Southeast ACCUTEST Laboratories

07/25/05

Technical Report for

Tetra Tech NUS

Former American Beryllium, Sarasota, FL

N1075

Accutest Job Number: F33465

Sampling Date: 07/22/05

Report to:

Total number of pages in report: **46**

ACCREDITED IN ACCORDANCE WITH nelac

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK

Sections: 1 2 3 4 5

# Table of Contents

Accutest Laboratories

# Sample Summary

Tetra Tech NUS

Job No: F33465

Former American Beryllium, Sarasota, FL
Project No: N1075

| Sample Number | Collected Date | Time | By | Received | Matrix Code | Type | Client Sample ID |
|---|---|---|---|---|---|---|---|
| F33465-1 | 07/22/05 | 12:25 | SRM | 07/22/05 | AQ | Ground Water | TT-MW-124 |
| F33465-2 | 07/22/05 | 16:20 | SRM | 07/22/05 | AQ | Ground Water | TT-MW-126 |

Accutest Laboratories

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | TT-MW-124 | | |
| Lab Sample ID: | F33465-1 | Date Sampled: | 07/22/05 |
| Matrix: | AQ - Ground Water | Date Received: | 07/22/05 |
| Method: | SW846 8260B | Percent Solids: | n/a |
| Project: | Former American Beryllium, Sarasota, FL | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | C0034107.D | 1 | 07/25/05 | KW | n/a | n/a | VC1389 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

VOA TCL 4.2 List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | 5.0 U | 25 | 5.0 | ug/l | |
| 71-43-2 | Benzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-27-4 | Bromodichloromethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-25-2 | Bromoform | 0.50 U | 1.0 | 0.50 | ug/l | |
| 108-90-7 | Chlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-00-3 | Chloroethane | 1.0 U | 2.0 | 1.0 | ug/l | |
| 67-66-3 | Chloroform | 0.94 | 1.0 | 0.50 | ug/l | I |
| 75-15-0 | Carbon disulfide | 1.0 U | 2.0 | 1.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | 0.50 U | 1.0 | 0.50 | ug/l | |
| 110-82-7 | Cyclohexane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1.0 U | 2.0 | 1.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 354-23-4 | 1,2-Dichlorotrifluoroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 124-48-1 | Dibromochloromethane | 0.40 U | 1.0 | 0.40 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.30 U | 1.0 | 0.30 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.30 U | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 76-13-1 | Freon 113 | 0.50 U | 1.0 | 0.50 | ug/l | |
| 591-78-6 | 2-Hexanone | 2.5 U | 5.0 | 2.5 | ug/l | |
| 98-82-8 | Isopropylbenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | 2.5 U | 5.0 | 2.5 | ug/l | |
| 79-20-9 | Methyl Acetate | 5.0 U | 10 | 5.0 | ug/l | |

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | TT-MW-124 | | |
| Lab Sample ID: | F33465-1 | Date Sampled: | 07/22/05 |
| Matrix: | AQ - Ground Water | Date Received: | 07/22/05 |
| Method: | SW846 8260B | Percent Solids: | n/a |
| Project: | Former American Beryllium, Sarasota, FL | | |

VOA TCL 4.2 List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 74-83-9 | Methyl bromide | 1.0 U | 2.0 | 1.0 | ug/l | |
| 74-87-3 | Methyl chloride | 1.0 U | 2.0 | 1.0 | ug/l | |
| 108-87-2 | Methylcyclohexane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-09-2 | Methylene chloride | 1.0 U | 5.0 | 1.0 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 2.5 U | 5.0 | 2.5 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 0.50 U | 1.0 | 0.50 | ug/l | |
| 100-42-5 | Styrene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.30 U | 1.0 | 0.30 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 127-18-4 | Tetrachloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 79-01-6 | Trichloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | 0.60 U | 2.0 | 0.60 | ug/l | |
| 75-01-4 | Vinyl chloride | 0.50 U | 1.0 | 0.50 | ug/l | |
| 1330-20-7 | Xylene (total) | 1.0 U | 3.0 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 105% | | 86-115% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 107% | | 73-126% |
| 2037-26-5 | Toluene-D8 | 97% | | 86-112% |
| 460-00-4 | 4-Bromofluorobenzene | 97% | | 83-119% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| 463-58-1 | Carbonyl sulfide | 4.53 | 6.6 | ug/l | JN |
| | Total TIC, Volatile | | 6.6 | ug/l | J |

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | TT-MW-124 | | |
| Lab Sample ID: | F33465-1 | Date Sampled: | 07/22/05 |
| Matrix: | AQ - Ground Water | Date Received: | 07/22/05 |
| Method: | SW846 8270C SW846 3510C | Percent Solids: | n/a |
| Project: | Former American Beryllium, Sarasota, FL | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F010475.D | 1 | 07/25/05 | NJ | 07/25/05 | OP13912 | SF587 |
| Run #2 | | | | | | | |

| | Initial Volume | Final Volume |
|---|---|---|
| Run #1 | 1000 ml | 1.0 ml |
| Run #2 | | |

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 2.0 U | 5.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-60-0 | Nitrobenzene-d5 | 63% | | 49-119% |
| 321-60-8 | 2-Fluorobiphenyl | 66% | | 45-118% |
| 1718-51-0 | Terphenyl-d14 | 77% | | 46-135% |

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | TT-MW-126 | | |
| Lab Sample ID: | F33465-2 | Date Sampled: | 07/22/05 |
| Matrix: | AQ - Ground Water | Date Received: | 07/22/05 |
| Method: | SW846 8260B | Percent Solids: | n/a |
| Project: | Former American Beryllium, Sarasota, FL | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | C0034108.D | 1 | 07/25/05 | KW | n/a | n/a | VC1389 |
| Run #2 | | | | | | | |

| | Purge Volume |
|---|---|
| Run #1 | 5.0 ml |
| Run #2 | |

VOA TCL 4.2 List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone [a] | 10.1 | 25 | 5.0 | ug/l | I |
| 71-43-2 | Benzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-27-4 | Bromodichloromethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-25-2 | Bromoform | 0.50 U | 1.0 | 0.50 | ug/l | |
| 108-90-7 | Chlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-00-3 | Chloroethane | 1.0 U | 2.0 | 1.0 | ug/l | |
| 67-66-3 | Chloroform | 1.1 | 1.0 | 0.50 | ug/l | |
| 75-15-0 | Carbon disulfide | 1.0 U | 2.0 | 1.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | 0.50 U | 1.0 | 0.50 | ug/l | |
| 110-82-7 | Cyclohexane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 1.0 U | 2.0 | 1.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 354-23-4 | 1,2-Dichlorotrifluoroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 124-48-1 | Dibromochloromethane | 0.40 U | 1.0 | 0.40 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | 0.30 U | 1.0 | 0.30 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | 0.30 U | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 76-13-1 | Freon 113 | 0.50 U | 1.0 | 0.50 | ug/l | |
| 591-78-6 | 2-Hexanone | 2.5 U | 5.0 | 2.5 | ug/l | |
| 98-82-8 | Isopropylbenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | 2.5 U | 5.0 | 2.5 | ug/l | |
| 79-20-9 | Methyl Acetate | 5.0 U | 10 | 5.0 | ug/l | |

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | TT-MW-126 | | |
| Lab Sample ID: | F33465-2 | Date Sampled: | 07/22/05 |
| Matrix: | AQ - Ground Water | Date Received: | 07/22/05 |
| Method: | SW846 8260B | Percent Solids: | n/a |
| Project: | Former American Beryllium, Sarasota, FL | | |

VOA TCL 4.2 List

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 74-83-9 | Methyl bromide | 1.0 U | 2.0 | 1.0 | ug/l | |
| 74-87-3 | Methyl chloride | 1.0 U | 2.0 | 1.0 | ug/l | |
| 108-87-2 | Methylcyclohexane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-09-2 | Methylene chloride | 1.0 U | 5.0 | 1.0 | ug/l | |
| 78-93-3 | Methyl ethyl ketone | 2.5 U | 5.0 | 2.5 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | 6.0 | 1.0 | 0.50 | ug/l | |
| 100-42-5 | Styrene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 0.30 U | 1.0 | 0.30 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | 0.50 U | 1.0 | 0.50 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 127-18-4 | Tetrachloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 79-01-6 | Trichloroethylene | 0.50 U | 1.0 | 0.50 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | 0.60 U | 2.0 | 0.60 | ug/l | |
| 75-01-4 | Vinyl chloride | 0.50 U | 1.0 | 0.50 | ug/l | |
| 1330-20-7 | Xylene (total) | 1.0 U | 3.0 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 105% | | 86-115% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 106% | | 73-126% |
| 2037-26-5 | Toluene-D8 | 95% | | 86-112% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | | 83-119% |

| CAS No. | Tentatively Identified Compounds [b] | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | Total TIC, Volatile | | 0 | ug/l | |

(a) CCV outside of control limits; results may be biased low.
(b) No TICs detected.

U = Not detected MDL - Method Detection Limit I = Result > = MDL but < RL J = Estimated value
RL = Reporting Limit V = Indicates analyte found in associated method blank
L = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Accutest Laboratories

# Report of Analysis



| | | | |
|---|---|---|---|
| Client Sample ID: | TT-MW-126 | | |
| Lab Sample ID: | F33465-2 | Date Sampled: | 07/22/05 |
| Matrix: | AQ - Ground Water | Date Received: | 07/22/05 |
| Method: | SW846 8270C SW846 3510C | Percent Solids: | n/a |
| Project: | Former American Beryllium, Sarasota, FL | | |

| | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| Run #1 | F010476.D | 1 | 07/25/05 | NJ | 07/25/05 | OP13912 | SF587 |
| Run #2 | | | | | | | |

| | Initial Volume | Final Volume |
|---|---|---|
| Run #1 | 1010 ml | 1.0 ml |
| Run #2 | | |

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 2.0 U | 5.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | Run# 1 | Run# 2 | Limits |
|---|---|---|---|---|
| 4165-60-0 | Nitrobenzene-d5 | 69% | | 49-119% |
| 321-60-8 | 2-Fluorobiphenyl | 72% | | 45-118% |
| 1718-51-0 | Terphenyl-d14 | 75% | | 46-135% |

U = Not detected MDL - Method Detection Limit
RL = Reporting Limit
L = Indicates value exceeds calibration range
I = Result > = MDL but < RL J = Estimated value
V = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

## Misc. Forms

# Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST Laboratories

# CHAIN OF CUSTODY

4405 VINELAND ROAD • SUITE C-15
ORLANDO, FL 32811
TEL: 407-425-6700 • FAX: 407-425-0707

ACCUTEST JOB #:
ACCUTEST QUOTE #: F33465

**CLIENT INFORMATION**

NAME: Tetra Tech
ADDRESS: 5421 Beaumont Center Blvd #660
CITY: Tampa STATE: FL ZIP: 33634
SEND REPORT TO:
PHONE #: 813-806-0202/Paul Calligan

**FACILITY INFORMATION**

PROJECT NAME: Former American Beryllium
LOCATION: Sarasota, Florida
PROJECT NO.: N1075
FAX #: 813-806-0405

**ANALYTICAL INFORMATION**

8260 Include Freon TICs
8270 1-4 Dioxane Only

**MATRIX CODES**

DW - DRINKING WATER
GW - GROUND WATER
WW - WASTE WATER
SO - SOIL
SL - SLUDGE
OI - OIL
LIQ - OTHER LIQUID
SOL - OTHER SOLID

LAB USE ONLY

| ACCUTEST SAMPLE # | FIELD ID / POINT OF COLLECTION | COLLECTION DATE | COLLECTION TIME | SAMPLED BY: | MATRIX | # OF BOTTLES | PRESERVATION HCl | NaOH | HNO3 | H2SO4 | NONE | 8260 | 8270 | LAB USE ONLY |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | TT-MW-124 | 7-22-05 | 1225 | SRM | GW | 5 | | | | | | 3 | 2 | |
| 2 | TT-MW-126 | 7-22-05 | 1620 | SRM | GW | 5 | | | | | | 3 | 2 | |

SRM

**DATA TURNAROUND INFORMATION**

- ☐ STANDARD
- ☐ 48 HOUR RUSH
- ☑ 24 HOUR EMERGENCY
- ☐ OTHER

APPROVED BY:

EMERGENCY OR RUSH IS FAX DATA UNLESS PREVIOUSLY APPROVED: ASAP

**DATA DELIVERABLE INFORMATION**

- ☐ STANDARD
- ☐ COMMERCIAL "B"
- ☐ DISK DELIVERABLE
- ☐ STATE FORMS
- ☐ OTHER (SPECIFY)

**COMMENTS/REMARKS**

TAT ASAP

**SAMPLE CUSTODY MUST BE DOCUMENTED BELOW EACH TIME SAMPLES CHANGE POSSESION, INCLUDING COURIER DELIVERY**

| RELINQUISHED BY SAMPLER: | DATE TIME: | RECEIVED BY: |
|---|---|---|
| 1. [signature] | 7-22-05/1710 | 1. [signature] |
| RELINQUISHED BY: | DATE TIME: | RECEIVED BY: |
| 3. [signature] | 7-22-05 1900 | 3. [signature] |
| RELINQUISHED BY: | DATE TIME: | RECEIVED BY: |
| 5. | | 5. |

| RELINQUISHED BY: | DATE TIME: | RECEIVED BY: |
|---|---|---|
| 2. | 7-22-05 1710 | 2. |
| RELINQUISHED BY: | DATE TIME: | RECEIVED BY: |
| 4. | | 4. |

SEAL #

PRESERVE WHERE APPLICABLE ☐

ON ICE ☒ TEMPERATURE 2.4 °C

**F33465: Chain of Custody**
**Page 1 of 2**

## ACCUTEST LABORATORIES SAMPLE RECEIPT CONFIRMATION

ACCUTEST'S JOB NUMBER: F33465 CLIENT: TRRS PROJECT: Former American Beryllium

DATE/TIME RECEIVED: 07/22/05 - 1900 # OF COOLERS RECEIVED: 1 COOLER TEMPS: 2.4°

METHOD OF DELIVERY: FEDEX UPS (ACCUTEST COURIER) GREYHOUND DELIVERY OTHER

AIRBILL NUMBERS: _____

### COOLER INFORMATION

- [ ] CUSTODY SEAL NOT PRESENT OR NOT INTACT
- [ ] NO COC RECEIVED
- [ ] ANALYSIS REQUESTED IS UNCLEAR OR MISSING
- [ ] SAMPLE DATES OR TIMES UNCLEAR OR MISSING
- [ ] TEMPERATURE CRITERIA NOT MET

### TRIP BLANK INFORMATION

- [x] TRIP BLANK NOT PROVIDED
- [ ] TRIP BLANK NOT ON COC
- [ ] TRIP BLANK INTACT
- [ ] TRIP BLANK NOT INTACT
- [ ] RECEIVED WATER TRIP BLANK
- [ ] RECEIVED SOIL TRIP BLANK

### SAMPLE INFORMATION

- [ ] SAMPLE LABELS PRESENT ON ALL BOTTLES
- [ ] CORRECT NUMBER OF CONTAINERS USED
- [ ] SAMPLE RECEIVED IMPROPERLY PRESERVED
- [ ] INSUFFICIENT VOLUME FOR ANALYSIS
- [ ] TIMES ON COC DON'T MATCH LABEL
- [ ] ID'S ON COC DON'T MATCH LABEL
- [ ] VOC VIALS HAVE HEADSPACE (MACRO BUBBLES)
- [ ] BOTTLES RECEIVED BUT ANALYSIS NOT REQUESTED
- [ ] NO BOTTLES RECEIVED FOR ANALYSIS REQUESTED
- [ ] UNCLEAR FILTERING INSTRUCTIONS
- [ ] UNCLEAR COMPOSITING INSTRUCTIONS
- [ ] SAMPLE(S) RECEIVED BROKEN
- [ ] % SOLIDS JAR NOT RECEIVED

### SOIL INFORMATION

NUMBER OF ENCORES ? 0

NUMBER OF 5035 FIELD KITS ? 0

SUMMARY OF COMMENTS: _____

TECHNICIAN SIGNATURE/DATE: 07/22/05 TECHNICIAN SIGNATURE/DATE: _____

ASBD06/22/05

**F33465: Chain of Custody**

**Page 2 of 2**

## GC/MS Volatiles

### QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

# Method Blank Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VC1389-MB | C0034099.D | 1 | 07/25/05 | KW | n/a | n/a | VC1389 |

