12-Apr-2010	13-Apr-2010	RR OF RUN 23 (SUB 012, 013, 015 PD 5)	OK
Cotinine	34	Accepted	12-Apr-2010	14-Apr-2010	REASSAYS-COTININE ONLY	OK
Cotinine	35	Accepted	13-Apr-2010	13-Apr-2010	REASSAYS-COTININE ONLY	OK
Cotinine	36	Accepted	13-Apr-2010	14-Apr-2010	REASSAYS	OK
Cotinine	37	Accepted	13-Apr-2010	14-Apr-2010	REASSAYS-COTININE ONLY	OK
Cotinine	38	Accepted	08-Apr-2010	09-Apr-2010	RI RUN 025- COTININE ONLY (SUB 024, 026, 028 PD5)	OK

Analyte Name	Batch Number	Regression Status	Extraction Date	Assay Date	Description	Comment
Cotinine	39	Accepted	15-Apr-2010	15-Apr-2010	ISRs	OK
Cotinine	40	Accepted	15-Apr-2010	16-Apr-2010	ISRs	OK
Cotinine	41	Accepted	15-Apr-2010	15-Apr-2010	REASSAYS	OK
Cotinine	43	Accepted	20-Apr-2010	20-Apr-2010	RR of 42 (ISR REASSAYS + Added ISRs) + Added ISRs	OK
Cotinine	44	Rejected	12-May-2010	12-May-2010	SSR	OK

Table 2. Quality Control Sample Data (Between-batch Precision and Accuracy)

Nicotine

Assay Date	Batch Number	QC A 1.50 ng/mL	QC B 8.00 ng/mL	QC C 37.5 ng/mL	QC C DF2 37.5 ng/mL	QC E DF10 195 ng/mL
26-Mar-2010	2	1.46	7.75	36.0		191
		1.43	8.23	34.3		192
						198
26-Mar-2010	3	1.47	7.29	34.7		188
		1.46	7.90	35.0		185
						191
27-Mar-2010	4	1.50	8.04	35.3		190
		1.42	7.77	34.4		192
						181
27-Mar-2010	26	1.50	7.78	35.7		213
		1.44	8.22	35.7		194
						187
29-Mar-2010	5	1.37	8.09	~45.0		183
		1.39	7.45	33.8		179
						177
30-Mar-2010	6	1.41	7.81	34.7		
		1.47	7.41	34.8		
30-Mar-2010	8	1.56	8.14	34.7		
		1.59	7.99	36.5		
30-Mar-2010	9	1.46	7.82	35.3		
		1.49	7.63	35.4		
30-Mar-2010	29	1.45	7.48	34.8		
		~1.86	7.57	36.7		
31-Mar-2010	10	1.45	7.87	35.6		
		1.45	7.83	35.4		
31-Mar-2010	11	1.40	8.03	34.2		
		1.31	7.65	37.1		
31-Mar-2010	12	1.46	7.76	33.4		
		1.51	7.81	37.9		
31-Mar-2010	13	1.43	7.41	34.0		
		1.48	7.30	32.8		
01-Apr-2010	16	1.35	7.61	34.0		
		1.47	7.73	33.7		
01-Apr-2010	17	1.37	7.75	33.6		
		1.52	7.46	35.7		
02-Apr-2010	18	1.52	7.92	35.3		
		1.45	8.24	35.3		
05-Apr-2010	19	1.37	7.77	33.2		

Assay Date	Batch Number	QC A 1.50 ng/mL	QC B 8.00 ng/mL	QC C 37.5 ng/mL	QC C DF2 37.5 ng/mL	QC E DF10 195 ng/mL
05-Apr-2010	21	1.44 1.51	7.77 7.49	35.5 34.0		
06-Apr-2010	20	1.50 1.48	7.39 7.78	36.5 35.2		
06-Apr-2010	22	1.52 1.49	8.08 7.32	33.8 35.7		
06-Apr-2010	24	1.46 1.46	7.74 7.58	35.7 35.3		
08-Apr-2010	25	1.44 1.35	7.46 7.58	35.2 34.3		
09-Apr-2010	27	1.41 1.36	7.81 7.52	34.6 35.1		
10-Apr-2010	28	1.46 1.51	7.39 7.75	34.2 34.4		
10-Apr-2010	30	1.49 1.37	7.56 7.59	34.2 35.7		
12-Apr-2010	31	1.38 1.46 1.62	8.19 7.95 7.68	33.8 38.1 ~46.4	36.7 33.1 36.8	
13-Apr-2010	33	1.43 1.38	7.68 7.81	34.5 36.3		
14-Apr-2010	36	1.40 1.46	7.81 7.98	36.1 36.8		182 188 191
15-Apr-2010	41	1.54 1.40	7.94 7.83	34.1 36.1		176 186 183
12-May-2010	44	1.43 1.37	7.39 7.48	33.2 36.1		
Mean		1.46	7.73	35.4	35.5	188
S.D.		0.0805	0.249	2.23	2.11	8.12
%CV		5.5	3.2	6.3	5.9	4.3
%Theoretical		97.3	96.6	94.4	94.7	96.4
%Bias		-2.7	-3.4	-5.6	-5.3	-3.6
n		60	60 60		3	21

~ > 15%Bias

Cotinine

Assay Date	Batch Number	QC A 3.00 ng/mL	QC B 37.5 ng/mL	QC C 150 ng/mL	QC C DF2 150 ng/mL	QC E DF10 780 ng/mL
26-Mar-2010	2	3.03	34.8	149		781
		2.94	36.7	148		817
						793
26-Mar-2010	3	3.02	34.7	151		781
		2.75	36.2	153		791
						807
27-Mar-2010	4	3.06	37.0	153		812
		3.18	36.8	156		804
						829
27-Mar-2010	26	2.99	35.6	150		~905
		2.99	36.4	152		800
						795
29-Mar-2010	5	3.03	36.4	~186		760
		2.96	34.7	142		762
						744
30-Mar-2010	6	3.01	35.9	153		
		3.05	35.2	153		
30-Mar-2010	8	3.02	36.9	151		
		2.93	36.7	147		
30-Mar-2010	9	3.22	35.3	144		
		2.79	35.2	148		
30-Mar-2010	29	2.82	34.3	149		
		~3.97	36.3	147		
31-Mar-2010	10	3.29	37.2	152		
		~3.47	37.0	148		
31-Mar-2010	11	3.19	36.1	146		
		2.93	36.3	149		
31-Mar-2010	12	3.08	36.0	142		
		2.98	35.7	152		
31-Mar-2010	13	2.90	34.6	143		
		2.92	35.1	144		
01-Apr-2010	16	2.94	34.1	144		
		2.93	35.4	149		
01-Apr-2010	17	3.03	35.8	149		
		2.89	34.5	143		
02-Apr-2010	18	2.99	35.8	152		
		3.11	37.4	150		
05-Apr-2010	19	2.82	35.7	141		
		2.87	33.6	142		
05-Apr-2010	21	3.01	34.8	141		
		2.85	32.9	144		

Assay Date	Batch Number	QC A 3.00 ng/mL	QC B 37.5 ng/mL	QC C 150 ng/mL	QC C DF2 150 ng/mL	QC E DF10 780 ng/mL
06-Apr-2010	20	3.12	35.6	148		
		2.86	35.4	145		
06-Apr-2010	22	2.87	33.5	145		
		3.01	35.4	150		
06-Apr-2010	24	3.17	35.6	146		
		3.05	34.9	151		
09-Apr-2010	38	2.97	36.5	152		
		2.83	35.8	151		
10-Apr-2010	30	3.16	36.5	144		
		3.20	35.9	147		
12-Apr-2010	31	3.13	36.2	157	156	
		2.83	36.5	~195	147	
					156	
13-Apr-2010	32	3.00	35.6	145		778
		2.95	35.9	145		815
						*3010
13-Apr-2010	33	3.07	35.0	146		
		2.85	36.6	154		
13-Apr-2010	35	3.07	35.5	155		792
		2.99	35.8	149		773
						773
14-Apr-2010	34	2.95	36.4	152		778
		2.92	35.2	~200		806
						793
14-Apr-2010	36	3.03	36.0	152		812
		3.07	35.4	155		807
						820
14-Apr-2010	37	2.99	36.6	156		761
		3.03	35.0	148		783
						779
15-Apr-2010	41	3.32	35.5	149		782
		3.33	36.9	152		770
						794
Mean		3.03	35.7	151	153	794
S.D.		0.185	0.928	10.6	5.20	28.4
%CV		6.1	2.6	7.0	3.4	3.6
%Theoretical		101.0	95.2	100.7	102.0	101.8
%Bias		1.0	-4.8	0.7	2.0	1.8
n		62	62	62	3	32

Reason Deactivated

* UISR

~ > 15%Bias

Table 3. Back-calculated Calibration Curve Standard Concentrations

Nicotine

Assay Date	Batch Number	STD B 0.500 ng/mL	STD C 1.00 ng/mL	STD D 2.00 ng/mL	STD E 4.00 ng/mL	STD F 8.00 ng/mL	STD G 10.0 ng/mL	STD H 20.0 ng/mL	STD I 40.0 ng/mL	STD J 50.0 ng/mL
26-Mar-2010	2	0.495	0.997	2.12	3.90	8.04	9.88	20.5	38.9	49.2
26-Mar-2010	3	0.495	1.03	1.95	3.99	8.45	9.95	20.0	40.4	47.6
27-Mar-2010	4	0.485	1.04	2.09	3.89	8.39	9.75	20.0	39.1	48.4
27-Mar-2010	26	0.497	1.02	1.96	3.96	8.43	9.94	20.0	39.0	49.7
29-Mar-2010	5	0.504	0.990	1.93	4.04	8.31	10.4	*27.0	39.8	47.8
30-Mar-2010	6	0.490	1.04	2.00	4.04	8.24	9.99	19.7	40.0	47.9
30-Mar-2010	8	0.483	1.06	2.02	*5.29	8.38	9.95	19.9	37.7	49.3
30-Mar-2010	9	0.498	0.992	2.03	4.14	8.25	9.87	19.9	38.9	48.7
30-Mar-2010	29	0.501	1.02	1.91	3.95	8.18	*13.2	19.9	39.4	51.8
31-Mar-2010	10	0.498	1.00	2.01	4.04	8.16	10.2	19.6	38.9	50.0
31-Mar-2010	11	0.504	0.986	1.96	4.08	8.28	9.96	20.9	38.9	47.9
31-Mar-2010	12	0.506	0.983	1.96	4.00	8.18	10.1	19.9	40.3	49.3

Assay Date	Batch Number	STD B 0.500 ng/mL	STD C 1.00 ng/mL	STD D 2.00 ng/mL	STD E 4.00 ng/mL	STD F 8.00 ng/mL	STD G 10.0 ng/mL	STD H 20.0 ng/mL	STD I 40.0 ng/mL	STD J 50.0 ng/mL
31-Mar-2010	13	0.500	1.01	1.97	3.84	8.02	10.2	20.5	39.9	*93.7
01-Apr-2010	16	0.483	1.08	1.97	3.88	8.36	10.0	19.4	39.3	*93.0
01-Apr-2010	17	0.500	1.00	1.94	4.27	8.02	9.98	19.8	40.3	48.3
02-Apr-2010	18	0.491	1.04	1.97	3.96	7.95	10.1	20.3	38.7	50.4
05-Apr-2010	19	0.494	1.03	1.99	3.94	8.20	10.1	20.7	39.1	48.2
05-Apr-2010	21	0.513	0.953	1.97	3.92	8.55	10.3	19.5	38.6	50.9
06-Apr-2010	20	0.489	1.03	2.04	3.94	8.18	10.1	19.9	39.3	48.5
06-Apr-2010	22	0.500	0.969	2.10	4.09	8.20	9.92	20.8	38.0	47.6
06-Apr-2010	24	0.496	0.996	2.05	4.05	8.20	10.4	19.8	39.3	47.0
08-Apr-2010	25	0.484	1.05	2.05	4.08	8.31	9.94	19.2	38.8	48.9
09-Apr-2010	27	0.486	1.05	2.00	4.03	8.51	10.2	19.5	37.9	48.2
10-Apr-2010	28	0.494	1.03	2.00	3.84	8.26	10.4	19.4	40.4	48.9
10-Apr-2010	30	0.498	1.01	1.97	3.90	8.34	10.2	20.4	39.1	48.4
12-Apr-2010	31	0.500	1.01	1.95	3.87	8.34	10.3	20.5	39.1	48.5

Assay Date	Batch Number	STD B 0.500 ng/mL	STD C 1.00 ng/mL	STD D 2.00 ng/mL	STD E 4.00 ng/mL	STD F 8.00 ng/mL	STD G 10.0 ng/mL	STD H 20.0 ng/mL	STD I 40.0 ng/mL	STD J 50.0 ng/mL
13-Apr-2010	33	0.510	0.962	1.97	4.03	8.46	9.99	19.9	39.4	49.6
14-Apr-2010	36	0.507	0.984	1.95	3.95	8.42	10.1	19.9	40.4	48.9
15-Apr-2010	41	0.497	1.00	2.03	4.04	8.28	10.3	19.6	38.7	48.8
12-May-2010	44	0.505	0.982	1.98	4.02	7.86	10.1	22.8	38.6	45.8
Mean		0.497	1.01	1.99	3.99	8.26	10.1	20.1	39.2	48.7
S.D.		0.00793	0.0302	0.0510	0.0959	0.166	0.174	0.682	0.732	1.20
%CV		1.6	3.0	2.6	2.4	2.0	1.7	3.4	1.9	2.5
%Bias		-0.6	1.0	-0.5	-0.3	3.3	1.0	0.5	-2.0	-2.6
n		30	30	30 29 30 29 29 30						28

Reasons Deactivated

* Rejected

** UISR

Cotinine

Assay Date	Batch Number	STD B 1.00 ng/mL	STD C 2.00 ng/mL	STD D 4.00 ng/mL	STD E 8.00 ng/mL	STD F 16.0 ng/mL	STD G 40.0 ng/mL	STD H 80.0 ng/mL	STD I 160 ng/mL	STD J 200 ng/mL
26-Mar-2010	2	1.00	1.95	3.97	8.42	17.7	39.3	79.4	153	188
26-Mar-2010	3	0.935	2.20	4.19	7.95	17.4	38.9	77.4	153	188
27-Mar-2010	4	0.993	2.00	4.02	8.13	17.4	39.5	77.7	155	194
27-Mar-2010	26	0.954	2.18	3.87	8.19	18.0	39.6	76.2	154	188
29-Mar-2010	5	0.971	2.08	4.02	8.03	17.9	39.3	*102	150	188
30-Mar-2010	6	0.986	1.99	4.22	7.88	17.4	40.0	77.6	156	189
30-Mar-2010	8	1.02	1.91	4.01	*10.8	17.8	39.6	78.6	158	191
30-Mar-2010	9	0.987	2.09	3.77	7.92	18.0	39.7	78.2	158	191
30-Mar-2010	29	0.991	2.02	3.96	8.01	17.5	*53.8	76.9	150	202
31-Mar-2010	10	1.02	1.91	3.90	8.15	17.8	40.2	79.3	153	194
31-Mar-2010	11	0.963	2.11	4.03	8.14	17.9	39.4	76.8	153	188
31-Mar-2010	12	1.02	1.88	3.95	8.35	18.3	38.5	79.3	154	190
31-Mar-2010	13	0.957	2.19	3.87	7.83	17.7	39.6	76.3	152	*374

Assay Date	Batch Number	STD B 1.00 ng/mL	STD C 2.00 ng/mL	STD D 4.00 ng/mL	STD E 8.00 ng/mL	STD F 16.0 ng/mL	STD G 40.0 ng/mL	STD H 80.0 ng/mL	STD I 160 ng/mL	STD J 200 ng/mL
01-Apr-2010	16	0.982	2.07	3.95	7.87	17.9	38.6	76.4	155	*363
01-Apr-2010	17	1.00	1.94	3.92	8.51	17.9	39.9	76.1	162	180
02-Apr-2010	18	1.00	1.96	3.97	8.26	17.3	40.5	77.9	156	189
05-Apr-2010	19	0.963	2.08	4.16	8.21	17.5	39.3	78.5	151	187
05-Apr-2010	21	1.00	1.92	4.08	8.11	18.1	40.8	76.5	150	190
06-Apr-2010	20	0.995	1.97	4.02	8.38	17.5	39.5	77.8	153	192
06-Apr-2010	22	0.979	2.08	3.93	7.87	18.1	40.3	77.5	155	188
06-Apr-2010	24	0.971	2.09	4.05	7.88	17.7	39.5	79.2	155	188
09-Apr-2010	38	1.00	1.96	4.04	8.01	17.8	39.5	76.5	157	195
10-Apr-2010	30	0.966	2.10	4.01	8.11	18.2	38.5	77.7	154	187
12-Apr-2010	31	***0.956	1.98	3.94	8.09	18.0	39.9	79.9	149	192
13-Apr-2010	32	***0.961	1.98	3.94	8.17	18.0	39.5	78.1	153	193
13-Apr-2010	33	***0.942	2.00	3.86	8.15	18.0	40.1	76.5	152	197
13-Apr-2010	35	***1.03	1.95	4.05	8.06	18.3	39.2	78.6	153	188

Assay Date	Batch Number	STD B 1.00 ng/mL	STD C 2.00 ng/mL	STD D 4.00 ng/mL	STD E 8.00 ng/mL	STD F 16.0 ng/mL	STD G 40.0 ng/mL	STD H 80.0 ng/mL	STD I 160 ng/mL	STD J 200 ng/mL
14-Apr-2010	34	***0.821	1.99	3.94	7.97	18.0	40.4	77.8	154	192
14-Apr-2010	36	***0.879	2.04	3.71	8.09	18.0	40.1	78.7	157	191
14-Apr-2010	37	***0.945	1.97	3.95	8.25	17.9	39.4	78.2	154	191
15-Apr-2010	41	0.995	1.99	3.96	8.30	17.8	39.4	77.8	155	189
Mean		0.985	2.02	3.98	8.11	17.8	39.6	77.8	154	190
S.D.		0.0220	0.0844	0.107	0.176	0.269	0.560	1.07	2.73	3.89
%CV		2.2	4.2	2.7	2.2	1.5	1.4	1.4	1.8	2.0
%Bias		-1.5	1.0	-0.5	1.4	11.3	-1.0	-2.8	-3.8	-5.0
n		24	31 31		30	31	30	30	31	29

Reasons Deactivated

* Rejected

** UISR

*** Not Used (Interference)

Table 4. Standard Curve Parameters

Nicotine

Assay Date	Batch Number	Slope	Intercept	R-Squared
26-Mar-2010	2	0.697403075	0.0152713854	0.9989
26-Mar-2010	3	0.706445863	-0.00108907368	0.9988
27-Mar-2010	4	0.722023949	-0.0121388560	0.9983
27-Mar-2010	26	0.700321338	0.0576758542	0.9993
29-Mar-2010	5	0.711684302	0.00562726413	0.9987
30-Mar-2010	6	0.702957684	0.00576209165	0.9992
30-Mar-2010	8	0.752747301	-0.0299261793	0.9980
30-Mar-2010	9	0.701560932	-0.0203278228	0.9993
30-Mar-2010	29	0.767128000	-0.0184485990	0.9991
31-Mar-2010	10	0.692767194	-0.0342701560	0.9997
31-Mar-2010	11	0.732553970	0.0344398994	0.9988
31-Mar-2010	12	0.743033392	-0.000958813697	0.9997
31-Mar-2010	13	0.705580343	-0.0553412025	0.9994
01-Apr-2010	16	0.773585939	-0.0370623123	0.9976
01-Apr-2010	17	0.771198231	-0.0282973514	0.9988
02-Apr-2010	18	0.755175090	-0.0185825060	0.9993
05-Apr-2010	19	0.697494228	-0.0436016857	0.9992
05-Apr-2010	21	0.743493020	-0.0298334199	0.9981
06-Apr-2010	20	0.691840000	-0.0157409191	0.9993
06-Apr-2010	22	0.765567919	-0.0510130902	0.9981
06-Apr-2010	24	0.687644907	-0.0186806251	0.9988
08-Apr-2010	25	0.721674119	-0.0350607624	0.9985
09-Apr-2010	27	0.722423092	-0.0231023448	0.9979
10-Apr-2010	28	0.717299485	-0.0364044351	0.9989
10-Apr-2010	30	0.701607487	-0.0248611489	0.9991
12-Apr-2010	31	0.676795896	0.00516014927	0.9989
13-Apr-2010	33	0.759313572	0.0441823485	0.9990
14-Apr-2010	36	0.694130106	-0.00745870681	0.9992
15-Apr-2010	41	0.768591449	-0.0214969758	0.9993
12-May-2010	44	0.717263988	-0.0278226987	0.9951
Mean		0.723376862	-0.0141133564	0.9987
S.D.		0.0292923871	0.0264949995	0.0009
%CV		4.0	-187.7	0.1
n		30	30	30

Cotinine

Assay Date	Batch Number	Slope	Intercept	R-Squared
26-Mar-2010	2	0.0122646983	0.00112238290	0.9967
26-Mar-2010	3	0.0122106584	0.000498314534	0.9947
27-Mar-2010	4	0.0121475348	0.00135374728	0.9981
27-Mar-2010	26	0.0126054879	0.000936005008	0.9943
29-Mar-2010	5	0.0131923521	-0.0000268880097	0.9953
30-Mar-2010	6	0.0125523278	0.000981248377	0.9973
30-Mar-2010	8	0.0277433954	0.00623577375	0.9968
30-Mar-2010	9	0.0127701807	0.00201567319	0.9961
30-Mar-2010	29	0.0269668299	0.00330670278	0.9973
31-Mar-2010	10	0.0124969373	0.00121875842	0.9969
31-Mar-2010	11	0.0266838939	-0.000788237311	0.9956
31-Mar-2010	12	0.0290458019	0.00400269190	0.9945
31-Mar-2010	13	0.0127448208	0.000909408189	0.9944
01-Apr-2010	16	0.0281036566	0.000900783927	0.9960
01-Apr-2010	17	0.0283325258	0.00100770705	0.9949
02-Apr-2010	18	0.0269709317	0.00471872693	0.9978
05-Apr-2010	19	0.0131590453	-0.0000432967094	0.9964
05-Apr-2010	21	0.0300520088	0.00172722273	0.9953
06-Apr-2010	20	0.0129805996	-0.000244161195	0.9974
06-Apr-2010	22	0.0292890712	0.00267437707	0.9958
06-Apr-2010	24	0.0128685183	-0.000279641964	0.9968
09-Apr-2010	38	0.0731417453	0.00307333643	0.9973
10-Apr-2010	30	0.0728383200	-0.00474722801	0.9949
12-Apr-2010	31	0.0732015722	0.0276831953	0.9956
13-Apr-2010	32	0.0766361955	0.0243259236	0.9961
13-Apr-2010	33	0.0296522358	0.0126371035	0.9956
13-Apr-2010	35	0.0767833740	0.0288213299	0.9945
14-Apr-2010	34	0.0295652514	0.0157755944	0.9961
14-Apr-2010	36	0.0754157624	0.0390337660	0.9954
14-Apr-2010	37	0.0771835278	0.0269916175	0.9963
15-Apr-2010	41	0.0293675942	0.0000628614301	0.9967
Mean		0.0328698986	0.00664144513	0.9960
S.D.		0.0242279292	0.0109947354	0.0011
%CV		73.7	165.5	0.1
n		31	31	31

Table 5. Study Sample Concentrations

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000077	001	1	1	1	1	0.00	OK		Nicotine
497170000078	001	1	2	2	1	0.00	OK		Nicotine
497170000079	001	1	3	3	1	26.8	OK		Nicotine
497170000080	001	1	4	4	1	34.6	OK		Nicotine
497170000081	001	1	5	5	1	30.4	OK		Nicotine
497170000082	001	1	6	6	1	25.4	OK		Nicotine
497170000083	001	1	7	7	1	14.6	OK		Nicotine
497170000084	001	1	8	8	1	10.5	OK		Nicotine
497170000085	001	1	9	9	1	8.25	OK		Nicotine
497170000086	001	1	10	10	1	5.61	OK		Nicotine
497170000087	001	1	11	11	1	4.56	OK		Nicotine
497170000088	001	1	12	12	1	3.69	OK		Nicotine
497170000089	001	1	13	13	1	3.50	OK		Nicotine
497170000090	001	1	14	14	1	3.41	OK		Nicotine
497170000091	001	1	15	15	1	2.84	OK		Nicotine
497170000092	001	1	16	16	1	2.96	OK		Nicotine
497170000093	001	1	17	17	1	1.96	OK		Nicotine
497170000094	001	1	18	18	1	1.81	OK		Nicotine
497170000095	001	1	19	19	1	1.62	OK		Nicotine
497170000058	001	2	1	1	2	0.00	OK		Nicotine
497170000059	001	2	2	2	2	0.00	OK		Nicotine
497170000060	001	2	3	3	2	0.00	OK		Nicotine
497170000061	001	2	4	4	2	0.00	OK		Nicotine
497170000062	001	2	5	5	2	0.810	OK		Nicotine
497170000063	001	2	6	6	2	0.962	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000064	001	2	7	7	2	1.03	OK		Nicotine
497170000065	001	2	8	8	2	0.968	OK		Nicotine
497170000066	001	2	9	9	2	0.968	OK		Nicotine
497170000067	001	2	10	10	2	1.17	OK		Nicotine
497170000068	001	2	11	11	2	0.868	OK		Nicotine
497170000069	001	2	12	12	2	0.735	OK		Nicotine
497170000070	001	2	13	13	2	0.637	OK		Nicotine
497170000071	001	2	14	14	2	0.523	OK		Nicotine
497170000072	001	2	15	15	2	0.00	OK		Nicotine
497170000073	001	2	16	16	2	0.00	OK		Nicotine
497170000074	001	2	17	17	2	0.00	OK		Nicotine
497170000075	001	2	18	18	2	0.00	OK		Nicotine
497170000076	001	2	19	19	2	0.00	OK		Nicotine
497170000039	001	3	1	1	3	0.00	OK		Nicotine
497170000040	001	3	2	2	3	0.00	OK		Nicotine
497170000041	001	3	3	3	3	0.00	OK		Nicotine
497170000042	001	3	4	4	3	0.691	OK		Nicotine
497170000043	001	3	5	5	3	1.85	OK		Nicotine
497170000044	001	3	6	6	3	2.59	OK		Nicotine
497170000045	001	3	7	7	3	3.75	OK		Nicotine
497170000046	001	3	8	8	3	5.26	OK		Nicotine
497170000047	001	3	9	9	3	3.93	OK		Nicotine
497170000048	001	3	10	10	3	3.49	OK		Nicotine
497170000049	001	3	11	11	3	2.78	OK		Nicotine
497170000050	001	3	12	12	3	2.24	OK		Nicotine
497170000051	001	3	13	13	3	1.83	OK		Nicotine
497170000052	001	3	14	14	3	1.49	OK		Nicotine
497170000053	001	3	15	15	3	1.20	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000054	001	3	16	16	3	1.03	OK		Nicotine
497170000055	001	3	17	17	3	0.869	OK		Nicotine
497170000056	001	3	18	18	3	0.636	OK		Nicotine
497170000057	001	3	19	19	3	0.674	OK		Nicotine
497170000020	001	4	1	1	4	0.00	OK		Nicotine
497170000021	001	4	2	2	4	0.00	OK		Nicotine
497170000022	001	4	3	3	4	0.00	OK		Nicotine
497170000023	001	4	4	4	4	0.814	OK		Nicotine
497170000024	001	4	5	5	4	2.73	OK		Nicotine
497170000025	001	4	6	6	4	3.37	OK		Nicotine
497170000026	001	4	7	7	4	4.97	OK		Nicotine
497170000027	001	4	8	8	4	4.14	OK		Nicotine
497170000028	001	4	9	9	4	3.57	OK		Nicotine
497170000029	001	4	10	10	4	2.13	OK		Nicotine
497170000030	001	4	11	11	4	1.79	OK		Nicotine
497170000031	001	4	12	12	4	1.45	OK		Nicotine
497170000032	001	4	13	13	4	1.32	OK		Nicotine
497170000033	001	4	14	14	4	1.11	OK		Nicotine
497170000034	001	4	15	15	4	0.928	OK		Nicotine
497170000035	001	4	16	16	4	0.911	OK		Nicotine
497170000036	001	4	17	17	4	0.695	OK		Nicotine
497170000037	001	4	18	18	4	0.684	OK		Nicotine
497170000038	001	4	19	19	4	0.625	OK		Nicotine
497170000001	001	5	1	1	5	0.00	OK		Nicotine
497170000002	001	5	2	2	5	0.00	OK		Nicotine
497170000003	001	5	3	3	5	0.00	OK		Nicotine
497170000004	001	5	4	4	5	0.545	OK		Nicotine
497170000005	001	5	5	5	5	1.56	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000006	001	5	6	6	5	2.28	OK		Nicotine
497170000007	001	5	7	7	5	2.90	OK		Nicotine
497170000008	001	5	8	8	5	3.75	OK		Nicotine
497170000009	001	5	9	9	5	4.04	OK		Nicotine
497170000010	001	5	10	10	5	2.94	OK		Nicotine
497170000011	001	5	11	11	5	2.16	OK		Nicotine
497170000012	001	5	12	12	5	1.69	OK		Nicotine
497170000013	001	5	13	13	5	1.46	OK		Nicotine
497170000014	001	5	14	14	5	1.10	OK		Nicotine
497170000015	001	5	15	15	5	1.24	OK		Nicotine
497170000016	001	5	16	16	5	0.887	OK		Nicotine
497170000017	001	5	17	17	5	0.713	OK		Nicotine
497170000018	001	5	18	18	5	0.607	OK		Nicotine
497170000019	001	5	19	19	5	0.718	OK		Nicotine
497170000172	003	1	1	1	1	0.651	OK		Nicotine
497170000173	003	1	2	2	1	0.577	OK		Nicotine
497170000174	003	1	3	3	1	9.04	OK		Nicotine
497170000175	003	1	4	4	1	19.1	OK		Nicotine
497170000176	003	1	5	5	1	17.9	OK		Nicotine
497170000177	003	1	6	6	1	9.80	OK		Nicotine
497170000178	003	1	7	7	1	9.50	OK		Nicotine
497170000179	003	1	8	8	1	8.14	OK		Nicotine
497170000180	003	1	9	9	1	6.76	OK		Nicotine
497170000181	003	1	10	10	1	5.25	OK		Nicotine
497170000182	003	1	11	11	1	4.18	OK		Nicotine
497170000183	003	1	12	12	1	3.44	OK		Nicotine
497170000184	003	1	13	13	1	3.29	OK		Nicotine
497170000185	003	1	14	14	1	2.83	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000186	003	1	15	15	1	2.62	OK		Nicotine
497170000187	003	1	16	16	1	2.41	OK		Nicotine
497170000188	003	1	17	17	1	2.25	OK		Nicotine
497170000189	003	1	18	18	1	1.89	OK		Nicotine
497170000190	003	1	19	19	1	1.70	OK		Nicotine
497170000153	003	2	1	1	2	0.742	OK		Nicotine
497170000154	003	2	2	2	2	0.680	OK		Nicotine
497170000155	003	2	3	3	2	0.635	OK		Nicotine
497170000156	003	2	4	4	2	0.621	OK		Nicotine
497170000157	003	2	5	5	2	0.729	OK		Nicotine
497170000158	003	2	6	6	2	0.758	OK		Nicotine
497170000159	003	2	7	7	2	1.04	OK		Nicotine
497170000160	003	2	8	8	2	0.780	OK		Nicotine
497170000161	003	2	9	9	2	0.848	OK		Nicotine
497170000162	003	2	10	10	2	0.882	OK		Nicotine
497170000163	003	2	11	11	2	0.924	OK		Nicotine
497170000164	003	2	12	12	2	0.956	OK		Nicotine
497170000165	003	2	13	13	2	0.935	OK		Nicotine
497170000166	003	2	14	14	2	1.04	OK		Nicotine
497170000167	003	2	15	15	2	0.920	OK		Nicotine
497170000168	003	2	16	16	2	0.885	OK		Nicotine
497170000169	003	2	17	17	2	0.831	OK		Nicotine
497170000170	003	2	18	18	2	0.785	OK		Nicotine
497170000171	003	2	19	19	2	0.703	OK		Nicotine
497170000134	003	3	1	1	3	0.00	OK		Nicotine
497170000135	003	3	2	2	3	0.566	OK		Nicotine
497170000136	003	3	3	3	3	0.629	OK		Nicotine
497170000137	003	3	4	4	3	1.20	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000138	003	3	5	5	3	1.74	OK		Nicotine
497170000139	003	3	6	6	3	1.93	OK		Nicotine
497170000140	003	3	7	7	3	2.46	OK		Nicotine
497170000141	003	3	8	8	3	3.01	OK		Nicotine
497170000142	003	3	9	9	3	2.93	OK		Nicotine
497170000143	003	3	10	10	3	2.44	OK		Nicotine
497170000144	003	3	11	11	3	1.95	OK		Nicotine
497170000145	003	3	12	12	3	1.77	OK		Nicotine
497170000146	003	3	13	13	3	1.58	OK		Nicotine
497170000147	003	3	14	14	3	1.33	OK		Nicotine
497170000148	003	3	15	15	3	1.41	OK		Nicotine
497170000149	003	3	16	16	3	1.21	OK		Nicotine
497170000150	003	3	17	17	3	1.03	OK		Nicotine
497170000151	003	3	18	18	3	0.930	OK		Nicotine
497170000152	003	3	19	19	3	0.706	OK		Nicotine
497170000115	003	4	1	1	4	0.895	OK		Nicotine
497170000116	003	4	2	2	4	0.805	OK		Nicotine
497170000117	003	4	3	3	4	0.957	OK		Nicotine
497170000118	003	4	4	4	4	0.904	OK		Nicotine
497170000119	003	4	5	5	4	0.871	OK		Nicotine
497170000120	003	4	6	6	4	.	Not Received		Nicotine
497170000121	003	4	7	7	4	.	Not Received		Nicotine
497170000122	003	4	8	8	4	1.08	OK		Nicotine
497170000123	003	4	9	9	4	1.70	OK		Nicotine
497170000124	003	4	10	10	4	1.54	OK		Nicotine
497170000125	003	4	11	11	4	1.69	OK		Nicotine
497170000126	003	4	12	12	4	1.64	OK		Nicotine
497170000127	003	4	13	13	4	1.49	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000128	003	4	14	14	4	1.42	OK		Nicotine
497170000129	003	4	15	15	4	1.49	OK		Nicotine
497170000130	003	4	16	16	4	1.39	OK		Nicotine
497170000131	003	4	17	17	4	1.10	OK		Nicotine
497170000132	003	4	18	18	4	0.988	OK		Nicotine
497170000133	003	4	19	19	4	1.04	OK		Nicotine
497170000096	003	5	1	1	5	1.15	OK		Nicotine
497170000097	003	5	2	2	5	0.892	OK		Nicotine
497170000098	003	5	3	3	5	1.04	OK		Nicotine
497170000099	003	5	4	4	5	0.937	OK		Nicotine
497170000100	003	5	5	5	5	1.18	OK		Nicotine
497170000101	003	5	6	6	5	1.34	OK		Nicotine
497170000102	003	5	7	7	5	1.53	OK		Nicotine
497170000103	003	5	8	8	5	1.76	OK		Nicotine
497170000104	003	5	9	9	5	1.80	OK		Nicotine
497170000105	003	5	10	10	5	1.94	OK		Nicotine
497170000106	003	5	11	11	5	2.21	OK		Nicotine
497170000107	003	5	12	12	5	2.22	OK		Nicotine
497170000108	003	5	13	13	5	2.03	OK		Nicotine
497170000109	003	5	14	14	5	1.93	OK		Nicotine
497170000110	003	5	15	15	5	1.73	OK		Nicotine
497170000111	003	5	16	16	5	1.56	OK		Nicotine
497170000112	003	5	17	17	5	1.33	OK		Nicotine
497170000113	003	5	18	18	5	1.23	OK		Nicotine
497170000114	003	5	19	19	5	1.15	OK		Nicotine
497170000267	005	1	1	1	1	0.513	OK		Nicotine
497170000268	005	1	2	2	1	0.00	OK		Nicotine
497170000269	005	1	3	3	1	9.62	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000270	005	1	4	4	1	18.9	OK		Nicotine
497170000271	005	1	5	5	1	14.7	OK		Nicotine
497170000272	005	1	6	6	1	10.1	OK		Nicotine
497170000273	005	1	7	7	1	7.96	OK		Nicotine
497170000274	005	1	8	8	1	6.60	OK		Nicotine
497170000275	005	1	9	9	1	5.49	OK		Nicotine
497170000276	005	1	10	10	1	4.19	OK		Nicotine
497170000277	005	1	11	11	1	3.74	OK		Nicotine
497170000278	005	1	12	12	1	3.00	OK		Nicotine
497170000279	005	1	13	13	1	3.37	OK		Nicotine
497170000280	005	1	14	14	1	2.95	OK		Nicotine
497170000281	005	1	15	15	1	2.71	OK		Nicotine
497170000282	005	1	16	16	1	1.95	OK		Nicotine
497170000283	005	1	17	17	1	1.75	OK		Nicotine
497170000284	005	1	18	18	1	1.78	OK		Nicotine
497170000285	005	1	19	19	1	1.71	OK		Nicotine
497170000248	005	2	1	1	2	0.00	OK		Nicotine
497170000249	005	2	2	2	2	0.00	OK		Nicotine
497170000250	005	2	3	3	2	0.00	OK		Nicotine
497170000251	005	2	4	4	2	1.10	OK		Nicotine
497170000252	005	2	5	5	2	0.926	OK		Nicotine
497170000253	005	2	6	6	2	1.54	OK		Nicotine
497170000254	005	2	7	7	2	1.64	OK		Nicotine
497170000255	005	2	8	8	2	1.52	OK		Nicotine
497170000256	005	2	9	9	2	2.41	OK		Nicotine
497170000257	005	2	10	10	2	1.76	OK		Nicotine
497170000258	005	2	11	11	2	1.77	OK		Nicotine
497170000259	005	2	12	12	2	1.71	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000260	005	2	13	13	2	1.43	OK		Nicotine
497170000261	005	2	14	14	2	1.35	OK		Nicotine
497170000262	005	2	15	15	2	1.19	OK		Nicotine
497170000263	005	2	16	16	2	1.07	OK		Nicotine
497170000264	005	2	17	17	2	0.971	OK		Nicotine
497170000265	005	2	18	18	2	0.975	OK		Nicotine
497170000266	005	2	19	19	2	0.901	OK		Nicotine
497170000229	005	3	1	1	3	0.00	OK		Nicotine
497170000230	005	3	2	2	3	0.00	OK		Nicotine
497170000231	005	3	3	3	3	0.00	OK		Nicotine
497170000232	005	3	4	4	3	0.00	OK		Nicotine
497170000233	005	3	5	5	3	0.00	OK		Nicotine
497170000234	005	3	6	6	3	0.00	OK		Nicotine
497170000235	005	3	7	7	3	0.642	OK		Nicotine
497170000236	005	3	8	8	3	0.637	OK		Nicotine
497170000237	005	3	9	9	3	0.598	OK		Nicotine
497170000238	005	3	10	10	3	0.694	OK		Nicotine
497170000239	005	3	11	11	3	0.720	OK		Nicotine
497170000240	005	3	12	12	3	0.545	OK		Nicotine
497170000241	005	3	13	13	3	0.00	OK		Nicotine
497170000242	005	3	14	14	3	0.00	OK		Nicotine
497170000243	005	3	15	15	3	0.00	OK		Nicotine
497170000244	005	3	16	16	3	0.00	OK		Nicotine
497170000245	005	3	17	17	3	0.00	OK		Nicotine
497170000246	005	3	18	18	3	0.00	OK		Nicotine
497170000247	005	3	19	19	3	0.00	OK		Nicotine
497170000210	005	4	1	1	4	0.00	OK		Nicotine
497170000211	005	4	2	2	4	0.00	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000212	005	4	3	3	4	0.00	OK		Nicotine
497170000213	005	4	4	4	4	0.594	OK		Nicotine
497170000214	005	4	5	5	4	1.32	OK		Nicotine
497170000215	005	4	6	6	4	1.86	OK		Nicotine
497170000216	005	4	7	7	4	2.40	OK		Nicotine
497170000217	005	4	8	8	4	2.55	OK		Nicotine
497170000218	005	4	9	9	4	2.17	OK		Nicotine
497170000219	005	4	10	10	4	1.99	OK		Nicotine
497170000220	005	4	11	11	4	1.73	OK		Nicotine
497170000221	005	4	12	12	4	1.51	OK		Nicotine
497170000222	005	4	13	13	4	1.29	OK		Nicotine
497170000223	005	4	14	14	4	1.13	OK		Nicotine
497170000224	005	4	15	15	4	1.08	OK		Nicotine
497170000225	005	4	16	16	4	0.884	OK		Nicotine
497170000226	005	4	17	17	4	0.852	OK		Nicotine
497170000227	005	4	18	18	4	0.720	OK		Nicotine
497170000228	005	4	19	19	4	0.660	OK		Nicotine
497170000191	005	5	1	1	5	0.705	OK		Nicotine
497170000192	005	5	2	2	5	0.887	OK		Nicotine
497170000193	005	5	3	3	5	0.641	OK		Nicotine
497170000194	005	5	4	4	5	1.02	OK		Nicotine
497170000195	005	5	5	5	5	2.39	OK		Nicotine
497170000196	005	5	6	6	5	3.45	OK		Nicotine
497170000197	005	5	7	7	5	4.73	OK		Nicotine
497170000198	005	5	8	8	5	5.00	OK		Nicotine
497170000199	005	5	9	9	5	4.66	OK		Nicotine
497170000200	005	5	10	10	5	4.51	OK		Nicotine
497170000201	005	5	11	11	5	4.08	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000202	005	5	12	12	5	4.38	OK		Nicotine
497170000203	005	5	13	13	5	4.34	OK		Nicotine
497170000204	005	5	14	14	5	3.86	OK		Nicotine
497170000205	005	5	15	15	5	3.54	OK		Nicotine
497170000206	005	5	16	16	5	3.36	OK		Nicotine
497170000207	005	5	17	17	5	3.01	OK		Nicotine
497170000208	005	5	18	18	5	2.73	OK		Nicotine
497170000209	005	5	19	19	5	2.71	OK		Nicotine
497170000362	007	1	1	1	1	3.02	OK		Nicotine
497170000363	007	1	2	2	1	3.05	OK		Nicotine
497170000364	007	1	3	3	1	5.67	OK		Nicotine
497170000365	007	1	4	4	1	6.09	OK		Nicotine
497170000366	007	1	5	5	1	9.40	OK		Nicotine
497170000367	007	1	6	6	1	9.59	OK		Nicotine
497170000368	007	1	7	7	1	8.29	OK		Nicotine
497170000369	007	1	8	8	1	8.24	OK		Nicotine
497170000370	007	1	9	9	1	7.93	OK		Nicotine
497170000371	007	1	10	10	1	7.56	OK		Nicotine
497170000372	007	1	11	11	1	7.15	OK		Nicotine
497170000373	007	1	12	12	1	7.31	OK		Nicotine
497170000374	007	1	13	13	1	6.84	OK		Nicotine
497170000375	007	1	14	14	1	6.20	OK		Nicotine
497170000376	007	1	15	15	1	6.01	OK		Nicotine
497170000377	007	1	16	16	1	6.23	OK		Nicotine
497170000378	007	1	17	17	1	6.44	OK		Nicotine
497170000379	007	1	18	18	1	5.98	OK		Nicotine
497170000380	007	1	19	19	1	5.58	OK		Nicotine
497170000343	007	2	1	1	2	2.54	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000344	007	2	2	2	2	2.85	OK		Nicotine
497170000345	007	2	3	3	2	2.58	OK		Nicotine
497170000346	007	2	4	4	2	2.60	OK		Nicotine
497170000347	007	2	5	5	2	2.48	OK		Nicotine
497170000348	007	2	6	6	2	2.48	OK		Nicotine
497170000349	007	2	7	7	2	2.33	OK		Nicotine
497170000350	007	2	8	8	2	2.51	OK		Nicotine
497170000351	007	2	9	9	2	2.61	OK		Nicotine
497170000352	007	2	10	10	2	2.65	OK		Nicotine
497170000353	007	2	11	11	2	2.88	OK		Nicotine
497170000354	007	2	12	12	2	2.51	OK		Nicotine
497170000355	007	2	13	13	2	2.70	OK		Nicotine
497170000356	007	2	14	14	2	2.65	OK		Nicotine
497170000357	007	2	15	15	2	2.61	OK		Nicotine
497170000358	007	2	16	16	2	2.54	OK		Nicotine
497170000359	007	2	17	17	2	2.29	OK		Nicotine
497170000360	007	2	18	18	2	2.42	OK		Nicotine
497170000361	007	2	19	19	2	3.25	OK		Nicotine
497170000324	007	3	1	1	3	2.79	OK		Nicotine
497170000325	007	3	2	2	3	2.90	OK		Nicotine
497170000326	007	3	3	3	3	3.11	OK		Nicotine
497170000327	007	3	4	4	3	3.88	OK		Nicotine
497170000328	007	3	5	5	3	4.10	OK		Nicotine
497170000329	007	3	6	6	3	4.23	OK		Nicotine
497170000330	007	3	7	7	3	.	Not Received		Nicotine
497170000331	007	3	8	8	3	.	Not Received		Nicotine
497170000332	007	3	9	9	3	.	Not Received		Nicotine
497170000333	007	3	10	10	3	.	Not Received		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000334	007	3	11	11	3	.	Not Received		Nicotine
497170000335	007	3	12	12	3	.	Not Received		Nicotine
497170000336	007	3	13	13	3	.	Not Received		Nicotine
497170000337	007	3	14	14	3	.	Not Received		Nicotine
497170000338	007	3	15	15	3	.	Not Received		Nicotine
497170000339	007	3	16	16	3	.	Not Received		Nicotine
497170000340	007	3	17	17	3	.	Not Received		Nicotine
497170000341	007	3	18	18	3	.	Not Received		Nicotine
497170000342	007	3	19	19	3	.	Not Received		Nicotine
497170000305	007	4	1	1	4	3.24	OK		Nicotine
497170000306	007	4	2	2	4	3.15	OK		Nicotine
497170000307	007	4	3	3	4	3.69	OK		Nicotine
497170000308	007	4	4	4	4	2.63	OK		Nicotine
497170000309	007	4	5	5	4	2.98	OK		Nicotine
497170000310	007	4	6	6	4	3.01	OK		Nicotine
497170000311	007	4	7	7	4	3.72	OK		Nicotine
497170000312	007	4	8	8	4	4.79	OK		Nicotine
497170000313	007	4	9	9	4	4.50	OK		Nicotine
497170000314	007	4	10	10	4	4.97	OK		Nicotine
497170000315	007	4	11	11	4	4.53	OK		Nicotine
497170000316	007	4	12	12	4	4.38	OK		Nicotine
497170000317	007	4	13	13	4	4.26	OK		Nicotine
497170000318	007	4	14	14	4	4.09	OK		Nicotine
497170000319	007	4	15	15	4	3.93	OK		Nicotine
497170000320	007	4	16	16	4	4.00	OK		Nicotine
497170000321	007	4	17	17	4	3.82	OK		Nicotine
497170000322	007	4	18	18	4	3.68	OK		Nicotine
497170000323	007	4	19	19	4	3.42	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000286	007	5	1	1	5	3.83	OK		Nicotine
497170000287	007	5	2	2	5	3.67	OK		Nicotine
497170000288	007	5	3	3	5	3.56	OK		Nicotine
497170000289	007	5	4	4	5	3.66	OK		Nicotine
497170000290	007	5	5	5	5	3.74	OK		Nicotine
497170000291	007	5	6	6	5	3.81	OK		Nicotine
497170000292	007	5	7	7	5	3.91	OK		Nicotine
497170000293	007	5	8	8	5	3.94	OK		Nicotine
497170000294	007	5	9	9	5	4.19	OK		Nicotine
497170000295	007	5	10	10	5	4.68	OK		Nicotine
497170000296	007	5	11	11	5	5.15	OK		Nicotine
497170000297	007	5	12	12	5	5.35	OK		Nicotine
497170000298	007	5	13	13	5	5.22	OK		Nicotine
497170000299	007	5	14	14	5	5.51	OK		Nicotine
497170000300	007	5	15	15	5	5.61	OK		Nicotine
497170000301	007	5	16	16	5	4.87	OK		Nicotine
497170000302	007	5	17	17	5	5.02	OK		Nicotine
497170000303	007	5	18	18	5	4.77	OK		Nicotine
497170000304	007	5	19	19	5	4.75	OK		Nicotine
497170000457	009	1	1	1	1	2.78	OK		Nicotine
497170000458	009	1	2	2	1	2.63	OK		Nicotine
497170000459	009	1	3	3	1	34.4	OK		Nicotine
497170000460	009	1	4	4	1	37.1	OK		Nicotine
497170000461	009	1	5	5	1	29.2	OK		Nicotine
497170000462	009	1	6	6	1	21.2	OK		Nicotine
497170000463	009	1	7	7	1	17.6	OK		Nicotine
497170000464	009	1	8	8	1	6.49	OK		Nicotine
497170000465	009	1	9	9	1	15.5	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000466	009	1	10	10	1	13.7	OK		Nicotine
497170000467	009	1	11	11	1	11.1	OK		Nicotine
497170000468	009	1	12	12	1	9.36	OK		Nicotine
497170000469	009	1	13	13	1	8.69	OK		Nicotine
497170000470	009	1	14	14	1	8.30	OK		Nicotine
497170000471	009	1	15	15	1	7.37	OK		Nicotine
497170000472	009	1	16	16	1	6.61	OK		Nicotine
497170000473	009	1	17	17	1	6.80	OK		Nicotine
497170000474	009	1	18	18	1	6.88	OK		Nicotine
497170000475	009	1	19	19	1	5.93	OK		Nicotine
497170000438	009	2	1	1	2	2.41	OK		Nicotine
497170000439	009	2	2	2	2	2.42	OK		Nicotine
497170000440	009	2	3	3	2	2.58	OK		Nicotine
497170000441	009	2	4	4	2	2.59	OK		Nicotine
497170000442	009	2	5	5	2	2.78	OK		Nicotine
497170000443	009	2	6	6	2	2.64	OK		Nicotine
497170000444	009	2	7	7	2	2.46	OK		Nicotine
497170000445	009	2	8	8	2	2.52	OK		Nicotine
497170000446	009	2	9	9	2	2.66	OK		Nicotine
497170000447	009	2	10	10	2	2.54	OK		Nicotine
497170000448	009	2	11	11	2	2.59	OK		Nicotine
497170000449	009	2	12	12	2	2.93	OK		Nicotine
497170000450	009	2	13	13	2	3.07	OK		Nicotine
497170000451	009	2	14	14	2	3.10	OK		Nicotine
497170000452	009	2	15	15	2	2.98	OK		Nicotine
497170000453	009	2	16	16	2	2.80	OK		Nicotine
497170000454	009	2	17	17	2	3.06	OK		Nicotine
497170000455	009	2	18	18	2	2.95	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000456	009	2	19	19	2	2.75	OK		Nicotine
497170000419	009	3	1	1	3	2.45	OK		Nicotine
497170000420	009	3	2	2	3	2.39	OK		Nicotine
497170000421	009	3	3	3	3	3.25	OK		Nicotine
497170000422	009	3	4	4	3	4.84	OK		Nicotine
497170000423	009	3	5	5	3	5.82	OK		Nicotine
497170000424	009	3	6	6	3	5.99	OK		Nicotine
497170000425	009	3	7	7	3	7.52	OK		Nicotine
497170000426	009	3	8	8	3	7.12	OK		Nicotine
497170000427	009	3	9	9	3	8.65	OK		Nicotine
497170000428	009	3	10	10	3	6.85	OK		Nicotine
497170000429	009	3	11	11	3	6.39	OK		Nicotine
497170000430	009	3	12	12	3	5.71	OK		Nicotine
497170000431	009	3	13	13	3	4.89	OK		Nicotine
497170000432	009	3	14	14	3	4.76	OK		Nicotine
497170000433	009	3	15	15	3	4.63	OK		Nicotine
497170000434	009	3	16	16	3	4.47	OK		Nicotine
497170000435	009	3	17	17	3	3.97	OK		Nicotine
497170000436	009	3	18	18	3	3.93	OK		Nicotine
497170000437	009	3	19	19	3	3.64	OK		Nicotine
497170000400	009	4	1	1	4	2.23	OK		Nicotine
497170000401	009	4	2	2	4	1.99	OK		Nicotine
497170000402	009	4	3	3	4	1.90	OK		Nicotine
497170000403	009	4	4	4	4	2.10	OK		Nicotine
497170000404	009	4	5	5	4	2.80	OK		Nicotine
497170000405	009	4	6	6	4	2.87	OK		Nicotine
497170000406	009	4	7	7	4	3.08	OK		Nicotine
497170000407	009	4	8	8	4	3.89	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000408	009	4	9	9	4	5.65	OK		Nicotine
497170000409	009	4	10	10	4	5.89	OK		Nicotine
497170000410	009	4	11	11	4	5.46	OK		Nicotine
497170000411	009	4	12	12	4	4.77	OK		Nicotine
497170000412	009	4	13	13	4	3.82	OK		Nicotine
497170000413	009	4	14	14	4	3.66	OK		Nicotine
497170000414	009	4	15	15	4	3.62	OK		Nicotine
497170000415	009	4	16	16	4	3.67	OK		Nicotine
497170000416	009	4	17	17	4	3.41	OK		Nicotine
497170000417	009	4	18	18	4	3.29	OK		Nicotine
497170000418	009	4	19	19	4	3.05	OK		Nicotine
497170000381	009	5	1	1	5	3.02	OK		Nicotine
497170000382	009	5	2	2	5	3.20	OK		Nicotine
497170000383	009	5	3	3	5	3.29	OK		Nicotine
497170000384	009	5	4	4	5	3.46	OK		Nicotine
497170000385	009	5	5	5	5	3.69	OK		Nicotine
497170000386	009	5	6	6	5	4.21	OK		Nicotine
497170000387	009	5	7	7	5	4.43	OK		Nicotine
497170000388	009	5	8	8	5	4.73	OK		Nicotine
497170000389	009	5	9	9	5	4.95	OK		Nicotine
497170000390	009	5	10	10	5	5.24	OK		Nicotine
497170000391	009	5	11	11	5	5.23	OK		Nicotine
497170000392	009	5	12	12	5	5.84	OK		Nicotine
497170000393	009	5	13	13	5	5.39	OK		Nicotine
497170000394	009	5	14	14	5	5.21	OK		Nicotine
497170000395	009	5	15	15	5	6.05	OK		Nicotine
497170000396	009	5	16	16	5	5.30	OK		Nicotine
497170000397	009	5	17	17	5	5.26	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000398	009	5	18	18	5	4.33	OK		Nicotine
497170000399	009	5	19	19	5	4.33	OK		Nicotine
497170000552	011	1	1	1	1	1.94	OK		Nicotine
497170000553	011	1	2	2	1	1.68	OK		Nicotine
497170000554	011	1	3	3	1	17.8	OK		Nicotine
497170000555	011	1	4	4	1	19.0	OK		Nicotine
497170000556	011	1	5	5	1	37.5	OK		Nicotine
497170000557	011	1	6	6	1	20.9	OK		Nicotine
497170000558	011	1	7	7	1	13.5	OK		Nicotine
497170000559	011	1	8	8	1	12.5	OK		Nicotine
497170000560	011	1	9	9	1	10.2	OK		Nicotine
497170000561	011	1	10	10	1	7.93	OK		Nicotine
497170000562	011	1	11	11	1	6.63	OK		Nicotine
497170000563	011	1	12	12	1	5.99	OK		Nicotine
497170000564	011	1	13	13	1	5.30	OK		Nicotine
497170000565	011	1	14	14	1	4.71	OK		Nicotine
497170000566	011	1	15	15	1	4.66	OK		Nicotine
497170000567	011	1	16	16	1	3.18	OK		Nicotine
497170000568	011	1	17	17	1	3.80	OK		Nicotine
497170000569	011	1	18	18	1	2.73	OK		Nicotine
497170000570	011	1	19	19	1	3.05	OK		Nicotine
497170000533	011	2	1	1	2	2.68	OK		Nicotine
497170000534	011	2	2	2	2	1.72	OK		Nicotine
497170000535	011	2	3	3	2	1.62	OK		Nicotine
497170000536	011	2	4	4	2	2.66	OK		Nicotine
497170000537	011	2	5	5	2	2.45	OK		Nicotine
497170000538	011	2	6	6	2	3.45	OK		Nicotine
497170000539	011	2	7	7	2	2.65	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000540	011	2	8	8	2	4.43	OK		Nicotine
497170000541	011	2	9	9	2	3.87	OK		Nicotine
497170000542	011	2	10	10	2	3.17	OK		Nicotine
497170000543	011	2	11	11	2	3.78	OK		Nicotine
497170000544	011	2	12	12	2	3.34	OK		Nicotine
497170000545	011	2	13	13	2	3.16	OK		Nicotine
497170000546	011	2	14	14	2	3.08	OK		Nicotine
497170000547	011	2	15	15	2	2.73	OK		Nicotine
497170000548	011	2	16	16	2	3.26	OK		Nicotine
497170000549	011	2	17	17	2	3.19	OK		Nicotine
497170000550	011	2	18	18	2	2.56	OK		Nicotine
497170000551	011	2	19	19	2	2.88	OK		Nicotine
497170000514	011	3	1	1	3	1.74	OK		Nicotine
497170000515	011	3	2	2	3	1.46	OK		Nicotine
497170000516	011	3	3	3	3	1.71	OK		Nicotine
497170000517	011	3	4	4	3	2.46	OK		Nicotine
497170000518	011	3	5	5	3	3.07	OK		Nicotine
497170000519	011	3	6	6	3	4.34	OK		Nicotine
497170000520	011	3	7	7	3	4.56	OK		Nicotine
497170000521	011	3	8	8	3	5.28	OK		Nicotine
497170000522	011	3	9	9	3	5.36	OK		Nicotine
497170000523	011	3	10	10	3	5.07	OK		Nicotine
497170000524	011	3	11	11	3	5.42	OK		Nicotine
497170000525	011	3	12	12	3	4.44	OK		Nicotine
497170000526	011	3	13	13	3	3.64	OK		Nicotine
497170000527	011	3	14	14	3	3.16	OK		Nicotine
497170000528	011	3	15	15	3	3.25	OK		Nicotine
497170000529	011	3	16	16	3	3.07	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000530	011	3	17	17	3	2.34	OK		Nicotine
497170000531	011	3	18	18	3	2.94	OK		Nicotine
497170000532	011	3	19	19	3	3.13	OK		Nicotine
497170000495	011	4	1	1	4	0.637	OK		Nicotine
497170000496	011	4	2	2	4	0.793	OK		Nicotine
497170000497	011	4	3	3	4	2.62	OK		Nicotine
497170000498	011	4	4	4	4	3.26	OK		Nicotine
497170000499	011	4	5	5	4	4.34	OK		Nicotine
497170000500	011	4	6	6	4	4.66	OK		Nicotine
497170000501	011	4	7	7	4	4.69	OK		Nicotine
497170000502	011	4	8	8	4	5.13	OK		Nicotine
497170000503	011	4	9	9	4	7.05	OK		Nicotine
497170000504	011	4	10	10	4	4.95	OK		Nicotine
497170000505	011	4	11	11	4	4.01	OK		Nicotine
497170000506	011	4	12	12	4	3.33	OK		Nicotine
497170000507	011	4	13	13	4	3.07	OK		Nicotine
497170000508	011	4	14	14	4	2.39	OK		Nicotine
497170000509	011	4	15	15	4	2.00	OK		Nicotine
497170000510	011	4	16	16	4	1.96	OK		Nicotine
497170000511	011	4	17	17	4	3.10	OK		Nicotine
497170000512	011	4	18	18	4	1.87	OK		Nicotine
497170000513	011	4	19	19	4	3.06	OK		Nicotine
497170000476	011	5	1	1	5	0.664	OK		Nicotine
497170000477	011	5	2	2	5	0.00	OK		Nicotine
497170000478	011	5	3	3	5	0.00	OK		Nicotine
497170000479	011	5	4	4	5	0.00	OK		Nicotine
497170000480	011	5	5	5	5	0.516	OK		Nicotine
497170000481	011	5	6	6	5	0.668	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000482	011	5	7	7	5	0.725	OK		Nicotine
497170000483	011	5	8	8	5	0.739	OK		Nicotine
497170000484	011	5	9	9	5	0.926	OK		Nicotine
497170000485	011	5	10	10	5	0.662	OK		Nicotine
497170000486	011	5	11	11	5	0.680	OK		Nicotine
497170000487	011	5	12	12	5	0.646	OK		Nicotine
497170000488	011	5	13	13	5	0.660	OK		Nicotine
497170000489	011	5	14	14	5	0.741	OK		Nicotine
497170000490	011	5	15	15	5	0.856	OK		Nicotine
497170000491	011	5	16	16	5	0.686	OK		Nicotine
497170000492	011	5	17	17	5	0.621	OK		Nicotine
497170000493	011	5	18	18	5	0.606	OK		Nicotine
497170000494	011	5	19	19	5	0.531	OK		Nicotine
497170000647	012	1	1	1	1	1.37	OK		Nicotine
497170000648	012	1	2	2	1	1.57	OK		Nicotine
497170000649	012	1	3	3	1	5.02	OK		Nicotine
497170000650	012	1	4	4	1	8.02	OK		Nicotine
497170000651	012	1	5	5	1	14.9	OK		Nicotine
497170000652	012	1	6	6	1	12.6	OK		Nicotine
497170000653	012	1	7	7	1	11.0	OK		Nicotine
497170000654	012	1	8	8	1	10.1	OK		Nicotine
497170000655	012	1	9	9	1	10.3	OK		Nicotine
497170000656	012	1	10	10	1	8.82	OK		Nicotine
497170000657	012	1	11	11	1	7.61	OK		Nicotine
497170000658	012	1	12	12	1	7.21	OK		Nicotine
497170000659	012	1	13	13	1	6.14	OK		Nicotine
497170000660	012	1	14	14	1	6.53	OK		Nicotine
497170000661	012	1	15	15	1	6.00	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000662	012	1	16	16	1	5.11	OK		Nicotine
497170000663	012	1	17	17	1	4.70	OK		Nicotine
497170000664	012	1	18	18	1	4.31	OK		Nicotine
497170000665	012	1	19	19	1	4.44	OK		Nicotine
497170000628	012	2	1	1	2	1.40	OK		Nicotine
497170000629	012	2	2	2	2	1.38	OK		Nicotine
497170000630	012	2	3	3	2	1.27	OK		Nicotine
497170000631	012	2	4	4	2	1.43	OK		Nicotine
497170000632	012	2	5	5	2	1.59	OK		Nicotine
497170000633	012	2	6	6	2	1.99	OK		Nicotine
497170000634	012	2	7	7	2	2.22	OK		Nicotine
497170000635	012	2	8	8	2	2.29	OK		Nicotine
497170000636	012	2	9	9	2	2.17	OK		Nicotine
497170000637	012	2	10	10	2	2.34	OK		Nicotine
497170000638	012	2	11	11	2	2.31	OK		Nicotine
497170000639	012	2	12	12	2	2.46	OK		Nicotine
497170000640	012	2	13	13	2	2.36	OK		Nicotine
497170000641	012	2	14	14	2	2.21	OK		Nicotine
497170000642	012	2	15	15	2	2.20	OK		Nicotine
497170000643	012	2	16	16	2	2.31	OK		Nicotine
497170000644	012	2	17	17	2	2.17	OK		Nicotine
497170000645	012	2	18	18	2	2.00	OK		Nicotine
497170000646	012	2	19	19	2	2.03	OK		Nicotine
497170000609	012	3	1	1	3	1.73	OK		Nicotine
497170000610	012	3	2	2	3	1.55	OK		Nicotine
497170000611	012	3	3	3	3	1.74	OK		Nicotine
497170000612	012	3	4	4	3	1.62	OK		Nicotine
497170000613	012	3	5	5	3	2.00	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000614	012	3	6	6	3	2.12	OK		Nicotine
497170000615	012	3	7	7	3	2.62	OK		Nicotine
497170000616	012	3	8	8	3	2.65	OK		Nicotine
497170000617	012	3	9	9	3	2.60	OK		Nicotine
497170000618	012	3	10	10	3	2.91	OK		Nicotine
497170000619	012	3	11	11	3	3.18	OK		Nicotine
497170000620	012	3	12	12	3	2.88	OK		Nicotine
497170000621	012	3	13	13	3	2.77	OK		Nicotine
497170000622	012	3	14	14	3	2.54	OK		Nicotine
497170000623	012	3	15	15	3	2.42	OK		Nicotine
497170000624	012	3	16	16	3	2.46	OK		Nicotine
497170000625	012	3	17	17	3	2.13	OK		Nicotine
497170000626	012	3	18	18	3	2.22	OK		Nicotine
497170000627	012	3	19	19	3	2.12	OK		Nicotine
497170000590	012	4	1	1	4	1.94	OK		Nicotine
497170000591	012	4	2	2	4	1.91	OK		Nicotine
497170000592	012	4	3	3	4	1.94	OK		Nicotine
497170000593	012	4	4	4	4	2.59	OK		Nicotine
497170000594	012	4	5	5	4	3.01	OK		Nicotine
497170000595	012	4	6	6	4	3.24	OK		Nicotine
497170000596	012	4	7	7	4	4.28	OK		Nicotine
497170000597	012	4	8	8	4	5.42	OK		Nicotine
497170000598	012	4	9	9	4	5.29	OK		Nicotine
497170000599	012	4	10	10	4	5.37	OK		Nicotine
497170000600	012	4	11	11	4	4.85	OK		Nicotine
497170000601	012	4	12	12	4	4.63	OK		Nicotine
497170000602	012	4	13	13	4	4.47	OK		Nicotine
497170000603	012	4	14	14	4	4.11	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000604	012	4	15	15	4	3.64	OK		Nicotine
497170000605	012	4	16	16	4	3.51	OK		Nicotine
497170000606	012	4	17	17	4	3.18	OK		Nicotine
497170000607	012	4	18	18	4	3.04	OK		Nicotine
497170000608	012	4	19	19	4	2.80	OK		Nicotine
497170000571	012	5	1	1	5	1.75	OK		Nicotine
497170000572	012	5	2	2	5	1.83	OK		Nicotine
497170000573	012	5	3	3	5	1.76	OK		Nicotine
497170000574	012	5	4	4	5	1.77	OK		Nicotine
497170000575	012	5	5	5	5	1.82	OK		Nicotine
497170000576	012	5	6	6	5	1.99	OK		Nicotine
497170000577	012	5	7	7	5	2.22	OK		Nicotine
497170000578	012	5	8	8	5	2.03	OK		Nicotine
497170000579	012	5	9	9	5	2.24	OK		Nicotine
497170000580	012	5	10	10	5	1.95	OK		Nicotine
497170000581	012	5	11	11	5	1.31	OK		Nicotine
497170000582	012	5	12	12	5	1.98	OK		Nicotine
497170000583	012	5	13	13	5	1.76	OK		Nicotine
497170000584	012	5	14	14	5	1.66	OK		Nicotine
497170000585	012	5	15	15	5	1.64	OK		Nicotine
497170000586	012	5	16	16	5	1.74	OK		Nicotine
497170000587	012	5	17	17	5	1.55	OK		Nicotine
497170000588	012	5	18	18	5	1.54	OK		Nicotine
497170000589	012	5	19	19	5	1.63	OK		Nicotine
497170000742	013	1	1	1	1	0.00	OK		Nicotine
497170000743	013	1	2	2	1	0.00	OK		Nicotine
497170000744	013	1	3	3	1	6.20	OK		Nicotine
497170000745	013	1	4	4	1	6.31	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000746	013	1	5	5	1	6.58	OK		Nicotine
497170000747	013	1	6	6	1	5.62	OK		Nicotine
497170000748	013	1	7	7	1	4.65	OK		Nicotine
497170000749	013	1	8	8	1	3.76	OK		Nicotine
497170000750	013	1	9	9	1	3.24	OK		Nicotine
497170000751	013	1	10	10	1	2.41	OK		Nicotine
497170000752	013	1	11	11	1	1.99	OK		Nicotine
497170000753	013	1	12	12	1	1.77	OK		Nicotine
497170000754	013	1	13	13	1	1.64	OK		Nicotine
497170000755	013	1	14	14	1	1.62	OK		Nicotine
497170000756	013	1	15	15	1	1.54	OK		Nicotine
497170000757	013	1	16	16	1	1.27	OK		Nicotine
497170000758	013	1	17	17	1	1.10	OK		Nicotine
497170000759	013	1	18	18	1	0.916	OK		Nicotine
497170000760	013	1	19	19	1	0.844	OK		Nicotine
497170000723	013	2	1	1	2	0.00	OK		Nicotine
497170000724	013	2	2	2	2	0.00	OK		Nicotine
497170000725	013	2	3	3	2	1.83	OK		Nicotine
497170000726	013	2	4	4	2	2.59	OK		Nicotine
497170000727	013	2	5	5	2	3.49	OK		Nicotine
497170000728	013	2	6	6	2	3.95	OK		Nicotine
497170000729	013	2	7	7	2	3.47	OK		Nicotine
497170000730	013	2	8	8	2	5.44	OK		Nicotine
497170000731	013	2	9	9	2	6.74	OK		Nicotine
497170000732	013	2	10	10	2	6.34	OK		Nicotine
497170000733	013	2	11	11	2	5.20	OK		Nicotine
497170000734	013	2	12	12	2	4.93	OK		Nicotine
497170000735	013	2	13	13	2	4.94	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000736	013	2	14	14	2	4.62	OK		Nicotine
497170000737	013	2	15	15	2	4.52	OK		Nicotine
497170000738	013	2	16	16	2	4.42	OK		Nicotine
497170000739	013	2	17	17	2	4.21	OK		Nicotine
497170000740	013	2	18	18	2	4.94	OK		Nicotine
497170000741	013	2	19	19	2	4.54	OK		Nicotine
497170000704	013	3	1	1	3	0.612	OK		Nicotine
497170000705	013	3	2	2	3	0.667	OK		Nicotine
497170000706	013	3	3	3	3	0.612	OK		Nicotine
497170000707	013	3	4	4	3	0.697	OK		Nicotine
497170000708	013	3	5	5	3	0.955	OK		Nicotine
497170000709	013	3	6	6	3	1.13	OK		Nicotine
497170000710	013	3	7	7	3	1.59	OK		Nicotine
497170000711	013	3	8	8	3	2.18	OK		Nicotine
497170000712	013	3	9	9	3	1.97	OK		Nicotine
497170000713	013	3	10	10	3	2.04	OK		Nicotine
497170000714	013	3	11	11	3	2.52	OK		Nicotine
497170000715	013	3	12	12	3	2.48	OK		Nicotine
497170000716	013	3	13	13	3	2.13	OK		Nicotine
497170000717	013	3	14	14	3	2.06	OK		Nicotine
497170000718	013	3	15	15	3	2.29	OK		Nicotine
497170000719	013	3	16	16	3	2.12	OK		Nicotine
497170000720	013	3	17	17	3	2.01	OK		Nicotine
497170000721	013	3	18	18	3	1.88	OK		Nicotine
497170000722	013	3	19	19	3	1.82	OK		Nicotine
497170000685	013	4	1	1	4	0.712	OK		Nicotine
497170000686	013	4	2	2	4	0.514	OK		Nicotine
497170000687	013	4	3	3	4	0.00	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000688	013	4	4	4	4	0.552	OK		Nicotine
497170000689	013	4	5	5	4	0.846	OK		Nicotine
497170000690	013	4	6	6	4	1.36	OK		Nicotine
497170000691	013	4	7	7	4	1.07	OK		Nicotine
497170000692	013	4	8	8	4	0.997	OK		Nicotine
497170000693	013	4	9	9	4	0.946	OK		Nicotine
497170000694	013	4	10	10	4	1.22	OK		Nicotine
497170000695	013	4	11	11	4	0.934	OK		Nicotine
497170000696	013	4	12	12	4	1.06	OK		Nicotine
497170000697	013	4	13	13	4	0.947	OK		Nicotine
497170000698	013	4	14	14	4	0.856	OK		Nicotine
497170000699	013	4	15	15	4	0.814	OK		Nicotine
497170000700	013	4	16	16	4	0.822	OK		Nicotine
497170000701	013	4	17	17	4	0.709	OK		Nicotine
497170000702	013	4	18	18	4	0.656	OK		Nicotine
497170000703	013	4	19	19	4	0.555	OK		Nicotine
497170000666	013	5	1	1	5	0.00	OK		Nicotine
497170000667	013	5	2	2	5	0.00	OK		Nicotine
497170000668	013	5	3	3	5	0.00	OK		Nicotine
497170000669	013	5	4	4	5	0.00	OK		Nicotine
497170000670	013	5	5	5	5	0.659	OK		Nicotine
497170000671	013	5	6	6	5	1.37	OK		Nicotine
497170000672	013	5	7	7	5	2.76	OK		Nicotine
497170000673	013	5	8	8	5	2.14	OK		Nicotine
497170000674	013	5	9	9	5	1.29	OK		Nicotine
497170000675	013	5	10	10	5	0.983	OK		Nicotine
497170000676	013	5	11	11	5	0.891	OK		Nicotine
497170000677	013	5	12	12	5	0.705	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000678	013	5	13	13	5	0.772	OK		Nicotine
497170000679	013	5	14	14	5	0.876	OK		Nicotine
497170000680	013	5	15	15	5	0.788	OK		Nicotine
497170000681	013	5	16	16	5	0.789	OK		Nicotine
497170000682	013	5	17	17	5	0.718	OK		Nicotine
497170000683	013	5	18	18	5	0.601	OK		Nicotine
497170000684	013	5	19	19	5	0.669	OK		Nicotine
497170000837	015	1	1	1	1	0.643	OK		Nicotine
497170000838	015	1	2	2	1	0.715	OK		Nicotine
497170000839	015	1	3	3	1	17.7	OK		Nicotine
497170000840	015	1	4	4	1	19.6	OK		Nicotine
497170000841	015	1	5	5	1	20.4	OK		Nicotine
497170000842	015	1	6	6	1	14.1	OK		Nicotine
497170000843	015	1	7	7	1	12.2	OK		Nicotine
497170000844	015	1	8	8	1	10.0	OK		Nicotine
497170000845	015	1	9	9	1	7.63	OK		Nicotine
497170000846	015	1	10	10	1	5.89	OK		Nicotine
497170000847	015	1	11	11	1	5.33	OK		Nicotine
497170000848	015	1	12	12	1	4.50	OK		Nicotine
497170000849	015	1	13	13	1	3.99	OK		Nicotine
497170000850	015	1	14	14	1	3.92	OK		Nicotine
497170000851	015	1	15	15	1	3.70	OK		Nicotine
497170000852	015	1	16	16	1	3.10	OK		Nicotine
497170000853	015	1	17	17	1	2.87	OK		Nicotine
497170000854	015	1	18	18	1	2.90	OK		Nicotine
497170000855	015	1	19	19	1	2.55	OK		Nicotine
497170000818	015	2	1	1	2	1.17	OK		Nicotine
497170000819	015	2	2	2	2	1.22	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000820	015	2	3	3	2	1.76	OK		Nicotine
497170000821	015	2	4	4	2	3.40	OK		Nicotine
497170000822	015	2	5	5	2	3.07	OK		Nicotine
497170000823	015	2	6	6	2	7.09	OK		Nicotine
497170000824	015	2	7	7	2	7.63	OK		Nicotine
497170000825	015	2	8	8	2	6.31	OK		Nicotine
497170000826	015	2	9	9	2	5.77	OK		Nicotine
497170000827	015	2	10	10	2	4.45	OK		Nicotine
497170000828	015	2	11	11	2	3.95	OK		Nicotine
497170000829	015	2	12	12	2	3.34	OK		Nicotine
497170000830	015	2	13	13	2	3.17	OK		Nicotine
497170000831	015	2	14	14	2	2.59	OK		Nicotine
497170000832	015	2	15	15	2	2.67	OK		Nicotine
497170000833	015	2	16	16	2	2.42	OK		Nicotine
497170000834	015	2	17	17	2	2.32	OK		Nicotine
497170000835	015	2	18	18	2	2.31	OK		Nicotine
497170000836	015	2	19	19	2	2.01	OK		Nicotine
497170000799	015	3	1	1	3	1.04	OK		Nicotine
497170000800	015	3	2	2	3	0.930	OK		Nicotine
497170000801	015	3	3	3	3	0.990	OK		Nicotine
497170000802	015	3	4	4	3	1.01	OK		Nicotine
497170000803	015	3	5	5	3	1.23	OK		Nicotine
497170000804	015	3	6	6	3	1.33	OK		Nicotine
497170000805	015	3	7	7	3	1.63	OK		Nicotine
497170000806	015	3	8	8	3	1.96	OK		Nicotine
497170000807	015	3	9	9	3	1.79	OK		Nicotine
497170000808	015	3	10	10	3	1.47	OK		Nicotine
497170000809	015	3	11	11	3	1.70	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000810	015	3	12	12	3	1.93	OK		Nicotine
497170000811	015	3	13	13	3	2.53	OK		Nicotine
497170000812	015	3	14	14	3	1.54	OK		Nicotine
497170000813	015	3	15	15	3	1.47	OK		Nicotine
497170000814	015	3	16	16	3	1.30	OK		Nicotine
497170000815	015	3	17	17	3	1.29	OK		Nicotine
497170000816	015	3	18	18	3	1.20	OK		Nicotine
497170000817	015	3	19	19	3	1.09	OK		Nicotine
497170000780	015	4	1	1	4	1.61	OK		Nicotine
497170000781	015	4	2	2	4	1.24	OK		Nicotine
497170000782	015	4	3	3	4	1.10	OK		Nicotine
497170000783	015	4	4	4	4	1.15	OK		Nicotine
497170000784	015	4	5	5	4	1.40	OK		Nicotine
497170000785	015	4	6	6	4	1.44	OK		Nicotine
497170000786	015	4	7	7	4	1.31	OK		Nicotine
497170000787	015	4	8	8	4	1.84	OK		Nicotine
497170000788	015	4	9	9	4	1.24	OK		Nicotine
497170000789	015	4	10	10	4	1.48	OK		Nicotine
497170000790	015	4	11	11	4	1.44	OK		Nicotine
497170000791	015	4	12	12	4	1.36	OK		Nicotine
497170000792	015	4	13	13	4	1.18	OK		Nicotine
497170000793	015	4	14	14	4	1.14	OK		Nicotine
497170000794	015	4	15	15	4	0.985	OK		Nicotine
497170000795	015	4	16	16	4	1.01	OK		Nicotine
497170000796	015	4	17	17	4	0.908	OK		Nicotine
497170000797	015	4	18	18	4	0.838	OK		Nicotine
497170000798	015	4	19	19	4	0.997	OK		Nicotine
497170000761	015	5	1	1	5	2.39	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000762	015	5	2	2	5	1.87	OK		Nicotine
497170000763	015	5	3	3	5	1.70	OK		Nicotine
497170000764	015	5	4	4	5	1.94	OK		Nicotine
497170000765	015	5	5	5	5	2.23	OK		Nicotine
497170000766	015	5	6	6	5	2.46	OK		Nicotine
497170000767	015	5	7	7	5	2.68	OK		Nicotine
497170000768	015	5	8	8	5	2.47	OK		Nicotine
497170000769	015	5	9	9	5	2.62	OK		Nicotine
497170000770	015	5	10	10	5	2.58	OK		Nicotine
497170000771	015	5	11	11	5	2.35	OK		Nicotine
497170000772	015	5	12	12	5	2.33	OK		Nicotine
497170000773	015	5	13	13	5	2.29	OK		Nicotine
497170000774	015	5	14	14	5	2.46	OK		Nicotine
497170000775	015	5	15	15	5	2.36	OK		Nicotine
497170000776	015	5	16	16	5	1.99	OK		Nicotine
497170000777	015	5	17	17	5	1.95	OK		Nicotine
497170000778	015	5	18	18	5	1.93	OK		Nicotine
497170000779	015	5	19	19	5	1.74	OK		Nicotine
497170000932	018	1	1	1	1	0.611	OK		Nicotine
497170000933	018	1	2	2	1	0.761	OK		Nicotine
497170000934	018	1	3	3	1	5.99	OK		Nicotine
497170000935	018	1	4	4	1	10.2	OK		Nicotine
497170000936	018	1	5	5	1	12.2	OK		Nicotine
497170000937	018	1	6	6	1	9.50	OK		Nicotine
497170000938	018	1	7	7	1	6.76	OK		Nicotine
497170000939	018	1	8	8	1	7.10	OK		Nicotine
497170000940	018	1	9	9	1	5.05	OK		Nicotine
497170000941	018	1	10	10	1	3.94	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000942	018	1	11	11	1	3.55	OK		Nicotine
497170000943	018	1	12	12	1	3.05	OK		Nicotine
497170000944	018	1	13	13	1	2.58	OK		Nicotine
497170000945	018	1	14	14	1	2.77	OK		Nicotine
497170000946	018	1	15	15	1	2.61	OK		Nicotine
497170000947	018	1	16	16	1	2.10	OK		Nicotine
497170000948	018	1	17	17	1	2.34	OK		Nicotine
497170000949	018	1	18	18	1	2.09	OK		Nicotine
497170000950	018	1	19	19	1	2.07	OK		Nicotine
497170000913	018	2	1	1	2	0.00	OK		Nicotine
497170000914	018	2	2	2	2	0.00	OK		Nicotine
497170000915	018	2	3	3	2	0.00	OK		Nicotine
497170000916	018	2	4	4	2	0.00	OK		Nicotine
497170000917	018	2	5	5	2	0.869	OK		Nicotine
497170000918	018	2	6	6	2	0.689	OK		Nicotine
497170000919	018	2	7	7	2	0.791	OK		Nicotine
497170000920	018	2	8	8	2	0.949	OK		Nicotine
497170000921	018	2	9	9	2	0.867	OK		Nicotine
497170000922	018	2	10	10	2	0.842	OK		Nicotine
497170000923	018	2	11	11	2	0.839	OK		Nicotine
497170000924	018	2	12	12	2	0.758	OK		Nicotine
497170000925	018	2	13	13	2	0.680	OK		Nicotine
497170000926	018	2	14	14	2	0.776	OK		Nicotine
497170000927	018	2	15	15	2	0.691	OK		Nicotine
497170000928	018	2	16	16	2	0.638	OK		Nicotine
497170000929	018	2	17	17	2	0.600	OK		Nicotine
497170000930	018	2	18	18	2	0.556	OK		Nicotine
497170000931	018	2	19	19	2	0.00	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000894	018	3	1	1	3	0.520	OK		Nicotine
497170000895	018	3	2	2	3	0.00	OK		Nicotine
497170000896	018	3	3	3	3	0.802	OK		Nicotine
497170000897	018	3	4	4	3	2.33	OK		Nicotine
497170000898	018	3	5	5	3	3.05	OK		Nicotine
497170000899	018	3	6	6	3	3.93	OK		Nicotine
497170000900	018	3	7	7	3	3.94	OK		Nicotine
497170000901	018	3	8	8	3	4.49	OK		Nicotine
497170000902	018	3	9	9	3	4.12	OK		Nicotine
497170000903	018	3	10	10	3	3.69	OK		Nicotine
497170000904	018	3	11	11	3	3.67	OK		Nicotine
497170000905	018	3	12	12	3	3.31	OK		Nicotine
497170000906	018	3	13	13	3	3.12	OK		Nicotine
497170000907	018	3	14	14	3	2.56	OK		Nicotine
497170000908	018	3	15	15	3	2.35	OK		Nicotine
497170000909	018	3	16	16	3	2.09	OK		Nicotine
497170000910	018	3	17	17	3	2.16	OK		Nicotine
497170000911	018	3	18	18	3	1.95	OK		Nicotine
497170000912	018	3	19	19	3	1.66	OK		Nicotine
497170000875	018	4	1	1	4	0.583	OK		Nicotine
497170000876	018	4	2	2	4	0.00	OK		Nicotine
497170000877	018	4	3	3	4	0.00	OK		Nicotine
497170000878	018	4	4	4	4	0.769	OK		Nicotine
497170000879	018	4	5	5	4	0.930	OK		Nicotine
497170000880	018	4	6	6	4	1.33	OK		Nicotine
497170000881	018	4	7	7	4	2.49	OK		Nicotine
497170000882	018	4	8	8	4	3.19	OK		Nicotine
497170000883	018	4	9	9	4	3.13	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000884	018	4	10	10	4	2.67	OK		Nicotine
497170000885	018	4	11	11	4	2.26	OK		Nicotine
497170000886	018	4	12	12	4	2.20	OK		Nicotine
497170000887	018	4	13	13	4	1.80	OK		Nicotine
497170000888	018	4	14	14	4	1.54	OK		Nicotine
497170000889	018	4	15	15	4	1.58	OK		Nicotine
497170000890	018	4	16	16	4	1.51	OK		Nicotine
497170000891	018	4	17	17	4	1.40	OK		Nicotine
497170000892	018	4	18	18	4	1.36	OK		Nicotine
497170000893	018	4	19	19	4	1.29	OK		Nicotine
497170000856	018	5	1	1	5	0.601	OK		Nicotine
497170000857	018	5	2	2	5	0.592	OK		Nicotine
497170000858	018	5	3	3	5	0.616	OK		Nicotine
497170000859	018	5	4	4	5	0.705	OK		Nicotine
497170000860	018	5	5	5	5	1.02	OK		Nicotine
497170000861	018	5	6	6	5	1.50	OK		Nicotine
497170000862	018	5	7	7	5	2.00	OK		Nicotine
497170000863	018	5	8	8	5	1.99	OK		Nicotine
497170000864	018	5	9	9	5	2.38	OK		Nicotine
497170000865	018	5	10	10	5	2.39	OK		Nicotine
497170000866	018	5	11	11	5	2.10	OK		Nicotine
497170000867	018	5	12	12	5	1.94	OK		Nicotine
497170000868	018	5	13	13	5	1.81	OK		Nicotine
497170000869	018	5	14	14	5	1.61	OK		Nicotine
497170000870	018	5	15	15	5	1.48	OK		Nicotine
497170000871	018	5	16	16	5	1.41	OK		Nicotine
497170000872	018	5	17	17	5	1.35	OK		Nicotine
497170000873	018	5	18	18	5	1.21	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000874	018	5	19	19	5	1.23	OK		Nicotine
497170001027	019	1	1	1	1	0.830	OK		Nicotine
497170001028	019	1	2	2	1	0.773	OK		Nicotine
497170001029	019	1	3	3	1	22.9	OK		Nicotine
497170001030	019	1	4	4	1	23.4	OK		Nicotine
497170001031	019	1	5	5	1	29.2	OK		Nicotine
497170001032	019	1	6	6	1	17.4	OK		Nicotine
497170001033	019	1	7	7	1	10.7	OK		Nicotine
497170001034	019	1	8	8	1	7.38	OK		Nicotine
497170001035	019	1	9	9	1	5.89	OK		Nicotine
497170001036	019	1	10	10	1	4.31	OK		Nicotine
497170001037	019	1	11	11	1	3.68	OK		Nicotine
497170001038	019	1	12	12	1	3.49	OK		Nicotine
497170001039	019	1	13	13	1	2.95	OK		Nicotine
497170001040	019	1	14	14	1	2.72	OK		Nicotine
497170001041	019	1	15	15	1	2.50	OK		Nicotine
497170001042	019	1	16	16	1	2.42	OK		Nicotine
497170001043	019	1	17	17	1	1.98	OK		Nicotine
497170001044	019	1	18	18	1	1.83	OK		Nicotine
497170001045	019	1	19	19	1	1.98	OK		Nicotine
497170001008	019	2	1	1	2	0.836	OK		Nicotine
497170001009	019	2	2	2	2	0.760	OK		Nicotine
497170001010	019	2	3	3	2	1.02	OK		Nicotine
497170001011	019	2	4	4	2	0.893	OK		Nicotine
497170001012	019	2	5	5	2	0.994	OK		Nicotine
497170001013	019	2	6	6	2	1.24	OK		Nicotine
497170001014	019	2	7	7	2	2.91	OK		Nicotine
497170001015	019	2	8	8	2	2.55	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001016	019	2	9	9	2	1.97	OK		Nicotine
497170001017	019	2	10	10	2	1.98	OK		Nicotine
497170001018	019	2	11	11	2	2.14	OK		Nicotine
497170001019	019	2	12	12	2	1.76	OK		Nicotine
497170001020	019	2	13	13	2	1.45	OK		Nicotine
497170001021	019	2	14	14	2	1.44	OK		Nicotine
497170001022	019	2	15	15	2	1.30	OK		Nicotine
497170001023	019	2	16	16	2	1.51	OK		Nicotine
497170001024	019	2	17	17	2	1.27	OK		Nicotine
497170001025	019	2	18	18	2	1.34	OK		Nicotine
497170001026	019	2	19	19	2	1.33	OK		Nicotine
497170000989	019	3	1	1	3	0.655	OK		Nicotine
497170000990	019	3	2	2	3	0.582	OK		Nicotine
497170000991	019	3	3	3	3	0.639	OK		Nicotine
497170000992	019	3	4	4	3	0.713	OK		Nicotine
497170000993	019	3	5	5	3	0.825	OK		Nicotine
497170000994	019	3	6	6	3	0.786	OK		Nicotine
497170000995	019	3	7	7	3	0.735	OK		Nicotine
497170000996	019	3	8	8	3	0.890	OK		Nicotine
497170000997	019	3	9	9	3	0.698	OK		Nicotine
497170000998	019	3	10	10	3	0.732	OK		Nicotine
497170000999	019	3	11	11	3	0.677	OK		Nicotine
497170001000	019	3	12	12	3	0.653	OK		Nicotine
497170001001	019	3	13	13	3	0.580	OK		Nicotine
497170001002	019	3	14	14	3	0.699	OK		Nicotine
497170001003	019	3	15	15	3	0.662	OK		Nicotine
497170001004	019	3	16	16	3	0.704	OK		Nicotine
497170001005	019	3	17	17	3	0.742	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001006	019	3	18	18	3	0.592	OK		Nicotine
497170001007	019	3	19	19	3	0.648	OK		Nicotine
497170000970	019	4	1	1	4	0.778	OK		Nicotine
497170000971	019	4	2	2	4	0.751	OK		Nicotine
497170000972	019	4	3	3	4	0.827	OK		Nicotine
497170000973	019	4	4	4	4	0.888	OK		Nicotine
497170000974	019	4	5	5	4	1.14	OK		Nicotine
497170000975	019	4	6	6	4	1.30	OK		Nicotine
497170000976	019	4	7	7	4	2.09	OK		Nicotine
497170000977	019	4	8	8	4	2.15	OK		Nicotine
497170000978	019	4	9	9	4	1.85	OK		Nicotine
497170000979	019	4	10	10	4	1.93	OK		Nicotine
497170000980	019	4	11	11	4	1.46	OK		Nicotine
497170000981	019	4	12	12	4	1.21	OK		Nicotine
497170000982	019	4	13	13	4	1.37	OK		Nicotine
497170000983	019	4	14	14	4	1.32	OK		Nicotine
497170000984	019	4	15	15	4	1.32	OK		Nicotine
497170000985	019	4	16	16	4	1.31	OK		Nicotine
497170000986	019	4	17	17	4	1.23	OK		Nicotine
497170000987	019	4	18	18	4	1.10	OK		Nicotine
497170000988	019	4	19	19	4	1.06	OK		Nicotine
497170000951	019	5	1	1	5	0.785	OK		Nicotine
497170000952	019	5	2	2	5	0.681	OK		Nicotine
497170000953	019	5	3	3	5	0.832	OK		Nicotine
497170000954	019	5	4	4	5	1.31	OK		Nicotine
497170000955	019	5	5	5	5	3.21	OK		Nicotine
497170000956	019	5	6	6	5	6.50	OK		Nicotine
497170000957	019	5	7	7	5	6.66	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000958	019	5	8	8	5	5.26	OK		Nicotine
497170000959	019	5	9	9	5	4.03	OK		Nicotine
497170000960	019	5	10	10	5	3.70	OK		Nicotine
497170000961	019	5	11	11	5	3.54	OK		Nicotine
497170000962	019	5	12	12	5	3.75	OK		Nicotine
497170000963	019	5	13	13	5	3.69	OK		Nicotine
497170000964	019	5	14	14	5	3.28	OK		Nicotine
497170000965	019	5	15	15	5	2.82	OK		Nicotine
497170000966	019	5	16	16	5	2.87	OK		Nicotine
497170000967	019	5	17	17	5	2.83	OK		Nicotine
497170000968	019	5	18	18	5	2.59	OK		Nicotine
497170000969	019	5	19	19	5	2.60	OK		Nicotine
497170001122	021	1	1	1	1	0.578	OK		Nicotine
497170001123	021	1	2	2	1	0.00	OK		Nicotine
497170001124	021	1	3	3	1	11.6	OK		Nicotine
497170001125	021	1	4	4	1	17.8	OK		Nicotine
497170001126	021	1	5	5	1	9.84	OK		Nicotine
497170001127	021	1	6	6	1	8.26	OK		Nicotine
497170001128	021	1	7	7	1	.	Not Received		Nicotine
497170001129	021	1	8	8	1	.	Not Received		Nicotine
497170001130	021	1	9	9	1	3.94	OK		Nicotine
497170001131	021	1	10	10	1	2.93	OK		Nicotine
497170001132	021	1	11	11	1	2.70	OK		Nicotine
497170001133	021	1	12	12	1	2.49	OK		Nicotine
497170001134	021	1	13	13	1	2.05	OK		Nicotine
497170001135	021	1	14	14	1	1.99	OK		Nicotine
497170001136	021	1	15	15	1	1.85	OK		Nicotine
497170001137	021	1	16	16	1	1.84	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001138	021	1	17	17	1	1.67	OK		Nicotine
497170001139	021	1	18	18	1	1.53	OK		Nicotine
497170001140	021	1	19	19	1	1.56	OK		Nicotine
497170001103	021	2	1	1	2	0.532	OK		Nicotine
497170001104	021	2	2	2	2	0.539	OK		Nicotine
497170001105	021	2	3	3	2	0.00	OK		Nicotine
497170001106	021	2	4	4	2	0.526	OK		Nicotine
497170001107	021	2	5	5	2	0.669	OK		Nicotine
497170001108	021	2	6	6	2	1.15	OK		Nicotine
497170001109	021	2	7	7	2	2.43	OK		Nicotine
497170001110	021	2	8	8	2	2.21	OK		Nicotine
497170001111	021	2	9	9	2	1.88	OK		Nicotine
497170001112	021	2	10	10	2	1.58	OK		Nicotine
497170001113	021	2	11	11	2	1.97	OK		Nicotine
497170001114	021	2	12	12	2	2.23	OK		Nicotine
497170001115	021	2	13	13	2	2.01	OK		Nicotine
497170001116	021	2	14	14	2	1.56	OK		Nicotine
497170001117	021	2	15	15	2	1.30	OK		Nicotine
497170001118	021	2	16	16	2	1.25	OK		Nicotine
497170001119	021	2	17	17	2	1.14	OK		Nicotine
497170001120	021	2	18	18	2	1.21	OK		Nicotine
497170001121	021	2	19	19	2	1.03	OK		Nicotine
497170001084	021	3	1	1	3	0.532	OK		Nicotine
497170001085	021	3	2	2	3	0.00	OK		Nicotine
497170001086	021	3	3	3	3	0.510	OK		Nicotine
497170001087	021	3	4	4	3	0.745	OK		Nicotine
497170001088	021	3	5	5	3	0.949	OK		Nicotine
497170001089	021	3	6	6	3	1.22	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001090	021	3	7	7	3	1.25	OK		Nicotine
497170001091	021	3	8	8	3	1.31	OK		Nicotine
497170001092	021	3	9	9	3	1.79	OK		Nicotine
497170001093	021	3	10	10	3	1.19	OK		Nicotine
497170001094	021	3	11	11	3	0.834	OK		Nicotine
497170001095	021	3	12	12	3	0.807	OK		Nicotine
497170001096	021	3	13	13	3	0.761	OK		Nicotine
497170001097	021	3	14	14	3	0.681	OK		Nicotine
497170001098	021	3	15	15	3	0.636	OK		Nicotine
497170001099	021	3	16	16	3	0.581	OK		Nicotine
497170001100	021	3	17	17	3	0.615	OK		Nicotine
497170001101	021	3	18	18	3	0.00	OK		Nicotine
497170001102	021	3	19	19	3	0.565	OK		Nicotine
497170001065	021	4	1	1	4	0.00	OK		Nicotine
497170001066	021	4	2	2	4	0.00	OK		Nicotine
497170001067	021	4	3	3	4	0.00	OK		Nicotine
497170001068	021	4	4	4	4	0.583	OK		Nicotine
497170001069	021	4	5	5	4	0.743	OK		Nicotine
497170001070	021	4	6	6	4	0.929	OK		Nicotine
497170001071	021	4	7	7	4	1.55	OK		Nicotine
497170001072	021	4	8	8	4	1.64	OK		Nicotine
497170001073	021	4	9	9	4	1.72	OK		Nicotine
497170001074	021	4	10	10	4	2.62	OK		Nicotine
497170001075	021	4	11	11	4	1.95	OK		Nicotine
497170001076	021	4	12	12	4	1.33	OK		Nicotine
497170001077	021	4	13	13	4	1.14	OK		Nicotine
497170001078	021	4	14	14	4	1.08	OK		Nicotine
497170001079	021	4	15	15	4	0.926	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001080	021	4	16	16	4	0.875	OK		Nicotine
497170001081	021	4	17	17	4	0.873	OK		Nicotine
497170001082	021	4	18	18	4	0.805	OK		Nicotine
497170001083	021	4	19	19	4	0.712	OK		Nicotine
497170001046	021	5	1	1	5	0.00	OK		Nicotine
497170001047	021	5	2	2	5	0.00	OK		Nicotine
497170001048	021	5	3	3	5	0.523	OK		Nicotine
497170001049	021	5	4	4	5	1.30	OK		Nicotine
497170001050	021	5	5	5	5	2.29	OK		Nicotine
497170001051	021	5	6	6	5	4.47	OK		Nicotine
497170001052	021	5	7	7	5	7.70	OK		Nicotine
497170001053	021	5	8	8	5	8.09	OK		Nicotine
497170001054	021	5	9	9	5	7.65	OK		Nicotine
497170001055	021	5	10	10	5	9.40	OK		Nicotine
497170001056	021	5	11	11	5	7.95	OK		Nicotine
497170001057	021	5	12	12	5	5.97	OK		Nicotine
497170001058	021	5	13	13	5	4.83	OK		Nicotine
497170001059	021	5	14	14	5	4.36	OK		Nicotine
497170001060	021	5	15	15	5	3.51	OK		Nicotine
497170001061	021	5	16	16	5	3.14	OK		Nicotine
497170001062	021	5	17	17	5	3.00	OK		Nicotine
497170001063	021	5	18	18	5	2.80	OK		Nicotine
497170001064	021	5	19	19	5	2.80	OK		Nicotine
497170001217	024	1	1	1	1	1.33	OK		Nicotine
497170001218	024	1	2	2	1	1.27	OK		Nicotine
497170001219	024	1	3	3	1	9.74	OK		Nicotine
497170001220	024	1	4	4	1	12.5	OK		Nicotine
497170001221	024	1	5	5	1	26.2	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001222	024	1	6	6	1	18.0	OK		Nicotine
497170001223	024	1	7	7	1	14.2	OK		Nicotine
497170001224	024	1	8	8	1	12.4	OK		Nicotine
497170001225	024	1	9	9	1	11.2	OK		Nicotine
497170001226	024	1	10	10	1	9.06	OK		Nicotine
497170001227	024	1	11	11	1	7.86	OK		Nicotine
497170001228	024	1	12	12	1	7.13	OK		Nicotine
497170001229	024	1	13	13	1	6.75	OK		Nicotine
497170001230	024	1	14	14	1	6.67	OK		Nicotine
497170001231	024	1	15	15	1	5.40	OK		Nicotine
497170001232	024	1	16	16	1	5.03	OK		Nicotine
497170001233	024	1	17	17	1	4.87	OK		Nicotine
497170001234	024	1	18	18	1	4.45	OK		Nicotine
497170001235	024	1	19	19	1	4.94	OK		Nicotine
497170001198	024	2	1	1	2	1.02	OK		Nicotine
497170001199	024	2	2	2	2	1.04	OK		Nicotine
497170001200	024	2	3	3	2	1.24	OK		Nicotine
497170001201	024	2	4	4	2	1.67	OK		Nicotine
497170001202	024	2	5	5	2	1.72	OK		Nicotine
497170001203	024	2	6	6	2	1.87	OK		Nicotine
497170001204	024	2	7	7	2	1.98	OK		Nicotine
497170001205	024	2	8	8	2	.	Not Received		Nicotine
497170001206	024	2	9	9	2	1.92	OK		Nicotine
497170001207	024	2	10	10	2	1.59	OK		Nicotine
497170001208	024	2	11	11	2	1.55	OK		Nicotine
497170001209	024	2	12	12	2	1.48	OK		Nicotine
497170001210	024	2	13	13	2	1.61	OK		Nicotine
497170001211	024	2	14	14	2	1.45	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001212	024	2	15	15	2	1.31	OK		Nicotine
497170001213	024	2	16	16	2	1.38	OK		Nicotine
497170001214	024	2	17	17	2	1.31	OK		Nicotine
497170001215	024	2	18	18	2	1.29	OK		Nicotine
497170001216	024	2	19	19	2	1.25	OK		Nicotine
497170001179	024	3	1	1	3	1.10	OK		Nicotine
497170001180	024	3	2	2	3	1.11	OK		Nicotine
497170001181	024	3	3	3	3	1.54	OK		Nicotine
497170001182	024	3	4	4	3	2.35	OK		Nicotine
497170001183	024	3	5	5	3	3.04	OK		Nicotine
497170001184	024	3	6	6	3	3.23	OK		Nicotine
497170001185	024	3	7	7	3	4.88	OK		Nicotine
497170001186	024	3	8	8	3	5.93	OK		Nicotine
497170001187	024	3	9	9	3	5.10	OK		Nicotine
497170001188	024	3	10	10	3	3.54	OK		Nicotine
497170001189	024	3	11	11	3	3.42	OK		Nicotine
497170001190	024	3	12	12	3	3.72	OK		Nicotine
497170001191	024	3	13	13	3	3.98	OK		Nicotine
497170001192	024	3	14	14	3	4.10	OK		Nicotine
497170001193	024	3	15	15	3	4.48	OK		Nicotine
497170001194	024	3	16	16	3	4.71	OK		Nicotine
497170001195	024	3	17	17	3	4.55	OK		Nicotine
497170001196	024	3	18	18	3	5.12	OK		Nicotine
497170001197	024	3	19	19	3	5.10	OK		Nicotine
497170001160	024	4	1	1	4	1.84	OK		Nicotine
497170001161	024	4	2	2	4	1.95	OK		Nicotine
497170001162	024	4	3	3	4	1.82	OK		Nicotine
497170001163	024	4	4	4	4	1.94	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001164	024	4	5	5	4	2.17	OK		Nicotine
497170001165	024	4	6	6	4	2.59	OK		Nicotine
497170001166	024	4	7	7	4	3.07	OK		Nicotine
497170001167	024	4	8	8	4	3.41	OK		Nicotine
497170001168	024	4	9	9	4	3.23	OK		Nicotine
497170001169	024	4	10	10	4	4.17	OK		Nicotine
497170001170	024	4	11	11	4	4.40	OK		Nicotine
497170001171	024	4	12	12	4	4.01	OK		Nicotine
497170001172	024	4	13	13	4	3.77	OK		Nicotine
497170001173	024	4	14	14	4	3.74	OK		Nicotine
497170001174	024	4	15	15	4	3.05	OK		Nicotine
497170001175	024	4	16	16	4	2.88	OK		Nicotine
497170001176	024	4	17	17	4	2.61	OK		Nicotine
497170001177	024	4	18	18	4	2.79	OK		Nicotine
497170001178	024	4	19	19	4	2.43	OK		Nicotine
497170001141	024	5	1	1	5	1.89	OK		Nicotine
497170001142	024	5	2	2	5	1.66	OK		Nicotine
497170001143	024	5	3	3	5	1.87	OK		Nicotine
497170001144	024	5	4	4	5	1.76	OK		Nicotine
497170001145	024	5	5	5	5	2.19	OK		Nicotine
497170001146	024	5	6	6	5	2.40	OK		Nicotine
497170001147	024	5	7	7	5	2.58	OK		Nicotine
497170001148	024	5	8	8	5	2.86	OK		Nicotine
497170001149	024	5	9	9	5	3.22	OK		Nicotine
497170001150	024	5	10	10	5	3.40	OK		Nicotine
497170001151	024	5	11	11	5	3.38	OK		Nicotine
497170001152	024	5	12	12	5	3.00	OK		Nicotine
497170001153	024	5	13	13	5	3.00	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001154	024	5	14	14	5	2.32	OK		Nicotine
497170001155	024	5	15	15	5	2.46	OK		Nicotine
497170001156	024	5	16	16	5	2.59	OK		Nicotine
497170001157	024	5	17	17	5	2.49	OK		Nicotine
497170001158	024	5	18	18	5	2.15	OK		Nicotine
497170001159	024	5	19	19	5	1.94	OK		Nicotine
497170001312	026	1	1	1	1	1.60	OK		Nicotine
497170001313	026	1	2	2	1	2.06	OK		Nicotine
497170001314	026	1	3	3	1	16.9	OK		Nicotine
497170001315	026	1	4	4	1	17.9	OK		Nicotine
497170001316	026	1	5	5	1	14.2	OK		Nicotine
497170001317	026	1	6	6	1	12.5	OK		Nicotine
497170001318	026	1	7	7	1	9.09	OK		Nicotine
497170001319	026	1	8	8	1	8.67	OK		Nicotine
497170001320	026	1	9	9	1	6.75	OK		Nicotine
497170001321	026	1	10	10	1	5.96	OK		Nicotine
497170001322	026	1	11	11	1	4.62	OK		Nicotine
497170001323	026	1	12	12	1	4.82	OK		Nicotine
497170001324	026	1	13	13	1	4.68	OK		Nicotine
497170001325	026	1	14	14	1	3.84	OK		Nicotine
497170001326	026	1	15	15	1	3.71	OK		Nicotine
497170001327	026	1	16	16	1	3.80	OK		Nicotine
497170001328	026	1	17	17	1	3.26	OK		Nicotine
497170001329	026	1	18	18	1	2.81	OK		Nicotine
497170001330	026	1	19	19	1	2.69	OK		Nicotine
497170001293	026	2	1	1	2	0.881	OK		Nicotine
497170001294	026	2	2	2	2	1.15	OK		Nicotine
497170001295	026	2	3	3	2	1.16	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001296	026	2	4	4	2	1.02	OK		Nicotine
497170001297	026	2	5	5	2	1.51	OK		Nicotine
497170001298	026	2	6	6	2	1.76	OK		Nicotine
497170001299	026	2	7	7	2	1.89	OK		Nicotine
497170001300	026	2	8	8	2	1.88	OK		Nicotine
497170001301	026	2	9	9	2	1.98	OK		Nicotine
497170001302	026	2	10	10	2	2.52	OK		Nicotine
497170001303	026	2	11	11	2	2.81	OK		Nicotine
497170001304	026	2	12	12	2	2.33	OK		Nicotine
497170001305	026	2	13	13	2	2.27	OK		Nicotine
497170001306	026	2	14	14	2	2.13	OK		Nicotine
497170001307	026	2	15	15	2	2.29	OK		Nicotine
497170001308	026	2	16	16	2	2.31	OK		Nicotine
497170001309	026	2	17	17	2	2.01	OK		Nicotine
497170001310	026	2	18	18	2	1.91	OK		Nicotine
497170001311	026	2	19	19	2	1.70	OK		Nicotine
497170001274	026	3	1	1	3	0.863	OK		Nicotine
497170001275	026	3	2	2	3	1.05	OK		Nicotine
497170001276	026	3	3	3	3	1.28	OK		Nicotine
497170001277	026	3	4	4	3	1.25	OK		Nicotine
497170001278	026	3	5	5	3	1.39	OK		Nicotine
497170001279	026	3	6	6	3	1.51	OK		Nicotine
497170001280	026	3	7	7	3	2.27	OK		Nicotine
497170001281	026	3	8	8	3	2.84	OK		Nicotine
497170001282	026	3	9	9	3	3.28	OK		Nicotine
497170001283	026	3	10	10	3	2.78	OK		Nicotine
497170001284	026	3	11	11	3	2.94	OK		Nicotine
497170001285	026	3	12	12	3	3.06	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001286	026	3	13	13	3	2.75	OK		Nicotine
497170001287	026	3	14	14	3	2.47	OK		Nicotine
497170001288	026	3	15	15	3	2.44	OK		Nicotine
497170001289	026	3	16	16	3	2.16	OK		Nicotine
497170001290	026	3	17	17	3	2.17	OK		Nicotine
497170001291	026	3	18	18	3	2.01	OK		Nicotine
497170001292	026	3	19	19	3	1.91	OK		Nicotine
497170001255	026	4	1	1	4	0.993	OK		Nicotine
497170001256	026	4	2	2	4	0.778	OK		Nicotine
497170001257	026	4	3	3	4	0.966	OK		Nicotine
497170001258	026	4	4	4	4	1.31	OK		Nicotine
497170001259	026	4	5	5	4	2.95	OK		Nicotine
497170001260	026	4	6	6	4	2.81	OK		Nicotine
497170001261	026	4	7	7	4	3.91	OK		Nicotine
497170001262	026	4	8	8	4	4.57	OK		Nicotine
497170001263	026	4	9	9	4	5.75	OK		Nicotine
497170001264	026	4	10	10	4	3.96	OK		Nicotine
497170001265	026	4	11	11	4	4.06	OK		Nicotine
497170001266	026	4	12	12	4	3.71	OK		Nicotine
497170001267	026	4	13	13	4	3.49	OK		Nicotine
497170001268	026	4	14	14	4	3.56	OK		Nicotine
497170001269	026	4	15	15	4	3.36	OK		Nicotine
497170001270	026	4	16	16	4	3.56	OK		Nicotine
497170001271	026	4	17	17	4	2.72	OK		Nicotine
497170001272	026	4	18	18	4	2.56	OK		Nicotine
497170001273	026	4	19	19	4	2.54	OK		Nicotine
497170001236	026	5	1	1	5	1.02	OK		Nicotine
497170001237	026	5	2	2	5	0.991	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001238	026	5	3	3	5	0.779	OK		Nicotine
497170001239	026	5	4	4	5	1.15	OK		Nicotine
497170001240	026	5	5	5	5	1.44	OK		Nicotine
497170001241	026	5	6	6	5	1.55	OK		Nicotine
497170001242	026	5	7	7	5	1.63	OK		Nicotine
497170001243	026	5	8	8	5	1.92	OK		Nicotine
497170001244	026	5	9	9	5	1.82	OK		Nicotine
497170001245	026	5	10	10	5	1.57	OK		Nicotine
497170001246	026	5	11	11	5	1.36	OK		Nicotine
497170001247	026	5	12	12	5	1.20	OK		Nicotine
497170001248	026	5	13	13	5	1.24	OK		Nicotine
497170001249	026	5	14	14	5	1.23	OK		Nicotine
497170001250	026	5	15	15	5	1.16	OK		Nicotine
497170001251	026	5	16	16	5	1.30	OK		Nicotine
497170001252	026	5	17	17	5	1.22	OK		Nicotine
497170001253	026	5	18	18	5	1.59	OK		Nicotine
497170001254	026	5	19	19	5	1.11	OK		Nicotine
497170001407	028	1	1	1	1	1.76	OK		Nicotine
497170001408	028	1	2	2	1	1.63	OK		Nicotine
497170001409	028	1	3	3	1	12.3	OK		Nicotine
497170001410	028	1	4	4	1	5.54	OK		Nicotine
497170001411	028	1	5	5	1	8.91	OK		Nicotine
497170001412	028	1	6	6	1	14.6	OK		Nicotine
497170001413	028	1	7	7	1	7.89	OK		Nicotine
497170001414	028	1	8	8	1	7.20	OK		Nicotine
497170001415	028	1	9	9	1	5.37	OK		Nicotine
497170001416	028	1	10	10	1	4.66	OK		Nicotine
497170001417	028	1	11	11	1	3.61	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001418	028	1	12	12	1	4.03	OK		Nicotine
497170001419	028	1	13	13	1	3.60	OK		Nicotine
497170001420	028	1	14	14	1	3.49	OK		Nicotine
497170001421	028	1	15	15	1	3.49	OK		Nicotine
497170001422	028	1	16	16	1	2.93	OK		Nicotine
497170001423	028	1	17	17	1	2.43	OK		Nicotine
497170001424	028	1	18	18	1	3.61	OK		Nicotine
497170001425	028	1	19	19	1	2.67	OK		Nicotine
497170001388	028	2	1	1	2	1.46	OK		Nicotine
497170001389	028	2	2	2	2	1.58	OK		Nicotine
497170001390	028	2	3	3	2	2.19	OK		Nicotine
497170001391	028	2	4	4	2	4.29	OK		Nicotine
497170001392	028	2	5	5	2	4.87	OK		Nicotine
497170001393	028	2	6	6	2	5.10	OK		Nicotine
497170001394	028	2	7	7	2	5.32	OK		Nicotine
497170001395	028	2	8	8	2	4.87	OK		Nicotine
497170001396	028	2	9	9	2	3.66	OK		Nicotine
497170001397	028	2	10	10	2	2.69	OK		Nicotine
497170001398	028	2	11	11	2	2.61	OK		Nicotine
497170001399	028	2	12	12	2	2.75	OK		Nicotine
497170001400	028	2	13	13	2	2.61	OK		Nicotine
497170001401	028	2	14	14	2	2.29	OK		Nicotine
497170001402	028	2	15	15	2	2.64	OK		Nicotine
497170001403	028	2	16	16	2	2.40	OK		Nicotine
497170001404	028	2	17	17	2	2.01	OK		Nicotine
497170001405	028	2	18	18	2	2.05	OK		Nicotine
497170001406	028	2	19	19	2	2.30	OK		Nicotine
497170001369	028	3	1	1	3	4.67	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001370	028	3	2	2	3	4.32	OK		Nicotine
497170001371	028	3	3	3	3	4.65	OK		Nicotine
497170001372	028	3	4	4	3	4.97	OK		Nicotine
497170001373	028	3	5	5	3	4.73	OK		Nicotine
497170001374	028	3	6	6	3	4.63	OK		Nicotine
497170001375	028	3	7	7	3	5.01	OK		Nicotine
497170001376	028	3	8	8	3	5.37	OK		Nicotine
497170001377	028	3	9	9	3	5.29	OK		Nicotine
497170001378	028	3	10	10	3	5.59	OK		Nicotine
497170001379	028	3	11	11	3	5.41	OK		Nicotine
497170001380	028	3	12	12	3	6.04	OK		Nicotine
497170001381	028	3	13	13	3	5.50	OK		Nicotine
497170001382	028	3	14	14	3	4.52	OK		Nicotine
497170001383	028	3	15	15	3	4.13	OK		Nicotine
497170001384	028	3	16	16	3	4.49	OK		Nicotine
497170001385	028	3	17	17	3	5.20	OK		Nicotine
497170001386	028	3	18	18	3	3.89	OK		Nicotine
497170001387	028	3	19	19	3	3.94	OK		Nicotine
497170001350	028	4	1	1	4	2.67	OK		Nicotine
497170001351	028	4	2	2	4	2.33	OK		Nicotine
497170001352	028	4	3	3	4	2.35	OK		Nicotine
497170001353	028	4	4	4	4	2.65	OK		Nicotine
497170001354	028	4	5	5	4	2.82	OK		Nicotine
497170001355	028	4	6	6	4	2.72	OK		Nicotine
497170001356	028	4	7	7	4	3.20	OK		Nicotine
497170001357	028	4	8	8	4	2.52	OK		Nicotine
497170001358	028	4	9	9	4	3.15	OK		Nicotine
497170001359	028	4	10	10	4	2.74	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001360	028	4	11	11	4	2.62	OK		Nicotine
497170001361	028	4	12	12	4	2.49	OK		Nicotine
497170001362	028	4	13	13	4	2.74	OK		Nicotine
497170001363	028	4	14	14	4	2.34	OK		Nicotine
497170001364	028	4	15	15	4	2.35	OK		Nicotine
497170001365	028	4	16	16	4	2.16	OK		Nicotine
497170001366	028	4	17	17	4	2.00	OK		Nicotine
497170001367	028	4	18	18	4	2.01	OK		Nicotine
497170001368	028	4	19	19	4	2.62	OK		Nicotine
497170001331	028	5	1	1	5	3.18	OK		Nicotine
497170001332	028	5	2	2	5	3.09	OK		Nicotine
497170001333	028	5	3	3	5	3.14	OK		Nicotine
497170001334	028	5	4	4	5	3.65	OK		Nicotine
497170001335	028	5	5	5	5	3.23	OK		Nicotine
497170001336	028	5	6	6	5	3.22	OK		Nicotine
497170001337	028	5	7	7	5	3.60	OK		Nicotine
497170001338	028	5	8	8	5	3.87	OK		Nicotine
497170001339	028	5	9	9	5	3.92	OK		Nicotine
497170001340	028	5	10	10	5	3.60	OK		Nicotine
497170001341	028	5	11	11	5	4.10	OK		Nicotine
497170001342	028	5	12	12	5	4.57	OK		Nicotine
497170001343	028	5	13	13	5	4.34	OK		Nicotine
497170001344	028	5	14	14	5	3.42	OK		Nicotine
497170001345	028	5	15	15	5	3.58	OK		Nicotine
497170001346	028	5	16	16	5	3.57	OK		Nicotine
497170001347	028	5	17	17	5	3.27	OK		Nicotine
497170001348	028	5	18	18	5	3.83	OK		Nicotine
497170001349	028	5	19	19	5	3.32	OK		Nicotine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000077	001	1	1	1	1	76.2	OK		Cotinine
497170000078	001	1	2	2	1	71.9	OK		Cotinine
497170000079	001	1	3	3	1	71.8	OK		Cotinine
497170000080	001	1	4	4	1	73.6	OK		Cotinine
497170000081	001	1	5	5	1	74.6	OK		Cotinine
497170000082	001	1	6	6	1	88.3	OK		Cotinine
497170000083	001	1	7	7	1	81.1	OK		Cotinine
497170000084	001	1	8	8	1	82.3	OK		Cotinine
497170000085	001	1	9	9	1	85.3	OK		Cotinine
497170000086	001	1	10	10	1	86.8	OK		Cotinine
497170000087	001	1	11	11	1	84.9	OK		Cotinine
497170000088	001	1	12	12	1	82.9	OK		Cotinine
497170000089	001	1	13	13	1	88.7	OK		Cotinine
497170000090	001	1	14	14	1	85.0	OK		Cotinine
497170000091	001	1	15	15	1	84.8	OK		Cotinine
497170000092	001	1	16	16	1	80.1	OK		Cotinine
497170000093	001	1	17	17	1	80.8	OK		Cotinine
497170000094	001	1	18	18	1	76.4	OK		Cotinine
497170000095	001	1	19	19	1	77.9	OK		Cotinine
497170000058	001	2	1	1	2	65.4	OK		Cotinine
497170000059	001	2	2	2	2	67.2	OK		Cotinine
497170000060	001	2	3	3	2	66.2	OK		Cotinine
497170000061	001	2	4	4	2	65.8	OK		Cotinine
497170000062	001	2	5	5	2	68.8	OK		Cotinine
497170000063	001	2	6	6	2	63.6	OK		Cotinine
497170000064	001	2	7	7	2	65.7	OK		Cotinine
497170000065	001	2	8	8	2	67.5	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000066	001	2	9	9	2	69.2	OK		Cotinine
497170000067	001	2	10	10	2	73.9	OK		Cotinine
497170000068	001	2	11	11	2	70.7	OK		Cotinine
497170000069	001	2	12	12	2	69.0	OK		Cotinine
497170000070	001	2	13	13	2	69.6	OK		Cotinine
497170000071	001	2	14	14	2	64.2	OK		Cotinine
497170000072	001	2	15	15	2	61.8	OK		Cotinine
497170000073	001	2	16	16	2	63.4	OK		Cotinine
497170000074	001	2	17	17	2	62.7	OK		Cotinine
497170000075	001	2	18	18	2	58.9	OK		Cotinine
497170000076	001	2	19	19	2	57.1	OK		Cotinine
497170000039	001	3	1	1	3	71.9	OK		Cotinine
497170000040	001	3	2	2	3	76.9	OK		Cotinine
497170000041	001	3	3	3	3	73.9	OK		Cotinine
497170000042	001	3	4	4	3	73.6	OK		Cotinine
497170000043	001	3	5	5	3	68.7	OK		Cotinine
497170000044	001	3	6	6	3	73.1	OK		Cotinine
497170000045	001	3	7	7	3	71.7	OK		Cotinine
497170000046	001	3	8	8	3	75.1	OK		Cotinine
497170000047	001	3	9	9	3	70.7	OK		Cotinine
497170000048	001	3	10	10	3	84.8	OK		Cotinine
497170000049	001	3	11	11	3	85.6	OK		Cotinine
497170000050	001	3	12	12	3	87.1	OK		Cotinine
497170000051	001	3	13	13	3	86.1	OK		Cotinine
497170000052	001	3	14	14	3	89.8	OK		Cotinine
497170000053	001	3	15	15	3	79.8	OK		Cotinine
497170000054	001	3	16	16	3	79.4	OK		Cotinine
497170000055	001	3	17	17	3	76.5	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000056	001	3	18	18	3	71.0	OK		Cotinine
497170000057	001	3	19	19	3	72.9	OK		Cotinine
497170000020	001	4	1	1	4	61.9	OK		Cotinine
497170000021	001	4	2	2	4	60.0	OK		Cotinine
497170000022	001	4	3	3	4	58.9	OK		Cotinine
497170000023	001	4	4	4	4	58.5	OK		Cotinine
497170000024	001	4	5	5	4	58.4	OK		Cotinine
497170000025	001	4	6	6	4	60.2	OK		Cotinine
497170000026	001	4	7	7	4	64.9	OK		Cotinine
497170000027	001	4	8	8	4	63.9	OK		Cotinine
497170000028	001	4	9	9	4	64.3	OK		Cotinine
497170000029	001	4	10	10	4	66.1	OK		Cotinine
497170000030	001	4	11	11	4	69.7	OK		Cotinine
497170000031	001	4	12	12	4	69.1	OK		Cotinine
497170000032	001	4	13	13	4	71.6	OK		Cotinine
497170000033	001	4	14	14	4	68.9	OK		Cotinine
497170000034	001	4	15	15	4	68.4	OK		Cotinine
497170000035	001	4	16	16	4	62.1	OK		Cotinine
497170000036	001	4	17	17	4	62.8	OK		Cotinine
497170000037	001	4	18	18	4	63.0	OK		Cotinine
497170000038	001	4	19	19	4	59.8	OK		Cotinine
497170000001	001	5	1	1	5	90.0	OK		Cotinine
497170000002	001	5	2	2	5	88.6	OK		Cotinine
497170000003	001	5	3	3	5	85.4	OK		Cotinine
497170000004	001	5	4	4	5	87.7	OK		Cotinine
497170000005	001	5	5	5	5	87.1	OK		Cotinine
497170000006	001	5	6	6	5	92.1	OK		Cotinine
497170000007	001	5	7	7	5	89.0	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000008	001	5	8	8	5	91.2	OK		Cotinine
497170000009	001	5	9	9	5	105	OK		Cotinine
497170000010	001	5	10	10	5	99.5	OK		Cotinine
497170000011	001	5	11	11	5	96.4	OK		Cotinine
497170000012	001	5	12	12	5	100	OK		Cotinine
497170000013	001	5	13	13	5	94.5	OK		Cotinine
497170000014	001	5	14	14	5	93.2	OK		Cotinine
497170000015	001	5	15	15	5	92.2	OK		Cotinine
497170000016	001	5	16	16	5	93.0	OK		Cotinine
497170000017	001	5	17	17	5	83.9	OK		Cotinine
497170000018	001	5	18	18	5	80.8	OK		Cotinine
497170000019	001	5	19	19	5	76.4	OK		Cotinine
497170000172	003	1	1	1	1	129	OK		Cotinine
497170000173	003	1	2	2	1	132	OK		Cotinine
497170000174	003	1	3	3	1	132	OK		Cotinine
497170000175	003	1	4	4	1	178	OK		Cotinine
497170000176	003	1	5	5	1	127	OK		Cotinine
497170000177	003	1	6	6	1	133	OK		Cotinine
497170000178	003	1	7	7	1	139	OK		Cotinine
497170000179	003	1	8	8	1	137	OK		Cotinine
497170000180	003	1	9	9	1	134	OK		Cotinine
497170000181	003	1	10	10	1	134	OK		Cotinine
497170000182	003	1	11	11	1	133	OK		Cotinine
497170000183	003	1	12	12	1	133	OK		Cotinine
497170000184	003	1	13	13	1	132	OK		Cotinine
497170000185	003	1	14	14	1	123	OK		Cotinine
497170000186	003	1	15	15	1	121	OK		Cotinine
497170000187	003	1	16	16	1	117	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000188	003	1	17	17	1	118	OK		Cotinine
497170000189	003	1	18	18	1	120	OK		Cotinine
497170000190	003	1	19	19	1	115	OK		Cotinine
497170000153	003	2	1	1	2	126	OK		Cotinine
497170000154	003	2	2	2	2	133	OK		Cotinine
497170000155	003	2	3	3	2	135	OK		Cotinine
497170000156	003	2	4	4	2	131	OK		Cotinine
497170000157	003	2	5	5	2	140	OK		Cotinine
497170000158	003	2	6	6	2	137	OK		Cotinine
497170000159	003	2	7	7	2	182	OK		Cotinine
497170000160	003	2	8	8	2	132	OK		Cotinine
497170000161	003	2	9	9	2	131	OK		Cotinine
497170000162	003	2	10	10	2	129	OK		Cotinine
497170000163	003	2	11	11	2	128	OK		Cotinine
497170000164	003	2	12	12	2	126	OK		Cotinine
497170000165	003	2	13	13	2	123	OK		Cotinine
497170000166	003	2	14	14	2	126	OK		Cotinine
497170000167	003	2	15	15	2	125	OK		Cotinine
497170000168	003	2	16	16	2	127	OK		Cotinine
497170000169	003	2	17	17	2	119	OK		Cotinine
497170000170	003	2	18	18	2	120	OK		Cotinine
497170000171	003	2	19	19	2	123	OK		Cotinine
497170000134	003	3	1	1	3	138	OK		Cotinine
497170000135	003	3	2	2	3	153	OK		Cotinine
497170000136	003	3	3	3	3	151	OK		Cotinine
497170000137	003	3	4	4	3	142	OK		Cotinine
497170000138	003	3	5	5	3	152	OK		Cotinine
497170000139	003	3	6	6	3	137	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000140	003	3	7	7	3	136	OK		Cotinine
497170000141	003	3	8	8	3	136	OK		Cotinine
497170000142	003	3	9	9	3	136	OK		Cotinine
497170000143	003	3	10	10	3	138	OK		Cotinine
497170000144	003	3	11	11	3	141	OK		Cotinine
497170000145	003	3	12	12	3	137	OK		Cotinine
497170000146	003	3	13	13	3	135	OK		Cotinine
497170000147	003	3	14	14	3	134	OK		Cotinine
497170000148	003	3	15	15	3	135	OK		Cotinine
497170000149	003	3	16	16	3	131	OK		Cotinine
497170000150	003	3	17	17	3	128	OK		Cotinine
497170000151	003	3	18	18	3	126	OK		Cotinine
497170000152	003	3	19	19	3	121	OK		Cotinine
497170000115	003	4	1	1	4	163	OK		Cotinine
497170000116	003	4	2	2	4	150	OK		Cotinine
497170000117	003	4	3	3	4	156	OK		Cotinine
497170000118	003	4	4	4	4	167	OK		Cotinine
497170000119	003	4	5	5	4	159	OK		Cotinine
497170000120	003	4	6	6	4	.	Not Received		Cotinine
497170000121	003	4	7	7	4	.	Not Received		Cotinine
497170000122	003	4	8	8	4	158	OK		Cotinine
497170000123	003	4	9	9	4	149	OK		Cotinine
497170000124	003	4	10	10	4	159	OK		Cotinine
497170000125	003	4	11	11	4	154	OK		Cotinine
497170000126	003	4	12	12	4	149	OK		Cotinine
497170000127	003	4	13	13	4	149	OK		Cotinine
497170000128	003	4	14	14	4	146	OK		Cotinine
497170000129	003	4	15	15	4	146	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000130	003	4	16	16	4	153	OK		Cotinine
497170000131	003	4	17	17	4	145	OK		Cotinine
497170000132	003	4	18	18	4	133	OK		Cotinine
497170000133	003	4	19	19	4	146	OK		Cotinine
497170000096	003	5	1	1	5	221	OK		Cotinine
497170000097	003	5	2	2	5	223	OK		Cotinine
497170000098	003	5	3	3	5	231	OK		Cotinine
497170000099	003	5	4	4	5	227	OK		Cotinine
497170000100	003	5	5	5	5	228	OK		Cotinine
497170000101	003	5	6	6	5	221	OK		Cotinine
497170000102	003	5	7	7	5	215	OK		Cotinine
497170000103	003	5	8	8	5	231	OK		Cotinine
497170000104	003	5	9	9	5	215	OK		Cotinine
497170000105	003	5	10	10	5	217	OK		Cotinine
497170000106	003	5	11	11	5	210	OK		Cotinine
497170000107	003	5	12	12	5	214	OK		Cotinine
497170000108	003	5	13	13	5	212	OK		Cotinine
497170000109	003	5	14	14	5	207	OK		Cotinine
497170000110	003	5	15	15	5	203	OK		Cotinine
497170000111	003	5	16	16	5	199	OK		Cotinine
497170000112	003	5	17	17	5	182	OK		Cotinine
497170000113	003	5	18	18	5	177	OK		Cotinine
497170000114	003	5	19	19	5	175	OK		Cotinine
497170000267	005	1	1	1	1	96.6	OK		Cotinine
497170000268	005	1	2	2	1	89.6	OK		Cotinine
497170000269	005	1	3	3	1	92.7	OK		Cotinine
497170000270	005	1	4	4	1	90.3	OK		Cotinine
497170000271	005	1	5	5	1	94.1	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000272	005	1	6	6	1	97.2	OK		Cotinine
497170000273	005	1	7	7	1	96.8	OK		Cotinine
497170000274	005	1	8	8	1	97.2	OK		Cotinine
497170000275	005	1	9	9	1	95.0	OK		Cotinine
497170000276	005	1	10	10	1	96.2	OK		Cotinine
497170000277	005	1	11	11	1	95.4	OK		Cotinine
497170000278	005	1	12	12	1	97.3	OK		Cotinine
497170000279	005	1	13	13	1	98.1	OK		Cotinine
497170000280	005	1	14	14	1	100	OK		Cotinine
497170000281	005	1	15	15	1	98.6	OK		Cotinine
497170000282	005	1	16	16	1	97.3	OK		Cotinine
497170000283	005	1	17	17	1	97.1	OK		Cotinine
497170000284	005	1	18	18	1	92.8	OK		Cotinine
497170000285	005	1	19	19	1	96.5	OK		Cotinine
497170000248	005	2	1	1	2	86.4	OK		Cotinine
497170000249	005	2	2	2	2	87.5	OK		Cotinine
497170000250	005	2	3	3	2	88.6	OK		Cotinine
497170000251	005	2	4	4	2	116	OK		Cotinine
497170000252	005	2	5	5	2	86.8	OK		Cotinine
497170000253	005	2	6	6	2	118	OK		Cotinine
497170000254	005	2	7	7	2	88.2	OK		Cotinine
497170000255	005	2	8	8	2	90.0	OK		Cotinine
497170000256	005	2	9	9	2	119	OK		Cotinine
497170000257	005	2	10	10	2	90.4	OK		Cotinine
497170000258	005	2	11	11	2	88.3	OK		Cotinine
497170000259	005	2	12	12	2	92.3	OK		Cotinine
497170000260	005	2	13	13	2	96.9	OK		Cotinine
497170000261	005	2	14	14	2	93.6	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000262	005	2	15	15	2	92.5	OK		Cotinine
497170000263	005	2	16	16	2	91.4	OK		Cotinine
497170000264	005	2	17	17	2	91.3	OK		Cotinine
497170000265	005	2	18	18	2	89.8	OK		Cotinine
497170000266	005	2	19	19	2	90.8	OK		Cotinine
497170000229	005	3	1	1	3	123	OK		Cotinine
497170000230	005	3	2	2	3	120	OK		Cotinine
497170000231	005	3	3	3	3	123	OK		Cotinine
497170000232	005	3	4	4	3	120	OK		Cotinine
497170000233	005	3	5	5	3	117	OK		Cotinine
497170000234	005	3	6	6	3	118	OK		Cotinine
497170000235	005	3	7	7	3	121	OK		Cotinine
497170000236	005	3	8	8	3	114	OK		Cotinine
497170000237	005	3	9	9	3	119	OK		Cotinine
497170000238	005	3	10	10	3	117	OK		Cotinine
497170000239	005	3	11	11	3	122	OK		Cotinine
497170000240	005	3	12	12	3	111	OK		Cotinine
497170000241	005	3	13	13	3	114	OK		Cotinine
497170000242	005	3	14	14	3	110	OK		Cotinine
497170000243	005	3	15	15	3	107	OK		Cotinine
497170000244	005	3	16	16	3	105	OK		Cotinine
497170000245	005	3	17	17	3	108	OK		Cotinine
497170000246	005	3	18	18	3	101	OK		Cotinine
497170000247	005	3	19	19	3	111	OK		Cotinine
497170000210	005	4	1	1	4	73.1	OK		Cotinine
497170000211	005	4	2	2	4	76.2	OK		Cotinine
497170000212	005	4	3	3	4	76.6	OK		Cotinine
497170000213	005	4	4	4	4	76.6	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000214	005	4	5	5	4	73.3	OK		Cotinine
497170000215	005	4	6	6	4	76.7	OK		Cotinine
497170000216	005	4	7	7	4	77.0	OK		Cotinine
497170000217	005	4	8	8	4	80.6	OK		Cotinine
497170000218	005	4	9	9	4	81.0	OK		Cotinine
497170000219	005	4	10	10	4	82.6	OK		Cotinine
497170000220	005	4	11	11	4	85.4	OK		Cotinine
497170000221	005	4	12	12	4	81.7	OK		Cotinine
497170000222	005	4	13	13	4	84.7	OK		Cotinine
497170000223	005	4	14	14	4	78.9	OK		Cotinine
497170000224	005	4	15	15	4	80.9	OK		Cotinine
497170000225	005	4	16	16	4	81.1	OK		Cotinine
497170000226	005	4	17	17	4	79.0	OK		Cotinine
497170000227	005	4	18	18	4	80.2	OK		Cotinine
497170000228	005	4	19	19	4	75.6	OK		Cotinine
497170000191	005	5	1	1	5	116	OK		Cotinine
497170000192	005	5	2	2	5	124	OK		Cotinine
497170000193	005	5	3	3	5	113	OK		Cotinine
497170000194	005	5	4	4	5	115	OK		Cotinine
497170000195	005	5	5	5	5	117	OK		Cotinine
497170000196	005	5	6	6	5	115	OK		Cotinine
497170000197	005	5	7	7	5	118	OK		Cotinine
497170000198	005	5	8	8	5	120	OK		Cotinine
497170000199	005	5	9	9	5	121	OK		Cotinine
497170000200	005	5	10	10	5	120	OK		Cotinine
497170000201	005	5	11	11	5	121	OK		Cotinine
497170000202	005	5	12	12	5	122	OK		Cotinine
497170000203	005	5	13	13	5	133	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000204	005	5	14	14	5	131	OK		Cotinine
497170000205	005	5	15	15	5	130	OK		Cotinine
497170000206	005	5	16	16	5	126	OK		Cotinine
497170000207	005	5	17	17	5	123	OK		Cotinine
497170000208	005	5	18	18	5	130	OK		Cotinine
497170000209	005	5	19	19	5	126	OK		Cotinine
497170000362	007	1	1	1	1	392	OK		Cotinine
497170000363	007	1	2	2	1	391	OK		Cotinine
497170000364	007	1	3	3	1	369	OK		Cotinine
497170000365	007	1	4	4	1	385	OK		Cotinine
497170000366	007	1	5	5	1	388	OK		Cotinine
497170000367	007	1	6	6	1	392	OK		Cotinine
497170000368	007	1	7	7	1	376	OK		Cotinine
497170000369	007	1	8	8	1	387	OK		Cotinine
497170000370	007	1	9	9	1	382	OK		Cotinine
497170000371	007	1	10	10	1	375	OK		Cotinine
497170000372	007	1	11	11	1	367	OK		Cotinine
497170000373	007	1	12	12	1	365	OK		Cotinine
497170000374	007	1	13	13	1	362	OK		Cotinine
497170000375	007	1	14	14	1	377	OK		Cotinine
497170000376	007	1	15	15	1	369	OK		Cotinine
497170000377	007	1	16	16	1	362	OK		Cotinine
497170000378	007	1	17	17	1	369	OK		Cotinine
497170000379	007	1	18	18	1	374	OK		Cotinine
497170000380	007	1	19	19	1	353	OK		Cotinine
497170000343	007	2	1	1	2	381	OK		Cotinine
497170000344	007	2	2	2	2	358	OK		Cotinine
497170000345	007	2	3	3	2	345	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000346	007	2	4	4	2	504	OK		Cotinine
497170000347	007	2	5	5	2	345	OK		Cotinine
497170000348	007	2	6	6	2	326	OK		Cotinine
497170000349	007	2	7	7	2	350	OK		Cotinine
497170000350	007	2	8	8	2	344	OK		Cotinine
497170000351	007	2	9	9	2	354	OK		Cotinine
497170000352	007	2	10	10	2	351	OK		Cotinine
497170000353	007	2	11	11	2	366	OK		Cotinine
497170000354	007	2	12	12	2	347	OK		Cotinine
497170000355	007	2	13	13	2	352	OK		Cotinine
497170000356	007	2	14	14	2	325	OK		Cotinine
497170000357	007	2	15	15	2	332	OK		Cotinine
497170000358	007	2	16	16	2	314	OK		Cotinine
497170000359	007	2	17	17	2	345	OK		Cotinine
497170000360	007	2	18	18	2	326	OK		Cotinine
497170000361	007	2	19	19	2	319	OK		Cotinine
497170000324	007	3	1	1	3	355	OK		Cotinine
497170000325	007	3	2	2	3	372	OK		Cotinine
497170000326	007	3	3	3	3	364	OK		Cotinine
497170000327	007	3	4	4	3	351	OK		Cotinine
497170000328	007	3	5	5	3	337	OK		Cotinine
497170000329	007	3	6	6	3	345	OK		Cotinine
497170000330	007	3	7	7	3	.	Not Received		Cotinine
497170000331	007	3	8	8	3	.	Not Received		Cotinine
497170000332	007	3	9	9	3	.	Not Received		Cotinine
497170000333	007	3	10	10	3	.	Not Received		Cotinine
497170000334	007	3	11	11	3	.	Not Received		Cotinine
497170000335	007	3	12	12	3	.	Not Received		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000336	007	3	13	13	3	.	Not Received		Cotinine
497170000337	007	3	14	14	3	.	Not Received		Cotinine
497170000338	007	3	15	15	3	.	Not Received		Cotinine
497170000339	007	3	16	16	3	.	Not Received		Cotinine
497170000340	007	3	17	17	3	.	Not Received		Cotinine
497170000341	007	3	18	18	3	.	Not Received		Cotinine
497170000342	007	3	19	19	3	.	Not Received		Cotinine
497170000305	007	4	1	1	4	311	OK		Cotinine
497170000306	007	4	2	2	4	328	OK		Cotinine
497170000307	007	4	3	3	4	342	OK		Cotinine
497170000308	007	4	4	4	4	318	OK		Cotinine
497170000309	007	4	5	5	4	325	OK		Cotinine
497170000310	007	4	6	6	4	320	OK		Cotinine
497170000311	007	4	7	7	4	319	OK		Cotinine
497170000312	007	4	8	8	4	318	OK		Cotinine
497170000313	007	4	9	9	4	324	OK		Cotinine
497170000314	007	4	10	10	4	332	OK		Cotinine
497170000315	007	4	11	11	4	315	OK		Cotinine
497170000316	007	4	12	12	4	325	OK		Cotinine
497170000317	007	4	13	13	4	312	OK		Cotinine
497170000318	007	4	14	14	4	299	OK		Cotinine
497170000319	007	4	15	15	4	306	OK		Cotinine
497170000320	007	4	16	16	4	286	OK		Cotinine
497170000321	007	4	17	17	4	307	OK		Cotinine
497170000322	007	4	18	18	4	296	OK		Cotinine
497170000323	007	4	19	19	4	295	OK		Cotinine
497170000286	007	5	1	1	5	334	OK		Cotinine
497170000287	007	5	2	2	5	326	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000288	007	5	3	3	5	386	OK		Cotinine
497170000289	007	5	4	4	5	304	OK		Cotinine
497170000290	007	5	5	5	5	344	OK		Cotinine
497170000291	007	5	6	6	5	324	OK		Cotinine
497170000292	007	5	7	7	5	333	OK		Cotinine
497170000293	007	5	8	8	5	342	OK		Cotinine
497170000294	007	5	9	9	5	342	OK		Cotinine
497170000295	007	5	10	10	5	338	OK		Cotinine
497170000296	007	5	11	11	5	329	OK		Cotinine
497170000297	007	5	12	12	5	348	OK		Cotinine
497170000298	007	5	13	13	5	336	OK		Cotinine
497170000299	007	5	14	14	5	347	OK		Cotinine
497170000300	007	5	15	15	5	337	OK		Cotinine
497170000301	007	5	16	16	5	315	OK		Cotinine
497170000302	007	5	17	17	5	320	OK		Cotinine
497170000303	007	5	18	18	5	320	OK		Cotinine
497170000304	007	5	19	19	5	306	OK		Cotinine
497170000457	009	1	1	1	1	318	OK		Cotinine
497170000458	009	1	2	2	1	314	OK		Cotinine
497170000459	009	1	3	3	1	333	OK		Cotinine
497170000460	009	1	4	4	1	328	OK		Cotinine
497170000461	009	1	5	5	1	329	OK		Cotinine
497170000462	009	1	6	6	1	344	OK		Cotinine
497170000463	009	1	7	7	1	327	OK		Cotinine
497170000464	009	1	8	8	1	311	OK		Cotinine
497170000465	009	1	9	9	1	325	OK		Cotinine
497170000466	009	1	10	10	1	329	OK		Cotinine
497170000467	009	1	11	11	1	306	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000468	009	1	12	12	1	319	OK		Cotinine
497170000469	009	1	13	13	1	305	OK		Cotinine
497170000470	009	1	14	14	1	312	OK		Cotinine
497170000471	009	1	15	15	1	304	OK		Cotinine
497170000472	009	1	16	16	1	311	OK		Cotinine
497170000473	009	1	17	17	1	314	OK		Cotinine
497170000474	009	1	18	18	1	310	OK		Cotinine
497170000475	009	1	19	19	1	305	OK		Cotinine
497170000438	009	2	1	1	2	372	OK		Cotinine
497170000439	009	2	2	2	2	357	OK		Cotinine
497170000440	009	2	3	3	2	368	OK		Cotinine
497170000441	009	2	4	4	2	343	OK		Cotinine
497170000442	009	2	5	5	2	363	OK		Cotinine
497170000443	009	2	6	6	2	345	OK		Cotinine
497170000444	009	2	7	7	2	358	OK		Cotinine
497170000445	009	2	8	8	2	351	OK		Cotinine
497170000446	009	2	9	9	2	340	OK		Cotinine
497170000447	009	2	10	10	2	324	OK		Cotinine
497170000448	009	2	11	11	2	340	OK		Cotinine
497170000449	009	2	12	12	2	332	OK		Cotinine
497170000450	009	2	13	13	2	335	OK		Cotinine
497170000451	009	2	14	14	2	339	OK		Cotinine
497170000452	009	2	15	15	2	337	OK		Cotinine
497170000453	009	2	16	16	2	312	OK		Cotinine
497170000454	009	2	17	17	2	447	OK		Cotinine
497170000455	009	2	18	18	2	348	OK		Cotinine
497170000456	009	2	19	19	2	438	OK		Cotinine
497170000419	009	3	1	1	3	411	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000420	009	3	2	2	3	436	OK		Cotinine
497170000421	009	3	3	3	3	408	OK		Cotinine
497170000422	009	3	4	4	3	427	OK		Cotinine
497170000423	009	3	5	5	3	406	OK		Cotinine
497170000424	009	3	6	6	3	383	OK		Cotinine
497170000425	009	3	7	7	3	388	OK		Cotinine
497170000426	009	3	8	8	3	392	OK		Cotinine
497170000427	009	3	9	9	3	381	OK		Cotinine
497170000428	009	3	10	10	3	385	OK		Cotinine
497170000429	009	3	11	11	3	396	OK		Cotinine
497170000430	009	3	12	12	3	372	OK		Cotinine
497170000431	009	3	13	13	3	377	OK		Cotinine
497170000432	009	3	14	14	3	352	OK		Cotinine
497170000433	009	3	15	15	3	377	OK		Cotinine
497170000434	009	3	16	16	3	361	OK		Cotinine
497170000435	009	3	17	17	3	458	OK		Cotinine
497170000436	009	3	18	18	3	357	OK		Cotinine
497170000437	009	3	19	19	3	362	OK		Cotinine
497170000400	009	4	1	1	4	360	OK		Cotinine
497170000401	009	4	2	2	4	394	OK		Cotinine
497170000402	009	4	3	3	4	392	OK		Cotinine
497170000403	009	4	4	4	4	384	OK		Cotinine
497170000404	009	4	5	5	4	382	OK		Cotinine
497170000405	009	4	6	6	4	379	OK		Cotinine
497170000406	009	4	7	7	4	373	OK		Cotinine
497170000407	009	4	8	8	4	377	OK		Cotinine
497170000408	009	4	9	9	4	359	OK		Cotinine
497170000409	009	4	10	10	4	384	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000410	009	4	11	11	4	350	OK		Cotinine
497170000411	009	4	12	12	4	350	OK		Cotinine
497170000412	009	4	13	13	4	333	OK		Cotinine
497170000413	009	4	14	14	4	343	OK		Cotinine
497170000414	009	4	15	15	4	344	OK		Cotinine
497170000415	009	4	16	16	4	339	OK		Cotinine
497170000416	009	4	17	17	4	360	OK		Cotinine
497170000417	009	4	18	18	4	379	OK		Cotinine
497170000418	009	4	19	19	4	333	OK		Cotinine
497170000381	009	5	1	1	5	400	OK		Cotinine
497170000382	009	5	2	2	5	374	OK		Cotinine
497170000383	009	5	3	3	5	387	OK		Cotinine
497170000384	009	5	4	4	5	393	OK		Cotinine
497170000385	009	5	5	5	5	384	OK		Cotinine
497170000386	009	5	6	6	5	411	OK		Cotinine
497170000387	009	5	7	7	5	384	OK		Cotinine
497170000388	009	5	8	8	5	414	OK		Cotinine
497170000389	009	5	9	9	5	387	OK		Cotinine
497170000390	009	5	10	10	5	382	OK		Cotinine
497170000391	009	5	11	11	5	393	OK		Cotinine
497170000392	009	5	12	12	5	371	OK		Cotinine
497170000393	009	5	13	13	5	370	OK		Cotinine
497170000394	009	5	14	14	5	388	OK		Cotinine
497170000395	009	5	15	15	5	374	OK		Cotinine
497170000396	009	5	16	16	5	379	OK		Cotinine
497170000397	009	5	17	17	5	382	OK		Cotinine
497170000398	009	5	18	18	5	361	OK		Cotinine
497170000399	009	5	19	19	5	381	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000552	011	1	1	1	1	217	OK		Cotinine
497170000553	011	1	2	2	1	212	OK		Cotinine
497170000554	011	1	3	3	1	217	OK		Cotinine
497170000555	011	1	4	4	1	215	OK		Cotinine
497170000556	011	1	5	5	1	297	OK		Cotinine
497170000557	011	1	6	6	1	218	OK		Cotinine
497170000558	011	1	7	7	1	217	OK		Cotinine
497170000559	011	1	8	8	1	228	OK		Cotinine
497170000560	011	1	9	9	1	230	OK		Cotinine
497170000561	011	1	10	10	1	223	OK		Cotinine
497170000562	011	1	11	11	1	225	OK		Cotinine
497170000563	011	1	12	12	1	216	OK		Cotinine
497170000564	011	1	13	13	1	217	OK		Cotinine
497170000565	011	1	14	14	1	211	OK		Cotinine
497170000566	011	1	15	15	1	217	OK		Cotinine
497170000567	011	1	16	16	1	209	OK		Cotinine
497170000568	011	1	17	17	1	204	OK		Cotinine
497170000569	011	1	18	18	1	202	OK		Cotinine
497170000570	011	1	19	19	1	201	OK		Cotinine
497170000533	011	2	1	1	2	169	OK		Cotinine
497170000534	011	2	2	2	2	165	OK		Cotinine
497170000535	011	2	3	3	2	159	OK		Cotinine
497170000536	011	2	4	4	2	163	OK		Cotinine
497170000537	011	2	5	5	2	162	OK		Cotinine
497170000538	011	2	6	6	2	162	OK		Cotinine
497170000539	011	2	7	7	2	163	OK		Cotinine
497170000540	011	2	8	8	2	167	OK		Cotinine
497170000541	011	2	9	9	2	165	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000542	011	2	10	10	2	164	OK		Cotinine
497170000543	011	2	11	11	2	162	OK		Cotinine
497170000544	011	2	12	12	2	168	OK		Cotinine
497170000545	011	2	13	13	2	155	OK		Cotinine
497170000546	011	2	14	14	2	155	OK		Cotinine
497170000547	011	2	15	15	2	159	OK		Cotinine
497170000548	011	2	16	16	2	154	OK		Cotinine
497170000549	011	2	17	17	2	144	OK		Cotinine
497170000550	011	2	18	18	2	151	OK		Cotinine
497170000551	011	2	19	19	2	141	OK		Cotinine
497170000514	011	3	1	1	3	193	OK		Cotinine
497170000515	011	3	2	2	3	191	OK		Cotinine
497170000516	011	3	3	3	3	196	OK		Cotinine
497170000517	011	3	4	4	3	194	OK		Cotinine
497170000518	011	3	5	5	3	193	OK		Cotinine
497170000519	011	3	6	6	3	243	OK		Cotinine
497170000520	011	3	7	7	3	199	OK		Cotinine
497170000521	011	3	8	8	3	195	OK		Cotinine
497170000522	011	3	9	9	3	208	OK		Cotinine
497170000523	011	3	10	10	3	198	OK		Cotinine
497170000524	011	3	11	11	3	193	OK		Cotinine
497170000525	011	3	12	12	3	189	OK		Cotinine
497170000526	011	3	13	13	3	189	OK		Cotinine
497170000527	011	3	14	14	3	190	OK		Cotinine
497170000528	011	3	15	15	3	180	OK		Cotinine
497170000529	011	3	16	16	3	179	OK		Cotinine
497170000530	011	3	17	17	3	175	OK		Cotinine
497170000531	011	3	18	18	3	177	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000532	011	3	19	19	3	171	OK		Cotinine
497170000495	011	4	1	1	4	71.0	OK		Cotinine
497170000496	011	4	2	2	4	72.1	OK		Cotinine
497170000497	011	4	3	3	4	72.0	OK		Cotinine
497170000498	011	4	4	4	4	74.8	OK		Cotinine
497170000499	011	4	5	5	4	74.9	OK		Cotinine
497170000500	011	4	6	6	4	78.1	OK		Cotinine
497170000501	011	4	7	7	4	74.6	OK		Cotinine
497170000502	011	4	8	8	4	78.4	OK		Cotinine
497170000503	011	4	9	9	4	82.6	OK		Cotinine
497170000504	011	4	10	10	4	83.0	OK		Cotinine
497170000505	011	4	11	11	4	78.8	OK		Cotinine
497170000506	011	4	12	12	4	81.4	OK		Cotinine
497170000507	011	4	13	13	4	80.7	OK		Cotinine
497170000508	011	4	14	14	4	78.9	OK		Cotinine
497170000509	011	4	15	15	4	76.3	OK		Cotinine
497170000510	011	4	16	16	4	70.7	OK		Cotinine
497170000511	011	4	17	17	4	44.5	OK		Cotinine
497170000512	011	4	18	18	4	72.5	OK		Cotinine
497170000513	011	4	19	19	4	75.0	OK		Cotinine
497170000476	011	5	1	1	5	46.4	OK		Cotinine
497170000477	011	5	2	2	5	48.4	OK		Cotinine
497170000478	011	5	3	3	5	47.7	OK		Cotinine
497170000479	011	5	4	4	5	46.1	OK		Cotinine
497170000480	011	5	5	5	5	43.9	OK		Cotinine
497170000481	011	5	6	6	5	48.9	OK		Cotinine
497170000482	011	5	7	7	5	49.7	OK		Cotinine
497170000483	011	5	8	8	5	49.1	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000484	011	5	9	9	5	48.9	OK		Cotinine
497170000485	011	5	10	10	5	48.0	OK		Cotinine
497170000486	011	5	11	11	5	51.1	OK		Cotinine
497170000487	011	5	12	12	5	50.4	OK		Cotinine
497170000488	011	5	13	13	5	51.4	OK		Cotinine
497170000489	011	5	14	14	5	51.3	OK		Cotinine
497170000490	011	5	15	15	5	50.7	OK		Cotinine
497170000491	011	5	16	16	5	49.5	OK		Cotinine
497170000492	011	5	17	17	5	50.2	OK		Cotinine
497170000493	011	5	18	18	5	51.0	OK		Cotinine
497170000494	011	5	19	19	5	51.1	OK		Cotinine
497170000647	012	1	1	1	1	291	OK		Cotinine
497170000648	012	1	2	2	1	299	OK		Cotinine
497170000649	012	1	3	3	1	276	OK		Cotinine
497170000650	012	1	4	4	1	271	OK		Cotinine
497170000651	012	1	5	5	1	295	OK		Cotinine
497170000652	012	1	6	6	1	277	OK		Cotinine
497170000653	012	1	7	7	1	283	OK		Cotinine
497170000654	012	1	8	8	1	277	OK		Cotinine
497170000655	012	1	9	9	1	295	OK		Cotinine
497170000656	012	1	10	10	1	281	OK		Cotinine
497170000657	012	1	11	11	1	263	OK		Cotinine
497170000658	012	1	12	12	1	280	OK		Cotinine
497170000659	012	1	13	13	1	261	OK		Cotinine
497170000660	012	1	14	14	1	282	OK		Cotinine
497170000661	012	1	15	15	1	271	OK		Cotinine
497170000662	012	1	16	16	1	260	OK		Cotinine
497170000663	012	1	17	17	1	248	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000664	012	1	18	18	1	253	OK		Cotinine
497170000665	012	1	19	19	1	245	OK		Cotinine
497170000628	012	2	1	1	2	239	OK		Cotinine
497170000629	012	2	2	2	2	241	OK		Cotinine
497170000630	012	2	3	3	2	241	OK		Cotinine
497170000631	012	2	4	4	2	242	OK		Cotinine
497170000632	012	2	5	5	2	224	OK		Cotinine
497170000633	012	2	6	6	2	221	OK		Cotinine
497170000634	012	2	7	7	2	243	OK		Cotinine
497170000635	012	2	8	8	2	238	OK		Cotinine
497170000636	012	2	9	9	2	240	OK		Cotinine
497170000637	012	2	10	10	2	236	OK		Cotinine
497170000638	012	2	11	11	2	237	OK		Cotinine
497170000639	012	2	12	12	2	244	OK		Cotinine
497170000640	012	2	13	13	2	234	OK		Cotinine
497170000641	012	2	14	14	2	231	OK		Cotinine
497170000642	012	2	15	15	2	228	OK		Cotinine
497170000643	012	2	16	16	2	238	OK		Cotinine
497170000644	012	2	17	17	2	228	OK		Cotinine
497170000645	012	2	18	18	2	220	OK		Cotinine
497170000646	012	2	19	19	2	220	OK		Cotinine
497170000609	012	3	1	1	3	319	OK		Cotinine
497170000610	012	3	2	2	3	282	OK		Cotinine
497170000611	012	3	3	3	3	276	OK		Cotinine
497170000612	012	3	4	4	3	271	OK		Cotinine
497170000613	012	3	5	5	3	322	OK		Cotinine
497170000614	012	3	6	6	3	276	OK		Cotinine
497170000615	012	3	7	7	3	275	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000616	012	3	8	8	3	271	OK		Cotinine
497170000617	012	3	9	9	3	262	OK		Cotinine
497170000618	012	3	10	10	3	284	OK		Cotinine
497170000619	012	3	11	11	3	280	OK		Cotinine
497170000620	012	3	12	12	3	277	OK		Cotinine
497170000621	012	3	13	13	3	262	OK		Cotinine
497170000622	012	3	14	14	3	246	OK		Cotinine
497170000623	012	3	15	15	3	242	OK		Cotinine
497170000624	012	3	16	16	3	235	OK		Cotinine
497170000625	012	3	17	17	3	251	OK		Cotinine
497170000626	012	3	18	18	3	235	OK		Cotinine
497170000627	012	3	19	19	3	236	OK		Cotinine
497170000590	012	4	1	1	4	276	OK		Cotinine
497170000591	012	4	2	2	4	297	OK		Cotinine
497170000592	012	4	3	3	4	267	OK		Cotinine
497170000593	012	4	4	4	4	270	OK		Cotinine
497170000594	012	4	5	5	4	262	OK		Cotinine
497170000595	012	4	6	6	4	273	OK		Cotinine
497170000596	012	4	7	7	4	262	OK		Cotinine
497170000597	012	4	8	8	4	268	OK		Cotinine
497170000598	012	4	9	9	4	274	OK		Cotinine
497170000599	012	4	10	10	4	258	OK		Cotinine
497170000600	012	4	11	11	4	264	OK		Cotinine
497170000601	012	4	12	12	4	264	OK		Cotinine
497170000602	012	4	13	13	4	261	OK		Cotinine
497170000603	012	4	14	14	4	263	OK		Cotinine
497170000604	012	4	15	15	4	266	OK		Cotinine
497170000605	012	4	16	16	4	247	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000606	012	4	17	17	4	245	OK		Cotinine
497170000607	012	4	18	18	4	235	OK		Cotinine
497170000608	012	4	19	19	4	253	OK		Cotinine
497170000571	012	5	1	1	5	271	OK		Cotinine
497170000572	012	5	2	2	5	269	OK		Cotinine
497170000573	012	5	3	3	5	263	OK		Cotinine
497170000574	012	5	4	4	5	272	OK		Cotinine
497170000575	012	5	5	5	5	272	OK		Cotinine
497170000576	012	5	6	6	5	265	OK		Cotinine
497170000577	012	5	7	7	5	273	OK		Cotinine
497170000578	012	5	8	8	5	270	OK		Cotinine
497170000579	012	5	9	9	5	253	OK		Cotinine
497170000580	012	5	10	10	5	269	OK		Cotinine
497170000581	012	5	11	11	5	161	OK		Cotinine
497170000582	012	5	12	12	5	261	OK		Cotinine
497170000583	012	5	13	13	5	255	OK		Cotinine
497170000584	012	5	14	14	5	242	OK		Cotinine
497170000585	012	5	15	15	5	235	OK		Cotinine
497170000586	012	5	16	16	5	244	OK		Cotinine
497170000587	012	5	17	17	5	243	OK		Cotinine
497170000588	012	5	18	18	5	239	OK		Cotinine
497170000589	012	5	19	19	5	229	OK		Cotinine
497170000742	013	1	1	1	1	56.6	OK		Cotinine
497170000743	013	1	2	2	1	58.2	OK		Cotinine
497170000744	013	1	3	3	1	56.6	OK		Cotinine
497170000745	013	1	4	4	1	53.6	OK		Cotinine
497170000746	013	1	5	5	1	58.6	OK		Cotinine
497170000747	013	1	6	6	1	59.3	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000748	013	1	7	7	1	63.0	OK		Cotinine
497170000749	013	1	8	8	1	58.6	OK		Cotinine
497170000750	013	1	9	9	1	63.1	OK		Cotinine
497170000751	013	1	10	10	1	58.1	OK		Cotinine
497170000752	013	1	11	11	1	62.3	OK		Cotinine
497170000753	013	1	12	12	1	60.7	OK		Cotinine
497170000754	013	1	13	13	1	58.5	OK		Cotinine
497170000755	013	1	14	14	1	56.0	OK		Cotinine
497170000756	013	1	15	15	1	59.8	OK		Cotinine
497170000757	013	1	16	16	1	59.1	OK		Cotinine
497170000758	013	1	17	17	1	59.9	OK		Cotinine
497170000759	013	1	18	18	1	59.3	OK		Cotinine
497170000760	013	1	19	19	1	57.5	OK		Cotinine
497170000723	013	2	1	1	2	78.5	OK		Cotinine
497170000724	013	2	2	2	2	75.8	OK		Cotinine
497170000725	013	2	3	3	2	74.7	OK		Cotinine
497170000726	013	2	4	4	2	76.7	OK		Cotinine
497170000727	013	2	5	5	2	77.2	OK		Cotinine
497170000728	013	2	6	6	2	75.6	OK		Cotinine
497170000729	013	2	7	7	2	77.7	OK		Cotinine
497170000730	013	2	8	8	2	75.6	OK		Cotinine
497170000731	013	2	9	9	2	77.8	OK		Cotinine
497170000732	013	2	10	10	2	77.8	OK		Cotinine
497170000733	013	2	11	11	2	78.9	OK		Cotinine
497170000734	013	2	12	12	2	85.1	OK		Cotinine
497170000735	013	2	13	13	2	87.9	OK		Cotinine
497170000736	013	2	14	14	2	88.4	OK		Cotinine
497170000737	013	2	15	15	2	90.4	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000738	013	2	16	16	2	93.1	OK		Cotinine
497170000739	013	2	17	17	2	95.6	OK		Cotinine
497170000740	013	2	18	18	2	122	OK		Cotinine
497170000741	013	2	19	19	2	125	OK		Cotinine
497170000704	013	3	1	1	3	114	OK		Cotinine
497170000705	013	3	2	2	3	131	OK		Cotinine
497170000706	013	3	3	3	3	116	OK		Cotinine
497170000707	013	3	4	4	3	118	OK		Cotinine
497170000708	013	3	5	5	3	129	OK		Cotinine
497170000709	013	3	6	6	3	116	OK		Cotinine
497170000710	013	3	7	7	3	126	OK		Cotinine
497170000711	013	3	8	8	3	110	OK		Cotinine
497170000712	013	3	9	9	3	115	OK		Cotinine
497170000713	013	3	10	10	3	122	OK		Cotinine
497170000714	013	3	11	11	3	119	OK		Cotinine
497170000715	013	3	12	12	3	132	OK		Cotinine
497170000716	013	3	13	13	3	120	OK		Cotinine
497170000717	013	3	14	14	3	117	OK		Cotinine
497170000718	013	3	15	15	3	121	OK		Cotinine
497170000719	013	3	16	16	3	118	OK		Cotinine
497170000720	013	3	17	17	3	124	OK		Cotinine
497170000721	013	3	18	18	3	120	OK		Cotinine
497170000722	013	3	19	19	3	115	OK		Cotinine
497170000685	013	4	1	1	4	73.8	OK		Cotinine
497170000686	013	4	2	2	4	73.0	OK		Cotinine
497170000687	013	4	3	3	4	72.4	OK		Cotinine
497170000688	013	4	4	4	4	71.7	OK		Cotinine
497170000689	013	4	5	5	4	74.4	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000690	013	4	6	6	4	100	OK		Cotinine
497170000691	013	4	7	7	4	69.9	OK		Cotinine
497170000692	013	4	8	8	4	72.4	OK		Cotinine
497170000693	013	4	9	9	4	71.7	OK		Cotinine
497170000694	013	4	10	10	4	72.0	OK		Cotinine
497170000695	013	4	11	11	4	71.9	OK		Cotinine
497170000696	013	4	12	12	4	70.7	OK		Cotinine
497170000697	013	4	13	13	4	71.8	OK		Cotinine
497170000698	013	4	14	14	4	70.2	OK		Cotinine
497170000699	013	4	15	15	4	71.5	OK		Cotinine
497170000700	013	4	16	16	4	75.8	OK		Cotinine
497170000701	013	4	17	17	4	70.6	OK		Cotinine
497170000702	013	4	18	18	4	67.1	OK		Cotinine
497170000703	013	4	19	19	4	65.3	OK		Cotinine
497170000666	013	5	1	1	5	66.2	OK		Cotinine
497170000667	013	5	2	2	5	63.5	OK		Cotinine
497170000668	013	5	3	3	5	64.7	OK		Cotinine
497170000669	013	5	4	4	5	62.5	OK		Cotinine
497170000670	013	5	5	5	5	62.3	OK		Cotinine
497170000671	013	5	6	6	5	60.4	OK		Cotinine
497170000672	013	5	7	7	5	61.2	OK		Cotinine
497170000673	013	5	8	8	5	62.8	OK		Cotinine
497170000674	013	5	9	9	5	64.7	OK		Cotinine
497170000675	013	5	10	10	5	60.7	OK		Cotinine
497170000676	013	5	11	11	5	60.8	OK		Cotinine
497170000677	013	5	12	12	5	61.7	OK		Cotinine
497170000678	013	5	13	13	5	61.0	OK		Cotinine
497170000679	013	5	14	14	5	61.0	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000680	013	5	15	15	5	60.1	OK		Cotinine
497170000681	013	5	16	16	5	60.6	OK		Cotinine
497170000682	013	5	17	17	5	58.9	OK		Cotinine
497170000683	013	5	18	18	5	57.2	OK		Cotinine
497170000684	013	5	19	19	5	57.7	OK		Cotinine
497170000837	015	1	1	1	1	105	OK		Cotinine
497170000838	015	1	2	2	1	116	OK		Cotinine
497170000839	015	1	3	3	1	118	OK		Cotinine
497170000840	015	1	4	4	1	117	OK		Cotinine
497170000841	015	1	5	5	1	116	OK		Cotinine
497170000842	015	1	6	6	1	108	OK		Cotinine
497170000843	015	1	7	7	1	124	OK		Cotinine
497170000844	015	1	8	8	1	122	OK		Cotinine
497170000845	015	1	9	9	1	120	OK		Cotinine
497170000846	015	1	10	10	1	122	OK		Cotinine
497170000847	015	1	11	11	1	120	OK		Cotinine
497170000848	015	1	12	12	1	120	OK		Cotinine
497170000849	015	1	13	13	1	120	OK		Cotinine
497170000850	015	1	14	14	1	120	OK		Cotinine
497170000851	015	1	15	15	1	115	OK		Cotinine
497170000852	015	1	16	16	1	116	OK		Cotinine
497170000853	015	1	17	17	1	115	OK		Cotinine
497170000854	015	1	18	18	1	113	OK		Cotinine
497170000855	015	1	19	19	1	114	OK		Cotinine
497170000818	015	2	1	1	2	134	OK		Cotinine
497170000819	015	2	2	2	2	135	OK		Cotinine
497170000820	015	2	3	3	2	135	OK		Cotinine
497170000821	015	2	4	4	2	175	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000822	015	2	5	5	2	135	OK		Cotinine
497170000823	015	2	6	6	2	182	OK		Cotinine
497170000824	015	2	7	7	2	180	OK		Cotinine
497170000825	015	2	8	8	2	135	OK		Cotinine
497170000826	015	2	9	9	2	132	OK		Cotinine
497170000827	015	2	10	10	2	147	OK		Cotinine
497170000828	015	2	11	11	2	144	OK		Cotinine
497170000829	015	2	12	12	2	141	OK		Cotinine
497170000830	015	2	13	13	2	135	OK		Cotinine
497170000831	015	2	14	14	2	131	OK		Cotinine
497170000832	015	2	15	15	2	136	OK		Cotinine
497170000833	015	2	16	16	2	133	OK		Cotinine
497170000834	015	2	17	17	2	130	OK		Cotinine
497170000835	015	2	18	18	2	130	OK		Cotinine
497170000836	015	2	19	19	2	124	OK		Cotinine
497170000799	015	3	1	1	3	112	OK		Cotinine
497170000800	015	3	2	2	3	109	OK		Cotinine
497170000801	015	3	3	3	3	110	OK		Cotinine
497170000802	015	3	4	4	3	104	OK		Cotinine
497170000803	015	3	5	5	3	104	OK		Cotinine
497170000804	015	3	6	6	3	99.0	OK		Cotinine
497170000805	015	3	7	7	3	104	OK		Cotinine
497170000806	015	3	8	8	3	109	OK		Cotinine
497170000807	015	3	9	9	3	104	OK		Cotinine
497170000808	015	3	10	10	3	101	OK		Cotinine
497170000809	015	3	11	11	3	102	OK		Cotinine
497170000810	015	3	12	12	3	109	OK		Cotinine
497170000811	015	3	13	13	3	94.3	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000812	015	3	14	14	3	106	OK		Cotinine
497170000813	015	3	15	15	3	103	OK		Cotinine
497170000814	015	3	16	16	3	104	OK		Cotinine
497170000815	015	3	17	17	3	100	OK		Cotinine
497170000816	015	3	18	18	3	93.8	OK		Cotinine
497170000817	015	3	19	19	3	98.1	OK		Cotinine
497170000780	015	4	1	1	4	99.5	OK		Cotinine
497170000781	015	4	2	2	4	94.9	OK		Cotinine
497170000782	015	4	3	3	4	91.4	OK		Cotinine
497170000783	015	4	4	4	4	93.1	OK		Cotinine
497170000784	015	4	5	5	4	92.1	OK		Cotinine
497170000785	015	4	6	6	4	94.1	OK		Cotinine
497170000786	015	4	7	7	4	96.6	OK		Cotinine
497170000787	015	4	8	8	4	126	OK		Cotinine
497170000788	015	4	9	9	4	90.2	OK		Cotinine
497170000789	015	4	10	10	4	91.8	OK		Cotinine
497170000790	015	4	11	11	4	91.0	OK		Cotinine
497170000791	015	4	12	12	4	90.5	OK		Cotinine
497170000792	015	4	13	13	4	91.3	OK		Cotinine
497170000793	015	4	14	14	4	89.1	OK		Cotinine
497170000794	015	4	15	15	4	87.2	OK		Cotinine
497170000795	015	4	16	16	4	84.2	OK		Cotinine
497170000796	015	4	17	17	4	81.0	OK		Cotinine
497170000797	015	4	18	18	4	85.7	OK		Cotinine
497170000798	015	4	19	19	4	84.1	OK		Cotinine
497170000761	015	5	1	1	5	174	OK		Cotinine
497170000762	015	5	2	2	5	179	OK		Cotinine
497170000763	015	5	3	3	5	171	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000764	015	5	4	4	5	167	OK		Cotinine
497170000765	015	5	5	5	5	173	OK		Cotinine
497170000766	015	5	6	6	5	174	OK		Cotinine
497170000767	015	5	7	7	5	176	OK		Cotinine
497170000768	015	5	8	8	5	177	OK		Cotinine
497170000769	015	5	9	9	5	169	OK		Cotinine
497170000770	015	5	10	10	5	165	OK		Cotinine
497170000771	015	5	11	11	5	176	OK		Cotinine
497170000772	015	5	12	12	5	159	OK		Cotinine
497170000773	015	5	13	13	5	172	OK		Cotinine
497170000774	015	5	14	14	5	173	OK		Cotinine
497170000775	015	5	15	15	5	168	OK		Cotinine
497170000776	015	5	16	16	5	172	OK		Cotinine
497170000777	015	5	17	17	5	165	OK		Cotinine
497170000778	015	5	18	18	5	160	OK		Cotinine
497170000779	015	5	19	19	5	160	OK		Cotinine
497170000932	018	1	1	1	1	83.8	OK		Cotinine
497170000933	018	1	2	2	1	74.9	OK		Cotinine
497170000934	018	1	3	3	1	75.1	OK		Cotinine
497170000935	018	1	4	4	1	79.9	OK		Cotinine
497170000936	018	1	5	5	1	77.1	OK		Cotinine
497170000937	018	1	6	6	1	79.1	OK		Cotinine
497170000938	018	1	7	7	1	80.3	OK		Cotinine
497170000939	018	1	8	8	1	81.0	OK		Cotinine
497170000940	018	1	9	9	1	83.1	OK		Cotinine
497170000941	018	1	10	10	1	80.2	OK		Cotinine
497170000942	018	1	11	11	1	83.9	OK		Cotinine
497170000943	018	1	12	12	1	83.3	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000944	018	1	13	13	1	84.0	OK		Cotinine
497170000945	018	1	14	14	1	77.7	OK		Cotinine
497170000946	018	1	15	15	1	81.8	OK		Cotinine
497170000947	018	1	16	16	1	78.4	OK		Cotinine
497170000948	018	1	17	17	1	78.1	OK		Cotinine
497170000949	018	1	18	18	1	79.7	OK		Cotinine
497170000950	018	1	19	19	1	75.0	OK		Cotinine
497170000913	018	2	1	1	2	71.8	OK		Cotinine
497170000914	018	2	2	2	2	72.2	OK		Cotinine
497170000915	018	2	3	3	2	72.2	OK		Cotinine
497170000916	018	2	4	4	2	77.1	OK		Cotinine
497170000917	018	2	5	5	2	70.5	OK		Cotinine
497170000918	018	2	6	6	2	56.6	OK		Cotinine
497170000919	018	2	7	7	2	72.0	OK		Cotinine
497170000920	018	2	8	8	2	75.6	OK		Cotinine
497170000921	018	2	9	9	2	72.8	OK		Cotinine
497170000922	018	2	10	10	2	70.8	OK		Cotinine
497170000923	018	2	11	11	2	71.0	OK		Cotinine
497170000924	018	2	12	12	2	69.2	OK		Cotinine
497170000925	018	2	13	13	2	69.6	OK		Cotinine
497170000926	018	2	14	14	2	68.8	OK		Cotinine
497170000927	018	2	15	15	2	67.2	OK		Cotinine
497170000928	018	2	16	16	2	69.9	OK		Cotinine
497170000929	018	2	17	17	2	67.0	OK		Cotinine
497170000930	018	2	18	18	2	63.8	OK		Cotinine
497170000931	018	2	19	19	2	63.0	OK		Cotinine
497170000894	018	3	1	1	3	159	OK		Cotinine
497170000895	018	3	2	2	3	155	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000896	018	3	3	3	3	150	OK		Cotinine
497170000897	018	3	4	4	3	157	OK		Cotinine
497170000898	018	3	5	5	3	152	OK		Cotinine
497170000899	018	3	6	6	3	154	OK		Cotinine
497170000900	018	3	7	7	3	148	OK		Cotinine
497170000901	018	3	8	8	3	153	OK		Cotinine
497170000902	018	3	9	9	3	149	OK		Cotinine
497170000903	018	3	10	10	3	156	OK		Cotinine
497170000904	018	3	11	11	3	154	OK		Cotinine
497170000905	018	3	12	12	3	151	OK		Cotinine
497170000906	018	3	13	13	3	152	OK		Cotinine
497170000907	018	3	14	14	3	151	OK		Cotinine
497170000908	018	3	15	15	3	153	OK		Cotinine
497170000909	018	3	16	16	3	149	OK		Cotinine
497170000910	018	3	17	17	3	152	OK		Cotinine
497170000911	018	3	18	18	3	144	OK		Cotinine
497170000912	018	3	19	19	3	149	OK		Cotinine
497170000875	018	4	1	1	4	78.4	OK		Cotinine
497170000876	018	4	2	2	4	71.6	OK		Cotinine
497170000877	018	4	3	3	4	70.8	OK		Cotinine
497170000878	018	4	4	4	4	70.7	OK		Cotinine
497170000879	018	4	5	5	4	72.1	OK		Cotinine
497170000880	018	4	6	6	4	71.6	OK		Cotinine
497170000881	018	4	7	7	4	69.8	OK		Cotinine
497170000882	018	4	8	8	4	69.6	OK		Cotinine
497170000883	018	4	9	9	4	70.4	OK		Cotinine
497170000884	018	4	10	10	4	75.8	OK		Cotinine
497170000885	018	4	11	11	4	74.2	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000886	018	4	12	12	4	76.5	OK		Cotinine
497170000887	018	4	13	13	4	76.4	OK		Cotinine
497170000888	018	4	14	14	4	75.5	OK		Cotinine
497170000889	018	4	15	15	4	74.3	OK		Cotinine
497170000890	018	4	16	16	4	74.7	OK		Cotinine
497170000891	018	4	17	17	4	72.2	OK		Cotinine
497170000892	018	4	18	18	4	72.3	OK		Cotinine
497170000893	018	4	19	19	4	71.5	OK		Cotinine
497170000856	018	5	1	1	5	119	OK		Cotinine
497170000857	018	5	2	2	5	119	OK		Cotinine
497170000858	018	5	3	3	5	117	OK		Cotinine
497170000859	018	5	4	4	5	114	OK		Cotinine
497170000860	018	5	5	5	5	116	OK		Cotinine
497170000861	018	5	6	6	5	113	OK		Cotinine
497170000862	018	5	7	7	5	115	OK		Cotinine
497170000863	018	5	8	8	5	116	OK		Cotinine
497170000864	018	5	9	9	5	120	OK		Cotinine
497170000865	018	5	10	10	5	124	OK		Cotinine
497170000866	018	5	11	11	5	121	OK		Cotinine
497170000867	018	5	12	12	5	121	OK		Cotinine
497170000868	018	5	13	13	5	121	OK		Cotinine
497170000869	018	5	14	14	5	121	OK		Cotinine
497170000870	018	5	15	15	5	116	OK		Cotinine
497170000871	018	5	16	16	5	115	OK		Cotinine
497170000872	018	5	17	17	5	113	OK		Cotinine
497170000873	018	5	18	18	5	110	OK		Cotinine
497170000874	018	5	19	19	5	111	OK		Cotinine
497170001027	019	1	1	1	1	184	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001028	019	1	2	2	1	184	OK		Cotinine
497170001029	019	1	3	3	1	179	OK		Cotinine
497170001030	019	1	4	4	1	180	OK		Cotinine
497170001031	019	1	5	5	1	180	OK		Cotinine
497170001032	019	1	6	6	1	186	OK		Cotinine
497170001033	019	1	7	7	1	189	OK		Cotinine
497170001034	019	1	8	8	1	188	OK		Cotinine
497170001035	019	1	9	9	1	179	OK		Cotinine
497170001036	019	1	10	10	1	176	OK		Cotinine
497170001037	019	1	11	11	1	181	OK		Cotinine
497170001038	019	1	12	12	1	179	OK		Cotinine
497170001039	019	1	13	13	1	173	OK		Cotinine
497170001040	019	1	14	14	1	180	OK		Cotinine
497170001041	019	1	15	15	1	180	OK		Cotinine
497170001042	019	1	16	16	1	175	OK		Cotinine
497170001043	019	1	17	17	1	183	OK		Cotinine
497170001044	019	1	18	18	1	182	OK		Cotinine
497170001045	019	1	19	19	1	182	OK		Cotinine
497170001008	019	2	1	1	2	149	OK		Cotinine
497170001009	019	2	2	2	2	156	OK		Cotinine
497170001010	019	2	3	3	2	170	OK		Cotinine
497170001011	019	2	4	4	2	161	OK		Cotinine
497170001012	019	2	5	5	2	148	OK		Cotinine
497170001013	019	2	6	6	2	147	OK		Cotinine
497170001014	019	2	7	7	2	150	OK		Cotinine
497170001015	019	2	8	8	2	151	OK		Cotinine
497170001016	019	2	9	9	2	149	OK		Cotinine
497170001017	019	2	10	10	2	146	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001018	019	2	11	11	2	149	OK		Cotinine
497170001019	019	2	12	12	2	152	OK		Cotinine
497170001020	019	2	13	13	2	137	OK		Cotinine
497170001021	019	2	14	14	2	133	OK		Cotinine
497170001022	019	2	15	15	2	137	OK		Cotinine
497170001023	019	2	16	16	2	136	OK		Cotinine
497170001024	019	2	17	17	2	139	OK		Cotinine
497170001025	019	2	18	18	2	140	OK		Cotinine
497170001026	019	2	19	19	2	148	OK		Cotinine
497170000989	019	3	1	1	3	123	OK		Cotinine
497170000990	019	3	2	2	3	125	OK		Cotinine
497170000991	019	3	3	3	3	124	OK		Cotinine
497170000992	019	3	4	4	3	121	OK		Cotinine
497170000993	019	3	5	5	3	126	OK		Cotinine
497170000994	019	3	6	6	3	118	OK		Cotinine
497170000995	019	3	7	7	3	116	OK		Cotinine
497170000996	019	3	8	8	3	123	OK		Cotinine
497170000997	019	3	9	9	3	118	OK		Cotinine
497170000998	019	3	10	10	3	116	OK		Cotinine
497170000999	019	3	11	11	3	111	OK		Cotinine
497170001000	019	3	12	12	3	112	OK		Cotinine
497170001001	019	3	13	13	3	114	OK		Cotinine
497170001002	019	3	14	14	3	114	OK		Cotinine
497170001003	019	3	15	15	3	114	OK		Cotinine
497170001004	019	3	16	16	3	115	OK		Cotinine
497170001005	019	3	17	17	3	109	OK		Cotinine
497170001006	019	3	18	18	3	112	OK		Cotinine
497170001007	019	3	19	19	3	107	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000970	019	4	1	1	4	131	OK		Cotinine
497170000971	019	4	2	2	4	131	OK		Cotinine
497170000972	019	4	3	3	4	128	OK		Cotinine
497170000973	019	4	4	4	4	127	OK		Cotinine
497170000974	019	4	5	5	4	131	OK		Cotinine
497170000975	019	4	6	6	4	130	OK		Cotinine
497170000976	019	4	7	7	4	133	OK		Cotinine
497170000977	019	4	8	8	4	126	OK		Cotinine
497170000978	019	4	9	9	4	125	OK		Cotinine
497170000979	019	4	10	10	4	121	OK		Cotinine
497170000980	019	4	11	11	4	116	OK		Cotinine
497170000981	019	4	12	12	4	123	OK		Cotinine
497170000982	019	4	13	13	4	122	OK		Cotinine
497170000983	019	4	14	14	4	118	OK		Cotinine
497170000984	019	4	15	15	4	119	OK		Cotinine
497170000985	019	4	16	16	4	117	OK		Cotinine
497170000986	019	4	17	17	4	115	OK		Cotinine
497170000987	019	4	18	18	4	116	OK		Cotinine
497170000988	019	4	19	19	4	118	OK		Cotinine
497170000951	019	5	1	1	5	121	OK		Cotinine
497170000952	019	5	2	2	5	119	OK		Cotinine
497170000953	019	5	3	3	5	118	OK		Cotinine
497170000954	019	5	4	4	5	114	OK		Cotinine
497170000955	019	5	5	5	5	119	OK		Cotinine
497170000956	019	5	6	6	5	118	OK		Cotinine
497170000957	019	5	7	7	5	119	OK		Cotinine
497170000958	019	5	8	8	5	120	OK		Cotinine
497170000959	019	5	9	9	5	119	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170000960	019	5	10	10	5	124	OK		Cotinine
497170000961	019	5	11	11	5	124	OK		Cotinine
497170000962	019	5	12	12	5	130	OK		Cotinine
497170000963	019	5	13	13	5	133	OK		Cotinine
497170000964	019	5	14	14	5	130	OK		Cotinine
497170000965	019	5	15	15	5	126	OK		Cotinine
497170000966	019	5	16	16	5	122	OK		Cotinine
497170000967	019	5	17	17	5	131	OK		Cotinine
497170000968	019	5	18	18	5	126	OK		Cotinine
497170000969	019	5	19	19	5	126	OK		Cotinine
497170001122	021	1	1	1	1	125	OK		Cotinine
497170001123	021	1	2	2	1	124	OK		Cotinine
497170001124	021	1	3	3	1	125	OK		Cotinine
497170001125	021	1	4	4	1	124	OK		Cotinine
497170001126	021	1	5	5	1	129	OK		Cotinine
497170001127	021	1	6	6	1	126	OK		Cotinine
497170001128	021	1	7	7	1	.	Not Received		Cotinine
497170001129	021	1	8	8	1	.	Not Received		Cotinine
497170001130	021	1	9	9	1	132	OK		Cotinine
497170001131	021	1	10	10	1	125	OK		Cotinine
497170001132	021	1	11	11	1	125	OK		Cotinine
497170001133	021	1	12	12	1	124	OK		Cotinine
497170001134	021	1	13	13	1	119	OK		Cotinine
497170001135	021	1	14	14	1	116	OK		Cotinine
497170001136	021	1	15	15	1	117	OK		Cotinine
497170001137	021	1	16	16	1	115	OK		Cotinine
497170001138	021	1	17	17	1	112	OK		Cotinine
497170001139	021	1	18	18	1	115	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001140	021	1	19	19	1	114	OK		Cotinine
497170001103	021	2	1	1	2	141	OK		Cotinine
497170001104	021	2	2	2	2	134	OK		Cotinine
497170001105	021	2	3	3	2	133	OK		Cotinine
497170001106	021	2	4	4	2	134	OK		Cotinine
497170001107	021	2	5	5	2	131	OK		Cotinine
497170001108	021	2	6	6	2	133	OK		Cotinine
497170001109	021	2	7	7	2	127	OK		Cotinine
497170001110	021	2	8	8	2	130	OK		Cotinine
497170001111	021	2	9	9	2	132	OK		Cotinine
497170001112	021	2	10	10	2	128	OK		Cotinine
497170001113	021	2	11	11	2	138	OK		Cotinine
497170001114	021	2	12	12	2	142	OK		Cotinine
497170001115	021	2	13	13	2	134	OK		Cotinine
497170001116	021	2	14	14	2	137	OK		Cotinine
497170001117	021	2	15	15	2	130	OK		Cotinine
497170001118	021	2	16	16	2	131	OK		Cotinine
497170001119	021	2	17	17	2	134	OK		Cotinine
497170001120	021	2	18	18	2	131	OK		Cotinine
497170001121	021	2	19	19	2	130	OK		Cotinine
497170001084	021	3	1	1	3	148	OK		Cotinine
497170001085	021	3	2	2	3	147	OK		Cotinine
497170001086	021	3	3	3	3	143	OK		Cotinine
497170001087	021	3	4	4	3	145	OK		Cotinine
497170001088	021	3	5	5	3	145	OK		Cotinine
497170001089	021	3	6	6	3	142	OK		Cotinine
497170001090	021	3	7	7	3	145	OK		Cotinine
497170001091	021	3	8	8	3	147	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001092	021	3	9	9	3	153	OK		Cotinine
497170001093	021	3	10	10	3	148	OK		Cotinine
497170001094	021	3	11	11	3	138	OK		Cotinine
497170001095	021	3	12	12	3	140	OK		Cotinine
497170001096	021	3	13	13	3	138	OK		Cotinine
497170001097	021	3	14	14	3	133	OK		Cotinine
497170001098	021	3	15	15	3	135	OK		Cotinine
497170001099	021	3	16	16	3	132	OK		Cotinine
497170001100	021	3	17	17	3	134	OK		Cotinine
497170001101	021	3	18	18	3	117	OK		Cotinine
497170001102	021	3	19	19	3	122	OK		Cotinine
497170001065	021	4	1	1	4	117	OK		Cotinine
497170001066	021	4	2	2	4	121	OK		Cotinine
497170001067	021	4	3	3	4	115	OK		Cotinine
497170001068	021	4	4	4	4	108	OK		Cotinine
497170001069	021	4	5	5	4	114	OK		Cotinine
497170001070	021	4	6	6	4	118	OK		Cotinine
497170001071	021	4	7	7	4	109	OK		Cotinine
497170001072	021	4	8	8	4	110	OK		Cotinine
497170001073	021	4	9	9	4	120	OK		Cotinine
497170001074	021	4	10	10	4	120	OK		Cotinine
497170001075	021	4	11	11	4	125	OK		Cotinine
497170001076	021	4	12	12	4	116	OK		Cotinine
497170001077	021	4	13	13	4	113	OK		Cotinine
497170001078	021	4	14	14	4	116	OK		Cotinine
497170001079	021	4	15	15	4	110	OK		Cotinine
497170001080	021	4	16	16	4	109	OK		Cotinine
497170001081	021	4	17	17	4	108	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001082	021	4	18	18	4	106	OK		Cotinine
497170001083	021	4	19	19	4	107	OK		Cotinine
497170001046	021	5	1	1	5	118	OK		Cotinine
497170001047	021	5	2	2	5	119	OK		Cotinine
497170001048	021	5	3	3	5	113	OK		Cotinine
497170001049	021	5	4	4	5	115	OK		Cotinine
497170001050	021	5	5	5	5	114	OK		Cotinine
497170001051	021	5	6	6	5	114	OK		Cotinine
497170001052	021	5	7	7	5	117	OK		Cotinine
497170001053	021	5	8	8	5	120	OK		Cotinine
497170001054	021	5	9	9	5	140	OK		Cotinine
497170001055	021	5	10	10	5	176	OK		Cotinine
497170001056	021	5	11	11	5	182	OK		Cotinine
497170001057	021	5	12	12	5	176	OK		Cotinine
497170001058	021	5	13	13	5	169	OK		Cotinine
497170001059	021	5	14	14	5	166	OK		Cotinine
497170001060	021	5	15	15	5	163	OK		Cotinine
497170001061	021	5	16	16	5	163	OK		Cotinine
497170001062	021	5	17	17	5	160	OK		Cotinine
497170001063	021	5	18	18	5	161	OK		Cotinine
497170001064	021	5	19	19	5	154	OK		Cotinine
497170001217	024	1	1	1	1	188	OK		Cotinine
497170001218	024	1	2	2	1	183	OK		Cotinine
497170001219	024	1	3	3	1	180	OK		Cotinine
497170001220	024	1	4	4	1	189	OK		Cotinine
497170001221	024	1	5	5	1	183	OK		Cotinine
497170001222	024	1	6	6	1	190	OK		Cotinine
497170001223	024	1	7	7	1	185	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001224	024	1	8	8	1	187	OK		Cotinine
497170001225	024	1	9	9	1	191	OK		Cotinine
497170001226	024	1	10	10	1	184	OK		Cotinine
497170001227	024	1	11	11	1	183	OK		Cotinine
497170001228	024	1	12	12	1	188	OK		Cotinine
497170001229	024	1	13	13	1	182	OK		Cotinine
497170001230	024	1	14	14	1	183	OK		Cotinine
497170001231	024	1	15	15	1	191	OK		Cotinine
497170001232	024	1	16	16	1	191	OK		Cotinine
497170001233	024	1	17	17	1	186	OK		Cotinine
497170001234	024	1	18	18	1	191	OK		Cotinine
497170001235	024	1	19	19	1	187	OK		Cotinine
497170001198	024	2	1	1	2	182	OK		Cotinine
497170001199	024	2	2	2	2	179	OK		Cotinine
497170001200	024	2	3	3	2	180	OK		Cotinine
497170001201	024	2	4	4	2	182	OK		Cotinine
497170001202	024	2	5	5	2	186	OK		Cotinine
497170001203	024	2	6	6	2	180	OK		Cotinine
497170001204	024	2	7	7	2	182	OK		Cotinine
497170001205	024	2	8	8	2	.	Not Received		Cotinine
497170001206	024	2	9	9	2	182	OK		Cotinine
497170001207	024	2	10	10	2	182	OK		Cotinine
497170001208	024	2	11	11	2	167	OK		Cotinine
497170001209	024	2	12	12	2	170	OK		Cotinine
497170001210	024	2	13	13	2	163	OK		Cotinine
497170001211	024	2	14	14	2	168	OK		Cotinine
497170001212	024	2	15	15	2	157	OK		Cotinine
497170001213	024	2	16	16	2	175	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001214	024	2	17	17	2	165	OK		Cotinine
497170001215	024	2	18	18	2	156	OK		Cotinine
497170001216	024	2	19	19	2	162	OK		Cotinine
497170001179	024	3	1	1	3	140	OK		Cotinine
497170001180	024	3	2	2	3	141	OK		Cotinine
497170001181	024	3	3	3	3	135	OK		Cotinine
497170001182	024	3	4	4	3	135	OK		Cotinine
497170001183	024	3	5	5	3	141	OK		Cotinine
497170001184	024	3	6	6	3	133	OK		Cotinine
497170001185	024	3	7	7	3	136	OK		Cotinine
497170001186	024	3	8	8	3	141	OK		Cotinine
497170001187	024	3	9	9	3	142	OK		Cotinine
497170001188	024	3	10	10	3	130	OK		Cotinine
497170001189	024	3	11	11	3	139	OK		Cotinine
497170001190	024	3	12	12	3	140	OK		Cotinine
497170001191	024	3	13	13	3	142	OK		Cotinine
497170001192	024	3	14	14	3	148	OK		Cotinine
497170001193	024	3	15	15	3	149	OK		Cotinine
497170001194	024	3	16	16	3	150	OK		Cotinine
497170001195	024	3	17	17	3	160	OK		Cotinine
497170001196	024	3	18	18	3	163	OK		Cotinine
497170001197	024	3	19	19	3	171	OK		Cotinine
497170001160	024	4	1	1	4	234	OK		Cotinine
497170001161	024	4	2	2	4	225	OK		Cotinine
497170001162	024	4	3	3	4	225	OK		Cotinine
497170001163	024	4	4	4	4	230	OK		Cotinine
497170001164	024	4	5	5	4	219	OK		Cotinine
497170001165	024	4	6	6	4	208	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001166	024	4	7	7	4	221	OK		Cotinine
497170001167	024	4	8	8	4	217	OK		Cotinine
497170001168	024	4	9	9	4	215	OK		Cotinine
497170001169	024	4	10	10	4	217	OK		Cotinine
497170001170	024	4	11	11	4	216	OK		Cotinine
497170001171	024	4	12	12	4	217	OK		Cotinine
497170001172	024	4	13	13	4	214	OK		Cotinine
497170001173	024	4	14	14	4	218	OK		Cotinine
497170001174	024	4	15	15	4	205	OK		Cotinine
497170001175	024	4	16	16	4	198	OK		Cotinine
497170001176	024	4	17	17	4	192	OK		Cotinine
497170001177	024	4	18	18	4	199	OK		Cotinine
497170001178	024	4	19	19	4	198	OK		Cotinine
497170001141	024	5	1	1	5	224	OK		Cotinine
497170001142	024	5	2	2	5	218	OK		Cotinine
497170001143	024	5	3	3	5	218	OK		Cotinine
497170001144	024	5	4	4	5	231	OK		Cotinine
497170001145	024	5	5	5	5	218	OK		Cotinine
497170001146	024	5	6	6	5	217	OK		Cotinine
497170001147	024	5	7	7	5	225	OK		Cotinine
497170001148	024	5	8	8	5	212	OK		Cotinine
497170001149	024	5	9	9	5	211	OK		Cotinine
497170001150	024	5	10	10	5	230	OK		Cotinine
497170001151	024	5	11	11	5	223	OK		Cotinine
497170001152	024	5	12	12	5	208	OK		Cotinine
497170001153	024	5	13	13	5	214	OK		Cotinine
497170001154	024	5	14	14	5	207	OK		Cotinine
497170001155	024	5	15	15	5	192	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001156	024	5	16	16	5	194	OK		Cotinine
497170001157	024	5	17	17	5	197	OK		Cotinine
497170001158	024	5	18	18	5	194	OK		Cotinine
497170001159	024	5	19	19	5	186	OK		Cotinine
497170001312	026	1	1	1	1	282	OK		Cotinine
497170001313	026	1	2	2	1	270	OK		Cotinine
497170001314	026	1	3	3	1	273	OK		Cotinine
497170001315	026	1	4	4	1	282	OK		Cotinine
497170001316	026	1	5	5	1	271	OK		Cotinine
497170001317	026	1	6	6	1	275	OK		Cotinine
497170001318	026	1	7	7	1	280	OK		Cotinine
497170001319	026	1	8	8	1	287	OK		Cotinine
497170001320	026	1	9	9	1	273	OK		Cotinine
497170001321	026	1	10	10	1	276	OK		Cotinine
497170001322	026	1	11	11	1	264	OK		Cotinine
497170001323	026	1	12	12	1	270	OK		Cotinine
497170001324	026	1	13	13	1	272	OK		Cotinine
497170001325	026	1	14	14	1	262	OK		Cotinine
497170001326	026	1	15	15	1	253	OK		Cotinine
497170001327	026	1	16	16	1	258	OK		Cotinine
497170001328	026	1	17	17	1	243	OK		Cotinine
497170001329	026	1	18	18	1	242	OK		Cotinine
497170001330	026	1	19	19	1	259	OK		Cotinine
497170001293	026	2	1	1	2	201	OK		Cotinine
497170001294	026	2	2	2	2	214	OK		Cotinine
497170001295	026	2	3	3	2	194	OK		Cotinine
497170001296	026	2	4	4	2	199	OK		Cotinine
497170001297	026	2	5	5	2	209	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001298	026	2	6	6	2	204	OK		Cotinine
497170001299	026	2	7	7	2	208	OK		Cotinine
497170001300	026	2	8	8	2	182	OK		Cotinine
497170001301	026	2	9	9	2	201	OK		Cotinine
497170001302	026	2	10	10	2	204	OK		Cotinine
497170001303	026	2	11	11	2	194	OK		Cotinine
497170001304	026	2	12	12	2	200	OK		Cotinine
497170001305	026	2	13	13	2	191	OK		Cotinine
497170001306	026	2	14	14	2	194	OK		Cotinine
497170001307	026	2	15	15	2	186	OK		Cotinine
497170001308	026	2	16	16	2	186	OK		Cotinine
497170001309	026	2	17	17	2	191	OK		Cotinine
497170001310	026	2	18	18	2	184	OK		Cotinine
497170001311	026	2	19	19	2	188	OK		Cotinine
497170001274	026	3	1	1	3	162	OK		Cotinine
497170001275	026	3	2	2	3	161	OK		Cotinine
497170001276	026	3	3	3	3	160	OK		Cotinine
497170001277	026	3	4	4	3	166	OK		Cotinine
497170001278	026	3	5	5	3	166	OK		Cotinine
497170001279	026	3	6	6	3	156	OK		Cotinine
497170001280	026	3	7	7	3	157	OK		Cotinine
497170001281	026	3	8	8	3	159	OK		Cotinine
497170001282	026	3	9	9	3	168	OK		Cotinine
497170001283	026	3	10	10	3	161	OK		Cotinine
497170001284	026	3	11	11	3	166	OK		Cotinine
497170001285	026	3	12	12	3	172	OK		Cotinine
497170001286	026	3	13	13	3	173	OK		Cotinine
497170001287	026	3	14	14	3	168	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001288	026	3	15	15	3	164	OK		Cotinine
497170001289	026	3	16	16	3	154	OK		Cotinine
497170001290	026	3	17	17	3	166	OK		Cotinine
497170001291	026	3	18	18	3	169	OK		Cotinine
497170001292	026	3	19	19	3	159	OK		Cotinine
497170001255	026	4	1	1	4	186	OK		Cotinine
497170001256	026	4	2	2	4	180	OK		Cotinine
497170001257	026	4	3	3	4	170	OK		Cotinine
497170001258	026	4	4	4	4	187	OK		Cotinine
497170001259	026	4	5	5	4	175	OK		Cotinine
497170001260	026	4	6	6	4	175	OK		Cotinine
497170001261	026	4	7	7	4	179	OK		Cotinine
497170001262	026	4	8	8	4	174	OK		Cotinine
497170001263	026	4	9	9	4	182	OK		Cotinine
497170001264	026	4	10	10	4	175	OK		Cotinine
497170001265	026	4	11	11	4	172	OK		Cotinine
497170001266	026	4	12	12	4	173	OK		Cotinine
497170001267	026	4	13	13	4	172	OK		Cotinine
497170001268	026	4	14	14	4	171	OK		Cotinine
497170001269	026	4	15	15	4	173	OK		Cotinine
497170001270	026	4	16	16	4	182	OK		Cotinine
497170001271	026	4	17	17	4	169	OK		Cotinine
497170001272	026	4	18	18	4	171	OK		Cotinine
497170001273	026	4	19	19	4	171	OK		Cotinine
497170001236	026	5	1	1	5	163	OK		Cotinine
497170001237	026	5	2	2	5	163	OK		Cotinine
497170001238	026	5	3	3	5	158	OK		Cotinine
497170001239	026	5	4	4	5	157	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001240	026	5	5	5	5	160	OK		Cotinine
497170001241	026	5	6	6	5	158	OK		Cotinine
497170001242	026	5	7	7	5	161	OK		Cotinine
497170001243	026	5	8	8	5	162	OK		Cotinine
497170001244	026	5	9	9	5	154	OK		Cotinine
497170001245	026	5	10	10	5	160	OK		Cotinine
497170001246	026	5	11	11	5	141	OK		Cotinine
497170001247	026	5	12	12	5	151	OK		Cotinine
497170001248	026	5	13	13	5	143	OK		Cotinine
497170001249	026	5	14	14	5	149	OK		Cotinine
497170001250	026	5	15	15	5	145	OK		Cotinine
497170001251	026	5	16	16	5	144	OK		Cotinine
497170001252	026	5	17	17	5	137	OK		Cotinine
497170001253	026	5	18	18	5	135	OK		Cotinine
497170001254	026	5	19	19	5	141	OK		Cotinine
497170001407	028	1	1	1	1	143	OK		Cotinine
497170001408	028	1	2	2	1	148	OK		Cotinine
497170001409	028	1	3	3	1	139	OK		Cotinine
497170001410	028	1	4	4	1	146	OK		Cotinine
497170001411	028	1	5	5	1	146	OK		Cotinine
497170001412	028	1	6	6	1	145	OK		Cotinine
497170001413	028	1	7	7	1	145	OK		Cotinine
497170001414	028	1	8	8	1	143	OK		Cotinine
497170001415	028	1	9	9	1	152	OK		Cotinine
497170001416	028	1	10	10	1	145	OK		Cotinine
497170001417	028	1	11	11	1	142	OK		Cotinine
497170001418	028	1	12	12	1	138	OK		Cotinine
497170001419	028	1	13	13	1	143	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001420	028	1	14	14	1	142	OK		Cotinine
497170001421	028	1	15	15	1	138	OK		Cotinine
497170001422	028	1	16	16	1	136	OK		Cotinine
497170001423	028	1	17	17	1	133	OK		Cotinine
497170001424	028	1	18	18	1	137	OK		Cotinine
497170001425	028	1	19	19	1	168	OK		Cotinine
497170001388	028	2	1	1	2	146	OK		Cotinine
497170001389	028	2	2	2	2	144	OK		Cotinine
497170001390	028	2	3	3	2	148	OK		Cotinine
497170001391	028	2	4	4	2	143	OK		Cotinine
497170001392	028	2	5	5	2	143	OK		Cotinine
497170001393	028	2	6	6	2	146	OK		Cotinine
497170001394	028	2	7	7	2	147	OK		Cotinine
497170001395	028	2	8	8	2	152	OK		Cotinine
497170001396	028	2	9	9	2	151	OK		Cotinine
497170001397	028	2	10	10	2	148	OK		Cotinine
497170001398	028	2	11	11	2	147	OK		Cotinine
497170001399	028	2	12	12	2	147	OK		Cotinine
497170001400	028	2	13	13	2	127	OK		Cotinine
497170001401	028	2	14	14	2	134	OK		Cotinine
497170001402	028	2	15	15	2	140	OK		Cotinine
497170001403	028	2	16	16	2	141	OK		Cotinine
497170001404	028	2	17	17	2	134	OK		Cotinine
497170001405	028	2	18	18	2	138	OK		Cotinine
497170001406	028	2	19	19	2	136	OK		Cotinine
497170001369	028	3	1	1	3	274	OK		Cotinine
497170001370	028	3	2	2	3	268	OK		Cotinine
497170001371	028	3	3	3	3	267	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001372	028	3	4	4	3	275	OK		Cotinine
497170001373	028	3	5	5	3	273	OK		Cotinine
497170001374	028	3	6	6	3	269	OK		Cotinine
497170001375	028	3	7	7	3	269	OK		Cotinine
497170001376	028	3	8	8	3	261	OK		Cotinine
497170001377	028	3	9	9	3	261	OK		Cotinine
497170001378	028	3	10	10	3	261	OK		Cotinine
497170001379	028	3	11	11	3	256	OK		Cotinine
497170001380	028	3	12	12	3	266	OK		Cotinine
497170001381	028	3	13	13	3	280	OK		Cotinine
497170001382	028	3	14	14	3	259	OK		Cotinine
497170001383	028	3	15	15	3	254	OK		Cotinine
497170001384	028	3	16	16	3	246	OK		Cotinine
497170001385	028	3	17	17	3	325	OK		Cotinine
497170001386	028	3	18	18	3	244	OK		Cotinine
497170001387	028	3	19	19	3	250	OK		Cotinine
497170001350	028	4	1	1	4	276	OK		Cotinine
497170001351	028	4	2	2	4	274	OK		Cotinine
497170001352	028	4	3	3	4	280	OK		Cotinine
497170001353	028	4	4	4	4	270	OK		Cotinine
497170001354	028	4	5	5	4	263	OK		Cotinine
497170001355	028	4	6	6	4	277	OK		Cotinine
497170001356	028	4	7	7	4	272	OK		Cotinine
497170001357	028	4	8	8	4	279	OK		Cotinine
497170001358	028	4	9	9	4	277	OK		Cotinine
497170001359	028	4	10	10	4	266	OK		Cotinine
497170001360	028	4	11	11	4	278	OK		Cotinine
497170001361	028	4	12	12	4	251	OK		Cotinine

Custom ID	Subject	Day Nominal	Hour Nominal	Time Text	Period	Concentration (ng/mL)	Sample Condition	Sample Comments	Analyte
497170001362	028	4	13	13	4	254	OK		Cotinine
497170001363	028	4	14	14	4	253	OK		Cotinine
497170001364	028	4	15	15	4	255	OK		Cotinine
497170001365	028	4	16	16	4	244	OK		Cotinine
497170001366	028	4	17	17	4	246	OK		Cotinine
497170001367	028	4	18	18	4	241	OK		Cotinine
497170001368	028	4	19	19	4	228	OK		Cotinine
497170001331	028	5	1	1	5	283	OK		Cotinine
497170001332	028	5	2	2	5	287	OK		Cotinine
497170001333	028	5	3	3	5	275	OK		Cotinine
497170001334	028	5	4	4	5	267	OK		Cotinine
497170001335	028	5	5	5	5	269	OK		Cotinine
497170001336	028	5	6	6	5	266	OK		Cotinine
497170001337	028	5	7	7	5	272	OK		Cotinine
497170001338	028	5	8	8	5	260	OK		Cotinine
497170001339	028	5	9	9	5	251	OK		Cotinine
497170001340	028	5	10	10	5	245	OK		Cotinine
497170001341	028	5	11	11	5	275	OK		Cotinine
497170001342	028	5	12	12	5	268	OK		Cotinine
497170001343	028	5	13	13	5	259	OK		Cotinine
497170001344	028	5	14	14	5	259	OK		Cotinine
497170001345	028	5	15	15	5	257	OK		Cotinine
497170001346	028	5	16	16	5	252	OK		Cotinine
497170001347	028	5	17	17	5	251	OK		Cotinine
497170001348	028	5	18	18	5	245	OK		Cotinine
497170001349	028	5	19	19	5	248	OK		Cotinine

Table 6. Summary of Reassays for Analytical Reasons

Analyte	Batch Number	Reason	Sample Name
Nicotine	2	DCU	AA90478-01 497170000362 007 N/A P1 1 / Day 1 1h PL-1
Nicotine	2	DCU	AA90478-01 497170000363 007 N/A P1 2 / Day 1 2h PL-1
Nicotine	2	DCU	AA90478-01 497170000457 009 N/A P1 1 / Day 1 1h PL-1
Nicotine	2	DCU	AA90478-01 497170000458 009 N/A P1 2 / Day 1 2h PL-1
Nicotine	2	DCU	AA90478-01 497170000552 011 N/A P1 1 / Day 1 1h PL-1
Nicotine	2	DCU	AA90478-01 497170000553 011 N/A P1 2 / Day 1 2h PL-1
Nicotine	2	DCU	AA90478-01 497170000565 011 N/A P1 14 / Day 1 14h PL-1
Nicotine	2	DCU	AA90478-01 497170000566 011 N/A P1 15 / Day 1 15h PL-1
Nicotine	2	DCU	AA90478-01 497170000567 011 N/A P1 16 / Day 1 16h PL-1
Nicotine	2	DCU	AA90478-01 497170000568 011 N/A P1 17 / Day 1 17h PL-1
Nicotine	2	DCU	AA90478-01 497170000569 011 N/A P1 18 / Day 1 18h PL-1
Nicotine	2	DCU	AA90478-01 497170000570 011 N/A P1 19 / Day 1 19h PL-1
Nicotine	3	DCU	AA90478-01 497170000647 012 N/A P1 1 / Day 1 1h PL-1
Nicotine	3	DCU	AA90478-01 497170000648 012 N/A P1 2 / Day 1 2h PL-1
Nicotine	3	DCU	AA90478-01 497170000649 012 N/A P1 3 / Day 1 3h PL-1
Nicotine	3	DCU	AA90478-01 497170000662 012 N/A P1 16 / Day 1 16h PL-1
Nicotine	3	DCU	AA90478-01 497170000663 012 N/A P1 17 / Day 1 17h PL-1
Nicotine	3	DCU	AA90478-01 497170000664 012 N/A P1 18 / Day 1 18h PL-1
Nicotine	3	DCU	AA90478-01 497170000665 012 N/A P1 19 / Day 1 19h PL-1
Nicotine	3	DCU	AA90478-01 497170000742 013 N/A P1 1 / Day 1 1h PL-1
Nicotine	3	DCU	AA90478-01 497170000743 013 N/A P1 2 / Day 1 2h PL-1
Nicotine	3	DCU	AA90478-01 497170000748 013 N/A P1 7 / Day 1 7h PL-1
Nicotine	3	DCU	AA90478-01 497170000749 013 N/A P1 8 / Day 1 8h PL-1
Nicotine	3	DCU	AA90478-01 497170000750 013 N/A P1 9 / Day 1 9h PL-1
Nicotine	3	DCU	AA90478-01 497170000751 013 N/A P1 10 / Day 1 10h PL-1
Nicotine	3	DCU	AA90478-01 497170000752 013 N/A P1 11 / Day 1 11h PL-1
Nicotine	3	DCU	AA90478-01 497170000753 013 N/A P1 12 / Day 1 12h PL-1
Nicotine	3	DCU	AA90478-01 497170000754 013 N/A P1 13 / Day 1 13h PL-1
Nicotine	3	DCU	AA90478-01 497170000755 013 N/A P1 14 / Day 1 14h PL-1
Nicotine	3	DCU	AA90478-01 497170000756 013 N/A P1 15 / Day 1 15h PL-1
Nicotine	3	DCU	AA90478-01 497170000757 013 N/A P1 16 / Day 1 16h PL-1
Nicotine	3	DCU	AA90478-01 497170000758 013 N/A P1 17 / Day 1 17h PL-1
Nicotine	3	DCU	AA90478-01 497170000759 013 N/A P1 18 / Day 1 18h PL-1
Nicotine	3	DCU	AA90478-01 497170000760 013 N/A P1 19 / Day 1 19h PL-1
Nicotine	3	DCU	AA90478-01 497170000837 015 N/A P1 1 / Day 1 1h PL-1
Nicotine	3	DCU	AA90478-01 497170000838 015 N/A P1 2 / Day 1 2h PL-1
Nicotine	3	DCU	AA90478-01 497170000848 015 N/A P1 12 / Day 1 12h PL-1
Nicotine	3	DCU	AA90478-01 497170000849 015 N/A P1 13 / Day 1 13h PL-1
Nicotine	3	DCU	AA90478-01 497170000850 015 N/A P1 14 / Day 1 14h PL-1

Analyte	Batch Number	Reason	Sample Name
Nicotine	3	DCU	AA90478-01 497170000851 015 N/A P1 15 / Day 1 15h PL-1
Nicotine	3	DCU	AA90478-01 497170000852 015 N/A P1 16 / Day 1 16h PL-1
Nicotine	3	DCU	AA90478-01 497170000853 015 N/A P1 17 / Day 1 17h PL-1
Nicotine	3	DCU	AA90478-01 497170000854 015 N/A P1 18 / Day 1 18h PL-1
Nicotine	3	DCU	AA90478-01 497170000855 015 N/A P1 19 / Day 1 19h PL-1
Nicotine	4	DCU	AA90478-01 497170000932 018 N/A P1 1 / Day 1 1h PL-1
Nicotine	4	DCU	AA90478-01 497170000933 018 N/A P1 2 / Day 1 2h PL-1
Nicotine	4	DCU	AA90478-01 497170000941 018 N/A P1 10 / Day 1 10h PL-1
Nicotine	4	DCU	AA90478-01 497170000942 018 N/A P1 11 / Day 1 11h PL-1
Nicotine	4	DCU	AA90478-01 497170000943 018 N/A P1 12 / Day 1 12h PL-1
Nicotine	4	DCU	AA90478-01 497170000944 018 N/A P1 13 / Day 1 13h PL-1
Nicotine	4	DCU	AA90478-01 497170000945 018 N/A P1 14 / Day 1 14h PL-1
Nicotine	4	DCU	AA90478-01 497170000946 018 N/A P1 15 / Day 1 15h PL-1
Nicotine	4	DCU	AA90478-01 497170000947 018 N/A P1 16 / Day 1 16h PL-1
Nicotine	4	DCU	AA90478-01 497170000948 018 N/A P1 17 / Day 1 17h PL-1
Nicotine	4	DCU	AA90478-01 497170000949 018 N/A P1 18 / Day 1 18h PL-1
Nicotine	4	DCU	AA90478-01 497170000950 018 N/A P1 19 / Day 1 19h PL-1
Nicotine	4	DCU	AA90478-01 497170001027 019 N/A P1 1 / Day 1 1h PL-1
Nicotine	4	DCU	AA90478-01 497170001028 019 N/A P1 2 / Day 1 2h PL-1
Nicotine	4	DCU	AA90478-01 497170001036 019 N/A P1 10 / Day 1 10h PL-1
Nicotine	4	DCU	AA90478-01 497170001037 019 N/A P1 11 / Day 1 11h PL-1
Nicotine	4	DCU	AA90478-01 497170001038 019 N/A P1 12 / Day 1 12h PL-1
Nicotine	4	DCU	AA90478-01 497170001039 019 N/A P1 13 / Day 1 13h PL-1
Nicotine	4	DCU	AA90478-01 497170001040 019 N/A P1 14 / Day 1 14h PL-1
Nicotine	4	DCU	AA90478-01 497170001041 019 N/A P1 15 / Day 1 15h PL-1
Nicotine	4	DCU	AA90478-01 497170001042 019 N/A P1 16 / Day 1 16h PL-1
Nicotine	4	DCU	AA90478-01 497170001043 019 N/A P1 17 / Day 1 17h PL-1
Nicotine	4	DCU	AA90478-01 497170001044 019 N/A P1 18 / Day 1 18h PL-1
Nicotine	4	DCU	AA90478-01 497170001045 019 N/A P1 19 / Day 1 19h PL-1
Nicotine	4	DCU	AA90478-01 497170001122 021 N/A P1 1 / Day 1 1h PL-1
Nicotine	4	DCU	AA90478-01 497170001123 021 N/A P1 2 / Day 1 2h PL-1
Nicotine	4	DCU	AA90478-01 497170001130 021 N/A P1 9 / Day 1 9h PL-1
Nicotine	4	DCU	AA90478-01 497170001131 021 N/A P1 10 / Day 1 10h PL-1
Nicotine	4	DCU	AA90478-01 497170001132 021 N/A P1 11 / Day 1 11h PL-1
Nicotine	4	DCU	AA90478-01 497170001133 021 N/A P1 12 / Day 1 12h PL-1
Nicotine	4	DCU	AA90478-01 497170001134 021 N/A P1 13 / Day 1 13h PL-1
Nicotine	4	DCU	AA90478-01 497170001135 021 N/A P1 14 / Day 1 14h PL-1
Nicotine	4	DCU	AA90478-01 497170001136 021 N/A P1 15 / Day 1 15h PL-1
Nicotine	4	DCU	AA90478-01 497170001137 021 N/A P1 16 / Day 1 16h PL-1
Nicotine	4	DCU	AA90478-01 497170001138 021 N/A P1 17 / Day 1 17h PL-1
Nicotine	4	DCU	AA90478-01 497170001139 021 N/A P1 18 / Day 1 18h PL-1
Nicotine	4	DCU	AA90478-01 497170001140 021 N/A P1 19 / Day 1 19h PL-1
Nicotine	5	DCU	AA90478-01 497170001217 024 N/A P1 1 / Day 1 1h PL-1

Analyte	Batch Number	Reason	Sample Name
Nicotine	5	DCU	AA90478-01 497170001218 024 N/A P1 2 / Day 1 2h PL-1
Nicotine	5	DCU	AA90478-01 497170001233 024 N/A P1 17 / Day 1 17h PL-1
Nicotine	5	DCU	AA90478-01 497170001234 024 N/A P1 18 / Day 1 18h PL-1
Nicotine	5	DCU	AA90478-01 497170001235 024 N/A P1 19 / Day 1 19h PL-1
Nicotine	5	DCU	AA90478-01 497170001312 026 N/A P1 1 / Day 1 1h PL-1
Nicotine	5	DCU	AA90478-01 497170001313 026 N/A P1 2 / Day 1 2h PL-1
Nicotine	5	DCU	AA90478-01 497170001322 026 N/A P1 11 / Day 1 11h PL-1
Nicotine	5	DCU	AA90478-01 497170001323 026 N/A P1 12 / Day 1 12h PL-1
Nicotine	5	DCU	AA90478-01 497170001324 026 N/A P1 13 / Day 1 13h PL-1
Nicotine	5	DCU	AA90478-01 497170001325 026 N/A P1 14 / Day 1 14h PL-1
Nicotine	5	DCU	AA90478-01 497170001326 026 N/A P1 15 / Day 1 15h PL-1
Nicotine	5	DCU	AA90478-01 497170001327 026 N/A P1 16 / Day 1 16h PL-1
Nicotine	5	DCU	AA90478-01 497170001328 026 N/A P1 17 / Day 1 17h PL-1
Nicotine	5	DCU	AA90478-01 497170001329 026 N/A P1 18 / Day 1 18h PL-1
Nicotine	5	DCU	AA90478-01 497170001330 026 N/A P1 19 / Day 1 19h PL-1
Nicotine	5	DCU	AA90478-01 497170001407 028 N/A P1 1 / Day 1 1h PL-1
Nicotine	5	DCU	AA90478-01 497170001408 028 N/A P1 2 / Day 1 2h PL-1
Nicotine	5	DCU	AA90478-01 497170001416 028 N/A P1 10 / Day 1 10h PL-1
Nicotine	5	DCU	AA90478-01 497170001417 028 N/A P1 11 / Day 1 11h PL-1
Nicotine	5	DCU	AA90478-01 497170001418 028 N/A P1 12 / Day 1 12h PL-1
Nicotine	5	DCU	AA90478-01 497170001419 028 N/A P1 13 / Day 1 13h PL-1
Nicotine	5	DCU	AA90478-01 497170001420 028 N/A P1 14 / Day 1 14h PL-1
Nicotine	5	DCU	AA90478-01 497170001421 028 N/A P1 15 / Day 1 15h PL-1
Nicotine	5	DCU	AA90478-01 497170001422 028 N/A P1 16 / Day 1 16h PL-1
Nicotine	5	DCU	AA90478-01 497170001423 028 N/A P1 17 / Day 1 17h PL-1
Nicotine	5	DCU	AA90478-01 497170001424 028 N/A P1 18 / Day 1 18h PL-1
Nicotine	5	DCU	AA90478-01 497170001425 028 N/A P1 19 / Day 1 19h PL-1
Nicotine	9	UISR	AA90478-01 497170001109 021 N/A P2 7 / Day 2 7h PL-1
Nicotine	14	Fail	AA90478-01 497170000989 019 N/A P3 1 / Day 3 1h PL-1
Nicotine	14	Fail	AA90478-01 497170000990 019 N/A P3 2 / Day 3 2h PL-1
Nicotine	14	Fail	AA90478-01 497170000991 019 N/A P3 3 / Day 3 3h PL-1
Nicotine	14	Fail	AA90478-01 497170000992 019 N/A P3 4 / Day 3 4h PL-1
Nicotine	14	Fail	AA90478-01 497170000993 019 N/A P3 5 / Day 3 5h PL-1
Nicotine	14	Fail	AA90478-01 497170000994 019 N/A P3 6 / Day 3 6h PL-1
Nicotine	14	Fail	AA90478-01 497170000995 019 N/A P3 7 / Day 3 7h PL-1
Nicotine	14	Fail	AA90478-01 497170000996 019 N/A P3 8 / Day 3 8h PL-1
Nicotine	14	Fail	AA90478-01 497170000997 019 N/A P3 9 / Day 3 9h PL-1
Nicotine	14	Fail	AA90478-01 497170000998 019 N/A P3 10 / Day 3 10h PL-1
Nicotine	14	UISR/Fail	AA90478-01 497170000999 019 N/A P3 11 / Day 3 11h PL-1
Nicotine	14	Fail	AA90478-01 497170001000 019 N/A P3 12 / Day 3 12h PL-1
Nicotine	14	UISR/Fail	AA90478-01 497170001001 019 N/A P3 13 / Day 3 13h PL-1
Nicotine	14	Fail	AA90478-01 497170001002 019 N/A P3 14 / Day 3 14h PL-1
Nicotine	14	Fail	AA90478-01 497170001003 019 N/A P3 15 / Day 3 15h PL-1

Analyte	Batch Number	Reason	Sample Name
Nicotine	14	Fail	AA90478-01 497170001004 019 N/A P3 16 / Day 3 16h PL-1
Nicotine	14	Fail	AA90478-01 497170001005 019 N/A P3 17 / Day 3 17h PL-1
Nicotine	14	Fail	AA90478-01 497170001006 019 N/A P3 18 / Day 3 18h PL-1
Nicotine	14	Fail	AA90478-01 497170001007 019 N/A P3 19 / Day 3 19h PL-1
Nicotine	14	Fail	AA90478-01 497170001084 021 N/A P3 1 / Day 3 1h PL-1
Nicotine	14	Fail	AA90478-01 497170001085 021 N/A P3 2 / Day 3 2h PL-1
Nicotine	14	Fail	AA90478-01 497170001086 021 N/A P3 3 / Day 3 3h PL-1
Nicotine	14	Fail	AA90478-01 497170001087 021 N/A P3 4 / Day 3 4h PL-1
Nicotine	14	Fail	AA90478-01 497170001088 021 N/A P3 5 / Day 3 5h PL-1
Nicotine	14	Fail	AA90478-01 497170001089 021 N/A P3 6 / Day 3 6h PL-1
Nicotine	14	Fail	AA90478-01 497170001090 021 N/A P3 7 / Day 3 7h PL-1
Nicotine	14	Fail	AA90478-01 497170001091 021 N/A P3 8 / Day 3 8h PL-1
Nicotine	14	UISR/Fail	AA90478-01 497170001092 021 N/A P3 9 / Day 3 9h PL-1
Nicotine	14	Fail	AA90478-01 497170001093 021 N/A P3 10 / Day 3 10h PL-1
Nicotine	14	UISR/Fail	AA90478-01 497170001094 021 N/A P3 11 / Day 3 11h PL-1
Nicotine	14	Fail	AA90478-01 497170001095 021 N/A P3 12 / Day 3 12h PL-1
Nicotine	14	UISR/Fail	AA90478-01 497170001096 021 N/A P3 13 / Day 3 13h PL-1
Nicotine	14	Fail	AA90478-01 497170001097 021 N/A P3 14 / Day 3 14h PL-1
Nicotine	14	Fail	AA90478-01 497170001098 021 N/A P3 15 / Day 3 15h PL-1
Nicotine	14	Fail	AA90478-01 497170001099 021 N/A P3 16 / Day 3 16h PL-1
Nicotine	14	Fail	AA90478-01 497170001100 021 N/A P3 17 / Day 3 17h PL-1
Nicotine	14	Fail	AA90478-01 497170001101 021 N/A P3 18 / Day 3 18h PL-1
Nicotine	14	Fail	AA90478-01 497170001102 021 N/A P3 19 / Day 3 19h PL-1
Nicotine	14	Fail	AA90478-01 497170001179 024 N/A P3 1 / Day 3 1h PL-1
Nicotine	14	Fail	AA90478-01 497170001180 024 N/A P3 2 / Day 3 2h PL-1
Nicotine	14	Fail	AA90478-01 497170001181 024 N/A P3 3 / Day 3 3h PL-1
Nicotine	14	Fail	AA90478-01 497170001182 024 N/A P3 4 / Day 3 4h PL-1
Nicotine	14	Fail	AA90478-01 497170001183 024 N/A P3 5 / Day 3 5h PL-1
Nicotine	14	Fail	AA90478-01 497170001184 024 N/A P3 6 / Day 3 6h PL-1
Nicotine	14	Fail	AA90478-01 497170001185 024 N/A P3 7 / Day 3 7h PL-1
Nicotine	14	Fail	AA90478-01 497170001186 024 N/A P3 8 / Day 3 8h PL-1
Nicotine	14	Fail	AA90478-01 497170001187 024 N/A P3 9 / Day 3 9h PL-1
Nicotine	14	Fail	AA90478-01 497170001188 024 N/A P3 10 / Day 3 10h PL-1
Nicotine	14	Fail	AA90478-01 497170001189 024 N/A P3 11 / Day 3 11h PL-1
Nicotine	14	Fail	AA90478-01 497170001190 024 N/A P3 12 / Day 3 12h PL-1
Nicotine	14	Fail	AA90478-01 497170001191 024 N/A P3 13 / Day 3 13h PL-1
Nicotine	14	Fail	AA90478-01 497170001192 024 N/A P3 14 / Day 3 14h PL-1
Nicotine	14	Fail	AA90478-01 497170001193 024 N/A P3 15 / Day 3 15h PL-1
Nicotine	14	Fail	AA90478-01 497170001194 024 N/A P3 16 / Day 3 16h PL-1
Nicotine	14	Fail	AA90478-01 497170001195 024 N/A P3 17 / Day 3 17h PL-1
Nicotine	14	Fail	AA90478-01 497170001196 024 N/A P3 18 / Day 3 18h PL-1
Nicotine	14	Fail	AA90478-01 497170001197 024 N/A P3 19 / Day 3 19h PL-1
Nicotine	15	Fail	AA90478-01 497170001274 026 N/A P3 1 / Day 3 1h PL-1

Analyte	Batch Number	Reason	Sample Name
Nicotine	15	Fail	AA90478-01 497170001275 026 N/A P3 2 / Day 3 2h PL-1
Nicotine	15	Fail	AA90478-01 497170001276 026 N/A P3 3 / Day 3 3h PL-1
Nicotine	15	Fail	AA90478-01 497170001277 026 N/A P3 4 / Day 3 4h PL-1
Nicotine	15	Fail	AA90478-01 497170001278 026 N/A P3 5 / Day 3 5h PL-1
Nicotine	15	Fail	AA90478-01 497170001279 026 N/A P3 6 / Day 3 6h PL-1
Nicotine	15	Fail	AA90478-01 497170001280 026 N/A P3 7 / Day 3 7h PL-1
Nicotine	15	Fail	AA90478-01 497170001281 026 N/A P3 8 / Day 3 8h PL-1
Nicotine	15	Fail	AA90478-01 497170001282 026 N/A P3 9 / Day 3 9h PL-1
Nicotine	15	Fail	AA90478-01 497170001283 026 N/A P3 10 / Day 3 10h PL-1
Nicotine	15	Fail	AA90478-01 497170001284 026 N/A P3 11 / Day 3 11h PL-1
Nicotine	15	Fail	AA90478-01 497170001285 026 N/A P3 12 / Day 3 12h PL-1
Nicotine	15	Fail	AA90478-01 497170001286 026 N/A P3 13 / Day 3 13h PL-1
Nicotine	15	UISR/Fail	AA90478-01 497170001287 026 N/A P3 14 / Day 3 14h PL-1
Nicotine	15	Fail	AA90478-01 497170001288 026 N/A P3 15 / Day 3 15h PL-1
Nicotine	15	Fail	AA90478-01 497170001289 026 N/A P3 16 / Day 3 16h PL-1
Nicotine	15	Fail	AA90478-01 497170001290 026 N/A P3 17 / Day 3 17h PL-1
Nicotine	15	Fail	AA90478-01 497170001291 026 N/A P3 18 / Day 3 18h PL-1
Nicotine	15	Fail	AA90478-01 497170001292 026 N/A P3 19 / Day 3 19h PL-1
Nicotine	15	Fail	AA90478-01 497170001369 028 N/A P3 1 / Day 3 1h PL-1
Nicotine	15	Fail	AA90478-01 497170001370 028 N/A P3 2 / Day 3 2h PL-1
Nicotine	15	Fail	AA90478-01 497170001371 028 N/A P3 3 / Day 3 3h PL-1
Nicotine	15	Fail	AA90478-01 497170001372 028 N/A P3 4 / Day 3 4h PL-1
Nicotine	15	Fail	AA90478-01 497170001373 028 N/A P3 5 / Day 3 5h PL-1
Nicotine	15	Fail	AA90478-01 497170001374 028 N/A P3 6 / Day 3 6h PL-1
Nicotine	15	Fail	AA90478-01 497170001375 028 N/A P3 7 / Day 3 7h PL-1
Nicotine	15	Fail	AA90478-01 497170001376 028 N/A P3 8 / Day 3 8h PL-1
Nicotine	15	Fail	AA90478-01 497170001377 028 N/A P3 9 / Day 3 9h PL-1
Nicotine	15	Fail	AA90478-01 497170001378 028 N/A P3 10 / Day 3 10h PL-1
Nicotine	15	Fail	AA90478-01 497170001379 028 N/A P3 11 / Day 3 11h PL-1
Nicotine	15	Fail	AA90478-01 497170001380 028 N/A P3 12 / Day 3 12h PL-1
Nicotine	15	Fail	AA90478-01 497170001381 028 N/A P3 13 / Day 3 13h PL-1
Nicotine	15	Fail	AA90478-01 497170001382 028 N/A P3 14 / Day 3 14h PL-1
Nicotine	15	Fail	AA90478-01 497170001383 028 N/A P3 15 / Day 3 15h PL-1
Nicotine	15	Fail	AA90478-01 497170001384 028 N/A P3 16 / Day 3 16h PL-1
Nicotine	15	Fail	AA90478-01 497170001385 028 N/A P3 17 / Day 3 17h PL-1
Nicotine	15	Fail	AA90478-01 497170001386 028 N/A P3 18 / Day 3 18h PL-1
Nicotine	15	Fail	AA90478-01 497170001387 028 N/A P3 19 / Day 3 19h PL-1
Nicotine	15	Fail	AA90478-01 497170000324 007 N/A P3 1 / Day 3 1h PL-1
Nicotine	15	Fail	AA90478-01 497170000325 007 N/A P3 2 / Day 3 2h PL-1
Nicotine	15	Fail	AA90478-01 497170000326 007 N/A P3 3 / Day 3 3h PL-1
Nicotine	15	Fail	AA90478-01 497170000327 007 N/A P3 4 / Day 3 4h PL-1
Nicotine	15	UISR/Fail	AA90478-01 497170000328 007 N/A P3 5 / Day 3 5h PL-1
Nicotine	15	Fail	AA90478-01 497170000329 007 N/A P3 6 / Day 3 6h PL-1

Analyte	Batch Number	Reason	Sample Name
Nicotine	17	UISR	AA90478-01 497170000409 009 N/A P4 10 / Day 4 10h PL-1
Nicotine	17	UISR	AA90478-01 497170000411 009 N/A P4 12 / Day 4 12h PL-1
Nicotine	17	UISR	AA90478-01 497170000413 009 N/A P4 14 / Day 4 14h PL-1
Nicotine	18	UISR	AA90478-01 497170000693 013 N/A P4 9 / Day 4 9h PL-1
Nicotine	26	DCU	AA90478-01 497170000077 001 N/A P1 1 / Day 1 1h PL-1
Nicotine	26	DCU	AA90478-01 497170000078 001 N/A P1 2 / Day 1 2h PL-1
Nicotine	26	DCU	AA90478-01 497170000087 001 N/A P1 11 / Day 1 11h PL-1
Nicotine	26	DCU	AA90478-01 497170000088 001 N/A P1 12 / Day 1 12h PL-1
Nicotine	26	DCU	AA90478-01 497170000089 001 N/A P1 13 / Day 1 13h PL-1
Nicotine	26	DCU	AA90478-01 497170000090 001 N/A P1 14 / Day 1 14h PL-1
Nicotine	26	DCU	AA90478-01 497170000091 001 N/A P1 15 / Day 1 15h PL-1
Nicotine	26	DCU	AA90478-01 497170000092 001 N/A P1 16 / Day 1 16h PL-1
Nicotine	26	DCU	AA90478-01 497170000093 001 N/A P1 17 / Day 1 17h PL-1
Nicotine	26	DCU	AA90478-01 497170000094 001 N/A P1 18 / Day 1 18h PL-1
Nicotine	26	DCU	AA90478-01 497170000095 001 N/A P1 19 / Day 1 19h PL-1
Nicotine	26	DCU	AA90478-01 497170000172 003 N/A P1 1 / Day 1 1h PL-1
Nicotine	26	DCU	AA90478-01 497170000173 003 N/A P1 2 / Day 1 2h PL-1
Nicotine	26	DCU	AA90478-01 497170000181 003 N/A P1 10 / Day 1 10h PL-1
Nicotine	26	DCU	AA90478-01 497170000182 003 N/A P1 11 / Day 1 11h PL-1
Nicotine	26	DCU	AA90478-01 497170000183 003 N/A P1 12 / Day 1 12h PL-1
Nicotine	26	DCU	AA90478-01 497170000184 003 N/A P1 13 / Day 1 13h PL-1
Nicotine	26	DCU	AA90478-01 497170000185 003 N/A P1 14 / Day 1 14h PL-1
Nicotine	26	DCU	AA90478-01 497170000186 003 N/A P1 15 / Day 1 15h PL-1
Nicotine	26	DCU	AA90478-01 497170000187 003 N/A P1 16 / Day 1 16h PL-1
Nicotine	26	DCU	AA90478-01 497170000188 003 N/A P1 17 / Day 1 17h PL-1
Nicotine	26	DCU	AA90478-01 497170000189 003 N/A P1 18 / Day 1 18h PL-1
Nicotine	26	DCU	AA90478-01 497170000190 003 N/A P1 19 / Day 1 19h PL-1
Nicotine	26	DCU	AA90478-01 497170000267 005 N/A P1 1 / Day 1 1h PL-1
Nicotine	26	DCU	AA90478-01 497170000268 005 N/A P1 2 / Day 1 2h PL-1
Nicotine	26	DCU	AA90478-01 497170000276 005 N/A P1 10 / Day 1 10h PL-1
Nicotine	26	DCU	AA90478-01 497170000277 005 N/A P1 11 / Day 1 11h PL-1
Nicotine	26	DCU	AA90478-01 497170000278 005 N/A P1 12 / Day 1 12h PL-1
Nicotine	26	DCU	AA90478-01 497170000279 005 N/A P1 13 / Day 1 13h PL-1
Nicotine	26	DCU	AA90478-01 497170000280 005 N/A P1 14 / Day 1 14h PL-1
Nicotine	26	DCU	AA90478-01 497170000281 005 N/A P1 15 / Day 1 15h PL-1
Nicotine	26	DCU	AA90478-01 497170000282 005 N/A P1 16 / Day 1 16h PL-1
Nicotine	26	DCU	AA90478-01 497170000283 005 N/A P1 17 / Day 1 17h PL-1
Nicotine	26	DCU	AA90478-01 497170000284 005 N/A P1 18 / Day 1 18h PL-1
Nicotine	26	DCU	AA90478-01 497170000285 005 N/A P1 19 / Day 1 19h PL-1
Nicotine	36	DCU	AA90478-01 497170000413 009 N/A P4 14 / Day 4 14h PL-1
Cotinine	8	AAR	AA90478-01 497170000628 012 N/A P2 1 / Day 2 1h PL-1
Cotinine	8	AAR	AA90478-01 497170000629 012 N/A P2 2 / Day 2 2h PL-1
Cotinine	8	AAR	AA90478-01 497170000630 012 N/A P2 3 / Day 2 3h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	8	AAR	AA90478-01 497170000631 012 N/A P2 4 / Day 2 4h PL-1
Cotinine	8	AAR	AA90478-01 497170000632 012 N/A P2 5 / Day 2 5h PL-1
Cotinine	8	AAR	AA90478-01 497170000633 012 N/A P2 6 / Day 2 6h PL-1
Cotinine	8	AAR	AA90478-01 497170000634 012 N/A P2 7 / Day 2 7h PL-1
Cotinine	8	AAR	AA90478-01 497170000635 012 N/A P2 8 / Day 2 8h PL-1
Cotinine	8	AAR	AA90478-01 497170000636 012 N/A P2 9 / Day 2 9h PL-1
Cotinine	8	AAR	AA90478-01 497170000637 012 N/A P2 10 / Day 2 10h PL-1
Cotinine	8	AAR	AA90478-01 497170000638 012 N/A P2 11 / Day 2 11h PL-1
Cotinine	8	AAR	AA90478-01 497170000639 012 N/A P2 12 / Day 2 12h PL-1
Cotinine	8	AAR	AA90478-01 497170000640 012 N/A P2 13 / Day 2 13h PL-1
Cotinine	8	AAR	AA90478-01 497170000641 012 N/A P2 14 / Day 2 14h PL-1
Cotinine	8	AAR	AA90478-01 497170000642 012 N/A P2 15 / Day 2 15h PL-1
Cotinine	8	AAR	AA90478-01 497170000643 012 N/A P2 16 / Day 2 16h PL-1
Cotinine	8	AAR	AA90478-01 497170000644 012 N/A P2 17 / Day 2 17h PL-1
Cotinine	8	AAR	AA90478-01 497170000645 012 N/A P2 18 / Day 2 18h PL-1
Cotinine	8	AAR	AA90478-01 497170000646 012 N/A P2 19 / Day 2 19h PL-1
Cotinine	9	AAR	AA90478-01 497170001014 019 N/A P2 7 / Day 2 7h PL-1
Cotinine	9	UISR	AA90478-01 497170001109 021 N/A P2 7 / Day 2 7h PL-1
Cotinine	9	UISR	AA90478-01 497170001118 021 N/A P2 16 / Day 2 16h PL-1
Cotinine	10	AAR	AA90478-01 497170001293 026 N/A P2 1 / Day 2 1h PL-1
Cotinine	10	AAR	AA90478-01 497170001294 026 N/A P2 2 / Day 2 2h PL-1
Cotinine	10	AAR	AA90478-01 497170001295 026 N/A P2 3 / Day 2 3h PL-1
Cotinine	10	AAR	AA90478-01 497170001296 026 N/A P2 4 / Day 2 4h PL-1
Cotinine	10	AAR	AA90478-01 497170001297 026 N/A P2 5 / Day 2 5h PL-1
Cotinine	10	AAR	AA90478-01 497170001298 026 N/A P2 6 / Day 2 6h PL-1
Cotinine	10	AAR	AA90478-01 497170001299 026 N/A P2 7 / Day 2 7h PL-1
Cotinine	10	AAR	AA90478-01 497170001301 026 N/A P2 9 / Day 2 9h PL-1
Cotinine	10	AAR	AA90478-01 497170001302 026 N/A P2 10 / Day 2 10h PL-1
Cotinine	10	AAR	AA90478-01 497170001303 026 N/A P2 11 / Day 2 11h PL-1
Cotinine	12	AAR	AA90478-01 497170000419 009 N/A P3 1 / Day 3 1h PL-1
Cotinine	12	AAR	AA90478-01 497170000420 009 N/A P3 2 / Day 3 2h PL-1
Cotinine	12	AAR	AA90478-01 497170000421 009 N/A P3 3 / Day 3 3h PL-1
Cotinine	12	AAR	AA90478-01 497170000422 009 N/A P3 4 / Day 3 4h PL-1
Cotinine	12	AAR	AA90478-01 497170000423 009 N/A P3 5 / Day 3 5h PL-1
Cotinine	12	AAR	AA90478-01 497170000424 009 N/A P3 6 / Day 3 6h PL-1
Cotinine	12	AAR	AA90478-01 497170000425 009 N/A P3 7 / Day 3 7h PL-1
Cotinine	12	AAR	AA90478-01 497170000426 009 N/A P3 8 / Day 3 8h PL-1
Cotinine	12	AAR	AA90478-01 497170000427 009 N/A P3 9 / Day 3 9h PL-1
Cotinine	12	AAR	AA90478-01 497170000428 009 N/A P3 10 / Day 3 10h PL-1
Cotinine	12	AAR	AA90478-01 497170000429 009 N/A P3 11 / Day 3 11h PL-1
Cotinine	12	AAR	AA90478-01 497170000430 009 N/A P3 12 / Day 3 12h PL-1
Cotinine	12	AAR	AA90478-01 497170000431 009 N/A P3 13 / Day 3 13h PL-1
Cotinine	12	AAR	AA90478-01 497170000432 009 N/A P3 14 / Day 3 14h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	12	AAR	AA90478-01 497170000433 009 N/A P3 15 / Day 3 15h PL-1
Cotinine	12	AAR	AA90478-01 497170000434 009 N/A P3 16 / Day 3 16h PL-1
Cotinine	12	AAR	AA90478-01 497170000435 009 N/A P3 17 / Day 3 17h PL-1
Cotinine	12	AAR	AA90478-01 497170000436 009 N/A P3 18 / Day 3 18h PL-1
Cotinine	12	AAR	AA90478-01 497170000437 009 N/A P3 19 / Day 3 19h PL-1
Cotinine	12	AAR	AA90478-01 497170000519 011 N/A P3 6 / Day 3 6h PL-1
Cotinine	12	AAR	AA90478-01 497170000521 011 N/A P3 8 / Day 3 8h PL-1
Cotinine	12	AAR	AA90478-01 497170000522 011 N/A P3 9 / Day 3 9h PL-1
Cotinine	12	AAR	AA90478-01 497170000609 012 N/A P3 1 / Day 3 1h PL-1
Cotinine	12	AAR	AA90478-01 497170000610 012 N/A P3 2 / Day 3 2h PL-1
Cotinine	12	AAR	AA90478-01 497170000611 012 N/A P3 3 / Day 3 3h PL-1
Cotinine	12	AAR	AA90478-01 497170000612 012 N/A P3 4 / Day 3 4h PL-1
Cotinine	12	AAR	AA90478-01 497170000613 012 N/A P3 5 / Day 3 5h PL-1
Cotinine	12	AAR	AA90478-01 497170000614 012 N/A P3 6 / Day 3 6h PL-1
Cotinine	12	AAR	AA90478-01 497170000615 012 N/A P3 7 / Day 3 7h PL-1
Cotinine	12	AAR	AA90478-01 497170000616 012 N/A P3 8 / Day 3 8h PL-1
Cotinine	12	AAR	AA90478-01 497170000617 012 N/A P3 9 / Day 3 9h PL-1
Cotinine	12	AAR	AA90478-01 497170000618 012 N/A P3 10 / Day 3 10h PL-1
Cotinine	12	AAR	AA90478-01 497170000619 012 N/A P3 11 / Day 3 11h PL-1
Cotinine	12	AAR	AA90478-01 497170000620 012 N/A P3 12 / Day 3 12h PL-1
Cotinine	12	AAR	AA90478-01 497170000621 012 N/A P3 13 / Day 3 13h PL-1
Cotinine	12	AAR	AA90478-01 497170000622 012 N/A P3 14 / Day 3 14h PL-1
Cotinine	12	AAR	AA90478-01 497170000623 012 N/A P3 15 / Day 3 15h PL-1
Cotinine	12	AAR	AA90478-01 497170000624 012 N/A P3 16 / Day 3 16h PL-1
Cotinine	12	AAR	AA90478-01 497170000625 012 N/A P3 17 / Day 3 17h PL-1
Cotinine	12	AAR	AA90478-01 497170000626 012 N/A P3 18 / Day 3 18h PL-1
Cotinine	12	AAR	AA90478-01 497170000627 012 N/A P3 19 / Day 3 19h PL-1
Cotinine	13	HSR	AA90478-01 497170000811 015 N/A P3 13 / Day 3 13h PL-1
Cotinine	13	HSR	AA90478-01 497170000901 018 N/A P3 8 / Day 3 8h PL-1
Cotinine	13	HSR	AA90478-01 497170000903 018 N/A P3 10 / Day 3 10h PL-1
Cotinine	13	HSR	AA90478-01 497170000905 018 N/A P3 12 / Day 3 12h PL-1
Cotinine	14	Fail	AA90478-01 497170000989 019 N/A P3 1 / Day 3 1h PL-1
Cotinine	14	HSR/Fail	AA90478-01 497170000990 019 N/A P3 2 / Day 3 2h PL-1
Cotinine	14	Fail	AA90478-01 497170000991 019 N/A P3 3 / Day 3 3h PL-1
Cotinine	14	Fail	AA90478-01 497170000992 019 N/A P3 4 / Day 3 4h PL-1
Cotinine	14	Fail	AA90478-01 497170000993 019 N/A P3 5 / Day 3 5h PL-1
Cotinine	14	Fail	AA90478-01 497170000994 019 N/A P3 6 / Day 3 6h PL-1
Cotinine	14	Fail	AA90478-01 497170000995 019 N/A P3 7 / Day 3 7h PL-1
Cotinine	14	Fail	AA90478-01 497170000996 019 N/A P3 8 / Day 3 8h PL-1
Cotinine	14	Fail	AA90478-01 497170000997 019 N/A P3 9 / Day 3 9h PL-1
Cotinine	14	Fail	AA90478-01 497170000998 019 N/A P3 10 / Day 3 10h PL-1
Cotinine	14	UISR/Fail	AA90478-01 497170000999 019 N/A P3 11 / Day 3 11h PL-1
Cotinine	14	Fail	AA90478-01 497170001000 019 N/A P3 12 / Day 3 12h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	14	UISR/Fail	AA90478-01 497170001001 019 N/A P3 13 / Day 3 13h PL-1
Cotinine	14	Fail	AA90478-01 497170001002 019 N/A P3 14 / Day 3 14h PL-1
Cotinine	14	Fail	AA90478-01 497170001003 019 N/A P3 15 / Day 3 15h PL-1
Cotinine	14	Fail	AA90478-01 497170001004 019 N/A P3 16 / Day 3 16h PL-1
Cotinine	14	Fail	AA90478-01 497170001005 019 N/A P3 17 / Day 3 17h PL-1
Cotinine	14	Fail	AA90478-01 497170001006 019 N/A P3 18 / Day 3 18h PL-1
Cotinine	14	Fail	AA90478-01 497170001007 019 N/A P3 19 / Day 3 19h PL-1
Cotinine	14	Fail	AA90478-01 497170001084 021 N/A P3 1 / Day 3 1h PL-1
Cotinine	14	Fail	AA90478-01 497170001085 021 N/A P3 2 / Day 3 2h PL-1
Cotinine	14	HSR/Fail	AA90478-01 497170001086 021 N/A P3 3 / Day 3 3h PL-1
Cotinine	14	Fail	AA90478-01 497170001087 021 N/A P3 4 / Day 3 4h PL-1
Cotinine	14	HSR/Fail	AA90478-01 497170001088 021 N/A P3 5 / Day 3 5h PL-1
Cotinine	14	HSR/Fail	AA90478-01 497170001089 021 N/A P3 6 / Day 3 6h PL-1
Cotinine	14	HSR/Fail	AA90478-01 497170001090 021 N/A P3 7 / Day 3 7h PL-1
Cotinine	14	Fail	AA90478-01 497170001091 021 N/A P3 8 / Day 3 8h PL-1
Cotinine	14	UISR/Fail	AA90478-01 497170001092 021 N/A P3 9 / Day 3 9h PL-1
Cotinine	14	Fail	AA90478-01 497170001093 021 N/A P3 10 / Day 3 10h PL-1
Cotinine	14	UISR/Fail	AA90478-01 497170001094 021 N/A P3 11 / Day 3 11h PL-1
Cotinine	14	Fail	AA90478-01 497170001095 021 N/A P3 12 / Day 3 12h PL-1
Cotinine	14	UISR/Fail	AA90478-01 497170001096 021 N/A P3 13 / Day 3 13h PL-1
Cotinine	14	Fail	AA90478-01 497170001097 021 N/A P3 14 / Day 3 14h PL-1
Cotinine	14	Fail	AA90478-01 497170001098 021 N/A P3 15 / Day 3 15h PL-1
Cotinine	14	Fail	AA90478-01 497170001099 021 N/A P3 16 / Day 3 16h PL-1
Cotinine	14	Fail	AA90478-01 497170001100 021 N/A P3 17 / Day 3 17h PL-1
Cotinine	14	Fail	AA90478-01 497170001101 021 N/A P3 18 / Day 3 18h PL-1
Cotinine	14	Fail	AA90478-01 497170001102 021 N/A P3 19 / Day 3 19h PL-1
Cotinine	14	HSR/Fail	AA90478-01 497170001179 024 N/A P3 1 / Day 3 1h PL-1
Cotinine	14	Fail	AA90478-01 497170001180 024 N/A P3 2 / Day 3 2h PL-1
Cotinine	14	Fail	AA90478-01 497170001181 024 N/A P3 3 / Day 3 3h PL-1
Cotinine	14	Fail	AA90478-01 497170001182 024 N/A P3 4 / Day 3 4h PL-1
Cotinine	14	HSR/Fail	AA90478-01 497170001183 024 N/A P3 5 / Day 3 5h PL-1
Cotinine	14	Fail	AA90478-01 497170001184 024 N/A P3 6 / Day 3 6h PL-1
Cotinine	14	Fail	AA90478-01 497170001185 024 N/A P3 7 / Day 3 7h PL-1
Cotinine	14	Fail	AA90478-01 497170001186 024 N/A P3 8 / Day 3 8h PL-1
Cotinine	14	Fail	AA90478-01 497170001187 024 N/A P3 9 / Day 3 9h PL-1
Cotinine	14	Fail	AA90478-01 497170001188 024 N/A P3 10 / Day 3 10h PL-1
Cotinine	14	Fail	AA90478-01 497170001189 024 N/A P3 11 / Day 3 11h PL-1
Cotinine	14	Fail	AA90478-01 497170001190 024 N/A P3 12 / Day 3 12h PL-1
Cotinine	14	Fail	AA90478-01 497170001191 024 N/A P3 13 / Day 3 13h PL-1
Cotinine	14	Fail	AA90478-01 497170001192 024 N/A P3 14 / Day 3 14h PL-1
Cotinine	14	Fail	AA90478-01 497170001193 024 N/A P3 15 / Day 3 15h PL-1
Cotinine	14	Fail	AA90478-01 497170001194 024 N/A P3 16 / Day 3 16h PL-1
Cotinine	14	Fail	AA90478-01 497170001195 024 N/A P3 17 / Day 3 17h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	14	HSR/Fail	AA90478-01 497170001196 024 N/A P3 18 / Day 3 18h PL-1
Cotinine	14	HSR/Fail	AA90478-01 497170001197 024 N/A P3 19 / Day 3 19h PL-1
Cotinine	15	Fail	AA90478-01 497170001274 026 N/A P3 1 / Day 3 1h PL-1
Cotinine	15	Fail	AA90478-01 497170001275 026 N/A P3 2 / Day 3 2h PL-1
Cotinine	15	Fail	AA90478-01 497170001276 026 N/A P3 3 / Day 3 3h PL-1
Cotinine	15	Fail	AA90478-01 497170001277 026 N/A P3 4 / Day 3 4h PL-1
Cotinine	15	Fail	AA90478-01 497170001278 026 N/A P3 5 / Day 3 5h PL-1
Cotinine	15	Fail	AA90478-01 497170001279 026 N/A P3 6 / Day 3 6h PL-1
Cotinine	15	Fail	AA90478-01 497170001280 026 N/A P3 7 / Day 3 7h PL-1
Cotinine	15	Fail	AA90478-01 497170001281 026 N/A P3 8 / Day 3 8h PL-1
Cotinine	15	Fail	AA90478-01 497170001282 026 N/A P3 9 / Day 3 9h PL-1
Cotinine	15	Fail	AA90478-01 497170001283 026 N/A P3 10 / Day 3 10h PL-1
Cotinine	15	Fail	AA90478-01 497170001284 026 N/A P3 11 / Day 3 11h PL-1
Cotinine	15	Fail	AA90478-01 497170001285 026 N/A P3 12 / Day 3 12h PL-1
Cotinine	15	Fail	AA90478-01 497170001286 026 N/A P3 13 / Day 3 13h PL-1
Cotinine	15	UISR/Fail	AA90478-01 497170001287 026 N/A P3 14 / Day 3 14h PL-1
Cotinine	15	Fail	AA90478-01 497170001288 026 N/A P3 15 / Day 3 15h PL-1
Cotinine	15	Fail	AA90478-01 497170001289 026 N/A P3 16 / Day 3 16h PL-1
Cotinine	15	Fail	AA90478-01 497170001290 026 N/A P3 17 / Day 3 17h PL-1
Cotinine	15	Fail	AA90478-01 497170001291 026 N/A P3 18 / Day 3 18h PL-1
Cotinine	15	Fail	AA90478-01 497170001292 026 N/A P3 19 / Day 3 19h PL-1
Cotinine	15	Fail	AA90478-01 497170001369 028 N/A P3 1 / Day 3 1h PL-1
Cotinine	15	Fail	AA90478-01 497170001370 028 N/A P3 2 / Day 3 2h PL-1
Cotinine	15	Fail	AA90478-01 497170001371 028 N/A P3 3 / Day 3 3h PL-1
Cotinine	15	Fail	AA90478-01 497170001372 028 N/A P3 4 / Day 3 4h PL-1
Cotinine	15	Fail	AA90478-01 497170001373 028 N/A P3 5 / Day 3 5h PL-1
Cotinine	15	Fail	AA90478-01 497170001374 028 N/A P3 6 / Day 3 6h PL-1
Cotinine	15	Fail	AA90478-01 497170001375 028 N/A P3 7 / Day 3 7h PL-1
Cotinine	15	Fail	AA90478-01 497170001376 028 N/A P3 8 / Day 3 8h PL-1
Cotinine	15	Fail	AA90478-01 497170001377 028 N/A P3 9 / Day 3 9h PL-1
Cotinine	15	Fail	AA90478-01 497170001378 028 N/A P3 10 / Day 3 10h PL-1
Cotinine	15	Fail	AA90478-01 497170001379 028 N/A P3 11 / Day 3 11h PL-1
Cotinine	15	Fail	AA90478-01 497170001380 028 N/A P3 12 / Day 3 12h PL-1
Cotinine	15	Fail	AA90478-01 497170001381 028 N/A P3 13 / Day 3 13h PL-1
Cotinine	15	Fail	AA90478-01 497170001382 028 N/A P3 14 / Day 3 14h PL-1
Cotinine	15	Fail	AA90478-01 497170001383 028 N/A P3 15 / Day 3 15h PL-1
Cotinine	15	Fail	AA90478-01 497170001384 028 N/A P3 16 / Day 3 16h PL-1
Cotinine	15	Fail	AA90478-01 497170001385 028 N/A P3 17 / Day 3 17h PL-1
Cotinine	15	Fail	AA90478-01 497170001386 028 N/A P3 18 / Day 3 18h PL-1
Cotinine	15	Fail	AA90478-01 497170001387 028 N/A P3 19 / Day 3 19h PL-1
Cotinine	15	Fail	AA90478-01 497170000324 007 N/A P3 1 / Day 3 1h PL-1
Cotinine	15	Fail	AA90478-01 497170000325 007 N/A P3 2 / Day 3 2h PL-1
Cotinine	15	Fail	AA90478-01 497170000326 007 N/A P3 3 / Day 3 3h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	15	Fail	AA90478-01 497170000327 007 N/A P3 4 / Day 3 4h PL-1
Cotinine	15	UISR/Fail	AA90478-01 497170000328 007 N/A P3 5 / Day 3 5h PL-1
Cotinine	15	Fail	AA90478-01 497170000329 007 N/A P3 6 / Day 3 6h PL-1
Cotinine	16	HSR	AA90478-01 497170000115 003 N/A P4 1 / Day 4 1h PL-1
Cotinine	16	HSR	AA90478-01 497170000118 003 N/A P4 4 / Day 4 4h PL-1
Cotinine	16	HSR	AA90478-01 497170000128 003 N/A P4 14 / Day 4 14h PL-1
Cotinine	17	AAR	AA90478-01 497170000305 007 N/A P4 1 / Day 4 1h PL-1
Cotinine	17	AAR	AA90478-01 497170000306 007 N/A P4 2 / Day 4 2h PL-1
Cotinine	17	AAR	AA90478-01 497170000307 007 N/A P4 3 / Day 4 3h PL-1
Cotinine	17	AAR	AA90478-01 497170000308 007 N/A P4 4 / Day 4 4h PL-1
Cotinine	17	AAR	AA90478-01 497170000309 007 N/A P4 5 / Day 4 5h PL-1
Cotinine	17	AAR	AA90478-01 497170000310 007 N/A P4 6 / Day 4 6h PL-1
Cotinine	17	AAR	AA90478-01 497170000311 007 N/A P4 7 / Day 4 7h PL-1
Cotinine	17	AAR	AA90478-01 497170000312 007 N/A P4 8 / Day 4 8h PL-1
Cotinine	17	AAR	AA90478-01 497170000313 007 N/A P4 9 / Day 4 9h PL-1
Cotinine	17	AAR	AA90478-01 497170000314 007 N/A P4 10 / Day 4 10h PL-1
Cotinine	17	AAR	AA90478-01 497170000315 007 N/A P4 11 / Day 4 11h PL-1
Cotinine	17	AAR	AA90478-01 497170000316 007 N/A P4 12 / Day 4 12h PL-1
Cotinine	17	AAR	AA90478-01 497170000317 007 N/A P4 13 / Day 4 13h PL-1
Cotinine	17	AAR	AA90478-01 497170000318 007 N/A P4 14 / Day 4 14h PL-1
Cotinine	17	AAR	AA90478-01 497170000319 007 N/A P4 15 / Day 4 15h PL-1
Cotinine	17	AAR	AA90478-01 497170000320 007 N/A P4 16 / Day 4 16h PL-1
Cotinine	17	AAR	AA90478-01 497170000321 007 N/A P4 17 / Day 4 17h PL-1
Cotinine	17	AAR	AA90478-01 497170000322 007 N/A P4 18 / Day 4 18h PL-1
Cotinine	17	AAR	AA90478-01 497170000323 007 N/A P4 19 / Day 4 19h PL-1
Cotinine	17	AAR	AA90478-01 497170000400 009 N/A P4 1 / Day 4 1h PL-1
Cotinine	17	AAR	AA90478-01 497170000401 009 N/A P4 2 / Day 4 2h PL-1
Cotinine	17	AAR	AA90478-01 497170000402 009 N/A P4 3 / Day 4 3h PL-1
Cotinine	17	AAR	AA90478-01 497170000403 009 N/A P4 4 / Day 4 4h PL-1
Cotinine	17	AAR	AA90478-01 497170000404 009 N/A P4 5 / Day 4 5h PL-1
Cotinine	17	AAR	AA90478-01 497170000405 009 N/A P4 6 / Day 4 6h PL-1
Cotinine	17	AAR	AA90478-01 497170000406 009 N/A P4 7 / Day 4 7h PL-1
Cotinine	17	AAR	AA90478-01 497170000407 009 N/A P4 8 / Day 4 8h PL-1
Cotinine	17	AAR	AA90478-01 497170000408 009 N/A P4 9 / Day 4 9h PL-1
Cotinine	17	UISR	AA90478-01 497170000409 009 N/A P4 10 / Day 4 10h PL-1
Cotinine	17	AAR	AA90478-01 497170000410 009 N/A P4 11 / Day 4 11h PL-1
Cotinine	17	UISR	AA90478-01 497170000411 009 N/A P4 12 / Day 4 12h PL-1
Cotinine	17	AAR	AA90478-01 497170000412 009 N/A P4 13 / Day 4 13h PL-1
Cotinine	17	UISR	AA90478-01 497170000413 009 N/A P4 14 / Day 4 14h PL-1
Cotinine	17	AAR	AA90478-01 497170000414 009 N/A P4 15 / Day 4 15h PL-1
Cotinine	17	AAR	AA90478-01 497170000415 009 N/A P4 16 / Day 4 16h PL-1
Cotinine	17	AAR	AA90478-01 497170000416 009 N/A P4 17 / Day 4 17h PL-1
Cotinine	17	AAR	AA90478-01 497170000417 009 N/A P4 18 / Day 4 18h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	17	AAR	AA90478-01 497170000418 009 N/A P4 19 / Day 4 19h PL-1
Cotinine	18	AAR	AA90478-01 497170000590 012 N/A P4 1 / Day 4 1h PL-1
Cotinine	18	AAR	AA90478-01 497170000591 012 N/A P4 2 / Day 4 2h PL-1
Cotinine	18	AAR	AA90478-01 497170000592 012 N/A P4 3 / Day 4 3h PL-1
Cotinine	18	AAR	AA90478-01 497170000593 012 N/A P4 4 / Day 4 4h PL-1
Cotinine	18	AAR	AA90478-01 497170000594 012 N/A P4 5 / Day 4 5h PL-1
Cotinine	18	AAR	AA90478-01 497170000595 012 N/A P4 6 / Day 4 6h PL-1
Cotinine	18	AAR	AA90478-01 497170000596 012 N/A P4 7 / Day 4 7h PL-1
Cotinine	18	AAR	AA90478-01 497170000597 012 N/A P4 8 / Day 4 8h PL-1
Cotinine	18	AAR	AA90478-01 497170000598 012 N/A P4 9 / Day 4 9h PL-1
Cotinine	18	AAR	AA90478-01 497170000599 012 N/A P4 10 / Day 4 10h PL-1
Cotinine	18	AAR	AA90478-01 497170000600 012 N/A P4 11 / Day 4 11h PL-1
Cotinine	18	AAR	AA90478-01 497170000601 012 N/A P4 12 / Day 4 12h PL-1
Cotinine	18	AAR	AA90478-01 497170000602 012 N/A P4 13 / Day 4 13h PL-1
Cotinine	18	AAR	AA90478-01 497170000603 012 N/A P4 14 / Day 4 14h PL-1
Cotinine	18	AAR	AA90478-01 497170000604 012 N/A P4 15 / Day 4 15h PL-1
Cotinine	18	AAR	AA90478-01 497170000605 012 N/A P4 16 / Day 4 16h PL-1
Cotinine	18	AAR	AA90478-01 497170000606 012 N/A P4 17 / Day 4 17h PL-1
Cotinine	18	AAR	AA90478-01 497170000607 012 N/A P4 18 / Day 4 18h PL-1
Cotinine	18	AAR	AA90478-01 497170000608 012 N/A P4 19 / Day 4 19h PL-1
Cotinine	18	UISR	AA90478-01 497170000693 013 N/A P4 9 / Day 4 9h PL-1
Cotinine	20	AAR	AA90478-01 497170001160 024 N/A P4 1 / Day 4 1h PL-1
Cotinine	20	AAR	AA90478-01 497170001161 024 N/A P4 2 / Day 4 2h PL-1
Cotinine	20	AAR	AA90478-01 497170001162 024 N/A P4 3 / Day 4 3h PL-1
Cotinine	20	AAR	AA90478-01 497170001163 024 N/A P4 4 / Day 4 4h PL-1
Cotinine	20	AAR	AA90478-01 497170001164 024 N/A P4 5 / Day 4 5h PL-1
Cotinine	20	AAR	AA90478-01 497170001165 024 N/A P4 6 / Day 4 6h PL-1
Cotinine	20	AAR	AA90478-01 497170001166 024 N/A P4 7 / Day 4 7h PL-1
Cotinine	20	AAR	AA90478-01 497170001167 024 N/A P4 8 / Day 4 8h PL-1
Cotinine	20	AAR	AA90478-01 497170001168 024 N/A P4 9 / Day 4 9h PL-1
Cotinine	20	AAR	AA90478-01 497170001169 024 N/A P4 10 / Day 4 10h PL-1
Cotinine	20	AAR	AA90478-01 497170001170 024 N/A P4 11 / Day 4 11h PL-1
Cotinine	20	AAR	AA90478-01 497170001171 024 N/A P4 12 / Day 4 12h PL-1
Cotinine	20	AAR	AA90478-01 497170001172 024 N/A P4 13 / Day 4 13h PL-1
Cotinine	20	AAR	AA90478-01 497170001173 024 N/A P4 14 / Day 4 14h PL-1
Cotinine	20	AAR	AA90478-01 497170001174 024 N/A P4 15 / Day 4 15h PL-1
Cotinine	20	AAR	AA90478-01 497170001178 024 N/A P4 19 / Day 4 19h PL-1
Cotinine	20	AAR	AA90478-01 497170001350 028 N/A P4 1 / Day 4 1h PL-1
Cotinine	20	AAR	AA90478-01 497170001351 028 N/A P4 2 / Day 4 2h PL-1
Cotinine	20	AAR	AA90478-01 497170001352 028 N/A P4 3 / Day 4 3h PL-1
Cotinine	20	AAR	AA90478-01 497170001353 028 N/A P4 4 / Day 4 4h PL-1
Cotinine	20	AAR	AA90478-01 497170001354 028 N/A P4 5 / Day 4 5h PL-1
Cotinine	20	AAR	AA90478-01 497170001355 028 N/A P4 6 / Day 4 6h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	20	AAR	AA90478-01 497170001356 028 N/A P4 7 / Day 4 7h PL-1
Cotinine	20	AAR	AA90478-01 497170001357 028 N/A P4 8 / Day 4 8h PL-1
Cotinine	20	AAR	AA90478-01 497170001358 028 N/A P4 9 / Day 4 9h PL-1
Cotinine	20	AAR	AA90478-01 497170001359 028 N/A P4 10 / Day 4 10h PL-1
Cotinine	20	AAR	AA90478-01 497170001360 028 N/A P4 11 / Day 4 11h PL-1
Cotinine	20	AAR	AA90478-01 497170001361 028 N/A P4 12 / Day 4 12h PL-1
Cotinine	20	AAR	AA90478-01 497170001362 028 N/A P4 13 / Day 4 13h PL-1
Cotinine	20	AAR	AA90478-01 497170001363 028 N/A P4 14 / Day 4 14h PL-1
Cotinine	20	AAR	AA90478-01 497170001364 028 N/A P4 15 / Day 4 15h PL-1
Cotinine	20	AAR	AA90478-01 497170001365 028 N/A P4 16 / Day 4 16h PL-1
Cotinine	20	AAR	AA90478-01 497170001366 028 N/A P4 17 / Day 4 17h PL-1
Cotinine	20	AAR	AA90478-01 497170001367 028 N/A P4 18 / Day 4 18h PL-1
Cotinine	20	AAR	AA90478-01 497170001368 028 N/A P4 19 / Day 4 19h PL-1
Cotinine	21	AAR	AA90478-01 497170000096 003 N/A P5 1 / Day 5 1h PL-1
Cotinine	21	AAR	AA90478-01 497170000097 003 N/A P5 2 / Day 5 2h PL-1
Cotinine	21	AAR	AA90478-01 497170000098 003 N/A P5 3 / Day 5 3h PL-1
Cotinine	21	AAR	AA90478-01 497170000099 003 N/A P5 4 / Day 5 4h PL-1
Cotinine	21	AAR	AA90478-01 497170000100 003 N/A P5 5 / Day 5 5h PL-1
Cotinine	21	AAR	AA90478-01 497170000101 003 N/A P5 6 / Day 5 6h PL-1
Cotinine	21	AAR	AA90478-01 497170000102 003 N/A P5 7 / Day 5 7h PL-1
Cotinine	21	AAR	AA90478-01 497170000103 003 N/A P5 8 / Day 5 8h PL-1
Cotinine	21	AAR	AA90478-01 497170000104 003 N/A P5 9 / Day 5 9h PL-1
Cotinine	21	AAR	AA90478-01 497170000105 003 N/A P5 10 / Day 5 10h PL-1
Cotinine	21	AAR	AA90478-01 497170000106 003 N/A P5 11 / Day 5 11h PL-1
Cotinine	21	AAR	AA90478-01 497170000107 003 N/A P5 12 / Day 5 12h PL-1
Cotinine	21	AAR	AA90478-01 497170000108 003 N/A P5 13 / Day 5 13h PL-1
Cotinine	21	AAR	AA90478-01 497170000109 003 N/A P5 14 / Day 5 14h PL-1
Cotinine	21	AAR	AA90478-01 497170000110 003 N/A P5 15 / Day 5 15h PL-1
Cotinine	22	AAR	AA90478-01 497170000286 007 N/A P5 1 / Day 5 1h PL-1
Cotinine	22	AAR	AA90478-01 497170000287 007 N/A P5 2 / Day 5 2h PL-1
Cotinine	22	AAR	AA90478-01 497170000288 007 N/A P5 3 / Day 5 3h PL-1
Cotinine	22	AAR	AA90478-01 497170000289 007 N/A P5 4 / Day 5 4h PL-1
Cotinine	22	AAR	AA90478-01 497170000290 007 N/A P5 5 / Day 5 5h PL-1
Cotinine	22	AAR	AA90478-01 497170000291 007 N/A P5 6 / Day 5 6h PL-1
Cotinine	22	AAR	AA90478-01 497170000292 007 N/A P5 7 / Day 5 7h PL-1
Cotinine	22	AAR	AA90478-01 497170000293 007 N/A P5 8 / Day 5 8h PL-1
Cotinine	22	AAR	AA90478-01 497170000294 007 N/A P5 9 / Day 5 9h PL-1
Cotinine	22	AAR	AA90478-01 497170000295 007 N/A P5 10 / Day 5 10h PL-1
Cotinine	22	AAR	AA90478-01 497170000296 007 N/A P5 11 / Day 5 11h PL-1
Cotinine	22	AAR	AA90478-01 497170000297 007 N/A P5 12 / Day 5 12h PL-1
Cotinine	22	AAR	AA90478-01 497170000298 007 N/A P5 13 / Day 5 13h PL-1
Cotinine	22	AAR	AA90478-01 497170000299 007 N/A P5 14 / Day 5 14h PL-1
Cotinine	22	AAR	AA90478-01 497170000300 007 N/A P5 15 / Day 5 15h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	22	AAR	AA90478-01 497170000301 007 N/A P5 16 / Day 5 16h PL-1
Cotinine	22	AAR	AA90478-01 497170000302 007 N/A P5 17 / Day 5 17h PL-1
Cotinine	22	AAR	AA90478-01 497170000303 007 N/A P5 18 / Day 5 18h PL-1
Cotinine	22	AAR	AA90478-01 497170000304 007 N/A P5 19 / Day 5 19h PL-1
Cotinine	22	AAR	AA90478-01 497170000381 009 N/A P5 1 / Day 5 1h PL-1
Cotinine	22	AAR	AA90478-01 497170000382 009 N/A P5 2 / Day 5 2h PL-1
Cotinine	22	AAR	AA90478-01 497170000383 009 N/A P5 3 / Day 5 3h PL-1
Cotinine	22	AAR	AA90478-01 497170000384 009 N/A P5 4 / Day 5 4h PL-1
Cotinine	22	AAR	AA90478-01 497170000385 009 N/A P5 5 / Day 5 5h PL-1
Cotinine	22	AAR	AA90478-01 497170000386 009 N/A P5 6 / Day 5 6h PL-1
Cotinine	22	AAR	AA90478-01 497170000387 009 N/A P5 7 / Day 5 7h PL-1
Cotinine	22	AAR	AA90478-01 497170000388 009 N/A P5 8 / Day 5 8h PL-1
Cotinine	22	AAR	AA90478-01 497170000389 009 N/A P5 9 / Day 5 9h PL-1
Cotinine	22	AAR	AA90478-01 497170000390 009 N/A P5 10 / Day 5 10h PL-1
Cotinine	22	AAR	AA90478-01 497170000391 009 N/A P5 11 / Day 5 11h PL-1
Cotinine	22	AAR	AA90478-01 497170000392 009 N/A P5 12 / Day 5 12h PL-1
Cotinine	22	AAR	AA90478-01 497170000393 009 N/A P5 13 / Day 5 13h PL-1
Cotinine	22	AAR	AA90478-01 497170000394 009 N/A P5 14 / Day 5 14h PL-1
Cotinine	22	AAR	AA90478-01 497170000395 009 N/A P5 15 / Day 5 15h PL-1
Cotinine	22	AAR	AA90478-01 497170000396 009 N/A P5 16 / Day 5 16h PL-1
Cotinine	22	AAR	AA90478-01 497170000397 009 N/A P5 17 / Day 5 17h PL-1
Cotinine	22	AAR	AA90478-01 497170000398 009 N/A P5 18 / Day 5 18h PL-1
Cotinine	22	AAR	AA90478-01 497170000399 009 N/A P5 19 / Day 5 19h PL-1
Cotinine	29	AAR	AA90478-01 497170000343 007 N/A P2 1 / Day 2 1h PL-1
Cotinine	29	AAR	AA90478-01 497170000344 007 N/A P2 2 / Day 2 2h PL-1
Cotinine	29	AAR	AA90478-01 497170000345 007 N/A P2 3 / Day 2 3h PL-1
Cotinine	29	AAR	AA90478-01 497170000346 007 N/A P2 4 / Day 2 4h PL-1
Cotinine	29	AAR	AA90478-01 497170000347 007 N/A P2 5 / Day 2 5h PL-1
Cotinine	29	AAR	AA90478-01 497170000348 007 N/A P2 6 / Day 2 6h PL-1
Cotinine	29	AAR	AA90478-01 497170000349 007 N/A P2 7 / Day 2 7h PL-1
Cotinine	29	AAR	AA90478-01 497170000350 007 N/A P2 8 / Day 2 8h PL-1
Cotinine	29	AAR	AA90478-01 497170000351 007 N/A P2 9 / Day 2 9h PL-1
Cotinine	29	AAR	AA90478-01 497170000352 007 N/A P2 10 / Day 2 10h PL-1
Cotinine	29	AAR	AA90478-01 497170000353 007 N/A P2 11 / Day 2 11h PL-1
Cotinine	29	AAR	AA90478-01 497170000354 007 N/A P2 12 / Day 2 12h PL-1
Cotinine	29	AAR	AA90478-01 497170000355 007 N/A P2 13 / Day 2 13h PL-1
Cotinine	29	AAR	AA90478-01 497170000356 007 N/A P2 14 / Day 2 14h PL-1
Cotinine	29	AAR	AA90478-01 497170000357 007 N/A P2 15 / Day 2 15h PL-1
Cotinine	29	AAR	AA90478-01 497170000358 007 N/A P2 16 / Day 2 16h PL-1
Cotinine	29	AAR	AA90478-01 497170000359 007 N/A P2 17 / Day 2 17h PL-1
Cotinine	29	AAR	AA90478-01 497170000360 007 N/A P2 18 / Day 2 18h PL-1
Cotinine	29	AAR	AA90478-01 497170000361 007 N/A P2 19 / Day 2 19h PL-1
Cotinine	29	AAR	AA90478-01 497170000438 009 N/A P2 1 / Day 2 1h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	29	AAR	AA90478-01 497170000439 009 N/A P2 2 / Day 2 2h PL-1
Cotinine	29	AAR	AA90478-01 497170000440 009 N/A P2 3 / Day 2 3h PL-1
Cotinine	29	AAR	AA90478-01 497170000441 009 N/A P2 4 / Day 2 4h PL-1
Cotinine	29	AAR	AA90478-01 497170000442 009 N/A P2 5 / Day 2 5h PL-1
Cotinine	29	AAR	AA90478-01 497170000443 009 N/A P2 6 / Day 2 6h PL-1
Cotinine	29	AAR	AA90478-01 497170000444 009 N/A P2 7 / Day 2 7h PL-1
Cotinine	29	AAR	AA90478-01 497170000445 009 N/A P2 8 / Day 2 8h PL-1
Cotinine	29	AAR	AA90478-01 497170000446 009 N/A P2 9 / Day 2 9h PL-1
Cotinine	29	AAR	AA90478-01 497170000447 009 N/A P2 10 / Day 2 10h PL-1
Cotinine	29	AAR	AA90478-01 497170000448 009 N/A P2 11 / Day 2 11h PL-1
Cotinine	29	AAR	AA90478-01 497170000449 009 N/A P2 12 / Day 2 12h PL-1
Cotinine	29	AAR	AA90478-01 497170000450 009 N/A P2 13 / Day 2 13h PL-1
Cotinine	29	AAR	AA90478-01 497170000451 009 N/A P2 14 / Day 2 14h PL-1
Cotinine	29	AAR	AA90478-01 497170000452 009 N/A P2 15 / Day 2 15h PL-1
Cotinine	29	AAR	AA90478-01 497170000453 009 N/A P2 16 / Day 2 16h PL-1
Cotinine	29	AAR	AA90478-01 497170000454 009 N/A P2 17 / Day 2 17h PL-1
Cotinine	29	AAR	AA90478-01 497170000455 009 N/A P2 18 / Day 2 18h PL-1
Cotinine	29	AAR	AA90478-01 497170000456 009 N/A P2 19 / Day 2 19h PL-1
Cotinine	29	AAR	AA90478-01 497170000533 011 N/A P2 1 / Day 2 1h PL-1
Cotinine	29	AAR	AA90478-01 497170000536 011 N/A P2 4 / Day 2 4h PL-1
Cotinine	29	AAR	AA90478-01 497170000538 011 N/A P2 6 / Day 2 6h PL-1
Cotinine	29	AAR	AA90478-01 497170000540 011 N/A P2 8 / Day 2 8h PL-1
Cotinine	33	AAR	AA90478-01 497170000571 012 N/A P5 1 / Day 5 1h PL-1
Cotinine	33	AAR	AA90478-01 497170000572 012 N/A P5 2 / Day 5 2h PL-1
Cotinine	33	AAR	AA90478-01 497170000573 012 N/A P5 3 / Day 5 3h PL-1
Cotinine	33	AAR	AA90478-01 497170000574 012 N/A P5 4 / Day 5 4h PL-1
Cotinine	33	AAR	AA90478-01 497170000575 012 N/A P5 5 / Day 5 5h PL-1
Cotinine	33	AAR	AA90478-01 497170000576 012 N/A P5 6 / Day 5 6h PL-1
Cotinine	33	AAR	AA90478-01 497170000577 012 N/A P5 7 / Day 5 7h PL-1
Cotinine	33	AAR	AA90478-01 497170000578 012 N/A P5 8 / Day 5 8h PL-1
Cotinine	33	AAR	AA90478-01 497170000579 012 N/A P5 9 / Day 5 9h PL-1
Cotinine	33	AAR	AA90478-01 497170000580 012 N/A P5 10 / Day 5 10h PL-1
Cotinine	33	AAR	AA90478-01 497170000582 012 N/A P5 12 / Day 5 12h PL-1
Cotinine	33	AAR	AA90478-01 497170000583 012 N/A P5 13 / Day 5 13h PL-1
Cotinine	33	AAR	AA90478-01 497170000584 012 N/A P5 14 / Day 5 14h PL-1
Cotinine	33	AAR	AA90478-01 497170000585 012 N/A P5 15 / Day 5 15h PL-1
Cotinine	33	AAR	AA90478-01 497170000586 012 N/A P5 16 / Day 5 16h PL-1
Cotinine	33	AAR	AA90478-01 497170000587 012 N/A P5 17 / Day 5 17h PL-1
Cotinine	33	AAR	AA90478-01 497170000588 012 N/A P5 18 / Day 5 18h PL-1
Cotinine	33	AAR	AA90478-01 497170000589 012 N/A P5 19 / Day 5 19h PL-1
Cotinine	33	AAR	AA90478-01 497170000761 015 N/A P5 1 / Day 5 1h PL-1
Cotinine	38	AAR	AA90478-01 497170001141 024 N/A P5 1 / Day 5 1h PL-1
Cotinine	38	AAR	AA90478-01 497170001142 024 N/A P5 2 / Day 5 2h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	38	AAR	AA90478-01 497170001143 024 N/A P5 3 / Day 5 3h PL-1
Cotinine	38	AAR	AA90478-01 497170001144 024 N/A P5 4 / Day 5 4h PL-1
Cotinine	38	AAR	AA90478-01 497170001145 024 N/A P5 5 / Day 5 5h PL-1
Cotinine	38	AAR	AA90478-01 497170001146 024 N/A P5 6 / Day 5 6h PL-1
Cotinine	38	AAR	AA90478-01 497170001147 024 N/A P5 7 / Day 5 7h PL-1
Cotinine	38	AAR	AA90478-01 497170001148 024 N/A P5 8 / Day 5 8h PL-1
Cotinine	38	AAR	AA90478-01 497170001149 024 N/A P5 9 / Day 5 9h PL-1
Cotinine	38	AAR	AA90478-01 497170001150 024 N/A P5 10 / Day 5 10h PL-1
Cotinine	38	AAR	AA90478-01 497170001151 024 N/A P5 11 / Day 5 11h PL-1
Cotinine	38	AAR	AA90478-01 497170001152 024 N/A P5 12 / Day 5 12h PL-1
Cotinine	38	AAR	AA90478-01 497170001153 024 N/A P5 13 / Day 5 13h PL-1
Cotinine	38	AAR	AA90478-01 497170001154 024 N/A P5 14 / Day 5 14h PL-1
Cotinine	38	AAR	AA90478-01 497170001155 024 N/A P5 15 / Day 5 15h PL-1
Cotinine	38	AAR	AA90478-01 497170001331 028 N/A P5 1 / Day 5 1h PL-1
Cotinine	38	AAR	AA90478-01 497170001332 028 N/A P5 2 / Day 5 2h PL-1
Cotinine	38	AAR	AA90478-01 497170001333 028 N/A P5 3 / Day 5 3h PL-1
Cotinine	38	AAR	AA90478-01 497170001334 028 N/A P5 4 / Day 5 4h PL-1
Cotinine	38	AAR	AA90478-01 497170001335 028 N/A P5 5 / Day 5 5h PL-1
Cotinine	38	AAR	AA90478-01 497170001336 028 N/A P5 6 / Day 5 6h PL-1
Cotinine	38	AAR	AA90478-01 497170001337 028 N/A P5 7 / Day 5 7h PL-1
Cotinine	38	AAR	AA90478-01 497170001338 028 N/A P5 8 / Day 5 8h PL-1
Cotinine	38	AAR	AA90478-01 497170001339 028 N/A P5 9 / Day 5 9h PL-1
Cotinine	38	AAR	AA90478-01 497170001340 028 N/A P5 10 / Day 5 10h PL-1
Cotinine	38	AAR	AA90478-01 497170001341 028 N/A P5 11 / Day 5 11h PL-1
Cotinine	38	AAR	AA90478-01 497170001342 028 N/A P5 12 / Day 5 12h PL-1
Cotinine	38	AAR	AA90478-01 497170001343 028 N/A P5 13 / Day 5 13h PL-1
Cotinine	38	AAR	AA90478-01 497170001344 028 N/A P5 14 / Day 5 14h PL-1
Cotinine	38	AAR	AA90478-01 497170001345 028 N/A P5 15 / Day 5 15h PL-1
Cotinine	38	AAR	AA90478-01 497170001346 028 N/A P5 16 / Day 5 16h PL-1
Cotinine	38	AAR	AA90478-01 497170001347 028 N/A P5 17 / Day 5 17h PL-1
Cotinine	38	AAR	AA90478-01 497170001348 028 N/A P5 18 / Day 5 18h PL-1
Cotinine	38	AAR	AA90478-01 497170001349 028 N/A P5 19 / Day 5 19h PL-1
Cotinine	39	AAR	AA90478-01 497170000365 007 N/A P1 4 / Day 1 4h PL-1
Cotinine	39	AAR	AA90478-01 497170000367 007 N/A P1 6 / Day 1 6h PL-1
Cotinine	39	AAR	AA90478-01 497170000380 007 N/A P1 19 / Day 1 19h PL-1
Cotinine	39	AAR	AA90478-01 497170000460 009 N/A P1 4 / Day 1 4h PL-1
Cotinine	39	AAR	AA90478-01 497170000464 009 N/A P1 8 / Day 1 8h PL-1
Cotinine	39	AAR	AA90478-01 497170000556 011 N/A P1 5 / Day 1 5h PL-1
Cotinine	39	AAR	AA90478-01 497170000650 012 N/A P1 4 / Day 1 4h PL-1
Cotinine	39	AAR	AA90478-01 497170000651 012 N/A P1 5 / Day 1 5h PL-1
Cotinine	39	AAR	AA90478-01 497170000659 012 N/A P1 13 / Day 1 13h PL-1
Cotinine	39	AAR	AA90478-01 497170001315 026 N/A P1 4 / Day 1 4h PL-1
Cotinine	39	AAR	AA90478-01 497170000637 012 N/A P2 10 / Day 2 10h PL-1

Analyte	Batch Number	Reason	Sample Name
Cotinine	39	AAR	AA90478-01 497170000646 012 N/A P2 19 / Day 2 19h PL-1
Cotinine	39	AAR	AA90478-01 497170000425 009 N/A P3 7 / Day 3 7h PL-1
Cotinine	39	AAR	AA90478-01 497170000427 009 N/A P3 9 / Day 3 9h PL-1
Cotinine	39	AAR	AA90478-01 497170000437 009 N/A P3 19 / Day 3 19h PL-1
Cotinine	39	AAR	AA90478-01 497170000619 012 N/A P3 11 / Day 3 11h PL-1
Cotinine	39	AAR	AA90478-01 497170000627 012 N/A P3 19 / Day 3 19h PL-1
Cotinine	39	AAR	AA90478-01 497170000307 007 N/A P4 3 / Day 4 3h PL-1
Cotinine	39	AAR	AA90478-01 497170000312 007 N/A P4 8 / Day 4 8h PL-1
Cotinine	39	AAR	AA90478-01 497170000319 007 N/A P4 15 / Day 4 15h PL-1
Cotinine	39	AAR	AA90478-01 497170000408 009 N/A P4 9 / Day 4 9h PL-1
Cotinine	39	AAR	AA90478-01 497170000418 009 N/A P4 19 / Day 4 19h PL-1
Cotinine	39	AAR	AA90478-01 497170000597 012 N/A P4 8 / Day 4 8h PL-1
Cotinine	40	AAR	AA90478-01 497170001170 024 N/A P4 11 / Day 4 11h PL-1
Cotinine	40	AAR	AA90478-01 497170001358 028 N/A P4 9 / Day 4 9h PL-1
Cotinine	40	AAR	AA90478-01 497170001368 028 N/A P4 19 / Day 4 19h PL-1
Cotinine	40	AAR	AA90478-01 497170000103 003 N/A P5 8 / Day 5 8h PL-1
Cotinine	40	AAR	AA90478-01 497170000107 003 N/A P5 12 / Day 5 12h PL-1
Cotinine	40	AAR	AA90478-01 497170000296 007 N/A P5 11 / Day 5 11h PL-1
Cotinine	40	AAR	AA90478-01 497170000304 007 N/A P5 19 / Day 5 19h PL-1
Cotinine	40	AAR	AA90478-01 497170000390 009 N/A P5 10 / Day 5 10h PL-1
Cotinine	40	AAR	AA90478-01 497170000395 009 N/A P5 15 / Day 5 15h PL-1
Cotinine	40	AAR	AA90478-01 497170001150 024 N/A P5 10 / Day 5 10h PL-1
Cotinine	40	AAR	AA90478-01 497170001326 026 N/A P1 15 / Day 1 15h PL-1
Cotinine	40	AAR	AA90478-01 497170000344 007 N/A P2 2 / Day 2 2h PL-1
Cotinine	40	AAR	AA90478-01 497170000349 007 N/A P2 7 / Day 2 7h PL-1
Cotinine	40	AAR	AA90478-01 497170000355 007 N/A P2 13 / Day 2 13h PL-1
Cotinine	40	AAR	AA90478-01 497170000361 007 N/A P2 19 / Day 2 19h PL-1

Total Number of Reassays for Analytical Reasons: 711

Table 7. Summary of Reassays for Sample Investigation

Subject	Period	Timepoint	Analyte	Reasons for Reassay	Units	<div> <div></div> <div>%</div> <div>%</div> <div>%</div> <div>%</div> </div>										Confirms Original	Reported Concentration
						Original Value	Reassay Value 1	Reassay Value 2	Reassay Value 3	Mean repeat	CV% of Reassays	Difference Reassay 1 and 2	Difference Reassay 2 and 3	Difference Reassay 1 and 3	Difference from Original		
7	4	12/Day 4 12h	Nicotine	SSR	ng/mL	3.300	4.380	N/AP	N/AP	4.380	N/AP	100.000	N/AP	100.000	32.727	No	4.380
9	1	8/Day 1 8h	Nicotine	SSR	ng/mL	6.490	5.280	N/AP	N/AP	5.280	N/AP	100.000	N/AP	100.000	18.644	Yes	6.490
11	4	17/Day 4 17h	Nicotine	SSR	ng/mL	5.350	3.100	N/AP	N/AP	3.100	N/AP	100.000	N/AP	100.000	42.056	No	3.100
28	1	3/Day 1 3h	Nicotine	SSR	ng/mL	12.300	13.600	N/AP	N/AP	13.600	N/AP	100.000	N/AP	100.000	10.569	Yes	12.300
28	1	4/Day 1 4h	Nicotine	SSR	ng/mL	5.540	5.430	N/AP	N/AP	5.430	N/AP	100.000	N/AP	100.000	1.986	Yes	5.540
28	1	5/Day 1 5h	Nicotine	SSR	ng/mL	8.910	8.790	N/AP	N/AP	8.790	N/AP	100.000	N/AP	100.000	1.347	Yes	8.910
28	1	6/Day 1 6h	Nicotine	SSR	ng/mL	14.600	12.500	N/AP	N/AP	12.500	N/AP	100.000	N/AP	100.000	14.384	Yes	14.600
28	1	7/Day 1 7h	Nicotine	SSR	ng/mL	7.890	8.190	N/AP	N/AP	8.190	N/AP	100.000	N/AP	100.000	3.802	Yes	7.890
28	1	8/Day 1 8h	Nicotine	SSR	ng/mL	7.200	6.980	N/AP	N/AP	6.980	N/AP	100.000	N/AP	100.000	3.056	Yes	7.200
28	1	9/Day 1 9h	Nicotine	SSR	ng/mL	5.370	5.320	N/AP	N/AP	5.320	N/AP	100.000	N/AP	100.000	0.931	Yes	5.370

Total Number of Reassays for Sample Investigation: 18

Table 8. Incurred Sample Reproducibility Samples

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
001	5	Day 5 12h	Nicotine	ng/mL	1.69	1.75	1.72	3.49	Pass	No	90.5
001	5	Day 5 6h	Nicotine	ng/mL	2.28	2.17	2.23	4.93	Pass	No	
001	4	Day 4 11h	Nicotine	ng/mL	1.79	1.69	1.74	5.75	Pass	No	
001	4	Day 4 7h	Nicotine	ng/mL	4.97	4.44	4.71	11.25	Pass	No	
001	3	Day 3 10h	Nicotine	ng/mL	3.49	3.34	3.42	4.39	Pass	No	
001	3	Day 3 8h	Nicotine	ng/mL	5.26	4.24	4.75	21.47	Fail	No	
001	1	Day 1 19h	Nicotine	ng/mL	1.62	1.60	1.61	1.24	Pass	No	
001	1	Day 1 7h	Nicotine	ng/mL	14.6	17.1	15.9	15.72	Pass	No	
003	5	Day 5 12h	Nicotine	ng/mL	2.22	2.28	2.25	2.67	Pass	No	
003	5	Day 5 16h	Nicotine	ng/mL	1.56	1.60	1.58	2.53	Pass	No	
003	5	Day 5 8h	Nicotine	ng/mL	1.76	1.81	1.79	2.79	Pass	No	
003	4	Day 4 9h	Nicotine	ng/mL	1.70	1.83	1.77	7.34	Pass	No	
003	3	Day 3 13h	Nicotine	ng/mL	1.58	1.63	1.61	3.11	Pass	No	
003	3	Day 3 5h	Nicotine	ng/mL	1.74	1.58	1.66	9.64	Pass	No	
003	3	Day 3 8h	Nicotine	ng/mL	3.01	2.75	2.88	9.03	Pass	No	
003	1	Day 1 10h	Nicotine	ng/mL	5.25	5.06	5.16	3.68	Pass	No	
003	1	Day 1 17h	Nicotine	ng/mL	2.25	2.22	2.24	1.34	Pass	No	
003	1	Day 1 18h	Nicotine	ng/mL	1.89	1.90	1.90	0.53	Pass	No	
003	1	Day 1 3h	Nicotine	ng/mL	9.04	9.45	9.25	4.43	Pass	No	
003	1	Day 1 4h	Nicotine	ng/mL	19.1	16.5	17.8	14.61	Pass	No	
005	5	Day 5 5h	Nicotine	ng/mL	2.39	2.41	2.40	0.83	Pass	No	
005	5	Day 5 8h	Nicotine	ng/mL	5.00	4.62	4.81	7.90	Pass	No	
005	4	Day 4 11h	Nicotine	ng/mL	1.73	1.87	1.80	7.78	Pass	No	
005	4	Day 4 12h	Nicotine	ng/mL	1.51	1.63	1.57	7.64	Pass	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
005	4	Day 4 9h	Nicotine	ng/mL	2.17	2.01	2.09	7.66	Pass	No	
005	2	Day 2 12h	Nicotine	ng/mL	1.71	1.64	1.68	4.17	Pass	No	
005	2	Day 2 9h	Nicotine	ng/mL	2.41	1.70	2.06	34.47	Fail	No	
005	1	Day 1 13h	Nicotine	ng/mL	3.37	3.07	3.22	9.32	Pass	No	
005	1	Day 1 3h	Nicotine	ng/mL	9.62	10.3	9.96	6.83	Pass	No	
005	1	Day 1 4h	Nicotine	ng/mL	18.9	17.9	18.4	5.43	Pass	No	
005	1	Day 1 8h	Nicotine	ng/mL	6.60	7.19	6.90	8.55	Pass	No	
007	5	Day 5 11h	Nicotine	ng/mL	5.15	5.24	5.20	1.73	Pass	No	
007	5	Day 5 19h	Nicotine	ng/mL	4.75	4.75	4.75	0.00	Pass	No	
007	5	Day 5 1h	Nicotine	ng/mL	3.83	3.86	3.85	0.78	Pass	No	
007	5	Day 5 6h	Nicotine	ng/mL	3.81	3.79	3.80	0.53	Pass	No	
007	4	Day 4 15h	Nicotine	ng/mL	3.93	3.91	3.92	0.51	Pass	No	
007	4	Day 4 3h	Nicotine	ng/mL	3.69	2.75	3.22	29.19	Fail	No	
007	4	Day 4 8h	Nicotine	ng/mL	4.79	4.42	4.61	8.03	Pass	No	
007	2	Day 2 13h	Nicotine	ng/mL	2.70	2.70	2.70	0.00	Pass	No	
007	2	Day 2 19h	Nicotine	ng/mL	3.25	2.64	2.95	20.68	Fail	No	
007	2	Day 2 2h	Nicotine	ng/mL	2.85	2.79	2.82	2.13	Pass	No	
007	2	Day 2 7h	Nicotine	ng/mL	2.33	3.17	2.75	30.55	Fail	No	
007	1	Day 1 19h	Nicotine	ng/mL	5.58	5.37	5.48	3.83	Pass	No	
007	1	Day 1 4h	Nicotine	ng/mL	6.09	6.28	6.19	3.07	Pass	No	
007	1	Day 1 6h	Nicotine	ng/mL	9.59	9.53	9.56	0.63	Pass	No	
009	5	Day 5 10h	Nicotine	ng/mL	5.24	5.03	5.14	4.09	Pass	No	
009	5	Day 5 15h	Nicotine	ng/mL	6.05	5.66	5.86	6.66	Pass	No	
009	5	Day 5 3h	Nicotine	ng/mL	3.29	3.46	3.38	5.03	Pass	No	
009	4	Day 4 19h	Nicotine	ng/mL	3.05	2.78	2.92	9.25	Pass	No	
009	4	Day 4 5h	Nicotine	ng/mL	2.80	2.85	2.83	1.77	Pass	No	
009	4	Day 4 9h	Nicotine	ng/mL	5.65	5.54	5.60	1.96	Pass	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
009	3	Day 3 19h	Nicotine	ng/mL	3.64	3.85	3.75	5.60	Pass	No	
009	3	Day 3 7h	Nicotine	ng/mL	7.52	6.67	7.10	11.97	Pass	No	
009	3	Day 3 9h	Nicotine	ng/mL	8.65	8.47	8.56	2.10	Pass	No	
009	1	Day 1 13h	Nicotine	ng/mL	8.69	8.07	8.38	7.40	Pass	No	
009	1	Day 1 4h	Nicotine	ng/mL	37.1	35.4	36.3	4.68	Pass	No	
009	1	Day 1 8h	Nicotine	ng/mL	6.49	6.21	6.35	4.41	Pass	No	
011	5	Day 5 9h	Nicotine	ng/mL	0.926	0.907	0.917	2.07	Pass	No	
011	4	Day 4 15h	Nicotine	ng/mL	2.00	1.96	1.98	2.02	Pass	No	
011	4	Day 4 9h	Nicotine	ng/mL	7.05	6.67	6.86	5.54	Pass	No	
011	3	Day 3 19h	Nicotine	ng/mL	3.13	3.21	3.17	2.52	Pass	No	
011	3	Day 3 9h	Nicotine	ng/mL	5.36	5.19	5.28	3.22	Pass	No	
011	1	Day 1 5h	Nicotine	ng/mL	37.5	25.3	31.4	38.85	Fail	No	
012	4	Day 4 8h	Nicotine	ng/mL	5.42	4.92	5.17	9.67	Pass	No	
012	3	Day 3 11h	Nicotine	ng/mL	3.18	3.08	3.13	3.19	Pass	No	
012	3	Day 3 19h	Nicotine	ng/mL	2.12	1.94	2.03	8.87	Pass	No	
012	2	Day 2 10h	Nicotine	ng/mL	2.34	2.24	2.29	4.37	Pass	No	
012	2	Day 2 19h	Nicotine	ng/mL	2.03	1.95	1.99	4.02	Pass	No	
012	1	Day 1 13h	Nicotine	ng/mL	6.14	6.50	6.32	5.70	Pass	No	
012	1	Day 1 4h	Nicotine	ng/mL	8.02	8.62	8.32	7.21	Pass	No	
012	1	Day 1 5h	Nicotine	ng/mL	14.9	15.0	15.0	0.67	Pass	No	
013	4	Day 4 10h	Nicotine	ng/mL	1.22	1.29	1.26	5.56	Pass	No	
013	4	Day 4 6h	Nicotine	ng/mL	1.36	0.942	1.15	36.35	Fail	No	
013	3	Day 3 11h	Nicotine	ng/mL	2.52	4.02	3.27	45.87	Fail	No	
013	3	Day 3 19h	Nicotine	ng/mL	1.82	1.74	1.78	4.49	Pass	No	
013	2	Day 2 9h	Nicotine	ng/mL	6.74	6.07	6.41	10.45	Pass	No	
013	1	Day 1 15h	Nicotine	ng/mL	1.54	1.38	1.46	10.96	Pass	No	
013	1	Day 1 5h	Nicotine	ng/mL	6.58	6.65	6.62	1.06	Pass	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
015	4	Day 4 10h	Nicotine	ng/mL	1.48	1.47	1.48	0.68	Pass	No	
015	4	Day 4 8h	Nicotine	ng/mL	1.84	1.34	1.59	31.45	Fail	No	
015	3	Day 3 13h	Nicotine	ng/mL	2.53	1.59	2.06	45.63	Fail	No	
015	1	Day 1 5h	Nicotine	ng/mL	20.4	22.2	21.3	8.45	Pass	No	
018	5	Day 5 14h	Nicotine	ng/mL	1.61	1.61	1.61	0.00	Pass	No	
018	4	Day 4 16h	Nicotine	ng/mL	1.51	1.80	1.66	17.47	Pass	No	
018	4	Day 4 8h	Nicotine	ng/mL	3.19	3.53	3.36	10.12	Pass	No	
018	3	Day 3 19h	Nicotine	ng/mL	1.66	1.55	1.61	6.83	Pass	No	
018	3	Day 3 6h	Nicotine	ng/mL	3.93	3.61	3.77	8.49	Pass	No	
018	3	Day 3 8h	Nicotine	ng/mL	4.49	3.95	4.22	12.80	Pass	No	
018	2	Day 2 8h	Nicotine	ng/mL	0.949	0.966	0.958	1.77	Pass	No	
018	1	Day 1 19h	Nicotine	ng/mL	2.07	1.79	1.93	14.51	Pass	No	
018	1	Day 1 5h	Nicotine	ng/mL	12.2	12.3	12.3	0.81	Pass	No	
019	5	Day 5 19h	Nicotine	ng/mL	2.60	2.59	2.60	0.38	Pass	No	
019	5	Day 5 7h	Nicotine	ng/mL	6.66	6.65	6.66	0.15	Pass	No	
019	4	Day 4 10h	Nicotine	ng/mL	1.93	2.16	2.05	11.22	Pass	No	
019	4	Day 4 8h	Nicotine	ng/mL	2.15	2.22	2.19	3.20	Pass	No	
019	2	Day 2 11h	Nicotine	ng/mL	2.14	2.13	2.14	0.47	Pass	No	
019	2	Day 2 16h	Nicotine	ng/mL	1.51	1.49	1.50	1.33	Pass	No	
019	2	Day 2 7h	Nicotine	ng/mL	2.91	2.35	2.63	21.29	Fail	No	
019	1	Day 1 19h	Nicotine	ng/mL	1.98	1.91	1.95	3.59	Pass	No	
019	1	Day 1 5h	Nicotine	ng/mL	29.2	28.6	28.9	2.08	Pass	No	
021	5	Day 5 19h	Nicotine	ng/mL	2.80	2.72	2.76	2.90	Pass	No	
021	5	Day 5 8h	Nicotine	ng/mL	8.09	8.27	8.18	2.20	Pass	No	
021	4	Day 4 10h	Nicotine	ng/mL	2.62	2.93	2.78	11.15	Pass	No	
021	3	Day 3 9h	Nicotine	ng/mL	1.79	1.79	1.79	0.00	Pass	No	
021	2	Day 2 14h	Nicotine	ng/mL	1.56	1.48	1.52	5.26	Pass	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
021	2	Day 2 8h	Nicotine	ng/mL	2.21	2.05	2.13	7.51	Pass	No	
021	1	Day 1 19h	Nicotine	ng/mL	1.56	1.48	1.52	5.26	Pass	No	
021	1	Day 1 4h	Nicotine	ng/mL	17.8	17.1	17.5	4.00	Pass	No	
024	5	Day 5 10h	Nicotine	ng/mL	3.40	3.39	3.40	0.29	Pass	No	
024	5	Day 5 19h	Nicotine	ng/mL	1.94	2.40	2.17	21.20	Fail	No	
024	4	Day 4 11h	Nicotine	ng/mL	4.40	4.34	4.37	1.37	Pass	No	
024	4	Day 4 19h	Nicotine	ng/mL	2.43	2.49	2.46	2.44	Pass	No	
024	2	Day 2 13h	Nicotine	ng/mL	1.61	1.41	1.51	13.25	Pass	No	
024	1	Day 1 19h	Nicotine	ng/mL	4.94	4.49	4.72	9.53	Pass	No	
024	1	Day 1 5h	Nicotine	ng/mL	26.2	24.7	25.5	5.88	Pass	No	
026	5	Day 5 18h	Nicotine	ng/mL	1.59	1.46	1.53	8.50	Pass	No	
026	5	Day 5 8h	Nicotine	ng/mL	1.92	1.86	1.89	3.17	Pass	No	
026	4	Day 4 19h	Nicotine	ng/mL	2.54	2.58	2.56	1.56	Pass	No	
026	4	Day 4 9h	Nicotine	ng/mL	5.75	5.83	5.79	1.38	Pass	No	
026	2	Day 2 19h	Nicotine	ng/mL	1.70	1.60	1.65	6.06	Pass	No	
026	1	Day 1 15h	Nicotine	ng/mL	3.71	3.42	3.57	8.12	Pass	No	
026	1	Day 1 4h	Nicotine	ng/mL	17.9	19.1	18.5	6.49	Pass	No	
028	4	Day 4 19h	Nicotine	ng/mL	2.62	2.51	2.57	4.28	Pass	No	
028	4	Day 4 9h	Nicotine	ng/mL	3.15	2.96	3.06	6.21	Pass	No	
028	2	Day 2 7h	Nicotine	ng/mL	5.32	5.02	5.17	5.80	Pass	No	
028	1	Day 1 6h	Nicotine	ng/mL	14.6	14.0	14.3	4.20	Pass	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
001	5	Day 5 12h	Cotinine	ng/mL	100	96.1	98.1	3.98	Pass	No	95.2
001	5	Day 5 6h	Cotinine	ng/mL	92.1	90.3	91.2	1.97	Pass	No	
001	4	Day 4 11h	Cotinine	ng/mL	69.7	61.9	65.8	11.85	Pass	No	
001	4	Day 4 7h	Cotinine	ng/mL	64.9	51.3	58.1	23.41	Fail	No	
001	3	Day 3 10h	Cotinine	ng/mL	84.8	77.4	81.1	9.12	Pass	No	
001	3	Day 3 8h	Cotinine	ng/mL	75.1	62.8	69.0	17.83	Pass	No	
001	1	Day 1 19h	Cotinine	ng/mL	77.9	71.3	74.6	8.85	Pass	No	
001	1	Day 1 7h	Cotinine	ng/mL	81.1	89.4	85.3	9.73	Pass	No	
003	5	Day 5 12h	Cotinine	ng/mL	214	201	208	6.25	Pass	No	
003	5	Day 5 16h	Cotinine	ng/mL	199	193	196	3.06	Pass	No	
003	5	Day 5 8h	Cotinine	ng/mL	231	210	221	9.50	Pass	No	
003	4	Day 4 9h	Cotinine	ng/mL	149	145	147	2.72	Pass	No	
003	3	Day 3 13h	Cotinine	ng/mL	135	134	135	0.74	Pass	No	
003	3	Day 3 5h	Cotinine	ng/mL	152	130	141	15.60	Pass	No	
003	3	Day 3 8h	Cotinine	ng/mL	136	128	132	6.06	Pass	No	
003	1	Day 1 10h	Cotinine	ng/mL	134	126	130	6.15	Pass	No	
003	1	Day 1 17h	Cotinine	ng/mL	118	111	115	6.09	Pass	No	
003	1	Day 1 18h	Cotinine	ng/mL	120	113	117	5.98	Pass	No	
003	1	Day 1 3h	Cotinine	ng/mL	132	132	132	0.00	Pass	No	
003	1	Day 1 4h	Cotinine	ng/mL	178	152	165	15.76	Pass	No	
005	5	Day 5 5h	Cotinine	ng/mL	117	118	118	0.85	Pass	No	
005	5	Day 5 8h	Cotinine	ng/mL	120	120	120	0.00	Pass	No	
005	4	Day 4 11h	Cotinine	ng/mL	85.4	84.3	84.9	1.30	Pass	No	
005	4	Day 4 12h	Cotinine	ng/mL	81.7	79.1	80.4	3.23	Pass	No	
005	4	Day 4 9h	Cotinine	ng/mL	81.0	76.9	79.0	5.19	Pass	No	
005	2	Day 2 12h	Cotinine	ng/mL	92.3	83.2	87.8	10.36	Pass	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
005	2	Day 2 9h	Cotinine	ng/mL	119	82.4	101	36.24	Fail	No	
005	1	Day 1 13h	Cotinine	ng/mL	98.1	92.9	95.5	5.45	Pass	No	
005	1	Day 1 3h	Cotinine	ng/mL	92.7	92.9	92.8	0.22	Pass	No	
005	1	Day 1 4h	Cotinine	ng/mL	90.3	86.2	88.3	4.64	Pass	No	
005	1	Day 1 8h	Cotinine	ng/mL	97.2	95.7	96.5	1.55	Pass	No	
007	5	Day 5 11h	Cotinine	ng/mL	329	315	322	4.35	Pass	No	
007	5	Day 5 19h	Cotinine	ng/mL	306	294	300	4.00	Pass	No	
007	5	Day 5 1h	Cotinine	ng/mL	334	324	329	3.04	Pass	No	
007	5	Day 5 6h	Cotinine	ng/mL	324	318	321	1.87	Pass	No	
007	4	Day 4 15h	Cotinine	ng/mL	306	291	299	5.02	Pass	No	
007	4	Day 4 3h	Cotinine	ng/mL	342	300	321	13.08	Pass	No	
007	4	Day 4 8h	Cotinine	ng/mL	318	315	317	0.95	Pass	No	
007	2	Day 2 13h	Cotinine	ng/mL	352	331	342	6.14	Pass	No	
007	2	Day 2 19h	Cotinine	ng/mL	319	295	307	7.82	Pass	No	
007	2	Day 2 2h	Cotinine	ng/mL	358	316	337	12.46	Pass	No	
007	2	Day 2 7h	Cotinine	ng/mL	350	278	314	22.93	Fail	No	
007	1	Day 1 19h	Cotinine	ng/mL	353	345	349	2.29	Pass	No	
007	1	Day 1 4h	Cotinine	ng/mL	385	368	377	4.51	Pass	No	
007	1	Day 1 6h	Cotinine	ng/mL	392	340	366	14.21	Pass	No	
009	5	Day 5 10h	Cotinine	ng/mL	382	355	369	7.32	Pass	No	
009	5	Day 5 15h	Cotinine	ng/mL	374	346	360	7.78	Pass	No	
009	5	Day 5 3h	Cotinine	ng/mL	387	384	386	0.78	Pass	No	
009	4	Day 4 19h	Cotinine	ng/mL	333	330	332	0.90	Pass	No	
009	4	Day 4 5h	Cotinine	ng/mL	382	338	360	12.22	Pass	No	
009	4	Day 4 9h	Cotinine	ng/mL	359	356	358	0.84	Pass	No	
009	3	Day 3 19h	Cotinine	ng/mL	362	357	360	1.39	Pass	No	
009	3	Day 3 7h	Cotinine	ng/mL	388	361	375	7.20	Pass	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
009	3	Day 3 9h	Cotinine	ng/mL	381	365	373	4.29	Pass	No	
009	1	Day 1 13h	Cotinine	ng/mL	305	293	299	4.01	Pass	No	
009	1	Day 1 4h	Cotinine	ng/mL	328	312	320	5.00	Pass	No	
009	1	Day 1 8h	Cotinine	ng/mL	311	291	301	6.64	Pass	No	
011	5	Day 5 9h	Cotinine	ng/mL	48.9	50.4	49.7	3.02	Pass	No	
011	4	Day 4 15h	Cotinine	ng/mL	76.3	66.8	71.6	13.27	Pass	No	
011	4	Day 4 9h	Cotinine	ng/mL	82.6	77.6	80.1	6.24	Pass	No	
011	3	Day 3 19h	Cotinine	ng/mL	171	170	171	0.58	Pass	No	
011	3	Day 3 9h	Cotinine	ng/mL	208	194	201	6.97	Pass	No	
011	1	Day 1 5h	Cotinine	ng/mL	297	195	246	41.46	Fail	No	
012	4	Day 4 8h	Cotinine	ng/mL	268	262	265	2.26	Pass	No	
012	3	Day 3 11h	Cotinine	ng/mL	280	262	271	6.64	Pass	No	
012	3	Day 3 19h	Cotinine	ng/mL	236	232	234	1.71	Pass	No	
012	2	Day 2 10h	Cotinine	ng/mL	236	230	233	2.58	Pass	No	
012	2	Day 2 19h	Cotinine	ng/mL	220	222	221	0.90	Pass	No	
012	1	Day 1 13h	Cotinine	ng/mL	261	261	261	0.00	Pass	No	
012	1	Day 1 4h	Cotinine	ng/mL	271	265	268	2.24	Pass	No	
012	1	Day 1 5h	Cotinine	ng/mL	295	260	278	12.59	Pass	No	
013	4	Day 4 10h	Cotinine	ng/mL	72.0	70.1	71.1	2.67	Pass	No	
013	4	Day 4 6h	Cotinine	ng/mL	100	71.1	85.6	33.76	Fail	No	
013	3	Day 3 11h	Cotinine	ng/mL	119	113	116	5.17	Pass	No	
013	3	Day 3 19h	Cotinine	ng/mL	115	110	113	4.42	Pass	No	
013	2	Day 2 9h	Cotinine	ng/mL	77.8	70.7	74.3	9.56	Pass	No	
013	1	Day 1 15h	Cotinine	ng/mL	59.8	52.2	56.0	13.57	Pass	No	
013	1	Day 1 5h	Cotinine	ng/mL	58.6	57.3	58.0	2.24	Pass	No	
015	4	Day 4 10h	Cotinine	ng/mL	91.8	88.7	90.3	3.43	Pass	No	
015	4	Day 4 8h	Cotinine	ng/mL	126	90.3	108	33.06	Fail	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
015	3	Day 3 13h	Cotinine	ng/mL	94.3	96.6	95.5	2.41	Pass	No	
015	1	Day 1 5h	Cotinine	ng/mL	116	117	117	0.85	Pass	No	
018	5	Day 5 14h	Cotinine	ng/mL	121	117	119	3.36	Pass	No	
018	4	Day 4 16h	Cotinine	ng/mL	74.7	81.5	78.1	8.71	Pass	No	
018	4	Day 4 8h	Cotinine	ng/mL	69.6	76.8	73.2	9.84	Pass	No	
018	3	Day 3 19h	Cotinine	ng/mL	149	135	142	9.86	Pass	No	
018	3	Day 3 6h	Cotinine	ng/mL	154	141	148	8.78	Pass	No	
018	3	Day 3 8h	Cotinine	ng/mL	153	149	151	2.65	Pass	No	
018	2	Day 2 8h	Cotinine	ng/mL	75.6	65.7	70.7	14.00	Pass	No	
018	1	Day 1 19h	Cotinine	ng/mL	75.0	69.7	72.4	7.32	Pass	No	
018	1	Day 1 5h	Cotinine	ng/mL	77.1	76.3	76.7	1.04	Pass	No	
019	5	Day 5 19h	Cotinine	ng/mL	126	126	126	0.00	Pass	No	
019	5	Day 5 7h	Cotinine	ng/mL	119	117	118	1.69	Pass	No	
019	4	Day 4 10h	Cotinine	ng/mL	121	131	126	7.94	Pass	No	
019	4	Day 4 8h	Cotinine	ng/mL	126	139	133	9.77	Pass	No	
019	2	Day 2 11h	Cotinine	ng/mL	149	145	147	2.72	Pass	No	
019	2	Day 2 16h	Cotinine	ng/mL	136	140	138	2.90	Pass	No	
019	2	Day 2 7h	Cotinine	ng/mL	150	152	151	1.32	Pass	No	
019	1	Day 1 19h	Cotinine	ng/mL	182	171	177	6.21	Pass	No	
019	1	Day 1 5h	Cotinine	ng/mL	180	181	181	0.55	Pass	No	
021	5	Day 5 19h	Cotinine	ng/mL	154	158	156	2.56	Pass	No	
021	5	Day 5 8h	Cotinine	ng/mL	120	126	123	4.88	Pass	No	
021	4	Day 4 10h	Cotinine	ng/mL	120	136	128	12.50	Pass	No	
021	3	Day 3 9h	Cotinine	ng/mL	153	145	149	5.37	Pass	No	
021	2	Day 2 14h	Cotinine	ng/mL	137	123	130	10.77	Pass	No	
021	2	Day 2 8h	Cotinine	ng/mL	130	127	129	2.33	Pass	No	
021	1	Day 1 19h	Cotinine	ng/mL	114	102	108	11.11	Pass	No	

Subject	Period	Time Point	Analyte	Units	Original Value	Reassay Value	Mean Value	% Difference	Reproducible?	Event?	% of Passing ISR Samples
021	1	Day 1 4h	Cotinine	ng/mL	124	116	120	6.67	Pass	No	
024	5	Day 5 10h	Cotinine	ng/mL	230	209	220	9.55	Pass	No	
024	5	Day 5 19h	Cotinine	ng/mL	186	199	193	6.74	Pass	No	
024	4	Day 4 11h	Cotinine	ng/mL	216	208	212	3.77	Pass	No	
024	4	Day 4 19h	Cotinine	ng/mL	198	197	198	0.51	Pass	No	
024	2	Day 2 13h	Cotinine	ng/mL	163	154	159	5.66	Pass	No	
024	1	Day 1 19h	Cotinine	ng/mL	187	173	180	7.78	Pass	No	
024	1	Day 1 5h	Cotinine	ng/mL	183	186	185	1.62	Pass	No	
026	5	Day 5 18h	Cotinine	ng/mL	135	130	133	3.76	Pass	No	
026	5	Day 5 8h	Cotinine	ng/mL	162	154	158	5.06	Pass	No	
026	4	Day 4 19h	Cotinine	ng/mL	171	181	176	5.68	Pass	No	
026	4	Day 4 9h	Cotinine	ng/mL	182	186	184	2.17	Pass	No	
026	2	Day 2 19h	Cotinine	ng/mL	188	168	178	11.24	Pass	No	
026	1	Day 1 15h	Cotinine	ng/mL	253	244	249	3.61	Pass	No	
026	1	Day 1 4h	Cotinine	ng/mL	282	273	278	3.24	Pass	No	
028	4	Day 4 19h	Cotinine	ng/mL	228	239	234	4.70	Pass	No	
028	2	Day 2 7h	Cotinine	ng/mL	147	135	141	8.51	Pass	No	
028	1	Day 1 6h	Cotinine	ng/mL	145	141	143	2.80	Pass	No	

Table 9. Incurred Sample Reproducibility Batch Statistics

Nicotine

Batch Number	STD B 0.500 ng/mL	STD C 1.00 ng/mL	STD D 2.00 ng/mL	STD E 4.00 ng/mL	STD F 8.00 ng/mL	STD G 10.0 ng/mL	STD H 20.0 ng/mL	STD I 40.0 ng/mL	STD J 50.0 ng/mL
39	0.499	0.993	1.99	4.06	8.75	9.89	19.5	39.0	48.1
%Theoretical	99.8	99.3	99.5	101.5	109.4	98.9	97.5	97.5	96.2
n	1	1	1	1	1	1	1	1	1

Batch Number	QC A 1.50 ng/mL	QC B 8.00 ng/mL	QC C 37.5 ng/mL
39	1.39	8.01	32.0
#2	1.42	7.64	34.0
Mean	1.41	7.83	33.0
%Theoretical	94.0	97.9	88.0
n	2	2	2

Calibration Curve Parameters:

Regression Method = LINEAR - Weighting Factor = 1/X**2

Slope = 0.689439891

Intercept = -0.0348234704

R-Squared = 0.9980

LLOQ = 0.500 ULOQ = 50.0

Batch Number	STD B 0.500 ng/mL	STD C 1.00 ng/mL	STD D 2.00 ng/mL	STD E 4.00 ng/mL	STD F 8.00 ng/mL	STD G 10.0 ng/mL	STD H 20.0 ng/mL	STD I 40.0 ng/mL	STD J 50.0 ng/mL
40	0.500	0.998	1.95	4.11	8.35	10.3	20.0	39.2	47.5
%Theoretical n	100.0 1	99.8 1	97.5 1	102.8 1	104.4 1	103.0 1	100.0 1	98.0 1	95.0 1

Batch Number	QC A 1.50 ng/mL	QC B 8.00 ng/mL	QC C 37.5 ng/mL
40	1.46 1.42	7.52 7.82	34.0 33.6
Mean	1.44	7.67	33.8
%Theoretical n	96.0 2	95.9 2	90.1 2

Calibration Curve Parameters:

Regression Method = LINEAR - Weighting Factor = $1/X^{**2}$

Slope = 0.680218734

Intercept = -0.0405454439

R-Squared = 0.9988

LLOQ = 0.500 ULOQ = 50.0

Batch Number	STD B 0.500 ng/mL	STD C 1.00 ng/mL	STD D 2.00 ng/mL	STD E 4.00 ng/mL	STD F 8.00 ng/mL	STD G 10.0 ng/mL	STD H 20.0 ng/mL	STD I 40.0 ng/mL	STD J 50.0 ng/mL
43	0.499	0.986	2.06	4.02	8.31	9.90	19.9	39.4	48.5
%Theoretical n	99.8 1	98.6 1	103.0 1	100.5 1	103.9 1	99.0 1	99.5 1	98.5 1	97.0 1

Batch Number	QC A 1.50 ng/mL	QC B 8.00 ng/mL	QC C 37.5 ng/mL	QC C DF2 37.5 ng/mL	QC E DF10 195 ng/mL
43	1.42 1.53	7.63 7.38	34.6 ~ 31.7	36.0 35.0 33.1	187 183 174
Mean	1.48	7.51	33.2	34.7	181
S.D.	N/AP	N/AP	N/AP	1.47	6.66
%CV	N/AP	N/AP	N/AP	4.2	3.7
%Theoretical n	98.7 2	93.9 2 2	88.5	92.5 3	92.8 3

Flagged Value
~ >15% Theoretical

Calibration Curve Parameters:
Regression Method = LINEAR - Weighting Factor = 1/X**2
Slope = 0.682005797
Intercept = -0.00768372725
R-Squared = 0.9994
LLOQ = 0.500 ULOQ = 50.0

Cotinine

Batch Number	STD B 1.00 ng/mL	STD C 2.00 ng/mL	STD D 4.00 ng/mL	STD E 8.00 ng/mL	STD F 16.0 ng/mL	STD G 40.0 ng/mL	STD H 80.0 ng/mL	STD I 160 ng/mL	STD J 200 ng/mL
39	0.999	1.97	4.02	8.11	18.1	40.3	77.2	152	190
%Theoretical	99.9	98.5	100.5	101.4	113.1	100.8	96.5	95.0	95.0
n	1	1	1	1	1	1	1	1	1

Batch Number	QC A 3.00 ng/mL	QC B 37.5 ng/mL	QC C 150 ng/mL
39	3.04	36.7	143
	3.13	34.6	138
Mean	3.09	35.7	141
%Theoretical	103.0	95.2	94.0
n	2	2	2

Calibration Curve Parameters:

Regression Method = LINEAR - Weighting Factor = $1/X^{**2}$

Slope = 0.0784021873

Intercept = 0.00312469149

R-Squared = 0.9960

LLOQ = 1.00 ULOQ = 200

Batch Number	STD B 1.00 ng/mL	STD C 2.00 ng/mL	STD D 4.00 ng/mL	STD E 8.00 ng/mL	STD F 16.0 ng/mL	STD G 40.0 ng/mL	STD H 80.0 ng/mL	STD I 160 ng/mL	STD J 200 ng/mL
40	0.995	1.99	3.95	8.29	17.8	39.1	76.7	156	192
%Theoretical	99.5	99.5	98.8	103.6	111.3	97.8	95.9	97.5	96.0
n	1	1	1	1	1	1	1	1	1

Batch Number	QC A 3.00 ng/mL	QC B 37.5 ng/mL	QC C 150 ng/mL
40	~ 3.52 3.26	35.3 36.9	148 142
Mean	3.39	36.1	145
%Theoretical	113.0	96.3	96.7
n	2	2	2

Flagged Value
~>15% Theoretical

Calibration Curve Parameters:
Regression Method = LINEAR - Weighting Factor = 1/X**2
Slope = 0.0758298016
Intercept = 0.00153660313
R-Squared = 0.9969
LLOQ = 1.00 ULOQ = 200

Batch Number	STD B 1.00 ng/mL	STD C 2.00 ng/mL	STD D 4.00 ng/mL	STD E 8.00 ng/mL	STD F 16.0 ng/mL	STD G 40.0 ng/mL	STD H 80.0 ng/mL	STD I 160 ng/mL	STD J 200 ng/mL
43	0.987	2.03	3.96	8.17	17.7	39.6	78.9	155	187
%Theoretical n	98.7 1	101.5 1	99.0 1	102.1 1	110.6 1	99.0 1	98.6 1	96.9 1	93.5 1

Batch Number	QC A 3.00 ng/mL	QC B 37.5 ng/mL	QC C 150 ng/mL	QC C DF2 150 ng/mL	QC E DF10 780 ng/mL
43	3.07 3.08	34.6 34.5	146 135	148 151 145	786 760 742
Mean	3.08	34.6	141	148	763
S.D.	N/AP	N/AP	N/AP	3.00	22.1
%CV	N/AP	N/AP	N/AP	2.0	2.9
%Theoretical n	102.7 2	92.3 2	94.0 2	98.7 3	97.8 3

Calibration Curve Parameters:

Regression Method = LINEAR - Weighting Factor = $1/X^{**2}$

Slope = 0.0784155751

Intercept = -0.00104271024

R-Squared = 0.9972

LLOQ = 1.00 ULOQ = 200

FIGURES

Figure 1. Calibration Curve Nicotine

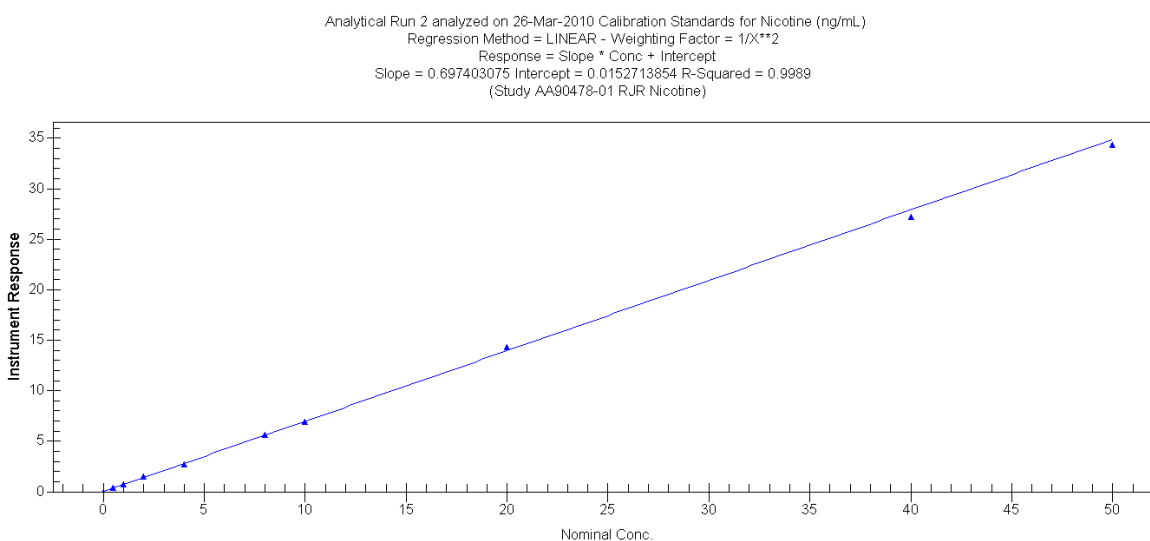
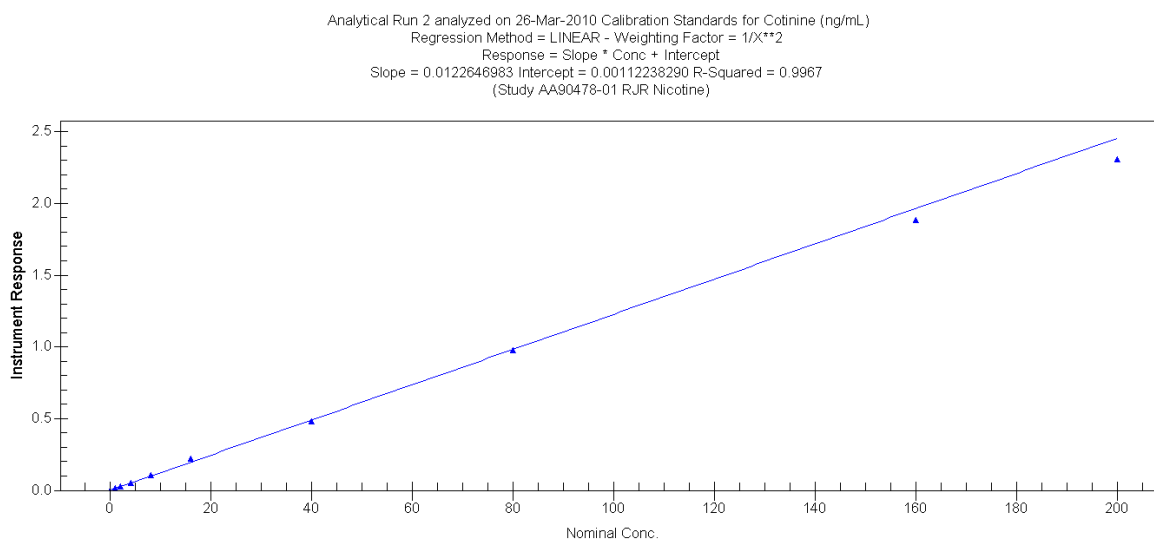


Figure 2. Calibration Curve Cotinine



ATTACHMENTS

Attachment 1. Quality Assurance Statement

QUALITY ASSURANCE

Various portions of this study were audited by the Quality Assurance Unit of Celerion and were checked for compliance with applicable Federal Regulations and Celerion Standard Operating Procedures.