The QC reported here applies to the following samples: Method: SW846 8260B

F33465-1, F33465-2

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 67-64-1 | Acetone | ND | 25 | 5.0 | ug/l | |
| 71-43-2 | Benzene | ND | 1.0 | 0.50 | ug/l | |
| 75-27-4 | Bromodichloromethane | ND | 1.0 | 0.50 | ug/l | |
| 75-25-2 | Bromoform | ND | 1.0 | 0.50 | ug/l | |
| 108-90-7 | Chlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 75-00-3 | Chloroethane | ND | 2.0 | 1.0 | ug/l | |
| 67-66-3 | Chloroform | ND | 1.0 | 0.50 | ug/l | |
| 75-15-0 | Carbon disulfide | ND | 2.0 | 1.0 | ug/l | |
| 56-23-5 | Carbon tetrachloride | ND | 1.0 | 0.50 | ug/l | |
| 110-82-7 | Cyclohexane | ND | 1.0 | 0.50 | ug/l | |
| 75-34-3 | 1,1-Dichloroethane | ND | 1.0 | 0.50 | ug/l | |
| 75-35-4 | 1,1-Dichloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | ND | 2.0 | 1.0 | ug/l | |
| 106-93-4 | 1,2-Dibromoethane | ND | 1.0 | 0.50 | ug/l | |
| 107-06-2 | 1,2-Dichloroethane | ND | 1.0 | 0.50 | ug/l | |
| 78-87-5 | 1,2-Dichloropropane | ND | 1.0 | 0.50 | ug/l | |
| 354-23-4 | 1,2-Dichlorotrifluoroethane | ND | 1.0 | 0.50 | ug/l | |
| 124-48-1 | Dibromochloromethane | ND | 1.0 | 0.40 | ug/l | |
| 75-71-8 | Dichlorodifluoromethane | ND | 1.0 | 0.50 | ug/l | |
| 156-59-2 | cis-1,2-Dichloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 10061-01-5 | cis-1,3-Dichloropropene | ND | 1.0 | 0.30 | ug/l | |
| 541-73-1 | m-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 95-50-1 | o-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 106-46-7 | p-Dichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 156-60-5 | trans-1,2-Dichloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 10061-02-6 | trans-1,3-Dichloropropene | ND | 1.0 | 0.30 | ug/l | |
| 100-41-4 | Ethylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 76-13-1 | Freon 113 | ND | 1.0 | 0.50 | ug/l | |
| 591-78-6 | 2-Hexanone | ND | 5.0 | 2.5 | ug/l | |
| 98-82-8 | Isopropylbenzene | ND | 1.0 | 0.50 | ug/l | |
| 108-10-1 | 4-Methyl-2-pentanone | ND | 5.0 | 2.5 | ug/l | |
| 79-20-9 | Methyl Acetate | ND | 10 | 5.0 | ug/l | |
| 74-83-9 | Methyl bromide | ND | 2.0 | 1.0 | ug/l | |
| 74-87-3 | Methyl chloride | ND | 2.0 | 1.0 | ug/l | |
| 108-87-2 | Methylcyclohexane | ND | 1.0 | 0.50 | ug/l | |
| 75-09-2 | Methylene chloride | ND | 5.0 | 1.0 | ug/l | |

# Method Blank Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VC1389-MB | C0034099.D | 1 | 07/25/05 | KW | n/a | n/a | VC1389 |

The QC reported here applies to the following samples: Method: SW846 8260B

F33465-1, F33465-2

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 78-93-3 | Methyl ethyl ketone | ND | 5.0 | 2.5 | ug/l | |
| 1634-04-4 | Methyl Tert Butyl Ether | ND | 1.0 | 0.50 | ug/l | |
| 100-42-5 | Styrene | ND | 1.0 | 0.50 | ug/l | |
| 71-55-6 | 1,1,1-Trichloroethane | ND | 1.0 | 0.50 | ug/l | |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | ND | 1.0 | 0.30 | ug/l | |
| 79-00-5 | 1,1,2-Trichloroethane | ND | 1.0 | 0.50 | ug/l | |
| 120-82-1 | 1,2,4-Trichlorobenzene | ND | 1.0 | 0.50 | ug/l | |
| 127-18-4 | Tetrachloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 108-88-3 | Toluene | ND | 1.0 | 0.50 | ug/l | |
| 79-01-6 | Trichloroethylene | ND | 1.0 | 0.50 | ug/l | |
| 75-69-4 | Trichlorofluoromethane | ND | 2.0 | 0.60 | ug/l | |
| 75-01-4 | Vinyl chloride | ND | 1.0 | 0.50 | ug/l | |
| 1330-20-7 | Xylene (total) | ND | 3.0 | 1.0 | ug/l | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 99% | 86-115% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 95% | 73-126% |
| 2037-26-5 | Toluene-D8 | 102% | 86-112% |
| 460-00-4 | 4-Bromofluorobenzene | 102% | 83-119% |

| CAS No. | Tentatively Identified Compounds | R.T. | Est. Conc. | Units | Q |
|---|---|---|---|---|---|
| | Total TIC, Volatile [a] | | 0 | ug/l | |

(a) No TICs detected.

# Blank Spike Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VC1389-BS | C0034098.D | 1 | 07/25/05 | KW | n/a | n/a | VC1389 |

The QC reported here applies to the following samples: Method: SW846 8260B

F33465-1, F33465-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|
| 67-64-1 | Acetone | 125 | 116 | 93 | 44-142 |
| 71-43-2 | Benzene | 25 | 26.7 | 107 | 80-120 |
| 75-27-4 | Bromodichloromethane | 25 | 25.7 | 103 | 75-120 |
| 75-25-2 | Bromoform | 25 | 22.4 | 90 | 60-129 |
| 108-90-7 | Chlorobenzene | 25 | 24.5 | 98 | 82-112 |
| 75-00-3 | Chloroethane | 25 | 29.0 | 116 | 67-148 |
| 67-66-3 | Chloroform | 25 | 25.5 | 102 | 78-118 |
| 75-15-0 | Carbon disulfide | 25 | 15.6 | 62* | 65-147 |
| 56-23-5 | Carbon tetrachloride | 25 | 28.2 | 113 | 69-137 |
| 110-82-7 | Cyclohexane | 25 | 25.3 | 101 | 77-140 |
| 75-34-3 | 1,1-Dichloroethane | 25 | 26.2 | 105 | 75-117 |
| 75-35-4 | 1,1-Dichloroethylene | 25 | 25.1 | 100 | 67-134 |
| 96-12-8 | 1,2-Dibromo-3-chloropropane | 25 | 20.2 | 81 | 54-125 |
| 106-93-4 | 1,2-Dibromoethane | 25 | 23.8 | 95 | 68-116 |
| 107-06-2 | 1,2-Dichloroethane | 25 | 24.7 | 99 | 68-121 |
| 78-87-5 | 1,2-Dichloropropane | 25 | 25.8 | 103 | 78-122 |
| 354-23-4 | 1,2-Dichlorotrifluoroethane | 25 | 24.7 | 99 | 62-132 |
| 124-48-1 | Dibromochloromethane | 25 | 23.6 | 94 | 68-118 |
| 75-71-8 | Dichlorodifluoromethane | 25 | 33.6 | 134 | 43-173 |
| 156-59-2 | cis-1,2-Dichloroethylene | 25 | 27.7 | 111 | 81-120 |
| 10061-01-5 | cis-1,3-Dichloropropene | 25 | 24.8 | 99 | 73-115 |
| 541-73-1 | m-Dichlorobenzene | 25 | 22.0 | 88 | 78-116 |
| 95-50-1 | o-Dichlorobenzene | 25 | 21.3 | 85 | 77-115 |
| 106-46-7 | p-Dichlorobenzene | 25 | 24.2 | 97 | 77-113 |
| 156-60-5 | trans-1,2-Dichloroethylene | 25 | 25.9 | 104 | 74-125 |
| 10061-02-6 | trans-1,3-Dichloropropene | 25 | 23.3 | 93 | 69-115 |
| 100-41-4 | Ethylbenzene | 25 | 25.6 | 102 | 82-115 |
| 76-13-1 | Freon 113 | 25 | 20.4 | 82 | 72-148 |
| 591-78-6 | 2-Hexanone | 125 | 109 | 87 | 60-125 |
| 98-82-8 | Isopropylbenzene | 25 | 25.7 | 103 | 83-129 |
| 108-10-1 | 4-Methyl-2-pentanone | 125 | 113 | 90 | 61-128 |
| 79-20-9 | Methyl Acetate | 125 | 106 | 85 | 58-135 |
| 74-83-9 | Methyl bromide | 25 | 28.6 | 114 | 60-165 |
| 74-87-3 | Methyl chloride | 25 | 25.6 | 102 | 58-152 |
| 108-87-2 | Methylcyclohexane | 25 | 28.1 | 112 | 84-135 |
| 75-09-2 | Methylene chloride | 25 | 25.1 | 100 | 66-125 |

# Blank Spike Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| VC1389-BS | C0034098.D | 1 | 07/25/05 | KW | n/a | n/a | VC1389 |

The QC reported here applies to the following samples: Method: SW846 8260B

F33465-1, F33465-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|
| 78-93-3 | Methyl ethyl ketone | 125 | 115 | 92 | 58-127 |
| 1634-04-4 | Methyl Tert Butyl Ether | 25 | 28.2 | 113 | 67-127 |
| 100-42-5 | Styrene | 25 | 26.4 | 106 | 58-125 |
| 71-55-6 | 1,1,1-Trichloroethane | 25 | 27.6 | 110 | 78-132 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | 25 | 20.8 | 83 | 67-119 |
| 79-00-5 | 1,1,2-Trichloroethane | 25 | 23.4 | 94 | 74-115 |
| 120-82-1 | 1,2,4-Trichlorobenzene | 25 | 18.4 | 74 | 66-122 |
| 127-18-4 | Tetrachloroethylene | 25 | 28.3 | 113 | 75-126 |
| 108-88-3 | Toluene | 25 | 28.5 | 114 | 81-114 |
| 79-01-6 | Trichloroethylene | 25 | 25.8 | 103 | 80-115 |
| 75-69-4 | Trichlorofluoromethane | 25 | 29.6 | 118 | 65-163 |
| 75-01-4 | Vinyl chloride | 25 | 31.6 | 126 | 70-151 |
| 1330-20-7 | Xylene (total) | 75 | 77.2 | 103 | 81-118 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 1868-53-7 | Dibromofluoromethane | 104% | 86-115% |
| 17060-07-0 | 1,2-Dichloroethane-D4 | 104% | 73-126% |
| 2037-26-5 | Toluene-D8 | 99% | 86-112% |
| 460-00-4 | 4-Bromofluorobenzene | 96% | 83-119% |

# Instrument Performance Check (BFB)



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

| | | | |
|---|---|---|---|
| Sample: | VC1377-BFB | Injection Date: | 07/13/05 |
| Lab File ID: | C0033801.D | Injection Time: | 10:10 |
| Instrument ID: | GCMSC | | |

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | | Pass/Fail |
|---|---|---|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 21370 | 21.3 | | Pass |
| 75 | 30.0 - 60.0% of mass 95 | 47229 | 47.1 | | Pass |
| 95 | Base peak, 100% relative abundance | 100258 | 100.0 | | Pass |
| 96 | 5.0 - 9.0% of mass 95 | 6585 | 6.6 | | Pass |
| 173 | Less than 2.0% of mass 174 | 429 | 0.43 | (0.48) [a] | Pass |
| 174 | 50.0 - 100.0% of mass 95 | 90109 | 89.9 | | Pass |
| 175 | 5.0 - 9.0% of mass 174 | 6281 | 6.3 | (7.0) [a] | Pass |
| 176 | 95.0 - 101.0% of mass 174 | 90957 | 90.7 | (100.9) [a] | Pass |
| 177 | 5.0 - 9.0% of mass 176 | 5663 | 5.6 | (6.2) [b] | Pass |

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| VC1377-IC1377 | C0033802.D | 07/13/05 | 10:36 | 00:26 | Initial cal 1 |
| VC1377-IC1377 | C0033803.D | 07/13/05 | 11:03 | 00:53 | Initial cal 5 |
| VC1377-IC1377 | C0033804.D | 07/13/05 | 11:30 | 01:20 | Initial cal 20 |
| VC1377-ICC1377 | C0033805.D | 07/13/05 | 11:58 | 01:48 | Initial cal 40 |
| VC1377-IC1377 | C0033806.D | 07/13/05 | 12:25 | 02:15 | Initial cal 70 |
| VC1377-IC1377 | C0033807.D | 07/13/05 | 12:52 | 02:42 | Initial cal 100 |
| VC1377-ICV1377 | C0033808.D | 07/13/05 | 14:26 | 04:16 | Initial cal verification 40 |

# Instrument Performance Check (BFB)



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

| | | | |
|---|---|---|---|
| Sample: | VC1389-BFB | Injection Date: | 07/25/05 |
| Lab File ID: | C0034096.D | Injection Time: | 09:17 |
| Instrument ID: | GCMSC | | |

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | | Pass/Fail |
|---|---|---|---|---|---|
| 50 | 15.0 - 40.0% of mass 95 | 22357 | 20.0 | | Pass |
| 75 | 30.0 - 60.0% of mass 95 | 54178 | 48.4 | | Pass |
| 95 | Base peak, 100% relative abundance | 111858 | 100.0 | | Pass |
| 96 | 5.0 - 9.0% of mass 95 | 8104 | 7.2 | | Pass |
| 173 | Less than 2.0% of mass 174 | 462 | 0.41 | (0.46) [a] | Pass |
| 174 | 50.0 - 100.0% of mass 95 | 100176 | 89.6 | | Pass |
| 175 | 5.0 - 9.0% of mass 174 | 7018 | 6.3 | (7.0) [a] | Pass |
| 176 | 95.0 - 101.0% of mass 174 | 97712 | 87.4 | (97.5) [a] | Pass |
| 177 | 5.0 - 9.0% of mass 176 | 5890 | 5.3 | (6.0) [b] | Pass |

(a) Value is % of mass 174
(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| VC1389-CC1377 | C0034097.D | 07/25/05 | 09:33 | 00:16 | Continuing cal 40 |
| VC1389-BS | C0034098.D | 07/25/05 | 10:00 | 00:43 | Blank Spike |
| VC1389-MB | C0034099.D | 07/25/05 | 10:30 | 01:13 | Method Blank |
| ZZZZZZ | C0034105.D | 07/25/05 | 13:15 | 03:58 | (unrelated sample) |
| ZZZZZZ | C0034106.D | 07/25/05 | 13:42 | 04:25 | (unrelated sample) |
| F33465-1 | C0034107.D | 07/25/05 | 14:09 | 04:52 | TT-MW-124 |
| F33465-2 | C0034108.D | 07/25/05 | 14:37 | 05:20 | TT-MW-126 |

# Volatile Internal Standard Area Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL



| | | | |
|---|---|---|---|
| Check Std: | VC1389-CC1377 | Injection Date: | 07/25/05 |
| Lab File ID: | C0034097.D | Injection Time: | 09:33 |
| Instrument ID: | GCMSC | Method: | SW846 8260B |

| | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT |
|---|---|---|---|---|---|---|---|---|
| Check Std | 1613005 | 10.23 | 1346661 | 13.47 | 723056 | 16.02 | 189367 | 7.46 |
| Upper Limit [a] | 3226010 | 10.73 | 2693322 | 13.97 | 1446112 | 16.52 | 378734 | 7.96 |
| Lower Limit [b] | 806503 | 9.73 | 673331 | 12.97 | 361528 | 15.52 | 94684 | 6.96 |

| Lab Sample ID | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT |
|---|---|---|---|---|---|---|---|---|
| VC1389-BS | 1584441 | 10.23 | 1286534 | 13.47 | 667557 | 16.02 | 185390 | 7.47 |
| VC1389-MB | 1849306 | 10.23 | 1422509 | 13.47 | 592215 | 16.02 | 191191 | 7.48 |
| ZZZZZZ | 1627781 | 10.24 | 1338799 | 13.47 | 593922 | 16.02 | 190863 | 7.48 |
| ZZZZZZ | 1532704 | 10.24 | 1239020 | 13.47 | 543294 | 16.02 | 186085 | 7.48 |
| F33465-1 | 1480443 | 10.23 | 1188963 | 13.47 | 530951 | 16.02 | 182920 | 7.48 |
| F33465-2 | 1435032 | 10.24 | 1165678 | 13.47 | 536625 | 16.02 | 173293 | 7.48 |

IS 1 = Fluorobenzene
IS 2 = Chlorobenzene-D5
IS 3 = 1,4-Dichlorobenzene-d4
IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