The dates the audits were performed, the areas audited, and the dates the audit reports were submitted to Celerion management are listed below.

Area Audited	Date of Audit	Date Audit Issued to Celerion Management
Database	04-Jun-2010	04-Jun-2010
Bioanalytical Report	21-Jun-2010	21-Jun-2010



Amy Sherwood
Quality Assurance Auditor, Bioanalytical



Date

Attachment 2. Sample Analysis Plan



621 Rose Street
Lincoln, NE 68502 USA
www.celerion.com
Tel: 402-476-2811
Toll Free: 800-776-1716
Fax: 402-939-0428

AMENDMENT 1 TO SAMPLE ANALYSIS PLAN

Bioanalysis of Nicotine and Cotinine in Human Serum In Support of Clinical Protocol CSD0914:

Assessment of Serum Nicotine Exposure from Modern Smoke-Free Tobacco Products

R. J. Reynolds Tobacco Company
P.O. Box 1487
Winston-Salem, NC 27102

Celerion-Lincoln Study: AA90478-01


Kirk Newland
Bioanalytical Principal Investigator
Celerion
621 Rose Street
Lincoln, NE 68502

Date: 20-Apr-2010

AMENDMENT SIGNATURE PAGE

<u>Amendment No.</u>	<u>Description</u>	<u>Date</u>
1	Globally changed MDS Pharma Services to Celerion	April 2010


The April 2010 amendments have been reviewed and approved by the individuals listed below.



Kirk Newland, B.S.
Bioanalytical Principal Investigator
Celerion, Lincoln, Nebraska

20-Apr-2010

Date



Mandy Boucher
Quality Assurance Auditor – Bioanalytical
Celerion, Lincoln, Nebraska

20 Apr 2010

Date

SIGNATURE PAGE

Herewith it is confirmed that this study will be performed according to and using Standard Operating Procedures (SOPs) in place in the bioanalytical laboratory of Celerion, Lincoln, Nebraska. These SOPs are written based on the principles and requirements described in a) 21 CFR Part 58, United States Code of Federal Regulations, and b) Guidance: Bioanalytical Method Validation, CDER, 2001.

BIOANALYTICAL:

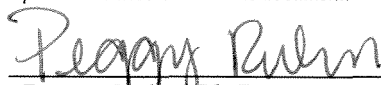


19-Mar-2010

Kirk Newland, B.S.
Bioanalytical Principal Investigator
Bioanalytical Department

Date

Signature of the MDS Pharma Services Bioanalytical Principal Investigator indicates approval of the procedure described in this document.



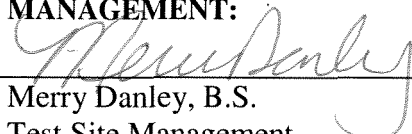
19-Mar-2010

Peggy Ruhn, Ph.D.
Substitute Bioanalytical Principal Investigator
Bioanalytical Department

Date

Signature of the MDS Pharma Services Bioanalytical Principal Investigator indicates approval of the procedure described in this document.

MANAGEMENT:



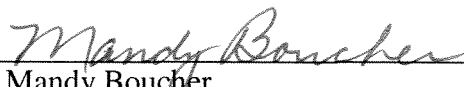
19-Mar-2010

Merry Danley, B.S.
Test Site Management
Bioanalytical Department

Date

Signature of the MDS Pharma Services Management personnel indicates approval of the procedure described in this document.

QUALITY ASSURANCE UNIT:



19 Mar 2010

Mandy Boucher
Quality Assurance Auditor
Quality Assurance Unit

Date

Signature by the primary MDS Pharma Services Quality Assurance Auditor responsible for the requirements outlined in this document indicates that it has been approved and that it complies with established practices and procedures, company standards, and applicable rules and regulations.

Mitch Stiles 3/26/10
Date
Sr. Manager – Product Integrity
R. J. Reynolds Tobacco Company

TABLE OF CONTENTS

TITLE PAGE	1
AMENDMENT SIGNATURE PAGE	2
SIGNATURE PAGE	3
ACRONYMS AND ABBREVIATIONS	7
1. PURPOSE OF THE BIOANALYTICAL STUDY	9
2. MATERIAL - REFERENCE ITEM(S)	9
3. METHOD SUMMARY	9
4. COMPUTER APPLICATION PROGRAMS	10
5. STUDY SAMPLES.....	11
5.1. Sample Source and Date of Receipt.....	11
5.2. Sample Management	11
6. DESCRIPTION OF AN ANALYTICAL RUN	11
7. ANALYTICAL RUN ACCEPTANCE CRITERIA	12
8. REASSAYS	12
8.1. Reassay For Analytical Reasons	12
8.2. Analytical Investigation	12
8.3. Incurred Sample Reproducibility	13
8.4. Sponsor Selected Reassays.....	13
9. STUDY ADMINISTRATION	13
9.1. Quality Assurance	13
9.2. Event Investigations and Deviations	14
9.3. Reporting of Bioanalytical Study Results	14
10. DATA STORAGE AND ARCHIVING	14
11. REFERENCES	14

12. CELERION GLOBAL AND LOCAL STANDARD OPERATING PROCEDURE TABLE OF CONTENTS.....	15
--------------------------------------------------------------------------------------	----

ACRONYMS AND ABBREVIATIONS

Acronyms/Abbreviations	Meaning
°C	degree Celsius (centigrade)
µg	microgram
AB	Applied Biosystems
API	atmospheric pressure ionization
BAM	bioanalysis method
BLK	blank
CDER	Center for Drug Evaluation and Research
CFR	Code of Federal Regulations
CV	coefficient of variation
Da	Dalton
EDTA	ethylenediaminetetraacetic acid
EXT	extraction
g	gram
GLP	good laboratory practices
h	hour
HDPE	high density polyethylene
HPLC	high performance liquid chromatography
ID	identification
INC	incongruous
INS	instrumentation
IS	internal standard
ISA	insufficient volume for full analysis
ISP	incomplete sample processing
ISR	incurred sample reproducibility
ISV	insufficient volume
IVR	insufficient volume to reassay
L	litre, liter
LLOQ	lower limit of quantitation
LNK	Celerion, Lincoln site
M	molar
mg	milligram
mL	millilitre, milliliter
mol	mole
MS	mass spectrometry
MW	molecular weight
n	number of data
N/AP	not applicable
N/AV	not available
NFV	not full volume
ng	nanogram
No.	number
NU	not used
OECD	Organization for Economic Cooperation and Development

Acronyms/Abbreviations	Meaning
PE	Perkin Elmer
Pd	Period
pg	picogram
QC	quality control
QCs	quality control samples
REF	reference
RI	reinjection
Rm.T.	room temperature
RR	reanalysis
RVL	remaining volume low
S.D.	standard deviation
SOP	standard operating procedure
SPE	solid-phase extraction
SST	system suitability test
STD	standard
Sub	subject
SVD	sample volume depleted
TBD	to be determined
Temp	temperature
ULOQ	upper limit of quantitation
USP	US pharmacopeia
\bar{x}	mean

1. PURPOSE OF THE BIOANALYTICAL STUDY

The purpose of the bioanalytical study is to determine the concentration of nicotine and cotinine in human serum study samples using a validated LC-MS/MS bioanalytical method.

2. MATERIAL - REFERENCE ITEM(S)

Only appropriately characterized and currently certified reference standards will be used for quantitation purposes.

3. METHOD SUMMARY

METHOD SUMMARY

(b) (4)



¹ The quality control samples used for dilution may be adjusted based on the observed sample concentrations.

METHOD SUMMARY

(b) (4)



4. COMPUTER APPLICATION PROGRAMS

Instrument specific software

Applied Biosystems Analyst[®] version 1.4.1

Watson[™] Bioanalytical LIMS version 7.3 for Windows

Labnotes[™] version 1.8

Higher versions may be used; this will be documented in the bioanalytical report.

² The quality control samples used for dilution may be adjusted based on the observed sample concentrations.

5. STUDY SAMPLES

5.1. Sample Source and Date of Receipt

The clinical study summary of protocol number CSD0914 specifies a planned number of 15 subjects, 19 sampling times and 5 periods.^[1]

Number of study samples planned to be analyzed	1425
Sample Arrival ^a	January, 2010
QCd data available	April, 2010
QAd data available	April, 2010
Sample Storage Temperature	-20°C
Analysis	Single analysis of all samples
Placebo Analysis	No placebo samples
Expected C _{max}	Not applicable
Sample Pre-dilutions	All period 1 samples will be prediluted with a DF=10. No predilutions will be used for the remainder of the periods.

^a The actual date(s) will be recorded in the study documentation and in the bioanalytical report.

5.2. Sample Management

After arrival, study samples will be logged into the LIMS (Laboratory Information Management System) of Celerion. The Sponsor and/or clinical representative will be informed of any discrepancy between individual sample identification and the shipment documentation.

6. DESCRIPTION OF AN ANALYTICAL RUN

Study samples will be analyzed according to the requirements of the clinical study design. When possible, all study samples for a given subject will initially be analyzed within the same analytical batch.

An analytical run, at a minimum, will contain ≥ 2 blank samples (to reflect at least 2% of the study samples), 2 standard zero samples (blank sample with the internal standard added), and a minimum of 1 replicate of 9 different calibration standards (non-zero standard samples).

A number of ≥ 2 QC samples at a minimum of 3 concentrations will be included to reflect at least 5% of the number of study samples. As required, dilution integrity of study samples is verified by the inclusion of at least 3 dilution QC samples (high QC samples may be used as dilution QC samples, if applicable), diluted in the same way as the study samples (for each dilution factor).

7. ANALYTICAL RUN ACCEPTANCE CRITERIA

(b) (4)



8. REASSAYS

8.1. Reassay For Analytical Reasons

If study samples are identified to be reassayed, these will be conducted according to Celerion SOPs.

8.2. Analytical Investigation

On occasion, unexpected analytical results may be obtained for individual study samples. Such values are defined as Events and are investigated and documented (refer also to Section 9.2). An Event Investigation may not always find an assignable cause that addresses the unexpected result. Hypotheses are formed with various possibilities of explaining the unexpected result. If a cause is not determined, the sample may be coded 'Value Requiring Confirmation' (VRC) and reassayed for confirmatory purposes.

If sufficient sample volume remains, VRC reassays are prepared and analyzed at least in singlet and preferably in duplicate or triplicate. The results are reported according to Celerion SOPs.

Bracketing samples (BSS) may be reassayed along with VRC samples. The bracketing samples selected and the reason for including bracketing study samples is documented before reassay.

8.3. Incurred Sample Reproducibility

The purpose of Incurred Sample Reproducibility (ISR) testing is to demonstrate that the analysis of clinical samples is reproducible for a given bioanalytical method, study population, and bioanalysis site.

Clinical samples will be selected for repeat analysis from multiple analytical run. The selected samples should represent the concentration range observed in the study.

The number of samples selected will be based on the total number of clinical samples analyzed in the study. For studies where the number of analyzed clinical samples is less than 1000, at least 10% of the analyzed samples will be selected with a minimum number of 20 samples. For studies where the number of analyzed clinical samples is greater than 1000 samples in size, an additional 5% of samples beyond the initial 1000 will be selected for testing.

Based on the approximate (1425) samples anticipated in protocol CSD0914 summary, at least 122 samples will be selected for ISR analysis.

ISR testing through repeat analysis of the clinical samples will be performed within the validated stability period for the bioanalytical method when possible.

The paired analysis will be considered acceptable if the repeat analysis has a percent difference $\leq 20\%$ for chromatographic/spectrometric methods. The ISR testing will be considered acceptable if $> 66.7\%$ of the reassayed values meet pair matching criteria.

8.4. Sponsor Selected Reassays

The Sponsor may request the reassay of study samples. The Sponsor must authorize the reassays in writing. It is the responsibility of the Sponsor to establish the reassay procedure prior to the initiation of study sample reanalysis. This procedure must be documented and it must specify the reason samples are selected for reassay and how they are reported prior to the reassay of samples. These samples are to be identified as 'SSR' (Sponsor Selected Reassay).

9. STUDY ADMINISTRATION

9.1. Quality Assurance

The Quality Assurance Unit (QAU) will review the Sample Analysis Plan (and any amendment(s)), and inspect the raw data and the final bioanalytical report (and any amendment(s)). All findings will be reported to the Study Director (if applicable) and the Bioanalytical Principal Investigator and Management. A Quality Assurance statement will be issued at the end of the bioanalytical study.

9.2. Event Investigations and Deviations

Unexpected occurrences and/or results will be investigated as an “Event” and documented according to Celerion SOPs. The impact of the Event on the study will be assessed and documented in the “Analytical Notes” section of the final bioanalytical report.

Deviations to an SOP, Clinical Protocol, or Sample Analysis Plan will be documented according to Celerion SOPs. This will describe the deviation and the action that was taken to resolve the issue. An assessment will be made of the impact on the study by the Bioanalytical Principal Investigator. All deviations categorized as “Critical” will be summarized in the “Analytical Notes” section of the Bioanalytical Report.

The QAU will review and sign all documentation for each Event Investigation or Deviation.

9.3. Reporting of Bioanalytical Study Results

Bioanalytical study sample results will be provided to the Sponsor in Microsoft Excel™ .xls file format (using 3 significant figures).

When determining the concentration of study samples, no extrapolation is permitted beyond the nominal values of the Lower Limit of Quantitation (LLOQ) and the Upper Limit of Quantitation (ULOQ) standards used to define the validated range. If necessary, samples are reassayed according to Celerion SOPs.

Celerion will provide a draft bioanalytical report for Sponsor’s review. If no comments are received within 90 days, Celerion reserves the right to issue the final bioanalytical report. The electronic copy in Adobe® Acrobat PDF format of the signed final bioanalytical report will be forwarded to the Sponsor. The original hardcopy of the bioanalytical report will be archived at Celerion.

The report will be sent to R. J. Reynolds Tobacco Company in an email. All corrections to the signed final bioanalytical report will be performed by means of an amendment.

10. DATA STORAGE AND ARCHIVING

All relevant project-related documentation, electronic data, and study correspondence will be stored at the Celerion, Lincoln, Nebraska Archive as described in Celerion Local Operations SOPs.

11. REFERENCES

- [1] Protocol Title: “Assessment of Serum Nicotine Exposure from Modern Smoke-Free Tobacco Products”
- [2] Bioanalytical Method SOP for the Determination of Nicotine and Cotinine in Human Serum, Celerion Study AA33664-5

12. CELERION GLOBAL AND LOCAL STANDARD OPERATING PROCEDURE TABLE OF CONTENTS

Global Bioanalytical Services Division GL-BIO-xxxxx or MDSPS-GBL-BAS G-xxx Series				
SOP Title	Document Number	Issue Number	Ed Center Document Number (if applicable)	Effective Date
Principal Investigator and Sample Analysis Plan	GL-BIO-10600	02	N/AP	06-Jan-2009
Chromatographic and Spectrometric Methods: Calibration Curve Preparation, Specifications and Acceptance Criteria	GL-BIO-10602	05	N/AP	13-Oct-2009
Reporting of Data Generated from the Analysis of Biological Matrices and the Reassay of Samples	GL-BIO-10603	03	N/AP	30-Apr-2008
Reference Standard Receipt, Preparation, Storage, and Disposal	GL-BIO-10604	02	N/AP	10-Mar-2009
Qualification of Analytical Instruments and Equipment	GL-BIO-10605	02	N/AP	12-Jun-2009
Quantitative Ligand-Binding Assays: Validation	GL-BIO-10606	03	N/AP	26-Aug-2009
Quantitative Ligand-Binding Assays: Calibration Curve Preparation, Assay Specifications and Acceptance Criteria	GL-BIO-10607	04	N/AP	16-Dec-2009
Event Resolution	GL-BIO-10608	03	N/AP	29-Jun-2009
Change Control Procedure for Computerized Systems in Bioanalysis	GL-BIO-10609	02	N/AP	12-Jun-2009
Chromatographic Peak Identification, Review and Acceptance	GL-BIO-10610	01	N/AP	30-Apr-2008
³ Equipment Operation, Calibration, Maintenance and Repair	GL-BIO-10612	00	N/AP	23-Jul-2008
Refrigerators, Freezers and Controlled Temperature Area	GL-BIO-10613	00	N/AP	23-Jul-2008
Reports, Amendments and Revisions	GL-BIO-10615	01	N/AP	01-Feb-2010
Study Correspondence	GL-BIO-10616	00	N/AP	06-Jun-2008
¹ Documentation of a Deviation	GL-BIO-10617	00	N/AP	07-May-2008
BAS Standard Operating Procedure Process	GL-BIO-10618	01	N/AP	19-Nov-2008

³ Note to File Attached

Global Bioanalytical Services Division GL-BIO-xxxxx or MDSPS-GBL-BAS G-xxx Series				
SOP Title	Document Number	Issue Number	Ed Center Document Number (if applicable)	Effective Date
Master Schedule for Non-Clinical Laboratory Studies	GL-BIO-10619	01	N/AP	06-Jan-2009
Chromatographic Method Development – Experimental Design and R & D Summary Documentation	GL-BIO-10620	01	N/AP	16-Apr-2009
Method Qualification of a Chromatographic Assay	GL-BIO-10622	02	N/AP	03-Nov-2009
Method Validation of a Chromatographic Assay	GL-BIO-10623	02	N/AP	21-Aug-2009
Content of Study Plans and Protocols for Method Validation	GL-BIO-10624	01	N/AP	24-Apr-2009
Incurred Sample Reproducibility	GL-BIO-10630	03	N/AP	06-Jul-2009
eLab Notebook Forms Control and Versioning	GL-BIO-10631	01	N/AP	10-Mar-2009
Biological Matrix Receipt, Storage, and Disposal	GL-BIO-10632	01	N/AP	13-Jul-2009
Labnotes™ Device Installation	GL-BIO-10633	02	NAP	06-Oct-2009
LBS and CBA Method Development Design, Qualification, and Documentation	GL-BIO-10635	02	N/AP	03-Nov-2009
Equipment Qualification and Maintenance Using Labnotes™	GL-BIO-10636	01	N/AP	20-Nov-2009
Balance Qualification and Maintenance in Labnotes™	GL-BIO-10637	02	N/AP	29-Dec-2009
Pipette Qualification and Maintenance in Labnotes™	GL-BIO-10638	02	N/AP	02-Feb-2010
Chemicals and Materials Receipt, Storage, and Disposal Using Labnotes™	GL-BIO-10642	01	N/AP	04-Feb-2010
BAS Quality Council Review	MDSPS-GBL-BAS G-001	01	GBL-BAS G-001	01-Aug-2008
BAS Document Control	MDSPS-GBL-BAS G-002	01	GBL-BAS G-002	31-Oct-2008
Quality Issues Resolution and Corrective / Preventive Action in BAS	MDSPS-GBL-BAS G-003	01	GBL-BAS G-003	04-Sep-2008
Hosting a Regulatory Inspection in BAS	MDSPS-GBL-BAS G-004	01	GBL-BAS G-004	03-Sep-2008

Global Bioanalytical Services Division GL-BIO-xxxxx or MDSPS-GBL-BAS G-xxx Series				
SOP Title	Document Number	Issue Number	Ed Center Document Number (if applicable)	Effective Date
Hosting a Client Audit in BAS	MDSPS-GBL-BAS G-005	01	GBL-BAS G-005	03-Sep-2008
Customer Quality Complaint Management in BAS	MDSPS-GBL-BAS G-006	01	GBL-BAS G-006	02-Sep-2008
Training and Records in Bioanalysis	MDSPS-GBL-BAS G-007	01	GBL-BAS G-007	31-Oct-2008

Global QA BIO SOPs – GL-QA-BIO-xxxxx or GL-ESD QA-xxxx Series			
SOP Title	Document No.	Issue No.	Effective Date
⁴ Critical Phase Inspections	GL-QA-BIO-10109	00	25-Mar-2008
Quality Assurance Audit Reports	GL-ESD QA-12001	01	05-Mar-2009
⁵ Internal Audit Program	GL-ESD QA-12003	01	18-Sep-2009
System/Process Audit	GL-ESD QA-12004	02	05-Oct-2009
Responding to Regulatory and Client Findings in ESD	GL-ESD QA-12008	01	31-Aug-2009
Vendor Audits	GL-ESD QA-12009	01	15-Oct-2009
Validation Deliverable Auditing Process	GL-ESD QA-12010	01	15-Nov-2009
ANVISA Regulatory Compliance	GL-ESD QA-12011	01	16-Oct-2009
Audit of Study Related Submissions in BAS	GL-ESD QA-12012	01	20-Nov-2009

⁴ Deviation Attached

⁵ Two Notes to File Attached

Bioanalytical Services Division – 03.01.xxx Series

SOP Title	Document No.	Issue No.	Effective Date
General Safety and Emergency Instructions	03.01.004	17	01-Apr-2009
Non-Electronic Raw Data	03.01.005	9	30-Apr-2008
Laboratory Documentation	03.01.009	19	30-Apr-2009
Power Failure Instructions	03.01.011	15	09-Jul-2009
Lincoln BAS (Bioanalytical Services) Management Responsibilities	03.01.034	11	08-May-2009
Bioanalysis Principal Investigator Responsibilities	03.01.036	9	21-Apr-2008
Training Documentation of Bioanalytical Associates	03.01.044	8	20-Nov-2009
Working Instructions	03.01.048	4	01-Sep-2008
Reinjections	03.01.049	4	13-Mar-2009
Recertification of Internal Standards by LCMS for Identity and Isotopic Purity Confirmation	03.01.052	2	14-Apr-2009
Archiving and Retrieving of Studies and Data in Labnotes™	03.01.056	1	29-Jun-2009
Bioanalytical Method (BAM) Procedures, BAM SOPs, and System Settings	03.01.057	2	16-Apr-2009
Freezer and Refrigerator Monitoring and Maintenance	03.01.058	2	10-May-2009
Recording and Storage of Non-electronic Raw Data in a Binder	03.01.059	3	13-Mar-2009
Creating an UISR Report Using Inspector Software	03.01.060	2	09-Mar-2009
⁶ Documentation of a Deviation	03.01.061	2	02-Jul-2009
^{7 & 8} Event Management and Resolution	03.01.062	2	02-Jul-2009
Archiving and De-archiving of Studies in Watson™	03.01.064	2	04-Jun-2009
Archiving Electronic Data	03.01.065	2	29-Jun-2009
Glassware Washing and Suitability	03.01.067	1	13-Jul-2009
Bioanalytical Master Signature List	03.01.068	1	06-Feb-2009
SOP Processes and Document Control in Bioanalytical	03.01.069	2	30-Jun-2009
Change Control	03.01.071	4	12-Nov-2009

⁶ Deviation Attached

⁷ Two Deviations Attached

⁸ Note to File Attached

SOP Title	Document No.	Issue No.	Effective Date
Method Qualification of a Chromatographic Assay	03.01.077	4	10-Dec-2009
¹ Method Validation of a Chromatographic Assay	03.01.078	6	10-Dec-2009
Chromatographic Validation Protocols	03.01.079	2	05-Oct-2009
Sample Management During Analysis	03.01.084	2	31-Aug-2009
Sample Management Post-analysis	03.01.086	3	12-Feb-2010
System Suitability Criteria	03.01.091	1	30-Mar-2009
Sample Management Pre-analysis	03.01.095	5	31-Aug-2009
Quality Control Review of Analytical Data	03.01.096	2	30-Sep-2009
Labeling in the Bioanalytical Laboratory	03.01.108	1	01-Sep-2008
Date and Time Format	03.01.109	1	05-Sep-2008
Reference Compound Weighing and Witnessing	03.01.110	1	22-Sep-2009
Reporting of Data and Reassay of Samples	03.01.111	1	16-Mar-2009
Stock Comparisons	03.01.113	1	30-Oct-2009

Bioanalytical Services Division – 03.02.xxx Series

SOP Title	Document No.	Issue No.	Effective Date
Pipet Check Procedure	03.02.046	17	13-May-2008
Laboratory Equipment Operation and Maintenance Procedures	03.02.047	13	03-Sep-2009
Radioisotope Detectors	03.02.049	7	18-May-2009
Plate Readers	03.02.051	7	25-May-2009
Barnstead NANOpure® Water Systems	03.02.057	6	12-Feb-2010
ELAN DRcE ICP-MS	03.02.061	2	29-Oct-2008
Operation and Use of the Savant Evaporators	03.02.062	2	31-Jul-2008
SHIMADZU HPLC System	03.02.069	2	30-May-2008
Maintenance of ELAN DRcE ICP-MS	03.02.072	1	22-Sep-2008
Instrument Analysis of an LCMS or HPLC Batch	03.02.073	2	08-May-2009
Daily Operation of the Zymark (Caliper) Sciclone ALH 3000	03.02.074	1	19-May-2009
Maintenance and Calibration of the Zymark (Caliper) Sciclone ALH 3000 Robot	03.02.075	1	19-May-2009

SOP Title	Document No.	Issue No.	Effective Date
Operation, Maintenance, and Calibration of the Centrifuges	03.02.076	1	30-Dec-2009
Operation and Maintenance of Cohesive HTLC System	03.02.077	1	15-Feb-2010
Operation and Maintenance of Jasco Pumps	03.02.078	1	15-Feb-2010
Maintenance of Perkin Elmer Pumps	03.02.079	1	19-Feb-2010
Fluorescence Detectors	03.02.080	1	27-Jan-2010

Site Management Division – 15.01.xxx Series			
---------------------------------------------	--	--	--

Archiving Methods and Procedures	15.01.003	5	27-Jun-2009
----------------------------------	-----------	---	-------------

Attachment 3. Method Validation Report

Attachment 4. Certificate(s) of Analysis

Johnson, Tom

AS/004263

⑨ 29 JUN 2009

From: Julie Boudries [julieb@isotope.com]
Sent: Wednesday, June 10, 2009 7:24 AM
To: Johnson, Tom
Subject: FW: Question from thomas johnson

Dear Tom,

I apologize that nobody has gotten back to you yet. The analytical work was performed on November 4, 2005. Please let me know if you need any additional details about the QC.

Best Regards,

Julie Boudries
 Customer Service Supervisor
 Cambridge Isotope Laboratories
 50 Frontage Road
 Andover, MA 01810
julieb@isotope.com
 phone: 1-800-322-1174 x291
 fax: 978-749-2768

exp date is 04 NOV 2007
 based on SOP GL-81010604-02
 ⑨ 29 JUN 2009

From: Johnson, Tom [mailto:Thomas.Johnson@mdsinc.com]
Sent: Tuesday, June 09, 2009 3:30 PM
To: Cambridge Isotope Labs
Subject: RE: Question from thomas johnson

Dear Cambridge,

Do you have a response for me yet?

Thank you,

Tom

From: webquestion@isotope.com [mailto:webquestion@isotope.com]
Sent: Friday, June 05, 2009 2:28 PM
To: cilsales@isotope.com
Cc: Johnson, Tom
Subject: Question from thomas johnson

QUESTION FROM THE CIL WEBSITE

From thomas johnson ON 06/05/2009 @ 03:27 PM**Question Type:** Technical Answer**Email:** tom.johnson@mdsinc.combr> **city:** Lincoln**State:** Nebraska**Country:** US**Organization:** mdspharma services**Title:** CofA Question

6/10/2009

question: Hi Cambridge, About 3 weeks ago we received from you the product DL-Nicotine (methyl-d3). We have an internal SOP that requires a date of authorization or testing date for the analytical work presented in the CofA. Please respond with either of these dates: The date Jeffrey O'Neill (QA) signed the CofA or the date the analytical work was done. Thanks Tom

This e-mail and any files transmitted with it may contain privileged and/or confidential information and may be read or used only by the intended recipient. If you are not the intended recipient of the e-mail or any of its attachments, please be advised that you have received this e-mail in error and any use, dissemination, distribution, forwarding, printing or copying of this e-mail or any attached files is strictly prohibited. If you have received this e-mail in error, please immediately purge it and all attachments and notify the sender by reply e-mail or contact the sender at the number listed.

Confidentiality Note: The information contained in this document is confidential information intended only for the use of the individual or entity named above. You are hereby notified that any dissemination, distribution (other than delivery to the addressee) or copy of this document is strictly prohibited. If you are not the intended recipient please contact the sender and delete all copies.

6/10/2009

Johnson, Tom

AS/004263

From: Christine Onthank [christineo@isotope.com]
Sent: Wednesday, August 12, 2009 10:37 AM
To: Johnson, Tom
Cc: Patricia Merryfield
Subject: RE: CIL DLM-1818-0 Request

Hello Tom,

That is correct. Cat# DLM-1818-0, Lot# PR-16884 was last shelf life tested on 22-OCT-2007.

Please let me know if you need further assistance.

Best regards,
Christine Onthank

Account Coordinator

Toll Free: 800.322.1174 (USA)
Telephone: 978.749.8000, x 230
Fax: 978.749.2768
conthank@isotope.com

Cambridge Isotope Laboratories

50 Frontage Road
Andover, MA 01810
www.isotope.com

↑
Exp = 22-Oct-2009
as per SOP
6L-B10-10604-02
(97)
12 Aug 2009

From: Patricia Merryfield
Sent: Wednesday, August 12, 2009 11:12 AM
To: Christine Onthank
Subject: FW: CIL DLM-1818-0 Request

From: Johnson, Tom [mailto:Thomas.Johnson@mdsinc.com]
Sent: Wednesday, August 12, 2009 10:42 AM
To: Patricia Merryfield
Cc: Calahan, Jean
Subject: FW: CIL DLM-1818-0 Request

Hi Sarah,

We ran across a discrepancy in our records and need your confirmation on some information. In the email immediately below you state that the material in question was last shelf life tested on 22-OCT-2007. Please confirm that this is for the compound DL-Nicotine (methyl-d3), Cat # DLM-1818-0, Lot # PR-16884.

Thank you for your help,

8/12/2009

Tom

Thomas C. Johnson, M.S.
Manager, Reference Standards Laboratory
MDSPharma Services
621 Rose Street Lincoln NE 68502
Phone 402-437-4794
Fax 866-358-7993
tom.johnson@mdsinc.com

From: Calahan, Jean
Sent: Tuesday, August 11, 2009 4:36 PM
To: Johnson, Tom
Subject: FW: CIL DLM-1818-0 Request

From: Sarah Blanchard [mailto:SarahB@isotope.com]
Sent: Tuesday, November 18, 2008 1:23 PM
To: Calahan, Jean
Cc: Johnson, Tom
Subject: RE: CIL DLM-1818-0 Request

Hi Jean,

I apologize for the delay in getting back to you. We last shelf life tested this material on 10/22/07.

Please feel free to contact me with any additional questions.

Thank you and best regards,
Sarah Blanchard
Cambridge Isotope Laboratories, Inc.

CIL is happy to announce its recent acquisition of Spectra Stable Isotopes. We are pleased to provide our customers with the full range of Spectra products which can be found on CIL's website at www.isotope.com

From: Calahan, Jean [mailto:Jean.Calahan@mdsinc.com]
Sent: Tuesday, November 18, 2008 10:46 AM
To: Sarah Blanchard
Cc: Johnson, Tom
Subject: RE: CIL DLM-1818-0 Request

Good Morning Sarah
I just wanted to follow up and see if you had any word on the COA date yet.

Thank you for your help.

Jean Calahan
Reference Standards/Lead-In Scientist
MDS Pharma Services
Lincoln, NE
jean.calahan@mdsinc.com
Direct 402.437.4776
Main 402.476.2811

8/12/2009

FAX 402.476.7598

From: Sarah Blanchard [mailto:SarahB@isotope.com]
Sent: Thursday, November 13, 2008 12:36 PM
To: Calahan, Jean
Cc: Johnson, Tom
Subject: RE: CIL DLM-1818-0 Request

Hi Jean,

Thank you for the email. I am currently waiting to hear back from our Materials Control Department to see if we can share this information. I will get back to you as soon as I hear.

Please feel free to contact me with any questions in the mean time.

Thank you and best regards,
Sarah Blanchard
Cambridge Isotope Laboratories, Inc.

CIL is happy to announce its recent acquisition of Spectra Stable Isotopes. We are pleased to provide our customers with the full range of Spectra products which can be found on CIL's website at www.isotope.com

From: Calahan, Jean [mailto:Jean.Calahan@mdsinc.com]
Sent: Thursday, November 13, 2008 12:27 PM
To: Sarah Blanchard
Cc: Johnson, Tom
Subject: RE: CIL DLM-1818-0 Request

Dear Sarah

I understand that CIL does not assign a shelf life to their products.

The information that I need is the date when the compound was characterized (identity and %purity determined).

Thank you for your help.

Jean Calahan
Reference Standards/Lead-In Scientist
MDS Pharma Services
Lincoln, NE
jean.calahan@mdsinc.com
Direct 402.437.4776
Main 402.476.2811
FAX 402.476.7598

From: Sarah Blanchard [mailto:SarahB@isotope.com]
Sent: Thursday, November 13, 2008 11:12 AM
To: Calahan, Jean
Subject: CIL DLM-1818-0 Request

Hi Jean,

Thank you for your email. CIL does not assign self-lives or expiration dates for our products. The assigned procedure is based on the known stability characteristics of each product. Instead, we suggest re-testing the

8/12/2009

material after having it for a certain amount of time. For the DL-NICOTINE, (METHYL-D3, 98%) we suggest re-testing this material after having it for 2 years.

Please feel free to contact me with any questions.

Thank you and best regards,

Sarah Blanchard

Sarah Blanchard

Account Coordinator, Sales Liaison

Western US and Western CAN

Toll Free: USA: 800.322.1174 x226

CAN: 800.643.7239

Fax: 978.749.2768

SarahB@isotope.com

www.isotope.com

Cambridge Isotope Laboratories, Inc.

50 Frontage Road

Andover, MA 01810-5413

CIL is happy to announce its recent acquisition of Spectra Stable Isotopes. We are pleased to provide our customers with the full range of Spectra products which can be found on CIL's website at www.isotope.com

Confidentiality Note: The information contained in this document is confidential information intended only for the use of the individual or entity named above. You are hereby notified that any dissemination, distribution (other than delivery to the addressee) or copy of this document is strictly prohibited. If you are not the intended recipient please contact the sender and delete all copies.

Confidentiality Note: The information contained in this document is confidential information intended only for the use of the individual or entity named above. You are hereby notified that any dissemination, distribution (other than delivery to the addressee) or copy of this document is strictly prohibited. If you are not the intended recipient please contact the sender and delete all copies.

Confidentiality Note: The information contained in this document is confidential information intended only for the use of the individual or entity named above. You are hereby notified that any dissemination, distribution (other than delivery to the addressee) or copy of this document is strictly prohibited. If you are not the intended recipient please contact the sender and delete all copies.

This e-mail and any files transmitted with it may contain privileged and/or confidential information and may be read or used only by the intended recipient. If you are not the intended recipient of the e-mail or any of its attachments, please be advised that you have received this e-mail in error and any use,

8/12/2009

dissemination, distribution, forwarding, printing or copying of this e-mail or any attached files is strictly prohibited. If you have received this e-mail in error, please immediately purge it and all attachments and notify the sender by reply e-mail or contact the sender at the number listed.

Confidentiality Note: The information contained in this document is confidential information intended only for the use of the individual or entity named above. You are hereby notified that any dissemination, distribution (other than delivery to the addressee) or copy of this document is strictly prohibited. If you are not the intended recipient please contact the sender and delete all copies.

8/12/2009



Pharma Services

Recertification Report – Instrumentation Form 03.01.052-02

Recertification of Internal Standards by LCMS for Identity and Isotopic Purity Confirmation

Recertification Report for: Nicotine

Internal Standard Name: D3-Nicotine

Internal Standard Lot#: PR-16884

Mean Peak Area of Analyte in ISTD Test Solution: 0

Mean Peak Area of ISTD in ISTD Test Solution: 35168

Percent Analyte in ISTD Test Solution: 0.0%

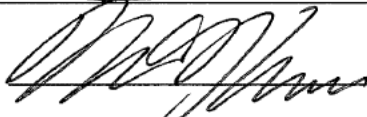
Raw data filename: AA33664-05-NIC-023-V01.rdb

Date of Analysis: 11 March 2010

Signature/date:

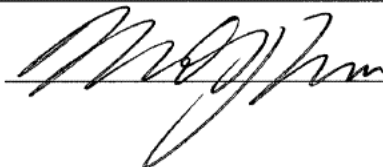
 12 Mar 2010

Template Verified by/Date:

 12 Mar 2010

Assigned Expiration Date: 04 November 2010

Expiration Date Verified by/Date

 12 Mar 2010

Recertification of Internal Standards by LCMS for Identity and Isotopic Purity ConfirmationInternal Standard: dg- NicotineLot number: AS1004 263 PR-16884Supplier: Cambridge Isotope LaboratoriesRequested by: Bridget Prevost BMP 10 Mar 2010Concentration of the ISTD Test Solution: 2.00 ng/ml
@ BMP 10 Mar 2010

(The instrumentation scientist should recommend a solvent and concentration for test solution)

Notebook Reference of ISTD Test Solution: V1570-61CSolvent used to prepare the ISTD Test Solution (including
Solvent Supplier/Lot # or Notebook Reference:Bottled water: Mallinckrodt
lot: G24004 grade: AR (ACS) cat: H453-7Primary Stock
Preparation Date: 21 Jan 2010Validation Study/Batch A133664-5 / Batch 23Performed by: BMP Date: 10 Mar 2010Template Verified by: Jelle Date: 11 Mar 2010

Calculation of Correction Factor (Potency)

Compound Name: Cotinine-d3
Source: Cerilliant
Alternate Name: N/A
Lot/Batch No.: FN072307-01
Location: R1676
Date Received: 09-APR-2009

AS STATED ON THE COA, THE CORRECTION FACTOR = 1.000

☒ This value will be accepted 'as is' and will be used in calculations for the determination of stock standard concentrations using the above lot of reference compound.

☐ The COA did not specify a potency; therefore, the following equation was used to assign the Correction Factor.

$$\text{Potency} = \frac{100 - \left(\frac{\% \text{ Salts Determined By Assay}}{100} + \frac{\% \text{ Water Content}}{100} + \frac{\% \text{ Residual Solvent}}{100} + \frac{\% \text{ Other Impurity}}{100} \right)}{100} \times \frac{\% \text{ Chromatographic Purity}}{100} \times \frac{\% \text{ Chiral Purity}}{100} \times \frac{\% \text{ Isotopic Purity}}{100} \times \frac{\% \text{ Other Purity}}{100} \times \frac{\text{MW Free Base}}{\text{MW Salt}}$$

Note: This is an example equation that may not be appropriate for all applications. The Reference Standards Custodians will manually document the calculation used in the area below.

use prepared conc of 100.0 µg/mL

The above Correction Factor was calculated by:

[Signature]
Signature

13-APR-2009
Date

The above Correction Factor was approved by:

[Signature]
Signature

15-Apr-2009
Date

This review is applicable to all locations of this lot/batch of reference material stored at MDS PS, Lincoln, Nebraska unless specified by the Bioanalytical Method or the Sponsor.

Attachment 5. Individual Run Reports

Individual Run Reports for All Accepted Batches

The Watson™ LIMS-generated Individual Run Reports are provided to demonstrate key elements such as peak area of the analyte, peak area of the internal standard, the ratio of analyte to internal standard, and the concentration for each calibration curve standard, quality control sample and subject sample assayed. For each accepted batch, these reports are divided into three separate tables:

- 1) Standard Sample Data
- 2) QC Sample Data
- 3) Study Sample Data

The Standard Sample Data table demonstrates the data obtained for calibration curve standards in each batch. Each calibration curve standard is represented by the corresponding nominal concentration. The corresponding STD identifier, i.e. STD C, can be found in the table for Back-calculated Calibration Curve Standard Concentrations.

The QC Sample Data table demonstrates the data obtained for quality control samples in each batch. Each quality control sample is represented by the corresponding nominal concentration. The corresponding QC identifier, i.e. QC A, can be found in the table for Quality Control Sample Data (Between-batch Precision and Accuracy). Samples appearing in the QC Sample Data table with a nominal concentration of 0.00 are System Suitability samples included for monitoring the stability of the instrument response. Accuracy criteria are not applicable; therefore, no nominal concentrations are assigned. The System Suitability samples are entered in Watson™ LIMS to facilitate the calculation of precision (%CV) and “drift” – the percent difference between calculated concentrations of System Suitability samples in the middle or at the end of the batch from those at the beginning of the batch.

The Study Sample Data table demonstrates the data obtained for subject samples in each batch. Each subject sample is represented by the subject number, time, and unique barcode number. In some cases, the terminology Treatment ID or Treatment Code reflects the period, not the randomization scheme.

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 2
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	181683 485	0 000000	-0 0915		-0 0915	0 0
9	0 00		0	188579 416	0 000000	-0 0915			
10	1 00	1 00000	2593 795	193199 96	0 013425	1 00	0 0		
11	2 00	0 250000	5187 849	207361 746	0 025018	1 95	-2 5		
12	4 00	0 0625000	10241 431	205822 239	0 049759	3 97	-0 8		
13	8 00	0 0156250	20272 977	194205 301	0 104389	8 42	5 3		
14	16 0	0 00390625	44273 647	203295 017	0 217780	17 7	10 6		
15	40 0	0 000625000	95410 962	197517 657	0 483050	39 3	-1 8		
16	80 0	0 000156250	195992 79	200983 42	0 975169	79 4	-0 8		
17	160	0 0000390625	409556 817	217678 922	1 881472	153	-4 4		
18	200	0 0000250000	468630 733	202819 036	2 310586	188	-6 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0122646983

Intercept = 0 00112238290

R-Squared = 0 9967

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 2
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	432773 042	187696 427	2 305707	1	188		186		1 0
2	0 00	469920 375	209592 1	2 242071	1	183				
3	0 00	492431 569	217173 443	2 267458	1	185				
4	0 00	480977 854	208369 431	2 308294	1	188				
5	0 00	458906 567	201235 73	2 280443	1	186				
48	0 00	616165 244	271597 635	2 268669	1	185				
49	0 00	575611 76	250471 751	2 298110	1	187				
89	0 00	569412 492	251752 988	2 261790	1	184				
90	0 00	605024 618	262465 013	2 305163	1	188				
33	3 00	7427 736	193780 237	0 038331	1	3 03	1 0	2 99	-0 3	2 1
65	3 00	9088 705	244453 792	0 037180	1	2 94	-2 0			
40	37 5	81728 217	190960 727	0 427984	1	34 8	-7 2	35 8	-4 5	3 7
72	37 5	118064 101	261636 152	0 451253	1	36 7	-2 1			
47	150	461990 258	251839 076	1 834466	1	149	-0 7	149	-0 7	0 5
87	150	467828 497	258193 745	1 811928	1	148	-1 3			
26	780	183450 649	191391 087	0 958512	10	781	0 1	797	2 2	2 3
57	780	258548 829	257678 448	1 003378	10	817	4 7			
80	780	241024 88	247413 109	0 974180	10	793	1 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 2
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 1 1h	96036 941	199474 926	0 481449	10	392	20	497170000362	AA90478-01 497170000362 007 N/A P1 Plasma-1 1 / Day 1 1h
007	N/A	2 / Day 1 2h	95966 425	199482 361	0 481077	10	391	21	497170000363	AA90478-01 497170000363 007 N/A P1 Plasma-1 2 / Day 1 2h
007	N/A	3 / Day 1 3h	100079 877	220818 54	0 453222	10	369	22	497170000364	AA90478-01 497170000364 007 N/A P1 Plasma-1 3 / Day 1 3h
007	N/A	4 / Day 1 4h	99141 946	209320 949	0 473636	10	385	23	497170000365	AA90478-01 497170000365 007 N/A P1 Plasma-1 4 / Day 1 4h
007	N/A	5 / Day 1 5h	95794 653	201050 499	0 476471	10	388	24	497170000366	AA90478-01 497170000366 007 N/A P1 Plasma-1 5 / Day 1 5h
007	N/A	6 / Day 1 6h	98287 192	203937 861	0 481947	10	392	25	497170000367	AA90478-01 497170000367 007 N/A P1 Plasma-1 6 / Day 1 6h
007	N/A	7 / Day 1 7h	89181 898	192666 801	0 462882	10	376	27	497170000368	AA90478-01 497170000368 007 N/A P1 Plasma-1 7 / Day 1 7h
007	N/A	8 / Day 1 8h	87517 785	183926 667	0 475830	10	387	28	497170000369	AA90478-01 497170000369 007 N/A P1 Plasma-1 8 / Day 1 8h
007	N/A	9 / Day 1 9h	80304 921	171016 31	0 469575	10	382	29	497170000370	AA90478-01 497170000370 007 N/A P1 Plasma-1 9 / Day 1 9h
007	N/A	10 / Day 1 10h	90077 239	195216 375	0 461423	10	375	30	497170000371	AA90478-01 497170000371 007 N/A P1 Plasma-1 10 / Day 1 10h
007	N/A	11 / Day 1 11h	85264 08	188752 051	0 451725	10	367	31	497170000372	AA90478-01 497170000372 007 N/A P1 Plasma-1 11 / Day 1 11h
007	N/A	12 / Day 1 12h	84228 739	187776 019	0 448560	10	365	32	497170000373	AA90478-01 497170000373 007 N/A P1 Plasma-1 12 / Day 1 12h
007	N/A	13 / Day 1 13h	85504 365	192231 466	0 444799	10	362	34	497170000374	AA90478-01 497170000374 007 N/A P1 Plasma-1 13 / Day 1 13h
007	N/A	14 / Day 1 14h	88990 125	192030 302	0 463417	10	377	35	497170000375	AA90478-01 497170000375 007 N/A P1 Plasma-1 14 / Day 1 14h
007	N/A	15 / Day 1 15h	89107 231	196417 554	0 453662	10	369	36	497170000376	AA90478-01 497170000376 007 N/A P1 Plasma-1 15 / Day 1 15h
007	N/A	16 / Day 1 16h	87781 189	197347 143	0 444806	10	362	37	497170000377	AA90478-01 497170000377 007 N/A P1 Plasma-1 16 / Day 1 16h
007	N/A	17 / Day 1 17h	86054 423	189702 232	0 453629	10	369	38	497170000378	AA90478-01 497170000378 007 N/A P1 Plasma-1 17 / Day 1 17h
007	N/A	18 / Day 1 18h	83832 246	182454 018	0 459471	10	374	39	497170000379	AA90478-01 497170000379 007 N/A P1 Plasma-1 18 / Day 1 18h
007	N/A	19 / Day 1 19h	90781 535	209175 518	0 433997	10	353	41	497170000380	AA90478-01 497170000380 007 N/A P1 Plasma-1 19 / Day 1 19h
009	N/A	1 / Day 1 1h	84993 272	217273 944	0 391180	10	318	42	497170000457	AA90478-01 497170000457 009 N/A P1 Plasma-1 1 / Day 1 1h
009	N/A	2 / Day 1 2h	82634 711	213857 473	0 386401	10	314	43	497170000458	AA90478-01 497170000458 009 N/A P1 Plasma-1 2 / Day 1 2h
009	N/A	3 / Day 1 3h	110515 548	270049 872	0 409241	10	333	44	497170000459	AA90478-01 497170000459 009 N/A P1 Plasma-1 3 / Day 1 3h
009	N/A	4 / Day 1 4h	103494 356	256834 862	0 402961	10	328	45	497170000460	AA90478-01 497170000460 009 N/A P1 Plasma-1 4 / Day 1 4h
009	N/A	5 / Day 1 5h	100722 811	248561 83	0 405222	10	329	46	497170000461	AA90478-01 497170000461 009 N/A P1 Plasma-1 5 / Day 1 5h
009	N/A	6 / Day 1 6h	95783 92	226557 754	0 422779	10	344	50	497170000462	AA90478-01 497170000462 009 N/A P1 Plasma-1 6 / Day 1 6h
009	N/A	7 / Day 1 7h	91339 93	226783 875	0 402762	10	327	51	497170000463	AA90478-01 497170000463 009 N/A P1 Plasma-1 7 / Day 1 7h
009	N/A	8 / Day 1 8h	85398 4	223006 26	0 382942	10	311	52	497170000464	AA90478-01 497170000464 009 N/A P1 Plasma-1 8 / Day 1 8h
009	N/A	9 / Day 1 9h	101292 149	253075 609	0 400245	10	325	53	497170000465	AA90478-01 497170000465 009 N/A P1 Plasma-1 9 / Day 1 9h
009	N/A	10 / Day 1 10h	107605 713	265701 446	0 404987	10	329	54	497170000466	AA90478-01 497170000466 009 N/A P1 Plasma-1 10 / Day 1 10h
009	N/A	11 / Day 1 11h	97826 367	260148 188	0 376041	10	306	55	497170000467	AA90478-01 497170000467 009 N/A P1 Plasma-1 11 / Day 1 11h
009	N/A	12 / Day 1 12h	93368 809	237942 064	0 392401	10	319	56	497170000468	AA90478-01 497170000468 009 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 1 13h	91983 858	245199 171	0 375139	10	305	58	497170000469	AA90478-01 497170000469 009 N/A P1 Plasma-1 13 / Day 1 13h
009	N/A	14 / Day 1 14h	100661 835	262093 831	0 384068	10	312	59	497170000470	AA90478-01 497170000470 009 N/A P1 Plasma-1 14 / Day 1 14h
009	N/A	15 / Day 1 15h	92063 823	245858 738	0 374458	10	304	60	497170000471	AA90478-01 497170000471 009 N/A P1 Plasma-1 15 / Day 1 15h
009	N/A	16 / Day 1 16h	102069 49	266666 189	0 382761	10	311	61	497170000472	AA90478-01 497170000472 009 N/A P1 Plasma-1 16 / Day 1 16h
009	N/A	17 / Day 1 17h	101950 657	263785 736	0 386490	10	314	62	497170000473	AA90478-01 497170000473 009 N/A P1 Plasma-1 17 / Day 1 17h
009	N/A	18 / Day 1 18h	98116 811	257466 015	0 381086	10	310	63	497170000474	AA90478-01 497170000474 009 N/A P1 Plasma-1 18 / Day 1 18h
009	N/A	19 / Day 1 19h	98626 666	262460 628	0 375777	10	305	64	497170000475	AA90478-01 497170000475 009 N/A P1 Plasma-1 19 / Day 1 19h
011	N/A	1 / Day 1 1h	68154 906	255146 757	0 267120	10	217	66	497170000552	AA90478-01 497170000552 011 N/A P1 Plasma-1 1 / Day 1 1h
011	N/A	2 / Day 1 2h	72276 971	277218 066	0 260722	10	212	67	497170000553	AA90478-01 497170000553 011 N/A P1 Plasma-1 2 / Day 1 2h
011	N/A	3 / Day 1 3h	72014 222	269007 124	0 267704	10	217	68	497170000554	AA90478-01 497170000554 011 N/A P1 Plasma-1 3 / Day 1 3h
011	N/A	4 / Day 1 4h	72828 739	274926 37	0 264903	10	215	69	497170000555	AA90478-01 497170000555 011 N/A P1 Plasma-1 4 / Day 1 4h
011	N/A	5 / Day 1 5h	69970 159	191790 269	0 364826	10	297	70	497170000556	AA90478-01 497170000556 011 N/A P1 Plasma-1 5 / Day 1 5h
011	N/A	6 / Day 1 6h	70400 325	262121 991	0 268578	10	218	71	497170000557	AA90478-01 497170000557 011 N/A P1 Plasma-1 6 / Day 1 6h
011	N/A	7 / Day 1 7h	75421 776	281588 034	0 267844	10	217	73	497170000558	AA90478-01 497170000558 011 N/A P1 Plasma-1 7 / Day 1 7h
011	N/A	8 / Day 1 8h	69949 647	248641 876	0 281327	10	228	74	497170000559	AA90478-01 497170000559 011 N/A P1 Plasma-1 8 / Day 1 8h
011	N/A	9 / Day 1 9h	76332 836	269937 514	0 282780	10	230	75	497170000560	AA90478-01 497170000560 011 N/A P1 Plasma-1 9 / Day 1 9h
011	N/A	10 / Day 1 10h	76468 396	278855 906	0 274222	10	223	76	497170000561	AA90478-01 497170000561 011 N/A P1 Plasma-1 10 / Day 1 10h
011	N/A	11 / Day 1 11h	72288 27	260600 931	0 277391	10	225	77	497170000562	AA90478-01 497170000562 011 N/A P1 Plasma-1 11 / Day 1 11h
011	N/A	12 / Day 1 12h	69047 544	259098 915	0 266491	10	216	78	497170000563	AA90478-01 497170000563 011 N/A P1 Plasma-1 12 / Day 1 12h
011	N/A	13 / Day 1 13h	68513 05	256338 298	0 267276	10	217	79	497170000564	AA90478-01 497170000564 011 N/A P1 Plasma-1 13 / Day 1 13h
011	N/A	14 / Day 1 14h	66926 986	257180 057	0 260234	10	211	81	497170000565	AA90478-01 497170000565 011 N/A P1 Plasma-1 14 / Day 1 14h
011	N/A	15 / Day 1 15h	65984 845	247316 756	0 266803	10	217	82	497170000566	AA90478-01 497170000566 011 N/A P1 Plasma-1 15 / Day 1 15h
011	N/A	16 / Day 1 16h	67736 69	263349 564	0 257212	10	209	83	497170000567	AA90478-01 497170000567 011 N/A P1 Plasma-1 16 / Day 1 16h
011	N/A	17 / Day 1 17h	67072 036	266273 988	0 251891	10	204	84	497170000568	AA90478-01 497170000568 011 N/A P1 Plasma-1 17 / Day 1 17h
011	N/A	18 / Day 1 18h	65948 552	265062 047	0 248804	10	202	85	497170000569	AA90478-01 497170000569 011 N/A P1 Plasma-1 18 / Day 1 18h
011	N/A	19 / Day 1 19h	62578 884	252824 142	0 247519	10	201	86	497170000570	AA90478-01 497170000570 011 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 3
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	221224 229	0 000000	-0 0408		-0 0408	0 0
9	0 00		0	215424 946	0 000000	-0 0408			
10	1 00	1 00000	2586 388	217152 251	0 011910	0 935	-6 5		
11	2 00	0 250000	5942 808	216963 789	0 027391	2 20	10 0		
12	4 00	0 0625000	11642 328	225410 95	0 051649	4 19	4 8		
13	8 00	0 0156250	21683 096	222329 821	0 097527	7 95	-0 6		
14	16 0	0 00390625	46629 594	218706 479	0 213206	17 4	8 8		
15	40 0	0 000625000	103810 144	218448 217	0 475216	38 9	-2 8		
16	80 0	0 000156250	195090 216	206403 529	0 945188	77 4	-3 3		
17	160	0 0000390625	383154 843	204659 512	1 872158	153	-4 4		
18	200	0 0000250000	490910 116	214269	2 291093	188	-6 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0122106584

Intercept = 0 000498314534

R-Squared = 0 9947

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 3
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	501471 349	217783 439	2 302615	1	189		189		1 3
2	0 00	462154 018	196166 875	2 355923	1	193				
3	0 00	490954 074	209496 226	2 343498	1	192				
4	0 00	478508 503	206153 461	2 321128	1	190				
5	0 00	484994 575	212253 936	2 284973	1	187				
48	0 00	528411 41	229667 311	2 300769	1	188				
49	0 00	514903 907	226515 578	2 273150	1	186				
89	0 00	438659 868	192468 128	2 279130	1	187				
90	0 00	473830 839	201696 263	2 349230	1	192				
33	3 00	8149 104	218067 059	0 037370	1	3 02	0 7	2 89	-3 7	6 6
65	3 00	7248 804	212593 271	0 034097	1	2 75	-8 3			
40	37 5	93110 123	219635 364	0 423930	1	34 7	-7 5	35 5	-5 3	3 0
72	37 5	90812 642	205086 768	0 442801	1	36 2	-3 5			
47	150	364949 536	197435 623	1 848448	1	151	0 7	152	1 3	0 9
87	150	364960 537	194797 634	1 873537	1	153	2 0			
26	780	207647 7	217549 194	0 954486	10	781	0 1	793	1 7	1 7
57	780	207916 472	215178 226	0 966252	10	791	1 4			
80	780	181947 17	184436 515	0 986503	10	807	3 5			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 3
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	1 / Day 1 1h	66688 577	187628 347	0 355429	10	291	20	497170000647	AA90478-01 497170000647 012 N/A P1 Plasma-1 1 / Day 1 1h
012	N/A	2 / Day 1 2h	79880 069	218432 997	0 365696	10	299	21	497170000648	AA90478-01 497170000648 012 N/A P1 Plasma-1 2 / Day 1 2h
012	N/A	3 / Day 1 3h	65693 469	194675 548	0 337451	10	276	22	497170000649	AA90478-01 497170000649 012 N/A P1 Plasma-1 3 / Day 1 3h
012	N/A	4 / Day 1 4h	73650 114	222499 902	0 331012	10	271	23	497170000650	AA90478-01 497170000650 012 N/A P1 Plasma-1 4 / Day 1 4h
012	N/A	5 / Day 1 5h	83901 501	232522 311	0 360832	10	295	24	497170000651	AA90478-01 497170000651 012 N/A P1 Plasma-1 5 / Day 1 5h
012	N/A	6 / Day 1 6h	72057 192	212452 379	0 339169	10	277	25	497170000652	AA90478-01 497170000652 012 N/A P1 Plasma-1 6 / Day 1 6h
012	N/A	7 / Day 1 7h	76723 093	221434 948	0 346481	10	283	27	497170000653	AA90478-01 497170000653 012 N/A P1 Plasma-1 7 / Day 1 7h
012	N/A	8 / Day 1 8h	72005 413	212620 729	0 338657	10	277	28	497170000654	AA90478-01 497170000654 012 N/A P1 Plasma-1 8 / Day 1 8h
012	N/A	9 / Day 1 9h	77543 462	215204 257	0 360325	10	295	29	497170000655	AA90478-01 497170000655 012 N/A P1 Plasma-1 9 / Day 1 9h
012	N/A	10 / Day 1 10h	72861 887	212056 834	0 343596	10	281	30	497170000656	AA90478-01 497170000656 012 N/A P1 Plasma-1 10 / Day 1 10h
012	N/A	11 / Day 1 11h	64373 573	200113 144	0 321686	10	263	31	497170000657	AA90478-01 497170000657 012 N/A P1 Plasma-1 11 / Day 1 11h
012	N/A	12 / Day 1 12h	76449 718	223184 05	0 342541	10	280	32	497170000658	AA90478-01 497170000658 012 N/A P1 Plasma-1 12 / Day 1 12h
012	N/A	13 / Day 1 13h	70420 878	220946 489	0 318724	10	261	34	497170000659	AA90478-01 497170000659 012 N/A P1 Plasma-1 13 / Day 1 13h
012	N/A	14 / Day 1 14h	74984 735	217097 089	0 345397	10	282	35	497170000660	AA90478-01 497170000660 012 N/A P1 Plasma-1 14 / Day 1 14h
012	N/A	15 / Day 1 15h	71257 118	215040 524	0 331366	10	271	36	497170000661	AA90478-01 497170000661 012 N/A P1 Plasma-1 15 / Day 1 15h
012	N/A	16 / Day 1 16h	69259 65	217917 567	0 317825	10	260	37	497170000662	AA90478-01 497170000662 012 N/A P1 Plasma-1 16 / Day 1 16h
012	N/A	17 / Day 1 17h	64880 189	213640 349	0 303689	10	248	38	497170000663	AA90478-01 497170000663 012 N/A P1 Plasma-1 17 / Day 1 17h
012	N/A	18 / Day 1 18h	69423 06	223929 205	0 310022	10	253	39	497170000664	AA90478-01 497170000664 012 N/A P1 Plasma-1 18 / Day 1 18h
012	N/A	19 / Day 1 19h	65171 49	217511 092	0 299624	10	245	41	497170000665	AA90478-01 497170000665 012 N/A P1 Plasma-1 19 / Day 1 19h
013	N/A	1 / Day 1 1h	14456 201	207651 752	0 069618	10	56 6	42	497170000742	AA90478-01 497170000742 013 N/A P1 Plasma-1 1 / Day 1 1h
013	N/A	2 / Day 1 2h	14684 774	205293 89	0 071530	10	58 2	43	497170000743	AA90478-01 497170000743 013 N/A P1 Plasma-1 2 / Day 1 2h
013	N/A	3 / Day 1 3h	14483 675	207955 627	0 069648	10	56 6	44	497170000744	AA90478-01 497170000744 013 N/A P1 Plasma-1 3 / Day 1 3h
013	N/A	4 / Day 1 4h	13655 126	206895 136	0 066000	10	53 6	45	497170000745	AA90478-01 497170000745 013 N/A P1 Plasma-1 4 / Day 1 4h
013	N/A	5 / Day 1 5h	14407 718	200047 255	0 072022	10	58 6	46	497170000746	AA90478-01 497170000746 013 N/A P1 Plasma-1 5 / Day 1 5h
013	N/A	6 / Day 1 6h	16437 406	225508 883	0 072890	10	59 3	50	497170000747	AA90478-01 497170000747 013 N/A P1 Plasma-1 6 / Day 1 6h
013	N/A	7 / Day 1 7h	16553 283	213839 926	0 077410	10	63 0	51	497170000748	AA90478-01 497170000748 013 N/A P1 Plasma-1 7 / Day 1 7h
013	N/A	8 / Day 1 8h	13655 404	189566 565	0 072035	10	58 6	52	497170000749	AA90478-01 497170000749 013 N/A P1 Plasma-1 8 / Day 1 8h
013	N/A	9 / Day 1 9h	16244 596	209430 733	0 077565	10	63 1	53	497170000750	AA90478-01 497170000750 013 N/A P1 Plasma-1 9 / Day 1 9h
013	N/A	10 / Day 1 10h	14860 035	207867 681	0 071488	10	58 1	54	497170000751	AA90478-01 497170000751 013 N/A P1 Plasma-1 10 / Day 1 10h
013	N/A	11 / Day 1 11h	16389 403	214206 66	0 076512	10	62 3	55	497170000752	AA90478-01 497170000752 013 N/A P1 Plasma-1 11 / Day 1 11h
013	N/A	12 / Day 1 12h	15901 164	212954 752	0 074669	10	60 7	56	497170000753	AA90478-01 497170000753 013 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	13 / Day 1 13h	15928 246	221530 626	0 071901	10	58 5	58	497170000754	AA90478-01 497170000754 013 N/A P1 Plasma-1 13 / Day 1 13h
013	N/A	14 / Day 1 14h	14670 401	212828 751	0 068931	10	56 0	59	497170000755	AA90478-01 497170000755 013 N/A P1 Plasma-1 14 / Day 1 14h
013	N/A	15 / Day 1 15h	16025 104	217924 053	0 073535	10	59 8	60	497170000756	AA90478-01 497170000756 013 N/A P1 Plasma-1 15 / Day 1 15h
013	N/A	16 / Day 1 16h	15058 3	207291 646	0 072643	10	59 1	61	497170000757	AA90478-01 497170000757 013 N/A P1 Plasma-1 16 / Day 1 16h
013	N/A	17 / Day 1 17h	15358 406	208423 198	0 073689	10	59 9	62	497170000758	AA90478-01 497170000758 013 N/A P1 Plasma-1 17 / Day 1 17h
013	N/A	18 / Day 1 18h	15067 697	206601 895	0 072931	10	59 3	63	497170000759	AA90478-01 497170000759 013 N/A P1 Plasma-1 18 / Day 1 18h
013	N/A	19 / Day 1 19h	14453 425	204451 668	0 070694	10	57 5	64	497170000760	AA90478-01 497170000760 013 N/A P1 Plasma-1 19 / Day 1 19h
015	N/A	1 / Day 1 1h	26808 051	207617 016	0 129123	10	105	66	497170000837	AA90478-01 497170000837 015 N/A P1 Plasma-1 1 / Day 1 1h
015	N/A	2 / Day 1 2h	31511 263	221928 732	0 141988	10	116	67	497170000838	AA90478-01 497170000838 015 N/A P1 Plasma-1 2 / Day 1 2h
015	N/A	3 / Day 1 3h	30971 136	213890 789	0 144799	10	118	68	497170000839	AA90478-01 497170000839 015 N/A P1 Plasma-1 3 / Day 1 3h
015	N/A	4 / Day 1 4h	30584 63	213100 459	0 143522	10	117	69	497170000840	AA90478-01 497170000840 015 N/A P1 Plasma-1 4 / Day 1 4h
015	N/A	5 / Day 1 5h	29335 575	206610 151	0 141985	10	116	70	497170000841	AA90478-01 497170000841 015 N/A P1 Plasma-1 5 / Day 1 5h
015	N/A	6 / Day 1 6h	28877 279	217308 513	0 132886	10	108	71	497170000842	AA90478-01 497170000842 015 N/A P1 Plasma-1 6 / Day 1 6h
015	N/A	7 / Day 1 7h	30303 367	200056 752	0 151474	10	124	73	497170000843	AA90478-01 497170000843 015 N/A P1 Plasma-1 7 / Day 1 7h
015	N/A	8 / Day 1 8h	29622 46	197869 591	0 149707	10	122	74	497170000844	AA90478-01 497170000844 015 N/A P1 Plasma-1 8 / Day 1 8h
015	N/A	9 / Day 1 9h	29665 95	201046 231	0 147558	10	120	75	497170000845	AA90478-01 497170000845 015 N/A P1 Plasma-1 9 / Day 1 9h
015	N/A	10 / Day 1 10h	30391 865	203926 135	0 149034	10	122	76	497170000846	AA90478-01 497170000846 015 N/A P1 Plasma-1 10 / Day 1 10h
015	N/A	11 / Day 1 11h	31070 178	211002 818	0 147250	10	120	77	497170000847	AA90478-01 497170000847 015 N/A P1 Plasma-1 11 / Day 1 11h
015	N/A	12 / Day 1 12h	31593 793	215125 428	0 146862	10	120	78	497170000848	AA90478-01 497170000848 015 N/A P1 Plasma-1 12 / Day 1 12h
015	N/A	13 / Day 1 13h	31826 959	215623 668	0 147604	10	120	79	497170000849	AA90478-01 497170000849 015 N/A P1 Plasma-1 13 / Day 1 13h
015	N/A	14 / Day 1 14h	27116 793	184360 486	0 147086	10	120	81	497170000850	AA90478-01 497170000850 015 N/A P1 Plasma-1 14 / Day 1 14h
015	N/A	15 / Day 1 15h	27554 709	195594 557	0 140877	10	115	82	497170000851	AA90478-01 497170000851 015 N/A P1 Plasma-1 15 / Day 1 15h
015	N/A	16 / Day 1 16h	26685 857	188373 402	0 141665	10	116	83	497170000852	AA90478-01 497170000852 015 N/A P1 Plasma-1 16 / Day 1 16h
015	N/A	17 / Day 1 17h	30410 73	215865 721	0 140878	10	115	84	497170000853	AA90478-01 497170000853 015 N/A P1 Plasma-1 17 / Day 1 17h
015	N/A	18 / Day 1 18h	27272 888	196475 035	0 138811	10	113	85	497170000854	AA90478-01 497170000854 015 N/A P1 Plasma-1 18 / Day 1 18h
015	N/A	19 / Day 1 19h	25651 7	183749 498	0 139601	10	114	86	497170000855	AA90478-01 497170000855 015 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 4
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	187069 747	0 000000	-0 111		-0 111	0 0
9	0 00		0	194640 229	0 000000	-0 111			
10	1 00	1 00000	2970 674	221489 902	0 013412	0 993	-0 7		
11	2 00	0 250000	5705 818	222778 115	0 025612	2 00	0 0		
12	4 00	0 0625000	11234 271	223649 146	0 050232	4 02	0 5		
13	8 00	0 0156250	20335 309	203114 612	0 100117	8 13	1 6		
14	16 0	0 00390625	44801 268	210094 727	0 213243	17 4	8 8		
15	40 0	0 000625000	102664 389	213627 481	0 480577	39 5	-1 3		
16	80 0	0 000156250	174848 032	184918 118	0 945543	77 7	-2 9		
17	160	0 0000390625	355112 413	188917 018	1 879727	155	-3 1		
18	200	0 0000250000	484032 347	204814 227	2 363275	194	-3 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0121475348

Intercept = 0 00135374728

R-Squared = 0 9981

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 4
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	458815 233	197163 54	2 327080	1	191		190		1 0
2	0 00	470102 412	201196 016	2 336539	1	192				
3	0 00	463126 576	202453 255	2 287573	1	188				
4	0 00	475896 987	204662 486	2 325277	1	191				
5	0 00	472849 041	205221 891	2 304087	1	190				
48	0 00	529265 712	233354 585	2 268075	1	187				
49	0 00	541922 611	234451 543	2 311448	1	190				
87	0 00	511199 409	218055 032	2 344360	1	193				
88	0 00	528422 95	230121 001	2 296283	1	189				
33	3 00	8666 36	224710 209	0 038567	1	3 06	2 0	3 12	4 0	2 7
65	3 00	8625	215985 32	0 039933	1	3 18	6 0			
40	37 5	101221 088	224247 24	0 451382	1	37 0	-1 3	36 9	-1 6	0 4
72	37 5	101084 589	225629 938	0 448011	1	36 8	-1 9			
47	150	441718 427	238202 362	1 854383	1	153	2 0	155	3 3	1 4
85	150	389869 071	205547 648	1 896733	1	156	4 0			
26	780	213028 539	215581 721	0 988157	10	812	4 1	815	4 5	1 6
57	780	206015 28	210648 091	0 978007	10	804	3 1			
80	780	218927 035	217016 436	1 008804	10	829	6 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 4
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
018	N/A	1 / Day 1 1h	23399 251	226720 459	0 103207	10	83 8	20	497170000932	AA90478-01 497170000932 018 N/A P1 Plasma-1 1 / Day 1 1h
018	N/A	2 / Day 1 2h	17307 237	187319 977	0 092394	10	74 9	21	497170000933	AA90478-01 497170000933 018 N/A P1 Plasma-1 2 / Day 1 2h
018	N/A	3 / Day 1 3h	20065 977	216817 75	0 092548	10	75 1	22	497170000934	AA90478-01 497170000934 018 N/A P1 Plasma-1 3 / Day 1 3h
018	N/A	4 / Day 1 4h	21757 61	221178 67	0 098371	10	79 9	23	497170000935	AA90478-01 497170000935 018 N/A P1 Plasma-1 4 / Day 1 4h
018	N/A	5 / Day 1 5h	21423 896	225397 502	0 095049	10	77 1	24	497170000936	AA90478-01 497170000936 018 N/A P1 Plasma-1 5 / Day 1 5h
018	N/A	6 / Day 1 6h	20936 145	214880 001	0 097432	10	79 1	25	497170000937	AA90478-01 497170000937 018 N/A P1 Plasma-1 6 / Day 1 6h
018	N/A	7 / Day 1 7h	20502 434	207298 6	0 098903	10	80 3	27	497170000938	AA90478-01 497170000938 018 N/A P1 Plasma-1 7 / Day 1 7h
018	N/A	8 / Day 1 8h	23612 624	236701 699	0 099757	10	81 0	28	497170000939	AA90478-01 497170000939 018 N/A P1 Plasma-1 8 / Day 1 8h
018	N/A	9 / Day 1 9h	22948 797	224438 843	0 102250	10	83 1	29	497170000940	AA90478-01 497170000940 018 N/A P1 Plasma-1 9 / Day 1 9h
018	N/A	10 / Day 1 10h	21557 154	218192 739	0 098799	10	80 2	30	497170000941	AA90478-01 497170000941 018 N/A P1 Plasma-1 10 / Day 1 10h
018	N/A	11 / Day 1 11h	21766 039	210812 515	0 103248	10	83 9	31	497170000942	AA90478-01 497170000942 018 N/A P1 Plasma-1 11 / Day 1 11h
018	N/A	12 / Day 1 12h	22573 882	220035 313	0 102592	10	83 3	32	497170000943	AA90478-01 497170000943 018 N/A P1 Plasma-1 12 / Day 1 12h
018	N/A	13 / Day 1 13h	23161 902	224047 745	0 103379	10	84 0	34	497170000944	AA90478-01 497170000944 018 N/A P1 Plasma-1 13 / Day 1 13h
018	N/A	14 / Day 1 14h	20002 211	208820 788	0 095786	10	77 7	35	497170000945	AA90478-01 497170000945 018 N/A P1 Plasma-1 14 / Day 1 14h
018	N/A	15 / Day 1 15h	22652 865	224903 148	0 100723	10	81 8	36	497170000946	AA90478-01 497170000946 018 N/A P1 Plasma-1 15 / Day 1 15h
018	N/A	16 / Day 1 16h	20759 634	214975 974	0 096567	10	78 4	37	497170000947	AA90478-01 497170000947 018 N/A P1 Plasma-1 16 / Day 1 16h
018	N/A	17 / Day 1 17h	23131 181	240452 116	0 096199	10	78 1	38	497170000948	AA90478-01 497170000948 018 N/A P1 Plasma-1 17 / Day 1 17h
018	N/A	18 / Day 1 18h	23266 169	237050 102	0 098149	10	79 7	39	497170000949	AA90478-01 497170000949 018 N/A P1 Plasma-1 18 / Day 1 18h
018	N/A	19 / Day 1 19h	20863 683	225749 466	0 092420	10	75 0	41	497170000950	AA90478-01 497170000950 018 N/A P1 Plasma-1 19 / Day 1 19h
019	N/A	1 / Day 1 1h	48658 634	216948 771	0 224286	10	184	42	497170001027	AA90478-01 497170001027 019 N/A P1 Plasma-1 1 / Day 1 1h
019	N/A	2 / Day 1 2h	51899 22	230896 733	0 224772	10	184	43	497170001028	AA90478-01 497170001028 019 N/A P1 Plasma-1 2 / Day 1 2h
019	N/A	3 / Day 1 3h	47395 47	216697 357	0 218717	10	179	44	497170001029	AA90478-01 497170001029 019 N/A P1 Plasma-1 3 / Day 1 3h
019	N/A	4 / Day 1 4h	49813 683	226047 534	0 220368	10	180	45	497170001030	AA90478-01 497170001030 019 N/A P1 Plasma-1 4 / Day 1 4h
019	N/A	5 / Day 1 5h	50241 937	228487 477	0 219889	10	180	46	497170001031	AA90478-01 497170001031 019 N/A P1 Plasma-1 5 / Day 1 5h
019	N/A	6 / Day 1 6h	49214 308	216556 698	0 227258	10	186	50	497170001032	AA90478-01 497170001032 019 N/A P1 Plasma-1 6 / Day 1 6h
019	N/A	7 / Day 1 7h	48924 133	211664 649	0 231140	10	189	51	497170001033	AA90478-01 497170001033 019 N/A P1 Plasma-1 7 / Day 1 7h
019	N/A	8 / Day 1 8h	48069 353	208936 617	0 230067	10	188	52	497170001034	AA90478-01 497170001034 019 N/A P1 Plasma-1 8 / Day 1 8h
019	N/A	9 / Day 1 9h	45684 054	208774 626	0 218820	10	179	53	497170001035	AA90478-01 497170001035 019 N/A P1 Plasma-1 9 / Day 1 9h
019	N/A	10 / Day 1 10h	43829 854	203513 732	0 215366	10	176	54	497170001036	AA90478-01 497170001036 019 N/A P1 Plasma-1 10 / Day 1 10h
019	N/A	11 / Day 1 11h	44072 47	198867 771	0 221617	10	181	55	497170001037	AA90478-01 497170001037 019 N/A P1 Plasma-1 11 / Day 1 11h
019	N/A	12 / Day 1 12h	43935 758	200790 12	0 218814	10	179	56	497170001038	AA90478-01 497170001038 019 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	13 / Day 1 13h	44999 901	212328 847	0 211935	10	173	58	497170001039	AA90478-01 497170001039 019 N/A P1 Plasma-1 13 / Day 1 13h
019	N/A	14 / Day 1 14h	47698 259	216729 498	0 220082	10	180	59	497170001040	AA90478-01 497170001040 019 N/A P1 Plasma-1 14 / Day 1 14h
019	N/A	15 / Day 1 15h	45089 568	205505 463	0 219408	10	180	60	497170001041	AA90478-01 497170001041 019 N/A P1 Plasma-1 15 / Day 1 15h
019	N/A	16 / Day 1 16h	45379 132	211748 185	0 214307	10	175	61	497170001042	AA90478-01 497170001042 019 N/A P1 Plasma-1 16 / Day 1 16h
019	N/A	17 / Day 1 17h	41209 43	184484 388	0 223376	10	183	62	497170001043	AA90478-01 497170001043 019 N/A P1 Plasma-1 17 / Day 1 17h
019	N/A	18 / Day 1 18h	47172 279	211689 826	0 222837	10	182	63	497170001044	AA90478-01 497170001044 019 N/A P1 Plasma-1 18 / Day 1 18h
019	N/A	19 / Day 1 19h	41671 578	187693 961	0 222019	10	182	64	497170001045	AA90478-01 497170001045 019 N/A P1 Plasma-1 19 / Day 1 19h
021	N/A	1 / Day 1 1h	33805 339	219801 242	0 153800	10	125	66	497170001122	AA90478-01 497170001122 021 N/A P1 Plasma-1 1 / Day 1 1h
021	N/A	2 / Day 1 2h	34104 014	225196 559	0 151441	10	124	67	497170001123	AA90478-01 497170001123 021 N/A P1 Plasma-1 2 / Day 1 2h
021	N/A	3 / Day 1 3h	32676 577	213488 475	0 153060	10	125	68	497170001124	AA90478-01 497170001124 021 N/A P1 Plasma-1 3 / Day 1 3h
021	N/A	4 / Day 1 4h	31189 166	204451 763	0 152550	10	124	69	497170001125	AA90478-01 497170001125 021 N/A P1 Plasma-1 4 / Day 1 4h
021	N/A	5 / Day 1 5h	33300 024	210812 497	0 157960	10	129	70	497170001126	AA90478-01 497170001126 021 N/A P1 Plasma-1 5 / Day 1 5h
021	N/A	6 / Day 1 6h	32484 371	209560 436	0 155012	10	126	71	497170001127	AA90478-01 497170001127 021 N/A P1 Plasma-1 6 / Day 1 6h
021	N/A	9 / Day 1 9h	35099 831	216524 565	0 162106	10	132	73	497170001130	AA90478-01 497170001130 021 N/A P1 Plasma-1 9 / Day 1 9h
021	N/A	10 / Day 1 10h	31569 608	206738 771	0 152703	10	125	74	497170001131	AA90478-01 497170001131 021 N/A P1 Plasma-1 10 / Day 1 10h
021	N/A	11 / Day 1 11h	31431 265	205447 92	0 152989	10	125	75	497170001132	AA90478-01 497170001132 021 N/A P1 Plasma-1 11 / Day 1 11h
021	N/A	12 / Day 1 12h	32067 937	210588 827	0 152277	10	124	76	497170001133	AA90478-01 497170001133 021 N/A P1 Plasma-1 12 / Day 1 12h
021	N/A	13 / Day 1 13h	30870 611	212124 332	0 145531	10	119	77	497170001134	AA90478-01 497170001134 021 N/A P1 Plasma-1 13 / Day 1 13h
021	N/A	14 / Day 1 14h	28689 798	202453 628	0 141710	10	116	78	497170001135	AA90478-01 497170001135 021 N/A P1 Plasma-1 14 / Day 1 14h
021	N/A	15 / Day 1 15h	29197 416	202993 837	0 143834	10	117	79	497170001136	AA90478-01 497170001136 021 N/A P1 Plasma-1 15 / Day 1 15h
021	N/A	16 / Day 1 16h	32783 508	231797 91	0 141431	10	115	81	497170001137	AA90478-01 497170001137 021 N/A P1 Plasma-1 16 / Day 1 16h
021	N/A	17 / Day 1 17h	29640 389	216225 942	0 137081	10	112	82	497170001138	AA90478-01 497170001138 021 N/A P1 Plasma-1 17 / Day 1 17h
021	N/A	18 / Day 1 18h	30414 025	215172 655	0 141347	10	115	83	497170001139	AA90478-01 497170001139 021 N/A P1 Plasma-1 18 / Day 1 18h
021	N/A	19 / Day 1 19h	28089 123	200607 241	0 140020	10	114	84	497170001140	AA90478-01 497170001140 021 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)
AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 5
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	218998 634	0 000000	0 00204		0 00204	0 0
9	0 00		0	225826 565	0 000000	0 00204			
10	1 00	1 00000	2948 999	230585 871	0 012789	0 971	-2 9		
11	2 00	0 250000	6337 654	230896 799	0 027448	2 08	4 0		
12	4 00	0 0625000	12219 712	230508 504	0 053012	4 02	0 5		
13	8 00	0 0156250	24029 478	227031 719	0 105842	8 03	0 4		
14	16 0	0 00390625	52064 838	220791 593	0 235810	17 9	11 9		
15	40 0	0 000625000	115744 362	223285 339	0 518370	39 3	-1 8		
16	80 0	0 000156250	224123 705	165991 579	*1 350211	*102			
17	160	0 0000390625	400255 731	202201 572	1 979489	150	-6 3		
18	200	0 0000250000	540120 79	217434 398	2 484063	188	-6 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0131923521

Intercept = -0 0000268880097

R-Squared = 0 9953

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 5
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	521925 972	214599 618	2 432092	1	184		179		1 9
2	0 00	512984 118	213116 307	2 407062	1	182				
3	0 00	511604 581	216318 763	2 365049	1	179				
4	0 00	514991 076	217327 858	2 369651	1	180				
5	0 00	509854 505	215927 32	2 361232	1	179				
48	0 00	489270 386	209165 089	2 339159	1	177				
49	0 00	486003 619	207792 709	2 338887	1	177				
89	0 00	485592 376	213692 319	2 272390	1	172				
90	0 00	494023 52	210565 415	2 346176	1	178				
33	3 00	8894 96	222326 242	0 040009	1	3 03	1 0	3 00	0 0	1 7
65	3 00	7894 225	202243 317	0 039033	1	2 96	-1 3			
40	37 5	108626 705	226388 149	0 479825	1	36 4	-2 9	35 6	-5 1	3 4
72	37 5	98215 776	214852 879	0 457130	1	34 7	-7 5			
47	150	405940 901	165279 68	2 456085	1	186	24 0	164	9 3	19 0
87	150	414111 454	220591 916	1 877274	1	142	-5 3			
26	780	229280 466	228700 067	1 002538	10	760	-2 6	755	-3 2	1 3
57	780	220652 155	219533 884	1 005094	10	762	-2 3			
80	780	216986 067	221039 382	0 981662	10	744	-4 6			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 5
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	1 / Day 1 1h	54875 524	221601 941	0 247631	10	188	20	497170001217	AA90478-01 497170001217 024 N/A P1 Plasma-1 1 / Day 1 1h
024	N/A	2 / Day 1 2h	54871 82	227662 992	0 241022	10	183	21	497170001218	AA90478-01 497170001218 024 N/A P1 Plasma-1 2 / Day 1 2h
024	N/A	3 / Day 1 3h	53032 947	222751 514	0 238081	10	180	22	497170001219	AA90478-01 497170001219 024 N/A P1 Plasma-1 3 / Day 1 3h
024	N/A	4 / Day 1 4h	55815 692	223866 771	0 249325	10	189	23	497170001220	AA90478-01 497170001220 024 N/A P1 Plasma-1 4 / Day 1 4h
024	N/A	5 / Day 1 5h	52481 638	217462 455	0 241337	10	183	24	497170001221	AA90478-01 497170001221 024 N/A P1 Plasma-1 5 / Day 1 5h
024	N/A	6 / Day 1 6h	58075 527	231780 6	0 250563	10	190	25	497170001222	AA90478-01 497170001222 024 N/A P1 Plasma-1 6 / Day 1 6h
024	N/A	7 / Day 1 7h	51904 353	212547 567	0 244201	10	185	27	497170001223	AA90478-01 497170001223 024 N/A P1 Plasma-1 7 / Day 1 7h
024	N/A	8 / Day 1 8h	55821 569	226837 683	0 246086	10	187	28	497170001224	AA90478-01 497170001224 024 N/A P1 Plasma-1 8 / Day 1 8h
024	N/A	9 / Day 1 9h	58535 002	231820 403	0 252502	10	191	29	497170001225	AA90478-01 497170001225 024 N/A P1 Plasma-1 9 / Day 1 9h
024	N/A	10 / Day 1 10h	55799 092	230254 119	0 242337	10	184	30	497170001226	AA90478-01 497170001226 024 N/A P1 Plasma-1 10 / Day 1 10h
024	N/A	11 / Day 1 11h	53508 377	221103 079	0 242006	10	183	31	497170001227	AA90478-01 497170001227 024 N/A P1 Plasma-1 11 / Day 1 11h
024	N/A	12 / Day 1 12h	54006 503	217706 646	0 248070	10	188	32	497170001228	AA90478-01 497170001228 024 N/A P1 Plasma-1 12 / Day 1 12h
024	N/A	13 / Day 1 13h	55276 603	229731 015	0 240614	10	182	34	497170001229	AA90478-01 497170001229 024 N/A P1 Plasma-1 13 / Day 1 13h
024	N/A	14 / Day 1 14h	57996 607	240232 626	0 241419	10	183	35	497170001230	AA90478-01 497170001230 024 N/A P1 Plasma-1 14 / Day 1 14h
024	N/A	15 / Day 1 15h	59754 967	236826 279	0 252316	10	191	36	497170001231	AA90478-01 497170001231 024 N/A P1 Plasma-1 15 / Day 1 15h
024	N/A	16 / Day 1 16h	58046 603	230359 112	0 251983	10	191	37	497170001232	AA90478-01 497170001232 024 N/A P1 Plasma-1 16 / Day 1 16h
024	N/A	17 / Day 1 17h	57162 973	233272 658	0 245048	10	186	38	497170001233	AA90478-01 497170001233 024 N/A P1 Plasma-1 17 / Day 1 17h
024	N/A	18 / Day 1 18h	59594 854	236113 364	0 252399	10	191	39	497170001234	AA90478-01 497170001234 024 N/A P1 Plasma-1 18 / Day 1 18h
024	N/A	19 / Day 1 19h	54903 275	222418 777	0 246846	10	187	41	497170001235	AA90478-01 497170001235 024 N/A P1 Plasma-1 19 / Day 1 19h
026	N/A	1 / Day 1 1h	82590 583	222275 693	0 371568	10	282	42	497170001312	AA90478-01 497170001312 026 N/A P1 Plasma-1 1 / Day 1 1h
026	N/A	2 / Day 1 2h	82127 375	230847 026	0 355765	10	270	43	497170001313	AA90478-01 497170001313 026 N/A P1 Plasma-1 2 / Day 1 2h
026	N/A	3 / Day 1 3h	84038 992	233337 215	0 360161	10	273	44	497170001314	AA90478-01 497170001314 026 N/A P1 Plasma-1 3 / Day 1 3h
026	N/A	4 / Day 1 4h	82275 705	221108 171	0 372106	10	282	45	497170001315	AA90478-01 497170001315 026 N/A P1 Plasma-1 4 / Day 1 4h
026	N/A	5 / Day 1 5h	76272 256	213464 356	0 357307	10	271	46	497170001316	AA90478-01 497170001316 026 N/A P1 Plasma-1 5 / Day 1 5h
026	N/A	6 / Day 1 6h	79687 365	219292 825	0 363383	10	275	50	497170001317	AA90478-01 497170001317 026 N/A P1 Plasma-1 6 / Day 1 6h
026	N/A	7 / Day 1 7h	81079 434	219844 284	0 368804	10	280	51	497170001318	AA90478-01 497170001318 026 N/A P1 Plasma-1 7 / Day 1 7h
026	N/A	8 / Day 1 8h	83920 098	221683 629	0 378558	10	287	52	497170001319	AA90478-01 497170001319 026 N/A P1 Plasma-1 8 / Day 1 8h
026	N/A	9 / Day 1 9h	78751 254	218712 314	0 360068	10	273	53	497170001320	AA90478-01 497170001320 026 N/A P1 Plasma-1 9 / Day 1 9h
026	N/A	10 / Day 1 10h	74306 948	204255 827	0 363794	10	276	54	497170001321	AA90478-01 497170001321 026 N/A P1 Plasma-1 10 / Day 1 10h
026	N/A	11 / Day 1 11h	80200 364	229978 655	0 348730	10	264	55	497170001322	AA90478-01 497170001322 026 N/A P1 Plasma-1 11 / Day 1 11h
026	N/A	12 / Day 1 12h	80113 585	224848 647	0 356300	10	270	56	497170001323	AA90478-01 497170001323 026 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
026	N/A	13 / Day 1 13h	77499 458	216343 288	0 358224	10	272	58	497170001324	AA90478-01 497170001324 026 N/A P1 Plasma-1 13 / Day 1 13h
026	N/A	14 / Day 1 14h	75858 063	219394 759	0 345761	10	262	59	497170001325	AA90478-01 497170001325 026 N/A P1 Plasma-1 14 / Day 1 14h
026	N/A	15 / Day 1 15h	74912 15	224469 032	0 333730	10	253	60	497170001326	AA90478-01 497170001326 026 N/A P1 Plasma-1 15 / Day 1 15h
026	N/A	16 / Day 1 16h	71260 992	209596 611	0 339991	10	258	61	497170001327	AA90478-01 497170001327 026 N/A P1 Plasma-1 16 / Day 1 16h
026	N/A	17 / Day 1 17h	68123 439	212210 625	0 321018	10	243	62	497170001328	AA90478-01 497170001328 026 N/A P1 Plasma-1 17 / Day 1 17h
026	N/A	18 / Day 1 18h	67335 752	210689 259	0 319597	10	242	63	497170001329	AA90478-01 497170001329 026 N/A P1 Plasma-1 18 / Day 1 18h
026	N/A	19 / Day 1 19h	65982 773	193263 712	0 341413	10	259	64	497170001330	AA90478-01 497170001330 026 N/A P1 Plasma-1 19 / Day 1 19h
028	N/A	1 / Day 1 1h	42131 41	223297 312	0 188679	10	143	66	497170001407	AA90478-01 497170001407 028 N/A P1 Plasma-1 1 / Day 1 1h
028	N/A	2 / Day 1 2h	40147 243	205086 112	0 195758	10	148	67	497170001408	AA90478-01 497170001408 028 N/A P1 Plasma-1 2 / Day 1 2h
028	N/A	3 / Day 1 3h	39628 267	215866 058	0 183578	10	139	68	497170001409	AA90478-01 497170001409 028 N/A P1 Plasma-1 3 / Day 1 3h
028	N/A	4 / Day 1 4h	40853 377	212259 299	0 192469	10	146	69	497170001410	AA90478-01 497170001410 028 N/A P1 Plasma-1 4 / Day 1 4h
028	N/A	5 / Day 1 5h	41437 118	214463 014	0 193213	10	146	70	497170001411	AA90478-01 497170001411 028 N/A P1 Plasma-1 5 / Day 1 5h
028	N/A	6 / Day 1 6h	39816 154	208861 849	0 190634	10	145	71	497170001412	AA90478-01 497170001412 028 N/A P1 Plasma-1 6 / Day 1 6h
028	N/A	7 / Day 1 7h	41405 371	216465 339	0 191279	10	145	73	497170001413	AA90478-01 497170001413 028 N/A P1 Plasma-1 7 / Day 1 7h
028	N/A	8 / Day 1 8h	40700 967	215163 14	0 189163	10	143	74	497170001414	AA90478-01 497170001414 028 N/A P1 Plasma-1 8 / Day 1 8h
028	N/A	9 / Day 1 9h	44349 484	221160 9	0 200530	10	152	75	497170001415	AA90478-01 497170001415 028 N/A P1 Plasma-1 9 / Day 1 9h
028	N/A	10 / Day 1 10h	39358 699	206461 392	0 190635	10	145	76	497170001416	AA90478-01 497170001416 028 N/A P1 Plasma-1 10 / Day 1 10h
028	N/A	11 / Day 1 11h	39841 665	212269 111	0 187694	10	142	77	497170001417	AA90478-01 497170001417 028 N/A P1 Plasma-1 11 / Day 1 11h
028	N/A	12 / Day 1 12h	39823 973	218685 99	0 182106	10	138	78	497170001418	AA90478-01 497170001418 028 N/A P1 Plasma-1 12 / Day 1 12h
028	N/A	13 / Day 1 13h	41307 838	219521 762	0 188172	10	143	79	497170001419	AA90478-01 497170001419 028 N/A P1 Plasma-1 13 / Day 1 13h
028	N/A	14 / Day 1 14h	40913 077	217674 118	0 187956	10	142	81	497170001420	AA90478-01 497170001420 028 N/A P1 Plasma-1 14 / Day 1 14h
028	N/A	15 / Day 1 15h	40352 427	221449 241	0 182220	10	138	82	497170001421	AA90478-01 497170001421 028 N/A P1 Plasma-1 15 / Day 1 15h
028	N/A	16 / Day 1 16h	38845 926	216456 928	0 179463	10	136	83	497170001422	AA90478-01 497170001422 028 N/A P1 Plasma-1 16 / Day 1 16h
028	N/A	17 / Day 1 17h	38160 755	217478 099	0 175469	10	133	84	497170001423	AA90478-01 497170001423 028 N/A P1 Plasma-1 17 / Day 1 17h
028	N/A	18 / Day 1 18h	40568 644	223950 468	0 181150	10	137	85	497170001424	AA90478-01 497170001424 028 N/A P1 Plasma-1 18 / Day 1 18h
028	N/A	19 / Day 1 19h	36818 936	165931 301	0 221893	10	168	86	497170001425	AA90478-01 497170001425 028 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 6
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	207215 177	0 000000	-0 0782		-0 0782	0 0
9	0 00		0	209018 242	0 000000	-0 0782			
10	1 00	1 00000	2754 525	206269 246	0 013354	0 986	-1 4		
11	2 00	0 250000	5271 482	202912 507	0 025979	1 99	-0 5		
12	4 00	0 0625000	10904 163	202327 951	0 053894	4 22	5 5		
13	8 00	0 0156250	20080 806	201028 241	0 099890	7 88	-1 5		
14	16 0	0 00390625	44613 538	202801 387	0 219986	17 4	8 8		
15	40 0	0 000625000	99350 516	197386 381	0 503330	40 0	0 0		
16	80 0	0 000156250	201230 123	206425 607	0 974831	77 6	-3 0		
17	160	0 0000390625	398585 487	203204 224	1 961502	156	-2 5		
18	200	0 0000250000	487449 689	205856 427	2 367911	189	-5 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0125523278

Intercept = 0 000981248377

R-Squared = 0 9973

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 6
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	469133 445	205623 713	2 281514	1	182		186		1 2
2	0 00	479074 225	204215 335	2 345927	1	187				
3	0 00	489539 403	207337 974	2 361070	1	188				
4	0 00	483745 586	206292 354	2 344952	1	187				
5	0 00	493016 881	212689 48	2 318013	1	185				
50	0 00	476596 777	204810 193	2 327017	1	185				
51	0 00	474523 553	205112 133	2 313484	1	184				
86	0 00	454866 098	192142 812	2 367333	1	189				
87	0 00	463184 292	199260 975	2 324511	1	185				
29	3 00	7230 367	186419 51	0 038785	1	3 01	0 3	3 03	1 0	0 9
62	3 00	8271 906	210948 451	0 039213	1	3 05	1 7			
39	37 5	90938 741	201603 527	0 451077	1	35 9	-4 3	35 6	-5 1	1 4
73	37 5	95985 435	217051 364	0 442225	1	35 2	-6 1			
49	150	387523 112	201405 334	1 924096	1	153	2 0	153	2 0	0 0
84	150	379606 335	197486 579	1 922188	1	153	2 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 6
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 2 1h	161049 577	196035 938	0 821531	1	65 4	20	497170000058	AA90478-01 497170000058 001 N/A P2 Plasma-1 1 / Day 2 1h
001	N/A	2 / Day 2 2h	153002 915	181218 635	0 844300	1	67 2	21	497170000059	AA90478-01 497170000059 001 N/A P2 Plasma-1 2 / Day 2 2h
001	N/A	3 / Day 2 3h	155122 549	186547 122	0 831546	1	66 2	22	497170000060	AA90478-01 497170000060 001 N/A P2 Plasma-1 3 / Day 2 3h
001	N/A	4 / Day 2 4h	158432 284	191486 921	0 827379	1	65 8	23	497170000061	AA90478-01 497170000061 001 N/A P2 Plasma-1 4 / Day 2 4h
001	N/A	5 / Day 2 5h	154207 322	178290 647	0 864921	1	68 8	24	497170000062	AA90478-01 497170000062 001 N/A P2 Plasma-1 5 / Day 2 5h
001	N/A	6 / Day 2 6h	146835 92	183697 823	0 799334	1	63 6	25	497170000063	AA90478-01 497170000063 001 N/A P2 Plasma-1 6 / Day 2 6h
001	N/A	7 / Day 2 7h	151469 263	183395 487	0 825916	1	65 7	26	497170000064	AA90478-01 497170000064 001 N/A P2 Plasma-1 7 / Day 2 7h
001	N/A	8 / Day 2 8h	151863 042	179143 644	0 847717	1	67 5	27	497170000065	AA90478-01 497170000065 001 N/A P2 Plasma-1 8 / Day 2 8h
001	N/A	9 / Day 2 9h	167738 863	192890 274	0 869608	1	69 2	28	497170000066	AA90478-01 497170000066 001 N/A P2 Plasma-1 9 / Day 2 9h
001	N/A	10 / Day 2 10h	165894 123	178683 266	0 928426	1	73 9	30	497170000067	AA90478-01 497170000067 001 N/A P2 Plasma-1 10 / Day 2 10h
001	N/A	11 / Day 2 11h	165739 716	186597 27	0 888222	1	70 7	31	497170000068	AA90478-01 497170000068 001 N/A P2 Plasma-1 11 / Day 2 11h
001	N/A	12 / Day 2 12h	164405 136	189685 342	0 866726	1	69 0	32	497170000069	AA90478-01 497170000069 001 N/A P2 Plasma-1 12 / Day 2 12h
001	N/A	13 / Day 2 13h	155546 192	177917 307	0 874261	1	69 6	33	497170000070	AA90478-01 497170000070 001 N/A P2 Plasma-1 13 / Day 2 13h
001	N/A	14 / Day 2 14h	148757 191	184356 718	0 806899	1	64 2	34	497170000071	AA90478-01 497170000071 001 N/A P2 Plasma-1 14 / Day 2 14h
001	N/A	15 / Day 2 15h	136557 582	175881 207	0 776419	1	61 8	35	497170000072	AA90478-01 497170000072 001 N/A P2 Plasma-1 15 / Day 2 15h
001	N/A	16 / Day 2 16h	150429 259	188932 017	0 796208	1	63 4	36	497170000073	AA90478-01 497170000073 001 N/A P2 Plasma-1 16 / Day 2 16h
001	N/A	17 / Day 2 17h	150167 207	190558 383	0 788038	1	62 7	37	497170000074	AA90478-01 497170000074 001 N/A P2 Plasma-1 17 / Day 2 17h
001	N/A	18 / Day 2 18h	135040 394	182342 587	0 740586	1	58 9	38	497170000075	AA90478-01 497170000075 001 N/A P2 Plasma-1 18 / Day 2 18h
001	N/A	19 / Day 2 19h	139315 244	194190 635	0 717415	1	57 1	40	497170000076	AA90478-01 497170000076 001 N/A P2 Plasma-1 19 / Day 2 19h
003	N/A	1 / Day 2 1h	296720 311	186833 464	1 588154	1	126	41	497170000153	AA90478-01 497170000153 003 N/A P2 Plasma-1 1 / Day 2 1h
003	N/A	2 / Day 2 2h	316956 23	190454 435	1 664210	1	133	42	497170000154	AA90478-01 497170000154 003 N/A P2 Plasma-1 2 / Day 2 2h
003	N/A	3 / Day 2 3h	311532 409	183172 946	1 700756	1	135	43	497170000155	AA90478-01 497170000155 003 N/A P2 Plasma-1 3 / Day 2 3h
003	N/A	4 / Day 2 4h	325884 548	197492 492	1 650111	1	131	44	497170000156	AA90478-01 497170000156 003 N/A P2 Plasma-1 4 / Day 2 4h
003	N/A	5 / Day 2 5h	337992 494	192379 279	1 756907	1	140	45	497170000157	AA90478-01 497170000157 003 N/A P2 Plasma-1 5 / Day 2 5h
003	N/A	6 / Day 2 6h	352860 946	205592 616	1 716311	1	137	46	497170000158	AA90478-01 497170000158 003 N/A P2 Plasma-1 6 / Day 2 6h
003	N/A	7 / Day 2 7h	352863 478	154652 198	2 281658	1	182	47	497170000159	AA90478-01 497170000159 003 N/A P2 Plasma-1 7 / Day 2 7h
003	N/A	8 / Day 2 8h	295481 368	178028 898	1 659738	1	132	48	497170000160	AA90478-01 497170000160 003 N/A P2 Plasma-1 8 / Day 2 8h
003	N/A	9 / Day 2 9h	304926 986	184784 935	1 650172	1	131	52	497170000161	AA90478-01 497170000161 003 N/A P2 Plasma-1 9 / Day 2 9h
003	N/A	10 / Day 2 10h	323534 736	200015 589	1 617548	1	129	53	497170000162	AA90478-01 497170000162 003 N/A P2 Plasma-1 10 / Day 2 10h
003	N/A	11 / Day 2 11h	328863 038	205111 007	1 603342	1	128	54	497170000163	AA90478-01 497170000163 003 N/A P2 Plasma-1 11 / Day 2 11h
003	N/A	12 / Day 2 12h	315605 321	199349 01	1 583180	1	126	55	497170000164	AA90478-01 497170000164 003 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	13 / Day 2 13h	312420 678	201809 067	1 548100	1	123	56	497170000165	AA90478-01 497170000165 003 N/A P2 Plasma-1 13 / Day 2 13h
003	N/A	14 / Day 2 14h	303099 505	191132 149	1 585811	1	126	57	497170000166	AA90478-01 497170000166 003 N/A P2 Plasma-1 14 / Day 2 14h
003	N/A	15 / Day 2 15h	309351 125	197775 468	1 564153	1	125	58	497170000167	AA90478-01 497170000167 003 N/A P2 Plasma-1 15 / Day 2 15h
003	N/A	16 / Day 2 16h	308451 551	192807 468	1 599790	1	127	59	497170000168	AA90478-01 497170000168 003 N/A P2 Plasma-1 16 / Day 2 16h
003	N/A	17 / Day 2 17h	302681 494	202329 462	1 495983	1	119	60	497170000169	AA90478-01 497170000169 003 N/A P2 Plasma-1 17 / Day 2 17h
003	N/A	18 / Day 2 18h	298484 852	198012 611	1 507403	1	120	61	497170000170	AA90478-01 497170000170 003 N/A P2 Plasma-1 18 / Day 2 18h
003	N/A	19 / Day 2 19h	301759 704	196112 208	1 538709	1	123	63	497170000171	AA90478-01 497170000171 003 N/A P2 Plasma-1 19 / Day 2 19h
005	N/A	1 / Day 2 1h	221428 215	203931 448	1 085797	1	86 4	64	497170000248	AA90478-01 497170000248 005 N/A P2 Plasma-1 1 / Day 2 1h
005	N/A	2 / Day 2 2h	210618 546	191684 937	1 098775	1	87 5	65	497170000249	AA90478-01 497170000249 005 N/A P2 Plasma-1 2 / Day 2 2h
005	N/A	3 / Day 2 3h	220603 262	198154 592	1 113289	1	88 6	66	497170000250	AA90478-01 497170000250 005 N/A P2 Plasma-1 3 / Day 2 3h
005	N/A	4 / Day 2 4h	219847 705	150522 377	1 460565	1	116	67	497170000251	AA90478-01 497170000251 005 N/A P2 Plasma-1 4 / Day 2 4h
005	N/A	5 / Day 2 5h	195990 864	179822 428	1 089913	1	86 8	68	497170000252	AA90478-01 497170000252 005 N/A P2 Plasma-1 5 / Day 2 5h
005	N/A	6 / Day 2 6h	214513 953	144954 679	1 479869	1	118	69	497170000253	AA90478-01 497170000253 005 N/A P2 Plasma-1 6 / Day 2 6h
005	N/A	7 / Day 2 7h	213992 843	193053 726	1 108463	1	88 2	70	497170000254	AA90478-01 497170000254 005 N/A P2 Plasma-1 7 / Day 2 7h
005	N/A	8 / Day 2 8h	221879 049	196144 963	1 131199	1	90 0	71	497170000255	AA90478-01 497170000255 005 N/A P2 Plasma-1 8 / Day 2 8h
005	N/A	9 / Day 2 9h	236658 244	157679 459	1 500882	1	119	72	497170000256	AA90478-01 497170000256 005 N/A P2 Plasma-1 9 / Day 2 9h
005	N/A	10 / Day 2 10h	228933 616	201671 223	1 135182	1	90 4	74	497170000257	AA90478-01 497170000257 005 N/A P2 Plasma-1 10 / Day 2 10h
005	N/A	11 / Day 2 11h	238100 135	214656 059	1 109217	1	88 3	75	497170000258	AA90478-01 497170000258 005 N/A P2 Plasma-1 11 / Day 2 11h
005	N/A	12 / Day 2 12h	245137 072	211400 369	1 159587	1	92 3	76	497170000259	AA90478-01 497170000259 005 N/A P2 Plasma-1 12 / Day 2 12h
005	N/A	13 / Day 2 13h	200198 49	164531 143	1 216782	1	96 9	77	497170000260	AA90478-01 497170000260 005 N/A P2 Plasma-1 13 / Day 2 13h
005	N/A	14 / Day 2 14h	222175 557	188991 3	1 175586	1	93 6	78	497170000261	AA90478-01 497170000261 005 N/A P2 Plasma-1 14 / Day 2 14h
005	N/A	15 / Day 2 15h	225053 038	193594 907	1 162495	1	92 5	79	497170000262	AA90478-01 497170000262 005 N/A P2 Plasma-1 15 / Day 2 15h
005	N/A	16 / Day 2 16h	239692 527	208772 255	1 148105	1	91 4	80	497170000263	AA90478-01 497170000263 005 N/A P2 Plasma-1 16 / Day 2 16h
005	N/A	17 / Day 2 17h	209963 754	183055 066	1 146998	1	91 3	81	497170000264	AA90478-01 497170000264 005 N/A P2 Plasma-1 17 / Day 2 17h
005	N/A	18 / Day 2 18h	213966 627	189730 59	1 127739	1	89 8	82	497170000265	AA90478-01 497170000265 005 N/A P2 Plasma-1 18 / Day 2 18h
005	N/A	19 / Day 2 19h	229490 5	201208 791	1 140559	1	90 8	83	497170000266	AA90478-01 497170000266 005 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 8
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		767 766	234355 49	0 003276	-0 107		-0 166	-50 2
9	0 00		0	237203 893	0 000000	-0 225			
10	1 00	1 00000	8110 18	235394 273	0 034454	1 02	2 0		
11	2 00	0 250000	16773 506	283809 325	0 059101	1 91	-4 5		
12	4 00	0 0625000	28893 537	246163 464	0 117375	4 01	0 3		
13	8 00	0 0156250	60429 072	197632 936	*0 305764	*10 8			
14	16 0	0 00390625	145205 288	290993 499	0 498998	17 8	11 3		
15	40 0	0 000625000	288875 122	261402 697	1 105096	39 6	-1 0		
16	80 0	0 000156250	508137 003	232298 635	2 187430	78 6	-1 8		
17	160	0 0000390625	1052061 113	239138 614	4 399378	158	-1 3		
18	200	0 0000250000	1428128 592	268935 746	5 310297	191	-4 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0277433954

Intercept = 0 00623577375

R-Squared = 0 9968

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 8
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1109993 406	213329 895	5 203178	1	187		185		1 9
2	0 00	1044796 417	203756 51	5 127671	1	185				
3	0 00	1117985 943	221547 331	5 046262	1	182				
4	0 00	1239290 202	241234 793	5 137278	1	185				
5	0 00	1102555 509	209189 551	5 270605	1	190				
50	0 00	1296540 773	255530 685	5 073914	1	183				
51	0 00	1301652 725	247891 723	5 250892	1	189				
86	0 00	970219 335	195355 281	4 966435	1	179				
87	0 00	1036792 116	205053 74	5 056197	1	182				
29	3 00	25079 921	278687 072	0 089993	1	3 02	0 7	2 98	-0 7	2 1
62	3 00	19706 226	224988 592	0 087588	1	2 93	-2 3			
39	37 5	271537 959	263937 727	1 028796	1	36 9	-1 6	36 8	-1 9	0 4
73	37 5	180943 768	176585 9	1 024678	1	36 7	-2 1			
49	150	1002119 284	238136 597	4 208170	1	151	0 7	149	-0 7	1 9
84	150	803854 251	197008 77	4 080297	1	147	-2 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 8
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	1 / Day 2 1h	1524725 064	217451 228	*7 011802	1	*AAR>(200)	20	497170000628	AA90478-01 497170000628 012 N/A P2 Plasma-1 1 / Day 2 1h
012	N/A	2 / Day 2 2h	1825305 525	267440 875	*6 825081	1	*AAR>(200)	21	497170000629	AA90478-01 497170000629 012 N/A P2 Plasma-1 2 / Day 2 2h
012	N/A	3 / Day 2 3h	1666207 073	247216 75	*6 739863	1	*AAR>(200)	22	497170000630	AA90478-01 497170000630 012 N/A P2 Plasma-1 3 / Day 2 3h
012	N/A	4 / Day 2 4h	1567856 592	229210 888	*6 840236	1	*AAR>(200)	23	497170000631	AA90478-01 497170000631 012 N/A P2 Plasma-1 4 / Day 2 4h
012	N/A	5 / Day 2 5h	1608317 964	236076 564	*6 812696	1	*AAR>(200)	24	497170000632	AA90478-01 497170000632 012 N/A P2 Plasma-1 5 / Day 2 5h
012	N/A	6 / Day 2 6h	1711593 964	255290 709	*6 704490	1	*AAR>(200)	25	497170000633	AA90478-01 497170000633 012 N/A P2 Plasma-1 6 / Day 2 6h
012	N/A	7 / Day 2 7h	1642854 069	248739 902	*6 604707	1	*AAR>(200)	26	497170000634	AA90478-01 497170000634 012 N/A P2 Plasma-1 7 / Day 2 7h
012	N/A	8 / Day 2 8h	1653879 841	246942 48	*6 697429	1	*AAR>(200)	27	497170000635	AA90478-01 497170000635 012 N/A P2 Plasma-1 8 / Day 2 8h
012	N/A	9 / Day 2 9h	1773393 459	263160 924	*6 738818	1	*AAR>(200)	28	497170000636	AA90478-01 497170000636 012 N/A P2 Plasma-1 9 / Day 2 9h
012	N/A	10 / Day 2 10h	1732564 96	256077 106	*6 765794	1	*AAR>(200)	30	497170000637	AA90478-01 497170000637 012 N/A P2 Plasma-1 10 / Day 2 10h
012	N/A	11 / Day 2 11h	1736121 599	262612 771	*6 610956	1	*AAR>(200)	31	497170000638	AA90478-01 497170000638 012 N/A P2 Plasma-1 11 / Day 2 11h
012	N/A	12 / Day 2 12h	1696097 894	245986 148	*6 895095	1	*AAR>(200)	32	497170000639	AA90478-01 497170000639 012 N/A P2 Plasma-1 12 / Day 2 12h
012	N/A	13 / Day 2 13h	1977851 766	290333 418	*6 812346	1	*AAR>(200)	33	497170000640	AA90478-01 497170000640 012 N/A P2 Plasma-1 13 / Day 2 13h
012	N/A	14 / Day 2 14h	1958005 294	283380 899	*6 909447	1	*AAR>(200)	34	497170000641	AA90478-01 497170000641 012 N/A P2 Plasma-1 14 / Day 2 14h
012	N/A	15 / Day 2 15h	1425362 559	222164 776	*6 415790	1	*AAR>(200)	35	497170000642	AA90478-01 497170000642 012 N/A P2 Plasma-1 15 / Day 2 15h
012	N/A	16 / Day 2 16h	1876756 422	284807 625	*6 589558	1	*AAR>(200)	36	497170000643	AA90478-01 497170000643 012 N/A P2 Plasma-1 16 / Day 2 16h
012	N/A	17 / Day 2 17h	1612590 316	246817 446	*6 533535	1	*AAR>(200)	37	497170000644	AA90478-01 497170000644 012 N/A P2 Plasma-1 17 / Day 2 17h
012	N/A	18 / Day 2 18h	1496615 695	245275 352	*6 101778	1	*AAR>(200)	38	497170000645	AA90478-01 497170000645 012 N/A P2 Plasma-1 18 / Day 2 18h
012	N/A	19 / Day 2 19h	1518634 799	244858 076	*6 202102	1	*AAR>(200)	40	497170000646	AA90478-01 497170000646 012 N/A P2 Plasma-1 19 / Day 2 19h
013	N/A	1 / Day 2 1h	605908 036	277319 669	2 184872	1	78 5	41	497170000723	AA90478-01 497170000723 013 N/A P2 Plasma-1 1 / Day 2 1h
013	N/A	2 / Day 2 2h	522386 095	247521 429	2 110468	1	75 8	42	497170000724	AA90478-01 497170000724 013 N/A P2 Plasma-1 2 / Day 2 2h
013	N/A	3 / Day 2 3h	531568 583	255862 067	2 077559	1	74 7	43	497170000725	AA90478-01 497170000725 013 N/A P2 Plasma-1 3 / Day 2 3h
013	N/A	4 / Day 2 4h	498222 186	233585 801	2 132930	1	76 7	44	497170000726	AA90478-01 497170000726 013 N/A P2 Plasma-1 4 / Day 2 4h
013	N/A	5 / Day 2 5h	661157 213	307886 831	2 147403	1	77 2	45	497170000727	AA90478-01 497170000727 013 N/A P2 Plasma-1 5 / Day 2 5h
013	N/A	6 / Day 2 6h	520005 296	247255 706	2 103107	1	75 6	46	497170000728	AA90478-01 497170000728 013 N/A P2 Plasma-1 6 / Day 2 6h
013	N/A	7 / Day 2 7h	524037 563	242326 705	2 162525	1	77 7	47	497170000729	AA90478-01 497170000729 013 N/A P2 Plasma-1 7 / Day 2 7h
013	N/A	8 / Day 2 8h	613907 944	291779 925	2 104010	1	75 6	48	497170000730	AA90478-01 497170000730 013 N/A P2 Plasma-1 8 / Day 2 8h
013	N/A	9 / Day 2 9h	572670 245	264485 81	2 165221	1	77 8	52	497170000731	AA90478-01 497170000731 013 N/A P2 Plasma-1 9 / Day 2 9h
013	N/A	10 / Day 2 10h	470635 355	217540 624	2 163437	1	77 8	53	497170000732	AA90478-01 497170000732 013 N/A P2 Plasma-1 10 / Day 2 10h
013	N/A	11 / Day 2 11h	568949 81	259303 562	2 194146	1	78 9	54	497170000733	AA90478-01 497170000733 013 N/A P2 Plasma-1 11 / Day 2 11h
013	N/A	12 / Day 2 12h	535832 81	226471 277	2 366008	1	85 1	55	497170000734	AA90478-01 497170000734 013 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	13 / Day 2 13h	533281 249	218152 42	2 444535	1	87 9	56	497170000735	AA90478-01 497170000735 013 N/A P2 Plasma-1 13 / Day 2 13h
013	N/A	14 / Day 2 14h	571096 733	232208 73	2 459411	1	88 4	57	497170000736	AA90478-01 497170000736 013 N/A P2 Plasma-1 14 / Day 2 14h
013	N/A	15 / Day 2 15h	581513 517	231373 806	2 513307	1	90 4	58	497170000737	AA90478-01 497170000737 013 N/A P2 Plasma-1 15 / Day 2 15h
013	N/A	16 / Day 2 16h	594316 586	229635 912	2 588082	1	93 1	59	497170000738	AA90478-01 497170000738 013 N/A P2 Plasma-1 16 / Day 2 16h
013	N/A	17 / Day 2 17h	578203 846	217538 343	2 657940	1	95 6	60	497170000739	AA90478-01 497170000739 013 N/A P2 Plasma-1 17 / Day 2 17h
013	N/A	18 / Day 2 18h	565489 615	166941 978	3 387342	1	122	61	497170000740	AA90478-01 497170000740 013 N/A P2 Plasma-1 18 / Day 2 18h
013	N/A	19 / Day 2 19h	593224 626	170589 317	3 477502	1	125	63	497170000741	AA90478-01 497170000741 013 N/A P2 Plasma-1 19 / Day 2 19h
015	N/A	1 / Day 2 1h	703610 812	189248 637	3 717917	1	134	64	497170000818	AA90478-01 497170000818 015 N/A P2 Plasma-1 1 / Day 2 1h
015	N/A	2 / Day 2 2h	740012 851	196898 911	3 758339	1	135	65	497170000819	AA90478-01 497170000819 015 N/A P2 Plasma-1 2 / Day 2 2h
015	N/A	3 / Day 2 3h	750518 044	200596 312	3 741435	1	135	66	497170000820	AA90478-01 497170000820 015 N/A P2 Plasma-1 3 / Day 2 3h
015	N/A	4 / Day 2 4h	736793 497	151359 751	4 867830	1	175	67	497170000821	AA90478-01 497170000821 015 N/A P2 Plasma-1 4 / Day 2 4h
015	N/A	5 / Day 2 5h	711796 615	190062 562	3 745065	1	135	68	497170000822	AA90478-01 497170000822 015 N/A P2 Plasma-1 5 / Day 2 5h
015	N/A	6 / Day 2 6h	753795 991	149505 803	5 041918	1	182	69	497170000823	AA90478-01 497170000823 015 N/A P2 Plasma-1 6 / Day 2 6h
015	N/A	7 / Day 2 7h	705172 764	141299 954	4 990609	1	180	70	497170000824	AA90478-01 497170000824 015 N/A P2 Plasma-1 7 / Day 2 7h
015	N/A	8 / Day 2 8h	578226 674	154632 593	3 739358	1	135	71	497170000825	AA90478-01 497170000825 015 N/A P2 Plasma-1 8 / Day 2 8h
015	N/A	9 / Day 2 9h	636276 518	174086 11	3 654953	1	132	72	497170000826	AA90478-01 497170000826 015 N/A P2 Plasma-1 9 / Day 2 9h
015	N/A	10 / Day 2 10h	700930 475	171680 321	4 082765	1	147	74	497170000827	AA90478-01 497170000827 015 N/A P2 Plasma-1 10 / Day 2 10h
015	N/A	11 / Day 2 11h	739033 349	184840 114	3 998230	1	144	75	497170000828	AA90478-01 497170000828 015 N/A P2 Plasma-1 11 / Day 2 11h
015	N/A	12 / Day 2 12h	685701 452	174422 068	3 931277	1	141	76	497170000829	AA90478-01 497170000829 015 N/A P2 Plasma-1 12 / Day 2 12h
015	N/A	13 / Day 2 13h	723082 903	193045 689	3 745657	1	135	77	497170000830	AA90478-01 497170000830 015 N/A P2 Plasma-1 13 / Day 2 13h
015	N/A	14 / Day 2 14h	773182 181	212110 223	3 645191	1	131	78	497170000831	AA90478-01 497170000831 015 N/A P2 Plasma-1 14 / Day 2 14h
015	N/A	15 / Day 2 15h	851491 171	225760 207	3 771662	1	136	79	497170000832	AA90478-01 497170000832 015 N/A P2 Plasma-1 15 / Day 2 15h
015	N/A	16 / Day 2 16h	701853 616	190023 618	3 693507	1	133	80	497170000833	AA90478-01 497170000833 015 N/A P2 Plasma-1 16 / Day 2 16h
015	N/A	17 / Day 2 17h	684942 269	189156 046	3 621043	1	130	81	497170000834	AA90478-01 497170000834 015 N/A P2 Plasma-1 17 / Day 2 17h
015	N/A	18 / Day 2 18h	622391 401	172577 672	3 606442	1	130	82	497170000835	AA90478-01 497170000835 015 N/A P2 Plasma-1 18 / Day 2 18h
015	N/A	19 / Day 2 19h	756662 516	219909 992	3 440783	1	124	83	497170000836	AA90478-01 497170000836 015 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 9
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	208075 664	0 000000	-0 158		-0 158	0 0
9	0 00		0	234033 577	0 000000	-0 158			
10	1 00	1 00000	3420 553	234008 829	0 014617	0 987	-1 3		
11	2 00	0 250000	6463 251	225302 602	0 028687	2 09	4 5		
12	4 00	0 0625000	12084 372	241163 111	0 050109	3 77	-5 8		
13	8 00	0 0156250	23847 191	231213 091	0 103139	7 92	-1 0		
14	16 0	0 00390625	53107 848	229327 639	0 231581	18 0	12 5		
15	40 0	0 000625000	118935 2	233532 895	0 509287	39 7	-0 8		
16	80 0	0 000156250	209324 404	209065 669	1 001238	78 2	-2 3		
17	160	0 0000390625	434778 864	215305 687	2 019356	158	-1 3		
18	200	0 0000250000	529672 545	216853 235	2 442539	191	-4 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0127701807

Intercept = 0 00201567319

R-Squared = 0 9961

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 9
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	547406 359	225707 074	2 425296	1	190		190		1 6
2	0 00	553592 592	227019 236	2 438527	1	191				
3	0 00	553053 205	224188 066	2 466916	1	193				
4	0 00	559534 458	225787 92	2 478142	1	194				
5	0 00	534476 295	220457 15	2 424400	1	190				
50	0 00	600672 291	251520 369	2 388166	1	187				
51	0 00	625189 018	256835 279	2 434202	1	190				
86	0 00	593345 897	247299 529	2 399301	1	188				
87	0 00	584016 943	248764 826	2 347667	1	184				
29	3 00	9981 567	231190 5	0 043175	1	3 22	7 3	3 01	0 3	10 1
62	3 00	9358 173	248286 858	0 037691	1	2 79	-7 0			
39	37 5	113080 862	249618 892	0 453014	1	35 3	-5 9	35 3	-5 9	0 2
73	37 5	110699 497	245125 606	0 451603	1	35 2	-6 1			
49	150	503479 401	273149 427	1 843238	1	144	-4 0	146	-2 7	1 9
84	150	467928 891	247793 983	1 888379	1	148	-1 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 9
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
018	N/A	1 / Day 2 1h	195604 06	212994 07	0 918354	1	71 8	20	497170000913	AA90478-01 497170000913 018 N/A P2 Plasma-1 1 / Day 2 1h
018	N/A	2 / Day 2 2h	202269 971	218913 805	0 923971	1	72 2	21	497170000914	AA90478-01 497170000914 018 N/A P2 Plasma-1 2 / Day 2 2h
018	N/A	3 / Day 2 3h	197916 321	214325 999	0 923436	1	72 2	22	497170000915	AA90478-01 497170000915 018 N/A P2 Plasma-1 3 / Day 2 3h
018	N/A	4 / Day 2 4h	215311 611	218337 258	0 986142	1	77 1	23	497170000916	AA90478-01 497170000916 018 N/A P2 Plasma-1 4 / Day 2 4h
018	N/A	5 / Day 2 5h	213512 741	236613 579	0 902369	1	70 5	24	497170000917	AA90478-01 497170000917 018 N/A P2 Plasma-1 5 / Day 2 5h
018	N/A	6 / Day 2 6h	173921 49	239855 447	0 725110	1	56 6	25	497170000918	AA90478-01 497170000918 018 N/A P2 Plasma-1 6 / Day 2 6h
018	N/A	7 / Day 2 7h	202240 217	219553 808	0 921142	1	72 0	26	497170000919	AA90478-01 497170000919 018 N/A P2 Plasma-1 7 / Day 2 7h
018	N/A	8 / Day 2 8h	213638 509	220944 702	0 966932	1	75 6	27	497170000920	AA90478-01 497170000920 018 N/A P2 Plasma-1 8 / Day 2 8h
018	N/A	9 / Day 2 9h	211194 272	226549 182	0 932223	1	72 8	28	497170000921	AA90478-01 497170000921 018 N/A P2 Plasma-1 9 / Day 2 9h
018	N/A	10 / Day 2 10h	201468 306	222395 686	0 905900	1	70 8	30	497170000922	AA90478-01 497170000922 018 N/A P2 Plasma-1 10 / Day 2 10h
018	N/A	11 / Day 2 11h	198680 86	218621 627	0 908789	1	71 0	31	497170000923	AA90478-01 497170000923 018 N/A P2 Plasma-1 11 / Day 2 11h
018	N/A	12 / Day 2 12h	213088 983	240502 219	0 886017	1	69 2	32	497170000924	AA90478-01 497170000924 018 N/A P2 Plasma-1 12 / Day 2 12h
018	N/A	13 / Day 2 13h	183205 69	205716 909	0 890572	1	69 6	33	497170000925	AA90478-01 497170000925 018 N/A P2 Plasma-1 13 / Day 2 13h
018	N/A	14 / Day 2 14h	200284 291	227419 312	0 880683	1	68 8	34	497170000926	AA90478-01 497170000926 018 N/A P2 Plasma-1 14 / Day 2 14h
018	N/A	15 / Day 2 15h	213975 39	248790 921	0 860061	1	67 2	35	497170000927	AA90478-01 497170000927 018 N/A P2 Plasma-1 15 / Day 2 15h
018	N/A	16 / Day 2 16h	202009 868	225918 013	0 894173	1	69 9	36	497170000928	AA90478-01 497170000928 018 N/A P2 Plasma-1 16 / Day 2 16h
018	N/A	17 / Day 2 17h	199943 367	233141 698	0 857604	1	67 0	37	497170000929	AA90478-01 497170000929 018 N/A P2 Plasma-1 17 / Day 2 17h
018	N/A	18 / Day 2 18h	183606 14	224737 823	0 816979	1	63 8	38	497170000930	AA90478-01 497170000930 018 N/A P2 Plasma-1 18 / Day 2 18h
018	N/A	19 / Day 2 19h	175770 718	217856 091	0 806820	1	63 0	40	497170000931	AA90478-01 497170000931 018 N/A P2 Plasma-1 19 / Day 2 19h
019	N/A	1 / Day 2 1h	473809 466	248741 154	1 904829	1	149	41	497170001008	AA90478-01 497170001008 019 N/A P2 Plasma-1 1 / Day 2 1h
019	N/A	2 / Day 2 2h	470824 883	235528 893	1 999011	1	156	42	497170001009	AA90478-01 497170001009 019 N/A P2 Plasma-1 2 / Day 2 2h
019	N/A	3 / Day 2 3h	468616 103	215419 405	2 175366	1	170	43	497170001010	AA90478-01 497170001010 019 N/A P2 Plasma-1 3 / Day 2 3h
019	N/A	4 / Day 2 4h	501876 397	244538 226	2 052343	1	161	44	497170001011	AA90478-01 497170001011 019 N/A P2 Plasma-1 4 / Day 2 4h
019	N/A	5 / Day 2 5h	457612 621	242119 171	1 890031	1	148	45	497170001012	AA90478-01 497170001012 019 N/A P2 Plasma-1 5 / Day 2 5h
019	N/A	6 / Day 2 6h	479298 952	255364 843	1 876918	1	147	46	497170001013	AA90478-01 497170001013 019 N/A P2 Plasma-1 6 / Day 2 6h
019	N/A	7 / Day 2 7h	452923 592	176962 704	*2 559430	1	*AAR>(200)	47	497170001014	AA90478-01 497170001014 019 N/A P2 Plasma-1 7 / Day 2 7h
019	N/A	8 / Day 2 8h	481776 79	249632 774	1 929942	1	151	48	497170001015	AA90478-01 497170001015 019 N/A P2 Plasma-1 8 / Day 2 8h
019	N/A	9 / Day 2 9h	433459 86	228187 904	1 899574	1	149	52	497170001016	AA90478-01 497170001016 019 N/A P2 Plasma-1 9 / Day 2 9h
019	N/A	10 / Day 2 10h	449050 276	240316 346	1 868580	1	146	53	497170001017	AA90478-01 497170001017 019 N/A P2 Plasma-1 10 / Day 2 10h
019	N/A	11 / Day 2 11h	461613 306	242918 205	1 900283	1	149	54	497170001018	AA90478-01 497170001018 019 N/A P2 Plasma-1 11 / Day 2 11h
019	N/A	12 / Day 2 12h	484762 373	249791 84	1 940665	1	152	55	497170001019	AA90478-01 497170001019 019 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	13 / Day 2 13h	413966 413	235666 367	1 756578	1	137	56	497170001020	AA90478-01 497170001020 019 N/A P2 Plasma-1 13 / Day 2 13h
019	N/A	14 / Day 2 14h	383049 684	224644 738	1 705135	1	133	57	497170001021	AA90478-01 497170001021 019 N/A P2 Plasma-1 14 / Day 2 14h
019	N/A	15 / Day 2 15h	446111 753	255323 647	1 747240	1	137	58	497170001022	AA90478-01 497170001022 019 N/A P2 Plasma-1 15 / Day 2 15h
019	N/A	16 / Day 2 16h	442009 46	253716 2	1 742141	1	136	59	497170001023	AA90478-01 497170001023 019 N/A P2 Plasma-1 16 / Day 2 16h
019	N/A	17 / Day 2 17h	423608 648	238978 397	1 772581	1	139	60	497170001024	AA90478-01 497170001024 019 N/A P2 Plasma-1 17 / Day 2 17h
019	N/A	18 / Day 2 18h	462172 547	257676 666	1 793614	1	140	61	497170001025	AA90478-01 497170001025 019 N/A P2 Plasma-1 18 / Day 2 18h
019	N/A	19 / Day 2 19h	434339 107	229116 05	1 895717	1	148	63	497170001026	AA90478-01 497170001026 019 N/A P2 Plasma-1 19 / Day 2 19h
021	N/A	1 / Day 2 1h	449935 434	250047 733	1 799398	1	141	64	497170001103	AA90478-01 497170001103 021 N/A P2 Plasma-1 1 / Day 2 1h
021	N/A	2 / Day 2 2h	413925 005	241655 567	1 712872	1	134	65	497170001104	AA90478-01 497170001104 021 N/A P2 Plasma-1 2 / Day 2 2h
021	N/A	3 / Day 2 3h	415516 556	243459 791	1 706715	1	133	66	497170001105	AA90478-01 497170001105 021 N/A P2 Plasma-1 3 / Day 2 3h
021	N/A	4 / Day 2 4h	431457 33	250987 998	1 719036	1	134	67	497170001106	AA90478-01 497170001106 021 N/A P2 Plasma-1 4 / Day 2 4h
021	N/A	5 / Day 2 5h	436692 995	260759 595	1 674696	1	131	68	497170001107	AA90478-01 497170001107 021 N/A P2 Plasma-1 5 / Day 2 5h
021	N/A	6 / Day 2 6h	427579 376	250730 569	1 705334	1	133	69	497170001108	AA90478-01 497170001108 021 N/A P2 Plasma-1 6 / Day 2 6h
021	N/A	7 / Day 2 7h	353752 676	107573 471	*3 288475	1	*AAR>(200)	70	497170001109	AA90478-01 497170001109 021 N/A P2 Plasma-1 7 / Day 2 7h
021	N/A	8 / Day 2 8h	418975 999	251180 206	1 668030	1	130	71	497170001110	AA90478-01 497170001110 021 N/A P2 Plasma-1 8 / Day 2 8h
021	N/A	9 / Day 2 9h	392145 241	232639 353	1 685636	1	132	72	497170001111	AA90478-01 497170001111 021 N/A P2 Plasma-1 9 / Day 2 9h
021	N/A	10 / Day 2 10h	410278 682	249895 62	1 641800	1	128	74	497170001112	AA90478-01 497170001112 021 N/A P2 Plasma-1 10 / Day 2 10h
021	N/A	11 / Day 2 11h	454169 38	256642 488	1 769658	1	138	75	497170001113	AA90478-01 497170001113 021 N/A P2 Plasma-1 11 / Day 2 11h
021	N/A	12 / Day 2 12h	457188 046	251553 191	1 817461	1	142	76	497170001114	AA90478-01 497170001114 021 N/A P2 Plasma-1 12 / Day 2 12h
021	N/A	13 / Day 2 13h	424205 043	247421 429	1 714504	1	134	77	497170001115	AA90478-01 497170001115 021 N/A P2 Plasma-1 13 / Day 2 13h
021	N/A	14 / Day 2 14h	433360 068	246642 073	1 757040	1	137	78	497170001116	AA90478-01 497170001116 021 N/A P2 Plasma-1 14 / Day 2 14h
021	N/A	15 / Day 2 15h	377532 895	226791 438	1 664670	1	130	79	497170001117	AA90478-01 497170001117 021 N/A P2 Plasma-1 15 / Day 2 15h
021	N/A	16 / Day 2 16h	185877 597	117355 783	*1 583881	1	*124	80	497170001118	AA90478-01 497170001118 021 N/A P2 Plasma-1 16 / Day 2 16h
021	N/A	17 / Day 2 17h	406153 99	237574 536	1 709586	1	134	81	497170001119	AA90478-01 497170001119 021 N/A P2 Plasma-1 17 / Day 2 17h
021	N/A	18 / Day 2 18h	384948 217	229920 011	1 674270	1	131	82	497170001120	AA90478-01 497170001120 021 N/A P2 Plasma-1 18 / Day 2 18h
021	N/A	19 / Day 2 19h	385157 482	231251 176	1 665537	1	130	83	497170001121	AA90478-01 497170001121 021 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 10
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	260320 736	0 000000	-0 0975		-0 0975	0 0
9	0 00		0	254816 956	0 000000	-0 0975			
10	1 00	1 00000	3598 573	257612 035	0 013969	1 02	2 0		
11	2 00	0 250000	6218 103	247933 919	0 025080	1 91	-4 5		
12	4 00	0 0625000	11580 635	231920 337	0 049934	3 90	-2 5		
13	8 00	0 0156250	25330 844	245867 831	0 103026	8 15	1 9		
14	16 0	0 00390625	57498 437	257630 945	0 223181	17 8	11 3		
15	40 0	0 000625000	121710 877	241794 605	0 503365	40 2	0 5		
16	80 0	0 000156250	234540 198	236249 266	0 992766	79 3	-0 9		
17	160	0 0000390625	504388 15	264166 896	1 909354	153	-4 4		
18	200	0 0000250000	595166 17	244995 532	2 429294	194	-3 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0124969373

Intercept = 0 00121875842

R-Squared = 0 9969

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 10
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	593214 339	245435 077	2 416991	1	193		191		1 1
2	0 00	600378 557	249985 413	2 401654	1	192				
3	0 00	582570 081	242618 82	2 401174	1	192				
4	0 00	575112 223	245558 183	2 342061	1	187				
5	0 00	596107 861	248525 192	2 398581	1	192				
50	0 00	613130 893	260212 682	2 356268	1	188				
51	0 00	636553 705	263210 655	2 418419	1	193				
85	0 00	641229 232	268320 069	2 389792	1	191				
86	0 00	594476 402	250850 078	2 369847	1	190				
29	3 00	10443 667	246610 954	0 042349	1	3 29	9 7	3 38	12 7	3 8
62	3 00	9965 595	223777 133	0 044534	1	3 47	15 7			
39	37 5	112317 865	240876 953	0 466287	1	37 2	-0 8	37 1	-1 1	0 4
73	37 5	127952 008	276087 008	0 463448	1	37 0	-1 3			
49	150	474910 901	249492 607	1 903507	1	152	1 3	150	0 0	1 9
83	150	391746 679	211572 658	1 851594	1	148	-1 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 10
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	1 / Day 2 1h	541422 729	237591 922	2 278793	1	182	20	497170001198	AA90478-01 497170001198 024 N/A P2 Plasma-1 1 / Day 2 1h
024	N/A	2 / Day 2 2h	526697 227	235707 182	2 234540	1	179	21	497170001199	AA90478-01 497170001199 024 N/A P2 Plasma-1 2 / Day 2 2h
024	N/A	3 / Day 2 3h	556744 361	247346 948	2 250864	1	180	22	497170001200	AA90478-01 497170001200 024 N/A P2 Plasma-1 3 / Day 2 3h
024	N/A	4 / Day 2 4h	573199 118	252245 215	2 272388	1	182	23	497170001201	AA90478-01 497170001201 024 N/A P2 Plasma-1 4 / Day 2 4h
024	N/A	5 / Day 2 5h	527952 868	226681 651	2 329050	1	186	24	497170001202	AA90478-01 497170001202 024 N/A P2 Plasma-1 5 / Day 2 5h
024	N/A	6 / Day 2 6h	513268 346	228600 264	2 245266	1	180	25	497170001203	AA90478-01 497170001203 024 N/A P2 Plasma-1 6 / Day 2 6h
024	N/A	7 / Day 2 7h	502125 762	220099 102	2 281362	1	182	26	497170001204	AA90478-01 497170001204 024 N/A P2 Plasma-1 7 / Day 2 7h
024	N/A	9 / Day 2 9h	471056 783	206890 158	2 276845	1	182	27	497170001206	AA90478-01 497170001206 024 N/A P2 Plasma-1 9 / Day 2 9h
024	N/A	10 / Day 2 10h	538893 38	236254 952	2 280982	1	182	28	497170001207	AA90478-01 497170001207 024 N/A P2 Plasma-1 10 / Day 2 10h
024	N/A	11 / Day 2 11h	497788 871	239000 831	2 082791	1	167	30	497170001208	AA90478-01 497170001208 024 N/A P2 Plasma-1 11 / Day 2 11h
024	N/A	12 / Day 2 12h	484939 61	227662 466	2 130082	1	170	31	497170001209	AA90478-01 497170001209 024 N/A P2 Plasma-1 12 / Day 2 12h
024	N/A	13 / Day 2 13h	470917 195	230468 944	2 043300	1	163	32	497170001210	AA90478-01 497170001210 024 N/A P2 Plasma-1 13 / Day 2 13h
024	N/A	14 / Day 2 14h	465823 469	221371 01	2 104266	1	168	33	497170001211	AA90478-01 497170001211 024 N/A P2 Plasma-1 14 / Day 2 14h
024	N/A	15 / Day 2 15h	442734 252	225521 679	1 963156	1	157	34	497170001212	AA90478-01 497170001212 024 N/A P2 Plasma-1 15 / Day 2 15h
024	N/A	16 / Day 2 16h	503920 978	230227 171	2 188799	1	175	35	497170001213	AA90478-01 497170001213 024 N/A P2 Plasma-1 16 / Day 2 16h
024	N/A	17 / Day 2 17h	536419 205	260558 058	2 058732	1	165	36	497170001214	AA90478-01 497170001214 024 N/A P2 Plasma-1 17 / Day 2 17h
024	N/A	18 / Day 2 18h	495594 932	253874 445	1 952126	1	156	37	497170001215	AA90478-01 497170001215 024 N/A P2 Plasma-1 18 / Day 2 18h
024	N/A	19 / Day 2 19h	418652 49	206863 714	2 023808	1	162	38	497170001216	AA90478-01 497170001216 024 N/A P2 Plasma-1 19 / Day 2 19h
026	N/A	1 / Day 2 1h	537401 035	210680 426	*2 550788	1	*AAR>(200)	40	497170001293	AA90478-01 497170001293 026 N/A P2 Plasma-1 1 / Day 2 1h
026	N/A	2 / Day 2 2h	557101 158	209628 585	*2 657563	1	*AAR>(200)	41	497170001294	AA90478-01 497170001294 026 N/A P2 Plasma-1 2 / Day 2 2h
026	N/A	3 / Day 2 3h	511142 883	189554 149	*2 696553	1	*AAR>(200)	42	497170001295	AA90478-01 497170001295 026 N/A P2 Plasma-1 3 / Day 2 3h
026	N/A	4 / Day 2 4h	584450 304	225982 057	*2 586269	1	*AAR>(200)	43	497170001296	AA90478-01 497170001296 026 N/A P2 Plasma-1 4 / Day 2 4h
026	N/A	5 / Day 2 5h	606861 888	234528 644	*2 587581	1	*AAR>(200)	44	497170001297	AA90478-01 497170001297 026 N/A P2 Plasma-1 5 / Day 2 5h
026	N/A	6 / Day 2 6h	632891 145	250377 607	*2 527747	1	*AAR>(200)	45	497170001298	AA90478-01 497170001298 026 N/A P2 Plasma-1 6 / Day 2 6h
026	N/A	7 / Day 2 7h	453171 373	172181 321	*2 631943	1	*AAR>(200)	46	497170001299	AA90478-01 497170001299 026 N/A P2 Plasma-1 7 / Day 2 7h
026	N/A	8 / Day 2 8h	333873 097	146966 239	2 271767	1	182	47	497170001300	AA90478-01 497170001300 026 N/A P2 Plasma-1 8 / Day 2 8h
026	N/A	9 / Day 2 9h	589651 311	230698 06	*2 555944	1	*AAR>(200)	48	497170001301	AA90478-01 497170001301 026 N/A P2 Plasma-1 9 / Day 2 9h
026	N/A	10 / Day 2 10h	580912 953	232073 521	*2 503142	1	*AAR>(200)	52	497170001302	AA90478-01 497170001302 026 N/A P2 Plasma-1 10 / Day 2 10h
026	N/A	11 / Day 2 11h	624789 432	249163 259	*2 507550	1	*AAR>(200)	53	497170001303	AA90478-01 497170001303 026 N/A P2 Plasma-1 11 / Day 2 11h
026	N/A	12 / Day 2 12h	575630 056	230247 301	2 500051	1	200	54	497170001304	AA90478-01 497170001304 026 N/A P2 Plasma-1 12 / Day 2 12h
026	N/A	13 / Day 2 13h	549908 45	230413 553	2 386615	1	191	55	497170001305	AA90478-01 497170001305 026 N/A P2 Plasma-1 13 / Day 2 13h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
026	N/A	14 / Day 2 14h	587550 315	242133 323	2 426557	1	194	56	497170001306	AA90478-01 497170001306 026 N/A P2 Plasma-1 14 / Day 2 14h
026	N/A	15 / Day 2 15h	558714 427	240577 115	2 322392	1	186	57	497170001307	AA90478-01 497170001307 026 N/A P2 Plasma-1 15 / Day 2 15h
026	N/A	16 / Day 2 16h	448491 428	192463 017	2 330273	1	186	58	497170001308	AA90478-01 497170001308 026 N/A P2 Plasma-1 16 / Day 2 16h
026	N/A	17 / Day 2 17h	546575 671	228818 609	2 388685	1	191	59	497170001309	AA90478-01 497170001309 026 N/A P2 Plasma-1 17 / Day 2 17h
026	N/A	18 / Day 2 18h	545036 002	236789 961	2 301770	1	184	60	497170001310	AA90478-01 497170001310 026 N/A P2 Plasma-1 18 / Day 2 18h
026	N/A	19 / Day 2 19h	604211 626	256723 568	2 353550	1	188	61	497170001311	AA90478-01 497170001311 026 N/A P2 Plasma-1 19 / Day 2 19h
028	N/A	1 / Day 2 1h	437759 495	239327 605	1 829122	1	146	63	497170001388	AA90478-01 497170001388 028 N/A P2 Plasma-1 1 / Day 2 1h
028	N/A	2 / Day 2 2h	415220 798	230078 598	1 804691	1	144	64	497170001389	AA90478-01 497170001389 028 N/A P2 Plasma-1 2 / Day 2 2h
028	N/A	3 / Day 2 3h	430450 661	233243 159	1 845502	1	148	65	497170001390	AA90478-01 497170001390 028 N/A P2 Plasma-1 3 / Day 2 3h
028	N/A	4 / Day 2 4h	432838 586	242885 734	1 782067	1	143	66	497170001391	AA90478-01 497170001391 028 N/A P2 Plasma-1 4 / Day 2 4h
028	N/A	5 / Day 2 5h	437419 493	244935 891	1 785853	1	143	67	497170001392	AA90478-01 497170001392 028 N/A P2 Plasma-1 5 / Day 2 5h
028	N/A	6 / Day 2 6h	403189 74	220727 797	1 826638	1	146	68	497170001393	AA90478-01 497170001393 028 N/A P2 Plasma-1 6 / Day 2 6h
028	N/A	7 / Day 2 7h	410682 219	223917 394	1 834079	1	147	69	497170001394	AA90478-01 497170001394 028 N/A P2 Plasma-1 7 / Day 2 7h
028	N/A	8 / Day 2 8h	375301 832	198092 887	1 894575	1	152	70	497170001395	AA90478-01 497170001395 028 N/A P2 Plasma-1 8 / Day 2 8h
028	N/A	9 / Day 2 9h	476218 889	251676 82	1 892184	1	151	71	497170001396	AA90478-01 497170001396 028 N/A P2 Plasma-1 9 / Day 2 9h
028	N/A	10 / Day 2 10h	469721 371	253395 825	1 853706	1	148	72	497170001397	AA90478-01 497170001397 028 N/A P2 Plasma-1 10 / Day 2 10h
028	N/A	11 / Day 2 11h	463056 482	252585 944	1 833263	1	147	74	497170001398	AA90478-01 497170001398 028 N/A P2 Plasma-1 11 / Day 2 11h
028	N/A	12 / Day 2 12h	386081 868	209417 582	1 843598	1	147	75	497170001399	AA90478-01 497170001399 028 N/A P2 Plasma-1 12 / Day 2 12h
028	N/A	13 / Day 2 13h	468919 242	296228 508	1 582965	1	127	76	497170001400	AA90478-01 497170001400 028 N/A P2 Plasma-1 13 / Day 2 13h
028	N/A	14 / Day 2 14h	393403 751	234425 018	1 678165	1	134	77	497170001401	AA90478-01 497170001401 028 N/A P2 Plasma-1 14 / Day 2 14h
028	N/A	15 / Day 2 15h	427704 016	244336 694	1 750470	1	140	78	497170001402	AA90478-01 497170001402 028 N/A P2 Plasma-1 15 / Day 2 15h
028	N/A	16 / Day 2 16h	409154 869	231709 737	1 765808	1	141	79	497170001403	AA90478-01 497170001403 028 N/A P2 Plasma-1 16 / Day 2 16h
028	N/A	17 / Day 2 17h	337373 618	201406 336	1 675089	1	134	80	497170001404	AA90478-01 497170001404 028 N/A P2 Plasma-1 17 / Day 2 17h
028	N/A	18 / Day 2 18h	395778 995	229180 488	1 726931	1	138	81	497170001405	AA90478-01 497170001405 028 N/A P2 Plasma-1 18 / Day 2 18h
028	N/A	19 / Day 2 19h	394458 957	231343 135	1 705082	1	136	82	497170001406	AA90478-01 497170001406 028 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 11
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	132806 426	0 000000	0 0295		0 0698	81 5
9	0 00		307 881	143466 218	0 002146	0 110			
10	1 00	1 00000	3773 973	151508 267	0 024909	0 963	-3 7		
11	2 00	0 250000	8495 987	153287 976	0 055425	2 11	5 5		
12	4 00	0 0625000	15835 587	148249 728	0 106817	4 03	0 8		
13	8 00	0 0156250	33169 996	153235 92	0 216464	8 14	1 8		
14	16 0	0 00390625	68947 81	144373 459	0 477566	17 9	11 9		
15	40 0	0 000625000	160180 981	152420 369	1 050916	39 4	-1 5		
16	80 0	0 000156250	310514 298	151481 747	2 049846	76 8	-4 0		
17	160	0 0000390625	607966 598	149426 048	4 068679	153	-4 4		
18	200	0 0000250000	674864 269	134797 276	5 006513	188	-6 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0266838939

Intercept = -0 000788237311

R-Squared = 0 9956

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 11
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	646489 506	127521 854	5 069637	1	190		189		1 4
2	0 00	591316 418	119493 082	4 948541	1	185				
3	0 00	607645 867	121983 294	4 981386	1	187				
4	0 00	550676 606	107977 241	5 099932	1	191				
5	0 00	524954 125	105404 149	4 980393	1	187				
50	0 00	670049 628	131105 404	5 110770	1	192				
51	0 00	660405 039	132049 836	5 001180	1	187				
86	0 00	668057 67	130497 714	5 119306	1	192				
87	0 00	668985 834	133893 983	4 996385	1	187				
29	3 00	13549 387	160703 133	0 084313	1	3 19	6 3	3 06	2 0	6 0
62	3 00	10914 227	140838 84	0 077494	1	2 93	-2 3			
39	37 5	147246 104	153055 602	0 962043	1	36 1	-3 7	36 2	-3 5	0 4
73	37 5	126760 92	131148 061	0 966548	1	36 3	-3 2			
49	150	481152 55	123706 167	3 889479	1	146	-2 7	148	-1 3	1 4
84	150	527138 19	132929 405	3 965550	1	149	-0 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 11
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 3 1h	252048 855	131467 613	1 917194	1	71 9	20	497170000039	AA90478-01 497170000039 001 N/A P3 Plasma-1 1 / Day 3 1h
001	N/A	2 / Day 3 2h	267436 774	130419 756	2 050585	1	76 9	21	497170000040	AA90478-01 497170000040 001 N/A P3 Plasma-1 2 / Day 3 2h
001	N/A	3 / Day 3 3h	264449 984	134166 781	1 971054	1	73 9	22	497170000041	AA90478-01 497170000041 001 N/A P3 Plasma-1 3 / Day 3 3h
001	N/A	4 / Day 3 4h	285735 662	145484 888	1 964023	1	73 6	23	497170000042	AA90478-01 497170000042 001 N/A P3 Plasma-1 4 / Day 3 4h
001	N/A	5 / Day 3 5h	271161 009	147878 886	1 833670	1	68 7	24	497170000043	AA90478-01 497170000043 001 N/A P3 Plasma-1 5 / Day 3 5h
001	N/A	6 / Day 3 6h	284821 503	146158 467	1 948717	1	73 1	25	497170000044	AA90478-01 497170000044 001 N/A P3 Plasma-1 6 / Day 3 6h
001	N/A	7 / Day 3 7h	296748 115	155066 785	1 913679	1	71 7	26	497170000045	AA90478-01 497170000045 001 N/A P3 Plasma-1 7 / Day 3 7h
001	N/A	8 / Day 3 8h	308044 751	153753 113	2 003503	1	75 1	27	497170000046	AA90478-01 497170000046 001 N/A P3 Plasma-1 8 / Day 3 8h
001	N/A	9 / Day 3 9h	282697 639	149904 494	1 885852	1	70 7	28	497170000047	AA90478-01 497170000047 001 N/A P3 Plasma-1 9 / Day 3 9h
001	N/A	10 / Day 3 10h	334735 421	148043 681	2 261058	1	84 8	30	497170000048	AA90478-01 497170000048 001 N/A P3 Plasma-1 10 / Day 3 10h
001	N/A	11 / Day 3 11h	352543 784	154323 777	2 284442	1	85 6	31	497170000049	AA90478-01 497170000049 001 N/A P3 Plasma-1 11 / Day 3 11h
001	N/A	12 / Day 3 12h	378404 394	162781 02	2 324622	1	87 1	32	497170000050	AA90478-01 497170000050 001 N/A P3 Plasma-1 12 / Day 3 12h
001	N/A	13 / Day 3 13h	363892 856	158526 348	2 295472	1	86 1	33	497170000051	AA90478-01 497170000051 001 N/A P3 Plasma-1 13 / Day 3 13h
001	N/A	14 / Day 3 14h	318464 758	133019 57	2 394120	1	89 8	34	497170000052	AA90478-01 497170000052 001 N/A P3 Plasma-1 14 / Day 3 14h
001	N/A	15 / Day 3 15h	308765 238	145052 433	2 128646	1	79 8	35	497170000053	AA90478-01 497170000053 001 N/A P3 Plasma-1 15 / Day 3 15h
001	N/A	16 / Day 3 16h	282023 874	133080 681	2 119195	1	79 4	36	497170000054	AA90478-01 497170000054 001 N/A P3 Plasma-1 16 / Day 3 16h
001	N/A	17 / Day 3 17h	298030 516	145995 718	2 041365	1	76 5	37	497170000055	AA90478-01 497170000055 001 N/A P3 Plasma-1 17 / Day 3 17h
001	N/A	18 / Day 3 18h	289930 527	153016 12	1 894771	1	71 0	38	497170000056	AA90478-01 497170000056 001 N/A P3 Plasma-1 18 / Day 3 18h
001	N/A	19 / Day 3 19h	229715 578	118170 496	1 943933	1	72 9	40	497170000057	AA90478-01 497170000057 001 N/A P3 Plasma-1 19 / Day 3 19h
003	N/A	1 / Day 3 1h	433624 645	117380 38	3 694183	1	138	41	497170000134	AA90478-01 497170000134 003 N/A P3 Plasma-1 1 / Day 3 1h
003	N/A	2 / Day 3 2h	482828 679	118132 236	4 087188	1	153	42	497170000135	AA90478-01 497170000135 003 N/A P3 Plasma-1 2 / Day 3 2h
003	N/A	3 / Day 3 3h	481939 09	119303 886	4 039593	1	151	43	497170000136	AA90478-01 497170000136 003 N/A P3 Plasma-1 3 / Day 3 3h
003	N/A	4 / Day 3 4h	411012 951	108646 579	3 783027	1	142	44	497170000137	AA90478-01 497170000137 003 N/A P3 Plasma-1 4 / Day 3 4h
003	N/A	5 / Day 3 5h	460973 01	113483 033	4 062043	1	152	45	497170000138	AA90478-01 497170000138 003 N/A P3 Plasma-1 5 / Day 3 5h
003	N/A	6 / Day 3 6h	443061 849	121022 921	3 660975	1	137	46	497170000139	AA90478-01 497170000139 003 N/A P3 Plasma-1 6 / Day 3 6h
003	N/A	7 / Day 3 7h	414790 648	114097 073	3 635419	1	136	47	497170000140	AA90478-01 497170000140 003 N/A P3 Plasma-1 7 / Day 3 7h
003	N/A	8 / Day 3 8h	441718 355	121933 276	3 622624	1	136	48	497170000141	AA90478-01 497170000141 003 N/A P3 Plasma-1 8 / Day 3 8h
003	N/A	9 / Day 3 9h	444871 349	123045 999	3 615488	1	136	52	497170000142	AA90478-01 497170000142 003 N/A P3 Plasma-1 9 / Day 3 9h
003	N/A	10 / Day 3 10h	465641 001	126049 308	3 694118	1	138	53	497170000143	AA90478-01 497170000143 003 N/A P3 Plasma-1 10 / Day 3 10h
003	N/A	11 / Day 3 11h	462350 048	122565 264	3 772276	1	141	54	497170000144	AA90478-01 497170000144 003 N/A P3 Plasma-1 11 / Day 3 11h
003	N/A	12 / Day 3 12h	439360 841	120536 848	3 645033	1	137	55	497170000145	AA90478-01 497170000145 003 N/A P3 Plasma-1 12 / Day 3 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	13 / Day 3 13h	490944 787	135952 026	3 611162	1	135	56	497170000146	AA90478-01 497170000146 003 N/A P3 Plasma-1 13 / Day 3 13h
003	N/A	14 / Day 3 14h	464153 433	129968 117	3 571287	1	134	57	497170000147	AA90478-01 497170000147 003 N/A P3 Plasma-1 14 / Day 3 14h
003	N/A	15 / Day 3 15h	502118 284	139440 048	3 600962	1	135	58	497170000148	AA90478-01 497170000148 003 N/A P3 Plasma-1 15 / Day 3 15h
003	N/A	16 / Day 3 16h	509328 386	145847 181	3 492206	1	131	59	497170000149	AA90478-01 497170000149 003 N/A P3 Plasma-1 16 / Day 3 16h
003	N/A	17 / Day 3 17h	476602 321	139392 518	3 419138	1	128	60	497170000150	AA90478-01 497170000150 003 N/A P3 Plasma-1 17 / Day 3 17h
003	N/A	18 / Day 3 18h	462783 227	137869 354	3 356679	1	126	61	497170000151	AA90478-01 497170000151 003 N/A P3 Plasma-1 18 / Day 3 18h
003	N/A	19 / Day 3 19h	405032 954	125847 847	3 218434	1	121	63	497170000152	AA90478-01 497170000152 003 N/A P3 Plasma-1 19 / Day 3 19h
005	N/A	1 / Day 3 1h	434288 767	132881 723	3 268236	1	123	64	497170000229	AA90478-01 497170000229 005 N/A P3 Plasma-1 1 / Day 3 1h
005	N/A	2 / Day 3 2h	396549 592	123625 024	3 207681	1	120	65	497170000230	AA90478-01 497170000230 005 N/A P3 Plasma-1 2 / Day 3 2h
005	N/A	3 / Day 3 3h	418441 584	127871 924	3 272349	1	123	66	497170000231	AA90478-01 497170000231 005 N/A P3 Plasma-1 3 / Day 3 3h
005	N/A	4 / Day 3 4h	402893 811	125646 26	3 206572	1	120	67	497170000232	AA90478-01 497170000232 005 N/A P3 Plasma-1 4 / Day 3 4h
005	N/A	5 / Day 3 5h	408897 682	130708 199	3 128325	1	117	68	497170000233	AA90478-01 497170000233 005 N/A P3 Plasma-1 5 / Day 3 5h
005	N/A	6 / Day 3 6h	384097 802	122270 068	3 141389	1	118	69	497170000234	AA90478-01 497170000234 005 N/A P3 Plasma-1 6 / Day 3 6h
005	N/A	7 / Day 3 7h	382002 548	118463 618	3 224640	1	121	70	497170000235	AA90478-01 497170000235 005 N/A P3 Plasma-1 7 / Day 3 7h
005	N/A	8 / Day 3 8h	374279 887	122715 859	3 049972	1	114	71	497170000236	AA90478-01 497170000236 005 N/A P3 Plasma-1 8 / Day 3 8h
005	N/A	9 / Day 3 9h	391545 178	123401 483	3 172937	1	119	72	497170000237	AA90478-01 497170000237 005 N/A P3 Plasma-1 9 / Day 3 9h
005	N/A	10 / Day 3 10h	387567 129	123922 894	3 127486	1	117	74	497170000238	AA90478-01 497170000238 005 N/A P3 Plasma-1 10 / Day 3 10h
005	N/A	11 / Day 3 11h	336813 734	103424 89	3 256602	1	122	75	497170000239	AA90478-01 497170000239 005 N/A P3 Plasma-1 11 / Day 3 11h
005	N/A	12 / Day 3 12h	379831 557	128195 081	2 962918	1	111	76	497170000240	AA90478-01 497170000240 005 N/A P3 Plasma-1 12 / Day 3 12h
005	N/A	13 / Day 3 13h	402457 585	131876 974	3 051765	1	114	77	497170000241	AA90478-01 497170000241 005 N/A P3 Plasma-1 13 / Day 3 13h
005	N/A	14 / Day 3 14h	367585 894	125245 266	2 934928	1	110	78	497170000242	AA90478-01 497170000242 005 N/A P3 Plasma-1 14 / Day 3 14h
005	N/A	15 / Day 3 15h	351501 521	122860 633	2 860978	1	107	79	497170000243	AA90478-01 497170000243 005 N/A P3 Plasma-1 15 / Day 3 15h
005	N/A	16 / Day 3 16h	351555 806	125049 846	2 811325	1	105	80	497170000244	AA90478-01 497170000244 005 N/A P3 Plasma-1 16 / Day 3 16h
005	N/A	17 / Day 3 17h	339900 874	117919 527	2 882482	1	108	82	497170000245	AA90478-01 497170000245 005 N/A P3 Plasma-1 17 / Day 3 17h
005	N/A	18 / Day 3 18h	321242 849	118774 131	2 704653	1	101	81	497170000246	AA90478-01 497170000246 005 N/A P3 Plasma-1 18 / Day 3 18h
005	N/A	19 / Day 3 19h	338047 617	113951 878	2 966582	1	111	83	497170000247	AA90478-01 497170000247 005 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 12
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	256013 843	0 000000	-0 138		-0 138	0 0
9	0 00		0	253889 215	0 000000	-0 138			
10	1 00	1 00000	9140 274	271464 314	0 033670	1 02	2 0		
11	2 00	0 250000	17033 023	291332 993	0 058466	1 88	-6 0		
12	4 00	0 0625000	31754 133	267576 049	0 118673	3 95	-1 3		
13	8 00	0 0156250	65741 251	266509 932	0 246675	8 35	4 4		
14	16 0	0 00390625	149037 7	277943 772	0 536215	18 3	14 4		
15	40 0	0 000625000	296126 489	263748 668	1 122760	38 5	-3 8		
16	80 0	0 000156250	604256 343	261868 796	2 307477	79 3	-0 9		
17	160	0 0000390625	1186979 614	265363 834	4 473027	154	-3 8		
18	200	0 0000250000	1350217 593	244829 759	5 514924	190	-5 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0290458019

Intercept = 0 00400269190

R-Squared = 0 9945

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 12
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1676877 164	293818 162	5 707194	1	196		193		2 1
2	0 00	1613874 348	286738 404	5 628386	1	194				
3	0 00	1518256 143	265811 445	5 711179	1	197				
4	0 00	1540352 299	269440 828	5 716848	1	197				
5	0 00	1554800 73	271589 788	5 724813	1	197				
50	0 00	1191049 773	218251 077	5 457246	1	188				
51	0 00	1224242 13	224023 902	5 464784	1	188				
86	0 00	1084481 67	197799 153	5 482742	1	189				
87	0 00	1068865 07	193353 021	5 528049	1	190				
29	3 00	24677 578	263695 259	0 093584	1	3 08	2 7	3 03	1 0	2 3
62	3 00	21151 065	233227 687	0 090688	1	2 98	-0 7			
39	37 5	255569 91	243478 337	1 049662	1	36 0	-4 0	35 9	-4 3	0 6
73	37 5	232737 68	223515 481	1 041260	1	35 7	-4 8			
49	150	942754 941	228786 7	4 120672	1	142	-5 3	147	-2 0	4 8
84	150	915816 865	206842 712	4 427600	1	152	1 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 12
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	1 / Day 3 1h	3237756 994	268140 588	*12 074849	1	*AAR>(200)	20	497170000419	AA90478-01 497170000419 009 N/A P3 Plasma-1 1 / Day 3 1h
009	N/A	2 / Day 3 2h	2713401 788	238771 672	*11 364002	1	*AAR>(200)	21	497170000420	AA90478-01 497170000420 009 N/A P3 Plasma-1 2 / Day 3 2h
009	N/A	3 / Day 3 3h	3118877 007	267944 326	*11 640019	1	*AAR>(200)	22	497170000421	AA90478-01 497170000421 009 N/A P3 Plasma-1 3 / Day 3 3h
009	N/A	4 / Day 3 4h	2812017 197	247898 363	*11 343428	1	*AAR>(200)	23	497170000422	AA90478-01 497170000422 009 N/A P3 Plasma-1 4 / Day 3 4h
009	N/A	5 / Day 3 5h	2743755 931	245000 68	*11 198973	1	*AAR>(200)	24	497170000423	AA90478-01 497170000423 009 N/A P3 Plasma-1 5 / Day 3 5h
009	N/A	6 / Day 3 6h	2778790 83	248173 262	*11 196979	1	*AAR>(200)	25	497170000424	AA90478-01 497170000424 009 N/A P3 Plasma-1 6 / Day 3 6h
009	N/A	7 / Day 3 7h	2729161 239	238577 895	*11 439288	1	*AAR>(200)	26	497170000425	AA90478-01 497170000425 009 N/A P3 Plasma-1 7 / Day 3 7h
009	N/A	8 / Day 3 8h	2735637 006	246270 163	*11 108276	1	*AAR>(200)	27	497170000426	AA90478-01 497170000426 009 N/A P3 Plasma-1 8 / Day 3 8h
009	N/A	9 / Day 3 9h	2797993 043	251758 855	*11 113782	1	*AAR>(200)	28	497170000427	AA90478-01 497170000427 009 N/A P3 Plasma-1 9 / Day 3 9h
009	N/A	10 / Day 3 10h	2741231 242	246205 775	*11 133903	1	*AAR>(200)	30	497170000428	AA90478-01 497170000428 009 N/A P3 Plasma-1 10 / Day 3 10h
009	N/A	11 / Day 3 11h	2666289 291	247103 561	*10 790169	1	*AAR>(200)	31	497170000429	AA90478-01 497170000429 009 N/A P3 Plasma-1 11 / Day 3 11h
009	N/A	12 / Day 3 12h	2488831 953	243326 213	*10 228376	1	*AAR>(200)	32	497170000430	AA90478-01 497170000430 009 N/A P3 Plasma-1 12 / Day 3 12h
009	N/A	13 / Day 3 13h	2426487 079	235020 391	*10 324581	1	*AAR>(200)	33	497170000431	AA90478-01 497170000431 009 N/A P3 Plasma-1 13 / Day 3 13h
009	N/A	14 / Day 3 14h	2541366 608	247986 67	*10 247997	1	*AAR>(200)	34	497170000432	AA90478-01 497170000432 009 N/A P3 Plasma-1 14 / Day 3 14h
009	N/A	15 / Day 3 15h	2580414 271	246402 252	*10 472365	1	*AAR>(200)	35	497170000433	AA90478-01 497170000433 009 N/A P3 Plasma-1 15 / Day 3 15h
009	N/A	16 / Day 3 16h	2396237 503	230921 608	*10 376844	1	*AAR>(200)	36	497170000434	AA90478-01 497170000434 009 N/A P3 Plasma-1 16 / Day 3 16h
009	N/A	17 / Day 3 17h	2404679 199	235999 825	*10 189326	1	*AAR>(200)	37	497170000435	AA90478-01 497170000435 009 N/A P3 Plasma-1 17 / Day 3 17h
009	N/A	18 / Day 3 18h	2564894 014	246876 403	*10 389385	1	*AAR>(200)	38	497170000436	AA90478-01 497170000436 009 N/A P3 Plasma-1 18 / Day 3 18h
009	N/A	19 / Day 3 19h	2516484 262	243064 36	*10 353160	1	*AAR>(200)	40	497170000437	AA90478-01 497170000437 009 N/A P3 Plasma-1 19 / Day 3 19h
011	N/A	1 / Day 3 1h	1299777 602	232087 209	5 600384	1	193	41	497170000514	AA90478-01 497170000514 011 N/A P3 Plasma-1 1 / Day 3 1h
011	N/A	2 / Day 3 2h	1290587 282	232495 902	5 551011	1	191	42	497170000515	AA90478-01 497170000515 011 N/A P3 Plasma-1 2 / Day 3 2h
011	N/A	3 / Day 3 3h	1277532 127	224700 884	5 685479	1	196	43	497170000516	AA90478-01 497170000516 011 N/A P3 Plasma-1 3 / Day 3 3h
011	N/A	4 / Day 3 4h	1266096 247	225047 981	5 625895	1	194	44	497170000517	AA90478-01 497170000517 011 N/A P3 Plasma-1 4 / Day 3 4h
011	N/A	5 / Day 3 5h	1248915 28	222707 709	5 607867	1	193	45	497170000518	AA90478-01 497170000518 011 N/A P3 Plasma-1 5 / Day 3 5h
011	N/A	6 / Day 3 6h	1355741 552	229996 639	*5 894615	1	*AAR>(200)	46	497170000519	AA90478-01 497170000519 011 N/A P3 Plasma-1 6 / Day 3 6h
011	N/A	7 / Day 3 7h	1251364 034	216448 955	5 781336	1	199	47	497170000520	AA90478-01 497170000520 011 N/A P3 Plasma-1 7 / Day 3 7h
011	N/A	8 / Day 3 8h	1472003 279	248758 515	*5 917399	1	*AAR>(200)	48	497170000521	AA90478-01 497170000521 011 N/A P3 Plasma-1 8 / Day 3 8h
011	N/A	9 / Day 3 9h	1261801 19	215319 087	*5 860146	1	*AAR>(200)	52	497170000522	AA90478-01 497170000522 011 N/A P3 Plasma-1 9 / Day 3 9h
011	N/A	10 / Day 3 10h	1197911 809	208667 314	5 740774	1	198	53	497170000523	AA90478-01 497170000523 011 N/A P3 Plasma-1 10 / Day 3 10h
011	N/A	11 / Day 3 11h	1286168 614	229630 989	5 601024	1	193	54	497170000524	AA90478-01 497170000524 011 N/A P3 Plasma-1 11 / Day 3 11h
011	N/A	12 / Day 3 12h	1195913 629	217930 201	5 487599	1	189	55	497170000525	AA90478-01 497170000525 011 N/A P3 Plasma-1 12 / Day 3 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
011	N/A	13 / Day 3 13h	1220373 438	222561 188	5 483317	1	189	56	497170000526	AA90478-01 497170000526 011 N/A P3 Plasma-1 13 / Day 3 13h
011	N/A	14 / Day 3 14h	1213433 968	219757 906	5 521685	1	190	57	497170000527	AA90478-01 497170000527 011 N/A P3 Plasma-1 14 / Day 3 14h
011	N/A	15 / Day 3 15h	1123294 881	214468 247	5 237581	1	180	58	497170000528	AA90478-01 497170000528 011 N/A P3 Plasma-1 15 / Day 3 15h
011	N/A	16 / Day 3 16h	1106031 336	212241 586	5 211190	1	179	59	497170000529	AA90478-01 497170000529 011 N/A P3 Plasma-1 16 / Day 3 16h
011	N/A	17 / Day 3 17h	1140958 228	224183 545	5 089393	1	175	60	497170000530	AA90478-01 497170000530 011 N/A P3 Plasma-1 17 / Day 3 17h
011	N/A	18 / Day 3 18h	1138479 444	220694 65	5 158618	1	177	61	497170000531	AA90478-01 497170000531 011 N/A P3 Plasma-1 18 / Day 3 18h
011	N/A	19 / Day 3 19h	1104410 086	221847 985	4 978229	1	171	63	497170000532	AA90478-01 497170000532 011 N/A P3 Plasma-1 19 / Day 3 19h
012	N/A	1 / Day 3 1h	1670014 306	203705 77	*8 198169	1	*AAR>(200)	64	497170000609	AA90478-01 497170000609 012 N/A P3 Plasma-1 1 / Day 3 1h
012	N/A	2 / Day 3 2h	1715488 969	220108 369	*7 793838	1	*AAR>(200)	65	497170000610	AA90478-01 497170000610 012 N/A P3 Plasma-1 2 / Day 3 2h
012	N/A	3 / Day 3 3h	1828681 229	235621 464	*7 761098	1	*AAR>(200)	66	497170000611	AA90478-01 497170000611 012 N/A P3 Plasma-1 3 / Day 3 3h
012	N/A	4 / Day 3 4h	1717142 87	217663 159	*7 888992	1	*AAR>(200)	67	497170000612	AA90478-01 497170000612 012 N/A P3 Plasma-1 4 / Day 3 4h
012	N/A	5 / Day 3 5h	1716972 445	219291 509	*7 829635	1	*AAR>(200)	68	497170000613	AA90478-01 497170000613 012 N/A P3 Plasma-1 5 / Day 3 5h
012	N/A	6 / Day 3 6h	1684718 166	215073 516	*7 833220	1	*AAR>(200)	69	497170000614	AA90478-01 497170000614 012 N/A P3 Plasma-1 6 / Day 3 6h
012	N/A	7 / Day 3 7h	1615825 117	203574 621	*7 937262	1	*AAR>(200)	70	497170000615	AA90478-01 497170000615 012 N/A P3 Plasma-1 7 / Day 3 7h
012	N/A	8 / Day 3 8h	1557592 598	195473 212	*7 968317	1	*AAR>(200)	71	497170000616	AA90478-01 497170000616 012 N/A P3 Plasma-1 8 / Day 3 8h
012	N/A	9 / Day 3 9h	1490748 474	183060 426	*8 143478	1	*AAR>(200)	72	497170000617	AA90478-01 497170000617 012 N/A P3 Plasma-1 9 / Day 3 9h
012	N/A	10 / Day 3 10h	1651275 126	201004 428	*8 215118	1	*AAR>(200)	74	497170000618	AA90478-01 497170000618 012 N/A P3 Plasma-1 10 / Day 3 10h
012	N/A	11 / Day 3 11h	1591131 783	194636 602	*8 174885	1	*AAR>(200)	75	497170000619	AA90478-01 497170000619 012 N/A P3 Plasma-1 11 / Day 3 11h
012	N/A	12 / Day 3 12h	1503601 859	196789 956	*7 640643	1	*AAR>(200)	76	497170000620	AA90478-01 497170000620 012 N/A P3 Plasma-1 12 / Day 3 12h
012	N/A	13 / Day 3 13h	1594880 183	211799 49	*7 530142	1	*AAR>(200)	77	497170000621	AA90478-01 497170000621 012 N/A P3 Plasma-1 13 / Day 3 13h
012	N/A	14 / Day 3 14h	1603734 596	213106 317	*7 525514	1	*AAR>(200)	78	497170000622	AA90478-01 497170000622 012 N/A P3 Plasma-1 14 / Day 3 14h
012	N/A	15 / Day 3 15h	1578683 313	213668 396	*7 388474	1	*AAR>(200)	79	497170000623	AA90478-01 497170000623 012 N/A P3 Plasma-1 15 / Day 3 15h
012	N/A	16 / Day 3 16h	1502098 992	201829 187	*7 442427	1	*AAR>(200)	80	497170000624	AA90478-01 497170000624 012 N/A P3 Plasma-1 16 / Day 3 16h
012	N/A	17 / Day 3 17h	1490474 1	204401 347	*7 291900	1	*AAR>(200)	81	497170000625	AA90478-01 497170000625 012 N/A P3 Plasma-1 17 / Day 3 17h
012	N/A	18 / Day 3 18h	1546336 904	214276 532	*7 216548	1	*AAR>(200)	82	497170000626	AA90478-01 497170000626 012 N/A P3 Plasma-1 18 / Day 3 18h
012	N/A	19 / Day 3 19h	1356353 61	193821 068	*6 997968	1	*AAR>(200)	83	497170000627	AA90478-01 497170000627 012 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 13
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	250095 483	0 000000	-0 0714		-0 0714	0 0
9	0 00		0	174151 35	0 000000	-0 0714			
10	1 00	1 00000	2995 075	228453 798	0 013110	0 957	-4 3		
11	2 00	0 250000	6913 151	239618 288	0 028851	2 19	9 5		
12	4 00	0 0625000	12247 253	243890 18	0 050216	3 87	-3 3		
13	8 00	0 0156250	24849 98	246818 282	0 100681	7 83	-2 1		
14	16 0	0 00390625	57474 61	253863 095	0 226400	17 7	10 6		
15	40 0	0 000625000	116167 466	229608 039	0 505938	39 6	-1 0		
16	80 0	0 000156250	247405 929	254289 724	0 972929	76 3	-4 6		
17	160	0 0000390625	457050 141	235580 303	1 940103	152	-5 0		
18	200	0 0000250000	1128889 07	236989 878	*4 763448	*374			

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0127448208

Intercept = 0 000909408189

R-Squared = 0 9944

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 160 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 13
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	571628 2	236887 137	2 413082	1	189		189		1 1
2	0 00	542888 781	222315 982	2 441969	1	192				
3	0 00	560227 82	231083 219	2 424355	1	190				
4	0 00	504893 372	207591 924	2 432144	1	191				
5	0 00	541899 15	227377 127	2 383261	1	187				
50	0 00	521252 129	217384 363	2 397836	1	188				
51	0 00	489815 097	206956 947	2 366749	1	186				
86	0 00	505693 126	211669 926	2 389065	1	187				
87	0 00	503008 71	211007 398	2 383844	1	187				
29	3 00	9092 529	239964 216	0 037891	1	2 90	-3 3	2 91	-3 0	0 5
62	3 00	8677 722	227522 265	0 038140	1	2 92	-2 7			
39	37 5	104010 198	235699 464	0 441283	1	34 6	-7 7	34 9	-6 9	1 0
73	37 5	96215 089	214532 582	0 448487	1	35 1	-6 4			
49	150	411482 572	225565 932	1 824223	1	143	-4 7	144	-4 0	0 5
84	150	385457 358	209485 326	1 840021	1	144	-4 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 160 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 13
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	1 / Day 3 1h	313641 754	214939 441	1 459210	1	114	20	497170000704	AA90478-01 497170000704 013 N/A P3 Plasma-1 1 / Day 3 1h
013	N/A	2 / Day 3 2h	343881 352	206053 232	1 668896	1	131	21	497170000705	AA90478-01 497170000705 013 N/A P3 Plasma-1 2 / Day 3 2h
013	N/A	3 / Day 3 3h	301358 371	203462 184	1 481152	1	116	22	497170000706	AA90478-01 497170000706 013 N/A P3 Plasma-1 3 / Day 3 3h
013	N/A	4 / Day 3 4h	303236 577	201036 776	1 508364	1	118	23	497170000707	AA90478-01 497170000707 013 N/A P3 Plasma-1 4 / Day 3 4h
013	N/A	5 / Day 3 5h	371268 488	225034 23	1 649831	1	129	24	497170000708	AA90478-01 497170000708 013 N/A P3 Plasma-1 5 / Day 3 5h
013	N/A	6 / Day 3 6h	299195 556	201884 885	1 482011	1	116	25	497170000709	AA90478-01 497170000709 013 N/A P3 Plasma-1 6 / Day 3 6h
013	N/A	7 / Day 3 7h	340892 305	211476 594	1 611962	1	126	26	497170000710	AA90478-01 497170000710 013 N/A P3 Plasma-1 7 / Day 3 7h
013	N/A	8 / Day 3 8h	337496 743	241003 515	1 400381	1	110	27	497170000711	AA90478-01 497170000711 013 N/A P3 Plasma-1 8 / Day 3 8h
013	N/A	9 / Day 3 9h	285281 54	193930 442	1 471051	1	115	28	497170000712	AA90478-01 497170000712 013 N/A P3 Plasma-1 9 / Day 3 9h
013	N/A	10 / Day 3 10h	334199 997	214013 838	1 561581	1	122	30	497170000713	AA90478-01 497170000713 013 N/A P3 Plasma-1 10 / Day 3 10h
013	N/A	11 / Day 3 11h	287756 067	189378 361	1 519477	1	119	31	497170000714	AA90478-01 497170000714 013 N/A P3 Plasma-1 11 / Day 3 11h
013	N/A	12 / Day 3 12h	333317 493	197463 838	1 687993	1	132	32	497170000715	AA90478-01 497170000715 013 N/A P3 Plasma-1 12 / Day 3 12h
013	N/A	13 / Day 3 13h	311440 539	203268 553	1 532163	1	120	33	497170000716	AA90478-01 497170000716 013 N/A P3 Plasma-1 13 / Day 3 13h
013	N/A	14 / Day 3 14h	341963 748	229518 348	1 489919	1	117	34	497170000717	AA90478-01 497170000717 013 N/A P3 Plasma-1 14 / Day 3 14h
013	N/A	15 / Day 3 15h	295311 411	191499 701	1 542099	1	121	35	497170000718	AA90478-01 497170000718 013 N/A P3 Plasma-1 15 / Day 3 15h
013	N/A	16 / Day 3 16h	328958 57	218938 779	1 502514	1	118	36	497170000719	AA90478-01 497170000719 013 N/A P3 Plasma-1 16 / Day 3 16h
013	N/A	17 / Day 3 17h	317646 127	200090 321	1 587514	1	124	37	497170000720	AA90478-01 497170000720 013 N/A P3 Plasma-1 17 / Day 3 17h
013	N/A	18 / Day 3 18h	325156 497	213328 419	1 524206	1	120	38	497170000721	AA90478-01 497170000721 013 N/A P3 Plasma-1 18 / Day 3 18h
013	N/A	19 / Day 3 19h	330953 989	226207 781	1 463053	1	115	40	497170000722	AA90478-01 497170000722 013 N/A P3 Plasma-1 19 / Day 3 19h
015	N/A	1 / Day 3 1h	326929 531	228199 083	1 432651	1	112	41	497170000799	AA90478-01 497170000799 015 N/A P3 Plasma-1 1 / Day 3 1h
015	N/A	2 / Day 3 2h	325878 05	234700 824	1 388483	1	109	42	497170000800	AA90478-01 497170000800 015 N/A P3 Plasma-1 2 / Day 3 2h
015	N/A	3 / Day 3 3h	277495 904	197174 585	1 407361	1	110	43	497170000801	AA90478-01 497170000801 015 N/A P3 Plasma-1 3 / Day 3 3h
015	N/A	4 / Day 3 4h	285604 805	214754 7	1 329912	1	104	44	497170000802	AA90478-01 497170000802 015 N/A P3 Plasma-1 4 / Day 3 4h
015	N/A	5 / Day 3 5h	317623 165	239245 592	1 327603	1	104	45	497170000803	AA90478-01 497170000803 015 N/A P3 Plasma-1 5 / Day 3 5h
015	N/A	6 / Day 3 6h	282584 035	223834 639	1 262468	1	99 0	46	497170000804	AA90478-01 497170000804 015 N/A P3 Plasma-1 6 / Day 3 6h
015	N/A	7 / Day 3 7h	269347 01	202392 743	1 330814	1	104	47	497170000805	AA90478-01 497170000805 015 N/A P3 Plasma-1 7 / Day 3 7h
015	N/A	8 / Day 3 8h	287402 733	206312 109	1 393048	1	109	48	497170000806	AA90478-01 497170000806 015 N/A P3 Plasma-1 8 / Day 3 8h
015	N/A	9 / Day 3 9h	282679 196	213123 461	1 326364	1	104	52	497170000807	AA90478-01 497170000807 015 N/A P3 Plasma-1 9 / Day 3 9h
015	N/A	10 / Day 3 10h	293130 635	227668 889	1 287530	1	101	53	497170000808	AA90478-01 497170000808 015 N/A P3 Plasma-1 10 / Day 3 10h
015	N/A	11 / Day 3 11h	325637 159	249128 262	1 307106	1	102	54	497170000809	AA90478-01 497170000809 015 N/A P3 Plasma-1 11 / Day 3 11h
015	N/A	12 / Day 3 12h	298916 762	216021 583	1 383736	1	109	55	497170000810	AA90478-01 497170000810 015 N/A P3 Plasma-1 12 / Day 3 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
015	N/A	13 / Day 3 13h	341967 892	164486 146	*2 079007	1	*AAR>(160)	56	497170000811	AA90478-01 497170000811 015 N/A P3 Plasma-1 13 / Day 3 13h
015	N/A	14 / Day 3 14h	296236 904	219617 456	1 348877	1	106	57	497170000812	AA90478-01 497170000812 015 N/A P3 Plasma-1 14 / Day 3 14h
015	N/A	15 / Day 3 15h	259079 437	197940 233	1 308877	1	103	58	497170000813	AA90478-01 497170000813 015 N/A P3 Plasma-1 15 / Day 3 15h
015	N/A	16 / Day 3 16h	271430 388	205190 313	1 322823	1	104	59	497170000814	AA90478-01 497170000814 015 N/A P3 Plasma-1 16 / Day 3 16h
015	N/A	17 / Day 3 17h	280921 029	220318 599	1 275067	1	100	60	497170000815	AA90478-01 497170000815 015 N/A P3 Plasma-1 17 / Day 3 17h
015	N/A	18 / Day 3 18h	252167 16	210711 116	1 196744	1	93 8	61	497170000816	AA90478-01 497170000816 015 N/A P3 Plasma-1 18 / Day 3 18h
015	N/A	19 / Day 3 19h	226766 513	181292 017	1 250836	1	98 1	63	497170000817	AA90478-01 497170000817 015 N/A P3 Plasma-1 19 / Day 3 19h
018	N/A	1 / Day 3 1h	437059 83	216253 58	2 021052	1	159	64	497170000894	AA90478-01 497170000894 018 N/A P3 Plasma-1 1 / Day 3 1h
018	N/A	2 / Day 3 2h	367535 949	185812 157	1 977997	1	155	65	497170000895	AA90478-01 497170000895 018 N/A P3 Plasma-1 2 / Day 3 2h
018	N/A	3 / Day 3 3h	413326 122	215406 357	1 918820	1	150	66	497170000896	AA90478-01 497170000896 018 N/A P3 Plasma-1 3 / Day 3 3h
018	N/A	4 / Day 3 4h	399280 393	198899 055	2 007452	1	157	67	497170000897	AA90478-01 497170000897 018 N/A P3 Plasma-1 4 / Day 3 4h
018	N/A	5 / Day 3 5h	374998 269	193981 154	1 933169	1	152	68	497170000898	AA90478-01 497170000898 018 N/A P3 Plasma-1 5 / Day 3 5h
018	N/A	6 / Day 3 6h	440352 147	224341 58	1 962865	1	154	69	497170000899	AA90478-01 497170000899 018 N/A P3 Plasma-1 6 / Day 3 6h
018	N/A	7 / Day 3 7h	389275 645	206269 794	1 887216	1	148	70	497170000900	AA90478-01 497170000900 018 N/A P3 Plasma-1 7 / Day 3 7h
018	N/A	8 / Day 3 8h	408275 434	199166 434	*2 049921	1	*AAR>(160)	71	497170000901	AA90478-01 497170000901 018 N/A P3 Plasma-1 8 / Day 3 8h
018	N/A	9 / Day 3 9h	411145 671	216756 12	1 896812	1	149	72	497170000902	AA90478-01 497170000902 018 N/A P3 Plasma-1 9 / Day 3 9h
018	N/A	10 / Day 3 10h	425995 702	207935 255	*2 048694	1	*AAR>(160)	74	497170000903	AA90478-01 497170000903 018 N/A P3 Plasma-1 10 / Day 3 10h
018	N/A	11 / Day 3 11h	275109 764	139949 164	1 965784	1	154	75	497170000904	AA90478-01 497170000904 018 N/A P3 Plasma-1 11 / Day 3 11h
018	N/A	12 / Day 3 12h	389158 192	190660 823	*2 041102	1	*AAR>(160)	76	497170000905	AA90478-01 497170000905 018 N/A P3 Plasma-1 12 / Day 3 12h
018	N/A	13 / Day 3 13h	395924 892	204603 981	1 935079	1	152	77	497170000906	AA90478-01 497170000906 018 N/A P3 Plasma-1 13 / Day 3 13h
018	N/A	14 / Day 3 14h	408455 913	212574 668	1 921470	1	151	78	497170000907	AA90478-01 497170000907 018 N/A P3 Plasma-1 14 / Day 3 14h
018	N/A	15 / Day 3 15h	371059 904	189697 653	1 956060	1	153	79	497170000908	AA90478-01 497170000908 018 N/A P3 Plasma-1 15 / Day 3 15h
018	N/A	16 / Day 3 16h	288601 393	151700 132	1 902447	1	149	80	497170000909	AA90478-01 497170000909 018 N/A P3 Plasma-1 16 / Day 3 16h
018	N/A	17 / Day 3 17h	386679 585	199875 024	1 934607	1	152	81	497170000910	AA90478-01 497170000910 018 N/A P3 Plasma-1 17 / Day 3 17h
018	N/A	18 / Day 3 18h	382512 901	207824 735	1 840555	1	144	82	497170000911	AA90478-01 497170000911 018 N/A P3 Plasma-1 18 / Day 3 18h
018	N/A	19 / Day 3 19h	389738 452	204979 161	1 901356	1	149	83	497170000912	AA90478-01 497170000912 018 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 160 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 16
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	152801 693	0 000000	-0 0321		-0 0321	0 0
9	0 00		0	160661 635	0 000000	-0 0321			
10	1 00	1 00000	4546 19	159556 88	0 028493	0 982	-1 8		
11	2 00	0 250000	8524 244	144290 949	0 059077	2 07	3 5		
12	4 00	0 0625000	18090 076	161692 186	0 111880	3 95	-1 3		
13	8 00	0 0156250	37692 145	169771 717	0 222017	7 87	-1 6		
14	16 0	0 00390625	78993 296	156500 509	0 504748	17 9	11 9		
15	40 0	0 000625000	191487 909	176152 914	1 087055	38 6	-3 5		
16	80 0	0 000156250	342674 22	159565 753	2 147542	76 4	-4 5		
17	160	0 0000390625	651568 834	149207 468	4 366865	155	-3 1		
18	200	0 0000250000	1680103 758	164897 876	*10 188753	*363			

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0281036566

Intercept = 0 000900783927

R-Squared = 0 9960

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 160 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 16
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	802162 385	150880 879	5 316528	1	189		186		2 6
2	0 00	830346 884	159447 208	5 207660	1	185				
3	0 00	847775 938	167778 452	5 052949	1	180				
4	0 00	802302 006	153541 259	5 225319	1	186				
5	0 00	796657 602	155519 43	5 122560	1	182				
50	0 00	876492 722	158877 071	5 516798	1	196				
51	0 00	871992 912	165314 487	5 274752	1	188				
84	0 00	782713 549	148962 617	5 254429	1	187				
85	0 00	772855 269	150698 306	5 128493	1	182				
29	3 00	11427 947	136670 346	0 083617	1	2 94	-2 0	2 94	-2 0	0 2
62	3 00	13820 573	166110 917	0 083201	1	2 93	-2 3			
39	37 5	149106 561	155657 546	0 957914	1	34 1	-9 1	34 8	-7 2	2 6
73	37 5	151789 583	152645 002	0 994396	1	35 4	-5 6			
49	150	654081 61	161757 604	4 043591	1	144	-4 0	147	-2 0	2 4
82	150	616911 044	147258 186	4 189316	1	149	-0 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 160 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 16
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 4 1h	252697 69	145233 161	1 739945	1	61 9	20	497170000020	AA90478-01 497170000020 001 N/A P4 Plasma-1 1 / Day 4 1h
001	N/A	2 / Day 4 2h	269675 566	159723 689	1 688388	1	60 0	21	497170000021	AA90478-01 497170000021 001 N/A P4 Plasma-1 2 / Day 4 2h
001	N/A	3 / Day 4 3h	278925 725	168339 85	1 656920	1	58 9	22	497170000022	AA90478-01 497170000022 001 N/A P4 Plasma-1 3 / Day 4 3h
001	N/A	4 / Day 4 4h	259047 672	157431 618	1 645462	1	58 5	23	497170000023	AA90478-01 497170000023 001 N/A P4 Plasma-1 4 / Day 4 4h
001	N/A	5 / Day 4 5h	273966 496	166747 245	1 643005	1	58 4	24	497170000024	AA90478-01 497170000024 001 N/A P4 Plasma-1 5 / Day 4 5h
001	N/A	6 / Day 4 6h	243522 079	143912 814	1 692150	1	60 2	25	497170000025	AA90478-01 497170000025 001 N/A P4 Plasma-1 6 / Day 4 6h
001	N/A	7 / Day 4 7h	271251 063	148733 011	1 823745	1	64 9	26	497170000026	AA90478-01 497170000026 001 N/A P4 Plasma-1 7 / Day 4 7h
001	N/A	8 / Day 4 8h	286729 003	159539 774	1 797226	1	63 9	27	497170000027	AA90478-01 497170000027 001 N/A P4 Plasma-1 8 / Day 4 8h
001	N/A	9 / Day 4 9h	289407 246	159954 613	1 809309	1	64 3	28	497170000028	AA90478-01 497170000028 001 N/A P4 Plasma-1 9 / Day 4 9h
001	N/A	10 / Day 4 10h	297097 927	159767 879	1 859560	1	66 1	30	497170000029	AA90478-01 497170000029 001 N/A P4 Plasma-1 10 / Day 4 10h
001	N/A	11 / Day 4 11h	278634 151	142206 597	1 959362	1	69 7	31	497170000030	AA90478-01 497170000030 001 N/A P4 Plasma-1 11 / Day 4 11h
001	N/A	12 / Day 4 12h	299889 444	154296 177	1 943596	1	69 1	32	497170000031	AA90478-01 497170000031 001 N/A P4 Plasma-1 12 / Day 4 12h
001	N/A	13 / Day 4 13h	274395 928	136241 952	2 014034	1	71 6	33	497170000032	AA90478-01 497170000032 001 N/A P4 Plasma-1 13 / Day 4 13h
001	N/A	14 / Day 4 14h	273347 581	141010 257	1 938494	1	68 9	34	497170000033	AA90478-01 497170000033 001 N/A P4 Plasma-1 14 / Day 4 14h
001	N/A	15 / Day 4 15h	259810 761	135144 15	1 922471	1	68 4	35	497170000034	AA90478-01 497170000034 001 N/A P4 Plasma-1 15 / Day 4 15h
001	N/A	16 / Day 4 16h	289658 889	165976 731	1 745178	1	62 1	36	497170000035	AA90478-01 497170000035 001 N/A P4 Plasma-1 16 / Day 4 16h
001	N/A	17 / Day 4 17h	274425 21	155418 283	1 765720	1	62 8	37	497170000036	AA90478-01 497170000036 001 N/A P4 Plasma-1 17 / Day 4 17h
001	N/A	18 / Day 4 18h	249921 884	141133 634	1 770817	1	63 0	38	497170000037	AA90478-01 497170000037 001 N/A P4 Plasma-1 18 / Day 4 18h
001	N/A	19 / Day 4 19h	254338 147	151254 746	1 681522	1	59 8	40	497170000038	AA90478-01 497170000038 001 N/A P4 Plasma-1 19 / Day 4 19h
003	N/A	1 / Day 4 1h	671884 157	145398 665	*4 620979	1	*AAR>(160)	41	497170000115	AA90478-01 497170000115 003 N/A P4 Plasma-1 1 / Day 4 1h
003	N/A	2 / Day 4 2h	597853 661	142227 564	4 203501	1	150	42	497170000116	AA90478-01 497170000116 003 N/A P4 Plasma-1 2 / Day 4 2h
003	N/A	3 / Day 4 3h	682887 143	155619 147	4 388195	1	156	43	497170000117	AA90478-01 497170000117 003 N/A P4 Plasma-1 3 / Day 4 3h
003	N/A	4 / Day 4 4h	668846 847	148339 806	*4 508883	1	*AAR>(160)	44	497170000118	AA90478-01 497170000118 003 N/A P4 Plasma-1 4 / Day 4 4h
003	N/A	5 / Day 4 5h	656778 483	147275 26	4 459530	1	159	45	497170000119	AA90478-01 497170000119 003 N/A P4 Plasma-1 5 / Day 4 5h
003	N/A	8 / Day 4 8h	679144 315	152985 943	4 439260	1	158	46	497170000122	AA90478-01 497170000122 003 N/A P4 Plasma-1 8 / Day 4 8h
003	N/A	9 / Day 4 9h	644097 054	153706 085	4 190446	1	149	47	497170000123	AA90478-01 497170000123 003 N/A P4 Plasma-1 9 / Day 4 9h
003	N/A	10 / Day 4 10h	737485 729	165396 48	4 458896	1	159	48	497170000124	AA90478-01 497170000124 003 N/A P4 Plasma-1 10 / Day 4 10h
003	N/A	11 / Day 4 11h	649133 596	149874 185	4 331190	1	154	52	497170000125	AA90478-01 497170000125 003 N/A P4 Plasma-1 11 / Day 4 11h
003	N/A	12 / Day 4 12h	668212 028	159234 611	4 196399	1	149	53	497170000126	AA90478-01 497170000126 003 N/A P4 Plasma-1 12 / Day 4 12h
003	N/A	13 / Day 4 13h	655678 869	156080 191	4 200910	1	149	54	497170000127	AA90478-01 497170000127 003 N/A P4 Plasma-1 13 / Day 4 13h
003	N/A	14 / Day 4 14h	742913 504	159203 795	*4 666431	1	*AAR>(160)	55	497170000128	AA90478-01 497170000128 003 N/A P4 Plasma-1 14 / Day 4 14h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	15 / Day 4 15h	635860 529	154787 063	4 107969	1	146	56	497170000129	AA90478-01 497170000129 003 N/A P4 Plasma-1 15 / Day 4 15h
003	N/A	16 / Day 4 16h	630075 001	146054 486	4 313972	1	153	57	497170000130	AA90478-01 497170000130 003 N/A P4 Plasma-1 16 / Day 4 16h
003	N/A	17 / Day 4 17h	625237 452	153219 631	4 080662	1	145	58	497170000131	AA90478-01 497170000131 003 N/A P4 Plasma-1 17 / Day 4 17h
003	N/A	18 / Day 4 18h	600587 663	161120 556	3 727567	1	133	59	497170000132	AA90478-01 497170000132 003 N/A P4 Plasma-1 18 / Day 4 18h
003	N/A	19 / Day 4 19h	646554 325	157417 468	4 107259	1	146	60	497170000133	AA90478-01 497170000133 003 N/A P4 Plasma-1 19 / Day 4 19h
005	N/A	1 / Day 4 1h	324264 824	157858 247	2 054152	1	73 1	61	497170000210	AA90478-01 497170000210 005 N/A P4 Plasma-1 1 / Day 4 1h
005	N/A	2 / Day 4 2h	342217 274	159696 963	2 142917	1	76 2	63	497170000211	AA90478-01 497170000211 005 N/A P4 Plasma-1 2 / Day 4 2h
005	N/A	3 / Day 4 3h	367874 939	170818 9	2 153596	1	76 6	64	497170000212	AA90478-01 497170000212 005 N/A P4 Plasma-1 3 / Day 4 3h
005	N/A	4 / Day 4 4h	327262 384	151942 219	2 153861	1	76 6	65	497170000213	AA90478-01 497170000213 005 N/A P4 Plasma-1 4 / Day 4 4h
005	N/A	5 / Day 4 5h	321959 164	156169 22	2 061604	1	73 3	66	497170000214	AA90478-01 497170000214 005 N/A P4 Plasma-1 5 / Day 4 5h
005	N/A	6 / Day 4 6h	322762 505	149653 665	2 156730	1	76 7	67	497170000215	AA90478-01 497170000215 005 N/A P4 Plasma-1 6 / Day 4 6h
005	N/A	7 / Day 4 7h	363425 191	167923 247	2 164234	1	77 0	68	497170000216	AA90478-01 497170000216 005 N/A P4 Plasma-1 7 / Day 4 7h
005	N/A	8 / Day 4 8h	334264 788	147458 342	2 266842	1	80 6	69	497170000217	AA90478-01 497170000217 005 N/A P4 Plasma-1 8 / Day 4 8h
005	N/A	9 / Day 4 9h	354654 731	155741 399	2 277203	1	81 0	70	497170000218	AA90478-01 497170000218 005 N/A P4 Plasma-1 9 / Day 4 9h
005	N/A	10 / Day 4 10h	359737 639	154835 637	2 323352	1	82 6	71	497170000219	AA90478-01 497170000219 005 N/A P4 Plasma-1 10 / Day 4 10h
005	N/A	11 / Day 4 11h	364208 358	151646 83	2 401688	1	85 4	72	497170000220	AA90478-01 497170000220 005 N/A P4 Plasma-1 11 / Day 4 11h
005	N/A	12 / Day 4 12h	351594 413	153141 967	2 295872	1	81 7	74	497170000221	AA90478-01 497170000221 005 N/A P4 Plasma-1 12 / Day 4 12h
005	N/A	13 / Day 4 13h	357215 833	150017 532	2 381161	1	84 7	75	497170000222	AA90478-01 497170000222 005 N/A P4 Plasma-1 13 / Day 4 13h
005	N/A	14 / Day 4 14h	352781 832	159131 941	2 216914	1	78 9	76	497170000223	AA90478-01 497170000223 005 N/A P4 Plasma-1 14 / Day 4 14h
005	N/A	15 / Day 4 15h	338375 323	148772 118	2 274454	1	80 9	77	497170000224	AA90478-01 497170000224 005 N/A P4 Plasma-1 15 / Day 4 15h
005	N/A	16 / Day 4 16h	326175 221	143005 659	2 280855	1	81 1	78	497170000225	AA90478-01 497170000225 005 N/A P4 Plasma-1 16 / Day 4 16h
005	N/A	17 / Day 4 17h	286421 766	128957 791	2 221050	1	79 0	79	497170000226	AA90478-01 497170000226 005 N/A P4 Plasma-1 17 / Day 4 17h
005	N/A	18 / Day 4 18h	313795 105	139122 001	2 255539	1	80 2	80	497170000227	AA90478-01 497170000227 005 N/A P4 Plasma-1 18 / Day 4 18h
005	N/A	19 / Day 4 19h	309149 354	145464 282	2 125260	1	75 6	81	497170000228	AA90478-01 497170000228 005 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)
AAR - Concentration Found is Greater than 160 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 17
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias
8	0 00		417 552	169918 985	0 002457	0 0512	
9	0 00		0	74500 377	*0 000000	*-0 0356	
10	1 00	1 00000	4816 525	163444 891	0 029469	1 00	0 0
11	2 00	0 250000	8930 023	159196 98	0 056094	1 94	-3 0
12	4 00	0 0625000	18561 664	165480 768	0 112168	3 92	-2 0
13	8 00	0 0156250	41725 499	172316 277	0 242145	8 51	6 4
14	16 0	0 00390625	86890 435	171393 79	0 506964	17 9	11 9
15	40 0	0 000625000	169596 568	149739 75	1 132609	39 9	-0 3
16	80 0	0 000156250	354905 932	164536 716	2 157001	76 1	-4 9
17	160	0 0000390625	751430 924	163768 155	4 588382	162	1 3
18	200	0 0000250000	831673 258	162895 671	5 105558	180	-10 0

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0283325258

Intercept = 0 00100770705

R-Squared = 0 9949

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* UISR

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 17
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	765210 877	147582 155	5 184982	1	183		185		1 8
2	0 00	809047 678	149720 674	5 403714	1	191				
3	0 00	767942 137	145985 171	5 260412	1	186				
4	0 00	795662 144	153960 266	5 167971	1	182				
5	0 00	840611 44	158920 838	5 289498	1	187				
50	0 00	745058 22	142623 681	5 223945	1	184				
51	0 00	702445 616	136293 178	5 153931	1	182				
86	0 00	707628 039	138051 624	5 125822	1	181				
87	0 00	777454 798	145767 068	5 333542	1	188				
29	3 00	13328 569	153670 915	0 086734	1	3 03	1 0	2 96	-1 3	3 3
62	3 00	11082 606	133859 546	0 082793	1	2 89	-3 7			
39	37 5	145496 348	143343 888	1 015016	1	35 8	-4 5	35 2	-6 1	2 6
73	37 5	148222 632	151582 013	0 977838	1	34 5	-8 0			
49	150	586312 956	139308 621	4 208734	1	149	-0 7	146	-2 7	2 9
84	150	510756 826	125688 303	4 063678	1	143	-4 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 17
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 4 1h	1540752 423	165357 067	*9 317730	1	*AAR>(200)	20	497170000305	AA90478-01 497170000305 007 N/A P4 Plasma-1 1 / Day 4 1h
007	N/A	2 / Day 4 2h	1244332 039	134487 783	*9 252380	1	*AAR>(200)	21	497170000306	AA90478-01 497170000306 007 N/A P4 Plasma-1 2 / Day 4 2h
007	N/A	3 / Day 4 3h	1393749 515	113663 661	*12 262050	1	*AAR>(200)	22	497170000307	AA90478-01 497170000307 007 N/A P4 Plasma-1 3 / Day 4 3h
007	N/A	4 / Day 4 4h	1423895 069	161140 035	*8 836383	1	*AAR>(200)	23	497170000308	AA90478-01 497170000308 007 N/A P4 Plasma-1 4 / Day 4 4h
007	N/A	5 / Day 4 5h	1280020 613	139112 503	*9 201334	1	*AAR>(200)	24	497170000309	AA90478-01 497170000309 007 N/A P4 Plasma-1 5 / Day 4 5h
007	N/A	6 / Day 4 6h	1406010 169	152104 753	*9 243696	1	*AAR>(200)	25	497170000310	AA90478-01 497170000310 007 N/A P4 Plasma-1 6 / Day 4 6h
007	N/A	7 / Day 4 7h	1434484 399	162197 056	*8 844084	1	*AAR>(200)	26	497170000311	AA90478-01 497170000311 007 N/A P4 Plasma-1 7 / Day 4 7h
007	N/A	8 / Day 4 8h	1343988 425	151130 151	*8 892921	1	*AAR>(200)	27	497170000312	AA90478-01 497170000312 007 N/A P4 Plasma-1 8 / Day 4 8h
007	N/A	9 / Day 4 9h	1301473 543	148172 751	*8 783488	1	*AAR>(200)	28	497170000313	AA90478-01 497170000313 007 N/A P4 Plasma-1 9 / Day 4 9h
007	N/A	10 / Day 4 10h	1070968 552	123262 25	*8 688536	1	*AAR>(200)	30	497170000314	AA90478-01 497170000314 007 N/A P4 Plasma-1 10 / Day 4 10h
007	N/A	11 / Day 4 11h	1392862 206	156726 008	*8 887244	1	*AAR>(200)	31	497170000315	AA90478-01 497170000315 007 N/A P4 Plasma-1 11 / Day 4 11h
007	N/A	12 / Day 4 12h	1315932 231	149834 636	*8 782564	1	*AAR>(200)	32	497170000316	AA90478-01 497170000316 007 N/A P4 Plasma-1 12 / Day 4 12h
007	N/A	13 / Day 4 13h	1216115 907	140632 008	*8 647504	1	*AAR>(200)	33	497170000317	AA90478-01 497170000317 007 N/A P4 Plasma-1 13 / Day 4 13h
007	N/A	14 / Day 4 14h	1268066 813	152145 251	*8 334580	1	*AAR>(200)	34	497170000318	AA90478-01 497170000318 007 N/A P4 Plasma-1 14 / Day 4 14h
007	N/A	15 / Day 4 15h	1222168 951	149163 642	*8 193478	1	*AAR>(200)	35	497170000319	AA90478-01 497170000319 007 N/A P4 Plasma-1 15 / Day 4 15h
007	N/A	16 / Day 4 16h	1309345 075	145026 068	*9 028343	1	*AAR>(200)	36	497170000320	AA90478-01 497170000320 007 N/A P4 Plasma-1 16 / Day 4 16h
007	N/A	17 / Day 4 17h	1225030 937	153576 112	*7 976702	1	*AAR>(200)	37	497170000321	AA90478-01 497170000321 007 N/A P4 Plasma-1 17 / Day 4 17h
007	N/A	18 / Day 4 18h	1168668 439	138190 635	*8 456929	1	*AAR>(200)	38	497170000322	AA90478-01 497170000322 007 N/A P4 Plasma-1 18 / Day 4 18h
007	N/A	19 / Day 4 19h	1105163 108	139698 852	*7 911039	1	*AAR>(200)	40	497170000323	AA90478-01 497170000323 007 N/A P4 Plasma-1 19 / Day 4 19h
009	N/A	1 / Day 4 1h	1449845 632	141485 186	*10 247332	1	*AAR>(200)	41	497170000400	AA90478-01 497170000400 009 N/A P4 Plasma-1 1 / Day 4 1h
009	N/A	2 / Day 4 2h	1598851 364	159460 283	*10 026643	1	*AAR>(200)	42	497170000401	AA90478-01 497170000401 009 N/A P4 Plasma-1 2 / Day 4 2h
009	N/A	3 / Day 4 3h	1344925 38	132424 156	*10 156194	1	*AAR>(200)	43	497170000402	AA90478-01 497170000402 009 N/A P4 Plasma-1 3 / Day 4 3h
009	N/A	4 / Day 4 4h	1366716 403	132288 411	*10 331339	1	*AAR>(200)	44	497170000403	AA90478-01 497170000403 009 N/A P4 Plasma-1 4 / Day 4 4h
009	N/A	5 / Day 4 5h	1448259 461	137514 626	*10 531676	1	*AAR>(200)	45	497170000404	AA90478-01 497170000404 009 N/A P4 Plasma-1 5 / Day 4 5h
009	N/A	6 / Day 4 6h	1436247 862	136658 948	*10 509724	1	*AAR>(200)	46	497170000405	AA90478-01 497170000405 009 N/A P4 Plasma-1 6 / Day 4 6h
009	N/A	7 / Day 4 7h	1270794 002	122903 441	*10 339776	1	*AAR>(200)	47	497170000406	AA90478-01 497170000406 009 N/A P4 Plasma-1 7 / Day 4 7h
009	N/A	8 / Day 4 8h	1429168 175	134437 828	*10 630700	1	*AAR>(200)	48	497170000407	AA90478-01 497170000407 009 N/A P4 Plasma-1 8 / Day 4 8h
009	N/A	9 / Day 4 9h	1304081 926	126955 137	*10 271990	1	*AAR>(200)	52	497170000408	AA90478-01 497170000408 009 N/A P4 Plasma-1 9 / Day 4 9h
009	N/A	10 / Day 4 10h	1058992 054	27366 428	*38 696758	1	*AAR>(200)	53	497170000409	AA90478-01 497170000409 009 N/A P4 Plasma-1 10 / Day 4 10h
009	N/A	11 / Day 4 11h	1292721 756	134121 938	*9 638406	1	*AAR>(200)	54	497170000410	AA90478-01 497170000410 009 N/A P4 Plasma-1 11 / Day 4 11h
009	N/A	12 / Day 4 12h	1012092 724	26786 01	*37 784378	1	*AAR>(200)	55	497170000411	AA90478-01 497170000411 009 N/A P4 Plasma-1 12 / Day 4 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 4 13h	1244617 943	131160 743	*9 489257	1	*AAR>(200)	56	497170000412	AA90478-01 497170000412 009 N/A P4 Plasma-1 13 / Day 4 13h
009	N/A	14 / Day 4 14h	1257199 382	33492 342	*37 536921	1	*AAR>(200)	57	497170000413	AA90478-01 497170000413 009 N/A P4 Plasma-1 14 / Day 4 14h
009	N/A	15 / Day 4 15h	921905 874	92310 375	*9 987023	1	*AAR>(200)	58	497170000414	AA90478-01 497170000414 009 N/A P4 Plasma-1 15 / Day 4 15h
009	N/A	16 / Day 4 16h	1220297 544	122106 965	*9 993677	1	*AAR>(200)	59	497170000415	AA90478-01 497170000415 009 N/A P4 Plasma-1 16 / Day 4 16h
009	N/A	17 / Day 4 17h	1245014 992	127011 453	*9 802384	1	*AAR>(200)	60	497170000416	AA90478-01 497170000416 009 N/A P4 Plasma-1 17 / Day 4 17h
009	N/A	18 / Day 4 18h	1130938 421	114373 014	*9 888158	1	*AAR>(200)	61	497170000417	AA90478-01 497170000417 009 N/A P4 Plasma-1 18 / Day 4 18h
009	N/A	19 / Day 4 19h	1339361 623	138134 511	*9 696068	1	*AAR>(200)	63	497170000418	AA90478-01 497170000418 009 N/A P4 Plasma-1 19 / Day 4 19h
011	N/A	1 / Day 4 1h	289050 114	143698 608	2 011503	1	71 0	64	497170000495	AA90478-01 497170000495 011 N/A P4 Plasma-1 1 / Day 4 1h
011	N/A	2 / Day 4 2h	283182 222	138550 664	2 043889	1	72 1	65	497170000496	AA90478-01 497170000496 011 N/A P4 Plasma-1 2 / Day 4 2h
011	N/A	3 / Day 4 3h	267291 02	130977 761	2 040736	1	72 0	66	497170000497	AA90478-01 497170000497 011 N/A P4 Plasma-1 3 / Day 4 3h
011	N/A	4 / Day 4 4h	283174 115	133496 086	2 121217	1	74 8	67	497170000498	AA90478-01 497170000498 011 N/A P4 Plasma-1 4 / Day 4 4h
011	N/A	5 / Day 4 5h	294668 01	138718 555	2 124215	1	74 9	68	497170000499	AA90478-01 497170000499 011 N/A P4 Plasma-1 5 / Day 4 5h
011	N/A	6 / Day 4 6h	303040 654	136964 185	2 212554	1	78 1	69	497170000500	AA90478-01 497170000500 011 N/A P4 Plasma-1 6 / Day 4 6h
011	N/A	7 / Day 4 7h	267990 175	126729 029	2 114671	1	74 6	70	497170000501	AA90478-01 497170000501 011 N/A P4 Plasma-1 7 / Day 4 7h
011	N/A	8 / Day 4 8h	285053 284	128213 332	2 223273	1	78 4	71	497170000502	AA90478-01 497170000502 011 N/A P4 Plasma-1 8 / Day 4 8h
011	N/A	9 / Day 4 9h	308878 79	131881 714	2 342090	1	82 6	72	497170000503	AA90478-01 497170000503 011 N/A P4 Plasma-1 9 / Day 4 9h
011	N/A	10 / Day 4 10h	256156 831	108917 662	2 351839	1	83 0	74	497170000504	AA90478-01 497170000504 011 N/A P4 Plasma-1 10 / Day 4 10h
011	N/A	11 / Day 4 11h	336999 485	150826 756	2 234348	1	78 8	75	497170000505	AA90478-01 497170000505 011 N/A P4 Plasma-1 11 / Day 4 11h
011	N/A	12 / Day 4 12h	336976 047	145982 817	2 308327	1	81 4	76	497170000506	AA90478-01 497170000506 011 N/A P4 Plasma-1 12 / Day 4 12h
011	N/A	13 / Day 4 13h	320792 22	140176 986	2 288480	1	80 7	77	497170000507	AA90478-01 497170000507 011 N/A P4 Plasma-1 13 / Day 4 13h
011	N/A	14 / Day 4 14h	297633 333	133007 482	2 237719	1	78 9	78	497170000508	AA90478-01 497170000508 011 N/A P4 Plasma-1 14 / Day 4 14h
011	N/A	15 / Day 4 15h	319767 024	147884 996	2 162268	1	76 3	79	497170000509	AA90478-01 497170000509 011 N/A P4 Plasma-1 15 / Day 4 15h
011	N/A	16 / Day 4 16h	292984 852	146199 133	2 004012	1	70 7	80	497170000510	AA90478-01 497170000510 011 N/A P4 Plasma-1 16 / Day 4 16h
011	N/A	17 / Day 4 17h	293576 379	143445 241	2 046609	1	72 2	81	497170000511	AA90478-01 497170000511 011 N/A P4 Plasma-1 17 / Day 4 17h
011	N/A	18 / Day 4 18h	278161 403	135379 708	2 054676	1	72 5	82	497170000512	AA90478-01 497170000512 011 N/A P4 Plasma-1 18 / Day 4 18h
011	N/A	19 / Day 4 19h	233393 213	109728 695	2 127003	1	75 0	83	497170000513	AA90478-01 497170000513 011 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 18
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias
8	0 00		0	148291 818	0 000000	-0 175	
9	0 00		0	65510 592	*0 000000	*-0 175	
10	1 00	1 00000	4608 991	145084 451	0 031768	1 00	0 0
11	2 00	0 250000	8067 885	140126 3	0 057576	1 96	-2 0
12	4 00	0 0625000	14348 129	128278 514	0 111851	3 97	-0 8
13	8 00	0 0156250	33669 99	148020 905	0 227468	8 26	3 3
14	16 0	0 00390625	63742 086	134866 99	0 472629	17 3	8 1
15	40 0	0 000625000	147198 442	134094 697	1 097720	40 5	1 3
16	80 0	0 000156250	306214 344	145352 594	2 106700	77 9	-2 6
17	160	0 0000390625	620148 317	147031 951	4 217779	156	-2 5
18	200	0 0000250000	780119 532	153075 517	5 096305	189	-5 5

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0269709317

Intercept = 0 00471872693

R-Squared = 0 9978

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* UISR

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 18
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	681697 498	133709 812	5 098336	1	189		192		1 8
2	0 00	670701 627	131959 131	5 082647	1	188				
3	0 00	669462 033	129765 593	5 159010	1	191				
4	0 00	748188 058	146576 93	5 104405	1	189				
5	0 00	696760 208	137618 568	5 062981	1	188				
50	0 00	756283 574	144011 277	5 251558	1	195				
51	0 00	761679 937	142883 994	5 330758	1	197				
86	0 00	801943 879	152467 9	5 259756	1	195				
87	0 00	790713 482	151608 821	5 215485	1	193				
29	3 00	10605 366	124266 426	0 085344	1	2 99	-0 3	3 05	1 7	2 8
62	3 00	15470 9	174858 531	0 088477	1	3 11	3 7			
39	37 5	162903 703	167933 601	0 970048	1	35 8	-4 5	36 6	-2 4	3 1
73	37 5	145931 39	143815 332	1 014714	1	37 4	-0 3			
49	150	595742 619	145027 987	4 107777	1	152	1 3	151	0 7	0 9
84	150	666423 634	164636 246	4 047855	1	150	0 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 18
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	1 / Day 4 1h	1052370 666	146335 185	*7 191508	1	*AAR>(200)	20	497170000590	AA90478-01 497170000590 012 N/A P4 Plasma-1 1 / Day 4 1h
012	N/A	2 / Day 4 2h	1019215 771	144948 086	*7 031592	1	*AAR>(200)	21	497170000591	AA90478-01 497170000591 012 N/A P4 Plasma-1 2 / Day 4 2h
012	N/A	3 / Day 4 3h	1015514 196	142995 037	*7 101744	1	*AAR>(200)	22	497170000592	AA90478-01 497170000592 012 N/A P4 Plasma-1 3 / Day 4 3h
012	N/A	4 / Day 4 4h	1023460 162	145552 907	*7 031534	1	*AAR>(200)	23	497170000593	AA90478-01 497170000593 012 N/A P4 Plasma-1 4 / Day 4 4h
012	N/A	5 / Day 4 5h	988008 948	134568 454	*7 342055	1	*AAR>(200)	24	497170000594	AA90478-01 497170000594 012 N/A P4 Plasma-1 5 / Day 4 5h
012	N/A	6 / Day 4 6h	931663 167	127388 395	*7 313564	1	*AAR>(200)	25	497170000595	AA90478-01 497170000595 012 N/A P4 Plasma-1 6 / Day 4 6h
012	N/A	7 / Day 4 7h	896989 652	128845 341	*6 961755	1	*AAR>(200)	26	497170000596	AA90478-01 497170000596 012 N/A P4 Plasma-1 7 / Day 4 7h
012	N/A	8 / Day 4 8h	909991 948	127645 804	*7 129039	1	*AAR>(200)	27	497170000597	AA90478-01 497170000597 012 N/A P4 Plasma-1 8 / Day 4 8h
012	N/A	9 / Day 4 9h	862476 826	118092 534	*7 303398	1	*AAR>(200)	28	497170000598	AA90478-01 497170000598 012 N/A P4 Plasma-1 9 / Day 4 9h
012	N/A	10 / Day 4 10h	947471 415	131426 919	*7 209112	1	*AAR>(200)	30	497170000599	AA90478-01 497170000599 012 N/A P4 Plasma-1 10 / Day 4 10h
012	N/A	11 / Day 4 11h	971117 665	135938 808	*7 143785	1	*AAR>(200)	31	497170000600	AA90478-01 497170000600 012 N/A P4 Plasma-1 11 / Day 4 11h
012	N/A	12 / Day 4 12h	996511 231	145455 346	*6 850977	1	*AAR>(200)	32	497170000601	AA90478-01 497170000601 012 N/A P4 Plasma-1 12 / Day 4 12h
012	N/A	13 / Day 4 13h	952525 614	136380 56	*6 984321	1	*AAR>(200)	33	497170000602	AA90478-01 497170000602 012 N/A P4 Plasma-1 13 / Day 4 13h
012	N/A	14 / Day 4 14h	935672 537	135645 228	*6 897939	1	*AAR>(200)	34	497170000603	AA90478-01 497170000603 012 N/A P4 Plasma-1 14 / Day 4 14h
012	N/A	15 / Day 4 15h	1023620 281	152878 413	*6 695650	1	*AAR>(200)	35	497170000604	AA90478-01 497170000604 012 N/A P4 Plasma-1 15 / Day 4 15h
012	N/A	16 / Day 4 16h	807277 678	123184 107	*6 553424	1	*AAR>(200)	36	497170000605	AA90478-01 497170000605 012 N/A P4 Plasma-1 16 / Day 4 16h
012	N/A	17 / Day 4 17h	946076 089	147204 811	*6 426937	1	*AAR>(200)	37	497170000606	AA90478-01 497170000606 012 N/A P4 Plasma-1 17 / Day 4 17h
012	N/A	18 / Day 4 18h	966758 607	147698 192	*6 545501	1	*AAR>(200)	38	497170000607	AA90478-01 497170000607 012 N/A P4 Plasma-1 18 / Day 4 18h
012	N/A	19 / Day 4 19h	959017 3	149971 183	*6 394677	1	*AAR>(200)	40	497170000608	AA90478-01 497170000608 012 N/A P4 Plasma-1 19 / Day 4 19h
013	N/A	1 / Day 4 1h	301445 599	151157 166	1 994253	1	73 8	41	497170000685	AA90478-01 497170000685 013 N/A P4 Plasma-1 1 / Day 4 1h
013	N/A	2 / Day 4 2h	312197 34	158257 386	1 972719	1	73 0	42	497170000686	AA90478-01 497170000686 013 N/A P4 Plasma-1 2 / Day 4 2h
013	N/A	3 / Day 4 3h	320714 975	163878 268	1 957032	1	72 4	43	497170000687	AA90478-01 497170000687 013 N/A P4 Plasma-1 3 / Day 4 3h
013	N/A	4 / Day 4 4h	303583 339	156509 091	1 939717	1	71 7	44	497170000688	AA90478-01 497170000688 013 N/A P4 Plasma-1 4 / Day 4 4h
013	N/A	5 / Day 4 5h	321557 003	159804 763	2 012187	1	74 4	45	497170000689	AA90478-01 497170000689 013 N/A P4 Plasma-1 5 / Day 4 5h
013	N/A	6 / Day 4 6h	296135 884	109426 778	2 706247	1	100	46	497170000690	AA90478-01 497170000690 013 N/A P4 Plasma-1 6 / Day 4 6h
013	N/A	7 / Day 4 7h	291290 141	154152 91	1 889618	1	69 9	47	497170000691	AA90478-01 497170000691 013 N/A P4 Plasma-1 7 / Day 4 7h
013	N/A	8 / Day 4 8h	276802 293	141453 917	1 956837	1	72 4	48	497170000692	AA90478-01 497170000692 013 N/A P4 Plasma-1 8 / Day 4 8h
013	N/A	9 / Day 4 9h	289503 016	39530 715	*7 323496	1	*AAR>(200)	52	497170000693	AA90478-01 497170000693 013 N/A P4 Plasma-1 9 / Day 4 9h
013	N/A	10 / Day 4 10h	250002 883	128514 052	1 945335	1	72 0	53	497170000694	AA90478-01 497170000694 013 N/A P4 Plasma-1 10 / Day 4 10h
013	N/A	11 / Day 4 11h	261997 085	134770 581	1 944023	1	71 9	54	497170000695	AA90478-01 497170000695 013 N/A P4 Plasma-1 11 / Day 4 11h
013	N/A	12 / Day 4 12h	280068 757	146595 745	1 910484	1	70 7	55	497170000696	AA90478-01 497170000696 013 N/A P4 Plasma-1 12 / Day 4 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	13 / Day 4 13h	270357 065	139252 881	1 941483	1	71 8	56	497170000697	AA90478-01 497170000697 013 N/A P4 Plasma-1 13 / Day 4 13h
013	N/A	14 / Day 4 14h	284404 858	149793 144	1 898651	1	70 2	57	497170000698	AA90478-01 497170000698 013 N/A P4 Plasma-1 14 / Day 4 14h
013	N/A	15 / Day 4 15h	314549 469	162718 999	1 933084	1	71 5	58	497170000699	AA90478-01 497170000699 013 N/A P4 Plasma-1 15 / Day 4 15h
013	N/A	16 / Day 4 16h	335996 374	164077 831	2 047787	1	75 8	59	497170000700	AA90478-01 497170000700 013 N/A P4 Plasma-1 16 / Day 4 16h
013	N/A	17 / Day 4 17h	289233 814	151504 508	1 909077	1	70 6	60	497170000701	AA90478-01 497170000701 013 N/A P4 Plasma-1 17 / Day 4 17h
013	N/A	18 / Day 4 18h	299710 537	165131 69	1 814979	1	67 1	61	497170000702	AA90478-01 497170000702 013 N/A P4 Plasma-1 18 / Day 4 18h
013	N/A	19 / Day 4 19h	257635 467	145961 055	1 765097	1	65 3	63	497170000703	AA90478-01 497170000703 013 N/A P4 Plasma-1 19 / Day 4 19h
015	N/A	1 / Day 4 1h	423998 657	157640 211	2 689661	1	99 5	64	497170000780	AA90478-01 497170000780 015 N/A P4 Plasma-1 1 / Day 4 1h
015	N/A	2 / Day 4 2h	402688 723	157020 713	2 564558	1	94 9	65	497170000781	AA90478-01 497170000781 015 N/A P4 Plasma-1 2 / Day 4 2h
015	N/A	3 / Day 4 3h	395617 989	160221 319	2 469197	1	91 4	66	497170000782	AA90478-01 497170000782 015 N/A P4 Plasma-1 3 / Day 4 3h
015	N/A	4 / Day 4 4h	374503 651	148819 73	2 516492	1	93 1	67	497170000783	AA90478-01 497170000783 015 N/A P4 Plasma-1 4 / Day 4 4h
015	N/A	5 / Day 4 5h	384916 544	154666 454	2 488688	1	92 1	68	497170000784	AA90478-01 497170000784 015 N/A P4 Plasma-1 5 / Day 4 5h
015	N/A	6 / Day 4 6h	379814 106	149435 32	2 541662	1	94 1	69	497170000785	AA90478-01 497170000785 015 N/A P4 Plasma-1 6 / Day 4 6h
015	N/A	7 / Day 4 7h	399675 648	153164 422	2 609455	1	96 6	70	497170000786	AA90478-01 497170000786 015 N/A P4 Plasma-1 7 / Day 4 7h
015	N/A	8 / Day 4 8h	406685 725	119634 578	3 399400	1	126	71	497170000787	AA90478-01 497170000787 015 N/A P4 Plasma-1 8 / Day 4 8h
015	N/A	9 / Day 4 9h	382037 329	156728 397	2 437576	1	90 2	72	497170000788	AA90478-01 497170000788 015 N/A P4 Plasma-1 9 / Day 4 9h
015	N/A	10 / Day 4 10h	367355 13	148043 926	2 481393	1	91 8	74	497170000789	AA90478-01 497170000789 015 N/A P4 Plasma-1 10 / Day 4 10h
015	N/A	11 / Day 4 11h	392275 766	159550 294	2 458634	1	91 0	75	497170000790	AA90478-01 497170000790 015 N/A P4 Plasma-1 11 / Day 4 11h
015	N/A	12 / Day 4 12h	371129 684	151742 423	2 445787	1	90 5	76	497170000791	AA90478-01 497170000791 015 N/A P4 Plasma-1 12 / Day 4 12h
015	N/A	13 / Day 4 13h	382787 627	155115 709	2 467755	1	91 3	77	497170000792	AA90478-01 497170000792 015 N/A P4 Plasma-1 13 / Day 4 13h
015	N/A	14 / Day 4 14h	388116 598	161159 29	2 408279	1	89 1	78	497170000793	AA90478-01 497170000793 015 N/A P4 Plasma-1 14 / Day 4 14h
015	N/A	15 / Day 4 15h	378262 276	160582 878	2 355558	1	87 2	79	497170000794	AA90478-01 497170000794 015 N/A P4 Plasma-1 15 / Day 4 15h
015	N/A	16 / Day 4 16h	357879 918	157305 041	2 275070	1	84 2	80	497170000795	AA90478-01 497170000795 015 N/A P4 Plasma-1 16 / Day 4 16h
015	N/A	17 / Day 4 17h	321290 295	146805 017	2 188551	1	81 0	81	497170000796	AA90478-01 497170000796 015 N/A P4 Plasma-1 17 / Day 4 17h
015	N/A	18 / Day 4 18h	338281 065	146102 142	2 315374	1	85 7	82	497170000797	AA90478-01 497170000797 015 N/A P4 Plasma-1 18 / Day 4 18h
015	N/A	19 / Day 4 19h	326245 202	143560 369	2 272530	1	84 1	83	497170000798	AA90478-01 497170000798 015 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 19
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	227946 075	0 000000	0 00329		0 00329	0 0
9	0 00		0	139712 792	0 000000	0 00329			
10	1 00	1 00000	2779 631	220178 56	0 012624	0 963	-3 7		
11	2 00	0 250000	5970 156	218503 385	0 027323	2 08	4 0		
12	4 00	0 0625000	12114 065	221548 911	0 054679	4 16	4 0		
13	8 00	0 0156250	24973 66	231340 464	0 107952	8 21	2 6		
14	16 0	0 00390625	52428 498	228272 379	0 229675	17 5	9 4		
15	40 0	0 000625000	107724 02	208547 943	0 516543	39 3	-1 8		
16	80 0	0 000156250	242877 178	235149 485	1 032863	78 5	-1 9		
17	160	0 0000390625	449706 971	226237 585	1 987764	151	-5 6		
18	200	0 0000250000	549035 893	223301 783	2 458717	187	-6 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0131590453

Intercept = -0 0000432967094

R-Squared = 0 9964

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 19
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	563917 261	230037 644	2 451413	1	186		185		0 7
2	0 00	590185 036	240613 367	2 452836	1	186				
3	0 00	578600 196	240107 977	2 409750	1	183				
4	0 00	570531 753	233296 917	2 445518	1	186				
5	0 00	560032 542	229188 13	2 443550	1	186				
50	0 00	574065 343	235929 145	2 433211	1	185				
51	0 00	566876 469	231819 511	2 445335	1	186				
86	0 00	581464 978	240688 51	2 415840	1	184				
87	0 00	533262 156	221518 411	2 407304	1	183				
29	3 00	8769 725	236677 134	0 037054	1	2 82	-6 0	2 85	-5 0	1 2
62	3 00	9265 471	245428 713	0 037752	1	2 87	-4 3			
39	37 5	115066 172	245128 655	0 469411	1	35 7	-4 8	34 7	-7 5	4 3
73	37 5	106017 411	239915 174	0 441895	1	33 6	-10 4			
49	150	438058 099	236494 251	1 852299	1	141	-6 0	142	-5 3	0 5
84	150	437116 088	234330 582	1 865382	1	142	-5 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 19
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
018	N/A	1 / Day 4 1h	224246 144	217273 317	1 032092	1	78 4	20	497170000875	AA90478-01 497170000875 018 N/A P4 Plasma-1 1 / Day 4 1h
018	N/A	2 / Day 4 2h	202963 024	215309 461	0 942657	1	71 6	21	497170000876	AA90478-01 497170000876 018 N/A P4 Plasma-1 2 / Day 4 2h
018	N/A	3 / Day 4 3h	205343 433	220383 626	0 931754	1	70 8	22	497170000877	AA90478-01 497170000877 018 N/A P4 Plasma-1 3 / Day 4 3h
018	N/A	4 / Day 4 4h	217034 703	233171 499	0 930794	1	70 7	23	497170000878	AA90478-01 497170000878 018 N/A P4 Plasma-1 4 / Day 4 4h
018	N/A	5 / Day 4 5h	202713 715	213698 773	0 948596	1	72 1	24	497170000879	AA90478-01 497170000879 018 N/A P4 Plasma-1 5 / Day 4 5h
018	N/A	6 / Day 4 6h	214560 587	227619 569	0 942628	1	71 6	25	497170000880	AA90478-01 497170000880 018 N/A P4 Plasma-1 6 / Day 4 6h
018	N/A	7 / Day 4 7h	212564 136	231439 448	0 918444	1	69 8	26	497170000881	AA90478-01 497170000881 018 N/A P4 Plasma-1 7 / Day 4 7h
018	N/A	8 / Day 4 8h	184101 165	200923 904	0 916273	1	69 6	27	497170000882	AA90478-01 497170000882 018 N/A P4 Plasma-1 8 / Day 4 8h
018	N/A	9 / Day 4 9h	221637 725	239169 596	0 926697	1	70 4	28	497170000883	AA90478-01 497170000883 018 N/A P4 Plasma-1 9 / Day 4 9h
018	N/A	10 / Day 4 10h	225699 361	226234 877	0 997633	1	75 8	30	497170000884	AA90478-01 497170000884 018 N/A P4 Plasma-1 10 / Day 4 10h
018	N/A	11 / Day 4 11h	222850 145	228189 498	0 976601	1	74 2	31	497170000885	AA90478-01 497170000885 018 N/A P4 Plasma-1 11 / Day 4 11h
018	N/A	12 / Day 4 12h	247032 076	245310 455	1 007018	1	76 5	32	497170000886	AA90478-01 497170000886 018 N/A P4 Plasma-1 12 / Day 4 12h
018	N/A	13 / Day 4 13h	233547 412	232340 051	1 005197	1	76 4	33	497170000887	AA90478-01 497170000887 018 N/A P4 Plasma-1 13 / Day 4 13h
018	N/A	14 / Day 4 14h	228933 838	230321 724	0 993974	1	75 5	34	497170000888	AA90478-01 497170000888 018 N/A P4 Plasma-1 14 / Day 4 14h
018	N/A	15 / Day 4 15h	245377 922	251013 253	0 977550	1	74 3	35	497170000889	AA90478-01 497170000889 018 N/A P4 Plasma-1 15 / Day 4 15h
018	N/A	16 / Day 4 16h	223236 627	227026 474	0 983307	1	74 7	36	497170000890	AA90478-01 497170000890 018 N/A P4 Plasma-1 16 / Day 4 16h
018	N/A	17 / Day 4 17h	228474 95	240492 324	0 950030	1	72 2	37	497170000891	AA90478-01 497170000891 018 N/A P4 Plasma-1 17 / Day 4 17h
018	N/A	18 / Day 4 18h	225569 331	237170 698	0 951084	1	72 3	38	497170000892	AA90478-01 497170000892 018 N/A P4 Plasma-1 18 / Day 4 18h
018	N/A	19 / Day 4 19h	202258 365	215021 983	0 940640	1	71 5	40	497170000893	AA90478-01 497170000893 018 N/A P4 Plasma-1 19 / Day 4 19h
019	N/A	1 / Day 4 1h	402264 545	232531 934	1 729932	1	131	41	497170000970	AA90478-01 497170000970 019 N/A P4 Plasma-1 1 / Day 4 1h
019	N/A	2 / Day 4 2h	359461 426	209287 099	1 717552	1	131	42	497170000971	AA90478-01 497170000971 019 N/A P4 Plasma-1 2 / Day 4 2h
019	N/A	3 / Day 4 3h	392223 627	232035 824	1 690358	1	128	43	497170000972	AA90478-01 497170000972 019 N/A P4 Plasma-1 3 / Day 4 3h
019	N/A	4 / Day 4 4h	392645 345	234323 147	1 675658	1	127	44	497170000973	AA90478-01 497170000973 019 N/A P4 Plasma-1 4 / Day 4 4h
019	N/A	5 / Day 4 5h	391529 028	226586 749	1 727943	1	131	45	497170000974	AA90478-01 497170000974 019 N/A P4 Plasma-1 5 / Day 4 5h
019	N/A	6 / Day 4 6h	406409 776	238160 731	1 706452	1	130	46	497170000975	AA90478-01 497170000975 019 N/A P4 Plasma-1 6 / Day 4 6h
019	N/A	7 / Day 4 7h	382768 597	218031 083	1 755569	1	133	47	497170000976	AA90478-01 497170000976 019 N/A P4 Plasma-1 7 / Day 4 7h
019	N/A	8 / Day 4 8h	375267 885	225948 631	1 660855	1	126	48	497170000977	AA90478-01 497170000977 019 N/A P4 Plasma-1 8 / Day 4 8h
019	N/A	9 / Day 4 9h	386031 419	233775 275	1 651293	1	125	52	497170000978	AA90478-01 497170000978 019 N/A P4 Plasma-1 9 / Day 4 9h
019	N/A	10 / Day 4 10h	354214 617	221604 997	1 598405	1	121	53	497170000979	AA90478-01 497170000979 019 N/A P4 Plasma-1 10 / Day 4 10h
019	N/A	11 / Day 4 11h	367664 156	239961 117	1 532182	1	116	54	497170000980	AA90478-01 497170000980 019 N/A P4 Plasma-1 11 / Day 4 11h
019	N/A	12 / Day 4 12h	364775 256	224963 054	1 621490	1	123	55	497170000981	AA90478-01 497170000981 019 N/A P4 Plasma-1 12 / Day 4 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	13 / Day 4 13h	346302 827	215326 028	1 608272	1	122	56	497170000982	AA90478-01 497170000982 019 N/A P4 Plasma-1 13 / Day 4 13h
019	N/A	14 / Day 4 14h	329909 859	212796 86	1 550351	1	118	57	497170000983	AA90478-01 497170000983 019 N/A P4 Plasma-1 14 / Day 4 14h
019	N/A	15 / Day 4 15h	327705 538	209076 2	1 567398	1	119	58	497170000984	AA90478-01 497170000984 019 N/A P4 Plasma-1 15 / Day 4 15h
019	N/A	16 / Day 4 16h	371307 732	240677 44	1 542761	1	117	59	497170000985	AA90478-01 497170000985 019 N/A P4 Plasma-1 16 / Day 4 16h
019	N/A	17 / Day 4 17h	333260 14	219962 838	1 515075	1	115	60	497170000986	AA90478-01 497170000986 019 N/A P4 Plasma-1 17 / Day 4 17h
019	N/A	18 / Day 4 18h	313837 447	206226 925	1 521806	1	116	61	497170000987	AA90478-01 497170000987 019 N/A P4 Plasma-1 18 / Day 4 18h
019	N/A	19 / Day 4 19h	335865 145	217137 266	1 546787	1	118	63	497170000988	AA90478-01 497170000988 019 N/A P4 Plasma-1 19 / Day 4 19h
021	N/A	1 / Day 4 1h	315369 127	205103 036	1 537613	1	117	64	497170001065	AA90478-01 497170001065 021 N/A P4 Plasma-1 1 / Day 4 1h
021	N/A	2 / Day 4 2h	350688 805	220059 986	1 593606	1	121	65	497170001066	AA90478-01 497170001066 021 N/A P4 Plasma-1 2 / Day 4 2h
021	N/A	3 / Day 4 3h	345897 752	228155 828	1 516059	1	115	66	497170001067	AA90478-01 497170001067 021 N/A P4 Plasma-1 3 / Day 4 3h
021	N/A	4 / Day 4 4h	334163 355	234913 554	1 422495	1	108	67	497170001068	AA90478-01 497170001068 021 N/A P4 Plasma-1 4 / Day 4 4h
021	N/A	5 / Day 4 5h	343222 996	228846 477	1 499796	1	114	68	497170001069	AA90478-01 497170001069 021 N/A P4 Plasma-1 5 / Day 4 5h
021	N/A	6 / Day 4 6h	337039 525	216624 661	1 555869	1	118	69	497170001070	AA90478-01 497170001070 021 N/A P4 Plasma-1 6 / Day 4 6h
021	N/A	7 / Day 4 7h	342904 822	238355 777	1 438626	1	109	70	497170001071	AA90478-01 497170001071 021 N/A P4 Plasma-1 7 / Day 4 7h
021	N/A	8 / Day 4 8h	335706 781	232473 554	1 444064	1	110	71	497170001072	AA90478-01 497170001072 021 N/A P4 Plasma-1 8 / Day 4 8h
021	N/A	9 / Day 4 9h	378907 391	239559 77	1 581682	1	120	72	497170001073	AA90478-01 497170001073 021 N/A P4 Plasma-1 9 / Day 4 9h
021	N/A	10 / Day 4 10h	346764 166	219448 803	1 580160	1	120	74	497170001074	AA90478-01 497170001074 021 N/A P4 Plasma-1 10 / Day 4 10h
021	N/A	11 / Day 4 11h	370535 075	225668 733	1 641942	1	125	75	497170001075	AA90478-01 497170001075 021 N/A P4 Plasma-1 11 / Day 4 11h
021	N/A	12 / Day 4 12h	342571 252	224899 369	1 523220	1	116	76	497170001076	AA90478-01 497170001076 021 N/A P4 Plasma-1 12 / Day 4 12h
021	N/A	13 / Day 4 13h	321227 21	216548 218	1 483398	1	113	77	497170001077	AA90478-01 497170001077 021 N/A P4 Plasma-1 13 / Day 4 13h
021	N/A	14 / Day 4 14h	337857 172	220995 426	1 528797	1	116	78	497170001078	AA90478-01 497170001078 021 N/A P4 Plasma-1 14 / Day 4 14h
021	N/A	15 / Day 4 15h	325640 924	225772 797	1 442339	1	110	79	497170001079	AA90478-01 497170001079 021 N/A P4 Plasma-1 15 / Day 4 15h
021	N/A	16 / Day 4 16h	321357 464	224489 996	1 431500	1	109	80	497170001080	AA90478-01 497170001080 021 N/A P4 Plasma-1 16 / Day 4 16h
021	N/A	17 / Day 4 17h	309213 691	218301 969	1 416449	1	108	81	497170001081	AA90478-01 497170001081 021 N/A P4 Plasma-1 17 / Day 4 17h
021	N/A	18 / Day 4 18h	283276 352	202513 916	1 398799	1	106	82	497170001082	AA90478-01 497170001082 021 N/A P4 Plasma-1 18 / Day 4 18h
021	N/A	19 / Day 4 19h	328579 994	232321 945	1 414330	1	107	83	497170001083	AA90478-01 497170001083 021 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 20
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	214699 425	0 000000	0 0188		0 0188	0 0
9	0 00		0	161615 401	0 000000	0 0188			
10	1 00	1 00000	2966 626	234215 744	0 012666	0 995	-0 5		
11	2 00	0 250000	5610 355	220978 423	0 025389	1 97	-1 5		
12	4 00	0 0625000	12032 064	231717 87	0 051925	4 02	0 5		
13	8 00	0 0156250	22653 202	208823 077	0 108480	8 38	4 8		
14	16 0	0 00390625	50747 119	223682 439	0 226871	17 5	9 4		
15	40 0	0 000625000	113538 921	221751 594	0 512009	39 5	-1 3		
16	80 0	0 000156250	232513 63	230160 208	1 010225	77 8	-2 8		
17	160	0 0000390625	461125 564	232533 654	1 983049	153	-4 4		
18	200	0 0000250000	491126 211	197443 205	2 487430	192	-4 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0129805996

Intercept = -0 000244161195

R-Squared = 0 9974

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 20
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	584521 443	242088 572	2 414494	1	186		185		1 0
2	0 00	558617 757	231888 139	2 408997	1	186				
3	0 00	555242 22	233019 382	2 382816	1	184				
4	0 00	567381 584	233467 888	2 430234	1	187				
5	0 00	559289 14	230688 082	2 424439	1	187				
50	0 00	562699 791	235673 317	2 387626	1	184				
51	0 00	541658 466	229875 124	2 356316	1	182				
86	0 00	536889 348	223478 215	2 402424	1	185				
87	0 00	598295 999	245102 634	2 441002	1	188				
29	3 00	9621 53	238771 857	0 040296	1	3 12	4 0	2 99	-0 3	6 2
62	3 00	8579 047	232673 879	0 036872	1	2 86	-4 7			
39	37 5	102665 753	222126 226	0 462196	1	35 6	-5 1	35 5	-5 3	0 4
73	37 5	108691 528	236635 786	0 459320	1	35 4	-5 6			
49	150	435224 144	227035 317	1 916989	1	148	-1 3	147	-2 0	1 4
84	150	436739 132	232582 096	1 877785	1	145	-3 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 20
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	1 / Day 4 1h	607832 513	209882 242	*2 896065	1	*AAR>(200)	20	497170001160	AA90478-01 497170001160 024 N/A P4 Plasma-1 1 / Day 4 1h
024	N/A	2 / Day 4 2h	597088 406	210417 937	*2 837631	1	*AAR>(200)	21	497170001161	AA90478-01 497170001161 024 N/A P4 Plasma-1 2 / Day 4 2h
024	N/A	3 / Day 4 3h	592742 416	210957 718	*2 809769	1	*AAR>(200)	22	497170001162	AA90478-01 497170001162 024 N/A P4 Plasma-1 3 / Day 4 3h
024	N/A	4 / Day 4 4h	637685 832	214207 811	*2 976949	1	*AAR>(200)	23	497170001163	AA90478-01 497170001163 024 N/A P4 Plasma-1 4 / Day 4 4h
024	N/A	5 / Day 4 5h	607197 606	214459 449	*2 831293	1	*AAR>(200)	24	497170001164	AA90478-01 497170001164 024 N/A P4 Plasma-1 5 / Day 4 5h
024	N/A	6 / Day 4 6h	577317 673	213965 194	*2 698185	1	*AAR>(200)	25	497170001165	AA90478-01 497170001165 024 N/A P4 Plasma-1 6 / Day 4 6h
024	N/A	7 / Day 4 7h	572813 507	207671 701	*2 758265	1	*AAR>(200)	26	497170001166	AA90478-01 497170001166 024 N/A P4 Plasma-1 7 / Day 4 7h
024	N/A	8 / Day 4 8h	603887 099	220869 627	*2 734134	1	*AAR>(200)	27	497170001167	AA90478-01 497170001167 024 N/A P4 Plasma-1 8 / Day 4 8h
024	N/A	9 / Day 4 9h	640403 018	233152 466	*2 746713	1	*AAR>(200)	28	497170001168	AA90478-01 497170001168 024 N/A P4 Plasma-1 9 / Day 4 9h
024	N/A	10 / Day 4 10h	610136 815	227657 873	*2 680060	1	*AAR>(200)	30	497170001169	AA90478-01 497170001169 024 N/A P4 Plasma-1 10 / Day 4 10h
024	N/A	11 / Day 4 11h	630093 741	229065 11	*2 750719	1	*AAR>(200)	31	497170001170	AA90478-01 497170001170 024 N/A P4 Plasma-1 11 / Day 4 11h
024	N/A	12 / Day 4 12h	604945 479	219147 355	*2 760451	1	*AAR>(200)	32	497170001171	AA90478-01 497170001171 024 N/A P4 Plasma-1 12 / Day 4 12h
024	N/A	13 / Day 4 13h	537367 336	203678 107	*2 638317	1	*AAR>(200)	33	497170001172	AA90478-01 497170001172 024 N/A P4 Plasma-1 13 / Day 4 13h
024	N/A	14 / Day 4 14h	620421 185	221415 561	*2 802067	1	*AAR>(200)	34	497170001173	AA90478-01 497170001173 024 N/A P4 Plasma-1 14 / Day 4 14h
024	N/A	15 / Day 4 15h	593253 436	227686 221	*2 605575	1	*AAR>(200)	35	497170001174	AA90478-01 497170001174 024 N/A P4 Plasma-1 15 / Day 4 15h
024	N/A	16 / Day 4 16h	554303 786	215177 254	2 576033	1	198	36	497170001175	AA90478-01 497170001175 024 N/A P4 Plasma-1 16 / Day 4 16h
024	N/A	17 / Day 4 17h	565949 854	227030 727	2 492834	1	192	37	497170001176	AA90478-01 497170001176 024 N/A P4 Plasma-1 17 / Day 4 17h
024	N/A	18 / Day 4 18h	570042 335	220310 947	2 587444	1	199	38	497170001177	AA90478-01 497170001177 024 N/A P4 Plasma-1 18 / Day 4 18h
024	N/A	19 / Day 4 19h	527242 103	199832 309	*2 638423	1	*AAR>(200)	40	497170001178	AA90478-01 497170001178 024 N/A P4 Plasma-1 19 / Day 4 19h
026	N/A	1 / Day 4 1h	528448 048	218393 656	2 419704	1	186	41	497170001255	AA90478-01 497170001255 026 N/A P4 Plasma-1 1 / Day 4 1h
026	N/A	2 / Day 4 2h	494476 922	211651 178	2 336282	1	180	42	497170001256	AA90478-01 497170001256 026 N/A P4 Plasma-1 2 / Day 4 2h
026	N/A	3 / Day 4 3h	485638 01	220686 515	2 200579	1	170	43	497170001257	AA90478-01 497170001257 026 N/A P4 Plasma-1 3 / Day 4 3h
026	N/A	4 / Day 4 4h	520477 518	214976 923	2 421086	1	187	44	497170001258	AA90478-01 497170001258 026 N/A P4 Plasma-1 4 / Day 4 4h
026	N/A	5 / Day 4 5h	484846 731	214011 956	2 265512	1	175	45	497170001259	AA90478-01 497170001259 026 N/A P4 Plasma-1 5 / Day 4 5h
026	N/A	6 / Day 4 6h	527747 009	231895 696	2 275795	1	175	46	497170001260	AA90478-01 497170001260 026 N/A P4 Plasma-1 6 / Day 4 6h
026	N/A	7 / Day 4 7h	501951 988	216024 48	2 323588	1	179	47	497170001261	AA90478-01 497170001261 026 N/A P4 Plasma-1 7 / Day 4 7h
026	N/A	8 / Day 4 8h	515923 169	228618 635	2 256698	1	174	48	497170001262	AA90478-01 497170001262 026 N/A P4 Plasma-1 8 / Day 4 8h
026	N/A	9 / Day 4 9h	527430 011	223560 832	2 359224	1	182	52	497170001263	AA90478-01 497170001263 026 N/A P4 Plasma-1 9 / Day 4 9h
026	N/A	10 / Day 4 10h	516407 378	227048 247	2 274439	1	175	53	497170001264	AA90478-01 497170001264 026 N/A P4 Plasma-1 10 / Day 4 10h
026	N/A	11 / Day 4 11h	446608 753	200576 226	2 226629	1	172	54	497170001265	AA90478-01 497170001265 026 N/A P4 Plasma-1 11 / Day 4 11h
026	N/A	12 / Day 4 12h	490655 182	218290 582	2 247716	1	173	55	497170001266	AA90478-01 497170001266 026 N/A P4 Plasma-1 12 / Day 4 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
026	N/A	13 / Day 4 13h	436786 152	196098 299	2 227384	1	172	56	497170001267	AA90478-01 497170001267 026 N/A P4 Plasma-1 13 / Day 4 13h
026	N/A	14 / Day 4 14h	455643 758	204805 514	2 224763	1	171	57	497170001268	AA90478-01 497170001268 026 N/A P4 Plasma-1 14 / Day 4 14h
026	N/A	15 / Day 4 15h	450001 629	200167 003	2 248131	1	173	58	497170001269	AA90478-01 497170001269 026 N/A P4 Plasma-1 15 / Day 4 15h
026	N/A	16 / Day 4 16h	482420 504	204759 934	2 356030	1	182	59	497170001270	AA90478-01 497170001270 026 N/A P4 Plasma-1 16 / Day 4 16h
026	N/A	17 / Day 4 17h	471678 903	214463 858	2 199340	1	169	60	497170001271	AA90478-01 497170001271 026 N/A P4 Plasma-1 17 / Day 4 17h
026	N/A	18 / Day 4 18h	476765 39	215338 088	2 214032	1	171	61	497170001272	AA90478-01 497170001272 026 N/A P4 Plasma-1 18 / Day 4 18h
026	N/A	19 / Day 4 19h	470451 139	211760 311	2 221621	1	171	63	497170001273	AA90478-01 497170001273 026 N/A P4 Plasma-1 19 / Day 4 19h
028	N/A	1 / Day 4 1h	727272 777	202881 864	*3 584711	1	*AAR>(200)	64	497170001350	AA90478-01 497170001350 028 N/A P4 Plasma-1 1 / Day 4 1h
028	N/A	2 / Day 4 2h	714674 957	202676 048	*3 526193	1	*AAR>(200)	65	497170001351	AA90478-01 497170001351 028 N/A P4 Plasma-1 2 / Day 4 2h
028	N/A	3 / Day 4 3h	768243 338	227033 56	*3 383832	1	*AAR>(200)	66	497170001352	AA90478-01 497170001352 028 N/A P4 Plasma-1 3 / Day 4 3h
028	N/A	4 / Day 4 4h	728220 487	216575 499	*3 362432	1	*AAR>(200)	67	497170001353	AA90478-01 497170001353 028 N/A P4 Plasma-1 4 / Day 4 4h
028	N/A	5 / Day 4 5h	791456 37	226154 072	*3 499634	1	*AAR>(200)	68	497170001354	AA90478-01 497170001354 028 N/A P4 Plasma-1 5 / Day 4 5h
028	N/A	6 / Day 4 6h	750469 071	214340 691	*3 501291	1	*AAR>(200)	69	497170001355	AA90478-01 497170001355 028 N/A P4 Plasma-1 6 / Day 4 6h
028	N/A	7 / Day 4 7h	711637 083	208313 608	*3 416181	1	*AAR>(200)	70	497170001356	AA90478-01 497170001356 028 N/A P4 Plasma-1 7 / Day 4 7h
028	N/A	8 / Day 4 8h	734477 988	212618 807	*3 454436	1	*AAR>(200)	71	497170001357	AA90478-01 497170001357 028 N/A P4 Plasma-1 8 / Day 4 8h
028	N/A	9 / Day 4 9h	719233 409	209503 326	*3 433041	1	*AAR>(200)	72	497170001358	AA90478-01 497170001358 028 N/A P4 Plasma-1 9 / Day 4 9h
028	N/A	10 / Day 4 10h	687871 775	204452 606	*3 364456	1	*AAR>(200)	74	497170001359	AA90478-01 497170001359 028 N/A P4 Plasma-1 10 / Day 4 10h
028	N/A	11 / Day 4 11h	701004 022	211135 735	*3 320158	1	*AAR>(200)	75	497170001360	AA90478-01 497170001360 028 N/A P4 Plasma-1 11 / Day 4 11h
028	N/A	12 / Day 4 12h	702794 786	213269 419	*3 295338	1	*AAR>(200)	76	497170001361	AA90478-01 497170001361 028 N/A P4 Plasma-1 12 / Day 4 12h
028	N/A	13 / Day 4 13h	665787 074	210184 534	*3 167631	1	*AAR>(200)	77	497170001362	AA90478-01 497170001362 028 N/A P4 Plasma-1 13 / Day 4 13h
028	N/A	14 / Day 4 14h	658660 632	200571 439	*3 283920	1	*AAR>(200)	78	497170001363	AA90478-01 497170001363 028 N/A P4 Plasma-1 14 / Day 4 14h
028	N/A	15 / Day 4 15h	728595 458	229290 344	*3 177611	1	*AAR>(200)	79	497170001364	AA90478-01 497170001364 028 N/A P4 Plasma-1 15 / Day 4 15h
028	N/A	16 / Day 4 16h	719673 798	219354 324	*3 280874	1	*AAR>(200)	80	497170001365	AA90478-01 497170001365 028 N/A P4 Plasma-1 16 / Day 4 16h
028	N/A	17 / Day 4 17h	680889 68	212987 187	*3 196857	1	*AAR>(200)	81	497170001366	AA90478-01 497170001366 028 N/A P4 Plasma-1 17 / Day 4 17h
028	N/A	18 / Day 4 18h	641792 105	209695 969	*3 060584	1	*AAR>(200)	82	497170001367	AA90478-01 497170001367 028 N/A P4 Plasma-1 18 / Day 4 18h
028	N/A	19 / Day 4 19h	684341 361	223985 255	*3 055296	1	*AAR>(200)	83	497170001368	AA90478-01 497170001368 028 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 21
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		569 961	295219 111	0 001931	0 00678		0 0153	79 1
9	0 00		557 559	228118 036	0 002444	0 0239			
10	1 00	1 00000	9227 185	289020 761	0 031926	1 00	0 0		
11	2 00	0 250000	17717 204	297726 766	0 059508	1 92	-4 0		
12	4 00	0 0625000	36554 028	293948 605	0 124355	4 08	2 0		
13	8 00	0 0156250	69801 896	284381 082	0 245452	8 11	1 4		
14	16 0	0 00390625	156105 199	285478 233	0 546820	18 1	13 1		
15	40 0	0 000625000	360239 869	293180 484	1 228731	40 8	2 0		
16	80 0	0 000156250	766641 657	333337 792	2 299894	76 5	-4 4		
17	160	0 0000390625	1332339 803	295333 886	4 511300	150	-6 3		
18	200	0 0000250000	1691827 334	295673 723	5 721940	190	-5 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0300520088

Intercept = 0 00172722273

R-Squared = 0 9953

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 21
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1620982 139	288591 3	5 616878	1	187		187		2 5
2	0 00	1630123 375	285585 499	5 708005	1	190				
3	0 00	1613065 936	290147 084	5 559477	1	185				
4	0 00	1666123 35	288237 646	5 780381	1	192				
5	0 00	1621064 697	287703 534	5 634497	1	187				
50	0 00	1710565 223	299809 266	5 705512	1	190				
51	0 00	1736181 702	305847 005	5 676635	1	189				
86	0 00	1636159 784	290806 885	5 626276	1	187				
87	0 00	1678917 856	317199 563	5 292939	1	176				
29	3 00	29411 076	318697 872	0 092285	1	3 01	0 3	2 93	-2 3	3 9
62	3 00	25940 042	297164 315	0 087292	1	2 85	-5 0			
39	37 5	330232 827	314858 025	1 048831	1	34 8	-7 2	33 9	-9 6	4 0
73	37 5	302897 563	305927 756	0 990095	1	32 9	-12 3			
49	150	1350058 281	318488 622	4 238953	1	141	-6 0	143	-4 7	1 5
84	150	1371578 143	316659 636	4 331396	1	144	-4 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 21
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 5 1h	717861 715	265266 126	2 706194	1	90 0	20	497170000001	AA90478-01 497170000001 001 N/A P5 Plasma-1 1 / Day 5 1h
001	N/A	2 / Day 5 2h	764960 491	287151 2	2 663964	1	88 6	21	497170000002	AA90478-01 497170000002 001 N/A P5 Plasma-1 2 / Day 5 2h
001	N/A	3 / Day 5 3h	803163 006	312636 098	2 569003	1	85 4	22	497170000003	AA90478-01 497170000003 001 N/A P5 Plasma-1 3 / Day 5 3h
001	N/A	4 / Day 5 4h	683179 032	259101 069	2 636728	1	87 7	23	497170000004	AA90478-01 497170000004 001 N/A P5 Plasma-1 4 / Day 5 4h
001	N/A	5 / Day 5 5h	786118 366	300209 561	2 618565	1	87 1	24	497170000005	AA90478-01 497170000005 001 N/A P5 Plasma-1 5 / Day 5 5h
001	N/A	6 / Day 5 6h	704410 001	254216 776	2 770903	1	92 1	25	497170000006	AA90478-01 497170000006 001 N/A P5 Plasma-1 6 / Day 5 6h
001	N/A	7 / Day 5 7h	802847 19	299996 502	2 676189	1	89 0	26	497170000007	AA90478-01 497170000007 001 N/A P5 Plasma-1 7 / Day 5 7h
001	N/A	8 / Day 5 8h	780907 898	284827 503	2 741687	1	91 2	27	497170000008	AA90478-01 497170000008 001 N/A P5 Plasma-1 8 / Day 5 8h
001	N/A	9 / Day 5 9h	785828 507	249171 464	3 153766	1	105	28	497170000009	AA90478-01 497170000009 001 N/A P5 Plasma-1 9 / Day 5 9h
001	N/A	10 / Day 5 10h	834122 673	278726 491	2 992621	1	99 5	30	497170000010	AA90478-01 497170000010 001 N/A P5 Plasma-1 10 / Day 5 10h
001	N/A	11 / Day 5 11h	843459 988	290885 386	2 899630	1	96 4	31	497170000011	AA90478-01 497170000011 001 N/A P5 Plasma-1 11 / Day 5 11h
001	N/A	12 / Day 5 12h	853849 915	282958 036	3 017585	1	100	32	497170000012	AA90478-01 497170000012 001 N/A P5 Plasma-1 12 / Day 5 12h
001	N/A	13 / Day 5 13h	870968 622	306461 755	2 842014	1	94 5	33	497170000013	AA90478-01 497170000013 001 N/A P5 Plasma-1 13 / Day 5 13h
001	N/A	14 / Day 5 14h	887411 621	316609 064	2 802862	1	93 2	34	497170000014	AA90478-01 497170000014 001 N/A P5 Plasma-1 14 / Day 5 14h
001	N/A	15 / Day 5 15h	907090 577	327049 891	2 773554	1	92 2	35	497170000015	AA90478-01 497170000015 001 N/A P5 Plasma-1 15 / Day 5 15h
001	N/A	16 / Day 5 16h	745441 767	266574 06	2 796378	1	93 0	36	497170000016	AA90478-01 497170000016 001 N/A P5 Plasma-1 16 / Day 5 16h
001	N/A	17 / Day 5 17h	722597 446	286466 302	2 522452	1	83 9	37	497170000017	AA90478-01 497170000017 001 N/A P5 Plasma-1 17 / Day 5 17h
001	N/A	18 / Day 5 18h	689212 353	283578 573	2 430411	1	80 8	38	497170000018	AA90478-01 497170000018 001 N/A P5 Plasma-1 18 / Day 5 18h
001	N/A	19 / Day 5 19h	755294 942	328505 959	2 299182	1	76 4	40	497170000019	AA90478-01 497170000019 001 N/A P5 Plasma-1 19 / Day 5 19h
003	N/A	1 / Day 5 1h	2088144 289	302886 976	*6 894137	1	*AAR>(200)	41	497170000096	AA90478-01 497170000096 003 N/A P5 Plasma-1 1 / Day 5 1h
003	N/A	2 / Day 5 2h	1871822 791	292942 293	*6 389732	1	*AAR>(200)	42	497170000097	AA90478-01 497170000097 003 N/A P5 Plasma-1 2 / Day 5 2h
003	N/A	3 / Day 5 3h	2137727 304	311196 716	*6 869376	1	*AAR>(200)	43	497170000098	AA90478-01 497170000098 003 N/A P5 Plasma-1 3 / Day 5 3h
003	N/A	4 / Day 5 4h	1850811 079	293556 798	*6 304780	1	*AAR>(200)	44	497170000099	AA90478-01 497170000099 003 N/A P5 Plasma-1 4 / Day 5 4h
003	N/A	5 / Day 5 5h	1948943 441	311392 24	*6 258805	1	*AAR>(200)	45	497170000100	AA90478-01 497170000100 003 N/A P5 Plasma-1 5 / Day 5 5h
003	N/A	6 / Day 5 6h	1941011 402	301890 308	*6 429525	1	*AAR>(200)	46	497170000101	AA90478-01 497170000101 003 N/A P5 Plasma-1 6 / Day 5 6h
003	N/A	7 / Day 5 7h	2036532 085	299667 922	*6 795963	1	*AAR>(200)	47	497170000102	AA90478-01 497170000102 003 N/A P5 Plasma-1 7 / Day 5 7h
003	N/A	8 / Day 5 8h	1814787 673	278507 679	*6 516114	1	*AAR>(200)	48	497170000103	AA90478-01 497170000103 003 N/A P5 Plasma-1 8 / Day 5 8h
003	N/A	9 / Day 5 9h	1933361 518	302770 852	*6 385560	1	*AAR>(200)	52	497170000104	AA90478-01 497170000104 003 N/A P5 Plasma-1 9 / Day 5 9h
003	N/A	10 / Day 5 10h	1828844 234	290839 466	*6 288157	1	*AAR>(200)	53	497170000105	AA90478-01 497170000105 003 N/A P5 Plasma-1 10 / Day 5 10h
003	N/A	11 / Day 5 11h	1644532 879	269197 013	*6 109031	1	*AAR>(200)	54	497170000106	AA90478-01 497170000106 003 N/A P5 Plasma-1 11 / Day 5 11h
003	N/A	12 / Day 5 12h	1851372 144	294760 458	*6 280938	1	*AAR>(200)	55	497170000107	AA90478-01 497170000107 003 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	13 / Day 5 13h	1662379 534	263394 379	*6 311371	1	*AAR>(200)	56	497170000108	AA90478-01 497170000108 003 N/A P5 Plasma-1 13 / Day 5 13h
003	N/A	14 / Day 5 14h	1755266 935	268380 807	*6 540210	1	*AAR>(200)	57	497170000109	AA90478-01 497170000109 003 N/A P5 Plasma-1 14 / Day 5 14h
003	N/A	15 / Day 5 15h	1736073 932	287590 791	*6 036612	1	*AAR>(200)	58	497170000110	AA90478-01 497170000110 003 N/A P5 Plasma-1 15 / Day 5 15h
003	N/A	16 / Day 5 16h	1448636 606	242671 608	5 969535	1	199	59	497170000111	AA90478-01 497170000111 003 N/A P5 Plasma-1 16 / Day 5 16h
003	N/A	17 / Day 5 17h	1664546 802	304231 012	5 471325	1	182	60	497170000112	AA90478-01 497170000112 003 N/A P5 Plasma-1 17 / Day 5 17h
003	N/A	18 / Day 5 18h	1579675 758	297264 112	5 314048	1	177	61	497170000113	AA90478-01 497170000113 003 N/A P5 Plasma-1 18 / Day 5 18h
003	N/A	19 / Day 5 19h	1597735 687	302883 246	5 275088	1	175	63	497170000114	AA90478-01 497170000114 003 N/A P5 Plasma-1 19 / Day 5 19h
005	N/A	1 / Day 5 1h	1023791 167	294706 586	3 473934	1	116	64	497170000191	AA90478-01 497170000191 005 N/A P5 Plasma-1 1 / Day 5 1h
005	N/A	2 / Day 5 2h	1108747 141	296579 616	3 738447	1	124	65	497170000192	AA90478-01 497170000192 005 N/A P5 Plasma-1 2 / Day 5 2h
005	N/A	3 / Day 5 3h	1005163 491	296921 017	3 385289	1	113	66	497170000193	AA90478-01 497170000193 005 N/A P5 Plasma-1 3 / Day 5 3h
005	N/A	4 / Day 5 4h	966909 786	278946 222	3 466295	1	115	67	497170000194	AA90478-01 497170000194 005 N/A P5 Plasma-1 4 / Day 5 4h
005	N/A	5 / Day 5 5h	984569 151	279564 139	3 521801	1	117	68	497170000195	AA90478-01 497170000195 005 N/A P5 Plasma-1 5 / Day 5 5h
005	N/A	6 / Day 5 6h	1052101 791	304328 302	3 457128	1	115	69	497170000196	AA90478-01 497170000196 005 N/A P5 Plasma-1 6 / Day 5 6h
005	N/A	7 / Day 5 7h	950565 309	267041 333	3 559619	1	118	70	497170000197	AA90478-01 497170000197 005 N/A P5 Plasma-1 7 / Day 5 7h
005	N/A	8 / Day 5 8h	1090216 242	301820 033	3 612140	1	120	71	497170000198	AA90478-01 497170000198 005 N/A P5 Plasma-1 8 / Day 5 8h
005	N/A	9 / Day 5 9h	1167099 993	321764 557	3 627186	1	121	72	497170000199	AA90478-01 497170000199 005 N/A P5 Plasma-1 9 / Day 5 9h
005	N/A	10 / Day 5 10h	1039926 013	287105 119	3 622109	1	120	74	497170000200	AA90478-01 497170000200 005 N/A P5 Plasma-1 10 / Day 5 10h
005	N/A	11 / Day 5 11h	1065665 94	293682 114	3 628638	1	121	75	497170000201	AA90478-01 497170000201 005 N/A P5 Plasma-1 11 / Day 5 11h
005	N/A	12 / Day 5 12h	1107566 176	301285 84	3 676131	1	122	76	497170000202	AA90478-01 497170000202 005 N/A P5 Plasma-1 12 / Day 5 12h
005	N/A	13 / Day 5 13h	1154164 604	288135 782	4 005627	1	133	77	497170000203	AA90478-01 497170000203 005 N/A P5 Plasma-1 13 / Day 5 13h
005	N/A	14 / Day 5 14h	1161104 285	295119 551	3 934352	1	131	78	497170000204	AA90478-01 497170000204 005 N/A P5 Plasma-1 14 / Day 5 14h
005	N/A	15 / Day 5 15h	1010301 614	258635 147	3 906281	1	130	79	497170000205	AA90478-01 497170000205 005 N/A P5 Plasma-1 15 / Day 5 15h
005	N/A	16 / Day 5 16h	1064210 805	280824 43	3 789595	1	126	80	497170000206	AA90478-01 497170000206 005 N/A P5 Plasma-1 16 / Day 5 16h
005	N/A	17 / Day 5 17h	1074207 797	290723 909	3 694941	1	123	81	497170000207	AA90478-01 497170000207 005 N/A P5 Plasma-1 17 / Day 5 17h
005	N/A	18 / Day 5 18h	1042295 969	266410 297	3 912371	1	130	82	497170000208	AA90478-01 497170000208 005 N/A P5 Plasma-1 18 / Day 5 18h
005	N/A	19 / Day 5 19h	1068856 512	281508 622	3 796887	1	126	83	497170000209	AA90478-01 497170000209 005 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 22
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	266143 22	0 000000	-0 0913		-0 0913	0 0
9	0 00		0	219390 559	0 000000	-0 0913			
10	1 00	1 00000	8574 642	273582 371	0 031342	0 979	-2 1		
11	2 00	0 250000	16414 38	257964 061	0 063630	2 08	4 0		
12	4 00	0 0625000	31506 516	267695 853	0 117695	3 93	-1 8		
13	8 00	0 0156250	63303 098	271450 673	0 233203	7 87	-1 6		
14	16 0	0 00390625	133030 383	249732 479	0 532692	18 1	13 1		
15	40 0	0 000625000	300606 779	253905 09	1 183934	40 3	0 8		
16	80 0	0 000156250	627934 457	276283 847	2 272787	77 5	-3 1		
17	160	0 0000390625	1231195 449	271081 664	4 541788	155	-3 1		
18	200	0 0000250000	1056628 032	192149 937	5 498977	188	-6 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0292890712

Intercept = 0 00267437707

R-Squared = 0 9958

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 22
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1595651 273	292554 07	5 454210	1	186		186		1 8
2	0 00	1669483 677	306260 107	5 451195	1	186				
3	0 00	1667083 887	297385 16	5 605807	1	191				
4	0 00	1554915 826	287721 67	5 404236	1	184				
5	0 00	1560443 528	289055 395	5 398424	1	184				
50	0 00	1525689 167	271436 085	5 620804	1	192				
51	0 00	1496239 634	280043 386	5 342885	1	182				
86	0 00	1418045 934	262044 003	5 411480	1	185				
87	0 00	1513809 631	276160 542	5 481629	1	187				
29	3 00	23413 348	270323 756	0 086612	1	2 87	-4 3	2 94	-2 0	3 4
62	3 00	23038 102	253384 515	0 090922	1	3 01	0 3			
39	37 5	275436 157	280112 672	0 983305	1	33 5	-10 7	34 5	-8 0	3 9
73	37 5	267815 354	257992 784	1 038073	1	35 4	-5 6			
49	150	1020361 504	239814 068	4 254803	1	145	-3 3	148	-1 3	2 4
84	150	1081923 695	246758 532	4 384544	1	150	0 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 22
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 5 1h	2300761 115	230947 776	*9 962257	1	*AAR>(200)	20	497170000286	AA90478-01 497170000286 007 N/A P5 Plasma-1 1 / Day 5 1h
007	N/A	2 / Day 5 2h	2534679 617	250339 255	*10 124979	1	*AAR>(200)	21	497170000287	AA90478-01 497170000287 007 N/A P5 Plasma-1 2 / Day 5 2h
007	N/A	3 / Day 5 3h	2354277 93	244658 889	*9 622695	1	*AAR>(200)	22	497170000288	AA90478-01 497170000288 007 N/A P5 Plasma-1 3 / Day 5 3h
007	N/A	4 / Day 5 4h	2522174 331	246658 194	*10 225382	1	*AAR>(200)	23	497170000289	AA90478-01 497170000289 007 N/A P5 Plasma-1 4 / Day 5 4h
007	N/A	5 / Day 5 5h	2318552 703	239511 724	*9 680331	1	*AAR>(200)	24	497170000290	AA90478-01 497170000290 007 N/A P5 Plasma-1 5 / Day 5 5h
007	N/A	6 / Day 5 6h	2538549 81	254130 943	*9 989141	1	*AAR>(200)	25	497170000291	AA90478-01 497170000291 007 N/A P5 Plasma-1 6 / Day 5 6h
007	N/A	7 / Day 5 7h	2253125 49	237166 724	*9 500175	1	*AAR>(200)	26	497170000292	AA90478-01 497170000292 007 N/A P5 Plasma-1 7 / Day 5 7h
007	N/A	8 / Day 5 8h	2273955 838	237675 627	*9 567476	1	*AAR>(200)	27	497170000293	AA90478-01 497170000293 007 N/A P5 Plasma-1 8 / Day 5 8h
007	N/A	9 / Day 5 9h	2363636 543	251736 805	*9 389317	1	*AAR>(200)	28	497170000294	AA90478-01 497170000294 007 N/A P5 Plasma-1 9 / Day 5 9h
007	N/A	10 / Day 5 10h	2270697 044	231732 235	*9 798797	1	*AAR>(200)	30	497170000295	AA90478-01 497170000295 007 N/A P5 Plasma-1 10 / Day 5 10h
007	N/A	11 / Day 5 11h	2329678 307	245033 21	*9 507602	1	*AAR>(200)	31	497170000296	AA90478-01 497170000296 007 N/A P5 Plasma-1 11 / Day 5 11h
007	N/A	12 / Day 5 12h	2403467 422	245703 863	*9 781968	1	*AAR>(200)	32	497170000297	AA90478-01 497170000297 007 N/A P5 Plasma-1 12 / Day 5 12h
007	N/A	13 / Day 5 13h	2406566 998	258500 505	*9 309719	1	*AAR>(200)	33	497170000298	AA90478-01 497170000298 007 N/A P5 Plasma-1 13 / Day 5 13h
007	N/A	14 / Day 5 14h	2547728 862	264290 922	*9 639865	1	*AAR>(200)	34	497170000299	AA90478-01 497170000299 007 N/A P5 Plasma-1 14 / Day 5 14h
007	N/A	15 / Day 5 15h	2428803 239	254773 277	*9 533195	1	*AAR>(200)	35	497170000300	AA90478-01 497170000300 007 N/A P5 Plasma-1 15 / Day 5 15h
007	N/A	16 / Day 5 16h	2271083 116	248552 658	*9 137231	1	*AAR>(200)	36	497170000301	AA90478-01 497170000301 007 N/A P5 Plasma-1 16 / Day 5 16h
007	N/A	17 / Day 5 17h	2262620 324	259355 845	*8 724000	1	*AAR>(200)	37	497170000302	AA90478-01 497170000302 007 N/A P5 Plasma-1 17 / Day 5 17h
007	N/A	18 / Day 5 18h	2254623 078	241180 044	*9 348299	1	*AAR>(200)	38	497170000303	AA90478-01 497170000303 007 N/A P5 Plasma-1 18 / Day 5 18h
007	N/A	19 / Day 5 19h	2073497 164	230400 462	*8 999536	1	*AAR>(200)	40	497170000304	AA90478-01 497170000304 007 N/A P5 Plasma-1 19 / Day 5 19h
009	N/A	1 / Day 5 1h	2859755 803	245084 525	*11 668447	1	*AAR>(200)	41	497170000381	AA90478-01 497170000381 009 N/A P5 Plasma-1 1 / Day 5 1h
009	N/A	2 / Day 5 2h	2796468 582	248095 49	*11 271743	1	*AAR>(200)	42	497170000382	AA90478-01 497170000382 009 N/A P5 Plasma-1 2 / Day 5 2h
009	N/A	3 / Day 5 3h	2673325 513	236423 377	*11 307365	1	*AAR>(200)	43	497170000383	AA90478-01 497170000383 009 N/A P5 Plasma-1 3 / Day 5 3h
009	N/A	4 / Day 5 4h	2927036 323	264974 893	*11 046467	1	*AAR>(200)	44	497170000384	AA90478-01 497170000384 009 N/A P5 Plasma-1 4 / Day 5 4h
009	N/A	5 / Day 5 5h	2963808 258	259560 484	*11 418565	1	*AAR>(200)	45	497170000385	AA90478-01 497170000385 009 N/A P5 Plasma-1 5 / Day 5 5h
009	N/A	6 / Day 5 6h	2934535 436	256419 75	*11 444264	1	*AAR>(200)	46	497170000386	AA90478-01 497170000386 009 N/A P5 Plasma-1 6 / Day 5 6h
009	N/A	7 / Day 5 7h	2533462 062	221016 889	*11 462753	1	*AAR>(200)	47	497170000387	AA90478-01 497170000387 009 N/A P5 Plasma-1 7 / Day 5 7h
009	N/A	8 / Day 5 8h	2679700 307	233900 341	*11 456590	1	*AAR>(200)	48	497170000388	AA90478-01 497170000388 009 N/A P5 Plasma-1 8 / Day 5 8h
009	N/A	9 / Day 5 9h	2394166 483	218263 99	*10 969132	1	*AAR>(200)	52	497170000389	AA90478-01 497170000389 009 N/A P5 Plasma-1 9 / Day 5 9h
009	N/A	10 / Day 5 10h	2460600 935	227299 081	*10 825389	1	*AAR>(200)	53	497170000390	AA90478-01 497170000390 009 N/A P5 Plasma-1 10 / Day 5 10h
009	N/A	11 / Day 5 11h	2688169 005	247106 571	*10 878582	1	*AAR>(200)	54	497170000391	AA90478-01 497170000391 009 N/A P5 Plasma-1 11 / Day 5 11h
009	N/A	12 / Day 5 12h	2299741 589	208806 479	*11 013746	1	*AAR>(200)	55	497170000392	AA90478-01 497170000392 009 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 5 13h	2792048 56	261786 993	*10 665345	1	*AAR>(200)	56	497170000393	AA90478-01 497170000393 009 N/A P5 Plasma-1 13 / Day 5 13h
009	N/A	14 / Day 5 14h	2686857 582	248076 115	*10 830779	1	*AAR>(200)	57	497170000394	AA90478-01 497170000394 009 N/A P5 Plasma-1 14 / Day 5 14h
009	N/A	15 / Day 5 15h	2264298 998	211439 259	*10 708981	1	*AAR>(200)	58	497170000395	AA90478-01 497170000395 009 N/A P5 Plasma-1 15 / Day 5 15h
009	N/A	16 / Day 5 16h	2418354 516	218882 373	*11 048649	1	*AAR>(200)	59	497170000396	AA90478-01 497170000396 009 N/A P5 Plasma-1 16 / Day 5 16h
009	N/A	17 / Day 5 17h	2487837 627	227850 175	*10 918744	1	*AAR>(200)	60	497170000397	AA90478-01 497170000397 009 N/A P5 Plasma-1 17 / Day 5 17h
009	N/A	18 / Day 5 18h	2447657 629	243499 938	*10 051985	1	*AAR>(200)	61	497170000398	AA90478-01 497170000398 009 N/A P5 Plasma-1 18 / Day 5 18h
009	N/A	19 / Day 5 19h	2489873 262	237230 358	*10 495593	1	*AAR>(200)	63	497170000399	AA90478-01 497170000399 009 N/A P5 Plasma-1 19 / Day 5 19h
011	N/A	1 / Day 5 1h	324117 375	238147 702	1 360993	1	46 4	64	497170000476	AA90478-01 497170000476 011 N/A P5 Plasma-1 1 / Day 5 1h
011	N/A	2 / Day 5 2h	372189 978	261959 956	1 420790	1	48 4	65	497170000477	AA90478-01 497170000477 011 N/A P5 Plasma-1 2 / Day 5 2h
011	N/A	3 / Day 5 3h	343886 808	245543 914	1 400510	1	47 7	66	497170000478	AA90478-01 497170000478 011 N/A P5 Plasma-1 3 / Day 5 3h
011	N/A	4 / Day 5 4h	325787 003	240613 493	1 353985	1	46 1	67	497170000479	AA90478-01 497170000479 011 N/A P5 Plasma-1 4 / Day 5 4h
011	N/A	5 / Day 5 5h	309751 242	240214 293	1 289479	1	43 9	68	497170000480	AA90478-01 497170000480 011 N/A P5 Plasma-1 5 / Day 5 5h
011	N/A	6 / Day 5 6h	295267 112	205754 508	1 435046	1	48 9	69	497170000481	AA90478-01 497170000481 011 N/A P5 Plasma-1 6 / Day 5 6h
011	N/A	7 / Day 5 7h	313800 065	215001 59	1 459524	1	49 7	70	497170000482	AA90478-01 497170000482 011 N/A P5 Plasma-1 7 / Day 5 7h
011	N/A	8 / Day 5 8h	314332 587	218258 135	1 440187	1	49 1	71	497170000483	AA90478-01 497170000483 011 N/A P5 Plasma-1 8 / Day 5 8h
011	N/A	9 / Day 5 9h	310301 651	216136 327	1 435676	1	48 9	72	497170000484	AA90478-01 497170000484 011 N/A P5 Plasma-1 9 / Day 5 9h
011	N/A	10 / Day 5 10h	298104 754	211460 601	1 409741	1	48 0	74	497170000485	AA90478-01 497170000485 011 N/A P5 Plasma-1 10 / Day 5 10h
011	N/A	11 / Day 5 11h	338984 015	226143 825	1 498975	1	51 1	75	497170000486	AA90478-01 497170000486 011 N/A P5 Plasma-1 11 / Day 5 11h
011	N/A	12 / Day 5 12h	317661 109	214860 632	1 478452	1	50 4	76	497170000487	AA90478-01 497170000487 011 N/A P5 Plasma-1 12 / Day 5 12h
011	N/A	13 / Day 5 13h	333926 077	221219 206	1 509480	1	51 4	77	497170000488	AA90478-01 497170000488 011 N/A P5 Plasma-1 13 / Day 5 13h
011	N/A	14 / Day 5 14h	344633 711	229018 826	1 504827	1	51 3	78	497170000489	AA90478-01 497170000489 011 N/A P5 Plasma-1 14 / Day 5 14h
011	N/A	15 / Day 5 15h	324576 921	218118 809	1 488074	1	50 7	79	497170000490	AA90478-01 497170000490 011 N/A P5 Plasma-1 15 / Day 5 15h
011	N/A	16 / Day 5 16h	302474 244	208124 958	1 453330	1	49 5	80	497170000491	AA90478-01 497170000491 011 N/A P5 Plasma-1 16 / Day 5 16h
011	N/A	17 / Day 5 17h	288173 632	195795 215	1 471811	1	50 2	81	497170000492	AA90478-01 497170000492 011 N/A P5 Plasma-1 17 / Day 5 17h
011	N/A	18 / Day 5 18h	309336 577	206593 789	1 497318	1	51 0	82	497170000493	AA90478-01 497170000493 011 N/A P5 Plasma-1 18 / Day 5 18h
011	N/A	19 / Day 5 19h	331212 228	220795 21	1 500088	1	51 1	83	497170000494	AA90478-01 497170000494 011 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 24
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	250215 93	0 000000	0 0217		0 0217	0 0
9	0 00		0	235033 552	0 000000	0 0217			
10	1 00	1 00000	3171 416	259551 977	0 012219	0 971	-2 9		
11	2 00	0 250000	6061 015	228112 649	0 026570	2 09	4 5		
12	4 00	0 0625000	13575 667	261654 468	0 051884	4 05	1 3		
13	8 00	0 0156250	24504 902	242176 822	0 101186	7 88	-1 5		
14	16 0	0 00390625	57649 576	253723 396	0 227214	17 7	10 6		
15	40 0	0 000625000	124191 251	244715 421	0 507493	39 5	-1 3		
16	80 0	0 000156250	238701 247	234177 252	1 019319	79 2	-1 0		
17	160	0 0000390625	470198 862	236427 294	1 988767	155	-3 1		
18	200	0 0000250000	574811 572	237948 355	2 415699	188	-6 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0128685183

Intercept = -0 000279641964

R-Squared = 0 9968

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 24
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	539441 794	222929 939	2 419782	1	188		189		1 1
2	0 00	576489 594	234685 749	2 456432	1	191				
3	0 00	575990 985	235988 218	2 440762	1	190				
4	0 00	596196 861	242676 416	2 456756	1	191				
5	0 00	576489 053	236442 881	2 438175	1	189				
50	0 00	554354 634	228259 981	2 428611	1	189				
51	0 00	586049 552	242890 23	2 412816	1	188				
86	0 00	545946 098	224635 074	2 430369	1	189				
87	0 00	538959 36	227178 148	2 372408	1	184				
29	3 00	9431 39	232619 603	0 040544	1	3 17	5 7	3 11	3 7	2 7
62	3 00	9550 346	245376 543	0 038921	1	3 05	1 7			
39	37 5	107461 311	234848 242	0 457578	1	35 6	-5 1	35 3	-5 9	1 4
73	37 5	118765 57	264866 53	0 448398	1	34 9	-6 9			
49	150	408793 322	218288 792	1 872718	1	146	-2 7	149	-0 7	2 4
84	150	437120 52	225712 703	1 936623	1	151	0 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 24
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
018	N/A	1 / Day 5 1h	359931 42	235373 086	1 529195	1	119	20	497170000856	AA90478-01 497170000856 018 N/A P5 Plasma-1 1 / Day 5 1h
018	N/A	2 / Day 5 2h	357247 87	234233 8	1 525176	1	119	21	497170000857	AA90478-01 497170000857 018 N/A P5 Plasma-1 2 / Day 5 2h
018	N/A	3 / Day 5 3h	364908 727	241852 227	1 508809	1	117	22	497170000858	AA90478-01 497170000858 018 N/A P5 Plasma-1 3 / Day 5 3h
018	N/A	4 / Day 5 4h	350931 229	238574 269	1 470952	1	114	23	497170000859	AA90478-01 497170000859 018 N/A P5 Plasma-1 4 / Day 5 4h
018	N/A	5 / Day 5 5h	343391 322	230751 875	1 488141	1	116	24	497170000860	AA90478-01 497170000860 018 N/A P5 Plasma-1 5 / Day 5 5h
018	N/A	6 / Day 5 6h	358984 245	247927 341	1 447941	1	113	25	497170000861	AA90478-01 497170000861 018 N/A P5 Plasma-1 6 / Day 5 6h
018	N/A	7 / Day 5 7h	338465 55	229173 94	1 476894	1	115	26	497170000862	AA90478-01 497170000862 018 N/A P5 Plasma-1 7 / Day 5 7h
018	N/A	8 / Day 5 8h	351583 93	235515 83	1 492825	1	116	27	497170000863	AA90478-01 497170000863 018 N/A P5 Plasma-1 8 / Day 5 8h
018	N/A	9 / Day 5 9h	328995 282	212664 152	1 547018	1	120	28	497170000864	AA90478-01 497170000864 018 N/A P5 Plasma-1 9 / Day 5 9h
018	N/A	10 / Day 5 10h	328462 275	206312 868	1 592059	1	124	30	497170000865	AA90478-01 497170000865 018 N/A P5 Plasma-1 10 / Day 5 10h
018	N/A	11 / Day 5 11h	385629 868	248502 279	1 551816	1	121	31	497170000866	AA90478-01 497170000866 018 N/A P5 Plasma-1 11 / Day 5 11h
018	N/A	12 / Day 5 12h	352528 596	226907 174	1 553625	1	121	32	497170000867	AA90478-01 497170000867 018 N/A P5 Plasma-1 12 / Day 5 12h
018	N/A	13 / Day 5 13h	396156 673	254494 098	1 556644	1	121	33	497170000868	AA90478-01 497170000868 018 N/A P5 Plasma-1 13 / Day 5 13h
018	N/A	14 / Day 5 14h	336907 483	216906 847	1 553236	1	121	34	497170000869	AA90478-01 497170000869 018 N/A P5 Plasma-1 14 / Day 5 14h
018	N/A	15 / Day 5 15h	326899 656	219089 752	1 492081	1	116	35	497170000870	AA90478-01 497170000870 018 N/A P5 Plasma-1 15 / Day 5 15h
018	N/A	16 / Day 5 16h	333401 152	225537 243	1 478253	1	115	36	497170000871	AA90478-01 497170000871 018 N/A P5 Plasma-1 16 / Day 5 16h
018	N/A	17 / Day 5 17h	324089 768	223027 4	1 453139	1	113	37	497170000872	AA90478-01 497170000872 018 N/A P5 Plasma-1 17 / Day 5 17h
018	N/A	18 / Day 5 18h	306216 923	217204 179	1 409811	1	110	38	497170000873	AA90478-01 497170000873 018 N/A P5 Plasma-1 18 / Day 5 18h
018	N/A	19 / Day 5 19h	325580 543	228566 793	1 424444	1	111	40	497170000874	AA90478-01 497170000874 018 N/A P5 Plasma-1 19 / Day 5 19h
019	N/A	1 / Day 5 1h	372715 857	240309 006	1 550986	1	121	41	497170000951	AA90478-01 497170000951 019 N/A P5 Plasma-1 1 / Day 5 1h
019	N/A	2 / Day 5 2h	374168 429	244772 611	1 528637	1	119	42	497170000952	AA90478-01 497170000952 019 N/A P5 Plasma-1 2 / Day 5 2h
019	N/A	3 / Day 5 3h	328623 769	216191 321	1 520060	1	118	43	497170000953	AA90478-01 497170000953 019 N/A P5 Plasma-1 3 / Day 5 3h
019	N/A	4 / Day 5 4h	338068 213	231309 527	1 461540	1	114	44	497170000954	AA90478-01 497170000954 019 N/A P5 Plasma-1 4 / Day 5 4h
019	N/A	5 / Day 5 5h	340673 449	222892 449	1 528421	1	119	45	497170000955	AA90478-01 497170000955 019 N/A P5 Plasma-1 5 / Day 5 5h
019	N/A	6 / Day 5 6h	378182 763	249241 159	1 517337	1	118	46	497170000956	AA90478-01 497170000956 019 N/A P5 Plasma-1 6 / Day 5 6h
019	N/A	7 / Day 5 7h	371868 195	242883 376	1 531057	1	119	47	497170000957	AA90478-01 497170000957 019 N/A P5 Plasma-1 7 / Day 5 7h
019	N/A	8 / Day 5 8h	383018 18	248569 158	1 540892	1	120	48	497170000958	AA90478-01 497170000958 019 N/A P5 Plasma-1 8 / Day 5 8h
019	N/A	9 / Day 5 9h	371638 907	242404 493	1 533135	1	119	52	497170000959	AA90478-01 497170000959 019 N/A P5 Plasma-1 9 / Day 5 9h
019	N/A	10 / Day 5 10h	381430 176	239891 217	1 590013	1	124	53	497170000960	AA90478-01 497170000960 019 N/A P5 Plasma-1 10 / Day 5 10h
019	N/A	11 / Day 5 11h	362802 721	226561 917	1 601340	1	124	54	497170000961	AA90478-01 497170000961 019 N/A P5 Plasma-1 11 / Day 5 11h
019	N/A	12 / Day 5 12h	265202 437	159035 117	1 667572	1	130	55	497170000962	AA90478-01 497170000962 019 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	13 / Day 5 13h	369824 11	216209 782	1 710487	1	133	56	497170000963	AA90478-01 497170000963 019 N/A P5 Plasma-1 13 / Day 5 13h
019	N/A	14 / Day 5 14h	359766 523	215548 012	1 669078	1	130	57	497170000964	AA90478-01 497170000964 019 N/A P5 Plasma-1 14 / Day 5 14h
019	N/A	15 / Day 5 15h	348254 055	214937 909	1 620254	1	126	58	497170000965	AA90478-01 497170000965 019 N/A P5 Plasma-1 15 / Day 5 15h
019	N/A	16 / Day 5 16h	398321 554	252979 58	1 574521	1	122	59	497170000966	AA90478-01 497170000966 019 N/A P5 Plasma-1 16 / Day 5 16h
019	N/A	17 / Day 5 17h	378328 403	223883 442	1 689845	1	131	60	497170000967	AA90478-01 497170000967 019 N/A P5 Plasma-1 17 / Day 5 17h
019	N/A	18 / Day 5 18h	357607 942	219893 442	1 626278	1	126	61	497170000968	AA90478-01 497170000968 019 N/A P5 Plasma-1 18 / Day 5 18h
019	N/A	19 / Day 5 19h	393681 28	242487 323	1 623513	1	126	63	497170000969	AA90478-01 497170000969 019 N/A P5 Plasma-1 19 / Day 5 19h
021	N/A	1 / Day 5 1h	336403 018	222076 577	1 514806	1	118	64	497170001046	AA90478-01 497170001046 021 N/A P5 Plasma-1 1 / Day 5 1h
021	N/A	2 / Day 5 2h	334173 662	219104 071	1 525182	1	119	65	497170001047	AA90478-01 497170001047 021 N/A P5 Plasma-1 2 / Day 5 2h
021	N/A	3 / Day 5 3h	323059 402	221327 096	1 459647	1	113	66	497170001048	AA90478-01 497170001048 021 N/A P5 Plasma-1 3 / Day 5 3h
021	N/A	4 / Day 5 4h	338150 719	228215 011	1 481720	1	115	67	497170001049	AA90478-01 497170001049 021 N/A P5 Plasma-1 4 / Day 5 4h
021	N/A	5 / Day 5 5h	357637 759	244703 746	1 461513	1	114	68	497170001050	AA90478-01 497170001050 021 N/A P5 Plasma-1 5 / Day 5 5h
021	N/A	6 / Day 5 6h	332281 74	226968 775	1 463998	1	114	69	497170001051	AA90478-01 497170001051 021 N/A P5 Plasma-1 6 / Day 5 6h
021	N/A	7 / Day 5 7h	355866 379	235945 225	1 508258	1	117	70	497170001052	AA90478-01 497170001052 021 N/A P5 Plasma-1 7 / Day 5 7h
021	N/A	8 / Day 5 8h	390791 09	252451 805	1 547983	1	120	71	497170001053	AA90478-01 497170001053 021 N/A P5 Plasma-1 8 / Day 5 8h
021	N/A	9 / Day 5 9h	424409 103	235835 975	1 799594	1	140	72	497170001054	AA90478-01 497170001054 021 N/A P5 Plasma-1 9 / Day 5 9h
021	N/A	10 / Day 5 10h	544524 844	240120 78	2 267712	1	176	74	497170001055	AA90478-01 497170001055 021 N/A P5 Plasma-1 10 / Day 5 10h
021	N/A	11 / Day 5 11h	540784 171	230617 739	2 344937	1	182	75	497170001056	AA90478-01 497170001056 021 N/A P5 Plasma-1 11 / Day 5 11h
021	N/A	12 / Day 5 12h	517302 454	228583 769	2 263076	1	176	76	497170001057	AA90478-01 497170001057 021 N/A P5 Plasma-1 12 / Day 5 12h
021	N/A	13 / Day 5 13h	511313 205	234903 304	2 176697	1	169	77	497170001058	AA90478-01 497170001058 021 N/A P5 Plasma-1 13 / Day 5 13h
021	N/A	14 / Day 5 14h	464113 53	217144 762	2 137346	1	166	78	497170001059	AA90478-01 497170001059 021 N/A P5 Plasma-1 14 / Day 5 14h
021	N/A	15 / Day 5 15h	445784 322	212559 892	2 097217	1	163	79	497170001060	AA90478-01 497170001060 021 N/A P5 Plasma-1 15 / Day 5 15h
021	N/A	16 / Day 5 16h	455873 939	217853 353	2 092573	1	163	80	497170001061	AA90478-01 497170001061 021 N/A P5 Plasma-1 16 / Day 5 16h
021	N/A	17 / Day 5 17h	456517 074	222152 103	2 054975	1	160	81	497170001062	AA90478-01 497170001062 021 N/A P5 Plasma-1 17 / Day 5 17h
021	N/A	18 / Day 5 18h	498861 362	240658 422	2 072902	1	161	82	497170001063	AA90478-01 497170001063 021 N/A P5 Plasma-1 18 / Day 5 18h
021	N/A	19 / Day 5 19h	412778 123	207835 627	1 986080	1	154	83	497170001064	AA90478-01 497170001064 021 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 26
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0.00		0	223389.593	0.000000	-0.0743		-0.0743	0.0
9	0.00		0	215352.556	0.000000	-0.0743			
10	1.00	1.00000	3055.826	235681.49	0.012966	0.954	-4.6		
11	2.00	0.250000	5846.184	205849.67	0.028400	2.18	9.0		
12	4.00	0.0625000	11513.056	231688.7	0.049692	3.87	-3.3		
13	8.00	0.0156250	22340.426	214474.53	0.104164	8.19	2.4		
14	16.0	0.00390625	48798.713	214613.172	0.227380	18.0	12.5		
15	40.0	0.000625000	111831.059	223647.275	0.500033	39.6	-1.0		
16	80.0	0.000156250	232535.316	241981.159	0.960965	76.2	-4.8		
17	160	0.0000390625	430550.344	221760.902	1.941507	154	-3.8		
18	200	0.0000250000	533290.942	225198.291	2.368095	188	-6.0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0.0126054879

Intercept = 0.000936005008

R-Squared = 0.9943

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1.00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 26
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	518868 551	221163 718	2 346084	1	186		185		1 0
2	0 00	472817 861	203107 434	2 327920	1	185				
3	0 00	490608 415	211201 838	2 322936	1	184				
4	0 00	491003 201	211441 666	2 322169	1	184				
5	0 00	515469 211	217139 382	2 373909	1	188				
48	0 00	507378 439	216780 838	2 340513	1	186				
49	0 00	491402 659	210488 745	2 334579	1	185				
89	0 00	505411 938	221388 968	2 282914	1	181				
90	0 00	485215 842	208593 876	2 326127	1	184				
33	3 00	7777 451	201166 869	0 038662	1	2 99	-0 3	2 99	-0 3	0 0
65	3 00	8587 106	222300 241	0 038628	1	2 99	-0 3			
40	37 5	95846 27	213202 011	0 449556	1	35 6	-5 1	36 0	-4 0	1 6
72	37 5	103165 24	224669 942	0 459186	1	36 4	-2 9			
47	150	419023 501	222019 192	1 887330	1	150	0 0	151	0 7	0 9
87	150	414100 865	215524 017	1 921368	1	152	1 3			
26	780	210889 375	184802 847	1 141159	10	905	16 0	833	6 8	7 5
57	780	246091 232	243670 256	1 009935	10	800	2 6			
80	780	220047 16	219355 326	1 003154	10	795	1 9			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 26
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 1 1h	19911 349	205359 815	0 096958	10	76 2	20	497170000077	AA90478-01 497170000077 001 N/A P1 Plasma-1 1 / Day 1 1h
001	N/A	2 / Day 1 2h	18906 231	206408 547	0 091596	10	71 9	21	497170000078	AA90478-01 497170000078 001 N/A P1 Plasma-1 2 / Day 1 2h
001	N/A	3 / Day 1 3h	21567 192	235785 47	0 091470	10	71 8	22	497170000079	AA90478-01 497170000079 001 N/A P1 Plasma-1 3 / Day 1 3h
001	N/A	4 / Day 1 4h	23267 2	248224 734	0 093734	10	73 6	23	497170000080	AA90478-01 497170000080 001 N/A P1 Plasma-1 4 / Day 1 4h
001	N/A	5 / Day 1 5h	21171 306	222985 13	0 094945	10	74 6	24	497170000081	AA90478-01 497170000081 001 N/A P1 Plasma-1 5 / Day 1 5h
001	N/A	6 / Day 1 6h	21467 891	191202 857	0 112278	10	88 3	25	497170000082	AA90478-01 497170000082 001 N/A P1 Plasma-1 6 / Day 1 6h
001	N/A	7 / Day 1 7h	21861 356	211954 145	0 103142	10	81 1	27	497170000083	AA90478-01 497170000083 001 N/A P1 Plasma-1 7 / Day 1 7h
001	N/A	8 / Day 1 8h	22463 229	214626 641	0 104662	10	82 3	28	497170000084	AA90478-01 497170000084 001 N/A P1 Plasma-1 8 / Day 1 8h
001	N/A	9 / Day 1 9h	23476 111	216458 819	0 108455	10	85 3	29	497170000085	AA90478-01 497170000085 001 N/A P1 Plasma-1 9 / Day 1 9h
001	N/A	10 / Day 1 10h	23699 45	214751 401	0 110358	10	86 8	30	497170000086	AA90478-01 497170000086 001 N/A P1 Plasma-1 10 / Day 1 10h
001	N/A	11 / Day 1 11h	22583 127	209273 512	0 107912	10	84 9	31	497170000087	AA90478-01 497170000087 001 N/A P1 Plasma-1 11 / Day 1 11h
001	N/A	12 / Day 1 12h	23081 078	219004 328	0 105391	10	82 9	32	497170000088	AA90478-01 497170000088 001 N/A P1 Plasma-1 12 / Day 1 12h
001	N/A	13 / Day 1 13h	23490 127	208335 282	0 112752	10	88 7	34	497170000089	AA90478-01 497170000089 001 N/A P1 Plasma-1 13 / Day 1 13h
001	N/A	14 / Day 1 14h	23562 612	218057 99	0 108057	10	85 0	35	497170000090	AA90478-01 497170000090 001 N/A P1 Plasma-1 14 / Day 1 14h
001	N/A	15 / Day 1 15h	22228 427	206057 949	0 107875	10	84 8	36	497170000091	AA90478-01 497170000091 001 N/A P1 Plasma-1 15 / Day 1 15h
001	N/A	16 / Day 1 16h	21282 979	208853 296	0 101904	10	80 1	37	497170000092	AA90478-01 497170000092 001 N/A P1 Plasma-1 16 / Day 1 16h
001	N/A	17 / Day 1 17h	22759 379	221505 403	0 102749	10	80 8	38	497170000093	AA90478-01 497170000093 001 N/A P1 Plasma-1 17 / Day 1 17h
001	N/A	18 / Day 1 18h	19655 354	202114 762	0 097248	10	76 4	39	497170000094	AA90478-01 497170000094 001 N/A P1 Plasma-1 18 / Day 1 18h
001	N/A	19 / Day 1 19h	21302 083	214912 388	0 099120	10	77 9	41	497170000095	AA90478-01 497170000095 001 N/A P1 Plasma-1 19 / Day 1 19h
003	N/A	1 / Day 1 1h	35800 614	218429 695	0 163900	10	129	42	497170000172	AA90478-01 497170000172 003 N/A P1 Plasma-1 1 / Day 1 1h
003	N/A	2 / Day 1 2h	36291 723	217437 668	0 166906	10	132	43	497170000173	AA90478-01 497170000173 003 N/A P1 Plasma-1 2 / Day 1 2h
003	N/A	3 / Day 1 3h	35073 03	209340 736	0 167540	10	132	44	497170000174	AA90478-01 497170000174 003 N/A P1 Plasma-1 3 / Day 1 3h
003	N/A	4 / Day 1 4h	37045 114	164577 46	0 225092	10	178	45	497170000175	AA90478-01 497170000175 003 N/A P1 Plasma-1 4 / Day 1 4h
003	N/A	5 / Day 1 5h	32741 782	202782 25	0 161463	10	127	46	497170000176	AA90478-01 497170000176 003 N/A P1 Plasma-1 5 / Day 1 5h
003	N/A	6 / Day 1 6h	36128 063	214100 023	0 168744	10	133	50	497170000177	AA90478-01 497170000177 003 N/A P1 Plasma-1 6 / Day 1 6h
003	N/A	7 / Day 1 7h	38530 118	219041 326	0 175903	10	139	51	497170000178	AA90478-01 497170000178 003 N/A P1 Plasma-1 7 / Day 1 7h
003	N/A	8 / Day 1 8h	36474 702	210425 197	0 173338	10	137	52	497170000179	AA90478-01 497170000179 003 N/A P1 Plasma-1 8 / Day 1 8h
003	N/A	9 / Day 1 9h	38123 519	224235 982	0 170015	10	134	53	497170000180	AA90478-01 497170000180 003 N/A P1 Plasma-1 9 / Day 1 9h
003	N/A	10 / Day 1 10h	38155 309	224847 763	0 169694	10	134	54	497170000181	AA90478-01 497170000181 003 N/A P1 Plasma-1 10 / Day 1 10h
003	N/A	11 / Day 1 11h	38989 872	231222 492	0 168625	10	133	55	497170000182	AA90478-01 497170000182 003 N/A P1 Plasma-1 11 / Day 1 11h
003	N/A	12 / Day 1 12h	39276 926	233727 669	0 168046	10	133	56	497170000183	AA90478-01 497170000183 003 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	13 / Day 1 13h	36167 524	216691 531	0 166908	10	132	58	497170000184	AA90478-01 497170000184 003 N/A P1 Plasma-1 13 / Day 1 13h
003	N/A	14 / Day 1 14h	34707 975	221661 676	0 156581	10	123	59	497170000185	AA90478-01 497170000185 003 N/A P1 Plasma-1 14 / Day 1 14h
003	N/A	15 / Day 1 15h	35351 566	231141 802	0 152943	10	121	60	497170000186	AA90478-01 497170000186 003 N/A P1 Plasma-1 15 / Day 1 15h
003	N/A	16 / Day 1 16h	32267 076	217445 943	0 148391	10	117	61	497170000187	AA90478-01 497170000187 003 N/A P1 Plasma-1 16 / Day 1 16h
003	N/A	17 / Day 1 17h	32696 356	218891 322	0 149373	10	118	62	497170000188	AA90478-01 497170000188 003 N/A P1 Plasma-1 17 / Day 1 17h
003	N/A	18 / Day 1 18h	32738 396	214870 363	0 152363	10	120	63	497170000189	AA90478-01 497170000189 003 N/A P1 Plasma-1 18 / Day 1 18h
003	N/A	19 / Day 1 19h	32464 786	222963 674	0 145606	10	115	64	497170000190	AA90478-01 497170000190 003 N/A P1 Plasma-1 19 / Day 1 19h
005	N/A	1 / Day 1 1h	27590 58	224750 482	0 122761	10	96 6	66	497170000267	AA90478-01 497170000267 005 N/A P1 Plasma-1 1 / Day 1 1h
005	N/A	2 / Day 1 2h	25765 89	226255 306	0 113880	10	89 6	67	497170000268	AA90478-01 497170000268 005 N/A P1 Plasma-1 2 / Day 1 2h
005	N/A	3 / Day 1 3h	25932 593	220107 873	0 117818	10	92 7	68	497170000269	AA90478-01 497170000269 005 N/A P1 Plasma-1 3 / Day 1 3h
005	N/A	4 / Day 1 4h	23634 05	205928 245	0 114768	10	90 3	69	497170000270	AA90478-01 497170000270 005 N/A P1 Plasma-1 4 / Day 1 4h
005	N/A	5 / Day 1 5h	25945 487	216991 406	0 119569	10	94 1	70	497170000271	AA90478-01 497170000271 005 N/A P1 Plasma-1 5 / Day 1 5h
005	N/A	6 / Day 1 6h	25985 734	210563 975	0 123410	10	97 2	71	497170000272	AA90478-01 497170000272 005 N/A P1 Plasma-1 6 / Day 1 6h
005	N/A	7 / Day 1 7h	26890 231	218751 296	0 122926	10	96 8	73	497170000273	AA90478-01 497170000273 005 N/A P1 Plasma-1 7 / Day 1 7h
005	N/A	8 / Day 1 8h	26577 371	215240 709	0 123477	10	97 2	74	497170000274	AA90478-01 497170000274 005 N/A P1 Plasma-1 8 / Day 1 8h
005	N/A	9 / Day 1 9h	25712 294	212936 326	0 120751	10	95 0	75	497170000275	AA90478-01 497170000275 005 N/A P1 Plasma-1 9 / Day 1 9h
005	N/A	10 / Day 1 10h	26185 289	214350 632	0 122161	10	96 2	76	497170000276	AA90478-01 497170000276 005 N/A P1 Plasma-1 10 / Day 1 10h
005	N/A	11 / Day 1 11h	26753 166	220747 452	0 121194	10	95 4	77	497170000277	AA90478-01 497170000277 005 N/A P1 Plasma-1 11 / Day 1 11h
005	N/A	12 / Day 1 12h	26367 07	213320 466	0 123603	10	97 3	78	497170000278	AA90478-01 497170000278 005 N/A P1 Plasma-1 12 / Day 1 12h
005	N/A	13 / Day 1 13h	24168 1	194038 277	0 124553	10	98 1	79	497170000279	AA90478-01 497170000279 005 N/A P1 Plasma-1 13 / Day 1 13h
005	N/A	14 / Day 1 14h	27585 316	216313 352	0 127525	10	100	81	497170000280	AA90478-01 497170000280 005 N/A P1 Plasma-1 14 / Day 1 14h
005	N/A	15 / Day 1 15h	27554 199	220140 078	0 125167	10	98 6	82	497170000281	AA90478-01 497170000281 005 N/A P1 Plasma-1 15 / Day 1 15h
005	N/A	16 / Day 1 16h	26670 497	215833 753	0 123570	10	97 3	83	497170000282	AA90478-01 497170000282 005 N/A P1 Plasma-1 16 / Day 1 16h
005	N/A	17 / Day 1 17h	27708 253	224694 589	0 123315	10	97 1	84	497170000283	AA90478-01 497170000283 005 N/A P1 Plasma-1 17 / Day 1 17h
005	N/A	18 / Day 1 18h	24356 726	206496 06	0 117952	10	92 8	85	497170000284	AA90478-01 497170000284 005 N/A P1 Plasma-1 18 / Day 1 18h
005	N/A	19 / Day 1 19h	27260 625	222355 154	0 122599	10	96 5	86	497170000285	AA90478-01 497170000285 005 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 29
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	155524 774	0 000000	-0 123		-0 123	0 0
9	0 00		0	151351 757	0 000000	-0 123			
10	1 00	1 00000	5257 657	175040 805	0 030037	0 991	-0 9		
11	2 00	0 250000	8337 784	144075 793	0 057871	2 02	1 0		
12	4 00	0 0625000	16757 025	152043 186	0 110212	3 96	-1 0		
13	8 00	0 0156250	32503 376	148121 224	0 219438	8 01	0 1		
14	16 0	0 00390625	68383 727	144170 518	0 474325	17 5	9 4		
15	40 0	0 000625000	117523 758	80881 628	*1 453034	*53 8			
16	80 0	0 000156250	257893 007	124189 362	2 076611	76 9	-3 9		
17	160	0 0000390625	540099 154	133001 97	4 060836	150	-6 3		
18	200	0 0000250000	378525 376	69374 043	5 456297	202	1 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0269668299