# Volatile Surrogate Recovery Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Method: SW846 8260B Matrix: AQ

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S1 | S2 | S3 | S4 |
|---|---|---|---|---|---|
| F33465-1 | C0034107.D | 105.0 | 107.0 | 97.0 | 97.0 |
| F33465-2 | C0034108.D | 105.0 | 106.0 | 95.0 | 96.0 |
| VC1389-BS | C0034098.D | 104.0 | 104.0 | 99.0 | 96.0 |
| VC1389-MB | C0034099.D | 99.0 | 95.0 | 102.0 | 102.0 |

| Surrogate Compounds | Recovery Limits |
|---|---|
| S1 = Dibromofluoromethane | 86-115% |
| S2 = 1,2-Dichloroethane-D4 | 73-126% |
| S3 = Toluene-D8 | 86-112% |
| S4 = 4-Bromofluorobenzene | 83-119% |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: VC1377-ICC1377
Lab FileID: C0033805.D



Response Factor Report MSVOA5

Method : C:\MSDCHEM\2\METHODS\82600713.M (RTE Integrator)
Title : EPA 624 & SWA 5030B/8260B
Last Update : Wed Jul 13 14:51:36 2005
Response via : Initial Calibration

Calibration Files
1 =C0033802.D 2 =C0033803.D 3 =C0033804.D 4 =C0033805.D
5 =C0033806.D 6 =C0033807.D

| | | Compound | 1 | 2 | 3 | 4 | 5 | 6 | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) | I | Fluorobenzene | ---------- | ---------- | ISTD | ---------- | ---------- | ---------- | | |
| 2) | | Dichlorodifluoromet | 0.375 | 0.282 | 0.291 | 0.303 | 0.291 | 0.303 | 0.307 | 11.09 |
| 3) | P | Chloromethane | 0.388 | 0.298 | 0.272 | 0.282 | 0.274 | 0.273 | 0.298 | 15.15 |
| 4) | C | Vinyl Chloride | 0.241 | 0.189 | 0.183 | 0.200 | 0.202 | 0.210 | 0.204 | 10.10 |
| 5) | | Bromomethane | 0.094 | 0.078 | 0.080 | 0.085 | 0.091 | 0.095 | 0.087 | 8.33 |
| 6) | | Chloroethane | 0.087 | 0.078 | 0.077 | 0.082 | 0.083 | 0.085 | 0.082 | 4.72 |
| 7) | | Trichlorofluorometh | 0.347 | 0.265 | 0.263 | 0.278 | 0.291 | 0.291 | 0.289 | 10.60 |
| 8) | | 1,2-Dichlorotrifluo | 0.411 | 0.329 | 0.291 | 0.314 | 0.303 | 0.289 | 0.323 | 14.11 |
| 9) | | Ethyl ether | 0.278 | 0.256 | 0.235 | 0.249 | 0.242 | 0.233 | 0.249 | 6.82 |
| 10) | | Acrolein | 0.002 | 0.005 | 0.006 | 0.007 | 0.007 | 0.007 | 0.006 | 29.47 |
| | | ---- Linear regr., Force(0,0) ---- Coefficient = 0.9998 | | | | | | | | |
| | | Response Ratio = 0.00000 + 0.00681 *A | | | | | | | | |
| 11) | | Freon 113 | 0.206 | 0.231 | 0.202 | 0.236 | 0.211 | 0.202 | 0.215 | 7.01 |
| 12) | | Acetone | 0.156 | 0.139 | 0.117 | 0.131 | 0.119 | 0.107 | 0.128 | 13.70 |
| 13) | C | 1,1-Dichloroethene | 0.558 | 0.437 | 0.412 | 0.467 | 0.459 | 0.436 | 0.461 | 11.08 |
| 14) | | Iodomethane | 0.366 | 0.337 | 0.327 | 0.387 | 0.359 | 0.354 | 0.355 | 6.03 |
| 15) | | Methyl Acetate | 0.241 | 0.228 | 0.208 | 0.224 | 0.209 | 0.199 | 0.218 | 7.10 |
| 16) | | Carbon Disulfide | 1.116 | 0.907 | 0.850 | 0.891 | 0.872 | 0.841 | 0.913 | 11.21 |
| 17) | | Methylene Chloride | 0.717 | 0.537 | 0.490 | 0.500 | 0.471 | 0.448 | 0.527 | 18.53 |
| | | ---- Linear regr., Force(0,0) ---- Coefficient = 0.9978 | | | | | | | | |
| | | Response Ratio = 0.00000 + 0.46060 *A | | | | | | | | |
| 18) | | Acrylonitrile | 0.083 | 0.085 | 0.101 | 0.104 | 0.102 | 0.101 | 0.096 | 9.72 |
| 19) | | Methyl Tert Butyl E | 0.619 | 0.614 | 0.620 | 0.651 | 0.613 | 0.595 | 0.619 | 2.93 |
| 20) | | trans-1,2-Dichloroe | 0.499 | 0.438 | 0.451 | 0.456 | 0.444 | 0.428 | 0.453 | 5.50 |
| 21) | | Hexane | 0.550 | 0.456 | 0.465 | 0.480 | 0.478 | 0.462 | 0.482 | 7.16 |
| 22) | | Vinyl acetate | 0.344 | 0.359 | 0.413 | 0.395 | 0.367 | 0.332 | 0.368 | 8.32 |
| 23) | | Di-isopropyl ether | 1.033 | 1.067 | 1.077 | 1.058 | 0.965 | 0.876 | 1.013 | 7.71 |
| 24) | P | 1,1-Dichloroethane | 0.643 | 0.589 | 0.574 | 0.561 | 0.531 | 0.510 | 0.568 | 8.21 |
| 25) | | ETBE | 0.839 | 0.848 | 0.880 | 0.916 | 0.880 | 0.866 | 0.871 | 3.14 |
| 26) | | 2-Butanone | 0.180 | 0.180 | 0.162 | 0.171 | 0.157 | 0.149 | 0.166 | 7.75 |
| 27) | | cis-1,2-Dichloroeth | 0.314 | 0.287 | 0.293 | 0.287 | 0.268 | 0.259 | 0.284 | 6.77 |
| 28) | | 2,2-Dichloropropane | 0.305 | 0.291 | 0.299 | 0.286 | 0.275 | 0.261 | 0.286 | 5.67 |
| 29) | | Bromochloromethane | 0.122 | 0.123 | 0.127 | 0.126 | 0.116 | 0.116 | 0.122 | 3.87 |
| 30) | C | Chloroform | 0.569 | 0.532 | 0.533 | 0.526 | 0.502 | 0.491 | 0.525 | 5.23 |
| 31) | | Tetrahydrofuran | 0.084 | 0.080 | 0.081 | 0.086 | 0.082 | 0.079 | 0.082 | 3.21 |
| 32) | S | Dibromofluoromethan | 0.245 | 0.238 | 0.257 | 0.258 | 0.253 | 0.255 | 0.251 | 3.10 |
| 33) | | 1,1,1-Trichloroetha | 0.441 | 0.404 | 0.398 | 0.401 | 0.388 | 0.383 | 0.403 | 5.09 |
| 34) | | Cyclohexane | 0.551 | 0.510 | 0.520 | 0.539 | 0.532 | 0.509 | 0.527 | 3.18 |
| 35) | | 1,1-Dichloropropene | 0.385 | 0.372 | 0.377 | 0.376 | 0.364 | 0.351 | 0.371 | 3.15 |
| 36) | | Carbon Tetrachlorid | 0.360 | 0.347 | 0.353 | 0.355 | 0.350 | 0.345 | 0.352 | 1.56 |
| 37) | S | 1,2-Dichloroethane- | 0.320 | 0.326 | 0.358 | 0.344 | 0.345 | 0.329 | 0.337 | 4.23 |
| 38) | | 1,2-Dichloroethane | 0.521 | 0.496 | 0.487 | 0.485 | 0.454 | 0.438 | 0.480 | 6.24 |
| 39) | | Benzene | 1.298 | 1.191 | 1.107 | 1.040 | 0.928 | 0.873 | 1.073 | 14.93 |
| 40) | | TAME | 0.796 | 0.846 | 0.819 | 0.816 | 0.742 | 0.718 | 0.790 | 6.24 |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: VC1377-ICC1377
Lab FileID: C0033805.D



| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 41) | | Trichloroethene | 0.356 | 0.313 | 0.291 | 0.291 | 0.285 | 0.280 | 0.303 | 9.47 |
| 42) | C | 1,2-Dichloropropane | 0.399 | 0.381 | 0.351 | 0.345 | 0.315 | 0.297 | 0.348 | 11.06 |
| 43) | | Methylcyclohexane | 0.524 | 0.467 | 0.458 | 0.451 | 0.424 | 0.406 | 0.455 | 8.97 |
| 44) | | Dibromomethane | 0.200 | 0.206 | 0.190 | 0.196 | 0.184 | 0.182 | 0.193 | 4.75 |
| 45) | | Bromodichloromethan | 0.448 | 0.450 | 0.433 | 0.430 | 0.417 | 0.410 | 0.431 | 3.69 |
| 46) | | 2-Nitropropane | 0.071 | 0.088 | 0.084 | 0.089 | 0.081 | 0.074 | 0.081 | 9.07 |
| 47) | | 2-Chloroethyl vinyl | 0.134 | 0.173 | 0.179 | 0.179 | 0.157 | 0.146 | 0.161 | 11.62 |
| 48) | | cis-1,3-Dichloropro | 0.456 | 0.484 | 0.497 | 0.518 | 0.494 | 0.488 | 0.489 | 4.11 |
| 49) | | 4-Methyl-2-pentanon | 0.275 | 0.367 | 0.322 | 0.329 | 0.293 | 0.265 | 0.309 | 12.42 |
| 50) | I | Chlorobenzene-d5 | ----------ISTD---------- | | | | | | | |
| 51) | S | Toluene-d8 | 1.355 | 1.321 | 1.307 | 1.266 | 1.255 | 1.303 | 1.301 | 2.79 |
| 52) | C | Toluene | 2.510 | 1.958 | 1.653 | 1.589 | 1.454 | 1.449 | 1.769 | 23.08 |
| | | ---- Linear regr., Force(0,0) ---- Coefficient = 0.9987 | | | | | | | | |
| | | Response Ratio = 0.00000 + 1.46898 *A | | | | | | | | |
| 53) | | trans-1,3-Dichlorop | 0.599 | 0.594 | 0.598 | 0.618 | 0.592 | 0.597 | 0.600 | 1.55 |
| 54) | | 1,1,2-Trichloroetha | 0.365 | 0.386 | 0.321 | 0.324 | 0.295 | 0.298 | 0.332 | 11.01 |
| 55) | | 2-hexanone | 0.249 | 0.345 | 0.304 | 0.325 | 0.280 | 0.259 | 0.294 | 12.83 |
| 56) | | 1,3-Dichloropropane | 0.698 | 0.694 | 0.634 | 0.618 | 0.545 | 0.533 | 0.620 | 11.37 |
| 57) | | Tetrachloroethene | 0.622 | 0.514 | 0.457 | 0.434 | 0.400 | 0.404 | 0.472 | 17.94 |
| | | ---- Linear regr., Force(0,0) ---- Coefficient = 0.9989 | | | | | | | | |
| | | Response Ratio = 0.00000 + 0.40682 *A | | | | | | | | |
| 58) | | Dibromochloromethan | 0.428 | 0.446 | 0.417 | 0.419 | 0.403 | 0.406 | 0.420 | 3.72 |
| 59) | | 1,2-Dibromoethane | 0.353 | 0.384 | 0.360 | 0.371 | 0.351 | 0.353 | 0.362 | 3.64 |
| 60) | | 1-Chlorohexane | 0.408 | 0.476 | 0.491 | 0.514 | 0.499 | 0.504 | 0.482 | 8.00 |
| 61) | P | Chlorobenzene | 1.369 | 1.306 | 1.151 | 1.125 | 1.035 | 1.022 | 1.168 | 12.14 |
| 62) | | 1,1,1,2-Tetrachloro | 0.486 | 0.456 | 0.399 | 0.380 | 0.331 | 0.320 | 0.395 | 16.75 |
| | | ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9987 | | | | | | | | |
| | | Response Ratio = 0.00000 + 0.40215 *A + -0.04247 *A^2 | | | | | | | | |
| 63) | C | Ethylbenzene | 2.124 | 2.065 | 1.856 | 1.786 | 1.603 | 1.543 | 1.830 | 12.89 |
| 64) | | m,p-Xylene | 1.622 | 1.581 | 1.432 | 1.387 | 1.234 | 1.181 | 1.406 | 12.66 |
| 65) | | o-Xylene | 1.540 | 1.620 | 1.530 | 1.489 | 1.310 | 1.248 | 1.456 | 9.96 |
| 66) | | Styrene | 0.884 | 1.120 | 1.130 | 1.106 | 0.972 | 0.922 | 1.022 | 10.70 |
| 67) | P | Bromoform | 0.264 | 0.313 | 0.285 | 0.311 | 0.302 | 0.305 | 0.297 | 6.33 |
| 68) | I | 1,4-Dichlorobenzene-d | ----------ISTD---------- | | | | | | | |
| 69) | | Isopropylbenzene | 3.964 | 3.744 | 3.539 | 3.489 | 3.156 | 3.137 | 3.505 | 9.26 |
| 70) | | Cyclohexanone | 0.061 | 0.027 | 0.023 | 0.025 | 0.025 | 0.027 | 0.031 | 46.87 |
| | | ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9995 | | | | | | | | |
| | | Response Ratio = 0.00000 + 0.02224 *A + 0.00044 *A^2 | | | | | | | | |
| 71) | S | 4-Bromofluorobenzen | 1.114 | 1.039 | 1.013 | 1.004 | 0.989 | 1.026 | 1.031 | 4.28 |
| 72) | P | 1,1,2,2-Tetrachloro | 1.378 | 1.379 | 1.017 | 0.986 | 0.862 | 0.877 | 1.083 | 21.83 |
| 73) | | trans-1,4-Dichloro- | 0.193 | 0.237 | 0.199 | 0.228 | 0.219 | 0.235 | 0.218 | 8.59 |
| 74) | | 1,2,3-Trichloroprop | 0.320 | 0.334 | 0.266 | 0.261 | 0.228 | 0.240 | 0.275 | 15.59 |
| | | ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9967 | | | | | | | | |
| | | Response Ratio = 0.00000 + 0.25487 *A + -0.00936 *A^2 | | | | | | | | |
| 75) | | Bromobenzene | 1.196 | 1.182 | 0.961 | 0.919 | 0.768 | 0.748 | 0.962 | 20.15 |
| | | ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9972 | | | | | | | | |
| | | Response Ratio = 0.00000 + 0.97010 *A + -0.11619 *A^2 | | | | | | | | |
| 76) | | n-Propylbenzene | 4.905 | 4.667 | 4.256 | 4.115 | 3.615 | 3.528 | 4.181 | 13.18 |
| 77) | | 1,3,5-Trimethylbenz | 3.020 | 3.120 | 2.836 | 2.679 | 2.320 | 2.291 | 2.711 | 12.87 |
| 78) | | 2-Chlorotoluene | 3.831 | 3.421 | 2.951 | 2.752 | 2.357 | 2.325 | 2.939 | 20.29 |
| | | ---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9976 | | | | | | | | |
| | | Response Ratio = 0.00000 + 2.88819 *A + -0.29725 *A^2 | | | | | | | | |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL
Sample: VC1377-ICC1377
Lab FileID: C0033805.D



| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 79) | 4-Chlorotoluene | 2.978 | 2.899 | 2.615 | 2.642 | 2.397 | 2.399 | 2.655 | 9.19 |
| 80) | tert-Butylbenzene | 2.226 | 2.200 | 1.812 | 2.074 | 1.897 | 1.903 | 2.019 | 8.58 |
| 81) | 1,2,4-Trimethylbenz | 3.028 | 3.012 | 2.896 | 2.883 | 2.600 | 2.599 | 2.836 | 6.79 |
| 82) | sec-Butylbenzene | 4.004 | 3.829 | 3.679 | 3.675 | 3.351 | 3.304 | 3.640 | 7.45 |
| 83) | 4-Isopropyltoluene | 2.967 | 2.917 | 2.983 | 2.966 | 2.721 | 2.703 | 2.876 | 4.49 |
| 84) | 1,3-Dichlorobenzene | 2.042 | 1.955 | 1.779 | 1.775 | 1.597 | 1.591 | 1.790 | 10.24 |
| 85) | 1,4-Dichlorobenzene | 2.250 | 2.072 | 1.744 | 1.727 | 1.567 | 1.564 | 1.821 | 15.39 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9985
Response Ratio = 0.00000 + 1.58510 *A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 86) | Benzyl chloride | 1.344 | 1.445 | 1.346 | 1.519 | 1.416 | 1.455 | 1.421 | 4.76 |
| 87) | n-Butylbenzene | 2.767 | 2.636 | 2.775 | 2.879 | 2.699 | 2.655 | 2.735 | 3.31 |
| 88) | 1,2-Dichlorobenzene | 2.128 | 1.994 | 1.740 | 1.767 | 1.583 | 1.556 | 1.795 | 12.61 |
| 89) | 1,2-Dibromo-3-Chlor | 0.198 | 0.158 | 0.126 | 0.138 | 0.128 | 0.137 | 0.147 | 18.37 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9976
Response Ratio = 0.00000 + 0.13408 *A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 90) | 1,2,4-Trichlorobenz | 1.239 | 0.827 | 0.760 | 0.848 | 0.851 | 0.903 | 0.904 | 18.84 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9978
Response Ratio = 0.00000 + 0.87896 *A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 91) | Hexachlorobutadiene | 0.947 | 0.557 | 0.484 | 0.520 | 0.501 | 0.509 | 0.586 | 30.40 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9996
Response Ratio = 0.00000 + 0.50737 *A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 92) | Naphthalene | 2.951 | 1.464 | 1.399 | 1.696 | 1.660 | 1.773 | 1.824 | 31.28 |

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9988
Response Ratio = 0.00000 + 1.49633 *A + 0.13588 *A^2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 93) | 1,2,3-Trichlorobenz | 1.342 | 0.696 | 0.624 | 0.724 | 0.704 | 0.738 | 0.805 | 33.07 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9982
Response Ratio = 0.00000 + 0.72384 *A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 94) I | Tert Butyl alcohol-d1 ----------ISTD---------- | | | | | | | | |
| 95) | Tert-Butyl alcohol | 1.566 | 1.799 | 1.307 | 1.301 | 1.225 | 1.207 | 1.401 | 16.68 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9992
Response Ratio = 0.00000 + 1.22451 *A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 96) | Tert Amyl Alcohol | 0.847 | 1.435 | 1.099 | 1.067 | 1.027 | 1.009 | 1.081 | 17.97 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9993
Response Ratio = 0.00000 + 1.02229 *A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 97) | 1,4-Dioxane | 0.102 | 0.166 | 0.144 | 0.134 | 0.126 | 0.128 | 0.133 | 15.87 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9990
Response Ratio = 0.00000 + 0.12836 *A

---

(#) = Out of Range

82600713.M Thu Jul 14 08:16:44 2005

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: VC1377-ICV1377
Lab FileID: C0033808.D



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\071305\C0033808.D Vial: 7
Acq On : 13 Jul 2005 2:26 pm Operator: KarenW
Sample : ICV1377-40 Inst : MSVOA5
Misc : ms4725,vc1377,,,,, Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\2\METHODS\82600713.M (RTE Integrator)
Title : EPA 624 & SWA 5030B/8260B
Last Update : Wed Jul 13 14:51:36 2005
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 137 | 0.00 | 10.23 |
| 2 | | Dichlorodifluoromethane | 0.307 | 0.312 | -1.6 | 141 | 0.00 | 4.56 |
| 3 | P | Chloromethane | 0.298 | 0.276 | 7.4 | 134 | 0.00 | 4.93 |
| 4 | C | Vinyl Chloride | 0.204 | 0.237 | -16.2 | 163 | -0.01 | 5.16 |
| 5 | | Bromomethane | 0.087 | 0.108 | -24.1# | 175 | 0.02 | 5.77 |
| 6 | | Chloroethane | 0.082 | 0.096 | -17.1 | 161 | 0.00 | 5.92 |
| 7 | | Trichlorofluoromethane | 0.289 | 0.320 | -10.7 | 158 | 0.00 | 6.30 |
| 8 | | 1,2-Dichlorotrifluoroetha | 0.323 | 0.302 | 6.5 | 132 | -0.03 | 6.59 |
| 9 | | Ethyl ether | 0.249 | 0.205 | 17.7 | 113 | 0.00 | 6.62 |
| | | | Amount | Calc. | %Drift | | | |
| 10 | | Acrolein | 200.000 | 368.365 | -84.2# | 250 | 0.00 | 6.82 |
| | | | AvgRF | CCRF | %Dev | | | |
| 11 | | Freon 113 | 0.215 | 0.155 | 27.9# | 90 | 0.00 | 6.98 |
| 12 | | Acetone | 0.128 | 0.110 | 14.1 | 115 | 0.00 | 6.99 |
| 13 | C | 1,1-Dichloroethene | 0.461 | 0.411 | 10.8 | 121 | 0.00 | 7.02 |
| 14 | | Iodomethane | 0.355 | 0.273 | 23.1# | 97 | 0.00 | 7.28 |
| 15 | | Methyl Acetate | 0.218 | 0.182 | 16.5 | 111 | 0.00 | 7.38 |
| 16 | | Carbon Disulfide | 0.913 | 0.473 | 48.2# | 73 | 0.00 | 7.41 |
| | | | Amount | Calc. | %Drift | | | |
| 17 | | Methylene Chloride | 40.000 | 36.267 | 9.3 | 114 | 0.00 | 7.60 |
| | | | AvgRF | CCRF | %Dev | | | |
| 18 | | Acrylonitrile | 0.096 | 0.045 | 53.1# | 60 | 0.00 | 7.81 |
| 19 | | Methyl Tert Butyl Ether | 0.619 | 0.667 | -7.8 | 141 | 0.00 | 7.85 |
| 20 | | trans-1,2-Dichloroethene | 0.453 | 0.412 | 9.1 | 124 | 0.00 | 7.89 |
| 21 | | Hexane | 0.482 | 0.343 | 28.8# | 98 | 0.00 | 8.17 |
| 22 | | Vinyl acetate | 0.368 | 0.367 | 0.3 | 127 | 0.00 | 8.33 |
| 23 | | Di-isopropyl ether | 1.013 | 0.906 | 10.6 | 117 | 0.00 | 8.35 |
| 24 | P | 1,1-Dichloroethane | 0.568 | 0.515 | 9.3 | 126 | 0.00 | 8.37 |
| 25 | | ETBE | 0.871 | 0.914 | -4.9 | 137 | 0.00 | 8.75 |
| 26 | | 2-Butanone | 0.166 | 0.138 | 16.9 | 111 | 0.00 | 8.95 |
| 27 | | cis-1,2-Dichloroethene | 0.284 | 0.279 | 1.8 | 133 | 0.00 | 9.00 |
| 28 | | 2,2-Dichloropropane | 0.286 | 0.270 | 5.6 | 130 | 0.00 | 9.03 |
| 29 | | Bromochloromethane | 0.122 | 0.134 | -9.8 | 145 | 0.00 | 9.28 |
| 30 | C | Chloroform | 0.525 | 0.486 | 7.4 | 127 | 0.00 | 9.31 |
| 31 | | Tetrahydrofuran | 0.082 | 0.080 | 2.4 | 128 | 0.00 | 9.34 |
| 32 | S | Dibromofluoromethane | 0.251 | 0.252 | -0.4 | 134 | 0.00 | 9.49 |
| 33 | | 1,1,1-Trichloroethane | 0.403 | 0.375 | 6.9 | 128 | 0.00 | 9.59 |
| 34 | | Cyclohexane | 0.527 | 0.463 | 12.1 | 118 | 0.00 | 9.68 |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: VC1377-ICV1377
Lab FileID: C0033808.D

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35 | | 1,1-Dichloropropene | 0.371 | 0.344 | 7.3 | 125 | 0.00 | 9.74 |
| 36 | | Carbon Tetrachloride | 0.352 | 0.336 | 4.5 | 130 | 0.00 | 9.78 |
| 37 | S | 1,2-Dichloroethane-d4 | 0.337 | 0.322 | 4.5 | 128 | 0.00 | 9.88 |
| 38 | | 1,2-Dichloroethane | 0.480 | 0.433 | 9.8 | 122 | 0.00 | 9.96 |
| 39 | | Benzene | 1.073 | 0.999 | 6.9 | 132 | 0.00 | 9.98 |
| 40 | | TAME | 0.790 | 0.743 | 5.9 | 125 | 0.00 | 9.99 |
| 41 | | Trichloroethene | 0.303 | 0.283 | 6.6 | 133 | 0.00 | 10.63 |
| 42 | C | 1,2-Dichloropropane | 0.348 | 0.323 | 7.2 | 128 | 0.00 | 10.87 |
| 43 | | Methylcyclohexane | 0.455 | 0.437 | 4.0 | 133 | 0.00 | 10.88 |
| 44 | | Dibromomethane | 0.193 | 0.181 | 6.2 | 127 | 0.00 | 11.01 |
| 45 | | Bromodichloromethane | 0.431 | 0.408 | 5.3 | 130 | 0.00 | 11.12 |
| 46 | | 2-Nitropropane | 0.081 | 0.074 | 8.6 | 114 | 0.00 | 11.31 |
| 47 | | 2-Chloroethyl vinyl ether | 0.161 | 0.171 | -6.2 | 131 | 0.00 | 11.33 |
| 48 | | cis-1,3-Dichloropropene | 0.489 | 0.472 | 3.5 | 125 | 0.00 | 11.57 |
| 49 | | 4-Methyl-2-pentanone | 0.309 | 0.274 | 11.3 | 114 | 0.00 | 11.65 |
| 50 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 131 | 0.00 | 13.47 |
| 51 | S | Toluene-d8 | 1.301 | 1.315 | -1.1 | 136 | 0.00 | 11.89 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 52 | C | Toluene | 40.000 | 42.612 | -6.5 | 129 | 0.00 | 11.96 |
| | | ---------- | AvgRF | CCRF | %Dev | | | ---------- |
| 53 | | trans-1,3-Dichloropropene | 0.600 | 0.584 | 2.7 | 124 | 0.00 | 12.12 |
| 54 | | 1,1,2-Trichloroethane | 0.332 | 0.309 | 6.9 | 125 | 0.00 | 12.35 |
| 55 | | 2-hexanone | 0.294 | 0.269 | 8.5 | 108 | 0.00 | 12.52 |
| 56 | | 1,3-Dichloropropane | 0.620 | 0.578 | 6.8 | 123 | 0.00 | 12.55 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 57 | | Tetrachloroethene | 40.000 | 42.173 | -5.4 | 130 | 0.00 | 12.58 |
| | | ---------- | AvgRF | CCRF | %Dev | | | ---------- |
| 58 | | Dibromochloromethane | 0.420 | 0.398 | 5.2 | 125 | 0.00 | 12.83 |
| 59 | | 1,2-Dibromoethane | 0.362 | 0.355 | 1.9 | 126 | 0.00 | 13.01 |
| 60 | | 1-Chlorohexane | 0.482 | 0.553 | -14.7 | 141 | 0.00 | 13.36 |
| 61 | P | Chlorobenzene | 1.168 | 1.101 | 5.7 | 129 | 0.00 | 13.50 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 62 | | 1,1,1,2-Tetrachloroethane | 40.000 | 38.166 | 4.6 | 122 | 0.00 | 13.56 |
| | | ---------- | AvgRF | CCRF | %Dev | | | ---------- |
| 63 | C | Ethylbenzene | 1.830 | 1.761 | 3.8 | 129 | 0.00 | 13.56 |
| 64 | | m,p-Xylene | 1.406 | 1.360 | 3.3 | 129 | 0.00 | 13.67 |
| 65 | | o-Xylene | 1.456 | 1.436 | 1.4 | 127 | 0.00 | 14.13 |
| 66 | | Styrene | 1.022 | 1.064 | -4.1 | 126 | 0.00 | 14.14 |
| 67 | P | Bromoform | 0.297 | 0.285 | 4.0 | 120 | 0.00 | 14.42 |
| 68 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 127 | 0.00 | 16.02 |
| 69 | | Isopropylbenzene | 3.505 | 3.466 | 1.1 | 126 | 0.00 | 14.51 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 70 | | Cyclohexanone | 200.000 | 194.442 | 2.8 | 120 | 0.00 | 14.68 |
| | | ---------- | AvgRF | CCRF | %Dev | | | ---------- |
| 71 | S | 4-Bromofluorobenzene | 1.031 | 1.032 | -0.1 | 131 | 0.00 | 14.72 |
| 72 | P | 1,1,2,2-Tetrachloroethane | 1.083 | 0.943 | 12.9 | 121 | 0.00 | 14.80 |
| 73 | | trans-1,4-Dichloro-2-bute | 0.218 | 0.236 | -8.3 | 131 | 0.00 | 14.85 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 74 | | 1,2,3-Trichloropropane | 40.000 | 40.006 | -0.0 | 120 | 0.00 | 14.90 |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: VC1377-ICV1377
Lab FileID: C0033808.D



| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 75 | Bromobenzene | 40.000 | 39.984 | 0.0 | 121 | 0.00 | 14.95 |
| | | AvgRF | CCRF | %Dev | | | |
| 76 | n-Propylbenzene | 4.181 | 4.127 | 1.3 | 127 | 0.00 | 14.96 |
| 77 | 1,3,5-Trimethylbenzene | 2.711 | 2.647 | 2.4 | 125 | 0.00 | 15.12 |
| | | Amount | Calc. | %Drift | | | |
| 78 | 2-Chlorotoluene | 40.000 | 40.242 | -0.6 | 123 | 0.00 | 15.12 |
| | | AvgRF | CCRF | %Dev | | | |
| 79 | 4-Chlorotoluene | 2.655 | 2.513 | 5.3 | 121 | 0.00 | 15.23 |
| 80 | tert-Butylbenzene | 2.019 | 1.968 | 2.5 | 120 | 0.00 | 15.52 |
| 81 | 1,2,4-Trimethylbenzene | 2.836 | 2.742 | 3.3 | 121 | 0.00 | 15.56 |
| 82 | sec-Butylbenzene | 3.640 | 3.570 | 1.9 | 123 | 0.00 | 15.75 |
| 83 | 4-Isopropyltoluene | 2.876 | 2.898 | -0.8 | 124 | 0.00 | 15.88 |
| 84 | 1,3-Dichlorobenzene | 1.790 | 1.643 | 8.2 | 118 | 0.00 | 15.96 |
| | | Amount | Calc. | %Drift | | | |
| 85 | 1,4-Dichlorobenzene | 40.000 | 40.764 | -1.9 | 119 | 0.00 | 16.05 |
| | | AvgRF | CCRF | %Dev | | | |
| 86 | Benzyl chloride | 1.421 | 1.612 | -13.4 | 135 | 0.00 | 16.16 |
| 87 | n-Butylbenzene | 2.735 | 2.715 | 0.7 | 120 | 0.00 | 16.33 |
| 88 | 1,2-Dichlorobenzene | 1.795 | 1.619 | 9.8 | 116 | 0.00 | 16.48 |
| | | Amount | Calc. | %Drift | | | |
| 89 | 1,2-Dibromo-3-Chloropropa | 40.000 | 36.678 | 8.3 | 114 | 0.00 | 17.32 |
| 90 | 1,2,4-Trichlorobenzene | 40.000 | 36.263 | 9.3 | 119 | 0.00 | 18.32 |
| 91 | Hexachlorobutadiene | 40.000 | 40.043 | -0.1 | 124 | 0.00 | 18.47 |
| 92 | Naphthalene | 40.000 | 38.615 | 3.5 | 116 | 0.00 | 18.68 |
| 93 | 1,2,3-Trichlorobenzene | 40.000 | 37.715 | 5.7 | 120 | 0.00 | 18.99 |
| | | AvgRF | CCRF | %Dev | | | |
| 94 I | Tert Butyl alcohol-d10 | 1.000 | 1.000 | 0.0 | 143 | 0.00 | 7.47 |
| | | Amount | Calc. | %Drift | | | |
| 95 | Tert-Butyl alcohol | 400.000 | 388.432 | 2.9 | 131 | 0.00 | 7.57 |
| 96 | Tert Amyl Alcohol | 400.000 | 393.549 | 1.6 | 135 | 0.00 | 9.79 |
| 97 | 1,4-Dioxane | 800.000 | 759.970 | 5.0 | 130 | 0.00 | 10.97 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
C0033805.D 82600713.M Thu Jul 14 08:15:46 2005

# Continuing Calibration Summary

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: VC1389-CC1377
Lab FileID: C0034097.D