Intercept = 0 00330670278

R-Squared = 0 9973

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 29
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	856718 165	172203 125	4 975044	1	184		183		2 0
2	0 00	824113 194	169081 691	4 874053	1	181				
3	0 00	893833 941	183044 38	4 883154	1	181				
4	0 00	805589 162	158069 68	5 096418	1	189				
5	0 00	968871 073	193630 344	5 003715	1	185				
50	0 00	679355 908	140635 073	4 830629	1	179				
51	0 00	706678 31	141233 087	5 003631	1	185				
86	0 00	639785 092	129781 129	4 929724	1	183				
87	0 00	578169 573	120732 022	4 788867	1	177				
29	3 00	11201 051	140954 393	0 079466	1	2 82	-6 0	3 40	13 3	23 9
62	3 00	13363 95	121144 359	0 110314	1	3 97	32 3			
39	37 5	97760 164	105186 273	0 929400	1	34 3	-8 5	35 3	-5 9	4 0
73	37 5	136987 204	139424 904	0 982516	1	36 3	-3 2			
49	150	552436 338	137325 246	4 022832	1	149	-0 7	148	-1 3	1 0
84	150	526804 305	132443 982	3 977563	1	147	-2 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 29
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 2 1h	1233385 938	124194 28	*9 931101	1	*AAR>(200)	20	497170000343	AA90478-01 497170000343 007 N/A P2 Plasma-1 1 / Day 2 1h
007	N/A	2 / Day 2 2h	1381950 952	133910 04	*10 319995	1	*AAR>(200)	21	497170000344	AA90478-01 497170000344 007 N/A P2 Plasma-1 2 / Day 2 2h
007	N/A	3 / Day 2 3h	1624284 183	162258 626	*10 010464	1	*AAR>(200)	22	497170000345	AA90478-01 497170000345 007 N/A P2 Plasma-1 3 / Day 2 3h
007	N/A	4 / Day 2 4h	1509426 304	152946 72	*9 868968	1	*AAR>(200)	23	497170000346	AA90478-01 497170000346 007 N/A P2 Plasma-1 4 / Day 2 4h
007	N/A	5 / Day 2 5h	1427032 418	148980 774	*9 578635	1	*AAR>(200)	24	497170000347	AA90478-01 497170000347 007 N/A P2 Plasma-1 5 / Day 2 5h
007	N/A	6 / Day 2 6h	1233887 233	125781 442	*9 809772	1	*AAR>(200)	25	497170000348	AA90478-01 497170000348 007 N/A P2 Plasma-1 6 / Day 2 6h
007	N/A	7 / Day 2 7h	1197399 532	130650 178	*9 164928	1	*AAR>(200)	26	497170000349	AA90478-01 497170000349 007 N/A P2 Plasma-1 7 / Day 2 7h
007	N/A	8 / Day 2 8h	1243595 037	133833 861	*9 292081	1	*AAR>(200)	27	497170000350	AA90478-01 497170000350 007 N/A P2 Plasma-1 8 / Day 2 8h
007	N/A	9 / Day 2 9h	1286728 757	138497 784	*9 290609	1	*AAR>(200)	28	497170000351	AA90478-01 497170000351 007 N/A P2 Plasma-1 9 / Day 2 9h
007	N/A	10 / Day 2 10h	1173767 999	125808 479	*9 329800	1	*AAR>(200)	30	497170000352	AA90478-01 497170000352 007 N/A P2 Plasma-1 10 / Day 2 10h
007	N/A	11 / Day 2 11h	1557275 311	157458 432	*9 890073	1	*AAR>(200)	31	497170000353	AA90478-01 497170000353 007 N/A P2 Plasma-1 11 / Day 2 11h
007	N/A	12 / Day 2 12h	1247889 539	138842 269	*8 987822	1	*AAR>(200)	32	497170000354	AA90478-01 497170000354 007 N/A P2 Plasma-1 12 / Day 2 12h
007	N/A	13 / Day 2 13h	1216744 858	135489 964	*8 980332	1	*AAR>(200)	33	497170000355	AA90478-01 497170000355 007 N/A P2 Plasma-1 13 / Day 2 13h
007	N/A	14 / Day 2 14h	1086841 407	121092 32	*8 975312	1	*AAR>(200)	34	497170000356	AA90478-01 497170000356 007 N/A P2 Plasma-1 14 / Day 2 14h
007	N/A	15 / Day 2 15h	925721 21	107476 152	*8 613271	1	*AAR>(200)	35	497170000357	AA90478-01 497170000357 007 N/A P2 Plasma-1 15 / Day 2 15h
007	N/A	16 / Day 2 16h	1091992 632	123018 891	*8 876626	1	*AAR>(200)	36	497170000358	AA90478-01 497170000358 007 N/A P2 Plasma-1 16 / Day 2 16h
007	N/A	17 / Day 2 17h	900194 446	106380 764	*8 462004	1	*AAR>(200)	37	497170000359	AA90478-01 497170000359 007 N/A P2 Plasma-1 17 / Day 2 17h
007	N/A	18 / Day 2 18h	924435 543	110598 16	*8 358507	1	*AAR>(200)	38	497170000360	AA90478-01 497170000360 007 N/A P2 Plasma-1 18 / Day 2 18h
007	N/A	19 / Day 2 19h	814094 146	71694 607	*11 355026	1	*AAR>(200)	40	497170000361	AA90478-01 497170000361 007 N/A P2 Plasma-1 19 / Day 2 19h
009	N/A	1 / Day 2 1h	926051 343	94696 176	*9 779184	1	*AAR>(200)	41	497170000438	AA90478-01 497170000438 009 N/A P2 Plasma-1 1 / Day 2 1h
009	N/A	2 / Day 2 2h	976817 645	104902 405	*9 311680	1	*AAR>(200)	42	497170000439	AA90478-01 497170000439 009 N/A P2 Plasma-1 2 / Day 2 2h
009	N/A	3 / Day 2 3h	905993 325	97921 506	*9 252241	1	*AAR>(200)	43	497170000440	AA90478-01 497170000440 009 N/A P2 Plasma-1 3 / Day 2 3h
009	N/A	4 / Day 2 4h	767874 36	81016 487	*9 478001	1	*AAR>(200)	44	497170000441	AA90478-01 497170000441 009 N/A P2 Plasma-1 4 / Day 2 4h
009	N/A	5 / Day 2 5h	972811 219	102695 806	*9 472745	1	*AAR>(200)	45	497170000442	AA90478-01 497170000442 009 N/A P2 Plasma-1 5 / Day 2 5h
009	N/A	6 / Day 2 6h	984828 291	104934 343	*9 385186	1	*AAR>(200)	46	497170000443	AA90478-01 497170000443 009 N/A P2 Plasma-1 6 / Day 2 6h
009	N/A	7 / Day 2 7h	1149589 033	125302 825	*9 174486	1	*AAR>(200)	47	497170000444	AA90478-01 497170000444 009 N/A P2 Plasma-1 7 / Day 2 7h
009	N/A	8 / Day 2 8h	1097477 178	121333 616	*9 045121	1	*AAR>(200)	48	497170000445	AA90478-01 497170000445 009 N/A P2 Plasma-1 8 / Day 2 8h
009	N/A	9 / Day 2 9h	1091620 17	122133 379	*8 937935	1	*AAR>(200)	52	497170000446	AA90478-01 497170000446 009 N/A P2 Plasma-1 9 / Day 2 9h
009	N/A	10 / Day 2 10h	1076529 593	121524 005	*8 858576	1	*AAR>(200)	53	497170000447	AA90478-01 497170000447 009 N/A P2 Plasma-1 10 / Day 2 10h
009	N/A	11 / Day 2 11h	1024195 338	118333 806	*8 655137	1	*AAR>(200)	54	497170000448	AA90478-01 497170000448 009 N/A P2 Plasma-1 11 / Day 2 11h
009	N/A	12 / Day 2 12h	1386766 126	150977 423	*9 185255	1	*AAR>(200)	55	497170000449	AA90478-01 497170000449 009 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 2 13h	1346574 132	152113 913	*8 852406	1	*AAR>(200)	56	497170000450	AA90478-01 497170000450 009 N/A P2 Plasma-1 13 / Day 2 13h
009	N/A	14 / Day 2 14h	1253182 189	139393 741	*8 990233	1	*AAR>(200)	57	497170000451	AA90478-01 497170000451 009 N/A P2 Plasma-1 14 / Day 2 14h
009	N/A	15 / Day 2 15h	1251847 076	143797 981	*8 705596	1	*AAR>(200)	58	497170000452	AA90478-01 497170000452 009 N/A P2 Plasma-1 15 / Day 2 15h
009	N/A	16 / Day 2 16h	1427297 606	147340 209	*9 687088	1	*AAR>(200)	59	497170000453	AA90478-01 497170000453 009 N/A P2 Plasma-1 16 / Day 2 16h
009	N/A	17 / Day 2 17h	1551709 023	168042 478	*9 234028	1	*AAR>(200)	60	497170000454	AA90478-01 497170000454 009 N/A P2 Plasma-1 17 / Day 2 17h
009	N/A	18 / Day 2 18h	1558805 434	168304 37	*9 261824	1	*AAR>(200)	61	497170000455	AA90478-01 497170000455 009 N/A P2 Plasma-1 18 / Day 2 18h
009	N/A	19 / Day 2 19h	1512867 718	163038 349	*9 279214	1	*AAR>(200)	63	497170000456	AA90478-01 497170000456 009 N/A P2 Plasma-1 19 / Day 2 19h
011	N/A	1 / Day 2 1h	782625 987	129907 137	*6 024503	1	*AAR>(200)	64	497170000533	AA90478-01 497170000533 011 N/A P2 Plasma-1 1 / Day 2 1h
011	N/A	2 / Day 2 2h	800822 737	179794 744	4 454094	1	165	65	497170000534	AA90478-01 497170000534 011 N/A P2 Plasma-1 2 / Day 2 2h
011	N/A	3 / Day 2 3h	705509 769	164594 327	4 286355	1	159	66	497170000535	AA90478-01 497170000535 011 N/A P2 Plasma-1 3 / Day 2 3h
011	N/A	4 / Day 2 4h	617151 534	109421 617	*5 640124	1	*AAR>(200)	67	497170000536	AA90478-01 497170000536 011 N/A P2 Plasma-1 4 / Day 2 4h
011	N/A	5 / Day 2 5h	683905 258	156266 734	4 376525	1	162	68	497170000537	AA90478-01 497170000537 011 N/A P2 Plasma-1 5 / Day 2 5h
011	N/A	6 / Day 2 6h	647012 812	113569 898	*5 697045	1	*AAR>(200)	69	497170000538	AA90478-01 497170000538 011 N/A P2 Plasma-1 6 / Day 2 6h
011	N/A	7 / Day 2 7h	647349 047	146794 187	4 409909	1	163	70	497170000539	AA90478-01 497170000539 011 N/A P2 Plasma-1 7 / Day 2 7h
011	N/A	8 / Day 2 8h	549982 198	93619 634	*5 874646	1	*AAR>(200)	71	497170000540	AA90478-01 497170000540 011 N/A P2 Plasma-1 8 / Day 2 8h
011	N/A	9 / Day 2 9h	621147 858	139419 726	4 455237	1	165	72	497170000541	AA90478-01 497170000541 011 N/A P2 Plasma-1 9 / Day 2 9h
011	N/A	10 / Day 2 10h	507383 383	114378 609	4 435999	1	164	74	497170000542	AA90478-01 497170000542 011 N/A P2 Plasma-1 10 / Day 2 10h
011	N/A	11 / Day 2 11h	601308 738	137613 584	4 369545	1	162	75	497170000543	AA90478-01 497170000543 011 N/A P2 Plasma-1 11 / Day 2 11h
011	N/A	12 / Day 2 12h	680130 531	150035 874	4 533119	1	168	76	497170000544	AA90478-01 497170000544 011 N/A P2 Plasma-1 12 / Day 2 12h
011	N/A	13 / Day 2 13h	609740 662	146031 413	4 175408	1	155	77	497170000545	AA90478-01 497170000545 011 N/A P2 Plasma-1 13 / Day 2 13h
011	N/A	14 / Day 2 14h	535624 21	127741 963	4 193017	1	155	78	497170000546	AA90478-01 497170000546 011 N/A P2 Plasma-1 14 / Day 2 14h
011	N/A	15 / Day 2 15h	572351 793	133392 228	4 290743	1	159	79	497170000547	AA90478-01 497170000547 011 N/A P2 Plasma-1 15 / Day 2 15h
011	N/A	16 / Day 2 16h	463453 429	111743 792	4 147465	1	154	80	497170000548	AA90478-01 497170000548 011 N/A P2 Plasma-1 16 / Day 2 16h
011	N/A	17 / Day 2 17h	463746 475	118986 764	3 897463	1	144	81	497170000549	AA90478-01 497170000549 011 N/A P2 Plasma-1 17 / Day 2 17h
011	N/A	18 / Day 2 18h	443707 32	109080 418	4 067708	1	151	82	497170000550	AA90478-01 497170000550 011 N/A P2 Plasma-1 18 / Day 2 18h
011	N/A	19 / Day 2 19h	491445 923	129413 803	3 797477	1	141	83	497170000551	AA90478-01 497170000551 011 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 30
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	211676 747	0 000000	0 0652		0 0652	0 0
9	0 00		0	246228 491	0 000000	0 0652			
10	1 00	1 00000	17405 032	265211 907	0 065627	0 966	-3 4		
11	2 00	0 250000	39010 77	263526 245	0 148034	2 10	5 0		
12	4 00	0 0625000	76869 898	267197 391	0 287690	4 01	0 3		
13	8 00	0 0156250	164346 399	280403 597	0 586107	8 11	1 4		
14	16 0	0 00390625	373069 818	282178 803	1 322104	18 2	13 8		
15	40 0	0 000625000	789726 661	282346 109	2 797016	38 5	-3 8		
16	80 0	0 000156250	1414163 167	250212 369	5 651852	77 7	-2 9		
17	160	0 0000390625	2869974 987	256283 307	11 198447	154	-3 8		
18	200	0 0000250000	3273160 354	240353 752	13 618096	187	-6 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0728383200

Intercept = -0 00474722801

R-Squared = 0 9949

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 30
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	3344726 334	241252 897	13 863984	1	190		190		0 7
2	0 00	3608229 098	262940 789	13 722592	1	188				
3	0 00	3710264 375	269640 687	13 760032	1	189				
4	0 00	3757212 927	273167 255	13 754258	1	189				
5	0 00	3607102 376	263874 516	13 669764	1	188				
50	0 00	3144915 756	227254 234	13 838755	1	190				
51	0 00	3043471 361	219116 625	13 889733	1	191				
86	0 00	2712142 343	193634 182	14 006527	1	192				
87	0 00	2761628 708	198225 386	13 931761	1	191				
29	3 00	55369 284	245859 932	0 225207	1	3 16	5 3	3 18	6 0	0 9
62	3 00	53819 147	236011 089	0 228037	1	3 20	6 7			
39	37 5	628722 886	237063 899	2 652124	1	36 5	-2 7	36 2	-3 5	1 2
73	37 5	518680 161	198559 319	2 612218	1	35 9	-4 3			
49	150	2259142 17	215512 219	10 482664	1	144	-4 0	146	-2 7	1 5
84	150	2052899 865	191190 512	10 737457	1	147	-2 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 30
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	1 / Day 3 1h	2057219 566	229410 608	8 967413	1	123	20	497170000989	AA90478-01 497170000989 019 N/A P3 Plasma-1 1 / Day 3 1h
019	N/A	2 / Day 3 2h	2136140 444	234428 482	9 112120	1	125	21	497170000990	AA90478-01 497170000990 019 N/A P3 Plasma-1 2 / Day 3 2h
019	N/A	3 / Day 3 3h	2207079 252	245439 514	8 992355	1	124	22	497170000991	AA90478-01 497170000991 019 N/A P3 Plasma-1 3 / Day 3 3h
019	N/A	4 / Day 3 4h	1763977 38	200299 838	8 806684	1	121	23	497170000992	AA90478-01 497170000992 019 N/A P3 Plasma-1 4 / Day 3 4h
019	N/A	5 / Day 3 5h	2025391 087	221351 801	9 150100	1	126	24	497170000993	AA90478-01 497170000993 019 N/A P3 Plasma-1 5 / Day 3 5h
019	N/A	6 / Day 3 6h	2032197 508	236814 396	8 581393	1	118	25	497170000994	AA90478-01 497170000994 019 N/A P3 Plasma-1 6 / Day 3 6h
019	N/A	7 / Day 3 7h	1934627 635	228359 242	8 471860	1	116	26	497170000995	AA90478-01 497170000995 019 N/A P3 Plasma-1 7 / Day 3 7h
019	N/A	8 / Day 3 8h	2127857 109	237605 912	8 955405	1	123	27	497170000996	AA90478-01 497170000996 019 N/A P3 Plasma-1 8 / Day 3 8h
019	N/A	9 / Day 3 9h	1681304 594	195201 087	8 613193	1	118	28	497170000997	AA90478-01 497170000997 019 N/A P3 Plasma-1 9 / Day 3 9h
019	N/A	10 / Day 3 10h	1664380 231	197126 01	8 443230	1	116	30	497170000998	AA90478-01 497170000998 019 N/A P3 Plasma-1 10 / Day 3 10h
019	N/A	11 / Day 3 11h	1772383 272	219732 04	8 066112	1	111	31	497170000999	AA90478-01 497170000999 019 N/A P3 Plasma-1 11 / Day 3 11h
019	N/A	12 / Day 3 12h	1814305 799	223457 089	8 119258	1	112	32	497170001000	AA90478-01 497170001000 019 N/A P3 Plasma-1 12 / Day 3 12h
019	N/A	13 / Day 3 13h	1950028 147	234614 875	8 311613	1	114	33	497170001001	AA90478-01 497170001001 019 N/A P3 Plasma-1 13 / Day 3 13h
019	N/A	14 / Day 3 14h	1747236 162	209635 543	8 334637	1	114	34	497170001002	AA90478-01 497170001002 019 N/A P3 Plasma-1 14 / Day 3 14h
019	N/A	15 / Day 3 15h	1931970 636	232108 264	8 323575	1	114	35	497170001003	AA90478-01 497170001003 019 N/A P3 Plasma-1 15 / Day 3 15h
019	N/A	16 / Day 3 16h	1772835 943	212468 244	8 344004	1	115	36	497170001004	AA90478-01 497170001004 019 N/A P3 Plasma-1 16 / Day 3 16h
019	N/A	17 / Day 3 17h	1792617 006	226346 748	7 919782	1	109	37	497170001005	AA90478-01 497170001005 019 N/A P3 Plasma-1 17 / Day 3 17h
019	N/A	18 / Day 3 18h	1907778 535	235015 051	8 117687	1	112	38	497170001006	AA90478-01 497170001006 019 N/A P3 Plasma-1 18 / Day 3 18h
019	N/A	19 / Day 3 19h	1733797 885	223417 208	7 760360	1	107	40	497170001007	AA90478-01 497170001007 019 N/A P3 Plasma-1 19 / Day 3 19h
021	N/A	1 / Day 3 1h	2487495 785	230775 053	10 778876	1	148	41	497170001084	AA90478-01 497170001084 021 N/A P3 Plasma-1 1 / Day 3 1h
021	N/A	2 / Day 3 2h	2558106 211	238631 826	10 719887	1	147	42	497170001085	AA90478-01 497170001085 021 N/A P3 Plasma-1 2 / Day 3 2h
021	N/A	3 / Day 3 3h	2493418 323	239027 227	10 431524	1	143	43	497170001086	AA90478-01 497170001086 021 N/A P3 Plasma-1 3 / Day 3 3h
021	N/A	4 / Day 3 4h	2194273 835	207546 184	10 572461	1	145	44	497170001087	AA90478-01 497170001087 021 N/A P3 Plasma-1 4 / Day 3 4h
021	N/A	5 / Day 3 5h	2438410 305	230441 025	10 581494	1	145	45	497170001088	AA90478-01 497170001088 021 N/A P3 Plasma-1 5 / Day 3 5h
021	N/A	6 / Day 3 6h	2383717 162	229898 585	10 368560	1	142	46	497170001089	AA90478-01 497170001089 021 N/A P3 Plasma-1 6 / Day 3 6h
021	N/A	7 / Day 3 7h	2220027 221	210764 024	10 533236	1	145	47	497170001090	AA90478-01 497170001090 021 N/A P3 Plasma-1 7 / Day 3 7h
021	N/A	8 / Day 3 8h	2173143 324	202697 431	10 721119	1	147	48	497170001091	AA90478-01 497170001091 021 N/A P3 Plasma-1 8 / Day 3 8h
021	N/A	9 / Day 3 9h	2284740 808	205474 284	11 119352	1	153	52	497170001092	AA90478-01 497170001092 021 N/A P3 Plasma-1 9 / Day 3 9h
021	N/A	10 / Day 3 10h	2283460 838	212368 344	10 752360	1	148	53	497170001093	AA90478-01 497170001093 021 N/A P3 Plasma-1 10 / Day 3 10h
021	N/A	11 / Day 3 11h	2097877 213	208202 594	10 076134	1	138	54	497170001094	AA90478-01 497170001094 021 N/A P3 Plasma-1 11 / Day 3 11h
021	N/A	12 / Day 3 12h	2201129 766	216534 956	10 165240	1	140	55	497170001095	AA90478-01 497170001095 021 N/A P3 Plasma-1 12 / Day 3 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
021	N/A	13 / Day 3 13h	2206795 446	220097 556	10 026442	1	138	56	497170001096	AA90478-01 497170001096 021 N/A P3 Plasma-1 13 / Day 3 13h
021	N/A	14 / Day 3 14h	2140715 303	220589 698	9 704512	1	133	57	497170001097	AA90478-01 497170001097 021 N/A P3 Plasma-1 14 / Day 3 14h
021	N/A	15 / Day 3 15h	2169434 845	221407 677	9 798372	1	135	58	497170001098	AA90478-01 497170001098 021 N/A P3 Plasma-1 15 / Day 3 15h
021	N/A	16 / Day 3 16h	1847226 169	191906 265	9 625669	1	132	59	497170001099	AA90478-01 497170001099 021 N/A P3 Plasma-1 16 / Day 3 16h
021	N/A	17 / Day 3 17h	1814409 428	185619 908	9 774864	1	134	60	497170001100	AA90478-01 497170001100 021 N/A P3 Plasma-1 17 / Day 3 17h
021	N/A	18 / Day 3 18h	1702679 563	199982 723	8 514133	1	117	61	497170001101	AA90478-01 497170001101 021 N/A P3 Plasma-1 18 / Day 3 18h
021	N/A	19 / Day 3 19h	2022370 211	228422 373	8 853643	1	122	63	497170001102	AA90478-01 497170001102 021 N/A P3 Plasma-1 19 / Day 3 19h
024	N/A	1 / Day 3 1h	2280650 343	224248 397	10 170197	1	140	64	497170001179	AA90478-01 497170001179 024 N/A P3 Plasma-1 1 / Day 3 1h
024	N/A	2 / Day 3 2h	2202437 886	215205 504	10 234115	1	141	65	497170001180	AA90478-01 497170001180 024 N/A P3 Plasma-1 2 / Day 3 2h
024	N/A	3 / Day 3 3h	2284195	232592 352	9 820594	1	135	66	497170001181	AA90478-01 497170001181 024 N/A P3 Plasma-1 3 / Day 3 3h
024	N/A	4 / Day 3 4h	2279149 752	231839 438	9 830725	1	135	67	497170001182	AA90478-01 497170001182 024 N/A P3 Plasma-1 4 / Day 3 4h
024	N/A	5 / Day 3 5h	2405903 086	234065 333	10 278767	1	141	68	497170001183	AA90478-01 497170001183 024 N/A P3 Plasma-1 5 / Day 3 5h
024	N/A	6 / Day 3 6h	2053645 393	211565 455	9 706903	1	133	69	497170001184	AA90478-01 497170001184 024 N/A P3 Plasma-1 6 / Day 3 6h
024	N/A	7 / Day 3 7h	1960744 143	197811 192	9 912200	1	136	70	497170001185	AA90478-01 497170001185 024 N/A P3 Plasma-1 7 / Day 3 7h
024	N/A	8 / Day 3 8h	1942035 131	189321 971	10 257843	1	141	71	497170001186	AA90478-01 497170001186 024 N/A P3 Plasma-1 8 / Day 3 8h
024	N/A	9 / Day 3 9h	1837467 145	177570 872	10 347796	1	142	72	497170001187	AA90478-01 497170001187 024 N/A P3 Plasma-1 9 / Day 3 9h
024	N/A	10 / Day 3 10h	1697169 999	179325 617	9 464180	1	130	74	497170001188	AA90478-01 497170001188 024 N/A P3 Plasma-1 10 / Day 3 10h
024	N/A	11 / Day 3 11h	1742897 447	172171 017	10 123059	1	139	75	497170001189	AA90478-01 497170001189 024 N/A P3 Plasma-1 11 / Day 3 11h
024	N/A	12 / Day 3 12h	1898030 575	185823 295	10 214169	1	140	76	497170001190	AA90478-01 497170001190 024 N/A P3 Plasma-1 12 / Day 3 12h
024	N/A	13 / Day 3 13h	1817996 722	175524 918	10 357485	1	142	77	497170001191	AA90478-01 497170001191 024 N/A P3 Plasma-1 13 / Day 3 13h
024	N/A	14 / Day 3 14h	1690049 13	156682 767	10 786439	1	148	78	497170001192	AA90478-01 497170001192 024 N/A P3 Plasma-1 14 / Day 3 14h
024	N/A	15 / Day 3 15h	1943852 941	179174 726	10 848924	1	149	79	497170001193	AA90478-01 497170001193 024 N/A P3 Plasma-1 15 / Day 3 15h
024	N/A	16 / Day 3 16h	1995331 284	182338 228	10 943022	1	150	80	497170001194	AA90478-01 497170001194 024 N/A P3 Plasma-1 16 / Day 3 16h
024	N/A	17 / Day 3 17h	2018045 841	173731 893	11 615863	1	160	81	497170001195	AA90478-01 497170001195 024 N/A P3 Plasma-1 17 / Day 3 17h
024	N/A	18 / Day 3 18h	1877476 871	158616 521	11 836578	1	163	82	497170001196	AA90478-01 497170001196 024 N/A P3 Plasma-1 18 / Day 3 18h
024	N/A	19 / Day 3 19h	2034997 18	163691 998	12 431867	1	171	83	497170001197	AA90478-01 497170001197 024 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 31
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		4993 389	222686 843	0 022423	-0 0719		-0 0514	-56 6
9	0 00		5989 536	235527 773	0 025430	-0 0308			
10	1 00	1 00000	16067 184	164514 892	*0 097664	*0 956			
11	2 00	0 250000	36373 403	210571 705	0 172736	1 98	-1 0		
12	4 00	0 0625000	72349 702	229106 211	0 315791	3 94	-1 5		
13	8 00	0 0156250	121741 259	196279 673	0 620244	8 09	1 1		
14	16 0	0 00390625	265384 794	197118 761	1 346319	18 0	12 5		
15	40 0	0 000625000	618963 306	210108 502	2 945922	39 9	-0 3		
16	80 0	0 000156250	1234801 018	210230 52	5 873557	79 9	-0 1		
17	160	0 0000390625	2479876 375	226326 411	10 957079	149	-6 9		
18	200	0 0000250000	2814112 361	199937 827	14 074937	192	-4 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0732015722

Intercept = 0 0276831953

R-Squared = 0 9956

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Not Used (Interference)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 31
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	3231176 431	230983 866	13 988754	1	191		195		2 1
2	0 00	3230207 081	227047 05	14 227038	1	194				
3	0 00	2954417 563	208704 997	14 155950	1	193				
4	0 00	3104524 66	220131 499	14 103046	1	192				
5	0 00	2908382 683	208741 853	13 932916	1	190				
52	0 00	2871529 681	195368 029	14 698053	1	200				
53	0 00	2983777 1	207558 334	14 375607	1	196				
92	0 00	3209691 686	222404 656	14 431765	1	197				
93	0 00	3213995 523	216475 615	14 846917	1	202				
34	3 00	53454 753	207857 645	0 257170	1	3 13	4 3	2 98	-0 7	7 1
71	3 00	55213 977	235216 189	0 234737	1	2 83	-5 7			
41	37 5	566591 125	211803 005	2 675085	1	36 2	-3 5	36 4	-2 9	0 6
78	37 5	560704 629	207636 837	2 700410	1	36 5	-2 7			
26	150	1130330 268	196808 617	5 743297	2	156	4 0	153	2 0	3 4
61	150	1093797 412	202704 178	5 396028	2	147	-2 0			
84	150	1132044 548	197583 035	5 729462	2	156	4 0			
51	150	2236491 579	194395 822	11 504834	1	157	4 7	176	17 3	15 3
90	150	2289166 583	160411 011	14 270632	1	195	30 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 31
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 3 1h	2590219 895	198755 904	13 032166	2	355	65	497170000324	AA90478-01 497170000324 007 N/A P3 Plasma-1 1 / Day 3 1h
007	N/A	2 / Day 3 2h	2785113 751	204167 794	13 641298	2	372	66	497170000325	AA90478-01 497170000325 007 N/A P3 Plasma-1 2 / Day 3 2h
007	N/A	3 / Day 3 3h	2706974 195	202988 023	13 335635	2	364	67	497170000326	AA90478-01 497170000326 007 N/A P3 Plasma-1 3 / Day 3 3h
007	N/A	4 / Day 3 4h	2718266 577	211052 115	12 879599	2	351	68	497170000327	AA90478-01 497170000327 007 N/A P3 Plasma-1 4 / Day 3 4h
007	N/A	5 / Day 3 5h	2533086 323	204637 1	12 378431	2	337	69	497170000328	AA90478-01 497170000328 007 N/A P3 Plasma-1 5 / Day 3 5h
007	N/A	6 / Day 3 6h	2677202 259	211818 732	12 639119	2	345	70	497170000329	AA90478-01 497170000329 007 N/A P3 Plasma-1 6 / Day 3 6h
026	N/A	16 / Day 1 16h	2903809 069	146496 617	*19 821680	1	*AAR>(200)	72	497170001327	AA90478-01 497170001327 026 N/A P1 Plasma-1 16 / Day 1 16h
026	N/A	17 / Day 1 17h	3523244 033	188801 153	*18 661136	1	*AAR>(200)	73	497170001328	AA90478-01 497170001328 026 N/A P1 Plasma-1 17 / Day 1 17h
026	N/A	18 / Day 1 18h	3613637 797	198305 529	*18 222577	1	*AAR>(200)	74	497170001329	AA90478-01 497170001329 026 N/A P1 Plasma-1 18 / Day 1 18h
026	N/A	19 / Day 1 19h	3606993 378	213854 345	*16 866589	1	*AAR>(200)	75	497170001330	AA90478-01 497170001330 026 N/A P1 Plasma-1 19 / Day 1 19h
026	N/A	1 / Day 3 1h	2249966 826	189533 071	11 871104	1	162	20	497170001274	AA90478-01 497170001274 026 N/A P3 Plasma-1 1 / Day 3 1h
026	N/A	2 / Day 3 2h	2208382 732	186677 824	11 829915	1	161	21	497170001275	AA90478-01 497170001275 026 N/A P3 Plasma-1 2 / Day 3 2h
026	N/A	3 / Day 3 3h	2227552 449	189178 994	11 774840	1	160	22	497170001276	AA90478-01 497170001276 026 N/A P3 Plasma-1 3 / Day 3 3h
026	N/A	4 / Day 3 4h	2317553 924	189963 503	12 199996	1	166	23	497170001277	AA90478-01 497170001277 026 N/A P3 Plasma-1 4 / Day 3 4h
026	N/A	5 / Day 3 5h	2302915 694	188633 911	12 208387	1	166	24	497170001278	AA90478-01 497170001278 026 N/A P3 Plasma-1 5 / Day 3 5h
026	N/A	6 / Day 3 6h	2069935 055	180873 609	11 444097	1	156	25	497170001279	AA90478-01 497170001279 026 N/A P3 Plasma-1 6 / Day 3 6h
026	N/A	7 / Day 3 7h	2105277 111	183086 892	11 498787	1	157	27	497170001280	AA90478-01 497170001280 026 N/A P3 Plasma-1 7 / Day 3 7h
026	N/A	8 / Day 3 8h	2197642 071	188762 031	11 642395	1	159	28	497170001281	AA90478-01 497170001281 026 N/A P3 Plasma-1 8 / Day 3 8h
026	N/A	9 / Day 3 9h	2557692 895	207153 435	12 346852	1	168	29	497170001282	AA90478-01 497170001282 026 N/A P3 Plasma-1 9 / Day 3 9h
026	N/A	10 / Day 3 10h	2155905 69	182945 74	11 784400	1	161	30	497170001283	AA90478-01 497170001283 026 N/A P3 Plasma-1 10 / Day 3 10h
026	N/A	11 / Day 3 11h	2372609 111	195206 225	12 154372	1	166	31	497170001284	AA90478-01 497170001284 026 N/A P3 Plasma-1 11 / Day 3 11h
026	N/A	12 / Day 3 12h	2559399 265	202544 763	12 636215	1	172	32	497170001285	AA90478-01 497170001285 026 N/A P3 Plasma-1 12 / Day 3 12h
026	N/A	13 / Day 3 13h	2352703 791	185307 384	12 696223	1	173	33	497170001286	AA90478-01 497170001286 026 N/A P3 Plasma-1 13 / Day 3 13h
026	N/A	14 / Day 3 14h	2357631 96	191585 19	12 305920	1	168	35	497170001287	AA90478-01 497170001287 026 N/A P3 Plasma-1 14 / Day 3 14h
026	N/A	15 / Day 3 15h	2220858 562	184969 939	12 006592	1	164	36	497170001288	AA90478-01 497170001288 026 N/A P3 Plasma-1 15 / Day 3 15h
026	N/A	16 / Day 3 16h	2304348 155	204318 157	11 278235	1	154	37	497170001289	AA90478-01 497170001289 026 N/A P3 Plasma-1 16 / Day 3 16h
026	N/A	17 / Day 3 17h	2452848 867	201906 983	12 148410	1	166	38	497170001290	AA90478-01 497170001290 026 N/A P3 Plasma-1 17 / Day 3 17h
026	N/A	18 / Day 3 18h	2369349 618	190955 012	12 407894	1	169	39	497170001291	AA90478-01 497170001291 026 N/A P3 Plasma-1 18 / Day 3 18h
026	N/A	19 / Day 3 19h	2518856 491	216021 485	11 660213	1	159	40	497170001292	AA90478-01 497170001292 026 N/A P3 Plasma-1 19 / Day 3 19h
028	N/A	1 / Day 1 1h	2286831 756	204505 816	*11 182233	1	*152	76	497170001407	AA90478-01 497170001407 028 N/A P1 Plasma-1 1 / Day 1 1h
028	N/A	2 / Day 1 2h	2196916 493	195256 06	*11 251464	1	*153	77	497170001408	AA90478-01 497170001408 028 N/A P1 Plasma-1 2 / Day 1 2h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
028	N/A	10 / Day 1 10h	2075309 407	184778 303	*11 231348	1	*153	79	497170001416	AA90478-01 497170001416 028 N/A P1 Plasma-1 10 / Day 1 10h
028	N/A	11 / Day 1 11h	2069057 195	187432 596	*11 038940	1	*150	80	497170001417	AA90478-01 497170001417 028 N/A P1 Plasma-1 11 / Day 1 11h
028	N/A	12 / Day 1 12h	1795741 501	160843 428	*11 164531	1	*152	81	497170001418	AA90478-01 497170001418 028 N/A P1 Plasma-1 12 / Day 1 12h
028	N/A	13 / Day 1 13h	2201694 05	200638 556	*10 973434	1	*150	82	497170001419	AA90478-01 497170001419 028 N/A P1 Plasma-1 13 / Day 1 13h
028	N/A	14 / Day 1 14h	2087405 85	186881 771	*11 169660	1	*152	83	497170001420	AA90478-01 497170001420 028 N/A P1 Plasma-1 14 / Day 1 14h
028	N/A	15 / Day 1 15h	1878421 709	184870 747	*10 160730	1	*138	85	497170001421	AA90478-01 497170001421 028 N/A P1 Plasma-1 15 / Day 1 15h
028	N/A	16 / Day 1 16h	1870827 951	181821 885	*10 289344	1	*140	86	497170001422	AA90478-01 497170001422 028 N/A P1 Plasma-1 16 / Day 1 16h
028	N/A	17 / Day 1 17h	1854144 33	184866 102	*10 029661	1	*137	87	497170001423	AA90478-01 497170001423 028 N/A P1 Plasma-1 17 / Day 1 17h
028	N/A	18 / Day 1 18h	2020698 119	191075 787	*10 575375	1	*144	88	497170001424	AA90478-01 497170001424 028 N/A P1 Plasma-1 18 / Day 1 18h
028	N/A	19 / Day 1 19h	1911277 5	187295 804	*10 204593	1	*139	89	497170001425	AA90478-01 497170001425 028 N/A P1 Plasma-1 19 / Day 1 19h
028	N/A	1 / Day 3 1h	2034789 321	202094 475	10 068505	2	274	42	497170001369	AA90478-01 497170001369 028 N/A P3 Plasma-1 1 / Day 3 1h
028	N/A	2 / Day 3 2h	1952872 499	198390 551	9 843576	2	268	43	497170001370	AA90478-01 497170001370 028 N/A P3 Plasma-1 2 / Day 3 2h
028	N/A	3 / Day 3 3h	2080162 983	212002 46	9 811976	2	267	44	497170001371	AA90478-01 497170001371 028 N/A P3 Plasma-1 3 / Day 3 3h
028	N/A	4 / Day 3 4h	2097532 638	207603 461	10 103553	2	275	45	497170001372	AA90478-01 497170001372 028 N/A P3 Plasma-1 4 / Day 3 4h
028	N/A	5 / Day 3 5h	2026879 199	202513 185	10 008628	2	273	46	497170001373	AA90478-01 497170001373 028 N/A P3 Plasma-1 5 / Day 3 5h
028	N/A	6 / Day 3 6h	1903893 163	192816 703	9 874109	2	269	47	497170001374	AA90478-01 497170001374 028 N/A P3 Plasma-1 6 / Day 3 6h
028	N/A	7 / Day 3 7h	2159004 8	218441 202	9 883689	2	269	48	497170001375	AA90478-01 497170001375 028 N/A P3 Plasma-1 7 / Day 3 7h
028	N/A	8 / Day 3 8h	1849969 562	193035 239	9 583585	2	261	49	497170001376	AA90478-01 497170001376 028 N/A P3 Plasma-1 8 / Day 3 8h
028	N/A	9 / Day 3 9h	1865478 254	194625 038	9 584986	2	261	50	497170001377	AA90478-01 497170001377 028 N/A P3 Plasma-1 9 / Day 3 9h
028	N/A	10 / Day 3 10h	1896689 582	198182 699	9 570409	2	261	54	497170001378	AA90478-01 497170001378 028 N/A P3 Plasma-1 10 / Day 3 10h
028	N/A	11 / Day 3 11h	1886119 21	200600 669	9 402358	2	256	55	497170001379	AA90478-01 497170001379 028 N/A P3 Plasma-1 11 / Day 3 11h
028	N/A	12 / Day 3 12h	2024628 707	207411 329	9 761418	2	266	56	497170001380	AA90478-01 497170001380 028 N/A P3 Plasma-1 12 / Day 3 12h
028	N/A	13 / Day 3 13h	2004818 362	195106 875	10 275488	2	280	57	497170001381	AA90478-01 497170001381 028 N/A P3 Plasma-1 13 / Day 3 13h
028	N/A	14 / Day 3 14h	2083504 147	219274 474	9 501809	2	259	58	497170001382	AA90478-01 497170001382 028 N/A P3 Plasma-1 14 / Day 3 14h
028	N/A	15 / Day 3 15h	1763172 78	188795 148	9 339079	2	254	59	497170001383	AA90478-01 497170001383 028 N/A P3 Plasma-1 15 / Day 3 15h
028	N/A	16 / Day 3 16h	1885469 294	208870 361	9 026983	2	246	60	497170001384	AA90478-01 497170001384 028 N/A P3 Plasma-1 16 / Day 3 16h
028	N/A	17 / Day 3 17h	1754779	147289 193	11 913834	2	325	62	497170001385	AA90478-01 497170001385 028 N/A P3 Plasma-1 17 / Day 3 17h
028	N/A	18 / Day 3 18h	1774689 975	198373 707	8 946196	2	244	63	497170001386	AA90478-01 497170001386 028 N/A P3 Plasma-1 18 / Day 3 18h
028	N/A	19 / Day 3 19h	1858447 915	202211 912	9 190596	2	250	64	497170001387	AA90478-01 497170001387 028 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 32
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		6968 477	214816 847	0 032439	0 106		0 0827	39 9
9	0 00		6410 131	221995 073	0 028875	0 0594			
10	1 00	1 00000	21980 819	224297 591	*0 097998	*0 961			
11	2 00	0 250000	36886 334	209778 281	0 175835	1 98	-1 0		
12	4 00	0 0625000	70382 588	215487 719	0 326620	3 94	-1 5		
13	8 00	0 0156250	144182 567	221672 087	0 650432	8 17	2 1		
14	16 0	0 00390625	297723 839	212583 175	1 400505	18 0	12 5		
15	40 0	0 000625000	654872 59	214694 508	3 050253	39 5	-1 3		
16	80 0	0 000156250	1318369 865	219253 786	6 012986	78 1	-2 4		
17	160	0 0000390625	2507588 454	213995 841	11 717931	153	-4 4		
18	200	0 0000250000	3143079 715	212320 828	14 803445	193	-3 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0766361955

Intercept = 0 0243259236

R-Squared = 0 9961

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Not Used (Interference)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 32
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	3141372 692	213353 924	14 723763	1	192		192		0 9
2	0 00	3129536 478	214080 223	14 618522	1	190				
3	0 00	3217020 127	215869 221	14 902635	1	194				
4	0 00	3369410 686	230123 162	14 641771	1	191				
5	0 00	3198650 168	219395 735	14 579363	1	190				
48	0 00	3173369 068	214617 069	14 786191	1	193				
49	0 00	3107743 352	211942 598	14 663137	1	191				
88	0 00	3481421 538	233712 296	14 896185	1	194				
89	0 00	3428933 374	230671 475	14 865008	1	194				
33	3 00	54264 258	213553 928	0 254101	1	3 00	0 0	2 98	-0 7	1 2
65	3 00	52788 379	211103 36	0 250059	1	2 95	-1 7			
40	37 5	606203 712	220033 832	2 755048	1	35 6	-5 1	35 8	-4 5	0 6
72	37 5	540501 056	194815 086	2 774431	1	35 9	-4 3			
47	150	2104078 846	188704 623	11 150118	1	145	-3 3	145	-3 3	0 0
86	150	2493488 164	223659 058	11 148612	1	145	-3 3			
26	780	1304757 744	218018 926	5 984608	10	778	-0 3	797	2 2	3 3
57	780	1359987 972	216800 252	6 273000	10	815	4 5			
80	780	1431659 897	61919 95	*23 121141	10	*3010				

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* UISR

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 32
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 2 1h	622264 647	211155 467	2 946950	10	381	20	497170000343	AA90478-01 497170000343 007 N/A P2 Plasma-1 1 / Day 2 1h
007	N/A	2 / Day 2 2h	593369 106	214638 223	2 764508	10	358	21	497170000344	AA90478-01 497170000344 007 N/A P2 Plasma-1 2 / Day 2 2h
007	N/A	3 / Day 2 3h	568969 28	213424 17	2 665908	10	345	22	497170000345	AA90478-01 497170000345 007 N/A P2 Plasma-1 3 / Day 2 3h
007	N/A	4 / Day 2 4h	805666 12	207293 452	3 886597	10	504	23	497170000346	AA90478-01 497170000346 007 N/A P2 Plasma-1 4 / Day 2 4h
007	N/A	5 / Day 2 5h	611326 495	229311 617	2 665920	10	345	24	497170000347	AA90478-01 497170000347 007 N/A P2 Plasma-1 5 / Day 2 5h
007	N/A	6 / Day 2 6h	574286 263	227831 475	2 520663	10	326	25	497170000348	AA90478-01 497170000348 007 N/A P2 Plasma-1 6 / Day 2 6h
007	N/A	7 / Day 2 7h	581477 474	214884 894	2 705995	10	350	27	497170000349	AA90478-01 497170000349 007 N/A P2 Plasma-1 7 / Day 2 7h
007	N/A	8 / Day 2 8h	598255 539	224801 321	2 661263	10	344	28	497170000350	AA90478-01 497170000350 007 N/A P2 Plasma-1 8 / Day 2 8h
007	N/A	9 / Day 2 9h	585558 645	213716 455	2 739886	10	354	29	497170000351	AA90478-01 497170000351 007 N/A P2 Plasma-1 9 / Day 2 9h
007	N/A	10 / Day 2 10h	626217 332	231035 529	2 710481	10	351	30	497170000352	AA90478-01 497170000352 007 N/A P2 Plasma-1 10 / Day 2 10h
007	N/A	11 / Day 2 11h	585395 655	206884 721	2 829574	10	366	31	497170000353	AA90478-01 497170000353 007 N/A P2 Plasma-1 11 / Day 2 11h
007	N/A	12 / Day 2 12h	565566 489	210656 854	2 684776	10	347	32	497170000354	AA90478-01 497170000354 007 N/A P2 Plasma-1 12 / Day 2 12h
007	N/A	13 / Day 2 13h	571693 009	210084 223	2 721256	10	352	34	497170000355	AA90478-01 497170000355 007 N/A P2 Plasma-1 13 / Day 2 13h
007	N/A	14 / Day 2 14h	533204 398	212321 2	2 511310	10	325	35	497170000356	AA90478-01 497170000356 007 N/A P2 Plasma-1 14 / Day 2 14h
007	N/A	15 / Day 2 15h	515672 866	200596 63	2 570696	10	332	36	497170000357	AA90478-01 497170000357 007 N/A P2 Plasma-1 15 / Day 2 15h
007	N/A	16 / Day 2 16h	518849 797	213642 688	2 428587	10	314	37	497170000358	AA90478-01 497170000358 007 N/A P2 Plasma-1 16 / Day 2 16h
007	N/A	17 / Day 2 17h	581973 139	217932 878	2 670424	10	345	38	497170000359	AA90478-01 497170000359 007 N/A P2 Plasma-1 17 / Day 2 17h
007	N/A	18 / Day 2 18h	544194 883	215880 745	2 520813	10	326	39	497170000360	AA90478-01 497170000360 007 N/A P2 Plasma-1 18 / Day 2 18h
007	N/A	19 / Day 2 19h	529418 784	214509 304	2 468046	10	319	41	497170000361	AA90478-01 497170000361 007 N/A P2 Plasma-1 19 / Day 2 19h
009	N/A	1 / Day 2 1h	621602 134	216355 146	2 873064	10	372	42	497170000438	AA90478-01 497170000438 009 N/A P2 Plasma-1 1 / Day 2 1h
009	N/A	2 / Day 2 2h	604569 564	218973 569	2 760925	10	357	43	497170000439	AA90478-01 497170000439 009 N/A P2 Plasma-1 2 / Day 2 2h
009	N/A	3 / Day 2 3h	704044 339	247528 911	2 844291	10	368	44	497170000440	AA90478-01 497170000440 009 N/A P2 Plasma-1 3 / Day 2 3h
009	N/A	4 / Day 2 4h	589355 983	222166 285	2 652770	10	343	45	497170000441	AA90478-01 497170000441 009 N/A P2 Plasma-1 4 / Day 2 4h
009	N/A	5 / Day 2 5h	586763 56	209299 816	2 803460	10	363	46	497170000442	AA90478-01 497170000442 009 N/A P2 Plasma-1 5 / Day 2 5h
009	N/A	6 / Day 2 6h	566588 206	212127 515	2 670979	10	345	50	497170000443	AA90478-01 497170000443 009 N/A P2 Plasma-1 6 / Day 2 6h
009	N/A	7 / Day 2 7h	532421 169	192132 945	2 771108	10	358	51	497170000444	AA90478-01 497170000444 009 N/A P2 Plasma-1 7 / Day 2 7h
009	N/A	8 / Day 2 8h	563545 417	207377 146	2 717490	10	351	52	497170000445	AA90478-01 497170000445 009 N/A P2 Plasma-1 8 / Day 2 8h
009	N/A	9 / Day 2 9h	527186 614	200366 932	2 631106	10	340	53	497170000446	AA90478-01 497170000446 009 N/A P2 Plasma-1 9 / Day 2 9h
009	N/A	10 / Day 2 10h	460225 275	183441 112	2 508845	10	324	54	497170000447	AA90478-01 497170000447 009 N/A P2 Plasma-1 10 / Day 2 10h
009	N/A	11 / Day 2 11h	562642 188	213866 083	2 630815	10	340	55	497170000448	AA90478-01 497170000448 009 N/A P2 Plasma-1 11 / Day 2 11h
009	N/A	12 / Day 2 12h	546532 309	212790 835	2 568402	10	332	56	497170000449	AA90478-01 497170000449 009 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 2 13h	465765 498	179598 603	2 593369	10	335	58	497170000450	AA90478-01 497170000450 009 N/A P2 Plasma-1 13 / Day 2 13h
009	N/A	14 / Day 2 14h	521616 292	198979 723	2 621455	10	339	59	497170000451	AA90478-01 497170000451 009 N/A P2 Plasma-1 14 / Day 2 14h
009	N/A	15 / Day 2 15h	554958 884	212988 062	2 605587	10	337	60	497170000452	AA90478-01 497170000452 009 N/A P2 Plasma-1 15 / Day 2 15h
009	N/A	16 / Day 2 16h	552087 689	228337 719	2 417856	10	312	61	497170000453	AA90478-01 497170000453 009 N/A P2 Plasma-1 16 / Day 2 16h
009	N/A	17 / Day 2 17h	586918 374	170210 851	3 448184	10	447	62	497170000454	AA90478-01 497170000454 009 N/A P2 Plasma-1 17 / Day 2 17h
009	N/A	18 / Day 2 18h	538701 604	200012 997	2 693333	10	348	63	497170000455	AA90478-01 497170000455 009 N/A P2 Plasma-1 18 / Day 2 18h
009	N/A	19 / Day 2 19h	524273 624	155029 713	3 381762	10	438	64	497170000456	AA90478-01 497170000456 009 N/A P2 Plasma-1 19 / Day 2 19h
011	N/A	1 / Day 2 1h	280102 762	212217 612	1 319885	10	169	66	497170000533	AA90478-01 497170000533 011 N/A P2 Plasma-1 1 / Day 2 1h
011	N/A	4 / Day 2 4h	271178 793	212511 217	1 276068	10	163	67	497170000536	AA90478-01 497170000536 011 N/A P2 Plasma-1 4 / Day 2 4h
011	N/A	6 / Day 2 6h	278008 329	219038 017	1 269224	10	162	68	497170000538	AA90478-01 497170000538 011 N/A P2 Plasma-1 6 / Day 2 6h
011	N/A	8 / Day 2 8h	276515 53	212327 606	1 302306	10	167	69	497170000540	AA90478-01 497170000540 011 N/A P2 Plasma-1 8 / Day 2 8h
015	N/A	13 / Day 3 13h	164736 809	220630 742	0 746663	10	94 3	82	497170000811	AA90478-01 497170000811 015 N/A P3 Plasma-1 13 / Day 3 13h
018	N/A	8 / Day 3 8h	240238 915	200487 127	1 198276	10	153	83	497170000901	AA90478-01 497170000901 018 N/A P3 Plasma-1 8 / Day 3 8h
018	N/A	10 / Day 3 10h	261940 474	214476 341	1 221302	10	156	84	497170000903	AA90478-01 497170000903 018 N/A P3 Plasma-1 10 / Day 3 10h
018	N/A	12 / Day 3 12h	281755 173	238558 434	1 181074	10	151	85	497170000905	AA90478-01 497170000905 018 N/A P3 Plasma-1 12 / Day 3 12h
026	N/A	1 / Day 2 1h	327609 416	209342 42	1 564945	10	201	70	497170001293	AA90478-01 497170001293 026 N/A P2 Plasma-1 1 / Day 2 1h
026	N/A	2 / Day 2 2h	343482 587	206529 426	1 663117	10	214	71	497170001294	AA90478-01 497170001294 026 N/A P2 Plasma-1 2 / Day 2 2h
026	N/A	3 / Day 2 3h	300335 99	198985 597	1 509335	10	194	73	497170001295	AA90478-01 497170001295 026 N/A P2 Plasma-1 3 / Day 2 3h
026	N/A	4 / Day 2 4h	335759 86	216657 582	1 549726	10	199	74	497170001296	AA90478-01 497170001296 026 N/A P2 Plasma-1 4 / Day 2 4h
026	N/A	5 / Day 2 5h	352544 395	216773 832	1 626324	10	209	75	497170001297	AA90478-01 497170001297 026 N/A P2 Plasma-1 5 / Day 2 5h
026	N/A	6 / Day 2 6h	344913 93	216882 607	1 590325	10	204	76	497170001298	AA90478-01 497170001298 026 N/A P2 Plasma-1 6 / Day 2 6h
026	N/A	7 / Day 2 7h	344273 783	212410 809	1 620792	10	208	77	497170001299	AA90478-01 497170001299 026 N/A P2 Plasma-1 7 / Day 2 7h
026	N/A	9 / Day 2 9h	351695 403	224931 276	1 563568	10	201	78	497170001301	AA90478-01 497170001301 026 N/A P2 Plasma-1 9 / Day 2 9h
026	N/A	10 / Day 2 10h	348117 914	219214 992	1 588021	10	204	79	497170001302	AA90478-01 497170001302 026 N/A P2 Plasma-1 10 / Day 2 10h
026	N/A	11 / Day 2 11h	344538 062	228146 881	1 510159	10	194	81	497170001303	AA90478-01 497170001303 026 N/A P2 Plasma-1 11 / Day 2 11h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 33
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		3940 363	320558 009	0 012292	-0 0116		-0 0155	-35 1
9	0 00		4195 805	347796 194	0 012064	-0 0193			
10	1 00	1 00000	14746 365	363381 57	*0 040581	*0 942			
11	2 00	0 250000	23567 825	327879 608	0 071880	2 00	0 0		
12	4 00	0 0625000	49745 316	391589 701	0 127034	3 86	-3 5		
13	8 00	0 0156250	84986 796	334214 983	0 254288	8 15	1 9		
14	16 0	0 00390625	175247 152	320148 311	0 547394	18 0	12 5		
15	40 0	0 000625000	420472 114	349847 637	1 201872	40 1	0 3		
16	80 0	0 000156250	779845 029	341788 939	2 281657	76 5	-4 4		
17	160	0 0000390625	1524194 477	338135 324	4 507646	152	-5 0		
18	200	0 0000250000	2142976 139	366392 063	5 848861	197	-1 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0296522358

Intercept = 0 0126371035

R-Squared = 0 9956

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Not Used (Interference)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 33
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1955049 763	334274 641	5 848633	1	197		198		1 2
2	0 00	1848263 221	312210 639	5 919924	1	199				
3	0 00	1884731 096	320510 424	5 880405	1	198				
4	0 00	1799942 257	301231 595	5 975277	1	201				
5	0 00	1843418 346	315255 964	5 847370	1	197				
50	0 00	1777215 402	301472 74	5 895111	1	198				
51	0 00	1662017 19	289245 97	5 746034	1	193				
86	0 00	1732277 607	293307 762	5 906007	1	199				
87	0 00	1674089 078	281177 751	5 953846	1	200				
29	3 00	31608 115	304732 073	0 103724	1	3 07	2 3	2 96	-1 3	5 3
62	3 00	28631 908	294943 917	0 097076	1	2 85	-5 0			
39	37 5	325973 167	310509 733	1 049800	1	35 0	-6 7	35 8	-4 5	3 2
73	37 5	326677 468	297632 13	1 097588	1	36 6	-2 4			
49	150	1330538 151	306388 846	4 342646	1	146	-2 7	150	0 0	3 8
84	150	1278289 281	279853 15	4 567714	1	154	2 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 33
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	1 / Day 5 1h	2588749 955	327911 037	*7 894672	1	*AAR>(200)	20	497170000571	AA90478-01 497170000571 012 N/A P5 Plasma-1 1 / Day 5 1h
012	N/A	2 / Day 5 2h	2541905 073	300603 214	*8 456014	1	*AAR>(200)	21	497170000572	AA90478-01 497170000572 012 N/A P5 Plasma-1 2 / Day 5 2h
012	N/A	3 / Day 5 3h	2323890 226	287246 803	*8 090221	1	*AAR>(200)	22	497170000573	AA90478-01 497170000573 012 N/A P5 Plasma-1 3 / Day 5 3h
012	N/A	4 / Day 5 4h	2521611 59	312704 71	*8 063875	1	*AAR>(200)	23	497170000574	AA90478-01 497170000574 012 N/A P5 Plasma-1 4 / Day 5 4h
012	N/A	5 / Day 5 5h	2512554 13	315044 22	*7 975243	1	*AAR>(200)	24	497170000575	AA90478-01 497170000575 012 N/A P5 Plasma-1 5 / Day 5 5h
012	N/A	6 / Day 5 6h	2458275 805	296134 307	*8 301219	1	*AAR>(200)	25	497170000576	AA90478-01 497170000576 012 N/A P5 Plasma-1 6 / Day 5 6h
012	N/A	7 / Day 5 7h	2301263 978	282734 406	*8 139314	1	*AAR>(200)	26	497170000577	AA90478-01 497170000577 012 N/A P5 Plasma-1 7 / Day 5 7h
012	N/A	8 / Day 5 8h	2422285 734	304628 246	*7 951612	1	*AAR>(200)	27	497170000578	AA90478-01 497170000578 012 N/A P5 Plasma-1 8 / Day 5 8h
012	N/A	9 / Day 5 9h	2509490 214	305662 671	*8 209999	1	*AAR>(200)	28	497170000579	AA90478-01 497170000579 012 N/A P5 Plasma-1 9 / Day 5 9h
012	N/A	10 / Day 5 10h	2456952 356	314660 972	*7 808253	1	*AAR>(200)	30	497170000580	AA90478-01 497170000580 012 N/A P5 Plasma-1 10 / Day 5 10h
012	N/A	11 / Day 5 11h	1334622 916	278931 127	4 784776	1	161	31	497170000581	AA90478-01 497170000581 012 N/A P5 Plasma-1 11 / Day 5 11h
012	N/A	12 / Day 5 12h	2346606 766	294746 57	*7 961439	1	*AAR>(200)	32	497170000582	AA90478-01 497170000582 012 N/A P5 Plasma-1 12 / Day 5 12h
012	N/A	13 / Day 5 13h	2225523 218	295072 97	*7 542281	1	*AAR>(200)	33	497170000583	AA90478-01 497170000583 012 N/A P5 Plasma-1 13 / Day 5 13h
012	N/A	14 / Day 5 14h	2071476 017	284539 175	*7 280108	1	*AAR>(200)	34	497170000584	AA90478-01 497170000584 012 N/A P5 Plasma-1 14 / Day 5 14h
012	N/A	15 / Day 5 15h	2051283 492	282673 942	*7 256712	1	*AAR>(200)	35	497170000585	AA90478-01 497170000585 012 N/A P5 Plasma-1 15 / Day 5 15h
012	N/A	16 / Day 5 16h	2075362 942	285508 376	*7 269009	1	*AAR>(200)	36	497170000586	AA90478-01 497170000586 012 N/A P5 Plasma-1 16 / Day 5 16h
012	N/A	17 / Day 5 17h	1791684 195	262406 398	*6 827898	1	*AAR>(200)	37	497170000587	AA90478-01 497170000587 012 N/A P5 Plasma-1 17 / Day 5 17h
012	N/A	18 / Day 5 18h	2016925 353	294881 422	*6 839784	1	*AAR>(200)	38	497170000588	AA90478-01 497170000588 012 N/A P5 Plasma-1 18 / Day 5 18h
012	N/A	19 / Day 5 19h	1895739 798	275506 942	*6 880915	1	*AAR>(200)	40	497170000589	AA90478-01 497170000589 012 N/A P5 Plasma-1 19 / Day 5 19h
013	N/A	1 / Day 5 1h	585378 231	296106 639	1 976917	1	66 2	41	497170000666	AA90478-01 497170000666 013 N/A P5 Plasma-1 1 / Day 5 1h
013	N/A	2 / Day 5 2h	539234 468	284306 387	1 896667	1	63 5	42	497170000667	AA90478-01 497170000667 013 N/A P5 Plasma-1 2 / Day 5 2h
013	N/A	3 / Day 5 3h	570688 752	295328 951	1 932383	1	64 7	43	497170000668	AA90478-01 497170000668 013 N/A P5 Plasma-1 3 / Day 5 3h
013	N/A	4 / Day 5 4h	527220 066	282568 522	1 865813	1	62 5	44	497170000669	AA90478-01 497170000669 013 N/A P5 Plasma-1 4 / Day 5 4h
013	N/A	5 / Day 5 5h	572734 697	307882 331	1 860239	1	62 3	45	497170000670	AA90478-01 497170000670 013 N/A P5 Plasma-1 5 / Day 5 5h
013	N/A	6 / Day 5 6h	508401 289	282022 131	1 802700	1	60 4	46	497170000671	AA90478-01 497170000671 013 N/A P5 Plasma-1 6 / Day 5 6h
013	N/A	7 / Day 5 7h	529805 143	289942 103	1 827279	1	61 2	47	497170000672	AA90478-01 497170000672 013 N/A P5 Plasma-1 7 / Day 5 7h
013	N/A	8 / Day 5 8h	545963 319	291002 159	1 876149	1	62 8	48	497170000673	AA90478-01 497170000673 013 N/A P5 Plasma-1 8 / Day 5 8h
013	N/A	9 / Day 5 9h	595157 024	308146 809	1 931407	1	64 7	52	497170000674	AA90478-01 497170000674 013 N/A P5 Plasma-1 9 / Day 5 9h
013	N/A	10 / Day 5 10h	496856 329	274114 174	1 812589	1	60 7	53	497170000675	AA90478-01 497170000675 013 N/A P5 Plasma-1 10 / Day 5 10h
013	N/A	11 / Day 5 11h	549633 563	302825 436	1 815018	1	60 8	54	497170000676	AA90478-01 497170000676 013 N/A P5 Plasma-1 11 / Day 5 11h
013	N/A	12 / Day 5 12h	516018 305	279904 504	1 843551	1	61 7	55	497170000677	AA90478-01 497170000677 013 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	13 / Day 5 13h	501635 962	275216 302	1 822697	1	61 0	56	497170000678	AA90478-01 497170000678 013 N/A P5 Plasma-1 13 / Day 5 13h
013	N/A	14 / Day 5 14h	518975 556	284858 757	1 821870	1	61 0	57	497170000679	AA90478-01 497170000679 013 N/A P5 Plasma-1 14 / Day 5 14h
013	N/A	15 / Day 5 15h	521083 759	290310 796	1 794917	1	60 1	58	497170000680	AA90478-01 497170000680 013 N/A P5 Plasma-1 15 / Day 5 15h
013	N/A	16 / Day 5 16h	518994 359	286597 638	1 810881	1	60 6	59	497170000681	AA90478-01 497170000681 013 N/A P5 Plasma-1 16 / Day 5 16h
013	N/A	17 / Day 5 17h	484768 28	275519 302	1 759471	1	58 9	60	497170000682	AA90478-01 497170000682 013 N/A P5 Plasma-1 17 / Day 5 17h
013	N/A	18 / Day 5 18h	495294 161	289611 45	1 710202	1	57 2	61	497170000683	AA90478-01 497170000683 013 N/A P5 Plasma-1 18 / Day 5 18h
013	N/A	19 / Day 5 19h	528722 698	306702 184	1 723896	1	57 7	63	497170000684	AA90478-01 497170000684 013 N/A P5 Plasma-1 19 / Day 5 19h
015	N/A	1 / Day 5 1h	1569274 629	227385 556	*6 901382	1	*AAR>(200)	64	497170000761	AA90478-01 497170000761 015 N/A P5 Plasma-1 1 / Day 5 1h
015	N/A	2 / Day 5 2h	1631391 884	306742 153	5 318447	1	179	65	497170000762	AA90478-01 497170000762 015 N/A P5 Plasma-1 2 / Day 5 2h
015	N/A	3 / Day 5 3h	1557089 423	305784 379	5 092116	1	171	66	497170000763	AA90478-01 497170000763 015 N/A P5 Plasma-1 3 / Day 5 3h
015	N/A	4 / Day 5 4h	1476211 941	297342 991	4 964677	1	167	67	497170000764	AA90478-01 497170000764 015 N/A P5 Plasma-1 4 / Day 5 4h
015	N/A	5 / Day 5 5h	1436593 765	279547 287	5 139001	1	173	68	497170000765	AA90478-01 497170000765 015 N/A P5 Plasma-1 5 / Day 5 5h
015	N/A	6 / Day 5 6h	1539590 242	297282 392	5 178881	1	174	69	497170000766	AA90478-01 497170000766 015 N/A P5 Plasma-1 6 / Day 5 6h
015	N/A	7 / Day 5 7h	1435872 479	274647 12	5 228063	1	176	70	497170000767	AA90478-01 497170000767 015 N/A P5 Plasma-1 7 / Day 5 7h
015	N/A	8 / Day 5 8h	1409797 212	267873 534	5 262921	1	177	71	497170000768	AA90478-01 497170000768 015 N/A P5 Plasma-1 8 / Day 5 8h
015	N/A	9 / Day 5 9h	1438692 078	286142 291	5 027890	1	169	72	497170000769	AA90478-01 497170000769 015 N/A P5 Plasma-1 9 / Day 5 9h
015	N/A	10 / Day 5 10h	1405478 012	286515 562	4 905416	1	165	74	497170000770	AA90478-01 497170000770 015 N/A P5 Plasma-1 10 / Day 5 10h
015	N/A	11 / Day 5 11h	1417344 164	271162 52	5 226918	1	176	75	497170000771	AA90478-01 497170000771 015 N/A P5 Plasma-1 11 / Day 5 11h
015	N/A	12 / Day 5 12h	1382582 667	292160 101	4 732277	1	159	76	497170000772	AA90478-01 497170000772 015 N/A P5 Plasma-1 12 / Day 5 12h
015	N/A	13 / Day 5 13h	1561050 762	305499 42	5 109832	1	172	77	497170000773	AA90478-01 497170000773 015 N/A P5 Plasma-1 13 / Day 5 13h
015	N/A	14 / Day 5 14h	1578504 771	306373 685	5 152220	1	173	78	497170000774	AA90478-01 497170000774 015 N/A P5 Plasma-1 14 / Day 5 14h
015	N/A	15 / Day 5 15h	1334715 258	266849 434	5 001754	1	168	79	497170000775	AA90478-01 497170000775 015 N/A P5 Plasma-1 15 / Day 5 15h
015	N/A	16 / Day 5 16h	1419232 027	277606 873	5 112381	1	172	80	497170000776	AA90478-01 497170000776 015 N/A P5 Plasma-1 16 / Day 5 16h
015	N/A	17 / Day 5 17h	1352400 828	275690 19	4 905509	1	165	81	497170000777	AA90478-01 497170000777 015 N/A P5 Plasma-1 17 / Day 5 17h
015	N/A	18 / Day 5 18h	1366140 92	287376 096	4 753843	1	160	82	497170000778	AA90478-01 497170000778 015 N/A P5 Plasma-1 18 / Day 5 18h
015	N/A	19 / Day 5 19h	1254029 996	264114 688	4 748051	1	160	83	497170000779	AA90478-01 497170000779 015 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 34
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		3384 857	303136 394	0 011166	-0 156		-0 172	-12 7
9	0 00		3118 972	304769 544	0 010234	-0 187			
10	1 00	1 00000	11732 102	292957 98	*0 040047	*0 821			
11	2 00	0 250000	20686 144	277361 234	0 074582	1 99	-0 5		
12	4 00	0 0625000	39978 212	302542 417	0 132141	3 94	-1 5		
13	8 00	0 0156250	67799 235	269684 248	0 251402	7 97	-0 4		
14	16 0	0 00390625	168180 701	307211 309	0 547443	18 0	12 5		
15	40 0	0 000625000	336652 666	277844 823	1 211657	40 4	1 0		
16	80 0	0 000156250	580244 578	250501 801	2 316329	77 8	-2 8		
17	160	0 0000390625	1083905 546	237982 458	4 554561	154	-3 8		
18	200	0 0000250000	1531038 035	269525 595	5 680492	192	-4 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0295652514

Intercept = 0 0157755944

R-Squared = 0 9961

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Not Used (Interference)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 34
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1551412 021	264687 692	5 861293	1	198		197		0 9
2	0 00	1577044 064	270053 733	5 839742	1	197				
3	0 00	1612544 186	277746 465	5 805814	1	196				
4	0 00	1635046 522	275410 442	5 936763	1	200				
5	0 00	1662877 963	282573 719	5 884758	1	199				
48	0 00	1623611 238	276505 333	5 871898	1	198				
49	0 00	1664937 011	284944 896	5 843014	1	197				
92	0 00	1150449 998	198645 818	5 791463	1	195				
93	0 00	1267445 016	218838 896	5 791681	1	195				
33	3 00	26051 625	252755 667	0 103070	1	2 95	-1 7	2 94	-2 0	0 7
65	3 00	27605 928	270188 093	0 102173	1	2 92	-2 7			
40	37 5	294477 969	269508 55	1 092648	1	36 4	-2 9	35 8	-4 5	2 4
72	37 5	275524 775	260685 239	1 056925	1	35 2	-6 1			
47	150	1284159 659	284358 392	4 515990	1	152	1 3	176	17 3	19 3
90	150	864256 521	145531 343	5 938628	1	200	33 3			
26	780	527082 214	227540 487	2 316433	10	778	-0 3	792	1 5	1 8
57	780	636679 375	265394 92	2 398989	10	806	3 3			
81	780	558446 853	236698 078	2 359321	10	793	1 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 34
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	1 / Day 3 1h	354617 14	287898 18	1 231745	10	411	42	497170000419	AA90478-01 497170000419 009 N/A P3 Plasma-1 1 / Day 3 1h
009	N/A	2 / Day 3 2h	372741 951	285842 57	1 304011	10	436	43	497170000420	AA90478-01 497170000420 009 N/A P3 Plasma-1 2 / Day 3 2h
009	N/A	3 / Day 3 3h	339656 111	278150 279	1 221124	10	408	44	497170000421	AA90478-01 497170000421 009 N/A P3 Plasma-1 3 / Day 3 3h
009	N/A	4 / Day 3 4h	368368 228	287939 277	1 279326	10	427	45	497170000422	AA90478-01 497170000422 009 N/A P3 Plasma-1 4 / Day 3 4h
009	N/A	5 / Day 3 5h	342291 546	281614 791	1 215460	10	406	46	497170000423	AA90478-01 497170000423 009 N/A P3 Plasma-1 5 / Day 3 5h
009	N/A	6 / Day 3 6h	345019 118	300543 41	1 147984	10	383	50	497170000424	AA90478-01 497170000424 009 N/A P3 Plasma-1 6 / Day 3 6h
009	N/A	7 / Day 3 7h	326055 171	280597 956	1 162001	10	388	51	497170000425	AA90478-01 497170000425 009 N/A P3 Plasma-1 7 / Day 3 7h
009	N/A	8 / Day 3 8h	338227 532	288001 735	1 174394	10	392	52	497170000426	AA90478-01 497170000426 009 N/A P3 Plasma-1 8 / Day 3 8h
009	N/A	9 / Day 3 9h	325289 951	285063 402	1 141114	10	381	53	497170000427	AA90478-01 497170000427 009 N/A P3 Plasma-1 9 / Day 3 9h
009	N/A	10 / Day 3 10h	312394 584	270888 232	1 153223	10	385	54	497170000428	AA90478-01 497170000428 009 N/A P3 Plasma-1 10 / Day 3 10h
009	N/A	11 / Day 3 11h	320001 608	269535 524	1 187234	10	396	55	497170000429	AA90478-01 497170000429 009 N/A P3 Plasma-1 11 / Day 3 11h
009	N/A	12 / Day 3 12h	308097 649	275836 154	1 116959	10	372	56	497170000430	AA90478-01 497170000430 009 N/A P3 Plasma-1 12 / Day 3 12h
009	N/A	13 / Day 3 13h	308038 966	272163 411	1 131816	10	377	58	497170000431	AA90478-01 497170000431 009 N/A P3 Plasma-1 13 / Day 3 13h
009	N/A	14 / Day 3 14h	266080 191	251537 795	1 057814	10	352	59	497170000432	AA90478-01 497170000432 009 N/A P3 Plasma-1 14 / Day 3 14h
009	N/A	15 / Day 3 15h	295152 027	260993 683	1 130878	10	377	60	497170000433	AA90478-01 497170000433 009 N/A P3 Plasma-1 15 / Day 3 15h
009	N/A	16 / Day 3 16h	265390 399	244989 492	1 083273	10	361	61	497170000434	AA90478-01 497170000434 009 N/A P3 Plasma-1 16 / Day 3 16h
009	N/A	17 / Day 3 17h	270576 382	197657 202	1 368917	10	458	62	497170000435	AA90478-01 497170000435 009 N/A P3 Plasma-1 17 / Day 3 17h
009	N/A	18 / Day 3 18h	270054 263	251934 373	1 071923	10	357	63	497170000436	AA90478-01 497170000436 009 N/A P3 Plasma-1 18 / Day 3 18h
009	N/A	19 / Day 3 19h	283136 168	260560 047	1 086645	10	362	64	497170000437	AA90478-01 497170000437 009 N/A P3 Plasma-1 19 / Day 3 19h
011	N/A	6 / Day 3 6h	190773 794	259578 412	0 734937	10	243	66	497170000519	AA90478-01 497170000519 011 N/A P3 Plasma-1 6 / Day 3 6h
011	N/A	8 / Day 3 8h	164523 085	278017 87	0 591772	10	195	67	497170000521	AA90478-01 497170000521 011 N/A P3 Plasma-1 8 / Day 3 8h
011	N/A	9 / Day 3 9h	158430 368	251208 788	0 630672	10	208	68	497170000522	AA90478-01 497170000522 011 N/A P3 Plasma-1 9 / Day 3 9h
012	N/A	1 / Day 2 1h	179545 234	248223 311	0 723321	10	239	20	497170000628	AA90478-01 497170000628 012 N/A P2 Plasma-1 1 / Day 2 1h
012	N/A	2 / Day 2 2h	193840 84	265991 609	0 728748	10	241	21	497170000629	AA90478-01 497170000629 012 N/A P2 Plasma-1 2 / Day 2 2h
012	N/A	3 / Day 2 3h	183043 086	251060 358	0 729080	10	241	22	497170000630	AA90478-01 497170000630 012 N/A P2 Plasma-1 3 / Day 2 3h
012	N/A	4 / Day 2 4h	193119 987	264022 597	0 731452	10	242	23	497170000631	AA90478-01 497170000631 012 N/A P2 Plasma-1 4 / Day 2 4h
012	N/A	5 / Day 2 5h	166161 014	244680 394	0 679094	10	224	24	497170000632	AA90478-01 497170000632 012 N/A P2 Plasma-1 5 / Day 2 5h
012	N/A	6 / Day 2 6h	173272 966	259110 997	0 668721	10	221	25	497170000633	AA90478-01 497170000633 012 N/A P2 Plasma-1 6 / Day 2 6h
012	N/A	7 / Day 2 7h	202295 347	276074 144	0 732757	10	243	27	497170000634	AA90478-01 497170000634 012 N/A P2 Plasma-1 7 / Day 2 7h
012	N/A	8 / Day 2 8h	193289 767	268866 528	0 718906	10	238	28	497170000635	AA90478-01 497170000635 012 N/A P2 Plasma-1 8 / Day 2 8h
012	N/A	9 / Day 2 9h	186991 197	258118 44	0 724440	10	240	29	497170000636	AA90478-01 497170000636 012 N/A P2 Plasma-1 9 / Day 2 9h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	10 / Day 2 10h	187863 909	263305 315	0 713483	10	236	30	497170000637	AA90478-01 497170000637 012 N/A P2 Plasma-1 10 / Day 2 10h
012	N/A	11 / Day 2 11h	178838 104	249859 378	0 715755	10	237	31	497170000638	AA90478-01 497170000638 012 N/A P2 Plasma-1 11 / Day 2 11h
012	N/A	12 / Day 2 12h	197375 399	267274 53	0 738474	10	244	32	497170000639	AA90478-01 497170000639 012 N/A P2 Plasma-1 12 / Day 2 12h
012	N/A	13 / Day 2 13h	192901 02	272057 127	0 709046	10	234	34	497170000640	AA90478-01 497170000640 012 N/A P2 Plasma-1 13 / Day 2 13h
012	N/A	14 / Day 2 14h	195601 766	279531 803	0 699748	10	231	35	497170000641	AA90478-01 497170000641 012 N/A P2 Plasma-1 14 / Day 2 14h
012	N/A	15 / Day 2 15h	190290 665	276054 617	0 689323	10	228	36	497170000642	AA90478-01 497170000642 012 N/A P2 Plasma-1 15 / Day 2 15h
012	N/A	16 / Day 2 16h	205852 999	286061 344	0 719611	10	238	37	497170000643	AA90478-01 497170000643 012 N/A P2 Plasma-1 16 / Day 2 16h
012	N/A	17 / Day 2 17h	151207 551	219417 955	0 689130	10	228	38	497170000644	AA90478-01 497170000644 012 N/A P2 Plasma-1 17 / Day 2 17h
012	N/A	18 / Day 2 18h	191130 856	286829 073	0 666358	10	220	39	497170000645	AA90478-01 497170000645 012 N/A P2 Plasma-1 18 / Day 2 18h
012	N/A	19 / Day 2 19h	186461 596	280421 613	0 664933	10	220	41	497170000646	AA90478-01 497170000646 012 N/A P2 Plasma-1 19 / Day 2 19h
012	N/A	1 / Day 3 1h	248856 85	259913 274	0 957461	10	319	69	497170000609	AA90478-01 497170000609 012 N/A P3 Plasma-1 1 / Day 3 1h
012	N/A	2 / Day 3 2h	221464 09	260960 369	0 848650	10	282	70	497170000610	AA90478-01 497170000610 012 N/A P3 Plasma-1 2 / Day 3 2h
012	N/A	3 / Day 3 3h	244912 347	294065 279	0 832850	10	276	71	497170000611	AA90478-01 497170000611 012 N/A P3 Plasma-1 3 / Day 3 3h
012	N/A	4 / Day 3 4h	204372 272	250224 378	0 816756	10	271	73	497170000612	AA90478-01 497170000612 012 N/A P3 Plasma-1 4 / Day 3 4h
012	N/A	5 / Day 3 5h	240197 601	248278 504	0 967452	10	322	74	497170000613	AA90478-01 497170000613 012 N/A P3 Plasma-1 5 / Day 3 5h
012	N/A	6 / Day 3 6h	208478 074	251057 466	0 830400	10	276	75	497170000614	AA90478-01 497170000614 012 N/A P3 Plasma-1 6 / Day 3 6h
012	N/A	7 / Day 3 7h	217144 508	262157 701	0 828297	10	275	76	497170000615	AA90478-01 497170000615 012 N/A P3 Plasma-1 7 / Day 3 7h
012	N/A	8 / Day 3 8h	217077 012	265227 405	0 818456	10	271	77	497170000616	AA90478-01 497170000616 012 N/A P3 Plasma-1 8 / Day 3 8h
012	N/A	9 / Day 3 9h	192298 097	243087 37	0 791066	10	262	78	497170000617	AA90478-01 497170000617 012 N/A P3 Plasma-1 9 / Day 3 9h
012	N/A	10 / Day 3 10h	209807 185	245297 307	0 855318	10	284	79	497170000618	AA90478-01 497170000618 012 N/A P3 Plasma-1 10 / Day 3 10h
012	N/A	11 / Day 3 11h	201975 446	239193 248	0 844403	10	280	80	497170000619	AA90478-01 497170000619 012 N/A P3 Plasma-1 11 / Day 3 11h
012	N/A	12 / Day 3 12h	195257 48	234290 486	0 833399	10	277	82	497170000620	AA90478-01 497170000620 012 N/A P3 Plasma-1 12 / Day 3 12h
012	N/A	13 / Day 3 13h	171332 032	217076 171	0 789271	10	262	83	497170000621	AA90478-01 497170000621 012 N/A P3 Plasma-1 13 / Day 3 13h
012	N/A	14 / Day 3 14h	156495 482	210937 786	0 741904	10	246	84	497170000622	AA90478-01 497170000622 012 N/A P3 Plasma-1 14 / Day 3 14h
012	N/A	15 / Day 3 15h	157758 221	215674 442	0 731465	10	242	85	497170000623	AA90478-01 497170000623 012 N/A P3 Plasma-1 15 / Day 3 15h
012	N/A	16 / Day 3 16h	154568 792	217472 553	0 710751	10	235	86	497170000624	AA90478-01 497170000624 012 N/A P3 Plasma-1 16 / Day 3 16h
012	N/A	17 / Day 3 17h	163494 943	215401 294	0 759025	10	251	87	497170000625	AA90478-01 497170000625 012 N/A P3 Plasma-1 17 / Day 3 17h
012	N/A	18 / Day 3 18h	142194 57	199723 242	0 711958	10	235	88	497170000626	AA90478-01 497170000626 012 N/A P3 Plasma-1 18 / Day 3 18h
012	N/A	19 / Day 3 19h	143122 093	200298 337	0 714545	10	236	89	497170000627	AA90478-01 497170000627 012 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 35
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		6107 087	215389 451	0 028354	-0 00609		0 0177	189 8
9	0 00		7205 425	225187 423	0 031997	0 0414			
10	1 00	1 00000	23655 128	219835 944	*0 107604	*1 03			
11	2 00	0 250000	39783 651	222518 751	0 178788	1 95	-2 5		
12	4 00	0 0625000	79942 276	235385 198	0 339623	4 05	1 3		
13	8 00	0 0156250	128261 527	198045 788	0 647636	8 06	0 8		
14	16 0	0 00390625	273773 076	190671 071	1 435840	18 3	14 4		
15	40 0	0 000625000	664101 199	218289 55	3 042295	39 2	-2 0		
16	80 0	0 000156250	1349316 626	222518 981	6 063827	78 6	-1 8		
17	160	0 0000390625	2600424 971	220997 889	11 766741	153	-4 4		
18	200	0 0000250000	3051189 653	211007 693	14 460087	188	-6 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0767833740

Intercept = 0 0288213299

R-Squared = 0 9945

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Not Used (Interference)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 35
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	3088101 139	212237 588	14 550208	1	189		190		1 3
2	0 00	3192329 834	219321 103	14 555507	1	189				
3	0 00	3068081 273	213995 978	14 337098	1	186				
4	0 00	3183148 293	216350 185	14 712945	1	191				
5	0 00	3120690 518	213962 36	14 585231	1	190				
48	0 00	3521232 829	234579 695	15 010817	1	195				
49	0 00	3744739 048	254383 974	14 720814	1	191				
88	0 00	2986653 609	204553 778	14 600824	1	190				
89	0 00	3089338 536	210411 111	14 682393	1	191				
33	3 00	57233 667	216036 082	0 264926	1	3 07	2 3	3 03	1 0	1 9
65	3 00	61258 799	237370 563	0 258072	1	2 99	-0 3			
40	37 5	627432 738	227941 29	2 752607	1	35 5	-5 3	35 7	-4 8	0 6
72	37 5	553985 491	199560 646	2 776026	1	35 8	-4 5			
47	150	2587945 548	217417 582	11 903111	1	155	3 3	152	1 3	2 8
86	150	2334588 108	203939 095	11 447477	1	149	-0 7			
26	780	1455407 844	238321 474	6 106910	10	792	1 5	779	-0 1	1 4
57	780	1325200 539	222089 536	5 966965	10	773	-0 9			
79	780	1405428 597	235723 927	5 962180	10	773	-0 9			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 35
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	1 / Day 4 1h	292017 127	228571 634	1 277574	10	163	20	497170000115	AA90478-01 497170000115 003 N/A P4 Plasma-1 1 / Day 4 1h
003	N/A	4 / Day 4 4h	293336 193	223265 063	1 313847	10	167	21	497170000118	AA90478-01 497170000118 003 N/A P4 Plasma-1 4 / Day 4 4h
003	N/A	14 / Day 4 14h	255587 985	222233 513	1 150087	10	146	22	497170000128	AA90478-01 497170000128 003 N/A P4 Plasma-1 14 / Day 4 14h
003	N/A	1 / Day 5 1h	377229 123	218506 748	1 726396	10	221	23	497170000096	AA90478-01 497170000096 003 N/A P5 Plasma-1 1 / Day 5 1h
003	N/A	2 / Day 5 2h	420115 509	241287 536	1 741141	10	223	24	497170000097	AA90478-01 497170000097 003 N/A P5 Plasma-1 2 / Day 5 2h
003	N/A	3 / Day 5 3h	403111 766	223686 084	1 802132	10	231	25	497170000098	AA90478-01 497170000098 003 N/A P5 Plasma-1 3 / Day 5 3h
003	N/A	4 / Day 5 4h	435655 094	245516 797	1 774441	10	227	27	497170000099	AA90478-01 497170000099 003 N/A P5 Plasma-1 4 / Day 5 4h
003	N/A	5 / Day 5 5h	403282 165	226837 619	1 777845	10	228	28	497170000100	AA90478-01 497170000100 003 N/A P5 Plasma-1 5 / Day 5 5h
003	N/A	6 / Day 5 6h	396978 914	230081 031	1 725387	10	221	29	497170000101	AA90478-01 497170000101 003 N/A P5 Plasma-1 6 / Day 5 6h
003	N/A	7 / Day 5 7h	376828 563	224383 654	1 679394	10	215	30	497170000102	AA90478-01 497170000102 003 N/A P5 Plasma-1 7 / Day 5 7h
003	N/A	8 / Day 5 8h	415006 667	230718 714	1 798756	10	231	31	497170000103	AA90478-01 497170000103 003 N/A P5 Plasma-1 8 / Day 5 8h
003	N/A	9 / Day 5 9h	367770 699	219432 648	1 676007	10	215	32	497170000104	AA90478-01 497170000104 003 N/A P5 Plasma-1 9 / Day 5 9h
003	N/A	10 / Day 5 10h	392028 349	231264 432	1 695152	10	217	34	497170000105	AA90478-01 497170000105 003 N/A P5 Plasma-1 10 / Day 5 10h
003	N/A	11 / Day 5 11h	381998 336	232841 134	1 640596	10	210	35	497170000106	AA90478-01 497170000106 003 N/A P5 Plasma-1 11 / Day 5 11h
003	N/A	12 / Day 5 12h	397945 852	237918 798	1 672612	10	214	36	497170000107	AA90478-01 497170000107 003 N/A P5 Plasma-1 12 / Day 5 12h
003	N/A	13 / Day 5 13h	396442 921	239248 496	1 657034	10	212	37	497170000108	AA90478-01 497170000108 003 N/A P5 Plasma-1 13 / Day 5 13h
003	N/A	14 / Day 5 14h	367371 126	226518 856	1 621813	10	207	38	497170000109	AA90478-01 497170000109 003 N/A P5 Plasma-1 14 / Day 5 14h
003	N/A	15 / Day 5 15h	399113 757	251001 277	1 590087	10	203	39	497170000110	AA90478-01 497170000110 003 N/A P5 Plasma-1 15 / Day 5 15h
007	N/A	1 / Day 5 1h	591715 028	227863 618	2 596795	10	334	41	497170000286	AA90478-01 497170000286 007 N/A P5 Plasma-1 1 / Day 5 1h
007	N/A	2 / Day 5 2h	588149 3	232374 139	2 531045	10	326	42	497170000287	AA90478-01 497170000287 007 N/A P5 Plasma-1 2 / Day 5 2h
007	N/A	3 / Day 5 3h	666175 578	222510 429	2 993907	10	386	43	497170000288	AA90478-01 497170000288 007 N/A P5 Plasma-1 3 / Day 5 3h
007	N/A	4 / Day 5 4h	550245 29	233215 164	2 359389	10	304	44	497170000289	AA90478-01 497170000289 007 N/A P5 Plasma-1 4 / Day 5 4h
007	N/A	5 / Day 5 5h	605740 402	227131 064	2 666920	10	344	45	497170000290	AA90478-01 497170000290 007 N/A P5 Plasma-1 5 / Day 5 5h
007	N/A	6 / Day 5 6h	571378 817	227174 637	2 515152	10	324	46	497170000291	AA90478-01 497170000291 007 N/A P5 Plasma-1 6 / Day 5 6h
007	N/A	7 / Day 5 7h	529270 149	204607 734	2 586755	10	333	50	497170000292	AA90478-01 497170000292 007 N/A P5 Plasma-1 7 / Day 5 7h
007	N/A	8 / Day 5 8h	584682 837	220007 792	2 657555	10	342	51	497170000293	AA90478-01 497170000293 007 N/A P5 Plasma-1 8 / Day 5 8h
007	N/A	9 / Day 5 9h	565031 843	212918 19	2 653751	10	342	52	497170000294	AA90478-01 497170000294 007 N/A P5 Plasma-1 9 / Day 5 9h
007	N/A	10 / Day 5 10h	567703 246	216191 694	2 625925	10	338	53	497170000295	AA90478-01 497170000295 007 N/A P5 Plasma-1 10 / Day 5 10h
007	N/A	11 / Day 5 11h	530306 967	207817 264	2 551795	10	329	54	497170000296	AA90478-01 497170000296 007 N/A P5 Plasma-1 11 / Day 5 11h
007	N/A	12 / Day 5 12h	562814 315	208382 958	2 700865	10	348	55	497170000297	AA90478-01 497170000297 007 N/A P5 Plasma-1 12 / Day 5 12h
007	N/A	13 / Day 5 13h	571083 587	218975 422	2 607980	10	336	56	497170000298	AA90478-01 497170000298 007 N/A P5 Plasma-1 13 / Day 5 13h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	14 / Day 5 14h	571207 328	211892 524	2 695741	10	347	58	497170000299	AA90478-01 497170000299 007 N/A P5 Plasma-1 14 / Day 5 14h
007	N/A	15 / Day 5 15h	460183 181	176078 771	2 613507	10	337	59	497170000300	AA90478-01 497170000300 007 N/A P5 Plasma-1 15 / Day 5 15h
007	N/A	16 / Day 5 16h	516555 6	210763 605	2 450877	10	315	60	497170000301	AA90478-01 497170000301 007 N/A P5 Plasma-1 16 / Day 5 16h
007	N/A	17 / Day 5 17h	539177 415	217190 054	2 482514	10	320	61	497170000302	AA90478-01 497170000302 007 N/A P5 Plasma-1 17 / Day 5 17h
007	N/A	18 / Day 5 18h	548187 146	220605 149	2 484925	10	320	62	497170000303	AA90478-01 497170000303 007 N/A P5 Plasma-1 18 / Day 5 18h
007	N/A	19 / Day 5 19h	491613 803	206661 485	2 378836	10	306	63	497170000304	AA90478-01 497170000304 007 N/A P5 Plasma-1 19 / Day 5 19h
009	N/A	1 / Day 5 1h	648969 472	209274 12	3 101050	10	400	64	497170000381	AA90478-01 497170000381 009 N/A P5 Plasma-1 1 / Day 5 1h
009	N/A	2 / Day 5 2h	637617 788	219559 22	2 904081	10	374	66	497170000382	AA90478-01 497170000382 009 N/A P5 Plasma-1 2 / Day 5 2h
009	N/A	3 / Day 5 3h	624896 625	208303 13	2 999939	10	387	67	497170000383	AA90478-01 497170000383 009 N/A P5 Plasma-1 3 / Day 5 3h
009	N/A	4 / Day 5 4h	616428 407	202292 429	3 047214	10	393	68	497170000384	AA90478-01 497170000384 009 N/A P5 Plasma-1 4 / Day 5 4h
009	N/A	5 / Day 5 5h	649875 862	218276 821	2 977301	10	384	69	497170000385	AA90478-01 497170000385 009 N/A P5 Plasma-1 5 / Day 5 5h
009	N/A	6 / Day 5 6h	639636 268	200703 056	3 186978	10	411	70	497170000386	AA90478-01 497170000386 009 N/A P5 Plasma-1 6 / Day 5 6h
009	N/A	7 / Day 5 7h	616758 098	207003 221	2 979461	10	384	71	497170000387	AA90478-01 497170000387 009 N/A P5 Plasma-1 7 / Day 5 7h
009	N/A	8 / Day 5 8h	655799 009	204240 513	3 210915	10	414	73	497170000388	AA90478-01 497170000388 009 N/A P5 Plasma-1 8 / Day 5 8h
009	N/A	9 / Day 5 9h	628301 423	209476 001	2 999396	10	387	74	497170000389	AA90478-01 497170000389 009 N/A P5 Plasma-1 9 / Day 5 9h
009	N/A	10 / Day 5 10h	595513 642	200972 534	2 963159	10	382	75	497170000390	AA90478-01 497170000390 009 N/A P5 Plasma-1 10 / Day 5 10h
009	N/A	11 / Day 5 11h	573006 965	188295 882	3 043120	10	393	76	497170000391	AA90478-01 497170000391 009 N/A P5 Plasma-1 11 / Day 5 11h
009	N/A	12 / Day 5 12h	582851 209	202724 922	2 875084	10	371	77	497170000392	AA90478-01 497170000392 009 N/A P5 Plasma-1 12 / Day 5 12h
009	N/A	13 / Day 5 13h	588703 363	205136 539	2 869812	10	370	78	497170000393	AA90478-01 497170000393 009 N/A P5 Plasma-1 13 / Day 5 13h
009	N/A	14 / Day 5 14h	597100 197	198359 555	3 010191	10	388	80	497170000394	AA90478-01 497170000394 009 N/A P5 Plasma-1 14 / Day 5 14h
009	N/A	15 / Day 5 15h	547785 621	188838 337	2 900818	10	374	81	497170000395	AA90478-01 497170000395 009 N/A P5 Plasma-1 15 / Day 5 15h
009	N/A	16 / Day 5 16h	574825 871	195393 581	2 941887	10	379	82	497170000396	AA90478-01 497170000396 009 N/A P5 Plasma-1 16 / Day 5 16h
009	N/A	17 / Day 5 17h	557232 999	188242 689	2 960184	10	382	83	497170000397	AA90478-01 497170000397 009 N/A P5 Plasma-1 17 / Day 5 17h
009	N/A	18 / Day 5 18h	553144 477	197483 725	2 800962	10	361	84	497170000398	AA90478-01 497170000398 009 N/A P5 Plasma-1 18 / Day 5 18h
009	N/A	19 / Day 5 19h	576820 483	195230 528	2 954561	10	381	85	497170000399	AA90478-01 497170000399 009 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 36
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		6170 686	198415 386	0 031100	-0 105		-0 0812	-41 5
9	0 00		5938 576	171084 105	0 034711	-0 0573			
10	1 00	1 00000	21162 939	200960 565	*0 105309	*0 879			
11	2 00	0 250000	37715 063	195645 285	0 192773	2 04	2 0		
12	4 00	0 0625000	69731 694	218809 825	0 318686	3 71	-7 3		
13	8 00	0 0156250	150804 787	232242 956	0 649341	8 09	1 1		
14	16 0	0 00390625	292397 758	209843 577	1 393408	18 0	12 5		
15	40 0	0 000625000	609588 617	198989 388	3 063423	40 1	0 3		
16	80 0	0 000156250	1160870 94	194213 332	5 977298	78 7	-1 6		
17	160	0 0000390625	2494718 087	210673 844	11 841613	157	-1 9		
18	200	0 0000250000	2748528 371	190347 506	14 439529	191	-4 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0754157624

Intercept = 0 0390337660

R-Squared = 0 9954

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Not Used (Interference)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 36
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	3391318 77	231609 531	14 642397	1	194		194		1 5
2	0 00	3299941 312	226606 34	14 562440	1	193				
3	0 00	3237901 25	222863 881	14 528605	1	192				
4	0 00	3274218 918	224502 875	14 584307	1	193				
5	0 00	3073371 564	209408 422	14 676447	1	194				
93	0 00	3260777 327	225886 071	14 435495	1	191				
94	0 00	2870946 478	190101 142	15 102205	1	200				
33	3 00	52549 292	196450 423	0 267494	1	3 03	1 0	3 05	1 7	0 9
66	3 00	49362 404	182456 256	0 270544	1	3 07	2 3			
40	37 5	510537 732	185312 377	2 755012	1	36 0	-4 0	35 7	-4 8	1 2
73	37 5	526600 861	194319 07	2 709980	1	35 4	-5 6			
47	150	2397984 182	208483 002	11 502061	1	152	1 3	154	2 7	1 4
91	150	2160774 649	184696 417	11 699061	1	155	3 3			
26	780	1230429 053	199687 073	6 161786	10	812	4 1	813	4 2	0 8
57	780	1207845 971	197211 423	6 124625	10	807	3 5			
83	780	1324405 023	212762 946	6 224792	10	820	5 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 36
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 4 1h	433220 433	181735 383	2 383798	10	311	20	497170000305	AA90478-01 497170000305 007 N/A P4 Plasma-1 1 / Day 4 1h
007	N/A	2 / Day 4 2h	472871 905	188006 258	2 515192	10	328	21	497170000306	AA90478-01 497170000306 007 N/A P4 Plasma-1 2 / Day 4 2h
007	N/A	3 / Day 4 3h	486357 788	185777 125	2 617964	10	342	22	497170000307	AA90478-01 497170000307 007 N/A P4 Plasma-1 3 / Day 4 3h
007	N/A	4 / Day 4 4h	495187 262	203334 732	2 435330	10	318	23	497170000308	AA90478-01 497170000308 007 N/A P4 Plasma-1 4 / Day 4 4h
007	N/A	5 / Day 4 5h	446459 405	179453 273	2 487887	10	325	24	497170000309	AA90478-01 497170000309 007 N/A P4 Plasma-1 5 / Day 4 5h
007	N/A	6 / Day 4 6h	498996 225	203667 961	2 450048	10	320	25	497170000310	AA90478-01 497170000310 007 N/A P4 Plasma-1 6 / Day 4 6h
007	N/A	7 / Day 4 7h	484072 975	197822 517	2 447006	10	319	27	497170000311	AA90478-01 497170000311 007 N/A P4 Plasma-1 7 / Day 4 7h
007	N/A	8 / Day 4 8h	474759 026	194772 545	2 437505	10	318	28	497170000312	AA90478-01 497170000312 007 N/A P4 Plasma-1 8 / Day 4 8h
007	N/A	9 / Day 4 9h	580806 076	234175 474	2 480217	10	324	29	497170000313	AA90478-01 497170000313 007 N/A P4 Plasma-1 9 / Day 4 9h
007	N/A	10 / Day 4 10h	517476 922	203285 006	2 545573	10	332	30	497170000314	AA90478-01 497170000314 007 N/A P4 Plasma-1 10 / Day 4 10h
007	N/A	11 / Day 4 11h	497603 47	205813 233	2 417743	10	315	31	497170000315	AA90478-01 497170000315 007 N/A P4 Plasma-1 11 / Day 4 11h
007	N/A	12 / Day 4 12h	494825 889	198489 772	2 492954	10	325	32	497170000316	AA90478-01 497170000316 007 N/A P4 Plasma-1 12 / Day 4 12h
007	N/A	13 / Day 4 13h	475806 941	198941 198	2 391696	10	312	34	497170000317	AA90478-01 497170000317 007 N/A P4 Plasma-1 13 / Day 4 13h
007	N/A	14 / Day 4 14h	546106 793	237879 701	2 295727	10	299	35	497170000318	AA90478-01 497170000318 007 N/A P4 Plasma-1 14 / Day 4 14h
007	N/A	15 / Day 4 15h	460320 098	196320 761	2 344735	10	306	36	497170000319	AA90478-01 497170000319 007 N/A P4 Plasma-1 15 / Day 4 15h
007	N/A	16 / Day 4 16h	449487 055	204706 398	2 195765	10	286	37	497170000320	AA90478-01 497170000320 007 N/A P4 Plasma-1 16 / Day 4 16h
007	N/A	17 / Day 4 17h	464274 056	197139 961	2 355048	10	307	38	497170000321	AA90478-01 497170000321 007 N/A P4 Plasma-1 17 / Day 4 17h
007	N/A	18 / Day 4 18h	461339 201	203340 856	2 268797	10	296	39	497170000322	AA90478-01 497170000322 007 N/A P4 Plasma-1 18 / Day 4 18h
007	N/A	19 / Day 4 19h	419755 443	185558 877	2 262115	10	295	41	497170000323	AA90478-01 497170000323 007 N/A P4 Plasma-1 19 / Day 4 19h
009	N/A	1 / Day 4 1h	562553 62	204443 834	2 751629	10	360	42	497170000400	AA90478-01 497170000400 009 N/A P4 Plasma-1 1 / Day 4 1h
009	N/A	2 / Day 4 2h	549555 288	182689 678	3 008135	10	394	43	497170000401	AA90478-01 497170000401 009 N/A P4 Plasma-1 2 / Day 4 2h
009	N/A	3 / Day 4 3h	537096 568	173629 915	*3 093341	10	*405	44	497170000402	AA90478-01 497170000402 009 N/A P4 Plasma-1 3 / Day 4 3h
009	N/A	4 / Day 4 4h	559424 696	190788 957	2 932165	10	384	45	497170000403	AA90478-01 497170000403 009 N/A P4 Plasma-1 4 / Day 4 4h
009	N/A	5 / Day 4 5h	564111 659	193169 466	2 920294	10	382	46	497170000404	AA90478-01 497170000404 009 N/A P4 Plasma-1 5 / Day 4 5h
009	N/A	6 / Day 4 6h	572917 486	197694 981	2 897987	10	379	48	497170000405	AA90478-01 497170000405 009 N/A P4 Plasma-1 6 / Day 4 6h
009	N/A	7 / Day 4 7h	618222 183	216768 307	2 851995	10	373	49	497170000406	AA90478-01 497170000406 009 N/A P4 Plasma-1 7 / Day 4 7h
009	N/A	8 / Day 4 8h	545078 591	188943 916	2 884870	10	377	50	497170000407	AA90478-01 497170000407 009 N/A P4 Plasma-1 8 / Day 4 8h
009	N/A	9 / Day 4 9h	547712 385	199605 869	2 743969	10	359	51	497170000408	AA90478-01 497170000408 009 N/A P4 Plasma-1 9 / Day 4 9h
009	N/A	10 / Day 4 10h	575367 451	195954 6	2 936228	10	384	52	497170000409	AA90478-01 497170000409 009 N/A P4 Plasma-1 10 / Day 4 10h
009	N/A	10 / Day 4 10h	4439271 968	155233 5	*28 597384	1	*AAR>(200)	53	497170000409	AA90478-01 497170000409 009 N/A P4 Plasma-1 10 / Day 4 10h
009	N/A	11 / Day 4 11h	526891 584	196594 435	2 680094	10	350	54	497170000410	AA90478-01 497170000410 009 N/A P4 Plasma-1 11 / Day 4 11h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	12 / Day 4 12h	505337 298	188543 181	2 680220	10	350	55	497170000411	AA90478-01 497170000411 009 N/A P4 Plasma-1 12 / Day 4 12h
009	N/A	12 / Day 4 12h	4798526 68	182326 483	*26 318320	1	*AAR>(200)	56	497170000411	AA90478-01 497170000411 009 N/A P4 Plasma-1 12 / Day 4 12h
009	N/A	13 / Day 4 13h	575307 51	225521 323	2 551012	10	333	58	497170000412	AA90478-01 497170000412 009 N/A P4 Plasma-1 13 / Day 4 13h
009	N/A	14 / Day 4 14h	517191 383	197154 961	2 623273	10	343	59	497170000413	AA90478-01 497170000413 009 N/A P4 Plasma-1 14 / Day 4 14h
009	N/A	14 / Day 4 14h	4416283 729	162325 666	*27 206318	1	*AAR>(200)	60	497170000413	AA90478-01 497170000413 009 N/A P4 Plasma-1 14 / Day 4 14h
009	N/A	15 / Day 4 15h	544848 176	206984 422	2 632315	10	344	61	497170000414	AA90478-01 497170000414 009 N/A P4 Plasma-1 15 / Day 4 15h
009	N/A	16 / Day 4 16h	498241 833	191758 825	2 598273	10	339	62	497170000415	AA90478-01 497170000415 009 N/A P4 Plasma-1 16 / Day 4 16h
009	N/A	17 / Day 4 17h	619385 243	224880 14	2 754291	10	360	63	497170000416	AA90478-01 497170000416 009 N/A P4 Plasma-1 17 / Day 4 17h
009	N/A	18 / Day 4 18h	535616 201	184986 659	2 895432	10	379	64	497170000417	AA90478-01 497170000417 009 N/A P4 Plasma-1 18 / Day 4 18h
009	N/A	19 / Day 4 19h	499240 123	195671 273	2 551423	10	333	65	497170000418	AA90478-01 497170000418 009 N/A P4 Plasma-1 19 / Day 4 19h
012	N/A	1 / Day 4 1h	411509 078	194155 195	2 119485	10	276	67	497170000590	AA90478-01 497170000590 012 N/A P4 Plasma-1 1 / Day 4 1h
012	N/A	2 / Day 4 2h	451143 526	197905 256	2 279593	10	297	68	497170000591	AA90478-01 497170000591 012 N/A P4 Plasma-1 2 / Day 4 2h
012	N/A	3 / Day 4 3h	403358 835	196444 485	2 053297	10	267	69	497170000592	AA90478-01 497170000592 012 N/A P4 Plasma-1 3 / Day 4 3h
012	N/A	4 / Day 4 4h	387524 07	186541 384	2 077416	10	270	70	497170000593	AA90478-01 497170000593 012 N/A P4 Plasma-1 4 / Day 4 4h
012	N/A	5 / Day 4 5h	418122 374	207535 069	2 014707	10	262	71	497170000594	AA90478-01 497170000594 012 N/A P4 Plasma-1 5 / Day 4 5h
012	N/A	6 / Day 4 6h	400977 84	191030 802	2 099022	10	273	72	497170000595	AA90478-01 497170000595 012 N/A P4 Plasma-1 6 / Day 4 6h
012	N/A	7 / Day 4 7h	468225 987	232326 713	2 015377	10	262	74	497170000596	AA90478-01 497170000596 012 N/A P4 Plasma-1 7 / Day 4 7h
012	N/A	8 / Day 4 8h	373748 04	181479 832	2 059447	10	268	75	497170000597	AA90478-01 497170000597 012 N/A P4 Plasma-1 8 / Day 4 8h
012	N/A	9 / Day 4 9h	433619 972	206167 685	2 103239	10	274	76	497170000598	AA90478-01 497170000598 012 N/A P4 Plasma-1 9 / Day 4 9h
012	N/A	10 / Day 4 10h	467910 814	235862 001	1 983833	10	258	77	497170000599	AA90478-01 497170000599 012 N/A P4 Plasma-1 10 / Day 4 10h
012	N/A	11 / Day 4 11h	330307 82	163009 996	2 026304	10	264	78	497170000600	AA90478-01 497170000600 012 N/A P4 Plasma-1 11 / Day 4 11h
012	N/A	12 / Day 4 12h	380523 045	187712 677	2 027157	10	264	79	497170000601	AA90478-01 497170000601 012 N/A P4 Plasma-1 12 / Day 4 12h
012	N/A	13 / Day 4 13h	381838 556	190187 935	2 007691	10	261	80	497170000602	AA90478-01 497170000602 012 N/A P4 Plasma-1 13 / Day 4 13h
012	N/A	14 / Day 4 14h	368572 908	182505 187	2 019520	10	263	81	497170000603	AA90478-01 497170000603 012 N/A P4 Plasma-1 14 / Day 4 14h
012	N/A	15 / Day 4 15h	381535 586	186661 362	2 043999	10	266	82	497170000604	AA90478-01 497170000604 012 N/A P4 Plasma-1 15 / Day 4 15h
012	N/A	16 / Day 4 16h	385824 713	202961 878	1 900971	10	247	84	497170000605	AA90478-01 497170000605 012 N/A P4 Plasma-1 16 / Day 4 16h
012	N/A	17 / Day 4 17h	374582 972	198881 907	1 883444	10	245	85	497170000606	AA90478-01 497170000606 012 N/A P4 Plasma-1 17 / Day 4 17h
012	N/A	18 / Day 4 18h	378227 86	208785 762	1 811560	10	235	86	497170000607	AA90478-01 497170000607 012 N/A P4 Plasma-1 18 / Day 4 18h
012	N/A	19 / Day 4 19h	372421 33	191096 908	1 948861	10	253	87	497170000608	AA90478-01 497170000608 012 N/A P4 Plasma-1 19 / Day 4 19h
013	N/A	9 / Day 4 9h	829190 546	152152 235	5 449743	1	71 7	88	497170000693	AA90478-01 497170000693 013 N/A P4 Plasma-1 9 / Day 4 9h
021	N/A	7 / Day 2 7h	1672303 317	173808 11	9 621549	1	127	89	497170001109	AA90478-01 497170001109 021 N/A P2 Plasma-1 7 / Day 2 7h
021	N/A	16 / Day 2 16h	1747580 343	176274 476	9 913973	1	131	90	497170001118	AA90478-01 497170001118 021 N/A P2 Plasma-1 16 / Day 2 16h

Response Type = Area Ratio

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

BLQ - Concentration Found is Less than 2.00 (Lowest Standard)
AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 37
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		5636 719	208429 928	0 027044	0 000679		0 0495	139 4
9	0 00		7561 21	218643 078	0 034582	0 0983			
10	1 00	1 00000	20877 242	208897 253	*0 099940	*0 945			
11	2 00	0 250000	40216 602	224293 749	0 179303	1 97	-1 5		
12	4 00	0 0625000	74167 161	223662 756	0 331603	3 95	-1 3		
13	8 00	0 0156250	146551 81	220855 695	0 663564	8 25	3 1		
14	16 0	0 00390625	298198 54	212177 346	1 405421	17 9	11 9		
15	40 0	0 000625000	682683 027	222647 217	3 066210	39 4	-1 5		
16	80 0	0 000156250	1302994 588	214980 961	6 060977	78 2	-2 3		
17	160	0 0000390625	2874337 687	241464 934	11 903748	154	-3 8		
18	200	0 0000250000	3222796 502	217944 255	14 787251	191	-4 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0771835278

Intercept = 0 0269916175

R-Squared = 0 9963

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Reason for Deactivation of Sample

* Not Used (Interference)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 37
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	2801607 616	189749 476	14 764771	1	191		192		0 5
2	0 00	2974873 959	201774 865	14 743531	1	191				
3	0 00	2759095 216	186304 824	14 809575	1	192				
4	0 00	2872422 284	195203 255	14 715033	1	190				
5	0 00	2907354 587	195665 422	14 858806	1	192				
49	0 00	2897697 249	195521 795	14 820329	1	192				
50	0 00	2878014 587	195078 17	14 753135	1	191				
93	0 00	3049869 987	205624	14 832267	1	192				
94	0 00	2855880	191763 15	14 892747	1	193				
34	3 00	58011 076	224974 034	0 257857	1	2 99	-0 3	3 01	0 3	0 9
65	3 00	51258 001	196346 839	0 261058	1	3 03	1 0			
41	37 5	537775 781	188776 044	2 848750	1	36 6	-2 4	35 8	-4 5	3 2
72	37 5	491436 357	180307 584	2 725545	1	35 0	-6 7			
48	150	2324012 062	192596 859	12 066718	1	156	4 0	152	1 3	3 7
91	150	2265667 126	198136 687	11 434869	1	148	-1 3			
26	780	1239635 54	210025 061	5 902322	10	761	-2 4	774	-0 8	1 5
57	780	1171064 572	192955 542	6 069090	10	783	0 4			
82	780	1170755 463	193902 35	6 037861	10	779	-0 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 37
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	7 / Day 2 7h	225132 796	189620 83	1 187279	10	150	62	497170001014	AA90478-01 497170001014 019 N/A P2 Plasma-1 7 / Day 2 7h
024	N/A	1 / Day 4 1h	391406 808	213392 255	1 834213	10	234	20	497170001160	AA90478-01 497170001160 024 N/A P4 Plasma-1 1 / Day 4 1h
024	N/A	2 / Day 4 2h	420322 294	238535 581	1 762095	10	225	21	497170001161	AA90478-01 497170001161 024 N/A P4 Plasma-1 2 / Day 4 2h
024	N/A	3 / Day 4 3h	377388 675	213531 256	1 767370	10	225	22	497170001162	AA90478-01 497170001162 024 N/A P4 Plasma-1 3 / Day 4 3h
024	N/A	4 / Day 4 4h	369032 754	204863 001	1 801364	10	230	23	497170001163	AA90478-01 497170001163 024 N/A P4 Plasma-1 4 / Day 4 4h
024	N/A	5 / Day 4 5h	358183 746	208426 026	1 718517	10	219	24	497170001164	AA90478-01 497170001164 024 N/A P4 Plasma-1 5 / Day 4 5h
024	N/A	6 / Day 4 6h	358434 602	219340 464	1 634147	10	208	25	497170001165	AA90478-01 497170001165 024 N/A P4 Plasma-1 6 / Day 4 6h
024	N/A	7 / Day 4 7h	374709 907	216193 063	1 733219	10	221	27	497170001166	AA90478-01 497170001166 024 N/A P4 Plasma-1 7 / Day 4 7h
024	N/A	8 / Day 4 8h	343661 896	202303 279	1 698746	10	217	28	497170001167	AA90478-01 497170001167 024 N/A P4 Plasma-1 8 / Day 4 8h
024	N/A	9 / Day 4 9h	361259 942	214138 696	1 687037	10	215	29	497170001168	AA90478-01 497170001168 024 N/A P4 Plasma-1 9 / Day 4 9h
024	N/A	10 / Day 4 10h	335133 721	197288 194	1 698701	10	217	30	497170001169	AA90478-01 497170001169 024 N/A P4 Plasma-1 10 / Day 4 10h
024	N/A	11 / Day 4 11h	353636 615	208503 032	1 696074	10	216	31	497170001170	AA90478-01 497170001170 024 N/A P4 Plasma-1 11 / Day 4 11h
024	N/A	12 / Day 4 12h	403610 573	236751 068	1 704789	10	217	32	497170001171	AA90478-01 497170001171 024 N/A P4 Plasma-1 12 / Day 4 12h
024	N/A	13 / Day 4 13h	362990 286	216017 049	1 680378	10	214	33	497170001172	AA90478-01 497170001172 024 N/A P4 Plasma-1 13 / Day 4 13h
024	N/A	14 / Day 4 14h	395860 447	231492 322	1 710037	10	218	35	497170001173	AA90478-01 497170001173 024 N/A P4 Plasma-1 14 / Day 4 14h
024	N/A	15 / Day 4 15h	345528 266	215094 537	1 606402	10	205	36	497170001174	AA90478-01 497170001174 024 N/A P4 Plasma-1 15 / Day 4 15h
024	N/A	19 / Day 4 19h	273786 537	176460 382	1 551547	10	198	37	497170001178	AA90478-01 497170001178 024 N/A P4 Plasma-1 19 / Day 4 19h
024	N/A	1 / Day 5 1h	336913 358	192074 257	1 754079	10	224	63	497170001141	AA90478-01 497170001141 024 N/A P5 Plasma-1 1 / Day 5 1h
024	N/A	2 / Day 5 2h	333116 281	195226 341	1 706308	10	218	64	497170001142	AA90478-01 497170001142 024 N/A P5 Plasma-1 2 / Day 5 2h
024	N/A	3 / Day 5 3h	327871 195	191976 712	1 707870	10	218	66	497170001143	AA90478-01 497170001143 024 N/A P5 Plasma-1 3 / Day 5 3h
024	N/A	4 / Day 5 4h	341482 755	188610 88	1 810515	10	231	67	497170001144	AA90478-01 497170001144 024 N/A P5 Plasma-1 4 / Day 5 4h
024	N/A	5 / Day 5 5h	347025 489	202923 709	1 710128	10	218	68	497170001145	AA90478-01 497170001145 024 N/A P5 Plasma-1 5 / Day 5 5h
024	N/A	6 / Day 5 6h	341433 266	200988 831	1 698767	10	217	69	497170001146	AA90478-01 497170001146 024 N/A P5 Plasma-1 6 / Day 5 6h
024	N/A	7 / Day 5 7h	313406 335	177775 564	1 762933	10	225	70	497170001147	AA90478-01 497170001147 024 N/A P5 Plasma-1 7 / Day 5 7h
024	N/A	8 / Day 5 8h	317005 084	190389 145	1 665038	10	212	71	497170001148	AA90478-01 497170001148 024 N/A P5 Plasma-1 8 / Day 5 8h
024	N/A	9 / Day 5 9h	374085 595	225442 178	1 659342	10	211	73	497170001149	AA90478-01 497170001149 024 N/A P5 Plasma-1 9 / Day 5 9h
024	N/A	10 / Day 5 10h	320201 278	178013 136	1 798751	10	230	74	497170001150	AA90478-01 497170001150 024 N/A P5 Plasma-1 10 / Day 5 10h
024	N/A	11 / Day 5 11h	351840 03	201180 955	1 748873	10	223	75	497170001151	AA90478-01 497170001151 024 N/A P5 Plasma-1 11 / Day 5 11h
024	N/A	12 / Day 5 12h	305214 331	186706 51	1 634728	10	208	76	497170001152	AA90478-01 497170001152 024 N/A P5 Plasma-1 12 / Day 5 12h
024	N/A	13 / Day 5 13h	329278 062	196070 521	1 679386	10	214	77	497170001153	AA90478-01 497170001153 024 N/A P5 Plasma-1 13 / Day 5 13h
024	N/A	14 / Day 5 14h	299521 704	184333 64	1 624889	10	207	78	497170001154	AA90478-01 497170001154 024 N/A P5 Plasma-1 14 / Day 5 14h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	15 / Day 5 15h	305663 542	203035 976	1 505465	10	192	79	497170001155	AA90478-01 497170001155 024 N/A P5 Plasma-1 15 / Day 5 15h
028	N/A	1 / Day 4 1h	398733 093	185053 284	2 154693	10	276	38	497170001350	AA90478-01 497170001350 028 N/A P4 Plasma-1 1 / Day 4 1h
028	N/A	2 / Day 4 2h	398940 872	186040 186	2 144380	10	274	39	497170001351	AA90478-01 497170001351 028 N/A P4 Plasma-1 2 / Day 4 2h
028	N/A	3 / Day 4 3h	436844 99	199849 01	2 185875	10	280	40	497170001352	AA90478-01 497170001352 028 N/A P4 Plasma-1 3 / Day 4 3h
028	N/A	4 / Day 4 4h	460556 572	217977 688	2 112861	10	270	42	497170001353	AA90478-01 497170001353 028 N/A P4 Plasma-1 4 / Day 4 4h
028	N/A	5 / Day 4 5h	408370 952	198657 223	2 055656	10	263	43	497170001354	AA90478-01 497170001354 028 N/A P4 Plasma-1 5 / Day 4 5h
028	N/A	6 / Day 4 6h	451780 34	208413 301	2 167714	10	277	44	497170001355	AA90478-01 497170001355 028 N/A P4 Plasma-1 6 / Day 4 6h
028	N/A	7 / Day 4 7h	427898 809	201415 688	2 124456	10	272	45	497170001356	AA90478-01 497170001356 028 N/A P4 Plasma-1 7 / Day 4 7h
028	N/A	8 / Day 4 8h	391758 607	179890 609	2 177760	10	279	46	497170001357	AA90478-01 497170001357 028 N/A P4 Plasma-1 8 / Day 4 8h
028	N/A	9 / Day 4 9h	409242 027	188917 548	2 166247	10	277	47	497170001358	AA90478-01 497170001358 028 N/A P4 Plasma-1 9 / Day 4 9h
028	N/A	10 / Day 4 10h	405560 33	194686 205	2 083149	10	266	51	497170001359	AA90478-01 497170001359 028 N/A P4 Plasma-1 10 / Day 4 10h
028	N/A	11 / Day 4 11h	421861 471	194241 437	2 171841	10	278	52	497170001360	AA90478-01 497170001360 028 N/A P4 Plasma-1 11 / Day 4 11h
028	N/A	12 / Day 4 12h	331603 901	168925 786	1 963015	10	251	53	497170001361	AA90478-01 497170001361 028 N/A P4 Plasma-1 12 / Day 4 12h
028	N/A	13 / Day 4 13h	375734 822	189418 636	1 983621	10	254	54	497170001362	AA90478-01 497170001362 028 N/A P4 Plasma-1 13 / Day 4 13h
028	N/A	14 / Day 4 14h	403733 091	203634 616	1 982635	10	253	55	497170001363	AA90478-01 497170001363 028 N/A P4 Plasma-1 14 / Day 4 14h
028	N/A	15 / Day 4 15h	381710 167	191432 607	1 993966	10	255	56	497170001364	AA90478-01 497170001364 028 N/A P4 Plasma-1 15 / Day 4 15h
028	N/A	16 / Day 4 16h	374621 811	196276 591	1 908642	10	244	58	497170001365	AA90478-01 497170001365 028 N/A P4 Plasma-1 16 / Day 4 16h
028	N/A	17 / Day 4 17h	370196 502	192574 255	1 922357	10	246	59	497170001366	AA90478-01 497170001366 028 N/A P4 Plasma-1 17 / Day 4 17h
028	N/A	18 / Day 4 18h	358575 14	189971 941	1 887516	10	241	60	497170001367	AA90478-01 497170001367 028 N/A P4 Plasma-1 18 / Day 4 18h
028	N/A	19 / Day 4 19h	340241 642	190494 012	1 786102	10	228	61	497170001368	AA90478-01 497170001368 028 N/A P4 Plasma-1 19 / Day 4 19h
028	N/A	1 / Day 5 1h	413225 316	187154 735	2 207934	10	283	80	497170001331	AA90478-01 497170001331 028 N/A P5 Plasma-1 1 / Day 5 1h
028	N/A	2 / Day 5 2h	461644 319	205759 531	2 243611	10	287	81	497170001332	AA90478-01 497170001332 028 N/A P5 Plasma-1 2 / Day 5 2h
028	N/A	3 / Day 5 3h	441564 294	205625 537	2 147420	10	275	83	497170001333	AA90478-01 497170001333 028 N/A P5 Plasma-1 3 / Day 5 3h
028	N/A	4 / Day 5 4h	419254 642	201164 721	2 084136	10	267	84	497170001334	AA90478-01 497170001334 028 N/A P5 Plasma-1 4 / Day 5 4h
028	N/A	5 / Day 5 5h	426508 589	202705 595	2 104079	10	269	85	497170001335	AA90478-01 497170001335 028 N/A P5 Plasma-1 5 / Day 5 5h
028	N/A	6 / Day 5 6h	418694 257	201154 547	2 081456	10	266	86	497170001336	AA90478-01 497170001336 028 N/A P5 Plasma-1 6 / Day 5 6h
028	N/A	7 / Day 5 7h	439199 31	206658 813	2 125239	10	272	87	497170001337	AA90478-01 497170001337 028 N/A P5 Plasma-1 7 / Day 5 7h
028	N/A	8 / Day 5 8h	438179 693	215484 969	2 033458	10	260	88	497170001338	AA90478-01 497170001338 028 N/A P5 Plasma-1 8 / Day 5 8h
028	N/A	9 / Day 5 9h	432542 717	220582 548	1 960911	10	251	89	497170001339	AA90478-01 497170001339 028 N/A P5 Plasma-1 9 / Day 5 9h
028	N/A	10 / Day 5 10h	412333 066	214552 021	1 921833	10	245	90	497170001340	AA90478-01 497170001340 028 N/A P5 Plasma-1 10 / Day 5 10h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 2 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 38
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	248140 58	0 000000	-0 0420		-0 0420	0 0
9	0 00		0	229018 989	0 000000	-0 0420			
10	1 00	1 00000	18458 148	241942 963	0 076291	1 00	0 0		
11	2 00	0 250000	36205 817	246999 578	0 146583	1 96	-2 0		
12	4 00	0 0625000	72175 998	241731 696	0 298579	4 04	1 0		
13	8 00	0 0156250	145260 557	246754 01	0 588686	8 01	0 1		
14	16 0	0 00390625	307832 219	236151 106	1 303539	17 8	11 3		
15	40 0	0 000625000	654720 18	226330 663	2 892760	39 5	-1 3		
16	80 0	0 000156250	1406815 756	251381 57	5 596336	76 5	-4 4		
17	160	0 0000390625	2649960 22	231192 051	11 462160	157	-1 9		
18	200	0 0000250000	3363809 969	236274 931	14 236847	195	-2 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0731417453

Intercept = 0 00307333643

R-Squared = 0 9973

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 38
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	3258466 17	233732 054	13 941033	1	191		191		1 4
2	0 00	3181262 024	229799 095	13 843666	1	189				
3	0 00	3213767 8	230332 509	13 952732	1	191				
4	0 00	3402850 627	237495 873	14 328041	1	196				
5	0 00	3446046 482	247949 472	13 898180	1	190				
50	0 00	4061743 851	288332 605	14 087008	1	193				
51	0 00	3554485 307	255815 005	13 894749	1	190				
86	0 00	3601811 167	255488 23	14 097758	1	193				
87	0 00	3514462 162	256344 419	13 709923	1	187				
29	3 00	62798 601	284715 888	0 220566	1	2 97	-1 0	2 90	-3 3	3 4
62	3 00	58455 614	278678 125	0 209760	1	2 83	-5 7			
39	37 5	700503 126	261774 603	2 675978	1	36 5	-2 7	36 2	-3 5	1 4
73	37 5	725652 119	277180 65	2 617975	1	35 8	-4 5			
49	150	3036182 739	273469 382	11 102460	1	152	1 3	152	1 3	0 5
84	150	2757160 506	249753 501	11 039527	1	151	0 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 38
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	1 / Day 5 1h	3662549 899	234733 235	*15 603031	1	*AAR>(200)	20	497170001141	AA90478-01 497170001141 024 N/A P5 Plasma-1 1 / Day 5 1h
024	N/A	2 / Day 5 2h	3873758 092	239650 033	*16 164229	1	*AAR>(200)	21	497170001142	AA90478-01 497170001142 024 N/A P5 Plasma-1 2 / Day 5 2h
024	N/A	3 / Day 5 3h	3646123 551	226385 743	*16 105800	1	*AAR>(200)	22	497170001143	AA90478-01 497170001143 024 N/A P5 Plasma-1 3 / Day 5 3h
024	N/A	4 / Day 5 4h	4562480	287827 484	*15 851440	1	*AAR>(200)	23	497170001144	AA90478-01 497170001144 024 N/A P5 Plasma-1 4 / Day 5 4h
024	N/A	5 / Day 5 5h	3556157 538	227625 577	*15 622838	1	*AAR>(200)	24	497170001145	AA90478-01 497170001145 024 N/A P5 Plasma-1 5 / Day 5 5h
024	N/A	6 / Day 5 6h	4270066 826	267119 606	*15 985599	1	*AAR>(200)	25	497170001146	AA90478-01 497170001146 024 N/A P5 Plasma-1 6 / Day 5 6h
024	N/A	7 / Day 5 7h	4542575 999	291878 49	*15 563243	1	*AAR>(200)	26	497170001147	AA90478-01 497170001147 024 N/A P5 Plasma-1 7 / Day 5 7h
024	N/A	8 / Day 5 8h	3829164 862	237918 103	*16 094466	1	*AAR>(200)	27	497170001148	AA90478-01 497170001148 024 N/A P5 Plasma-1 8 / Day 5 8h
024	N/A	9 / Day 5 9h	4013770 798	261304 397	*15 360518	1	*AAR>(200)	28	497170001149	AA90478-01 497170001149 024 N/A P5 Plasma-1 9 / Day 5 9h
024	N/A	10 / Day 5 10h	4155014 303	264164 144	*15 728911	1	*AAR>(200)	30	497170001150	AA90478-01 497170001150 024 N/A P5 Plasma-1 10 / Day 5 10h
024	N/A	11 / Day 5 11h	4068166 764	263406 707	*15 444431	1	*AAR>(200)	31	497170001151	AA90478-01 497170001151 024 N/A P5 Plasma-1 11 / Day 5 11h
024	N/A	12 / Day 5 12h	3695008 78	246069 271	*15 016133	1	*AAR>(200)	32	497170001152	AA90478-01 497170001152 024 N/A P5 Plasma-1 12 / Day 5 12h
024	N/A	13 / Day 5 13h	3890165 601	259094 779	*15 014450	1	*AAR>(200)	33	497170001153	AA90478-01 497170001153 024 N/A P5 Plasma-1 13 / Day 5 13h
024	N/A	14 / Day 5 14h	3844597 333	257449 501	*14 933404	1	*AAR>(200)	34	497170001154	AA90478-01 497170001154 024 N/A P5 Plasma-1 14 / Day 5 14h
024	N/A	15 / Day 5 15h	3669272 288	247641 77	*14 816855	1	*AAR>(200)	35	497170001155	AA90478-01 497170001155 024 N/A P5 Plasma-1 15 / Day 5 15h
024	N/A	16 / Day 5 16h	3693139 752	260193 752	14 193806	1	194	36	497170001156	AA90478-01 497170001156 024 N/A P5 Plasma-1 16 / Day 5 16h
024	N/A	17 / Day 5 17h	4089520 485	283566 447	14 421736	1	197	37	497170001157	AA90478-01 497170001157 024 N/A P5 Plasma-1 17 / Day 5 17h
024	N/A	18 / Day 5 18h	3470053 709	243944 62	14 224760	1	194	38	497170001158	AA90478-01 497170001158 024 N/A P5 Plasma-1 18 / Day 5 18h
024	N/A	19 / Day 5 19h	3931891 21	288776 654	13 615682	1	186	40	497170001159	AA90478-01 497170001159 024 N/A P5 Plasma-1 19 / Day 5 19h
026	N/A	1 / Day 5 1h	2939825 579	246479 207	11 927276	1	163	41	497170001236	AA90478-01 497170001236 026 N/A P5 Plasma-1 1 / Day 5 1h
026	N/A	2 / Day 5 2h	2982845 702	249614 931	11 949789	1	163	42	497170001237	AA90478-01 497170001237 026 N/A P5 Plasma-1 2 / Day 5 2h
026	N/A	3 / Day 5 3h	2862532 555	247386 37	11 571101	1	158	43	497170001238	AA90478-01 497170001238 026 N/A P5 Plasma-1 3 / Day 5 3h
026	N/A	4 / Day 5 4h	2963668 342	257555 433	11 506914	1	157	44	497170001239	AA90478-01 497170001239 026 N/A P5 Plasma-1 4 / Day 5 4h
026	N/A	5 / Day 5 5h	2737711 367	234518 715	11 673744	1	160	45	497170001240	AA90478-01 497170001240 026 N/A P5 Plasma-1 5 / Day 5 5h
026	N/A	6 / Day 5 6h	2915529 175	251837 843	11 577010	1	158	46	497170001241	AA90478-01 497170001241 026 N/A P5 Plasma-1 6 / Day 5 6h
026	N/A	7 / Day 5 7h	3175449 313	270107 183	11 756256	1	161	47	497170001242	AA90478-01 497170001242 026 N/A P5 Plasma-1 7 / Day 5 7h
026	N/A	8 / Day 5 8h	2903849 916	245174 707	11 844003	1	162	48	497170001243	AA90478-01 497170001243 026 N/A P5 Plasma-1 8 / Day 5 8h
026	N/A	9 / Day 5 9h	2848468 883	252541 898	11 279193	1	154	52	497170001244	AA90478-01 497170001244 026 N/A P5 Plasma-1 9 / Day 5 9h
026	N/A	10 / Day 5 10h	3216209 945	275034 919	11 693824	1	160	53	497170001245	AA90478-01 497170001245 026 N/A P5 Plasma-1 10 / Day 5 10h
026	N/A	11 / Day 5 11h	2417188 542	234664 164	10 300629	1	141	54	497170001246	AA90478-01 497170001246 026 N/A P5 Plasma-1 11 / Day 5 11h
026	N/A	12 / Day 5 12h	2751118 499	248222 801	11 083263	1	151	55	497170001247	AA90478-01 497170001247 026 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
026	N/A	13 / Day 5 13h	2896196 514	276044 454	10 491776	1	143	56	497170001248	AA90478-01 497170001248 026 N/A P5 Plasma-1 13 / Day 5 13h
026	N/A	14 / Day 5 14h	2796615 009	257315 137	10 868443	1	149	57	497170001249	AA90478-01 497170001249 026 N/A P5 Plasma-1 14 / Day 5 14h
026	N/A	15 / Day 5 15h	2949009 636	277517 421	10 626395	1	145	58	497170001250	AA90478-01 497170001250 026 N/A P5 Plasma-1 15 / Day 5 15h
026	N/A	16 / Day 5 16h	2454199 96	233464 987	10 512069	1	144	59	497170001251	AA90478-01 497170001251 026 N/A P5 Plasma-1 16 / Day 5 16h
026	N/A	17 / Day 5 17h	2370122 635	237017 983	9 999759	1	137	60	497170001252	AA90478-01 497170001252 026 N/A P5 Plasma-1 17 / Day 5 17h
026	N/A	18 / Day 5 18h	2472621 045	250233 239	9 881265	1	135	61	497170001253	AA90478-01 497170001253 026 N/A P5 Plasma-1 18 / Day 5 18h
026	N/A	19 / Day 5 19h	2469281 028	239685 164	10 302186	1	141	63	497170001254	AA90478-01 497170001254 026 N/A P5 Plasma-1 19 / Day 5 19h
028	N/A	1 / Day 5 1h	5634163 837	279875 822	*20 130942	1	*AAR>(200)	64	497170001331	AA90478-01 497170001331 028 N/A P5 Plasma-1 1 / Day 5 1h
028	N/A	2 / Day 5 2h	5098762 012	253246 906	*20 133561	1	*AAR>(200)	65	497170001332	AA90478-01 497170001332 028 N/A P5 Plasma-1 2 / Day 5 2h
028	N/A	3 / Day 5 3h	5084629 043	255235 874	*19 921295	1	*AAR>(200)	66	497170001333	AA90478-01 497170001333 028 N/A P5 Plasma-1 3 / Day 5 3h
028	N/A	4 / Day 5 4h	5258087 353	250002 74	*21 032119	1	*AAR>(200)	67	497170001334	AA90478-01 497170001334 028 N/A P5 Plasma-1 4 / Day 5 4h
028	N/A	5 / Day 5 5h	4845912 177	243149 357	*19 929776	1	*AAR>(200)	68	497170001335	AA90478-01 497170001335 028 N/A P5 Plasma-1 5 / Day 5 5h
028	N/A	6 / Day 5 6h	5262871 143	260294 281	*20 218927	1	*AAR>(200)	69	497170001336	AA90478-01 497170001336 028 N/A P5 Plasma-1 6 / Day 5 6h
028	N/A	7 / Day 5 7h	4516843 301	231230 933	*19 533906	1	*AAR>(200)	70	497170001337	AA90478-01 497170001337 028 N/A P5 Plasma-1 7 / Day 5 7h
028	N/A	8 / Day 5 8h	4956590 947	243733 737	*20 336089	1	*AAR>(200)	71	497170001338	AA90478-01 497170001338 028 N/A P5 Plasma-1 8 / Day 5 8h
028	N/A	9 / Day 5 9h	4555217 949	234060 795	*19 461687	1	*AAR>(200)	72	497170001339	AA90478-01 497170001339 028 N/A P5 Plasma-1 9 / Day 5 9h
028	N/A	10 / Day 5 10h	4494156 794	233091 769	*19 280633	1	*AAR>(200)	74	497170001340	AA90478-01 497170001340 028 N/A P5 Plasma-1 10 / Day 5 10h
028	N/A	11 / Day 5 11h	4757428 639	235770 874	*20 178186	1	*AAR>(200)	75	497170001341	AA90478-01 497170001341 028 N/A P5 Plasma-1 11 / Day 5 11h
028	N/A	12 / Day 5 12h	5502793 769	281166 47	*19 571302	1	*AAR>(200)	76	497170001342	AA90478-01 497170001342 028 N/A P5 Plasma-1 12 / Day 5 12h
028	N/A	13 / Day 5 13h	4250359 481	216545 314	*19 628037	1	*AAR>(200)	77	497170001343	AA90478-01 497170001343 028 N/A P5 Plasma-1 13 / Day 5 13h
028	N/A	14 / Day 5 14h	4600272 12	240699 698	*19 112081	1	*AAR>(200)	78	497170001344	AA90478-01 497170001344 028 N/A P5 Plasma-1 14 / Day 5 14h
028	N/A	15 / Day 5 15h	4009787 761	212490 666	*18 870418	1	*AAR>(200)	79	497170001345	AA90478-01 497170001345 028 N/A P5 Plasma-1 15 / Day 5 15h
028	N/A	16 / Day 5 16h	4118549 448	214638 213	*19 188333	1	*AAR>(200)	80	497170001346	AA90478-01 497170001346 028 N/A P5 Plasma-1 16 / Day 5 16h
028	N/A	17 / Day 5 17h	4926397 72	280836 122	*17 541895	1	*AAR>(200)	81	497170001347	AA90478-01 497170001347 028 N/A P5 Plasma-1 17 / Day 5 17h
028	N/A	18 / Day 5 18h	4649796 49	241696 181	*19 238188	1	*AAR>(200)	82	497170001348	AA90478-01 497170001348 028 N/A P5 Plasma-1 18 / Day 5 18h
028	N/A	19 / Day 5 19h	4021119 548	222289 318	*18 089576	1	*AAR>(200)	83	497170001349	AA90478-01 497170001349 028 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 39
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	274276 084	0 000000	-0 0399		-0 0399	0 0
9	0 00		0	261486 361	0 000000	-0 0399			
10	1 00	1 00000	22921 428	281531 233	0 081417	0 999	-0 1		
11	2 00	0 250000	39952 638	254112 891	0 157224	1 97	-1 5		
12	4 00	0 0625000	92043 752	289483 811	0 317958	4 02	0 5		
13	8 00	0 0156250	166178 127	260051 59	0 639020	8 11	1 4		
14	16 0	0 00390625	365799 974	257456 478	1 420823	18 1	13 1		
15	40 0	0 000625000	774140 213	244668 99	3 164031	40 3	0 8		
16	80 0	0 000156250	1549886 513	255842 845	6 057963	77 2	-3 5		
17	160	0 0000390625	3224145 616	271057 533	11 894691	152	-5 0		
18	200	0 0000250000	4169166 102	279954 356	14 892307	190	-5 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0784021873

Intercept = 0 00312469149

R-Squared = 0 9960

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 39
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	3833682 014	252319 367	15 193768	1	194		191		1 4
2	0 00	4276659 826	291805 486	14 655858	1	187				
3	0 00	3738199 739	245113 577	15 250888	1	194				
4	0 00	4050012 974	272830 628	14 844422	1	189				
5	0 00	4052359 042	271080 36	14 948922	1	191				
51	0 00	4069482 205	276635 156	14 710647	1	188				
52	0 00	3690524 914	243634 196	15 147812	1	193				
91	0 00	4542570 311	304845 038	14 901244	1	190				
92	0 00	3851306 83	260222 115	14 800075	1	189				
29	3 00	69297 455	286666 078	0 241736	1	3 04	1 3	3 09	3 0	2 1
62	3 00	67472 545	271870 935	0 248179	1	3 13	4 3			
40	37 5	691682 811	240109 859	2 880693	1	36 7	-2 1	35 7	-4 8	4 1
75	37 5	703263 225	259117 379	2 714072	1	34 6	-7 7			
50	150	2797421 48	249231 416	11 224193	1	143	-4 7	141	-6 0	2 5
89	150	2948568 412	271731 598	10 851033	1	138	-8 0			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 39
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	8 / Day 3 8h	1245835 532	253038 012	4 923511	1	62 8	56	497170000046	AA90478-01 497170000046 001 N/A P3 Plasma-1 8 / Day 3 8h
001	N/A	13 / Day 3 13h	0	294385 616	*0 000000	1	*BLQ<(1 00)	59	497170000051	AA90478-01 497170000051 001 N/A P3 Plasma-1 13 / Day 3 13h
001	N/A	7 / Day 4 7h	981743 451	243895 502	4 025263	1	51 3	74	497170000026	AA90478-01 497170000026 001 N/A P4 Plasma-1 7 / Day 4 7h
001	N/A	11 / Day 4 11h	1378598 339	283925 669	4 855490	1	61 9	76	497170000030	AA90478-01 497170000030 001 N/A P4 Plasma-1 11 / Day 4 11h
003	N/A	5 / Day 3 5h	2413368 973	236030 796	10 224805	1	130	57	497170000138	AA90478-01 497170000138 003 N/A P3 Plasma-1 5 / Day 3 5h
003	N/A	8 / Day 3 8h	2439092 226	242345 595	10 064521	1	128	58	497170000141	AA90478-01 497170000141 003 N/A P3 Plasma-1 8 / Day 3 8h
003	N/A	13 / Day 3 13h	2343473 657	222870 179	10 514972	1	134	60	497170000146	AA90478-01 497170000146 003 N/A P3 Plasma-1 13 / Day 3 13h
003	N/A	9 / Day 4 9h	2906444 777	256451 457	11 333314	1	145	77	497170000123	AA90478-01 497170000123 003 N/A P4 Plasma-1 9 / Day 4 9h
005	N/A	9 / Day 2 9h	1496524 123	231601 193	6 461643	1	82 4	38	497170000256	AA90478-01 497170000256 005 N/A P2 Plasma-1 9 / Day 2 9h
005	N/A	12 / Day 2 12h	1718696 617	263214 826	6 529635	1	83 2	39	497170000259	AA90478-01 497170000259 005 N/A P2 Plasma-1 12 / Day 2 12h
005	N/A	9 / Day 4 9h	1587520 413	263245 639	6 030567	1	76 9	78	497170000218	AA90478-01 497170000218 005 N/A P4 Plasma-1 9 / Day 4 9h
005	N/A	12 / Day 4 12h	1422826 014	229279 958	6 205628	1	79 1	79	497170000221	AA90478-01 497170000221 005 N/A P4 Plasma-1 12 / Day 4 12h
007	N/A	4 / Day 1 4h	7663797 709	263117 221	*29 126933	1	*AAR>(200)	20	497170000365	AA90478-01 497170000365 007 N/A P1 Plasma-1 4 / Day 1 4h
007	N/A	6 / Day 1 6h	6538409 163	217919 52	*30 003779	1	*AAR>(200)	21	497170000367	AA90478-01 497170000367 007 N/A P1 Plasma-1 6 / Day 1 6h
007	N/A	19 / Day 1 19h	6360045 706	237176 97	*26 815612	1	*AAR>(200)	22	497170000380	AA90478-01 497170000380 007 N/A P1 Plasma-1 19 / Day 1 19h
007	N/A	3 / Day 4 3h	5978552 085	245260 07	*24 376378	1	*AAR>(200)	80	497170000307	AA90478-01 497170000307 007 N/A P4 Plasma-1 3 / Day 4 3h
007	N/A	8 / Day 4 8h	5529987 255	233914 738	*23 641038	1	*AAR>(200)	81	497170000312	AA90478-01 497170000312 007 N/A P4 Plasma-1 8 / Day 4 8h
007	N/A	15 / Day 4 15h	5521945 053	250588 21	*22 035933	1	*AAR>(200)	82	497170000319	AA90478-01 497170000319 007 N/A P4 Plasma-1 15 / Day 4 15h
009	N/A	4 / Day 1 4h	6100817 136	238112 306	*25 621595	1	*AAR>(200)	23	497170000460	AA90478-01 497170000460 009 N/A P1 Plasma-1 4 / Day 1 4h
009	N/A	8 / Day 1 8h	5729870 045	224577 548	*25 513993	1	*AAR>(200)	24	497170000464	AA90478-01 497170000464 009 N/A P1 Plasma-1 8 / Day 1 8h
009	N/A	7 / Day 3 7h	7532136 136	272884 813	*27 601888	1	*AAR>(200)	61	497170000425	AA90478-01 497170000425 009 N/A P3 Plasma-1 7 / Day 3 7h
009	N/A	9 / Day 3 9h	6669199 731	221525 47	*30 105792	1	*AAR>(200)	63	497170000427	AA90478-01 497170000427 009 N/A P3 Plasma-1 9 / Day 3 9h
009	N/A	19 / Day 3 19h	7376140 94	274484 572	*26 872698	1	*AAR>(200)	64	497170000437	AA90478-01 497170000437 009 N/A P3 Plasma-1 19 / Day 3 19h
009	N/A	9 / Day 4 9h	6865554 479	260434 162	*26 361958	1	*AAR>(200)	83	497170000408	AA90478-01 497170000408 009 N/A P4 Plasma-1 9 / Day 4 9h
009	N/A	19 / Day 4 19h	7653077 873	311905 104	*24 536559	1	*AAR>(200)	84	497170000418	AA90478-01 497170000418 009 N/A P4 Plasma-1 19 / Day 4 19h
011	N/A	5 / Day 1 5h	3891324 659	231459 277	*16 812135	1	*AAR>(200)	25	497170000556	AA90478-01 497170000556 011 N/A P1 Plasma-1 5 / Day 1 5h
011	N/A	9 / Day 3 9h	4180074 859	275106 929	15 194364	1	194	65	497170000522	AA90478-01 497170000522 011 N/A P3 Plasma-1 9 / Day 3 9h
011	N/A	19 / Day 3 19h	3294896 387	247415 021	13 317285	1	170	66	497170000532	AA90478-01 497170000532 011 N/A P3 Plasma-1 19 / Day 3 19h
011	N/A	9 / Day 4 9h	1458696 157	239650 379	6 086768	1	77 6	85	497170000503	AA90478-01 497170000503 011 N/A P4 Plasma-1 9 / Day 4 9h
011	N/A	15 / Day 4 15h	1280482 129	244364 667	5 240046	1	66 8	86	497170000509	AA90478-01 497170000509 011 N/A P4 Plasma-1 15 / Day 4 15h
012	N/A	4 / Day 1 4h	5322762 975	250676 815	*21 233567	1	*AAR>(200)	26	497170000650	AA90478-01 497170000650 012 N/A P1 Plasma-1 4 / Day 1 4h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	5 / Day 1 5h	4653554 61	212040 184	*21 946569	1	*AAR>(200)	27	497170000651	AA90478-01 497170000651 012 N/A P1 Plasma-1 5 / Day 1 5h
012	N/A	13 / Day 1 13h	4656820 202	228844 545	*20 349273	1	*AAR>(200)	28	497170000659	AA90478-01 497170000659 012 N/A P1 Plasma-1 13 / Day 1 13h
012	N/A	10 / Day 2 10h	4095043 512	216605 095	*18 905573	1	*AAR>(200)	41	497170000637	AA90478-01 497170000637 012 N/A P2 Plasma-1 10 / Day 2 10h
012	N/A	19 / Day 2 19h	3842026 436	225748 561	*17 019052	1	*AAR>(200)	42	497170000646	AA90478-01 497170000646 012 N/A P2 Plasma-1 19 / Day 2 19h
012	N/A	11 / Day 3 11h	5085502 571	236736 891	*21 481665	1	*AAR>(200)	67	497170000619	AA90478-01 497170000619 012 N/A P3 Plasma-1 11 / Day 3 11h
012	N/A	19 / Day 3 19h	4581190 613	257122 211	*17 817172	1	*AAR>(200)	68	497170000627	AA90478-01 497170000627 012 N/A P3 Plasma-1 19 / Day 3 19h
012	N/A	8 / Day 4 8h	4787295 877	243620 35	*19 650640	1	*AAR>(200)	87	497170000597	AA90478-01 497170000597 012 N/A P4 Plasma-1 8 / Day 4 8h
012	N/A	19 / Day 4 19h	0	0	*N/A	1	*BLQ<(1 00)	88	497170000608	AA90478-01 497170000608 012 N/A P4 Plasma-1 19 / Day 4 19h
013	N/A	5 / Day 1 5h	959581 393	213309 885	4 498532	1	57 3	30	497170000746	AA90478-01 497170000746 013 N/A P1 Plasma-1 5 / Day 1 5h
013	N/A	9 / Day 2 9h	1316194 876	237473 752	5 542486	1	70 7	43	497170000731	AA90478-01 497170000731 013 N/A P2 Plasma-1 9 / Day 2 9h
013	N/A	11 / Day 3 11h	1850563 67	208401 981	8 879780	1	113	69	497170000714	AA90478-01 497170000714 013 N/A P3 Plasma-1 11 / Day 3 11h
013	N/A	19 / Day 3 19h	2198768 338	254679 681	8 633466	1	110	70	497170000722	AA90478-01 497170000722 013 N/A P3 Plasma-1 19 / Day 3 19h
015	N/A	5 / Day 1 5h	2371164 547	257857 609	9 195635	1	117	31	497170000841	AA90478-01 497170000841 015 N/A P1 Plasma-1 5 / Day 1 5h
015	N/A	13 / Day 3 13h	2151289 679	283958 232	7 576078	1	96 6	71	497170000811	AA90478-01 497170000811 015 N/A P3 Plasma-1 13 / Day 3 13h
018	N/A	5 / Day 1 5h	1389978 137	232111 019	5 988419	1	76 3	32	497170000936	AA90478-01 497170000936 018 N/A P1 Plasma-1 5 / Day 1 5h
018	N/A	8 / Day 2 8h	1142751 309	221789 527	5 152413	1	65 7	44	497170000920	AA90478-01 497170000920 018 N/A P2 Plasma-1 8 / Day 2 8h
018	N/A	8 / Day 3 8h	2485114 254	212047 807	11 719594	1	149	72	497170000901	AA90478-01 497170000901 018 N/A P3 Plasma-1 8 / Day 3 8h
018	N/A	19 / Day 3 19h	2596154 91	244978 332	10 597488	1	135	73	497170000912	AA90478-01 497170000912 018 N/A P3 Plasma-1 19 / Day 3 19h
019	N/A	5 / Day 1 5h	3492426 081	245548 573	14 222954	1	181	33	497170001031	AA90478-01 497170001031 019 N/A P1 Plasma-1 5 / Day 1 5h
019	N/A	7 / Day 2 7h	2772727 231	232272 488	11 937390	1	152	45	497170001014	AA90478-01 497170001014 019 N/A P2 Plasma-1 7 / Day 2 7h
019	N/A	16 / Day 2 16h	2630470 476	240301 103	10 946560	1	140	46	497170001023	AA90478-01 497170001023 019 N/A P2 Plasma-1 16 / Day 2 16h
021	N/A	4 / Day 1 4h	2178251 118	240059 776	9 073786	1	116	34	497170001125	AA90478-01 497170001125 021 N/A P1 Plasma-1 4 / Day 1 4h
021	N/A	8 / Day 2 8h	2680354 144	268308 22	9 989832	1	127	47	497170001110	AA90478-01 497170001110 021 N/A P2 Plasma-1 8 / Day 2 8h
021	N/A	14 / Day 2 14h	2394996 989	248340 815	9 643993	1	123	48	497170001116	AA90478-01 497170001116 021 N/A P2 Plasma-1 14 / Day 2 14h
024	N/A	5 / Day 1 5h	3779689 802	259308 309	14 576046	1	186	35	497170001221	AA90478-01 497170001221 024 N/A P1 Plasma-1 5 / Day 1 5h
024	N/A	13 / Day 2 13h	2890865 808	239792 252	12 055710	1	154	49	497170001210	AA90478-01 497170001210 024 N/A P2 Plasma-1 13 / Day 2 13h
026	N/A	4 / Day 1 4h	5160902 993	233738 992	*22 079769	1	*AAR>(200)	36	497170001315	AA90478-01 497170001315 026 N/A P1 Plasma-1 4 / Day 1 4h
026	N/A	10 / Day 2 10h	0	302724 568	*0 000000	1	*BLQ<(1 00)	53	497170001302	AA90478-01 497170001302 026 N/A P2 Plasma-1 10 / Day 2 10h
026	N/A	19 / Day 2 19h	3050700 991	231928 304	13 153638	1	168	54	497170001311	AA90478-01 497170001311 026 N/A P2 Plasma-1 19 / Day 2 19h
028	N/A	6 / Day 1 6h	3114115 779	280905 004	11 086010	1	141	37	497170001412	AA90478-01 497170001412 028 N/A P1 Plasma-1 6 / Day 1 6h
028	N/A	7 / Day 2 7h	2890543 341	273431 457	10 571364	1	135	55	497170001394	AA90478-01 497170001394 028 N/A P2 Plasma-1 7 / Day 2 7h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 40
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	268912 526	0 000000	-0 0203		-0 0203	0 0
9	0 00		0	291788 65	0 000000	-0 0203			
10	1 00	1 00000	20881 081	271219 179	0 076990	0 995	-0 5		
11	2 00	0 250000	46564 89	305296 788	0 152523	1 99	-0 5		
12	4 00	0 0625000	95553 718	317295 173	0 301151	3 95	-1 3		
13	8 00	0 0156250	198639 642	315196 146	0 630210	8 29	3 6		
14	16 0	0 00390625	425766 565	314728 747	1 352805	17 8	11 3		
15	40 0	0 000625000	889033 359	299456 043	2 968828	39 1	-2 3		
16	80 0	0 000156250	1594184 883	273888 036	5 820571	76 7	-4 1		
17	160	0 0000390625	3151590 14	265987 369	11 848646	156	-2 5		
18	200	0 0000250000	3897842 418	268362 894	14 524521	192	-4 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0758298016

Intercept = 0 00153660313

R-Squared = 0 9969

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 40
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	4003253 238	275133 191	14 550237	1	192		191		0 8
2	0 00	3958157 104	273304 034	14 482615	1	191				
3	0 00	3821922 18	264090 583	14 472012	1	191				
4	0 00	3764297 169	259467 674	14 507769	1	191				
5	0 00	3821322 312	264757 644	14 433284	1	190				
51	0 00	3826960 295	266062 698	14 383678	1	190				
52	0 00	3892117 494	272770 83	14 268819	1	188				
91	0 00	4345431 121	298072 698	14 578427	1	192				
92	0 00	3849062 138	263508 585	14 606971	1	193				
29	3 00	70967 356	264416 789	0 268392	1	3 52	17 3	3 39	13 0	5 4
62	3 00	71549 857	287506 92	0 248863	1	3 26	8 7			
40	37 5	722656 505	269505 652	2 681415	1	35 3	-5 9	36 1	-3 7	3 1
75	37 5	690280 22	246846 426	2 796395	1	36 9	-1 6			
50	150	3081441 273	275412 114	11 188474	1	148	-1 3	145	-3 3	2 9
89	150	3597439 97	334940 956	10 740520	1	142	-5 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 40
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	12 / Day 1 12h	0	0	*N/A	1	*BLQ<(1 00)	68	497170000088	AA90478-01 497170000088 001 N/A P1 Plasma-1 12 / Day 1 12h
001	N/A	19 / Day 1 19h	1320193 436	244193 679	5 406337	1	71 3	69	497170000095	AA90478-01 497170000095 001 N/A P1 Plasma-1 19 / Day 1 19h
001	N/A	6 / Day 5 6h	1639350 582	239308 595	6 850362	1	90 3	36	497170000006	AA90478-01 497170000006 001 N/A P5 Plasma-1 6 / Day 5 6h
001	N/A	9 / Day 5 9h	0	0	*N/A	1	*BLQ<(1 00)	37	497170000009	AA90478-01 497170000009 001 N/A P5 Plasma-1 9 / Day 5 9h
001	N/A	12 / Day 5 12h	1798482 354	246861 447	7 285392	1	96 1	38	497170000012	AA90478-01 497170000012 001 N/A P5 Plasma-1 12 / Day 5 12h
003	N/A	3 / Day 1 3h	2877138 969	287634 439	10 002762	1	132	63	497170000174	AA90478-01 497170000174 003 N/A P1 Plasma-1 3 / Day 1 3h
003	N/A	4 / Day 1 4h	2760986 536	239418 368	11 532058	1	152	64	497170000175	AA90478-01 497170000175 003 N/A P1 Plasma-1 4 / Day 1 4h
003	N/A	10 / Day 1 10h	2417609 174	252608 721	9 570569	1	126	70	497170000181	AA90478-01 497170000181 003 N/A P1 Plasma-1 10 / Day 1 10h
003	N/A	17 / Day 1 17h	2110671 271	249919 697	8 445398	1	111	71	497170000188	AA90478-01 497170000188 003 N/A P1 Plasma-1 17 / Day 1 17h
003	N/A	18 / Day 1 18h	2023842 178	235672 415	8 587523	1	113	72	497170000189	AA90478-01 497170000189 003 N/A P1 Plasma-1 18 / Day 1 18h
003	N/A	8 / Day 5 8h	4008235 288	247947 22	*16 165679	1	*AAR>(200)	39	497170000103	AA90478-01 497170000103 003 N/A P5 Plasma-1 8 / Day 5 8h
003	N/A	12 / Day 5 12h	3903761 024	245288 961	*15 914948	1	*AAR>(200)	41	497170000107	AA90478-01 497170000107 003 N/A P5 Plasma-1 12 / Day 5 12h
003	N/A	16 / Day 5 16h	3586528 768	244459 494	14 671260	1	193	42	497170000111	AA90478-01 497170000111 003 N/A P5 Plasma-1 16 / Day 5 16h
005	N/A	3 / Day 1 3h	1732095 109	245786 4	7 047156	1	92 9	65	497170000269	AA90478-01 497170000269 005 N/A P1 Plasma-1 3 / Day 1 3h
005	N/A	4 / Day 1 4h	1776400 983	271713 203	6 537779	1	86 2	66	497170000270	AA90478-01 497170000270 005 N/A P1 Plasma-1 4 / Day 1 4h
005	N/A	8 / Day 1 8h	1795592 323	247343 792	7 259500	1	95 7	67	497170000274	AA90478-01 497170000274 005 N/A P1 Plasma-1 8 / Day 1 8h
005	N/A	13 / Day 1 13h	1826638 877	259353 449	7 043048	1	92 9	73	497170000279	AA90478-01 497170000279 005 N/A P1 Plasma-1 13 / Day 1 13h
005	N/A	5 / Day 5 5h	2184463 936	243408 413	8 974480	1	118	43	497170000195	AA90478-01 497170000195 005 N/A P5 Plasma-1 5 / Day 5 5h
005	N/A	8 / Day 5 8h	2366232 094	260598 542	9 079990	1	120	44	497170000198	AA90478-01 497170000198 005 N/A P5 Plasma-1 8 / Day 5 8h
007	N/A	2 / Day 2 2h	7283251 125	262461 992	*27 749737	1	*AAR>(200)	82	497170000344	AA90478-01 497170000344 007 N/A P2 Plasma-1 2 / Day 2 2h
007	N/A	7 / Day 2 7h	9564442 909	299894 245	*31 892719	1	*AAR>(200)	83	497170000349	AA90478-01 497170000349 007 N/A P2 Plasma-1 7 / Day 2 7h
007	N/A	13 / Day 2 13h	6166719 797	253501 139	*24 326202	1	*AAR>(200)	84	497170000355	AA90478-01 497170000355 007 N/A P2 Plasma-1 13 / Day 2 13h
007	N/A	19 / Day 2 19h	6652400 136	259568 834	*25 628655	1	*AAR>(200)	85	497170000361	AA90478-01 497170000361 007 N/A P2 Plasma-1 19 / Day 2 19h
007	N/A	11 / Day 5 11h	6319249 378	248813 041	*25 397581	1	*AAR>(200)	45	497170000296	AA90478-01 497170000296 007 N/A P5 Plasma-1 11 / Day 5 11h
007	N/A	19 / Day 5 19h	5641260 064	242563 153	*23 256871	1	*AAR>(200)	46	497170000304	AA90478-01 497170000304 007 N/A P5 Plasma-1 19 / Day 5 19h
009	N/A	10 / Day 5 10h	6629587 516	241709 327	*27 427934	1	*AAR>(200)	47	497170000390	AA90478-01 497170000390 009 N/A P5 Plasma-1 10 / Day 5 10h
009	N/A	15 / Day 5 15h	6577654 059	247352 587	*26 592219	1	*AAR>(200)	48	497170000395	AA90478-01 497170000395 009 N/A P5 Plasma-1 15 / Day 5 15h
011	N/A	9 / Day 5 9h	991060 471	259199 864	3 823538	1	50 4	49	497170000484	AA90478-01 497170000484 011 N/A P5 Plasma-1 9 / Day 5 9h
013	N/A	15 / Day 1 15h	1044884 618	263796 92	3 960943	1	52 2	74	497170000756	AA90478-01 497170000756 013 N/A P1 Plasma-1 15 / Day 1 15h
013	N/A	6 / Day 4 6h	1377979 546	255411 504	5 395135	1	71 1	20	497170000690	AA90478-01 497170000690 013 N/A P4 Plasma-1 6 / Day 4 6h
013	N/A	10 / Day 4 10h	1294392 356	243525 932	5 315214	1	70 1	21	497170000694	AA90478-01 497170000694 013 N/A P4 Plasma-1 10 / Day 4 10h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
015	N/A	19 / Day 1 19h	0	0	*N/A	1	*BLQ<(1 00)	76	497170000855	AA90478-01 497170000855 015 N/A P1 Plasma-1 19 / Day 1 19h
015	N/A	8 / Day 4 8h	1746073 117	254899 259	6 850052	1	90 3	22	497170000787	AA90478-01 497170000787 015 N/A P4 Plasma-1 8 / Day 4 8h
015	N/A	10 / Day 4 10h	1663219 778	247241 392	6 727109	1	88 7	23	497170000789	AA90478-01 497170000789 015 N/A P4 Plasma-1 10 / Day 4 10h
018	N/A	19 / Day 1 19h	1323941 205	250414 363	5 287002	1	69 7	77	497170000950	AA90478-01 497170000950 018 N/A P1 Plasma-1 19 / Day 1 19h
018	N/A	8 / Day 4 8h	1198121 886	205734 528	5 823631	1	76 8	24	497170000882	AA90478-01 497170000882 018 N/A P4 Plasma-1 8 / Day 4 8h
018	N/A	16 / Day 4 16h	1535601 5	248386 807	6 182299	1	81 5	25	497170000890	AA90478-01 497170000890 018 N/A P4 Plasma-1 16 / Day 4 16h
018	N/A	14 / Day 5 14h	2263838 103	254621 44	8 890996	1	117	53	497170000869	AA90478-01 497170000869 018 N/A P5 Plasma-1 14 / Day 5 14h
019	N/A	19 / Day 1 19h	3345578 527	258119 585	12 961351	1	171	78	497170001045	AA90478-01 497170001045 019 N/A P1 Plasma-1 19 / Day 1 19h
019	N/A	8 / Day 4 8h	2533585 353	239921 295	10 560069	1	139	26	497170000977	AA90478-01 497170000977 019 N/A P4 Plasma-1 8 / Day 4 8h
019	N/A	10 / Day 4 10h	2262232 345	227084 571	9 962070	1	131	27	497170000979	AA90478-01 497170000979 019 N/A P4 Plasma-1 10 / Day 4 10h
019	N/A	7 / Day 5 7h	2327086 805	262543 759	8 863615	1	117	54	497170000957	AA90478-01 497170000957 019 N/A P5 Plasma-1 7 / Day 5 7h
019	N/A	19 / Day 5 19h	2332679 952	244747 156	9 530979	1	126	55	497170000969	AA90478-01 497170000969 019 N/A P5 Plasma-1 19 / Day 5 19h
021	N/A	19 / Day 1 19h	2205039 937	284464 954	7 751535	1	102	79	497170001140	AA90478-01 497170001140 021 N/A P1 Plasma-1 19 / Day 1 19h
021	N/A	9 / Day 3 9h	3119168 282	284553 676	10 961617	1	145	86	497170001092	AA90478-01 497170001092 021 N/A P3 Plasma-1 9 / Day 3 9h
021	N/A	10 / Day 4 10h	2479348 671	240012 816	10 330068	1	136	28	497170001074	AA90478-01 497170001074 021 N/A P4 Plasma-1 10 / Day 4 10h
021	N/A	8 / Day 5 8h	2556293 431	267852 947	9 543645	1	126	56	497170001053	AA90478-01 497170001053 021 N/A P5 Plasma-1 8 / Day 5 8h
021	N/A	19 / Day 5 19h	3024406 401	251801 189	12 011089	1	158	57	497170001064	AA90478-01 497170001064 021 N/A P5 Plasma-1 19 / Day 5 19h
024	N/A	19 / Day 1 19h	3921719 345	298119 066	13 154876	1	173	80	497170001235	AA90478-01 497170001235 024 N/A P1 Plasma-1 19 / Day 1 19h
024	N/A	8 / Day 3 8h	0	0	*N/A	1	*BLQ<(1 00)	87	497170001186	AA90478-01 497170001186 024 N/A P3 Plasma-1 8 / Day 3 8h
024	N/A	19 / Day 3 19h	0	0	*N/A	1	*BLQ<(1 00)	88	497170001197	AA90478-01 497170001197 024 N/A P3 Plasma-1 19 / Day 3 19h
024	N/A	11 / Day 4 11h	3916588 352	247507 46	*15 824122	1	*AAR>(200)	30	497170001170	AA90478-01 497170001170 024 N/A P4 Plasma-1 11 / Day 4 11h
024	N/A	19 / Day 4 19h	3758626 775	251077 019	14 970015	1	197	31	497170001178	AA90478-01 497170001178 024 N/A P4 Plasma-1 19 / Day 4 19h
024	N/A	10 / Day 5 10h	4246505 522	258613 63	*16 420270	1	*AAR>(200)	58	497170001150	AA90478-01 497170001150 024 N/A P5 Plasma-1 10 / Day 5 10h
024	N/A	19 / Day 5 19h	3252355 031	215034 97	15 124773	1	199	59	497170001159	AA90478-01 497170001159 024 N/A P5 Plasma-1 19 / Day 5 19h
026	N/A	15 / Day 1 15h	4822212 546	266062 136	*18 124385	1	*AAR>(200)	81	497170001326	AA90478-01 497170001326 026 N/A P1 Plasma-1 15 / Day 1 15h
026	N/A	9 / Day 4 9h	3424292 665	242795 025	14 103636	1	186	32	497170001263	AA90478-01 497170001263 026 N/A P4 Plasma-1 9 / Day 4 9h
026	N/A	19 / Day 4 19h	3300575 635	240398 258	13 729615	1	181	33	497170001273	AA90478-01 497170001273 026 N/A P4 Plasma-1 19 / Day 4 19h
026	N/A	8 / Day 5 8h	2946675 768	252012 107	11 692596	1	154	60	497170001243	AA90478-01 497170001243 026 N/A P5 Plasma-1 8 / Day 5 8h
026	N/A	18 / Day 5 18h	2460942 308	250470 932	9 825261	1	130	61	497170001253	AA90478-01 497170001253 026 N/A P5 Plasma-1 18 / Day 5 18h
028	N/A	9 / Day 4 9h	4482621 83	242451 421	*18 488742	1	*AAR>(200)	34	497170001358	AA90478-01 497170001358 028 N/A P4 Plasma-1 9 / Day 4 9h
028	N/A	19 / Day 4 19h	4496064 093	247330 605	*18 178357	1	*AAR>(200)	35	497170001368	AA90478-01 497170001368 028 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 41
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	275291 355	0 000000	-0 00214		-0 00214	0 0
9	0 00		0	278053 402	0 000000	-0 00214			
10	1 00	1 00000	7742 091	264253 881	0 029298	0 995	-0 5		
11	2 00	0 250000	14192 479	243067 104	0 058389	1 99	-0 5		
12	4 00	0 0625000	29948 287	257591 66	0 116263	3 96	-1 0		
13	8 00	0 0156250	58933 837	241656 285	0 243875	8 30	3 8		
14	16 0	0 00390625	142772 037	272481 593	0 523969	17 8	11 3		
15	40 0	0 000625000	298477 287	258113 608	1 156380	39 4	-1 5		
16	80 0	0 000156250	547615 096	239585 459	2 285678	77 8	-2 8		
17	160	0 0000390625	1161575 23	255647 744	4 543655	155	-3 1		
18	200	0 0000250000	1711894 159	308291 643	5 552840	189	-5 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0293675942