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\072505\C0034097.D Vial: 1
Acq On : 25 Jul 2005 9:33 am Operator: KarenW
Sample : CC1377-40 Inst : MSVOA5
Misc : ms4772,vc1389,,,,, Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\2\METHODS\82600713.M (RTE Integrator)
Title : EPA 624 & SWA 5030B/8260B
Last Update : Wed Jul 13 14:51:36 2005
Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | Fluorobenzene | 1.000 | 1.000 | 0.0 | 114 | 0.00 | 10.23 |
| 2 | | Dichlorodifluoromethane | 0.307 | 0.324 | -5.5 | 122 | 0.00 | 4.55 |
| 3 | P | Chloromethane | 0.298 | 0.283 | 5.0 | 115 | 0.00 | 4.93 |
| 4 | C | Vinyl Chloride | 0.204 | 0.219 | -7.4 | 126 | 0.00 | 5.16 |
| 5 | | Bromomethane | 0.087 | 0.092 | -5.7 | 124 | 0.02 | 5.77 |
| 6 | | Chloroethane | 0.082 | 0.086 | -4.9 | 120 | 0.02 | 5.94 |
| 7 | | Trichlorofluoromethane | 0.289 | 0.321 | -11.1 | 132 | -0.01 | 6.30 |
| 8 | | 1,2-Dichlorotrifluoroetha | 0.323 | 0.307 | 5.0 | 112 | -0.03 | 6.59 |
| 9 | | Ethyl ether | 0.249 | 0.255 | -2.4 | 117 | 0.00 | 6.62 |
| | | | Amount | Calc. | %Drift | | | |
| 10 | | Acrolein | 200.000 | 184.733 | 7.6 | 105 | 0.00 | 6.82 |
| | | | AvgRF | CCRF | %Dev | | | |
| 11 | | Freon 113 | 0.215 | 0.204 | 5.1 | 99 | 0.00 | 6.97 |
| 12 | | Acetone | 0.128 | 0.099 | 22.7# | 87 | 0.00 | 7.00 |
| 13 | C | 1,1-Dichloroethene | 0.461 | 0.422 | 8.5 | 104 | 0.01 | 7.03 |
| 14 | | Iodomethane | 0.355 | 0.320 | 9.9 | 95 | 0.00 | 7.27 |
| 15 | | Methyl Acetate | 0.218 | 0.201 | 7.8 | 103 | 0.00 | 7.38 |
| 16 | | Carbon Disulfide | 0.913 | 0.826 | 9.5 | 106 | 0.00 | 7.40 |
| | | | Amount | Calc. | %Drift | | | |
| 17 | | Methylene Chloride | 40.000 | 39.218 | 2.0 | 103 | 0.00 | 7.60 |
| | | | AvgRF | CCRF | %Dev | | | |
| 18 | | Acrylonitrile | 0.096 | 0.099 | -3.1 | 108 | 0.00 | 7.81 |
| 19 | | Methyl Tert Butyl Ether | 0.619 | 0.638 | -3.1 | 112 | 0.00 | 7.85 |
| 20 | | trans-1,2-Dichloroethene | 0.453 | 0.431 | 4.9 | 108 | 0.00 | 7.90 |
| 21 | | Hexane | 0.482 | 0.454 | 5.8 | 108 | 0.00 | 8.18 |
| 22 | | Vinyl acetate | 0.368 | 0.361 | 1.9 | 105 | 0.00 | 8.33 |
| 23 | | Di-isopropyl ether | 1.013 | 0.971 | 4.1 | 105 | 0.00 | 8.35 |
| 24 | P | 1,1-Dichloroethane | 0.568 | 0.557 | 1.9 | 114 | 0.00 | 8.37 |
| 25 | | ETBE | 0.871 | 0.887 | -1.8 | 111 | 0.00 | 8.75 |
| 26 | | 2-Butanone | 0.166 | 0.143 | 13.9 | 96 | 0.00 | 8.95 |
| 27 | | cis-1,2-Dichloroethene | 0.284 | 0.294 | -3.5 | 117 | 0.00 | 9.00 |
| 28 | | 2,2-Dichloropropane | 0.286 | 0.283 | 1.0 | 113 | 0.00 | 9.03 |
| 29 | | Bromochloromethane | 0.122 | 0.127 | -4.1 | 116 | 0.00 | 9.28 |
| 30 | C | Chloroform | 0.525 | 0.533 | -1.5 | 116 | 0.00 | 9.31 |
| 31 | | Tetrahydrofuran | 0.082 | 0.076 | 7.3 | 101 | 0.00 | 9.34 |
| 32 | S | Dibromofluoromethane | 0.251 | 0.261 | -4.0 | 116 | 0.00 | 9.48 |
| 33 | | 1,1,1-Trichloroethane | 0.403 | 0.397 | 1.5 | 113 | 0.00 | 9.59 |
| 34 | | Cyclohexane | 0.527 | 0.504 | 4.4 | 107 | 0.00 | 9.68 |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: VC1389-CC1377
Lab FileID: C0034097.D

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 35 | | 1,1-Dichloropropene | 0.371 | 0.377 | -1.6 | 115 | 0.00 | 9.74 |
| 36 | | Carbon Tetrachloride | 0.352 | 0.360 | -2.3 | 116 | 0.00 | 9.78 |
| 37 | S | 1,2-Dichloroethane-d4 | 0.337 | 0.330 | 2.1 | 110 | 0.00 | 9.88 |
| 38 | | 1,2-Dichloroethane | 0.480 | 0.467 | 2.7 | 110 | 0.00 | 9.96 |
| 39 | | Benzene | 1.073 | 1.058 | 1.4 | 116 | 0.00 | 9.98 |
| 40 | | TAME | 0.790 | 0.817 | -3.4 | 114 | 0.00 | 9.99 |
| 41 | | Trichloroethene | 0.303 | 0.293 | 3.3 | 115 | 0.00 | 10.63 |
| 42 | C | 1,2-Dichloropropane | 0.348 | 0.340 | 2.3 | 113 | 0.00 | 10.87 |
| 43 | | Methylcyclohexane | 0.455 | 0.462 | -1.5 | 117 | 0.00 | 10.88 |
| 44 | | Dibromomethane | 0.193 | 0.196 | -1.6 | 115 | 0.00 | 11.01 |
| 45 | | Bromodichloromethane | 0.431 | 0.440 | -2.1 | 117 | 0.00 | 11.12 |
| 46 | | 2-Nitropropane | 0.081 | 0.082 | -1.2 | 105 | 0.00 | 11.31 |
| 47 | | 2-Chloroethyl vinyl ether | 0.161 | 0.112 | 30.4# | 72 | 0.00 | 11.34 |
| 48 | | cis-1,3-Dichloropropene | 0.489 | 0.507 | -3.7 | 112 | 0.00 | 11.57 |
| 49 | | 4-Methyl-2-pentanone | 0.309 | 0.289 | 6.5 | 100 | 0.00 | 11.66 |
| 50 | I | Chlorobenzene-d5 | 1.000 | 1.000 | 0.0 | 120 | 0.00 | 13.47 |
| 51 | S | Toluene-d8 | 1.301 | 1.240 | 4.7 | 118 | 0.00 | 11.89 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 52 | C | Toluene | 40.000 | 41.430 | -3.6 | 115 | 0.00 | 11.97 |
| | | ---------- | AvgRF | CCRF | %Dev | | | ---------- |
| 53 | | trans-1,3-Dichloropropene | 0.600 | 0.573 | 4.5 | 111 | 0.00 | 12.12 |
| 54 | | 1,1,2-Trichloroethane | 0.332 | 0.304 | 8.4 | 113 | 0.00 | 12.35 |
| 55 | | 2-hexanone | 0.294 | 0.244 | 17.0 | 90 | 0.00 | 12.52 |
| 56 | | 1,3-Dichloropropane | 0.620 | 0.572 | 7.7 | 111 | 0.00 | 12.54 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 57 | | Tetrachloroethene | 40.000 | 40.352 | -0.9 | 114 | 0.00 | 12.58 |
| | | ---------- | AvgRF | CCRF | %Dev | | | ---------- |
| 58 | | Dibromochloromethane | 0.420 | 0.400 | 4.8 | 115 | 0.00 | 12.83 |
| 59 | | 1,2-Dibromoethane | 0.362 | 0.350 | 3.3 | 113 | 0.00 | 13.01 |
| 60 | | 1-Chlorohexane | 0.482 | 0.501 | -3.9 | 117 | 0.00 | 13.36 |
| 61 | P | Chlorobenzene | 1.168 | 1.081 | 7.4 | 115 | 0.00 | 13.50 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 62 | | 1,1,1,2-Tetrachloroethane | 40.000 | 39.180 | 2.1 | 114 | 0.00 | 13.56 |
| | | ---------- | AvgRF | CCRF | %Dev | | | ---------- |
| 63 | C | Ethylbenzene | 1.830 | 1.715 | 6.3 | 115 | 0.00 | 13.57 |
| 64 | | m,p-Xylene | 1.406 | 1.327 | 5.6 | 115 | 0.00 | 13.67 |
| 65 | | o-Xylene | 1.456 | 1.400 | 3.8 | 113 | 0.00 | 14.13 |
| 66 | | Styrene | 1.022 | 1.056 | -3.3 | 115 | 0.00 | 14.14 |
| 67 | P | Bromoform | 0.297 | 0.295 | 0.7 | 114 | 0.00 | 14.42 |
| 68 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 122 | 0.00 | 16.02 |
| 69 | | Isopropylbenzene | 3.505 | 3.283 | 6.3 | 115 | 0.00 | 14.51 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 70 | | Cyclohexanone | 200.000 | 173.175 | 13.4 | 102 | 0.00 | 14.68 |
| | | ---------- | AvgRF | CCRF | %Dev | | | ---------- |
| 71 | S | 4-Bromofluorobenzene | 1.031 | 0.992 | 3.8 | 120 | 0.00 | 14.72 |
| 72 | P | 1,1,2,2-Tetrachloroethane | 1.083 | 0.896 | 17.3 | 111 | 0.00 | 14.80 |
| 73 | | trans-1,4-Dichloro-2-bute | 0.218 | 0.177 | 18.8 | 94 | 0.00 | 14.85 |
| | | ---------- | Amount | Calc. | %Drift | | | ---------- |
| 74 | | 1,2,3-Trichloropropane | 40.000 | 38.216 | 4.5 | 110 | 0.00 | 14.89 |

# Continuing Calibration Summary

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: VC1389-CC1377
Lab FileID: C0034097.D

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 75 | Bromobenzene | 40.000 | 38.789 | 3.0 | 113 | 0.00 | 14.95 |
| | | AvgRF | CCRF | %Dev | | | |
| 76 | n-Propylbenzene | 4.181 | 3.869 | 7.5 | 114 | 0.00 | 14.96 |
| 77 | 1,3,5-Trimethylbenzene | 2.711 | 2.578 | 4.9 | 117 | 0.00 | 15.12 |
| | | Amount | Calc. | %Drift | | | |
| 78 | 2-Chlorotoluene | 40.000 | 38.349 | 4.1 | 113 | 0.00 | 15.12 |
| | | AvgRF | CCRF | %Dev | | | |
| 79 | 4-Chlorotoluene | 2.655 | 2.416 | 9.0 | 111 | 0.00 | 15.23 |
| 80 | tert-Butylbenzene | 2.019 | 1.908 | 5.5 | 112 | 0.00 | 15.51 |
| 81 | 1,2,4-Trimethylbenzene | 2.836 | 2.686 | 5.3 | 113 | 0.00 | 15.56 |
| 82 | sec-Butylbenzene | 3.640 | 3.433 | 5.7 | 114 | 0.00 | 15.76 |
| 83 | 4-Isopropyltoluene | 2.876 | 2.786 | 3.1 | 114 | 0.00 | 15.88 |
| 84 | 1,3-Dichlorobenzene | 1.790 | 1.571 | 12.2 | 108 | 0.00 | 15.96 |
| | | Amount | Calc. | %Drift | | | |
| 85 | 1,4-Dichlorobenzene | 40.000 | 38.334 | 4.2 | 107 | 0.00 | 16.04 |
| | | AvgRF | CCRF | %Dev | | | |
| 86 | Benzyl chloride | 1.421 | 1.385 | 2.5 | 111 | 0.00 | 16.16 |
| 87 | n-Butylbenzene | 2.735 | 2.627 | 3.9 | 111 | 0.00 | 16.33 |
| 88 | 1,2-Dichlorobenzene | 1.795 | 1.521 | 15.3 | 105 | 0.00 | 16.48 |
| | | Amount | Calc. | %Drift | | | |
| 89 | 1,2-Dibromo-3-Chloropropa | 40.000 | 34.430 | 13.9 | 102 | 0.00 | 17.32 |
| 90 | 1,2,4-Trichlorobenzene | 40.000 | 33.229 | 16.9 | 105 | 0.00 | 18.32 |
| 91 | Hexachlorobutadiene | 40.000 | 36.666 | 8.3 | 109 | 0.00 | 18.48 |
| 92 | Naphthalene | 40.000 | 36.531 | 8.7 | 105 | 0.00 | 18.68 |
| 93 | 1,2,3-Trichlorobenzene | 40.000 | 33.321 | 16.7 | 101 | 0.00 | 18.99 |
| | | AvgRF | CCRF | %Dev | | | |
| 94 I | Tert Butyl alcohol-d10 | 1.000 | 1.000 | 0.0 | 123 | 0.00 | 7.46 |
| | | Amount | Calc. | %Drift | | | |
| 95 | Tert-Butyl alcohol | 400.000 | 380.970 | 4.8 | 110 | 0.00 | 7.57 |
| 96 | Tert Amyl Alcohol | 400.000 | 375.536 | 6.1 | 110 | 0.00 | 9.79 |
| 97 | 1,4-Dioxane | 800.000 | 728.211 | 9.0 | 107 | 0.00 | 10.96 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
C0033805.D 82600713.M Mon Jul 25 15:01:10 2005

## GC/MS Semi-volatiles

# QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

# Method Blank Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP13912-MB | F010472.D | 1 | 07/25/05 | NJ | 07/25/05 | OP13912 | SF587 |



The QC reported here applies to the following samples: Method: SW846 8270C

F33465-1, F33465-2

| CAS No. | Compound | Result | RL | MDL | Units | Q |
|---|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | ND | 5.0 | 2.0 | ug/l | |

| CAS No. | Surrogate Recoveries | | Limits |
|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 52% | 19-90% |
| 4165-62-2 | Phenol-d5 | 34% | 10-68% |
| 118-79-6 | 2,4,6-Tribromophenol | 76% | 36-137% |
| 4165-60-0 | Nitrobenzene-d5 | 73% | 49-119% |
| 321-60-8 | 2-Fluorobiphenyl | 75% | 45-118% |
| 1718-51-0 | Terphenyl-d14 | 79% | 46-135% |

# Blank Spike Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

| Sample | File ID | DF | Analyzed | By | Prep Date | Prep Batch | Analytical Batch |
|---|---|---|---|---|---|---|---|
| OP13912-BS | F010471.D | 1 | 07/25/05 | NJ | 07/25/05 | OP13912 | SF587 |



The QC reported here applies to the following samples: Method: SW846 8270C

F33465-1, F33465-2

| CAS No. | Compound | Spike ug/l | BSP ug/l | BSP % | Limits |
|---|---|---|---|---|---|
| 123-91-1 | 1,4-Dioxane | 50 | 30.8 | 62 | 9-70 |

| CAS No. | Surrogate Recoveries | BSP | Limits |
|---|---|---|---|
| 367-12-4 | 2-Fluorophenol | 63% | 19-90% |
| 4165-62-2 | Phenol-d5 | 45% | 10-68% |
| 118-79-6 | 2,4,6-Tribromophenol | 85% | 36-137% |
| 4165-60-0 | Nitrobenzene-d5 | 83% | 49-119% |
| 321-60-8 | 2-Fluorobiphenyl | 83% | 45-118% |
| 1718-51-0 | Terphenyl-d14 | 83% | 46-135% |

# Instrument Performance Check (DFTPP)



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: SF580-DFTPP
Lab File ID: F010288.D
Instrument ID: GCMSF

Injection Date: 07/14/05
Injection Time: 09:25

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | | Pass/Fail |
|---|---|---|---|---|---|
| 51 | 30.0 - 60.0% of mass 198 | 98608 | 38.0 | | Pass |
| 68 | Less than 2.0% of mass 69 | 0 | 0.0 | (0.0) [a] | Pass |
| 69 | Mass 69 relative abundance | 103916 | 40.0 | | Pass |
| 70 | Less than 2.0% of mass 69 | 624 | 0.24 | (0.6) [a] | Pass |
| 127 | 40.0 - 60.0% of mass 198 | 122213 | 47.1 | | Pass |
| 197 | Less than 1.0% of mass 198 | 202 | 0.08 | | Pass |
| 198 | Base peak, 100% relative abundance | 259544 | 100.0 | | Pass |
| 199 | 5.0 - 9.0% of mass 198 | 17139 | 6.6 | | Pass |
| 275 | 10.0 - 30.0% of mass 198 | 54352 | 20.9 | | Pass |
| 365 | 1.0 - 100.0% of mass 198 | 4846 | 1.9 | | Pass |
| 441 | Present, but less than mass 443 | 24130 | 9.3 | (72.7) [b] | Pass |
| 442 | 40.0 - 100.0% of mass 198 | 165544 | 63.8 | | Pass |
| 443 | 17.0 - 23.0% of mass 442 | 33205 | 12.8 | (20.1) [c] | Pass |

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| SF580-IC580 | F010289.D | 07/14/05 | 09:44 | 00:19 | Initial cal 5 |
| SF580-IC580 | F010290.D | 07/14/05 | 10:15 | 00:50 | Initial cal 25 |
| SF580-IC580 | F010291.D | 07/14/05 | 10:45 | 01:20 | Initial cal 50 |
| SF580-ICC580 | F010292.D | 07/14/05 | 11:15 | 01:50 | Initial cal 75 |
| SF580-IC580 | F010293.D | 07/14/05 | 11:46 | 02:21 | Initial cal 100 |
| SF580-IC580 | F010294.D | 07/14/05 | 12:17 | 02:52 | Initial cal 125 |
| SF580-ICV580 | F010295.D | 07/14/05 | 12:53 | 03:28 | Initial cal verification 50 |
| OP13806-BS | F010299.D | 07/14/05 | 14:58 | 05:33 | Blank Spike |
| OP13806-MB | F010300.D | 07/14/05 | 15:29 | 06:04 | Method Blank |
| ZZZZZZ | F010301.D | 07/14/05 | 16:01 | 06:36 | (unrelated sample) |
| F33029-1 | F010302.D | 07/14/05 | 16:32 | 07:07 | (used for QC only; not part of job F33465) |
| OP13806-MS | F010303.D | 07/14/05 | 17:03 | 07:38 | Matrix Spike |
| OP13806-MSD | F010304.D | 07/14/05 | 17:34 | 08:09 | Matrix Spike Duplicate |
| ZZZZZZ | F010305.D | 07/14/05 | 18:04 | 08:39 | (unrelated sample) |
| ZZZZZZ | F010306.D | 07/14/05 | 18:34 | 09:09 | (unrelated sample) |

# Instrument Performance Check (DFTPP)



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: SF587-DFTPP
Lab File ID: F010469.D
Instrument ID: GCMSF
Injection Date: 07/25/05
Injection Time: 09:51

| m/e | Ion Abundance Criteria | Raw Abundance | % Relative Abundance | | Pass/Fail |
|---|---|---|---|---|---|
| 51 | 30.0 - 60.0% of mass 198 | 87883 | 41.7 | | Pass |
| 68 | Less than 2.0% of mass 69 | 0 | 0.0 | (0.0) [a] | Pass |
| 69 | Mass 69 relative abundance | 88408 | 42.0 | | Pass |
| 70 | Less than 2.0% of mass 69 | 532 | 0.25 | (0.6) [a] | Pass |
| 127 | 40.0 - 60.0% of mass 198 | 103664 | 49.2 | | Pass |
| 197 | Less than 1.0% of mass 198 | 0 | 0.0 | | Pass |
| 198 | Base peak, 100% relative abundance | 210730 | 100.0 | | Pass |
| 199 | 5.0 - 9.0% of mass 198 | 14704 | 7.0 | | Pass |
| 275 | 10.0 - 30.0% of mass 198 | 42853 | 20.3 | | Pass |
| 365 | 1.0 - 100.0% of mass 198 | 3563 | 1.7 | | Pass |
| 441 | Present, but less than mass 443 | 17786 | 8.4 | (73.1) [b] | Pass |
| 442 | 40.0 - 100.0% of mass 198 | 122317 | 58.0 | | Pass |
| 443 | 17.0 - 23.0% of mass 442 | 24345 | 11.6 | (19.9) [c] | Pass |

(a) Value is % of mass 69
(b) Value is % of mass 443
(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

| Lab Sample ID | Lab File ID | Date Analyzed | Time Analyzed | Hours Lapsed | Client Sample ID |
|---|---|---|---|---|---|
| SF587-CC580 | F010470.D | 07/25/05 | 10:11 | 00:20 | Continuing cal 75 |
| OP13912-BS | F010471.D | 07/25/05 | 10:53 | 01:02 | Blank Spike |
| OP13912-MB | F010472.D | 07/25/05 | 11:23 | 01:32 | Method Blank |
| ZZZZZZ | F010473.D | 07/25/05 | 11:52 | 02:01 | (unrelated sample) |
| ZZZZZZ | F010474.D | 07/25/05 | 12:22 | 02:31 | (unrelated sample) |
| F33465-1 | F010475.D | 07/25/05 | 12:52 | 03:01 | TT-MW-124 |
| F33465-2 | F010476.D | 07/25/05 | 13:22 | 03:31 | TT-MW-126 |

# Semivolatile Internal Standard Area Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Check Std: SF587-CC580 Injection Date: 07/25/05
Lab File ID: F010470.D Injection Time: 10:11
Instrument ID: GCMSF Method: SW846 8270C

| | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT | IS 5 AREA | RT | IS 6 AREA | RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Check Std | 189133 | 4.52 | 730159 | 5.57 | 430301 | 7.71 | 754374 | 10.16 | 655593 | 15.07 | 593919 | 17.56 |
| Upper Limit [a] | 378266 | 5.02 | 1460318 | 6.07 | 860602 | 8.21 | 1508748 | 10.66 | 1311186 | 15.57 | 1187838 | 18.06 |
| Lower Limit [b] | 94567 | 4.02 | 365080 | 5.07 | 215151 | 7.21 | 377187 | 9.66 | 327797 | 14.57 | 296960 | 17.06 |

| Lab Sample ID | IS 1 AREA | RT | IS 2 AREA | RT | IS 3 AREA | RT | IS 4 AREA | RT | IS 5 AREA | RT | IS 6 AREA | RT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| OP13912-BS | 183838 | 4.52 | 691994 | 5.57 | 405278 | 7.72 | 684703 | 10.16 | 556981 | 15.06 | 486030 | 17.56 |
| OP13912-MB | 178386 | 4.52 | 671189 | 5.57 | 375614 | 7.71 | 655917 | 10.16 | 566785 | 15.06 | 504770 | 17.55 |
| ZZZZZZ | 184822 | 4.52 | 695281 | 5.57 | 386395 | 7.71 | 682955 | 10.16 | 588891 | 15.06 | 542049 | 17.55 |
| ZZZZZZ | 186136 | 4.52 | 711127 | 5.57 | 400154 | 7.71 | 688992 | 10.16 | 584077 | 15.06 | 517862 | 17.55 |
| F33465-1 | 185606 | 4.52 | 690014 | 5.57 | 391081 | 7.71 | 684646 | 10.16 | 590185 | 15.06 | 532256 | 17.55 |
| F33465-2 | 189360 | 4.52 | 686005 | 5.57 | 380168 | 7.71 | 641274 | 10.16 | 515953 | 15.06 | 459221 | 17.55 |

IS 1 = 1,4-Dichlorobenzene-d4
IS 2 = Naphthalene-d8
IS 3 = Acenaphthene-D10
IS 4 = Phenanthrene-d10
IS 5 = Chrysene-d12
IS 6 = Perylene-d12

(a) Upper Limit = +100% of check standard area; Retention time +0.5 minutes.
(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

# Semivolatile Surrogate Recovery Summary



Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Method: SW846 8270C Matrix: AQ

Samples and QC shown here apply to the above method

| Lab Sample ID | Lab File ID | S1 | S2 | S3 |
|---|---|---|---|---|
| F33465-1 | F010475.D | 63.0 | 66.0 | 77.0 |
| F33465-2 | F010476.D | 69.0 | 72.0 | 75.0 |
| OP13912-BS | F010471.D | 83.0 | 83.0 | 83.0 |
| OP13912-MB | F010472.D | 73.0 | 75.0 | 79.0 |

| Surrogate Compounds | Recovery Limits |
|---|---|
| S1 = Nitrobenzene-d5 | 49-119% |
| S2 = 2-Fluorobiphenyl | 45-118% |
| S3 = Terphenyl-d14 | 46-135% |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL
Sample: SF580-ICC580
Lab FileID: F010292.D



Response Factor Report MS-F

Method : C:\MSDCHEM\1\METHODS\8270C.M (RTE Integrator)
Title : SW846 8270C OR EPA 625
Last Update : Thu Jul 14 13:35:24 2005
Response via : Initial Calibration

Calibration Files
5 =F010289.D 25 =F010290.D 50 =F010291.D 75 =F010292.D
100 =F010293.D 125 =F010294.D icv =F010295.D

| | Compound | 5 | 25 | 50 | 75 | 100 | 125 | icv | Avg | %RSD |
|---|---|---|---|---|---|---|---|---|---|---|
| 1) I | 1,4-Dichlorobenzene-d | ISTD | | | | | | | | |
| 2) | 1,4-Dioxane | 0.344 | 0.363 | 0.429 | 0.410 | 0.416 | 0.421 | | 0.397 | 8.77 |
| 3) | N-nitrosodimethyl | 0.550 | 0.559 | 0.640 | 0.657 | 0.642 | 0.652 | | 0.617 | 7.86 |
| 4) | Pyridine | 1.031 | 0.968 | 1.166 | 1.105 | 1.141 | 1.227 | | 1.106 | 8.49 |
| 5) | Benzaldehyde | 0.905 | 0.905 | 0.673 | 0.480 | 0.758 | | | 0.744 | 23.90 |
| 6) | Aniline | 1.724 | 1.909 | 1.918 | 1.984 | 1.985 | 2.017 | | 1.923 | 5.51 |
| 7)S | 2-Fluorophenol | 1.061 | 1.159 | 1.217 | 1.246 | 1.228 | 1.235 | | 1.191 | 5.95 |
| 8) | bis(2-Chloroethyl | 0.957 | 1.036 | 1.093 | 1.123 | 1.125 | 1.116 | | 1.075 | 6.19 |
| 9)S | Phenol-d5 | 1.392 | 1.540 | 1.621 | 1.626 | 1.634 | 1.625 | | 1.573 | 6.06 |
| 10)C | Phenol | 1.469 | 1.525 | 1.613 | 1.594 | 1.614 | 1.781 | | 1.599 | 6.63 |
| 11) | 2-Chlorophenol | 1.245 | 1.320 | 1.384 | 1.392 | 1.390 | 1.398 | | 1.355 | 4.50 |
| 12) | 1,3-Dichlorobenze | 1.444 | 1.484 | 1.544 | 1.547 | 1.530 | 1.520 | | 1.512 | 2.66 |
| 13)C | 1,4-Dichlorobenze | 1.493 | 1.543 | 1.592 | 1.600 | 1.566 | 1.550 | | 1.557 | 2.50 |
| 14) | 1,2-Dichlorobenze | 1.381 | 1.427 | 1.466 | 1.442 | 1.430 | 1.415 | | 1.427 | 1.97 |
| 15) | Benzyl alcohol | 0.705 | 0.809 | 0.888 | 0.897 | 0.889 | 0.910 | | 0.850 | 9.34 |
| 16) | bis(2-chloroisopr | 1.489 | 1.535 | 1.619 | 1.621 | 1.621 | 1.642 | | 1.588 | 3.85 |
| 17) | 2-Methylphenol | 1.044 | 1.157 | 1.229 | 1.238 | 1.246 | 1.253 | | 1.195 | 6.80 |
| 18) | Acetophenone | 1.658 | 1.672 | 1.788 | 1.861 | 1.822 | 1.884 | | 1.781 | 5.37 |
| 19) | Hexachloroethane | 0.549 | 0.568 | 0.590 | 0.593 | 0.587 | 0.585 | | 0.579 | 2.89 |
| 20)P | N-Nitroso-di-n-pr | 0.830 | 0.916 | 0.949 | 0.971 | 0.975 | 1.004 | | 0.941 | 6.58 |
| 21) | 3&4-Methylphenol | 1.140 | 1.242 | 1.292 | 1.328 | 1.321 | 1.348 | | 1.278 | 6.02 |
| 22) I | Naphthalene-d8 | ISTD | | | | | | | | |
| 23)S | Nitrobenzene-d5 | 0.355 | 0.375 | 0.389 | 0.387 | 0.396 | 0.390 | | 0.382 | 3.91 |
| 24) | Nitrobenzene | 0.338 | 0.363 | 0.373 | 0.370 | 0.380 | 0.378 | | 0.367 | 4.22 |
| 25) | Isophorone | 0.570 | 0.610 | 0.624 | 0.617 | 0.637 | 0.638 | | 0.616 | 4.02 |
| 26)C | 2-Nitrophenol | 0.188 | 0.203 | 0.212 | 0.208 | 0.212 | 0.207 | | 0.205 | 4.51 |
| 27) | 2,4-Dimethylpheno | 0.333 | 0.366 | 0.378 | 0.375 | 0.385 | 0.377 | | 0.369 | 5.06 |
| 28) | bis(2-Chloroethox | 0.341 | 0.362 | 0.380 | 0.369 | 0.384 | 0.383 | | 0.370 | 4.46 |
| 29) | Benzoic Acid | | 0.226 | 0.259 | 0.273 | 0.280 | 0.281 | | 0.264 | 8.76 |
| 30)C | 2,4-Dichloropheno | 0.278 | 0.316 | 0.326 | 0.312 | 0.320 | 0.313 | | 0.311 | 5.40 |
| 31) | 1,2,4-Trichlorobe | 0.329 | 0.338 | 0.341 | 0.332 | 0.337 | 0.331 | | 0.335 | 1.31 |
| 32) | Naphthalene | 1.000 | 1.067 | 1.094 | 1.077 | 1.106 | 1.077 | | 1.070 | 3.48 |
| 33) | 4-Chloroaniline | 0.418 | 0.450 | 0.456 | 0.450 | 0.458 | 0.447 | | 0.447 | 3.23 |
| 34) | 2,6-Dichloropheno | 0.276 | 0.296 | 0.298 | 0.288 | 0.296 | 0.285 | | 0.290 | 2.95 |
| 35)C | Hexachlorobutadie | 0.177 | 0.185 | 0.191 | 0.179 | 0.185 | 0.176 | | 0.182 | 3.23 |
| 36) | Caprolactam | 0.118 | 0.139 | 0.139 | 0.143 | 0.147 | 0.145 | | 0.139 | 7.69 |
| 37)C | 4-Chloro-3-methyl | 0.293 | 0.317 | 0.330 | 0.327 | 0.334 | 0.335 | | 0.323 | 4.91 |
| 38) | 2-Methylnaphthale | 0.663 | 0.709 | 0.731 | 0.711 | 0.729 | 0.712 | | 0.709 | 3.44 |
| 39) | 1-Methylnaphthale | 0.649 | 0.688 | 0.693 | 0.679 | 0.703 | 0.676 | | 0.681 | 2.70 |
| 40) | 1,2,4,5-Tetrachlo | 0.328 | 0.345 | 0.342 | 0.331 | 0.340 | 0.328 | | 0.336 | 2.16 |
| 41) I | Acenaphthene-d10 | ISTD | | | | | | | | |
| 42)P | Hexachlorocyclope | 0.120 | 0.216 | 0.303 | 0.322 | 0.326 | 0.337 | | 0.271 | 31.67 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9978
Response Ratio = 0.00000 + 0.32655 *A

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: SF580-ICC580
Lab FileID: F010292.D

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 43)C | 2,4,6-Trichloroph | 0.347 | 0.388 | 0.403 | 0.400 | 0.402 | 0.398 | 0.389 | 5.53 |
| 44) | 2,4,5-Trichloroph | 0.365 | 0.405 | 0.427 | 0.427 | 0.426 | 0.426 | 0.413 | 6.00 |
| 45)S | 2-Fluorobiphenyl | 1.346 | 1.394 | 1.447 | 1.401 | 1.412 | 1.382 | 1.397 | 2.40 |
| 46) | 1,1'-Biphenyl | 1.416 | 1.479 | 1.544 | 1.561 | 1.521 | 1.551 | 1.512 | 3.66 |
| 47) | 2-Chloronaphthale | 1.112 | 1.181 | 1.207 | 1.191 | 1.196 | 1.197 | 1.181 | 2.94 |
| 48) | 2-Nitroaniline | 0.323 | 0.360 | 0.383 | 0.381 | 0.392 | 0.393 | 0.372 | 7.13 |
| 49) | Acenaphthylene | 1.853 | 1.975 | 2.038 | 2.028 | 2.031 | 2.020 | 1.991 | 3.56 |
| 50) | Dimethylphthalate | 1.328 | 1.393 | 1.404 | 1.405 | 1.425 | 1.420 | 1.396 | 2.53 |
| 51) | 2,6-Dinitrotoluen | 0.299 | 0.325 | 0.335 | 0.328 | 0.335 | 0.332 | 0.326 | 4.22 |
| 52)C | Acenaphthene | 1.119 | 1.205 | 1.235 | 1.205 | 1.217 | 1.206 | 1.198 | 3.36 |
| 53) | 3-Nitroaniline | 0.315 | 0.357 | 0.368 | 0.362 | 0.370 | 0.371 | 0.357 | 5.97 |
| 54)P | 2,4-Dinitrophenol | 0.072 | 0.129 | 0.176 | 0.188 | 0.207 | 0.218 | 0.165 | 33.29 |