Intercept = 0 0000628614301

R-Squared = 0 9967

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 41
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1619055 121	298172 738	5 429923	1	185		186		1 1
2	0 00	1607577 636	301284 408	5 335748	1	182				
3	0 00	1733937 34	315909 769	5 488711	1	187				
4	0 00	1779241 117	322761 797	5 512552	1	188				
5	0 00	1573872 17	284997 297	5 522411	1	188				
60	0 00	1368681 442	250636 843	5 460815	1	186				
61	0 00	1443588 429	262776 865	5 493590	1	187				
30	3 00	24196 426	248014 342	0 097561	1	3 32	10 7	3 33	11 0	0 2
47	3 00	22872 556	234056 801	0 097722	1	3 33	11 0			
35	37 5	252765 484	242386 801	1 042819	1	35 5	-5 3	36 2	-3 5	2 7
48	37 5	273627 24	252668 955	1 082948	1	36 9	-1 6			
36	150	1002092 275	229531 923	4 365808	1	149	-0 7	151	0 7	1 4
58	150	1036847 271	232494 948	4 459655	1	152	1 3			
25	780	565034 158	245898 845	2 297832	10	782	0 3	782	0 3	1 5
43	780	490680 832	216932 387	2 261907	10	770	-1 3			
53	780	631543 95	270763 14	2 332459	10	794	1 8			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 41
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	3 / Day 4 3h	293956 661	255180 295	1 151957	10	392	56	497170000402	AA90478-01 497170000402 009 N/A P4 Plasma-1 3 / Day 4 3h
009	N/A	14 / Day 4 14h	2391704 931	232196 003	*10 300371	1	*AAR>(200)	57	497170000413	AA90478-01 497170000413 009 N/A P4 Plasma-1 14 / Day 4 14h
012	N/A	1 / Day 5 1h	194827 486	244678 169	0 796260	10		20	497170000571	AA90478-01 497170000571 012 N/A P5 Plasma-1 1 / Day 5 1h
012	N/A	2 / Day 5 2h	200753 227	254430 335	0 789030	10		21	497170000572	AA90478-01 497170000572 012 N/A P5 Plasma-1 2 / Day 5 2h
012	N/A	3 / Day 5 3h	198383 371	256413 663	0 773685	10		22	497170000573	AA90478-01 497170000573 012 N/A P5 Plasma-1 3 / Day 5 3h
012	N/A	4 / Day 5 4h	210527 352	263867 927	0 797851	10		23	497170000574	AA90478-01 497170000574 012 N/A P5 Plasma-1 4 / Day 5 4h
012	N/A	5 / Day 5 5h	190725 08	238845 359	0 798530	10		24	497170000575	AA90478-01 497170000575 012 N/A P5 Plasma-1 5 / Day 5 5h
012	N/A	6 / Day 5 6h	193220 267	248662 897	0 777037	10		26	497170000576	AA90478-01 497170000576 012 N/A P5 Plasma-1 6 / Day 5 6h
012	N/A	7 / Day 5 7h	197958 481	247230 786	0 800703	10		27	497170000577	AA90478-01 497170000577 012 N/A P5 Plasma-1 7 / Day 5 7h
012	N/A	8 / Day 5 8h	203681 307	256955 212	0 792672	10		28	497170000578	AA90478-01 497170000578 012 N/A P5 Plasma-1 8 / Day 5 8h
012	N/A	9 / Day 5 9h	203544 22	274176 869	0 742383	10		29	497170000579	AA90478-01 497170000579 012 N/A P5 Plasma-1 9 / Day 5 9h
012	N/A	10 / Day 5 10h	224195 681	283743 106	0 790136	10		31	497170000580	AA90478-01 497170000580 012 N/A P5 Plasma-1 10 / Day 5 10h
012	N/A	12 / Day 5 12h	189993 463	248219 765	0 765424	10		32	497170000582	AA90478-01 497170000582 012 N/A P5 Plasma-1 12 / Day 5 12h
012	N/A	13 / Day 5 13h	180588 246	241466 355	0 747882	10		33	497170000583	AA90478-01 497170000583 012 N/A P5 Plasma-1 13 / Day 5 13h
012	N/A	14 / Day 5 14h	199067 18	280588 94	0 709462	10		34	497170000584	AA90478-01 497170000584 012 N/A P5 Plasma-1 14 / Day 5 14h
012	N/A	15 / Day 5 15h	172611 629	249622 996	0 691489	10		37	497170000585	AA90478-01 497170000585 012 N/A P5 Plasma-1 15 / Day 5 15h
012	N/A	16 / Day 5 16h	167683 503	233554 827	0 717962	10		38	497170000586	AA90478-01 497170000586 012 N/A P5 Plasma-1 16 / Day 5 16h
012	N/A	17 / Day 5 17h	162569 747	227545 229	0 714450	10		39	497170000587	AA90478-01 497170000587 012 N/A P5 Plasma-1 17 / Day 5 17h
012	N/A	18 / Day 5 18h	185774 865	265004 432	0 701026	10		40	497170000588	AA90478-01 497170000588 012 N/A P5 Plasma-1 18 / Day 5 18h
012	N/A	19 / Day 5 19h	156400 72	232496 259	0 672702	10		41	497170000589	AA90478-01 497170000589 012 N/A P5 Plasma-1 19 / Day 5 19h
015	N/A	1 / Day 5 1h	116353 69	228136 067	0 510019	10		42	497170000761	AA90478-01 497170000761 015 N/A P5 Plasma-1 1 / Day 5 1h
028	N/A	11 / Day 5 11h	190098 152	235058 798	0 808726	10		44	497170001341	AA90478-01 497170001341 028 N/A P5 Plasma-1 11 / Day 5 11h
028	N/A	12 / Day 5 12h	182682 489	232471 832	0 785826	10		45	497170001342	AA90478-01 497170001342 028 N/A P5 Plasma-1 12 / Day 5 12h
028	N/A	13 / Day 5 13h	172074 823	226264 791	0 760502	10		46	497170001343	AA90478-01 497170001343 028 N/A P5 Plasma-1 13 / Day 5 13h
028	N/A	14 / Day 5 14h	183288 072	240748 797	0 761325	10		49	497170001344	AA90478-01 497170001344 028 N/A P5 Plasma-1 14 / Day 5 14h
028	N/A	15 / Day 5 15h	182870 571	241875 925	0 756051	10		50	497170001345	AA90478-01 497170001345 028 N/A P5 Plasma-1 15 / Day 5 15h
028	N/A	16 / Day 5 16h	187917 422	253422 914	0 741517	10		51	497170001346	AA90478-01 497170001346 028 N/A P5 Plasma-1 16 / Day 5 16h
028	N/A	17 / Day 5 17h	164540 889	223307 575	0 736835	10		52	497170001347	AA90478-01 497170001347 028 N/A P5 Plasma-1 17 / Day 5 17h
028	N/A	18 / Day 5 18h	182519 095	253550 749	0 719852	10		54	497170001348	AA90478-01 497170001348 028 N/A P5 Plasma-1 18 / Day 5 18h
028	N/A	19 / Day 5 19h	173585 157	237929 016	0 729567	10		55	497170001349	AA90478-01 497170001349 028 N/A P5 Plasma-1 19 / Day 5 19h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1.00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 43
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	288734 567	0 000000	0 0133		0 0707	114 7
9	0 00		2579 234	287121 642	0 008983	0 128			
10	1 00	1 00000	20776 106	272115 752	0 076350	0 987	-1 3		
11	2 00	0 250000	43357 189	274362 725	0 158029	2 03	1 5		
12	4 00	0 0625000	85896 188	277393 57	0 309655	3 96	-1 0		
13	8 00	0 0156250	167205 338	261457 925	0 639511	8 17	2 1		
14	16 0	0 00390625	393995 945	284517 204	1 384788	17 7	10 6		
15	40 0	0 000625000	745889 088	240065 528	3 107023	39 6	-1 0		
16	80 0	0 000156250	1461475 894	236133 213	6 189201	78 9	-1 4		
17	160	0 0000390625	3037009 286	249769 089	12 159268	155	-3 1		
18	200	0 0000250000	3870485 346	263776 686	14 673341	187	-6 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0784155751

Intercept = -0 00104271024

R-Squared = 0 9972

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 43
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	3578539 36	247703 858	14 446845	1	184		186		0 9
2	0 00	3718187 595	252148 523	14 746022	1	188				
3	0 00	3827281 548	265691 484	14 404984	1	184				
4	0 00	3720635 214	256212 968	14 521651	1	185				
5	0 00	3875303 011	266757 723	14 527426	1	185				
49	0 00	3782339 468	260829 42	14 501200	1	185				
50	0 00	4000651 928	270468 458	14 791566	1	189				
93	0 00	3968959 18	273923 671	14 489289	1	185				
94	0 00	3926179 288	270818 461	14 497458	1	185				
34	3 00	63537 534	264702 866	0 240033	1	3 07	2 3	3 08	2 7	0 2
67	3 00	66543 16	276912 503	0 240304	1	3 08	2 7			
41	37 5	716402 708	264302 581	2 710540	1	34 6	-7 7	34 6	-7 7	0 2
75	37 5	754613 161	279022 472	2 704489	1	34 5	-8 0			
26	150	1573637 853	271437 95	5 797413	2	148	-1 3	148	-1 3	2 0
58	150	1611061 083	272742 502	5 906894	2	151	0 7			
83	150	1678092 674	295890 809	5 671324	2	145	-3 3			
48	150	3578445 787	313598 852	11 410902	1	146	-2 7	141	-6 0	5 5
91	150	3099032 411	292822 644	10 583309	1	135	-10 0			
27	780	1559983 529	253160 115	6 162043	10	786	0 8	763	-2 2	2 9
59	780	1785380 951	299622 751	5 958763	10	760	-2 6			
84	780	1677231 059	288213 34	5 819408	10	742	-4 9			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 43
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	7 / Day 1 7h	865013 856	285785 508	*3 026794	2	*77 2	88	497170000083	AA90478-01 497170000083 001 N/A P1 Plasma-1 7 / Day 1 7h
001	N/A	7 / Day 1 7h	1970329 144	280984 573	7 012232	1	89 4	76	497170000083	AA90478-01 497170000083 001 N/A P1 Plasma-1 7 / Day 1 7h
001	N/A	10 / Day 3 10h	729447 59	245455 156	*2 971816	2	*75 8	90	497170000048	AA90478-01 497170000048 001 N/A P3 Plasma-1 10 / Day 3 10h
001	N/A	10 / Day 3 10h	1796141 224	296037 643	6 067273	1	77 4	78	497170000048	AA90478-01 497170000048 001 N/A P3 Plasma-1 10 / Day 3 10h
003	N/A	8 / Day 5 8h	506974 964	308647 08	1 642572	10	210	53	497170000103	AA90478-01 497170000103 003 N/A P5 Plasma-1 8 / Day 5 8h
003	N/A	12 / Day 5 12h	427045 741	270622 761	1 578011	10	201	54	497170000107	AA90478-01 497170000107 003 N/A P5 Plasma-1 12 / Day 5 12h
005	N/A	11 / Day 4 11h	866312 002	274086 575	*3 160724	2	*80 6	81	497170000220	AA90478-01 497170000220 005 N/A P4 Plasma-1 11 / Day 4 11h
005	N/A	11 / Day 4 11h	1747848 494	264488 601	6 608408	1	84 3	70	497170000220	AA90478-01 497170000220 005 N/A P4 Plasma-1 11 / Day 4 11h
007	N/A	4 / Day 1 4h	772058 727	267626 128	2 884841	10	368	20	497170000365	AA90478-01 497170000365 007 N/A P1 Plasma-1 4 / Day 1 4h
007	N/A	6 / Day 1 6h	765507 301	287050 059	2 666808	10	340	21	497170000367	AA90478-01 497170000367 007 N/A P1 Plasma-1 6 / Day 1 6h
007	N/A	19 / Day 1 19h	723361 055	267520 457	2 703947	10	345	22	497170000380	AA90478-01 497170000380 007 N/A P1 Plasma-1 19 / Day 1 19h
007	N/A	2 / Day 2 2h	666957 149	269219 913	2 477369	10	316	63	497170000344	AA90478-01 497170000344 007 N/A P2 Plasma-1 2 / Day 2 2h
007	N/A	7 / Day 2 7h	537058 85	246132 099	2 181994	10	278	64	497170000349	AA90478-01 497170000349 007 N/A P2 Plasma-1 7 / Day 2 7h
007	N/A	13 / Day 2 13h	662967 069	255443 604	2 595356	10	331	65	497170000355	AA90478-01 497170000355 007 N/A P2 Plasma-1 13 / Day 2 13h
007	N/A	19 / Day 2 19h	644798 765	279067 582	2 310547	10	295	66	497170000361	AA90478-01 497170000361 007 N/A P2 Plasma-1 19 / Day 2 19h
007	N/A	3 / Day 4 3h	623471 102	265228 53	2 350694	10	300	40	497170000307	AA90478-01 497170000307 007 N/A P4 Plasma-1 3 / Day 4 3h
007	N/A	8 / Day 4 8h	687740 405	278525 713	2 469217	10	315	42	497170000312	AA90478-01 497170000312 007 N/A P4 Plasma-1 8 / Day 4 8h
007	N/A	15 / Day 4 15h	605002 287	264936 733	2 283573	10	291	43	497170000319	AA90478-01 497170000319 007 N/A P4 Plasma-1 15 / Day 4 15h
007	N/A	1 / Day 5 1h	3477886 839	273676 989	12 707999	2	324	85	497170000286	AA90478-01 497170000286 007 N/A P5 Plasma-1 1 / Day 5 1h
007	N/A	1 / Day 5 1h	7042117 498	276175 142	*25 498738	1	*AAR>(200)	72	497170000286	AA90478-01 497170000286 007 N/A P5 Plasma-1 1 / Day 5 1h
007	N/A	6 / Day 5 6h	2902512 13	232512 651	12 483244	2	318	86	497170000291	AA90478-01 497170000291 007 N/A P5 Plasma-1 6 / Day 5 6h
007	N/A	6 / Day 5 6h	6074548 921	242014 597	*25 099928	1	*AAR>(200)	73	497170000291	AA90478-01 497170000291 007 N/A P5 Plasma-1 6 / Day 5 6h
007	N/A	11 / Day 5 11h	704919 844	285477 253	2 469268	10	315	55	497170000296	AA90478-01 497170000296 007 N/A P5 Plasma-1 11 / Day 5 11h
007	N/A	19 / Day 5 19h	599725 2	260491 012	2 302287	10	294	56	497170000304	AA90478-01 497170000304 007 N/A P5 Plasma-1 19 / Day 5 19h
009	N/A	4 / Day 1 4h	675470 466	275881 588	2 448407	10	312	23	497170000460	AA90478-01 497170000460 009 N/A P1 Plasma-1 4 / Day 1 4h
009	N/A	8 / Day 1 8h	590468 029	259284 387	2 277299	10	291	24	497170000464	AA90478-01 497170000464 009 N/A P1 Plasma-1 8 / Day 1 8h
009	N/A	13 / Day 1 13h	3182258 885	277171 454	11 481193	2	293	79	497170000469	AA90478-01 497170000469 009 N/A P1 Plasma-1 13 / Day 1 13h
009	N/A	13 / Day 1 13h	6033149 008	266943 779	*22 600823	1	*AAR>(200)	68	497170000469	AA90478-01 497170000469 009 N/A P1 Plasma-1 13 / Day 1 13h
009	N/A	7 / Day 3 7h	761553 848	269046 674	2 830564	10	361	35	497170000425	AA90478-01 497170000425 009 N/A P3 Plasma-1 7 / Day 3 7h
009	N/A	9 / Day 3 9h	783164 582	273851 183	2 859818	10	365	36	497170000427	AA90478-01 497170000427 009 N/A P3 Plasma-1 9 / Day 3 9h
009	N/A	19 / Day 3 19h	751295 845	268830 834	2 794679	10	357	37	497170000437	AA90478-01 497170000437 009 N/A P3 Plasma-1 19 / Day 3 19h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	5 / Day 4 5h	3802918 011	286802 763	13 259698	2	338	82	497170000404	AA90478-01 497170000404 009 N/A P4 Plasma-1 5 / Day 4 5h
009	N/A	5 / Day 4 5h	7948241 393	259334 18	*30 648646	1	*AAR>(200)	71	497170000404	AA90478-01 497170000404 009 N/A P4 Plasma-1 5 / Day 4 5h
009	N/A	9 / Day 4 9h	803242 952	287619 846	2 792724	10	356	44	497170000408	AA90478-01 497170000408 009 N/A P4 Plasma-1 9 / Day 4 9h
009	N/A	19 / Day 4 19h	776185 976	300083 845	2 586564	10	330	45	497170000418	AA90478-01 497170000418 009 N/A P4 Plasma-1 19 / Day 4 19h
009	N/A	3 / Day 5 3h	3735508 655	247877 8	15 069961	2	384	87	497170000383	AA90478-01 497170000383 009 N/A P5 Plasma-1 3 / Day 5 3h
009	N/A	3 / Day 5 3h	7937095 262	266327 363	*29 802027	1	*AAR>(200)	74	497170000383	AA90478-01 497170000383 009 N/A P5 Plasma-1 3 / Day 5 3h
009	N/A	10 / Day 5 10h	755623 129	271768 651	2 780391	10	355	57	497170000390	AA90478-01 497170000390 009 N/A P5 Plasma-1 10 / Day 5 10h
009	N/A	15 / Day 5 15h	782014 448	288270 312	2 712782	10	346	60	497170000395	AA90478-01 497170000395 009 N/A P5 Plasma-1 15 / Day 5 15h
011	N/A	5 / Day 1 5h	417253 953	273553 661	1 525309	10	195	25	497170000556	AA90478-01 497170000556 011 N/A P1 Plasma-1 5 / Day 1 5h
012	N/A	4 / Day 1 4h	548541 721	263682 518	2 080311	10	265	28	497170000650	AA90478-01 497170000650 012 N/A P1 Plasma-1 4 / Day 1 4h
012	N/A	5 / Day 1 5h	542384 03	265800 701	2 040567	10	260	29	497170000651	AA90478-01 497170000651 012 N/A P1 Plasma-1 5 / Day 1 5h
012	N/A	13 / Day 1 13h	578473 16	282493 423	2 047740	10	261	30	497170000659	AA90478-01 497170000659 012 N/A P1 Plasma-1 13 / Day 1 13h
012	N/A	10 / Day 2 10h	491182 774	272252 415	1 804145	10	230	32	497170000637	AA90478-01 497170000637 012 N/A P2 Plasma-1 10 / Day 2 10h
012	N/A	19 / Day 2 19h	470092 611	270809 353	1 735880	10	222	33	497170000646	AA90478-01 497170000646 012 N/A P2 Plasma-1 19 / Day 2 19h
012	N/A	11 / Day 3 11h	535455 336	261027 285	2 051339	10	262	38	497170000619	AA90478-01 497170000619 012 N/A P3 Plasma-1 11 / Day 3 11h
012	N/A	19 / Day 3 19h	533750 287	293039 275	1 821429	10	232	39	497170000627	AA90478-01 497170000627 012 N/A P3 Plasma-1 19 / Day 3 19h
012	N/A	8 / Day 4 8h	634197 152	309268 047	2 050639	10	262	46	497170000597	AA90478-01 497170000597 012 N/A P4 Plasma-1 8 / Day 4 8h
018	N/A	6 / Day 3 6h	1442837 462	238880 618	*6 039994	2	*154	89	497170000899	AA90478-01 497170000899 018 N/A P3 Plasma-1 6 / Day 3 6h
018	N/A	6 / Day 3 6h	2917892 07	264198 905	11 044300	1	141	77	497170000899	AA90478-01 497170000899 018 N/A P3 Plasma-1 6 / Day 3 6h
019	N/A	11 / Day 2 11h	1485866 43	267107 27	*5 562808	2	*142	80	497170001018	AA90478-01 497170001018 019 N/A P2 Plasma-1 11 / Day 2 11h
019	N/A	11 / Day 2 11h	3048718 364	267740 649	11 386834	1	145	69	497170001018	AA90478-01 497170001018 019 N/A P2 Plasma-1 11 / Day 2 11h
024	N/A	11 / Day 4 11h	505183 198	310455 466	1 627232	10	208	47	497170001170	AA90478-01 497170001170 024 N/A P4 Plasma-1 11 / Day 4 11h
024	N/A	10 / Day 5 10h	437146 866	266828 261	1 638308	10	209	61	497170001150	AA90478-01 497170001150 024 N/A P5 Plasma-1 10 / Day 5 10h
026	N/A	4 / Day 1 4h	586122 659	273505 901	2 142998	10	273	31	497170001315	AA90478-01 497170001315 026 N/A P1 Plasma-1 4 / Day 1 4h
026	N/A	15 / Day 1 15h	527934 192	276057 612	1 912406	10	244	62	497170001326	AA90478-01 497170001326 026 N/A P1 Plasma-1 15 / Day 1 15h
028	N/A	9 / Day 4 9h	0	0	*N/A	10	*BLQ<(10 0)	51	497170001358	AA90478-01 497170001358 028 N/A P4 Plasma-1 9 / Day 4 9h
028	N/A	19 / Day 4 19h	499772 541	266767 488	1 873439	10	239	52	497170001368	AA90478-01 497170001368 028 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 44
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		2338 758	300923 181	0 007772	0 0693		0 0672	4 4
9	0 00		2449 363	329041 79	0 007444	0 0651			
10	1 00	1 00000	24271 765	307625 017	0 078900	0 984	-1 6		
11	2 00	0 250000	50559 712	314051 956	0 160992	2 04	2 0		
12	4 00	0 0625000	102535 634	329399 146	0 311281	3 97	-0 8		
13	8 00	0 0156250	198585 666	303268 368	0 654818	8 39	4 9		
14	16 0	0 00390625	413933 926	320014 717	1 293484	16 6	3 8		
15	40 0	0 000625000	893032 793	302049 334	2 956579	38 0	-5 0		
16	80 0	0 000156250	2365952 989	338978 839	6 979648	89 7	12 1		
17	160	0 0000390625	3532111 772	304667 64	11 593328	149	-6 9		
18	200	0 0000250000	4432669 542	311762 006	14 218120	183	-8 5		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 0777660603

Intercept = 0 00237919833

R-Squared = 0 9944

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 44
Serum, Concentration of Cotinine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	4329678 917	302122 333	14 330880	1	184		184		0 9
2	0 00	4535517 899	314791 948	14 407986	1	185				
3	0 00	4259689 044	303076 489	14 054832	1	181				
4	0 00	4410688 578	306393 032	14 395525	1	185				
5	0 00	4425093 18	312633 505	14 154251	1	182				
26	0 00	4588365 673	324134 796	14 155733	1	182				
27	0 00	4547845 387	315123 951	14 431926	1	186				
39	0 00	4699809 564	327830 88	14 336080	1	184				
40	0 00	4503382 444	316854 85	14 212762	1	183				
21	3 00	75989 974	297677 045	0 255277	1	3 25	8 3	3 20	6 7	2 4
30	3 00	82301 607	334075 539	0 246356	1	3 14	4 7			
23	37 5	867048 757	307082 589	2 823503	1	36 3	-3 2	35 1	-6 4	4 8
33	37 5	850066 739	321766 049	2 641878	1	33 9	-9 6			
25	150	3542532 235	315572 108	11 225746	1	144	-4 0	146	-2 7	1 9
37	150	3526572 861	306832 045	11 493496	1	148	-1 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 44
Serum, Concentration of Cotinine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	12 / Day 4 12h	6825210 868	307607 237	*22 188070	1	*AAR>(200)	20	497170000316	AA90478-01 497170000316 007 N/A P4 Plasma-1 12 / Day 4 12h
009	N/A	8 / Day 1 8h	6487500 086	304988 908	*21 271266	1	*AAR>(200)	22	497170000464	AA90478-01 497170000464 009 N/A P1 Plasma-1 8 / Day 1 8h
011	N/A	17 / Day 4 17h	1085590 492	313399 283	3 463921	1	44 5	24	497170000511	AA90478-01 497170000511 011 N/A P4 Plasma-1 17 / Day 4 17h
028	N/A	3 / Day 1 3h	3538736 707	305407 575	11 586932	1	149	28	497170001409	AA90478-01 497170001409 028 N/A P1 Plasma-1 3 / Day 1 3h
028	N/A	4 / Day 1 4h	3461218 519	310895 9	11 133047	1	143	29	497170001410	AA90478-01 497170001410 028 N/A P1 Plasma-1 4 / Day 1 4h
028	N/A	5 / Day 1 5h	3460196 205	306361 948	11 294471	1	145	31	497170001411	AA90478-01 497170001411 028 N/A P1 Plasma-1 5 / Day 1 5h
028	N/A	6 / Day 1 6h	3017627 373	320251 099	9 422692	1	121	32	497170001412	AA90478-01 497170001412 028 N/A P1 Plasma-1 6 / Day 1 6h
028	N/A	7 / Day 1 7h	3647594 898	321963 292	11 329226	1	146	34	497170001413	AA90478-01 497170001413 028 N/A P1 Plasma-1 7 / Day 1 7h
028	N/A	8 / Day 1 8h	3405645 546	308708 392	11 031918	1	142	35	497170001414	AA90478-01 497170001414 028 N/A P1 Plasma-1 8 / Day 1 8h
028	N/A	9 / Day 1 9h	3485109 784	307939 763	11 317505	1	146	36	497170001415	AA90478-01 497170001415 028 N/A P1 Plasma-1 9 / Day 1 9h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 1 00 (Lowest Standard)

AAR - Concentration Found is Greater than 200 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 2
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	32747 706	0 000000	-0 0219		-0 0219	0 0
9	0 00		0	35245 845	0 000000	-0 0219			
10	0 500	4 00000	12815 262	35579 287	0 360189	0 495	-1 0		
11	1 00	1 00000	26104 332	36727 584	0 710755	0 997	-0 3		
12	2 00	0 250000	52205 571	34901 362	1 495803	2 12	6 0		
13	4 00	0 0625000	101768 274	37172 043	2 737764	3 90	-2 5		
14	8 00	0 0156250	206525 922	36725 969	5 623430	8 04	0 5		
15	10 0	0 0100000	244731 447	35446 871	6 904176	9 88	-1 2		
16	20 0	0 00250000	497793 644	34747 241	14 326134	20 5	2 5		
17	40 0	0 000625000	1050907 445	38674 413	27 173197	38 9	-2 8		
18	50 0	0 000400000	1233035 595	35931 603	34 316187	49 2	-1 6		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 697403075

Intercept = 0 0152713854

R-Squared = 0 9989

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 2
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1090699 709	32869 538	33 182691	1	47 6		47 8		1 7
2	0 00	1195009 305	36651 989	32 604214	1	46 7				
3	0 00	1264527 795	38404 889	32 926219	1	47 2				
4	0 00	1238044 485	37007 105	33 454238	1	47 9				
5	0 00	1173670 512	35989 721	32 611270	1	46 7				
48	0 00	1538126 342	45276 699	33 971698	1	48 7				
49	0 00	1461070 292	43176 782	33 839259	1	48 5				
89	0 00	1453111 55	42573 069	34 132178	1	48 9				
90	0 00	1503255 118	45121 649	33 315607	1	47 7				
33	1 50	34921 806	33866 462	1 031162	1	1 46	-2 7	1 45	-3 3	1 5
65	1 50	43564 254	43062 17	1 011660	1	1 43	-4 7			
40	8 00	189570 652	34980 598	5 419308	1	7 75	-3 1	7 99	-0 1	4 2
72	8 00	251454 919	43680 101	5 756738	1	8 23	2 9			
47	37 5	1042189 949	41476 071	25 127499	1	36 0	-4 0	35 2	-6 1	3 4
87	37 5	1114803 35	46532 4	23 957573	1	34 3	-8 5			
26	195	446602 718	33479 578	13 339556	10	191	-2 1	194	-0 5	2 0
57	195	599686 718	44804 425	13 384542	10	192	-1 5			
80	195	569439 96	41293 743	13 789982	10	198	1 5			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 2
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 1 1h	8390 253	36132 68	*0 232207	10	*BLQ<(5 00)	20	497170000362	AA90478-01 497170000362 007 N/A P1 Plasma-1 1 / Day 1 1h
007	N/A	2 / Day 1 2h	9001 294	35903 72	*0 250706	10	*BLQ<(5 00)	21	497170000363	AA90478-01 497170000363 007 N/A P1 Plasma-1 2 / Day 1 2h
007	N/A	3 / Day 1 3h	15385 216	37458 148	0 410731	10	5 67	22	497170000364	AA90478-01 497170000364 007 N/A P1 Plasma-1 3 / Day 1 3h
007	N/A	4 / Day 1 4h	16664 895	37852 749	0 440256	10	6 09	23	497170000365	AA90478-01 497170000365 007 N/A P1 Plasma-1 4 / Day 1 4h
007	N/A	5 / Day 1 5h	23933 595	35696 052	0 670483	10	9 40	24	497170000366	AA90478-01 497170000366 007 N/A P1 Plasma-1 5 / Day 1 5h
007	N/A	6 / Day 1 6h	24580 805	35942 235	0 683898	10	9 59	25	497170000367	AA90478-01 497170000367 007 N/A P1 Plasma-1 6 / Day 1 6h
007	N/A	7 / Day 1 7h	20716 452	34901 608	0 593567	10	8 29	27	497170000368	AA90478-01 497170000368 007 N/A P1 Plasma-1 7 / Day 1 7h
007	N/A	8 / Day 1 8h	18256 788	30963 176	0 589629	10	8 24	28	497170000369	AA90478-01 497170000369 007 N/A P1 Plasma-1 8 / Day 1 8h
007	N/A	9 / Day 1 9h	18738 265	32973 437	0 568284	10	7 93	29	497170000370	AA90478-01 497170000370 007 N/A P1 Plasma-1 9 / Day 1 9h
007	N/A	10 / Day 1 10h	19281 813	35526 577	0 542743	10	7 56	30	497170000371	AA90478-01 497170000371 007 N/A P1 Plasma-1 10 / Day 1 10h
007	N/A	11 / Day 1 11h	17239 955	33547 378	0 513899	10	7 15	31	497170000372	AA90478-01 497170000372 007 N/A P1 Plasma-1 11 / Day 1 11h
007	N/A	12 / Day 1 12h	17544 032	33390 91	0 525413	10	7 31	32	497170000373	AA90478-01 497170000373 007 N/A P1 Plasma-1 12 / Day 1 12h
007	N/A	13 / Day 1 13h	17049 923	34615 33	0 492554	10	6 84	34	497170000374	AA90478-01 497170000374 007 N/A P1 Plasma-1 13 / Day 1 13h
007	N/A	14 / Day 1 14h	14569 662	32569 135	0 447346	10	6 20	35	497170000375	AA90478-01 497170000375 007 N/A P1 Plasma-1 14 / Day 1 14h
007	N/A	15 / Day 1 15h	14918 597	34346 256	0 434359	10	6 01	36	497170000376	AA90478-01 497170000376 007 N/A P1 Plasma-1 15 / Day 1 15h
007	N/A	16 / Day 1 16h	15881 573	35338 143	0 449417	10	6 23	37	497170000377	AA90478-01 497170000377 007 N/A P1 Plasma-1 16 / Day 1 16h
007	N/A	17 / Day 1 17h	14823 803	31914 754	0 464481	10	6 44	38	497170000378	AA90478-01 497170000378 007 N/A P1 Plasma-1 17 / Day 1 17h
007	N/A	18 / Day 1 18h	14600 903	33784 653	0 432176	10	5 98	39	497170000379	AA90478-01 497170000379 007 N/A P1 Plasma-1 18 / Day 1 18h
007	N/A	19 / Day 1 19h	15209 537	37598 174	0 404529	10	5 58	41	497170000380	AA90478-01 497170000380 007 N/A P1 Plasma-1 19 / Day 1 19h
009	N/A	1 / Day 1 1h	7384 715	37735 34	*0 195698	10	*BLQ<(5 00)	42	497170000457	AA90478-01 497170000457 009 N/A P1 Plasma-1 1 / Day 1 1h
009	N/A	2 / Day 1 2h	9016 229	44223 687	*0 203878	10	*BLQ<(5 00)	43	497170000458	AA90478-01 497170000458 009 N/A P1 Plasma-1 2 / Day 1 2h
009	N/A	3 / Day 1 3h	111979 049	46446 528	2 410924	10	34 4	44	497170000459	AA90478-01 497170000459 009 N/A P1 Plasma-1 3 / Day 1 3h
009	N/A	4 / Day 1 4h	116171 892	44669 577	2 600694	10	37 1	45	497170000460	AA90478-01 497170000460 009 N/A P1 Plasma-1 4 / Day 1 4h
009	N/A	5 / Day 1 5h	90254 761	44051 615	2 048841	10	29 2	46	497170000461	AA90478-01 497170000461 009 N/A P1 Plasma-1 5 / Day 1 5h
009	N/A	6 / Day 1 6h	57158 074	38234 688	1 494927	10	21 2	50	497170000462	AA90478-01 497170000462 009 N/A P1 Plasma-1 6 / Day 1 6h
009	N/A	7 / Day 1 7h	48913 928	39400 333	1 241460	10	17 6	51	497170000463	AA90478-01 497170000463 009 N/A P1 Plasma-1 7 / Day 1 7h
009	N/A	8 / Day 1 8h	17453 892	37294 269	0 468005	10	6 49	52	497170000464	AA90478-01 497170000464 009 N/A P1 Plasma-1 8 / Day 1 8h
009	N/A	9 / Day 1 9h	46967 13	42973 446	1 092934	10	15 5	53	497170000465	AA90478-01 497170000465 009 N/A P1 Plasma-1 9 / Day 1 9h
009	N/A	10 / Day 1 10h	43782 582	45207 169	0 968488	10	13 7	54	497170000466	AA90478-01 497170000466 009 N/A P1 Plasma-1 10 / Day 1 10h
009	N/A	11 / Day 1 11h	34629 955	44041 023	0 786311	10	11 1	55	497170000467	AA90478-01 497170000467 009 N/A P1 Plasma-1 11 / Day 1 11h
009	N/A	12 / Day 1 12h	28207 379	42233 605	0 667889	10	9 36	56	497170000468	AA90478-01 497170000468 009 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 1 13h	25432 102	40939 042	0 621219	10	8 69	58	497170000469	AA90478-01 497170000469 009 N/A P1 Plasma-1 13 / Day 1 13h
009	N/A	14 / Day 1 14h	27009 006	45486 235	0 593784	10	8 30	59	497170000470	AA90478-01 497170000470 009 N/A P1 Plasma-1 14 / Day 1 14h
009	N/A	15 / Day 1 15h	22695 25	42879 599	0 529279	10	7 37	60	497170000471	AA90478-01 497170000471 009 N/A P1 Plasma-1 15 / Day 1 15h
009	N/A	16 / Day 1 16h	23055 541	48418 33	0 476174	10	6 61	61	497170000472	AA90478-01 497170000472 009 N/A P1 Plasma-1 16 / Day 1 16h
009	N/A	17 / Day 1 17h	22277 736	45534 092	0 489254	10	6 80	62	497170000473	AA90478-01 497170000473 009 N/A P1 Plasma-1 17 / Day 1 17h
009	N/A	18 / Day 1 18h	22709 411	45838 733	0 495420	10	6 88	63	497170000474	AA90478-01 497170000474 009 N/A P1 Plasma-1 18 / Day 1 18h
009	N/A	19 / Day 1 19h	19045 556	44434 784	0 428618	10	5 93	64	497170000475	AA90478-01 497170000475 009 N/A P1 Plasma-1 19 / Day 1 19h
011	N/A	1 / Day 1 1h	7099 231	44199 017	*0 160620	10	*BLQ<(5 00)	66	497170000552	AA90478-01 497170000552 011 N/A P1 Plasma-1 1 / Day 1 1h
011	N/A	2 / Day 1 2h	8433 626	47957 267	*0 175857	10	*BLQ<(5 00)	67	497170000553	AA90478-01 497170000553 011 N/A P1 Plasma-1 2 / Day 1 2h
011	N/A	3 / Day 1 3h	58382 618	46558 561	1 253961	10	17 8	68	497170000554	AA90478-01 497170000554 011 N/A P1 Plasma-1 3 / Day 1 3h
011	N/A	4 / Day 1 4h	62296 153	46364 18	1 343627	10	19 0	69	497170000555	AA90478-01 497170000555 011 N/A P1 Plasma-1 4 / Day 1 4h
011	N/A	5 / Day 1 5h	88632 757	33734 312	2 627377	10	37 5	70	497170000556	AA90478-01 497170000556 011 N/A P1 Plasma-1 5 / Day 1 5h
011	N/A	6 / Day 1 6h	67305 733	45666 694	1 473847	10	20 9	71	497170000557	AA90478-01 497170000557 011 N/A P1 Plasma-1 6 / Day 1 6h
011	N/A	7 / Day 1 7h	44502 701	46425 164	0 958590	10	13 5	73	497170000558	AA90478-01 497170000558 011 N/A P1 Plasma-1 7 / Day 1 7h
011	N/A	8 / Day 1 8h	39287 707	44150 515	0 889858	10	12 5	74	497170000559	AA90478-01 497170000559 011 N/A P1 Plasma-1 8 / Day 1 8h
011	N/A	9 / Day 1 9h	33013 974	45632 741	0 723471	10	10 2	75	497170000560	AA90478-01 497170000560 011 N/A P1 Plasma-1 9 / Day 1 9h
011	N/A	10 / Day 1 10h	26747 918	47049 568	0 568505	10	7 93	76	497170000561	AA90478-01 497170000561 011 N/A P1 Plasma-1 10 / Day 1 10h
011	N/A	11 / Day 1 11h	21644 147	45316 615	0 477621	10	6 63	77	497170000562	AA90478-01 497170000562 011 N/A P1 Plasma-1 11 / Day 1 11h
011	N/A	12 / Day 1 12h	19450 992	44939 135	0 432830	10	5 99	78	497170000563	AA90478-01 497170000563 011 N/A P1 Plasma-1 12 / Day 1 12h
011	N/A	13 / Day 1 13h	16901 627	43929 564	0 384744	10	5 30	79	497170000564	AA90478-01 497170000564 011 N/A P1 Plasma-1 13 / Day 1 13h
011	N/A	14 / Day 1 14h	14580 55	42727 833	*0 341242	10	*BLQ<(5 00)	81	497170000565	AA90478-01 497170000565 011 N/A P1 Plasma-1 14 / Day 1 14h
011	N/A	15 / Day 1 15h	14705 604	44261 371	*0 332245	10	*BLQ<(5 00)	82	497170000566	AA90478-01 497170000566 011 N/A P1 Plasma-1 15 / Day 1 15h
011	N/A	16 / Day 1 16h	10758 74	44925 648	*0 239479	10	*BLQ<(5 00)	83	497170000567	AA90478-01 497170000567 011 N/A P1 Plasma-1 16 / Day 1 16h
011	N/A	17 / Day 1 17h	14173 525	46319 13	*0 305997	10	*BLQ<(5 00)	84	497170000568	AA90478-01 497170000568 011 N/A P1 Plasma-1 17 / Day 1 17h
011	N/A	18 / Day 1 18h	9871 417	47574 281	*0 207495	10	*BLQ<(5 00)	85	497170000569	AA90478-01 497170000569 011 N/A P1 Plasma-1 18 / Day 1 18h
011	N/A	19 / Day 1 19h	13709 012	45693 192	*0 300023	10	*BLQ<(5 00)	86	497170000570	AA90478-01 497170000570 011 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 3
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	39756 349	0 000000	0 00154		0 00154	0 0
9	0 00		0	41572 735	0 000000	0 00154			
10	0 500	4 00000	13797 617	39548 803	0 348876	0 495	-1 0		
11	1 00	1 00000	28264 516	39037 782	0 724030	1 03	3 0		
12	2 00	0 250000	58157 197	42297 531	1 374955	1 95	-2 5		
13	4 00	0 0625000	111880 046	39727 482	2 816188	3 99	-0 3		
14	8 00	0 0156250	240448 288	40271 482	5 970684	8 45	5 6		
15	10 0	0 0100000	289567 01	41195 907	7 029024	9 95	-0 5		
16	20 0	0 00250000	535809 653	37978 07	14 108396	20 0	0 0		
17	40 0	0 000625000	1040400 815	36456 938	28 537800	40 4	1 0		
18	50 0	0 000400000	1361326 763	40505 368	33 608552	47 6	-4 8		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 706445863

Intercept = -0 00108907368

R-Squared = 0 9988

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 3
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1350808 46	39502 129	34 195839	1	48 4		47 9		2 0
2	0 00	1226868 983	36046 371	34 035853	1	48 2				
3	0 00	1308588 992	38742 565	33 776519	1	47 8				
4	0 00	1280720 67	37516 479	34 137550	1	48 3				
5	0 00	1318336 062	39305 649	33 540626	1	47 5				
48	0 00	1405954 636	40224 859	34 952382	1	49 5				
49	0 00	1403149 106	42190 899	33 257151	1	47 1				
89	0 00	1196518 298	36722 73	32 582499	1	46 1				
90	0 00	1292382 326	38190 739	33 840202	1	47 9				
33	1 50	42966 145	41411 179	1 037549	1	1 47	-2 0	1 47	-2 0	0 5
65	1 50	40744 134	39426 292	1 033425	1	1 46	-2 7			
40	8 00	212039 96	41186 064	5 148342	1	7 29	-8 9	7 60	-5 0	5 7
72	8 00	214425 718	38446 168	5 577298	1	7 90	-1 3			
47	37 5	926186 298	37754 472	24 531830	1	34 7	-7 5	34 9	-6 9	0 6
87	37 5	944967 645	38173 376	24 754626	1	35 0	-6 7			
26	195	516226 991	38888 304	13 274608	10	188	-3 6	188	-3 6	1 6
57	195	523932 542	40098 471	13 066148	10	185	-5 1			
80	195	454975 556	33808 1	13 457590	10	191	-2 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 3
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	1 / Day 1 1h	2888 843	34348 969	*0 084103	10	*BLQ<(5 00)	20	497170000647	AA90478-01 497170000647 012 N/A P1 Plasma-1 1 / Day 1 1h
012	N/A	2 / Day 1 2h	4391 464	41291 06	*0 106354	10	*BLQ<(5 00)	21	497170000648	AA90478-01 497170000648 012 N/A P1 Plasma-1 2 / Day 1 2h
012	N/A	3 / Day 1 3h	13124 53	37678 165	*0 348333	10	*BLQ<(5 00)	22	497170000649	AA90478-01 497170000649 012 N/A P1 Plasma-1 3 / Day 1 3h
012	N/A	4 / Day 1 4h	23201 993	41009 033	0 565778	10	8 02	23	497170000650	AA90478-01 497170000650 012 N/A P1 Plasma-1 4 / Day 1 4h
012	N/A	5 / Day 1 5h	44767 681	42713 319	1 048097	10	14 9	24	497170000651	AA90478-01 497170000651 012 N/A P1 Plasma-1 5 / Day 1 5h
012	N/A	6 / Day 1 6h	35443 428	39783 482	0 890908	10	12 6	25	497170000652	AA90478-01 497170000652 012 N/A P1 Plasma-1 6 / Day 1 6h
012	N/A	7 / Day 1 7h	31232 464	40373 672	0 773585	10	11 0	27	497170000653	AA90478-01 497170000653 012 N/A P1 Plasma-1 7 / Day 1 7h
012	N/A	8 / Day 1 8h	28143 569	39689 59	0 709092	10	10 1	28	497170000654	AA90478-01 497170000654 012 N/A P1 Plasma-1 8 / Day 1 8h
012	N/A	9 / Day 1 9h	29028 476	39925 681	0 727063	10	10 3	29	497170000655	AA90478-01 497170000655 012 N/A P1 Plasma-1 9 / Day 1 9h
012	N/A	10 / Day 1 10h	25125 678	40405 492	0 621838	10	8 82	30	497170000656	AA90478-01 497170000656 012 N/A P1 Plasma-1 10 / Day 1 10h
012	N/A	11 / Day 1 11h	20313 88	37886 7	0 536174	10	7 61	31	497170000657	AA90478-01 497170000657 012 N/A P1 Plasma-1 11 / Day 1 11h
012	N/A	12 / Day 1 12h	20767 263	40849 376	0 508386	10	7 21	32	497170000658	AA90478-01 497170000658 012 N/A P1 Plasma-1 12 / Day 1 12h
012	N/A	13 / Day 1 13h	17702 587	40901 829	0 432807	10	6 14	34	497170000659	AA90478-01 497170000659 012 N/A P1 Plasma-1 13 / Day 1 13h
012	N/A	14 / Day 1 14h	18275 859	39715 364	0 460171	10	6 53	35	497170000660	AA90478-01 497170000660 012 N/A P1 Plasma-1 14 / Day 1 14h
012	N/A	15 / Day 1 15h	16911 262	39989 087	0 422897	10	6 00	36	497170000661	AA90478-01 497170000661 012 N/A P1 Plasma-1 15 / Day 1 15h
012	N/A	16 / Day 1 16h	13409 667	38285 647	*0 350253	10	*BLQ<(5 00)	37	497170000662	AA90478-01 497170000662 012 N/A P1 Plasma-1 16 / Day 1 16h
012	N/A	17 / Day 1 17h	12296 516	39350 887	*0 312484	10	*BLQ<(5 00)	38	497170000663	AA90478-01 497170000663 012 N/A P1 Plasma-1 17 / Day 1 17h
012	N/A	18 / Day 1 18h	13318 002	41725 822	*0 319179	10	*BLQ<(5 00)	39	497170000664	AA90478-01 497170000664 012 N/A P1 Plasma-1 18 / Day 1 18h
012	N/A	19 / Day 1 19h	11752 037	41032 013	*0 286411	10	*BLQ<(5 00)	41	497170000665	AA90478-01 497170000665 012 N/A P1 Plasma-1 19 / Day 1 19h
013	N/A	1 / Day 1 1h	0	39036 711	*0 000000	10	*BLQ<(5 00)	42	497170000742	AA90478-01 497170000742 013 N/A P1 Plasma-1 1 / Day 1 1h
013	N/A	2 / Day 1 2h	0	38187 29	*0 000000	10	*BLQ<(5 00)	43	497170000743	AA90478-01 497170000743 013 N/A P1 Plasma-1 2 / Day 1 2h
013	N/A	3 / Day 1 3h	16679 22	38202 814	0 436597	10	6 20	44	497170000744	AA90478-01 497170000744 013 N/A P1 Plasma-1 3 / Day 1 3h
013	N/A	4 / Day 1 4h	17323 611	38987 15	0 444342	10	6 31	45	497170000745	AA90478-01 497170000745 013 N/A P1 Plasma-1 4 / Day 1 4h
013	N/A	5 / Day 1 5h	17853 167	38515 583	0 463531	10	6 58	46	497170000746	AA90478-01 497170000746 013 N/A P1 Plasma-1 5 / Day 1 5h
013	N/A	6 / Day 1 6h	16765 578	42313 161	0 396226	10	5 62	50	497170000747	AA90478-01 497170000747 013 N/A P1 Plasma-1 6 / Day 1 6h
013	N/A	7 / Day 1 7h	13547 697	40631 504	*0 333428	10	*BLQ<(5 00)	51	497170000748	AA90478-01 497170000748 013 N/A P1 Plasma-1 7 / Day 1 7h
013	N/A	8 / Day 1 8h	8864 679	36264 489	*0 244445	10	*BLQ<(5 00)	52	497170000749	AA90478-01 497170000749 013 N/A P1 Plasma-1 8 / Day 1 8h
013	N/A	9 / Day 1 9h	8824 572	39448 295	*0 223700	10	*BLQ<(5 00)	53	497170000750	AA90478-01 497170000750 013 N/A P1 Plasma-1 9 / Day 1 9h
013	N/A	10 / Day 1 10h	4052 073	39537 549	*0 102487	10	*BLQ<(5 00)	54	497170000751	AA90478-01 497170000751 013 N/A P1 Plasma-1 10 / Day 1 10h
013	N/A	11 / Day 1 11h	6002 438	41114 93	*0 145992	10	*BLQ<(5 00)	55	497170000752	AA90478-01 497170000752 013 N/A P1 Plasma-1 11 / Day 1 11h
013	N/A	12 / Day 1 12h	5030 067	40480 434	*0 124259	10	*BLQ<(5 00)	56	497170000753	AA90478-01 497170000753 013 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	13 / Day 1 13h	4723 608	41760 487	*0 113112	10	*BLQ<(5 00)	58	497170000754	AA90478-01 497170000754 013 N/A P1 Plasma-1 13 / Day 1 13h
013	N/A	14 / Day 1 14h	3598 392	38744 154	*0 092876	10	*BLQ<(5 00)	59	497170000755	AA90478-01 497170000755 013 N/A P1 Plasma-1 14 / Day 1 14h
013	N/A	15 / Day 1 15h	4108 783	41599 795	*0 098769	10	*BLQ<(5 00)	60	497170000756	AA90478-01 497170000756 013 N/A P1 Plasma-1 15 / Day 1 15h
013	N/A	16 / Day 1 16h	2979 172	37727 243	*0 078966	10	*BLQ<(5 00)	61	497170000757	AA90478-01 497170000757 013 N/A P1 Plasma-1 16 / Day 1 16h
013	N/A	17 / Day 1 17h	3373 123	38347 808	*0 087961	10	*BLQ<(5 00)	62	497170000758	AA90478-01 497170000758 013 N/A P1 Plasma-1 17 / Day 1 17h
013	N/A	18 / Day 1 18h	3083 814	38363 606	*0 080384	10	*BLQ<(5 00)	63	497170000759	AA90478-01 497170000759 013 N/A P1 Plasma-1 18 / Day 1 18h
013	N/A	19 / Day 1 19h	2366 528	38490 58	*0 061483	10	*BLQ<(5 00)	64	497170000760	AA90478-01 497170000760 013 N/A P1 Plasma-1 19 / Day 1 19h
015	N/A	1 / Day 1 1h	2296 284	38857 781	*0 059095	10	*BLQ<(5 00)	66	497170000837	AA90478-01 497170000837 015 N/A P1 Plasma-1 1 / Day 1 1h
015	N/A	2 / Day 1 2h	2692 924	40176 64	*0 067027	10	*BLQ<(5 00)	67	497170000838	AA90478-01 497170000838 015 N/A P1 Plasma-1 2 / Day 1 2h
015	N/A	3 / Day 1 3h	49858 43	39843 149	1 251368	10	17 7	68	497170000839	AA90478-01 497170000839 015 N/A P1 Plasma-1 3 / Day 1 3h
015	N/A	4 / Day 1 4h	53453 486	38562 953	1 386136	10	19 6	69	497170000840	AA90478-01 497170000840 015 N/A P1 Plasma-1 4 / Day 1 4h
015	N/A	5 / Day 1 5h	55549 884	38642 085	1 437549	10	20 4	70	497170000841	AA90478-01 497170000841 015 N/A P1 Plasma-1 5 / Day 1 5h
015	N/A	6 / Day 1 6h	39479 295	39576 299	0 997549	10	14 1	71	497170000842	AA90478-01 497170000842 015 N/A P1 Plasma-1 6 / Day 1 6h
015	N/A	7 / Day 1 7h	30858 305	35787 406	0 862267	10	12 2	73	497170000843	AA90478-01 497170000843 015 N/A P1 Plasma-1 7 / Day 1 7h
015	N/A	8 / Day 1 8h	25815 478	36588 2	0 705568	10	10 0	74	497170000844	AA90478-01 497170000844 015 N/A P1 Plasma-1 8 / Day 1 8h
015	N/A	9 / Day 1 9h	20485 764	38058 941	0 538264	10	7 63	75	497170000845	AA90478-01 497170000845 015 N/A P1 Plasma-1 9 / Day 1 9h
015	N/A	10 / Day 1 10h	16444 549	39627 375	0 414980	10	5 89	76	497170000846	AA90478-01 497170000846 015 N/A P1 Plasma-1 10 / Day 1 10h
015	N/A	11 / Day 1 11h	14405 311	38399 862	0 375140	10	5 33	77	497170000847	AA90478-01 497170000847 015 N/A P1 Plasma-1 11 / Day 1 11h
015	N/A	12 / Day 1 12h	12662 245	40453 591	*0 313007	10	*BLQ<(5 00)	78	497170000848	AA90478-01 497170000848 015 N/A P1 Plasma-1 12 / Day 1 12h
015	N/A	13 / Day 1 13h	11566 097	39449 711	*0 293186	10	*BLQ<(5 00)	79	497170000849	AA90478-01 497170000849 015 N/A P1 Plasma-1 13 / Day 1 13h
015	N/A	14 / Day 1 14h	9093 78	33330 245	*0 272839	10	*BLQ<(5 00)	81	497170000850	AA90478-01 497170000850 015 N/A P1 Plasma-1 14 / Day 1 14h
015	N/A	15 / Day 1 15h	9003 959	37730 289	*0 238640	10	*BLQ<(5 00)	82	497170000851	AA90478-01 497170000851 015 N/A P1 Plasma-1 15 / Day 1 15h
015	N/A	16 / Day 1 16h	7275 211	34773 152	*0 209219	10	*BLQ<(5 00)	83	497170000852	AA90478-01 497170000852 015 N/A P1 Plasma-1 16 / Day 1 16h
015	N/A	17 / Day 1 17h	7438 979	40364 835	*0 184294	10	*BLQ<(5 00)	84	497170000853	AA90478-01 497170000853 015 N/A P1 Plasma-1 17 / Day 1 17h
015	N/A	18 / Day 1 18h	8491 656	36668 485	*0 231579	10	*BLQ<(5 00)	85	497170000854	AA90478-01 497170000854 015 N/A P1 Plasma-1 18 / Day 1 18h
015	N/A	19 / Day 1 19h	6645 416	32958 423	*0 201630	10	*BLQ<(5 00)	86	497170000855	AA90478-01 497170000855 015 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 4
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	35090 481	0 000000	0 0168		0 0168	0 0
9	0 00		0	37548 79	0 000000	0 0168			
10	0 500	4 00000	14126 9	41792 666	0 338023	0 485	-3 0		
11	1 00	1 00000	29632 551	39989 695	0 741005	1 04	4 0		
12	2 00	0 250000	60673 994	40620 097	1 493694	2 09	4 5		
13	4 00	0 0625000	102992 003	36824 207	2 796856	3 89	-2 8		
14	8 00	0 0156250	227991 111	37733 482	6 042143	8 39	4 9		
15	10 0	0 0100000	262116 857	37288 579	7 029414	9 75	-2 5		
16	20 0	0 00250000	473306 422	32730 956	14 460513	20 0	0 0		
17	40 0	0 000625000	940958 586	33331 608	28 230219	39 1	-2 3		
18	50 0	0 000400000	1299000 103	37182 918	34 935400	48 4	-3 2		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 722023949

Intercept = -0 0121388560

R-Squared = 0 9983

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 4
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1276080 938	38380 939	33 247778	1	46 1		47 0		2 1
2	0 00	1271396 625	36287 081	35 037170	1	48 5				
3	0 00	1230431 782	37161 983	33 109960	1	45 9				
4	0 00	1344615 921	40032 686	33 587952	1	46 5				
5	0 00	1307727 691	38174 155	34 256886	1	47 5				
48	0 00	1453243 166	41618 211	34 918444	1	48 4				
49	0 00	1461068 762	42485 636	34 389711	1	47 6				
87	0 00	1341739 677	39948 034	33 587127	1	46 5				
88	0 00	1421542 221	42575 182	33 388988	1	46 3				
33	1 50	43266 266	40529 698	1 067520	1	1 50	0 0	1 46	-2 7	3 9
65	1 50	39404 326	38962 123	1 011350	1	1 42	-5 3			
40	8 00	229387 759	39607 46	5 791529	1	8 04	0 5	7 91	-1 1	2 4
72	8 00	225559 416	40297 822	5 597310	1	7 77	-2 9			
47	37 5	1115624 131	43795 566	25 473449	1	35 3	-5 9	34 9	-6 9	1 8
85	37 5	948145 507	38228 756	24 801893	1	34 4	-8 3			
26	195	539580 113	39274 735	13 738606	10	190	-2 6	188	-3 6	3 1
57	195	518200 65	37467 127	13 830808	10	192	-1 5			
80	195	546489 552	41806 567	13 071859	10	181	-7 2			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 4
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
018	N/A	1 / Day 1 1h	1888 016	42696 575	*0 044219	10	*BLQ<(5 00)	20	497170000932	AA90478-01 497170000932 018 N/A P1 Plasma-1 1 / Day 1 1h
018	N/A	2 / Day 1 2h	2150 652	34612 626	*0 062135	10	*BLQ<(5 00)	21	497170000933	AA90478-01 497170000933 018 N/A P1 Plasma-1 2 / Day 1 2h
018	N/A	3 / Day 1 3h	16074 708	38253 046	0 420220	10	5 99	22	497170000934	AA90478-01 497170000934 018 N/A P1 Plasma-1 3 / Day 1 3h
018	N/A	4 / Day 1 4h	30060 242	41296 159	0 727919	10	10 2	23	497170000935	AA90478-01 497170000935 018 N/A P1 Plasma-1 4 / Day 1 4h
018	N/A	5 / Day 1 5h	35984 406	41287 464	0 871558	10	12 2	24	497170000936	AA90478-01 497170000936 018 N/A P1 Plasma-1 5 / Day 1 5h
018	N/A	6 / Day 1 6h	26805 337	39803 763	0 673437	10	9 50	25	497170000937	AA90478-01 497170000937 018 N/A P1 Plasma-1 6 / Day 1 6h
018	N/A	7 / Day 1 7h	18346 072	38531 94	0 476126	10	6 76	27	497170000938	AA90478-01 497170000938 018 N/A P1 Plasma-1 7 / Day 1 7h
018	N/A	8 / Day 1 8h	21371 779	42680 501	0 500739	10	7 10	28	497170000939	AA90478-01 497170000939 018 N/A P1 Plasma-1 8 / Day 1 8h
018	N/A	9 / Day 1 9h	14598 749	41417 937	0 352474	10	5 05	29	497170000940	AA90478-01 497170000940 018 N/A P1 Plasma-1 9 / Day 1 9h
018	N/A	10 / Day 1 10h	11282 828	40653 705	*0 277535	10	*BLQ<(5 00)	30	497170000941	AA90478-01 497170000941 018 N/A P1 Plasma-1 10 / Day 1 10h
018	N/A	11 / Day 1 11h	10096 111	38870 851	*0 259735	10	*BLQ<(5 00)	31	497170000942	AA90478-01 497170000942 018 N/A P1 Plasma-1 11 / Day 1 11h
018	N/A	12 / Day 1 12h	9600 106	40901 723	*0 234712	10	*BLQ<(5 00)	32	497170000943	AA90478-01 497170000943 018 N/A P1 Plasma-1 12 / Day 1 12h
018	N/A	13 / Day 1 13h	8955 592	42246 212	*0 211986	10	*BLQ<(5 00)	34	497170000944	AA90478-01 497170000944 018 N/A P1 Plasma-1 13 / Day 1 13h
018	N/A	14 / Day 1 14h	7022 081	39712 071	*0 176825	10	*BLQ<(5 00)	35	497170000945	AA90478-01 497170000945 018 N/A P1 Plasma-1 14 / Day 1 14h
018	N/A	15 / Day 1 15h	8095 552	40869 832	*0 198081	10	*BLQ<(5 00)	36	497170000946	AA90478-01 497170000946 018 N/A P1 Plasma-1 15 / Day 1 15h
018	N/A	16 / Day 1 16h	6038 777	40484 701	*0 149162	10	*BLQ<(5 00)	37	497170000947	AA90478-01 497170000947 018 N/A P1 Plasma-1 16 / Day 1 16h
018	N/A	17 / Day 1 17h	7951 637	42930 013	*0 185223	10	*BLQ<(5 00)	38	497170000948	AA90478-01 497170000948 018 N/A P1 Plasma-1 17 / Day 1 17h
018	N/A	18 / Day 1 18h	6523 899	42589 886	*0 153180	10	*BLQ<(5 00)	39	497170000949	AA90478-01 497170000949 018 N/A P1 Plasma-1 18 / Day 1 18h
018	N/A	19 / Day 1 19h	6545 185	41989 082	*0 155878	10	*BLQ<(5 00)	41	497170000950	AA90478-01 497170000950 018 N/A P1 Plasma-1 19 / Day 1 19h
019	N/A	1 / Day 1 1h	2101 822	40684 94	*0 051661	10	*BLQ<(5 00)	42	497170001027	AA90478-01 497170001027 019 N/A P1 Plasma-1 1 / Day 1 1h
019	N/A	2 / Day 1 2h	2693 243	42084 902	*0 063995	10	*BLQ<(5 00)	43	497170001028	AA90478-01 497170001028 019 N/A P1 Plasma-1 2 / Day 1 2h
019	N/A	3 / Day 1 3h	65394 382	39907 147	1 638663	10	22 9	44	497170001029	AA90478-01 497170001029 019 N/A P1 Plasma-1 3 / Day 1 3h
019	N/A	4 / Day 1 4h	72746 531	43367 399	1 677447	10	23 4	45	497170001030	AA90478-01 497170001030 019 N/A P1 Plasma-1 4 / Day 1 4h
019	N/A	5 / Day 1 5h	87524 171	41754 773	2 096148	10	29 2	46	497170001031	AA90478-01 497170001031 019 N/A P1 Plasma-1 5 / Day 1 5h
019	N/A	6 / Day 1 6h	49235 335	39487 253	1 246867	10	17 4	50	497170001032	AA90478-01 497170001032 019 N/A P1 Plasma-1 6 / Day 1 6h
019	N/A	7 / Day 1 7h	29292 933	38678 149	0 757351	10	10 7	51	497170001033	AA90478-01 497170001033 019 N/A P1 Plasma-1 7 / Day 1 7h
019	N/A	8 / Day 1 8h	19410 474	37252 75	0 521048	10	7 38	52	497170001034	AA90478-01 497170001034 019 N/A P1 Plasma-1 8 / Day 1 8h
019	N/A	9 / Day 1 9h	15761 259	38167 346	0 412951	10	5 89	53	497170001035	AA90478-01 497170001035 019 N/A P1 Plasma-1 9 / Day 1 9h
019	N/A	10 / Day 1 10h	12745 879	37713 989	*0 337962	10	*BLQ<(5 00)	54	497170001036	AA90478-01 497170001036 019 N/A P1 Plasma-1 10 / Day 1 10h
019	N/A	11 / Day 1 11h	9712 158	37196 786	*0 261102	10	*BLQ<(5 00)	55	497170001037	AA90478-01 497170001037 019 N/A P1 Plasma-1 11 / Day 1 11h
019	N/A	12 / Day 1 12h	9156 68	36407 962	*0 251502	10	*BLQ<(5 00)	56	497170001038	AA90478-01 497170001038 019 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	13 / Day 1 13h	8350 133	39914 283	*0 209202	10	*BLQ<(5 00)	58	497170001039	AA90478-01 497170001039 019 N/A P1 Plasma-1 13 / Day 1 13h
019	N/A	14 / Day 1 14h	7356 832	41803 729	*0 175985	10	*BLQ<(5 00)	59	497170001040	AA90478-01 497170001040 019 N/A P1 Plasma-1 14 / Day 1 14h
019	N/A	15 / Day 1 15h	6754 445	38881 781	*0 173717	10	*BLQ<(5 00)	60	497170001041	AA90478-01 497170001041 019 N/A P1 Plasma-1 15 / Day 1 15h
019	N/A	16 / Day 1 16h	5865 374	39079 464	*0 150088	10	*BLQ<(5 00)	61	497170001042	AA90478-01 497170001042 019 N/A P1 Plasma-1 16 / Day 1 16h
019	N/A	17 / Day 1 17h	4917 163	35920 662	*0 136890	10	*BLQ<(5 00)	62	497170001043	AA90478-01 497170001043 019 N/A P1 Plasma-1 17 / Day 1 17h
019	N/A	18 / Day 1 18h	6421 836	39608 474	*0 162133	10	*BLQ<(5 00)	63	497170001044	AA90478-01 497170001044 019 N/A P1 Plasma-1 18 / Day 1 18h
019	N/A	19 / Day 1 19h	4961 57	35440 202	*0 139998	10	*BLQ<(5 00)	64	497170001045	AA90478-01 497170001045 019 N/A P1 Plasma-1 19 / Day 1 19h
021	N/A	1 / Day 1 1h	2085 123	40651 271	*0 051293	10	*BLQ<(5 00)	66	497170001122	AA90478-01 497170001122 021 N/A P1 Plasma-1 1 / Day 1 1h
021	N/A	2 / Day 1 2h	1634 436	40851 479	*0 040009	10	*BLQ<(5 00)	67	497170001123	AA90478-01 497170001123 021 N/A P1 Plasma-1 2 / Day 1 2h
021	N/A	3 / Day 1 3h	33099 868	39997 115	0 827556	10	11 6	68	497170001124	AA90478-01 497170001124 021 N/A P1 Plasma-1 3 / Day 1 3h
021	N/A	4 / Day 1 4h	48451 846	38109 662	1 271380	10	17 8	69	497170001125	AA90478-01 497170001125 021 N/A P1 Plasma-1 4 / Day 1 4h
021	N/A	5 / Day 1 5h	26828 732	38431 106	0 698099	10	9 84	70	497170001126	AA90478-01 497170001126 021 N/A P1 Plasma-1 5 / Day 1 5h
021	N/A	6 / Day 1 6h	21279 416	36420 876	0 584264	10	8 26	71	497170001127	AA90478-01 497170001127 021 N/A P1 Plasma-1 6 / Day 1 6h
021	N/A	9 / Day 1 9h	11810 904	39360 858	*0 300067	10	*BLQ<(5 00)	73	497170001130	AA90478-01 497170001130 021 N/A P1 Plasma-1 9 / Day 1 9h
021	N/A	10 / Day 1 10h	8978 037	37405 119	*0 240022	10	*BLQ<(5 00)	74	497170001131	AA90478-01 497170001131 021 N/A P1 Plasma-1 10 / Day 1 10h
021	N/A	11 / Day 1 11h	6601 136	36244 864	*0 182126	10	*BLQ<(5 00)	75	497170001132	AA90478-01 497170001132 021 N/A P1 Plasma-1 11 / Day 1 11h
021	N/A	12 / Day 1 12h	6916 559	38991 549	*0 177386	10	*BLQ<(5 00)	76	497170001133	AA90478-01 497170001133 021 N/A P1 Plasma-1 12 / Day 1 12h
021	N/A	13 / Day 1 13h	5861 04	39662 296	*0 147774	10	*BLQ<(5 00)	77	497170001134	AA90478-01 497170001134 021 N/A P1 Plasma-1 13 / Day 1 13h
021	N/A	14 / Day 1 14h	6491 497	38115 661	*0 170310	10	*BLQ<(5 00)	78	497170001135	AA90478-01 497170001135 021 N/A P1 Plasma-1 14 / Day 1 14h
021	N/A	15 / Day 1 15h	5408 147	38072 422	*0 142049	10	*BLQ<(5 00)	79	497170001136	AA90478-01 497170001136 021 N/A P1 Plasma-1 15 / Day 1 15h
021	N/A	16 / Day 1 16h	5517 037	43157 254	*0 127836	10	*BLQ<(5 00)	81	497170001137	AA90478-01 497170001137 021 N/A P1 Plasma-1 16 / Day 1 16h
021	N/A	17 / Day 1 17h	6316 482	39556 133	*0 159684	10	*BLQ<(5 00)	82	497170001138	AA90478-01 497170001138 021 N/A P1 Plasma-1 17 / Day 1 17h
021	N/A	18 / Day 1 18h	4090 396	39399 831	*0 103818	10	*BLQ<(5 00)	83	497170001139	AA90478-01 497170001139 021 N/A P1 Plasma-1 18 / Day 1 18h
021	N/A	19 / Day 1 19h	5132 818	36849 119	*0 139293	10	*BLQ<(5 00)	84	497170001140	AA90478-01 497170001140 021 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 5
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	37083 389	0 000000	-0 00791		-0 00791	0 0
9	0 00		0	39563 918	0 000000	-0 00791			
10	0 500	4 00000	14095 66	38670 639	0 364505	0 504	0 8		
11	1 00	1 00000	28353 328	39921 884	0 710220	0 990	-1 0		
12	2 00	0 250000	56293 868	40796 875	1 379857	1 93	-3 5		
13	4 00	0 0625000	116007 135	40242 314	2 882715	4 04	1 0		
14	8 00	0 0156250	230112 493	38862 673	5 921170	8 31	3 9		
15	10 0	0 0100000	284336 685	38513 869	7 382709	10 4	4 0		
16	20 0	0 00250000	550744 608	28645 622	*19 226135	*27 0			
17	40 0	0 000625000	1079499 17	38122 659	28 316471	39 8	-0 5		
18	50 0	0 000400000	1357633 252	39934 51	33 996492	47 8	-4 4		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 711684302

Intercept = 0 00562726413

R-Squared = 0 9987

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 5
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1263593 425	37057 257	34 098407	1	47 9		46 3		2 1
2	0 00	1269107 395	38784 72	32 721840	1	46 0				
3	0 00	1221159 203	36109 761	33 817981	1	47 5				
4	0 00	1285809 402	38667 166	33 253262	1	46 7				
5	0 00	1273489 371	39809 487	31 989595	1	44 9				
48	0 00	1250137 574	38010 131	32 889589	1	46 2				
49	0 00	1238285 102	37801 136	32 757881	1	46 0				
89	0 00	1284907 83	39289 907	32 703255	1	45 9				
90	0 00	1295589 682	40146 969	32 271171	1	45 3				
33	1 50	39692 279	40563 541	0 978521	1	1 37	-8 7	1 38	-8 0	1 0
65	1 50	36778 379	37074 793	0 992005	1	1 39	-7 3			
40	8 00	239051 702	41496 23	5 760805	1	8 09	1 1	7 77	-2 9	5 8
72	8 00	219456 275	41325 614	5 310418	1	7 45	-6 9			
47	37 5	965209 964	30147 341	32 016421	1	45 0	20 0	39 4	5 1	20 1
87	37 5	985894 289	40933 096	24 085505	1	33 8	-9 9			
26	195	513117 52	39353 75	13 038593	10	183	-6 2	180	-7 7	1 7
57	195	526172 281	41204 862	12 769665	10	179	-8 2			
80	195	513478 884	40673 964	12 624265	10	177	-9 2			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 5
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	1 / Day 1 1h	4600 099	39075 065	*0 117725	10	*BLQ<(5 00)	20	497170001217	AA90478-01 497170001217 024 N/A P1 Plasma-1 1 / Day 1 1h
024	N/A	2 / Day 1 2h	3370 481	39971 451	*0 084322	10	*BLQ<(5 00)	21	497170001218	AA90478-01 497170001218 024 N/A P1 Plasma-1 2 / Day 1 2h
024	N/A	3 / Day 1 3h	28358 031	40570 876	0 698975	10	9 74	22	497170001219	AA90478-01 497170001219 024 N/A P1 Plasma-1 3 / Day 1 3h
024	N/A	4 / Day 1 4h	35424 081	39673 555	0 892889	10	12 5	23	497170001220	AA90478-01 497170001220 024 N/A P1 Plasma-1 4 / Day 1 4h
024	N/A	5 / Day 1 5h	72906 922	38940 557	1 872262	10	26 2	24	497170001221	AA90478-01 497170001221 024 N/A P1 Plasma-1 5 / Day 1 5h
024	N/A	6 / Day 1 6h	53973 27	42048 184	1 283605	10	18 0	25	497170001222	AA90478-01 497170001222 024 N/A P1 Plasma-1 6 / Day 1 6h
024	N/A	7 / Day 1 7h	39854 588	39162 044	1 017684	10	14 2	27	497170001223	AA90478-01 497170001223 024 N/A P1 Plasma-1 7 / Day 1 7h
024	N/A	8 / Day 1 8h	37457 518	42080 864	0 890132	10	12 4	28	497170001224	AA90478-01 497170001224 024 N/A P1 Plasma-1 8 / Day 1 8h
024	N/A	9 / Day 1 9h	33074 1	41050 928	0 805685	10	11 2	29	497170001225	AA90478-01 497170001225 024 N/A P1 Plasma-1 9 / Day 1 9h
024	N/A	10 / Day 1 10h	25861 175	39759 514	0 650440	10	9 06	30	497170001226	AA90478-01 497170001226 024 N/A P1 Plasma-1 10 / Day 1 10h
024	N/A	11 / Day 1 11h	22796 151	40359 234	0 564831	10	7 86	31	497170001227	AA90478-01 497170001227 024 N/A P1 Plasma-1 11 / Day 1 11h
024	N/A	12 / Day 1 12h	20203 729	39358 567	0 513325	10	7 13	32	497170001228	AA90478-01 497170001228 024 N/A P1 Plasma-1 12 / Day 1 12h
024	N/A	13 / Day 1 13h	20905 635	42987 3	0 486321	10	6 75	34	497170001229	AA90478-01 497170001229 024 N/A P1 Plasma-1 13 / Day 1 13h
024	N/A	14 / Day 1 14h	20673 517	43027 411	0 480473	10	6 67	35	497170001230	AA90478-01 497170001230 024 N/A P1 Plasma-1 14 / Day 1 14h
024	N/A	15 / Day 1 15h	16686 033	42814 845	0 389725	10	5 40	36	497170001231	AA90478-01 497170001231 024 N/A P1 Plasma-1 15 / Day 1 15h
024	N/A	16 / Day 1 16h	15485 464	42555 193	0 363891	10	5 03	37	497170001232	AA90478-01 497170001232 024 N/A P1 Plasma-1 16 / Day 1 16h
024	N/A	17 / Day 1 17h	14877 66	41335 949	*0 359921	10	*BLQ<(5 00)	38	497170001233	AA90478-01 497170001233 024 N/A P1 Plasma-1 17 / Day 1 17h
024	N/A	18 / Day 1 18h	14224 305	42531 469	*0 334442	10	*BLQ<(5 00)	39	497170001234	AA90478-01 497170001234 024 N/A P1 Plasma-1 18 / Day 1 18h
024	N/A	19 / Day 1 19h	12969 665	41908 011	*0 309479	10	*BLQ<(5 00)	41	497170001235	AA90478-01 497170001235 024 N/A P1 Plasma-1 19 / Day 1 19h
026	N/A	1 / Day 1 1h	3722 546	38084 368	*0 097745	10	*BLQ<(5 00)	42	497170001312	AA90478-01 497170001312 026 N/A P1 Plasma-1 1 / Day 1 1h
026	N/A	2 / Day 1 2h	4546 156	41208 209	*0 110322	10	*BLQ<(5 00)	43	497170001313	AA90478-01 497170001313 026 N/A P1 Plasma-1 2 / Day 1 2h
026	N/A	3 / Day 1 3h	50394 379	41644 441	1 210111	10	16 9	44	497170001314	AA90478-01 497170001314 026 N/A P1 Plasma-1 3 / Day 1 3h
026	N/A	4 / Day 1 4h	54018 425	42181 285	1 280625	10	17 9	45	497170001315	AA90478-01 497170001315 026 N/A P1 Plasma-1 4 / Day 1 4h
026	N/A	5 / Day 1 5h	40483 572	39951 005	1 013331	10	14 2	46	497170001316	AA90478-01 497170001316 026 N/A P1 Plasma-1 5 / Day 1 5h
026	N/A	6 / Day 1 6h	36564 553	40787 714	0 896460	10	12 5	50	497170001317	AA90478-01 497170001317 026 N/A P1 Plasma-1 6 / Day 1 6h
026	N/A	7 / Day 1 7h	26517 122	40654 491	0 652256	10	9 09	51	497170001318	AA90478-01 497170001318 026 N/A P1 Plasma-1 7 / Day 1 7h
026	N/A	8 / Day 1 8h	26600 546	42742 19	0 622349	10	8 67	52	497170001319	AA90478-01 497170001319 026 N/A P1 Plasma-1 8 / Day 1 8h
026	N/A	9 / Day 1 9h	19599 616	40307 744	0 486249	10	6 75	53	497170001320	AA90478-01 497170001320 026 N/A P1 Plasma-1 9 / Day 1 9h
026	N/A	10 / Day 1 10h	16676 83	38810 761	0 429696	10	5 96	54	497170001321	AA90478-01 497170001321 026 N/A P1 Plasma-1 10 / Day 1 10h
026	N/A	11 / Day 1 11h	12914 856	41127 788	*0 314018	10	*BLQ<(5 00)	55	497170001322	AA90478-01 497170001322 026 N/A P1 Plasma-1 11 / Day 1 11h
026	N/A	12 / Day 1 12h	13396 672	41230 669	*0 324920	10	*BLQ<(5 00)	56	497170001323	AA90478-01 497170001323 026 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
026	N/A	13 / Day 1 13h	13421 88	40233 655	*0 333598	10	*BLQ<(5 00)	58	497170001324	AA90478-01 497170001324 026 N/A P1 Plasma-1 13 / Day 1 13h
026	N/A	14 / Day 1 14h	11166 594	40001 209	*0 279156	10	*BLQ<(5 00)	59	497170001325	AA90478-01 497170001325 026 N/A P1 Plasma-1 14 / Day 1 14h
026	N/A	15 / Day 1 15h	9941 379	41157 873	*0 241543	10	*BLQ<(5 00)	60	497170001326	AA90478-01 497170001326 026 N/A P1 Plasma-1 15 / Day 1 15h
026	N/A	16 / Day 1 16h	9254 753	38139 396	*0 242656	10	*BLQ<(5 00)	61	497170001327	AA90478-01 497170001327 026 N/A P1 Plasma-1 16 / Day 1 16h
026	N/A	17 / Day 1 17h	8969 428	36314 078	*0 246996	10	*BLQ<(5 00)	62	497170001328	AA90478-01 497170001328 026 N/A P1 Plasma-1 17 / Day 1 17h
026	N/A	18 / Day 1 18h	7163 963	39132 585	*0 183069	10	*BLQ<(5 00)	63	497170001329	AA90478-01 497170001329 026 N/A P1 Plasma-1 18 / Day 1 18h
026	N/A	19 / Day 1 19h	8146 574	36718 399	*0 221866	10	*BLQ<(5 00)	64	497170001330	AA90478-01 497170001330 026 N/A P1 Plasma-1 19 / Day 1 19h
028	N/A	1 / Day 1 1h	4816 387	40516 14	*0 118876	10	*BLQ<(5 00)	66	497170001407	AA90478-01 497170001407 028 N/A P1 Plasma-1 1 / Day 1 1h
028	N/A	2 / Day 1 2h	3900 572	37303 53	*0 104563	10	*BLQ<(5 00)	67	497170001408	AA90478-01 497170001408 028 N/A P1 Plasma-1 2 / Day 1 2h
028	N/A	3 / Day 1 3h	36253 75	41015 39	0 883906	10	12 3	68	497170001409	AA90478-01 497170001409 028 N/A P1 Plasma-1 3 / Day 1 3h
028	N/A	4 / Day 1 4h	16235 671	40609 467	0 399800	10	5 54	69	497170001410	AA90478-01 497170001410 028 N/A P1 Plasma-1 4 / Day 1 4h
028	N/A	5 / Day 1 5h	24166 308	37793 04	0 639438	10	8 91	70	497170001411	AA90478-01 497170001411 028 N/A P1 Plasma-1 5 / Day 1 5h
028	N/A	6 / Day 1 6h	42147 485	40473 609	1 041357	10	14 6	71	497170001412	AA90478-01 497170001412 028 N/A P1 Plasma-1 6 / Day 1 6h
028	N/A	7 / Day 1 7h	21829 751	38513 778	0 566804	10	7 89	73	497170001413	AA90478-01 497170001413 028 N/A P1 Plasma-1 7 / Day 1 7h
028	N/A	8 / Day 1 8h	20616 072	39806 791	0 517903	10	7 20	74	497170001414	AA90478-01 497170001414 028 N/A P1 Plasma-1 8 / Day 1 8h
028	N/A	9 / Day 1 9h	15575 791	40130 13	0 388132	10	5 37	75	497170001415	AA90478-01 497170001415 028 N/A P1 Plasma-1 9 / Day 1 9h
028	N/A	10 / Day 1 10h	11528 485	39502 891	*0 291839	10	*BLQ<(5 00)	76	497170001416	AA90478-01 497170001416 028 N/A P1 Plasma-1 10 / Day 1 10h
028	N/A	11 / Day 1 11h	10092 143	38684 641	*0 260882	10	*BLQ<(5 00)	77	497170001417	AA90478-01 497170001417 028 N/A P1 Plasma-1 11 / Day 1 11h
028	N/A	12 / Day 1 12h	10594 93	38975 14	*0 271838	10	*BLQ<(5 00)	78	497170001418	AA90478-01 497170001418 028 N/A P1 Plasma-1 12 / Day 1 12h
028	N/A	13 / Day 1 13h	10220 191	39604 455	*0 258057	10	*BLQ<(5 00)	79	497170001419	AA90478-01 497170001419 028 N/A P1 Plasma-1 13 / Day 1 13h
028	N/A	14 / Day 1 14h	9970 279	42097 09	*0 236840	10	*BLQ<(5 00)	81	497170001420	AA90478-01 497170001420 028 N/A P1 Plasma-1 14 / Day 1 14h
028	N/A	15 / Day 1 15h	11468 861	42579 408	*0 269352	10	*BLQ<(5 00)	82	497170001421	AA90478-01 497170001421 028 N/A P1 Plasma-1 15 / Day 1 15h
028	N/A	16 / Day 1 16h	8173 187	41813 326	*0 195468	10	*BLQ<(5 00)	83	497170001422	AA90478-01 497170001422 028 N/A P1 Plasma-1 16 / Day 1 16h
028	N/A	17 / Day 1 17h	7253 247	39912 899	*0 181727	10	*BLQ<(5 00)	84	497170001423	AA90478-01 497170001423 028 N/A P1 Plasma-1 17 / Day 1 17h
028	N/A	18 / Day 1 18h	10575 602	41076 258	*0 257463	10	*BLQ<(5 00)	85	497170001424	AA90478-01 497170001424 028 N/A P1 Plasma-1 18 / Day 1 18h
028	N/A	19 / Day 1 19h	7138 181	30774 217	*0 231953	10	*BLQ<(5 00)	86	497170001425	AA90478-01 497170001425 028 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 6
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	37375 672	0 000000	-0 00820		-0 00820	0 0
9	0 00		0	37946 745	0 000000	-0 00820			
10	0 500	4 00000	13085 189	37367 465	0 350176	0 490	-2 0		
11	1 00	1 00000	27528 167	37531 529	0 733468	1 04	4 0		
12	2 00	0 250000	53237 257	37701 77	1 412063	2 00	0 0		
13	4 00	0 0625000	104463 133	36682 262	2 847783	4 04	1 0		
14	8 00	0 0156250	216122 982	37261 372	5 800189	8 24	3 0		
15	10 0	0 0100000	257514 977	36652 348	7 025879	9 99	-0 1		
16	20 0	0 00250000	521633 119	37572 134	13 883511	19 7	-1 5		
17	40 0	0 000625000	1034051 331	36747 611	28 139280	40 0	0 0		
18	50 0	0 000400000	1271784 577	37794 235	33 650227	47 9	-4 2		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 702957684

Intercept = 0 00576209165

R-Squared = 0 9992

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 6
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1240781 519	38528 644	32 204132	1	45 8		46 5		2 1
2	0 00	1246302 283	39363 169	31 661635	1	45 0				
3	0 00	1266826 532	38356 474	33 027711	1	47 0				
4	0 00	1257619 101	39180 803	32 097839	1	45 7				
5	0 00	1306561 812	39012 564	33 490796	1	47 6				
50	0 00	1220091 34	37496 856	32 538497	1	46 3				
51	0 00	1214397 515	37329 315	32 532006	1	46 3				
86	0 00	1185235 516	35021 689	33 842900	1	48 1				
87	0 00	1204798 868	36647 426	32 875402	1	46 8				
29	1 50	35984 994	36207 964	0 993842	1	1 41	-6 0	1 44	-4 0	2 9
62	1 50	39389 405	37849 244	1 040692	1	1 47	-2 0			
39	8 00	197392 698	35907 924	5 497190	1	7 81	-2 4	7 61	-4 9	3 7
73	8 00	210284 145	40327 377	5 214427	1	7 41	-7 4			
49	37 5	887716 162	36359 934	24 414680	1	34 7	-7 5	34 8	-7 2	0 2
84	37 5	894907 52	36623 563	24 435294	1	34 8	-7 2			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 6
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 2 1h	4783 674	38820 966	0 123224	1	BLQ<(0 500)	20	497170000058	AA90478-01 497170000058 001 N/A P2 Plasma-1 1 / Day 2 1h
001	N/A	2 / Day 2 2h	4551 891	34477 733	0 132024	1	BLQ<(0 500)	21	497170000059	AA90478-01 497170000059 001 N/A P2 Plasma-1 2 / Day 2 2h
001	N/A	3 / Day 2 3h	5146 077	35504 419	0 144942	1	BLQ<(0 500)	22	497170000060	AA90478-01 497170000060 001 N/A P2 Plasma-1 3 / Day 2 3h
001	N/A	4 / Day 2 4h	9517 22	35811 629	0 265758	1	BLQ<(0 500)	23	497170000061	AA90478-01 497170000061 001 N/A P2 Plasma-1 4 / Day 2 4h
001	N/A	5 / Day 2 5h	19964 983	34699 283	0 575372	1	0 810	24	497170000062	AA90478-01 497170000062 001 N/A P2 Plasma-1 5 / Day 2 5h
001	N/A	6 / Day 2 6h	24323 155	35650 31	0 682271	1	0 962	25	497170000063	AA90478-01 497170000063 001 N/A P2 Plasma-1 6 / Day 2 6h
001	N/A	7 / Day 2 7h	25392 845	34706 844	0 731638	1	1 03	26	497170000064	AA90478-01 497170000064 001 N/A P2 Plasma-1 7 / Day 2 7h
001	N/A	8 / Day 2 8h	22751 447	33145 754	0 686406	1	0 968	27	497170000065	AA90478-01 497170000065 001 N/A P2 Plasma-1 8 / Day 2 8h
001	N/A	9 / Day 2 9h	24880 474	36245 599	0 686441	1	0 968	28	497170000066	AA90478-01 497170000066 001 N/A P2 Plasma-1 9 / Day 2 9h
001	N/A	10 / Day 2 10h	28402 906	34173 734	0 831133	1	1 17	30	497170000067	AA90478-01 497170000067 001 N/A P2 Plasma-1 10 / Day 2 10h
001	N/A	11 / Day 2 11h	21750 09	35300 729	0 616137	1	0 868	31	497170000068	AA90478-01 497170000068 001 N/A P2 Plasma-1 11 / Day 2 11h
001	N/A	12 / Day 2 12h	18781 636	35963 69	0 522239	1	0 735	32	497170000069	AA90478-01 497170000069 001 N/A P2 Plasma-1 12 / Day 2 12h
001	N/A	13 / Day 2 13h	15174 405	33452 643	0 453609	1	0 637	33	497170000070	AA90478-01 497170000070 001 N/A P2 Plasma-1 13 / Day 2 13h
001	N/A	14 / Day 2 14h	13039 563	34951 952	0 373071	1	0 523	34	497170000071	AA90478-01 497170000071 001 N/A P2 Plasma-1 14 / Day 2 14h
001	N/A	15 / Day 2 15h	11748 516	34580 552	0 339743	1	BLQ<(0 500)	35	497170000072	AA90478-01 497170000072 001 N/A P2 Plasma-1 15 / Day 2 15h
001	N/A	16 / Day 2 16h	10862 684	35347 891	0 307308	1	BLQ<(0 500)	36	497170000073	AA90478-01 497170000073 001 N/A P2 Plasma-1 16 / Day 2 16h
001	N/A	17 / Day 2 17h	9822 036	36048 095	0 272470	1	BLQ<(0 500)	37	497170000074	AA90478-01 497170000074 001 N/A P2 Plasma-1 17 / Day 2 17h
001	N/A	18 / Day 2 18h	9144 546	34531 06	0 264821	1	BLQ<(0 500)	38	497170000075	AA90478-01 497170000075 001 N/A P2 Plasma-1 18 / Day 2 18h
001	N/A	19 / Day 2 19h	9648 249	36302 194	0 265776	1	BLQ<(0 500)	40	497170000076	AA90478-01 497170000076 001 N/A P2 Plasma-1 19 / Day 2 19h
003	N/A	1 / Day 2 1h	18451 116	34982 856	0 527433	1	0 742	41	497170000153	AA90478-01 497170000153 003 N/A P2 Plasma-1 1 / Day 2 1h
003	N/A	2 / Day 2 2h	17064 629	35288 736	0 483572	1	0 680	42	497170000154	AA90478-01 497170000154 003 N/A P2 Plasma-1 2 / Day 2 2h
003	N/A	3 / Day 2 3h	16159 943	35744 801	0 452092	1	0 635	43	497170000155	AA90478-01 497170000155 003 N/A P2 Plasma-1 3 / Day 2 3h
003	N/A	4 / Day 2 4h	16098 412	36380 646	0 442499	1	0 621	44	497170000156	AA90478-01 497170000156 003 N/A P2 Plasma-1 4 / Day 2 4h
003	N/A	5 / Day 2 5h	18981 689	36620 424	0 518336	1	0 729	45	497170000157	AA90478-01 497170000157 003 N/A P2 Plasma-1 5 / Day 2 5h
003	N/A	6 / Day 2 6h	20041 719	37214 831	0 538541	1	0 758	46	497170000158	AA90478-01 497170000158 003 N/A P2 Plasma-1 6 / Day 2 6h
003	N/A	7 / Day 2 7h	21209 008	28807 745	0 736226	1	1 04	47	497170000159	AA90478-01 497170000159 003 N/A P2 Plasma-1 7 / Day 2 7h
003	N/A	8 / Day 2 8h	18920 488	34148 55	0 554064	1	0 780	48	497170000160	AA90478-01 497170000160 003 N/A P2 Plasma-1 8 / Day 2 8h
003	N/A	9 / Day 2 9h	20728 004	34437 688	0 601899	1	0 848	52	497170000161	AA90478-01 497170000161 003 N/A P2 Plasma-1 9 / Day 2 9h
003	N/A	10 / Day 2 10h	23686 113	37857 21	0 625670	1	0 882	53	497170000162	AA90478-01 497170000162 003 N/A P2 Plasma-1 10 / Day 2 10h
003	N/A	11 / Day 2 11h	24785 214	37838 995	0 655018	1	0 924	54	497170000163	AA90478-01 497170000163 003 N/A P2 Plasma-1 11 / Day 2 11h
003	N/A	12 / Day 2 12h	25359 074	37395 15	0 678138	1	0 956	55	497170000164	AA90478-01 497170000164 003 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	13 / Day 2 13h	24982 989	37673 667	0 663142	1	0 935	56	497170000165	AA90478-01 497170000165 003 N/A P2 Plasma-1 13 / Day 2 13h
003	N/A	14 / Day 2 14h	26176 248	35676 441	0 733712	1	1 04	57	497170000166	AA90478-01 497170000166 003 N/A P2 Plasma-1 14 / Day 2 14h
003	N/A	15 / Day 2 15h	25092 533	38446 723	0 652657	1	0 920	58	497170000167	AA90478-01 497170000167 003 N/A P2 Plasma-1 15 / Day 2 15h
003	N/A	16 / Day 2 16h	23090 719	36784 683	0 627726	1	0 885	59	497170000168	AA90478-01 497170000168 003 N/A P2 Plasma-1 16 / Day 2 16h
003	N/A	17 / Day 2 17h	22826 689	38680 53	0 590134	1	0 831	60	497170000169	AA90478-01 497170000169 003 N/A P2 Plasma-1 17 / Day 2 17h
003	N/A	18 / Day 2 18h	20185 229	36193 483	0 557703	1	0 785	61	497170000170	AA90478-01 497170000170 003 N/A P2 Plasma-1 18 / Day 2 18h
003	N/A	19 / Day 2 19h	18765 809	37518 217	0 500179	1	0 703	63	497170000171	AA90478-01 497170000171 003 N/A P2 Plasma-1 19 / Day 2 19h
005	N/A	1 / Day 2 1h	11019 173	37177 423	0 296394	1	BLQ<(0 500)	64	497170000248	AA90478-01 497170000248 005 N/A P2 Plasma-1 1 / Day 2 1h
005	N/A	2 / Day 2 2h	9573 015	35773 253	0 267603	1	BLQ<(0 500)	65	497170000249	AA90478-01 497170000249 005 N/A P2 Plasma-1 2 / Day 2 2h
005	N/A	3 / Day 2 3h	9271 026	37015 014	0 250467	1	BLQ<(0 500)	66	497170000250	AA90478-01 497170000250 005 N/A P2 Plasma-1 3 / Day 2 3h
005	N/A	4 / Day 2 4h	21929 363	28026 295	0 782457	1	1 10	67	497170000251	AA90478-01 497170000251 005 N/A P2 Plasma-1 4 / Day 2 4h
005	N/A	5 / Day 2 5h	21885 633	33320 042	0 656831	1	0 926	68	497170000252	AA90478-01 497170000252 005 N/A P2 Plasma-1 5 / Day 2 5h
005	N/A	6 / Day 2 6h	29234 483	26841 927	1 089135	1	1 54	69	497170000253	AA90478-01 497170000253 005 N/A P2 Plasma-1 6 / Day 2 6h
005	N/A	7 / Day 2 7h	42696 137	36877 251	1 157791	1	1 64	70	497170000254	AA90478-01 497170000254 005 N/A P2 Plasma-1 7 / Day 2 7h
005	N/A	8 / Day 2 8h	39987 003	37279 675	1 072622	1	1 52	71	497170000255	AA90478-01 497170000255 005 N/A P2 Plasma-1 8 / Day 2 8h
005	N/A	9 / Day 2 9h	47586 861	28031 336	1 697631	1	2 41	72	497170000256	AA90478-01 497170000256 005 N/A P2 Plasma-1 9 / Day 2 9h
005	N/A	10 / Day 2 10h	45985 857	37041 913	1 241455	1	1 76	74	497170000257	AA90478-01 497170000257 005 N/A P2 Plasma-1 10 / Day 2 10h
005	N/A	11 / Day 2 11h	47744 338	38248 498	1 248267	1	1 77	75	497170000258	AA90478-01 497170000258 005 N/A P2 Plasma-1 11 / Day 2 11h
005	N/A	12 / Day 2 12h	45991 495	38133 095	1 206078	1	1 71	76	497170000259	AA90478-01 497170000259 005 N/A P2 Plasma-1 12 / Day 2 12h
005	N/A	13 / Day 2 13h	33968 15	33691 533	1 008210	1	1 43	77	497170000260	AA90478-01 497170000260 005 N/A P2 Plasma-1 13 / Day 2 13h
005	N/A	14 / Day 2 14h	34110 118	35717 78	0 954990	1	1 35	78	497170000261	AA90478-01 497170000261 005 N/A P2 Plasma-1 14 / Day 2 14h
005	N/A	15 / Day 2 15h	30372 893	36163 817	0 839870	1	1 19	79	497170000262	AA90478-01 497170000262 005 N/A P2 Plasma-1 15 / Day 2 15h
005	N/A	16 / Day 2 16h	28281 621	37404 717	0 756098	1	1 07	80	497170000263	AA90478-01 497170000263 005 N/A P2 Plasma-1 16 / Day 2 16h
005	N/A	17 / Day 2 17h	23475 478	34110 337	0 688222	1	0 971	81	497170000264	AA90478-01 497170000264 005 N/A P2 Plasma-1 17 / Day 2 17h
005	N/A	18 / Day 2 18h	24541 31	35513 388	0 691044	1	0 975	82	497170000265	AA90478-01 497170000265 005 N/A P2 Plasma-1 18 / Day 2 18h
005	N/A	19 / Day 2 19h	23271 008	36415 504	0 639041	1	0 901	83	497170000266	AA90478-01 497170000266 005 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 8
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	29151 935	0 000000	0 0398		0 0398	0 0
9	0 00		0	29698 241	0 000000	0 0398			
10	0 500	4 00000	10066 555	30149 886	0 333884	0 483	-3 4		
11	1 00	1 00000	26111 02	34064 258	0 766522	1 06	6 0		
12	2 00	0 250000	47327 573	31725 696	1 491774	2 02	1 0		
13	4 00	0 0625000	102966 918	26037 284	*3 954595	*5 29			
14	8 00	0 0156250	231726 764	36927 421	6 275195	8 38	4 8		
15	10 0	0 0100000	248754 295	33358 276	7 457049	9 95	-0 5		
16	20 0	0 00250000	430679 752	28847 628	14 929468	19 9	-0 5		
17	40 0	0 000625000	904798 666	31893 204	28 369638	37 7	-5 8		
18	50 0	0 000400000	1240283 605	33445 935	37 083239	49 3	-1 4		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 752747301

Intercept = -0 0299261793

R-Squared = 0 9980

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 8
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	942151 329	26818 066	35 131218	1	46 7		47 5		2 3
2	0 00	899728 919	24900 107	36 133536	1	48 0				
3	0 00	978309 876	27863 428	35 110894	1	46 7				
4	0 00	1088345 026	31057 03	35 043435	1	46 6				
5	0 00	943307 931	26550 189	35 529236	1	47 2				
50	0 00	1159226 703	32064 153	36 153355	1	48 1				
51	0 00	1195192 986	31947 605	37 411036	1	49 7				
86	0 00	875903 908	25218 578	34 732486	1	46 2				
87	0 00	930502 902	25763 468	36 117145	1	48 0				
29	1 50	40878 659	35744 776	1 143626	1	1 56	4 0	1 58	5 3	1 3
62	1 50	33117 299	28317 984	1 169479	1	1 59	6 0			
39	8 00	205767 785	33749 33	6 096944	1	8 14	1 8	8 07	0 9	1 3
73	8 00	133251 903	22271 51	5 983065	1	7 99	-0 1			
49	37 5	818071 226	31317 462	26 121888	1	34 7	-7 5	35 6	-5 1	3 6
84	37 5	657315 338	23934 627	27 462945	1	36 5	-2 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 8
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	1 / Day 2 1h	29079 825	28339 306	1 026130	1	1 40	20	497170000628	AA90478-01 497170000628 012 N/A P2 Plasma-1 1 / Day 2 1h
012	N/A	2 / Day 2 2h	33149 431	32856 627	1 008912	1	1 38	21	497170000629	AA90478-01 497170000629 012 N/A P2 Plasma-1 2 / Day 2 2h
012	N/A	3 / Day 2 3h	30947 375	33294 113	0 929515	1	1 27	22	497170000630	AA90478-01 497170000630 012 N/A P2 Plasma-1 3 / Day 2 3h
012	N/A	4 / Day 2 4h	30916 743	29642 51	1 042987	1	1 43	23	497170000631	AA90478-01 497170000631 012 N/A P2 Plasma-1 4 / Day 2 4h
012	N/A	5 / Day 2 5h	36323 709	31077 101	1 168826	1	1 59	24	497170000632	AA90478-01 497170000632 012 N/A P2 Plasma-1 5 / Day 2 5h
012	N/A	6 / Day 2 6h	48883 667	33349 948	1 465779	1	1 99	25	497170000633	AA90478-01 497170000633 012 N/A P2 Plasma-1 6 / Day 2 6h
012	N/A	7 / Day 2 7h	53073 918	32310 86	1 642603	1	2 22	26	497170000634	AA90478-01 497170000634 012 N/A P2 Plasma-1 7 / Day 2 7h
012	N/A	8 / Day 2 8h	53695 403	31736 021	1 691939	1	2 29	27	497170000635	AA90478-01 497170000635 012 N/A P2 Plasma-1 8 / Day 2 8h
012	N/A	9 / Day 2 9h	55809 18	34836 558	1 602029	1	2 17	28	497170000636	AA90478-01 497170000636 012 N/A P2 Plasma-1 9 / Day 2 9h
012	N/A	10 / Day 2 10h	57882 236	33418 315	1 732051	1	2 34	30	497170000637	AA90478-01 497170000637 012 N/A P2 Plasma-1 10 / Day 2 10h
012	N/A	11 / Day 2 11h	62013 731	36286 713	1 708993	1	2 31	31	497170000638	AA90478-01 497170000638 012 N/A P2 Plasma-1 11 / Day 2 11h
012	N/A	12 / Day 2 12h	62663 327	34339 807	1 824801	1	2 46	32	497170000639	AA90478-01 497170000639 012 N/A P2 Plasma-1 12 / Day 2 12h
012	N/A	13 / Day 2 13h	69177 408	39666 957	1 743956	1	2 36	33	497170000640	AA90478-01 497170000640 012 N/A P2 Plasma-1 13 / Day 2 13h
012	N/A	14 / Day 2 14h	64966 329	39811 751	1 631838	1	2 21	34	497170000641	AA90478-01 497170000641 012 N/A P2 Plasma-1 14 / Day 2 14h
012	N/A	15 / Day 2 15h	50949 899	31348 439	1 625277	1	2 20	35	497170000642	AA90478-01 497170000642 012 N/A P2 Plasma-1 15 / Day 2 15h
012	N/A	16 / Day 2 16h	61789 868	36084 707	1 712356	1	2 31	36	497170000643	AA90478-01 497170000643 012 N/A P2 Plasma-1 16 / Day 2 16h
012	N/A	17 / Day 2 17h	52517 647	32776 701	1 602286	1	2 17	37	497170000644	AA90478-01 497170000644 012 N/A P2 Plasma-1 17 / Day 2 17h
012	N/A	18 / Day 2 18h	48933 502	33158 196	1 475759	1	2 00	38	497170000645	AA90478-01 497170000645 012 N/A P2 Plasma-1 18 / Day 2 18h
012	N/A	19 / Day 2 19h	49116 659	32742 615	1 500084	1	2 03	40	497170000646	AA90478-01 497170000646 012 N/A P2 Plasma-1 19 / Day 2 19h
013	N/A	1 / Day 2 1h	7672 159	38224 707	0 200712	1	BLQ<(0 500)	41	497170000723	AA90478-01 497170000723 013 N/A P2 Plasma-1 1 / Day 2 1h
013	N/A	2 / Day 2 2h	5540 406	33153 648	0 167113	1	BLQ<(0 500)	42	497170000724	AA90478-01 497170000724 013 N/A P2 Plasma-1 2 / Day 2 2h
013	N/A	3 / Day 2 3h	45480 563	33708 018	1 349251	1	1 83	43	497170000725	AA90478-01 497170000725 013 N/A P2 Plasma-1 3 / Day 2 3h
013	N/A	4 / Day 2 4h	59593 009	31074 406	1 917752	1	2 59	44	497170000726	AA90478-01 497170000726 013 N/A P2 Plasma-1 4 / Day 2 4h
013	N/A	5 / Day 2 5h	111180 47	42806 334	2 597290	1	3 49	45	497170000727	AA90478-01 497170000727 013 N/A P2 Plasma-1 5 / Day 2 5h
013	N/A	6 / Day 2 6h	94651 535	32158 931	2 943243	1	3 95	46	497170000728	AA90478-01 497170000728 013 N/A P2 Plasma-1 6 / Day 2 6h
013	N/A	7 / Day 2 7h	86636 762	33510 368	2 585372	1	3 47	47	497170000729	AA90478-01 497170000729 013 N/A P2 Plasma-1 7 / Day 2 7h
013	N/A	8 / Day 2 8h	160959 118	39612 615	4 063330	1	5 44	48	497170000730	AA90478-01 497170000730 013 N/A P2 Plasma-1 8 / Day 2 8h
013	N/A	9 / Day 2 9h	167794 977	33256 575	5 045468	1	6 74	52	497170000731	AA90478-01 497170000731 013 N/A P2 Plasma-1 9 / Day 2 9h
013	N/A	10 / Day 2 10h	137500 946	28988 966	4 743217	1	6 34	53	497170000732	AA90478-01 497170000732 013 N/A P2 Plasma-1 10 / Day 2 10h
013	N/A	11 / Day 2 11h	130502 969	33601 712	3 883819	1	5 20	54	497170000733	AA90478-01 497170000733 013 N/A P2 Plasma-1 11 / Day 2 11h
013	N/A	12 / Day 2 12h	105259 941	28611 567	3 678930	1	4 93	55	497170000734	AA90478-01 497170000734 013 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	13 / Day 2 13h	106436 471	28844 534	3 690005	1	4 94	56	497170000735	AA90478-01 497170000735 013 N/A P2 Plasma-1 13 / Day 2 13h
013	N/A	14 / Day 2 14h	107325 442	31147 471	3 445719	1	4 62	57	497170000736	AA90478-01 497170000736 013 N/A P2 Plasma-1 14 / Day 2 14h
013	N/A	15 / Day 2 15h	100533 174	29840 465	3 369022	1	4 52	58	497170000737	AA90478-01 497170000737 013 N/A P2 Plasma-1 15 / Day 2 15h
013	N/A	16 / Day 2 16h	94856 48	28754 77	3 298809	1	4 42	59	497170000738	AA90478-01 497170000738 013 N/A P2 Plasma-1 16 / Day 2 16h
013	N/A	17 / Day 2 17h	91430 546	29117 611	3 140043	1	4 21	60	497170000739	AA90478-01 497170000739 013 N/A P2 Plasma-1 17 / Day 2 17h
013	N/A	18 / Day 2 18h	81729 684	22137 064	3 691984	1	4 94	61	497170000740	AA90478-01 497170000740 013 N/A P2 Plasma-1 18 / Day 2 18h
013	N/A	19 / Day 2 19h	77073 618	22766 727	3 385362	1	4 54	63	497170000741	AA90478-01 497170000741 013 N/A P2 Plasma-1 19 / Day 2 19h
015	N/A	1 / Day 2 1h	20532 171	24188 356	0 848845	1	1 17	64	497170000818	AA90478-01 497170000818 015 N/A P2 Plasma-1 1 / Day 2 1h
015	N/A	2 / Day 2 2h	22851 954	25745 774	0 887600	1	1 22	65	497170000819	AA90478-01 497170000819 015 N/A P2 Plasma-1 2 / Day 2 2h
015	N/A	3 / Day 2 3h	34812 246	26817 531	1 298115	1	1 76	66	497170000820	AA90478-01 497170000820 015 N/A P2 Plasma-1 3 / Day 2 3h
015	N/A	4 / Day 2 4h	49145 487	19452 572	2 526426	1	3 40	67	497170000821	AA90478-01 497170000821 015 N/A P2 Plasma-1 4 / Day 2 4h
015	N/A	5 / Day 2 5h	63360 202	27779 239	2 280847	1	3 07	68	497170000822	AA90478-01 497170000822 015 N/A P2 Plasma-1 5 / Day 2 5h
015	N/A	6 / Day 2 6h	103680 055	19530 656	5 308580	1	7 09	69	497170000823	AA90478-01 497170000823 015 N/A P2 Plasma-1 6 / Day 2 6h
015	N/A	7 / Day 2 7h	105544 231	18468 584	5 714798	1	7 63	70	497170000824	AA90478-01 497170000824 015 N/A P2 Plasma-1 7 / Day 2 7h
015	N/A	8 / Day 2 8h	100874 694	21361 546	4 722256	1	6 31	71	497170000825	AA90478-01 497170000825 015 N/A P2 Plasma-1 8 / Day 2 8h
015	N/A	9 / Day 2 9h	100404 9	23291 574	4 310782	1	5 77	72	497170000826	AA90478-01 497170000826 015 N/A P2 Plasma-1 9 / Day 2 9h
015	N/A	10 / Day 2 10h	74651 167	22479 784	3 320813	1	4 45	74	497170000827	AA90478-01 497170000827 015 N/A P2 Plasma-1 10 / Day 2 10h
015	N/A	11 / Day 2 11h	68019 899	23081 249	2 946977	1	3 95	75	497170000828	AA90478-01 497170000828 015 N/A P2 Plasma-1 11 / Day 2 11h
015	N/A	12 / Day 2 12h	54587 594	21950 236	2 486880	1	3 34	76	497170000829	AA90478-01 497170000829 015 N/A P2 Plasma-1 12 / Day 2 12h
015	N/A	13 / Day 2 13h	54740 011	23233 85	2 356046	1	3 17	77	497170000830	AA90478-01 497170000830 015 N/A P2 Plasma-1 13 / Day 2 13h
015	N/A	14 / Day 2 14h	53480 867	27889 179	1 917621	1	2 59	78	497170000831	AA90478-01 497170000831 015 N/A P2 Plasma-1 14 / Day 2 14h
015	N/A	15 / Day 2 15h	60069 116	30313 413	1 981602	1	2 67	79	497170000832	AA90478-01 497170000832 015 N/A P2 Plasma-1 15 / Day 2 15h
015	N/A	16 / Day 2 16h	45756 131	25517 46	1 793130	1	2 42	80	497170000833	AA90478-01 497170000833 015 N/A P2 Plasma-1 16 / Day 2 16h
015	N/A	17 / Day 2 17h	38353 762	22376 546	1 714016	1	2 32	81	497170000834	AA90478-01 497170000834 015 N/A P2 Plasma-1 17 / Day 2 17h
015	N/A	18 / Day 2 18h	37764 432	22109 165	1 708089	1	2 31	82	497170000835	AA90478-01 497170000835 015 N/A P2 Plasma-1 18 / Day 2 18h
015	N/A	19 / Day 2 19h	41579 44	28061 506	1 481725	1	2 01	83	497170000836	AA90478-01 497170000836 015 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 9
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	33818 339	0 000000	0 0290		0 0290	0 0
9	0 00		0	38896 936	0 000000	0 0290			
10	0 500	4 00000	12184 217	37064 168	0 328733	0 498	-0 4		
11	1 00	1 00000	25012 359	37031 618	0 675433	0 992	-0 8		
12	2 00	0 250000	56607 182	40292 909	1 404892	2 03	1 5		
13	4 00	0 0625000	106464 07	36879 627	2 886799	4 14	3 5		
14	8 00	0 0156250	218939 029	37978 455	5 764822	8 25	3 1		
15	10 0	0 0100000	267179 038	38688 213	6 905954	9 87	-1 3		
16	20 0	0 00250000	488414 793	34975 166	13 964617	19 9	-0 5		
17	40 0	0 000625000	985263 162	36088 059	27 301639	38 9	-2 8		
18	50 0	0 000400000	1206310 978	35360 164	34 114971	48 7	-2 6		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 701560932

Intercept = -0 0203278228

R-Squared = 0 9993

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 9
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1268879 517	38186 656	33 228349	1	47 4		48 2		1 8
2	0 00	1236385 436	36610 303	33 771516	1	48 2				
3	0 00	1275015 361	37447 632	34 047957	1	48 6				
4	0 00	1288475 682	38777 468	33 227432	1	47 4				
5	0 00	1237608 43	36059 08	34 321686	1	49 0				
50	0 00	1418798 288	42057 589	33 734656	1	48 1				
51	0 00	1483146 885	44700 188	33 179880	1	47 3				
86	0 00	1422634 633	40557 355	35 077106	1	50 0				
87	0 00	1404126 497	41645 636	33 716054	1	48 1				
29	1 50	38177 753	37895 129	1 007458	1	1 46	-2 7	1 48	-1 3	1 4
62	1 50	40905 045	40011 702	1 022327	1	1 49	-0 7			
39	8 00	230623 945	42182 075	5 467345	1	7 82	-2 3	7 73	-3 4	1 7
73	8 00	220038 208	41281 188	5 330230	1	7 63	-4 6			
49	37 5	1090564 906	44124 823	24 715451	1	35 3	-5 9	35 4	-5 6	0 2
84	37 5	1047834 319	42223 476	24 816392	1	35 4	-5 6			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 9
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
018	N/A	1 / Day 2 1h	7550 771	34794 862	0 217008	1	BLQ<(0 500)	20	497170000913	AA90478-01 497170000913 018 N/A P2 Plasma-1 1 / Day 2 1h
018	N/A	2 / Day 2 2h	6579 932	37127 784	0 177224	1	BLQ<(0 500)	21	497170000914	AA90478-01 497170000914 018 N/A P2 Plasma-1 2 / Day 2 2h
018	N/A	3 / Day 2 3h	6580 334	35442 956	0 185660	1	BLQ<(0 500)	22	497170000915	AA90478-01 497170000915 018 N/A P2 Plasma-1 3 / Day 2 3h
018	N/A	4 / Day 2 4h	11458 487	37896 487	0 302363	1	BLQ<(0 500)	23	497170000916	AA90478-01 497170000916 018 N/A P2 Plasma-1 4 / Day 2 4h
018	N/A	5 / Day 2 5h	22985 345	39003 843	0 589310	1	0 869	24	497170000917	AA90478-01 497170000917 018 N/A P2 Plasma-1 5 / Day 2 5h
018	N/A	6 / Day 2 6h	18299 936	39549 165	0 462714	1	0 689	25	497170000918	AA90478-01 497170000918 018 N/A P2 Plasma-1 6 / Day 2 6h
018	N/A	7 / Day 2 7h	18941 102	35439 485	0 534463	1	0 791	26	497170000919	AA90478-01 497170000919 018 N/A P2 Plasma-1 7 / Day 2 7h
018	N/A	8 / Day 2 8h	24339 749	37720 496	0 645266	1	0 949	27	497170000920	AA90478-01 497170000920 018 N/A P2 Plasma-1 8 / Day 2 8h
018	N/A	9 / Day 2 9h	22460 913	38197 655	0 588018	1	0 867	28	497170000921	AA90478-01 497170000921 018 N/A P2 Plasma-1 9 / Day 2 9h
018	N/A	10 / Day 2 10h	21174 239	37125 576	0 570341	1	0 842	30	497170000922	AA90478-01 497170000922 018 N/A P2 Plasma-1 10 / Day 2 10h
018	N/A	11 / Day 2 11h	21120 119	37183 645	0 567995	1	0 839	31	497170000923	AA90478-01 497170000923 018 N/A P2 Plasma-1 11 / Day 2 11h
018	N/A	12 / Day 2 12h	21053 758	41151 448	0 511616	1	0 758	32	497170000924	AA90478-01 497170000924 018 N/A P2 Plasma-1 12 / Day 2 12h
018	N/A	13 / Day 2 13h	16082 024	35224 894	0 456553	1	0 680	33	497170000925	AA90478-01 497170000925 018 N/A P2 Plasma-1 13 / Day 2 13h
018	N/A	14 / Day 2 14h	21048 913	40151 11	0 524242	1	0 776	34	497170000926	AA90478-01 497170000926 018 N/A P2 Plasma-1 14 / Day 2 14h
018	N/A	15 / Day 2 15h	19419 402	41799 463	0 464585	1	0 691	35	497170000927	AA90478-01 497170000927 018 N/A P2 Plasma-1 15 / Day 2 15h
018	N/A	16 / Day 2 16h	17441 028	40805 707	0 427416	1	0 638	36	497170000928	AA90478-01 497170000928 018 N/A P2 Plasma-1 16 / Day 2 16h
018	N/A	17 / Day 2 17h	15766 68	39362 845	0 400547	1	0 600	37	497170000929	AA90478-01 497170000929 018 N/A P2 Plasma-1 17 / Day 2 17h
018	N/A	18 / Day 2 18h	14622 26	39579 323	0 369442	1	0 556	38	497170000930	AA90478-01 497170000930 018 N/A P2 Plasma-1 18 / Day 2 18h
018	N/A	19 / Day 2 19h	12831 319	39458 427	0 325186	1	BLQ<(0 500)	40	497170000931	AA90478-01 497170000931 018 N/A P2 Plasma-1 19 / Day 2 19h
019	N/A	1 / Day 2 1h	23655 963	41806 092	0 565850	1	0 836	41	497170001008	AA90478-01 497170001008 019 N/A P2 Plasma-1 1 / Day 2 1h
019	N/A	2 / Day 2 2h	21589 053	42077 893	0 513074	1	0 760	42	497170001009	AA90478-01 497170001009 019 N/A P2 Plasma-1 2 / Day 2 2h
019	N/A	3 / Day 2 3h	26378 232	37998 869	0 694185	1	1 02	43	497170001010	AA90478-01 497170001010 019 N/A P2 Plasma-1 3 / Day 2 3h
019	N/A	4 / Day 2 4h	25431 461	41947 373	0 606271	1	0 893	44	497170001011	AA90478-01 497170001011 019 N/A P2 Plasma-1 4 / Day 2 4h
019	N/A	5 / Day 2 5h	28903 171	42710 303	0 676726	1	0 994	45	497170001012	AA90478-01 497170001012 019 N/A P2 Plasma-1 5 / Day 2 5h
019	N/A	6 / Day 2 6h	38087 707	44756 349	0 851001	1	1 24	46	497170001013	AA90478-01 497170001013 019 N/A P2 Plasma-1 6 / Day 2 6h
019	N/A	7 / Day 2 7h	64411 099	31899 129	2 019212	1	2 91	47	497170001014	AA90478-01 497170001014 019 N/A P2 Plasma-1 7 / Day 2 7h
019	N/A	8 / Day 2 8h	77719 433	43873 853	1 771429	1	2 55	48	497170001015	AA90478-01 497170001015 019 N/A P2 Plasma-1 8 / Day 2 8h
019	N/A	9 / Day 2 9h	54779 815	40137 602	1 364800	1	1 97	52	497170001016	AA90478-01 497170001016 019 N/A P2 Plasma-1 9 / Day 2 9h
019	N/A	10 / Day 2 10h	57670 735	42136 772	1 368656	1	1 98	53	497170001017	AA90478-01 497170001017 019 N/A P2 Plasma-1 10 / Day 2 10h
019	N/A	11 / Day 2 11h	62650 752	42402 882	1 477512	1	2 14	54	497170001018	AA90478-01 497170001018 019 N/A P2 Plasma-1 11 / Day 2 11h
019	N/A	12 / Day 2 12h	52430 868	43148 964	1 215113	1	1 76	55	497170001019	AA90478-01 497170001019 019 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	13 / Day 2 13h	41349 787	41598 962	0 994010	1	1 45	56	497170001020	AA90478-01 497170001020 019 N/A P2 Plasma-1 13 / Day 2 13h
019	N/A	14 / Day 2 14h	40527 61	40910 238	0 990647	1	1 44	57	497170001021	AA90478-01 497170001021 019 N/A P2 Plasma-1 14 / Day 2 14h
019	N/A	15 / Day 2 15h	38893 84	43656 876	0 890898	1	1 30	58	497170001022	AA90478-01 497170001022 019 N/A P2 Plasma-1 15 / Day 2 15h
019	N/A	16 / Day 2 16h	45385 77	43818 073	1 035777	1	1 51	59	497170001023	AA90478-01 497170001023 019 N/A P2 Plasma-1 16 / Day 2 16h
019	N/A	17 / Day 2 17h	36993 25	42469 081	0 871063	1	1 27	60	497170001024	AA90478-01 497170001024 019 N/A P2 Plasma-1 17 / Day 2 17h
019	N/A	18 / Day 2 18h	40376 852	43751 888	0 922860	1	1 34	61	497170001025	AA90478-01 497170001025 019 N/A P2 Plasma-1 18 / Day 2 18h
019	N/A	19 / Day 2 19h	36409 18	40021 852	0 909733	1	1 33	63	497170001026	AA90478-01 497170001026 019 N/A P2 Plasma-1 19 / Day 2 19h
021	N/A	1 / Day 2 1h	14810 49	41932 257	0 353200	1	0 532	64	497170001103	AA90478-01 497170001103 021 N/A P2 Plasma-1 1 / Day 2 1h
021	N/A	2 / Day 2 2h	16037 075	44823 072	0 357786	1	0 539	65	497170001104	AA90478-01 497170001104 021 N/A P2 Plasma-1 2 / Day 2 2h
021	N/A	3 / Day 2 3h	12835 362	42819 526	0 299755	1	BLQ<(0 500)	66	497170001105	AA90478-01 497170001105 021 N/A P2 Plasma-1 3 / Day 2 3h
021	N/A	4 / Day 2 4h	14950 656	42869 599	0 348747	1	0 526	67	497170001106	AA90478-01 497170001106 021 N/A P2 Plasma-1 4 / Day 2 4h
021	N/A	5 / Day 2 5h	20179 496	44941 717	0 449015	1	0 669	68	497170001107	AA90478-01 497170001107 021 N/A P2 Plasma-1 5 / Day 2 5h
021	N/A	6 / Day 2 6h	33398 691	42411 015	0 787500	1	1 15	69	497170001108	AA90478-01 497170001108 021 N/A P2 Plasma-1 6 / Day 2 6h
021	N/A	7 / Day 2 7h	62170 234	17905 848	*3 472063	1	*4 98	70	497170001109	AA90478-01 497170001109 021 N/A P2 Plasma-1 7 / Day 2 7h
021	N/A	8 / Day 2 8h	68039 878	44497 971	1 529056	1	2 21	71	497170001110	AA90478-01 497170001110 021 N/A P2 Plasma-1 8 / Day 2 8h
021	N/A	9 / Day 2 9h	51701 843	39797 762	1 299114	1	1 88	72	497170001111	AA90478-01 497170001111 021 N/A P2 Plasma-1 9 / Day 2 9h
021	N/A	10 / Day 2 10h	46537 14	42796 022	1 087417	1	1 58	74	497170001112	AA90478-01 497170001112 021 N/A P2 Plasma-1 10 / Day 2 10h
021	N/A	11 / Day 2 11h	60253 728	44295	1 360283	1	1 97	75	497170001113	AA90478-01 497170001113 021 N/A P2 Plasma-1 11 / Day 2 11h
021	N/A	12 / Day 2 12h	66878 482	43374 445	1 541887	1	2 23	76	497170001114	AA90478-01 497170001114 021 N/A P2 Plasma-1 12 / Day 2 12h
021	N/A	13 / Day 2 13h	58420 831	42038 656	1 389693	1	2 01	77	497170001115	AA90478-01 497170001115 021 N/A P2 Plasma-1 13 / Day 2 13h
021	N/A	14 / Day 2 14h	46009 562	42881 018	1 072959	1	1 56	78	497170001116	AA90478-01 497170001116 021 N/A P2 Plasma-1 14 / Day 2 14h
021	N/A	15 / Day 2 15h	36142 121	40401 985	0 894563	1	1 30	79	497170001117	AA90478-01 497170001117 021 N/A P2 Plasma-1 15 / Day 2 15h
021	N/A	16 / Day 2 16h	30123 264	35292 606	0 853529	1	1 25	80	497170001118	AA90478-01 497170001118 021 N/A P2 Plasma-1 16 / Day 2 16h
021	N/A	17 / Day 2 17h	33101 245	42554 119	0 777862	1	1 14	81	497170001119	AA90478-01 497170001119 021 N/A P2 Plasma-1 17 / Day 2 17h
021	N/A	18 / Day 2 18h	34500 807	41656 888	0 828214	1	1 21	82	497170001120	AA90478-01 497170001120 021 N/A P2 Plasma-1 18 / Day 2 18h
021	N/A	19 / Day 2 19h	29033 467	41144 793	0 705641	1	1 03	83	497170001121	AA90478-01 497170001121 021 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 10
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	43452 103	0 000000	0 0495		0 0495	0 0
9	0 00		0	43095 797	0 000000	0 0495			
10	0 500	4 00000	13991 346	45054 59	0 310542	0 498	-0 4		
11	1 00	1 00000	27785 338	42091 045	0 660125	1 00	0 0		
12	2 00	0 250000	54246 831	39991 842	1 356447	2 01	0 5		
13	4 00	0 0625000	118058 348	42698 415	2 764935	4 04	1 0		
14	8 00	0 0156250	237178 475	42235 114	5 615670	8 16	2 0		
15	10 0	0 0100000	290108 715	41450 88	6 998855	10 2	2 0		
16	20 0	0 00250000	554244 752	40883 073	13 556827	19 6	-2 0		
17	40 0	0 000625000	1220430 65	45359 906	26 905493	38 9	-2 8		
18	50 0	0 000400000	1465363 74	42324 883	34 621802	50 0	0 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 692767194

Intercept = -0 0342701560

R-Squared = 0 9997

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 10
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1403438 805	41472 093	33 840559	1	48 9		48 7		1 4
2	0 00	1435652 292	42735 788	33 593678	1	48 5				
3	0 00	1397329 046	41167 825	33 942261	1	49 0				
4	0 00	1403261 366	40868 401	34 336097	1	49 6				
5	0 00	1421586 143	42542 036	33 416035	1	48 3				
50	0 00	1490973 069	43420 388	34 338087	1	49 6				
51	0 00	1501597 292	44431 401	33 795857	1	48 8				
85	0 00	1533507 804	45763 364	33 509508	1	48 4				
86	0 00	1435192 591	43791 45	32 773352	1	47 4				
29	1 50	42564 34	43854 614	0 970578	1	1 45	-3 3	1 45	-3 3	0 0
62	1 50	39524 689	40810 83	0 968485	1	1 45	-3 3			
39	8 00	230873 424	42589 186	5 420940	1	7 87	-1 6	7 85	-1 9	0 4
73	8 00	255455 72	47399 723	5 389393	1	7 83	-2 1			
49	37 5	1037732 046	42167 118	24 609983	1	35 6	-5 1	35 5	-5 3	0 4
83	37 5	904124 188	36937 046	24 477436	1	35 4	-5 6			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 10
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	1 / Day 2 1h	29287 762	43450 872	0 674043	1	1 02	20	497170001198	AA90478-01 497170001198 024 N/A P2 Plasma-1 1 / Day 2 1h
024	N/A	2 / Day 2 2h	29158 349	42625 138	0 684065	1	1 04	21	497170001199	AA90478-01 497170001199 024 N/A P2 Plasma-1 2 / Day 2 2h
024	N/A	3 / Day 2 3h	36203 986	43769 056	0 827159	1	1 24	22	497170001200	AA90478-01 497170001200 024 N/A P2 Plasma-1 3 / Day 2 3h
024	N/A	4 / Day 2 4h	47338 002	42216 849	1 121306	1	1 67	23	497170001201	AA90478-01 497170001201 024 N/A P2 Plasma-1 4 / Day 2 4h
024	N/A	5 / Day 2 5h	46658 011	40262 841	1 158836	1	1 72	24	497170001202	AA90478-01 497170001202 024 N/A P2 Plasma-1 5 / Day 2 5h
024	N/A	6 / Day 2 6h	51685 51	40989 683	1 260939	1	1 87	25	497170001203	AA90478-01 497170001203 024 N/A P2 Plasma-1 6 / Day 2 6h
024	N/A	7 / Day 2 7h	53838 717	40257 503	1 337359	1	1 98	26	497170001204	AA90478-01 497170001204 024 N/A P2 Plasma-1 7 / Day 2 7h
024	N/A	9 / Day 2 9h	47055 872	36238 304	1 298512	1	1 92	27	497170001206	AA90478-01 497170001206 024 N/A P2 Plasma-1 9 / Day 2 9h
024	N/A	10 / Day 2 10h	44506 323	41686 237	1 067650	1	1 59	28	497170001207	AA90478-01 497170001207 024 N/A P2 Plasma-1 10 / Day 2 10h
024	N/A	11 / Day 2 11h	43909 612	42203 078	1 040436	1	1 55	30	497170001208	AA90478-01 497170001208 024 N/A P2 Plasma-1 11 / Day 2 11h
024	N/A	12 / Day 2 12h	40101 061	40589 395	0 987969	1	1 48	31	497170001209	AA90478-01 497170001209 024 N/A P2 Plasma-1 12 / Day 2 12h
024	N/A	13 / Day 2 13h	43438 003	40293 98	1 078027	1	1 61	32	497170001210	AA90478-01 497170001210 024 N/A P2 Plasma-1 13 / Day 2 13h
024	N/A	14 / Day 2 14h	39952 398	41209 646	0 969491	1	1 45	33	497170001211	AA90478-01 497170001211 024 N/A P2 Plasma-1 14 / Day 2 14h
024	N/A	15 / Day 2 15h	35560 175	40755 727	0 872520	1	1 31	34	497170001212	AA90478-01 497170001212 024 N/A P2 Plasma-1 15 / Day 2 15h
024	N/A	16 / Day 2 16h	37562 357	40850 983	0 919497	1	1 38	35	497170001213	AA90478-01 497170001213 024 N/A P2 Plasma-1 16 / Day 2 16h
024	N/A	17 / Day 2 17h	38011 295	43516 407	0 873493	1	1 31	36	497170001214	AA90478-01 497170001214 024 N/A P2 Plasma-1 17 / Day 2 17h
024	N/A	18 / Day 2 18h	39066 293	45417 279	0 860164	1	1 29	37	497170001215	AA90478-01 497170001215 024 N/A P2 Plasma-1 18 / Day 2 18h
024	N/A	19 / Day 2 19h	31398 565	37660 004	0 833738	1	1 25	38	497170001216	AA90478-01 497170001216 024 N/A P2 Plasma-1 19 / Day 2 19h
026	N/A	1 / Day 2 1h	22439 866	38956 05	0 576030	1	0 881	40	497170001293	AA90478-01 497170001293 026 N/A P2 Plasma-1 1 / Day 2 1h
026	N/A	2 / Day 2 2h	31054 936	40631 296	0 764311	1	1 15	41	497170001294	AA90478-01 497170001294 026 N/A P2 Plasma-1 2 / Day 2 2h
026	N/A	3 / Day 2 3h	28097 206	36387 737	0 772161	1	1 16	42	497170001295	AA90478-01 497170001295 026 N/A P2 Plasma-1 3 / Day 2 3h
026	N/A	4 / Day 2 4h	29069 933	43172 362	0 673346	1	1 02	43	497170001296	AA90478-01 497170001296 026 N/A P2 Plasma-1 4 / Day 2 4h
026	N/A	5 / Day 2 5h	41831 971	41219 574	1 014857	1	1 51	44	497170001297	AA90478-01 497170001297 026 N/A P2 Plasma-1 5 / Day 2 5h
026	N/A	6 / Day 2 6h	53618 422	45188 063	1 186562	1	1 76	45	497170001298	AA90478-01 497170001298 026 N/A P2 Plasma-1 6 / Day 2 6h
026	N/A	7 / Day 2 7h	40361 849	31642 484	1 275559	1	1 89	46	497170001299	AA90478-01 497170001299 026 N/A P2 Plasma-1 7 / Day 2 7h
026	N/A	8 / Day 2 8h	43106 863	34038 105	1 266430	1	1 88	47	497170001300	AA90478-01 497170001300 026 N/A P2 Plasma-1 8 / Day 2 8h
026	N/A	9 / Day 2 9h	56567 264	42381 021	1 334731	1	1 98	48	497170001301	AA90478-01 497170001301 026 N/A P2 Plasma-1 9 / Day 2 9h
026	N/A	10 / Day 2 10h	72386 301	42328 35	1 710114	1	2 52	52	497170001302	AA90478-01 497170001302 026 N/A P2 Plasma-1 10 / Day 2 10h
026	N/A	11 / Day 2 11h	84014 992	43907 497	1 913454	1	2 81	53	497170001303	AA90478-01 497170001303 026 N/A P2 Plasma-1 11 / Day 2 11h
026	N/A	12 / Day 2 12h	64506 654	40766 045	1 582362	1	2 33	54	497170001304	AA90478-01 497170001304 026 N/A P2 Plasma-1 12 / Day 2 12h
026	N/A	13 / Day 2 13h	63519 655	41306 56	1 537762	1	2 27	55	497170001305	AA90478-01 497170001305 026 N/A P2 Plasma-1 13 / Day 2 13h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
026	N/A	14 / Day 2 14h	62586 228	43380 329	1 442733	1	2 13	56	497170001306	AA90478-01 497170001306 026 N/A P2 Plasma-1 14 / Day 2 14h
026	N/A	15 / Day 2 15h	66921 093	43102 43	1 552606	1	2 29	57	497170001307	AA90478-01 497170001307 026 N/A P2 Plasma-1 15 / Day 2 15h
026	N/A	16 / Day 2 16h	54731 826	34921 635	1 567276	1	2 31	58	497170001308	AA90478-01 497170001308 026 N/A P2 Plasma-1 16 / Day 2 16h
026	N/A	17 / Day 2 17h	55683 139	41080 909	1 355451	1	2 01	59	497170001309	AA90478-01 497170001309 026 N/A P2 Plasma-1 17 / Day 2 17h
026	N/A	18 / Day 2 18h	55969 07	43377 251	1 290286	1	1 91	60	497170001310	AA90478-01 497170001310 026 N/A P2 Plasma-1 18 / Day 2 18h
026	N/A	19 / Day 2 19h	53200 477	46388 47	1 146847	1	1 70	61	497170001311	AA90478-01 497170001311 026 N/A P2 Plasma-1 19 / Day 2 19h
028	N/A	1 / Day 2 1h	42438 474	43368 798	0 978549	1	1 46	63	497170001388	AA90478-01 497170001388 028 N/A P2 Plasma-1 1 / Day 2 1h
028	N/A	2 / Day 2 2h	43380 347	40791 013	1 063478	1	1 58	64	497170001389	AA90478-01 497170001389 028 N/A P2 Plasma-1 2 / Day 2 2h
028	N/A	3 / Day 2 3h	63960 365	43147 062	1 482381	1	2 19	65	497170001390	AA90478-01 497170001390 028 N/A P2 Plasma-1 3 / Day 2 3h
028	N/A	4 / Day 2 4h	132929 657	45275 528	2 936016	1	4 29	66	497170001391	AA90478-01 497170001391 028 N/A P2 Plasma-1 4 / Day 2 4h
028	N/A	5 / Day 2 5h	149408 357	44783 626	3 336227	1	4 87	67	497170001392	AA90478-01 497170001392 028 N/A P2 Plasma-1 5 / Day 2 5h
028	N/A	6 / Day 2 6h	141863 476	40535 804	3 499708	1	5 10	68	497170001393	AA90478-01 497170001393 028 N/A P2 Plasma-1 6 / Day 2 6h
028	N/A	7 / Day 2 7h	154689 259	42334 693	3 653960	1	5 32	69	497170001394	AA90478-01 497170001394 028 N/A P2 Plasma-1 7 / Day 2 7h
028	N/A	8 / Day 2 8h	121033 597	36206 192	3 342898	1	4 87	70	497170001395	AA90478-01 497170001395 028 N/A P2 Plasma-1 8 / Day 2 8h
028	N/A	9 / Day 2 9h	111311 223	44476 159	2 502717	1	3 66	71	497170001396	AA90478-01 497170001396 028 N/A P2 Plasma-1 9 / Day 2 9h
028	N/A	10 / Day 2 10h	81078 067	44400 202	1 826074	1	2 69	72	497170001397	AA90478-01 497170001397 028 N/A P2 Plasma-1 10 / Day 2 10h
028	N/A	11 / Day 2 11h	80293 645	45342 173	1 770838	1	2 61	74	497170001398	AA90478-01 497170001398 028 N/A P2 Plasma-1 11 / Day 2 11h
028	N/A	12 / Day 2 12h	70029 925	37466 903	1 869114	1	2 75	75	497170001399	AA90478-01 497170001399 028 N/A P2 Plasma-1 12 / Day 2 12h
028	N/A	13 / Day 2 13h	76528 768	43149 267	1 773582	1	2 61	76	497170001400	AA90478-01 497170001400 028 N/A P2 Plasma-1 13 / Day 2 13h
028	N/A	14 / Day 2 14h	66060 483	42605 461	1 550517	1	2 29	77	497170001401	AA90478-01 497170001401 028 N/A P2 Plasma-1 14 / Day 2 14h
028	N/A	15 / Day 2 15h	72321 267	40338 321	1 792868	1	2 64	78	497170001402	AA90478-01 497170001402 028 N/A P2 Plasma-1 15 / Day 2 15h
028	N/A	16 / Day 2 16h	69194 066	42481 826	1 628792	1	2 40	79	497170001403	AA90478-01 497170001403 028 N/A P2 Plasma-1 16 / Day 2 16h
028	N/A	17 / Day 2 17h	47648 107	35108 305	1 357175	1	2 01	80	497170001404	AA90478-01 497170001404 028 N/A P2 Plasma-1 17 / Day 2 17h
028	N/A	18 / Day 2 18h	56424 28	40710 06	1 386003	1	2 05	81	497170001405	AA90478-01 497170001405 028 N/A P2 Plasma-1 18 / Day 2 18h
028	N/A	19 / Day 2 19h	64185 422	41139 748	1 560180	1	2 30	82	497170001406	AA90478-01 497170001406 028 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 11
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	16420 232	0 000000	-0 0470		-0 0470	0 0
9	0 00		0	17772 62	0 000000	-0 0470			
10	0 500	4 00000	7621 78	18886 91	0 403548	0 504	0 8		
11	1 00	1 00000	15134 773	20009 407	0 756383	0 986	-1 4		
12	2 00	0 250000	26765 473	18237 862	1 467577	1 96	-2 0		
13	4 00	0 0625000	58818 002	19442 061	3 025297	4 08	2 0		
14	8 00	0 0156250	115473 797	18932 394	6 099271	8 28	3 5		
15	10 0	0 0100000	147992 095	20180 82	7 333304	9 96	-0 4		
16	20 0	0 00250000	296433 866	19308 382	15 352600	20 9	4 5		
17	40 0	0 000625000	554643 171	19416 568	28 565459	38 9	-2 8		
18	50 0	0 000400000	700551 966	19957 079	35 102931	47 9	-4 2		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 732553970

Intercept = 0 0344398994

R-Squared = 0 9988

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 11
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	591159 369	16049 602	36 833273	1	50 2		50 2		2 5
2	0 00	525364 344	14038 699	37 422581	1	51 0				
3	0 00	556349 48	15521 401	35 844025	1	48 9				
4	0 00	475169 762	13186 418	36 034787	1	49 1				
5	0 00	484760 721	13535 076	35 815146	1	48 8				
50	0 00	625184 821	16238 538	38 500068	1	52 5				
51	0 00	624315 232	17053 455	36 609311	1	49 9				
86	0 00	624592 999	17158 1	36 402224	1	49 6				
87	0 00	652454 225	17236 504	37 853049	1	51 6				
29	1 50	23006 013	21756 506	1 057431	1	1 40	-6 7	1 36	-9 3	4 7
62	1 50	18089 338	18218 313	0 992921	1	1 31	-12 7			
39	8 00	118559 432	20043 424	5 915129	1	8 03	0 4	7 84	-2 0	3 4
73	8 00	102331 141	18144 541	5 639776	1	7 65	-4 4			
49	37 5	411566 571	16421 806	25 062199	1	34 2	-8 8	35 7	-4 8	5 7
84	37 5	455971 549	16751 706	27 219410	1	37 1	-1 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 11
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 3 1h	2141 3	18203 691	0 117630	1	BLQ<(0 500)	20	497170000039	AA90478-01 497170000039 001 N/A P3 Plasma-1 1 / Day 3 1h
001	N/A	2 / Day 3 2h	2316 925	17398 328	0 133169	1	BLQ<(0 500)	21	497170000040	AA90478-01 497170000040 001 N/A P3 Plasma-1 2 / Day 3 2h
001	N/A	3 / Day 3 3h	4827 415	18061 05	0 267283	1	BLQ<(0 500)	22	497170000041	AA90478-01 497170000041 001 N/A P3 Plasma-1 3 / Day 3 3h
001	N/A	4 / Day 3 4h	10191 627	18847 626	0 540738	1	0 691	23	497170000042	AA90478-01 497170000042 001 N/A P3 Plasma-1 4 / Day 3 4h
001	N/A	5 / Day 3 5h	27889 716	20106 629	1 387091	1	1 85	24	497170000043	AA90478-01 497170000043 001 N/A P3 Plasma-1 5 / Day 3 5h
001	N/A	6 / Day 3 6h	37167 775	19253 862	1 930406	1	2 59	25	497170000044	AA90478-01 497170000044 001 N/A P3 Plasma-1 6 / Day 3 6h
001	N/A	7 / Day 3 7h	58327 737	20994 602	2 778225	1	3 75	26	497170000045	AA90478-01 497170000045 001 N/A P3 Plasma-1 7 / Day 3 7h
001	N/A	8 / Day 3 8h	79668 541	20479 77	3 890109	1	5 26	27	497170000046	AA90478-01 497170000046 001 N/A P3 Plasma-1 8 / Day 3 8h
001	N/A	9 / Day 3 9h	57076 702	19604 738	2 911373	1	3 93	28	497170000047	AA90478-01 497170000047 001 N/A P3 Plasma-1 9 / Day 3 9h
001	N/A	10 / Day 3 10h	52643 607	20330 95	2 589333	1	3 49	30	497170000048	AA90478-01 497170000048 001 N/A P3 Plasma-1 10 / Day 3 10h
001	N/A	11 / Day 3 11h	43677 59	21075 845	2 072400	1	2 78	31	497170000049	AA90478-01 497170000049 001 N/A P3 Plasma-1 11 / Day 3 11h
001	N/A	12 / Day 3 12h	36443 53	21798 746	1 671818	1	2 24	32	497170000050	AA90478-01 497170000050 001 N/A P3 Plasma-1 12 / Day 3 12h
001	N/A	13 / Day 3 13h	29322 003	21309 47	1 376008	1	1 83	33	497170000051	AA90478-01 497170000051 001 N/A P3 Plasma-1 13 / Day 3 13h
001	N/A	14 / Day 3 14h	21172 697	18757 7	1 128747	1	1 49	34	497170000052	AA90478-01 497170000052 001 N/A P3 Plasma-1 14 / Day 3 14h
001	N/A	15 / Day 3 15h	18687 884	20507 254	0 911282	1	1 20	35	497170000053	AA90478-01 497170000053 001 N/A P3 Plasma-1 15 / Day 3 15h
001	N/A	16 / Day 3 16h	14539 852	18470 466	0 787195	1	1 03	36	497170000054	AA90478-01 497170000054 001 N/A P3 Plasma-1 16 / Day 3 16h
001	N/A	17 / Day 3 17h	12464 061	18568 871	0 671234	1	0 869	37	497170000055	AA90478-01 497170000055 001 N/A P3 Plasma-1 17 / Day 3 17h
001	N/A	18 / Day 3 18h	10599 941	21187 964	0 500281	1	0 636	38	497170000056	AA90478-01 497170000056 001 N/A P3 Plasma-1 18 / Day 3 18h
001	N/A	19 / Day 3 19h	9027 695	17089 387	0 528263	1	0 674	40	497170000057	AA90478-01 497170000057 001 N/A P3 Plasma-1 19 / Day 3 19h
003	N/A	1 / Day 3 1h	5940 484	15808 138	0 375786	1	BLQ<(0 500)	41	497170000134	AA90478-01 497170000134 003 N/A P3 Plasma-1 1 / Day 3 1h
003	N/A	2 / Day 3 2h	7137 648	15907 077	0 448709	1	0 566	42	497170000135	AA90478-01 497170000135 003 N/A P3 Plasma-1 2 / Day 3 2h
003	N/A	3 / Day 3 3h	7924 716	16007 091	0 495075	1	0 629	43	497170000136	AA90478-01 497170000136 003 N/A P3 Plasma-1 3 / Day 3 3h
003	N/A	4 / Day 3 4h	14055 02	15430 054	0 910886	1	1 20	44	497170000137	AA90478-01 497170000137 003 N/A P3 Plasma-1 4 / Day 3 4h
003	N/A	5 / Day 3 5h	20187 138	15441 339	1 307344	1	1 74	45	497170000138	AA90478-01 497170000138 003 N/A P3 Plasma-1 5 / Day 3 5h
003	N/A	6 / Day 3 6h	23227 388	16021 652	1 449750	1	1 93	46	497170000139	AA90478-01 497170000139 003 N/A P3 Plasma-1 6 / Day 3 6h
003	N/A	7 / Day 3 7h	29009 639	15780 371	1 838337	1	2 46	47	497170000140	AA90478-01 497170000140 003 N/A P3 Plasma-1 7 / Day 3 7h
003	N/A	8 / Day 3 8h	35173 291	15700 107	2 240322	1	3 01	48	497170000141	AA90478-01 497170000141 003 N/A P3 Plasma-1 8 / Day 3 8h
003	N/A	9 / Day 3 9h	33627 415	15436 674	2 178411	1	2 93	52	497170000142	AA90478-01 497170000142 003 N/A P3 Plasma-1 9 / Day 3 9h
003	N/A	10 / Day 3 10h	29861 252	16396 607	1 821185	1	2 44	53	497170000143	AA90478-01 497170000143 003 N/A P3 Plasma-1 10 / Day 3 10h
003	N/A	11 / Day 3 11h	24661 967	16817 842	1 466417	1	1 95	54	497170000144	AA90478-01 497170000144 003 N/A P3 Plasma-1 11 / Day 3 11h
003	N/A	12 / Day 3 12h	22632 865	17002 37	1 331159	1	1 77	55	497170000145	AA90478-01 497170000145 003 N/A P3 Plasma-1 12 / Day 3 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	13 / Day 3 13h	22976 74	19316 007	1 189518	1	1 58	56	497170000146	AA90478-01 497170000146 003 N/A P3 Plasma-1 13 / Day 3 13h
003	N/A	14 / Day 3 14h	18029 724	17846 882	1 010245	1	1 33	57	497170000147	AA90478-01 497170000147 003 N/A P3 Plasma-1 14 / Day 3 14h
003	N/A	15 / Day 3 15h	19814 898	18556 616	1 067808	1	1 41	58	497170000148	AA90478-01 497170000148 003 N/A P3 Plasma-1 15 / Day 3 15h
003	N/A	16 / Day 3 16h	18136 492	19748 349	0 918380	1	1 21	59	497170000149	AA90478-01 497170000149 003 N/A P3 Plasma-1 16 / Day 3 16h
003	N/A	17 / Day 3 17h	14645 339	18610 317	0 786947	1	1 03	60	497170000150	AA90478-01 497170000150 003 N/A P3 Plasma-1 17 / Day 3 17h
003	N/A	18 / Day 3 18h	13607 986	19009 392	0 715856	1	0 930	61	497170000151	AA90478-01 497170000151 003 N/A P3 Plasma-1 18 / Day 3 18h
003	N/A	19 / Day 3 19h	9696 946	17570 561	0 551886	1	0 706	63	497170000152	AA90478-01 497170000152 003 N/A P3 Plasma-1 19 / Day 3 19h
005	N/A	1 / Day 3 1h	3252 046	17504 806	0 185780	1	BLQ<(0 500)	64	497170000229	AA90478-01 497170000229 005 N/A P3 Plasma-1 1 / Day 3 1h
005	N/A	2 / Day 3 2h	3427 068	16599 741	0 206453	1	BLQ<(0 500)	65	497170000230	AA90478-01 497170000230 005 N/A P3 Plasma-1 2 / Day 3 2h
005	N/A	3 / Day 3 3h	3844 9	17923 711	0 214515	1	BLQ<(0 500)	66	497170000231	AA90478-01 497170000231 005 N/A P3 Plasma-1 3 / Day 3 3h
005	N/A	4 / Day 3 4h	4127 084	16978 953	0 243071	1	BLQ<(0 500)	67	497170000232	AA90478-01 497170000232 005 N/A P3 Plasma-1 4 / Day 3 4h
005	N/A	5 / Day 3 5h	5225 279	17981 222	0 290596	1	BLQ<(0 500)	68	497170000233	AA90478-01 497170000233 005 N/A P3 Plasma-1 5 / Day 3 5h
005	N/A	6 / Day 3 6h	6553 408	16727 138	0 391783	1	BLQ<(0 500)	69	497170000234	AA90478-01 497170000234 005 N/A P3 Plasma-1 6 / Day 3 6h
005	N/A	7 / Day 3 7h	8256 417	16349 156	0 505006	1	0 642	70	497170000235	AA90478-01 497170000235 005 N/A P3 Plasma-1 7 / Day 3 7h
005	N/A	8 / Day 3 8h	8620 081	17201 451	0 501125	1	0 637	71	497170000236	AA90478-01 497170000236 005 N/A P3 Plasma-1 8 / Day 3 8h
005	N/A	9 / Day 3 9h	8023 578	16979 113	0 472556	1	0 598	72	497170000237	AA90478-01 497170000237 005 N/A P3 Plasma-1 9 / Day 3 9h
005	N/A	10 / Day 3 10h	9353 696	17236 952	0 542654	1	0 694	74	497170000238	AA90478-01 497170000238 005 N/A P3 Plasma-1 10 / Day 3 10h
005	N/A	11 / Day 3 11h	8034 742	14301 056	0 561829	1	0 720	75	497170000239	AA90478-01 497170000239 005 N/A P3 Plasma-1 11 / Day 3 11h
005	N/A	12 / Day 3 12h	7450 685	17190 808	0 433411	1	0 545	76	497170000240	AA90478-01 497170000240 005 N/A P3 Plasma-1 12 / Day 3 12h
005	N/A	13 / Day 3 13h	6777 138	17317 111	0 391355	1	BLQ<(0 500)	77	497170000241	AA90478-01 497170000241 005 N/A P3 Plasma-1 13 / Day 3 13h
005	N/A	14 / Day 3 14h	6680 299	16755 259	0 398699	1	BLQ<(0 500)	78	497170000242	AA90478-01 497170000242 005 N/A P3 Plasma-1 14 / Day 3 14h
005	N/A	15 / Day 3 15h	5848 867	16902 718	0 346031	1	BLQ<(0 500)	79	497170000243	AA90478-01 497170000243 005 N/A P3 Plasma-1 15 / Day 3 15h
005	N/A	16 / Day 3 16h	5468 884	16680 337	0 327864	1	BLQ<(0 500)	80	497170000244	AA90478-01 497170000244 005 N/A P3 Plasma-1 16 / Day 3 16h
005	N/A	17 / Day 3 17h	5250 158	16518 545	0 317834	1	BLQ<(0 500)	82	497170000245	AA90478-01 497170000245 005 N/A P3 Plasma-1 17 / Day 3 17h
005	N/A	18 / Day 3 18h	4726 292	16065 199	0 294194	1	BLQ<(0 500)	81	497170000246	AA90478-01 497170000246 005 N/A P3 Plasma-1 18 / Day 3 18h
005	N/A	19 / Day 3 19h	4412 496	15662 679	0 281720	1	BLQ<(0 500)	83	497170000247	AA90478-01 497170000247 005 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 12
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	33122 459	0 000000	0 00129		0 00129	0 0
9	0 00		0	31133 786	0 000000	0 00129			
10	0 500	4 00000	12539 383	33452 82	0 374838	0 506	1 2		
11	1 00	1 00000	26916 436	36910 377	0 729238	0 983	-1 7		
12	2 00	0 250000	47570 253	32656 413	1 456689	1 96	-2 0		
13	4 00	0 0625000	99859 513	33623 739	2 969911	4 00	0 0		
14	8 00	0 0156250	214923 564	35357 13	6 078648	8 18	2 3		
15	10 0	0 0100000	245597 049	32620 435	7 528932	10 1	1 0		
16	20 0	0 00250000	487691 626	32927 806	14 810936	19 9	-0 5		
17	40 0	0 000625000	972113 134	32497 196	29 913754	40 3	0 8		
18	50 0	0 000400000	1124289 596	30695 355	36 627353	49 3	-1 4		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:
Slope = 0 743033392
Intercept = -0 000958813697
R-Squared = 0 9997