---- Quadratic regr., Force(0,0) ---- Coefficient = 0.9990
Response Ratio = 0.00000 + 0.13865 *A + 0.02606 *A^2

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 55) | Dibenzofuran | 1.639 | 1.709 | 1.734 | 1.723 | 1.730 | 1.701 | 1.706 | 2.05 |
| 56) | 2,4-Dinitrotoluen | 0.361 | 0.436 | 0.437 | 0.429 | 0.444 | 0.437 | 0.424 | 7.36 |
| 57)P | 4-Nitrophenol | 0.146 | 0.169 | 0.181 | 0.184 | 0.186 | 0.189 | 0.176 | 9.17 |
| 58) | 2,3,4,6-Tetrachlo | 0.247 | 0.286 | 0.310 | 0.316 | 0.311 | 0.320 | 0.298 | 9.27 |
| 59) | Fluorene | 1.291 | 1.417 | 1.422 | 1.404 | 1.412 | 1.393 | 1.390 | 3.55 |
| 60) | 4-Chlorophenyl-ph | 0.627 | 0.661 | 0.664 | 0.658 | 0.659 | 0.654 | 0.654 | 2.09 |
| 61) | Diethylphthalate | 1.285 | 1.370 | 1.405 | 1.380 | 1.403 | 1.400 | 1.374 | 3.32 |
| 62) | 4-Nitroaniline | 0.308 | 0.357 | 0.366 | 0.365 | 0.370 | 0.370 | 0.356 | 6.76 |
| 63) I | Phenanthrene-d10 | ----------ISTD---------- | | | | | | | |
| 64) | 4,6-Dinitro-2-met | 0.139 | 0.162 | 0.168 | 0.169 | 0.172 | | 0.162 | 8.21 |
| 65)C | n-Nitrosodiphenyl | 0.543 | 0.572 | 0.590 | 0.580 | 0.587 | 0.582 | 0.576 | 2.97 |
| 66) | 1,2-Diphenylhydra | 0.666 | 0.725 | 0.749 | 0.741 | 0.759 | 0.732 | 0.729 | 4.54 |
| 67)S | 2,4,6-Tribromophe | 0.070 | 0.078 | 0.079 | 0.078 | 0.079 | 0.077 | 0.077 | 4.59 |
| 68) | 4-Bromophenyl-phe | 0.191 | 0.193 | 0.199 | 0.195 | 0.200 | 0.198 | 0.196 | 1.78 |
| 69) | Hexachlorobenzene | 0.172 | 0.182 | 0.184 | 0.180 | 0.184 | 0.181 | 0.180 | 2.54 |
| 70) | Atrazine | 0.198 | 0.217 | 0.222 | 0.223 | 0.222 | 0.222 | 0.217 | 4.48 |
| 71)C | Pentachlorophenol | 0.057 | 0.078 | 0.082 | 0.086 | 0.089 | | 0.079 | 16.19 |

---- Linear regr., Force(0,0) ---- Coefficient = 0.9997
Response Ratio = 0.00000 + 0.08588 *A

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 72) | Phenanthrene | 1.135 | 1.168 | 1.186 | 1.154 | 1.172 | 1.154 | 1.161 | 1.50 |
| 73) | Anthracene | 1.093 | 1.173 | 1.213 | 1.184 | 1.197 | 1.175 | 1.172 | 3.56 |
| 74) | Carbazole | 0.994 | 1.075 | 1.099 | 1.076 | 1.091 | 1.073 | 1.068 | 3.53 |
| 75) | Di-n-butylphthala | 1.123 | 1.273 | 1.328 | 1.307 | 1.331 | 1.312 | 1.279 | 6.19 |
| 76)C | Fluoranthene | 1.083 | 1.166 | 1.193 | 1.165 | 1.174 | 1.157 | 1.156 | 3.28 |
| 77) I | Chrysene-d12 | ----------ISTD---------- | | | | | | | |
| 78) | Benzidine | 0.967 | 0.940 | 0.891 | 1.002 | 0.958 | | 0.952 | 4.29 |
| 79) | Pyrene | 1.502 | 1.597 | 1.658 | 1.611 | 1.611 | 1.601 | 1.597 | 3.20 |
| 80)S | Terphenyl-d14 | 0.880 | 0.938 | 0.990 | 0.962 | 0.972 | 0.960 | 0.950 | 4.04 |
| 81) | Butylbenzylphthal | 0.569 | 0.681 | 0.744 | 0.734 | 0.752 | 0.741 | 0.703 | 10.06 |
| 82) | 3,3'-Dichlorobenz | 0.428 | 0.495 | 0.504 | 0.470 | 0.495 | 0.485 | 0.479 | 5.83 |
| 83) | Benzo[a]anthracen | 1.262 | 1.364 | 1.421 | 1.394 | 1.426 | 1.419 | 1.381 | 4.54 |
| 84) | Chrysene | 1.260 | 1.309 | 1.349 | 1.303 | 1.309 | 1.292 | 1.304 | 2.20 |
| 85) | bis(2-Ethylhexyl) | 0.756 | 0.912 | 0.996 | 0.996 | 1.008 | 0.993 | 0.944 | 10.41 |
| 86) I | Perylene-d12 | ----------ISTD---------- | | | | | | | |
| 87)C | Di-n-octylphthala | 1.344 | 1.760 | 1.946 | 1.952 | 1.937 | 1.916 | 1.809 | 13.22 |
| 88) | Benzo[b]fluoranth | 1.289 | 1.436 | 1.475 | 1.500 | 1.512 | 1.575 | 1.464 | 6.65 |
| 89) | Benzo[k]fluoranth | 1.289 | 1.435 | 1.479 | 1.446 | 1.397 | 1.348 | 1.399 | 5.01 |
| 90)C | Benzo[a]pyrene | 1.218 | 1.363 | 1.420 | 1.403 | 1.418 | 1.413 | 1.373 | 5.72 |
| 91) | Indeno[1,2,3-cd]p | 0.981 | 1.118 | 1.158 | 1.177 | 1.203 | 1.252 | 1.148 | 8.14 |
| 92) | Dibenz[a,h]anthra | 0.929 | 1.063 | 1.125 | 1.187 | 1.189 | 1.198 | 1.115 | 9.40 |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL
Sample: SF580-ICC580
Lab FileID: F010292.D

93) Benzo[g,h,i]peryl 1.133 1.260 1.265 1.280 1.296 1.317 1.258 5.14

(#) = Out of Range

8270C.M Thu Jul 14 14:42:39 2005

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: SF580-ICV580
Lab FileID: F010295.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\071405\F010295.D Vial: 8
Acq On : 14 Jul 2005 12:53 pm Operator: nareshj
Sample : icv580-50 Inst : MS-F
Misc : op13711,sf580,1000,,,1,1,water Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\8270C.M (RTE Integrator)
Title : SW846 8270C OR EPA 625
Last Update : Thu Jul 14 13:35:24 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | Amount | Calc. | %Drift | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 40.000 | 40.000 | 0.0 | 90 | 0.00 | 4.58 |
| 2 | | 1,4-Dioxane | 50.000 | 55.696 | -11.4 | 0 | 0.02 | 2.11 |
| 3 | | N-nitrosodimethylamine | 50.000 | 45.987 | 8.0 | 0 | 0.01 | 2.43 |
| 4 | | Pyridine | 50.000 | 46.323 | 7.4 | 0 | 0.01 | 2.45 |
| 5 | | Benzaldehyde | 50.000 | 61.723 | -23.4# | 0 | 0.00 | 4.26 |
| 6 | | Aniline | 50.000 | 43.142 | 13.7 | 0 | 0.00 | 4.34 |
| 7 | S | 2-Fluorophenol | | ----------NA---------- | | | | |
| 8 | | bis(2-Chloroethyl)ether | 50.000 | 55.564 | -11.1 | 0 | 0.00 | 4.39 |
| 9 | S | Phenol-d5 | | ----------NA---------- | | | | |
| 10 | C | Phenol | 50.000 | 50.691 | -1.4 | 0 | 0.00 | 4.36 |
| 11 | | 2-Chlorophenol | 50.000 | 51.931 | -3.9 | 0 | 0.00 | 4.43 |
| 12 | | 1,3-Dichlorobenzene | 50.000 | 51.302 | -2.6 | 0 | 0.00 | 4.53 |
| 13 | C | 1,4-Dichlorobenzene | 50.000 | 51.161 | -2.3 | 0 | 0.00 | 4.59 |
| 14 | | 1,2-Dichlorobenzene | 50.000 | 52.181 | -4.4 | 0 | 0.00 | 4.70 |
| 15 | | Benzyl alcohol | 50.000 | 50.234 | -0.5 | 0 | 0.00 | 4.70 |
| 16 | | bis(2-chloroisopropyl)eth | 50.000 | 51.483 | -3.0 | 0 | 0.00 | 4.79 |
| 17 | | 2-Methylphenol | 50.000 | 51.754 | -3.5 | 0 | 0.00 | 4.80 |
| 18 | | Acetophenone | 50.000 | 51.803 | -3.6 | 0 | 0.00 | 4.89 |
| 19 | | Hexachloroethane | 50.000 | 51.677 | -3.4 | 0 | 0.00 | 4.96 |
| 20 | P | N-Nitroso-di-n-propylamin | 50.000 | 51.464 | -2.9 | 0 | 0.00 | 4.90 |
| 21 | | 3&4-Methylphenol | 100.000 | 102.663 | -2.7 | 0 | 0.00 | 4.92 |
| 22 | I | Naphthalene-d8 | 40.000 | 40.000 | 0.0 | 89 | 0.00 | 5.64 |
| 23 | S | Nitrobenzene-d5 | | ----------NA---------- | | | | |
| 24 | | Nitrobenzene | 50.000 | 51.266 | -2.5 | 0 | 0.00 | 5.03 |
| 25 | | Isophorone | 50.000 | 53.643 | -7.3 | 0 | 0.00 | 5.23 |
| 26 | C | 2-Nitrophenol | 50.000 | 51.967 | -3.9 | 0 | 0.00 | 5.30 |
| 27 | | 2,4-Dimethylphenol | 50.000 | 51.303 | -2.6 | 0 | 0.00 | 5.36 |
| 28 | | bis(2-Chloroethoxy)methan | 50.000 | 50.217 | -0.4 | 0 | 0.00 | 5.43 |
| 29 | | Benzoic Acid | 100.000 | 110.250 | -10.3 | 0 | 0.00 | 5.54 |
| 30 | C | 2,4-Dichlorophenol | 50.000 | 52.482 | -5.0 | 0 | 0.00 | 5.53 |
| 31 | | 1,2,4-Trichlorobenzene | 50.000 | 51.577 | -3.2 | 0 | 0.00 | 5.59 |
| 32 | | Naphthalene | 50.000 | 50.918 | -1.8 | 0 | 0.00 | 5.67 |
| 33 | | 4-Chloroaniline | 50.000 | 27.985 | 44.0# | 0 | 0.00 | 5.74 |
| 34 | | 2,6-Dichlorophenol | 50.000 | 53.387 | -6.8 | 0 | 0.00 | 5.74 |
| 35 | C | Hexachlorobutadiene | 50.000 | 51.749 | -3.5 | 0 | 0.00 | 5.78 |
| 36 | | Caprolactam | 50.000 | 51.637 | -3.3 | 0 | 0.00 | 6.14 |
| 37 | C | 4-Chloro-3-methylphenol | 50.000 | 50.548 | -1.1 | 0 | 0.00 | 6.29 |
| 38 | | 2-Methylnaphthalene | 50.000 | 49.251 | 1.5 | 0 | 0.00 | 6.41 |
| 39 | | 1-Methylnaphthalene | 50.000 | 50.790 | -1.6 | 0 | 0.00 | 6.53 |
| 40 | | 1,2,4,5-Tetrachlorobenzen | 50.000 | 49.774 | 0.5 | 0 | 0.00 | 6.62 |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: SF580-ICV580
Lab FileID: F010295.D

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 41 | I | Acenaphthene-d10 | 40.000 | 40.000 | 0.0 | 90 | 0.00 | 7.81 |
| | | ---------- Amount | Calc. | %Drift | ---------- | | | |
| 42 | P | Hexachlorocyclopentadiene | 50.000 | 45.956 | 8.1 | 0 | 0.00 | 6.60 |
| | | ---------- Amount | Calc. | %Drift | ---------- | | | |
| 43 | C | 2,4,6-Trichlorophenol | 50.000 | 51.560 | -3.1 | 0 | 0.00 | 6.78 |
| 44 | | 2,4,5-Trichlorophenol | 50.000 | 50.913 | -1.8 | 0 | 0.00 | 6.84 |
| 45 | S | 2-Fluorobiphenyl | | ----------NA---------- | | | | |
| 46 | | 1,1'-Biphenyl | 50.000 | 51.266 | -2.5 | 0 | 0.00 | 7.01 |
| 47 | | 2-Chloronaphthalene | 50.000 | 50.225 | -0.5 | 0 | 0.00 | 7.03 |
| 48 | | 2-Nitroaniline | 50.000 | 47.962 | 4.1 | 0 | 0.00 | 7.20 |
| 49 | | Acenaphthylene | 50.000 | 50.112 | -0.2 | 0 | 0.00 | 7.60 |
| 50 | | Dimethylphthalate | 50.000 | 52.069 | -4.1 | 0 | -0.01 | 7.48 |
| 51 | | 2,6-Dinitrotoluene | 50.000 | 49.785 | 0.4 | 0 | 0.00 | 7.56 |
| 52 | C | Acenaphthene | 50.000 | 50.520 | -1.0 | 0 | 0.00 | 7.86 |
| 53 | | 3-Nitroaniline | 50.000 | 26.575 | 46.9# | 0 | 0.00 | 7.80 |
| | | ---------- Amount | Calc. | %Drift | ---------- | | | |
| 54 | P | 2,4-Dinitrophenol | 100.000 | 94.826 | 5.2 | 0 | 0.00 | 7.98 |
| | | ---------- Amount | Calc. | %Drift | ---------- | | | |
| 55 | | Dibenzofuran | 50.000 | 48.039 | 3.9 | 0 | 0.00 | 8.13 |
| 56 | | 2,4-Dinitrotoluene | 50.000 | 51.372 | -2.7 | 0 | 0.00 | 8.18 |
| 57 | P | 4-Nitrophenol | 100.000 | 100.715 | -0.7 | 0 | 0.00 | 8.18 |
| 58 | | 2,3,4,6-Tetrachlorophenol | 50.000 | 47.411 | 5.2 | 0 | 0.00 | 8.36 |
| 59 | | Fluorene | 50.000 | 50.437 | -0.9 | 0 | 0.00 | 8.68 |
| 60 | | 4-Chlorophenyl-phenylethe | 50.000 | 52.684 | -5.4 | 0 | 0.00 | 8.72 |
| 61 | | Diethylphthalate | 50.000 | 52.195 | -4.4 | 0 | 0.00 | 8.60 |
| 62 | | 4-Nitroaniline | 50.000 | 43.973 | 12.1 | 0 | 0.00 | 8.80 |
| 63 | I | Phenanthrene-d10 | 40.000 | 40.000 | 0.0 | 90 | 0.00 | 10.28 |
| 64 | | 4,6-Dinitro-2-methylpheno | 100.000 | 108.701 | -8.7 | 0 | 0.00 | 8.85 |
| 65 | C | n-Nitrosodiphenylamine | 50.000 | 51.509 | -3.0 | 0 | 0.00 | 8.94 |
| 66 | | 1,2-Diphenylhydrazine | 50.000 | 52.620 | -5.2 | 0 | 0.00 | 8.99 |
| 67 | S | 2,4,6-Tribromophenol | | ----------NA---------- | | | | |
| 68 | | 4-Bromophenyl-phenylether | 50.000 | 52.003 | -4.0 | 0 | 0.00 | 9.54 |
| 69 | | Hexachlorobenzene | 50.000 | 51.441 | -2.9 | 0 | 0.00 | 9.59 |
| 70 | | Atrazine | 50.000 | 52.269 | -4.5 | 0 | 0.00 | 9.96 |
| | | ---------- Amount | Calc. | %Drift | ---------- | | | |
| 71 | C | Pentachlorophenol | 100.000 | 102.061 | -2.1 | 0 | 0.00 | 9.99 |
| | | ---------- Amount | Calc. | %Drift | ---------- | | | |
| 72 | | Phenanthrene | 50.000 | 51.386 | -2.8 | 0 | 0.00 | 10.32 |
| 73 | | Anthracene | 50.000 | 49.569 | 0.9 | 0 | 0.00 | 10.41 |
| 74 | | Carbazole | 50.000 | 47.366 | 5.3 | 0 | 0.00 | 10.76 |
| 75 | | Di-n-butylphthalate | 50.000 | 51.853 | -3.7 | 0 | 0.00 | 11.55 |
| 76 | C | Fluoranthene | 50.000 | 52.062 | -4.1 | 0 | 0.00 | 12.48 |
| 77 | I | Chrysene-d12 | 40.000 | 40.000 | 0.0 | 88 | 0.00 | 15.19 |
| 78 | | Benzidine | | ----------NA---------- | | | | |
| 79 | | Pyrene | 50.000 | 52.071 | -4.1 | 0 | 0.00 | 12.88 |
| 80 | S | Terphenyl-d14 | | ----------NA---------- | | | | |
| 81 | | Butylbenzylphthalate | 50.000 | 53.149 | -6.3 | 0 | 0.00 | 14.35 |
| 82 | | 3,3'-Dichlorobenzidine | 50.000 | 1.596 | 96.8# | 0 | 0.00 | 15.22 |
| 83 | | Benzo[a]anthracene | 50.000 | 51.606 | -3.2 | 0 | 0.00 | 15.16 |
| 84 | | Chrysene | 50.000 | 53.016 | -6.0 | 0 | 0.00 | 15.23 |
| 85 | | bis(2-Ethylhexyl)phthalat | 50.000 | 54.316 | -8.6 | 0 | 0.00 | 15.54 |

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL
Sample: SF580-ICV580
Lab FileID: F010295.D

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 86 | I | Perylene-d12 | 40.000 | 40.000 | 0.0 | 87 | 0.00 | 17.68 |
| 87 | C | Di-n-octylphthalate | 50.000 | 56.471 | -12.9 | 0 | 0.00 | 16.73 |
| 88 | | Benzo[b]fluoranthene | 50.000 | 51.057 | -2.1 | 0 | 0.00 | 17.07 |
| 89 | | Benzo[k]fluoranthene | 50.000 | 53.773 | -7.5 | 0 | 0.00 | 17.12 |
| 90 | C | Benzo[a]pyrene | 50.000 | 49.758 | 0.5 | 0 | 0.00 | 17.58 |
| 91 | | Indeno[1,2,3-cd]pyrene | 50.000 | 52.753 | -5.5 | 0 | 0.00 | 19.26 |
| 92 | | Dibenz[a,h]anthracene | 50.000 | 50.257 | -0.5 | 0 | 0.00 | 19.32 |
| 93 | | Benzo[g,h,i]perylene | 50.000 | 50.746 | -1.5 | 0 | 0.00 | 19.61 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F010295.D 8270C.M Thu Jul 14 14:44:55 2005

# Continuing Calibration Summary

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: SF587-CC580
Lab FileID: F010470.D



Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\072505\F010470.D Vial: 2
Acq On : 25 Jul 2005 10:11 am Operator: nareshj
Sample : cc580-75 Inst : MS-F
Misc : op13884,sf587,30.8,,,1,1,soil Multiplr: 1.00
MS Integration Params: Rteint.p

Method : C:\MSDCHEM\1\METHODS\8270C.M (RTE Integrator)
Title : SW846 8270C OR EPA 625
Last Update : Wed Jul 20 12:46:04 2005
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

| | | Compound | AvgRF | CCRF | %Dev | Area% | Dev(min) | R.T. |
|---|---|---|---|---|---|---|---|---|
| 1 | I | 1,4-Dichlorobenzene-d4 | 1.000 | 1.000 | 0.0 | 67 | -0.02 | 4.52 |
| 2 | | 1,4-Dioxane | 0.397 | 0.413 | -4.0 | 67 | -0.08 | 1.99 |
| 3 | | N-nitrosodimethylamine | 0.617 | 0.677 | -9.7 | 69 | -0.07 | 2.33 |
| 4 | | Pyridine | 1.106 | 1.210 | -9.4 | 73 | -0.06 | 2.36 |
| 5 | | Benzaldehyde | 0.744 | 0.938 | -26.1# | 130 | -0.03 | 4.20 |
| 6 | | Aniline | 1.923 | 2.145 | -11.5 | 72 | -0.03 | 4.29 |
| 7 | S | 2-Fluorophenol | 1.191 | 1.264 | -6.1 | 68 | -0.04 | 3.55 |
| 8 | | bis(2-Chloroethyl)ether | 1.075 | 1.136 | -5.7 | 67 | -0.03 | 4.34 |
| 9 | S | Phenol-d5 | 1.573 | 1.725 | -9.7 | 71 | -0.05 | 4.30 |
| 10 | C | Phenol | 1.599 | 1.694 | -5.9 | 71 | -0.03 | 4.30 |
| 11 | | 2-Chlorophenol | 1.355 | 1.464 | -8.0 | 70 | -0.02 | 4.38 |
| 12 | | 1,3-Dichlorobenzene | 1.512 | 1.585 | -4.8 | 68 | -0.02 | 4.48 |
| 13 | C | 1,4-Dichlorobenzene | 1.557 | 1.648 | -5.8 | 69 | -0.03 | 4.53 |
| 14 | | 1,2-Dichlorobenzene | 1.427 | 1.522 | -6.7 | 70 | -0.02 | 4.64 |
| 15 | | Benzyl alcohol | 0.850 | 0.944 | -11.1 | 70 | -0.03 | 4.64 |
| 16 | | bis(2-chloroisopropyl)eth | 1.588 | 1.735 | -9.3 | 71 | -0.02 | 4.73 |
| 17 | | 2-Methylphenol | 1.195 | 1.344 | -12.5 | 72 | -0.03 | 4.73 |
| 18 | | Acetophenone | 1.781 | 1.951 | -9.5 | 70 | -0.02 | 4.84 |
| 19 | | Hexachloroethane | 0.579 | 0.609 | -5.2 | 68 | -0.03 | 4.90 |
| 20 | P | N-Nitroso-di-n-propylamin | 0.941 | 1.054 | -12.0 | 72 | -0.03 | 4.84 |
| 21 | | 3&4-Methylphenol | 1.278 | 1.408 | -10.2 | 71 | -0.03 | 4.86 |
| 22 | I | Naphthalene-d8 | 1.000 | 1.000 | 0.0 | 67 | -0.03 | 5.57 |
| 23 | S | Nitrobenzene-d5 | 0.382 | 0.403 | -5.5 | 70 | -0.01 | 4.95 |
| 24 | | Nitrobenzene | 0.367 | 0.387 | -5.4 | 70 | -0.03 | 4.97 |
| 25 | | Isophorone | 0.616 | 0.673 | -9.3 | 73 | -0.03 | 5.17 |
| 26 | C | 2-Nitrophenol | 0.205 | 0.218 | -6.3 | 70 | -0.03 | 5.23 |
| 27 | | 2,4-Dimethylphenol | 0.369 | 0.399 | -8.1 | 72 | -0.03 | 5.29 |
| 28 | | bis(2-Chloroethoxy)methan | 0.370 | 0.392 | -5.9 | 71 | -0.02 | 5.36 |
| 29 | | Benzoic Acid | 0.264 | 0.303 | -14.8 | 75 | -0.05 | 5.44 |
| 30 | C | 2,4-Dichlorophenol | 0.311 | 0.333 | -7.1 | 72 | -0.03 | 5.46 |
| 31 | | 1,2,4-Trichlorobenzene | 0.335 | 0.344 | -2.7 | 69 | -0.03 | 5.52 |
| 32 | | Naphthalene | 1.070 | 1.128 | -5.4 | 70 | -0.03 | 5.59 |
| 33 | | 4-Chloroaniline | 0.447 | 0.487 | -8.9 | 73 | -0.03 | 5.66 |
| 34 | | 2,6-Dichlorophenol | 0.290 | 0.311 | -7.2 | 72 | -0.03 | 5.67 |
| 35 | C | Hexachlorobutadiene | 0.182 | 0.192 | -5.5 | 72 | -0.03 | 5.71 |
| 36 | | Caprolactam | 0.139 | 0.168 | -20.9# | 79 | -0.05 | 6.05 |
| 37 | C | 4-Chloro-3-methylphenol | 0.323 | 0.355 | -9.9 | 73 | -0.04 | 6.20 |
| 38 | | 2-Methylnaphthalene | 0.709 | 0.765 | -7.9 | 72 | -0.03 | 6.33 |
| 39 | | 1-Methylnaphthalene | 0.681 | 0.729 | -7.0 | 72 | -0.04 | 6.44 |
| 40 | | 1,2,4,5-Tetrachlorobenzen | 0.336 | 0.350 | -4.2 | 71 | -0.04 | 6.53 |

Job Number: F33465 Sample: SF587-CC580
Account: TETFLTAM Tetra Tech NUS Lab FileID: F010470.D
Project: Former American Beryllium, Sarasota, FL

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 41 | I | Acenaphthene-d10 | 1.000 | 1.000 | 0.0 | 71 | -0.04 | 7.71 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 42 | P | Hexachlorocyclopentadiene | 75.000 | 67.646 | 9.8 | 65 | -0.03 | 6.51 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 43 | C | 2,4,6-Trichlorophenol | 0.389 | 0.404 | -3.9 | 72 | -0.04 | 6.69 |
| 44 | | 2,4,5-Trichlorophenol | 0.413 | 0.420 | -1.7 | 70 | -0.04 | 6.75 |
| 45 | S | 2-Fluorobiphenyl | 1.397 | 1.455 | -4.2 | 74 | -0.04 | 6.80 |
| 46 | | 1,1'-Biphenyl | 1.512 | 1.554 | -2.8 | 70 | -0.04 | 6.92 |
| 47 | | 2-Chloronaphthalene | 1.181 | 1.218 | -3.1 | 72 | -0.04 | 6.93 |
| 48 | | 2-Nitroaniline | 0.372 | 0.410 | -10.2 | 76 | -0.04 | 7.11 |
| 49 | | Acenaphthylene | 1.991 | 2.099 | -5.4 | 73 | -0.04 | 7.51 |
| 50 | | Dimethylphthalate | 1.396 | 1.486 | -6.4 | 75 | -0.03 | 7.40 |
| 51 | | 2,6-Dinitrotoluene | 0.326 | 0.346 | -6.1 | 75 | -0.04 | 7.47 |
| 52 | C | Acenaphthene | 1.198 | 1.268 | -5.8 | 74 | -0.04 | 7.77 |
| 53 | | 3-Nitroaniline | 0.357 | 0.397 | -11.2 | 78 | -0.04 | 7.71 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 54 | P | 2,4-Dinitrophenol | 75.000 | 82.036 | -9.4 | 79 | -0.04 | 7.89 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 55 | | Dibenzofuran | 1.706 | 1.786 | -4.7 | 73 | -0.04 | 8.04 |
| 56 | | 2,4-Dinitrotoluene | 0.424 | 0.471 | -11.1 | 78 | -0.04 | 8.09 |
| 57 | P | 4-Nitrophenol | 0.176 | 0.202 | -14.8 | 78 | -0.05 | 8.07 |
| 58 | | 2,3,4,6-Tetrachlorophenol | 0.298 | 0.328 | -10.1 | 73 | -0.04 | 8.26 |
| 59 | | Fluorene | 1.390 | 1.484 | -6.8 | 75 | -0.04 | 8.58 |
| 60 | | 4-Chlorophenyl-phenylethe | 0.654 | 0.687 | -5.0 | 74 | -0.04 | 8.62 |
| 61 | | Diethylphthalate | 1.374 | 1.489 | -8.4 | 76 | -0.04 | 8.51 |
| 62 | | 4-Nitroaniline | 0.356 | 0.412 | -15.7 | 80 | -0.04 | 8.70 |
| 63 | I | Phenanthrene-d10 | 1.000 | 1.000 | 0.0 | 74 | -0.05 | 10.16 |
| 64 | | 4,6-Dinitro-2-methylpheno | 0.162 | 0.174 | -7.4 | 76 | -0.04 | 8.75 |
| 65 | C | n-Nitrosodiphenylamine | 0.576 | 0.601 | -4.3 | 76 | -0.04 | 8.84 |
| 66 | | 1,2-Diphenylhydrazine | 0.729 | 0.777 | -6.6 | 77 | -0.05 | 8.88 |
| 67 | S | 2,4,6-Tribromophenol | 0.077 | 0.079 | -2.6 | 75 | -0.05 | 8.99 |
| 68 | | 4-Bromophenyl-phenylether | 0.196 | 0.198 | -1.0 | 75 | -0.04 | 9.44 |
| 69 | | Hexachlorobenzene | 0.180 | 0.186 | -3.3 | 76 | -0.04 | 9.49 |
| 70 | | Atrazine | 0.217 | 0.241 | -11.1 | 79 | -0.05 | 9.84 |
| | | ---------- | Amount | Calc. | %Drift | ---------- | | |
| 71 | C | Pentachlorophenol | 75.000 | 82.592 | -10.1 | 84 | -0.04 | 9.88 |
| | | ---------- | AvgRF | CCRF | %Dev | ---------- | | |
| 72 | | Phenanthrene | 1.161 | 1.217 | -4.8 | 78 | -0.04 | 10.21 |
| 73 | | Anthracene | 1.172 | 1.258 | -7.3 | 78 | -0.04 | 10.30 |
| 74 | | Carbazole | 1.068 | 1.171 | -9.6 | 80 | -0.04 | 10.65 |
| 75 | | Di-n-butylphthalate | 1.279 | 1.421 | -11.1 | 80 | -0.03 | 11.45 |
| 76 | C | Fluoranthene | 1.156 | 1.278 | -10.6 | 81 | -0.03 | 12.37 |
| 77 | I | Chrysene-d12 | 1.000 | 1.000 | 0.0 | 83 | -0.05 | 15.07 |
| 78 | | Benzidine | 0.952 | 1.081 | -13.6 | 101 | -0.05 | 12.74 |
| 79 | | Pyrene | 1.597 | 1.588 | 0.6 | 82 | -0.05 | 12.77 |
| 80 | S | Terphenyl-d14 | 0.950 | 0.933 | 1.8 | 80 | -0.05 | 13.20 |
| 81 | | Butylbenzylphthalate | 0.703 | 0.762 | -8.4 | 86 | -0.04 | 14.25 |
| 82 | | 3,3'-Dichlorobenzidine | 0.479 | 0.538 | -12.3 | 95 | -0.04 | 15.12 |
| 83 | | Benzo[a]anthracene | 1.381 | 1.462 | -5.9 | 87 | -0.04 | 15.06 |
| 84 | | Chrysene | 1.304 | 1.384 | -6.1 | 88 | -0.05 | 15.12 |
| 85 | | bis(2-Ethylhexyl)phthalat | 0.944 | 1.056 | -11.9 | 88 | -0.03 | 15.44 |

# Continuing Calibration Summary

Job Number: F33465
Account: TETFLTAM Tetra Tech NUS
Project: Former American Beryllium, Sarasota, FL

Sample: SF587-CC580
Lab FileID: F010470.D

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 86 | I | Perylene-d12 | 1.000 | 1.000 | 0.0 | 88 | -0.06 | 17.56 |
| 87 | C | Di-n-octylphthalate | 1.809 | 2.050 | -13.3 | 92 | -0.04 | 16.64 |
| 88 | | Benzo[b]fluoranthene | 1.464 | 1.494 | -2.0 | 88 | -0.05 | 16.96 |
| 89 | | Benzo[k]fluoranthene | 1.399 | 1.542 | -10.2 | 94 | -0.06 | 17.01 |
| 90 | C | Benzo[a]pyrene | 1.373 | 1.476 | -7.5 | 93 | -0.05 | 17.48 |
| 91 | | Indeno[1,2,3-cd]pyrene | 1.148 | 1.222 | -6.4 | 91 | -0.05 | 19.15 |
| 92 | | Dibenz[a,h]anthracene | 1.115 | 1.178 | -5.7 | 87 | -0.05 | 19.20 |
| 93 | | Benzo[g,h,i]perylene | 1.258 | 1.376 | -9.4 | 94 | -0.05 | 19.49 |

(#) = Out of Range SPCC's out = 0 CCC's out = 0
F010292.D 8270C.M Mon Jul 25 13:38:05 2005