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 12
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1237118 218	35509 416	34 839160	1	46 9		49 1		2 6
2	0 00	1255215 215	33699 896	37 246857	1	50 1				
3	0 00	1201299 457	31929 394	37 623622	1	50 6				
4	0 00	1194200 419	32255 381	37 023293	1	49 8				
5	0 00	1189102 889	32444 758	36 650077	1	49 3				
50	0 00	1014448 308	28419 3	35 695753	1	48 0				
51	0 00	1041977 481	29060 531	35 855418	1	48 3				
86	0 00	947425 072	25189 295	37 612211	1	50 6				
87	0 00	901209 356	24956 044	36 111868	1	48 6				
29	1 50	36270 774	33531 871	1 081681	1	1 46	-2 7	1 49	-0 7	2 4
62	1 50	33873 246	30206 735	1 121381	1	1 51	0 7			
39	8 00	186616 697	32379 114	5 763490	1	7 76	-3 0	7 79	-2 6	0 5
73	8 00	164785 205	28407 052	5 800856	1	7 81	-2 4			
49	37 5	752054 043	30296 742	24 822935	1	33 4	-10 9	35 7	-4 8	8 9
84	37 5	704330 968	25020 788	28 149832	1	37 9	1 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 12
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	1 / Day 3 1h	61937 431	34015 534	1 820857	1	2 45	20	497170000419	AA90478-01 497170000419 009 N/A P3 Plasma-1 1 / Day 3 1h
009	N/A	2 / Day 3 2h	55060 741	31024 818	1 774732	1	2 39	21	497170000420	AA90478-01 497170000420 009 N/A P3 Plasma-1 2 / Day 3 2h
009	N/A	3 / Day 3 3h	82013 224	33940 707	2 416368	1	3 25	22	497170000421	AA90478-01 497170000421 009 N/A P3 Plasma-1 3 / Day 3 3h
009	N/A	4 / Day 3 4h	112189 028	31174 143	3 598785	1	4 84	23	497170000422	AA90478-01 497170000422 009 N/A P3 Plasma-1 4 / Day 3 4h
009	N/A	5 / Day 3 5h	137219 62	31754 141	4 321314	1	5 82	24	497170000423	AA90478-01 497170000423 009 N/A P3 Plasma-1 5 / Day 3 5h
009	N/A	6 / Day 3 6h	138467 157	31097 102	4 452735	1	5 99	25	497170000424	AA90478-01 497170000424 009 N/A P3 Plasma-1 6 / Day 3 6h
009	N/A	7 / Day 3 7h	167172 593	29937 842	5 583989	1	7 52	26	497170000425	AA90478-01 497170000425 009 N/A P3 Plasma-1 7 / Day 3 7h
009	N/A	8 / Day 3 8h	176640 035	33400 175	5 288596	1	7 12	27	497170000426	AA90478-01 497170000426 009 N/A P3 Plasma-1 8 / Day 3 8h
009	N/A	9 / Day 3 9h	201170 8	31316 143	6 423869	1	8 65	28	497170000427	AA90478-01 497170000427 009 N/A P3 Plasma-1 9 / Day 3 9h
009	N/A	10 / Day 3 10h	158833 086	31222 87	5 087075	1	6 85	30	497170000428	AA90478-01 497170000428 009 N/A P3 Plasma-1 10 / Day 3 10h
009	N/A	11 / Day 3 11h	155586 772	32796 907	4 743946	1	6 39	31	497170000429	AA90478-01 497170000429 009 N/A P3 Plasma-1 11 / Day 3 11h
009	N/A	12 / Day 3 12h	131221 797	30919 024	4 244047	1	5 71	32	497170000430	AA90478-01 497170000430 009 N/A P3 Plasma-1 12 / Day 3 12h
009	N/A	13 / Day 3 13h	114460 882	31533 989	3 629762	1	4 89	33	497170000431	AA90478-01 497170000431 009 N/A P3 Plasma-1 13 / Day 3 13h
009	N/A	14 / Day 3 14h	118505 553	33543 512	3 532890	1	4 76	34	497170000432	AA90478-01 497170000432 009 N/A P3 Plasma-1 14 / Day 3 14h
009	N/A	15 / Day 3 15h	111122 15	32286 565	3 441746	1	4 63	35	497170000433	AA90478-01 497170000433 009 N/A P3 Plasma-1 15 / Day 3 15h
009	N/A	16 / Day 3 16h	104530 474	31506 77	3 317715	1	4 47	36	497170000434	AA90478-01 497170000434 009 N/A P3 Plasma-1 16 / Day 3 16h
009	N/A	17 / Day 3 17h	92636 913	31442 845	2 946200	1	3 97	37	497170000435	AA90478-01 497170000435 009 N/A P3 Plasma-1 17 / Day 3 17h
009	N/A	18 / Day 3 18h	94432 816	32362 361	2 917983	1	3 93	38	497170000436	AA90478-01 497170000436 009 N/A P3 Plasma-1 18 / Day 3 18h
009	N/A	19 / Day 3 19h	86164 507	31849 752	2 705343	1	3 64	40	497170000437	AA90478-01 497170000437 009 N/A P3 Plasma-1 19 / Day 3 19h
011	N/A	1 / Day 3 1h	38396 49	29716 387	1 292098	1	1 74	41	497170000514	AA90478-01 497170000514 011 N/A P3 Plasma-1 1 / Day 3 1h
011	N/A	2 / Day 3 2h	32036 178	29479 036	1 086744	1	1 46	42	497170000515	AA90478-01 497170000515 011 N/A P3 Plasma-1 2 / Day 3 2h
011	N/A	3 / Day 3 3h	38117 102	29966 603	1 271986	1	1 71	43	497170000516	AA90478-01 497170000516 011 N/A P3 Plasma-1 3 / Day 3 3h
011	N/A	4 / Day 3 4h	52808 344	28915 303	1 826311	1	2 46	44	497170000517	AA90478-01 497170000517 011 N/A P3 Plasma-1 4 / Day 3 4h
011	N/A	5 / Day 3 5h	65119 953	28577 319	2 278729	1	3 07	45	497170000518	AA90478-01 497170000518 011 N/A P3 Plasma-1 5 / Day 3 5h
011	N/A	6 / Day 3 6h	98954 09	30698 223	3 223447	1	4 34	46	497170000519	AA90478-01 497170000519 011 N/A P3 Plasma-1 6 / Day 3 6h
011	N/A	7 / Day 3 7h	98681 231	29102 809	3 390780	1	4 56	47	497170000520	AA90478-01 497170000520 011 N/A P3 Plasma-1 7 / Day 3 7h
011	N/A	8 / Day 3 8h	128990 346	32883 086	3 922696	1	5 28	48	497170000521	AA90478-01 497170000521 011 N/A P3 Plasma-1 8 / Day 3 8h
011	N/A	9 / Day 3 9h	114640 838	28778 061	3 983619	1	5 36	52	497170000522	AA90478-01 497170000522 011 N/A P3 Plasma-1 9 / Day 3 9h
011	N/A	10 / Day 3 10h	108128 687	28704 974	3 766897	1	5 07	53	497170000523	AA90478-01 497170000523 011 N/A P3 Plasma-1 10 / Day 3 10h
011	N/A	11 / Day 3 11h	121138 562	30090 774	4 025771	1	5 42	54	497170000524	AA90478-01 497170000524 011 N/A P3 Plasma-1 11 / Day 3 11h
011	N/A	12 / Day 3 12h	96298 641	29199 762	3 297926	1	4 44	55	497170000525	AA90478-01 497170000525 011 N/A P3 Plasma-1 12 / Day 3 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
011	N/A	13 / Day 3 13h	80112 982	29601 149	2 706415	1	3 64	56	497170000526	AA90478-01 497170000526 011 N/A P3 Plasma-1 13 / Day 3 13h
011	N/A	14 / Day 3 14h	63883 922	27249 299	2 344424	1	3 16	57	497170000527	AA90478-01 497170000527 011 N/A P3 Plasma-1 14 / Day 3 14h
011	N/A	15 / Day 3 15h	66360 453	27465 7	2 416121	1	3 25	58	497170000528	AA90478-01 497170000528 011 N/A P3 Plasma-1 15 / Day 3 15h
011	N/A	16 / Day 3 16h	66195 889	29003 819	2 282316	1	3 07	59	497170000529	AA90478-01 497170000529 011 N/A P3 Plasma-1 16 / Day 3 16h
011	N/A	17 / Day 3 17h	52908 283	30394 927	1 740695	1	2 34	60	497170000530	AA90478-01 497170000530 011 N/A P3 Plasma-1 17 / Day 3 17h
011	N/A	18 / Day 3 18h	63990 757	29353 255	2 180023	1	2 94	61	497170000531	AA90478-01 497170000531 011 N/A P3 Plasma-1 18 / Day 3 18h
011	N/A	19 / Day 3 19h	69943 776	30109 507	2 322980	1	3 13	63	497170000532	AA90478-01 497170000532 011 N/A P3 Plasma-1 19 / Day 3 19h
012	N/A	1 / Day 3 1h	37363 964	29146 07	1 281955	1	1 73	64	497170000609	AA90478-01 497170000609 012 N/A P3 Plasma-1 1 / Day 3 1h
012	N/A	2 / Day 3 2h	34277 787	29799 778	1 150270	1	1 55	65	497170000610	AA90478-01 497170000610 012 N/A P3 Plasma-1 2 / Day 3 2h
012	N/A	3 / Day 3 3h	39037 459	30172 724	1 293800	1	1 74	66	497170000611	AA90478-01 497170000611 012 N/A P3 Plasma-1 3 / Day 3 3h
012	N/A	4 / Day 3 4h	34048 099	28291 474	1 203476	1	1 62	67	497170000612	AA90478-01 497170000612 012 N/A P3 Plasma-1 4 / Day 3 4h
012	N/A	5 / Day 3 5h	41979 269	28267 182	1 485089	1	2 00	68	497170000613	AA90478-01 497170000613 012 N/A P3 Plasma-1 5 / Day 3 5h
012	N/A	6 / Day 3 6h	46793 878	29728 919	1 574019	1	2 12	69	497170000614	AA90478-01 497170000614 012 N/A P3 Plasma-1 6 / Day 3 6h
012	N/A	7 / Day 3 7h	51594 79	26534 081	1 944472	1	2 62	70	497170000615	AA90478-01 497170000615 012 N/A P3 Plasma-1 7 / Day 3 7h
012	N/A	8 / Day 3 8h	52918 602	26855 311	1 970508	1	2 65	71	497170000616	AA90478-01 497170000616 012 N/A P3 Plasma-1 8 / Day 3 8h
012	N/A	9 / Day 3 9h	47443 693	24555 905	1 932069	1	2 60	72	497170000617	AA90478-01 497170000617 012 N/A P3 Plasma-1 9 / Day 3 9h
012	N/A	10 / Day 3 10h	56480 763	26131 366	2 161416	1	2 91	74	497170000618	AA90478-01 497170000618 012 N/A P3 Plasma-1 10 / Day 3 10h
012	N/A	11 / Day 3 11h	61081 986	25881 922	2 360025	1	3 18	75	497170000619	AA90478-01 497170000619 012 N/A P3 Plasma-1 11 / Day 3 11h
012	N/A	12 / Day 3 12h	57454 397	26814 74	2 142642	1	2 88	76	497170000620	AA90478-01 497170000620 012 N/A P3 Plasma-1 12 / Day 3 12h
012	N/A	13 / Day 3 13h	58418 114	28371 464	2 059045	1	2 77	77	497170000621	AA90478-01 497170000621 012 N/A P3 Plasma-1 13 / Day 3 13h
012	N/A	14 / Day 3 14h	54322 933	28799 534	1 886243	1	2 54	78	497170000622	AA90478-01 497170000622 012 N/A P3 Plasma-1 14 / Day 3 14h
012	N/A	15 / Day 3 15h	52285 786	29049 83	1 799865	1	2 42	79	497170000623	AA90478-01 497170000623 012 N/A P3 Plasma-1 15 / Day 3 15h
012	N/A	16 / Day 3 16h	52371 049	28629 525	1 829267	1	2 46	80	497170000624	AA90478-01 497170000624 012 N/A P3 Plasma-1 16 / Day 3 16h
012	N/A	17 / Day 3 17h	45352 196	28618 399	1 584722	1	2 13	81	497170000625	AA90478-01 497170000625 012 N/A P3 Plasma-1 17 / Day 3 17h
012	N/A	18 / Day 3 18h	47683 38	28942 284	1 647533	1	2 22	82	497170000626	AA90478-01 497170000626 012 N/A P3 Plasma-1 18 / Day 3 18h
012	N/A	19 / Day 3 19h	41643 142	26474 865	1 572931	1	2 12	83	497170000627	AA90478-01 497170000627 012 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 13
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	41689 31	0 000000	0 0784		0 0784	0 0
9	0 00		0	26926 081	0 000000	0 0784			
10	0 500	4 00000	10896 626	36593 076	0 297778	0 500	0 0		
11	1 00	1 00000	27261 51	41387 316	0 658692	1 01	1 0		
12	2 00	0 250000	52429 639	39233 099	1 336362	1 97	-1 5		
13	4 00	0 0625000	104417 53	39366 712	2 652432	3 84	-4 0		
14	8 00	0 0156250	228551 838	40789 509	5 603201	8 02	0 3		
15	10 0	0 0100000	268828 166	37731 556	7 124757	10 2	2 0		
16	20 0	0 00250000	582574 459	40484 324	14 390124	20 5	2 5		
17	40 0	0 000625000	1026675 945	36531 734	28 103674	39 9	-0 3		
18	50 0	0 000400000	2570446 746	38923 3	*66 038767	*93 7			

Model: Response = Slope * Concentration + Intercept

Curve Parameters:
Slope = 0 705580343
Intercept = -0 0553412025
R-Squared = 0 9994

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 40 0 (Highest Standard)

Reason for Deactivation of Sample
* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 13
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1278901 408	39132 354	32 681433	1	46 4		47 0		1 9
2	0 00	1254977 387	38257 081	32 803794	1	46 6				
3	0 00	1250363 797	38393 678	32 566919	1	46 2				
4	0 00	1285144 562	39674 529	32 392182	1	46 0				
5	0 00	1263501 659	37826 834	33 402258	1	47 4				
50	0 00	1247303 159	37459 106	33 297729	1	47 3				
51	0 00	1144591 842	34127 364	33 538829	1	47 6				
86	0 00	1156304 343	33669 785	34 342493	1	48 8				
87	0 00	1180074 645	35877 036	32 892200	1	46 7				
29	1 50	36867 065	38622 922	0 954538	1	1 43	-4 7	1 46	-2 7	2 4
62	1 50	37490 936	37923 629	0 988590	1	1 48	-1 3			
39	8 00	207434 9	40116 762	5 170779	1	7 41	-7 4	7 36	-8 0	1 1
73	8 00	180676 186	35481 392	5 092139	1	7 30	-8 8			
49	37 5	858894 546	35890 919	23 930692	1	34 0	-9 3	33 4	-10 9	2 5
84	37 5	825584 387	35791 444	23 066529	1	32 8	-12 5			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 40 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 13
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	1 / Day 3 1h	13555 756	36029 283	0 376243	1	0 612	20	497170000704	AA90478-01 497170000704 013 N/A P3 Plasma-1 1 / Day 3 1h
013	N/A	2 / Day 3 2h	14871 066	35837 28	0 414961	1	0 667	21	497170000705	AA90478-01 497170000705 013 N/A P3 Plasma-1 2 / Day 3 2h
013	N/A	3 / Day 3 3h	12871 659	34222 028	0 376122	1	0 612	22	497170000706	AA90478-01 497170000706 013 N/A P3 Plasma-1 3 / Day 3 3h
013	N/A	4 / Day 3 4h	14696 703	33662 654	0 436588	1	0 697	23	497170000707	AA90478-01 497170000707 013 N/A P3 Plasma-1 4 / Day 3 4h
013	N/A	5 / Day 3 5h	24031 638	38869 724	0 618261	1	0 955	24	497170000708	AA90478-01 497170000708 013 N/A P3 Plasma-1 5 / Day 3 5h
013	N/A	6 / Day 3 6h	25459 602	34236 138	0 743647	1	1 13	25	497170000709	AA90478-01 497170000709 013 N/A P3 Plasma-1 6 / Day 3 6h
013	N/A	7 / Day 3 7h	39960 765	37527 813	1 064831	1	1 59	26	497170000710	AA90478-01 497170000710 013 N/A P3 Plasma-1 7 / Day 3 7h
013	N/A	8 / Day 3 8h	60777 56	41027 533	1 481385	1	2 18	27	497170000711	AA90478-01 497170000711 013 N/A P3 Plasma-1 8 / Day 3 8h
013	N/A	9 / Day 3 9h	45418 208	34104 943	1 331719	1	1 97	28	497170000712	AA90478-01 497170000712 013 N/A P3 Plasma-1 9 / Day 3 9h
013	N/A	10 / Day 3 10h	50315 846	36281 579	1 386815	1	2 04	30	497170000713	AA90478-01 497170000713 013 N/A P3 Plasma-1 10 / Day 3 10h
013	N/A	11 / Day 3 11h	57391 264	33313 284	1 722774	1	2 52	31	497170000714	AA90478-01 497170000714 013 N/A P3 Plasma-1 11 / Day 3 11h
013	N/A	12 / Day 3 12h	55824 819	32954 207	1 694012	1	2 48	32	497170000715	AA90478-01 497170000715 013 N/A P3 Plasma-1 12 / Day 3 12h
013	N/A	13 / Day 3 13h	52298 997	36149 407	1 446746	1	2 13	33	497170000716	AA90478-01 497170000716 013 N/A P3 Plasma-1 13 / Day 3 13h
013	N/A	14 / Day 3 14h	56176 079	40087 472	1 401338	1	2 06	34	497170000717	AA90478-01 497170000717 013 N/A P3 Plasma-1 14 / Day 3 14h
013	N/A	15 / Day 3 15h	53200 685	34042 515	1 562772	1	2 29	35	497170000718	AA90478-01 497170000718 013 N/A P3 Plasma-1 15 / Day 3 15h
013	N/A	16 / Day 3 16h	53182 879	36896 585	1 441404	1	2 12	36	497170000719	AA90478-01 497170000719 013 N/A P3 Plasma-1 16 / Day 3 16h
013	N/A	17 / Day 3 17h	49969 003	36629 958	1 364157	1	2 01	37	497170000720	AA90478-01 497170000720 013 N/A P3 Plasma-1 17 / Day 3 17h
013	N/A	18 / Day 3 18h	46848 015	36823 534	1 272230	1	1 88	38	497170000721	AA90478-01 497170000721 013 N/A P3 Plasma-1 18 / Day 3 18h
013	N/A	19 / Day 3 19h	46803 387	38057 6	1 229804	1	1 82	40	497170000722	AA90478-01 497170000722 013 N/A P3 Plasma-1 19 / Day 3 19h
015	N/A	1 / Day 3 1h	26382 655	38840 3	0 679260	1	1 04	41	497170000799	AA90478-01 497170000799 015 N/A P3 Plasma-1 1 / Day 3 1h
015	N/A	2 / Day 3 2h	23520 196	39156 454	0 600672	1	0 930	42	497170000800	AA90478-01 497170000800 015 N/A P3 Plasma-1 2 / Day 3 2h
015	N/A	3 / Day 3 3h	22608 61	35145 334	0 643289	1	0 990	43	497170000801	AA90478-01 497170000801 015 N/A P3 Plasma-1 3 / Day 3 3h
015	N/A	4 / Day 3 4h	24576 055	37431 25	0 656565	1	1 01	44	497170000802	AA90478-01 497170000802 015 N/A P3 Plasma-1 4 / Day 3 4h
015	N/A	5 / Day 3 5h	32182 27	39686 293	0 810917	1	1 23	45	497170000803	AA90478-01 497170000803 015 N/A P3 Plasma-1 5 / Day 3 5h
015	N/A	6 / Day 3 6h	32137 197	36356 161	0 883955	1	1 33	46	497170000804	AA90478-01 497170000804 015 N/A P3 Plasma-1 6 / Day 3 6h
015	N/A	7 / Day 3 7h	39136 647	35758 734	1 094464	1	1 63	47	497170000805	AA90478-01 497170000805 015 N/A P3 Plasma-1 7 / Day 3 7h
015	N/A	8 / Day 3 8h	49594 9	37330 987	1 328518	1	1 96	48	497170000806	AA90478-01 497170000806 015 N/A P3 Plasma-1 8 / Day 3 8h
015	N/A	9 / Day 3 9h	44934 605	37227 204	1 207037	1	1 79	52	497170000807	AA90478-01 497170000807 015 N/A P3 Plasma-1 9 / Day 3 9h
015	N/A	10 / Day 3 10h	37641 846	38228 331	0 984658	1	1 47	53	497170000808	AA90478-01 497170000808 015 N/A P3 Plasma-1 10 / Day 3 10h
015	N/A	11 / Day 3 11h	50660 243	44367 942	1 141821	1	1 70	54	497170000809	AA90478-01 497170000809 015 N/A P3 Plasma-1 11 / Day 3 11h
015	N/A	12 / Day 3 12h	48131 14	36831 36	1 306798	1	1 93	55	497170000810	AA90478-01 497170000810 015 N/A P3 Plasma-1 12 / Day 3 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
015	N/A	13 / Day 3 13h	50978 663	29463 987	1 730202	1	2 53	56	497170000811	AA90478-01 497170000811 015 N/A P3 Plasma-1 13 / Day 3 13h
015	N/A	14 / Day 3 14h	38917 727	37795 603	1 029689	1	1 54	57	497170000812	AA90478-01 497170000812 015 N/A P3 Plasma-1 14 / Day 3 14h
015	N/A	15 / Day 3 15h	32810 678	33461 764	0 980542	1	1 47	58	497170000813	AA90478-01 497170000813 015 N/A P3 Plasma-1 15 / Day 3 15h
015	N/A	16 / Day 3 16h	30642 5	35444 913	0 864511	1	1 30	59	497170000814	AA90478-01 497170000814 015 N/A P3 Plasma-1 16 / Day 3 16h
015	N/A	17 / Day 3 17h	33029 225	38633 282	0 854942	1	1 29	60	497170000815	AA90478-01 497170000815 015 N/A P3 Plasma-1 17 / Day 3 17h
015	N/A	18 / Day 3 18h	28956 228	36579 041	0 791607	1	1 20	61	497170000816	AA90478-01 497170000816 015 N/A P3 Plasma-1 18 / Day 3 18h
015	N/A	19 / Day 3 19h	23071 369	32311 529	0 714029	1	1 09	63	497170000817	AA90478-01 497170000817 015 N/A P3 Plasma-1 19 / Day 3 19h
018	N/A	1 / Day 3 1h	11594 051	37225 664	0 311453	1	0 520	64	497170000894	AA90478-01 497170000894 018 N/A P3 Plasma-1 1 / Day 3 1h
018	N/A	2 / Day 3 2h	8928 475	31379 296	0 284534	1	BLQ<(0 500)	65	497170000895	AA90478-01 497170000895 018 N/A P3 Plasma-1 2 / Day 3 2h
018	N/A	3 / Day 3 3h	18156 147	35580 208	0 510288	1	0 802	66	497170000896	AA90478-01 497170000896 018 N/A P3 Plasma-1 3 / Day 3 3h
018	N/A	4 / Day 3 4h	54663 904	34384 567	1 589780	1	2 33	67	497170000897	AA90478-01 497170000897 018 N/A P3 Plasma-1 4 / Day 3 4h
018	N/A	5 / Day 3 5h	70024 365	33426 638	2 094867	1	3 05	68	497170000898	AA90478-01 497170000898 018 N/A P3 Plasma-1 5 / Day 3 5h
018	N/A	6 / Day 3 6h	102295 505	37684 796	2 714503	1	3 93	69	497170000899	AA90478-01 497170000899 018 N/A P3 Plasma-1 6 / Day 3 6h
018	N/A	7 / Day 3 7h	98639 015	36202 387	2 724655	1	3 94	70	497170000900	AA90478-01 497170000900 018 N/A P3 Plasma-1 7 / Day 3 7h
018	N/A	8 / Day 3 8h	104147 084	33441 434	3 114313	1	4 49	71	497170000901	AA90478-01 497170000901 018 N/A P3 Plasma-1 8 / Day 3 8h
018	N/A	9 / Day 3 9h	102529 811	35952 961	2 851777	1	4 12	72	497170000902	AA90478-01 497170000902 018 N/A P3 Plasma-1 9 / Day 3 9h
018	N/A	10 / Day 3 10h	90535 772	35561 805	2 545871	1	3 69	74	497170000903	AA90478-01 497170000903 018 N/A P3 Plasma-1 10 / Day 3 10h
018	N/A	11 / Day 3 11h	62121 723	24515 021	2 534027	1	3 67	75	497170000904	AA90478-01 497170000904 018 N/A P3 Plasma-1 11 / Day 3 11h
018	N/A	12 / Day 3 12h	75370 318	33066 893	2 279329	1	3 31	76	497170000905	AA90478-01 497170000905 018 N/A P3 Plasma-1 12 / Day 3 12h
018	N/A	13 / Day 3 13h	72452 713	33728 834	2 148094	1	3 12	77	497170000906	AA90478-01 497170000906 018 N/A P3 Plasma-1 13 / Day 3 13h
018	N/A	14 / Day 3 14h	62191 226	35531 332	1 750321	1	2 56	78	497170000907	AA90478-01 497170000907 018 N/A P3 Plasma-1 14 / Day 3 14h
018	N/A	15 / Day 3 15h	51143 125	31939 084	1 601271	1	2 35	79	497170000908	AA90478-01 497170000908 018 N/A P3 Plasma-1 15 / Day 3 15h
018	N/A	16 / Day 3 16h	39660 813	27907 04	1 421176	1	2 09	80	497170000909	AA90478-01 497170000909 018 N/A P3 Plasma-1 16 / Day 3 16h
018	N/A	17 / Day 3 17h	49104 515	33442 588	1 468323	1	2 16	81	497170000910	AA90478-01 497170000910 018 N/A P3 Plasma-1 17 / Day 3 17h
018	N/A	18 / Day 3 18h	44450 598	33574 812	1 323927	1	1 95	82	497170000911	AA90478-01 497170000911 018 N/A P3 Plasma-1 18 / Day 3 18h
018	N/A	19 / Day 3 19h	38523 751	34571 485	1 114322	1	1 66	83	497170000912	AA90478-01 497170000912 018 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 40 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 16
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	18584 287	0 000000	0 0479		0 0479	0 0
9	0 00		0	19775 191	0 000000	0 0479			
10	0 500	4 00000	6556 24	19493 79	0 336325	0 483	-3 4		
11	1 00	1 00000	15104 425	18915 798	0 798508	1 08	8 0		
12	2 00	0 250000	29037 466	19515 044	1 487953	1 97	-1 5		
13	4 00	0 0625000	61640 266	20780 895	2 966199	3 88	-3 0		
14	8 00	0 0156250	120170 24	18697 894	6 426940	8 36	4 5		
15	10 0	0 0100000	161111 987	20913 174	7 703852	10 0	0 0		
16	20 0	0 00250000	292397 276	19527 386	14 973703	19 4	-3 0		
17	40 0	0 000625000	564488 046	18581 814	30 378522	39 3	-1 8		
18	50 0	0 000400000	1494345 021	20777 865	*71 920047	*93 0			

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 773585939

Intercept = -0 0370623123

R-Squared = 0 9976

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 40 0 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 16
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	675412 827	18016 236	37 489120	1	48 5		47 3		2 6
2	0 00	705188 601	19128 114	36 866604	1	47 7				
3	0 00	723372 438	19908 267	36 335279	1	47 0				
4	0 00	663931 545	17782 554	37 336119	1	48 3				
5	0 00	665376 689	18949 084	35 113924	1	45 4				
50	0 00	728100 585	20524 69	35 474377	1	45 9				
51	0 00	746228 131	19660 923	37 954888	1	49 1				
84	0 00	668177 878	18319 011	36 474561	1	47 2				
85	0 00	681913 823	18925 236	36 031985	1	46 6				
29	1 50	18494 559	18330 768	1 008935	1	1 35	-10 0	1 41	-6 0	6 0
62	1 50	22554 945	20499 549	1 100265	1	1 47	-2 0			
39	8 00	111843 495	19109 869	5 852656	1	7 61	-4 9	7 67	-4 1	1 1
73	8 00	108428 12	18236 306	5 945728	1	7 73	-3 4			
49	37 5	525654 446	20009 886	26 269737	1	34 0	-9 3	33 9	-9 6	0 6
82	37 5	483622 926	18577 528	26 032685	1	33 7	-10 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 40 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 16
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 4 1h	2398 717	18841 127	0 127313	1	BLQ<(0 500)	20	497170000020	AA90478-01 497170000020 001 N/A P4 Plasma-1 1 / Day 4 1h
001	N/A	2 / Day 4 2h	2310 414	20391 377	0 113303	1	BLQ<(0 500)	21	497170000021	AA90478-01 497170000021 001 N/A P4 Plasma-1 2 / Day 4 2h
001	N/A	3 / Day 4 3h	2915 181	21046 62	0 138511	1	BLQ<(0 500)	22	497170000022	AA90478-01 497170000022 001 N/A P4 Plasma-1 3 / Day 4 3h
001	N/A	4 / Day 4 4h	12376 8	20886 821	0 592565	1	0 814	23	497170000023	AA90478-01 497170000023 001 N/A P4 Plasma-1 4 / Day 4 4h
001	N/A	5 / Day 4 5h	43713 568	21053 645	2 076295	1	2 73	24	497170000024	AA90478-01 497170000024 001 N/A P4 Plasma-1 5 / Day 4 5h
001	N/A	6 / Day 4 6h	50302 053	19588 295	2 567965	1	3 37	25	497170000025	AA90478-01 497170000025 001 N/A P4 Plasma-1 6 / Day 4 6h
001	N/A	7 / Day 4 7h	73915 935	19423 122	3 805564	1	4 97	26	497170000026	AA90478-01 497170000026 001 N/A P4 Plasma-1 7 / Day 4 7h
001	N/A	8 / Day 4 8h	66178 316	20907 537	3 165285	1	4 14	27	497170000027	AA90478-01 497170000027 001 N/A P4 Plasma-1 8 / Day 4 8h
001	N/A	9 / Day 4 9h	55038 421	20201 637	2 724454	1	3 57	28	497170000028	AA90478-01 497170000028 001 N/A P4 Plasma-1 9 / Day 4 9h
001	N/A	10 / Day 4 10h	32683 161	20277 252	1 611814	1	2 13	30	497170000029	AA90478-01 497170000029 001 N/A P4 Plasma-1 10 / Day 4 10h
001	N/A	11 / Day 4 11h	24680 314	18359 492	1 344281	1	1 79	31	497170000030	AA90478-01 497170000030 001 N/A P4 Plasma-1 11 / Day 4 11h
001	N/A	12 / Day 4 12h	21486 947	19880 1	1 080827	1	1 45	32	497170000031	AA90478-01 497170000031 001 N/A P4 Plasma-1 12 / Day 4 12h
001	N/A	13 / Day 4 13h	18053 152	18375 057	0 982481	1	1 32	33	497170000032	AA90478-01 497170000032 001 N/A P4 Plasma-1 13 / Day 4 13h
001	N/A	14 / Day 4 14h	15031 002	18328 228	0 820101	1	1 11	34	497170000033	AA90478-01 497170000033 001 N/A P4 Plasma-1 14 / Day 4 14h
001	N/A	15 / Day 4 15h	12515 318	18379 943	0 680923	1	0 928	35	497170000034	AA90478-01 497170000034 001 N/A P4 Plasma-1 15 / Day 4 15h
001	N/A	16 / Day 4 16h	13477 045	20193 358	0 667400	1	0 911	36	497170000035	AA90478-01 497170000035 001 N/A P4 Plasma-1 16 / Day 4 16h
001	N/A	17 / Day 4 17h	9643 747	19252 532	0 500908	1	0 695	37	497170000036	AA90478-01 497170000036 001 N/A P4 Plasma-1 17 / Day 4 17h
001	N/A	18 / Day 4 18h	8644 299	17561 319	0 492235	1	0 684	38	497170000037	AA90478-01 497170000037 001 N/A P4 Plasma-1 18 / Day 4 18h
001	N/A	19 / Day 4 19h	8770 75	19651 853	0 446307	1	0 625	40	497170000038	AA90478-01 497170000038 001 N/A P4 Plasma-1 19 / Day 4 19h
003	N/A	1 / Day 4 1h	12197 046	18603 706	0 655625	1	0 895	41	497170000115	AA90478-01 497170000115 003 N/A P4 Plasma-1 1 / Day 4 1h
003	N/A	2 / Day 4 2h	11276 376	19256 941	0 585575	1	0 805	42	497170000116	AA90478-01 497170000116 003 N/A P4 Plasma-1 2 / Day 4 2h
003	N/A	3 / Day 4 3h	13433 29	19108 09	0 703016	1	0 957	43	497170000117	AA90478-01 497170000117 003 N/A P4 Plasma-1 3 / Day 4 3h
003	N/A	4 / Day 4 4h	12212 898	18445 003	0 662125	1	0 904	44	497170000118	AA90478-01 497170000118 003 N/A P4 Plasma-1 4 / Day 4 4h
003	N/A	5 / Day 4 5h	12309 816	19341 312	0 636452	1	0 871	45	497170000119	AA90478-01 497170000119 003 N/A P4 Plasma-1 5 / Day 4 5h
003	N/A	8 / Day 4 8h	15111 378	18995 382	0 795529	1	1 08	46	497170000122	AA90478-01 497170000122 003 N/A P4 Plasma-1 8 / Day 4 8h
003	N/A	9 / Day 4 9h	24969 205	19489 104	1 281188	1	1 70	47	497170000123	AA90478-01 497170000123 003 N/A P4 Plasma-1 9 / Day 4 9h
003	N/A	10 / Day 4 10h	24266 405	21000 995	1 155488	1	1 54	48	497170000124	AA90478-01 497170000124 003 N/A P4 Plasma-1 10 / Day 4 10h
003	N/A	11 / Day 4 11h	22642 397	17815 87	1 270912	1	1 69	52	497170000125	AA90478-01 497170000125 003 N/A P4 Plasma-1 11 / Day 4 11h
003	N/A	12 / Day 4 12h	24562 338	19938 598	1 231899	1	1 64	53	497170000126	AA90478-01 497170000126 003 N/A P4 Plasma-1 12 / Day 4 12h
003	N/A	13 / Day 4 13h	21914 338	19704 866	1 112128	1	1 49	54	497170000127	AA90478-01 497170000127 003 N/A P4 Plasma-1 13 / Day 4 13h
003	N/A	14 / Day 4 14h	21554 381	20257 934	1 063997	1	1 42	55	497170000128	AA90478-01 497170000128 003 N/A P4 Plasma-1 14 / Day 4 14h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	15 / Day 4 15h	21445 854	19252 026	1 113953	1	1 49	56	497170000129	AA90478-01 497170000129 003 N/A P4 Plasma-1 15 / Day 4 15h
003	N/A	16 / Day 4 16h	18512 244	17893 139	1 034600	1	1 39	57	497170000130	AA90478-01 497170000130 003 N/A P4 Plasma-1 16 / Day 4 16h
003	N/A	17 / Day 4 17h	15693 663	19364 127	0 810450	1	1 10	58	497170000131	AA90478-01 497170000131 003 N/A P4 Plasma-1 17 / Day 4 17h
003	N/A	18 / Day 4 18h	14493 41	19935 073	0 727031	1	0 988	59	497170000132	AA90478-01 497170000132 003 N/A P4 Plasma-1 18 / Day 4 18h
003	N/A	19 / Day 4 19h	16247 045	21098 103	0 770071	1	1 04	60	497170000133	AA90478-01 497170000133 003 N/A P4 Plasma-1 19 / Day 4 19h
005	N/A	1 / Day 4 1h	5968 801	20371 227	0 293002	1	BLQ<(0 500)	61	497170000210	AA90478-01 497170000210 005 N/A P4 Plasma-1 1 / Day 4 1h
005	N/A	2 / Day 4 2h	5397 814	19781 205	0 272876	1	BLQ<(0 500)	63	497170000211	AA90478-01 497170000211 005 N/A P4 Plasma-1 2 / Day 4 2h
005	N/A	3 / Day 4 3h	5362 595	20601 7	0 260299	1	BLQ<(0 500)	64	497170000212	AA90478-01 497170000212 005 N/A P4 Plasma-1 3 / Day 4 3h
005	N/A	4 / Day 4 4h	7989 332	18909 248	0 422509	1	0 594	65	497170000213	AA90478-01 497170000213 005 N/A P4 Plasma-1 4 / Day 4 4h
005	N/A	5 / Day 4 5h	18795 21	19143 552	0 981804	1	1 32	66	497170000214	AA90478-01 497170000214 005 N/A P4 Plasma-1 5 / Day 4 5h
005	N/A	6 / Day 4 6h	26825 598	19088 482	1 405329	1	1 86	67	497170000215	AA90478-01 497170000215 005 N/A P4 Plasma-1 6 / Day 4 6h
005	N/A	7 / Day 4 7h	37219 826	20434 884	1 821387	1	2 40	68	497170000216	AA90478-01 497170000216 005 N/A P4 Plasma-1 7 / Day 4 7h
005	N/A	8 / Day 4 8h	36679 44	18979 321	1 932600	1	2 55	69	497170000217	AA90478-01 497170000217 005 N/A P4 Plasma-1 8 / Day 4 8h
005	N/A	9 / Day 4 9h	31471 607	19168 41	1 641848	1	2 17	70	497170000218	AA90478-01 497170000218 005 N/A P4 Plasma-1 9 / Day 4 9h
005	N/A	10 / Day 4 10h	28565 579	19007 171	1 502884	1	1 99	71	497170000219	AA90478-01 497170000219 005 N/A P4 Plasma-1 10 / Day 4 10h
005	N/A	11 / Day 4 11h	26508 815	20314 621	1 304913	1	1 73	72	497170000220	AA90478-01 497170000220 005 N/A P4 Plasma-1 11 / Day 4 11h
005	N/A	12 / Day 4 12h	21606 12	19131 967	1 129320	1	1 51	74	497170000221	AA90478-01 497170000221 005 N/A P4 Plasma-1 12 / Day 4 12h
005	N/A	13 / Day 4 13h	18168 799	18842 078	0 964267	1	1 29	75	497170000222	AA90478-01 497170000222 005 N/A P4 Plasma-1 13 / Day 4 13h
005	N/A	14 / Day 4 14h	15674 496	18688 456	0 838726	1	1 13	76	497170000223	AA90478-01 497170000223 005 N/A P4 Plasma-1 14 / Day 4 14h
005	N/A	15 / Day 4 15h	15468 585	19419 624	0 796544	1	1 08	77	497170000224	AA90478-01 497170000224 005 N/A P4 Plasma-1 15 / Day 4 15h
005	N/A	16 / Day 4 16h	11764 617	18191 002	0 646727	1	0 884	78	497170000225	AA90478-01 497170000225 005 N/A P4 Plasma-1 16 / Day 4 16h
005	N/A	17 / Day 4 17h	10713 974	17225 457	0 621985	1	0 852	79	497170000226	AA90478-01 497170000226 005 N/A P4 Plasma-1 17 / Day 4 17h
005	N/A	18 / Day 4 18h	9445 202	18175 824	0 519657	1	0 720	80	497170000227	AA90478-01 497170000227 005 N/A P4 Plasma-1 18 / Day 4 18h
005	N/A	19 / Day 4 19h	8868 48	18726 335	0 473583	1	0 660	81	497170000228	AA90478-01 497170000228 005 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 40 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 17
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias
8	0 00		0	21497 932	0 000000	0 0367	
9	0 00		0	9482 265	*0 000000	*0 0367	
10	0 500	4 00000	7319 932	20498 709	0 357092	0 500	0 0
11	1 00	1 00000	14481 355	19494 874	0 742829	1 00	0 0
12	2 00	0 250000	29984 747	20418 777	1 468489	1 94	-3 0
13	4 00	0 0625000	68089 107	20853 97	3 265043	4 27	6 8
14	8 00	0 0156250	134065 496	21779 789	6 155500	8 02	0 3
15	10 0	0 0100000	151394 232	19739 588	7 669574	9 98	-0 2
16	20 0	0 00250000	317024 173	20812 981	15 232041	19 8	-1 0
17	40 0	0 000625000	653940 234	21065 974	31 042487	40 3	0 8
18	50 0	0 000400000	722978 791	19433 961	37 201824	48 3	-3 4

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 771198231

Intercept = -0 0282973514

R-Squared = 0 9988

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Reason for Deactivation of Sample

* UISR

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 17
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	669394 434	18313 377	36 552212	1	47 4		48 1		1 8
2	0 00	711025 172	18602 553	38 221914	1	49 6				
3	0 00	666291 209	18020 148	36 974791	1	48 0				
4	0 00	683100 918	18726 384	36 477994	1	47 3				
5	0 00	697420 943	18582 183	37 531701	1	48 7				
50	0 00	645942 592	17644 539	36 608641	1	47 5				
51	0 00	628050 03	16878 265	37 210580	1	48 3				
86	0 00	653812 983	17383 75	37 610584	1	48 8				
87	0 00	678999 91	18769 187	36 176309	1	46 9				
29	1 50	20596 715	20043 489	1 027601	1	1 37	-8 7	1 45	-3 3	7 3
62	1 50	19203 754	16739 518	1 147211	1	1 52	1 3			
39	8 00	111587 318	18750 394	5 951199	1	7 75	-3 1	7 61	-4 9	2 7
73	8 00	110100 357	19222 515	5 727677	1	7 46	-6 8			
49	37 5	471691 777	18210 993	25 901486	1	33 6	-10 4	34 7	-7 5	4 3
84	37 5	414923 993	15081 477	27 512159	1	35 7	-4 8			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 17
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 4 1h	50823 216	20556 704	2 472343	1	3 24	20	497170000305	AA90478-01 497170000305 007 N/A P4 Plasma-1 1 / Day 4 1h
007	N/A	2 / Day 4 2h	44532 607	18522 307	2 404269	1	3 15	21	497170000306	AA90478-01 497170000306 007 N/A P4 Plasma-1 2 / Day 4 2h
007	N/A	3 / Day 4 3h	42158 126	14974 783	2 815275	1	3 69	22	497170000307	AA90478-01 497170000307 007 N/A P4 Plasma-1 3 / Day 4 3h
007	N/A	4 / Day 4 4h	43860 847	21946 848	1 998503	1	2 63	23	497170000308	AA90478-01 497170000308 007 N/A P4 Plasma-1 4 / Day 4 4h
007	N/A	5 / Day 4 5h	42487 519	18706 972	2 271213	1	2 98	24	497170000309	AA90478-01 497170000309 007 N/A P4 Plasma-1 5 / Day 4 5h
007	N/A	6 / Day 4 6h	47269 727	20582 497	2 296598	1	3 01	25	497170000310	AA90478-01 497170000310 007 N/A P4 Plasma-1 6 / Day 4 6h
007	N/A	7 / Day 4 7h	57367 135	20198 648	2 840147	1	3 72	26	497170000311	AA90478-01 497170000311 007 N/A P4 Plasma-1 7 / Day 4 7h
007	N/A	8 / Day 4 8h	73527 379	20062 698	3 664880	1	4 79	27	497170000312	AA90478-01 497170000312 007 N/A P4 Plasma-1 8 / Day 4 8h
007	N/A	9 / Day 4 9h	64122 702	18646 359	3 438886	1	4 50	28	497170000313	AA90478-01 497170000313 007 N/A P4 Plasma-1 9 / Day 4 9h
007	N/A	10 / Day 4 10h	64816 894	17039 913	3 803828	1	4 97	30	497170000314	AA90478-01 497170000314 007 N/A P4 Plasma-1 10 / Day 4 10h
007	N/A	11 / Day 4 11h	71834 886	20709 164	3 468749	1	4 53	31	497170000315	AA90478-01 497170000315 007 N/A P4 Plasma-1 11 / Day 4 11h
007	N/A	12 / Day 4 12h	64634 945	25670 188	2 517899	1	3 30	32	497170000316	AA90478-01 497170000316 007 N/A P4 Plasma-1 12 / Day 4 12h
007	N/A	13 / Day 4 13h	62713 85	19263 322	3 255609	1	4 26	33	497170000317	AA90478-01 497170000317 007 N/A P4 Plasma-1 13 / Day 4 13h
007	N/A	14 / Day 4 14h	60612 206	19385 708	3 126644	1	4 09	34	497170000318	AA90478-01 497170000318 007 N/A P4 Plasma-1 14 / Day 4 14h
007	N/A	15 / Day 4 15h	58432 879	19485 442	2 998797	1	3 93	35	497170000319	AA90478-01 497170000319 007 N/A P4 Plasma-1 15 / Day 4 15h
007	N/A	16 / Day 4 16h	59067 099	19316 575	3 057845	1	4 00	36	497170000320	AA90478-01 497170000320 007 N/A P4 Plasma-1 16 / Day 4 16h
007	N/A	17 / Day 4 17h	54946 166	18831 881	2 917721	1	3 82	37	497170000321	AA90478-01 497170000321 007 N/A P4 Plasma-1 17 / Day 4 17h
007	N/A	18 / Day 4 18h	50425 838	17953 788	2 808646	1	3 68	38	497170000322	AA90478-01 497170000322 007 N/A P4 Plasma-1 18 / Day 4 18h
007	N/A	19 / Day 4 19h	45245 637	17317 903	2 612651	1	3 42	40	497170000323	AA90478-01 497170000323 007 N/A P4 Plasma-1 19 / Day 4 19h
009	N/A	1 / Day 4 1h	29778 14	17620 393	1 689982	1	2 23	41	497170000400	AA90478-01 497170000400 009 N/A P4 Plasma-1 1 / Day 4 1h
009	N/A	2 / Day 4 2h	31206 137	20739 181	1 504695	1	1 99	42	497170000401	AA90478-01 497170000401 009 N/A P4 Plasma-1 2 / Day 4 2h
009	N/A	3 / Day 4 3h	25105 616	17457 129	1 438130	1	1 90	43	497170000402	AA90478-01 497170000402 009 N/A P4 Plasma-1 3 / Day 4 3h
009	N/A	4 / Day 4 4h	27922 015	17528 787	1 592923	1	2 10	44	497170000403	AA90478-01 497170000403 009 N/A P4 Plasma-1 4 / Day 4 4h
009	N/A	5 / Day 4 5h	36973 327	17322 122	2 134457	1	2 80	45	497170000404	AA90478-01 497170000404 009 N/A P4 Plasma-1 5 / Day 4 5h
009	N/A	6 / Day 4 6h	38369 869	17547 525	2 186626	1	2 87	46	497170000405	AA90478-01 497170000405 009 N/A P4 Plasma-1 6 / Day 4 6h
009	N/A	7 / Day 4 7h	38256 897	16287 472	2 348854	1	3 08	47	497170000406	AA90478-01 497170000406 009 N/A P4 Plasma-1 7 / Day 4 7h
009	N/A	8 / Day 4 8h	54989 282	18485 549	2 974717	1	3 89	48	497170000407	AA90478-01 497170000407 009 N/A P4 Plasma-1 8 / Day 4 8h
009	N/A	9 / Day 4 9h	68688 141	15874 469	4 326957	1	5 65	52	497170000408	AA90478-01 497170000408 009 N/A P4 Plasma-1 9 / Day 4 9h
009	N/A	10 / Day 4 10h	63608 388	3109 522	*20 456002	1	*26 6	53	497170000409	AA90478-01 497170000409 009 N/A P4 Plasma-1 10 / Day 4 10h
009	N/A	11 / Day 4 11h	74914 665	17901 759	4 184766	1	5 46	54	497170000410	AA90478-01 497170000410 009 N/A P4 Plasma-1 11 / Day 4 11h
009	N/A	12 / Day 4 12h	52763 086	3544 175	*14 887269	1	*19 3	55	497170000411	AA90478-01 497170000411 009 N/A P4 Plasma-1 12 / Day 4 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 4 13h	50657 759	17343 265	2 920889	1	3 82	56	497170000412	AA90478-01 497170000412 009 N/A P4 Plasma-1 13 / Day 4 13h
009	N/A	14 / Day 4 14h	50695 855	5178 965	*9 788800	1	*12 7	57	497170000413	AA90478-01 497170000413 009 N/A P4 Plasma-1 14 / Day 4 14h
009	N/A	15 / Day 4 15h	35018 4	12686 249	2 760343	1	3 62	58	497170000414	AA90478-01 497170000414 009 N/A P4 Plasma-1 15 / Day 4 15h
009	N/A	16 / Day 4 16h	44830 782	16001 76	2 801616	1	3 67	59	497170000415	AA90478-01 497170000415 009 N/A P4 Plasma-1 16 / Day 4 16h
009	N/A	17 / Day 4 17h	42757 928	16415 886	2 604668	1	3 41	60	497170000416	AA90478-01 497170000416 009 N/A P4 Plasma-1 17 / Day 4 17h
009	N/A	18 / Day 4 18h	37041 766	14746 079	2 511974	1	3 29	61	497170000417	AA90478-01 497170000417 009 N/A P4 Plasma-1 18 / Day 4 18h
009	N/A	19 / Day 4 19h	42245 412	18194 171	2 321920	1	3 05	63	497170000418	AA90478-01 497170000418 009 N/A P4 Plasma-1 19 / Day 4 19h
011	N/A	1 / Day 4 1h	8355 204	18052 966	0 462816	1	0 637	64	497170000495	AA90478-01 497170000495 011 N/A P4 Plasma-1 1 / Day 4 1h
011	N/A	2 / Day 4 2h	10241 522	17549 305	0 583586	1	0 793	65	497170000496	AA90478-01 497170000496 011 N/A P4 Plasma-1 2 / Day 4 2h
011	N/A	3 / Day 4 3h	35550 155	17842 574	1 992434	1	2 62	66	497170000497	AA90478-01 497170000497 011 N/A P4 Plasma-1 3 / Day 4 3h
011	N/A	4 / Day 4 4h	42096 751	16959 191	2 482238	1	3 26	67	497170000498	AA90478-01 497170000498 011 N/A P4 Plasma-1 4 / Day 4 4h
011	N/A	5 / Day 4 5h	59443 559	17931 57	3 315023	1	4 34	68	497170000499	AA90478-01 497170000499 011 N/A P4 Plasma-1 5 / Day 4 5h
011	N/A	6 / Day 4 6h	63168 89	17700 165	3 568831	1	4 66	69	497170000500	AA90478-01 497170000500 011 N/A P4 Plasma-1 6 / Day 4 6h
011	N/A	7 / Day 4 7h	60830 83	16943 113	3 590298	1	4 69	70	497170000501	AA90478-01 497170000501 011 N/A P4 Plasma-1 7 / Day 4 7h
011	N/A	8 / Day 4 8h	70238 423	17883 085	3 927646	1	5 13	71	497170000502	AA90478-01 497170000502 011 N/A P4 Plasma-1 8 / Day 4 8h
011	N/A	9 / Day 4 9h	93936 434	17376 439	5 405966	1	7 05	72	497170000503	AA90478-01 497170000503 011 N/A P4 Plasma-1 9 / Day 4 9h
011	N/A	10 / Day 4 10h	58243 687	15358 586	3 792256	1	4 95	74	497170000504	AA90478-01 497170000504 011 N/A P4 Plasma-1 10 / Day 4 10h
011	N/A	11 / Day 4 11h	56203 484	18363 542	3 060601	1	4 01	75	497170000505	AA90478-01 497170000505 011 N/A P4 Plasma-1 11 / Day 4 11h
011	N/A	12 / Day 4 12h	47674 333	18798 953	2 536010	1	3 33	76	497170000506	AA90478-01 497170000506 011 N/A P4 Plasma-1 12 / Day 4 12h
011	N/A	13 / Day 4 13h	42281 864	18083 869	2 338098	1	3 07	77	497170000507	AA90478-01 497170000507 011 N/A P4 Plasma-1 13 / Day 4 13h
011	N/A	14 / Day 4 14h	32207 648	17778 059	1 811652	1	2 39	78	497170000508	AA90478-01 497170000508 011 N/A P4 Plasma-1 14 / Day 4 14h
011	N/A	15 / Day 4 15h	30855 716	20400 906	1 512468	1	2 00	79	497170000509	AA90478-01 497170000509 011 N/A P4 Plasma-1 15 / Day 4 15h
011	N/A	16 / Day 4 16h	27538 62	18586 952	1 481610	1	1 96	80	497170000510	AA90478-01 497170000510 011 N/A P4 Plasma-1 16 / Day 4 16h
011	N/A	17 / Day 4 17h	73665 706	17965 455	4 100409	1	5 35	81	497170000511	AA90478-01 497170000511 011 N/A P4 Plasma-1 17 / Day 4 17h
011	N/A	18 / Day 4 18h	24524 381	17336 538	1 414607	1	1 87	82	497170000512	AA90478-01 497170000512 011 N/A P4 Plasma-1 18 / Day 4 18h
011	N/A	19 / Day 4 19h	32341 933	13855 653	2 334205	1	3 06	83	497170000513	AA90478-01 497170000513 011 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 18
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias
8	0 00		0	19175 804	0 000000	0 0246	
9	0 00		0	8520 297	*0 000000	*0 0246	
10	0 500	4 00000	6493 72	18419 499	0 352546	0 491	-1 8
11	1 00	1 00000	13248 719	17225 785	0 769121	1 04	4 0
12	2 00	0 250000	24107 011	16404 606	1 469527	1 97	-1 5
13	4 00	0 0625000	57902 823	19465 67	2 974612	3 96	-1 0
14	8 00	0 0156250	102131 538	17064 61	5 984991	7 95	-0 6
15	10 0	0 0100000	133277 527	17431 907	7 645608	10 1	1 0
16	20 0	0 00250000	275005 075	17959 46	15 312547	20 3	1 5
17	40 0	0 000625000	539375 537	18480 012	29 186969	38 7	-3 3
18	50 0	0 000400000	699144 621	18390 575	38 016463	50 4	0 8

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 755175090

Intercept = -0 0185825060

R-Squared = 0 9993

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Reason for Deactivation of Sample

* UISR

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 18
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	575516 024	15772 791	36 487900	1	48 3		48 0		1 5
2	0 00	593675 219	16451 826	36 085673	1	47 8				
3	0 00	606474 548	16795 561	36 109216	1	47 8				
4	0 00	669851 577	18480 316	36 246760	1	48 0				
5	0 00	625024 071	17560 56	35 592491	1	47 2				
50	0 00	708982 099	19628 709	36 119650	1	47 9				
51	0 00	705439 453	18814 882	37 493695	1	49 7				
86	0 00	762156 747	21284 38	35 808266	1	47 4				
87	0 00	773407 985	21423 739	36 100514	1	47 8				
29	1 50	18915 03	16746 005	1 129525	1	1 52	1 3	1 49	-0 7	3 3
62	1 50	26007 024	24101 154	1 079078	1	1 45	-3 3			
39	8 00	123895 802	20768 424	5 965585	1	7 92	-1 0	8 08	1 0	2 8
73	8 00	124674 178	20093 228	6 204786	1	8 24	3 0			
49	37 5	510879 637	19183 158	26 631675	1	35 3	-5 9	35 3	-5 9	0 0
84	37 5	574248 102	21544 814	26 653658	1	35 3	-5 9			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 18
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	1 / Day 4 1h	27104 149	18704 792	1 449048	1	1 94	20	497170000590	AA90478-01 497170000590 012 N/A P4 Plasma-1 1 / Day 4 1h
012	N/A	2 / Day 4 2h	26060 681	18260 015	1 427199	1	1 91	21	497170000591	AA90478-01 497170000591 012 N/A P4 Plasma-1 2 / Day 4 2h
012	N/A	3 / Day 4 3h	26206 288	18096 663	1 448128	1	1 94	22	497170000592	AA90478-01 497170000592 012 N/A P4 Plasma-1 3 / Day 4 3h
012	N/A	4 / Day 4 4h	36602 286	18910 908	1 935512	1	2 59	23	497170000593	AA90478-01 497170000593 012 N/A P4 Plasma-1 4 / Day 4 4h
012	N/A	5 / Day 4 5h	41236 538	18311 993	2 251887	1	3 01	24	497170000594	AA90478-01 497170000594 012 N/A P4 Plasma-1 5 / Day 4 5h
012	N/A	6 / Day 4 6h	42473 033	17504 632	2 426388	1	3 24	25	497170000595	AA90478-01 497170000595 012 N/A P4 Plasma-1 6 / Day 4 6h
012	N/A	7 / Day 4 7h	55497 742	17284 22	3 210891	1	4 28	26	497170000596	AA90478-01 497170000596 012 N/A P4 Plasma-1 7 / Day 4 7h
012	N/A	8 / Day 4 8h	73552 692	18052 952	4 074275	1	5 42	27	497170000597	AA90478-01 497170000597 012 N/A P4 Plasma-1 8 / Day 4 8h
012	N/A	9 / Day 4 9h	67468 044	16969 611	3 975816	1	5 29	28	497170000598	AA90478-01 497170000598 012 N/A P4 Plasma-1 9 / Day 4 9h
012	N/A	10 / Day 4 10h	69864 117	17308 871	4 036319	1	5 37	30	497170000599	AA90478-01 497170000599 012 N/A P4 Plasma-1 10 / Day 4 10h
012	N/A	11 / Day 4 11h	66459 088	18230 396	3 645510	1	4 85	31	497170000600	AA90478-01 497170000600 012 N/A P4 Plasma-1 11 / Day 4 11h
012	N/A	12 / Day 4 12h	64239 403	18485 902	3 475048	1	4 63	32	497170000601	AA90478-01 497170000601 012 N/A P4 Plasma-1 12 / Day 4 12h
012	N/A	13 / Day 4 13h	61658 764	18359 073	3 358490	1	4 47	33	497170000602	AA90478-01 497170000602 012 N/A P4 Plasma-1 13 / Day 4 13h
012	N/A	14 / Day 4 14h	56118 949	18176 61	3 087427	1	4 11	34	497170000603	AA90478-01 497170000603 012 N/A P4 Plasma-1 14 / Day 4 14h
012	N/A	15 / Day 4 15h	55737 53	20397 468	2 732571	1	3 64	35	497170000604	AA90478-01 497170000604 012 N/A P4 Plasma-1 15 / Day 4 15h
012	N/A	16 / Day 4 16h	45239 993	17183 013	2 632832	1	3 51	36	497170000605	AA90478-01 497170000605 012 N/A P4 Plasma-1 16 / Day 4 16h
012	N/A	17 / Day 4 17h	49779 555	20879 608	2 384123	1	3 18	37	497170000606	AA90478-01 497170000606 012 N/A P4 Plasma-1 17 / Day 4 17h
012	N/A	18 / Day 4 18h	47094 479	20662 076	2 279271	1	3 04	38	497170000607	AA90478-01 497170000607 012 N/A P4 Plasma-1 18 / Day 4 18h
012	N/A	19 / Day 4 19h	43870 65	20895 965	2 099479	1	2 80	40	497170000608	AA90478-01 497170000608 012 N/A P4 Plasma-1 19 / Day 4 19h
013	N/A	1 / Day 4 1h	10742 946	20700 307	0 518975	1	0 712	41	497170000685	AA90478-01 497170000685 013 N/A P4 Plasma-1 1 / Day 4 1h
013	N/A	2 / Day 4 2h	7817 531	21153 666	0 369559	1	0 514	42	497170000686	AA90478-01 497170000686 013 N/A P4 Plasma-1 2 / Day 4 2h
013	N/A	3 / Day 4 3h	6935 379	21757 25	0 318762	1	BLQ<(0 500)	43	497170000687	AA90478-01 497170000687 013 N/A P4 Plasma-1 3 / Day 4 3h
013	N/A	4 / Day 4 4h	8925 957	22418 327	0 398154	1	0 552	44	497170000688	AA90478-01 497170000688 013 N/A P4 Plasma-1 4 / Day 4 4h
013	N/A	5 / Day 4 5h	13736 747	22138 247	0 620498	1	0 846	45	497170000689	AA90478-01 497170000689 013 N/A P4 Plasma-1 5 / Day 4 5h
013	N/A	6 / Day 4 6h	15427 544	15271 005	1 010251	1	1 36	46	497170000690	AA90478-01 497170000690 013 N/A P4 Plasma-1 6 / Day 4 6h
013	N/A	7 / Day 4 7h	16116 694	20489 027	0 786601	1	1 07	47	497170000691	AA90478-01 497170000691 013 N/A P4 Plasma-1 7 / Day 4 7h
013	N/A	8 / Day 4 8h	14546 697	19817 899	0 734018	1	0 997	48	497170000692	AA90478-01 497170000692 013 N/A P4 Plasma-1 8 / Day 4 8h
013	N/A	9 / Day 4 9h	15483 294	5016 569	*3 086431	1	*4 11	52	497170000693	AA90478-01 497170000693 013 N/A P4 Plasma-1 9 / Day 4 9h
013	N/A	10 / Day 4 10h	16312 813	18014 995	0 905513	1	1 22	53	497170000694	AA90478-01 497170000694 013 N/A P4 Plasma-1 10 / Day 4 10h
013	N/A	11 / Day 4 11h	12663 578	18437 343	0 686844	1	0 934	54	497170000695	AA90478-01 497170000695 013 N/A P4 Plasma-1 11 / Day 4 11h
013	N/A	12 / Day 4 12h	15238 91	19426 78	0 784428	1	1 06	55	497170000696	AA90478-01 497170000696 013 N/A P4 Plasma-1 12 / Day 4 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	13 / Day 4 13h	12631 481	18143 58	0 696196	1	0 947	56	497170000697	AA90478-01 497170000697 013 N/A P4 Plasma-1 13 / Day 4 13h
013	N/A	14 / Day 4 14h	12988 369	20682 475	0 627989	1	0 856	57	497170000698	AA90478-01 497170000698 013 N/A P4 Plasma-1 14 / Day 4 14h
013	N/A	15 / Day 4 15h	12863 164	21586 036	0 595902	1	0 814	58	497170000699	AA90478-01 497170000699 013 N/A P4 Plasma-1 15 / Day 4 15h
013	N/A	16 / Day 4 16h	13130 541	21810 605	0 602026	1	0 822	59	497170000700	AA90478-01 497170000700 013 N/A P4 Plasma-1 16 / Day 4 16h
013	N/A	17 / Day 4 17h	11384 419	22019 164	0 517023	1	0 709	60	497170000701	AA90478-01 497170000701 013 N/A P4 Plasma-1 17 / Day 4 17h
013	N/A	18 / Day 4 18h	11042 753	23170 703	0 476583	1	0 656	61	497170000702	AA90478-01 497170000702 013 N/A P4 Plasma-1 18 / Day 4 18h
013	N/A	19 / Day 4 19h	8188 09	20433 958	0 400710	1	0 555	63	497170000703	AA90478-01 497170000703 013 N/A P4 Plasma-1 19 / Day 4 19h
015	N/A	1 / Day 4 1h	25796 606	21541 993	1 197503	1	1 61	64	497170000780	AA90478-01 497170000780 015 N/A P4 Plasma-1 1 / Day 4 1h
015	N/A	2 / Day 4 2h	19394 163	21091 922	0 919507	1	1 24	65	497170000781	AA90478-01 497170000781 015 N/A P4 Plasma-1 2 / Day 4 2h
015	N/A	3 / Day 4 3h	17350 206	21279 575	0 815346	1	1 10	66	497170000782	AA90478-01 497170000782 015 N/A P4 Plasma-1 3 / Day 4 3h
015	N/A	4 / Day 4 4h	17558 615	20643 511	0 850563	1	1 15	67	497170000783	AA90478-01 497170000783 015 N/A P4 Plasma-1 4 / Day 4 4h
015	N/A	5 / Day 4 5h	21620 382	20850 19	1 036939	1	1 40	68	497170000784	AA90478-01 497170000784 015 N/A P4 Plasma-1 5 / Day 4 5h
015	N/A	6 / Day 4 6h	21715 087	20312 702	1 069040	1	1 44	69	497170000785	AA90478-01 497170000785 015 N/A P4 Plasma-1 6 / Day 4 6h
015	N/A	7 / Day 4 7h	20406 543	21072 016	0 968419	1	1 31	70	497170000786	AA90478-01 497170000786 015 N/A P4 Plasma-1 7 / Day 4 7h
015	N/A	8 / Day 4 8h	21876 851	15943 644	1 372136	1	1 84	71	497170000787	AA90478-01 497170000787 015 N/A P4 Plasma-1 8 / Day 4 8h
015	N/A	9 / Day 4 9h	19866 012	21718 657	0 914698	1	1 24	72	497170000788	AA90478-01 497170000788 015 N/A P4 Plasma-1 9 / Day 4 9h
015	N/A	10 / Day 4 10h	23467 413	21363 583	1 098477	1	1 48	74	497170000789	AA90478-01 497170000789 015 N/A P4 Plasma-1 10 / Day 4 10h
015	N/A	11 / Day 4 11h	21776 215	20440 11	1 065367	1	1 44	75	497170000790	AA90478-01 497170000790 015 N/A P4 Plasma-1 11 / Day 4 11h
015	N/A	12 / Day 4 12h	21004 571	20894 526	1 005267	1	1 36	76	497170000791	AA90478-01 497170000791 015 N/A P4 Plasma-1 12 / Day 4 12h
015	N/A	13 / Day 4 13h	18274 337	20865 803	0 875803	1	1 18	77	497170000792	AA90478-01 497170000792 015 N/A P4 Plasma-1 13 / Day 4 13h
015	N/A	14 / Day 4 14h	17958 446	21360 822	0 840719	1	1 14	78	497170000793	AA90478-01 497170000793 015 N/A P4 Plasma-1 14 / Day 4 14h
015	N/A	15 / Day 4 15h	16389 204	22590 711	0 725484	1	0 985	79	497170000794	AA90478-01 497170000794 015 N/A P4 Plasma-1 15 / Day 4 15h
015	N/A	16 / Day 4 16h	15912 163	21437 553	0 742256	1	1 01	80	497170000795	AA90478-01 497170000795 015 N/A P4 Plasma-1 16 / Day 4 16h
015	N/A	17 / Day 4 17h	13882 109	20820 242	0 666760	1	0 908	81	497170000796	AA90478-01 497170000796 015 N/A P4 Plasma-1 17 / Day 4 17h
015	N/A	18 / Day 4 18h	12890 903	20992 254	0 614079	1	0 838	82	497170000797	AA90478-01 497170000797 015 N/A P4 Plasma-1 18 / Day 4 18h
015	N/A	19 / Day 4 19h	14614 689	19902 313	0 734321	1	0 997	83	497170000798	AA90478-01 497170000798 015 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 19
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	39892 491	0 000000	0 0625		0 0625	0 0
9	0 00		0	34171 361	0 000000	0 0625			
10	0 500	4 00000	11204 071	37236 163	0 300892	0 494	-1 2		
11	1 00	1 00000	24938 975	37073 533	0 672689	1 03	3 0		
12	2 00	0 250000	53647 246	39940 22	1 343189	1 99	-0 5		
13	4 00	0 0625000	104135 726	38539 435	2 702056	3 94	-1 5		
14	8 00	0 0156250	222521 223	39214 027	5 674531	8 20	2 5		
15	10 0	0 0100000	262755 256	37558 634	6 995868	10 1	1 0		
16	20 0	0 00250000	565204 479	39340 522	14 366980	20 7	3 5		
17	40 0	0 000625000	1035585 652	38072 688	27 200224	39 1	-2 3		
18	50 0	0 000400000	1259792 869	37541 325	33 557496	48 2	-3 6		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 697494228

Intercept = -0 0436016857

R-Squared = 0 9992

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 19
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1331058 316	39160 717	33 989631	1	48 8		47 8		1 6
2	0 00	1385578 01	41018 424	33 779406	1	48 5				
3	0 00	1377945 481	41354 159	33 320602	1	47 8				
4	0 00	1357299 509	40062 417	33 879621	1	48 6				
5	0 00	1321365 97	40853 043	32 344371	1	46 4				
50	0 00	1384195 105	41861 152	33 066340	1	47 5				
51	0 00	1381575 181	41978 47	32 911518	1	47 2				
86	0 00	1408279 317	41856 434	33 645468	1	48 3				
87	0 00	1317821 998	39794 039	33 116065	1	47 5				
29	1 50	38397 485	42165 038	0 910647	1	1 37	-8 7	1 41	-6 0	3 5
62	1 50	39454 545	41184 891	0 957986	1	1 44	-4 0			
39	8 00	238675 016	44393 885	5 376304	1	7 77	-2 9	7 77	-2 9	0 0
73	8 00	218100 849	40579 262	5 374687	1	7 77	-2 9			
49	37 5	943089 484	40746 762	23 145139	1	33 2	-11 5	34 4	-8 3	4 7
84	37 5	986288 982	39853 018	24 748163	1	35 5	-5 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 19
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
018	N/A	1 / Day 4 1h	13434 633	37005 09	0 363048	1	0 583	20	497170000875	AA90478-01 497170000875 018 N/A P4 Plasma-1 1 / Day 4 1h
018	N/A	2 / Day 4 2h	10664 315	37154 492	0 287026	1	BLQ<(0 500)	21	497170000876	AA90478-01 497170000876 018 N/A P4 Plasma-1 2 / Day 4 2h
018	N/A	3 / Day 4 3h	11388 05	38965 78	0 292258	1	BLQ<(0 500)	22	497170000877	AA90478-01 497170000877 018 N/A P4 Plasma-1 3 / Day 4 3h
018	N/A	4 / Day 4 4h	19715 603	40017 197	0 492678	1	0 769	23	497170000878	AA90478-01 497170000878 018 N/A P4 Plasma-1 4 / Day 4 4h
018	N/A	5 / Day 4 5h	21838 037	36085 04	0 605183	1	0 930	24	497170000879	AA90478-01 497170000879 018 N/A P4 Plasma-1 5 / Day 4 5h
018	N/A	6 / Day 4 6h	34512 934	39043 063	0 883971	1	1 33	25	497170000880	AA90478-01 497170000880 018 N/A P4 Plasma-1 6 / Day 4 6h
018	N/A	7 / Day 4 7h	66902 9	39589 248	1 689926	1	2 49	26	497170000881	AA90478-01 497170000881 018 N/A P4 Plasma-1 7 / Day 4 7h
018	N/A	8 / Day 4 8h	81539 917	37390 778	2 180749	1	3 19	27	497170000882	AA90478-01 497170000882 018 N/A P4 Plasma-1 8 / Day 4 8h
018	N/A	9 / Day 4 9h	90551 492	42379 787	2 136667	1	3 13	28	497170000883	AA90478-01 497170000883 018 N/A P4 Plasma-1 9 / Day 4 9h
018	N/A	10 / Day 4 10h	73932 188	40701 766	1 816437	1	2 67	30	497170000884	AA90478-01 497170000884 018 N/A P4 Plasma-1 10 / Day 4 10h
018	N/A	11 / Day 4 11h	62919 195	41033 693	1 533354	1	2 26	31	497170000885	AA90478-01 497170000885 018 N/A P4 Plasma-1 11 / Day 4 11h
018	N/A	12 / Day 4 12h	61937 298	41483 743	1 493050	1	2 20	32	497170000886	AA90478-01 497170000886 018 N/A P4 Plasma-1 12 / Day 4 12h
018	N/A	13 / Day 4 13h	50612 465	41699 929	1 213730	1	1 80	33	497170000887	AA90478-01 497170000887 018 N/A P4 Plasma-1 13 / Day 4 13h
018	N/A	14 / Day 4 14h	40133 415	39047 515	1 027810	1	1 54	34	497170000888	AA90478-01 497170000888 018 N/A P4 Plasma-1 14 / Day 4 14h
018	N/A	15 / Day 4 15h	44889 217	42402 88	1 058636	1	1 58	35	497170000889	AA90478-01 497170000889 018 N/A P4 Plasma-1 15 / Day 4 15h
018	N/A	16 / Day 4 16h	41082 504	40830 202	1 006179	1	1 51	36	497170000890	AA90478-01 497170000890 018 N/A P4 Plasma-1 16 / Day 4 16h
018	N/A	17 / Day 4 17h	40132 939	42917 036	0 935128	1	1 40	37	497170000891	AA90478-01 497170000891 018 N/A P4 Plasma-1 17 / Day 4 17h
018	N/A	18 / Day 4 18h	38710 496	42710 766	0 906340	1	1 36	38	497170000892	AA90478-01 497170000892 018 N/A P4 Plasma-1 18 / Day 4 18h
018	N/A	19 / Day 4 19h	32812 561	38189 073	0 859213	1	1 29	40	497170000893	AA90478-01 497170000893 018 N/A P4 Plasma-1 19 / Day 4 19h
019	N/A	1 / Day 4 1h	20287 239	40643 603	0 499150	1	0 778	41	497170000970	AA90478-01 497170000970 019 N/A P4 Plasma-1 1 / Day 4 1h
019	N/A	2 / Day 4 2h	18413 493	38341 129	0 480254	1	0 751	42	497170000971	AA90478-01 497170000971 019 N/A P4 Plasma-1 2 / Day 4 2h
019	N/A	3 / Day 4 3h	21877 839	41037 315	0 533121	1	0 827	43	497170000972	AA90478-01 497170000972 019 N/A P4 Plasma-1 3 / Day 4 3h
019	N/A	4 / Day 4 4h	24067 314	41782 957	0 576008	1	0 888	44	497170000973	AA90478-01 497170000973 019 N/A P4 Plasma-1 4 / Day 4 4h
019	N/A	5 / Day 4 5h	31089 894	41387 944	0 751182	1	1 14	45	497170000974	AA90478-01 497170000974 019 N/A P4 Plasma-1 5 / Day 4 5h
019	N/A	6 / Day 4 6h	36628 628	42496 428	0 861923	1	1 30	46	497170000975	AA90478-01 497170000975 019 N/A P4 Plasma-1 6 / Day 4 6h
019	N/A	7 / Day 4 7h	55543 66	39254 121	1 414977	1	2 09	47	497170000976	AA90478-01 497170000976 019 N/A P4 Plasma-1 7 / Day 4 7h
019	N/A	8 / Day 4 8h	57629 486	39582 222	1 455944	1	2 15	48	497170000977	AA90478-01 497170000977 019 N/A P4 Plasma-1 8 / Day 4 8h
019	N/A	9 / Day 4 9h	51917 702	41737 465	1 243911	1	1 85	52	497170000978	AA90478-01 497170000978 019 N/A P4 Plasma-1 9 / Day 4 9h
019	N/A	10 / Day 4 10h	51097 119	39261 31	1 301462	1	1 93	53	497170000979	AA90478-01 497170000979 019 N/A P4 Plasma-1 10 / Day 4 10h
019	N/A	11 / Day 4 11h	41294 335	42452 762	0 972713	1	1 46	54	497170000980	AA90478-01 497170000980 019 N/A P4 Plasma-1 11 / Day 4 11h
019	N/A	12 / Day 4 12h	32515 151	40681 359	0 799264	1	1 21	55	497170000981	AA90478-01 497170000981 019 N/A P4 Plasma-1 12 / Day 4 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	13 / Day 4 13h	35392 386	38674 444	0 915136	1	1 37	56	497170000982	AA90478-01 497170000982 019 N/A P4 Plasma-1 13 / Day 4 13h
019	N/A	14 / Day 4 14h	34631 551	39439 637	0 878090	1	1 32	57	497170000983	AA90478-01 497170000983 019 N/A P4 Plasma-1 14 / Day 4 14h
019	N/A	15 / Day 4 15h	33927 814	38764 088	0 875238	1	1 32	58	497170000984	AA90478-01 497170000984 019 N/A P4 Plasma-1 15 / Day 4 15h
019	N/A	16 / Day 4 16h	36162 354	41684 186	0 867532	1	1 31	59	497170000985	AA90478-01 497170000985 019 N/A P4 Plasma-1 16 / Day 4 16h
019	N/A	17 / Day 4 17h	32924 405	40585 117	0 811243	1	1 23	60	497170000986	AA90478-01 497170000986 019 N/A P4 Plasma-1 17 / Day 4 17h
019	N/A	18 / Day 4 18h	27505 248	38085 418	0 722199	1	1 10	61	497170000987	AA90478-01 497170000987 019 N/A P4 Plasma-1 18 / Day 4 18h
019	N/A	19 / Day 4 19h	27773 568	40052 593	0 693427	1	1 06	63	497170000988	AA90478-01 497170000988 019 N/A P4 Plasma-1 19 / Day 4 19h
021	N/A	1 / Day 4 1h	9945 77	36764 382	0 270527	1	BLQ<(0 500)	64	497170001065	AA90478-01 497170001065 021 N/A P4 Plasma-1 1 / Day 4 1h
021	N/A	2 / Day 4 2h	10818 69	39374 663	0 274763	1	BLQ<(0 500)	65	497170001066	AA90478-01 497170001066 021 N/A P4 Plasma-1 2 / Day 4 2h
021	N/A	3 / Day 4 3h	11342 392	40152 987	0 282479	1	BLQ<(0 500)	66	497170001067	AA90478-01 497170001067 021 N/A P4 Plasma-1 3 / Day 4 3h
021	N/A	4 / Day 4 4h	15308 053	42181 185	0 362912	1	0 583	67	497170001068	AA90478-01 497170001068 021 N/A P4 Plasma-1 4 / Day 4 4h
021	N/A	5 / Day 4 5h	19296 446	40637 172	0 474847	1	0 743	68	497170001069	AA90478-01 497170001069 021 N/A P4 Plasma-1 5 / Day 4 5h
021	N/A	6 / Day 4 6h	22895 901	37895 194	0 604190	1	0 929	69	497170001070	AA90478-01 497170001070 021 N/A P4 Plasma-1 6 / Day 4 6h
021	N/A	7 / Day 4 7h	41889 324	40402 037	1 036812	1	1 55	70	497170001071	AA90478-01 497170001071 021 N/A P4 Plasma-1 7 / Day 4 7h
021	N/A	8 / Day 4 8h	46770 563	42507 067	1 100301	1	1 64	71	497170001072	AA90478-01 497170001072 021 N/A P4 Plasma-1 8 / Day 4 8h
021	N/A	9 / Day 4 9h	49075 56	42416 69	1 156987	1	1 72	72	497170001073	AA90478-01 497170001073 021 N/A P4 Plasma-1 9 / Day 4 9h
021	N/A	10 / Day 4 10h	69642 457	39047 078	1 783551	1	2 62	74	497170001074	AA90478-01 497170001074 021 N/A P4 Plasma-1 10 / Day 4 10h
021	N/A	11 / Day 4 11h	51562 648	39236 195	1 314160	1	1 95	75	497170001075	AA90478-01 497170001075 021 N/A P4 Plasma-1 11 / Day 4 11h
021	N/A	12 / Day 4 12h	35278 859	39863 521	0 884991	1	1 33	76	497170001076	AA90478-01 497170001076 021 N/A P4 Plasma-1 12 / Day 4 12h
021	N/A	13 / Day 4 13h	28769 423	38116 17	0 754783	1	1 14	77	497170001077	AA90478-01 497170001077 021 N/A P4 Plasma-1 13 / Day 4 13h
021	N/A	14 / Day 4 14h	28678 82	40415 904	0 709592	1	1 08	78	497170001078	AA90478-01 497170001078 021 N/A P4 Plasma-1 14 / Day 4 14h
021	N/A	15 / Day 4 15h	22992 36	38186 891	0 602101	1	0 926	79	497170001079	AA90478-01 497170001079 021 N/A P4 Plasma-1 15 / Day 4 15h
021	N/A	16 / Day 4 16h	23055 287	40700 212	0 566466	1	0 875	80	497170001080	AA90478-01 497170001080 021 N/A P4 Plasma-1 16 / Day 4 16h
021	N/A	17 / Day 4 17h	22028 433	38971 002	0 565252	1	0 873	81	497170001081	AA90478-01 497170001081 021 N/A P4 Plasma-1 17 / Day 4 17h
021	N/A	18 / Day 4 18h	18609 055	35930 421	0 517919	1	0 805	82	497170001082	AA90478-01 497170001082 021 N/A P4 Plasma-1 18 / Day 4 18h
021	N/A	19 / Day 4 19h	19039 788	42005 531	0 453269	1	0 712	83	497170001083	AA90478-01 497170001083 021 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 20
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	39580 787	0 000000	0 0228		0 0309	36 9
9	0 00		392 379	35160 899	0 011160	0 0389			
10	0 500	4 00000	12954 004	40115 981	0 322914	0 489	-2 2		
11	1 00	1 00000	27151 232	38825 954	0 699306	1 03	3 0		
12	2 00	0 250000	58237 585	41793 116	1 393473	2 04	2 0		
13	4 00	0 0625000	102107 385	37648 394	2 712131	3 94	-1 5		
14	8 00	0 0156250	224872 638	39861 582	5 641338	8 18	2 3		
15	10 0	0 0100000	277428 329	39690 441	6 989802	10 1	1 0		
16	20 0	0 00250000	557751 419	40496 102	13 772966	19 9	-0 5		
17	40 0	0 000625000	1142775 047	42067 859	27 165039	39 3	-1 8		
18	50 0	0 000400000	1246566 403	37173 793	33 533474	48 5	-3 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 691840000

Intercept = -0 0157409191

R-Squared = 0 9993

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 20
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1427449 848	44283 532	32 234327	1	46 6		47 7		1 3
2	0 00	1349466 78	41370 787	32 618833	1	47 2				
3	0 00	1338114 622	40601 208	32 957508	1	47 7				
4	0 00	1375579 556	40920 356	33 616021	1	48 6				
5	0 00	1345643 244	41116 908	32 727248	1	47 3				
50	0 00	1356666 243	40876 787	33 189160	1	48 0				
51	0 00	1321992 6	39462 09	33 500319	1	48 4				
86	0 00	1319905 793	39969 846	33 022539	1	47 8				
87	0 00	1492555 029	45530 954	32 781106	1	47 4				
29	1 50	42419 579	41946 756	1 011272	1	1 48	-1 3	1 50	0 0	1 9
62	1 50	41745 183	40172 029	1 039160	1	1 52	1 3			
39	8 00	214881 166	40047 079	5 365714	1	7 78	-2 8	7 93	-0 9	2 7
73	8 00	230255 216	41320 629	5 572403	1	8 08	1 0			
49	37 5	972379 539	39984 241	24 319070	1	35 2	-6 1	34 5	-8 0	2 9
84	37 5	997399 407	42678 916	23 369839	1	33 8	-9 9			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 20
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	1 / Day 4 1h	49203 881	39151 587	1 256753	1	1 84	20	497170001160	AA90478-01 497170001160 024 N/A P4 Plasma-1 1 / Day 4 1h
024	N/A	2 / Day 4 2h	50860 786	38089 157	1 335309	1	1 95	21	497170001161	AA90478-01 497170001161 024 N/A P4 Plasma-1 2 / Day 4 2h
024	N/A	3 / Day 4 3h	48094 252	38699 712	1 242755	1	1 82	22	497170001162	AA90478-01 497170001162 024 N/A P4 Plasma-1 3 / Day 4 3h
024	N/A	4 / Day 4 4h	53418 731	40265 486	1 326663	1	1 94	23	497170001163	AA90478-01 497170001163 024 N/A P4 Plasma-1 4 / Day 4 4h
024	N/A	5 / Day 4 5h	60848 091	41035 141	1 482829	1	2 17	24	497170001164	AA90478-01 497170001164 024 N/A P4 Plasma-1 5 / Day 4 5h
024	N/A	6 / Day 4 6h	70834 491	39934 523	1 773766	1	2 59	25	497170001165	AA90478-01 497170001165 024 N/A P4 Plasma-1 6 / Day 4 6h
024	N/A	7 / Day 4 7h	83176 674	39501 919	2 105636	1	3 07	26	497170001166	AA90478-01 497170001166 024 N/A P4 Plasma-1 7 / Day 4 7h
024	N/A	8 / Day 4 8h	95754 201	40888 326	2 341847	1	3 41	27	497170001167	AA90478-01 497170001167 024 N/A P4 Plasma-1 8 / Day 4 8h
024	N/A	9 / Day 4 9h	94194 295	42403 924	2 221358	1	3 23	28	497170001168	AA90478-01 497170001168 024 N/A P4 Plasma-1 9 / Day 4 9h
024	N/A	10 / Day 4 10h	126055 393	43941 281	2 868724	1	4 17	30	497170001169	AA90478-01 497170001169 024 N/A P4 Plasma-1 10 / Day 4 10h
024	N/A	11 / Day 4 11h	131977 18	43537 646	3 031335	1	4 40	31	497170001170	AA90478-01 497170001170 024 N/A P4 Plasma-1 11 / Day 4 11h
024	N/A	12 / Day 4 12h	117159 531	42453 431	2 759719	1	4 01	32	497170001171	AA90478-01 497170001171 024 N/A P4 Plasma-1 12 / Day 4 12h
024	N/A	13 / Day 4 13h	96820 359	37336 879	2 593156	1	3 77	33	497170001172	AA90478-01 497170001172 024 N/A P4 Plasma-1 13 / Day 4 13h
024	N/A	14 / Day 4 14h	107413 402	41811 248	2 569007	1	3 74	34	497170001173	AA90478-01 497170001173 024 N/A P4 Plasma-1 14 / Day 4 14h
024	N/A	15 / Day 4 15h	89391 193	42700 338	2 093454	1	3 05	35	497170001174	AA90478-01 497170001174 024 N/A P4 Plasma-1 15 / Day 4 15h
024	N/A	16 / Day 4 16h	79281 176	40156 237	1 974318	1	2 88	36	497170001175	AA90478-01 497170001175 024 N/A P4 Plasma-1 16 / Day 4 16h
024	N/A	17 / Day 4 17h	71549 291	39932 464	1 791757	1	2 61	37	497170001176	AA90478-01 497170001176 024 N/A P4 Plasma-1 17 / Day 4 17h
024	N/A	18 / Day 4 18h	75942 902	39722 327	1 911844	1	2 79	38	497170001177	AA90478-01 497170001177 024 N/A P4 Plasma-1 18 / Day 4 18h
024	N/A	19 / Day 4 19h	63220 204	37883 658	1 668799	1	2 43	40	497170001178	AA90478-01 497170001178 024 N/A P4 Plasma-1 19 / Day 4 19h
026	N/A	1 / Day 4 1h	27070 115	40313 27	0 671494	1	0 993	41	497170001255	AA90478-01 497170001255 026 N/A P4 Plasma-1 1 / Day 4 1h
026	N/A	2 / Day 4 2h	19830 666	37944 25	0 522626	1	0 778	42	497170001256	AA90478-01 497170001256 026 N/A P4 Plasma-1 2 / Day 4 2h
026	N/A	3 / Day 4 3h	25507 728	39102 996	0 652322	1	0 966	43	497170001257	AA90478-01 497170001257 026 N/A P4 Plasma-1 3 / Day 4 3h
026	N/A	4 / Day 4 4h	35565 594	39944 954	0 890365	1	1 31	44	497170001258	AA90478-01 497170001258 026 N/A P4 Plasma-1 4 / Day 4 4h
026	N/A	5 / Day 4 5h	79522 72	39276 115	2 024709	1	2 95	45	497170001259	AA90478-01 497170001259 026 N/A P4 Plasma-1 5 / Day 4 5h
026	N/A	6 / Day 4 6h	83699 877	43349 076	1 930834	1	2 81	46	497170001260	AA90478-01 497170001260 026 N/A P4 Plasma-1 6 / Day 4 6h
026	N/A	7 / Day 4 7h	104220 724	38774 046	2 687899	1	3 91	47	497170001261	AA90478-01 497170001261 026 N/A P4 Plasma-1 7 / Day 4 7h
026	N/A	8 / Day 4 8h	131999 9	41935 586	3 147682	1	4 57	48	497170001262	AA90478-01 497170001262 026 N/A P4 Plasma-1 8 / Day 4 8h
026	N/A	9 / Day 4 9h	162799 776	41096 89	3 961365	1	5 75	52	497170001263	AA90478-01 497170001263 026 N/A P4 Plasma-1 9 / Day 4 9h
026	N/A	10 / Day 4 10h	113872 03	41821 154	2 722833	1	3 96	53	497170001264	AA90478-01 497170001264 026 N/A P4 Plasma-1 10 / Day 4 10h
026	N/A	11 / Day 4 11h	103411 23	37033 02	2 792406	1	4 06	54	497170001265	AA90478-01 497170001265 026 N/A P4 Plasma-1 11 / Day 4 11h
026	N/A	12 / Day 4 12h	103214 062	40406 528	2 554391	1	3 71	55	497170001266	AA90478-01 497170001266 026 N/A P4 Plasma-1 12 / Day 4 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
026	N/A	13 / Day 4 13h	91403 086	38059 003	2 401615	1	3 49	56	497170001267	AA90478-01 497170001267 026 N/A P4 Plasma-1 13 / Day 4 13h
026	N/A	14 / Day 4 14h	93120 406	38041 62	2 447856	1	3 56	57	497170001268	AA90478-01 497170001268 026 N/A P4 Plasma-1 14 / Day 4 14h
026	N/A	15 / Day 4 15h	85199 987	36914 811	2 308016	1	3 36	58	497170001269	AA90478-01 497170001269 026 N/A P4 Plasma-1 15 / Day 4 15h
026	N/A	16 / Day 4 16h	93475 612	38166 501	2 449153	1	3 56	59	497170001270	AA90478-01 497170001270 026 N/A P4 Plasma-1 16 / Day 4 16h
026	N/A	17 / Day 4 17h	74543 974	40015 596	1 862873	1	2 72	60	497170001271	AA90478-01 497170001271 026 N/A P4 Plasma-1 17 / Day 4 17h
026	N/A	18 / Day 4 18h	71982 956	40959 573	1 757415	1	2 56	61	497170001272	AA90478-01 497170001272 026 N/A P4 Plasma-1 18 / Day 4 18h
026	N/A	19 / Day 4 19h	67458 777	38703 546	1 742961	1	2 54	63	497170001273	AA90478-01 497170001273 026 N/A P4 Plasma-1 19 / Day 4 19h
028	N/A	1 / Day 4 1h	64778 664	35359 21	1 832017	1	2 67	64	497170001350	AA90478-01 497170001350 028 N/A P4 Plasma-1 1 / Day 4 1h
028	N/A	2 / Day 4 2h	61892 031	38704 431	1 599094	1	2 33	65	497170001351	AA90478-01 497170001351 028 N/A P4 Plasma-1 2 / Day 4 2h
028	N/A	3 / Day 4 3h	65302 043	40482 602	1 613089	1	2 35	66	497170001352	AA90478-01 497170001352 028 N/A P4 Plasma-1 3 / Day 4 3h
028	N/A	4 / Day 4 4h	72076 222	39669 671	1 816910	1	2 65	67	497170001353	AA90478-01 497170001353 028 N/A P4 Plasma-1 4 / Day 4 4h
028	N/A	5 / Day 4 5h	80724 23	41639 647	1 938639	1	2 82	68	497170001354	AA90478-01 497170001354 028 N/A P4 Plasma-1 5 / Day 4 5h
028	N/A	6 / Day 4 6h	73482 304	39435 674	1 863346	1	2 72	69	497170001355	AA90478-01 497170001355 028 N/A P4 Plasma-1 6 / Day 4 6h
028	N/A	7 / Day 4 7h	81494 079	37039 447	2 200197	1	3 20	70	497170001356	AA90478-01 497170001356 028 N/A P4 Plasma-1 7 / Day 4 7h
028	N/A	8 / Day 4 8h	69081 279	39969 094	1 728367	1	2 52	71	497170001357	AA90478-01 497170001357 028 N/A P4 Plasma-1 8 / Day 4 8h
028	N/A	9 / Day 4 9h	85950 298	39735 889	2 163040	1	3 15	72	497170001358	AA90478-01 497170001358 028 N/A P4 Plasma-1 9 / Day 4 9h
028	N/A	10 / Day 4 10h	71247 501	37860 849	1 881825	1	2 74	74	497170001359	AA90478-01 497170001359 028 N/A P4 Plasma-1 10 / Day 4 10h
028	N/A	11 / Day 4 11h	70094 862	39057 809	1 794644	1	2 62	75	497170001360	AA90478-01 497170001360 028 N/A P4 Plasma-1 11 / Day 4 11h
028	N/A	12 / Day 4 12h	67912 936	39732 991	1 709233	1	2 49	76	497170001361	AA90478-01 497170001361 028 N/A P4 Plasma-1 12 / Day 4 12h
028	N/A	13 / Day 4 13h	72254 265	38427 459	1 880277	1	2 74	77	497170001362	AA90478-01 497170001362 028 N/A P4 Plasma-1 13 / Day 4 13h
028	N/A	14 / Day 4 14h	61144 143	38070 421	1 606080	1	2 34	78	497170001363	AA90478-01 497170001363 028 N/A P4 Plasma-1 14 / Day 4 14h
028	N/A	15 / Day 4 15h	69387 897	43022 732	1 612819	1	2 35	79	497170001364	AA90478-01 497170001364 028 N/A P4 Plasma-1 15 / Day 4 15h
028	N/A	16 / Day 4 16h	59293 823	40082 169	1 479307	1	2 16	80	497170001365	AA90478-01 497170001365 028 N/A P4 Plasma-1 16 / Day 4 16h
028	N/A	17 / Day 4 17h	55119 021	40266 03	1 368872	1	2 00	81	497170001366	AA90478-01 497170001366 028 N/A P4 Plasma-1 17 / Day 4 17h
028	N/A	18 / Day 4 18h	54234 3	39387 497	1 376942	1	2 01	82	497170001367	AA90478-01 497170001367 028 N/A P4 Plasma-1 18 / Day 4 18h
028	N/A	19 / Day 4 19h	74768 768	41592 727	1 797640	1	2 62	83	497170001368	AA90478-01 497170001368 028 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 21
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	34208 499	0 000000	0 0401		0 0401	0 0
9	0 00		0	34068 32	0 000000	0 0401			
10	0 500	4 00000	12203 694	34746 991	0 351216	0 513	2 6		
11	1 00	1 00000	23785 851	35037 911	0 678860	0 953	-4 7		
12	2 00	0 250000	50588 975	35308 095	1 432787	1 97	-1 5		
13	4 00	0 0625000	96937 844	33619 891	2 883348	3 92	-2 0		
14	8 00	0 0156250	206871 32	32688 156	6 328632	8 55	6 9		
15	10 0	0 0100000	266415 363	34848 198	7 645026	10 3	3 0		
16	20 0	0 00250000	564602 549	39045 908	14 459967	19 5	-2 5		
17	40 0	0 000625000	995510 514	34724 538	28 668791	38 6	-3 5		
18	50 0	0 000400000	1287561 933	34053 794	37 809647	50 9	1 8		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 743493020

Intercept = -0 0298334199

R-Squared = 0 9981

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 21
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1183706 532	31739 917	37 293939	1	50 2		48 5		2 2
2	0 00	1179307 164	33202 847	35 518254	1	47 8				
3	0 00	1201988 865	33641 521	35 729326	1	48 1				
4	0 00	1207063 014	34818 864	34 666927	1	46 7				
5	0 00	1185279 533	33334 616	35 557018	1	47 9				
50	0 00	1356145 331	37040 081	36 612915	1	49 3				
51	0 00	1339465 405	36552 902	36 644571	1	49 3				
86	0 00	1288030 713	35992 43	35 786156	1	48 2				
87	0 00	1406124 517	38278 262	36 734283	1	49 4				
29	1 50	40998 303	37587 22	1 090751	1	1 51	0 7	1 51	0 7	0 5
62	1 50	37210 062	34345 842	1 083394	1	1 50	0 0			
39	8 00	213884 72	38604 107	5 540465	1	7 49	-6 4	7 44	-7 0	1 0
73	8 00	188708 117	34516 126	5 467245	1	7 39	-7 6			
49	37 5	934665 773	37038 257	25 235145	1	34 0	-9 3	35 3	-5 9	5 0
84	37 5	999072 654	36870 946	27 096475	1	36 5	-2 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 21
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 5 1h	7439 058	33934 189	0 219220	1	BLQ<(0 500)	20	497170000001	AA90478-01 497170000001 001 N/A P5 Plasma-1 1 / Day 5 1h
001	N/A	2 / Day 5 2h	6034 154	34470 332	0 175054	1	BLQ<(0 500)	21	497170000002	AA90478-01 497170000002 001 N/A P5 Plasma-1 2 / Day 5 2h
001	N/A	3 / Day 5 3h	8009 842	37789 248	0 211961	1	BLQ<(0 500)	22	497170000003	AA90478-01 497170000003 001 N/A P5 Plasma-1 3 / Day 5 3h
001	N/A	4 / Day 5 4h	12295 062	32759 023	0 375318	1	0 545	23	497170000004	AA90478-01 497170000004 001 N/A P5 Plasma-1 4 / Day 5 4h
001	N/A	5 / Day 5 5h	41579 365	36889 159	1 127143	1	1 56	24	497170000005	AA90478-01 497170000005 001 N/A P5 Plasma-1 5 / Day 5 5h
001	N/A	6 / Day 5 6h	57060 708	34247 481	1 666129	1	2 28	25	497170000006	AA90478-01 497170000006 001 N/A P5 Plasma-1 6 / Day 5 6h
001	N/A	7 / Day 5 7h	79675 964	37524 158	2 123324	1	2 90	26	497170000007	AA90478-01 497170000007 001 N/A P5 Plasma-1 7 / Day 5 7h
001	N/A	8 / Day 5 8h	94932 586	34406 533	2 759144	1	3 75	27	497170000008	AA90478-01 497170000008 001 N/A P5 Plasma-1 8 / Day 5 8h
001	N/A	9 / Day 5 9h	101713 353	34207 103	2 973457	1	4 04	28	497170000009	AA90478-01 497170000009 001 N/A P5 Plasma-1 9 / Day 5 9h
001	N/A	10 / Day 5 10h	72198 67	33488 38	2 155932	1	2 94	30	497170000010	AA90478-01 497170000010 001 N/A P5 Plasma-1 10 / Day 5 10h
001	N/A	11 / Day 5 11h	56476 48	35756 743	1 579464	1	2 16	31	497170000011	AA90478-01 497170000011 001 N/A P5 Plasma-1 11 / Day 5 11h
001	N/A	12 / Day 5 12h	46257 437	37716 893	1 226438	1	1 69	32	497170000012	AA90478-01 497170000012 001 N/A P5 Plasma-1 12 / Day 5 12h
001	N/A	13 / Day 5 13h	40188 118	38200 26	1 052038	1	1 46	33	497170000013	AA90478-01 497170000013 001 N/A P5 Plasma-1 13 / Day 5 13h
001	N/A	14 / Day 5 14h	30386 793	38609 686	0 787025	1	1 10	34	497170000014	AA90478-01 497170000014 001 N/A P5 Plasma-1 14 / Day 5 14h
001	N/A	15 / Day 5 15h	37163 661	41814 744	0 888769	1	1 24	35	497170000015	AA90478-01 497170000015 001 N/A P5 Plasma-1 15 / Day 5 15h
001	N/A	16 / Day 5 16h	21993 44	34936 114	0 629533	1	0 887	36	497170000016	AA90478-01 497170000016 001 N/A P5 Plasma-1 16 / Day 5 16h
001	N/A	17 / Day 5 17h	18057 5	36099 664	0 500212	1	0 713	37	497170000017	AA90478-01 497170000017 001 N/A P5 Plasma-1 17 / Day 5 17h
001	N/A	18 / Day 5 18h	14930 733	35401 95	0 421749	1	0 607	38	497170000018	AA90478-01 497170000018 001 N/A P5 Plasma-1 18 / Day 5 18h
001	N/A	19 / Day 5 19h	20055 582	39801 822	0 503886	1	0 718	40	497170000019	AA90478-01 497170000019 001 N/A P5 Plasma-1 19 / Day 5 19h
003	N/A	1 / Day 5 1h	28959 356	35228 251	0 822049	1	1 15	41	497170000096	AA90478-01 497170000096 003 N/A P5 Plasma-1 1 / Day 5 1h
003	N/A	2 / Day 5 2h	24056 561	37994 047	0 633167	1	0 892	42	497170000097	AA90478-01 497170000097 003 N/A P5 Plasma-1 2 / Day 5 2h
003	N/A	3 / Day 5 3h	27968 787	37530 563	0 745227	1	1 04	43	497170000098	AA90478-01 497170000098 003 N/A P5 Plasma-1 3 / Day 5 3h
003	N/A	4 / Day 5 4h	24380 791	36582 06	0 666469	1	0 937	44	497170000099	AA90478-01 497170000099 003 N/A P5 Plasma-1 4 / Day 5 4h
003	N/A	5 / Day 5 5h	32234 232	37995 356	0 848373	1	1 18	45	497170000100	AA90478-01 497170000100 003 N/A P5 Plasma-1 5 / Day 5 5h
003	N/A	6 / Day 5 6h	35737 226	36925 569	0 967818	1	1 34	46	497170000101	AA90478-01 497170000101 003 N/A P5 Plasma-1 6 / Day 5 6h
003	N/A	7 / Day 5 7h	40951 23	37057 179	1 105082	1	1 53	47	497170000102	AA90478-01 497170000102 003 N/A P5 Plasma-1 7 / Day 5 7h
003	N/A	8 / Day 5 8h	43488 945	34067 047	1 276569	1	1 76	48	497170000103	AA90478-01 497170000103 003 N/A P5 Plasma-1 8 / Day 5 8h
003	N/A	9 / Day 5 9h	48645 363	37212 32	1 307238	1	1 80	52	497170000104	AA90478-01 497170000104 003 N/A P5 Plasma-1 9 / Day 5 9h
003	N/A	10 / Day 5 10h	48794 021	34591 035	1 410597	1	1 94	53	497170000105	AA90478-01 497170000105 003 N/A P5 Plasma-1 10 / Day 5 10h
003	N/A	11 / Day 5 11h	56071 968	34730 338	1 614495	1	2 21	54	497170000106	AA90478-01 497170000106 003 N/A P5 Plasma-1 11 / Day 5 11h
003	N/A	12 / Day 5 12h	58442 344	36134 607	1 617351	1	2 22	55	497170000107	AA90478-01 497170000107 003 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	13 / Day 5 13h	48927 329	33009 696	1 482211	1	2 03	56	497170000108	AA90478-01 497170000108 003 N/A P5 Plasma-1 13 / Day 5 13h
003	N/A	14 / Day 5 14h	48554 113	34521 692	1 406481	1	1 93	57	497170000109	AA90478-01 497170000109 003 N/A P5 Plasma-1 14 / Day 5 14h
003	N/A	15 / Day 5 15h	44065 722	35011 591	1 258604	1	1 73	58	497170000110	AA90478-01 497170000110 003 N/A P5 Plasma-1 15 / Day 5 15h
003	N/A	16 / Day 5 16h	35520 095	31391 732	1 131511	1	1 56	59	497170000111	AA90478-01 497170000111 003 N/A P5 Plasma-1 16 / Day 5 16h
003	N/A	17 / Day 5 17h	36663 541	38269 584	0 958033	1	1 33	60	497170000112	AA90478-01 497170000112 003 N/A P5 Plasma-1 17 / Day 5 17h
003	N/A	18 / Day 5 18h	31765 612	35900 946	0 884813	1	1 23	61	497170000113	AA90478-01 497170000113 003 N/A P5 Plasma-1 18 / Day 5 18h
003	N/A	19 / Day 5 19h	29929 076	36213 852	0 826454	1	1 15	63	497170000114	AA90478-01 497170000114 003 N/A P5 Plasma-1 19 / Day 5 19h
005	N/A	1 / Day 5 1h	17557 459	35496 219	0 494629	1	0 705	64	497170000191	AA90478-01 497170000191 005 N/A P5 Plasma-1 1 / Day 5 1h
005	N/A	2 / Day 5 2h	23686 482	37613 57	0 629732	1	0 887	65	497170000192	AA90478-01 497170000192 005 N/A P5 Plasma-1 2 / Day 5 2h
005	N/A	3 / Day 5 3h	15768 139	35312 35	0 446533	1	0 641	66	497170000193	AA90478-01 497170000193 005 N/A P5 Plasma-1 3 / Day 5 3h
005	N/A	4 / Day 5 4h	25480 943	34970 584	0 728639	1	1 02	67	497170000194	AA90478-01 497170000194 005 N/A P5 Plasma-1 4 / Day 5 4h
005	N/A	5 / Day 5 5h	63317 55	36289 6	1 744785	1	2 39	68	497170000195	AA90478-01 497170000195 005 N/A P5 Plasma-1 5 / Day 5 5h
005	N/A	6 / Day 5 6h	93531 884	36887 758	2 535581	1	3 45	69	497170000196	AA90478-01 497170000196 005 N/A P5 Plasma-1 6 / Day 5 6h
005	N/A	7 / Day 5 7h	114456 697	32850 217	3 484199	1	4 73	70	497170000197	AA90478-01 497170000197 005 N/A P5 Plasma-1 7 / Day 5 7h
005	N/A	8 / Day 5 8h	127670 628	34647 239	3 684872	1	5 00	71	497170000198	AA90478-01 497170000198 005 N/A P5 Plasma-1 8 / Day 5 8h
005	N/A	9 / Day 5 9h	134271 503	39048 944	3 438544	1	4 66	72	497170000199	AA90478-01 497170000199 005 N/A P5 Plasma-1 9 / Day 5 9h
005	N/A	10 / Day 5 10h	115460 791	34745 005	3 323090	1	4 51	74	497170000200	AA90478-01 497170000200 005 N/A P5 Plasma-1 10 / Day 5 10h
005	N/A	11 / Day 5 11h	114780 096	38176 164	3 006591	1	4 08	75	497170000201	AA90478-01 497170000201 005 N/A P5 Plasma-1 11 / Day 5 11h
005	N/A	12 / Day 5 12h	119913 712	37124 557	3 230038	1	4 38	76	497170000202	AA90478-01 497170000202 005 N/A P5 Plasma-1 12 / Day 5 12h
005	N/A	13 / Day 5 13h	110977 519	34751 081	3 193498	1	4 34	77	497170000203	AA90478-01 497170000203 005 N/A P5 Plasma-1 13 / Day 5 13h
005	N/A	14 / Day 5 14h	102617 724	36162 061	2 837718	1	3 86	78	497170000204	AA90478-01 497170000204 005 N/A P5 Plasma-1 14 / Day 5 14h
005	N/A	15 / Day 5 15h	86425 123	33241 643	2 599905	1	3 54	79	497170000205	AA90478-01 497170000205 005 N/A P5 Plasma-1 15 / Day 5 15h
005	N/A	16 / Day 5 16h	82483 767	33437 106	2 466833	1	3 36	80	497170000206	AA90478-01 497170000206 005 N/A P5 Plasma-1 16 / Day 5 16h
005	N/A	17 / Day 5 17h	75615 276	34217 174	2 209863	1	3 01	81	497170000207	AA90478-01 497170000207 005 N/A P5 Plasma-1 17 / Day 5 17h
005	N/A	18 / Day 5 18h	66453 502	33262 54	1 997848	1	2 73	82	497170000208	AA90478-01 497170000208 005 N/A P5 Plasma-1 18 / Day 5 18h
005	N/A	19 / Day 5 19h	72051 691	36327 452	1 983395	1	2 71	83	497170000209	AA90478-01 497170000209 005 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 22
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	32264 094	0 000000	0 0666		0 0666	0 0
9	0 00		0	30431 716	0 000000	0 0666			
10	0 500	4 00000	10697 954	32257 622	0 331641	0 500	0 0		
11	1 00	1 00000	22148 304	32073 213	0 690555	0 969	-3 1		
12	2 00	0 250000	49749 3	31989 427	1 555179	2 10	5 0		
13	4 00	0 0625000	100111 952	32541 779	3 076413	4 09	2 3		
14	8 00	0 0156250	195422 761	31380 825	6 227458	8 20	2 5		
15	10 0	0 0100000	240836 91	31938 62	7 540617	9 92	-0 8		
16	20 0	0 00250000	508268 545	31973 315	15 896648	20 8	4 0		
17	40 0	0 000625000	990638 462	34081 575	29 066687	38 0	-5 0		
18	50 0	0 000400000	862182 968	23687 493	36 398236	47 6	-4 8		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 765567919

Intercept = -0 0510130902

R-Squared = 0 9981

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 22
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1269172 561	34894 863	36 371330	1	47 6		47 5		2 0
2	0 00	1339451 604	36265 256	36 934845	1	48 3				
3	0 00	1279916 889	36679 29	34 894811	1	45 6				
4	0 00	1263353 328	34570 131	36 544650	1	47 8				
5	0 00	1228930 822	34458 936	35 663632	1	46 7				
50	0 00	1195145 793	32650 689	36 603999	1	47 9				
51	0 00	1182586 476	32954 319	35 885629	1	46 9				
86	0 00	1186334 376	32504 468	36 497579	1	47 7				
87	0 00	1215825 605	32577 208	37 321357	1	48 8				
29	1 50	35862 601	33000 45	1 086731	1	1 49	-0 7	1 48	-1 3	1 4
62	1 50	33111 871	31085 694	1 065180	1	1 46	-2 7			
39	8 00	192026 73	34592 859	5 551051	1	7 32	-8 5	7 53	-5 9	3 9
73	8 00	173682 62	29564 938	5 874615	1	7 74	-3 3			
49	37 5	816407 303	29943 377	27 265038	1	35 7	-4 8	35 7	-4 8	0 0
84	37 5	824876 86	30239 447	27 278173	1	35 7	-4 8			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 22
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 5 1h	84388 421	29279 02	2 882215	1	3 83	20	497170000286	AA90478-01 497170000286 007 N/A P5 Plasma-1 1 / Day 5 1h
007	N/A	2 / Day 5 2h	89115 652	32279 227	2 760774	1	3 67	21	497170000287	AA90478-01 497170000287 007 N/A P5 Plasma-1 2 / Day 5 2h
007	N/A	3 / Day 5 3h	79843 188	29886 126	2 671580	1	3 56	22	497170000288	AA90478-01 497170000288 007 N/A P5 Plasma-1 3 / Day 5 3h
007	N/A	4 / Day 5 4h	90389 678	32822 968	2 753854	1	3 66	23	497170000289	AA90478-01 497170000289 007 N/A P5 Plasma-1 4 / Day 5 4h
007	N/A	5 / Day 5 5h	84833 471	30177 797	2 811122	1	3 74	24	497170000290	AA90478-01 497170000290 007 N/A P5 Plasma-1 5 / Day 5 5h
007	N/A	6 / Day 5 6h	88745 285	31004 563	2 862330	1	3 81	25	497170000291	AA90478-01 497170000291 007 N/A P5 Plasma-1 6 / Day 5 6h
007	N/A	7 / Day 5 7h	90086 949	30589 754	2 945004	1	3 91	26	497170000292	AA90478-01 497170000292 007 N/A P5 Plasma-1 7 / Day 5 7h
007	N/A	8 / Day 5 8h	90978 313	30645 743	2 968710	1	3 94	27	497170000293	AA90478-01 497170000293 007 N/A P5 Plasma-1 8 / Day 5 8h
007	N/A	9 / Day 5 9h	100092 065	31702 992	3 157180	1	4 19	28	497170000294	AA90478-01 497170000294 007 N/A P5 Plasma-1 9 / Day 5 9h
007	N/A	10 / Day 5 10h	105004 04	29708 201	3 534514	1	4 68	30	497170000295	AA90478-01 497170000295 007 N/A P5 Plasma-1 10 / Day 5 10h
007	N/A	11 / Day 5 11h	117194 206	30138 373	3 888538	1	5 15	31	497170000296	AA90478-01 497170000296 007 N/A P5 Plasma-1 11 / Day 5 11h
007	N/A	12 / Day 5 12h	121659 795	30078 008	4 044809	1	5 35	32	497170000297	AA90478-01 497170000297 007 N/A P5 Plasma-1 12 / Day 5 12h
007	N/A	13 / Day 5 13h	127478 073	32311 848	3 945242	1	5 22	33	497170000298	AA90478-01 497170000298 007 N/A P5 Plasma-1 13 / Day 5 13h
007	N/A	14 / Day 5 14h	132284 624	31742 4	4 167442	1	5 51	34	497170000299	AA90478-01 497170000299 007 N/A P5 Plasma-1 14 / Day 5 14h
007	N/A	15 / Day 5 15h	128698 151	30317 761	4 244975	1	5 61	35	497170000300	AA90478-01 497170000300 007 N/A P5 Plasma-1 15 / Day 5 15h
007	N/A	16 / Day 5 16h	114596 65	31154 396	3 678346	1	4 87	36	497170000301	AA90478-01 497170000301 007 N/A P5 Plasma-1 16 / Day 5 16h
007	N/A	17 / Day 5 17h	121727 308	32106 62	3 791346	1	5 02	37	497170000302	AA90478-01 497170000302 007 N/A P5 Plasma-1 17 / Day 5 17h
007	N/A	18 / Day 5 18h	107796 991	29953 063	3 598864	1	4 77	38	497170000303	AA90478-01 497170000303 007 N/A P5 Plasma-1 18 / Day 5 18h
007	N/A	19 / Day 5 19h	107472 874	29958 989	3 587333	1	4 75	40	497170000304	AA90478-01 497170000304 007 N/A P5 Plasma-1 19 / Day 5 19h
009	N/A	1 / Day 5 1h	72685 712	32179 836	2 258735	1	3 02	41	497170000381	AA90478-01 497170000381 009 N/A P5 Plasma-1 1 / Day 5 1h
009	N/A	2 / Day 5 2h	77215 352	32154 296	2 401401	1	3 20	42	497170000382	AA90478-01 497170000382 009 N/A P5 Plasma-1 2 / Day 5 2h
009	N/A	3 / Day 5 3h	74414 555	30129 074	2 469859	1	3 29	43	497170000383	AA90478-01 497170000383 009 N/A P5 Plasma-1 3 / Day 5 3h
009	N/A	4 / Day 5 4h	84815 805	32677 086	2 595574	1	3 46	44	497170000384	AA90478-01 497170000384 009 N/A P5 Plasma-1 4 / Day 5 4h
009	N/A	5 / Day 5 5h	89541 409	32311 171	2 771221	1	3 69	45	497170000385	AA90478-01 497170000385 009 N/A P5 Plasma-1 5 / Day 5 5h
009	N/A	6 / Day 5 6h	101994 859	32125 306	3 174907	1	4 21	46	497170000386	AA90478-01 497170000386 009 N/A P5 Plasma-1 6 / Day 5 6h
009	N/A	7 / Day 5 7h	98846 071	29594 114	3 340058	1	4 43	47	497170000387	AA90478-01 497170000387 009 N/A P5 Plasma-1 7 / Day 5 7h
009	N/A	8 / Day 5 8h	107695 66	30168 628	3 569790	1	4 73	48	497170000388	AA90478-01 497170000388 009 N/A P5 Plasma-1 8 / Day 5 8h
009	N/A	9 / Day 5 9h	109841 022	29356 344	3 741645	1	4 95	52	497170000389	AA90478-01 497170000389 009 N/A P5 Plasma-1 9 / Day 5 9h
009	N/A	10 / Day 5 10h	113539 955	28657 669	3 961940	1	5 24	53	497170000390	AA90478-01 497170000390 009 N/A P5 Plasma-1 10 / Day 5 10h
009	N/A	11 / Day 5 11h	123598 456	31259 936	3 953893	1	5 23	54	497170000391	AA90478-01 497170000391 009 N/A P5 Plasma-1 11 / Day 5 11h
009	N/A	12 / Day 5 12h	125194 897	28322 433	4 420344	1	5 84	55	497170000392	AA90478-01 497170000392 009 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 5 13h	138503 395	33967 656	4 077508	1	5 39	56	497170000393	AA90478-01 497170000393 009 N/A P5 Plasma-1 13 / Day 5 13h
009	N/A	14 / Day 5 14h	125411 827	31844 819	3 938218	1	5 21	57	497170000394	AA90478-01 497170000394 009 N/A P5 Plasma-1 14 / Day 5 14h
009	N/A	15 / Day 5 15h	126993 649	27709 494	4 583037	1	6 05	58	497170000395	AA90478-01 497170000395 009 N/A P5 Plasma-1 15 / Day 5 15h
009	N/A	16 / Day 5 16h	118166 694	29507 808	4 004591	1	5 30	59	497170000396	AA90478-01 497170000396 009 N/A P5 Plasma-1 16 / Day 5 16h
009	N/A	17 / Day 5 17h	116902 514	29388 446	3 977839	1	5 26	60	497170000397	AA90478-01 497170000397 009 N/A P5 Plasma-1 17 / Day 5 17h
009	N/A	18 / Day 5 18h	100198 287	30668 663	3 267123	1	4 33	61	497170000398	AA90478-01 497170000398 009 N/A P5 Plasma-1 18 / Day 5 18h
009	N/A	19 / Day 5 19h	101353 649	31022 168	3 267136	1	4 33	63	497170000399	AA90478-01 497170000399 009 N/A P5 Plasma-1 19 / Day 5 19h
011	N/A	1 / Day 5 1h	14289 687	31250 977	0 457256	1	0 664	64	497170000476	AA90478-01 497170000476 011 N/A P5 Plasma-1 1 / Day 5 1h
011	N/A	2 / Day 5 2h	7164 795	31726 254	0 225832	1	BLQ<(0 500)	65	497170000477	AA90478-01 497170000477 011 N/A P5 Plasma-1 2 / Day 5 2h
011	N/A	3 / Day 5 3h	8007 002	31836 344	0 251505	1	BLQ<(0 500)	66	497170000478	AA90478-01 497170000478 011 N/A P5 Plasma-1 3 / Day 5 3h
011	N/A	4 / Day 5 4h	9287 083	31120 727	0 298421	1	BLQ<(0 500)	67	497170000479	AA90478-01 497170000479 011 N/A P5 Plasma-1 4 / Day 5 4h
011	N/A	5 / Day 5 5h	10400 461	30230 844	0 344035	1	0 516	68	497170000480	AA90478-01 497170000480 011 N/A P5 Plasma-1 5 / Day 5 5h
011	N/A	6 / Day 5 6h	13135 17	28537 745	0 460274	1	0 668	69	497170000481	AA90478-01 497170000481 011 N/A P5 Plasma-1 6 / Day 5 6h
011	N/A	7 / Day 5 7h	13605 977	26984 202	0 504220	1	0 725	70	497170000482	AA90478-01 497170000482 011 N/A P5 Plasma-1 7 / Day 5 7h
011	N/A	8 / Day 5 8h	14467 152	28125 247	0 514383	1	0 739	71	497170000483	AA90478-01 497170000483 011 N/A P5 Plasma-1 8 / Day 5 8h
011	N/A	9 / Day 5 9h	17356 974	26383 802	0 657865	1	0 926	72	497170000484	AA90478-01 497170000484 011 N/A P5 Plasma-1 9 / Day 5 9h
011	N/A	10 / Day 5 10h	13410 713	29401 55	0 456123	1	0 662	74	497170000485	AA90478-01 497170000485 011 N/A P5 Plasma-1 10 / Day 5 10h
011	N/A	11 / Day 5 11h	13781 598	29334 147	0 469814	1	0 680	75	497170000486	AA90478-01 497170000486 011 N/A P5 Plasma-1 11 / Day 5 11h
011	N/A	12 / Day 5 12h	11965 601	26974 898	0 443583	1	0 646	76	497170000487	AA90478-01 497170000487 011 N/A P5 Plasma-1 12 / Day 5 12h
011	N/A	13 / Day 5 13h	12957 788	28524 243	0 454273	1	0 660	77	497170000488	AA90478-01 497170000488 011 N/A P5 Plasma-1 13 / Day 5 13h
011	N/A	14 / Day 5 14h	15236 428	29495 032	0 516576	1	0 741	78	497170000489	AA90478-01 497170000489 011 N/A P5 Plasma-1 14 / Day 5 14h
011	N/A	15 / Day 5 15h	17882 162	29588 941	0 604353	1	0 856	79	497170000490	AA90478-01 497170000490 011 N/A P5 Plasma-1 15 / Day 5 15h
011	N/A	16 / Day 5 16h	13101 58	27629 279	0 474192	1	0 686	80	497170000491	AA90478-01 497170000491 011 N/A P5 Plasma-1 16 / Day 5 16h
011	N/A	17 / Day 5 17h	10885 139	25632 736	0 424658	1	0 621	81	497170000492	AA90478-01 497170000492 011 N/A P5 Plasma-1 17 / Day 5 17h
011	N/A	18 / Day 5 18h	12093 004	29285 53	0 412934	1	0 606	82	497170000493	AA90478-01 497170000493 011 N/A P5 Plasma-1 18 / Day 5 18h
011	N/A	19 / Day 5 19h	10065 081	28304 329	0 355602	1	0 531	83	497170000494	AA90478-01 497170000494 011 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 24
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	43545 952	0 000000	0 0272		0 0272	0 0
9	0 00		0	39512 603	0 000000	0 0272			
10	0 500	4 00000	14096 339	43708 875	0 322505	0 496	-0 8		
11	1 00	1 00000	25403 193	38140 98	0 666034	0 996	-0 4		
12	2 00	0 250000	60209 637	43344 022	1 389111	2 05	2 5		
13	4 00	0 0625000	109957 967	39784 903	2 763811	4 05	1 3		
14	8 00	0 0156250	250712 339	44619 05	5 618953	8 20	2 5		
15	10 0	0 0100000	290151 825	40686 758	7 131358	10 4	4 0		
16	20 0	0 00250000	550736 289	40581 972	13 570959	19 8	-1 0		
17	40 0	0 000625000	1068993 27	39545 74	27 031819	39 3	-1 8		
18	50 0	0 000400000	1354255 675	41903 198	32 318671	47 0	-6 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 687644907

Intercept = -0 0186806251

R-Squared = 0 9988

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 24
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1217549 081	37247 208	32 688331	1	47 6		48 0		1 3
2	0 00	1308857 385	40142 81	32 605027	1	47 4				
3	0 00	1331839 622	39781 378	33 478972	1	48 7				
4	0 00	1351871 367	41091 742	32 898858	1	47 9				
5	0 00	1335212 957	40559 069	32 920207	1	47 9				
50	0 00	1295032 548	38776 852	33 397052	1	48 6				
51	0 00	1341337 94	40393 873	33 206470	1	48 3				
86	0 00	1291905 47	40149 093	32 177700	1	46 8				
87	0 00	1273558 695	38107 169	33 420449	1	48 6				
29	1 50	38864 866	39409 01	0 986192	1	1 46	-2 7	1 45	-3 3	1 0
62	1 50	39007 815	40023 511	0 974623	1	1 44	-4 0			
39	8 00	207641 035	39984 103	5 193090	1	7 58	-5 3	7 52	-6 0	1 1
73	8 00	229631 785	44941 596	5 109560	1	7 46	-6 8			
49	37 5	908517 49	37506 125	24 223177	1	35 3	-5 9	35 3	-5 9	0 2
84	37 5	946393 628	39140 177	24 179595	1	35 2	-6 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 24
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
018	N/A	1 / Day 5 1h	16746 847	42410 802	0 394872	1	0 601	20	497170000856	AA90478-01 497170000856 018 N/A P5 Plasma-1 1 / Day 5 1h
018	N/A	2 / Day 5 2h	15595 959	40159 058	0 388355	1	0 592	21	497170000857	AA90478-01 497170000857 018 N/A P5 Plasma-1 2 / Day 5 2h
018	N/A	3 / Day 5 3h	17641 76	43581 548	0 404799	1	0 616	22	497170000858	AA90478-01 497170000858 018 N/A P5 Plasma-1 3 / Day 5 3h
018	N/A	4 / Day 5 4h	20144 667	43187 922	0 466442	1	0 705	23	497170000859	AA90478-01 497170000859 018 N/A P5 Plasma-1 4 / Day 5 4h
018	N/A	5 / Day 5 5h	28852 405	42057 643	0 686020	1	1 02	24	497170000860	AA90478-01 497170000860 018 N/A P5 Plasma-1 5 / Day 5 5h
018	N/A	6 / Day 5 6h	44949 977	44397 971	1 012433	1	1 50	25	497170000861	AA90478-01 497170000861 018 N/A P5 Plasma-1 6 / Day 5 6h
018	N/A	7 / Day 5 7h	52386 39	38672 77	1 354607	1	2 00	26	497170000862	AA90478-01 497170000862 018 N/A P5 Plasma-1 7 / Day 5 7h
018	N/A	8 / Day 5 8h	54781 597	40509 549	1 352313	1	1 99	27	497170000863	AA90478-01 497170000863 018 N/A P5 Plasma-1 8 / Day 5 8h
018	N/A	9 / Day 5 9h	61767 032	38099 461	1 621205	1	2 38	28	497170000864	AA90478-01 497170000864 018 N/A P5 Plasma-1 9 / Day 5 9h
018	N/A	10 / Day 5 10h	61232 79	37736 095	1 622658	1	2 39	30	497170000865	AA90478-01 497170000865 018 N/A P5 Plasma-1 10 / Day 5 10h
018	N/A	11 / Day 5 11h	63165 445	44301 279	1 425815	1	2 10	31	497170000866	AA90478-01 497170000866 018 N/A P5 Plasma-1 11 / Day 5 11h
018	N/A	12 / Day 5 12h	54790 554	41691 61	1 314187	1	1 94	32	497170000867	AA90478-01 497170000867 018 N/A P5 Plasma-1 12 / Day 5 12h
018	N/A	13 / Day 5 13h	52964 108	43212 414	1 225669	1	1 81	33	497170000868	AA90478-01 497170000868 018 N/A P5 Plasma-1 13 / Day 5 13h
018	N/A	14 / Day 5 14h	40957 925	37710 126	1 086125	1	1 61	34	497170000869	AA90478-01 497170000869 018 N/A P5 Plasma-1 14 / Day 5 14h
018	N/A	15 / Day 5 15h	37779 319	37829 55	0 998672	1	1 48	35	497170000870	AA90478-01 497170000870 018 N/A P5 Plasma-1 15 / Day 5 15h
018	N/A	16 / Day 5 16h	36548 443	38449 753	0 950551	1	1 41	36	497170000871	AA90478-01 497170000871 018 N/A P5 Plasma-1 16 / Day 5 16h
018	N/A	17 / Day 5 17h	35291 206	38728 236	0 911253	1	1 35	37	497170000872	AA90478-01 497170000872 018 N/A P5 Plasma-1 17 / Day 5 17h
018	N/A	18 / Day 5 18h	30734 933	37746 167	0 814253	1	1 21	38	497170000873	AA90478-01 497170000873 018 N/A P5 Plasma-1 18 / Day 5 18h
018	N/A	19 / Day 5 19h	33214 924	39994 957	0 830478	1	1 23	40	497170000874	AA90478-01 497170000874 018 N/A P5 Plasma-1 19 / Day 5 19h
019	N/A	1 / Day 5 1h	21969 852	42169 624	0 520988	1	0 785	41	497170000951	AA90478-01 497170000951 019 N/A P5 Plasma-1 1 / Day 5 1h
019	N/A	2 / Day 5 2h	19092 882	42481 545	0 449439	1	0 681	42	497170000952	AA90478-01 497170000952 019 N/A P5 Plasma-1 2 / Day 5 2h
019	N/A	3 / Day 5 3h	21318 464	38541 638	0 553128	1	0 832	43	497170000953	AA90478-01 497170000953 019 N/A P5 Plasma-1 3 / Day 5 3h
019	N/A	4 / Day 5 4h	34607 596	39298 051	0 880644	1	1 31	44	497170000954	AA90478-01 497170000954 019 N/A P5 Plasma-1 4 / Day 5 4h
019	N/A	5 / Day 5 5h	85034 165	38828 013	2 190021	1	3 21	45	497170000955	AA90478-01 497170000955 019 N/A P5 Plasma-1 5 / Day 5 5h
019	N/A	6 / Day 5 6h	196117 732	44082 189	4 448911	1	6 50	46	497170000956	AA90478-01 497170000956 019 N/A P5 Plasma-1 6 / Day 5 6h
019	N/A	7 / Day 5 7h	202197 757	44351 55	4 558978	1	6 66	47	497170000957	AA90478-01 497170000957 019 N/A P5 Plasma-1 7 / Day 5 7h
019	N/A	8 / Day 5 8h	159835 869	44404 48	3 599544	1	5 26	48	497170000958	AA90478-01 497170000958 019 N/A P5 Plasma-1 8 / Day 5 8h
019	N/A	9 / Day 5 9h	119485 023	43403 595	2 752883	1	4 03	52	497170000959	AA90478-01 497170000959 019 N/A P5 Plasma-1 9 / Day 5 9h
019	N/A	10 / Day 5 10h	106780 246	42229 365	2 528578	1	3 70	53	497170000960	AA90478-01 497170000960 019 N/A P5 Plasma-1 10 / Day 5 10h
019	N/A	11 / Day 5 11h	96864 202	40059 103	2 418032	1	3 54	54	497170000961	AA90478-01 497170000961 019 N/A P5 Plasma-1 11 / Day 5 11h
019	N/A	12 / Day 5 12h	82578 687	32228 25	2 562308	1	3 75	55	497170000962	AA90478-01 497170000962 019 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	13 / Day 5 13h	98324 081	39019 884	2 519846	1	3 69	56	497170000963	AA90478-01 497170000963 019 N/A P5 Plasma-1 13 / Day 5 13h
019	N/A	14 / Day 5 14h	84667 254	37892 318	2 234417	1	3 28	57	497170000964	AA90478-01 497170000964 019 N/A P5 Plasma-1 14 / Day 5 14h
019	N/A	15 / Day 5 15h	76417 569	39826 957	1 918740	1	2 82	58	497170000965	AA90478-01 497170000965 019 N/A P5 Plasma-1 15 / Day 5 15h
019	N/A	16 / Day 5 16h	85051 353	43528 158	1 953939	1	2 87	59	497170000966	AA90478-01 497170000966 019 N/A P5 Plasma-1 16 / Day 5 16h
019	N/A	17 / Day 5 17h	75472 475	39123 526	1 929082	1	2 83	60	497170000967	AA90478-01 497170000967 019 N/A P5 Plasma-1 17 / Day 5 17h
019	N/A	18 / Day 5 18h	66925 54	37962 819	1 762923	1	2 59	61	497170000968	AA90478-01 497170000968 019 N/A P5 Plasma-1 18 / Day 5 18h
019	N/A	19 / Day 5 19h	75180 546	42452 33	1 770940	1	2 60	63	497170000969	AA90478-01 497170000969 019 N/A P5 Plasma-1 19 / Day 5 19h
021	N/A	1 / Day 5 1h	9968 844	38400 197	0 259604	1	BLQ<(0 500)	64	497170001046	AA90478-01 497170001046 021 N/A P5 Plasma-1 1 / Day 5 1h
021	N/A	2 / Day 5 2h	9448 272	37785 917	0 250047	1	BLQ<(0 500)	65	497170001047	AA90478-01 497170001047 021 N/A P5 Plasma-1 2 / Day 5 2h
021	N/A	3 / Day 5 3h	12999 637	38158 978	0 340670	1	0 523	66	497170001048	AA90478-01 497170001048 021 N/A P5 Plasma-1 3 / Day 5 3h
021	N/A	4 / Day 5 4h	34008 749	38968 381	0 872727	1	1 30	67	497170001049	AA90478-01 497170001049 021 N/A P5 Plasma-1 4 / Day 5 4h
021	N/A	5 / Day 5 5h	65521 065	42149 397	1 554496	1	2 29	68	497170001050	AA90478-01 497170001050 021 N/A P5 Plasma-1 5 / Day 5 5h
021	N/A	6 / Day 5 6h	118236 931	38713 098	3 054184	1	4 47	69	497170001051	AA90478-01 497170001051 021 N/A P5 Plasma-1 6 / Day 5 6h
021	N/A	7 / Day 5 7h	219373 295	41556 702	5 278891	1	7 70	70	497170001052	AA90478-01 497170001052 021 N/A P5 Plasma-1 7 / Day 5 7h
021	N/A	8 / Day 5 8h	247543 699	44659 474	5 542916	1	8 09	71	497170001053	AA90478-01 497170001053 021 N/A P5 Plasma-1 8 / Day 5 8h
021	N/A	9 / Day 5 9h	212720 734	40591 706	5 240498	1	7 65	72	497170001054	AA90478-01 497170001054 021 N/A P5 Plasma-1 9 / Day 5 9h
021	N/A	10 / Day 5 10h	270864 403	42012 211	6 447278	1	9 40	74	497170001055	AA90478-01 497170001055 021 N/A P5 Plasma-1 10 / Day 5 10h
021	N/A	11 / Day 5 11h	221196 261	40608 407	5 447056	1	7 95	75	497170001056	AA90478-01 497170001056 021 N/A P5 Plasma-1 11 / Day 5 11h
021	N/A	12 / Day 5 12h	157730 045	38612 955	4 084900	1	5 97	76	497170001057	AA90478-01 497170001057 021 N/A P5 Plasma-1 12 / Day 5 12h
021	N/A	13 / Day 5 13h	130120 255	39438 448	3 299325	1	4 83	77	497170001058	AA90478-01 497170001058 021 N/A P5 Plasma-1 13 / Day 5 13h
021	N/A	14 / Day 5 14h	114214 647	38351 32	2 978115	1	4 36	78	497170001059	AA90478-01 497170001059 021 N/A P5 Plasma-1 14 / Day 5 14h
021	N/A	15 / Day 5 15h	91283 331	38060 822	2 398354	1	3 51	79	497170001060	AA90478-01 497170001060 021 N/A P5 Plasma-1 15 / Day 5 15h
021	N/A	16 / Day 5 16h	80599 504	37691 902	2 138377	1	3 14	80	497170001061	AA90478-01 497170001061 021 N/A P5 Plasma-1 16 / Day 5 16h
021	N/A	17 / Day 5 17h	79093 618	38754 77	2 040874	1	3 00	81	497170001062	AA90478-01 497170001062 021 N/A P5 Plasma-1 17 / Day 5 17h
021	N/A	18 / Day 5 18h	83153 715	43587 719	1 907733	1	2 80	82	497170001063	AA90478-01 497170001063 021 N/A P5 Plasma-1 18 / Day 5 18h
021	N/A	19 / Day 5 19h	70783 805	37081 416	1 908875	1	2 80	83	497170001064	AA90478-01 497170001064 021 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 25
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	56660 913	0 000000	0 0486		0 0486	0 0
9	0 00		0	52963 983	0 000000	0 0486			
10	0 500	4 00000	18614 42	59280 19	0 314007	0 484	-3 2		
11	1 00	1 00000	38082 432	52860 596	0 720431	1 05	5 0		
12	2 00	0 250000	77592 831	53723 357	1 444303	2 05	2 5		
13	4 00	0 0625000	158975 921	54683 482	2 907202	4 08	2 0		
14	8 00	0 0156250	340316 878	57074 578	5 962670	8 31	3 9		
15	10 0	0 0100000	417251 401	58448 473	7 138790	9 94	-0 6		
16	20 0	0 00250000	815520 016	59013 394	13 819236	19 2	-4 0		
17	40 0	0 000625000	1545106 715	55217 196	27 982347	38 8	-3 0		
18	50 0	0 000400000	2053451 084	58234 145	35 261977	48 9	-2 2		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 721674119

Intercept = -0 0350607624

R-Squared = 0 9985

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 25
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1988516 907	57277 194	34 717429	1	48 2		48 2		1 5
2	0 00	1997732 283	57712 351	34 615334	1	48 0				
3	0 00	2036361 483	58481 069	34 820866	1	48 3				
4	0 00	2047927 991	59289 985	34 540876	1	47 9				
5	0 00	1965437 867	55021 859	35 721037	1	49 5				
50	0 00	2064538 191	59669 162	34 599752	1	48 0				
51	0 00	2115335 204	62497 696	33 846611	1	46 9				
86	0 00	2180514 104	62841 607	34 698573	1	48 1				
87	0 00	2195467 706	62209 523	35 291505	1	49 0				
29	1 50	55725 441	59134 997	0 942343	1	1 35	-10 0	1 38	-8 0	3 1
62	1 50	63577 079	64849 313	0 980382	1	1 41	-6 0			
39	8 00	330039 217	60762 504	5 431626	1	7 58	-5 3	7 70	-3 8	2 1
73	8 00	358263 245	63924 641	5 604462	1	7 81	-2 4			
49	37 5	1480963 863	59864 599	24 738558	1	34 3	-8 5	34 5	-8 0	0 6
84	37 5	1588176 148	63612 462	24 966431	1	34 6	-7 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 25
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
024	N/A	1 / Day 5 1h	72865 109	54784 848	1 330023	1	1 89	20	497170001141	AA90478-01 497170001141 024 N/A P5 Plasma-1 1 / Day 5 1h
024	N/A	2 / Day 5 2h	67824 078	58484 804	1 159687	1	1 66	21	497170001142	AA90478-01 497170001142 024 N/A P5 Plasma-1 2 / Day 5 2h
024	N/A	3 / Day 5 3h	68190 753	51826 817	1 315743	1	1 87	22	497170001143	AA90478-01 497170001143 024 N/A P5 Plasma-1 3 / Day 5 3h
024	N/A	4 / Day 5 4h	79751 083	64639 083	1 233790	1	1 76	23	497170001144	AA90478-01 497170001144 024 N/A P5 Plasma-1 4 / Day 5 4h
024	N/A	5 / Day 5 5h	80120 632	51741 382	1 548483	1	2 19	24	497170001145	AA90478-01 497170001145 024 N/A P5 Plasma-1 5 / Day 5 5h
024	N/A	6 / Day 5 6h	97786 629	57653 326	1 696114	1	2 40	25	497170001146	AA90478-01 497170001146 024 N/A P5 Plasma-1 6 / Day 5 6h
024	N/A	7 / Day 5 7h	104611 847	57296 214	1 825807	1	2 58	26	497170001147	AA90478-01 497170001147 024 N/A P5 Plasma-1 7 / Day 5 7h
024	N/A	8 / Day 5 8h	113132 482	55770 479	2 028537	1	2 86	27	497170001148	AA90478-01 497170001148 024 N/A P5 Plasma-1 8 / Day 5 8h
024	N/A	9 / Day 5 9h	133033 14	58088 91	2 290164	1	3 22	28	497170001149	AA90478-01 497170001149 024 N/A P5 Plasma-1 9 / Day 5 9h
024	N/A	10 / Day 5 10h	141569 677	58596 398	2 416013	1	3 40	30	497170001150	AA90478-01 497170001150 024 N/A P5 Plasma-1 10 / Day 5 10h
024	N/A	11 / Day 5 11h	138119 216	57412 553	2 405732	1	3 38	31	497170001151	AA90478-01 497170001151 024 N/A P5 Plasma-1 11 / Day 5 11h
024	N/A	12 / Day 5 12h	116729 227	54863 737	2 127621	1	3 00	32	497170001152	AA90478-01 497170001152 024 N/A P5 Plasma-1 12 / Day 5 12h
024	N/A	13 / Day 5 13h	116957 492	54942 108	2 128741	1	3 00	33	497170001153	AA90478-01 497170001153 024 N/A P5 Plasma-1 13 / Day 5 13h
024	N/A	14 / Day 5 14h	92799 538	56614 112	1 639159	1	2 32	34	497170001154	AA90478-01 497170001154 024 N/A P5 Plasma-1 14 / Day 5 14h
024	N/A	15 / Day 5 15h	102015 636	58739 13	1 736758	1	2 46	35	497170001155	AA90478-01 497170001155 024 N/A P5 Plasma-1 15 / Day 5 15h
024	N/A	16 / Day 5 16h	109340 249	59687 995	1 831863	1	2 59	36	497170001156	AA90478-01 497170001156 024 N/A P5 Plasma-1 16 / Day 5 16h
024	N/A	17 / Day 5 17h	101078 249	57473 891	1 758681	1	2 49	37	497170001157	AA90478-01 497170001157 024 N/A P5 Plasma-1 17 / Day 5 17h
024	N/A	18 / Day 5 18h	88418 653	58226 339	1 518534	1	2 15	38	497170001158	AA90478-01 497170001158 024 N/A P5 Plasma-1 18 / Day 5 18h
024	N/A	19 / Day 5 19h	82722 528	60652 163	1 363884	1	1 94	40	497170001159	AA90478-01 497170001159 024 N/A P5 Plasma-1 19 / Day 5 19h
026	N/A	1 / Day 5 1h	42670 074	61026 747	0 699203	1	1 02	41	497170001236	AA90478-01 497170001236 026 N/A P5 Plasma-1 1 / Day 5 1h
026	N/A	2 / Day 5 2h	37785 33	55573 453	0 679917	1	0 991	42	497170001237	AA90478-01 497170001237 026 N/A P5 Plasma-1 2 / Day 5 2h
026	N/A	3 / Day 5 3h	30084 694	57101 879	0 526860	1	0 779	43	497170001238	AA90478-01 497170001238 026 N/A P5 Plasma-1 3 / Day 5 3h
026	N/A	4 / Day 5 4h	42478 21	53376 339	0 795825	1	1 15	44	497170001239	AA90478-01 497170001239 026 N/A P5 Plasma-1 4 / Day 5 4h
026	N/A	5 / Day 5 5h	53419 928	53202 023	1 004096	1	1 44	45	497170001240	AA90478-01 497170001240 026 N/A P5 Plasma-1 5 / Day 5 5h
026	N/A	6 / Day 5 6h	56683 839	52412 833	1 081488	1	1 55	46	497170001241	AA90478-01 497170001241 026 N/A P5 Plasma-1 6 / Day 5 6h
026	N/A	7 / Day 5 7h	64312 369	56206 27	1 144221	1	1 63	47	497170001242	AA90478-01 497170001242 026 N/A P5 Plasma-1 7 / Day 5 7h
026	N/A	8 / Day 5 8h	73163 352	54081 671	1 352831	1	1 92	48	497170001243	AA90478-01 497170001243 026 N/A P5 Plasma-1 8 / Day 5 8h
026	N/A	9 / Day 5 9h	79479 752	62266 516	1 276445	1	1 82	52	497170001244	AA90478-01 497170001244 026 N/A P5 Plasma-1 9 / Day 5 9h
026	N/A	10 / Day 5 10h	67862 366	61893 526	1 096437	1	1 57	53	497170001245	AA90478-01 497170001245 026 N/A P5 Plasma-1 10 / Day 5 10h
026	N/A	11 / Day 5 11h	58010 408	61489 211	0 943424	1	1 36	54	497170001246	AA90478-01 497170001246 026 N/A P5 Plasma-1 11 / Day 5 11h
026	N/A	12 / Day 5 12h	54470 888	65782 514	0 828045	1	1 20	55	497170001247	AA90478-01 497170001247 026 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
026	N/A	13 / Day 5 13h	55374 459	64433 252	0 859408	1	1 24	56	497170001248	AA90478-01 497170001248 026 N/A P5 Plasma-1 13 / Day 5 13h
026	N/A	14 / Day 5 14h	55334 688	64932 479	0 852188	1	1 23	57	497170001249	AA90478-01 497170001249 026 N/A P5 Plasma-1 14 / Day 5 14h
026	N/A	15 / Day 5 15h	49906 091	61945 725	0 805642	1	1 16	58	497170001250	AA90478-01 497170001250 026 N/A P5 Plasma-1 15 / Day 5 15h
026	N/A	16 / Day 5 16h	56507 512	62604 354	0 902613	1	1 30	59	497170001251	AA90478-01 497170001251 026 N/A P5 Plasma-1 16 / Day 5 16h
026	N/A	17 / Day 5 17h	52569 896	62325 717	0 843470	1	1 22	60	497170001252	AA90478-01 497170001252 026 N/A P5 Plasma-1 17 / Day 5 17h
026	N/A	18 / Day 5 18h	65011 905	58334 125	1 114475	1	1 59	61	497170001253	AA90478-01 497170001253 026 N/A P5 Plasma-1 18 / Day 5 18h
026	N/A	19 / Day 5 19h	48923 848	63878 873	0 765885	1	1 11	63	497170001254	AA90478-01 497170001254 026 N/A P5 Plasma-1 19 / Day 5 19h
028	N/A	1 / Day 5 1h	141618 005	62620 281	2 261536	1	3 18	64	497170001331	AA90478-01 497170001331 028 N/A P5 Plasma-1 1 / Day 5 1h
028	N/A	2 / Day 5 2h	134930 451	61565 904	2 191642	1	3 09	65	497170001332	AA90478-01 497170001332 028 N/A P5 Plasma-1 2 / Day 5 2h
028	N/A	3 / Day 5 3h	136576 964	61271 587	2 229042	1	3 14	66	497170001333	AA90478-01 497170001333 028 N/A P5 Plasma-1 3 / Day 5 3h
028	N/A	4 / Day 5 4h	157417 066	60501 896	2 601853	1	3 65	67	497170001334	AA90478-01 497170001334 028 N/A P5 Plasma-1 4 / Day 5 4h
028	N/A	5 / Day 5 5h	143624 665	62463 503	2 299337	1	3 23	68	497170001335	AA90478-01 497170001335 028 N/A P5 Plasma-1 5 / Day 5 5h
028	N/A	6 / Day 5 6h	130534 843	56999 966	2 290086	1	3 22	69	497170001336	AA90478-01 497170001336 028 N/A P5 Plasma-1 6 / Day 5 6h
028	N/A	7 / Day 5 7h	152851 839	59587 328	2 565174	1	3 60	70	497170001337	AA90478-01 497170001337 028 N/A P5 Plasma-1 7 / Day 5 7h
028	N/A	8 / Day 5 8h	168265 699	61044 268	2 756454	1	3 87	71	497170001338	AA90478-01 497170001338 028 N/A P5 Plasma-1 8 / Day 5 8h
028	N/A	9 / Day 5 9h	164205 663	58817 098	2 791802	1	3 92	72	497170001339	AA90478-01 497170001339 028 N/A P5 Plasma-1 9 / Day 5 9h
028	N/A	10 / Day 5 10h	156667 453	61209 703	2 559520	1	3 60	74	497170001340	AA90478-01 497170001340 028 N/A P5 Plasma-1 10 / Day 5 10h
028	N/A	11 / Day 5 11h	172410 931	58953 379	2 924530	1	4 10	75	497170001341	AA90478-01 497170001341 028 N/A P5 Plasma-1 11 / Day 5 11h
028	N/A	12 / Day 5 12h	216366 63	66298 504	3 263522	1	4 57	76	497170001342	AA90478-01 497170001342 028 N/A P5 Plasma-1 12 / Day 5 12h
028	N/A	13 / Day 5 13h	173994 78	56234 847	3 094074	1	4 34	77	497170001343	AA90478-01 497170001343 028 N/A P5 Plasma-1 13 / Day 5 13h
028	N/A	14 / Day 5 14h	141059 514	57942 151	2 434489	1	3 42	78	497170001344	AA90478-01 497170001344 028 N/A P5 Plasma-1 14 / Day 5 14h
028	N/A	15 / Day 5 15h	115765 709	45384 892	2 550754	1	3 58	79	497170001345	AA90478-01 497170001345 028 N/A P5 Plasma-1 15 / Day 5 15h
028	N/A	16 / Day 5 16h	126094 392	49620 214	2 541190	1	3 57	80	497170001346	AA90478-01 497170001346 028 N/A P5 Plasma-1 16 / Day 5 16h
028	N/A	17 / Day 5 17h	144019 849	61983 19	2 323531	1	3 27	81	497170001347	AA90478-01 497170001347 028 N/A P5 Plasma-1 17 / Day 5 17h
028	N/A	18 / Day 5 18h	164001 997	60123 841	2 727737	1	3 83	82	497170001348	AA90478-01 497170001348 028 N/A P5 Plasma-1 18 / Day 5 18h
028	N/A	19 / Day 5 19h	134209 761	56876 364	2 359675	1	3 32	83	497170001349	AA90478-01 497170001349 028 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 26
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		2401 864	38226 063	0 062833	0 00736		-0 00952	-251 1
9	0 00		1526 492	38937 57	0 039204	-0 0264			
10	0 500	4 00000	17589 666	43336 722	0 405884	0 497	-0 6		
11	1 00	1 00000	28068 63	36430 674	0 770467	1 02	2 0		
12	2 00	0 250000	57138 051	39889 891	1 432394	1 96	-2 0		
13	4 00	0 0625000	105468 999	37295 483	2 827930	3 96	-1 0		
14	8 00	0 0156250	225890 848	37908 065	5 958913	8 43	5 4		
15	10 0	0 0100000	285272 183	40635 18	7 020325	9 94	-0 6		
16	20 0	0 00250000	617325 49	43880 077	14 068469	20 0	0 0		
17	40 0	0 000625000	1093235 98	39904 414	27 396367	39 0	-2 5		
18	50 0	0 000400000	1361754 576	39075 352	34 849451	49 7	-0 6		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 700321338

Intercept = 0 0576758542

R-Squared = 0 9993

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 26
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1343205 121	40296 999	33 332634	1	47 5		48 3		1 3
2	0 00	1243308 9	36014 737	34 522226	1	49 2				
3	0 00	1277019 285	38218 096	33 413995	1	47 6				
4	0 00	1300673 667	37517 738	34 668233	1	49 4				
5	0 00	1331083 377	39530 277	33 672503	1	48 0				
48	0 00	1327113 435	39005 685	34 023590	1	48 5				
49	0 00	1294684 705	38045 513	34 029892	1	48 5				
89	0 00	1346315 233	39900 431	33 741872	1	48 1				
90	0 00	1286526 078	38013 54	33 843890	1	48 2				
33	1 50	39305 471	35580 098	1 104704	1	1 50	0 0	1 47	-2 0	2 9
65	1 50	40926 76	38482 346	1 063520	1	1 44	-4 0			
40	8 00	205961 833	37417 764	5 504386	1	7 78	-2 8	8 00	0 0	3 9
72	8 00	226305 998	38900 256	5 817597	1	8 22	2 8			
47	37 5	971501 303	38765 609	25 060907	1	35 7	-4 8	35 7	-4 8	0 0
87	37 5	951447 372	37950 044	25 071048	1	35 7	-4 8			
26	195	485673 407	32440 454	14 971227	10	213	9 2	198	1 5	6 8
57	195	576140 036	42314 368	13 615707	10	194	-0 5			
80	195	510780 49	38877 279	13 138278	10	187	-4 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 26
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 1 1h	0	36995 464	*0 000000	10	*BLQ<(5 00)	20	497170000077	AA90478-01 497170000077 001 N/A P1 Plasma-1 1 / Day 1 1h
001	N/A	2 / Day 1 2h	1986 183	36077 014	*0 055054	10	*BLQ<(5 00)	21	497170000078	AA90478-01 497170000078 001 N/A P1 Plasma-1 2 / Day 1 2h
001	N/A	3 / Day 1 3h	78049 566	40396 059	1 932108	10	26 8	22	497170000079	AA90478-01 497170000079 001 N/A P1 Plasma-1 3 / Day 1 3h
001	N/A	4 / Day 1 4h	109552 323	44121 745	2 482955	10	34 6	23	497170000080	AA90478-01 497170000080 001 N/A P1 Plasma-1 4 / Day 1 4h
001	N/A	5 / Day 1 5h	87168 403	39824 986	2 188787	10	30 4	24	497170000081	AA90478-01 497170000081 001 N/A P1 Plasma-1 5 / Day 1 5h
001	N/A	6 / Day 1 6h	61535 575	33457 633	1 839209	10	25 4	25	497170000082	AA90478-01 497170000082 001 N/A P1 Plasma-1 6 / Day 1 6h
001	N/A	7 / Day 1 7h	41203 863	38194 127	1 078801	10	14 6	27	497170000083	AA90478-01 497170000083 001 N/A P1 Plasma-1 7 / Day 1 7h
001	N/A	8 / Day 1 8h	29359 876	37168 736	0 789908	10	10 5	28	497170000084	AA90478-01 497170000084 001 N/A P1 Plasma-1 8 / Day 1 8h
001	N/A	9 / Day 1 9h	23875 51	37587 861	0 635192	10	8 25	29	497170000085	AA90478-01 497170000085 001 N/A P1 Plasma-1 9 / Day 1 9h
001	N/A	10 / Day 1 10h	17309 971	38432 135	0 450404	10	5 61	30	497170000086	AA90478-01 497170000086 001 N/A P1 Plasma-1 10 / Day 1 10h
001	N/A	11 / Day 1 11h	12676 174	37193 396	*0 340818	10	*BLQ<(5 00)	31	497170000087	AA90478-01 497170000087 001 N/A P1 Plasma-1 11 / Day 1 11h
001	N/A	12 / Day 1 12h	9885 603	38560 438	*0 256366	10	*BLQ<(5 00)	32	497170000088	AA90478-01 497170000088 001 N/A P1 Plasma-1 12 / Day 1 12h
001	N/A	13 / Day 1 13h	10184 636	38853 154	*0 262132	10	*BLQ<(5 00)	34	497170000089	AA90478-01 497170000089 001 N/A P1 Plasma-1 13 / Day 1 13h
001	N/A	14 / Day 1 14h	9288 119	38385 932	*0 241967	10	*BLQ<(5 00)	35	497170000090	AA90478-01 497170000090 001 N/A P1 Plasma-1 14 / Day 1 14h
001	N/A	15 / Day 1 15h	8687 646	37909 185	*0 229170	10	*BLQ<(5 00)	36	497170000091	AA90478-01 497170000091 001 N/A P1 Plasma-1 15 / Day 1 15h
001	N/A	16 / Day 1 16h	8112 213	36498 21	*0 222263	10	*BLQ<(5 00)	37	497170000092	AA90478-01 497170000092 001 N/A P1 Plasma-1 16 / Day 1 16h
001	N/A	17 / Day 1 17h	6677 132	39103 425	*0 170756	10	*BLQ<(5 00)	38	497170000093	AA90478-01 497170000093 001 N/A P1 Plasma-1 17 / Day 1 17h
001	N/A	18 / Day 1 18h	5144 848	37243 748	*0 138140	10	*BLQ<(5 00)	39	497170000094	AA90478-01 497170000094 001 N/A P1 Plasma-1 18 / Day 1 18h
001	N/A	19 / Day 1 19h	4635 553	38401 942	*0 120711	10	*BLQ<(5 00)	41	497170000095	AA90478-01 497170000095 001 N/A P1 Plasma-1 19 / Day 1 19h
003	N/A	1 / Day 1 1h	2048 455	37560 759	*0 054537	10	*BLQ<(5 00)	42	497170000172	AA90478-01 497170000172 003 N/A P1 Plasma-1 1 / Day 1 1h
003	N/A	2 / Day 1 2h	2879 856	36837 253	*0 078178	10	*BLQ<(5 00)	43	497170000173	AA90478-01 497170000173 003 N/A P1 Plasma-1 2 / Day 1 2h
003	N/A	3 / Day 1 3h	26140 081	37855 816	0 690517	10	9 04	44	497170000174	AA90478-01 497170000174 003 N/A P1 Plasma-1 3 / Day 1 3h
003	N/A	4 / Day 1 4h	41939 368	30039 183	1 396155	10	19 1	45	497170000175	AA90478-01 497170000175 003 N/A P1 Plasma-1 4 / Day 1 4h
003	N/A	5 / Day 1 5h	48012 158	36659 284	1 309686	10	17 9	46	497170000176	AA90478-01 497170000176 003 N/A P1 Plasma-1 5 / Day 1 5h
003	N/A	6 / Day 1 6h	27156 147	36512 413	0 743751	10	9 80	50	497170000177	AA90478-01 497170000177 003 N/A P1 Plasma-1 6 / Day 1 6h
003	N/A	7 / Day 1 7h	28907 416	40000 399	0 722678	10	9 50	51	497170000178	AA90478-01 497170000178 003 N/A P1 Plasma-1 7 / Day 1 7h
003	N/A	8 / Day 1 8h	22883 673	36457 364	0 627683	10	8 14	52	497170000179	AA90478-01 497170000179 003 N/A P1 Plasma-1 8 / Day 1 8h
003	N/A	9 / Day 1 9h	20184 069	37995 635	0 531221	10	6 76	53	497170000180	AA90478-01 497170000180 003 N/A P1 Plasma-1 9 / Day 1 9h
003	N/A	10 / Day 1 10h	15871 554	39249 64	*0 404375	10	*BLQ<(5 00)	54	497170000181	AA90478-01 497170000181 003 N/A P1 Plasma-1 10 / Day 1 10h
003	N/A	11 / Day 1 11h	13035 761	41481 684	*0 314253	10	*BLQ<(5 00)	55	497170000182	AA90478-01 497170000182 003 N/A P1 Plasma-1 11 / Day 1 11h
003	N/A	12 / Day 1 12h	11452 615	38627 822	*0 296486	10	*BLQ<(5 00)	56	497170000183	AA90478-01 497170000183 003 N/A P1 Plasma-1 12 / Day 1 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
003	N/A	13 / Day 1 13h	9902 003	38321 812	*0 258391	10	*BLQ<(5 00)	58	497170000184	AA90478-01 497170000184 003 N/A P1 Plasma-1 13 / Day 1 13h
003	N/A	14 / Day 1 14h	8398 058	39165 929	*0 214423	10	*BLQ<(5 00)	59	497170000185	AA90478-01 497170000185 003 N/A P1 Plasma-1 14 / Day 1 14h
003	N/A	15 / Day 1 15h	8163 694	40121 445	*0 203475	10	*BLQ<(5 00)	60	497170000186	AA90478-01 497170000186 003 N/A P1 Plasma-1 15 / Day 1 15h
003	N/A	16 / Day 1 16h	7914 047	39086 868	*0 202473	10	*BLQ<(5 00)	61	497170000187	AA90478-01 497170000187 003 N/A P1 Plasma-1 16 / Day 1 16h
003	N/A	17 / Day 1 17h	7286 995	39128 977	*0 186230	10	*BLQ<(5 00)	62	497170000188	AA90478-01 497170000188 003 N/A P1 Plasma-1 17 / Day 1 17h
003	N/A	18 / Day 1 18h	5722 828	39065 272	*0 146494	10	*BLQ<(5 00)	63	497170000189	AA90478-01 497170000189 003 N/A P1 Plasma-1 18 / Day 1 18h
003	N/A	19 / Day 1 19h	5517 009	40988 397	*0 134599	10	*BLQ<(5 00)	64	497170000190	AA90478-01 497170000190 003 N/A P1 Plasma-1 19 / Day 1 19h
005	N/A	1 / Day 1 1h	2167 647	40516 933	*0 053500	10	*BLQ<(5 00)	66	497170000267	AA90478-01 497170000267 005 N/A P1 Plasma-1 1 / Day 1 1h
005	N/A	2 / Day 1 2h	1817 767	39264 125	*0 046296	10	*BLQ<(5 00)	67	497170000268	AA90478-01 497170000268 005 N/A P1 Plasma-1 2 / Day 1 2h
005	N/A	3 / Day 1 3h	29028 215	39689 879	0 731376	10	9 62	68	497170000269	AA90478-01 497170000269 005 N/A P1 Plasma-1 3 / Day 1 3h
005	N/A	4 / Day 1 4h	49796 026	36119 506	1 378646	10	18 9	69	497170000270	AA90478-01 497170000270 005 N/A P1 Plasma-1 4 / Day 1 4h
005	N/A	5 / Day 1 5h	42924 523	39475 276	1 087377	10	14 7	70	497170000271	AA90478-01 497170000271 005 N/A P1 Plasma-1 5 / Day 1 5h
005	N/A	6 / Day 1 6h	29163 102	38029 634	0 766852	10	10 1	71	497170000272	AA90478-01 497170000272 005 N/A P1 Plasma-1 6 / Day 1 6h
005	N/A	7 / Day 1 7h	24167 663	39278 433	0 615291	10	7 96	73	497170000273	AA90478-01 497170000273 005 N/A P1 Plasma-1 7 / Day 1 7h
005	N/A	8 / Day 1 8h	19484 297	37471 774	0 519973	10	6 60	74	497170000274	AA90478-01 497170000274 005 N/A P1 Plasma-1 8 / Day 1 8h
005	N/A	9 / Day 1 9h	16470 57	37241 124	0 442268	10	5 49	75	497170000275	AA90478-01 497170000275 005 N/A P1 Plasma-1 9 / Day 1 9h
005	N/A	10 / Day 1 10h	12628 835	38182 471	*0 330750	10	*BLQ<(5 00)	76	497170000276	AA90478-01 497170000276 005 N/A P1 Plasma-1 10 / Day 1 10h
005	N/A	11 / Day 1 11h	10957 637	38380 615	*0 285499	10	*BLQ<(5 00)	77	497170000277	AA90478-01 497170000277 005 N/A P1 Plasma-1 11 / Day 1 11h
005	N/A	12 / Day 1 12h	9004 047	38488 896	*0 233939	10	*BLQ<(5 00)	78	497170000278	AA90478-01 497170000278 005 N/A P1 Plasma-1 12 / Day 1 12h
005	N/A	13 / Day 1 13h	8056 156	34648 62	*0 232510	10	*BLQ<(5 00)	79	497170000279	AA90478-01 497170000279 005 N/A P1 Plasma-1 13 / Day 1 13h
005	N/A	14 / Day 1 14h	9282 871	36661 192	*0 253207	10	*BLQ<(5 00)	81	497170000280	AA90478-01 497170000280 005 N/A P1 Plasma-1 14 / Day 1 14h
005	N/A	15 / Day 1 15h	8277 918	38041 306	*0 217603	10	*BLQ<(5 00)	82	497170000281	AA90478-01 497170000281 005 N/A P1 Plasma-1 15 / Day 1 15h
005	N/A	16 / Day 1 16h	5307 305	38410 553	*0 138173	10	*BLQ<(5 00)	83	497170000282	AA90478-01 497170000282 005 N/A P1 Plasma-1 16 / Day 1 16h
005	N/A	17 / Day 1 17h	5429 198	40630 037	*0 133625	10	*BLQ<(5 00)	84	497170000283	AA90478-01 497170000283 005 N/A P1 Plasma-1 17 / Day 1 17h
005	N/A	18 / Day 1 18h	5630 906	35520 108	*0 158527	10	*BLQ<(5 00)	85	497170000284	AA90478-01 497170000284 005 N/A P1 Plasma-1 18 / Day 1 18h
005	N/A	19 / Day 1 19h	5294 847	39794 997	*0 133053	10	*BLQ<(5 00)	86	497170000285	AA90478-01 497170000285 005 N/A P1 Plasma-1 19 / Day 1 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 27
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	45054 907	0 000000	0 0320		0 0320	0 0
9	0 00		0	44269 433	0 000000	0 0320			
10	0 500	4 00000	12997 601	39646 394	0 327838	0 486	-2 8		
11	1 00	1 00000	28782 274	39217 456	0 733915	1 05	5 0		
12	2 00	0 250000	59262 203	41680 436	1 421823	2 00	0 0		
13	4 00	0 0625000	122860 374	42500 856	2 890774	4 03	0 8		
14	8 00	0 0156250	256109 422	41819 628	6 124144	8 51	6 4		
15	10 0	0 0100000	299575 202	40711 593	7 358474	10 2	2 0		
16	20 0	0 00250000	594097 799	42228 209	14 068743	19 5	-2 5		
17	40 0	0 000625000	1235618 97	45171 849	27 353739	37 9	-5 3		
18	50 0	0 000400000	1505925 69	43277 503	34 796963	48 2	-3 6		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 722423092

Intercept = -0 0231023448

R-Squared = 0 9979

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 27
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1461532 717	43639 936	33 490716	1	46 4		47 2		1 9
2	0 00	1490894 335	42741 18	34 881918	1	48 3				
3	0 00	1467136 489	43864 748	33 446824	1	46 3				
4	0 00	1379885 315	39827 673	34 646396	1	48 0				
5	0 00	1495720 502	43832 191	34 123790	1	47 3				
53	0 00	1417855 673	42819 63	33 112282	1	45 9				
54	0 00	1459684 139	42243 059	34 554414	1	47 9				
93	0 00	1274562 145	37893 74	33 635164	1	46 6				
94	0 00	1281759 082	37014 397	34 628663	1	48 0				
30	1 50	38215 753	39815 27	0 959827	1	1 36	-9 3	1 41	-6 0	5 0
67	1 50	42533 424	41281 963	1 030315	1	1 46	-2 7			
40	8 00	237257 077	43877 521	5 407258	1	7 52	-6 0	7 46	-6 8	1 2
79	8 00	234761 035	44172 854	5 314600	1	7 39	-7 6			
52	37 5	1019059 915	40269 912	25 305740	1	35 1	-6 4	34 7	-7 5	1 8
91	37 5	950710 251	38560 993	24 654714	1	34 2	-8 8			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 27
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	1 / Day 1 1h	6818 914	41694 425	0 163545	1	BLQ<(0 500)	20	497170000077	AA90478-01 497170000077 001 N/A P1 Plasma-1 1 / Day 1 1h
001	N/A	2 / Day 1 2h	8565 942	42155 508	0 203199	1	BLQ<(0 500)	21	497170000078	AA90478-01 497170000078 001 N/A P1 Plasma-1 2 / Day 1 2h
001	N/A	11 / Day 1 11h	133587 79	40796 311	3 274507	1	4 56	22	497170000087	AA90478-01 497170000087 001 N/A P1 Plasma-1 11 / Day 1 11h
001	N/A	12 / Day 1 12h	110582 864	41842 768	2 642819	1	3 69	23	497170000088	AA90478-01 497170000088 001 N/A P1 Plasma-1 12 / Day 1 12h
001	N/A	13 / Day 1 13h	101206 773	40366 425	2 507202	1	3 50	24	497170000089	AA90478-01 497170000089 001 N/A P1 Plasma-1 13 / Day 1 13h
001	N/A	14 / Day 1 14h	101058 107	41371 585	2 442694	1	3 41	25	497170000090	AA90478-01 497170000090 001 N/A P1 Plasma-1 14 / Day 1 14h
001	N/A	15 / Day 1 15h	74048 943	36482 964	2 029685	1	2 84	26	497170000091	AA90478-01 497170000091 001 N/A P1 Plasma-1 15 / Day 1 15h
001	N/A	16 / Day 1 16h	79474 781	37549 243	2 116548	1	2 96	27	497170000092	AA90478-01 497170000092 001 N/A P1 Plasma-1 16 / Day 1 16h
001	N/A	17 / Day 1 17h	54923 258	39404 52	1 393831	1	1 96	28	497170000093	AA90478-01 497170000093 001 N/A P1 Plasma-1 17 / Day 1 17h
001	N/A	18 / Day 1 18h	47569 318	36961 207	1 287007	1	1 81	29	497170000094	AA90478-01 497170000094 001 N/A P1 Plasma-1 18 / Day 1 18h
001	N/A	19 / Day 1 19h	45781 013	39920 098	1 146816	1	1 62	31	497170000095	AA90478-01 497170000095 001 N/A P1 Plasma-1 19 / Day 1 19h
003	N/A	1 / Day 1 1h	18926 635	42346 283	0 446949	1	0 651	32	497170000172	AA90478-01 497170000172 003 N/A P1 Plasma-1 1 / Day 1 1h
003	N/A	2 / Day 1 2h	16670 698	42342 009	0 393715	1	0 577	33	497170000173	AA90478-01 497170000173 003 N/A P1 Plasma-1 2 / Day 1 2h
003	N/A	10 / Day 1 10h	151358 178	40159 985	3 768880	1	5 25	34	497170000181	AA90478-01 497170000181 003 N/A P1 Plasma-1 10 / Day 1 10h
003	N/A	11 / Day 1 11h	115848 671	38668 42	2 995950	1	4 18	35	497170000182	AA90478-01 497170000182 003 N/A P1 Plasma-1 11 / Day 1 11h
003	N/A	12 / Day 1 12h	103318 638	42020 463	2 458770	1	3 44	36	497170000183	AA90478-01 497170000183 003 N/A P1 Plasma-1 12 / Day 1 12h
003	N/A	13 / Day 1 13h	95461 546	40557 941	2 353708	1	3 29	37	497170000184	AA90478-01 497170000184 003 N/A P1 Plasma-1 13 / Day 1 13h
003	N/A	14 / Day 1 14h	81942 755	40571 919	2 019691	1	2 83	38	497170000185	AA90478-01 497170000185 003 N/A P1 Plasma-1 14 / Day 1 14h
003	N/A	15 / Day 1 15h	79642 272	42545 321	1 871940	1	2 62	39	497170000186	AA90478-01 497170000186 003 N/A P1 Plasma-1 15 / Day 1 15h
003	N/A	16 / Day 1 16h	72244 85	42045 878	1 718239	1	2 41	41	497170000187	AA90478-01 497170000187 003 N/A P1 Plasma-1 16 / Day 1 16h
003	N/A	17 / Day 1 17h	61823 549	38606 564	1 601374	1	2 25	42	497170000188	AA90478-01 497170000188 003 N/A P1 Plasma-1 17 / Day 1 17h
003	N/A	18 / Day 1 18h	52454 974	39057 988	1 343002	1	1 89	43	497170000189	AA90478-01 497170000189 003 N/A P1 Plasma-1 18 / Day 1 18h
003	N/A	19 / Day 1 19h	48711 082	40336 961	1 207604	1	1 70	44	497170000190	AA90478-01 497170000190 003 N/A P1 Plasma-1 19 / Day 1 19h
005	N/A	1 / Day 1 1h	14019 344	40311 052	0 347779	1	0 513	45	497170000267	AA90478-01 497170000267 005 N/A P1 Plasma-1 1 / Day 1 1h
005	N/A	2 / Day 1 2h	13773 922	42517 974	0 323955	1	BLQ<(0 500)	46	497170000268	AA90478-01 497170000268 005 N/A P1 Plasma-1 2 / Day 1 2h
005	N/A	10 / Day 1 10h	112840 927	37555 598	3 004637	1	4 19	47	497170000276	AA90478-01 497170000276 005 N/A P1 Plasma-1 10 / Day 1 10h
005	N/A	11 / Day 1 11h	105433 198	39373 144	2 677795	1	3 74	48	497170000277	AA90478-01 497170000277 005 N/A P1 Plasma-1 11 / Day 1 11h
005	N/A	12 / Day 1 12h	91289 143	42601 706	2 142852	1	3 00	49	497170000278	AA90478-01 497170000278 005 N/A P1 Plasma-1 12 / Day 1 12h
005	N/A	13 / Day 1 13h	99128 96	41053 752	2 414614	1	3 37	50	497170000279	AA90478-01 497170000279 005 N/A P1 Plasma-1 13 / Day 1 13h
005	N/A	14 / Day 1 14h	86915 691	41205 658	2 109314	1	2 95	51	497170000280	AA90478-01 497170000280 005 N/A P1 Plasma-1 14 / Day 1 14h
005	N/A	15 / Day 1 15h	82818 618	42769 098	1 936413	1	2 71	55	497170000281	AA90478-01 497170000281 005 N/A P1 Plasma-1 15 / Day 1 15h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
005	N/A	16 / Day 1 16h	56861 169	40965 623	1 388022	1	1 95	56	497170000282	AA90478-01 497170000282 005 N/A P1 Plasma-1 16 / Day 1 16h
005	N/A	17 / Day 1 17h	53257 788	42795 304	1 244477	1	1 75	57	497170000283	AA90478-01 497170000283 005 N/A P1 Plasma-1 17 / Day 1 17h
005	N/A	18 / Day 1 18h	51696 837	40899 365	1 264001	1	1 78	58	497170000284	AA90478-01 497170000284 005 N/A P1 Plasma-1 18 / Day 1 18h
005	N/A	19 / Day 1 19h	47746 741	39318 889	1 214346	1	1 71	59	497170000285	AA90478-01 497170000285 005 N/A P1 Plasma-1 19 / Day 1 19h
007	N/A	1 / Day 1 1h	85341 018	39533 542	2 158699	1	3 02	60	497170000362	AA90478-01 497170000362 007 N/A P1 Plasma-1 1 / Day 1 1h
007	N/A	2 / Day 1 2h	84266 659	38629 413	2 181412	1	3 05	61	497170000363	AA90478-01 497170000363 007 N/A P1 Plasma-1 2 / Day 1 2h
009	N/A	1 / Day 1 1h	76743 763	38677 355	1 984204	1	2 78	62	497170000457	AA90478-01 497170000457 009 N/A P1 Plasma-1 1 / Day 1 1h
009	N/A	2 / Day 1 2h	68763 327	36622 487	1 877626	1	2 63	63	497170000458	AA90478-01 497170000458 009 N/A P1 Plasma-1 2 / Day 1 2h
011	N/A	1 / Day 1 1h	51277 622	37251 221	1 376535	1	1 94	64	497170000552	AA90478-01 497170000552 011 N/A P1 Plasma-1 1 / Day 1 1h
011	N/A	2 / Day 1 2h	45685 68	38331 226	1 191866	1	1 68	65	497170000553	AA90478-01 497170000553 011 N/A P1 Plasma-1 2 / Day 1 2h
011	N/A	14 / Day 1 14h	136220 164	40321 757	3 378329	1	4 71	66	497170000565	AA90478-01 497170000565 011 N/A P1 Plasma-1 14 / Day 1 14h
011	N/A	15 / Day 1 15h	121008 341	36232 126	3 339808	1	4 66	68	497170000566	AA90478-01 497170000566 011 N/A P1 Plasma-1 15 / Day 1 15h
011	N/A	16 / Day 1 16h	84214 402	37082 703	2 270989	1	3 18	69	497170000567	AA90478-01 497170000567 011 N/A P1 Plasma-1 16 / Day 1 16h
011	N/A	17 / Day 1 17h	105877 714	38924 806	2 720058	1	3 80	70	497170000568	AA90478-01 497170000568 011 N/A P1 Plasma-1 17 / Day 1 17h
011	N/A	18 / Day 1 18h	72820 293	37297 951	1 952394	1	2 73	71	497170000569	AA90478-01 497170000569 011 N/A P1 Plasma-1 18 / Day 1 18h
011	N/A	19 / Day 1 19h	86228 063	39561 471	2 179597	1	3 05	72	497170000570	AA90478-01 497170000570 011 N/A P1 Plasma-1 19 / Day 1 19h
012	N/A	1 / Day 1 1h	37118 373	38434 666	0 965752	1	1 37	73	497170000647	AA90478-01 497170000647 012 N/A P1 Plasma-1 1 / Day 1 1h
012	N/A	2 / Day 1 2h	43837 233	39574 953	1 107701	1	1 57	74	497170000648	AA90478-01 497170000648 012 N/A P1 Plasma-1 2 / Day 1 2h
012	N/A	3 / Day 1 3h	143302 951	39776 448	3 602709	1	5 02	75	497170000649	AA90478-01 497170000649 012 N/A P1 Plasma-1 3 / Day 1 3h
012	N/A	16 / Day 1 16h	143445 752	39101 232	3 668574	1	5 11	76	497170000662	AA90478-01 497170000662 012 N/A P1 Plasma-1 16 / Day 1 16h
012	N/A	17 / Day 1 17h	143341 812	42517 946	3 371325	1	4 70	77	497170000663	AA90478-01 497170000663 012 N/A P1 Plasma-1 17 / Day 1 17h
012	N/A	18 / Day 1 18h	126126 44	40856 702	3 087044	1	4 31	78	497170000664	AA90478-01 497170000664 012 N/A P1 Plasma-1 18 / Day 1 18h
012	N/A	19 / Day 1 19h	125387 249	39364 537	3 185284	1	4 44	80	497170000665	AA90478-01 497170000665 012 N/A P1 Plasma-1 19 / Day 1 19h
013	N/A	1 / Day 1 1h	5448 733	42517 53	0 128153	1	BLQ<(0 500)	81	497170000742	AA90478-01 497170000742 013 N/A P1 Plasma-1 1 / Day 1 1h
013	N/A	2 / Day 1 2h	3799 058	37772 569	0 100577	1	BLQ<(0 500)	82	497170000743	AA90478-01 497170000743 013 N/A P1 Plasma-1 2 / Day 1 2h
013	N/A	7 / Day 1 7h	118994 856	35641 046	3 338703	1	4 65	83	497170000748	AA90478-01 497170000748 013 N/A P1 Plasma-1 7 / Day 1 7h
013	N/A	8 / Day 1 8h	97336 834	36112 121	2 695406	1	3 76	84	497170000749	AA90478-01 497170000749 013 N/A P1 Plasma-1 8 / Day 1 8h
013	N/A	9 / Day 1 9h	76799 151	33143 864	2 317145	1	3 24	85	497170000750	AA90478-01 497170000750 013 N/A P1 Plasma-1 9 / Day 1 9h
013	N/A	10 / Day 1 10h	61006 822	35566 553	1 715286	1	2 41	86	497170000751	AA90478-01 497170000751 013 N/A P1 Plasma-1 10 / Day 1 10h
013	N/A	11 / Day 1 11h	50025 63	35352 691	1 415044	1	1 99	87	497170000752	AA90478-01 497170000752 013 N/A P1 Plasma-1 11 / Day 1 11h
013	N/A	12 / Day 1 12h	47040 912	37394 862	1 257951	1	1 77	88	497170000753	AA90478-01 497170000753 013 N/A P1 Plasma-1 12 / Day 1 12h
013	N/A	13 / Day 1 13h	42973 03	37087 591	1 158690	1	1 64	89	497170000754	AA90478-01 497170000754 013 N/A P1 Plasma-1 13 / Day 1 13h
013	N/A	14 / Day 1 14h	41118 916	35829 35	1 147632	1	1 62	90	497170000755	AA90478-01 497170000755 013 N/A P1 Plasma-1 14 / Day 1 14h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0.500 (Lowest Standard)

AAR - Concentration Found is Greater than 50.0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 28
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	40579 538	0 000000	0 0508		0 0508	0 0
9	0 00		0	41578 922	0 000000	0 0508			
10	0 500	4 00000	13567 216	42632 988	0 318233	0 494	-1 2		
11	1 00	1 00000	26976 378	38494 113	0 700792	1 03	3 0		
12	2 00	0 250000	57997 911	41559 41	1 395542	2 00	0 0		
13	4 00	0 0625000	117966 04	43458 098	2 714478	3 84	-4 0		
14	8 00	0 0156250	240311 005	40834 322	5 885025	8 26	3 3		
15	10 0	0 0100000	298770 989	40420 565	7 391559	10 4	4 0		
16	20 0	0 00250000	590633 368	42568 842	13 874781	19 4	-3 0		
17	40 0	0 000625000	1164017 04	40176 608	28 972507	40 4	1 0		
18	50 0	0 000400000	1361819 788	38851 134	35 052253	48 9	-2 2		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 717299485

Intercept = -0 0364044351

R-Squared = 0 9989

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 28
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1533068 983	45501 716	33 692553	1	47 0		48 2		2 2
2	0 00	1490561 126	43392 329	34 350798	1	47 9				
3	0 00	1431145 708	40433 727	35 394850	1	49 4				
4	0 00	1512499 521	44161 75	34 249085	1	47 8				
5	0 00	1562291 534	44567 842	35 054233	1	48 9				
56	0 00	1487274 909	43307 54	34 342170	1	47 9				
57	0 00	1517434 642	43857 985	34 598823	1	48 3				
93	0 00	1513348 898	42122 205	35 927580	1	50 1				
94	0 00	1368732 104	40718 254	33 614705	1	46 9				
31	1 50	43216 459	41203 156	1 048863	1	1 51	0 7	1 50	0 0	0 9
68	1 50	45454 309	44180 414	1 028834	1	1 49	-0 7			
43	8 00	231572 534	41910 507	5 525405	1	7 75	-3 1	7 66	-4 3	1 7
79	8 00	238013 447	44164 498	5 389248	1	7 56	-5 5			
55	37 5	1058874 937	42994 428	24 628190	1	34 4	-8 3	34 3	-8 5	0 4
91	37 5	993678 84	40582 214	24 485575	1	34 2	-8 8			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 28
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	15 / Day 1 15h	40869 986	38150 238	1 071290	1	1 54	20	497170000756	AA90478-01 497170000756 013 N/A P1 Plasma-1 15 / Day 1 15h
013	N/A	16 / Day 1 16h	33273 636	38200 493	0 871026	1	1 27	21	497170000757	AA90478-01 497170000757 013 N/A P1 Plasma-1 16 / Day 1 16h
013	N/A	17 / Day 1 17h	33882 917	45161 182	0 750266	1	1 10	22	497170000758	AA90478-01 497170000758 013 N/A P1 Plasma-1 17 / Day 1 17h
013	N/A	18 / Day 1 18h	27930 692	45007 702	0 620576	1	0 916	23	497170000759	AA90478-01 497170000759 013 N/A P1 Plasma-1 18 / Day 1 18h
013	N/A	19 / Day 1 19h	22742 718	39963 506	0 569087	1	0 844	24	497170000760	AA90478-01 497170000760 013 N/A P1 Plasma-1 19 / Day 1 19h
015	N/A	1 / Day 1 1h	17967 989	42302 522	0 424750	1	0 643	25	497170000837	AA90478-01 497170000837 015 N/A P1 Plasma-1 1 / Day 1 1h
015	N/A	2 / Day 1 2h	19163 219	40217 399	0 476491	1	0 715	26	497170000838	AA90478-01 497170000838 015 N/A P1 Plasma-1 2 / Day 1 2h
015	N/A	12 / Day 1 12h	132327 522	41496 442	3 188888	1	4 50	27	497170000848	AA90478-01 497170000848 015 N/A P1 Plasma-1 12 / Day 1 12h
015	N/A	13 / Day 1 13h	113036 178	40049 127	2 822438	1	3 99	28	497170000849	AA90478-01 497170000849 015 N/A P1 Plasma-1 13 / Day 1 13h
015	N/A	14 / Day 1 14h	113290 17	40860 279	2 772624	1	3 92	29	497170000850	AA90478-01 497170000850 015 N/A P1 Plasma-1 14 / Day 1 14h
015	N/A	15 / Day 1 15h	94842 831	36188 954	2 620767	1	3 70	30	497170000851	AA90478-01 497170000851 015 N/A P1 Plasma-1 15 / Day 1 15h
015	N/A	16 / Day 1 16h	94129 113	43037 131	2 187161	1	3 10	32	497170000852	AA90478-01 497170000852 015 N/A P1 Plasma-1 16 / Day 1 16h
015	N/A	17 / Day 1 17h	81067 761	40068 018	2 023254	1	2 87	33	497170000853	AA90478-01 497170000853 015 N/A P1 Plasma-1 17 / Day 1 17h
015	N/A	18 / Day 1 18h	78716 778	38575 477	2 040591	1	2 90	34	497170000854	AA90478-01 497170000854 015 N/A P1 Plasma-1 18 / Day 1 18h
015	N/A	19 / Day 1 19h	66171 042	36970 053	1 789855	1	2 55	35	497170000855	AA90478-01 497170000855 015 N/A P1 Plasma-1 19 / Day 1 19h
018	N/A	1 / Day 1 1h	15537 466	38635 259	0 402158	1	0 611	36	497170000932	AA90478-01 497170000932 018 N/A P1 Plasma-1 1 / Day 1 1h
018	N/A	2 / Day 1 2h	20274 932	39814 4	0 509236	1	0 761	37	497170000933	AA90478-01 497170000933 018 N/A P1 Plasma-1 2 / Day 1 2h
018	N/A	10 / Day 1 10h	113799 536	40793 458	2 789652	1	3 94	38	497170000941	AA90478-01 497170000941 018 N/A P1 Plasma-1 10 / Day 1 10h
018	N/A	11 / Day 1 11h	107408 885	42754 829	2 512205	1	3 55	39	497170000942	AA90478-01 497170000942 018 N/A P1 Plasma-1 11 / Day 1 11h
018	N/A	12 / Day 1 12h	88774 572	41229 381	2 153187	1	3 05	40	497170000943	AA90478-01 497170000943 018 N/A P1 Plasma-1 12 / Day 1 12h
018	N/A	13 / Day 1 13h	77787 78	42904 76	1 813034	1	2 58	41	497170000944	AA90478-01 497170000944 018 N/A P1 Plasma-1 13 / Day 1 13h
018	N/A	14 / Day 1 14h	80305 907	41247 291	1 946938	1	2 77	42	497170000945	AA90478-01 497170000945 018 N/A P1 Plasma-1 14 / Day 1 14h
018	N/A	15 / Day 1 15h	78155 492	42498 084	1 839036	1	2 61	44	497170000946	AA90478-01 497170000946 018 N/A P1 Plasma-1 15 / Day 1 15h
018	N/A	16 / Day 1 16h	60497 982	41088 457	1 472384	1	2 10	45	497170000947	AA90478-01 497170000947 018 N/A P1 Plasma-1 16 / Day 1 16h
018	N/A	17 / Day 1 17h	72112 782	44011 643	1 638493	1	2 34	46	497170000948	AA90478-01 497170000948 018 N/A P1 Plasma-1 17 / Day 1 17h
018	N/A	18 / Day 1 18h	61994 152	42320 864	1 464860	1	2 09	47	497170000949	AA90478-01 497170000949 018 N/A P1 Plasma-1 18 / Day 1 18h
018	N/A	19 / Day 1 19h	61038 439	42105 473	1 449656	1	2 07	48	497170000950	AA90478-01 497170000950 018 N/A P1 Plasma-1 19 / Day 1 19h
019	N/A	1 / Day 1 1h	22002	39371 219	0 558835	1	0 830	49	497170001027	AA90478-01 497170001027 019 N/A P1 Plasma-1 1 / Day 1 1h
019	N/A	2 / Day 1 2h	20348 369	39304 591	0 517710	1	0 773	50	497170001028	AA90478-01 497170001028 019 N/A P1 Plasma-1 2 / Day 1 2h
019	N/A	10 / Day 1 10h	138097 114	45204 548	3 054938	1	4 31	51	497170001036	AA90478-01 497170001036 019 N/A P1 Plasma-1 10 / Day 1 10h
019	N/A	11 / Day 1 11h	101044 851	38851 582	2 600791	1	3 68	52	497170001037	AA90478-01 497170001037 019 N/A P1 Plasma-1 11 / Day 1 11h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	12 / Day 1 12h	102481 614	41556 01	2 466108	1	3 49	53	497170001038	AA90478-01 497170001038 019 N/A P1 Plasma-1 12 / Day 1 12h
019	N/A	13 / Day 1 13h	82373 328	39564 309	2 082011	1	2 95	54	497170001039	AA90478-01 497170001039 019 N/A P1 Plasma-1 13 / Day 1 13h
019	N/A	14 / Day 1 14h	67994 525	35495 543	1 915579	1	2 72	58	497170001040	AA90478-01 497170001040 019 N/A P1 Plasma-1 14 / Day 1 14h
019	N/A	15 / Day 1 15h	63142 765	35953 201	1 756249	1	2 50	59	497170001041	AA90478-01 497170001041 019 N/A P1 Plasma-1 15 / Day 1 15h
019	N/A	16 / Day 1 16h	68521 157	40366 399	1 697480	1	2 42	60	497170001042	AA90478-01 497170001042 019 N/A P1 Plasma-1 16 / Day 1 16h
019	N/A	17 / Day 1 17h	55318 363	39950 314	1 384679	1	1 98	61	497170001043	AA90478-01 497170001043 019 N/A P1 Plasma-1 17 / Day 1 17h
019	N/A	18 / Day 1 18h	56018 17	43969 026	1 274037	1	1 83	62	497170001044	AA90478-01 497170001044 019 N/A P1 Plasma-1 18 / Day 1 18h
019	N/A	19 / Day 1 19h	62487 838	45244 15	1 381125	1	1 98	63	497170001045	AA90478-01 497170001045 019 N/A P1 Plasma-1 19 / Day 1 19h
021	N/A	1 / Day 1 1h	16091 795	42555 442	0 378137	1	0 578	64	497170001122	AA90478-01 497170001122 021 N/A P1 Plasma-1 1 / Day 1 1h
021	N/A	2 / Day 1 2h	12308 546	42716 131	0 288147	1	BLQ<(0 500)	65	497170001123	AA90478-01 497170001123 021 N/A P1 Plasma-1 2 / Day 1 2h
021	N/A	9 / Day 1 9h	119598 354	42860 142	2 790433	1	3 94	66	497170001130	AA90478-01 497170001130 021 N/A P1 Plasma-1 9 / Day 1 9h
021	N/A	10 / Day 1 10h	85873 134	41526 924	2 067891	1	2 93	67	497170001131	AA90478-01 497170001131 021 N/A P1 Plasma-1 10 / Day 1 10h
021	N/A	11 / Day 1 11h	74226 717	39111 081	1 897844	1	2 70	69	497170001132	AA90478-01 497170001132 021 N/A P1 Plasma-1 11 / Day 1 11h
021	N/A	12 / Day 1 12h	74980 157	42928 55	1 746627	1	2 49	70	497170001133	AA90478-01 497170001133 021 N/A P1 Plasma-1 12 / Day 1 12h
021	N/A	13 / Day 1 13h	62864 725	43861 618	1 433251	1	2 05	71	497170001134	AA90478-01 497170001134 021 N/A P1 Plasma-1 13 / Day 1 13h
021	N/A	14 / Day 1 14h	56224 806	40402 114	1 391630	1	1 99	72	497170001135	AA90478-01 497170001135 021 N/A P1 Plasma-1 14 / Day 1 14h
021	N/A	15 / Day 1 15h	52857 222	40942 548	1 291010	1	1 85	73	497170001136	AA90478-01 497170001136 021 N/A P1 Plasma-1 15 / Day 1 15h
021	N/A	16 / Day 1 16h	50606 971	39527 173	1 280308	1	1 84	74	497170001137	AA90478-01 497170001137 021 N/A P1 Plasma-1 16 / Day 1 16h
021	N/A	17 / Day 1 17h	45563 988	39131 049	1 164395	1	1 67	75	497170001138	AA90478-01 497170001138 021 N/A P1 Plasma-1 17 / Day 1 17h
021	N/A	18 / Day 1 18h	42553 925	40019 434	1 063332	1	1 53	76	497170001139	AA90478-01 497170001139 021 N/A P1 Plasma-1 18 / Day 1 18h
021	N/A	19 / Day 1 19h	44269 534	40760 221	1 086097	1	1 56	77	497170001140	AA90478-01 497170001140 021 N/A P1 Plasma-1 19 / Day 1 19h
024	N/A	1 / Day 1 1h	38438 276	41991 904	0 915373	1	1 33	78	497170001217	AA90478-01 497170001217 024 N/A P1 Plasma-1 1 / Day 1 1h
024	N/A	2 / Day 1 2h	34586 263	39653 149	0 872220	1	1 27	80	497170001218	AA90478-01 497170001218 024 N/A P1 Plasma-1 2 / Day 1 2h
024	N/A	17 / Day 1 17h	134233 177	38804 417	3 459224	1	4 87	81	497170001233	AA90478-01 497170001233 024 N/A P1 Plasma-1 17 / Day 1 17h
024	N/A	18 / Day 1 18h	114868 701	36383 046	3 157204	1	4 45	82	497170001234	AA90478-01 497170001234 024 N/A P1 Plasma-1 18 / Day 1 18h
024	N/A	19 / Day 1 19h	137488 802	39241 942	3 503619	1	4 94	83	497170001235	AA90478-01 497170001235 024 N/A P1 Plasma-1 19 / Day 1 19h
026	N/A	1 / Day 1 1h	41904 011	37704 333	1 111384	1	1 60	84	497170001312	AA90478-01 497170001312 026 N/A P1 Plasma-1 1 / Day 1 1h
026	N/A	2 / Day 1 2h	48421 891	33593 713	1 441397	1	2 06	85	497170001313	AA90478-01 497170001313 026 N/A P1 Plasma-1 2 / Day 1 2h
026	N/A	11 / Day 1 11h	127858 737	38973 13	3 280689	1	4 62	86	497170001322	AA90478-01 497170001322 026 N/A P1 Plasma-1 11 / Day 1 11h
026	N/A	12 / Day 1 12h	137317 352	40163 936	3 418922	1	4 82	87	497170001323	AA90478-01 497170001323 026 N/A P1 Plasma-1 12 / Day 1 12h
026	N/A	13 / Day 1 13h	123159 226	37099 293	3 319719	1	4 68	88	497170001324	AA90478-01 497170001324 026 N/A P1 Plasma-1 13 / Day 1 13h
026	N/A	14 / Day 1 14h	110951 04	40863 187	2 715183	1	3 84	89	497170001325	AA90478-01 497170001325 026 N/A P1 Plasma-1 14 / Day 1 14h
026	N/A	15 / Day 1 15h	97490 928	37168 204	2 622966	1	3 71	90	497170001326	AA90478-01 497170001326 026 N/A P1 Plasma-1 15 / Day 1 15h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0.500 (Lowest Standard)

AAR - Concentration Found is Greater than 50.0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 29
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		357 772	18811 523	0 019019	0 0488		0 0364	48 1
9	0 00		0	17657 835	0 000000	0 0240			
10	0 500	4 00000	8050 948	21990 406	0 366112	0 501	0 2		
11	1 00	1 00000	13611 046	17844 079	0 762777	1 02	2 0		
12	2 00	0 250000	27715 383	19195 118	1 443877	1 91	-4 5		
13	4 00	0 0625000	53054 998	17605 594	3 013531	3 95	-1 3		
14	8 00	0 0156250	110828 982	17715 699	6 255976	8 18	2 3		
15	10 0	0 0100000	103484 559	10234 697	*10 111150	*13 2			
16	20 0	0 00250000	222310 289	14599 268	15 227496	19 9	-0 5		
17	40 0	0 000625000	481143 309	15925 123	30 212847	39 4	-1 5		
18	50 0	0 000400000	402728 341	10134 49	39 738392	51 8	3 6		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 767128000

Intercept = -0 0184485990

R-Squared = 0 9991

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Reason for Deactivation of Sample

* Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 29
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	745307 695	20600 686	36 178780	1	47 2		46 4		3 2
2	0 00	727695 242	19664 268	37 005966	1	48 3				
3	0 00	788725 363	23330 399	33 806767	1	44 1				
4	0 00	708378 976	19448 666	36 423011	1	47 5				
5	0 00	882442 521	24218 227	36 437123	1	47 5				
50	0 00	565917 325	16648 196	33 992712	1	44 3				
51	0 00	632036 406	17758 694	35 590253	1	46 4				
86	0 00	575246 862	16544 439	34 769802	1	45 3				
87	0 00	504620 082	14138 14	35 692112	1	46 6				
29	1 50	18508 402	16963 032	1 091102	1	1 45	-3 3	1 66	10 7	17 5
62	1 50	24112 638	17118 825	1 408545	1	1 86	24 0			
39	8 00	68539 212	11986 403	5 718080	1	7 48	-6 5	7 53	-5 9	0 8
73	8 00	99512 491	17199 908	5 785641	1	7 57	-5 4			
49	37 5	447897 376	16796 387	26 666293	1	34 8	-7 2	35 8	-4 5	3 7
84	37 5	455047 868	16156 759	28 164551	1	36 7	-2 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 29
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 2 1h	29400 078	15222 907	1 931305	1	2 54	20	497170000343	AA90478-01 497170000343 007 N/A P2 Plasma-1 1 / Day 2 1h
007	N/A	2 / Day 2 2h	36073 359	16619 105	2 170596	1	2 85	21	497170000344	AA90478-01 497170000344 007 N/A P2 Plasma-1 2 / Day 2 2h
007	N/A	3 / Day 2 3h	38738 837	19731 544	1 963295	1	2 58	22	497170000345	AA90478-01 497170000345 007 N/A P2 Plasma-1 3 / Day 2 3h
007	N/A	4 / Day 2 4h	35642 176	18013 124	1 978678	1	2 60	23	497170000346	AA90478-01 497170000346 007 N/A P2 Plasma-1 4 / Day 2 4h
007	N/A	5 / Day 2 5h	35194 788	18714 908	1 880575	1	2 48	24	497170000347	AA90478-01 497170000347 007 N/A P2 Plasma-1 5 / Day 2 5h
007	N/A	6 / Day 2 6h	29563 463	15664 349	1 887309	1	2 48	25	497170000348	AA90478-01 497170000348 007 N/A P2 Plasma-1 6 / Day 2 6h
007	N/A	7 / Day 2 7h	28440 214	16071 219	1 769636	1	2 33	26	497170000349	AA90478-01 497170000349 007 N/A P2 Plasma-1 7 / Day 2 7h
007	N/A	8 / Day 2 8h	30298 602	15864 252	1 909866	1	2 51	27	497170000350	AA90478-01 497170000350 007 N/A P2 Plasma-1 8 / Day 2 8h
007	N/A	9 / Day 2 9h	34522 947	17384 764	1 985816	1	2 61	28	497170000351	AA90478-01 497170000351 007 N/A P2 Plasma-1 9 / Day 2 9h
007	N/A	10 / Day 2 10h	32583 258	16154 364	2 016994	1	2 65	30	497170000352	AA90478-01 497170000352 007 N/A P2 Plasma-1 10 / Day 2 10h
007	N/A	11 / Day 2 11h	43523 749	19884 857	2 188789	1	2 88	31	497170000353	AA90478-01 497170000353 007 N/A P2 Plasma-1 11 / Day 2 11h
007	N/A	12 / Day 2 12h	32522 152	17069 315	1 905299	1	2 51	32	497170000354	AA90478-01 497170000354 007 N/A P2 Plasma-1 12 / Day 2 12h
007	N/A	13 / Day 2 13h	34944 298	17054 333	2 048998	1	2 70	33	497170000355	AA90478-01 497170000355 007 N/A P2 Plasma-1 13 / Day 2 13h
007	N/A	14 / Day 2 14h	29639 248	14707 523	2 015244	1	2 65	34	497170000356	AA90478-01 497170000356 007 N/A P2 Plasma-1 14 / Day 2 14h
007	N/A	15 / Day 2 15h	27143 87	13696 504	1 981810	1	2 61	35	497170000357	AA90478-01 497170000357 007 N/A P2 Plasma-1 15 / Day 2 15h
007	N/A	16 / Day 2 16h	30722 975	15919 66	1 929876	1	2 54	36	497170000358	AA90478-01 497170000358 007 N/A P2 Plasma-1 16 / Day 2 16h
007	N/A	17 / Day 2 17h	23696 968	13643 75	1 736837	1	2 29	37	497170000359	AA90478-01 497170000359 007 N/A P2 Plasma-1 17 / Day 2 17h
007	N/A	18 / Day 2 18h	24825 708	13499 601	1 838996	1	2 42	38	497170000360	AA90478-01 497170000360 007 N/A P2 Plasma-1 18 / Day 2 18h
007	N/A	19 / Day 2 19h	21695 89	8772 208	2 473253	1	3 25	40	497170000361	AA90478-01 497170000361 007 N/A P2 Plasma-1 19 / Day 2 19h
009	N/A	1 / Day 2 1h	21410 07	11678 497	1 833290	1	2 41	41	497170000438	AA90478-01 497170000438 009 N/A P2 Plasma-1 1 / Day 2 1h
009	N/A	2 / Day 2 2h	24692 982	13450 617	1 835825	1	2 42	42	497170000439	AA90478-01 497170000439 009 N/A P2 Plasma-1 2 / Day 2 2h
009	N/A	3 / Day 2 3h	23611 846	12024 244	1 963687	1	2 58	43	497170000440	AA90478-01 497170000440 009 N/A P2 Plasma-1 3 / Day 2 3h
009	N/A	4 / Day 2 4h	20160 196	10244 053	1 967990	1	2 59	44	497170000441	AA90478-01 497170000441 009 N/A P2 Plasma-1 4 / Day 2 4h
009	N/A	5 / Day 2 5h	25759 693	12205 79	2 110449	1	2 78	45	497170000442	AA90478-01 497170000442 009 N/A P2 Plasma-1 5 / Day 2 5h
009	N/A	6 / Day 2 6h	26417 337	13188 083	2 003122	1	2 64	46	497170000443	AA90478-01 497170000443 009 N/A P2 Plasma-1 6 / Day 2 6h
009	N/A	7 / Day 2 7h	27772 564	14859 745	1 868980	1	2 46	47	497170000444	AA90478-01 497170000444 009 N/A P2 Plasma-1 7 / Day 2 7h
009	N/A	8 / Day 2 8h	29039 708	15157 519	1 915862	1	2 52	48	497170000445	AA90478-01 497170000445 009 N/A P2 Plasma-1 8 / Day 2 8h
009	N/A	9 / Day 2 9h	31007 256	15333 674	2 022167	1	2 66	52	497170000446	AA90478-01 497170000446 009 N/A P2 Plasma-1 9 / Day 2 9h
009	N/A	10 / Day 2 10h	29106 73	15076 593	1 930591	1	2 54	53	497170000447	AA90478-01 497170000447 009 N/A P2 Plasma-1 10 / Day 2 10h
009	N/A	11 / Day 2 11h	28620 18	14563 025	1 965263	1	2 59	54	497170000448	AA90478-01 497170000448 009 N/A P2 Plasma-1 11 / Day 2 11h
009	N/A	12 / Day 2 12h	44835 831	20080 376	2 232818	1	2 93	55	497170000449	AA90478-01 497170000449 009 N/A P2 Plasma-1 12 / Day 2 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	13 / Day 2 13h	44568 96	19097 941	2 333705	1	3 07	56	497170000450	AA90478-01 497170000450 009 N/A P2 Plasma-1 13 / Day 2 13h
009	N/A	14 / Day 2 14h	46026 613	19484 866	2 362172	1	3 10	57	497170000451	AA90478-01 497170000451 009 N/A P2 Plasma-1 14 / Day 2 14h
009	N/A	15 / Day 2 15h	44477 795	19638 112	2 264871	1	2 98	58	497170000452	AA90478-01 497170000452 009 N/A P2 Plasma-1 15 / Day 2 15h
009	N/A	16 / Day 2 16h	35662 529	16732 425	2 131343	1	2 80	59	497170000453	AA90478-01 497170000453 009 N/A P2 Plasma-1 16 / Day 2 16h
009	N/A	17 / Day 2 17h	51744 979	22188 419	2 332071	1	3 06	60	497170000454	AA90478-01 497170000454 009 N/A P2 Plasma-1 17 / Day 2 17h
009	N/A	18 / Day 2 18h	51353 805	22906 302	2 241907	1	2 95	61	497170000455	AA90478-01 497170000455 009 N/A P2 Plasma-1 18 / Day 2 18h
009	N/A	19 / Day 2 19h	48412 556	23128 361	2 093212	1	2 75	63	497170000456	AA90478-01 497170000456 009 N/A P2 Plasma-1 19 / Day 2 19h
011	N/A	1 / Day 2 1h	35869 515	17604 398	2 037531	1	2 68	64	497170000533	AA90478-01 497170000533 011 N/A P2 Plasma-1 1 / Day 2 1h
011	N/A	2 / Day 2 2h	31579 785	24305 941	1 299262	1	1 72	65	497170000534	AA90478-01 497170000534 011 N/A P2 Plasma-1 2 / Day 2 2h
011	N/A	3 / Day 2 3h	26904 851	21921 984	1 227300	1	1 62	66	497170000535	AA90478-01 497170000535 011 N/A P2 Plasma-1 3 / Day 2 3h
011	N/A	4 / Day 2 4h	30257 889	14976 347	2 020378	1	2 66	67	497170000536	AA90478-01 497170000536 011 N/A P2 Plasma-1 4 / Day 2 4h
011	N/A	5 / Day 2 5h	38071 51	20440 767	1 862528	1	2 45	68	497170000537	AA90478-01 497170000537 011 N/A P2 Plasma-1 5 / Day 2 5h
011	N/A	6 / Day 2 6h	37344 722	14223 775	2 625514	1	3 45	69	497170000538	AA90478-01 497170000538 011 N/A P2 Plasma-1 6 / Day 2 6h
011	N/A	7 / Day 2 7h	38184 531	18965 556	2 013362	1	2 65	70	497170000539	AA90478-01 497170000539 011 N/A P2 Plasma-1 7 / Day 2 7h
011	N/A	8 / Day 2 8h	42540 498	12590 019	3 378907	1	4 43	71	497170000540	AA90478-01 497170000540 011 N/A P2 Plasma-1 8 / Day 2 8h
011	N/A	9 / Day 2 9h	53024 23	17977 173	2 949531	1	3 87	72	497170000541	AA90478-01 497170000541 011 N/A P2 Plasma-1 9 / Day 2 9h
011	N/A	10 / Day 2 10h	40154 488	16660 622	2 410143	1	3 17	74	497170000542	AA90478-01 497170000542 011 N/A P2 Plasma-1 10 / Day 2 10h
011	N/A	11 / Day 2 11h	52241 083	18130 117	2 881453	1	3 78	75	497170000543	AA90478-01 497170000543 011 N/A P2 Plasma-1 11 / Day 2 11h
011	N/A	12 / Day 2 12h	56017 143	21996 687	2 546617	1	3 34	76	497170000544	AA90478-01 497170000544 011 N/A P2 Plasma-1 12 / Day 2 12h
011	N/A	13 / Day 2 13h	45895 096	19050 41	2 409140	1	3 16	77	497170000545	AA90478-01 497170000545 011 N/A P2 Plasma-1 13 / Day 2 13h
011	N/A	14 / Day 2 14h	41018 157	17502 076	2 343617	1	3 08	78	497170000546	AA90478-01 497170000546 011 N/A P2 Plasma-1 14 / Day 2 14h
011	N/A	15 / Day 2 15h	33446 157	16109 406	2 076188	1	2 73	79	497170000547	AA90478-01 497170000547 011 N/A P2 Plasma-1 15 / Day 2 15h
011	N/A	16 / Day 2 16h	35232 829	14213 502	2 478828	1	3 26	80	497170000548	AA90478-01 497170000548 011 N/A P2 Plasma-1 16 / Day 2 16h
011	N/A	17 / Day 2 17h	36968 6	15228 644	2 427570	1	3 19	81	497170000549	AA90478-01 497170000549 011 N/A P2 Plasma-1 17 / Day 2 17h
011	N/A	18 / Day 2 18h	26783 572	13763 185	1 946030	1	2 56	82	497170000550	AA90478-01 497170000550 011 N/A P2 Plasma-1 18 / Day 2 18h
011	N/A	19 / Day 2 19h	34833 362	15881 341	2 193351	1	2 88	83	497170000551	AA90478-01 497170000551 011 N/A P2 Plasma-1 19 / Day 2 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 30
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	32491 142	0 000000	0 0354		0 0354	0 0
9	0 00		0	38727 647	0 000000	0 0354			
10	0 500	4 00000	13678 649	42158 796	0 324455	0 498	-0 4		
11	1 00	1 00000	29028 008	42273 416	0 686673	1 01	1 0		
12	2 00	0 250000	57438 127	42221 739	1 360392	1 97	-1 5		
13	4 00	0 0625000	118368 908	43664 967	2 710844	3 90	-2 5		
14	8 00	0 0156250	260203 844	44650 336	5 827590	8 34	4 3		
15	10 0	0 0100000	303407 361	42601 805	7 121937	10 2	2 0		
16	20 0	0 00250000	561420 165	39279 835	14 292834	20 4	2 0		
17	40 0	0 000625000	1104489 403	40292 757	27 411612	39 1	-2 3		
18	50 0	0 000400000	1278858 159	37656 777	33 960903	48 4	-3 2		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 701607487

Intercept = -0 0248611489

R-Squared = 0 9991

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 30
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1343264 482	39094 07	34 359801	1	49 0		49 3		1 1
2	0 00	1415506 659	40826 657	34 671138	1	49 5				
3	0 00	1448480 936	42425 977	34 141369	1	48 7				
4	0 00	1525598 541	44259 357	34 469514	1	49 2				
5	0 00	1401475 048	40849 817	34 307988	1	48 9				
50	0 00	1227736 579	35650 308	34 438316	1	49 1				
51	0 00	1180598 513	33460 612	35 283231	1	50 3				
86	0 00	980709 552	27895 701	35 156297	1	50 1				
87	0 00	1058848 919	30695 485	34 495266	1	49 2				
29	1 50	35480 546	37764 01	0 939533	1	1 37	-8 7	1 38	-8 0	0 5
62	1 50	33873 17	35953 703	0 942133	1	1 38	-8 0			
39	8 00	208908 56	39401 324	5 302070	1	7 59	-5 1	7 89	-1 4	5 4
73	8 00	160831 422	28096 276	5 724297	1	8 19	2 4			
49	37 5	813345 639	32464 805	25 053150	1	35 7	-4 8	34 8	-7 2	3 9
84	37 5	727654 448	30752 543	23 661602	1	33 8	-9 9			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 30
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
019	N/A	1 / Day 3 1h	16058 785	36952 677	0 434577	1	0 655	20	497170000989	AA90478-01 497170000989 019 N/A P3 Plasma-1 1 / Day 3 1h
019	N/A	2 / Day 3 2h	14393 912	37527 612	0 383555	1	0 582	21	497170000990	AA90478-01 497170000990 019 N/A P3 Plasma-1 2 / Day 3 2h
019	N/A	3 / Day 3 3h	16300 459	38476 549	0 423647	1	0 639	22	497170000991	AA90478-01 497170000991 019 N/A P3 Plasma-1 3 / Day 3 3h
019	N/A	4 / Day 3 4h	15102 102	31773 28	0 475308	1	0 713	23	497170000992	AA90478-01 497170000992 019 N/A P3 Plasma-1 4 / Day 3 4h
019	N/A	5 / Day 3 5h	19680 029	35522 097	0 554022	1	0 825	24	497170000993	AA90478-01 497170000993 019 N/A P3 Plasma-1 5 / Day 3 5h
019	N/A	6 / Day 3 6h	19470 956	36982 42	0 526492	1	0 786	25	497170000994	AA90478-01 497170000994 019 N/A P3 Plasma-1 6 / Day 3 6h
019	N/A	7 / Day 3 7h	18429 635	37523 96	0 491143	1	0 735	26	497170000995	AA90478-01 497170000995 019 N/A P3 Plasma-1 7 / Day 3 7h
019	N/A	8 / Day 3 8h	22649 912	37784 397	0 599451	1	0 890	27	497170000996	AA90478-01 497170000996 019 N/A P3 Plasma-1 8 / Day 3 8h
019	N/A	9 / Day 3 9h	15089 113	32480 858	0 464554	1	0 698	28	497170000997	AA90478-01 497170000997 019 N/A P3 Plasma-1 9 / Day 3 9h
019	N/A	10 / Day 3 10h	15620 937	31942 894	0 489027	1	0 732	30	497170000998	AA90478-01 497170000998 019 N/A P3 Plasma-1 10 / Day 3 10h
019	N/A	11 / Day 3 11h	16371 48	36374 264	0 450084	1	0 677	31	497170000999	AA90478-01 497170000999 019 N/A P3 Plasma-1 11 / Day 3 11h
019	N/A	12 / Day 3 12h	15772 81	36408 049	0 433223	1	0 653	32	497170001000	AA90478-01 497170001000 019 N/A P3 Plasma-1 12 / Day 3 12h
019	N/A	13 / Day 3 13h	15225 699	39830 434	0 382263	1	0 580	33	497170001001	AA90478-01 497170001001 019 N/A P3 Plasma-1 13 / Day 3 13h
019	N/A	14 / Day 3 14h	16496 968	35451 318	0 465341	1	0 699	34	497170001002	AA90478-01 497170001002 019 N/A P3 Plasma-1 14 / Day 3 14h
019	N/A	15 / Day 3 15h	16778 588	38189 379	0 439352	1	0 662	35	497170001003	AA90478-01 497170001003 019 N/A P3 Plasma-1 15 / Day 3 15h
019	N/A	16 / Day 3 16h	15903 812	33905 459	0 469063	1	0 704	36	497170001004	AA90478-01 497170001004 019 N/A P3 Plasma-1 16 / Day 3 16h
019	N/A	17 / Day 3 17h	18392 314	37093 34	0 495839	1	0 742	37	497170001005	AA90478-01 497170001005 019 N/A P3 Plasma-1 17 / Day 3 17h
019	N/A	18 / Day 3 18h	15828 383	40562 557	0 390222	1	0 592	38	497170001006	AA90478-01 497170001006 019 N/A P3 Plasma-1 18 / Day 3 18h
019	N/A	19 / Day 3 19h	14861 657	34578 943	0 429789	1	0 648	40	497170001007	AA90478-01 497170001007 019 N/A P3 Plasma-1 19 / Day 3 19h
021	N/A	1 / Day 3 1h	13336 85	38303 768	0 348186	1	0 532	41	497170001084	AA90478-01 497170001084 021 N/A P3 Plasma-1 1 / Day 3 1h
021	N/A	2 / Day 3 2h	12391 301	39685 696	0 312236	1	BLQ<(0 500)	42	497170001085	AA90478-01 497170001085 021 N/A P3 Plasma-1 2 / Day 3 2h
021	N/A	3 / Day 3 3h	12939 576	38824 769	0 333281	1	0 510	43	497170001086	AA90478-01 497170001086 021 N/A P3 Plasma-1 3 / Day 3 3h
021	N/A	4 / Day 3 4h	17040 522	34234 045	0 497765	1	0 745	44	497170001087	AA90478-01 497170001087 021 N/A P3 Plasma-1 4 / Day 3 4h
021	N/A	5 / Day 3 5h	23764 285	37065 753	0 641139	1	0 949	45	497170001088	AA90478-01 497170001088 021 N/A P3 Plasma-1 5 / Day 3 5h
021	N/A	6 / Day 3 6h	28283 335	33989 702	0 832115	1	1 22	46	497170001089	AA90478-01 497170001089 021 N/A P3 Plasma-1 6 / Day 3 6h
021	N/A	7 / Day 3 7h	30754 179	36043 964	0 853241	1	1 25	47	497170001090	AA90478-01 497170001090 021 N/A P3 Plasma-1 7 / Day 3 7h
021	N/A	8 / Day 3 8h	29653 813	33132 858	0 894997	1	1 31	48	497170001091	AA90478-01 497170001091 021 N/A P3 Plasma-1 8 / Day 3 8h
021	N/A	9 / Day 3 9h	39908 726	32346 248	1 233798	1	1 79	52	497170001092	AA90478-01 497170001092 021 N/A P3 Plasma-1 9 / Day 3 9h
021	N/A	10 / Day 3 10h	27784 562	34427 149	0 807054	1	1 19	53	497170001093	AA90478-01 497170001093 021 N/A P3 Plasma-1 10 / Day 3 10h
021	N/A	11 / Day 3 11h	20566 806	36725 987	0 560007	1	0 834	54	497170001094	AA90478-01 497170001094 021 N/A P3 Plasma-1 11 / Day 3 11h
021	N/A	12 / Day 3 12h	18596 99	34361 54	0 541215	1	0 807	55	497170001095	AA90478-01 497170001095 021 N/A P3 Plasma-1 12 / Day 3 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
021	N/A	13 / Day 3 13h	17418 508	34223 483	0 508964	1	0 761	56	497170001096	AA90478-01 497170001096 021 N/A P3 Plasma-1 13 / Day 3 13h
021	N/A	14 / Day 3 14h	15730 134	34733 883	0 452876	1	0 681	57	497170001097	AA90478-01 497170001097 021 N/A P3 Plasma-1 14 / Day 3 14h
021	N/A	15 / Day 3 15h	14840 683	35194 456	0 421677	1	0 636	58	497170001098	AA90478-01 497170001098 021 N/A P3 Plasma-1 15 / Day 3 15h
021	N/A	16 / Day 3 16h	11466 78	29951 13	0 382850	1	0 581	59	497170001099	AA90478-01 497170001099 021 N/A P3 Plasma-1 16 / Day 3 16h
021	N/A	17 / Day 3 17h	12466 453	30667 97	0 406497	1	0 615	60	497170001100	AA90478-01 497170001100 021 N/A P3 Plasma-1 17 / Day 3 17h
021	N/A	18 / Day 3 18h	10743 676	35203 086	0 305191	1	BLQ<(0 500)	61	497170001101	AA90478-01 497170001101 021 N/A P3 Plasma-1 18 / Day 3 18h
021	N/A	19 / Day 3 19h	13381 807	35987 642	0 371845	1	0 565	63	497170001102	AA90478-01 497170001102 021 N/A P3 Plasma-1 19 / Day 3 19h
024	N/A	1 / Day 3 1h	27292 347	36454 737	0 748664	1	1 10	64	497170001179	AA90478-01 497170001179 024 N/A P3 Plasma-1 1 / Day 3 1h
024	N/A	2 / Day 3 2h	27022 693	35801 674	0 754789	1	1 11	65	497170001180	AA90478-01 497170001180 024 N/A P3 Plasma-1 2 / Day 3 2h
024	N/A	3 / Day 3 3h	40231 403	37991 266	1 058965	1	1 54	66	497170001181	AA90478-01 497170001181 024 N/A P3 Plasma-1 3 / Day 3 3h
024	N/A	4 / Day 3 4h	60050 244	36990 031	1 623417	1	2 35	67	497170001182	AA90478-01 497170001182 024 N/A P3 Plasma-1 4 / Day 3 4h
024	N/A	5 / Day 3 5h	75012 533	35595 169	2 107380	1	3 04	68	497170001183	AA90478-01 497170001183 024 N/A P3 Plasma-1 5 / Day 3 5h
024	N/A	6 / Day 3 6h	77226 372	34445 166	2 242009	1	3 23	69	497170001184	AA90478-01 497170001184 024 N/A P3 Plasma-1 6 / Day 3 6h
024	N/A	7 / Day 3 7h	109268 34	32114 788	3 402431	1	4 88	70	497170001185	AA90478-01 497170001185 024 N/A P3 Plasma-1 7 / Day 3 7h
024	N/A	8 / Day 3 8h	121628 632	29423 273	4 133756	1	5 93	71	497170001186	AA90478-01 497170001186 024 N/A P3 Plasma-1 8 / Day 3 8h
024	N/A	9 / Day 3 9h	99981 223	28152 751	3 551384	1	5 10	72	497170001187	AA90478-01 497170001187 024 N/A P3 Plasma-1 9 / Day 3 9h
024	N/A	10 / Day 3 10h	73421 674	29892 542	2 456187	1	3 54	74	497170001188	AA90478-01 497170001188 024 N/A P3 Plasma-1 10 / Day 3 10h
024	N/A	11 / Day 3 11h	68630 254	28903 569	2 374456	1	3 42	75	497170001189	AA90478-01 497170001189 024 N/A P3 Plasma-1 11 / Day 3 11h
024	N/A	12 / Day 3 12h	71509 635	27653 645	2 585903	1	3 72	76	497170001190	AA90478-01 497170001190 024 N/A P3 Plasma-1 12 / Day 3 12h
024	N/A	13 / Day 3 13h	75792 835	27360 975	2 770107	1	3 98	77	497170001191	AA90478-01 497170001191 024 N/A P3 Plasma-1 13 / Day 3 13h
024	N/A	14 / Day 3 14h	73481 951	25747 066	2 853993	1	4 10	78	497170001192	AA90478-01 497170001192 024 N/A P3 Plasma-1 14 / Day 3 14h
024	N/A	15 / Day 3 15h	84998 641	27275 062	3 116350	1	4 48	79	497170001193	AA90478-01 497170001193 024 N/A P3 Plasma-1 15 / Day 3 15h
024	N/A	16 / Day 3 16h	93057 357	28377 241	3 279295	1	4 71	80	497170001194	AA90478-01 497170001194 024 N/A P3 Plasma-1 16 / Day 3 16h
024	N/A	17 / Day 3 17h	87266 28	27550 434	3 167510	1	4 55	81	497170001195	AA90478-01 497170001195 024 N/A P3 Plasma-1 17 / Day 3 17h
024	N/A	18 / Day 3 18h	90720 295	25441 535	3 565834	1	5 12	82	497170001196	AA90478-01 497170001196 024 N/A P3 Plasma-1 18 / Day 3 18h
024	N/A	19 / Day 3 19h	94319 146	26529 898	3 555202	1	5 10	83	497170001197	AA90478-01 497170001197 024 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 31
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	38298 472	0 000000	-0 00762		-0 00762	0 0
9	0 00		0	42454 74	0 000000	-0 00762			
10	0 500	4 00000	10652 292	30979 164	0 343853	0 500	0 0		
11	1 00	1 00000	24630 686	35771 685	0 688553	1 01	1 0		
12	2 00	0 250000	54043 637	40736 021	1 326679	1 95	-2 5		
13	4 00	0 0625000	92501 489	35272 126	2 622510	3 87	-3 3		
14	8 00	0 0156250	196366 116	34769 253	5 647694	8 34	4 3		
15	10 0	0 0100000	253254 24	36167 437	7 002272	10 3	3 0		
16	20 0	0 00250000	521665 344	37635 299	13 861065	20 5	2 5		
17	40 0	0 000625000	1058628 855	40016 515	26 454799	39 1	-2 3		
18	50 0	0 000400000	1200673 798	36587 687	32 816335	48 5	-3 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 676795896

Intercept = 0 00516014927

R-Squared = 0 9989

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 31
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1391355 83	40797 354	34 104070	1	50 4		50 3		1 4
2	0 00	1348914 773	40400 941	33 388202	1	49 3				
3	0 00	1275098 782	37406 294	34 087814	1	50 4				
4	0 00	1333776 594	38867 911	34 315623	1	50 7				
5	0 00	1238781 924	35720 779	34 679589	1	51 2				
52	0 00	1274235 003	37035 996	34 405312	1	50 8				
53	0 00	1330309 053	38705 083	34 370397	1	50 8				
92	0 00	1414523 858	42398 006	33 362981	1	49 3				
93	0 00	1349705 205	40098 657	33 659611	1	49 7				
34	1 50	37304 796	37592 236	0 992354	1	1 46	-2 7	1 54	2 7	7 3
71	1 50	42369 046	38475 39	1 101199	1	1 62	8 0			
41	8 00	213956 554	39711 084	5 387830	1	7 95	-0 6	7 82	-2 3	2 4
78	8 00	198596 985	38176 875	5 202023	1	7 68	-4 0			
26	37 5	427040 786	34344 416	12 434067	2	36 7	-2 1	35 5	-5 3	5 9
61	37 5	422806 088	37741 092	11 202805	2	33 1	-11 7			
84	37 5	450380 865	36191 679	12 444321	2	36 8	-1 9			
51	37 5	854116 805	33100 02	25 804117	1	38 1	1 6	42 3	12 8	13 9
90	37 5	902155 103	28743 442	31 386467	1	46 4	23 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 31
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 3 1h	34606 989	36436 392	0 949792	2	2 79	65	497170000324	AA90478-01 497170000324 007 N/A P3 Plasma-1 1 / Day 3 1h
007	N/A	2 / Day 3 2h	37537 741	37993 877	0 987994	2	2 90	66	497170000325	AA90478-01 497170000325 007 N/A P3 Plasma-1 2 / Day 3 2h
007	N/A	3 / Day 3 3h	38494 782	36386 119	1 057952	2	3 11	67	497170000326	AA90478-01 497170000326 007 N/A P3 Plasma-1 3 / Day 3 3h
007	N/A	4 / Day 3 4h	46945 565	35598 844	1 318738	2	3 88	68	497170000327	AA90478-01 497170000327 007 N/A P3 Plasma-1 4 / Day 3 4h
007	N/A	5 / Day 3 5h	46460 581	33372 073	1 392199	2	4 10	69	497170000328	AA90478-01 497170000328 007 N/A P3 Plasma-1 5 / Day 3 5h
007	N/A	6 / Day 3 6h	52412 795	36483 739	1 436607	2	4 23	70	497170000329	AA90478-01 497170000329 007 N/A P3 Plasma-1 6 / Day 3 6h
026	N/A	16 / Day 1 16h	72790 629	28273 864	2 574485	1	3 80	72	497170001327	AA90478-01 497170001327 026 N/A P1 Plasma-1 16 / Day 1 16h
026	N/A	17 / Day 1 17h	81781 869	36954 647	2 213033	1	3 26	73	497170001328	AA90478-01 497170001328 026 N/A P1 Plasma-1 17 / Day 1 17h
026	N/A	18 / Day 1 18h	68347 204	35801 763	1 909046	1	2 81	74	497170001329	AA90478-01 497170001329 026 N/A P1 Plasma-1 18 / Day 1 18h
026	N/A	19 / Day 1 19h	77145 78	42310 554	1 823322	1	2 69	75	497170001330	AA90478-01 497170001330 026 N/A P1 Plasma-1 19 / Day 1 19h
026	N/A	1 / Day 3 1h	20300 732	34463 348	0 589053	1	0 863	20	497170001274	AA90478-01 497170001274 026 N/A P3 Plasma-1 1 / Day 3 1h
026	N/A	2 / Day 3 2h	25013 286	34859 881	0 717538	1	1 05	21	497170001275	AA90478-01 497170001275 026 N/A P3 Plasma-1 2 / Day 3 2h
026	N/A	3 / Day 3 3h	30702 176	35221 921	0 871678	1	1 28	22	497170001276	AA90478-01 497170001276 026 N/A P3 Plasma-1 3 / Day 3 3h
026	N/A	4 / Day 3 4h	31523 105	37143 061	0 848694	1	1 25	23	497170001277	AA90478-01 497170001277 026 N/A P3 Plasma-1 4 / Day 3 4h
026	N/A	5 / Day 3 5h	34308 32	36235 841	0 946806	1	1 39	24	497170001278	AA90478-01 497170001278 026 N/A P3 Plasma-1 5 / Day 3 5h
026	N/A	6 / Day 3 6h	36191 33	35267 265	1 026202	1	1 51	25	497170001279	AA90478-01 497170001279 026 N/A P3 Plasma-1 6 / Day 3 6h
026	N/A	7 / Day 3 7h	52837 306	34346 445	1 538363	1	2 27	27	497170001280	AA90478-01 497170001280 026 N/A P3 Plasma-1 7 / Day 3 7h
026	N/A	8 / Day 3 8h	70021 822	36289 105	1 929555	1	2 84	28	497170001281	AA90478-01 497170001281 026 N/A P3 Plasma-1 8 / Day 3 8h
026	N/A	9 / Day 3 9h	84546 916	37969 481	2 226707	1	3 28	29	497170001282	AA90478-01 497170001282 026 N/A P3 Plasma-1 9 / Day 3 9h
026	N/A	10 / Day 3 10h	67643 887	35810 908	1 888919	1	2 78	30	497170001283	AA90478-01 497170001283 026 N/A P3 Plasma-1 10 / Day 3 10h
026	N/A	11 / Day 3 11h	76198 541	38227 567	1 993288	1	2 94	31	497170001284	AA90478-01 497170001284 026 N/A P3 Plasma-1 11 / Day 3 11h
026	N/A	12 / Day 3 12h	79933 922	38459 277	2 078404	1	3 06	32	497170001285	AA90478-01 497170001285 026 N/A P3 Plasma-1 12 / Day 3 12h
026	N/A	13 / Day 3 13h	68297 177	36571 1	1 867518	1	2 75	33	497170001286	AA90478-01 497170001286 026 N/A P3 Plasma-1 13 / Day 3 13h
026	N/A	14 / Day 3 14h	63127 553	37658 032	1 676337	1	2 47	35	497170001287	AA90478-01 497170001287 026 N/A P3 Plasma-1 14 / Day 3 14h
026	N/A	15 / Day 3 15h	61857 215	37292 294	1 658713	1	2 44	36	497170001288	AA90478-01 497170001288 026 N/A P3 Plasma-1 15 / Day 3 15h
026	N/A	16 / Day 3 16h	56263 095	38372 597	1 466231	1	2 16	37	497170001289	AA90478-01 497170001289 026 N/A P3 Plasma-1 16 / Day 3 16h
026	N/A	17 / Day 3 17h	56912 631	38636 553	1 473026	1	2 17	38	497170001290	AA90478-01 497170001290 026 N/A P3 Plasma-1 17 / Day 3 17h
026	N/A	18 / Day 3 18h	51067 617	37489 054	1 362201	1	2 01	39	497170001291	AA90478-01 497170001291 026 N/A P3 Plasma-1 18 / Day 3 18h
026	N/A	19 / Day 3 19h	50350 082	38742 159	1 299620	1	1 91	40	497170001292	AA90478-01 497170001292 026 N/A P3 Plasma-1 19 / Day 3 19h
028	N/A	1 / Day 1 1h	45988 286	38381 325	1 198194	1	1 76	76	497170001407	AA90478-01 497170001407 028 N/A P1 Plasma-1 1 / Day 1 1h
028	N/A	2 / Day 1 2h	40300 078	36327 558	1 109353	1	1 63	77	497170001408	AA90478-01 497170001408 028 N/A P1 Plasma-1 2 / Day 1 2h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
028	N/A	10 / Day 1 10h	113654 686	35988 369	3 158095	1	4 66	79	497170001416	AA90478-01 497170001416 028 N/A P1 Plasma-1 10 / Day 1 10h
028	N/A	11 / Day 1 11h	88500 59	36139 466	2 448863	1	3 61	80	497170001417	AA90478-01 497170001417 028 N/A P1 Plasma-1 11 / Day 1 11h
028	N/A	12 / Day 1 12h	94266 156	34514 724	2 731187	1	4 03	81	497170001418	AA90478-01 497170001418 028 N/A P1 Plasma-1 12 / Day 1 12h
028	N/A	13 / Day 1 13h	98834 712	40471 782	2 442065	1	3 60	82	497170001419	AA90478-01 497170001419 028 N/A P1 Plasma-1 13 / Day 1 13h
028	N/A	14 / Day 1 14h	83436 977	35282 259	2 364842	1	3 49	83	497170001420	AA90478-01 497170001420 028 N/A P1 Plasma-1 14 / Day 1 14h
028	N/A	15 / Day 1 15h	83274 451	35169 407	2 367809	1	3 49	85	497170001421	AA90478-01 497170001421 028 N/A P1 Plasma-1 15 / Day 1 15h
028	N/A	16 / Day 1 16h	68157 425	34303 717	1 986882	1	2 93	86	497170001422	AA90478-01 497170001422 028 N/A P1 Plasma-1 16 / Day 1 16h
028	N/A	17 / Day 1 17h	57995 067	35193 47	1 647893	1	2 43	87	497170001423	AA90478-01 497170001423 028 N/A P1 Plasma-1 17 / Day 1 17h
028	N/A	18 / Day 1 18h	86332 336	35222 599	2 451050	1	3 61	88	497170001424	AA90478-01 497170001424 028 N/A P1 Plasma-1 18 / Day 1 18h
028	N/A	19 / Day 1 19h	65516 887	36149 04	1 812410	1	2 67	89	497170001425	AA90478-01 497170001425 028 N/A P1 Plasma-1 19 / Day 1 19h
028	N/A	1 / Day 3 1h	60457 181	38121 388	1 585912	2	4 67	42	497170001369	AA90478-01 497170001369 028 N/A P3 Plasma-1 1 / Day 3 1h
028	N/A	2 / Day 3 2h	53932 808	36753 177	1 467433	2	4 32	43	497170001370	AA90478-01 497170001370 028 N/A P3 Plasma-1 2 / Day 3 2h
028	N/A	3 / Day 3 3h	61181 132	38790 174	1 577233	2	4 65	44	497170001371	AA90478-01 497170001371 028 N/A P3 Plasma-1 3 / Day 3 3h
028	N/A	4 / Day 3 4h	68602 031	40685 021	1 686174	2	4 97	45	497170001372	AA90478-01 497170001372 028 N/A P3 Plasma-1 4 / Day 3 4h
028	N/A	5 / Day 3 5h	61011 923	37969 481	1 606867	2	4 73	46	497170001373	AA90478-01 497170001373 028 N/A P3 Plasma-1 5 / Day 3 5h
028	N/A	6 / Day 3 6h	53568 496	34059 96	1 572770	2	4 63	47	497170001374	AA90478-01 497170001374 028 N/A P3 Plasma-1 6 / Day 3 6h
028	N/A	7 / Day 3 7h	72617 45	42726 343	1 699594	2	5 01	48	497170001375	AA90478-01 497170001375 028 N/A P3 Plasma-1 7 / Day 3 7h
028	N/A	8 / Day 3 8h	64134 849	35225 811	1 820678	2	5 37	49	497170001376	AA90478-01 497170001376 028 N/A P3 Plasma-1 8 / Day 3 8h
028	N/A	9 / Day 3 9h	65440 629	36447 785	1 795462	2	5 29	50	497170001377	AA90478-01 497170001377 028 N/A P3 Plasma-1 9 / Day 3 9h
028	N/A	10 / Day 3 10h	71090 504	37491 65	1 896169	2	5 59	54	497170001378	AA90478-01 497170001378 028 N/A P3 Plasma-1 10 / Day 3 10h
028	N/A	11 / Day 3 11h	68459 93	37312 868	1 834754	2	5 41	55	497170001379	AA90478-01 497170001379 028 N/A P3 Plasma-1 11 / Day 3 11h
028	N/A	12 / Day 3 12h	78014 148	38057 979	2 049876	2	6 04	56	497170001380	AA90478-01 497170001380 028 N/A P3 Plasma-1 12 / Day 3 12h
028	N/A	13 / Day 3 13h	68840 261	36896 178	1 865783	2	5 50	57	497170001381	AA90478-01 497170001381 028 N/A P3 Plasma-1 13 / Day 3 13h
028	N/A	14 / Day 3 14h	62755 716	40892 326	1 534658	2	4 52	58	497170001382	AA90478-01 497170001382 028 N/A P3 Plasma-1 14 / Day 3 14h
028	N/A	15 / Day 3 15h	49785 454	35481 235	1 403149	2	4 13	59	497170001383	AA90478-01 497170001383 028 N/A P3 Plasma-1 15 / Day 3 15h
028	N/A	16 / Day 3 16h	56175 642	36838 079	1 524934	2	4 49	60	497170001384	AA90478-01 497170001384 028 N/A P3 Plasma-1 16 / Day 3 16h
028	N/A	17 / Day 3 17h	46032 636	26061 924	1 766279	2	5 20	62	497170001385	AA90478-01 497170001385 028 N/A P3 Plasma-1 17 / Day 3 17h
028	N/A	18 / Day 3 18h	47832 87	36187 199	1 321817	2	3 89	63	497170001386	AA90478-01 497170001386 028 N/A P3 Plasma-1 18 / Day 3 18h
028	N/A	19 / Day 3 19h	51339 097	38380 912	1 337621	2	3 94	64	497170001387	AA90478-01 497170001387 028 N/A P3 Plasma-1 19 / Day 3 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 33
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	42027 6	0 000000	-0 0582		-0 0582	0 0
9	0 00		0	47041 643	0 000000	-0 0582			
10	0 500	4 00000	21240 386	49264 496	0 431150	0 510	2 0		
11	1 00	1 00000	36268 847	46831 868	0 774448	0 962	-3 8		
12	2 00	0 250000	78226 282	50917 379	1 536338	1 97	-1 5		
13	4 00	0 0625000	138874 532	44703 117	3 106596	4 03	0 8		
14	8 00	0 0156250	274411 436	42401 567	6 471729	8 46	5 8		
15	10 0	0 0100000	367471 236	48161 209	7 630025	9 99	-0 1		
16	20 0	0 00250000	698701 025	46059 828	15 169423	19 9	-0 5		
17	40 0	0 000625000	1372579 329	45865 315	29 926303	39 4	-1 5		
18	50 0	0 000400000	1902923 037	50510 182	37 674048	49 6	-0 8		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 759313572

Intercept = 0 0441823485

R-Squared = 0 9990

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 33
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1670544 543	44804 497	37 285198	1	49 0		49 8		1 7
2	0 00	1575935 916	41871 953	37 637029	1	49 5				
3	0 00	1595977 104	41519 659	38 439071	1	50 6				
4	0 00	1554800 011	41053 901	37 872163	1	49 8				
5	0 00	1571813 298	42352 38	37 112750	1	48 8				
50	0 00	1632614 947	42050 757	38 824865	1	51 1				
51	0 00	1523910 978	41126 32	37 054397	1	48 7				
86	0 00	1577498 587	41489 716	38 021436	1	50 0				
87	0 00	1550389 732	40557 675	38 226790	1	50 3				
29	1 50	49659 708	44058 642	1 127128	1	1 43	-4 7	1 41	-6 0	2 5
62	1 50	45575 836	41715 05	1 092551	1	1 38	-8 0			
39	8 00	253047 196	43059 348	5 876708	1	7 68	-4 0	7 75	-3 1	1 2
73	8 00	249514 334	41786 952	5 971106	1	7 81	-2 4			
49	37 5	1136423 059	43352 933	26 213291	1	34 5	-8 0	35 4	-5 6	3 6
84	37 5	1108950 53	40182 03	27 598171	1	36 3	-3 2			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 33
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	1 / Day 5 1h	65590 028	47902 691	1 369235	1	1 75	20	497170000571	AA90478-01 497170000571 012 N/A P5 Plasma-1 1 / Day 5 1h
012	N/A	2 / Day 5 2h	61666 567	42972 839	1 435013	1	1 83	21	497170000572	AA90478-01 497170000572 012 N/A P5 Plasma-1 2 / Day 5 2h
012	N/A	3 / Day 5 3h	58197 615	42144 963	1 380891	1	1 76	22	497170000573	AA90478-01 497170000573 012 N/A P5 Plasma-1 3 / Day 5 3h
012	N/A	4 / Day 5 4h	62425 102	44881 591	1 390884	1	1 77	23	497170000574	AA90478-01 497170000574 012 N/A P5 Plasma-1 4 / Day 5 4h
012	N/A	5 / Day 5 5h	63371 475	44549 572	1 422493	1	1 82	24	497170000575	AA90478-01 497170000575 012 N/A P5 Plasma-1 5 / Day 5 5h
012	N/A	6 / Day 5 6h	65811 436	42275 462	1 556729	1	1 99	25	497170000576	AA90478-01 497170000576 012 N/A P5 Plasma-1 6 / Day 5 6h
012	N/A	7 / Day 5 7h	69304 506	40088 435	1 728791	1	2 22	26	497170000577	AA90478-01 497170000577 012 N/A P5 Plasma-1 7 / Day 5 7h
012	N/A	8 / Day 5 8h	70465 665	44361 594	1 588439	1	2 03	27	497170000578	AA90478-01 497170000578 012 N/A P5 Plasma-1 8 / Day 5 8h
012	N/A	9 / Day 5 9h	75147 978	43018 288	1 746884	1	2 24	28	497170000579	AA90478-01 497170000579 012 N/A P5 Plasma-1 9 / Day 5 9h
012	N/A	10 / Day 5 10h	67800 472	44364 61	1 528256	1	1 95	30	497170000580	AA90478-01 497170000580 012 N/A P5 Plasma-1 10 / Day 5 10h
012	N/A	11 / Day 5 11h	41505 519	39930 413	1 039446	1	1 31	31	497170000581	AA90478-01 497170000581 012 N/A P5 Plasma-1 11 / Day 5 11h
012	N/A	12 / Day 5 12h	65387 244	42202 929	1 549353	1	1 98	32	497170000582	AA90478-01 497170000582 012 N/A P5 Plasma-1 12 / Day 5 12h
012	N/A	13 / Day 5 13h	58222 787	42071 27	1 383908	1	1 76	33	497170000583	AA90478-01 497170000583 012 N/A P5 Plasma-1 13 / Day 5 13h
012	N/A	14 / Day 5 14h	55255 782	42302 591	1 306203	1	1 66	34	497170000584	AA90478-01 497170000584 012 N/A P5 Plasma-1 14 / Day 5 14h
012	N/A	15 / Day 5 15h	52951 745	41043 708	1 290131	1	1 64	35	497170000585	AA90478-01 497170000585 012 N/A P5 Plasma-1 15 / Day 5 15h
012	N/A	16 / Day 5 16h	56786 466	41675 688	1 362580	1	1 74	36	497170000586	AA90478-01 497170000586 012 N/A P5 Plasma-1 16 / Day 5 16h
012	N/A	17 / Day 5 17h	47241 448	38614 111	1 223424	1	1 55	37	497170000587	AA90478-01 497170000587 012 N/A P5 Plasma-1 17 / Day 5 17h
012	N/A	18 / Day 5 18h	50346 761	41568 144	1 211186	1	1 54	38	497170000588	AA90478-01 497170000588 012 N/A P5 Plasma-1 18 / Day 5 18h
012	N/A	19 / Day 5 19h	52016 85	40600 487	1 281188	1	1 63	40	497170000589	AA90478-01 497170000589 012 N/A P5 Plasma-1 19 / Day 5 19h
013	N/A	1 / Day 5 1h	9014 023	42103 757	0 214091	1	BLQ<(0 500)	41	497170000666	AA90478-01 497170000666 013 N/A P5 Plasma-1 1 / Day 5 1h
013	N/A	2 / Day 5 2h	8440 871	41528 649	0 203254	1	BLQ<(0 500)	42	497170000667	AA90478-01 497170000667 013 N/A P5 Plasma-1 2 / Day 5 2h
013	N/A	3 / Day 5 3h	9591 47	42390 924	0 226262	1	BLQ<(0 500)	43	497170000668	AA90478-01 497170000668 013 N/A P5 Plasma-1 3 / Day 5 3h
013	N/A	4 / Day 5 4h	17459 639	41615 491	0 419547	1	BLQ<(0 500)	44	497170000669	AA90478-01 497170000669 013 N/A P5 Plasma-1 4 / Day 5 4h
013	N/A	5 / Day 5 5h	24413 61	44862 182	0 544191	1	0 659	45	497170000670	AA90478-01 497170000670 013 N/A P5 Plasma-1 5 / Day 5 5h
013	N/A	6 / Day 5 6h	43985 949	40491 202	1 086309	1	1 37	46	497170000671	AA90478-01 497170000671 013 N/A P5 Plasma-1 6 / Day 5 6h
013	N/A	7 / Day 5 7h	85820 429	40148 905	2 137553	1	2 76	47	497170000672	AA90478-01 497170000672 013 N/A P5 Plasma-1 7 / Day 5 7h
013	N/A	8 / Day 5 8h	68135 517	40866 419	1 667274	1	2 14	48	497170000673	AA90478-01 497170000673 013 N/A P5 Plasma-1 8 / Day 5 8h
013	N/A	9 / Day 5 9h	45328 923	44419 301	1 020478	1	1 29	52	497170000674	AA90478-01 497170000674 013 N/A P5 Plasma-1 9 / Day 5 9h
013	N/A	10 / Day 5 10h	29580 816	37414 328	0 790628	1	0 983	53	497170000675	AA90478-01 497170000675 013 N/A P5 Plasma-1 10 / Day 5 10h
013	N/A	11 / Day 5 11h	31275 099	43371 237	0 721102	1	0 891	54	497170000676	AA90478-01 497170000676 013 N/A P5 Plasma-1 11 / Day 5 11h
013	N/A	12 / Day 5 12h	23467 462	40511 942	0 579273	1	0 705	55	497170000677	AA90478-01 497170000677 013 N/A P5 Plasma-1 12 / Day 5 12h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
013	N/A	13 / Day 5 13h	24939 115	39538 684	0 630752	1	0 772	56	497170000678	AA90478-01 497170000678 013 N/A P5 Plasma-1 13 / Day 5 13h
013	N/A	14 / Day 5 14h	29177 516	41151 012	0 709035	1	0 876	57	497170000679	AA90478-01 497170000679 013 N/A P5 Plasma-1 14 / Day 5 14h
013	N/A	15 / Day 5 15h	27469 106	42745 559	0 642619	1	0 788	58	497170000680	AA90478-01 497170000680 013 N/A P5 Plasma-1 15 / Day 5 15h
013	N/A	16 / Day 5 16h	26989 783	41961 674	0 643201	1	0 789	59	497170000681	AA90478-01 497170000681 013 N/A P5 Plasma-1 16 / Day 5 16h
013	N/A	17 / Day 5 17h	23150 097	39277 518	0 589398	1	0 718	60	497170000682	AA90478-01 497170000682 013 N/A P5 Plasma-1 17 / Day 5 17h
013	N/A	18 / Day 5 18h	21456 02	42891 647	0 500238	1	0 601	61	497170000683	AA90478-01 497170000683 013 N/A P5 Plasma-1 18 / Day 5 18h
013	N/A	19 / Day 5 19h	24524 049	44402 252	0 552315	1	0 669	63	497170000684	AA90478-01 497170000684 013 N/A P5 Plasma-1 19 / Day 5 19h
015	N/A	1 / Day 5 1h	62049 044	33350 648	1 860505	1	2 39	64	497170000761	AA90478-01 497170000761 015 N/A P5 Plasma-1 1 / Day 5 1h
015	N/A	2 / Day 5 2h	66611 67	45393 516	1 467427	1	1 87	65	497170000762	AA90478-01 497170000762 015 N/A P5 Plasma-1 2 / Day 5 2h
015	N/A	3 / Day 5 3h	60134 666	44997 094	1 336412	1	1 70	66	497170000763	AA90478-01 497170000763 015 N/A P5 Plasma-1 3 / Day 5 3h
015	N/A	4 / Day 5 4h	65802 948	43320 122	1 518993	1	1 94	67	497170000764	AA90478-01 497170000764 015 N/A P5 Plasma-1 4 / Day 5 4h
015	N/A	5 / Day 5 5h	70969 992	40907 563	1 734887	1	2 23	68	497170000765	AA90478-01 497170000765 015 N/A P5 Plasma-1 5 / Day 5 5h
015	N/A	6 / Day 5 6h	84044 434	44022 814	1 909111	1	2 46	69	497170000766	AA90478-01 497170000766 015 N/A P5 Plasma-1 6 / Day 5 6h
015	N/A	7 / Day 5 7h	82678 543	39832 849	2 075637	1	2 68	70	497170000767	AA90478-01 497170000767 015 N/A P5 Plasma-1 7 / Day 5 7h
015	N/A	8 / Day 5 8h	75728 706	39519 516	1 916236	1	2 47	71	497170000768	AA90478-01 497170000768 015 N/A P5 Plasma-1 8 / Day 5 8h
015	N/A	9 / Day 5 9h	84373 017	41419 082	2 037057	1	2 62	72	497170000769	AA90478-01 497170000769 015 N/A P5 Plasma-1 9 / Day 5 9h
015	N/A	10 / Day 5 10h	84125 093	41962 131	2 004786	1	2 58	74	497170000770	AA90478-01 497170000770 015 N/A P5 Plasma-1 10 / Day 5 10h
015	N/A	11 / Day 5 11h	76546 084	41834 229	1 829748	1	2 35	75	497170000771	AA90478-01 497170000771 015 N/A P5 Plasma-1 11 / Day 5 11h
015	N/A	12 / Day 5 12h	78920 191	43548 643	1 812231	1	2 33	76	497170000772	AA90478-01 497170000772 015 N/A P5 Plasma-1 12 / Day 5 12h
015	N/A	13 / Day 5 13h	80714 442	45263 449	1 783215	1	2 29	77	497170000773	AA90478-01 497170000773 015 N/A P5 Plasma-1 13 / Day 5 13h
015	N/A	14 / Day 5 14h	83463 421	43603 319	1 914153	1	2 46	78	497170000774	AA90478-01 497170000774 015 N/A P5 Plasma-1 14 / Day 5 14h
015	N/A	15 / Day 5 15h	74277 728	40399 55	1 838578	1	2 36	79	497170000775	AA90478-01 497170000775 015 N/A P5 Plasma-1 15 / Day 5 15h
015	N/A	16 / Day 5 16h	64781 589	41751 885	1 551585	1	1 99	80	497170000776	AA90478-01 497170000776 015 N/A P5 Plasma-1 16 / Day 5 16h
015	N/A	17 / Day 5 17h	62175 204	40850 38	1 522023	1	1 95	81	497170000777	AA90478-01 497170000777 015 N/A P5 Plasma-1 17 / Day 5 17h
015	N/A	18 / Day 5 18h	61147 882	40488 379	1 510258	1	1 93	82	497170000778	AA90478-01 497170000778 015 N/A P5 Plasma-1 18 / Day 5 18h
015	N/A	19 / Day 5 19h	53031 996	38902 26	1 363211	1	1 74	83	497170000779	AA90478-01 497170000779 015 N/A P5 Plasma-1 19 / Day 5 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 36
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	37357 457	0 000000	0 0107		0 0107	0 0
9	0 00		0	31663 967	0 000000	0 0107			
10	0 500	4 00000	12720 171	36963 556	0 344127	0 507	1 4		
11	1 00	1 00000	25350 523	37535 535	0 675374	0 984	-1 6		
12	2 00	0 250000	54619 846	40663 806	1 343205	1 95	-2 5		
13	4 00	0 0625000	118583 609	43363 467	2 734643	3 95	-1 3		
14	8 00	0 0156250	225019 217	38551 074	5 836912	8 42	5 3		
15	10 0	0 0100000	257216 506	36824 343	6 984958	10 1	1 0		
16	20 0	0 00250000	515549 513	37322 974	13 813195	19 9	-0 5		
17	40 0	0 000625000	1091489 261	38960 476	28 015296	40 4	1 0		
18	50 0	0 000400000	1246111 517	36716 708	33 938541	48 9	-2 2		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:
Slope = 0 694130106
Intercept = -0 00745870681
R-Squared = 0 9992

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 36
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1509015 442	42741 644	35 305508	1	50 9		49 6		2 8
2	0 00	1425415 368	42540 365	33 507361	1	48 3				
3	0 00	1403679 354	41295 249	33 991304	1	49 0				
4	0 00	1433250 227	41163 361	34 818591	1	50 2				
5	0 00	1429662 2	39748 1	35 968064	1	51 8				
93	0 00	1393331 298	41753 07	33 370751	1	48 1				
94	0 00	1238749 838	36334 364	34 093065	1	49 1				
33	1 50	35261 103	36503 777	0 965958	1	1 40	-6 7	1 43	-4 7	3 0
66	1 50	35983 137	35737 062	1 006886	1	1 46	-2 7			
40	8 00	189202 205	34934 776	5 415870	1	7 81	-2 4	7 90	-1 3	1 5
73	8 00	198181 877	35847 539	5 528465	1	7 98	-0 3			
47	37 5	962385 873	38373 13	25 079681	1	36 1	-3 7	36 5	-2 7	1 4
91	37 5	874258 972	34223 762	25 545379	1	36 8	-1 9			
26	195	482832 637	38187 419	12 643762	10	182	-6 7	187	-4 1	2 4
57	195	482935 952	37068 891	13 028066	10	188	-3 6			
83	195	523098 946	39422 795	13 268946	10	191	-2 1			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 36
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	1 / Day 4 1h	6349 772	34498 525	*0 184059	10	*BLQ<(5 00)	20	497170000305	AA90478-01 497170000305 007 N/A P4 Plasma-1 1 / Day 4 1h
007	N/A	2 / Day 4 2h	7314 935	36234 847	*0 201876	10	*BLQ<(5 00)	21	497170000306	AA90478-01 497170000306 007 N/A P4 Plasma-1 2 / Day 4 2h
007	N/A	3 / Day 4 3h	6712 246	35885 134	*0 187048	10	*BLQ<(5 00)	22	497170000307	AA90478-01 497170000307 007 N/A P4 Plasma-1 3 / Day 4 3h
007	N/A	4 / Day 4 4h	7045 165	36495 009	*0 193045	10	*BLQ<(5 00)	23	497170000308	AA90478-01 497170000308 007 N/A P4 Plasma-1 4 / Day 4 4h
007	N/A	5 / Day 4 5h	6158 236	34878 863	*0 176561	10	*BLQ<(5 00)	24	497170000309	AA90478-01 497170000309 007 N/A P4 Plasma-1 5 / Day 4 5h
007	N/A	6 / Day 4 6h	8178 174	37751 241	*0 216633	10	*BLQ<(5 00)	25	497170000310	AA90478-01 497170000310 007 N/A P4 Plasma-1 6 / Day 4 6h
007	N/A	7 / Day 4 7h	8223 129	37505 047	*0 219254	10	*BLQ<(5 00)	27	497170000311	AA90478-01 497170000311 007 N/A P4 Plasma-1 7 / Day 4 7h
007	N/A	8 / Day 4 8h	12127 646	38326 873	*0 316427	10	*BLQ<(5 00)	28	497170000312	AA90478-01 497170000312 007 N/A P4 Plasma-1 8 / Day 4 8h
007	N/A	9 / Day 4 9h	15440 095	44472 601	*0 347182	10	*5 11	29	497170000313	AA90478-01 497170000313 007 N/A P4 Plasma-1 9 / Day 4 9h
007	N/A	10 / Day 4 10h	13754 592	38829 358	*0 354232	10	*5 21	30	497170000314	AA90478-01 497170000314 007 N/A P4 Plasma-1 10 / Day 4 10h
007	N/A	11 / Day 4 11h	12963 426	38926 264	*0 333025	10	*BLQ<(5 00)	31	497170000315	AA90478-01 497170000315 007 N/A P4 Plasma-1 11 / Day 4 11h
007	N/A	12 / Day 4 12h	12130 572	37910 876	*0 319976	10	*BLQ<(5 00)	32	497170000316	AA90478-01 497170000316 007 N/A P4 Plasma-1 12 / Day 4 12h
007	N/A	13 / Day 4 13h	11317 091	38004 577	*0 297782	10	*BLQ<(5 00)	34	497170000317	AA90478-01 497170000317 007 N/A P4 Plasma-1 13 / Day 4 13h
007	N/A	14 / Day 4 14h	13959 748	44745 121	*0 311984	10	*BLQ<(5 00)	35	497170000318	AA90478-01 497170000318 007 N/A P4 Plasma-1 14 / Day 4 14h
007	N/A	15 / Day 4 15h	10252 753	36375 707	*0 281857	10	*BLQ<(5 00)	36	497170000319	AA90478-01 497170000319 007 N/A P4 Plasma-1 15 / Day 4 15h
007	N/A	16 / Day 4 16h	10549 222	38224 454	*0 275981	10	*BLQ<(5 00)	37	497170000320	AA90478-01 497170000320 007 N/A P4 Plasma-1 16 / Day 4 16h
007	N/A	17 / Day 4 17h	9162 27	38092 016	*0 240530	10	*BLQ<(5 00)	38	497170000321	AA90478-01 497170000321 007 N/A P4 Plasma-1 17 / Day 4 17h
007	N/A	18 / Day 4 18h	9021 878	39462 797	*0 228617	10	*BLQ<(5 00)	39	497170000322	AA90478-01 497170000322 007 N/A P4 Plasma-1 18 / Day 4 18h
007	N/A	19 / Day 4 19h	8259 576	36072 982	*0 228968	10	*BLQ<(5 00)	41	497170000323	AA90478-01 497170000323 007 N/A P4 Plasma-1 19 / Day 4 19h
009	N/A	1 / Day 4 1h	6421 59	40041 839	*0 160372	10	*BLQ<(5 00)	42	497170000400	AA90478-01 497170000400 009 N/A P4 Plasma-1 1 / Day 4 1h
009	N/A	2 / Day 4 2h	5541 246	35314 464	*0 156912	10	*BLQ<(5 00)	43	497170000401	AA90478-01 497170000401 009 N/A P4 Plasma-1 2 / Day 4 2h
009	N/A	3 / Day 4 3h	5034 839	33345 016	*0 150992	10	*BLQ<(5 00)	44	497170000402	AA90478-01 497170000402 009 N/A P4 Plasma-1 3 / Day 4 3h
009	N/A	4 / Day 4 4h	5662 184	37659 007	*0 150354	10	*BLQ<(5 00)	45	497170000403	AA90478-01 497170000403 009 N/A P4 Plasma-1 4 / Day 4 4h
009	N/A	5 / Day 4 5h	6374 966	36283 823	*0 175697	10	*BLQ<(5 00)	46	497170000404	AA90478-01 497170000404 009 N/A P4 Plasma-1 5 / Day 4 5h
009	N/A	6 / Day 4 6h	8059 355	38576 48	*0 208919	10	*BLQ<(5 00)	48	497170000405	AA90478-01 497170000405 009 N/A P4 Plasma-1 6 / Day 4 6h
009	N/A	7 / Day 4 7h	8142 757	41415 055	*0 196613	10	*BLQ<(5 00)	49	497170000406	AA90478-01 497170000406 009 N/A P4 Plasma-1 7 / Day 4 7h
009	N/A	8 / Day 4 8h	10628 261	36560 659	*0 290702	10	*BLQ<(5 00)	50	497170000407	AA90478-01 497170000407 009 N/A P4 Plasma-1 8 / Day 4 8h
009	N/A	9 / Day 4 9h	13037 256	37959 798	*0 343449	10	*5 06	51	497170000408	AA90478-01 497170000408 009 N/A P4 Plasma-1 9 / Day 4 9h
009	N/A	10 / Day 4 10h	15871 035	38575 12	*0 411432	10	*6 03	52	497170000409	AA90478-01 497170000409 009 N/A P4 Plasma-1 10 / Day 4 10h
009	N/A	10 / Day 4 10h	134763 933	32995 863	4 084268	1	5 89	53	497170000409	AA90478-01 497170000409 009 N/A P4 Plasma-1 10 / Day 4 10h
009	N/A	11 / Day 4 11h	14486 91	38022 193	*0 381012	10	*5 60	54	497170000410	AA90478-01 497170000410 009 N/A P4 Plasma-1 11 / Day 4 11h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	12 / Day 4 12h	11180 201	35988 791	*0 310658	10	*BLQ<(5 00)	55	497170000411	AA90478-01 497170000411 009 N/A P4 Plasma-1 12 / Day 4 12h
009	N/A	12 / Day 4 12h	121884 98	36916 792	3 301614	1	4 77	56	497170000411	AA90478-01 497170000411 009 N/A P4 Plasma-1 12 / Day 4 12h
009	N/A	13 / Day 4 13h	10872 082	44341 187	*0 245191	10	*BLQ<(5 00)	58	497170000412	AA90478-01 497170000412 009 N/A P4 Plasma-1 13 / Day 4 13h
009	N/A	14 / Day 4 14h	9305 924	37372 412	*0 249005	10	*BLQ<(5 00)	59	497170000413	AA90478-01 497170000413 009 N/A P4 Plasma-1 14 / Day 4 14h
009	N/A	14 / Day 4 14h	85510 263	31769 627	*2 691573	1	*3 89	60	497170000413	AA90478-01 497170000413 009 N/A P4 Plasma-1 14 / Day 4 14h
009	N/A	15 / Day 4 15h	8379 975	38165 601	*0 219569	10	*BLQ<(5 00)	61	497170000414	AA90478-01 497170000414 009 N/A P4 Plasma-1 15 / Day 4 15h
009	N/A	16 / Day 4 16h	7978 786	36011 807	*0 221560	10	*BLQ<(5 00)	62	497170000415	AA90478-01 497170000415 009 N/A P4 Plasma-1 16 / Day 4 16h
009	N/A	17 / Day 4 17h	8763 179	43387 911	*0 201973	10	*BLQ<(5 00)	63	497170000416	AA90478-01 497170000416 009 N/A P4 Plasma-1 17 / Day 4 17h
009	N/A	18 / Day 4 18h	7824 874	34793 963	*0 224892	10	*BLQ<(5 00)	64	497170000417	AA90478-01 497170000417 009 N/A P4 Plasma-1 18 / Day 4 18h
009	N/A	19 / Day 4 19h	8183 958	36465 184	*0 224432	10	*BLQ<(5 00)	65	497170000418	AA90478-01 497170000418 009 N/A P4 Plasma-1 19 / Day 4 19h
012	N/A	1 / Day 4 1h	5024 544	38761 685	*0 129627	10	*BLQ<(5 00)	67	497170000590	AA90478-01 497170000590 012 N/A P4 Plasma-1 1 / Day 4 1h
012	N/A	2 / Day 4 2h	5767 306	37229 998	*0 154910	10	*BLQ<(5 00)	68	497170000591	AA90478-01 497170000591 012 N/A P4 Plasma-1 2 / Day 4 2h
012	N/A	3 / Day 4 3h	4748 818	36362 44	*0 130597	10	*BLQ<(5 00)	69	497170000592	AA90478-01 497170000592 012 N/A P4 Plasma-1 3 / Day 4 3h
012	N/A	4 / Day 4 4h	5373 945	35705 082	*0 150509	10	*BLQ<(5 00)	70	497170000593	AA90478-01 497170000593 012 N/A P4 Plasma-1 4 / Day 4 4h
012	N/A	5 / Day 4 5h	6873 567	40091 123	*0 171449	10	*BLQ<(5 00)	71	497170000594	AA90478-01 497170000594 012 N/A P4 Plasma-1 5 / Day 4 5h
012	N/A	6 / Day 4 6h	9201 976	34209 467	*0 268989	10	*BLQ<(5 00)	72	497170000595	AA90478-01 497170000595 012 N/A P4 Plasma-1 6 / Day 4 6h
012	N/A	7 / Day 4 7h	12796 347	42586 534	*0 300479	10	*BLQ<(5 00)	74	497170000596	AA90478-01 497170000596 012 N/A P4 Plasma-1 7 / Day 4 7h
012	N/A	8 / Day 4 8h	11482 068	34797 837	*0 329965	10	*BLQ<(5 00)	75	497170000597	AA90478-01 497170000597 012 N/A P4 Plasma-1 8 / Day 4 8h
012	N/A	9 / Day 4 9h	14711 172	39652 009	*0 371007	10	*5 45	76	497170000598	AA90478-01 497170000598 012 N/A P4 Plasma-1 9 / Day 4 9h
012	N/A	10 / Day 4 10h	15211 635	45226 269	*0 336345	10	*BLQ<(5 00)	77	497170000599	AA90478-01 497170000599 012 N/A P4 Plasma-1 10 / Day 4 10h
012	N/A	11 / Day 4 11h	9391 659	30887 842	*0 304057	10	*BLQ<(5 00)	78	497170000600	AA90478-01 497170000600 012 N/A P4 Plasma-1 11 / Day 4 11h
012	N/A	12 / Day 4 12h	10781 061	34859 026	*0 309276	10	*BLQ<(5 00)	79	497170000601	AA90478-01 497170000601 012 N/A P4 Plasma-1 12 / Day 4 12h
012	N/A	13 / Day 4 13h	10649 849	35365 222	*0 301139	10	*BLQ<(5 00)	80	497170000602	AA90478-01 497170000602 012 N/A P4 Plasma-1 13 / Day 4 13h
012	N/A	14 / Day 4 14h	8711 248	34560 49	*0 252058	10	*BLQ<(5 00)	81	497170000603	AA90478-01 497170000603 012 N/A P4 Plasma-1 14 / Day 4 14h
012	N/A	15 / Day 4 15h	8868 824	34941 949	*0 253816	10	*BLQ<(5 00)	82	497170000604	AA90478-01 497170000604 012 N/A P4 Plasma-1 15 / Day 4 15h
012	N/A	16 / Day 4 16h	8197 112	39401 35	*0 208041	10	*BLQ<(5 00)	84	497170000605	AA90478-01 497170000605 012 N/A P4 Plasma-1 16 / Day 4 16h
012	N/A	17 / Day 4 17h	8303 095	37617 478	*0 220724	10	*BLQ<(5 00)	85	497170000606	AA90478-01 497170000606 012 N/A P4 Plasma-1 17 / Day 4 17h
012	N/A	18 / Day 4 18h	7462 765	41059 757	*0 181754	10	*BLQ<(5 00)	86	497170000607	AA90478-01 497170000607 012 N/A P4 Plasma-1 18 / Day 4 18h
012	N/A	19 / Day 4 19h	6890 692	36414 206	*0 189231	10	*BLQ<(5 00)	87	497170000608	AA90478-01 497170000608 012 N/A P4 Plasma-1 19 / Day 4 19h
013	N/A	9 / Day 4 9h	20029 997	30865 638	0 648942	1	0 946	88	497170000693	AA90478-01 497170000693 013 N/A P4 Plasma-1 9 / Day 4 9h
021	N/A	7 / Day 2 7h	55650 036	33105 991	1 680966	1	2 43	89	497170001109	AA90478-01 497170001109 021 N/A P2 Plasma-1 7 / Day 2 7h
021	N/A	16 / Day 2 16h	30032 035	35754 313	*0 839956	1	*1 22	90	497170001118	AA90478-01 497170001118 021 N/A P2 Plasma-1 16 / Day 2 16h

Response Type = Area Ratio

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

BLQ - Concentration Found is Less than 0.500 (Lowest Standard)
AAR - Concentration Found is Greater than 50.0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 39
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	51104 057	0 000000	0 0505		0 0505	0 0
9	0 00		0	51738 391	0 000000	0 0505			
10	0 500	4 00000	16209 028	52412 984	0 309256	0 499	-0 2		
11	1 00	1 00000	32113 182	49399 878	0 650066	0 993	-0 7		
12	2 00	0 250000	74709 241	55777 071	1 339426	1 99	-0 5		
13	4 00	0 0625000	134122 518	48490 5	2 765955	4 06	1 5		
14	8 00	0 0156250	291798 656	48638 393	5 999348	8 75	9 4		
15	10 0	0 0100000	327246 98	48221 923	6 786270	9 89	-1 1		
16	20 0	0 00250000	666565 574	49667 777	13 420483	19 5	-2 5		
17	40 0	0 000625000	1390039 67	51780 65	26 844771	39 0	-2 5		
18	50 0	0 000400000	1840048 014	55526 927	33 137941	48 1	-3 8		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 689439891

Intercept = -0 0348234704

R-Squared = 0 9980

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 39
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1668341 586	49878 945	33 447812	1	48 6		48 8		1 7
2	0 00	1799883 772	52919 015	34 012042	1	49 4				
3	0 00	1586294 493	46639 2	34 012043	1	49 4				
4	0 00	1777970 708	51937 432	34 232935	1	49 7				
5	0 00	1715941 322	50277 292	34 129549	1	49 6				
51	0 00	1774099 152	53196 772	33 349752	1	48 4				
52	0 00	1594506 948	48574 242	32 826183	1	47 7				
91	0 00	2048009 211	61155 44	33 488586	1	48 6				
92	0 00	1662395 191	50931 725	32 639680	1	47 4				
29	1 50	50449 574	54724 594	0 921881	1	1 39	-7 3	1 41	-6 0	1 5
62	1 50	48051 812	50857 513	0 944832	1	1 42	-5 3			
40	8 00	255893 59	46604 328	5 490769	1	8 01	0 1	7 83	-2 1	3 3
75	8 00	254631 415	48654 848	5 233423	1	7 64	-4 5			
50	37 5	1099723 506	49875 879	22 049206	1	32 0	-14 7	33 0	-12 0	4 3
89	37 5	1251899 598	53545 662	23 380038	1	34 0	-9 3			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 39
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	8 / Day 3 8h	148585 394	51483 754	2 886064	1	4 24	56	497170000046	AA90478-01 497170000046 001 N/A P3 Plasma-1 8 / Day 3 8h
001	N/A	13 / Day 3 13h	0	42882 497	*0 000000	1	*BLQ<(0 500)	59	497170000051	AA90478-01 497170000051 001 N/A P3 Plasma-1 13 / Day 3 13h
001	N/A	7 / Day 4 7h	142355 919	47060 497	3 024956	1	4 44	74	497170000026	AA90478-01 497170000026 001 N/A P4 Plasma-1 7 / Day 4 7h
001	N/A	11 / Day 4 11h	63160 524	55903 114	1 129821	1	1 69	76	497170000030	AA90478-01 497170000030 001 N/A P4 Plasma-1 11 / Day 4 11h
003	N/A	5 / Day 3 5h	51021 072	48245 877	1 057522	1	1 58	57	497170000138	AA90478-01 497170000138 003 N/A P3 Plasma-1 5 / Day 3 5h
003	N/A	8 / Day 3 8h	92704 629	49785 549	1 862079	1	2 75	58	497170000141	AA90478-01 497170000141 003 N/A P3 Plasma-1 8 / Day 3 8h
003	N/A	13 / Day 3 13h	49650 082	45509 262	1 090989	1	1 63	60	497170000146	AA90478-01 497170000146 003 N/A P3 Plasma-1 13 / Day 3 13h
003	N/A	9 / Day 4 9h	57992 682	47372 633	1 224181	1	1 83	77	497170000123	AA90478-01 497170000123 003 N/A P4 Plasma-1 9 / Day 4 9h
005	N/A	9 / Day 2 9h	52442 953	46211 059	1 134857	1	1 70	38	497170000256	AA90478-01 497170000256 005 N/A P2 Plasma-1 9 / Day 2 9h
005	N/A	12 / Day 2 12h	57453 579	52529 161	1 093746	1	1 64	39	497170000259	AA90478-01 497170000259 005 N/A P2 Plasma-1 12 / Day 2 12h
005	N/A	9 / Day 4 9h	74162 942	54760 383	1 354317	1	2 01	78	497170000218	AA90478-01 497170000218 005 N/A P4 Plasma-1 9 / Day 4 9h
005	N/A	12 / Day 4 12h	49300 031	45246 962	1 089577	1	1 63	79	497170000221	AA90478-01 497170000221 005 N/A P4 Plasma-1 12 / Day 4 12h
007	N/A	4 / Day 1 4h	229312 946	53381 478	4 295740	1	6 28	20	497170000365	AA90478-01 497170000365 007 N/A P1 Plasma-1 4 / Day 1 4h
007	N/A	6 / Day 1 6h	295680 704	45251 473	6 534167	1	9 53	21	497170000367	AA90478-01 497170000367 007 N/A P1 Plasma-1 6 / Day 1 6h
007	N/A	19 / Day 1 19h	174100 59	47497 35	3 665480	1	5 37	22	497170000380	AA90478-01 497170000380 007 N/A P1 Plasma-1 19 / Day 1 19h
007	N/A	3 / Day 4 3h	88769 263	47624 89	1 863926	1	2 75	80	497170000307	AA90478-01 497170000307 007 N/A P4 Plasma-1 3 / Day 4 3h
007	N/A	8 / Day 4 8h	145850 551	48388 874	3 014134	1	4 42	81	497170000312	AA90478-01 497170000312 007 N/A P4 Plasma-1 8 / Day 4 8h
007	N/A	15 / Day 4 15h	131347 117	49359 291	2 661041	1	3 91	82	497170000319	AA90478-01 497170000319 007 N/A P4 Plasma-1 15 / Day 4 15h
009	N/A	4 / Day 1 4h	1186632 469	48757 313	24 337528	1	35 4	23	497170000460	AA90478-01 497170000460 009 N/A P1 Plasma-1 4 / Day 1 4h
009	N/A	8 / Day 1 8h	202966 062	47767 93	4 249003	1	6 21	24	497170000464	AA90478-01 497170000464 009 N/A P1 Plasma-1 8 / Day 1 8h
009	N/A	7 / Day 3 7h	246949 885	54144 141	4 560972	1	6 67	61	497170000425	AA90478-01 497170000425 009 N/A P3 Plasma-1 7 / Day 3 7h
009	N/A	9 / Day 3 9h	254981 035	43927 974	5 804525	1	8 47	63	497170000427	AA90478-01 497170000427 009 N/A P3 Plasma-1 9 / Day 3 9h
009	N/A	19 / Day 3 19h	136273 86	52035 55	2 618861	1	3 85	64	497170000437	AA90478-01 497170000437 009 N/A P3 Plasma-1 19 / Day 3 19h
009	N/A	9 / Day 4 9h	185814 885	49097 174	3 784635	1	5 54	83	497170000408	AA90478-01 497170000408 009 N/A P4 Plasma-1 9 / Day 4 9h
009	N/A	19 / Day 4 19h	120859 678	64211 806	1 882203	1	2 78	84	497170000418	AA90478-01 497170000418 009 N/A P4 Plasma-1 19 / Day 4 19h
011	N/A	5 / Day 1 5h	832919 344	47888 586	17 392857	1	25 3	25	497170000556	AA90478-01 497170000556 011 N/A P1 Plasma-1 5 / Day 1 5h
011	N/A	9 / Day 3 9h	193682 464	54659 438	3 543440	1	5 19	65	497170000522	AA90478-01 497170000522 011 N/A P3 Plasma-1 9 / Day 3 9h
011	N/A	19 / Day 3 19h	107781 466	49555 959	2 174945	1	3 21	66	497170000532	AA90478-01 497170000532 011 N/A P3 Plasma-1 19 / Day 3 19h
011	N/A	9 / Day 4 9h	213989 263	46891 448	4 563503	1	6 67	85	497170000503	AA90478-01 497170000503 011 N/A P4 Plasma-1 9 / Day 4 9h
011	N/A	15 / Day 4 15h	62253 03	47233 542	1 317984	1	1 96	86	497170000509	AA90478-01 497170000509 011 N/A P4 Plasma-1 15 / Day 4 15h
012	N/A	4 / Day 1 4h	304104 033	51455 543	5 910034	1	8 62	26	497170000650	AA90478-01 497170000650 012 N/A P1 Plasma-1 4 / Day 1 4h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
012	N/A	5 / Day 1 5h	458926 754	44423 416	10 330740	1	15 0	27	497170000651	AA90478-01 497170000651 012 N/A P1 Plasma-1 5 / Day 1 5h
012	N/A	13 / Day 1 13h	210942 873	47434 79	4 447008	1	6 50	28	497170000659	AA90478-01 497170000659 012 N/A P1 Plasma-1 13 / Day 1 13h
012	N/A	10 / Day 2 10h	65769 906	43580 211	1 509169	1	2 24	41	497170000637	AA90478-01 497170000637 012 N/A P2 Plasma-1 10 / Day 2 10h
012	N/A	19 / Day 2 19h	61631 505	46943 239	1 312894	1	1 95	42	497170000646	AA90478-01 497170000646 012 N/A P2 Plasma-1 19 / Day 2 19h
012	N/A	11 / Day 3 11h	99240 36	47447 788	2 091570	1	3 08	67	497170000619	AA90478-01 497170000619 012 N/A P3 Plasma-1 11 / Day 3 11h
012	N/A	19 / Day 3 19h	67333 216	51691 814	1 302590	1	1 94	68	497170000627	AA90478-01 497170000627 012 N/A P3 Plasma-1 19 / Day 3 19h
012	N/A	8 / Day 4 8h	168250 675	50109 311	3 357673	1	4 92	87	497170000597	AA90478-01 497170000597 012 N/A P4 Plasma-1 8 / Day 4 8h
012	N/A	19 / Day 4 19h	0	0	*N/A	1	*BLQ<(0 500)	88	497170000608	AA90478-01 497170000608 012 N/A P4 Plasma-1 19 / Day 4 19h
013	N/A	5 / Day 1 5h	200766 463	44112 976	4 551188	1	6 65	30	497170000746	AA90478-01 497170000746 013 N/A P1 Plasma-1 5 / Day 1 5h
013	N/A	9 / Day 2 9h	194195 036	46791 594	4 150212	1	6 07	43	497170000731	AA90478-01 497170000731 013 N/A P2 Plasma-1 9 / Day 2 9h
013	N/A	11 / Day 3 11h	117700 832	43022 009	2 735828	1	4 02	69	497170000714	AA90478-01 497170000714 013 N/A P3 Plasma-1 11 / Day 3 11h
013	N/A	19 / Day 3 19h	58104 898	49756 603	1 167783	1	1 74	70	497170000722	AA90478-01 497170000722 013 N/A P3 Plasma-1 19 / Day 3 19h
015	N/A	5 / Day 1 5h	776565 903	50822 375	15 280000	1	22 2	31	497170000841	AA90478-01 497170000841 015 N/A P1 Plasma-1 5 / Day 1 5h
015	N/A	13 / Day 3 13h	58640 979	55248 771	1 061399	1	1 59	71	497170000811	AA90478-01 497170000811 015 N/A P3 Plasma-1 13 / Day 3 13h
018	N/A	5 / Day 1 5h	387683 429	45762 771	8 471590	1	12 3	32	497170000936	AA90478-01 497170000936 018 N/A P1 Plasma-1 5 / Day 1 5h
018	N/A	8 / Day 2 8h	28587 868	45276 314	0 631409	1	0 966	44	497170000920	AA90478-01 497170000920 018 N/A P2 Plasma-1 8 / Day 2 8h
018	N/A	8 / Day 3 8h	122972 975	45785 759	2 685835	1	3 95	72	497170000901	AA90478-01 497170000901 018 N/A P3 Plasma-1 8 / Day 3 8h
018	N/A	19 / Day 3 19h	50110 034	48589 845	1 031286	1	1 55	73	497170000912	AA90478-01 497170000912 018 N/A P3 Plasma-1 19 / Day 3 19h
019	N/A	5 / Day 1 5h	948149 698	48113 47	19 706533	1	28 6	33	497170001031	AA90478-01 497170001031 019 N/A P1 Plasma-1 5 / Day 1 5h
019	N/A	7 / Day 2 7h	74150 888	46689 88	1 588158	1	2 35	45	497170001014	AA90478-01 497170001014 019 N/A P2 Plasma-1 7 / Day 2 7h
019	N/A	16 / Day 2 16h	48413 487	48933 795	0 989367	1	1 49	46	497170001023	AA90478-01 497170001023 019 N/A P2 Plasma-1 16 / Day 2 16h
021	N/A	4 / Day 1 4h	545600 903	46464 621	11 742287	1	17 1	34	497170001125	AA90478-01 497170001125 021 N/A P1 Plasma-1 4 / Day 1 4h
021	N/A	8 / Day 2 8h	76641 037	55585 408	1 378798	1	2 05	47	497170001110	AA90478-01 497170001110 021 N/A P2 Plasma-1 8 / Day 2 8h
021	N/A	14 / Day 2 14h	47537 246	48388 729	0 982403	1	1 48	48	497170001116	AA90478-01 497170001116 021 N/A P2 Plasma-1 14 / Day 2 14h
024	N/A	5 / Day 1 5h	913293 84	53693 442	17 009411	1	24 7	35	497170001221	AA90478-01 497170001221 024 N/A P1 Plasma-1 5 / Day 1 5h
024	N/A	13 / Day 2 13h	46506 126	49632 219	0 937015	1	1 41	49	497170001210	AA90478-01 497170001210 024 N/A P2 Plasma-1 13 / Day 2 13h
026	N/A	4 / Day 1 4h	637543 272	48617 045	13 113575	1	19 1	36	497170001315	AA90478-01 497170001315 026 N/A P1 Plasma-1 4 / Day 1 4h
026	N/A	10 / Day 2 10h	0	44248 196	*0 000000	1	*BLQ<(0 500)	53	497170001302	AA90478-01 497170001302 026 N/A P2 Plasma-1 10 / Day 2 10h
026	N/A	19 / Day 2 19h	49392 713	46197 521	1 069164	1	1 60	54	497170001311	AA90478-01 497170001311 026 N/A P2 Plasma-1 19 / Day 2 19h
028	N/A	6 / Day 1 6h	546260 115	56853 149	9 608265	1	14 0	37	497170001412	AA90478-01 497170001412 028 N/A P1 Plasma-1 6 / Day 1 6h
028	N/A	7 / Day 2 7h	187667 022	54762 568	3 426922	1	5 02	55	497170001394	AA90478-01 497170001394 028 N/A P2 Plasma-1 7 / Day 2 7h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 40
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	52315 661	0 000000	0 0596		0 0596	0 0
9	0 00		0	54628 998	0 000000	0 0596			
10	0 500	4 00000	15493 786	51700 629	0 299683	0 500	0 0		
11	1 00	1 00000	35843 87	56136 811	0 638509	0 998	-0 2		
12	2 00	0 250000	79732 858	62015 743	1 285687	1 95	-2 5		
13	4 00	0 0625000	164998 542	59824 375	2 758049	4 11	2 8		
14	8 00	0 0156250	337421 268	59854 556	5 637353	8 35	4 4		
15	10 0	0 0100000	394614 029	56876 635	6 938069	10 3	3 0		
16	20 0	0 00250000	686371 123	50691 07	13 540277	20 0	0 0		
17	40 0	0 000625000	1400196 875	52555 539	26 642232	39 2	-2 0		
18	50 0	0 000400000	1664332 722	51593 441	32 258611	47 5	-5 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 680218734

Intercept = -0 0405454439

R-Squared = 0 9988

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 40
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1731916 068	51865 543	33 392421	1	49 2		48 8		2 2
2	0 00	1737580 499	50654 993	34 302255	1	50 5				
3	0 00	1674999 509	50457 672	33 196131	1	48 9				
4	0 00	1620773 25	49752 271	32 576870	1	48 0				
5	0 00	1682380 004	50090 162	33 587035	1	49 4				
51	0 00	1719573 719	51419 955	33 441759	1	49 2				
52	0 00	1715828 567	52121 9	32 919532	1	48 5				
91	0 00	1904860 357	60098 215	31 695789	1	46 7				
92	0 00	1687152 814	51310 146	32 881466	1	48 4				
29	1 50	49296 492	51847 602	0 950796	1	1 46	-2 7	1 44	-4 0	2 0
62	1 50	50398 511	54573 862	0 923492	1	1 42	-5 3			
40	8 00	266231 454	52462 31	5 074718	1	7 52	-6 0	7 67	-4 1	2 8
75	8 00	258343 919	48963 976	5 276204	1	7 82	-2 3			
50	37 5	1201583 484	52067 162	23 077568	1	34 0	-9 3	33 8	-9 9	0 8
89	37 5	1425083 604	62498 283	22 801964	1	33 6	-10 4			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 40
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	12 / Day 1 12h	0	0	*N/A	1	*BLQ<(0 500)	68	497170000088	AA90478-01 497170000088 001 N/A P1 Plasma-1 12 / Day 1 12h
001	N/A	19 / Day 1 19h	49202 84	46901 129	1 049076	1	1 60	69	497170000095	AA90478-01 497170000095 001 N/A P1 Plasma-1 19 / Day 1 19h
001	N/A	6 / Day 5 6h	69657 927	48410 904	1 438889	1	2 17	36	497170000006	AA90478-01 497170000006 001 N/A P5 Plasma-1 6 / Day 5 6h
001	N/A	9 / Day 5 9h	0	0	*N/A	1	*BLQ<(0 500)	37	497170000009	AA90478-01 497170000009 001 N/A P5 Plasma-1 9 / Day 5 9h
001	N/A	12 / Day 5 12h	56013 695	48605 707	1 152410	1	1 75	38	497170000012	AA90478-01 497170000012 001 N/A P5 Plasma-1 12 / Day 5 12h
003	N/A	3 / Day 1 3h	371853 736	58226 557	6 386325	1	9 45	63	497170000174	AA90478-01 497170000174 003 N/A P1 Plasma-1 3 / Day 1 3h
003	N/A	4 / Day 1 4h	554335 774	49594 806	11 177295	1	16 5	64	497170000175	AA90478-01 497170000175 003 N/A P1 Plasma-1 4 / Day 1 4h
003	N/A	10 / Day 1 10h	174351 384	51210 288	3 404616	1	5 06	70	497170000181	AA90478-01 497170000181 003 N/A P1 Plasma-1 10 / Day 1 10h
003	N/A	17 / Day 1 17h	72767 136	49460 503	1 471217	1	2 22	71	497170000188	AA90478-01 497170000188 003 N/A P1 Plasma-1 17 / Day 1 17h
003	N/A	18 / Day 1 18h	64440 905	51558 239	1 249866	1	1 90	72	497170000189	AA90478-01 497170000189 003 N/A P1 Plasma-1 18 / Day 1 18h
003	N/A	8 / Day 5 8h	59158 868	49766 549	1 188728	1	1 81	39	497170000103	AA90478-01 497170000103 003 N/A P5 Plasma-1 8 / Day 5 8h
003	N/A	12 / Day 5 12h	74393 104	49362 59	1 507075	1	2 28	41	497170000107	AA90478-01 497170000107 003 N/A P5 Plasma-1 12 / Day 5 12h
003	N/A	16 / Day 5 16h	51185 341	48975 862	1 045114	1	1 60	42	497170000111	AA90478-01 497170000111 003 N/A P5 Plasma-1 16 / Day 5 16h
005	N/A	3 / Day 1 3h	347961 888	49756 438	6 993304	1	10 3	65	497170000269	AA90478-01 497170000269 005 N/A P1 Plasma-1 3 / Day 1 3h
005	N/A	4 / Day 1 4h	640608 575	52728 946	12 149087	1	17 9	66	497170000270	AA90478-01 497170000270 005 N/A P1 Plasma-1 4 / Day 1 4h
005	N/A	8 / Day 1 8h	246356 095	50767 042	4 852678	1	7 19	67	497170000274	AA90478-01 497170000274 005 N/A P1 Plasma-1 8 / Day 1 8h
005	N/A	13 / Day 1 13h	107142 337	52239 339	2 050990	1	3 07	73	497170000279	AA90478-01 497170000279 005 N/A P1 Plasma-1 13 / Day 1 13h
005	N/A	5 / Day 5 5h	79084 563	49414 686	1 600426	1	2 41	43	497170000195	AA90478-01 497170000195 005 N/A P5 Plasma-1 5 / Day 5 5h
005	N/A	8 / Day 5 8h	157441 359	50716 988	3 104312	1	4 62	44	497170000198	AA90478-01 497170000198 005 N/A P5 Plasma-1 8 / Day 5 8h
007	N/A	2 / Day 2 2h	96230 863	51873 145	1 855119	1	2 79	82	497170000344	AA90478-01 497170000344 007 N/A P2 Plasma-1 2 / Day 2 2h
007	N/A	7 / Day 2 7h	127591 175	60377 641	2 113219	1	3 17	83	497170000349	AA90478-01 497170000349 007 N/A P2 Plasma-1 7 / Day 2 7h
007	N/A	13 / Day 2 13h	90325 584	50316 683	1 795142	1	2 70	84	497170000355	AA90478-01 497170000355 007 N/A P2 Plasma-1 13 / Day 2 13h
007	N/A	19 / Day 2 19h	90119 149	51301 426	1 756660	1	2 64	85	497170000361	AA90478-01 497170000361 007 N/A P2 Plasma-1 19 / Day 2 19h
007	N/A	11 / Day 5 11h	184471 637	52394 049	3 520851	1	5 24	45	497170000296	AA90478-01 497170000296 007 N/A P5 Plasma-1 11 / Day 5 11h
007	N/A	19 / Day 5 19h	157120 516	49273 455	3 188746	1	4 75	46	497170000304	AA90478-01 497170000304 007 N/A P5 Plasma-1 19 / Day 5 19h
009	N/A	10 / Day 5 10h	166546 806	49258 699	3 381064	1	5 03	47	497170000390	AA90478-01 497170000390 009 N/A P5 Plasma-1 10 / Day 5 10h
009	N/A	15 / Day 5 15h	193765 629	50850 898	3 810466	1	5 66	48	497170000395	AA90478-01 497170000395 009 N/A P5 Plasma-1 15 / Day 5 15h
011	N/A	9 / Day 5 9h	30025 831	52110 84	0 576192	1	0 907	49	497170000484	AA90478-01 497170000484 011 N/A P5 Plasma-1 9 / Day 5 9h
013	N/A	15 / Day 1 15h	47511 058	52839 855	0 899152	1	1 38	74	497170000756	AA90478-01 497170000756 013 N/A P1 Plasma-1 15 / Day 1 15h
013	N/A	6 / Day 4 6h	29899 206	49826 848	0 600062	1	0 942	20	497170000690	AA90478-01 497170000690 013 N/A P4 Plasma-1 6 / Day 4 6h
013	N/A	10 / Day 4 10h	41629 879	49666 093	0 838195	1	1 29	21	497170000694	AA90478-01 497170000694 013 N/A P4 Plasma-1 10 / Day 4 10h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
015	N/A	19 / Day 1 19h	0	0	*N/A	1	*BLQ<(0 500)	76	497170000855	AA90478-01 497170000855 015 N/A P1 Plasma-1 19 / Day 1 19h
015	N/A	8 / Day 4 8h	43062 974	49292 26	0 873625	1	1 34	22	497170000787	AA90478-01 497170000787 015 N/A P4 Plasma-1 8 / Day 4 8h
015	N/A	10 / Day 4 10h	47041 73	48869 293	0 962603	1	1 47	23	497170000789	AA90478-01 497170000789 015 N/A P4 Plasma-1 10 / Day 4 10h
018	N/A	19 / Day 1 19h	58440 524	49745 92	1 174780	1	1 79	77	497170000950	AA90478-01 497170000950 018 N/A P1 Plasma-1 19 / Day 1 19h
018	N/A	8 / Day 4 8h	103348 448	43825 918	2 358158	1	3 53	24	497170000882	AA90478-01 497170000882 018 N/A P4 Plasma-1 8 / Day 4 8h
018	N/A	16 / Day 4 16h	55566 923	46881 02	1 185275	1	1 80	25	497170000890	AA90478-01 497170000890 018 N/A P4 Plasma-1 16 / Day 4 16h
018	N/A	14 / Day 5 14h	53337 389	50712 86	1 051753	1	1 61	53	497170000869	AA90478-01 497170000869 018 N/A P5 Plasma-1 14 / Day 5 14h
019	N/A	19 / Day 1 19h	63643 384	50533 963	1 259418	1	1 91	78	497170001045	AA90478-01 497170001045 019 N/A P1 Plasma-1 19 / Day 1 19h
019	N/A	8 / Day 4 8h	72243 749	49260 534	1 466564	1	2 22	26	497170000977	AA90478-01 497170000977 019 N/A P4 Plasma-1 8 / Day 4 8h
019	N/A	10 / Day 4 10h	63674 707	44570 521	1 428628	1	2 16	27	497170000979	AA90478-01 497170000979 019 N/A P4 Plasma-1 10 / Day 4 10h
019	N/A	7 / Day 5 7h	230182 16	51363 243	4 481457	1	6 65	54	497170000957	AA90478-01 497170000957 019 N/A P5 Plasma-1 7 / Day 5 7h
019	N/A	19 / Day 5 19h	87106 356	50590 521	1 721792	1	2 59	55	497170000969	AA90478-01 497170000969 019 N/A P5 Plasma-1 19 / Day 5 19h
021	N/A	19 / Day 1 19h	51754 238	53576 767	0 965983	1	1 48	79	497170001140	AA90478-01 497170001140 021 N/A P1 Plasma-1 19 / Day 1 19h
021	N/A	9 / Day 3 9h	66657 857	56474 067	1 180327	1	1 79	86	497170001092	AA90478-01 497170001092 021 N/A P3 Plasma-1 9 / Day 3 9h
021	N/A	10 / Day 4 10h	90886 933	46500 48	1 954538	1	2 93	28	497170001074	AA90478-01 497170001074 021 N/A P4 Plasma-1 10 / Day 4 10h
021	N/A	8 / Day 5 8h	291576 022	52179 943	5 587895	1	8 27	56	497170001053	AA90478-01 497170001053 021 N/A P5 Plasma-1 8 / Day 5 8h
021	N/A	19 / Day 5 19h	92720 648	51330 689	1 806339	1	2 72	57	497170001064	AA90478-01 497170001064 021 N/A P5 Plasma-1 19 / Day 5 19h
024	N/A	19 / Day 1 19h	180435 569	59838 04	3 015399	1	4 49	80	497170001235	AA90478-01 497170001235 024 N/A P1 Plasma-1 19 / Day 1 19h
024	N/A	8 / Day 3 8h	0	0	*N/A	1	*BLQ<(0 500)	87	497170001186	AA90478-01 497170001186 024 N/A P3 Plasma-1 8 / Day 3 8h
024	N/A	19 / Day 3 19h	0	0	*N/A	1	*BLQ<(0 500)	88	497170001197	AA90478-01 497170001197 024 N/A P3 Plasma-1 19 / Day 3 19h
024	N/A	11 / Day 4 11h	143303 2	49236 841	2 910487	1	4 34	30	497170001170	AA90478-01 497170001170 024 N/A P4 Plasma-1 11 / Day 4 11h
024	N/A	19 / Day 4 19h	79355 233	48034 138	1 652059	1	2 49	31	497170001178	AA90478-01 497170001178 024 N/A P4 Plasma-1 19 / Day 4 19h
024	N/A	10 / Day 5 10h	118162 549	52236 727	2 262059	1	3 39	58	497170001150	AA90478-01 497170001150 024 N/A P5 Plasma-1 10 / Day 5 10h
024	N/A	19 / Day 5 19h	64268 947	40437 797	1 589329	1	2 40	59	497170001159	AA90478-01 497170001159 024 N/A P5 Plasma-1 19 / Day 5 19h
026	N/A	15 / Day 1 15h	120344 854	52651 322	2 285695	1	3 42	81	497170001326	AA90478-01 497170001326 026 N/A P1 Plasma-1 15 / Day 1 15h
026	N/A	9 / Day 4 9h	196668 6	50124 753	3 923582	1	5 83	32	497170001263	AA90478-01 497170001263 026 N/A P4 Plasma-1 9 / Day 4 9h
026	N/A	19 / Day 4 19h	86920 501	50697 906	1 714479	1	2 58	33	497170001273	AA90478-01 497170001273 026 N/A P4 Plasma-1 19 / Day 4 19h
026	N/A	8 / Day 5 8h	62919 539	51255 829	1 227559	1	1 86	60	497170001243	AA90478-01 497170001243 026 N/A P5 Plasma-1 8 / Day 5 8h
026	N/A	18 / Day 5 18h	48093 725	50336 479	0 955445	1	1 46	61	497170001253	AA90478-01 497170001253 026 N/A P5 Plasma-1 18 / Day 5 18h
028	N/A	9 / Day 4 9h	95342 747	48349 598	1 971945	1	2 96	34	497170001358	AA90478-01 497170001358 028 N/A P4 Plasma-1 9 / Day 4 9h
028	N/A	19 / Day 4 19h	83689 167	50152 219	1 668703	1	2 51	35	497170001368	AA90478-01 497170001368 028 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 41
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	35707 262	0 000000	0 0280		0 0280	0 0
9	0 00		0	36298 053	0 000000	0 0280			
10	0 500	4 00000	12236 002	33978 106	0 360114	0 497	-0 6		
11	1 00	1 00000	23422 489	31363 32	0 746812	1 00	0 0		
12	2 00	0 250000	51062 219	33191 259	1 538424	2 03	1 5		
13	4 00	0 0625000	97740 219	31719 803	3 081363	4 04	1 0		
14	8 00	0 0156250	225162 667	35494 128	6 343660	8 28	3 5		
15	10 0	0 0100000	253019 012	32176 668	7 863431	10 3	3 0		
16	20 0	0 00250000	464146 729	30907 301	15 017381	19 6	-2 0		
17	40 0	0 000625000	1008671 709	33894 63	29 759042	38 7	-3 3		
18	50 0	0 000400000	1501384 572	40085 457	37 454595	48 8	-2 4		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 768591449

Intercept = -0 0214969758

R-Squared = 0 9993

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 41
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1410661 169	38449 301	36 688864	1	47 8		47 2		1 9
2	0 00	1420326 415	40145 233	35 379703	1	46 1				
3	0 00	1491300 47	40170 104	37 124636	1	48 3				
4	0 00	1581425 754	42654 835	37 074947	1	48 3				
5	0 00	1363592 829	37890 311	35 987903	1	46 9				
60	0 00	1264059 444	35229 605	35 880602	1	46 7				
61	0 00	1284300 289	35914 554	35 759884	1	46 6				
30	1 50	37406 624	32166 904	1 162892	1	1 54	2 7	1 47	-2 0	6 7
47	1 50	34427 246	32707 737	1 052572	1	1 40	-6 7			
35	8 00	193944 645	31892 647	6 081171	1	7 94	-0 8	7 89	-1 4	1 0
48	8 00	199872 216	33340 665	5 994848	1	7 83	-2 1			
36	37 5	827775 867	31590 939	26 202952	1	34 1	-9 1	35 1	-6 4	4 0
58	37 5	885349 884	31905 488	27 749141	1	36 1	-3 7			
25	195	472051 171	35025 349	13 477415	10	176	-9 7	182	-6 7	2 8
43	195	400194 058	27966 852	14 309585	10	186	-4 6			
53	195	525494 36	37389 969	14 054421	10	183	-6 2			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 41
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	3 / Day 4 3h	5868 2	34641 524	*0 169398	10	*BLQ<(5 00)	56	497170000402	AA90478-01 497170000402 009 N/A P4 Plasma-1 3 / Day 4 3h
009	N/A	14 / Day 4 14h	93021 836	33337 618	2 790296	1	3 66	57	497170000413	AA90478-01 497170000413 009 N/A P4 Plasma-1 14 / Day 4 14h
012	N/A	1 / Day 5 1h	5084 849	31955 18	*0 159124	10	*BLQ<(5 00)	20	497170000571	AA90478-01 497170000571 012 N/A P5 Plasma-1 1 / Day 5 1h
012	N/A	2 / Day 5 2h	5071 018	34274 38	*0 147954	10	*BLQ<(5 00)	21	497170000572	AA90478-01 497170000572 012 N/A P5 Plasma-1 2 / Day 5 2h
012	N/A	3 / Day 5 3h	5920 471	35204 075	*0 168176	10	*BLQ<(5 00)	22	497170000573	AA90478-01 497170000573 012 N/A P5 Plasma-1 3 / Day 5 3h
012	N/A	4 / Day 5 4h	5924 178	36527 398	*0 162185	10	*BLQ<(5 00)	23	497170000574	AA90478-01 497170000574 012 N/A P5 Plasma-1 4 / Day 5 4h
012	N/A	5 / Day 5 5h	5256 723	31851 254	*0 165040	10	*BLQ<(5 00)	24	497170000575	AA90478-01 497170000575 012 N/A P5 Plasma-1 5 / Day 5 5h
012	N/A	6 / Day 5 6h	5691 772	33977 581	*0 167516	10	*BLQ<(5 00)	26	497170000576	AA90478-01 497170000576 012 N/A P5 Plasma-1 6 / Day 5 6h
012	N/A	7 / Day 5 7h	7446 066	32882 117	*0 226447	10	*BLQ<(5 00)	27	497170000577	AA90478-01 497170000577 012 N/A P5 Plasma-1 7 / Day 5 7h
012	N/A	8 / Day 5 8h	5197 986	35303 587	*0 147237	10	*BLQ<(5 00)	28	497170000578	AA90478-01 497170000578 012 N/A P5 Plasma-1 8 / Day 5 8h
012	N/A	9 / Day 5 9h	5749 278	38247 216	*0 150319	10	*BLQ<(5 00)	29	497170000579	AA90478-01 497170000579 012 N/A P5 Plasma-1 9 / Day 5 9h
012	N/A	10 / Day 5 10h	5869 244	37587 196	*0 156150	10	*BLQ<(5 00)	31	497170000580	AA90478-01 497170000580 012 N/A P5 Plasma-1 10 / Day 5 10h
012	N/A	12 / Day 5 12h	5928 496	33558 653	*0 176661	10	*BLQ<(5 00)	32	497170000582	AA90478-01 497170000582 012 N/A P5 Plasma-1 12 / Day 5 12h
012	N/A	13 / Day 5 13h	4753 593	32749 342	*0 145151	10	*BLQ<(5 00)	33	497170000583	AA90478-01 497170000583 012 N/A P5 Plasma-1 13 / Day 5 13h
012	N/A	14 / Day 5 14h	6084 711	37599 283	*0 161831	10	*BLQ<(5 00)	34	497170000584	AA90478-01 497170000584 012 N/A P5 Plasma-1 14 / Day 5 14h
012	N/A	15 / Day 5 15h	4597 834	33496 497	*0 137263	10	*BLQ<(5 00)	37	497170000585	AA90478-01 497170000585 012 N/A P5 Plasma-1 15 / Day 5 15h
012	N/A	16 / Day 5 16h	4337 482	31578 719	*0 137355	10	*BLQ<(5 00)	38	497170000586	AA90478-01 497170000586 012 N/A P5 Plasma-1 16 / Day 5 16h
012	N/A	17 / Day 5 17h	3663 046	30445 437	*0 120315	10	*BLQ<(5 00)	39	497170000587	AA90478-01 497170000587 012 N/A P5 Plasma-1 17 / Day 5 17h
012	N/A	18 / Day 5 18h	4868 914	35879 035	*0 135704	10	*BLQ<(5 00)	40	497170000588	AA90478-01 497170000588 012 N/A P5 Plasma-1 18 / Day 5 18h
012	N/A	19 / Day 5 19h	4430 117	32012 379	*0 138388	10	*BLQ<(5 00)	41	497170000589	AA90478-01 497170000589 012 N/A P5 Plasma-1 19 / Day 5 19h
015	N/A	1 / Day 5 1h	4689 276	30452 758	*0 153985	10	*BLQ<(5 00)	42	497170000761	AA90478-01 497170000761 015 N/A P5 Plasma-1 1 / Day 5 1h
028	N/A	11 / Day 5 11h	10228 482	30312 157	*0 337438	10	*BLQ<(5 00)	44	497170001341	AA90478-01 497170001341 028 N/A P5 Plasma-1 11 / Day 5 11h
028	N/A	12 / Day 5 12h	10903 374	30189 105	*0 361169	10	*BLQ<(5 00)	45	497170001342	AA90478-01 497170001342 028 N/A P5 Plasma-1 12 / Day 5 12h
028	N/A	13 / Day 5 13h	9235 386	28511 756	*0 323915	10	*BLQ<(5 00)	46	497170001343	AA90478-01 497170001343 028 N/A P5 Plasma-1 13 / Day 5 13h
028	N/A	14 / Day 5 14h	8458 764	32033 669	*0 264059	10	*BLQ<(5 00)	49	497170001344	AA90478-01 497170001344 028 N/A P5 Plasma-1 14 / Day 5 14h
028	N/A	15 / Day 5 15h	8105 609	32195 172	*0 251765	10	*BLQ<(5 00)	50	497170001345	AA90478-01 497170001345 028 N/A P5 Plasma-1 15 / Day 5 15h
028	N/A	16 / Day 5 16h	9379 172	33275 478	*0 281864	10	*BLQ<(5 00)	51	497170001346	AA90478-01 497170001346 028 N/A P5 Plasma-1 16 / Day 5 16h
028	N/A	17 / Day 5 17h	8120 131	31257 653	*0 259781	10	*BLQ<(5 00)	52	497170001347	AA90478-01 497170001347 028 N/A P5 Plasma-1 17 / Day 5 17h
028	N/A	18 / Day 5 18h	9375 581	33799 517	*0 277388	10	*BLQ<(5 00)	54	497170001348	AA90478-01 497170001348 028 N/A P5 Plasma-1 18 / Day 5 18h
028	N/A	19 / Day 5 19h	8320 943	31429 948	*0 264746	10	*BLQ<(5 00)	55	497170001349	AA90478-01 497170001349 028 N/A P5 Plasma-1 19 / Day 5 19h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0.500 (Lowest Standard)

AAR - Concentration Found is Greater than 50.0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 43
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	51082 396	0 000000	0 0113		0 0113	0 0
9	0 00		0	49589 72	0 000000	0 0113			
10	0 500	4 00000	16198 134	48720 756	0 332469	0 499	-0 2		
11	1 00	1 00000	32657 841	49105 343	0 665057	0 986	-1 4		
12	2 00	0 250000	65523 153	46915 518	1 396620	2 06	3 0		
13	4 00	0 0625000	126726 456	46404 703	2 730897	4 02	0 5		
14	8 00	0 0156250	285883 267	50482 116	5 663060	8 31	3 9		
15	10 0	0 0100000	296705 121	43988 617	6 745043	9 90	-1 0		
16	20 0	0 00250000	582479 518	42854 755	13 591946	19 9	-0 5		
17	40 0	0 000625000	1193220 97	44393 015	26 878575	39 4	-1 5		
18	50 0	0 000400000	1566373 541	47336 645	33 090084	48 5	-3 0		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:
Slope = 0 682005797
Intercept = -0 00768372725
R-Squared = 0 9994

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 43
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1457556 494	43627 177	33 409370	1	49 0		48 4		1 3
2	0 00	1476078 605	44171 71	33 416832	1	49 0				
3	0 00	1505782 522	44975 995	33 479693	1	49 1				
4	0 00	1501864 787	45791 625	32 797805	1	48 1				
5	0 00	1589660 312	47631 033	33 374466	1	48 9				
49	0 00	1461357 831	44541 141	32 809169	1	48 1				
50	0 00	1630363 243	50331 223	32 392681	1	47 5				
93	0 00	1621353 815	49716 761	32 611815	1	47 8				
94	0 00	1575132 833	48433 277	32 521707	1	47 7				
34	1 50	44540 589	46315 904	0 961669	1	1 42	-5 3	1 48	-1 3	5 3
67	1 50	50296 076	48692 13	1 032941	1	1 53	2 0			
41	8 00	248361 408	47798 208	5 196040	1	7 63	-4 6	7 51	-6 1	2 4
75	8 00	260913 581	51936 335	5 023720	1	7 38	-7 8			
26	37 5	568861 659	46428 916	12 252314	2	36 0	-4 0	34 7	-7 5	4 2
58	37 5	570000 792	47857 069	11 910483	2	35 0	-6 7			
83	37 5	605679 166	53705 947	11 277693	2	33 1	-11 7			
48	37 5	1365886 022	57949 931	23 570106	1	34 6	-7 7	33 2	-11 5	6 2
91	37 5	1112595 99	51423 363	21 636002	1	31 7	-15 5			
27	195	569296 628	44727 855	12 728011	10	187	-4 1	181	-7 2	3 7
59	195	639011 16	51186 756	12 483916	10	183	-6 2			
84	195	628814 241	52871 587	11 893236	10	174	-10 8			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 43
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
001	N/A	7 / Day 1 7h	257148 533	52081 141	*4 937460	2	*14 5	88	497170000083	AA90478-01 497170000083 001 N/A P1 Plasma-1 7 / Day 1 7h
001	N/A	7 / Day 1 7h	548304 521	47121 176	11 636053	1	17 1	76	497170000083	AA90478-01 497170000083 001 N/A P1 Plasma-1 7 / Day 1 7h
001	N/A	10 / Day 3 10h	51659 935	48910 851	*1 056206	2	*3 12	90	497170000048	AA90478-01 497170000048 001 N/A P3 Plasma-1 10 / Day 3 10h
001	N/A	10 / Day 3 10h	103070 26	45426 61	2 268940	1	3 34	78	497170000048	AA90478-01 497170000048 001 N/A P3 Plasma-1 10 / Day 3 10h
003	N/A	8 / Day 5 8h	7579 447	53490 187	*0 141698	10	*BLQ<(5 00)	53	497170000103	AA90478-01 497170000103 003 N/A P5 Plasma-1 8 / Day 5 8h
003	N/A	12 / Day 5 12h	7458 107	47841 554	*0 155892	10	*BLQ<(5 00)	54	497170000107	AA90478-01 497170000107 003 N/A P5 Plasma-1 12 / Day 5 12h
005	N/A	11 / Day 4 11h	28692 18	48995 436	*0 585609	2	*1 74	81	497170000220	AA90478-01 497170000220 005 N/A P4 Plasma-1 11 / Day 4 11h
005	N/A	11 / Day 4 11h	60890 782	47969 278	1 269370	1	1 87	70	497170000220	AA90478-01 497170000220 005 N/A P4 Plasma-1 11 / Day 4 11h
007	N/A	4 / Day 1 4h	20513 664	47232 095	*0 434316	10	*6 48	20	497170000365	AA90478-01 497170000365 007 N/A P1 Plasma-1 4 / Day 1 4h
007	N/A	6 / Day 1 6h	29696 257	50788 668	*0 584702	10	*8 69	21	497170000367	AA90478-01 497170000367 007 N/A P1 Plasma-1 6 / Day 1 6h
007	N/A	19 / Day 1 19h	17152 496	47354 405	*0 362215	10	*5 42	22	497170000380	AA90478-01 497170000380 007 N/A P1 Plasma-1 19 / Day 1 19h
007	N/A	2 / Day 2 2h	7303 598	47982 482	*0 152214	10	*BLQ<(5 00)	63	497170000344	AA90478-01 497170000344 007 N/A P2 Plasma-1 2 / Day 2 2h
007	N/A	7 / Day 2 7h	6900 296	42883 33	*0 160909	10	*BLQ<(5 00)	64	497170000349	AA90478-01 497170000349 007 N/A P2 Plasma-1 7 / Day 2 7h
007	N/A	13 / Day 2 13h	9271 584	45636 568	*0 203161	10	*BLQ<(5 00)	65	497170000355	AA90478-01 497170000355 007 N/A P2 Plasma-1 13 / Day 2 13h
007	N/A	19 / Day 2 19h	9269 282	50558 693	*0 183337	10	*BLQ<(5 00)	66	497170000361	AA90478-01 497170000361 007 N/A P2 Plasma-1 19 / Day 2 19h
007	N/A	3 / Day 4 3h	8581 337	47571 802	*0 180387	10	*BLQ<(5 00)	40	497170000307	AA90478-01 497170000307 007 N/A P4 Plasma-1 3 / Day 4 3h
007	N/A	8 / Day 4 8h	16849 452	51582 593	*0 326650	10	*BLQ<(5 00)	42	497170000312	AA90478-01 497170000312 007 N/A P4 Plasma-1 8 / Day 4 8h
007	N/A	15 / Day 4 15h	14409 214	46723 177	*0 308395	10	*BLQ<(5 00)	43	497170000319	AA90478-01 497170000319 007 N/A P4 Plasma-1 15 / Day 4 15h
007	N/A	1 / Day 5 1h	63980 55	50854 001	*1 258122	2	*3 71	85	497170000286	AA90478-01 497170000286 007 N/A P5 Plasma-1 1 / Day 5 1h
007	N/A	1 / Day 5 1h	133869 258	50943 986	2 627774	1	3 86	72	497170000286	AA90478-01 497170000286 007 N/A P5 Plasma-1 1 / Day 5 1h
007	N/A	6 / Day 5 6h	51867 704	41265 549	*1 256925	2	*3 71	86	497170000291	AA90478-01 497170000291 007 N/A P5 Plasma-1 6 / Day 5 6h
007	N/A	6 / Day 5 6h	124966 921	48498 561	2 576714	1	3 79	73	497170000291	AA90478-01 497170000291 007 N/A P5 Plasma-1 6 / Day 5 6h
007	N/A	11 / Day 5 11h	17341 803	48265 046	*0 359304	10	*5 38	55	497170000296	AA90478-01 497170000296 007 N/A P5 Plasma-1 11 / Day 5 11h
007	N/A	19 / Day 5 19h	14413 462	46403 776	*0 310610	10	*BLQ<(5 00)	56	497170000304	AA90478-01 497170000304 007 N/A P5 Plasma-1 19 / Day 5 19h
009	N/A	4 / Day 1 4h	113729 553	49274 767	*2 308069	10	*34 0	23	497170000460	AA90478-01 497170000460 009 N/A P1 Plasma-1 4 / Day 1 4h
009	N/A	8 / Day 1 8h	17963 818	47126 284	*0 381185	10	*5 70	24	497170000464	AA90478-01 497170000464 009 N/A P1 Plasma-1 8 / Day 1 8h
009	N/A	13 / Day 1 13h	140619 098	50168 69	*2 802925	2	*8 24	79	497170000469	AA90478-01 497170000469 009 N/A P1 Plasma-1 13 / Day 1 13h
009	N/A	13 / Day 1 13h	277528 895	50468 252	5 499079	1	8 07	68	497170000469	AA90478-01 497170000469 009 N/A P1 Plasma-1 13 / Day 1 13h
009	N/A	7 / Day 3 7h	21574 779	46685 614	*0 462129	10	*6 89	35	497170000425	AA90478-01 497170000425 009 N/A P3 Plasma-1 7 / Day 3 7h
009	N/A	9 / Day 3 9h	26367 111	47400 176	*0 556266	10	*8 27	36	497170000427	AA90478-01 497170000427 009 N/A P3 Plasma-1 9 / Day 3 9h
009	N/A	19 / Day 3 19h	12170 23	47453 201	*0 256468	10	*BLQ<(5 00)	37	497170000437	AA90478-01 497170000437 009 N/A P3 Plasma-1 19 / Day 3 19h

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
009	N/A	5 / Day 4 5h	41234 763	49194 77	*0 838194	2	*2 48	82	497170000404	AA90478-01 497170000404 009 N/A P4 Plasma-1 5 / Day 4 5h
009	N/A	5 / Day 4 5h	96641 894	49840 252	1 939033	1	2 85	71	497170000404	AA90478-01 497170000404 009 N/A P4 Plasma-1 5 / Day 4 5h
009	N/A	9 / Day 4 9h	20461 514	52191 153	*0 392049	10	*5 86	44	497170000408	AA90478-01 497170000408 009 N/A P4 Plasma-1 9 / Day 4 9h
009	N/A	19 / Day 4 19h	10513 649	53863 413	*0 195191	10	*BLQ<(5 00)	45	497170000418	AA90478-01 497170000418 009 N/A P4 Plasma-1 19 / Day 4 19h
009	N/A	3 / Day 5 3h	54574 641	48171 624	*1 132921	2	*3 34	87	497170000383	AA90478-01 497170000383 009 N/A P5 Plasma-1 3 / Day 5 3h
009	N/A	3 / Day 5 3h	115859 952	49190 163	2 355348	1	3 46	74	497170000383	AA90478-01 497170000383 009 N/A P5 Plasma-1 3 / Day 5 3h
009	N/A	10 / Day 5 10h	18119 603	48256 854	*0 375482	10	*5 62	57	497170000390	AA90478-01 497170000390 009 N/A P5 Plasma-1 10 / Day 5 10h
009	N/A	15 / Day 5 15h	19772 584	51705 764	*0 382406	10	*5 72	60	497170000395	AA90478-01 497170000395 009 N/A P5 Plasma-1 15 / Day 5 15h
011	N/A	5 / Day 1 5h	75565 351	47089 351	*1 604723	10	*23 6	25	497170000556	AA90478-01 497170000556 011 N/A P1 Plasma-1 5 / Day 1 5h
012	N/A	4 / Day 1 4h	26421 534	46600 416	*0 566981	10	*8 43	28	497170000650	AA90478-01 497170000650 012 N/A P1 Plasma-1 4 / Day 1 4h
012	N/A	5 / Day 1 5h	44494 637	49599 008	*0 897087	10	*13 3	29	497170000651	AA90478-01 497170000651 012 N/A P1 Plasma-1 5 / Day 1 5h
012	N/A	13 / Day 1 13h	21786 462	50910 066	*0 427940	10	*6 39	30	497170000659	AA90478-01 497170000659 012 N/A P1 Plasma-1 13 / Day 1 13h
012	N/A	10 / Day 2 10h	6759 914	48355 259	*0 139797	10	*BLQ<(5 00)	32	497170000637	AA90478-01 497170000637 012 N/A P2 Plasma-1 10 / Day 2 10h
012	N/A	19 / Day 2 19h	6814 555	47313 967	*0 144028	10	*BLQ<(5 00)	33	497170000646	AA90478-01 497170000646 012 N/A P2 Plasma-1 19 / Day 2 19h
012	N/A	11 / Day 3 11h	8208 265	45231 67	*0 181472	10	*BLQ<(5 00)	38	497170000619	AA90478-01 497170000619 012 N/A P3 Plasma-1 11 / Day 3 11h
012	N/A	19 / Day 3 19h	6647 947	50714 309	*0 131086	10	*BLQ<(5 00)	39	497170000627	AA90478-01 497170000627 012 N/A P3 Plasma-1 19 / Day 3 19h
012	N/A	8 / Day 4 8h	20252 699	57147 406	*0 354394	10	*5 31	46	497170000597	AA90478-01 497170000597 012 N/A P4 Plasma-1 8 / Day 4 8h
018	N/A	6 / Day 3 6h	64496 657	48787 023	*1 322004	2	*3 90	89	497170000899	AA90478-01 497170000899 018 N/A P3 Plasma-1 6 / Day 3 6h
018	N/A	6 / Day 3 6h	119458 425	48654 305	2 455249	1	3 61	77	497170000899	AA90478-01 497170000899 018 N/A P3 Plasma-1 6 / Day 3 6h
019	N/A	11 / Day 2 11h	37146 687	50139 135	*0 740872	2	*2 20	80	497170001018	AA90478-01 497170001018 019 N/A P2 Plasma-1 11 / Day 2 11h
019	N/A	11 / Day 2 11h	71757 521	49596 643	1 446822	1	2 13	69	497170001018	AA90478-01 497170001018 019 N/A P2 Plasma-1 11 / Day 2 11h
024	N/A	11 / Day 4 11h	15888 251	58231 699	*0 272845	10	*BLQ<(5 00)	47	497170001170	AA90478-01 497170001170 024 N/A P4 Plasma-1 11 / Day 4 11h
024	N/A	10 / Day 5 10h	10350 489	44982 473	*0 230100	10	*BLQ<(5 00)	61	497170001150	AA90478-01 497170001150 024 N/A P5 Plasma-1 10 / Day 5 10h
026	N/A	4 / Day 1 4h	61079 138	48334 983	*1 263663	10	*18 6	31	497170001315	AA90478-01 497170001315 026 N/A P1 Plasma-1 4 / Day 1 4h
026	N/A	15 / Day 1 15h	11505 314	48488 951	*0 237277	10	*BLQ<(5 00)	62	497170001326	AA90478-01 497170001326 026 N/A P1 Plasma-1 15 / Day 1 15h
028	N/A	9 / Day 4 9h	0	0	*N/A	10	*BLQ<(5 00)	51	497170001358	AA90478-01 497170001358 028 N/A P4 Plasma-1 9 / Day 4 9h
028	N/A	19 / Day 4 19h	8343 272	47939 819	*0 174036	10	*BLQ<(5 00)	52	497170001368	AA90478-01 497170001368 028 N/A P4 Plasma-1 19 / Day 4 19h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

* - Sample Rejected

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Standard Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 44
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Wgt	Area	IntStd Area	Response Value	Conc Found	%Bias	Mean Conc	%CV
8	0 00		0	52207 221	0 000000	0 0388		0 0388	0 0
9	0 00		0	59631 669	0 000000	0 0388			
10	0 500	4 00000	18367 57	54981 857	0 334066	0 505	1 0		
11	1 00	1 00000	38052 732	56241 461	0 676596	0 982	-1 8		
12	2 00	0 250000	80300 673	57612 526	1 393806	1 98	-1 0		
13	4 00	0 0625000	152739 746	53515 798	2 854106	4 02	0 5		
14	8 00	0 0156250	314418 871	56027 017	5 611915	7 86	-1 8		
15	10 0	0 0100000	379005 192	52646 297	7 199085	10 1	1 0		
16	20 0	0 00250000	974352 915	59648 649	16 334870	22 8	14 0		
17	40 0	0 000625000	1472209 803	53168 073	27 689734	38 6	-3 5		
18	50 0	0 000400000	1867843 808	56894 829	32 829764	45 8	-8 4		

Model: Response = Slope * Concentration + Intercept

Curve Parameters:

Slope = 0 717263988

Intercept = -0 0278226987

R-Squared = 0 9951

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

QC Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 44
Serum, Concentration of Nicotine (ng/mL)

Sample No	Nom Conc	Area	IntStd Area	Response Value	Dilution Factor	Conc Found	%Bias	Mean Conc	Mean %Bias	%CV
1	0 00	1835735 897	53720 579	34 171931	1	47 7		46 8		1 4
2	0 00	1894894 704	56211 077	33 710343	1	47 0				
3	0 00	1818477 229	53560 308	33 951956	1	47 4				
4	0 00	1890371 24	56182 571	33 646934	1	46 9				
5	0 00	1840302 304	54895 79	33 523560	1	46 8				
26	0 00	1889121 314	57514 426	32 846043	1	45 8				
27	0 00	1918417 583	56383 852	34 024238	1	47 5				
39	0 00	1932880 666	58647 194	32 957769	1	46 0				
40	0 00	1881701 291	56657 792	33 211695	1	46 3				
21	1 50	53047 734	53182 781	0 997461	1	1 43	-4 7	1 40	-6 7	3 0
30	1 50	57176 52	59862 042	0 955138	1	1 37	-8 7			
23	8 00	296594 772	56221 87	5 275434	1	7 39	-7 6	7 44	-7 0	0 9
33	8 00	304737 259	57077 886	5 338972	1	7 48	-6 5			
25	37 5	1370069 147	57563 762	23 800897	1	33 2	-11 5	34 7	-7 5	5 9
37	37 5	1356062 801	52465 069	25 846965	1	36 1	-3 7			

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)
AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Nicotine and Cotinine in Human Serum
Celerion Study AA90478-01

Study Sample Data

R J Reynolds Tobacco Company Study: AA90478-01 RJR Nicotine Batch 44
Serum, Concentration of Nicotine (ng/mL)

Subject No	Trt Code	Time (Standard)	Area	IntStd Area	Response Value	Dilution Factor	Conc	Sample No	Barcode	Sample Name
007	N/A	12 / Day 4 12h	171619 72	55062 255	3 116831	1	4 38	20	497170000316	AA90478-01 497170000316 007 N/A P4 Plasma-1 12 / Day 4 12h
009	N/A	8 / Day 1 8h	214977 142	57230 258	3 756355	1	5 28	22	497170000464	AA90478-01 497170000464 009 N/A P1 Plasma-1 8 / Day 1 8h
011	N/A	17 / Day 4 17h	121718 18	55420 732	2 196257	1	3 10	24	497170000511	AA90478-01 497170000511 011 N/A P4 Plasma-1 17 / Day 4 17h
028	N/A	3 / Day 1 3h	536559 968	55214 137	9 717800	1	13 6	28	497170001409	AA90478-01 497170001409 028 N/A P1 Plasma-1 3 / Day 1 3h
028	N/A	4 / Day 1 4h	215248 26	55699 029	3 864489	1	5 43	29	497170001410	AA90478-01 497170001410 028 N/A P1 Plasma-1 4 / Day 1 4h
028	N/A	5 / Day 1 5h	330620 001	52652 346	6 279302	1	8 79	31	497170001411	AA90478-01 497170001411 028 N/A P1 Plasma-1 5 / Day 1 5h
028	N/A	6 / Day 1 6h	498552 029	55560 037	8 973213	1	12 5	32	497170001412	AA90478-01 497170001412 028 N/A P1 Plasma-1 6 / Day 1 6h
028	N/A	7 / Day 1 7h	327297 149	55967 383	5 847998	1	8 19	34	497170001413	AA90478-01 497170001413 028 N/A P1 Plasma-1 7 / Day 1 7h
028	N/A	8 / Day 1 8h	285654 997	57389 242	4 977501	1	6 98	35	497170001414	AA90478-01 497170001414 028 N/A P1 Plasma-1 8 / Day 1 8h
028	N/A	9 / Day 1 9h	209635 737	55350 725	3 787407	1	5 32	36	497170001415	AA90478-01 497170001415 028 N/A P1 Plasma-1 9 / Day 1 9h

Response Type = Area Ratio

BLQ - Concentration Found is Less than 0 500 (Lowest Standard)

AAR - Concentration Found is Greater than 50 0 (Highest Standard)

Attachment 6. Chromatograms

Chromatograms from Batches 2, 6, 11, 12, 16, 17, 21, 22, 26, 29, and 31

Each chromatogram has a sample file name at the top left hand side. The first number in the name represent the batch number, the next number in the name represents the injection number within the batch. Following the injection number is the Celerion study number. Following the Celerion Study number is the unique sample identification as indicated below.

04264474711 1 B P1 0.33333h HEP PL-1 1"



Celerion Bar Code - Subject ID – Treatment - Dosing Period - Hour - Anti Coagulant - Split - Dilution

Results from the initial baseline integration and any subsequent re-integration are on file at Celerion, Lincoln, Nebraska.

